North-Eastern Hill University Shillong

Forty-Fifth Annual Report



2018 - 2019

From the Vice-Chancellor's Desk



It gives me immense pleasure to place before you this 45th Annual Report on the activities and achievements of NEHU for the year 2018-19. This Annual Report depicts the continuous growth and development of the University in its pursuit towards excellence and shows that we have passed another milestone towards excellence. There has been much that NEHU has achieved for 45 years of its existence and what had been accomplished in 2018-19 is in concurrence with the University's motto - **RISE UP AND BUILD**.

NEHU is committed to achieving what it has been set up as objectives with a vision to develop academic leadership, keeping in consonance with the national and global perspective that values diversity and inclusion. It mission is, therefore, to achieve excellence in teaching learning and research, capacity building, social outreach, skill development and innovative academic programmes.

The eight Schools of the University have 44 teaching departments and one Centre located in the Shillong and Tura Campus. The total of 310 teachers and 5235 students give rise to a favourable teacher student ratio of 1:17. In addition, there are 77 colleges offering under-graduate and post-graduate courses which are affiliated to the University. As many as 1485 students of different departments of the University were awarded degrees/diplomas.

On 10th January, 2019 the University has signed a MoU with the Chulalongkorn University, Bangkok, Thailand to promote Academic cooperation between Thai & Indian Educational Institutes and scholars from both Chulalongkorn University and NEHU will embark upon the research project entitled "CU-NEHU

ASEAN-India Innovative Academic Cooperation". The research output has been satisfactory with approximately 600 research papers published in reputed national and international journals. During the period under reference, different departments of the University organized around 50 National and International Conferences/Seminars. Also many of our Faculty members were actively involved in 92 research projects various Government supported by funding agencies, 32 research projects were completed during the year 2018-19 and some consultancy work were also undertaken.

My heartfelt gratitude goes to all the students, teaching and non-teaching staff, and other stakeholders for their tireless contribution towards this end. I would like to place on record my thanks to the members of the Editorial Board for bringing out this Annual Report which is a source of valuable information to our readers.

Prof. S.K. Srivastava Vice-Chancellor

Executive Summary

North-Eastern Hill University, is a Central University established on 26 May,1973, by an act of Indian Parliamentand became functional on 19th July with the appointment of Dr. Chandran D. S. Devanesen as its first founder Vice-Chancellor, is a teaching and affiliating University for the hill areas of the North-Eastern region. At present the jurisdiction of NEHU is the state of Meghalaya having one campus at Tura in Garo Hills.

This 45th annual report presents the activities and achievements of the University for the period from 1 April 2018 to 31 March 2019. The information incorporated in this annual report is based on the report provided by the Academic departments/Centre, administrative departments and Central services of the University.

Background

The University has eight schools of study: (i) School of Economics, Management and Information Sciences (SEMIS) (ii) School of Education (SE) (iii) School of Humanities (SH) (iv) School of Human and Environmental Science (SHES) (v) School of Life Sciences (SLS) (vi) School of Physical Sciences (SPS) (vii) School of Social Sciences (SSS) and (viii) School of Technology (SOT), consisting of 44 Departments and 1 Centre.

The number of Departments and Centre in each school of study are shown in the following fig.1

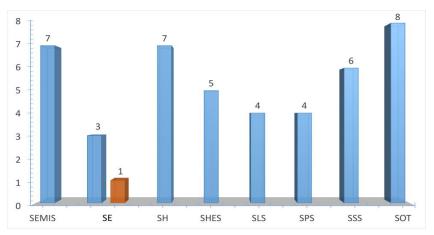


Fig. 1: Number of Departments in each School of Studies

Total number of Departments at Shillong and Tura campuses are 35 and 9 respectively. Only one Centre named Distance Education is located in Bijni campus of NEHU, Shillong. Many Departments of the University offer Postgraduate teaching and Ph.D. programme. Some Departments offer M.Phil. programme also. Some Departments also offer undergraduate degrees but almost all the Departments of the University are involved in the research activities. Many Departments are supported by the central Governments funding agencies like Special Assistance Programme(SAP) and Fund for Improvement of S&T infrastructure in universities & higher educational institutions (FIST) Department of Science and Technology. Two departments Botany and Chemistry are recognized by the UGC as the Centre for advanced studies. There are 71 affiliated colleges in which 33 have got permanent affiliation and 38 are temporarily affiliated. The above figures include the Prestigious North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS)also.

Several awards have been instituted by NEHU are awarded as follows-:

President of India, Dr. Shankar Doyal Sharma Gold medal was awarded to Ms. Alka Blah of Commerce Department and Ms. Ristabell Marak of Garo Department.

Srimati Sarada Krishna Iyer Memorial Award was given to Ms. Mapukala Jamir and Ms. Teresa C. Lalruatpuii of Political Science Department.

U Tirot Sing Memorial Prize was given to Mr. Songachan H A S of Good Will College and Ms. Nerisita Shylla of Jaintia Eastern College.

Prof. M. K. Khare Memorial Prize was given to Ms. Keleni-I Nagi and Ms. Riva Mary Rani of Zoology Department.

Prof. M. N. Karna Young Sociologist Prize was given to Ms. Evangelyne Wahlang and Ms. Risalina Veema Syngkon of Sociology Department.

Rajendra Kumar Sunaheri Devi Jain Charitable Endowment Book Grant award went to Ms. Mary Lalruatsangi and Ms. Rizhune.

Dr. D. S. Babu Memorial Awards was given to Ms. Georgina Banylla Kharlukhiand Ms. Irilang Lyngdoh Mawlong of Education Department.

Prof. S. S. Khare Promising Mathematician Award was given to Mr. Santosh Safi and Mr. Phyrnailang Warjri.

Administrative Departments of the University consist of the College Development council, Examination Department, Finance Department and Planning Department.

The Central services of the University comprises of Bioinformatics Centre, Campus Development Department, Career and Counselling Cell (Shillong), Career Counseling Cell (Tura Campus), Central Library(Shillong), Central Library (Tura Campus), Computer Centre, Equal Opportunity Cell, Health Centre, Hindi Cell, Internal Quality Insurance Cell, National Service Scheme (NSS)Cell, NEHU Data and Voice Network(NDVN),Sophisticated Analytical Instrument Facility(SAIF),Sports Department, Students' Welfare Cell ,UGC-Human Resource Development Centre and Internal Complaint Cell etc.

Teaching faculty and Non-teaching staff

The University has 465 sanctioned posts of which 310 have been filled under five categories Gen., OBC, SC, ST and PWD. 155 teaching posts are lying vacant under different categories of teachers. Two additional post are there. The detail description of the sanctioned, filled and vacant posts of the faculties of the University are given in figure 2.

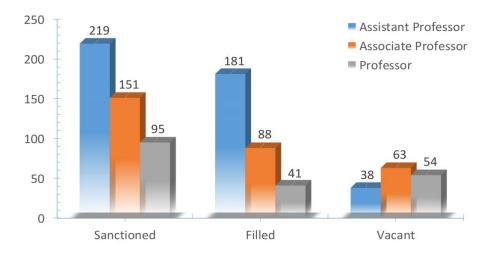


Fig. 2: Teaching Staff Position

Total sanctioned post of Non-teaching staff in the University are 1012 under which Group-A, Group-B, Group-C and Group-D are 64,185,451 and 312 respectively. Filled posts of Non-teaching staff are 527 and vacant posts are 485. The figure 3 describes the detail of the sanctioned, filled and vacant positions of the non-teaching staff.

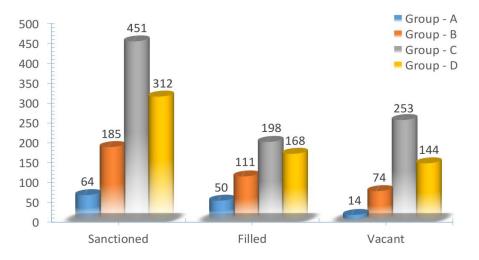


Fig. 3: Non-Teaching Staff Position

Student Enrollment

NEHU is a teaching cum affiliating University in Meghalaya and attracts students from different parts of the country and also from abroad. Students' admission in the various Departments are done on the basis of rules laid down by the University as per guide line of the UGC. The University has adopted Choice Based Credit system(CBCS) at its post graduate Departments and in some undergraduate Departments.

During the year 2018-2019, 5235 students have been enrolled in various courses of the University. Thus students –teacher ratio is about 12:1

Enrollments of the students in various courses of the University Departments are given in the figure 4 and also in the tabular form in table number 1.

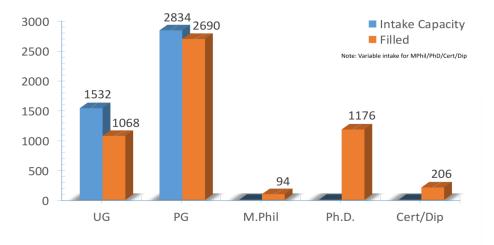


Fig. 4: Course-wise student enrollment status

	GI	EN	S	Г	SC	С	OB	SC	TOT	AL
Course	М	F	М	F	М	F	М	F	М	F
BA LLB (Honours)	7	14	123	142	0	4	0	0	130	160
B Arch	49	43	32	20	4	1	0	2	85	66
B Tech	201	55	215	58	59	7	27	5	502	125
UG TOTAL	257	112	370	220	63	12	27	7	717	351
MA	30	80	392	967	2	5	8	20	432	1072
M Sc	53	57	211	307	3	6	6	4	273	374
M Com	5	16	42	36	1	1	0	0	48	53
M Lib Info Sc	1	0	22	36	0	0	0	0	23	36
M B A (GM)	12	17	15	5	3	3	0	0	30	25
M B A (SM)	4	6	3	1	1	1	0	0	8	8
MBA (ABFT)	2	1	13	11	0	0	0	0	15	12
M C A	16	1	15	15	1	0	0	0	32	16
MTTM	2	2	24	28	2	0	0	0	28	30
LLM	1	1	9	10	0	0	0	0	10	11
M Ed	0	4	5	55	0	0	0	0	5	59
PG TOTAL	126	185	751	1471	13	16	14	24	904	1696
M Tech	22	13	32	16	2	3	2	0	58	32
M Phil	1	21	16	36	3	3	7	7	27	67
PhD	156	159	299	435	40	21	33	33	528	648
PD Research	0	0	1	0	0	0	0	0	1	0

PG Diploma	0	3	14	20	0	0	0	0	14	23
FC SEDE	4	9	51	94	0	2	2	7	57	112
Grand Total	566	502	1534	2292	121	57	85	78	2306	2929

Table 2: Enrolment of Students from Different States for the Academic Year 2018-19

	GE	ΪN	S	Т	S	C	Ol	3C	TO	TAL
ALL COURSES	М	F	М	F	М	F	М	F	М	F
A & N Islands				1						1
Andhra Pradesh	4	0	9	0	0	0	0	0	13	0
Arunachal Pradesh	5	4	24	79	0	0	1	2	30	85
Assam	259	202	170	94	47	18	32	25	508	339
Bihar	16	6	0	1	0	2	4	0	20	9
Delhi	1	1	0	0	0	0	1	0	2	1
Jammu & Kashmir	4	0	0	0	0	0	0	0	4	0
Jharkhand	1	1	3	1	1	0	0	0	5	2
Kerala	2	2	2	4	0	0	0	0	4	6
Madhya Pradesh	0	0	0	0	1	0	0	0	1	0
Maharashtra	1	0	5	1					6	1
Manipur	9	27	92	94	2	2	5	9	108	132
Meghalaya	188	226	1097	1808	57	23	28	38	1370	2095
Mizoram	0	0	38	45	2	0	1	0	41	45
Nagaland	1	2	85	149	1	1	0	1	87	153
Odisha	2	2	0	0	0	0	0	0	2	2
Puducherry								1		1
Punjab	1								1	
Rajasthan					2				2	0
Sikkim	1	2	0	1	0	1	0	1	1	5
Tamil Nadu	1	0	0	0	0	0	0	0	1	0
Tripura	4	4	7	11	0	2	5	0	16	17
Uttar Pradesh	16	3	1	0	0	2	5	0	22	5
Uttarakhand	3	0	0	0	0	0	0	0	3	0
West Bengal	36	12	1	3	8	6	3	1	48	22
Foreign	11	8	0	0	0	0	0	0	11	8
GRAND TOTAL	566	502	1534	2292	121	57	85	78	2306	2929

Enrollments of the students in the affiliated colleges of the University are given both in figure 5 and in tabular form in the table 3 as shown below-

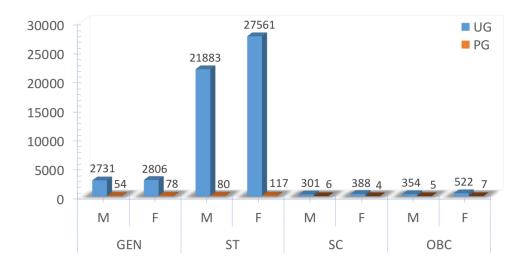


Fig 5. - Enrolment of Students for the Academic Year 2018 - 19 (Affiliated Colleges)

		EN	S		S			3C	ТОТ	AL
State	М	F	М	F	М	F	М	F	М	F
Andhra Pradesh	3	2	0	1	0	0	0	0	3	3
Arunachal Pradesh	8	13	598	583	10	6	4	2	620	604
Assam	262	341	235	265	27	18	83	159	607	783
Bihar	13	10	1	2	1	0	7	12	22	24
Chhattisgarh	0	1	0	1	0	0	0	0	0	2
Delhi	1	2	2	0	0	0	0	0	3	2
Gujarat	44	54	0	0	0	0	0	0	44	54
Haryana	1	2							1	2
Himachal Pradesh	2	0	0	0	0	0	0	0	2	0
Jharkhand	0	1	8	2	0	1	1	0	9	4
Karnataka	0	0	0	1					0	1
Kerala	1	5	0	0	0	0	0	3	1	8
Madhya Pradesh	9	2	0	0	0	0	0	0	9	2
Maharashtra	0	1	0	0	0	1	0	0	0	2
Manipur	37	77	591	918	19	31	57	85	704	1111
Mizoram	0	1	563	641	3	1	0	1	566	644
Nagaland	3	1	294	487	2	0	1	1	300	489
Orissa	1	0	0	0	0	0	0	2	1	2
Punjab	4	2	0	0	0	0	0	0	4	2
Rajasthan	7	1	1	0	1	0	6	0	15	1

Table 3: Enrolment of Students for the Academic Year 2018 - 19 Affiliated Colleges

Sikkim	0	1	0	2	0	0	0	0	0	3
Tamil Nadu	4	0	0	0	0	1	0	0	4	1
Tripura	6	12	246	197	4	4	8	5	264	218
Uttarakhand	13	6	1	1	1	1	1	8	16	16
West Bengal	6	9	3	6	0	2	0	1	9	18
Meghalaya	2331	2321	19438	24610	239	326	191	250	22229	27526
Foreign Students	30	19								
Total	2786	2884	21981	27717	307	392	359	529	25433	31522

Degree Awarded

During the year 2018-19, the total number of degrees awarded are 8653, Ph.D. degrees 147, M.Phil. degree 38, P.G. Degrees 1222, Bachelor's degrees 7246 etc.

Publications:

During 2018-19, the number of published papers are more in national and international papers which evident from the faculties profile. About 600 papers are published in in UGC recognized journals.

Academic Collaborations:

Faculty members are heavily engaged in Collaboration with outside state and central Government agencies like BARC, IUAC, DRDO, IGCAR, NEGRIMS, Dr. B. Barooah Cancer Institute (BBCI), Guwahati etc.

Hostel Accommodation: 1806 students were provided hostel accommodation at Shillong Campus and 270 students were provided hostel accommodation at Tura Campus.

Other Activities

UGC-Human Resource Development Centre (HRDC):

Has organized 4 orientation programmes and conducted Refresher courses in Tribal Studies, Political Science, Disaster Management, Earth Science and Natural Resource Management, Folkloristics and Semiotics and Zoology.

HRDC has also organized short term courses in research methodology, gender sensitization, SPSS, also a workshop On MOOC's, e-content Development and open educational resource.

Central Library Shillong

Central Library Shillong was awarded a "*Certificate of Content Contribution*" by the National Digital Library of India (NDLI) and Indian Institute of Technology Kharagpur under the aegis of The Ministry of Human Resource Development (MHRD), Government of India (GOI) as a result of the digital services rendered to NDLI through the Library Digitization Programme.

Library Orientation Programme was conducted from 17 to 28 September 2018 in the Central Library Conference Hall for the first semester students of different academic departments. The programme sensitized the newly enrolled library members with the library's rules and guidelines, in-house/online resources, Online Public Access Catalogue (OPAC) which concluded with a guided tour of the Central Library.

The 7th Library Internship Programme was conducted by the Central Library from 4th July to 14th September, 2018 for the out-going MLISc 4th semester students of the Department of Library & Information Science, NEHU, Shillong

The Library House-Keeping Operations (Job Diary) was conducted by the Library for the 2nd semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong during March to May, 2018.

Computer Centre

One-day Workshop on Document Preparation through Latex was organized by IQAC and Computer Centre on 24/10/2018.

IQAC

IQAC organised a ONE-DAY Workshop for Non- Teaching staff of the University on "Document Preparation through La-Tex" on 24th October, 2018

5th IQAC Meeting was convened on 25th October, 2018 to finalise AQAR 2017-18 and discuss the important issues regarding quality enhancement of the University.

NSS

The NSS Unit, NEHU organised two **blood donation camps** today the 12th October 2018. However, because of the forthcoming puja holiday many students left the campus. So, only 40 donated out of 58 registered students.

The NSS unit of Synod College, Shillong organized a **blood donation** camp at the college premises in collaboration with Dr. H. G. Gordon Robert Hospital, Shillong on 28th March 2019. Altogether 32 volunteers donated blood.

The NSS unit of BBS College, Shillong organized a **blood donation** camp at the college premises in collaboration with Pasteur Institute, Shillong on 30th March 2019 at the college campus. 29 volunteers donated blood.

Republic Day Parade Camp:

The **Selection Camp** for the Pre Republic Day Parade camp was held on 14^{th} September 2018 at the Community Hall, NEHU, Shillong. About 150 students from all colleges participated in the same. 14 volunteers attended the **Pre Republic Day Parade Camp** at USTM, Khanapara, Meghalaya from $4^{\text{th}} - 13^{\text{th}}$ November 2018.

2 NSS volunteers from Union Christian College and Kiang Nangbah Government College participated in the *Republic Day Parade Camp* held at New Delhi from 1st- 31st January 2019.

North East NSS Festivals

30 volunteers along with 1 Programme Officer from 2 colleges and 1 P. G. unit attended the North East NSS Festival at Itanagar, Arunachal Pradesh from $23^{rd} - 27^{th}$ March 2019.

SAIF SAIF organized the following programmes during the period mentioned:

(i) LC-MSand its applications 3rd-5th Apr,'18
(ii)ICP-OES Principles and its applications 18th- 20th April'18

ICAR-NE region

(i) TEM 3rd -5th Oct,'18 (ii) SEM24-26thSept,"18

Sports Department of NEHU is very active and has organized the following events:

The Sports Department, NEHU in collaboration with Telecom Center of Excellence India supported by the Department of Telecommunications, Government of India organised a Workshop on Innovation in Mobile Application and Development Ecosystem (I-MADE) on the 24th August 2018 at the Department of Information Technology (IT), SOT, NEHU, Shillong. Altogether 52 colleges participated in the events.

Career and Counselling Cell Shillong

The following activities were conducted by the Cell for the year 2018-19. Several Companies have organised campus placement drive in NEHU like

Regalix, Hyderabad in collaboration with Career & Counseling Cell, NEHU, Shillong conducted a pool campus drive for B.Tech. students of NEHU, Shillong where some students from Assam University, Silchar also attended the drive on 6th April, 2018 at the School of Technology, NEHU, Shillong. Altogether, 11 students got selected where 1studentis from Bineswar Brahma Engineering College, Assam, 3 students from Tezpur University,2 students from Assam Engineering College and 5 students from School of Technology, NEHU, Shillong. 85 students from School of Technology, NEHU, Shillong attended the drive.

The Placement & Counselling Cell, NEHU, Tura Campus

Organised three (5) Entrepreneurship Awareness Camps during Feb 07-Feb 23, 2019and one (1) FDP on Entrepreneurship for faculty members during Jan 21-Feb 02, 2019. Dr. Abhigyan Bhattacharjee was the coordinator of the programme. This was sponsored by EDII, Regional Office, Guwahati.12 students have got placement under placement and counselling cell Tura Campus.

CDD

Painting of front boundary wall of Shillong Campus(14) Construction of 11/0.433 KV substation No. 16 for School of Physical Sciences at NEHU permanent campus, Shillings'. Providing service connection, panels and installation of 1x630KVA transformer.

Renovation of Old residential quarters, Painting Administrative building, Painting of Examination building, Painting and need based repairing of Library building, Resurfacing of existing road (Phase-I),

Construction of 100 seated Women's hostel including warden's residence, Construction of Academic Building for conducting M.Ed. programme, (24) Repair of parking area of Administrative building entrance to KV road towards ICSSR etc.

Conclusion:

North-Eastern Hill University has maintained its status as a leading central University in building excellence and raising the standards of higher education. NIRF ranking of NEHU is within 50 in the country. The University is above par in terms of enrollment, student teacher ratio, female to- male ratio enrollment, and above all, excellent in teaching and research. The University being in the North-East part of the country but attracting students from the main land of India. University with its motto Rise up and build is uniformly marching ahead to achieve its goal.

Officer of the University

Visitor	President of India
Chief Rector	Governor of Meghalaya
Chancellor	
Vice-Chancellor	Prof. Sri Krishna Srivastava
Pro-Vice-Chancellor (Shillong)	Prof. H. Lamin
Pro-Vice-Chancellor (Tura)	Prof. G. Singaiah
Registrar	Dr. J. N. Nayak
Finance Officer	Shri L. M. K. Lyngrah
Controller of Examination	Dr. Debashish Chowdhury
Librarian	Shri F. R. Sumer (In-charge)
Dean, Student' Welfare	Prof. H. Kayang (Till 27.09.2018)
	Prof. S. Umdor (Since28.09.2018)
Dean, School of Economics, Management & Information Sciences	Prof. B. Panda
Dean, School of Education	Prof. S. M. Sungoh
Dean, School of Human and Environmental Sciences	Prof. R. Khongsdier
Dean, School of Life Sciences	Prof. B. B. P. Gupta
Dean, School of Physical Sciences	Prof. R. H. D. Lyngdoh
Dean, School of Social Sciences	Prof. C. A. Mawlong
Dean, School of Technology	Prof. Gautam Saha

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SCHOOL OF ECONOMICS, MANAGEMENT AND INFORMATION SCIENCES

Dean	: Prof. Bhagirathi Panda
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The School of Economics, Management and Information Sciences comprises seven Agri departments, namely -Business Management Food Technology, and Commerce, Economics, Journalism and Mass Communication, Library and Information Sciences, Management, and Tourism and Hotel Management. All the departments offer the Master and Ph.D. programmes, and the Department of Economics also offers the M. Phil programme. The USPs of the school are its (i) vibrant academic culture created and sustained by the mosaic of experienced and young faculty drawn from different parts of the country and the opportunity of working in a multicultural environment, (ii) an overt teaching pedagogy principally grounded on the imperative of balancing theory and practice and (iii) the ambience of teaching and research on different subjects calibrated and qualified by contemporariness, relevance and job requirements of the students, the North Eastern Region of India and the country.

Some of the quantifiable outcomes of the School under the period of report (April 2018-March 2019) are listed out below:

Sl. No	Outcomes	No
1	Papers published in National and International Journals	77
2	No of Books Published	7
3	Book chapters/conference proceedings published	32
4	Ph.D. Awarded	25
5	Seminars organised	19
6	Management Development Programme Organised	1
7	Seminars/conferences/workshops attended by faculty with paper presentation	65
8	Projects undertaken by Faculty	8
9	Fellowships received by students for undertaking Ph.D programme	48
10	Students Placed (departments of Management, THM and Library & Information Sciences only)	46

Ι

Each department under the school has its thrust areas of research. However, areas in which the school has established its primacy at the national level include Economics of North Eastern Region of India, Rural and Labour Economics, Public Economics and Local Finances, Environmental and Resource Sub-regional Economics. Economics. Accounting & Finance, Entrepreneurship & Small Business, Micro-Finance and Rural Credit Management, Information Technology Supply Chain and Social Marketing, Hospitality and Tourism Management, Studies, Sustainable Tourism, Agri and Food Marketing;Food Biotechnolog, Knowledge

Organisation, Information Storage and Retrieval, Application of Management Concepts and Management Principles in Libraries and Information Centres, Information/Knowledge Management, Information Management, Film Studies and Culture & Media Studies. Faculty members of the school, in addition to teaching and research, have also provided crucial policy support to the central, state and local governments on issues and programmes of transformative development. In March 2019 the School for the first time organised an MDP programme for 1997 and 1999 batch IRS officers of Government of India.

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND FOOD TECHNOLOGY (TURA CAMPUS)

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E-mail	: amftnehutura@gmail.com, sheenahaorongbam@gmail.com

Faculty :	3	
Designation	Name and Qualification	Specialization
		Biochemical, Analytical &
	Dr.Sheena Haorongbam,Ph.D. (Panjab	Nutritional aspect of Plant-Based
Assistant	University), M.Sc. (Panjab University)	Foods, Process and Preservation of
Professor		Foods, its Health Impacts & Food
		habits, Quality Control in Food
		Industry
	Dr.Gino A. Sangma, Ph.D. (NEHU),	Marketing Management and
	MBA (NEHU)	Agribusiness Management
		Fruits & Vegetables Processing
	Shri Sasikumar R, M.Sc. (G. B. Pant	Technology
	University of Agriculture &	Food Biotechnology
	Technology)	Beverage Technology
		Fermentation Technology, Emerging
		technology in food processing

Thrust Areas of Research

Management of Small Business, Entrepreneurship, Supply Chain Management, Micro Finance Rural Marketing , Agri and Food Marketing, Tourism Development, Food Biotechnology, Food Processing Technology, Food packaging technology, Fermentation technology, Traditional Knowledge and Food Habits, Certification and quality assurance of foods, Post Harvest and Processing technology and Management of Fruits &

vegetables, Skill Development, Rural extension services, Food Analysis and Hygiene, Underutilized Forest resources, Emerging technology in food processing

Brief Statement of Academic Activities:

Co-organized MOSAIC 2018 in "Mapping Skills and Competencies for Future Managers" in collaboration with Department of Management, NEHU, Tura Campus held on 9th May 2015

Students' Profile

Enrolment Capacity: Degree - MBA (ABFT); Enrolment Capacity -15

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MBA	15	11	-	23	-	3	5	21	26
(ABFT)									

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MBA	4	1	1	3	-	1	3	2	5
(ABFT)									

Fieldwork/Educational Tour of Students a) INDUSTRIAL TOUR OF STUDENTS

Teacher-in-Charge :Dr. Sheena

Haorongbam

Places/Institutions Visited: Bangalore and Visvesvaraya Goa: Industrial & Technological Museum, Lalbagh Botanical Garden, Bannerghatta Biological Park, Recipharm Pharmaservices Pvt. Ltd., Pepsico India Holdings Pvt. Ltd., Mondelez India Food Ltd (Cadburys India Ltd.), United Breweries Limited, Karnataka Soaps & Detergents Ltd. (Mysore Sandal Soap industry), Keya Foods International Pvt. Ltd., BAMUL Bangalore Dairy, Bangalore Co-OP Mysore Polymers & Milk Union Ltd., Rubber Products Limited, Maxvita Foods (India) Pvt. Ltd., Goa Industrial And Canning Company Limited, Seahath Canning Company (Oceans Secret), Tropical Spice Garden, etc.

Duration of Tour: 15days

Purpose of Tour: Industrial Exposure Courses Conducted

Postgraduate

Semester-I : Management Concepts; Managerial Economics: Computer Applications; **Business** Environment: Ouantitative Analysis Managerial for Decision; Accounting for Managers; Financial Management; Management of Food and Agribusiness. Semester-II : Business Communication;

Agri-Business Marketing; Human Resource Management in Agri-Business; Operations Management; Supply Chain and Retail Management; Legal Aspects of Business; Fundamentals of Food Processing and Preservation; Tax Laws Semester-III : Research Methods: Entrepreneurship and New Venture Development; Agricultural Credit and Cooperative Management; Agribusiness Management; Agri and Food Marketing; Farm Business Management; Agricultural Project Management; Agricultural Input Management; ICT in Agribusiness; Food Chemistry and Analysis; Food Microbiology; Unit Operations in Food Processing; Post Harvest Management of Horticultural Crops; Food Additives and Regulations

Semester-IV : Strategic Management; Intellectual Property Rights; Commercial Horticulture; Commodity Futures Trading; International Trade in Agriculture; Livestock Production Management; Cereal and Bakery Technology; Food Hygiene and Sanitation; Total Quality Management in Food Industry; Beverages and Fermentation Technology; Project/ Dissertation

Publications

Research Papers *Published in India*

Sasikumar, R, Sankar Chandra Deka (2018). Influence of thermosonication treatments on bioactive compounds and sensory quality of fruit (*Haematocarpus validus*) juice. *Journal* of Food Processing and Preservation, 42(8).https://doi.org/10.1111/jf pp.13701.

Sasikumar, R, Vivek, K, Sankar Chandra Deka (2019). Sensory evaluation of ultrasound assisted microwave treated fruit (*Haematocarpus validus*) juice through fuzzy logic approach. *International Food Research Journal*.

Books/Book Chapters/Proceedings

Sasikumar, R, Sankar Chandra Deka (2019). Effect of Ultrasound-Assisted Treatment on Postharvest Quality of *Khoonphal* (*Haematocarpus validus*) of Meghalaya North-East India. *Innovations in Food Processing Technologies*. Nandan Sit, Laxmikant, S. Badwaik and Amit Baran Das (Eds). New India Publishing Agency (NIPA), New Delhi, Chapter 8, p.185-191.

Research Projects New Projects

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rs)
Value Addition of Banana	Sasikumar R (PI)	Department of	71,06,000.00
(Musa. sp) and Creating Small		Biotechnology,	
Scale Enterprises of		Government of India,	
Meghalaya Tribal Community		New Delhi	
Though Minimal Processing			
Technology			
Value Chain on Processing of	Sasikumar R (PI)	Department of	45,00,000.00
Novel Duck Meat and Egg		Biotechnology,	
Products Under Existing		Government of India,	
Farming System of NER for		New Delhi	
Entrepreneurship Development			
Extraction and Characterisation	Sasikumar R (PI)	Science and	28,00,000.00
of Functional Phytochemicals		Engineering Research	
from Khoonphal		Board (SERB),	
(Haematocarpus validus) of		Department of Science	
Meghalaya and its Value		and Technology,	
Addition		Government of India,	
		New Delhi	

Ongoing				
Title of Project	Pl/Co-Pl	Funding	Amount	
		Agency	(Rupees)	
Development of Low Cost Process	Sasikumar R	Ministry of	26, 00,000.00	
Technology for Extraction of	(PI)	Tribal Affairs,		
Oleoresin, Essential Oils and its		TRIFED,		
Value Added Products from		Government of		
Tejpatta (Cinnamomum tamala)		India, New		
and Creating Entrepreneurship for		Delhi		
Tribal People of Meghalaya				
Phytochemical and Molecular	PI: Dr. Arindam	DST (SERB),	30,04,000.00	
Characterization, Bioprospecting	Barman	New Delhi		
of Genes, Value Addition and	Co-PI: Dr.			
Quality Enrichment of Bamboo	Sheena			
Through Plant Tissue Culture	Haorongbam			
Technique From North East India.				

DEPARTMENT OF COMMERCE

Head	: Prof.A.P. Pati- upto 19.09.2018
	: Prof. K.C. Kabra - w.e.f. 20.09.2018
Telephone	: 0364-272-3161 / 9436309498
E-mail	: hodcom@nehu.ac.in

Faculty	:6	
Designation	Name and Qualification	Specialization
	Dr.N.M. Panda, M.Com, (Utkal University) &	Mgt. Accounting &
	Ph.D, (Manipur University)	Entrepreneurship
Professor	Dr.A.P. Pati, M.Com, Ph.D, (Utkal University)	Finance
	,CMA (ICAI, Kolkata)	
	Dr. K.C. Kabra, M. Com., Ph. D, (Raj.	Accounting & Finance
	Vidyapeeth)	
	Dr.R.A.J. Syngkon, M.Com , Ph.D (NEHU)	Managerial Economics &
		Entrepneurship
Assistant	Dr.S. Kharmawphlang, M.Com., Ph.D	Entrepreneurship & Marketing
Professor	(NEHU)	
	Dr.S.G. Maji, M.Com., Ph.D, (Burdwan	Accounting & Finance
	University)	

Enrolment Capacity: M. Com – 50 & Ph.D.– Variable

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MCom	48	53	2	79	-	20	80	21	101
Ph.D.	2	1	-	1	-	2	2	1	3

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
M.Com.	17	20	2	34	-	1	26	11	37
Ph.D.	3	3	1	-	2	3	1	5	6

Students Awarded Ph.D. Degree : 6 Research Fellowship

CSIR- UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other(You name it)	Others
UGC- NET(02)	-	-	-	-	Assam Slet (01)	-

Fieldwork/Educational Tour of Students

Teacher-in-Charge: Dr. S. Kharmawphlang & Dr. S.G. Maji

Places/Institutions Visited Bhubaneswar, Puri, Konark, Chilka Lake, Vaizag Port (Vishakhapatnam), Shipping Corporation of India, Andhra University. Duration of Tour (Dates and number of days): 14 Days i.e., from 14.01.2019 to 28.01.2019

Purpose of Tour: To give exposure to the Students the operation of Industries like Tourism, Port and Shipping.

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes *Organized*

One day Workshop on Design Thinking was organised on 19.09.2018 with technical support from Prof A N Bhattacharya from School of Inspired Leadership (SOIL), Gurgoan. The programme was coordinated by Dr. N M Panda from the department.

One day Financial Literacy Programme was organized in the department on 09.10.2018 with technical support from Bombay Stock Exchange (BSE), Mumbai.The programme was coordinated by Dr. K.C. Kabra from the department.

Extension Lecture on "Citation and Reference Management: Hands-on with Mendeley" was organised for Research Scholars in the department on 23.02.2019 where Dr Neha Gulati, Assistant Professor from University Business School (UBS), Punjab University, Chandigarh was resource person. The programme was coordinated by Dr. K C Kabra.

Extension Lecture on "Economic and Business Condition of NE India" was delivered by Prof N M Panda in the department on 07.03.2019 where 40 students of M Com (International Business) from NGM College, Polachi, Tamil Nadu participated.The programme was coordinated by Dr. K.C. Kabra from the department.

Attended

K. C. Kabra

3rd National Conference of North East India Commerce and Management Association (NEICMA) organised by the Department of Commerce, J B College, Jorhat, Assam on dated 5th& 6th Oct 2018 and presented a paper titled "What Determines Firms' Voluntary Disclosure? Evidences from Literature"

Santi Gopal Maji

Annual Banking Conference 2018, Organised by Bangladesh Institute of BankManagement during November 7- 8 at Dhaka and presented a paper entitled "Profitability of Banks in India: Impacts of Market Structure and Risk".

Publications:

Published in India:

Deb, R., Panda N.M. (2017). Social Proclivity of Social Entrepreneurs in Secondary Education of Assam, Amity *Journal of Entrepreneurship*, 2(2): 12-24. Deb, R. and Panda N.M. (2018). Mapping Social 1 Entrepreneurial Traits: A Study of Secondary Education in Assam, *Vivekananda Journal of Research*, 7 (2): 159-180.

Pati, A P. (2019) Microfinance Intervention and Millennium Development Goals: Observations from Global Data In: Development and Deprivation in the Indian Subcontinent. U K De and M Pal (Eds).Levant Books India, New Delhi.

Saha, R., Kabra, K. C. (2018). Corporate Governance and Firm Value: Review of research in view of major reforms in India. *Research Bulletin*, 44(II): 39-57.

Saha, R., Kabra, K. C. (2018). Are Companies Rewarded for More Voluntary Disclosure? Evidences from Literature.*Pacific Business Review International*, Vol. 11 (2): 37-48.

Kharmawphlang, S. (2019).Small Enterprise Growth in North East India.*Journal of Entrepreneurship and Management*, 8 (1): 22-33.

Kharmawphlang, S. (2019).Non- Financial Costs Impedes Growth: A Study of MSMEs In Meghalaya. Journal of Rural and Industrial Development, 7 (1): 12-24.

Maji, S.G. and Goswami, M. (2018), "Quality of Intellectual Capital Disclosure in India: A Study of Knowledge-based and Traditional Sector", Research Bulletin, Vol. 44, No. 1, pp. 121-138.

Published abroad:

Roy, P., Pati, A P. (2019). Double bottom line commitments of microfinance: evidence from Indian institutions. *International Journal of Social Economics*, 46 (1): 116-131. https://doi.org/10.1108/IJSE-08-2016-0240.

Pati, A P. (2017). Transformation and Sustainability Relationship in Indian Microfinance Institutions. International Journal of Services, Economics and Management, 8 (4):250-267, https://doi.org/10.1504/IJSEM.2017.095451

Maji, S.G., Goswami, M. (2018). IC disclosure practices in India using a comprehensive disclosure framework: A study of knowledge-based companies. *Journal of Indian Business Research*, 10(4): 345-363, https://doi.org/10.1108/JIBR-01-2017-0011.

Maji, S.G., Hazarika, P. (2018). Capital regulation, competition and risk-taking behavior of Indian banks in a simultaneous approach. *Managerial Finance*, 44(4): 459-477, https://doi.org/10.1108/MF-

09-2017-0340.

Laskar, N., Maji, S.G. (2018). Disclosure of corporate sustainability performance and firm performance in Asia. Asian

Review of Accounting, 26(4): 414 – 443, https://doi.org/10.1108/ARA-02-2017-0029

Honours/Awards/Recognition: K. C. Kabra

President, Indian Accounting Association, Meghalaya Chapter, Shillong.

Founder Member of North East India Commerce and Management Association (NEICMA), Dept of Commerce, Gauhati University, Guwahati – 14 (Assam)

Santi Gopal Maji

Editorial board member in "Journal of Human Resource Management", Science Publishing Group, New York, USA.

Other Activities Nagari Mohan Panda

Participated as a resource person and delivered a talk titled "Innovation in SMEs in North East India: Present Status and Future Challenges" in two days National seminar on "Entrepreneurship and Business Innovation in North –East India: A Gap in Micro and Small Industries" organised by Department of management, NEHU, Tura campus during 16th-17th, November, 2018.

Participated in the National Level Seminar organised by PG Department of Commerce, Fakir Mohan College (Autonomous) as the Key note Speaker on 11. 1.2019 and delivered a talk "Entrepreneurial on Behaviour: The call of the Day" at Balasore. Participated as a resource person and delivered talk titled "Role of а Entrepreneurship and Innovation in Development of Rural Areas in Western Odisha" organised by Department of Commerce, Govt. College Koraput on

30.1.2019. Participated as a resource person and delivered a talk titled "Behaviour needed to become a Successful Entrepreneur" organised by The Department of Business Administration, Central University of Odisha, Koraput on 31.1.2019. Participated as a Resource Person in a Three Day Workshop on "Preparation of Handbook on Innovation and Entrepreneurship Development for North East Region of India" organised by Department of Education in Social science, NCERT, New Delhi during 14-16, Jan, 2019.

K. C. Kabra

Delivered a lecture titled "Career in Commerce" under Orientation Programme on 16th Aug 2018 at the Department of Commerce, University of Science and Technology, Baridua, Meghalaya

Santi Gopal Maji

x 0
Participated and delivered lecture as
resource person in the refresher course on
Commerce, Management and
Economics at UGC-HRDC, Ranchi
University on November, 20, 2018.
Reviewer of-
International Journal of Emerging Markets
(Emerald)
International Journal of Indian Culture and
Business Management (Inderscience)
Journal of Financial Economic Policy
(Emerald)
International Journal of Learning and
Intellectual Capital (Inderscience)
International Journal of Correspondence Strategy

International Journal of Corporate Strategy and Social Responsibility (Inderscience)

DEPARTMENT OF ECONOMICS

Head	: Prof. B. Mishra
Telephone	: 2723178(O), 2550391/2726178 (R)
E-mail	: bmishra_nehu@hotmail.com
Website	: http://nehu-economics.info

Faculty : 12

Designatior	Name and Qualification	Specialization
	Dr.N. Srivastav, M.A (Rajasthan) Ph.D. (IIT Kanpur)	Industrial Economics
	Dr.E.D. Thomas, M.A, Ph. D (NEHU)	Macroeconomics, International Economics & Rural Economics Human Development, Women
Professor	Dr.P. Nayak, M.A (Utkal)., Ph.D (IIT Kharagpur)	Empowerment
	Dr.B. Mishra, M.A., Ph.D (Utkal)	Public Economics, Political Economy, Fiscal and Budgetary Theory
	Dr.U.K. De, M.Sc., M. Phil, Ph.D. (Burdwan)	Applied Econometrics, Environmental and Resource Economics, Agricultural Economics, Development Economics, Empowerment of Women
	Dr.B. Panda, M.A (Utkal), M. Phil (Berhampur), Ph. D (Utkal) S. Umdor, M.A., Ph. D. (NEHU)	Development Economics, Act East Policy and Rural Development Development Economics, North East Economy, Local Government Finance
Associate Professor	Dr.P.S. Suresh, M.A., M. Phil (S.V. Univ.), Ph.D.(Hyd.)	Financial Economics
	Dr.W. Tariang, M.A., Ph. D (NEHU)	Agriculture Economics, Gender & Poverty
	Dr.D. Nongkynrih, M.A, Ph. D	Development issues related to North East
Assistant	(NEHU)	India – Employment, Unemployment.
Assistant Professor	Dr.D.W. Thangkhiew, M.A., Ph.D.	Macroeconomics
	(NEHU) Dr.V. Pala, M.A., Ph.D. (NEHU)	Poverty analysis, Labour market studies, intergroup disparities.

Thrust Areas of Research:

Public Economics and Local Finances, Economics of North East India with emphasis on Upland Economy,Rural Development, Human Development,Financial EconomicsEnvironmental Economics

Brief Statement of Academic Activities:

During year, the the Department concentrated on its Post-Graduate teaching programmes and research. The faculty members participated in a number of regional. national and international Seminars/Conferences. The department had organized Training Programme on Skill Development of Women for Employability and Entrepreneurship for North East Region.

25th to 28th March, 2019. This Training programme was attended by more than 35 partoicipants from different disciplines of the University. Further, to enrich the academic exposure of our students, two of the 3rd semester students i.e. Miss Soreni Odyuo and Miss Ingrid Danica K. Rynjah visited Japan under the IRIS programme of the Government of Japan from 26th January 2019 to 3rdFebruary 2019. Another attainment of the department was the awarding of annual scholarships to ten meritorious ST students of the 3rd semester batch by the EXIM bank of India for the year 2018-19. Faculties of the department had visiting /collaborative assignments with eminent institutes like Panjabi University, Patiala and Vidya Sagar University, Medinapore, West Bengal.

Students Profile:

Enrolment Capacity: M.A/ M.Sc. - 56, Ph.D. - Variable

Degree	Mal e	Fem ale	SC	ST	GE N	OB C	NR A	Meghala ya	Non- Meghalaya	Total
M.A	17	39	1	48	7	-	-	38	18	56
Ph. D	4	6	-	7	3	-	-	6	4	10
Degree Awarded										

Degree	SC	ST	GEN	OBC	Male	Female	Meghalaya	Non- Meghalaya	Total
M.A	2	38	5	2	20	27	26	21	47
M. Phil.	-	-	-	1	-	1	-	1	1
Ph.D	-	3	4	-	5	2	1	6	7

Students Awarded Ph.D. Degree: 8

Placement of Students: NA Research Fellowship:

CSIR- UGC- NET	UGC Non-Net	Rajiv Gandhi SC/ST		Meritorious Malana Azad Minority	ICSSR Fellowship	NFST Fellows hip
(JRF)				Fellowship		
6	14	1	-	-	3	2

Field work/Educational Tour of Students

Teacher-in-Charge: Dr. W. Tariang & Prof. E. D. Thomas Places/ Institutions visited: Mumbai & Goa

Duration of Tour: 7^{th} -18th January, 2019 – 12 days

Purpose of Tour: To study the working condition of industrial workers of Industrial Units in and around Mumbai

Courses Conducted: *Postgraduate* (M.A)

Semester-I: Microeconomics Analysis-I, Macroeconomics-I, Mathematics for Economists, Economics of Growth & Development-I, Classical Political Economy.

Semester-II: Microeconomics-II,

Macroeconomics-II, Techniques of Statistical Analysis, Economics of Growth & Development-II.

Open Course: Budgetary Theory & Practice, Econometrics-I.

Semester-III: Elementary Econometrics,

International Economics, Industrial Economics.

Open Course: Economics of Agriculture, Economy of North-Eastern Region. **Semester-IV:** Fundamentals of Financial Markets, Indian Economic Problems and Policy, Environmental Economics, Economics of Social Sector, Public Economics.

M. Phil/Ph.D. Courses:

Research Methodology in Economics, Contemporary Economic Issues, Review of Literature

Seminars/Conferences/Symposia/Workshop s/Extension Programmes etc.: *Organized*:

Prof. B. Mishra organised aWorkshop on All India Survey on Higher Education (AISHE) on 27.04.2018 as Coordinator, sponsored by Ministry of Human Resource Development (MHRD) in collaboration with North-Eastern Hill University. Workshop on *Sankalph Se Siddhi* Mission.13th July, 2018, NEHU, Shillong.Joint Coordinator - Dr. Deigracia Nongkynrih. Organised by NCPCR, Government of India, SCPCR, Meghalaya, State Education Department, Government of Meghalaya and NEHU, Shillong.

Training Programme on *Skill Development* of Women for Employability and Entrepreneurship for North East Region. 25th to 28th March, 2019. Coordinator- Dr. Deigracia Nongkynrih. Organised by Department of Economics, NEHU and VVGNLI, Noida,

Management Development Programme for 1997 &1999 Batch of Indian Revenue Officers. 29th -30th March, 2019. ICSSR-NERC, NEHU, Shillong.Coordinator- Dr. Deigracia Nongkynrih. Organised by the Office Dean, SEMIS, NEHU, Shillong and Supported by NACIN, Shillong.

Attended:

Prof. B.Mishra was invited as a Resource Person to deliver a lecture on 'Entrepreneurship and Innovation: Lessons from Abroad "in the Training Programme on Skill Development for Employability and Entrepreneurship, organized by Department of Economics in collaboration with V.V. Giri National Labour Institute , 26th March, 2019.

Prof. B.Mishra was invited as a Resource Person to deliver a keynote Address in the National Seminar on 'Human Development in India with Special Reference to North Eastern Region: Emerging Issues and Policy Paradigms " at S. S. College , Hailakandi, Assam, 10th April, 2018

Prof. B. Mishra attended a Workshop on "UGC Quality Mandate in HEI's". organised by the Teaching Learning Cenmtre, Madan Mohan Malaviya Mission on Teachers and Teaching (PMMMNMIT), at Central University of Rajasthan, Jaipur, 9th -10th September,2018.

Prof. B. Mishra attended and participated a three weeks Training programme on "Leadearship for Academicians Progamme (LEAP)" as a MHRD Nominee at IIT, Kanpur from 19th November to 30th November, 2018 and at NTU, Singapore from 3rd December to 8th December,2018.

Prof. Bhagirathi Panda, presented the panellist paper entitled "Act East Policy, India's North East and ASEAN: Issues in Economic Integration" in the National Brainstorming Session and Panel Discussion "Revisiting Asian on Connectedness: India and ASEAN Relations in 21st Century" organised by ASEAN Study Centre, ICSSR-NERC, Shillong on 8th August 2018.

Prof. Bhagirathi Panda Presented the resource person's paper entitled "Business and Change: The Reality and the Response" in the North East Management Conclave on "Leadership in the Age of Disruption" organised jointly by All India Management Association and Guwahati Management Association on 21st August 2018 in ITA Centre, Guwahati.

Prof. Bhagirathi Panda Presented the resource person's paper entitled "Social Entrepreneurship and the Evolving Nature of Economic Development: An Analysis" on 20th October 2018 in the International Conference on "Economic Research" organised by Alanya Aladdin Kekubat University, Alanya, Turkey from 19-20th October 2018.

Prof. Bhagirathi Panda chaired the academic session 3A in the in the International Conference on "Economic

Research" organised by Alanya Aladdin Kekubat University, Alanya, Turkey from 19-20th October 2018.

Prof. Bhagirathi Panda presented an invited paper "Act East Policy, Regional Economic Integration and Contextualisation of Industrialisation: An Analysis of India's North Eastern Region" in the international conference on the theme "Planning for Industrialization in 21st Century" organised by the department of Economics, Punjabi University, Patiala in November 15-16, 2018 held at Punjabi University Campus, Patiala.

Prof. Bhagirathi Panda delivered an invited talk titled "Rural Non-Farm Economy and Economic Development: Theory and Practice" to the faculty and students in Punjabi University, Patiala, Punjab on 19th November 2018

Prof. Bhagirathi Panda acted as a resource person in a seminar in BB College, Chandikhol, Odisha on 4th January 2018 and delivered the resources person's lecture entitled "Economic Development: An Anecdote of its Concept, Approach and Practice.

Prof. Bhagirathi Panda Chaired the academic session of the 20th Conference of the North Eastern Economic Association organised by the Department of Economics, Dibrugarh University held in the campus of Dibrugarh University, Assam on 8-9th March 2019.

Prof. Bhagirathi Panda Presented the resource person's paper entitled "Social Entrepreneurship and its relevance in the Economy of NER" on 26th March 2019 in the workshop on Skill Development for Employability and Entrepreneurship organised by the Department of

Economics, NEHU, Shillong from 19-20th October 2018.

Dr Deigracia Nongkynrih presented a paper on "Customary Practices among the Khasi Tribe of Meghalaya in relation to Land" at the Seminar on "Agrarian Crisis, Rural Credit and Employment in North East" Organised by OKDISCD, Guwahati and Department of Economics, NEHU, Shillong, $23^{rd} - 24^{th}$ February, 2018.

Dr Deigracia Nongkynrih presented a paper on"Economic Diversification in Rural Meghalaya" at the 19th Annual Conference cum National Seminar of NEEA on "Structural Transformation and Economic Development in North East India" Organised by Department of Economics, NEHU, Shillong, 23rd – 24th March, 2018.

Prof. N. Srivastav attended as a resource person and presented a paper on "RAF: an opportunity for better Quality Assessment of Higher Education"; at the V Technical Session of the two-day Seminar on 'NAAC Revised Accreditation Framework: Challenges and Opportunity with Special Reference to North-eastern Region', organized by the IQAC, Shillong College, Shillong on 23rd and 24th August 2018; Prof. N. Srivastav delivered the key note

address as the Guest of Honor on 'Data Collection and Analysis' at the Valedictory session of 10 days Research Methodology Course jointly organized by BB Ambedkar Central University and the Association of the Socio-Economic Development Studies, Lucknow (U.P.) sponsored by the ICSSR, New Delhi on November 02, 2018;

Prof. N. Srivastav Presented with Joel Basumatary a paper on "Poverty Impact of Out-of-Pocket Expenditure on Health Care in Rural Assam" at the Seventh Annual Conference of Indian Health Economics and Policy Association (IHEPA)organized by the Gulati Institute of Finance and Taxation (GIFT), Trivandrum, Kerala: 24-25 January, 2019;

Prof. N. Srivastav attended as a resource person and presented a key note address on, "Role of New Accreditation Quality Paradigm of NAAC: Challenges and Opportunities for the Higher Educational Institutions", at the inaugural session of the two-day national seminar on 'New Quality Paradigm in NAAC Accreditation', organized by the IQAC, ADFP College, Nagaon, Assam on March 01, 2019 (abstract published);

Prof. N. Srivastav attended as a resource person and chaired the first technical Sessionat the two day North East Economic Association 20th Annual Conference on 'Industry and Trade in North East India: The Path Traversed and the Way Ahead', organized by the Dibrugah University, Dibrugarh, Assam on March 08-09, 2019.

Dr. V. Pala presented a paper entitled "Human Development in the North-Eastern Region of India: Identifying priorities for public policy" in the UGC-SAP National Seminar on Public Policy, Governance and Development in Northeastern States, organized by Political Science Department, NEHU, Shillong, 13th – 15th March 2019.

Dr. V. Pala presented a paper entitled "Role of Khasi - Pnar Women as Community Builders and Peace Makers", at the National Seminar on *The Role of Women in Peace Processes*, organised by North Eastern Social Research Centre (NESRC), Guwahati, 2nd - 3rd November, 2018.

Prof. U.K. De Presented a paper with Christopher P.P. Shafuda, on "Government

Spending and Socio-Economic Development in Namibia" in a seminar on "Centralized and Decentralized Banking: A Study of the Risk-Return Profile of Banks" and "Government Spending and Socio-Economic Development in Namibia" at the Bangladesh Institute of Bank Management, Dhaka on 25-11-2018.

Prof. U.K.De Presented an paper with Christopher P.P. Shafuda, on "Government Spending and Socio-Economic Development in Namibia" in a seminar on "Centralized and Decentralized Banking: A Study of the Risk-Return Profile of Banks" and "Government Spending and Socio-Economic Development in Namibia" at the Bangladesh Institute of Bank Management, Dhaka on 25-11-2018.

Prof. U.K.De as Resource Person presented a special paper on "Risk Reduction through Adaptation to Climate Change and Diversification of Crop for Sustainable Agriculture in Eastern Himalaya" in the UGC SAP (DRS-I) Supported International Seminar on Sustainable Development of Backward Regions with Special Reference to Issues of Resource Management in West Bengalduring 27-28 March, 2019 Also chaired the Inaugural Session and another session on Inclusive and Sustainable Development: A Study with Special Reference to Backward Areas of West Bengal

Prof. U.K.De attended and chaired a session on "History, Migration & Social Movement" in the International Seminar on Community & Cultural Multiplicity in North East India & South Asia: Ethnography, History & Society organised by North East India Council for Social Science Research on 20-22 May, 2019. Prof. U.K. De as Resource Person delivered a talk on Important Aspects of Report Writing in a workshop on "Report Writing" for the research students at the University of Science & Technology, Meghalaya (USTM) on 29 September 2018.

Prof. U.K.De as Resource Person delivered two lectures on "Cost Effectiveness and Cost Utility Analysis" and "Critical Analysis of a Health Economic Study" in the Workshop on *Health Economics and Outcome Analysis* organised by the Department of Pharmacology, NEIGRIHMS Shillong during 22-23 February 2019.

Prof. U.K.De as invited speaker presented a paper on "Climate Change and Agricultural Productivity in India's Eastern Himalayan Region" in the ICSSR-ERC National Conference on *Challenges of Twenty First Century Management: Technology, Environment and Gender* Organised by Heritage Business School and Durgapur Women's College on March 29-30, 2019.

Prof. S.Umdor presented a paper entitled 'Functioning of Autonomous District Councils In Northeast India: A review of the Finances of the Councils', in the XIX Annual Conference of the Indian Association of Social Science Institutions held during on 11-13 January 2019 at the National Institute of Rural Development & Panchayati Raj, Hyderabad

Prof. S.Umdor presented a paper entitled 'Delivering Good Governance in Autonomous Councils in Northeast India: Exploring the Missing Link' in UGC- SAP National Seminar on Public policy, Governance and Development in North Eastern States, organized by Political Science Department, NEHU during March 13-14, 2019 at NEHU Shillong.

Prof. S.Umdor attended as resource person and made a presentation on the Entrepreneurial Finance in a workshop on Skill Development for Employability and Entrepreneurship organized by Department of Economics, NEHU, Shillong on 27 of March 2019, organized by Department of Economics, NEHU and VVGNLI, New Delhi.

Prof. S.Umdor attended National Workshop on Leadership Development in for Higher Education University Administrators organized by National Institute of Educational Planning and Administration (NIEPA) during 7-9 January, 2019 at New Delhi

Dr.W.Tariang Participated in a two day workshop on "Adoption, Promotion and Development of MOOCS through SWAYAM platform" organised by North-Eastern Hill University, Shillong on 28th and 29th May 2019.

Publications

Hassan,S.U and Mishra, B. (2018). Fiscal Tribal Dilemma: Imbalance in Protectionism and Optimum Resources Utilization Policies in North Eastern States of India. Economic Affairs, *66(3)*, *pp*.729-740,

Hassan,S.U., Mishra, B. (2018). Does an Economic and Political affairs matter in determining the Tax revenue of Jammu and Kashmir State (India): An Approach through VECM Model.Iranian Economic Review, *American Economic Association*, 22(2), pp.471-501

H.assan,S.U., Mishra, B. (2018). Spending mechanism and population Dimensions:

An Econometric approach. Asian Journal of Management Applications and Research,8(1), pp.342-355.

Talukdar, M.K, Mishra, B. (2018).

"Contextualising Income Growth Against the Backdrop of Public Expenditure Aggregates : A Case Study of Assam for the Period 1980- 2014" Asian Journal of Multidimensional Research, Vol. 7 (9),pp.181-197.

Roy, Chhanda Saha., Panda, B.(2018).MGNREGA and Women's Empowerment: A Study of Bodoland Territorial Area District in Assam. International journal of Basic and Applied Research. 8(7): 395-408

Srivastav N. and Basumatary J. (2018) "Analysis of the out-of-pocket Expenditure on Health Care in the Rural Chirang District of Assam", International Journal of Social Science and Development Policy, Vol.4, No.1, January- June, pp. 59-71 Srivastav N. and Shohe S.O. (2018) Security Concerns "Financial for Healthcare among Elderly People Rural Areas: a Case Study of Tribal Community in North-East India" Indian Journal of Economics and Development, Vol 6 (8), August; pp-1-7

Srivastav N. and Shohe S.O. (2018) "Work Participation among the Elderly People Living in Rural Areas in India: a case Study on Determinants" Indian Journal of Economics and Development, Vol 6 (11), November; pp-1-9

Basumatary, J. and Srivastav, N. (2019), "Quality of Rural Public Health Care Services in NER of India: Analysis from User's Perspective", Indian Journal of Economic Development, January, Vol.7 (1), pp-01-09. Rajbongshi, G. and De, U. K. (2019). Severity of Road Accidents in India and Its Underlying Causes. *Journal of NEICSSR*, 43(1): 89-102, (ISSN: 0970-7913).

Shafuda, Christopher P. and De, U.K. (2019). Upshot of Public Health Expenditure on Economic Development. *Journal of NEICSSR*, 43(1): 103-114, (ISSN: 0970-7913).

Dkhar, D.S. and De, U.K. (2018). Public expenditure on Agriculture and Economic Growth: A Case Study of Meghalaya. *Agricultural Economic Research Review*, 31(2), 271-279, (DOI: 10.5958/0974-0279.2018.00044.7) (ISSN: 0971-3441, Online: 0974-0279).

De, U.K (2019). Regional Integration and Trade of India and Bangladesh with ASEAN Countries: An Empirical Investigation. The Comilla University Journal of Social Science, 1(1), 1-18. De, U.K. and Dkhar, D. S. (2018). Public Expenditure and Agricultural Production in Meghalaya, India: An Application of Bounds Testing Approach to Co-Integration and Error Correction Model. International Journal of Environmental Sciences & Natural Resources, 8(2): 01-08, (ISSN: 2572-1119), DOI: 1019081/IJESNR.2018.08.555735

De, U.K. (2018). Road Infrastructure and Agricultural Development: A Policy Intervention in a Backward Rural Economy. *Society & Change*, XII(2): 45-75, April-June, (ISSN: 1997-1052 (Print), 227-202X (Online)).

De, U. K. and Vupru, V. (2019).Role of Neighborhood Socio-Cultural & Religious Homogeneity in Housing Choice at Dimapur Town, India.*Journal of* *Developing Areas,* 53(2): 123-138, (*ISSN.* 1548-2278 (Print), 0022-037X (Online)).

George, S., Suresh, P.S. (2018). Long Memory in Indian Equity Market: Detrended Fluctuation Analysis. Indian Journal of Research in Capital Markets, 5(3), 7-18.

George, S., Suresh, P.S. (2018).Dependency in Price Discovery Process in Indian Equity Market. Pacific Business Review international, 10(9), 91-99.

Nongkynrih, D. (2018). Socio-Economic Status of Urban Educated Unemployed Youth in Meghalaya.*Labour & Development*, 25(1):107-123.

Nongkynrih, D. (2018). Youth Unemployment in Meghalaya: A Synoptic View of Educated Unemployed. *Man and Society: A Journal of North-East Studies*, XV:.31-44.

Khongji, P., Nongkynrih, D. (2018). Labour Supply and Unemployment Projections for North East India (2011 – 2031). Arthshastra, Indian Journal of Economics and Research, 7(6):.30-42.

Pala,V.& Sangma,P.D.(2018).DeterminantsofWomen'sParticipationinAgricultureinIndiawith special focus on the Role ofEducation.International Journal of SocialScienceandEconomic Research, 3(6):2771-2782.

Books/Book Chapters/Proceedings *Published abroad:*

George, S., Suresh, P.S. (2018).Trading Behavior of Investor Categories and its Impact on Indian Equity Market.In : Advances in Finance and Applied Economics. N.R. Bhanumurthy., K. Shanmugan., K.S.S. Nerlekar., and S. Hegade (Eds.). Springer, Singapore, pp. 185-195.

Panda, B.(2018). Rural Non-Farm Employment in North-East India: A Temporal and Spatial Analysis. In: *Employment and Labour Market in North-East India :Interrogating Structural Changes*.Virginius Xaxa, Debdulal Saha, Rajdeep Singha(eds). Routledge, New York Chapter XI, Page 319-344.

Published in India:

George, S., Suresh, P.S. (2019). A Regional and State-wise Comparative Analysis of Directed Credit Program in India.In :Development and Deprivation in the Indian Sub-continent (pp.56-83). De, U.K. and Pal, M (Eds.), India: Levant Books.

George, S., Suresh, P.S. (2018).Digitalization, Demonetisation and Stock Market: An Indian Experience. In : T.Deka and R. Khataniar (Eds.), GST. Demonetisation and Development (pp. 60-86). Visakhapatanam, India: Global Publishing House (India).

Panda, B. (2018), editor. (2017). Proceedings of 19th Annual Conference of North East Economic Association on (i) Entrepreneurship and Campaigns of Skill India, Start-Up India and (ii) Structural Transformation of the North Eastern Economy, Eastern Panorama publications, Shillong, ISBN: 978-938-812-902-2.

Panda, B.(2019). Act East Policy and Economic Development of the North East: A Conceptual Analysis. In: *Border Trade in North East India: A politico-Economic Perspective*. M.B.Das and R.Das(Eds.). Indu Book Services, New Delhi, Chapter 8, p. 66-74. Basumatary, N., Panda, B.(2018). Governance and Economic Developmental outcomes in Assam: A District Level Analysis. In: Proceedings of 19th Annual Conference of North East Economic Association and National Seminar on (i) Entrepreneurship and Campaigns of Skill India, Start-Up India and (ii) Structural Transformation of the North Eastern Economy, Eastern Panorama Publications, Shillong, ISBN: 978-938-812-902-2

Thomas, C.J., Nongkynrih, D. (2018). North-East of India and BIMSTEC: A Reality Check. In: *Twenty Years of BIMSTEC: Promoting Regional Cooperation and Integration in the Bay of Bengal Region.* Prabir De (Eds.), KW Publishers, New Delhi, p.193-211.

Nongkynrih, D. (2018).Economic Diversification in Rural Meghalaya. In Proceedings of 19th Annual Conference of NEEA and National Seminar on Structural Transformation and Economic Development in North East India. Eastern Panorama Publications, Shillong.

Nongkynrih, D. (2019). Potential for Ecotourism Circuits in Meghalaya^{: An} ^Exposition. In: *Emerging Dynamics of Indian Tourism and Hospitality*. U.N.Shukla and S. Kulshreshtha (Eds.).Copal Publishing Group, Uttar Pradesh, p.225-237.

Srivastav N. and Shohe S.O. (2018) "Income Status and Economic Security of the Rural Aged People in Nagaland" published in the Seminar proceedings of 19th Annual Conference of North-East Economic Association, Eastern Panorama Offset, Shillong; pp? Srivastav N. and Basumatary J. (2018) "Catastrophic Expenditure due to out-of-Pocket Health Care Payments and its Determinants in Assam" published in the Seminar proceedings of 19th Annual Conference of North-East Economic Association, Eastern Panorama Offset, Shillong; pp?

Srivastav, N. (2018). "Problems of Industrial labour", in S. K. Borkakoti (ED.) *Problems of Industrial Labour in Assam*, Ajanta Press: Assam, 11-19 (ISBN: 978-93-81694-58-9);

De, U.K. and Pal, M. (Eds).(2019). Development and Deprivation in Indian Sub-Continent, Levant Books, Kolkata, (ISBN 978-93-88069-19-9).

De, U.K. and Bharati, P. (Eds). (2019),*Health and Healthcare in Indian Sub-continent: Special Focus on North-East India*, Concept Publishing Company, New Delhi(ISBN 978-93-86682-84-0).

De, U. K. (Ed). (2019). Resource and Development in India – Special Focus on Tourism, Entrepreneurship & Natural Resources of North-East, Concept Publishing Company, New Delhi (ISBN 978-93-86682-75-8).

De, U. K. and Ghosh, B. N. (Eds). (2018). Deprivation, Development and Empowerment of Women in India: North-East Perspectives, Bookwell, New Delhi (ISBN:978-93-86578-28-0).

Das, N., De, U.K. and Deori, S. (2019). Characteristics of Tourists in Nameri National Park, Assam: An Assessment. in U.K. De (Ed.) *Resource and Development in India: Special Focus on Tourism, Entrepreneurship and Natural Resources of North East,* Concept Publishing Company Pvt. Ltd., New Delhi, pp. 3-26, (ISBN: 978-93-86682-75-8).

U.K. De, and Nongbri, J. (2019).Expectation of Tourists in Meghalaya and the Effect of Experience on their Visiting Decision. in U.K. De (Ed.) Resource and Development in India: Special Focus on Tourism, Entrepreneurship and Natural Resources of North East. Concept Publishing Company Pvt. Ltd., New Delhi, pp. 65-77, (ISBN: 978-93-86682-75-8).

De, U.K. (2018). Scope of Women Empowerment through Self-Help Group in Informal Activities: A Case of Jharkhand. in B. Rit, M. Kanjilal and B. Dasgupta (Eds.), *Globalisation and the Unorganised Sector in India*, Jogesh Chandra Chaudhuri College, Kolkata, Pp. 34-50, (ISBN: 978-8192-407531).

Swer, S. M and Umdor, S (2018): Overview of Rural Credit Markets in Northeast India, In Proceeding of the 19th Annual Conference of Northeast Economic Association and National Seminar on (i) Entrepreneurship and Campaigns of Skill India, Start-Up India, and (ii) Structural Transformation of the North Eastern Economy, Eastern Panorama Publications, Shillong, ISBN:978-938-812-902-2

Hrahsel, A. L and Umdor, S (2018): A Temporal Analysis of the Growth of Manufacturing Industries in Northeast India during 1980-81 to 2014-15, In Proceeding of the 19th Annual Conference of Northeast Economic Association and National Seminar on (i) Entrepreneurship and Campaigns of Skill India, Start-Up India, and (ii) Structural Transformation of the North Eastern Economy, Eastern Panorama Publications, Shillong, ISBN:978-938-812-902-2

Title of the Project	PI/Co-PI	Funding Agency	Amount(Rs.)
Identifying Pathways Out of	PI: Prof. Amaresh	Indian Council of	Rs. 40,00,000/-
Durable Inequalities	Dubey, CSRD, JNU	Social Science	
_	Co-PI: Dr. K. K.	Research, New	
	Mishra, BHU, Prof.	Delhi	
	R. Pandey, BHU, Dr.		
	G. Sridevi,		
	University of		
	Hyderabad and Dr.		
	V. Pala, NEHU		

Research Projects: Ongoing Research Projects

Academic Collaboration: Panjabi University, Patiala and Vidya Sagar University, Medinapore, West Bengal.

Honours/Awards/Recognitions

Prof. Bhagirathi Panda was made a member of the editorial board of the NEHU Journal in 2018. Prof. U. K. De is appointed as the

Visiting Professor under SAP (DRS-I), Department of Economics, Vidyasagar University, Midnapore, West Bengal, 23/03/2019 to 29/03/2019. Prof. U. K. De was elected as Vice President of North-East India Council for Social Science Research, Shillong since

2017.Prof. U. K. de was appointed as the Editor of Climatology and Weather Forecasting,International Journal of Environmental Sciences &Natural Resources. Prof. U.k.De was appointed as a member of International Advisory Board for the journal – Annals of Statistical Theory and Applications.

Other Activities:

Prof. Bhagirathi Panda was appointed a visiting professor, in the department of economics, Punjabi University, Patiala and in this capacity delivered lectures and interacted with the students and faculty from 16-21st November 2018.

Prof. Bhagirathi Panda on 17th July 2018 interacted through video-conferencing with NITI Aayog and other heads/their representatives of 15 chosen national Institutions on the topic of engaging NEHU for the purpose of providing third party validation for relevant best practices that have been uploaded on the India Knowledge Hub (http://www.indiaknowledgehub.gov.in) portal of NITI Aayog.

Prof. Bhagirathi Panda was a reviewer to (i) the journal of borderland studies, Rutledge 2018 and (ii) Journal of Social Change and Development, OKDISCD, 2018.

Prof. Panda delivered two lectures entitled 'Globalisation and Economic Development' and "Globalisation, Regional Economic Integration and Act East Policy: The Case of the North East India" in the Refresher Course on State and Globalisation organised by Political Science Department, NEHU on November 2018, (ii)Participated as an invited academician in a roundtable discussion of India-Japan Third Space Conversation Series on the theme "Japan-India Cooperation on Connectivity: Reflections from North East India" held on 21st September 2018 at Asian Confluence Centre, organised by Asian

Confluence Centre, Shillong, (iii)Participated as an invited academician in an interactive roundtable discussion with Ms. Patricia L. Hoffman, Consul General, USA in Kolkata on the topic "India USA Partnership for a Prosperous Indo Pacific" on 28th February 2019, organised by Asian Confluence Centre, at Asian Confluence, Shillong, (iv) Participated as an invited academician in an interaction session on the theme "North East India: From Land Locked to water linked land-bridge-exploring the BIMSTEC Mechanism" led by the Ambassador Shahidul Islam, secretary general, BIMSTEC held on March 17, 2019 at Asian Confluence, Shillong, (v) Participated as an invited academician in a two days roundtable discussion on Issues of Fiscal Federalism in India organised by OKD Institute of Social Change and Development, Guwahati in collaboration with the National Institute of Public Finance and Policy (NIPFP), New Delhi held during March 27-28, at hotel Vivant, Guwahati.

Dr Deigracia Nongkynrihacted asResource Person for National Seminar on "Consolidation and Challenges of Tourism: The Road Ahead" Organised by Shillong Commerce College, Shillong, 7th - 8th September, 2018, (ii) was anInvited Panellist in the Workshop "Status of Women's Studies in North East India", Organised by OKDISCD, Guwahati, 18th -19th January, 2019, (iii Chaired two sessions at the Workshop "Status of Women's Studies in North East India", Organised by OKDISCD, Guwahati, 18th -19th January, 2019, (iv) acted as Resource Person for Training Programme on "Skill Development of Women for Employability and Entrepreneurship for North East Region" Organised by Department of Economics, NEHU and

VVGNLI, Noida, 25th to 28th March, 2019.

Prof. N. Srivastav (i) delivered a guest lecture on 'Economic Life of Elderly', to the training work shop for Longitudinal Ageing Study in India (LASI) organized by MRSSIndia for International Institute for Population Studies, Mumbai sponsored by the Ministry of Health and family Welfare, GOI, New Delhi on May 26, 2018; (ii) delivered a lecture on 'The Quality Parametersin Higher Education in India' in the 44th UGC-HRDC sponsored Orientation Program organized by the UGC-Human Resource Development Centre, NEHU, Shillong, on July30, 2018; (iii) delivered a lecture on 'The Role of NAAC in Quality Assessment of Higher Education and the Role of NAAC' in the 45th UGC-HRDC sponsored Orientation Program organized by the UGC-Human Resource Development Centre, NEHU, Shillong, on August 20, 2018; (iv) Member to the Administrative Audit Committee at the Lady Keane College, Shillong and conducted two days audit on November 19-20, 2018, prepared and submit the report; (v)delivered a lecture 'Environmental Economics: Some on Contemporary Issues' in the refresher Course on Earth Science and Natural Resource Management organized by the Department of Geography and sponsored bv the UGC-Human Resource Development Centre, NEHU, Shillong, on November22, 2018;(vi) delivered a lecture on 'The Role of NAAC in Quality Assessment of Higher Education : The Revised Accreditation Framework", in the 46th UGC-HRDC sponsored Orientation Program organized by the UGC-Human Resource Development Centre, NEHU, Shillong, on February 15, 2019;(vii) delivered a lecture on 'The Revised Accreditation and Assessment Framework

of NAAC: Challenges for the Higher Educational Institutions",in the 47th UGC-HRDC sponsored Orientation Program organized by the UGC-Human Resource Development Centre, NEHU, Shillong, on March 15, 2019;

Dr. V.Pala Delivered a lecture on "Human Development in the North Eastern Region of India" at St. Edmund's College, Shillong on 30th March 2019, (ii) Delivered a lecture on "Textbook and Teaching of Economics" in the programme "Training of Key Resource Persons on Textbook Analysis for the states of Manipur and Meghalaya" at North East Regional Institute of Education (NERIE), Umiam, Shillong, 25th to 1st March, 2019, (iii) Delivered a lecture on "Public Policy, Social Exclusion, Unemployment and Sustainable Development" to students of St. Edmund's College, Shillong and Sophia Girls' College, Ajmer at St. Edmund's College Shillong on 6^{th} February 2019, (iv) Resource Person in the programme "Development of a module on textbook analysis" conducted by and held at North East Regional Institute of Education (NERIE), Umiam, Shillong, 27th to 29th November, 2018, (iv) Participated in the Policy Analysis Program Evaluation Workshop and organized by Cornell University, USA and Grassroots Research and Advocacy Movement (GRAAM), Mysore, India at the Institute for Social and Economic Change (ISEC), Bengaluru during 3rd – 18th July 2018.

Prof. U.K.De Delivered two lectures on the topic "Carbon Footprint, Carbon Cycle and Human Intervention" on 30-11-2018 and 01-12-2018 in the Refresher Course on *Earth Science & Natural Resource Management* of the Department of Geography, NEHU, Shillong held during 12th November 2018 to 02nd December, 2018, (ii)Delivered an invited lecture on "Crop Diversity Pattern, Regional Convergence and Climate Change Adaptation in North-East India" on 22nd January (Tuesday), 2019 at 1:30 PM in Mrinalini Datta Mahavidyapith, Birati, Kolkat,

(iii) Acted as Reviewer of the following Journals (a) Journal of Developing Areas, International Journal of Statistical Sciences, (b) Indian Economic Journal, (c) Economic Analysis and Policy, Climatology and Weather Forecasting, Housing Studies, (d)nternational Journal of Rural Management, (v) International Journal of Environment and Sustainable Development, Journal of Development and Agricultural Economics, African Journal of Agricultural Economics, (e)International Journal of Financial Economic Policy, (f)Science Journal of Ecology, Archive of Agronomy and Soil Science.

Dr.W. Tariang (i) accompanied the students of IIIrd Semester, 2018 on a study tour to Mumbai and Goa from 7th January 2019-18the January 2019, (ii) Participated in a two day workshop on "Adoption, Promotion and Development of MOOCS through SWAYAM platform" organised by North-Eastern Hill University, Shillong on 28th and 29th May 2019, (iii) Supervised and assisted in a field survey in connection with the project titled" Impact of Economic Environment and Culture and Empowerment of Women Engaged in Self help Group Activities: A Study of Selected States in North-east India" conducted by Prof. S. Banerjee and Prof. A Dutta, University of Calcutta.

DEPARTMENT OF JOURNALISM AND MASS COMMUNICATION

Head	: Dr. Kamaljit Chirom
Telephone	: 0364-272-3401
E-mail	: kchirom@nehu.ac.in

Faculty : 3

racuity .	5	1
Designation	Name and Qualification	Specialization
	Dr.Kamaljit Chirom, MA, Ph.D. (MU)	Film Studies,
		Communication Research,
Assistant		Culture and
Professor		Communication.
	Dr.Barath N, M.Phil.l, Ph.D. (HCU)	Media and Culture Studies,
		Media and Minorities,
		Development
		Communication
	Shri Karen L. Donoghue, MA	Television Studies, New
	-	Media, Media
		Representation

Thrust Areas of Research

Film Studies, Culture and Media, Television, New Media, Print Culture, Development Communication, Media Representation. Department is running the MA (Journalism and Mass Communication) and the first batch of students passed out in 2016. The Department conducted many activities during 2018-19 period including film festivals, film workshops, photo exhibition programmes, and national seminar.

Brief Statement of Academic Activities

Students' Profile

Enrolment Capacity: MA (Journalism and Mass Communication) - 20

Degree *	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA	10	9	0	16	-	3	13	6	19

Degrees Awarded

Degree *	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA	8	8	0	11	1	4	8	8	16

Seminars/Conferences/Workshops/Symposi a/Extension Programmes

Organized

National Seminar on *Folk Media at the Intersection of Culture and Technology*organised by the Department of Journalism & Mass Communication from 28th February- 1st March 2019. Venue: Science Seminar Hall, NEHU, Shillong. Convener: Dr. Kamaljit Chirom.

10-day Film making Workshop and threeday non-competitive Documentary, Short and Animation Film Festival cum Masterclasses "MIFF in MEGHALAYA", from 25 March-3 April, 2019 at North-Eastern Hill University's Auditorium, Shillong.Organised by the Department of Journalism & Mass Communication, North-Eastern Hill University in collaboration with Films Division, Government of India. Coordinator: Dr. Kamaljit Chirom.

Attended

Dr. Kamaljit Chirom

Presented paper titled "Repressed Dreams and Women in Lipstick Under My Burkha" at the National Seminar on *Media, Women and Culture: The Indian Trijunction* organised by the Department of Mass Communication, Mizoram University on 13-14 September 2018 at Mizoram University, Aizwal.

Dr. Barath N.

Presented a paper titled, "Visual Turn of North-East as an argumentative necessity for the need of new disciplinary trajectories" in a national level seminar "Contesting the Site of Sights: The discourse of Visual media cultures with special reference to northeast India" organized by EFLU Shillong on 10-11th June 2019. Karen L. Donoghue

Presented a paper titled "Reimagining the Northeast: Perspectives on Counterrepresentations" at a National Seminar on Politics of Representation: Dalits, Adivasis and Minoritiesorganised by Institute of Tribal Studies and Research, University of Calicut from 28-30 January, 2019. Presented a paper titled "Mainstreaming the Peripheral: The Northeast on Indian Media" at a N,ational Seminar on Media Representation of Northeast India: Looking Back and Looking Forward organised by Dept. of Mass Communication, Rajiv Gandhi University in collaboration with Rajiv Gandhi National Institute of Youth Development (RGNIYD), Ministry of Youth Affairs and Sports.

Karen L. Donoghue

Delivered a lecture on "Media and Gender" at UGC-HRDC, NEHU on 12th October 2018 for UGS-HRDC Short Term Course in Gender Sensitisation (8th-13th October, 2018).

Publications

Published in India

Donoghue, K. L., and Chirom, K. (2019). Rey, The New Feminine. *Remarking an Analisation*. 3(19): 261-265. Donoghue, K. L. & Hangsing, P. (2019).Northeast on National Media: Issues of Representation, *Ajanta*. 8(1): 14-20.

Donoghue, K.L (2018). Mapping the interface between Facebook and Mizo Adolescents: The Diatribe of "K-Poppers" on Michelle Varte's Wall in: *Media and the Margins*. Ratnamala, V. (Ed.).Pencil books, Chennai, Chapter 5, p. 57-80.

Other Activities

Dr. Kamaljit Chirom

Participated the National Seminar on "Centralisation, Democracy and Dissent: The Role of the media in Contestation and Reconciliation" organised by North Eastern Social Research Centre, Guwahati on 28-29 May, 2018.

Chaired a session at the National Seminar on "Media, Women and Culture: The Indian Trijunction" organised by the Department of Mass Communication, Mizoram University on 13-14 September 2018 at Mizoram University, Aizwal.

Delivered lecture as resource person on the topic "Oral History of the Tribals of Manipur" during the Refresher Course on Tribal Studies at UGC-HRDC, NEHU, Shillong on 5th October 2018.

Participated in the Faculty Development Programme on on "Multimodality, Multimediality in Literature, Cinema and the Allied Arts" organised by Teaching Learning Centre, Ramanujan College, University of Delhi from 1st to 7th August 2018 at Ramanujan College, New Delhi.

Participated in the training programme on "Role of Media in Disaster Management" organised by Meghalaya State Disaster Management Authority in collaboration with Directorate of Information and Public Relations, Government of Meghalaya and Shillong Press Club on 13th October 2018 at Pinewood Hotel, Shillong.

Resource Person at the Film Screening of Japanese films on 16th November, 2018 during the International Cherry Blossom Festival at 5th Polo Ground.

Judge for *Online Short Film Competition* in the Annual NEIGRIHMS UGCON held on 17th, 18th and 19th of August 2018.

Dr. Barath N.

Invited as a resource person for a two day national workshop on Subaltern Cinema conducted by Department of Communication, Mizoram University 19th-20th March 2019.

Invited as a Speaker for a book release event (*Modern Mizoram History, Culture, Poetics*) conducted by Department of Communication, Mizoram University on 18th March 2019

Presented a paper titled, "Visual Turn of North-East as an argumentative necessity for the need of new disciplinary trajectories" in a national level seminar "Contesting the Site of Sights: The discourse of Visual media cultures with special reference to northeast India" organized by EFLU Shillong on 10-11th June 2019

Been awarded Ph.D. after the completion of Viva-voce on 13.11.2018 from the University of Hyderabad.

Invited as a resource person for a two day national workshop on Subaltern Cinema conducted by Department of Communication, Mizoram University 19th-20th March 2019.

Invited as a Speaker for a book release event (*Modern Mizoram History, Culture, Poetics*) conducted by Department of Communication, Mizoram University on 18th March 2019.

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

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Telephone	: +91364 2723149(O) +8416076564 (M)
E-mail	: bikilaloo@rediffmail.com, bikitariang@gmail.com

Designation	Name and Qualification	Specialization
	Dr.Moses M. Naga, MLISc., Ph.D. (NEHU)	Application of Management Concepts and Management
Professor		Principles in Libraries and
		Information Centres,
		Information Literacy
	Dr.Bikika Laloo, MLISc (NEHU), Ph.D	User Studies, Collection
	(Gauhati University), M.A. English (IGNOU)	Development, Library and
		Information Science
		Education, Professional
		Development Activities
		inLibrarianship,
		Documentation of
		Indigenous Knowledge
Associate	Dr.Paokholun Hangsing, MLISc (Delhi), Ph.D.	Media Content Analysis,
Professor	(NEHU)	Digital Libraries, Library
		Consortia, LIS Education
		and Professional
		Competencies
	Dr.Jacqueline Jeane Thabah,	Knowledge Organisation,
	MLISc &Ph.D.(NEHU)	Research Methodology,
Assistant		Competency Studies of Library and Information Professionals
Professor	Dr.JiarlimonKhongtim, MLISc, PGDCA	Computer Applications,
	.Ph.D (NEHU)	Research Methodology.
	Dr.S. Ravikumar, MSc in LISc(Madras), Ph.D.	Scientometrics, Information
		,
	(Mizoram)	Retrieval, Library Software

Thrust Area of Research

Knowledge Organisation, Information Storage and Retrieval, Application of Management Concepts and Management Principles in Libraries and Information Centres, Information/Knowledge Management, Information Literacy and Reading Habits of Students, Tapping, Preservation and Conservation of Indigenous Knowledge of the North-East India, Users' Needs and their Information Seeking Behaviour, Computer Applications and Applications of Information Communication Technology in Managing Libraries and Information Centres, Digital Libraries, Information Management with special reference to Centrally sponsored Rural/Urban Development Schemes in North East India.

Brief Statement of Academic Activities

The Department remained vibrant and active throughout the year under report. Most of its faculty and Ph.D. scholars were academically productive in terms of attendance and paper presentations at seminars and conferences as well as publications in journals of national and international repute. The Department could produce four Ph. Ds during the year under report. The faculty have contributed towards various academic activities, such as seminars, conferences, refresher courses and summer schools.

Students' Profile

Enrolment Capacity: MA/MSc - 30Ph.D. - Variable

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MLISc	15	15	-	30	-	-	26	4	30
MSc									
Ph.D.	3	5	-	5	-	2	3	4	8
Dogwood A	wouda	d							

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MLISc	8	18	-	24	1	-	24	2	27
MSc									
Ph.D.	1	4	-	4	-	1	3	2	5

Students Awarded Ph.D. Degree : 5

Placement of Students- 19 students got placement

Research Fellowships

CSIR-UGC- NET	UGC Non- Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Azad Fellowship	Malana Minority		Others
	5	1				5	1

Fieldwork/Educational Tour of Students

Teacher-in-Charge: Dr. Jacqueline J. Thabah

Places/Institutions Visited: Bangalore and Mysore

Christ University Library, Indian Institute of Management, Indian Institute of Science, Raman Research Institute, National Law School, Bangalore University Library, Mysore Library

Duration of Tour:14 days

Purpose of Tour: The study tour is part of the regular academic programme/Credit Course - Paper C-205 : Library House Keeping Operations.

To earn full credit in this paper, students are required to visit various types of libraries, get exposed to the different library environment and acquire knowledge about those libraries. Students are also expected to collect vital information and submit a report during 2^{nd} semester examination.

Courses Conducted

Postgraduate

Semester I: Foundations of Library and Information Science; Knowledge Organization I

(Theory);Knowledge Organization I (Practice);Information Sources and

Services; Foundation of Computer Application.

Semester II: System Analysis and Design; Knowledge Organisation II (Theory); Knowledge Organisation II (Practice); Library Software Package (Theory and Practice); Library Housekeeping Operations.

SemesterIII:InformationRetrieval;ResearchMethodology;CollectionDevelopment;DatabaseManagementSystem;InformationCommunication Technology.

Semester-IV: Management of Library and Information Systems; Digital Libraries; E-

Learning and Content management System (Theory and Practice); Information Sources and Services (Practice); Dissertation.

M.Phil./Ph.D. Courses

Research Methodology in Library and Information Science, Advances in Library and Information Management, Trends in Libraries and Librarianship, Advances in Information System Studies, Review of Literature

Seminars/Conferences/Workshops/Symposi a/Extension Programmes *Organized*

Bikika Laloo

Organised a One Day Awareness Programmeon Health Literacy in Rtiang village, Umsning, Ri Bhoi District, in August 2018, along with Miss Deity Kharakor, Research Scholar and Dr. Mebarisha Wolflang, (ex-phycisian Robert Hospital, Children's Hospital and NIT Shillong). Distributed questionnaires and pamphlets, had group discussion with villagers and lecture by Dr. Mebarisha Wolflang.

S.Ravikumar, Ph.D

Organised **"National Workshop on Metadata Standard Using OSS Library Management Software"** from March 25th to 31st March, 2018

Attended Bikika Laloo

Attended the Two Day International Conference on "Bridging the Digital Divide — Role of Libraries and Information Centres with Special Reference to the North Eastern Region" 5th- 6th of Sept., 2018, in Shillong College and presented a paper with Jangkhohao Hangsing titled 'Issues in researching on Indigenous Knowledge'

ii. Attended the 'International Conference on Future of Libraries' organized by the IIM Bangalore and ISI Kolkata in IIM Bangalore in February of 2019 and presented a paper with Deity Kharakor on 'Role of Libraries in Imparting Health Literacy in Rural Areas: A Study of Rtiang Village in Khasi Hills of Meghalaya.'

Attended the 36th International Academic Conference, London, UK organized by the International Institute of Social and Economic Sciences (ISES) during 22 May 2018 to 25 May 2018 in London, United Kingdom and presented a paper titled 'It works! Whatsapp as a Supplementary Teaching Tool in Higher Education : A Study of Library and Information Science Education in Meghalaya, India.'

Presentation or Poster. State title of presentation (do not use uppercase initials throughout), along with the name (in italics), place and date of the event. This is meant only for Faculty Members, not students or research scholars]

Jiarlimon Khongtim, Ph.D

Attended a UGC-sponsored Refresher Course on "Disaster Management (Interdisciplinary)"from 12th November to 2nd December 2018organized by the UGC Human Resource Development Centre, NEHU, Shillong-22

Attended a UGC-sponsored workshop on "MOOC's e-content development and open educational resources" from 11^{th} –

16th March, 2019 organized by the UGC Human Resource Development Centre, NEHU, Shillong-22.

Publications:

Published in India/ Abroad:

Hangsing, J. & Laloo, B (2018) "Issues In Researching on Indigenous Knowledge," In: Bridging the Digital Divide – Role of Libraries and information Centers with Special Reference to the North Eastern Region. Lyngdoh, B. (et al...) (Eds.). International Conference held on September 5-6, 2018 at Shillong College, Shillong. 84-86p.

Astuti, P. A. A. and P. Hangsing (2018) "Predicting theBehavior of Young Voters in Elections: A Case Study of Governor Election in Jakarta, Indonesia",JurnalKomunikasi: Malaysian Journal of Communication 34 (4)2018: 357-372.

https://doi.org/10.17576/JKMJC-2018-3404-21

Guite, Florence and P. Hangsing, (2019) "Identifying the Trusted and Preferred Health Information Sources of Rural Women of Kangpokpi Area, Manipur" (2019). Library Philosophy and Practice (e-journal).

2240.https://digitalcommons.unl.edu/libph ilprac/2240

Eddie Jones Nongneng and J.J. Thabah (2018). Library Digitisation: A Case Study of NEHU Central Library. In: Bridging the Digital Divide – Role of Libraries and information Centers with Special Reference to the North Eastern Region. Lyngdoh, B. (et al...) (Eds.). International Conference held on September 5-6, 2018 at Shillong College, Shillong. Pp. 335-340.

Jiarlimon Khongtim, Jacqueline J. Thabah and Naga, Moses M. (2018). Impact of Information Literacy on Magazine Reading Habits of School Students of Shillong: A Case Study. In: *Emerging Trends in Librarianship: Role of Libraries in Learning Environment*. Elavazhagan, K. (et al...) Eds. International Conference held on December 10-12, 2018 at Indian Institute of Management, Tiruchirapalli. Pp. 236 – 242. ISBN: 978-81-929999-0-6

Jiarlimon Khongtim & Ibajanaishisha M. Kharbudon (2018).Information Literacy:Role of Libraries in Bridging the Digital Divide. In: Bridging the Digital Divide - Role of Libraries and information Centers with Special Reference to the North Eastern Region. Lyngdoh, B. (et al...) (Eds.). International Conference held on September 5-6, 2018 at Shillong College, Shillong. 149-151p.-. Jiarlimon Khongtim, Jacqueline J. Thabah and Naga, Moses M. (2018).Impact of Information Literacy on Magazine **Reading Habits of School Students of** Shillong: A Case Study. In: Emerging Trends in Librarianship: Role of Libraries in Learning Environment. Elavazhagan, K. (et al...) Eds. International Conference held on December 10-12, 2018 at Indian Institute of Management, Tiruchirapalli. 236 – 242p. ISBN: 978-81-929999-0-6 Jiarlimon Khongtim and Moses M. Naga (2019).A Brief History of the Department of Library and **Information Science in North-Eastern** Hill University (NEHU), Shillong. In: 50 years of LIS Education in North East India. Singh, Sanjay Kumar (Editor). Published by the Department of Library & Information Science, Gauhati University, Guwahati.35 -42p.ISBN: 978-81-908708-7-X

Academic Collaborations

Dr. Jacqueline Jeane Thabah,

As Supervisor and Consultant of Organisation of the Asian Confluence

Library, Shillong w.e.f. July – December 2018.

Honours/Awards/Recognitions

Ph.D. AWARDED Mrs. Nirmali Chakraborty, on the topic 'Application of Knowledge Management Tools: A Case Study of Select Organizations,' 2018, under the supervision of Prof. Bikika Laloo

Ph.D. Thesis Submitted: Ms. PridaAriani Ambar Astuti an overseas doctoral candidate from Indonesiasubmitted her Thesis entitled "The Cognitive Effects of Social Media Content on University Students: A Case Study of Grade 'A' University Departments in Jakarta, Indonesia." She worked under the supervision of Dr. P. Hangsing.

Ph.D. Result Declared: Mrs. LalditumSinate was awarded the degree of Doctor of Philosophy by the university on her thesis "Design and Development of Library 2.0 for the University Libraries of North-East India Using Web 2.0 Tools: A Technical Feasibility Study." She worked under the supervision of Dr. P. Hangsing

Other Activities

Moses M. Naga, MLISc & Ph.D. (NEHU)

Attended and presented a paper on "Documentation of Herbal Medicinal Knowledge on Oroxylum Indicum as used by the Poumai Nagas", at the national Seminar on "Effective Protection of Traditional knowledge and Cultural Expressions: National and Community Experiences" organized by National Law and Judicial University Academy. Guwahati, Assam in association with North East Centre, New Delhi, during 3-4 May, 2019 sponsored by Indian Council of Social Science Research (ICSSR)

Bikika Laloo, MLISc (NEHU), Ph.D (Gauhati)

Invited speaker at the International Seminar on Digital Humanities and Digital Societies in the Contemporary World (DHDS 2018), 18th – 19th January, 2018 organised by the Department of Library and Information Science, University of Calcutta

Chairperson for Technical Session during the International Conference organized by Shillong College on 5th and 6th September 2018.

Invited speaker at the Promotion of Library Automation and Networking in North-Eastern Region (PLANNER) Convention organized by the INFLIBNET Centre in Tripura University, 15th -17th November, 2018

Member, Programme Advisory Board of the Indira Gandhi National Centre for the Arts, (IGNCA), North Eastern Region, Guwahati, Assam, 15th February, 2019

Resource person in the Refresher Course conducted by the Department of Cultural and Creative Studies, North-Eastern Hill University, Shillong and delivered2 (two) lectures on "Exploring the Information Gateways to North East India's Folklore Potential," on 28th March, 2019.

Convener MLISC and Ph.D. Admissions Committee

Promoted to Professor on21st February, 2019.

Paokholun Hangsing, MLISc (Delhi), Ph.D. (NEHU)

Delivered the Keynote address at the National Seminar on "Systematizing Library System to Inspire Readership Community" held on 8th to 9th December 2018, sponsored by Raja RamMohun Roy Library Foundation (RRRLF), Ministry of Culture, Govt. of India, Dept. of Art & Culture, Govt. of Manipur, and organised by the Manipur Library Association (MALA) at the State Central Library, Manipur Delivered an invited lecture on "**Digital Initiatives of Government of India in Education with special reference to open educational resources for school educators**" in the Training Programme on "Capacity Building Programme for the DIET/SCERT Librarians/Library-in-Charges of North Eastern Region" held from 11th to 15th March 2019 at NERIE, Shillong organised by National Council of Educational Research and Training (NCERT), New Delhi

Dr. P. Hangsing attended various selection committees of different institutions as subject expert.

Jacqueline Jeane Thabah, MLISc & Ph.D. (NEHU)

As Co-Chairperson for Technical Session B on the theme 'Genesis of Digital Divide: Its needs, relevance and significance' during the International Conference organized by Shillong College on 5th and 6th September 2018.

Acted as one of the Judges for the Annual Keanean Science and Arts Student's Award 2019 on the **"Relevance of Text Books in the Digital Era"** on 23rd March 2019 at the lady Keane College, Shillong.

Delivered a lecture on "Plagiarism and role of Copyright, IPR and DRM" on 12/3/2019 during the 5 day Training Programme on "20.02 – Capacity Building Programme for the DIET/SCERT Librarians/Library In-charge of North Eastern Region" w.e.f. 11th to 15th March 2019 at NERIE, Shillong.

S. Ravikumar, MSc in LISc(Madras), Ph.D. (Mizoram)

Delivered lecture as resource person in the "National workshop on Koha integrated libary Management system",Organised by Assam Women's Univesity, Jorhat, Assam. from August 20-22, 2018

Delivered lecture as resource person in the ICSSR-sponsored workshop on "**Research methodology course in social sciences**" Organised by Bankikanta Kakati Research Institute, Krishna Kanata Handiquie State Open University, 3rd to 12th October, 2018

Delivered lecture as resource person in the UGC-sponsored workshop on "MOOC's e-content development and open educational resources" from $11^{\text{th}} - 16^{\text{th}}$ March, 2019 organized by the UGC Human Resource Development Centre, NEHU, Shillong-22.

DEPARTMENT OF MANAGEMENT (TURA CAMPUS)

Head	: Prof. J. U. Ahmed
Telephone	: 03651-224566 (0)/9436316065 (M)
E-mail	: jaynaluahmed@yahoo.co.in

Faculty :10

Faculty	10	
Designation	Name and Qualification	Specialization
	Dr.G. Singaiah, MCom (Andhra),	Cross Cultural Management, Marketing
	Ph.D. (Utkal)	and Entrepreneurship Development
	Dr.J. U. Ahmed, MCom, Ph.D. (Assam)	Finance, Banking and Statistical Methods
Professor	Dr.K. C. Biswal, MCom (BU), Ph.D. (Berhampur)	Accounting and Finance, Management Information System and E-commerce, Microfinance
		Human Resource Management and
	Dr.A. Bhattacharjee, MCom, Ph.D.	Development, Economics, Rural
Associate	(Gauhati)	Marketing and Entrepreneurship
Professor		Development
	Dr.D. Bhagat, MBA (Assam Agri	D. Bhagat, MBA (Assam Agri Univ),
	Univ), Ph.D. (Gauhati)	Ph.D. (Gauhati)
	Dr.Kh. Devananda Singh, MBA (IGNOU), Ph.D. (Manipur)	Accounting and Finance, Entrepreneurship and Agricultural Finance
	Dr.S. B. A. Mazumder, MBA (Assam University) Ph.D. (Assam)	Marketing and Finance
Assistant Professor	Dr.S. L. S. Akoijam, MBA (Amity), Ph.D. (Manipur)	International Business and Marketing
	Dr.Thrinadha Rao Bandaru, MBA,	Tourism, Human Resource Management
	Ph.D. (Pondicherry)	and International Business
	Dr.Bimal Deb Nath, MBA (Devi	Information Technology, E-commerce and
	Ahilya), Ph.D. (NEHU)	Data analysis

Thrust Areas of Research

Entrepreneurship development, small cross-cultural businessmanagement, management, international business, tourism management, supplychain management, micro-finance and rural credit management, business process reengineering, agri-business, e-commerce, corporate finance, bank finance, portfolio management, informationtechnology and social marketing.

Brief Statement of Academic Activities

During the period under report, the faculty members published books and research papers in various national and international journals and edited books. They also participated and presented papers in a number of national and international seminars and conferences. The faculty members also organised seminars/workshop/symposiums/conferenc es/MDPs and participated in FDPs, refresher courses, orientation and programmes. To boost the supply chain

management education in the region, the North-Eastern Region Chapter of the Institute for Supply Management (NERC-ISM): An affiliate of ISM (USA), which was started in the Department on 5 April 2013, has carried out its activities by increasing its membership and partners with Dr. Deepak Bhagat as President.

Students' Profile Enrolment Capacity: MBA (66)Ph.D.Variable

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MBA	14	11	2	12	_	11	12	13	25
(GEN)	14	11		12	-	11	12	15	23
MBA									
(SERVI	3	2		1	-	4	1	4	5
CES)									
Ph.D.	7	4	2	3	-	6	7	4	11

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MBA	19	21	3	10	-	27	9	31	40
Ph.D.	3	3	-	4	-	2	4	2	6

Students Awarded Ph.D. Degree : 6

Placement of Students - 14 students got placement

Research Fellowship

CSIR- UGC- NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other (You name it)	Others
-	-	2	-	-	-	-

Courses Conducted

Postgraduate: MBA (General) and MBA (Service Management)

MBA (General)

The Department offers thirty-two courses for the MBA programme, out of which twenty are corecourses and one project work equivalent to two courses. Besides these, ten special courses, five each from two specialisation groups are to be pursued. The dual specialisation coursesare based on four functional areas of management, viz., Financial Management, MarketingManagement, Human Resource Management and Agri-Business Management.

MBA (Service Management)

The Department offers thirty-two courses for MBA (Service Management), out of which twentyare core courses and one project work equivalent to two courses. Besides these, ten specialcourses, five from any one of the functional areas and five from any one of the sartorial areas areto be pursued. The specialisation courses are based on four functional areas of management, viz., Finance, Marketing Management, Human Resource Management and Agri-BusinessManagement; and three sartorial areas of Management, viz., Banking and Insurance, NGOManagement, and Tourism Management.

Ph.D. Courses

Business Research Methods, Management Thoughts and Thinkers, Emerging Issues in Business.

Seminars/Conferences/Workshops/Symposi a/Extension Programmes

Organized

Faculty Development Programme in Entrepreneurship, sponsored by EDII, Guwahati Regional Office was conducted at Tura Christian College, Tura, Jan 21-Feb 02, 2019. Dr Abhigyan Bhattacharjee was the convener.

Entrepreneurship Awareness Camps, Sponsored by EDII, Guwahati Regional Office, was conducted at North- Eastern Hill University, Tura Campus Feb 07-Feb 23, 2019. Dr Abhigyan Bhattacharjee was convenor.

SYNERGOS' 2018 an HR Conclave of Department of Management, NEHU, Tura Campus on "Scanning the Employability Skills of Future Managers" May 12, 2018.Dr Abhigyan Bhattacharjee was the convener.

National Seminar on Entrepreneurship and Business Innovation in North-East -India: A Gap in Micro and Small Industries was organised by Department of Management, North-Eastern Hill University, Tura Tura. Campus, 16^{th} 17^{th} Meghalaya during and November, 2018 at Department of Management, NEHU, Tura Campus. Meghalaya. Dr.K C Biswal was the coordinator and Dr. Thrinadha Rao Bandaru was Joint Co-Ordinator

Seven days workshop on "Data Analytics and Business research Dimensions" organized by Dept. of Management, NEHU, Tura Campus, Tura during 03-09 Aug ,2018. Dr. Bimal Deb Nath was Co-Ordinator and Dr. Thrinadha Rao Bandaru was Joint- coordinator Two days international Seminar on "Data *Analytics and Business research Dimensions*" organized by Dept. of Management, NEHU, Tura Campus, Tura during 10-11 Aug ,2018. Dr. Bimal Deb Nath was Co-Ordinator and Dr. Thrinadha Rao Bandaru was Joint- coordinator.

Attended

Prof. K C Biswal

Presented paper on "Recent trends in entrepreneurship (start-ups) development with reference to North East-India"in National Seminar and XXXIX All Odisha Commerce Conference on 3rd and 4th February, 2019 on Make in Indiaorganised by P.G.Department of Commerce, Utkal University, Vani Vihar, Bhubaneswar,Odisha, India.

Dr Abhigyan Bhattacharjee

Presented a paper on "Socio-economic impact assessment of haat participants at kalaichar border haat through propensity score analysis", Invited paper, Dr. Abhigvan Bhattachariee. Technical Session II A, at Two Day National Seminar on Act East and Northeast: Prospects and Challenges, 12th and 13th March, 2019, Department of Political Science, Assam University, Silchar. ii) presented a paper on "Micro-financing in north-east region through self help groups bank linkage programme: a current overview", at the National Seminar on Banks and Financial Institutions in North-East Region: Prospects and Challenges, March 8-9, 2019, IIBM Campus, Guwahati.

Dr. Deepak Bhagat

Presented paper on (i) "Gender Dynamics of Work Participation in Patrilineal and Matrilineal Societies: Evidences from Rural North- East India", National Seminar on New Paradigms of Commerce and Management: Opportunities and Challenges, Kaziranga University, Jorhat, Assam, 5th- 6th April, , 2019; (ii) "Occupational Stress and Burnout among the Nurses of Meghalaya", World Summit on Resource Management and Sustainable Development, University of Mysore, Mysore, 22nd - 24th February, 2019; (iii) "The Role of Emotional Intelligence in Professionals Perceived Health Care Stress: Influence of Digitalization", National Conference on Digital Economy: Business Opportunities and Challenges, University of Madras, Chepauk, Chennai, 10th January, 2019; (iv) "Supporting the Emotional Intelligence of Healthcare Professionals through Digitization",42nd Indian Social Science Congress on Human Future in Digital Era, Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, 27th – 31st December, 2018

Dr. Sunildro L.S. Akoijam

Presented paper (i) entitled "Issues of Sustainability and Management: A study of Micro Enterprises in Assam " in an International Conference organized by Indian Institute of Management, Kashipur (IIM-Kashipur) on May 25-27, 2018; (ii) "Challenges in talent acquisition and retention: A Study of Non Profit sector in India" in ILERA World Congress organised by ILERA at Seoul, South Korea on July 23-27, 2018;(iii) "Marketing Strategies of weekly markets in Garo Hills of Meghalava" in an International organised Conference North-Eastern Management Association (NEMA) & MIMS, Manipur University on November 22-24 2018.

Dr. Sultana Begum Abida Mazumder

Presented a paper on "Entrepreneurship in Silchar: a case study of Quickobook" in a National Seminar on Entrepreneurship and business innovation in north-east India: A gap in micro and small industries, organized by Department of Management, NEHU, Tura campus on 16th and 17th November, 2018. She also participated in (i) International Seminar on Data analytics and Business Research Dimensions, organized by Department of Management, NEHU, Tura campus on 10th and 11th August, 2018; (ii) Participated in the 45th orientation Programme, organized by North-Eastern Hill University, Shillong, from 20th August to 16th September 2018; Dr. Thrinadha Pao Bandagu

Dr. Thrinadha Rao Bandaru

Presented paper entitled "Influence of Organizational Motivation on Performance APTDC Limited, Visakhapatnam of Division" at 23rd International Joint World Cultural Tourism Conference 2018 & 9th World Tourism Conference on 'World Tourism Development: Managerial Implications' organized **byNational** Institute of Tourism and Hospitality Management, Hyderabad, India in collaboration with World Cultural Tourism Association and World Tourism Association during 10th-12thJanuary, 2019.

Publications

Published in India

Bhattacharjee, A., & Barman, M. (2019).Pattern of cross-border commodity transactions through kalaichar border haat.*Indian Journal of Economics and Development*, 7 (3): 1-7.

Bhattacharjee, A., & Barman, M. (2018).A review on Indo-Bangladesh cross border trade through kalaichar border haat. *International Journal of Research in Social Sciences*, October, Vol. 8 Issue 10(1): 6-15.

Banerjee, A., K., & Bhattacharjee, A. (2018). Employability skills for the management students in north-east India: An observed and expectancy analysis. *Journal of Management Research and Analysis (JMRA)*. December, Vol 05 Issue 4(2): 88-96.

Banerjee, Arun, Kumar.,& Bhattacharjee, Abhigyan. (2019). Analysing the recruiters' perspectives on employability skills of management graduates in northeast India, *International Journal of Management, IT & Engineering*, February, Vol. 9 Issue 2(1): 355-361.

Biswal, K. C., and Sangama, J.T. (2018). "A study on Corporate Saving and Corporate Performance in Power Generating Companies in India with Reference to Select Private Sector". *International Journal of Emerging Technologies and Innovative Research*, 5(10): 111-117.

Tiwari, S. & Bhagat, D. (2019).Occupational Stress and Burnout among the Nurses of Meghalaya.*Shanlax International Journal of Arts, Science and Humanities*, 6(2): 41-48

Tiwari, S. & Bhagat, D. (2019). The Role of Emotional Intelligence in Health Care Professionals Perceived Stress: Influence of Digitalization. *Ajanta*, 8(1): 124-136

Tiwari, S. & Bhagat, D. (2018).Occupational Stress among Healthcare Professionals in West Garo Hills District of Meghalaya.*International Journal of Management, Technology and Engineering*, 8(12): 1684-1691

Changde Catherine, L. H., Bhagat, D. and Barooah, B. K. (2018). A Study on Economics of Broiler Farming in Jorhat District of Assam. *Indian Journal of Poultry Science*, 53(2): 241-246

Denyse, M. & Bhagat, D. (2018). Examining the Role of Intention and Perceived Behavioral Control on Purchase of Ethical Products in Rwanda. *Indian Journal of Marketing*, 48(5): 21-35

Singh, K. D. & Onahring, B. D. (2019). Entrepreneurial intension, job satisfaction organisation commitment - Construct of a research model through literature review. *Journal of Global Entrepreneurship Research*, <u>https://doi.org/10.1186/s40497-018-0134-2</u> Published online by SPRINGER: 21 January 2019. (ISSN: 2251-7316) Sangma, D. A. & Singh, K. D. (2019).Financing of Microenterprises in Garo Hills, Meghalaya –An Analysis.*International Journal of Applied Social Science*, 6 (3): 503-509. (ISSN: 2394-1405)

Singh, K. D. (2019). Entrepreneurial Intention - A Case from Indian Matrilineal Society.*Intellection*, 7(1), 9-21.

Akoijam, S. L.S. (2018). Exploring the problems of the Rural Weekly markets: A study of Garo Hills districts of Meghalaya, *International Journal of Management Studies*, 5 (4): 93-100.

Mazumder, S. B. (2018). Determinants of Remittances: A Study in Cachar District of Assam. *Global Business Review*, I (II), Sage Publications, DOI: 10.1177/0972150918811524

Books/Book Chapters/Proceedings Books

Biswal, K.C. (2018). *Financial Research Trends and Issues* (Eds.). Published by KunalBooks Publications, New Delhi, ISBN: 978-93-86714-85-5.

Bhattacharjee, A. (2018). *Human Resource Management and Development in the Digital Age*, (Eds), Published by Mittal Publications, New Delhi.

Bhattacharjee, A. (2018). *Digital Impact* on *Human Resources Practices*, (Eds), Published by Mittal Publications, New Delhi.

Singh, K. D. &Onahring, B. D. (2019). *Tourism and Hotel Industry in Megh*alaya, Manas Publishers and Distributors, Jaipur (ISBN 978-93-83231-58-4).

Singh, W.C, Meitei, C.I., Akoijam, L.S. S, Singh, S. S, (Editors).(2018). *Recent Trends in Sustainable Development*, Himalaya Publishing House, Mumbai, ISBN:978-93-5299-478-6.

Singh, W.C, Akoijam, L.S. S, Sharma, L.S., Ahmed, J,U., (Editors). (2018). *Recent Trends in Business and* *Management*, Himalaya Publishing House, Mumbai, ISBN: 978-93-5299-481-6.

Singh,S. S., Akoijam, L.S. S, Singh, W.C. (Editors). (2018). Sustainable Business Development: Contemporary Issues and Challenges, Himalaya Publishing House, Mumbai, ISBN: 978-93-5299-476-2

Book Chapters

Biswal,K.C., and Das,S.(2018).Economic Growth and Developments of Rural India by Co-operative Banks. In: *Financial Research Trends and Issues* (Edited), Published by KUNAL BOOKS, New Delhi, Chapter 6,p.41-47.ISBN:978-93-86714-85-5.

Biswal,K.C. and Narzary, D (2018): " Effect of Dividend Announcement on Share Price Behaviour of Selected Indian Companies". In: *Financial Research Trends and Issues* (Edited), Published by KUNAL BOOKS, New Delhi, Chapter 7, p.48-66.ISBN:978-93-86714-85-5.

Biswal, K.C.,Raj,S.(2018). Micro Finance Schemes of Nalanda (Bihar), In: *Financial Research Trends and Issues* (Edited), Published by KUNAL BOOKS, New Delhi, Chapter 10, p.85-93.ISBN:978-93-86714-85-5.

Biswal,K.C., Sangama, J.T. (2018). A study of Financial Institutions in Indian Power Sector. In: Financial Research Trends and Issues (Edited), Published by KUNAL BOOKS, New Delhi, Chapter 20, p.166-170-66.ISBN:978-93-86714-85-5. Biswal.K.C. and Narzary, D (2018): "Efficiency Management of Industrial Sector in Meghalaya. In: Financial Research Trends and Issues (Edited), Published by KUNAL BOOKS, New Chapter 21,p.171-182-Delhi, 66.ISBN:978-93-86714-85-5. Bharali, D., Akoijam, L.S. S. (2018). Culinary Tourism as a Destination Branding: A Case Study of Assam. In: Emerging Dynamics of Indian Tourism and Hospitality: Transformation and Innovation. Shukla, U.N., Kulshreshtha, S.K. (Eds.). Copal Publication, Ghaziabad, Chapter 22, p.216-224 Mazumder, S. B. (2018). International Migrant Remittances: Their role and impact. In Finance For Sustainable Development. M. S. Jahur, & S. M. Uddin, Department of Finance, Faculty of Business Administration, University of

Chittagong.p.167-181

Research Projects

New Projects			
Title of Project	Pl/Co-Pl	Funding Agency	Amount
			(Rupees)
Mapping the Vulnerability of	Dr. Deepak	ICSSR, New	Rs. 10, 00,000.00
Indigenous Hill People of	Bhagat	Delhi IMPRESS	
Meghalaya to Food Insecurity	_	Project	

Ongoing

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)
Dynamics Of Cross-Border Trade And Assessment Of The Socio-Economic Impact On The Tribal Populace Of Border Regions Of Meghalaya	Dr Abhigyan Bhattacharjee	ICSSR, NEW DELHI	8,00,000

Socio-Economic Impact of Weekly	Dr Sunildro	ICSSR, New	6,00,000
Markets in Rural Areas: A Study of	L.S. Akoijam	Delhi	
Farmers in Garo Hills of Meghalaya			

Completed during Year

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)		
A Diagnostic Study on Financial Structure of Tea Estates of Barak Valley of Assam	Prof. J. U. Ahmed	ICSSR, New Delhi	6,00,000		
An Evaluation of Micro Finance Scheme: A study on SHGs in Three Districts of Garo Hills of Meghalaya	Prof. K. C. Biswal	ICSSR, New Delhi	15,00,000		
A Comparative Study on Income and Employment Pattern in Patrilineal and Matrilineal Societies of Rural North East India: A Socio- Economic Assessment	Dr. Deepak Bhagat	ICSSR, New Delhi	8, 00,000		

Other Activities

Prof. G. Singaiah

(i)Chaired technical session in International Seminar on "Data Analytics and Business research Dimensions" organized by Dept. of Management, NEHU, Tura Campus, Tura during 10-11 Aug ,2018. (ii) Chaired a technical session at the International Conference on "Recent Trends in Business Management and Sustainable Development" on 23/11/2018 organised by NEMA in collaboration with MIMS, Manipur University during 22-24th November 2018. (ii) Participated in Association of Indian Universities East Zone Vice Chancellors Meet hosted by NEHU on 18th and 19th January, 2019 on the theme Social Development and Sustainability (iii) Chief guest in "Emerging trend in digital marketing -Challenges and opportunities" organised by Department of International Business Studies during 22nd & 23rd March, 2019 (iv) Foreign Expert in QAA program of UGC Nepal during January, 2019

Prof. J. U. Ahmed

Chaired technical session International Seminar on "Data Analytics and Business research Dimensions " organized by Dept. of Management, NEHU, Tura Campus, Tura during 10-11 Aug ,2018.Chaired a technical session entitled "Recent Trends in Organisation Behaviour and HRM" at the International Conference on "Recent Trends in Business Management and Sustainable Development" on 23/11/2018 organised by NEMA in collaboration with MIMS, Manipur University during 22-24thNovember 2018. He was also the president of the conference.Chaired a technical session in the National "Conference on Entrepreneurship. Innovation and Society" held at St. Anthony's college, Shillong on 14/12/2018 organised by XLRI in association with St. Anthony's college, Shillong, 6) Delivered a talk at KNB college Assam Karimganj, on "Carrier Opportunities for Youngsters" in the Carrier Counselling Programme Organised

by ERD Foundation, Guwahati on 29/12/2018.

Abhigyan Bhattacharjee

Attended and completed successfully the 40th Faculty Development Programme in Management at IIM, Ahmedabad, during May 13-Aug 31, 2018. (ii) Acted as Resource person in the training program on 'Work Ethics' for the Executives at NERLDC, Power System Operation Corporation Limited, Shillong, Meghalaya on the theme "Work ethics, preventive vigilance and RTI Act" (9-11 Oct, 2018) on 9th October, 2018. (iii) Delivered a Keynote Address on "Circular Economyfor Productivity and Sustainability" at the National Productivity Week organised by Guwahati Management Association in collaboration with National Productivity Council, Guwahati at Hotel Pragati Manor, Guwahati, on 12th Feb 2019. (iv) Acted as Session Chair in the Technical Session IVA at the Two Day National Seminar on Act East and Northeast: Prospects and Challenges, 12th and 13th March, 2019, Department of Political Science, Assam University, Silchar.

Deepak Bhagat

Attended (i) "National Workshop on Conservation of Biodiversity" organised by Department of Horticulture, NEHU, Tura, Meghalaya; Department of Botany, Goalpara College, Assam and Department of Zoology, Don Bosco College, Tura on 28th November, 2018; (ii) ICAR, New Delhi Sponsored Short Course on "Role of Agri Business Sector and Market Intelligence in Enhancing Farmer's Income (10/07/2018 to 19/07/2018) organised by Department of Agricultural Economics and Farm Management, Assam Agricultural University, Jorhat

Sunildro L S Akoijam

(i) Invited as a Session Chair of Session on "Employee Turnover" in 18th ILERA World Congress at Seoul, South Korea on 26th July, 2018. (ii) Invited for a Guest Lecture by the Centre of Entrepreneurship and Skills Development and MIMS, Manipur University and delivered 5 "Services lectures on Marketing, Marketing Management, Consumer Behaviour, Branding & Promotion and Advertising and Sales Promotion " during 2nd to 17th January, 2019 (iii) Reviewer of International Journal of Social Economics (Emerald Publication, UK)He also; (iv) Refresher Course "Business, on Economics and Management" organised by HRDC, Manipur University on 18th January to 8th February 2019.

Bimal Deb Nath

Delivered a lecture on "Introduction to R" for seven days workshop on "Data Analytics and Business research Dimensions " organized by Dept. of Management, NEHU, Tura Campus, Tura during 03-09 Aug ,2018.

DEPARTMENT OF TOURISM AND HOTEL MANAGEMENT

Head	: Dr. Punit Gautam
Telephone	: +364- 2723441 (O), +91-9436565964 (M)
E-mail	: saurabh5sk@yahoo.com, saurabhdixit@nehu.ac.in

Faculty	:4			
Designation	Name and Qualification	Specialization		
	Dr. Saurabh Kumar Dixit, M.T.M.	Hospitality/Tourism		
	(I.G.N.O.U., New Delhi), Ph.D. (B. U., Jhansi)	Management, Consumer		
Associate		Behaviour, Gastronomic		
Professor		Tourism, Tourism Experiential		
		Marketing		
	Dr. Punit Gautam, M.T.A. (K. U., Haryana),	Tour Packaging, Eco and		
	D.Phil. (H. N. B. G. U., Srinagar, Garhwal)	Sustainable Tourism, Tourism		
		Impacts		
	Dr. Benjamin F. Lyngdoh, M.Com. (G. U.,	Tourism Entrepreneurship,		
	Assam), Ph.D. (N.E.H.U., Shillong)	Marketing, Impact Assessment		
Assistant	Dr. Sharad Kumar Kulshreshtha, M.T.A. (A	Emerging Tourism Concepts,		
Professor	M. U., Aligarh), Ph.D. (B.R.A. University,	MICE & Events, Indigenous		
	Agra)	Food & Beverage, Rural &		
		Sustainable Tourism		

Thrust Areas of Research

Hospitality and Tourism Studies in General; Sustainable Tourism: Gastronomic Tourism; Entrepreneurship; Emerging Tourism Trends; MICE and Tourism Events Tourism; Service Marketing and Tourism Promotion in Region through a Synthesis of the Socio-Economic Systems, Culture, Practices and Processes in Particular.

The Department is offering postgraduate degree i.e. Master of Tourism and Travel Management (MTTM)and Ph. D degree in Tourism and Hotel Management.During the period under report, the faculty members published books and research papers in various national and international journals and edited books. They also participated and presented papers in a number of national and international seminars and conferences.

Non-

Meghalaya

9

Total

25

Brief Statement of Academic Activities Students' Profile

Enrolment Capacity: MTTM- 30, Ph.D. – Variable

14

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MTTM	27	30	2	51	-	-	47	10	57
Ph. D.	9	5	1	8	-	5	8	6	14

Degrees Awarded- MTTM-25							
Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya

0

Degrees A	warded-	MTTM -25
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11

MTTM

3

16

0

2

Placement of Students - 13

Research Fellowship	
UGC NET JRF	: 2
UGC NET SRF	:1
UGC-Non-NET	: 2
National Fellowship for Higher Education of ST	: 2

Fieldwork/Educational Tour of Students

Teacher-in-Charge:Dr. Punit Gautam Places/Institutions Visited:Yuksom, South Sikkim

Duration of Tour (Dates and number of days): 10 days

*Purpose of Tour:*To provide exposure to the students with established tourist destination and to train them in various adventure activities.

Courses Conducted

Postgraduate:MTTM (Master of Tourism and Travel Management)

Semester I

Principles and Practices of Tourism, Principles of Management and Organizational Behaviour, Hotel Operations and Management, Tourism Geography, Business Communication, Economics for Tourism, Tourism Products of India, Human Resource Management.

Semester II

Travel Agency and Tour Operations Management, Tourism Marketing, Transport Operations and Linkages, Accommodation Management, Accounting and Finance for Tourism and Hotel Business, Research Methodology, Event Management, Legal and Regulatory Framework of Tourism.

Semester III

Tour Guiding and Escorting, Food and Beverage Management, Society and Culture of North-East India, Information Technology for Tourism and Hotel Business.

Specializations:

TourismManagement:AviationManagement,TourPackagingManagement.Vacant and the second seco

Hotel Management: Rooms Division Management, Revenue and Yield Management.

Tourism Marketing: Tourist Behaviour, Selling and Negotiation Skills.

Tourism Entrepreneurship: Tourism and Hotel entrepreneurship, Small Business Management.

Semester IV

Tourism Products of North-East India, Destination Planning and Management, Internship.

Specializations:

TourismManagement:MICEManagement, Sustainable Tourism.

Hotel Management: Property Planning and Management, Quality Management.

Tourism Marketing: Destination Marketing and Branding, Customer Relationship Management.

Tourism Entrepreneurship: Business Plan Development, Social Entrepreneurship.

Ph.D. Courses

Research Methodology, Contemporary Issues in Tourism and Hospitality Management, Literature

Seminars/Conferences/Workshops/Symposi a/Extension Programmes

Organized

Organised a *Workshop on Yoga* in collaboration with India Tourism, Shillong on June 17, 2019 in the Department of

Tourism and Hotel Management with Dr. Saurabh Kumar Dixit as convener.

Attended

Dr. S. K. Dixit

Presented paper on 'Indigenous Cuisine and Gastronomic Tourism: Evidence from Meghalaya (India)' in the 4^{th} UNWTO World Forum on Gastronomy Tourism from May 30 to June 1, 2018 at Hotel Intercontinental, Bangkok, Thailand.

Presented paper on 'Gastronomic Tourism as A Form of Destination Identity' in the *National Conference on Destination Branding and Competitive Positioning* from September 6-8, 2018 organized by School of Business Studies, Central University of Jammu, Jammu, India.

Presented paper on 'Understanding Gastronomic Identity of Meghalaya through Visitor's Motivation for Local Foods' in the Synthesize: An International Interdisciplinary Conference on Business Studies and Social Sciences from December 18-19, 2018 organized by School of Business Studies and Social Sciences, Christ (Deemed to be University), Bangalore, India.

Participated as Resource Person in the International Conference on Smart Tourism, Smart Destinations and Limits of Being Traveller from February 18 to 19, 2019held at Institute of Tourism and Travel Management, Govindpuri, Gwalior, India.

DeliveredKeynote Speech on 'Developing Sustainable Food Tourism Product' in the *International Food Travel Summit FoodTreX Kathmandu* from May 24 to 26, 2019held at Park Village Resort, Budhanilkantha, Govindpuri, Kathmandu, Nepal.

Dr. B. F. Lyngdoh

Presented paper titled 'Superstructure and business practices of Tourism-related

Microenterprise' at International Conference on Smart Tourism, Smart Destination and Limits of Being Traveller at Indian Institute of Tourism and Travel Management, Gwalior; 18th – 19th February, 2019.

Presented paper titled 'Tourism-related Microenterprise socio-economic impact: A stratum-based propensity score analysis of Meghalaya, India' at *National Conference* on Entrepreneurship, Innovation and Society at St. Anthony's College, Shillong; $13^{\text{th}} - 15^{\text{th}}$ December, 2018.

Presented paper titled 'Business practices of Tourism-related Microenterprise of Meghalaya: Is sustainability factored in?' at *International Conference on Recent Trends in Business, Management and Sustainable Development* at Manipur Institute of Management Studies, Manipur University; 22nd – 24th November, 2018.

Presented paper titled 'Does Tourismrelated Microenterprise lead to human resource development?' at 3^{rd} National Conference of North East India Commerce and Management Association on Emerging Trends in Commerce and Management at J.B. College, Jorhat; $5^{th} - 6^{th}$ October, 2018.

Dr. S. K. Kulshreshtha

Delivered a lecture on 'prospects of Wellness Tourism in North East India' at *Regional Seminar on Prospect of Yoga and Naturopathy in Health Care system in Present era* North Eastern Institute of Ayurveda and Homoeopathy, Shillong dated 29th May, 2018.

Delivered a lecture inthe National Seminar on Consolidations and Challenges of Tourism: The Road Ahead In North East India in Regional Seminar on "Destination Marketing Of Meghalaya: A Promotional Strategy" organized by Shillong Commerce College, Shillong Sponsored by Planning department under VAF, Govt. of Meghalaya & 7th September, 2018.

Invited as Expert lecture on Green Skill Development Programme Course on Waste Management, on 'Community Based Waste Management' on 11th August 2018, ENVIS Centre, NEHU, Shillong.

Invited as experts in the GSDP Course "Waste Management". Towards Zero waste society - Concepts related to 4R 14th August 2018 ENVIS Centre, NEHU, Shillong.

Invited as Expert lecture on Green Skill Development Programme Course on Environmental Law, on Introduction of Environmental Laws and contemporary Issues in context of Travel, Tourism & Hospitality sector in India on 11 October 2018, ENVIS Centre, NEHU, Shillong.

Invited as Expert lecture on Green Skill Development Programme Course on Environmental Law, on Introduction of Environmental Laws and contemporary Issues in context of Travel, Tourism & Hospitality sector in India on 13 November, 2018, ENVIS Centre, NEHU, Shillong.

Invited as experts to deliver a special talk on *Circular Economy for Productivity and Sustainability dated* 18 February, 2019 in slot of 9:30Aa.M. -10:30AM..

Participated in *Responsible Tourism Workshop* in association with Outlook India organized by Meghalaya Tourism on dated 18th February, Convention Centre, Shillong.

Presented paper on 'Yoga tourism : New approach to Nature Health Care System in India' at Regional Seminar on Prospect of Yoga and Naturopathy in health Care system in Present era North Eastern Institute of Ayurveda and Homoeopathy, Shillong dated 31st May, 2018.

Publications

Published in India

Lyngdoh, B.F. (2018). Impact of Tourism Entrepreneurship on their socio-economic Outcomes: A Propensity Score Analysis. *International Journal of Tourism and Travel*, 11(1&2): 18-25.

Kulshrestha, S.K., (2018). Porvottar Paryatan: Atulya Bharat ka Anveshit Swarg, *Gyan Garima Sindhu(Paryatan Vishashank)*, 57: 59-63.

Published Abroad

Dixit, S.K (2018), Asian Genders in Tourism, *Tourism Culture and Communication*, 18 (3):223-224.

Dixit, S.K (2019), Management and marketing of wine tourism business: theory, practice, and cases, *Information Technology & Tourism*. 21 (1):135-137.

Dixit, S. K., Kuan-Huei Lee & Poh Theng Loo (2019) Consumer behavior in hospitality and tourism, *Journal of Global Scholars of Marketing Science*, 29(2): 151-161.

Books

Dixit, S.K., editor (2019), *The Routledge Handbook of Gastronomic Tourism*,

Routledge Publications, UK.

Shukla, U.N., Kulshreshtha, S.K., editors. (2019). *Emerging Dynamics of Indian Tourism and Hospitality: Transformation and Innovation*. Copal Publishing, Sahibabad, Distt. Ghaziabad (U.P.).

Book Chapters/Proceedings

Dixit S.K. (2019), Introduction. In: *The Routledge Handbook of Gastronomic Tourism*, S. K. Dixit (ed.). Routledge Publications, UK, p. 1-10.

Dixit S.K. (2019), Gastronomic Tourism: A Theoretical Construct. In: *The Routledge Handbook of Gastronomic Tourism*, S. K. Dixit (ed.). Routledge Publications, UK,Chapter 1, p. 13-23. Dixit S.K. (2019), Conclusion: Building an Agenda for Global Gastronomic Tourism Research. In:*The Routledge Handbook of Gastronomic Tourism*, S. K. Dixit (ed.). Routledge Publications, UK, p. 572-575.

Dixit S. K. and Mawroh (2019), Vocational Education and Training for Hospitality and Tourism Industry in India. In:*Tourism Education and Asia*, C. Liu, H. Schänzel (eds.), Springer Nature Singapore Pte. Ltd., Chapter 3, p. 35-48.

Dixit S. K. and Mawroh (2019), Cultural Manifestation of Food in Branding Destination: A Case of Khasi Food of Meghalaya, India. In: *Food Tourism in Asia*, E. Park et al. (eds.), Springer Nature Singapore Pte. Ltd., Chapter 10, p. 143-154.

Lyngdoh, B.F. (2018). Superstructure and business practices of Tourism-related Microenterprise: The two limits of 'Think Global Act Local' Paradox. In: *Sustainable Business Development: Contemporary Issues and Challenges*. S.S. Singh, S.L.S. Akoijam and W.C. Singh (Eds). Himalaya Publishing House, Mumbai, p. 134-142. Lyngdoh, B.F. (2018). Business practices of Tourism-related Microenterprise of Meghalaya: Is sustainability factored in? In: *Recent Trends in Sustainable Development*. W.C. Singh and C.I. Meitei (Eds). Himalaya Publishing House, Mumbai, p. 194-201.

Kulshreshtha, S.K., (2019). Utsav evm Parv; Atuliniya Bharat ka Jivant Sanskritik Darshan.In:Sunil kumar and Alok Singh (eds.), Yash Publisher and Distributors, New Delhi.

MOOCs (developed in 3 quadrants) per module

Kulshreshtha, S.K., (2019). E-Pathshala Paper No-13 Destination Management, Module No-10 Destination Development through Events https://epgp.inflibnet.ac.in/ahl.php?csrno= 1827

Kulshreshtha, S.K., (2019). Paper No-01Tourism and Hospitality: Concept, Components, Status and Trends, Module No-36: Changing pattern of Societyhttps://epgp.inflibnet.ac.in/ahl.php? csrno=1827

Funds Received from Agencies including NEHU/UGC Research Projects Completed during Year

Title of Project	Pl/Co-Pl	Funding	Amount
		Agency	(Rupees)
Study of Service Quality,	PI - Dr. Saurabh	University	Rs. 9,69,600/-
Satisfaction and the Intent to	Kumar Dixit	Grants	(Nine Lakh
Return among Tourists Visiting		Commission,	Sixty Nine
the Leading Hotels of Guwahati		New Delhi	Thousand and
(Assam) and Shillong (Meghalaya)			Six Hundred
			Only)

Honours/Awards/Recognitions

Dr. S. K. Dixit isAwarded *The Medal of Merit* for dissemination and development of Gastronomic Tourism knowledge globally by **The World Gastronomy Institute**, Spain on May 8, 2019

SCHOOL OF EDUCATION

Dean: Prof S. M. SungohTelephone: 0364-2723590/2723591Email: deaneducation.nehu@gmail.com

The School of Education consists of four Departments/ Centres viz. Department of Adult & Continuing Education, Department of Education (both at Shillong and Tura Campus), and Centre for Distance Education.

of The Department Education conducts M.A. (Education) and Ph.D. Programmes both at Shillong and Tura Campuses while M.Ed. programme is also conducted at Shillong Campus. The thrust areas of the department are: System of Education in North East. Test Construction, TeacherEducation, EducationalP sychology, Environmental Education, Special Education & Inclusive Education, Value and Peace Education, Early Childhood Education and Elementary Education and Higher Education.

The Department of Adult & Continuing Education, besides various kinds of training and extension activities offers M.A. and Ph.D. Programmes in Adult & Continuing Education. The major thrust areas of this department are on Migrant Workers, Health and Education, Women Empowerment, Literacy, Post Literacy and Continuing Education, Study on the Aged, Guidance and Counselling, HIV/AIDS, Mass Media, Vocational Training, Skill Development, Family Life Education, Substance Abuse, Rural Tourism, Health, Challenged/Differently able, Environment, Social Security.

The Centre for Distance Education offer Foundation Course on Education of Children with Disabilities

The faculty members of the school through their rigorous involvement in Teaching, Research and Extension activities has contributed extensively to the advancement of knowledge in various fields of Education

The School of Education has also received sanctions to establish two centres i.e. (i) Centre for Pre-Service Teacher Education and (ii) Centre for Professional Development of Teacher Educators, under the Pandit Madan Mohan Malaviya National Teachers and Teaching Mission on (PMMMNMTT) Project for three years. The main aim of this project is to undertake an indepth work in specific areas of Elementary and Secondary Teacher Education and School Education. It also has the scope of offering programmes for teachers, teacher administrators. educators and

DEPARTMENT OF ADULT AND CONTINUING EDUCATION

Head	: Prof. E. Jyrwa
Telephone	: 0364-2723321 (O)/ 9863096010 (M)
E-mail	: hodcace@nehu.ac.in

Faculty: 7

Designation	Name and Qualification	Specialization
Professor	Dr.B.P. Sahu, MSW, Ph.D.	Human Resource Development, PMIR
	(Kurukshetra)	Group Work in Adult Education, Disaster
		Management
	Dr.E. Jyrwa, MPhil ,Ph.D.	National, Regional and International
	(NEHU)	Perspective of Adult Education, Philosophy of
		Adult Education, Rural Development
Associate	Dr.J. Mawthoh, MA,	Environmental Education Disaster
Professor	Ph.D.(NEHU)	Management, Research Methodology,
		Entrepreneurship and Skill Development
	Dr.E. Syngkon, MA,	Population Education, Adult Psychology,
	Ph.D.(NEHU)	Women Education, Research Methodology
	Dr.W.S. Mylliemngap, MA,	Policies and Programmes of Adult Education in
	MPhil and Ph.D. (NEHU)	India, Material Development in Vernacular
Assistant		Language for Non-Formal Education
Professor		Intervention
	Dr.J.I. Rapthap,	Guidance & Counselling Women
	MSW(Bombay	Empowerment, Inclusive Education, Disaster
	University),Ph.D.(NEHU)	Management, Community Organization &
		Development
	N. S. Devi, M.Sc (NEHU)	Rural Development, Extension Education,
		Communication methods in Adult Education

Thrust Areas of Research

Literacy, Post-Literacy and Continuing Education, Study on Women SHG, Women Empowerment Entrepreneurship, Child Protection, Street Vendors, A study on Accredited Social Health Activist, Guidance and Counselling, Mass Media, Vocational Training, Skill Development, Family Life Education, Rural Tourism, Challenged/Differently Abled, Environment, Social Security, Adult Education, Perspectives of Adult and Lifelong Learning, Philosophy of Adult Education, and Rural Development

Brief Statement of Academic Activities

The Department of Adult and Continuing Education is offering courses for the MA and Ph.D. programmes. The current intake capacity for MA is 50.

Lifelong Learning and Skill Development has emerged as the key component in the field of Adult and Continuing Education. Keeping this in view, the Department has widened its scope to cover multidisciplinary subjects. The students admitted to this Department are drawn from various academic disciplines. The teachers in the Department make effort to utilize new techniques of teaching by supplementing lectures with slides presentation, group discussions and exposure trips. The Department offers Open Courses on Extension Education, Rural Development and Human Resource Development. The Department also introduced a core paper on Disaster Management which is a relevant subject in this contemporary world. In addition, the students are taught to develop literary materials such as posters and booklets for the neo-literates on various components of Adult Education in local dialect. These materials can be used for the benefit of the neo-literates at the grass root level. The Department is also involved in Field Outreach and Extension programmes besides Teaching and Research.

Students' Profile

Enrolment Capacity: MA- 50, Ph.D. - Variable

Degree	Mal	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
	e								
MA	5	42	-	46	-	1	44	3	47
Ph.D.	3	1	-	03	-	01	3	1	4

Degrees Awarded:

Degree	Mal	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
	e								
MA	5	22	-	26	-	01	24	3	27
Ph.D.	2	3	-	3	-	02	3	2	5

Students Awarded Ph.D. Degree: 6

Research Fellowships:

CSIR- UGC- NET	UGC Non- Net	Rajiv Gandhi SC/ST	ICPR Fellowsh ip	Meritoriou s Maulana Azad Minority Scholarship	Any other	Others
2	12	1	-	-	Teacher Fellowship under faculty development programme, UGC, NERO- 1 NFST- 1	ICSSR – 1 UGC Fellowship SRF- 03

Fieldwork:

Teacher-in-Charge: Dr Jacinta I. Rapthap *Places/Institutions Visited:* Four (4) Special Schools located in Shillong viz. Roilang Vocational Training Centre, Jyoti Sroat Inclusive School & Centre for the Hearing Impaired & Mary Rice Centre. *Duration of Tour* 1 day. *Purpose of Tour:* Educational, Exposure cum Orientation Visit for the 2nd Semester Students.

Courses Conducted:

Postgraduate: MAin Adult and Continuing Education Semester I

Foundation of Adult and Continuing Education; Adult Psychology and Learning; Communication in Adult Education; Environmental Education;Research Methodology.

Semester II

National and International Perspective of Adult and Lifelong Learning; Policies and Programmes of Adult Education in India; Human Relationship: Group Dynamics, Leadership and Management; Inclusive Education; Extension Education and Development.

Semester III

Guidance and Counselling; Women Literacy and Empowerment; NGO: Concept and Management; Human Resource Development; Rural Development; Sustainable Development.

Semester IV

PopulationEducation;CommunityOrganizationandEmpowerment;Entrepreneurship and SkillDevelopment;Material Development inVernacularLanguage;DisasterManagement.

Ph.D. Courses

Research Methodology; Perspective in Adult and Continuing Education; Literature Review andSeminar Presentation.

Seminars/Conferences/Symposia/Works hops Organised: Prof. B. P. Sahu:

Socio-Economic Survey and Identification of Need Based Skill Development Programmes for Unemployed Youth from 13th-18thMay, 2018 in villages around DDU Community College, Wahiajer.

Skill Development Programme on House Electrical Wiring at DDU Community College, Wahiajer from 24th – 29thSeptember, 2018.

Dr. J. I. Rapthap:

Coordinated Refresher Course in Disaster Management from the 12th November, 2018 to the 2nd December, 2018 at UGC-HRDC, NEHU, Shillong.

Attended

Prof. B. P. Sahu

Presented a paper on (i) "Strategies of Women Empowerment"on 12th April 2018 in the eve of Workshop organised by All Jorhat District Students Union at Guidance Skill Development Centre, Chakihat, Sarbaibondha, Jorhat, Assam from 12-14th April 2018. (ii) Acted as Resource person in the Workshop entitled "Tool Development for Evaluation of Training Programs conducted by NERIE during 2010-2015" held at North-East Regional Institute of Education, NCERT, Umiam on 16.8.18.(iii) "Issues of Quality in Higher Education: Defining Quality, Quality Assurance" in the eve of National Seminar organised by IOAC, Jaintia Eastern College, Khliehriat in collaboration with RUSA, Meghalaya and Shillong on 15th November, ICSSR. 2018.(iv) Participated and presented a paper as resource person on "Self Concept and Academic Achievement in English Literature among Secondary School

Students" in the eve of National Seminar organised by IQAC, Jaintia Eastern College, Khliehriat in collaboration with RUSA, Meghalaya and ICSSR, Shillong on 15th November, 2018. (v) Chaired a session on "Achieving Sustainable Development Goals 2030: Education as a Catalyst" the ofNational in eve Conference on 16th November, 2018 organised by North East Regional Institute of Education, NCERT, Umiam. (vi) "Sustainable Management of Environmental Resources: A Case study of OMC in Odisha" in the eve of National Conference on Achieving Sustainable Development Goals 2030: *Education as a catalyst* on 16th November, 2018 organised by North-East Regional Institute Education, NCERT, of Umiam.(vii) "Personal and Family Well Being of Maram, Naga and Lodha Tribes (PTG's) of Manipur and Odisha" in the 63rd All India Adult Education Conference on the theme "Lifelong Learning and Rural Development: National Perspectives in the Context of Sustainable 2030" Development Goals jointly organised by Indian Adult Education Association (IAEA), New Delhi and the Department of Lifelong learning and Extension (DLLE), University of North Bengal, Siliguri on 27th November. 2018.(viii) "Health Status of Workers and Non Workers in Daitari Mines of Odisha: Lifelong Learning Strategy through Adult Education Intervention" in the 63rd All India Adult Education Conference on the theme "Lifelong Learning and Rural Development: National Perspectives in the Context of Sustainable Development Goals 2030" jointly organised by Indian Adult Education Association (IAEA), New Delhi and the Department of Lifelong learning and Extension (DLLE), University of North Bengal, Siliguri on 28th November, 2018. (ix) "A Study on

Coping Mechanism of Parents with Differently Abled Children with Special Reference to Kolkata, West Bengal" in the 63rd All India Adult Education Conference on the theme"Lifelong Learning and Development: Rural National Perspectives in the Context of Sustainable 2030" Development Goals jointly organised by Indian Adult Education Association (IAEA), New Delhi and the Department of Lifelong learning and Extension (DLLE), University of North Bengal, Siliguri on 29th November, 2018.(x) Invited as Guest Lecturer and delivered four lectures on "Use of Statistical tools in Social Science Research", "Literature Review using Cooper's Taxonomy", "Development of Interview Schedule/ Questionnaire" and "Integration of Multiple Reviews", for Research Methodology course for the M.Phil and Ph.D. students in the Department of Lifelong Learning and Extension, University of Mumbai on 9th and 10th January 2019. (xi) Presented a paper as Keynote speaker on 'Forest Ecology in North East India" on the eve of International Conference on "Ecology, Ethology and Environment Management' (ICEEE 2019) organized by Department of Zoology on 11th and 12th of January, 2019 at VPM's B. N. Bandodkar College, Thane.

Dr. J. Mawthoh

Presented a paper on (i) "Understanding Identity Crisis in North East India in the 14^{th} Context of Globalization" on November 2018 at John Roberts Theological Seminary, Mawklot, East Khasi Hills.(ii) Presented the keynote address on the inaugural session of the 1stNational Conference held at Sngap Syiem College, Mawkyrwat, South West Khasi Hills on 23rd November 2018.(iii) "Innovative Pedagogy and Effective

Teaching Learning" at *the National* Seminar on 15th November 2018 organised by Jaintia Eastern College, Jaintia Hills.

Attended the Valedictory function of Vigilance Awareness Week and delivered a talk on "Eradicate Corruption-Build a new India" on 2^{nd} November 2018organised by NEEPCO at Lower New Colony, Shillong. (ii) Attended Youth Parliament and delivered a talk on "Role of the Youth in Social 30^{th} Development"on October 2018 organised by Grassroots NGO at Sankardev College.(iii) Delivered the key note address а Two-DayNational Conferenceon "Achieving Sustainable Development Goals 2030: Education as Catalyst"at NERIE, Umiam, Shillong on 16th November 2018.

Publications

Books/Book Chapters/Proceedings:

Sahu, B.P (2018). Determinates of the Attitude and Burden of caregivers of the Children with Intellectual Disability Enrolled in Special Schools: LLL for the Parents. *Indian Journal of Adult Education, Vol. 79, No. 2, April-June, 2018, ISSN 0019-5006, pp 5-22.*

Syngkon, E. (2018). Assessing the Awareness Level of Neo-Literate Tribal Women on their Civil, Economic, Political and Legal Rights. *AJANTA Peer Reviewed and UGC Listed Journal, Vol. VII, No. 40776, July-September, 2018, ISSN 2277-5730, pp.17-27.*

Academic Collaborations: The Department of Adult and Continuing Education for Extension and Field Outreach Programmes has networking role with colleges and collaborations with Governmental and Non-Governmental Agencies.

Other Activities Prof. B. P. Sahu

Acted as the Keynote Speaker and delivered a paper on "Awareness on E-Waste Management" at Nongstoin College on 9th February, 2019 organised by the Department of Adult Education, North-Eastern Hill University, Shillong. (ii) Refresher Course organised by Academic Staff College, North Eastern Hill University, Shillong in Collaboration with Department of Adult and Continuing Education on the theme Disaster Management and delivered a lecture on "Role Education of in Disaster "on Management 16.11.2018. (iii) Refresher Course organised by Academic North Staff College, Eastern Hill University, Shillong in Collaboration with Department of Adult and Continuing Education on the theme Disaster Management and delivered a lecture on "Community Based Rehabilitation" on 19.11.2018.

Submitted a Survey report on "Need Based Skill Development Programmes and Vocational Training for Unemployed Youth: A study in and around rural areas of DDU Community College, Wahiajer" on 12th March 2019 to the Pro-Vice Chancellor, NEHU, Shillong.

Worked as Consultant in the Workshop to develop the Curriculum in Master of Social Work organized by Assam Don Bosco University, Azara, Guwahati at Siloam, Barapani from 22nd - 23rd March, 2019.

Developed the Syllabus for Certificate Course in Plumbing, Electrical Wiring and Welding & Fabrication for the DDU Community College, Wahiajer, a constituent College of North-Eastern Hill University, Shillong.

Dr. E. Syngkon

Acted as Resource person for the Refresher Course organised by Academic Staff College,

North Eastern Hill University, Shillong in Collaboration with Department of Adult and Continuing Education on the theme *Disaster Management* and delivered a lecture on "Impact of Disaster Events on Women" on 15.11.2018.

Dr. J. I. Rapthap:

Attended and delivered a lecture on (i) "Trauma Counselling: Coping with Disasters" during the Refresher Course in *Disaster Management* from the 12th November 2018 to the 2nd December 2018 at UGC-HRDC, NEHU Shillong on the 19th November 2018. (ii) "Community Participation in Disaster Management" during the Refresher Course in Disaster Management from the 12th November 2018 to the 2nd December 2018 at UGC-HRDC, NEHU, Shillong on the 30th November 2018.(iii) Attended & Delivered lecture on "Inclusive а Education & Its Relevance in this 21st Century" during the Ring the bell Campaign organized by Mary Rice Centre, Laitumkhrah, Shillong on the 12th March 2019.

DEPARTMENT OF EDUCATION

Head	: Professor C. Nongbr			
Telephone	: 2723340 (Head), 2'	723346(O),		
Email ID	09436102123 (M) : hodedu@nehu.ac.in			
Eman ID	: hodedu@nehu.ac.in			
FacultyProfile	e : 9			
Designation	Name and Qualification	Specialization		
	Dr. S. M. Sungoh	Teacher Education, Teaching at Tertiary		
	M.A; M.Phil&Ph.D. (NEHU)	Level, Measurement & Evaluation,		
		Educational Psychology, Guidance &		
		Counseling, Research Methodology.		
	Dr. C. Nongbri M.A (Pol. Sc) M.Ed&Ph.D.	Educational Management and Change,		
Professor	M.A (Pol. Sc) M.Ed&Ph.D. (NEHU)	Curriculum Development and Instruction, System of Teacher Education in India		
110105501	(NEIIO)	and Educational System in India		
	Dr. Ibadani Syiem	Psychology of Education, , Early		
	MA; B.Ed, Ph.D. (NEHU),	Childhood Education, Guidance and		
		Counseling, Environmental Education,		
		Research Methodology.		
	Dr. B. Bazeley Kharbirymbai	Educational Technology, Philosophy of		
	B.Sc Hons, B.Ed, M.A	Education, Research Methods,		
	Education, Ph.D.,(NEHU) Diploma in Management,	Curriculum Development, Educational Testing & Evaluation, Higher Education,		
	PGDESD	Economics of Education		
Assistant	Dr. Rihunlang Rymbai	Teacher Education, Science Education,		
Professor	M.Sc.(Chy), M.Ed& PH.D.	Methods of Teaching, Environmental		
	(NEHU)	Education, Research Methodology.		
	Dr. Ashok Kumar			
	M.A(Psycho) M. Ed, M. Phil	Educational Psychology, Sociology of		
	(Edu), M. Sc,(Anthro) Ph.D.	Education, Educational Testing		
	(Andhra) M.A. English (Dr. B.R			
	.A.O.U.,) M.Sc. Zoology			
	(Achrya Nagarjuna)			
	Dr. Vandana	Research Method in Education,		
	M.A. English, (Purvanchal), M. Ed&Ph.D. (BHU)	Sociology of Education, Teaching Podogogy Languages (English Hindi)		
	Dr. Euodia B Myrthong	Pedagogy : Languages (English, Hindi) Educational Psychology, Guidance &		
	M.A.&Ph.D. (NEHU)	Counselling, Educational Research		
	Dr. Naraginti Amareswaran	Value Education, Educational		
	M.A. (Philosophy),M.Ed.,Ph.D.	Philosophy, Educational Technology,		
	(Sri Venkateswara)	ICT in Education		

Thrust Areas of Research:

System of Education in North East, Test Construction, Teacher Education, Educational Psychology, Environmental Education

Brief Statement of Academic Activities: The Department of Education has been offering courses for M.A, M.Ed and Ph.D. Programmes. The Department admitted 50 Students in the M.A. Programme and 47 in the M.Ed Programme. At present, the M. Ed programme is enhanced to Two Years Course comprising of four semesters as per the NCTE Regulations, 2014. The current intake capacity for MA is 50 and M. Ed is 50.

Students' Profile

Enrolment Capacity: <u>MA: 50</u>, <u>M.Ed: 47</u>, <u>Ph.D.: 8</u> Actual Admissions

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA	6	44	-	50	-	-	43	7	50
M.Ed	4	43	-	45	-	2	41	6	47
Ph.D.	2	6	-	8	-	-	5	3	8

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
M.A	3	45	-	48	-	-	46	2	48
M.Ed	3	17	1	16	-	3	15	5	20
Ph.D.	3	9	-	9	-	3	6	6	12

* Foreign Students (2 Male and 1 Female) Students Awarded Ph.D. Degree : 12 Research Fellowship

CSIR- UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other(You name it)	Others
-	4	3	-	-	-	-

Fieldwork/Educational Tour of Students

Teacher-in-Charge: Prof I. Syiem, Dr. A Kumar and Mr. C. K. Mathew Places/Institutions Visited: Study tour to Vishakhapatnam and Kolkata for M.A and M Ed W competer students Duration of Tour: 1st -10th February 2019 Purpose of Tour: To visit the educational institutions of Vishakhapatnam and Kolkata Courses Conducted: *MA (Education)*

M.Ed IV sei	nester students
Semester	Courses
Semester-	Philosophical Foundations of Education, Advanced Educational Psychology,
Ι:	Educational Management and Change, Research Methodology in Education (I&II),
Semester-	Curriculum Development and Instruction, Sociology of
II :	Education, Educational Testing & Evaluation, Environmental Education and Mental
	Health Education,

Semester-	Educational Technology, Comparative Education, Early Childhood Education,
III :	Teacher Education, Special Education
Semester-	Laboratory Practical, Higher Education in India, Guidance and Counseling,
IV :	Methods of Teaching at Tertiary Level, Economics of Education.
M.Ed	
Semester	Courses
Semester-	Introduction to Educational Studies, Teacher Education I – Teachers and Teaching,
Ι:	Psychology of Learning & Development, Research Method-I, Research Method-II,
	Skill Development.
Semester-	Theory & Practice of Teaching, Educational Testing, Teacher Education II -
II :	Professional development of Teachers, Internship in DIET's/CTE's for Four weeks,
	Academic Writing & Presentation, Mental Health
Semester-	Education in Philosophical Perspective, Elective – Development of Elementary
III :	Education, Development of Secondary & Higher Secondary Education, Optional -
	ICT in Education, Inclusive Education, Educational Planning, Management &
	Finance, Early Childhood Education, Dissertation, Historical Development of
	Education in India, Curriculum Development.
Semester-	Educational in Social Perspective, Elective – Management of Elementary
IV :	Education, Management of Secondary and Higher Secondary Education, Optional –
	Experimental Education, Guidance & Counseling, Women Education,
	Environmental Education, Dissertation.
Ph.D. Courses	
Course III then Education Descent Methodalous Deta Analosia & Courseton Analisations	

Course Higher Education, Research Methodology, Data Analysis & Computer Applications. Work

Seminars/Conferences/Workshops/Sympo sia/ExtensionProgrammes

Organized: The Department organized a programme to celebrated 15th birth anniversary of M.K. Gandhi on National Education Day on the theme "contribution of M.K. Gandhi in Education" on 9thNovember, 2018 at Cluster of Classroom other than Science, NEHU, Shillong with Prof. B.B. Kharbirymbai as Co-ordinator.

Prof C. Nongbri

- Organised the 25th Annual Conference Cum National Seminar on the theme "Educational Leadership, Management and Governance with special reference to North East India" on6th& 7th March, 2019, Auditorium Old NEHU Guest House, NEHU, Shillong.
- Organised and Participated in Nai- Talim Gandhiji's Experiential Learning Round Table and Discussion Flow on 14th March, 2019.Organised by Mahatma Gandhi National Council of Rural Education, Hyderbad in collaboration with Department of Education, NEHU, Shillong.
- Organised and participated in a Consultative Workshop on Nai Talim, Experiential Learning and Work Education in School and Teacher Education Curriculum, organised by the Department of Shillong Education, NEHU, in collaboration with the Mahatma Gandhi National Council of Rural Education, (MGNCRE) Hyderbad, Ministry of Human Resource Development (MHRD) on 15thMarch, 2019.

Attended

Prof S.M. Sungoh

- Attended (i) a meeting of the Eastern Regional Council of National Council for Teacher Education, at Bhubaneshwar on 25th -26th April 2018. (ii) 30th April to 2nd May 201 (iii) $25^{\text{th}} - 26^{\text{th}}$ May, 2018.(iv) $2^{\text{nd}} - 3^{\text{rd}}$ July, 2018.(v) $22^{\text{nd}} - 23^{\text{rd}}$ July, 2018.(vi) 11th -12th August, 2018.(vii) 15th-16th November, 2018. (viii) Attended a Lecture given by Shri Jaideep Mazumdar, IFS, Ambassador of India to "India Manila, Philipines on and ASEAN" on 17th December, 2018 at ASEAN Studies Centre and ICSSR-NERC, Shillong. (ix) Attended a meeting of the North East Regional Institute of Education (NCERT) on 9th January, 2019.
- Chaired a session on (i) Nai- Talim Gandhiji's Experiential Learning Round Table and Discussion Flow on 14th March, 2019organized by the Department of Education, in collaboration with the Mahatma Gandhi National Council of Rural Education (MGNCRE) Ministry of Human Resource Development, (MHRD) Government of India. (ii) Consultative Workshop on Nai Talim, Experiential Learning and Work Education in School and Teacher Education Curriculum, organised by the Department of Education, NEHU, Shillong in collaboration with the Mahatma Gandhi National Council of Rural Education, (MGNCRE)Hyderabad, Ministry of Human Resource Development (MHRD) on 15thMarch, 2019...

Prof C. Nongbri

Presented a paper on (i) "Use of ICT in an Inclusive educational setting at the Two-Day International Conference on "Bridging the Digital Divide: Role of Libraries and Information Centres with special Reference to North Eastern Region" organized by the Shillong College Central Library in collaboration with IQAC, Shillong College, Shillong on September 5-6, 2018.(ii) "Two - Year B. Ed Programme in Meghalaya: A close School Internship look into the Programme for Quality Teachers" at the International Conference on the theme "Recent Trends in Educational Psychology" organized by the Department of Psychology &Education. MSU. Baroda, on January 11-12, 2019.

- Participated in the *Two- day National Conference on Nai Talim and Experiential Learning* at Dr MCR HRD Institute, Hyderabad on 27-28 February, 2019 organized by the Mahatma Gandhi National Council of Rural Education (MGNCRE) Ministry of Human Resource Development,(MHRD) Government of India.
- Chaired a Technical Session on March 6, 2019 in the 25th Annual Conference cum National Seminar of the North East India Education Society on *Managerial Roles and Competencies of Heads of Institutions* organised by the Department of Education, NEHU, Shillong, **on** 6th& 7th March, 2019, Auditorium,Old Guest House, NEHU, Shillong
- Presented a paper on (i) "Governance of Higher Education in Meghalaya" on 7th March. 2019 in the 25th Annual Conference cum-seminar of the North-East India Education Societv on Educational Leadership, Management and Governance with special reference to North **East Indiaon** 6^{th} & 7^{th} of March, 2019 organised by the Department of Education, NEHU, Shillong. (ii) "Total Quality Management in Higher Education: A Conceptual Review on 7th March. 2019 in the 25th Annual Conference cumseminar of the North-East India Education Society" Educational Leadership, Management and Governance with special reference to North East India" on 6^{th} & 7^{th} of

March, 2019 organised by the Department of Education, NEHU, Shillong.

Prof I.Syiem

- Presented a paper on "Redefining teacher effectiveness for quality teaching and learning in higher education for future promises on the 25th August, 2018 in the National Seminar on Recent Trends in Higher Education in India: Issues and Challenges on 25th & 26th August, 2018 organised Guwahati College Teacher Unit in collaboration with Assam College Teacher Association, Guwahati.(ii) "Enhancing Scientific Aptitude for better achievement in science subject among students on 25th August, 2018 in the National Seminar on Recent Trends in Higher Education in India: Issues and Challenges on 25ht & 26th August, 2018 organised by Guwahati College Teacher Unit in collaboration with the Assam Teacher Association.(iii) College "Applicability of TQM to Higher Education"in the 25th Annual Conferencecum-National Seminar of the North East India Education Societyon Educational Leadership and Management with special reference to North- East India on 6th&7th March 2019 March 2019 organised by Dept of Education, North- Eastern Hill University Shillong.
- Chaired a Technical session on7th March, 2019 in the 25th Annual Conference cum seminar of North -East India Education Society, "Educational Leadership, Management and Governance with special reference to North-East India organised by Department of Education, NEHU, Shillong.
- Participated in a Consultative Workshop on Nai Talim, Experiential Learning and Work Education in School and Teacher Education Curriculum, organised by the Department of Education, NEHU, Shillong in collaboration with the

Mahatma Gandhi National Council of Rural Education, (MGNCRE) Hyderabad,Ministry of Human Resource Development (MHRD) on 15thMarch, 2019.

Prof B.B. Kharbirymbai

Presented a paper titled"Preservation of Indigenous knowledge in North East India - Opportunities and Challenges'' at the two days international conference on the theme-"Bridging the digital divide-Role of Libraries and Information centers with special reference to North Eastern *Region''* on the 5^{th} & 6^{th} of September 2018 at Shillong College, Shillong.(ii) "St. Mary's College of Teacher Education, Shillong –A case study" on the 25th-26th August, 2018 at a National Seminar organized by the Guwahati College Teachers Unit in collaboration with Assam College Teachers Association(Kamrup Metro Zone) "Leadership role Guwahati.(iii) of teachers, work place Norms and Ethics" at National Seminar cum 25th Annual conference of NEIES on 6th -7th March, 2019 organized by Department of Education, NEHU Shillong and North East India Education Society(NEIES) Shillong.(iv) "Importance of Guidance and Counselling in school management" at National Seminar cum 25th Annual conference of NEIES on the 6th -7th March 2019 organized by Department of Education, NEHU Shillong and North East India Education Society(NEIES) Shillong. (v)"Management of school education in North Eastern Region, South West Garo Hills" at National Seminar cum 25th Annual conference of NEIES on 6th -7th March 2019 organized by Department of Education, NEHU Shillong and North East India Education Society(NEIES) Shillong.

Participated and attended a campus based event "Democracy Wall" held on 30th May,2018 organized by Dean, School of Student Welfare, NEHU, Shillong.(ii) National conference on NAAC revised accreditation framework: Challenges and opportunities with special reference to North Eastern Region, organized by IQAC, Shillong College from the 23-24th August, 2018 (iii) A conversation cafe-"How has the Education System helped or hindered our learning curve" on the 31st August 2018 organized by INDI-ED a non-profit organization at the Multi-Convention Hall NEHU, Shillong. (iv) Consultative Workshop on Nai Talim, Experiential Learning and Work Education in School and Teacher Education Curriculum, organised by the Education, Department of NEHU. Shillong in collaboration with the Mahatma Gandhi National Council of Rural Education, National Council of Rural Education. (MGNCRE) Hyderabad, Ministry of Human Resource Development (MHRD) on 15thMarch, 2019.

Dr. Rihunlang Rymbai

Presented a paper on "Women and work: work stress, work-family balance and work related quality of life of women teachers." in an International Conference on the theme "Women and Development" organised by Union Christian College, Meghalaya in collaboration with P. A. Sangma Foundation, Meghalaya from 26th to 28th July 2018.(ii) "Urbanization: Positive and negative consequence in Education." In theNational Seminar organised on a theme "Urbanization in India: Issues and Predicaments" by UGC-SAP (DSA-I) of the Department of Sociology, North-Eastern Hill University from 14th to 15th February 2019.(iii) "Educational leadership with zeal: Place of character

strength."in the 25th Annual Conference cum National Seminar on the theme "Educational Leadership, Management and Governance with special reference to India" North East organised by Department of Education, North-Eastern Hill University held from 6th to 7th March 2019.(iv) "Leadership style in the secondary schools of Mawiong" in the 25th Annual Conference cum National Seminar on the theme "Educational Leadership, Management and Governance with special reference to North East India" organised by Department of Education, North-Eastern Hill University held from 6th to 7th March 2019.(v) "Creative leadership: Concept and understanding"in the 25th Annual Conference cum National Seminar on the theme "Educational Leadership, Management and Governance with special reference to North East India" organised by Department of Education, North-Eastern Hill University held from 6th to 7th March 2019.(vi) "Management of school education: Problems faced by principalsof secondary schools in Shillong"in the 25th Annual Conference cum National Seminar on the theme "Educational Leadership, Management and Governance with special reference to East India "organised North by Department of Education, North-Eastern Hill University held from 6th to 7th March 2019.

Dr. Ashok Kumar Erigala

Presented a paper on (i) "Teacher effectiveness at higher educational level in Jaintia Hills Districts" on 25th -26thAugust, 2018in the National Seminar onRecent Trends in Higher Education in India: Issues and Challenges. organised by Guwahati College Teachers' Unit, Guwahati.(ii) "Social Intelligence in relation to Pro-Social Behaviour ofHigher Secondary Students in East Khasi Hills

Meghalaya "in District. the 8thInternational Conference on School Psychology. organised by Dept of Psychology & Para Psychology, Andhra University,11th to 13th, October. 2018.(iii)"E-learning: its importance, impact and implications on education "in ICSSR National Seminar onE-Learning Leads Academic Success in Secondary Education. organised by College of Education, Adikavi Nannaya University, AP. 13th -14th November, 2018. (iv) "Exclusion of women from Higher Education in Contemporary India."inthe UGC National Seminar on Women in Contemporary Social Realm. organised by Department of Sociology Social work, Acharya Nagarjuna and University, 27th -28th February, 2019.(v) "Changing roles of leadership and management of head of institutions of secondary schools." Inthe25thAnnual Conference cum seminar on the theme Educational leadership Management and Governance with special reference to North East India organised by Departmentof Education, NEHU, Shillong, in 6th -7th March, 2019.

Participated in a Consultative Workshop on *Nai Talim, Experiential Learning and Work Education in School & Teacher Education Curriculum.* on 15th March, 2019. Organised byDept of Education, NEHU, Shillong in collaboration with the Mahatma Gandhi National Council of Rural Education, (MGNCRE) Hyderabad,Ministry of Human Resource Development (MHRD)

Dr. Vandana

Presented a paper on 'Learning mathematics ethnomatically- an experience of Primary students of Ukhrul district, Manipur' in a *National Seminar on Mathematics Education*, organized by NERIE, Shillong on 21-22nd December, 2017.(ii) 'Selfleadership, Psychological Capital and academic adjustment of first year university students in East-Khasi Hills District of Meghalaya' in an International Seminar on Peace, Well-being and Education' organized by Department of Education, Jadavpur University on 28-29 December, 2018.(iii) Presented a paper on 'Psychological Capital amongst Higher Education teachers-a retrospective analytical reading' in the National Seminar on Recent trends in Higher Education in India, organized by Guwahati College Teachers' Unit on 25-26 August, 2018.

Dr. E.B. Myrthong

Presented a paper on (i) "Problems faced by rural students in Higher Education in Meghalaya: A pilot study" in the National Seminar on Recent Trends in Higher Education India: Issues in and Challenges, Guwahati College, Guwahati on 25th -26th August, 2018.(ii) "Rural students and Science Education in Higher Education: Problems and challenges" in National Seminar on Science the Education in North-Eastern States of India: Current Status and future Directions, organized by the Department of Education, Mizoram University on 3rd 2^{nd} & November, 2018. (iii) "Leadership styles of school principals and its influence on the academic performance of Secondary school students of East Khasi Hills District of Meghalaya" in the 25th Annual conference cum National Seminar on Educational Leadership, Management and Governance with special reference to North East India, organized by the Department of Education, NEHU, Shillong on 6th -7th March, 2019. (iv) "Influence of teachers' social-emotional competency in 25^{th} classroom management" in the Annual Conference and National Seminar on Educational Leadership, Management and Governance with special reference to North East India, organized by the Department of Education, NEHU, Shillong on 6th -7th March, 2019.(v) "Teachers' burnout and causes of burnout among college teachers in Municipal area of Dimapur, Nagaland" in the *National Seminar on Issues and Challenges of Higher Education in North East India* on 14th-15th March 2019 organised by IQAC, Immanuel College, Dimapur, Nagaland.

Dr. N. Amareswaran

- Presented a paper on (i) "Open Educational Resources (OER) for teaching, learning and research" at the *International Conference on Bridging the Digital Divide – Role of Libraries & Information centres* with special reference to North-Eastern Region on 5-6 September 2018.
- Attended a (i) National Workshop on teaching, learning and evaluation online with Moodle MOOC Platform & Open Educational Resources organized by National Institute of Educational Planning and Administration, New Delhi on 6-10 August 2018. (ii) National Workshop on identification of research methodology resources for teachers in Higher Education organized by National Institute of Educational Planning and Administration, New Delhi during 11-13 June 2018.

Publications

Research Papers

Published in India

- Nikhla, W., Nongbri, C. (2018). Curriculum and practices for Early Childhood Education- A Concern. *International Journal of Research and Analytical Reviews* 5(3): 1134-1138
- Synrem, E., Syiem, I. (2018). Relationship between scientific and achievement in Science subject of class IX students in Ri Bhoi District of Meghalaya. *International Journal of Research and Analytical Reviews*,(IJRAR) 5(3): 38-41

- Synrem, E., Syiem, I. (2018) Relationship between study habits and achievement in Science subject of class IX students in Ri Bhoi District of Meghalaya. *International Education and Research Journal*(IERJ) 4(9): 7-9
- KharbiRymbai (2018) Published a paper titled- ''Education of the tribes in India'' at Tetso Journal of Educational Research, Vol-1, edited by Earlitha Sangma and Alemla Jamir- Pp 1-5.
- Rymbai, R., Hajong, A. (2019). Teacher values and teacher self-efficacy of West Garo Hills district higher secondary school teachers. *Journal of Emerging Technologies and Innovative Research*. 6(2): 292 – 297.
- Kumar. E.A., Papang,(2018) Teacher effectiveness in relation to job satisfaction of secondary teachers in Jaintia Hills, Meghalaya. *International Journal of Creative Research Thoughts*, 6(2): 588-592.
- Kumar. E A., Papang,(2018) Teacher effectiveness in relation to work motivation of secondary school teachers in Jaintia Hills district, Meghalaya. *Research Direction- International Online Multidisciplinary Journal*, 5(10): 76-82.
- Kharluni,Kumar. E .A.(2018)Social intelligence and social competence of higher secondary students of Mylliem block in East Khasi Hills district of Meghalaya. *International Journal of Creative Research Thoughts*, 6(2):1378-1384.
- Kumar. E .A., Kharluni, (2018) Pro-Social Behaviour and academic achievement of Higher Secondary Students in East Khasi Hills District of Meghalaya, India. *Review*

of Research-International Online Multidisciplinary Journal, 7(9): 38-46.

- Ngasainao, G., Vandana (2018). Connecting culture with mathematics classroom-A study on primary students of Ukhrul district, Manipur. *Research Journal of Social and Life Sciences*, XXV(III):152-59.
- Sherpa, K., Rymbai, R. (2018). Women education: Analysis of educational schemes available for women. *International Journal of Creative Research and Though*, 6(2): 1127–1133.
- Amareswaran, N. (2018). Educational tourism - a key for social learning. *Emerging Dyanmics of Indian Tourism* and Hospitality, Vol (issue): pp:321-327
- Amareswaran, N. (2018). Philosophical thoughts of Budda for happy and healthy life. *Current Global Reviewer*, *I*(1), 60-67.
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- Kichu, T., Amareswaran, N. (2017). Technical and vocational educationin Nagaland - a key for development. International Education & Research Journal (IERJ), 3(5): 598-600.

Published Abroad

- Kharbirymbai, B.B., (2018) ICT in Tertiary Education and its types. *International Journal of Education and Humanities*, 8(5):270-280.
- Kharbirymbai, B.B., (2018) Value Education in the schools of Shillong, Meghalaya. International Journal of Education and Humanities, 9(1): 100-104.
- Kharbirymbai, B.B., (2018) Total Quality Management(TQM) in Higher Education-Need of the hour*International Journal of Education and Humanities*. 11(1): 46-50

- KharbiRymbai, B.B., (2018) Environmental Awareness of Higher Secondary School Students International online multidisciplinary Journal 7(9):63-66
- Kharbirymbai, B.B., (2018) "Education of the tribes in India". In Testo Journal of Educational Research, E. Sangma and Jamir, Vol:1-5
- Rymbai, R. (2019). Hope and self-efficacy of university students. *International Journal of Basic and Applied Research*,6(2): 1127 – 1133.
- Tiewsoh, I., Rymbai, R. (2019). Teacherleadership skills: Significance in educational organization. *International Journal of Research and Analytical Reviews*, 6(1):1161 – 1164.
- Myrthong, E.B., Nonglait, W.L. (2018). Developing teacher's social- emotional competency for optimum classroom participation. *International Journal of Research in Management & Social Science.* 6(2, I): 15-18.

Books/Book Chapters/Proceedings

- Syiem, I., (2019) Linguistic and Emotional Intelligence : relevance to language learning, In *Glimpse of some of the Austro-Asiatic languages in India* S.K.
 Singh, S. Lyngdoh, B. Khyriem (Ed) EBPH, Guwahati, ISBN -978-93-88881-4-2 Chapter X, p. 88-93
- Kharbirymbai,B.B (2019) Cross Cultural Communications-Effects in Todays society,In "Glimpse of some of the Austro-Asiatic Languages",S.K Singh,S.Lyndoh,B.Khyriem (Ed)-Eastern book house (EBH) publishers, Guwahati ISBN 978-93-88881-14-2, chapter 14 (p)119-124.
- Kharbirymbai, B.B(2019), "Reforming the higher education system of India with special

reference to North Eastern *Region''Reforms* and Innovations and their impact on Quality Assurance of Higher Education in India with special reference to North Eastern Region'' Dr.A. Rahman,(Ed) , Dr.Sarat Borkataki, Principal College, Nowgoan,Assam,2018, chapter1, p:17-30

- Rymbai, R. (2018). Values in Action: Hope amongst the Tribal Students of North-Eastern Hill University. In: Understanding the Tribes of AsiaD.A. Kharshandi: (Ed)Lakshi Publishers and Distributors, New Delhi chapter 28 p.309 -318.
- Papang, Kumar. A. E (2018) Teacher effectiveness at higher education level in Jaintia Hills districts.In: *Research trends in Higher Education in India: Issues and Challenges.* S. Rahman, G. C. Deka (Eds.). Guwhati College Teacher Unit, Guwhati, p. 165-172. Chandra Prakash.
- Ngasainao, G., Vandana (2018). Effect of ethno-mathematical teaching strategy on learning outcome in Mathematics: A study on primary students Tangkhul tribe, Manipur. In: *Education, Culture, and Society* by Department of Teacher

Education, Manipur University.Chapter 5, p 37-42.

- Myrthong, E.B., Nonglait, F.L. (2018). Problems faced by Rural Students in Higher Education in Meghalaya. In: *Recent Trends in Higher Education in India: Issues and Challenges*. Safiqur, R., Deka G.C. (Ed).Guwahati, Chandra Praskash, Chapter 2, p. 6-12
- Amareswaran, N., Cosmedalis, N. (2018). Life skill education of secondary school teachers.
- Lap Lambert Academic Publishing.Germany, ISBN 978-3-330-06199-6
- Amareswaran, N.,Harjinder, K.S. (2018). Information and communication technology for children with special needs. In:*Inclusive Education Practices* and ChallengesS. Deepa, New Delhi: K.K. Publications.Chapter 29 p. 203-210.
- Amareswaran, N. (2019). Continuing professional development (CPD) of teacher through information and (ICT). communication technology In:*Ouality* Teacher Education, B. E. Liegise (Ed) Publishing Company, Dimapur chapter 20 p 112-116

Funds Received from Agencies including NEHU/UGC Research Projects: Ongoing

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)
Exclusion of Scheduled Tribes	Dr. Ashok	Indian Council of	Rs. 8,00,000/-
from Secondary Education in	Kumar Erigala	Social Science	
Meghalaya		Research.(ICSSR),	
		New Delhi	

Completed

Completea			
Title of Project	Pl/Co-Pl	Funding	Amount
		Agency	(Rupees)
A Critical Analysis of Problems of			
North-East People with Special	Dr. Naraginti	UGC, New	24 .00 Lakhs
Reference to the Role of	Amareswaran	Delhi	
Education			

Academic Collaborations Honours/Awards/Recognitions

Prof S.M. Sungoh

President of the North East India Education Society(NEIES)

Prof. I. Syiem:

Advisory Board member of an

Interdisciplinary Journal in Social Science (peer reviewed) international journal of St. Claret College, Zairo India, ISSN: 2349-400

Other Activities

Prof S.M. Sungoh

Resource person on "Assessment of Minor and Major Research Proposals" held in Lady Keane College, Shillong on 5th April, 2018.(ii) an Extended Contact Programme (ECP) of Post Graduate Diploma in Higher Education (PGDHE) on the topic: "What is Profession/ Characteristics of Teaching as а Profession. How is it different from other Professions?" organized by IGNOU on 14.05.2018 in IGNOU Regional Centre, NEHU Campus, Umshing, Shillong.(iii) The draft Meghalaya State Policy on Education (2018), held at DERT Office, Shillong, Meghalaya, on June 15, 2018.(iv) UGC-HRDC 44th Orientation Program held on 9th and 11th July, 2018 organised by HRDC NEHU, Shillong. (v) Workshop on Research Methodology in Social Sciences for the Research Scholars and Faculty Members on a topic entitled "Tools in Social Science Research" on 5th September, 2018 held in ICSSR:NERC, 45^{th} UGC -HRDC Shillong.(vi) Orientation Program held on 21st and 23th August, 2018 organised by HRDC NEHU, Shillong. (vii) Consultative Meet of North Eastern States on "Emerging Issues and Challenges of Teacher Education at Secondary stage" held at NCERT, New

Delhi on 4-6 December, 2018.(viii) UGC -HRDC 46th Orientation Program held on 22nd and 28th January,2019 organised by HRDC NEHU, Shillong. (ix) UGC – HRDC 47th Orientation Program held on 19th and 28thFebruary,2019 organised by HRDC NEHU, Shillong. (x) "Students Portfolio" in a workshop organized by Department of Education for Colleges of Teacher Education in Meghalaya on 27th March, 2019, in NEHU.

Prof C. Nongbri

Resource Person in an Extended Contact Programme (ECP) of Post Graduate Diploma in Higher Education (PGDHE) on the topic: "Financing of Higher Education- Issues and Trends" on 14.05.2018 organized by IGNOU on 11th -20thMay 2018 in IGNOU Regional Centre, NEHU Campus, Umshing, Shillong. (ii)two lecturesCurriculum Development at the Higher Education Level on July 19, 2018 in the 44th Orientation Programme organized by UGC-HRDC, NEHU, Shillong from 4th -31st July 2018.(iii) Two lectures on Curriculum Development at the Higher Education Level on September 4, 2018 in the 45th Orientation Programme (General) for College & University teachers organized by UGC-HRDC, NEHU, Shillong from 20thAugust-6thSeptember, 2019.(iv) Two lectures on Curriculum Development at the Higher Education Level on February 4, 2019 in the 46th Orientation Programme for College & University teachers organized by UGC-HRDC, NEHU, Shillong from January 21st to February-17th, 2019.(v) Two lectures on Curriculum Development at the Higher Education Level on March 14, 2019 in the 47th Orientation Programme (General) for College & University teachers organized by UGC-HRDC,

NEHU, Shillong from18th February-17th March, 2019.

Prof I.Syiem

- Delivered a lecture on (i) "What is Learning? Types and factors affecting Learning "organised by Indira Gandhi National Open University (IGNOU) in the Extended Contact Programme for Post Graduate Diploma in Higher Education (PGDHE) 16thMay, 2018.(ii) "Writing a Proposal" Research organised by Department of Political Science (P.G. Course) Synod College Shillong on 24th& 25^{th} May, 2018. (iii) the Key Note Address on 25^{th} August, 2018 in the National Seminar on " Recent Trends in Higher Education in India: Issues & Challenges " organised by Guwahati College Teacher's Unit Gauhati (Kamrup Metro Zone) on 25th & 26th August, 2018. (iv) "Recent Trends in Higher Education in India: Issues & Challenges " on 25th August, 2018 organised by Guwahati College Teacher's Unit in Gauhati Kamrup Metro Zone) on 25th& 26th August, 2018.
- Expert member on "Synopsis presentation "organised by Department of Education, University of Science & Technology (USTM), Meghalaya on 27th August, 2018

Prof B.B. Kharbirymbai

Resource person on the topic-ICT in Higher Education, on 5th April 2018 at Winter School Programme,organized by UGC-HRDC NEHU, Shillong from 19th -8th April,2018.(ii) Management and structure of Higher Education in the IGNOU extension programme Post Graduate Diploma In Higher Education Programme conducted by IGNOU-Shillong on 17th May, 2018 in India at IGNOU,Shillong. (iii) USTM, Baridua, Meghalaya on the 26th of June, 2018 for two Ph.D. Proposals.(iv) one day workshop on Action Research at USTM, Baridua, Meghalaya on the 13th October 2018. (v) Resource person on the topic- ICT in Higher Education at UGC-HRDC, NEHU Shillong on the Orientation Programme held the 16th June, 2018.(vi) Resource person at NERIE-NCERT,Nongsder Umiam,Shillong for finalization of research tool for the project titled-"Evaluation of the influence of in-service training programme conducted in the state 20^{th} Meghalaya'' on the of of August, 2018. (vii) Higher Education in North East India. at UGC-HRDC, NEHU Shillong for Orientation Programme on the 21st August,2018 .(viii) Sampling Design at 5 days workshop on Research Methodology at UGC-HRDC,NEHU Shillong on the 27th September,2018(ix) Sampling Techniques at 5 days workshop on Research Methodology at UGC-HRDC,NEHU Shillong on the 27th September, 2018(x) "Introduction to MOOCs" on the 11th of March 2019 at Short Term Courses on MOOCs,e-content development and Open Educational Resources" conducted by UGC-Human Resource Development Center, NEHU Shillong from the 11-16th March 2019.(xi)'Folklore and Pedagogy'' on the 29th of March 2019 at the Refresher Course organized by The Department of Cultural and Creative Studies, NEHU-Shillong and conducted by UGC-Human Resource Development Center, NEHU Shillong from the 18th March -07th of 2019. .(xii)"ICT in Higher April Education" on the 5th of February, 2019 at 46th Orientation Programme conducted by UGC-Human Resource Development Center, NEHU Shillong from the 21st of January -17th of February, 2019. .(xiii)''ICT in Higher Education'' on the 16th of July, 2018 at 44th Orientation Programme conducted by UGC-Human

Resource Development Center,NEHU Shillong from the 14-31st of July, 2018.(xiv)'Sampling Techniques '' on the 15th of March, 2019 at the Refresher Course conducted by UGC-Human Resource Development Center, NEHU Shillong. (xv) "Reforms in Indian Higher Education" on the 14th of March 2019 at the Orientation Programme conducted by UGC-Human Resource Development Center,NEHU Shillong.

- Expert for Ph.D. synopsis presentations and evaluation on 26th July 2018 at the Department of Education,USTM,Baridua,Ri-Bhoi, Meghalaya. (ii)Vice Chancellors nominee for Ph.D. viva in the Department of Education, University of Science and Technology(USTM) on the 26th of April,2018 (iii) Expert and examiner at the Ph.D. Progress Report presentation at USTM, Baridua Meghalaya on 18th March 2019
- Examiner for (i) M.A dissertation viva voce on 1st August,2018 at IGNOU,Shillong. (ii)Examiner at Department of Education,Gauhati University for M.Ed Dissertation viva voce on the 7th,8th and 9th of August,2018.

Dr. Rihunlang Rymbai

Participated in (i) the Consultative Meet of North Eastern States on Emerging Issues and Challenges of Teacher Education at Secondary Stage organized by Department of Teacher Education, NIE, NCERT, New Delhi at North East Regional Institute of Education, Umiam, Barapani, Shillong during 4th to 6th December, 2018.(ii) Nai Talim, Experiential Learning and Work Education in School and Teacher Education Curriculum (A Consultative Workshop) organized by the Department of Education, NEHU, Shillong in collaboration with the Mahatma Gandhi National Council of Rural Education, Hyderabad at the Department of Education, NEHU, Shillong on 15th March, 2019.

Delivered a lecture on the topic, (i) "Teachers as Counsellors: Need of Guidance and Counselling for Young Adults" on 16rd May 2018 in the Extended Contact Programme (ECP) for Post Graduate Diploma in Higher Education (PGDHE)organized by IGNOU Regional Centre, NEHU Campus, Shillong, from 11th May to 17th May, 2018.(ii) "Counselling through Role Play" in the Extended Contact Programme (ECP) for Post Graduate Diploma in Higher Education (PGDHE) on 16th May 2018, organized by IGNOU Regional Centre, NEHU Campus, Shillong, from 11th May to 17th May, 2018.(iv) "Methods, Evaluation and Research in Science Education" on 30th November 2018, in a training programme "Training of KRPs on Science Education at Elementary and Secondary Level" organized by NERIE, NCERT from 26th November to 30th November, 2018.(v) "Life Skills" on 14th March 2019, in a Talk organized by Department of Education, St. Mary's College, Shillong.

Dr. Ashok Kumar Erigala

Delivered (i) two lectures on "Education and Exclusion of Tribeswith special reference to Visakhapatnam Agency" in Centre for Study of Social Exclusion and Inclusive Policy, Andhra University on 12th and 13th April, 2018.(ii) "Group Project Work as a Technique for Learning at College Level" in the Extended Contact Programme of PGDHE" organised by IGNOU Reagional Centre on 11th May, 2018.(iii) "Discussion on Pros and Cons of Lecture Method" in the Extended of Contact Programme PGDHE" organised by IGNOU Reagional Centre on 11th May, 2018.(iv) "Discussion on Research Project Work" in the Extended Contact Programme of PGDHE" organised by IGNOU Reagional Centre on 17^{th} May, 2018.(v) "ICT in TeacherEducation and Latest Trends"in Smt.Addepalli Mahalakshmi College of Education for Women, Rajamahendravarm, E.G.District, AP. on 9th October, 2018 (vi) "Pedagogy of Social Sciences at Secondary Level" in NERIE, Umiam, Shillong. On 20th and 21st February, 2019.

Dr. Vandana

Delivered a lecture to D El Ed students on "Micro-teaching" in Ramarati Devi Shikshan and PrashikshanSansthan, Mirzapur, UP from 8-13 October, 2018.

Dr. E. B. Myrthong

Delivered a lecture on the topic (i) "Learners with Special Needs", for post graduate, diploma in higher education, in IGNOU, Shillong on 15/5/2019. (ii) the topic"Discussion on Project Work", for post graduate, diploma in higher education, in IGNOU, Shillong on 15/5/2019.(iii) esource person on the topic"Innovative Teaching", for College Teachers, Model Christian College, Kohima, Nagaland on 12th -13th July, 2018

Dr. N. Amarewaran

Delivered two lectures on (i) Research Methodology in the field of Special Education through ICT, and (ii) Research Methodology through MOOC with Special Reference to Special Education at Refresher Programme on Research Methodology in the field of Special Education and Disability Rehabilitation organized by the Dept of Education, Mizoram University, Aizawl, Mizoram during 26-30 March 2019.on Blog: Online Learning and e-Content Development at One Week Faculty Development Programme organized by UGC-HRDC, Savitribai Phule Pune University, Pune, Maharashtra during 4-10 February 2019.(iii) two lectures on MOOCs (ii) and Online Learning at 119 Orientation Programme organized by UGC-HRDC, Gauhati University, Assam during 13th February – 14th March 2019.(iv) Digital Initiatives of Govt. of India, (ii) Teacher Education through ICT, (iii) Open Resources for Educational Teacher Education at Refresher Course on Teacher Education organized by UGC-HRDC, Gauhati University, Assam from27th February – 19th March 2019.(vi) on (i) Grounded Theory, and (ii) Ethnographic Research at Research Methodology for Ph.D. Students organized by Women's Sudies Centre and Dept of Teacher Education, Nagaland University, Kohima during 19th -28th February 2019.(iv five lectures on (i) Constructivism in Teaching, (ii) Learning Centric Approach of Teaching, (iii) Effective Classroom Management, (iv) ICT Based Teaching -Learning, and (v) ICT Based Teaching, Learning and Evaluation at Short-Term Training Programme on Innovation and Rejuvenation of Teaching in Higher Education organized by Suren Das College in Collaboration with Teaching Learning Centre, Texpur University under PMMMNMTT, Haio, Assam during 4th -9th February 2019 (vi). Government of India Digital Initiatives at Winter School on Bio-Resources of North-East India organized by UGC-HRDC, Gauhati University, Assam from 13th Jan - 11th 2019.(vii)Delivered February three lectures (i) Searching and Researching econtent, (ii) OER for Learning, Teaching & Research, (iii) MOOC Providers and SWAYAM, and (iv) Development of econtent at Short-Term Course (STC) MOOCs, e-Content Development and Open Educational Resources organized

by UGC-HRDC, Gauhati University, Assam from 26th November 2018 to 2nd December 2018.((viii) Delivered five lectures on MOOCs & Online Learning at 118 Orientation Programme organized by UGC-HRDC, Gauhati University, Assam from 15th December 2018 – 11th January 2019.

- Resource person (xi) at a National Workshop on Blended Learning Approach for Teacher Educator organized by School of Education, Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya, Wardha from 26-2018 September 2018
- Delivered (x) seven lectures on (i) Learning Online- Researching and Researching, (ii) ICT Initiatives of Govt of India SWAYAM, (iii) FutureLearn – A MOOC Platform, (iv) Open Educational Resources (OER), (v) e-Content Development, (vi) Storing and Sharing of e-content, and (vii) Learning Online and Collaboration at Workshop on Massive Open Online Courses (MOOCs) organized by Dept of Education & IQAC, LCB College, Guwahati, Assam during 26-27 March 2019.(xi) Delivered three lectures on (i) Philosophy and Philosophical Foundations of Education through MOOC, (ii) Massive Open Online Courses (MOOCs) and SWAYAM, and (iii) Open Educational Resources (OER) at Workshop on MOOCs organized by B. Borooah College, Guwahati, Assam on 16th March 2019.(xi) Delivered eight lectures on (i) e-Learning, (ii) MOOCs, (iii) Open Educational Resources (OER), (iv) Future Learn, (v) SWAYAM, (vi)

Learning Online and Collaboration, (vii) e-Content Development at Two-Day Workshop on e-Learning, MOOCs, and e-Content Development organized by IQAC, Pub Kamrup College, Pub-Kamarup, Assam during 1-2 February 2019.(xii) Delivered eight lectures on (i) Learning Online – Searching and Researching, (ii) Learning Online -Collaboration, (iii) Blended Learning, (iv) Flipped Learning, (v) FutureLearn, (vi) MOOCs, (viii) SWAYAM, and (viii) e-Content Development at Workshop on MOOCs and e-Content Development organized by IQAC, B. Borooah College, Guwahati, Assam during 28-29 January 2019..(xiii) Delivered four lectures on (i) e-Learning, (ii) MOOC, (iii) Development of e-Content, and (iv) Open Educational Resources at Workshop on e-Learning, MOOC and Development of e-Contents organized by College of Education, Nagaon, Assam on 24th January 2019. .(xiv) Delivered seven lectures on (i) Digital Learning, (ii) Blended Learning, (iii) Flipped Learning, (iv) Moodle & LMS, (v) SWAYAM, (vi) FutureLearn & Open Educational Resources, and (vii) e-Content at Workshop on Digital Learning organized by Handique Girl's College, Guwahati, Assam during 14-15 December 2018.

Acted as a resource person at a National Workshop on Blended Learning Approach for Teacher Educator organized by School of Education, Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya, Wardha during 26-2018 September 2018.

DEPARTMENT OF EDUCATION (TURA CAMPUS)

Head:	Prof. Nikme S.C. Momin
Telephone:	09436315571/09862045603
Email Id.:	edntcnehu@gmail.com

Faculty:4

Designation	Name & Qualification	Specialization
	Dr. NikmeS.C.Momin, MA &Ph.D. NEHU,	Educational Psychology, Teacher
		Education & Environmental
Professor		Education
	Dr. B.C.Das,M.A.(Utkal),M.Phil(DAV),Ph.D.,	Educational Technology, Teacher
	(B.H.U)	Education, Research Methodology
	Dr.S.C.Subudhi, MA, M.Phil & Ph. (Kurukshetra	Research Methodology in Education,
Associate	University).	Educational Testing & Measurement
Professor		and Special Education
	Dr.Madhusudan.J.V.,M.Ed,M.Phil&Ph.D.(Gulba	Sociology of Education, Early
	rga University) (On lien)	Childhood Education& Higher
		Education in India

Thrust Area of Research

Educational Psychology, Educational Management and Change, Curriculum Development and Instruction, Value and Peace Education, Environmental Education, Teacher Education & Methods of Teaching, Special Education & Inclusive Education, Research Methodology, Early Childhood Education & Elementary Education, Higher Education & Comparative Education.

Brief Statement of Academic Activities

The Department of Education, NEHU, Tura Campus was established in August 2001. Since then, it has been offering two years

Students' Profile

Enrolment Capacity: P.G. : 30: Ph.D.: Varies as per capacity Actual Admission: M.A. and Ph. D. Programmes in Education. Besides regular teaching and research work, the department conducted course seminars in which students presented papers on various topics.

The department is also engaged in Research Project works funded by the UGC and ICSSR, New Delhi, and ICSSR, NEHU-Shillong. The Department has a wellestablished Psychological Laboratory with adequate number of psychological tests and equipments where students conduct tests and experiment as a part of their course work.

	OBC	SC	ST	GEN	MAL E	FEMAL E	MEGHALY A	NON- MEGHALAYA	TOTAL
P.G	-	-	28	1	2	26	27	1	28
Ph.	-	-	4	-	3	1	1	3	4
D.									

P.G Degree Awarded

	OBC	SC	ST	GEN	MALE	FEMALE	MEGHALA YA	NON- MEGHALAYA	TOTAL
P.G	-	-	28	1	2	27	28	1	29
Ph.D.	-	-	2	-	2	-	1	1	2

Ph.D. Degree Awarded : 3

Research Fellowship

CSIR - UGC -NET	UGC Non- Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	JRF	Other
-	05	-	-	-	03	-

Seminars/ Conference/ Symposia/Extension Programmes/Attended /and Paper Presented:

Organized

Prof. NikmeS.C.Momin

Organized a "Workshop cum Community Service on Environmental Issues and Problems: A Local Perspective for Sustainable Development" on the 25th and 26th March, 2019 at Bolmagre Village, Rongram Block, West Garo Hills District Meghalaya.

Attended

Prof. Nikme S.C.Momin

Presented a paper (i) entitled "School Leadership Preparation and Development Expectancy for Meghalaya" on the "25th Conference Annual NEIES *-cum-*National Seminar Educational on Leadership, Management and Governance with Special Reference to North-East India" organized jointly by North East India Education Society (NEIES) with Department of Education, NEHU, Shillong in NEHU, Shillong on the 6th and 7th March,2019. (ii) "Classroom Management and Teaching Strategies in Social Science of Class X in Government Secondary Schools of Meghalaya" on the "25th Annual NEIES

- Conference –cum- National Seminar on Educational Leadership, Management and Governance with Special Reference to North-East India" organized jointly by North East India Education Society (NEIES) with Department of Education, NEHU, Shillong in NEHU, Shillong on the 6th and 7th March, 2019.
- Attended a *"Workshop on Experiential Learning for University Department of Education and Teacher Educators"* organized jointly by Department of Education, NEHU, Shillong with Mahatma Gandhi National Council of Rural Education (MGNCRE) Department of Education, Ministry of Human Resource Development (MHRD) in the Department of Education, NEHU, Shillong on the 15th March, 2019.

Dr.S.C.Subudhi

Presented a paper on "It is brutal truth that Peace education is a dream while there are high crime against Disable Children" in an *International Seminar*in the Dept. of Education, Mizoram University, Mizoram on 13-14 March 2018 (ii) on "Skill Development in Teacher Education" in the *National Seminar*in the Dept. of Education, Teaching Learning Centre, Shri. Bahadur Rastriya Vidyapith, New Delhi on 14-16 March 2018. (iii) "Emerging trends and innovations in Teacher education" in the National Seminarin theDept. of Education, School of Professional studies, Skkim University, Gangtok, Sikkim on 22-23 march,2018. (iv) "Business History: Problems of unemployment and assessment of entrepreneurial competencies in north-east India" at in the National Seminarin the Dept. of History and Archaeology, NEHU, Tura Campus, Tura, Meghalaya on 26-27 March, 2018. (iv) "Issues and Challanges of Higher Education in North East India" in the National Seminar on at Immanuel College, Dimapur, Nagaland on 14-15 March, 2019. Topic Entitled "Quality control; in Higher Education: An analysis". Funded by ICSSR, New Delhi.

Publication of Research Papers Prof. Nikme S.C.Momin

- Momin, N., Sangma, T, T. (2019). "Effectiveness of Reading Comprehension Package in terms of Reading Comprehension of Class IX students of Tura". *International Journal of Research and Analytical Reviews*. 6(1):350-353
- Momin, N., Chetry, G. (2019). "Occupational Aspiration of Undergraduates in Meghalaya". *International Journal of Advanced Research*. 7(1): http://dx.doi.org/100.21474/IJAR01/8403.
- Momin, N., Marak, K.T, K (2019).
 "Transformational Application Avenue of CORT Thinking Strategy for Higher Education". *International Journal of Advanced Research*. 7(4): http://dx.doi.org/100.21474/IJAR01/8789.
 Dr.S.C.Subudhi:

Subudhi, S.C. (2018), Peace education will be a dream while there are high crimes against disabled children'. Anweshan; Journal of Education, Sonepat, Haryana.Vol-VIII, No-01, June 2018, 24-33, ISSN 2249-3794, UGC approved list-63243.

Prof. Nikme S.C.Momin Honours/Awards/Recognition

Member of the Task Force Committee on the Meghalaya State Education Policy, Government of Meghalaya, Education Department, Shillong –Meghalaya, vide letter No.EDN.49/2015/312 dated 21.3.2018

Member of the Task Force Committee on the Meghalaya State Curriculum Framework, Government of Meghalaya, Education Department, Shillong –Meghalaya, vide letter No.EDN.172/2002/Pt/25 dated 1.3.2019

Member of the Board Committee of the Meghalaya Board of School Education (MBOSE), Government of Meghalaya, Education Department, Shillong – Meghalaya vide letter No.EDN.146/97/Pt/643 dated 8.6.2018

Other Activities

Dr.S.C.Subudhi :

Delivered four lectures in a Faculty Development Programme on National workshop on "Constructive Lesson Plan" for DIET faculty on 25/02/2019 organized by FDC, Mizoram University, Aizawl. Topics were: Constructivism Evaluation and Constructivism Lesson Plan.

CENTRE FOR DISTANCE EDUCATION

Telephone : 0364-2226822/2228705(Office), 9436303111 (M)	v1)
Head : Prof. R. N. Rai	AD.

Faculty	: 2	
Designation	Name and Qualification	Specialization
Professor	Dr. R. N. Rai (M.A., Ph.D.)	Psychological Testing and Social Psychology of Aging
Assistant Professor	Dr. R. C. Pandey (M.A., Ph.D.)	Experimental Psychology & Statistics

Thrust area of the Centre:

The Centre offers General, Certificate, Diploma and Degree Courses in distance mode to all those who have for some reason or other been deprived of formal education and are seeking higher education irrespective of age or region where they reside. The Centre offers Degree, Diploma and Certificate Courses through distance mode relevant to the region.

Brief Statement of Academic Activities:

The Centre for Distance Education (CDE) has been selected as the only nodal agency of the Rehabilitation Council of India (RCI), New Delhi to spread the teaching learning on disabilities areas in the entire

Students Profile

Students I forme		
Enrolment capacity	:	FC-SEDE - 300
Actual Admission	•	

North Eastern Region of India through the distance mode. In the disability areas, the Centre for Distance Education, NEHU presently offers the Foundation Course on Education of Children with Disability (FC-SEDE). The programme coordinators and counselors have been exposed to the new techniques of distance mode of education through orientation programmes.

The Centre is hosting the IGNOU Study Centre, Shillong. Under this Centre, Master and Bachelor Degree Programmes, Diploma and Certificate Programmes are offered to students of different categories. More than 1200 distance learners are enrolled under this Study Centre.

Course	Male	Female	SC	ST	OBC	GEN	Megha laya	Non- Megh alaya	TOTAL
FC-SEDE	58	111	2	14 5	9	13	116	53	169

Course	Male	Female	SC	ST	OBC	GEN	Megha laya	Non- Megh alaya	TOTAL
B.ED- SEDE	10	15	1	8	4	12	8	17	25
FC-SEDE	24	67	-	79	4	8	63	28	91

Degrees Awarded

Placement of Students:

Successful students of Disability Programmes are placed under SSA and special schools of the North-East Region of the Country and all over the country. The students have also joined various NGOs to cater the needs of the challenged population which is a sizable number in the North Eastern Region.

Courses conducted :

Foundation Course on Education of Children with Disabilities (FC-SEDE)

Developing Broad Positive Perception of Children with Disabilities and Intervention Measures.

Understanding Education for the Children with Disabilities.

Understanding of Early Chilhood Development and Intervention of Children with Disabilities.

Development of Adaptive Skills, Assistive Devices and Special Therapies for Children with Disabilities.

Basic Training for Teaching Children with Special Needs.

B.Ed.-Special Education (B.Ed.-SEDE) B.Ed.-SEDE 1st Year Theory

Education in Emerging Indian society Educational Psychology Introduction to Disability Teaching of English/Hindi/regional Language Introduction to Education of Visually Impaired Children/Identification & Assessment of Persons with Mental Retardation / Foundation of Education for the Hearing Impaired

Practical

Core Training in Teaching Skill Psychology Practical Basic Computer Operation Adaptive skills, Aids & Appliances Training in Visual Impairment, Mental Retardation and Hearing Impairment. Teaching Practice in English/Hindi/Regional Language Teaching Practice in Inclusive School

B.Ed.-SEDE 2nd Year Theory

Educational Planning and Management, Curriculum designing & Research, Teaching of Science/Teaching of Mathematics/Teaching of social Studies Educational Perspective of Visual Impairment Instructional Methods Mental Retardation: Its Multidisciplinary Aspects Curriculum and Teaching Strategies Aural and Oral Rehabilitation of the Hearing Impaired Methodology of Teaching Language and Other Subjects to Hearing Impaired

Practical

Work Experience/Art Education Co Curricular and extracurricular activities Project Work in Visual Impairment Training on Equipment related to Visual Impairment Project Work in Mental Retardation Training on equipment related to Mental Retardation

Project work in Hearing Impairment Training on Equipment related to Hearing Impairment

Seminars/	Conferences /	
Workshops/Syn	/Extension	
Programmes		
Attended:		
R. N. Rai		
Chaired the	Scientific	Session of
International	Conference	of the Indian
		chology (IAAP)
during 14 th	to 16 th Feb	ruary 2019 on
Psychology	: Opportu	nities Beyond

Boundaries organized by Department of Psychology Kurukshetra University, Kurukshetra, Haryana

Academic Collaborations

The Centre is conducting the FC-SEDE course in collaboration with Rehabilitation Council of India, New Delhi.

Other Activities

R. N. Rai Delivered Lectures in NEIGRIMS for B.SC Nursing 1st Year students from July 2018 to February 2019.

SCHOOL OF HUMANITIES

Dean

Prof. B. K. Agarwala (upto 30th November 2018) : Prof. Streamlet Dkhar (w.e.f. 1st December 2018) : 0364-2723501/ 3305/ 9436117479/ 9378185259 Telephone Nos. : E-mail ID s.dkhar@rediffmail.com •

The School of Humanities has seven Departments in all: Five Departments are in NEHU Shillong Campus. These are English, Philosophy, Khasi, Linguistics and Hindi. The two other Departments in NEHU, Tura English and Garo. All Campus are MA Ph.D. Departments have and programmes and Few Departments like Khasi, Hindi and Linguistics have also conducted MPhil Programmes during the Academic session 2018-19. Each Department has its own identified thrust areas of research. A number of teachers are actively involved in research activities and published their research papers in professional and literary journals and in book chapters. Few of them have published their creative writings as well. A number of teachers from the School have been invited as resource persons, panellists, Chief Guests, Special Guests and Chairpersons in the seminars, workshops, symposiums, refresher courses

and orientation courses within NEHU, Government Departments of Meghalaya, and in the Country and abroad. A number of faculty members have been awarded and recognised for their exemplary contributions in their fields. And few of them have become members, office bearers and advisers of the professional bodies. different Some Departments have taken students for study tours and fieldtrips as per the requirements of the components of their MA Courses. It is worth mentioning that a collaborative project on "Multilingual Online Dictionary" between NEHU and Chulalongkorn University, Thailand has been actively involved by the Departments of Linguistics and Hindi and the Dean of the School as the Academic Coordinator. Over all, the School of Humanities is making a good progress in research and collaborative works with other academic bodies, institutions within the state and beyond.

DEPARTMENT OF ENGLISH

Head	: Prof. Sukalpa Bhattacharjee (upto July 31, 2018)
	: Prof. Mala Renganathan (w.e.f. 1 st August 2018)
Telephone	: 0364-2723503 /0364-2723513 (Office), 9436732332 (Mobile)
Email	:hodeng@nehu.ac.in

Faculty	: 13	
Designation	Name and Qualification	Specialization
	Dr. Mala Renganathan, MA (Madurai Kamaraj University) MPhil (Pondicherry University), Ph.D. (MKU)	Drama / Theatre, Indian Writing in English, Terror & Literature Studies
	Dr. Esther Syiem, MA (Delhi), MPhil &Ph.D. (NEHU)	American Literature, Indian Writing in English, Folklore Studies
	Dr. Moon Moon Mazumdar, MA &Ph.D. (NEHU), DDE (IGNOU)	Shakespeare Studies, British Fiction, Postcolonial Literature and Tagore Studies
	Dr. Sukalpa Bhattacharjee, MA, MPhil &Ph.D. (NEHU)	Critical Theory, Postcolonial Literatures and Gender Studies
Professor	Dr. Utpala G. Sewa, MA, MPhil &Ph.D. (NEHU)	British Poetry and Diasporic Literature
	Dr. Jyotirmoy Prodhani, MA (PuneUniversity), Ph.D. (NEHU)	Theatre and Performance, Translation, North East Studies and Dalit Literature
	Dr. Kynpham Sing Nongkynrih, MA &Ph.D. (NEHU)	World Poetry in English Translation, English Poetry, Indian Poetry in English Translation, Northeast Poetry in English Translation, Classical Criticism and English Literary Criticism up to the Romantics
Associate	Smt. Nola Syiem, MA (NEHU), MPhil (Delhi University) (Retired in October 2018)	16 th and 17 th Century British Drama
Professor	Shri. Rabindra Singh Ngangom, MA (NEHU)	Indian Poetry in English, Northeast Poetry in English, World Literature in English Translation
	Shri. Lang Kupar K. War, MA (NEHU)	Modern Fiction, Postcolonial Literature and Visual Studies
Assistant	Dr. Suranjana Choudhury, MA (Assam University, Silchar), MPhil (Jadavpur University), Ph.D. (Calcutta University)	Women's Writing, British Fiction, South Asian Literature, Partition Narratives, Popular Culture Studies

Professor	Dr. Rimi Nath, MA &Ph.D. (Gauhati University)	Indian Writing in English, Partition Narratives, Migration and Diaspora Studies and South Asian Literature
	Dr. Somjyoti Mridha, M.A., MPhil &Ph.D. (JNU)	Indian Writing in English, Ideas of Nation and Nationalism, Post- Colonial Studies and Literatures of Kashmir Conflict

Thrust Areas of Research

Contemporary Literatures including North East Literature Studies, South Asian Literature, New Literatures in English, Drama, Theatre and Performance Studies, Comparative Literatures and Gender/ Ethnic/Cultural Studies with special focus on the literary traditions of Europe, America and India in general and North-East India in particular.

Brief Statement of Academic Activities

(i) The Department in collaboration with the Department of Cultural and Creative organised a film Studies screening (Wanphrang K. Diengdoh's Because We Did Not Choose at the Theatre Hall on 10th May 2018, (ii) Prof. Asha Kuthari Chaudhuri (Department of English, Gauhati University) lectured in the Department as Visiting Fellow from 25th May, 2018 to 31st May, 2018, (iii) The Department in collaboration with ICSSR, NERC, Shillong organized a Special Lecture/Talk by Prof. Peter Hudis (Professor of Philosophy and Humanities at Oakton Community College in Illinois, USA) on "Frantz Fanon's Revolutionary Humanism: Its Meaning for Today" in the Conference Hall of the ICSSR on 11th June, 2018, (iv) The Department organized a Special lecture on "Literature and Social Science: An Interface" delivered by Prof. G. **Students' Profile**

Haragopal (Retd. Department of Political Science, University of Hyderabad and currently a Visiting Professor in National Law School in Bangalore), at 11 am in the English Department Cluster Classroom on 20thMarch, 2019, (v) On 4th June, 2018, the playThe Cursed Tongue (based on the TV series, Mind Your Language), produced by the Department, was performed by the IV Semester Students of 2018 batch, (vi) On 9th August, 2018, the Department of English in collaboration with the family members of (Late) Professor N. Hasan, esteemed faculty in the department from 1974 to 2004, organized a Memorial Program for Prof. Hasan on his birth anniversary, Thursday the 9th August, 2018, in the Cluster Classroom of NEHU, Shillong. The program mainly consisted of students' and faculty's reminiscences of Prof. Hasan through poetry readings/ speeches and readings of his translations, and the program also included a film screening on Prof. Hasan, and (vii) From 13th to 15th December, 2018, the Department organised Under Pine Tree Theatre Festival: Literature to Theatre in collaboration with NIT Meghalya and NSD, New Delhi in Old Guest House, NEHU, Shillong.

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA -	10	45	-	49	-	6	35	19 + 1 foreign	55
								student	
Ph.D.	5	5	-	5	1	4	2	8	10

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA	13	36	1	44		4	32	17	49
Ph.D.	3	5		7		1	7	1	8

Students Awarded Ph.D. Degree : 8 Placement of Students

government/semi-government/private sectors, media, publishing houses and NGOs.

Students have found employment in schools, colleges, universities and other

Research Fellowship

Number of students qualified NET: 5

CSIR-UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Maulana Azad Minority Fellowship	Any other	Others
3 JRF 1 SRF	-	-	-	-	Ph.D 15 NEHU Non NET Fellowship	-

Fieldwork/Educational Tour of Students

Teacher-in-Charge: Prof. Mala Renganathan Places/Institutions Visited: Chennai, Madurai & Kanyakumari (Tamil Nadu), visited SCILET, American College, Madurai and Madurai Kamaraj University, Madurai. Duration of Tour: 14 days.

Purpose of Tour: To understand the cultural richness and ambience of places like Madurai and Kanyakumari with their ancient and architecturally rich temples and memorials and to understand the vast educational opportunity and exposure available in a historically resplendent city like Chennai. The tour was also meant for a visit to a library specialising in South Asian Literature called the SCILET (Study Center for Indian Literature & English Translation), American College. The visit to Madurai further provided the students with a happy and

healthy academic interaction with the MA English students of the American College and also the MA French Students of the Madurai Kamaraj University, Madurai.

Courses Conducted: The following new syllabus is effective from August 2017 till date

SEMESTER I : Poetry (Chaucer to Pope), Fiction (19th Century to the Beginning of the 20th Century), Drama (Renaissance to Restoration), Classical Literary Theory and Criticism, Nineteenth Century American Literature.

SEMESTER II : Poetry (Blake to

Browning), Fiction (Early Twentieth Century to Mid-Twentieth Century), Environment & Indian Writing in English, The Beginnings of English Literary Criticism, World Literature in Translation (Option A), South Asian Literature (Option B), Modern Indian Drama (Option C).

SEMESTER III : Poetry (Yeats to Duffy), Shakespeare I, Literary Theory and Criticism: Romantic Age to Structuralism, Contemporary Indian Fiction in Translation (Option A), Women and Travel (Option B), Drama in Performance (Option C), Women's Writings (Option A), River Narratives from India (Option B), and Literature from India's North East (Option C).

SEMESTER IV : Fiction: Late Twentieth Century and Beyond, Contemporary American Literature (Option A) Postcolonial Literatures (Option B), Shakespeare II, Contemporary Theory, Modern Drama.

M.Phil./Ph.D. Courses

Research Methodology (4 Credits), Research Writing and Presentation (4 Credits), (Option D) The Literature of North-East India (4 Credits).

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes Organized

The Department of English organized a Theatre Workshop on "Voice and Body" on 30th and 31st May, 2018. Prof. Asha Kuthari Chaudhuri, Visiting Fellow, conducted the Workshop.

Other Activities

Mr. Shekhar Gupta (Editor and Journalist) launched a Digital news venture called The Print. The MA students and Research Scholars of the Department of English, NEHU, Shillong, participated in an event called 'Democracy Wall', an Initiative of The Print, on 30th May 2018. The main aim of the event is to engage with student audiences on topical issues in an environment of free speech and to provide a platform for healthy questioning of established ideas. The Department of English, Jaintia Eastern College, Khliehriat, visited the Department on 17th September, 2018, with the objective to help the rural students to know the parent university and to give them the opportunity to interact with the faculty members and students of the Department of English, NEHU, Shillong.

Attended

Prof. Mala Renganathan

Delivered a plenary lecture on "Conceptualising and Understanding Literary / Critical Cosmopolitanism" and also Chaired the second Technical Session on 20th April 2018 in the two-day National Seminar on "The Challenges of Cosmopolitanism in English Literature" organized by the Department of English, University of Science and Technology, Meghalaya, on 20th– 21st April, 2018.

Participated in the Interactive Round Table Discussion on "India USA partnership for a Prosperous Indo Pacific: Perspectives in the Third Space from Meghalaya and North East India" organized by the Asian Confluence Center, Laitimukhrah, Shillong on 28th February 2019.

Prof. SukalpaBhattacharjee

Presented papers on(i) "Otherness and the Politics of Literary Cultures in Northeast India" in the one-day national symposium on 'Translating Modernity: A Study of Literary Culture in India' organised by the Department of English, JamiaMilliaIslamia University, in collaboration with the Sahitya Akademi, New Delhi on the 20th of February 2019 in JamiaMilliaIslamia, New Delhi, (ii) "The map is not the territory": Tale (ing) An/Other History" at the International Seminar on 'Historicizing Borders: New Perspectives on Politics, Ethnicity and Transnational Linkages in North-East India', organized by the Department of History

NEHU (UGC-SAP-DSA II), on the 27th of March 2019, and (iii) "Gender, Culture and Religion: A Feminist Perspective" at the International Conference on 'Circles of Gender Liberation and Rethinking of Cultural Traditions with reference to South East Asia' at Lady Keane College, Shillong on the 30th of March 2019.

Prof. Kynpham Sing Nongkynrih

Attended and Presented papers on (i) "Kaktientynraikumkasurkajingim" (The mother tongue as the voice of life) at the Seminar on conference on "Habaimkaktien, imkajaitbynriew" ("Alive the language, alive the race") organised by Khasi Authors' Society, at Shillong College, Shillong, on 4thAugust 2018 (ii) "Kajingbatailyngkotshaphangkaktien Khasi" ("A brief outline of the Khasi language.") at Seminar "Habaimkaktien, the on imkajaitbynriew" ("Alive the language, alive the race") organised by Khasi Authors' Society, at Jaiñtia Eastern College, Khliehriat, on 25th August 2018.

Prof. JyotirmoyProdhani

Presented Plenary Talk titled, "Sifung, Sharati, Banhi: The Songs of Dr. BhupenHazarika and the Ethos of the Northeast" in the International Conference on Performing the Nation: Memory and Desire in Contemporary Literature, organised by PG Dept of English, Berhampore University, Odisha on 8-9 February, 2019.

Dr. Suranjana Choudhury

Presented papers on (i) "Poetics and politics of displacement: resonances in select poetry from India's northeast" in National Seminar Cartographies of Diaspora and Displacements: Narratives of Expatriates and Poetics of Exile organised by Kristujayanthi College, Bangalore on 18th December, 2018, (ii) "Interconnected past, bordered present: resonances of Partition in select Bangla memoirs" in an International Conference on South Asian Literature, Culture and Society organized by B.T.M College, Purulia, west Bengal on 27-28 February, 2018.

Deliveredan invited talk as (i) Resource person in a two-day Inter-College Students' Workshop under RUSA programme, on 15th and 16th March 2019, entitled, The Art of Story-telling organized by Department of English, Women's College, Shillong, (ii) "Literature in English from India's Northeast: Major themes and Engagements" as part of a WEBINAR talk organized by the Department of English, Sarsuna College, Kolkata in collaboration with the Centre for Comparative Literature, VisvaBharati University, Santiniketan, (iii) 'What recourse then, but to the map?': understanding 'Partition' in select writings from Barak Valley' in a National Seminar Home And Beyond : Belonging, Unbelonging, Nostalgia organized by Santipur College, West Bengal on 25-26 February, 2019, (iv) "The Image of Fallen Women in Literature" in UGC HRDC, NEHU coordinated short term course on Gender Sensitization, 9th October, 2018, and (v) "Partition Discourses in Folklore" in Course in Folkloristics and Refresher Semiotics organized by Department of Cultural and Creative Studies, NEHU in collaboration with UGC HRDC, NEHU on 27th March, 2019.

Dr. RimiNath

Presented a paper entitled 'Travelling for "roots search": Reading Bharati Mukherjee's Desirable Daughters, its sequel The Tree Bride and JhumpaLahiri's In Other Words' in an international conference on Cartographies of Understanding/ Imagining: Explorations into Travel Narratives. Department of English and Languages in association with Research Amrita Centre for and Development (ACRD), School of Arts and Sciences, Amrita VishwaVidyapeetham, Kochi Campus, 24-25 January, 2019.

Dr. SomjyotiMridha

Presented paperson (i) "Representing Kashmiri Pandits: Interrogating the idea of a Marginal/Minority community in recent Kashmiri Pandit Narratives" at the International Conference, Moving Beyond the Margin: The Politics of Exclusion and Assimilation, organized by the Department of English, Central University of Rajasthan on the 15th and 16th of November, 2018, (ii) Presented a Paper titled, "Post-Truth and Kashmir Conflict: A Study of recent Literary Output about Kashmir" at the International Conference organized by the Indian Association for Commonwealth Literature and Language Studies (IACLALS) and the Department of English, Pondicherry University, Puducherry, from the 6th to the 8th of February, 2019.

Publications

Published in India

Bhattacharjee, S. (2018) Gendering Democracy: Recasting the Multitude. *Indian Journal of Gender Studies* (SAGE Publications), Vol. 25, issue 3, 368-383. ISSN 0971-5215.

Choudhury, S. (2018). Difficult displacements, lost homes: Partition in select autobiographical writings. *Journal of Literature and Culture Studies*, V (1), pp. 96-108.

Choudhury, S. (2018). Tropes of remembering Partition: unsettling remnants in select narratives from Bengal. *The Heritage: Multilingual Research Journal on Indology*, IX (2), pp. 19-30.

Choudhury, S., Sengupta, N., editors. (2018). Women as the Displaced: The Context of South Asia. (Issue 44). https://cafedissensus.com/2018/05/05/content s-women-as-the-displaced-the-context-ofsouth-asia-issue-44/ISSN 2373-177X

Choudhury, S. (2018). Review of Sumana Roy's Missing. <u>https://cafedissensus</u> blog.com/2018/07/24/book-review-sumana-roys-missing/

Choudhury, S. (2018). The Forgotten Khasi, Jaintia, Garo, War Labourers of World war I. *The Wire* on September 10.

Mridha, S. (2018). Stories of/from Kashmir. *Yendai*. The Autumn Issue, November.

Mridha, S. (2018). Interrogating the Idea of India: A Study of Cinematic Representation of Kashmir Conflict from Bollywood and Beyond. *DUJES* (Dibrugarh University Journal of English Studies). Vol. 27, 2018-19 Issue.

Nath, R., (2018). Nellie. *Coldnoon: International Journal of Travel Writing and Travelling Cultures.* June 30.

Nath, R., (2018). Pobitora. Yendai.Aa biannual e-journal. November 30, 2018.

Ngangom, R. S. (2018). Father on Earth. In *Pratik: A Magazine of Contemporary Writing*, Vol.XV/No.2/ Summer.

Ngangom, R. S. (2018). Learner. In *Pratik: A Magazine of Contemporary Writing*, Vol.XV/No.2/ Summer.

Ngangom, R. S. (2018). Native Land. *The Himalayan Arc: Journeys East of South-east.* Namita Gokhale (Ed.). Harper Collins India, Noida.

Ngangom, R. S. (2018). A Poem for Mother in Poetry at Sangam, *Poets and their Mothers* issue in November.

Ngangom, R. S. (2018). Alternative Poetry of the Northeast. *Sahapedia*. An open online encyclopaedic resource, on 13 November 2018.

Nongkynrih, K S. (2018). His Mother's Pork and Why He's Not a Christian. *Indian Quarterly*. Jan-March 2019:1-8.

Prodhani. J. (2019). Unipolar Food Paradigm: Questioning the Metanarrative of Food Fundamentalism in India. *Man and Society: A Journal of North-East Studies*. Vol. XV, Summer 2019. Pp 7-30. ISSN2229-4058. Renganathan, M., Dkhar, G. J. (2019). Book Review. Kanaklata Baruah by Sheila Bora Journal of North East Researches, X: 97-8

Published Abroad

Bhattacharjee, S. (2018). The Politics of Gendered Resistance: Body and Agency. In *Northeast India: A Reader*. B. Oinam and D. A. Sadokpam (Eds). Routledge, London and New York. ISBN 978-1-138-36396-0

Nongkynrih, K. S. (2018). One Haiku. Cattails.*The Official Journal of the United Haiku and Tanka Society*. Oct. 2018: 22.

Nongkynrih, K. S. (2018). Three Haiku. Presence. *Britain's Leading Independent Haiku Journal*.62: 37.

Nongkynrih, K. S. (2018). By the Roadside. *Dog-Ear*. Sept. 2018: 1.

Books/Book Chapters/Proceedings

Nongkynrih, K. S. (2018). Manik: A Play in Five Acts. Dhauli Books, Bhubaneswar, ISBN 978-81-938505-2-7.

Prodhani, J. (2019) Longing for the *Lung*ta: The Abiding Echo of Tibetan Collapse and the Loss of Home in KaushikBarua'. *Windhorse Writing from India's North-East: Recovering the Small Voices* Ed. Dwijen Sharma. Jaipur: Aadi Publishers, Pp 159-177. ISBN 978-93-87799-14-1.

Prodhani, J. (2018) Interlinkages and the Cosmopolitan Spaces in the Narratives of India's North East. Cosmopolian Spaces: Indian Literature and Counterpoints of Modernity. Ed. MalashriLal. New Delhi: Sahitya Akademi. Pp 1856-198. ISBN9789386771612.

Research Projects

Ongoing

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)
"Gendering Terrorism in South Asian Narratives in the post 9/11 Era: A Select Study of Indian- Pakistani-Afghan and Srilankan Writings in English." Major Research Project	Prof. Mala Renganathan	UGC	12,79,800/-

Honours/Awards/Recognition Prof. SukalpaBhattacharjee

Advisory Board Member, Women's Studies Centre, Dibrugarh University, Assam. Member, Society for the History of Emotions (SHE) Australia. Life Member, North East India History Association (NEIHA)

Prof. Mala Renganathan

Member, BPGS, Assam University, Silchar. Member, UGC Expert Committee a) for the consideration of applications for the award of IshanUday" Special Scholarship Scheme for North Eastern Region scholarship for the year 2017-18 on 17th May 2018 in UGC, New Delhi. b) Member, UGC Expert Committee, for grant of PG affiliation to various assigned colleges c) Member, UGC Committee as part of a UGC Team for visit to colleges on hostel buildings matters d) Member, UGC Review Committee for SAP Program in the Department of English, Mizoram University Member, Selection Committee: a) Central Agricultural University, Imphal b) NIT Arunachal Member, Advisory Board, Journal of Language, Literature and Culture with ISSN 2348-652X (Department of English, Assam University, Silchar).

Dr. Suranjana Choudhury

Member of Editorial Committee of *NEHU* Journal from 2017 till May, 2019.

Member of Doctoral Board of Humanities and Social Sciences in National Institute o Technology, Shillong.

Dr. SomjyotiMridha

Awarded Ph.D. from the Centre for English Studies, Jawaharlal Nehru University, New Delhi on the 8th of January, 2019.

Other Activities

Prof. SukalpaBhattacharjee

Peer Reviewer for the (i)Indian Journal for Gender Studies (SAGE Journals), (ii) Asian Ethnicity (Taylor & Francis), (iii) Literaria: An Annual Journal of the Department of English, GurucharanCollege, Assam.

Delivered Lectures on (i) "Gender Society and Identity" on the 9th of July 2018 at the 44th Orientation Programme for College and University Teachers organized by UGC-Human Resource Development Centre, NEHU Shillong, (ii) "Gender issues" at the Department of English, Lady Keane College on 11th of July 2018, (iii) Shillong "Understanding feminism" and "Gender, Language and Literature" respectively on the 6th of August 2018 at the Refresher Course in 'Women's Studies & Empowerment' held for College and University Teachers and organized by UGC-Human Resource Development Centre, Gauhati University, Guwahati,(iv) "Gender Justice" on the 22nd of August 2019 at the 45th Orientation College and University Programme for Teachers organized by UGC-Human Resource Development Centre, NEHU (iv) "Review of Literature, Shillong. References, Bibliography" at the Workshop on Research Methodology in Social Sciences for the Research Scholars and Faculty Members organized by the ICSSR NERC Shillongon the 12^{th} of September 2019, (v) "Exploring Female Voices in the Writings of

Contemporary Indian English Literature"in the National Seminar at Gargaon College, Sibsagar Assam on the 21st of September 2018, (vi) "Gender Justice" on the 10th of October 2018 at the Short Term Course in Gender Sensitization Programme for College and University Teachers and Research by UGC-Human Scholars, organized Resource Development Centre, NEHU Shillong. (vii) "Gender. Culture and Environment" on the 28th of October 2018 at the Green Skill Development Programme, Certificate Course on Environmental Laws, sponsored by moEF, Government of India and organized by the ENVIS RP Centre NEHU Shillong, (viii) "Gender Justice" on the 11th of February 2019 at the 46th Orientation Programme for College and University Teachers organized by UGC-Human Resource Development Centre, NEHU Shillong, (ix) "Gender Justice" on the 14th of March at the 47th 2019 Orientation Programme for College and University Teachers organized by UGC-Human Resource Development Centre, "Folklore NEHU Shillong, (x) and Subalternity" at the Refresher Course held for College and University Teachers and organized by the Department of Cultural and Creative Studies, NEHU in collaboration with UGC-Human Resource Development Centre, NEHU Shillong on 26th of March 2019. Panelist at a panel on "Challenges and Reforms in Higher Education" organized by Women's College Shillong on the 13th of August 2019.

Prof. Mala Renganathan

Field trip to Jadavpur University Library, Kolkata and RabindraBhavan Library & Archival Units, Bolpur, Santiniketanbetween 1st to 6th May 2018, in relation to the UGC-MRP field work related trips.

Took charge as Head, Department of English, NEHU, Shillong, on1st August 2018.

Students' Study Tour to Chennai, Madurai and Kanyakumari, Tamil Nadu from 18th to 31st January 2019.

Prof. Kynpham Sing Nongkynrih

Self-composed poems selected by NES, AIR, Shillong, for broadcast in their special programme called "Reflections".

Prof. JyotirmoyProdhani

Under Pine Tree Theatre Festival: Literature to Theatre 13-15 December, 2018 at NEHU, Shillong in collaboration with NIT, Meghalaya, NSD, New Delhi

Mr. Rabindra Singh Ngangom

Read self-composed poems in (i) Abhivyakti program organised by the Sahitya Akademi in Guwahati on 23.6.2018, (ii) A session "Poetry and its Milieu" at the Brahmaputra Literary Festival, Guwahati, on 1st February 2019.

Chaired and read self-composed poems in "Poets' Meet" session at Abhivyakti, organised by the Sahitya Akademi, in Agartala, on 15th June 2019.

Dr. Suranjana Choudhury

Reviewer of (i) Appropriations: A Peer Reviewed Research Journal(ISSN: 0975-1521), (ii) Currents: A Journal of Young English Philology Thought (ISSN: 2449-8769) affiliated with Nicolaus Copernicus University in Torun, Poland.

Dr. RimiNath

Read self composed poems at an event Return to the peoples: an afternoon of music and poetry(in solidarity with World Poetry Movement), Guest House Conference Hall, EFLU, Shillong, 31st August, 2018.

Dr. SomjyotiMridha

Attended Refresher Course (RC) from the Human Resource Development Centre (HRDC) of the University of Hyderabad (UoH) from the 7th of December to the 27th of December, 2018. Delivered a lecture titled, "What is Indian Literature?" at the Avvaiyar Government College for Women, Government of Puducherry on the 4th February, 2019.

DEPARTMENTOF ENGLISH (TURA CAMPUS)

Head	:	Prof Sujata Gurudev
Telephone	:	9436592455
E-mail	:	englishtura.nehu@gmail.com

Faculty	: 6	
Designation	Name and Qualification	Specialization
	Dr. Sujata Gurudev, M.A., M.Phil. &Ph.D. (NEHU)	American Lit., Modern British
Professor		Fiction, Modern Poetry
	Dr. Dwijen Sharma, M.A, M.Phil.,	Indian English Lit., Literary &
Professor	Ph.D.(Dibrugarh)	Cultural Theory
		Postcolonial Lit., Literary
	Dr. Ramona M. Sangma, M. A. &Ph.D. (NEHU)	Theory & Criticism, Ethno-
		Literature.
		Indian Writing in English,
	Dr. Jova C. Marak M.A. & Ph. D. (NEHU)	Women Writings, Ethno-Lit
Assistant	Dr. Namrata Pathak, M.A. (Gauhati Univ.),	British & Continental Drama,
Professor	M.Phil.&Ph.D. (EFLU)	Literary Theory & Criticism,
		Gender Studies
	Dr. L K Gracy, M.A. &Ph.D. (NEHU)	British Fiction, British Poetry

Thrust Area of Research

Ecology and Literature, Cultural Studies and Ethnic Literature, Translation Studies, Dalit and Marginal Literature, Indian English Writings, Postcolonial Literature, Women and Gender Studies, Theatre Studies, Western Literary Theory and Indian Poetics.

Brief Statement of Academic Activities

The Department conducts M.A and Ph. D. programmes in English Literature, with emphasis on the thrust areas. The Department began publishing a peer reviewed Research Journal *Protocol:Journal* of *Translation, Creative and Critical Writings* in 2007 with funds from the ICSSR, New Delhi. The Journal caters to researchers and authors from the region and

the country with emphasis on translation from regional languages to English, creative writings and critical studies. At present, the Journal is under review to be listed in the UGC-Approved List of Journals.Student Seminar has been introduced in the Department to orient the Master's level students towards serious research. Regular Seminars on progress of Ph.D. scholars are held in the Department.Scholars and professionals from areas of mass media, graphic design, anthropology, and film studies are invited to the Department to present their talks and interact with the students. The Department also has a students' Wall Magazine and a Film Club.

Students' P	rofile
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Enrolment Capacity:				M.A	. – 33				
Degree	SC	ST	OBC	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	1	24	-	1	5	21	23	3	26

Degrees Awarded

Degree	SC	ST	OBC	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	1	25	2	3	9	22	23	8	31
Ph.D.	-	1	-	1	1	1	1	1	2

Students Awarded Ph.D. Degree :2 Research Fellowships UGC JRF: 01 NEHU Non NET Fellowship: 03 Educational Tour of Students

Teacher-in-Charge: Dr L.K. Gracy

Places/Institutions visited: Chennai, Kanyakumari, Thiruvantanapuram, Alappuza, Kochi, Bangalore, Mysore.

Duration of tour: 17 Days

Purpose of Tour: To visit Educational Institutions, Museums, Historical places of interest and to learn and observe the socio economic progress and diversity of the country especially pertaining to Kerela and Karnataka.

Courses Conducted: Post Graduate: MA

Semester I: Poetry (Chaucer to Pope), Fiction (19th Century to Beginning of 20th Century),Drama (Renaissance to Restoration),Classical Literary Theory and Criticism,19th Century American Literature.

Semester II: Poetry (Blake to Browning), Fiction (Early 20th Century to Mid 20th Century),Environmental & Indian Writing in English, The Beginnings of English Literary Criticism, Open Course: A World Literature in Translation, B South Asian Literature,C Modern Indian Drama.

Semester III : Poetry (Yeats to Duffy), Shakespeare I, Literary Theory and Criticism (Romantic Age to Structuralism)

Open Courses

Contemporary Indian Fiction in Translation, Women and Travel Drama in Performance

Semester IV : Fiction (late 20th Century and Beyond),Open Course: A. Contemporary

American Literature, B. Postcolonial Literatures, Shakespeare II,Contemporary Theory,Modern Drama.

Ph.D. Course Work

Research Methodology, Research Writing and Presentation, (Option B) Theory and Text

Seminars/Conferences/Symposia/Extension Programmes etc.

Attended

Prof. Sujata Gurudev

Delivered lectures on (i) "Translation and the problems of Translation" in the Sahitya Akademi Sponsored Translation Workshop from Garo into English organized by the Departments of English and Garo on 29thMay, 2018, (ii) "Research Methodology at Loyola College", Williamnagar on as a part of Extension programme of the Dept of English, NEHU, Tura Campus on 4th June, 2018.

Prof.Dwijen Sharma

Presented a paper titled "The Indian English Novel after the Liberalization, Privatization and Globalization" in a National Seminar on Literature in English: Post 1990 at A. M. College, Pune, on 8th and 9th February, 2019. Delivered Invited Lectures on (i) "The Postcolonial Lens and Reading Literature" at Bomdila Govt. College, Arunachal Pradesh, 11^{th} October, 2018, (ii) on 'Indian Intellectual Tradition: From Gandhi to Khilnani' at Lanka Mahavidyalaya, Lanka, Hojai, Assam on 21st April, 2018, (iii) "Research and Innovative Ideas" at Loyola College, Williamnagar on as a part of Extension programme of the Dept of English, NEHU, Tura Campus on 4th June, 2018, and

delivered a Plenary Talk on "Conceptualizing North-East Indian Writing in English" in a National Seminar on Recent Issues in Literature and Language Studies at the Department of Assamese, Dibrugarh University on 30th March, 2019.

Chaired two technical sessions in (i) The Seminar Cultural National on Self-Fashioning in North East India: Interplay of the Oral, the Written and the Performative Arts organized by Department of MIL&LS, Gauhati University in collaboration with NEIAHS and MAKAIS, Kolkata on 22nd& 23rd March 2019, and (ii) National Seminar on Recent Issues in Literature and Language Studies organized by Department of Assamese, Dibrugarh University on 30th March 2019

Dr. Ramona M Sangma

Resource person at one day Sensitization programme on "Leadership Role of Women" under RUSA Equity Programme at College of Teacher Education, Rongkhon Tura on 9th April 2018, Delivered a lecture on "Curriculum Transaction" at Loyola College, Williamnagar on as a part of Extension programme of the Dept of English, NEHU, Tura Campus on 4th June, 2018.

Editor/translator in the three-day Garo-English Translation Workshop organized by the Sahitya Akademi in collaboration with the Department of English and Department of Garo, NEHU, Tura, from 29th to 31st May, 2018.

Dr. Namrata Pathak

Resource person and presented a paper titled (i) "Problematizing the Terrain: Recent trends in Poetry in English from North East India" in a National seminar on *Recent Issues in Literature and Language Studies* organized by Dept. of Assamese, Dibrugarh University on 30th March, 2019, (ii) "Translating Shakespeare across cultures: radicalizing Romeo and Juliet and Macbeth" in an International Seminar on *Negotiating* Culture: New Frontiers in Translation and Language Learning organized by Department of Foreign Languages in collaboration with Institute of South Asian Studies, Russian State University for Humanities, Moscow, Russia from 22nd to 23rd January, 2019 and also a Resource person/ translator in (i) the three-day Garo-English Translation Workshop organized by the Sahitya Akademi in collaboration with the Department of English and Department of Garo, NEHU, Tura, from 29th to 31st May, 2018.Participated in a workshop on *Humanities* Across **Borders** (HaB) Methodologies Workshop at Cotton University, Guwahati, Assam (India) from 2-4 April 2018.

Speaker in the session (i)*Kathan Mancha*, in the *All India Young Writers Meet* under the joint aegis of Sahitya Akademi, New Delhi, and Publication Board, Guwahati, at Chandmari on 29thDecember, 2018, (ii) Poetry from North East India, in the *Ethos Literary Festival*, Dum Dum, Kolkata, from 22nd to 23rd December, 2018.

Dr. L K Gracy

Resource person/ translator in the three-day Garo-English Translation Workshop organized by the SahityaAkademi in collaboration with the Department of English and Department of Garo, NEHU, Tura, from 29th to 31st May, 2018.

Publications

Published in India

Pathak, N. (2018). Plays of Ratan Thiyam and H. Kanhailal: some critical thoughts. *Drishti: The Sight*, 7 (1):12-19.

Pathak, N. (2018). The nodes of convergences of film and literature: tracing the historical trajectory. *Appropriations*, 12 (13): np.

Pathak, N. (2018). "Death" and "violence" in Mitra Phukan's writings: unraveling an

aesthetics of pain in *Hope* and *The Collector's Wife. Contemporary Literary Review India*, 5(2): 62-80.

Pathak, N. (2018). A review of Arun Sarma's play Aahaar. *TheThumb Print-A Magazine* from the East. http://www.thethumbprintmag.com/a-reviewof-arun-sarmas-play-aahaar/

Pathak, N. (2018). Alifa: fear, trauma, and desire. *TheThumb Print-A Magazine from the East*.

http://www.thethumbprintmag.com/aifa-the-fear-trauma-and-desire/, 18th April, 2018.

Pathak, N. (2018). A progenitor of new ideas, Sukracharjya Rabha.*TheThumb Print-A* Magazine from the

East.http://www.thethumbprintmag.com/a-tribute-to-a-progenitor-of-new-ideas-sukracharjya-rabha/

Sharma,D., Gogoi,L. (2019).Memory, Identity and Social Structure: Material Culture in Bhupen Hazarika's Songs. (Jointly with), *Drishti: the Sight*, Vol. VII, Issue: II (November, 2018 – April, 2019); pp. 20 - 25; ISSN 2319-8281

Sharma,D. (2019). Transcending Identity, Celebrating Humanity: A Reading of Three Contemporary Assamese Women's Novels. *Narrative Cultures and Textual Traditions of North-East India*. A. Ara, D. Sharma and B.

J. Gogoi (Eds). Purbayon Publication,

Guwahati (Assam), Pp. 188-199; ISBN 978-93-88593-31-1

Published Abroad

Pathak, N. (2018). The politics of rhetorics: re-membering and re-narrating "bodily resistances" in Rabijita Gogoi's plays. *Indian Theatre Journal: The Journal of Indian Performance Knowledge*, 1 (2): 49-62.

Pathak, N. (2018). A book review of Sanjoy Hazarika's Strangers No More: New Narratives from India's Northeast..*Cafe Dissensus*.https://cafedissensus.com/ Pathak, N. (2018). A book review of Mrinalini Harchandrai's A Bombay in My Beat. *Kitaab*. https://kitaab.org/

Books/Book Chapters

Sharma, D. (2019). Writing from India's North-East: Recovering the Small Voices, Aadi Publications, Jaipur, 2019; ISBN 978-93-87799-14-1

Sangma, R. (2018). Illuminance: Wangala and Other Rituals of the Garos, Bidawe Media, Tura. ISBN- 978-81-938203-0-8 Pathak, N. (2018). That's How Mirai Eats a Pomegranate. New Delhi, Red River. ISBN: 978-81-936130-6-1

Book Edited

Pathak, N., Sarma, D. (editors). (2019). *Reimagining Life in/through Literature. Essays and Reviews on Arun Sarma's Works*. Guwahati, Asomiya Sahitya Sanmilani. ISBN: 978-81-930616-7-1.

Honours/Awards/Recognition

Dr. Namrata Pathak

Selected for the award for Associateship of the UGC Inter-University Centre for Humanities and Social Sciences (IUC) for the year, 2018, at Indian Institute of Advanced Study, Shimla.

Other Activities

Dr. Namrata Pathak

(i) Reviewer of the National Journal, Dibrugarh University Journal of English Studies (DUJES), (ii) Participated in a Panel Discussion organized by the Department of History and Archaeology on the eve of International Women's Day on 8th March, 2019, and (iii) Panelist in the Guwahati Grand Poetry Festival, February 20th -21st, 2018, and moderated the *Third Veritable Verses Session* on *North-East Poetry in Translation* dedicated to the memory of Late Nalinidhar Bhattacharjya.

DEPARTMENT OF GARO, TURA CAMPUS

Head	:	Dr. Fameline K. Marak
Telephone	:	03651-223107, Fax: 03651-223953
Email	:	fkmarak@gmail.com.
	:	garodeptnehu@gmail.com.

Faculty	: 4	
Designation	Name and Qualification	Specialization
	Dr. Fameline K. Marak,	Traditional &
Associate	M.A. (Socio.) NEHU &Ph.D.(NEHU)	Modern Poetry,
Professor		Folk Literature &
		A·chik folklore
	Dr. JacquelineR.Marak, M.Ed. (Utkal) Ph.D.(NEHU)	Fictional Studies
Assistant Professor	Dr. Dokatchi Ch.Marak, M.A. & Ph.D. (NEHU).	Linguistics
	Shri. Crystal Cornelious D. Marak, M.A. (NEHU)	Fictional Studies

Thrust Area of Research

A·chik Literature, Language, Folklore, and Literature in Translation, Environmental Studies and World Literature including Indian Writings in English.

Brief Statement of Academic Activities

The Department of Garo came into being in August 1996 when NEHU, Tura Campus, Tura was created. Since its inception, the Department is imparting M.A. and Ph.D.was conducted from the year 2011. The Department continues in its research activities to preserve and promote the rich A chik tradition and language through translation and documentation in areas of Folklore, Linguistics and Literature. Out of 12 (twelve) Ph.D. students in the Department, 3 (three) awarded Ph.D. degree and 1 (one) scholar awaiting result. The Department holds class seminars regularly to impart research oriented interest among the Master level students and Research scholars. Field studies are conducted regularly and students are encouraged to make inquiries

into the folk literature and culture of the people of Garo Hills. As there is a need to improve and preserve the language, literature and culture of the Garos/ A·chiks, students are always encouraged to write articles, poems, short stories, essays, field reports etc. Seminars and workshops are conducted in the Department. Visiting regularly Professors/Fellows and Scholars are invited from other Universities for special lectures on selected topic such as Oral Narrative, Literary Theory & Criticism, Research Methodology and Theory of Translation etc., where the students have freedom to discuss and interact with the professionals. The Department also organizes Remedial classes annually on relevant topics, such as: English Grammar, Translation, Letter Drafting, Rhetoric and Prosody, English pronunciation and Phonetic transcription etc. At present the Department is running with one Associate Professor; three Assistant Professors and three Guest Lecturers.

Students' Profile

Enrolment capacity: P.G.: 33 Ph.D.: Variable Actual Admission: M.A./Ph.D. -(2018-19)

Degree	MALE	FEMALE	SC	ST	GEN	MEGHALAYA	Non	TOTAL
							MEGHALAYA	
M.A.	17	16	-	33	-	33	-	33
Ph.D.	-	1	-	1	-	1	-	1

Degrees Awarded

Degre	Male	Female	SC	ST	GEN	Meghalaya	Non-	TOTAL
e							Meghalaya	
M.A.	6	26	-	32	-	32	-	32
Ph.D.	-	2	-	2	-	2	-	2

Students awarded Ph.D. Degree : 2 Research Fellowship

CSIR UGC-	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other(You name it)	Others
-	4	-	-	-	-	-

Fieldwork/Educational Tour of Students

Fieldwork of the 1st Semester and 3rd Semester students:

Teacher-in-charge: Shri. Crystal Cornelious D. Marak

Places/Institutions visited: Bugakolgre Village

Duration of the tour/trip: 1 day

Purpose of Tour: The purpose of the fieldwork was to study the Wangala Festival (Post Harvest Festival) their oral narratives reflected in rituals and ceremonies in connection with Course No. GAR: C102-Poetry I and Course No. GAR: O 305-Folklore I.

Educational Tour of the 3rd Semester Students

Teacher-in-charge: Jacqueline R. Marak, Assistant Professor, Dept. of Garo, NEHU, Tura.

Places/Institutions visited: Bengaluru & Mysore to Ooty & Mysore to Mangaluru &

Mangaluru to Mysore Visited important places like Mysore Palace, Temples, Zoo, Universities, Churches, Botanical Garden, Brindavan Garden, Ooty Botanical Garden, Tea Garden, Tea Factory and Chocolate Factory, Planetarium show, Science Centre, Zoo, Lake Garden, Artisan & Gutthumane, Beach, Lal Bagh Botanical Garden, Metro station.

Duration of the tour/trip: 12th-24th January, 2019 (14 days)

Purpose of Tour: The purpose of the Academic tour was to expose the students to life and world outside their University and to make them aware about the life and culture of the people outside their own. It was also aimed at providing opportunities to the students to learn new experiences and knowledge by visiting Educational Institutions and Historical.

Courses Conducted *M. A.*

M. A.

- Semester-I : History of Garo Language and Literature, Poetry-I-Sacrificial Rites & Invocations, Drama-I,
- Linguistics-I & Environmental Studies.
- Semester-II :Fiction-I, Literature in

Translation, Prose-I, Linguistics-II &

Linguistics-III

- Semester-III :Literary Theory & Criticism, Epic as a Literary Genre, Drama-II, Linguistics IV &Folklore-I
- Semester-IV :Poetry-II, Folklore-II, Tragedy as a Literary Genre, Indian Literature in English &Modern Poetry
- **Ph.D. Courses** : Research Methodology, Seminar Paper: Literature Review & Research Paper and Presentation, Literary Themes, Literary Theory and Criticism, Language and Folklore.

Seminar/ Conference/ Symposia/Extension Programmes

Organized

The Depatment organized (i) 3 Day Translation Workshop of Sahitya Akademi from 29^{th} - 31^{st} May, 2018, (ii) All India poetry Festival on 17^{th} September, 2018, (iii) One Day Seminar on the International Mother Tongue Day on 22^{nd} February, 2019, (iv) An interactive class with Mr. Mirthnarch K. Marak, a Garo poet with the teaching faculty and the students of the department on 8^{th} March, 2019.

Dr.Fameline K. Marak

Organising member of the (i) *3 day Garo-English Translation Workshop* organized by Sahitya Akademi, New Delhi in collaboration with Department of English and Department of Garo, NEHU Tura at the North-Eastern Hill University, Tura Campus, Tura, from 29th - 31st May, 2018, (ii) *All India Poetry Festival*by Sahitya Akademi at the North-Eastern Hill University, Tura Campus, Tura, on 17^{th} September, 2018, (iii) Workshop on *Traditional Musical Instruments* (*Chigring, flutes, spi, dama, dotdrong, rikwareng, rikgitok, grika and Wangala dance*) from $3^{\text{rd}} - 8^{\text{th}}$ December, 2018 at the Don Bosco School, Tura, and (iv) *International Mother Tongue Day* by the Department of Garo in collaboration with A·chik Literature Society, Tura at the Conference Hall, NEHU, Tura Campus on 22.2.2019.

Organised the A·chik Literature Society's *Writers' Meet* in collaboration with Department of Garo, NEHU, Tura Campus, Tura, on 29^{th} September, 2018 at Chritian Girls H.S.School, Tura.

Attended

Dr. Fameline K. Marak

(i) Language expert (Garo) at the 3 day Garo-English Translation Workshop organized by Sahitya Akademi, New Delhi in collaboration with Department of English and Department of Garo, NEHU Tura at the North-Eastern Hill University, Tura Campus, Tura, from 29th - 31st May 2018, (ii) A panellist for the topic Literature from the North-East Language and Literature: In Pursuit of a Script for Non-Script Language at the Arunachal Literature Festival, 2018 organized by Department of Information and Public Relations, Government of Arunachal Pradesh at D.K. Convention Centre, Itanagar from 28th -30th November, 2018.

Delivered an (i) Introductory Remarks at the Inaugural session of the *All India Poetry Festival* by Sahitya Akademi at the North-Eastern Hill University, Tura Campus, Tura, on 17th September, 2018, (ii) Talk on "Preservation of the Rich Traditional Value of the Garos"at the *Workshop-cum-event Ethnica, 2018* organised by the department of History and Archaelogy, NEHU Tura Campus from 5th -6th November, 2018.

Presented a paper titled (i) "Jattang A·songtangna Ka·saani aro On·kanganiko

Minggittam Poedoo Pangchake Amsandia"at the seminar on International Mother Tongue Day organised by the Department of Garo in collaboration with A chik Literature Society, Tura at the Conference Hall, NEHU, Tura Campus on 22.2.2019, (ii) "Garo Literature: Its Growth and Development" organised by the department of Comparative Indian Language and Literature, University of Calcutta in collaboration with Central Institute of Indian Languages for a Three-Level Centenary Day National Commemoration Seminar on the Establishment of the Department of Modern Indian Languages as a invitee at the University of Calcutta from 6th -8th March, 2019. (iii) A self composed poem "Seni Sintee Kalima" at the A-chik Literature Society's Writers' Meet in collaboration with Department of Garo, NEHU, Tura Campus, Tura, on 29th September, 2018 at Chritian Girls H.S.School, Tura.

Dr.Jacqueline R. Marak

Organizing member of (i) the 3 day Garo-English Translation Workshop organized by New Sahitya Akademi, Delhi in collaboration with Department of English and Department of Garo, NEHU Tura at the North-Eastern Hill University, Tura Campus, Tura, from 29th - 31st May 2018, (ii) A chik Literature Society'sWriters' Meet in collaboration with Department of Garo. on29th Tura Campus, Tura, NEHU, September, 2018 at Chritian Girls H.S.School, Tura, (iii) All India Poetry Festivalby Sahitya Akademi at the North-Eastern Hill University, Tura Campus, Tura, on 17th September, 2018, (iv) Workshop on Traditional Musical Instruments (Chigring, flutes, spi, dama, dotdrong, rikwareng, rikgitok, grika and Wangala dance) from 3rd - 8th December, 2018 at the Don Bosco School, Tura, and (v) Seminar on International Mother Tongue Day by the Department of Garo in collaboration with A chik Literature Society, Tura at the Conference Hall, NEHU, Tura Campus on 22.2.2019.

Presented a(i) Self composed poem "Mandal Bibal"at A.chik the Literature Society's Writers' Meet in collaboration with Department of Garo, NEHU, Tura Campus, Tura, on29th September, 2018 at Chritian Girls H.S.School, Tura, (ii) Paper on "Culture of the Garos- Then and Now"in the Seminar on 'Cultural Self-National Fashioning in North-East India: Interplay of the Oral, the written and the Performative Arts' organised by the Department of Modern Indian Language and Literary Studies, Gauhati University from 21st -22nd March 2019, (iii) Paper on "Daororo Jakkalgijagipa Sastroni A·chik Kattarang" at the International Mother Tongue Day organised by the Department of Garo in collaboration with A chik Literature Society, Tura at the Conference Hall, NEHU, Tura Campus on 22.2.2019.

Translated Prabodh M.Sangma's three short stories : "Ka·tongarini Ka·saa" (Love of the Pure Heart), "Dante-Beatrice" and "Dishru-The Daughter of the King"at the *3 day Garo-English Translation Workshop* organized by Sahitya Akademi North-Eastern Hill University, Tura Campus, Tura, from 29th -31st May 2018.

Dr.Dokatchi Ch. Marak

Organising member of the (i) 3 day Garo-English Translation Workshop organized by Akademi. New Sahitya Delhi in collaboration with Department of English and Department of Garo, NEHU Tura at the North-Eastern Hill University, Tura Campus, Tura, from 29th - 31st May 2018, (ii) A chik Society's*Writers*' Literature Meet in collaboration with Department of Garo, on29th NEHU, Tura Campus, Tura. Chritian September, 2018 at Girls H.S.School, Tura, (iii) All India Poetry Festivalby Sahitya Akademi at the NorthEastern Hill University, Tura Campus, Tura, on 17th September, 2018, (iv) Workshop on *Traditional Musical Instruments (Chigring, flutes, spi, dama, dotdrong, rikwareng, rikgitok, grika and Wangala dance)* from 3rd - 8th December, 2018 at the Don Bosco School, Tura, (v) Seminar on *International Mother Tongue Day* by the Department of Garo in collaboration with A chik Literature Society, Tura at the Conference Hall, NEHU, Tura Campus on 22.2.2019.

Attended

Presented papers on (i) "Reflections of sociopolitical life in the novels Khalsin and Sonatchi (Garo) and Nunna Kawngthuampuiah (Mizo)" in the Mizo Literature Festival cum National Seminar, Department of Mizo, Mizoram University on 6th -8th June, 2018, (ii) "Gimaangenggipa Ku·sikrangko Ripingani" in the Seminar organised by the Department of Garo, NEHU, Tura Campus in collaboration with A chik Literature Society on22.2.2019, and (iii) "Oral Narratives: with Special Reference to Three Garo Folktales", in the National Seminar on Cultural Self-Fashioning in North-East India: Interplay of the Oral, the Written and the Performativeorganised by the Department of Modern Indian Language, Gauhati University from 21st -22nd March 2019, and (iv) "Simsakbo", a self composed poem in the All India Poetess Conference at Bidar, Karnataka from 26th -28th October 2018.

Participated as an expert in the workshop on (i) Preparation of Interactive Talking Dictionaries of Languages of North-East India, organised by Central Institute of Indian Languages, Department of Higher Education, Ministry of HRD, Govt. of India at NEHU, Shillong from 7th to 11th May 2018, (ii) language expert in translation workshop organised by the CBSE, Delhi from 6th -10th August 2018, and (iii) language expert in workshop organised by the CBSE, Delhi from 4th -9thMarch 2019.

(i) Attended as one of the translators in the three day Garo-English Translation workshop organised by the Department of Garo, NEHU, Tura Campus, sponsored by Sahitya Akademi from 29th -31st May 2018, (ii) Attended the PEN International Congress at Savitribhai Phule Pune University from 26th -28th September 2018.

Shri. Crystal Cornelious D. Marak

Organising member of the (i) 3 day Garo-English Translation Workshop organized by Sahitya Akademi, New Delhi in collaboration with Department of English and Department of Garo, NEHU Tura at the North-Eastern Hill University, Tura Campus, Tura, from 29th - 31st May 2018, (ii) All India Poetry Festivalby Sahitya Akademi at the North-Eastern Hill University, Tura Campus, Tura, on 17th September, 2018, (iii) Seminar on International Mother Tongue Day by the Department of Garo in collaboration with A.chik Literature Society, Tura at the Conference Hall, NEHU, Tura Campus on 22.2.2019.

Organised as Secretary ALS (i) the A chik Literature Society'sWriters' Meet in collaboration with Department of Garo, on29th NEHU, Tura Campus, Tura, September, 2018 Chritian at Girls H.S.School. Tura. (ii) Workshop on Traditional Musical Instruments (Chigring, flutes, spi, dama, dotdrong, rikwareng, rikgitok, grika and Wangala dance) from 3rd - 8th December, 2018 at the Don Bosco School, Tura, and (iii) A.chik Literature Society's seminar on International Mother Tongue Day in collaboration Department of Garo, NEHU Tura at the Conference Hall, NEHU, Tura Campus on 22.2.2019.

Attended

Translated five short stories of Prabodh M.Sangma Viz. (i) "Kam Ka·ani Somoi" (ii) "Sao Sarap Gnanggipa Krismas" (iii) "An·tangna Gitan Ka·sabo" (iv)

(v) "A·gilsako Jekai "Ku·mikcheta" Atchirama-sachiba" at the 3 day Garo-English Translation Workshop organized by Akademi North-Eastern Sahitya Hill University, Tura Campus, Tura, from 29th -31st May 2018. Presented self composed poems (i) "Aman' Ku·sik"at the A·chik Literature Society's Writers' Meet in collaboration with Department of Garo, on29th NEHU, Tura Campus, Tura, 2018 Chritian September, at Girls H.S.School, Tura, (ii) (a) "Balpakram", (b) "Nang na", at the All India Poetry Festival by Sahitya Akademi at the North-Eastern Hill University, Tura Campus, Tura, on 17th September, 2018. Presented a paper on "Wilberth D. Marakni kan dikgipa golpo Den galgija SMS-ni theme," at the International Mother Tongue Day organised by the Department of Garo in collaboration with A chik Literature Society, Tura at the Conference Hall, NEHU, Tura Campus on 22.2.2019.

Publications

Marak, J.R. (2018), "Funeral and Post Funeral Practices of the Chisaks". *Manviki*, An International Journal of Humanities & Social Sciences, Vol. X No. I July-December 2018, pp. 13-16

Books/Book Chapters

Marak, J.R. (2018). Descriptive analysis of Gara-Gan ching. In: *Garo and its Cognate Languages*. Anundoram Borooah Institute of Language, Art & Culture, Assam.

Funds Received from Agencies including NEHU/UGC

Funds received from NEHU Tura Campus, Tura for organizing *3 day Garo- English Translation Workshop* organized by Sahitya Akademi, New Delhi in collaboration with Department of English and Department of Garo, NEHU Tura at the North-Eastern Hill University, Tura Campus, Tura, from 29th -31st May 2018.

Funds received from NEHU Tura Campus for organizing*All India Poetry Festival*by Sahitya Akademi at the North-Eastern Hill University, Tura Campus, Tura, on 17th September, 2018.

Research Projects: Consultancy Completed during Year: March, 2019

SI. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Led Landscape Management Project	Garo (Team work)	Meghalaya Basin Management Agency	29,100/-
	Translation: Community Operations Manual		The World Bank	

Other Activities:

Dr.Fameline K. Marak

A Committee member, the General Council for the "Society for Promotion of Arts & Cultural Enrichment (SPACE),Meghalaya", w.e.f. 23rd August, 2016 till date. Member, General Council, Sahitya Akademi, New Delhi.

Advisroy Board for Sahitya Akademi's North-East Centre for Oral Literature,

(NECOL) Agartala from 15th May, 2017 till date.

Judge for different events/ competition Varsity Week programme, NEHU, Tura Campus, Tura in 2018.

Judge, (Poetry on Garo section), the Meghalaya Poetry Competition organised by the All India Poetess Conference Meghalaya Chapter since 2013 -18. Member, College Inspection Team for Raid Laban College, Shillong on 29th March, 2019.

Judge for Ethnic Food Competition at the *Workshop-cum-event Ethnica, 2018* organised by the department of History and Archaelogy, NEHU Tura Campus from 5th - 6th November, 2018

Teacher In-charge as HOD of Conference Hall of NEHU, Tura Campus, Tura (since 2015 till date)

Dr.Jacqueline R. Marak

Convener, Standardization of Garo spelling, A·chik Literature Society, 2013 till date. Life member of all India Poetess Conference. Member of Meghalaya Poetry Competition, 2018-19.

Member of Editorial Board, *NokdangniRipeng*, 2015 till date. Judge, (Poetry on Garo section), the Fourth Meghalaya Poetry Competition organised by the All India Poetess Conference Meghalaya Chapter since 2018.

Member, Governing Body, Durama College, Rongkhon, Tura and MendipatharCollege, Mendipathar in 2018-19. Member, Governing Body, Mason Phillips Academy, Tura (Affiliated to MLCU, Shillong). 2018-19. Member, Inspection Team, Tikirkila College, West Garo Hills. 2018.

Dr.DokatchiCh.Marak

Convener, the Board of Scrutiny, A·chik Literature Society, Tura, 2015 till date. Life Member, the All India Poetess Conference, India. Life Member, the A·chik Literature Society, Tura, Meghalaya. Member, the Editorial Board, *Nokdangni Ripeng*, Tura, Meghalaya, 2015 till date. Life Member, the Tribal Literary Forum of India.

Shri. Crystal Cornelious D. Marak

Life Member and Secretary, A·chik Literature Society, Tura, West Garo Hills, Meghalaya, since 2014 till date. Life Member of the Garo Graduate Union, Tura, West Garo Hills, Meghalaya. Member, Advisory Committee to advise the Government for State Literary Award Judge for Varsity Week programme for different events/ competition in 2018. Teacher-in-charge of the field study at Bugakolgre Village on 8th October, 2018

DEPARTMENT OF HINDI

Head	: Prof. M. P. Pandey
Telephone	: 0364-2723514 (O), 2723515 (O), 9436163149
E-mail	: hodhin@nehu.ac.in, mppnehu@yahoo.co.in

Faculty	:4	
Designation	Name and Qualification	Specialization
	Dr.M. P. Pandey M.A., Kashi Vidyapeeth, Varanasi. Ph.D., Kashi Vidyapeeth, Varanasi.	Criticism & Poetics
	Dr.D. K. Choubey	Medieval Literature &
	M.A Gauhati University	Comparative Study
Professor	Ph.D Manipur University	
	Dr. B. P. Tripathi	
	M.A J.N.U. New Delhi	Modern Poetry .
	M.Phil, &Ph.D., J.N.U. New Delhi	
	Dr. H. K. Mishra	Hindi Journalism & Modern
	M.A. – BHU, Varanasi	Literature
	Ph. D. – BHU, Varanasi	

Thrust area of research in the Department North-Eastern Literature and Comparative Study.

Brief Statement of Academic activitiesduring the year

During the academic year many academic activities have been initiated. 'Sodharthi Sanvaad Manch" (Research Forum of the Department) was established on 4th May, 2018. The research scholars of the

Department participated very actively and organized many programmes during the year. The programmes like, Premchand Jayanti, Bhishma Sahani Jayanti, Antarrashtriya Matri-Bhasha Diwas was organized by the 'Sanvaad Manch'. A special lecture of Prof. Anand Kumar, an eminent sociologist from JNU, was organized on the topic 'Bhasha ka Samajshastra aur Vaishweekaran ki Chunoutiyan'.

Students' Profile

Enrolment capacity:

M.A - 55 **M. Phil**- 10

Ph.D. - Variable

Actual Admission : 40				6 (07 Total – 53	
Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-	Total
							Meghalaya	
M.A.	1	8	31	12	28	6	34	40
M.Phil	-	2	4	2	4	1	5	6
Ph. D.	2	1	4	6	1	1	6	7

Students Awarded Degree

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	Total
M.A.	1	2	28	12	19	2	29	31
M.Phil	2	3	2	2	5	2	5	7
Ph. D.	-	-	-	-	-	-	-	-

Research Fellowship:

CSIR- UGC- NET	UGC Non- Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Neritorious Maulana Azad Minority Fellowship	Any other (Your name it)	Others
1	24	-	-	-	-	-

Courses Conducted : M.A.

Semester I : Hindi Bhasha evam Uska Vikash, Bhartiya Kavyashastra-I, Aadhunik Kavya, (Chhayavadtak) evam Paryavaran Parak Kavya, Hindi Gadya Sahitya-I (Natak evam Nibandh), Aadikalin Hindi Sahitya ka Itihas.

Semester II : Bhaktikalin Kavya, Bhartya Kavyashastra-II, Hindi Gadya Sahitya-II (Upanyas evam Kahani), Aadikalin Kavya, Prayojanmoolak Hindi.

Semester III : Hindi Sahitya ka Madhayakal, Ritikaleen Kavya, Hindi Natak, Anuvad-Sidhant evamVyawhar, Lok Sahitya.

Semester IV : Hindi Sahityaka Aadhunikkal, Chhayavadottar Kavya, Paschatya Sahityalochana evam Hindi Aalochana, Bhasha Vigyan, Hindi Nibandh

M. Phil/Ph.D. Course

Anusandhanki Pravidhi aur Prakriya, Hindi Sahityaki Vaicharik Prishth bhoomi, Sangosthi evam Samiksha.

Seminars/Conferences/Workshops/Symposia/ Extension Programes

Attended

Prof. M. P. Pandey

Chaired (i) a session of National Seminar on the topic 'Poorvottar Bharat mein Hindi ki Stithi' organized by B.B.S. Colleg, Shillong on22nd September, 2018 in Shillong, (ii) a function of Hindi Diwas Samapan Samaroh as chief guest

organized by Power Grid Corporation of India, Shillong on 28th September, 2018. Delivered a lecture in a workshop on the topic 'Hindi ke Prayog ka Mahatva evam Rastriya Ekata' organized by Govt. of India, Department of Atomic Energy, Atomic Minerals Directorate for Exploration & Research (NER), Shillong on 6th December, 2018 in Shillong. Presented papers (i) 'Poorvottar Bharat mein Hindi ke Pragog ki Samasyayein' in a National Seminar on the topic organized by Meghalaya Rashtra Bhasha Prachar Samitee and Hindi Cell, NEHU on 23rd February, 2019 at Shillong, (ii) 'Poorvottar Bharat ka Hindi sahitya'in a National Seminar organized by Sahitya Sammelan, Pryag and Rajeev Gandhi University, Itanagar, Arunachal Pradesh on 11th March, 2019. Participated in (i) Vishwa Hindi Diwas Program in Department of South Asian Languauge, Chulalalongkorn University, Bangkok, Thailand and delivered a lecture on the topic 'Poorvottar Bharat ki Kavita' on 10th January, 2019 in Bangkok, Thailand, (ii) as Chief Guest in an 'Inter-College workshop on Hindi Poetry composition' organized by Women's College, Shillong on 13th March,2019 and delivered a lecture on the topic 'Kavya Rachana ki prakriya' in Shillong.

Prof. D. K.Choubey

Presented a Key note address on Purvottar Bharat mein Hindi ki Sthiti evam Chunoutian' organized by Sahitya Academi, New Delhi and Hindi Department, Rajeev Gandhi University' on 24th September, 2018 at Itanagar.

Chaired the sessions of National Seminars on the topics (i) 'Anuvad evam Bhartiya Bhashaen' organized by B.B.S. Colleg, Shillong on22nd September, 2018, (ii) 'Purvottar Bharat mein Vaikalpik Lipi ke Roop mein Devnagri Lipi' organized by Nagari Lipi Parishad. Delhi evam Hindi Department, Tripura University on5th October, 2018 at Agartala, (iii) 'Chhavavad ke Sau Varsh' organized by Central Hindi Institute, Agara and Hindi Department, Guwahati University on1stNovember, 2018 at Guwahati, (iv) 'Purvottar ki Bhasha Sahitya ke Vikash mein Hindi ka Yogdan' organized by MGAU, Vardha and Guwahati University on 28th February, 2019 at Guwahati, and (v) 'Purvottar Bharat mein Hindi Sahitya'organized by Assam Rajya Rashtra Bhasha Prachar Samiti' on 31st March, 2019 at Guwahati.

Presented Papersin National Seminars on (i) 'Hindi aur Hinditar Bhashaon ka Antersambandh' in the organized by Assam Rashtra Bhasha Prachar Samitee on 30th August, 2018 at Guwahati.

(ii) 'Bhartiya Janjatiya Sahitya mein Hindi ki Bhumika' organized by Meghalaya Rashtra Bhasha Prachar Samitee and Hindi Cell, NEHU on 23rd February, 2019 at Shillong, (iii) 'Purvottar Bharat mein Hindi Sahitya' organized by MGAU, Vardha and Guwahati University on 27th February, 2019 at Guwahati. (iv) 'Purvottar Bharat mein Bhakti Andolan ki Prishthbhumi' organized by Sahitya Academi and Hindi Department, Gorakhpur University on 4th March. 2019 at Gorakhpur, and (v) 'Purvottar Bharat mein Hindi ki Sthiti' organized by Sahitya Sammelan, Pryag and Rajeev Gandhi University, Itanagar, Arunachal Pradesh on 11th March. 2019.

Dr. H. K. Mishra

Presented papers in National Semianrs on (i) 'Purvottar ki Bhashayen aur Hindi', organized by BBS College, Shillong on 22nd September, 2018, (ii) 'Chhayawad ki Den', organized by Department of Hindi, Gauhati University, Guwahati on 1st&2nd November, 2018. (iii) 'Purvottar ka Janajatiya Sahity aur Hindi', organized by Meghalaya Rashtrabhasha Prachar Sabha, Shillong on 23rd& 24th February, 2019, (iv) 'Sahitya aur Sahityakar : Dayittwa aur mulyabodh', organized by Assam Rashtrabhasha Prachar Samiti, Jorhat on 30th& 31st March, 2019, (v) 'Bahulatawadi Sanskriti aur Purvottar Bharat ki Bhashayen', organized by Department of Hindi, RGU, Itanagar on 21st& 22nd February, 2019, and also presented a paper in an International Seminar, 'Vartaman Samasyayen aur Lok ki Bhumika' organized by SSPG College, Ghazipur, on 23rd& 24th November, 2018.

Delivered a keynote address and chaired a session in an International seminar organized by SSPG college, Ghazipur on 23rd& 24th November, 2018, and chaired a session in a National Semianr on 'Bahulatawadi Sanskriti aur Purvottar Bharat ki Bhashayen', organized by Department of Hindi, RGU, Itanagar on 21st& 22rd February, 2019.

Publications

Published In India

Choubey, D.K. (2018).Nagaland ka Bhasha Sahitya: Swaroop Vivechan, Chintan Srijan, Issue 2, ISSN- 0973-1490:110-114

Choubey, D.K.(2019). Purvottar Bharat ka Lok Sahitya, Avadh Archana, ISSN – 0974-004X: 9-11

Tripathi, B. P. (2018), Samkaleen Kavita ka Deshantar, Srijan Sarokar, July-September, p. 20-24

Tripathi, B. P.(2018), Aqhoshit Apatkal ka Naya Daur, Pragatisheel Irawati, Oct.-Dec., p- 10-17

Mishra, H. K. (2018). Prakriti evam Pravidhi, Chintan Srijan, Issue-I, ISSN 0973-1490 : 60-67.

Mishra, H. K. (2019). Bharatiya Bahulata ke Pariprekshya mein Purvottar ki Bhashayen, Nutanvagdhara, Issue-37, ISSN 076-092X : 15-18

Mishra, H. K.(2018). Kafan : Murda Samaj ki Aawaran Katha, Pustak Warta Issue 71-72, ISSN 2349-1809 : 23-27, July-October, 2017

Mishra, H. K.(2018). Hindi Natak aur Rangmanch, Jankriti e Magazine, Vol.-3, Issue 34-35,ISSN 2454-2725 : 175-180, March, 2018

Books

Pandey, M.P.(2018). Khublai Shibun Cheedvan Manav Prakashan, Kolkatta, ISBN 978-81-93723-2-3 Tripathi, B. P. (2018). Pratibaddhata ki Nayi Jameen (Alochana) Pratishruti Prakashan, Kolkatta, ISBN 978-93-83772-68-1

Tripathi, B. P. (2019). Pukarta hun Kabir (Selected Poems) Aman Prakashan, Kanpur (U.P.), ISBN 978-93-88260-42-8

Book chapters

Pandey, M.P.(2018). Hindi ka Bhashayee Paridrishya, Hindi aur Purvottar, Vani Prakashan, ISBN 798-93-87648-50-0

Choubey, D.K. (2019). Arunachal Pradesh ki Aapatani Bhasha ki Lokoktiyan: Swaroop Vivechan, Purvottar Bharat Bhasha Sahitya aur Sanskriti, Yash Publication, Delhi, ISBN 978-93-8113-78-6 : 96-101

Choubey, D.K. (2019). Arunachli Janjatiyon mein Prachalit Ram Katha', Hindi aur Purvottar, Vani Prakashan, Delhi, ISBN – 978-93-87648-50-0 : 98-103.

Tripathi, B. P. (2018). Jeeviton ki Advitiya Sambhavna hai Prithvi, Jaise Dhoop mein Ghana Saya Lokmitra, ISBN 798-93-80347-72-1

Tripathi, B. P. (2018). Khasi aur Garo Bhashaon ki Kalatmak utkrishtta, Hindi aur Purvottar, Vani Prakashan, ISBN 798-93-87648-50-0

Tripathi, B. P.(2019). Hindi Sahitya ka Bazarkal, Bazar ke Chakravyuh mein Sahitya, New Delhi, ISBN 798-93-88658-05-8

Tripathi, B. P. (2019), Satven Indni ka aughar Sadhak, Hamare Samay mein Muktibodh, Vani Prakashan, New Delhi, ISBN 798-93-88684-19-4

Other activities

Prof. M.P.Pandey

Visited Chulalongkorn University (CU), Bangkok as a members of the delegation from NEHU to signed an MoU on 10th January, 2019 between Professor S.K. Srivastava, the Vice-Chancellor of NEHU, Shillong and Professor Bundhit Eua-arporm, the President of the Chulalongkorn University (CU), Bangkok in the presence of His Excellency Chutintorn Gongsakdi, the Ambassador of Thailand to India **Lectures**

and his counterpart Her Excellency Suchitra Durai, the Ambassaador of India to Thailand and a host of dignitaries.

Prof. D. K. Choubey

Delivered lectures on (i) 'Rajbhasha Hindi Karyanvayan ki Chunoutiyan' at NIELIT, Shillong on 13th SeptemberDelivered a lecture on Official Hindi workshop on Functional Hindi and Translation at EFLU, Shillong on 14th September, 2018, (ii) 'Chhayavad evam Prasad aur Nirala' at Tibbati Shodh Sansthan, Sarnath, Uttar Pradesh, on 2nd February, 2019, (iii) 'Purvottar Bharat ki Bhasha-Sanskriti' at Vasant Mahila College, Varanasi, on 2nd February, 2019, (iv) 'Lok Sanskriti' at Department of Hindi, Manipur University, Imphal on 16th March, 2019 and (v) 'Functional Hindi and Translation'at the Official Hindi orkshop at EFLU, Shillong on 19th September, 2019.

Participated (i) as an expert member in extempore speech competition, organized by AFWA Eastern Air Command, Shillong on 4th July, 2018, (ii) as an expert member in Award Committee of Central hindi Institute, Agara at Delhi on 13th March, 2019, and (iii) Workshop for Hindi-Jayantia Adhyetakosh by Central Hindi Institute, Agara at Regional Centre, Shillong from 19th Nov. to 25th November, 2018 and 2nd workshop from 12th Dec. to 21st December, 2018.

Editor of NEHU Jyoti Annual Magazine of Hindi Cell, NEHU, Shillong, Issue II, August, 2018.

Dr. H. K. Mishra

Delivered lectures in (i) Army Public School, Shillong on 18th July, 2018 on the occasion of Inter House Competition, (ii) Kendriya Vidyalaya, NEHU, Shillong on 31st October, 2018 on the occasion of Inter School Debate Competition on Vigilance Awareness, and (iii) 'Hindi Poetry Writing' Workshop organized by Women's College, Shillong on 13th March, 2019.

Sl. no.	Name	Institute	Date	Торіс
1	Dr. Jagdish N.	Rajdhani College,	05.04.2018	Bharat ka Samajik evam
	Sinha	Delhi University		Aetihasik Pariprekshya
2	Prof. Aanand	JNU, Delhi	27.03.2019	Bhasha ka Samaj Shastra aur
	Kumar			Vaishwikaran ki Chunoutiyan

DEPARTMENT OF KHASI

Head	: Prof. Antoinette Kharmalki
Telephone	: 2723301 (O)
E-mail	: antoinette_kharmalki@rediffmail.com

Faculty	:6	
Designation	Name and Qualification	Specialization
Professor	Dr.B.War, M.Phil (Delhi Univ), Ph.D. (London)	Linguistics
	Dr.S.Dkhar, M.Phil(NEHU), Ph.D. (NEHU)	Khasi Drama
	Dr.A.Kharmalki, M.A.(Delhi Univ), Ph.D. (NEHU)	Linguistics
	Dr.D.R.L.Nonglait, M.Phil (NEHU), PGDTE	_
	(CIEFL), Ph.D. (NEHU)	Literary Criticism on
		Khasi Fiction
Assistant	Dr.B.Bairo, M.A.(NEHU), Ph.D.(NEHU)	Fiction
Professor		
	Dr.M.M.Khymdeit, M.Phil (G.U), Ph.D. (NEHU)	Poetry

Thrust Area of Research:

Khasi Literature, Literature in Translation, and Environmental Awareness in Khasi Literature, Khasi Literary Theory and Criticism and Folklore in Khasi Literature.

Brief Statement of Academic Activities:

The Department organized a one day Programme to celebrate the 37th Anniversary of the Department on the 28th September, 2018.

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.	-	53	-	11	42	53	-	53
M.Phil	-	5	-	1	4	5	-	05
Ph.D.	-	2	-	-	2	2	-	02

Degree Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A	-	47	-	08	39	47	-	47
-								
Ph.D.	-	01	-	-	01	01	-	01
Ph.D.	-	01	-	-	01	01	-	01

Students Awarded Ph.D. Degree : 1 Placement of Students: 6 Research Fellowship

CSIR- UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other(You name it)	Others
	12					

Field/Educational Tour of Students

Teacher-in-Charge: Dr. M.M.Khymdeit Places/Institutions visited: Udaipur, Rajasthan and Gujarat. Duration of tour: 12 days.

Purpose of Tour: To take students to visit

historical places of Rajasthan and Gujarat. Through this tour the students will be able to observe the rich culture of other states.

Study Tours/Field Trips of Students:

Study Tour on the 23^{rd} February, 2019 to Sohra, East Khasi Hills District, in connection with Course No.KHA-113 C (Culture in Khasi Literature – I).

Courses Conducted M.A.

Semester I: KhasiLinguistics I, Khasi Poetry I, Khasi Drama I, Aspects of Culture in Khasi Literature - I and Literary Theory and Criticism – I.

Semester II: Khasi Linguistics II, Literary Theory and Criticism - II, Khasi Drama II, Literature in Translation- I and Khasi Poetry II.

Semester III: Khasi Linguistics III, Literary Theory and Criticism – III, Environmental Awareness in Khasi Literature, Khasi Fiction-I and Literature in Translation-II.

Semester IV: Khasi Linguistics IV, Khasi Poetry-III, Khasi Fiction-II, Literary Theory and Criticism – IV and Aspects of Culture in Khasi Literature – II.

M.Phil/Ph.D. Courses

Research Methodology, Seminar Papers -(Option A) Literary Theory and Criticism, (Option B) Emerging Trends in Khasi Literature and (Option C) Translation and Khasi Literature.

Seminars/Conferences/Symposia/Extensio n Programmes etc.

Organized

The Department organized a one day Programme to celebrate the 37th Anniversary of the Department on the 28th September, 2018, at the Cluster Classroom (Room No.203) at NEHU, Shillong.

Prof. Streamlet Dkhar

Coordinator of Poetry Recitation on Mahatma Gandhi in the cultural programme Jan Andolan for Swachhata as part of the celebration of 150th Birth anniversary of Mahatma Gandhiheld on 2nd October 2018 at Soso Tham Auditorium organized by the Directorate, Arts and Culture, Government of Meghalaya, (ii) Eight Meghalaya Poetry Competition Cum Poetry Festival 2018, on the theme "Peace/ Jingsuk/ Tom Toma/ Shanti" held at St. Edmund's College Auditorium on 16th November 2018, (iii) Memorial Lecture on "The contributions of D. T. Laloo and H. W. Sten to Khasi Literature" and the book release of Silbi Passah and Lucky Kharpuri, (iv) Memorial Lecture on "The contributions of (L) Prof. Radhon Sing Lyngdoh to Khasi Literature",

and (v) Memorial Lectures on "The contributions of (L) Prof. Bevan L. Swer and (L) Webster Davies Jyrwa to Khasi Literature".

Attended

Prof. B.War

Presented a paper as Resource Person "Ka Ktien Khasi ha ka Longïing Austro-Asiatic" (The place of Khasi in the Austro-Asiatic Language Family) on the 4th August 2018 in the Seminar Haba Im Ka Ktien, Im Ka Jaitbynrieworganized by the Department of Khasi, Shillong College in collaboration with the Khasi Authors' Society in Shillong College, Shillong.

Prof. Streamlet Dkhar

Resource personof (i)Poetry Recitation on Mahatma Gandhi and recited a self composed poem on Gandhi "A man of Peace" in the cultural programme Jan Andolan for Swachhata as part of the celebration of 150th Birth anniversary of Mahatma Gandhiheld on 2nd October 2018 at Soso Tham Auditorium organized by the Directorate, Arts and Culture, Government of Meghalaya, (ii) Two-day National Seminar on Tribal Language Development and Literature as part of the 15th Year Celebration of the All India Tribal Literary Forum" and presented a paper on "History and Development of Khasi Language and the Present Scenario" held on 5th and 6th May 2018 at Press Club Hall, Ranchi, Jharkhand, organized by Ramnika Foundation, in association with Indira Gandhi University, Madhya Pradesh and All India Tribal Literary Forum, (iii) Training programme on Legal Awareness on Women and Child Rights and did the power point presentation on "The Status of Women in Matrilineal Society: the Past and Present with special reference to Meghalaya" held on 9th May 2018 at Meghalaya Administrative Training Institute, Shillong organized by the

Department of Personnel and Training, Government of Meghalaya, (iv) National Seminar on Mizo Literature to commemorate the Birth centenary of L. Biakliana (1918-1941) and presented a paper on "L. Biakliana: A Study of his Short Story, Lali and his two poems "True Love" (translated by H. Lalrinfela) and "Lonely Cottage" (translated by L. Khiangte) held on the 6th August 2018 at St. Anthony's College auditorium, organized by the Department of Mizo, St. Anthony's College, Shillong, (v) Seminar on Haba ka Ktien ka Im, Im ka Jaitbynriewand presented a paper on "Ka Kyrdan jong Ka Ktien bad ka Litereshor Khasi" organized by Khasi Department, Balawan College and Khasi Authors' Society held on 1st September 2018, at Balawan College, Umsning, Ri-Bhoi District (vi) Orientation programme for Officer Trainees of IAS, 2017 Batch, Assam Meghalaya Cadre and did the power point presentation on "Status of Women in Matrilineal Society with special emphasis to Khasi and Garo of Meghalaya" held on 26th September 2018 at Meghalava Administrative Training Institute, Shillong, organized by the Directorate Meghalaya Administrative Training Institute, Shillong, (vii) National seminar on Community and Identity Formation in North-East India and presented a paper on "Constructing Tribal Identity through language, literature and literary movements with special emphasis on Khasi" held on 28th September 2018 at the auditorium of Kiang Nangbah Government College, West Jaiñtia Hills, Jowai; organized by Departments of Khasi and History, Kiang Nangbah Government College, West Jaiñtia Hills, Jowai, (viii) World Hindi Dav (Viswa Hindi Diwas) 2019 and read out self composed poem in Khasi "Ki Dew ka Jingim" and a translated version in Hindi by Dr. J.S. Dkhar "Zindegi ki lehere" held on 10th January 2019 at Room 105 Maha Chulalongkorn Building, Chulalongkorn University, Bangkok;

organised by the South Asian Languages Section in collaboration with Faculty of Arts, Chulalongkorn University and Indian Studies Centre of Chulalongkorn University, Thai Hindi Parishad and Thai-Bharat Cultural Lodge. Thailand, (ix) Panel discussion on "Folk Music and Modern Days" in the Rare Arts Festival of North East India organised by Indian Council of Cultural Relations in collaboration with North Eastern Council and Asian Confluence held on 23rd February 2019 at Asian Confluence auditorium, Laitumkhrah Shillong, (x) Workshop on Creative Writing and Poetry for students of different colleges of Shillong and did a power point presentation on "Understanding Poetry" held on 13th March 2019 at Women's College Auditorium; organised by the Department of Hindi, Women's College, Shillong, (xi) Workshop on The Art of Story Telling for students of different colleges of Shillong and the topic is "The Art of Story Telling: The Narrative techniques and the skills of a narrator and folktales" held on 15th March 2019 at Women's College Auditorium organised by the Department of English, Women's College, Shillong, (xii) Workshop Youth and Nation Building and talked on "Students and Youths are the future pillars of the Nation" as part of the International Conference of the South Asian Culture and Literature Summit 2019 held on 29th March 2019 at Jahingarabad, Bangladesh; organised by the Association for South Asian Culture and Literature (AFSACL), and (xiii) Poetic Gathering and spoke on "Linguistic affinity and cultural exchange in the South Asian countries" and read out a self composed poem "One Religion" held on 31st March 2019 at Dr. R. K. Dhar Hall, Dargah Gate Sylhet; organised by Viswa Kobi Moncho, Sylhet, Bangladesh.

Chaired (i) the inaugural session held on 19th December 2018 at St. Edmund's College auditorium, Shillong. Organised by Ka Thiar Lyngwiar Dpei Society, Shillong in

collaboration with AIPC, Meghalaya Chapter and the Department of Khasi, St. Edmund's College Shillong, (ii) the inaugural and technical session held on 16th February 2019 Edmund's College auditorium, at St. Shillong. Organised by Ka Thiar Lyngwiar Dpei Society, Shillong in collaboration with AIPC, Meghalaya Chapter and the Department of Khasi, St. Edmund's College Shillong, (iii) the inaugural session; organized by the AIPC Meghalaya Chapter, in collaboration with St. Edmund's College, Shillong, sponsored by the Govt. of Meghalaya under VAF Scheme and Ramesh Bawri Group of Industries, (v) the inaugural session of the programme held on 1st December 2018 organised by Ka Thiar Lyngwiar Dpei Society, Shillong in collaboration with the Department of Khasi, St. Edmund's College Shillong, and (vi) a technical session in a seminar organized by the Department of Khasi, Buddha Bhanu Saraswati College, Shillong on the 24th November, 2018.

Chief Guest in (i) The *Rashtriya Poorvottar Rang UtsavNational Theatre Festival* held on 1st March 2019 at Soso Tham Auditorium, Shillong; organised by National School of Drama New Delhi in collaboration with Directorate of Arts and Culture Shillong, and (ii) Workshop on the *Chaita Parva Chhau Festival* held on 14th March 2019 at Soso Tham Auditorium; organised by Sangeet Natak Akademi. New Delhi in collaboration with the Department of Arts and Culture, Shillong.

Guest of Honour (i) In the *Festival of Africa:* Dance and Music of Algeria held on 27th May, 2018 at Aurobindo Auditorium, organized by Indian Council for Cultural Relations, Regional Centre, Shillong, (ii) Special Guest in the Inaugural Function of *Rare Arts Festival of North East India* and spoke on "Importance to preserve and promote Traditional musical instruments among the Tribal of Northeast India" and was a Panelist in the panel discussion on "Folk Music and Promotion of making Traditional musical instruments" held on 24th February 2019 at Wahkhenorganised by Indian Council of Cultural Relations in collaboration with North Eastern Council and Raid Wahkhen, and (iii)Chairperson in the 2nd day of the *International conference of the* South Asian Culture and Literature Summit 2019 and read out a self composed poem on "Peace" held on 28th March 2019 at Jahingarabad, Bangladesh; organised by the Association for South Asian Culture and Literature AFSACL).

Attended as the Advisory Board Member in the meeting of the 1stBoard of Management, 2018 of the Centre for women's Studies, Dibrugarh University, Assam held on 30th May 2018 organized by the Centre for Women's studies Dibrugarh University at the auditorium of the Centre.

Panelistin the Panel Discussion on *Hills Autonomous District Councils and importance of Sixth Schedule* held on 2nd March 2019 at J. N. Stadium, Polo Shillong; organised by Batesi TV and Peitngor Cable News, Shillong.

Prof. Antoinette Kharmalki

Attended as Resource Person and delivered a speech at a Rally on Language Identity, organized by Khasi Authors' Society, Shillong held on the 22nd September, 2018, at Malki Ground, Shillong.

Dr. D.R.L.Nonglait

Chaired Sessions of (i) the Mizo Literature Festival Cum National Seminar, 2018 organized by the Department of Mizo, Mizoram University, Aizawl in collaboration with NEC, Ministry of DONER, Shillong on $6^{\text{th}} - 8^{\text{th}}$ June, 2018, (ii) a Programme in observance of "Thomas Jones Day", the 22nd June, 2018 organised by the Khasi Authors' Society, Shillong in collaboration with the Khasi Department, Synod College, Shillong at Synod College, Jaiaw, Shillong, (iii) the Inaugural Session of a "Regional Seminar cum Literary Day" "Haba im ka Ktien im ka Jaitbynriew" organized by the Khasi Authors' Society, Shillong on the 11th September, 2018 at National Durbar Hall, Mawkhar, Shillong.

Presented papers on (i) "U Thomas Jones I bad u Synñiang jong u sha ka Litereshor Khasi" in a Seminar organized by Khraw Sing Christian College, Mawphlang on the 22nd June, 2018, and (ii) "Ka jingtbit kren kum ka atiar ban synshar ïa ka jingmut jingpyrkhat ki nongsngap" at a seminar organized by Buddha Bhanu Saraswati College, Shillong on the 24th November, 2018.

Panelist of a Panel Discussion on "Ki jingmyntoi lada ka ktien Khasi ka ïoh rung ha ka Eight Schedule ka Riti Synshar ka ri India" held in July, 2018 at Doordarshan Kendra, Shillong.

Chief Guest at (i) Book Launch programme on the 7th September, 2018 at Mawkhar Durbar Hall, Mawkhar, Shillong - delivered speech and released a Khasi novel, entitled Shaei Ngan Phai authored by Dr. B.Ps. Toi, (ii) Fifth Anniversary Day of the Khasi Jaintia Welfare Association Research Cell, Shillong, the 20th August, 2018 celebrated at National Durbar Hall, Mawkhar, Shillong delivered speech and released a book entitled U John Birds Shadwell Ka Parom History authored by Mr. S.S. Majaw, and (iii) Guest of Honour at a Book Launch Programme on the 25th February, 2019, organized at Shillong Press Club, Lachumiere, Shillong. Delivered speech and released a book, entitled La donkam Ban Pynbeit Noh ïa ka Jingspel Dak Khasi.

Delivered a key note address in (i) a seminar on "Haba im ka Ktien im ka Jaitbynriew" organized by the Khasi Department, Sngap Syiem College in collaboration with the Khasi Authors' Society, Shillong on 11th August, 2018 at Sngap Syiem College, Mawkyrwat, (ii) a seminar on "Haba im ka Ktien im ka Jaitbynriew" organized by the Khasi Department, Thomas Jones Synod College, Jowai in collaboration with the Khasi Authors' Society, Shillong on 18th August, 2018 at Thomas Jones Synod College, Jowai, (iii) a seminar on "Haba im ka Ktien im ka Jaitbynriew" organized by the Khasi Department, Jaintia Eastern College, Khliehriat in collaboration with the Khasi Authors' Society, Shillong on 25th August, 2018 at Jaintia Eastern College, Khliehriat, (iv) a seminar on "Haba im ka Ktien im ka organized by the Khasi Jaitbynriew" Department, Balawan College, Umsning in collaboration with the Khasi Authors' Society, Shillong on 1st September, 2018 at Balawan College, Umsning, (v) a seminar on "Haba im ka Ktien im ka Jaitbynriew" organized by the Khasi Department, Nongstoin College in collaboration with the Khasi Authors' Society, Shillong on 8th September, 2018 at Nongstoin College, Nongstoin, (vi) a Rally on "Haba im ka Ktien im ka Jaitbynriew" organized by Khasi Authors' Society, Shillong held on the 22nd September, 2018 at Malki Ground, Shillong, and a Resource Person in a seminar on "Haba im ka Ktien im ka Jaitbynriew" organized by the Khasi Department, Shillong College in collaboration with the Khasi Authors' Society, Shillong on 4th August, 2018 at Shillong College, Shillong.

Dr. M.M.Khymdeit

Attended a Workshop on "MOOC's, econtent Development and Open Educational Resources" from 11th to 16th March 2019.

Publications: Published in India Bairo, Bandarilin. (2018).Khyndiat halor Ka Psycho Analysis Bad Ka Bishar Bniah ïa ka Literashor, in *Ka Thwet Jingstad (Quest for Knowledge)*, Vol.IV No.1. December, 2018:.12-15.

Khymdeit, M.M. (2018). Ka Jingslor noh ka Jinglong Kyrpang jong ka Jaitbynriew kumba ka paw ha ki Poim u Kynpham Sing Nongkynrih. *Ka Syngkhong Jingtip.* B.M. Wolflang (Ed.) Khasi Authors' Society ISSN:2278-6791. Vol-7: 56-68.

Khymdeit, M.M, (2018). Ka Mynsiem Ieit Mariang bad Ieit Ri ha ki Poim u Victor G.Bareh. *Ka Thwet Jingstad (Quest for Knowledge)*, Vol.IV No.1. December, 2018:.43-48.

Books/Book Chapters/Proceedings

Dkhar. Streamlet (2018).*Ki Kyrpien Jong Ka Por: Ki Tanka Ha Ka Khasi Bad Kiwei De Ki Poim,* Eses Plus Publications, Shillong, ISBN: 978-81-927797-3-7

Dkhar, Streamlet. (2018). "The Role of Indian Women for national harmony" published in *Souvenir of the Eighteen National Mega Convention, All India Poetess Conference*, published by AIPC, Bidar: Ed. Mangala Kapre: np

Dkhar, Streamlet. (2018).*Ki Poitri Bad Ki Khana Lyngkot Na Ka Bynta Ki Khynnah*, Chapter 2: "Por Shuti", Chapter 4: "Ki Jinghikai ba bha", Chapter 8: "Ko Lawkyntang", Chapter 12: "U Sim Tyngwieng" and Chapter 13: "U Symper bad u Kyllang". Published by Directorate of Educational Research, & Training, (DERT), Shillong: np

Dkhar, Streamlet. (2018). A translated version of "Indian Auto Biography in Literature with special reference to Khasi" entitled "Khasi Sahitya Me Atma Katha Ek Adhyan" translated by Dr. Jean S. Dkhar published in *Bhasha (March-April 2018 Vol. 277-57Special volume : Bhartiya Atma Katha Sahitya Visheshang.* Published by the Central Hindi Nidashalai, Bharat Sarkar. Ed. Anita Dagore and Co-eds Anupam Mathur & Achyut Kumar Singh. ISSN: 0523 2018: 107-116

Dkhar, Streamlet. (2018). Poems: "A Hopeful Survivor" and "The Tears of Blood" published in *Souvenir of the Eighteen National Mega Convention, All India Poetess Conference*, published by AIPC, Bidar Ed. Mangala Kapre : 92

Dkhar, Streamlet. (2018). "Ka Kyrdan Jong Ka Ktien Bad Litereshor Khasi: Ka Mynnor bad Mynta". Published in the *Souvenir*, *Sarad Smaranika 2018* for its Diamond Jubilee Celebration; published by the Relief & Rehabilitation Colony Welfare Society, Shillong, Ed. Subhadeep Bhattacharjee: np

Dkhar, Streamlet. (2018). "Ngi Dei Kiei" and "Ka Nonglaitim badap Jingkyrmen" Self composed poems published in the *Souvenir*, *Sarad Smaranika 2018* for its Diamond Jubilee Celebration; published by the Relief & Rehabilitation Colony Welfare Society, Shillong, Ed. Subhadeep Bhattacharjee: np

Dkhar Streamlet (2018). "Katto Katne Halor ka Tanka" published in *Ka Thwet Jingstad* Vol. IV No. 1 December 2018, *A Journal of the Society for Khasi Studies*, ISSN No. 2278-6813.

Dkhar Streamlet (2018).Translated into Khasi the document on "Translation of Voluntary Certification Scheme for the Traditional Community Healthcare Practitioners" *A training module of Bio-Resource Development* Centre: BRDC, Upper Shillong.

Nonglait, D.R.L.(2018). "Katto katne Shaphang ka Jingim bad Jingtrei u Thomas Jones II" in *Ka Pateng Khristan* (Vol. LXXXII No.8, August, 2018), published by the Khasi Jaintia Presbyterian Assembly, Shillong.

Nonglait, D.R.L.(2018). "Katto katne na ka Ktien U Blei halor ka Jingïashonglok Para Shynrang Para Kynthei (Homosexuality)" in *Youth Sunday Golden Jubilee Celebration Souvenir (1968 -2018)*, published by the Jingïaseng Samla, Khasi Jaintia Presbyterian Assembly, Shillong.

Book forwards & Messages Prof. Streamlet Dkhar

Foreword on the books (i)*Ki Sai Snier Syrdoh Tyngier* "Tang khyndiat ki Jingkynthoh" authored by Andreas Sun (2018): 13-18, (ii) *Ki Ummat Ksiar Na Thwei Dohnud, Ki Poitri Khasi* "Tang Katto Katne ki Jingkynthoh" authored by Lucky Kharpuri 2018: iii-iv, (iii) *U Kyllang Bad U Symper bad Kiwei pat Ki sawangka,* "Katto Katne Kyntien" authored by Silbi Passah (2018): 4-6, and (iv) *Ka Ïit Khmih Shat Phalang ka Thup Poitri,* "Tang khyndiat ki jingkynthoh" authored Renewbiang Dkhar. (2018): vi-x.

Messages in the (i) Souvenir of the Eighteen National Mega Convention, All India Poetess Conference, at Bidar, Karnataka :AIPC, Bidar, Karnataka. Ed. Mangala Kapre (2018):np, (ii) Souvenir National Convention All India Poetess Conference 2018Kairali: Trivandrum AIPC. and Sahithi. Thiruvananthapuram, Kerala. Ed: Dr. P. K. Radhamani. (2018): 10, and (iii) AIPC National Convention at Ahmedabad:. published by AIPC, Ahmedabad. Ed : Dr. Suman Sharma (2018):np

Honours/Awards/Recognitions Prof. Streamlet Dkhar

Academic Coordinator and Chairperson for the Research Projects on *Multilingual Online Dictionary, Creative Tourism: Culture of Conservation* after the MoU signed between NEHU and Chulalongkorrn University, Bangkok, Thailand. Awarded the Lifetime Achievement Award at the *Eighteen National Mega Convention*, *All India Poetess Conference*, held on 26th October, 2018 at Bidar, Karnataka for the contributions in the field of Education and Literature.

Awarded an Award of Honour for an exemplary contributions to Poetry, Drama and Khasi Culture conferred by the Association for Asian Culture and Literature in its International conference on "South Asian Culture and Literature Summit 2019" held on 28th March 2019 at Jahingarabad, Bangladesh.

Elected Chairperson of AIPC, National held in its General Council on 27th October, 2018 at Bidar, Karnataka.

Nominated Chief Adviser of the Association of South Asian Culture and Literature, 2018-20 BY AFSACL, Pirganj, Rangpur, Bangladesh.

Nominated Chief Adviser of the Meghalaya State Kick Boxing Association, 2018

Other Activities

Prof. B. War

Member, Linguistic Association of Great Britain, United Kingdom.

Member, Transactions of Philological Society, United Kingdom.

President, Society for Khasi Studies, Shillong.

Member, Main Committee to look into the matter for inclusion of the Khasi Language in the 8th Schedule of the Constitution of India, Arts and Culture Department, Government of Meghalaya.

Founder-President & life member, Tribal Literary Forum of India.

Chairperson, Committee for reviewing manuscripts for financial assistance to Khasi authors, Department of Education, Government of Meghalaya, Shillong. 2010 -2016 Coordinator of Committee on Preservation and Promotion of Endangered Languages, NEHU, Shillong

Founder President, Shillong Academic Society

President, Managing Committee, Lummawbah Government Lower Primary School, Lummawbah, Shillong

Prof. Streamlet Dkhar:

Expert of the Committee for reviewing manuscripts for financial assistance to Khasi authors, constituted by Department of Education, Government of Meghalaya, Shillong

Board member of Management of the Centre for Women's Studies, Dibrugarh University, Assam vide No. DU/RG/G.01.01/18/2468

Expert of the Committee for reviewing Khasi Books for State Literary Awards to Khasi authors, constituted by Directorate of Arts and Culture, Shillong

Board of Editors of the Reputed Research journal *Journal of Humanities and Social Sciences*(JHSS)Sami Apartment, Dodhpur, Aligarh, Uttar Pradesh, India. Ed. Dr. M.A. Lari Azad ISSN: 0974-8806

Member of the Main Committee to look into the matter for inclusion of the Khasi Language in the 8th Schedule of the Constitution of India, constituted by Directorate of Arts and Culture, Government of Meghalaya

A Committee member of the General Council for the "Society for Promotion of Arts & Cultural Enrichment (SPACE),Meghalaya".

Editorial Board Member, *Ka Thwet Jingstad* (*Quest for Knowledge*) a research Journal with ISSN No. 2278-6813 published by the Society for Khasi Studies, Shillong.

Delivered a short speech on the demand of the inclusion of Khasi language for the inclusion of Khasi Language into Eight Schedule of the Constitution of India in the seminar on *Haba im ka Ktien Im ka* *Jaitbynriew* held on 11th August 2018 at Sngap Syiem College, Mawkyrwat organized by Department of Khasi, Sngap Syiem College, Mawkyrwat in collaboration with Khasi Authors' Society.

Participated in the *Dialogue amongst* Stakeholders in addressing Sexual Violence against Women and Children in Meghalaya held on 25th May 2018 at Poinisuk Hotel, organized by North East Network, Shillong.

Was a Special Guest in the traditional music cum poetry reading programme entitled Ki Khriang Ka Dohnud and presented Self composed folk poem, "U Kui" held on 25/8/2018 at Little Chef Cafe organised by Ki Umpohliew Ka Mynnor in association with Little Chef Cafe, Laitumkhrah, Shillong Was a Special Guest in the celebration of 99th year of visit of Gurudev Rabindranath Tagore to Shillong and spoke on "Gurudev Rabindranath Tagore as a Poet of all ages" and presented a self composed poem dedicated to Tagore. The programme was held on 11, October, 2018, at Brookside Rabindra Art Gallery, Rilbong, Shillong, organised by Malabika Bisharad and Group. Was a Guest of Honour in the opening ceremony of the 1st Meghalaya State Kickboxing

Championship 2018 and spoke on the role of Sports in moulding young children and youth to

maintain discipline in life" held on 16/10/18 at Indoor Stadium Laban organised by the

Organising Committee Meghalaya Kick boxing.

Performed a group harvest dance in a cultural programme of the Eighteenth National Poetry Convention held on 26/10/18 at Rang Mandir Auditorium, Bidar, Karnataka organized by AIPC, Bidar.

Was a Chief Guest in the Felicitation programme of Miss Monica Nongrum who participated

in the Muah Thai Asian Championship 2018 at Beijing held at Hotel Assembly Shillong

on 6th December 2018 organised by Meghalaya Muah Thai Association, Shillong. Resource person in the Clan meeting of Kur Kharsyntiew and spoke on the theme "Ka Ting Kur, Dei Kur bad Kam Kur Ha ka Imlang Sahlang" held on 29th December, 2018 at Mawkarah, West Khasi Hills District, Nongkhlaw. Organised by the Seng Kur Kharsyntiew Central Body.

Attended as the Academic Coordinator in the Signing of MoU Ceremony between Chulalongkorn University and NEHU in the presence of Prof. Bundhit Eua-arporn, President of CU, HE Ms Suchitra Durai Ambassador of India to Thailand, H.E. Mr. Chutintorn Gongsakdi, Ambassador of Thailand to India, Prof. S. K Srivastava, Vice Chancellor NEHU and Asst. Prof. Apisak Dhiravisit, Deputy Director of Thailand Research Fund. It was held at Chulalongkorn University, Bangkok on 10th January 2019 organised by Chulalongkorn University.

Attended the Programme *Gather Around the Hearth An evening of Poetry and Traditional music* and participated in the Panel discussion on "problems of translating poems of one culture to another language of a different culture" held on 18th January 2019 at You and I Cafe, Shillong; organised by the Poets Translating Poets.

Was in a panel of judges in the Traditional dress competition, "Ka Jingïakob Riam Tynrai U Khasi ha ka Nam u 'Nai Khatsaw Synñia bad ka Lukhimai" held on 19/01/19 at Crinoline swimming pool organised by the KSU, Upper Shillong.

Chief Guest in the closing function of the Inter College Volleyball 2018-19 organised by Directorate of Sports, NEHU, Shillong held at NEHU, Volleyball Ground.

Delivered a speech as Chief Adviser of Meghalaya Kick Boxing Association in the last day of camping for the Participants of Inter University Kick Boxing Association representing NEHU, held on 23, February 2019 at Mawlai lew Rynghep Community Hall, Shillong organised by MSKA, Shiillong.

Invited Guest in the Special function of Khasi Learning Centre held on 2/3/19 at Shillong Law College, organised by SBUK.

Special Guest in the Jazz Concert performed by Thai Artists held on 5th March 2019 at NEIGRIHMS Auditorium organised by ICCR Regional Centre in collaboration with the Department of Arts and Culture, Govt of Meghalaya.

Leader of the Cultural troupe from Shillong and performed a "Chad Sukhra, Jaiñtia folk dance" along with the team of Meghalaya in the Cultural Programme as part of the *International conference of the South Asian Culture and Literature Summit* 2019 held on held on 28th March 2019 at Jahingarabad, Bangladesh organised by the Association South Asian Culture and Literature (AFSACL).

Was a Special Guest in an interview with the *Motherland TV*, Dhaka, Bangladesh along with an eminent Bangla writer and journalist of Bangladesh based in Beijing, China, Shri ABM Salahuddin on the topic, "Sharing of experience as an eminent author and how cultures are exchanged to maintain friendly

relations between Bangladesh and India" and read out a self composed poem at the end of the interview held on 30/3/19 at *Motherland TV* Studio, Dhaka, Bangladesh

Prof. A. Kharmalki:

Member, *Ka Thwet Jingstad (Quest for Knowledge)* a research journal with ISSN accreditation published by the Society for Khasi Studies, Shillong.

Dr. B.Bairo:

Member Editorial Board of *Ka Thwet Jingstad (Quest for Knowledge)*, a research journal with ISSN accreditation published by the Society for Khasi Studies, Shillong. Secretary of the Society for Khasi Studies, Shillong.

Dr. M.M.Khymdeit:

Editor, *Ka Thwet Jingstad (Quest for Knowledge)*, a research journal with ISSN accreditation published by the Society for Khasi Studies, Shillong.

Programme Officer, National Service Scheme (NSS), NEHU.

Air talk on "U Soso Tham kum u nongkyrsiew ïa ka jaitbynriew Hynñiewtrep" broadcasted by AIR, Shillong on the 18th December, 2018

Department of Linguistics

Head	:	Prof. Shailendra Kumar Singh
Telephone	:	0364272 -3310 (O), 9863279254 (M)
Email	:	tosksingh@rediffmail.com, tosksinghnehu@gmail.com

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Faculty		
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Designation	Name and Qualification	Specialization
Professor Associate Professor	Dr.Shailendra Kumar Singh, M.A (Linguistics) Delhi University; M.A. (Hindi) Karnataka State Open University, M.Phil and Ph.D. (Linguistics), University of Hyderabad. Dr.Umarani Pappuswamy, M.A. and M.Phil (Linguistics), Bharathiar University, Ph.D. (Linguistics) University of Mysore, Post-Doc, University of Antwerpen, Belgium. (an lian for 2 years wof 16/02/2017)	New Linguistic World Order, Alternative- Sociolinguistics Translation, Deep Multilingualism, North-East India Linguistics & Linguistic Landscaping. Computational Linguistics, Typology, Semantics, Intelligent Tutoring Systems, Artificial Intelligence in Education, Cognitive Linguistics, Dialogue Systems and Discourse A polyais
Assistant Professor	 (on lien for 2 years wef:16/02/2017) Dr.Saralin A. Lyngdoh, M.A. (Linguistics) NEHU, M.A.(English) NEHU, M.Phil (Linguistics), Delhi University, Ph.D. (Linguistics), Delhi University. Dr.Barika Khyriem, M.A. (Linguistics), NEHU; M.Phil (Linguistics), NEHU; M.Phil (Linguistics), NEHU Dr.Bijoy L. Dhanwar, M.A. (Linguistics), NEHU, M.Phil. (Linguistics), University of Hyderabad. Ph.D. (Linguistics), NEHU 	Discourse Analysis. Syntax, Typology. Linguistic structures of NE languages, Structures of South Asian Languages, South Asia as a Linguistics Area, Austro-Asiatic Languages of North East India, Phonetics & Phonology, Dialectology, Sociolinguistics, Austro-Asiatic Linguistics, Tibeto-Burman Linguistics, Typology, Syntax, Lexicography, Historical Linguistics.

Thrust Area of Research

Tibeto-Burman and Austro-Asiatic languages/dialects of the North-East of India. Phonetics and Phonology, Morphology, Syntax, Semantics and Pragmatics, Lexicography, Computational Linguistics, Translation, Field Methods, Language Education, Ethnolinguistics, Sociolinguistics, Languages of North-East India and language Ideology.

Brief Statement of Academic Activities

The Department admitted 35 students to its M.A. programme during the current year. 34 students successfully completed their M.A. Programme. The Department organized a series of

programmes including International Conference and Workshops, and brought in many international scholars from all the continents to the university.

Stud	lents' Prof	file/E1	nrolm	ent Ca	pacity:	M.A - 45			Ph.D. – Variable		
	Degree SC ST Gen OBC			Male	Female	Meghalaya	Non-Meghalaya Tota				
	M.A		34		-	6	28	18	16	34	

Degrees Awarded

-8		-							
	Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghlaya	TOTAL
	M.A.	-	34	-	6	28	18	16	34
	M.Phil.	-	4	2	2	4	3	3	6
	Ph.D.	-	3	1	1	3	2	2	4

Placement of students: 1

Research Fellowship:

CSIR- UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Maulana Azad minority Fellowship Any other (You name it)	Any other (You name it)	Others
-	4	-	-	-	-	-

Educational Tour of Students:

Field Trip of students Teacher –In- Charge: Dr S.A.Lyngdoh Students: 3rd Semester Places Visited: Golaghat in Assam Duration of the Trip: 2 days Purpose: Fieldwork Training as a compulsory part of the curriculum for the M.A Programme.

Courses Conducted

M.A

Semester I: General Linguistics, Morphology, Syntax-I, Phonetics and Phonology and Socio-Linguistics

Semester II: Semantics and Pragmatics, Ethnolinguistics, Advanced Syntax, Lexicology and

Lexicography, Advanced Sociolinguistics.

Semester III: Structure of Austro- Asiatic Languages, Field Methods, Linguistic Structure of

South Asian Languages, Language Planning and Policy, Language of N.E India and

Language Ideology.

Semester IV: Generative Phonology, Historical and Comparative Linguistics, Psycholinguistics, Translation Theory and Practice, Language Conflict and Resolution Studies

M.Phil/Ph.D. Course Work

Research Methodology, Current Trends in Linguistics (Optional 1), Current Trends in North East Linguistics (Optional 2), Advances in Natural Language Processing(Optional 3), Seminar Paper.

Seminar/Conferences /Symposia/ Workshop

Attended

Prof. Shailendra Kumar Singh

Presented papers on (i)'Alternative Linguistics: 21st Century Linguistic Reality' at the "5th Anniversary of Kllas & S'ri:A:di S'amkara Bhagavatpujyapa:da:h's Birthday Celebration" and Extension Lecture. Osmania University, Hyderabad, 20th April 2018, (ii) 'Linguistic Habitat of North-east India' in an "International Conference of Endangered Language of Delhi-NCR: the North East India Focus" 7th&8th May 2018, (iii) 'Developing Smaller languages: Within Involvement and Beyond Intervention, at the International Conference on 'Mediating Multilingualism' at Amity University, Gurugram, on 18th -19th March 2019, and (iv) New Direction to Linguistics' in 'SCONLI-13, IIT-ISM, Dhanbaad, Jharkhand, 31 January 2019.

Presented papers inNational Seminar on (i)'Language Endangerment' in a on "Debating Indian Aspirational Languages" Centre for Endangered Language (CFEL), Visva-Bharati 9th-11th September 2018, (ii) 'Negotiating Issues of Orality: An Alternative Linguistic Approach in a National Seminar on "Negotiating Issues of Orality, Folk and History in the 21st century" ICFAI University, Tripura in Collaboration with ICSSR on 5th -6th November 2018.

Delivered a key note Address 'Indigenous Language: Within and Beyond Linguistics' COIL-1,

IIT-Patna, Bihar, 21-23 February 2019.

Attended (i) a workshop as a Resource Person 'Revision of Syllabus of NET Subject: Linguistics'

University Grant Commission, New Delhi, 21st& 22nd May 2018, and (ii) MoU Signing Ceremony between Chulalongkorn University and NEHU for 9th to 13thJanuary 2019.

Dr. S. A. Lyngdoh

Resource Person in (i) UGC-HRDC Winter School "The Principles of English Grammar and their

Applications: The Common Errors (19th March to 8th April 2018), (ii) Developing Minority Languages" Training of Teachers on Teaching-Learning in Multilingual Class at the Primary Level for North East" at NERIE (23rd to 2nd Oct 2018), (iii) 5 days' Workshop on Development of Resource Materials from Tribal Languages (Sadri & Kharia) to Assamese School Language at NERIE (27th-31st August, 2018), and (iv) World's Mother Tongue's Day at All India Radio, Shillong (March, 2019).

Attended (i) MoU Signing Ceremony between Chulalongkorn University and NEHU for 9th to 13thJanuary 2019, (ii) *Identification of POS Tag for Khasi Language based on Hidden Markov Model*

POS Tagger. In the 20th International Conference on Computational Linguistics and Intelligent

Text Processing La Rochelle, France (7th -13th, April 2019), (iii) "International Conference on Endangered Language of Delhi-NCR: The North EastIndia Focus organized by National Law University (NLU), Delhi on 7th&8th May 2018, and (iv) 5 days Workshop on" Development of Resources Materials from Tribal Languages(Sadri &Kharia) to Assamese School Language (27th -31st August 2018) at NERIE.

Presented a paper on "Language Interrelations: The Degeneration of Socio-Cultural and Traditional Values in Khasi and Hmar in International Conference on Endangered Languages of Delhi- NCR: The North East India Focus organized by National Law University (NLU).Delhi.

Dr. Barika Khyriem

Attended and presented a paper titled, "From Linguistic Diversity to Language Endangerrment" at the "International Conference on Endangered Language of Delhi-NCR: The North EastIndia Focus organized by National Law University (NLU), Delhi on 7th&8th May 2018, (ii) MoU Signing Ceremony between Chulalongkorn University and NEHU for 9th to 13thJanuary 2019.

Publications

Dkhar, G.D. and Singh, S. K. (2018). Linguistic Landscaping, Language Ideology and Language Policy: A Case Study of Meghalaya. In: *International Journal of Applied Linguistics*, Special Issue on The Linguistic Landscaping of India, New Delhi: Bahri Publication.Vol.44,N0.1-2, ISSN 0379-0037, Jan-Dec 2018.

Singh, S.K., Lalhmingmawia, and Chimirala, U.M. (2018). Understanding the Linguistic Landscaping in North East India with reference to Three Case Studies: Aizwal, Shillong, and Thahekhu Village. In: *International Journal of Applied Linguistics*, Special Issue on the Linguistic Landscaping of India, New Delhi: Bahri Publication.Vol.44, N0.1-2, ISSN 0379-0037, Jan-Dec 2018.

Singh, S.K. & Chimirala, U.M. (2018) Editorial. In:*International Journal of Applied Linguistics*. Special Issue on The Linguistic Landscaping of India. Vol.44, N0.1-2, ISSN 0379-0037, Jan-Dec.

Lyngdoh, S. A. (2018). Khasi Language as dominant part of speech (POS) Ascendant in NLP in proceedings of International *Conference* *on Computational Intelligence & IOT (ICCIIoT).* Elsevier-SSRN(ISSN-1556-5068),2018.

Lyngdoh, S. A, Infimate, M. (2018). Passivization in Hmar in Language in India. In <u>www.languageinindia.com</u>. ISSN1930-2940,Vol 19:5 May, 2019.

Saikia, B., Khyriem B. (2018). "A Lexical Comparison between standard Assamese and the Barpetia Variety of Assamese" In IJELLH, Vol6 Issue 3, 2018 PP 498-509. Rymbai.R., Khyriem, B. 2018.*Ethnolinguistics* study of forms and address in Khasi. In understanding the Tribes of Asia in Khasi: (Eds). Lakshi Publisher & Distributors, Delhi.

Singh, S.K. 2018. Language Endangerment: Within and Beyond Idealistic and Stochastic Linguistics. In Pattanaik, K & Tripathi, A.K (eds). Indian Languages and Cultures: A Debate. The marginalized Publication, New Delhi. **Book Edited**

Singh, S.K., Lyngdoh, S. A., Khyriem, B. (2018). *A Glimpse of Some of the Austro-Asiatic Languages in India*(Eds.).Eastern Book House, Gauhati.

Books/Book Chapters

Funds received from Agencies other than NEHU/UGC Research Projects Ongoing:

Title of Project	PI/Director	Funding agency	Amount(Rupees)
Linguistic Landscaping of Capital Cities of	Prof S. K. Singh	ICSSR	14,00,000
Hindi Belt			

Other Activities Shailendra Kumar Singh

Guest Editor inIndian Journal of Applied Linguistics. Theme: Linguistic Landscape of India. Vol.44, N0.1-2, ISSN 0379-0037, Jan-Dec 2018.

Invited Lectures

Prof. Prasananshu from National Law University, New Delhi, delivered a talk on "Language Endangerment in National Capital Region (NCR)" on 6th April 2018. Prof. K. Rastogi from University of Lucknow, Department of Linguistics, delivered a talk on "Raji: An Endangered Language" on 6th April 2018.

Prof M. Barbora from Tezpur University, Assam, delivered a talk on "Language Endangerment in North East India" on 6th April 2018.

Prof. Prasananshu, National Law University, New Delhi, Prof. K. Rastogi, Department of Linguistics, University of Lucknow and Prof M. Barbora, Tezpur University, Assam had an Interactive talk with students and research scholars of the department on "The Future of Linguistics" on 4th Sept. 2018.

DEPARTMENT OF PHILOSOPHY

Head	: Prof.X.P. Mao: upto 11.03.2019
	: Prof. Vanlalnghak: w.e.f. 21.03.2019
Telephone	: 0364-272 -3552
E-mail	: philosophynehu@gmail.com

Faculty :8 Designation	Name and Qualification	Specialization
Professor	Dr. Binod Kumar Agarwala	Social & Political Philosophy,
	M.A., M. Phil.(Delhi), Ph.D. (Lucknow)	Ethics, Hermeneutics, Kant,
	(Retd. On November 2018)	Gadamer.
	Dr. Vanlalnghak	Philosophy of Culture, Moral
	M.A (NEHU), Ph. D	Philosophy, Analytic
	(IIT Kanpur)	Philosophy.
	Dr. Xavier P. Mao	Existentialism, Ethics
	M.A (NEHU), M.Phil.(Delhi), M. Lett.	
	(Sydney)	
	Ph.D, (NEHU)	
Associate	Dr. Prasenjit Biswas	Phenomenology &
Professor	M.A., Ph.D. (NEHU)	Continental Philosophy,
		Philosophy of Mind,
		Philosophy of Tribes of NE
		India.
	Dr. Laxminanrayan Lenka	Analytic Philosophy,
	M.A (Utkal),	Philosophical Anthropology,
	M.Phil., Ph.D.(Hyderabad)	Philosophy of Wittgenstein,
	(10 th August 2018 on Lien to Hyderabad	Speech Acts, Western
	University)	Epistemology.
Assistant	Dr.E. Richard Tongper	Philosophy of Religion,
Professor	M.A., M.Phil., Ph.D (NEHU)	Philosophical Theology,
		Applied Ethics, Gandhian
		Philosophy.
	Dr. Basil Pohlong	Philosophy of Religion,
	M.A., Ph.D. (NEHU)	Philosophical Anthropology,
		Philosophy of Culture, Ethics
	Dr. AribamUttam Sharma	Logic and Epistemology.
	M.A(Manipur University) Ph.D.(NEHU)	

Thrust Area of Research Philosophy of Culture with special reference to the tribal thought of the North-Eastern region.

Brief Statement of Academic Activities Students' Profile/Enrolment Capacity: M.A

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	Total
M.A	1	53	4	14	44	51	7	58
Ph.D.	-	6	-	4	2	3	3	6

Degree Awarded:

Degree	SC	ST	GEN	OBC	Male	Female	Meghalaya	Non-	Total
								Meghalaya	
M.A	-	52	2	-	22	32	29	25	54
Ph.D.	-	6	-	-	4	2	4	2	6

Ph.D. DegreeAwarded : 6

Research Fellowship

CSIR- UGC- NET	UGC Non- Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other (Your name if) NFHE for ST	Other
4	21	-	-	-	1	-

Courses Conducted Postgraduate

- Semester- I: Indian Metaphysics, Western Metaphysics Symbolic Logic Philosophy of Religion Indian Philosophy of Language-I
- Semester- II: Ethics & Environment, Indian Epistemology, Western Epistemology. Indian Moral Philosophy, Indian Philosophy of Language-II
- Semester III: Philosophy of Social sciences, Phenomenology &Existentialism, Philosophy of Post Modernism-I, Analytic Philosophy, Contemporary Philosophy of Religion, Tribal Thought and Culture
- Semester IV: Modernism & Responses, Philosophy of Culture, Philosophy of Post-Modernism-II, Western Moral Philosophy, Applied Ethics, Philosophy of Wittgenstein

Ph.D. Courses: Research Methodology, Seminar Paper, Philosophy of Culture & Religion

Seminars/Conferences/Workshops/Sympo sia/Extension Programme Attended

Prof. Vanlalnghak

Delivered (i) Four Lectures in the workshop on Tirbes of Chhatisgarg during 18-20, April 2018 organised by Department of Tribal Studies, Indira Gandhi Tribal University, Amarkantak, and sponsored by ICPR, New Delhi, (ii) Two Lectures on Philosophy of Culture in a Refresher Course on "Folkloristics and Semiotics" organized by Department of Cultural and Creative Studies, NEHU during 18 March – 7 April, 2019.

Presented a paper on "Traditional Ways for Maintenance of Social Order and Cultural Identity in Mizo Society "in a National Seminar on" Indegenous (Tribal) Religious Philosophy of North-East India: Some Contemporary Perspective" organized by Indian Council of Philosophical research (ICPR) New Delhi in Collaboration with the North-East Center, New Delhi, during 22-23 March, 2019 at Assam University, Silchar.

Prof. X P Mao

Presented papers on (i) 'Non-violence and a way of life according to Gandhi' in the World Philosophy Congress in Beijing from $13^{th}-17^{th}$ August 2018. (ii) 'Higher Education in India a Critical Evaluation' in Emmanuel College, Dimapur, Nagaland in 20th April 2018, (iii) 'Moral Philosophy' in the Asian Philosophy Conferenceheld at Nalanda University on 5th – 6th January 2019, and (iv) 'Feminist Theorizing with Special reference to Naga Women'in March 2019 and Chaired a few sessions in Indian Philosophy Congress at Nalanda University, Bihar.

Dr. Prasenjit Biswas

Presented papers on (i) "Hindutva Emotions: Everyday Anti-Politics" at the 15th Annual conference of Centre for Citizenship Studies, Wayne State University, Detroit, USA on

12th April, 2018, and (ii) "The Biometric State:

Citizenship in India and its

manyConundrums" at the 16th annual conference of centre for citizenship studies, Wayne State University, Detroit, USA on 22ndMarch, 2019.

Chaired a session on Documenting Citizenship at the at the 16th annual conference of

Centre for citizenship studies, Wayne State University, Detroit, USA on 21st March, 2019.

Delivered (i) special lecture on "South Asian perspectives on Human Rights and

Dialogues" organized by the Centre for Human Rights, London on 11th July, 2019, (ii) Keynote address entitled, "Northeast India: А Celebration of Cultures inConceptual Terms" at ICPR-UGC-ICSSR sponsored National Conference on India'snortheast: Celebration of А Indigenous Cultures from Phenomenological Approach" heldat St. Joseph Autonomous College, Kohima on 23 rd November, 2018, a lecture on "Coherence (iii) and Correspondence theories of Truth:Arguments from Richard Rorty's Love and Truth"at the Indian Council of Philosophical Research, New Delhi sponsored by WorldPhilosophy Day held on 14th November, 2018, (iv) a special invited lecture entitled. "Interdisciplinary Perspectives on language, Writing and Communication: Post-Structuralism and Beyond" at Banasthali Vidyapeeth, Banasthali on 28 th October, 2018, (v) a lecture in a seminar "Heidegger's Kehre in Derrida's Play" at HSS, IIT Mumbai on21st January, 2019, and (vi) a lecture "Citizenship amendment bill and Responses to it" atInauguration of special centre for Northeast India studies, JNU, New Delhi held on 25thJanuary, 2019.

Participant in the Panel on Posthumanist Frontiers held at Ian Ramsay Centrefor Theology, University of Oxford, UK on 7th July, 2018.

Dr. B. Pohlong

Presented a paper titled, "The Ethics of Care: A Critical Examination" at the National Seminar on Circle of Gender Libeiaton and Rethinking of Cultural Traditional with reference to South-East Asia, held on 29 – 30 March 2019 at Lady Keane College Shillong. (ICSSR-NERC) Shillong.

Publications

Published in India

Mao, X. P. (2018).Moral Philosophy versus Morality.*Journal Jijnāsā*, Volume V. Bora, S. (Ed). Guwahati University, Guwahati.

Pohlong, B. (2019). Environmental Crisis and Ethical Subtainability in Issues in Philosophy East and West. Bhattacharyya, B., Kalita, T. (eds.). Guwahati, Department of Philosophy, Krishna Kanta Handiqui State Open University.

Biswas, Prasenjit. (2018). A Reverse Oriental Gaze at Hegel from India? Jadavpur Journalof Philosophy, vol.27, No. 1; 131-41.

Biswas, Prasenjit. (2019). "Northeast India: A Celebration of Cultures in Conceptual Terms". Dr. Joy Thomas SVD et. al. (eds.). India's Northeast: A Celebration of Cultures. IndianSociety for Promoting Christian Knowledge: New Delhi. (pp. xxix-xlvii).

Published Abroad

Biswas, Prasenjit. (2018). Dams and Disasters in the Northeast India: A Collateral 'Ethical'

Relationship. In *Development and Disaster Management: A. Study of the Northeastern States of India.* Singh, A. et. al. (Eds.). Palgrave Macmillan: Singapore. pp. 215-28.

Biswas, Prasenjit. 2018. Post-development, democratic discourse and dissensus: A critique of Vision 2020. In *Northeast India: A Reader*. Oinam, B. et. al. (eds.), Routledge:London and New York.(pp. 453-64).

Books/Book Chapters/Proceedings Dr. A. U. Sharma

Sharma, Aribam Uttam. 2019 Alternate Rationality: Its Possibility and Silence Mittal Publication, New Delhi

Honours/ Awards/ Recognition Dr. Prasenjit Biswas

Acted as an invited member of International Jury for Annual Book Award at 16th Annual Conference of Centre for Citizenship Studies, Wayne State University, Detroit, USA and presented the citation to the awardee held on 21st March, 2019.

Other Activities: Prof. X. P. Mao

Delivered lectures on (i) Existentialism in St. Anthony's College inMay 2018, and (ii) Gandhi's Satyagraha at Women's College, Shillong in March 2019.

Presented a paper Buddhist Dharnma in Colombo, Sri Lankain June 2018.

Unanimously elected as the Joint Secretary of Indian Philosophy congress on 7th January 2019.

Consultant reviewer of the Top Philosophical Journal the J.I.C.P.R Journal published by Springer publisher, Germany in December 2018.

Dr. P. Biswas

Attended Faraday Summer Course at Lucy Cavendish College, Cambridge University on Science, Faith and Human Flourishing, July 1-6, 2018.

SCHOOL OF HUMAN AND ENVIRONMENTAL SCIENCES

Dean	: Prof. R. Khongsdier
Telephone	: 0364-2723221 (O)
Fax	: 0364-2550040
E-mail	: deanshes@nehu.ac.in

The School of Human and Environmental Sciences is comprised of five departments: Anthropology, Environmental namely Studies, Geography, Horticulture, and Rural Development and Agricultural Production. These departments are involved in a wide variety of academic activities with a view touplifting the socio-economic conditions and welfare of the people of the hill areas in North-East India. All the departments offer postgraduate programmes underthechoicebased credit system as well as Ph.D. programmes. The Department of Rural Development and Agricultural Production offers M.Phil.programme, also the whereasthe Department of Geography conducts a self-financed Postgraduate Diploma in Geo-informatics. Three of the five departments have conducted field work and study tours for the post-graduate students.

During the current year, 166and 7 students were enrolled for postgraduate and M.Phil.programmes, respectively, and 29 students were admitted to the Ph.D. programme. As many as 118 students were awarded aMaster's degree and 19research scholars were awarded theirPh.D. degree, while 17 more received anM.Phil. degree. The research profile of the School is

impressive with most faculty members from across the departments published research papers in journals of national and international repute. Faculty members of the School published 62 research papers in journals published from India and 14 papers in iournals published abroad. Thev published4 books and contributed 18 book chapters. In addition, the departments under the School completed 11 research projects, and 20 research projects including one international project are ongoing. One Department namely department, of Geography, is being supported by UGC-SAP-DRS-III and DST-FIST programmes. Faculty members of the departments were also involved in organisinglectures, seminars, conferences, workshops and symposia. national and international Several collaborative research programmes have been undertaken across the departments during the year under report. Academic collaborations have been initiated with the University of Alaska, Syracuse University, USA; Tel-Aviv University, Israel; Earth Observatory of Singapore, NTU, Singapore; General information Russian Foundation for Basic Research (RFBR). Moscow: universities and academia in Poland and Japan.

DEPARTMENT OF ANTHROPOLOGY

Head	: Prof.Lucy T.V. Zehol (upto11.10.2018)
	: Prof. D.K. Limbu (w.e.f. 12.10.2018)
Telephone	: 0364-2723105 (O)/9436118429 (M)
E-mail	: lzehol@yahoo.com

Faculty :11

Designation	Name and Qualification	Specialization
8	Dr. T.B. Subba, M.Phil. , Ph.D.	Cultural Anthropology (Migration,
	(North Bengal Univ)	Development, Diaspora)
	Dr. H.Lamin, M.Phil., Ph.D.	Cultural Anthropology (Medical
	(NEHU)	Anthropology and Economic
	(On lien as Pro-Vice Chancellor)	Anthropology)
	Dr. R. Khongsdier, M.Phil., Ph.D.	Biological Anthropology (Health and
Professor	(NEHU)	Nutrition, Demography and
		Population Genetics)
	Dr. L.T.V.Zehol, M.Phil., Ph.D.	Cultural Anthropology (Ethnicity,
	(NEHU)	Development, Anthropology of
		Women and Gender)
	Dr. D.K. Limbu, M.Phil., Ph.D.	Biological Anthropology (Population
	(NEHU)	Genetics, Dental Anthropology,
		Demography)
	Dr. G. Ranjan, MA&Ph.D.	Cultural Anthropology (Tribal
	(Lucknow)	development, Ethnography, Literary
		Anthropology, Anthropology of
		Politics)
	Dr. B. Langstieh, MSc (NEHU),	Biological Anthropology
	Ph.D. (ISI, Calcutta)	(Anthropo-genetics, Molecular
		Anthropology, Demography, Human
		Ecology, Aging, RCH)
A	Dr. Q. Marak, MA (Gauhati), Ph.D.	Archaeological Anthropology (Food
Associate Professor	(NEHU)	Studies, Material Culture,
Professor		Archaeology of Northeast India)
	Dr. V. Pakyntein, MA (NEHU),	Cultural Anthropology
	M.Phil., Ph.D. (Delhi Univ)	(Matrilineality, Gender Issues and
	, (, ,	Socio-Cultural Change)
	Dr. LW, Dishor M. Dhil, Dh.D.	3,
Assistant	Dr. J.W. Dkhar, M.Phil., Ph.D. (NEHU)	Biological Anthropology (Growth and Nutrition)
Assistant Professor		
1 1 0105501	Dr. S. Ghosh, MSc , Ph.D. (Delhi	Biological Anthropology (Humon
	Univ)	Biological Anthropology (Human Adaptation and Physiology)
	Ulliv)	Auaptation and Physiology)

Thrust Area of Research

The Department trains and creates expertise in Cultural and Biological Anthropology. It is the only Anthropology Department in North-East India with equal strength of faculty in these two major fields of anthropology. Its mission is to contribute to the betterment and well-being of society, particularly in North-East India, by carrying out researches on biological aspects (such as population genetics, human growth and nutritional anthropometry, nutrition, demography, reproductive and child health) and socio-cultural aspects (like identity and ethnicity, development, women and gender issues, ethno medicine, food, and sociocultural change).

Brief Statement of Academic Activities

The Department offers specialization in Cultural and Biological Anthropology with broad orientation to Archeology and Linguistic Anthropology. It enrolled thirty studentsforthe MA/MScprogrammes andfive students for the Ph.D. programme during the current year. Thirty students completed their MA/MSc and five students were awarded the Ph.D. degree.

The Department is collaborating one international project on "A Dental Morphometric Examination of the Distinctiveness and Affinities of Austro-Asiatic- and Tibeto-Burman-speaking Ethnic Groups of South Asia" with Dr. Brian E. HeM.Phil. 1 of the Department of Anthropology, University of Alaska, USA. The Department is also undertaking two projects titled "Pattern of Hearing Loss and Inheritance among Rural Population of Pynursla Block, Meghalaya" sponsored by NEIGRIHMS/ICMR, and "Documentation of Endangered Material Culture of the Garos of Meghalaya" in collaboration with the Anthropological Survey of India, Ministry of Culture and Tourism, Government of India, North-East Regional Centre, Shillong. The faculty of the Department published twenty publications including one edited book and nine chapters in edited volumes.

Students' Profile

Enrolment Capacity: MA/MSc – 30,Ph.D.-Variable

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA/MSc	07	23		25		05	06	24	30
Ph.D.	02	05		06		01	01	06	07

Degrees Awarded

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA/MSc	08	22		28		02	06	24	30
Ph.D.	01	04		03		02		05	05

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name of Supervisor
Ms. Chunthuilui	Biosocial Factors Influencing Fertility and	Prof. D. K. Limbu
Kamei	Infant and Child Mortality among the	
	Nagas of Manipur	
Ms.	Rice Culture and Gender Roles among the	Prof. L. Zehol
KhachunglaTangvah	Tangkhuls of Ukhrul District, Manipur.	
Mr. Akoijam Milan	Megaliths and Jaintia Culture: A Study in	Dr. Q. Marak
Meitei	Archaeological Anthropology	

Ms.	Subsistence Strategies of the Prehistoric	Dr. Q. Marak
GangotriBhuyan	Populations in West Garo Hills	
Ms.	Maternal and child Health Status of the	Dr. B. T. Langstieh
HoineilamKipgen	Thadou – Kuki of Senapati District,	
	Manipur: Anthropological Study	

Placement of Students: 4

Research Fellowships: 7

UGC-JRF: 2 UGC NON-NET: 5

Fieldwork/Educational Tour of Students

Fieldwork Teacher-in-Charge: Prof.GeetikaRanjan *Places Visited*: Wahiajervillage, WestJaintia Hill District, Meghalaya *Duration of Tour*: 21 Days (10-31 January 2018) *Purpose of Tour*: Field work for students' dissertation

Courses Conducted

Postgraduate: MA/MSc

Semester-I

Introduction to Anthropology, Archaeological Anthropology, Biological Anthropology, Social and Cultural Anthropology, Linguistic Anthropology.

SemesterII

Palaeoanthropology, Prehistoric Cultures, Material Culture andMuseum Method, Human Ecology and Adaptation (Open), Anthropology of North East India (Open).

SemesterIII

Anthropology of India, Medical Anthropology, Field Work Methods and Techniques, Demography, Anthropology of Gender (Open), Human Genetics, Practical in Biological Anthropology-I, Human Growth and Body Composition (Open).

Semester IV

Theories in Anthropology, Development Anthropology, Economic Anthropology, Biostatistics, Dissertation and *Viva-Voce*, Biocultural Anthropology, Dental Anthropology, Practical in Biological Anthropology-II. *Ph.D. Courses* Research Methodology in Anthropology, Recent Developments in Social and Cultural Anthropology, Advanced Studies in Biological Anthropology, Review of Literature and Seminar.

Seminars/Conferences/Symposia/Worksho ps

Organised

Prof. L. Zehol

Organised a Tribal Animation Film Festival at NEHU, from 1st – 3rd March, 2019 as coordinator with Dr. Tara Douglas which was supported by NEC, Shillong and Trust for Tribal Art Culture and Knowledge, Delhi.

Prof. B.T. Langstieh

Organised an open lecture delivered by Dr. Brian E. HeM.Phil. l, Dental Anthropologist, Department of Anthropology, University of Alaska, Fairbanks (USA) on the topic "Eastward Ho! A Dental Pathology Investigation of Health and Diet in the Bronze Age Karakum Desert and Beyond in Southern Central Asia" in the Social Science Clustered Class Rooms on 25 May 2018.

Attended

Prof. T. B. Subba

Delivered a lecture on "Tribal status for 11 leftover communities of Sikkim: Eligibility, Aspirations and Apprehensions" at the Sikkim Summit for Tribal Status 2018, Manan Kendra, Gangtok, on 4th May 2018.

Delivered the Elwin Memorial Lecture titled "Verrier Elwin and his Fieldwork Method" at the national seminar on "Verrier Elwin: Fieldwork Tradition and Indian Anthropology" held on $21^{st} - 22^{nd}$ May 2018 at the NEHU Old Guesthose and organised by the Anthropological Survey of India, NERC, Shillong.

Delivered an orientation lecture on "Religion and Society in Darjeeling –Sikkim Himalayas" at the Salesian College, Sonada, near Darjeeling, on 23rd June 2018 under the aegis of the Asia Network Faculty Enrichment Programme on Religion in National and International Affairs in China and India (June 22nd – 29th 2018).

Delivered the VI Christoph von Furer-Haimendorf Commemorative Lecture at Rajic Gandhi University on 22nd November 2018. Topic: "Christoph von Furer-Haimendorf: A Crusader for Tribal Rights".

Prof. L. Zehol

Presented a paper entitled "Sanitizing the Erotic: A Women's Body" at the National Seminar on Contemporary Anthropology and North East India & 48th Annual Conference Indian Anthropological Society organized by the Department of Anthropology, Cotton university, Guwahati (1–3 November 2018).

Prof. R. Ranjan

Delivered (i) plenary lecture titled "An anthropologist among the wild life experts: juxtaposition of different perspectives"at the two day national seminar on *Anthropology in the 21st Century*organized by Department of Anthropology, Assam University – Diphu Campus from 11 to 12 February, 2019, and (ii) presented a paper titled "Living and Working Conditions of Girls Working as 'Maids' in Households" at the two day national Seminar on *Urbanization in India: Issues and Predicaments* organized by Department of Sociology, NEHU, Shillong (14-15 February 2019).

Dr. J.W. Dkhar

Presented a paper on "Health and National Status of Biate Boys of East Jaintia Hills, Meghalaya"at the national seminar on *Maternal and Child Health in India: Issues and Challenges* on 15-16 November 2018, Assam University, Diphu Campus.

Dr. SudiptaGhosh

Paper titled "Angiotensin Coverting Enzyme genotypes in relation to high altitude hypoxia among the TawangMonpa from Himalayan Mountains" was presented in the Seventh Annual Kathmandu Conference on Nepal and Himalaya organized by the Association for Nepal and the Himalayan Studies, Britain Nepal Academic Council, Centre for Himalayan Studies – CNRS and Nepal Academic Network (Japan) during 25th – 27th July, 2018 in Kathmandu, Nepal.

Paper titled "Exhaled Nitric Oxide in ethnically distinct high altitude native populations" was presented in the 5th International Leh Symposium 2018 at Gangtok, Sikkim organized by the CSIR – Institute of Genomics and Integrative Biology (IGIB), Delhi during $15^{th} - 19^{th}$ November, 2018

Paper titled "Hypoxic ventilator response in relation to hypobaric hypoxia among the TawangMonpa from Eastern Himalayan Moutain" was presented in the XII ISMM World Congress on Mountain Medicine organized by the International Society for Mountain Medicine (ISMM) and EURAC Research, Europe during $21^{\text{st}} - 24^{\text{th}}$ November, 2018 in Kathmandu, Nepal.

Paper titled "Heritability of the Body Composition and Blood Pressure association in ethnically distinct indigenous populations" was presented in the American Association of Physically Anthropologists (AAPA) Annual meeting organized by the American Association of Physical Anthropologists (AAPA) during $27^{\text{th}} - 30^{\text{th}}$ March, 2019 in Cleveland Convention Center, Cleveland, OH, USA.

Dr. Q.Marak

Presented a special lecture titled, "Prehistoric archaeology is dead!" From rhetoric to practice." Also chaired a session titled: Communities: Tribes, Castes and Peasants. National seminar in Contemporary Anthropology and Northeast India and 48th Conference the Annual of Indian Anthropological Society, Kolkata at department of Anthropology, Cotton University, Guahati from November $1^{st} - 3^{rd}$, 2018.

Presented a paper titled, 'Documentation, Dissemination and Ethics of doing Archaeological Research in Northeast India' at the Two – day International Seminar on Concept of Cultural Heritage Management and its Significance across the Global Ethnic Groups on $19^{\text{th}} - 20^{\text{th}}$, February 2019 at The Asiatic Society, Kolkata.

Publications

Published in India

Limbu, D.K., M.R. Marak. (2018). "A genetic study among the Garos of Asanang Village, West Garo Hills District, Meghalaya". *Thar journal*, 1: 1 – 15 Limbu. D.K. Khual, G.K. (2019). "Prevalence of Obesity and Hypertension Among the Zou Mothers of Manipur, Northeast India". The Oriental Anthropologist.https://journals.sagepub.com/ doi/10.1177/0972558X9835388 Ranjan, Geetika. (2019)." Field, Fieldwork and Fieldworker: Back to the Basics", Annual Bulletin of the department of Anthropology, Guahati University, XIX:1-11. Langstieh.B. T and LongkumerMoajungla (2019) "Traditional Fermented Food among the AoNagas of Nagaland". Anthropology *Today* 4: 91 – 100. PakynteinValentina (2018)." Politics of Inclusion and Exclusion: Identity of the Lyngngam and Marngar of Meghalaya". Anthropology Today, Vol.3.2018:95-107. Marak, Q. (2018). "Soul loss and retrieval: Understanding the MiAmua ritual of the Garos". Journal of Indian Anthropological Society, 53(3): 219 – 233. Marak, O. (2018). "Rice from A.ba: Stories, Rituals and Practices of the Garos. South Asian Anthropologist", 18(2): 161 – 175. Marak, Q., Ashraf A. A. (2018). Short Axe typology: A morphometric study with special reference to Garo Hills Lithics. The Oriental Anthropologist, 18(2): 209 – 222.

Published abroad

Subba.T.B., Race, Identity and Nationality: Relocating Nepali Nationalism in India. Millennial Asia, 2018, 9 (1): 6-8. DOI: 10.1177/0976399617753750.

http://journal.sagepub.com/home/mla.

Marak, Q., Bhuyan, G (2019). Prehistoric tools from Misimagre, Northeast India: A typo-technological study. Anthropology and Ethnology Open Access Journal, 2(2): DOI: 10.23880/aeoaj-16000118.

Books/Book Chapters/Proceedings

Abroad

Ranjan, Geetika, (2018)." Multinational Banking Culture in India": Facts in Fiction. In: In Between Fiction and Non Fiction: Reflection on the Poetics of Ethnography in Literature and Film. Michelangelo Paganopoulos (Ed.). Cambridge Scholars Publishing, New Castle upon Tyne, Chapter 6, p. 120 - 129.

Published in India

Marak, Q., editor. (2019). "Megalithic Traditions of Northeast India. Concept", New Delhi, ISBN: 93 – 86682-70-2.

Ranjan, Geetika. (2019). "Rat-hole Mining in Meghalaya: Consequence and Concerns". In : Dimensions of Anthropological Research in Northeast India. SarthakSen Gupta and Juri Borah (Eds).Gyan Publishing House, New Delhi, Chapter 15, p. 269-278.

Ranjan, Geetika and PynshailangDohling. (2018). "Life in Melody: The Musical World of the Garo. In: Anthropology of Northeast India". SarthakSengupta(Ed.). Gyan Publishing House, New Delhi,p.223-234.

Zehol.Lucy (2018). "An Interface of Gender and Ethnicity in Northeast India": An Exploration in S. Sengupta (ed) Anthropology in North East India. Gyan Publishing House, New Delhi.

Langstieh.B.T and Khamu S., (2019) (Book Chapter) Anthropometric Profile and Nutritional Status of an Elderly Tribal Population in North – East India. In: Growth and Nutritional Studies in North East India. S. Sengupta& D. Dutta (Eds.), Gyan Publishing House, New Delhi, Chapter 12, p. 2017 – 228.

Marak Q. (2019). Fleshing the skeleton: Understanding prehistoric cultures in Garo Hills. In: Dimensions of Anthropological research in Northeast India. S, Sengupta and J. Borah (Eds), Gyan Publishing, Delhi, Chapter, Chapter 14, p. 247 – 70.

Marak, Q. (2018). Food and Gender: A case study of the matrilineal Garos. In: Empirical Anthropology: Issues of Academic Friends and Friends in the Field. G. Pfeffer and N. nath (Eds.), Concept Publishing Co., New Delhi, Chapter 6, p. 86 – 102.

Marak, Q. (2018). Living megalithic tradition in Jaintia Hills, Meghalay. In: History, Culture and Archaeological Studies: Recent Trend. Commemoration volume to Prof. M. L. K. Murthy. Volume I. P. Chenna Reddy (Ed.), B R Publishing Corporation, Delhi, Chapter 15, p. 291 – 300.

Research	Projects
0	2

Ongoing: 3			
Title of Project	Pl/Co-Pl	Funding Agency	in lakhs
Documentation of	Dr. Q. Marak	Anthropological	5.00
Endangered Material Culture of the Garos of		Survey of India	
Meghalaya			
Pattern of Hearing Loss and	Dr. B. Langstieh (Co- PI)	NEIGRIHMS/	1.90
Inheritance among Rural	&	ICMR	
Population of Pynursla	Dr. A. Bhatia,		
Block, Meghalaya	NEIGRIHMS, Shillong		
An Exploratory Study on	ValentinaPakyntein	National	9.12
the Socio-economic Status	-	Commission of	
and Problems of Single		Women (NCW),	
Mothers Meghalaya		New Delhi	

Completed: one

compicica. one			
Title of Project	Pl/Co-Pl	Funding Agency	in lakhs
A Dental Morphometric	Dr. B. Langstieh	Fulbright-Nehru	5000
Examination of the	(Co-PI) & Dr. Brian	Senior Research	
Distinctiveness and Affinities	E. HeM.Phil.l (PI),	Fellowship and	
of Austro-Asiatic- and Tibeto-	University of	University of	
Burman-speaking Ethnic	Alaska, Fairbanks,	Alaska, USA	
Groups of South Asia	USA.		

Academic Collaborations

- Dr. B. T. Langstieh collaborated with (i) Dr. Brian E. HeM.Phil. 1 (Department of Anthropology, College of Liberal Arts, University of Alaska, USA) on Dental Morphometric Examination of the Distinctiveness and Affinities of Austro-Asiatic- and Tibeto-Burman-speaking Ethnic Groups of South Asia, and (ii) Dr. Abhijeet Bhatia (ENT Department, NEIGRIHMS, Shillong) on Pattern of Hearing Loss and Inheritance among Rural Population of Pynursla Block, Meghalaya.
- Dr. Q. Marak was an Advisor on Human Ecology component to the project "Characterization of Community Reserves and Assessment of their Conservation Values in Meghalaya" at Salim Ali Centre for Ornithology and Natural History, Coimbatore (PI: Dr. P.V. Karunakaran).
- Dr. SudiptaGhosh collaborated with (i) Prof. Tom D. Brutsaert (Department of Anthropology and Exercise Science, Syracuse University, USA) on *High Altitude Hypoxia: Comparison between North-East India and Peru*, and (ii) Prof. Gregory Livshits (Department of Anatomy and Anthropology, Tel-Aviv University, Israel) on *Quantitative Genetic Analysis of the Facial profile between the Santhals and Chuvash: A comparative Study.*

Honours/Awards/Recognitions Prof. T. B. Subba

Chairman, UGC Expert Committee for drafting Learning Outcome – Based Curriculum Framework for Anthropology (May 2018 – April 2019).

Chairman, Inquiry Committee, Bodoland University, Assam (13th September – 30th October 2018) constituted by the Governor of Assam.

Prof. R. Khongsdier

- Member of (i) Meghalaya State Level Scrutiny Committee for Scheduled Tribes, Government of Meghalaya, and (ii) Meghalaya State Task Force on Minorities.
- Member of the Editorial Boards of the Journal of Life Sciences, Indian Journal of Research in Anthropology, TheAnthropologist, and the International Journal of Anthropology and Ethnology.

Q. Marak

Member of Editorial Board of the International Journal Anthropology and Ethnology Open Access Journal.

Other Activities

Prof. T.B. Subba

Member, Academic Council, National Resource Centre in Anthropology, Utkal University, Bhubaneswar, Odisha from 28th May 2018 till date. He is also a Member of the Governing Council, Asian Confluence, Shillong, since 13 March 2019.

Prof. R. Khongsdier

Member of the Governing Body of the North Eastern Institute of Ayurveda Homoeopathy, Shillong.

Prof. L. Zehol

Organised the Ms. KhachunglaTangvah Rice Culture and Gender Roles among the Tangkhuls of Ukhrul District, Manipur, June 2018, (ii) Served as mentor of Dr. Tara Douglas – Post Doctoral Scholar.

Prof.D.K. Limbu

Executive member of Indira Gandhi RashtriyaManavSangrahalaya, Bhopal. He also served as a Resource person in the ICSSR sponsored national Seminar (27–28 April 2018) organized by NBC College, Dibrugarh, Assam.

Prof.B.T. Langstieh

Conducted Field visit and Health Camp at Mercy Home, Shillong 22nd August 2018.Organised and conducted Field visits and Awareness Camp on Hearing Disability and Counselling at Massar village, Pynursla, East Khasi Hills District, Meghalaya in collaboration with Dr. A. Bhatia, NEIGRIHMS, Shillong on 13th September 2018, 22nd January 2019 etc.

Dr. Q. Marak

Reviewer of the journals of Kolkata Society for Asian Studies, Anthropology and Ethnology Open Access Journal, and the Indian Anthropological Society.

DEPARTMENT OF ENVIRONMENTAL STUDIES

Head	: Prof. D. Walia, upto24.03.2019
	: Prof. D.Paul, w.e.f. 25.03.2019
	: 0364-2721157 (O); 9436732431 (M)
Telephone	: hodces@nehu.ac.in;pauld97@rediffmail.com
E-mail	

Faculty :7	1	1			
Designation	Name and Qualification	Specialization			
Professor	Dr. Lalit Kumar Jha, M.Sc. (Bhagalpur Univ.), Ph.D. (L.N.M.U.), Diploma(Two Years) in Forestry (FRI Dehra Dun)	Forestry, Forest Laws and Rural Development			
	Dr. B. K. Tiwari, M. Sc. Gorakhpur University, Ph. D. (NEHU)	Natural Resource Management			
	Dr. O. P. Singh, M. Sc. (BHU), Ph. D. (BHU)	Environmental Monitoring and Remediation of Degraded Ecosystems			
	Dr. Devesh Walia, M. Tech. Applied Geology (Dr H S G. University), Ph.D. (Gauhati University)	Magnetotelluric, Seismotectonics, Rador monitoring studies in NER			
	Dr. D. Paul, M. Sc (NEHU), Ph. D. (NEHU)	Entomology, IPM, Soil faunal ecology and biodiversity Biopesticides, Bioremediation			
	Dr. Madho Singh Bisht, M.Sc.(JNVU), Ph.D(DU)	Bamboo as a multipurpose plant, waste reuse and recycling, sustainable use of natural resources			
AssociateProfessor					

Thrust Area of Research:

Natural Resource Management, Environmental Monitoring and Remediation Degraded Ecosystems, Forest of Management, Forest Biodiversity monitoring management, land reclamation and (Social/agro forestry) and rural development ,Forests policy and Law, Environmental Impact Assessment, Environmental Biology, Integrated Pest Management, Policy Oriented Research on Forest and Environment and Watershed Management; Magnetotelluric studies, Global Positioning system studies and micro-seismicity of NE Region; Radon activity concentration in NER; Earthquake forecasting research and impact of seismicity on infrastructures.Environmental monitoring & abetment, climate change monitoring & mitigation and natural resource management,Bamboo as a multipurpose plant, waste reuse and recycling, sustainable use of natural resources.Biopesticides, Bioremediation..

Brief Statement of Academic Activities

The Department took part in several international and national workshops/seminars/ Training programs and undertook research projects aimed at creating database much-needed for promoting ecologically sound and sustainable development of the hill regions of northeast India. The Department also contributed towards configuring the deeper crustal structure for understanding the crustal evolutionary processes, global positioning system studies and seismicity of the northeast India along with the radon activity concentration. The Department received grants to support the research and other activities of the Department. The grants received from various external funding agencies were used to strengthen ongoing research and extension activities and in development of laboratory and other infrastructure.

M.Sc. – 25, Ph.D. – Variable

Students' Profile

Enrolment Capacity: Enrolment Capacity:

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	-	22	4	9	17	17	9	26
Ph.D.	1	2	2	3	2	2	3	5

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	-	21	03	13	11	18	6	24
Ph.D.	1	4	2	4	3	3	4	7

Research Fellowships

CSIR- UGC- NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other(You name it)	Others
-	07	01	-	-	02 (DST Project Fellowship)	-

Fieldwork/Educational Tour of Students

Teacher-in-Charge: Dr. S.S. Chaturvedi *Places/Institutions visited:*

Bangaluru (Lalbagh Botanical Garden, Visvesvariya Industrial and Technological Museum, Jawaharlal Nehru Planetarium, Bull Temple), Mysuru (Brindavan Garden, Vishveshwaria aquarium, Mysuru San Sculpture Museum and World Wax Museum, Sri Chamarajendra Zoological Garden, Mysuru Palace, St. Philomen"s Cathedral, Karanji Lake), Chennai (Chennai Rail Museum, Madras Crocodile Centre for Herpetology, Snake Park, Marina Beach, Government Museum, Santhome Cathedral), Puducherry (Matrimandir, Rock Beach), and Mahabalipuram (Shore Temple and Beach, Rock Relife of Descent of Ganga).

Duration of tour:15 days

Purpose of Tour: To understand the importance of the places of visit and their relevance and contribution with special reference to environmental sciences.

Courses Conducted *Postgraduate*

Semester-I

Environment, Ecology and Ecosystem Dynamics Environmental Pollution Forestry and Water Resources

Semester-II

Environmental Microbiology, Biotechnology and Toxicology Environmental Impact Assessment and Environmental Policies Remote Sensing and Geographical Information System Environmental Law

Semester-III :

Disaster Management Environmental Geoscience and Energy Environmental Issues and Problems of North East India Research Methods, Techniques and Statistical Analysis **Semester-IV** : Environmental Economics and Sociology Forest Management and Biodiversity

Ph.D. Courses

Research Methodology in Environmental Science

Contemporary Environmental Science Seminars/Conferences/Workshops/Sympo sia/Extension Programmes Organized Prof.D. Walia

Jointly organised ISCA Lecture Series with Shillong Chapter, Indian Science Congress Association, Kolkataon NE India: Issues and Challenges; Is there a life on Mars? and "Intelligent use of Space Technology" on 8th June 2018.

Bhuvisamvad, an initiative of Ministry of Mines, Government of India, on 25th July.

Jointly organised ISCA Lecture Series with Shillong Chapter, Indian Science Congress Association, Kolkata on "The first map of Brahmaputra in Assam with Calcutta and Oxford diversions by Mark Davies, Oxford, UK on 19th November 2018.

Jointly organised with Shillong Chapter, Science Congress Association, Indian Kolkata a program to commemorate the 150th Birth Anniversary of Mahatma Gandhi, a talk by Prof. Fabio Scialpi, Professor of Religions and Philosophies of India and the Far East, University of Studies of Basilicata, Rome on "Mahatma Gandhi, a man of past India, a guide for present world society, and a light for the future of mankind" on 26th November 2018 alongwith the exhibition, quiz and awareness program on Mahatma Gandhi and Prof. V. Elwin, father of NE Indian Tribes.

National Seminar on Earthquake Hazards: Perception, Mitigation and Management on 9th and 10th November 2018 organized in association with Shillong Chapter, Indian Science Congress Association, Kolkata and EWMI, Guwahati.

Advisory Group Meeting on Benefit Sharing Strategy for the Meghna Basin (Bangladesh and India) organised from 17th to 19 January 2019 at NEHU Shillong by International Union for Conservation of Nature and NEHU, Shillong.

International Earth Sciences Olympiad (IESO) 2019 Entrance Test on 19 January 2019, NEHU, Shillong.

Prof.O.P. Singh:

Workshop cum awareness meeting was organized on 'Coal mining, Environment and Livelihood in Meghalaya' at Khliehriat, East Jaintia Hills on 26th June 2018 for village heads and their representatives and district officials in collaboration with Meghalaya Basin Development Authority.

Attended

Prof.M. S. Bisht:

Presented a paper on, "Bamboo Shoot as a Potential Source of Dietary Fibre for Food Fortification". 11th World Bamboo Congress, Mexico, August 14-18, 2018.

Delivered a lecture on, "Bamboo: A Sustainable Resource for the Scio-Economic Development of Manipur in the 21st century". October 25-26, 2018, Lamka Bamboo Fair 2018, Churachandpur, Manipur.

Lecture on, "Bamboo for Nutrition and Health". February 4-8, 2019, 3rd World Bamboo Workshop, Manipur.

Prof.B.K. Tiwari:

Participated as Chief Guest, delivered inaugural and Key Note address at the International Conference on Natural Resource Management and Climate Change with special focus on India's North East (26-27 March 2019 at National Institute of Rural Development and PR, NERC, Guwahati. Delivered plenary lecture on Adaptation and Mitigation of Climate Change in North-East India on 6th March, 2019 in the Seminar on Recent Trends in Ecological Research (RTER 2019) held at Assam University, Silchar (5-7 March, 2019). Resource parson and Workshop cum Brain Storming Session on Himalaya Matters for Ecological and Economic Security organised by GB Pant National Institute of Himalayan Environment and Sustainable Development on 22nd January, 2019 at NIRD & PR, NERC, Guwahati. Was invited as Chief Guest and Inaugural Address at the Seminar on Empowerment through digital India Initiative (24-28 September, 2018 organised by NIRD & PR, NERC, Guwahati. Presented the report on 'Transforming Shifting Cultivation in

North-East India' at NITI Aayog, New Delhi on 27th June, 2018. Was Resource Person at the Focus Group Discussion cum Workshop on Methodology for Determining Minimum Support Price for Minor Forest Produce in India on 12th September, 2018 held at Shillong.

Prof. Devesh Walia:

Lead talkonAdvances in Space Technology for Mineral Exploration and Geological Studies duringregional seminar on "Advances in Remote Sensing and GIS Applications" scheduled during May 10 - 11, 2018 at NESAC, Shillong and Chaired a session during the same.

Presented papers on EM studies in NE India: Issues and Challenges and Simultaneous MT/MV soundings along the profile crossing the Indian Craton, Himalaya and Eastern Tibet (Ivan VARENTSOV, Pavel IVANOV, Ilya LOZOVSKY, Devesh WALIA, Sachin KUMAR,Denghai BAI, Xin LI- EHS3D WG) during International Symposium on Intracontinental Orogens at Moscowfrom 20th September 2018.

Kulhiu Mero, Hiambok Jones Syiemlieh& Devesh Walia "Determination of Rare Earth Elements in the Conglomerates of Tyrsad and Weiloi Area of East Khasi Hills, Meghalaya by using ICP-MS technique" at the National Seminar "On Understanding the Earth for Resourcing Future Generations" on the 5th and 6th March 2018, at North-Eastern Hill University, Shillong, Meghalaya.

Kulhiu Mero, Hiambok Jones Syiemlieh, Devesh Walia & Santosh Kumar Vislavat. "Determination of Rare Earth Elements in the conglomerate of Tyrsad-Weiloi area, Meghalaya, North-East India by using Inductively Coupled Plasma-Mass Spectrometry".30th National Conference of Indian Institute of Geomorphologists (IGI) organized by Department of Geography, JamiaMilliaIslamia, New Delhi, 3-5th October,2018 on the focal theme "Geomorphology, Environment and Society".

Attended, Chaired session and presented oral and poster paper and invited talk in *106th Indian Science Congress*, LPU, Jalandhar 3-7 January (2019) on Study on Active Tectonics of Shillong Plateau; Climate Change Resilience Analysis: Issues and Challenges; Speleothems and their use as Climate Archives in Shillong Plateau;

Attended, chaired a session and gave invited talk on Agriculture – Impact of Pesticides / Insecticides and other Agrochemicals on North East Flora & Faunaduring the Regional Conference on Safety Management in Industries, Hazardous Waste Management, Storage & amp; Transportation of Chemicals, Petroleum, Petroleum Products and Capacity Building of North Eastern States towards Emergency Response, October 8-9, 2018 at Hotel Lily, Guwahati, Assam,

Attended and made presentation during the Workshop on Geotechnical investigation from 28 Feb to 2 Mar 2019, IIT Guwahati.

Prof.O.P. Singh:

Delivered 11th Memorial Lecture organized in memory of (L) Valentine Richard Miranda and Marjorie Miranda by St. Edmond's College, Shillong on Sept. 11, 2018 on the topic 'Judicious Use of Natural Resources'. Delivered a lecture on the topic 'Water Pollution with regards to urban areas' in the technical session of the "Northeast Green Submit" held during 23-26th Oct., 2018.

Publications

Published in India

Bajwa H.K., Santosh O., Koul A., Bisht M.S. and Nirmala C. (2018). "Antioxidant content and antioxidant activity of aqueous extract from processed shoots of an edible bamboo *Dendrocalamus*

hamiltonii Nees & Arn". Ex Munro and their effect on hepatic lipid peroxidation levels in Balb/c mice. Journal of Pharmacognosy and Phytochemistry, 7(5): 3248-3255.

S. Mukherjee, R. Wahlang and S.S. Chaturvedi (2018). "Folk use of medicinal plants by ethenic communities in fringe area of Neora-Valley National Park, Darjeeling". *Hill Geographer*, VVVIV(1):81-94

Arun Jyoti Nath, Brejesh Kumar Tiwari, Gudeta W Sileshi, Uttam Kumar Sahoo, Biplab Brahma, Sourabh Deb, Ningthoujam Bijaylaxmi Devi, Ashesh Kumar Das, Demsai Reang, Shiva Shankar Chaturvedi, Om Prakesh Tripathi, Dhruba Jyoti Das and Asha Gupta (2019). Allometric model for estimation of forest biomass in North East India. *Forests*, 10, 103; doi:10.339/f10020103 Balawan Joshua Mawrie &Dibyendu Paul (2018) Analysis of Lindane and Dieldrin

in food samples collected from a market inShillong city, India, by Gas

Chromatography-Mass spectrometry. *International Research Journal of*

Biological Sciences Vol. 7(8), 7-11,

Mero.Kulhiu, Syiemlieh.Hiambok Jones, Walia. Devesh. Flow Characteristics of Conglomerates around Tyrsad and Weiloi village, East Khasi Hills District, Meghalaya, India. *Indian Journal of Geomorphology*, 22(2). ISSN: 0973-2411. pp.87-99.

Mero.Kulhiu, Syiemlieh.Hiambok Jones, Walia. Devesh. Qualitative Analysis of Trace Elements in the Conglomerates of Tyrsad-Weiloi Area, Meghalaya, North-East India by using Energy-Dispersive X-Ray Spectroscopy. *International Journal of Management, Technology and Engineering.* ISSN NO:2249-7455. 8, IssueX, Octocober,2018. pp.2550-2562 Sherjit Singh, L, Walia, D. Mohon Singh, Kh. (2018). Geodynamics and Seismic Vulnerability in Indo-Myanmar Range, *Journal of Emerging Technologies and Innovative Research.* 5 (8): 409-412.

R. Eugene Lamare, Thangjam Somendro Singh and **O. P Singh** (2019) Land use Land Cover Change in East Jaintia Hills, Meghalaya in Relation to Limestone Mining. **Environment and Ecology 37** (3A): 886-893.

Wansah Pyrbot, Lamjingshaihun Shabong and **Om Prakash Singh** (2019) Neutralization of Acid Mine Drainage Contaminated Water and Ecorestoration of Stream in a Coal Mining Area of East Jaintia Hills, Meghalaya. **Mine Water** and the Environmenthttps://doi.org/10.1007/s102 30-019-00601-9

Published Abroad

Nirmala C., Bisht M.S., Bajwa H.K. and Santosh O. (2018). Bamboo: A rich source of antioxidants and its application in the food and pharmaceutical industry. Trends in Food Science and Technology, doi.org/10.1016/j.tifs.2018.05.003

Santosh O., Bajwa H.K., Bisht M.S. and Nirmala C. (2018). Freeze-dried bamboo shoot powder for food fortification: enrichment of nutritional content and organoleptic qualities of fortified biscuits. MOJ Food Processing and Technology, 6(4):342–348.

VarentsovIv.M., Bai D., Ivanov P.V., Kumar S., Li X., Lozovsky I.N., Walia D. First results of new simultaneous MT/MV soundings in the Eastern Tibet and SE India // XXIV EM Induction Workshop (Extended Abstracts). Helsingør, Denmark. 2018. 4p.

VarentsovIv.M., Bai D., Walia D., Gokarn S.G., Lozovsky I.N., Li X. Geoelectric structure of the transition zone from the Eastern Tibet to the Indian Plate: New soundings of the project EHS3D // Problems of geodynamics and geoecology of intracontinental orogens (VII Int. Symposium, Extended Abstracts). Bishkek: RS RAS. 2017a. P. 399-404 (in Russian)

VarentsovIv.M., Bai D., Walia D., Lozovsky I.N. First interpretation results for integrated arrays of deep EM soundings in NW China and NE India // Aspects of theory and practice of geological interpretation of geophysical fields (Proc. Int. Uspensky Seminar. 44th Session). Moscow: IPE RAS. 2017b. P. 74-79 (In Russian).

VarentsovIv.M., Ivanov P.V., Lozovsky I.N., Bai D., Li X., Kumar S., Walia D. Deep simultaneous MT/MB soundings at profiles, crossing Indian Craton, Himalaya and Western Tibet // Proc. Int. Conf. "Influence of external fields on seismic regime and their monitoring". Bishkek: RS RAS. 2018. P. 161-165 (in Russian).

Books/Book Chapters/Proceedings

Singh, O. P., S. De and L. Cajee (2018) State of the Environment Report of Mizoram- 2016. published in collaboration with the Department of Environment, Forests & Climate Change, Government of Mizoram. pp 1-274.

Research Projects

Ongoing Pl/Co-Pl **Title of Project** Funding Amount Agency (Rupees) Technology Development Prof. M. S. Bisht State Council of Rs. 10,91,000 for Bamboo-Plastic Board from Waste Science, Plastic and Bamboo Strips Technology & Environment, Meghalaya Technology Development for Prof. M. S. Bisht State Council of Rs. 8,19,000 Making Boards from Waste Pine Science, Needles Technology &Environment, Meghalaya D. Paul (PI) Meghalaya 16,27,200 Biodiversity inventorization and conservation through assisted Cements Ltd regeneration of RETspecies in limestone mining area of Meghalaya Cements Ltd Assessment of carbon and carbon PI: Department of 12,76,000 sequestration potential of major Dr. S. S. Science and land use sectors in Meghalaya Technology, Chaturvedi Co-PI: New Delhi Professor B. K. Tiwari 13,86,000 Preparation of People's Prof. B.K.Tiwari Meghalaya Biodiversity Biodiversity Register (PBRs) covering 10 Gram Sevak Circles Board, Shillong under Khatarshnong Laitkroh C&RD Block in the state of Meghalaya for one year 2017-2018 Phytodiversity Prof. B.K.Tiwari 20,00,000 Forest and phytosociological charecterisation Department, of Sacred Groves of Meghalaya; Government of For two years 2015-2017 Meghalaya Study on mining affected areas and Prof. О. P. Meghalaya 4,89,045 its impact on livelihood Singh basin (2nd instalment) Management Agency, Meghalaya Rainfall Induced Landslide Hazard Prof. Devesh DST, New Delhi 26,11,000 and Forecast and Prevention Walia GPS based TEC for earthquake Prof. Devesh TDP, NESAC 7,00,000 precursor for understanding Walia (PIseismicity in Shillong Plateau. Gopal Sharma, NESAC

Completed during Year

Title of Project	Pl/Co-Pl	Funding	Amount
3		Agency	(Rupees)
Final Environmental Assessment Study of High Voltage DC transmission lines in Meghalaya and preparation of FEAR thereof	D. Paul (PI)	POWERGRID	18,00,000
Preparation of People's Biodiversity Register (PBRs) covering 10 Gram Sevak Circles under Khatarshnong Laitkroh C&RD Block in the state of Meghalaya for one year 2017-2018	Prof. B.K.Tiwari/Co PI: Prof. D Paul	Meghalaya Biodiversity Board, Shillong	13,86,000
Phytodiversity and phytosociological charecterisation of Sacred Groves of Meghalaya; For two years 2015-2017	Prof. B.K.Tiwari, Co PI: Dr K. Upadhaya	Forest Department, Government of Meghalaya	20,00,000
Study on Flora and Fauna and Survival in Acidic Water of Kopili Reservoir of Kopili Hydro Electric Plant, Umrongso, Dima Hasao District, Assam with emphasis on Identification of Endangered Species and a Practical Solution to their Conservation under Existing Condition of Acidic Water	Prof. O. P. Singh	North Eastern Electric Power Corporation (NEEPCO) Limited	12,00,000
Preparation of the State of Environment Report (SoER) for Mizoram	Prof. O. P. Singh (PI), Prof. S. De (Co-PI), Dr. L. Cajee (Co-PI)	Department of Environment & Forests, Government of Mizoram	25,00,000
Deep Lithospheric Structure Across the Indo Myanmar Arc in India Using Magnetotelluric Data	Prof. Devesh Walia	Ministry of Earth Sciences, New Delhi	30,42 ,000
Deep Structure of Tectonospherein the Eastern Himalaya from Joint Electromagnetic and Seismic Soundings: Analysis of Magnetotelluric Responses and Receiver Functions	Prof. Devesh Walia	DST-RFBR, New Delhi	29,15,000

Academic Collaborations Prof. M. S. Bisht

Collaboration with Professor C. Nirmala, Department of Botany, Panjab University, Chandigarh on Bamboo for Food and Medicines.

Prof. Devesh Walia

Collaboration with Prof AtulSaxena. of Department Physics, NEHU on Seismicity; Dr. P. Banerjee, Executive Director, Earth Observatory of Singapore, NTU, Singapore on Global Positioning System; Prof. Ivan Varentsov, Director, RFBR, Moscow on magnetotelluric study. Dr. Gopal Sharma, Scientist, NESAC, Shillong.

Honours/Awards/Recognitions

Prof. Devesh Walia is incorporated as Advisory Group Member on Benefit Sharing Strategy for the Meghna Basin (Bangladesh and India) by International Union for Conservation of Nature. Life Member, Indian Society for Training and Development (ISTD), New Delhi.

Other Activities

Prof. Devesh Walia

Gave an Invited Talk during the "DEMETRIX" on 27th April, 2018 on "ISSUES AND CHALLENGES IN GEOLOGICAL SCIENCES" Cotton University, Guwahati.Delivered lectures during the Refresher Course for faculty members of Political Science; Disaster Management and Geography on 26-10 2018; 09-11-2018 and 13-11-2018 on Natural Hazards. An invited lecture entitled-"Earthquake - a natural disaster" at Atomic Minerals Division- NER, Shillong on 13thSeptember 2018. Attended Brainstorming session on Climate Change

and its Implications for N. E. States organised by Tezpur University on 01st June 2018. Attended workshop organised by IRADe, New Delhi, GBPNIESD and NESAC on Vulnerability assessment of the City - Shillong along with development of disaster resilience plan and capacity building on disaster resilience on 12th June 2018. Attended Stakeholder Consultation workshop for City Disaster Management Plan (CDMP) of Shillong Municipal Area on 31st July Visited the Geoelectromagnetic 2018. Research Centre of the Schmidt Institute of Physics of the Earth, Russian Academy of Sciences for 12 days from September 18-29, 2018 for the scientific work on geophysical problems resulted from the DST/RFBR project "Deep structure of the tectonosphere in the Eastern Himalaya from joint electromagnetic and seismic soundings: Analysis of magneto-telluric responses and functions".Attend receiver the Pre-Awareness Meet of North-East India Education Summit on 30th October, 2018, NEHU.Invited talk on Tectonics of North-Eastern Indian region during Advisory Group Meeting on Benefit Sharing Strategy for the Meghna Basin (Bangladesh and India) on 17th January 2019 at NEHU Shillong organised by International Union for Conservation of Nature and NEHU, Shillong.Life Member, Indian Society for Training and Development (ISTD) 2018.

Prof.O. P. Singh

Prepared 'State of the Environment Report of Mizoram- 2016. Delivered two lectures in Refresher Course organized by the Department of Geography, NEHU, Shillong on the topic 'Environmental effects of mining and utilization of coal in energy production' on 19th November 2018.

DEPARTMENT OF GEOGRAPHY

Head	: Prof. Sunil Kumar De
Telephone	: 0364-272-3201/3202
E-mail	: hodgeo@nehu.ac.in, desunil@gmail.com

Faculty	:7	
Designation	Name and Qualification	Specialization
	Dr. B.S.Mipun, MA (JNU), Ph.D (NEHU)	Agricultural Geography, RS & GIS
Professor	Dr.D.K.Nayak, M.Phil, Ph.D (JNU)	Social and Population Geography, Gender and Health related Issues
	Dr.H.J.Syiemlieh, M.Phil & Ph.D (NEHU)	Fluvial and Applied Geomorphology
	Dr. Sunil Kumar De, M.Sc. & Ph.D.	Environmental
	(Calcutta University)	Geomorphology;Geomorphological
		Hazards
Associate	Dr.L.Cajee, M.Sc & Ph.D. (NEHU)	Bio- Geography and Geography of
Professor		Tourism
	Dr.P.K.Ryngnga, M.Phil & Ph.D (JNU)	Regional Development, Urban
		Geography, Remote Sensing & GIS
Assistant Professor	Dr.S. Purkayastha, MA & Ph.D (NEHU)	Population Geography, Geography of Development, Geography of North- East India

Thrust Area of Research

(i) Geomorphology with focus on Applied Geomorphology and Geomorphological Hazards, (ii) Environmental studies with focus on Climatology and Climate Change, Water Resources and Hydrology, Biogeography and Biodiversity and Watershed Management Studies, (iii) Regional Development and Regional Planning, (iv) Researches on Social and Cultural Diversity of the North-Eastern Region with a special focus on Tribal Development, (v) GIS and Remote Sensing applications in Environment and Land Use Planning.

Brief Statement of Academic Activities

The Department is supported by UGC-SAP-DRS-III and DST-FIST programmes.

The Department organized lecture series by different reputed academicians during 2018-2019.

Prof. Sushil Kumar Halder of the Centre of Advanced Studies, Department of Economics, Jadavpur University delivered lecture on 13.08.2018 in the Department on "Multidimensional Poverty Trap in India at Sub-National Level Analysis Based on NFHS (I-IV) Data".

A meeting with faculty members of the Department of Geogralhy and Prof. T. Hayashi of the DPRI, University of Kyoto Japan was held on 07.09.2018 in order to

discuss the possible themes of research under the bi-lateral collaboration between the Department of Geography, NEHU and DPRI, University of Kyoto, Japan.

Lecture of Dr. Martin J Ossewaarde, formerly in the Environment Ministry's Division for Climate Change, Netherlandswas held on 13.09.2018 on the topic "Sustainable Development"

Prof. Dr. Sadhana Kothari, Dean, UCSSH and Chairperson, Dept. of Geography, Mohanlal Sukhadia University, Udaipur delivered invited lecture on 26.10.2018 in the Department of Geography, NEHU, Shillong on the theme entitled " Natural Disaster Management "

Prof. Subir Sarkar, *Head, Department of Geography and Applied Geography, North Bengal University and National Geospatial Professor, Dept. of Science & Technology, Govt. of India* delivered lecture on "Application of Geospatial technology in Geographical Studies" as an invited speaker in the Department of Geography, North-Eastern Hill University, Shillong on 26.11.2018. Prof. Sarkar was also pleased to meet the research scholars of the department

in an interactive session on 'Geospatial Technology in decision support for Development Planning' on 27.11.2018.

A lecture of Dr. Mark Davies, *Oxford based Historical Geographer*was held on 15.11.2018 on the topic: "First map of the Brahmaputra in Assam (1792 - 1794) and the Calcutta maps prepared by Col. Thomas Wood of the Survey of India".

Dr. Priyank Pravin Patel of *Department of Geography, Presidency University* delivered lecture on 11.12.2018 on the topic: "Utilizing Geoinformatics for Geographical Analysis".

Prof. Narayan Jana, of Department of *Geography, Burdwan University* spoke on "Disaster Management in India: Paradigm Shift, Institutional Initiatives and Policy Framework" on 15.12.2018 in the Department of Geography, NEHU.

A team of Researchers from Japan headed by Prof. T. Terao of Kagawa University, Japan (our collaborator) visited the department during their stay for field work.

Apart from this the Department of Geography also runs a self-financed twosemester PG Diploma in Geoinformatics in the University.

Students'	Profile
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Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A./M.Sc.	1	29	8	12	26	16	22	38
Ph.D.	-	04	1	2	3	2	3	5
PG Diploma (Geoinformatics)	-	23	3	10	16	20	6	26

Enrolment Capacity: M.A/M.Sc. -38,PG Diploma(Geoinformatics) – 26, Ph.D. – Variable

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-	TOTAL
							Meghalaya	
M.A./M.Sc./	-	35	3	13	25	24	14	38
M.Phil.	4	7	1	5	7	4	8	12
Ph.D.	-	3	2	2	3	1	4	5
PGDiploma	-	13	13	11	15	7	19	26
(Geoinformatics)								

Students Awarded Ph.D. Degree : 5 Research Fellowships

CSIR- UGC- NET	UGC Non- NET	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other(You name it)	Others
1	13	4	0	1	UGC-NET JRF:11 BSR: 1 NFHE:3	PDF-3

Fieldwork/Educational Tour of Students

1.*Teacher In-Charge*: Prof. Sunil Kumar De, Accompanying Person: Dr. Markynti Swer *Places Visited*: Bhubaneswar, Puri, Chennai & Mahabalipuram

Purpose: All India Study Tour under Course No. GEOC 201- Geography of India

2. *Teacher In-Charge*: Prof. B. S. Mipun, Accompanying Person: Dr. L. Cajee

Places selected for field survey: Amphangre and Umpher villages, Ri-Bhoi District, Meghalaya

Duration: 12 days

Purpose: Socio-economic and physical survey by the IV Semester M.A. /M.Sc. students, under Course No. GEOC 401-Dissertation

Courses Conducted *Postgraduate*

Semester-I : Geomorphology, Climatology, Economic Geography, Geographical Thought-I, Quantitative Techniques in Geography-I, Cartography-I (Practical)

Semester-II Geography of : India, Principles of Ecology (open course) Biogeography (open course), Population and Settlement Geography, Geographical Thought-II, Quantitative Techniques in Geography-II, Cartography-II (Practical), Geography of North-East India (open course)

of Semester-III : Geography India, Principles of Ecology (open course) Biogeography (open course), Population and Settlement Geography, Geographical Thought-II, Quantitative Techniques in (Practical), Geography-II, Cartography-II Geography of North-East India (open course) Semester-IV : Dissertation, Advanced Geomorphology, Tropical Geomorphology, Environmental Geomorphology, Applied Climatology, Agricultural Geography, Geography of Tourism, Urban Geography, Social Geography, Cultural Geography, Population and Development

PG Diploma in Geoinformatics

Semester I: Principles of Remote Sensing & GPS; Fundamentals of GIS; Cartography & Geo-Statistics; Geosciences & Image Interpretation; Computer Programming.

Semester II: Digital Image Processing; Spatial Analysis & Modelling; Project;

Geoinformatics in Agriculture, Soil & Land Evaluation; Geoinformatics in Regional and Urban Planning; Geoinformatics in Water Resources; Geoinformatics in Disaster Management

M.Phil/Ph.D. Courses

Research Methodology Geography, in Tools and Techniques Advanced in Geographical Researches, Contemporary Geomorphic Issues in North-east India, Geo-Hydrological Processes of Extreme Humid Tropics; Population, Development and Environment, Remote Sensing and GIS

Duration: 12 days

Techniques for Agricultural Geography, Contemporary Issues in Urban Development with Special Reference to India, Geographical Perspectives in Cultural Tourism.

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes *Organized*

Refresher Course on Earth Sciences, Geography and Allied Disciplines having theme " EarthScience& Natural Resource Management"organized by the UGC-HRDC, North Eastern Hill University, Shillong during 12.11.2018-02.12.2018. *Coordinator:* Prof. D. K. Nayak

Workshop on "Advanced Research Training" from 24th Dec. to 30th Dec. 2018 organized for Royal University of Bhutan in the Department of Geography, NEHU, Shillong. Coordinator: Prof. B. S. Mipun

AIU East Zone VC's meet 2018-19 held on 18th and 19th Jan 2019, organized by NEHU, Shillong. Coordinator: Prof. B. S. Mipun

Attended

Prof. B. S. Mipun

Climate Change Conclave 2018, National Seminar on Climate actions for India's combat climate changes, April 21-22, 2018, organized by Department of Geography, Shaheed Bhagat Singh Evening College, University of Delhi. Lead Speaker, Guest of Honour and Chaired a session.

Workshop on "Research, Innovation and Technology in Higher Education", organized by NEIPA, New Delhi at Goa University, Goa from 28^{th} Jan. -2^{nd} Feb. 2019.

Prof. D. K. Nayak

Chairperson and lead speaker in the session Urbanisation and Environment in the National Seminar on Environmental Issues, Vivekananda College For Women, Barisha, Kolkata 7th April, 2018.

National Symposium on Regional Disparity of Development in South Asia with Special *Reference to North-East India*, October 12-13, 2018, Department of Geography, Gauhati University. Paper presented "Demographic Transformation of South Asia: Trends and Implications"

International Conference on "Society and Sustainability: An Interdisciplinary Approach, Vivekanand College, Kolkata, 12-13 January, 2019. Delivered a plenary lecture entitled "The Greying South Asia". Chaired a session on Urban Issues: Challenges and mitigation.

National Seminar on *Negotiating Nature, Culture and the Future,* 28 February- 1st March, 2019, Presidency University, Kolkata. Presented a special lecture on "Environment, Inequality and Human Development"

Guest of Honour at National Conference on Social Science and Humanities, 20-21, December, 2018, Mahatma Gandhi University, Khanapara, Meghalaya. Delivered a lecture entitled "Relevance of Social Science in Science and Technology"

National Seminar on "*Harnessing wetlands* for Sustainable Livelihood", 26-27 November, 2018, Cotton University, Guwahati.

National seminar on "*Water, Sustainability, Livelihood and Climate Change*" 14-16 March, 2019, Centre for the Study of Regional Development, JNU, New Delhi. Chaired a Session on ecology and Development: Practices, Assessment and Implications.

Prof. Sunil Kumar De

Presented paper on "Impact of Human Activities and vice versa on Ranikhola River, Sikkim, India" in the European Geosciences Union Assembly held in the Austria International Convention Centre, Vienna during 08-13.04.2018. Participated the IAG (International Association of Geomorphologists) Executive Committee Meeting as Vice President (Working Group In Charge).

Chaired the technical Session TS-4: Water Resoruces, Snow and Glaciers-2 in the Seminar on Advances in Remote Sensing and GIS Applications organized the North-Eastern Space Application Centre, Umiam, Meghalaya during May 10-11, 2018

Delivered Lead Lecture on "Impact of Climate Change on Landslides" and Chaired the technical session "Coastal on Geomorphology -02" in the 30th National Conference of the Indian Institute of Geomorphologists on "Geomorphology, Environment and Society" organized by the Department of Geography, Jamia Milia Islamia, New Delhi during 3-5 October, 2018. Presented 10 scientific papers in different technical sessions as Co-author.

Delivered lead lecture on 'Impact of human activities on the changing morphology of the Haora River, Tripura, India' and Chaired the technical session on "Frontiers of Physical the 40th Indian Geography-II" in Geographers meet 2019 and National Conference 'Water on Sustainability, Livelihood and Climate Change' organized by the Centre for the Study of Regional Development, Jawaharlal Nehru University, New Delhi during March 14-16, 2019.

Delivered Special Lecture on "Impact of Climate Change on Landslides" and Chaired the technical session on "Human-Nature Relationship: An Environmental Quest" in the International Conference on 'Society and Sustainability: An Interdisciplinary Approach' jointly organized by the Department of Geography, Vivekananda College, Kolkata, West Bengal and The Eastern Geographical Society, Bhubaneswar, Odisha during January, 12-13, 2019

Presented a paper on "Impact of Rural Clusters and Urban Slum areas on the River Haora, Tripura" in the National Symposium on "Regional Disparity of Development in South Asia with Special Reference to NorthEast India" organized by the North-East India Geographical Society, Department of Geography, Gauhati University during October 12-13, 2018

Dr. P. K. Ryngnga

Paper presented on 'Urbanization Process, Trends, patterns and its Consequences of Urban Shillong' in the National Seminar on Growth of Unplanned Towns and Cities in the North Eastern Regions of India: Problems and Alleviation organized by Shillong Law College, 5-7 June 2018.

Paper presented on '*Urban landuse of Shillong*' in the International Conference of Geography & Geo informatics for Sustainable Development, Bangkok, Thailand, 19-20th July 2018.

Paper presented on '*A geographical Analysis* of Urbanization Trends of Shillong'in the National Seminar on Urbanization in India: Issues and Predicaments, Department of Sociology, NEHU, February 14-15th 2019.

Paper presented on 'Spatio-Temporal Variability in Domestic Water Demand and Supply in Shillong Urban Agglomeration' in the 40th Indian Geographers Meet & International Conference on Water. Sustainability, Livelihood and Climate Change, , Jawaharlal Nehru University, March 14-16th 2019.

Paper presented on '*Reviving Traditional* Water Harvesting System in Meghalaya: The Need of the Hour' in the International Seminar on Understanding Water Crisis: The way Forward, Synod College, 6th-7th June 2019

Dr.S. Purkayastha

Presented paper entitled "The distribution of the Kuki and Naga settlements in relation to the forest in Kangokpi district' in the National Seminar on "Society, Ecology and Environment in Manipur: Climate Change Perspectives" organized by Moreh College, Moreh, Manipur during 28-29 December, 2018 and sponsored by Forest and Environment Department, Govt. of Manipur. Presented paper titled -Impact of self help groups in empowering the Rajbangsi women in Northern districts of West Bengal" in the 29th Biennial conference of NEIGS cum

Publications

Published in India

Manoj Kumar Debnath and Debendra Kumar Nayak (2018) "Male Outmigration in West Bengal: Regional Pattern and Determinants", *Transactions*, Vol 40, No.1 January, pp 119-130 ISSN 0970-9851

Debendra Kumar Nayak (2018) "Demographic Dynamics and Climate Change" Journal of Indian Institute of Public Administration, Vol. XXV pp.44-49. ISSN2231-556X.

Mero, K., Syiemlieh, H.J., and Walia, D.: Qualitative analysis of trace elements in the conglomerates of Tyrsad-Weiloi area, Meghalaya, North-East India by using Energy-Dispersive X-Ray Spectroscopy, *International Journal of Management, Technology And Engineering,* Volume 8, Issue X, OCTOBER/2018 (ISSN NO : 2249-7455)

Sahidul Karim and Sunil Kumar De (2017): Changes in channel morphology of Damodar River due to Panchet Dam, West Bengal. *Hill Geographer*, XXXIII:2 (2017), 17-29, (ISSN 0970-5023)

Rintu Sarkar and Sunil Kumar De (2018): Channel pattern analysis of the courses of Teesta with surface morphology of Teesta Megafan. *Hill Geographer*, XXXIV (2): 71-89 (2018) (ISSN 0970-5023)

Sahidul Karim, Sunando Bandyopadhyay and Sunil Kumar De (2018): Impact of Panchet and Maithon Dam on the Flow Regimes of Damodar River, India, *Journal of Indian Geomorphology*, 6 (ISSN 2320-0731)

Sunil Kumar De (2019): India-Bangladesh International Border and its socio-economic 11th International Geographical Union Commission Seminar, Focal theme: Environment and sustainable livelihood. organized by B. Barooah college, Guwahati , on 8-9th Feb. 2018.

impact. *Balaka*, 28(37): 282-290 (ISSN 2230 9381)

Cajee, L. :Water Management During The Dry Seasn in the Betel Leaf Plantations of the Southern Slopes of the Meghalaya Plateau in *International Journal of Research in Management and Social Science Vol: 6, Issue 2 (II), April-June 2018; pp 44-47.*

Ray, M., Gayen S., Ryngnga, P.K (2018). Spatio Temporal Analysis of Urbanization in Cooch Behar District, West Bengal, India.*International Journal of Innovative Social Science & Humanities Research*,4 (4): 66-73.

Ryngnga, P.K., Lynrah M.K.F (2018). Impact of Road Widening on Land Use Land Cover: A Case Study of Ri Bhoi, Meghalaya, *International Journal of Multi-DisciplinaryResearch and Development*, 3(11): 310-315.

Ryngnga, P.K. (2018). Traditional Irrigation System: Bamboo DrippingSystem in Meghalaya. *International Journal of Science and Research*, 7(10): 1533-1534.

Ryngnga, P.K. (2018). Characteristics and Consequences of Urbanization in India's North East: A Case of Shillong. *International Journal for Scientific Research & Development*, 6(8):581-585.

Ryngnga, P.K., (2018). Applications of New and Emerging Forms of Geospatial Data in Urban Studies.*International Journal for Scientific Research & Development*, 6(7):667-669.

Ryngnga, P.K. (2018). 3D Terrain Visualization of GIS Data for Analysis.*International Journal of Science and Research*, 7(10): 143-146.

Syiemlieh, H., Shymbin, B., Ryngnga, P.K., (2018). Application of Remote Sensing and

GIS in studying Land Use Changes (A Case Study of Laitumkhrah, Shillong, Meghalaya).*ADBU Journal of Engineering Technology*, 6(2): 30-36.

Hiranmay Rishi and Subrata Purkayastha (2018): A comparative study of the demographic attributes of Tal and Diara Regions of Malda, West Bengal. Indian *Journal of Spatial Science*, Spring Issue 10 (1): 67-77

Sarath Chandran and Subrata Purkayastha (2018): History of reclaimed Kayals in Kuttanad Wetland and associated social divide in Alappzha District, Kerala. *International Journal of Research and Analytical Reviews*, 5(3): 573-581

Raju Debbarma and Subrata Purkayastha (2018): Contribution by different agencies in the expansion of area under rubber plantation in Tripura, India. *International Journal of Research and Analytical Reviews*, 5(4): 227-237

Published Abroad

Prokop P, Kruczkowska B, Syiemlieh, H.J, Bucała Hrabia A.: Impact of topography and sedentary swidden cultivation on soils in the hilly uplands of North East India. *Land Degradation Dev.* 2018; 29:2760–2770. https://doi.org/10.1002/ldr.3018

Debnath, M, Syiemlieh, H.J, Sharma, M.C., Kumar, R, Chowdhury, A, Lal, U.: Glacial lake dynamics and lake surface temperature assessment along the KangchengayoPauhunri Massif, Sikkim Himalaya, 1988–2014. *Remote Sensing Applications: Society and Environment*, Elsevier, 9 (2018) 26-41 Shreya Bandyopadhyay and Sunil Kumar De (2018): Anthropogenic impacts on the morphology of the Haora River, Tripura, India. *Géomorphologie: relief, processus, environnement, 24:2, [Online since 21 June 2018].* URL:

http://journals.openedition.org/geomorpho logie/12019 (ISSN : 1266-5304)

Raju Debbarma and Subrata Purkayastha (2018): Expansion of area under rubber plantation and its distribution in Tripura, India. *Space and Culture, India*, 6 (5): 56-70

Books/Book Chapters/Proceedings

Syiemlieh, H. J. (2018): The Neolithic Site of 'Law Nongthroh: A Geographical In: Prehistoric Cultures Perspective. Through the Lens of Archaeology: A report on the Archaeological Excavation of 'Law Nongthroh, Sohpetbneng Hill, Khasi Hills, Meghalaya. M. Mitri (Ed), Union Christian College, Meghalaya, Chapter 8, p. 129-131. Shreya Bandyopadhyay and Sunil Kumar De (2019): Gaps in Integrated Water Resource Management in Tripura: examples of human activities on the changing morphology of the Haora River, Tripura, India. In 'Environmental Administration: concepts, issues and challenges (ed. by Chakma, B. R.). B. R. Publishing Corporation, Delhi, pp. 29-38 (ISBN 9789388789011)

Funds Received from Agencies: UGC-SAP-DRS-III- **Rs.** 4,00,000 Research Projects *Ongoing*

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)
Desertification and Land Degradation: Monitoring, Vulnerability Assessment and Combating Plans	Prof. B.S.Mipun	SAC, ISRO, DoS, Ahmedabad	24,90,000

Academic Collaborations

Indo-Polish Collaboration (INSA-PAS) on 'Impact of Extreme Rainfall on Soil Properties and Water resources in NE India' between the Department of Geoenvironmental Research, IGIPZ, Polish Academy of Sciences, Krakow, Poland and the Department of Geography, NEHU, Shillong. Indian Coordinator: Prof. H. J. Syiemlieh

Indo-Japan collaboration between the Department of Education, Kagawa University , Takamatsu, Japan and the Department of Geography, NEHU, Shillong on 'Climate Change in South Asia'. Indian Coordinator: Dr. L. Cajee

Honours/Awards/Recognitions

Prof. D. K Nayak has been appointed as the Editor of the journal *Transactions* of the Institute of Indian Geographers (IIG), Pune Prof. Sunil Kumar De has been elected as the Eastern Zone Representative in the EC of the Institute of Indian Geographers (IIG), Pune

Other Activities

Prof. B. S. Mipun

43rd Orientation Programme, UGC-HRDC, NEHU, Shillong, 28th Jan-16thFeb, 2019, 02 lectures on 5th Feb.

44th Orientation Programme, UGC-HRDC, NEHU, Shillong, 18th Feb-11th March 2019, 02 lectures on 19th Feb.

45th Orientation Programme, UGC-HRDC, NEHU, Shillong, 18th Feb-11th March 2019, 02 lectures on 8th March.

Short-term course on Disaster Management, UGC-HRDC, Osmania Univ, Hyderabad, 25.2.2019-2.3.2019, 2 lectures on 1.3.2019.

Prof. D. K. Nayak

Invited lecture on "Integrating Gender in Climate Change Adaptation" Capacity Building and Training Programme, National Mission for Sustaining the Himalayan Ecosystem, 30th August, 2018, Agartala, Tripura Invited lecture on "Integrating Gender in Climate Change Adaptation" Capacity Building and Training Programme, National Mission for Sustaining the Himalayan Ecosystem, 7th September, 2018, Aizawl, Mizoram

Co-coordinator, Refresher Course on "Earth Science and Natural Resource Management" UGC-HRDC, NEHU. Shillong, 12 November-02 December, 2018 Delivered a series of 5 lectures in the Workshopon Advances in Research, jointly organized by Department of Geography, NEHU, Shillong and Sherubtse College, Royal University of Bhutan,24th -30th December, 2018, Department of Geography, NEHU, Shillong.

Delivered 14 lectures in the HRDC, NEHU Shillong on different topics in the Referesher, Orientation, short term courses and Summer Schools.

Invited lecture on *Greying South Asia* at Ravenshaw University, Cuttack, Odisha on 16th January, 2019

Prof. H. J. Syiemlieh

Invited lecture on 'The rainiest belt of Meghalaya Plateau – Sociological, archaeological & hydroclimato-logical perspectives' in the Institute of Industrial Science, University of Tokyo University, 11th February, 2019

'The rainiest belt of Meghalaya Plateau – Archaeological & hydroclimato-logical perspectives' in Kagawa University, 20th February, 2019

Prof. Sunil Kumar De

Delivered invited talk as Guest Speaker on 'Ecosystem based Disaster Risk Reduction in the Tropics: Geomorphological Perspective' in the Summer Course on Ecosystem based Disaster Risk Reduction in the Tropics organized by the Faculty of Geography, University of Gadja Mada, Yogyakarta, Indonesia during **30 July-02 August, 2018**. Delivered invited lecture in the Department of Geography, Aliah University, Kolkata on "Environmental Geomorphology with Special Reference to Landslides in Darjeeling Himalayas" on 31.01.2019

Delivered 2 (two) Lectures as a Resource Person in the Refresher Course on Disaster Management organized by the UGC- HRDC, Calcutta University on 04.01.2019.

Delivered 1 (one) Lecture on Landslides: Causes and Remedial Measures in the Refresher Course on Disaster Management organized by the UGC- HRDC, North-Eastern Hill University on 20.11.2018,

Delivered invited lecture in East Calcutta Girls' College, Kolkata on "Geomorphic Hazards with Special Reference to Landslide on 16.04.2018.

Delivered invited lecture for College and University teachers in Ashutosh College, Kolkata on "Techniques in Geomorphology with Special Reference to Landslide on 07.04.2018.

Dr. L. Cajee

Resource Person on the topic "Semester System and CBCS": 27thAugust 2018 Academic Staff College, NEHU, Shillong

Dr. P. K. Ryngnga

Course Expert on Geo Information System in Green Skill Development Programme,

Certificate Course on Waste Management, Department of Bio medical Engineering, North Eastern Hill University, Shillong, 2 months duration, 6th August-6th October 2018.Also developed a course manual on QGIS.

Delivered 3 lectures in Refresher Course on Earth Sciences and Geogrphy, EarthScience & Natural Resource Management, UGC-HRDC, NEHU. Shillong, 12 November-01

December, 2018

Advisory Cum Working Committee member, State of Council of Science Technology & Environment, Meghalaya.

Life member, Indian Society of Geomatics, Space Applications Centre (ISRO), Ahmedabad.

Life member, Institute of Indian Geographers, Pune.

Life member, Indian Society for Development and Planning, New Delhi.

Advisory Cum Working Committee member, State of Council of Science Technology & Environment, Meghalaya.

Dr. S. Purkayastha

Delivered one lecture in the Refresher Course in Earth Sciences and Geography held in ASC, NEHU, Shillong from 19th June-8th July 2017

DEPARTMENT OF HORTICULTURE (TURA CAMPUS)

Head	: Dr. Sunil Kumar: upto 28.02.2019 : Prof. C. P. Suresh: w.e.f. 01.03.2019
Telephone	:8974455216
E-mail	: nehuhort@gmail.com; sureshcp2112@gmail.com

Faculty :	5										
Designation	Name and Qualification	Specialization									
	Dr. C. Perinba Suresh	Fruits and Orchard									
Professor	M.Sc (Ag) Horticulture (BCKV), Ph.D	Management, Post-Harvest									
	(Hort.) PHT (BCKV)	Technology of Horticultural									
	Crops										
Associate	Dr. Sunil Kumar (on lien)	Floriculture									
Professor	M.Sc (Ag) Horticulture (BHU), Ph.D										
	(Hort.) (CCS HAU)										
	Dr. Arvind Kumar Chaurasiya	Post-Harvest Technology of									
	M.Sc. (Ag) Horticulture (NDUAT), Ph.D	Horticultural Crops									
Assistant	(Hort.) PHT (BCKV)										
Professor	Dr. Arindam Barman	Vegetable Science and									
	M.Sc Vegetable Science (GBPUA&T)	Environmental Science									
	Ph.D (Environmental Science) (IIT,										
	Dhanbad)										
	Dr. Yumnam Somi Singh	Fruit Science, Fruits and									
	M.Sc (Hort) Fruit Science (UAS-Dharwad)	Orchard Management									
	Ph.D (Hort.) (BCKV)										

Thrust Area of Research

Conservation of genetic biodiversity, sustainable organic farming, standardization of production techniques for Hill Horticulture and to adapt to the changing climatic scenario.

Brief Statement of Academic Activities

The Department mainly concentrates on horticultural related research and extension works with an aim to improve the aspects of Hill Horticultural System and to develop technical manpower in North-Eastern regions in general and Meghalaya state in particular.

Students' Profile

Enrolment Capacity: MSc (Horticulture) -15, Ph.D. - Variable

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
M.Sc.	06	18		24		00	20	04	24
Ph.D.	03	07		07	01	02	08	02	10

Degree Awarded

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
M.Sc.	03	07		09		01	06	04	10

Courses Conducted: Postgraduate- (i) M.Sc (Hort.) Fruit Science; (ii) M.Sc. (Hort.) Vegetable Science and (iii) M.Sc. (Hort.) Floriculture and Landscaping.

SemesterI

Propagation and Nursery Management of Horticultural Crops; Protected Cultivation of Horticultural Crops; Organic Horticulture; Post-Harvest Technology of Horticultural Crops; Biotechnology of Horticultural Crops; Basic Statistical Methods in Agriculture.

Semester II

Growth and Development of Horticultural Crops;Tropical and Dry Land Fruit production; Biodiversity and Conservation of Fruit Crops;Production Technology of Warm Season Vegetable Crops;Seed Production Technology of Vegetable Crops;Production Technology of Cut Flowers;Landscaping and Ornamental Garden; Production of Plantation Crops; Library Information and Basic Concepts of Laboratory Techniques.

Semester III

Breeding of Fruit Crops; Breeding of Vegetable Crops; Breeding of Flower Crops and Ornamental plants; Sub-Tropical and Temperate Fruit production; Canopy Management of Fruit Crops; Production Technology of Cool Season Vegetable Crops; Production Technology of Loose Flowers; Turfing and Turf Management; Intellectual Property andIts Application in Agriculture; Processing of Plantation Crops, Spices, Medicinal and Aromatic Crops;

Educational Tour of Students

Teacher-in-charge: Dr. A.K. Chaurasiya Places/Institutions Visited: Gujarat and Goa Duration of tour: 14 days Purpose of tour: Educational Tour Production Technology of Under Exploited Vegetable Crops; Research-1(Methodology and Seminar).

Semester IV

Research II (Field Laboratory Analysis); Research III (Data Analysis and Interpretation); Research IV Dissertation.

Ph.D. Courses

SemesterI

Research Methodologies in Horticulture; Advances in Production of Fruit Crops; Advances in Growth and Development of Fruit Crops; Advances in Production of Major and Under Utilized Vegetable Crops; Advances in Breeding of Vegetable Crops; Advances in Flower Production; Advances in Breeding of Flower Crops.

SemesterII

Advances in Breeding of Fruit Crops; Biotic and Abiotic Stress Management in Vegetable Crops; Advances in Landscaping; Organic Horticulture; Advances in Post-Harvest Technology of Fruit Crops; Advances in Post-Harvest Technology of Vegetable Crops; Advances in Post-Harvest Technology of Flower Crops; Protected Cultivation of Fruit Crops; Protected Cultivation of Vegetable Crops; Protected Cultivation of Flower Crops.

Seminars/Conferences/Symposia/Workshops *Organised:*

Prof. C.P. Suresh

Co-ordinated two days Training Programme on "Skill development for the upliftment of through livelihood post-harvest management of horticultural crops" in the Department of Horticulture, NEHU, Tura Campus from 28th to 29th March 2019. Academic Coordinator for the "3rd Northeast Green Summit 2018" organized by Meghalaya State Pollution Control Board, Govt. of Meghalaya, Institute of Bioresources and Sustainable Development (IBSD). Ministrv of Science and Technology and Vibgyor Media Solutions from 23rd – 26th October 2018, Shillong, Meghalaya.

Dr. A. K. Chaurasiya

Organized Two days training on "Skill development for the upliftment of livelihood through post- harvest management of horticultural crops" as an Organising Secretary and Resource Person organised by Department of Horticulture, NEHU, Tura Campus, Meghalaya from 28th-29th March at Tura.

Dr. Arindam Barman

Organized "National Workshop on Conservation of Biodiversity"in collaboration with Goal Para College, Assam and Don Bosco College, Tura, Meghalaya on 28th of November, 2018 Organized Two days training on "Skill *development for the upliftment of livelihood* through post- harvest management of horticultural crops" as an Co-organizer organised by Department of Horticulture, NEHU, Tura Campus, Meghalaya from 28th-29th March at Tura.

Dr. Yumnam Somi Singh

Organized two days Training Programme on "Skill development for the upliftment of livelihood through post-harvest management of horticultural crops" as Co-Organizing Secretary organised by Department of Horticulture, NEHU, Tura Campus, Meghalaya from 28th-29thMarch at Tura.

Attended

Prof. C.P. Suresh

Chaired the Technical Session I in the "National Workshop on Conservation of Biodiversity (NSWB 2018)" organized by the Department of Horticulture, NEHU, Tura Campus, Meghalaya, Department of Botany, Goalpara College Assam and Department of Zoology, Don Bosco College, Tura, Meghalaya on 28th November 2018.

Delivered a lecture on the topic-"Biodiversity: Conservation and Threats" in the "National Workshop on Conservation of Biodiversity (NSWB 2018)" organized by the Department of Horticulture, NEHU, Tura Campus, Meghalaya, Department of Botany, Goalpara College Assam and Department of Zoology, Don Bosco College, Tura, Meghalaya on 28th November 2018.

Resource Person and delivered a lecture on "Horticultural Entrepreneurship" in a National Seminar on "Entrepreneurship and Business Innovation in North East India: A Gap in Micro and Small Industries" organized by Department of Management, NEHU, Tura Campus from 16th to 17th November 2018. Resource Person and delivered a lecture on "Plant Genetic resources of Fruit Crops" in the Workshop on "Conservation of Plant Genetic Resources of Meghalaya" organized by ICAR-National Bureau of Plant Genetic Resources, New Delhi-110012 from $20^{\text{th}} - 21^{\text{st}}$ September-2018.

Dr. A.K. Chaurasiya

Participated in the national Workshop on "Conservation of Plant Genetic Resources of Meghalaya held in SMELS, Dakopgre, Tura on 20-21 September, 2018 Organized by ICAR-NBPGR, New Delhi.

Participated in the national Workshop on *Conservation of Biodiversity (VWCB* 2018)held in Tura, on 28th November, 2018. Organized by Department of Horticulture, NEHU, Tura Campus, Meghalaya, Department of Botany, Goalpara and Department of Zoology, Don Bosco College, Tura.

Completed the DBT, Ministry of Science and Technology, GOI sponsored Short Term Training Programme (6 days) on "Bioinformatics- Computation In Wet Lab" organized by the Department of Bioinformatics Infrastructure facility, NEHU, Tura Campus from 25th February to 2nd March, 2019.

Dr. Arindam Barman

Attended Two Weeks' Faculty Development Programme (FDP) organized by the Placement & Counseling Cell and Department of Management, North-Eastern Hill University, Tura Campus, Meghalaya (March 1st to 14th, 2018).

Delivered a lecture entitled "Divergence analysis among the landraces of pumpkin (*Cucurbita moschata* Duch.) from Meghalaya, India" at the "National Conference on Biogeochemical Cycles and Climate Change" organized byDepartment of Environmental Science and Engineering, Indian Institute of Technology (ISM), Dhanbad, Jharkhand(August 10th to 11th, 2018)

Delivered a lecture entitled "PCR and its applications" at the "Popular Lectures on Modern Technology in Biological Sciences" organized by Biotech Hub, Don Bosco College, Tura, Meghalaya on 25th September, 2018.

Delivered a lecture entitled "Overview on Role of Comparative Genomics in Conservation of Biodiversity" at the "National Workshop on Conservation of Biodiversity" organized by Department of Horticulture, North-Eastern Hill University, Tura Campus on 28th November, 2018.

Attended National Short Term Training Program on "Bioinformatics – Computation in Wet Lab" organized by Bioinformatics Centre (BIF), Department of RDAP, North-Eastern Hill University, NEHU, Meghalaya from February 25 to March 02, 2019.

Presented a paper entitled "Genetic engineering and its applications" at the "3-Day Hands-on-Training Programme" organized by IBT Hub, Don Bosco College, Tura from 4th to 6th March, 2019.

Dr. Yumnam Somi Singh

Participated in the National Short Term Training Program on "Introductory Bioinformatics: A journey from Sequence to Structure" organized by the Department of Rural Development and Agricultural Production, NEHU, Tura Campus from 21st to 23rd March 2018.

Participated in the Model Training Course on "Improving Resource Use Efficiency of Location Specified Refined IFS Models and Livelihood Security in Hilly Region" organized by ICAR-Krishi Vigyan Kendra, Churachandpur, ICAR Research Complex for NEH Region, Manipur Centre, Imphal from 28th September to 5th October 2018.

Participated in the National Workshop on "Conservation of Biodiversity" organized by Department of Horticulture, NEHU, Tura Campus on 28th November 2018.

Publications

Published in India

Suresh C P and Momin K C. 2018. Back to the roots: Wild edible fruits for crop improvement and crop security. *Journal of Agriculture Technology*. 5(1):32-37.

Deb P and Suresh C P. 2018. Changes in Quality of Litchi (Cv. Bombai) as influenced by Different Post Harvest Treatments under Ambient Storage Conditions.*Indian Agriculturist*.62 (3, 4).99-105.

Bhanusree M R , Ghosh S K, Kumar K R, Suresh C P and Chakravarty S. 2018. Effect of different Post-Harvest Packaging Treatments on Shelf Life of Banana Var. Grand Naine.*Bulletin of Environment, Pharmacology and Life Sciences*.7(1).119-124.

Singh, A. K., **Chaurasiya, A. K.** and Mitra, S. (2018). Genotype-by-harvesting studies in elephant foot yam (Amorphophallus paeoniifolius Dennst- Nicolson).*Vegetable Science*. 45(1): 86-91. (NAAS=4.96)

Singh, A. K., Chaurasiya, A. K. and Mitra, S. (2018). Quality evaluation of elephant foot yam (*Amorphophallus paeoniifolius* Dennst- Nicolson) cultivars during growth and development. *Indian Journal of Ecology*. 45(2): 430-432. (NAAS=4.96)

Singh, A. K., Chaurasiya, A. K. and Chakraborty, I. (2019).Quality retention of

bael candy during storage. *Indian J. Hort.* 76(2): 373-376. (NAAS=6.10)

Barman, A., Anshumali. (2018). Genetic diversity estimates in landraces of Pumpkin (*Cucurbita moschata* Duch.) from North Eastern Himalayan region of India using agro-morphological and molecular traits. *Indian Journal of Agricultural Sciences*, 88 (1): 79-85.

Barman, A., Anshumali., Gupta, P.C. (2018). Antilithiatic and diuretic activity of *Cucurbita moschata* on ethylene glycol induced lithiasis in male albino Wistar rats. *Indian Journal of Animal Sciences*, 88 (4): 407-411.

Barman, A., Anshumali. (2018). Divergence analysis among the landraces of pumpkin (*Cucurbita moschata* Duch.) from Meghalaya, India.Proceedings National Conference on "Biogeochemical Cycles and Climate Change".10th to 11th August, IIT (ISM), Dhanbad, Jharkhand, India. pp. 1-9.

Published Abroad

Bhutia K D, Suresh C P, Pala N A, Shukla G. and Chakravarty S. 2018. Nutraceutical Potential of Some Wild Edible Fruits of Sikkim, Himalaya, India.*Ethno Med.* 12(1, 2): 106-112

Singh, A. K., **Chaurasiya, A. K.** and Mitra, S. (2018). Consumer acceptance of lactic acid fermented elephant foot yam pickle. *Chemical Science Review and Letters*.7(25) 373-378. (NAAS=5.21)

Published in India Books

Dr. A.K. Chaurasiya Singh, A. K., Chaurasiya, A. K. and Singh, A. K. 2019. Postharvest Management and Value Addition of Underutilized Fruit Crops. Published by: Daya Publishing House: A Division of Astral International

Pvt. Ltd. New Delhi –110 002, ISBN 978-93-88173-83-4 (HB).

Book Chapters

Prof. C.P. Suresh

Suresh C P, Singh D B and Bahadur V. 2019.Fruit Crop Production (Banana).*Agro India Publications, Allahabad,* pp.30-40.

Mani A and Suresh C P. 2018. Climate Resilient Fruit Crops - Possible Solution to Ensure Nutritional Security in Changing Climate Scenario Climate Smart Agriculture, Edition: 1st, Publisher: Parmar Publishing Depot, Editors: Dhermesh Vinayak Shedekar, Verma, Asmita Murumkar, Ritesh Sharma, Amarendra Kumar, Varsha Rani, Faisal Yusuf, Brajendra Parmar, pp.52-62.

Dr. Arindam Barman

Barman, A., Anshumali., Sangma, C.S., Barman, R.M. 2018. Recent Trends in Agricultural Biotechnology.New Delhi Publishers, New Delhi, India, ISBN: 978-93-86453-52-5.

Sangma, C.S., Sangma, O.K., Sangma, F.A., Barman, A. 2018. Scope of crop improvementin vegetables through biotechnological tools.In. BarmanA, Anshumali, Sangma C.S and Barman, R.M. (Eds), Recent Trends in Agricultural Biotechnology. New Delhi, India. New Delhi Publishers.ISBN: 978-93-86453-52-5, pp. 77-95. Thirumdasu, R.K., Chatterjee, R., Gajjela, S., Barman, A. 2018.Process, progress, pipeline and parturiency on the production of transgenic vegetables. In. BarmanA, Anshumali, Sangma, C.S and Barman, R.M. (Eds), Recent Trends in Agricultural Biotechnology. New Delhi, India. New Delhi Publishers.ISBN: 978-93-86453-52-5, p. 96-110.

Sangma, C.S., Momin, B., Barman, A. 2018. Application of Biofortification for crop improvement.In. BarmanA, Anshumali, Sangma C.S and Barman, R.M. (Eds), Recent Trends in Agricultural Biotechnology. New Delhi, India. New Delhi Publishers.ISBN: 978-93-86453-52-5, p. 111-121.

Marak, C.M., Barman, A., Sangma, C.S. 2018.Green Biotechnology: Potential and prospects to tackle future challenges. In. BarmanA, Anshumali, Sangma C.S and Barman, R.M. (Eds), Recent Trends in Agricultural Biotechnology. New Delhi, India. New Delhi Publishers.ISBN: 978-93-86453-52-5, p. 123-135.

Barman A, Marak, C.M., Barman, R.M., Sangma, C.S. 2018.Nutraceutical Properties of Legume Seeds and Their Impact on Human Health. In. Jose C. Jimenez-Lopez (Eds), Legume Seed Nutraceutical Research.London, UK. Intech Open Limited. DOI: 10.5772/intechopen.75158, ISBN: 978-1-78985-398-8, Print ISBN: 978-1-78985 397-1.

Ungu	ing (9)			
Sl.	Title of Project	PI/Co-PI	Funding Agency	Amount
No.				in Rupess
1.	Characterization of high value phytochemicals of anti-diabetic and immunomodulatory properties in North Eastern banana varieties	Suresh	Department of Biotechnology (DBT), New Delhi	56,30,000
2.	Value addition of banana (Musa.	0	Department of	78,00,000

Research Projects

	× 1	ana 1	D' 1 1	
	sp) and creating small scale	C.P. Suresh	Biotechnology	
	enterprises of Meghalaya tribal community though minimal		(DBT), New Delhi	
2	processing technology			
3.	Development of Low Cost Process			
	Technology for Extraction of	C N D		
	Oleoresin, Essential Oils and its	Co-PI: Dr.		22 22 000
	value added products from Tejpatta	A.K.	TRIFED, New Delhi	22,33,000
	(Cinnamomum tamala) and	Chaurasiya		
	creating Entrepreneurship for			
	Tribal people of Meghalaya	DI D	D i i i	12 01 000
4.	Molecular and Morphological	PI: Dr.	Department of	42,81,000
	Diversity Analysis of Cucurbits of	Arindam	Biotechnology, New	
	Garo Hills Meghalaya	Barman	Delhi	
5.	Phytochemical and molecular	PI: Dr.	DST (SERB), New	30,04,000
	characterization, bioprospecting of	Arindam	Delhi	
	genes, value addition and quality	Barman		
	enrichment of Bamboo through			
	plant tissue culture technique from			
	North East India			10.0000
6.	Utilization of novel	Mentor	DST, New Delhi	18,60,000
	biotechnological tools using agro-	Scientist:		
	waste products for livelihood	Dr. Arindam		
	improvement of farmers of	Barman		
-	Meghalaya India	DI D	D ()	70.02.000
7.	Isolation and characterization of	PI: Dr.	Department of	79,82,800
	bioactive components from	Arindam	Biotechnology, New	
	indigenous plants of NEH region	Barman	Delhi	
	for antiurolithiatic potential with			
	standardized phytochemical and			
0	pharmacological parameters		DOT (CEDD) M	22 42 5 (0
8.	Extraction and characterization of	Co- PI: Dr.	DST (SERB), New	23,42,560
	functional phytochemicals from	Arindam	Delhi	
	khoonphal (Haematocarpus	Barman		
	<i>validus</i>) of Meghalaya and its value			
	addition	DI D		27.05.000
9.	Cultivation of packing leaves plant	PI: Dr.	National Mission on	37,95,000
	for livelihood enhancement of ST	Arindam	Himalayan Studies	
	communities and promotion of	Barman	(NMHS)	
	packing leaves as substitute of			
	plastics in Meghalaya			

Academic Collaboration Prof. C.P. Suresh

Research collaboration with Dr. P. Suresh Kumar, Senior Scientist (Horticulture), National Research Centre for Banana, Trichy for the utilization of North-East Development Project fund (Rs. 1 Lakh) as North-East partner for the effective implementation of improvement of Banana cultivation in Garo Hills, Meghalaya through the distribution of Banana saplings and technical knowhow.

Research collaboration with Dr. Muthu M. Vaganan, Principal Scientist, Biochemistry, National Research Centre for Banana, Trichy as a project partner in the project entitled "Characterization of high value phytochemicals of anti-diabetic and immunomodulatory properties in North-Eastern Banana varieties".

7a. Society Building through Community Farming:

Instrumental for the award of "Best Banana Conservation Award" to Shri. Debabrat Rabha of Meghalaya by ICAR-National Research Centre for Banana, Tiruchirappalli on the occasion of 25th Foundation Day and Kisan Mela on 31st Aug. 2018 for the successful cultivation of One Lakh different banana varieties during the year 2017-18 through community farming by providing technical guidance and nutritional inputs.

Dr. Arindam Barman

Arindam Barman collaborated with Uttar Banga Krishi Viswavidalaya, Coochbehar, West Bengal on the DBT, New Delhi project entitled "Molecular and Morphological Diversity Analysis of Cucurbits of Garo Hills Meghalaya".

Arindam Barman collaborated with Chhatrapati Shahu Ji Maharaj University, Kanpur, Uttar Pradesh; North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences is a medical institute of India, Shillong, Meghalaya and The Energy and Research Institute (The North-Eastern Regional Centre), Guwahati on the DBT, New Delhi project entitled "Isolation and characterization of bioactive components from indigenous plants of NEH region for antiurolithiatic potential with standardized phytochemical and pharmacological parameters"

Arindam Barman collaborated with The Energy and Research Institute (The North-Eastern Regional Centre), Guwahati on the National Mission on Himalayan Studies (NMHS) project entitled "Cultivation of packing leaves plant for livelihood enhancement of ST communities and promotion of packing leaves as substitute of plastics in Meghalaya".

Honours/Awards/Recognitions Prof. C.P. Suresh

Conferred Senior Scientist of the Year (2018) award by Coochbehar Association for Cultivation of Agricultural Sciences, Uttar Banga Krishi Viswavidyalaya, West Bengal, India

DEPARTMENT OF RURAL DEVELOPMENT AND AGRICULTURAL PRODUCTION (TURA CAMPUS)

Head	: Dr. D. C. Kalita
Telephone	: 7005473148 (M)
E-mail	: himalidurga@gmail.com

Faculty :5			
Designation	Name and Qualification	Specialization	
Professor	Prof. D.C. Kalita, Ph.D. (Assam	Agricultural Economics	
	Agricultural University	_	
	Prof. S .C. Srivastava, Ph.D.	Economics	
	(Allahabad University)		
	Dr. B K Mishra, Ph.D. (Banaras Hindu	Dairy Technology	
Assistant Professor	University)		
	Dr. Binu Mathew, Ph.D.	Fruits and Orchard	
	(BidhanChandra	Management	
	KrishiViswavidyalaya, West Bengal)		
	Dr. Lolly S. Pereira, Ph.D.	Fruits and Orchard	
	(BidhanChandra	Management	
	KrishiViswavidyalaya, West Bengal)		

Thrust Area of Research:

Rural development, agronomy, horticulture and animal sciences. The department conducts studies on impact assessment, micro and decentralized planning, local governance, globalization and food security, indigenous knowledge systems in agriculture and allied sectors, conservation of bioresources, animal husbandry, dairy and food sciences, fruit and vegetables preservation, ethnobotanical studies and plant biotechnology.

Brief statement of academic activities:

Being multidisciplinary in nature the department undertakes both teaching and

of bio-	department is also offering M.Phil and Ph.D.
and food	Programme. In addition to this, the
servation,	department is also involved in carrying out
plant	consultancy, projects, seminars, trainings and
-	workshops etc.
	Enrolment Capacity in M.Sc. in 2018-19: 25
ties:	seats
ure the	
ning and	

research in the areas concerning rural

development, agronomy, horticulture and

animal sciences. The department provides

both theoretical and practical exposure to

M.Sc. (RDAP) students in various areas relating to the multidisciplinary P.G

programme within the stipulated time. The

Students'	Profile:

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-	Total
							Meghalaya	
M.Sc.	-	47	1	15	33	42	6	48
M.Phil	-		1	-	7	6	1	7
Ph.D.	3	14	7	7	17	14	10	24

Degree Awarded:

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-	Total
							Meghalaya	
M.Sc.	-	21	1	10	12	18	4	22
M.Phil	-	4	1	-	5	3	2	5
Ph.D.	-	2	-	-	2	-	2	2

Students Awarded Ph.D.: 2

Students Awarded M.Phil.: 4

Research Fellowships:

UGC Non-net	ICSSR Fellowship	Rajiv Gandhi National Fellowship
10	3	0

Educational Tour of Students:

Teacher In-charge: Prof. D. C. Kalita and Dr. B. K. Mishra *Places/Institution Visited*:Bidhan Chandra Krishi Vidyalaya, West Bengal *Duration of theTour:* 7 days *Purpose of Tour:* Exposure to agricultural techniques, processes, etc.

Courses Conducted:

Semester-I: General Aspects of Rural Development, Introductory Agriculture & Agronomy, Fundamentals of Horticulture, Introduction to Animal Husbandry and Poultry, Soil Conservation and Watershed Management, Computer Application.

Semester-II:Rural Development Approaches, Programmes and Policies, Package and Practices of field Crops, Plant propagation and Nursery Management, Dairy and livestock management, Farm Management, Organic Farming (Open Course)

Semester-III: Basic Statistics and Software Applications, Rural Development Organizations, Institutions and Administration, Production Technologies of Horticultural Crops-I, Principles and Practices of Dairy Management, Rural Development Planning and Project Management, Commercial Floriculture and Landscaping, Swine, Goat and Sheep Production, Dairy Farming and Rural Development, Economic Reforms and Rural Development

Semester-IV: Rural Marketing and Entrepreneurship development, Research Methods, Agricultural Surveying and levelling, Rural credit and Micro-finance, Production Technology of Horticultural Crops-II, Processing of Livestock Products, IEC and Rural development, Post Harvest Management of Horticultural Crops, Rabbit, Fishery and Poultry Production, Micro-enterprise and Non-Farm sector Development, Protected Cultivation of Horticultural Crops, Indigenous Dairy Products and Soya Milk.

M.Phil./Ph.D. Courses:

Research Methodology, General Aspects of Rural Development and Agricultural Production, Rural Development and Sustainable Change (Optional), Horticultural Production and Management (Optional), Animal Production and Management (Optional)

Seminar/Conferences/Workshops/Symposi a/Extension Programmes:

Dr. Lolly S. Pereira

1. Participated in the one day National workshop on "Maximal usage of foldscope to explore miniatures in the world" sponsored by DBT, Ministry ofScience and Technology, GOI, New Delhi and jointly organized by department of RDAP, NEHU, Tura campus AND Department of Biotechnology, Stella Maris College, Chennai, 10th September, 2018 at NEHU Tura campus.

2. Participated in the National short term training program on "Bioinformatics-

Dr. B. Mathew

Adela D Marak and B. Mathew (2019) Traditional healing methods for bone fracture practiced by the Garo tribe of Meghalaya. Paper presented in the "International Conference on Biodiversity, Environment and Human Health: Innovations and Emerging Trends" organized my Mizoram University, Aizawl on 12-14 2018. (ORAL)

Gaithoiliu Phaomie and B. Mathew (2019). Morphological characterization of Jackfruit (*Artocarpus heterophyllus* Lam.) in West Garo Hills district of Meghalaya. Paper presented in the "International Conference on Biodiversity, Environment and Human Health: Innovations and Emerging Trends organized my Mizoram University, Aizawl on 12-14 2018. (POSTER)

Kiran, C., Mathew, B and Pereira L.S. (2019) Micro propagation of Indian wild orange (*Citrus indica*, Tanaka). Presented in International conference on Trends in Plant Sciences and Agro biotechnology 2019 at IIT, Guwahati on February 14-16, 2019. Abstract page No. 226. (POSTER)

Participated in the one day National workshop on "Maximal usage of foldscope to explore miniatures in the world" sponsored by DBT, Ministry of Science and Technology, GOI, New Delhi and jointly organized by department of RDAP, NEHU, Tura campus AND Department of Biotechnology, Stella Maris College, Chennai 10th September, 2018 at NEHU Tura campus.

Participated in the National short term training program on "**Bioinformaticscomputation in wet lab**" sponsored by DBT, Ministry of Science and Technology, computation in wet lab" sponsored by DBT, Ministry ofScience and Technology, GOI, New Delhi and organized by BIF Centre, NEHU, Tura campus from 25th February to March 2nd, 2019.

GOI, New Delhi and organized by BIF Centre, NEHU, Tura campus from 25th March to March 2nd, 2019.

Publications:

Research Papers:

Pratibha Mohan and D.C. Kalita (2019): Impact of Bank finance on income and employment of composite fish culture in Sivasagar district of Assam. Transient, 8: 27-30

Birendra Kumar Mishra, Subrota Hati, Jonah Brahma, Maulik Patel, Sujit Das. Identification and Characterization of Yeast Strains Associated. With the Fermented Rice Beverages of Garo Hills, Meghalaya, India. International Journal of Current Microbiology and Applied Sciences. ISSN: 2319-7692. 2018:7(2): 3079-3090

Nalanda Bala Murugan and **Birendra Kumar Mishra**, Biswajit Paul. Antioxidant and antibacterial evaluation of medicinal plants used in the starter culture (Wanti) of fermented rice beverage in West Garo hills, Meghalaya. Journal of Pharmacognosy and Phytochemistry. ISSN: 2278-4136 2018:7(1):1669-1674

Bethsheba Basaiawmoit and B K Mishra. Standardization of Technology for the preparation of "Tungrymbai" using selected Lactobacillus strain, International Journal of Current Microbiology and Applied Sciences. ISSN: 2319-7692. 2018:7(3):2361-2372

Birendra Kumar Mishra, Subrota Hati, Sujit Das,Reena Kumari. Evaluation of probiotic potential of Lactobacillus isolated from traditional fermented foods of Garo Hills, Meghalaya. Reviews in Medical Microbiology.ISSN:0954139X.2018:29:120-128

Bala Murugan N, **Mishra B K** and Paul B. Antibacterial Activity of Indigenous Fermented Rice Beverage of West Garo Hills, Meghalaya, India. International Journal of Fermented Foods. ISSN: 2321-712X. 2018:7 (1) 39-44

Bethsheba Basaiawmoit and B K Mishra. Storage study of Pre-cooked and Post cooked Tungrymbai (Fermented Soy Food of Khasi Hills, Meghalaya. International Journal of Fermented Foods. ISSN: 2321-712X. 2018:7 (1) 39-44

Bethsheba Basaiawmoit, Birendra Kumar Mishra. Comparative study of Pre-cooked and Post cooked Tungrymbai: A fermented soya product of Meghalaya. International Journal of Food Science and Nutrition.ISSN:2455-4898.2018:3(2):129-132.

Upasana Deb and B.K. Mishra.Detection of Adulterants in selected spices Sold in Garo Hills, Meghalaya. Journal of Agroecology and Natural Resource Management.ISSN:2394-0786.2019: 6(2):44-47.

Upasana Deb and B.K. Mishra.Quality of milk sold in West Garo Hills, Meghalaya. International Journal of Science Environment and Technology.ISSN: 2278-3687(O).2019:8(2):358-364.

11.Phaomei G., Pereira L. S. and Mathew B. (2018) Variability of fruit characters of Jackfruit in Rongram block of West Garo Hills of Meghalaya. *Environment and Ecology*, 36(2A):611-615.

12. Sangma Y. A. S., Pereira L. S.and Dang J. C. (2018) In- vitro seed germination of

Citrus macroptera Mont. - An endangered species of Meghalaya. *Environment and Ecology*, 36(3):855-859.

13. Marak L.C., Pereira L. S., Chakraborty R. and Mazumdar D. (2018) Plant pathogens and soil microbes associated with Citrus indica in Nokrek Biosphere Reserve of Meghalaya. *Research on Crops*, 19(3): 486-491.

14. Sangma Y. A. S., Pereira L. S. and Dang J. C. (2018) Effect of media and culture environment on in- vitro seed germination of Citrus indica Tanaka. *Environment and Ecology*, 36(4):1-6.

1 5. Marak L.C., Pereira L. S., Chakraborty R. and Mazumdar D. (2019) Relationship between soil microbes and plant pathogens of *Baccaureafamiflora* in Nokrek Biosphere Reserve of Meghalaya.*Plant Archives*, 19(1):821-826.

K.D. Singh and B. Mathew (2019) Medicinal plants used by Garo Tribe of West

Garo Hills, Meghalaya. *Environment and Ecology*, 37(1A):187-193.

Phaomei, G., Pareira, L.S., Mathew, B (2018) Variability of fruit characters of

jackfruit in Rongram Block of West Garo Hills of Meghalaya. *Environment and Ecology* 36(2A): 611-615.

Das S., Dang JC and Mathew B. (2018) Surface sterilization protocol for in vitro propagation of *Artocarpus heterophyllus* Lam. *Environment and Ecology*, 36(4A):1176-1180.

Fund Received from Agencies including NEHU/UGC/DBT: Research Projects Completed:

Sl. No.	Title of the Project	PI / Co-PI	Funding Agency	Amount(Rs)
1	Bio-Prospecting Lactic Cultures from	Dr. B. K.	DBT, Govt. of	72,06,200
	North-Eastern Regions to Develop	Mishra(PI)	India	
	Functional Fermented Soya Foods with			
	Potential Health Benefits			

Ongoing Research Project:

1	Development of Technology for the preparation of fermented rice beverage in Meghalaya and evaluation of its functional properties		DBT, Govt. of India	89,75,000
2	In vitro mass multiplication and conservation of some endangered Citrus Species of NEH Region of India		DBT, Govt. of India	30,79,000
3.	Isolation and microscopical examination of lactic acid bacteria and their Probiotic potentials (in vitro study) from fermented foods of Garo hills, Meghalaya	Dr. B. K.Mishra (PI)	DBT, Govt. of India	8,00,000

Academic Collaborations:

The department has undertaken professional collaboration with NIRD, Hyderabad and ICAR Research complex for NEH Region, Barapani for practical exposure. The department has also developed networking with the local level NGOs where the 3rd and 4th semester students are acting as resource persons and interacting directly with the villagers. The department has also collaborated with Anand Agricultural University, Guirat: Bangha Uttar KrishiViswavidyalaya, Pundibari, West Bengal; ICAR Tripura Centre, ICAR Imphal and Amity University, Gurgaon under DBT Twinning Research Programme.

Field Trips:

Field trips are integral part of the course curriculum of the department and on an average students visit villages to interact with the beneficiaries of various government programmes or organizations/departments involved in implementation of rural development, horticulture and livestock development programmes. All these visits are assignment oriented and marks are awarded on the basis of the reports prepared by the students. As such all courses in-charge are involved in these visits

Other Activities:

Dr. L. S. Pereira is appointed as Cocoordinator of training programmes on "Integrated Farming cum Post harvest Management" in collaboration with Bethany Society, Tura, and Meghalaya State Skill Development Society (MSSDS), funded by Asian Development Bank (ADB) for a period of 1 year (2019-2020).

Dr. B. Mathew is appointed as Nodal Officer of Assessment and Certification of training programmes on "Integrated Farming cum Post harvest Management" in collaboration with Bethany Society, Tura, and Meghalaya State Skill Development Society (MSSDS), funded by Asian Development Bank (ADB) for a period of 1 year (2019-2020).

SCHOOL OF LIFE SCIENCES

 Dean
 : Prof. B.B.P. Gupta

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The School of Life Sciences comprises four departments, namely academic the Department of Zoology, the Department of Botany, the Department of Biochemistry, and the Department of Biotechnology and Bioinformatics. The School is a premier centre for post-graduate teaching and research in frontier areas of Biology. The major thrust areas of research include Immunology, Endocrinology, Reproductive Physiology, Microbiology, Enzymology, Medicinal Biochemistry, Biogerontology, Radiation Biology, Carcinogenesis and Cancer Biology, Adaptational Biochemistry, Brain disorders, Cardiovascular diseases, Diabetes, Genetics, Fish Biology, Helminthology, Physiology, Nitrogen Molecular Biology, Fixation. Protein Chemistry, Natural Products, Ecology, Forestry, Biodiversity, Taxonomy, and Biotechnology, etc. The Departments under the School of Life Sciences have developed one of the best scientific infrastructural facilities of the country for promoting higher studies and research in the North-Eastern Region. These Departments have procured state-of-the-art equipment like Next Generation Sequencers, DNA Sequencer, DNA Synthethizer, Confocal Microscope, Gamma Radiation Source, FACS, Real Time PCR Systems, Flameless Atomic Absorption, Nitrogen Analyser, Automatic Scintillation Analyser, etc. The Departments have attracted financial assistance for extramural

research from National funding agencies like Department of Biotechnology, Department of Science and Technology, Indian Council of Scientific and Industrial Research, Indian Council of Medical Research, Department of Atomic Energy, Indian Council of Agricultural Research, etc. The University Grants Commission, New Delhi has been financially supporting all the departments under its Special Assistance Programme as well as COSIST Programme. Further, these Departments have received financial support under the DST-FIST Programme. The Departments have attracted highly qualified faculty members, many of whom have been awarded National and International fellowships for their significant research contributions as well as for undertaking collaborative research projects in the country and abroad. A large number of students under the School qualify for various Eligibility Tests such as NET, GATE, SLET, etc., every year. The graduates and research students of the School are successful in obtaining employment in academic and research institutions in the country and abroad. The students, research scholars and faculty have easy access to wi-fi supported high speed internet connectivity. The School has developed a Central Instrumentation Facility, a Seminar Hall and a Conference Room for promoting research and academic activities.

DEPARTMENT OF BIOCHEMISTRY

Head	: Prof. A.K. Singh
Telephone	: 0364-2722101
E-mail	: aksingh_nehu@yahoo.co.in

Faculty: 10

Designation	Name and Qualification	Specialization		
	Dr. A.N. Rai, MSc (BHU), Ph.D.	Plant-Microbe Interactions,		
	(Dundee, Scotland)	Cyanobacteria		
Professor	Dr.R. Sharma, MSc &Ph.D. (BHU)	Biochemistry of Aging		
	Dr. D. N. Sharan, MSa & Dh. D. (INILI)	Radiation and Cancer		
	Dr.R.N. Sharan, MSc &Ph.D. (JNU)	Molecular Biology		
		Medical Biochemistry,		
	Dr. D. Syiem, MSc &Ph.D. (NEHU)	Enzymology, Natural		
		Product		
	Dr.A.K. Singh, MSc (DDUGU),	Molecular Microbial		
	Ph.D. (HCU)	Ecology		
	Dr. M. B. Syiem, MSc &Ph.D.	Cyanobacterial Diversity,		
	(NEHU)	Cyanobacterial Biofertilizer		
	(NEIIO)	and Bioremediation		
Associate		Cancer and Radiation		
Professor	Dr.L. Kma, MSc &Ph.D. (NEHU)	Countermeasures		
	Dr. P.K. Ambasht, MSc &Ph.D.	Enzymology: Enzyme		
	(BHU)	Purification, Kinetics and		
Assistant	(BHC)	Immobilization		
Professor	Dr.S. Bhan, MSc &Ph.D. (BHU)	Medical Biochemistry,		
	DI.S. Bildii, MSC &FILD. (BIIC)	Nano-Biomaterials		
	Dr.T. Tripathi, MSc (UOM), Ph.D.	Molecular and Structural		
	(JNU)	Biophysics		

Thrust Areas of Research

Medical Biochemistry (Development and Aging, Diabetes, Medicinal Plants, Natural Products, Molecular Biology of Radiation Damage/Repair and Carcinogenesis, Neurobiochemistry, Nano-biomaterial), Microbial Biochemistry (Plant-Microbe Interaction, Cyanobacterial Diversity and Cyanobacterial Nitrogen Fixation, biofertilizer and Bioremediation), Protein Chemistry (Enzymology: Purification, kinetics and immobilization; Molecular and Structural Biophysics).

Brief Statement of Academic Activities

The Department admitted twenty-two students for MSc and six students for Ph.D. programme. During this period, seventeen students have successfully completed their MSc and six students have been awarded the Ph.D. degree. Research scholars participated in various seminar/workshops/conference/symposia and gave poster or oral presentation. Faculty members delivered guest lectures in different institutions, presented research papers and

invited talks different delivered in seminar/workshops/conference/symposia in India and abroad. Department of Biochemistry hosted Prof. G.B.N. Chainy from Dept. Biotechnology, Utkal University, Bhubaneswar, Odisha under DBT-NER Visiting Research Professorship (VRP) till 31.07.2018. He engaged some M.Sc. Practical classes (BCH-C-204). Scientists from other institutions visited Department of Biochemistry and delivered talks.

Dr. Debajyoti Dutta, Dept. Biochemistry, University of Canada delivered a talk titled "A detergent free study of plant Na^+/H^+ antiporter SOS1" (February 20, 2019).

Dr. Kelath Murali Manoj Biotechnology and Healthcare Division, PSG Institute of Advanced Studies, Peelamedu, Tamil Nadu delivered a talk titled "Why is oxygen the elixir of life? How does cyanide kills so quickly?" (March 8, 2019).

The Department of Biochemistry is being supported by UGC SAP-DRS III.

Students' Profile

Enrolment Capacity: MSc-22 Ph.D. - Variable

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non- Meghalaya	Total
MSc	6	16	-	18	-	4	19	3	22
Ph.D.	1	5	1	4	-	1	3	3	6

Degrees Awarded

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya		Total
MSc	2	15	-	14	-	3	15	Meghalaya 2	17
Ph.D.	3	3	1	4	-	1	2	4	6

Students Awarded Ph.D. Degree : 6 Placement of Students - 2 Research Fellowship: 17

CSIR- UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	National Fellowship for Higher Education	DRS	DST Inspire
2	12	-	-	2	1

Courses Conducted

Postgraduate: MSc *Semester I* Core courses BCH-C-101Chemistry and Biomolecules; BCH-C-102 Enzymology; BCH-C-103 Intermediary metabolism; BCH-C-104 Practical. Semester II Core courses BCH-C-202 Physiological Chemistry; BCH-C-204 Practical. Open courses BCH-O-201 Techniques in Biochemistry; BCH-O-203 Microbiology.

Semester III

Core courses

BCH-C-301 Genetics; BCH-C-302 Medical Biochemistry; BCH-C-305 Practical. Open courses BCH-O-303 Environmental Biochemistry;

BCH-O-304 Nutritional and Clinical

Biochemistry

Biochemistry

Semester-IV

Core courses BCH-C-401 Molecular Biology; BCH-C-402 Immunology; BCH-C-403 Bioenergetics; BCH-C-404 Project.

Ph.D. courses

SLS-Ph.D.-01Research Methodology; BCH-Ph.D.-02 Topics in Biochemistry; BCH-PP-03 Review of Literature and Seminar.

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes

Organized

Contemporary Research in Medical and Microbial Biochemistry (CRMMB-2019), March 26, 2019, Department of Biochemistry, NEHU, Shillong.Chairman: Prof. R. Sharma, CoordinatorUGC DRS III; Organizing Secretary: Dr. S. Bhan. Attended

Prof. A.N. Rai

Delivered a lecture on the theme "Environment management" at the Conference *Harmony 2018* at Ranchi (October 29-31, 2018).

Delivered a lecture on the theme "Academic leadership and management of academic institutions" at *Academic Leadership Program for VCs, PVCs, Deans and Directors*at Gaya (December 13, 2018).

Prof. R. Sharma

Delivered a lecture titled "Modulation of IGF-1 signaling cascade by dietaryrestriction

in brain of aging mice" at the International Conference on Neuroscience and 36th Annual Meeting of Indian Academy of Neurosciencesat Department of Zoology, Institute of Science, BHU, Varanasi (October 29-31, 2018).

Prof. R.N. Sharan

Delivered invited and plenary talks titled

"India and tobacco - rethinking the issues and solutions" in the International conference, theGlobal Forum on Nicotine - 2018 (GNF-2018) at Warsaw (Poland)(June 14-17, 2018); "Risk Communication - A scientist's perception" in Plenary Panel Discussion # 3in an International conference, the Global Tobacco & Nicotine Forum - 2018 (GTNF-2018)titled Mapping the Future - Where next with innovation and harm reduction? London. UK (September 11-14. 2018);"Tobacco and Harm Minimization: An Indian Perspective" at Harm Reduction Seminar æ Round Table at India International Centre, New Delhi (September 27, 2018);"India's Challenges on Tobacco Harm Reduction & Cessation" at Discussion meeting on Tobacco Harm Reduction & Cessation at Hall Willow, India Habitat Centre, New Delhi through Video Conferencing (September29, 2018); "Tobacco, nicotine and harm minimization: Perspectives from science" in Second Asian Forum Harm Reduction (AHRF) international seminarat Manila (Philippines) (November 15, 2018); "ADP-ribose polymer adduct (ARPA): A novel epigenetic biomarker of human cancer" at International Conference on Molecular Basis of Disease & Therapy (ICMBDT-2019) at Department of Biotechnology, Central University of (March Rajasthan, Ajmer 8-10. 2019);"Tobacco, Nicotine and Harm Minimization - Perceptions & Realities: An Indian Study" at SecondHarm Reduction Seminar å Round *Table*at Vivanta Ambassador, New Delhi (March 15, 2019).

Invited as International Expert among four experts from Italy, UK, Greece and Indiaby US-India Strategic Partnership Forum (USISPF) in *First and Second Harm Reduction Seminar & Round Table* at India International Centre, New Delhi (September 27, 2018) and at Vivanta Ambassador, New Delhi (March 15, 2019).

Panellist

A Satellite Meeting titled *Howmight lessons learned from the UK and other progressive THR regulatory frameworks inform THR in Africa and other LMICs?* under the auspices of Africa Harm Reduction Alliance (AHRA) at Warsaw (Poland)(June 14, 2018).

Chaired a scientific session and delivered a talk titled "Molecular Radiobiology: Biomarker Discovery for precision & personalized radiotherapy" in the National seminar titled *Current Trends in Biotechnology Research (CTBR-2019)* at Department of Biotechnology, Assam University, Silchar (March 19-20, 2019).

Prof. D. Syiem

Chaired a scientific session in the seminar Contemporary Research in Medical and Microbial Biochemistry (CRMMB-2019), at Department of Biochemistry, NEHU, Shillong (March 26, 2019).

Prof. A.K. Singh

Delivered an invited talk titled

"Kinetics of petroleum hydrocarbon degradation" at *National Symposium on* "Current Trends and Future Prospects in Plant Science Research" at Department of Botany, Centre of advanced study, Institute of Science, Banaras Hindu University, Varanasi - 221005 (February 1-3, 2019).

Chaired a scientific session in the seminar Contemporary Research in Medical and Microbial Biochemistry (CRMMB-2019), at Department of Biochemistry, NEHU, Shillong (March 26, 2019).

Dr. L. Kma

Presented a paper titled "Vicenin-2 acts as a radiosensitizer of the non-small cell lung cancer by lowering Akt Expression" in International *symposium on tumor microenvironment and cancer prevention & therapeutics*, School of Life Sciences, Jawaharlal Nehru University, New Delhi (February 8-9, 2019).

Chaired a scientific session in the seminar Contemporary Research in Medical and Microbial Biochemistry (CRMMB-2019), at Department of Biochemistry, NEHU, Shillong (March 26, 2019).

Dr. T. Tripathi

Attended and delivered invited/plenary lecture titled "Linked thiol-based redox metabolism of parasitic liver flukes: Novel pathway for drug discovery" in the

XLII All India Cell Biology Conference and 2nd International Conference on Trends in Cell and Molecular Biology in BITS Pilani K.K. Birla Goa Campus, Goa (December 21-23. 2018); National Conference on Structural Bioinformatics and Computer Aided Drug Discovery (SBCAAD-2019) at the Department of Bioinformatics, Alagappa University, Karaikudi (February 12-15, International Conference 2019); on Molecular Basis of Disease and Therapeutics (ICMBDT-2019)"at the Central University 09-10, of Rajasthan, Aimer (March 2019);Conference on "Recent Advancements Biochemical Engineering in and Biotechnology (RABEB-2019)" at IIT, BHU, Varanasi (March 15-16, 2019).

Attended and delivered invited/plenary lecture titled "Unusual linked thiol-based redox metabolism of parasitic helminths: Novel pathway for drug discovery"in the *International Congress on Parasitology* (ICOPA-2018) held in Daegu, South Korea (August 19-24, 2018);"Unusual linked thiolbased redox metabolism of parasitic flukes: Novel pathway for drug discovery"in the International Conference on *Life Science Research & its Interface with Engineering* and Allied Sciences (LSRIEAS-2018) in BITS, Pilani (November 01-03, 2018); "Structural insights into natural compounds as inhibitors of redox metabolism of the liver fluke Fasciola gigantica: Novel pathway for drug discovery"in the National Conference onTranslational Drug discovery: Current trends and future interventionsat Assam Downtown University (November 10-11, 2018).

Chaired a scientific session in the National Conference on *Structural Bioinformatics and Computer Aided Drug Discovery (SBCAAD-*2019) held in the Department of Bioinformatics, Alagappa University, Karaikudi (February 12-13, 2019).

Attended and presented a poster titled "Characterization of the functionally important drug target proteins from the liver fluke *Fasciola gigantica*" in the *Young Investigators Meet-2019* at Radisson Blu Hotel, Guwahati (March 6-8, 2019).

Publications

Published in India

Ahad, R.I.A., Syiem, M.B. (2018). Ameloriating potential of Ca^{2+} on Cd^{2+} induced toxicity on carbon assimilation in the cyanobacterium *Nostoc muscorum* Meg 1. *Research Journal of Life Sciences, Bioinformatics, Pharmaceuticaland Chemical Sciences,* 4(2): 322-337.

Ahad, R.I.A., Kynshi, B.L., Syiem, M.B. (2018). Protective role of Ca^{2+} towards Cu^{2+} induced toxicity on photosynthetic pigments, morphology and ultra-structures of the cyanobacterium *Nostoc muscorum* Meg 1. *Biosciences, Biotechnology Research Asia*, 15(3): 591-601.

Ahad, R.I.A., Syiem, M.B. (2018). Copperinduced morphological, physiological and biochemical responses in the cyanobacterium *Nostoc muscorum* Meg 1. *Nature Environment &Pollution Technology*,17(4): 1077-1086.

Bora, J., Sahariah, P., Patar, A.K., Syiem, D., Bhan, S. (2018). Attenuation of diabetic hepatopathy in alloxan-induced diabetic mice by methanolic flower extract of *Phlogacanthus thyrsiflorus* Nees. *Journal of Applied Pharmaceutical* Science, 8(7): 114-120.

Bora, J., Syiem, D., Bhan, S. (2018). Methanolic flower extract of *Phlogacanthus thyrsiflorus* Nees attenuates diabetic nephropathy in alloxan-induced diabetic mice. *Asian Journal of Pharmaceutical and Clinical Research*, 11(7): 113-116.

Chetri, P.B., Shukla, R., Pakharukova, M.Y., Mordvinov, V.A., Tripathi, T. (2018).Optimization of soluble expression, purification and preliminary characterization of cytochrome P450 of the liver fluke *Opisthorchis felineus.Journal of Protein and Proteomics*, 9(2): 91-99.

Lanong, S., Kharshandi, F., Kayang, H., Syiem, D. (2018). Report on isolation of plant growth promoting bacteria (PGPB) from the gut of lesser horseshoe bat collected from the north-eastern part of India.*International Journal of Advanced Scientific Research and Management*, 3(12): 78-89.

Sahariah, P., Bora, J., Patar, A. K., Syiem, D., Bhan, S. (2018). Effect of Dillenia indica against oxidative stress-induced L. cardiomyopathy on alloxan-induced diabetes mice model. Asian Journal of Pharmaceutical and Clinical Research, 11(8): 445-449.

Sahariah, P., Bora, J., Syiem, D., Bhan, S. (2018). Evaluation of antihyperglycemic and antioxidative effects of *Dillenia indica* L. using *in vivo* approaches. *International*

Journal of Pharmaceutical Sciences and Research, 9(11): 4551-4561.

Published Abroad

Ahad, R.I.A., Syiem, M.B. (2018). Copper and cadmium induced toxicity on the cyanobacterium *Nostoc muscorum* Meg 1: A comparative study. *EurAsian Journal of Biosciences*, 12(2): 333-345.

Baruah, T. J., Sharan R. N., Kma, L. (2018). Vicenin-2: A potential radiosensitizer of nonsmall cell lung cancer cells. *Molecular Biology Reports*,45(5): 1219-1225.

Chetri, P.B., Shukla, R., Tripathi, T. (2019). Identification and characterization of glyceraldehyde 3-phosphate dehydrogenase from *Fasciola gigantica*. *Parasitology Research*,118(3): 861-872.

Dhasmana, D., Singh, A., Shukla, R., Tripathi, T., Garg, N. (2018) Targeting nucleotide binding domain of Pglycoprotein for reversal of multi drug resistance in cancer. *Scientific Reports*, 8: Article No. 11973.

Goswami, S., Ahad, R.I.A., Syiem, M.B. (2019). Expression of copper toxicity in the rice-field

cyanobacterium *Anabaena oryzae* Ind4.*EurA* sian Journal of Biosciences, 13(1): 57-67.

Hadem, I. K. H., Majaw, T., Kharbuli, B., Sharma, R. (2019). Beneficial effects of dietary restriction in aging brain. *Journal of Chemical Neuroanatomy*, 95: 123-133.

Joshi, V., Upadhyay, A., Chhangani, D., Amanullah, A., Sharan, R. N., Mishra, A. (2018). Gp78 involvement in cellular proliferation: Can act as a promising modulator for cell cycle regulatory proteins? *Journal of Cellular Physiology*, 233(10): 6352-6368.

Kalita, P., Shukla, H., Gadhave, K., Giri, R., Tripathi, T. (2018). Role of the glutaredoxin domain and FAD in the stabilization of thioredoxin glutathione reductase. *Archives of Biochemistry and Biophysics*,656: 38-45. Majaw, S., Challam, S K., Syiem, D. (2018). Effect of *Potentilla fulgens* L. on selected enzyme activities and altered tissue morphology in diabetic mice. *Journal of Morphological Sciences*, 35(3):153-160.

Marbaniang, C., Kma, L. (2018). Dysregulation of glucose metabolism by oncogenes and tumor suppressors in cancer cells. *Asian Pacific Journal of Cancer Prevention*, 19(9): 2377-2390.

Namdev, P., Lyngdoh, D.L., Dar, H.Y., Chaurasiya, S.K., Srivastava, R., Tripathi, T. Anupam, R. (2019). Intrinsically disordered HTLV-1 p30 protein: Experimental and computational evidence. *AIDS Research and Human Retrovirus*, doi: 10.1089/AID.2018.0196.

Patar, A.K., Sharma, A., Syiem D., Bhan, S. (2018). "Chlorophyllin supplementation modulates hyperglycemia-induced oxidative stress and apoptosis in liver of streptozotocin-administered mice". *BioFactors*, 44(5):418-430.

Phukan, T., Rai, A.N., Syiem, M.B. (2018). Dose dependent variance in UV-C radiation induced effects on carbon and nitrogen metabolism in the cyanobacterium Nostoc muscorum Meg1. *Ecotoxicology and Environmental Safety*, 155: 171-179.

Sahoo, M. K., Kumar, J. E., Sinha, B., Marbaniang, M., Sharan, R. N. (2018). Comparative studies of mineralization and detoxification of Mordant Black 17 in aqueous solution by UV light induced Mn^+/H_2O_2 and $Mn^+/S_2O_8^{2-}$ systems. *Water Science and Technology*, 77(12): 2917-2928.

Shav-Tal, Y., Tripathi, T.(2018).Yeast and human nuclear pore complexes: Not so similar after all. *Trends in Cell Biology*, 28(8): 589-591.

Shukla, H., Khan, S.R., Shukla, R., Krishnan, M.Y., Akhtar, M.S., Tripathi, T. (2018). Alternate pathway to ascorbate induced inhibition of *Mycobacterium tuberculosis*. *Tuberculosis*, 111: 161-169.

Shukla, R., Shukla, H., Tripathi, T. (2019). Structural and energetic understanding of novel natural inhibitors of *Mycobacterium tuberculosis* malate synthase. *Journal of Cellular Biochemistry*, 120(2): 2469-2482.

Sonkar, A., Lyngdoh, D., Shukla, R., Shukla, H., Tripathi, T., Ahmed, S. (2018). Point mutation A394E in the central intrinsic disordered region of Rna14 leads to chromosomal instability in fission yeast. *International Journal of Biological Macromolecules*, 119: 785-791.

Sonkar, A., Shukla, H., Shukla, R., Kalita, J., Tripathi, T. (2019). Unfolding of *Acinetobacter baumannii* MurA proceeds through a metastable intermediate: A combined spectroscopic and computational investigation. *International Journal of Biological Macromolecules*, 126: 941-951.

Suttiprapa, S., Sotillo, J., Smout, M., Suyapoh, W., Chaiyade, S., Tripathi, T., Laha, T., Loukas, A. (2018). *Opisthorchis viverrini* proteome and host-parasite interactions. *Advances in Parasitology*,102: 45-72.

Tripathi, T., Chattopadhyay, K. (2019). Interaction of α -synuclein with ATP synthase: Switching role from physiological to pathological. *ACS Chemical Neuroscience*, 10(1): 16-17.

Tripathi, T., Kalita, J. (2019). Abnormal microtubule dynamics impair the nuclearcytoplasmic transport in dementia.*ACS Chemical Neuroscience*, 10(3): 1133-1134.

Tripathi, T., Kalita, P. (2019). Synergistic effect of amyloid- β and tau disrupts neural circuits. *ACS Chemical Neuroscience*,10(3): 1129-1130.

Tripathi, T, Prakash, J., Shav-Tal, Y. (2019) Phospho-tau impairs nuclear-cytoplasmic transport. *ACS Chemical Neuroscience*10(1): 36-38.

Verma, S., Kumar, A., Tripathi, T., Kumar, A. (2018). Muscarinic and nicotinic acetylcholine receptor agonists: Current scenario in Alzheimer's disease therapy. *Journal of Pharmacy and Pharmacology*, 70(6): 985-993.

Vijayakumar, R., Shukla, R., Shukla, H., Tripathi, T. (2018). Structure-function studies of the asparaginyl tRNA synthetase from *Fasciola gigantica*: Understanding the role of catalytic and non-catalytic domains. *Biochemical Journal*, 475(21): 3377-3391.

Books/Book Chapters/Proceedings

Kma, L., editor. (2018). *Trends in Experimental Biology, Vol 3*. Excel India Publishers, New Delhi, ISBN: 978-93-88237-07-9.

Marbaniang, C., Kma, L. (2018). Eukaryotic transcription of protein-coding genes. In: *Trends in Experimental Biology, Vol 3.* L. Kma (Ed.), Excel India Publishers, New Delhi, Chapter 3, p. 37-49.

Mishra, A.K., Tiwari, D.N., Rai, A.N., editors (2019). *Cyanobacteria: From Basic Science to Applications*. Academic Press, London, Oxford (UK) & Cambridge, San Diego (USA). ISBN: 978-01-2814-667-5.

Rai, A.N., editor (2018). *Handbook of Symbiotic Cyanobacteria.E-Book*.CRC Press, Boca Raton, Florida. ISBN: 978-13-5108-808-4.

Rai, A.N., Singh, A.K., Syiem, M.B. (2019). Plant growth promoting abilities in cyanobacteria. In: *Cyanobacteria: From Basic Science to Applications*. A.K. Mishra, D.N. Tiwari and A.N. Rai (Eds.). Academic Press, London, Oxford (UK) & Cambridge, San Diego (USA). Chapter 23, p.459-476.

Sharma, R. (2018). Studies on biomodulators of glucocorticoid receptor in mice. In: *Research Highlights of Extra Mural Research Grant (Life Sciences 2010-2015)*, Science and Engineering Research Board, pp. 88-90, DST, New Delhi.

Shukla, H., Tripathi, T. (2017). Studying parasite gene function and interaction through ribozymes and riboswitches design mechanism. In *Synthetic Biology: Omics tools and their applications* (S. Singh, ed.)

pp. 51-74, Springer Singapore. [ISBN 978- 981-10-8692-2.]

Funds Received from Agencies including NEHU/UGC NEHU: Rs.19,03,000

UGC SAP DRS: Recurring Rs.13,00,000

Research Projects

New Projects: NIL

Ongoing:3

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)
Screening of human Brucellosis infection in Northeast regions using point of care immunological and molecular tools.	Dr. Surya Bhan	Department of Biotechnology, New Delhi	39.06 Lac
Enhancing Clinical Efficacy of Radiotherapy by Personalized and Precision Radiotherapy (PPRT) Utilizing the Biomarkers of Molecular Biodosimetry	Prof. R. N. Sharan	International Atomic Energy Agency (IAEA), Vienna	40 Lac (Euro 50,000) (approx.)
Deciphering The Molecular Mechanisms Governing The Direct $A\beta$ Aggregation Inhibition With The Serum Protein- Transferrin: Implications for Alzheimer's Disease	Dr. T. Tripathi	Department of Biotechnology, New Delhi	42 Lac

Completed during Year:1

Title of Project	Pl/Co-Pl	Funding Agency	Amount
			(Rupees)
Interactions of mRNA Export	Dr. T.Tripathi	UGC- Israel Science	2,10,000,00/
Factors and Nuclear Pores		Foundation	
Characterized and Quantified by			
Biochemistry, Biophysics And			
High-Resolution Imaging			

Academic Collaborations

Prof. R.N. Sharan

Established research collaboration with Dr. B. Barooah Cancer Institute (BBCI),

Guwahati for collaborative clinical research to test the response of 2 genetic biomarkers in patients undergoing radio- and chemotherapy under an ongoing IAEA-CRP (research contract # 22218). A formal MOU was signed between Prof. R.N. Sharan as PI of the project and Director, B. Barooah Cancer Institute, Guwahati for exchange of tissues/materials from patients (August 3, 2018).

Dr. T. Tripathi

Prof. Yaron Shav Tal, Bar Ilan University, Israel, UGC-ISF Project Grant; Prof. Viatcheslav Mordvinov, Institute of Cytology and Genetics, Russian Academy of Sciences, Novosibirsk, Russia, DST-Russian Foundation Project Grant; Prof. Banchob Sripa, Khon Kaen University, Khon Kaen, Thailand; Dr. Rajanish Giri, IIT Mandi, DBT Project Grant.

Prof. G.B.N. Chainy

Department of Biotechnology, Utkal University, Bhubaneswar, Odisha collaborated research in the Department of Biochemistry under *DBT-NER Visiting Research Professorship* (VRP) (April 1 to July 3, 2018).

Honours/Awards/Recognitions

Prof. A.N. Rai

Elected President of National Environmentalists' Association, 2018-2019. Chairman

Institute of Advanced Study in Science and Technology Foundation Day Awards Presentation, Guwahati (November 3, 2018); Selection Committee, National Institute of Abiotic Stress Management, ICAR, Baramati (March 8, 2019).

Member Selection Committee

Central Agriculture University (Imphal), Barapani (March 11, 2019).

Member Governing Council

Indian Institute of Governance and Leadership, 2019; Institute of Advanced Study in Science and Technology (IASST) Guest of Honour at NAAC, Bangaluru for the Seminar on "Managing Quality in Higher Education" (August 9, 2018).

Chief Guest at National Manuscript Mission "Basic Workshop on Manuscriptology and Paleography" at B N Mandal University, Madhepura (August 16-17, 2018).

"Ghazipur Gaurav Samman" from "Sahitya Chetna Samaj, Ghazipur (UP) at their 34th Annual Meet (January 13, 2019).

Prof. R. Sharma

Member

Technical Expert Committee (TEC) on Chronic Disease Biology, DBT, GOI, New Delhi; Task Force on Star Colleges, DBT, GOI, New Delhi; Technical Expert Committee (TEC) for Medical Biotechnology-I, DBT, GOI, New Delhi; Selection Committee of DBT-RA National Programme in Biotechnology& Life Sciences, IISc, Bangalore.

Chaired

DBT Task Force Meeting of Neurosciences on August 24, 2018 at NewDelhi; Symposium III on Neurobiology of Development and aging and Oral session Neuroendocrinology VIII on during International Conference. on Neurosciences and36th Annual Meeting of Indian Academy Neurosciences at Department of Zoology, Institute of Science, BHU, Varanasi (October 29-31, 2018).

Prof. R.N. Sharan

Indian Patent # 302099(application # 839/KOL/2013 under ITC) granted on an energy efficient, economically viable and environmentally friendly 'green' technology for treatment and bio-detoxification of azo dye contaminated wastewater effluent from industries to a team comprising Prof. R.N. Sharan along with Dr. M. K. Sahoo and Mr. Bhauk Sinha (Dept. of Chemistry, NEHU) on October 10, 2018 (Reference date July 12, 2013).

Member

Executive Committee for the NE Zone of the National Council of Science Museum (NCSM)(2018-20);Steering Committee of DBT-NER for HRD (2018-20);Institutional Bio-Safety Committee (IBSC) of NEHU.

UGC nominee for the Advisory Committee of DRS-II (SAP) program sectioned to Department of Biotechnology, Assam University, Silchar (2018-23).

Mentor of 3 researchers (2 in India and 1 in UK) on their individual research in the domain of harm reduction science (2018-19) sponsored by Knowledge, Action & Change (KAC), UK.

Prof. D. Syiem

Member

State Level Expert Appraisal Committee (SEAC) for Environmental Impact Assessment, Govt. of Meghalaya, (Nov, 2018 to Nov 2021); Board of Studies Royal Global University, Guwahati, Assam. (2019-2020).

Prof. M.B. Syiem

Member

National Assessment and Accreditation Council (NAAC), Bangalore, India.

Dr. T. Tripathi

Young Scientist Award (2019) by the Indian Society of Chemists and Biologists; Malviya Memorial Award (2017) from the Biotech Research Society of India.

Elected as Member of Royal Society of Biology, London in 2019; Joint Secretary of the Bioinformatics and Drug Discovery Society, India.

Other Activities Prof. A.N. Rai

Chairman, NAAC team for Sree Siddaganga College of Arts, Science and Commerce, Tumkur (Karnataka), (August 10-11, 2018); Chaireda Session at India-Egypt workshop on *Agricultural Biotechnology* held at NEHU, Shillong, (September 10-12, 2018).

Delivered a talk "Teaching with a human face" as Resource Person at Orientation Programme for College Teachers at St. Anthony's College Shillong (April 20, 2018); "Managing quality in higher education" at National Assessment and Accreditation Council, Bangaluru (August 9, 2018).

Attended Governing Council meeting of Institute of Advanced Study in Science and Technology, DST, New Delhi (September15, 2018).

Prof. R. Sharma

Attended

DBT Task Force Meeting of *Neurosciences* at NewDelhi(April 19-20. 2018); DBT Task Force Meeting of Star Colleges (May 8-9, 2018) at NewDelhi; CSIR-HRDG Pre-Exam Meeting in Life Sciences at New Delhi (May 26-29, 2018); Attended CSIR-HRDG Review Meeting at New Delhi (June 15-17, 2018); CSIR-HRDG Post-Exam Meeting in Life Sciences at New Delhi (October 24, 2018);DBT TEC Meeting on Chronic Disease Biology atNew Delhi (January 17-18, 2019);DBT Task Force Meeting on Star Colleges at NewDelhi (January 22-23, 2019).

Delivered Lectures

"Why do we age: evolutionary and biological reasons" and "Indian Academies: excellent platform for promotion of Science and Technology" at HRDC, Gauhati University (July 13, 2018).

Prof. R.N. Sharan

Visited Institute of Neuroscience & Medicine (INM), Forshungszentrum Jülich in Germany for discussion on the collaborative research (June 18-19, 2018).

Attended

First Steering committeemeeting of the DBT-NER at its headquarters in New Delhi (February 6, 2019); SecondExecutive committeemeeting ofNSCM at NIPER, Guwahati (March 29, 2019); Advisory Committee meeting of SAP-II program at Department of Biotechnology, Assam University, Silchar (March 19, 2019).

Invited to visit Southamptonin United Kingdom for interaction with scientists engaged in Harm Reduction Research and for advice on the ongoing research (June 20-22, 2018).

Prof. D. Syiem

Delivered lectures in HRDC NEHU Shillong on "Nutrition and Diabetes" in:

UGC-HRDC Summer School in Basic Science (July 5,9, 2018); UGC-HRDC 44th Orientation (July 24,25, 2018) and UGC-HRDC 47th Orientation Programme (March 12, 2019).

Delivered lectures in HRDC NEHU Shillong on "Nutrition and its impact on health" in: UGC-HRDC Refresher course in Tribal studies (October 12, 2018); UGC-HRDC. 46th Orientation Programme (February 14, 2019).

Prof. A.K. Singh

Visited as NAAC Peer Team member Swargiya Dadasheb Kalmegh Smruti Dental College & Hospital, Nagpur (August 23-24, 2018); Phulsing Naik Mahavidyalaya, Pusad, Yavatmal, (October 08-09, 2018).

Prof. M.B.Syiem

Subject Expert in the Selection Committee Meeting

Department of Biochemistry, St. Edmund's College, Shillong, (July 4, 2018); Department of Nutrition, Union Christian College, Umiam, Meghalaya (July11, 2018).

Delivered lectures

"Biochemical Calculations" in Summer School on Skill development workshop on value addition to bioresources through microbial techniques at Department of Botany, NEHU, Shillong (June 20, 2018); "Basics of Bio-energetics 1" and "Basics of Bio-energetics 2" at UGC-HRDC Summer School in Basic Science, NEHU Shillong (July 6, 2018).

Convener and chairperson Board of Studies, Microbiology, North-Eastern Hill University, Shillong.

Attended

Experts' conclave as Subject Expert for Biochemistry syllabus development in Royal Global University, Guwahati, Assam (June 29, 2018); NAAC Assessors' Orientation Programme for women in New Delhi (September 20, 2018).

Visit as NAAC Peer Team member/ Coordinator

Shri Nagpur Gujarati Mandal's Vrajlal Manilal Vasant Commerce, JaydeoShankar Manishankar Thakar Arts and Jashibhai Jijibhai Patel Science College, Wardhman Nagar, Central Avenue, Nagpur (October 15-16, 2018); Maharshi Dayadand University, Rohtak, (March 5-7, 2019).

Reviewer in journals

Journal of cleaner production; International Biodeterioration & Biodegradation; Journal of Hazardous material, Environment monitoring and assessment, Journal of Phytoremediation.

Dr. L. Kma

Deliveredan invited Talk "Smart City: A Socio-Economic & Political Prospective" at St. Mary's College, Shillong (March 4, 2019).

Reviewer in journals

International Journal of Radiation Biology; Journal of Radiation Research; Cell Communication and Signaling; International Journal of Public Health and Epidemiology Research

Dr. P.K. Ambasht

Delivered series of invited lectures on "Mechanism of Enzyme Action and regulation" in School of Biotechnology, Institute of Science, BHU, Varanasi (March 13-14, 2019).

Member

Academic Council NEHU (2018-2021); NEHUTA Election Committee (2018); National Advisory Committee of Indian Science Congress Association, Shillong Chapter.

Attended

Meeting of Security Council, NEHU as CRTWC representative (2018).

Reviewer

Journal of Plant Biochemistry and Biotechnology, Journal of Proteins and Proteomics, Recent Patents on Food Nutrition and Agriculture.

Dr. S. Bhan

Elected as Treasurer in Faculty Club Management Committee (FCMC 2018).

Dr. T. Tripathi

Academic Editor of PLoS ONE; Editorial Board Member of Scientific Reports (Nature Publishing Group).

Delivered an invited lecture titled "Dynamic thiol-based redox metabolism in the liver flukes offers novel targets for drug development" in the Department of Biotechnology, Utkal University, Bhubaneshwar (April 17, 2018); "Role of structurally distant amino acids in modulating the structure and activity of M. tuberculosis isocitrate lyase: Road for novel drugs"Department anti-tubercular of Chemistry, Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel(July 17, 2018).

Reviewer of the Journals

Biochemical Journal, The Journal of Physical Chemistry, Protein Science, Parasitology Research, Biophysical Chemistry, Journal of Theoretical Biology, Infection **Genetics** and Evolution, Parasitology International, BMC Genomics, PLoS ONE, Molecular and Cellular Biochemistry, Biochimie, Biochimica et Biophysica Acta, RSC Advances, Bioconjugate

Chemistry, Bioscience Reports, Current Pharmaceutical Design, Current Topics in Medicinal Chemistry, Progress in Biochemistry and Biophysics, Journal of Chemical Information and Modeling, Journal of Cellular Physiology, Scientific Reports, International Journal **Biological** of Macromolecules, Journal of Biomolecular Structure & Dynamics, Applied Microbiology and Biotechnology.

DEPARTMENT OF BIOTECHNOLOGY AND BIOINFORMATICS

Head	: Professor Kripamoy Aguan
Telephone	: 0364-272-2401/2402/2420
E-mail	: hodbthbic@nehu.ac.in/biotechnologynehu@gmail.com

Faculty :	:7	
Designation	Name and Qualification	Specialization
	Dr. Anupam Chatterjee M.Sc. (Burdwan), Ph. D. (BHU)	Genetics & Molecular Biology
	Dr. S. Rama Rao M.Sc.&Ph.D. (Jodhpur Univ.)	Plant Cellular and Molecular Genetics
Professor	Dr. KripamoyAguan M.Sc. (IARI), Ph.D.(Univ.of Birmingham)	Genetics & Molecular Biology
	Dr. Santa Ram Joshi M.Sc. & Ph.D. (NEHU)	Microbiology
	Dr. (Mrs.) Suktilang Majaw M.Sc.(Tezpur), Ph.D. (NEHU)	Biochemistry
Assistant Professor	Dr. Atanu Bhattacharjee M.Sc.(NEHU), M.Sc. (Annamalai Univ.),Ph.D. (NEHU)	Bioinformatics & Microbiology
	Dr. (Mrs.) Neha Chaurasia M.Sc.& Ph.D. (BHU)	Environmental Biotechnology

Thrust Areas of Research

Molecular Genetics, Microbiology.

Brief Statement of Academic Activities

The Department of Biotechnology andBioinformatics started in 2005. It offers Post Graduate (M.Sc. and Ph.D.) academic programmes. North-Eastern Region of India is the hotspot of biodiversity which rich in flora and fauna. The department envisions for the development of bio-resources, its exploration, conservation and sustainable utilization coupled with the need of trained manpower in Biotechnology and Bioinformatics network. Therefore, the Department of Biotechnology andBioinformatics is providing training and environment with the latest research information in their respective fields and bringing them closer to the rest of the world

as far as scientific advancements are concerned. Based on the overall academic objectives of the Department and its faculty's potential, the Department was considered for financial support for "M.Sc. Biotechnology" by the Department of Biotechnology, Government of India, New Delhi. The Department has taken pride assixbatches of M.Sc. students have successfully completed their M.Sc. degree and some of them have already joined in different IITs, IMTECH, AIIMS, IISc, and others for their Ph.D. degree, while many others have joined different National Biotech Companies. While giving importance to the global scenario, the Department also lays emphasis on regional priorities in research and development incorporated into its programme. This programme is intended to develop, acquire,

and maintain the modern state-of-the art in teaching, training, research, databases, and software development related to biologically rich resources of the North-EasternRegion of India, which could ultimately contribute towards socio-economic development of the tribal people of the region. The Department has been receiving adequate extramuralfinancial support from various Central Government agencies, which include Special Assistance program of UGC-DRS-I (SAP), phase I and II programs of DST-FIST, besides regular support from DBT for teaching and research programs. The additional extramural support in the form of projects come from DBT, ICAR, DST, UGC, CSIR, Ministry of Environment & Forest etc., which are received by faculty members.

Students' Profile Enrolment Capacity: M.Sc. -24; Ph.D. – Variable

Degree	SC	OBC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	-	4	15	5	10	14	11	13	24
Ph.D.	-	-	3	1	-	-	3	1	4

Degrees Awarded

Degree	SC	OBC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	-	1	10	9	10	10	07	13	20
Ph.D.	-	-	-	3	1	2	1	2	03

Students Awarded Ph.D. Degree : 3 Placement of Students - 10 Research fellowship

CSIR- UGC- NET/ GATE	UGC- Non- NET	National Fellowship for ST student	ICPR Fellowship	Meritorious Maulana Azad Fellowship	DST	ICMR
04 / 04	08	01	-	-	02	02

Courses Conducted Postgraduate

- Semester-I: Cell Biology & Genetics, Biomolecules, and Microbiology.
- Semester-II: Molecular Biology, Immunology, and Microbial Technology.
- Semester-III: Animal Cell Science & Technology, Genetic Engineering, and Plant
- Biotechnology.

Semester-IV: Bioprocess Engineering &Technology, Environmental Biotechnology,

Molecular Genetics, and Applied Microbiology.

The department offers open courses on Microbial Technology, Applied Molecular Genetics, Bioinformatics in Molecular and cellular Biology under CBCS in the M.Sc. 2^{nd} and 3^{rd} semesters.

Ph.D. Courses

Ph. D Course Work (One Semester):

Research Methodology, (School Level), Biotechnology in Medicine, Agriculture and Microbiology, (Department Level), Review of literature (Department Level).

Seminars/Conferences/Symposia/Extensio nProgrammes etc.

Organized

National Conference on "Recent Advances in Applied Biological Sciences", 4-5 May, 2018. Organizing Secretary- Prof. A. Chatterjeeand treasurer - Dr. S. Majaw (Supported by UGC-SAP& DST, New Delhi).

Attended

Prof. A. Chatterjee

Delivered an Invited Lecture in the Symposium on "Glimpses of Science from North-East India" held at Symbiosis Ishanya Cultural & Educational Centre, Pune; 31st Aug., 2018. Title of my talk: Oral and Esophageal Cancer in North-East India **Continues in Epidemic Proportions:** Evaluation of Carcinogenic Risks and Its Early Detection" Delivered Key-note Address in the UGC-Sponsored National Conference on "Contemporary Excitement in New Biology, 30th and 31st October, 2018 held at Department of Zoology, Nagaland University, Nagaland. Title of my talk: Oral and Esophageal Cancer in North-East India **Continues in Epidemic Proportions:** Evaluation of Carcinogenic Risks and Its Early Detection" Delivered an Invited talk in 44th Annual Conference in ISHG, Theme on "Genomics for Health and Precision Medicine", 30th Jan to 1st Feb., 2019 at NIBMG, Kylani, W. Bengal. Title of my talk: Induction of

genomic instability by altering the expression

of mitotic checkpoint genes in areca-nut induced carcinogenesis Delivered an Invited talk in International Conference on RAICMHAS, 2nd Feb.to 4th Feb.2019 at Brainware University, Barasat, Kolkata, W. Bengal. Title of my talk: Oral and Esophageal Cancer in North-East India Continues in Epidemic Proportions: Evaluation of Carcinogenic Risks and Its Early Detection"

Prof. K. Aguan

Workshop on MOOC's, e-content Development and Open Educational Resources held in HRDC, NEHU, Shillong at HRDC, NEHU, Shillong in May 2019.

Prof. S.R. Joshi

Prof. S. R. Joshi gave an invited Talk on" Traditionally fermented food microbiome and lactic acid bacteria: Need for relook at some probiotics isolates for their safe consumption" during a conference cum Workshop on "Host-Microbe Interactions" organised by Institute of Advanced Studies in Science and Technology, Guwahati, Assam on 2nd Feb 2019.

Prof. S.R. Joshi delivered an invited talk on "Probiotic bacteria and health management from the perspectives of *Enterococcus* prevalent in traditionally fermented products" during the National symposium on" Probiotics and Functional Foods on Health Management" organised by Tezpur University, Assam (India) on 4th March 2019.

Dr. S. Majaw

Workshop on Foldscope at Department of Biomedical Engineering, NEHU, Shillong on 12th July 2018.

Short-term Course in SPSS at HRDC, NEHU, Shillong from 29th Oct-03rd Nov 2018.

Workshop on MOOC's, e-content Development and Open Educational Resources to be held in HRDC, NEHU, Shillong at HRDC, NEHU, Shillong from 11th-16th March 2019.

Presented a paper at BioCARe Conclave organized on 8th and 9th March, 2019 at the National Institute of Plant Genome Research, (NIPGR), New Delhi.

Publications

A. Chatterjee, Sanjay Gupta (2018) The multifaceted role of glutathione S-transferases in cancer. *Cancer Letter*, 433: 33-42.

B Bose, D Tripathy, A. Chatterjee, P Tandon, S Kumaria (2018) Secondary metabolite profiling, cytotoxicity, antiinflammatory potential and in vitro inhibitory activities of Nardostachys jatamansi on key enzymes linked to hyperglycemia, hypertension and cognitive disorders. *Phytomedicine*, 55: 58-69.

A. Gurung, D. Tripathy, A. Chatterjee, A Bhatacharjee (2019) Bioprospection of antiinflammatory phyto- chemicals suggest Rutaecarpine and Quinine as promising 15-Lipoxygenase inhibitors. *J of Cellular Biochemistry*120: 13598-13613.

AK Behera, Manoj Kumar, MK Shanmugam, A. Bhattacharya, A Bhat, M. Vasudevan, KS Gopinath, A Mihiyuddin, A Chatterjee, G Swethi, TK Kundu. (2019) Functional interplay between YY1 and CARM1 promotes oral carcinogenesis. *Oncotarget*, 10: 3709-3724.

Sanjoy Kumar Sheet, Bhaskar Sen, Sumit Kumar Patra, Monosh Rabha, Kripamoy Aguan, and Snehadrinarayan Khatua (2018). Aggregation-Induced Emission-Active Ruthenium(II) Complex of 4,7-Dichloro Phenanthroline for Selective Luminescent Detection and Ribosomal RNA Imaging. *ACS Applied Materials & Interfaces*, 10(17): 14356-14366.

Sanjoy Kumar Sheet, BhaskarSen, Kripamoy Aguanand Snehadrinarayan Khatua (2018). A cationic organoiridium(III) complex-based AIEgen for selective light-up detection of rRNA and nucleolar staining. *Dalton Transaction* 47: 11477-11490.

SK Patra, SK Sheet, B Sen, K Aguan, DR Roy, S Khatua (2017). Highly Sensitive Bifunctional Probe for Colorimetric Cyanide and Fluorometric H2S Detection and Bioimaging: Spontaneous Resolution, Aggregation, and Multicolor Fluorescence of Bisulfide Adduct. *The Journal of Organic Chemistry* 82 (19), 10234-10246.

SK Sheet, B Sen, R Thounaojam, K Aguan, S Khatua (2017). Ruthenium (II) Complex-Based Luminescent Bifunctional Probe for Ag+ and Phosphate Ions: Ag+-Assisted Detection and Imaging of rRNA. *Inorganic chemistry* 56 (3), 1249-1263.

P Baruah, G Basumatary, SO Yesylevskyy, K Aguan, G Bez, S Mitra (2018). Novel coumarin derivatives as potent acetylcholinesterase inhibitors: insight into efficacy, mode and site of inhibition. *Journal* of *Biomolecular Structure and Dynamics* 37 (7), 1750-1765.

Sobhani R, Mitra S and Aguan K (2018). Terminalia chebula: A promising indigenous phyto-therapeutics for Alzheimer's disease. *Pharmacognosy Magazine* 14 (57), 465.

Paul, S., Bhagobaty, R.K., Nihalani, M.C., Joshi, S.R. (2019). Are endophytic fungi a feasible option as biofuel nanofactories? *International Journal of Scientific Research and Review*, 7(5): 1112-1118.

Nongkhlaw, M., Joshi, S.R. (2019). Molecular insight into the expression of metal transporter genes in *Chryseobacterium* sp. PMSZPI isolated from uranium deposit. *PLoS ONE*, 14(5): e0216995. https://doi.org/10.1371/journal.

pone.0216995

Baul, T.S.B., Nongsiej, K., Ka-ot, A.L., Joshi, S.R., Leon, I.R., Hopfi, H. (2019). Tweaking the affinity of aryl-substituted diazosalicylato- and pyridine ligands towards Zn (II) and its neighbors in the periodic system of the elements, Cu (II) and Cd (II), and their antimicrobial activity. *Applied Organometallic Chemistry*, e4905. https://doi.org/10.1002/aoc.4905

Gurung, A.B., Pamay, P., Tripathy, D., Biswas, K., Chatterjee, A., Joshi, S.R., Bhattacharjee, A. (2019). Bioprospection of anti-inflammatory phytochemicals suggests rutaecarpine and quinine as the promising 15-lipoxygenase inhibitors. *Journal of Cellular Biochemistry*, DOI: 10.1002/jcb.28634

Biswas, K., Sharma, P., Joshi, S.R. (2019). Co-occurrence of antibiotic resistance and virulence determinants in enterococci isolated from traditionally fermented fish products. *Journal of Global Antimicrobial Resistance*, 17: 79-83. DOI https://doi.org/10.1016/j.jgar.2018.11.012

Joshi, S.R., Nongbri, E.L., Biswas, K. (2018). Incidence of virulence determinants and antibiotic resistance in *Enterococcus* species of dairy origin. *Newsletter-Probiotic Association of India*, 15: 9-10

Bhattacherjee, D., Sheet, S.K., Khatua, S., Biswas, K., Joshi, S.R., Myrboh, B. (2018). A reusable magnetic nickel nanoparticle based catalyst for the aqueous synthesis of diverse heterocycles and their evaluation as potential anti-bacterial agent. Bioorganic & Medicinal Chemistry, 26: 5018-28. https://doi.org/10.1016/j.bmc.2018.08.033 Banerjee, S., Joshi, S.R., Mandal, T., Halder, G. (2018). Application of zirconium caged activated biochar alginate beads towards deionization of Cr(VI) laden water in a fixed bed column reactor. Journal of *Environmental Chemical Engineering*, 6(4): 4018-4029. DOI: 10.1016/j.jece.2018.06.011 Baul, T.S., Nongsiej, K., Biswas, K., Joshi, S.R., Hopfi, H. (2018). Pyridine aided progression from amorphous to crystalline bis([5-(aryl)-1-diazenyl] quinolin-8-olato) zinc(II) compounds - Solution and solidstate structural characterization, nanoparticle and antibacterial activity. formation

Inorganica Chimica Acta, DOI: 10.1016/j.ica.2018.06.049

Upadhyay, S., Khyriem, A.B., Bhattacharya, P., Bhattacharjee, A., Joshi, S.R. (2018). High-level aminoglycoside resistance in *Acinetobacter baumannii* recovered from intensive care unit patients in Northeastern India. *Indian Journal of Medical Microbiology*, 36: 43-48

Paul, S., Bhagobaty, R.K., Nihalani, M.C., Joshi, S.R. (2018). Diversity and lipid content analysis of oleaginous endophytic fungi associated with biodiesel plants. *Sydowia*, 70: 27-35. DOI 10.12905/0380.sydowia70-2018-0027

Majaw S, Challam SK, Syiem D. Effect of *Potentilla fulgens* L. on selected enzyme activities and altered tissue morphology in diabetic mice. Journal of Morphological Sciences, 2018: DOI https://doi.org/10.1055/s-0038-1669934.

Gurung, A. B., Mayengbam, B., & Bhattacharjee, A. (2018). Discovery of novel drug candidates for inhibition of soluble epoxide hydrolase of arachidonic acid cascade pathway implicated in atherosclerosis. *Computational biology and chemistry*, 74, 1-11.

Gurung, A. B., & Bhattacharjee, A. (2018). Met117 oxidation leads to enhanced flexibility of cardiovascular biomarkerlipoprotein-associated phospholipase A2 and reduced substrate binding affinity with platelet-activating factor. *International journal of biological macromolecules*, 112, 831-840.

Chakrabhavi Dhananjaya Mohan, Hanumantharayappa Bharathkumar, Atanu Bhattacharjee, Peter E. Lobie, Amudha Deivasigamani, Kam Man Hui, Basappa, (2018). N-Substituted Pyrido-1,4-Oxazin-3-Ones Induce Apoptosis of Hepatocellular Carcinoma Cells by Targeting NF-κB Signaling Pathway.*Frontiers in Pharmacology*, 9:1-15 Arun B. Gurung, Atanu Bhattacharjee (2018). Impact of a non-synonymous Q281R polymorphism on structure of human Lipoprotein-Associated Phospholipase A₂ (Lp-PLA₂). Journal of Cellular Biochemistry, 119(8): 7009-7021

Mandal M. K. and Chaurasia N. (2018) Molecular characterization of freshwater microalgae and nutritional exploration to enhance their lipid yield. 3Biotech, 8(5):238. doi: 10.1007/s13205-018-1248-5.

Books/Book Chapters/Proceedings Prof. S.R.Joshi

Bhattacharjee, K., Joshi, S.R. (2018). Lithic bacteria, a lesser known group in biomining arena. In: *Microbial Cell Factories*. Deepansh Sharma and Baljeet Singh Saharan (Eds.). Taylor & Francis Group, CRC Press, Boca Raton, Florida, USA. pp 51-68

Joshi, S.R., Kalita, D. (2018). Biological, chemical and nanosorption pproaches in Remediation of metal wastes. *In:* Remediation Measures for Radioactively Contaminated Areas. D.K. Gupta and A. Voronina (Eds.) Springer Nature, Switzerland. Pp. 93-112.

Borthakur, M. and Joshi, S.R. (2019). Wild Mushrooms as Functional Foods: The Significance of Inherent Perilous Metabolites. *In:* New and Future Developments in Microbial Biotechnology and Bioengineering. A. Pandey (Ed.). DOI: https://doi.org/10.1016/B978-0-444-63504-4.00001-3 Lyngdoh J, Hussain MI, Majaw S, Kalita HK. An intrusion detection method using artificial immune system approach. In: Informatics Advanced for Computing Research, Luhach AK, Singh D, Hsiung PA, Hawari KBG, Lingras P, Singh PK (Editors), Springer Nature Singapore Pte Ltd 2019, Singapore pp 379-387 (part of the Communications Computer in and Information Science book series CCIS, volume 956).

Dr. Atanu Bhattacharjee

Velmurugan, D & H. V. Kutumbarao, N & Vijayan, Viswanathan & Bhattacharjee, Atanu. (2019). Structure-Based Drug Design with a Special Emphasis on Herbal Extracts. In book: Structural Bioinformatics: Applications in Preclinical Drug Discovery Process, Springer publication, pp.271-305

Dr. Neha Chaurasia

Chattarjee A., Mandal M.K. and Chaurasia, N.(2019)Use of Microbial Bio-Fertilizers Agro-Environmental technology in Sustainability.singh In New and Future Developments in Microbial Biotechnology and Bioengineering, Elsevier, pp. Barauh P and Chaurasia, N (2019) A recent perspective bioremediation on of agrochemicals by microalgae: aspects and strategies"chapter for the book"Environmental and Agricultural Microbiology: Advances and Applications" Elsevier, pp.

Dr. S. Majaw

Funds Received from Agencies including NEHU/UGC

Non- Plan: DBT- M.Sc. Teaching: DST-FIST : DBT (Project): DST (Project): Min. of Forest & Env.: Rs.10.50 lakhs Rs. 24.25925 lakhs Rs.52.00 lakhs Rs. 91.91092 lakhs Rs. 44.60 lakhs Rs. 21.492 lakhs

Research Projects:

New Projects

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rs. in lakhs)
Virtual National Oral Cancer Institute	Prof. A. Chatterjee	DBT, New Delhi	58,45,000

Ongoing projects			
Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rs.in lakhs)
Study of antiobesity property of root extract of <i>Potentilla fulgens</i> , a known anti-diabetic medicinal plant available in Meghalaya	Dr. S. Majaw	SERB,DST, New Delhi	8,00,000
Elucidation of mechanism of action and anti-cancer activity of novel iminoenamine derivatives to treat androgen independent prostate cancer		DBT, New Delhi	11,14,000

Completed during Year

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rs.) in lakhs
Association between the loss of tumor suppressor genes and deregulation of Mad2 expression in raw areca-nut induced cancer samples	Prof. A. Chatterjee	DST, New Delhi	36,60,000
Metagenomic and Functional Characterization of Soy-based Fermented Foods of North-eastern Region	Prof. S.R. Joshi	DBT, New Delhi	12,64,000
Technology Development, Management and Lon-term Monitoring of Shifting cultivation and Coal mining in North-Eastern India	Prof. S.R. Joshi	National Mission on Himalayan Studies, Ministry of Environment, Forests and Climate Change, Govt. of India	21,492
Establishment of Culture- CollectionCentre in North-East Region of India Phase II	Prof. S.R. Joshi	DBT, New Delhi	3,58,092
Study the effect of <i>Potentilla fulgens</i> L. extract on the AMP-activated protein kinase) AMPK pathway- regulated metabolism in induced- diabetic mice	Dr. Suktilang Majaw (PI) & Prof. D. Syiem (co-PI)	DBT, New Delhi	6,10,000

Academic Collaborations: (Mention the name of collaborator (s), collaborating Institution (s) and the title of the project)

Prof. K. Aguan collaborated with Prof. S. Mitra, Dept. Of chemistry, NEHU: Activity-: Various project collaborations to answer biological questions with a deeper chemistry approaches.

Prof. K. Aguan collaborated with Dr. S. Khatua, Dept. Of Chemistry, NEHU; Activity-: Collaboration to study and develop several inorganic molecules that have intrinsic fluorescence properties and harness the features for differentially labelling cell organelles

Prof. S.R. Joshi collaborated with Dr. Kanthi Kiran Kondepudi, Dr Mahendra Bishnoi and Dr Shrikant Mantri: National Agri-Food Biotechnology Institute, Mohali, Punjab (Project: Metagenomic and Functional Characterization of Soy-based Fermented Foods of Northeastern Region)

Prof. S.R. Joshi collaborated with Prof. kanwaljit Chopra: University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh (Project: Metagenomic and Functional Characterization of Soy-based Fermented Foods of Northeastern Region)

Dr. Atanu Bhattacharjee collaborated with Prof. S. Kabilan, Annamalai University and Prof. M. Ramanathan from PSG College of Pharmacy on an ongoing DBT sponsored research project: "Elucidation of mechanism of action and anti-cancer activity of novel iminoenamine derivatives to treat androgen independent prostate cancer"

Dr. Atanu Bhattacharjee collaborated with Dr. Sanjay Banerjee from DDRC, Gurgaon and Dr. N. Talukdar from IASST, Guwahati on an DBT sponsored research project "Integrating herbal medicine of NER with contemporary approaches to develop therapeutic strategies for metabolic syndrome"

Honours/Awards/Recognitions

Prof. S.R. Joshi, Member of Board of Studies in Ayurveda and Homoeopathy, North East Institute of Ayurveda and Homoeopathy, Shillong.

Prof. S.R. Joshi, Member of Task Force of Meghalaya State Curriculum Framework, 2019

Prof. S.R. Joshi, Advisory Member of Star College scheme, St. Edmund's College, Shillong

Dr. S. Majaw is a Member of Kendriya Vidyalaya Management Committee, Eastern Air Command, Upper Shillong

Other Activities

Prof. A. Chatterjee attended "India-UK Cancer Research Initiative Researchers' Summit" at The Lalit Hotel, New Delhi, 14th to 16th Nov., 2018. Organized by Department of Biotechnology, Ministry of Science & Technology, India.

Prof. A. Chatterjee attended Two DBT- Task Forces meeting at New Delhi

Prof. S.R. Joshi delivered a talk on "Local Resources and Teaching Strategies" during the 44th Orientation Programme(General) at UGC-HRDC, NEHU on 10th July 2018.

Prof. S.R. Joshi delivered a talk on "Teaching and challenges in Institutions of Higher Learning" during the 45th Orientaion Programme(General) at UGC-HRDC, NEHU on 30th August 2018.

Prof. S.R. Joshi delivered a talk on "Resource Utilization in Teaching" during the 46th Orientaion Programme at UGC-HRDC, NEHU on 4th Feb 2019.

Prof. S.R. Joshi delivered a talk on "Teaching at Institutions of Higher Learning: Challeneges and opportunities" during the 47th Orientation Programme at UGC-HRDC, NEHU on 21st Feb 2019.

Dr. S. MajawObserver for CBSE-CTET examination held on 09/12/2018 at K.V. E.A.C. Upper Shillong, 793009.

Dr. Atanu Bhattacharjee andArun Bahadur Gurung (RS) presented an abstruct- Met117 oxidation leads to enhanced flexibility of cardiovascular biomarker- lipoproteinassociated phospholipase A₂ and reduced substrate binding affinity with plateletactivating factor. At: International conference on Advanced Chemical and Structural Biology. 19-21st February 2019 organised by: PRIST (Deemed to be University), Thanjavur, Tamil Nadu. Dr. Neha Chaurasia presented an abstract titled "NaCl supplementation enhances the lipid content of native microalgae of Meghalaya compared to pH variation in culture" at the National conf. "Emerging Trends in Production of Biofuels and their Impact on Global Economy" held on 27-28 July 2018 at CHRIST (Deemed to be University), Bangalore, Karnataka, India

Reviewers for journals of national/international repute -

Prof. K. Aguan Journal of Toxicology in vitro journal of complementary and alternative medicine Elsevier journal of traditional and complementary medicine

Dr. Atanu Bhattacharjee Reviewer of scientific manuscripts for JBSD journal

Dr. S. Majaw Journal of Traditional and Complementary Medicine; Journal of Applied Pharmaceutical Science.

DEPARTMENT OF BOTANY

Head	: Prof. Uma Shankar
Telephone	: 0364-272 2201/2202
E-mail	: hodbot@nehu.ac.in

Faculty	:11	
Designation	Name and Qualification	Specialization
Professor	Dr.N.K. Chrungoo, M.Sc. & Ph.D. (Kashmir)	Plant Physiology and Plant
		Molecular Biology
	Dr.M.S. Dkhar, M.Sc. Ph.D .(NEHU)	Microbial Ecology and Microbiology
	Dr.N. Venugopal*, M.Sc. Ph.D. (Madras)	Plant Reproductive Biology and
		Anatomy
	Dr.S.K. Barik**, M.Sc. (Behrampur) & Ph.D.	Forest Ecology and Management,
	(NEHU)	Biodiversity Conservation and EIA
	Dr.Uma Shankar, M.Sc. (Agra) & Ph.D.	Ecology, Biosystematics,
	(NEHU)	Biodiversity Conservation
	Dr.H. Kayang, M.Sc. , Ph.D. (NEHU)	Microbial Ecology and Microbiology
	Dr.S. Kumaria, M.Sc., Ph.D. (NEHU)	Plant Biotechnology and Physiology
	Dr.Y. Kumar, M.Sc. (Agra), Ph.D. (NEHU)	Plant Taxonomy and Biosystematics
1	Dr.L. Kharlukhi, M.Sc. (NEHU), Ph.D.	Seed Physiology
	(IARI)	
Associate	Dr.P. Ramanujam, M.Sc., Ph.D. (NEHU)	Plant Ecology, Algal Ecology
Professor		
Assistant	Dr.M.C. Das, M.Sc., Ph.D. (NEHU)	Plant Biotechnology
Professor		

* Retired in May 2018; **On lien since November 04, 2016 (as Director, NBRI, Lucknow)

Thrust Areas of Research: Plant and Microbial Diversity: Assessment, Characterization, Bioprospection, and Conservation.

Brief Statement of Academic Activities

The Department was upgraded to the status of Centre for Advanced Studies in Botany in the year 2006 and completed successfully Phase II UGC Centre for Advanced Studies in Botany in March, 2017. The Department offers two M.Sc. Programmes, *viz.*, M.Sc. (Botany) and M.Sc. (Plant Molecular Biology), and Ph.D. Programme in Botany. The Department introduced the revised syllabi for both the courses in M.Sc. Degree Programmes with the beginning of the session in 2018. Faculty members are actively involved in diverse areas of research in plant sciences and are operating several research projects funded by various national and international agencies. The Department is currently coordinating four multi-institutional research projects. Eleven individual research projects are also going on. The Department received a research grant of 177.875 lakhs (Rupees one hundred seventy-seven lakhs eighty seven thousand five hundred only) from different funding agencies (including non-plan grant from the UGC) during 2018–19. The faculty members were invited to deliver lectures at important national and international events, such as symposia and seminars as keynote and lead speakers.

Besides regular teaching and research programmes, the Department organised several workshops and training programmes. Five students were offered student fellowship within the Department and three traineeships were awarded to Post-M.Sc. students. Eight students of the Department availed internships at various universities/ laboratories in the country. Dr. Seraj Ahmad, Dr. Prasenjit Paul, Dr. Diana Kharkongor, Dr. Macmillan Nongkhlaw, Dr. Niraj Singh and Dr. Soumya Prasad taught some courses as Guest Faculty during the year. The faculty, staff and students received a number of awards and fellowships during the year.

Thirty one students were admitted to M.Sc. in Botany and ten students to M.Sc. in Plant Molecular Biology during the year. Twenty-nine students were awarded the M.Sc. degree in Botany and seven students were awarded the M.Sc. degree in Plant Molecular Biology. One student was admitted to the Ph.D. programme. Seven students were awarded the Ph.D. degree during the year. The research scholars participated in workshops and training programmes at universities/institutions, and also presented papers at national and international seminars/symposia in India and abroad. Seven students qualified NET, one student qualified GATE and two students qualified SLET during the year. A total of 55 research papers were published in peer-reviewed scientific journals of national and international repute and conference proceedings.

Ms. Sheryl Lanong, a research scholar from the Department of Microbiology, Pondicherry University worked under Prof. H. Kayang from December, 2017 to June, 2018. Several distinguished scientists delivered talks on different topics during the year. These included Prof. Sanjay Kapoor, Department of Plant Molecular Biology, University of Delhi; Dr. Pon Lead Researcher Samuel, at Corteva Agroscience, Agriculture Division of Dow Dupont, Department of Botany, Johnston, Iowa, USA; Prof. S.K. Sopory, ICGEB, New Delhi; Prof. M.S. Hanafy, Professor of Biotechnology, National Research Centre, Cairo; Prof. M.S. Sheshasayee, UAS, Bengaluru; Prof. Ashwani Pareekh, JNU, New Delhi; Prof. Prabhajeet Singh, Guru Nanak Dev University, Amritsar;

Dr. Sulakshana Jain, DST, New Delhi; Prof. (Dr.) Mohamed Zaghloul, Faculty of Science, Suez Canal University, Egypt; Dr. T.R. Sharma, National Agricultural Biotechnology Institute, Mohali; Prof. A.N. Lahiri Majumder, Bose Institute, Kolkata; Dr. Wricha Tyagi, CAU, Meghalaya; Prof. Anjaan Banerjee, IISER, Pune; Dr. Ayam Gangarani Devi, ICAR Complex for NER, Agartala; Prof. (Dr.) Nour Shafik El-Gendy, Prof. of Petroleum and Environmental Biotech., Egyptian Petroleum Research Institute, Cairo, Egypt; Dr. Sharmila Chattopadhyay, IICB, Kolkatta; Prof. Desouky Abdel Halem, Genetic Engineering and Biotechnology Research Institute, City of Scientific Research and Technological Applications, Alexandria, Egypt; Prof. Datta Madamwar, Sardar Patel University, Gujarat; Prof. I.S. Thakur, JNU, New Delhi; Prof. Utpal Nath, IISc., Bengaluru; Prof. Arun Goyal, Department of Bioscience & Bioengineering, IIT, Guwahati; Prof. Kannan Pakshirajan, Department of Bioscience & Bioengineering, IIT, Guwahati; Dr. Aijaz A. Wani, University of Kashmir, Srinagar, and Dr. Subhra Chakraborty, NIPGR, New Delhi. Six representatives of pharmaceutical companies from Hyderabad visited the Department on 25th July 2018 with regard to Lakadong Turmeric mission and to understand the plan of action of the department in contributing to the Mission Lakadong. They were: Mr. P.V. Rao, IRS, Chairman, Goldmargh Venture Capital; Dr. Jagadeesh Rangisetty, CEO and Managing Director, Biophore; Dr. Manik Reddy Pullagurla, Chief Scientific Officer, Biophore; Dr. Amar Venkatarangan, President, Biophore Nutraceuticals; Dr. Venkata Rangaiah Setlem, Chief Executive Officer in Oman LLC and Mr. B.Vijay Bhasker, MD, Inavir Pharmatech.

Prof. N. Venugopal and Mrs. Bharati Sangma (Staff) superannuated. The Department paid homage to and remembered the illustrious contribution of Prof. R.S. Tripathi, FNA, FNASc who passed away on February 14, 2019 at his residence in Lucknow.

Students' Profile Enrolment Capacity: (1) M.Sc. in Botany: 30; (2) M.Sc. in Plant Molecular Biology (PMB): 10; Ph.D.: Variable.

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-	Total
								Meghalaya	
M.Sc.	10	21	2	23		6	18	13	31
(Botany)									
M.Sc.	4	6		10			10		10
(PMB)									
Ph.D.		1		1			1		1

Degrees Awarded:

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non- Meghalaya	Total
M.Sc. (Botany)	7	22		27		2	19	10	29
M.Sc. (PMB)	3	4		7			6	1	7
Ph.D.	1	6		3		4	3	4	7

Students Awarded Ph.D. Degree: 7 Placement of Students - 3 **Research Fellowshin**

CSIR-UGC- NET	UGC Non- Net	National Fellowship for SC/ST	Meritorious Maulana Azad Minority Fellowship	Project Fellowship	DST-Inspire Fellowship
1	11	11		7	1

Fieldwork/Educational Tour of Students: Field excursion of M.Sc. students was undertaken in East Khasi Hills.

Courses Conducted: Revised Syllabi Effective from 2017

Postgraduate:

1. M.Sc. in Botany Semester I

Microbiology, Mycology and Plant Pathology; Microbiology, Mycology and Plant Pathology (Practical); Algae, Bryophytes and Pteridophytes; Algae, Bryophytes and Pteridophytes (Practical); Gymnosperms and Plant Anatomy, Gymnosperms and Plant Anatomy (Practical). Semester II

Angiosperm Taxonomy, Economic Botany and Ethnobotany, Angiosperm Taxonomy, Economic Botany and Ethnobotany (Practical), Plant Biochemistry and Molecular Biology, Plant Biochemistry and Molecular Biology (Practical), Stress Biology (Open), Bioprocess Development (Open), Techniques in Molecular Biology (Open).

Semester III

Genetics, Cytogenetics and Plant Breeding; Genetics, Cytogenetics and Plant Breeding (Practical); Plant Physiology, Plant Physiology (Practical), Biodiversity and Phytogeography, Environmental Pollution and Conservation (Open), Biostatistics (Open).

Semester IV

Plant Reproductive Biology and Biotechnology, Plant Reproductive Biology and Biotechnology (Practical), Plant Ecology and Ecosystem Analysis, Plant Ecology and Ecosystem Analysis (Practical), Project Work.

Broad Areas for Specialisation through Project Work

Plant Ecology, Microbial Ecology, Plant Molecular Biology, Advanced Plant Physiology, Taxonomy and Diversity of Angiosperms,

Development and Reproduction of Angiosperms, Plant Biotechnology, Plant Genetics and Cvtogenetics, Lower plants.

2. M.Sc. in Plant Molecular Biology Semester I

Microbiology, Cell Biology and Plant Physiology, Fundamentals of Genetic Engineering, Lab Work/ Practical (Practical).

Semester II

Plant Biochemistry and Molecular Biology, Eukaryotic Genome Organization, Stress Biology (Open), Bioprocess Development (Open), Techniques in Molecular Biology (Open), Lab Work/ Practical (Practical).

Semester III

Genetics, Cytogenetics and Plant Breeding; Metabolite Engineering (Open), Environmental Pollution and Conservation (Open), Computer Applications and Bioinformatics (Open), Lab Work/ Practical (Practical).

Semester IV

Plant Biotechnology, Molecular Basis of Differentiation, Lab Work/Practical, Project Work and Dissertation.

Broad areas for Specialization through Project Work.

Microbiology, Molecular Ecology, Plant Biotechnology, Plant Molecular Biology.

Ph.D. Courses

Research Methodology, Plant Sciences, Review of Literature and Seminar.

Seminars/Conferences/Workshops/Symposia/ Extension Programmes

Organized:

A Talk on *Cellular Agriculture: Implications in Agricultural Productivity* on April 27, 2018. (Speaker: Prof. Sanjay Kapoor, Department of Plant Molecular Biology, University of Delhi).

The International Day for Biological Diversity: Celebrating 25 years of Action for Biodiversity was celebrated by The Botanic Club, Department of Botany on May 22, 2018. (Coordinator: Prof. Uma Shankar)

A National Seminar on Advances in Structure and Function of Plants and Felicitation of Prof. N. Venugopal on his Superannuation on May 30, 2018 at the North-Eastern Hill University, Shillong, organized by the Department of Botany, North-Eastern Hill University, Shillong. (Convener: Dr. M.C. Das)

Summer School on the Value Addition to Bioresources through Microbial Techniques, June 15 to July 02, 2018 organised under DBT State Level Biotech HUB Programme (Coordinator: Prof. H. Kayang).

An Indo-Egypt Joint Brainstorming Meeting on Agricultural Biotechnology for identification of priority areas for research in the field of Agri-Biotechnology, sponsored by the DST during September 10-12, 2018 (Coordinator-India: Prof. N.K. Chrungoo).

A Workshop on Isolation and Functional Characterization of MicroRNAs on November 13-16, 2018 (Coordinator: Prof. N.K. Chrungoo). A Talk on Nanoconjugates for Smart Delivery Applications in Crop Plants on February 13, 2019. (Speaker: Dr. Pon Samuel, Lead Researcher at Corteva Agroscience, Dow Dupont, IOWA, USA).

Attended

Prof. N.K. Chrungoo

Delivered a talk on "Agri-biotechnology in food security and social change: taking a leaf out of Dragon's rice fields" in the Department of Philosophy NEHU on May 9, 2018.

Delivered an invited talk on the "omics" revolution in post genomics era: Manipulating Complex Pathways for improved nutritional quality of plant proteins" at St. Edmund's College on October 28, 2018.

Delivered a talk on "Finding the pearls in wilderness: Engineering black rice for higher flavonoid content at Institute of Crop Science, Chinese Academy of Agricultural Sciences, Beijing on November 1,2018.

Delivered a talk on "Green Agriculture for minor Grain crops: A Global perspective for their domestication NW A & F University, Shanxi, China on Nov. 5, 2018

Delivered an invited talk on "Bioentrepreneurship" at St. Edmund's College on March 13, 2019.

Prof. Uma Shankar

Presented Progress Report in the "First Meeting of the Project Investigators" of the long-term multi-component project on "Inventories and Mapping of Bioresources in North-East India", held during May 05-06, 2018 at the Hotel, Gangok, Sikkim, organized by the ATREE, Bangalore and DBT, New Delhi.

Presented an Invited Talk on "How much have we benefitted from the advances in RS and GIS applications in forestry, biodiversity and ecology in north-east India?" in National Seminar on "Advances in Remote Sensing & GIS Applications" held during May 10-11, 2018, organized by the Shillong Chapter of Indian Society of Remote Sensing (ISRS); Shillong Chapter of Indian Society of Geomatics (ISG); Department of Geography, North-Eastern Hill University, Shillong; and North-Eastern Space Application Centre (NESAC), Department of Space, Government of India.

Presented an Invited Talk on "International Day for Biological Diversity: Celebrating 25 Years of Action for Biodiversity" on May 22, 2018 in the Seminar Hall, SLS Cluster of Classrooms, North-Eastern Hill University, Shillong.

Presented an invited Talk on "Herbarium Techniques" to the students of the BAMS course on June 27, 2018 at the North-Eastern Institute of Ayurveda and Homeopathy (NEIAH), Ministry of Ayush, Government of India, Shillong.

Presented an invited Talk on "Recent Trends in Botanical Researches in India" to the participants of the Summer School in Basic Sciences held during July 04-24, 2018 at the UGC-Human Resource Development Centre, North-Eastern Hill University, Shillong.

Presented an invited Talk on "Current Status of Biodiversity Research in India" to the participants of the Summer School in Basic Sciences held during July 04-24, 2018 at the UGC-Human Resource Development Centre, North-Eastern Hill University, Shillong.

Presented an invited Talk on "Diversity in sal forests of India" in the Refresher Course in Life Science (Botany, Biotechnology & Zoology) on July24, 2018 at the Human Resource Development Centre (HRDC), Gauhati University, Guwahati, Assam.

Presented an invited Talk on "Do we have tropical rainforests in northeast India?" in the Refresher Course in Life Science (Botany, Biotechnology & Zoology) on July24, 2018 at the Human Resource Development Centre (HRDC), Gauhati University, Guwahati, Assam.

Presented an invited Talk on "Plastic waste in solid waste: Introduction to polymers" on August

23, 2018 at the ENVIS Centre on Biomedical, Electronic, Hazardous Waste Management, North-Eastern Hill University, Shillong.

Presented an invited Talk on "Plastic Waste in Solid Waste: Need of plastics in society" on August 23, 2018 at the ENVIS Centre on Biomedical, Electronic, Hazardous Waste Management, North-Eastern Hill University, Shillong.

Presented Progress Report in the "1st Technical Programme Discussion Meeting (TPDM)" of the Advisors and Partner-Researchers of a long-term project on "Invasive Alien Plants in Himalayas: Status, Ecological Impacts and Management", held during September 08-09, 2018 at North-Eastern Hill University, Shillong.

Presented an invited Talk on "Are the tropical rain forests of southwest China similar with those of northeast India?" at the Xishuangbanna Tropical Botanic Garden (XTBG), Chinese Academy of Sciences, Yunnan, China on November14, 2018 during his visit under Bilateral Exchange Programme-2018 of the Indian National Science Academy and Chinese Academy of Sciences (INSA-CAS).

Presented an invited Talk on "How far similar are the tropical rainforests of southwest China with those of northeast India?" at the Institute of Botany (IB), Chinese Academy of Sciences, Beijing, China on November 27, 2018 during his visit under Bilateral Exchange Programme-2018 of the Indian National Science Academy and Chinese Academy of Sciences (INSA-CAS).

Delivered an invited lecture on "Molecular strategies in sustainable biodiversity and conservation" in the Workshop-cum-Lecture Series on Skill Development in "Molecular Strategies for Understanding Biodiversity and Human Diseases", organized by NEHU and CSIR-IGIB Collaboration, DBT sponsored NER Twinning Program, held during February 27 – March 01, 2019 in Bioinformatics Centre, NEHU, Shillong.

Presented Progress Report in the "2nd Technical Programme Discussion Meeting (TPDM)" of the Advisors and Partner-Researchers of a long-term project on "Invasive Alien Plants in Himalayas: Status, Ecological Impacts and Management", held during March 26-27, 2019 at Panjab University, Chandigarh.

Prof. Yogendra Kumar

Delivered an invited lecture on "Medicinal Plants of East Karbi Anglong Wildlife Sanctuary, Assam India, in 12th Annual Convention of ABAP & International Conference on "Biodiversity, Environment and Human Health: Innovations and Emerging Trends" held at Mizoram University, Aizawl during November 12-14, 2018.

Prof. H. Kayang

Delivered an invited lecture on "Biopesticides in integrated plant disease management" in the Workshop cum Lecture Series on Skill Development in Molecular Strategies for understanding Biodiversity and Human Diseases organized by NEHU CSIR-IGIB Collaboration, DBT sponsored NER Twinning Program held on February 27 – March 01, 2019 in Bioinformatics Centre, NEHU, Shillong.

Prof. S. Kumaria

Delivered a talk on "Plant Tissue Culture or Test Tube Plants" during the Exposure Visit of Entrepreneurs to North-Eastern Hill University, Shillong on 7th July, 2018.

Delivered an invited lecture on "Plant Tissue Culture: An approach to ex situ conservation of RET plants" duringthe Orientation Programme 2018 organized by the University of Science and Technology, Meghalaya on the 18th August, 2018.

Dr. Meera C. Das

Attended and Participated 50th Meeting of Plant Tissue Culture Association, International Conference on trends in Plant Sciences and Agrobiotechnology on February 14-16, 2019 at IIT, Guwahati.

Delivered an invited talk on "*In Vitro* Conservation of Some Medicinal Plants of Meghalaya" in the National seminar on Himalayan Plants for Medicine and Health organized by Sikkim University on 29th March, 2019.

Publications:

Research papers

Published in India

Adhikari, D., Tiwary, R., Singh, P.P., Upadhaya, K., Singh, B., Haridasan, K.E., Bhatt, B.B., Chettri, A., Barik, S.K. (2019). Ecological niche modeling as a cumulative environmental impact assessment tool for biodiversity assessment and conservation planning: A case study of critically endangered plant *Lagerstroemia minuticarpa* in the Indian Eastern Himalaya, *Journal of Environmental Management*, 243, 299-307.

Adhikari, D., Mir, A.H., Upadhaya, K., Iralu, V., Roy, D.K. (2018). Abundance and habitatsuitability relationship deteriorate in fragmented forest landscapes: a case of *Adinandra griffithii* Dyer, a threatened endemic tree from Meghalaya in northeast India. *Ecological Processes*, 7(3): 1-9.

Bhat, N.A., Jeri, L., Kumar, Y., Mir, A.H. (2018). First observation of field dodder and its host range in Meghalaya, *Indian Journal of Weed Science*. 50(2): 192–194.

Bhat, N.A., Jeri, L., Mipun, P., Kumar Y. (2018). Systematic studies (Micro-Morphological, Leaf Architectural, Anatomical and Palynological) of genus *Physalis* L. (Solanaceae) in Northeast India, *Plant Archives*. 18(2): 2229-2238.

Devi, S. Devika, Kharsahnoh, B., Kumaria, S., Das, M.C. (2018). Artificial seed for short-term storage: using nodal buds in *Aquilaria malaccensis* Lam. *Current Science*, 115 (11): 2103-2109.

Devi, S.P., Kumaria, S., Sharma, Ph. Ranjit, Khoyumthem, P., Tandon, P. (2019). *Nepenthes khasiana* Hook f., an endangered tropical pitcher plant of India. *Indian Journal of Traditional Knowledge*, 18 (1): 68-75 (*Impact Factor 1.061*)

Kumaria, S., Paul, P. (2019). Orchids: The Wealth of Nature. *Oneness, An SNGCC publication*, 1 (IV):13-14 & 19-20.

Marbaniang, J.V., Kumaria, S. (2018). Genetic diversity and population structure assessment of *Malaxis acuminata* D. Don, a threatened terrestrial medicinal orchid using SPAR methods. *International Journal of Advanced Life Sciences*, 11(3): 86-98.

Nag, S., Kumaria, S.(2018). *In vitro* propagation of medicinally threatened orchid *Vanda coerulea*: An improved method for the production of phytochemicals, antioxidants and phenylalanine ammonia lyase activity. *Journal of Pharmacognosy and Phytochemistry*, 7(4): 2973-2982 (Impact Factor: RJIF 5.52).

Published abroad

Adhikari, D., Reshi, Z., Dutta, B.K., Samant, S.S., Chettri, A., Upadhaya, K., Shah, M.A., Singh, P.P., Tiwary, R., Majumdar, K., Pradhan, A., Thakur, M.L., Salam, N., Zahoor, Z., Mir, S.H., Kaloo, Z.A., Barik, S.K. (2018). Inventory and characterization of new populations through ecological niche modelling improve threat assessment. *Current Science*, 114(3): 519-531.

Anandhapriyan, M., Uma Shankar (2018). Hypothesis on anthropogenic speciation along roads – case study using *Lantana camara* L. *The International Reviewer* 5: 14-18. (ISSN 2395-1575).

Barik, S.K., Tiwari, O.N, Adhikari, D., Singh, P.P., Tiwary, R., Barua, S. (2018). Geographic distribution pattern of threatened plants of India and steps taken for their conservation. *Current Science*, 114(3): 470-503.

Barman, D., Dkhar, M.S. (2018). Plant Growth-Promoting Potential of Endophytic Bacteria Isolated from *Costus speciosus* in Tropical Deciduous Forest of Eastern Himalaya. *Proceedings of National Academy of Sciences India, Section B. Biological Sciences*, http://doi.org/10.1007/s40011-018-0998-5.

Bhat, N.A., Jeri, L., Roy, D.K., Kumar, Y. (2018). Petrosaviaceae, a new family record for India, *Bangladesh Journal of Plant Taxonomy*. 25(1): 113-117.

Bhattacharyya, P., Paul, P., Kumaria, S., Tandon, P. (2018). Transverse thin cell layer (t-TCL)-mediated improvised micropropagation protocol for endangered medicinal orchid *Dendrobium aphyllum* Roxb: an integrated phytomolecular approach. *Acta Physiologiae Plantarum*, 40:137 (1-14) (Impact Factor: 1.438).

Borthakur, S.K., Baruah, P.S., Deka, K., Das, P., Sarma, B., Adhikari, D., Tanti, B. (2018). Habitat distribution modelling for improving conservation status of *Brucea mollis* Wall. Ex Kurz. – An endangered potential medicinal plant of northeast India. *Journal for Nature Conservation*, 43(2018): 104-110.

Bose, B., Tripathy,D., Chatterjee, A., Tandon,P., Kumaria, S. (2019). Secondary metaboliteprofiling, cytotoxicity, antiinflammatory potential and *in vitro* inhibitory activities of *Nardostachys jatamansi* on key enzymes linked to hyperglycemia, hypertension and cognitive disorders. *Phytomedicine*, 55 (2019) 58–69 (Impact Factor: 3.610).

Chettry, U., Chrungoo, N.K., Kulkarni, K. (2019). Comparative transcriptomics approach in elucidation of carotenoid biosynthesis regulation

in grains of rice (*Oryza sativa* L.). Scientific Reports. DOI:10.1038/s41598-018-38233-8 2.

Chaudhari, A.K., Singh, V.K., Dwivedy, A.K., Das, S., Upadhyay, N., Singh, A., Dkhar, M.S., Kayang, H., Prakash, B., Dubey, N.K. (2018). Chemically characterized *Pimenta dioica* (L.) Merr. essential oil as a novel plant based antimicrobial against fungal and aflatoxin B1 contamination of stored maize and its possible mode of action. *Natural Product Research*, DOI: org/10.1080/14786419.2018.1499634. (Impact factor: 1.82).

Chuzho, K., Dkhar, M.S. (2018). Ecological Determinants of Wood-rotting Fungal Diversity and First Report of *Favolaschia calocera*, an invasive species from India. *Proc. Natl. Acad. Sci., Sect. B Biol. Sci.*, DOI: 10.1007/s40011-018-1038-1. (Impact factor: 0.62, h5 index: 16).

Chuzho, K., Dkhar, M.S. (2018). Effects of environmental and host characteristics on diversity and distribution of wood-rotting fungi of Mount Puliebadze, Nagaland. *Studies in Fungi* 3(1): 241-247, DOI: 10.5943/sif/3/1/24.

Chuzho, K., Dkhar, M.S. (2019). Diversity of Ascomycetous wood-rotting fungi along an altitudinal gradient in forests of Nagaland and first report of *Jackrogersella minutela* from India. *Journal of Indian Academy of wood Sciences*, DOI: 10.1007/s13196-109-00233-0. (Impact factor: 0.60, h5 index: 7).

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Adhikari, D., Singh, P.P., Tiwary, R., Barik, S.K. (2018). Modelling the environmental niche and potential distributional area of *Magnolia campbellii* Hook.f. & Thompson for its conservation in the Indian Eastern Himalaya. *In: Plant for Commercial Value*. Write & Print Publication, New Delhi

Barik, S.K., Chrungoo, N.K., Adhikari, D. (2018). (eds.) Conservation of threatened plants of India, (special volume: conservation of threatened plants).

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Brahma, J., Uma Shankar (2018). Chemical composition and allelopathic effect of the essential oils of *Ageratum conyzoides* L. and *A. houstonianum* Mill., Pages 151-152 in Biodiverse 2018, *Proceedings of theInternational Symposium on Biodiversity and Biobanking*" (eds. Chetia, H., Kabiraj, D. and Singh, T.), Centre for the Environment, Indian Institute of Technology, Guwahati.

Mir, A.H., Jeri, L., Upadhaya, K., Bhat, N.A., Borah, R., Choudhury, H., Kumar, Y. (2019). Diversity, Bioprospection and Commercial Importance of Indian Magnolias, *Plants for Human Survival and Medicine*, 195-218. New India Publishing Agency, New Delhi.

Funds Received from Agencies including NEHU/UGC

Sl. #	Funding Agency	Amount (Rupees in Lakhs)				
1.	NEHU	19.910				
2.	DBT	96.995				
3.	MoEFCC-GBP/IERP	45.970				

4.	Govt. of Meghalaya	15.000
	Total	177.875
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(Rupees one hundred seventy seven lakhs eighty seven thousand five hundred only)

Research Projects Ongoing Projects

SI. No.	<i>oing Projects</i> Title of Project	Pl/Co-Pl	Funding Agency	Amount Rs. in Lakh
1.	Chemical Ecology of the North East Region (NER) of India: A Collaborative Programme Linking NER and Bangalore Researchers	Prof. N.K. Chrungoo (PI)	DBT- NER/Agri/24/2013	24.91
2.	Biotech Hub	Prof. N.K. Chrungoo (Co- ordinator)	DBT, New Delhi	30.235
3.	Fungal and mycotoxin contamination of stored maize (<i>Zea mays</i> Linn) samples in Meghalaya and antimicrobial and mycotoxin inhibitory efficacy of some biocontrol agents and essential oils of traditionally used medicinal plants of the region".	M.S. Dkhar (PI), H. Kayang (Co-I) Collaborators: Prof. N.K. Dubey (PI); Dr. Bhanu Prakash (Co-I), BHU	DBT, New Delhi (NER-BPMC), Govt. of India, New Delhi Twinning Project Sanction No. BT/01/17/NE/TAX, dated 29.03. 2018 (Total 75.542 lakhs)	5.92
4.	A Multi-institutional Networking Project Bioresource and sustainable livelihoods in North East India: Component 4: Biodiversity based livelihoods Sub Project: 4- Development of captive farming, sustainable harvest technologies, integration with plantation programmes and agroforestry, and value addition of targeted bioresources <i>Zanthoxylum</i> and <i>Gaultheria</i> species.	Prof. H. Kayang (PI), Dr. P. Ramanujam (Co- I)	DBT, New Delhi Sanction No. BT/01/17/NE/TAX, dated 29.03. 2018	23.55
5.	Micropropagation of Lakadong Turmeric.	Prof. Suman Kumaria (PI), Dr. Meera Chetri Das (PI) Prof. S. Rama Rao (Project Coordinator and PI, Department of Biotechnology and Bioinformatics, NEHU)	Govt. of Meghalaya No. AGRI (SCH) 15/2018/98, DATED 3 RD October, 2018, Total sanctioned Rs. 59.62 Lakhs	15.00
6.	Exploration of genomic-wide polymorphism, imprintomes and methylomes to unfold the genetic, epigenetic and evolutionaries mysteries of	Prof. Suman Kumaria (PI), Dr. Meera Chetri Das (Co-I)	DBT, (NER- BPMC), Govt. of India, New Delhi. Twinning Project	12.38

7.	basal angiosperms with emphasis on Nymphaea L. under DBT's program for the NE. Phytoplankton of Fresh water habitats of Meghalaya, Mizoram and Nagaland states of India.	Collaborators: Prof. Manu Agarwal, University of Delhi (PI) and Prof. S. Goel, University of Delhi (Co-I) Dr. P. Ramanujam (PI)	Sanction No. BT/PR16385/NER/9 5/124/2015 dated: 09/11/2016) MoEF (F.No.22018/17/201 6-CS (TAX) dated	13.32
8.	Non-Timber forest products used by local tribes in Meghalaya: database, distribution and capacity building.	Prof. Uma Shankar (PI)	21st Sep,2017) Rs. 24.35 Lakh GBPI/IERP (MoEFCC), Almora (Rs. 13.3628 Lakh vide letter no. GBPI/IERP/17- 18/55/ dated 26.03.2018	Nil
9.	A Multi-institutional Networking Project entitled "Invasive alien plants in Himalayas: status, ecological impact and management"	Prof. Uma Shankar (PI)	NMHS, GBPNIHESD, Almora (Rs. 468.39 Lakh vide letter no. NMHS-2017/LG- 01/475 dated 22.12.2017, (Rs. 468.39 Lakhs vide letter no. NMHS- 2017/LG-01/475 dated 22.12.2017; (Rs. 64.17 Lakhs)	32.65
10.	A Multi-institutional Networking Project entitled "Bioresource and sustainable livelihoods in North East India: Component 1: Inventories and mapping of bioresources in North East India, Sub- project 10: Quantitative assessment and mapping of plant diversity and biological resources in Meghalaya"	Prof. Uma Shankar (PI)	DBT, New Delhi (Rs. 78.49 Lakh vide letter no. BT/01/17/NE/TAX dated 29.03.2018; (Rs. 22.016 Lakhs)	Nil
11.	A Multi-institutional Networking Project entitled "Bioresource and sustainable livelihoods in North East India: Component 1: Inventories and mapping of bioresources in North East India, Sub- project 17: Quantitative assessment and mapping of the diversity of Cicadas of North East India"	Prof. Uma Shankar (Co-I) Dr. S.R. Hajong (PI)	DBT, New Delhi (Rs. 69.74 Lakh vide letter no. BT/01/17/NE/TAX dated 29.03.2018; (Rs. 19.616 Lakhs)	Nil

Completed Projects

SI. No.	Title of Project	Pl/Co-Pl	Funding Agency	Amount in Rs. in Lakh
1.	All India Network Project on "Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools"	Prof. N.K. Chrungoo (PI)	DBT, New Delhi (A Multi-institutional Networking Project)	
2.	All India network project on "Functional genomics approaches in understanding the regulation of flowering and carotenoid biosynthesis in saffron crocus"	Prof. N.K. Chrungoo (PI)	DBT, New Delhi (A Multi-institutional Networking Project)	

Academic Collaborations

Prof. N.K. Chrungoo

Collaborated with Prof. Ashwani pareek of JNU, Prof. Manoj Dhar of Jammu University and Dr. Mukesh Jain of JNU on network programme on saffron.

Collaborated with Prof. Melliang Zhou of Institute of Crop Sciences, Chinese Academy of Sciences, Beijing on Global Tertiary Buckwheat Genome Project.

Prof. N.K. Chrungoo and Prof. S.K. Barik

Collaborated with Bangalore researchers on the project Chemical Ecology of the Northeast Region of India: A Collaborative Programme Linking NER and Bangalore Researchers.

Prof. M.S. Dkhar and Prof. H. Kayang

Collaborated with Prof. N. K. Dubey and Dr. Bhanu Prakash, BHU, Varanasi, on the project Fungal and Mycotoxin Contamination of Stored maize (Zea mays Linn) Samples in Meghalaya and Anti-microbial and Mycotoxin Inhibitory Efficacy of Some Biocontrol Agents and Essential oils of Traditionally Used Medicinal Plants of the Region under the DBT program for the NE.

Prof. H. Kayang and Dr. P. Ramanujam

Collaborated with Dr. R. Ganesan (ATREE, Bangalore) on a multi-institutional networking project, entitled *Bioresource and Sustainable Livelihoods in North-East India: Component 4: Biodiversity based livelihoods Sub Project: 4-Development of captive farming, sustainable harvest technologies, integration with plantation programmes and agroforestry, and value addition of targeted bioresources Zanthoxylum and Gaultheria species.*

Prof. Uma Shankar

Collaborated with Prof. R.K. Kohli, Central University of Punjab, Bathinda on a multiinstitutional networking project entitled "Invasive alien plants in Himalayas: status, ecological impact and management".

Collaborated with Dr. R. Ganesan (ATREE, Bangalore) on a multi-institutional networking project entitled *Bioresource and Sustainable Livelihoods in North-East India: Component 1: Inventories and Mapping of Bioresources in North-East India, Sub-Project 10: Quantitative Assessment and Mapping of Plant Diversity and Biological Resources in Meghalaya.*

Prof. Suman Kumaria and Dr. Meera Chetri Das

Collaborated with Prof. Manu Agarwal and Prof. S. Goel, University of Delhi, on *Exploration of Genomic-Wide Polymorphism, Imprintomes and Methylomes to Unfold the Genetic, Epigenetic and Evolutionary Mysteries of Basal Angiosperms with Emphasis on Nymphaea L.* under the DBT program for the NE.

Honours/Awards/Recognitions Honours

Prof. N. K. Chrungoo

Member of the Editorial Board of the *Fagopyrum*, the official journal of the International Buckwheat Researchers Association.

Member of the Board of Post-Graduate Studies in Botany, Cotton University, Guwahati.

Member of the Advisory Committee DRS-III, Department of Botany, Annamalai University. Member of DBT Steering Committee on Biotechnology Based Programme for Societal Development. Member of DBT Technical Expert Committee

on Energy, Environment and Biodiversity

Conservation for North Eastern region.

Member of DBT Committee for Rasmalingasamy Fellowship Programme.

Member of DBT Apex committee on Basic Plant Biology Agriculture and Frontier Areas.

Prof. Uma Shankar

Member of the Board of Studies, Tripura University, Suryamaninagar, Tripura.

Member, Research Advisory Committee, Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow.

Member, AICOPTAX, MoEFCC, New Delhi.

Member, Governing Body, Buddha Bhanu Saraswati College, Upper Mawprem, Shillong, Meghalaya.

Chairman, RAC (2017-19), North-Eastern Hill University, Shillong.

Visitor's Nominee and Expert Member, Selection Committee for the posts of faculty in the Department of Botany, DDU Gorakhpur University, Gorakhpur, May 24-28, 2018.

Expert Member, Selection Committee for placement of Assistant Professor (Stage-III) to Associate Professor (Stage-IV) as per UGC Regulation 2010 in the Department of Botany, Lady Keane College, Shillong, held on March 20, 2019.

Prof. H. Kayang

Convener and Chairman of Board of Studies in Home Science (w.e.f. 2018 - 2021)

Member of Examination Consultative Committee (w.e.f. 2018)

Member of the Institutional Bio-Safety Committee (IBSC) (w. e. f. June 2018).

Member of the Internal Complaint Committee (ICC) (w.e.f. August 2018 -2021)

Member of the Programme Advisory Committee (PAC) on Plant Sciences under Science and Engineering Research Board (SERB), Department of Science and Technology (DST), New Delhi (w.e.f. 12.11.2018 – 11.11.2021).

Prof. Suman Kumaria

• Councillor of the Journal of the Orchid Society of India (TOSI).

Awards

Prof. Uma Shankar

INSA-CAS BEP Award 2018, by the Indian National Science Academy, New Delhi.

EET-CRS Top List-25 Award (Best Faculty) in 2018, conferred by the Educationexpo at Radisson, Bengaluru, India on June 17, 2018.

FISEB Award (Fellowship of the International Society of Environmental Botanists) in 2018 conferred by the International Society of Environmental Botanists (ISEB) on November 28, 2018 at Lucknow.

LEAP Award (Academic Leadership Development Programme) by the National Institute of Educational Planning and Administration (NIEPA), New Delhi, India and the Said Business School, University of Oxford, Oxford, UK in February, 2019.

Mrs. Bharati Sangma (Staff) NEHU Appreciation Award 2018.

Ms. Taba Yehi (M.Sc. Student)

Visit to Japan under IRIS Programme from 26.01.2019 to 02.02.2019.

Other Activities

Prof. N.K. Chrungoo

Visited Institute of Crop Science, Chinese Academy of Agricultural Sciences, Beijing from Nov. 1-3, 2018.

College of Agriculture, North West Agriculture & Forestry University, Shanxi, China from Nov. 4-8, 2018.

Reviewer for the International journals viz., BMC Genomics, BMC Plant Biology, Plant Science, Scientific Reports, Agricultural Research, Plant and Cell Physiology, Biological Journal of the Linnean Society.

Prof. Uma Shankar

Visited Xishuangbanna Tropical Botanic Garden (XTBG), Yunnan, China and the Institute of Botany, Chinese Academy of Sciences (IBCAS), Beijing during October 28 and November 29, 2018 under Bilateral Exchange Programme-2018 of the Indian National Science Academy and Chinese Academy of Sciences (INSA-CAS) vide grant no. Int/CAS/2017/07/ dated 11.12.2017.

Visited National Institute of Educational Planning and Administration (NIEPA), New Delhi, India during February 3-13, 2019 as a part of the curriculum study of the Academic Leadership Development Programme (LEAP) – NIEPA Module organized by the National Institute of Educational Planning and Administration (NIEPA), New Delhi, sponsored by the Ministry of Human Resources and Development (MHRD), Government of India, New Delhi.

Visited Said Business School, University of Oxford, Oxford, UK during February 13-20, 2019 as a part of the curriculum study of the Academic Leadership Development Programme (LEAP) – Oxford Module organized by the National Institute of Educational Planning and Administration (NIEPA), New Delhi, sponsored by the Ministry of Human Resources and Development (MHRD), Government of India, New Delhi.

Reviewer for Forest Ecology and Management, Journal of Forestry Research, Forest Ecosystems,

Geographia Polonica, Journal of Biosciences, Current Science, Tropical Ecology, Pleione, Proceedings of the National Academy of Sciences, India, Section B (NASB).

Prof. Suman Kumaria

Reviewer for the international journals - The Journal of Horticultural Science & Biotechnology, BMC Plant Biology, Journal of Separation Science, Natural Product Research, Acta Physiologia Plantarum, Gene, Current Journal of Applied Science and Technology, Proceedings of the National Academy of Sciences, India Section B (NASB).

DEPARTMENT OF ZOOLOGY

Head	: Prof.S.N. Ramanujam, up to 23.11.2018
Telephone	Prof. Arun K. Yadav, w.e.f 24.11.2018
E-mail	: 0364-2722301
	: hodzoo@nehu.ac.in

Faculty :	13	
Designation	Name and Qualification	Specialization
Professor	Dr.B. B. P. Gupta, M.Sc., Ph.D. (BHU)	Endocrinology and
		Reproductive Physiology
	Dr.S. B. Prasad, M.Sc., Ph.D. (BHU)	Cell and Tumour Biology
	Dr.R. N. K. Hooroo, M.Sc., Ph.D. (NEHU)	Developmental Biology
	Dr.N. Saha, M.Sc.&Ph.D. (NEHU)	Biochemical Adaptation and Metabolic Regulation
	Dr.S. N. Ramanujam, M.Sc. (Bangalore),	Fish Biology and
	Ph.D. (NEHU).	Environmental Toxicology
	Dr.A.K.Yadav, M.Sc. (Agra), Ph.D.	Parasitology and
	(NEHU)	Ethnopharmacology
	Dr.B. Roy, M.Sc. (NBU), Ph.D. (NEHU)	Parasitology and
		Toxicology
	Dr.A. S. Dixit, M.Sc. (Gorakhpur	Endocrinology and
	Univesity), Ph.D. (BHU)	Chronobiology
	Dr.B. Keshan, M.Sc., Ph.D. (Calcutta)	Insect Endocrinology and Molecular Biology
Associate Professor	Dr.S. Ghosh, M.Sc., Ph.D. (Calcutta)	Genetics
110103501	Dr.S. R. Hajong, M.Sc., Ph.D. (NEHU)	Insect Biodiversity and Entomology
Assistant	Dr.S. Choudhury, M.Sc., Ph.D. (NEHU)	Entomology
Professor	Dr.B. Das, M.Sc. (Berhampur), Ph.D. (NEHU)	Biological Chemistry

Thrust Areas of Research

The Department is engaged in research under the thrust area "Faunal Diversity and Ecophysiology" in various disciplines, such as biodiversity of fishes, amphibian and insects in the North-Eastern Region; adrenergic signal transduction in pineal gland; hormonal regulation of oxidative metabolism;chronoendocrinology, photophysiology andseasonality in reproduction, migration and moult in some birds of North-Eastern; breeding biology of endangered fishes, amphibians and birds; cisplatin action as an anticancer drug and efficacy of putative anticancerous plants and animals from the North-Eastern Region; biochemical adaptation to nitrogen; carbohydrate, protein and oxidative metabolism; nitric oxide signalling under various environmental stresses in airbreathing fishes; diversity of helminth and nematomorh parasites in the North-Eastern Region, with emphasis on molecular taxonomy of zoonotic parasites; bioprospection of anthelmintic efficacy of plants used in traditional medicine systems andvalidation of Ayurvedic formulations; silkworm growth and development under various environmental stresses and the involvement of hormones mediated signaling pathway and epigenetic study of human cancer with emphasis on the role of DNA methylation.

Brief Statement of Academic Activities

Department of Zoology The offers specializations in all major disciplines of Zoology. Faculty members of the Department have several collaborations with international and national academic and research institutions. The Department has successfully organized several national and regional seminars, symposia and workshops having direct regional and national relevance. Besides book(s)/book chapters, manv research papers are published in reputed national and international journals. The Department offers the MSc and Ph.D. Programmes. The Department has adopted the choice-based credit system (CBCS) at the MSc level. A good number of research students of Department have qualified in the CSIR-UGC NET examination and National

Fellowship for Higher Education, etc. Some students have acquired important faculty positions in educational and research institutions of the North-Eastern Region and other parts of the country. The total intake of students per year for MSc Zoology course is 30, and for the Ph.D. programme it varies from 15 to 20. The faculty members and research students of this Department are recipients of various awards, distinctions and fellowships. Based on the overall academic and research contributions, the Department was awarded the three phases of DRS and three phases of DSA programme by the UGC under its Special Assistance Programme to promote higher research with special reference to the North-Eastern Region. Further, the Department has received grants recently under the DST-FIST programme for the second time and third phase of UGC-DSA programme. The Department has various research projects sponsored by UGC, DST, DBT, ICMR, ICAR, MoEF, etc. All these projects have a direct relevance to the socio-economic development of the North-Eastern Region. The Department is conducting seminars every week for MSc students under the supervision of faculty members. The Department also runs a "Zoonic Society" for various activities involving students, teaching and nonteaching staff.

Students' Profile

<i>Enrolment Capacity</i> : MSc - 30, Ph.D10-15	
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Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MSc	10	21	-	28	-	3	26	5	31
Ph.D.	8	6	-	9	-	5	8	6	14

Degrees Awarded

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MSc	9	21	-	30	-	-	28	2	30
Ph.D.	1	6	1	3	1	2	5	2	7

Students Awarded Ph.D. Degree : 7 Placement of Students - 1

Research Fellowships:

UGC Non-NetNational Fellowship for Higher Education3117

Courses Conducted

Postgraduate: MSc

Semester I

Cell Biology and Immunology; Biological Chemistry and Molecular Biology; Genetics and Developmental Biology.

Semester II

Animal Physiology; Parasitology and Entomology; Techniques in Biology.

Semester III

Endocrinology and Reproductive Biology; Aquatic Biology and Fisheries; Animal Diversity.

Semester IV

Biosystematics and Evolution; Ecology and Environmental Biology; Special Paper. * **Special Papers Offered*: Biochemical Adaptation and Metabolic Regulation; Developmental Biology; Endocrinology and Reproductive Physiology; Fish Biology; Helminth Parasitology; Insect Physiology; Molecular Cell Biology and Immunology.

Ph.D. Courses

Research Methodology; Optional Papers (Applied Entomology; Chronobiology; Fish Physiology and Toxicology; Molecular and Biochemical Zoology; Tropical Parasitology; Review of Literature.

Seminars/Conferences/Symposia/Worksho ps

Organized

The Department of Zoology, North-Eastern Hill University, Shillong and Zoological Society, Kolkata jointly organized the National Conference on Recent Trends in Zoological Research in North-East India during April 19-20, 2018 with Prof. S.N. Ramanujam as Convenor and Prof. A.K. Yadav as Organizing Secretary.

The Department of Zoology, North-Eastern Hill University, Shillong organized the National Lecture Series with the sponsorship of DSA-Phase III (SAP) programme, March 28, 2019.

The Department of Zoology, North-Eastern Hill University, Shillong catered the UGC Refresher Course in Zoology, organized by UGC-Human Resource Development Centre, NEHU from 18th March to 7th April, 2019 with Prof. A. S. Dixit as Course Coordinator.

Prof. B.B.P. Gupta organised National Life Science Entrepreneurship Awareness Programme, March 8, 2019, School of Life Sciences, North-Eastern Hill University, Shillong.

Prof. B. Keshan served as a member of the University level Yoga Committee, NEHU, and involved in organization of the *'International Yoga Day 2018*', June 21, 2018 at NEHU.

Attended

Prof. B.B. P. Gupta

National Conference on *Recent Trends in* Zoological Research in North-East India, April 19-20, 2018, jointly organized by the Zoological Society, Kolkata and NEHU, , Shillong.

Workshop on *Innovations and Good Practices in Institutional Governance of Higher Education*, February 28 - March 2, 2019 held at National Institute of Educational Planning and Administration (NIEPA), New Delhi-110016, and presented a report on "Good Practices Adopted by the North-Eastern Hill University, Shillong".

Prof. S.B. Prasad

National Conference on Recent Trends in Zoological Research in North-East India, April 19-20, 2018 held at NEHU, Shillong. National Conference on Recent trends in

Biological Research and Future Prospects organized by Department of Zoology, Sikkim University, Gangtok, May 28-29, 2018 and delivered an invited talk on "An overview on the traditional Zoo-therapeutic remedies: Antitumor and antibacterial activity of bee's propolis from Meghalaya." 106th Indian Science Congress, January 3-7, 2019 held at Lovely Professional University, Phagwara, Punjab anddelivered an invited lecture on "Traditional zoo-therapeuticbased medicinal uses by the indigenous ethnic Karbi community: Experimental evaluation of anticancer potentials of Blister beetles from Karbi Anglong, Assam, India."

Prof. R.N.K. Hooroo

National Conference on *Recent Trends in Zoological Research in North-East India,* April 19-20, 2018 organized by the Department of Zoology, NEHU, Shillong and Zoological Society (Kolkata), and chaired a session.

Workshop on *Skill development and value addition to resources and microbial techniques*, June 15, 2018 organized by the Department of Botany, NEHU, Shillong.

North East Innovators Meet & Technology Innovation and Entrepreneurship Expo 2019, February 28, 2019 in NEHU, Shillong organised by the State Council of Science, Technology & Environment Meghalaya in collaboration with National Innovation Foundation and the Meghalaya Basin Development Authority.

104th meeting at NIPER, Hyderabad, March 24–27, 2019 as a member DST (SEED DIVISION).

Prof. N. Saha

National Seminar on *Recent Advances in Bio-Sciences*, September 21-22, 2018 organized by the Department of Zoology, Pagjyotish College, Guwahati and delivered aninvited lecture.

7th International Conference on Molecular Signaling, January 23-25, 2019, organized by the Savitribai Phule Pune University and National Centre for Cell Science, Pune and delivered aninvited lecture.

Prof. S.N. Ramanujam

National Conference on *Recent Trends in Zoological Research in North-East India*, April 19-20, 2018, jointly organized by the Zoological Society, Kolkata and North-Eastern Hill University, Shillong.

Prof. A.K. Yadav

National Conference on *Recent Trends in Zoological Research in North East India*" in joint collaboration with Zoological Society (Kolkata), April 19-20, 2018, Department of Zoology, NEHU, Shillong.

14th International Congress of Parasitology, Daegu, South Korea (August 19-24, 2018) and delivered an invited lecture on "Indian herbal remedies against neglected helminthozoonoses: leads from traditionally used medicinal plants" in the session "Neglected tropical helminthozoonoses: Emerging diseases in Asia".

DBT-Star College Programme at Meerut College, Meerut, January 9, 2019 and delivered an invited talk on "Neglected helminthic diseases & Indian Traditional Medicines: Current Trends and Future Perspectives."

Prof. A.S. Dixit

National Symposium on *Avian Biology*, Department of Zoology, Mizoram University, Aizawl from October 22-24, 2018, chaired a session and delivered an invited talk.

Delivered an invited lecture on Research Methodology in the University of Science, Technology and Management, Meghalaya.

Workshop on "*Time, Brain and Behavior*" organized by the Department of Zoology, Ch. Charan Singh University, Meerut from March 6-10, 2019 and a delivered lecture.

"International Symposium on *Biological Rhythms*", organized by the Department of Zoology, Ch. Charan Singh University, Meerut, March 11-13, 2019, chaired a session and delivered an invited talk.

National Conference on *Recent Trends in Zoological Research in North-East India*, April 19-20, 2018 organized by the Department of Zoology, NEHU, Shillong and Zoological Society (Kolkata), and chaired a session.

Prof. B. Keshan

National Conference on *Recent Trends in Zoological Research in North East India*" held during April 19-20, 2018, jointly organized by Department of Zoology NEHU, Shillong and Zoological Society, Kolkata and was a member of the organizing committee.

6th Asia Pacific Congress on Sericulture and Insect Biotechnology (APSERI-2019), held at Mysore, India during March 2-4, 2019, organized by the International Sericultural Commission and presented a paper titled "The functional implications of the insulin/insulin signaling pathway in silkworm, Bombyx mori".

Dr. S.R. Hajong

NEBIORES Project Workshop at IBSD Imphal and delivered a talk on insect biodiversity methodology.

Dr. B. Das

14th International Congress of Parasitology (ICOPA 2018) held at Daegu, Republic of Korea during August 19-24, 2018 *Experimental Biology 2018* held at San

Diego Convention Center, 111 West Harbor Drive, San Diego, California, USA, during April 21-25, 2018.

Research Papers

Published in India

Prasad, S.B., Bhaumik, A., Monisha, J., A.B., Kunnumakkara, Gurung, A.B., А., Bhattacharjee, Prasad R. (2018). Betulinic acid-mediated cell cycle arrest, decrease in mitochondrial membrane dehydrogenase potential and succinate murine ascites activity in Dalton's lymphoma. European J. Pharm. Med. Res., 5(9): 303-314.

Prasad, R., Prasad, S.B. (2018). Antitumor activity of rutin-cisplatin in combination and its protective effect against hematotoxicity. *Res. J. Life Sci. Bioinformatics Pharm. Chem. Sci.*, 4(6): 42-56.

Sangma, G.T., Syiemlieh, J., Prasad, S.B. (2019). Hospital-based study on the prevalence of cancers in Garo Hills, Meghalaya, India. *Indian J. Comm. Health*, 31(1): 127-131.

Banerjee B., Koner D., Lal P., Kumari S., Hasan R., Saha N. (2019). Role of taurine in cellular volume regulation in erythrocytes of air-breathing catfish (*Clarias magur*) under osmotic stress. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, Doi: 10.1007/s40011-018-01067-5.

Ronghang, B, Zimic, P., Roy, B. (2018). Stereoscan and molecular characterization of rumen flukes of Mithun (*Bos frontalis*, Lambert 1804) from Arunachal Pradesh, India. *North Bengal University Journal of Animal Science*. 12: 1-10.

Hajong, S., Thangkiew, R. (2018). Extension in its distribution range and a new record for the cicada genus Salvazana Distant, 1913 (Hemiptera: Cicadidae: Cryptotympanii) from India. *Journal of Threatened Taxa*, 10(3), 11454-11458.

https://doi.org/10.11609/jott.3781.10.3.11454

-11458 Das, B., Dutta, A. (2018). Phosphoenolpyruvate carboxykinase: a target enzyme in management of helminth parasites? In: *Advances in medico-veterinary parasitology: an Indian perspective*. A. K. Yadav, V. Tandon, S. L. Hoti (Eds.). Panima Publishing Corporation, Daryaganj, New Delhi, p.459-474.

Published Abroad

Premabati, Y., Singh, K. M., Gupta, B. B. P. (2018). Inverse Relationship between Diurnal Rhythms in Plasma Levels of Thyroid Hormones and Pineal Arylalkylamine-N-acetyltransferase (AANAT) Activity in an Air-breathing Fish, *Clarias gariepinus*. *Biological Rhythm Research*, 49(2). DOI:10.1080/09291016.2017.1350443.

Saha, S., Singh, K. M., Gupta, B. B. P. (2018). Season-dependent differential effects of temperature on circadian rhythm of expression of core clock genes in the pineal organ of an air-breathing catfish, *Clarias gariepinus*. *Biological Rhythm Research*, DOI: 10.1080/09291016.2018.1525139.

Kharkongor, M., Hooroo, R.N.K., Dey, S. (2018). Effects of the insecticide chlorpyrifos, on hatching, mortality and morphology of *Duttaphrynus melanostictus* embryos. *Chemosphere*, 210: 917-921.

Thabah, C.M., Devi, L.M., Hooroo, R.N.K., Dey, S. (2018). Morphological Alterations in the External Gills of Some Tadpoles in Response to pH. *Journal of Morphological* Sciences. DOI https://doi.org/ 10.1055/s-0038-1669476.

Shangpliang, P.W., Nongkynrih, S.J., Hooroo, R.N.K. (2018). Breeding site selection of some anurans in Meghalaya in relation to the physicochemical variables of water. *GARI International Journal of Multidisciplinary Research*, 4: 16-28.

Choudhury M. G., Kumari S., Das K.B. and Saha N. (2018). Lipopolysaccharide causes NF κ B-mediated induction of inducible nitric oxide synthase gene and more production of nitric oxide in air-breathing catfish, *Clarias magur* (Hamilton). *Gene*, 658: 18-27.

Banerjee B., Koner D., Bhuyan G. and Saha N. (2018). Differential expression of multiple glutamine synthetase genes in air-breathing magur catfish, *Clarias magur* and their induction under hyper-ammonia stress. *Gene*, 671: 85-95.

Kumari S., Choudhury M.G., Saha N. (2018). Hyper-ammonia stress causes induction of inducible nitric oxide synthase gene and more production of nitric oxide in airbreathing magur catfish, *Clarias magur* (Hamilton). *Fish Physiology and Biochemistry*, doi: 10.1007/s10695-018-0593-y.

Koner D., Banerjee B., Hasan R., Saha N. (2019). Antioxidant activity of endogenously produced nitric oxide against the zinc oxide nanoparticle-induced oxidative stress in primary hepatocytes of air-breathing catfish, *Clarias magur. Nirtic Oxide*, 84: 7-15.

Yadav, A.K., Tobias, J.C., Schmidt-Rhaesa (2018). *Gordionus maori* (Nematomorpha, Gordiida), a new species of horsehair worm from New Zealand. *New Zealand J Zool*, 45: 29-42.

Vijaya, Yadav, A.K., Gogoi, S. (2018). *In vitro* and *in vivo* anthelmintic efficacy of two pentacyclic triterpenoids, ursolic acid and betulinic acid against mice pinworm, *Syphacia obvelata. J Parasit Dis*, 42(1):144-149.

Chen, R.P., Yadav, A.K. (2018). *In vitro* anthelmintic evaluation of common Indian ayurvedic anthelmintic drugs: Krimimudgar Ras, Kriminol and Vidangasava against intestinal helminths. *TANG*. 8:e15.

Roy, B., Pathaw, D. (2018). Cytotoxic effects of the phytochemical (+)- α -viniferin in Swiss albino mice. *British Journal of Pharmaceutical and Medical Research.* 3(5): 1340-1351.

Dev, D., Roy, B. (2019). Wound-healing potential of roots of Hygrophila *auriculata* Schumach. in Swiss albino mice. *Applied Clinical Pharmacology and Toxicology*. https//doi. 10.29011/ACPT-117.100017.

Zimik, P., Sharma, S., Roy, B. (2019). Characterization of

*Clinostomum*metacercariae using microscopic and molecular approaches. *Annals of Parasitology*. 65(1):87-97.

Dixit, A.S., Byrsat, S. (2018). Photoperiodic control of GnRH-I expression in seasonal reproduction of the Eurasian tree sparrow. *Photochemical & Photobiological. Science*, 17: 934-945.

Dixit, A.S., Bamon, I., Singh, N.S. (2018). Temperature modulates photoperiodic seasonal responses in the subtropical tree sparrow, *Passer montanus*. *Journal of Comparative Physiology A*, 204: 721-735.

Kh. S.D., Keshan, B. (2019). Mobilization of fat body glycogen and haemolymph trehalose under nutritional stress in *Bombyx mori* larvae in relation to their physiological age and the duration of food deprivation. *Biologia*, <u>https://doi.org/10.2478/s11756-019-00196-0</u>.

Mihsill, K.R.R. and Keshan, B. (2019). *Pseudonemophas versteegii* ecdysone receptor mRNA, partial cds. GenBank Accession Number- MH580298

Mihsill, K.R.R. and Keshan, B. (2019). *Pseudonemophas versteegii* ecdysoneinducible protein E75 mRNA. GenBank Accession Number- MK432951 Khongsti S., Lamare F. A., Shunyub N. B., Ghosh S., Maitra A., Ghosh S. (2018) Whole genome DNA methylation profiling of oral cancer in ethnic population of Meghalaya, North East India reveals novel genes. *Genomics, 110:112-123*

Dey, S. and Choudhury, S. (2018) Physiological significance of gravity receptors on larval cephalic cuticle in the Silk moth, *Antheraea proylei* Jolly. *Microscopy Research and Technique*, 81(9):1-8.

<u>Sequences submitted by N. Saha to the</u> <u>GenBank and accession numbers received</u> (2018-2019):

MH938567: Hasan R., Banerjee B. and Saha N. *Heteropneustes fossilis* glutathione peroxidase 4 (*gpx4*) mRNA, complete cds.

MH938571: Hasan R., Banerjee B. and Saha N. *Heteropneustes fossilis* lactate dehydrogenase B (*ldhb*) mRNA, complete cds.

MH938569: Hasan R., Banerjee B. and Saha N. *Heteropneustes fossilis* mitochondrial succinate dehydrogenase iron-sulfur subunit (*sdhb*) mRNA, complete cds; nuclear gene for mitochondrial product.

MK033477: Kumari S., Hasan R., Banerjee B. and Saha N. *Clarias magur* nuclear factor of activated T-cells 5 (*nfat5*) mRNA, partial cds.

MH734249: Hasan R., Banerjee B. and Saha N. *Clarias magur* glutathione S-transferase kappa 1 (*gstk1*) mRNA, complete cds.

MH734248: Hasan R., Banerjee B. and Saha N. *Clarias magur* glutathione S-transferase omega-1 (*gsto1*) mRNA, complete cds.

MH734247: Hasan R., Banerjee B. and Saha N. *Clarias magur* glutathione S-transferase theta-1 (*gstt1*) mRNA, complete cds.

MH734246: Hasan R., Banerjee B. and Saha N. *Clarias magur* glutathione S-transferase 3 (*gsta3*) mRNA, partial cds.

MH998154: Banerjee B., Hasan R. and Saha N. *Clarias magur* thioredoxin reductase 2 (*txnrd2*) mRNA, complete cds.

MH423833: Hasan R., Banerjee B., Koner D. and Saha, N. *Clarias magur* E3 ubiquitin-protein ligase ZNRF2 (*znrf2*) mRNA, complete cds. **MH938568**: Hasan R., Banerjee B. and Saha N. *Heteropneustes fossilis* hypoxia inducible factor 1 alpha (*hif1a*) mRNA, complete cds.

MH938566: Hasan R., Banerjee B. and Saha N. *Heteropneustes fossilis* heat shock cognate 70 (*hsc70*) mRNA, partial cds.

MH938565: Hasan R., Banerjee B. and Saha N. *Heteropneustes fossilis* heat shock protein 70 (*hsp70*) mRNA, partial cds.

MH938564: Hasan R., Banerjee B. and Saha, N. *Heteropneustes fossilis* catalase (*cat*) mRNA, complete cds.

MH938563: Hasan R., Banerjee B. and Saha N. *Heteropneustes fossilis* superoxide dismutase 2 (*sod2*) mRNA, complete cds.

MH521258: Hasan R., Banerjee B., Koner D. and Saha N. *Clarias magur* kelch-like ECH-associated protein 1 (*keap1*) mRNA, complete cds.

MH938570: Hasan R., Banerjee B. and Saha N. *Heteropneustes fossilis* caspase 3 (*casp3*) mRNA, complete cds.

MH521259: Hasan R., Koner D., Banerjee B. and Saha N. *Clarias magur* interleukin 1 beta (*il1b*) mRNA, complete cds.

Books/Book Chapters/Proceedings

Prasad, S.B. (2019). Traditional zootherapeutic-based medicinal uses by the indigenous ethnic Karbi community: evaluation Experimental of anticancer potentials of blister beetles from Karbi Anglong, Assam, India. In: Recent developments in veterinary and zoological sciences. K. K. Sharma and V.L. Saxena (Eds.). Today & Tomorrow's printers and publishers, New Delhi, p. 151-180. (ISBN 978-81-701-9630-3).

Verma, A.K., Prasad, S.B. (2018). Cantharidin: Bioactive compound from Blister beetles, (*Epicauta hirticornis*) triggers apoptotic cell death and arrests cell cycle in a murine tumor model. In: *Biodiversity conservation: Strategies and applications*. G.S. Solanki (Ed). South Eastern Book agencies, Guwahati, p. 233-246. (ISBN 978-81-937-3274-8).

Sailo, L., Solanki, G. S., Ramanujam, S. N. and Lalthanzara, H. (2018). Distribution mapping of Grey Peacock pheasant *Polyplectron bicalcaratum* (Linn. 1758) in Mizoram: A potential indicator of climate change. : In: *Biodiversity Conservation: Strategies and Applications* G. SSolanki, (Ed.), South Eastern book Agencies, Guwahati, India, p. 75-81.

Manorama, M, and Ramanujam, S. N. (2018). Ultrastructural studies of the intestine in Shalynai *Puntius shalynius* Yazdani and Talukdar 1975, an endemic and threatened fish from Umiam river, Meghalaya, India.: In: *Biodiversity Conservation: Strategies and Applications* G. SSolanki, (Ed.), South Eastern Book Agencies, Guwahati, India, p. 261-267.

Research Projects

New: 2

Title of Project	Pl/Co-Pl	Funding Agency	Rupees in lakh
To Elucidate the Unique Biochemical Adaptational Strategies that allow two Air-breathing Catfishes (<i>Clarias</i> <i>batrachus</i> and <i>Heteropneustes fossilis</i>) to survive in Ammonia Enriched Toxic Waste		NASF-ICAR	93.2
Quantitative Assessment and Mapping of Cicadas from Northeast India	Dr.S.R. Hajong	DBT,NewDelhi	70.0

Title of Project	Pl/Co-Pl	Funding Agency	Rupees in lakh
Influence of Altitudinal Variations on Breeding Activity of Anurans Prevailing in the Hilly Terrain of Meghalaya.	Prof. (Mrs.) R.N.K.Hooroo	DST-SERB	38.86
Molecular Adaptation during Exposure to Zinc Oxide and Titanium Dioxide Nanoparticles with Special Reference to Oxidative stress, Nitric Oxide Production, Heat Shock Protein Expression and Induction of Apoptosis in air- breathing Catfish, <i>Clarias batrachus</i>	Prof. N. Saha	DST-SERB, New Delhi	77.27
Effect of Climate Change on Breeding Biology of Songbirds	Prof. A. S. Dixit	Department of Biotechnology, New Delhi	62.01

Completed: 7

Title of Project	Pl/Co-Pl	Funding	Rupees in
		Agency	lakh
Possible Upregulation of Ornithine-	Prof. N. Saha	DST-SERB,	49.95
urea Cycle Genes and Involvement		New Delhi	
of MAPKs to Adapt under Hyper-			
ammonia Stress in Air-breathing			
Catfish, Heteropneustes fossilis			
Anticipation in Genes: Molecular,	Prof. A. S. Dixit	Department of	69.88
Physiological and Behavioral		Biotechnology,	
Correlates of Response of Circa-		New Delhi	
annual Clocks to Seasons in Night-			
Migratory Songbirds: Investigation			
of Physiological and Metabolic			
Adaptations in Migrants.			
Identification of Biomarkers of	Dr. Srimoyee	DBT (NER)	85.20
Oropharyngeal Cancer Prevalent in	Ghosh (PI),	GOI	
North-Eastern States of India by	Dr. B.Syunyu		
Whole Genome Methylation and	(Co-PI), Dr.		
Expression Profiling	Arindam Maitra		
	(Co-PI), Dr.		
	Sharmila		
	Sengupta (Co-		
	PI)		
Identification and Development of	Dr. Srimoyee	DST, GOI	46.54
DNA Methylation Biomarkers for	Ghosh (PI),		
Stomach Cancers Prevalent in	Dr.Saia		

Mizoram, India	Chenkual, (Co- PI)		
Identification and Development of DNA Methylation Biomarkers for Oral/Oropharyngeal Cancers Prevalent in the North-Eastern States of India	Dr. Srimoyee Ghosh (PI), Dr. B. Shunyu (Co-PI)	DBT, GOI	53.08
Niangtaser-an Unique Insect Resource from Ribhoi	Dr.S.R. Hajong Prof. Hambok Syiemlieh	Meghalaya Basin Development Authority	3.85
Evaluation of Mitochondrial Glycerophosphate Dehydrogenase (mGPDH) for its Role in Type 2 Diabetes Mellitus (T2DM) (EMR/2016/001283 dated February 01, 2017)	Dr. B Das (PI)	DST-SERB, GoI	29.54

Academic Collaborations

India

Prof. R.N.K. Hooroocollaborated with: (i) Prof. S.K. Dutta, Nature Environment and Wildlife Society, Angul, Odisha (ii) Prof. S. Dey, SAIF, NEHU, Shillong.

Prof. N. Sahacollaborated with: (i) Prof. S. Bhattacharya, Visva-Bharati, Santiniketan (ii) Dr. H. K. Barman, ICAR-CIFA, Bhubaneswar (iii) Dr. V. Mohindra, ICAR-NBFGR, Lucknow.

Prof. A.K. Yadav collaborated with Prof. G. Bez and Dr. R. L Nongkhlaw, Department of Chemistry, NEHU, Shillong.

Prof. A.S. Dixitcollaborated with: (i) Prof. Vinod Kumar, Delhi University, New Delhi (ii) Prof. Sangeeta Rani, Lucknow University, Lucknow (iii) Dr. Praful Singru, NISER, Bhubaneswar (iv) Dr. Monika Sadanada, Mangalore University, Mangalore (v) Prof. Sanjay Bhardwaj, Chaudhary Charan Singh University, Meerut **Dr. S. Ghosh** collaborated with:(i) Dr. Arindam Maitra, National Insitute of Biomedical Genomics (NIBMG), Kalyani, West Bengal. (ii) Dr. Neizekhotuo Brian Shunyu, NEIGRIHMS, Shillong. (iii) Dr. Saia Chenkual, Civil Hospital, Aizwal, Mizoram.

Dr. B. Das collaborated with: (i) Prof. K. Satyamoorthy, Manipal University, Manipal (ii) Prof. S. Mishra, ILS, Bhubaneswar, Odisha.

Abroad

Prof. R.N.K. Hooroo collaborated with: (i) Prof. Indraneil Das, Institute of Biodiversity and Environmental Conservation, University Malaysia, Malaysia.

Prof. A.K. Yadav collaborated with Prof. Andreas-Schmidt Rhaesa, University of Hamburg, Germany.

Prof. A.S. Dixit collaborated with Prof. KazuyoshiTsutsui, HiroshimaUniversity Higashi-Hiroshima, Japan.

Dr. B. Das collaborated with Dr. Todd Holyoak, University of Waterloo, Canada.

Honours/Awards/Recognitions Prof. N. Saha

PAC Member of the DST-SERB Animal Science Group, New Delhi (2018- 2021). Expert Committee member for the DST-SERB Young Scientists Scheme, New

Delhi (2015-2018) Task Force Member of the DST-SERB Empowerment and Equity Opportunities for Excellence in Science Committee (2018-2021)

Research Advisory Committee member of the ICAR-National Bureau of Fish Genetic Resources, Lucknow

BPGS Member of the Department of Zoology, Sikkim University, Gangtok

(i) BOS member of the Department of Zoology, Tripura University, Agartala

Prof. A.K. Yadav

M.M. Chakravorty Commemoration Lecture, 2018 under the aegis of the Zoological Society of Kolkata at Kolkata University, Kolkata.

Appointed as Associate Editor, BMC Complementary and Alternative Medicine (Springer, Nature, U.K.).

Technical Expert Committee Member for Medical Biotechnology, Department of Biotechnology, Ministry of Science & Technology, Govt. of India (2018-2020).

Editorial Board Member, Journal of Parasitic Diseases (Springer).

Editorial Advisory Member, Tang, Humanitis Medicine, (South Korea).

Editorial Member, Journal of Alternative Medical Research (USA)

Prof. A. S. Dixit

Elected Vice-President of Indian Society for Chronobiolgy from 1st April, 2019 to 31st March, 2021. Ranju Chetri was awarded 3rd prize in poster presentation in the "International Symposium on Current Trends in Biological Sciences" held at University of Lucknow, Lucknow from March 27-28, 2018.

Other Activities

Prof. B.B.P. Gupta

Member of the Selection Committee for Summer Research Fellowship (SRF) and FAST-SF, Indian Academy of Sciences, Bengaluru.

Chairman, National Academy of Sciences NER Local Chapter, Shillong (April -October, 2018).

Member of the Editorial Board of the American Journal of Experimental Biology.

Reviewer, Journal of Photochemistry and Photobiology (Elsevier).

Delivered lectures in the Refresher Course in Zoology (18th March to 7th April, 2019) conducted by the Human Resource Development Centre, North-Eastern Hill University.

Prof. S.B. Prasad

Delivered two lectures and conducted one practical class as a resource person at Refresher Course 'Recent advances in Zoology' organized by Zoology Department, NEHU, Shillong during March 18 and April 7, 2019.

Prof. N. Saha

Acted as reviewers in journals like PloS One, Frontiers in Molecular Biology, Ecotoxicology and Environmental Safety, Aquatic Toxicology, Aquaculture, Comparative Biochemistry and Physiology, Journal of Comparative Physiology.

Prof. S. N. Ramanujam

Member of Board of Studies in Zoology, Mizoram University, Aizawl. Delivered lectures in Refresher course in

Zoology in March-April, 2019.

Reviewers for journals of national/international repute

Prof. A.K. Yadav

Life Member, Indian Society for Parasitology Fellow, Zoological Society (FZS). Member, Technical Expert Committee, DBT-NER, Govt. of India, Medical Biotechnology Member-Secretary, Institutional Ethics Committee (Animals Models), NEHU Executive Committee Member, Indian Society of Parasitology. Chairman, BOS in Clinical Nutrition and Dietetics, NEHU, Shillong. Examiner of Union Public Service Commission, New Delhi. Reviewers for Journal of Ethnopharmacology (Elsevier), PLoS ONE, Annals of Ayurvedic Medicine, International Journal of Pharmaceutics (Elsevier). BMC Complementary Alternative Medicine (Springer Nature), (Elsevier).

Prof. A.S. Dixit

Peer reviewers: National and International Journals: J. Exp. Biol., Ind. J. Exp. Biol., Chronobiol. Int., Photochem. &Photobiol. Sci., Comp. Biochem. Physiol., J. and Comp. Physiol. B etc. Peer reviewer of research proposals:

Department of Science and Technology, New Delhi.

Editorial Board member of "The NEHU Journal".

Examiner: Undergraduate, Post-graduate, Ph. D. and competitive examinations of own and other Indian Universities.

Selection committee member: Appointed selection committee member for the recruitment of teachers in Kendriya Vidyalaya Sangathan. New Delhi

Course Coordinator, UGC Refresher Course in Zoology, North Eastern Hill University, Shillong from 18th March to 7th April, 2019.

Prof. B. Keshan

Life Member- Indian Science Congress Association, Kolkata.

Life Member – The Zoological Society, Kolkata.

Reviewer for Scientific Reports (Nature Publishing Group).

Co-Chairperson for two scientific sessions and adjudicator for poster presentation for "National Conference on Recent Trends in Zoological Research in North East India' during April 19-20, 2018, jointly organized by the Department of Zoology North-Eastern Hill University, Shillong and Zoological Society, Kolkata.

Resource person in the Refresher Course in Zoology (18th March- 7th April, 2019) and delivered four lectures on 19th, 23rd and 25th of March, 2019.

Member of the Selection Committee for appointment of Guest Lecturer, Manipur University, December, 2018.

Paper-setter for M.Sc. examination, 2018 for Tripura University

Dr. S. Ghosh

Reviewer for journals of national/international repute: Current Science

Dr. S.R. Hajong

Member, Tura Govt. College for NAAC accredition.

Member, NEHU evaluation committee for Nongstoin College.

Dr. B. Das

External reviewer for international journals, Biochemical Journal, PloS One, Bioscience Reports, Molecular and Biochemical Parasitology, The Journal of Nutritional Biochemistry, Comparative Biochemistry and Physiology Part (B), Journal of Parasitic Diseases.

Judge in "Proteins and Enzymes" for judging undergraduate poster competition at

"Experimental Biology 2018" held at San Diego Convention Center, 111 West Harbor Drive; San Diego, California, USA, during 21st-25th April 2018

Delivered a lecture and conducted practical on "Advances in structural analyses of macromolecules" in Summer School in Basic Sciences at UGC-HRDC, NEHU, Shillong-793022, on 12th July 2018

Conducted two lectures and one practical class on "Polymerase Chain Reaction" in Refresher Course in Zoology, NEHU, Shillong on 22, 23, 25 March, 2019

SCHOOL OF PHYSICAL SCIENCES

Dean: Prof. R. H. Duncan LyngdohTelephone: 0364-2722501(O) / 943633332(M)E-mail: rhdl@nehu.ac.in, harkuduncanl@yahoo.co.in

The School of Physical Sciences consists of the Departments of Chemistry, Mathematics, Physics and Statistics. All the Departments are involved in postgraduate teaching and research (Ph.D. programme in all Departments; M.Phil. programme in Departments of Mathematics and of Statistics). Every department has its chosen thrust areas for carrying out research work. The 38 faculty members in the School

engage in research of significance, leading to a total of 86 publications, and the award of 21 Ph.D. degrees. In addition to many individual research projects, the Departments have received extra financial support from DST-FIST and UGC-SAP. The Department of Chemistry is a UGC Centre of Advanced Study. Many faculty members have national and international collaborations.

DEPARTMENT OF CHEMISTRY

Head	: Prof. A. K. Chandra
Telephone	: 0364-2722601(O)/9436163024 (M)
E-mail	: akchandra@nehu.ac.in

Faculty: 17

Designation	Name and Qualification	Specialization
Professor	Dr.B. Myrboh, MSc &Ph.D. (NEHU)	Organic Chemistry
	Dr.R. H. Duncan Lyngdoh, MSc (NEHU),Ph.D. (IIT Madras)	Organic Chemistry
	Dr.R. A. Lal, MSc &Ph.D. (BHU)	Inorganic Chemistry
	Dr.K. Mohan Rao, MSc (SV Univ), Ph.D. (IIT Kanpur)	Inorganic Chemistry
	Dr.A.K.Chandra, MSc &Ph.D. (Burdwan)	Physical Chemistry
	Dr.G. Bez, MSc &Ph.D. (Gauhati)	Organic Chemistry
	Dr.H. Askari, MSc/Ph.D. (AMU)	Physical Chemistry
	Dr.T.S. Basu Baul, MSc (Jabalpur), Ph.D. (N. Bengal)	Inorganic Chemistry
	Dr.S. Mitra, MSc (Vidyasagar),Ph.D. (IACS, Kolkata)	Physical Chemistry
Associate Professor	Dr.M. K. Sahoo, MSc (Utkal), Ph.D. (Comenius, Czechoslovakia)	Organic Chemistry
	Dr.M. Velusamy, MSc, Ph.D. (Bharathidasan)	Inorganic Chemistry
	Dr.R. L. Nongkhlaw, MSc & Ph.D. (NEHU)	Organic Chemistry
Assistant Professor	Dr.E. K. Rymmai, MSc, Ph.D. (NEHU)	Inorganic Chemistry
Professor	Dr.D. P. S. Negi, MSc ,Ph.D. (IIT Roorkee)	Physical Chemistry
	Dr.B. Sarkar, MSc (N. Bengal), Ph.D. (IIT Guwahati)	Physical Chemistry
	Dr.A. K. Pal, MSc (Calcutta), Ph.D. (Kalyani)	Organic Chemistry
	Dr.S. Khatua, MSc (Vidyasagar),Ph.D. (IIT Kharagpur)	Inorganic Chemistry

Thrust Areas of Research

Organometallic Chemistry, Coordination Chemistry, Computational Chemistry, Theoretical Reaction Kinetics, Synthetic Organic Chemistry, Heterocyclic Chemistry, Chemistry of Surfactants, Photocatalysis, Environmental Chemistry, Natural Product Chemistry.

Brief Statement of Academic Activities

The Department has been accorded as a Centre for Advanced Studies in Chemistry by UGC and was also supported by DST through FIST. The Department offers the M.Sc. and Ph.D. programmes. Thirty-eight MSc and eleven Ph.D. students were admitted to the Department in 2018-19. Nine students were awarded the Ph.D. degree. All

faculty members are engaged in active research. Eight students qualified for the CSIR NET JRF/Lectureship and one for SLET (North-East). Ten students are working as post-doctoral fellows both in abroad and India. At present, there are two new research projects and six ongoing individual research schemes funded by DST-SERB and DBT.

Students' Profile

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MSc	15	23	2	21	02	13	20	18	38
Ph.D.	05	06	0	06		05	06	05	11

Degrees Awarded

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MSc	11	23	00	21	04	12	15	20	34
Ph.D.	09	00	00	03		06	02	07	09

Students awarded Ph.D. degree :6 Placement of Students

M.Sc students passing out from this Department have been placed as teachers in different colleges and schools, as scientists in research organizations, and as research scholars in this Department and other institutes. Some research scholars have joined different University/institute as research associates. Mr. Smarling Suting got faculty positions as Asst. Professor in Tura Govt. College.

Courses Conducted

Postgraduate: MSc

Semester I

Inorganic Chemistry-I; Organic Chemistry-I; Physical Chemistry-I; Laboratory Course in Organic Chemistry.

Semester II

Inorganic Chemistry-II; Organic Chemistry-II; Physical Chemistry-II; Laboratory Course in Inorganic Chemistry.

Topics in Organic Synthesis; Computer Programming in Chemistry, Organometallic

Chemistry, Bioorganic Chemistry; Chemistry of Surfactants.

Semester III

Inorganic Chemistry-III; Organic Chemistry-III; Physical Chemistry-III; Laboratory Course in Physical Chemistry; Environmental and Analytical Chemistry; Photochemistry; Bioinorganic Chemistry; Natural Products Chemistry; Principles and Applications of Fluorescence Spectroscopy.

Semester IV

Inorganic Chemistry-IV; Organic Chemistry-IV; Physical Chemistry-IV; Seminar; Project Work in Inorganic/Organic/Physical Chemistry.

Ph.D. Courses

Research Methodologies in Chemistry; Analytical Techniques in Chemistry; Advanced Inorganic Chemistry; Advanced Organic Chemistry; Advanced Physical Chemistry.

Seminars/Conferences/Symposia/Works hops

Organized

Prof. S. Mitra was the Convener of "National Seminar on Cotemporary Challenges in Chemistry, (NSC3-2018)" organized jointly by NEHU, Shillong and S N Bose National Centre for Basic Sciences, Kolkata during 20-21 November 2018 as a part of outreach program to celebrate 125th birth anniversary of S N Bose at North-Eastern Hill University (NEHU), Shillong.

THE PROFESSIONAL DEVELOPMENT PROGRAMME FOR SCIENCE TEACHERS:

The Royal Society of Chemistry under the Yusuf Hamied Inspirational Chemistry Programme and The Chemistry Club, Department of Chemistry, North-Eastern Hill University, Shillong, has successfully conducted the Professional Development Programme for Science Teachers during 3rd October 2018 to 11th October 2018 in the following four institutions located in different districts of the state.

Mairang Presbytarian Science College, (3rd and 4th October)

Ram Krishna Mission HS School, Cherrapunjee (5th and 6th October)

Sacred Heart H S School, Mawlai, Shillong (8th and 9th October)

St Paul H S School, Nongpoh (10th and 11th October 2018)

The programme was led by Mrs.Vimala Oak, Teacher Developer and Resource Person, Royal society of Chemistry, Bangalore and Dr. R.L. Nongkhlaw, as Local Coordinator.

2nd SOCIAL OUTREACH PROGRAMME:

The Chemistry Club, Department of Chemistry, North-Eastern Hill University, Shillong, organisedthe 2ndSocial Outreach Programme atTynringGovernment School, East Khasi Hills District, Meghalaya on the 2nd of November 2018 where School bags, stationery items besides clothes, toys etc were donated to the school children. The programme was funded by members of the chemistry club.

Attended

Prof. A. K. Chandra

Delivered invited talk on "Quantum Mechanics: Evolution and Applications in Chemistry, August 20, 2018 at St. Edmund's College, Shillong

Dr. M. Velusamy.

Session Chair, International conference on modern trends in chemical sciences including green chemistry, organised by the Department of chemistry, SRM Institute of Science and Technology, Chennai, 27-29 December 2018.

Dr. D.P.S. Negi

Delivered an invited Lecture on "Colorimetric sensing of Al³⁺ and 6-mercaptopurine using functionalized gold nanoparticles" at the Third International Conference on Nanomaterials (ICN 2018) Kottayam, India, during 11-13 May 2018.

Dr. B. Sarkar.

National Seminar on Contemporary Challenges in Chemistry (NSC3-2018), NEHU, Shillong & SNBNCBS, Kolkata, November 20-21, 2018, Title of the poster: Gas phase 1,3-cycloaddition of ozone with catechol: Formation of Criegee intermediates **Dr. A.K. Pal.**

Presented a poster at National Seminar on Contemporary Challenges in Chemistry (NSC3-2018) Dept. Of Chemistry, North Eastern Hill University, Shillong, November, 2018.

Delivered an invited lecture at National Seminar cum Workshop in Nanoscience (NSWN-2018) Dept. Of Nanotechnology, North Eastern Hill University, Shillong May 29-31, 2018.

Dr. S. Khatua

Presented a poster at National seminar on contemporary challenges in chemistry (NSC3-2018) 20-21 Nov. 2018, NEHU. Shillong

Delivered an invited lecture on Photoluminescent d^6 -metal complex based probes for thedetection of bio-relevant species and chemical warfare agents" at Frontiers in Chemical Sciences (FICS)–2018, December 6-8, 2018, IIT Guwahati.

Delivered an invited lecture on "Ru(II) and Ir(III) based luminescent probes for biorelevantspecies and chemical warfare agents detection" at Interaction Meeting of Alumni and Faculties of Department of Chemistry, IIT Kharagpur, 30th March, 2019.

Dr R. H. Duncan Lyngdoh

Delivered an invited talk entitled "Metalmetal bond distances and bond orders for binuclear complexes of 3d-block metalsTi through Zn: Theory and experiment compared" at the 59th Sanibel Symposium on Quantum Chemistry and Dynamics held at St Simons Island, Georgia (USA) from 17th to 22nd February 2019.

Presented an Invited Talk entitled "Structure and reactivity in chemistry" at the ICSSR National Seminar on "Coproduction of Science with Social Order: A Social Science Perspective on the Gifts of Science to Society" at Nowgong College, Nagaon, Assam, on 18th August, 2018.

Publications:

Published abroad and in UGC listed Journals

Lily, M., Baidya, B., Chandra, A.K. (2019) Dual level direct dynamics study of gas phase reaction of CF₃CH₂OCH₂CF₃ with Cl atoms and atmospheric degradation of CF₃CH₂OCH₂CF₃. *Chem. Phys. Lett.*,721: 141-148.

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Baidya, B., Lily, M., Chandra, A.K. (2018) Theoretical Insight into the Kinetics of H-Abstraction Reaction of CHF₂CH₂OH with OH Radical, Atmospheric Lifetime and Global Warming Potential. *Chemistry Select*,3: 6136-6144.

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Premila Devi & R. H. Duncan Lyngdoh* (2019). Uncatalyzed Thermal Gas Phase Aziridination of Martina Devi, Esther Chingbiaknem& R. H. Duncan Lyngdoh* (2018). A Molecular Mechanics Study on GA Codon Box Translation. J. Theor. Biol., 441: 28-43.

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Ibaniewkor, L. M., Sanjay, A., Lincoln, D., Jaya, L. T., Krishna, M. P., Mohan Rao, K. (2019). Synthesis and antimicrobial studies of half-sandwich arene platinum group metal complexes containing pyridylpyrazolyl ligands. *J. Coordination Chemistry.*, 72: 294-308.

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Basu Baul, T. S., Dutta, D., Duthie, A., Guedes da Silva, M. F. C., Rocha, B. M. G., Saurav, S., Manna, S. K. (2018). Syntheses, structural snapshots, solution redox properties, and cytotoxic performances of designated ferrocene scaffolds appended with organostannyl(IV) benzoates en route for human hepatic carcinoma. *Organometallics*, 37: 2961-2979.DOI:

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Sonu, V. K., Mitra, S. (2019). Quenching of luminol fluorescence at nano-bio interface: Towards the development of an efficient energy transfer system. J. *Fluorescence.*, 29: 165 – 176.

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Pilania, M., Rohman, M. A., Arun, V., Mehra, M. K., Mitra, S., Kumar, D. (2018). An efficient synthesis of triazolium ion based NHC precursor using diaryliodonium salts and their photophysical properties. *Organic & Biomolecular Chemistry.*,16: 7340 - 7345.

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Kharbani D, Khatua S, Soh C and Rymmai* (2019). E. Κ. Uncoordination mode of κ^0 -Janus scorpionatewith La(III) and Ce(III) Complexes: Synthesis, characterization, thermolysis and crystal structure determination. Journal of Molecular Structure., 1176: 128-132.

Kharbani, D, Kurbah, S. D, Rymmai, E.K. (2018) "Crystal structures of Ru(II)

complexes with pyrazole and pyrazolate derivatives of tris(3,5-dimethylpyrazolyl) borohydride". *Journal of Structural chemistry.*,59: 1186-1191.

Deb, D. K. and Sarkar, Biplab (2019). Formation of Criegee intermediates and peroxy acids: a computational study of gasphase 1,3-cycloaddition of ozone with catechol, *Phys. Chem. Chem. Phys.*, DOI: 10.1039/C9CP01312A

Gupta, A., Jamatia, R., Patil, R. A., Ma, Y.-R., Pal, A. K. (2018). Copper Oxide/Reduced Graphene Oxide Nanocomposite-Catalyzed Synthesis of Flavanones and Flavanones with Triazole Hybrid Molecules in One Pot: A Green and Sustainable Approach. *ACS Omega.*, 3(7): 7288–7299.

Gupta, A., Jamatia, R., Dam, B., Pal, A. K. (2018). Development of Synergistic, Dual Pd-Cu@rGO Catalyst for Suzuki, Heck and Click Reactions: Facile Synthesis of Triazole or Tetrazole Containing Biaryls and Stilbenes. *ChemistrySelect.*, 3(28): 8212 – 8220.

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Paul, D., Khatua, S., Chatterjee, P. N. (2019) A Facile Iron-Catalyzed Dual CC Bond Cleavage: An Approach towards Triaryl Methanes. *New J. Chem.*, https://doi.org/ 10.1039/C9NJ00149B.

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Sawkmie, M. L., Paul, D., Khatua, S., Chatterjee, P. N. (2019): Active bismuth mediated allylation of carbonyls/Ntosyl aldimines and propargylation of aldehydes in water, *Journal of Chemical Sciences.*, 131: 51: https://doi.org/10.1007/s12039-019-1625-6

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Bhattacharjee, D., Sheet, S. K., Khatua, S., Biswas, K., Joshi, S. R., Myrboh, B. (2018), A reusable magnetic nickel nanoparticle based catalyst for the aqueous synthesis of diverse heterocycles and their evaluation as potent anti-bacterial agent. *Bioorganic & Medicinal Chemistry.*, 26(18): 5018–5028.

Paul, D., Rudra, S., Rahman, P., Khatua, S., Pradhan, M., Chatterjee, P. N. (2018),: Synthesis and characterization of Pd- γ -Fe₂O₃ nanocomposite and its application as a magnetically recyclable catalyst in ligand-free Suzuki-Miyaura reaction in water. *J. Organometallic Chem.*, 871: 96-102.

Chatterjee, P. N., Paul, D., Sawkmie, M. L., Sinha, A. K., Khatua, S. (2018): Synthesis, characterization of active Sn (0), and its application in selective propargylation of aldehyde at room temperature in water, *Canadian Journal of Chemistry.*, 97(1): 29-36.

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Sheet, S. K., Sen, B., Patra, S. K., Rabha, M., Aguan, K., Khatua, S. (2018) Aggregation-Induced Emission-Active Ruthenium(II) Complex of 4,7-Dichloro Phenanthroline for Selective Luminescent Detection and Ribosomal RNA Imaging. *ACS Appl. Mater. Interfaces.*, 10(17): 14356–14366.

Devi, S. Premila & Duncan Lyngdoh, R. H. (2018). Uncatalyzed thermal gas phase aziridination of alkenes by organic azides. Part 2: Whole azide reaction with alkene. *J. Chem. Sci.*, 131: 06.

Duncan Lyngdoh, R. H., King, R. B., Schaefer, H. F. (2018). Metal-metal bond distances and bond orders in binuclear metal complexes of the first row transition metals titanium through zinc. *Chem. Rev.*, 118: 11626-11726.

Book Chapters/proceedings: Dr. M. Velusamy.

Hsia, C. -Wei., Velusamy, M., Tsao, J. -T., Hsia, C. -H., Chou, D. -S., Jayakumar, T., Lee, L. -W., Li, J. -Y., Sheu, J. -R. (2018) New Therapeutic agent against arterial thrombosis: An iridium(III)-derived organometallic compound. MDPI Publisher, Switzerland, Chapter 2, p. 21-36, ISBN: 978-3-03897-542-7.

Funds Received from Agencies including NEHU/UGC NEHU: Rs. 28.27 lacs

Research Projects New: 2

Title of Project	PI/Co-PI	Funding Agency	Rupees in lakh
Photophysical Studies on Polypyridyl Complexes: Towards the Development of Nanoscopic Fluorescent Targets		DST-SERB	45.74
Assessment of Elimate change impact on soils and various water marring of Meghalaya using existing and newer techniques.	Dr. S. Khatua	DST-SERB	66.45

Ongoing: 6

Title of Project	PI/Co-PI	Funding Agency	Rupee s in lakh
Molecular mechanism of designated ferrocene scaffold appended with organostannyl benzoates for anticancer activity	Dr. T.S.B. Baul	DBT	43.12
Cyclometalated platinum-based triplet enutter for OLED applications	Dr. M. Velusamy	DST-SERB	35.04
Synthetic studies on Organo Encapsulated Nanoparticles for fabrication of C-N, C-O, C-S bonds leading to five and six membered rings: An experimental and computational approach	Dr. R.L. Nongkhlaw	DST-SERB	28.51
Preparation and characterization of stabilized magnetic nanoparticles (MNPs) supported with Pd complex and catalytic uses in C-H activation and asymmetric synthesis	Dr. A. K. Pal	DST-SERB	25.55
"Isolation and characterization of bioactive components from indigenous plants of NEH region for antiurolithiatic potential with standardized phytochemical and pharmacological Parameters	Dr. A. K. Pal	DBT	79.83
Theoretical Investigations of Hydrogen Bond Interactions Involved in the Reaction of Volatile Organic Compounds Presents in the Atmosphere	Dr. Biplab Sarkar	DST SERB	27.50

Academic Collaborations.

Prof. A.K. Chandra has academic collaboration with the Quantum Chemistry Group, University of Leuven, Belgium, and the Department of Chemistry, Quy Nhon University, Vietnam, on High End Theoretical Calculations.

Prof. K.M. Rao has academic collaborations Yurij with (i) Prof. Mozharivskyj, Department of Chemistry and Chemical Biology, McMaster University, Canada (ii) Prof. Roger M Phillips, Department of Cancer Pharmacology, Institute of Cancer University Therapeutics, of Bradford, Bradford, UK (iii) Dr. Werner Kaminsky, Department of Chemistry, University of Washington, Seattle, WA 98195, USA(iv) Prof. Krishna Mohan, P. Department of Centre Biotechnology and for Nanotechnology, Indian Institute of Technology Roorkee, Roorkee- 247 667, India. (v) Prof. A. Uma, Centre for Biotechnology (CBT), Institute of Science & Jawaharlal Technology (IST), Nehru Technological University Hyderabad (JNTUH), Kukatpally-500 085, Hyderabad, Telangana State, India

Prof. T. S. Basu Baul has academic collaborations with (i) Andrew Duthie, School of Life & Environmental Science, Deakin University, Australia; (ii) M. Fátima C. Guedes da Silva, Centro de Química Estrutural. Instituto Superior Técnico. Universidade de Lisboa, Portugal; (iii) H. Höpfl, Centro de Investigaciones Químicas, Universidad Autónoma del Estado de Morelos, Mexico; (iv) Edward R.T. Tiekink, Research Centre for Crystalline Materials, Sunway University, Malaysia; (v) Edit Y. Tshuva, Institute of Chemistry, The Hebrew University of Jerusalem, Israel; (vi) A. Lyčka, University of Hradec Králové, Faculty of Science, Czech Republic;(vii) B. Koch, Department of Zoology, Banaras Hindu University, Varanasi; (viii) S. K. Manna,

Centre for DNA Fingerprinting & Diagnostics, Hyderabad.

Prof. S. Mitra has academic collaborations with Prof. Semen \mathbf{O} (i) Yesylevskyy, Department of Physics of Biological Systems, Institute of Physics of the National Academy of Sciences of Ukraine, Ukraine on Breathing motion of macromolecules in complex biological system; (ii) Prof K. Aguan, Dept. of Biotechnology, NEHU on Quantitative assay of novel AD drugs;(iii) Prof. S. R. Joshi, Biotechnology, NEHU Dept. of on Antibacterial activity at nano-bio interfaces; (iv) Dr. A. Bhattacharjee, Dept. of Biotechnology, NEHU on Modelling drugprotein interaction and (v) Dr. P. R. Bangal, IICT, Hyderabad on Ultrafast time-resolved spectroscopy.

Dr. M.K. Sahoo has academic collaboration with (i) Prof. R.N. Sharan, Dept. of

Biochemistrym NEHU, Shillong

M. Velusamy. academic Dr. has collaborations with (i) Dr. Ramasamy Mayilmurugan, School of Chemistry, Madurai Kamaraj University, Madurai 625021.(ii) Prof. Joen Rong Sheu, Graduate Institute of Medical Sciences, College of Medicine, Taipei Medical University, Taipei 110, Taiwan.(iii) Dr. A. Kathiravan, National Centre for Ultrafast Process, University of Madras, Chennai 600005.

Dr. D. P. S. Negi has academic collaborations with Dr. L. Robindro Singh, Department of Nanotechnology, NEHU.

Dr. B. Sarkar has academic collaborations with (i) Dr. Aloke Das, Associate Professor, Department of Chemistry, IISER Pune, Dr. Homi Bhabha Road, Pashan, Pune, Maharashtra-411008 (ii) Dr. Amit Kumar Paul, Assistant Professor, Department of Chemistry, NIT Meghalaya, Shillong, Meghalaya 793003

Dr. A.K. Pal has academic collaborations with (i) Prof. Yuan-Ron Ma, Department of Physics, National Dong Hwa University,

Hualien 97401, Taiwan. Characterizations of nanoparticles and graphene oxide.

Dr. S. Khatua has academic collaborations with (i) Prof. K. Aguan, Department of Biotechnology and Bioinformatics, NEHU, Shillong; (ii) Dr. Debesh R. Roy, Applied Physics Department, S. V. NIT, Surat, Pin-395 007, INDIA; (iii) Prof. N. Saha, Dept. of Zoology, NEHU, Shillong) on DST project 'A Lab on a molecule for cation and anion sensing' and (iv) . P. N. Chatterjee, Dept. of Chemistry, NIT Meghalaya.

Other activities

Prof. A. K. Chandra. He is a frequent reviewer of the journals like J. Phys. Chem. (A & B), RSC Adv., New J. Chem., Chem. Phys.Lett., Comput.Theor. Chem., J. Comput. Chem., Chemistry Select etc.

Prof. B. Myrboh is a frequent reviewer of Tetrahedron letters; RSC Adv. and others.

Reviewer for following journals: *Plos One*, *Inorganic Chemistry*, *Bioorganic Chemistry*, *Journal of Biomolecular Structure and Dynamics*.

Prof. K.M. Rao is a frequent reviewer for several journals of national/international repute.

Prof. G.

Dr. Bez is a frequent reviewer of the journals like Journal of Organic Chemistry (ACS), Medicinal Chemistry Letters (ACS), ACS Sustainable Chemistry and Engineering (ACS), New Journal of Chemistry (RSC), RSC Advance (RSC), Catalysis Letters (Elsevier), Tetrahedron Letters (Elsevier), Journal of Molecular Catalysis B: Enzymatic, Molecular Diversity (Springer), Current Organocatalysis (Bentham), Current Microwave Chemistry (Bentham), Letters in Organic Chemistry (Bentham). **Prof. H. Askari** is he is a frequent reviewer of the journal of Computational Biology and Chemistry.

Prof. T. S. Basu Baul

Dr. Basu Baul is an Editorial Board member of the journal "Main Group Metal Chemistry (De Gruyter)", Berlin, Germany. He is also a frequent reviewer for Journal of Organometallic Chemistry, Inorganica Chimica Acta. Applied Organometallic Zeitschriftfüranorganische und Chemistry, allgemeine Chemie, Main Group Metal Chemistry.

Prof. S.

Dr. Mitra is a reviewer of reputed international journals like JACS, JPC, PCCP, CPL, J. Photochem. Photobiol. A & B, Spectrochim. Acta-A, J. Lumin., J. Mol. Struct. etc.

Dr. M. K. SahooProf. R.N. Sharan, Dept. of Biochemistry NEHU, Shillong.

Dr. Sahoo is a frequent reviewer for the journals Chemosphere, Int. Rev. Chem. Eng., Chem. Eng. J., Crit. Rev. Environ. Sci. Technol., J. Radiat. Res., J. Adv. Oxdn. Technol., Desalination and Water Treatment, Sep. Purif. Tech., Ecological Eng.

Dr. Rishanlang Nongkhlaw is a frequent reviewer for the journals Tetrahedron (Elsevier), Chemistry Select (Wiley), Journal of Inorganic and Organometallic Polymers and Materials (Springer), Dyes and Pigments (Elsevier) and Polycyclic Aromatic Compounds.

Dr. D. P. S. Negi is a frequent reviewer for the journal Materials Research Express and Nanotechnology.

Dr. B. Sarkar is a frequent reviewer for the journal Reviewer RSC advances and a

Resource person UGC-HRDC, Academic Staff College, NEHU.

Dr. A.K. Pal is a frequent reviewer of Chemistry Select- Wiley, Green Chemistry – RSC, Applied Organo Mettalic Chemistry-Wiley, New Journal of Chemistry-RSC.

Dr. S. Khatua is a frequent reviewer for journals of Royal Society of Chemistry

(RSC) and American Chemical Society (ACS).

Honours/Rewards and Recognitions:

Dr. D.P.S. Negi received "Outstanding Reviewer Award" in 2018 from IOP Publishing, U.K., for reviewing manuscripts for Materials Research Express.

DEPARTMENT OF MATHEMATICS

Head	: Dr.A.M. Buhphang (Teacher in charge): upto 05.12.2018
	: Prof. D. Bhattacharjee: w.e.f 05.12.2018-
Telephone	: 0364-2722711 (O)/09436309613 (M)
E-mail	:debashis_bhattacharjee@yahoo.com, hodmath@nehu.ac.in

Faculty: 6

Designation	Name and Qualification	Specialization
Professor	Dr.D. Bhattacharjee, Ph.D. (Warsaw	Number Theory
	University, Poland)	
	Dr. A.M.Buhphang, Ph.D.(NEHU)	Ring Theory
	Dr.A.T.Singh, Ph.D.(NEHU)	Algebraic and Differential Topology
Assistant	Dr.S.Dutta, Ph.D. (NEHU)	Rings of Continuous Functions
Professor	Shri John Paul JalaKharbhih,	Rings of Continuous Functions
	MSc(NEHU)	
	Shri Ph. Chinglensana, MSc (Delhi)	Algebraic Topology

Thrust Areas of Research

Thrust areas of research in alphabetical order are Algebra, Algebraic and Differential Topology, Dynamical Systems, Geometry and Number Theory.

Brief Statement of Academic Activities

In the year under review, the department continues to give quality and rigorous M Sc /M.Phil.and Pre-Ph.D. courses of different subjects of Mathematics like Algebra, Analysis, Complex Function Theory, Differential Equations, Linear Algebra, Mechanics, Number Theory, Numerical Analysis and Computer Programming, Functional Analysis Topology, Algebraic Topology, Topology, Differential Commutative Algebra. The Department conducted regular seminar and colloquia on the topics in the thrust areas of research. It continues to follow the culture of pursuing fundamental research of original nature and refraining from repetitive and marginal research. It continues to emphasize on the quality of research output rather than quantity. Students of the Department continue to perform well in obtaining UGC/CSIR NET Junior Research Fellowship and NET Lecturership.

Students' Profile

Enrolment Capacity:	M. Sc –36, M.Phil./Ph.D.	– Variable
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Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
M Sc	22	14	1	30	-	4	25	11	35
M.Phil	1	1	-	1	-	1	-	1	2
Ph.D.	4	1	1	2	-	2	2	3	5
Degrees A	Degrees Awarded								

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
M Sc	13	10	-	21	-	2	15	8	23
Ph.D.	-	-	-	-	-	-	-	-	-

Placement of Students:

Mr. Chanlemki Lanong, Assistant Prof., St. Mary's College. Mr. Stefferson Malngiang, Assistant Prof., Union Christian College. Mr. Santosh Safi, Assistant Prof., Union Christian College.

Research Fellowships:

CSIR-UGC-NET	UGC Non-Net	National Fellowship for Higher Education
5	9	0

Fieldwork/Educational Tour of Students

Teacher-in-Charge: Dr. A.M. Buhphang. Places/Institutions Visited: Goa University, Goa

Duration of Tour: 02.01.2019 till 16.01.2019, 14 days. Purpose of Tour: To expose our students to the academic atmosphere of other universities.

Courses Conducted

Postgraduate: MSc

SemesterI

Analysis I; AMES; Linear Algebra; ODE; Classical Mechanics. *SemesterII*

Elementary Graph Theory; Algebra;

Topology; PDE; Analysis II.

SemesterIII

CFT; Functional Analysis; ENT; Programming in C and Applications; Computer programming practical.

SemesterIV

Numerical Analysis; Computer Oriented Numerical Analysis; Operations Research;RingTheory; Algebraic Topology.

M.Phil./Ph.D. Courses

Compulsory Course: Research Methodology in Mathematics

Optional Courses: Galois Theory; Rings of Continuous Functions; Algebraic Geometry; Commutative Algebra; Advanced Ring Theory; Magneto Fluid Dynamics; Fluid Mechanics; Advanced Algebraic Topology; Differential Topology; Cosmology; Tensor Analysis and Theory of Relativity, Analytic Number Theory; Algebraic Number Theory; Topics in Algebra; Topics in Differential Manifolds; Topics in Riemannian Geometry; Homological Algebra; Advanced Group Theory; Theory of Characters; Topological Graph; Application ofLinear Algebra; Advanced Topics in Discrete Mathematics; Computational Homology; Relativistic Mechanics.

Seminars/Conferences/Symposia/Worksho ps

Organized

The department organized an Annual Foundation School III National Center for Mathematics (NCM) during July 2-21, 2018 with Dr. A.T. Singh and Prof. H.K. Mukerjee as the conveners of the school. The department in collaboration with the Assam University, Silchar organised an Annual Foundation School I during June 4-30, 2018 with Dr. A.T. Singh as the academic convener of the school. The department organised a two-day National seminar on Topology and Algebra, during March 13-14, 2019 with Dr. A.M. Buhphang as the convener of the programme.

Attended

Prof. H.K. Mukerjee delivered six lectures on "Differential Topology, Thom's Cobordism theory", at the National Center for Mathematics (NCM) sponsored AIS Differential Topology, NEHU, Shillong, July 02 to 21, 2018. Prof. H.K. Mukerjee delivered lectures on "Recent Advances in Basic Sciences – Topology and Applications", at the UGC-HRDC Summer School in Basic Sciences, during July 4-24, 2018.

Prof. H.K. Mukerjee delivered four lectures on "Algebraic Topology - a brief introduction", delivered four invited lectures at the Refresher course at the North Bengal University, during December 07 - 27, 2018.
Prof. H.K. Mukerjee delivered two invited lectures "On Some Aspects of Galois Theory" at the Mathematics day (birth anniversary of S. Ramanujan) celebration at NASI, Allahabad, Dec 22-23, 2018.
Dr. A. M. Buhphang delivered five lectures

on Algebra in the Annual Foundation School II held at Assam University, Silchar, during June 4-30, 2018.

Dr. A.M. Buhphang participated in and presented a poster on 'Lifting modules and the regularity conditions' at the CIMPA Research School on 'Topics in Ring Theory' at the African Institute of Mathematical Sciences, Cape Town, South Africa, during July 16-28, 2018.

Dr. A.M. Buhphang delivered an invited talk on 'A brief account of Galois' contributions toward Algebra' organized by Lady Keane College on 22nd September, 2018.

Dr. A.M. Buhphang partipated in a 'Research School on cluster algebras' held at the International Centre for Theoretical Sciences during December 8-22, 2018.

Dr. A.M. Buhphang participated and gave a contributed talk on 'Some vanishing conditions on Leavitt-path algebras' in the Asia Australia Conference held at the Western Sydney University during January 21-25, 2019.

Dr. A.M. Buhphang delivered a talk 'On generalised inverses and vanishing conditions of some algebras' at the UGC-

SAP sponsored National seminar on

Topology and Algebra organized by the

department of Mathematics, NEHU, Shillong during March 13-14, 2019.

Dr.A.M. Buhphang acted as a chairperson during the National Seminar on Pure and Applied Mathematics, 19-20 September, 2018, St. Mary's College, Shillong.

Dr. S. Dutta delivered a talk on 'Intermediate algebras of C(X)' at the UGC-SAP sponsored National seminar on Topology and Algebra organized by the department of Mathematics, NEHU, Shillong during March 13-14, 2019.

Dr. S. Dutta acted as a chairperson during the National Seminar on Pure and Applied Mathematics, 19-20 September, 2018, St. Mary's College, Shillong.

Dr. A. T. Singh delivered five lectures at the National Center for Mathematics (NCM) sponsored AFS-II held at Assam University,

Silchar, during June 4-30, 2018. Dr. A. T. Singh delivered five lectures at the National Center for Mathematics (NCM)

sponsored AIS Differential Topology,

NEHU, Shillong, July 02 to 21, 2018.

Dr. A. T. Singh delivered a lecture

in NSTA organised by St. Berchmans

College, Changanaserry, Kottayam, Kerala, during 7-9 February 2018.

Dr. A.T. Singh delivered a talk 'On some unsolved problems in elementary number theory' at NBHM & KSCSTE sponsored National Seminar on Algebraic and Number Theory' organized by Al-Ameen College, Edathala, Kerela, during September 13-14, 2018.

Mr. John Paul Jala Kharbhih presented a paper on "A remark on Filialness in C(X)" at the in the National Seminar on Pure and Applied Mathematics organised by Department of Mathematics, St. Mary's College, Shillong during19-20 September, 2018.

Mr. John Paul Jala Kharbhih presented a paper on 'Weak prime ideals in rings of continuous functions' at the UGC-SAP sponsored National seminar on Topology and Algebra organized by the department of Mathematics, NEHU, Shillong during March 13-14, 2019.

Mr. Ph. Chinglensana attended a CIMPA-NIMS Research School on "Symplectic embedding, systolic inequalities and celestial mechanics", 11th - 20th June 2018, organised by CIMPA and NIMS, Daejeon, South Korea.

Publications

Published in India Mukerjee H.K. (2018), Classification of manifolds – different shades, *The Mathematics Student*, Vol. 87 (3-4), 13-45.

Funds Received from Agencies including NEHU/UGC

UGC-SAP(DRS-II) (Non-Recurring) – Rs. 23 lakhs UGC-SAP(DRS-II) (Recurring) – Rs. 9.1 lakhs NEHU (Non-Plan) – Rs. 3.8 lakhs DST-FIST- Rs. 29.25 lakhs

Academic Collaborations

Our department has collaboration with the International Centre for Pure and Applied Mathematics (CIMPA), France, for research purposes.

DEPARTMENT OF PHYSICS

Head	: Prof. Atul Saxena
Telephone	: 0364-2722827/2722801
E-mail	: atulnehu@yahoo.co.in, hodphy@nehu.ac.in

Faculty: 9

Designation	Name and Qualification	Specialisation
	Dr.B.M.Jyrwa, M.Sc.(NEHU), Ph.D.(NEHU)	Nuclear Physics(Theoretical)
	Dr. P. Nongkynrih, M.Sc.(NEHU), Ph.D.(NEHU)	Nuclear Physics (Experimental)
	Dr. Y.N. Tiwari, M.Sc. (Patna University), Ph.D. (Patna University), LL. B (Patna University)	Atomic, Molecular, Optical and Laser Physics (Theoretical)
Professor	Dr. A. Saxena, M. Phil (IAS, Meerut), Ph.D.(NEHU)	Nuclear Physics (Experimental)
	Dr. M.C. Mahato, M.Sc.(Ranchi), Ph.D. (I. I. Sc. Bangalore)	Condensed Matter Physics and Statistical Physics
	Dr. P.K. Patra, M.Sc. (Sambalpur University) Ph.D. (NEHU)	Nanoscience, High Energy Physics
Associate	Dr.S.S. Khatri, M.Sc.(NEHU), Ph.D. (NEHU)	Laser Physics (Experimental)
Professor	Dr.A.K. Biswas, M.Sc. (IIT, Kharagpur), Ph.D. (IP, Bhubaneshwar)	High Energy Physics (Theory)
Assistant Professor	Dr.S.S.Pohlong,M.Sc.(NEHU),Ph.D.(NEHU)	Solid State Physics (Theory)

Thrust Areas of Research:

Theoretical physics with thrust in using covariance matrix of nuclear data needed for nuclear reactors, measurement of high energy photon and neutron nuclear reaction crosssections in structural materials, study of preequilibrium processes, EXFOR Compilations, Experimental Nuclear Physics with thrust in characterization of radiation detectors and measurement of environmental radioactivity (hazard indices),

with particular emphasis on radon measurement, Solid State Physics (Theory), High Energy Physics (Theory), Laser Physics (Experiment), Condensed Matter Physics, Statistical Physics, NanoScience. Currently involved in research activities in the area of Nanoscience and investigation on the mechanical properties of Carbon Nanotubes (CNTs)

Brief Statement of Academic:

The main academic activity of the Department is the teaching M.Sc. (Physics) courses to a class of 34 (thirty-four) students in each M.Sc. (First and Second years). The Department also conducts the Ph.D. Course Work for newly admitted doctoral candidates. In addition to teaching M.Sc. and Ph.D. courses, members of the Faculty have been engaged in guiding research for Ph.D. scholars and in carrying out their own research works. Faculty members visited various reputed national and international institutions to carry out their research collaborations and delivered talks on their research contributions.

Students' Profile/Enrolment Capacity:M.Sc.33 Ph.D. - Variable

:

Degre e	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non- Meghalaya	Total
M.Sc.	21	12	01	28	-	04	32	01	33
Ph.D.	04	02	-	03	-	03	04	02	06

Degrees Awarded

Degre	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-	
e								Meghalaya	Total
M.Sc.	24	08	01	28	-	03		03	32
Ph.D.	-	01	-	-	-	01	01	-	01

Students Awarded Ph.D. Degree01

Research Fellowship 16 **Meritorious Malana** CSIR-UGC Rajiv ICPR Any other Others UGC-Non-Gandhi **Azad Minority** (National Fellowship NET Net SC./ST Fellowship **Fellowship for** Higher Education 02 01 10 03

Fieldwork/Educational Tour of

Students	
Teacher-in-Charge	: Prof. A. Saxena
Places/Institutions visited	: Delhi - Udaipur

Duration of Tour Purpose of Tour : 07/01/2019 to 20/01/2019 : To visit different Scientific Institutes

Courses Conducted Post-graduate

: M.Sc.

Semester I : Classical Mechanics, Quantum Mechanics I, Mathematical Physics, Laboratory – I. Semester II :

Semester II

Electrodynamics, Electronics, Quantum Mechanics II, Laboratory II.

Semester III

Nuclear Physics I, Solid State Physics I, Atomic and Molecular Physics, Laboratory III, Environmental Physics.

Semester IV

Thermal Physics, Computational Techniquesand Numerical Methods, Computational Techniques-Laboratory, Optional Papers on Solid State Physics II, High Energy Physics, Laser Physics and Nuclear Physics II.

:

Ph.D. Courses

Nuclear Physics, Experimental Techniques and Their Applications, Statistical & Numerical Methods in Physics

Attended:

Prof. B.M. Jyrwa

Delivered an invited talk entitled "Use of Covariance Matrix related to uncertainty in the experiment of determination of ⁶⁰Ni (p, n) ⁶⁰Cu reaction cross section" at the National Conference on *Trends of Modern Physics* organized by Physics Department, Don Bosco University from 22nd to 23rd February, 2019.

Prof.Y.N. Tiwari

UGC Observer in the State Eligibility Test for Assistant Professor organized by West Bengal College Service Commission on 2nd December,2018 at Alipurduar & Coochbehar centre.

Prof. P.K. Patra

Attended and delivered keynote addressin Mizoram Science Congress 2018 on the topic "Recent Advances in Nanoscience and CNT in Mizoram Science Congress 2018" held at Pachhunga University College, Mizoram University, Aizawl, Mizoram from October 4-5, 2018.

Chaired a technical session in Mizoram Science Congress 2018 held at Pachhunga University College, Mizoram University, Aizawl, Mizoram from October 4-5, 2018.

Publications Research Papers Published in India

Khardewsaw, A., Maibam, D., Sharma, Y., Saxena, A. (2019). Indoor radon measurement in some villages of West Khasi Hills District of Meghalaya, India, JETIR, Vol (6):3, pp:482-488 (2019).

Published Abroad

Lawrinaing, B., Badwar, S., Ghosh, R., Jyrwa, B., Naik, H., Suryanarayana S.V., Naik Y.P (2018). Excitation functions of protoninduced reactions on ^{nat}FE and ^{nat}Zr targets for the production of cobalt and niobium isotopes. Eur Phys J A 54:14 (Received: 26 April, 2018, Accepted: 25 June, 2018, Published online :28 August, 2018).

Badwar, S., Ghosh, R., Yerraguntla S.S., Jyrwa B.M., Lawriniang B.M., Naik, H., Naik, Y., Suryanarayana, V., Ganesan, S. (2018). Measurements and uncertainty propagation for the ^{nat}Ni(p,x)⁶¹ Cu reaction cross-section up to the proton energies of 20 MeV. *Nucl Phys A* 977:112-128 (Received 14 April, 2018; received in revised form 24 June, 2018; accepted 25 June, 2018, Available online: 28 June 2018). Badwar, S., Ghosh, R., Lawriniang, B.M., Sheela Y.S., Naik H., Jyrwa B.M., Naik, Y.P., Suryanarayana S.V., Ganesan, S. (2018). Measurement of ⁹⁶Zr(n,y)⁹⁷ reaction cross section at the netron energies of 0.61 and 1.05MeV and covariance analysis for the uncertainty. *Eur Phys J* A 54:168 (Received: 6 April, 2018/Revised: 27 July, 2018, Published online: 8 October, 2018).

Lawrinaing, B., Ghosh, R., Badwar, S., Yerraguntla, S.S., Jyrwa, B., Naik, H., Naik, Y.P., Suryanarayana, S.V. (2018). Measurements of ⁶⁰Ni (P,n)⁶⁰Cu reaction cross-sections and covariance analysis of theuncertainty. *J Radional Nucl Chem* 319:695-701 (Received: 23 July, 2018 / Published online: 10 December, 2018).

Kharkongor, D., Mahato, M.C. (2018). Resonance Oscillation of a damped driven simple pendulum. *European Journal of Physics*, <u>39</u>, 065002 (http://doi.org/10.1088/1361-6404/aadafo) **Books/Proceedings**

Pyngrope, A., Khardewsaw, A., Jami, N., Talang, T., Maibam, D., Sharma Y., Walia, D., Saxena, A. (2019). Measurement of indoor raqdon activity levels in Jowai region, Meghalaya, India, National Conference on Trends in Modern Physics, February 22nd – 23rd, 2019

Ram, M., Shankar, A., Saxena, A. (2019). Heusler ally Cu²MnAl: GGA + U Study, National Conference on *Trends in Science and Technology*, Department of Computer Science and Applications, Mathematics and Physics, Selesian College, Siliguri, 27th – 28th February, 2019.

Lyngdoh Mawphlang, B.R.K.L., and Patra, P.K. (2018). Study of buckling behaviour of a single-walled fixed-fixed carbon nanotube using nonlocal continuum model and Laplace transform at the National Conference on *Materials, Condensed Matter and Theoretical Physics (NSMSMTP)* – 2018, held at the Department of Physics, Anandaram Dhekial Phookan College (ADP College), Nagaon, Assam from December 20-21, 2018.

Lyngdoh Mawphlang, B.R.K.L., and Patra, P.K. (2019). Study of buckling behaviour of a single-walled simply supported carbon nanotube using nonlocal continuum model and Laplace transform at the National Conference on Trends in Modern Physics (TiMP) – 2019, held at Department of Physics, Assam Don Bosco University, Sonapur, Assam from February 22-23, 2019.

Fund Received from Agencies including NEHU/UGC Research Projects Ongoing

S1.	Title of the Project	PI	Funding	Amount
о.			Agency	(in Rs)
1	Climate Change assessment	Prof. A. Saxena	Departyment of	Rs.63,04,230/-
	in selected areas of		Science	
	Meghalaya using		Technology	
	meteorological measurements		(SPLIC: Climate	
	and its impact on water		Change	
	resources		Programme)	

Completed:

Sl. No.	Title of the Project	PI	Funding Agency	Amount (in Rs)
1	Measurement of Radon, Thoron and Gamma radiation	Prof. A. Saxena	Department of Atomic Energy-	Rs.35,91,400/-

level in three districts of	Board of Research
Meghalaya	in Nuclear
	Sciences

Academic Collaborations : Prof. P.K. Patra

Collaborated with Dr. D.P. Rai, Physics Department, Pachhunga University College, Aizawl, Mizoram

Other Activities

Prof.Y. N. Tiwari Visited to the following collegesas Member Coordinator of NAAC peer team :

:

A.V. Kanthama ollege for Women, Hassan, Karnataka, 9-10 th August, 2018

Sri Kumara Gurupara Swamigal Arts College, Thoothukudi Distrct, Tamil Nadu 27-28 September, 2018

Kuriakosi Elias College, Kottayam, Kerala during 26-27, March,2019

Prof. M.C. Mahato

Reviewer of i) Physical Review E, ii) Physica A and iii) International Journal of Modern Physics B

Prof. P.K. Patra

Reviewers for journals of International repute

i) Nanotechnology, IOP Publishing on June 06, 2018.

ii) Iranian Journal of Science and Technology Transaction A: Science, Springer on September 22, 2018.

DEPARTMENT OF STATISTICS

Head	: Prof. R. Singh
Telephone	: 0364-2722901
E-mail	: hodsta@nehu.ac.in

Faculty	: 6			
Designation	Name and Qualification	Specialization		
	Dr.G. Das M. A. (Delhi Univ.), Ph. D. (NEHU)	Survey Sampling		
Professor	Dr.R. Singh M. Sc.(Patna University) Ph. D. (Patna University)	Econometrics, Demography, Poverty & Human Development		
	Dr. T.K. Chakrabarty M. Stat. (Agra Univversity), Ph. D. (Manipur Univ.)	Time Series Modelling, Statistical Demography and Health Analytics		
	Dr. B.K. Gupt M. Sc. (Stat) (AMU), Ph. D. (Guahati University)	Survey Sampling		
Associate Professors	Dr.S.K. Jha M. Sc. (Patna university).Ph. D. (Patna University)	Probability Distribution, Correlated Data Analysis, Computation and Spatial Statistics		
Assistant Professors	Dr.B. Das M. Sc. Ph. D. (Gauhati University)	Distribution Theory, Environmental Statistics		

Thrust Areas of Research:

Distribution Theory, Modeling with quantile functions, Spatial Statistics, Event History and life course data analysis, Demography, Econometrics, Poverty & Human Development.

Brief Statement of Academic Activities:

The Department is financially supported by the FIST programme of DST, Government of India. It offers choice based credit system M. Sc. as well as Ph. D. & M. Phil. Programmes. Apart from giving adequate exposure in the theoretical areas of the subject, it emphasises on the practical training using latest softwares such as STATA, SPSS, R, S-PLUS, SYSTAT, MINITAB and MS-EXCEL. Department uses a quality and rigorous curriculum in Research Methodology as a compulsory paper in the M.Phil./Ph.D. research work. All the faculty members are actively engaged in research in the eminent fields such as Econometrics, Demography, Spatial Statistics, Statistical Distribution Theory, Survey Sampling Theory and Time Series.

Students' Profile: Enrolment Capacity: M. Sc. – 25, Ph. D. – Variable, M. Phil. - Variable Actual Admission:

	Meghalaya						Non-Meghalaya						
Degree	Degree SC		ST Gen		SC		ST		Gen		Total		
	Μ	F	M	F	М	F	M	F	M	F	M	F	
M. Sc.	-	-	05	05	05	-	-	-	06	03	01	-	25
Ph. D.	-	-	-	-	-	-	-		-	-	-	-	
M. Phil.	-	-	-	-	-	-	-	-	-	-	-	-	-

Degrees Awarded:

	Meghalaya						Non-Meghalaya						
Degree	S	С	S	ST		Gen		SC		ST		Gen	
	М	F	M	F	М	F	М	F	M	F	M	F	
M. Sc.	-	-	01	04	-	-	01	-	01	05	-	01	13
Ph. D.	-	-	-	-	-	-	-	-	-	-	01	02	03

Students Awarded Ph. D. Degree : 3

Placement of Students:

Name of Students	Post	Place of Work
Dr. Mallika Deb	Assistant Professor	Central University of Rajasthan, Ajmer
	(on contract)	305817, Rajasthan
Dr. Dreamlee Sharma	Assistant Professor	Adamas University, Kolkata 700126,
		West Bengal
Mr. Khuraijam Shitle	Assistant Director	Directorate of Economics and Statistics,
Kumar		Government of Manipur, Imphal,
		Manipur
Ms. Jayanti Kumari	Assistant Professor	Shillong College, Shillong 793003,
		Meghalaya
Ms. Baiakmenlang Syiem	Assistant Professor	St. Anthony's College, Shillong 793001,
		Meghalaya
Mr. Ronald Eleaser Kurbah	Assistant Professor	Shillong College, Shillong 793003,
		Meghalaya

Research Fellowships:

Research Fellowships	UGC Non-NET	Inspire	Rajiv Gandhi	National
	Fellowship	Fellowship	Fellowship for	Fellowship &
	-	-	SC/ST	Scholarship
No. of Research	08	-	-	01
Scholars				

Courses Conducted: M. Sc. Programme

Semester - I: Mathematical Analysis and Linear Algebra, Distribution Theory, Probability Theory, Practical I (Statistical Computing in R), & Practical II (Distribution and Linear Algebra)

Semester - II: Survey Sample, Statistical Inference I, Linear Models & Regression Analysis, Poverty, Human Development & Environmental Statistics & Practical III (Sampling, Inference I and Regression).

Semester - III: Design& Analysis of Experiments, Statistical Inference II, Econometrics, Stochastic Processes, Practical IV (Design, Inference II and Econometrics)

- IV: Applied Multivariate Semester Analysis, Time Series Analysis & Forecasting, Project Work, Practical V (Multivariate and Time Series and Optional Reliability Theory, Operation Paper), Research, Population Dynamic and Demography.

M. Phil./Ph. D. Programmes

Research Methodology in Statistics, Bayesian Inference and Analysis, Statistical Modelling.

Seminars/Conference/Workshops/Symposi a/Extension Programme *Attended*:

Prof. T. K. Chakrabarty

Presented a paper entitled "A disaggregated analysis of child nutrition indicators in WHO-SEAR nation: Assessment of the challenges for SDG nutrition targets" at the 4th Asian Population Association Conference held at Shanghai University, Shanghai, China during 11-14 July, 2018. **Prof. Rajeshwar Singh** Presented paper entitled "Multicollinearity: Problems with Remedial Measures" in National Seminar on Recent Trendsin Theoretical and Applied Statistics – IV (RTTS – IV) held on 15-16 March 2019 organised by Department of Statistics, Dibrugarh University, Dibrugarh.

Presented paper entitled "Impact of Disability in Constructing Life Table" in National Seminar on Recent Trends in Theoretical and Applied Statistics – IV (RTTS – IV) held on 15-16 March 2019 organised by Department of Statistics, Dibrugarh University, Dibrugarh.

Presented paper entitled "First Marriage Decrement Tables for Women in India" in National Seminar on Recent Trends in Theoretical and Applied Statistics – IV (RTTS – IV) held on 15-16 March 2019 organised by Department of Statistics, Dibrugarh University, Dibrugarh.

Dr. S. K Jha

Presented paper entitled "A spatial simultaneous autoregression Model for heterogeneous data and its implementation" in National Seminar on Recent Trends in Theoretical and Applied Statistics – IVheld on 15-16 March 2019 organised by Department of Statistics, Dibrugarh University, Dibrugarh.

Dr. Bhanita Das

Presented paper entitled "Concomitants of Order statistics for Bivariate Transmuted Exponentiated Gumbel distribution" in National Seminar on Recent Trends in Theoretical and Applied Statistics – IV held on 15-16 March 2019organised by Department of Statistics, Dibrugarh University, Dibrugarh.

Books/ Book Chapters

Chakrabarty, T.K., and Sharma, D., (2018). The Quantile-Based Skew Logistic Distribution with Applications. In: *Statistics* *and its Applications*. A.K. Chattopadhyay and G. Chattopadhyay (Eds.) Springer Nature Singapore Pte. Ltd., Chapter 6, p. 51-73.

Publications in Journals *Published in India*:

Biswa, A. Singh, R. (2018), "Estimation of Parameter Vector Using Ridge and Pricipal Components Regression Techniques for Non- Orthogonal Data", International Advanced Research Journal in Science, Engineering and Technology, Vol.5 (7), *Published Abroad*:

Sharma, D., and Chakrabarty, T.K., (2019). The Quantile-based flattened logistic distribution: Some properties and Applications. Communication in Statistics – Theory and Methods, 48(14): 3643-3662.

Deka, D., and Das, B., (2019). On Concomitants of Upper Record Statistics and Survival Analysis for a Morgenstern TYPE bivariate Transmuted Exponentiated Gumbel Distribution. International Journal of Scientific Research in Mathematical and Statitical Sciences, Vol 6(2).

Funds Received from Agencies including NEHU/UGC NEHU Non-Plan Allocation – 2.75 Lakh

Other Activities

Prof. T K Chakrabarty

Delivered lectures on Ecological Statistics during a refresher course in Zoology at UGC-HRDC, NEHU (18th March, 2019 to 7th April, 2019).

Acted as a member of the State Level Task Force on Mobility, Planning Department, Government of Meghalaya during 2018-19.

Dr. B Das

Reviewer for journal SANKHYA, Indian Journal of Statistics.

Participated in the Summer School in Basic Sciences from 4th July, 2018 to 24th July, 2018 in UGC, HRDC, NEHU, Shillong.

Participated in the Short Term Course in Basic Sciences from 27th May,2019 - 1st June, 2019 in UGC, HRDC, NEHU, Shillong.

SCHOOL OF SOCIAL SCIENCES

Dean: Prof. Cecile A. MawlongTelephone: 0364-2723001Fax: 0364-25511944E-mail: deansss@nehu.ac.in,camawlong@hayoo.com

The School of Social Sciences has six departments under its fold; theDepartments of History, Political Science, Sociology, Cultural and Creative Studies, Law and History and Archaeology (Tura Campus).

The thrust area of research for the departments of History, Political Science and Sociology are onvarious aspects of the society, economy and polityinNortheast India while the department of Law has as its primary focus, Constitutional Law, Environmental Law, Cyber Law, Patent Law, Industrial Law, Family Law, Commercial Law, Criminal and International Law. The departments of History, Political Science and Sociology have for several years benefitted from the UGC-SAP Programme. The Department of History has completed its SAP-DSA II programme in March 2019, while the departments of Political Science and Sociology have an on-going SAP-DRS II programme.

The major thrust area of research in the department of Cultural and Creative Studies is studying various theoretical, conceptual, analytical and contextual issues relating to different aspects of folklore, folk and traditional music and visual arts.

During the period under report the faculty members of the various departments under the School have been involved in a number of academic programmes like attending and organising national and international seminars, delivering lectures and key note addresses at various institutions in the region and beyond. Other academic activities include the conduct of refresher courses for College/University teachers, and holding of dialogues with colleagues engaged in undergraduate teaching within the region.

Some faculty was also involved in conducting field and study tours relevant to their programmes of study.

The Department of Political Science had invited a number of eminent persons from other universities to deliver lectures on topics that are currant and relevant to their thrust area of research. The lectures were open to all members from the School.

The Department of Law organised the 2nd National Moot-Court Competition at NEHU Shillong on 4th& 5th October, 2018.

It may also be noted that all faculty members from the different departments under the School were actively engaged in research activities by way of the publication of articles, book chapters and books in Indian publications and a few in foreign publications.

In conclusion it is worth mentioning that Prof. Desmond L. Kharmawphlang former Head of the department Cultural and Creative Studies was part of the NEHU delegation to visit Chulalongkorn University, Bangkok to sign an MOU between NEHU and Chulalongkorn University in January 8-12, 2019.

DEPARTMENT OF CULTURAL AND CREATIVE STUDIES

Head	: Prof. Desmond L. Kharmawphlang
Telephone	: 0364-2723374/3371/3372 (O)/09863060983 (M)
E-mail	: hodcccs@nehu.ac.in

Faculty :	4	
Designation	Name and Qualification	Specialization
Professor	Dr. Desmond L. Kharmawphlang, Ph.D. (NEHU)	English
	Dr.Subrat Kumar Nanda, Ph.D. (JNU)	Sociology
Associate Professor	Dr.LapynshaiSyiem, Ph.D. (NEHU)	Music
Assistant Professor	Shri.BedantaKalita, MFA (MSUB)	Painting

Thrust Area of Research:

Theoretical, conceptual, analytical and contextual issues relating to different aspects of folklore, folk and traditional music and visual arts.

Brief Statement of Academic Activities:

The department runs a regular MA course in folkloristics and the PG Diploma courses in music and painting. In addition, the department offers the Ph.D.programme in folkloristics, which covers studies primarily related to folklore and other related areas

such as folk music, traditional performing arts, folk theatre, etc. Candidates desirous of pursuing research work in these areas are provided with necessary facilities, technical and professional guidance. Both theoretical knowledge and practical training are provided to the students admitted to the postgraduate course in folkloristics and the diploma courses in music and painting. Besides teaching and research, the department regularly engages in extension activities as part of its academic programmes.

Students' Profile:

Enrolment Capacity: MA Folkloristics–30, PG Diploma Music-20, PG Diploma Painting – 10, Ph.D.-Variable

Degree	Male	Female	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA				-	-			
Folkloristics	8	18	26			25	1	26
PG Diploma				-	-			
Music	1	3	4			3	1	4
PG Diploma Painting	4	2	6	-	-	6	-	6

Degrees Awarded

Degree	Male	Female	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA				-	-		02	21
Folkloristics	08	13	21			19	02	21
PG Diploma				-	-			
Music	08	03	11			11		11
PG Diploma				-	-			
Painting	06	02	08			07	01	08

Students Awarded Ph.D. Degree: 2 Research Fellowship:

CSIR- UGC- NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other(You name it)	Others
10	4	1			1 (Swami	
					Vivekananda	
					Single child	
					Fellowship)	

Fieldwork/Educational Tour of Students:

Teacher-in-Charge: Shri. Auswyn Winter Japang

Places/Institutions Visited: Goa and Kolkata Duration of Tour: 15 days

Purpose of Tour: To enable the students to acquaint themselves with the folklore and other oral traditions and literature of different communities in this part of the country.

Besides, a field trip for the students of MA Folkloristics was conducted at Umpowin, Ri-Bhoi District during 3rd&4thNovember 2018 under the supervision of Prof. Desmond L. Kharmawphlang to study the folk material culture of the region.

Courses Conducted: *Postgraduate*: MA (Folkloristics) *Semester-I*

Introduction to Folkloristics; History of Folklore Studies; Introduction to Semiotics; Folklore Theories-I; Field Methods and Studies.

Semester-II

Folklore Theories-II; Folk Literature-I; Public Sector Folklore; Introduction to Visual Arts; Urban Folklore.

Semester-III

Ethnomusicology; Folk Literature-II; Introduction to Performing Arts; Folklore of Northeast India-I; Social Folk Custom.

Semester-IV

Material Culture; Language, Culture and Society; Narratology, Folklore of Northeast India-II; Dissertation.

PG Diploma (Painting)

Semester-I

Fundamentals of Visual Arts (Theory); Introduction to Indian and Chinese Art (Theory); Drawing and Colour Application (Practical); Sculpture (Practical); Introduction to Folk Art and Craft of Northeast India (Theory).

Semester-II

Introduction to Western Art (Theory); Print Making (Practical); Creative Painting (Practical); Enamel Painting in Glazing Technique (Practical); Introduction to Indian and Western Aesthetics (Theory).

PG Diploma (Music)

Semester-I

Brief History of Indian Classical Music (Theory); Introduction to General Musical Terms (Theory); Introduction to Indian Classical music (Practical); Practical Training in Indian Classical Music (Practical); Introduction to Western Musical (Staff) Notation (Practical).

Semester-II

Study of Selected Musical Instruments (Theory); Songs of Meghalaya (Practical); Rhythmic Pattern of Music of Meghalaya (Practical); Concept of Rhythmic Pattern of music of Meghalaya (Theory); Proficiency Western Musical Instruments (Practical).

Ph.D. Courses

Research Methodology; Recent Trends in Folkloristics; Advanced Course in Performing Arts.

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes:

Prof. Desmond L. Kharmawphlang:

(i)Two-Day Programme on Ek Bharat Shreshtha Bharat on 16th& 17th November 2018 at the Multi-Use Convention Hall, NEHU, Shillong Campus.

Presented papers entitled (i) "U Ngat Puri Legends: An Eco-Critical Perspective"at International Seminar on Folk Narratives in Region of Intensive Cultural Exchange organized by Catania University in Ragusa, Italy from 12th to 16th June 2018. (ii) "Stories on Looms: Texts and Textiles" at International Colloquium organized by CIHA-India and National Museum Institute, New Delhi on 28th November 2018. (iii)"Understanding the Sacred" at National Symposium organized by Tezpur University, Assam on 25th February 2019. (iv) "Folklore and Fiction: Contexts and Strategies with Reference to Khasi Fiction" at the National Conference on Identity and Diversity within Boundaries and Margins: Exploring Literature & Culture from India's North East organized by the Centre for North East Studies and Policy Research, Jamia Millia Islamia, New Delhi on 13th & 14th March 2019. Resource Person in the Two-Day National Seminar on "Environment Consciousness and Sustainability: To Know Globally and Act Locally", 20-21 June 2018, Lady Keane College, Shillong.

Honours/Awards/Recognitions Prof. Desmond L. Kharmawphlang:

Was part of the NEHU delegation to visit Chulalongkorn University, Bangkok to sign MOU between NEHU and Chulalongkorn University. January 8-12, 2019.

Other Activities Prof. Desmond L. Kharmawphlang:

Was Co-ordinator of the Refresher Course in Folkloristics and Semiotics conducted by UGC-HRDC, NEHU, Shillong in March 2019.

Nominated member of the Academic Council, Tezpur University, Assam, 29th October 2018.

DEPARTMENT OF HISTORY AND ARCHAEOLOGY (TURA CAMPUS)

Head	: Dr. Tilok Thakuria
Telephone	: 9127422780
E-mail	: history_archaeology@rediffmail.com

Faculty :	2	
Designation	Name and Qualification	Specialization
Assistant	Dr. Tilok Thakuria, Ph.D. (DCPRI,	Archaeology, Ethno-Archaeology,
Professor	Pune)	Archaeology and Culture of
		Northeast India
	Dr. Doneti Sivaji, M. Phil, Ph.D (HCU)	Business History, Studies on
		Entrepreneurship, Studies on Cast.

Thrust Area of Research

History of ancient India and archaeology of India and Southeast Asia, with special emphasis on North-East India archaeology, ethno-archaeology and culture studies of Northeast India.

Students' Profile

Enrolment Capacity: MA-25, Ph.D. - Variable

Degre e*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non- Meghalaya	Total
MA	10	14	-	23	-	1	22	2	24

Courses Conducted:

M.A.

- Semester I (new syllabus since July 2018) HAR-101: Historical Methods – I, HAR-102: Prehistoric Archaeology, HAR-103: Social and Polity formation in Ancient India-I, HAR-104: Introduction to Archaeology, HAR-105: Social and Polity Formation in North-East India
- Semester II HAR-201: Historical Methods – II, HAR-202: Social and Polity formation in Ancient India-II, Pre-Industrial Society, HAR-O-203: Archaeology of Northeast India,HA-204: Pre-Industrial Society, HAR-205: The Neolithic cultures in India
- Semester III (Old Syllabus) HAR-301: Capitalism and Colonialism, HAR-302:

Practical's in Archaeology, HAR-303: Economy and Society in Early India, HAR-304 Religion and Society in Early India, HAR-305: Making of Modern India Society

Semester-IV : HAR-401: Capitalism and Colonialism – II, HAR-402: The Chalcolithic Age in India,HAR-403: Christianity in North – East India,HAR-O-404: Economy and Society in early North-East India,HAR-O-405: Perspectives in History and Culture of North-East India.

M.Phil./Ph.D. Courses:

Course work: HAR-C-501: History and Theory

HAR-C-502: Research Methodology HAR-C-503: Oral Traditions

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes *Attended*

Dr. Tilok Thakuria

Presented a paper on "Engravings of Dima-Hasoa, Assam: An reprisal" in the National seminar on "Affinities and Expressions of Prehistoric and Archaeological cultures in Northeast India with special emphasis on Rock Art" held on 10th to 11 September 2018, Organised Indira Gandhi Center for the Arts, New Delhi and Indira Gandhi National Tribal University, Amarkantak

Presented a paper on "Megalithic Monumentality Vidarbha: Architectures and Commonality" in the National seminar on "Affinities and Expressions of Prehistoric and Archaeological cultures in Northeast India with special emphasis on Rock Art" held on 10th to 11 September 2018, Organised Indira Gandhi Center for the Arts, New Delhi and Indira Gandhi National Tribal University, Amarkantak

Participated as Resource person in the National Workshop on "Archaeology: Methods and Approaches" held on 30th April to 7th May 2018, Organised by Dept. History and Archaeology, Nagaland University.

Participated as Resource person in the National Workshop on "Harppan Stone Bead Making" held on 14th February to 18th February 2019, Organised by Pt. Ravi Sankar University, Raipur

Presented a paper on "*Prehistoric* Archaeology of Northeast India: Excavations at Misimagre" in the International Worship on "Rice", held on March 20th to 21st 2019, Organised by M.S. University, Gujarat and UCL, London.

Presented a paper on "Colonial Archaeology of Northeast India as 'Colonial Discourse" in the National Seminar on "Converging Spectrum of Anthropology with Special Emphasis of Assam and Adjoining Areas" held on March 14th to 15st 2019, Organised by Anthropology Department, Gauhati University.

Publications: *Published in India* Dr. Tilok Thakuria

Thakuria, T. (2019). Lathi: A Fortified Early Historic Site in Coastal Odisa, *Journal of History and Culture Multidisciplinary Studies in Archaeology*, 4: 19-24169-190.

DEPARTMENT OF HISTORY

Head	: Prof. Vanlalruata Rengsi
Telephone	: 364-2723019
E-mail	: ruatarengsi@yahoo.co.in

Designation	Name and Qualification	Specialization		
0	Dr. M. Momin, M.Phil/Ph.D. (JNU)	Ancient Indian History & Early		
		Northeast India.		
	Dr. F.A. Qadri, M.Phil/Ph.D. (AMU)	Medieval Indian History and		
		Northeast India.		
Professor	Dr. C.A. Mawlong, PG Dip. in	Archaeology & Early Northeast		
	Archaeology- (IoA, Delhi), Ph.D.(NEHU)	India		
	Dr. T. Gurung Nag, M.Phil/Ph.D. (NEHU)	Modern Indian History and Northeast India		
	Dr. A.K. Thakur, M.A/Ph.D. (BU, Muzaf)	Medieval Indian History and Northeast India.		
	Dr. V.R. Rengsi, M.Phil/Ph.D.(NEHU)	History of Sciences and Non- Indian History		
	Dr. S.N. Lamare, M.Phil/Ph.D. (NEHU)	Modern Indian History and Modern Northeast India.		
	Dr. A.N. Passah, M.Phil/Ph.D. (NEHU)	History of South East Asia and		
		Modern Northeast India		
Associate	Dr. A. Mathur, M.A./Ph.D.(Rohilkhand	Ancient Indian History,		
Professor	Uni.)	Culture& Archaeology.		
		Medieval Indian History		
	Dr. M.S.N. Rahman, M.A/Ph.D. (Calcutta)			
Assistant	Dr. B. Dutta, M.A./Ph.D. (NEHU)	Modern Indian History		
Professor				

Thrust Area of Research: The Department's thrust area is Northeast India.

Brief Statement of Academic Activities:

During the period under report the faculty members of the Department were involved in several academic programmes like attending /organising seminars, field and study tours, conducting Refresher Course for College/University teachers, and holding dialogues with colleagues engaged in undergraduate teaching within the region.

Students' Profile

Enrolment Capacity: MA - 50, M. Phil - 4, Ph.D. - 11

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA	16	34	-	48	-	02	16	34	50
M.Phil.	01	03	-	04	-	-	01	03	04
Ph.D.	05	06	01	08	-	02	02	09	11

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA	15	34	-	48	-	01	24	25	49
M.Phil.	-	01	-	-	-	01		01	01
Ph.D.	01	02	-	02	-	01	02	01	03

Students Awarded Ph.D. Degree: 3 Research Fellowship

CSIR- UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Any other(You name it)	Others
-	28	02	-	-	1 (ICSSR)	

Educational Tour of Students:

Teacher-in-Charge: Prof. V. Rengsi Places/Institutions Visited: Mumbai Duration of Tour :14 days

Purpose of Tour: The places have rich historical importance for the students of ancient, medieval and modern histories including archaeology. The places will give first-hand experience and knowledge of the past developments preserved in architectural monuments and various museu8ms located at the places. It is important for the students to see for themselves the historical heritage of India which they otherwise only read about in books.

Field work: 4th semester students were taken for a museum visit to the Don Bosco Centre for Indigenous Cultures Mawlai Museum on 11 May 2018 as part requirement of the course on Archaeology: Methods and Approaches – an observation.

Courses Conducted

Semester I: Historical Methods-I; Prehistoric to Ancient Societies; Modern Indian Society; British Expansion and Imperial Policy in India; Social Movement in USA; The Rise of Islam and the Early Caliphate; Economy and Society in Medieval India.

Semester II: Historical Methods-II; Feudalism; Colonialism, Imperialism and Economic Change in India; Colonialism in South East Asia; (Open Course): Society, Technology and History: Prehistoric Age to Industrial Revolution; Polity and Society in Medieval India; The Umayyad and Abbasid Empires.

Semester III: Capitalism and Imperialism -I; Religion and Society in Ancient India; Indian Nationalism; Ancient Indian Art and Architecture; History of Ideas in Modern India; (Open Courses) Social Forces and Social Mobilization; Introduction to Gender History;

Semester IV: Capitalism and Imperialism – II; Social and State Formations; Archaeology: Methods and Approaches; Colonialism; Communalism and Secularism; Contemporary India; Socio-Economic History of N.E.I. – The Early Period; The Rise of South Indian Civilization; Christianity in North East India.

M.Phil/Ph.D. Courses: Research Methodology, History and Theory, Critical Reading of History (Seminar Paper)

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes *Organized:*

Convener: Prof. S.N. Lamare, Co-Convener: Dr. B. Dutta.

International Seminar onNegotiating Borderlands: Politics, Ethnicity and Transnational Challenges in NE India26-28 February 2019 under UGC-SAP-DSA programme, NEHU, Shillong.

Attended:

Prof. F.A. Qadri

27th International Educational Conference organized by American Federation of Muslims of Indian Origin (AFMI) at Patna, December 22 -23, 2018 and presented a paper on "Salahuddin Khuda Bakhsh: A Liberal Expositor of Islamic History".

Prof. C.A. Mawlong:

1. Participated in a two day (18-19 January 2019) workshop on the theme *Status of Women's Studies in North East India* organised by the OKD Institute of Social Sciences, Guwahati and presented a paper on *"Khasi-JaintiaMatriliny: Problems and Perspectives"*.

2. Presented a paper"Exploring the Intersection of Borders and Culture: A Study of the War-Khasi of Meghalaya" at an International Seminar on the theme *Historicizing Borders: New Perspectives on Politics, Ethnicity and Trans-National Linkages in Northeast India*, on 26-28 February, 2019, organised by the Department of History, NEHU, Shillong. Chaired a Plenerysession and the Valedictory session at the International Seminar on the theme *Historicizing Borders: New Perspectives on Politics, Ethnicity and Trans-National Linkages in Northeast India*, on 26-28 February, 2019, organised by the Department of History, NEHU, Shillong.

Prof. T. Gurung Nag

Presented a paper titled *Border and Borderlands: Historicizing the Indo-Nepal Border and its Implications in The Eastern Himalaya*, at an international seminar titled organized by the Department of History, NEHU, Shillong on the theme Historicising Borders; New Perspectives on Politics, Ethnicity and Trans –National Linkages in Northeast India on 26-28th February, 2019, *NEHU, Shillong*.

Chaired an Academic Session at an international seminar titled organized by the Department of History on the theme Historicising Borders; New Perspectives on Politics, Ethnicity and Trans –National Linkages in Northeast India on 26-28th February, 2019, NEHU, Shillong.

Prof. Amrendra Kumar Thakur

Delivered the 19th Dr. Yogendra Mishra Memorial Lecture 'Some Facets of the History of Early Assam' organized by Bihar Archaeological Society and Dr. Yogendra Mishra Memorial Lecture Organising Committee, Patna Museum, Patna, 21.4.2018.

Delivered lectures on "*Research Question Formulation and Historical Research and Interpretation*" during the ICSSR, New Delhi sponsored Capacity Building Programme for the Faculty Members of Social Sciences organized by Nagaland University, Kohima Campus, Nagaland, 11-12 May 2018. Delivered lectures on "Data Collection and Research Methodology of Qualitative Research" during the ICSSR, New Delhi sponsored Capacity Building Programme for the Faculty Members of Social Sciences organized by Assam Don Bosco University, Sonapur, Assam, 12-13 July 2018.

Presented a paper "Question of Clothing and Civilisation in Pre-Colonial Northeast India: Attempts Towards a Historical Reconstruction" during the 39th Annual Conference of North East India History Association held at Synod College, Shillong, Meghalaya (1-3 Nov. 2018).

Presented a paper "*The Vernacular Text and* '*Objective*' *History Writing in Northeast India*" during the ICSSR, New Delhi sponsored National Seminar on Historical Development in Northeast India: Trends and Perspectives organized by Department of History, Don Bosco College, Kohima, Nagaland, 16-17 November 2018.

Presented a paper "Use of Traditional Technology for the Sustainable Development: Success Stories of Northeast India" during the Plenary Session of the Golden Jubilee Annual Conference of Regional Science Association of India, organized by Institute for Excellence in Higher Education, Bhopal and Madhya Pradesh Private University Regulatory Commission, Bhopal, 20-22 February 2019. Presented a paper "Technological Past of the Hill Societies of Northeast India: Awaiting Researches" during the Plenary of North Eastern Regional Council, Shillong, ICHR and **ICSSR** New Delhi sponsored Seminar International organized by Department of History, Mizoram University, Aizawl, on "Writing History on Highlanders of North East India", from 5-6 March 2019.

Prof. V. Rengsi:

Presented a paper "A Technological Perspective on the Making of the Chin and Mizo from Colonial to Contemporary Times"in an International Conference organized by Department of History, North-Eastern Hill University UGC-SAP-DSA-II on 26 – 28 February, 2019 on 'Historicizing Borders: New Perspectives on politics, ethnicity and trans-national linkages in North-East India'

Presented a paper "Technology in the Making of the Hill Tribes of Northeast India with Special Reference to the Mizo" in the Plenary of North Eastern Regional Council, Shillong, ICHR and ICSSR New Delhi sponsored International Seminar organized by Department of History, Mizoram University, Aizawl, on "Writing History on Highlanders of North East India", from 5-6 March 2019.

Chaired a session at the International Seminar on the theme *Historicizing Borders: New Perspectives on Politics, Ethnicity and Trans-National Linkages in Northeast India*, on 26-28 February, 2019, organised by the Department of History, NEHU, Shillong.

Chaired a session in the North Eastern Regional Council, Shillong, ICHR and ICSSR New Delhi sponsored International Seminar organized by Department of History, Mizoram University, Aizawl, on "Writing History on Highlanders of North East India", from 5-6 March 2019.

Prof. S.N. Lamare

Presented a paper on "*Changing Oral Narratives*" in a National Seminar "Community and Identity Formation in North East India" 28th-29th September 2018, organised by the History and Khasi Departments, Kiang Nangbah Government College, Jowai. Attended a Regional workshop on Revisiting the Political History of Northeast Indiaheld on 22nd November 2018, organised by the Department of History and Political Science, Sankardev College, Shillong and presented a paper on "*British Attitude Towards the Hill Tribes of North East India*".

Co-convener of an International Seminar on "Historicising Borders: New Perspectives on Politics, Ethnicity and Trans-National Linkages in Northeast India", from 26th -28th February 2019, as part of the series of UGC-SAP-DSA II, Seminar, Department of History, NEHU, Shillong.

Presented a paper on "*Lines, Images And Cross Border Travelers*" in an International Seminar "Historicising Borders: New Perspectives on Politics, Ethnicity and Transnational Linkages in Northeast India" 26th - 28th February 2019, Organised by the Department of History, NEHU, Shillong under UGC-SAP-DSA programme.

Prof. Amena N. Passah

"Unsung Heroes of the Khasi-Jaintia Hills in the Freedom Struggle", in National Seminar, 'Role of the North-East in the Freedom Movement,' organised by Pandu College, Pandu, Guwahati, 2019, 19TH - 20thMarch.

,"*Matriliny among the Khasi-Jaintia-Garo: Gender Concerns*" in International Seminar, "History of Writing of the Highlanders of North East India," organised by the Dept, of History and Ethnography, Mizoram University, Aizawl, 2019, 5th-6th March.

, "Partition of India: Through the lens of a Jaintia Woman"in the International Seminar, "Historicizing Borders: New Perspectives on Politics, Ethnicity and trans-National Linkages in North –east India" organised by the Department of History, NEHU, Shillong, 2019, 26th-28th February.

"Proverbs of the Khasi-Jaintia people: A Social History Perspective" in 39thRegional Session of North East India History Association, Synod College, Shillong, 2018, 1st- 3rd November.

Dr. AparnaMathur

Presented a paper "*Tantra and Art: Some Reflections from Early Assam*" during the 39th Annual Conference of North East India History Association held at Synod College, Shillong, 1-3 November 2018.

Dr. M.S.N. Rahman

⁶Beyond the Borders: Indo-Bangla People to People Relations', UGC-SAP-DSA II and NEHU sponsored International Seminar onHistoricizing Borders: New Perspectives on Politics, Ethnicity and Trans-National Linkages in North-east India, held on 26-28 February, 2019 in the Department of History, NEHU, Shillong.

'Status of Women in Islam', National Seminar on Circles of Gender Liberation and Rethinking of Cultural Traditions with reference to South-East Asia organized by Department of Philosophy, Lady Keane College, Shillong in Collaboration with ICSSR-NERC Shillong, during 29-30, March, 2019.

'The Philosophy of Syed Ahamadl Haq and its Relevance Today in Global and Regional Context', International Seminar on Sufi Spirituality and Humanism in the Writings of Banglar Rumi Syed Ahamadul Haq organized by Allama Rumi Society, Dhaka, held on 8th September, 2018 at the University of Dhaka, Bangladesh.

'Koch Identity', National Seminar on "Community and Identity Formation in North-East India organized by History and Khasi Department, Kiang Nangbah Government College, Jowai, Meghalaya, held on $28^{th} - 29^{th}$ September, 2018.

Dr. B. Dutta:

1. Presented a paper in an International Conference organized by Nehru Memorial Museum and Libraryin association with Department of History, North-Eastern Hill University on13-14 June, 2019 on '*Custom*, *Law and the Colonial State in Northeast India: Dynamics and Challenges for the Postcolonial State*'. The title of the paper is 'From Lines to Belts: Legislating Anxiety, immigration and community relations in late colonial Assam'.

2.Presented a paper in an International Conference organized by Department of History, North-Eastern Hill University UGC-SAP-DSA-IIon 26 – 28 February, 2019 on 'Historicizing Borders: New Perspectives on politics, ethnicity and trans-national linkages in North-East India'. The title of the paper is 'King's Men and the Borders: Boundary commissioners and the making of North-East India'.

Publications *Published in India:*

Qadri F. A. (2018) "Salahuddin Khuda Bakhsh: A Liberal Expositor of Islamic History", *Proceedings 27th International Educational Conference* organized by American Federation of Muslims of Indian Origin AFMI), Patna, pp.32-34.

Thakur, A. K. (2018). Ramayana Traditions Northeast India. In*Proceedings of North East India History Association*, 38th session, Mirza. pp. 34-42. ISSN: 2349-753X and No. 42520 in the UGC Approved List of Journals.

Thakur, A. K. (2018). Ramayana Traditions Northeast India. In*Proceedings of North East India History Association*, 38th session, Mirza. pp. 34-42. ISSN: 2349-753X and No. 42520 in the UGC Approved List of Journals.

Thakur, A. K. (2018). Apatani Clothing: A Window to History.In *Reading in Culture & Tradition*, Dree Festival Committee, Itanagar, pp.1-5.

Thakur, A. K.. (2018). Pre-colonial Trade in Arunachal Pradesh and Assam.In *The Falling*

Polities: Crisis and Decline of States in North-East India in the Eighteenth Century.TejimalaGurung (Ed.). DVS Publications, Guwahati. pp. 182-198. ISBN 978-93-85839-12-2.

Thakur, A. K. (2019). Ecology and Social Formation in Precolonial Northeast India: A Brief Study. In *Exploring Environment History of North East India*. SatyadeoPoddar (Ed.). Akansha Publishing House, Delhi, ISBN, 978-81-8370-542-4, pp.75-81.

Thakur, A. K. (2019). Cultural Heritage Studies: Some Issues. In *Cultural Heritage of Northeast India*.Eli Doye (Ed.). Aayu Publications, New Delhi, pp. xxv-xxxi. ISBN: 978-93-85161-94-0

Lamare S.N. (2018) "Of Philosophy and Perception of nature: The Jaintia Stance" in S. Khyriemmujat (ed) *Echoes from The Hills: An Interdisciplinary Journal*, Vol. II, ISSN:2581-5253 Shillong college, Boyce Road, Laitumkrah, Shillong, pp.15-22.

Passah, Amena N. (2018). "Unsung Heroes: The Khasis in the I.N.A", in *Proceedings of North East India History Association*, 38th Session, Mirza, pp.577-591.

Mathur A. (2018). Buddhist Art in Assam: Some Observations.In *Proceedings of North East India History Association*, Mirza Session, 2017. 2018, pp.93-101. ISSN: 2349-753X and No. 42520 in the UGC Approved List of Journals.

Mathur, Aparna. (2019). Ecological Past of Early Assam as Reflected in the Inscriptions.In *Exploring Environment History of North East India: Trends and Possibilities*.SatyadeoPoddar (Ed.). Akansha Publishing House, Delhi, pp. 65-72. ISBN, 978-81-8370-542-4,

Rahman M.S.N. (2018) 'Universal and Syncretic Approaches of Sufism' in Prasanta Mandal and Anjona Chattopadhyay (eds.), *Murmurs of History*, Progressive Publishers, Kolkata, ISBNOctober, 1918, pp.465-479.

Rahman M.S.N. (2018) 'Religious and Cultural Syncretism in Medieval Bengal', ISSN, 0972-8406, *The NEHU Journal*, Vol. XVI, No. 1, Jan-June 2018, pp.51-77.

Dutta.B. (2018) 'Muted Voices and Gendered Memories: Some Notes on violent uprooting from partitioned Assam', *Cafe Dissensus*, New York, Issue 44, , ISSN: 2373-177X

Dutta.B. (2018) 'Partition and the Citizenship Imbroglio in North- East India', *Asian Journal of Development Matters*, Vol.12, No1(1) Special Issue, June, pp229-240, ISSN 0973-9629

Dutta.B. (2019) 'The Illusive Indian: The predicament of determining citizens between politics and the Law in Assam', *EastWind*, Vol.15, No 1, Nov2018-Jan., pp16-27

Book Chapters

(a) Published in India

Dutta.B. (2018) 'Collapse of a Colonial Cosmopolity', Preeti Gill and Samrat (ed) *Insider-Outsider: Belonging and Unbelonging in Northeast India*, Amaryllis, New Delhi, pp. 47-63, ISBN-978-93-88241-35-9

Dutta.B. (2018) 'The Story of the Stout Fanatical Mahomedan: Bengali Peasant Immigration and 'Wastelands' in colonial Assam', Sajal Nag and IshratAlam (ed) *Blending Nation and Region: Essays in Honour of Late Professor AmalenduGuha*, Primus Books, Delhi, pp 426-439, ISBN-978-93-86552-73-0

Published Abroad

Dutta.B. (2019) 'Recovering a Forgotten Partition: Decolonization, displacement and memories of Home and uprooting in postcolonial Assam', Amit Ranjan (ed) *Partition of India: Postcolonial Legacies*, Routledge, India, London/New York, pp. 91-104, ISBN-978-0-367-24731-7

Funds Received from Agencies including NEHU/UGC: (NEHU-1.98,000/-) Research Projects Ongoing

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)
UGC-SAP-DSA II	Prof. C.A. Mawlong	UGC	8,00,000
Borders, Identities and the	Dr. B. Dutta	OKDISCD,	4,00,000
Predicament of Citizenship in Post		Guwahati	
Colonial Assam (1947-2005)			

Completed during Year

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)
UGC-SAP-DSA II	Prof. C.A. Mawlong	UGC	8,00,000

Title of Project	Pl/Co-Pl	Funding	Amount
		Agency	(Rupees)
Borders, Identities and the	Dr. B. Dutta	OKDISCD,	4,00,000.00
Predicament of Citizenship in Post		Guwahati	
Colonial Assam (1947-2005)			

Other Activities: Prof. C.A. Mawlong:

Resource person at a Refresher Course in Folkloristics, organized by the Department of Cultural & Creative Studies and Academic Staff College, NEHU in March 2019.

Undertook two NAAC Peer Team Visits to Dravidian University in Andhra Pradesh and S.E.A. College in Karnataka in September and December, 2018, respectively.

Undertook a field trip with IV Semester students to Mawbuh Village in Ri-Bhoi Distrist.as part of their course work on Archaeology: Methods & Approaches.

Research person for Refresher Course on the theme Tribal students organized by Academic Staff College in September – October 2019.

Prof. Amena N. Passah

Resource Person, "Mahatma Gandhi and North-East India-Empowering Women" in Symposium, 'Mahatma Gandhi and North-East India' organised by Anthropological Survey of India, Mawblei, Shillong, 2019, 14th February.

Resource Person in 'Special Training Programme on Practice and Procedure for dealing with Matrimonial Dispute with Special Emphasis on the Matrimonial System in the State of Meghalaya" in the Conference Hall, High Court of Meghalaya, organized by the Meghalaya State Judicial Academy, Shillong, on 19th May,2018 Resource Person, on "Feminism: Its Ramifications", organized by Dept. of History, St.Mary's College, Shillong, on 28th September,2018 Participated in brainstorming session at

I.I.M. Shillong on the burgeoning traffic congestion in Shillong, organized by Good World Foundation in collaboration with IIM, Shillong, on 6th October, 2018

Dr. M.S.N. Rahman:

Delivered three lectures on 'Islam and Globalization' in the Refresher Course in Political Science on State and Globalizationat UGC- Human Resources Development Centre, North-Eastern Hill University, Shillong. on 23, 24, 25 October, 2018.

B. Dutta:

Resource Person at the 118th Orientation Programme organized by the UGC- HRDC, University of Mysore, Mysore in October, 2018.

DEPARTMENT OF LAW

Head	: Prof. J. J. Mozika
Telephone	: 9436312487/0364-2723801
E-mail	: j_mozika@yahoo.co.in, hodlaw@nehu.ac.in

Faculty	:8	
Designation	Name and Qualification	Specialization
Professor	Dr. J.J. Mozika, LL.M, Ph.D. (Law) (NBU)	Administrative Law,
		Jurisprudence, Women &
	Dr.Chintamani Rout, M.A. LL.M,	Law
	Ph.D.(Law)Utkal University	Commercial Law &
		Constitutional Law
	Dr. R.K. Mishra, LL.M, Ph.D. (Law), (BHU)	Intellectual Property Right
		& Criminal Law
	Dr. A.K. Singh, LL.M (B.H.U.), Ph.D.(Law)	Criminal Law, Human
		Rights & Private
		International Law
	Dr. N. Kumar, LL.M (Jamia Milia Islamia),	Corporate Laws, Public
Assistant	Ph.D.(Law)	Health Law, Human
Professor		Rights, Constitutional Law,
		Environmental Laws &
		Cyber Crimes
	Dr. R. Sil, LL.M, Ph.D.(Law) University of	Public Laws
	Burdwan	
	Shri. S. Tiwari, LL.M (BHU), M.Phil in	International Law,
	International Law (JNU)	International
		Environmental Law,
		International Humanitarian
		Law
	Dr. P. Gupta, M.Sc. LL.M. (ILI, New Delhi),	Law and Medicine,
	Ph.D.(Law)	Environmental Law,
		Gender Studies

Thrust Areas of Research

Constitutional Law, Environmental Law, Cyber Law, Patent Law, Industrial Law, Family Law, Commercial Law, Criminal Law & International Law.

Students' Profile Enrolment Capacity: Ph.D. /I

Ph.D. /LL.M/	B.A.LL.B	(Hons)
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Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
Ph.D.	4	1	-	2	-	3	-	5	5
LL.M	5	6	-	11	-	-	10	1	11

B.A.LL	31	30	2	54	-	5	52	9	61
.B(Hon									
s)									

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
Ph.D.	-	2	-	1	-	1	_	1	2
LL.M	5	5	-	8	-	2	6	4	10
B.A.LL	19	27	1	40	-	5	41	5	46
.B(Hon									
s)									

Students Awarded Ph.D. Degree : 2

Courses Conducted B.A. LL.B(Hons)

B.A. LL.B(Hons)	
Semester I	Semester II
LLB101 English – I	LLB201 English – II
LLB102 Political Science I	LLB202 Political Science II
LLB103 Sociology – I	LLB203 Sociology – II
LLB104 Micro Economics	LLB204 Macro Economics
LLB105 Law of Tort	LLB205 Law of Contract
Semester III	Semester IV
LLB301 English III LLB302 Political Science – III	LLB401 Indian Economy LLB402 Political Science – V
LLB302 Political Science – III LLB303 Political Science - IV	LLB402 Political Science – V LLB403 Political Science - VI
LLB304 Sociology III	LLB404 Family Law – I
LLB305 Special Contract	LLB405 Law of Crimes – I (Indian Penal Code)
Semester V	Semester VI
LLB501 Constitutional Law - I	LLB601 Administrative Law
LLB502 Jurisprudence	LLB602 Constitutional Law – II
LLB503 Law of Crimes – II (Cr.P.C)	LLB603 Human Rights Law and Practice
LLB504 Family Law – II	LLB604 Labour Law – I
LLB505 Property Law	LLB605 Public International Law
Second VII	Concerto V
Semester VII	Semester X
LLB701 Company Law	LLB1001 Honours VI Forensic Science
LLB702 Labour Law - II	LLB1002 Honours VII Private International Law
LLB703 Copyright	LLB1003 Honours VIII Offences against Child
	& Juvenile offences
IIP704 Intermediation of Statutos	LLB1004 Legislative Drafting
LLB704 Interpretation of Statutes	LEDTOOT Legislative Diatting

LLB705 Drafting, Pleading &	LLB 1006 Moot Court, Exercise and Internship
Conveyance	
Semester IX	Semester VIII
LLB901 Honours III Women & Criminal	LLB801 Civil Procedure Code & Limitation Act
Law	
LLB902 Honours IV Trademark &	LLB802 Law of Evidence
Design	
LLB903 Honours V Health Law	LLB803 Honours II Patent Law
LLB904 Information Technology Law	LLB804 International Environmental Law
LLB905 Alternate Dispute Resolution	LLB805 Professional Ethics and Professional
	Accounting System

LL.M 2 Years programme:

Semester	Course Number & Name	Marks	Credit
			S
Semester	Compulsory:		
Ι	LLMC101 Indian Constitutional Law	150	6
	Specializations: (One group comprising three courses to be		
	offered at any given time to be decided by the Department.)		
	A) CONSTITUTIONAL LAW		
	LLMC 102: Constitutionalism and Constitutional		
	Development in India and England	100	4
	LLMC 103: Comparative Study of Federalism	100	4
	LLMC 104: Civil and Political Rights: Comparative Study of	100	4
	Selected Constitutions		
	B) JURISPRUDENCE	100	4
	LLMC 105: Theories of Law	100	4
	LLMC 106: Theories of Justice	100	4
	LLMC 107: Theories of Rights		
	C) LAW OF CRIMES	100	4
	LLMC 108: Criminology and Penology	100	4
	LLMC 109: Criminal Law in India	100	4
	LLMC 110: Cyber Crimes		
Total		450	18
Semester	Compulsory:		
Π	LLMC 201 Legal Education and Research Methodology	150	6
	Specializations: (One course to be offered at any given time		
	from one group to be decided by the Department.)		
	A) HUMAN RIGHTS		
	LLMC 202: International Law of Human Rights	100	4
	B) CORPORATE LAW		
	LLMC 203: Business Organization	100	4
	C) ALTERNATE DISPUTE RESOLUTION SYSTEM		
	LLMC 204: Domestic and International Commercial	100	4
	Arbitration		

			1
	$O_{\text{max}} = O_{\text{max}} = O_{$	100	4
	Open Courses (As per CBCS): (Any two courses to be offered		4
	during second semester.)	100	4
	LLMO 205: Copy Right: National and International		
	Perspective		
	LLMO 206: Trade Marks, Design and Geographical		
	Indications		
	LLMO 207: International Environmental Law		
	LLMO 208: Natural Resource and the Law in India		
	LLMO 209: Development and Regulation of International		
	Trade		
	LLMO 210: Legal Regulation of Economic Enterprises		
Total		450	18
Semester	Compulsory:		
III	LLMC 301 LAW AND SOCIAL TRANSFORMATION IN	150	6
	INDIA		
	Specializations: (Two courses to be offered from the group		
	selected during second semester)	100	4
	A) HUMAN RIGHTS	100	4
	LLMC 302: Human Rights and the Refugees		
	LLMC 303: Human Rights in India	100	4
	B) CORPORATE LAW	100	4
	LLMC 304: Business Management (Company Management		
	& Administration)	100	4
	LLMC 305: Law Relating to Multinational Corporation	100	4
	C) ALTERNATIVE DISPUTE RESOLUTION		
	LLMC 306: Enforcement of Foreign Award and Conciliation		
	in India		
	LLMC 307: Mediation, Lok Adalats and Consumer Forums	100	4
	etc.		
	Open courses (Any one course to be offered during the third		
	semester)		
	LLMO 308: Patents and Protection of Plant Varieties and		
	Farmers' Rights		
	LLMO 309: Pollution Control Laws in India		
	LLMO 310: Legal Regulation of International Trade.		
Total		450	18
Semester	Compulsory:	+30	10
IV	LLMC 401 Judicial Process		
T A	LLMC 401 Judicial Process	150	6
	LLMC 403 General Proficiency	150	6
	LLMC 405 General Pronciency LLMC 404 Viva voce	130 50	2
		50	2

		100	4
Total		450	18
Grand Total	l of four semesters	1800	72

Ph. D Course Work:

LAW 101: Legal Research Methodology: (4 credits) LAW 102: Judicial Process: (4 credits) LAW 103: Comparative Constitutional Law: (4 credits)

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes *Organized*

The Department of Law organized the Second NEHU National Moot Court Competition from 4-6 October, 2018. Dr. Naveen Kumar was the faculty co-ordinator of the Programme in which 18 teams comprising law colleges and universities from across India had participated in the event. Chanakya National Law University, Patna was declared as the winner of the Competition, followed by Runner Ups Amity Law School Kolkata.

Attended

Prof. Chintamani Rout

Presented a Research paper titled" The Legal Theory of Property Rights" in the International Conference on Intellectual Property Rights, organized by the National Law University and Judicial Academy, Assam on 18 & 19th August, 2018.

Presented a paper as a Resource Person titled "Problem of Human Trafficking in India on Global perspective" in a Workshop on Human Trafficking in India for Border Security Force of India and Bangladesh Border Guards, organized by the Frontier Head Quarter, BSF Meghalaya on 5th November, 2018 at BOP Dawki, Meghalaya. Presented a paper as a Resource Person titled, "The Importance of Legal Education and Research Methodology" in a National Workshop on Our Common Concern on Teaching and Research in Law (CCTRAL- 2018), at Chanakya National Law University, Patna on 15th December, 2018.

Dr. R.K. Mishra

Presented paper (in the international seminar on Global Challenges and Solutions) titled Traditional ecological knowledge and biological diversity act, 2002: a critical Analysis, *Ravi Kant Mishra*, Faculty of Law, University of Lucknow, Lucknow on 14&15-04-2018.

Participated in the Short Term Course on Gender Sensitization in UGC Human Resource Development Centre, NEHU from 8th Octomer2018 to 13th October,2018.

Participated in the UGC Sponsored Short Term Course on MOOCS E-Content Educational Development and open Resources in UGC Human Resource Development Centre Gauhati University 26^{th} November,2018 from to 02 December,2018.

Dr. A.K. Singh

Participated and presented paper in the UGC funded International Conference on Endangered Languages of Delhi-NCR: The North-East India Focus organized by National Law University (NLU) Delhi on 8th May, 2018. The title of the paper is A Discourse on Legal Protection of Khasi Language. And also, chaired on session in this Conference.

Participated as resource person in on day Workshop on Human Trafficking in India organized by the Frontier HQ BSF Meghalaya, India and Bangla Desh Border Guard(BGB) at BOP Dawki ex. 30, on 5th November,2008. The title of the paper is; A Critical Analysis of the Law relating to Human Trafficking.

Participated as Resource Person in 1st North East India Conclave on Role of Youth in Promotion of Mother Tongue (Sindhi) conducted by the National Council for Promotion of Sindhi Language, Ministry of HRD, New Delhi, on 3rd March,2019 in Shillong.

Participated in the Short Term Course on Gender Sensitization in UGC Human Resource Development Centre, NEHU from 8th Octomer2018 to 13th October,2018.

Participated in the UGC Sponsored Short Term Course on MOOCS E-Content Development open Educational and Resources in UGC Human Resource Development Centre Gauhati University 26^{th} from November,2018 to 02 December,2018.

Dr. N. Kumar

Participated in UGC-Sponsored Short Term Course on Moocs, E-Content Development and open Educational Resources from 26th November- 2nd December, 2018 organised by the University Grants Commission Human Resource Development Centre, Gauhati University.

Presented a paper entitled "Legislations in North East India: Lacking Socio-historical Perspectives in the 39th Annual Session of the North East India History Association held at Synod College, Shillong from 1st -3rd November, 2018.

Participated in the Short-term Course in Gender Sensitization from 8th - 13th October, 2018 organised by the University Grants Commission Human Resource Development Centre, North-Eastern Hill University, Shillong.

Dr. R. Sil.

Attended a Course Work on Research Methodology in labour Studies held during $8^{th} - 9^{th}$ April, 2019 organized by the V.V. Giri National Labour Institute, NOIDA.

Mr. S. Tiwari

Participated in aWorkshop on Qualitative Methods in Legal Research with Special Focus on Atlas-Ti Applications, September 24-26, 2018 organized by National Law University, Delhi.

Attended a National Seminar organized by "New Paradigms in Disability Studies and Health Laws: Meta-narratives and Realities" organized by the National Law University and Judicial Academy, Assam on 27 -28 October 2018.

Participated and successfully completed 2nd Refresher Course in Environmental Studies (Interdisciplinary) organized by the Jawaharlal Nehru University, New Delhi from 12 November to 7 December 2018.

Publications *Published in India* Prof. Chintamani Rout

Rout, C. (2018). Media the Fourth Pillar of Democracy. Education plus: A Peer Reviewed Journal-An *International Journal of Education* &*Humanities,* IX (1): pp.291-297.

Dr. R.K. Mishra

Mishra, Ravi Kant (2016-17). 'Access and benefit sharing' in India. *The Legal Analyst.* 1&2:81-85.

Mishra, Ravi Kant (2016). Traditional knowledge and benefit sharing. *Global journal of Socio-Legal studies*, 3(1):8-19.

Mishra, Ravi Kant (2017). IPR protection in agriculture in India: an overview. *Global journal of Socio-Legal studies*, 4(1):1-10.

Mishra, Ravi Kant (2018). Offence of rape in a matrilineal society: an analysis. *Global journal of Socio-Legal studies*, 5(1):1-11.

Dr. A.K. Singh

"Electronic Evidence and the Indian Evidence Act: Analysis", in *Law Review*, ISSN-2349-946X, Vol.36, 2016, pp.84-93.

"Internal Security Operation in India and Human Rights: An Analysis with Special Reference to North-Eastern States" in *Sri Ji SocioLegal Journal, :A Research Journal,* ISSN 2231-1556, Vol12, 2017, pp.22-30

"The Clinical Establishment Act, 2010: A Boon or Bane" in Journal *of Juridical and Social Science*, ISSN 2231-4436, Vol.7 No.2 ,2017 pp.9-22

"Meghalaya Transfer of Land (Regulation) Act,1971: A Critical Analysis" *Law Review*, ISSN-2349-946X, Vol 37 No.1 2017, pp.55-61

"Corporate Criminal Liability: An Analysis" in *Chotanagpur Law Journal*, Vol.11, No. 11, 2017-2018, pp.216-227, ISSN 0973-5858

"Administration of Justice Among the Khasi Tribes of Meghalaya: A Rhetoric or Reality" in *Sri Ji SocioLegal Journal, A Research Journal*, ISSN 2231-1556, Vol 13, 2017, pp.23-42

"Marital Rape and Human Rights: An Analysis with Special Reference to India" in *India International Journal of Juridical Sciences*, Vol.6 Issue 1&2 (March &September) 2017, ISSN:2278-3237 pp.14-29

Bharat me Manavadhikar: Chunautia evan Vidhik Sarankshan in NEHU Jyoti, pp.123-124, August,2018, b RNI Ref No. MEGHIN00011/2017

Dr. N. Kumar

Kumar Naveen (2017), Protection of Environment in Meghalaya and Role of the National Green Tribunal, *Proceedings of North-East India Historical Association*, pp. 303-314. ISSN: 2349-753X.

Kumar Naveen (2017), Corporate Social Responsibility under Companies Act, 2013: A Probe, *Kashmir University Law Review*, Vol. XXIV No.24, pp. 147-158. ISSN: 0975-6639.

Kumar Naveen (2016), Right to Health: An Assessment of the Draft National Health Policy, 2015, *Rajiv Gandhi University Research Journal*, Vol. 15 No.2, pp. 61-71. ISSN: 2250- 2866.

Kumar Naveen (2017), Protecting Human Right through Good Governance: The Role of Judiciary, *Global journal of Socio-Legal studies*, 4(1): 74-92.

Dr. R. Sil

"Unwed Mother: A perspective of Rights and its Socio-Economic Impact" Published in India International Journal of juridical Sciences (A Peer Reviewed Referred Journal) Vol. 6 Issue 1&2, march & September 2017 (combine issue) ISSN No. 2278-3237 UGS Approval (Sr. 63782) at p.38.

Published Abroad

Books/Book Chapters/Proceedings Prof. J.J. Mozika

Mozika, J.J, "A Victim-Centric Approach Towards Combating Human Trafficking", in Chakraborty, Bandyopadhyay & Biawas (ed.) *Trafficking in Persons, Prevention, Control and Rehabilitation*, Department of Law, University of North Bengal, Darjeeling. ISBN-978-81-921285-5-5, 2017, p.17-26.

Prof. Chintamani Rout

Rout, C. (2018). Social Justice and Positive Discrimination. In: *Towards Social Justice, Edited by* C. Joshua Thomas and P. Kakoti, ICSSR-NERC, Pentagon Press Peacock Lane, New Delhi, PP.45-54.

Rout, C. (2018). Indigenous People and their Development: Legal and Constitutional Safeguards. In *Understarding the Tribes of Asia, edited by* David Kharchandy, Lakshi Publishers & Distributirs, New Delhi, pp.339-346.

Dr. A.K. Singh

Uniform Civil Code and India: An Analysis in *Constitutional Law and Uniform Civil Code in India edited* by Vijay Pratap Singh (etal), ABS BOOKS Publishers, Delhi, 2018, ISBN 987-93-86088-86-4 pp.37-51

Right to Privacy vs Freedom of Speech: An Analysis with Special Reference to India in *Indian Constitution:Essay in Honour of Prof S.S.Singh* edited by Uday Pratap Singh (etal), ABS BOOKS Publishers, Delhi,2018, ISBN: 978-93-8608874-1 pp.28-36.

Dr. N. Kumar

Kumar Naveen (2018), "Apradhik Nyay Pranali main Raj Bhasa ka Prayog tatha Adhunik Pradhyogiki", in Dr. E. K. Dunai (eds)Sahithik Niband: Kuch Vichar Kuch Prasna,Yash Publishers and Distributors, Delhi, pp. 91-94. ISBN: 978-93-81633-28-8.

Other Activities

Prof. J.J. Mozika

Delivered a lecture as Resource Person in the Green Skill Development Programme (GSDP) Certificate Course by MOEF&CC Government of India on the topic "Environmental Justice & Environmental Auditing" on 16th October, 2018 in the ENUIS RP Centre, NEHU, Shillong.

Delivered a lecture talk in the Regional Consultation on Review of Sexual Workplace Harassment at (Prevention. Prohibition and Redressal) Act. 2013 conducted by the Centre for Gender Justice, National Law University and Judicial Academy, Assam in collaboration with National Commission for Women on 16th Feb, 2019.

Prof. Chintamani Rout

Attended one Day National Seminar on "Electoral Politics in North-East India; An Analysis of Last Assembly Elections", organized by Indian Council of Social Science Research, North Eastern Regional Centre, NEHU Campus, Shillong on 21st April, 2018.

Attended Teacher Training Programme on Environment Law, organized by Centre for Environment Law, Policy and Research, National law University, Delhi under the aegis of National Academy of Law Teachers from 9-15th July, 2018.

Participated in the 2nd Regional Consultation on Child Rights in the context of Human Trafficking in North-East, organized by the International Justice Mission and North East for Child Rights, under the aegis of Meghalaya State Legal Services Authority and Nagaland SLSA held at Yojna Bhawan, Meghalaya Secretariat, Shillong on 22nd September, 2018.

Acted as a Judge in the Preliminary Round and Quarter Final Round on 2nd National Moot-Court Competition organized by the Department of Law, NEHU Shillong on 4th& 5th October, 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "The Indian Constitution & Environment Protection" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 8th October, 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "Environment Laws in India-Its Impact and Implementation" in the **ENVIS** RP CENTRE. Dept. of **Bio-Medical** Engineering, School of Technology, NEHU, Shillong on 9th October, 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "Need for Environmental Law: An Indian Perspective" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 12th October, 2018

Delivered a lecture to the Master Trainers on Environment on the Topic "The Court System and Tribunals and their Relevance in Indian Judiciary in the Administration of Justice" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 1st November, 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "Public Interest Litigation and its Advantages and Disadvantages" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 1st November, 2018.

Invited as a Resource Person to deliver a lecture on "Appeal/Complaint Procedure and Role of Information Commission and Courts" for a Training Programme under Right to Information Act, 2005 to the Police Officers at NEPA, Meghalaya on 13th December, 2018.

Dr. R.K. Mishra

Delivered a lecture as a resource person at teachers training programme organised at centre school NEHU on the topic Pocso Act and its implications in June 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "Convention on Bio-Diversity" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 15th October, 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "Various International Documents on Bio-Diversity and Genetic Resources" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 18th October, 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "Genetic Resources and Biological Diversity Act" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 20th October, 2018

Delivered a lecture to the Master Trainers on Environment on the Topic "Environmental Degradation and Biological Diversity Act" in the ENVIS RP CENTRE, Dept. of BioMedical Engineering, School of Technology, NEHU, Shillong on 25th October, 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "Benefit Sharing and Biological Act 2002" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 26th October, 2018.

Delivered a lecture to the Master Trainers on Environment on the Topic "Biological Diversity Board and its Functioning in India" in the ENVIS RP CENTRE, Dept. of Bio-Medical Engineering, School of Technology, NEHU, Shillong on 29th October, 2018.

Delivered five lectures to the Master of Science on "Intellectual property Right and Bio Technology" in the Dept. of Bio-Technology, NEHU, Shillong on 22nd May-28th May, 2018.

Dr. A.K. Singh

Delivered lecture as resource person in three days Course on Community policing conducted by the Police Training School, Shillong, Meghalaya on following topics:

(i)'Legal Aspect of Community Policing' in Police Training School Meghalaya on 10th April 2018(ii) Urban Community policing with case studies on 11th April2018(iii) when community *Problems/Situations* policing is not successful' on 12th April 2018. Delivered lecture on 'Social Defence: Nature Areas and Need' on 18th July.2018 in three Days State level programme on Social Defence for Middle Level police functionaries conducted by Police Training School, Shillong Meghalaya

Delivered lecture as resource person in a three days Course (19-21 September,2018) on Juvenile Justice Act and Human Rights. The topics are (i) International Humantarian Law and overview(ii)Juvenile Justice Act, Section50-68 and(iii)Punishment in Child in need cruelty and employment of Juvenile.

Delivered lecture on 17th October 2018 on Indian Forest Act, 1927 and Forest Conservation Act, 1980, in the Green Skill Development Programme (GSDP) certificate course conducted by the ENVIS RP Centre, NEHU.

Delivered lecture 20th October 2018 Wildlife (Protection) Act, 1972 as amended in 1991, 2002 and 2006: Biological Diversity Act, 2002; etc.in in the Green Skill Development Programme (GSDP) certificate course conducted by the ENVIS RP Centre, NEHU.

Dr. N. Kumar

Delivered lectures on "Construction and Demolition Waste Management and Bio-Medical Waste Management: Legislative, regulatory and policy aspects" on 8th August, 2018 from 1100- 1200hrs and on 10th August, 2018 from 1600-1700hrs during the GSDP Course on Waste Management held at Biomedical Engineering Department (BME), NEHU, Shillong.

Delivered 7 lectures as Resource Person in the Green Skill Development Programme (GSDP) Certificate Course by MOEF&CC Governmentof India on the topic "Environmental Justice & Environmental Auditing" on 16th October, 2018 in the ENVIS RP Centre, NEHU, Shillong sponsored by The Ministry of Environment Forest and Climate Change, Governmentof India on the Topic of "Evolution and Principles of International Environmental Law and State Responsibility and Drafting Legal Documents on 15th October, 22nd October, 25th October, 29th October, 13th November& 14th November, 2018.

Delivered a lecture on Principle of Natural Justice and its applicability in Departmental Enquiry during the 4-day Module on Departmental Enquiry organised by the North-Eastern Police Academy w.e.f. 17th to 20th September, 2018.

Organised the NEHU 2^{nd} National Moot Court Competition, 2018 from $4^{th} - 6^{th}$ October, 2018 as the Convener of the Organising Committee. Participated as a Conciliator in the Mega Lok Adalat on 27th October, 2018 organised by the Office of the District & Sessions Judge/ District Legal Services Authority, East Khasi Hills District, Shillong

Participated as an Examiner on the Presentation by students on various 19th related topics environment on 2018 November, held at Biomedical Engineering Department (BME), NEHU, Shillong.

Participated as a Conciliator in the National Lok Adalat on 9th March, 2019 organised by the Office of the District & Sessions Judge/ District Legal Services Authority, East Khasi Hills District, Shillong.

Dr. R. Sil

"Allegation of causing of death in false encounter etc. & case study on escalation of violence, custodial death/torture during interrogation/custodial rape/encounters" on 16^{th} March, 2018 in a three days Training of Trainers (TOT) Programme on Human Rights regarding held at Police Training School, Meghalaya, sponsored by National Human Rights Commission (NHRC), New Delhi w.e.f $14^{th} - 16^{th}$ March, 2018.

Delivered lecture on "Bonded Labour Issues and Child Labour Issues with relevant Acts, Human Trafficking including Child Trafficking and Relevant Laws." On 26th& 27th March, 2018 in a three days Training Programme on Protection of Children from Sexual Offences (POSCO) Act 2012 conducted by Police Training School, Shillong w.e.f 26th& 27th March, 2018.

Delivered lectures (three days consecutively) on the topic "Police Public Relation – Reason of Good and Bad Relations, Community Policing, Role and Function of Police Officer for better Community and Policing; Problems of Youth in Community" on 10th, 12th April, 2018 respectively, conducted by Police Training School, Shillong w.e.f 10th – 12th February, 2018.

Delivered lectures as guest faculty on "Women's Rights with Special Reference to Right to Workplace on 8th May, 2019 in a Training Programme conducted by The Regional Training Division for Lady Officer of GSI, NER at Regional Training Division, Shillong on 8th May, 2019 for 2nd Workshop on Self Defence for Lady Officer of GSI, NER.

"Social Defence: Legislations and Programmes" on 18th July, 2018, in a three days State Level Programme on Social Defences for Middle Level Police Functionaries of Police Department in collaboration with Police Training School, Shillong.

Delivered lectures on "Establishing Identity of Deceased when he is unknown & disinterring of dead bodies" on 27th September, 2018 in a two days course on Investigation of Homicide, Suicide and Drowning Case, w.e.f 27th – 28th September, 2018 conducted by Police Training School, Shillong.

Delivered lectures on "Police Reforms and Importance of Human Rights Education for Police, Function and Procedure of Juvenile, Justice Board and Child need of Care and Protection- Rehabilitation and Social Integration, Role of Child Welfare Officers" on $19^{\text{th}} - 21^{\text{st}}$ September, 2018 consecutively, conducted by Police Training School, Shillong in a three days course on Juvenile Justice Act and Human Rights w.e.f $19^{\text{th}} - 21^{\text{st}}$ September, 2018.

Delivered lectures as Resource Person on the topic "Introduction to Indian Legal System and Environment Impact and Policy" on 9th& 11th October, 2018 held at Bio –Medical Engineering Department (BME), NEHU, Shillong conducted by ENVIS RP Centre, NEHU, Shillong sponsored by (MoEFACC), Government of India.

Delivered lecture on "Investigation of suspect and frame charges for prosecution" on 26th October, 2018 in a three days course

on Investigation and Prosecution of Cases, conducted by Police Training School, Shillong w.e.f 24th to 26th October, 2018.

Mr. S. Tiwari

Judged the 23rd Stetson International Environmental Moot Court Competition – 2018-19 organized by the Jindal Global Law School, Sonipat from 23 – 25 November 2018.

Delivered a Lecture as Resource Person on "Difference between legal insanity Forensic Psychiatry and medical insanity" at a Seminar on "Mental Health" organized by the Meghalaya State Judicial Academy, Shillong on 1 December 2018.

Judged the INTERNATIONAL ESSAY WRITING COMPETITION, 2018 on the theme of "International Trade, Human Rights And Sustainable Development: An Entangled For А Trinity Necessarv Nation's Development" Organized By University Institute Of Legal Studies, Panjab University In Partnership With Surna&Surana International Attorneys, Chennai.

Delivered a Lecture as Resource Person on "Legal Framework and Policies with Human Trafficking (International)in a 5 day Module on "Anti-Human Trafficking" organized by the North Eastern Police Academy, Shillong for police officers in the rank of SI and SP from across the country on 9 May 2018.

Delivered a lecture as Resource Person on "IT Act with special reference to Section 46 & 69A; 65B Indian Evidence Act & Bankers' Books Evidence Act", at the Three day Training Programme on 'Investigation on Cyber Crime Cases', organized by the Police Training School, Shillong, Meghalaya, 2nd -4th May 2018.

Delivered a Lecture as Resource Person on "International Jurisprudence on Child Rights" to the participants of 6 months Diploma Course on Child Right and Law, conducted by Centre for Child Rights, National Law University and Judicial Academy, Assam on 22nd September, 2018.

DEPARTMENT OF POLITICAL SCIENCE

 Head
 : Prof. K. Debbarma: 10.12.2018

 : Prof.H. Srikanth: 11.12.2018

 Telephone

 : 9436165370

 E-mail

 : hskant@gmail.com

Faculty	:8				
Designation	Name and Qualification	Specialization			
	Dr.K. Debbarma, M.Phil.,Ph.D. (NEHU) Dr.H. Srikanth, M.Phil.,Ph.D. (Hyderabad) Dr.R. K. Satapathy,	HumanRights,DevelopmentAdministrationandPoliticsofMigration in North East India.PoliticalTheory,Political Economy,SocialMovementsInternationalPolitics,Political Theory			
Professor	M.Phil. (Sambalpur), Ph.D. (NEHU) Dr.T. T. Haokip, M.Phil.,Ph.D. (NEHU)	and Electoral Politics Foreign Policy, Public Administration, Government and Politics in North East India.			
	Dr.Susmita Sen Gupta, M.Phil.,Ph.D. (NEHU)	India. Indian Government and Politics, Politics of North East India			
	Dr.Munmun Majumdar, M.Phil.,Ph.D. (JNU)	South East Asian Studies and International Politics			
Associate Professor	Dr.Biswajit Mohapatra, M.Phil.,Ph.D. (JNU)	India South and South East Asia, Look/Act East Policy, North East Politics			
Assistant Professor	Dr.Suparna Bhattacharjee, M.Phil.,Ph.D. (JNU)	International Politics and Trade			

Thrust Areas of Research

Contemporary Issues in Indian Politics and Politics of North East India.

Brief Statement of Academic Activities

The Department of Political Science, established in 1974, aims at building an academic community of students, researchers and teachers devoted to an open, critical and analytical study of the discipline with an emphasis on inter-disciplinary approach. It also aims at making courses and research work that are socially relevant and developing an awareness of the basic issues and problems in the discipline so as to equip the students intellectually to fulfil these needs. With the strength of eight faculty members, the Department has 104 students on its roll at the MA level. The Department admits M.Phil. and Ph.D. scholars who undergo course work for one semester followed by dissertation/thesis writing on proposals approved by the School Board of Social Sciences. At present, there are 50 research scholars who are engaged in the M.Phil. and Ph.D. programmes of the Department. The Department is in SAP-DRS-II. And the thrust area of SAP is "Political Processes and Economic Changes in Northeast India."

Students' Profile Enrolment Capacity:

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA	17	36	-	53	-	-	29	24	53
Ph.D.	3	3	-	5	-	1	1	5	6
Degrees Awarded									

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
MA	19	28	-	43	2	2	19	28	47
M.Phil.	2	2	-	3	-	1	1	3	4
Ph.D.	1	3	-	4	-	-	2	2	4

Students Awarded Ph.D. Degree : 6

Research Fellowship

CSIR- UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Maulana Azad Minority Fellowship	Any other (You name it)	Others
3	21	1	-	-	ICSSR =3	National Fellow- ship =4

Courses Conducted

Postgraduate

<u>Semester I</u>

Compulsory Core Courses: Liberal Political Theory, Theory of International Politics, Major Concepts and Issues in Public Administration, Indian Political System, State Politics in India with Special Reference to North-East India (I).

<u>Semester II</u>

Compulsory Core Courses: Marxist Political Theory, Problems of International Politics,

State Politics in India with Special Reference to North-East India (II).

Optional Core Courses (Any one): Third World Political Theory, Administrative Theory, East & South East Asian Political Systems, West-Asian Political Systems. Open Courses (Any one): Government and Politics in N.E. India, Democracy in India, Modern Indian Political Ideas.

Semester III

Compulsory Core Courses: Contemporary Political Theory, Research Methodology I. Optional Core Courses (Any one): Issues in Women's Studies, International Law and International Organisation, South Asian Political Systems, South Asian Political Systems, African Political Systems. Open Courses (Any two): Globalisation, Politics of Social Movements in India, Women and Political Theory, Development Administration, Issues in Environmental Politics.

Semester IV

Compulsory Core Courses: Major Debates in Political Theory, Comparative Politics, Research Methodology II.

Optional Courses (Any two): Political Ideology, Political Sociology, Foreign Policy of Major Powers, Indian Political Economy, Human Rights.

Ph.D. Courses

Compulsory Courses: Research Methodology, Seminar Paper on Frontier of Knowledge in the relevant field.

1. Prof. Prabhat Kumar Datta, Former Faculty, Calcutta University on 25th -28th February, 2019.

Talks Delivered: Democratic Denationalization in India: Old Issues and New Challenges.

Right to Information: Historical Perspective. Engendering Rural Governance in India: Emerging Challenges and Possibilities Community Studies in India: Methodological Issues and Challenges.

2. Prof. Ashok Acharya, Delhi University on 5th -8th March, 2019.

Talks Delivered: Interpreting Nietzsche. Lecture on Egalitarianism. Realizing Rights: Sharing Fieldwork Notes from Uttarakhand. Global Justice in an Unequal World. Optional Courses (Any one): Issues and Processes in the Politics of North-East India, Issues in Indian Politics, Women and Politics in North-East India, Critical Perspectives on Knowledge and Power, Advanced Studies in International Politics, Environmental Politics.

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes *Organized* Seminar Organized by Department

The UGC-SAP International Seminar on *"Public Policy, Governance and Development in North-Eastern States"* on March 13-14, 2019 in the Old NEHU Guest House, Shillong. Coordinated by Prof. K. Debbarma

Special Lectures / Public Talks delivered by the following Visiting Fellows during 2018-19 as part of UGC-SAP:

3. Prof. G. Haragopal, Visiting Professor, National Law School of India University, Bengaluru on 18th -21st March, 2019.

Talks Proposed: Political Economy of Public Policy in India. Higher Education in India: Equity vs.

Excellence.

Human Rights Movements in India. KCR Phenomena in Telangana.

4. Prof. Anand Kumar, Former Faculty, Jawaharlal Nehru University, New Delhi on 26th – 30th March, 2019.

Talks Proposed:

Challenges of Democratic Nation Building in 21st Century India.

Globalization and India.

Non-Violence Social Movements in the 21st Century.

Methods of Studying Democratization.

Seminars and Conferences Attended by Faculty

Prof. K. Debbarma

Delivered a lecture on "Challenges to Human Rights in North East India" on 1st November 2018, in the Refresher Course in Political Science, organized by Human Research Development Centre, NEHU, Shillong.

Delivered two lectures on "Asset-Based Community Development" on 8th November 2018, in the Refresher Course in Political Science, organized by Human Research Development Centre, NEHU, Shillong.

Presented a paper on "Policies and Implementation on Women Empowerment in Meghalaya", in National Seminar on Public Policy, Governance and Development of North-Eastern States of India, organized by organized by Department of Political Seminar, NEHU, Shillong, on March 13-15, 2019.

Prof. H. Srikanth

Delivered a lecture on "Structure of Academic Writing" in 46th Orientation Program organized by HRDC, NEHU, Shillong on January 30, 2019.

Delivered two lectures on "Transnational Crimes in the name of Globalization", and "Agrarian Crisis in India" in the Refresher Course in Political Science, organized by HRDC, NEHU in November, 2019.

Delivered two lectures on "Tribal Movement in India" and "Writing and Publication of Journal Articles" in Refresher Course on Tribal Studies in September-October, 2018.

Delivered two lectures – "Structure of Academic Writing" and "Review of Literature" in Workshop on Research Methodology in Social Sciences" organized by ICSSR-NERC on 11 and 13 September 2018. Presented a paper on "Implementation of BADP in Meghalaya", in National Seminar on Public Policy, Governance and Development of North-Eastern States of India, organized by organized by Department of Political Seminar, NEHU, Shillong, on March 13-15, 2019.

Prof. R. K. Satapathy

Presented a paper on "Meghalaya Elections" in Lokniti meeting in New Delhi on 16th April 2018.

Presented a paper in the National Seminar on "Globalization and Traditional Institutions in North East India" in Mizoram University on 3rd October 2018.

Prof. T. T. Haokip

Participated and presented a paper on "The Politics of Anglo-Kuki War" in One-day National Conference titled 'India's Frontier Uprising during First World War: The Anglo-Kuki War 1917-1919' at Nehru Memorial Museum and Library, New Delhi on 15 October 2018.

Participated and chaired the National Seminar on Society, Ecology and Environment in Manipur: A Climate Change Perspective jointly organized by Forest Department, government of Manipur and Kuki Research Forum at Moreh College from 28-29 December, 2018.

Participated and chaired the National Seminar on Society, Ecology and Environment in Manipur: A Climate Change Perspective jointly organized by Forest Department, government of Manipur and Kuki Research Forum at Moreh College from 28-29 December, 2018.

Participated and presented a paper on "Interactions Across India-Myanmar Border: The Kuki people" at UGC SAP International Seminar on Historicizing borders: New Perspectives on Politics, Ethnicity and Trans-National Linkages in North-East India, organized by History Department, NEHU Shillong from 26-28thFebruary 2019.

Delivered 3 lectures on "Foreign Policy and Globalization" in a refresher course in Political science, organized by HRD, NEHU, Shillong from 22/10/2018 to 11/11/2018.

Delivered keynote address on "The Significance of Anglo-Kuki War" at National symposium on Remembering Anglo-Kuki War, 1917-1919: Hundredth year of the War against Imperialism organized by the Department of Humanity and Social Sciences, IIT, Gauhati at guest House Conference Room, IIT on 7thFebruary 2019.

Presented a paper on "Traditional and Democratic Governance in North East India: Manipur Experience", in National Seminar on Public Policy, Governance and Development of North-Eastern States of India, organized by organized by Department of Political Seminar, NEHU, Shillong, on March 13-15, 2019.

Prof. Susmita Sen Gupta

Presented a paper titled "Equity and Ethnic Politics in Northeast India" in a National Seminar on "Equity with Special Emphasis on NER" organized by Dr. Ambedkar Chair, Tezpur University during June 21-22, 2018.

Presented a paper on "Ethnicity and Development: A Civil Society Perspective", in National Seminar on Public Policy, Governance and Development of North-Eastern States of India, organized by organized by Department of Political Seminar, NEHU, Shillong, on March 13-15, 2019.

Presented a paper "Chakma Migration in Arunachal Pradesh and its Consequences on the Rights of Indigenous People" in a National Seminar on Migration and its Affects on the Rights of Indigenous People in Northeast India organized byInstitute of Tai Studies and Research, Moranhat in collaboration with ICHR, New Delhi during March 9-10,2019

Prof. Munmun Majumdar

Delivered a Key note address in the session on "Global Strides of Indian Economy" at the International Conference on "Aspiring India", 58 All India Political Science 29-30 Dec 2018, Conference Meerut. Organized by India Political Science Conference and Department of Political Science, Chuadhary Charan Singh University, Meerut, UP.

Dr. Biswajit Mohapatra

Presented a paper on "Emergence and Significance of North East India as a Strategic Factor in India's Act East Policy", in ICSSR sponsored National Seminar on Locating Northeast In India's Neighbourhood Policy: Problems And Prospects, September 29 & 30, 2018 at North Lakhimpur College (Autonomous), Assam. Presented a paper on "Gandhi's Swadeshi and the Contemporary World Economy An Assessment of its Significance and Perspectives, Two days National Seminar on "Gandhian Thought and Polity: Contemporary Society" 4th-5th October 2018, National Archives of India, New Delhi, to commemorate the 150th Birth Anniversary of Mahatma Gandhi, the Father of Nation

Presented a paper on "Rural and Women Entrepreneurship - The Ecosystem and Policy Options for North East India" in National Seminar on "Entrepreneurship and Business Innovation in North East-India: A Gap in Micro and Small Industries, November 16 -17, 2018, organized by Department of Management, North-Eastern Hill University (NEHU), Tura Campus, Tura, Meghalaya.

Presented a paper on "Higher Education and Sustainable Rural Livelihoods: Tackling the Challenges", in National Seminar on *Facilitating Sustainable Livelihoods for the Impoverished: The Role of Educational Process*, Dept of Lifelong Learning and Extension in collaboration with Interdisciplinary School (IDS) (Humanities & Social Science) Savitribai Phule Pune University (Formerly University of Pune), Pune , Maharashtra, on 3rd- 4th. January 2019

Presented a paper on "Leveraging the Indian Diaspora and India's Foreign Policy Shifts", in International Conference on 'Indic Identity of Indian Diaspora: Its Historical, Philosophical and Contemporary *Contributions to the World and* India', Banaras Hindu University (BHU), Varanasi, 24 and 25 January 2019 Presented a paper on "Globalization, Governance and Scheduled Areas: Reorienting the local institutions of Governance", in Two Day National Seminar on Society, Economy and Polity of North East India: Past And Present, 22nd& 23rd February 2019, Bodoland University, Kokrajhar BTC, Assam Presented a paper on "Globalization, Rise of New Media and National Security, International Seminar on "Impact of Social Media on Peace & Security", on 7th & 8th March, 2019, Department of Defence and Strategic Studies (DDSS), Yashwantrao Chavan National Center of International Security and Defense Analysis (YC-NISDA), Savitribai Phule Pune University (SPPU), Pune, Maharashtra, India.

Presented a paper on "Artificial Intelligence and Democracy: A Game Changer for India? *World Symposium on Artificial Intelligence in Governance and Disaster Management*, March 11-13,2019, Special Centre for Disaster Research, Jawaharlal Nehru University, New Delhi Presented a paper on "India and Eurasia Relations: Challenges & Perspectives', National Seminar on India's Foreign Policy: Continuity and Change under PM Modi, March 29th & 30th ,2019, Guru Nanak Dev University, Amritsar, Punjab, India Presented a paper on "Regional Issues: Gulf Security, Middle East and South Asia: 7th ICWA-PSAIDS Dialogue 2019, organized by The Indian Council of World Affairs (ICWA), New Delhi and Prince Al Faisal Institute of Diplomatic Studies (PSAIDS), Riyadh, Saudi Arabia, 26March, 2019 at Prince Al Faisal Institute of Diplomatic Studies (PSAIDS), Riyadh, Saudi Arabia.

Dr. Suparna Bhattacharjee

Presented a paper titled "Border Haat: Through the lens of realities", at the International Seminar on *Historicising Borders: New Perspectives on Political, Ethnicity and International Linkages*, on February 27,2019, organised by the Dept of History, NEHU

Publications Research Papers *Published in India*

H. Srikanth, "Dalit Movement for Social Justice: Politics of Accommodation in Telugu Region", C. Joshua Thomas, Padmakshi Kakoti, *Towards Social Justice*, Pentagon, New Delhi, November 2018, ISBN 9789386618443. pp. 101-115 H. Srikanth, C.J. Thomas, "Challenges and Predicaments of Naga Nationalism", in Bhagat Oinam, Dhiren Sadopkam eds., *Northeast India: A Reader*, Chapter 6, Routledge, March 2019. ISBN 9781138363960, Pp.

Satapathy, R.K., "Diversity in Voting Pattern in North East India" in the book *How India* *Votes* edited by Ashutosh Kumar and Y. S. Sisodia published by Orient Blackswan, October 2018., **pp.**?

T. T. Haokip, "To Fence or Not to Fence the India (Manipur)-Myanmar Border" in Manipur State Kut 2018 Souvenir, (ed.) Lunsieh Kipgen, Published by State Level Kut Committee, Manipur, pp.10-14

M. Majumdar, "The Belt and Road Initiative and Southeast Asia" in Jaggannath P. Panda and Titli Basu (Eds.), China-India-Japan in the Indo-Pacific Ideas, Interests and Infrastructure, Pentagon Press in Association with IDSA, New Delhi, 2018, pp. 372-386. (ISBN 978-93-86618-42-9).

M. Majumdar, "India, Vietnam and the South China Sea" in Shakti Sinha and Sonu Trivedi (Eds.), Emerging Horizons in India-Vietnam Relations, Pentagon Press, New Delhi, 2018, pp.57-67. (ISBN 978-93-86618-37-5).

M. Majumdar, "The Belt and Road Initiative and Southeast Asia" In: *China-India-Japan in the Indo-Pacific Ideas, Interests and Infrastructure*, Jagganath P. Panda and Titli Basu (Eds.) Pentagon Press in Association with IDSA, New Delhi, 2018, chapter 19, pp. 372-386. (ISBN 978-93-86618-42-9).

M. Majumdar, "India, Vietnam and the South China Sea" In: *Emerging Horizons in India*- *Vietnam Relations*, Shakti Sinha and Sonu Trivedi (Eds.), Pentagon Press, New Delhi, 2018, chapter 6, pp.57-67. (ISBN 978-93-86618-37-5).

B.K. Mohapatra, "Human Rights Education in India and the North East: Panoramic View of Needs & Strategies, *Dialectics and Dynamics of Human Rights*", Prof Neelima Deshmukh (Ed.), ISBN 9789350703878, Shanti Prakashan, Ahmedabad, pp. 259-268, 2019

B.K. Mohapatra, India China Relations and the New Silk Road: Emerging Dynamics and Geopolitical Realities, *India and the Silk Road: Exploring Current Opportunities*, Nasir Raza Khan, (Ed.), Primus Books, New Delhi, pp 136-144, 2019

Suparna Bhattacharjee, "Look East to Act East: Contextualising India's Engagement with Singapore", Asian Journal of Development matters, No (1), Special Issue, Vol. 12, ISSN 09739629, July, 2018

Published Abroad:

Susmita Sen Gupta, "Ethnicity and Development – A Civil Society Perspective from North- East India", Asian Institute of Research, *Journal of Social and Political Sciences* (ISSN: 2621-5675), July 9, 2018.

Funds Received from Agencies including NEHU/UGC:
From Department UGC SAP: Rs. 6,60,000 for the year 2018-19
Research Projects
Completed during Year

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Rupees)
"Implementation of Border Areas Development Program (BADP) in Garo Hills, Meghalaya"	Prof. H. Srikanth	ICSSR-NERC	Rs. 75000
"Fencing the Indo-Myanmar Border: Problems and Perceptions of the Kukis in Moreh and Tamu", Submitted to ASEAN Studies Centre.	Prof. T. T. Haokip (PI) Prof. H. Srikanth (Co PI)	Ministry of External Affairs, Government of India	5 lakhs

Other Activities Prof. K. Debbarma

Conducted and moderated a seminar session with the participants of Refresher Course in Political Science on 2nd November 2018, in the Refresher Course in Political Science, organized by Human Research Development Centre, NEHU, Shillong.

Delivered a lecture on "Challenges to Human Rights in North East India" on 1st November 2018, in the Refresher Course in Political Science, organized by Human Research Development Centre, NEHU, Shillong.

Delivered two lectures on "Asset-Based Community Development" on 8th November 2018, in the Refresher Course in Political Science, organized by Human Research Development Centre, NEHU, Shillong.

Delivered a lecture in a Workshop on Research Methodology in Ramanujan College, New Delhi, on 18th March, 2019.

Prof. H. Srikanth

Invited for Interactive Roundtable Discussion organized by Asian Confluence on "Indo-US Partnership for a Prosperous Indo-Pacific" on February 29, 2019.

Participated in deliberations of "Shillong Dialogue Roundtable Shared Borders, Shared Opportunities: "Transforming Geo Spaces to celebrating ideas, skills, and People", organized by Asian Confluence on 16th and 17th August 2018.

Participated in the Panel Discussion on "Revisiting Asian Connectedness: Indo-ASEAN Relations in 21st Century" on 8thAugust, 2018.

Prof. R. K. Satapathy

Organised a National Seminar in ICSSR-NERC Shillong on "Electoral Politics in North East India: Analysis of Last Assembly Elections" on 21st April 2018. Organized a Seminar on "ASEAN Day" in ASEAN Study Centre, Shillong on 8th August 2018.

Organized distinguished lecture series of Ex-Ambassador in NEHU on 14th September 2018.

Organised "Ek Bharat Shrestha Bharat Programme" in NEHU on 16th November 2018.

Took part in the panel discussion on "Electronic Voting Machines" organized by the Press Club of Meghalaya on 14th November 2018.

Prof. Susmita Sen Gupta

Delivered a lecture on "Nationalism and Regional Parties of Meghalaya" in the Refresher Course in Tribal Studies organized by UGC-HRDC NEHU during September 24- October 13, 2018.

Delivered a lecture on "Post-national Debates" in the Refresher Course on State and Globalization organized by the Department of Political Science, NEHU during October22-November10, 2018.

Prof. Munmun Majumdar

Delivered a lecture on "Globalization and Connectivity" in the Refresher Course on State and Globalization, HRD, Department of Political Science, NEHU.

Chaired the Third Academic Session of the UGC-SAP Seminar on "PublicPolicy, Governance and Development in North-Eastern States of India" held on 14th March 2019 in NEHU Campus, Shillong.

Dr. Biswajit Mohapatra

Organized Workshop in the Refresher Course in Political Science on State and Globalization, October 22-November 10, 2018.

Dr. Suparna Bhattacharjee

Delivered a lecture on "Review of Literature from the perspective of Social Science," in the Winter School organized by UGC-HRDC NEHU on March 21, 2018.

Delivered a lecture on "Why do we need to know about style Sheet? -Contextualising APA Style sheet" in the Winter School organized by UGC-HRDC NEHU on March 22, 2018.

Delivered a lecture on "Are We Honest? : Research Ethics and Plagiarism" during the Refresher Course in English and Comparative Literature, organised by Human Resource Development Centre (HRDC), North-Eastern Hill University (NEHU) on April 5, 2018.

Delivered a lecture on "Plagiarism and Social Science Research" during the orientation course organised by Human Resource Development Centre (HRDC), University of Mysore on October 12, 2018. Delivered a lecture on "Review of Literature: Essentials to know" during the orientation course organised by Human Resource Development Centre (HRDC), University of Mysore on October 12, 2018.

Delivered a lecture on "Development and Tourism: Government of India's Policy and North-East" during the orientation course organised by Human Resource Development Centre (HRDC), University of Mysore on October 13, 2018.

Delivered a lecture on "Water Justice Movement and Right to Water: Human Rights Dimension" during the orientation course organised by Human Resource Development Centre (HRDC), University of Mysore on October 13, 2018.

DEPARTMENT OF SOCIOLOGY

Head	: Prof. A.K.Nongkynrih
Telephone	: (0364) 2723040
E-mail	: hodsoc@nehu.ac.in

Faculty:7

Designation	Name and Qualification	Specialization					
	Dr.C.L. Imchen, M.A., M.Phil., Ph. D. (JNU);	Political Sociology; Polity Formation and Indigenous Peoples					
Professor	Dr.I.L. Aier, M.A., M. Phil., Ph. D. (NEHU); Political Sociology Sociology of Relig Ethnic Relations						
	Dr.A. K. Nongkynrih, M.A., M. Phil., Ph. D. (NEHU);	Sociology of Family & Kinship, Sociology of Organisations, Sociology of Rural Development					
	Dr.D. V. Kumar, M.A., M. Phil., Ph.D. (JNU);	Modernization, Ethnicity and Social Change					
	Dr.B. Panda. M.A., M.Phil. (University of Hyderabad), Ph. D. (IIT/ Kanpur);	Sociology of Third Sector, Sociology of Development					
Associate Professor	Dr.Rekha M. Shangpliang, M.A., M. Phil., Ph.I (NEHU);	Sociology of Environment Sociology of Gender					
Assistant Professor	Md Yusuf Khan, M.A. (AMU), M. Phil (DU)	Ethnicity, Urban Sociology, Migration					

Thrust Areas of Research:

Social Change is the main thrust area of the department. It is concentrating in understanding the changes taking place in the societies of the region.

Brief Statement of Academic Activities:

The Department is concentrating on understanding changes taking place in the societies of the region. The Department of Sociology began instructions at M. A., M. Phil., and Ph. D. Levels in 1976. Besides teaching and supervising research, the faculty engages in individual research activities as well. With the existing faculty expertise, the developed research Department has excellence in the studies of political dynamics and Social Movements, emerging accommodation between native systems and Nation State. ethnic identity. the Globalisation and its impact on the North-Eastern Region, land and privatization of communal lands, rural developmental schemes and policies and traditional political

institutions, Modern Organizations. Moreover, faculty members have been involved in their own capacities in community extension programmes, development of evaluation tools, documentation of Khasi indigenous forest management with reference to environment, evaluative research on community approach to development.

Students' Profile /Enrolment Capacity: M.A/M.Sc. - Ph.D. - Variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
MA	-	50	1	10	41	24	27	51
Ph.D.	-	3	1	-	4	2	2	4

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A	-	46	3	8	41	22	27	49
Ph.D.	-	5	1	-	6	1	5	6

Students Awarded Ph.D. Degree : 6

Research Fellowship:

CSIR-	UGC	Rajiv	ICPR	Meritorious	Any other	Others
UGC-	Non-NET	Gandhi	Fellowship	Maulana	(You name	
NET		SC/ST		Azad	it)	
				Minority		
				Fellowship		
01	03	-	-	-	-	-

Courses Conducted:

Postgraduate

Semester-I :

Soc: C: 101: Sociological Theories – I Soc: C: 102: Methodology of Social Research – I Soc: C: 103: Sociology of Family and Kinship Soc: C: 104: Indian Society – I Soc: C: 105: Indian Society – II

Semester-II

Soc: C: 201: Sociological Theories - I

:

Soc: C: 202: Methodology of Social Research – II Soc: C: 203: Sociology of Religion Soc: C: 204: Indian Society – III Soc: O: 207: Open Course – (Ethnic Relations)

Semester-III :

Soc: C: 301: Economy and Society Soc: C: 302: Political Sociology Soc: C: 303: Sociology of Development Soc: C: 304: Open Course – (Sociology of Gender) Soc: O: 309: Open Course – (Urban Sociology)

Semester-IV :

Soc: C: 401: Social Change Soc: C: 402: Sociology of Environment Soc: C: 403: Tribal Movements in India Soc: C: 404: Sociology of Organisations Soc: C: 405: Sociology of Development- II

Ph.D. Courses

SOC P 01: Designing Sociological Research SOC P 02: Sociological Concepts SOC P 03: Advanced Sociological Theory

Seminars/Conferences/Symposia/Extensio n Programmes etc.

Organized

National Seminar on Urbanization in India: Issues and Predicaments, Date: $14^{th} - 15^{th}$ February, 2019, Venue: New Guest House, NEHU, Shillong. The convener was Prof. B. Panda and the Co- convener was Md. Yusuf Khan.

Publications: *Published in India:* Prof. D.V.Kumar

Kumar, D.V. (2018). Explaining the Mizo ethnicity. In: *Issues and Themes inContemporary Society*. B.K. Nagla and Vinay Kumar Srivastava (Eds.). Rawat Publicaton, Jaipur, Chapter 13, p.177-188.

Dr. Rekha M. Shangpliang

Shangpliang, Rekha M. (2018). Tribal Women and Natural Resource Management: The Khasi Women of Meghalaya in India: *Echoes From the Hills*: II (2): 36-51 Shangpliang, Rekha M. (2018). Forest and Tribal Life with special reference to the Khasi of Meghalaya. In: Understanding the Tribes of Asia. David Arnold Kharchandy (Eds.). Lakshi Publishers and Distributers. New Delhi. Chapter 2.p.215-228.

Seminar attended: Prof.A.K.Nongkynrih

Presented а paper on Sustainable Development Goals and the UN Declaration onthe right of indigenous People in a Twoday national seminar on Marginalization andMarginality in India with a focus on North Eastern Region: Multiple Contexts for StateIntervention, 15th -16th March, 2019, OKDISCD, Guwahati, organised bv Department of Sociology, Tezpur University. A Resource person in a seminar on *Making* PoliceStructures Lean and More Effective, 29 June, 2018, Umsaw, Meghalaya, North-Eastern Police Academy, Ministry of Home affairs, Government of India.

Md. Yusuf Khan

Presented a research paper entitled "Factors of migration of Pangals to Imphal city" in the National Seminar on Urbanization in India: Issues and Predicaments held on 14th and 15th February, 2019 organized by the department of Sociology, NEHU, Shillong.

Prof. B.Panda

Presented a paper "Rurbanization and the Growing Importance of Small Towns" in a national seminar on Urbanization in India: Issues and Predicaments organized by Department of Sociology NEHU, Shillong during 14th-15th February, 2019.

Presented a paper entitled "Identity, Citizenship Participation and Inclusive Development" in First Annual Social Science Congress of Indian Council of Social Science Research - North Eastern Regional Centre in Collaboration with Department of Sociology, Tezpur University on Citizenship, Ethnicity and Inclusive Development held in Tezpur University during 24th-26th March, 2019. Delivered a lecture on 26th October2018 on "Dimensions of Social Change in North-East India with Special Reference to Khasi Society in Meghalaya" in Department of Humanities and Social Sciences, Indian Institute of Technology (IIT) Roorkee.

Delivered a lecture on 2nd November, 2018 on "Importance of Sociology in Contemporary Times" in the Department of Sociology, Maharaja Bir Bikram College, Agartala, Tripura.

Delivered a lecture on 6th November, 2018 on "Conceptual and Theoretical Aspects of Social Entrepreneurship" in the Department of Sociology, Tripura University.

Delivered a lecture on 8th November, 2018 on "Identity Formation in Era of Globalization" at Refresher Course in Political Science, NEHU, Shillong.

Delivered a lecture on "Problems and Challenges of Elderly in Contemporary Society" organized by Department of Sociology, Ekamra College, Bhubaneswar on 12th January, 2019.

Dr. Rekha. M. Shangpliang

Attended and Predsented paper: (a) Attended and presented a paper at the International Conference on "Women and Development"held from 26th -28th July 2018, on the topic "Tribal Women and Natural Resource Management: The Khasi Women of Meghalaya in India organised by UCC College, Umiam Khwan, Ri- Bhoi District Meghalaya.

Attended and presented a paper on the topic The Gender Dimension of Rural- Urban Migration in at the National Seminar on Urbanization in India: Issues and Predicaments organized by the Department of Sociology, NEHU on the 14th and 15th February, 2019.

Represented NEHU at a National Level Conference on "Monitoring of Swadhar Grehs in the country" organized by the National Commission for Women (NCW), New Delhi on the 14th and 15th September, 2018.

Title of the Project	PI/Co-PI	Funding Agency	Amount (Rs)
Examining the Perceptions Towards the People of the North- east in Bengaluru: A Sociological Understanding	Prof. D.V.Kumar	SAP-DSA 1 of the UGC	130000/-
Factor of Migration: A Study of Pangals in Mantripukhri in Manipur.	Md. Yusuf Khan	SAP-DSA- I	
Completed a Project Entitled "The Role and Significance of Social Capital for Entrepreneurship: An Empirical Exploration"	Prof. B.Panda	SAP DSA I	130000/-

Research Projects (2019-2020):

Honours/Awards/Recognitions Prof. D. V. Kumar

Member of the Editorial Advisory Committee of Sociological Bulletin (Sage Publication) of the Indian Sociological Society. Reviewer for the Journal Asian Ethnicity and SociologicalBulletin.

Prof.A.K. Nongkynrih

Member of the Review Board, Journal of Northeast Indian Cultures, a Peer reviewed

:

International Journal. Member of the Advisory Editorial Committee of E- journal of the Indian Sociological Society (ISS)

Dr. Rekha M. Shangpliang

Member of Governing Body as a parent Representative at Loreto Convent, Shillong since February 2019 till date.

Was a judge at the Extempore Speech and Spell Bee Competition organized by the NEHUSU during the Varsity Month in April 2018-2019

Delivered 2(two) lectures at Refresher Courses:

Delivered a lecture at a Refresher Course organized by Political Science Department, NEHU on the Topic: "Women and Globalization"

Delivered a lecture at a Refresher Course organized by History Department, NEHU on the topic "Nature as a Cultural Symbol-Roots of Environmental Change".

Other Activities:

Prof. A.K. Nongkynrih

Member of Advisory Committee on Legislation and Legal Issues, Khasi Hills Autonomous District Council.

Delivered a talk on *Sociology as a Career*, 27th July, Byndihati, St. Anthony's College Extension Campus. Delivered a lecture on *Local Government*, in a 3- day Capacity Building in Local Government, 3- 5th December 2018, Shillong, Indian Council of Social Science, North- Eastern Regional

Centre. Delivered a talk on Youthleadership and Skills Development, 23-24 November 2018, in the 1st National Conference organised by Sngap Sing College, Mawkyrwat. Delivered lecture а on Community Mobilisation Needs and Assessment, 26th March 2019, in a training programme on Skill Development for Employability and Entrepreneurship and Work Ethic, 22 August 2018, Tangkul Katamnao Long, Shillong. Delivered a talk on Sustainable Tourism in Meghalaya, 27 October 2018, Sohra, Our Lady of the Mission.

Reviewers for the Journal of *Asian Ethnicity*, March 2019.

RefresherCourseontopics:RoleofTraditionalInstitutionsinDisasterPreparednessand Management,17November2018.ConceptsinDesign,12June2018.Process ofDesign,12June2018.Process ofSensitization,11October2018.Nutrition:ASociologicalPerspectives,13MarchSacredSitesandOralTradition,MarchMarch2019.SitesASociological

Prof. B. Panda

Chaired a session on 26th March, 2019 in First Annual Social Science Congress of Indian Council of Social Science Research – North Eastern Regional Centre in Collaboration with Department of Sociology, Tezpur University on Citizenship, Ethnicity and Inclusive Development held in Tezpur University during 24th-26th March, 2019.

SCHOOL OF TECHNOLOGY

Dean	: Prof. Gautam Saha
Telephone	: 0364-2723601(O)/7980904316(M)
E-mail	: deanst@nehu.ac.in, dr.goutamsaha@gmail.com

As seen from the profiles of different departments (IT, ECE, Energy Engineering, Biomedical Engineering, Nano Technology, Architecture Engineering, BSSS and MCA), it is clear that these departments are relatively new entities but vibrant with academic activities, performing well with several newer ideas & thoughts. Several projects are being executed over here. As regards to Dept. of Information Technology, a big project on the state of art initiative on IOT is being implemented here. Many research scholars are working here in the area of IoT. Some of their previous research experiences developed here is also shared by our Defense organizations recently. Lot of research works are being executed in the area of Computational Biological, Cryptography. Many research scholars work in these domain in the form of Ph.D Recently, research activity has been carried out in the state-of-the art area BLOCKCHAIN domain. Researchers are carried out for the convergence of BLOCKCHAIN with IoT to enhance its security aspect so that IoT can be used in the financial transaction and other related area. Many research scholars in SOT have been awarded with "Visvesvaraya Ph.D." fellowship award whose fellowship is of the order of about Rs. 35000/-(approximately) per month. Four students are performing Ph.D.s in this scheme with aim to develop some products for industry using their research endeavor from the departments of IT, ECE and Biomedical Engineering. These departments have produced lot of research articles which are published in top

grade Journals of the area. Two of the faculty members' research articles (one from the IT in the area of Computation al Biology, another in BME department) were accepted in World Congresses of their respective branch. One of the faculties has published a book from the international publication (Taylor & Francis) on the area of Bioprocess Engineering. Many Patents are filed or in the verge of filing from the project works of M.Tech. or B.Tech students' projects. Efforts are been made to to initiate Start-up ventures using these patented ideas. Recently NEHU got First prize in the "Start-up Yatra initiatives". Many of faculty members of SOT are invited for delivering lectures in different universities of India. As regarding ECE Dept. lot of works are initiated in the area of Communication, Microwave & Signal processing. At least, few IEEE transaction publications on the area of Communication Engineering and Microwave Engineering have been published and many are in there in the anvil. Few IEEE transaction publications on the area of Bioinformatics, IoT, Image Processing domain has been accepted or published. This ECE department is in the fast track of development. A few project works are being executed from here. As regarding Biomedical Engineering, It is clearly seen that the department is bustling with lot of research projects from different forums from Govt. of India. Many good research papers were published from this department. Lot research works are still under execution. They are working in collaboration with NEIGRIHMs,

One of the Doctors of Shillong. NEIGRIHMS is performing his Ph.D. work from this department. As regarding Energy Engineering, which can be termed as engineering of future, lot research papers are published from here in reputed Journals. One patent has been filed from here with regards to production Bio-Diesel & Bio-Petrol from Pine tree extracts. Pertinent works are carried out in the domain of Solar Cell. Many projects and collaborative research works are going on from this department. As regards to the department of Nano-Technology where Post Graduate studies like M.Tech. are carried out and important research activities are also being executed from here. This department is equipped with state of the art equipment required for their purpose. This department is endowed with many good research projects. As regards to the department of Architectural Engineering, the department is offering B.Arch. program successfully. As regards to the department of BSSS, which contains experts from different streams like Physics, Chemistry, mathematics, Biology, Humanities and Management studies, is also a hub of research. This department not only provides the lesson for very foundation subjects engineering to the engineering students (by teaching the fundamental subjects like Physics, Chemistry, mathematics,

Linguistics, Humanities and Management studies) but also have developed basic Sciences research Laboratories to add to the glory to SOT, NEHU. They also carry out many pertinent research activities here. Many projects in the domain of Environmental Engineering, Physics etc are carried out here. This department also encourages students for getting involved into many innovative ideas for the students. Speaking about the department of MCA, which is situated at Tura Campus, NEHU, provides MCA degree. This depart is also engaged in the endeavor of executing very strong research work in collaboration with Indian Statistical Institute, Kolkata. It is executing some research projects related to recognition of Prehistoric scripts etc. Recently they have published many papers in high impact factored Journals and producing high quality research articles. As regarding the department of Architecture, I like to mention that this department which is nourished by young faculties are running very string. They are earning lot of consultancy revenue for NEHU.

As a whole, as seen from the above it can be safely inferred that SOT is presently a vibrant department where lot of research, innovation and startup initiatives have been initiated successfully.

DEPARTMENT OF ARCHITECTURE

Head	: Shri Banbhalang Swer
Telephone	: 0364-2724101/8794741771
E-mail	: banbha13@gmail.com, bswer@nehu.ac.in

Faculty :	3				
Designation	Name and Qualification	Specialization			
	ShriBanbhalang Swer,	Urban Design			
	Master in Architecture (SPA, Delhi)	Urban Planning			
Assistant	Post Graduate Diploma in Urban Planning and				
Professor	sor Development (PGDUPDL) IGNOU				
	Smt.Ibynta .B. Tiewsoh,	Product Design			
	Master in Design (IIT Bombay)				
	ShriRameez Gazi,	Landscape Design			
	Master in Landscape Architecture (SPA,				
	Delhi)				

Students' Profile Enrolment Capacity: BArch - 40

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
BArch	20	11		10		21	10	21	31
1 st year									
BArch	15	08	01	05		17	05	18	23
2 nd year									
BArch	19	20	02	16		21	13	26	39
3 rd year									
BArch	19	14	02	12		19	09	24	33
4 th year									
BArch	16	12		11		17	09	19	28
5 th year									

Courses Conducted

Undergraduate: Bachelor of Architecture (BArch)

SemesterI

Structural Design I (Applied Mechanics); Building Materials I; Introduction to Architecture; Communication Skills; Architectural Design I; Building Construction and Technology I; Architectural Graphics I; Workshop I.

SemesterII

Structural Design II; Building Materials II; History of Architecture I; Architectural Design II; Building Construction and Technology II; Architectural Graphics II; Workshop II.

SemesterIII

Structural Design III; Building Materials III; History of Architecture II; Climatology I; Surveying and Leveling; Architectural Design III; Building Construction and Technology III; Architectural Graphics III (Computer Applications) SemesterIV

Structural Design IV; Building Materials IV; Modern Architecture; Climatology II; Building Services I; Architectural Design IV; Building Construction and Technology IV; Architectural Graphics IV (Computer Applications)

Semester V

Structural DesignV; Theory of DesignII; Modern Architecture; Building Services II; ElectiveI: (i) Interior Design, (ii) Art in Architecture and History of Meghalaya's Art and Culture; Architectural Design IV; Building Construction and Technology V; Computer Application II.

Semester VI

Structural DesignVI; Estimation, Costing and Specifications; Building Bye-Laws and Codes of Practices; Advanced Building ServicesIII (Acoustics); ElectiveII: (i) Design for Disabled, (ii) Sustainable Architecture; Architectural Design VI; Building Construction and TechnologyVI; Working Drawing1.

Semester VII

Advanced Structural Design; Landscape & Site Planning; Town Planning; Elective III: (i)Industrial Design, (ii) Intelligent Buildings; Landscape & Site Planning (Studio); Architectural Design- VII; Building Construction & Technology – VII; CAD – II. Semester VIII

Urban Design; Elective – IV: (i)Urban Conservation, (ii)Housing; Urban Design (Studio); Architectural Design – VIII; Advanced Building Construction & Technology; Project Introduction and Dissertation; CAD - III

Semester IX

Professional Practice and Management; Elective-V: (i) Construction Management and Real Estate, (ii) Disaster Resistant structures; Thesis Project; Architectural Seminar

Semester X

Professional Training & Viva Voce

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes Shri Banbhalang Swer *Organized*

Banbhalang Swer (convener) organised a One day talk and Discussion on Local Architecture and One Day Site Visit on the 22nd and 23rd May 2016 with the students and Faculty of BVCOA, Navi Mumbai and the Department of Architecture, SOT,NEHU, Shillong

Banbhalang Swer as a Member in organizing a National Conference on recent Advances in Nanoscience and Nanotechnology in the Department of Nanotechnology, School Of Technology, NEHU, Shillong on the 8th September 2016 to 9th September 2016.

Banbhalang Swer (convener) organised a two days workshop on Tensegrity on the 23rd and 24th Oct 2017 inviting resource person Ar. Tathagata Hazra for demonstration and this is also a part of the DIC course in the Department of Architecture, SOT,NEHU, Shillong.

Banbhalang Swer (convener) organised a two days workshop on Bamboo Living on the 29th and 30th Oct 2017 inviting resource person Ar. Shantanu Heisnam for demonstration and this is also a part of the DIC course in the Department of Architecture, SOT,NEHU, Shillong.

Attended

Banbhalang Swer attended a Three (3) days Training programme on The Energy Conservation Building Code (ECBC) held on the 20th to 22nd February 2019 organised by All India Institute of local self governments in collaboration with the Bureau and Meghalaya state designated agency on energy conservation, organizing secretary Mr. C.S.Thangkhiew.

Banbhalang Swer attended LIVING ROOT BRIDGES (LRBs) -MULTIDISCIPLINARY PERSPECTIVES held on Monday 18th March 2019 - 9am/5pm Conference Day ICSSR Guest House and Tuesday 19th March 2019 - 8am/5pm Site Visit. HOSTED BY Department of Bioinformatics and Biotechnology North Eastern Hill University Shillong Professor SR Joshi and ORGANISED BY Technical University of Munich Green Technologies in Landscape Architecture Wilfrid Middleton MEng Professor Ferdinand Ludwig.

Banbhalang Swer attended and presented a paper titled "Understanding and analyzing the existing status of river systems in Greater Shillong Planning Area (G.S.P.A): Its impact and future implication on the environment" at the International Seminar on "Understanding Water Crisis: The Way Forward" held on the 6th-7th June 2019 at Synod College.

David Arnold Kharchandy Organizing Secretary International Seminar.

Publications

Applied Mechanics and Materials (Volume 878) "The Consecrated Sohpetbneng Peak (Navel of Heaven) - The Meaning and the Need for Protection, reservation and Conservation", Applied Mechanics and Materials, Vol. 878, pp. 146-151, 2018. ISSN 1662-7482.

Consultancy Projects

Title of Project	Pl/Co-Pl	Funding Agency	Amount (Cr)
Preparation of Comprehensive Concept note of Proposed Projects under NLCPR.	Ar. B.Swer	State Sports Council, Government of Meghalaya	NA
Preparation of the Detailed Project report for the Proposed Auditorium at NEHU, Shillong.	Ar. B.Swer	North Eastern Council (NEC)	15
Preparation of the Detailed Project report for the Proposed Tribal Women Museum of North east India at Department of Anthropology, NEHU, Shillong.	Ar. B.Swer	North Eastern Council (NEC)	03
Designing of the Proposed Construction of Farmers Hostel Cum Training Centre at the office of the District training Officer, Upper Shillong, East Khasi Hill District	Ar. B.Swer	MeECL Government of Meghalaya	8.5

Academic Collaborations

Member of the Board of Studies of Department of Architecture, NEHU

Member of the Board of Studies of Department of Computer Application, NEHU Member of the Board of Studies of Department of Electronic and Communication, NEHU Member of School Board of Technology, NEHU

Other Activities

Delivered an invited lecture on **"Traditional** Architecture and the History of Khasi house Form" at the UGC Human resource Development Centre , NEHU, Shillong. During the Refresher course on Tribal **Studies** for college and University Teachers from 24th September to 14th October 2018. Member of the Building Committee, NEHU, Shillong.

Member of the Master Plan Committe for Bijni Complex NEHU, Shillong.

Seminar/Conference/Symposium/Extensio n Programme etc. Shri Rameez Raja Gazi *Attended:*

Rameez Raja Gazi attended a five day workshop on the *Process of preparation for*

NBA (National Board of Accreditation) on behalf of theDepartment of Architecture for the School of Technology.

Rameez Raja Gazi presented a paper entitled "WATER BUDGETING AND MANAGEMENT FOR SUSTAINABLE LANDSCAPE" at an InternationalSeminar on "UNDERSTANDING WATER CRISIS: THE WAY FORWARD" organised by Synod College in collaboration with the "P. A. Sangma Foundation" and "Meghalaya Basin Development Authority".

DEPARTMENT OF BASIC SCIENCES AND SOCIAL SCIENCES

Head	: Dr. A. Sinha
Telephone	: 0364-2723641/42, 9863095102
E-mail	: hodbsss@gmail.com, emailtosinha@gmail.com
Faculty	• 14

Faculty :	14	
Designation	Name and Qualification	Specialization
Professor	Dr. P.V. Koparkar; M. Sc., Ph. D. (NU)	Physics (Instrumentation/
		Atmospheric
		Sciences/Nanomaterials)
Associate	Dr. M.M. Singh; M.Sc. (BhU), Ph.D.	Mathematics (Number
Professor	(PU)	Theory, Algebraic Number
		Theory, Numerical Analysis,
		Discrete Mathematics)
	Dr. A. Sinha; M.Sc. (LU), Ph.D. (NEHU)	Chemistry (Physical &
		Analytical)
Assistant	Dr. Phrangstone Khongjee; M.Sc.	Statistics (Sampling Theory
Professor	(NEHU), NET (UGC); Ph. D. (NEHU)	and Demography)
	Dr. Hiranjit Choudhury; M.Sc. (NEHU),	Botany (Plant Biotechnology)
	Ph.D. (NEHU)	
	Dr. Regenel S. Kharwanlang; M.Sc.	Physics (Theoretical Physics)
	(NEHU), NET (UGC); Ph. D. (NEHU)	
	Dr. Krishna Upadhaya; M.Sc. (NEHU),	Botany (Plant Ecology)
	Ph.D. (NEHU)	
	Dr. Jyoti Narayan; M.Sc. (KU), M. Phil.	Chemistry (Physical
	(KU), Ph.D. (KU)	Analytical /Nanoscience and
		Nanomaterials)
	Dr. Jibitesh Dutta; M.Sc. (NEHU), NET	Mathematics (Dynamical
	(UGC/CSIR); Ph. D. (NEHU)	Systems)
	Shri Sainkupar M.N. Mawiong; M.Sc.;	Mathematics
	M. Phil. (NEHU), NET (UGC)	
	Smt. Evapynhun Giri; M.A. (NEHU), M.	English
	Phil. (NEHU)	
	Dr. R. S. Singh; M.Sc. (Jadavpur	Chemistry (Organic/Bio-
	University), NET (CSIR), Ph.D (CSIR-	organic/ Soft materials)
	IICT, Osmania University)	Physics (Thin film/
	Dr. M. Mahato; M. Sc. (Burdwan	Physics (Thin film/
	University), NET (CSIR), Ph. D.	Molecular Spectroscopy/ Nanobiotechnology)
	(Calcutta University)	
	Dr. Munshi Ram; M.Com (VBSPU),	Commerce- HRM (Human
	Ph.D. (BHU)	Resource Management)

Thrust Areas of Research:

Basic & Applied Mathematics, Basic & Applied Physics, Atmospheric Sciences, Chemical Sciences, Nanoscience and Nanotechnology, Basic Environmental Sciences, Biotechnology, Basic & Applied Economics, Applied Statistics, and Communicative English, with emphasis on multidisciplinary interdisciplinary and studies.

Brief Statement of Academic Activities

The Department of BSSS is not offering any course of study as such. However, the teachers of the Department are teaching the core courses of Basic Sciences, Humanities and Social Sciences which appear in the B. Tech curricula of ECE, IT, BME and EE of the School of Technology.

In addition, the members of the Faculty have engaged themselves in research activity in their respective core fields of interest as also in the interdisciplinary and multidisciplinary areas.

Students' Profile: Enrolment Capacity:

M. Phil.- Variable, Ph.D. - Variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Phil.	-	-	1		1	-	1	1
Ph. D.*	-	14	11	16	9	9	16	25
			(5 OBC)					

* Out of 25, 13 students are admitted in other departments, while 12 are admitted in BSSS

Research Fellowships:

CSIR-	UGC	National	Meritorious	Any	other	Total
UGC- NET	Non- NET	Fellowship for Higher Education of ST Students (Rajiv Gandhi SC/ST)	Maulana Azad Minority Fellowship	DBT-JRF (Non- NET)	MoEF & CC (Non- NET)	
3	12	8	-	2	-	2

Courses conducted:

The core courses pertaining to basic sciences, humanities and commerce are taught for the B. Tech programme of the departments/disciplines of Electronics & Communication Engineering, Information Technology, Bio-medical Engineering, and Energy Engineering, in the School of Technology. The details of the courses are as below:

Semester I & II : Professional Communication Skills, Digital English Language Laboratory, Engineering Mathematics I, Engineering Physics, Laboratory, Engineering Physics Engineering Mechanics, Basic Electrical Engineering, Basic Electrical Laboratory, Workshop Practice, Electronics Laboratory, Elements of Environmental Sciences, Engineering Mathematics II, Engineering Chemistry, Engineering Chemistry Laboratory, Computer Systems and Programming, Computer Programming Laboratory, Basic Electronics, Basic Basic

Electronics Laboratory and Engineering Graphics for ECE, IT BME and EE.

- Semester III : Economics and Financial Accounting for IT only
- Semester IV : Statistics and Random Processes, for both ECE & IT.
- Semester V : Industrial Economics and Management, for ECE only.

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Attended

Prof. P. V. Koparkardelivered a talk on the topic"Remote sensing techniques in exploration of causes to current atmospheric changes including natural hazards, like earthquake, worst weather situations and ecology problems: Indian earth observation remote sensing satellites and applications reaping social benefits" in the National Seminar on Advances in Electronics and Allied Science & Technology, organized by Electronic Scientists and Engineers Society (ESES) and Physics Department, Guwahati University on 6 October, 2018 at Guwahati University.

Dr. M. M. Singh presented papers on the topics (i) "Generalized Pell's equations in Gaussian integers" in the UGC-SAP sponsored National Seminar on Topology and Algebra, organized by Department of Mathematics, NEHU, Shillong during March 13-14, 2019, (ii) "A note on exponential equations" in the UGC SAP National Seminar on Topology and Algebra. organized by Department of Mathematics, NEHU, Shillong during March 13-14, 2019, and (iii) "The unit graph of a commutative semiring" in the UGC SAP National Seminar on Topology and Algebra, organized by Department of Mathematics, NEHU, Shillong during March 13-14, 2019.

Dr. H. Choudhury delivered invited lectures on the topics (i) "Science for the people and the people for science" organized by the Institutional Biotech Hub, Lady Keane College, Shillong, under the aegis of the Department of Biotechnology, Government of India, New Delhi, India during the National Science Day celebration on the 28th February 2019 at Lady Keane College, "DNA sequencing-Shillong, (ii) an overview and pyrosequencing" in the National Level Workshop on Interactive Next Generation Sequencing (NGS) Data Analysis held from 15-17th November, 2018 organized by Bioinformatics Centre, NEHU, Shillong, sponsored by DBT, Government of India, and (iii) "Importance and applications of biotechnology" during a One-Day Outreach Awareness Programme on 23rd June 2018 at Lady Keane College, organized by the Institutional Biotech Hub, Lady Keane College, Shillong, under the aegis of Department of the Biotechnology, Government of India, New Delhi, India,

Dr. K. Upadhaya (i) Presented a paper on "Sacred groves of Meghalaya, an overview" in the Seminar on Ecological Traditions of Meghalaya, organized by CPR Environmental Centre, Chennai in collaboration with Lady Keane College, Shillong held on March 27, 2019 at Shillong. **Dr.** Jyoti Narayan presented a paper on "Quantum dot sensitizes solar cell (QDSSC): Advantages and challenges" in the International Conference on Advanced Materials for Energy Science and Technology (AMEST-2019) held during February 26-28, 2019, organized by the Department of Energy Engineering, North-Eastern Hill University, Shillong-793022, Meghalaya, India.

Publications: *Published in India*

Singh, M. M., Nongbsap, W. (2019). A public key cryptography based on the m-Injectivity of Z_{pqr} over itself. Journal of *Emerging Technologiesand Innovative* Research, 6 (3): 131-139.

Singh, M. M., Kharbuki, A. (2019). Pell's equations in Gaussian integers. *JP Journal ofAlgebra, Number Theory and Applications*, 42 (1): 15-32.

Khongji, P. (2019). To study some economic implications of population projection for states in North East India till 2031. *Indian Journal of Economics and Development*, 7 (2): 1-8.

Khongji, P., Nongkynrih, D. (2018). Labour supply and unemployment projections for North East India (2011-2031). *Arthshastra, Indian Journal of Economics and Research*, 7 (6): 30-42.

Mawiong, A. M., Senjam, G. S., Haobam, M., Singh, N. H., Khongji, P. (2018). A study of psychiatric co-morbidities among treatment seeking opioid injectors attending tertiary care teaching hospital, Imphal for a period of 2 years. *Journal of Medical Society*, 32:174-77.

Published Abroad

Singh, M. M., Goswami, P. (2018). An application of signed quadratic residues in public key cryptography. *Discrete Mathematics, Algorithms and Applications,* 10 (5), 1850081.

Singh, M. M., Sawkmie, A. (2018). On the uniqueness of the factorization of power digraphs modulo n. *Rendiconti Del Seminario Mathematico Della Universita Di Padova*, 140: 185-219.

Iralu, V., Upadhaya, K. (2018). Seed dormancy, germination and seedling characteristics of Elaeocarpus prunifolius Wall. ex Müll. Berol.: a threatened tree species of north-eastern India. *New Zealand Journal of Forestry Science*, 48: 16. https://doi.org/10.1186/s40490-018-0121y.

Zonunmawia, H., Khyllep, W., Dutta, J., Jarv, L. (2018). Cosmological dynamics of brane gravity: A global dynamical system perspective. *Physical Review D*, 98 (8), 083532.

Chetry, B., Dutta, J., Abdolmaleki, A. (2018). Thermodynamics of event horizon with modified Hawking temperature in scalar-tensor gravity. *General Relativity and Gravitation*, 50 (10), 130.

Baruah, J. M., Kalita, S., Narayan, J. (2019). Green chemistry synthesis of biocompatible ZnS quantum dots (QDs): their application as potential thin films and antibacterial agent. *Journal of International Nano Letters*, 9 (2): 149-159.

Narayan, J., Dhungel, K., Warjri, M. (2019). Hydrogen peroxide sensing activity of macaranga denticulata stabilized multifunctional silver nanocomposite. *Materialstoday Proceedings*, 12 (3): 644-654. Singh, W. P., Singh, R. S. (2019). Gelationbased visual detection of analytes. *Soft Materials*, 17: 93-118.

Book/Book Chapters/ Proceedings

Mir, A. H., Jeri, L., Upadhaya, K., Bhat, N. A., Borah, R., Choudhury, H., Kumar, Y.

(2019). Diversity, bioprospection and commercial importance of Indian Magnolias.In: *Plants for Human Survival and Medicine*.B. Singh (Ed.). New India Publishing Agency, New Delhi, India, Chapter 9, p. 195-217.

Research Projects:

New I	Projects	
	T *41	6.41

SI. No	Title of the Project	PI/Co-PI	Funding Agency	Amount (Rupees)
1	Challenging General Relativity at the Largest Scales: A Systematic Investigation of Cosmological Perturbations in Modified Gravity	PI. Dr. J. Dutta	Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Govt. of India. Duration 3 yrs (18.03.2019-17.03.2022)	22,37,442
2	Quantum Dot Based Biosensor for Early Detection of Prostate Cancer Using Multiple Biomarkers in Biological Samples	PI: Dr. M. Gogoi, Co-PI: Dr. M Mahato	Department of Biotechnology (DBT), Govt of India, Duration: 3 yrs (21.09.2018- 20.09.2021)	56,99,000

Ongoing Projects

SI.	Title of Project	PI/Co-PI	Funding Agency	Amount
No.				(Rupees)
1	Phytochemical	PI: Dr. H.	Department of	39,28,000
	Examination, Molecular	Choudhury	Biotechnology, (DBT),	
	Characterization and	Co-PI: Prof. S.	Govt. of India (GoI),	
	Propagation of <i>Illicium</i>	R. Rao and	New Delhi	
	<i>griffithii</i> Hook. F. &	Dr. A.	Duration 3 yrs	
	Thoms.: A Medicinally	Bhattacharjee	(17.1.2017 to	
	Important RET Plant of	-	16.1.2020)	
	Northeast India for			
	Improving Economic- and			
	Conservation- Status			
2	Bottom-Up	PI: Dr M.	SERB, DST, Govt of	32,15,000
	Nanobiocomposite Film of	Mahato	India	
	Protein, Polymer and	Co-PI: Dr. M.	(EMR)	
	Nanoparticles by Langmuir	Gogoi,	March, 2017-March,	

3	Bldgett/Layer by Layer Technique for Pesticide Sensing Application Conversion of Waste Plastic into Value Added Products	PI: Dr M. Mahato Co-PI: Dr. M. Gogoi	2020 SERB, DST, Govt of India (Special) April, 2017-April, 2019	7,24,000
4	Orchid Bioresources of the North-east India- Conservation, <u>Database Development and</u> <u>Information Networking</u>	PI: Dr. H. Choudhury Co-PI: Dr. K. Upadhaya and Dr. A. Bhattacharjee		
5	Traditional Knowledge System-Network Programme on Convergence of Traditional Knowledge Systems for Integration to Sustainable Development in the Indian Himalayan Region	PI: Dr. K. Upadhaya	/	99,77,000

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount (Rupees)
1	To Study Some Social and Economic Implications of Population Projection for States in North East of India Till 2031	Project Director: Dr. P. Khongji	ICSSR, New Delhi 2017 - 2018 (Completed on 21 st Jan, 2019)	3,00,000

Academic Collaborations

Dr. M. M. Singh has collaborative research with Dr. Jituparna Goswami, Assistant Professor, Department of Mathematics, Gauhati University, Guwahati, Assam.

Dr.H. Choudhuryhas collaborative research with (i) Dr. V. Kumar, Forest Research Institute, Dehra Dun, Prof. S. R. Rao and Dr. A. Bhattacharjee, Department of Biotechnology and Bioinformatics, NEHU, Shillong on *Phytochemical examination*, molecular characterization and propagation of Illiciumgriffithii Hook. F. & Thoms .: a medicinally important RET plant of Northeast India for improving economic- and conservation-(ii) status, Dr. A. Bhattacharjee, Department of Biotechnology and Bioinformatics, NEHU, Shillong, Dr. K. Upadhaya, Department of Basic Sciences & Social Sciences, NEHU, Shillong, Dr. Sunil S. Thorat, Regional Centre of Institute of Bioresources and Sustainable Development (IBSD), Gangtok, Sikkim, Dr. Chittaranjan Deb, Department of Botany, Nagaland University, Dr. Rajiv Kumar Singh, Rajiv

Gandhi University, Itanagar, Arunachal Pradesh, Mr. Bharat G. Somkuwar, Institute of Bioresources and Sustainable Development, Imphal, Manipur, Dr. Swapan Kumar Sinha, TERI-Northeastern Regional Centre, Guwahati, Assam, Prof. B. K. Datta, Tripura University, Tripura, Dr. Kalidas Upadhyaya, Mizoram University and Dr. Dhanaraj Singh Thokchom, Centre for Orchid Gene Conservation of Eastern Himalayan Region (COGCEHR), FEEDS/ Krishi Vigyan Kendra- Sylvan, Manipur, onOrchid bioresources of the North-east India- conservation, database development and information networking,

Dr. K. Upadhaya has collaborative research with (i) Prof. S.K. Barik, Department of Botany, NEHU, Shillong and Prof. S. C. Garkoti, JNU, New Delhi on Traditional knowledge system-network programme on convergence of traditional knowledge systems for integration to sustainable development in the Indian Himalayan region, (ii) Dr. H. Choudhury of Department of Basic Sciences & Social Sciences NEHU, Shillong and Dr. A. Bhattacharjee, Department of Biotechnology and Bioinformatics, NEHU, Shillong on Orchid bioresources of the North-east Indiaconservation, database development and information networking.

Dr. Jyoti Narayan has collaborative research with Drug Discovery Lab, Biological and Chemical Sciences Section, Life Sciences Division, Institute of Advanced Study in Science and Technology, Guwahati- 781035, Assam, India.

Dr. M. Mahato has collaborative research with (i) Dr. M. Gogoi, Department of Biomedical Engineering, NEHU, Shillong on (a)Quantum dot basedbiosensor for early detection of prostate cancer using multiple biomarkers in biological samples, (b)

Bottom-up nanobiocomposite film of protein, polymer and nanoparticles by Langmuir Bldgett/ layer by layer technique for *pesticide sensing application*, and (c) Conversion of waste plastic into value added products, (ii) Dr. Basudev Pradhan, Central University of Jharkhand on polymer nanocomposite work, (iii) Dr. Robindro L. Singh, Department of Nanotechnology on waste to nanomaterial work, (iv) Dr. Devkumar Mahato, NIT, Patna on magnetic study, and (v) Dr. A. K. Pal, Department of Shillong Chemistry, NEHU, on Nanomaterial synthesis, characterization and their novel applications

Honours/Awards/Recognitions *Dr. A. Sinha*

(i) received 1stPrize as a team in "Start Up Yatra Project Shillong" on 23rd Feb, 2019 at IIM, Shillong, organised by Start Up India, Government of India, (ii) has been nominated ISCA representative of Shillong Chapter for 2018-2019, and (iii)has been selected as the Expert Member of Advisory Panel, STAR College Scheme under the STAR Status Award granted by Department of Biotechnology (DBT), GoI, to St. Edmund's College, Shillong, Meghalaya.

Dr. K. Upadhaya

(i) Member of Expert Committee of Meghalaya Biodiversity Board, Government of Meghalaya (ii) Expert Member Monitoring Committee of Eco-sensitive Zone Nongkhyllem Wild Life Sanctuary, Govt. of Meghalaya, and (iii) Expert Member Monitoring Committee of Eco-sensitive Zone Narphu Wild Life Sanctuary, Govt. of Meghalaya.

Dr. J. Dutta has been selected as 'Associate of Inter University Centre for Astronomy and Astrophysics (IUCAA)', Pune, India with effect from August 1, 2018 till July 31, 2021.

Other Activities Dr. A. Sinha

organised One Day Sensitisation (i) Workshop, named "Citizens' Townhall" on 6thMarch, 2019 at NEHU in collaboration with Josh Talks, Gurgaon withNEHU being the Community Partner of the event, (ii) organised the event of RUN FOR UNITY on 31st October, 2018 at NEHU to mark National Unity Day in commemoration of the Birth Anniversary of SardarVallabh Bhai Patel, (iii) functioned as Nodal Officer of NEHU to organise North-East India Education Summit in collaboration with the Department of Higher & Technical Education, Government of Mizoram, held on 30th October, 2018, and (iv) appointed as a member of Steering Committee of NEHU Incubation Centre in August, 2018.

Dr. M. M. Singh

(i) an invited reviewer for Mathematical Review (MR), American Mathematical Society (AMS), USA, and (ii) an invited reviewer for Defence Science Journal (DRDO), (iii) an invited editorial manager of Discrete Mathematics, Algorithms and Applications, World Scientific Publication, (iv) a resource person in the National Workshop on Cryptography organized by Department of Mathematics, University of Science & Technology, Meghalaya, Sponsored by Indian Statistical Institute, Kolkata during September 25-26, 2018, (v) a member of the editorial board of the in-house magazine 'NEHU JYOTI', and (vi) a guest faculty for M.Sc. in the Department of Mathematics, NEHU, Shillong, for the academic year 2018.Dr. Singhalso chaired a technical sessions in the National Seminar on Pure and Applied Mathematics organized by the Department of Mathematics, St. Mary's College, Shillong during September 19-20, 2018.

Dr. H. Choudhury

Attended - (i) Short Term Training Programe (STTP) on "National Board of Accreditation (NBA)" organised from October 29-November 02, 2018 at School of Technology, North-Eastern Hill University, Shillong, Meghalaya by the National Institute of Technical Teachers' Training and Research (Govt. of India), Kolkata, WB, (ii) Short-term course on "Gender Sensitization" organised from October 08-13, 2018 by the University Grants Commission, Human Resource Development Centre, North-Eastern Hill University, Shillong. Meghalaya, India, (iii) Short-term course on "Research Methodology" organised from September 24-29, 2018 by the University Grants Commission, Human Resource Development Centre, North-Eastern Hill University, Shillong, Meghalaya, India, (iv) delivered a series of lectures under the 'Green Skill Development Programme (GSDP)' on the topics- (a) "Elements of Solid Waste Management System", (b) "Integrated Solid Waste Management System (ISWM)", and (c) "Waste Data Collection", during a two Month's GSDP course titled 'Waste Management' with effect from 6th August 2018, organized by ENVIS Resource Partner Centre, North-University, Shillong. Eastern Hill Meghalaya, under the aegis of the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, and (ii) has been a Guest Faculty for M.Sc. (PMB) in the Department of Botany, NEHU, Shillong for the academic year 2018.

Dr. K. Upadhaya

Attended (i) Short-term course on "Gender Sensitization" organised from October 08-13, 2018 by the University Grants Commission, Human Resource Development Centre, North-Eastern Hill University, Shillong,

Meghalaya, India, and (ii) Short-term course on "Research Methodology" organised from September 24-29, 2018 by the University Grants Commission, Human Resource Development Centre, North-Eastern Hill University, Shillong, Meghalaya, India, (iii) delivered two lectures in the UGC-sponsored Summer School Programmes in Basic Sciences (4-24th July 2018), organized by the UGC-Human Resource Development Centre, NEHU, Shillong for College and University "Traditional the topic teachers on Management Practices and Biodiversity Conservation in Meghalaya".Dr. Upadhaya also chaired a technical session in the Seminar on Ecological Traditions of Meghalaya, organized CPR by Environmental Centre. Chennai in collaboration with Lady Keane College, Shillong held on March 27, 2019 at Shillong.

Dr. P.Khongjee- Guest Faculty for MA/M.Sc. in the Department of Statistics, NEHU, Shillong for the academic year 2018.

Dr. Jyoti Narayan

(i) attended the International Conference on Advanced Materials for Energy Science and Technology (AMEST-2019) held duringFebruary 26-28, 2019, organized by the Department of Energy Engineering, North-Eastern Hill University, Shillong-793022, Meghalaya, India, (ii) attended Workshop on Inductively Coupled Plasma-Optical Emission Spectroscopy (ITCP-OES) and its Application during April 18-20, 2018 at SAIF, NEHU, Shillong, and (iii) been an invited reviewer for Journal of Material Sciences: Materials in Electronics, Springer.

Dr. J. Dutta

(i) has participated in UGC-SAP sponsored National Seminar on Topology and Algebra at the Department of Mathematics, NEHU, Shillong during 13-14th March, 2019, (ii) has been invited for study visit to IUCAA (Inter University Centre for Astronomy and Astrophysics, Pune) with full travel and subsistence for academic interactions with IUCAA members and visiting faculty 14-27th January 2019, and (iii) has been invited to attend the Eighty-Fourth Annual meeting of the Indian Academy of Sciences held at Banaras Hindu University, Varanasi during November, 2018. Dr. J. Duttaalso $1-5^{\text{th}}$ chaired a technical session in the National Seminar on Pure and Applied Mathematics at St. Mary's College Shillong during September 19-20, 2018.

Dr. M. Mahato

(i) has attended one week workshop on *NBA Accreditation* on 29 Oct-2 Nov, 2018 organized by School of Technology, NEHU and National Institute of Technical Teachers Training and Research, Kolkata, (ii) has participated in the *RUN FOR UNITY* on 31st October, 2018 on the occasion of National Unity Day, and (iii) was an organizing member of "*National Seminar cum Workshop in Nanoscience (NSWN-2018)*" held at Department of Nanotechnology, NEHU, Shillong during May 29-31, 2018.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Head	: Dr. D. Bhatia: upto 28.11.2018
	: Dr. ManashjitGogoi (Teacher in charge): w.e.f. 29.11.208
Telephone	: 0364-2723856 (H), 0364-2723852 (O)
E-mail	: manash.aec.@gmail.com

Designation	Name and Qualification	Specialization
Associate	Dr.Dinesh Bhatia	Biomedical Engineering; Medical
Professor		Informatics; Biomechanics and
		Rehabilitation Engineering; Signal and
		Image Processing; Marketing and
		International Business
Assistant	Mr. Nitin Sahai	Computer Aided Tissue Engineering,
Professor	Ph.D, NEHU	Biomechanics and Biomaterials
110105501	M.Tech MNNIT, Allahabad	
	Dr. Sudip Paul	Electrophysiology, Biomedical
	Ph.D IIT-BHU	Instrumentation, Artificial Organ and
	M.TechIT-BHU	Rehabilitation system,
		Biomedical Signal Processing
	Dr. Manashjit Gogoi	Electrophysiology, Biomedical
Assistant	Ph.D IIT-Bombay	Instrumentation, Artificial Organ and
Professor	M.TechTezpur	Rehabilitation system,
	-	Biomedical Signal Processing
	Mr. Gajendra Kumar Mourya	Medical Image Processing, Signal
	Ph.D, NEHU	Processing and Biomedical
	M.Tech IIT-BHU	Instrumentation
	MBA Marketing	
	Mr. Shyamal Mandal	Medical Image Processing,
	Ph.D IIT, KHARAGPUR	Nanotechnology, Biomaterials
	M.Tech IIT, KHARAGPUR	

Thrust Area of Research

Biomechanics and Rehabilitation Engineering, Biomedical devices and signal processing, Electrophysiology and medical Instrumentation, Bio-nanotechnology, Nano medicine and Cancer drug delivery,Medical Image analysis and processing, Biomaterials and Artificial Organs, Medical Informatics and Telemedicine, Biomedical

Signal Instrumentation, Biomedical Processing, Artificial organ and Rehabilitation Engineering, Medical Image Processing, Medical Imaging System, Biomedical Instrumentation, Biomedical Signal Processing, Tissue Engineering, Biomaterials, Biomechanics, Computer Aided Tissue Engineering, Biomaterials, Medical Imaging, Nanotechnology.

Brief Statement of Academic Activities

The Department of Biomedical Engineering (BME) was established in 2012 under the School of Technology funded by MHRD, Government of India, with the purpose to promote studies in new emerging areas of medical sciences and technology, employing advancements in technology for the benefit of masses and patients. The Department intends to provide education to young minds for achievement of better health care solutions with emphasis on learning new techniques, developing innovative ideas DEPARTMENT OF BIOMEDICAL ENGINEERING 292 School of Technology through learning, skill development, research and development (R&D), and industryinstitution interaction in the field. Faculty members and students published 31 papers in journals of national and international and book chapters and proceedings.

Students' Profile

Students' Profile / Enrolment Capacity: B. Tech. – 60 (60 seats from Vertical and 6 seats from Lateral Entry) Admissions:

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
B.Tech (I st year)	02	08	04	10	03	08	06	14
B.Tech (II nd year)	01	03	07	03	08	02	09	11
B.Tech (III rd year)	03	17	18	19	18	04	32	36
B.Tech (IVth year)	03	09	21	15	18	09	24	33

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
Ph.D.	2	2	5+1*	8	2	1	9	10

* Visvesvaraya Fellow through Ministry of DeitY, MHRD, Gol.

Fieldwork/Educational Tour of Students

Teacher-in-Charge: Mr. Shyamal Mandal &Mr. Gajendra Kr. MouryaPlaces/Institutions Visited: National Instituteof Electronics & Information Technology(NIELIT), ShillongDuration ofTour :02 weeksPurpose of Tour: Industrial Tour on coursetitled "Repair & Maintenance of MedicalElectronics Equipment".Courses Conducted PostgraduateSemester I: Engineering Mathematics-I,EngineeringChemistry,Engineering

Mechanics. Engineering Physics, Introduction to Biomedical Engineering, Laboratory, Engineering Chemistry Engineering Physics Laboratory, Semester II : Engineering Mathematics – II, Computer Systems and Programming, Elements of Environmental Sciences, Basic Electrical Engineering, Professional Communication Skills, Computer Programming Laboratory, Basic Electrical Engineering Laboratory. Semester III : Bioelectronics, Biomaterials,

Human Anatomy and Physiology, Medical

Microbiology and Biochemistry, Bioelectronics Laboratory, Human Anatomy and Physiology Laboratory, Medical Microbiology and Biochemistry Laboratory.

Semester-IV : Statistics and Random Processes, Biomedical Instrumentation –I, Tissue Engineering and Artificial Organs, Biomedical Signals and Systems, Biomedical Instrumentation Laboratory –I, Biomedical Signals and Systems Laboratory, General Proficiency – I

Semester-V : Bio-Transport Process, Microprocessor and Microcontroller, Biomedical Signal Processing, Biomedical Instrumentation-II, Microprocessor and Microcontroller Laboratory, Biomedical Signal Processing Laboratory, Biomedical Instrumentation-II Laboratory.

Semester- VI : Medical Imaging Techniques, Modelling of Physiological Systems, Artificial Organ and Rehabilitation Engineering, Professional Ethics and IPR, Elective I, Modelling of Physiological Systems Laboratory, Hardware Design Project Laboratory, Seminar & Group Discussion, General Proficiency –III.

: Bio-Nanotechnology, Semester- VII Hospital Management, Medical Image Processing, Industrial Economics and Management, Elective-II(open), Bio-Nanotechnology Laboratory, Medical Image Processing Laboratory, Industrial Tour, General Proficiency - IV.

Semester-VIII : Major Project*, General Proficiency – V.

Ph.D. Courses

Research Methodology, Advance in Nanomedicine and Advance in Biomedical Instrumentation.

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes *Attended* Mr. Nitin Sahai

Biomaterials and Novel Technologies for Healthcare, 2nd International Biennial Conference BioMaH, October 8-11th 2018 – Frascati (Rome), Italy.

Attended **GIAN course** on "Modeling Simulation, Performance Evaluation and Biological Safety for Medical Devices for Respiratory and Cardiovascular Assistance" during 22/03/2018- 02/04/2018 held at MNNIT, Allahabad.

Dr. Manashjit Gogoi

Winter School held in UGC- Human Resource Development Centre, NEHU, Shillong during March 19-April 8, 2018.

Mr. Gajendra Kumar Mourya

Faculty Development Programme on "Python Programming" An Initiative of Ministry of Electronics & Information Technology (MeitY), Government of India.Electronics & ICT Academy IIT Guwahati, Assam <u>11-17 April, 2018</u>. Attended The 106th Indian Science Congress perceives the theme of FUTURE INDIA – Science and Technology, at Lovely Professional University (LPU) from 3rd Jan 2019 to 7th Jan 2019.

Mr. Shyamal Mandal

Workshop on "*Recent Trends in Healthcare Technology*" Training programme on NBA Accreditation.

UGC Sponsored Refresher Course.

Publications Research Papers

Published Abroad:

Mr. Nitin Sahai

Nitin Sahai,Nabeel Ahmad,Manashjit Gogoi(October2018),NanoparticlesBasedDrugDelivery forTissueRegenerationUsingBiodegradableScaffolds:aReview,Current PathobiologyReports,CurrentPathobiologyReports 6 (4), 219-224.AtulAtulKumarSharma,RaghuvendraPripathi,DineshBhatia,SudipPaul,Nitin

Sahai, T. K. Sinha (July 2018), The Evolution and Advancement of Pacemaker Technology, *International Journal of Computational Engineering Research (IJCER), ISSN (e): 2250 – 3005, Volume 08, Issue 7*, pp. 34-53.

Nayan M. Kakoty, Angana Saikia, Nabasmita Phukan, Malarvili Balakrishnan, **Nitin Sahai**, Sudip Paul and Dinesh Bhatia (2018), *Combination of EMG Features based on A Stability Index for Finger Movements Recognition*, Journal of Procedia Computer Science, **Elsevier**, 133, 92-98.

Dr. Manashjit Gogoi

Sahai N., Ahmad N., Gogoi M.(2018). Nanoparticles based drug delivery for tissue regeneration using biodegradable scaffolds: A review, Current Pathobiology Reports, 6: 1-6

Sahai N., Gogoi.M. (2019) Computer Aided Designing and Finite Element Analysis for Development of porous 3-D tissue scaffold-A review, International Journal of Biomedical Engineering and Technology, (In press).

Mr. Gajendra Kumar Mourya

Mourya G. K., Bhatia D, Handique, Warjri A., War S., Amir A (2018) "Segmentation of Liver Using Random Forest Classifier", World Academy of Science, International Journal of Computer and Information Engineering Vol:12, No:2, 2018, ICCVIP 2018.

Mourya G. K., Bhatia D, Handique A., Warjri A., War S., Amir A. 2018 "2D/3D Liver Segmentation from CT Datasets" Advances in Communication, Devices and Networking, Chapter 68, pp 1-7, ISBN: 978-981-10-7900-9 Springer Nature, Singapore Pte Ltd. doi: 10.1007/978-981-10-7901-6.

Mourya G.K., Bhatia D., Handique A., (2018) "Segmentation of Liver from 3D Medical Imaging Dataset for Diagnosis and Treatment Planning of Liver Disorders," published in book titled Design and Development of Affordable Healthcare Technologies, IGI Global , USA , ISBN 9781522549697, DOI: 10.4018/978-1-5225-4969-7.

Books/Book Chapters/Proceedings:

Das B.*, Gogoi M.*, Hazra S., Patra S. (2018). Nanocarriers for drug delivery for selected Neglected Tropical Diseases, In: *Nanoconjugate Nanocarriers for Drug Delivery*. R. K. Keservani, A. K. Sharma (Eds.) Apple Academic Press, 447-480.

Gajendra Mourya,D. Bhatia, Sarada Dakua, Julien Abinahed and Abdulla Al-Ansari "Novel Graph-based Image Segmentation: Application to Medical Imaging" ICPRAI 2018 First International Conference on Pattern Recognition and Artificial Intelligence at Concordia University, Montreal, Canada, May 14-17 2018.

Mourya G. K., Bhatia D, Handique A., Warjri A., War S., Amir A. 2018 "2D/3D Liver Segmentation from CT Datasets" Advances in Communication, Devices and Networking, Chapter 68, pp 1-7, ISBN: 978-981-10-7900-9 Springer Nature, Singapore Pte Ltd. doi: 10.1007/978-981-10-7901-6.

Mourva Gajendra, D. Bhatia, Sarada Dakua, Julien Abinahed and Abdulla Al-Ansari "Novel Graph-based Image Segmentation: Application to Medical Imaging" ICPRAI 2018 First International Conference on Pattern Recognition and Artificial Intelligence at Concordia University, Montreal, Canada, May 14-17 2018.

Paul, S.*, Bhattacharya, P. (2018). Early intervention of cerebral stroke using biosignals. *Central India Institute of Medical Sciences (CIIMS) Research Showcase at Hotel Centre point, Nagpur.*

Paul, S.*, Saikia, A. (2018). Detection of Parkinson's Disease Using Bio Signals.

105th Indian Science Congress 2018, Manipur University, Imphal, India, p. 46.

Sahai N., Gogoi M. (2018). Computational Modeling and Analysis of Knee Articulating Cartilage for Development of its Biodegradable Chitosan Tissue Scaffold, Biomaterials and Novel Technologies for Healthcare, 2nd International Biennial Conference BioMaH, October 8-11th 2018 – Frascati (Rome), Italy.

Sahai N., Gogoi M. (2019). Techniques and software used in 3D printing for

Nanomedicine In: *Applications 3D Printing Technology in Nanomedicine.* N. Ahmad, P. Gopinath, R. Dutta (Eds.) Elsevier, 23-41. Sarma T, **Sahai N.,** Pandey D., Tewari R.P., Bhatia D. (2018). Manufacturing Of Patient Specific Ankle Foot Orthotic Device Using 3d Printing", International Conference on "Recent Innovations and Developments in Mechanical Engineering" (IC-RIDME-2018), November 8-10, 2018. Springer publication.

Funds Received from Agencies including NEHU/UGC *New Projects*

Dr. Manashjit Gogoi

Di Manashjit Obgol			
Quantum Dot Based	Dr. Manashjit Gogoi, Dr.	Department of	56,99,996/-
Biosensor for Early	Abhijeet Balwantrao Joshi/	Biotechnology,	
Detection of Prostate	Co-PI: Dr. Mrityunjoy	Government of	
Cancer Using multiple	Mahato, Dr. Prashant	India.	
biomarkers in Biological	Kodgire		
samples	-		
Screening of human	Dr. Surya Bhan, Dr. Rajpal	Department of	61,32,992/-
Brucellosis in Northeast	Singh Kashyap; Co-PI: Dr.	Biotechnology,	
region using point of care	Nitin Sahai, Dr. Manashjit	Government of	
immunological and	Gogoi and Dr. Aliabbas	India.	
molecular tools	Husian		

Ongoing Projects

Mr. Nitin Sahai

Title of Project	Pl/Co-Pl	Funding Agency	Amount
Modeling, Simulation and	Principal	Department of	Rs. 54L
Development Of Smart Active	Investigator	Biotechnology,	(approx.)
Ankle Foot Orthotic Device for		Government of	
Gait Rehabilitation		India	
Design of Neural Network based	Co-	Department of	Rs. 69.64 L
Pacemaker	Principal	Biotechnology,	
	Investigator	Government of	
		India	
Screening of human Brucellosis	Co-	Department of	Rs. 61,32,992
infection in North east regions	Principal	Biotechnology,	
using point of care immunological	Investigator	Government of	
and molecular tools	_	India	

Dr. Sudip Paul

Title of Project Pl/Co-Pl		Funding Agency Amount	
Design of Neural Network	Dr. Dinesh	Twinning programme,	69,64,000.00
based Pacemaker	Bhatia, PI	Department of	
	Dr. Sudip Paul,	Biotechnology, Govt. of	
	Co-PI	India	
	Mr. Nitin Sahai,		
	Co-PI		
	Dr. Dinesh	Department of Science	
Design of pulsed electrical	Bhatia, PI	and Technology (DST),	
knee stimulator for	Dr. Sudip Paul,	Ministry of Science and	46,77,000.00
osteoarthritis (OA) patients	Co-PI	Technology, Govt. of	
	0-11	India	

Dr. Manashjit Gogoi

Title of Project	Pl/Co-Pl	Funding Agency	Amount
Bottom-Up	Dr. Mrityunjoy	SERB, DST, Govt of	32,15,000/-
Nanobiocomposite Film of	Mahato/ Dr.	India	
Protein, Polymer and	Manashjit Gogoi		
Nanoparticles by Langmuir			
Bldgett/Layer by Layer			
Technique for Pesticide			
Sensing Application			
Conversion of Waste	Dr. Mrityunjoy	SERB, DST, Govt of	7,24,000/-
Plastic into Value Added	Mahato/ Dr.	India	
Products	Manashjit		
	Gogoi		

Mr. Gajendra Kumar Mourya

Title of Project	Pl/Co-Pl	Funding Agency	Amount
Automatic	Principal	Science and Engineering	Rs. 11.00
Segmentation of	Investigator	Research Board (SERB),	lakhs
Abdominal Organs in		Department of Science and	
3D Medical Data Sets		Technology (DST), Ministry of	
for Diagnosis and		Science and Technology, Govt. of	
Treatment Planning.		India	

Completed during Year Dr. Sudip Paul

211 Sump I um			
Title of Project	Pl/Co-Pl	Funding Agency	Amount
Design of Artificial	Mr. Nitin Sahai, PI	Department of	Rs. 35L
Hand with Artificial	Dr. Dinesh Bhatia,	Biotechnology,	(approx.)
Fingers	Co-PI	Government of India	
	Dr. Sudip Paul, Co-		
	PI		

Academic Collaborations Dr. Sudin Paul.

S.No.	Name of collaborator(s)	Collaborating Institution(s),	The title of project or any academic activity
1.	Dr. Manish Kapoor	NEIGRIHMS, Shillong	Design of Neural Network based pacemaker

Dr. Manashjit Gogoi

Dr. Abhijeet Balwantrao Joshi and Dr. Prashant Kodgirefrom IIT Indore, for the project entitled "Quantum Dot Based Biosensor for Early Detection of Prostate Cancer Using multiple biomarkers in Biological samples".

Dr. Arup jyoti Baruah and Dr. Chandan Nath from NEIGRIHMS, Shillong for the project entitled "Quantum Dot Based Biosensor for Early Detection of Prostate Cancer using multiple biomarkers in Biological samples". Dr. Rajpal Singh Kashyap and Dr. Aliabbas Husian from CIIMS, Nagpur project entitled "Screening of human Brucellosis in Northeast region using point of care immunological and molecular tools".

Honours/Awards/Recognitions Mr. Nitin Sahai

Science Communicator in the 106th session of Indian Science Congress, from 3rd Jan 2019 to 7th Jan 2019.

ICMR International travel grant Non-ICMR Scientists to present oral presentation at BIOMAH- 2018 at Rome, Italy.

Dr. Sudip Paul

Science Communicator in the 105th session of Indian Science Congress, 2018.

Selected as **Post Doc Fellow (Visiting Research fellow)** under Biotechnology Overseas Associateship for the Scientists working in North Eastern States of India: 2017-18 supported by Department of

Department of Biotechnology, Government of India.

Other Activities

Mr. Nitin Sahai

Member BPS, Department of Bioengineering and Technology, Faculty of Technology, Guwahati University, Guwahati, Assam (2018-21).

Project reviewer for Department of Science & Technology(DST), GOI, New Delhi and Department of Biotechnology(DBT), GOI, New Delhi.

Reviewer for IGI, Global, Springer and Elsevier publication.

Dr. Manashjit Gogoi

Membership/Visiting Fellows of statutory bodies of recognized educational institutions outside NEHU:

Life member of Institution of Engineers, India (M-1561671)

Life member of Indian Science Congress Association (L24046)

Life Member of Society of Biomedical Engineering India (LM-1038)

Life Member of Biomaterials and Artificial Organs (LM-640)

Life Member of IIT-Bombay Alumni Association (140007)

Reviewers for journals of national/international repute:

Reviewer of Nanoscience and Nanoengineering Journal (Horizon Research Publishing, USA) Reviewer of Universal Journal of Medical Science (Horizon Research Publishing, USA) Reviewer of Biomedical Research Journal Reviewer of Cellulose Journal Reviewer of BionanoScience Journal

Lectures delivered at Refresher Courses/Orientation Programs/Workshops, etc.:

"Therapeutic evaluation of engineered magnetic liposomes for cancer therapy" invited talk in National Seminar Cum Workshop in Nanoscience (NSWN-2018) held in NEHU, Shillong during 29th-31st May 2018.

"Herbal Nanomedicines for Cancer Therapy" invited talk in National Seminar Cum Workshop in Nanoscience (NSWN-2018) held in NEHU, Shillong during 29th-31st May 2018.

Head In-charge of the Department of Biomedical Engineering, NEHU, Shillong since November 2018.

Mr. Gajendra Kumar Mourya

Oral presentation, on 3D Simulation for Computer Guided Liver Biopsy and Needle Path Planning from CT Image at Lovely Professional University (LPU), Punjab during The 106th Indian Science Congress on 7th Jan 2019.

Keynote speaker, TEQUIP-III

fundedNational Seminar on Application of Computational Tools in Science and Technology at Bineswer Brahma Engineering College, Kokrajhar, Assam on 21st September 2018. Life Member of Biomedical Engineering Society of India. (#. LM-1029) Since 2013. Life Member of Indian Society of Biomechanics. (#N-198) Since March 2009. Associate member of The Institution of **Electronics and Telecommunication** Engineers (IETE).(# AM-232509) Since Dec 2012 Life Member of Instrument Society of India (ISI) (# 2156) Life member of The Indian Science Congress

Life member of The Indian Science Congress Association (ISCA) (#L22324) Since 2013.

DEPARTMENT OF COMPUTER APPLICATIONS (TURA CAMPUS)

Head	: Dr. Anindya Halder
Telephone	: 919774471479 (M) /7980918985 (M)
E-mail	: computerapplication.nehu@gmail.com, anindya.halder@gmail.com

Faculty : 3

Designation	Name and Qualification	Specialization		
		Machine Learning, Soft		
Assistant	Dr. AnindyaHalder, MCA, Ph.D.	Computing, Biomedical		
		Imaging, Bioinformatics		
		Computer Networks,		
Professor	Mr. Ansuman Kumar, MCA, M.Tech	Bioinformatics, Theory of		
		Computation.		
		Data Mining, Artificial		
	Mr. Rubul Kumar Bania, MCA, M.Tech	Intelligence, Biomedical		
		Imaging		

Thrust Areas of Research

Machine Learning, Pattern Recognition, Data mining, Bioinformatics, Medical Image Analysis, and Remote Sensing Image Analysis.

Brief Statement of Academic Activities

The Department of Computer Applications was established in the year of 2012 under the School of Technology. The Department offers the Three-Year Master's programme in Computer Applications (MCA) since 2013 and the Ph.D. programme in Computer Applications from 2016. The core part of the MCA curriculum embodies theoretical and practical knowledge basic to the industry/academic/research with special reference to emerging technologies relevant to the field of computer applications. During the year under report, the Department undertook an industrial study tour for the students of MCA final year to Darjelling and Sikkim. Twelve students were awarded their MCA degree.

Students' Profile

Enrolment Capacity: MCA -20, Ph.D. - Variable

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
1 st Sem	14	6	-	12	-	8	9	11	20
3 rd Sem	10	5	-	11	-	4	8	7	15
5 th Sem	8	5	1	7	-	5	8	5	13

Degree Awarded

D	egree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
	MCA	8	4	1	5	3	3	8	4	12

Courses Conducted Postgraduate: MCA Semester I

Digital Logic Design; Programming and Problem Solving through C; OrganisationalBehaviour, Accounting and Financial Management; Discrete Mathematics and Probability Theory.

Semester II

Theory of Computation; Data Structures Using C++; Object Oriented Programming and Design; Computer Graphics; Computer Organisation and Architecture.

Semester III

Database Management System-I; Data Communication and Networks-I; Operating System, Design and Analysis of Algorithms; GUI Programming Using VB.NET.

Semester IV

Software Engineering; Data Communication and Networks-II and Network Programming using Linux, Oracle, Database Management System-II; Internet Technology and Applications; Artificial Intelligence.

Semester V

Compiler Design; Programming through Java; System Programming; Data Mining; Minor Project. *Semester VI*

Major Project.

Fieldwork/Educational Tour of Students

Teacher-in-Charge: Mr. Rubul Kumar Bania,

Places/Institutions Visited: Darjelling and Sikkim

Duration of Tour: 27/12/2018 to 05/01/2019 (10 days)

Purpose of Tour: To visit few Industries and academic institutes like Sikkim University,

NIT-Sikkim, Sikkim State Council of Science and Technology

etc. and

also to have an overview of the impact of tourism and to explore the

possibilities of IT to promote tourism industry.

Educational Tour of Students

The Department organized an industrialstudy tour to Darjelling and Sikkim for the students of MCA final year under the guidance of Mr. Rubul Kumar Bania, Assistant Professor during 27/12/2018 to 05/01/2019.

Seminars/Conferences/Symposia/Worksho ps

Organized

The Department also organized National Workshop on Android Application Development

in collaboration with Aspirevision Tech Ltd. during 11-15, March, 2019.

Attended

A. Halder delivered invited lecture on "Microarray data analysis using computational methods in DBT sponsored National Short Term Training Program on Bioinformatics – Computation in Wet Lab organized by Bioinformatics Infrastructure Facility, NEHU, Tura Campus during 25 Feb-2 March, 2019.

A. Kumar and**A. Halder**, Ensemble technique using Fuzzy-Rough approach for cancer sample classification from gene expression data. *National Conference on Mathematical Sciences & Applications in Science, Engineering & Technology (MSASET-2018) organized by Dept. of Mathematics, Rajib Gandhi University, Arunachal Pradesh during25-26th March 2019.*

Publications

Published Abroad

A. Halder and A. Kumar, Active Learning using Rough Fuzzy Classifier for Cancer Prediction from Microarray GeneExpression data. *Journal of Biomedical Informatics*, 92,103136 (2019).

A. Kumar and A. Halder, Semi-supervised Fuzzy Vaguely Quantified Rough Nearest Neighbour Classifier for Cancer Sample Classification from Gene Expression Data. *Journal of Computer and Mathematical Sciences*, 9(7), 840-849 (2018).

A. Kumar and A. Halder, Cancer Classification from Gene Expression data using Fuzzy-Rough techniques: An Empirical Study. *International Journal of Computer Sciences and Engineering*, 6(6), 415-420 (2018).

R. K. Bania and R. U. Khan, Handwritten Assamese Character Recognition using Texture and DiagonalOrientation features with Artificial Neural Network. *International Journal of Applied Engineering Research*, *(IJAER)*, May 2018. Vol-13, N0- 10, Page. 7797-7805, ISSN 0973-4562.

R. K. Bania and P. Duarah, Exam Time Table Scheduling using Graph Coloring

Approach.	Inter	nationa	l	Jour	nal	of
Computer	Scienc	ces a	nd	Eng	gineer	ing.
(IJCSE) ,	May	2018.	Vo	ol-6,	Issue	e-5.,
Page.84-93.	ISSN-2	2347-26	93			

Published in India

Published a book chapter: A review on Solid waste management with recent advanced technologies in global and Indian context in Book title: Climate Change and Sustainable Management of Natural Resources. ISBN: 978-93-87263-90-1, 2018.

Other Activities

Dr. Anindya Halder Acted as reviewer in various international journals and conferences.

Mr. Rubul Kumar Bania

Participated in UGC sponsored Refresher Course, Gauhati University,HRDC, Assam, during 24th Sep 2018 to Oct 2018.

ELECTRONICS AND COMMUNICATION ENGINEERING

Head	: Dr. Rupaban Subadar
Telephone	: 0364-2723661
E-mail	: hodece@nehu.ac.in, rupaban.subadar@gmail.com

Faculty	:11
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Designation	Name and Qualification	Specialization		
Professor	Dr. Lairenlakpam Joyprakash Singh, M. Tech (Tezpur University), Ph.D. (Jadavpur University)	Signal Processing		
	Dr. Sushanta Kabir Dutta, M. Tech (Manipal), Ph.D. (NEHU)	SpeechSignalProcessing,MachineLearningforSpeechProcessing		
Associate Professor	Dr. Subhash C. Arya, B. Tech (GGSIPU), Ph.D. (ISM)	Silicon Photonics and Optical Communication Systems		
	Dr. Rupaban Subadar, M. Tech (Tezpur University), Ph.D. (IIT, Ghy)	Theory of wireless communication		
	Dr. Juwesh Binong, M. Sc. (Bhavnagar), Ph.D. (Tezpur University)	Machine Learning and AI		
	Dr. Rajkishur Mudoi, M. Tech (Tezpur University), Ph.D. (NEHU)	Wireless Communication, VLSI Design.		
	Miss. Fidalizia Pyrtuh, B. Tech (SJCE), M. Tech (IIIT, Alahabad)	Signal & Speech Processing		
Assistant Professor	Mr. Jaydeep Swarnakar, B. Tech (Kalyani University), M. Tech (Jadavpur University)	Fractional order system, Control system.		
	Mr. Asif Ahmed, B. Tech (Kalyani University), M. Tech (NIT, Durgapur)	Mixed Signal CAD tool Development		
	Dr. Pankaj Sarkar, Ph.D. (Jadavpur University)	Microwave Passive and Active circuits design		
	Mr. Nipanka Bora, M. Tech (Tezpur University).	Nano Scaled Device Modelling, VLSI Design		

Thrust Areas of Research

Signal Processing: Speech, Language and Speaker Recognition, Digital Image Processing, Quantized Semiconductor Structures, Microwave passive and active circuit design, Telecommunication Engineering, Optical Fiber Communication and Opto-Electronics Devices, Theory of Wireless communication, MIMO, Mixed Signal CAD tool and VLSI Design, Qualitative Reasoning and Context Awareness

Brief Statement of Academic Activities

The Department is currently running three programmes, namely B. Tech, M. Tech and

Ph. D. in ECE Engineering. As for B. Tech Electronics and Communication Engineering, the Department admitted 60 students by vertical entry and 6 students by lateral entry. 11 students were admitted to the M Tech programme. A total of 60 and 06 students have completed their B. Tech and M. Tech degrees in Electronics and Communication Engineering, respectively. Faculty and students have published fifteen papers in national and international journals and three chapters in edited books and proceedings.

Students' Profile

Enrolment Capacity: BTech - 60/6 (Vertical/Lateral), MTech - 18, Ph.D. - Variable

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
BTech	187	40	22	105	-	100	61	166	227
MTech	16	12	1	18	-	9	14	14	28
Ph.D.	1	1	1	-	-	-	-	2	2
D (1 1								

Degrees Awarded

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Tot al
BTech	37	13	3	18	0	29	12	38	50
MTech	5	1	-	3	0	3	2	4	6

Students Awarded Ph.D. Degree: 2 Fieldwork/Educational Tour of Students

Teacher-in-Charge: Miss Fidalizia Pyrtuh *Places/Institutions Visited:* Bangalore *Duration of Tour:*06/01/2019-22/01/2019(17 Days)

Purpose of Tour: Industrial Visit.

Courses Conducted

Undergraduate: BTech (Electronics and Communication Engineering)

Semester II

Basic Electronics; Basic Electronics Laboratory.

Semester III

Electronic Devices and Circuits; Signals and Systems; Electrical Network Theory; Data Structures and Algorithms; Electronic Devices and Circuits Laboratory; PCB Design Laboratory.

Semester IV

Electromagnetic Theory; Digital Electronics; Linear Integrated Circuits and Systems; Electronics Measurements and Instrumentation; Digital Electronics Laboratory; Linear Integrated Circuits Laboratory; Electronics Measurements and Instrumentation Laboratory.

Semester V

Microprocessor; Principles of Communication Systems; Power Electronics; Basic Control Engineering; Microprocessor Laboratory; Communication Systems Laboratory; Simulation using MATLAB.

Semester VI

Embedded Systems and Microcontrollers; Digital Signal Processing; Microwave Engineering; Computer Communications and Networks; Antenna, Embedded Systems and Microcontrollers Laboratory; Digital Signal Processing Laboratory; Microwave Engineering Laboratory; GPIII.

Semester VII

Introduction VLSI Design; Digital Communication, Data Communication Systems; Information Theory and Coding; VLSI Design Laboratory; Digital Communication Laboratory.

Semester VIII

Major Project.

Postgraduate: MTech (Electronics and Communication Engineering)

Semester I

Mathematical and Statistical Techniques; Advanced Communication Engineering; Elective I (Speech Processing; Advanced Wireless Communication; Microwave Theory and Techniques; VLSI Devices and Modelling; Lightwave Communication System); ElectiveII (Spoken Language Identication Techniques, Speaker Recognition, Machine Learning, Advanced Fiber Optic Communication, Communication Network) RF and Communication Lab.

Semester II

Mobile Communication; Advanced Digital Signal Processing; Open Course I(Analog IC Design, Advanced Embedded Systems, High Speed Digital Design, Advanced Control Engineering, Antenna Theory and Design); Open Course II(Advanced Image Processing, Computational Electromagnetics, Optical Communication Networks, Processor Architectures for VLSI, Digital IC Design); Advanced Digital Signal Proc. Lab.

SemesterIII

Dissertation - Part I

SemesterIV

Dissertation - Part II

Ph.D. Courses

Course work Research Methodology; Mathematical Methods; Speech Processing; Advanced Wireless Communication; Microwave Theory and Techniques; VLSI Devices and Modelling, Lightwave Communication System; Spoken Language Techniques; Identification Speaker Recognition; Machine Learning; Advanced Mobile Communication; Fiber Optic Communication; Analog IC Design; Advanced Embedded Systems; High Speed Digital Advanced Design; Control Engineering; Antenna Theory and Design; Advanced Image Processing; Computational Electromagnetics; Communication Networks; Processor Architectures for VLSI; Digital IC Design.

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes *Organized*

The Department has organized the "*Three* Day National Workshop on Embedded Systems & Its Applications (ES&A-2019)" during 20th -22nd February, 2019. Dr. Juwesh Binong was the convener of the workshop.

Attended

Dr. Subhash C. Arya presented invited talks on "Modeling of P-I-N injection type Silicon Phase Shifter for high-speed optical communication" and "Modeling of novel nano-photonic photo-activated optical modulator" in the national seminar cum workshop in Nano Science from May 29th -31st, 2018 held at Dept. of Nanotechnology, NEHU, Shillong.

Dr. Subhash C. Arya presented a paper entitled, "Mathematical Modeling of Carrier Depletion based P-N Junction Optical Phase Shifter using Evolutionary Algorithm" in the 2nd International Conference on Innovations in Electronics, Signal Processing and Communication (IESC 2019) during March 1-2, 2019 organised by Department of ECE, NIT Meghalaya

Dr. Subhash C. Arya presented a poster entitled, "Modeling of PN and P-I-N Optical Phase Shifter using MOGA' in the 5th National Workshop on NEMS/MEMS & Theranostic Devices during 21-23 February, 2019 held at Centre for Nanotechnology, Indian Institute of Technology, India

Dr. Subhash C. Arya presented a paper on, "Modeling of novel Nano-Photonic photoactivated optical modulator", in Research Conclave 19 during 14-17th March, 2019 at IIT Guwahati and has been honoured with Second prize.

Dr. Subhash C. Aryapresented a paper entitled , "Silicon-based Passive and Active Photonic Devices: Modeling and Characterization for PICs" during Feb. 26th - 28th, 2019 at Dept. of Energy Engineering, NEHU, Shillong

Dr. Rupaban Subadar presented a paper titled "Combine Effect of Large and Small Scale Fading on the Performance of QAM" in the 2nd International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech), jointly organised by IEM, Kolkata and IEEE Kolkata section on 4th and 5th April 2018.

Dr. Rajkishur Mudoi presented a paper on "ABER of Transmit Antenna Selection with Maximal Ratio Combining-MIMO System over Nakagami-m Fading Channels" in the 4^{th} National Conference on Emerging Trends and Applications in Computer Science during the 14^{th} and 15^{th} of September, 2018 at the Department of Computer Science , St. Anthony's College, Shillong.

Mr. Jaydeep Swarnakar presented a research paper titled, "Realization of fractional-order proportional derivative controller for a class of fractional-order system in delta domain" in the 3rd International Conference on Intelligent Communication, Control and Devices (ICICCD), 21-22 December, 2018 organized by Department of Electrical and Electronics Engineering, University of Petroleum and Energy Studies, Dehradun, India.

Publications:

Research Papers

Published in India

Das P. and Subadar, R. (2018). Combine Effect of Large and Small Scale Fading on the Performance of QAM. 2nd International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech), Kolkata, 1-4.

Pyrtuh, F. (2018). Automatic Speaker Verification System using EMD Technique. *International Journal of New Innovations in Engineering and Technology.* 8(1).

Published Abroad

Dutta, S. K. and Singh, L. J. (2018). A Comparison of three spectral features for phone recognition in sub-optimal environments. *International Journal of Applied Pattern Recognition*, 5(2): 137-148.

Dutta, S. K. and Singh, L. J. (2018). A study of prosodic feature- based Classification of languages from North-eastern India. *Advances in Communication, Devices and Networking. Part of the Lecture Notes in Electrical Engineering*, 462: 583-589.

Rahman, A., Dutta, S. K.and Sarkar, P. (2018). A Compact Ku-band bandpass filter with wide upper Stopband using SIR. *Advances in Communication, Devices and Networking. Part of the Lecture Notes in Electrical Engineering*, 462: 169-174.

Kakati, D., Arya, S. C. (2018). A Full-duplex fiber/wireless optical coherent communication system with digital signal processing at the receiver. Optik -International Journal for Light and Electron 171: 190-199. Optics. https://doi.org/10.1016/j.ijleo.2018.05.140 Kakati, D., Arya, S. C. (2018). Performance of 120 Gbps Single Channel Coherent DP-16-QAM in Terrestrial FSO Link under

Different Weather Conditions. *Optik* -*International Journal for Light and Electron Optics*, 178:1230-1239, https://doi.org/10.1016/j.ijleo.2018.10.035.

Saikia, B. and Subadar, R. (2018). Adaptive M-MRC scheme with estimation error over TWDP fading. *International Journal of Autonomous and Adaptive Communications Systems*, 12(1): 75-89.

Saikia, B. and Subadar, R.(2018). Effect of estimation error on dual MRC receiver over Hoyt fading channels, *International Journal of Electronics Letters*, 1-7. DOI: 10.1080/21681724.2018.1523470,

Saikia, B. and Subadar, R.(2018). Effect of Channel Estimation Errors on the Performance of an M-MRCReceiver over TWDP Fading Channels.*International* *Journal of Applied Engineering Research*, 13(18): 13737-13743.

Das K. and Mudoi, R. (2018). Analysis of EEG Signals using Empirical Mode Decomposition and Support Vector Machine. *IEEE International Conference on Power, Control, Signals and Instrumentation Engineering*, 358-362.

Swarnakar, J., Sarkar, P., Singh, L. J. (2018). A unified direct approach for discretizing fractional-order differentiator in deltadomain. *International Journal of Modeling, Simulation and Scientific Computing*, 9(6):185055,https://doi.org/10.1142/S179396 2318500551

Swarnakar, J., Sarkar, P., Singh, L. J. fractional-order (2018).Realization of operator in complex domains—a comparative study. Advances in Communication. Devices and Networking.Part of the Lecture Notes in Electrical Engineering. 462: 711-718.

Swarnakar, J., Sarkar, P., Singh, L. J. (2019). Rational approximation methods for a class of fractional-order SISO System in delta domain. *Advances in Communication, Devices and Networking. Part of Lecture Notes in Electrical Engineering.* 537: 395-402. Bora,N. and Subadar, R. (2019). An analytical surface potential model for highly doped ultrashort asymmetric junctionless transistor. *Advances in Communication, Devices and Networking* 537:45-53.

Books/Book Chapters/Proceedings

Arya, S. C. (2018). Parameter optimization of carrier-depletion based PN junction optical phase shifter using multi-objective genetic algorithm (MOGA). In: *Proceedings of the Photonics-2018*, New Delhi.

Mudoi, R., Saikia, H. and Subadar, R. (2018). ABER of Transmit Antenna Selection with Maximal Ratio Combining-MIMO System over Nakagami-m Fading Channels. In *the 4th National Conference on Emerging Trends and Applications in Computer Science*, organized by the Department of Computer Science, St. Anthony's College, Shillong.

Bora, N. andSubadar,R. (2018). Performance analysis of ultra-short junctionless DGMOS nanowire transistors with high-k gate dielectric, 4th National Conference on Emerging Trends and Applications in Computer Science, Shillong, Meghalaya.

Research Projects *Ongoing*

Title of Project	Pl/Co-Pl	Funding	Amount	
		Agency	(Rupees)	
Modeling and Design of Silicon	Dr. Subhash C.	DST-SERB,	32, 92,200.00	
Based Optical Modulator for high speed Optical	Arya	New Delhi		
Communication System				

Other Activities

Dr. Subhash C. Arya has delivered two invited talks in the Department of ECE at NIT Manipur during Sept. 17-18, 2018 on "Comprehension on Cognitive, Psychomotor and Affective domain teaching and learning in Electronics and Communication Engineering" and "Modeling and Design of Silicon-based Optical Phase shifter/Modulator for a high-speed optical communication system" Dr. S. C. Arya attended a seminar on "Electoral Politics in North-East India: Analysis of the Last Assembly Elections" organized by ICSSR-North Eastern Regional Centre Shillong on 21^{st} April, 2018.

Dr. Rupaban Subadar chaired a session in the the 2ndInternational Conference on Innovations in Electronics, SignalProcessing and Communication (IESC 2019) organised by, Department of ECE, NIT Meghalaya.

Dr. Rupaban Subadar has delivered a talk on "Recent developments on Wireless Communication" in national level workshop "Recent trends in Signal Processing and Communication" held at NIT, Nagaland, Dimapur, on15thand 16th August 2018.

Dr. Rupaban Subadar is the member of the BOS the department of Electronics and Communication Engineering, NERIST, Nirjuli, Itanagar; ii) doctoral committee of Ms. Priyanka Chetri, NIT, Nagaland, iii) BOS member Department of IT, Tripura University.

Dr Juwesh Binong chaired a session in International Conference on Innovations in Electronics, Signal Processing and Communication (IESC 2019), held during 1st - 2nd March, 2019 organized by Department Electronics of and Communication Engineering, National Institute of Technology (NIT), Meghalaya, Shillong.

Rajkishur Mudoi has delivered three invited talk entitled "Introduction to Embedded Systems", "Microcontrollers and Embedded Systems" and "Embedded Systems & Its Applications" in the "Three Day National Workshop on Embedded Systems & Its Applications (ES&A-2019) organized by the Department of Electronics & Communication Engineering, North-Eastern Hill University, Shillong, Meghalaya, during 20th -22nd February, 2019.

Miss F. Pyrtuhdelivered an Invited Talk entitled "Applications of Embedded Systems" in "Three-Day National Workshop on Embedded Systems & its Applications(ES&A-2019) organized by the Department of Electronics & Communication Engineering, North-Eastern Hill University, Shillong, Meghalaya, during 20th-22nd.February,2019.

Dr. Rajkishur Mudoi completed the Short Term Training Programme on "LABVIEW & MATLAB Applications in Engineering" organized by National Institute of Technical Teachers Training and Research, Kolkata from 10.12.2018 to 21.12.2018.

Dr. Pankaj Sarkar chaired a session in International Conference on Innovations in Electronics. Signal Processing and Communication (IESC 2019), scheduled from 1st - 2nd March, 2019 organized by Electronics Department of and Engineering, Communication National Institute of Technology Meghalaya, Shillong. Mr. N. Bora completed the UGC sponsored 44th Orientation Course held at UGC-HRDC, NEHU, Shillong, 4-30 July, 2018.

Dr. S. C. Arya attended "10th INUP familiarization Workshop on Nanofabrication Technologies" and "NCPRE familiarization workshop on Photovoltaics" during Nov. 30-1st Dec. 2018 held at IIT Bombay.

Dr. S. C. Arya, Dr. Rajkishur Mudoi and Mr. Nipanka Bora attended a workshop on "Present Trends in Healthcare Technology" held on May 30th, 2018 organized by Dept of BME, NEHU, and Shillong.

Dr. S. C. Arya, Dr. Rajkishur Mudoi and Mr. Nipanka Bora attended one day knowledge sharing program on "IoT and its impact on Business" at SOT, NEHU Shillong on August 31st, 2018.

DEPARTMENT OF ENERGY ENGINEERING

Head	: Dr. Samrat Paul (Teacher in charge)
Telephone	: + 91 9485043421
E-mail	: paulsamrat17@gmail.com

Faculty	:4	
Designation	Name and Qualification	Specialization
	Dr. Samrat Paul, Ph. D (TU). M.Tech (TU)	Solar Energy, Energy
		Nanomaterials
Assistant	Mr. Manmit Saikia, M.Tech (TU)	Design of Energy Conversion
Professor		Devices, Bio Energy
	Mr. Sanat Das , M.Tech (IITK)	Propulsion Thermal Energy
		Storage System, Renewable
		Energy Utilization
	Mr. Samar Jyoti Hazarika, M.Tech (TU)	Energy Management and
		Accounting

Thrust Areas of Research

Energy Materials

Brief Statement of Academic Activities

The Department is currently offering B.Tech in Energy Engineering and PhD in Energy Engineering

Students' Profile Degrees Awarded:

Degrees Awarded.									
Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
BTech	46	9	7	24	2	22	10	45	45

Research Fellowship:

CSIR- UGC-NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritoriou s Malana Azad Minority Fellowship	Any other	Others
					DST-SERB National Post- Doctoral Fellowship Scheme (Dr. Rahul Singh Chutia	

Courses Conducted

Undergraduate:BTech(Energy Engineering) SemesterI

Engineering Mathematics-I, Engineering Physics - I, Elements of Environmental Science, Professional Communication Skills, Solid Mechanics, Digital English Language Laboratory, Engineering Drawing.

SemesterII

Engineering Mathematics -II, Engineering Physics-II, Engineering Chemistry, Basic Electronic Devices, Engineering Physics Laboratory, Engineering Chemistry Laboratory, Electronic Devices Laboratory.

SemesterIII

Basics of Renewable Energy Technology, Electrical Devices and Circuits, Fluid Mechanics, Engineering Thermodynamics, Energy Laboratory-I, Studio for Design.

SemesterIV

Heat and Mass Transfer, Nuclear Energy, Solar Thermal Technology, Biomass and Bio-fuel Technology, Energy Laboratory-II, Studio for Stimulation.

SemesterV

Solar Thermal Technology, Biomass and Biofuel Technology, Energy Economics and Planning, Energy Auditing, Nuclear Energy, Solar Thermal Laboratory, Biomass and Bio-fuel Laboratory, Energy Auditing Laboratory, Seminar.

SemesterVI

Photovoltaic Conversion Technology, Internal Combustion Engine and Gas Turbine, Hydro, Wind, Ocean and Tidal Energy Technology, Industrial Economics and Energy Management, Climate change and Carbon Trade, Photovoltaic ConversionLaboratory, Internal Combustion Engine Laboratory, Hydro, Wind and Ocean Technology Laboratory, General Proficiency-III.

Semester VII

Professional Ethics and IPR, Nanotechnology for Renewable Energy Systems, Chemical Energy Storage Devices and Systems, Fuel Cell and Hydrogen Energy, Waste Heat Recovery, Chemical Storage and Fuel Cell Laboratory, Field Visit/Industrial Training, Minor Project and Seminar, General Proficiency -IV.

Semester VIII

Major Project, General Proficiency -V.

PhD Courses

Research Methodology, Energy Resources and Technology, Nanomaterials in Energy Devices and Systems.

Seminars/Conferences/Symposia/Worksho ps

Organized Dr. Samrat Paul

The Department organized: (i) International Conference on Advanced Materials for Energy Science and Technology (AMEST-2019), 26th February to 28th February 2019, Department of Energy Engineering, NEHU, Shillong. Convenor: Dr. Samrat Paul. Conference Secretary: Mr. Sanat Das, and (ii) One day seminar on AKSHYA 20^{th} DIVAS. URJA August 2018. Department of Energy Engineering, NEHU, Shillong. Convenor: Dr. Samrat Paul. Conference Secretary: Mr. Sanat Das.

Attended Dr. Samrat Paul

Delivered an oral presentation on "Synthesis of mixed halide perovskite using low temperature method for Photovoltaic application", International Conference on Renewable and Alternate Energy (ICRAE 2018). December 04-06, 2018, NEDFi Convention Centre, Guwahati.

Presented a poster paper on "Magnetically separable nanocatalyst biofuel for application. A study on recent advances", International Conference on Renewable and Alternate Energy (ICRAE-2018), December 04-06, 2018, NEDFi Convention Centre, Guwahati.

Publications

Published in India

Saha, R., Chutia, R.S., Gohain, P.P., Choudhury, M.G., Paul, S., Samdarshi, (2019). Optimization of process S. K. parameters for carbon nanotubes synthesis using Green precursors. *Carbon - Science and Technology*, 11 (2):116 – 123.

Saha, R., Paul, S. (2019).Synthesis of $NH_2CH_5=NH_2$ based mixed halide Perovskite nanoparticles using single step low temperature microwave assisted heating. *Carbon - Science and Technology*, 11 (2):124 – 129.

Books/Book Chapters/Proceedings

Saha, R., Paul, S.(2018).Synthesis of mixed halide perovskite using low temperature method for Photovoltaic application. ASTU, Guwahati, ISBN: 978-93-80813-65-3. Gohain, P. P., Chutia, R. S., Paul, S. (2018). Magnetically separable nanocatalyst for biofuel application: A study on recent advances. ASTU, Guwahati,ISBN: 978-93-80813-65-3.

Research Projects *Ongoing:*2

Title of Project	Pl/Co-Pl	Funding	Rupees in
		Agency	lakh
Synthesis of D-group Metal	PI: Dr. Samrat Paul	DST-SERB	46.12
Oxide-Pervoskite	Co-PI: Mr Sanat Das		
Nanocomposite for Dye			
Sensitized Solar Cell			

DEPARTMENT OF INFORMATION TECHNOLOGY

Head	: Dr. Debdatta Kandar
Telephone	: 0364-2723611(O)
E-mail	: hodit@nehu.ac.in

Faculty :1	2	
Designation	Name and Qualification	Specialization
Professor	Dr. Goutam Saha, MTech (Univ of Calcutta), Ph.D. (IIT Kharagpur) PDF(Ben Gurian Univ-Israel), PDF(IIT Kharagpur)	SDN based IoT, Bioinformatics and System Biology, River Interlinking, Block chain based security system
Associate Professor	Dr.Md. Iftekhar Hussain, MTech.,Ph.D. (Tezpur Univ) Dr.Bubu Bhuyan, MTech (Tezpur University), Ph.D. (Jadavpur Univ) Hemanta Kumar Kalita*, MTech (Tezpur Univ), Ph.D. (Jadavpur Univ)	Internet of Things (IoT), Wireless Networks Cryptography, Information Security Performance Engineering, Computer and Network Security, Wireless Sensor Network, Spatial Data Mining, Expert Systems Wireless Mobile Communication,
	Dr.Debdattta Kandar, MTech (AAIDU), Ph.D. (Jadavpur Univ), PDF(Univ. of Johannesburg)	Soft Computing, Artificial Intelligence, RADAR Imaging
	Swarup Roy**, MTech.,Ph.D. (Tezpur Univ), PDF(UCCS, USA) Dr.Arnab Kumar Maji, MTech (IIEST, Shibpur), Ph.D. (Assam Univ)	Data mining, Computational Biology Image Security, E-Commerce
Assistant Professor	Sangita Neog, MTech (Tezpur Univ) Dr.Sufal Das, BTech (WBUT), MTech(Tezpur Univ), Ph.D. (NEHU)	Information Theoretic Security Big Data Analysis, Data Mining, Soft Computing, Automata Theory
	Subhas Chandra Sahana, MTech (Tezpur Univ) K. Amitab, ME (Punjab Engg. College) Amitabha Nath, MTech (Tezpur Univ)	Cryptography and Network Security Image processing, Soft computing Machine learning, image processing, data analytics

* On lien wef 01.08.2017 ** On lien wef 04.10.2017

Thrust Areas of Research

Internet of Things (IoT), Wireless Networking, Cryptography and Network Security, Artificial Intelligence, Image Processing, Big Data Analysis

Brief Statement of Academic Activities

The Department is offering the BTech (IT), MTech (IT) and Ph.D. programmes. During the year under report, 34 students completed their BTech degree and 13 students got their MTech degree and 03 students got Ph.D. degree. In addition to teaching and research programmes, the Department organized a faculty development program on "Security Issues and challenges of IoT" during September 10-14, 2018.

A Technoprenerurs Interaction meeting was organized on October 31, 2018. A seminar on

Innovation, Incubation and Entrepreneurship was organized on March 01, 2019.

Eleven students received the UGC-Non-Net Fellowship; two students were awarded the Visvesvaraya Fellowship; and four students received Rajiv Gandhi National Fellowship for SC/ST. Faculty members of the Department contributed twenty four papers published in international/national journals, and thirteen chapters/papers in edited volumes and proceedings.

Students' Profile

Enrolment Capacity: *BTech* – 60/6 (*Vertical/Lateral*); *MTech* – 18+2*; *Ph.D.* - *Variable*

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total
B.Tech	51	15	6	29	6	25	16	50	66
M.Tech	9	9	1	9	2	6	8	10	18
Ph.D.	5	2	1	2	0	4	3	4	7
Degrees Awarded									
Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non-Meghalaya	Total

Degree*	Male	Female	SC	51	ORC	GEN	Meghalaya	Non-Meghalaya	l otal
B.Tech	9	25	0	5	0	29	5	29	34
M.Tech	4	9	0	4	0	9	4	9	13
Ph.D.	3	0	0	0	0	3	0	3	3

Students Awarded Ph.D. Degree : 3 Placement of Students - 11 Research Fellowship

CSIR- UGC- NET	UGC Non-Net	Rajiv Gandhi SC/ST	ICPR Fellowship	Meritorious Malana Azad Minority Fellowship	Visvesvaraya Ph.D Scheme	Others
-	11	4	-	1	2	-

Courses Conducted Undergraduate: BTech

Semester I

Schrester 1		
Engineering	Mathematics-I;	Engineering
Chemistry;	Engineering	Mechanics;
Engineering	Physics, Basic	Electrical
Engineering;	Engineering	Physics
Laboratory; Er	igineering Graphic	cs.
Semester II		
Engineering	Mathematics-II;	Computer
Systems and	Programming; 1	Elements of
Environmental	Science; Basic	Electronics;
Professional	Communication	n Skills;

Computer Programming Laboratory; Digital English Language Laboratory.

Semester III

Digital Electronics; Data Structures and Algorithms; Discrete Mathematics; Computer Graphics and Multimedia; Data Communication; Data Structure Laboratory; Computer Graphics and Multimedia Lab.

Semester IV

Statistics and Random Processes; Relational Data Base Management Systems; Formal Language and Automata Theory; Object Oriented Programming &Methodology: Computer Organization and Architecture; Data Base Management Systems Laboratory; **Object** Oriented

Programming using C++ Laboratory

Semester V

Management Information System; Microprocessor, Information Theory and Coding; Object Oriented Programming and Methodology; Algorithm Analysis and Design; Computer Networks; Microprocessor Laboratory; Object Oriented Programming Laboratory; Computer Networks Laboratory.

Semester VI

Operating System; Software Engineering; Relational Database Management System; Elective Compiler Design; I (Data Compression/ Mobile Computing); Elective II (Cryptography & Network Security/ Artificial Intelligence); Operating System Laboratory; Database Management System Laboratory; Compiler Design Laboratory; General Proficiency III.

Semester VII

Professional Ethics and IPR: System Administration; Web Technology; Elective III (Fuzzy Logic & Neural Networks); Elective IV (Pattern Recognition); System Administration Laboratory; Visual Programming Laboratory; Web Technology Laboratory; Minor Project.

Semester VIII

Major Project; General Proficiency-IV (Grand Viva).

Postgraduate: MTech

Semester I

Mathematical Foundations of Information Science; Theory of Computer Science; Computer Architecture and Operating System: Advanced Database System; Elective (Cryptography); Software System Laboratory.

Semester II

Algorithms and Complexity; Advanced Networks; Computer Elective I (Computational Intelligence); Elective II

(Image Processing/ Network Security); Elective III (Data mining and Data warehousing/ Pattern Recognition); Seminar on Advanced Topics; Internet Technology Lab.

Semester III

MTech Thesis; Elective IV (Advance Wireless Networks, Cryptography). Semester IV MTech Thesis

Ph.D. Courses

Research Methodology; Algorithm Analysis and Design; Elective (Advanced Wireless Networks).

Seminars/Conferences/Workshops/Sympo sia/Extension Programmes

The Department organized a faculty development program on "SECURITY ISSUES AND CHALLENGES OF IOT" at department of I.T., during September 10-14, 2018. Dr. A. K. Maji was the Coordinator for the event.

Attended

Prof. G. Saha delivered an invited talk on "Controlling the effect of external perturbation on GRN using PIN controller approach" in the IEEE 5th International Conference on Opto-Electronics and Applied Optics (OPTRONIX-2019) on March 20, 2019.

Prof. G. Saha delivered a series of lectures for Final year M.Sc. students in the Kalyani University on the topic "Some aspects of Bioprocess Engineering" during January 28-30, 2019.

Prof. G. Saha delivered a talk in the seminar on "Some Aspects of Bioinformatics and System Biology" at Dr. Sudhir Chandra Sur Degree Engineering College, Dum Dum, Kolkata on February 1, 2019.

Mrs. S. Neog and Mr. S.C. Sahana attended a Development Programme Faculty on "Security issues & challenges of Internet of Things" at NEHU during 10-14 September 2018.

Dr. Md. I. Hussain and Mr. S.C. Sahana attended an in-house Training programme on "NBA Accreditation Process" organized by NITTTR, Kolkata at NEHU during October 29 to November 02, 2018.

Dr. A.K. Maji presented a paper "Plain Text Encryption using Sudoku Cipher" in the 3rdInternational Conference on Soft Computing: Theories and Application, National Institute of Technology, Jalandhar during December 21-23 2018.

Dr. A.K. Maji acted as Session Chair for the track "Soft Computing and Machine Learning" in 2nd International Conference on Innovations in Electronics, Signal Processing and Communication (IESC 2019) on 01st March 2019.

Dr. S. Das attended a STTP on "Mathematics and Computation" at NITTTR Kolkata during January 2019

Publications

Research Papers

Published in India

Das, R.K., Khongbuh, W., Pohremon, F.H., Maji, A.K., Saha, G. (2019). Controller Placement and Selection Strategy for SDN. In: *Social Science Research Network*, p. 17-21, Elsevier.

Leki, C.T., Ahmed, N., Hussain, M. I. (2018). Comparison of AES and PRESENT Block Cipher for 6LoWPAN Based Internetof-Things. *International Journal of Computational Intelligence & IoT*, 1(2): 255-259.

Rahman, H., Hussain, M.I. (2018). LiO-IoT: A Light-weight Ontology to provide Semantic Interoperability in Internet of Things. *International Journal of Computational Intelligence & IoT*, 2(4): 571-575.

Warjri, S., Pakray, P., Lyngdoh, S., Maji, A.K. (2019). Khasi Language as dominant Part-Of-Speech(POS) ascendant in NLP. In: Social Science Research Network, p. 45-53, Elsevier.

Published Abroad

Khan, A., Saha, G., & Pal, R. K. (2019). Modified half-system based method for reverse engineering of gene regulatory networks. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*: https://doi.org/10.1109/TCBB.2019.2892450. Chowdhury, S., Datta, P., Pal, R. K., Saha, G. (2019). An efficient multiple fault detection technique in digital microfluidic biochips. *IETE Journal of Research*, 1-14.

Mandal, S., Saha, G., Pal, R. K. (2019). Reconstruction of gene regulatory networks using S-system with a genetic algorithm and flower pollination algorithm hybrid. *International Journal of Bio-Inspired Computation*, 13(3), 169-188.

Ahmed, N., De, D., Hussain, I. (2018). Internet of Things (IoT) for Smart Precision Agriculture and Farming in Rural Areas. IEEE Internet of Things Journal, 5(6): 4890-4899. (IF=9.51)

Ahmed, N., Rahman, H., Hussain, I. (2018). An IEEE 802.11 ah-based scalable network architecture for Internet of Things. Annals of Telecommunications, 73(7-8): 499-509. (IF=1.55)

Ahmed, N., Rahman, H., Hussain, M. I. (2018). A QoS-aware hybrid data aggregation scheme for Internet of Things. Annals of Telecommunications, 73(7-8): 475-486. (IF=1.55)

Medhi, K., Amitab, K., Kumar, V. D., Kandar, D. (2018). Noise Reduction in Synthetic Aperture Radar Images Using Convolutional Neural Network. Journal of Computational and Theoretical Nanoscience, 15(8): 2572-2576.

https://doi.org/10.1166/jctn.2018.7500

Dhilip K., V., Vinoth Kumar, V., Kandar, D. (2018). Data Transmission Between Dedicated Short Range Communication and WiMAX for Efficient Vehicular Communication. Journal of Computational Methods in Sciences and Engineering, 18(4): 2649-2654. doi:10.1166/jctn.2018.7515

Chyne, Phidahunlang, & Kandar, D. (2019). A Weighted Vehicular Clustering (WVC) for Leveraged Communication in VANETs, 11(1):1337-1346

Debnath, S., Bhuyan, B.(2019). Efficient and scalable outsourced data access control with user revocation in cloud: A comprehensive study, Multiagent and Grid Systems, Vol. 14(4):383-401 DOI: 10.3233/MGS-180297

Jana, S., Maji, A.K., & Pal, R.K. (2019). A Novel SPN based Video steganographic scheme using Sudoku puzzle for Secured data Hiding. *Innovations in Systems and Software Engineering*, 15(1): 65-73.

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Das, S., and Kalita, H.K. (2018). S3CALL: A Semi-Supervised Sentiment Classification Method for Large Web-Based Data.*Journal* of Computational and Theoretical Nanoscience 15.6-7 (2018): 2264-2268.

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Books/Book Chapters/Proceedings

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Communication and Sensor Networks (CCSN), pp. 1-7, New Town, Kolkata, India Lyngdoh, J., Hussain, M. I., Majaw, S., Kalita, H.K. (2018). An Intrusion Detection Method Using Artificial Immune System Approach. In: International Conference on Advanced Informatics for Computing Research, pp. 379-387, Springer, Singapore. Deb, Subhrajyoti, Upadhya, Rohit, and Applicability Bhuyan, B.(2018), of Lightweight Stream Cipher in Crowd Computing: A Detailed Survey and Analysis. Crowd-Assisted Networking In: and Computing, Al-Sakib Khan Pathan(ed.), CRCPress, Chapter 9, pp.219-246

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Nath, A., Mthethwa, F., Saha, G. (2019). Rainfall-runoff estimation using adaptive neuro-fuzzy inference system with particle swarm optimization technique. In: *Proceedings of International conference on chemistry and environmental sustainability* (ICCES-2019), MZU Aizawl, Mizoram. p. 105.

Nath, A., Mawlong, P., Saha, G., (2019). River body extraction using convolutional neural network. In: *Proceedings of International conference on recent trends in electronics and computer science* (ICRTECS-2019), NIT Silchar, Assam. p. 51.

Funds Received from Agencies including NEHU/UGC Research Projects

Ongoing **Title of Project** Pl/Co-Pl Funding Amount Agency (Rupees) Dr. Md. Iftekhar Hussain (PI) QoS Provisioning in Ministry of Rs. 16.61 Internet of Things Dr. Hemanta Kumar Kalita (Co-Electronics & Lakh (Total (IoT) PI) Information outlay: 82.4 Dr. Debashis De, MAKAUT(Cotechnology Lakh) (MeitY) PI)

Academic Collaborations

Prof. G. Saha has collaborated with Prof. Rajat Kumar Paul, Professor, University of Calcutta, Acharya Prafulla Chandra Shiksha Prangan, JD - 2, Sector – 3, Salt Lake, Kolkata – 106. They are supervising Three Ph.D. candidates with him as Joint supervisor.

Other Activities

Prof. G. Saha has appliedfor an Indian Patent Application No. TEMP/E-1/20918/2019-KOL. "Automated Vehicle Accident and Theft Prevention Device." Inventor: Goutam Saha. 2019

Mr. A. Nath acted as

a resource person and delivered a lecture on "Basics of Information theft and prevention mechanism" for UGC-HRDC 47th Orientation Programme (General), 18th February – 17th March, 2019. a resource person and delivered a lecture on "Web development – the easy way" for UGC-HRDC short term course on MOOCS, econtent development and open educational resources held on March 12, 2019.

Dr. S. Das acted as

a resource person and delivered a lecture on "Data Analysis with WEKA" for UGC-HRDC short term course on MOOCS, econtent development and open educational resources held on March 15, 2019.

DEPARTMENT OF NANOTECHNOLOGY

Head	: Dr. L. Robindro Singh (Teacher-in- charge)
Telephone	: 0364-2723903
E-mail	: robindro001@yahoo.co.in, officenanonehu@gmail.com

Faculty :2	2	
Designation	Name and Qualification	Specialization
Assistant	Dr. L. Robindro Singh, Ph.D.	Nanomaterials, CNT, Nanoceramics,
Professor		Nanomedicine
Assistant	Mr. D. Pyngrope, M.Tech	Nanomaterials, Nanoelectronics,
Professor		Nanocomposites, MEMS and NEMS

Thrust Areas of Research

Nanomaterials, Assembled Nanoparticles, Micro-Electro-Mechanical Systems (MEMS), Nano-Electro-Mechanical Systems (NEMS), Nanoceramics, Nanomedicine, Nanocomposites, Photonics and Carbon nanotube (CNT), Nanobiotechnology. **Brief Statement of Academic Activities**

The Department of Nanotechnology is offering the M.Tech. and Ph.D. programmes. The faculty members are actively involved in diverse areas of research in Nanoscience and Nanotechnology, viz., nanomaterials, nanophosphors, CNT, hybrid nanomaterials, MEMs, and drug delivery. The Department started M. Tech-III and IV semesters' projects to train students in different areas of research. The Department is also having collaborations with BARC, Manipur University, IIT Guwahati. **IGCAR** Kalpakam, and UGC-CSR, Indore. Many passed- out students could clear GATE examination and are currently pursuing their higher studies (Ph.D.) in reputed institutes like IIT, Guwahati and NITs. Mr. N. Ibomcha Singh the project RAs got Ph.D. admission to the University of Taiwan. The faculty invited members were to different conferences and symposia for delivering their research findings. Two Ph.D. students of the Department also received the National Fellowship for Higher Education (ST). One Ph.D. thesis in the declared I June 2018. Four students received the Merit-Cum-Means Scholarship Scheme for Professional and Technical Course CS, and two students were awarded the NEHU PG-Merit Scholarship.

Students' Profile

Enrolment Capacity: M. Tech (Nanotechnology) - 18, Ph.D.-Variable

Degree	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non- Meghalaya	Total
M.Tech. Sem-IV	9	3	1	2	-	9	-	12	12
MTech Sem-II	7	7	2	7	-	5	6	08	14

Degrees Awarded

Degree*	Male	Female	SC	ST	OBC	GEN	Meghalaya	Non- Meghalaya	Total
Ph.D.	01	00	00	00	00	01	00	01	01

Students Awarded Ph.D.Degree: 01 Research Fellowship: 03

Meritorious Malana National Others **Azad Minority Fellowship** CSIR-Rajiv UGC **ICPR** for Higher UGC-Gandhi Fellowship Non-Net Fellowship NET SC/ST Education (ST)-1 --2 _

Fieldwork/Educational Tour of Students :01

Teacher-in-Charge: Dr. L. R. Singh Places/Institutions Visited: IIT, Roorkee Duration of Tour: 5th to 20th Oct., 2018. Purpose of Tour: Lab Visit

Courses Conducted

Postgraduate: MTech (Nanotechnology) *Semester 1* Introduction to Nanomaterials and Nanotechnology

Numerical Methods

Quantum Mechanics for Nanostructured systems Advanced Nanostructured materials

Lithography and Nanofabrication

Nanophotonics Nanomatrials Laboratory *Semester II* Micro and Nanoelectronics

Polymer and Nanocomposite

Environmental Nanotechnology and Nanobiotechnology Carbon Nanostructures and Application

Nanotechnology for Energy Device MEMS and NEMS Micro and Nanoelectronics Laboratory

Semester III

Dissertation Phase I *Semester IV* Dissertation Phase II

Ph.D. Courses Work

Research Methodology; Optical Properties of Nanomaterials; Nanomedicine and Drug Delivery; Nanotechnology for Solar Photovoltaic.

Attended

Dr. L. Robindro Singh attended Training on NBA Acreditation organised by National Institute of Technical Teachers Training and Research, Kolkata from 29th Oct to 2nd Oct, 2018.

Dr. L. Robindro Singh presented an Invited Talk on Radioluminescence and optimization fo Mn²⁺ and Cu²⁺ in BaSO₄ nanoparticles for International Conference on Luminescence and Its Applications (ICLA-2019) during 7th to 10th January, 2019 organized by LSI and School of Physics and Astrophysics, PRS University, Raipur.

Organized Workshop

Department of Nanotechnology organized 3 days National Seminar Cum Workshop in Nanoscience and hands on Training on Sophisticated Instrument

Publication

Published Abroad

R. Hemam, L. Robindro Singh, S.D. Singh and R.N. Sharan, Preparation of CaB₄O₇ nanoparticles doped with different concentrations Tb³⁺ of Photoluminescence and : /optically stimulated thermoluminescence luminescence study J. Luminescence, 197 (2018) 399-405.

https://doi.org/10.1016/j.jlumin.2018.01.062. ISSN: 022-2313.

Ranjoy Wangkhem, N. Shanta Singh, N. Premananda Singh, S. Dorendrajit Singh, L. Robindro Singh, Facile synthesis of redispersible YVO4: Ln^{3+} ($Ln^{3+} = Dy^{3+}$, Eu^{3+} , Sm^{3+}) nanocrystals: Luminescence studies and sensing of Cu²⁺ ions, Journal of Luminescence 203 (2018) 341–348. doi.org/10.1016/j.jlumin.2018.06.064. ISSN: 022-2313.

Pallabi Gogoi, L. Robindro Singh and D. Pamu, Low temperature synthesis and characterization of nanocrystalline $Mg(Zr_{0.05}Ti_{0.95})O_3$ ceramics. Journal of American Ceramic Society,101 (2018) 1–11. DOI: 10.1111 /jace. 15864. ISSN:1551-2916.

D. Pyngrope, L.R. Singh, A.I. Prasad, and A. Bora, Synthesis, Characterization and Comparative Luminescence Studies of Rare-Earth-Doped Gd₂O₃ Nanoparticles, Journal of Materials Engineering and Performance,27(6) (2018) 2754-2758. doi.org/10.1007/s11665-018-3367-x. SSN: 1059-9495. Amresh I. Prasad, L.Robindro Singh, Rashmi Joshi and R.S. Ningthoujam, Luminescence study of crystalline phase of $Y_2Si_2O_7$ from mesoporous silica and Y_2O_3 :Ln³⁺ at 900°C, AIP Advances

Funds Received from Agencies including NEHU/UGC

SSN: 1059-9495. IF: 1.653

8(2018) 105310-19 doi.org/10.1063/1.5037184

Title of Project	Pl/Co-Pl	Funding Agency	Rupees in lakh
Production of new non-toxic	L.R. Singh	DST	6.30
photoluminescentnano-materials and their			
application in energy and forensic fields			
Preparation of procesable oxide nanoparticles	L.R. Singh	UGC-DAE	10.08
doped with lanthanide ions and their	_		
luminescence study			
"Plant encapsulated nanosystem: An alternative	Dr. L. R. Singh	DBT, ND	76.63
to antimicrobial growth promoter in poultry	_		
health in North-Eastern India"			

Academic Collaborations

Research Projects Ongoing: 2

The Department collaborated with: (i)UGC-CSR, Indore, on Preparation and Luminescence Behaviour of Lanthanide Doped Oxide *Phosphors*,(ii) IGCAR, Kalpakam,on *Characterization* and Investigation of Luminescence Properties of Zn^{2+} and Sulphate Based-Nano-Phosphors Doped with Lanthanide and Metal Ions for Feasibility on Luminescence Dosimetry

Application, (iii) BARC on Preparation, Characterization and Luminescence Study of $Li_{2}B_{4}O_{7}$ Nanoparticles Doped with Metal and Lanthanide Ions for Feasibility of Their Application in Radiation Dosimetry (RPD Section) and in Chemistry Division Nano-Delivery Drug by Mesoporous Nanoparticles, and (iv) Manipur University on Preparation. Characterization and Luminescence Study of $Li_2B_4O_7$

Nanoparticles Doped with Metal and Lanthanide Ions for Feasibility of Their Application in Radiation Dosimetry.

Foreign Collaboration

Under the international collaboration Indo-Egypt with Dr. Mona MostafaSaif, Ain Shams University Egypt conducted a collaborative project on *Production of new non-toxic photoluminescentnano-materials and their application in energy and forensic fields*funded by DST New Delhi and Science and Technology Egypt.

ADMINISTRATIVE DEPARTMENTS

IX

COLLEGE DEVELOPMENT COUNCIL

In-charge	: Dr. C. R. Diengdoh
Telephone	: 0364-2721201/1202/1203/1204 (O)
E-mail	: dircdc@nehu.ac.in, cdcnehu@gmail.com

The College Development Council is an intermediary between the University and the affiliated colleges under its jurisdiction. It is the principal Advisory Body to the Executive Council and theAcademic Council of the University in all matters relating to affiliation. It is constituted every two years and has representatives comprising university officials, faculty members, principals and teachers of affiliated colleges, and a representative of the Government of Meghalaya. Itplans for the integrated development of the affiliated colleges by extending help, guidance and advice. Serving as an academic guide to the college system, it ensures availability and use of facilities in the University departments to the teachers of affiliated colleges. It provides a forum for taking necessary steps on various aspects of education with a view to promoting coordinationand improving the general educational standards in the affiliated colleges of the University.

In accordance with the Section 2(f) and 12(B) of UGC Act, 1956, the Council is also a liaison between UGC/MHRD and affiliated colleges in carrying out all procedural formalities regarding proposals for obtaining funds under the different schemes for the overall development of the Colleges.

The University has 70 (seventy) affiliated colleges, of which 33 are permanently affiliated and 37 are provisionally affiliated.

Some of the official transactions of the College Development Council are as follows:

Processing of applications of affiliated colleges for grant of affiliation.

Constitution of Inspection Teams for inspecting the colleges.

Convening of Affiliation Committee.

Placing of recommendations of Affiliation Committee as agenda to AcademicCouncil/Executive Council for consideration and approval.

Appointing Subject Experts/Vice Chancellor's Nominees as members ofSelection/Screening Committees for appointing/placement of Assistant Professors inaffiliated Colleges as per University/UGC norms.

Nominating NEHU representatives from among the Academicians, to represent theUniversity on the Governing Bodies/Advisory Committees of the affiliated colleges.

Circulation of information/guidelines/regulations of NEHU, UGC, MHRD and otheragencies to affiliated colleges.

Forwarding of proposals submitted by the colleges to the UGC for funding purposesunder its various schemes.

Legal matters of affiliated colleges.

General/Miscellaneous correspondences with Affiliated

Colleges/StateGovernment/University Academicians/University

Administration/UGC, New Delhi andGuwahati/MHRD, New Delhi.

List of Colleges Visited by Various Inspection Teams during 2018-19 for

Affiliation of UG and PG Courses

Jaintia Eastern College, Khliehriat, East Jaintia Hills

Lady Keane College, Shillong, East Khasi Hills

Woodland Institute of Nursing, Laitkor, Shillong,East Khasi Hills

Mendipathar College, Mendipathar, North Garo Hills

Shillong College, Shillong, East Khasi Hills

Umshyrpi College, Shillong,East Khasi Hills Morning Star College, Shillong,East Khasi

Hills

Nabon Women's Synod College, Shillong,East Khasi Hills

Don Bosco College Of Teacher Education, Tura, West Garo Hills

Shangpung College, Nongrim, Shangpung, P/o Jowai, West Jaintia Hills

North Eastern Institute of Ayurveda & Homoeopathy (NEIAH), Mawdiang diang Shillong,East Khasi Hills

Ri Bhoi College, Nongpoh, Ri Bhoi Dist

Tura Law College, New Tura, West Garo Hills

Nongrum College, Zekabari, West Garo Hills Tirot Sing Memorial College, Mairang, West Khasi Hills

Shillong Law College, Shillong,East Khasi Hills

Women's College, Shillong,East Khasi Hills Nongstoin College, Nongstoin, West Khasi Hills

NEIGRIHMS, Mawdiang diang, Shillong,East Khasi Hills

St.Edmund's College, Shillong,East Khasi Hills

St.Anthony's College, Shillong,East Khasi Hills

Synod College, Shillong, East Khasi Hills

Lyngngam Presbyterian College, Mawthengkut, P.O. Riangdo, West Khasi Hills

B.B.S. College, Shillong, East Khasi Hills

Sankardev College, Shillong,East Khasi Hills Raid Laban College, Shillong,East Khasi Hills

Khadar Daloi Law College, Jowai, West Jaintia Hills

Bissau College, Shillong, East Khasi Hills

Mawsynram Border Area College, Mawsynram, East Khasi Hills

Sankardev College, Shillong,East Khasi Hills North East Adventist College, Thadlaskein, West Jaintia Hills

Nongtalang College, Nongtalang, West Jaintia Hills

Tura Government College, Tura, West Garo Hills

NEIGRIHMS College of Nursing, Mawdiang diang, Shillong,East Khasi Hills

Actions taken on Affiliation Matters, etc. during 2018-19

Permission to Open New College: One College

Provisional Affiliation of New College: One College

Provisional Affiliation to New Subject(s)/Course(s) of study in an Affiliated College/Institution: Five Colleges

Renewal of Provisional Affiliation : Twenty Colleges

Permanent Affiliation of Subject(s)/Course(s) of study in permanently affiliated colleges: Seven Colleges

Permission to start P.G Department in an existing College/ Institution: Three Colleges

Permission or Provisional Affiliation to start PG Department in an existing College/Institution: One College

Renewal of Provisional Affiliation to PG Course: Three Colleges NAAC Assessment and Accreditation of colleges during 2018-2019

Two Colleges were assessed and accredited by NAAC, Bangalore:

Thomas Jones Synod College, Jowai, West Jaintia Hills with **Grade 'B'**

Mendipathar College, Mendipathar, North Garo Hills with **Grade 'C'**

Other Activities

In the year under report, the CDC was instrumental:

In recommending/approving Nodal Officers of affiliated colleges for uploading data of the affiliated colleges for All India Survey on Higher Education (AISHE) carried out by the Department of Higher Education, MHRD, New Delhi.

As Nodal Office in collecting and uploading data of the University on AISHE Portal as required by Department of Higher Education, MHRD, New Delhi, for the year 2018-19.The data base on higher learning was successfully uploaded for the University on the AISHE portal for the year 2018-19.

In coordinating matters related to cocurricular activities i.e. sports with the affiliated colleges under NEHU. As Nodal Office in coordinating the UGC Expert Committee's visits to 11 (eleven) affiliated colleges located in East Khasi Hills, West Khasi Hills, West Jaintia Hills, West Garo Hills and North Garo Hills Districts of Meghalaya, for on-the- spot evaluation of ongoing projects forScheme of Development of Sports Infrastructure and Equipments in Colleges under the jurisdiction of UGC, North Eastern Regional Office (NERO), Guwahati.

In coordinating matters concerning the establishment of Deen Dayal Upadhaya Community College/Deen Dayal Upadhaya Kaushal Vikash Kendra (Skill Development) and B.Voc at Wahiajer, West Jaintia Hills District, Meghalaya under NEHU.

In contributing to matters relating to University Plan with the MHRD/UGC.

In convening of meetings of the Working Committee constituted by the University on the task of revamping relevant issues pertaining to the UG level Semester System introduced by the University in its Affiliated Colleges from the academic session 2015-16.

EXAMINATION DEPARTMENT

Controller of Examinations Telephone Email : Debasish Chowdhury : 0364 2721211 / 1212 : offcoe@nehu.ac.in

The Examination Department in any university setup is one of its key nodal centres. Its routine activities include a host of exercises it needs to perform throughout the year and the Examination Department of North-Eastern Hill University too did try its level best working round the year to ensure that it delivers its mandated services as best as it could.

During the period under report, the department conducted the routine end semester examinations both at the university departments and at the affiliated colleges and ensured, to the extent feasible, fast processing of the results for the benefit of the concerned students. It makes one happy to report that during the year, the university could bring out almost all Post graduate final semester examination results within a period of about ten days counting from the day when the last of such an examinations was held in a PG department and, this indeed, was a record performance.

During the Academic Year under review, the Examination Department was, by and large, successful in effectively declaring all its Under Graduate end semester examination results within the stipulated timeframe which, in turn, facilitated aspiring students to join in Post Graduate Programmes for pursuing their higher studies either at this university or elsewhere in the country/abroad.

During the year under review, the Department conducted and successfully brought out in time the results of the last edition of the Annual Examination System that now stands fully phased out post switching over to the Semester System of Examinations.

In pursuance of the Government of India's "Digital India" initiative, the Department strived hard to improvise further its automation initiatives. Accordingly, the online filing of examination application forms, registration forms introduced the previous year have further been streamlined thereby facilitating hassle free and timely Registration issuance of Cards and examination Hall Tickets. Plan are also afoot to ensure that the system of downloadable auto-generated Hall Tickets are made operative at students end in near future to all active students enrolled in the various affiliated colleges under the belt of the university.

The University Management System (UMS) which is the University's exclusive ERP system automation solution was effectively deployed to ensure that processing of results of all university departments are handled smoothly and uploading of IA marks/ end semester examination marks of concerned students by the respective faculty in charge are carried out in an error free and speedy facilitating manner thereby timely declaration of results. By incorporating in the examination module of the software features these, the processing such as and computation of the end semester results could successfully be minimised bringing down the timeline for publication of end semester results in a significant manner.

The examination department is closely working along with the Computer Centre to ensure that facilities such as online availability of the academic credentials of students through the National Academic Depository (NAD) portal are put in place to enable them use the features available in the portal to the best of their advantage.

During the year under review, the University successfully conducted various examinations of professional degree programmes offered at its own campus as also in the various affiliated institutes and brought out their results in time. Accordingly, the University examinations conducted of various Engineering, Medical and Medico related professional programmes at the North Eastern Institute of Ayurveda & Homeopathy (NEIAH), The North East Indira Gandhi Institute of Medical and Health Sciences (NEIGRIMHS), the Wood land Nursing Institute, the Regional Institute of Technology(RIST) besides its own Engineering programmes run at its campus in the School of Technology.

The Department, despite some teething issues, has by now integrated its receipt payment processes in Public Finance Management System (PFMS) thereby facilitating cashless transactions towards payment of TA bills/ examination remuneration bills etc., to the concerned teachers. Examination Fee payable by the students are also being collected in online mode either through RTGS / NEFT or through SBI Collect.

As a part of research activities and in adherence to the UGC guidelines in such matter, the University departments, in coordination Examination with the Department conduct coursework examinations for the enrolled M. Phil and PhD Scholars, the results of which have been brought out within the stipulated timeframe.

The Examination Department receives scores of requests from external agencies for verification and authentication of certificates / documents issued by this University for the purpose of employment. The Department has taken all feasible measures to ensure that such requests are responded to and disposed of as expeditiously as possible by according them the priority they demand and deserve.

The examination department as part of its regular workload did engage in preparing various data sheets as and when required for their onward submission to the concerned authorities such as the UGC, the MHRD and such other government or statutory bodies.

The department responded to scores of RTI queries by individuals or various government or non-government agencies as the case may be with all the promptness it has in its command.

The department remained engaged round the year in the preparation, sorting and sending of examination related materials to all concerned and by and large, was able to stick to the relevant schedules for each such job.

During the year under review, the Examination department took proactive steps to streamline the academic calendar at the undergraduate level with a view to ensure improved teaching-learning time and ambiance at colleges without curtailing the permissible vacation time in any manner.

During the year under review, the Examination department played a key role in organizing the XXVth Convocation of the university wherein two batches of Graduates and Post Graduate students besides hundred plus Ph.D. and M. Phil Scholars collected their Award certificates in person.

In the year under report, the Examination Department took the initiative of preparing a comprehensive status report detailing its work structure, strengths, weaknesses, opportunities and threats and after a thread bare discussion on it in the Examination Consultative Committee (ECC) presented the same to the Vice-Chancellor for his appraisal and needful guidance on the issues raised therein. The examination department during the year under report had tried to have, to the extent feasible, an open door policy to its stakeholders to sort out various issues that arose from time to time and, in its bid to do so, had organized several meetings with various stakeholders that included the students, the teachers and the Principals of various colleges and institutes.

The year under review was hectic as usual for the Examination Department. It, however, makes the people currently deployed here somewhat happy that it could attend to most of its call in a reasonable manner. Scope for improvements in a system that needs to attend to so many diverse and even divergent calls obviously are ample. We, at the examination department, sincerely hope that in the coming year the department, with the cooperation and needful guidance of all, would be able to show further improvements in delivering the good it is mandated to deliver.

FINANCE DEPARTMENT

Finance Officer: Shri. L.M. K. LyngrahTelephone: 0364 2721021(O)Email: fo@nehu.ac.inAccountsofPayments for the Period Ending 31.03.2019

RECEIPTS	CURRENT YEAR 2018-19	PREVIOUS YEAR 2017- 18	PAYMENTS	CURRENT YEAR 2018-19	PREVIOUS YEAR 2017-18
I. Opening					
Balances			I. Expenses		
			a) Establishment	195566983	
a) Cash balances	121150		Expenses	7	935112802
			b)Academic		
b) Bank balances			Expenses	98595251	119189768
i) In current			c) Administrative		
accounts	695679149	441499658	Expenses	125164539	109226940
ii) In Deposit					
accounts(deduct					
bank balance					
closed/transferred					
herein as Receipts			d) Transportation		
& Income)			Expenses	14066677	15121365
			e) Repairs and		
iii) Savings	121667272		Maintenance		
accounts	9	727851903	Expenses	51786059	65461183
			f) Prior period		
c) Investments		351185601	expenses	291400	
			II. Payments		
			against		
			Earmarked/Endo		
II.Grants Received			wment Funds	27684546	17757695
a) From Govt. of	237843855				
India	2	2748971642			
b) From State					
Government					
c) From other					
sources	750340	1161074			
III. Academic			III. Payments		
Receipts			against		
			Sponsored		
	164096644	53173728	Project/Schemes	91435239	102850846
			IV. Payments		
			against		
IV.Receipts against			Sponsored		
Earmarked,Endow			Fellowships/		
ment Funds	46356084	45825107	Scholarships	16735610	18899624

V. Receipt against Sponsored			V. Investments		
Projects/Schemes	93462451	49882989	made		15127322
j			a) Out of		
			Earmarked/Endo		
			wment funds	140611000	
			b) Out of Own		
			Funds	527472000	
			c) Out of Corpus		
			Fund		
VI.Receipts against					
sponsored			VI. Term		
Fellowships and			Deposits with		
Scholarships	12744128	12093770	Scheduled Banks		
			VII.Expenditure		
			on Fixed Assets		
VII. Income on			and Capital Work		
Investments from			in Progress		
a)Earmarked/Endo					
wment funds	386777	2158760	a) Fixed Assets	123415876	11427642
b)Main account			b)Capital Works		
investments	439520		in Progress	14609231	66242680
			c)Statutory		
			remittances and		
			release of security		
			and caution		
			deposits	313770255	76784268
			VIII. Other		
			Payments		
			including		
VIII. Interest			Statutory	751075	740(07
received on			Payments	751875	742627
a)Bank deposits					
b)Loans &					
Advances					
c)Savings Bank	25609042	24245012			
accounts	35608042	24345912			
d)Corpus, Earmarked &					
Earmarked & Endowment Funds					
	0420220	11214022			
Account	9420238	11214923			

RECEIPTS	CURRENT YEAR 2018- 19	PREVIOUS YEAR 2017-18	PAYMENTS	CURRENT YEAR 2018- 19	PREVIOU S YEAR 2017-18
IX.Investment			IX. Refund of		
encashed	115881000	21558316	grants	1220234	691170
X.Term Deposits			X. Deposits		13828504
with Scheduled			&Advances/Inter	55593967	6

Unidentified Receipts in Capital Account XIX. Income Tax Refund for AY 2016-17	<u>65215598</u> 69320	475088734			47508873
Unidentified Receipts in Capital Account XIX. Income Tax Refund for AY					
Unidentified Receipts in Capital Account XIX. Income Tax	65215598				
Unidentified Receipts in Capital Account	65215598				
Unidentified Receipts in	65215598				
Unidentified					
1					
Locale Chedules and L					
Stale Cheques and					
Adjustment of					1
XVIII.	4/9038				
XVII. Cheques to be Reissued	479038				
	19296869	131021077			
XVI. Receipts yet to be Identified	10206960	121021077			
Corpus Account	140351	173931			
Miscellaneous in	140251	172021			
XV.					
			c) Investments		1
					35118560
			Accounts	1235524414	29
			ii) In Savings		12166727
			Accounts	179346701	9
			i) In Current		69567914
			b)Bank balances		
			a)Cash in Hand	31538	121150
recovery	270000		balances	01.500	101150
Receipts/Loan	0.0000		XIV. Closing		
XIV. Any other					
etc	70108052	85726733	Corpus Account	15177	36302
Earnest Deposits			Adjustments in		
Security, Caution,			XIII.		
dues including					
XIII. Statutory					
bearing advances	26175692	22345751	Campus		364239
Advances/Interest			Account of Tura		
XII. Deposits and			in Capital		
			XII. Adjustments		
Income)	21979703	20696471	Payments		
Prior Period			XI. Other		
income(including					
XI.Other			advances		
Banks encashed			est bearing advances		

PLANNING DEPARTMENT

Assistant Registrar Telephone Email

: Georgina Umdor : 0364 2721087(O) : gumdor@nehu.ac.in

The North-Eastern Hill University established the Planning Department in 1978 with the objective of designing and implementing the vision plan for expansion and development of the University in different fields.

It is the central unit for overall formulation of various development projects based on budgetary provisions of the University, along with the plan proposals of different Schools, Departments, Centers etc, and finalize the proposals on recommendations made by the Planning Committee of the University.

The Plan Proposal of the University for the year 2018-19 was submitted to University Grants Commission, New Delhi, amounting to Rs. 20,287.41 (Rupees in Lakhs) only.

The details of Grants/Subsidies received during the year 2018-19 is as enumerated and enclosed at **ANNEXTURE 'A'**

SCHEDULE 3(c): UNUTILIZED GRANTS FROM UC STATE GOVERNMENTS	GC, GOVERNMENT OF IN	DIA &
<u>STATE GOVERNMENTS</u>		Amount in Rupees
PARTICULARS	PARTICULARS CURRENT YEAR 2018-19	
A. UGC (PLA	N)	
Balance B/F	375337423	581771205
Add: Receipts during the year		
Total (a)	375337423	581771205
Less: Refunds		
Less: Utilized for Revenue Expenditure	17391753	48969891
Less: Utilized for Capital Expenditure	58309473	157463891
Total (b)	75701226	206433782
Unutilized Carried Forward (a-b)	299636197	375337423
B. UGC PLAN:CHAIR FOR 1	RIBAL STUDIES	
Balance B/F	2500000	2500000
Add: Receipts during the year		
Total (c)	2500000	2500000
Less: Refunds		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital Expenditure		
Total (d)	0	0

Unutilized Carried Forward (c-d)	2500000	2500000
C. UGC PLAN: COLLABORATION BETWEEN QUEENS	UNIVERSITY AND N.	E.REGION
Balance B/F	83909564	83909564
Add: Receipts during the year		
Total (e)	83909564	83909564
Less: Refunds		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital Expenditure		
Total (f)	0	0
Unutilized Carried Forward (e-f)	83909564	83909564
Notes:-		
-Unutilized grants includes advances on Capital Account		
-Unutilized grants include grants received in advance for the	next year	

-Unutilized grants are represented on the Assets side by Bank balances, Short term Deposits with Banks and advances on Capital Account

		Amount in Rupees			
PARTICULARS	CURRENT YEAR 2018-19	PREVIOUS YEAR 2017-18			
D. MINISTRY OFSPORTS & YOUTH AFFAIRS	FOR SAF GAMES (PL	LAN)			
Balance B/F	1214292	2100000			
Add: Receipts during the year					
Total (g)	1214292	2100000			
Less: Refunds					
Less: Utilized for Revenue Expenditure		885708			
Less: Utilized for Capital Expenditure					
Total (h)	0	885708			
Unutilized Carried Forward (g-h)	1214292	1214292			
E. UGC (NON PLAN)		I			
Balance B/F	0	0			
Add: Receipts during the year	727455360	2606047842			
Total (i)	727455360	2606047842			
Less: Refunds					
Less: Utilized for Revenue Expenditure	693645342	2570401990			
Less: Utilized for Capital Expenditure	33810018	35645852			
Total (j)	724755360	2606047842			
Unutilized Carried Forward (i-j)	0	0			
F. MINISTRY OF SOCIAL JUSTICE SCHEME FOR CH DISABLED	F. MINISTRY OF SOCIAL JUSTICE SCHEME FOR CREATION OF FACILITIES FOR DISABLED				
F. MINISTRY OF SOCIAL JUSTICE SCHEME FOR	7365300	11536358			

CREATION OF FACILITIES FOR DISABLED		
Add: Receipts during the year	206530	31342
Total (k)	7571830	11567700
Less: Refunds		
Less: Utilized for Revenue Expenditure		122400
Less: Utilized for Capital Expenditure	2663166	4080000
Total (l)	2663166	4202400
Unutilized Carried Forward (k-l)	4908664	7365300
Notes:-		
-Unutilized grants includes advances on Capital Account		
-Unutilized grants include grants received in advance for the next	year	

-Unutilized grants are represented on the Assets side by Bank balances, Short term Deposits with Banks and advances on Capital Account

		Amount in Rupees			
	CURRENT	PREVIOUS			
PARTICULARS	YEAR 2018-19	YEAR 2017-18			
G. MINISTRY OF WOMEN & CHILD DEVELOPMI	OMEN HOSTEL)				
Balance B/F	3777733	3667359			
Add: Receipts during the year	133967	136052			
Total (m)	3911700	3803411			
Less: Refunds					
Less: Utilized for Revenue Expenditure		25678			
Less: Utilized for Capital Expenditure					
Total (n)	0	25678			
Unutilized Carried Forward (m-n)	3911700	3777733			
H. OTHER SPECIAL ASSISTANCE SCHEMES AND SPONSORED PROGRAMMES					
Balance B/F	10269823	-7990405			
Add: Receipts during the year	44574545	62113923			
Total (o)	54844368	54123518			
Less: Refunds	1220234				
Less: Utilized for Revenue Expenditure	29161645	30846622			
Less: Utilized for Capital Expenditure	9272665	13007073			
Total (p)	39654544	43853695			
Unutilized Carried Forward (o-p)	15189824	10269823			
I. SALARY GRAM	NT				
Balance B/F	0				
Add: Receipts during the year	904618727				
Total (q)	904618727	0			
Less: Refunds					
Less: Utilized for Revenue Expenditure	755206039				
Less: Utilized for Capital Expenditure					
Total (r)	755206039	0			

Unutilized Carried Forward (q-r)	149412688	0
Notes:-		
-Unutilized grants includes advances on Capital		
Account		
-Unutilized grants include grants received in advance for	r the next year	

-Unutilized grants are represented on the Assets side by Bank balances, Short term Deposits with Banks and advances on Capital Account

PARTICULARS	CURRENT YEAR 2018-19	Amount in Rupees PREVIOUS YEAR 2017- 18
J. RECURRING GRAN		
Balance B/F	<u> </u>	
Add: Receipts during the year	581531757	
Total (s) Less: Refunds	581531757	0
Less: Utilized for Revenue Expenditure	518414500	
Less: Utilized for Capital Expenditure	510414500	
Total (t)	518414500	0
Unutilized Carried Forward (s-t)	63117257	0
		0
K. CAPITAL GRANT		
Balance B/F	0	
Add: Receipts during the year	50237990	
Total (u) Less: Refunds	50237990	0
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital Expenditure	42588249	
	42588249	0
Total (v) Unutilized Carried Forward (u-v)	7649741	0
		*
Grand Total (A+B+C+D+E+F+G+H+I+J+K)	631449927	484374135
Notes:-		
-Unutilized grants includes advances on Capital Account		
-Unutilized grants include grants received in advance for th	e next year	
-Unutilized grants are represented on the Assets side by Bar Banks and advances on Capital Account		Deposits with

CENTRAL SERVICES BIOINFORMATICS CENTRE

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Co-Coordinator

: Dr. Devendra K. Biswal

2. Thrust Area of Research: Biodiversity Informatics

3. **Publications**:

*Devendra Kumar Biswal, Tanmoy Roychowdhury, Priyatama Pandey, Veena Tandon. De novo genome and transcriptome analyses provide insights into the biology of the trematode human parasite Fasciolopsis buski **One.** 2018: PLoS 13(10): e0205570. Published online 2018 Oct 16. doi: 10.1371/journal.pone.0205570 PMCID: PMC6191129

*[#]Biswal DK, Yanthan S, Konhar R, Debnath M and Tandon P. Phylogeny and Biogeography of Carnivorous Plant Family Nepenthaceae with reference to the Indian pitcher plant Nepenthes khasiana reveals an Indian subcontinent origin of Nepenthes colonization in South east Asia during the Miocene epoch. Front. Ecol. Evol. | doi: 10.3389/fevo.2018.00108 (2018).

Konhar R, Debnath M, Bhattacharjee A, Sunar D, Tandon P, [#]Biswal Dk. The Complete Chloroplast Genome of Dendrsobium nobile. an endangered medicinal orchid from Northeast India and its comparison with related chloroplast Dendrobium genomes of species. bioRxiv 316778; doi: https://doi.org/10.11 01/316778 (Accepted in PeerJ) (2018). *[#]Biswal DK, Yanthan S, Konhar R et al. Phylogeny and biogeography of the carnivorous plant family Droseraceae with representative Drosera species India.

fromNortheast I *F1000Research* (2017), 6:1454

(doi: 10.12688/f1000research.12049.1)

**Biswal D, Konhar R, Debnath M, Parameswaran S, Sundar D, Tandon P. Chloroplast Genome Sequence Annotation of <i>Dendrobium nobile</i> (Asparagales: Orchidaceae), an Endangered Medicinal Orchid from Northeast India. PLoS Currents. 2017 May 19;9. PubMed PMID: 28736679.

Research Projects: Ongoing Research Project(s)

Title of Project	Pl	Funding	Amount
		Agency	(Rs)
1. Understanding the biosystematics and	Dr. Devendra	DBT, GOI	Rs. 117.00
biodiversity of few selected carnivorous	K Biswal		Lakhs
plants in Meghalaya: A next generation			
genomics and proteomics approach IN			
COLLABORATION WITH CSIR-IGIB			
under DBT-NER Twinning program.			
Project Outlay: Rs. 117 lakhs			

Research Project(s) completed during Year

Title of Project	Pl	Funding Agency	Amount
NER Twinning project	Dr. Devendra K	DBT, GOI	Project Outlay:
on Next Generation	Biswal		186 lakhs
Sequencing (NGS)-			
based de novo			
assembly of			
expressed transcripts			
and genome			
information of			
Orchids in North-			
East India in			
collaboration with IIT ,			
Delhi 2014;			

4. Seminar/Conference/Symposium/E xtension Programme etc.

Organized:

"Skill Development in Molecular Strategies for Understanding Biodiversity and Human Diseases" February 28-March 02, 2019 in the DBT NER Twinning program with IGIB, Delhi (Dr. Devendra Biswal: Program Coordinator)

DBT-BTISnet sponsored Interactive NGS Data Analysis November 15-17, 2018 Attended:

Dr. Devendra Biswal presented a peer reviewed scientific paper in the 17thINCOB 2018 26-28 September, 2018 organized by JNU, IIT Madras and APBIONET

Dr. Devendra Biswal presented a Poster in a 2-day long One Health India Conference, 2019 jointly organized by Department of Biotechnology (DBT), Ministry of Science and Technology in partnership with the Departments of Agriculture Research and Education (DARE) and Animal Husbandry, Dairying & Fisheries (DAHDF), Ministry of Agriculture & Farmers' Welfare; the Departments of Health Research (DHR) and Health & Family Welfare (DHFW), Ministry of Health & Family Welfare, February 18-19, 2019

5. Academic Collaborations

Program Coordinator: Dr. Devendra K Biswal, NEHU, Shillong Collaborators: Prof. S. R. rao, NEHU; Dr. Debasis Dash, IGIB; Dr. Shantanu Sengupta, IGIB, Delhi Title: Understanding the biosystematics and biodiversity of few selected carnivorous plants in Meghalaya: A next generation genomics and proteomics approach

6. Other Activities

Member, International Society For Computational Biology Member, BIOCLUES, an affiliate of ISCB Member, NIRF, NEHU Member, Incubation Centre, NEHU

Talks	in	refresh	er C	ourses	and
Nationa	a/Inte	rnational	l		Level
Progra	ms/co	nference	s/Semina	ars/Exp	oert
Talks e	tc.				
Invited	in h	ouse lec	ture on	Evolu	tionary

Invited in house lecture on Evolutionary Bioinformatics in the PG department of Bioinformatics, Odisha University of Agriculture and Technology, Bhubaneswar in any convenient date from 2nd to 6th October, 2018

Invited Resource person lectures in the Refresher Course in Zoology (18th March-17th April, 2019) and delivered 4 lectures in HRDC, NEHU, Shillong, HRDC, (Formerly Academic Staff College)

Invited Resource person talk in the National level Bioinformatics Workshop at St. Edmunds College, Shillong during June 2019 Resource person Talk in the DBT-sponsored National level 3-day Basic Skill Development Training Program and Lecture series on ""Skill Development in Molecular Strategies for Understanding Biodiversity and Human Diseases" during Feb-March , 2019 National level Invited Expert Talk on Biodiversity Informatics in the DBT-National Bioinformatics Network Meet on 29 Aug 2018 at ICGEB, New Delhi

Invited talk during the Project Inception meeting of the DBT sponsored multiinstitutional Collaborative project "Bio resources and Sustainable Livelihoods in North East India" May 04, 2018. National level

Invited talk in the DBTs-sponsored Workshop on NGS Sequencing: an overview at Biotech Park, Lucknow during March 27-29, 2019

Resource person in the DBT-sponsored National level workshop on INTERACTIVE NGS DATA ANALYSIS NOVEMBER 15-17, 2018

BIOINFORMATICS CENTRE(TURA CAMPUS)

oordinator : Dr. B. K. Mishra						
Contact number	:	9436306	259			
Website	:	https://ne	ehu.ac.in/department/22/nehu.ac.in/	/RDAPtura/BIF%20Tura/home.html		
Email	:	birendra	birendramishra14@gmail.com, bif.rdapnehutura@gmail.com			
Office Staff: 3						
Name of the Staff		f	Designation	Working Since		
Dr. B. K. Mishra			Coordinator	27 th September, 2010		
Dr. B. Mathew			Co-Coordinator	4 th December, 2013		
DBT sponsored Posts on Contract basis						
Dr. Suman Kumar Nandy		ar	Research Associate	28 th November, 2016		

BACKGROUND

The Bioinformatics Infrastructure Facility (BIF) of NEHU, Tura campus was established in 2008 in the able leadership of the Pro-Vice-Chancellor, North-Eastern Hill University, Tura campus. The centre has successfully completed a decade long journey of providing a solitary bioinformatics platform to all the biological and computational science departments in Garo Hills, Meghalaya. The centre is frequently used by faculty members, scholars, M. Sc. students and project fellows for both research and training purpose. The centre is dedicated in generation of skilled human resource and popularization of bioinformatics bv organizing short term training & outreach programs as well long term courses with DBT Studentship and Traineeship on regular basis. The centre is also fulfilling the need of well equipped and advanced computer laboratory facility for the post graduate and doctoral students of Department of Rural Development and Agricultural Production (RDAP). Further the centre has lent its hand in conducting the theory and practical classes and examinations for two papers of Semester 1 & 3 in RDAP PG courses. In addition to providing training and teaching facilities the centre is also engaged in independent and collaborative research in the frontiers areas of biomedical science, structural bioinformatics and characterization of probiotics isolated from the fermented foods of Meghalaya.

Thrust Area Of Research

In silico characterization of probiotic organisms isolated from fermented foods of north-east India; Structural Bioinformatics mainly focusing Macromolecular interaction, Receptor – Ligand interaction studies, Molecular modelling and Simulation; Establishment of Next-Generation Sequencing Data Analysis Platform.

Academic Activities Training Programs

National Short Term Training Program on "Bioinformatics - Computation in Wet Lab" was organized during February 25 – March 02, 2019 at Bioinformatics Centre (BIF), North-Eastern Hill University, Tura Campus. MULTIPLE (3) One Day Workshop on "Maximal Usage of Foldscope to Explore Miniatures in the World" was organized in collaboration with Bioinformatics Centre (BIF), NEHU, Tura Campus at NEHU, Tura Campus; Don Bosco College, Tura and College of Community Science, Central Agricultural University, Tura, Meghalaya on September 10, 11 and November 26, 2018 respectively.

Outreach Program

MULTIPLE (4) One Day Outreach Program on "Role of Bioinformatics in Understanding Biology" held at Bioinformatics Centre (BIF), North-Eastern Hill University, Tura Campus on March 12, 13, 15, & 26, 2019 for the post-graduate and under graduate students

Teaching Program

The full course of 'Computer Applications (RDA-106)' and part of 'Basic Statistics & software Application (RDA-301)' in postgraduate RDAP curriculum was conducted by Bioinformatics centre.

DBT Traineeship & Studentship

Two students have been completed their sixmonth training on Bioinformatics.

Research Activities

In silico studies of receptor mediated viral endocytosis

Differential approaches of lysosomotropic agents in inducing cell death

Impact of single amino acid variations in Protein-Protein Interaction and in onset of disease phenotypes

Prediction of Cancer Subtypes from miRNA datasets using semi-supervised machine Learning techniques

Differential gene expression studies of probiotic microorganisms isolated from traditional fermented foods of North-East India

Functional Genomics studies of Indian Wild Orange

Seminars/Conferences/Symposia/ Workshops

Nandy SK. 2019. Bioinformatics – The in silico molecular biology and beyond. In:Multiple One Day Training Program on "Role of Bioinformatics in Understanding Biology" held at Bioinformatics Centre (BIF), North-Eastern Hill University, Tura Campus on March 12, 13, 15, & 26, 2019.

Nandy SK. 2019. Biological Databases and Visualization of Biomolecules. In: National Short Term Training Program on "Bioinformatics - Computation in Wet Lab" held during February 25 – March 02, 2019 at BIF, NEHU, Tura Campus

Nandy SK. 2019. Bioinformatics Tools for Sequence& Phylogenetic Analysis. In: National Short Term Training Program on "Bioinformatics - Computation in Wet Lab" held during February 25 – March 02, 2019 at BIF, NEHU, Tura Campus

Nandy SK. 2018. Bioinformatics – Transforming Biology. In: Popular Lectures on Modern Technology in Biological Sciences on September 25, 2018 at Don Bosco College, Tura, Meghalaya

Publications

Shaikh S, Nandy SK, Canti C, Lavandero S. Bafilomycin-A1 and ML9 exert different lysosomal actions to induce cell death. Current molecular pharmacology. 2019; doi: 10.2174/1874467212666190308131250.

Bhattacharjee C, Nandy SK, Das P, Mukhopadhyay A. Differential interaction strategies of hepatitis c virus genotypes during entry–An in silico investigation of envelope glycoprotein E2-CD81 interaction. Infection, Genetics and Evolution. 2019; 69:48-60.

Shaikh S, Nandy SK, Cantí C, Lavandero S. Lysosomotropic bafilomycin-A1 and ML9 causes cell death without affecting the ROS and ATP level. Free Radical Biology and Medicine. 2018;120: S149.

Infrastructure Facilities

Hardware: Desktops – 12, IBM Server Medium end – 1, UPS – 12, UPS 1kVA APC – 02, Online UPS 3kVA, Internal Hard Disk 500GB, External Hard Disk 1TB, Canon iR 2002 photocopier cum printer, HP Laser jet with networking Printer, HP Desk Jet Printer, Canon DRC240 Duplex Scanner, Canon PIXMA G3010, Server HPE DL 380 Gen10LCD with Rack and console, Projector SHARP PG LX-2000, Voltage Stabilizer, Computer table and chair – 12, Digital Podium Strake SRP-60M.

Software: Microsoft visual studio Professional 2012, Microsoft SQL Server Std Edition 2012, Microsoft Windows R Sever 2012 Standard, Microsoft Windows Sever 2012 User CAL (5 CAL), Discovery Studio Visualiser, VMD, MEGA, SPSS, GROMACS.

CAMPUS DEVELOPMENT DEPARTMENT

University Engineer(In-Charge) Telephone (Office/Mobile) Email. : Shri. J.Cherian : 0364-2722069/ 9863027393 : jcherian@nehu.ac.in

	Details of Works undertake	en by CDD d	luring 2018-19						
Sl.No	Name of Work	Allocated Amount (Rs. Lakhs)	Status						
1	2	3	4						
(I)	Work taken up from XII Plan Grant for Infrastructure Developmet								
	Shillong Campus								
1	Renovation of Old residential quarters	101.55	Work completed to the extent of approved amount						
2	Painting of Administrative Building	26.24	Work completed						
3	Painting of Examination Building	16.26	Work completed						
4	Painting and need based repair of Library building	10.00	Work Completed						
5	Resurfacing of existing road (phase-I)	72.26	Work completed						
6	Construction of 100 seated Women's hostel including warden's residence	804.14	Work outsourced to CPWD. Only preliminary work unde progress						
7	Construction of Academic Building for conducting M.Ed programme	409.62	Work outsourced to CPWD. Only preliminary work unde progress						
	Tura Campus	105.00							
8	Construction of service building	185.00	Work completed						
9	Construction of basement under MBA hostel	8.53	Work completed						
10	Providing feeder pillar and incoming feeder cable	50.00	Work outsourced to Me.E.C.L. for an amount of Rs. 25.64 lakhs						
11	Providing temporary structure for Academic activity	37.79	work nearing completion						
12	Construction of 12 units of L-Type quarters	578.84	Work outsourced to CPWD. 15% of the work is completed						
13	Construction of 6 units of P-Type quarters	339.84	Work outsourced to CPWD. 15% of the work is completed						
14	Construction of 4 units of Type-II quarters	96.11	Work outsourced to CPWD. 15% of the work is						

			completed
15	Cuast Hansa naan Derithan Atmost	900.00	Out of the overall allocation
15	Guest House near Borjhar Airport	900.00	of Rs. 900.00 lakhs, Rs.
			379.82 lakhs have been
			charged to XI plan. The
			building have been
			completed and is currently
			under use. Work relating to
	T () A	2(2(10	lift is under progress
	Total Amount	3636.18	
1	2	3	4
(II)	Work taken up from One Time Grant amo	ounting to R	s. 753.00 lakhs.
	Shillong Campus		
	(1) Repair/maintenance of Hostel Sensiar Block-A	41.36	work nearing completion
	(2) Repair/Maintenance of Hostel Sensiar Block-B	42.28	work nearing completion
	(3)Repair/Maintenance of Hostel Sensiar	38.82	work nearing completion
	Block-C		
	(4) Repair/Maintenance of Hostel Sensiar	41.68	
	Block-D		
	(5) Repair/Maintenance ofHostel Balgito	39.32	work nearing completion
	Block-A		
	(6)Repair/Maintenance ofHostel Balgito	41.47	work nearing completion
	Block-B		
	(7) Repair/Maintenance of Dining Hall of	13.79	work completed
	Balgito A & B		
	(8) Repair/Maintenance of Dining Hall of	15.89	work completed
	Sensiar A & B		
	(9) Reapir/Maintenance of Dining Hall of	15.89	work completed
	Sensiar C & D	14.65	
	(10) Water tank staging for Balgito &	14.65	work under progress
	Sensiar hostels including dining halls		
	(11) Providing chain link fencing around		work nearing completion
	International Hostel, Hostel No. 2, 8	18.27	
	including extension of barbed wire fencing		
	of hostel No. 10 & 11.		
	(12) Internal electrification works of		
	4(four) blocks of Sensiar hostel, 2(Two) Blocks of Balgito hostel and 3-(blocks) of 3	30.92	work under progress
	e (50.92	work under progress
	dining halls of Balgito and sensiar hostels at NEHU, Shillong.		
	(13) Repairing and painting of Dept. of		
	Physics and Mathematics	36.87	work under progress
			1

	Chemistry		
	(15) Repairing and painting of Lecture Hall		
	of Science Complex	11.41	work under progress
	(16) Repairing and painting of Dept. of		
	Bio-Chemistry & Dean's Office of School	23.44	work under progress
	of Life Sciences		a chi anaci progress
	(17) Repairing and painting of Dept. of		
	Zoology	21.14	work under progress
	(18) Repairing and painting of Dept. of		
	Botany	21.08	work under progress
	(19) Repairing and painting of SAIF		
	building	27.38	work under progress
	(20) RCC water tank staging for Physics		
	dept.	10.89	work under progress
	Additional works approved from savings(21) Fencing around hostel 12 to 16	8.18,	
	(21) Fencing around noster 12 to 10	4.16,	
		7.28,	work under progress
		3.32	
	(22) Equip and the stall 17 to 22		
	(22) Fencing around hostel 17 to 23	13.45,9.57	work under progress
	(23) Repair and maintenance of hostel No.	11.89	work under progress
	19 (24) Repair of parking area of		
		7.16	
	Administrative building entrance to KV road towards ICSSR etc.	7.16	work completed
	road towards ICSSK etc.		
1	2	3	4
1	(25) Repair of road from junction near Old		
	Guest House towards RUAB	5.57	work nearing completion
	(26) Resurfacing and repair of internal		
	road at Sensiar and Balgito hostels	4.19	work yet to commence
	(27) Resurfacing of internal road of KV	9.94	work completed
	(28) Repair and surfacing of road in front	7.74	work completed
	of $L23 - L37$	4.97	work nearing completion
	(29) Repair and resurfacing of service road		
	near quarter No.L5 to L22	4.33	work nearing completion
	(30) Resurfacing and repair of internal		
	road at Chinlung and Sophetbneng hostels	2.91	work completed
	(31) Widening of parking space near erstwhile USIC	13.15	work nearing completion
	(32) Resurfacing of the road segment	4.79	work nearing completion
	opposite Economics Department		
	(33) Resurfacing of internal road from	4.96	work completed
	Petrol pump to Multiuse		-
	Tura Campus		

			1
	(34) Painting of Management block, library, Boys & Girls hostel at Tura Campus	35.73	work completed
	(35) Repair and Renovation of Academic Buildings at Tura Campus	29.5	work under progress
	Total Amount	720.28	
(III)	Work taken up from One Time Grant amo	ks. 1500.00 lakhs.	
	(1) Providing one geyser including allied	10.32	work completed
	plumbing works in Type-II quarters at NEHU, Shillong		
	(2) Providing an additional geyser including allied plumbing works in L- Type quarters at NEHU, Shillong	29.34	work under progress
	(3) Repair & Maintenance of Quarter No.L23 to L37 at NEHU, Shillong (Civil& Plumbing works)	41.12	work under progress
	(4) Painting of front boundary wall of Shillong Campus	13.79	work completed
	(5) Renovation of wash room of Administrative Building at NEHU, Shillong	18.7	work under progress
	(6) Covering of remaining portion of gable end wall (near stage) of Convocation shed at NEHU Shillong (Balance Work)	9.13	work under progress
	(7) Providing Fire fighting devices in Administrative, examination, Library, Multiuse Convention hall, New & Old guest house at NEHU, Shillong.	10.21	Poor response in tender despite several attempts
1	2	2	1
1		3	4
	 (8) Up-gradation, modernization, renovation of 11KV ring main system and re-arrangement by providing installation testing, commissioning of 11KV, VCB panel at primary substation, 33/11KV at NEHU permanent campus, Shillong S.H. Providing 7(Seven) section 11KV,630A, Indoor Type VCB panel at sub-station No. 1. 	40.59	Work in progress
	 (9) Up-gradation, modernization, renovation of 11KV ring main system and re-arrangement by providing installation testing, commissioning of 11KV, VCB panel at other distribution substation Nos. 4 & 6 at NEHU permanent campus, Shillong 	38.36	Work completed

			1
	S.H. Providing 7(Seven) section 11KV,630A, Indoor Type VCB panel at sub-station No. 4& 6. Three Section Indoor		
	11KV VCB Panel.		
	(10) Up-gradation, modernization,		
	renovation of 11KV ring main system and		
	re-arrangement by providing installation testing, commissioning of 11KV, VCB		
	panel at other distribution substation Nos.		
	2, and remaining 2(two) section panel of		
	S/S-1 at NEHU permanent campus,		
	Shillong		
	S.H. Providing 11KV,630A, Indoor Type	42.81	Work in progress
	VCB panel at sub-station No. 2 and		
	remaining 2(two) section panel at sub-		
	station No. 1. Also for provding 11KV		
	Indoor panel and one LT cubical panel at		
	Sub-station No. 16.		
	(11) Dismantling, re-arrangement and up-	42.55	Work in progress
	gradation of L.T.panel and replacement		
	with new panel at sub-station No. 3		
	,4(Housing & Girls hostel) and sub-station		
	No. 10(social science) at NEHU, Shillong		
	(12) Procurement of instrument and		
	providing lightening protection system at		
	NEHU permanent campus, Shillong	10.94	
	a) Procurement of digital instrument	19.84	work completed
	b) providing special advanced lightning	25.7	work completed
	protection (13) Replacement of spare parts, control	16.52	work completed
	switches, for hostels, dining halls and	10.52	work completed
	dormitories with improvement of		
	compound light fixtures in the hostel		
	buildings at NEHU p.c., Shillong		
	(14) Construction of 11/0.433 KV sub-	46.47	Civil work completed.
	station No. 16 for School of Physical	4.31	Electrical work in progress
	Sciences at NEHU permanent campus,	-	
	ShillongS.H. Providing service connection,		
	panels and installation of 1x630KVA		
	transformer		
1	2	3	4
	(15) Replacement and renovation of old 33		
	KV switch gears equipments &		
	transformers, 33/11KV, 2x3 MVA capacity		
	with installation, testing and		

	Grand Total Amount (I+II+III+IV)	Rs. 5170.55	L akha
	Electrical Mainetenance for the year 2018-19		of Rs. 238.00 lakhs and completed
(IV)	Works taken up from Non-Plan : Civil &	300.00	Works taken up to the extent
	Total Amount	514.09	
	testing and commissioning at sub-station No. 3,5,7 & 8 at NEHU permanent campus, Shillong		
	(16) Repairing and maintenance of 11KV VCB Panel and re-installtion along with	16.28	Work in tendering stage
	transformer, outdoor type. S/I/T/C of potential transformers , 33KV isolators. S/I/T/C of other accessories.(Bay-2)		
	 (a) S/I/T/C of 33/11KV ,2x3MVA transformer, outdoor type. S/I/T/C of potential transformers , 33KV isolators. S/I/T/C of other accessories.(Bay-1) (b) S/I/T/C of 33/11KV ,2x3MVA 	45.03	Work in progress Work in progress
	commissioning complete in all respect for primary sub-station No. 1 at NEHU permanent campus, Shillong		

CAREER AND COUNSELLING CELL

Coordinator	: Prof. GoutamSaha
Telephone	: 0364-2723604 (O)/ 2723607(C)
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E-mail	: placement.nehu@gmail.com, placement@nehu.ac.in

The Career and Counseling Cell (CCC) was established on 01st April 2008 as per UGC guidelines functioning from the School of Technology, NEHU. Till date it is being run by a faculty Coordinator and two office staff personnel. Being the component factor of the University, the CCC endeavors to provide the best opportunities to NEHU graduates in terms of counseling and guidance, campus placements, trainings, internship opportunities etc. The Cell regularly publicizes detailed notification on any matter related to counseling, training, and career/job opportunities, job fairs, pool campus for students' if any such information from any quarter is received or forwarded to the Cell. The Cell also interacts with reputed industries, organizations, training centers and other entities for meeting the demands of the students from time to time. To facilitate the objectives, enrollment of representatives from various departments of the University has been formulated under the guidance of the Coordinator. The Committee consists of faculty and student representatives, who coordinate the different activities of the Cell. Job-oriented awareness workshops are being organized by the Cell regularly for the students of NEHU and affiliated colleges. The Cell invites experts from corporate organization for interactive sessions, lectures on soft skills and allows their participation in internship/implant training to the students. The Cell also organizes job fairs / career related fairs, pool campuses for the job seekers in the university premises as per opportunity and requirements. Apart from

hiring activities. the Cell organizes interactive sessions, special lectures and seminars so as to prepare the students for a smooth transition to their professional lives and face the challenges of the corporate world. With its interaction with company/industry on a regular basis, the students can avail the opportunity to undergo training during semester break in reputed companies, industries, hospitals and government organizations etc.

The following activities were conducted by the Cell for the year 2018-19.

Regalix. Hyderabad in collaboration with Career & Counseling Cell, NEHU, Shillong conducted a pool campus drive for B.Tech students of NEHU, Shillong where some students from Assam University & Sichar University also attended the drive on 6^{th} April, 2018 at the School of Technology, NEHU, Shillong. Altogether, 11 students got selected where 01 student is from Bineswar Brahma Engineering College, Assam, 03 students from Tezpur University, 02 students from Assam Engineering College and 05 students from School of Technology, NEHU, Shillong. 85 students from School of Technology, NEHU, Shillong attended the drive.

E & Y, Global Delivery Services had conducted a recruitment drive on 7th April, 2018 at Poinisuk Hotel, Laitumkhrah, Shillong where 15students from NEHU, Shillong and some of its affiliated colleges attended the drive. **08** students from **Commerce Department**, **NEHU**, **Shillong** have been selected.

Through the interaction of the Career & Counselling Cell, NEHU, Shillong, Power Grid Complex, Lapalang, Shillong, a Central PSU in the power sector, having their North Eastern Load Regional Despatch Centre (NERLDC) located at Shillong, has conducted a selection Meghalaya process/interview at NERLDC, Shillong on 7th May, 2018 where 01 student from Hindi Department, NEHU, Shillong &01 MBA student from NEHU, Tura Campus got selected .05 students so far attended the drive.

With the interaction of Career and Counselling Cell, NEHU, Shillong an **Orientation Program** was conducted by **AIESEC** in collaboration with the NEHUSU, Shillong on three consecutive days (14th, 15th& 16th May, 2018) at Multi Use Conventional Hall, NEHU, Shillong where around 150 students attended the program.

An online test for B.Tech students was conducted in Guwahati on 8th September, 2018 by Tata Consultancy Services Limited (TCSL) where around 15 students participated the online test out of which 01 student from ECE Department, School of Technology, NEHU, Shillong got selected.

Calvin Klein & Tommy Hilfiger, India in collaboration with Career & Counseling Cell, NEHU, Shillong conducted a pool campus drive for students of NEHU, Shillong on 22^{nd} February, 2019in the School of Technology Building, NEHU, Shillong, where a total of 48 students attended the drive. So far no students got placed.

Regalix, Hyderabad in collaboration with Career & Counseling Cell, NEHU, Shillong conducted a pool campus drive for B.Tech students of NEHU, Shillong in the School of Technology Building, NEHU, Shillong, where some students from Tezpur University & Nagaland University also attended the drive on 28th February, 2019. Altogether 04 students got selected, 02 students from TezpurUniversity and 02 students from School of Technology, NEHU, Shillong.

An online recruitment test was administered by Chegg, India on 5th March, 2019 for the students of NEHU, Shillong where around 70 students from various department of NEHU, Shillong took part out of which 18 students got placed.

42 students of NEHU, Shillong attended the pool campus drive conducted by**Infosys Pvt. Ltd** at Tezpur University on 7th & 8th March, 2019 where 04 students of School of Technology, NEHU, Shillong got placed.

International, Delhi Public School (DPS) Amalapuram in collaboration with Career & Counseling Cell, NEHU, Shillong conducted a pool campus drive on 11th& 12th March, 2019 for the students of NEHU, Shillong in the School of Technology Building, NEHU, Shillong, where 10 students got placed.

<u>Campus Placement Performance</u> Details of the students placed through the Career and Counseling Cell during the year 2018 - 2019

SI No	Name of the company	Name of students who got selected	Date of interview	Department/ Branch	University/ College
1.	Regalix,			B. Tech EE	Bineswar
	Hyderabad				Brahma
					Engineering
					College,
	(Salary:4.0L/	1.Ms. Kankana Deka			Assam
	pa approx +	2. Ms. Anjum Firdaus	06.04.18	B. Tech ECE	-
	Other	3. Mr. Siddhartha Tamuly	-	B. Tech ECE	Tezpur
	Incentives as	4. Ms. Monalisa Hazarika	+	B. Tech ECE	University
	per Company	5. Mr. Nabir Das	-	B. Tech EE	Assam
	norms)			B. Tech EE	Engineering
		6. Mr. Dipankar Sarkar	-		College
		7. Ms. Nitu Sharma	ļ	B. Tech IT	
		8. Ms. Sushweta Kar	ļ	B. Tech IT	School of
		9. Ms. Rashika Agarwal		B. Tech IT	Technology,
		10. Ms. Saumya Kushwaha		B. Tech IT	NEHU,
		11. Ms. Anisha Chaki		B. Tech ECE	Shillong
		1. Punam Bhusal			NEHU,
2.	E & Y,				Shillong
	Global	2. Debashree Dey	07.04.18		NEHU,
	Delivery				Shillong
	Services	3. Leo themjung Makan		M. Com	NEHU,
	(Salary:		<u>_</u>		Shillong
	04L/pa approx	4. Adarsh Sonari			NEHU,
	+ Other		<u>_</u>		Shillong
	Incentives as	5. Bandashisha Sohtun			NEHU,
	per Company				Shillong
	norms)	6. Larimon Mawiong			NEHU,
			ļ		Shillong
		7. Barihun Syiemlieh			NEHU,
		,. Durman Gylenmen	ļ		Shillong
		8. Bharti Rajpurohit			NEHU,
L					Shillong
3.	Power System Operation			MBA	
					NEHU, Tura
		1. Subhashish Sarmah			
	Cooperation		07.05.18		
	Limited	2. Md Islam Khan			NEHU,
	(POSOCO)			TT' 1'	Shillong
	(Salary:			Hindi	

	20600/				
	20600/				
	46500/- pm				
	approx + Other				
	Incentives as				
	per Company				
	norms)				
4.	Tata				
	Consultancy				
	Services		08 ⁻ .08. 18	B. Tech ECE	~
	(TCS)				School of
	(Salary:	1. Hemjyoti Debnath			Technology,
	04L/pa approx				NEHU,
	+ Other				Shillong
	Incentives as				
	per Company				
	norms)				
_				B. Tech BME	School of
5.	Regalix,	1. Rohit Dutta			Technology,
	Hyderabad		28.02.19	D	NEHU,
	(Salary:	2. Divya Tiwari	4	B. Tech IT	Shillong
	04L/pa approx	3. Prateeksha Choudhury		B. Tech CSE	Tezpur
	+ Other		_		University
	Incentives as				
	per Company	4. Sanskritu Gogoi			
	norms)			B. Tech ECE	-
					Tezpur
		1. D. '			University
		1. Priyam Kurmi		B. Tech IT	
		2. Roopam Bhattacharjee	1	B. Tech ENE	
			4		
		3. Lipika Devi		B. Tech ENE	
		4. Shailendra Ray	1	B. Tech BME	
		5. Tultul Doley	05.03.19	B. Tech IT	
6.					
	Chegg, India	6. Rohit Dutta		B. Tech BME	NEHU,
	(Salary: 30.80K/pm	7. Partha Pratim Baishya	1	B. Tech BME	Shillong
	approx + Other	8. Priyanka Choudhury	-	B. Tech BME	
	Incentives as	9. Kumar Gaurav	+	B. Tech ECE	
	per Company				
	norms)	10. Kajal Mishra		B. Tech IT	
L				1	1

		 11. Pranjit Doley 12. Nitesh Agarwal 13. Saswata Chakraborty 14. Divya Tiwari 15. Abhinav Luitel 16. Sushmita Debbarma 	-	 B. Tech IT Economics 	
		17. Narayan Prajapati 18.Sudweepta Mech	-	B. Tech IT B. Tech ECE	
7.	Infosys Pvt. Ltd (Salary: 3.6 L/pa approx + Other	1. Akashitara Bhuyan2. Abhinav Luitel3. Nitesh Agarwal	- 07. 03. 19 & - 08. 03. 19	B. Tech BME B. Tech IT B. Tech IT	School of Technology, NEHU, Shillong
	Incentives as per Company norms)	4. Saswata Chakraborty	-	B. Tech IT	
<u>8.</u>	International Delhi Public School (DPS) Amalapuram (Salary:15k- 25k. p.m. approx + Other Incentives as per Company norms)	1. Divya Tiwari2. Arindom Sharma3. Samrat Charaimria4. Rimpal Paul5. Kajal Mishra6. Daiaiminot K7. Elizabeth Ekka8. Priyanka Chowdhury9. Aparna Roy10. Ranjana Das	<u>11.03.19</u> <u>&</u> <u>12.03.19</u>	B. Tech ITB. Tech ECEChemistryB. Tech ITB. Tech ITHindiHindiB. Tech BMEHindiB. Tech ECE	<u>NEHU,</u> Shillong

Sl Nos	the year 20 Names	Department
1.	Sonu Saha	Information Technology
2.	Shaphiiakyrmen Skhembill	Information Technology
3.	Daisy Baruah	Information Technology
4.	Sudarshana Barman	Biomedical Engineering
5.	Uddipta Bora	Biomedical Engineering
6.	Charlington Kharumlong	Nanotechnology (M.Tech)
7.	Akash Pradhan	Electronics & Communication Engineering
8.	Jyotishmita Baruah	Electronics & Communication Engineering
9.	Sangit Borthakur	Electronics & Communication Engineering
10.	Ravi Raj Ladha	Energy Engineering
11.	Rishikesh Kashyap	Energy Engineering
12.	Aditya Sarkar	Botany
13.	Adoryllene Dkhar Sawian	Botany
14.	Rusom Gary Lyngdoh / Depok Sangma	Economics
15.	Parthana Dihingia / Annaabella Suram	Economics
16.	Kyrshan Skhem Lating	Education
17.	Daphishisha Shabong	Education
18.	Rosestar Sing Khasain	Education
19.	Nakita Warjri	Education
20.	Hawaibam Jhalari Devi	Tourism & Hotel Management
21.	Shashanka Tiwari	Tourism & Hotel Management
22.	Deepak Mishra	Hindi
23.	Krishna Kumar Saha	Hindi
24.	Suman Das	Commerce
25.	Daiasanlang Rose Nengnong	Commerce
26.	Gouravmoy Boruah	Electronics & Communication Engineering

Career and Counseling Cell student representatives running different activities of Cell for the year 2018-2019

27.	Cindy Vanlalzari Sailo	Zoology
28.	Edmund E Hek	Zoology
29.	Deihok Challam	Physics
30.	Arban S. Youroi	Physics
31.	Hutkhurdin	History
32.	Kimlun Chungdim	Adult & Continuing Education
33.	Larisalin Syiemlieh	Adult & Continuing Education
34.	Yshuva Lyngdoh	Environmental Science
35.	Sillilia P. Jana	Environmental Science
36.	Chaity Bhattacharjee	English
37.	Daryll Khongwir	English
38.	Jessica rymbai	Sociology
39.	L. Ginkhangam Haokip	Sociology
40.	Lincoln Dkhar	Chemistry
41.	L. Joyson	Chemistry
42.	Fulstar Lamin	Library & Information Science
43.	Angie K Nongkheng	Library & Information Science
44.	Manifest Manner	Khasi
45.	Pynkmenhunlang Sohtun	Khasi
46.	Mebanshembha Kharshiing	Architecture
47.	T. Rakesh Singha	Artchitecture
48.	Ms. Josephine Chhakchhuak	Political Science
49.	Mr. Vitoka Achumi	Political Science
50.	Mr. Arban Youroi	Physics
51.	Ms. Deihok Challam	Physics

CAREER AND COUNSELLING CELL (TURA CAMPUS)

Officer-In-Charge	:	Dr. Abhigjan Bhattacharjee
Telephone	:	09435017519/08415098100
Email	:	abhigyan09@rediffmail.com

The Career and Counselling Cell (CCC) is also functioning on Tura Campus known as Placement & Counselling Cell. Following the UGC guidelines, the Cell plays a major role in addressing the diverse socio-economic handicaps of the students belonging to the different communities by providing active guidance and information regarding career and placement opportunities. In doing so, the CCC interacts with reputed industries, organizations, training centers, and other entities through seminars, workshops, placement drives, etc., in collaboration with the Department of Management and others.

Activities under taken during 2018-19

ERNST & YOUNG organized a pool campus drive on 6th April 2018, which was held in Redisson Blue. 6 students participated from Department of Management, Nehu Tura Campus of which one got shortlisted for the next round of selection process.

Regalix, a Hyderabad based company conducted a pool campus drive on 4th April 2018 in NEHU Tura Campus, in which students from Department of Management from NEHU, Tura Campus and Gauhati University participated.

SYNERGOS' 2018 an HR Conclave of Department of Management, NEHU, Tura Campus on "Scanning the Employability Skills of Future Managers" May 12, 2018.Dr Abhigyan Bhattacharjee was the convener. CEOs, MDs, Directors, HR Managers and senior Executive from different industries were the resource persons in the form of panel discussions and talks.

The Placement & Counselling Cell, NEHU, Tura Campus organised three (5) Entrepreneurship Awareness Camps during Feb 07-Feb 23, 2019and one (1) FDP on Entrepreneurship for faculty members during Jan 21-Feb 02, 2019. Dr. Abhigyan Bhattacharjee was the coordinator of the programme. This was sponsored by EDII, Regional Office, Guwahati.

2 students were placed in Bharti Airtel Ltd in the capcity as TSM (Rural) and Store Manager. Campus drive was held during 21st and 22nd Nov, 2017.

3 students were placed as Assistant Managers in HDFC bank. Campus drive was conducted on 1st March, 2018.

2 students were placed as Assistant Manager in Axis bank. Campus drive was conducted 16th Feb 2018.

1 student got placed as HR Trainee at NERLDC, POSOCO, Shillong, Meghalaya. Campus placement conducted on 07th May, 2018.

4 students got placed as Executive trainee at Oppo Mobiles. Campus placement conducted on 07th May, 2018.

1 student got placed as HR Trainee at North-East Small Finance Bank Ltd. Campus placement conducted on 10th May, 2018.

CENTRAL LIBRARY

Librarian (In-Charge)	: Dr. F.R. Sumer
Telephone	: 0364-2721251(O)
E-mail	: frsumer@nehu.ac.in

Brief Statement of Activities

During the period, the Central Library was engaged with the responsibility to support the academic community with their teaching, research and learning curriculum.

Committed effort especially during the period saw NEHU being identified as a Content Partner to the National Digital Library of India (NDLI), a project funded by The Ministry of Human Resource Development (MHRD), Government of India and implemented by Indian Institute of Technology Kharagpur in view of the rich digital content that it host in its Institutional Repository (http://dspace.nehu.ac.in) through the Library Digitization Programme.

So as to ignite the minds of the young professionals and staff with the spirit of librarianship, the Central Library also celebrated National Librarian's Day (11th August) to commemorate the 126 birth anniversarv of Padmashree Dr. S.R. Ranganathan (1892 -1972). As part of the celebration, a documentary film on the life and works of Dr. S.R. Ranganathan was screened in the presence of Officers, Staff and Interns of the Library. Books authored by Dr. S.R. Ranganathan including his contributions to the field of librarianship were also displayed in the library.

In order to disseminate and share the knowledge acquired, the qualified and highly skilled library personnel acted as invited resource persons in workshops/programmes/courses conducted by reputed organizations/institutes/colleges. On similar context, the above-mentioned personnel were also nominated by the university as member-expert in inspection teams and selection committees from time to time. During commencement of a new academic session the newly enrolled library members were oriented with the various library facilities and services through an annual orientation programme conducted by the Library. Every summer, the post graduate students of Master in Library and Information Science (MLISc.) of NEHU and Pondicherry University were inducted into an Internship Programme, which was conducted by the Library in order to hone their skills and prepare them for the job market.

As a collaborative effort the Central Library organized a Book Exhibition as part of the university's celebration of "*The International Yoga Day*" on 21st June 2018 at Convention Hall, NEHU. Secondly, a Book Exhibition was also organized on 26th November 2018 at Social Science Clusters Block, NEHU, Shillong to marked the "*150th Birth Centenary year of Mahatma Gandhi*" Celebrations. Both the book exhibitions were co-ordinated by Dr. M. Rana, Assistant Librarian with assistance from the library staff.

During the period, the Central Library is also indebted to those individuals and Departments/Institutions/Organizations who had supported the Library through gifted documents which had enriched our collection. A word of gratitude also goes to the students of the Department of Library and Information Science who had lend a helping hand as Library Interns during the period.

Budget Allocation 2018-19

Partic	ulars	Rupees in lacs
	Books	
	a) Non-Plan: Central Library	21.00
	b) Non-Plan: UGC-SAP for Mathematics Dept.	01.50
	c) Non-Plan: Special assistance for Architecture Dept. (one time)	07.00
1.	Journals and Periodicals a) Non-Plan:Journals and periodicals for sciences - Scientific journals including subscription to e-resources and online databases.	142.50
	b) Non-Plan: Journals and periodicals for other than the sciences viz. Humanities, Social Sciences, etc.	51.50
	c)University Library: Digitization including subscription of E ShodhSindhu (ESS) Consortium E-Journals etc.	150.00
2.	Non-Plan:Recurring Expenditures & Contingency	30.00
Total		403.50

Library Collection: 294774volumes

Particulars	Volumes
Economics, Management and Information Sciences	0157
Education	0085
Humanities	0720
Human and Environmental Sciences	0056
Life Sciences	0061
Physical Sciences	0044
Social Sciences	0188
Technology	0223
Gifts and others (Computers, General etc.)	0460
NBHM	0039
DST/FIST	0046
Theses	0431
Data Bank (Government Publications and Reports received gratis)	0294
Total books added during the year	2510

Subscription to Periodicals including Scientific Journals (Titles in Print)

• International Journals : 144

• Indian journals : 133 Total : 277

New Membership Enrollment during the year (2018-19)

Particulars	Number
Undergraduate Students	0291
Postgraduate Students	1073
Research Scholars	0159
University Teachers	0000
Non-Teaching Staff	0000
Visiting/Guest Professors/Lecturers	0013
Others (Including College Teachers)	0003
Total number of new members	1539

Usage of books and journals etc.

Average number of books issued/returned/renewed: 296 per day

Number of users who availed consultation services: 457 per year

Number of users of journals and back volumes: 896 per month

Number of users of Theses/Dissertations including Data Bank: (i) Students: 250 per month, (ii) Research Scholars: 430 per month, and (iii) Others: 120 per month

Photocopies of journal articles including Back Volumes made: 120 copies per month

Average number of internet users: 36 per month

NEHU usage of E-ShodhSindhu Consortium e-resources during 2018: 228742 full-text articles downloaded.

Revenue Generated by the Library during the Year

Consultation fees: Rs. 4800.00 Fines from Books overdue (including Law Library): Rs. 71,980.00 Total: Rs. 76,780.00

Other Activities

Awareness/Orientation/Internship Programme for Students and Research Scholars

Library Orientation Programme was conducted from 17 to 28 September 2018 in

the Central Library Conference Hall for the first semester students of different academic departments. The programme sensitized the newly enrolled library members with the library's rules and guidelines, inhouse/online resources, Online Public Access Catalogue (OPAC) which concluded with a guided tour of the Central Library. The programme was co-ordinated by Dr. M. Rana, Assistant Librarian.

The 7th Library Internship Programme was conducted by the Central Library from 4th July to 14th September, 2018 for the outgoing MLISc 4th semester students of the Department of Library & Information Science, NEHU, Shillong. The programme was co-ordinated by Dr. Lalhmachhuana, Documentation Officer.

The Library House-Keeping Operations (Job Diary) was conducted by the Library for the 2nd semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong during March - May 2018. The programme was co-ordinated by Shri A. Blah, Assistant Librarian.

Exposure to e-Resources across the Academic Fraternity

Access to the online resources that are accessible through the e-ShodhSindhu and DelCON Consortium including those subscribed by the Library were provided to research scholars and faculty. Also, the library facilitates interaction with M.Phil. and Ph.D. research scholars on access to various electronic resources including the use of the Plagiarism Detection Software(PDS).

For the convenience of the users, online services for the subscribed/renewed edatabases and e-journals were extended through the respective hyperlinks that are placed on the Library webpage (http://www.nehu.ac.in/library).

To maintain uninterrupted access to the eresources, remote access facilities were extended to interested researchers of the university including those located in NEHU Tura Campus, Tura, Meghalaya.

Membership with other Libraries/Network

The Central Library, NEHU is one of the active member of UGC's Inter University Centre(IUC) viz. INFLIBNET Centre, Gandhinagar, Gujarat.

Subscription to e-journals, e-books and Online Databases

The following subscribed online databases and e-journals were renewed/subscribed during the period: (a) Biological Abstracts, (b) IndiaStat, (c) Library and Information Abstracts, (d) IEEE, IEL Online, (e) Scopus, (f) Elsevier ScienceDirect - eSS 10 Subjects Collection (g) Emerald eSS 138 titles Collection, (h) Institute of Physics(IOP) Complete Collection 76 titles (i) Royal Society of Chemistry Gold Collection Excluding Archive 2018, (j) SciFinder Scholar, (k) SIAM - eSS Collection and (l) Wiley Blackwell Publishing eSS 908 titles.

Important Activities/Steps Accomplished towards Improvement of Library Services The Library subscribed to e-resources from 7(seven) publishers that were discontinued

by e-ShodhSindhu (Ess) through central funding. Additional equipment and infrastructure viz.

computers, printers were installed.

Awareness on the availability of online learning resource portal, namely National Digital Library of India(NDLI), e-ShodhSindhu & DelCON Consortium including subscribed e-resources were initiated in the university.

Awareness on the National Digital Repository for theses and dissertations, *viz*. Shodhganga and the use of Plagiarism Detection Software(PDS) were conducted in the University. A total of 330 soft copies of PhD Theses were uploaded in the Shodhganga repository. A total of 17,836 pages of the rare, out of print books and newspapers were digitized and uploaded on the NEHU Institutional Repository.

Additional unit of the Lex Air Digital Capture Book Reader that was procured by the library to support the visually impaired library members.

Wifi facility was upgraded inside the Central Library.

Seminars/Conferences/Orientation Course/Workshops/Extension Programmes etc. Dr. F.R. Sumer

Acted as a resource person during the 44th, 45th, 46th and 47th Orientation Programmes during 2018-19 conducted by the UGC-HRDC, NEHU, and delivered a total of 11(eleven) lectures during the aforesaid programmes.

Acted as a resource person during the Short-Term Course in Research Methodology conducted by the UGC-HRDC, NEHU during $24^{\text{th}} - 29^{\text{th}}$ September 2018 and delivered 3(three) lectures.

Acted as a resource person during the Tribal Studies conducted by the UGC-HRDC, NEHU during 24th September – 14th October 2018 and delivered 3(three) lectures.

Acted as a resource person during the Short-Term Course: "MOOCS, E-content Development and Open Educational Resources" conducted by the UGC-HRDC, NEHU during $11^{\text{th}} - 16^{\text{th}}$ March 2019 and delivered 1(one) lectures.

Acted as a resource person (i) during a 5days Training Programme entitled "20.02-Capacity Building Programme for the DIET/SCERT Librarians/Library In-Charges of North Eastern Region" organized by Library and Documentation Division, NCERT, New Delhi and delivered lectures on 14th March 2019 at NERIE, Shillong on the topic "Traditional Library Services and role of free/open source software for library management: issues and challenges" (ii) in a 1 (one) day workshop as part of the Faculty Development Programme organized by the College Library in collaboration with the Internal Quality Assurance Cell(IQAC), St. Shillong entitled Edmund's College, "Dissemination of information through eresources" (1 October 2018).

National Digital Library of India (NDLI), a project of Ministry of Human Resource Development (MHRD), Government of India and implemented by Indian Institute of Technology Kharagpur awarded a "Certificate of Nodal Coordination" acknowledging the co-ordination and support extended to NDLI through the Library Digitization Programme.

Acted as a resource person during one week National Workshop on "Metadata Standard Using OSS Library Management Software", organized by the Department of Library and Information Science, NEHU, Shillong held from 25th& 31st March, 2019 at NEHU, Shillong.

Invited to Chair a session during the International Conference on "Bridging the Digital Divide – Role of Libraries & Information Centres with Special Reference to North Eastern Region" organized by Shillong College Central Library in collaboration with IQAC, Shillong College that was held on 5th& 6th September, 2018 at Shillong College, Shillong.

Nominated as a Member/Expert of a Selection Committee held during 8February 2019 for the recruitment of a Library Information Assistant in North East Police Academy (NEPA) Umiam, Meghalaya.

Extended free consultation services during the period to Librarians of affiliated colleges and other organizations in Meghalaya and those located in other states of the North Eastern Region on aspects related to library management, automation and delivery of online services.

Inspection to: 1. Don Bosco College of Teacher Education, Tura, West Garo Hills (Visited on 5th April 2018) 2. Ri Bhoi College, Nongpoh, Ri Bhoi District (Visited on the 24th August 2018) 3. Synod College, East Khasi Hills, Shillong (Visited on 28th February 2019) 4. Shillong College, East Khasi Hills, Shillong (Visited on 18th March 2019) 5. Shillong College, East Khasi Hills, Shillong (Visited on 4th May 2018)

Dr. Lalhmachhuana

Acted as a resource person during the 44th, 46th and 47th Orientation Programmes during 2018-19 conducted by the UGC-HRDC, NEHU, and delivered two lectures on each occasion.

Acted as a resource person during the Short-Term Course in Research Methodology conducted by the UGC-HRDC, NEHU during $24^{\text{th}} - 29^{\text{th}}$ September 2018. Delivered two lectures on "Evaluation of Web Content" and "Scholarly Web Resources for Students" on 24/11/2018 as a Resource Person for the DBT Star College Scheme Workshop for Students conducted by the Department of Biotechnology, St. Edmund's College, Shillong.

Delivered 2 lectures on 13/3/2019 at the Training Workshop on "20.02 - Capacity Building for the DIET/SCERT Librarians/Library-Incharges of North-Eastern Region" conducted by North-East Regional Institute of Education/NCERT, Umiam, Shillong from $11^{\text{th}} - 15^{\text{th}}$ March 2019.

Delivered lectures during the Library House-Keeping Operations (Job Diary) conducted by the Library for the 2nd semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong during March - May 2018. Under his supervision, the staff of the Documentation Section conducted hands on training to the students of the aforesaid programme.

Delivered lectures during the 7th Internship Programme conducted by the library during 4th July - 14th September 2018, for the 4th semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong. Under his supervision, the staff of the Documentation Section conducted hands on training to the participants of the 7th Internship Programme. Delivered lectures during the Library Orientation Programme 2018 for the newly enrolled Students, Research Scholars of the University held during 17th - 28th September 2018 in the Central Library, NEHU, Shillong.

Dr. Manoj Rana

Presented a paper on "Digital Humanities (DH): Challenges and Opportunities" at the International Conference on "Bridging the Digital Divide – Role of Libraries & Information Centres with Special Reference to North Eastern Region" organized by Shillong College Central Library in collaboration with IQAC, Shillong College held on 5th& 6th September, 2018 at Shillong College, Shillong.

Presented a paper on "A Comparative Study of Reference Management Softwares" at the International Conference on "Bridging the Digital Divide – Role of Libraries & Information Centres with Special Reference to North Eastern Region" organized by Shillong College Central Library in collaboration with IQAC, Shillong College held on 5th& 6th September, 2018 at Shillong College, Shillong.

Participated in the 25th Annual Conference cum Seminar on "Educational Leadership, Management and Governance with special reference to North East India" organized by the Department of Education, NEHU, Shillong held on 6th& 7th March, 2019 at NEHU, Shillong.

Participated in the "National Workshop on Metadata Standard Using OSS Library Management Software", organized by the Department of Library and Information Science, NEHU, Shillong held from 25th& 31st March, 2019 at NEHU, Shillong.

Completed a 2 week MOOC Course on "Digital Skills: Grow your Career" offered by Accenture, dated 14th September 2018. Completed a Course on "Understanding Open Educational Resources" offered by the Commonwealth of Learning, Canada, dated 14th September 2018. Completed a 3 week MOOC Course on "Study UK: A Guide for Education Agents and Counsellors" offered by British Council, dated 14th September 2018. Completed a 4 week MOOC Course on "Study UK: Prepare to Study and Live in the UK" offered by British Council, dated 19th September 2018, Completed a 4 week MOOC Course on "Making Teacher Education Relevant for 21st Century Africa"

offered by The Open University of Tessa, dated 8th March 2019. Completed a 2 week MOOC Course on "Digital Skills: Mobile" offered by Accenture, dated 9th March 2019. Completed a 2 week MOOC Course on "Digital Skills: Social Media" offered by Accenture, dated 9th March 2019.

Participated in the online "Quiz on Entrepreneurship" organized by MyGov and Ministsry of Skill Development & Entrepreneurship, Govt. of India, Online quiz on "Bapu@150" organized by MyGov and Gandhi Smriti and Darshan Samiti, Govt. of India. Online quiz on "Bapu@150"(In Hindi) organized by MyGov and Gandhi Smriti and Darshan Samiti, Govt. of India. Online "MyGov Weekly Quiz #4" organized by MyGov, Govt. of India. Online "MyGov Weekly Quiz #7" organized by MyGov, Govt. of India. Online "MyGov Weekly Quiz #13" organized by MyGov, Govt. of India. Online "Quiz on Health & Wellness Centres" organized by MyGov and Ministsry of Health & Family Welfare, Govt. of India.

Delivered lectures during the Library House-Keeping Operations (Job Diary) conducted by the Library for the 2nd semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong during March - May 2018. Under his supervision, the staff of the Acquisition Section conducted hands on training to the students of the aforesaid programme.

Delivered lectures during the 7th Internship Programme conducted by the library during 4th July – 14th September 2018, for the 4th semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong. Under his supervision, the staff of the Acquisition Section conducted hands on training to the participants of the 7th Internship Programme. Co-ordinated and delivered lectures during the Library Orientation Programme 2018 for the newly enrolled Students, Research Scholars of the University held during 17th -28th September 2018 in the Central Library, NEHU, Shillong.

Inspection to: 1. Nongstoin College, Nongstoin, West Khasi Hills (Visited on the 27th August 2018) 2. BBS College, East Khasi Hills, Shillong (Visited on the 24th November 2018) 3. Sankardev College, East Khasi Hills, Shillong (Visited on 21st February 2019)

Shri J.P. Nongbri

Imparted training on the *Circulation Module including Registration and Renewal of Library Members on the Koha Open Source Integrated Library Management Software* to the Librarians of Shillong Law College, Shillong (September 2018), Tirot Sing Memorial College, Mairang (March 2019), Jowai Polytechnic, Jowai and Synod College, Shillong (July 2018).

Delivered lectures during the Library House-Keeping Operations (Job Diary) conducted by the Library for the 2nd semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong during March - May 2018. Under his supervision, the staff of the Circulation Section conducted hands on training to the students of the aforesaid programme.

Delivered lectures during the 7th Internship Programme conducted by the library during 4th July – 14th September 2018, for the 4th semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong. Under his supervision, the staff of the Circulation Section conducted hands on training to the participants of the 7th Internship Programme. Inspection to: 1. Nongstoin College, Nongstoin, West Khasi Hills (Visited on the 28th September 2018) 2. Lady Keane College, East Khasi Hills, Shillong (Visited on the 19th March 2019) 3. Lyngngam Presbyterian College, Mawthengkut, P.O. Riangdo West Khasi Hills, Meghalaya(Visited on 23rd March 2019).

Shri A. Blah

Imparted training on the *Cataloguing and Serial Modules of the Koha Open Source Integrated Library Management Software* to the Librarians of Shillong Law College, Shillong (September 2018), Tirot Sing Memorial College, Mairang (March 2019), Jowai Polytechnic, Jowai and Synod College, Shillong (July 2018).

Co-ordinated and delivered lectures during the Library House-Keeping Operations (Job Diary) conducted by the Library for the 2nd semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong during March -May 2018.Under his supervision, the staff of the Periodical and Technical Sections conducted hands on training to the students of the aforesaid programme.

Delivered lectures during the 7th Internship Programme conducted by the library during 4^{th} July – 14th September 2018, for the 4th semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong. Under his supervision, the staff of the Periodical and Technical Sections conducted hands on training to the participants of the 7th Internship Programme.

Inspection to: 1. Jaintia Eastern College, Khliehriat, East Jaintia Hills 2. (Visited on the 6th April 2018) 2. Tura Law College, New Tura, West Garo Hills (Visited on the 25th August 2018) 3. Nongstoin College, Nongstoin, West Khasi Hills (Visited on the 30th August 2018) 4. Khadar Daloi Law College, Jowai, West Jaintia Hills (Visited on the 15th March 2019)

Shri B. Sten

Acted as a Resource Person in the Training Programme entitled *"Capacity Building"* the Programme DIET/SCERT for Librarians/Library In-Charge of North East Region" conducted by North East Regional of Education (NERIE) Institute in collaboration with National Council of Educational Research and Training (NCERT) on 15th March 2019 at NERIE, Shillong

On invitation, extended expert advice on aspects of library automation including installation of Integrated Library Management Software - Koha and Local Area Network (LAN) in libraries of affiliated colleges viz. Shillong Law College, Shillong(September 2018), Tirot Sing Memorial College, Mairang (March 2019), Jowai Polytechnic and Jowai Polytechnic, Jowai).

Invited to restore and made functional "*E-Granthalaya*": a library management software in the library of Synod College, Shillong. Involved in the migration of 75,000 library records from "*E-Granthalaya*" to Integrated Library Management Software – Koha and setting up of the Local Area Network (LAN) in the library of Synod College, Shillong (July 2018).

Co-ordinated, a post installation, two weeks training on system administrative including data backup and the other modules of the software meant for the Librarians of Shillong Law College, Shillong(September 2018), Tirot Sing Memorial College, Mairang (March 2019), Jowai Polytechnic, Jowai and Synod College, Shillong (July 2018).

Invited to installed and customized an Open Source Integrated Library Management Software: Koha in the Library of Shillong Polytechnic, Shillong during the month of April 2017. One week training on system administrative including data backup was extended to the Librarian, Shillong Polytechnic during the month of May 2017. Delivered lectures during the Library House-Keeping Operations (Job Diary) conducted by the Library for the 2nd semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong during March - May 2018. Under his supervision, the staff of the Computer Unit including Reprography and Digitization conducted hands on training to the students of the aforesaid programme.

elivered lectures during the Internship Programme conducted by the library during 4^{th} July – 14^{th} September 2018 for the 4^{th} semester students of Master of Library Science & Information Science (MLISc.), Department of Library and Information Science, NEHU, Shillong. Under his supervision, the staff of the Computer Unit including Reprography and Digitization conducted hands on training to the participants of the 7th Internship Programme. Inspection to: 1. Jaintia Eastern College, Khliehriat, East Jaintia Hills (Visited on the 15th May 2018) 2. Shangpung College, West Jaintia Hills District (Visited on the 28th May 2018) 3. North-Eastern Institute of Homoepathy(NEIAH), Ayurvedha & Shillong (Visited on the 29th June 2018) 4. St. Anthony's College, Byndihati, Khliehriat, East Jaintia Hills 5. Tura Law College, New

Tura, West Garo Hills (Visited on the 25th August 2018) 6. Nongstoin College, Nongstoin, West Khasi Hills (Visited on the 30th August 2018) 7. Khadar Daloi Law College, Jowai, West Jaintia Hills (Visited on the 15th March 2019)

Achievement

Shri B. Sten, Information Scientist, Central Library, North-Eastern Hill University was awarded doctoral degree on the thesis entitled "Impact of information literacy on rural Development programmes in Ribhoi district of Meghalaya: a case study of Umkei and Mawtneng villages under the Umsning Block, Ri Bhoi District, Meghalaya". The research work was carried out under the supervision of Prof. Moses M. Naga, Department of Library and Information Science, North-Eastern Hill University, Shillong.

North-Eastern Hill University, Shillong was awarded а *"Certificate"* of Content Contribution" by the National Digital Library of India (NDLI) and Indian Institute of Technology Kharagpur under the aegis of Ministry of Human The Resource Development (MHRD), Government of India(GOI) as a result of the digital services rendered to NDLI through the Library Digitization Programme.

CENTRAL LIBRARY (TURA CAMPUS)

Assistant Librarian

: Mr. A.J.Singh,

Staff: 5

Assistant Librarian	Mr. A.J.Singh,
(Sr. Prof. Asstt.).	Dr. A.K. Mondal,
(MTS)	Shri R.P. Yadav,
(MTS)	Shri. UdaiNathNaik,
(MTS)	Smt. SitaChetri,

North Eastern Hill University, Tura Campus was established in 1996 to impart Higher Education with the Motto "RISE UP AND BUILD". The Campus nowhas 9 (Nine) Post-Graduate and Research Departments. They are - English, Garo, Rural Education, Development and Agricultural Production, Management, Computer Application, Horticulture, Agri-Business Management & Food Technology and History & Archaeology.

During 2018-2019, the Campus Library achieved outstanding progress in terms of its collection. The Library continued to offer services like Reference, Circulation, Bibliography Services, Reprography, OPAC, online access to ejournals & databases and internet browsing facilities to the students, research scholars, faculty members and non- teaching staff of the Campus.

= 49 Members

The Annual Report of NEHU, Tura Campus Library for the year 2018-2019 is furnished below:-Budget Allocation of Books & Periodicals 2018-2019 (Non-Plan)......Rs. 12.00 Lacs. Book Grant = Rs. 3.10 Lacs. Periodicals Subscription = Rs. 7.90 Lacs Library Stationary and Others = Rs. 1.00 lacs **Collection Development.** Total Book collection upto 31.03.2019 = 28551 Vols. Books on Purchase = 27770 Vols. Books on Gift = 781 Vols. Books Added during the year (2018-2019) = 482 Vols. Purchased Books = 457 Vols. Gifted Books = 25 Vols. No. of Journals Subscribed (2018) = 89 Indian Journals = 71Foreign Journals = 18Library Membership Statistics (2018-2019) = 566 Members Students of 9(Nine) PG Departments = 437 Members

360

M.Phil. / Ph.D. Scholars

Faculty Members	= 41 Members
Guest Lecturers	= 13 Members
Non-Teaching Staff	= 26 Members
Library Circulation Statistics (2018-2019)	
Books Issued	=7174 Vols.
Books Returned	=7019 Vols.
Books Consulted	=19,618 Vols.
Statistics of Technical and Library Automation Unit	
Books Classified (2018-2019)	= 482 Vols.
Books Added in the Database & Bar	coded $= 482$ Vols.

Statistics of Reprography Units (2018-2019)

Total no. of Xerox Exposure Provided =27750 exposures

Revenue Collected during 2018-2019

Reprography Services Overdue Fine

Activities by Library Staff.

Library is using Libsys4 software for its computerised housekeeping operations. All the books are in the Computer processed database and they are available on OPAC and on Web-OPAC.

Library provided orientation to the new students on the use of OPAC and introduced the library resources (Print & Electronic) to them.

The library started introducing smart card for issue and return (Circulation) for the Students.

= Rs. 20,778/-= Rs. 2,600/-

NEHU, Tura Campus Library is not only rendering services to its academic user communities but also providing Library services to the neighbouring collegesofWest Garo Hills district. NEHU Tura Campus Library always maintain its standard in regards to providing quality services to students, research scholars, faculty members and non-teaching staff members and aims to further advance the academic functioning of NEHU, Tura Campus, Tura.

COMPUTER CENTRE

Head	: Prof. Mangal C. Mahato
Telephone	: 0364-2723751/272833
E-mail	: hodcc@nehu.ac.in_mangal@nehu.ac.in

Faculty/Staff:5

Designation	Name and Qualification	Specialization
In-Charge	Prof. Mangal C. Mahato, Ph.D.	Solid State Physics
	(IISc Bangalore).	
Senior System	Shri P.P.Dey, B.Tech(REC Warangal),	Electronics &
Analyst	M.Tech (NEHU)	Communication Engineering,
		Information Technology
System Analyst	Shri H.Kharshiing, B.Tech (Jawaharlal	Computer Science &
	Nehru Engg College)	Engineering
	Shri M.Kharjana, B.E. (Sardar Patel	Computer Science &
	College of Engg., Mumbai) On study	Engineering
	leave w.e.f 14 th August'2017	
Computer	Shri P.Kharlukhi, BCA	Computer Hardware &
Operator	Posted to examination section w.e.f	Networking
	Sept'2016.	

Thrust Area of Research:

Providing High Performance Computing facility (24 x 7) to faculty members, research scholars and students of the University, conducting short term courses in computer related subjects, Supporting ICT/ UMS related automation activities of the University.

Brief statement of academic/other activities:

Research Scholars and Teachers/non-teachers from various Departments/Centres utilize the facilities of the Centre for computational work, documentation and internet facility. Short Term Courses are conducted throughout the year and they are as follows: C Programming Java Programming Windows & MS-Office. Computer Hardware & Networking The centre has been providing support to the

online admission process conducted by the

university every year. The Computer Centre lab is provided to the applicants of various University programs to fill up the online forms.

Helpdesk for the University's online admission process to various programs is also setup in the Centre.

The Centre has also been assisting the Finance, Examination and Administration Departments of NEHU. System Analyst and Data Entry Operators of the Centre are involved in the Examination Department's work on a regular basis.

One day Workshop on Document Preparation Through LaTex was organized by IQAC and Computer Centre on 24/10/2018.

ESTA-16 Software was installed in 3 Desktop Computer of CDD, NEHU on 15/5/2018.

A training was organised for the department of Management (MBA) Tura campus, METAT of Seventh-day Adventists, Surat, Tura Law College, Shillong Law College and Khat-Ar-Doloi College for the use of Examination module of UMS. Training was imparted on Examination module of the

UMS on 12/9/2018 to the Faculty from various Department of NEHU.

Student intake (Short Term Courses): Enrolment capacity: 80nos.

	OBC	SC	ST	Gen	Male	Female	From Meghalaya	From Outside
Windows & MS-Office	-	I	17	-	6	11	17	-

Short Term Courses Taught:-

C programming by Mr.P.P.Dey Java Programming by Mr.M.Kharjana MS-Windows & MS-Office by Mr.H.Kharshiing Hardware & Networking by Mr.P.Kharlukhi

Persons Used the Computational facities and published papers:

Prof.A.K.Chnadra of Department of Chemistry,NEHU Dr.Timir Tripathi ,Department of Bio-Chemistry Prof.N.Sha,Department of Zoology Dr.Bipalb Sarkar,Department of Chemistry Prof.R.H.Duncan Lyngdoh, Department of Chemistry

Infrastructure facilities

High Performance Cluster Computer:

SULEKOR-Dell Cluster has been in use by the University community primarily by Research Scholars from the Department of Chemistry, Physics, Bio-Chemistry, Biotechnology and BSSS. This system is available to the user 24x7. The SULEKOR has primarily users for Fortran, Gromacs and Gaussian.

SULEKOR-HP High Performance Cluster Computer:

SULEKOR-HP Cluster was reinstalled w.e.f June'2016. It has been in use by the University community primarily by Research Scholars from the Department of Physics, Zoology and BSSS. This system is also available to the user 24x7. The SULEKOR-HP has primarily users for Fortran, and BLAST.

25 Desktop PCs (Linux)

All these Desktop PCs are connected on a LAN with NEHU internet facility.

25 Desktop PCs (Windows)

Similarly, all these Desktop PCs are also connected on a LAN with NEHU internet facility.

Other activities:

Computer Centre generated an amount of Rs 42,223/- during the period through its various activities.

Mr.P.P.Dey is deputed as Nodal Officer for the ongoing NAD (National Academic Depository) activities of the University.

Mr.P.P.Dey is continuing as the Associate Project Manager for the ongoing UMS implementation.

Mr.H.Kharshiing, Mr.P.P.Dey and Mr.P.Kharlukhi are providing assistance to Examination Section, Administration Section and Finance Section of NEHU in Computer Automation work.

Mr.H. Kharshiing and Mr.P.P.Dey are supporting the helpdesk for University Online Admission.

Staffs of Computer Centre are engaged by the Finance Section, Examination Section and College Development Council of NEHU as and when required.

EQUAL OPPORTUNITY CELL

Brief statement of activities

The Cell deals with matters pertaining to implementation of Government of India Orders, UGC Guidelines and other instructions issued from time to time on the subject of reservation, etc. in co-ordination with Establishment-I & II Sections and the Statistical Cell of the University. As per the information collected by the Cell from the concerned Sections, the present position of SCs/STs & PWDs at teaching, non-teaching levels and admission to various courses/degrees as on 31.03.2019, is as under:

(A) Teaching staff

		Total Post		In Position out of Total Filled							
Sl.No.	Name of the post	Sanctioned	Filled	Gen.	OBC	SC	ST	PWD	Total	Vaca	
	Sunetionea	1 mea	0011	ове		51	1	rotur	nt		
1.	Assistant Professor	219	181	125	19	21	15	1	181	38	
2.	Associate Professor	151	88	82	-	1	5	-	88	63	
3.	Professor	95	41	39	-	1	1	-	41	54	
4.	Professor/Associate Professor	2	-	-	-	-	-	-	-	2	

(B) Non-Teaching staff

Sl.No Name of the		Total Post		In Position out of Total Filled							
	post	Sanction ed	Filled	Gen.	OBC	SC	ST	PW D	Total	Vacant	
1.	Group-A	64	50	50	-	-	-	-	50	14	
2.	Group-B	185	111	34	42	22	12	1	111	74	
3.	Group-C	451	198	68	15	2	112	1	198	253	
4	Group-D	312	168	71	13	2	82	-	168	144	

(C) Admission to various courses/degrees (2018-19)

	Course/Deg	Total Seats	0	In Position out of Total Filled						
Sl.No	ree	Sanctioned	Filled	Ge n.	OB C	SC	ST	PW D	Tota 1	Vacant
1.	UG	1532	1068	369	34	75	590	0	106 8	-
2.	PG	2834	2690	346	40	33	226 0	11	269 0	-
3.	M.Phil	Not fixed	94	22	14	6	52	0	94	-
4.	Ph.D.	Not fixed	1176	314	66	61	734	1	117 6	-
5.	Cert/Dip	Not fixed	206	16	9	2	179	0	206	-

HEALTH CENTRE

Staff	
SHILLONG CAMPUS	
Chief Medical Officer	: Dr. M. Marwein
Chief Medical Officer	: Dr. C. Mukhim
Senior Medical Officer	: Dr. M.B.G. Momin
Staff Nurses	: One regular and two on contractual basis
Physiotherapist	: One on contractual basis
Pharmacist	: Two
Laboratory Technician	: One
Laboratory Technician	: One
Other staff	Two office staff, one MTS (one daily wage), one Dresser (on
	contractual basis)
Telephone	One Receptionist, three Cleaners, and two Safaiwalas.
	: 0364-2721705/2224639

The following facilities are available at the Health Centre:

1). **CONSULTATION**: Medical Officers are available for consultation at fixed hours as well as for emergency consultation beyond duty hours.

2). **PHARMACY:** The required medicines are purchased from the wholesale suppliers and stored at the medical store. These medicines are issued to the patients based on the prescription by the Doctors.

3). **DRESSING ROOM**: Dressings, injections and minor surgical procedures are carried out in the dressing room.

4). **LABORATORY**: Bio-Chemical and Clinical Pathology tests for blood and urine analysis are performed in the Medical Laboratory of the Health Centre.

5). **OBSERVATION ROOM**: In the observation room, moderately sick patients have been taken care off for giving IV drips etc.

6). **IN-PATIENT TREATMENT**: Patients requiring in-patient treatment are referred to the

hospitals/ specialist within Shillong and thereafter outside Shillong depending upon the necessity.

7). **AMBULANCE**: Ambulance service is provided during emergency for transporting the severely sick patients from residents to Clinic/Hospitals.

8). **EMERGENCY DUTY**: The Resident Medical Officers and Resident Nurse are doing emergency duty outside duty hours whenever needed.

 9). CREDIT BILLING FACILITY: NEHU has credit billing facility available for patients admitted in Nazareth and KJP Hospitals in Shillong and CMC Hospital at Vellore.
 10). SPORTS AID: First Aid service is provided at various sport tournaments organised by the University.

11). PHYSIOTHERAPY: The facility is available for the University community.
12). MEDICAL CAMP : Free medical camps like Bone Mineral Density, Eye Check up, Diabetes and Blood Donation camps are being held at the Health Centre

HINDI CELL

Hindi Officer Telephone E-mail : Sri Rajendra Kr. Ram : 0364-2721331(O)/9435174858 (M) : hindiofficer@nehu.ac.in

The Hindi Cell was established in pursuance of the Official Language Policy of the Government of India to promote the progressive use of *Rajbhasha* Hindi. An Official Language Implementation Committee is also constituted in the University for implementing, reviewing and monitoring the *Rajbhasha* Policy.

Activities

During the year, a Hindi Training Programme for the employees of the University was conducted under the aegis of the Government of India, Hindi Teaching Scheme, Shillong Centre. After completion of different courses, i.e. *Prabodh, Praveen* and *Pragya*, cash awards were given to the successful employees. And the successful employees of the *Pragya* course were given a one-year special increment as per the Government of India's order and guidelines.

The Departmental Official Language Implementation Committee held all the mandatory meetings in every quarter. The quarterly report regarding the progressive use of Hindi was forwarded to the Ministry of Human Resource Development and the Ministry of Home Affairs, Government of India. Besides, Hindi Workshops were conducted for the employees of the University at Shillong Campus. The Cell also convenes the meeting of the Quarterly Official Language Implementation Committee regularly, which is mandatory according to the Ministry of Home Affairs, Government of India.

During the period, the Hindi Cell also conducted the Hindi Divas at Shillong

campus in the month of September 2018, in which several Hindi competitions, *viz*. Hindi extempore speech, Hindi Essay Writing, Poem recitation, Basketball Competition and Hindi Quiz competitions were conducted. The winners of the competitions were awarded cash prizes with certificates on the valedictory function. In addition, the Hindi Cell also observed the Matribhash Divas in the University on 21 February 2019.

Hindi Cell has published the 2nd Edition of Annual-in-House Magazine 'NEHU JYOTI' in Hindi.

Attended:

Rajendra Kr. Ramattended the 11th World Hindi Conference, from 18th to 20th August, 2018, which were organized by the Ministry of Foreign Affairs and Govt. of Mauritius, at Port Louis, Mauritius.

Rajendra Kr. Ramattended the Official Languages Conference organized by Department of Official Language, MHRD, Govt. of India,from 31st January to 1st February, 2019 at Port Blair, Andaman & Nicobar Island.

Rajendra Kr. Ram attended a two days National publicity conference cum National literary seminar on the $23^{rd} - 24^{th}$ February, 2019 in collaboration with Meghalaya Rashtriya Bhasha prachar samiti, Shillong at Auditorium Old Guest House NEHU, Shillong.

INTERNAL QUALITY ASSURANCE CELL

Director: Prof. Purusottam NayakTelephone: 0364- 2721070/1080(0); 9436111308 (M)E-mail: directoriqac@nehu.ac.in

The IQAC is meant for planning, guiding, monitoring and assuring Quality and its enhancement and doing the necessary activities for achievement of the same. It also aims at systematizing efforts and measures of the University towards academic and overall excellence of the University. To achieve this end the IQAC has performed the following functions in the academic year 2018-19

IQAC collected required information from various Departments/Centers/ Sections of the University for preparation of the Annual Quality Assurance Report for the academic year 2017-18, prepared the report AQAR 2017-18 and submitted to NAAC, Bangalore and uploaded to the University website A number of applications received from faculty members for their promotions under Career Advancement Scheme (CAS) were screened by IQAC with the help of various Screening Committees constituted for the purpose with the approval of the Vice-Chancellor.

IQAC organised a ONE-DAY Workshop for Non- Teaching staff of the University on "Document Preparation through La-Tex" on 24th October, 2018

5th IQAC Meeting was convened on 25th October, 2018 to finalise AQAR 2017-18 and discuss the important issues regarding quality enhancement of the University.

NATIONAL SERVICE SCHEME CELL

Programme Coordinator	: Dr. Deigracia Nongkynrih
Telephone	: 2721151, 2721152, and 2721153.
Fax	: 2721151.
E-mail	: nss.nehu@gmail.com

The National Service Scheme (NSS) of Government of India envisages to utilize the free Higher time of Secondary School/Colleges/University students for socially productive works. An important feature of the NSS is that its programmes are organized by the student volunteers themselves, under the guidance of their teachers as Programme Officers. The work undertaken by the NSS units are divided into Regular Activities and Special Camping. The volunteer strength has increased to 21567 comprising volunteers from 2 P.G. units, 40 colleges and 2 Medical institute with 91 NSS Programme Officers.

Review Meeting:

A *review meeting* for Programme Officers was held on 18th May 2018 at the Vice- Chancellor's Conference Room, NEHU, Shillong. More than 50 NSS Programme Officer's from different institutions attended the meeting.

Owing to the success of the Blind walk, a *review meeting* was held in the Monfort School, Tura on 12th October 2018 where a discussion on the future plans to make people aware of the importance of eye donation was done. The meeting was attended by Programme Officer Mr. Suraj Pradhan.

The 38th NSS University Advisory Committee meeting was held on 13th May 2019 at NEHU, Shillong.

Blood Donation:

This year 18 camps were held with 526 NSS volunteers making donations to the various blood banks in the state through *Blood Donation Camps and Emergency Donations*. These camps were conducted in collaboration with the Meghalaya AIDS Control Society, (MACS) State Blood Transfusion Council (SBTC) and the blood banks

of Pasteur Institute, Nazareth Hospital, NEIGRIHMS and Tura Civil Hospital.

Meghalaya AIDS Control Society organised the State Level Observation of "*World Blood Donor Day*" on the 14th June 2018 at Durbar Hall, Raj Bhavan, Shillong. 11 NSS volunteers from NSS unit, NEHU, Shillong attended the same.

The NSS unit of Shillong Commerce College, Shillong organised a *blood donation cum awareness programme* on 19th June 2018 at the college campus.

The NSS Unit of Shillong College, once again conducted its regular *blood donation camp* in the College Campus on the 21st August, 2018. The camp was held as part of its regular activities programme of the NSS which is conducted annually to generate awareness amongst youth on how blood donation a life and that there is an increase in number of donors which is a healthy trend. The Camp was conducted in collaboration with the NCC Unit of the college and the Regional Blood Bank, Pasteur Institute, Shillong. Large number of volunteers attended the camp and after thorough medical investigations, 34 units of blood could be collected from volunteers. The camp was also attended by many teachers and non teaching staffs among others.

The NSS Unit, NEHU, Shillong in collaboration with Meghalaya AIDS Control Society organised an awareness program on *voluntary blood donation* on the 12th September 2018 at Non-Science cluster classroom. Dr. Hughbert Dkhar was the resource person and 68 new volunteers participated in the program.

The NSS unit of Union Christian College in collaboration with Dr, H. Gordon Robert Hospital, Jaiaw, Shillong and NEIGRIHMS, Shillong organized a *blood donation camp* at the college campus on 19th September 2018. 75 volunteers donated blood.

The NSS Unit, NEHU organised two *blood donation camps* today the 12th October 2018.

However, because of the forthcoming puja holiday many students left the campus. So, only 40 donated out of 58 registered students.

The NSS unit of Synod College, Shillong organized a *blood donation* camp at the college premises in collaboration with Dr. H. G. Gordon Robert Hospital, Shillong on 28th March 2019. Altogether 32 volunteers donated blood.

The NSS unit of BBS College, Shillong organized a *blood donation* camp at the college premises in collaboration with Pasteur Institute, Shillong on 30th March 2019 at the college campus. 29 volunteers donated blood.

Republic Day Parade Camp :

The *Selection Camp* for the Pre Republic Day Parade camp was held on 14^{th} September 2018 at the Community Hall, NEHU, Shillong. About 150 students from all colleges participated in the same. 14 volunteers attended the *Pre Republic Day Parade Camp* at USTM, Khanapara, Meghalaya from $4^{\text{th}} - 13^{\text{th}}$ November 2018.

2 NSS volunteers from Union Christian College and Kiang Nangbah Government College participated in the *Republic Day Parade Camp* held at New Delhi from 1st- 31st January 2019.

North East NSS Festivals :

30 volunteers alongwith 1 Programme Officer from 2 colleges and 1 P. G. unit attended the *North East NSS Festival* at Itanagar from $23^{rd} - 27^{th}$ March 2019.

Adventure/Trekking Programme:

The NSS unit of Tura Government College, Tura organised *trekking cum adventure programme* on 6^{th} June 2018. More than 60 NSS volunteers participated in the same.

The NSS unit of Nongtalang College organized a *trekking expedition* on the theme "Healthy Youth for Healthy India" on the 19th February 2019 from Kudeng Thymmai to Kudeng Rim in War Jaintia. Altogether 55 NSS volunteers took part in this expedition.

The NSS Unit, Women's College Shillong organized an *Adventure Trip/Trekking* on the 19th March 2019, from College (Women's College) to Umroi Airport, a distance of 30 km. altogether. A number of 107 NSS volunteers and five teachers

including 2 Programme Officer's took part in the programme.

Special Camps: Under the theme of "Healthy Youth for Healthy India"

Special Camps were held at various places as highlighted below:

Shillong College, Shillong at Nongkyndah village and Nongeitniang village.

Kiang Nangbah Government College, Jowai at Khonglah village.

Jaintia Eastern College, Khliehriat at Suchen Rimvillage.

Lady Keane College, Shillong at Subakalai-Laitsohpliah village.

Sngap Syiem College, Mawkyrwat at Nongdom-Nongbreivillage.

Union Christian College, Umiam at Mawlyndepvillage.

Mawlai Presbyterian College at Laitmawroh village.

Shillong College, Shillong at Ur Masi U Johvillage.

Durama College, Tura at Buriparavillage.

St. Edmund's College, Shillong at Diengsong village andDewlieh village.

Thomas Jones Synod College, Jowai at Amutong village.

Women's College, Shillong at Mawkyrdep village.

Capt Williamson Memorial Govt College, at Masighatvillage.

Mawsynram Border Area College, at Phlangmawsyrpatvillage.

Mendipathar College, Mendipathar at Kera Galram village.

Nongtalang College, Nongtalang at Lamin village.

Nongstoin College, Nongstoin at Nongrangoi village.

Tura Government College, Tura at Chasingrevillage.

Acheng Rangmanpa College, Mahendraganj at Fakirpara village.

St. Anthony's College, Shillong at Lumsohpieng village.

NSS NEHU, Unit, Shillong at Nongsangu Village. Lady Keane College, Shillong at Subakalai-Laitsohpliah village.

St. Anthony's College extension, Byndihati at Lumshken village.

Nabon Women's Synod College, Shillong at Umjathangvillage.

Loyola College, Williamnagar at Chiringgrovillage.

St. Dominic's College, Shillong at Niangbyrnai village.

Ri-Bhoi College, Nongpoh at Umkyrpiang village. Major activities undertaken during these camps were:

Socio-economic survey of the village, literacy programmes, demonstration on rural technologies and low cost sanitation, disaster management, formation of SHG's, waste disposal and composting, cleaning drives, white washing of local schools, digging of water ponds/fish ponds, asset creation, quiz/debate, sports competitions, trekking, awareness on HIV/AIDS, drug abuse etc. Besides these activities, free medical and eye check-up camps have become a regular feature during these camps. We are grateful to the DMHO's of the different districts and to Bansara Eye Care Centre, Shillong for their support.

Workshops/

Trainings/Orientations/Seminars:

5 Programme Officers from different colleges attended the "*North East Conference on Earthquake/Landslide Mitigation*" from 30th April to 1st May 2018 held at the State Convention Centre, Shillong organised by the Meghalaya State Disaster Management Authority (MSDA) Government of Meghalaya.

NSS Shillong College Unit, conducted a one day *Orientation Programme* for newly inducted volunteers of the college on the 15th June, 2018 at the college Indoor Sports Complex.

This is to inform you that the NSS Unit, NEHU, Shillong under the leadership of Dr. E. B. Myrthong organised the *Orientation Programme* on the 9th October 2018. The resource persons of the programme were Mr. Badonbok Paliar and Mr. Shining Kharbihkhiew. A total number of 118 new NSS volunteers attended and the programme was very successful.

Ms. E. Myrthong, Programme Officer, NSS Unit, NEHU, Shillong attended the orientation cum training of *State level Coordination Committee* and *District level Coordination Committee* on 28th March 2019 organised by the State Tobacco Control Cell, Meghalaya at Hotel Poinisuk, Shillong.

Programme organizer alongwith Mr. B. Kharkongor attended the *meeting* with Youth organizations held at the office of the Chief Electoral Officer, Meghalaya on 21st February 2019 and 25th March 2019.

The Unit of Union Christian College conducted a one day workshop on *personality development and communication skills* at their adopted village of Mawlyndep on 9th March 2019. 180 students attended including 30 from SOS Children's Village, Umiam.

3 (three) NSS Programme Officer's from 3 colleges attended a *TOT on Youth & Sustainable Development Goals* organized by RGNIYD at Sikkim from $11^{\text{th}} - 14^{\text{th}}$ March 2019.

NSS Day:

The NSS Cell NEHU in observance of 49th NSS Foundation Day organized a day long programme on 24th September 2018 at the Multi-Use Convention Centre, NEHU, Shillong. More than 700 NSS volunteers along with Programme Officers from different institutions attended the programme. Honb'le Governor of Meghalaya Shri. Tathagata Roy, was the chief guest on the occasion. The University Level NSS Awards were also presented on the occasion. The best NSS Unit was awarded to Lady Keane College, Shillong, Tura Government College, Tura, Union Christian College, Umsaw Khwan, BBS College, Shillong and Kiang Nangbah Government College, Jowai. Thebest Programme Officer was awarded to Mr. K. Sarma. Union Christian College, Umsaw Khwan and The best NSS Volunteer Awards were given to Mr. James Hitler Mawphniang, NSS Unit, NEHU, Shillong, Mr. Barrister Kharsahnoh, Shillong College, Shillong and Ms. Batsachi Rikkamba T. Sangma, Tura Government College, Tura.

The awards were given on the basis of their committed and effective participation in community service. The day ended with a variety programme which comprised songs, dances, skits and multi-varied cultural items.

Environmental Programmes:

The NSS Unit, NEHU, Shillong organised a *weeding programme* on 5th May 2018. 15 NSS volunteers alongwith Forest Department,

Government of Meghalaya participated in the programme.

Several NSS units observed *World Environment Day* on 5th June 2018 by organizing varied programmes on the theme "*Connecting People to Nature*" such as tree plantation, cleaning drive, skit, song, lectures based on environmental issues, drawing competitions for school children of adopted village. About 2000+ saplings were planted.

The NSS Unit NEHU, Shillong organised a *one week weeding and cleaning program* at NSS garden near lake side. 2 volunteers participated in each day and on the 30th June 2018 a total number of 16 volunteers participated.

The NSS unit of St. Edmund's College, Shillong organized a *cleaning drive* at the college campus on 26th February 2019. More than 50 NSS volunteers participated.

The NSS unit of Union Christian College in collaboration with the village Durbar, Umbir organized a *tree plantation programme* in the college campus on 19th September 2018. About 100+ saplings were planted.

Other Activities :

The NSS unit of Seng Khasi College conducted an *awareness programme* on *"Cancer"* at the college campus. Resource persons were from NEIGRIHMS and Civil Hospital, Shillong.

The NSS Unit, NEHU, Shillong organised a *food fest* on 9th May 2018 at Community Hall, NEHU. 11 volunteers participated in organising the program. The amount profited from the food fest will be donated to orphanage.

The NSS unit of St. Edmund's College, Shillong celebrated the *International Day of Biodiversity* on the theme *"Celebrating 25 years of action for biodiversity"* on 24th May, 2018 on the college premises. The day was initiated with a cleaning drive, followed by distribution of saplings under its *'Adopt a tree'* drive and slogan writing competition.

As part of the *fund raising Program*, NSS Unit, NEHU, Shillong organised a *Cricket Tournament* at NEHU campus on the 27th May 2018.

NSS Unit of Shillong College observed the *World No Tobacco Day* on the 31^{st} May 2018 in collaboration with the NPCDCS O/o District Medical & Health Officer East Khasi Hills. On this day a rally was conducted from Police Bazaar to State Central Library. 40 numbers of NSS volunteers participated in this programme.

In connection with the aim of the government to include in the electoral process all those who are eighteen and above, the district election office of West Jaintia Hills conducted a *debate* on the topic *"Electoral Participation is healthy for the country"*. The NSS volunteer of Kiang Nangbah Government College, Jowai Miss Nicia Khonglah got the second position for the motion along with a certificate and a trophy.

NSS Unit of Shillong Commerce College, Shillong observed the *World No Tobacco Day* on 15th June 2018 at the college campus.

In observation of *"International Day of Yoga"* different NSS units organised several programme at their respective institution on 21^{st} June 2018.

The NSS unit of Sankardev College organized a one-day awareness programme on *"Youth and Addiction to Technology: Impact, Consequences and Remedy"* on 26th September 2018 at the college campus.

A **Blind walk** was organized on 11th October 2018 in Tura town for the first time. Many organizations collaborated together to make this possible. The walk was whistled off by the DC of West Garo Hills. (Sir Ram Singh, IAS). It started from DC Park to supermarket and back. All the participants of the walk were blindfolded and the walk was led by two NSS Volunteers holding the banner by the side and DC Sir in the middle. The program was volunteered by the NSS Unit of Don Bosco College, Tura under the in charge of P.O. Suraj Pradhan. The NSS unit also cleaned the area where the program was held after it was over.

On the occasion of the birth anniversary of *Sardar Vallabhai Patel* the NSS unit of Kiang Nangbah Government College conducted a lecture on the role played by Sardar Patel to bring unity to the country in the face of growing seditious tendency in some parts of the country like in Jammu and Kashmir and the princely state of Hyderabad.The unit also organized *run for unity*. The event started from mission hospital at 7am and ended at 8am at the college campus.

Sports Authority of India (SAI) in collaboration with NSS Unit NEHU Shillong organised a *Run for Unity* in observance of birth anniversary of Sardar Vallabhai Patel on 31st October 2018 at SAI NEHU, Shillong. More Than 200 participants participated. The Shillong Law College NSS unit organised a *health Camp* on the 10th November, 2018 at Marbisu Village (adopted village), more than 270 villagers benefited from the camp. However, people who attended the camp were majority of women and children, many were prescribed with multi vitamins, calcium, iron, de worming, and anti scabies medicines. On the whole the programme ended successfully with appreciation and thanks from the village.

The NSS Unit Nongtalang College, Nongtalang observed Communal Harmony Week from 19th – 25th November 2018 at the college campus. On 19th November 2018 the unit conducted an essay competition on the topics "Communalism -Challenges for maintaining Harmony and Around Unity". National 22 volunteers participated in this competition. On 22nd November 2019 the unit observed the Flag Day in the college premises. Volunteers collected donations for the national Foundation for Communal harmony.

Programme Organiser conducted the *screening* of participants for the National Youth Parliament at Shillong College from 17th to 19th January 2019.

NSS Cell, NEHU hosted the *State Level Youth Parliament* at the NEHU Old Guest House Auditorium Hall on 7th February 2019. 15 participants from all the districts took part in the programme.

The Unit of St. Mary's College, Shillong conducted a popular talk on *"Smart City"* a socioeconomic and political perspective on 4th March 2019 at the college auditorium. Dr. L. Kma, Programme Coordinator, NSS Cell, NEHU attended as resource person.

20 (Twenty) NSS volunteers from Mairang Presbyterian Science College, Mairang, Nongtalang College, Nongtalang, Don Bosco College, Tura and Ri-Bhoi College, Nongpoh attended a *National Integration Camp* at Don Bosco University, Sonapur, Assam from 8th – 14th March 2019.

The NSS Unit Women's College organized an awareness programme on the 12th March 2019 in the College Auditorium on "*The Ill Effects of Unplanned and Unscientific Mining Activities*". A number of 100 students participated in the programme.

The unit of St. Dominic's College, Shillong organized awareness campaign on *traffic rules, road safety and effects of noise pollution* on 15th March 2019. (newspaper clipping attached).

The NSS unit of St. Mary's College, Shillong organized a *NSS leadership and Reach Out programme* on 20th March 2019 at Madanrting, Shillong. 100 volunteers attended.

Special Programme during Special Camping :

NSS units have also constructed community utilities through the labour of volunteers at the respective adopted villages during the course of the special camping programme:

Bus shed near the college Campus of Jaintia Eastern College, Khliehriat. *Footpath* at Lumsohpieng village. *Special Planting drive (Black Pepper)* for income

generation at Chiringgro village.

Village footpath at Nongeitniang village.

Villagefootpath at Nongkyndah village.

Water drain at Khonglah village.

"Awareness Billboards" at Subakalai-Laitsohpliah village.

Traditional drinking water at Nongdom-Nongbrei village.

Footpath at Ur Masi-U-Joh village.

Drain channel at Diengsong village.

Footpath at Dewlieh village.

Footpath at Mawkyrdep village.

Footpath at Nongsangu village.

Footpath at Nongrangoi village.

Footpath and dustbin at NEHU Permanent Campus, Shillong.

RCC bus shed at NEHU, Permanent Campus near SSPTS Maxi Cab stand.

Bathrooms/washing shed at Phud Japung Phlang Mawsyrpat village.

RCC bus shed at Mawkynroh, Umshing opposite NEHU, permanent campus, Shillong.

Toilet constructions: Swacch Bharat Abhiyan

Boy's toilet at Kendriya Vidyalaya School, Permanent Campus, NEHU, Shillong. *Toilet* at Laitmawroh village.

NEHU DATA AND VOICE NETWORK (NDVN)

SHILLONG CAMPUS	
Administrative in-	: Prof. P. Nongkynrih
chargeTechnical Officer	: Mr. Ivan Lyngdoh
System Analyst	: Mr. S. Nongkhlaw
Technical Assistant	: Mr. S. N. Sharma
Field Assistant (Technical)	: Mr. Kapoorchand Chaudhury (On contract)
Telephone	: 0364-2726195/2726196/2726197/2551297
E-mail	: admin@nehu.ac.in & ndvn@nehu.ac.in

NDVN Committee 2019-2020

(Constituted vide letter No. 34-1/Admn/NDVN Committee/2016/7890 dated 5th March 2019)

Chairperson.
Member.
e. Member.
pert Member
Member
Member.
Member.
Member.
Member.
lyst Member
Member
Member
Convener

The NEHU Data and Voice Network (NDVN) Facility, commissioned in 2003 as VSAT Facility is the network backbone for Information and Communication all Technology (ICT) related services covering all academic and administrative to departments including Hostels and Residential quarters. **Facility & Services**

Major initiative of the year A.

The WIFI project of the MHRD-MEITY ERNET commissioned through and operational now has more than 5000 registered users and the following are the additional components added to the network on the 2nd Phase.

S. No.	Description	Qty	Status
1	48 port 10/100/1000Base-T module	1	Installed
2	Access Switch-Layer2 with console/ auxiliary ports along with all other accessories and required modules /components:		
i	24 port PoE 10/100/1000 Mbps (Ethernet-RJ45) switch with 2 1Gig/2 10Gig uplinking Ports with SFP+ support- Cisco WS- C2960X-24PD-L	15	Installed

ii	24 port 10/100/1000 Mbps (Ethernet-RJ45) switch with 2 1Gig/2 10Gig uplinking Ports with SFP+ support Cisco WS-C2960X- 24TD-L	71	Installed
iii	1000BaseLX SFP	30	Installed
3	Network Management Software (NMS) for 100 switches - Cisco Prime Infrastructure, R-PI2X-K9	1	Installed
4	Additional licenses for 50 switches for NMS (ref.Previous PO)	1	Installed
5	Wireless Access System(WLAN)		
i	Wireless Access Points supporting 802.11a/b/g/n/ac and with suitable antenna - Cisco 3702E	260	Installed
6	Firewall: Appliance based Hardware firewall with minimum 4x 1Gigabit Ethernet ports - Cisco ASA 5555-X with FirePOWER services, ASA5555-FPWR-K9	1	Installed
7	IPS: Appliance based Hardware IPS with minimum 6x 1Gigabit Ethernet ports - Radware DP1016	1	Installed
8	Latest Servers with Windows server 2008 or latest -Cisco UCS C240 M4S	2	Installed

Installed HP ML 150 Gen9 2 x86 64bit processor (Intel Xeon E52620 v3); 64 GB ; 2*600 GB SAS running NEHU Webserver http://www.nehu.ac.in

Installed 2 nos of Desktop PC DELL OPTIPLEX 3060MX XCTO having

Windows 10 Pro 64 Licensed & Preloaded

Intel® Core[™] i5-8500 8 GB DDR4-2666 SDRAM 1 TB 7200 rpm SATA for **CUBE Software** for call logging and required billing and Remote Maintenance respectively.

All active Devices areunder either warranty or Annual Maintenance Contract.

B. Existing Infrastructure

Sr.No.	Description	Qnty
1	Core Switch - Cisco Nexus 7000, N7K-C7010	1
2	Zonal Switch-type2 - Cisco Nexus 5000, N5K-C56128P	4
3	Cisco WS-C2960X-24PD-L 24 port PoE 10/100/1000 Mbps Switch	35
4	Cisco WS-C2960X-24TD-L 24 port 10/100/1000 Mbps Switch	35
5	Cisco 5520, AIR-CT5520-100-K9 Wireless LAN Controller	2
6	Cisco 3702E Wireless Access Points	170
7	Cisco 3702E with external enclosure Wireless Access	17
8	Cisco UCS C240 M4S with Enterprise Linux Server-	1
9	KVM switch, Keyboard & display –	1
10	5KVA online UPS with 1 hour battery backup	4
11	1KVA UPS with 30 minutes battery backup-	36
12	Resident Engineer	2
13	All required Passive components (Racks, UTP, Fibre cables & accessories)	

1. WIFI-MHRD-MEITY through ERNET with more than 5000 Users

1. SERVERS

The HP BladeChassis C7000 host 9 Blade Servers for the following services:-

4 Nos of Squid **Proxy servers**

Examination Webserver

(http://exams.nehu.ac.in/)

DNS Servers

Dell Server running Mail (nehu.ac.in) and **LDAP** for single sign on authentication.

IBM severs running HP's Intelligent Management Center ()IMC) and Extreme's Epicenter for **Network Management** System.

IBM Server running Avaya VisAbility Management Suite for telephony Administration.

2. DATA NETWORK

The National Knowledge Network (NKN) of 1Gbps link commissioned on 19th May 2010 provides Internet access and other related applications (Internet, IP authenticated e-journals from UGC-Infonet E-journal consortium, mail and web etc.) to all Academic and Administrative departments.

The Extreme Summit **Black Diamond 8806 Core Switch**with 24 ports 1/10 GbpsFibre connectivity and latest MSM and OSprovides connectivity, routing, vlans access to and from all layers 2 (L2) switches located in departments' buildings.

All Departments are connected to the core switch with the Layer 2 Switches consisting of Extreme Summit X150-24t, Extreme Summit X150-48t, HP Procurve 1920 Cisco SG500 with gigabit uplinks.

Dedicated Internet connections with 48 port L2 HP ProcurveSwitches are provided to most departments having **computer laboratory facilities**.

The **NextGen Firewall** DELL SonicWallSuperMassive 9200 provides the required up-to-date network security and performance. The DELL SonicWallEmail Appliance Security (ESA) provides enhanced security and spam filter for the mail server.

WI-FI connectivity is available in all **hostels**with LAN-Controller based Access Points.

Broadband Internet connectivity is provided to all P- Type, L- Type, Type V, Type IV and Type III **residential quarters** with the installation of 6 nos of **IPDSLAM**.

The Network provides **IP CCTV** cameras connectivity across the campus.

3. OTHER SERVICES

Intranet and Internet connectivity for the **Digital Repository** under the Library Digitalization Project of UPE.

Intranet and Internet connectivity for the University Management Software (UMS), the ERP e-governance project running several Academic, Finance and Administration Modules.

Web and sub-domain services to

Library Services (OPAC).

Access to Computer Centre's HPC (Sulekor).

Bioinformatics Centre - NEIHPID (North-East India Helminth Parasite Information Database http://nepiac.nehu.ac.in).

Geography Department's Automatics weather station.

4. VOICE NETWORK

TwoAvaya S8730 servers in hot-standby mode,twoG650 Media-gateways located in NDVN. Administrative Building and Political Science Departmentand four G450 Media-gatewayslocated in the School of Technology (SOT), Old Guest House, Type II and New SOT provide TDM backbone and enable switch architecture for the IP voice/telephony network. All the Mediagateways are connected and registered to the Server-over-IP-Back-Bone.

The 2 Mbps PRI and 2 Mbps Level-DID leased lines from BSNL integrated with the IP –PBX Server provide incoming and outgoing telephone calls facilities to/from the network Voice Network (Telephone connectivity) is extended to all Departments, Centres, Administrative building and most residences quarters with a capacity of over 1500 telephone extensions.

SOPHISTICATED ANALYTICAL INSTRUMENT FACILITY

Head	: Prof. Sudip Dey
Telephone	: 0364-2721801(O) /9436119787(M)
Fax	: 0364-2550212
E-mail	:saifnehu@gmail.com, hodsaif@nehu.ac.in, sudipdey.dey1@gmail.com

Faculty and Scientific officer :7

Designation	Name and Qualification	Specialization
Professor	Dr. Sudip Dey MSc (NEHU), Ph.D. (NEHU)	Zoology: Animal Physiology Electron Microscopy and Biological Ultra structure
	Dr. T. Chakraborty MSc (NEHU), Ph.D. (NEHU)	Solid State Physics
Sr. Scientific Officer	Dr. B. Dkhar, MSc (NEHU), Ph.D. (GU) Dr. D.Dey, MSc (NEHU), Ph.D.(RDU) Dr. P.S.Dkhar, MSc (NEHU), Ph.D. (NEHU)) Dr. S.K.Prasad, MSc (NEHU), Ph.D. (NEHU) Mr. J.M.Sohtun, MSc (NEHU)	Zoology Chemistry Biophysics Bio Chemistry Bio Chemistry Biochemistry

Brief Statement of Academic Activities

Analytical Service and Data Interpretation in Scanning Electron Microscopy, Transmission Electron Microscopy, FT- NMR, ICP, GF-AAS, Image Analyze, LC-MS

Seminars/Conferences/Workshops/Symposia/Extension Programmes

Organized			
Event	Date	Venue	Convener
(A)Workshop			
(i) LC-MS: & its applications	3 rd -5 th Apr,'18	SAIF	Mr. J.M.Sohtun
(ii)ICP-OES: Principles	18 th -20 th April'18	8 SAIF	Dr. P.S.Dkhar

& Applications (*B*) *Training*

ICAR-NE region

(i) TEM	3^{rd} - 5^{th} Oct, '18	SAIF	Dr. B.Dkhar
(ii) SEM	24-26thSept,"18	SAIF	Mr. N.K.Rynjah
(iii) FT-NMR	24 th -26 th sept,'18	SAIF	Dr. D.Dey
(iv) ICP, AAS,CHN	4 th -15 th sept,'18	SAIF	Dr. P.S.Dkhar

Attended

1 Dr.Jasha MH Anal

Science Writing Workshop from 24/9/2018 - 29/9/2018 (6 days) by Current Science Association, Bengaluru.

2. J.P.Nogkynrih

(i)Setting up of Biological Sample preparation Laboratory: USIC, Burdwan University: 2018) (As a Resource Person)

(ii) A seven day National workshop on "Hands on training on Transmission Electron Microscopy"-7th to 15th February, 2019, Burdwan University (As a Resource Person: Technical)

Research Papers

Published Abroad

1.Thabah,C.M,,Devi,L.M.,Hooroo,R.N.K.,D ey,Sudip (2018) Morphological alterations in the External gills of some tadpoles in response to pH, *J.Morphological Sciences*, DOI https/doi.org/10.1055/s-00-166947638 2. Kharkhongor, M., Hooroo, R.N.K and Dey, Sudip (2018) : Effect of the insecticide Chlorpyrifos on hatching, mortality and morphology of *Duttaphrynus melanostictus* embryos,, Chemosphere 210, 917-920 **Other Activities**

Dr. J.M.Anal

Reviewer of International Journal: Medicinal Chemistry Research (MCRE)

Springer journal,Environmental Engineering Research, of the Korean Society of Environmental Engineers (KSEE), Chemosphere, Elsevier and others.

SPORTS DEPARTMENT

Teacher-in-Charge	:	Prof. S. Umdor
Telephone	:	0364-2721381/1383
Email	:	nehusports@gmail.com

Staff	:	03		
Name		Designation	Telephone	
Shri. N. Das		Assistant Director	0364-2721383	
Mrs. A. R. Synnah		Basketball Coach		
Shri. L. Darlong		Football Coach		

The Sports Department of the University functions under the overall guidance of the NEHU Sports Board, which is chaired by the Vice-Chancellor of the University. The Sports Department is the nodal agency for organising sports activities for students of the university and affiliated colleges, and also for other stakeholders of the University. The Department is also actively involved in providing support to students in conducting sporting events such as annual varsity fest and other sporting events organised from time to time.

Activities undertaken during 2018-19

The annual meeting of NEHU Sports Board was convened on the 14th June 2018, which was chaired by the Vice-Chancellor Prof. S K Srivastava. Important decisions were taken in the meeting including approval of the annual sports calendar of the University and necessary amendments of the constitution of the Sports Board.

To promote sports in the region and also build goodwill amongst stakeholder of higher education, the Sports Department of the University organised the 4th NEHU Vice-Chancellor Cricket Tournament 2018at the Multi Purpose Ground, NEHU Permanent Campus, Shillong from 24th to 27thApril 2018. Altogether 4 teams wereinvited to take part in the tournament, viz., i) Ministry of Human Resource and Development (MHRD) Govt. of India, New Delhi, ii) State Bank of India (SBI), Shillong, iii) Meghalaya College Teachers Association (MCTA), Shillong and iv) Host University. The final match was played between MHRD (GOI), New Delhi Versus NEHU team in which the latter emerged as champion. The tournament ended with a closing ceremony where Prof. B. Panda, Dean, School of Economics, Management and Library Science, NEHU graced the occasion as Chief Guest.

The Department organised the Inter-College Badminton (Men & Women), Table Tennis (Men &Women) and Chess (Combined)Tournament from 30th August to 1st September 2018in the Indoor Stadium and NEHUSU office. In the Badminton Men & Women categories, the winners were St. Anthony's College. In Table Tennis Men & Women events, St. Anthony's College lifted the championship trophies in both categories. In the Chess (Combined), St. Anthony's College won the event. Prof. B. S Mipun, Department of Geography NEHU, was the Chief Guest in the closing ceremony and gave away the prizes to the winning teams.

Sports Department, The NEHU in collaboration with Telecom Center of Excellence India supported bythe Department Telecommunications, of

Government of India organised a Workshop on Innovation in Mobile Application and Development Ecosystem (I-MADE) on the 24th August 2018 at the Department of Information Technology (IT), SOT, NEHU, Shillong. Altogether 52 colleges participated in the events.

To Commemorate the birth anniversary of Major Dhyan Chand which is also celebrated as the National Sports Day, the Department organised an*Inter-College Cross Country and the NEHU Cross Country Run*on 29 August 2018 for teaching, non-teaching members and students of the University. In the Inter-College Cross Country Run, St. Anthony's College, Shillong, emerged as the overall champion in the both Menand Womencategories.

The Department organised the Inter-College Basketball (Men & Women) Tournament from the 24th to 27thSeptember 2018at the NEHU Basketball Court. Altogether 09 Colleges in the Men's section and 07 colleges in the Women's section participated in the tournament. In Men's section, St.Anthony's College defeated K.L. BajoriaCollege, while in the Women's section St.Anthony's College defeated Shillong College and was champions. Shri L.M.K. declared as Lyngrah, Finance Officer, NEHU was the Chief Guest and gave away the prizes to the winning teams.

The Department organised the *Inter-College Football (Men) Tournament* from 6thto 16thNovember 2018 at NEHU Football Ground. Altogether 25 colleges participated in the tournament. The final match was played between Mawlai Presbyterian College and B.B.S College; where former emerged as champion. The tournament ended with a closing ceremony in which the Chief Guest, Prof. L.J. Singh, Department Electronic & Communication Engineering (SOT), NEHU, gave away the prizes to the winning teams.

The NEHU Basketball (Women) Team participated in the *East-Zone Inter-University Basketball (Women) Tournament* organised by the Gauhati University, Gopinath Bardoloi Nagar, Guwahati, Assam from 9th to 12th November 2018.

The NEHU Chess (Men & Women) Teams Participated in the East- Zone Inter University Chess (Men & Women) Tournament Organised by the KIIT University, Bhubaneswar, Odisha from the 21st to 24th November 2018.

The Department in collaboration with NEHU Research Scholar Forum organized a talk on the Adventure Sports (Caves and Rivers in Meghalaya) on the 13th November 2018 at the Science Seminar Hall, NEHU Permanent Campus, Shillong. Shri Thomas Arbenz, Editor and Main Author of Caves Pearls of Meghalaya, Shri Zorba Laloo, Co-Author of *'Meghalaya Rivers'* and Shri Brian Daly Kharpan, Founder of Meghalaya Adventure Association were the invited speakers. A large number of students attended the program.

The Department organised the *Inter-College Volleyball (Men &Women) Tournament* from 20thto 22nd November 2018 at NEHU Multi Purpose Ground, Shillong. Altogether 07 colleges in the Men Section and 06 colleges in the Women section participated in the tournament. In the Men's section, St. Anthony's College defeated the Union Christian College and was declared as Champions, while in the Women's section St. Edmunds College defeated Union Christian College and emerged as champion.

The Department organised the NEHU Inter College Cricket Men Tournament from the 25thFebruary to 2ndMarch 2019 at the Multi Purpose Ground, NEHU Permanent Campus, Shillong. Altogether 09 colleges participated in the tournament. The final match was played between St. Anthony's College and Shillong College, where the former emerged as the champion.

For the first time, the North-Eastern HillUniversity Kick Boxing (Men & Women) Team participated in the All India *Inter-University* Kick Boxing (Men & Women) *Championship* organised by Andhra University, Visakhapatnam, Andhra Pradesh under the aegis of Association of Indian Universities, New Delhi from 8th to 11th March 2019. Three participants Mr. Hame Shaniah Suiam, Ioonis Mynsong and Miss Belldona Pakyntein secured 3rd place in their respective weight categories and were awarded with bronze medals.

The North-Eastern Hill University Wushu (Men) Team also for the first time participated in the All India *Inter-University* Wushu (Men) *Championship* organised by the Punjab University, Chandigarh from 12th to 16th March 2019. Mr. Lamphrang Kharsahnoh secured 3rd place in his weight category and was awarded with bronze medal.

STUDENTS' WELFARE

Prof. S. Umdor

Dean, Students' Welfare Phone: (0364) 272-1181 Email: dsw@nehu.ac.in

Prof. L. Joyprakash Singh Provost, NEHU

Phone: (0364) 272-1181 Email: dsw@nehu.ac.in

The office of the Dean, Students' Welfare serves as the nodal agency for student services and their welfare. The major concerns of the office have been the management of the Halls of residences of the Post- graduate, Under-graduate and Research Students, organizing academic study tours through the Departments, Co-ordination of students' sports and cultural activities, conduct of elections to the Students Union, award of the Ph.D. /M.Phil / Non-Net fellowships and Post-graduate scholarships, grant to outstanding students, and grant of Students' Aid to economically weak students. This office also facilitates admission of International Students.

Residence in Hostels: In Shillong Campus the number of Students who were given hostel accommodation during the year 2018-2019 is as follows:

Programme of Study	Gender	GEN	ST	SC	OBC	International students	Total
R.S.	MEN	78	102	27	32	7	242
	WOMEN	85	129	12	23	0	249
P.G.	MEN	49	230	7	19	5	307
	WOMEN	41	228	6	15	5	422
U.G.	MEN	152	208	45	79	2	488
	WOMEN	78	103	11	28	0	220
Total		483	1000	108	196	19	1806

Study Tour: The office coordinated the study tours of the following fourteen academic Departments from Shillong Campus for the year 2018-2019

Name of Department
ECE
Economics
Physics
Commerce
Sociology
Biochemistry
English
History
Education
Anthropology
Nanotechnology
Chemistry
Mathematics
Khasi

The DSW Office supported the conduct of the following additional students' activities:

In order that the term of the NEHUSU and of the Academic calendar coincides, the Elections to the Union Executive Committee of the NEHUSU were held every year, however, during the term 2018-19 the office bearers were elected uncontested and the charge for handing and taking of the outgoing and the new office-bearers of NEHUSU took place on 1st October, 2018.

DSW office supported the Annual event of NEHUSU to showcase talents of students of the University. During 2018-19 the Varsity Fests was held from 5^{th} to 22^{nd} March, 2019.

STUDENT AID FUND: During the year 2018-19, 41 students (1 Post graduate and 40 under graduate) were awarded the Student Aid Fund @ Rs. 3000/- per student per annum for Postgraduate student and @ Rs. 4000/- per student per annum for Under graduate students.

NEHU P.G. MERIT SCHOLARSHIP: During the year 2018-19, 65 Post graduate students were awarded the NEHU P.G. Merit Scholarship, out of which 43 numbers were the Fresh allotees and 22 numbers were the Renewal (including ST/SC) @ Rs.3000/- per student per annum.

U.G.C. NON-NET FELLOWSHIP: During the year 2018-19, a total number of 324 Ph.D. Scholars and 62 M.Phil Scholars were awarded the U.G.C. Non-NET Fellowship @ 8000/ students per month for Ph.D. scholars and @5000/students per month for M.Phil scholars.

STUDENTS' WELFARE CELL (TURA CAMPUS)

Teacher in- Charge, Stu	ident's Welfare: Dr. Deepak Bhagat
Telephone	:+91-9436733357
E-mail	:dip19bhagat@gmail.com

Teacher – in- Charge, Sports	: Dr. Gino A Sangma
Telephone	: +91-9612155002

Coordinator (Special Lecture Group) : Dr. Tilok Thakuria Telephone :+91-8575133962

The Office of the Teacher in- Charge Students' Welfare, NEHU, Tura campus continued to provide ample scope, opportunities and facilities for the all round development of the students. The major activities of the office have been coordination of students admission in various hostels of the university; management of post- graduate student's hostels; conduct of elections of the office bearers and other representatives of students union; supervision and coordination of co- curricular, cultural and sports activities of the students; issuing of travel concession to the students for educational/industrial tours and organising special lectures by eminent personalities etc. **Residents in Hostels**

In the Tura campus, the numbers of students residing in the hostels during the year 2018-2019 are as follows:

Pai	rticulars	ST	SC	GEN	OBC	FOREIGN STUDENTS	TOTAL
P.G.	Men	82	3	23	8	1	117
r.u.	Women	117	4	9	9	1	140
Ph.D.	Men	3		3	4	1	11
FII.D.	Women	1	1				2
	Total	203	8	35	21	3	270

Study Tours/Industrial Tours

The Office of the Teacher in- Charge Students' Welfare, NEHU, Tura campus facilitated the study tours/industrial tours of the following academic departments of the Tura campus: (a) Department of English; (b) Department of Garo (c) Department of Computer Applications; (d) Department of History and Archaeology; and (e) Department of Horticulture.

Additional Student's Activities

Annual Varsity Week (18th April, 2018- 26th April, 2018): Supported the Annual Varsity Week organised by PGSU, NEHU, Tura Campus.

One Day Workshop (8th May, 2018) on "Role of Student Leaders in Institutional Building in the Context of Changed Economic Scenario of the Country" with Prof. B N Singh, Ex- IIT (Kharagpur) and Former Dean, Doon Business School, Dehradun as Resource Person.

World Environment Day (5th June, 2018): In its continuous endeavour to keep the campus and environment green, World Environment Day was observed on 5th June, 2018. The programme was coordinated by Office of the Teacher in-Charge Students' Welfare and PGSU, NEHU, Tura Campus. International Yoga Day (21st June, 2018): To mark the celebration, on 21st June, International Yoga day was organized. The event was successful with the participation of both teaching and non-teaching staff along with students.

INDIC TALK on Dharma and Ecology (2nd August, 2018): A special talk given by Dr. Pankaj Jain, Department of Philosophy and Religion, University of North Texas, USA.

P A Sangma Memorial Lecture (1st September, 2018): The "Second P A Sangma Memorial Lecture" was organised on 1st September, 2018. The Memorial Lecture was delivered by Noble Peace Laureate (2014) Sri Kailash Satyarthi. Orientation Programme (13th September, 2018): An orientation programme for the newly admitted 1st Semester Students was organised on 13th Semester, 2018.

PGSU Election (1st Nov, 2018): Election for new office bearers of PGSU, NEHU, Tura Campus was held on 1st November, 2018.

NEHU, Tura Campus Foundation Day (23rd Feb, 2019): The 23rd Foundation Day of NEHU, Tura Campus was organised on 23rd February, 2019 in NEHU Tura Campus, Chasingre.

Other Events: Other events organised by the PGSU, NEHU, Tura campus in last one year were Parting Social, Fresher's Social, Teachers' Day etc.

UGC-HUMAN RESOURCE DEVELOPMENT CENTRE

Director	: Prof. Rakesh Mohan
Telephone	: 0364-2721401/2721402
Fax	: 0364-2550103
E-mail	: hrdcnehu@gmail.com

Faculty:3

Designation	Name and Qualification	Specialization
Professor	Prof. Rakesh Mohan M.Sc., Ph.D., BCKV Mohanpur	Agronomy
Associate Professor	Dr. (Mrs.) Quendarisa Kharbuli M.Sc., Ph.D. , NEHU, Shillong	Zoology (Genetics)
Assistant Professor	Dr. (Mrs.) Kuheli Biswas Das M.Sc., Ph.D. NEHU, Shillong	Zoology (Biochemical Adaptation)

Thrust area of research:

The UGC-Human Resource Development Centre (UGC-HRDC) has been established to upgrade the knowledge and skills of faculty members of the institutions of higher education, under the Faculty Development Programme of the UGC, New Delhi. The UGC-HRDC organizes Refresher Courses (RCs) and Orientation Programmes (OPs) for the faculty of Universities and Colleges, located in the North-Eastern region as well as in other parts of the country. RCs and OPs are conducted in subjects approved by the UGC, New Delhi in order to update and acquaint the participating teachers with the latest developments and recent trends in their respective subjects. The OPs and RCs are designed to empower the teachers with depth of knowledge to enhance their teaching skills as well as capabilities. Besides, UGC-HRDC conducts Short-Term Courses and Principal Workshops for the Faculties, Research Scholars, Academic Administrators as well as Principals of affiliated Colleges.

Brief statement of academic activities:

The UGC-HRDC was established at NEHU in 2006 with financial assistance from the UGC. It became fully functional in March, 2007 after appointment of non-teaching staff (7 Nos.). The UGC sanctioned 3 academic posts (Professor-Director: 1; Reader: 1, and Lecturer: 1), which are filled up accordingly. The UGC-ASC was allotted three rooms for the faculty members, three office rooms, two lecture rooms, one library-cum-documentation room and a computer Laboratory in the Building for Centre of Studies.

Further, the UGC-HRDC established a Computer Laboratory with 24 numbers of state of the art PCs, a Server, two Network Laserjet Printers, a DLP Projector and a Scanner etc. The Computer Lab is used for training the participants of the OPs and RCs as well as the faculty, research scholars and students of the University in information technology with special reference to teaching and research. The UGC-HDRC has taken up a new initiative to have a one day Interactive Session of the respective departmental Refresher Course Participants with the faculty members of the concerned department on academic reforms.

During 2018-19, the UGC-HRDC conducted a total 15 nos. of programmes i.e. 4 Orientation Programmes, 6 Refresher Courses, 1 Special Summer School, 3 Short-Term Courses, 1 Workshop on MOOC's and trained a total of 641participants belonging to various universities and colleges recognized by the UGC.

Courses Conducted:

The UGC-Human Resource Development Centre conducted the following courses during the year 2018-19:

<u>Sl.No.</u>	Orientation Programme	Duration
1	44 th Orientation Programme	4 th July to 31 st July, 2018
2	45 th Orientation Programme	20 th August to 16 th September, 2018
3	46 th Orientation Programme	12 th January to 17 th February 2019
4	47 th Orientation Programme	18 th February to 17 th March, 2019

<u>Sl.No.</u>	<u>Refresher Courses</u>	<u>Duration</u>
1	Refresher Course in Tribal Studies	24 th September to 14 th October, 2018
2	Refresher Course in Political Science	22 nd October to 11 th November, 2018
3	Refresher Course in Disaster Management	12 th November to 2 nd December, 2018
4	Refresher Course in Earth Science & Natural Resource Management	12 th November to 2 nd December, 2018
5	Refresher Course in Folkloristics & Semiotics	18 th March to 7 th April, 2019
6	Refresher Course in Zoology	18 th March to 7 th April, 2019

<u>Sl.No.</u>	<u>Short-Term Course/ Workshop/ etc</u>	Duration
1	STC in Research Methodology	24 th to 29 th September, 2018
2	STC in Gender Sensitization	8 th to 13 th October, 2018
3	STC in SPSS	29 th October to 3 rd November, 2018

4	Workshop on MOOC's, e-content Development and Open Educational Resources	11 th to 16 th March, 2019
Sl. No.	Special Summer/ Winter School-2018	Duration
1	Special Summer School	4 th July to 24 th July, 2018

Study Tours/Field Trips:

Name of Teacher-in	Places/	Name of the Courses/Programmes	Dates
Charge	Institutions		
8-	Visited		
Dr.(Mrs.) Q. Kharbuli,	DBCIC,	44 th Orientation Programme	17 th July, 2018
UGC-HRDC, NEHU	Shillong		
Dr.(Mrs.) Q. Kharbuli,	SILOAM,	44 th Orientation Programme	21 st July, 2018
UGC-HRDC, NEHU	Umsawkhwan		
Dr.(Mrs.) K.B. Das,	SILOAM,	Summer School in Basic	21 st July, 2018
UGC-HRDC, NEHU	Umsawkhwan	Sciences	
Dr.(Mrs.) Q. Kharbuli,	Sohra and	44 th Orientation Programme	28 th July, 2018
UGC-HRDC, NEHU	adjacent places		
Dr.(Mrs.) K.B. Das,	SILOAM,	45 th Orientation Programme	7 th September
UGC-HRDC, NEHU	Umsawkhwan		2018
Dr.(Mrs.) Q. Kharbuli,	Nartiang	Refresher Course in Tribal	2 nd October, 2018
UGC-HRDC, NEHU		Studies	
Dr. B. Mohapatra,	Sohra and	Defrecher Course in Delitical	3 rd November,
Dept. of Political	adjacent places	Refresher Course in Political Science	2018
Science, NEHU			
Prof. D.K. Nayak,	Mawsynram	Refresher Course in Earth	24 th November,
Dept. of Geography,		Sciences & Natural Resources	2018
NEHU		Management	
Dr.(Mrs.) Q. Kharbuli,	SILOAM,	46 th Orientation Programme	2 nd February,
UGC-HRDC, NEHU	Umsawkhwan	40 Offentation Programme	2018
Dr.(Mrs.) Q. Kharbuli,	Mawphlang	46 th Orientation Programme	9 th February,
UGC-HRDC, NEHU		40 Offentation Programme	2018
Dr.(Mrs.) K.B. Das,	Sohra and	47 th Orientation Programme	9 th March, 2019
UGC-HRDC, NEHU	adjacent places	-	
Prof. A.S. Dixit, Dept.	Sohra and	Refresher Course in Zoology	30 th March, 2019
of Zoology, NEHU	adjacent places		
Prof. D. L.	Nongkhlaw	Refresher Course in Folkloristics	30 th March, 2019
Kharmawphlang, Dept.	8	& Semiotics	
of Cultural & Creative			
Studies, NEHU			

Purpose of visit:

These field trips and visits are a regular feature since they are included in the curriculum, designed for Orientation Programmes and Refresher Courses whose objective is Resource Awareness and knowledge Generation. Furthermore, since the Orientation Programmes provide training to the new-entrant College and University teachers participating from different states of the country; these visits expand learning beyond the classrooms and expose them to the mesmerizing scenic beauty of the State and glimpses of the cultural heritage of entire North-East India. Siloam being а Transformational Leadership Resource Centre provides an excellent environment to the participants for faculty development especially in Interpersonal Relationship and Student guidance and counseling.

Seminars/ Conferences/ Symposia/ Extension Programmes etc: *Attended:*

Dr.(Mrs.) Q. Kharbuli, Associate Professor, HRDC, NEHU attended as a resource person in a Workshop entitled "Achieving Excellence in Higher Education: Strategies and Efficacy organized by IQAC St. Edmund's College, Shillong on 23rd April, 2018.

Funds Received from Agencies Other than NEHU: The UGC-Human Resource Development Centre was sanctioned Rs. 91.00 Lakhs for the year 2018-19 from the University Grants Commission, New Delhi, for conducting Refresher Course and Orientation Programmes, Short-Term Courses/Workshops in approved subjects and for meeting other expenditures.

Infrastructure added during the period: Library books (25 Nos.).

Other Activities:

Dr. Q. Kharbuli, Associate Professor, HRDC, NEHU: Lectures delivered at Refresher Courses/ Orientation Programmes/ Worskshops/etc:

SI.	Programmes/Courses/Workshops	Date of Lectures	No. of	Topic (s)
No.	etc		Lectures	
1	Summer School in Basic Sciences	5 th & 18 th July, 2018	2	Drug Delivery
	$(4^{th} - 24^{th} July, 2018)$			System through Nanotechnology
2	44 th Orientation Programme	7^{th} , 13^{th} , 19^{th} 30^{th}	5	Project Proposal,
	$(4^{th} - 31^{st} July, 2018)$	July, 2018		Minor and Major Project, Faculty
3	45 th Orientation Programme	21 st ,29 th August,	5	Development API-
	(20 th August – 16 th September, 2018)	10 th & 13 th		2010, 2016 SPSS
		September, 2018		Environment and
				Concept of
				Measurements,
				Data Entry.
4	STC – Research Methodology (24 th –	26 th September, 2018	1	Concept of
	29 th September, 2018			Measurement
5	Refresher Course in Tribal Studies	29 th September, 1 st ,	13	Setting up SPSS,
	(24 th September – 14 th October, 2018)	$3^{\rm rd}$, $4^{\rm th}$, $6^{\rm th}$, $8^{\rm th}$, $9^{\rm th}$, $11^{\rm th}$,		Concept of
		12 th October, 2018		Measurement, API

6	STC in Gender Sensitization (8th -	9 th October, 2018	1	Gender and
	13 th October, 2018)			Biology: Sex Differentiation and
7	STC in SPSS (29 th October – 3 rd	29 th October & 1 st	5	its Disturbances SPSS Environment
	SIC in SPSS (29 October -3 November, 2018)	November, 2018	5	and Concept of
	1000000000	1000011001, 2010		Measurement, Data
				Entry
8	46 th Orientation Programme (21 st	29 th , 30 th January, 6 th ,11 th February	5	Project Proposal,
	January – 17 th February, 2019)	6 th ,11 th February		Minor and Major
		2019		Project, Faculty
9	47 th Orientation Programme (18 th	19 th ,20 th ,25 th ,26 th	6	Development API-
	February – 17 th March, 2019)	February & 7 th		2010, 2016 SPSS
		March, 2019		Environment and
				Concept of
				Measurements, Data Entry.
10	STC in MOOCs, e-Content	11 th March, 2019	1	Introduction of
10	Development and OER $(11^{\text{th}} - 16^{\text{th}})$	11 Waten, 2017	1	MOOCs OER and
	March, 2019)			e-content
				development,
				Hands On Moodle
				Cloud Site for all
				participants who
				attended the course
11	Refresher Course in Folkloristics and		1	Evaluation for
	Semiotics (18 th March – 7 th April, 2019)			Seminar
12	M. Tech Programme, Nanotechnology	Teaching, Evaluating	49	Nanobiotechnology
	Department, NEHU (2 nd Semester	etc	Sessions	
	February – July, 2019)			
13	Course Work for Ph.D Programme,	Teaching, Evaluating	2	SPSS (Computer
	Sociology Department, NEHU	22^{nd} & 25^{th} March,		Application on
		2019	0	Data Analysis)
14	M. A. Programme, Political Science	April – May, 2018	8	Special Lecture on
	Dept. Synod College		Sessions	SPSS
15	Indian Institute of Tourism and Travel	6 th December 2018	2	Gender and Age
	Management, Shillong			Sensitization
16	Lady Keane College, Zoology	23 rd March, 2019.		Judge in the Inter-
	Department			college poster
				Competition

Dr. K. B. Das, Assistant Professor, HRDC, NEHU: Lectures delivered at Refresher Courses/Orientation Programmes/ Workshops/etc:

SI.	Programmes/Courses/Workshops etc	Date of Lectures	No. of
No.			Lectures
1	Summer School in Basic Sciences (4 th - 24 th	5 th & 7 th July, 2018	2
	July, 2018)		
2	44 th Orientation Programme $(4^{th} - 31^{st} July,$	7 th & 9 th July, 2018	2
	2018)		
3	45 th Orientation Programme (20 th August – 16 th	$20^{\text{th}}, 21^{\text{st}}\& 22^{\text{nd}}$	4
	September, 2018)	September, 2018	
4	Refresher Course in Tribal Studies (24 th	5 th October, 2018	2
	September – 14 th October, 2018)		
5	Refresher Course in Disaster Management (12 th	28 th November, 2018	1
	November -2^{nd} December, 2018)		
6	46 th Orientation Programme (21 st January – 17 th	22 nd January & 5 th	3
	February, 2019)	February, 2019	
7	47 th Orientation Programme (18 th February – 17 th	19 th February & 25 th	4
	March, 2019)	February, 2019	

Internal Compliant Cell

Internal Complaint Committee

In pursuance of the Resolution No:EEC:45:2017:6:4(i) adopted in its 45th Emergent Executive Council meeting heldon 7.4.2017 and NO:AC:99:2017:5:1(xiv) adopted in its 99th Academic Council meeting held on 22nd and 24th November, 2017 and in supersession of the notification of even No-104 dt. 16.7.2015 the Vice Chancellor is pleased to notify the Internal Complaint Committee consisting of the following members with immediate effect till 15/7/2018 or until further order whichever is earlier.

Sl.no	Name	Designation
1.	Profl (Mrs) S. Dkhar Department of Khasi, NEHU, Shillong	Presiding Officer
2.	Dean, Student Welfare NEHU, Shillong	Member
3.	Prof. Sukalpa Bhattacharjee Department of English, NEHU Shillong	Member
4.	Dr. Tejimla Gurung Nag Department of History, NEHU, Shillong	Member
5.	Dr. (Smt) Begonia Dkhar Scientific Officer (SAIF), NEHU Shillong	Member
6.	Smti. T.A.W. Umdor Technical Assistant, Chemistry Department, NEHU Shillong	Member
7.	Smti. Tshering Yangi Advocate Mitali Laitumkhrah, Shillong 793003	Member
8.	Smti. Rosana Lyngdoh Social Worker Arkynti Springside Jingkieng, Nongthymmai	Member
9.	Smti. Eda Kynta Social Worker Department of Social Work St. Edmund's College, Shillong 793003	Member
10.	Ms. Jupitara Kalita	Member

Sl.no	Name	Designation
	Department of Bio-Chemistry, NEHU, Shillong	
11.	Ms. Merry C. Passah	Member

ICC Tura Campus

According to the 99th Academic Council meeting held on 22nd and 24th November, 2017 the Internal Complaint Committee (ICC) wing Tura Campus consists of the following members with immediate effect for a period of three years or until further order whichever is earlier.

Sl.no	Name	Designation
1.	Prof. B.M Jyrwa Department of Physics, NEHU Shillong	Presiding Officer
2.	Dr. (Mrs.) J.R. Marak, Asst. Professor, Department of Garo, NEHU, Tura campus	Member
3.	Dr. (Mrs). L.K.Cracy, Asst. Professor Department of English	Member
4.	Mrs. Sabdoka D. Sangma, MTS, NEHU, Tura Campus	Member
5.	Mr. L.M. Marak UDC, NEHU, Tura Campus	Member
6.	Mr. Pharmenach Ch. Marak, Research Scholar Department of English, NEHU, Tura Campus	Member
7.	Ms. Brenda D. Marak, Research Scholar Department of Management, NEHU, Tura Campus	Member
8.	Ms. Tengsil G. Marak, 3rd Sem Student Department of Computer Applications NEHU, Tura Campus	Member
9.	Mrs. Balsa B. Sangma, President Mother's Union, Tura	Member
10.	Ms. Gomati Sharma, Advocate DC Court, Tura	Member

5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year				
Total grievances receivedNumber of grievances redressedAvg. Number of days for grievance redressal				
1. One case but purely an Administration cum Academic matter (Dated 03.07. 2018)	The Department concerned and Dean has been requested to take up the matter	3 days		
2. Old Case dated 9/10/2017	Transferred to NEHU Tura Campus	-		

Appendix A

MEMBERS OF THE UNIVERSITY COURT (Constituted under Clause 10A of the University Statute)

10A.	(1) The Court shall consist of the follow Ex-Officio members:	ving membe	ers, namely;
(i)	Chancellor, Ex-officio	-	Vacant
(ii)	Vice-Chancellor, Ex-officio	-	Prof. Sri Krish
(iii)	Pro-Vice-Chancellor, Ex-officio	-	1. Prof.Henry
	Pro-Vice Chancellor Tura Campus		2. Prof. G. Sin
(iv)	Dean of Students' Welfare,	-	Prof.S. Umdor
(v)	Registrar, Ex-officio	-	Dr.J.N. Nayak

- (vi) Librarian, Ex-officio
- (vii) Proctor, Ex-officio
- (viii) Finance Officer, Ex-Officio

Representatives of Schools and Departments

Deans of Schools of Studies, Ex-officio (ix)

- ina Srivastava
- Lamin ngaiah
- Dr.F.R.Sumer (In-Charge) -
- Dr R.L. Nongkhlaw -
- Shri L.M.K.Lyngrah _
- 1. Dean, School of Humanities
- 2. Dean,
 - School of Life Sciences,
- 3. Dean, School of Physical Sciences, 4. Dean,
 - School of Social Sciences,
- 5. Dean, School of Economics, Management & Information Sciences
- 6. Dean, School of Human and **Environmental Sciences**
- 7. Dean, School of Technology
- 8. Dean, School of Education
- ALL PROFESSORS
 - 1. Department of Statistics, NEHU, Shillong
 - 2. Department of Information Technology, NEHU, Shillong
- (x) All Professors, ex-officio,
- Heads of Departments, who are (xi) not Professor, Ex-Officio

Tura Campus.

(xii) Two Associate Professor who are not Head of Department and two Asstt. Professor to be appointment by rotation in the Manner prescribed by Ordinance.

- 3. Department of Basis SC. & Social Sciences, NEHU, Shillong
- 4. Department of Journalism & Mass Communication, NEHU, Shillong. (Teacher In-Charge)
- 5. Depart of Tourism &Hotel management, NEHU, Shillong.
- 6. Department of Bio-Medical Engineering, NEHU, Shillong
- 7. Department of Nano Technology, NEHU, Shillong.(Teacher In-Charge)
- 8. Department of Architecture, NEHU, Shillong (Teacher in Charge)
- 9. Department of Energy Engineering, NEHU, Shillong. (Teacer-in Charge)
- 1. Department of Garo, NEHU Tura Campus, Tura,
- Department of Computer Application, NEHU Tura Campus, Tura. (Teacher In-Charge)
- 3. Department of History & Archaeology, NEHU Tura Campus, Tura (Teacher In-Charge)
- 4. Department of Agri Bussiness Management &Food Technology, NEHU Tura Campus,Tura, (Teacher In-Charge)

Associate Professor

- 1.Miss Nola Syiem (Upto 31.10.2018) Deptt, of English, NEHU, Shillong
- 2. Dr.P.Ramanujam, w.e.f 19.12.2018 Department of English, NEHU,Shillong.
- 3. Dr.B.K.Gupt, (w.e.f 23.04.2018) Department of Statistics, NEHU,Shillong.

Assistant Professor (upto. 30.06.2018)

- 1. Dr. R.C.Pandey, w.e.f 10.05.2018 Department of Distance Education, NEHU, Shillong
- 2. Dr.E.Tongper Deptt of Philosophy, NEHU, Shillong
- 1. Principal, St. Mary's College Laitumkhrah, Shillong-793003.
- Principal, St. Mary's College of Teacher Education, Laitumkhrah, Shillong – 793003.
- 3. Principal, Union Christian College Umiam Khwan, Ri Bhoi District.
- 4. Principal, Shillong College Shillong.
- 5. Principal, Tura Government College Tura.
- 6. Principal, Sankardev College Shillong.
- 7. Principal, College of Teacher Education,Shillong

w.e.f 01.03.2016 upto 31.03.2018

(xiii) Seven Principals of

ofMeghalaya

Colleges in the State of

(xiv) Four teachers from affiliated , Colleges nominated by the Visitor on the recommendation of the Vice-Chancellor

w.e.f 10.08.2018

- 1. Dr.(Ms) Berylda Hedi Patti Buam, College of Teacher of Education, Shillong
- 2. Dr.Padmini Bhattacharjee, Associate Professor, St.Anthony's College, Shillong.
- Dr.Ashutosh Dey, Associate Professor, Deptt. of Economics, Ri Bhoi College, Nongpoh, (Meghalaya).
- 4.. Dr.(Mrs) E.Kharkongor, Associate Professor, Deptt. of Economics, Shillong

[[
Representatives of Parliament	LOK SABHA w.e.f	
(xv) Six representatives of	25.10.2016	Delhi Address
Parliament, four to be		18 Mahadev Road
nominated by the Speaker of	1. Smti. Bijoya Chakravarty	New Delhi – 110001
the Lok Sabha from among the	Srinagar Path, Bye Lane	
members thereof and two to be	Ι	17 Windsor Place
nominated by the Chairman of	Guwahati – 5, Assam	Ferozeshah Road
the Rajya Sabha from among		New Delhi – 110001
the members thereof. However,	2. Shri Biren Singh Engti	34, APJ Abdul Kalam
in the event that a member of	ITI Colony, Vill	Road
Parliament becomes a Minister	Rongmongwe	New Delhi
or Speaker / Deputy Speaker /	Ward No. 5, P.O. & PS	
Lok Sabha, or Deputy	Diphu	164, North Avenue
Chairman, Rajya Sabha,	-	New Delhi – 110001
her/his nomination/ election on	3. Shri Conrad Sangma	
the Statutory Body shall be	Walbakgiri P.O. Tura	
deemed to have been	West Garo Hill District,	8- Pandit Marg
terminated.	Meghalaya	New Delhi - 110001
	4. Sh. Ram Prasad Sarmah	
	House No. 6 Kacharibasti	
	Ulubari, Kamrup Metro,	
	Guwahati, Assam - 781007	
	<u>Rajya Sabha</u>	
	1. Shri Oscar Fenandes	
	4-1-40 Doris Rest Heaven	
	Brahmagiri, Ambalapadi	
	Post	
	Udupi- 576103	
	(w.e.f 26.09.2016)	

(xvii) Six representatives of the Registered Graduates of the University to be elected in the manner prescribed by Ordinance	Vacant

Representatives of Students	w.e.f 22.05.2018 for 1 year		
(xviii) Four students to be nominated by the Vice-Chancellor.	 Larity Myrsing, Msc, Deptt of Statistics, NEHU, Shillong. 		
	 Mr.Austin Bankerlang Syndor, Deptt of Tourism & Hotel Management, NEHU,Shillong. 		
	 Everisa Nengnong,Ph.D., Deptt of Tourism & Hotel Management, NEHU,Shillong. 		
	 Mr.Rajib Borah,Ph D, Deptt of Bio-Tech &Bio- Informatics,NEHU,Shillon 		
Other Members (xix) (a) Not more than five persons to be nominated by the Visitor.	 Prof Bechan lal , Deptt of Zoology, Institute of Science, Banaras Hindu University, Varanasi 221005. Email: <u>lalbhu@yahoo.co.in</u> Mobile no:919336938955 		
	 2. Prof. Hijam Tombi Singh,V.C, of University Bhagavata Culture & Hare Krishna Road Land Airport Road, Imphal Manipuri -795001. Email: <u>tmbsingh@gmail.com</u> Mobile no: 09450587733 		
	 Prof.Suneet Dwivedi, Banerjee Centre of Atmospheric and Ocean Studies, University of Allahabad, Allahabad Uttar Pradesh – 211002 Email:Suneetdwivedi@gmail.com 		
	 Mobile no:09412596137 4. Prof.Ashoi Mittal, Deptt. of Economics, Aligarh Muslim University UP -202002 Email:askmittal@yahoo.com 5. Prof. Madhoolika Agarwala, Professor and Head , Deptt of Botany, Banaras Hindu University (BHU) 		

	Varanasi-221005 Email: madhooagrawal@gmail.com Mobile no: 9415628573
(xix) (b) Not more than two persons to be nominated by the Chancellor	Vacant
(xix) (c) Not more than two persons to be nominated by the Chief Rector	 Shri C.C.mihsill, IAS upto 12.11.2018 Secretary Education Department Government of Meghalaya, Shillong. Shri. A.Ch.Marak,(MCS)upto 12,11,2018 Director of School Education & Literary, Governmnent of Meghalaya, Shillong. Dr.H.Iangrai, w.e.f -05.04.2018 Associate Professor, Shillong College.
Representatives of the Non-Teaching Staff (xx) Two members of non-teaching staff to be nominated by the Vice-Chancellor	 President, Non-Teaching Staff Association NEHU, Shillong. General Secretary, Non-Teaching Staff Association, NEHU, Shillong.
Representatives of State Governments (xxi) Two representatives of the State of Meghalaya to be nominated by the State Government concerned.1	VACANT
Remaining Members of the Executive Council (xxii) Members of the Executive Council, who are not otherwise members of the Court:	 Principal, Women's College,Shillong Principal, Sohra Government College Saitsohpen, Sohra- 793108.
Secretarary Ex-Officio	East Khasi Hills District Registrar.

Appendix **B**

MEMBERS OF THE EXECUTIVE COUNCIL

(Constituted under Clause 11(I) of the Statutes of the University)

(All the members of the Executive Council, other than ex officio members, shall hold office for a term of three years)

Clause 1(i)	1.	Prof. Sri Krishna Srivastava Vice-Chancellor, NEHU. Fax No: 03642550076 Ph.No: 2721001/2721002/255007 e-mail: <u>vcnehu@nehu.ac.in</u>	- 4(R)	Chairman
Clause 1(ii)	1.	Prof.Henry Lamin Pro-Vice-Chancellor NEHU, Campus, Shillong Mob.No: 9436103856 e-mail: <u>hlamin30492@gmail.com</u>	-	Member
	2.	Prof. G.Singaiah Pro-Vice-Chancellor NEHU, Tura Campus, Tura Mob.No: 9485190779 e-mail: <u>gsingaiah@yahoo.com</u> : <u>nehutura@rediffmail.com</u>	-	Member
Clause 1(iii) 1	•	Prof. S.M.Sungoh Dean, School of Education, NEHU, Shillong. smsungoh@yahoo.co.in	-	Member
	2.	Prof. Gautam Saha Dean, School of Technology NEHU, Shillong <u>drgoutamsaha@gmail.com</u>	-	Member
	3.	Prof B.K.Agarwala Dean, School of Humanities, NEHU, Shillong.	-	Member (upto 30.11.2018)
		Prof (Mrs) C.A.Mawlong Dean, School of Social Sciences NEHU, Shillong,	-	Member (w.e.f.10.12.2018)

4.	Prof. B.Mishra - Dean, School of Economics,Management & Information Sciences, NEHU, Shillong.		Member (upto 4.03.2018)
	Prof. R.H.D. Lyngdoh - Dean, School of Physical Sciences NEHU, Shillong. rhdl@nehu.ac.in		Member (w.e.f.23.04.2018)
Clause 1(iv) 1.		-	Vacant
Clause 1(v) 2.	1. Mrs Nola Syiem, Department of English, NEHU, Shillong.	-	Member (upto 31.10.2018)
	Dr.B.K.Gupt, Department of Statistics, NEHU, Shillong bkgupt@yahoo.co.in	-	Member
Clause 1(vi) 1.	Principal, Women's College, Shillong.	-	Member
2.	womens@gmail.com Principal, Sohra Government College, Sohra-793108 Contact.No-03637-2534676(O) e-mail: sohragovernmentcollege@gn	-	Member
Clause 1(vii) 1.	Director, Higher & Technical Education, Govt. of Meghalaya, Shillong. Fax No: 22286015 Ph: 2226015 (M) 9485034201. e-mail: dhtemeghalaya@yahoo.o	-	Member
Clause 1(viii) 1.	Visitor's Nominee Prof Hijam Tombi Singh, Vice Chancellor of University of Bhagavata Culture, Hare Krishna Road Land Airport Road, Imphal	-	Member (w.e.f.28.3.2019)

Manipur- 795001. tmbsingh@gmail.com

	2.	Prof.Madhoolika Agrawal, Professor and Head, Departmet of Botany, Banaras Hindu University(BHU), Varanasi-221005. madhoo.agrawal@gmail.com	-	Member (wef.28.3.2019)
Clause 1(ix)	1.	Visitor's Nominee Sh.Milind SudhakarMarathe, Associate Professor, Deptt of Electronics Engineering, K.J.Somaiya College of Engineerin Mumbai-400077.	- - g, Vidyaviha	Member
	2.	milindsmarathe @gmail.com Sh.Rabi Ranjan Sen, Assistant Professor(senior scale) Deptt of History,Katwa College, Katwa, Barddhaman, West Bengal- 713130.	`-	Member
	3.	ranjan740@yahoo.com Dr. Bubul Kumar Saikia, Principal, L.T.K. College P.O.Azad North Lakhimpur, Assam-787031.	-	Member
	4.	bsaikie418@gmail.com Prof. Anjila Gupta, Vice Chancellor, Guru Ghasidas Vishwavidyalaya Bilaspur-495009.	-	Member
	1.	vcpaggu@yahoo.com Finance Officer, NEHU, Shillong. Ph. No: 2721021/2721020 Fax No: 03642551153	-	(Permanent Invitee)
	2.	Registrar NEHU, Shillong. Ph. No: 2721011/2721012/(R)2551 Fax No: 03642551634	· ·	-Officio-Secretary)

Appendix C

MEMBERS OF THE ACADEMIC COUNCIL

(Constituted under Clause 14(I) of the Statutes of the University)

(All the members of the Executive Council, other than ex officio members, shall hold office for a term of three years)

1 Ex-Officio-Members

- (i) Vice-Chancellor,
- (ii) **Pro-Vice-Chancellor**
- (iii) Deans of Schools
- (iv) Dean of Students' Welfare,
- (v) Heads of Departments and Centres of Studies,
- (vi) Librarian,
- (vii) Principals of Colleges maintained by the University,
- (viii) All Professors, other than the Heads of Departments and Centres, to be nominated by the Vice-Chancellor.

	THE DETAILS	
Prof. S.K.Srivastava Vice-Chancellor, NEHU, Shillong	-	Chairman
Prof. Henry Lamin Pro-Vice-Chancellor NEHU, Shillong	-	Member
Prof. G.Saingaiah Pro-Vice-Chancellor NEHU, Tura Canmpus	-	Member
All Deans of Schools NEHU, Shillong	-	Members
Prof S.N.Lamare Dean, Students Welfare	-	Member
Prof. S.Umdor Dean, Students Welfare	-	Member
All Head of the Department/Centre NEHU, Shillong/Tura.	-	Members
Dr. F.R.Sumer(In-charge) Librarian NEHU, Shillong	-	Member

Members

(ix) Six principals of Colleges admitted to the Privileges of the University

- 1. Principal, St. Dominic's College, Dumdum, Nongthymmai, Shillong -793014.
- 2. Principal, Thomoas Jones Synod College, Jowai -793150, West Jaintia Hills District, Meghalaya
- Principal, Mawsynram Border Area College, Mawsynram 793113, East Khasi Hills District, Meghalaya
- 4. Principal, Nabon Women's Synod College, Jaiaw, Shillong-793002, East Khasi Hills District, Meghalaya
- 5. Principal, North-East Adventist College, Jawai, Thadlaskein 793151, West Jaintia Hills Disstrict, Meghalaya.
- 6. Principal, Williamnagar Government College, Williamnagar -794111, East Garo Hills District, Meghalaya.

(x) Five teachers of the University, by rotation according to seniority of which two shall be Associate Professors and three Assistant Professor.

(xi)

ASSOCIATE PROFESSOR

- 1. Dr. B.K.Gupt, Department of Statistics, NEHU, Shillong
- 2. Dr. P.Ramanujam, Department of Botany, NEHU, Shillong.

ASSISTANT PROFESSOR

- 3. Dr. R.C.Pandey, Centre for Distance Education, NEHU, Shillong
- 4. Smti. J.R.Marak, Department Garo, NEHU, Shillong, Tura Campus.
- 5. Dr. P.K.Ambasht, Department of Bio-Chemistry, NEHU, Shillong

(xii) Four persons, not being employees of the University or of a College or Institution by or affiliated to it, to be nominated by the Visitor for their special knowledge.

- 1. Prof. Bhaben Kalita, Department of Mathematics, Guwahati University, Guwahati, Assam. 781014
- 2. Dr. Mukul Bora, Director, Institute of Engineering & Technology, Dibrugarh University, Dibrugarh, Assam.

3. Dr. Mukunda Rajbongshi, Principal(Ret.), Lakhimpur Girls' College, *ip* to 23/11/2018 MD Genius Academic (College of Arts, Science & Commerce), Assam. 787001

4. Prof. Kshiti Bhusan Das, Professor of Commerce Utkal University, Odisha-751004.

- 1. Prof. Pradeshi Lal, Vice-Chancellor, Nagaland University, Nagaland -797001
- Prof. Saket Khushwaha, Vice-Chancellor, Rajiv Gandhi University, Arunachal Pradesh, Rono Hills, Doimukh, Arunachal Pradesh - 791 112

3. Prof S.Vasudevan, Department of Inorganic and Physical Chemistrywef 14/2/2019 IISC Bangalore -560012

4. Dr. Vibhash Chandra Jha, Senior Professor, Department of Geography Visva Bharati, Santiniketan, West Bengal-731235.

(xiii) Six teachers of the Colleges admitted to the Privileges of the University. 1. Dr. A.R.Myrthong, Lady Keane College, Shillong.

- 2. Dr. S.K.Pradhan, St.Anthonys College, Shillong.
- 3. Dr. (Ms.) B.H.Buam, College of Teacher, Education, Shillong
- 4. Dr. Prashanta Sarkhel, St. Edmunds College, Shillong.
- 5. Dr. E.Kharkongor, Shillong College, Shillong.
- 6. Dr. Davidson Diengdoh, Jaintia Eastern College, Khliehriat.

(xiv) Two Post-Graduate Students of the University One from Sciences and one from Humanities and one Research Scholar to be elected on academic merit in the manner prescribed by an Ordinance

Post Graduate Students:

- 1. Ms Lynda Bessy Lyngdoh, Department of History, NEHU, Shillong.
- 2. Mr. Ashraf Ali, Department of Nanotechnology, NEHU, Shillong.

Research Scholar

1. Mr. Md. Nawaz Sarif, Department of Education, NEHU, Shillong.

Permanent Invitee(s)

- 1. Director, College Development Council, NEHU, Shillong.
- 2. Controller of Examinations, NEHU, Shillong.

Secretary (Ex-Officio)

Registrar, NEHU, Shillong.

Appendix D

MEMBERS OF THE BOARD OF RESEARCH STUDIES (Constituted under Clause OA-6(I) of the Ordinances of the University)

Vice-Chancellor,(Ex-Officio) Prof. S.K.Srivastava

- Chairman

Vice-Chancellor, NEHU, Shillong.

Pro-Vice-Chancellor – Members

Dean of Schools, (Ex-Officio) -Members

2. Dean, School of Humanities

- 3. Dean, School of Physical Sciences, NEHU, Shillong.
- 4. Dean, School of Social Sciences, NEHU, Shillong.
- 5. Dean, School of Economics Management & Information Sciences,
- 6. Dean, School of Human and Environmental Sciences.
- 7. Dean, School of Education
- 8. Dean, School of Technology.
 - ALL HEADS
 - ALL PROFESSORS

Upto- 21.02.2019

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Studies -(Ex-Offcio) Members

All Professors, other than the Dean of Schools and Head of Departments & Centre-(Ex-Officio) Members

1. Prof. Henry Lamin Pro-Vice-Chancellor NEHU, Shillong.

> 2. Prof. G.Singaiah Pro-Vice-Chancellor, NEHU, Tura Campus.

1. Dean, School of Life Sciences, NEHU, Shillong.

- NEHU, Shillong.

- Heads of Department and Centre of

Six Readers, from NEHU to be nominated by the Vice-Chancellor, three from Humanities & Social Sciences and three from Sciences.

Four External experts, two representing from Humanities & Social Sciences and two from Sciences

Secretary (Ex-Officio)

- Dr.Lapynshai Syiem, Deptt. of Creative & Cultural Studies, NEHU,Shillong
- 2. Dr.B.P.Tripathi, Deptt. of Hindi, NEHU,Shillong.
- Dr.A.Bhattacharjee, Deptt. of Management, NEHU,Tura Campus, Tura.
- 4. Dr.S.S.Khatri, Deptt. of Physics NEHU,Shillong.
- Dr. Dinesh Bhatia, Deptt. of Biomedical Engineering, NEHU,Shillong.
- 6. Dr.Y.Kumar, Deptt. of Botany, NEHU,Shillong. **Upto-21.2.2019**
- Prof.M.M.Chaturvedi, Dean,Research(Life Sciences) Deptt. of Zoology, University of Delhi-110007.
- Prof.T.Lhungdim, Deptt. of Education, Rajiv Gandhi University, Rono Hills Doimukh, Arunachal Pradesh- 791112
- Prof S.C. Channa, Deptt. of Anthropology, University of Delhi, Delhi – 110007
- 4. Prof.Rajib Mall, Deptt of CSE, Indian Institute of Technology,Kharagpur, (IIT/Kgp),West Bengal- 721302.

Registrar, NEHU, Shillong