

North-Eastern Hill University



Fortieth
Annual
Report

2013-2014

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Annual Report

North-Eastern Hill University

Shillong

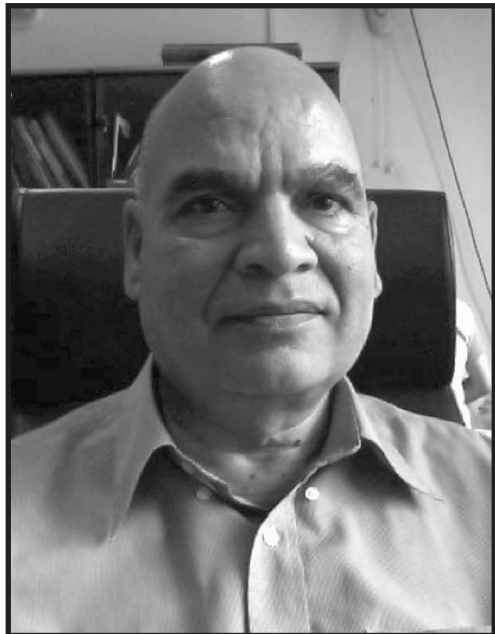
Fortieth

Annual Report



2013 – 2014

From the Vice-Chancellor's Desk



Greetings from North-Eastern Hill University!

I am happy to place before you the Annual Report for the year 2013-14 comprising the details of the University and activities of its Academic as well as Service Departments/Centres. During the year under reference, we held the 21st Convocation of the University where Hon'ble President of India graced the occasion as the Chief Guest and also delivered the Convocation Address.

Though NEHU is the oldest Central University in the North East, it is comparatively nascent in terms of other Central University

of the country and hence, continues to grow and improve its performance every year. Several of our Academic Departments are recognised by the UGC in the form of Special Assistance Programme (SAP) and also Centre for Advanced Studies (CAS) scheme. Some of the Science Departments of the University are also covered under the FIST and PURSE programme of the DST.

Presently the University has 364 teachers and 4856 students (46% male and 54% female) out of which, 665 are Research Scholars. In all the University has 44 academic departments and 2 centres of studies in two campuses - one at Shillong and the other one at Tura. The new Departments that have come-up during the year are - History & Archaeology, Journalism & Mass Communication, Tourism & Hotel Management, Agri-Business & Food Technology, Department of Horticulture, Computer Application, Bio-medical Engineering, Energy Engineering, Nano-Technology and Architecture. In addition, there are around 45,000 under-graduate students in 64 colleges affiliated to the University.

The University is on verge of filling up all vacancies of the faculty positions and also a large number of existing faculties were promoted under the Career Advancement Scheme (CAS) as per the UGC norms 2010. We hope to clear the remaining promotional cases within couple of months.

Although the financial constraints continue to persist, our efforts to cut expenditure and raise internal revenue have partially helped to tie-up the situation, though there is a need for

the UGC to increase our non-plan budgetary allocation.

I thank the university community for their hard work and devotion to duty for making NEHU a name to reckon with. I also congratulate the students who graduated from the University during the year under reference.

Last but not the least, I thank the Editorial Team led by Prof. R.H.D Lyngdoh for their good effort in preparing the Annual Report within the stipulated time-frame and also thank the Hindi Cell of the University for translating the same.

Prabodh Shukla

Prabodh Shukla

Executive Summary

This Annual Report gathers together the activities and achievements of the North-Eastern Hill University (NEHU) from 1st April 2013 to 31st March 2014. A survey is made from the academic side and includes the Administrative Departments as well as the Central Services (Facilities) of the University. The University has two campuses – in Shillong and in Tura – and is comprised of eight Schools of Studies with 43 Departments and two Centres of Studies, where 3 new Departments have been added to this Report in the period under review here. NEHU has 64 colleges affiliated to it (32 permanently affiliated), including the North-Eastern Indira Gandhi Institute of Health and Medical Sciences and some Minority Educational Institutions around the country.

The Central Services include the UGC Academic Staff College, Bioinformatics Centre, two Central Libraries (at Shillong and at Tura), Computer Centre, Placement Cell (Tura), Equal Opportunity Cell, two Voice and Data Networks (at Shillong and at Tura), Hindi Cell, Internal Quality Assurance Cell, National Service Scheme, Publication Unit, Sophisticated Analytical Instruments Facility, Sports Department, Students' Welfare Cell, Women's Cell and Health Centres (Shillong and Tura) which provide facilities to serve the educational, research and health needs of the University, besides catering to extracurricular aspects of University life like sports, social activities and general welfare.

The year 2013-2014 has seen an upsurge of research and development efforts, where 29 new research projects were sanctioned, besides 34 completed and 109 ongoing schemes. The net funding for research received in 2013-14 amounted to about Rs 49 crores. Publications included 257 research papers in international journals, 245 in national journals, 46 books authored by faculty, 15 books edited and 102 chapters contributed in books. Faculty organized 4 international and 40 national conferences/symposia in NEHU. 102 papers were presented in international conferences and 295 papers in national conferences held at NEHU and elsewhere.

There are 60 Professors, 95 Associate Professors and 189 Assistant Professors in service as University Faculty, coming to a total faculty of 344 teachers. Details regarding teaching posts are given below giving also the categories against which the posts filled were advertised.

Table 1: University Faculty Composition

<i>No.</i>	<i>Name of Post</i>	Total Posts			In position as per category				
		<i>Sanctioned</i>	<i>Filled</i>	<i>Vacant</i>	<i>Gen</i>	<i>OBC</i>	<i>SC</i>	<i>ST</i>	<i>PWD</i>
1	Lecturer/Assistant Professor	205	189	16	133	19	21	15	01
2	Reader/Associate Professor	147	95	52	89	-	01	05	-

3	Professor	93	60	33	58	-	01	01	-
4	Professor/ Reader	01	-	01	-	-	-	-	-
	Total	446	344	102	280	19	23	21	01

A total of 4856 students are enrolled in University teaching Departments for the academic year 2013-2014, with a teacher-student ratio of 1:13. 1280 students are in the Bachelor's courses (B.Tech., B.Ed. SEDE and B.A. LI.B). 1372 are in M.A. courses, 604 in M.Sc. courses, 294 in other Master's courses, along with 577 students in the FC SEDE and PG Diploma courses.. NEHU has 665 registered Ph.D. students and 46 M.Phil. students. There are 44,931 students enrolled in the colleges affiliated to NEHU. The distribution of enrolled students in University Departments is given below:

Table 2: Student Enrolment in University Departments

ENROLMENT OF STUDENTS FOR THE ACADEMIC YEAR 2013-14: UTD : COURSEWISE										
COURSES	GEN	GEN	S. T	S. T	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
B A L L B (Honours)	9	20	140	148	1	7	1	1	151	176
B Ed SEDE	56	69	93	88	8	4	32	23	189	184
B Tech	182	41	176	58	61	16	39	7	458	122
M A	17	65	364	904	3	11	2	6	386	986
M Sc	44	58	200	282	6	9	2	3	252	352
M Com	7	9	37	38	2	1	2	2	48	50
M Lib Inf. Sc	5	7	15	24	0	0	1	4	21	35
M B A	9	6	34	21	0	2	1	1	44	30
M C A	1	2	7	2	0	0	0	0	8	4
M F A	0	0	3	4	0	0	0	0	3	4
M Tech	8	5	9	5	5	2	0	0	22	12
M Ed	0	1	4	18	0	0	0	0	4	19
M Phil	4	9	17	15	1	0	0	0	22	24
Ph D	123	112	164	217	19	11	12	7	318	347
PG Diploma	18	16	16	29	6	1	4	3	44	49
FC SEDE	108	45	79	185	17	4	38	16	242	250
TOTAL	591	465	1358	2038	129	68	134	73	2212	2644

All 665 Research Scholars registered for the Ph.D. programme receive Fellowships. 482 Ph.D. and M.Phil. students receive the UGC- Non-Net Fellowship. During the period under report, 33 students were awarded the Ph.D. degree (16 from the Arts stream, 15 from the Sciences and 2 from others). 4 students were awarded the M.Phil. degree. 904 students were awarded various Master's degrees, 302 were awarded various Bachelor's degrees, and 46 received postgraduate diplomas. The Table below summarizes the results for award of degrees to students of University Departments in 2013:

	Gen	ST	SC	OBC	M/F	Total
BA LLB Hon	5	27	0	0	16/16	32
B.Tech	115	60	31	64	201/69	270
M.A.	34	481	6	6	141/386	527
M.Sc.	37	188	4	3	99/133	232
M.Com.	8	12	0	0	10/10	20
M.Lib.Info.Sc	1	20	0	0	7/14	21
M.B.A	38	15	3	0	33/23	56
M.C.A	14	8	0	0	15/7	22
M.S.W	2	24	0	0	14/12	26
PGDCA	1	11	1	0	5/8	13
PG Diploma	7	26	0	0	19/14	33
M.Ed.(2012)	0	20	0	0	5/15	20
M.Phil.	3	1	0	0	0/4	4
Ph.D.	24	35	0	0	26/33	59

In the Shillong Campus, a total of 1015 Students were given hostel accommodation during the year 2013-2014, details given as follows:

		ST	SC	GEN	OBC	Total
R. S.	Men	40	10	42	16	108
	Women	52	1	41	10	104
P. G.	Men	158	3	13	5	179
	Women	293	6	34	17	350
U. G.	Men	96	25	64	17	202
	Women	31	6	18	3	58
Foreign Students	Men			12		12
	Women			2		2
TOTAL		670	51	226	68	1015

The Central Library at Shillong has 2,74,751 volumes, while the Central Library at Tura has 23,315 volumes. 3,335 members are enrolled in the Central Library, Shillong.

Infrastructure development included completion of the Cultural Park building, University Auditorium building and back-up power supply for the Life Sciences School. The Class Rooms Cluster (for Sciences and others) is being furnished. Work underway includes two research scholars hostels (Shillong Campus), MBA Mens Hostel (Tura Campus), new Guest House near LGBI Airport, and electrical work in the staff quarters (Shillong Campus) and in the Administrative Building (Tura Campus).

Total receipts for the University came to Rs 250,18,30,780/-, including Rs 114.03 crores as Non-Plan grants from UGC, Rs 35.00 crores as Plan/UPE grant and Rs 52.82 crores as special assistance and sponsored schemes. Total expenses came to Rs 213,95,85,694/-, all utilized for various purposes for the University.

The NSS Cell conducted numerous blood donation camps and tree plantation programmes involving University and College students, along with 19 special camps entitled “Healthy Youth for Healthy India”. The UGC-Academic Staff College conducted 4 Orientation Programmes and 10 Refresher Courses. A Hindi Training Programme was conducted for NEHU employees, along with Hindi Divas and publication of “NEHU Jyoti” (magazine in Hindi for NEHU). Sports events included the Jowai Zone, Shillong Zone and Inter-Zone tournaments in badminton, table tennis and chess, the NEHU Open Marathon, as well as Inter-College tournaments in basketball, football and cricket.

Officers of North-Eastern Hill University

Visitor	Shri Pranab Mukherjee, President of India
Chancellor	Professor André Beteillé
Chief Rector	Dr. K. K. Paul, Governor of Meghalaya
Vice-Chancellor	Prof. P. Shukla
Pro-Vice-Chancellor (Shillong)	Prof. B. Marboh
Pro-Vice-Chancellor (Tura)	Prof. E. D. Thomas
Registrar	Shri D. Deb
Finance Officer	
Controller of Examinations	Dr. L. Cajee
Librarian	Dr. I. Majaw
Dean Students' Welfare	Prof. R. N. Sharan upto 16.12.2013 Dr. S. N. Lamare (w.e.f. 17.12.2013)
Dean, School of Economics, Management & Information Sciences	Prof. N. M. Panda
Dean, School of Education	Prof. P. K. Gupta upto 21.7.2013. Prof. Man Mohan Singh from 22.7.13
Dean, School of Human and Environmental Sciences	Prof. H. Lamin
Dean, School of Humanities	Prof. Jagat Pal upto 2.2.2014 Prof (Mrs) B War from 3.2.2014
Dean, School of Life Sciences	Prof. A. K. Misra
Dean, School of Physical Sciences	Prof. H. K. Mukherjee upto 2.2.2014 Prof B. Jyrwa from 3.2.2014
Dean, School of Social Sciences	Prof. L. S. Gassah upto 1.8.2013 Prof C. L. Imchen from 2.8.2013
Dean, School of Technology	Prof. S. Choudhury (upto 06 May 2013) Prof. B. Myrboh (from 06/6/ 2013 to 21 /11/ 2013) Prof. P. V. Koparkar (w.e.f. 22/11/ 2013)

Members of the Editorial Board

R. H. Duncan Lyngdoh, Chairman

P. K. Gupta, Member

P. V. Koparkar, Member

N. Srivastav, Member

Esther Syiem, Member

H. Kayang, Member

F. A. Qadri, Member

H. J. Syiemlieh, Member

B. Shylla, Member

R. K. Rani, Member

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I

**SCHOOL OF ECONOMICS, MANAGEMENT &
INFORMATION SCIENCES**

Dean : Prof. N. M. Panda
Phones : 2723131 (O), 2551311 (O)

The School consists of seven academic departments – Economics, Commerce, Library and Information Science, Management (Tura Campus), Tourism and Hotel Management, Journalism and Mass Communication, and Agri and Food Technology (Tura Campus), of which the last three came into existence a few months before the start of this year under report. As is evident from the annual reports of the departments, the faculty members of the School, through their active involvement in teaching, research and extension activities,

contributed appreciably towards knowledge advancement and social uplift – the twin goals of Indian higher education.

The School organized a Seminar involving participation of faculty members, research scholars and a team of delegates from Reserve Bank of India on 8th April 2013. The discussion covered two topics – Fiscal-Monetary Coordination and State Finance in India, which were of topical interest to the teachers and research scholars of the School.

DEPARTMENT OF COMMERCE

Head : K. C. Kabra
Telephone : 2723161
E-mail : hodcom@nehu.ac.in; kckabra@nehu.ac.in; kabranehu@gmail.com

Faculty :

Sl. No.	Designation	Name and Qualifications	Specialization
1.	Professor	N. M. Panda, M.Com. & LL.B. (Utkal), Ph.D. (Manipur), FDP (IIMA)	Management Accounting & Entrepreneurship
2.	Professor	V. K. Shrotryia, M.Com., LL.B. & Ph. D. (Rohilkhand)	Organizational Behavior, HRM & Strategy
3.	Associate Professor	A. P. Pati, M.Com., Ph.D. & LL.B. (Utkal), ACWA (ICWAI), DBF (ICFAI)	Finance
4.	Associate Professor	K. C. Kabra, M.Com. & Ph.D. (JR Nagar Raj Vidyapeeth University, Udaipur)	Accounting & Finance
5.	Assistant Professor	R. A. J. Syngkon, M.A., M.Com. & Ph.D. (NEHU)	Managerial Economics & Entrepreneurship
6.	Assistant Professor	S. G. Maji, M.Com. & Ph.D. (Burdwan), DBM (ICFAI)	Accounting & Finance
7.	Assistant Professor	S. Kharmawphlang, M.Com. (NEHU), DFM (NILEM, Chennai)	Entrepreneurship & Marketing

Thrust Areas of Research

The Department aims at imparting education that is needed for creating and management of business enterprises in an emerging economy of North-East India. Keeping in view the importance of business research both at national and regional level, it also conducts socially relevant research work, awareness programmes, etc. The following are the thrust areas of research in the department:

- Accounting & Finance
- Entrepreneurship & Small Business
- Organisational Happiness

Brief Statement of Academic Activities

There are seven regular teachers including two Professors, two Associate Professors, and three Assistant Professors. Currently the Department has 91 students on roll at M.Com. level including two foreign nationals (one from Ethiopia and another from Liberia) and 26 students at the Doctoral level including one foreign national from Iraq. Besides regular teaching, the Department conducts seminars, workshops, awareness programmes, career counseling sessions and discussions on contemporary topics like union budget, etc. for the students to enhance their understanding and presentation skills and to share the outcome of their project

School of Economics, Management and Information Sciences

/ field work. Further the Department has conducted a Refresher Course in Commerce and

Management on the theme “Entrepreneurship: Theories, Policies and Practices”.

Students’ Profile

Enrolment Capacity: M.Com. - 53; Ph.D. – variable

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Com	1	40	11+1*	26	27	32	21	53
Ph. D	1	5	3	4	5	5	4	9

*Foreign National

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Com	-	18	8	10	16	20	6	26
Ph. D	-	-	1	1	-	-	1	1

Students Awarded Ph.D. Degree

Name of student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Purna Prasad Sharma	Subsidised Micro-Finance and Financial Performance of SHGs: A Study of Meghalaya	Dr A P Pati

Courses Conducted

Postgraduate: M.Com.

Semester I : Business Environment, Organization Behavior, Corporate Accounting, Statistics for Decision Making, Managerial Economics.

Semester II : Advanced Financial Management, Marketing Management and Policy, Corporate Reporting Practices, *Service Management, NGO Management, Tax Planning & Management and Information Technology & Business.*

Semester III : Financial Markets & Instruments, Entrepreneurship, Cost & Management Accounting, *Financial Risk Management, Management of Small Enterprise, Business Survey and Research.*

Semester IV : International Business, Strategic Management, Security Analysis & Portfolio Management, Project Planning & Control, Human Resource Management.

(Courses given in *italics* are open courses)

M.Phil. / Ph.D. Course Work

Research Methodology, *Management Theory & Entrepreneurship*, *Accounting & Finance Theory*, *Organisational Behaviour*, and Literature Review in concerned area.

(Courses given in *italics* are open courses)

Seminars/Conferences/Symposia/Extension Programmes etc.

Organized

Prof. N. M. Panda organized a Workshop for the District Level Officers of Meghalaya on *Innovation Scheme under DIF* on 10th October 2013 in collaboration with the State Innovation Council and conducted three sessions covering the topics: (i) The concept of Innovation (ii) Preparation of Innovative Project Proposal (iii) Funding and Evaluation of Innovative Projects under DIF.

Attended/Participated

N. M. Panda

- Attended a national seminar on *Education in the North-East: Status and Perspectives* organized by the Dept of Education, NEHU, Shillong in association with ICSSR – NERC, shilling on 3rd – 4th September 2013 and presented a paper on *University Governance*.
- Delivered the Key-Note Address and presented a paper titled *India's Look East' Policy and its North East Region* in the National Seminar on India's look East Policy and the Response of the North-Eastern states' organized by St. Joseph College, Jakhama, Nagaland on 4th -5th October, 2013.

V. K. Shrotryia

- Participated in 66th All India Commerce Conference held at the Bangalore

University, Bengaluru (Karnataka) during Dec 5-7, 2013 and presented a paper titled *Prioritizing an agenda for strengthening commerce education in India* on 5th Dec 2013 in the International Seminar Session on *Inclusive Growth and Sustainability: Role of Commerce Education in India*.

- Participated in Regional Convention on *People's Expectations from the New Union Government on Budgetary Priorities* on 7th Oct 2013 at Hotel Landmark, Guwahati organised by North-East Network in collaboration with People's Budget Initiative of Centre for Budget and Governance Accountability and made a presentation on Education Sector in North-East India.
- Participated in *The North East Marketing Conclave (Re-Mark)* organized by FICCI on 29th August, 2013 at Hotel Nakshatra, Guwahati.
- Participated in the National Seminar on *Corporate Social Responsibility in Community Development* organized by Avinashilingam University Institute for Home Science and Higher Education for Women, Coimbatore (Tamilnadu) on 22-23 January 2014 and presented a Kasturi Saikia coauthored paper titled *Role of Corporate Social Responsibility in Community Development: A case study of Numaligarh Refinery Limited, Assam*.

A. P. Pati

- Presented a paper titled *Financial Inclusion in Meghalaya: an imperative for Inclusive Growth* at National seminar held on Financial Inclusion and Inclusive Growth organised by the Department of Business Administration, Tezpur University on 25th - 26th Oct 2013.

K. C. Kabra

- Presented a paper titled *Draft Proposal on Integrated Reporting* at the UGC-Sponsored National Seminar on Convergence of Accounting Standards (for Reporting purpose) organized by Department of Commerce & Management Shillong College and Shillong College Academic Society Shillong in collaboration with Meghalaya Economic Association on 24-25th May 2013..

S. G. Maji

- Participated in International Conference on *Sustainability Management and the Power of Innovation* organized by Prestige Institute of Management, Gwalior, during 10-12th January 2013 and presented a paper titled *Influence of Financial performance Indicators on Market Share of General Insurance Company in India: A Study*.
- Participated in *Indian Finance Conference* organized by IIM Ahmedabad, IIM Bangalore and IIM Calcutta, during 18-19th December, 2013 and presented a paper titled *Impact of Intellectual Capital on Credit and Insolvency Risks of Indian Commercial Banks: An Empirical Investigation*.
- Participated in International Conference on *Economics, Business and Management* Organized by Serial Publication, New Delhi on 13th September, 2013 and presented a paper titled *Speed of Achieving Budgeted Targets: A Study on Selected Oil Refineries of Iraq*.
- Participated in International Conference on *Finance and Business Management (ICFBM - 13)* organized by Society of Technical and Management Professionals (STMP), Haridwar, during 15-16th June, 2013 and

presented a paper titled *Determinants of Dividend Policy in the Indian Banking Sector*.

- Participated in 5th International Conference on *Role on Innovation in Business* organized by IFIM Business School, Bangalore during 16-17th May, 2013 and presented a paper titled *An Empirical Investigation of VAIC and Extended VAIC Methods in Indian Knowledge Based Sector*.

S. Kharmawphlang

- Presented a paper titled *Accounting standards of India and Iraq and their harmonization with International Accounting Standard* at the UGC sponsored national seminar organized by Department of Commerce and Management, Shillong College in collaboration with Meghalaya Economic Association, Shillong on 24th and 25th May 2013.

Publications

Research Papers

Published in India

Shrotryia, V.K. (2014). Individuals and organizations: Who work for whom?. *SME World*. 7:26-27.

Shrotryia, V.K. (2013). Focusing on organizational happiness: A winning strategy for sustaining. *SME World*. 6:16-20

Shrotryia, V.K. (2013). Innovation and entrepreneurship is the key. *SME World*. 6: 30-32.

Shrotryia, V.K. (2013). Reconfiguring priorities – agenda well-being. *SME World*. 6: 19.

Lyngdoh, B.F. & Pati, A.P. (2013). Microfinance and women empowerment: A case of matrilineal tribal society of India. *Pranjan -*

Journal of Social and Management Science, 42: 113-130.

Lyngdoh, B.F. & Pati, A.P. (2013). Impact of microfinance on women empowerment in the matrilineal tribal society of India: An analysis using propensity score matching and difference-in-difference. *International Journal of Rural Management*, 9: 45-69.

Bhattacharjee, Jaya & Kabra, K.C. (2013). Fiscal crisis in higher education: A case study of NEHU. *International Journal of Applied Management Research*. 1: 42-48.

Majhi, S.G., & Panda, N.M. (2013). Speed of achieving budgeted targets: A study on selected oil refineries of Iraq. *The Journal of World Economic Review*. pp. 141-151.

Kharmawphlang, S. (2013). Micro and small enterprise financing in Meghalaya: Role of Meghalaya Industrial Development Corporation (MIDC). *Vision International Refereed Research Journal for Management and Commerce*. 1: 93-104.

Research Projects

Completed during year

No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	"Capital Structure and Sustainability: An Empirical study on Indian Micro Financing Institutions"	Dr A. P. Pati	UGC Major Research Project	Rs. 6 Lakhs

Academic Activities

N. M. Panda

- Participated as a Resource Person in the Training Programme organized by RTI, Shillong (Indian Audit and Accounts Department, GOI) on *Special Course on Risk Based Audit Approach with*

Published Abroad

Shrotryia, V.K. (2013). Culture, gross national happiness and disasters: Strategies for preparedness and management of disasters in Bhutan. *Journal of Integrated Disaster Risk Management*. 3: 1 – 14.

Majhi, S.G. (2013). Determinants of dividend policy in their Indian banking sector. *Interdisciplinary Journal of Management & Behavioural Sciences*. 2: 26-36.

Books/Book Chapters/Proceedings

Lyngdoh, B.F. & Pati, A.P. (2013), *Micro Finance and Women Empowerment* (Himalaya Publishing House).

Yasmin, S., Majhi, S.G., & Pati, A.P. (2013). Influence of financial performance indicators on market share of general insurance companies in India: A Study. In *Sustainability Management and the Power of Innovation*. S. S. Bhakar, V. K. Bhatnagar and R. Banerjee (Eds.). Bloomsbury, India. pp. 143-154.

Quantitative Techniques and Statistical Sampling for Senior Audit Officers during 25th -28th Nov 2013 and conducted 5th sessions covering the topics: Sampling Theory and Estimation of Sampling Error, Monetary Unit Sampling, Compliance Testing and a Case Study.

V. K. Shrotryia

- Member, Review Board of *The IIS University Journal of Commerce and Management*, *International Journal of Indian Culture and Business Management*, and *Invertis Journal of Management*.
- Member, Editorial Board of *Review of Management*, *The Journal of Management Scholars*, *Invertis Journal of Management*, *The Journal of Social Science Today*, *Indian Journal of Development Research*, and *Journal of Commerce and Information Technology*.
- Member Board of Post Graduate Studies at the Department of Commerce, Tripura University, Agartala and at the Department of Management, North-Eastern Hill University, Tura Campus, Shillong.
- Coordinator, NEHU Extension Lectures
- Chairman, NEHU Faculty Club Management Committee
- Delivered a talk on '*Human Values in Business*' at the Department of Commerce, Tripura University, Agartala on 17th Feb 2014
- Delivered a talk on '*Learning and Thinking for self development*' at the School of Business Studies, Bangalore University, Bangalore on 6th Dec 2013
- Delivered a talk on '*Happiness and Public Policy*' (30th Nov 2013) during a Refresher Course for Political Science Teachers at UGC Academic Staff College, NEHU, Shillong
- Delivered a talk on '*Change and the entrepreneurial mindset - lessons from the field*' (29 Nov 2013) during Refresher Course for Commerce and Management Teachers, at UGC Academic Staff College, NEHU, Shillong
- Delivered a talk on '*Leading Through Positive Psychology*' (2 sessions), during 25th Orientation Program – General (21st Oct – 17th Nov 2013) on 15th Nov 2013, at the UGC Academic Staff College, NEHU, Shillong
- Delivered a talk on '*What are you going to leave behind?*' on 6th Nov 2013 during a Faculty Development Program organised by the Centre for Management, North-Eastern Regional Institute of Science and Technology, Nirjuli, Arunachal Pradesh.
- Delivered lectures on '*Concept of Happiness*', '*Economics of Happiness*', '*Happiness in Nations*', and '*Organizational Happiness – Concept and Applications*' on 28-29 Sept 2013 during 17th Integrated Refresher Course 2013 for Commerce, Economics and Management (14th Sept 2013 to 4th Oct 2013) organized by the Department of Commerce and Business Administration at University of Allahabad, UP, India.
- Delivered a talk on '*Effective Communication Strategies for Negotiation – Life-skill sets for India Post Employees*', on 26th August 2013, during a capacity building program organised by the office of the Post Master General, Shillong, Meghalaya.
- Delivered a talk on '*Happiness – Concept and Trends in Nations*' (2 sessions) on 10th Aug 2013, during a Summer School at Academic Staff College, Manipur University, Imphal, Manipur.
- Delivered a talk on '*What Makes People Great?*' (2 sessions), during 24th Orientation Program – General (5th June – 2nd July 2013)

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on 19th June 2013, at the UGC Academic Staff College, NEHU, Shillong

- Delivered a talk on '*Work-Life Balance: towards attaining Organisational Happiness*' (2 sessions), during 23rd Orientation Program – General (22 April – 19 May 2013) on 14th May 2013, at the UGC Academic Staff College, NEHU, Shillong

K. C. Kabra

- Awarded 3rd place in NEHU open Marathon 2013 organized by the Department of Sports, NEHU, Shillong on 6.9.2013.
- Delivered a talk on *Integrated Reporting* (2 sessions) on 14th September 2013 at the Special Winter School in Management Sciences (2nd-22nd September 2013) organized by the Department of Management, NEHU, Tura.
- Delivered a talk on *Strategic Analysis* (2 sessions) and a talk on *Social Accounting*

(2 sessions) on 14th September 2013 at the Special Winter School in Management Sciences (2nd - 22nd September 2013) organized by the Department of Management, NEHU, Tura.

- Delivered a talk on *Corporate Social Responsibility* (2 sessions) on 30th Nov. 2013 at the Refresher Course in Business Studies organized by Academic Staff College, Mizoram University, Aizawl.

R. A. J. Syngkon

- Coordinator, Refresher Course in Commerce & Management from 18th November to 8th December 2013 on the Theme *Entrepreneurship: Theories, Policies and Practices*.
- Attended a three week Summer School scheduled from 12th August 2013 to 1st September 2013 organized by the UGC-Academic Staff College, NEHU, Shillong.

DEPARTMENT OF ECONOMICS

Head : Prof. S. K. Mishra
Telephone : (0364) 2723171 (O), 9862005729 (M)
E-mail : mishrasknehu@hotmail.com
Dept. Website : <http://nehu-economics.info>

Faculty

Designation	Name and Qualification	Specialization
Professor	S.K. Mishra, M.A. (Bhagalpur), M.R.P. & Ph.D. (IIT Kharagpur)	Operations Research, Econometrics, Computer Applications, Planning
	N. Srivastav, M.A.(Rajasthan), Ph.D.(IIT Kanpur)	Industrial Economics
	E. D. Thomas, M.A. & Ph.D.(NEHU) – (On Lien as Pro-VC, Tura)	-
	P. Nayak, M.A.(Utkal), Ph.D..(IIT Kharagpur)	Human Development, Women Empowerment
	B. Mishra, M.A. & Ph.D..(Utkal)	Public Economics, Political Economy
	U. K. De, M.Sc. & Ph.D. (Burdwan)	Econometrics, Environment & Resource Economics, Empowerment of Women
	B. Panda, M.A. (Utkal), M.Phil. (Berhampur), Ph.D. (Utkal)	Development Economics, Rural Economics
Associate Professor	P. S. Suresh, M.A. & M.Phil. (S. V.Univ.), Ph.D. (Hyderabad)	Financial Economics
	S. Umdor, M.A. & Ph.D. (NEHU)	Indian Economy, Local Govt. Finance
Assistant Professor	W. Tariang, M.A.(NEHU)	Agricultural Economics, Gender & Poverty
	D. Nongkynrih, M.A. & Ph.D. (NEHU)	Labour Economics
	D.W. Thangkhiew, M.A. (NEHU)	Macroeconomics
	D. Das, M.Sc.(Guwahati), Ph.D. (IIT Guwahati)	Econometrics
	Veronica Pala, M.A. & Ph.D. (NEHU)	Microeconomics, Quantitative Economics

Thrust Areas of Research

Development Economics, Public Economics, Environmental Economics, Rural Development, Econometrics, Operations Research, Health Economics, Economics of Education, Gender Economics and Economics of North Eastern Region.

Brief Statement of Academic Activities

The Department admitted 54 M.A./M.Sc. students in August 2013 and 3 Ph.D. students in February 2014. In the 2011-13 batch 39 M.A./M.Sc. Student passed out. Three research scholars obtained their Ph.D. degrees. The Department offered five open courses namely, Budgetary Theory & Practice, Computer Applications in Economic Analysis, Economics of Social Sector, Economics of Agriculture and

Economy of North-Eastern Region catering to its own students as well as the students of other Departments. The faculty members are actively engaged in research work, publishing 9 papers in Indian journals, 7 papers in journals abroad and 10 research papers in proceedings of seminars or as edited book chapters. They also participated in other seminars, contributing 16 research papers. During the period under reference 2 research projects were completed and investigation on 5 ongoing research projects, amounting to Rs. 40 lakh or above, was carried out. Additionally, the faculty members received recognition from national as well as international academic/ governmental organizations as members on various committees, as experts and invited lecturers. According to the IDEAS ranking, the Department is the 20th among the top 25% Economics Departments/Institutes in India.

Students' Profile

Enrolment Capacity: M.A/ M.Sc. – 55; M. Phil, Ph.D. – Variable

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.A./M.Sc.	1	49	3	20	34	35	19	54
M. Phil.	-	-	-	-	-	-	-	-
Ph.D.	-	2	1	3	-	2	1	3

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.A./M.Sc.	-	39	-	14	25	24	15	39
Ph.D.	-	2	1	2	1	1	2	3

School of Economics, Management and Information Sciences

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)
Mr. Biswanath Khilar	Economics and Quality of School Education in Sikkim.	Prof.S.K.Mishra (Supervisor)
Mrs.Ibandalin Wanswett	Rural Non-Farm Employment in North East India: A Case Study of Meghalaya.	Dr.B.Panda (Supervisor)
Mr. Imlisunep Changery	Economics of Urban Informal Sector in Nagaland: A Case Study of Dimapur city.	Dr.B. Panda (Supervisor)

Courses Conducted

Postgraduate

Semester I : Microeconomics Analysis-I, Macroeconomics - I, Mathematics for Economist, Economics of Development-I, Public Economics.

Semester II : Microeconomics - II, Macroeconomics-II, Techniques of Statistical Analysis, Economics of Development-II.

Open Courses : Budgetary Theory & Practice, Computer Applications in Economic Analysis, Economics of Social Sector.

Semester III : Historical Perspective of Modern Economics-I, International Economics, Industrial Economics.

Open Courses:Economics of Agriculture, Economy of North-Eastern Region.

Semester IV : Historical Perspective of Modern Economics-II, Indian Economic Problems and Policy, Environmental Economics, Labour Economics, Financial Economics.

M.Phil/Ph.D.:Research Methodology in Economics, Contemporary Economic Issues, Recent Advances in Economic Theory, Review of Literature.

Educational Tour of Students

Teacher-in-Charge: Mrs. D.W. Thangkhiew (Asstt. Professor)

Places/Institutions visited: ISI (Bangalore) and Madras University

Duration of tour: 20 days

Purpose of Tour: Educational

Seminars/Conferences/Symposia/Extension Programmes etc.

Attended/Participated

Prof. P. Nayak

Participated as a Resource Person and chaired the 2nd technical sessions in the National Seminar on 'Ushering Economic Growth in the North Eastern Region of India' organized by the Dept. of Economics, Manipur University, Imphal, Manipur during 29-30 November 2013.

Participated as a Resource Person and chaired the 1st technical session in the National Seminar on 'Implementation of Social

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Welfare Schemes in India with Special Reference to Assam: Issues and Challenges organized by Department of Economics, Amguri College, Amguri, Assam during 25-26 October 2013.

Participated as a Resource Person and chaired the 1st and 2nd technical sessions in the National Seminar on *'Role of Women Entrepreneur in the Socio Economic Development of North-East India* organized by Dept. of Economics, Moirabari College, Moirabari, Morigaon District, Assam, during 7-8 October 2013.

Participated as a Resource Person and chaired the 4th technical session in the National Seminar on *'Issues on Economics of Education with Special Reference to North East India'* organized by the Dept. of Economics, Guwahati College, Bamunimaidan, Guwahati, Assam during 16-17 June 2013.

Prof. B. Mishra

Was invited as a Resource Person to deliver a talk and chaired a technical session in AICTE sponsored National Seminar on *Entrepreneurship: Global Vision – Local Expression* at Assam Down Town University, Guwahati, on 9th November, 2013.

Was invited as a Resource Person, chaired one technical session and presented a paper entitled “Constraints of Resource Mobilisation in North-East India: Implication for Economic Development” in the National Seminar on *“Ushering Economic Growth in the North Eastern Region of India”* at Department of Economics, Manipur University, Imphal, on 29th -30th November, 2013

Was invited as a Resource Person to deliver a talk in the plenary session and chaired one

technical session in the National Seminar on “Reviving Indian Economy: Issues and Challenges” at Department of Business Administration, Sambalpur University, Odisha, 15th - 16th March, 2014

Was invited as a Resource Person to deliver the Key-Note address and chaired one technical Sessions in the National Seminar on *“Indo-Myanmar Border Trade: Emerging Trends and its Implications”* at Department of Economics, Manipur University, Imphal, 29th March, 2014

Prof. U. K. De

Participated and presented a paper on “Crop Diversification in Assam and Use of Modern Inputs under Changing Climatic Condition: Indication of a Retrograded Option”, in International Econference on *“Issues on Development, Well being and Livelihood”* organised by the Dept. of Economics, University of Burdwan, during January 17- 18, 2014.

Participated and presented a paper on “Global Warming and the Pattern of Overall Climate Changes in Sub-Himalayan Assam Region of North-East India” in the 7th Biennial Conference of INSEE on *Global Change, Ecosystems, Sustainability* organized by the Indian Society for Ecological Economics at Tezpur University, Assam during 5-7 December, 2013.

Delivered a lecture on the “Role of Ecotourism in the Conservation of Forest Resources and Bio-diversity and the Rural Livelihood” in the workshop on *‘Assessing Feasibility of Promoting Eco-tourism in Intangki National Park, Nagaland’* organized by the Department of Forests, Ecology, Environment & Wildlife, Nagaland in

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collaboration with the Regional Centre, National Afforestation & Eco development Board, Shillong on 10th March, 2014 in the State Environment & Forestry Training Institute, Dimapur.

Presented a paper as Resource Person on “Empowerment of Rural People through MGNREGA with Special Emphasis to Women in Morigaon, Assam”, in the UGC Sponsored National Seminar on “*Dynamics of Development and Discontent*” organized by Tufanganj Mahavidyalaya, West Bengal during 27-28, September, 2013.

Presented invited paper as Resource Person on “Ecotourism as Income Generating Activities” in the Regional Workshop on *Prospects of Involving JFMCs in Eco-Tourism as Income Generating Activities/ Livelihood Activities in North-East India* organized by RCNAEB during 22-24 August, 2013 at ICSSR Guest House, NEHU, Shillong.

Prof. B. Panda

Attended as a Resource Person and presented a research paper entitled ‘Role of research and teaching in ensuring excellence in higher education’ in the UGC sponsored National Seminar on ‘*Promotion of Research Culture in Enhancing Quality Higher Education in India*’ at B. P. Chaliha College, Nagarbera, Assam on 26th June 2013.

Attended as a Resource Person and made a presentation entitled ‘Protecting farmers as a special class of consumer-producer’ in the National Symposium on ‘*Protecting the Rural Consumers in a Globalised Market Place*’ organised by Administrative Staff College of India, Hyderabad, on 26th - 27th July 2013.

Participated and presented a paper entitled ‘Research in economics in north east India: progress, deficits and limitations’ in the UGC-SAP National Symposium on *Social Science Research in Northeast India: Practices, Problems and Prospects* organised by the Department of Political Science, NEHU held at Conference Hall, ICSSR-NERC, Shillong on 21-22nd March 2014.

Ms. W. Tariang

Participated in a UGC Sponsored Workshop on “*Capacity Building for Women Managers in Higher Education*”, organized by Department of Anthropology, NEHU, Shillong, from June 11th to June 15th, 2013.

Dr. D. Nongkynrih

Presented a paper entitled “Geography as an Opportunity: North East Connecting India with ASEAN” at the International Seminar on *India’s Look East Policy and the North Eastern Region: Strengthening the Continental Route*, Organised by ICSSR-NERC, Shillong and NEC, Shillong on March 21-22, 2013.

Dr. V. Pala

Presented a paper titled “Combating Child Labour: The Need for a Holistic Approach” in the *National Seminar on Child Advocacy: A Collective Call to Action*, organised by the Department of Social Work, Women’s College, Shillong, October 25-26, 2013.

Publications

Research Papers

Published in India

Nayak, P., Mishra, S.K. (2013). Status of development of NE States in India in the

- national perspective. *Eastern Panorama* 22: 15-25.
- Nayak, P., Mishra, S.K. (2013). Status of development of NE States in India in the national perspective. *Eastern Panorama* 22: 15-25.
- Panda, B. (2013). Sliding rupee and its impact on the north eastern economy. *The North East Today*. 6: 26-27.
- Umdor, S. (2013). An exploratory study of rural livelihoods in eastern Himalaya, Meghalaya, India. *ENVIS Bulletin*. 21: \$-\$.
- Tariang, W. (2013). Boosting rural tourism in North East India, *International Journal of Research in IT and Management*. 3: \$-\$.
- Nongkynrih, D. (2013). Gender inequality in school education – with special reference to North East India. *Indian Educational Review*. 51: 13-30.
- Mahanta, R., Das, D. (2013). Measuring forest dependence and perception towards biodiversity conservation - a study of households in village forest and encroached villages of Assam. *Journal of Social Review*. 1:1-13
- Das, D. (2013). Is solar electrification a sustainable solution for rural electrification? Learning from field experience. *Indian Journal of Energy*. 2: 1-11
- Das, D., Mahanta, R. (2013). Willingness to spend labour hour for biodiversity conservation: a case study with special reference to village forest dwellers and encroachers in Assam. *Journal of Biodiversity*. 4: 45-51.
- Published Abroad**
- Xie, J.C., Kar, T., Mishra, S.K., Xie, R.H. (2014). Improved pair-potential function for diatomic systems. *Chemical Physics Letters* 593: 77-82.
- Pou, Kh., Mishra, S.K. (2013). Institutional shackles to entrepreneurial development among the ethnic groups in North East India: a study on entrepreneurial environment in Poumai Naga ethnic group. *International Journal of Advancements in Research & Technology*. 2:396-413.
- De, U. K. (2014). Globalisation and cointegration among the states and convergence across the continents: a panel data analysis. *Economic Analysis and Policy*. 44: 107-121.
- De, U. K. (2012). Nature based tourism, opportunities of indigenous women and their empowerment: a North East Indian perspective. *Asian Journal of Hospitality and Tourism*. 11: 110-128.
- De, U. K. (2013). Sustainable nature based tourism, involvement of indigenous women and development: a case of North East India. *Tourism Recreation Research*. 38: 311-324.
- De, U. K. (2014). India's Look East for integration with East Asia: steps towards progress". *Journal of International Economics*. 5: 105-121.
- Mahanta, R., Das, D. (2013). Attitudes towards biodiversity conservation of forests dwellers and encroachers: a case study of Assam in Northeast India. *Small-Scale Forestry*. 12:307-319.
- Books/Book Chapters/Proceedings**
- Nayak, P. (2013). Some facts and figures on development attainments in Nagaland. In: *Proceedings of the National Seminar on 'Ushering Economic Growth in the North Eastern Region of India'* held at Dept. of

- Economics, Manipur University, Imphal, Manipur.
- Nayak, P., Mahanta, B. (2013). Gender disparity and women empowerment in Assam. In: *Proceedings of National Seminar on 'Implementation of social welfare schemes in India with special reference to Assam: Issues and challenges'* held at Dept. of Economics, Amguri College, Amguri, Assam.
- Nayak, P. (2013). Human development in North Eastern Region of India: issues and challenges. In: *Proceedings of the National Seminar on 'Poverty and human development: Issues and challenges'* held at Dept. of Economics, Doomdooma College, Assam.
- Nayak, P. and Mishra, S.K. (2013). Problems and prospects of promoting tourism in Meghalaya. In: *Proceedings of the National Seminar on 'Promotion of International Tourism Circuits in North East India: Prospects, Priorities and Strategic Options'* held at Assam University, Silchar, Assam.
- Mishra, B. (2013). Constraints of resource mobilization in North-East India: Implications for economic development. In: *Proceedings of the National Seminar on Ushering Economic Growth in the North Eastern Region of India* held at Dept. of Economics, Manipur University, Imphal, Manipur.
- Umdor, S. (2013). Meghalaya. In: *Status of Panchayati Raj in the States and Union Territories of India*. Institute of Social Science (ed.), Concept Publishing Company, New Delhi, p.414-419.
- Umdor, S. (2013). Mizoram. In: *Status of Panchayati Raj in the States and Union Territories of India*. Institute of Social Science (Ed.), Concept Publishing Company,, New Delhi, p. 425-431.
- Umdor, S. (2014). State of primary education in Meghalaya: with special reference to Mid Day Meal Scheme. In: *Sustaining Development in North-East India- Emerging Issues, Challenges and Policy Measures*, Anupam Hazra (Ed.), Concept Publishing Company, New Delhi, p. 70-88.
- Umdor, S. (2014). It's the economy stupid. In: *Vision for Meghalaya - On and Beyond the Inner Line Permit*. H. Srikanth, C.J. Thomas and R. E. Kharbani (Eds.), ICSSR-NEC, Shillong, p. 82-88.
- Tariang, W. (2013). Boosting the potential of rural tourism in the North Eastern region. In: Manjit Das (Ed.) *Economy of North East India: Issues and Dimensions*, Lakshmi Publications, New Delhi.
- Das, D. (2013). Rural electrification through solar energy: issues and challenges. In: *Economy of North East India: Issues and Dimension*. M. Das (Ed.) Laxmi Publication, New Delhi.

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Funds Received from Agencies including NEHU/UGC:

Non-Plan Grant: Rs. 10.00 Lakh

Research Projects

Ongoing

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Evaluation of State Finances: Meghalaya (for the 14th Finance Commission, Govt of India).	Dr. S. Umdor (PI)	Govt. of India	NA
2	Study on Low Credit Deposit in Meghalaya (for State Level Bankers Committee, Meghalaya)	Dr. S. Umdor (PI)	Govt. of Meghalaya	NA
3	Study on Local Government Finance in the Sixth Schedule Areas of Northeast India.	Dr. S. Umdor (PI)	ICSSR, New Delhi	NA
4	Adaptation to Climate Change: A Case Study of Flood Prone Areas of Assam.	Dr. D. Das	ICSSR	Rs. 749125.00
5	Levels of Living and Poverty among Socio-religious Groups in India: Analysis of the Correlates and Determinants at the Region Level.	PI: Dr. V. Pala Co-PI: Ms. A. M. W. K. Shadap, St. Edmund's College, Shillong	Indian Council of Social Science Research, New Delhi	Rs. 18,50,000/-

Completed during Year

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Costs and Benefits of Protection: A Case Study of Kaziranga National Park.	Dr. D. Das	UGC	Rs. 3,27,000/-
2	Gender Issues in Rural Meghalaya	Dr. V. Pala	International Fund for Agricultural Development, Rome	Rs. 35,000/-

Academic Collaborations

Prof. U. K. De worked as a visiting faculty of Economic Research Unit, Indian Statistical Institute Kolkata during 20-12-2013 to 03-02-2014.

Honours/Awards/Recognitions

Prof. S K. Mishra

Member, Plagiarism Committee of *RePEc*, the world's largest collection of journal articles, software and on-line economics working papers, run by a collaborative effort of hundreds of volunteers in 81 countries to enhance the dissemination of research in economics, with HQ in USA.

Member, Editorial Board, *Indian Journal of Regional Science*, Regional Science Association, Kolkata.

Associate Editor, *Gitam Review of International Business*, Gitam School of International Business, Gitam University, Visakhapatnam.

Prof. B. Panda

Appointed by Ministry of Rural Development, Govt. of India, a member of the expert committee on effective initiatives district award under MGNREGA for the year 2013-14.

Other Activities

Prof. N. Srivastav

Delivered two lectures on 'Environmental Issues and Planning for a Sustainable Development' in the 24th UGC-ASC sponsored Orientation Program organized by the Academic Staff College, NEHU, Shillong, June 10, 2013.

Delivered two lectures on 'Global Environmental Issues and Sustainable Development' in the 25th UGC-ASC sponsored Orientation Program organized by the Academic Staff College, NEHU, Shillong, November 11, 2013.

Delivered two lectures on 'Issues and Problems of Product Differentiation: Some recent Development' in the UGC-ASC sponsored Refresher Course in Commerce and Management organized by the Department of Commerce, NEHU, Shillong, November 19, 2013.

Prof. P. Nayak

Delivered two lectures on "Human Development: Theory and Measurement" on 27.11.2013 in the U.G.C. Refresher Course on *Democracy and Development: Issues and Challenges*, organized by the Dept. of Political Science, NEHU, Shillong.

Prof. B. Mishra

Invited to attend the Regional Conference of the 14th Finance Commission (North-Eastern Region), held at IIT, Guwahati on 12th. June, 2013.

Invited as a Resource Person to deliver 4 lectures in the Special Winter School in Management Sciences, organized by Department of Management, NEHU, Tura Campus on 17th and 18th September, 2013.

Invited to deliver two lectures on "Qualitative Research" in the Ph.D. Course Work at Department of Business Administration, Sambalpur University, Odisha, on 14th March, 2014.

Prof. U.K. De

Presented invited lecture on "Ecotourism, its Relevance for Development and

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Conservation of Bio-diversity and other Natural Resources”, in the State Level Workshop on Assessing Feasibility of Promoting Eco-tourism in Ntangki National Park of Peren District of Nagaland, organised by the National Afforestation and Eco-Development Board, NEHU at Dimapur during 10-12 March, 2014.

Presented invited seminar on “Changing Climate and the Agricultural Scenario of Assam since 1950” at Indian Statistical Institute, Kolkata on 29-01-2014.

Prof. B. Panda

Chaired a session on ‘Women Empowerment’ in the National Seminar on *Poverty and Human Development: Issues and Challenges*, organized by the Dept. of Economics, Doomdooma College, Assam, 10-11 May, 2013.

Delivered a lecture entitled ‘Impact of insurgent activities on the economic development of the country” in the Refresher Course for 34th – 36th batch Dy Superintendents of Police organised by North Eastern Police Academy, Shillong, on 19/08/13.

Delivered a lecture entitled ‘recent developments in economics of development’ in the UGC-

Special Summer School for college and university teachers on the topic ‘Recent advances in social and natural sciences’ organised by Department of Education, NEHU, on 24.08.2013.

Delivered two lecturers on ‘Urban informal sector’ in the Refresher Course organised by the Deptt. of Commerce, NEHU on 26th November 2013.

Delivered two lectures entitled ‘Concepts and approaches to development’, in the Refresher Course organized by the Department of Political Science, NEHU, 27th Nov 2013.

Delivered two lectures on ‘Inclusive development’ in the 26th Orientation Programme for college and university teachers, organised by UGC-ASC, NEHU on 10.02.2014.

Evaluated the performance of MGNREGA in the districts of Bankura in West Bengal, Bhilwara in Rajasthan, Koraput in Odisha and Srikakulam in Andhra Pradesh as a member of the central expert team, Ministry of Rural Development, Govt. of India during 3rd to 18th January 2014.

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

Head : Dr. Bikika Laloo
Telephone : 91-364 272 3149/ 3142 (O)
E-mail : bikilaloo@rediffmail.com. & bikitariang@g.mail.com.

Faculty

Designation	Name and Qualification	Specialization
Professor	Moses M. Naga, M.L.I.Sc. & Ph.D. (NEHU)	Management of Library and Information Systems, Foundations of Library & Information Science, Information Literacy.
Associate Professor	Dr. Bikika Laloo, M.L.I.Sc., (NEHU), Ph.D. (G.U) M.A. English (IGNOU)	Information Sources & Service, Collection Development, User Studies, Library and Information Science Education.
Assistant Professor	Dr. Paokholun Hangsing, M.L.I.Sc., (Delhi), Ph.D. & PGDCA (NEHU)	System Analysis & Design; Information Communication Technology; Database Management System; Digital Libraries; Advances in Information System Studies.
	Jacqueline Jeane Thabah, M.L.I.Sc. (NEHU)	Knowledge Organisation.
	Jiarlimon Khongtim, M.L.I.Sc. & PGDCA (NEHU)	Library Software Packages Research Methodology.
	Dr. S. Ravikumar, M.Sc. (Madras) M.Phil. (Allagappa), Ph.D. (Mizoram), PGDC (Bharathidasan)	Information Retrieval, Indexing, Scientometrics and Webometric, Open Source Software.

Thrust Areas of Research

The Department's thrust areas of research are: (1) Information Retrieval, Information & Knowledge Management, (2) Database Management Systems, (3) Communication Technologies & Digital Libraries, (4) Measurement & Effectiveness of Information Services and Information Centers, (5) Human Resource Management of Academic Libraries, Content Analysis, Marketing of Information Products and Services

Brief Statement of Academic Activities

The year 2013-14 saw the faculty of the Department participating in a variety of scholarly activities, from attending seminars and conferences to acting as resource persons at various programs. The Department's research and literary output were also evident in the publications contributed by the faculty. Many journal articles were published during the year. The students of the Department were no less fruitful - as many as 7 of them passed the NET

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examinations. Many were also absorbed into libraries of various institutions in Meghalaya and other states during 2013-14. The Ph.D.

research scholars wrote articles for journals and presented papers at programs in different parts of the country.

Students' Profile

Enrolment Capacity: MLISc. - 30; Ph.D. – Variable

Admissions

Degree	SC	ST	Gen	Male	Female	Meghalaya	Non- Meghalaya	Total
MLISc	Nil	29	1	13	17	24	6	30
Ph.D.	1	1	1	2	1	1	2	3

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	Total
MLISc	Nil	25	1	9	17	18	8	26
Ph.D.	Nil	1	1	1	1		2	2

Students awarded Ph. D Degree

Name of Student	Title of Thesis	Names(s) of Supervisor(s)/ Joint Supervisor.
Mrs. Rupali Goswami	Information System for Credit Deployment in Indian Commercial Banks : A Case Study	Prof. Moses .M. Naga Prof. N.M. Panda
Mr. Mangkhollen Singson	Pricing Models and Usage of E-Journal in a consortia Environment : A Study of UGC Infonet	Dr. P. Hangsing.

Placement of Students during 2013-14

The following students were placed in Library Posts:-

1. Mr. Pyndap Kharkongngor – Indian Council of Agricultural Research Umiam
2. Miss Agreesha Lating - Army Public School Kolkata – West Bengal.
3. Miss Allysa N. Swer – NEHU Central Library.
4. Miss. Iabanshai Phyrnai Kshiar – Nicholas Roy Bible College – Sohryngkham.
5. Miss Sandra Hynniewta – K.L. Bajoria Higher Secondary School, Shillong.
6. Miss Satarupa Paul – Don Bosco Senior Secondary School, Gauhati
7. Miss Amanda Shanpru – Lady Keane College, Shillong.
8. Mr. Mebanai Kupa Diengdoh - Nabon College, Shillong.

School of Economics, Management and Information Sciences

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| <p>9. Mr. P.S. Gladson Pao - Unity College Dimapur.</p> <p>10. Miss Florence Lianching – Grace Bible College, Churchandpur</p> | <p>11. Miss. Dooh ki wan Sten – John Robert Theological Seminary, Mawklot.</p> <p>12. Miss Apdiang Nongdhar – NEHU Central Library Digitization project.</p> |
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Courses Conducted during the Year

M.L.I.Sc.

Sl. No.	1st Semester
1.	Foundations of Library and Information Science.
2.	Knowledge Organization - 1 (Theory)
3.	Knowledge Organization - 1 (Practice)
4.	Information Sources and Services
5.	Foundation of Computer Application.
Sl. No.	2nd Semester
1.	System Analysis and Design.
2.	Knowledge Organisation –11 (Theory)
3.	Knowledge Organisation –11 (Practice))
4.	Library Software Package (Theory and Practice)
5.	Library Housekeeping Operations
Sl No.	3rd Semester
1.	Information Retrieval
2.	Research Methodology
3.	Collection Development
4.	Database Management System
5.	Information Communication Technology
Sl. No.	4th Semester
1.	Management of Library and Information Systems
2.	Digital Libraries
3.	E- Learning and Content management System (Theory and Practice)
4.	Information Sources and Services (Practice)
5.	Dissertation.

Ph.D.

1.	Research Methodology in Library and Information Science.
2.	Advance in knowledge management and Organizational Studies
3.	Advance in library and Information management.
4.	Trends in Libraries and librarian ship
5.	Advances in Information System Studies.
6.	Literature Review

Study Tours/Field Trips during the Year

Teacher In-charge: Dr. S. Ravikumar, Assistant Professor

Places/Institutions visited: (1) British Council Library, Kolkata, (2) American Consulate Library, (3) Central Library of Jodhpur University, (4) Central Library of Indian Association for the Cultivation of Science, (5) Indian Statistical Institute Library, (6) Asiatic Society Library, and (7) Bose Institute Library & National Library.

Duration of the tour/trip: 20th Feb to 2nd Mar, 2014

Purpose of visit: Curriculum Based Stipulated Study Tour (CSST), is a compulsory component of MLI.Sc Course. Objective of CSST is to give practical exposure to the students about different types of libraries existing. This enables the PG students to know about different types of library collections, their working pattern, their users need and demand, type of

services extended to their users. Students are exposed to latest gadgets/ equipment's used by various libraries for their day to day activities. As a whole the study tour to Kolkata was an eye opener for our students on various facets of Library and Information science.

Seminars/Conferences Symposia/ Extension Programmes

Organized

Prof. Moses M. Naga was the Conference Director of the *International Conference on Information Literacy in the Knowledge Society* during 6-8 March, 2014 organised by the Department of Library and Information Science, NEHU, Shillong in collaboration with the Indian Council of Social Science Research (ICSSR), New Delhi. Funds received for the International Conference on "Information Literacy in the Knowledge Society" from various Agencies were as given below:

Sl. No.	Funding Agencies	Amount in Rupees
1	Indian Council of Social Science Research (ICSSR), New Delhi	Rs. 5, 00, 000/- (Rupees five lakhs only)
2	NEHU	Rs. 1, 00, 000/- (Rupees one lakh only)
Total		Rs. 6, 00, 000/- (Rupees six lakhs only)

Attended/Participated

Dr. Bikika Laloo

Presented a paper on “Quality of Students Admitted to Library Schools: A Study of Meghalaya, India” at *The West East Institute 2013 Antalya Eurasian Academic Conference*, 12-15 January, 2014, The West East Institute, Antalya, Turkey.

Presented paper on “Role of Employing Institutions in Facilitating Professional Development Activities” International Conference on “*Information Literacy in the Knowledge Society*,” 6th-8th March, 2014 Department of Library and Information Science, NEHU, Shillong,

Prof. Moses M. Naga

Presented a paper on “Agricultural Information Literacy: A Case Study of Cassava Farmers in Umudike Community in Nigeria”, Co-authored with C.P. Uzuegbu, Lecturer, DLISc., Michael Okpara University of Agriculture Umudike, Abia State, Nigeria during the International Conference on “*Information Literacy in the Knowledge Society*” during 6-8 March, 2014 organised by the Department of Library and Information Science, NEHU, Shillong in collaboration with the Indian Council of Social Science Research (ICSSR), New Delhi.

Dr. P. Hangsing

With M. Singson as co-author presented a paper entitled “Reaffirming 80/20 Rule in Indian Academic Consortia” at the *International Conference on Digital Libraries (ICDL) 2013*, New Delhi, India from 27th to 29th Nov. 2013 organized by The Energy and Resource Institute (TERI)

With Ivana Komel as co-author presented a paper entitled “Internet Literacy and

Online Privacy Mechanisms of Students: A Comparative Study of two Slovenian Elementary Schools” at the *International Conference on Information Literacy in the Knowledge Society* held from 6th to 8th March 2014, organized by North-Eastern Hill University, Shillong in collaboration with Indian Council of Social Science Research (ICSSR), New Delhi

Presented a paper entitled “The Exclusion of Indigenous Knowledge in the Knowledge Society” at the *International Conference on Information Literacy in the Knowledge Society* held from 6th to 8th March 2014, organized by North-Eastern Hill University, Shillong in collaboration with Indian Council of Social Science Research (ICSSR), New Delhi

With B. Goswami Baruah as co-author presented a paper entitled “Prospect of Personality Development and Communication Skills in LIS Education: A Study in Indian Context” at the *International Conference on Information Literacy in the Knowledge Society* held from 6th to 8th March 2014, organized by North-Eastern Hill University, Shillong in collaboration with Indian Council of Social Science Research (ICSSR), New Delhi.

Mrs. J. J. Thabab

Attended and presented a paper on “Communication skills for Library & Information Professionals” at the International Conference on *Information Literacy in the Knowledge Society*, Department of Library & Information Science, NEHU, Shillong, 6th to 8th March 2014.

Mrs. J. Khongtim

Attended and presented a paper on “Library Software Literacy of College Librarians in

Shillong: A Study” by Synteng Nongdhar, Lapdianghun and Khongtim, Jiarlimon, and presented a paper on “Post Graduate Students’ Awareness of Copyright Infringement: A Study of the School of Life Sciences in North-Eastern Hill University, Shillong, India” in the *International Conference on Information Literacy in the Knowledge Society* held on 6th - 8th March 2014 organized by this Department in collaboration with Indian Council of Social Science Research, New Delhi, India

Dr. S. Ravikumar

Attended and presented Paper on “Women Empowerment Through Information Literacy: A Self Help Group Approach at the International Conference on *Information Literacy in the Knowledge Society* hosted by Department of Library & Information Science, NEHU, Shillong, during 6th to 8th March 2014.

Publications

Published in India

Laloo, B. and Thabah, M. (2013). Personal Book Collection of Politicians and Bureaucrats in Shillong, India: A Survey. *IASLIC Bulletin*, vol. 58: \$ to \$

Laloo, B. (2014). Managing and Documenting Indigenous Traditional Knowledge of North-East India: A Proposal. In: *Proceedings of the International Seminar on Application of Communication and Information Technology in Library Science* held 28 - 30 January 2014 at Variable Energy Cyclotron Centre, SINP, Kolkata.

Hangsing, P. and Singson, M. (2013). Preservation, Discography and Cultural Crossings of the North Eastern Indian

Tribal Folk Music on Free File Hosting Sites. In: *Preservation of Information Resources in 21st Century*. Pravakar Rath, R. Ramachandran, & R. N. Mishra (Eds.). (Today and Tomorrow’s Printers and Publishers: Delhi) pp 139-150

Published Abroad

Laloo, B. (2013). Bibliometric Study of Research Output of Botany Faculties to Manage Journal Collection in NEHU Library. *International Journal of Library and Information Studies*, Vol.3 (2) Apr-Jun, 2013, ISSN: 2231-4911

Laloo, B. and Buhiril, J. L. (2013). Information Needs and Information Seeking Behavior of Teachers of Special Education in Shillong, India. *Journal of the American Academy of Special Education Professionals* (Fall 2013 Issue)

Laloo, B. (2013). Quality of Students Admitted to Library Schools: A Study of Meghalaya, India. *West East Journal of Social Sciences* ISSN 2168-7315

Other Activities

Bikika Laloo

1. Delivered 2 Lectures on Personality Development and Library Legislation in India at the Certificate Course in Library and Information Science, conducted by the NEHU Central Library, NEHU.
2. Delivered 1 invited lecture on “Are we up for the challenges? Librarianship in the Digital Era” on 26th March, 2014, at the National Workshop cum Training Programme on “Management of Libraries and Information Centres in Digital Era” at the Rajiv Gandhi Indian Institute of Management, Shillong.

DEPARTMENT OF MANAGEMENT

Head : Prof. J. U. Ahmed
Telephone : 03651-224566 (0), Cell: +91-94363-16065
E-mail : jaynaluahmed@yahoo.co.in

Faculty

Designations	Name and Qualifications	Specialisations
Professors	G. Singaiah, M.Com, MBA (Andhra University), Ph.D. (Utkal), FDP (SICI)	Cross Cultural Management, Marketing and Entrepreneurship Development
	J. U. Ahmed, M.Com, Ph.D., LL.B. (Assam University), LL.M. (GOU)	Finance, Banking and Statistical Methods
Associate Professors	A. Bhattacharjee, M.Com., B.Ed., Ph.D. (Gauhati)	Human Resource Management, Rural Marketing and Entrepreneurship Development
	K.C. Biswal, M.Com., MBA., M.Phil., Ph.D (Berhampur University)	Accounting & Finance, Management Information System and E-commerce.
Assistant Professors	D. Bhagat, MBA (Assam Agricultural University), Ph.D. (Gauhati)	Agri-Business Management, Supply Chain Management & Quantitative Technique
	Kh. Devananda Singh, PGDIBO, M.Com, MBA (IGNOU), Ph.D. (Manipur)	Accounting & Finance, Entrepreneurship and Agricultural Finance
	S.B.A. Mazumder, MBA (Assam University)	Marketing & Finance
	S.L.S. Akoijam, MBA (Amity)	International Business & Marketing
	Thrinadha Rao Bandaru, MBA (Pondicherry)	Tourism and Human Resource Management
	Bimal Deb Nath, MBA (Devi Ahilya University), Ph.D. (NEHU)	Information System and Information Technology

Thrust Areas of Research

The thrust areas of the department are Entrepreneurship Development, Small Business Management, Cross-Cultural Management, International Business, Tourism Management,

Supply Chain Management, Micro-Finance & Rural Credit Management, Business Process Re-engineering, Agri-Business, E-Commerce, Corporate Finance, Bank Finance, Portfolio Management, Information Technology and Social Marketing

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Brief Statement of Academic Activities

During the period under report, the department started to publish one bi-annual international journal and the faculty members published books and research papers in various national / international journals and edited books.

They also participated and presented papers in a number of national and international seminars /conferences. The faculty members also organised seminars/workshops/ symposia/ conferences and participated in MDP, FDP, Refresher Courses and Orientation Programs.

Students' Profile

Enrolment Capacity: M.B.A. – 43; Ph.D. - Variable

Actual Admission

	Male	Female	SC	ST	GEN	Meghalaya	Non-Meghalaya	Total
MBA	29	14	01	30	12	32	11	43
Ph.D	5	3	01	05	02	04	04	08

Degrees Awarded

	Male	Female	SC	ST	GEN	Meghalaya	Non-Meghalaya	Total
MBA	26	07	03	17	13	18	15	33
Ph.D	03	01	-	-	04	-	04	04

Students Awarded Ph.D. degree

Name of the student	Title of thesis	Name of the Supervisor
Hedayatullah Choudhury	Management of Non-Performing Assets of Scheduled Commercial Banks: A Study in Barak Valley of Assam	Prof. J. U. Ahmed
Govinda Prasad Bhandari	Performance of Regional Rural Banks: An Evaluative Study of Meghalaya Rural Bank	Prof. J. U. Ahmed
Sunil Kumar Newar	Evaluation of Entrepreneurship Development Process: A Case Study of Garo Hills in Meghalaya	Prof. G. Singaiah
Rohima Ahmed	Correlates of Information Technology, Business Process Re-engineering and Organisational Culture: An Empirical Study in Indian Context	Prof. J. U. Ahmed

Placement of Students

The conscious effort put in by the Placement Cell of the NEHU Tura campus has resulted in some of the biggest recruiters like Vodafone India Ltd,

Hi-Design HR, PRADAN, IDBI Bank, IOCL, BCPL, Nestle, Dabur, WIPRO, HDFC Bank, Axis Bank, AMUL etc. showing keen interest in our Department. The placement record has

been cent per cent with average CTC offered being Rs. 4.50 lakhs.

Courses Conducted

The department offers two Master's programme, viz., MBA & MBA (Service Management), and the Ph.D programme.

MBA

The department under MBA programme offers 32 courses, out of which 20 are core courses and one project work equivalent to two courses. Besides these, 10 special courses, five each from two specialisation groups are to be pursued. The dual specialised courses are based on four functional areas of management, viz, finance, marketing management, human resource management and agri-business management.

MBA (Service Management)

The department under MBA (Service Management) offers 32 courses, out of which 20 are core courses and one project work equivalent to two courses. Besides these, 10 special courses, five from any one of the functional areas and five from any one of the sectoral areas are to be pursued. The specialised courses are based on four functional areas of management, viz, finance, marketing management, human resource management and agri-business management; and three sectoral areas of management, viz, banking and insurance, NGO management and tourism management.

Ph.D.

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

Industrial Tour of Students

Teacher(s) in-charge: Dr. K. C. Biswal and Dr. Bimal Deb Nath

Places/ Institutions visited: Visakhapatnam and Bhubaneswar

Duration of the tour: 15 days (1st February 2014 to 15th February 2014)

Purpose of visit: The industrial visit with the second semester students (43 students) of the department was carried out for practical industrial exposures. They visited some reputed industries/institutions like VIZAG Steel Plant, Visakhapatnam Sea Port, BHEL, OMFED, Indian Rail Coach (Workshop), Parley G Biscuit Factory, Bhubaneswar.

Seminar/Conferences/Workshop/Extension Programmes

Organized

1. The Department organised a National Symposium on 'Role of SEBI and NSEIL in the Indian Capital Market' in collaboration with National Stock Exchange of India Ltd (NSEIL) Kolkata Regional Office, and Securities and Exchange Board of India (SEBI) on 4th April 2013. Dr. A. Bhattacharjee coordinated the programme.
2. An HR Conclave entitled "Human Resources at the Crossroads" was organised by the Department held at Vivekananda Kendra, Guwahati on 18th May 2013. Dr. A. Bhattacharjee coordinated the Conclave.
3. The Department organised a National Seminar on '*Entrepreneurship: A Drive towards Socio-Economic development in North Eastern Region*' on 4th June, 2013. Dr. Kh. D. Singh coordinated the Seminar.

NEHU Annual Report 2013-2014

4. The Department organized ICSSR–NERC sponsored three-day “Workshop on Entrepreneurship and Social Change’ during 21st to 23rd August, 2013. Dr. Kh. D. Singh coordinated the programme.
5. The ‘First International Academic Collaboration Programme’ between the Department of Management, NEHU, Tura Campus, and the Faculty of Business Administration and Management, Patuakhali Science and Technology University, Patuakhali, Bangladesh, was organised in the Department on 27th August 2013. Prof. J. U. Ahmed and Dr. D. Bhagat coordinated the programme.
6. The UGC-ASC NEHU ‘Special Winter School in Management Sciences’ was organised during 2nd to 24th September 2013. Dr. Kh. D. Singh coordinated the programme.
7. The Management Fest-Mosaic:13 was held on 12th November 2013 to promote industry-academia interface. Mr. Sunildro L.S. Akoijam coordinated the Fest.
8. A Seminar on ‘Career Guidance and Counselling’ was held on 18th November, 2013, at the conference hall of the Department under the ‘Chief Minister’s Career Guidance Scheme’. Dr. B. Bhagat and Ms. S.B.A. Mazumder coordinated the programme.
9. A Felicitation Programme was held on 29th November, 2013 to felicitate the Director and Vice-Chairman, State Resource Centre, NEHU, Shillong, on receiving the National Literacy Award 2013, on 8th September, 2013, at Vigyan Bhawan, New Delhi. Prof. J. U. Ahmed coordinated the programme.
10. Inauguration & Release of an international journal entitled “International Journal of Applied Management Research (IJAMR)” was held on 29th November, 2013 in the Conference Hall. Dr. D. Bhagat coordinated the programme.
11. The Department conducted ‘Entrepreneurship Skill Development Programme on Food Processing Industry’ during 22nd - 26th March 2014. Prof. G. Singaiah coordinated the programme.

Attended/Participated

- Prof. G. Singaiah presented (1) a joint paper with N.K. Srivastava titled “ Social Entrepreneurship: A Promise of Sustainable Development and Livelihood in Assam” in the International Seminar on ‘Issues on Development, Well being and Livelihood’, organized by the Department of Economics, University of Burdwan, West Bengal during 17-18th January 2014; (2) a paper titled “Evaluation of Entrepreneurship Development Process: A Perspective” at the National Seminar on *Entrepreneurship: A Drive Towards Socio-Economic Development of North Eastern Region* organized by the Dept. of Management, NEHU, Tura Campus, on June 4, 2013 .
- Prof. J. U. Ahmed presented (1) a paper titled, “The Growth of Micro and Small Enterprises in the Global Era: An Evidence” at the National Seminar on *Entrepreneurship: A Drive Towards Socio-Economic Development of North Eastern Region* organized by the Dept. of Management, NEHU, Tura Campus, on June 4, 2013; (2) a paper entitled, “Institutional Financing of Tea Industry: A Case Study” at the National Seminar on *Recent Trends in Financial Management and Financial Service* on 4th January 2014 held at St. Joseph’s Degree & PG College, Hyderabad.

- Dr. K.C. Biswal presented (1) a paper entitled “Corporate Social Responsibility Report, 2012-2013” at the 36th *All India Accounting Conference and International Seminar on Accounting Education and Research* held at Visakhapatnam during 11th & 12th January, 2014; (2) a paper entitled “Agri-Tourism: A Catalyst to Rural Development in Meghalaya State” in the National seminar on *Entrepreneurship: A Drive towards Socio-Economic Development of North-Eastern Region* organised by the Department of Management, NEHU, Tura campus on 4th June, 2013.
- Dr. Deepak Bhagat presented (1) a paper entitled “Marketing Strategies Adopted by Rice Entrepreneurs in Jorhat District of Assam” at the National Seminar on *Entrepreneurship: A Drive Towards Socio- Economic Development of North-Eastern Region* organised by Department of Management, NEHU, Tura Campus on 4th June, 2013; (2) a paper entitled “Reappraising Management Education in India” at the National Conference on *Changing Scenario of Management Education in India* organized by Royal School of Business, Gyan Sagar Foundation Group of Institutions, Guwahati, on 21st Feb, 2014.
- Ms. Sultana B. A. Mazumder presented a paper entitled “Women Entrepreneurship in India: Determinants and Challenges” at the National Seminar on *Entrepreneurship: A Drive towards Socio-economic Development of North Eastern Region* held at the Department of Management, NEHU, Tura campus on 4th June, 2013.
- Mr. Sunildro L.S. Akoijam presented (1) a paper entitled “Exploring the Challenges of Customer Retention: A Relationship Marketing Perspective” at the National Conference on *Recent Developments on Business Management* organized by Kurukshetra Institute of Technology and Management, Kurukshetra on April 20, 2013; (2) a paper entitled “Exploiting Brand Loyalty Using Relationship Marketing: A Critical Review” at the *International Conference on Operations and IT for Sustainable Development* organized by CMR Institute of Management Studies, Bangalore, on April 24-25, 2013; (3) a paper entitled “Social Enterprise as an Intervention for Regional Development: Evidences from North-Eastern India” at the National Seminar on *Entrepreneurship: A Drive Towards Socio-Economic Development of North Eastern Region* organized by Dept. of Management, NEHU, Tura Campus on June 4, 2013; (4) a paper entitled “Leveraging the Brand through Brand Extension: A Case Study of Selected MNCs in India” at the *International Seminar on ‘Ubiquitous Marketing* organized by KJ Somaiya Institute of Management Studies & Research, Mumbai on January 6-8, 2014.
- Mr. Thrinadha Rao Bandaru presented (1) a paper entitled “Retaining Employees of Hotel Industry- Challenges Ahead” at the International Conference on *Contemporary Research in Tourism and Hospitality: Theory, Practice and Pitfalls* organized by the Department of Tourism Studies, Pondicherry University in collaboration with Bournemouth University, UK and Indian Institute of Tourism and Travel Management, Gwalior during 18-21 February 2014; (2) a paper entitled “Prospects of Pro Poor Tourism As Entrepreneurial Development with Special Reference to Meghalaya” at the National Conference on *Entrepreneurship: A Drive*

Towards Socio-Economic Development of North Eastern Region organized by Department of Management, North Eastern Hill University, Tura Campus, Tura, Meghalaya on 4th June, 2013.

Publications

Research Papers

Published in India

- Ahmed, J. U. and Hasan, H. (2013). E-Commerce in Syria: Overall ICT Perspective. *International Journal of Applied Management Research*, (ISSN: 2347-2839), 1(2): 75-99.
- Ahmed, J. U. (2013). The Efficacy and Working of Regional Rural Banks: An Implication in Indian Context. *International Journal of Banking, Risk and Insurance*, (ISSN: 2320-7507), 2(3): 18-29.
- Ahmed, J. U., Bhandari, G.P., and Ahmed, R. (2013). Profitability of Regional Rural Banks in India: An Empirical Analysis in Meghalaya Rural Bank. *Journal of Rural and Industrial Development*, (ISSN: 2321-1873), 1(1): 1-15.
- Bhattacharjee, A. (2013). An Empirical Analysis on the Consumers' Awareness of Rights and Education with Reference to FMCG products. *Journal of Exclusive Management Science* 2(10): 1-7
- Bhattacharjee, A. (2013). An Entrepreneurial Analysis of the Strawberry Crop of Meghalaya. *International Journal of Management Research and Review*, 3(11): 3719-3726
- Biswal, K.C. (2013). Tourism in India: A Perspective View of Meghalaya Tourism. *Journal of Business Management, Commerce & Research*, (ISSN:2278-5280), 1(4): 71-83
- Biswal, K.C. (2013). Determinants of Cash Flow Behaviour in Indian Banking Industry: A Study on IDBI Bank. *Journal of Business Management, Commerce & Research*, (ISSN:2219-250X), 1(3): 63-73.
- Biswal, K.C. (2013). Rural Industrialization: A Study on Small Scale Industrial Units in Meghalaya. *Source*, Journal of Don Bosco College, Tura, (ISSN:2250-0642), 3:42-52
- Bhagat, D & Dhar, U. R. (2014). Economics of High Value Agricultural Commodity Marketing in Garo Hills (Meghalaya). *Journal of Supply Chain Management Systems*, 2(4): 53-59.
- Bhagat, D & Dhar, U. R. (2014). Factors Contributing the Success of Rural Entrepreneurs In Hilly Areas: An Insight from Garo Hills, Meghalaya. *Journal of Entrepreneurship and Management*, 3(1): 11- 18.
- Akoijam, L.S. S. (2013). Cultural Dynamics: An Integrated Approach towards Sustainable Development. *Research Journal of Social and Life Sciences* (ISBN: 978-81-87364-55-9), pp. 123-135.
- Akoijam, L.S. S. & Ibohal, M. Ch. (2013). Branding Strategies of MNCs: A Study of Selected FMCG Products in Indian Market. *International Journal of Research in Management and Social Science*, 1(1): 49-60
- Akoijam, L.S. S. & Ibohal, M. Ch. (2013). Brand Awareness of MNCs in Indian Market: A Case Study of FMCG Sector. *Jaipuria e-Vaani, International Journal of Research in Management & IT*, 1(1): 27-44

Published Abroad

Ahmed, J. U. (2013). Performance Evaluation of Regional Rural Banks: Evidence from Indian Rural Banks. *Global Journal of Management and Business Research, USA* (ISSN: 0975-5853), 13(10): 67-78.

Books/ Book Chapters/ Proceedings

Published in India

Ahmed, J. U. and Singh, Kh. D (2014). *Financing Priority Sector in India: Scenario, Setback and Solutions*. Manas Publishers and Distributors, Jaipur, (ISBN: 978-93-83231-19-5)

Ahmed, J. U (2014). Perspectives of Ethnicity in the Context of Globalization. In: Pradhani, J. and Thakur, R.S (eds.), *Culture, Ethnicity and Identity: A Reade* (DVS Publishers, Guwahati) (ISBN:978-81-86307-77-9), pp-282-292.

Ahmed, J. U. and Bhandari, G.P. (2014). Performance of Regional Rural Banks: A Case of Meghalaya Rural Bank. In: Singha, K. and Singh, M.A (eds.), *Identity, Politics and Economic Development in North-East India*. (Concept Publishing Company (P) Ltd, New Delhi). (ISBN:978-93-5125-040-1), Chapter 9, pp-149-165

Ahmed, J. U. and Rashid, M.A (2014). Financial Institutions in Financing Small and Medium Entreprises: A Study of Garo Hills in Meghalaya. In: Singha, K. and Singh, M.A. (eds.), *Identity, Politics and Economic*

Development in North-East India (Concept Publishing Company (P) Ltd, New Delhi). (ISBN:978-93-5125-040-1), Chapter-10, pp-166-195.

Singh, K.D., Ahmed, J.U and Bhandari, G.P (2014). Priority Sector Lending by Rural Banks in India: An Evaluative Study on Meghalaya Rural Bank. In: Ahmed, J. U, & Singh, Kh. D, (eds.), *Financing Priority Sector in India: Scenario, Setback and Solutions* (Manas Publishers and Distributors, Jaipur) (ISBN: 978-93-83231-19-5), pp-99-118

Mazumder, S. B. A. (2014). Priority Sector Lending: Policies and Issues. In: Ahmed, J. U, & Singh, Kh. D (eds.) *Financing Priority Sector in India: Scenario, Setback and Solutions* (Manas Publishers and Distributors, Jaipur) (ISBN: 978-93-83231-19-5), pp-27-38

Akoijam, L.S. S. (2014). Role of Social Network in the Entrepreneurial Drive in this Globalized Era. In: Singh, W.C. & Meitei, I. (eds.) *Entrepreneurship in the Era of Globalization* (Sunmarg Publications, New Delhi) (ISBN: 938-2-606-09-2) pp. 56-63

Published Abroad

Akoijam, L.S. S. (2013) Relationship Marketing as a Driver of Brand Loyalty: A Conceptual Analysis. In: Subrata, Deb Nath (eds.) *Contemporary Management Research Handbook* (Lampert Academic Publishing, Germany) (ISBN: 978-3-659-49072-9), pp.383-398.

Research Projects

Ongoing

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	An Evaluative Study on the Performance and Working of Meghalaya Rural Bank	Principal Investigator- Dr. J. U. Ahmed	Indian Council of Social Science Research, New Delhi	Rs.8,00,000/-
2	Comparative Study on Micro and Small Enterprises in Imphal West District of Manipur And West Garo Hills of Meghalaya - The Entrepreneurial Perspective	Principal Investigator- Dr. Kh.D. Singh	Indian Council of Social Science Research, New Delhi	Rs.7,00,000/-

Completed during year

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Evolution of Entrepreneurial Motivation Process– A cross cultural Perspectives of North East India	Principal Investigator- Prof. G. Singaiah	University Grants Commission, New Delhi	Rs. 7,00,000/-

Other Academic Activities

The Department started a bi-annual, peer-reviewed international journal entitled *International Journal of Applied Management Research* (ISSN: 2347-2839) with Prof. J. U. Ahmed as Chief Editor and Dr. Deepak Bhagat as Managing Editor.

The North-Eastern Region Chapter of the Institute for Supply Management (ISM) - India (An affiliate of ISM, USA) has been started in the Department on 5th April 2013 under the chairmanship of Dr. D. Bhagat.

Prof. J. U. Ahmed delivered the Late Shri. N. J. Yasaswy memorial lecture entitled “Financial Inclusion for Women Entrepreneurs” at ICAI University,

Meghalaya on 8th October, 2013. He also delivered a lecture on “Career Option and Professional Commitment” at University of Science and Technology (USTM), Meghalaya in August 2013. Prof. Ahmed delivered a lecture on “Financing Micro & Small Enterprises” on 6th August, 2013 in the workshop on ‘Entrepreneurship and Social Change’ organized by Department of Management, NEHU, Tura Campus held during 5-7 August, 2013. He also delivered two lectures on “Regional Rural Banks and Its Impact to Rural Economic Development” and on “Financial Management” at the Special Winter School in Management Sciences jointly organized by UGC-ASC, NEHU, Shillong, and Department

- of Management, NEHU, Tura Campus, Meghalaya during 2nd to 22nd Sept, 2013.
- Dr. K. C. Biswal delivered two lectures on 'Self employment opportunities in West Garo Hills District' & 'Tribal Entrepreneurship :A Study of Meghalaya' at the ICSSR sponsored Workshop on 'Entrepreneurship and Social Change' held at the Department of Management, NEHU, Tura campus on 22nd August 2013. He also delivered two lectures on 'Corporate Finance' and 'Research Methodology' at the Winter School in Management organised by Department of Management, NEHU, Tura campus on 18th September 2013. In addition, Dr. Biswal delivered two lectures on 'Computer Application in Finance' & 'Management Information system' at Gokul Institute of Technology and Sciences, Vizianagaram, Andhra Pradesh on 16th January 2014.
- Dr. Deepak Bhagat participated in "Special Winter School in Management Sciences" organised by UGC- Academic Staff College, NEHU, held in the Department of Management, NEHU, Tura Campus during 2/9/2013 to 22/9/2013.
- Ms. Sultana B. A. Mazumder participated (1) a Training Programme on 'Computer and Statistical Methods in Social Science' organized by Department of Statistics, Gauhati University from 18th April to 27th April, 2013; (2) a Training Programme on 'Capacity Building for university/College Teachers in Social Sciences' organized by Himachal Pradesh University, Shimla from 10th May to 23rd May, 2013; (3) a Special Winter School in Management Sciences organized by the Department of Management, NEHU, Tura campus from 2nd September to 22nd September 2013; (4) a workshop on 'Data Analysis for Business Research' organized jointly by the Bayesian and Interdisciplinary Research Unit (BIRU), Indian Statistical Institute (ISI), Kolkata and Department of Business Administration, Assam University, Silchar during December 12-14, 2013; (5) a 'Research methodology Course' organized by Department of Education, University of Calcutta from 6th January to 16th January, 2014. Ms. Mazumder also delivered a lecture on "Women Entrepreneurship" on 6th August, 2013 in a workshop on 'Entrepreneurship and Social Change' organized by Department of Management, NEHU, Tura campus held during 5-7th August, 2013.
- Mr. Sunildro L.S. Akoijam participated a 'Special Winter School in Management Sciences' organized by UGC-Academic College, NEHU, Shillong, on September 2nd -22nd, 2013.
- Mr. T.R. Bandaru delivered (1) a lecture on the topic "Team Building and Communication" in Five Day National Institute of MSME Workshop on 'Skill Development Training Program on Food Processing' organised by the Department of History & Archaeology , NEHU, Tura Campus during 22nd -27th March 2014; (2) a lecture on the topic "Tourism Entrepreneurship – A Boon to North East India" in Three Day ICSSR sponsored Workshop on 'Entrepreneurship and Social Change' in the Department of Management, NEHU, Tura Campus, during 21st – 23rd August, 2013.
- Dr. Bimal Deb Nath delivered a lecture on the topic "E-commerce in Entrepreneurship" in a three- day ICSSR sponsored Workshop on 'Entrepreneurship and Social Change' organised by the Department of Management, NEHU, Tura Campus, during 21st – 23rd August, 2013.

DEPARTMENT OF JOURNALISM AND MASS COMMUNICATION

Head : Kamaljit Chirom
Telephone : 9615055950
E-mail : kamalchi@yahoo.co.in

Faculty

Designation	Name and Qualification	Specialization
Assistant Professor	Kamaljit Chirom, M.A. (Manipur)	Film Studies, Advertising and Public Relations, Cultural Communication
	Barath N., M.A. & M.Phil. (Hyderabad)	Hyderabad Media and Culture Studies, Development Communication, Print Media
	Karen L. Donoghue, M.A. (Sikkim Manipal)	Electronic Film Production, Television, New Media Studies

Brief Statement of Academic Activities

Plans are underway to start the M.A. Course in Journalism & Mass Communication in 2014

Seminars/Conferences/Symposia/Extension Programmes etc.

Attended/Participated

- i. Karen L. Donoghue attended the IEEE sponsored *1st International Conference on Emerging Trends and Applications in Computer Science*, held at Siloam Barapani.
- ii. Kamaljit Chirom presented paper titled "Children and Conflict Situation in Manipur" at the *North-Eastern Regional Seminar on Child Rights and the Media* organised by the Department of Journalism and Mass Communication, EFL University, Shillong Campus in partnership with UNICEF, Assam on 31 October and

1 November 2013 at EFLU, Shillong Campus.

- iii. Kamaljit Chirom presented a paper titled "The *Shingju* of Kakching: Its popularity and significance in Manipur" at the Two-Day National Seminar on *Issues and Challenges of Ethnic Food Product Entrepreneurs and Cottage Industries in North East India* organised by Department of Anthropology, Kha Manipur College, Kakching, Manipur, India on 30th and 31st January 2014.

Publications

Research Papers

- i. Barath Nataraj (2013). Book Review on "The Silent Raga". *Man and Society*.10: 160-163
- ii. Kamaljit Chirom (2013). Manipuri Cinema: Creativity in Adversity. *International Journal of Communication*. 23 (No. 1-2).

School of Economics, Management and Information Sciences

Honours/Awards/Recognitions

Kamaljit Chirom was recipient of the Dr. Ambedkar Fellowship National Award-3013, which was awarded by Bharatiya Dalit Sahitya Akademi, New Delhi.

Other Activities

Barath N.

Delivered 5 lectures on Culture and Communication at EFLU, Shillong

Delivered 5 lectures on Mass Communication Theory at EFLU, Shillong

Karen L. Donoghue

Delivered a lecture at Anthony's College on "Social Networking".

Delivered 8 lectures on Stagecraft at University of Technology, Shillong.

Conducted series of programmes on "Career Guidance" for Doordarshan, Shillong Kendra

DEPARTMENT OF TOURISM AND HOTEL MANAGEMENT

Head : Dr. Saurabh Kumar Dixit
Telephone : 09436565964 (M)
E-mail : saurabh5sk@yahoo.com, saurabhdixit@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Associate Professor	Dr. Saurabh Kumar Dixit, B.H.M. & C.T. (M.J.P.R.K. University Bareilly), M.T.M. (IGNOU), Ph.D. (Bundelkhand)	Tourism/ Hotel Management
	Dr. Punit Gautam, M.T.A. (Kurukshetra), D.Phil. (Garhwal)	Tourism Management
Assistant Professor	Dr. Benjamin F. Lyngdoh, M.Com. (Gauhati), Ph.D. (NEHU)	Accountancy and Finance
	Dr. Sharad Kumar Kulshreshtha, M.Com., PG Dip in EDP and M.T.A. (AMU), Ph.D. (B.R.A. University)	Event Management/ Service Marketing

Thrust Areas of Research

Hospitality Management; Guest/ Visitor Satisfaction; Tourism Marketing; Eco / Sustainable Tourism; Tourism Policy; Planning Impacts ; Tour Operations; Finance; Human Resource Management; Entrepreneurship; Development Studies; MICE & Event Management; Travel Agency Management; Service Marketing and Emerging Tourism trends.

Brief Statement of Academic Activities

The faculty members engaged themselves in strengthening the departmental infrastructure like purchase of equipments, furnishing of faculty rooms and library books of the concerned subjects. The faculty members of the Department with the help of external subject experts prepared the detailed course structure for the MBA programme in Tourism and Hotel Management to be proposed by the Department. Besides

the requisition of subject books/ journals are also forwarded to the Central Library for their procurement. Board of Post Graduate Studies of the Department is also got constituted in this period.

Seminars/Conferences/Symposia/ Extension Programmes

Attended/Participated

Dr Saurabh Kumar Dixit

- Presented a paper on “Nurturing a priceless drop: an approach for sustainable tourism practices” in the *National Level Conference on Tourism & Water: Protecting Our Common Future* on September 27, 2013 organized by Department of Tourism, Government of Meghalaya.
- Presented a paper on “Approaches for sustainable tourism development in Meghalaya” in the *Directors Conclave-2014*

on January 18-19, 2014 at Institute of Tourism and Travel Management, Govindpuri, Gwalior.

- Delivered Keynote Address on “North-East India – a paradise unexplored for world tourism” in *International Level NE India ASEAN Travel Mart* on February 24, 2014 at Maniram Divan Trade Centre, Guwahati.

Dr. Sharad Kumar Kulshreshtha

- Presented a paper on “Nurturing a Priceless Drop: An Approach for Sustainable Tourism Practices” in connection with World Tourism Day on the theme of Tourism & Water: Protecting our Common Future organized by Department on Tourism, Government of Meghalaya on Sept 27, 2013.
- Participated in the 4th *India International Hotel, Travel & Tourism Research Conference* (IIHTTRC-2014) organized by Banarsidas Chandiwal Institute of Hotel Management & Catering Technology, New Delhi, on 12-15 February 2014.

Publications

Research Papers

Published in India

- Lyngdoh, B. F. and Rynjah, M. O. (2013). Bridging tourist needs gap through micro-enterprise: A case study of Cherrapunji destination of Meghalaya, India. *International Journal of Applied Management Research*. 1: 10-22.
- Lyngdoh, B. F. (2013). Tourism attractiveness of Meghalaya: An exploration of entrepreneurial opportunities. *IUP Journal of Entrepreneurship Development*. 10: 1-17.
- Lyngdoh, B. F. and Pati, A.P. (2013). Impact of microfinance on women empowerment in

the matrilineal tribal society of India: An analysis using propensity score matching and difference-in-difference. *International Journal of Rural Management*. 9: 45-69.

- Lyngdoh, B. F. and Pati, A.P. (2013). Microfinance and women empowerment: A case of matrilineal tribal society of India. *Prajan: Journal of Social and Management Sciences*. 42: 113-129.

Published Abroad

- Dixit S.K. (2013). A study of guest's expectation and perception of hotel service quality: case of Khajuraho, India. *Enlightening Tourism: A Pathmaking Journal*, 3: 125-141.

Book

- Lyngdoh, B.F. and Pati, A.P. (2013). *Microfinance and women empowerment*. (Mumbai: Himalaya Publishing House)

Book Chapters/Proceedings

- Dixit S.K. (2013) Entrepreneurial Developments in Tourism and Hospitality Industry: Indian Perspectives. In: *Advances in Hotel, Travel and Tourism Research: A Global Perspective*. Bhandari R.K., Kumar Bhupesh, Sharma Piyush and Saraswati Arvind Kumar (Eds.). (Banarsidas Chandiwal Institute of Hotel Management & Catering Technology, New Delhi): Chapter 15, pp 138-146
- Dixit S.K. (2014) Indigenous Tourism Vis-À-Vis Destination Sustainability: Case of Madhya Pradesh. In *Contemporary Trends in Tourism & Hospitality Management*. Aima Ashok, Chauhan Vinay and Bhasin Jaya (Eds.) (Primus Books, New Delhi): Chapter 13, pp 147-159.
- Gautam, P., Thakur, P. (2014) An approach for sustainable tourism development

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in mountains: A case study of Shimla Environs. In: *Exploring Tourism and Hospitality Industry: Issues and Strategies*. K. Gupta, P. Gautam, A. S. Thakur (Eds.). (Neha Publishers & Distributors, Delhi): Chapter 4, pp.62-83.

- Chourasia, B., Gautam, P. (2014), Significance of Indian Travel, Tourism and Hospitality Industry in Economic Development: An Indian Experience. In *Economic Development with Devaluation of Non Economic Values: Problems and Remedies*. A. K. Misra and A. Agarwal (Eds.). (Mumkshu Publication of Humanities, Shahjahanpur): Chapter --, p.488-495.
- Kulshreshtha, S.K. & Shukla, U.N (2014). Rural Tourism: A Key of Rural Development. In *Management and Socio-Economic*

Development. Agrawal AK and Singh .AK. (Mittal Publications, New Delhi): Chapter 8: 95-108

- Kulshreshtha, S.K. & Shukla, U.N (2014). Corporate Social Responsibilities and Ethics of Travel and Tourism Industry. In *Management and Socio-Economic Development*. Agrawal AK and Singh A K . (Mittal Publications, New Delhi): Chapter 9: 109-122.
- Kulshreshtha, S.K. (2014). Prospect and Opportunities in Tourism Sector through Public Private Partnership. In: *Public Private Partnership-The Need of Hour*. Mishra RK, Rajesh G, Mishra S and Chandrashekhar M. (Bloomsbury India, New Delhi).

Research Projects

New Projects

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	Impact of Tourism-related Micro and Small Enterprise on Entrepreneur's Socio-economic Outcomes: A Propensity Score Analysis of Meghalaya	Dr. Benjamin F. Lyngdoh	Indian Council of Social Science Research, New Delhi	Rs. Four lakhs

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND FOOD TECHNOLOGY

Head : Dr. Sheena Haorongbam
Telephone : 03651-223107
E-mail : abmftnehutura@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Assistant Professor	Sheena Haorongbam (Ph.D).	Botany, Biochemical & Nutritional aspect of Plant-Based Foods, Technology of Food Industry, Health Impacts & Food habits, Food Analysis
	Gino A. Sangma (M.Sc.)	Marketing management and Agribusiness Management
	Sasi Kumar R. (M.Sc.)	Food Processing & Technology-Food Analysis and Quality Control

Thrust Areas of Research

Food Processing & Technology, Food Analysis and Quality Control, Technology Pertaining to the Food Industry, its Health Impacts & Food habits, Marketing management and Agribusiness Management

Students' Profile/Enrolment Capacity

Master's Degree in Food and Agribusiness Management (MFA)

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
MFA	NIL	06	NIL	03	03	06	NIL	06

Courses Conducted

Postgraduate First Semester started July 2013

Semester – I:

1	MFA-101	Management Concepts.
2	MFA-102	Managerial Economics
3	MFA-103	Computer Applications
4	MFA- 104	Business environment

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5	MFA- 105	Quantitative Analysis for Managerial Decision
6	MFA- 106	Accounting for Managers.
7	MFA- 107	Financial Management.
8	MFA-108	Management of Food and Agribusiness

Semester - II:

1	MFA-201	Business Communication
2	MFA-202	Agri-Business Marketing
3	MFA-203	Human Resource Management in Agri-Business
4	MFA-204	Operations Management
5	MFA-205	Supply Chain and Retail Management
6	MFA-206	Legal Aspects of Business
7	MFA-207	Fundamentals of Food Processing and Preservation
8	MFA-208	Tax Laws.

Educational Tour of Students

Teacher-in-Charge: Shri Gino A. Sangma

Places/Institutions visited: Goa, Mumbai and Kolkata/Tropical Spice Plantation (Goa),

Maganlal Food Products Pvt. Ltd (Lonavala) and Science City (Kolkata)

Duration of tour: 14 days (4th February to 18th February 2014)

Purpose of Tour: Industrial Exposure

II

SCHOOL OF EDUCATION

Dean : Prof. Man Mohan Singh
Telephone : 2723591 (O)
Email : deaneducation.nehu@gmail.com

DEPARTMENT OF ADULT AND CONTINUING EDUCATION

Head : Dr. B. P. Sahu
Telephone : 2723328 (O), 9436302933 (M), 2726028 (R)
E-mail : bishnusw@yahoo.com

Faculty

Designation	Name and Qualification	Specialization
Professor	E. Jyrwa, M.A. M. Phil & Ph.D. (NEHU)	Research Methodology, National, Regional and International Strategies of Adult Education, Adult Education for Rural Development & Philosophy of Adult Education
Associate Professor	B. P. Sahu, M.S.W & Ph.D. (Kurukshetra)	Group Work in Adult Education & Human Resource Development
	J. Mawthoh, M.A. & Ph.D. (NEHU)	Research Methodology, Environmental Education, Management of Non-Governmental Organisations & Entrepreneurship Development for Adult Learners.
Assistant Professor	N. P. Goel, M.Sc., MPS (IIPS, Mumbai), Ph.D. (NEHU)	Research Methodology, Population Education
	Mrs. W. S. Myllemngap, M.A. & M.Phil. (NEHU)	Introduction to Adult and Continuing Education, Social Development, Social Policy & Social Action, Material Development in Vernacular Language for Non-Formal Education Intervention
	E. Syngkon, M.A. & Ph.D. (NEHU)	Adult Psychology, Women Education, Extension Education, Research Methodology, Adult and Continuing Education Practices
	J. I. Rapthap, MSW (Mumbai)	Guidance and Counselling Inclusive Education, Community Organization and Community Development
	N.S. Devi, M.Sc. (NEHU)	Rural Development, Extension Education, Methods of Communication, Environmental Education, Management of NGOs.

Thrust Areas of Research

(i) Adult Education (ii) Continuing Education
 (iii) Literacy Programme (iv) Functional

Literacy (v) Total Literacy Campaign (vi) Post Literacy Programme (vii) Counselling (viii) Open Schooling (ix) Mass Media (x) Women

School of Education

Empowerment (xi) Aged people (xii) Rural Livelihood and Social Development (xiii) Workers in Organised and Unorganised Sector (xiv) Skill Development and Training (xv) Self Help Groups (xvi) Inclusive Education (xvii) Tribal Health (xviii) Political Socialisation (xix) Environmental Impact Assessment.

Brief Statement of Academic Activities

In the last decade, a number of changes have occurred in the fields of Adult Education. Adult learning has become one of the important components of lifelong learning. The key role of adult learning in developing citizenship and competences is well recognized. In the 21st century, students should be able to cope with constant changes. Our rapidly changing world causes a large share of its students to be forced

into new and challenging working environments, which call for new skills and attitudes. Therefore the teaching process in the department has been geared up for preparing the students to become lifelong learners by helping them develop lifelong learning skills. The Department has advanced in implementing an engaging style of teaching, research, and extension and hence supporting the development of learning skills among the students. We have developed and are promoting innovative learning strategies for training of future adult educators with a view to enhance their motivation and ensuring their active engagement in lifelong learning process. Thus the entire focus of the Department is to develop and disseminate strategies to stimulate demand for lifelong learning teaching, research and extension.

Students' Profile

Enrolment Capacity: M.A: 40 Ph.D: Variable

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.	-	40	-	7	33	37	3	40
Ph.D.	1	6	2	4	5	6	3	9

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.	-	18	-	04	14	17	1	18
Ph.D.	1	-	-	-	1	-	1	1

Students Awarded Ph.D Degree

Name of Student	Title of Thesis	Name of Supervisor
Smt. Rituparna Rajendra	Non-Formal Educational Strategies to Improve the Occupational Health and Literacy of the Coal Mine Workers of Assam	Dr. B. P. Sahu

Courses Conducted

M.A. in Adult and Continuing Education

Semester I : Introduction to Adult and Continuing Education; Adult Psychology; Methods of Communication in Adult Education; Environmental Education; Research Methodology.

Semester II : National and International Perspective of Adult Education; Policies and Programmes of Adult Education in India; Group Work in Adult and Continuing Education; Inclusive Education; Extension Education.

Semester III : Guidance and Counseling; Women Education and Empowerment; Management of Non-Governmental Organisations; Human Resource Development; Rural Development.

Semester IV : Population Education; Community Organisation and Development; Entrepreneurship and Skill Development; Material Development in Vernacular Languages; Disaster Management.

Ph.D. Courses:

Research Methodology
Adult and Continuing Education Practices
Literature Review and Seminar Presentation

Educational Tour of Students

Teacher-in-Charge: Dr. N. P. Goel and Dr. B. P. Sahu

Places/Institutions Visited: Kanyakumari and Chennai

Duration of Tour: 10th December, 2013 to 26th December, 2013

Purpose of Tour: Educational

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized

Dr. B. P. Sahu organised a *Refresher Course on Disaster Management* in collaboration with the Academic Staff College, NEHU, Shillong, from 18th November to 8th December, 2013.

Dr. N. P. Goel organised a *UGC Short Term Course on Research Methodology* in the Department of Adult and Continuing Education in collaboration with the Academic Staff College, NEHU, Shillong, from 23rd to 28th September 2013.

Participated

Prof. E. Jyrwa

Delivered a lecture on “*Role of Community Based Organisation for Sustainable Development*” at the Special Summer School for College and University Teachers (Arts and Sciences) on 29th August 2013 organized by the Department of Education, NEHU, Shillong in association with UGC-ASC, NEHU from 12th August to 1st September 2013,

Attended the 2013 “Asian Literacy Conference” at Bali, Indonesia, from 5th to 7th September 2013, organised by the International

School of Education

Reading Association and the Indonesian Reading and Writing Association at the Grand Santhi Hotel, Denpasar, Bali-Indonesia.

Dr. B. P. Sahu

Acted as Chairperson in a session on the theme “*ICT for Rural Development*” on the eve of the International Conference on Extension Education and Rural Communities held on 6th and 7th April, 2013 organised by the Department of Life Long Learning and Extension, University of Mumbai, ICSSR and Amlani College, Mumbai

Acted as Resource Person, Moderator and Paper presenter in the National Seminar on *Inclusive Development – Bridging the Gap* held on 7th and 8th June, 2013, and organised by the Department of Social Work, St. Edmunds’s College, Shillong, and presented a paper “Social inclusion for endangered primitive Jarawa tribe of Andaman Islands”

Was Resource Person in the UGC sponsored National Seminar on *Quality Enhancement in Higher Education with Special Reference to North Eastern Region* held 9-10 October, 2013 organised by Internal Quality Assurance Cell, Tihu College, Tihu, Nalbari, Assam.

Attended the International Conference on *Extension Education and Rural Communities* held 6-7 April, 2013, and organised by the Department of Life Long Learning and Extension, University of Mumbai, ICSSR and Amlani College, Mumbai, and presented (i) a paper titled “A study on local level disaster risk management with special reference to flood in Assam”, (ii) a paper titled “Social security for unorganised coal mine workers: A study in Jaintia Hills

District of Meghalaya” on the eve of the Conference, and (iii) a paper titled “*Child Labour and Child Marriage among Tea Labour Communities of Assam: Strategies for Social Work Intervention*” on the eve of the Conference.

Ms. J. I. Rapthap

Attended the UGC Sponsored Seminar on “Women Empowerment” organized by the Academic Activity Committee, Raid Laban College, Shillong, in collaboration with the State Bank of India, and presented a paper on “*Empowerment of Disabled Women in Meghalaya*” on 13th September 2013.

Publications

Research Papers

Published Abroad

B. P. Sahu (2014). Problems and prospects in implementation of Swarnajayanti Gram Swarozgar Yojana in Haryana. *Research on Humanities and Social Sciences*, ISSN (Paper) 2224-5766 ISSN, 2014 (Online) 2225-0484 (Online) www.iiste.org Vol.4, No.5.

Published in India

B. P. Sahu (2013). National rural health mission in Meghalaya: A review of past performance and future directions. *Journal of Juridical and Social Science*, 3: 39-46.

B. P. Sahu (2013). Coal mining in Jaintia Hills District of Meghalaya: Work management and impact of mining”, *BSSS Journal of Social Work*, 1: 126-143.

B. P. Sahu (2013). Working of ICDS in East Khasi Hills District of Meghalaya: An evaluation study. *Journal of Juridical and Social Science*, 1: .52-74.

- B. P. Sahu (2014). A study of educational status of Mon District in Nagaland”, *Edu Explorer*, 1: 67-83.

Books/Book Chapters/Proceedings

- B.P. Sahu and Co-author (2014). *Menace of Population Pressure and its Impact on Environment and Economy* (Lakshi Publishers and Distributors, New Delhi).
- B.P. Sahu (2013). Social Security for Unorganised Coal Mine Workers: A Study in Jaintia Hills District of Meghalaya. In: *Extension Education and Rural Communities*, Patil, D. S., Jadhav. K., Mohankumar, K. C. (Eds.). Rishabh Publishing House, Mumbai. (2013). p. 13-39.
- B.P. Sahu (2013). Child Labour and Child Marriage among Tea Labour Communities of Assam: Strategies for Social Work Intervention”, In: *Extension Education and Rural Communities*, Patil, D. S., Jadhav. K., Mohankumar, K. C. (Eds.). Rishabh Publishing House, Mumbai. p. 49-66
- B.P. Sahu (2013). “A Study on Local Level Disaster Risk Management with special reference to Flood in Assam”. In: *Extension Education and Rural Communities*, Patil, D. S., Jadhav. K., Mohankumar, K. C. (Eds.). Rishabh Publishing House, Mumbai. p. 177-190.
- B. P. Sahu (2013). ICT Literacy Among +2 Students in Relation to their Gender and College Management”, Satpathy, Kishore Chandra, Biswas, Nikunja Behari (Eds.). *Vistas of Education*, N. E. Books and Publishers, Silchar. p.132-146.
- B. P. Sahu (2014). Population pressure in India: Its impact on economy and environment”,

Sahu, B. P., Degi, Keshang (Eds.). *Menace of Population Pressure and its Impact on Environment and Economy*, Lakshi Publishers and Distributors, New Delhi. p. 1-13.

Other Activities

Dr. N. P. Goel

- Delivered a series of four lectures on the *Application of SPSS Package for Agricultural Use* on 27th August 2013.
- Delivered a series of lectures on *Research Methodology in Social Science* organized by ICSSR-NERC, Shillong during 11-14 November 2013.
- Delivered eight lectures at the *Short Term Course in SPSS for Research Scholars, College and University Teachers* organized by UGC-Academic Staff College, NEHU, Shillong from 2 - 7 December 2013.
- Delivered a series of lectures at the *Capacity Building Programme for Faculty in Social Science* organized by ICSSR-NERC, Shillong from 6 – 19 March 2013.
- Acted as a resource person for DEE, NCERT, New Delhi, in a workshop on *Implementation of Quality Monitoring Programme in 100 Clusters of the Country* organized by North East Regional Institute of Education (NCERT), Umiam, Ri-Bhoi, Meghalaya, held from 1 - 14 March 2014.
- Acted as a resource person for DEE, NCERT, New Delhi, in the Regional Level Workshop on *Quality Monitoring Tools (QMTs) under SSA* organized by North East Regional Institute of Education (NCERT), Umiam, Ri-Bhoi held from 25th - 27th March 2014.

DEPARTMENT OF EDUCATION

Head : Professor C. Nongbri
Telephone : 2723340 (Head), 2723347(O), 9436307570 (M)
Email ID : hodedu@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Prof. P. K. Gupta M.Sc. Chy (Agra); M.Ed. (Delhi); M.Phil. & Ph.D. (Meerut)	Experimental Education, Research Methods and Statistics, Science and Mathematics Teaching, Economics of Education and Philosophy of Education
	Prof. A. Henia M.A. (Gauhati); M.Phil. & Ph.D. (JNU)	Higher Education in India, Comparative Education, Special Education (Gifted & Creative), Environmental Education, Development System of Education, Sociology of Education, Teacher Education, Women Education
	Prof. S. M. Sungoh M.A; M.Phil. & Ph.D. (NEHU)	Teacher Education, Teaching at Tertiary Level, Measurement & Evaluation, Educational Psychology, Guidance & Counseling, Research Methodology.
	Prof. C. Nongbri M.A (Pol. Sc.); M.Ed. & Ph.D. (NEHU)	Educational Management and Change, Curriculum Development and Instruction, System of Teacher Education in India and Educational System in India
Associate Professor	Dr. Ibadani Syiem MA; B.Ed. & Ph.D. (NEHU),	Psychology of Education, Early Childhood Education, Guidance and Counseling, Environmental Education, Mental Health Education
	Dr. B. Bazeley K. Rymbai MA; B.Ed. & Ph.D. (NEHU)	Educational Technology, Philosophy of Education, Research Methods, Curriculum Development, Educational Testing & Evaluation, Higher Education, Economics of Education

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Assistant Professor	Dr. Yodida Bhutia MA Eng. Litt. (Madurai Kamraj) ; M.Ed. (Mangalore); MA Edu (PGDHE); Ph.D. (NEHU)	Mental Health Education, Educational Technology, Educational Psychology, Educational Testing and Evaluation and Research Methodology in Education
	Mrs. Rihunlang Rymbai M.Sc.(Chy) & M.Ed. (NEHU)	Teacher Education, Science Education, Methods of Teaching, Environmental Education.
	Dr. Ashok Kumar M.A. (Psycho); M.Ed.; M.Phil. (Edu); M.Sc. (Anthro); Ph.D (Andhra); M.A. English (Dr.B.R.A. O.U.); M.Sc. Zoology (Acharya Nagarjuna)	Educational Psychology, Sociology of Education, Educational Testing
	Dr. (Mrs). Vandana M.A. English (Purvanchal); M.Ed. & Ph.D. (BHU)	Research Method in Education, Sociology of Education, Teaching Pedagogy : Languages (English, Hindi)
	Ms. Euodia B Myrthong M.A. Edn. (NEHU)	Educational Psychology, Guidance & Counselling, Educational Research
	Dr. Naraginti Amareshwaran M.A. (Philosophy); M.Ed. & Ph.D. (Sri Venkateswara)	Value Education, Educational Philosophy, Educational Technology, ICT in Education

Thrust Areas of Research

(i) System of Education in the North East;
(ii) Correlates of Achievement; (iii) Test Construction and Standardization; (iv) Mental Health; (v) Economics of Education; (vi) Teacher Effectiveness

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 48 Students in the M.A. programme and 23 in the M.Ed. programme during the year 2013. Eleven students qualified their UGC NET (Lectureship) in 2013. All the Teachers of the Department

have actively participated in various activities, like attending Seminars, Conferences and Workshops. They have also conducted research in various areas and have published articles in books and journals.

The Department has organized two National Seminars on the themes “Transforming Teacher Education in the North Eastern Region” and “Education in the North East: Status & Perspective” in the months of July and September 2013 respectively under the sponsorship of ICSSR-NERC, Shillong. The Department also organized one UGC-ASC sponsored Special Summer School for College and University teachers on the theme ‘Recent Advances in

School of Education

Natural & Social Sciences in the month of August 2013.

The Department of Education being the Monitoring Institution for SSA is engaged in

monitoring SSA Project under signed the MOU in September 2013 with the Ministry of Human Resource Development (MHRD) New Delhi for the whole State of Meghalaya.

Students' Profile

Enrolment Capacity: M.A. : 48; M.Ed. : 23; Ph.D. : Variable

Actual Admissions

Course	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.	-	44	2	2	44	34	12	46
M.Ed.	-	20	1	3	18	19	2	21
Ph.D.	-	10	1	4	7	11		11

Degrees Awarded

Course	SC	ST	Gen	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A. (2012-13)	-	42	02	05	37	25	19	44
M.Ed. (2011-12)	-	14	03	04	13	15	02	17
Ph.D. (2013-14)	-	09	03	05	08	08	05	13

Note: Results for 6 (six) M.Ed. students awaited, as their dissertations marks are yet to come.

Students Awarded PhD Degree

Name of the student	Topic of Thesis	Name (s) of Supervisor(s)
Ms. Iaraplang Dkhar	Education of Girls in Jaintia Hills District of Meghalaya	Prof. A. Henia
Ms. Supriya Barsaikia	A Study of Human Rights Privileges Available to Differently Abled Learners in Assam	Prof. A. Henia
Ms. Praqatti Lama	Parent-Child Relationship between Khasi and Nepali School Going Students of East and West Khasi Hills	Prof. S.M.Sungoh
Mr. Jacob Myrten	A Study of Scientific Attitude and General Intelligence in Relation to the Level of Academic Achievement in Science among Higher Secondary Students in East Khasi Hills District, Meghalaya	Prof. S.M. Sungoh

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Ms. Angeleen Lyngdoh	A Study of Social Intelligence in Relation to Teaching Aptitude of Student Teachers in the State of Meghalaya	Prof. S.M. Sungoh
Ms. Deisa Cara Laloo	A Study of Personality Patterns and Educational Aspirations of Secondary School Students in East Khasi Hills District, Meghalaya	Prof. S.M. Sungoh
Mr. Synsharlang Nongkhaw	Evaluation of Higher Secondary Examination System in Meghalaya : An Analysis	Prof. C. Nongbri
Mr. Ivanteilang War	A Study of Multigrade Teaching in Primary Schools in Jaintia Hills District of Meghalaya	Prof. S.M. Sungoh
Ms. Yondalin Nongkynrih	Status and Problems of elementary Education in Ri-Bhoi and West Khasi Hills Districts of Meghalaya	Prof. A. Henia
Mr. S. Nixon Ringmiso	Status and Problems of Primary Education in Ukhrul and Tamenglong Districts of Manipur	Prof. A. Henia
Ms. Vanlalhlani Ralte	A Study of Environmental Education Textbooks and Environmental Awareness amongst High School Students in Lunglei District of Mizoram	Dr. B.B.K. Rymbai
Ms. Dinesh Kumari	Effect of Scientific Attitude and Scientific Aptitude on the Academic Achievement in Science Subject of Class X Students in East Khasi Hills District of Meghalaya”	Prof. P.K.Gupta
Md. Delowar Hussain	An Evaluative Study on the Implementation of Sarva Shiksha Abhiyan in Barpeta District of Assam”	Dr. B.B.K. Rymbai

Courses Conducted

M.A. (Education)

Courses

- Semester I : Philosophy of Education, Psychology of Education, Educational Management and Change, Research Methodology in Education (I&II)
- Semester II : Curriculum Development and Instruction, Sociology of Education, Educational Testing & Evaluation, Environmental

Education and Mental Health Education

- Semester III : Educational Technology, Comparative Education, Early Childhood Education, Teacher Education, Special Education
- Semester IV : Laboratory Practical, Higher Education in India, Guidance and Counseling, Methods of Teaching at Tertiary Level, Economics of Education.

School of Education

M.Ed.

Semester-I : Foundations of Education; Educational Psychology; Research Methods- (I &II) and System of Teacher Education in India.

Semester- II : Theory and Practice of Teaching; Educational Testing; Dissertation, Educational Planning and Finance; Mental Health Education.

Ph.D. Courses

Research Methodology, Data Analysis & Computer Applications and Review of Related Literature.

Seminars/Conférences/Symposium/Extension Programmes, etc.

Organized

Prof. A. Henia

Organized UGC Sponsored Special Summer School for College and University teachers on the theme “*Recent Advances in Natural Sciences and Social Sciences*” from 12 August to 01 September, 2013, at ASC-NEHU Shillong.

Prof. S. M. Sungoh

Organized a National Seminar On “Transforming Teacher Education in the North-Eastern Region”, with the sponsorship of ICSSR-NERC, Shillong at Department of Education, NEHU, Shillong on 18 and 19 July, 2013.

C. Nongbri

Organized the *National Seminar on Education in the North East: Status & Perspective*

organized by Department of Education, NEHU Shillong, with sponsorship of ICSSR-NERC, Shillong, at Dept. of Education, NEHU, Shillong, from 3 to 4 September 2013.

I. Syiem

Organized the UGC-sponsored 18th Refresher Course in Education on the theme “Psychology of Education” from 22 April to 11 May, 2013, at Academic Staff College, NEHU, Shillong.

B. B. K. Rymbai

Was Organizing Secretary for the *National Seminar on Education in the North East: Status and Perspective* organized by the Department of Education, NEHU Shillong in collaboration with ICSSR-NERC Shillong held at NEHU from the 3rd to 4th of September, 2013.

Organized a tour programme for the M.A 3rd Semester students to NERIE-NCERT Umiam as an exposure study for Educational Technology in collaboration with NERIE-NCERT on 26th November, 2013.

Was a Co-Course Coordinator of the special Summer School held from 12 August to 01 September 2013 organized by the Academic Staff College, NEHU, Shillong.

Participated

P. K. Gupta

Delivered a Key Note Address in the *National Seminar on Transforming Teacher Education in the North Eastern Region of India* organized by Department of Education, NEHU, Shillong with the sponsorship of ICSSR-NERC, Shillong on 18th July, 2013. Also Chaired First

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Academic Session on “Quality in Teacher Education” and delivered Valedictory Address as Chief Guest on 19th July, 2013.

Attended a Three Day Workshop on “Establishing Subject Based Networks in the Universities” organized by NUEPA at New Delhi from 29th to 31st August, 2013..

Delivered a Key Note Address in the *National Seminar on Education in the North East: Status & Perspective* organized by Department of Education, NEHU Shillong with the sponsorship of ICSSR–NERC, Shillong, on 3rd September, 2013. Also chaired an Academic Session on 4th September, 2013.

Delivered Presidential Address of North East India Education Society during the 21st Annual Conference - Cum Seminar of NEIES on the theme “Current Trends & Issues in Education & Research” organized by the Department of Education, Rajiv Gandhi University, Doimukh, Arunachal Pradesh. at Itanagar on 7th November, 2013. Also chaired an Academic Session on 8th November, 2013.

Delivered an invited talk on “Economic Analysis of Education: Implications for Financial Management” in an Orientation Programme in Planning & Management of School Finances for North Eastern States jointly organized by NUEPA, New Delhi and Department of Education NEHU, Shillong at NEHU, Shillong, on 28 November, 2013.

A. Henia

Presented a paper entitled “*Importance of Science and Technology Education towards National Development*” in the two-day *International Seminar on Attracting Best Talents in Basic Sciences* organised by

Shillong College, and sponsored by Council of Scientific and Industrial Research, New Delhi, Indian National Science Academy, New Delhi, and ICSSR, New Delhi, held at Shillong, 24 and 25 July, 2013.

Participated in the three–day *International Seminar on Culture of Memory Mnemo-cultural Praxis in South, Southeast and other Asian Countries* organised by the English and Foreign Languages University, Shillong Campus, in collaboration with ICSSR-NERC, Central Institute of Indian Languages, Mysore and Maulana Abdul Kalam Azad Institute of Asian Studies, held at Shillong on 7 – 9 November, 2013.

Presented a paper entitled “Emerging Trends of Higher Education in India” in the 3-day *International Conference on Education: Teaching to Learning–Reconceptualization of Higher Education with the Emerging Environment of ICT - a reference to North East India* organised by Assam Don Bosco University in collaboration with the Department of Education, Gauhati University, and held at Guwahati on 24–26 February, 2014.

Presented a paper entitled “Knowledge Society in Higher Education Perspective” in the three-day *International Conference on Information Literacy in the Knowledge Society* organised by the Department of Library and Information Science, NEHU, Shillong, in collaboration with ICSSR-New Delhi, held at NEHU Shillong on 6-8 March, 2014.

Presented a paper entitled “Conservation of Environment for Healthy Living- Role of Educational Institutions in North East India” in the *National Seminar on Burning Environmental Issues: Risk to Biodiversity*

School of Education

and Human Health with Special Reference to North East India organised by St. Mary's College Shillong, and sponsored by State Council of Science, Technology and Environment, Government of Meghalaya and ICSSR-NERC, held at Shillong on 15-16 May 2013.

Chaired the Third Academic Session and also presented paper on the title "Challenges of Rural Schools towards Implementation of RTE Act 2009 in North East India" in the two-day *National Seminar on Right To Education - North East Region: Issues, Challenges and the Way Forward* organised by National Institute of Rural Development NER Centre Guwahati, and held at NIRD Guwahati, on 20-21 May, 2013.

Participated in the two-day National Seminar on *Harbingers of Transformation: Social Change in a Globalised Era* organised by William Carey University, Shillong, and sponsored by the Act Group of Institutions, Bangalore, on 21-22 June, 2013.

Participated in the Program and Consultative Meet in Observance of the International Day Against Drug Abuse and Illicit Trafficking organised by the Department of Social Welfare, Government of Meghalaya with Regional Resource Training Centre Kohima, Nagaland, on 26 June, 2013.

Chaired the Second Academic Session on Pedagogical Concern in Teacher Education and presented a paper entitled "Teacher Education in North East India: Issues and Challenges" in the two-day *National Seminar on Transforming Teacher Education in the North Eastern Region of India* organised by the Department of Education, NEHU, sponsored by ICSSR-NERC, and held at NEHU, Shillong, on 18-19 July, 2013.

Chaired an Academic Session, presented a paper on "Quality Women's Education – North East India" and chaired the Valedictory Function in the *National Seminar on Education in North East India: Status and Perspective* organised by Department of Education, NEHU, Shillong, on 3-4 September, 2013.

Presented a joint paper in the 21st Annual Conference cum Seminar of the North East India Education Society organised by Department of Education, Rajiv Gandhi University and held at RGU Itanagar on 7-8 November, 2013.

Presented a joint paper entitled "Progress of Women's Education in Manipur since Statehood" in the 34th Annual Conference of North East India History Association organised by Manipur University and held at MU, Imphal, on 11-13 November 2013.

Chaired the First Technical Session and also presented paper in the Second Session on the title "*Role of Educational Institutions on Human Rights Education*" in the two-day National Seminar on Education and Human Rights in North East India organised by Department of Education Raha College, Nagaon Assam, sponsored by ICSSR-NERC and held at Raha College on 21-22 December, 2013

S. M. Sungoh

Attended the 36th Meeting of the Advisory Committee of ICSSR, NERC, Shillong, on 5th March 2014.

Paper presented jointly on "Education for Development through RTE" in the *National Seminar on Right to Education in the North East Region: Issues, Challenges and the*

Way Forward held at NIRD-NERC during May 20th – 21st 2013, Guwahati, Assam.

Paper presented jointly on “*Need of IASEs in North-East India for Quality Teacher Education in the National Seminar on Transforming Teacher Education in the North Eastern India*” held on 18-19 July 2013, organized by the Department of Education, NEHU, Shillong.

Paper presented jointly on “Peace – The Real Need of Modern Society” in the *International Seminar on Attracting Best Talents in Basic Sciences* organized by Shillong College in collaboration with IQAC Shillong College held 24-25 July 2013, at Shillong, Meghalaya.

Paper presented jointly on “Education and Development in North-Eastern India” in the *National Seminar on Education in the North East: Status and Perspective*” held 3-4 September, 2013, organized by Department of Education, NEHU, Shillong.

Presented a paper jointly on “Learning to Live Together” at the *National Seminar on National Education Policy Perspective* organized by State College of Teacher Education, Kohima, in collaboration with Department of Education, Nagaland University from 12th to 13th September 2013.

C. Nongbri

Paper presented on “Financing of Education for Implementation of Centrally Sponsored Schemes (SSA & RMSA) in North Eastern States: Issues and Challenges” in the *National Seminar on Right to Education in the North East Region: Issues, Challenges and the Way Forward* held at NIRD-NERC during May 20–21, 2013, at Guwahati, Assam.

Paper presented on “Autonomy of B.Ed. Colleges in Meghalaya: An Analysis” in the *National Seminar on Transforming Teacher Education in the North Eastern Region of India* organized by Department of Education, NEHU, Shillong with the sponsorship of ICSSR, New Delhi and ICSSR–NERC, Shillong, on 18th July, 2013.

Paper presented on “Financing Infrastructural Facilities in Science Education at the Secondary Level in Meghalaya” in an International Seminar organized by Shillong College in collaboration with IQAC Shillong College held 24-25 July 2013 in Shillong.

Paper presented jointly on “Teacher Education at Secondary Level in Meghalaya” in the National Seminar on Education in the North East: Status & Perspective organized by Department of Education, NEHU Shillong, with sponsorship of ICSSR–NERC, Shillong, on 4 September, 2013.

Presented a paper jointly on “Teacher Education in Nagaland” at the *National Seminar on National Education Policy Perspective* organized by State College of Teacher Education, Kohima in collaboration with Department of Education, Nagaland University on 12-13, September, 2013.

Paper presented jointly on “Need of Examination and Evaluation Reforms in Teacher Education at Secondary Level” at the 21st Annual Conference–Cum Seminar of North-East India Education Society on *Current Trends & Issues in Education & Research* organized by Department of Education, Rajiv Gandhi University, Doimukh, Arunachal Pradesh at Itanagar in collaboration with NEIES, Shillong on November 7-8, 2013.

School of Education

Presented a paper jointly on “Need of Physical Education in Schools: A Philosophical Perspective” in the *National Seminar on New Perspective of Health and Physical Education in School* held 19-20 February 2014 at NERIE-NCERT, Umiam, Meghalaya.

I. Syiem

Presented a paper “River Wah Umkhrah in Shillong: Encroachment and its Consequences”, a paper on “Waste Management in Shillong: A Case Study” and a paper on “Value Orientation in Science Education” in a National Seminar organized by Saint Mary’s College, Shillong, on May 15-16, 2013.

Presented a paper on “Opinion of Teachers and Students at Secondary Schools towards Sex Education ” and a paper on “A Study on Emotional Intelligence of Secondary School Students of Shillong ” and chaired the Academic Session II in a National Seminar organized by North East Regional Institute of Education (NCERT), Umiam, Meghalaya, on February 19-20, 2014

Presented a paper on “A Study on Internet Literacy of Postgraduate Students, NEHU Shillong” in an International Seminar organized by Department of Library and Information Science, NEHU, Shillong, on March 6-8, 2014.

Chaired the Academic Session III in the International Seminar on “Attracting Best Talents In Basic Sciences”, organized by Shillong College, Shillong on 24th and 25th July 2013.

Brinda Bazeley Khar Rymbai

Participated, chaired Session IV and presented a paper on “ICT in Innovative Teaching-

Learning” in *International Seminar on Attracting Best Talents in Basic Sciences* organized by Shillong College in 24-25 July, 2013, on the occasion of their Golden Jubilee Celebrations.

Co-authored and jointly presented a paper titled “A study of memory level of teaching and culture” at the *International Seminar on Cultures of Memory: Mnemocultural Praxis in South Asian Countries* at English & Foreign languages University, Shillong Campus, in collaboration with ICSSR-NERC, CIFL-Mysore, ICSSR-New Delhi, and Maulana Abdul Kalam Azad of Asian Studies, Kolkata, in 7-9 November, 2013.

Presented a paper titled “Women Empowerment - Indian Perspective” and attended the *Bangkok International Conference on Social Sciences* held 18-20 January 2014 at Landmark, Lancaster Hotel, Bangkok, Thailand.

Presented a paper titled “Transforming teaching learning through the use of ICTs in knowledge based economy” on 7 March, 2014, at the *International Conference on Information Literacy in Knowledge Society* held 6–8 March, 2014 organized by Department of Library and Information Science, NEHU, Shillong.

Presented a paper on “Environmental Ethics and Education” at the National Seminar on *Burning Environmental Issues: Risk to Biodiversity & Human Health with Special Reference to North East*” organized by St. Mary’s College Shillong, in 15 - 16 May 2013.

Presented a paper titled “Bringing quality in the schools of North East through RTE” at the National Seminar on *Right to Education in*

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North East Region: Issues and Challenges and the Way Forward held 20–21 May, 2013, organized by National Institute of Rural Development (NIRD) Guwahati.

Presented a paper titled “Quality and Excellence in Indian Higher Education” at the National Seminar held at Kamrup College, Nalbari, Assam, held 30-31 May, 2013.

Presented a paper titled “Quality requirements in Teacher Education System” and participated in the *National Seminar on Transforming Teacher Education in the North East* held 18 -19 July, 2013, and organized by the Department of Education, NEHU, Shillong.

Presented a paper titled “Variation of social customs in the tribes of Meghalaya” at the National Seminar on *Democracy and Development in India's North-East: Challenges and Opportunities* organized by ICSSR-NERC Shillong, and held 6 -7 December, 2013.

Presented a paper on “Opportunities and Possibilities of Sustainable Education through Human Rights” at a National Seminar on *Education and Human Rights in North East of India* organized by the Department of Education, Raha College, Assam, during 21-22 December, 2013, and sponsored by ICSSR New Delhi.

Presented a paper titled “Women Empowerment in Indian Society - Need of the Hour” and a joint paper titled “Need of the Hour - Rise of Womanhood” in the National Seminar on *Women Empowerment and Cultural Constraints in North East India* held at NIRD-NERC Guwahati, during 10 - 11 March, 2014.

Presented a paper titled “Skill Based Education: Job Prospects for Students” at the National

Seminar on Education in the North East: Status and Perspective organized by the Department of Education, NEHU, Shillong, in collaboration with ICSSR-NERC Shillong, held at NEHU 3-4 September, 2013.

Presented a joint paper on “Water Supply in Shillong - A study” at the National Seminar on Water Resource Management organized by Department of Geography, Sri Venkateswara University, Tirupati, Andhra Pradesh, held 22 -23 January, 2014.

Co-authored and jointly presented a paper titled “Impact of mid-day meals (MDM) in SSA schools of Shillong, Meghalaya” at the 21st Annual Conference cum Seminar of the North East India Education Society (NEIES) on *Current Trends and Issues in Education and Research* held 7–8 November, 2013, organized by NEIES in collaboration with the Department of Education, Rajiv Gandhi University, Doimukh, Arunachal Pradesh.

Yodida Bhutia

Presented a paper titled “Girls education in North East - An Analysis” in the National Seminar on *Education in North East: Status & Perspectives* organised by the Department of Education, NEHU, at Shillong from 3 - 4 September 2013

Presented a paper on “Academic anxiety among class X students of Sikkim” in a National Seminar on *New Perspectives of Health and Physical Education in School* held 19-20 February, 2014, and organized by NERIE-NCERT, Meghalaya..

Rihunlang Rymbai

Presented a paper titled “Solid Waste: An Environmental Concern and the Role of

School of Education

Environmental Education”, in a National Seminar on *Burning Environmental Issues: Risk to Biodiversity and Human Health with Special Reference to North East India* organized by St. Mary’s College in collaboration with State Council of Science Technology and Environment on 15 – 16 May 2013.

Presented a paper titled “Continuing Transformation for Quality Teacher Education”, in a National Seminar on *Transforming Teacher Education in the North-Eastern Region of India* organized by Department of Education, North Eastern Hill University on 18th and 19th July 2013.

Presented a paper titled “A Wonderful Science Class: A Journey from Planning to Achievement of Learning Outcome” in an International Seminar on *Attracting Best Talents in Basic Sciences* organized by Shillong College in collaboration with IQAC Shillong College, and held 24 - 25 July 2013

Presented a paper titled “Novel Endeavour in Higher Education in India’s North-Eastern States” in a National Seminar on *Education in the North East: Status and Perspective* organized by Department of Education, NEHU, Shillong on 3rd and 4th September 2013.

Presented a paper titled “Unfair Means in Examinations: Regulations and Its Riddance” in a UGC Sponsored National Seminar on *Examination and Evaluation System in Higher Education with Special Reference to Undergraduate Level* organized by R. G. Baruah College, Guwahati, held 27 and 28 September 2013,

Ashok Kumar

Presented a paper entitled “Constructivism in Teacher Education” in a National Seminar

on *Transforming Teacher Education in North East India* organized by Dept. of Education, NEHU, during 18–19 July 2013, at NEHU Shillong.

Presented a paper entitled “Importance of Higher Education in North East India” in a National Seminar on *Education in North East: Status and Perspective* organized by Dept. of Education, NEHU, during 3 - 4 September 2013, at NEHU, Shillong.

Vandana

Attended National Seminar on Burning Environmental Issues: Risk to Biodiversity and Human Health with Special Reference to North-East organized by St. Mary’s College, Shillong, on 15.05.13 to 16.05.13

Presented a joint paper entitled ‘Trend of Research in North-East India’ in a National Seminar organized by Department of Education, Rajiv Gandhi University and North Eastern India Education Society, Shillong on 7-8 November 2013 at Itanagar.

Euodia Bahun Myrthong

Presented a paper titled ‘Education in the New Perspective: Teachers’ View’ in a National Seminar on *Right to Education in the North Eastern Region: Issues, Challenges and a Way Forward* at NIRD-NERC, Guwahati on 20-21, May 2013.

Presented a paper entitled “A Study on Emotional Maturity of Student Teachers in a National Seminar on *Transforming Teacher Education in North-Eastern India* on 18-19 July 2013 organised by Department of Education, NEHU, at Shillong.

Presented a paper titled ‘Girls Education in North East India – An Analysis’ in a National Seminar on *Education in the North*

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East: Status and Perspective organized by Department of Education, NEHU, at Shillong from 3-4 September 2013.

Presented a paper entitled ‘Trends of Research in North-East India – A Reflection’ in a Conference-cum-Seminar on *Current Trends and Issues in Education and Research* organized by Rajiv Gandhi University, Arunachal Pradesh, at Itanagar on 7 - 8 November, 2013.

Presented a paper entitled “A Study of Health Education its Impact on Health Attitude of Secondary School Students in Rural Areas of Meghalaya” in a National Seminar on *New Perspectives of Health and Physical Education in School* organized by NERIE, NCERT, Umiam, Meghalaya on 19 - 20 February, 2014.

N. Amareswaran

Presented a paper jointly on “Need of Physical Education in Schools: A Philosophical Perspective” in the National Seminar on *New Perspective of Health and Physical Education in School* held 19-20 February 2014 at NERIE, NCERT, Umiam, Meghalaya

Presented a paper jointly on “Water Supply in Shillong – A Study” at the *National Seminar on Water Resource Management* organized by the Dept. of Geography, Sri Venkateswara University, Tirupati, Andhra Pradesh held January 22 and 23, 2014.

Participated in the National Workshop on *Establishing Teaching Learning Centres in Higher Education* organized by the Department of Higher and Professional Education of NUEPA, New Delhi, from November 26-29, 2013.

Presented a paper jointly on “Need of Examination and Evaluation Reforms in Teacher Education at Secondary Level” in the 21st Annual Conference-Cum-Seminar of the North East India Education Society (NEIES) organized by the NEIES in collaboration with Department of Education, Rajiv Gandhi University, Doimukh, Arunachal Pradesh from 7th to 8th November 2013.

Presented a paper jointly on “A Study of Memory Level of Teaching and Culture” at the International Seminar on *Cultures of Memory: Mnemocultural Praxis in South, Southeast and other Asian Countries* organized by English and Foreign Language University, Shillong, on 7–9 November 2013.

Presented a paper on “Awareness Of Child Rights Through Media In North-East India” in the *Northeastern Regional Seminar on Child Rights and the Media* organized by Department of Journalism and Mass Communication, EFLU, Shillong Campus in partnership with UNICEF, Assam on 31 October and 01 November 2013.

Presented a paper jointly on “Learning to Live Together” at the *National Seminar on National Education Policy Perspective* organized by the State College of Teacher Education, Kohima, in collaboration with the Department of Education, Nagaland University, from 12 - 13 September 2013.

Papers presented jointly on “Teacher Education at Secondary Level in Meghalaya” and on “Education and Development in North-Eastern India” in the *National Seminar on Education in the North East: Status and Perspective* held on 3 and 4 September 2013 organized by the Department of Education, NEHU, Shillong.

School of Education

Paper presented jointly on “Peace – The Real Need of Modern Society” in the *International Seminar on Attracting Best Talents in Basic Sciences* organized by Shillong College in collaboration with IQAC Shillong College held on 24 and 25 July 2013, at Shillong, Meghalaya.

Paper presented jointly on “Need of IASEs in North-East India for Quality Teacher Education” in the *National Seminar on Transforming Teacher Education in the North Eastern India* held 18 and 19 July 2013, and organized by the Department of Education, NEHU, Shillong.

Paper presented jointly on Education for Development through RTE in the National Seminar on Right to Education in the North East Region: Issues, Challenges and the Way Forward held at NIRD-NERC during May 20th – 21st 2013, Guwahati, Assam.

Publications

Research Papers

Published in India

Rai, D. & P. K. Gupta (2013). Study Habits of Class X Students- A Study of Sikkim State. *Education: North East* (Journal of North East India Education Society, Shillong) 17: 71-75.

Gupta P. K & Bankitlang L.P. (2014). An Experimental Study to Enhance the Mathematical Ability of Class VII Students. *Journal of Recent Educational & Psychological Researches*, 3: 12-15.

Nongkhlaw, S & Nongbri, C., (2013). An Analysis of MBOSE Syllabus Question Paper at the Higher Secondary Examination, *Education North East* (Journal of North

East India Education Society, Shillong) 17: 80-87

Nongbri, C. (2013). Child Friendly Classroom. *Education: North East* 17: 65-75

Syiem, I. S. (2013). Status and Problems of the Aged in Shillong Town- Meghalaya. *Journal of International Academic Research for Multidisciplinary* 1: 461-465

Syiem I. S. (2013). River Wah Umkhrah in Shillong: Encroachment and Consequences. *Journal of International Academic Research for Multidisciplinary*. 1: 272-276

K Rymbai B. B. (2013). Issues and Challenges of Implementing CCE. *Education: North East* 17: 1-8.

K Rymbai B.B (2013) Determinants of Personality Disorders *Education: North East*. 17: 1-5.

Rymbai R. (2013). Teachers: Leaders in Making. *Education: North East* 17: 27–36.

Rymbai R. (2013). Training in Scientific Method: An Aim of Science Teaching. *Education : North East* 17: 37–42.

International

K Rymbai B. B. (2013). Environmental Ethics and Education. *Education Plus: An Inter-national Journal of Education and Humanities* 2: 125-128.

K Rymbai B. B. (2013). Status of Working Women in Indian Society- Issues, Challenges and Problems. *International Journal of Educational Research and Administration* 3: 1-4.

K Rymbai B B. (2013). Opportunities and Possibilities of Sustainable Education through Human Rights. *International*

Journal of Educational Research and Administration 4:1-4.

K Rymbai B. B. (2013) Status of Elderly in Society. *Journal of Education and Welfare* 2 (1)

K Rymbai B. B. (2013). Towards Quality Assessment in Higher Education. *Journal of Education & Humanities* 2: 222-230.

Vandana & Kushwaha, M. (2014). Walking on Tight Ropes – Balancing between Islamic and Modern Worldview: An Ethnographic Study of Girls Madarsa. *Global Journal of Multi-disciplinary Studies* 3: 260-280

Books/Chapters/Proceedings

Published in India

Gupta P. K. (2013). Quality Assurance in Higher Education – Role of Stakeholders. In *Quality Assurance in Higher Education*. N. Kalita and J. Ch. Goswami (Eds), EBH Publishers (India), Guwahati, Chapter 1, pp, 1-7.

Gupta P. K. (2013). Transforming Teacher Education in India. In: *Proceedings of National Seminar on Transforming Teacher Education in the North East Region of India* organized by Department of Education, NEHU, Shillong under sponsorship of ICSSR-NERC, Shillong p. 11-18

K. Rymbai B. B. (2013). Values in Buddhist Education. In *Proceedings of National Seminar on Rise, Fall and Revival of Buddhism in India*. p. 179-186.

K. Rymbai B. B. (2013) Quality Requirements in Teacher Education System. In *Proceedings of the National Seminar on Transforming*

Teacher Education in the North East (held 18-19 July, 2013, organized by the Department of Education, NEHU, Shillong), pp, 31-37

K. Rymbai, B.B. (2014). Quality Assurance in Teacher Education. In *Initiatives and Mechanism in Education* (Eds. Rajnesh Pandey & Pooja Tyagi, Omega Publishers), Chapter 13 pp. 104-113.

Amareswaran, N. (2013). Ambedkar and Human Values. *Proceedings of National Seminar on Ambedkar: Architect of Modern India*. Pp:142-149.

Amareswaran, N. (2013). Moral Values in Buddhism. *Proceedings of National Seminar on Rise, Fall and Revival of Buddhism in India*, pp. 82-92

Published Abroad

Amareswaran, N., Prashanth Kumar, P. (2013). Moral Values of B.Ed. Students. (Lap Lambert Academic Publishing, Germany)

Anuradha, R.K., Amareswaran, N. (2013). Environmental Awareness among Secondary School Teachers. (Lap Lambert Academic Publishing, Germany).

Funds Received from Agencies other than NEHU

Received Rs 6.30 lakhs (Rupees Six lakhs Thirty thousand) only from MHRD, New Delhi for monitoring work of SSA for the State of Meghalaya.

Received Rs 3.60 lakhs (Rupees Three lakhs Sixty thousand) only from MHRD, New Delhi for monitoring work of Rashtriya Madhyamik Shiksha Abhiyan

School of Education

Research Projects

Ongoing

Sl.No	Title of project	PI/Co-PI	Funding Agency	Amount
1.	Monitoring Institution for SSA	Prof. C.Nongbri	(MHRD) New Delhi	Rs.9.60 lakhs
2.	Monitoring Institution for RMSA	Prof. S.M. Sungoh	(MHRD) New Delhi	Rs. 3.60 lakhs
3.	Emotional Intelligence and its Relationship with Selected Personality Characteristics of Secondary School Students in East Khasi Hills , Meghalaya	Dr I. Syiem	UGC-New Delhi	Rs 1.20 lakhs
4.	Development and Problems of Secondary Education in Sikkim.	Dr. Y Bhutia	ICSSR – New Delhi	Rs 6 lakhs

Other Academic Activities:

P. K. Gupta

Delivered four lectures on the topics (i) Logical methods of Inquiry (ii) Why People behave as they do (iii) Mental Health (iv) Psycho Analysis in a 23rd Orientation programme for college & University Teachers Organized by UGC- Academic Staff College, NEHU, Shillong from 22nd April to 19th May 2013. Lectures were delivered on 16th & 17th May 2013.

As a resource person delivered an invited lecture on Experimental Method of Research in a Workshop on Research Methodology & Scientific Instrumentation organized by Lady Keane's College, Shillong on 29th May, 2013

Delivered two lectures on the topics (i) Advancing Knowledge through Logical Method of Inquiry and (ii) Scientific Method of Inquiry in a UGC Special

Summer School on Recent Advances in Natural Sciences and Social Sciences Organized by Department of Education, NEHU, Shillong on 14th & 21st August, 2013

Delivered a lecture on “Mental Health & Counseling in Guidance & Counseling Course organized by NERIE, shilling on 9th September, 2013.

Delivered six lectures on the topics (i) Scope & Types of Research (ii) Methods of Research Inquiry (iii) Survey Method of Research (iv) Qualitative and quantitative Approaches to Research (v) Experimental Method of Research Inquiry (vi) Scientific Method of Research Inquiry in a Short Term course in Research Methodology for College & University Teachers organized by Department of Adult & Continuing Education, NEHU, Shillong. Lectures delivered on 23rd & 24th September 2013

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Delivered two invited lectures on the topic (i) Logical Method of Research Inquiry and (ii) Scientific Method of Inquiry in an Orientation Programme for Research Scholars and Faculty members belonging to SC and other Marginalized group organized by Opportunities Cell, Tezpur University, in Collaboration of ICSSR – NERC, Shillong on 25th & 26th September, 2013.

As a Member Coordinator of the NAAC's Peer Team visited Janta College of Education – Chandrapur (Maharashtra) on 14th & 15th October 2013.

Delivered Six lectures on the topics (i) Logical Method of Inquiry (ii) Scientific Method of Inquiry & (iii) Experimental Method of Inquiry (iv) Why people behave as they do (v) Mental Health and (vi) Psycho Analysis in the 25th Orientation Programme for College & University Teachers organized by UGC Academic Staff College, NEHU Shillong. Lectures delivered on 23, 24, 25, 28, 29 & 30 October, 2013.

Delivered two invited lectures on the topics (i) Logical Method of Research Inquiry and (ii) Scientific Method of Research Inquiry in a Workshop on “Research Methodology in Social Sciences” organized by ICSSR–NERC, Shillong, on 5th November, 2013.

As a Member Coordinator of the NAAC's Peer Team visited Pataudi College of Education, Pataudi Gurgaon, (Haryana) on 15th & 16th November 2013.

Delivered two invited lectures on (i) Teacher Education Reform Perspective: Past & Present (ii) Professionalization of Teacher Education in a Capacity Building Programme for KPP'S of North East on

NCFTE -2009 organized by NERI, Umiam, Shillong on 4th December, 2013.

Delivered an invited lecture on “Effective teaching in an Orientation Programme at Academic Staff College, Gauhati University, Gauhati on 23rd December, 2013.

Delivered two lectures on (i) Logical Method of Inquiry and (ii) Scientific Method of Inquiry in a “Research Methodology Workshop for Social Sciences” organized by ICSSR–NERC Shillong on 7th March, 2014.

Delivered two lectures on (i) Logical Method of Inquiry and (ii) Scientific Method of Inquiry in 27th Orientation Programme organized by UGC Academic Staff College, NEHU Shillong on 25th & 27th March, 2014.

A. Henia

Acted as Resource Person and delivered lecture on “*Examining Rashtriya Ucchatar Shiksha Abhiyan (RUSA) Its Implication for Higher Education in India*” in the ECP –Diploma Course in Higher Education IGNOU Programme. Organised by IGNOU-NERC, Shillong. on 25 May, 2013.

As Resource Person delivered an invited lecture on “*High Standards and Expectations in Higher Educational Institutions*” in the NAAC Workshop on the theme “Best Practices in Higher Education” organised by IQAC, Cotton College, Guwahati, from 31 June – 1 July, 2013.

Acted as Resource Person in the Panel Discussion on “Best Practices in Higher Education” in the IQAC Workshop Organized by Cotton College at Guwahati, on 1st July, 2013.

As Resource Person delivered a lecture on “*Higher Education for International Understanding*” in the UGC sponsored

School of Education

Special Summer School (12 August to 1st September, 2013) jointly organised by the Department of Education and UGC-ASC, NEHU Shillong at ASC-NEHU Shillong on 28 August, 2013. As Course Coordinator also organized and evaluated the Seminar Programme for the participants of the Summer School on 20th August, 2013.

As Invited Resource Person delivered a lecture on “*Problems Facing by the North Eastern States in Financing of School Education*” in the Orientation Programme in Planning and Management of School Finances for Educational Officers of the North Eastern States. Organised by National University of Planning and Administration, New Delhi, in collaboration with Department of Education, NEHU Shillong during 25-26 November, 2013.

S. M. Sungoh

Delivered three invited lectures as Resource Person at the Orientation Programme organized by UGC-Academic Staff College, NEHU, Shillong on 17th, 24th & 26th June, 2013

Delivered an invited lecture as Resource Person on “Recent Advances in Natural Sciences and Social Sciences” organized UGC-Academic Staff College, NEHU, Shillong on 16th August, 2013

Delivered three invited lectures as Resource Person at the Orientation Programme organized by UGC-Academic Staff College, NEHU, Shillong, on 23rd, 24th & 25th October, 2013.

Delivered three invited lectures as Resource Person at the Orientation Programme organized by UGC-Academic Staff College, NEHU, Shillong, on 21 and 24th March, 2014.

Delivered two invited lectures as Resource Person at the Orientation Programme organized by UGC-Academic Staff College, NEHU, Shillong on March, 2014.

Went for NAAC Visits to: P.M.G. College of Education, New Delhi on 28th and 29th October, 2013, M.B.M. B.Ed. College, Sri Ganganagar, Rajasthan on 11th - 12th March, 2014 and Sammilani Teacher’s Training College, Kolkata, on 27th – 28th March, 2014.

Acted as a Consultant for “Total Quality Management TSG- National Literacy Mission Authority”, MHRD, on 24-25 June, 2013 at Jamnagar House, New Delhi.

Acted as an Expert for the “Interactive Session with Task Force on Restructuring of NCTE” on 9th July, 2013 in NAAC Office, Nagarbhavi, Bangalore.

Delivered a Keynote Address for a Workshop on “Research Methodology in Social Sciences” organized by the ICSSR-NERC, Shillong on 5th November, 2013.

Delivered a lecture for a Workshop on Research Methodology in Social Sciences on the topic “Introduction to Research Methodology in Social Sciences”, organized by the ICSSR-NERC, Shillong on 5th November, 2013.

Delivered a lecture for a Workshop on Research Methodology in Social Sciences, on “Review of Literature”, organized by the ICSSR-NERC, Shillong on 11th November, 2013.

Chaired an academic session for a seminar on “Democracy and Development in India’s North East: Challenges and Opportunities” at ICSSR-NERC, Shillong, on 7th December, 2013.

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Delivered an invited lecture as Resource Person in an “Orientation Programme on Management of Diversity and Equity in Universities and Colleges” for the Coordinators of the Equal Opportunity Cell/ Special Cell/ Minority Cell/ Women Protection Cell on 2nd - 6th December, 2013, at NUEPA, New Delhi.

Acted as an Expert for “Evaluation of Proposals from College Teachers for the Award of Minor Research Project and Conducting of Seminar/ Conference/Workshop” held on 17th January, 2014 at UCG, Eastern Regional Office, Kolkata.

Acted as Resource Person for “Workshop on Capacity Building Programme for Social Science Faculty Members”, organized by the ICSSR-NERC, Shillong on 6th March, 2014.

C. Nongbri

Delivered a lecture in the UGC Sponsored Summer School organized by Department of Education, NEHU, Shillong from 12 August 2013 to 1 September 2013 on 27 August, 2013.

Delivered a lecture on the topic “Curriculum Development” in 25th Orientation Programme for College & University of Teachers organized by UGC Academic Staff College, NEHU Shillong. Lectures were delivered on 29th October, 2013.

Delivered a lecture on the topic “Curriculum Development” in 25th Orientation Programme for College & University of Teachers organized by UGC Academic Staff College, NEHU Shillong. Lectures delivered on 29th October, 2013.

Delivered an Invited talk on Implementation of Centrally Sponsored Scheme (SSA

& RMSA in North Eastern States) in an Orientation Programme on Planning & Management of School Finances for North Eastern States jointly organized by NUEPA, New Delhi and Department of Education NEHU, Shillong at NEHU New Guest House, Shillong on 27th November, 2013.

Delivered an Invited lecture in the sponsored on Curriculum Development in 26th Orientation Programme organized by UGC Academic Staff College, NEHU Shillong from 29th January to 25th May 2014. Lectures were delivered on 5th February, 2014

Delivered an Invited lecture in the sponsored on Curriculum Development in 27th Orientation Programme organized by UGC Academic Staff College, NEHU Shillong on 28th March, 2014

I. S. Syiem

As resource person delivered an Invited lecture on the topic “Emotional Intelligence” in a Special Summer School for College & University Teachers organised by Department of Education, NEHU, on 13th August, 2013

Delivered an Invited Lecture on the topic “Emotional Intelligence : the Secret of Successful Entrepreneurship” in the Refresher Course in Commerce and Management for College and University Teachers, organised by the Department of Commerce, NEHU, Shillong, on 26th November, 2013.

Delivered an Invited Lecture on the topic “Emotional Intelligence: A Basic Competency for Teachers ”organised by the UGC-ASC, NEHU Shillong in the 26th Orientation Programme for College and

School of Education

University Teachers, organized by UGC-ASC, NEHU, Shillong, on 10th February, 2014.

Acted as resource person on the topic “Emotional Intelligence for Teachers” organised by the UGC-ASC, NEHU Shillong, in the 27th Orientation Programme for College and University Teachers, held on 26th March, 2014.

B. B. K. Rymbai

Delivered an invited lecture as a Resource person on the topic “Issues of quality in higher education: Defining quality and assurance” at the Post Graduate Diploma in Higher Education (PGDHE) organized by IGNOU-NERC, Shillong on 24 May, 2013

Delivered an invited lecture as a Resource person on the NAAC sponsored workshop on “Best Practices in Higher Education” and gave a lecture on the title “*Towards Quality Assessment in Higher Education*” on 31st May - 1st June 2013 at Cotton College organized by NAAC-IQAC Cell Cotton College, Guwahati.

Was a panelist at Cotton College of a workshop on “Best Practices in Higher Education” on 1st June, 2013, organized by IQAC Cell Cotton College, Guwahati.

Delivered an invited lecture as a Resource person on “New ICT intervention in Higher Education” at the Special Summer School organized by Academic Staff College NEHU on 21st August, 2013.

Delivered two invited lectures as a Resource person at a workshop on Research Methodology on 25th September, 2013 on

the topic “Sampling Techniques” organized by UGC-Academic Staff College, NEHU, Shillong.

Delivered an invited Lecture as a Resource person on the topic “Teaching of Science in Schools” at a workshop organized at NERIE-NCERT Umiam on 15th November, 2013.

Delivered an invited lecture as a Resource person on the topic “Education and Human Rights in North East India” at a National Seminar organized by the Department of Education, Raha College, Assam, on 21st-22nd of December, 2013, sponsored by ICSSR New Delhi.

Was a panelist in the panel discussion forum on the theme “Women Empowerment and Cultural Constraints in North East India, held at NIRD-NERC Guwahati held from 10th -11th March, 2014.

Delivered an invited lecture as a Resource person for a workshop held at NERIE-NCERT on “Evolving classroom process framework at secondary stage for the states of Meghalaya and Mizoram under RMSA” on 27th March, 2014.

Delivered an invited lecture as a Resource person on the topic-“Can Technology Change Learning?” at the Orientation Programme held at Academic Staff College, NEHU, Shillong, on 28th March, 2014

Was a Resource person for Counseling Courses in IGNOU on 1st, 8th, 15th, 20th, 29th March 2014.

Rihunlang Rymbai

Resource person on 22nd May 2013 for the Extended Contact Programme organized

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by IGNOU Regional Centre, Shillong w.e.f. 20th May to 29th May, 2013, for the Post Graduate Diploma in Higher Education (PGDHE) programme.

Resource person on 5th October 2013 for 10 Days Orientation Programme on “Teaching of Science” at Directorate of Educational Research and Training (DERT), Shillong from 30th September to 10th October, 2013, for Secondary School Teachers of Meghalaya.

Ashok Kumar

As one of the members of the teacher team, organised an online interaction programme for M.A. students at North Eastern Regional Institute of Education Shillong in November 2012.

Participated in the ICSSR-Two Week Capacity Building Training Programme for Young Faculty in Social Sciences held at Dept. of Psychology, Andhra University, Visakhapatnam from 12th February, 2014 to 25th February, 2014.

N. Amareswaran

Attended the ICSSR sponsored Workshop on “Capacity Building Programme for Faculty in Social Science” organized by ICSSR-NERC, Shillong, on 6th – 19th March, 2014.

Member of Advisory Board for *Research Tracks* - an international peer-reviewed bi-annual journal in Education.

Member of Editorial Board for a book entitled “Quality Implementation & Improvisation in Teacher Education”.

DEPARTMENT OF EDUCATION (TURA)

Head : Dr (Mrs) Nikme S.C. Momin
Telephone : 09436315571;
Email : edntcnehu@gmail.com

Faculty

Designation	Name & Qualification	Specialization
Associate Professor	Nikme S. C. Momin, MA & Ph.D. (NEHU)	Value Education, Educational Psychology & Environmental Education
	B. C. Das, M.A.(Utkal), M.Phil. (DAV), Ph.D. (BHU)	Educational Technology, Teacher Education, Research Methodology
Assistant Professor	S. C. Subudhi, M.A., M.Phil & Ph.D. (Kurukshetra)	Research Methodology & Statistics, Special Education
	Madhusudan. J. V., M.Ed., M.Phil & Ph.D. (Gulbarga University)	Sociology of Education, Early Childhood Education.

Thrust Areas of Research

Value and Peace Education, Teacher Education, Methods of Teaching at Tertiary Level, Special Education, and Elementary 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 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 SCR, NEHU-Shillong. The Department has a well established Psychological Laboratory with adequate number of psychological tests and equipments where students conduct tests and experiments.

Students' Profile

Enrolment Capacity: P.G. : 30; Ph.D.: Variable

Actual Admission

	OBC	SC	ST	GEN	MALE	FEMALE	MEGHALAYA	NON-MEGHALAYA	TOTAL
MA	-	-	28	2	3	27	29	1	30
PhD	-	-	2	2	3	1	2	2	4

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Degree Awarded

	OBC	SC	ST	GEN	MALE	FEMALE	MEGHALAYA	NON-MEGHALAYA	TOTAL
P.G	-	1	25	3	3	26	24	5	29

Courses Conducted

M.A. (Education)

Semester I : Philosophy of Education, Psychology of Education, Educational Management and Change, and Research Methodology in Education (I & II)

Semester II : Curriculum Development and Instruction, Sociology of Education, Educational Testing & Evaluation, Environmental Education and Mental Health Education

Semester III : Educational Technology, Comparative Education, Early Childhood Education, Teacher Education, Education for the Gifted & the Creative and Special Education,

Semester IV : Laboratory Practical, Higher Education in India, Guidance and Counseling, Education for the Physically and the Cognitively Challenged, Methods of Teaching at Tertiary Level and Economics of Education

Ph.D. Courses

Research Methodology
Data Analysis and Computer Application
Review of Related Literature

Educational Tour

Teacher in-charge: Dr. Nikme S.C.Momin

Places/institutions visited: The Tour consisted of visits to Educational Institutions, Historical Museums and Archaeological sites, places of Philosophical and Religious interests, areas of Ecological concerns and Cultural and Socio-economic centers in and around Thiruvananthapuram (Kerala) and Bangalore (Karnataka) .

Duration of tour: 21 days from 17/01/2014 to 06/02/2014.

Purpose of tour: To learn about the overall activities and the progress of the people of South India. Through traveling and observation, the students of the Department had optimized about the learning of the area.

Seminars/Conferences/Symposia/Extension Programmes etc.

Dr. Nikme S. C. Momin

Presented a paper on “SWOT analysis of extension education for quality orientation in higher education” in a National Seminar on *Quality Sustenance in NAAC Accredited Institutions of Higher Education* by the IQAC, Don Bosco College Tura, Meghalaya, on 6th to 7th May, 2013.

Presented a paper on “Continuous and comprehensive evaluation: Role of teachers” and a paper on “Continuous and comprehensive evaluation and drastic need of parental involvement” in the 27th Annual Conference of All Garo Hills Primary

School of Education

School Teachers' Association, Ampati Zone, South-West Garo Hills, Meghalaya, on 23rd May, 2013.

Presented a paper on "Literacy and entrepreneurship skill development in West Garo Hills District of Meghalaya" in the National Seminar on *Entrepreneurship: A Drive Towards Socio-Economic Development of North Eastern Region* organised by the Department of Management, NEHU, Tura Campus, Tura, Meghalaya on 4th June, 2013.

Presented a paper on "Attitude of the teacher educators towards innovative practices in the environment of ICT: a reference to Meghalaya" and a paper on "Understanding the higher secondary students' guidance needs, stress and academic achievement for transition to higher education: A study of Garo Hills Meghalaya, India" in the *International Conference on Teaching to Learning: A Reconceptualisation of Education in the Emerging Context of ICT, a Special Reference to North East India* organised by the Assam Don Bosco University, Assam, in collaboration with the Department of Education, Guwahati University, Assam on 24th to 26th February, 2014.

Presented a paper on "Socio-Educational problems faced by school heads in managing the primary schools of Garo Hills, Meghalaya" and a paper on "Role of school heads in the primary schools of Garo Hills, Meghalaya" in a Training Programme on "Maintenance of School Records for the School Heads of Primary Schools" conducted by District Institute of Education and Training, Tura, Meghalaya, at Koinadubi Village, West Garo Hills, on 10th -14th March, 2014.

Dr. J. V. Madhusudan

Presented a paper on "Children's Pre-School Participation and the Promise of RTE Act: Evidences and Implications in the Context of the NE States of India" in a National Seminar on *Right to Education (RTE): Issues and Concerns in Implementation* organized by State Institute of Educational Management and Training, Dept. of School Education, Govt. of Andhra Pradesh, during 25-26, February, 2014.

Presented a paper on "SWOT analysis of extension education for quality orientation in higher education" in a National Seminar on *Quality Sustenance in NAAC Accredited Institutions of Higher Education* by the IQAC, Don Bosco College Tura, Meghalaya during 6-7 May, 2013.

Presented a paper on "Related Issue of Children's Participation in Pre-School Education and the RTE Act" in a National Seminar on *Right to Education in the NE Region* held at NIRD-NERC, Guwahati, during 20-21 May, 2013.

Publications

Research Papers

International

Momin, N.S.C., Shadap, P. A. (2013). Ingenuous stewardship for sustainable environmental turn-out in Meghalaya. *International Journal of Arts & Education Research*. 2:528-537.

Momin, N.S.C., Sangma, P. A (2013). Planning, decision making and management of school finances by the school heads in Meghalaya. *International Journal of Arts & Education Research*. 2:639-645.

Momin, N.S.C., Das, K (2013). Educational stress and strategies for reduction: A picture of Meghalaya. *International Journal of Arts & Education Research*. 2:706-711.

Subudhi, S.C. (2013). Higher Education for Rural People is a Challenge. *International Journal of Educational Aspects, Management Studies and Applied Science*. 1:150-154.

Subudhi, S.C. (2013). Role of private sector investment in education of Meghalaya. *Pedagogy of Learning: An International Journal of Education*. 1: 57-62.

National

Momin, N.S.C., Madhusudan. J.V (2013). Extension Education for Quality Orientation in Higher Education. *Education: North East (Journal of the North East India Education Society)* 17:6-10.

Momin, N.S.C, (2013). Insufficient support system in schools of Meghalaya: A case study. *SOURCE: A Journal of Humanities and Social Sciences*. 3: 98-10.

Subudhi, S.C. (2013). Free Food Facility at Elementary Schools: Towards Rural Educational Empowerment in Meghalaya. *Anweshan; Journal of Education*. Vol- II, No. 2: 55-60.

Madhusudan. J.V., (2013). Secondary Education in three Major States of North-Eastern Region of India. *A Peer Review Journal of Humanities and Social Sciences*. 3: 9-19

Momin, N. S. C., Madhusudan. J.V (2013). Extension Education for Quality Orientation in Higher Education. *Education North-East*

(*Journal of the North-East India Education Society*). 17: 6-10.

Madhusudan. J.V., (2013). Schooling according to Household Wealth Index for the selected States of India. *Education India (A Quarterly Journal of Dialogue on Education)*. 2: 268-277

Madhusudan. J.V., (2013). Education of Adolescents in the Empowered Action Group States. *Asian Academic Research Journal of Social Sciences and Humanities*. 1: 233-242.

Books/Chapters/Proceedings

Momin, N.S.C., Shadap, P.A (2014). Strength-Weakness-Opportunities-Threats: Analysis of environmental education for schools in Meghalaya. In: Momin, N.S.C. and Madhusudan. J.V. (Eds). *Prospects and Issues Concerning Education at Secondary Level*. Manas Publishers and Distributors, Rajasthan: 111-125.

Momin, N. S. C., Madhusudan. J. V. (2014). *Prospects and Issues Concerning Education at Secondary Level*. Manas Publishers and Distributors, Jaipur, Rajasthan. ISBN: 978-81-921743-8-9.

Momin, N.S.C., Madhusudan. J.V (2013). *Adult Literacy in Meghalaya, India- Impact of Sakshar Bharat Programme for Women*. LAP Lambert Academic Publishing, Germany: ISBN: 978-36-59416-02-6.

Madhusudan. J. V. (2013). *Primary Education in India's North-East*. Lap Lambert Academic Publishing, Germany

School of Education

Research Projects

Ongoing

No	Title of the Project	PI/Co-PI	Funding Agency	Amount
1.	A Study on Learners' Attitude and its impact on Sakshaar Bharat West Garo Hills, Meghalaya	Dr. Nikme Salse C.Momin	SRC, NEHU, Shillong, Meghalaya	Rs 60,000/-
2	Concept Development in Science Subject among Hearing Impaired Children Studying in Integrated and Segregated Educational Settings of Meghalaya'	Dr. S.C. Subudhi	ICSSR, New Delhi	Rs 7,00,000/-

Completed during Year

No.	Title of the Project	PI	Funding Agency	Amount
1	Educational Facilities and Mental Health of Physically Challenged and Normal children in integrated educational settings of North-East States of India	Dr. S.C. Subudhi	ICSSR, New Delhi	Rs 5,75,120/-
2	Study of Classroom Management Ability among Lower Primary School Teachers Teaching at Multi-grade Settings in West Garo Hills District of Meghalaya'	Dr. S.C. Subudhi	ICSSR, NERC, Shillong	Rs 60,000/-.

Other Activities

Dr. Nikme S. C. Momin

Delivered six papers in a UGC-ASC, NEHU Refresher Course in English and Comparative Literature and Language conducted by the Departments of English and Garo, NEHU, Tura during 6th to 26th May, 2013. The papers were - *Learning Perspectives: A Need for Teachers' Understanding; Learning Experiences and Educational Objectives ; Mind Map Of The Affective Domain In Learning; Professional Ethics Of The Teachers; An Introduction To Research*

Educational Research: Qualitative Research Method.

Delivered two lectures entitled *Review of Literature in Research Methodology* in Short Term Course on Research Methodology organized by the Department of RDAP, NEHU, Tura Campus in collaboration with the UGC-Academic Staff College, NEHU, Shillong , 24th to 29th March, 2014.

Dr. S. C. Subudhi

Delivered a lecture on *Quality in Higher Education: An Observation* in a National Seminar at Don Bosco College, Tura, Meghalaya on 6th May, 2013.

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Delivered ten lectures on *Action research methodology* in a Workshop for Elementary School Teachers of East Garo Hills District of Meghalaya organized by DIET, Resubelpara, North Garo Hills from 20th May to 24th May, 2013.

Delivered a talk on *Higher education in rural India: a challenge* in an UGC sponsored National Seminar organized by Kamata College, Nalbari, Assam from 30 to 31st May, '2013.

Delivered six lectures on *Research Methodology* in Short Term Course on Research

Methodology organized by the Department of RDAP, NEHU, Tura Campus in collaboration with the UGC-Academic Staff College, NEHU, Shillong, 24th to 29th March, 2014.

Dr. J. V. Madhusudan

Delivered two lectures on *Focus Group Discussion* during the Short Term Course on Research Methodology organized by the Department of RDAP, NEHU, Tura Campus in collaboration with the UGC-Academic Staff College, NEHU, Shillong, on 24th and 29th March, 2014.

CENTRE FOR DISTANCE EDUCATION

Head : Prof. R. N. Rai
Telephone : 0364-2226822/2228705(Office), 9436303111 (M)
Email : rnrai1957@yahoo.com.in

Faculty

<i>Designation</i>	<i>Name and Qualification</i>	<i>Specialization</i>
Professor	R. N. Rai M.A., Ph.D. Psychology (BHU)	Psychological Testing and Social Psychology of Aging
Assistant Professor	R. C. Pandey M.A., Ph.D. Psychology (Kumaon)	Experimental Psychology & Statistics

Thrust Area of the Centre

The thrust area of the Centre is to offer 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.

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 North Eastern Region of India through the distance mode. In the disability areas, the centre started the B.Ed, special education (B.Ed.-SEDE) in 2007, the Foundation Course on Education of Children with Disability (FC-SEDE) in 2010. In addition the centre has the Post Graduate Diploma in Entrepreneurship (PGDE) and the

Floriculture Course which is the most sought after programme in the region. For Floriculture courses the centre organized field trip for students to provide them hands on training in different parts of Meghalaya. The programme coordinators and counselors have been exposed to the new techniques of distance mode of education through orientation programmes. The following is a list of academic programmes under operation:

- (i) 6 months Certificate Course in Floriculture
- (ii) 3 months General Course in Floriculture
- (iii) 1 year Post Graduate Diploma Course in Entrepreneurship
- (iv) 2 years B.Ed.- Special Education (B.Ed.-SEDE)
- (v) 3 months Foundation Course on Education of Children with Disabilities (FC-SEDE)
- (vi) 1 year Post Graduate Professional Diploma in Special Education (PGPD-SEDE)

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Students' Profile

Enrolment capacity: **B.Ed.-SEDE- 200, PGPD-SEDE – 160, FC-SEDE – 640**
Floriculture & Entrepreneurship – 50

Actual Admissions

	Male	Female	ST	SC	Gen	OBC	Meghalaya	Non - Meghalaya	Total
B.Ed.-SEDE	75	123	72	11	79	36	54	144	198
Foundation Course on Education of Children with Disabilities (FC-SEDE)	255	240	264	22	155	54	122	373	495
Post Graduate Professional Diploma in Special Education (PGPD-SEDE)	30	39	28	7	27	7	11	58	69
TOTAL	360	402	364	40	261	97	187	575	762

Degrees Awarded

	Male	Female	St	Sc	Gen	OBC	Meghalaya	Non - Meghalaya	Total
B.Ed.-SEDE	11	34	29	-	12	04	23	22	45
Foundation Course on Special Education of Children with Disabilities (FC-SEDE) 1st Batch	60	84	85	06	41	12	64	80	144
TOTAL	71	118	114	06	53	16	87	102	189

School of Education

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 NGO to cater the needs of the challenged population which is a sizable number in the North Eastern Region. The students of Floriculture and Entrepreneurship Programmes have started their own venture and have become job provider for many.

Courses Conducted

Certificate and General Course in Floriculture

Commercial Floriculture, Nursery Establishment, Propagation of Ornamental Crops, Annuals, Cultivation of Selected Commercial Flowers, Common Pests and Diseases, Dried Flower Making, Wild Plants of Horticultural Potential in Northeast India, Orchid Cultivation-I, Orchid Cultivation-II, Common Diseases and Pests of Orchids, Plant Tissue Culture, Laboratory Equipments and General Techniques, Tissue Culture Media, Clonal Propagation of Orchids, Rose Cultivation, Botany, Nursery Practices-I, Nursery Practices-II (Organic Gardening-A), Nursery Practices-III (Organic Gardening-B), Nursery Practices-IV, Manures and Fertilizers, Pests and Diseases, Gardens, Planting of Ornamental Plants-I, Planting of Ornamental Plants-II, Growing of Ornamental Plants in Containers, Cut Flowers and Their Arrangements, Dried Flower arranging, Commercial Aspects of Floriculture

Post Graduate Diploma in Entrepreneurship

Entrepreneurship and Environment, Venture Creation, Business Communication Skill, Enterprise Management, Strategic Management of Small Enterprise, Enterprise Control System, Export and Import Management, Project Report.

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 extra curricular 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

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 Childhood 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.

Post Graduate Professional Diploma in Special Education –PGPD-SEDE

Introduction to Disabilities.
Three Specialized Theory Courses in any one optional Disability Area:
Visual Impairment
Mental Retardation
Hearing Impairment
Practical Courses in any one opted Disability Area:
Visual Impairment
Mental Retardation
Hearing Impairment

Conferences/Symposia/Extension Programmes etc.

Participated

Prof. R. N. Rai chaired the Scientific Session on 'Psychology in the Public Interest' in the 17th *International Conference of Indian Academy of Applied Psychology* organized by the P. G. Department of Studies and Research in Psychology, Karnataka University, Dharwad, held from 22nd to 24th May, 2013.

Prof. R. N. Rai chaired a Scientific Session on 'School Psychology Services to Children with Multiple Disabilities' in the 3rd *INSPA National Conference* organized by National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD), Chennai, held from 22nd to 24th November, 2013.

Prof. R. N. Rai chaired the Scientific Session on 'Psychology for Holistic Living in Global World' in the 18th *International Conference of Indian Academy of Applied Psychology* organized by Smt. Laxmiben & Shree Chimanlal Mehta (GLS) Arts College, Ahmedabad, held from 1st to 3rd March, 2014.

Academic Collaboration

The Centre is conducting the following courses on Special Education Programme in collaboration with the Rehabilitation Council of India, New Delhi.

- (i) B.Ed.-SEDE
- (ii) Post Graduate Professional Diploma in Special Education (PGPD-SEDE)
- (iii) Foundation Course on Education of Children with Disabilities (FC-SEDE)

School of Education

Honors/Awards/Recognition

Prof. R. N. Rai was nominated Vice-President of Indian School Psychology Association (InSPA), 7,14th Street, Krishna Nagar, Puducherry, from 1st April, 2013, for 3 Years.

Prof. R. N. Rai was nominated Editorial Consultant of the Journal of the Indian Academy of Applied Psychology from January 2014.

Any Other Activities

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 1,200 distance learners are enrolled under this Study Centre.

Prof. R. N. Rai delivered Lectures in NEIGRIHMS, Shillong, for B.Sc. Nursing 1st Year students from July 2013 to February 2014.

CENTRE FOR SCIENCE EDUCATION

Head : Prof. M. S. Bisht
Telephone : 272-2950; 272 2951
E-mail : msbisht@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Dr. Man Mohan Singh, M.A, Ph.D	Science Education
	Dr. Debashis Bhattacharjee, Ph. D. (Warsaw)	Mathematics (Number Theory)
	Dr. M. S. Bisht, Ph. D. (Delhi University)	Biological and Environmental Sciences
	Dr. P. K. Patra , Ph. D. (NEHU)	High Energy Physics/ Nanophysics

Thrust Areas of Research

Research in science education, development of scientific temper among students and community at large, promotion of scientific awareness among youth, innovative methods of science teaching and learning.

Brief Statement of Academic Activities

The Centre for Science Education is mainly involved in research activities in the area of physical, biological and environmental sciences. Faculty members have research projects on various aspects and working on natural resource use, waste recycling, reuse and management, number theory and carbon nanotubes, etc. Tools and method for teaching are being developed to make students and general public aware about their environment, sustainable use of natural resources and waste management.

Seminars/Conferences/Symposia/Extension Programmes etc.

Participated

Prof. P. K. Patra delivered an invited talk on “Carbon dating and its various uses” in a

National Seminar on the Commemoration of the Centenary Year of Bohr’s Atomic Theory at Lady Kean College, Shillong, August 23 -24, 2013.

Prof. D. Bhattacharjee attended International Research School and Conference on *Fourier Analysis of Groups in Combinatorics* from Nov. 18 – 30, 2013 at North-Eastern Hill University, Shillong.

Prof. D. Bhattacharjee attended a workshop on *Computational Information Processing* from Dec. 3 – 6, 2013, at North-Eastern Hill University, Shillong

Prof. M. S. Bisht delivered an invited lecture on “Bamboo shoot as a natural resource for sustainable socio-economic development of North-East region of India: bamboo shoot as food” at the International Bamboo Conclave and Expo 2014, Feb. 22-23, 2014, organized by the Bamboo Society of India, Bengaluru.

Prof. M. S. Bisht delivered a lecture on “Bamboo: a sustainable natural resource

School of Education

for socio-economic development of North-East region” in the *National Symposium on Emerging Trends in Botanical Sciences*, held Feb. 17-18, 2014, at Department of Botany, Punjabi University, Patiala.

Publications

Research Papers

Published in India

Chongtham, N., Bisht, M. S., Premalata, T. (2013). Germplasm evaluation in bamboos: from chromosomes to molecular markers. *Plant Cell Biotechnology and Molecular Biology* 14: 115-127

Published Abroad

Patra, P. K., Kumar, S. (2013). General expressions for deflection, strain energy and upper bound on the load of a cantilevered carbon nanotube. *Journal of Computational and Theoretical Nanoscience*, 10: 2732-2736.

Chongtham, N., Bisht, M. S., Laishram, M. (2013). Bioactive compounds in bamboo shoots: health benefits and prospects for developing functional foods. *International Journal of Food Science and Technology*, doi.10.11.11, 12470 (online).

Funds Received from Agencies including NEHU/UGC

Total Fund for Centre: Rs. 11,12,300/-

Research Projects

New Projects

<i>S. No.</i>	<i>Title of Project</i>	<i>PI/Co-PI</i>	<i>Funding Agency</i>	<i>Amount</i>
1.	Bamboo Shoot as a Functional Food and Nutraceutical: Extraction of Bioactive Compounds from Juvenile Shoots for Commercial Exploitation and Socio-Economic Development of the Region	Prof. M. S. Bisht (Co-PI)	Department of Biotechnology (DBT)	Rs. 18,29,300/- (NEHU Share)

Ongoing

<i>Sl. No.</i>	<i>Title of Project</i>	<i>PI/Co-PI</i>	<i>Funding Agency</i>	<i>Amount</i>
1.	Organic Garbage Recycling for the Generation of Livelihood and Zero Waste	Prof. M. S. Bisht (PI)	DST, GoI, New Delhi	Rs. 13,50,584

Completed during Year 2013-2014

<i>Sl. No.</i>	<i>Title of Project</i>	<i>PI/Co-PI</i>	<i>Funding Agency</i>	<i>Amount</i>
1.	Development of Processing Techniques for Preserving Juvenile Shoots of Nutritionally Rich Bamboos of sub-Himalayan and North-Eastern Region of India	Prof. M. S. Bisht (Co-PI)	Ministry of Food Processing Industry, New Delhi	Rs. 13,30,000/-
2.	Novel Plant Genotypes for Predicted Climate Change	Prof. M. S. Bisht (PI)	UGC New Delhi	Rs. 7,06,800/-
3.	Exploration and Germplasm Collection of Citrus from the North-East India and Characterization of Genetic Variability Using cellular and Molecular Cytogenetical Approaches	Prof. M. S. Bisht (Co-PI)	University Grants Commission, New Delhi	-

Academic Collaborations

Prof. P. K. Patra collaborated with Prof. S. Kumar, Physics Department, North-Eastern Hill University, Shillong

Prof. M. S. Bisht collaborated with Prof. C. Nirmala, Department of Botany, Panjab University, Chandigarh

Collaboration with Dr. Kananbala Sarangthem, Department of Life Sciences, Manipur University, Canchipur.

Other Activities

Prof. P. K. Patra delivered five lectures in the UGC-ASC sponsored Refresher Course

in Physics organized by the Physics Department, NEHU, Shillong, during June 5 -25, 2013.

Prof. P. K. Patra shared the teaching load for Ph.D. Courses in the Physics Department, North-Eastern Hill University, Shillong.

Prof. M. S. Bisht delivered a lecture-cum-training on “Techniques of Anther Culture” under UGC Innovative Programme on September 18-19, 2013, at Dayalbagh Educational Institute (Deemed University), Agra, Uttar Pradesh.

III

SCHOOL OF HUMANITIES

Dean : Prof (Mrs) B. War
Telephone : 0364-272 3501(O)
9436337721 (M)
Email ID : bwar57@yahoo.co.in

Brief Report

The School of Humanities has five departments in Shillong Campus, i.e. English, Hindi, Khasi, Linguistics and Philosophy. It also has two departments in Tura Campus, i.e. English and Garo. All the departments conducted MA and PhD Programmes during 2013-14. Three departments, namely, Hindi, Khasi and Linguistics also conducted MPhil Programme during the year. Faculty members of the School were actively involved in teaching, guiding research scholars and other academic activities. Each department has its own thrust areas of research. Many

faculty members of the School have produced a large number of research papers in professional journals and contributed chapters to a number of books. They have also edited and written books and presented papers in Seminars and Conferences. A number of faculty members have been invited as resource persons and to chair sessions in Seminars, Conferences, Workshops and Refresher Courses within and outside NEHU. Some Departments have organized National Seminars, Workshops and Refresher Courses and take students on study tours to various places in the country. The School has made progress in diverse research fields.

DEPARTMENT OF ENGLISH

Head : Prof. Esther Syiem
Telephone : 0364-2723503 (Office); 94363 36158 (Mobile)
E-mail : esthersyiem17@yahoo.co.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Esther Syiem M.A. (Delhi) M.Phil., Ph.D. (NEHU)	American Literature, Modern Fiction, Folk Literature
	Moon Moon Mazumdar M.A., Ph.D. (NEHU) D.D.E. (IGNOU)	Modern British Literature, Women's Writing, Translation and Tagore Studies
	Sukalpa Bhattacharjee M.A., M.Phil., Ph.D. (NEHU)	Critical Theory, Gender Studies
	Mala Renganathan M.A.(Madurai Kamaraj), M.Phil. (Pondicherry), Ph.D. (MKU)	Drama/Theatre (American & Indian); Indian Fiction in English; Women's Writing
	Utpala G. Sewa M.A., M.Phil., Ph.D. (NEHU)	British Poetry, Fiction
	Jyotirmoy Prodhani M.A. (Poona), Ph.D. (NEHU)	Theatre, Ethnic Studies and Translation
Associate Professor	Kynpham Sing Nongkynrih M.A., Ph.D. (NEHU)	Poetry/World Poetry in Translation
	Nobonita Ganguly M.A. (NEHU)	Modern British Fiction
	Nola Syiem M.A. (NEHU) M.Phil. (Delhi)	British Drama 16 th -17 th Century
	Ngangom Rabindra Singh M.A. (NEHU)	Indian Writing in English & World Lit. in Translation & Modern Poetry
Assistant Professor	Lang Kupa K. War M.A. (NEHU)	Modern Fiction
	Suranjana Choudhury M.A. (Assam Univ) M.Phil. (Jadavpur), Ph.D. (Calcutta)	Cultural Studies, Gender Studies
	Rimi Nath M.A. (Gauhati)	Indian Writing in English and South Asian Diasporic Fiction
	Somjyoti Mridha M.A., M.Phil. (JNU) Joined 29 th April 2013	Indian English Literature

School of Humanities

Thrust Areas of Research

Indian Writing in English; Literature in English and in Translation; Comparative Literature; Gender and Culture Studies linking them to various texts, narratives and theatre, with special emphasis upon the literary traditions of North East India.

Brief Statement of Academic Activities

The Department organised a Students' Seminar on 19th June 2013 on "Textual Reading

and Interpretation", conducted by Prof. S. Bhattacharjee.

A Refresher Course was conducted from 10.3.2014-30.3.2014 coordinated by Mrs. N. Syiem and Prof. Jyotirmoy Prodhani. The Theme of the Refresher Course was "Transcending the Canon: Emerging Indian Literatures in the New Boundaries".

The students of the Department brought out the second issue of their Newsletter *Writer's Pub*.

Students' Profile

Enrolment Capacity: M.A. - 52; Ph.D. – Variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.A.	-	50	2	7	45	41	11	52
Ph.D.	-	4	2	4	2	2	4	6

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.A.	1	34	4	2	37	24	15	39
Ph.D.	-	-	1	-	1	1	-	1

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Sarita Pradhan	The Subaltern Speaks: A Study of Three Contemporary Women Poets of the Indian Subcontinent	Prof. U.G. Sewa

Placement of Students

Students have been placed in various capacities in governmental organizations and publishing

houses, as teachers and administrators in universities in India and abroad, colleges and schools or with NGOs.

Courses Conducted

Postgraduate

Semester I : ENG: C 101 Poetry I, ENG: C 102 Fiction I, ENG: C 103 Drama I, ENG: C 104 Literary Theory & Criticism I, ENG: C 105 American Literature I

Semester II : ENG: C 106 Poetry II, ENG: C 107 Fiction II, ENG: C 108 Drama II, ENG: C 109 Literary Theory & Criticism II, ENG: O 110 Commonwealth Literature (Option A), World Literature in Translation (Option B)

Semester III : ENG: C 111 Poetry III, ENG: C 112 Shakespeare I, ENG: C 113 Literary Theory & Criticism III, ENG: O 114 American Literature II (Option A), ENG: O 114 Modern Indian Drama (Option B), ENG: O 115 Indian Fiction in Translation (Option A), Women's Writing (Option B)

Semester IV : ENG: C 116 Fiction III, ENG: C 117 Drama III, ENG: C 118 Shakespeare II, ENG: C 119 Literary Theory & Criticism IV, ENG: C 120 Environment & Indian Writing in English

M.Phil/Ph.D. Courses

ENG 501: Research Methodology (4 Credits)
ENG 502L Research Writing and Presentation (4 Credits)

ENG 503 (Option C): Contemporary World Poetry (4 Credits)

Educational Tour of Students

Teacher-in-Charge: Mr. Lang Kupar K. War, Assistant Professor in the Department, took students for a study tour in February 2014 to Mumbai and Goa.

Places/Institutions visited: The 3rd semester students of the Department of English, NEHU, Shillong, undertook a study tour to Mumbai and Goa from the 15th to the 24th of February 2014. In Mumbai, the students visited the Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, formerly Prince of Wales Museum of Western India. Students witnessed the art, archaeology and natural history collection of the museum which comprises approximately 50,000 artifacts. Students also visited the Jehangir Art Gallery, one of the most important art galleries in the country, in the Kala Ghoda area of south Mumbai.

In Goa, students visited The Basilica of Bom Jesus or Boreia Jezuchi Bajilika. The monument is a UNESCO World Heritage Site. The basilica holds the mortal remains of St. Francis Xavier located in Old Goa. A visit was also made to the Sé Catedral de Santa Catarina, known as Se Cathedral, one of the oldest and most celebrated religious buildings in Goa and one of the largest churches in Asia.

Duration of tour: 15 days; 15th - 24th of February 2014.

Purpose of Tour: To enable students to broaden their perspective and understanding of art as it is linked to literature.

Seminars/Conferences/Symposia/Extension Programmes etc.

Participated

Prof. Sukalpa Bhattacharjee

Presented a paper entitled "Articulating Differences: Social Democracy and the

School of Humanities

Gendered Space” at a National Seminar on “Democracy and Development in India’s North East: Challenges and Opportunities”, on 7th December 2013 at ICSSR-NERC Shillong.

Presented a paper on “Teaching Humanities: Access, Quality and Development” at the Indian Council of Philosophical Research (ICPR) National Seminar on “The Place of Humanities in Our Universities” organized by ICPR –Delhi on the 14th of January 2014 at the India International Centre, New Delhi.

Presented a paper entitled “‘Putting his story next to her’s: Gender and Resistant Subjectivity” at the National Seminar organised by the Department of History, under its UGC-SAP-DSA-II programme on “Reinterpretation of Sources for Writing Gender History: Creating an Alternative Narrative” on the 24th of March 2014.

Presented a paper entitled “Theorizing Tribal Literature: Politics of Identity” at the National Seminar on “Constructing Identity in Tribal Literature and Languages of India” organized by the Khasi Department NEHU Shillong on 26th March, 2014.

Presented a paper entitled “Theorizing Tribal Diaspora: Alternative Narratives” at the National Seminar on “Diaspora and Folklore: Exploring the Changing Dimensions of Folklore” organised by the Department of Creative and Cultural Studies NEHU, on 27th March 2014.

Prof. Mala Renganathan

Coordinated Campus Study Abroad Programmes as Fulbright Campus Representative. The following programmes was organized:

A talk by Madhabi Roy, USIEF Kolkata on “Graduate Studies in the USA: Application

and Admission Process for masters and PhD Candidates” on November 6, 2013

Participated in the Fulbright-Nehru Outreach Programme organised by USIEF, Kolkata for NEHU Faculty and Scholars, on 16.05.13.

Nominated by the university to participate in the USIEF, Kolkata sponsored Workshop on “Building Partnerships” on April 4-5, 2013 at Hotel Dynasty, SS Road, Lakhtokia, Guwahati-781001, Assam.

Prof. Jyotirmoy Prodhani

Delivered the 4th *Thakur Panchanan Burma Memorial Lecture* on “Trajectories of Memory and the Distillation of Ethnic Identity” organized by Centre for Studies in Local Languages and Culture (CSLLC), North Bengal University, Darjeeling, 14 February, 2014.

Presented a paper entitled, “Distillation of Memory, Dislocated Identity and the Imperatives of Retrieval: Trajectories of Reclamation with special reference to the Kamatapur Agenda of the Koch Rajbongshis” in the International Seminar on *Cultures of Memory: Mnemocultural Praxis in Southeast and other Asian Countries* organised by EFL University Shillong Campus on 07-09 November 2013.

Presented a paper entitled, “Emerging Sites of the Post-Ethnic Discourse: Countering the Meta-Ethnic” at a National Seminar on “Globalisation and Ethnic Identity” organized by Department of English & Philosophy, Pachhunga University College Aizawl, Mizoram, in collaboration with Directorate of Arts and Culture, Govt. of Mizoram on 23rd-24th May 2013.

Participated as a translator in the *Literary Translation Autumn School* organized by

Sahitya Akademi in collaboration with British Council, Delhi on 21st to 25th October 2013.

Ms. Rimi Nath

Presented a paper entitled “Migration from South Asian nations (Pakistan and Nepal): A Literary Perspective”, and chaired a session on “South Asian Migration and Diaspora” in an International Conference on *Asian Migration and the Global Asian Diasporas*, City University of Hong Kong, 6-7 September 2013.

Presented a paper entitled “Postmodernism and the Role of Memory in the Formation of a Nation” in an International Conference on *Cultures of Memory: Mnemocultural Praxis in Southeast and other Asian Countries*, EFL University, Shillong Campus, 07-09 November 2013.

Publications

Research Papers

Published in India

Bhattacharjee, Sukalpa.(2013). “Personal Narratives: Tracing the (Wo)man’s Voice” in *Man and Society: A Journal of North-East Studies*, 10: 9-20.

Nongkynrih, Kynpham Sing. (2013). Longing for the Rain: Remembering the Cherrapunjee Summers. *Travel Plus*. January-February: 64-68.

Nongkynrih, Kynpham Sing. (2013). The Legend of U Thlen. *The Obliterary Journal*, Vol. 2: 153-176.

Choudhury, Suranjana. (2013). Wrecked Human Marches: Partition Exodus in Some Literary Narratives from Bengal. *The Visva-Bharati Quarterly*. 22: 171-182

Nath, R., (2013). Memory-Home-Diaspora: A Reading of Manjushree Thapa’s *Seasons of Flight.. International Journal on Multicultural Literature* 3: 67-72.

Published Abroad

Nongkynrih, Kynpham Sing. (2013). Japih: scrumptious meat or prophetic frog? *Planet: The Welsh Internationalist*. 212: 91-94.

Books/Book Chapters/Proceedings

Syiem, Esther (co-editor). (2014). *People’s Linguistic Survey of India Vol. 19, Part II, The Languages of Meghalaya*, New Delhi, Orient Blackswan Pvt. Ltd.

Syiem, Esther (co-editor). (2014). *People’s Linguistic Survey of India Meghalaya Ki Jait Ktien bad ki Ktien Tnat Meghalaya Agangipa Ku. Sik Aro Uarangni Rokomrang*. Shillong, Ri Khasi Book Agency.

Syiem, Esther (2013) “Mano Ba Synshar Īa Ka Sem?” Pt. 1 & II in *Ka Thwet Jingstad* (Quest for Knowledge) Vol.II No.3. pp. 64-66. ISSN No. 2278-6813.

Bhattacharjee, Sukalpa (2013). “Literature and the Problem of Meaning” in Rustam Brahma ed. *Critical Theory and Practice in 21st Century*, New Delhi, Creative Books. pp 23-33.

Bhattacharjee, Sukalpa (2014). “Democracy, Development and Justice: A Gender Perspective” in K.S. Subramanian edited *Security, Governance and Democratic Rights: Essays on the North-East*” New Delhi: Neogi Books. pp 209-219.

Bhattacharjee, Sukalpa (2014). ”Gendered Constructions of Identity in Northeast-India” in K.M. Baharul Islam edited *Issues in Women’s Rights: A Practioner’s Resource*

Book, New Delhi: Allied Publishers Private Limited. pp 318-327.

Bhattacharjee, Sukalpa (2014). "Creativity and Politics of Representation: Tribal Literature in Northeast India" in Nibir K. Ghosh and A. Karunaker eds. *Mirrors and Lamps: Global Perspectives*, (Published by Osmania University, Hyderabad under SAP-DRS), Hyderabad: Siri Publishers. ps 174-194.

Bhattacharjee, Sukalpa (2014). "Narrating Trauma: The Gendered Body as Text" in S. Baral ed. *Textualizing Trauma: Narratives from Northeast India*, New Delhi. Authors Press. pp 63-74.

Renganathan, Mala. Book Review. *Universally Loved: Reception of Tagore in North-East India*. Ed. Indra Nath Choudhuri. *Journal of North East Researches*, V (5) March 2014: 79-82.

Prodhani, J. and Thakur, R.S. (Eds.) (2014) *Culture, Ethnicity and Identity: A Reader*. Guwahati: DVS Publishers. ISBN 978-81-86367-77-9.

Prodhani, J. (2013) *Madhupur Bahudur* Translation of Assamese short stories by Sheelabhadra. New Delhi: Sahitya Akademi, 2013 ISBN978-81-260-4065-0.

Prodhani, J. (2013) "Tagore and the Rajbanshi Narrative" In: *Endeavour*, Tanuj Kumar Dey Ed. (Research and Publication Cell, Lala). ISBN 9788192402774, p 178-190

Nongkynrih, Kynpham Sing. (2014), Seeking Shillong's Spirit of Night. In: *Day's End Stories: Life after Sundown in Small-Town India*. Subuhi Jiواني (Ed.). (Westland/Tranquebar Press, New Delhi): Chapter 4, 51- 68.

Academic Collaborations

Ms. Rimi Nath was a member of the editorial board for a book project *The Age of Asian Migration: Continuity, Diversity and Susceptibility* (City University of Hong Kong).

Other Activities

Prof. Esther Syiem

Moderated a session on "A Point of View" on 9th May 2013 at the CALM Festival May 9-11 org. by SAHAKI Society Shillong.

Participated as Regional Editor in the Workshop on People's Linguistics Survey of India organized by Bhasha Research and Publication Centre, Baroda in the ICSSR Guesthouse, NEHU Shillong on the 11th June 2013.

Resource Person in Refresher Course at the Department of Cultural and Creative Studies, NEHU, on 30th and 31st July 2014 on "Orality Folklore and Literature with special reference to African American Literature".

Chaired a session on 26th September at the NFSC Conference for Tata Fellows in Folklore A Collaborative Conference between NFSC and NEHU, funded by Sir Dorabji Tata Trust, Mumbai 24-26th Sept 2013 at NEHU Shillong.

Attended the launch of PLSI volumes and participated in the National Consultation on *People's Linguistics Survey of India, Community Ethnography & Eco-cultural Mapping* organized by Lalit Akademi, Sahitya Akademi, Sangeet Natak Akademi, Indira Gandhi National Open University, New Delhi and Bhasha Research and Publication Centre, Baroda in New Delhi on the 5th, 6th, 7th September 2013.

NEHU Annual Report 2013-2014

Conducted an interview of Minnie Vaid, author of *Iron Irom: Two Journeys* at the Arts and Culture Festival entitled 18 Degrees Festival held at the Soso Tham Auditorium in Shillong on 28th September 2013.

Read out self composed poems and chaired one session (8th November) at EFLU International Seminar on *Cultures of Memory: Mnemocultural Praxis in Southeast and other Asian Countries* (07-09 November 2013) at EFL University, Shillong Campus.

Participated in a panel discussion on “Language Diversity” on 16th February 2014 organized jointly by Bhasha Centre, Sahitya Akademi, Lalit Kala Akademi and Orient BlackSwan at Pragati Maidan New Delhi in session entitled “The Himalayan Story”.

Participated in a panel discussion on 18th February 2014 at Pragati Maidan, New Delhi in a Seminar entitled *Diversity and Dialogue: Translation Among Indian Languages* in Session entitled “Translating Oral Discourse: An Inter Language Dialogue” organised jointly with NBT-IGNOU, New Delhi.

Participated in a panel discussion at the Jaipur Literature Festival, Jaipur, on 19th January 2014 in a session entitled “Chronicles of Conflict and Change”.

Participated in poetry reading and interactive session on 20th January 2014 at the Jaipur Literature Festival, Jaipur in session entitled “The Worlds in Our Hand”.

Participated at the Sahitya Akademi’s Annual Festival of Letters, from 10th-15th March 2014, in programme entitled *Face to Face* in conversation with Temsula Ao, Sahitya Akademi Award winner for English 2014 on 13th March 2014.

On an invitation received by the Chinese Writers Association and as member from Sahitya Akademi, New Delhi, of Indian Writers’ Delegation, visited Beijing, Tianjin and Shanghai, China and participated in interactive sessions with Chinese writers from 15th-24th March 2014.

Prof. Moon Moon Mazumdar

Resource Person and chaired sessions at UGC sponsored National Seminar organized by the Department of English, Tihu College, Nalbari on 20th and 21st June 2013.

Prof. Sukalpa Bhattacharjee

Delivered invited Lecture on “Tagore’s Idea of Education” on 8th of May 2013 at Women’s College on the occasion of Rabindra Jayanti, organized by the College.

Delivered a lecture on “Gendering of Social Discourse”, as Resource Person at Academic Staff College NEHU in Orientation Course on the 17th of May 2013.

Delivered invited Lecture at St Mary’s College Shillong on 6th of June 2013 at a Seminar on Youth Development on the occasion of the Platinum Jubilee Celebrations.

Delivered a lecture entitled “Female Articulation in Literature and Folklore” as Resource Person at UGC Sponsored Refresher Course on “Semiotics and Folklore” on the 3rd of August 2013, organized by Department of Cultural and Creative Studies NEHU.

Delivered a lecture on “Critical Reading” at ICSSR Sponsored National Workshop on “Academic Writing and Publication” on 11th September 2013 at ICSSR-NERC Shillong.

Delivered a lecture on “A Critique of Matriliney in Meghalaya” as Resource Person in Raid Laban College in One day State Level

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- Seminar on “Women’s Empowerment” on 13th September 2013.
- Chaired an Academic Session at the International Seminar on *Cultures of Memory: Mnemocultural Praxis in South, Southeast and Other Asian Countries* on 8th of November 2013 at EFLU, Shillong Campus.
- Delivered a lecture on “Report Writing” at a Workshop on Research Methodology in Social Sciences at ICSSR-NERC, Shillong on the 9th of Nov 2013.
- Delivered a lecture on “Gendering of Social Discourse”, as Resource Person at Academic Staff College NEHU in Orientation Course on the 11th of November 2013.
- Delivered 8 Invited Extension Lectures on Literary Theory in G.C. College Silchar, (Assam University) from 9th January 2014 to 31st Jan 2014.
- Delivered two lectures on Gender and Society as Resource Person at Academic Staff College NEHU in Orientation Course on the 12th & 19th of Feb 2014, respectively.
- Delivered two lectures on “Plagiarism” and “Critical Reading” at ICSSR-NERC Workshop on Capacity Building Programme for Social Science Faculty Members on the 18th of March 2014, organised by the ICSSR-NERC, Shillong.
- Chaired an Academic Session at the National Seminar organized by the Department of History, under its UGC-SAP-DSA-II programme on “Reinterpretation of Sources for Writing Gender History: Creating an Alternative Narrative” on the 27th of March 2014.
- Copyedited *Man and Society: A Journal of North-East Studies*, Vol X, Summer 2013.

Prof. Mala Renganathan

- Delivered two lectures as Resource Person on “Folk Theatre” on July 24, 2013 in the UGC Academic Staff College, NEHU, Shillong Refresher Course on Folkloristics and Semiotics” organized by the Department of Cultural and Creative Arts, NEHU, Shillong from 1 to 21 July 2013.
- Delivered two lectures as Resource Person on “Effective Writing” on 11th and 13th September, 2013 in the Workshop on Academic Writing and Publication organized by EPW and ICSSR-NERC from 9-13, Sept. 2013 at the ICSSR-NERC, Shillong.
- Delivered one lecture as Resource Person on “Language Problems in Academic Writing” on 18th March 2014, in the “Capacity Building Programme in Social Science Research” organized by the ICSSR-NERC during 6th-19th March at the ICSSR-NERC, Shillong.

Prof. Jyotirmoy Prodhani

- Organised a Refresher Course as a Coordinator on *Transcending the Canon: Emerging Indian Literatures in the New Boundaries* at ASC, NEHU, Shillong from 10th March to 30th March 2014.

Mrs. Nola Syiem

- Coordinated Refresher Course in English on *Transcending the Canon: Emerging Indian Literatures in the New Boundaries* at ASC, NEHU, Shillong from 10th March to 30th March 2014.
- Participated as Resource Person in Question Bank Workshop on English Language and Comprehension org. by Staff Selection Commission Govt. of India 2013-2014 in Shillong, from Oct. 2013- Jan 2014.

DEPARTMENT OF ENGLISH (TURA)

Head : Prof. Sujata Gurudev
Telephone : 03651-223628
Email : s_gurudev@rediffmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Sujata Gurudev, M.A., M.Phil. & Ph.D. (NEHU)	American Literature, Modern British Fiction, Modern Poetry
Associate Professor	Angela R. W. Ingty, M.A. (Gauhati), M.Phil. (Madras Christian College), P.G.D.T.E. (CIEFL, Shillong), Ph.D. (NEHU)	Language & Linguistics, British Poetry, Renaissance Drama
	Dwijen Sharma, M.A, M.Phil., Ph.D. (Dibrugarh)	Indian English Lit., Literary & Cultural Theory
Assistant Professor	Raj Shekhar Thakur, M.A. (Patna)	Literary Theory & Criticism, ELT, Modern Drama, British Poetry
	Ramona M. Sangma, M. A. & Ph.D. (NEHU)	Postcolonial Lit., Literary Theory & Criticism, Ethno-Literature.
	Jova C. Marak M.A. & Ph. D. (NEHU)	Indian Writing in English, Women Writings, Ethno-Lit
	Namrata Pathak, M.A. (Gauhati), M. Phil. & Ph.D. (EFLU)	British & Continental Drama, Literary Theory & Criticism, Gender Studies
	L K Gracy, M.A. & Ph.D. (NEHU)	British Fiction, British Poetry

Thrust Areas of Research

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

Brief Statement of Academic Activities

The Department conducts M.A and Ph. D. programme in English Literature. The

Student's Seminar has been introduced in the Department to orient the Master's Level students towards serious research. The Department in collaboration with the ASC conducts Refresher courses for college and university teachers. A Research Journal *Protocol*, a journal for translation, creative and critical writings is published by the Department. Scholars and professionals from the areas of mass media, graphic design, anthropology and film studies are invited to the Department to present their talks and interact with the students. Seminars

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and Workshops have been organized regularly. Regular film and audio–visual shows are being held to give supplementary exposure to students.

Further, the Department has produced plays and dramas to promote social–cultural awareness.

Students’ Profile

Enrolment capacity: M.A. - 33; Ph.D. - Variable

Actual Admissions

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non-Meghalaya	TOTAL
M.A.	00	30	02	04	28	29	03	32
Ph.D.	01	08	01	03	07	09	01	10

Degrees Awarded

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non-Meghalaya	TOTAL
M.A.	03	27	02	08	24	30	02	32
Ph.D.	00	01	00	00	01	01	00	01

Details of Students Awarded Ph. D Degrees

Name of the student	Title of Thesis	Name of Supervisor
Twinkle R. Marak	The Rooted Past and Fragmented Present: A Study of Chinua Achebe’s African Trilogy	Prof. Sujata Gurudev

Educational Tour of Students

Teacher in-charge: Mr. Gino Sangma

Places/Institution Visited: Kolkata, Mumbai and Goa

Duration of the Tour: 15 Days

Purpose of Visit: To provide exposure to students so they can experience the diversity and vastness of our country; it helps in promoting inter-cultural dialogue and harmony.

Seminars/Conferences/Symposia/Workshop/Extension Programmes etc.

Prof. Sujata Gurudev

Presented a joint paper with Ms. Preetinicha Barman Prodhani titled “Palimpsest of Memory and the Anxiety of Retrieval in the Novels of Orhan Pamuk and Khaled Hosseini” in the International Seminar on *Cultures of Memory: Mnemocultural Praxis in Southeast and other Asian Countries* at EFL University, Shillong Campus on 7th November 2013.

Dr. Angela W. Ingty

Presented a paper entitled “Reduplication in the Garo Language” in the 8th International Conference of the North East India Linguistic Society at Don Bosco Institute, Kharguli, Guwahati on 31st, 1st and 2nd January 2014.

Dwijen Sharma

Presented a paper entitled “Translation of Images: A Study” at a National Conference on *Translation and Cross-Cultural Studies* at SCP Arts and DDS Commerce College, Mahalingpur, Karnataka on 23rd and 24th August 2013.

Presented a paper entitled “Miss India and Khap Panchayat: Paradoxes of Globalisation” at a National Seminar on *Gender Studies in Indian Perspective: History, Politics & Text* at Sapatgram College, Assam on 3rd and 4th October 2013.

Presented a paper entitled “Miss World Contest: Sexuality and Nationality at War with Globality” at an International Seminar on *Globalisation to Glocalisation* at Bodoland University, Kokrajhar, Assam on 4th, 5th and 6th October 2013.

Presented a paper entitled “Nostalgia, Personal Memory and Hometown: A Reading of Sheelabhadra’s ‘Madhupur Bohudoor’” at an International Seminar on *Cultures of Memory: Mnemocultural Praxis in Southeast and other Asian Countries* at EFL University, Shillong Campus on 7th, 8th and 9th November 2013.

Presented a paper entitled “Translation & Third Language” at a National Seminar on *Literatures in Translation: A comparative Exercise* at Goalpara College, Assam, on 21st and 22nd February 2014.

Delivered one Extension Lecture on “Postcolonialism” in Karnataka State Women’s University, Bijapur, Karnataka on 22nd August 2013.

Delivered one Extension Lecture on “Postcolonial Theory” in Rani Channamma University, P G Centre, Bijapur, Karnataka on 26th August 2013.

Dr. Ramona Sangma

Presented a paper entitled “Myth of Creation Among Garos: The Beginning of Garments and Ornaments” in Symposium entitled *Threads of Change Textile Cultures of North East India* organised by IGNCa and NID at New Delhi on 7th and 8th January 2014.

Dr. Namrata Pathak

Presented a paper entitled “Memory, Remembering and Re-telling: “Bodily” Resistances in Rabijita Gogoi’s *Rangphorpi Rongbe*” at an International Seminar on *Cultures of Memory: Mnemocultural Praxis in Southeast and other Asian Countries* at EFL University, Shillong Campus on 7th, 8th and 9th November 2013.

Presented a paper entitled “Globalization and Everyday Life: Commodification of Culture and the Tribes of North East India” in a national seminar on *The Practice of Everyday Life in North-East* at Tezpur University, Tezpur on 14th and 15th March 2014.

Publications

Gurudev, S. (2014). “Ethnicity and Individual Identity: A Textual Overview”. In: *Culture, Ethnicity and Identity: A Reader*. Jyotirmoy Prodhani & R.S. Thakur (Eds.) DVS Publishers, Guwahati: p. 39- 42.

- Gurudev, S. (2014). "Hermann Hesse's Siddhartha as a Narrative". In: *Indian Fiction in Translation: Issues and Explorations*. Dwijen Sharma (Ed.) MRB Publishers (India), Guwahati: p. 118- 135.
- Ingty, Angela W. (2014). "The Garo language of Meghalaya". In: *The Languages of Meghalaya*. G. N.Devy & Esther Syiem (Eds.) Orient Blackswan, New Delhi.
- Ingty, Angela W. (2014). "The Hundred Drums Wangala Festival of the Garos". In: *Culture, Ethnicity and Identity: A Reader*. Jyotirmoy Prodhani & R.S. Thakur (Eds.) DVS Publishers, Guwahati: p. 246- 251.
- Ingty, Angela W. (2014). "Rudali: A Story of Exploitation, Struggle and Survival". In: *Indian Fiction in Translation: Issues and Explorations*. Dwijen Sharma (Ed.) MRB Publishers (India), Guwahati: p. 208- 233.
- Ingty, Angela W. (co-edited) (2014) *People's Linguistic Survey of India Meghalaya Ki Jait Ktien bad ki Ktien Tnat Meghalaya Agangipa Ku. Sik Aro Uarangni Rokomrang*. Shillong, Ri Khasi Book Agency.
- Sharma, Dwijen. (2014). (Ed.) *Indian Fiction in Translation: Issues and Explorations*. MRB Publishers (India), Guwahati.
- Sharma, Dwijen. (2014). "Mrityunjay: A Symptomatic Study" In: *Indian Fiction in Translation: Issues and Explorations*. Dwijen Sharma (Ed.) MRB Publishers (India), Guwahati: p. 234- 248.
- Thakur, R. S. & Jyotirmoy Prodhani. (2014). (Eds.) *Culture, Ethnicity and Identity: A Reader*. DVS Publishers, Guwahati: p. 246- 251.
- Sangma, Ramona M. (2014). "Sacred Groves: Their Significance and Importance among the Garos". In: *Culture, Ethnicity and Identity: A Reader*. Jyotirmoy Prodhani & R.S. Thakur (Eds.) DVS Publishers, Guwahati: p. 258- 262.
- Marak, Jova Ch. (2014). "The Ethnic Divide and the Garos". In: *Culture, Ethnicity and Identity: A Reader*. Jyotirmoy Prodhani & R.S. Thakur (Eds.) DVS Publishers, Guwahati: p. 252- 257.
- Pathak, Namrata. (2014). "Of Spaces and Margins: A Reading of Bhisam Sahni's Tamas". In: *Indian Fiction in Translation: Issues and Explorations*. Dwijen Sharma (Ed.) MRB Publishers (India), Guwahati: p. 88- 101.
- Funds Received from Agencies other than NEHU**
- Rs.One Lakh from ICSSR, New Delhi, for the publication of *Protocol: Journal of Translation, Creative and Critical Writings* published by the Department.
- Other Activities**
- Prof. Sujata Gurudev**
- Co-editor of the biannual peer reviewed research journal with ISSN accreditation published by the Department, *Protocol: Journal of Translation, Creative and Critical Writings*.
- Mr. R.S Thakur**
- Delivered a lecture on "Aesthetics of the Dalit Literature" in the Refresher Course on *Transcending the Canon: Emerging Indian Literatures in the New Boundaries* organised by the Dept. of English, NEHU, Shillong, from 10th to 29th March 2014.

Dr. Angela W. Ingty

Participated in several hearings and meetings of the State Women's Commission of Meghalaya, which meets at least once every month.

Attended the launch of PLSI volumes and participated in the National Consultation on *People's Linguistics Survey of India, Community Ethnography & Eco-cultural Mapping* organized by Lalit Akademi, Sahitya Akademi, Sangeet Natak Akademi, Indira Gandhi National Open University, New Delhi and Bhasha Research and Publication Centre, Baroda in New Delhi on the 5th, 6th, 7th September 2013.

Mr. Dwijen Shama

Delivered one Lecture on "Main Trends in Indian English Fiction" in the Refresher Course on Assamese Literature organised by the Academic Staff College, Gauhati University on 29th June 2013.

Mr. R. S. Thakur

Co-editor of *Protocol: Journal of Translation, Creative and Critical Writings*, the

biannual peer reviewed research journal with ISSN accreditation published by the Department.

Dr. Ramona M. Sangma

Resource Person to NID, Ahmedabad, Gujarat on one week teaching assignment on "Introduction to Narratives and Narratology" from 15th-19th July 2013.

Editor of *Protocol: Journal of Translation, Creative and Critical Writings*, the biannual peer reviewed research journal with ISSN accreditation published by the Department.

Editor of *Kimpret : A Bi-lingual Quarterly* in English and Garo.

Dr. Jova Ch. Marak

Co-editor of *Protocol: Journal of Translation, Creative and Critical Writings*, the biannual peer reviewed research journal with ISSN accreditation published by the Department.

Dr. L K Gracy

Co-editor of *Protocol: Journal of Translation, Creative and Critical Writings*, a biannual peer reviewed research journal with ISSN accreditation published by the Department.

DEPARTMENT OF GARO

Head : Dr. F. K. Marak
Telephone : 03651- 223107
E-mail : fkmarak@gmail.com.
: dokatchi10@rediffmail.com

Faculty

Designation	Name and Qualification	Specialization
Associate Professor	Fameline K. Marak, M.A. & Ph.D.(NEHU)	Folkloristics
Assistant Professor	Jacqueline R. Marak, M.Ed. (Utkal) Ph.D.(NEHU)	Fictional Studies
	Dokatchi Ch. Marak, M.A. & Ph.D. (NEHU)	Linguistics
	Crystal Cornelious D. Marak, M.A. (NEHU)	Fictional Studies

Thrust Area of Research

The thrust areas of the Department include A·chik Literature, Language, Folklore, Literature in translation, Environmental Studies and World Literature including Indian Writing in English.

Brief Statement of Academic Activities

The Department of Garo came into being in August 1996 when NEHU, Tura Campus was created. Since its inception, the Department has been conducting the M.A. Course. The Ph.D. Course was conducted from the year 2011. The Department continues in its research activities to preserve and promote the rich tradition of Garo language through translation and documentation in areas of Folklore, Linguistics and Literature.

Seven students have completed their Ph.D. Coursework out of which six scholars are

pursuing the Ph.D. Course. The Department holds class seminars regularly to impart research oriented interest among the Masters level students. Field Studies are conducted regularly and students are encouraged to make inquiries into the folk literature and culture of the people of the 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, etc. Seminars and Workshops are conducted regularly. Visiting Professors/ Fellows and Scholars are invited from other Universities for class lectures, where students have the freedom to discuss and interact with professionals. At present the Department is running with four permanent Teaching Faculty and three Guest Lecturers with one LDC and one IV Grade staff on contractual basis.

Students Profile

Enrolment capacity: P.G.: 33; M.Phil: Variable; Ph.D.: Variable

Actual Admissions

Degree	SC	ST	Gen	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.A.	-	33	-	10	23	33	-	33
M.Phil	-	-	-	-	-	-	-	-
Ph.D.	-	3	-	2	1	3	-	-

Degrees Awarded: Nil so far

Courses Conducted during the Year

Core Courses	Open Courses
1st Semester: 1. GAR-101-Core: History of Garo Language and Literature 2. GAR-102-Core: Poetry-I-Sacrificial Rites & Invocations 3. GAR-103-Core: Drama-I 4. GAR-104-Core: Linguistics-I: Basic Concepts, Definition and Scope of Linguistics, Garo Morphology & Semantics 5. GAR-105-Core: Environmental Studies	
2nd Semester: 1. GAR-201-Core: Fiction-I 2. GAR-202-Core: Literature in Translation 3. GAR-203-Core: Prose-I 4. GAR-204-Core: Linguistics-II- Phonetics & Phonology	2nd Semester: GAR-205-Open: Linguistics-III – Tibeto-Burman Languages of the North-East (Classification and Bodo Group of Languages)
3rd Semester GAR-301-Core: Literary Theory & Criticism GAR-302-Core: Epic as a Literary Genre GAR-303-Core: Drama-II	3rd Semester: GAR-304-Open: Linguistics IV- Language & Society GAR-305-Open: Folklore-I Definition, Scope & Different Forms of Folklore & Field Techniques
4th Semester: GAR-401-Core: Poetry-II: Poetry from 1881 to 1994 GAR-402-Core: Folklore-II-Garo Folktales, Folksongs, Proverbs & Sayings GAR-403-Core: Tragedy as a Literary Genre GAR-404-Core: Indian Literature in English GAR-405-Core: Modern Poetry	

Ph.D. Courses

GAR-501-Research Methodology

GAR-502-Seminar Paper

(a) Literature Review-

(b) Research Paper and Presentation.

GAR-503-Literary Themes, Literary Theory and Criticism, Language and Folklore

Educational Tour

Teacher-in-charge: Mr. Crystal Cornelious D. Marak, Assistant Professor

Places/Institutions visited: Mumbai and Goa. The important places visited by the students were Goa University, Goa, India Gate, Mumbai, Old Church Goa, Museum, Goa.

Duration of tour: 28th Jan'-10th Feb. 2014 (14 days)

Purpose of visit: The purpose of the Academic study tour was to expose the students and make them aware of the life and culture of the people living in the western parts of India. Another purpose was to make them visit Goa University, Goa, to learn new experiences by interacting with students from Goa University, Goa.

Seminars/Conferences/Symposia/ Extension Programmes etc.

Attended/Participation

Dr. (Mrs.) Fameline K. Marak

Resource person at the Regional Seminar on "Superstition in the Tribal cultures of the Northeast: a Study of Myth and Reality" organized by the Department of Arts & Culture, Government of Meghalaya on 3rd & 4th May 2013.

Delivered 3 lectures as Resource Person on "The Importance of Folklore in Literature" in

the UGC-ASC, NEHU Refresher Course in English & Comparative Literature and Language organized by the Departments of English & Garo, NEHU, Tura Campus, Tura, from 6th-26th May 2013.

Resource Person in the Seminar organized by State Resource Centre, NEHU, Shillong to observe Gandhi Jayanti at Asananggre, Rongram, West Garo Hills on 2nd October 2013. Presented a paper entitled: "Life and Contribution of Mahatma Gandhi".

Presented a paper entitled "Changing Aspects of Folk Customs among the A'chiks (Garo) of Assam: A Survey" at the National Seminar on "Diaspora and Folklore: Exploring and Changing Dimensions of Folklore in Tribal Diaspora" organized by the Department of Cultural and Creative Studies, NEHU, Shillong in collaboration with Maulana Abdul Kalam Azad Institute of Asian Studies, Kolkata, on 27th-28th March 2014, Shillong.

Dr. (Mrs.) Jacqueline R. Marak

Presented paper on "Folklore in the Development of Garo Literature in Garo Diaspora" in the National Seminar on "Diaspora and Folklore: Exploring the Changing Dimensions of Folklore in Tribal Diaspora", organised by the Department of Cultural and Creative Studies, NEHU, Shillong, on 27th & 28th March 2014, Shillong.

Participated as resource person in a Remedial Course on "The Study of Literature" on 14th June, 16th July & 17th July 2013 organised by the Department of Garo, NEHU, Tura Campus.

Attended National Seminar on "Constructing Identity in Tribal Literature & Languages of India" organised by the Khasi Department,

NEHU Annual Report 2013-2014

NEHU, Shillong, on 27th March 2014, Shillong.

Dr. Dokatchi Ch. Marak

Participated as resource person in the Remedial Course on “The Study of Literature” organised by the Department of Garo, NEHU, Tura Campus, on 14th June, 16th July & 17th July 2013, Tura.

Attended the launch of PLSI volumes and participated in the National Consultation on *People's Linguistics Survey of India, Community Ethnography & Eco-cultural Mapping* organized by Lalit Akademi, Sahitya Akademi, Sangeet Natak Akademi, Indira Gandhi National Open University, New Delhi and Bhasha Research and Publication Centre, Baroda in New Delhi on 5th, 6th, 7th September 2013.

Presented a paper entitled *Descriptive Analysis of Gara-Ganching: A Variety of the Garo Language* at the 8th International Conference organised by the North-Eastern Indian Linguistics Society (NEILS), 31st January-2nd February 2014, Guwahati.

Presented a paper entitled, *Colonialism & its Effects on the Socio-Culture & Religious life of the A-chik (Garo)* at the National Seminar on “Constructing Identity in Tribal Literature & Languages of India”, organized by Khasi Department, NEHU, Shillong, 26th-28th March 2014, Shillong.

Publications

Published in India

Dr. (Mrs.) Jacqueline R. Marak

‘*Golap Aro Nightingale Do-o*’ A-chik Kurang’, Vol 1 No 8 May and June, 2013. Published by A-chik Literature Society, Tura.

‘*Judson Aro Uni Balis*’, Mikaoa, 28th Edition. Published by Garo Graduates Union, December 2013.

‘*Doroo: A Garo Traditional Song*’ in SOURCE, A Journal of Humanities and Social Science Vol.3 (2013) ISSN2250-0642 p.20-27, Published by Don Bosco College, Tura.

Dr. (Mrs.) Dokatchi Ch. Marak

‘*Unheard Voices*’, Souvenir, A-chik Literature Society, Tura, Golden Jubilee 2013.

Mr. Crystal Cornelious D. Marak

“*Kan-dike Knaatanirang*” published in *A-chik Ku-rang* Vol 1 No. 8 May- June 2013 p.27.

“*A-chik A-songni Adita Mingsinggipa Biaprang*” Souvenir, A-chik Literature Society, Tura, Golden Jubilee, 2013 p. 33-34.

“*Rori*” Mikaoa, 28th Edition, p.58-59. Published by Garo Graduates’ Union, Tura December 2013.

“*Chadambe Ong-mitingon Maikai Sea-Jotani A-baona Re-ongkatbagen*” published in *Chokchim* p.9-11 by D.K. Baptist Youth Fellowship, Tura.

Book Publication

Dr Dokatchi Ch. Marak

Marak. Dokatchi, Ch. (co-edited) (2014) *People's Linguistic Survey of India Meghalaya Ki Jait Ktien bad ki Ktien Tnat Meghalaya Agangipa Ku. Sik Aro Uarangni Rokomrang*. Shillong, Ri Khasi Book Agency.

Honours /Awards/Recognitions

Students

4th Semester student Miss. Nobarina R. Marak Department of Garo, NEHU, Tura

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Campus, Tura, was awarded 2nd Prize in Music Individual Folk, organised by the Meghalaya State Olympic Association, in collaboration with Directorate of Sports and Youth Affairs, Shillong, at Youth Festival, 2013, Shillong.

Other Activities

Dr. (Mrs.) Fameline K. Marak

Resource Person for “Responsibility and Accountability for Teachers” and “Career Guidance and Counseling for Students” conducted under the Chief Minister Youth Development Scheme on 26/7/2013 at Mount Penuel Secondary School, East Garo Hills, Williamnagar.

Facilitator for three day Remedial Course on “The Study of Literature” organised by the Department of Garo, NEHU Tura Campus, on 14th June, 16th & 17th July 2013, Tura.

Mr. Crystal Cornelious D. Marak

Participated at North East and Eastern Young Writers’ Meet on 27th-28th July, 2013 at Swosti Premium, Joydev Vihar, Bhubaneswar.

Participated in the “*Regional Seminar on Folklore*,” organized by the Achik Literature Society, Tura, on the occasion of its Golden Jubilee Celebration on 25th & 26th October 2013 at Don Bosco College of Teacher Education, Tura.

DEPARTMENT OF HINDI

Head : Prof. D. K. Choubey
Telephone : 0364-2723514 (O); 0364-2550139 ®; Mobile: 9436312134
E-mail : hodhin@nehu.ac.in
 dkchoubey@live.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Prof. D. K. Choubey, M.A. (Gauhati); Ph.D, (Manipur Univ.)	<i>Medieval Literature, Comparative Study</i>
	Prof. M.P.Pandey, M.A. & Ph.D.(Kashi Vidyapeeth)	<i>Criticism, Poetics</i>
Associate Professor	Dr. B. P. Tripathi, M.A., M.Phil. & Ph.D. (JNU)	<i>Modern Poetry</i>
	Dr. H. K. Mishra, M.A. & Oh.D. (BHU)	<i>Hindi Journalism & Modern Literature</i>

Thrust Area of Research

Modern Hindi Literature and Comparative Study.

Brief Statement of Academic Activities

During the academic year, many scholars of National level e.g. Prof. Ramdeva Shukla, Ex. Head, Gorakhpur University, Dr. Sunita Rani Gosh, Department of Hindi, Agra College, Agra, Prof. Awadhesh Pradhan, Banaras Hindu University, Varanasi, Prof. Chandrakala Pandey, Calcutta University, Kolkata, etc. visited the Department and interacted with students and Research Scholars. One Ph. D. and five M. Phil students made their pre-submission

seminar presentations in the Department. One Ph.D. Scholar has been awarded the Ph.D. Degree and five M. Phil students have submitted their Dissertations. During the academic session, the Department invited one Visiting Professor – Prof. S. M. Iqbal, Andhra University, Vishakhapatnam. The Department also engaged one Guest Lecturer to fulfill the requirement of teaching in M. A. Courses. The Department also conducted a study tour in which the students of 1st and 3rd semester of the M.A. programme visited North India including several universities, cultural centres and places related to the growth and development of Hindi Language and Literature.

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Students' Profile

PG Programmes (a) Enrolment capacity : M.A. - 55, M. Phil. – 10; Ph.D. - Variable

(b) Actual Admission : 23 + 10 + 6 = 39

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.	1	13	9	3	20	8	15	23
M.Phil	1	-	9	8	2	-	10	10
Ph. D.	-	1	5	5	1	-	6	6

Degree Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.	1	13	14	7	21	4	24	28
M.Phil	-	-	-	-	-	-	-	-
Ph. D.	-	-	1	1	-	-	1	1

Students Awarded Ph. D. Degree

Name of Student	Title of Thesis	Name of Supervisor
Vishwajeet Kumar Mishra	Maitreyi Pushpa ke Katha Sahitya mein Parampra aur Aadhunika ka Dwandwa	Prof. M. P. Pandey

Placement of Students

Some students of the M.A. M.Phil. and Ph.D. Courses have been placed in various Universities, Colleges, Schools and Offices (State and Central Govt. and Public Sector) in various parts of the country.

Courses Conducted

M.A. (CBCS)

1st Semester :

HINc 101 Hindi Bhasha evam Uska Vikash
HINc 102 Bhartiya Kavyashastra-I
HINc 103 Aadhunika Kavya (Chhayavad tak evam Paryavaran Parak Kavya

HINc 104 Hindi Gadya Sahitya-I (Natak evam Nibandh)

HINc 105 Aadikalin Hindi Sahitya ka Itihas

2nd Semester :

HINc 201 Bhaktikalin Kavya
HINc 202 Bhartiya Kavyashastra-II
HINc 203 Hindi Gadya Sahitya-II (Upanyas evam Kahani)
HINc 204 Aadikalin Kavya
HINc 205 Prayojanmoolak Hindi

3rd Semester :

HINc301 Hindi Sahitya ka Madhayakal
HINc 302 Ritikaleen Kavya
HINc 303 Hindi Natak

HINo 304 Anuvad-Sidhant evam Vyawhar
HINo 305 Lok Sahitya

4th Semester :

HINc 401 Hindi Sahitya ka Aadhunikkal
HINc 402 Chhayavadottar Kavya
HINc 403 Paschatya Sahityalochana evam
Hindi Aalochana
HINc 404 Bhasha Vigyan
HINc 405 Hindi Nibandh

M. Phil/Ph.D. Courses

HIN. C.W- I Anusandhan ki Pravidhi aur
Prakriya
HIN. C.W- II Hindi Sahitya ki Vaicharik
Prishthbhoomi
HIN. C.W- III Sangosthi evam Samiksha

Educational Tour of Students

Teacher-in-Charge: Dr. B. P. Tripathi

Places/Institutions visited: Jodhpur, Ajmer,
Jaipur, Mount Abo, Delhi

Duration of tour: 15 days (from 8th Feb. to 21st
Feb., 2014)

Purpose of Tour: To promote Language &
Literature with North Indian students & Scholars
and Cultural exchange between North-East
Students and North Indian Students.

**Seminars/Conferences/Symposia/
Extension Programmes etc**

Organised

A one day National Workshop on 'Purvottar
Rajya aur Prayojanmoolak Hindi' was held
on 3rd October, 2013 at the Department of
Hindi, NEHU, organized by Central Hindi
Institute Shillong Centre.

A Three day National Workshop on "Test,
Evaluation and Article Writing" organized

by Central Institute of Indian Languages
(CIIL) Mysore was held at Department of
Hindi from 13th March to 15th March, 2014.

A Two day National Seminar on "Aalochana ka
Sankat : Aagrah evam Dharana" organized
by the Department of Hindi with the
assistance of Central Institute of Hindi,
Shillong Centre was held on 28th March
& 29th March, 2014 at the Science Seminar
Hall, NEHU.

Participated

Prof. D. K. Choubey

Presented a paper entitled, "Hindi Upanyason
mein Chitrit Rastriya Aikya Bhavna", in
a two day National Seminar on "Diversity
of Conflicts in Post War Indian Fiction"
on the 13th August, 2013 organized by
Department of Bengali & Assamese,
at LOKD College Dhekiajuli, Assam.

Delivered a lecture in a workshop on "Purvottar
Rajya aur Prayojanmoolak Hindi",
organized by the Central Institute of
Hindi, Regional Centre, Shillong on the 3rd
October, 2013, at the Department of Hindi,
NEHU, Shillong.

Delivered two lectures as resource person in a
Refresher Course on "Hindi Teaching and
Its Challenges" organized by the Central
Institute of Hindi, Regional Centre, Shilling
on 30th October, 2013.

Participated in an Orientation programme for
Academic Counselors of Hindi, organized
by Indira Gandhi National Open University
(IGNOU), Regional Centre, Shillong on 20th
February, 2014.

Delivered a lecture at a National Seminar on,
"Purvottar ki Bhashayon ka Hindi ke Vikas
mein Yogdan", organized by Meghalaya

Rastra Bhasha Prachar Samittee, Science Centre, Guwahati, on 30.3.2014.

Prof. M. P. Pandey

Delivered a lecture in a workshop on “Purvottar Rajya aur Prayojanmoolak Hindi” organized by Central Institute of Hindi, Regional Centre, Shillong on the 3rd October, 2013.

Delivered two lectures as resource person in a Refresher Course organized by Central Institute of Hindi, Regional Centre, Shillong on 23rd October, 2013.

Delivered a lecture on “Rajbhasha ka Prayog evam Sancharan” in a National workshop for teachers from different parts of India on, “Our Cultural Diversity” on 29th October, 2013, in Directorate of Art & Culture, Govt. of Meghalaya, Shillong.

Delivered a lecture as Resource Person in a Refresher Course on “Value Crisis in Disasters” on 19th November, 2013, organized by Department of Adult & Continuing Education, NEHU, Shillong.

Participated in an Orientation programme for Academic Counselors of Hindi, organized by Indira Gandhi National Open University (IGNOU), Regional Centre, Shillong on 20th & 21st February, 2014.

Dr. B. P. Tripathi

Delivered a lecture as Resource Person in a Refresher Course on “Tragedy of Uttarakhand” on 21st November, 2013, organized by Department of Adult & Continuing Education, NEHU, Shillong.

Delivered a lecture in a National Seminar on “Sahitya, Sanskriti aur Adhunik Bhartiya Samaj”, organized by Avadhoot Bhagvan Ram P.G. College, Anpara, Sonbhadra on 23rd January, 2014.

Dr. H. K. Mishra

Presented a paper at a National Seminar on “Kshetriya Bhasha evam Hindi”, organized by Meghalaya Rastra Bhasha Prachar Samittee, Shillong on the 30.3.2014 at the Science Centre, Guwahati.

Publications

Journals

Choubey, D.K. (2013). Purvottar Bharat ka Bhakti Andolan : Pristhbhoomi evam Prerana Srot, Vishwa Bharti Patrika, Santiniketan, page – 44-50, RIN 12088/66.

Choubey, D. K. (2014). Edited a Refereed Journal ‘Anviksha by Department of Assamese, Dibrugarh University, Assam, as a member of Editorial Board, vol. 1, ISSN 2348-067X.

Mishra, H.K. (2013). ‘Upanyas Ageya’ research journal – Samavartika, Hindu P. G. College, Jamaniya, page 175-189, ISSN 2319-9466.

Book/Book Chapter/Proceedings

Choubey, D. K. (2013). Book Chapter, “Samkalin Kavita ke Katha Vaishishtya ke Pariprekshya mein Kavi Bhagwat Ravat”. In: *Nayee Kavita : Vividh Paksha* (Udyoga Nagar Prakashan, Ghaziabad). pp. 72-82, ISBN 978-93-80455-76-1.

Choubey, D.K. (2013). Book Chapter, “Meghalaya ki Hindi evam Hinditar Patrakarita”. In: *Bhartiya Patrakarita Naye Kshitij* (Sri Natraj Prakashan, Delhi). pp 394-399, ISBN 178-93-81350-56-0.

Tripathi, B. P. (2013). Book review, “Kat to Delhi” (Short Stories) Parichay, pp. 149-152.

Tripathi, B. P. (2013). Book Chapter, “Muktibodh ki Kavita Par Drishtipat” In: *Nayee Kavita* :

Vividh Paksha (Udyoga Nagar Prakashan, Gaziabad). pp. 127-138. ISBN 978-93-80455-76-1

Mishra, H.K. (2013). Book chapter, “Baudhik Prakharta ke Rachanakar Ageya”. In: *Ageya aur Hindi Sahitya* (Vangmaya Prakashan, Aligarh). pp. 52-58. SBN 978-93-82485-03-2.

Other Activities

Dr. D. K. Choubey

Chaired Technical Session on 28th March, 2014 in National Seminar on “Aalochana ka Sankat: Aagrah evam Dharana” organized by Department of Hindi, NEHU, Shillong with the financial assistance of Central Hindi Institute, Agra.

Chaired Third Technical session on 13th August, 2013 in two day National Seminar on “Diversity of Conflicts in Post War Indian Fiction” organized by Department of Bengali & Assamese, at LOKD College Dhekiajuli, Assam.

Conducted a three day training programme as coordinator of “Test, Evaluation and Article Writing” organized by the Central Institute of Indian Languages (CIIL) Mysore in the Department of Hindi from 13th March to 15th March, 2014.

Conducted a three day training programme as Director “Aalochana ka Sankat : Aagrah evam Dharana” organized by the Department of Hindi, NEHU, with the assistance of Central Institute of Hindi, Shillong Centre on 28th March & 29th March, 2014 at Science Seminar Hall, NEHU.

Delivered a lecture on “The Importance of Hindi” on Hindi Diwas organized by DDK, Shillong on 13th September, 2013.

Dr. M. P. Pandey

Delivered a lecture to the M.A. (Hindi) 2nd & 4th Semester Students as Visiting Fellow in the Department of Hindi, Tripura University, Suryamaninagar, Agartala from 3rd February, 2014 to 17th February, 2014.

Chaired Samvay session on 29th March, 2014 at National Seminar on “Aalochana ka Sankat” organized by Department of Hindi, NEHU, Shillong

Dr. B.P. Tripathi

In-charge Study Tour for 2013-14 from 8th February to 21st February, 2014 for M.A. (Hindi) 1st & 3rd semester for the purpose of cultural and literary exchange programme of students of N.E. Region & Northern India.

Visiting Professors

Prof. Ramdeva Shukla, Ex. Head (Gorakhpur University) delivered lectures to the students of 2nd and 4th Semesters on the topic ‘Ritikal : Aagrah evam Dharana’ on 13.5.2013.

Dr. Sunita Rani Gosh, Department of Hindi, Agra College, Agra, delivered lectures to the students of 2nd and 4th semesters on the topic “Samkalin Kavita mein Yugbodh” on 13.5.2013.

Prof. Awadhesh Pradhan, Banaras Hindu University, Varanasi delivered lectures to the students of 1st and 3rd semesters on the topic “Hindi Sahitya ka Shukla Paksha” on 19.9.2013.

Prof. Chandrakala Pandey, Calcutta University, Kolkata delivered lectures to the students of 1st and 3rd semesters on “Premchand: Naye Sandarva evam Nayi Drishti” on 24.9.2013.

DEPARTMENT OF KHASI

Head : Prof. Antoinette Kharmalki
Telephone : 0364-2723301
E-mail : antoinette_kharmalki@rediffmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	B. War, M.A. (NEHU), M.A. (Delhi), M.Phil. (Delhi), Ph.D. (London)	Linguistics
	S. Dkhar, M.A. (NEHU), M.Phil. (NEHU), Ph.D. (NEHU)	Khasi Drama
	A. Kharmalki, M.A. (NEHU), M.A. (Delhi), B.Ed (NEHU), M.Phil. (NEHU), Ph.D. (NEHU)	Linguistics
Associate Professor	D. R. L. Nonglait, M.A. & M.Phil. (NEHU), PGDTE (CIEFL), Ph.D. (NEHU)	Literary Criticism on Khasi Fiction
Assistant Professor	B. Bairo, M.A. (NEHU).	Fiction
	M. M. Khyndeit, M.A. (NEHU), M.Phil. (Gauhati)	Poetry

Thrust Areas of Research

The Thrust areas include Khasi Literature, Literature in Translation, Environmental Awareness in Khasi Literature, Khasi Literary Theory and Criticism and Folklore in Khasi Literature.

Brief Statement of Academic Activities

The Department organized a National Seminar on *Construction of Identity in Tribal Literature*

and *Languages in India* in collaboration with the Tribal Literary Forum of India, Shillong from 26th to 28th March 2014.

The Department collaborated with the Community Documentation Committee, Mawlai, in the Release of the Khasi Documentary film “Mawlai” on the 17th Aug, 2013, in a function held at the Multi Use Convention Hall, NEHU, Shillong.

Students’ Profile

Enrolment Capacity: M.A, M.Phil. & Ph.D. – Variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A	X	52	X	06	46	52	X	52
M.Phil	X	10	X	02	08	10	X	10
Ph.D	X	03	X	02	01	03	X	03

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Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A	X	48	X	08	40	48	X	48
M.Phil	X	X	X	X	X	X	X	X
Ph.D	X	01	X	01	X	01	X	01

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Supervisor
Mr.Thomlin Lynshing	Echoes From Past: A Critical Study of <i>Ka Phawar</i> as a Literary Form	Prof. B. War

Placement of Students

Mr. Thomlin Lynshing appointed as Lecturer in St.Anthony's College, Shillong.

Literature-II and Khasi Drama – IV.

Courses Conducted

M.A.

Semester I : Linguistics I, Khasi Poetry I, Khasi Literary Criticism, Khasi Fiction I and Khasi Drama I.

Semester II : Khasi Linguistics II, Khasi Drama II, Literary Theory and Criticism, Literature in Translation- I and Khasi Poetry II.

Semester III : Khasi Linguistics III, Khasi Drama III, Culture in Khasi Literature – I, Khasi Fiction- II and Literature in Translation-II.

Semester IV : Linguistics IV, Khasi Fiction-III, Environmental Awareness and Poetry-III, Culture in Khasi

M.Phil/Ph.D.

Research Methodology, Seminar Papers - (Option A) Literary Theory and Criticism, (Option B) Literary Themes.

Educational Tour of Students

Teacher-in-Charge: Mr. M.M.Khymdeit, Assistant Professor.

Places/Institutions visited: Wah Rilang, Mawkyrwat, West Khasi Hills District on 4th May, 2013 and to Kyllang Peak, West Khasi Hills District on 16th November, 2013.

Duration of tour: One day each.

Purpose of Tour: As part of the Course KHA-118C (Environmental Awareness in Khasi Literature and Poetry–III) and as part of the Course KHA-113 C (Culture in Khasi Literature–I).

**Seminars/Conferences/Symposia/
Extension Programmes etc.**

Participated

Prof B. War

Regional Editor in the Workshop on the People's Linguistics Survey of India organized by Bhasha Research and Publication Centre, Baroda in the ICSSR Guesthouse, NEHU Shillong on the 11th June 2013.

Delivered 2 lectures as Resource Person on "Translation and Khasi Literature" in *Special Lectures on Khasi Literature* organized by the Department of Khasi, St. Anthony's College, Shillong on the 8th August 2013.

Presented a paper as Resource Person on "On the standardization and vocabulary development of Khasi Language" in the Symposium on *Improvement and Development of Khasi Language* organized by the Khasi Jaintia Presbyterian Assembly on the 20th August 2013 at Dinam Hall, Shillong.

Attended the launch of PLSI volumes and participated in the National Consultation on *People's Linguistics Survey of India, Community Ethnography & Eco-cultural Mapping* organized by Lalit Akademi, Sahitya Akademi, Sangeet Natak Akademi, Indira Gandhi National Open University, New Delhi and Bhasha Research and Publication Centre, Baroda in New Delhi on the 5th, 6th, 7th September 2013.

Chaired a function of The Shillong Academic Society to felicitate Prof. J. War and release of the book *Linguistics Ecology: Meghalaya* edited by Shailendra Kumar Singh and Saralin A. Lyngdoh on the 26th

October 2013 at the Bharat Scouts and Guides Conference Hall, Shillong.

Presented a paper "Ka Drama Khasi kum ka Itkhmih jong ka Imlang Sahlang" (Khasi Drama as a mirror of society) in the Symposium on Khasi Drama organized by All India Radio, Shillong on the 4th March 2014 at Don Bosco Youth Centre, Shillong.

Chaired the Inaugural and Valedictory Functions and presented a paper "Constructing Identity: A Study of Khasi Drama" in the National Seminar on *Constructing Identity in Tribal Literature and Languages of India* organized by the Department of Khasi, NEHU in collaboration with the Tribal Literary Forum of India, Shillong from the 26th to the 28th March 2014.

Prof. S. Dkhar

Regional Coordinator of the UGC Capacity Building of Women Managers in Higher Education Sensitization, Awareness and Motivation (SAM) Training workshop held from 30th March to 3rd April 2013 at Tripura University, organized by the Department of Commerce, Tripura University, Agartala. Presentation on the genesis of SAM and Training of the Trainers (ToT) Workshop held at different places of Northeast.

Coordinator of the Regional Seminar on "Superstition in the Tribal Cultures of the Northeast." Gave a speech on the theme of the seminar at the inaugural function and chaired two technical sessions on 3rd and 4th May 2013 at the Arts and Culture Hall, Shillong, organized by the Department of Arts and Culture, Government of Meghalaya.

Coordinator of the programme for the District level Cultural Competition on "Folksongs,

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Folk Dance & Indigenous Instrumental” held on 24th September 2014 at Seng Khasi Higher Secondary School, organized by the District Level Art and Culture Society, Government of Meghalaya, Shillong.

Coordinator of the Fourth Meghalaya Poetry Competition 2013; chaired the inaugural function organized by the All India Poetess Conference, Meghalaya Chapter in collaboration with the Government of Meghalaya under VAF Scheme; held on 30/11/13 at the art and Culture Hall, Shillong.

Resource Person in the Training for organizations providing services to women on “Gender and Violence Against Women”. Presented a paper on “Understanding Violence Against Women” organised by Northeast Network held at Eldorado Guest House Shillong on 30th September 2013.

Resource person in the multilingual poetry session: The Literary Forum on “The Life and Works of Dr. Kamal a renowned Manipuri poet”. Translated and read out his poem into Khasi on 28/10/2013 at UCC Auditorium, Barapani; organized by Sahitya Akademi in collaboration with Manipuri Sahitya Parishad, Meghalaya

Resource person in the multilingual Poetry session and presented two self composed poems entitled “Ka Bapli kynrad” (A poor She) and “Exploitation” and as Special Guest in the closing function spoke on “National Integration through Regional Languages” on the occasion of the 104th Birth anniversary of Mahakavi Laxmi Prasad Devkota held at Gurkha Patchala Auditorium, Shillong on 10th November 2013.

Resource person in the Celebration of the 73rd Death Anniversary of Soso Tham,

and delivered a speech on “Soso Tham as a Visionary poet” organised by the Department of Art and Culture held at Soso Tham Auditorium, Shillong on 18th December 2013.

Resource person in “Cultures of Peace Festival of the Northeast” and was one of the main speakers on “Contribution of Women Poets of North East Region” held on 3rd February 2014 at Cotton College Guwahati, organized by Zubaan Publishing House in collaboration with KHUBLEI.

Resource person at the National Seminar on “Impact of Globalization on the Tribal Language, Literature and Culture” and presented a paper on “Impact of Globalization on Khasi Language, Literature and Culture” organized by the Assamese, Marathi and Language unit Bhasha Bhavana, Visva Bharati, Bolpur, in collaboration with CIIL, Mysore, held on 20-21 Feb, 2014 at New Bhasha Bhavana Building, Shantiniketan, Bolpur, Kolkata.

Resource person in the Symposium on “Ka Lyngwiar Ki Sawangka” and presented a paper on “Ka Jingroi Jingsan ka Sawangka (Drama) Khasi naduh basdang haduh 2011” organized by All India Radio, Shillong held on 4th March 2014 at Don Bosco Youth Centre, Shillong.

Resource person at the National Seminar on “Constructing Identity in Tribal Literature and Languages of India”. Presented a paper on “Influence of Globalization on Tribal Identity of India with special reference to Khasi Language and literature” and chaired one session. Organized by the Department of Khasi, NEHU, Shillong in collaboration with the Tribal Forum of India, held on 26-28th March 2014 at ICSSR Conference Hall, NEHU, Campus, Shillong.

Dr. D. R. L. Nonglait

Participated as a panelist in a Panel Discussion on “The Life and Contributions of Thomas Jones” organized by Thomas Jones School of Mission and Evangelism, Nongsawlia, Sohra at Sohra on 22nd June, 2013.

Chaired a session in the Literary day Celebration of the Khasi Authors’ Society, Shillong organized by the Khasi Authors’ Society on 11th August, 2013 at Durbar Hall, Mission Compound, Mawkhar, Shillong.

Chaired a session in a Seminar on “Media, Nations and Democracy in Meghalaya; Experiences and Prospects” organized by the Rupang Silver Jubilee Celebrations Committee on the 10th August, 2013 at the Durbar Hall Mission Compound, Mawkhar, Shillong.

Chaired a session in a Symposium on “Ka Jingpynbha bad Pynroi ĩa ka Ktien Khasi” organized by the Khasi Jaintia Presbyterian Assembly held on 20th August, 2013 at Dinam Hall Jaiaw, Shillong.

Delivered a keynote address in a seminar on “Ki Um Ki Wah ha ka Literashor Khasi” organized by the Khasi Authors’ Society on 11th September, 2013 at Durbar Hall, Mission Compound, Mawkhar, Shillong.

Participated as a panelist in a panel discussion on the theme “Ka Shongkha Shongman bad ki jingeh ha kine ki sngi” organized by the Social Economic Life Development Department, KJP Synod Sepngi on the 12th September, 2013 at Dinam Hall, Shillong.

Coordinator of a three day National Seminar on “Constructing Identity in Tribal Literature and Languages of India” held from 26th to 28th March 2014 organized by the Department of Khasi, NEHU, in collaboration with the

Tribal Literary Forum of India, Shillong and ICSSR, Shillong.

Presented a paper on “Fear of Identity Loss in the Poetry of Soso Tham, H.Elias and S.J.Duncan” in the National Seminar “Constructing Identity in Tribal Literature and Languages of India” held from 26th to 28th March, 2014.

Dr. Bandarilin Bairo

Presented a paper entitled “Inciting violence in the name of u Thlen: A Critical Study of Paul Lyngdoh’s Short story “U Thlen” at the Regional Seminar on “Superstition in the Tribal Cultures of the Northeast: A Study of Myth and Reality” organized by the Department of Arts & Culture, Government of Meghalaya held on the 3rd – 4th May 2013.

Presented a paper entitled “Articulating Personal Identity in Paul Lyngdoh’s Short Story ‘Ah Blei’ (Oh God)” in the National Seminar on “Constructing Identity in the Tribal Literature and Languages of North-East India” organized by the Department of Khasi, NEHU, Shillong, held on the 26th – 28th of March 2014.

Mr. Marbhador M. Khyndeit

Presented a paper entitled “Superstitions and Practices of the Khasis during pregnancy with reference to Radhon Singh Berry’s *Ka Jingsneng Tymmen – II*” in the Regional Seminar on ‘Superstition in the Tribal Cultures of the Northeast: a Study of Myth and Reality’ organized by the Department of Arts and Culture, Government of Meghalaya held on 3rd and 4th May 2013.

Presented a paper entitled “Ki um ha Ki Sngi Ba Rim U Hynniew Trep” in the Local Seminar

on “Ki Um ki Wah katkum ba ki paw ha ka Khasi Litereshor bad Kolshor” organized by the Khasi Authors’ Society held on 14th December, 2013.

Presented a Paper on “Erosion of Ethnic Identity of the Khasi in the Poetry of Kynpham Sing Nongkynrih” in the National Seminar on “Constructing Identity in Tribal Literature and Languages of India” organized by the Department of Khasi in collaboration with Tribal Literary Forum of India held from 26th to 28th March 2014.

Publications

War, Badaplin (2013). Pronouns of Power and Solidarity in Khasi. In *Linguistics Ecology: Meghalaya*. S. K. Singh and S. A. Lyngdoh (Eds). EBH Publishers (India), p. 247-256. ISBN 978-93-80261-96-6.

War, Badaplin (2013). Ki Ktien Tnat Jong Ka Ktien Khasi. In *Ka Thiar Ki Nongthoh* 10: 1-12 (Khasi Author’s Society, Shillong). ISSN 2278-6805.

War, Badaplin (2013) U Nongäathuh (the Narrator) Ha Ka Khana-lyngkot “Puhbsein”. *Ka Thwet Jingstad (Quest for Knowledge)* Vol. II No.3: 4-8. ISSN No. 2278-6813.

War, Badaplin (2013) Khasi Phonotactics. *Ka Thwet Jingstad (Quest for Knowledge)* Vol. II 3: 44-48. ISSN No. 2278-6813.

Dkhar, S. (2013). Katto katne ki Mat ban Hikai ia ka Poetry, *Ka Syngkhong Jingtip* (Khasi Authors Society, Shillong) – ISSN 2278-6791 (pp 48- 60).

Dkhar, S. (2013). Women Empowerment in Rural India. (Keynote Address for *Empowerment of Women in Rural India* (ed. Dipti Goswami) [Bahona College

Publication Cell, Jorhat] (ISBN 978-93-82030-61-4 (pp 1-10).

Dkhar, S. (2013), “U Rabindranath Tagore bad ka jingäadei jong u bad Ka Shillong. *Ka Thwet Jingstad* Vol. II No. 3: 9-15. ISSN No. 2278-6813.

Dkhar, S. (2013), “A Hero Amongst the Lilies” (A Travelogue) published in the Journal of AIPC on the occasion of the 11th International Poetry Convention, Thailand 23-29 June 2013. Edited by Prabha Sharma & Dr. Roshan Ara, Khurja, Uttar Pradesh, (pp. 36-40).

Kharmalki, A. (2013). Semantic Extension: The Case of Khasi. *Ka Thwet Jingstad Vol. II No.3* pp 49-52. ISSN No. 2278-6813.

Nonglait, D. R. L. (2013). Ki Jingduh Jingmyntoi jong ka Shongkha Shongman Bym Pat Biang Por. In *Nongsynrieh District Ka Jingrakhe Jubilee Rupa 1988-2013*, Nongsynrieh District, Meghalaya.

Nonglait, D. R. L. (2013). “Khasi Oral Narratives and Tradition” in *Linguistics Ecology Meghalaya*, Eds S. K. Singh and S.A. Lyngdoh, (EBH Publishers India, Guwahati).

Nonglait, D. R. L. (2013). “Ka Thymmei U Thomas Jones, U Kpa ki Dak thoh Khasi bad u Nongseng baneh ki Skul Primary” in *Ka Syngkhong Jingtip Thup IV* (Khasi Authors’ Society).

Nonglait, D. R. L. (2013). “Khasi Language: A brief History” in *Ka Thwet Jingstad* (Society for Khasi Studies, Shillong).

Bairo. Bandarilin, (2013) “Katto Katne Ki Syrtap Jingmut Ha Ka Khana Lyngkot U Men Mali” in the journal *Ka Thwet Jingstad*

Vol. II No. 3 (Society for Khasi Studies, Shillong).

Khyndeit, Marbhador M., (2013). “U Bevan L. Swer kum u nongpeit pyrman ia ka hiarpateng ha ka ‘Meingi Bakthang” in *Ka Thwet Jingstad Vol. II No.3*: 16-20. ISSN No. 2278-6813.

Books/Book Chapter

War, Badaplin. (co-edited) (2014). *People’s Linguistic Survey of India Meghalaya Ki Jait Ktien bad ki Ktien Tnat Meghalaya Agangipa Ku. Sik Aro Uarangni Rokomrang*. (Ri Khasi Book Agency, Shillong).

Khyndeit, Marbhador M. (co-edited) (2014). *People’s Linguistic Survey of India Meghalaya Ki Jait Ktien bad ki Ktien Tnat Meghalaya Agangipa Ku. Sik Aro Uarangni Rokomrang*. (Ri Khasi Book Agency, Shillong).

Honours/Awards/Recognitions

Prof. B. War

Appointed Chairperson of the Reviewing Committee for granting financial assistance to Khasi authors by the Government of Meghalaya, Shillong.

President, Tribal Literary Forum of India.

President, Society for Khasi Studies.

President, Shillong Academic Society

Prof. S. Dkhar

Nominated member of Language Expert of the Grant In Aid Committee of CIIL, Mysore from 2013 for three years approved vide Ministry of Human Resource Development, Govt. of India Letter No. F.8-52/2012/L-II Dated 10/10/2013.

Nominated Regional Advisory Committee Member of the Indian Council for Cultural Relations, Shillong (Ministry of External Affairs, Govt. of India) from 2013.

Awarded the Meghalaya Day Award (Tirof Sing Award, 2013) for exemplary contribution to Arts and Literature by the State Government of Meghalaya on 26th January 2014 at Polo Ground, Shillong.

Awarded the Sarojini Naidu Samman in the 14th All India Poetess Conference held at District Library, Dibrugarh Assam, on 10th March 2014.

Other Activities

Prof S. Dkhar

Guest of Honour in the celebration of 22nd Nepali Bhasha Diwas and spoke on “The Importance of Language in Preservation the Existence of Culture” held at Gurkha Patchala Auditorium on 18th August 2013 organized by Shillong Bhanu Jayanti Celebration Committee, Shillong.

Reviewed book entitled *Ka Poetry u D. S. Khongdup* written by B. Raplang and the book *Ka Kolshor Khasi: Ka Iktiar u Shynrang bad ka Bhah ka Kynthei Khasi* Ed. Department of Khasi, Synod College held on 3rd September 2013 at Synod College Conference Hall, organized by Synod College Shillong..

Chaired a technical session of the seminar on “Ki Um Ki Wah Katkum ba ki Paw ha ka Khasi Literature bad Kolshor” organized by Khasi Authors Society in collaboration with the Government of Meghalaya under VAF Scheme, held at Mission Durbar Hall, Shillong on 14th December, 2013.

Presented a book review on the Khasi Encyclopedic Dictionary entitled *Ka Dienshonhi* written by Rev. Dr. Iarington Kharkongor in launching of the book held at Presbyterian Church of India, Church House, Lower Lachumere, Shillong on 12th December 2013, organized by the author.

Presented a book review of the book entitled *Na U Kpa Sha U Khun (Letters of Soso Tham to his son Primrose G. Gatphoh)* written by Alvareen D. Dkhar in the launching of the book held on 28th December 2013 at Dinam Hall, Shillong organized by the author and her family.

Convener of the Quiz Competition in the programme 18 Degrees - State level (Inter District) Cultural Competitions 2013 held on 27th September 2013 at Soso Tham Auditorium, Shillong organised by the Department of Arts and Culture, Government of Meghalaya.

Resource person in the Training Workshop on “Gender Sensitivity and Disaster Management” and presented a paper on “Gender Sensitivity - Making Women Visible to overcome vulnerability” organized

by the District Disaster Management Authority, Govt. of Meghalaya, held at the Conference Room of the DC’s Office, Shillong on 3rd December 2013.

Dr Bandarilin Bairo

Member, Shillong Academic Society, Shillong.

Mr. Marbhador M. Khyndeit

Secretary of the Society for Khasi Studies.

Joint Secretary of the Tribal Literary Forum of India

Member of the Shillong Academic Society

Resource Person in the CBSE Workshop held from 22nd – 24th May, 2013 at New Delhi.

Acted as Judge in the Fr. Joseph Bachiarello Memorial Inter-College Debate Competition on “Ki Spah Mariang ka lthymmei ka ioh ka kot” organized by the Department of Khasi, St. Anthony’s College on 7th August, 2013.

Coordinator of a three day National Seminar on “Constructing Identity in Tribal Literature and Languages of India” held from 26th to 28th March 2014 organized by the Department of Khasi, NEHU, in collaboration with the Tribal Literary Forum of India, Shillong.

DEPARTMENT OF LINGUISTICS

Head : Dr. Umarani Pappuswamy
Telephone : 0364-272 -3310; Mobile: +91-8974036356
E-mail : umaranip@gmail.com; umarani@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Shailendra Kumar Singh M.A (Delhi); M.A. (Hindi) (Karnataka State Open University); M.Phil & Ph.D, (Hyderabad)	New Linguistics World Order, Alternative- Socio-linguistics, Translation, Deep Multilingualism, North-East India Linguistics & Linguistic Landscaping
Associate Professor	Umarani Pappuswamy M.A. and M.Phil. (Bharathiar); Ph.D, (Mysore); Post-Doc. (Antwerpen, Belgium)	Computational Linguistics, Typology, Semantics, Intelligent Tutoring Systems, Artificial Intelligence in Education, Cognitive Linguistics, Dialogue Systems and Discourse Analysis.
Assistant Professor	Saralin A. Lyngdoh M.A. (Linguistics & English) (NEHU); M.Phil & Ph.D. (Delhi).	Syntax, Eco- Linguistics, Language Ideology and Typology
	Barika Khyriem, M.A. NEHU; M.Phil (Delhi).	Phonetics and Phonology, Sociolinguistics, Austro-Asiatic Linguistics.
	Bijoy L. Dhanwar, M.A. (NEHU); M.Phil. (Hyderabad).	Tibeto-Burman Linguistics, Typology, Syntax, Lexico-graphy and Historical Linguistics.

Thrust Area of Research

The thrust area of the Department is to research on the numerous Tibeto-Burman and Austro-Asiatic languages/dialects of the North-East of India and build up expertise for field work, data analysis, and descriptive linguistics by training students through M.A. M.Phil and Ph.D programmes. 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, etc., have been emphasized upon in order to provide a wide option for students of Linguistics.

Brief Statement of Academic Activities

The Department admitted 45 students into its M.A. programme; 12 students into its M.Phil

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programme and 4 students into its Ph.D programme during the current year. 31 students successfully completed their M.A. programme

and 4 of them completed their M.Phil degrees and 4 passed the UGC Net examination.

Students' Profile

Enrolment Capacity: M.A.: 45; M.Phil/ Ph.D: Variable.

Actual Admission : M.A.: 43; M.Phil: 12; Ph.D: - Nil.

Degrees Awarded

Course	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.	-	30	1	6	25	30	1	31
M.Phil	-	4	-	-	4	4	-	4
Ph.D	-	-	-	-	-	-	-	-

Ph.D. Degrees Awarded

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/Joint Supervisor
Barika Khyriem	A Comparative Study of some Regional Dialects of Khasi Language: A Lexical and Phonological Study.	Prof. Juanita War
Wandashisha Lyngdoh	Shillong as a Micro-linguistic Area: A Study of Morphological and Morpho-syntactic features	Prof. Juanita War
Christina Kharlukhi	The Morphological Typology of Tibeto-Burman Languages with reference to Mara, Biate, Monsang and Hallam	Prof. Juanita War
Rupak Rabha	Language Maintenance and Language Shift among the Rabhas of Meghalaya.	Prof. Juanita War
Chelmelyne Dhar	A Phonological and Lexical Study of Lamin and Shella Varieties of Khasi: A Comparative Study	Prof. Juanita War
Badakerlin Lyngdoh	Some Aspects of Maram Dialect of West Khasi Hills	Prof. Juanita War
Imlienla Imchen	The Phonology and Morphology of Sangtam	Prof. Juanita War
T.Sochemla Chang	Chang Morphology	Prof. S.K.Singh
Khawlsongkim Suantak	Vaiphei Phonetics, Phonology and Morphology: A Descriptive Study	Prof.S.K.Singh

School of Humanities

C.Lalremzami	Lai Phonetics, Phonology and Morphology: A Descriptive Study	Prof.S.K.Singh
Atonu Kakoty	The Impact of Language Learning Strategies Instruction on Assamese ESL Learners	Dr Umarani Pappuswamy

Study Tours/Field Trips

Teachers-in-charge: Dr. Umarani Pappuswamy and Mr. Bijoy L.Dhanwar

Students: III semester

Places visited: Jirang in Ri Bhoi district of Meghalaya

Duration of the trip: May 23 – 26, 2013

Purpose: Fieldwork training, which is a compulsory part of the curriculum in the M.A. programme.

Courses Conducted

M.A.

Semester I : General Linguistics; Morphology; Syntax I; Phonetics and Phonology and Sociolinguistics.

Semester II : Semantics and Pragmatics, Ethnolinguistics, Advanced Syntax, Lexicology and Lexicography, Computational Linguistics.

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, Psycho-linguistics,

Translation Theory and Practice and Language Conflict and Resolution.

M.Phil/Ph.D. Coursework

Research Methodology; Current Trends in Linguistics (Optional 1); Current Trends in North East Linguistics (Optional 2); and Seminar Paper.

Seminars/ Conferences / Workshop/ Extension Programmes

Organized

Dr. Umarani Pappuswamy was a member of the Organising Committee and also served as Abstracts Coordinator, 1st International and 35th Annual Conference of Linguists, at Central Institute of Indian Languages, Mysore, November 27-29, 2014.

Panelist on “Classifiers in Indian Languages” at the 1st International and 35th Annual Conference of Linguists, at CIIL, Mysore, November 27-29, 2014.

Attended/Presented

Prof. Shailendra K. Singh

Presented a paper on “New Linguistic World Order and Alternative Sociolinguistics” in International Conference on “Linguistics, Literature and Arts” during 15-16 February, 2014 at Hong Kong.

Delivered a lecture on “desh ki AshA, hindi bhAshA” (Hindi as hope of Nation) in Workshop on Official Language organised

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by Power Grid Corporation of India on 28th February, 2014 at Guwahati.

Delivered a lecture on “rAjbhAShA hinDi ke vikAs men chunautiyaN evm uplabdhiyAn: purvottar ke vesheSh sandarbh men” (Challenges and Achievements in path of development of official language Hindi in special reference to North East Reign) organised by Indian Oil Corporation Limited, Guwahati on 21st March, 2014 at Guwahati.

Presented a paper on “Revisiting Linguistic Bio-Diversity” in National Symposium on “Linguistic Biodiversity: Issues and Problems” organized by the Department of Linguistics, AMU in collaboration with Central Institute of Indian Languages, Mysore and Indian Council of Social Sciences Research, New Delhi, 22-23 March, 2014 at Aligarh.

Delivered a lecture on “Women Discourse: An Alternative Approach” in National Seminar on “Women and Participation” at Department of Hindi, Gulbarga University, Karnataka in collaboration with CIIL, Mysore, 25-26 March, 2014 at Gulbarga.

Delivered a lecture on “Regional variations of Hindi and Indian Multilingualism” in National workshop on “Language Teaching” hosted by Room to Read, 13-14 December, 2013 at Delhi.

Delivered a lecture on “Language Acquisition, Grammar and Mother tongue” in National Workshop on “Language Teaching” hosted by Room to Read, 13-14 December, 2013 at Delhi.

Prof. Umarani Pappuswamy

International

Classifiers in Tibeto Burman Languages of India: Invited talk for the Panel “Classifiers

in Indian Languages” at the 1st International and 35th Annual Conference of Linguists, at CIIL, Mysore, November 27-29, 2014.

Chaired two sessions on Computational Linguistics at the 1st International and 35th Annual Conference of Linguists, at CIIL, Mysore, November 27-29, 2014.

“Advances in Natural Language Processing: With Special Focus on Documentary Linguistics and Intelligent Tutoring Systems”, Plenary Talk, 11th International Conference on South Asian Languages (ICOSAL-11), Varanasi.

National

“Language Documentation and Description of North-East Indian Languages: The Current Scenario”: Invited talk at the UGC-SAP National Symposium on “Social Science Research on North-East India: Practices, Problems and Prospects” held at the ICSSR-NERC, Shillong during March 21-22, 2014.

Presented a paper entitled “Identity and Linguistic Human Rights in the Context of North-East India”, at the National Conference on “Constructing Identity in Tribal Literature and Languages of India” organized by the Department of Khasi NEHU in collaboration with Tribal Literary Forum of India Shillong (26th – 28th March 2014).

Dr. Saralin A. Lyngdoh

Presented a joint paper with J. War on “Issues and Problem of Identity in North East” at the National Conference on “Constructing Identity in Tribal Literature and Languages of India” organized by the Department of Khasi NEHU in collaboration with the Tribal Literary Forum of India Shillong (26th – 28th March 2014).

Dr. Barika Khyriem

Presented paper on “Identity and Problem of Language Planning with reference to North East India” at the National Conference on “Constructing Identity in Tribal Literature and Languages of India” organized by the Department of Khasi Shillong in collaboration with the Tribal Literary Forum of India (TLFI) Shillong, 26th – 28th March 2014.

Mr. Bijoy L. Dhanwar

Attended the National Workshop on “Research in Tribal languages of North-East India” from 6-7 November 2013, organized by The English and Foreign Languages University, Shillong Campus, Shillong and delivered a lecture on “Some Aspects of Tibeto-Burman Syntax” on 7th November 2013.

Publications

Research Papers

Singh, S. K. (2014). purvottar kI bhAShAoM kA ek vaikalpik samAjbhAShAvaigyanik adhyayan. (An Alternative Sociolinguistics study of NE languages) purvottar bhAraTl darpaN, Nagaland Rashtrabhasha Prachar Samiti, Kohima. 11-23.

Singh, S. K. (2014). purvottar kI bhAsha-pAristhitiki (Ecology of NE languages). in www.hinditech.in a Web Research Journal ISSN : 2231-4989.

Singh, S. K. (2014). sanrachanavaad evm anuvAd (Structuralism and Translation) in www.hinditech.in a Web Research Journal ISSN : 2231-4989.

Books/Book Chapters/Proceedings

J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (2014.), *Austro-Asiatic Linguistics of North*

East India (eds.) Eastern Book House, Guwahati.

Singh, S. K. (2014). New Linguistic World Order and Alternative Sociolinguistics”. in *International Proceedings of Economics Development and Research: ‘Linguistics, Literature and Arts’* IACSIT Press, Singapore.

Singh, S. K. (2014). Revisiting Austro-Asiatic Linguistics of NE India in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

Singh, S. K., Bareh, C. (2014). Basics of Austro-Asiatic in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

Singh, S. K., Dkhar, G. D. (2014). Linguistic Landscaping of Multilingual Shillong in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

Singh, S. K., Dkhar, G. D. (2014). Processing of Idioms and Compounds in Second Language: A Case study of Khasi-English Bilinguals in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

Lyngdoh Saralin and Aitilang L. Nongrang (2014). Some Syntactic Characteristics Aspects of Dewsawlia: A variety of Khasi in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

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Lyngdoh Saralin and Happylina Buhphang (2014). Some Syntactic Characteristics Aspects of Dewswalia: A variety of Khasi in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

Khyriem, Barika (2014). Major Phonological Processes in Khasi in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

Khyriem Barika and Barilin Syiemlieh (2014). Segmental Phonology of Mawlong in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

Khyriem Barika and Lakyntiew Sohkhet (2014). Multilingualism in Meghalaya with reference to Byrnihat in *Austro-Asiatic Linguistics of North East India*. J. War, S.K. Singh, S.A. Lyngdoh & B. Khyriem (eds.), Eastern Book House, Guwahati.

Funds Received from Agencies other than NEHU

Agency	Amount	Year
Ministry of Communication & Information Technology	78.11 Lakhs	2011-2014

Research Projects

The Project ELMTS-Bodo financed by the Ministry of Communication with grant of Rs 78.11 Lakhs from 2011-2014. Principal Investigator: Prof. S. K. Singh

Scheme for Protection and Preservation of Endangered Languages (SPPEL). Investigator: Dr. Umarani Pappuswamy, w.e.f. November 2013. Institution: Central Institute of Indian Languages, Mysore.

Mother Tongue Survey of India: Phase III; In Collaboration with the Language Division, Kolkata. Coordinators: Dr. Uma Pappuswamy and Mr. Bijoy L. Dhanwar.

Academic/Professional Collaborations

Prof. Umarani Pappuswamy

Dr. Umarani Pappuswamy collaborated with several national and international institutes like: (1) International: Australian National

University, Australia; and Nanyang Technological University, Singapore. (2) National: Central Institute of Indian Languages, Mysore and Language Division, Kolkata.

Dr. Umarani Pappuswamy and Mr. Bijoy L. Dhanwar

Consultancy services to the Mother Tongue Survey of India, a mega project undertaken by the Language Division, Kolkata.

Honours /Awards/Recognition

Dr. Umarani Pappuswamy, Member of the Publication Committee, Indian Linguistics Journal published by the Linguistic Society of India for the term January 2012 – December 2014.

Dr. Umarani Pappuswamy, Associate Editor of the Journal South Asian Language Review <http://journalsalr.com>; ISSN: 0971-0485

Other Academic Activities

Shailendra K. Singh

Delivered a lecture on “Translation and Post Structuralism” at Department of Language Technology, MGAHV, Wardha on 17th July, 2013.

Delivered a lecture on “Ecological Disasters” at Refresher Course in Department of Adult and Continuing Education, NEHU on 20th December, 2013 at Shillong.

Umarani Pappuswamy

Delivered two talks on Computational Linguistics at UGC Refresher Course in English and Competitive Literature and Language jointly organized by the Departments of English and Garo, NEHU Campus, Tura on May 20, 2013.

Delivered two invited talks on Semiotics at UGC Refresher Course on Folkloristics and Semiotics on 3rd August 2013.

Delivered two invited talks at UGC Refresher Course on Education on “Recent Trends in Linguistics and Recent Advances in Computational Linguistics” on 12th and 13th August 2013.

Delivered an invited talk at the UGC Short Term Course on ‘Research Methodology’ on 26th September 2013 organized by

the Department of Adult and Continuing Education in association with UGC-ASC, NEHU Shillong on “How to Prepare a Bibliography”.

Delivered an invited talk at UGC Refresher Course in Department of Adult and Continuing Education, NEHU, Shillong on 6th December 2013 on “Culture and Public Awareness in Disaster Management”.

Visiting Professors/Fellows

Prof. Nicholas Evans, Australian National University, Canberra, Australia: Visiting Fellow, from 14th June – 18th June 2013; delivered lectures in the department for students and gave one Extension Lecture for NEHU Faculty titled “The Words and the Web of life: Reconnecting Language Documentations with Ethnobiology”.

Prof. Suhrnam Sharma, (retd) Prof. Deccan College, Pune: Visiting Professor from 1st September – December 2013. Taught “Linguistic Structure of South Asian Languages” for IIIrd Semester students, and also supervised some M.A. dissertations.

Prof K.V. Subbarao, (retd.) Prof, Univ. of Delhi: Visiting Fellow from 12th– 22nd September 2013. Delivered lectures to M.A., M.Phil and Ph.D students and trained them in doing typological research.

DEPARTMENT OF PHILOSOPHY

Head : Prof. Binod Kumar Agarwala
Telephone : 272 3552
E-mail : philosophynehu@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Jagat Pal, M.A (Allahabad), Ph.D. (IIT, Kanpur) (Redt.31.01.2014)	Moral Philosophy, Logic, Indian Philosophy, Analytic Philosophy, Philosophy of Language.
	Binod Kumar Agarwala, M.A., M.Phil.(Delhi), Ph.D. (Lucknow)	Social & Political Philosophy, Ethics, Hermeneutics, Kant, Gadamer.
	Vanlalnghak, M.A. (NEHU), Ph.D. (IIT Kanpur)	Philosophy of Culture, Moral Philosophy, Analytic Philosophy.
	Xavier P. Mao, M.A. (NEHU), M.Phil.(Delhi), M.Lett. (Sydney) Ph.D., (NEHU)	Existentialism, Ethics
Associate Professor	N. Parthasarathy, M.A. (Indian Philosophy) (Madras) M. Phil. (Madras)	Indian Philosophy & Indological Studies.
	Prasenjit Biswas, M.A., Ph.D. (NEHU)	Phenomenology & Continental Philosophy, Philosophy of Mind, Philosophy of Tribes of NE India.
	Laxminanrayan Lenka M.A.(Utkal), M.Phil., Ph.D.(Hyderabad)	Analytic Philosophy, Philosophical Anthropology, Philosophy of Wittgenstein, Speech Acts, Western Epistemology.
Assistant Professor	E. Richard Tongper, M.A., M.Phil., Ph.D (NEHU)	Philosophy of Religion, Philosophical Theology, Applied Ethics, Gandhian Philosophy.
	Basil Pohlong, M.A., Ph.D. (NEHU)	Philosophy of Religion, Philosophical Anthropology, Philosophy of Culture, Ethics
	Uttam A Sharma, M.A.(Manipur)	Logic and Epistemology.

School of Humanities

Thrust Areas of Research

Philosophy of Culture with special reference to the tribal thought of the North-Eastern region.

Brief Statement of Academic Activities

Faculty members published books and many papers in books and journals pertaining to

their research work. Faculty served as resource persons for refresher courses within and outside NEHU. Faculty participated and presented papers at regional, national and international seminars/conferences.

Students' Profile

Enrolment Capacity: M.A. - 51; Ph.D. - Variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.		47	4	13	38	33	18	51
	OBC							
PhD.	2	2		3	1	1	3	4

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.		36	5	11	30	18	23	41
PhD.		3		2	1		3	3

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Mr. O. L. Longkumer	Intelligibility of Religious Language and Beliefs with Special Reference to Wittgenstein	Dr. L. N. Lenka
Mr. N. Ramthing	A Kantian Approach to Ethics of Business Corporation	Prof. Jagat Pal
Ms. WabangnaroImchen	Soren Kierleegard's Ideological Notion of Morality: A Critical Appraisal	Dr. E. R. Tongper

Courses Conducted

M.A.

Semester- I : PhiC-101-Indian Metaphysics,
PhiC-102-Western Metaphysics
PhiC-103-Symbolic Logic
PhiC-104-Philosophy of Religion
PhiC-105-Indian Philosophy of Language-I

Semester- II : PhiO-201-Ethics & Environment
PhiC-202-Indian Epistemology
PhiC-203-Western Epistemology
PhiC-204-Indian Moral Philosophy
PhiC-205-Indian Philosophy of Language-II

Semester – III : PhiO-301-Philosophy of Social sciences
PhiO-302-Phenomenology & Existentialism
PhiC-303-Philosophy of Post Modernism-I
PhiC-304-Analytic Philosophy
PhiC-3006-Contemporary Philosophy of Religion
PhiC-3007-Tribal Thought and Culture

Semester – IV : PhiC-401-Modernism & Responses
PhiC-402-Philosophy of Culture
PhiC-403-Philosophy of Post-Modernism-II
PhiC-4004-Western Moral Philosophy
PhiC-4005-Applied Ethics
PhiC-4006-Philosophy of Wittgenstein

Ph.D. Courses

Phi-501 - Research Methodology
Phi-502 - Seminar Paper
Phi-503 - Philosophy of Culture & Religion

Educational Tour of Students

Teacher-in-charge: Prof. X. P. Mao

Places/Institutions visited: Mumbai and Goa

Duration of Tour: 19th January to 2nd February, 2014

Purpose of Tour: Enrich the students by studying and observing important places.

Seminar/Conference/Symposia/Extension Programme etc.

Organized

Prof. Vanlalnghak organized the *North-East Philosophy Teachers' Meet-2013* on the theme: "Teaching and Research in Philosophy: Problems and Prospects", 3-5 July, 2013 at NEHU, Shillong.

Mr. N. Parthasarathy organized a tour of the Research Scholars of the Department of Philosophy, University of Madras, to the holy Shrine of Ramanuja at Sri Perumbadur, Kanchipuram district on 3rd February 2014 as the outreach programme of the Department.

Attended/Participated

Prof. B. K. Agarwala

Presented a paper, "Thought of Bhagavadgītā and Savarna in Contemporary Dalit Discourse: A Rejection of Legacy of Ambedkar" at a National Seminar on *Dr. B R Ambedkar's Ideas and Thoughts*, organized in the Permanent Campus of North Eastern Hill University, Shillong, March 11 – 12, 2013.

School of Humanities

Prof. Vanlalnghak

Participated in an International Seminar on “Ethnicity and Globalization with Reference to the Communities of South Asia” organized by the Department of Philosophy, Lady Keane College, Shillong, 4-5 December, 2013, sponsored by ICPR and ICSSR New Delhi.

Prof. X. P. Mao

Presented a paper entitled “Globalization and Tribal Identity” in a UGC sponsored National Seminar on “Globalization and Ethnic Identity” held at Pachunga University College, Aizawl, 23-24th May, 2013.

Delivered a lecture as a Resource Person on “The Culture of Love and Non-violence” at UCC, Barapani, Shillong, in a National Students Movement’s Workshop on 22nd May 2013.

Presented a paper entitled “Engagement with China, India’s Weaknesses and Strengths” at St. Joseph’s College, Zakhama, on 5th October 2013, in a National Seminar on “Look East Policy”, 4th October to 6th October, 2013.

Presented a paper on “Caste, Class and the Politics of Identity Formation” at a National Seminar on “Social and Economic Status of the Marginalized Communities in Nagaland with special reference to the Scheduled Castes Groups” on 1st November 2013, sponsored by ICSSR and organized by Patkai Christian College, Chumukedima, Nagaland.

Delivered a lecture in Refresher Course in the Commerce Department, NEHU, Shillong on 2nd December, 2013 on “Philosophy of Commerce”.

Mr. N. Parthasarathy

Presented a paper on “Jaina Ethics and Sustainable Development” at a National Seminar on “Comparative Religion and Ethics in the Global Era” organized by the School of Philosophy & Religious Thought at the Department of Philosophy, University of Madras, TK Campus, Chennai on 22nd January 2014.

Dr. Prasenjit Biswas

Presented a paper entitled, “Connecting the Self: Northeast India and Southeast Asian Communities” in a UGC sponsored National Seminar on *Globalization and Ethnic Identity*, held in Pachhunga University College, Aizawl, 23-24th May, 2013.

Presented a paper entitled, “Knowledge, Liberation and Ethnic Life-Worlds on North-East India” in an International Seminar on Ethnicity and Globalization held in the Dept. of Philosophy, Lady Keane College, Shillong 5th December, 2013.

Presented a paper entitled, “Are we in for Post-humanist Post-humanities?” in a ICPR National Seminar on *The Place of Humanities in Our Universities*, 13-15 January, 2014 at New Delhi.

Delivered Four Lectures on “State of the Art in Social Theory” at ICSSR sponsored Refresher Course at A.N. Sinha Institute, Patna on 28-29th January, 2014.

Presented a paper entitled, “Aporias of Social Theory” at a National Seminar on *Postmodern Philosophy* in the Dept. of Philosophy under UGC-DSA, North Bengal University, Siliguri, 13-14th February, 2014.

Delivered Four Lectures on “Historical and Philosophical Methods” at UGC-ASC

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Refresher Course at Gauhati University, Gauhati on 17-18th February, 2014.

Presented a paper, “Re-engaging the Political: Neoliberal State and Social Movements in India” in ICSSR-UGC sponsored Seminar on *Post-liberalization Democratic Experience in India*, at Dept. of Political Science, NBU, Siliguri on 28th February, 2014.

Presented a paper entitled, “Religious Economy and Buddhist Practices of Khamptis of Assam and Arunachal Pradesh” in the Dept. of Cultural Studies, Tezpur University, Tezpur at an ICPR National Seminar on *Khamptis and Singhijos* on 27-28th March, 2014.

Presented a paper entitled, “A Sufistic Rendering of Rybayiaa” at ICPR National Seminar on *The Philosophical Wisdom on Umar Khayam* held at Guwahati on 30th March, 2014.

Dr. Basil Pohlong

Presented a paper on “Khasi Diaspora in Bangladesh” in a National Seminar on *Inter-State Border Cultural Transaction: Exploring the Praxis of Folk Communicative Norms in North-East India*, organized by the Department of Cultural and Creative Studies, NEHU, Shillong on 2-3 May 2013.

Presented paper at National Seminar on *Globalization and Ethics Identity* organized by English and Philosophy Department, Pachhunga University College, Aizawl on 23rd and 24th May 2013.

Participated in International Seminar on *Ethnicity and Globalization: With reference to the Communities of South Asia*, organized by Lady Keans’ College, sponsored by ICPR, New Delhi, ICSSR, New Delhi,

ICSSR, NERC, Shillong on 4-5th December, 2013.

Mr. Aribam Uttam Sharma

Presented a paper “Effacing encounter: A Tale of Two Musical Subversions” at an International Seminar on *Ethnicity and Globalisation: with reference to the communities of South Asia* organized by the Department of Philosophy, Lady Keans’ College, Shillong, sponsored by ICPR, New Delhi, ICSSR, New Delhi, and ICSSR, NERC, Shillong, 4-5th December, 2013.

Publications

Research Publications

Biswas, P. (2013). The inscrutable substance of Ontology. *Sociological Bulletin*.62(1): 124-29.

Biswas, P.(2013). Phenomenology and Ontology of Humiliation. *Man and Society: A Journal of North-East Studies*. 10: 180-202.

Biswas, P. (2013). Revisiting India’s Northeast: a New Way of Philosophizing. *Manavayatan: the Humanosphere*. III (1: 39-57.

Biswas, P. (2014). Homelands in the mountains and rivers: re-identification of the idea of northeast. *Journal of North-east Indian culture*. III 1: 39-57.

Pohlong, B. (2013), Humans and their Natural Environment: An Ethical and Religious Exploration. *Manavayajan* II 2: 57-75.

Books/Book Chapters/Proceedings

Agarwala, B. K. (2014) Tribal Reason as Metis: a Study of Folk Tales from Khasi, Mizo and Naga traditions in *Nature, Culture and Philosophy: Indigenous Ecologies of North East India*. Saji Varghese,(Ed.).

School of Humanities

Laxmi Publishers & Distributions, New Delhi: p.1-73.

Agarwala, B. K. (2013) Kant's Ethics in *Understanding Ethics*, Vibhachaturvedi & Pragati Sahni,(Eds.). Macmillan Publishers India Ltd., Delhi: p.44-55.

Agarwala, B.K. (2013) Justice in *Understanding Ethics*, Vibha Chaturvedi & Pragati Sahni (Eds.). Macmillan Publishers India Ltd., Delhi: p.164-176.

Biswas, P. (2013) Philosophy as Anthropocentrism: Language, Life and *Aporia*: In *Philosophy and Anthropology: Border crossings and Transformation*. A. K. Giri and J. Clammers (Eds.). Anthem Press, London: Chapter 7: 123-40.

Biswas, P. (2014). Daya Krishna's 'Presuppositionless Philosophy': Sublimity as the Source of Value and Knowledge in *Philosophy as Samvada and Svaraj: Dialogical Meditations on Daya Krishna and Ramchandra Gandhi*. ShailMayaram(Ed.). SAGE Publications India Pvt. Limited, New Delhi: Chapter 11, p.139-60.

Lenka, L. (2014) *Quine's philosophy*, Northern Book Centre, New Delhi.

Pohlong, B., (2014), Locating Environmental Ethics in Khasi Tradition in *Nature, Culture and Philosophy*. Saji Varghese, (Ed.). Lakshi Publisher & Distributors, New Delhi: Chapter3, p 90-111.

Other Activities

Prof. B. K. Agarwal

Delivered four lectures (2 hours each) on 'Hermeneutics,' in the Department of Philosophy, Lucknow University, Lucknow,

on January 31, 2014, February 3, 5 & 7, 2014 respectively.

Prof. Xavier P. Mao

Delivered a lecture on "The State of Affairs in Higher Education in India" at Tezpur University on 29th July 2013.

Delivered four lectures at Mizoram University both in Orientation course and in Refresher Course on 23rd November, 2013 on "Moral Philosophy".

N. Parthasarathy

Delivered IPC Endowment Lecture (2013-2014) on *Social Stratification: New Perspectives* on 21st February 2014 at Department of Philosophy, University of Madras, TK Campus, Chennai.

Attended as a special invitee the *L D Swamikannu Pillai Endowment lecture* (2013-2014) on 24th February 2014 at the Department of Philosophy, University of Madras, TK Campus, Chennai and delivered a lecture on "Body, Embodiment and the Person".

Attended as a Special Invitee and delivered the *Nimishakkavi K. Subbiah Naidu Endowment Lecture* (2013-14) on the Universality of Vaishnavism on 17th February 2014 at the Department of Philosophy, University of Madras, TK Campus, Chennai.

Dr. Prasenjit Biswas

Delivered Four Lectures on "Post-Analytic Philosophy of Language" at Mizoram University under ASC-UGC between 13-14th December, 2013.

Delivered an Institute Colloquium entitled, "Aporias of Social Theory" at Humanities and Social Sciences at IIT Bombay, 14th March, 2014.

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Jan 31, 2014: Al Jazeera: “Jury Still out on Indian Gang Rape.” www.aljazeera.com/.../jury-still-out-indian-gang-rape-20141316595531...

Dec 2, 2013, Madrassas in India Attract Hindu Student. www.aljazeera.com/.../madrassas-india-attract-hindu-students-20131118.

Aug 31, 2013. ‘The proce of tea from death valley’ at www.theaustralian.com.au/...price-of-tea.../story-fnb 1 brze-1226707856072.

Basil Pohlong

Participated in *North-East Philosophy Teachers Meet 2013*. Organised by ICPR, New Delhi, at Shillong, from 3-5 July, 2013.

IV

SCHOOL OF HUMAN AND ENVIRONMENTAL SCIENCES

Dean : Prof. H. Lamin
Telephone : (0364) 272 3206 (O) 253 733 (R) 94361 03856 (M)
Email : hlamin3@hotmail.com

The School of Human and Environmental Sciences is comprised of five Departments: the Department of Anthropology, the Department of Geography, the Department of Rural Development and Agricultural Production, the Department of Environmental Studies and the Department of Horticulture. The faculty members of the School are actively involved in post graduate teaching as well as in research programmes offered in each of the Departments. The thrust areas of the research in the School are aimed at creation of knowledge and better understanding of the biocultural, environmental and natural resource management systems with special reference to the North eastern region of India. This year 130 students were admitted to the various post graduate programmes of the School. As many as 110 students passed their post graduate examinations. The Department of Horticulture started M.Sc programmes this year with 10 students admitted to the programme. The scholars who were awarded with Ph.D. is 23, M.Phil. – 7, PG Diploma – 20 and MA/M.Sc – 109. There are ten projects sponsored by various funding agencies and are being implemented by the faculty members of the School. Three new research projects were

received by the faculty members belonging to the School while two research projects were completed this year. All full time research scholars are receiving fellowship and nearly all the teachers of the School are guiding Ph.D students. The Departments of the School have several collaborative research projects funded by national and international agencies. Such research collaborations invariably include exchange of faculty and organization of seminars for dissemination of result. The Departments of the School organized four national level seminars, workshops and training programmes. The Department of Geography is supported under UGC's Special Assistance Programme (SAP II) and received a special grant for infrastructural development for the Department. The faculty members of the School are also actively collaborating with the Department of Atomic Energy, Government of India, Bhabha Atomic Research Centre, Mumbai in a research project pertaining to the proposed site of uranium mining in Meghalaya. Some of the faculty members of the School are also working as chair and members of various national committee, boards and task forces of the state and union Governments.

DEPARTMENT OF ANTHROPOLOGY

Head : Prof. R. Khongsdier
Telephone : 2723102 (O), 2550255 (R)
Email : rkhongsdier@hotmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	T. B. Subba, M.A., Ph.D. (N. Bengal) (On lien as Vice-Chancellor of Sikkim University)	Cultural Anthropology
	H. Lamin, M.A., Ph.D. (NEHU)	Cultural Anthropology
	R. Khongsdier, M.Sc., Ph.D. (NEHU)	Biological Anthropology
	L. Zehol, M.A., Ph.D. (NEHU)	Cultural Anthropology
Associate Professor	D.K. Limbu, M.Sc., Ph.D. (NEHU)	Biological Anthropology
	B. T. Langstieh, M.Sc.(NEHU), Ph.D. (Cal. Univ)	Biological Anthropology
	G. Ranjan, M.A., Ph.D. (Lucknow Univ)	Cultural Anthropology
	V. Pakyntein, M.A., M.Phil. (Delhi Univ)	Cultural Anthropology
Assistant Professor	J.W. Dkhar, M. Sc., Ph.D. (NEHU)	Biological Anthropology
	Q. Marak, M.A., (Gauhati Univ), Ph.D. (NEHU)	Cultural Anthropology
	Sudipta Ghosh, M.Sc., Ph.D. (Delhi Univ)	Biological Anthropology

Thrust Areas of Research

Population genetics including DNA studies with special focus on phylogenetic relationship of human populations and other related health issues, (2) Biocultural aspects of human growth and nutrition, (3) Demography, reproductive and child health, (4) Gender issues, and (5) Ethnicity and identity.

Brief Statement of Academic Activities

The Department admitted thirty students for M.A./M.Sc. programmes and nine students for Ph.D. Programme during the year. Twenty eight students successfully completed their M.A./M. Sc. and six students were awarded Ph.D. degree.

Five students passed the UGC-NET during the current year. The Department is collaborating with NEIGHIMS and the National Institute of Immunohematology, Mumbai, to characterize and identify the RBC antigen distribution pattern of the indigenous populations of Meghalaya in order to develop a blood donor base pertaining to the antigen systems. One international project titled “Nepal on the Move: Conflict, Migration and Stability” is being collaborated with the Department of Anthropology, Aarhus University, Denmark. Another international project entitled “A Dental Morphometric Examination of the Distinctiveness and Affinities of Austro-Asiatic- and Tibeto-Burman-speaking Ethnic Groups of South Asia” is being collaborated

School of Human and Environmental Sciences

with Dr. Brian E. Hemphill, Department of Anthropology, College of Liberal Arts, University of Alaska, USA. The Department is also undertaking two projects entitled “Rice and Acha Cha’a: Stories and Practices from Garo Hills Meghalaya” sponsored by IGRMS, New Delhi, and “Nude Images of Northeast India: Interpreting Verrier Elwin’s Ethnographic

Photographs” sponsored by ICSSR-NERC, Shillong. The department organized the UGC-Capacity Building Sensitization/Awareness/Motivation Workshop of Women Managers in Higher Education at NEHU, Shillong, with effect from 11th to 15th June, 2013. The faculty of the Department published more than thirteen publications during the year under report.

Students’ Profile

Enrolment Capacity: P.G.: 30 Ph.D.: Variable

Student Intake

Actual Admission	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
P.G.	-	30	-	76	23	16	14	30
Ph.D.	-	8	1	2	7	2	7	9

Degrees Awarded

Actual Admission	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A./M.Sc.	-	27	1	11	17	7	21	28
Ph.D.	-	9	1	6	4	2	8	10

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name of Supervisor
Ms. Naromongla Jamir	Participation of Naga Women in Electoral Politics: A Case Study of Kohima Town	Dr. Lucy Zehol
Mr. C. Lalrammuana	Dental Anthropology of the Mizo of Aizawl Town, Mizoram	Dr. D.K. Limbu
Mr. Letminthang Khongsai	Biosocial Determinants of Fertility and Child Mortality among the Khongsai Kukis of Manipur	Dr. D.K. Limbu
Ms. Charisma K. Lepcha	Religion, Culture and Identity: A Comparative Study on the Lepchas of Dzongu, Kalimpong and Ilam	Prof. T.B. Subba
Fr. Barnes L. Mawrie	From Maternal Uncle to Father: An Anthropological Study on Changing Patriarchy in Khasi Society	Prof. T.B. Subba
Mr. Happystone Syngkon	Status and Determinants of Child Mortality among the Pnars of Jaintia Hills District, Meghalaya	Dr. D.K. Limbu

Courses Conducted

M.A./M.Sc.

Semester I : Palaeo-anthropology; Archaeological Anthropology; Physical Anthropology; Social and Cultural Anthropology; Indian Prehistoric Archaeology.

Semester II : Human Origin and Evolution; Fieldwork Methods and Techniques; Human Ecology and Adaptation (**Open**); Anthropology of Northeast India (**Open**); Asian Prehistoric Archeology.

Semester III : Anthropology of India; Anthropology of Gender; Culture, Health and Medicine; Language, Culture and Society (**Open**); Demography; Human Genetics; Human Growth and Body Composition; Practical in Physical Anthropology-I.

Semester IV : Theories in Anthropology; Economy and Culture; Development Anthropology; Biostatistics; Biocultural Anthropology; Dental Anthropology; Practical in Physical Anthropology – II; Dissertation.

Study Tour/Field Trips of Students

Dr. J. W. Dkhar took the 3rd Semester students to Nongtalang village, East Khasi Hills District, Meghalaya, from 6th to 26th January 2014 for fieldwork training (3rd Semester).

Seminars/Conferences/Symposia/Extension Programmes, etc.

Organised

Dr. L. Zehol coordinated the UGC-Capacity Building Sensitization/ Awareness/ Motivation Workshop of Women Managers in Higher Education at NEHU, Shillong, with effect from 11th to 15th June, 2013.

Participated

Dr. L. Zehol attended: (i) a UGC-SAP national seminar on ‘Socio-Political Dynamics in the Northeast India’ organised by the Department of Political Science, NEHU, Shillong (25-26 March 2013) and presented a paper on “Experiencing Gender at the Cross Roads of Ethnicity”, (ii) a national seminar on ‘Superstition in the Tribal Cultures of the Northeast: A Study of Myth and Reality’ organized by the Department of Arts & Culture, Government of Meghalaya, Shillong (3-4 May 2013) and presented a paper on “Folk Beliefs (Superstitious Beliefs) amongst the Naga of Khezhakeno - The Legendary Naga Village”, and (iii) a national seminar on ‘Diaspora and Folklore: Exploring the Changing Dimensions of Folklore in Tribal Diaspora’ organised by the Department of Cultural and Creative Studies, NEHU, Shillong (27-28 March 2014) and presented a paper titled “Naga Diaspora: Rethinking Conceptual Issues and Methodologies.”

Dr. D.K. Limbu attended a national seminar on ‘Anthropology in 21st Century’ organised by the Department of Anthropology, University of North Bengal (25-26 March 2014) and presented a paper entitled “Biosocial correlates of Fertility and Mortality among

the Assamese Muslim women of Kamrup District, Assam.”

Dr. Geetika Ranjan attended: (i) an international conference on ‘Religion, Science and Spirituality in Indian context – New Trends and Research’ organised by Manav Kalyan Evam Vigyan Prasara Sansthan, Lucknow (21-22 December 2013) and presented a paper entitled “Ethnographic Perceptions on the Religion of a Tribe: An Exploration”, (ii) a national seminar on ‘Promoting Well-being among Elderly: An Indian Perspective’ organized by the Department of Psychology, Lucknow University (26-27 December, 2013) and presented a paper titled “Elderly among the Khasi: An Anthropological Study of a Tribe in Northeast India”, and (iii) a national seminar on ‘Diaspora and Folklore: Exploring the Changing Dimensions of Folklore in Tribal Diaspora’ organised by the Department of Culture and Creative Studies, NEHU, Shillong (27-28 March 2014) and presented a paper entitled “Biraha: Songs Traversing Time and Space.”

Dr. Q. Marak attended: (i) a three-day national seminar on ‘People’s Art of North East India: History, Identity and Emerging Realities’ organised by Indira Gandhi Rashtriya Manav Sangrahalaya (IGRMS), Bhopal in collaboration with the Department of Anthropology, Rajiv Gandhi University (5-7 March 2014) and presented a paper titled, “Mi Amua: A Study on Ritual Arts of the Garos of Meghalaya, India”, and (ii) a six-day international union of Anthropological and Ethnological Sciences (IUAES) Congress held at Manchester University, UK (5-10 August 2013) and presented two papers: (a) “Food Tasks and Food Allocation: A Case Study of a

Matrilineal Society”, and (b) “Studying the Self: The Dilemma and Ethics of Doing Auto-Ethnography in the Native Context.” She was also a discussant for Panel LD03 Health and Emerging Regional Demographic Trends, and chaired Panel G05: Doing Autoethnography: A Practice of Realist Ethnography or Rewriting Memory?

Publications

Published in India

- Kamei, C. and Limbu, D.K. 2013. Eruption of permanent teeth among the Gowda Girls of Kodagahali Village of Mysore District of Karnataka. *Anthropologist*, 16:731-734.
- Marak, Q. and Kalita, J. 2013. Indigenous knowledge systems associated with hunting among the Padams of Arunachal Pradesh, India. *Antrocom Online Journal of Anthropology*, 9(2): 237-45.
- Marak, Q. 2013. Cultural ecology of shifting cultivation in Garo Hills, Meghalaya. In: S. K. Singh and S. A. Lyngdoh (Eds.), *Linguistic Ecology: Meghalaya*. Guwahati: EBH Publication, pp. 277-90.
- Marak, Q. 2014. Experimenting with stone tools: The Garo Neoliths. In: T. Jamir and M. Hazarika (Eds.), *50 Years After Daojali Hading: Emerging Perspectives in the Archaeology of Northeast India*. New Delhi: Research India Press, pp. 182-191.
- Meitei, A. M. and Marak, Q. 2013. A Study on Megalithic burial stones from Jaintia Hills, Meghalaya. *South Asian Anthropologist*, 13(2): 157-66.
- Ranjan, G. 2013. Industrialization in the Terai and its impact on the Bhoksas. In: K. Sharma, S. Mehta and A.K. Sinha (Eds.), *Global Warming, Human Factors*

and Environment: Anthropological Perspectives. New Delhi: Excel India Publishers, pp. 285-292.

Samson Singh, M. and Dkhar, J.W. 2013. Growing Obese in Manipur: Relationship between age and obesity among the Meitei males of Manipur, India. *Anthropologist*, 16(3): 753-756.

Soanes, R. and Marak, Q. 2013. The Clan System in a matrilineal society: Its organization, importance and function. *The Oriental Anthropologist*, 13 (1): 99-110.

Zehol, L. 2013. Gender justice in the Northeast India: An Anthropological perspective in gender sensitivity and justice. *Oriens Journal*, 4: 9-23.

Zehol, L. 2014. Rural Naga women as natural resource managers: Issues and challenges, In: Manis Kumar Raha (Ed.), *North East:*

The Human Landscape. New Delhi: Concept Publishing Company, pp. 212-219.

Published Abroad

Haloi, A. and Limbu, D.K. 2013. Socio-economic factors influence the age at first marriage of Muslim women of a remote population of North-East India. *Antrocom Online Journal of Anthropology*, 9:75-79.

Haloi, A. and Limbu, D.K. 2013. Nutritional status, fertility and factors associated with anaemia: A cross sectional study among a rural population of Muslim women in Assam, India. *Anthrop.Anz.*,70:193-201.

Books/Book Chapters/Proceedings

Marak, Q. 2014. *Living Traditions: An Ethnoarchaeological Study of Garo Hills, Meghalaya, India*. Saarbrücken: LAP.

Research Projects

Ongoing Projects

Title of the Project	Name of PI/Co-PI	Funding Agency	Amount received
Nepal on the Move: Conflict, Migration and Stability	Prof. T. B. Subba and Dr. Ranjan Gupta	Danida Fellowship Centre, Denmark	18.54 lakhs
Rice and Aba Cha'a: Stories and Practices from Garo Hills Meghalaya	Dr. Q. Marak	IGRMS, New Delhi	10.60 lakhs
Nude Images of Northeast India: Interpreting Verrier Elwin's Ethnographic Photographs	Dr. Q. Marak	ICSSR-NERC, Shillong	0.60 lakhs
Red Blood Cell Antigen Typing among Indigenous Populations of Meghalaya and Native Population of Mumbai	Dr. B. Langstieh, Dr. L.N. Lyngdoh, NEIGRIHMS, and Dr. K. Vasantha, NIIH, Mumbai	DBT, Govt. of India	8.70 lakhs

Academic Collaborations

India

Prof. R. Khongsdier collaborated with Dr. S. Bisai and Dr. K. Bose, Vidyasagar University, in a project on “Body composition in relation to obesity and associated factors among adolescents in Meghalaya and West Bengal”.

Abroad

Dr. B.T. Langstieh corroborated with: (i) Prof. Maria Sasvari-Szekely and Dr. Csaba Barta, Institute of Medical Chemistry, Molecular Biology and Patho-Chemistry, Semmelweis University, Budapest, Hungary, and Dr. Anna Szekely, Institute of Psychology, Eötvös Loránd University, Budapest, Hungary, in a project on psychogenetics, (ii) Prof. Donna Leonetti and Dr. Geoff Kushnick, Department of Anthropology, University of Washington, Seattle, in a project on human behavioural ecology.

Dr. G. Ranjan corroborated with Dr. J. Seberg, Department of Anthropology, Aarhus University, Denmark, in a project titled “Nepal on the Move: Conflict, Migration and Stability.”

Dr. Sudipta Ghosh corroborated with Prof. Tom D. Brutsaert of Syracuse University and Prof. Fabiola Leon, President of UPCH university of Lima, Peru, in a project entitled “Natural selection and Genes determining Higher Arterial Saturation in Peruvian Quechua” funded by NSF, USA.

Honours/Awards/Recognitions

Prof. R. Khongsdier was appointed as an Expert Member of the State Level Scrutiny Committee for Schedule Tribes, Government of Meghalaya.

Other Activities

Prof. R. Khongsdier served as a member of the Editorial Board of the Journal of Human Biology, Anthropologist Journal, and Journal of Biological Sciences.

Prof. L. Zehol coordinated the UGC-Capacity Building Sensitization/Awareness/Motivation Workshop of Women Managers in Higher Education at NEHU, Shillong (June 11-15, 2013), (ii) delivered a lecture on “Gender: A Conceptual discussion” in the UGC-Refresher Course in English, UGC- academic Staff College, NEHU (March 30, 2013), (iii) delivered a lecturer on “Gender and Folklore” in the UGC-Refresher Course in Cultural and Creative Studies, UGC-Academic Staff College, NEHU (August 01, 2013), and (iv) delivered a lecture on: (a) “Historiography Trends, Prospects and Challenges: Misconception on Northeast” (b) “Negotiating Ethnicity – Ethnic Tensions and Conflicts” in the UGC-Refresher Course in History, UGC-Academic Staff College, NEHU (March 01-4, 2014), (vi) acted as a resource person in the discussion on “Misconception on Northeast& creative engagement with the culture dynamic of the Northeast India” held at IIM, Shillong (August 13-14, 2013), (vii) acted as a resource person on “Research Design in ICSSR-NERC-capacity building for Faculty Members in Social Science” in ICSSR-NERC, Shillong (March 07, 2014), and acted as a chair person in Technical Session-V of the national seminar on ‘Diaspora and Folklore: Exploring the Changing Dimensions of Folklore in Tribal Diaspora’ organised by the Department of Cultural and Creative Studies, NEHU, Shillong (March 28, 2014).

- Dr. Geetika Ranjan participated in workshop under the ongoing project entitled “Nepal on the Move: Conflict, Migration and Stability - Nepalese Migrants in the Coal-Mines of India’s Northeast: Risk, Remittances and Return to Nepal” at Aarhus, Denmark (June 19- 28, 2013). She also participated in workshop under the same project at Kathmandu, Nepal (February 24-28, 2014).
- Ms. V. Pakyntein participated as a Resource Person in (i) UGC National Workshop on ‘Capacity Building for Women Managers in Higher Education- Sensitization/ Awareness/Motivation (SAM) Workshop’ organized by Tripura University, Suryamaninagar, Agartala (April 02, 2013). As Trainer Associate she also facilitated the theme on ‘Managing Personal and Professional Roles’ in three sessions: (a) Introducing Personal and Professional Roles, (b) Work System and Professional System, and (c) Integration of Social and Professional Roles, and (ii) attended the workshop on ‘Women in Leadership: The Unknown Woman’ organized by Climate Change Adaptation in North Eastern Region of India, Shillong (CCA-NER) and GIZ (German Institute of International Development) at Asian Confluence Centre, Shillong (October 23-24, 2013).
- Dr. Q. Marak attended national workshop on ‘Experimental Lithic Knapping & Microwear Studies’ at Administrative Training Institute (ATI), Kohima (March 15-23, 2014) organised by the Department of History & Archaeology, Nagaland University, Kohima campus, Meriema in joint collaboration with the Indian Council of Historical Research (ICHR), New Delhi.
- Dr. Sudipta Ghosh delivered a lecture on ‘Chronic Energy Deficiency and Morbidity among Santhals of West Bengal, India’ in Biological Anthropology Unit, Indian Statistical Institute, Calcutta (November 21-23, 2013) and (ii) attended ICSSR workshop on ‘Capacity Building Programme for Social Science Faculty Members’ organised by the Department of Anthropology, University of Delhi (February 03-14, 2014).

DEPARTMENT OF ENVIRONMENTAL STUDIES

Head : Prof O. P. Singh
Telephone : 0364-272-1159
E-mail : opsinghnehu@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	B. K. Tiwari M Sc (Gorakhpur) Ph.D. (NEHU)	Natural Resource Management
	Lalit Kumar Jha M.Sc (Bhagalpur); Ph.D. (LNMU), Diploma in Forestry (FRI Dehra Dun)	Forestry, Forest Laws and Rural Development
	O. P. Singh, M.Sc. & Ph.D. (BHU)	Environmental Monitoring and Remediation of Degraded Ecosystems
	Devesh Walia, M.Tech. (Dr H S G Univ), Ph D. (Gauhati)	Tectonics, surface and subsurface imaging
	D. Paul, M.Sc. & Ph.D. (NEHU)	Entomology, IPM, Soil faunal ecology and biodiversity
Assistant Professor	S. S. Chaturvedi M.Sc (Gorakhpur), Ph.D. (BHU)	Environmental Monitoring and Phytoremediation

Thrust Areas of Research

Biodiversity Conservation, Environmental Monitoring, Forest Management, Natural Resource Management, Environmental Impact Assessment, Environmental Biology, Integrated Pest Management, Policy Oriented Research on Forest and Environment and Watershed Management; Magnetotelluric studies, Global Positioning system studies, Radon activity concentration, micro-seismicity and seismic disaster management in NE Indian Region.

Brief Statement of Academic Activities

The Department organized seminars and undertook research projects aimed at creating

much-needed database for promoting ecologically sound and sustainable development of northeast Indian region. 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 and radon activity concentration measurement. The Department received grants from a number of national and international agencies viz., University Grants Commission, New Delhi; Ministry of Water Resources, GOI, New Delhi; North Eastern Electric Power Corporation (NEEPCO), Guwahati to support the research and other activities of the Department. The grants received from

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various external funding agencies were used to strengthen ongoing research and extension

activities and in development of laboratory and other infrastructure.

Students' Profile

Enrolment Capacity: M.Sc. – 25; Ph.D. – Variable

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	nil	23	2	6	19	24	1	25
Ph.D.	nil	3	1	1	3	3	1	4

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	1	19	2	9	13	15	7	22
Ph.D.								

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Shiv Kumar Prasad	Biochemical Responses and Ultrastructural Changes under Environmental Stress in Some Hill Stream fishes of Meghalaya	Prof. O. P. Singh
P. Nylla Rymbai	Geomorphological, Biophysical and Socio-economic Attributes of Umbanum Micro Watershed	Prof L.K. Jha
Jimcarbrist P. Marak	Assessment of Provenance Variance of <i>Pinus kesiya</i> Royle ex Gord in Meghalaya	Prof. L.K. Jha
Niranjan Kumar	Assessment of Radiation Level in the Edible Biota due to Naturally Occurring ⁴⁰ K, ²³⁸ U and ²³² Th Radionuclides in Domiasiat area of Meghalaya	Dr. S. S. Chaturvedi
Anamika Upadhaya	Biodiversity and Nutritive Value of Semi-wild and Wild Citrus species of Meghalaya	Dr. S. S. Chaturvedi B. K. Tiwari (Joint Supervisor)
Donboklang Marbaniang	Heavy Metal Removal Potential of some Aquatic Macrophytes of Khasi Hills districts of Meghalaya	Dr. S. S. Chaturvedi

School of Human and Environmental Sciences

Beula Sharon Challam	Effect of Dairy Effluent on Growth, Nutrient uptake and yield of Rapeseed (<i>Brassica Campestris</i> L.) and Maize (<i>Zea mays</i> L.)	Dr. S. S. Chaturvedi
Sudipta Dey	Nutritive Values of Wild Edible Insects of Meghalaya	Prof. D. Paul
Athoibi Nongmaithem	Study on Biodiversity of Soil Arthropods in Forests and Agroecosystems of Meghalaya	Prof. D. Paul and Prof L. K. Jha
Arvind Kumar	Hydrogeochemical Study of Hot and Saline springs of North East India	Prof. D. Walia
Marvellous B. Lynser	Forest products of Raid Saw Sympet, Meghalaya and their Contribution to the Livelihood of the People	Prof. B.K. Tiwari

Courses Conducted

Postgraduate

Semester-I : Environment, Ecology and Ecosystem Dynamics
Environmental Pollution
Forestry and Water Resources
Practicals

Semester-II : Environmental Microbiology, Biotechnology and Toxicology
Environmental Impact Assessment and Environmental Policies
Practicals
Remote Sensing and Geographical Information System
Environmental Law
Natural Resource Management

Semester-III : Environmental Geoscience and Energy
Research Methods, Techniques and Statistical Analysis
Practicals
Disaster Management

Environmental Issues and Problems of North East India

Semester-IV : Environmental Economics and Sociology
Forest Management and Biodiversity
Practicals
Project work and Field work/
Study Tour

Ph.D. Courses

Research Methodology in Environmental Science
Contemporary Environmental Science
Review of Literature

Educational Tour of Students

Teachers-in-Charge: Prof. O.P. Singh & Prof. L.K. Jha

Places/Institutions Visited: Kolkata, Godkhali, Sundarban

Duration of Tour: 11 days

Purpose of Tour:

a. To visit research and academic institutions

- b. To visit different habitats and ecosystems
- c. Collection and study of different geo-environmental/ industrial areas and submission of report.
- d. To study Mangrove and Marine ecology

Seminars/Conferences/Symposia/Extension Programmes etc.

Organized

Prof B. K. Tiwari organized

National Conference on Biodiversity and Environment (NCBE-2014) on 10-12 February, 2014 in collaboration with Bishop Heber College, Tiruchirapalli, Tamilnadu, at Shillong Science Centre, NEHU, Shillong

Shillong Water Conclave on 22nd March 2014 in collaboration with Meghalaya Water Foundation and Water Resources Department of Government of Meghalaya at Multi Use Convention Centre, NEHU, Shillong

Participated

Prof B. K. Tiwari participated in

26th International Congress for Conservation Biology, Baltimore, USA on 21-25th July, 2013 and presented paper entitled “Technological Innovations in Shifting Cultivation practices by three tribal farming communities of Meghalaya, North east India.

Regional Seminar on “Burning Environmental Issues: Risk to Biodiversity and Human Health, with Special Reference to North East India” organized by St Mary’s College, Shillong. Chaired the Inaugural Session and presented Key Note address on

“Environmental Issues risk to biodiversity and Human health with special reference to North East India”.

“Group convergence method workshop on revision of retes of NPV applicable for different class/category of forests” organised by Indian Institute of Forest Management, Bhopal on 26th April, 2013.

“Knowledge sharing workshop on Ecosystem based adaptation concepts and practices” organised by Commission on Ecosystem Management, IUCN- South Asia on 28th January, 2014 in Kathmandu.

101st Session of Indian Science Congress, presented invited paper entitled “Traditional knowledge based biodiversity conservation and Natural Resource management practices of Tribal people of North East India on 3-7 February, 2014 in Jammu.

National Conference on Biodiversity and Environment (NCBE-2014) on 10-12 February, 2014 delivered the Keynote Address on the theme of the Seminar held at Shillong Science Centre, NEHU, Shillong.

Publications

Research Papers

Published in India

Giri, N., Singh, O.P. (2012). Biomonitoring of water quality using benthic macro-invertebrates of river Singye Chhu in Bhutan. *J. Basic and Applied Biology* 6: 44-49.

Jha, L. K. (2013). Critical analysis of the National and the State’s enactments and the Courts pronouncements for arriving at comprehensive legal definition of ‘Forests’ and ‘Plantation Forests’ for

- institution in the National enactment [The Forest Act, 1927 or the Forest (Conservation) Act, 1980]. *Environment and Forest Law Times Journal* 3: 13-26.
- Jha, L. K. and Imotemsu (2013). Need for institution of provisions in the ancient monuments and archaeological sites and remains (Amendment and Validation) Act, 2010 to respect the Rights of the individuals, clan and communities of the North-eastern states, granted vide special provisions of the constitution of India. *Environment and Forest Law Times Journal*, 3: 18-27.
- Imotemsu and Jha, L. K. (2013). Extension of provisions of the Forest (Conservation) Act, 1980 in the State of Nagaland: Critical evaluation on its applicability and impact. *Environment and Forest Law Times Journal*, 3: 97-104.
- Imotemsu and Jha, L. K. (2013). Provisions in the Biological Diversity Act, 2002 having bearing on the State Governments and gaps need to be examined to strengthen the Act. *Environment and Forest Law Times Journal*, 3: 81-89.
- Paul, D. and Dey, S. (2013). Nutritive potential of the silkworm *Bombyx mori* and its Socio economic significance. *Ann. Entomol.*, 31: 67-73.
- Marbaniang, D. and Chaturvedi, S.S. (2013). Bioaccumulation of nickel in three aquatic Macrophytes of Meghalaya, India. *Journal of Sustainable Environmental Research*, 2: 81-90.
- Challam, B. S. and Chaturvedi, S.S. (2013). Effect of treated dairy effluent on height and yield of *Zea mays* L. *Rasayan J. Chem*, 6: 153-157.
- Published Abroad**
- Giri, N. and Singh, O.P. (2013) Urban growth and water quality in Thimphu, Bhutan. *J. Urban & Envtl. Engg* 7: 82-95.
- Chase, P. and Singh, O.P. (2013) Uses and conservation of ethnomedicinal herbs by Angamis of Nagaland. *J. Tropical Med. Plants* 14: 51-58.
- Paul, D. and Dey, S. (2014). Selenium content and uptake in crops as affected by soil Selenium content and implications on human health. *Comm. Soil Sc. & Plant analysis*, 45: 429-436.
- Books/Book Chapters/Proceedings**
- Tiwari, B. K. (Editor) (2012). *Joint Forest Management in North-East India A Trainers' Resource Book*. Research India Publications, Delhi, 357 p, ISBN: 978-81-904362-6-7
- Malhotra, K.C., Saroj K. Barik and Brajesh K. Tiwari (Authors) (2013). *Micro-level People's Perception on Climate Change*, 386 p, Regency Publications, New Delhi, ISBN: 978-81-89233-89-1
- I. Ao, A. Lakshminath and L.K. Jha (2013). *Biological Diversity Acts*. A. P. H. Publishing Corporation, New Delhi, pp 1-441.
- Ajai and Devesh Walia (Editors) (2013). *Challenging Areas in Earth Science Research Towards Empowering the Society*. ISBN: 81-81837-14-4

Funds Received from Agencies including NEHU/UGC

Research Projects

Ongoing

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	Impact of Mining on Water Resources of Jaintia Hills, Meghalaya.	Prof. O. P. Singh	Ministry of Water Resources, New Delhi.	Rs. 5,47,000/-
2.	Assessment of lipids and fat soluble vitamins in wild edible insects of Meghalaya	D. Paul	DRDO	3.6 Lacs
3.	Geophysical studies in southern part of Shillong plateau using micro-earthquake technique	D. Walia	NEC	
4.	Impact of fire and grazing on the structure and function of grassland ecosystem of Cherrapunjee,	B. K. Tiwari	Ministry of Environment and Forests, New Delhi	3.8 Lacs

Completed during Year

No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	Implication of faunal grazing on available soil Nitrogen in Forests and agroecosystems of Meghalaya	D. Paul	UGC	10.6 Lacs
2.	Magnetotelluric Studies in NE India	Devesh Walia	MoES, New Delhi	113 Lacs

Academic Collaborations

Professor B. K. Tiwari has research collaboration with Friedrich-Schiller-Universität Jena, Löbdergraben 32, 07743, Jena, Germany, and during the year under report NEHU signed a MOU with Friedrich-Schiller-Universität, Jena to institutionalize the on-going collaboration with Professor Tiwari as one of the nodal points.

Professor Devesh Walia has research collaboration with EOS- NTU, Singapore,

IIG, Navi Mumbai, Department of Physics, NEHU, Shillong.

Professor Devesh Walia has research collaboration with Earth Observatory of Singapore, NTU, Singapore; IIG, Navi Mumbai, Department of Physics, NEHU, Shillong.

Honours/Awards/Recognitions

Prof B. K. Tiwari

Awarded two months DFG-INSA Fellowship under International Collaboration/Exchange

School of Human and Environmental Sciences

Programme during 2013 to visit Friedrich-Scheller-Universität, Jena, w.e.f . 10 October -9th December, 2013.

Elected Fellow of The Society of Ethnobotanists in 2013 for his contributions in the interdisciplinary Science of Ethnobotany.

Member Programme Advisory and Monitoring Committee (PAMC) of National Programme on Carbon Sequestration (NPCS) Research of Department of Science and Technology, Government of India, New Delhi.

Member of Core Group, Commission on Ecosystem Management IUCN, South Asia

Member of Meghalaya Heritage Authority, Government of Meghalaya 2013

Member, Academic Council, Meghalaya Institute of Natural Resources, Govt. of Meghalaya

Member of Task Force on Climate Change Adaptation Programme in Meghalaya

Member of Expert Committee of Meghalaya Biodiversity Board, Government of Meghalaya

Other Activities

Professor O. P. Singh

Participated, delivered a talk and Chaired a Session in Seminar on 'Clean technology: Energy & Water sector' organized jointly by Indian Chamber of Commerce (ICC), European Business and Technology Centre and Fraunhofer (Germany) in Shillong during 27-29th May, 2013. The topic of the talk was "Clean technology needs of Meghalaya in Water sector".

Delivered a lecture on "Vikas aur Paryavaran: Sanrakshan ke Sadhan" at the Atomic

Minerals Directorate for Exploration & Research (NER), Department of Atomic Energy, Government of India, Shillong on 21.3.2014.

Delivered a lecture in refresher Course organized by the Department of Adult & Continuing Education, NEHU on Disaster management. The topic of the lecture was "Natural and Manmade disasters and its implications in North Eastern Region on 19.11.2013.

Professor B. K. Tiwari

Delivered a lecture entitled "Nurture Nature for Future" in the refresher course organized by Department of History, NEHU, Shillong on 12th March, 2014.

Delivered an invited talk entitled "Traditional Community Forest Management Systems in Meghalaya, North East India: A working model of Common Property Regime" in Fakultät für Umwelt und Natürliche Ressourcen, Albert-Ludwigs-Universität, Freiburg, Germany on 3rd December, 2013.

Supervised M. Sc Thesis entitled "Institutions in Sustainable Community Forestry Forest Conservation, Equity, and Cross-level Governance Interactions in Mawlyngbna, Meghalaya, India" in the Department of Forest Ecology and Management Faculty of Environment and Natural Resources, Albert-Ludwigs-Universität Freiburg.

Professor Devesh Walia

Participated in the NDMA Discussion meeting with NE States for "M 8.7 Shillong 1897 Earthquake Scenario: NE multistate preparedness campaign" held on 27th January 2014; and was the Observer during the Mega Mock exercise in Shillong on 10th March 2014.

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Participated in the School on “Fourier analysis and its applications” organized by Department of Mathematics, NEHU from 18th to 29th November 2013.

Is the External Member to audit internal efficiency/ responsiveness/ service delivery

of Geological Survey of India - NER for implementation of “Sarvottam”.

Delivered a lecture in a Refresher Course organized by the Department of Adult & Continuing Education, NEHU on Disaster management.

DEPARTMENT OF GEOGRAPHY

Head : Prof. Zahid Husain Qureshi
Telephone : 272-3201, 272- 3209 (O), 09463105768 (M)
Email ID : husainzahid1@rediffmail.com; ZHQureshi@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialisation
Professors	A.C. Mohapatra, M.A., M. Phil. (JNU), Ph. D. (NEHU)	Regional Development & Planning, Philosophy and Methodology in Geography, Environmental Issues
	Surendra Singh, M.A., Ph. D. (Meerut) (Retired on superannuation on 30 th September, 2013)	Agricultural Geography, Area Planning and Quantitative Techniques
	B.S. Mipun, M.A., (JNU), Ph.D. (NEHU)	Agricultural Geography, RS and GIS
	D. K. Nayak, M.A., M. Phil., Ph. D. (JNU)	Social and Population Geography, Gender and Health related Issues
	Z. H. Qureshi, M.A., Ph. D. (M.L. Sukhadia University)	Geomorphology, Environment and Ecology
	H. J. Syiemlieh, M.A., M. Phil., Ph.D. (NEHU)	Fluvial and Applied Geomorphology
	Prof. Sunil Kumar De, M.Sc., Ph.D. (Calcutta University)	Geomorphology (Geomorphological Hazards)
Associate Professor	Mr. P. G. Momin, M.A. (JNU), M. Phil. (NEHU)	Climate and Ecology
Assistant Professors	Dr. P. K. Rynnga, M.A. (NEHU), M. Phil., Ph.D. (JNU)	Regional Development, Urban Geography, Remote Sensing & GIS
	Dr. S. Purkayastha, M.A., M. Phil., Ph.D. (NEHU)	Social and Population Geography, Development and Environmental Issues

Thrust Areas of Research

(i) Geomorphology with focus on Regional and Applied Geomorphology, (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

One candidate qualified in the UGC NET-JRF, and as many as twenty (20) candidates from the Department qualified in the UGC NET (8 Females and 12 Males). Apart from its usual teaching and research programmes, the Department was involved in organising a joint Workshop in collaboration with the NESAC, Barapani and IGU. Only the Department of Geography has the distinction of running a self-financed two-semester PG Diploma in

Geoinformatics in the University. The fourth batch is going to complete the Diploma in July, 2014. The faculty remained active in publication of research papers in a number of international and national journals as well as in book chapters. Most of the faculty members attended and presented research papers in national and international Conferences/ Seminars. A number of research scholars also attended and presented research papers in national and international Conferences and Seminars. As many as seven research scholars were awarded Ph. D. degree. The research scholars of the Department took keen interest in running of the '*NEHU Geographical Research Forum*' with an objective of sharing, exchanging and improving intellectual capacity. The forum organised a number of talks on contemporary issues of geographical significance, and a number of research scholars presented research papers and progress of their works in the *Forum*. The Department has Geographical Society of North-Eastern Hill Region (India) which publishes the journal "*Hill Geographer*" regularly.

Students' Profile

Enrolment Capacity: M.A./M.Sc.- 38 M.Phil. - 8 Ph. D.: Variable PGD in Geoinfo: 20

Actual Admission

	SC	ST	Gen	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A./M.Sc.	-	35	3	18	20	24	14	38
M. Phil	-	7	1	5	3	2	6	8
Ph.D.	2	9	3	10	4	3	11	14
PG Diploma in Geoinformatics	2	11	5	9	9	8	10	18

School of Human and Environmental Sciences

Degrees Awarded

	SC	ST	Gen	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A./M.Sc.	-	35	3	15	23	19	19	38
M. Phil	-	4	3	2	5	2	5	7
Ph.D.	-	4	3	2	5	3	4	7
PG Diploma in Geoinformatics	2	12	6	7	13	7	13	20

Details of Students Awarded Ph.D. Degree

Name of the Students	Title of Thesis	Name(s) of Supervisor/(s) Joint Supervisor
Mr. Gajen Bhuyan	Floods and its Socio-Economic Consequences in the Lower Reaches of Dikrong River	Prof. H.J. Syiemlieh
Ms. Zona Bhuyan	Women in Urban Informal Sector: A Study in Women's Participation and Empowerment in the City of Guwahati	Prof. A.C. Mohapatra/ Prof. B.P. Panda (Jt. Supervisor)
Ms. Madhuparna Bhattacharjee Sharma	Quality of Life and Livelihood Pattern in Lower Subansiri District: A Geographical Study	Prof. A.C. Mohapatra
Ms. Bathsheba G. Pyngrope	Identification and Assessment of Potentials of Ecotourism Sites in Khasi and Jaintia Hills, Meghalaya	Dr. L. Cajee
Ms. Banida Shisha Kharkongor	Road Network and Socio-Economic Development in Ri-Bhoi District, Meghalaya	Prof. S. Singh
Ms. Markynti Swer	Ageing of Population of North Eastern Region of India with special reference to the state of Meghalaya	Prof. D. K. Nayak
Mr. R. Vanlalvena	Cropping Pattern and Agricultural Productivity in Lunglei District of Mizoram	Prof. B.S. Mipun

Placement of Students

Mr. Sanjay Choudhury, Lecturer in NDA, Kharagwasla, Pune (Maharashtra)

Courses Conducted

M.A.

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)

Semester III : Regional Development and Planning, Social and Cultural Geography (open course), Environment and Development (open course), Research Methodology, Computer Aided Cartography (Practical), Remote Sensing and GIS (Practical)

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

M.Phil. / Ph. D.

Research Methodology in Geography, Advanced Tools and Techniques 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 Techniques for Agricultural Geography, Contemporary Issues in Urban Development with Special Reference to India, Geographical Perspectives in Cultural Tourism.

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

Study Tours/Field Trips of Students

1. Teacher in-Charge: Dr. P.K. Ryngha;
Accompanying teacher: Prof Sunil Kumar De

Places visited: Kolkata-Sundarbans-Puri

Duration: Fourteen days from 12th to 25th February 2014

Purpose: All India Study Tour under Course No. GEOC 201- Geography of India

2. Teacher In-Charge: Prof. H.J. Syiemlieh

Places visited: In and around Mawtwar, East Khasi Hills District, Meghalaya

Duration: Seven days from 14th December to 20th December, 2013

Purpose: Socio-economic and physical survey by the IV Semester M.A. /M.Sc. students, under Course No. GEOC 401- Dissertation

Seminars/Conferences/Symposia/Extension Programmes

Organised

Organised in collaboration with the NESAC and IGU a joint Workshop on 'Holistic Approach using Integrated Geophysical Studies for the Management of Natural Hazards', from 21st to 23rd April, 2013, at NESAC, Barapani, Shillong.

Participated

Prof. A.C. Mohapatra was invited as past President, IIG, and chaired a Session at the Indian Geographer's Meet, Dept. of Geography, Univ. of Burdwan, Burdwan (W.B.), from 11th to 13th Nov., 2013.

As Resource Person presented a paper on "The Changing Role of State in Post-Liberalisation Era in the Indian Economy: Perspectives on Regional Development" in the National Seminar on 'Contradictions of Development in the Globalising South: A Spatio-Social Perspective', Dept. of Geography, Univ. of Bombay, Mumbai, on 25th and 26th Feb., 2014: As Resource Person presented a paper on 'Pedagogy in Geography' in National Workshop on 'Geography Teaching at UG & PG Level in India' Dept. of Geography, Univ. of Bombay, Mumbai, on 27th and 28th February, 2014.

Prof. B.S. Mipun attended the National Seminar on 'Welfare Schemes of Govt. of India' Amguri College, Sibsagar, Assam, from 26-27th Oct., 2013 as a Resource Person and Chaired a Session.

Chaired a Session in the 35th Indian Geographers' Meet and International Conference, Dept.

of Geography, Univ. of Burdwan, Burdwan (W.B.), from 11th to 13th, Nov., 2013.

Prof. D.K. Nayak presented a poster on "An assessment of redistribution of population in Majuli Island, India due to river bank erosion" in the XXVII IUSSP International Population Conference, Busan, Republic of Korea, from 26th to 31st August, 2013.

Chaired a session and presented a paper on "Reorienting Geography Education at Post Graduate Level" in the 35th Geographers Meet and International Conference on Environment Development and Equity, University of Burdwan, Burdwan (W.B.), from 11th to 13th Nov., 2013.

Chaired a Session and presented an invited lecture on "Sustainability of Commercialisation of Agriculture in Tribal areas of the North-East: The Case of Meghalaya" in the National Conference on Sustainable Resource Development and Management, Pt. Ravishankar University, Raipur, Chhattisgarh, from 20th to 22nd Jan., 2014.

Chaired Technical Session III, in the National Seminar on Land, People and Society, Dept. of Geography, North Bengal University, Darjeeling, on 6th and 7th March, 2014 : Delivered the Key Note Address in the National Seminar on Living with Hazards, Dept. of Geography, North Bengal University, Darjeeling, on 27-28 March, 2014.

Chaired a Session on Experiments in Curriculum and Pedagogy, and presented a paper on Rethinking Regional Geography, in the Colloquium on 'Rethinking Geography Education and Research in India', Centre for the Study of Regional Development, J.N.U., New Delhi, from 9th to 30 March, 2014.

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Prof. Z.H. Qureshi presented a paper (with C. Lalnunkima) on 'Analysis of Causative Factors of Landslides in Aizawl' in the 'Regional Workshop on Disaster Management, with special reference to Landslides', Geological Survey of India, North East Region, Shillong, on 22 and 23 October, 2013 : Presented a paper on 'Causative Factors of Landslides and Development' in the National Seminar on 'Strategy to Mitigate Disaster in North Eastern Region, with special reference to Arunachal Pradesh', Arunachal University of Studies, Namsai (Ar. P.), on 30th November and 1st December, 2013.

Attended as the Guest of Honour, the Inaugural Function and Chaired the First Technical Session of the National Seminar on 'Strategy to Mitigate Disaster in North Eastern Region, with special reference to Arunachal Pradesh', organised by Arunachal University of Studies, Namsai (Arunachal. Pr.), on 30th November, 2013.

Prof. H.J. Syiemlieh presented papers on 'Application of SCS Curve Number in Runoff estimation in Cherrapunjee, Meghalaya' (with S. Marwein) and 'Bedload Grain Size distribution along the main channel of Pahamsyiem Watershed' (with R. Khongjee), in the 26th IGI Annual Conference at Vadodara, Dept. of Geography, M.S. University of Baroda, Vadodara, from 20th to 22nd Nov., 2013.

Presented a paper on 'Introduction to one of the World's Most Rainiest Places: Meghalaya' in the Workshop on 'Fluvial & Coastal Disasters Research in Asia', DPRI Japan, on 15 January, 2014.

Presented a paper on 'Environment characteristics of the North Eastern Indian Sub-Continent –

Special reference to the High Rainfall areas of Meghalaya Plateau' in the Workshop on 'Disasters and People's Livelihood in South Asia', Tohoku University, Tokyo, on 20 January, 2014.

Prof. Sunil Kumar De delivered a special lecture as a Resource Person on "Anthropogenic Impact on Landslides in the Darjiling Himalayas", in the UGC sponsored National Seminar on 'Contemporary Issues on Environment and Development in India and Adjacent Countries', Dept. of Geography, Kalyani Mahavidyalaya and Dept. of Environmental Science, Kalyani University, Kalyani, Nadia, on 20th and 21st September, 2013.

Presented a paper (with Shreya Bandyopadhyay) on 'Bank Erosion Hazard Zonation- a proposed method and its application on the River Haora, Tripura, India, in the 35rd Indian Geographers Meet and International Conference, Dept. of Geography, University of Burdwan, Burdwan (W. B.) from 11th to 13th November 2013.

Presented a paper (with Kapil Ghosh) on 'Estimation of Soil Erosion and Sediment Yield of the Haora River Basin using Sedimentary Delivery Ratio (SDR) Method in the 26th Annual Conference of the Indian Institute of Geomorphologists (IGI) on 'Dynamics of Earth Surface Processes', Dept. of Geography, M.S. University of Baroda, Vadodara, from 20th to 22nd November 2013.

Delivered an invited talk on "Human Interference on Landslides in Darjiling Himalayas and their Mitigation" in the National Seminar on 'Understanding Hazards and their Mitigation Options', School of Sciences, Netaji Subhas Open University, Kolkata, from 28th to 29th March, 2014

Organized the IAG/AIG EC meeting at the University of Vienna as the Secretary General and participated the European Geosciences Union Assembly, Vienna, Austria, on 2nd May, 2014.

Chaired the Sessions on ‘Geomorphological Hazards’ and presented papers on (i) A proposed method of Bank Erosion Hazard Zonation and its Application on the River Haora (as Co-Author), (ii) A comparative study between Weight-rating and Analytical Hierarchical Methods of Landslide Susceptibility Zonation and Geotechnical investigation of some individual landslides in Dhalai District, Tripura, India, and (iii) Landslide Susceptibility in the North District of Sikkim, India, in the 8th International Conference on Geomorphology, Paris, France, from 25th Aug., to 5th Sept., 2013

Dr. P.K. Ryngnga Presented a paper on the ‘Role of traditional Institutions in Developmental Process of Meghalaya’ in the National Seminar on ‘Democracy and Development in India’s North East: Challenges and Opportunities’, ICSSR-NERC, Shillong, on 18th and 19th December. 2013.

Dr. S. Purkayastha presented a paper ‘A comparative study on the socio-economic impact of limestone mining by corporate sector and individual miners in and around Shella, Meghalaya’ in the National Seminar on ‘Environmental Risk, Biodegradation and Human Health, St. Mary’s College, Shillong, on 15th and 16th May, 2013.

Presented a paper ‘Hydro- power development and the Lepchas: A case study of Dzongu in Sikkim, India ‘in the International Convention of Asian Scholars Meet held at Macau (People’s Republic of China), from 24th to 27th June 2013.

Publications

Research Papers

Published in India

Bandyopadhyay, Shreya, Saha, Sushmita, Ghosh, Kapil and De, Sunil Kumar (2013). Validation of BEHI Model through field generated data for assessing bank erosion along the River Haora, West Tripura. *Earth Science India*, 6 (III): 126-135 (ISSN: 0974 – 8350).

Bandyopadhyay, Shreya, Ghosh, Kapil, Saha, Sushmita, Chakravorti, Sumanto and De, Sunil Kumar (2013). Status and Impact of Brick Fields on the River Haora, West Tripura. *Transactions*, 35 (2): 275-286(ISSN 0970-9851).

Mohapatra, A.C. (2013). Political economy of natural resources and geography, Presidential Address, 34th IIG, CESS, Trivandrum, *Transactions, Institute of Indian Geographers*, 35(2): 149-156.

Published Abroad

Bandyopadhyay, Shreya, Ghosh, Kapil, Saha, Sushmita and De, Sunil Kumar (2013). Channel plan form change and detachment of tributary: a study on the Rivers Haora and Katakhal, Tripura, India. *Geomorphology*, Elsevier, 193:1, pp. 25–35 (ISSN: 0169-555X).

Bhuyan, M. and Husain, Z. (2013). Shortage of Domestic Water in Jorhat Town, Assam, India, *International Research Journal of Social Sciences*, 2(6): 24-29 (ISSN 2319–3565).

Bhuyan, M. and Husain, Z. (2013). Implications of Water Stress on Women in Slums of Jorhat Town, Assam. *International Journal of Innovative Research and Studies*, 2(6):380-389(ISSN: 2319-9725).

- Bhuyan, M. and Husain, Z. (2013). Urban Growth and Water Supply in Jorhat, India. *Journal-American Water Works Association*, 105 (11): 72-75 (ISSN: 0003-150X).
- Bhuyan, M. and Husain, Z. (2014). Spatio-Temporal Variation of Scarcity of Water for Domestic Consumption: A Case Study of Jorhat Town, Assam. *International Journal of Earth Sciences and Engineering*, 7(1):128-134 (ISSN: 0974-5904).
- Ernst, N., Peterse, F., Breitenbach, S.F.M., Syiemlieh, H.J., and Eglinton T.I. (2013). Biomarkers record environmental changes along an altitudinal transect in the wettest place on earth, *Organic Geochemistry*:60: 93-99.
- Ghosh, Kapil, De, Sunil Kumar, Bandyopadhyay, Shreya and Saha, Sushmita (2013) Assessment of Soil Loss of Dhalai River Basin, Tripura, India using USLE. *International Journal of Geosciences*, 4(1): 11-23 (ISSN 2156-8367).
- Ghosh, Kapil, Bandyopadhyay, Shreya, Ghosh, Goutam Kumar and De, Sunil Kumar (2013). GIS based Landslide Vulnerability Assessment in Dhalai District, Tripura. *Journal of Geo-Environment Observer*, 2 (2): 19-25 (ISSN: 2277-6141).
- Mohapatra, A.C. and Bhuyan, Zona (2013). Women immigration in urban sectors of a Metropolitan city of Assam, India, *Clarion*, 1(2): 205-213.
- Purkayastha S. (2013). Hydro power development and the Lepchas: A case study of Dzongu in Sikkim, India, *International Research Journal of Social Sciences*, 2(8): 19-24 (ISSN 2319-3565).
- Ryngnga, P.K. (2014). Analysing Urban Land Use Change in GIS Environment. *International Journal of Scientific Research and Management*, 2(4): 738-741.
- Ryngnga, P.K. (2014). Measuring Traffic Congestion of Shillong: An Appraisal Study. *International Journal of Scientific Research*, 3 (5): 63-64.
- Turconi, Laura, De, Sunil Kumar, Demurtas, Francesca, Demurtas, Luca, Pendugiu, Bruna, Tropeano, Domenico and Savio, Gabriele (2013). An analysis of debris-flow events in the Sardinia Island (Thyrranian Sea, Italy). *Environmental Earth Sciences*, 69 (5):1509-1521 (ISSN: 1866-6280).

Books/Book Chapters/ Proceeding

- Bhuyan, M. and Husain, Z. (2013). Assessment of Water Stress Areas in Jorhat Town, Assam. In A. Sharma, (ed.), *Hydrology and Water Quality Monitoring*, Morigaon College, Morigaon, pp. 62-72. (ISBN: 978-927242-0-1)
- Husain, Z. (2014). Some Theoretical and Empirical Issues for consideration of the TAC on Landslide Management and Mitigation. *Proceeding of the Regional Workshop on Landslide Disaster Management*, Geol. Survey of India, NER, Shillong, pp.42- 45.
- Kima, C.L. and Husain, Z. (2014). Analysis of Causative Factors of Landslides in Aizawl. *Proceeding of the Regional Workshop on Landslide Disaster Management*, Geol. Survey of India, NER, Shillong, pp. 88-98.
- Mipun, B.S. and Sarma, Pranjit (2013). Modelling of New Habitat for Rhinos (Rhinoceros Unicorn) on the Basis of a Case

Study on Rajiv Gandhi Orang National Park of Assam”, in Ajai and D. Walia (eds.) *Challenging Areas in Earth Science Research Towards Empowering the Society*, NEHU Publications, Shillong, pp. 203-213. (ISBN No. 81-87837-14-4).

Nayak, D.K. (2012). Social Construction of Disasters, in Subir Sarkar (ed.), *Mapping Hazards and Disasters*, Dept. of Geography and Applied Geography, North Bengal University, Siliguri, pp. vi-ix.

Ryngnga, P.K. (2013). Ethnic Tensions and Community Conflicts in North East India: A Challenge to India's Integrity and Unity, in K.J. Azam, (ed.), *Conflicting Ethnicities: Locating the Local in the Global*, Manohar Publishers & Distributors, New Delhi, pp. 125-139.

Funds Received from Agencies including NEHU/UGC

From individual Research Projects funded by DST/BRNS/MoEF: 38.13 lakhs

UGC (SAP III) - 6.1 lakhs

DST-PURSE

Research Projects

“Desertification Status Mapping of India (Second Cycle)”. Principal Investigator: Prof. B. S. Mipun. Sponsored by MoEF, New Delhi. Grant : Rs. 17.84 lakhs

Rainfall-Runoff-Sediment Response near Uranium Mining Site, Domiasiat. Principal Investigator: Prof. H. J. Syiemlieh. Sponsored by BRNS, Mumbai. Grant : 20.29 lakhs.

Academic Collaborations

Prof. H.J. Syiemlieh and Mr. Danny M. Synnah are collaborating with (i) Dr. P. Prokop, Dept. of Geoenvironmental Research, IGIZ, Polish Academy of Sciences, Krakow, Poland.

Prof. H.J. Syiemlieh and Dr. L. Cajee are collaborating with Prof. T. Hayashi, Disaster Prevention Research Institute, Kyoto University, Japan.

Prof B.S. Mipun is a team member in the collaboration with Friedrich Schiller University, Jena, Federal Republic of Germany.

Honours/Awards/Recognition

Prof. D.K. Nayak appointed as member of the Academic Council, Sikkim University, Gangtok, for the period 2014-2016.

Prof. D.K. Nayak appointed as a member of the Project Advisory Committee (PAC) of the National Translation Mission (NTM) under the Central Institute of Indian Institute of Indian Languages (CIIL), for the period 2014-16.

Prof. Sunil Kumar De elected as the Secretary General of the International Association of Geomorphologists (IAG/AIG) for the period 2013-2017.

Other Activities

Prof. B. S. Mipun was an Advisory Committee Member in organisation of the Workshop on “Holistic Scientific Approach using Integrated Geophysical Studies for the Management of Natural Hazards” NESAC, Umiam, Meghalaya, organised by NESAC and IGU, on 22-23 April, 2013; Delivered Lectures in North Bengal University,

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Siliguri, 25-26, March 2014; Two lectures in the 24th Orientation Course, ASC, NEHU, June, 2013; One lecture in the 22nd Refresher Course, ASC, NEHU, August, 2013; Two lectures in the UGC Summer School, Education Dept, on Recent Advances in Science, ASC, NEHU, Shillong, Aug, 2013; One lecture in the UGC Refresher Course, Deptt. of Geography, University of Pune, Pune, Oct, 2013; Two lectures in the UGC Refresher Course, Dept of Adult & Continuing Edn, ASC, NEHU, Shillong, 19th Nov, 2013, Two lectures in the 26th Orientation Course, ASC, NEHU, Shillong, 11th Feb, 2014; Two lectures in the Refresher Course, Dept of History, ASC, NEHU, Shillong, 8th March, 2014.

Prof. D.K Nayak

Delivered a number of lectures in Refresher Course in English and Orientation Courses organized by Academic Staff College, NEHU, Shillong.

Dr. P.K. Ryngnga

Delivered two lectures in Refresher Course conducted by Department of Cultural and Creative Studies, North Eastern Hill University, Shillong, on 02nd August 2013; Two lectures in Refresher Course conducted by Department of Adult and Continuing Education, North Eastern Hill University, Shillong, on 22nd November 2013.

Dr. S. Purkayastha

Delivered lectures as a resource person in the UGC sponsored Refresher Course in Disaster Management, ASC, NEHU, Shillong, from 18th Nov. to 8th Dec. 2013; Delivered lectures as a resource person in the Programme Wooster in Shillong -A collaboration between Wooster College, Ohio, USA and St. Anthony's College, Shillong, from 15th May to 15th June, 2013.

DEPARTMENT OF RURAL DEVELOPMENT AND AGRICULTURAL PRODUCTION

Head : Prof. S.C. Srivastava
Telephone : 03651-221407; 09436313379
Email : Subhash58nehu @ yahoo.co.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Dr. S .C. Srivastava, Ph.D. in Economics (Allahabad University)	Regional Planning, Micro Planning, Development Studies, Rural Development
Associate Professor	Dr. D. C. Kalita, Ph.D. in Agricultural Economics (Assam Agricultural University)	Project Planning and Management, Micro-credit and Micro-finance, Research Methodology, Agricultural Marketing
Assistant Professor	Shri. J. P. Jaiswal, M.Sc. in Agricultural Engineering (Allahabad University)	Soil & Water Conservation
	Dr. B. K. Mishra, Ph.D. in Animal Husbandry and Dairying (Banaras Hindu University)	Dairy Technology
	Dr. Binu Mathew, Ph.D. in Horticulture (Bidhan Chandra Krishi Vishwavidyalaya)	Fruits and Orchard Management
	Dr. Lolly S. Pereira, Ph.D. in Horticulture (Bidhan Chandra Krishi Vishwavidyalaya)	Fruits and Orchard Management

Thrust Area of Research

The department mainly concentrates on multi-disciplinary research in the areas of the rural development, impact assessment, micro and decentralized planning, local governance, globalization and food security, marketing of rural products, agronomy, horticulture and animal science.

Brief Statement of Academic Activities

Being multidisciplinary in nature the department undertakes both teaching and research in the areas concerning rural development, agronomy, horticulture and animal science. The department provides both theoretical and practical exposure to M.Sc (RDAP) students in various areas relating to the multidisciplinary Post Graduate Programme within the stipulated time. In addition to this, the department is also involved in doing

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consultancy research and other projects. Visits to villages, entrepreneurial units and Institutions related to Rural development Horticulture, Livestock Management and Agronomy are regular features of the academic curriculum of

the M.Sc. Programme. The Department is also involved in field based studies, both through its Ph.D. and M.Phil Programme and by way of undertaking research projects.

Students' Profile

Enrolment Capacity: M.A.- 25; M.Phil.- 8; Ph.D.-Variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	-	23	1	8	17	22	3	25
M.Phil.	1	4	1	2	4	4	2	6
Ph.D.	-	4	3	2	5	4	3	7

Actual Admission

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	-	-	-	12	10	22	-	22
M.Phil.	-	-	-	-	-	-	-	-
Ph.D.	-	-	2	1	1	2	-	2

Degrees Awarded

Details of Students awarded Ph.D. degree

Name of the student	Title of thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Mr. Biswajit Paul	Physico-Chemical and Microbial Quality of Milk and Milk Products in Garo Hills, Meghalaya	Dr. B. K. Mishra
Ms. Ajanta Deb Kar	Diversification of Agriculture in West Garo Hills District, Meghalaya	Dr. Binu Mathew (Supervisor) Prof. Eugene D. Thomas (Jt. Supervisor)

Placement of Students

The Department does not have a placement cell. However, the students are mostly placed with District Rural Development Agencies, Meghalaya Integrated Basin Development and Livelihood Promotions Agency, etc.

Courses Conducted

Semester I : General Aspects of Rural Development
Introductory Agriculture and Agronomy
Fundamentals of Horticulture

School of Human and Environmental Sciences

	<p>Introduction to Animal Husbandry & Poultry</p> <p>Soil Conservation and Watershed Management</p> <p>Computer Applications.</p>	<p>Vegetables and Spices</p> <p>Processing of Livestock Products</p> <p>IEC and Rural Development</p> <p>Post-Harvest Management of Horticultural Crops</p> <p>Rabbit, Fishery and Poultry Production</p> <p>Micro-Enterprise and Non-Farm Sector Development</p> <p>Minor Horticultural Crops</p> <p>Indigenous Dairy Products and Soya Milk</p>
Semester II :	<p>Rural Development Approaches, Programmes and Policies</p> <p>Package of Practices for Field Crops</p> <p>Plant Propagation and Nursery Management</p> <p>Dairy and Livestock Development</p> <p>Farm Management</p> <p>Organic Farming</p>	
Semester III :	<p>Basic Statistics and Software Applications</p> <p>Rural Development Organizations, Institutions and Administration</p> <p>Production Technology of Horticultural Crops-I</p> <p>Principles and Practices of Dairy Farm Management</p> <p>Rural Development Planning and Project Management</p> <p>Commercial Floriculture and Landscaping</p> <p>Swine, Goat and Sheep Production</p> <p>Dairy Farming and Rural Development</p> <p>Economic Reforms and Rural Development</p>	<p>Ph.D. /M.Phil Courses</p> <p>Research Methodology</p> <p>Rural Development and Agricultural Production</p> <p>Rural Development and Sustainable Change</p> <p>Horticultural Production and Management</p> <p>Animal Production and Management</p>
		<p>Study Tour of Students</p> <p>Name of Teacher in-charge: Dr. B. K. Mishra</p> <p>Places/Institutions Visited: ANAND (Gujarat), Agra and New Delhi.</p> <p>Duration of the Tour: 19th Dec, 2013 to 31st Dec 2013</p> <p>Purpose of Visit: (a) To expose the students to various research and contribution made by ANAND Agriculture University, NDDB, AMUL, IRMA and Vidya Dairy. (b) To expose the students about Agra Fort and Taj Mahal followed by they have visited the development made by ICAR and IARI New Delhi.</p>
Semester IV :	<p>Rural Marketing and Entrepreneurship Development</p> <p>Research Methods</p> <p>Agricultural Surveying and Leveling</p> <p>Rural Credit and Micro-Finance</p> <p>Production Technology of</p>	<p>Seminars/Conferences/Symposia/ Extension Programmes etc.</p> <p>Participated</p> <p>Dr. Binu Mathew attended a <i>Short Term Course on Research Methodology</i> organised in</p>

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collaboration with the UGC-ASC NEHU Shillong from 24-29 March 2014

Presented as poster in the National seminar on 'Adaptation and Mitigation Strategies of Climate Change for sustainable livelihood' organised by COBAKAS, Uttar Banga Krishi Viswavidyalaya, Cooch Behar, West Bengal held on 5-7th March 2014 on the topic "Soil moisture conservation techniques in fruit orchard under contour system of planting in Garo hills, Meghalaya"

Presented a paper on "Vermicomposting – A profitable enterprise for rural youth". in the National Seminar on 'Entrepreneurship: A drive towards socio-economic development of North Eastern Region' organised by the Dept. of Management, NEHU Tura Campus, Meghalaya on 14th June 2013.

Dr. Lolly S. Pereira attended a Short Term Course on Research Methodology organised in collaboration with the UGC-ASC NEHU Shillong from 24-29 March 2014

Presented as poster in the National seminar on 'Adaptation and Mitigation Strategies of Climate Change for sustainable livelihood' organised by COBAKAS, Uttar Banga Krishi Viswavidyalaya, Cooch Behar, West Bengal held on 5-7th March 2014 on the topic "Soil moisture conservation techniques in fruit orchard under contour system of planting in Garo hills, Meghalaya"

Presented a paper on "Vermicomposting – A profitable enterprise for rural youth". in the National Seminar on 'Entrepreneurship: A drive towards socio-economic development of North Eastern Region' organised by the Dept. of Management, NEHU Tura Campus, Meghalaya on 14th June 2013.

Dr. B.K. Mishra attended a National Conference on *Contemporary Bioinformatics Researches in India* on 10th November, 2013 at Bioinformatics Center, Assam University, Silchar.

Attended the 6th NEBInet Coordinators Meet, Interactive meeting for North East Bioinformatics Center on 11-12 November 2013 at Assam University Silchar, Assam

Attended 25th Annual BTIS NET Coordinators Meeting on 27-28 February 2014 at CSIR, National Institute of Oceanography, Dona Paula, Goa.

Attended short term course on Research Short Term Course on Research Methodology organised in collaboration with the UGC-ASC NEHU Shillong from 24-29 March 2014

Publications

Deb Kar, A., Mathew, B. and Thomas, E.D. (2013) Diversification of agriculture in West Garo Hills District of Meghalaya (India) for sustainable rural development. *Transient*, 3: 47-60. (ISSN 2250-0650)

Dang, J.C., Shabaree, Y.A. Sangma and Binu Mathew (2013) In vitro germination of *Citrus indica* Tanaka – An endangered dwarf plant of Garo Hills, Meghalaya, India. *Transient*, 3: 61-67 (ISSN 2250-0650)

Mishra B. K., and Kumar Sunil, (2013). Private dairy farm management- A case study. *Indian Society of Animal Production and Management*, 28: 160-166

Mishra, B. K. and Choubey, C.S. (2013). Dairy husbandry in Indian economy. *Journal of The Kalash Science*, 1: 139-151.

Mishra B.K. (2013). Comparative studies on the sterilization of milk by conventional and microwave process. *Journal of The Kalash Science*, 1: 53-61.

Mishra B.K. (2013). A review on economic importance of bovine mastitis. *Transient*, 3: 157-168.

Paul, B. and Mishra B. K. (2013). Organoleptic quality of milk in Garo Hills, Meghalaya. *Transient*, 3: 29-38.

Mittal, K., Prajapati J.B., Hati S. and Mishra, B.K. (2013). Hurdle technology: Its potential application in food industry. *International Journal of Applied Management Research*, 1: 157-168.

Books/Book Chapters/ Proceedings

Mishra B. K. and Barman, R. Mitra (2013). Pesticide Residue in Milk and Dairy Products. In *Dairy and Food Processing Industry-Recent Trends Volume-II*, Ed. B. K. Mishra (Biotech Books, New Delhi), pp-292-313.

Kumar, S. and Mishra, B. K. (2013). *Livestock Production and Management-Recent Trends and Future Prospects*. New India Publishing Agency, New Delhi. ISBN 978-93-81450-70-3

Kumar, S. and Mishra, B. K. (2013). *Advances in Livestock Production and Management*. Jaya Publishing House, New Delhi. ISBN 978-93-82471-19-6

Mishra, B. K. (2013). *Dairy and Food Processing Industry-Recent Trends Volume-I*. Biotech

Books, New Delhi. ISBN 978-81-7622-298-3

Mishra, B. K. (2013). *Dairy and Food Processing Industry-Recent Trends Volume-I*. Biotech Books, New Delhi. ISBN 978-81-7622-299-0

Funds Received from Agencies including NEHU/UGC

Research Projects

Completed during Year

“SDS-PAGE Characterisation of indigenous germplasms of Cho-Cho and Jackfruit in Garo Hills of Meghalaya”. Principal Investigator: Dr. Binu Mathew. Sponsored by University Grants Commission, New Delhi. Grant: Rs. 10.71 lakhs

“Study on morphological and biochemical properties of citrus reticulata grown in the Garo Hills of Meghalaya”. Principal Investigator: *Dr. Lolly S. Pereira*. Sponsored by University Grants Commission, New Delhi. Grant: Rs. 1.85 lakhs

Academic Collaborations

Dr. Binu Mathew is collaborating with the Don Bosco College, Tura, Meghalaya as *Co-investigator* of Biotech Hub Project entitled ‘In vitro propagation of endangered/ economically important plants & DNA-Barcoding of animals/plants’ sponsored by DBT (NER), Ministry of Science and Technology, New Delhi.

DEPARTMENT OF HORTICULTURE (TURA CAMPUS)

Head : Prof. C. Perinba Suresh
Telephone : 08974455216 / 03651-223107 / 220014
E-mail : nehuhort@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Dr. C. Perinba Suresh, M.Sc. Agri. (Hort.), Ph.D. (Hort.)	Fruits & Orchard Management, Post Harvest Technology of Horticultural Crops
Associate Professor	Dr. Sunil Kumar, M.Sc. (Hort.), Ph.D.(Hort.)	Floriculture
Assistant Professor	Dr. Arvind Kumar Chaurasiya, M.Sc. Agri. (Hort.), Ph.D. (Hort.)	Post Harvest Technology of Horticultural Crops
	Mr. Arindam Barman, M.Sc. (Hort.)	Vegetable Science
	Mr. Yumnam Somi Singh, M.Sc. (Hort.)	Fruit Science

Thrust Areas of Research

The utmost priority of the Department is to impart knowledge and Education related to Horticulture and Allied branches and to serve as a centre for academic excellence in Horticulture. The department mainly concentrates on multi-disciplinary research and extension works with an aim to improve the aspects of Hill Horticultural System and develop technical manpower in North-Eastern regions and

Meghalaya state in particular. Further, the thrust areas lie on conservation of genetic biodiversity, sustainable green farming and to adapt in the climate change scenario. An establishment of an infrastructure including well-equipped laboratories and an operational research management system is necessary which will ensure quick, efficient and cost effective implementation of research programmes.

Students' Profile

Enrolment Capacity: M.Sc. :- 10; Ph.D. — Variable

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Sc.	-	8	2	3	7	9	1	10
Ph.D.	-	-	-	-	-	-	-	-

School of Human and Environmental Sciences

Courses Conducted this Year

Postgraduate

Semester-I:

Fruit and Plantation Crops

HFP-101: Tropical and Dry Land Fruit Production (2+1)

HFP-102: Subtropical and Temperate Fruit Production (2+1)

HOR-103: Biotechnology in Crop Sciences (2+1)

HOR-104: Basic Statistics Methods in Agriculture (2+1)

HFP-105: Biodiversity and Conservation of Fruit Crops (2+1)

HFP-106: Breeding of Fruit Crops (2+1)

Floriculture, Medicinal and Aromatic Crops

HFM-101: Production Technology of Cut Flowers (2+1)

HFM-102: Production Technology of Loose Flowers (2+1)

HOR-103: Biotechnology in Crop Sciences (2+1)

HOR-104: Basic Statistics Methods in Agriculture (2+1)

HFM-105: Production Technology of Medicinal and Aromatic Crops (2+1)

HFM-106: Breeding of Flower Crops and Ornamental Plants (2+1)

Vegetable and Spice Crops

HVS-101: Production Technology of Cool Season Vegetable Crops (2+1)

HVS-102: Growth and Development of Vegetable Crops (2+1)

HOR-103: Biotechnology in Crop Sciences (2+1)

HOR-104: Basic Statistics Methods in Agriculture (2+1)

HVS-105: Seed Production Technology of Vegetable Crops (2+1)

HVS-106: Breeding of Vegetable Crops (2+1)

Semester-II

Fruit and Plantation Crops

HFP-201: Production Technology of Plantation Crops (2+1)

HFP-202: Processing of Plantation Crops (2+1)

HVS-201: Production Technology of Warm Season Vegetable Crops (2+1)

HFM-201: Landscaping and Ornamental Gardening (2+1)

HOR-O-205: Protected Cultivation (3+1)

HFP-206: Research/Dissertation-I (0+3)

Floriculture, Medicinal and Aromatic Crops

HFM-201: Landscaping and Ornamental Gardening (2+1)

HFM-202: Processing of Medicinal and Aromatic Crops (2+1)

HVS-201: Production Technology of Warm Season Vegetable Crops (2+1)

HFP-201: Production Technology of Plantation Crops (2+1)

HOR-O-205: Protected Cultivation (3+1)

HFM-206: Research/Dissertation-I (0+3)

Vegetable and Spice Crops

HVS-201: Production Technology of Warm Season Vegetable Crops (2+1)

HVS-202: Fundamental of Processing of Vegetables (1+1)

HFM-201: Landscaping and Ornamental Gardening (2+1)

HFP-201: Production Technology of Plantation Crops (2+1)

HOR-O-205: Protected Cultivation (3+1)

HVS-206: Research/Dissertation-I (0+3)

Semester-III and Semester-IV are not listed since classes for these are yet to commence:

Seminars/Conferences/Symposia/ Extension Programmes

Attended

Dr. C.P. Suresh

2nd International Symposium on *Minor Fruits and Medicinal Plants* organized by Faculty of Agriculture University of Ruhuna Mapalana, Kamburupitiya, Sri Lanka, December 20, 2013.

National Conference on *Adaptation and Mitigation Strategies of Climate Change for Sustainable Livelihood* organized by Cooch Behar Association for Cultivation of Agricultural Sciences, West Bengal, March 5-7, 2014 at Uttar Banga Krishi Viswavidyalaya, Pundibari, West Bengal.

Dr. Sunil Kumar

Model Training Course on *Value Addition in Flower Crops* organized by Division of Floriculture & Landscaping, Indian Agricultural Research Institute, November 04-11, 2013.

XXIII Group Meeting of AICRP on Floriculture, February 25-27, 2014 at PAU, Ludhiana

Mr. Y.S. Singh

National Seminar on *Entrepreneurship: A Drive towards Socio-economic Development of North Eastern Region* organized by Department of Management, NEHU, Tura Campus on 4th June, 2013

Publications

Research Papers

Published in India

Barman, A., Singh, D. K. and Maurya, S. K. (2013). SDS-PAGE based protein profiling

and diversity assessment of indigenous germplasms of phoot (*Cucumis melo* L. var *momordica* Duth & Full.). *Progressive Horticulture*. **45** (1): 169-173

Kumar, S., Momin Ch., K., Momin Ch., B. and Marak R. B. (2013). Evaluation of gladiolus (*Gladiolus hybrida*) cultivars for flower and corm production under Pasighat (Arunachal Pradesh) condition, *Current Horticulture* **1**(2): 16–20.

Kumar, S. and Sharma, S. (2013). Effect of organic manure, drying methods on flower yield and carotenoid contents in marigold (*Tagetes erecta* L.), *Asian Journal of Horticulture* **8** (2): 385-390.

Kumar, S.; Tomar, K. S.; Shakywar, R. C.; Sen. D. and Pathak, M. (2013). Screening of rose varieties against black spot disease and its management in East Siang District of Arunachal Pradesh, *International Journal of Agriculture, Environment & Biotechnology* **6**(3): 587-595

Kumar, S.; Tomar, K. S. and Shakywar, R. C. (2013). Screening of *Gerbera jamesonii* Genotypes against powdery mildew under naturally ventilated polyhouse in Arunachal Pradesh, *Annals of Horticulture* **6**(1): 156-158.

Kumar, S.; Shakywar, R. C. Tomar, K. S. and Pathak, M. (2013). Varietal screening of rose (*Rosa x hybrida*) cultivars and in vitro efficacy of fungicides against black spot disease (*Diplocarpon rosae* Wolf.) in Arunachal Pradesh, *Global Journal of Environmental Science and Technology* **1**(1): 15-19.

Rao, B. N.; Jha, A. K.; Deo, C.; Kumar, S.; Roy, S. S. and Ngachan, S. V. (2013). Effect of irrigation and mulching on

growth, yield and quality of passion fruit (*Passiflora edulis*) Sims, *Journal of Crop and Weed* **9**(1): 94-98.

Shakywar, R. C.; Kumar, S. and Tomar, K. S. (2013). Fungicides and varietal response for the management of powdery mildew of gerbera under polyhouse condition, *Journal of Plant Disease Sciences*, **8** (2):225-227.

Shakywar, R. C.; Pathak, M.; Singh, S.; Kumar, M. and Kumar, S. (2013). Integrated management of Alternaria blight of pigeonpea in Arunachal Pradesh, *Annals of Plant Protection Sciences* **21**(2): 444.

Suresh, C.P. (2014). Spices, medicinal and aromatic plants in Meghalaya: An overview. *Indian J. of Arecanut, Spices & Medicinal plants*. **16**(1).

Published Abroad

Chaurasiya, A. K.; Chakraborty, I. and Saha, J. (2014). Value addition of palmyra palm and studies on the storage life. *J. Food Sci. & Technol.*, **51** (4): 768-773.

Sasi Kumar, R., Ray, R. C., Paul, P. K. and Suresh, C.P. (2013). Development and storage studies of therapeutic Ready to Serve (RTS) made from blend of *Aloe vera* and Ginger juice. *J. Food Process Technol.* **4**(6).

Books/Book Chapters/Proceedings

Barman, A. (2013). *Instant Vegetable Science (2nd Edition)*. Sharma Publishers and Distributors, New Delhi, India: ISBN-13978-81-920090-2-5

Bhutia, K.P., Suresh, C.P. and Subha, P. (2013). Nutritional composition of some minor fruits of the Sikkim Himalayas. In *Developing the potential of underutilized horticultural crops of hill regions*. ISBN 81-7019-473-3, Today and Tomorrow's Printers and Publishers.

Chaurasiya, A. K. and Singh, A. K. (2013). Value added products from Aonla. In: *Dairy and Food Processing Industry (Recent Trends)* Ed. B. K. Mishra, Part- II. Pub: Biotech Books 4762-63/23, New Delhi: ISBN: 978-81-7622-299-0, p. 176-188.

Kumar, S. and Tomar, K. S. (2013). Floriculture in North-Eastern Region: Present Status and Future Prospects. In: *Agrarian Economy in India: Challenges and Government Initiatives*. Eds. Sarkar *et al.* ISBN 978-93-82816-02-7, Mangalam Publishers & Distributors, Delhi.

Kumar, S. and Tomar, K. S. (2013). Floriculture in North-Eastern Region: Present Status and Future Prospects. In: *Agrarian Economy in India: Challenges and Government Initiatives*. Eds. Sarkar *et al.* ISBN 978-93-82816-02-7, Mangalam Publishers & Distributors, Delhi.

Funds Received from Agencies including NEHU/UGC

Research Projects

Ongoing

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	SDS-PAGE Characterization of Germplasm Lines of Chow-Chow and Jackfruit of Garo Hills of Meghalaya	Co-PI Mr. Arindam Barman	UGC (University Grant Commission), New Delhi, India	Rs 10,67,000/-

Academic Collaborations

Dr. C.P. Suresh

Supervisor for Mr. Sarad Gurung, Ph.D. Scholar IXth Semester, Department of Pomology & Post-Harvest Technology, Uttar Banga Krishi Viswavidyalaya. Thesis title: “Efficacy of inorganic & organic amendments, growth regulators and micronutrients on the performance of Darjeeling Mandarin Orange”.

Co-supervisor for Mr. Bilok Sharma Ph.D. Scholar IVth Semester, Department of Botany, North Bengal University, Siliguri. Thesis title: “Studies on different cultural conditions for commercial production of pineapple (*Ananas comosus* L.)”.

Other Activities

Dr. C.P. Suresh

Founder member/joint secretary for CoochBehar Association for Cultivation of Agricultural Sciences

Life member of South Indian Horticulture Association

Life member of Society for Promotion of Horticulture

Life member of Fruit Science Society of Bangladesh

Life member of AIPUB

Member in Board of Studies, Department of Horticulture, Sikkim University

Member for Ph.D. Admission Committee, Department of Management, NEHU, Tura Campus

Member of Editorial Board in *Journal of Agriculture and Technology*

International Evaluator of the Project Tbilisi, Gorgia National Science Foundation

Dr. Sunil Kumar

Editor of (1) *Current Horticulture*, (2) *Indian Journal of Agricultural Sciences*, (3) *Hort Flora Research Spectrum*

Delivered lectures on (a) Prospects & Potential of Floriculture in North-Eastern Region, and (b) Floriculture: A Boon for Entrepreneurship, in the Special Winter School in Management Sciences, organized by UGC-Academic Staff College, NEHU, Shilong.

Life member of *Journal of Current Horticulture*, Modi Nagar, Gaziabad.

V

SCHOOL OF LIFE SCIENCES

Dean : Prof. A. K. Misra
Telephone : 0364-272-2001/2002
E-mail : deansls@nehu.ac.in

The School comprises of four Departments. All the four Departments are very active in teaching and research. The School admitted 49 students to the Ph.D. programme during the year. Seven students qualified NET and six students qualified GATE during the period. The constituent Departments organised 11 Conferences/ Seminars etc. during the year. The School also organised the 17th International Conference on Frankineae and Actinorhizal Plants during April 10 to 12, 2014. Thirty five participants representing ten countries attended the Conference. The papers presented at the Conference were published as a special volume in November 2014 by the Journal of Biosciences, jointly published by the Indian Academy of Sciences, Bangalore and Springer.

The Dean, School of Life Sciences was guest editor for this special volume. The Faculty of the School secured Rupees 1272.86 lakh as grant from external agencies for research and teaching activities. More than 100 research papers were published by the faculty in various national and international journals of repute. The Department of Botany has been recognized this year by the UGC as a Centre for Advanced Studies in Botany and the Department of Biochemistry successfully completed UGC-SAP DRS phase II programme. The Faculty members of the School have received several awards during the year and have served as expert members in several Government of India Committees, members of editorial Boards of Journals of international repute, etc.

DEPARTMENT OF BIOCHEMISTRY

Head : Prof. R. Sharma
Telephone : 0364-2722101
E-mail : sharamesh@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	A.N. Rai: M.Sc. (BHU), Ph.D. (Dundee, Scotland) - Presently Director, NAAC Bangalore	Microbiology
	R. Sharma: M.Sc. & Ph.D. (BHU)	Development and Aging
	R.N. Sharan: M.Sc. & Ph.D. (JNU)	Cancer and Radiation Biology
	A. Alam: M.Sc. (AMU), Ph.D. (FTI, Moscow)	Cancer Immunotherapy
	D. Syiem: M.Sc. & Ph.D. (NEHU)	Protein Chemistry/ Enzymology and Study of Medicinal Plant/ Natural Products
	A.K. Singh: M.Sc. (Gorakhpur), Ph.D. (HCU)	Microbiology
	M. B. Syiem: M.Sc. & Ph.D. (NEHU)	Microbiology
Associate Professor	Nil	
Assistant Professor	P.K. Ambasht: M.Sc. & Ph.D. (BHU)	Enzymology/Enzyme Biotechnology
	L. Kma: M.Sc. & Ph.D. (NEHU)	Cancer and Radiation Countermeasures
	S. Bhan: M.Sc. & Ph.D. (BHU)	Medical Biochemistry
	T. Tripathi: M.Sc. (Mysore); Ph.D. (JNU)	Molecular Biophysics

Thrust Areas of Research

Medical Biochemistry: Development and Aging, Medicinal Plants, Carcinogenesis and Radiation Biology, Drug Delivery and Tumour Immunology, Protein Chemistry, Enzymology and Neurobiochemistry.

Microbial Biochemistry: Plant-Microbe Interaction, Cyanobacterial Diversity, Nitrogen Fixation and Microbial Bioremediation.

Brief Statement of Academic Activities

The Department admitted 21 students for M.Sc. and 10 students for Ph. D. programme. During

School of Life Sciences

this period 21 students successfully completed their M.Sc. and 4 students were awarded Ph. D. degree. During 2013-14, 1 student cleared CSIR JRF-NET, 2 students received Rajiv Gandhi National Fellowship and 5 students received NEHU non-NET Fellowship. A student of the Department, Mr. Rabbul Ibne A. Ahad, was awarded the President of India, Dr. Shankar Dayal Sharma Gold Medal for

General Proficiency at the XXI Convocation of NEHU (2013). The Department completed the UGC-SAP-DRS II Program. The Department organized a National Seminar on *New Frontiers in Biochemical Research* in March 2014. In addition, faculty members and research scholars participated and delivered lectures in various seminars/ workshops/ conferences/ symposia in India and abroad.

Students' Profile *Enrolment Capacity: M.Sc. - 21 Ph.D. –Variable*

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	--	17	4	5	16	15	6	21
Ph.D.	1	3	6	4	6	3	7	10

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	--	14	6	6	14	14	6	20
Ph.D.	--	2	2	3	1	3	1	4

Details of Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Mrs. Natasha A. Nongrum	Impact of Commonly Used Herbicides and Pesticides on Nitrogen Metabolism of Free-Living Cyanobacterial Isolates from Rice Fields of Meghalaya	Prof. M. B. Syiem
Mr. Akoijam Chingkeihunba	Diversity and Molecular Typing of Filamentous Cyanobacteria Isolated from Various Habitats and their Biotechnological Implications	Prof. A. K. Singh
Mr. Kitlangki Suchiang	Dietary and Hormonal Modulation of Acetylcholinesterase in Mice as a Function of Age	Prof. R. Sharma
Mr. Gopesh Paul	A Study on Strontium Accumulation and its Effect on Metabolism in Cyanobacteria	Prof. A. K. Singh

Placement of Students

1. Ms. D. Deka joined Omega Health Care Management Services Pvt. Ltd., Bengaluru.
2. Ms. C. Deb joined as faculty in University of Science & Technology, Meghalaya.
3. Ms. Parimita Kakoti joined as faculty in Assam Down Town University, Guwahati.
4. Ms. K. Devi joined Oil India Limited, Duliajan, Assam.

Courses Conducted

Postgraduate

Semester-I : Chemistry and Biomolecules; Enzymology; Intermediary Metabolism; Practicals.

Semester-II : Techniques in Biochemistry; Physiological Chemistry; Microbiology; Practicals.

Semester-III : Genetics; Medical Biochemistry; Environmental Biochemistry; Nutritional and Clinical Biochemistry; Practicals.

Semester-IV : Molecular Biology; Immunology; Bioenergetics; Practicals.

M.Phil/Ph.D. Courses

Research Methodology; Topics in Biochemistry; Review of Literature and Seminar.

Seminars/Conferences/Symposia/ Extension Programmes etc.

Organized

The Department organized a Seminar on *New Frontiers in Biochemical Research* under

the UGC-SAP-DRS II Programme on 25 March 2014.

Participated

Prof. R. Sharma

Delivered a lecture on “Why do we age? Interventions for healthy aging” at the *Science Academies Lecture Workshop on Frontiers in Life Science*, Department of Zoology, NEHU, Shillong, May 21-24, 2013.

Delivered a lecture on “Protein carbonylation: a marker of oxidative stress during aging and its modulation by dietary restriction” at the National Seminar on *Redox Biology (including Molecular Biology)*, CAS in Life Sciences, Manipur University, Imphal, March 28-29, 2014.

Gave an invited lecture on “Protein structure and biosignalling” in the Autumn School in DBT State Level Biotech Hub Programme at NEHU, on October 18-23, 2013.

Prof. R. N. Sharan

Attended and delivered a plenary talk titled “Molecular bio-marker for bio-dosimetry to deal with radiation accidents and emergencies exposing human populations to radiation: Strategy for the future” and chaired a scientific session in the *3rd Asian Congress of Radiation Research (ACRR-2013)* at International Convention Center, Beijing, China, May 10-13, 2013.

Attended the *Training Meeting on Biodosimetry in the 21st Century* jointly organized by International Atomic Energy Agency (IAEA), Vienna and Hi-CARE, Japan, at Hiroshima during-June 10-14, 2013, as the nominee of Government of India and delivered an invited talk titled

“Biodosimetry in the 21st century: Case of molecular biomarker”.

Visited the National Institute of Biomedical Innovation under Nomura Project at Ibaraki, Osaka, Japan from June 15-17, 2013, and delivered a invited talk titled “Molecular bio-markers and tool for biosimetry in the future”.

Delivered an invited talk titled “Repair of single- and double-strand DNA breaks caused by different qualities of radiation: Criticality of *RecA* mediated repair system” and chaired the Valedictory Session in the National *Symposium on Radiation and Photochemistry* (NSRP-2013) at Department of Chemistry, NEHU, Shillong, March 20-22, 2013.

Invited as a Faculty in the 1st *Indian Cancer Congress* held at Kempinski Hotel, Shahadra, NCR (21-24 November 2013). He also served as a Panelist in the Plenary Session on Cancer Scene in India, and as an Expert in a Round Table Discussion on “Cancer genomics - Are we ready?”

Prof. D. Syiem

Was a Resource Person and chaired sessions for the 2-day *Consultative Workshop on Conservation and Promotion of Medicinal and Aromatic Plants* organized by Bio-Resources Development Centre, February 26-27, 2014.

Delivered a talk on “Bioprospecting medicinal plants in Meghalaya” at the State Bioresource Centre, Meghalaya Government, October 4, 2013.

Delivered a lecture on “Chromatographic and spectroscopic profiling of *Potentilla fulgens*” at VRR Diagnostic Centre, Chennai, on August 22, 2013.

Prof. A. K. Singh

Delivered an invited talk titled “Molecular cloning, expression and enzymatic characterization of glutathione s-transferase from *Synechocystis* sp PCC 6803” at the *National Conference on Frontiers in Algology and Algal Biotechnology* [NCFAAB] held at Visva Bharati University, Santiniketan, November 15-17, 2013.

Delivered a plenary lecture titled “Characterization of GST from a cyanobacterial strain *Synechocystis* sp PCC 6803” at a National Symposium at Botany Department, Banaras Hindu University, Varanasi, February 24-26, 2014.

Dr. P. K. Ambasht

Delivered 3 guest lectures on “Mechanism of enzyme catalyzed reaction” to the M.Sc. Biotechnology students at School of Biotechnology, Banaras Hindu University, Varanasi on April 3-5, 2013.

Presented a paper on “Characterization of alpha amylase from *Pennisetum typhoides* entrapped inside gelatin beads” at the *First International and Third National Conference on Biotechnology, Bioinformatics and Bioengineering*, Tirupati, June 28-29, 2013.

Delivered 3 guest lectures on “Regulation of enzyme activity” to the M.Sc. Biotechnology students at School of Biotechnology, Banaras Hindu University, Varanasi on February 13-15, 2014.

Dr. L. Kma

Presented a paper entitled “Evaluation of the anticancer property of methanolic extracts of *Aristolochia tagala* and *Curcuma caesia* on hepatocellular carcinoma induced by diethylnitrosamine in mice model’ at a

National Conference in Sikkim University (October 3-5, 2013).

Presented a paper entitled "Evaluation of the antioxidant potential of methanolic extracts of *Aristolochia tagala* and *Curcuma caesia* in diethylnitrosamine-induced carcinogenesis in Balb/c mice" in the *International Conference on Recent Trends in Free Radical and Antioxidant Research and XIII Annual Meeting of the Society for Free Radical Research-India* organized by Society for Free Radical Research India at Lonavala, India, on January 27-30, 2014.

Dr. S. Bhan

Attended and delivered a lecture on "The antihyperglycemic and antioxidant role of chlorophyllin in streptozotocin induced diabetic mice" in the *National Conference on New Frontiers in Medicinal Plant Research* organised by Sikkim University on October 3-5, 2013.

Dr. T. Tripathi

Delivered an invited lecture in the *National Conference on Recent trends in Protein Structural Biology* held at Jamia Millia Islamia University, New Delhi, on December 16-18, 2013.

Delivered an invited lecture in the 6th *International Symposium on Recent Trends in Macromolecular Structure and Function* held at CAS of Crystallography and Biophysics, University of Madras, January 22-24, 2014.

Delivered an invited lecture in the Department of Biochemistry, University of Madras, January 25, 2014.

Publications

Research Papers

Published in India

Sharma, R., Syiem, D. (2013). Goals towards healthy ageing. *Curr. Sci.* 104: 999.

Kharwanlang, B., Sharma, R. (2013). Glucocorticoids in health and diseases: A special reference to glucocorticoid receptor signaling pathways and molecular networking. *J. Endocrinol. Reprod.* 17: 31-40.

Kma, L. (2013). Transforming growth factor-beta1 as lung injury biomarker: Review. *Int. J. Life Sci. Biotechnol. Pharm. Res.* 2: 39-58.

Syiem, D., Warjri, P. (2013). The effect of aqueous extract on *Smilax perfoliata* on blood glucose, lipids and selected hepatic enzymes of alloxan- induced diabetic mice. *Int. J. Pharm. Bio. Sci.* 4: 945-955.

Lyngdoh, J. P., Syiem, D., Mao, A. A. (2014). Pattern of traditional medicine usage in East Khasi Hills of Meghalaya. *Indian J. Traditional Knowledge* 13: 164-170.

Kharkrang, K., Ambasht, P. K. (2013). Immobilization of α -amylase from *Pennisetum typhoides* inside gelatin beads and its characterization. *J. Protein Proteomics* 4: 183-189.

Tripathi, T. (2013). Calculation of thermodynamic parameters of protein unfolding using far-ultraviolet circular dichroism: A Review. *J. Proteins Proteomics* 4: 85-91.

Published Abroad

Dkhar, P., Sharma, R. (2013). Attenuation of age-related increase of protein carbonylation in the liver of mice by melatonin and curcumin. *Mol. Cell. Biochem.* 380: 153-160.

- Kharbhih, W. J., Sharma, R. (2014). Age-dependent increased expression and activity of inorganic pyrophosphatase in the liver of male mice and its further enhancement with short- and long-term dietary restriction. *Biogerontology* 15: 81-86.
- Sahoo, M. K., Sayoo, L., Naik, D. B., Sharan, R. N. (2013). Improving the operational parameters with high electrical energy efficiency for UVC induced advanced oxidation and mineralization of Acid blue 29: Generation of eco-friendly effluent. *Separation and Purification Technology* 106: 110-116.
- Kma, L. (2013). Roles of plant extracts and constituents in cervical cancer therapy. Mini-review. *Asian Pacific J. Cancer Prevention*, 14: 3429-3436.
- Kma, L. (2013). Synergistic effect of resveratrol and radiotherapy in control of cancers. Review. *Asian Pacific J. Cancer Prevention*, 14: 6197-6208.
- Bhan, S., Mitra, R., Arya, A. K., Pandey, H. P., Tripathi, K. (2013). A study on evaluation of apoptosis and expression of Bcl-2-related marker in wound healing of streptozotocin-induced diabetic rats: *ISRN Dermatology* 2013: Article ID 739054 (6 pages).
- Mitra, R., Bhan, S., Nath, G., Kumar, N., Ali, Z. (2013). Development of a novel rapid immuno-diagnostic kit based on flagellar 40kDa antigen epitope for the detection of typhoid fever in Indian patients. *The Scientific World Journal* (2013): Article ID 363652 (7 pages).
- Yogavel, M., Tripathi, T., Gupta, A., Bandy, M. M., Rahlfs, S., Becker, K., Belrhali, H., Sharma, A. (2014). Atomic-resolution crystal structure of glutaredoxin 1 from *Plasmodium falciparum* and comparison with other Grxs. *Acta Crystallogr. D Biol. Crystallogr.* 70: 91-100.

Books/Book Chapters/Proceedings

- Syiem, M. B., Rai, A. N. (2013), Cyanobacteria in symbiosis: cellular responses. In *Stress biology of Cyanobacteria*. A. K. Srivastava, A. N. Rai and B. A. Neilan (Eds). CRC Press, Taylor & Francis Group, Boca Raton, Florida: Chapter 13, p. 257-272.

Funds Received from Agencies including NEHU/UGC

NEHU: Rs. 21,00,000/-

Research Projects

New Projects

No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	How AMFR Gene Regulates Cell Division and Cancer after Stress Exposure?	Dr. A. Mishra (IIT Rajasthan)/ Prof. R. N. Sharan	BRNS, DAE, Mumbai	Rs. 23,90,000/-
2	Biochemical and Functional Properties of <i>Synechocystis</i> Glutathione S-transferase(s)	Dr. T. Tripathi	DST, New Delhi	Rs. 50,00,000/-

Ongoing

No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Study of Induction Kinetics of Dicentric (DC), Micronuclei (MN) and Premature Chromatin Condensations (PCC) in the Peripheral Blood Lymphocytes (PBL) of Ethnic Population Groups of North-East India Following γ -Irradiation <i>Ex Vivo</i> : A Comparative Study	Prof. R. N. Sharan	International Atomic Energy Agency (IAEA)	Rs. 20,00,000/-
2	Study on the Potentials of Anti-diabetic Plants of Traditional Use for the Management of Alzheimer's Disease	Prof. D. Syiem	DBT, New Delhi	Rs.67,00,000/-
3	Quantitative Coupling of Hydrocarbon Degradation and Bacterial Communities in Petroleum Hydrocarbon Impacted Sediments Undergoing Bioremediation	Prof. A. K. Singh	DBT, New Delhi	Rs. 37,00,000/-
4	A Detailed Study on the Potential of Locally Isolated Cyanobacteria in Biosorption of Heavy Metals Common in Water Bodies of Meghalaya	Prof. M. B. Syiem	UGC, New Delhi	Rs. 13,00,000/-
5	Strategy Development for the Mitigation of Heavy Metals in Surface Waters around Coal Mining Areas using Native Cyanobacterial Strains	Prof. M. B. Syiem	DBT, New Delhi	Rs. 87,00,000/-
6	Identification, Molecular Characterization and Structure Determination of Glutaredoxin System Proteins from Infectious Flukes	Dr. T. Tripathi	DBT, New Delhi	Rs. 43,00,000/-

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7	Enhancing Functional Repertoire of Eukaryotic RNA Polymerase II	Dr. T. Tripathi	DBT, New Delhi	Rs. 83,00,000/-
8	Molecular Proteomic Studies of the Glutathione S-Transferase Protein System of the Giant Intestinal Fluke- <i>Fasciolopsis buski</i>	Dr. T. Tripathi	ICMR, New Delhi	Rs. 10,00,000/-
9	An Investigation into the Role of Solution Variables in Amyloidogenesis	Dr. T. Tripathi	DST, New Delhi	Rs. 19,00,000/-

Completed during Year

No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Studies on Biomodulators of Glucocorticoid Receptor in Mice	Prof. R. Sharma	DST, New Delhi	Rs. 21,00,000/-
2	Biodosimetry Studies using Cytogenetic and Gene Expression Profiles in Human Peripheral Blood Lymphocytes Exposed to Gamma Radiation <i>ex vivo</i>	Prof. R. N. Sharan/ Dr. L. Kma	BRNS, DAE, Mumbai	Rs. 43,00,000/-

Academic Collaborations

A collaborative research project has been started by Prof. R. N. Sharan with Dr. A. Mishra at IIT Rajasthan, Jodhpur with funding by BRNS. Three collaborative projects of Prof. D. Syiem, Prof. A. K. Singh & Dr M. B. Syiem under DBT-Twining are continuing in the department. Two other collaborative DBT-funded research projects are running in the laboratory of Dr. T. Tripathi. There are also research collaborations at individual level with the following institutes: Toho University, Japan; Research Centre, Juelich, FRG; Osaka University, Japan; University of Cambridge, UK; Newcastle University, UK; JNU, BHU, etc.

Honours/Awards/Recognitions

Prof. R. Sharma

Selected for INSA Senior Scientists Bilateral International Exchange Programme-2014, Hungary;

Member, Editorial Board of *Biogerontology* (Springer, The Netherlands)

Member, Editorial Board of *International Journal of Developmental Neurosciences* (Elsevier, USA)

Member, Editorial Board of *Frontiers in Aging Research* (Switzerland).

Prof. R.N. Sharan

One provisional patent application # 486/KOL/2013 on “A bio-marker and method of molecular bio-dosimetry” under International Treaties and Conventions (ITC) filed at Kolkata in 2013 with applicants/inventors: Prof. R. N. Sharan & Secretary, DAE/Ms. Saibadaiahun Nongrum, Dr. S. T. Vaiphei, Dr. L. Kma & Dr. R. C. Chaubey.

One full patent application # 839/KOL/2013 on “A process for wastewater treatment” under International Treaties and Conventions (ITC) filed at Kolkata in 2013 with applicants/inventors: Dr. M. K. Sahoo & Prof. R. N. Sharan/Mr. B. Sinha. The application is under examination.

Dr. T. Tripathi

Member, Scientific Board of Biological, Pharmaceutical & Medical Sciences of International institute of Chemical, Biological and Environmental Engineering.

Selected as a Biochemistry Editor by Webmed Central.

Other Activities

Prof. R. Sharma

Attended IQAC meeting of Manipur University, Imphal on July 12, 2013.

Delivered two lectures at Academic Staff College NEHU in 24th and 25th Orientation Programme on June 11, 2013 and Nov. 08, 2013 on “Aging and interventions for healthy aging”.

Attended Assessor’s Interaction Meeting (AIM) on February 6-7, 2014 at NAAC, Bangalore.

Prof. R. N. Sharan

Expert Member of selection committee of Pune University for appointment of Professors in September 2013.

Appointed as Visitor’s Nominee to the Executive Council of Assam University, Silchar (2013-16).

Appointed as Visitor’s Nominee to the Court of Banaras Hindu University, Varanasi (2013-16).

Appointed as an Expert of Scientific Advisory Committee (SAC) by DG, ICMR for the Institute of Cytology and Preventive Oncology (ICPO), Noida (2013).

Appointed as a Member of North East-Project Advisory Committee (NE-PAC) by DG, ICMR for award of research projects in the NE region (2013).

Appointed as a Member of the Board of Studies for Professional Courses at NEIGRIHMS Shillong (2013-16).

Appointed as a Member of the Steering Committee for Center of Life Sciences at Central University of Jharkhand, Ranchi (2013-16).

Appointed as a Member of the Advisory Committee for management of Pachhunga University College under Mizoram University, Aizawl (2013-16).

Appointed as a Member of the DBT Advisory Committee for Department of Molecular Biology & Biotechnology, Tezpur University, Assam (2014-17).

Prof. D. Syiem

Delivered a lecture on “Trade in medicinal plants” in the Refresher Course in Commerce & Management, NEHU, November 29, 2013.

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Resource person for UGC-ASC 26th Orientation Programme (General) organized by Academic Staff College, NEHU, February 18, 2014.

Prof. A. K. Singh

Delivered an invited lecture titled “Hydrocarbon bioremediation” for a Refresher Course in Disaster Management organized by Department of Adult and Continuing Education, NEHU, in November 25, 2013.

Prof. M. B. Siyem

Member, Counselling Board for *MBBS and MD* in NEIGRIHMS, Shillong.

Attended *Assessor’s Interaction Meeting* (AIM) on February 6-7, 2014 at NAAC, Bangalore.

Reviewer for *International Invention Journal of Biochemistry and Bioinformatics*.

Reviewer for *World Journal of Biology and Biological Sciences*.

Dr. P. K. Ambasht

Invited as judge in the Golden Jubilee Jawaharlal Nehru Regional level Science, Mathematics and Environment Exhibition, Kendriya Vidyalaya NEHU campus, Shillong, October 7, 2013.

Elected as Joint Secretary, NEHUTA (2013).

Dr. L. Kma

Delivered a lecture on ‘Environmental protection’ on the occasion of World Environment Day organized by NSS PG Unit NEHU, June 5, 2013.

Delivered a Keynote Address on “Impact of tobacco consumption” on the occasion of Anti-Tobacco Day, jointly organized by Rotary Club of Orchid City and NSS NEHU, June 17, 2013.

Panellist for ‘Panel Discussion on the occasion of Golden Jubilee of Teaching in Science in Shillong College’, July 29, 2013.

Judge in the Inter-College Debate Competition on ‘The Relevance of Basic and Applied Sciences’ in Lady Keane’s College Shillong, October 8, 2013.

Judge in the Inter-College Debate Competition on ‘HIV/AIDS’ in State Central Library Shillong, November 30, 2013.

Dr. T. Tripathi

Attended the *National Workshop on Proteomics, Biomarkers & Diagnostics* held in Regional Center for Biotechnology, Gurgaon, October 21-25, 2013.

Attended the *National Conference on Recent Trends in Protein Structural Biology* held in Jamia Millia Islamia University, New Delhi, December 16-18, 2013.

Attended the *6th International Symposium on Recent Trends in Macromolecular Structure and Function* held in CAS of Crystallography and Biophysics, University of Madras, January 22-24, 2014.

Life member of International Society for Infectious Diseases, USA.

Member, Committee for the *International Conference on Biochemistry and Molecular Biology*, 2014, Dubai, UAE.

DEPARTMENT OF BIOTECHNOLOGY & BIOINFORMATICS

Head : Prof. Anupam Chatterjee
Telephone : 0364-272-2401/2402
E-mail : biotechnologynehu@gmail.com; biotechnologynehu@hotmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Professor Anupam Chatterjee M.Sc. (Burdwan), Ph.D. (BHU)	Genetics & Molecular Biology
	Professor S. Rama Rao M.Sc. & Ph.D. (Jodhpur Univ.)	Plant Cellular and Molecular Genetics
	Professor Kripamoy Aguan M.Sc (IARI), Ph.D. (Birmingham)	Genetics & Molecular Biology
Associate Professor	Dr. S. R. Joshi M.Sc./ Ph.D. (NEHU)	Microbiology
Assistant Professor	Dr. (Mrs.) Suktilang Majaw M.Sc./ Ph.D. (NEHU)	Biochemistry
	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, Cellular and Molecular Cytogenetics, Phylo-diversity Assessment and Characterization and Micro-symbiont (*Rhizobium*) association with native legumes and their molecular characterization, Epilepsy and Alzheimers' Disease, Diabetes Research, Molecular modelling and design of inhibitors for various diseases, Environmental biotechnology, Abiotic stress tolerance in soil microbes.

Brief Statement of Academic Activities

The Department of Biotechnology & Bioinformatics at the North Eastern Hill University, Shillong was started in 2005. It offers Postgraduate (M.Sc. and Ph.D.) academic programmes. The North Eastern Region of India is rich in flora and fauna and is a hotspot region for biodiversity. For Bioresource development, exploration, conservation and proper utilization, the need of trained manpower was felt in Biotechnology along with the linkage between biotechnological work and bioinformatics networking. Therefore, the Department of

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Biotechnology and Bioinformatics initiated this programme and is providing training and research environment which provides people with latest information in their respective fields and bring 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 faculties' potentialities, the Department was considered for financial support for "M.Sc. Biotechnology" by the Department of Biotechnology, New Delhi. The department is happy to state that four batches of M.Sc. students have successfully completed their M.Sc. degree and some students have already joined in different IITs, IMTECH, AIIMS, IISc. etc. for their Ph.D. degree, while many others had joined different National Biotech Companies. The Department, while giving

importance to the global scenario, has research and development in the region incorporated into its programme. This programme is intended to develop, acquire and maintain modern state-of-the-art teaching, training, research, databases and software development related to biologically rich resources of the North-Eastern region of India, which could ultimately contribute towards socio-economic development of the tribal people of this region. The Department has in the year 2010 received DST-FIST support for strengthening infrastructural facility for academic support from Department of Science & Technology, Govt. of India. The extramural support in the form of projects received by faculty members comes from DBT, DST, UGC, BARC, DRDO, ICAR, etc.

Students' Profile

Enrolment Capacity: M.Sc. – 24; Ph.D. – Variable

Admissions

Degree	SC	ST	GEN / OBC	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	-	12	10/01	06	17	14	09	23
Ph.D.		03	04	04	03	05	02	07

Degrees Awarded

Degree	SC	ST	GEN / OBC	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	01	13	07/01	10	13	14	09	23
Ph.D.	01		03	02	02	-	04	04

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Abhishek Das	Studies on Anti-tumor and Radio-protective Potentials of <i>Dioscorea alata</i> L. and <i>Clerodendron colebrookianum</i> Walp. in Mammalian Cell Systems	Prof. A. Chatterjee
Nitin Ghoshal	Role of Glutathione in Sensitivity towards Radiation in Mammalian and Insect Cells	Prof. A. Chatterjee
Purabi Saikia	Microbiological Study of the Retail Chicken Meat of Meghalaya	Dr. S. R. Joshi
Barnali Sarma	Characterization and Diversity Analysis of Metal Tolerant Pseudomonads from Uranium Rich Area of Meghalaya	Dr. S. R. Joshi

Placement of Students

1. Mr. Arun Bahadur Gurung joined as Ph.D scholar in NEHU, Shillong
2. Mr Anuj K Borah joined as Ph.D, scholar in Tezpur University
3. Ms Manashi Das joined as trainee in BCIL (Prosetta Bioinformatics Pvt. Ltd, Mysore)
4. Ms Rukshna Aziz joined as Project Assistant in Tezpur University
5. Ms. Subhalakshmi Sharma joined as trainee in BCIL, New Delhi
6. Ms Nabanita Borkakoty joined as trainee in BCIL, Chandigarh
7. Ms Nasheman Khongthaw joined as Ph.D, scholar in NEHU, Shillong
8. Mr Donbor Pathaw joined as Ph.D, scholar in NEHU, Shillong
9. Ms Juban Sunabi joined as Ph.D, scholar in Botany Department NEHU, Shillong

Courses Conducted

Postgraduate (M.Sc. in Biotechnology)

- Semester-I : Cell Biology & Genetics, Biomolecules, Microbiology
- Semester-II : Molecular Biology, Immunology, Microbial Technology
- Semester-III : Animal Cell Science & Technology, Genetic Engineering, Plant Biotechnology
- Semester-IV : Bioprocess Engineering & Technology, Environmental Biotechnology, Molecular Genetics, Applied Microbiology

The Department has offered open courses on Microbial Technology, Applied Molecular Genetics and Bioinformatics in Molecular and cellular Biology under CBCS in the M.Sc. 2nd and 3rd semesters.

Ph.D. Courses

Ph. D Course Work (One Semester)

- a) Research Methodology, (School Level)
- b) Biotechnology in Medicine, Agriculture and Microbiology, (Dept. Level)
- c) Review of literature (Dept. Level)

Seminars/Conferences/Symposia/Extension Programmes etc.

Organized

National Workshop on *Hands on Training on Techniques in Biotechnological Research* organized with the Department of Zoology, North-Eastern Hill University, Shillong, from 24th February to 08th March, 2014 (Participants – 20) sponsored by Department of Biotechnology, New Delhi.

Conference on *An Interactive Meeting with Traditional Herbal Practitioners of Meghalaya on Use of Plant Based Herbal Drugs* during 13-14 June 2013 at NEHU, Shillong, organized by Dr. A. Bhattacharjee.

Participated

Prof. A. Chatterjee

Invited Lecture on “Antioxidant and antitumor activity of the root of *Potentilla fulgens*” at the UGC-DRS sponsored *National Seminar on Bioprospecting of Natural Products* in Department of Zoology, University of Burdwan, in 5–6 December 2013.

Invited talk on “Raw betel-nut induced genomic changes and chromosome instability leading to cancer” in the Molecular Biology & Genetics Unit, JNCASR, Bangalore, on 28th January 2014.

Invited talk on “Raw betel-nut induced genomic changes and chromosome instability

leading to cancer” in NEIST, Jorhat, North-East Chapter of the Society of Biological Chemistry Meeting on 22nd February 2014.

Invited Lecture on “Raw betel-nut induced genomic changes and chromosome instability leading to cancer” at the UGC-DRS sponsored *National Seminar on Recent trend in Biotechnological Research* in the Department of Biotechnology, Assam University, 25th and 26th March, 2014.

Prof. S. R. Rao

Attended the *CLC Genomics Seminar and Quiagen Workshop* on 4–5 March 2014 at Department of Soil and Crop Sciences, Texas A & M University, College Station, Texas, USA.

Delivered invited lecture on “C-DNA synthesis” at the Center for Advanced Studies, Department of Botany, NEHU, Shillong, on 30th May 2013.

Delivered extension lectures on “Plant cell tissue and organ culture” to M.Sc. (Bioscience and Bioinformatics) students as Visiting Professor at the Department of Molecular Biology & Biotechnology of Tezpur Central University, Assam, from 2-6 October, 2013.

Delivered two invited lectures on Genetics and Biotechnology at the ten-day *Autumn School in Plant Science* organized under DBT State Level Biotech HUB program at the Center for Advanced Study, Department of Botany, NEHU, Shillong, from 18-31 October 2013.

Delivered a lecture on “Cytogenetic and molecular approaches to aid plant breeding of Pluses (*Vigna*), Okra (*Abelmoschus*) and Cotton (*Gossipium*)” at Plant Breeding/Genetic Circle at Agri-life Research and Extension, Department of Soil and Crop

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Sciences, Texas A & M University, Texas, USA, on 14th February 2014.

Prof. K. Aguan

Presented a lecture on 'Neuronal excitability and epilepsy' in the Workshop on *Advances in Computational Neuroscience* held at NEHU on 24-29 March, 2014.

With M. M. Islam and Dr. S. Mitra presented a poster entitled "Towards the development of fluorescence based method in assaying acetylcholinesterase inhibitors" in the *National Symposium on Sustainable Chemistry: Frontiers and Challenges* held in NEHU, Shillong, from 27 February to 01 March, 2014.

With M. M. Islam and Dr. S. Mitra presented a poster on "Fluorescence spectroscopic analysis of lysozyme binding compounds: Correlation with enzymatic activity" at the *Symposium on Fluorescence Correlation Spectroscopy* held 23-28 November, 2013, in JNC SR and IISc, Bangalore.

Dr. S. R. Joshi

Delivered a lecture on "Resource utilization in teaching in institutions of higher learning" at the UGC-Academic Staff College, NEHU during the 23rd Orientation Programme on 23rd April, 2013.

Delivered an invited theme lecture on "Bioremediation and biotechnological green solutions" at St Mary's College, Shillong, during the National Seminar on *Burning Environmental Issues: Risk to Biodiversity and Human Health with Reference to NE India* held on May 16, 2013.

Delivered a lecture on "Teaching challenges in institutions of higher learning" at the

UGC-Academic Staff College, NEHU, during the 24th Orientation Programme on June 12, 2013.

Delivered a lecture on "Teaching challenges in institutions of higher learning" at the UGC-Academic Staff College, NEHU, during the 25th Orientation Programme on November 7, 2013.

Delivered a lecture on "Teaching in institutions of higher learning" at the UGC-Academic Staff College, NEHU, during the 26th Orientation Programme on Feb 4, 2014.

Delivered a talk on "Biotechnology and entrepreneurship" in the UGC-Special Summer School on *Recent Advances in Natural Sciences and Social Sciences* on 22 August 2013.

Delivered a talk on "Innovations in traditional fermented foods" in the UGC- Special Summer School on *Recent Advances in Natural Sciences and Social Sciences* on 23rd August 2013.

Dr. S. Majaw

Attended the UGC-sponsored *Capacity Building of Women Managers in Higher Education: Sensitivity/Awareness/Motivation Workshop* organized by Department of Anthropology, NEHU, Shillong, from 11– 15 June 2013.

Attended the UGC-Sponsored Refresher Course in Biotechnology at Jawaharlal University, New Delhi, from 22 July to 16 August 2013.

Dr. Neha Chaurasia

Presented a paper entitled "Induction of lipids under different abiotic stress conditions in *Anabaena* sp. and *Scenedesmus* sp. for biofuel production" in the 6th Annual KSTA Conference-2013 on 20-21 Dec, 2013, at Christ University, Bangalore,

organized by Karnataka Science and Technology Academy and Dept. of Science and Technology, Govt. of Karnataka.

Publications

Research Papers

Published in India

- John, J.K., Nissar, V.A.M., Latha, M., Sutar, S., Patil, P., Malik, S.K., Negi, K.S., Keisham, M., Rao, S.R., Yadav, S.R. and Bhat, K.V. (2013). Genetic resources and crossability relationship among various species of *Abelmoschus*. *Curr. Hort.* 1: 35-46.
- Sutar, S.P, Khedasana, K., Rao, S.R., Bhat, K.V. and Yadav SR. (2013). Chromosome counts in the genus *Cucumis* L. [Cucurbitaceae] from India. *Plant Sci. Feed*, 3: 80-82.
- Sarma B., Acharya, C. and Joshi, S. R. (2013) Plant growth promoting and metal bioadsorption activity of metal tolerant *Pseudomonas aeruginosa* isolate characterized from uranium ore deposit. *Proc. Natl. Acad. Sci., India B Biol. Sci.* DOI 10.1007/s40011-012-0136-8.
- Saikia, P. and Joshi S.R. (2014) A study on the occurrence of non-O157 Shiga toxin-producing *Escherichia coli* isolates in retail chicken meats marketed in North-East India. *Proc. Natl. Acad. Sci. India, B Biol. Sci.* 84:337-342; DOI: 10.1007/s40011-012-0143-9.
- Kumar R., Nongkhaw M., Acharya C. and Joshi S.R. (2013) Growth media composition and heavy metal tolerance behaviour of bacteria characterized from the sub-surface soil of uranium rich ore bearing site of Domiasiat in Meghalaya. *Indian J. Biotechnol.* 12: 115-119
- Bhattacharjee K. and Joshi S.R. (2013) Phylogenetic rearrangement of *Streptomyces* spp. On the basis of Internal Transcribed Spacer (ITS) region using molecular morphometrics approach. *Indian J. Biotechnol.* 12: 67-79.
- Banerjee S. and Joshi S. R. (2012) Insights into cave architecture and the role of bacterial biofilm. *Proc. Natl. Acad. Sci. India B Biol. Sci.* 83: 277-290.
- Banerjee S. and Joshi S.R. (2012) Preliminary screening and compositional analysis of bacterial biofilm from hypogean environments of Meghalaya, India. *Keanean J. Sci.* 1: 20-32
- Kumar R., Nongkhaw M., Acharya C. and Joshi S.R. (2013) Bacterial community structure from the perspective of the uranium ore deposits of Domiasiat in India. *Proc. Natl. Acad. Sci., India B Biol. Sci.* 83: 485-497.
- Devi L. S., Bareh D.A. and Joshi S. R. (2013) Studies on biosynthesis of antimicrobial silver nanoparticles using endophytic fungi isolated from the ethno-medicinal plant *Gloriosa superba* L. *Proc. Natl. Acad. Sci. India B Biol. Sci.* DOI: 10.1007/s40011-013-0185-7
- Nath A., Chattopadhyay A. and Joshi S.R. (2013) Biological activity of endophytic fungi of *Rouwolfia serpentina* Benth, an ethnomedicinal plant used in folk medicines in Northeast India. *Proc. Natl. Acad. Sci., India B Biol. Sci.* DOI: 10.1007/s40011-013-0184-8.
- Thokchom S. and Joshi S.R. (2013) Physicochemical analysis of ethnically fermented soybean products of North-East India and molecular characterization of

- associated lactic acid bacteria. *Proc. Natl. Acad. Sci. India B Biol. Sci.* DOI: 10.1007/s40011-013-0199-1
- Kumar R., Nongkhaw M., Acharya C. and Joshi S.R (2013) Soil bacterial metagenomic analysis from uranium ore deposit of Domiasiat in North-east India. *Curr. Science* 105: 495-498
- Blah M. M. and Joshi S.R. (2013) Nutritional content evaluation of traditional recipes consumed by ethnic communities of Meghalaya, India. *Ind J. Tradit. Know.* 12: 498-505
- Bhattacharjee K., Banerjee S., Bawitlung L., Krishnappa D. and Joshi S.R. (2013) A study on parameter optimization for degradation of endosulfan by bacterial consortia isolated from contaminated soil. *Proc. Natl. Acad. Sci. India B Biol. Sci.* DOI: 10.1007/s40011-013-0223-5
- Khaund P. and Joshi S.R (2013) Wild edible macrofungal species consumed by the Khasi tribe of Meghalaya, India. *Indian J. Nat. Prod. Resources* 4:179-204
- Sarma B., Acharya C. and Joshi S. R. (2013) Characterization of metal tolerant *Serratia* spp. isolates from sediments of uranium ore deposit of Domiasiat in Northeast India. *Proc. Natl. Acad. Sci. India B Biol. Sci.* DOI: 10.1007/s40011-013-0236-0
- Koijam K. and Joshi S. R (2013) Exopolysaccharide production by a lactic acid bacteria, *Leuconostoc lactis* isolated from ethnically fermented beverage. *Natl. Acad. Sci. Lett.* 37: 59–64 DOI 10.1007/s40009-013-0203-6
- Rapsang G. F. (2013) Molecular and probiotic functional characterization of *Lactobacillus* spp. associated with traditionally fermented fish Tungtap of Meghalaya in Northeast India. *Proc. Natl. Acad. Sci. India B Biol. Sci.* DOI 10.1007/s40011-013-0234-2.
- Nongkhaw F. M. W. and Joshi S. R. (2014) Micrographical assessment of antifungal effect of endophytic bacteria. *Proc. Natl. Acad. Sci. India B Biol. Sci.* DOI: 10.1007/s40011-014-0321-z
- Majaw, S. and Nongbet, A. (2013). Evaluation of antioxidant activity of TLC fractions of *Clerodendron colebrookianum* leaf extract containing flavonoids. *Int. J. Pharmacy Pharmaceut. Sci.* 5: 90-94.
- Published Abroad**
- Chatterjee A. (2013) Reduced glutathione: A radioprotector or a modulator of DNA repair activity? *Nutrients* 5: 525-542.
- Kurkalang S., Banerjee A., Ghosal N., Dkhar H. and Chatterjee A. (2013) Induction of chromosome instability and stomach cancer by altering the expression pattern of mitotic checkpoint genes in mice exposed to arecanut. *BMC Cancer*, 13:315
- Das A., Chaudhuri D., Ghate N. B., Chatterjee A. and Mandal N. (2013) Comparative assessment of phytochemicals and antioxidant potential of methanolic and aqueous extracts of *Clerodendrum colebrookianum* Walp leaf from North-East India. *Int. J Pharmacy Pharmaceut. Sci* 5: 420-427
- Choudhary A., Mittal A.K., Radhika M., Tripathy D., Chatterjee A., Banerjee U. C. and Singh I. P. (2013) Fulgic Acid A and B - two new stereoisomeric antioxidant triterpenes from *Potentilla fulgens*. *Fitoterapia* 91C: 290-292
- Mukherjee A.K., Chatterjee S., Majumdar S., Saikia D., Thakura R. and Chatterjee A.

- (2013) Characterization of a pro-angiogenic novel peptide from Russell's viper (*Daboia russelii russelii*) venom. *Toxicon*. 77C: 26-3
- Das A., Chaudhuri D., Ghate N.B, Chatterjee A. and Mandal N. (2014) Phytochemical analysis, antioxidant and anticancer potential of leaf extracts from edible greater Yam, *Dioscorea alata* L., from North-East India. *Int. J. Phytopharm.* 5: 109-119.
- Hynniewta, M., Malik, S. K. and Rao, S. R. (2014). Genetic diversity and phylogenetic analysis of *Citrus* (L) from North-East India as revealed by meiosis and molecular analysis of internal transcribed spacer region of rDNA. *MetaGene* 2: 237–251.
- Merita, K., Anju, S., Madhavan, L., Kattukunnel, J.J., Yadav, S.R., Bhat, K.V. and Rao, S.R. (2013). IAPT/IOPB chromosome data 15-*Abelmoschus* and *Vigna*. *Taxon* 62: 1–11.
- Khedasana, R., John, J.K., Yadav, S.R., Bhat, K.V., and Rao, S.R. (2013). Comparative male meiotic studies in some Indian representative species of *Cucumis* L (Cucurbitaceae). *Caryologia* ID: 854613 DOI:10.1080/00087114.2013.854613).
- Gehlot, H.S., Tak, N., Kaushik, M., Mitra, S., Wen-Ming Chen, Poweleit, N., Panwar, D., Poonar, N., Parihar, R., Tak, A., Singh S. I., Ojha, A., Rao, S. R., Simon M.F, dos Reis F. B. Junior, Perigolo, N., Tripathi, A., Sprent, J.I., Peter, J., Young, W. James. E. K. and Prasad. G. (2013). An invasive *Mimosa* in India does not adopt the symbionts of its native relatives. *Annals of Botany* DOI:10.1093/aob/mct112.
- Agarwal, R., Sujimoto, H., Tandon, R., Rao, S.R., and Raina. S. N. (2013). Species-genomic relationships among the tribasic diploid and polyploid *Carthamus* taxa, based on physical mapping of active and inactive 18S-5.8S-26S and 5S ribosomal RNA gene families and the two tandem repeated DNA sequences. *Gene* DOI: 10.1016/j.gene. 2013.03.036.
- Dkhar, J., Kumaria, S., Rao, S. R. and Tandon. P. (2013). New insights into character evolution, hybridization and diversity of Indian *Nymphaea* (Nymphaeaceae): Evidence from molecular and morphological data. *System. Biodiv.* 11: 77–86.
- Sutar, S., Patil, P., Aitawade, M., John J., Malik, S., Rao S. R., Yadav, S. R., and Bhat, K. V. (2013). A new species of *Abelmoschus* Medik. (Malvaceae) from Chhattisgarh, India. *Gen Resource Crop Evol.* DOI 10.1007/s10722-013-0023-z.
- John, J., Khedasana, R., Nissar, V.A.M., Scariah, S., Sutar, S., Rao, S. R., Nizar, M.A., Latha, M., Yadav, S.R., and Bhat, K.V. (2013). On the occurrence, distribution and taxonomy of *Cucumis setosus* Cogn., an endemic wild edible vegetable from India. *Gen Resource Crop Evol.* DOI 10.1007/s10722-012-9899-2, 60:1037–1046.
- Devi, S.P., Kumaia, S., Rao, S. R., and Tandon. P. (2013). In vitro propagation and assessment of clonal fidelity of pitcher plant, *Nepenthes khasiana* Hook.f.; A medicinal and insectivorous plant of India. *Acta Physiol. Planta* DOI 10.1007/s11738-013-1314-x.
- Devi, S. P., Kumaria, S., Rao, S. R., and Tandon. P. (2014). Single primer amplification reaction (SPAR) methods reveal subsequent increase in genetic variations in micropropagated plants of *Nepenthes khasiana* Hook. f. maintained for three consecutive regenerations. *Gene* 538:23-29.

- Lyngwi N. A, Koijam K., Sharma D. and Joshi S. R. (2013) Culturable bacterial diversity along the altitudinal zonations and vegetation range of tropical Eastern Himalaya *Rev. Biol. Trop.* 61: 467-490.
- Nath A. and Joshi S. R (2013) Bioactivity assessment of endophytic fungi associated with the ethnomedicinal plant *Potentilla fulgens*. *World J Pharmaceut Res.* 2: 2596-2607.
- Nongkhaw F. M.W and Joshi S. R (2014) Distribution pattern analysis of epiphytic bacteria on ethnomedicinal plant surfaces: A micrographical and molecular approach. *J Microsc. Ultrastruct.* DOI 10.1016/j.jmau.2014.02.003
- Bhattacharjee K, Joshi S. R (2014) NEMiD: A web-based curated microbial diversity database with Geo-based plotting. *PLoS ONE* 9: e94088.
- Khaund P. and Joshi S. R (2014) Enzymatic profiling of wild edible mushrooms consumed by the ethnic tribes of India. *J. Korean Soc. Appl. Biol. Chem.* 57: 263–271

Books/Book Chapters/Proceedings

- K. Aguan (2013). Chapter 1 (Recombinant DNA technology) and Chapter 2 (Molecular approaches to crop and animal improvement). In: *Genetics & Biochemistry* (IGNOU, New Delhi)
- Rao, S.R., Kumar, A., Rawat, D., Ram, H. (2013). Analysis of genetic diversity between and within the populations of some selected trees species – cytogenetic and molecular approaches. In: *Assessment & Conservation of Forest Genetic Resources through Biotechnological Interventions*, S. Singh and R. Das (Eds.). Indian Council of Forestry Research and Education, Dehradun, India. pp.1-13.
- Rao, S.R., Kumar, A., Sharma, S.K., Lamo, J. Ojha, A. (2013). Genetic minutiae of some threatened medicinal herbs of Indian Thar desert. In: *Advances in Medicinal Plant Research*. A. Bohra, A. Bohra and S.Bissa (Eds.); Agrobios, Jodhpur (India), 29-33.

Funds Received from Agencies including NEHU/UGC

Funding Agency		Amount (in lakhs)
NEHU (N-Plan)	-	09.00
DBT	-	84.80
DBT-M.Sc. teaching	-	11.46
DST	-	25.50
DST-PURSE	-	06.00
NEC	-	39.94
OIL	-	09.58
DAT	-	20.53
ICAR/NAIP	-	26.60

School of Life Sciences

Research Projects

New Projects

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount (in lakhs)
1	Development of a bacterial consortium for bioremediation of lead from solution	Dr. S.R Joshi	Department of Biotechnology, Govt of India	5.00
2	Assessment & conservation of microbial diversity in sacred groves with special reference to plant growth promoting <i>Bacillus</i> and related genera as influenced by environmental degradation	Dr. S.R Joshi	North-Eastern Council, Govt of India	39.94
3	Screening of Endophytic fungi having biofuel generation potential from biodiesel plants of Assam	Dr. S.R Joshi	Oil India Limited, Duliajan, Assam	9.58
4	Growth kinetics and adaptation behavior characterization of cesium and strontium tolerant bacteria	Dr. S.R Joshi	Department of atomic Energy, BRNS, Govt of India	20.53

Ongoing

Sl No.	Title of Project	PI/Co PI	Funding Agency	Amount (in lakhs)
1	Purification and characterization of bioactive natural antioxidant, immunomodulator and anticancer products from <i>Dioscorea alata</i> L., of North Eastern region of India	Prof. A. Chatterjee	DBT, Govt of India	8.2
2	Studies on antitumor and radio-protective potential of <i>Potentilla fulgens</i> Wall ex Hook. and characterization of its active compounds	Prof. A. Chatterjee	DBT, Govt of India	7.8
3	Allelic loss of mitotic checkpoint genes and their expression level in oral and esophageal cancer samples of raw betel-nut chewers in Meghalaya	Prof. A. Chatterjee	DST, Govt. of India	8.5

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4	Biosystematics of the genera <i>Vigna</i> , <i>Cucumis</i> and <i>Abelmoschus</i> .	Dr. K.V.Bhat (PI), Prof. S. R.Rao (Co-PI)	ICAR/NAIP Funded by World Bank	26.60
5	Characterization of Rhizobia associated with native and wild legumes of North East India with special emphasis on Meghalaya	Prof. S. Rama Rao (PI), Dr. S.R. Joshi (Co-PI)	Department of Biotechnology, Govt. of India	4.40
6	Whole genome and transcriptome changes as a consequence of allo and auto polyploidy in <i>Vigna</i> L.	Prof. S. Rama Rao (PI), Dr. S. Goel (Co-PI), Dr. S.K. Agarwal	Department of Biotechnology, Govt. of India	19.21
7	Development of AChE-inhibitor for Alzheimer's Disease: Screening, designing, synthesis and biological validation using chemical library & North-East Indian plants	Prof. K. Aguan	Department of Biotechnology, Govt of India	9.72
8	Impact assessment of Jhumming on native plants and soil microbiota and restoration of sustainable Jhum agro-ecosystems in Northeast India	Dr. S.R. Joshi	Department of Biotechnology, Govt of India	21.36
9	Collection and molecular characterization of mushrooms from sacred groves of Meghalaya	Dr. S.R. Joshi	Science & Engineering Research Board, DST, Govt of India	11.00
10	Study of anti-diabetic property and the mechanism of action of the wild edible plants available in North East India	Dr. S. Majaw	Science and Engineering Research Board, DST, New Delhi	6.00
11	Protein-protein interface targeted drug designing	Dr. A. Bhattacharjee	DBT, Govt. of India	9.11

School of Life Sciences

Completed during Year

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount (in lakhs)
1.	Exploration and germplasm collection of <i>Citrus</i> from the North Eastern India and characterization of genetic variability using cellular and molecular approaches	Prof. S. Rama Rao (PI), Prof. M.S. Bisht (Co-PI)	UGC, New Delhi	NIL
2.	Development of antiepileptic drugs: based on molecular physiology of epilepsy causing gene EFHC1 and Ayurvedic remediation	Prof. K. Aguan	Department of Biotechnology, Govt of India	86.4
3.	Development of web-based microbial database (bacteria, fungi and actinomycetes) of North-East India	Dr. S.R. Joshi	DEIT, GoI	270.30
4.	Isolation, characterization and anti-cancer property of endophytic fungal metabolites from North-Eastern India	Dr. S.R. Joshi	Department of Biotechnology, (NER Twinning Programme) Govt of India	43.57
5.	The use of biodiversity as a source of new chemical entities against defined molecular targets for treatment of tuberculosis	Dr. A. Bhattacharjee	Department of Biotechnology, Govt. of India	3.24

Academic Collaborations

1. NIPER, Chandigarh
2. Bose Institute, Kolkata
3. Visva Bharati University, Santiniketan, West Bengal
4. Molecular Biology Division, BARC, Mumbai
5. National Institute of Technology, Durgapur, West Bengal

6. University of Madras

7. IIT Kharagpur, West Bengal

Honours/Awards/Recognitions

Prof. S. R. Rao was awarded DBT-CREST Fellow at the Department of Soil and Crop Sciences, Texas A&M University, College Station, USA, from 5th January to 4th April, 2014.

DEPARTMENT OF BOTANY

Head : Prof. S. K. Barik
Telephone : +91 364 2722201, 2722202
E-mail : headbotany@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Dr. P. Tandon, M.Sc. (Lucknow); Ph.D. (Jodhpur)	Plant Physiology, Biochemistry and Biotechnology
	Dr. R. C. Laloo,* M.Sc. & Ph.D. (Gauhati)	Ecology
	Dr. A. K. Misra M.Sc.& Ph.D. (Meerut)	Cell and Molecular Genetics
	Dr. N. K. Chrungoo, M. Sc. & Ph.D. (Kashmir)	Plant Physiology, Plant Molecular Biology
	Dr. M. S. Dkhar, M. Sc. & Ph.D. (NEHU)	Microbiology and Microbial Ecology
	Dr. N. Venugopal, M. Sc. & Ph.D. (Madras)	Plant Anatomy and Reproductive Biology
	Dr. S. K. Barik, M. Sc. (Berhampur); Ph.D. (NEHU)	Forest Ecology and Management, Biodiversity Conservation, and EIA
	Dr. Uma Shankar, M.Sc. (Agra); Ph.D. (NEHU)	Ecology, Biodiversity and Conservation
	Dr. H. Kayang, M. Sc. & Ph.D. (NEHU)	Microbiology and Microbial Ecology
Associate Professor	Dr. S. Kumaria, M. Sc. & Ph.D. (NEHU)	Plant Physiology and Biotechnology
	Dr. Y. Kumar, M.Sc. (Agra); Ph.D.(NEHU)	Plant Taxonomy and Biosystematics
	Dr. L. Kharlukhi, M. Sc. (NEHU); Ph.D. (IARI)	Seed Physiology
Assistant Professor	Dr. P. Ramanujam, M. Sc. & Ph. D. (NEHU)	Plant Ecology, Algal Ecology
	Dr. M. C. Das, M. Sc. & Ph.D. (NEHU)	Plant Physiology and Biotechnology

*On E.O.L to Govt. of Meghalaya as a Deputy Chief Minister

School of Life Sciences

Thrust Area of Research

Plant and microbial diversity: Assessment, Characterization, Bio-prospection, and Conservation

Brief Statement of Academic Activities

The Department is a UGC Centre for Advanced Studies in Botany (Phase II) and offers two M. Sc. Programmes i.e. M. Sc. (Botany) and M. Sc. (Plant Molecular Biology) and Ph. D. Programme. The faculty members are active in diverse areas of research in plant sciences and are operating several research projects funded by various national and international agencies. The department has also research collaboration with several international and national organizations/universities. The faculty members were invited to various programmes to deliver lectures by different institutions in the country and abroad. The research students also presented papers in different seminars, symposia, workshops and

training programmes in India and abroad. Twenty two students were admitted to Ph. D. Programme of the Department during the year. Thirteen students were awarded Ph.D. degree. Thirty one students were admitted to M.Sc. (Botany) and 10 students to M.Sc. (Plant Molecular Biology) programmes. Twenty one students were awarded M.Sc. degrees in Botany and six students in Plant Molecular Biology. Twenty nine research papers were published in reputed International and National Journals. One student cleared UGC-CSIR NET examination and four students qualified in GATE. Besides regular teaching and research programmes, the Department has been engaged in several academic activities like organization of workshops, autumn/refresher Courses, and training programmes. Several distinguished scientists were invited to deliver thematic talks during the year. The students are regularly offered traineeship/student fellowship within the department and are also sent outside for advance training.

Students' Profile Enrolment Capacity: M.Sc. (Botany) – 31
M.Sc (Plant Molecular Biology)-10

Ph.D. Variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.(Botany)	1	28	2	10	21	19	12	31
M.Sc (PMB)	-	6	4	3	7	7	3	10
Ph.D.	1		4	5	17	13	9	22

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc. (Botany)	-	19	2	11	10	10	11	21
M.Sc (PMB)	-	3	3	-	6	3	3	6
Ph.D.	-	10	3	5	8	8	5	13

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Details of Students Awarded Ph.D. Degree

Sl. No.	Name of Student	Title of Thesis	Name (s) of Supervisor (s)/ Supervisors
1.	Ms. Subarna Hajong	Biochemical studies and effects of photon flux densities on <i>in vitro</i> establishment of mycorrhizal association in <i>Dendrobium chrysanthum</i> Wall in Lindl.	Prof. S. Kumaria (Supervisor) Prof. P. Tandon (Joint Supervisor).
2.	Mr. Neli Lokho Pfoze	Ethnobotanical studies and phytochemical analysis of selected medicinal plants of Senapati District, Manipur	Dr. Y. Kumar (Supervisor) Prof. B. Myrboh (Joint Supervisor)
3.	Mr. Viki Manners	DNA fingerprinting and in vitro propagation of <i>Vanda coerulea</i> Griff Ex. Lindl.	Prof. S. Kumaria (Supervisor) Prof. P. Tandon (Joint Supervisor)
4.	Ms. Jasmine Theseze Sawain	Impact of domestic discharge on the water quality of River Umkhrach in Shillong, Meghalaya and bioaccumulation of pollutants in plants	Prof. R. C Laloo
5.	Mr. Mechuselie Kehie	Biotechnological enhancement of capsaicin biosynthesis in cell cultures of <i>Capsicum chinense</i> Jacq	Prof. P. Tandon (Supervisor) Prof. S. Kumaria (Joint Supervisor)
6.	Mr. Kitboklang Nongrum	Effect of provenance variation on seed characteristics, germination and seedling growth of tree bean (<i>Parkia roxburghii</i> G. Don)	Prof. U. Shankar (Supervisor) Dr. B.P. Bhatt (Joint Supervisor)
7.	Ms. Febreena Grace Lyndem	Effect of coal stock drainage on the soil and ecophysiology of paddy and potato crops in Jaintia Hills, Meghalaya	Prof. R. C. Laloo
8.	Ms. Mautushi Das	Effect of coal mining on the periphytonic and benthic algal communities in the streams of Jaintia Hills, Meghalaya	Dr. P. Ramanujam
9.	Ms. Hygina Siangbood	Studies on diversity, productivity and nutrient content in algal communities of Umie river, Meghalaya	Dr. P. Ramanujam

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10.	Ms. Mildona Swer	Population structure and regeneration of Himalayan yew (<i>Taxus wallichiana</i> Zucc.) in subtropical forests of Meghalaya	Prof. U. Shankar (Supervisor) Dr. B.P. Bhatt (Joint Supervisor)
11.	Ms. Ruth Laldinthar	Role of earthworms on soil microbial diversity and leaf litter decomposition in soils from selected forests stands of Meghalaya	Prof. M. S. Dkhar (Supervisor) Prof. H. Kayang (Joint Supervisor)
12.	Ms. Ayam Gangarani Devi	Molecular profiling of selected accessions of rice (<i>Oryza sativa</i> L.) varying in starch quality from North-East India	Prof. N. K. Chrungoo
13.	Mr. Amit Kumar Tripathi	Quantitative assessment of floristic diversity and species populations in hill forests of Meghalaya	Prof. U. Shankar

Placement of Students

1. Dr. Subarna Hajong joined as DBT Research Associate in Applied Mycology Laboratory Department of Botany, University of Delhi under the supervision of Dr. Rupam Kapoor.
2. Dr. Mechusellie Kehie joined as DST-(SERB) Young Scientist in Post Graduate Department of Environmental Science, Patkai Christian College (Autonomous).
3. Dr L. S. Songachan joined as Assistant Professor in Ura College of Teacher Education, Kohima, Nagaland.

Courses Conducted

Postgraduate

M.Sc Botany

Semester I : Mycology, Plant Pathology and Microbiology; Algae, Bryophytes and Pteridophytes and Gymnosperms and Plant Anatomy.

Semester II : Plant Taxonomy and Economic Botany; Plant Biochemistry and Molecular Biology; Stress Biology; Techniques in Molecular Biology and Bioprocess Development

Semester III : Genetics, Cytogenetics and Plant Breeding, Plant Physiology; Biodiversity and Phytogeography; Environmental Pollution and Conservation and Biostatistics.

Semester IV : Plant Reproductive Biology and Biotechnology; Plant Ecology and Ecosystem Analysis and Project Work

M.Sc. Plant Molecular Biology

Semester I : Mycology and Plant Pathology; Microbiology; Cell Biology and Plant Physiology.

Semester II : Plant Biochemistry and Molecular Biology; Eukaryotic

Genome Organization; Stress Biology; Techniques in Molecular Biology and Bioprocess Development

Semester III : Genetics, Cytogenetics and Plant Breeding, Metabolite Engineering; Environmental Pollution and Conservation and Computer Applications and Bioinformatics and Project Work and Dissertation.

Semester IV : Plant Biotechnology; Molecular Basis of Differentiation and Project Work and Dissertation

Ph. D. Course Work

Paper I : Research Methodology

Paper II : Plant Sciences

Paper III : Review of Literature and Seminar

Educational Tour of Students

Teacher-in-Charge: Prof. S. K. Barik

Places/Institutions Visited: The students were taken to Jaisalmer, Jaipur and Jodhpur in Rajasthan to study the desert ecosystem and plants. They were taken to Sariska wildlife sanctuary to experience the ecosystem and species conservation programme. On the way, the students also visited the National Botanical Garden at Noida and some historical places in Delhi.

Duration of Tour: 15 days

Seminar/ Conference/Symposium/ Extension programmes etc.

Organised

Organized Monitoring Workshop under All-India Coordinated DBT project entitled

d “Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools” at Sikkim University, Gangtok on 17th May, 2013.

Autumn School in Plant Sciences for Graduate degree students from October 18-31, 2013

Inception workshop under All India Coordinated Network Research Project “Functional genomics approaches in understanding the regulation of synthesis and accumulation of apocarotenoids in saffron crocus (*Crocus sativus* L.)” on Oct. 26, 2013 at Dept. Of Biotechnology, University of Kashmir, Srinagar.

Hands on training Workshop on “Techniques in Proteomics” from February 20 – March 14, 2014.

A two day Workshop on “*Reproductive Biology of Threatened Plants*” at Baba Ghulam Shah Bad Shah University, Jammu and Kashmir on February 21- 22, 2014 in collaboration with the Centre for Biodiversity, Baba Ghulam Shah Bad Shah University, Jammu and Kashmir.

Hands-on Training Workshop on “*NGS and Its Applications*” from March 1-8, 2014

The Department organized a National Symposium entitled *Himalayan Biodiversity: Prospects and Challenges* during March 20-21, 2014.

Ecological Niche Modeling hands-on training under All India Coordinated DBT Project at NEHU from 27-28 March, 2014.

Participated

Prof. Pramod Tandon

Delivered an invited lecture on “Plant Resources, Food Security and Climate Change – An

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Indian Perspective” during *Convocation Week Celebrations* at Lucknow University on 6th January, 2014.

Delivered an invited talk entitled ‘Plant Genetic Resources of India – Some Issues’ at the *Science Academies’ Workshop on Frontiers in Life Sciences* held in Zoology Department, NEHU on 23rd May 2013.

Delivered the Inaugural Address as Chief Guest of the Workshop on *Advance Biological Tools and Techniques* held in the Botany Department of Gauhati University on 29th April 2013.

Attended the 12th *International Conference on Bioinformatics* held in Taicang, China during September 20-22, 2013. A paper entitled “Age estimation for the genus *Cymbidium* (Orchidaceae: Epidendroideae) with implementation of fossil data calibration using molecular markers (ITS2 & matK) with a Bayesian relaxed clock implying phylo-geographic inference in continuous space” was presented.

Chaired the Technical Session ‘Entrepreneurship and Opportunities’ at Workshop on “Defining the Role of Women Scientists and Teachers in Promotion and Application of Science and Technology- Northeast India Perspectives” organized by the National Academy of Sciences on May 8-9, 2013 at Lady Keane College, Shillong.

Prof. N. K. Chrungoo

Delivered a Key note address on “Agricultural Biodiversity in North East India: Issues and Challenges” at *National Conference on Biodiversity and Environment*, Shillong Science Centre, 12th February, 2014.

Presented a plenary lecture on “Genetic Diversity in Himalayan Buckwheats: A

Perspective for Use in Crop Improvement Programmes” at 13th *International Symposium on Buckwheat* held at Lasko, Slovenia from August 20-26, 2013 and Chaired a session on “Genetic Diversity in Buckwheats”.

Prof. M. S. Dkhar

Delivered an invited talk on “Management of Organic Wastes with special Reference to Vermicomposting” at FRI, Dehradun on July 24, 2013.

Prof. S. K. Barik

Attended the *Regional Workshop on Climate Change Adaptation* organized by ICIMOD at Guwahati on February 25 – 26, 2014 and talked on “Ecosystem based adaptation approach to Climate Change in Himalayas”.

Delivered the lead talk on “Biodiversity of Eastern Himalayas” on 31st January, 2014 in the 7th *Environmental Summit – 2014* held at Delhi during 30th January to 3rd February, 2014 organized by UNDP-CMS, Vatavaran.

Attended the *National Consultation Workshop on Trans-boundary Landscape Management* organized by International Centre for Integrated Mountain Development (ICIMOD), Kathmandu and GB Pant Institute of Himalayan Environment and Development at Itanagar on 4th and 5th January, 2014 as a Subject Expert member/ Resource Person and presented a paper on “Strategies for biodiversity conservation in Brahmaputra-Salween (Indo-China-Myanmar) landscape”.

Presented a paper on “Carbon stock in traditional agroforestry systems of Meghalaya” at the *Workshop on “Traditional Agro-forestry Systems”* at North-Eastern Hill University,

Shillong on 2nd December, 2013, organized jointly by Jawaharlal Nehru University, New Delhi, NEHU, and United Nations University, Tokyo.

Attended as an expert member and spoke on “Possibilities of NEXUS applications in north-east” at a Workshop on NEXUS at GIZ, Shillong on 26th November, 2013.

Attended as an Expert member and talked on “Need to convert biodiversity of north-east into bioresources” during the Brainstorming Session on “Bioresources and Sustainable Development in North East” held at Institute of Bioresources and Sustainable Development (IBSD), Imphal during November 11-12, 2013, organized by, IBSD, Imphal, and Department of Biotechnology, Government of India, New Delhi,

Delivered Keynote address in the UGC-sponsored National Symposium on *Biodiversity Conservation in Eastern Himalayas* at Sikkim University, Gangtok on 8th November, 2013 organized by Sikkim University.

Delivered Keynote address on 29th September, 2013 in the UGC-sponsored National Conference on *Biodiversity: Interrelationship between Flora, Fauna and Human* held at Kolkata on September 29 – 30, 2013 organized by West Bengal State University, Kolkata.

Attended the 3rd *Mountain Summit* at Kohima on September 25-26, 2013, and chaired/moderated the day-long Forestry Session on 25th September, 2013.

Delivered a lecture on “Experiences of Rural Bioresource Complex in developing women entrepreneurs under technology

transfer programme” at Lady Keane College, Shillong on 8th May, 2013 in the Workshop organized by National Science Academy, Allahabad.

Prof. S. K. Barik (Extension activities)

Delivered Keynote addresses on the occasion of “World Environment Day – 2013” at North-Eastern Hill University, Shillong organized by NSS, and at Anthropological Survey of India, Shillong.

Delivered a talk on environmental Conservation on 24th October, 2013 in the workshop on *Environmental Education* organized by CCR, New Delhi.

Published an article on *Importance of Biodiversity Conservation* in the Shillong Times on 22nd May, 2013 on the occasion of World Biodiversity Day – 2013.

Completed the establishment of Rural Bioresource complex and Technology Incubation centre at Leskin, Jaintia Hills, Meghalaya.

Prof. H. Kayang

Delivered 2 lectures on “Popularization and dissemination of Technology of Biopesticide formulation among the poor and marginal farmers of weaker sections in North East region” at Krishi Vigyan Kendra (KVK), East Khasi Hills District, Upper Shillong on 28th February, 2014 organized under DST collaborating project, Government of India.

Prof. Suman Kumaria

Delivered a talk on “Orchid resources of north-east India: Empowering woman folk” in the workshop on *Defining the role of women scientist and teachers in promotion and application of science and technology – northeast India Perspectives*, May 8-9,

2013 organized by National Academy of Sciences, India, NER Local chapter.

Dr. Meera Chettri Das

Attended the 2nd International Symposium on Plant Cryopreservation at Fort Collins, Colorado, USA held on August 11-14, 2013 and presented a paper on “Cryopreservation and affect of Lipoic acid (LA) and Glycine betaine (GB) on the improved regrowth of shoot tips of *Dendrobium nobile*, a medicinally important orchid”.

Publications

Research Papers

Published in India

- Daimei, P., Kumar, Y. (2013), *Alpinia blepharocalyx* var. *Glabrior* (Zingiberaceae): A new record for Manipur, India *Pleione* 7: 567-580.
- Devi, R. J. and N. K. Chrungoo (2013). Diversity in seed and pollen morphology of *Chenopodium quinoa* and *Chenopodium album*: potential underutilized crops from the genus *Chenopodium* complex. *NeBio* 4: 36-41.
- Majumdar, K., Datta, B. K., Shankar Uma (2013). *Bhesa robusta* (Roxb.) Ding Hon, Celastraceae: a new distributional record from Tripura, India. *J. Bombay Nat. Hist. Soc.* 110:166-168.
- Misra, A. K. (2013). Editorial, *J. Biosci* 38: 675–676.
- Nongrum, A., Kharlukhi, L. (2013). Effect of seed treatment for laboratory germination of *Albizia chinensis*. *J. For. Res.* 24: 709- 713.
- Pfoze, N. L., Kumar, Y., Myrboh, B. (2013). Screening of bioactive phytochemicals obtained from lesser known ethnomedicinal

plants of Senapati district, Manipur. *Pleione* 7: 489-500.

- Sarma, K., Sarma, R. K. and Barik, S. K. (2012). Soil erosion vulnerability mapping of Nokrek Biosphere Reserve, Meghalaya using Geographic Information System. *Disaster & Development* 6: 19-34.
- Upadhaya, K., Thapa, N., Lakadong, N. J., Barik, S. K. and Sarma, K. (2013). Priority areas for conservation in Northeast India: A case study in Meghalaya based on plant species diversity and endemism. *Int. J. Ecol. Environ. Sci.* 39: 125-136.
- Venugopal, N., Ahuja P. (2013). Seed germination of *Panax wangianus* S. C. Sun (Araliaceae): a critically endangered medicinal plant of Meghalaya, Northeast India. *J. Plant Repr. Biol.* 5: 156-160.
- Yanthan, M., Misra, A. K. (2013). Amplicon Restriction Patterns associated with rhizome activity of root nodules for selection of superior *Myrica* seedlings. *J. Biosci* 38: 789–795.

Published Abroad

- Bhattacharyya, P., Kumaria, S., Kumar, S., Tandon, P. (2013). Start Codon Targeted (ScoT) marker reveals genetic diversity of *Dendrobium nobile* Lindl., an endangered medicinal orchid species, *Gene* 529: 21-26.
- Chrungoo, N. K., Kreft, I., Sangma, Shiny Ch., Devadasan, N., Dohtdong, L., Chetri, U. (2013). Genetic Diversity in Himalayan Buckwheats: A perspective for use in crop improvement programmes. *Adv. Buckwheat Res.* 12: 6-18.
- Daimei, P., Kumar, Y. (2013), Ethnobotanical uses of gingers in Tamenglong district, Manipur, Northeast India. *Gen. Res. Crop. Evol.* 60: 273-285.

- Das, Panna, Saha, A. K., Kayang, H. (2013). Arbuscular mycorrhizal fungal morphology in *Michelia champaca* L. *J. Mycopathol. Res.* 51: 177- 179.
- Devi, S. P., Kumaria, S., Rao, S. R., Tandon, P. (2014). Single primer amplification reaction (SPAR) methods reveal subsequent increase in genetic variations in micropropagated plants of *Nepenthes khasiana* Hook. F. Maintained for three consecutive regenerations. *Gene* 538: 23–29.
- Dochhil H., Dkhar M.S., Barman D. (2013). Seed germination enhancing activity of endophytic *Streptomyces* isolated from indigenous ethno-medicinal plant *Centella asiatica*. *Int. J. Pharm. Bio. Sci.* 4: 256-262.
- Ghosh, A., Luis, A. S., Bras, J. L. A., Pathaw, N., Chrungoo, N. K., Carlos, M. G. A. F., Goyal, A. (2013). Deciphering Ligand Specificity of a *Clostridium thermocellum* Family 35 Carbohydrate Binding Module (CtCBM35) for Gluco- and Galacto-Substituted Mannans and Its Calcium Induced Stability. *PLOS One* 8: e80415.
- Hajong S., Kumaria, S., Tandon, P. (2013). Effect of plant growth regulators on regeneration potential of axenic nodal segments of *Dendrobium chrysanthum* Wall. Ex Lindl. *J. Agr. Sci. Tech.* 15: 1425-1435.
- Kehie, M., Kumaria, S. and Tandon, P. (2013). *In vitro* plantlet regeneration from cotyledon segments of *Capsicum chinense* Jacq. Cv. Naga King Chili, and determination of capsaicin content in fruits of *in vitro* propagated plants by High Performance Liquid Chromatography. *Sc. Hort.* 164: 1–8.
- Kehei, M., Kumaria, S. and Tandon, P. (2014). Manipulation of culture strategies to enhance capsaicin biosynthesis in suspension and immobilized cell cultures of *Capsicum chinense* Jacq. Cv. Naga King Chili. *Bioprocess Biosyst. Engg.* 37:1055-1063.
- Kharkongor, D., Ramanujam, P. (2013). Diversity and species composition of sub-aerial algal communities in forested areas of Meghalaya, India. *Int. J. Biod.* 1:1-10.
- Laldinthar, R., Dkhar, M.S. (2014). Studies on the decomposition of leaf litter of *Polyalthia longifolia* (Sonner.) Thw. And *Rhododendron rboretum* Sm. At high and low altitude forest stands of Meghalaya. *Int. J. Sci. Res.* 3: 41-43.
- Lyngdoh, A., Dkhar, M. S. (2014). First report of two wood-rotting fungi, *Cyclomyces fuscus* and *Humphreya coffeatum*, from India. *J. New Biol. Reports* 3: 25 – 28.
- Lyngdoh, A., Dkhar, M.S. (2014). Wood-rotting fungi in East Khasi Hills of Meghalaya, northeast India, with special reference to *Heterobasidion perplexa* (a rare species – new to India). *Cur. Res. Env. Appl. Mycol.* 4: 117–124.
- Shylla, O., Ramanujam, P. (2013). Effect of nutrient on diversity of algae in Marngar Lake, Meghalaya (India). *Inter. J. Algae* 15: 239-250.
- Singh, B., Adhikari, D., Barik, S.K., Chettri, A. (2013). *Pterocymbium tinctorium* (Merrill, 1901) (Magnoliophyta: Malvales: Sterculiaceae: Sterculioideae): New record from mainland India and extension of geographical distribution. *Checklist* 9: 622-625.
- Songachan, L.S., Kayang, H. (2013). Diversity of arbuscular mycorrhizal fungi associated

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with *Flemingia vestita* Benth. Ex Baker. *Int. J. Fungal Biol.* 4: 85-95.

Venugopal, N., Ahuja, P., Lalchhanhimi, (2014). A unique type of endosperm in *Panax wanganus* S. C. Sun. *J. Plant Develop.* 20: 45-50.

Book/Book Chapters/Proceedings

Malhotra, Kailash C., Barik, Saroj K. And Tiwari, Brajesh K. (2013). *Micro-level*

people's perception on climate change. Astral International Publications, New Delhi.

Choudhury, H., Kumaria, S., Tandon, P. (2014). Pinus Biotechnology: Progress and Prospects. In *Tree Biotechnology*, K. G. Ramawat, Jean-Michel Merillon and M. R. Ahuja (Eds.) CRC Press Inc, New York: Chapter 8, p. 223-24.

Funds Received from Agencies including NEHU/UGC

Funding Agency	Amount (in lakhs)
NEHU (Non-Plan):	17.80
DBT:	107.17
DST:	21.43
BRNS:	28.67

Research Projects

New Projects

Sl. No.	Title of the project	PI/Co-PI(s)	Funding Agency	Amount in Rupees
1	Popularization and dissemination of technology of bio-pesticide formulations among the poor and marginal (ST) farmers of weaker sections in North East region.	H. Kayang (PI)	DST, New Delhi (Collaborating Project)	Rs. 41,39,000/-
2	Survey of endophytic fungi associated with some aromatic plants of North Eastern region and assessment of their effect on chemical profile and biological activity as antimicrobial, aflatoxin inhibitors and antioxidant.	M. S. Dkhar (PI) H. Kayang (Co-PI) Collaborators: Banaras Hindu University	DBT, New Delhi (Twinning Project for NER),	Rs. 59, 35,000/-

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3	Molecular characterization and chemo-profiling of two pharmacologically relevant species of <i>Dendrobium</i> found in Northeast India.	S. Kumaria (PI) M. C. Das (Co-PI) Hiranjit Choudhury (Co-PI) Collaborators: Sunita Shailajan (PI) Herbal Lab., Mumbai	DBT's Twinning programme for the NE.	Rs. 7, 75, 000/-
4	All India coordinated network Research project "Functional genomics approaches in understanding the regulation of synthesis and accumulation of apocarotenoids in saffron crocus (<i>Crocus sativus</i> L.)"	N. K. Chrungoo, PI and All-India programme Coordinator.	DBT	Rs. 38, 97, 200/
5	Kinetics and mechanism of uptake, translocation and accumulation of natural uranium and fission product ¹³⁷ Cs in plants	N. K. Chrungoo, PI Collaborator: P.M. Ravi, BARC, PC	DAE-BRNS	28,67,300

Ongoing Research Project (s)

Sl. No.	Title of the project	PI/Co-PI(s)	Funding Agency	Amount received during 2013-14 (Rupees)
1.	All India Coordinated research project on Reproductive Biology of Four Rare, endangered and Threatened (RET) Tree species namely: <i>Aquilaria malaccensis</i> (Thymeleaceae), <i>Gymnocladus assamensis</i> (Caesalpiniaceae), <i>Ilex khasiana</i> (Aquifoliaceae): and <i>Illicium griffithii</i> (Illiciaceae) of North East India particularly in Arunachal Pradesh and Meghalaya	N. Venugopal (PI)	MoEF	Nil

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2.	Preventing Extinction And Improving Conservation Biological Tools, Status Of Threatened Plant Species Through Application Of Biological Tools, DBT	<p>All India Coordinator: S.K. Barik</p> <p>Sub-Project 1: Coordinator: P. Tandon PI: S.K. Barik Co-Pis: N. Venugopal H. Choudhury M.C. Das</p> <p>Sub-Project 2: PI: N.K. Chrungoo Co-Pis: S. Kumaria K. Upadhaya</p> <p>Sub-Project 15: Coordinator: S.K. Barik Joint Coordinator: N.K. Chrungoo</p>	DBT, New Delhi	Rs. 33,47,800
3.	Functional Characterization of an endosperm specific promoter p1028 from common buckwheat and transfer of <i>Bwleg1</i> gene coding for the buckwheat 26 kDa lysine rich seed storage protein to rice for nutritional enhancement of its grain proteins.	<p>N. K. Chrungoo, PI P. Tandon, Co-PI Collaborators: S. K. Sopory, JNU, PI Ashwani Pareek, JNU, Co-PI</p>		Nil

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4.	Phytochemical profiling, molecular characterization and conservation of <i>Flemingia vestita</i> : Endemic medicinally important plant of Northeast India.	S. Kumaria (PI) H. Choudhury (Co-PI) Collaborators: Sunita Shailajan (PI) Herbal Lab., Mumbai	DBT's Twinning programme for the NE.	Rs. 4,96,000/-
5.	Conservation of some <i>Paphiopedilum</i> species (orchid) of Northeast India through asymbiotic seed germination and cryopreservation	Meera Chettri Das (PI) S. Kumaria (Co- PI)	UGC, New Delhi	Nil
6.	All India Coordinated research project on sacred grove ecosystem services of Meghalaya	S. K. Barik (PI) and All India Coordinator and K. Upadhaya (Co-PI)	MoEF	Nil

Research Project(s) completed during year

Sl. No.	Title of the project	PI/Co-PI(s)	Funding Agency	Amount (Rupees)
1.	Micropropagation of <i>Nardostachys grandiflora</i> and <i>Malaxis wallichii</i> - Two threatened medicinal plants of Northeast India.	P. Tandon (PI) S. Kumaria (Co-PI), H. Choudhury (Co-PI)	DBT	Rs. 6,81,000/-
2.	Establishment of Rural Bioresource Complex in north-east India	Coordinator: P. Tandon PI: SK Barik	DBT	Rs. 33,15,776/-

Academic Collaborations

India

Jawaharlal Nehru University, New Delhi

Herbal Research Lab., Ramnarain Ruia College,
Mumbai

Banaras Hindu University, Varanasi

Indian Institute of Horticultural Research (IIHR), Bengaluru

National institute of Plant Genome Research,
New Delhi

University of Jammu, Jammu

University of Kashmir, Srinagar

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37 Universities/Institutions all over the country under the DBT programme, “Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools” (Being coordinated by the Department).

16 Universities/Institutions all over the country under the All India Coordinated research project on “Quantification of Sacred Grove Ecosystem Services”, sponsored by Ministry of Environment and Forests (Being coordinated by the Department).

Abroad

Feiburg University, Feiburg, Germany

University of Ljubljana, Slovenia

Honours/Awards/Recognitions

Prof. P. Tandon

Was conferred the prestigious A.R. Chavan Memorial Lecture Award by the M.S. University, Vadodara. He delivered a lecture entitled ‘Plant Genetic Resources, Food Security and Climate Change An Indian Perspective’ on 7th August 2013. He also delivered a lecture on ‘Clonal Propagation and Cryopreservation of Plants in the Department of Botany at M.S. University.

Was conferred the prestigious Lecture Award in field of Biodiversity by the National Academy of Sciences (2013).

Prof. P. Tandon has been appointed member of the following:

National Advisory Council of Government of India.

Advisory Committee of the National Academy of Sciences on Brahmaputra Gallery at Guwahati.

Council, the National Academy of Sciences, India.

Advisor, Institute of Life Sciences, Malkolam Knowledge Centre, Hyderabad

Search Committee for recommending a panel of names for appointment of Chancellor of Usha Martin University.

Member, Biotechnology Vision Group of Uttar Pradesh, Government.

Prof. A. K. Misra

Nominated by UGC as Expert on the Advisory Committee of UGC SAP programme of Department of Botany, Sri Venkateshwara University, Tirupati.

Edited Special Issue of The Journal of Biosciences (November, 2013) jointly published by the Indian Academy of Sciences, Bangalore and Springer.

Gave a series of honorary lectures at the Orientation programmes for University/ College teachers organised by the Academic Staff College, NEHU.

Became Member of the Executive Council of NEHU.

Appointed Director, Internal Quality Assurance Cell, NEHU.

Prof. N. K. Chrungoo has been appointed as

Member, Faculty of Biotechnology, D.Y. Patil Univ., Pune

Member, DBT task force on Plant Biotechnology and emerging areas

Member, DBT task force on Biotechnology based programmes for women

Member, Board of Post Graduate Studies in Botany, Tripura University, Agartala

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Asia pacific representative on the Editorial Board of the Journal FAGOPYRUM.

Delivered extension lectures on Feb. 7-8, 2014 at Tejpur Central University, Tejpur

Prof. S.K. Barik has been appointed as

Expert Member in the DBT Task Force on “Environmental Biotechnology and Biodiversity”.

Expert Member in the DBT Apex Committee on Biotechnology research for North-East.

Expert Member on the Scientific advisory Committee on ENVIS of Ministry of Environment and Forests, Government of india.

Expert Member, Committees on Identification of Eco-sensitive Zones in Meghalaya and Nagaland.

Expert Member, Meghalaya State Biodiversity Board.

Expert Member, Indira Gandhi Paryavaran Purashkar, Ministry of Environment and Forests, Government of India.

Associate Editor, *Tropical Ecology*

Member Editorial Board, *Journal of Biodiversity*

Member, Executive Council, *International Society for Tropical Ecology*, and *International Society for Environmental Botanists*.

Delivered talks in two Orientation Courses, one Summer School, one Autumn Course, and one Refresher Course organized under Academic Staff College, NEHU, Shillong.

Prof. H. Kayang has been appointed as member of Board of Studies of the Department of Environmental Science, Mizoram University (2013-2016).

Dr. Meera Chettri Das was awarded Overseas Associateship, DBT Govt. of India during August, 2013 to January, 2014.

DEPARTMENT OF ZOOLOGY

Head : Prof. N. Saha
Telephone : 0364-2722301/2304(O)
E-mail : nsaha@nehu.ac.in; nsahanehu@hotmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	V. Tandon, M.Sc. & Ph.D. (Panjab)	Parasitology
	B. K. Sharma, M.Sc. & Ph.D. (Panjab)	Limnology & Biosystematics
	B. B. P. Gupta, M. Sc. & Ph.D. (BHU).	Endocrinology
	S. B. Prasad, M.Sc. & Ph.D. (BHU).	Cell Biology
	R. N. K. Hooroo, M.Sc.& Ph.D. (NEHU).	Developmental Biology
	N. Saha, M.Sc.& Ph.D., (NEHU).	Biochemical Adaptation
	S. N. Ramanujam, M.Sc. (Bangalore), Ph.D. (NEHU).	Fish Biology
	A. K. Yadav, M.Sc. (Agra), Ph.D. (NEHU).	Parasitology
	B. Roy, M.Sc. (NBU), Ph.D. (NEHU).	Parasitology
	A. S. Dixit, M.Sc.(Gorakhpur Univ.), Ph.D. (BHU).	Endocrinology
Associate Professor	B. Keshan, M.Sc.& Ph.D. (Calcutta).	Insect Endocrinology and Molecular Biology
	S. Ghosh, M.Sc. & Ph.D.(Calcutta).	Genetics
Assistant Professor	S. Choudhury, M.Sc. & Ph.D. (NEHU).	Entomology
	S. R.Hajong, M.Sc.& Ph.D.(NEHU).	Entomology
	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 diversity of helminth parasites and entomopathogenic nematodes in N. E. region with emphasis on molecular taxonomy of zoonotic parasites and bioprospection of anthelmintic efficacy

of plants used in traditional medicine systems, biodiversity of freshwater zooplanktons, fishes, amphibian and insects in N.E. region, adrenergic signal transduction in pineal gland, hormonal regulation of oxidative metabolism, and breeding biology of endangered fishes, amphibians and birds, cisplatin action as an anticancer drug, and efficacy of putative anticancerous plants and animals from N.E. region, biochemical

adaptation to nitrogen, carbohydrate, protein and oxidative metabolism, and nitric oxide signaling under various environmental stresses in air-breathing fishes, 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

The Department of Zoology offers specializations in all major disciplines of Zoology. The Department is regularly conducting UGC Refresher course in Zoology for the college and University teachers. Faculties 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, a large number of research papers have been published in reputed national and international journals by its faculties. The Department offers M.Sc. and Ph.D. Programme. The students are offered specializations in all major disciplines of Zoology. The Department has adopted the Choice-based credit system (CBCS) at the M.Sc. Some research students

qualified CSIR-UGC NET. Some students have acquired important faculty positions in educational and research institutions of the N.E. region and other parts of the country. The total intake of students per year for M.Sc. 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 recipient of various awards, distinctions and fellowships. Based on overall academic and research contributions, this Department was awarded the three phases of DRS and two phases of DSA programme by the University Grants Commission (UGC) under its Special Assistance Programme to promote higher research with special reference to the N.E. region. Faculties of this Department are actively involved in the University with Potential for Excellence (UPE): Biosciences Programme sanctioned by the UGC, New Delhi. The Department has various research projects sponsored by UGC, DST, DBT, ICMR, ICAR and MoEF. All these projects have a direct relevance to the socio-economic development of the N.E. region. The Department is conducting seminars every week for the active participation of M.Sc. students to deliver a talk under the supervision of faculty members. The Department runs a “Zoonic Society” for various activities involving students, teaching and non-teaching staff.

Students' Profile

Enrolment Capacity: M.Sc.-30; Ph.D. –Variable

Admissions

Degree	SC/ OBC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	01	28	01	07	23	17	13	30
M.Phil	–	–	–	–	–	–	–	–
Ph.D.	03	05	02	07	03	04	06	10

School of Life Sciences

Degrees Awarded

Degree	SC/ OBC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	00	28	02	12	18	16	14	30
M.Phil.	-	-	-	-	-	-	-	-
Ph.D.	02	01	05	05	03	03	05	08

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Mr. Sudeep Ghatani	Status of amphistomiasis and molecular taxonomy of gastrothylacid parasites (Platyhelminthes: Trematoda: Gastrothylacidae) in mammalian livestock in Northeast India.	Prof. V. Tandon
Ms. Sunila Thapa	Studies on helminth parasite spectrum of edible freshwater fishes and fish-borne zoonoses in Meghalaya, Northeast India.	Prof. V. Tandon
Mr. Donald B. Jyrwa	Studies on helminthoses and molecular taxonomy of caryophyllideancestodes in freshwater fishes in Meghalaya.	Prof. V. Tandon
Mr. Th. N. Singh	Studies on growth, sexual maturation and induced breeding of endangered chocolate mahseer, <i>Neolissocheilus hexagonolepis</i> (McClelland).	Prof. B. B. P. Gupta
Mr. A.K. Verma	Studies on the antitumor efficacy and toxicity of the blister beetle <i>Mylabris cichorii</i> extract in mice bearing ascites Dalton's lymphoma.	Prof. S.B. Prasad
Ms. Gitalee Bhuyan	Studies on tissue specific expression and induction of multiple glutamine synthetase genes under hyper-ammonia stress and ammonia-induced nitrotyrosination of glutamine synthetase in catfish, <i>Heteropneustes fossilis</i> .	Prof. N. Saha
Mr. Manas Das	Effect of osmotic stress on gluconeogenesis and mitogen activated protein kinases in the air-breathing catfish, <i>Heteropneustes fossilis</i> .	Prof. N. Saha

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Ms. Maisnam Manorama Devi	Studies on distribution and biology of an ornamental fish <i>Puntius shalynius</i> Yazdani and Talukdar in Meghalaya	Prof. S. N. Ramanujam
Ms. Ramita Sougrakpam	Photoperiodic regulation of seasonality in reproduction in the yellow-breasted bunting, <i>Emberiza aureola</i> (Pallas).	Prof. A. S. Dixit

Placement of Students

1. Dr. Jollin Andrea Shylla (student of Prof. V Tandon) was appointed as DST INSPIRE Faculty Fellow at NEIGRIHMS, Shillong.
2. Dr. Mahua G. Choudhury (student of Prof. N. Saha) was appointed as Women Scientist under the DBT-Biocare in the Department of Zoology, NEHU, Shillong.
3. Dr. Ramita Sougrakpam (student of Prof. A. S. Dixit) was appointed as Assistant Professor in the Department of Zoology, *St. Joseph's College*, Jakhama, Nagaland.

Courses Conducted

Postgraduate: M.Sc. in Zoology

Semester I : Cell Biology & Immunology, Biological Chemistry & Molecular Biology, Genetics & Developmental Biology.

Semester II : Animal Physiology, Parasitology & Entomology, Techniques in Biology.

Semester III : Endocrinology & Reproductive Biology, Aquatic Biology & Fisheries, Animal Diversity.

Semester IV : Biosystematics & Evolution, Ecology & Environmental Biology, Special Paper*.

***Special Papers offered:** Biochemical Adaptation and Metabolic Regulation,

Developmental Biology, Endocrinology and Reproductive Physiology, Fish Biology, Genetics, Helminth Parasitology, Insect Physiology, Molecular Cell Biology and Immunology.

Ph.D. Courses:

Paper 1 : Research Methodology

Paper 2 : Optional Papers: (A) Applied Entomology, (B) Chronobiology, (C) Fish Physiology and Toxicology, (D) Freshwater Ecology, (E) Molecular and Biochemical Zoology and (F) Tropical Parasitology

Paper 3 : Review of Literature

Educational Tour of Students

Teacher-in-Charge: Prof. B. Roy

Places/Institutions Visited: Puri sea beach; CIFA and Nandankanan, Bhubaneswar, Science city, Bose Institute, Calcutta University and Zoological Survey of India in Kolkata.

Duration of Tour: 05.01.2014 to 14.01.2014

Purpose of Tour: Prof. B. Roy took M.Sc. 3rd Semester students on study tour to Bhubaneswar and Kolkata and visited various academic and research institutes relevant to the courses in M.Sc. from 05 to 14 January, 2014

**Seminars/Conferences/Symposia/
Extension Programme etc.**

Organized:

A two-day workshop on “Defining the Role of Women Scientists and Teachers in Promotion and Application of Science and Technology- Northeast India Perspective” organized by the National Academy of Sciences, India (NASI) North East Region Local Chapter in collaboration with Lady Keane College, Shillong on 8-9 May 2013.

Science Awareness/Communication Programme- St Edmund’s School, May 10, 2013 under the aegis of National Academy of Sciences India (NASI) –NE Region Local Chapter, Shillong.

Science Academies’ Lecture Workshop on ‘Frontiers in Life Sciences’, Department of Zoology, NEHU, Shillong, 21-24 May, 2013.

Workshop on “Next Generation Sequencing: Bioinformatics and Data Analysis” June 17-21, 2013 under the aegis of DBT-sponsored NER Twinning project “Next Generation Sequencing and Genome Information of Parasite Biodiversity of medico-veterinary significance in North-East India”, Bioinformatics Centre, NEHU, Shillong.

“2nd Colloquium of DBT’s Overseas Associates of NER” at NEHU, Shillong, on December 9, 2013, sponsored by DBT, GoI.

National Workshop on “Hands-on Training on Techniques used in Biotechnological Research” February 28 - March 8, 2014 under “DBT-Programme on Improvement of Infrastructure for Biotechnology Teaching, Training & Research in NE India”.

“Current Perspectives in Zoological Sciences” under the DSA-Phase II (UGC-SAP) Programme on 28th March, 2014.

Participated

Prof. V. Tandon attended

Science Academies’ Lecture Workshop on ‘Frontiers in Life Sciences’, Department of Zoology, NEHU, Shillong, 21-24 May, 2013.

The 2nd International Conference on Translational Biomedical Informatics & The 12th International Conference on Bioinformatics (INCoB 2013), Taicang, China, 20-22 September, 2013.

National Conference on Contemporary Bioinformatics Research in India. DBT Bioinformatics Centre, Assam University, Silchar, 10 November, 2013 & 6th NEBInet Coordinators’ Meeting, 11-12 November, 2013.

Delivered Keynote Address on- “Research and databases developed Bioinformatics Centre (Distributed Information Centre and Nodal Centre NEBInet), NEHU, Shillong”.

The 83rd Annual Session of the National Academy of Sciences, India and Symposium on “Space for Human Welfare”, Goa University, Goa. 5-7 December, 2013 and delivered the Sectional President talk on “Neglected Tropical Diseases: Trematodiasis - The Indian Scenario”.

Prof. S. B. Prasad attended

101st Indian Science Congress at the University of Jammu, Jammu, 3-7 February, 2014 and delivered an invited talk on “Studies on antitumor activity and tissue toxicity of cantharidin, a monoterpenoid, isolated from blister beetles, *Mylabris cichorii*”.

Prof. R. N. K. Hooroo attended

“Science Academics” lecture workshop on Frontiers in Life Sciences held at Department of Zoology on 21 May 2013.

International Conference on Electron Microscopy and XXXIV Annual Meeting of the Electron Microscope Society of India (EMSI) jointly organized by Saha Institute of Nuclear Physics, Kolkata and East Zone Chapter of EMSI, Kolkata, 3-5 July, 2013.

Served as a resource person in the refresher course held in the Department of Zoology, M.D.S University, Ajmer, Rajasthan, 10-13 August, 2013.

Served as a Guest faculty in the SERB 6th School in Herpetology held at Wildlife Institute of India, Dehradun, 28-31 August, 2013.

Prof. N. Saha attended

The Seminar on ‘Biological Research in Human Welfare’ at the Department of Zoology, University of North Bengal, Siliguri, 7-8 February, 2014 and delivered a lead lecture on “Air-breathing catfishes of India: Their cellular and biochemical adaptational strategies with relation to nitrogen metabolism”.

Prof. A. K. Yadav attended

The TM’s 2nd World Virology & Microbiology Online Conference organized by Target Meeting Team, TX, USA, and chaired a scientific session 5: Epidemiology and Microbiology-I and presented a research paper, “Therapeutic and toxicological evaluations of *Acorus calamus* Linn., a traditional anthelmintic plant of Northeast India”, 16-18 April, 2013.

Prof. B. Roy attended

The International Conference on Electron Microscopy and XXXIV Annual meeting of the Electron Microscope Society of India (EMSI) Kolkata, 3–July, 2014 and delivered an invited lecture.

Prof. A. S. Dixit attended

DST-SERB School in Chronobiology 2013 at JNCASR, Bangalore, 16 -30 June 2013

Dr. S. R. Hajong attended

National Symposium on ‘Recent Advances in Beneficial Insects’ at the Indian Institute of Natural Resins & Gums (IINRG), Ranchi, Jharkhand, 27-29 November, 2013 and presented a paper entitled ‘*Trigonabee* (Apidae: Meliponini) and its rearing in Ri-Bhoi district of Meghalaya’.

The International Conference on ‘Faunal Biodiversity at Department of Zoology, University of Lucknow, 22-23 March, 2014 and presented a paper entitled ‘Preliminary studies on some characteristics of nest structure in *Polyrhachis dives belli* Forel, (Hymenoptera: Formicidae) from North-East India and their Conservation Strategies’.

Publications

Research Papers

Published in India

Athokpam, V.D., Tandon, V. (2013). A survey of metacercarial infections in commonly edible fish and crab hosts prevailing in Manipur, Northeast India. *J. Par. Disease*, DOI: 10.1007/s12639-013-0360-z.

Ramnath Jyrwa, D.B., Dutta, A.K., Das, B., Tandon, V. (2014). Molecular

- characterization of the Indian poultry nodular tapeworm, *Raillietinaechinobothrida* (Cestoda: Cyclophyllidae: Davaineidae) based on rDNA internal transcribed spacer-2 region. *J. Par. Disease*, DOI: 10.1007/s12639-012-0184-2 (2012).
- Ramnath Jyrwa, D.B., Dutta, A. K., Das, B., Tandon, V. (2014). Molecular characterization of the Indian poultry nodular tapeworm, *Raillietinaechinobothrida* (Cestoda: Cyclophyllidae: Davaineidae) based on rDNA internal transcribed spacer 2 region. *J. Par. Disease* 38:22–26.
- Kalita, S., Verma, A. K., Prasad, S.B. (2014). Chlorambucil and ascorbic acid-mediated anticancer activity and hematological toxicity in Dalton's ascites lymphoma- bearing mice. *Indian J. Exp. Biol.* 52: 112-124.
- Rangad, D., Hooroo, R.N.K. (2013). Anuran fauna of Riat Laban reserve forest, Meghalaya with a note on the breeding habitat of some species *Pranikee- J. Zool. Soc.* 15: 40 – 58.
- Banerjee, B., Bhuyan, G., Saha, N. (2013). Influence of hypertonicity on the induction of ureogenesis and amino acid metabolism in air-breathing walking catfish (*Clarias batrachus*, Bloch). *Indian J. Exp. Biol.* 53: 611-625.
- Sailo, L., Solanki, G. S., Ramanujam, S. N., Lalthanzara, H. (2013) Survey on distribution of pheasants (Galliformes) in Mizoram, India. *Sci. Vis.* 13: 90-95.
- Lalthanzara, H., Ramanujam, S. N. (2014). Earthworm cast production and physico-chemical properties in two agroforestry systems of Mizoram (India). *Trop. Ecol.* 55: 75 – 84.
- Roy, B., Giri, B.R. (2013). Anti-acetylcholinesterase activity of root hair of *Carex baccans* on the trematode *Artyfechinostomum sufrartyfex*. *NBU J. Ani. Sci.* 7: 1-5.
- Singh, N. S., Dixit, A. S. (2014). Participation of endogenous circadian rhythm in photoperiodic time measurement during ovarian responses of the subtropical tree sparrow, *Passer montanus*. *Indian J. Exp. Biol.* 52: 596-503.
- Hajong, S.R. (2013). Record of a rare snakefly (Raphidioptera: Inocelliidae) from Meghalaya. *NeBIO* 4:50-51.
- Hajong, S.R. (2013). Mass emergence of a cicada (Homoptera: Cicadidae) and its capture methods and consumption by villagers in Ri-bhoi district of Meghalaya. *J. Ent. Res.* 37: 341-343.
- Rahman, S., Hajong, S.R. (2013). Quantitative changes in lipids and carbohydrates of temporal workers and drones in *Apis cerana indica* (Fabricius). *Haltere* 4: 59-67.
- Kharbangar, M., Hajong, S. R., Choudhury, S. (2013). New records of thrips (Thysanoptera) species associated with rice in Khasi Hills, Meghalaya. *J. Ent. Zool. Stud.* 1:100-104.
- Published abroad
- Kumar, S., Biswal, D. K., Tandon, V. (2013). *In-silico* analysis of caspase-3 and -7 proteases from blood-parasitic *Schistosoma* species (Trematoda) and their human host. *Bioinformation* 9: 456-463.
- Biswal, D.K., Ghatani, S., Shylla, J. A., Sahu, R., Mullapudi, N., Bhattacharya, A., Tandon,

- V. (2013). An integrated pipeline for next-generation sequencing and annotation of the complete mitochondrial genome of the giant intestinal fluke, *Fasciolopsis buski* (Lankester, 1857) Looss, 1899 (Digenea: Fasciolidae). *Peer.J.* 1:e207; dx.doi.org/10.7717/peerj.207.
- Shylla, J. A., Ghatani, S., Tandon, V. (2013). Utility of divergent domains of 28S ribosomal RNA in species discrimination of paramphistomes (Trematoda: Digenea: Paramphistomoidea). *Parasitol.Res.* 112: 4239-4253.
- Kar, P.K., Murmu, S., Saha, S., Tandon, V., Acharya, K. (2014). Anthelmintic efficacy of gold nanoparticles derived from a phytopathogenic fungus, *Nigrospora oryzae*. *PLoS one*, 9 (1):e84693.
- Sharma, B. K., Pachau, L. 2013. Zooplankton diversity of a sub-tropical reservoir of Mizoram, Northeast India. *Opusc. Zool.* 44:47-60.
- Amenla., Verma, A. K., Prasad, S.B. (2013). Dietary ascorbic acid-mediated augmentation of antitumor activity and protection against toxicities induced by *cis*-diamminedichloroplatinum-(II) in Dalton's lymphoma-bearing mice. *J. Cancer Res. Updates* 2: 116-130.
- Verma, A. K., Nath, P., Prasad, S. B., Kardong, D., Kashyap, A.J.D., Chillawar, R. (2013). Homology modeling and characterization of phosphoenolpyruvate carboxykinase (PEPCK) from *Schistosoma japonicum*. *IOSR J. Pharm. Biol. Sci.* 8: 82-93.
- Verma, A.K., Prasad, S.B., Kalliyappan, K., Arjun, J. (2013). Crystal structure of cantharidin (2, 6-Dimethyl-4, 10-dioxatricyclo-[5.2.1.0^{2,6}] Decane-3, 5-Dione) isolated from red headed blister beetle, *Epicautahirticornis*. *Int. J. Bioassays* 2: 527-530.
- Verma, A. K., Prasad, S.B. (2013). Changes in glutathione, oxidative stress and mitochondrial membrane potential in apoptosis involving the anticancer activity of cantharidin isolated from red-headed blister beetles, *Epicautahirticornis*. *Anti-Cancer Agents Med. Chem.* 13:1096-1114.
- Verma, A. K., Prasad, S.B. (2013). Antitumor effect of blister beetles: An ethno-medicinal practice in Karbi community and its experimental evaluation against a murine malignant tumor model. *J. Ethnopharmacol.* 148: 869-879.
- Prasad, S.B., Verma, A.K. (2013). Cantharidin-mediated ultrastructural and biochemical changes in mitochondria lead to apoptosis and necrosis in murine Dalton's lymphoma. *Micr. Microana.* 19: 1377-1394.
- Arjun, J., Verma, A. K., Prasad, S. B. (2014). Method of preparation and biochemical analysis of local tribal wine *Judima*: an indigenous alcohol used by dimas tribe of North Cachhar Hills District of Assam, India. *Int. Food Res. J.* 21: 463-470.
- Das, M., Banerjee, B., Choudhury, M. G., Saha, N. (2013). Environmental hypertonicity causes induction of gluconeogenesis in the air-breathing singhi catfish, *Heteropneustes fossilis*. *PLoS ONE*, 8(12), e85535. doi: 10.1371/journal.pone.0085535. eCollection 2013
- Schmidt-Rhaesa, A., Yadav, A.K. (2013). One new species and a new record of the genus *Chordodes* (Nematomorpha: Gordiida)

- from North-East India. *Zootaxa* 3693: 293-300.
- Ronghang, B., Roy, B. (2013). Filarial infections in semi-wild cattle of Northeast India: first record of *Seteriadigitata* (von Linstov 1906) in *Bosfrontalis* (Lambert 1804). *J. Parasit. Dis.* DOI 10.1007/s12639-013-0404-4.
- Giri, B.R., Roy, B. (2013). Nephrotoxic potential of *Carexbaccans* (Family: Cyperaceae): a light and electron microscopic studies. *J. Toxicol. Health* 103: 244-251.
- Dasgupta, S., Roy, B., Giri, B.R. (2013). Ultrastructural observations on *Raillietinaechinobothrida* exposed to crude extract and active compound of *Sercurinegavirosa*. *Micron* 50: 62-67.
- Giri, B.R., Roy, B. (2013). Evidence of apoptosis in *Raillietinaechinobothrida* induced by methanolic extract of three traditional medicinal plants of Northeast India. *Exp. Parasitol.* 134: 466-473.
- Dasgupta, S., Roy, B., Venkataswamy, M., Giri, B.R. (2013). Effects of *Acacia oxyphylla* and *Securinegavirosa* on functional characteristics of *Raillietinaechinobothrida* (Phylum: Platyhelminthes; Class: Cestodea), a poultry cestode parasite. *J. Parasit. Dis.* 37: 125-130.
- Swargiary, A., Roy, B., Giri, B.R., Ronghang, B. (2013). A comparative study on the anthelmintic efficacy of some medicinal plants of North-East India: alteration in the glycolytic enzymes of *Fasciolopsis buski*, a giant intestinal fluke. *Asian Pac. J. Trop. Med.* 4: 412-420.
- Giri, B.R., Roy, B. (2014). Resveratrol induced structural and biochemical alterations in the tegument of *Raillietinaechinobothrida*. *Parasitol. Int.* 63: 432-437.
- Dixit, A. S., Sougrakpam, R. (2013). Photoperiodic regulation of seasonal reproduction, molt and body weight in the migratory male yellow-breasted bunting (*Emberiza aureola*). *Anim. Repro. Sci.* 141: 98-108.
- Dixit, A. S., Singh, N. S. (2013). Seasonal variations in plasma levels of testosterone and estradiol 17 β and histomorphometric analyses of gonads in the wild and captive tree sparrow. *Can. J. Zool.* 91: 302-312.
- Singh, N. S., Dixit, A. S. (2014). Morphology and ultrastructural studies of pineal organ of the tree sparrow (*Passer montanus*). *Micron* 58: 9-14.
- Fujiwara K., Ghosh, S., Liang, P., Morien, E., Soma M., Nagase H. (2013) Genome-Wide Screening of Aberrant DNA Methylation Which Associated With Gene Expression in Mouse Skin Cancers. *Mol. Carcino.* DOI: 10.1002/mc.22085.
- Uekusa, S., Kawashima, H., Sugito, K., Yoshizawa, S., Shinojima, Y., Igarashi, J., Ghosh, S., Wang, X., Fujiwara, K., Ikeda, T., Koshinaga, T., Soma, M., Nagase, H. (2014). NR4A3, a possible oncogenic factor for neuroblastoma associated with CpG methylation within the third exon. *Int. J. Oncol.* 44: 1669-1677.
- Hajong, S. R., Yaakop, S. (2013). *Chremistica ribhoisp.n* (Hemiptera: Cicadidae) from North-East India and its mass emergence. *Zootaxa* 3702: 493-500.
- Kharbani, H., Hajong, S.R. (2013). Seasonal patterns in ant (Hymenoptera: Formicidae) activity in a forest habitat of the West Khasi Hills, Meghalaya, India. *Asian Myrmecol.* 5: 103-112.

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Das, B., Tandon, V., Saxena, J. K., Joshi, S., Singh, A. R. (2013). Purification and characterization of phosphoenolpyruvate carboxykinase

from *Raillietinaechinobothrida*, a cestode parasite of the domestic fowl. *Parasitology* 140:136–146.

Sequences submitted by Prof. V. Tandon *et al.* to the Gen Bank (NCBI) during the period of the report:

Sr. No.	Parasite Name	ITS2	18S	28S	mtCO1
1.	<i>Paragonimuswestermani</i>	KC297494	KF781291	KF781290	KF781292
2.	<i>Paragonimusheterotremus</i>	KF781293	KF781295	KF781294	-
3.	<i>Microphallus</i> sp. 1	KF738448	KF781296	KF738451	KF738454
4.	<i>Euclinostomumheterostomum</i>	KF781297	-	-	-
5.	<i>Clinostomoidesbrieni</i> (Manipur)	KF781298	KF781300	KF781299	-
6.	<i>Clinostomoidesbrieni</i> (Meghalaya)	KF811007	KF811009	KF811008	-
7.	<i>Clinostomumcomplanatum</i>	KF811010	KF811012	KF811011	-
8.	<i>Polylekithum</i> sp.	KF738449	-	KF738452	-
9.	<i>Posthodiplostomum</i> sp.	KF738447	KF738455	KF738450	KF738453
10.	<i>Fasciolagigantica</i>	KC535542	-	KC602458	-
11.	<i>Fasciolopsisbuski</i>	DQ351842	-	KC602457	EF027094
12.	<i>Opisthorchisnoverca</i>	KC109193	-	KC295443	KC255247
13.	<i>Eurytremapancreaticum</i>	KC535542	-	KC602456	KC535544
14.	<i>Gastrodiscoideshominis</i>	-	-	JX678246	-
15.	<i>Hymenolepisdimunata</i>	-	-	-	KJ576905
16.	<i>Moniezia</i> sp.	-	-	-	KJ576906

Sequences submitted by Saha *et al.* to the GenBank and accession numbers received during the period of the report:

- i. **KF475767**: Banerjee, B., Saha, N. *Clarias batrachus* argininosuccinate synthase (ASS1) mRNA, partial cds, 871 bp
- ii. **KF447150**: Banerjee, B., Saha, N. *Clarias batrachus* carbamoyl phosphate synthetase II mRNA, partial cds, 572 bp
- iii. **KF444053**: Banerjee, B. and Saha, N. *Clarias batrachus* type II arginase (ARG2) mRNA, partial cds, 683 bp
- iv. **KC507186**: Banerjee, B., Saha, N. *Clarias batrachus* glutamate dehydrogenase mRNA, partial cds, 1872 bp
- v. **KC665945**: Chakraborty, A., Banerjee, B. and Saha, N. *Clarias batrachus* glutathione S-transferase mRNA, partial cds, 535 bp

- vi. **KC689797**: Chakraborty, A., Banerjee, B., Saha, N. *Clarias batrachus* glutathione S-transferase theta-1 mRNA, partial cds, 523bp
- vii. **KF414736**: Chakraborty, A., Banerjee, B., Saha, N. *Clarias batrachus* glutathione peroxidase 1 (GPx1) mRNA, partialcds, 452 bp
- viii. **KC736973**: Chakraborty, A., Banerjee, B., Saha, N. *Clarias batrachus* glutathione peroxidase 3 (GPX3) mRNA, partialcds, 434 bp
- ix. **KF444052**: Chakraborty, A., Banerjee, B., Saha, N. *Clarias batrachus* Cu-Zn superoxide dismutase (SODC) mRNA, partialcds, 426 bp
- x. **KF977829**: Chakraborty, A., Banerjee, B., Saha, N. *Clarias batrachus* catalase (CAT) mRNA, partial cds, 629 bp
- xi. **AB905611**: Banerjee, B., Chakraborty, A., Koner, D. and Saha, N. *Clarias batrachus* mitochondrial aspartate aminotransferase (AATm) mRNA, partial cds, 988 bp
- xii. **AB911122**: Banerjee, B., Saha, N. and Sah K. *Clarias batrachus* alanine aminotransferase mRNA, completecds, 1610 bp
- xiii. **AB916539**: Banerjee, B., Saha, N. *Clarias batrachus* elongation factor 1-alpha mRNA, complete cds, 2090 bp
- xiv. **KF444054**: Lal, P., Banerjee, B. and Saha, N. *Heteropneustes fossilis* argininosuccinate synthetase (ASS1) mRNA, partial cds, 849 bp
- xv. **KF672794**: Hangzo, H., Banerjee, B. and Saha, N. *Monopterus albus* glutamine synthetase (GS02) mRNA, partial cds, 868 bp.

Books/Book Chapters/Proceedings

- Choudhury, M. G., Saha, N. (2013). Nitric oxide synthetic machineries and possible roles of nitric oxide in various physiological functions in fish. In *Advances in Fish Research*. U.C. Goswami (Ed.). Narendra Publishing House, Delhi: Volume VI: 217-255.
- Kumar, S., Biswal, D. K., Aravamudhan, S., Tandon, V. (2013). CAVS (Computer-aided Virtual Screening): A command line program for automated virtual screening of large set ligands against multiple protein targets. In *Proceeding of International Conference on Health, Environment and Industrial Biotechnology (ICHEIB), BioSangam-2013*. S. Sharma (Ed). McGraw Hill Education (India), New Delhi: 288-291.
- Prasad, S. B. and Verma, A. K. (2013). Studies on the cantharidin-mediated antitumor activity and toxicity in tumor-bearing mice. In *Proceedings: 2nd International Summit on Toxicology*, USA: Chapter 3: 5.
- Prasad, S. B., Verma, A. K. (2014). Studies on antitumor activity and tissues toxicity of cantharidin, a monoterpenoid, Isolated from blister beetles, *Mylabris cichorii*. In *Contemporary Topics in Life Sciences*. P.P. Mathur (Ed.). Narendra Publishing House, New Delhi: 197–214.
- Ramanujam, S. N., Ratha, B. K., Dominic, R. (2013). Piscicidal plants in fish nursery management. In *Advances in Fish Research*. U.C. Goswami (Ed.). Narendra Publishing House, Delhi: Chapter 15: 233 – 256.
- Sharma, S., Sharma, B. K. 2013. Faunal Diversity of Aquatic Invertebrates of Deepor Beel (a Ramsar site), Assam, northeast India.

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In *Wetland Ecosystem Series*. Zool. Surv. India, Kolkata: Chapter 17:1-227.

Tandon, V., Roy, B., Shylla, J. A., Ghatani, S. 2014. Amphistomes. In *Digenetic Trematodes, Advances in Experimental Medicine and Biology*. R. Toledo and B. Fried (Eds.). Springer Science+Business Media, New York: Chapter 11:766.

Tandon, V., Yadav, A. K., Roy, B. (2013). Gastrointestinal helminth infections and herbal cures in the traditional medicine of tribal communities in Northeast India. In *Biodiversity and Traditional Knowledge*. R.N. Pati (Ed.). Cambridge Scholar Publishing, U.K.

Funds Received from Agencies including NEHU/UGC etc.:

Total: Rs. 7,72,34,000/-

Research Projects

New Projects

Sl No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Anticipation in genes: Molecular, physiological and behavioral correlates of response of circa-annual clocks to seasons in night-migratory songbirds: Investigation of physiological and metabolic adaptations in migrants.	Prof. A. S. Dixit	DBT, New Delhi	Rs. 70,00,000/-
2	Identification and development of DNA methylation biomarkers for oral/oropharyngeal cancers prevalent in the North-Eastern States of India.	Dr. S. Ghosh	DBT, New Delhi	Rs.53,08,000/-
3	Identification and development of DNA methylation biomarkers for stomach cancers prevalent in Mizoram, India.	Dr. S. Ghosh	DST, New Delhi.	Rs. 46,54,000/-
4	Antibiosis and other protective mechanisms against entomopathogens in a nest building eusocial ant.	Dr.S.R.Hajong	DST, New Delhi	Rs.12,00,000/-

School of Life Sciences

Ongoing

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Establishment of portal for Indian Bioresource Information Network (IBIN): “BRIC Biodiversity Informatics: Data Capture and Management – III” (for NEHU, Shillong).	Prof. V. Tandon (PI)	National Bioresource Development Board of DBT, New Delhi	Rs. 31,84, 000/-
2	Bio-Informatics Centre (DIC)-w.e.f. 2011	Prof. V.Tandon, Dy.Coordinator	DBT, New Delhi	Rs. 20,00,000/- per annum
3	Molecular characterization of food-borne trematodes and cestodes prevailing in Northeast India.	Prof. V. Tandon (PI)	ICMR-ICAR coordinated Joint project on zoonoses	Rs. 17,01,000/- per annum
4	Molecular characterization in the expression of mRNAs for ornithine-urea cycle enzymes and enzyme proteins, multiple glutamine synthetase genes and signaling cascades under hyper-ammonia stress in the air-breathing walking catfish, <i>Clarias batrachus</i> .	Prof. N. Saha (PI)	DBT, New Delhi	Rs. 69,10,000 /-
5	Effects of high environmental ammonia on the expression of multiple glutamine synthetase genes, mitogen-activated protein kinases and Hsp70 in the air-breathing mud eel, <i>Monopterus albus</i> .	Prof. N. Saha (PI)	UGC, New Delhi	Rs.12,76,000 /-
6	Histopathological and enzymatic studies on toxicity of Cu and Cd in the catfish, <i>Heteropneustes fossilis</i> (Bloch) in relation to pH variation.	Prof. S. N. Ramanujam (PI)	UGC, New Delhi	Rs. 8, 61, 800/-
7	Studies on the pharmacological properties of <i>Lysimachiaramosa</i> and its active component(s).	Prof. B. Roy (PI)	UGC, New Delhi	Rs.12,78,800/-

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8	Cytotoxic potential of α -viniferin, a natural polyphenolic compound in Swiss albino mice.	Prof. B. Roy (PI)	DST, New Delhi	Rs. 49,58,000/-
9	Role of kisspeptin and GnIH in regulation of seasonal breeding in the tree sparrow.	Prof. A. S. Dixit	DST, New Delhi	Rs. 49,59,400/-
10	Insect hormones and insulin signaling in silkworm, <i>Bombyxmori</i> under fed and starved conditions: a study at molecular level.	Dr. B. Keshan (PI)	DBT, New Delhi	Rs.55,57, 000 /-
11	Comparative proteomic and transcriptomic analyses of PEPCK under the influence of <i>Flemingiavestita</i> -derived phytoestrogen (Genistein).	Dr. B. Das (PI)	DBT, New Delhi	Rs. 1,30,93,000/-
12	Analysis of molecular signaling proteins and epigenetic factors responsible for regulation of PEPCK expression.	Dr. B. Das (PI and Coordinator)	DBT, New Delhi	Rs. 58,20,000/-
13	Epigenetic status of pro/anti apoptotic activity of age-related genes involved in breast cancer.	Dr. B. Das (PI and Coordinator)	DBT, New Delhi	Rs. 36,23,000/-

Completed during the year

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Nextgenerationsequencinga ndgenomeinformationofpar asitebiodiversityofmedico-veterinarysignificanceinNorth-EastIndia	Prof. V. Tandon (PI)	DBT -NER Twinning Programme (2011- 2014)	Rs. 78,80, 000/-
2	Influence of hyper-ammonia stress on the expression of multiple glutamine synthetase genes, mRNAs for ornithine-urea cycle enzymes and mitogen activated protein kinase in air-breathing catfish, <i>Heteropneustes fossilis</i> .	Prof. N. Saha (PI)	DST, New Delhi (2010-2013)	Rs. 38,50,000/-

Academic Collaborations

India

Prof. N. Saha collaborated with Dr. Manask. Santra, Scientist D, National Centre for Cell Sciences, Pune.

Prof. A. S. Dixit collaborated with (i) Prof. V. Kumar, Department of Zoology, Delhi University, Delhi (ii) Prof. Sangeeta Rani, Department of Zoology, Lucknow University, Lucknow.

Dr. B. Das collaborated with (i) Dr. Amit Sharma, International Centre for Genetic Engineering and Biotechnology, New Delhi (ii) Prof. K. Satyamorthy, Manipal University, Manipal; Prof. S. Mishra, ILS, Bhubaneswar, Odisha and (iii) Dr. A. Kataki, BBICI, Guwahati, Assam; North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong.

Abroad

Prof. A. K. Yadav collaborated with Dr. Andreas-Schmidt Rhaesa, University of Hamburg, Germany on Biodiversity of Indian Nematomorphs and published joint papers out of collaborative work.

Prof. A. S. Dixit collaborated with (i) Prof. Kazuyoshi Tsutsui, Laboratory of Integrative Brain Research, Department of Biology, Waseda University, Tokyo, Japan.

Dr. S. Ghosh collaborated with National Institute of Biomedical Genomics, Kalyani, WB.

Dr. S. R. Hajong collaborated with Dr. Salmah Yaakop, Centre for Insects Systematic, School of Environmental and Natural Resource Sciences, Faculty of Science and Technology, Kebangsaan University, Malaysia.

Dr. B. Das collaborated with (i) Dr. Rakesh Kumar, Department of Biochemistry and Molecular Biology, Institute of Coregulator Biology, Washington, USA and (ii) Dr. V. Ferro, SIPBS, Strathclyde University, Scotland, UK.

Honours/Awards/Recognitions

Prof. V. Tandon was (i) nominated as a member of 'Steering Committee for All India Coordinated Project on capacity building in Taxonomy (AICOPTAX)' (MoE&F, GOI), (ii) elected as Sectional President: Biological Sciences - The 83rd Annual Session of the National Academy of Sciences, India and Symposium on "Space for Human Welfare", Goa University, Goa. 5-7 December, 2013, (iii) elected as a General Secretary (outstation) - National Academy of Sciences, India 2014- 2015.

Prof. B. K. Sharma served as Visiting Professor, Department of Zoology & Fisheries, Vidyasagar University, Mindapore, West Bengal, in January – February, 2014.

Prof. B. B. P. Gupta was (i) elected member of the Editorial Board, Proceedings of the Indian National Science Academy (Biological Sciences), New Delhi, and (ii) appointed member of the Editorial Board, American Journal of Experimental Biology.

Prof. S. B. Prasad gave a talk on "*Cancer: Causes, food habits and prevention*" at Atomic Minerals division Directorate for exploration and research, DAE, Shillong on August 7, 2013.

Prof. N. Saha was appointed as a (i) PAC member of the DST-SERB Animal Science Group (2012-2014), (ii) Task Force member

of DST-SERB for Empowerment and Equity for Excellence in Science Committee (2013-2015), (iii) Member of the UGC Major Research Project Evaluation Committee.

Prof. S. N. Ramanujam was appointed external expert for School Board of School of Ecology and Environmental Sciences, Assam University.

Prof. A. K. Yadav served as an Editorial Board Member of the Journal of Parasitic Diseases (Springer)

Prof. A. S. Dixit was (i) elected as Vice-President of Indian Society of Chronobiology and (ii) appointed member of the team to prepare course content for “Chronobiology” for the UGC’s e pathsala program for PG

Dr. B. Keshan served as an organizing committee member, resource person in the

National Workshop on “Hands-on Training on Techniques used in Biotechnological Research” 28 February to 8 March, 2014 under “DBT-Programme on Improvement of Infrastructure for Biotechnology Teaching, Training & Research in NE India”, organized jointly by Department of Zoology and Department of Biotechnology and Bioinformatics, NEHU, Shillong.

Dr B. Das served as an organizing committee member, resource person in the National Workshop on “Hands-on Training on Techniques used in Biotechnological Research” 28 February to 8 March, 2014 under “DBT-Programme on Improvement of Infrastructure for Biotechnology Teaching, Training & Research in NE India”, organized jointly by Department of Zoology and Department of Biotechnology and Bioinformatics, NEHU, Shillong.

VI

SCHOOL OF PHYSICAL SCIENCES

Dean : Prof. B. Jyrwa
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Brief Account of School Level Activities

The School of Physical Sciences consists of the Departments of Chemistry, Mathematics, Physics and Statistics. All Departments are involved in postgraduate teaching and research (M.Phil/Ph.D.) programmes. Every Department has its thrust areas for carrying out research work. The faculty members of the School through their significant research contributions have earned recognition. In addition to individual research projects,

the Departments of Chemistry, Mathematics, Physics and Statistics have received financial support from the DST-FIST and UGC-SAP schemes, where the Department of Chemistry received the status of Centre for Advanced Studies. Besides this, there are quite a number of faculty members having individual Projects. Refresher Courses have also been conducted, and Seminars/Workshops have been organized by different departments. Many faculty members have national and international collaboration besides individual projects.

DEPARTMENT OF CHEMISTRY

Head : Prof. R.A. Lal
Telephone : 2722601; 9436311770(M)
E-mail : ralal@rediffmail.com ralal@rediffmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	K. Ismail, M.Sc./Ph.D. (AMU)	Physical Chemistry
	B. Myrboh, M.Sc./Ph.D. (NEHU)*	Organic Chemistry
	R. H. Duncan Lyngdoh, M.Sc. (NEHU); Ph.D. (IIT Madras)	Organic Chemistry
	R. A. Lal, M.Sc./Ph.D. (BHU)	Inorganic Chemistry
	K. Mohan Rao, M.Sc. (S. V. Univ.); Ph.D. (IIT Kanpur)	Inorganic Chemistry
	A.K.Chandra, M.Sc./Ph.D. (Burdwan Univ.)	Physical Chemistry
	G. Bez, M.Sc./Ph.D. (Gauhati Univ.)	Organic Chemistry
Associate Professor	A. Lemtur, M.Sc./Ph.D. (NEHU)	Physical Chemistry
	H. Askari, M.Sc./Ph.D. (AMU)	Physical Chemistry
	T.S. Basu Baul, M.Sc. (Jabalpur); Ph.D. (N. Bengal)	Inorganic Chemistry
	M. K. Sahoo, M.Sc. (Utkal); Ph.D. (Comenius, Czechoslovakia)	Organic Chemistry
	S. Mitra, M.Sc. (Vidya Sagar); Ph.D. (IACS, Kolkata)	Physical Chemistry
	M. Velusamy, M.Sc/Ph.D. (Bharathidasan)	Inorganic Chemistry
Assistant Professor	R. L. Nongkhlaw, M.Sc./Ph.D. (NEHU)	Organic Chemistry
	E. K. Rymmai, M.Sc./Ph.D (NEHU)	Inorganic Chemistry
	D. P. S. Negi, M.Sc. (Roorkee); Ph.D. (IIT Roorkee)	Physical Chemistry
	B. Sarkar, M.Sc. (N. Bengal); Ph.D. (IIT Guwahati)	Physical Chemistry

School of Physical Sciences

Assistant Professor	A. K. Pal, M.Sc. (Calcutta); Ph.D. (Kalyani)	Organic Chemistry
	S. Khatua, M.Sc. (Vidya Sagar); Ph.D. (IIT Kharagpur)	Inorganic Chemistry

* On lien as Pro-Vice-Chancellor, Shillong Campus.

Thrust Areas of Research

Organometallic Chemistry, Coordination Chemistry, Computational Chemistry, Theoretical Reaction Kinetics, Synthetic Organic Chemistry, Heterocyclic Chemistry, Chemistry of Surfactants, Dynamics of Excited States, Photocatalysis, Natural Products Chemistry

were admitted to the Department in the said period. Eight students were awarded the Ph.D. degree, one student qualified for the CSIR NET Fellowship and one student got CSIR-SRF. One student qualified for the Civil Service examination conducted by the UPSC in 2012. There are many individual research schemes funded by DST, UGC, CSIR, DRDO, DAE (BRNS), DBT and DIT.

Brief Statement of Academic Activities

The Department offers the M.Sc. and Ph.D. programmes. 36 M.Sc. and 15 Ph.D. students

Students' Profile Enrolment Capacity: M.Sc. - 36; Ph.D. - Variable

Actual Admissions

Degree	SC	ST	Gen	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Sc.	03	24	09	22	14	24	12	36
Ph.D.	01	08	06	11	04	08	07	15

Degrees Awarded

Degree	SC	ST	Gen	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Sc.	--	21	03	11	13	19	05	24
Ph.D.	--	04	03	04	03	01	06	07

Details of Students awarded Ph.D. degree

Name of the student	Title of Thesis	Name(s) of Supervisor(s)/ Jt. Supervisor
Ms. Shokip Tumtin	Synthetic Studies on Oxazine and Pyrazine Derivatives and their Related Heterocycles"	Prof. B. Myrboh (Supervisor) Dr. R.L. Nongkhaw (Joint Supervisor)

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Mr. Kiew Shaphrang Kharnaor	Quantum Chemical Studies on the Structure, Stability and Rearrangements of Various $C_nH_n^+$ Carbocations ($n = 4$ to 7)	Prof. R.H.D. Lyngdoh
Ms. Sairem Gloria	Syntheses and Spectral Analyses of Some Platinum Group Metal Complexes with Multidentate Nitrogen Donor Ligands	Prof. K.M. Rao
Mr. Henry N. Pangamte	Quantum Chemical Investigations on Arynes: Quinolynes and Isoquinolynes"	Prof. R.H.D. Lyngdoh
Mr. Pranjal Protim Bora	Studies on Development of New Strategies for Stereoselective Synthesis and Derivatization of Bioactive Natural Products	Prof. G. Bez
Mr. Mithu Saha	Synthesis of Novel Heterocycles by the Application of Knoevenagel Condensation, Michael Addition and Nanoparticles Catalyzed Reactions	Dr. Amarta Kumar Pal
Ms. Atoholi Sema	Synthesis of Novel Chiral Catalysts Derived from Amino Acids and their Applications in Organic Reactions	Prof. G. Bez

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 Universities/Institutes for as Research Associates.

Courses Conducted

M.Sc. Courses

Semester I : Inorganic Chemistry-I, Organic Chemistry-I, Physical Chemistry-I, Quantum Chemistry, Laboratory Course in Organic Chemistry.

Semester II : Inorganic Chemistry-II, Organic Chemistry-II, Physical Chemistry-II, Molecular Spectroscopy, 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, Applications of Spectroscopic Methods, Laboratory Course in Physical Chemistry, Environmental

School of Physical Sciences

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 and Physical Chemistry.

Ph.D. Courses

Research Methodologies in Chemistry, Spectroscopic and Crystallographic Techniques in Chemistry, Advanced Inorganic Chemistry, Advanced Organic Chemistry, Advanced Physical Chemistry, Advanced Quantum Chemistry.

Study Tour of Students

Teachers in-charge: Prof. R.H. Duncan Lyngdoh and Dr. A.K. Pal

Places visited: (i) Nehru Science Centre, Mumbai, (ii) Tata Institute of Fundamental Research, Mumbai, (iii) Indian Institute of Technology, Powai, Mumbai, (iv) Heritage Sites in Goa.

Duration: 14 days (04/2/2014 to 14/2/2014)

Purpose: Exposure and interaction at leading centres of chemical research so as to improve knowledge and better understanding of chemistry.

Seminar/Conference/Symposium/Extension Programme etc.

Organised

A National Symposium on *Sustainable Chemistry: Frontiers & Challenges* was organized by the Department of Chemistry,

North-Eastern Hill University, Shillong during Feb 27-March 1, 2014, with Prof. R. H. Duncan Lyngdoh as Convener.

Attended

Prof. K. Ismail

Delivered an invited lecture entitled “Aggregation behavior of sodium dioctyl sulfosuccinate in aqueous ethylene glycol medium: A case of hydrogen bonding between surfactant and solvent and its manifestation in the surface tension isotherm” in the *5th Asian Conference on Colloid and Interface Science* held at North Bengal University, Darjeeling during Nov. 20-23, 2013.

Delivered an invited lecture entitled “Effect of urea on aggregation and adsorption of AOT in water” in the *16th National Conference on Surfactants, Emulsions and Biocolloids* held at Central Leather Research Institute, Chennai during Nov. 28-30, 2014.

Delivered a plenary lecture entitled “Influence of counterions on surfactant aggregation” in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges* held at Department of Chemistry, North-Eastern Hill University, Shillong during Feb 27-March 1, 2014.

Delivered an invited lecture entitled “Chemistry of surfactants and its role in nanoparticle synthesis” in the *Indo-German Bilateral Workshop on Surfactants and Amphiphilic Polymers in Nanotechnology – On the Way to Smarter Formulations* held at Panjab University, Chandigarh during March 20-21, 2014.

Prof. R. H. Duncan Lyngdoh

Sole resource person at a two-day workshop on “Survey of Techniques & Methodologies

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in Computational Chemistry” at the Department of Chemistry, Pondicherry University, on 05-06 April 2013 and delivered 6 lectures.

Presented an invited lecture at the *National Seminar on Impact of Research Projects on Quality of Research in Chemistry* held at Synod College, Shillong, on 30 August 2013.

Delivered the *First Prof. S. N. Paul Memorial Lecture* at the Annual Inter-College Students' Chemistry Seminar-2013 held in St. Anthony's College, Shillong, on 09 November 2013.

Presented as Research Supervisor (i) a poster by Dr K. S. Kharnaor entitled “Isomerization, structure and charge distribution of $C_7H_7^+$ cation isomers in gas phase presumably to tropylium cation, (ii) a poster by Dr H. N. Pangamte entitled “ADFT study of aromatic stabilization energy of quinolynes and isoquinolynes, (iii) a poster by Tejeshwori Salam entitled “H-bonded pairing properties of methylated DNA bases: Significance for mutagenesis and carcinogenesis, (iv) a poster by S. P. Devi with entitled “Catalyzed and uncatalyzed nitrene transfer reactions to C-H bonds of different types of hydrocarbons, (v) a poster by Martina Devi entitled “Role of codon-anticodon pairing for the four-fold degeneracy of alanine, and (v) a poster by E. Chingbiaknem entitled “Spanning H-bonded interactions between amino acid side chains and DNA base pairs, at the *National Symposium on Sustainable Chemistry: Frontiers & Challenges SCFC-2014* at Department of Chemistry, NEHU, Shillong during Feb 27-March 1, 2014.

Prof. K. M. Rao

Delivered invited lectures entitled “Arene ruthenium chemistry” and “Chemistry of

elements” at the *Science Academies Lecture Workshop on Modern Trends in Chemistry* at Tezpur University, Tezpur, Assam, on November 20-22, 2013.

Presented as Research Supervisor a poster by K. Mahesh entitled “Chemosensitivity studies of half-sandwich platinum group metals containing bithiazole ligands” in the *International Conference on Chemical Biology Disease Mechanisms and Therapeutics (ICCB- 2014)* held at Indian Institute of Chemical Technology, Hyderabad, during February 6-8, 2014.

Presented as Research Supervisor (i) a poster by N. R. Palepu entitled “Syntheses, characterization and structural studies of h^6 - and h^5 - cyclic π -perimeter hydrocarbon complexes of Ru(II), Rh(III) and Ir(III) with three isomers of pyridine carbaldehydepicolinichydrazone Schiff base ligand”, and (ii) a poster co-authored with S. Sangilipandi entitled “Syntheses and structural characterization of Rhenium(I) metal complexes having bis(di-2-pyridylaminomethyl) benzene” in the *Symposium on Modern Trends in Inorganic Chemistry MTIC-XV* held at IIT Roorkee during December 13-16, 2013.

Presented as Research Supervisor a poster by N. R. Palepu entitled “DFT and cytotoxic studies of Ru(II), Rh(III) and Ir(III) complexes” in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges SCFC-2014* at Department of Chemistry, NEHU, Shillong during Feb 27-March 1, 2014.

Prof. A. K. Chandra

Chaired a technical session at the *National Symposium on Sustainable Chemistry:*

Frontiers and Challenges at NEHU, Shillong, during Feb. 27-March 1, 2014.

Presented as Research Supervisor (i) a poster by Dipankar Sutradhar entitled “Theoretical investigation on the O...Cl interaction between fluorinated dimethylether and chlorine molecule”, and (ii) a poster by Makroni Lily entitled “Theoretical investigation on the gas phase reactions of $\text{CF}_3\text{CH}_2\text{OCH}_2\text{CF}_3$ with OH radical” in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges* at NEHU, Shillong, during Feb 27-March 1, 2014.

Prof. G. Bez

Participated in the Gaussian Workshop organized jointly by Scuba Scientific and Gaussian at New Delhi during Jan. 6-10, 2014.

Presented as Research Supervisor (i) a poster by H. A. Sema entitled “L-proline derived catalyst for direct asymmetric Aldol reaction”, and (ii) a poster by P. Bora entitled “Michael addition of nitroalkane to nitroolefin in aqueous medium at neutral pH”, in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges* at NEHU, Shillong, during Feb 27-March 1, 2014.

Dr. H. Askari

Presented as Research Supervisor a poster by S. Mandal (co-author G. Das and supervisor Prof. G. Bez) entitled “Molecular interactions of (S)-2-amino-3-(3,4-dihydroxyphenyl) propanoic acid with doubly charged transition metal ions” in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges* at NEHU, Shillong, during Feb 27-March 1, 2014.

Dr. T. S. Basu Baul

Delivered an invited lecture entitled “Structure-based design, synthesis and advancement towards tin-based anticancer chemotherapeutics” in the *National Seminar on Recent Trends in Chemical Science* held at Department of Chemistry, Manipur University, during 22-23 March. 2013.

Presented as Research Supervisor (i) a poster by D. Dutta entitled “Triphenyltin(IV) complexes encompassing cytotoxic potential”, (ii) a poster by P. Kehie entitled “Synthesis, characterization and structures of diorganotin(IV) complexes of Schiff base derived from L-serine”, (iii) a poster by S. Kundu entitled “Synthesis, characterization, structures and in vitro cytotoxic properties of some water soluble zinc complexes”, in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges* at NEHU, Shillong, during Feb 27-March 1, 2014.

Dr. M. K. Sahoo

Delivered an invited talk (co-authored by B. Sinha and R.N. Sharan) entitled “Fenton, Fenton-like, photo-Fenton and photo-Fenton-like processes” at the *1st National Conference on Advanced Oxidation Processes*, Thapar University, Patiala, Nov. 21-24, 2013.

Presented a paper entitled “A comparative study on mineralization and biodegradation of aqueous Mordant Black 17 by light and metal ion catalyzed advanced oxidation processes” at the *National Symposium on Sustainable Chemistry: Frontiers and Challenges* held at NEHU, Shillong during Feb. 27-March 1, 2014.

Chaired a technical session at the *National Symposium on Sustainable Chemistry:*

Frontiers and Challenges at NEHU, Shillong, during Feb. 27-March 1, 2014.

Chaired a technical session at the *1st National Conference on Advanced Oxidation Processes* held at Thapar University, Patiala during Nov. 21-23, 2013.

Dr. S. Mitra

Delivered an invited lecture entitled “Photochemistry of substituted 1,4-dihydropyridines: Formation of ICT state through 1,3-H migration” in the *National Conference on Photosciences: Contemporary Challenges and Future Perspectives (NCP-2013)*, held at Jadavpur University, Kolkata during 12-14 December 2013.

Delivered an invited lecture entitled “Fluorescence modulation in alloxazines: Exploring the mechanism of water catalyzed riboflavin biosynthesis pathway” in the *DAE-BRNS 13th Biennial Trombay Symposium on Radiation & Photochemistry (TSRP-2014)* held at BARC, Mumbai during 6-9 January 2014.

Presented as Research Supervisor a poster by Smritakshi Phukan entitled “Understanding the fluorescence behavior of photo-active polyhydroquinoline derivatives: A combined experimental and DFT based approach”, in the *International Conference on Photochemistry 2013 (ICP-2013)* organized in Katholieke University, Leuven, Belgium during 21-26 July, 2013.

Presented as Research Supervisor (i) a poster by Smritakshi Phukan entitled “Photophysical study of novel 2H-indazolo[2,1-b] phthalazine-trione derivatives in homogeneous media and micro-heterogeneous environment”; (ii)

a poster by M. M. Islam (co-author Prof. K. Aguwan and supervisor Dr. S. Mitra) entitled “Towards the development of fluorescence based method in assaying acetylcholinesterase inhibitors” in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges* at NEHU, Shillong during Feb. 27-March 1, 2014.

Presented as Research Supervisor (i) a poster by P. M. Gashnga “Photochemistry of o-hydroxy carbonyl compounds in homogeneous and heterogeneous media: tuning normal to ESIPT emission”, (ii) a poster by M. M. Islam entitled “Fluorescence studies on the interaction and binding of sulfadiazine and caffeine with human serum albumin” in the *Symposium on Radiation and Photochemistry (TSRP-2014)* held in BARC, Mumbai, 6-9 January, 2014.

Presented as Research Supervisor a poster by M. M. Islam with co-author Prof. K. Aguwan entitled “Fluorescence spectroscopic analysis of lysozyme binding compounds: correlation with enzymatic activity” in the *Symposium on Fluorescence Correlation Spectroscopy (FCS-2013)* held in at JNC SR and IISc, Bangalore during 23-28th November.

Dr. A. K. Pal

Presented as Research Supervisor (i) a poster by R. Jamatia (co-author M. Saha) entitled “An efficient facile and one-pot synthesis of benzodiazepines and benzimidazole using magnetically retrievable Fe_3O_4 nanocatalyst under solvent free condition”, (ii) a poster by M. Saha entitled “Fermented Baker’s yeast: an efficient catalyst for the synthesis of pyran derivatives in water at room temperature”, (iii) a poster by B.

Dam entitled “Fe₃O₄@SiO₂ nanoparticles: A magnetically retrievable heterogeneous catalyst for the one-pot multi-component synthesis of 1,4-dihydropyridine derivatives in water”, and (iv) a poster by S. Nandi (co-authors M. Saha, M. M. Islam, S. Mitra, B. Dam and supervisor A.K. Pal) entitled “Microwave promoted facile synthesis of functionalized [1,6] naphthyridines and their photophysical studies” in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges* at NEHU, Shillong during Feb. 27-March 1, 2014.

Dr. S. Khatua

Presented a poster (co-authors S. Sheet and M. Schmittel) entitled “Development of a ‘lab-on-a-molecule’ chemosensor for multianalyte quantification” in the *National Symposium on Sustainable Chemistry: Frontiers & Challenges* at NEHU, Shillong during Feb. 27-March 1, 2014.

Publications

Research Papers

Published in India

- Pfoze, N.L., Kumar, Y., Myrboh, B. (2013). Screening of bioactive phytochemicals obtained from lesser known ethnomedicinal plants of Senapati district of Manipur, India. *East Himalayan Society for Spermatophyte Taxonomy*, 7: 489-500.
- Kathing, C., Tumtin, S., Singh, N.G., Rani, J.W., Phucho, I.T., Nongpiur, A., Nongrum, R., Nongkhaw, R. L. (2013). Cupric acetate catalysed alkylation of indoles in water: A comparative study between conventional heating and microwave irradiation. *Organic Chemistry: An Indian Journal*, 9: 257-266.

Saha, M., Nandi, S., Pal, A.K. (2013). Synthesis for the 4,4'-(arylmethylene)bis(1*H*-pyrazol-5-ols) in aqueous medium under microwave irradiation in presence of ionic surfactant. *Organic Chemistry: An Indian Journal*, 10: 4-7.

Published Abroad

- Thapa, U., Ismail, K. (2013). Urea effect on aggregation and adsorption of sodium dioctyl sulfosuccinate in water. *J. Colloid Interface Sci.*, 406: 172-177.
- Dey, J., Saha, M., Pal, A.K., Ismail, K. (2013). Regioselective nitration of aromatic compounds in an aqueous sodium dodecylsulfate and nitric acid medium. *R. Soc. Chem. Adv.*, 3: 18609-18613.
- Thapa, U., Dey, J., Kumar, S., Hassan, P.A., Aswal, V.K., Ismail, K. (2013). Tetraalkyl ammonium ion induced micelle-to-vesicle transition in aqueous sodium dioctyl sulfosuccinate solution. *Soft Matter.*, 9: 11225-11232.
- Dey, J., Kumar, S., Nath, S., Ganguly, R., Aswal, V.K., Ismail, K. (2014). Additive induced core and corona specific dehydration and ensuing growth and interaction of pluronic F127 micelles. *J. Colloid Interface Sci.*, 415: 95-102.
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- Dey, J., Kumar, S., Srivastava, A., Verma, G., Hassan, P.A., Aswal, V.K., Kohlbrecher, J., Ismail, K. (2014). Effect of ethylene glycol on the special counterion binding and microstructures of sodium dioctylsulfosuccinate micelles. *J. Colloid Interface Sci.*, 414: 103-109.

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- Koch, A., Phukan, A., Chanu, O.B., Kumar, A., Lal, R.A. (2014). Synthesis, characterization and electrochemical studies of heterometallic manganese(IV)-zinc(II) and manganese(IV)-copper(II) complexes derived from bis(2-hydroxy-1-naphthaldehyde)oxaloyldihydrazone. *J. Mol. Struct.*, 1060: 119-130.
- Kumar, A., Koch, A., Borthakur, R., Chakraborty, M., De, A.K., Phukan, A., Bez, G., Lal, R.A. (2014). Synthesis and spectroscopic characterization of monometallic molybdenum (VI) complexes derived from bis(2-hydroxy-1-naphthaldehyde) succinoyldihydrazone. *J. Mol. Str.*, 1063: 92-101.
- Borthakur, R., Kumar, A., Lemtur, A., Lal, R.A. (2013). Synthesis, characterization and electrochemical properties of bis(μ_2 -perchlorato)tricopper (II) complexes derived from succinoyldihydrazones. *R. Soc. Chem. Adv.*, 3: 15139-15147.
- Borthakur, R., Asthana, M., Kumar, A., Koch, A., Lal, R.A. (2013). Solvent free selective oxidation of alcohols catalyzed by trinuclear complex with dicopper(II)-monozinc(II) centre using hydrogen peroxide as an oxidant. *R. Soc. Chem. Adv.*, 3: 22957-22962.
- Kumar, A., Chanu, O.B., Koch, A., Lal, R.A. (2013). Heterobimetallic dioxomolybdenum(VI) complexes derived from bis(2-hydroxy-1-naphthaldehyde) malonoyldihydrazone: Synthesis and characterization. *J. Struct. Chem.*, 54: 702-712.
- Basumatary, D., Kumar, A., Lal, R.A. (2013). Synthesis, characterization and electrochemical study of manganese(II) complexes derived from polyfunctional adipoyldihydrazone. *Int. J. Adv. Res. Tech.*, 2: 217-225.
- Borthakur, R., Kumar, A., Lal, R.A. (2014). Synthesis and characterization of heterotrinuclear bis(μ_2 -chlorido)dicopper (II) mono zinc(II) complexes derived from succinoyldihydrazones, *Spectrochim. Acta*, Part A, 118: 94-101.
- Mishra, B.K., Lily, M., Chakrabarty, A.K., Deka, R., Chandra, A.K. (2014). A DFT study on kinetics of the gas phase reactions of $\text{CH}_3\text{CH}_2\text{OCF}_3$ with OH radicals and Cl atoms. *J. Fluor. Chem.*, 159: 57-64.
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- Lily, M., Sutradhar, D., Chandra, A.K. (2013). Theoretical investigations on kinetics, mechanism and thermochemistry of the gas phase reactions of $\text{CHF}_2\text{OCF}_2\text{CHF}_2$ with OH radicals. *Comput. Theo. Chem.*, 1022: 50-58.

- Zeegers-Huyskens, T., Lily, M., Sutradhar, D., Chandra, A.K. (2013). Theoretical study of the O...Cl interaction in fluorinated dimethyl ethers complexed with a Cl atom: Is it through a two-center-three-electron bond? *J. Phys. Chem. A*, 117: 8010-8016.
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- Sema, H.A., Bez, G., Karmakar, S. (2014). Asymmetric Henry reaction catalyzed by L-proline derivatives in the presence of Cu(OAc)₂: Isolation and characterization of an *in situ* formed Cu(II) complex. *Appl. Organomet. Chem.*, 28: 290-297.
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- Bora, P.P., Bihani, M., Bez, G. (2013). Multicomponent synthesis of dihydropyrano[2,3-*c*]pyrazoles catalyzed by lipase from *Aspergillus niger*. *J. Mol. Catal B: Enzym.*, 92: 24-33.
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- Basu Baul, T.S., Longkumer, I., Ng, S. W., Tiekink, E. R. T. (2013). (2-{[4-(Chlorido mercuryl)phenyl]iminomethyl}pyridine-K²N,N'}) diiodidomercury(II)dimethyl sulfoxide monosolvate. *Acta Crystallogr.*, E69: m633-m634.
- Basu Baul, T. S., Kundu, S., Linden, A., Raviprakash, N., Manna, S., C. Guedes da Silva, F. (2014). Synthesis and characterization of some water soluble Zn(II) complexes with (*E*)-*N*-(pyridin-2-ylmethylene)arylamine that regulate tumour cell death by interacting with DNA. *Dalton Trans.*, 43: 1191-1202.
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- Basu Baul, T.S., Longkumer, I., Linden, A. (2014). An organomercury enzyme activator as a versatile template for new organomercury(II) compounds encompassing homo-bimetallic (RHg/Hg) and hetero-bimetallic (RHg/Cd) compositions: Syntheses, photoluminescence and structures. *J. Organomet. Chem.*, 761: 156-168.
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- Saha, M., Das, B., Pal, A.K. (2013). Synthesis of pyran derivatives under ultrasound irradiation using Ni nanoparticles as reusable catalyst in aqueous medium. *C. R. Chimie.*, 16: 1079-1085.
- Jamatia, R., Saha, M., Pal, A.K. (2014). An efficient facile and one-pot synthesis of benzodiazepines and chemoselective 1,2-disubstituted benzimidazoles using magnetically retrievable Fe_3O_4 nanocatalyst under solvent free condition. *R. Soc. Chem. Adv.*, 4: 12826-12833.
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Funds Received from Agencies including NEHU/UGC

UGC under SAP CAS-I	: 10,75,000/=	(Recurring Grant for 2013-14)
National Conference	SCFC-2014	: 4,20,000/=

Research Projects

New Research Projects

- “Synthetic Studies of Selenium dioxide (SeO_2), Selenous acid (H_2SeO_3) and Selenic Acid (H_2SeO_4) in Organic Reactions: Synthesis of important Organo-Selenium Intermediates and attempt at Asymmetric Synthesis of a-substituted Propiophenones and related Reactions. Principal Investigator: Prof. B. Myrboh. Sponsored by SERB, DST, New Delhi. Grant: Rs. 49,06,000 /-.
- “Study of Redox Potential of Novel 1,2,4-Trioxane Nanoparticles and Assessment of their Compatibility to Radiotherapy”. Principal Investigator: Prof. G. Bez. Sponsored by DAE-BRNS, Mumbai. Grant: Rs. 27,44,276 /-.
- “Mineralization and Biototoxicity Assessment Studies of Selected Surfactant Formulations by Some Advanced Oxidation Processes”. Principal Investigator: Dr. M. K. Sahoo. Sponsored by DAE-BRNS, Mumbai. Grant: Rs. 31,18,750 /-.

“Development of “Lab-on-a-Molecule” Chemosensor for Cation and Anion Sensing”. Principal Investigator: Dr. S. Khatua, Sponsored by SERB-DST, New Delhi. Grant: Rs. 27,60,000 /-.

Ongoing Research Projects

“Studies on the Synthetic Utility of Selenium Compounds: Development of New Methodologies for C-C, C-X and C-Se Coupling in Organic Synthesis and Preparation of Novel Organo-selenium Intermediates”. Principal Investigator: Prof. B. Myrboh. Sponsored by CSIR, New Delhi.

“Studies on the Synthetic Utility of Selenium Dioxide: Development of New Methodologies for Carbon-Carbon Coupling in Organic Synthesis and Related Work”. Principal Investigator: Prof. B. Myrboh. Sponsored by UGC, New Delhi.

“New Synthetic Aspects and Catalytic Study of Late Transition Metal Complexes Bearing Homo- and Hetero-Scorpionates and η -Heterocyclic Carbenes as Ligands”. Principal Investigator: Prof. K. M. Rao. Sponsored by UGC, New Delhi.

“Synthesis, Reactivity and Structural Studies of Platinum Group Metal Complexes Containing η^5 and η^6 -Cyclhydrocarbons and Multidentate Nitrogen Bases”. Principal Investigator: Prof. K. M. Rao. Sponsored by CSIR New Delhi.

“Theoretical Studies on the Kinetics, Thermochemistry and Reactivity of Some Selected Radical Reactions of Atmospheric Importance”, Principal Investigator: Prof. A. K. Chandra. Sponsored by CSIR, New Delhi.

“Synthetic and Structural Studies Projected towards Self-assemblies of Extended

Schiff Base and Reduced Schiff Base Amino Acetate Skeletons Incorporating Organotin(IV) Moieties and Evaluation of their Cytotoxic Potential”. Principal Investigator: Dr. T. S. Basu Baul. Sponsored by CSIR, New Delhi.

“Synthesis and Characterization of Organotitanium(IV) carboxylates and Evaluation of their Antitumour Properties”. Principal Investigator: Dr. T. S. Basu Baul. Sponsored by UGC, New Delhi.

“Rational Design, Synthetic Strategies for Developing Organometallic Anticancer Compounds based on Organotin and Organoiron”. Principal Investigator: Dr. T. S. Basu Baul. Sponsored by DBT, New Delhi.

“UV Light and Transition Metal-Catalyzed Degradation and Mineralization Studies of Some Azo Dyes by Hydrogen Peroxide”. Principal Investigator: Dr. M. K. Sahoo. Sponsored by UGC, New Delhi.

“Development of AChE-inhibitor for Alzheimer’s Disease: Screening, Designing, Synthesis and Biological Validation using Chemical Library and Traditional North-East Indian Plants”. Co- Principal Investigator: Dr. S. Mitra. Sponsored by DBT, New Delhi.

“Spectrophotometric Investigation on Model Nitrogen Containing Heterocyclic Drugs and their Interaction with DNA Nucleotides”. Principal Investigator: Dr. S. Mitra. Sponsored by CSIR, New Delhi.

“Traceless Synthesis of Coumarin, Pyrrole and Polyhydroquinoline Annulated Benzodiazepine, Benzazepine and 5,11-Dihydrobenzo-[e]pyrido[3,2-b][1,4] diazepine-6-one Derivatives”. Principal Investigator: Dr. A. K. Pal. Sponsored by SERB-DST, New Delhi.

School of Physical Sciences

“Identification, Molecular Characterization and Structure Determination of Glutaredoxin System Protein from Infectious Flukes”. Co-Principal Investigator: Dr. A. K. Pal. Sponsored by DBT, New Delhi.

“Protein-Protein Interface Targeted Drug Designing”. Co-Principal Investigator: Dr. A. K. Pal. Sponsored by DBT, New Delhi.

Completed

“Computational Elucidations on Codon-Anticodon Pairing and the Genetic Code”, Principal Investigator: Prof. R. H. D. Lyngdoh. Sponsored by CSIR, New Delhi.

Academic Collaborations

Prof. K. Ismail has academic collaborations with (i) Dr. V. K. Aswal, Solid State Physics Division, Bhabha Atomic Research Center, Mumbai (ii) Dr. P. A. Hassan, Chemistry Division, Bhabha Atomic Research Center, Mumbai (iii) Dr. S. Mahiuddin, Materials Science Division, CSIR-North East Institute of Science and Technology, Jorhat (iv) Dr. R. Biswas, Chemical, Biological and Macromolecular Sciences, S. N. Bose National Centre for Basic Sciences, Salt Lake, Kolkata.

Prof. R. A. Lal has academic collaborations with Dr. Arvind Kumar, Department of Chemistry, Faculty of Science and Agriculture, the University of West Indies, St. Augustine, Trinidad and Tobago.

Prof. K. M. Rao has academic collaborations with (i) Prof. Yuriy Mozharivskyj, Department of Chemistry and Chemical Biology, McMaster University, Canada (ii) Prof. Roger M Phillips, Department of Cancer Pharmacology, Institute of Cancer Therapeutics, University of Bradford,

Bradford, UK (iii) Prof. Dr. Habil Werner Kaminsky, Department of Chemistry, University of Washington, Seattle, WA 98195, USA.

Prof. A. K. Chandra has academic collaboration with Quantum Chemistry Group, University of Leuven, Belgium.

Dr. T. S. Basu Baul has academic collaborations with Prof. A. Linden, University of Zurich, Switzerland; Prof. H. K. Fun, University of Malaya, Malaysia; Prof. G. Eng, University of the District of Columbia, USA; Prof. E. R. T. Tiekink, Universiti Sains Malaysia, Malaysia, Prof. U. Englert, Institut für Anorganische Chemie, RWTH Aachen University, Germany, Prof. M. Fátima C. Guedes da Silva, University of Lisbon, Portugal, Prof. A. Duthie, School of Life & Environmental Science, Deakin University, Australia, Prof. P. Singh, *Guru Nanak Dev University, Amritsar*, Dr. S. K. Manna, Centre for DNA Fingerprinting and Diagnostics, Hyderabad.

Dr. M. K. Sahoo has academic collaborations with Prof. R.N. Sharan, Dept. of Biochemistry, NEHU, Shillong; Dr. D. B. Naik, Radiation and Photochemistry Division, BARC, Trombay, Mumbai; Dr. C. Srinivas, Process Development Division, BARC, Trombay, Mumbai.

Dr. S. Mitra has academic collaborations with Prof. K. Aguan, Department of Biotechnology & Bioinformatics, NEHU, Shillong; Prof. D. Kumar, BITS, Pilani; Dr. A. Bhasikuttan, BARC, Mumbai.

Dr. A. K. Pal has academic collaborations with Dr. T. Tripathi, Department of Biochemistry; Dr. A. Bhattacharya, Department of Biotechnology & Bioinformatics; Dr. S.

Mitra, Department of Chemistry; Prof K. Ismail, Department of Chemistry; Prof K. Aguan, Department of Biotechnology & Bioinformatics, NEHU, Shillong.

Any Other Activities

Prof. K. Ismail has been elected as Honorary Editor of the Physical and Industrial Chemistry Section of the Journal of the Indian Chemical Society for the term 2014-2016.

Prof. R. H. Duncan Lyngdoh was (i) appointed as Member, Board of the School of Physical Sciences, Mizoram University, Aizawl, Mizoram, for 2013-2016, (ii) appointed as Member, Board of Governors, Central Institute of Technology, Kokrajhar, Assam, and (iii) selected as Member, Editorial

Board, ISST Journal of Applied Chemistry (ISSN: 0976-7355).

Mr. B. Sinha, Research Scholar working under Dr. M. K. Sahoo, received the Young Investigators Award at the *Second International Conference on Advanced Oxidation Processes (AOP-2012)*, **School of Environmental Sciences, Mahatma Gandhi University, Kottayam, Kerala, held during October 5-8, 2012.**

Mr. Vikash Kumar Sonu, Research Scholar working under Dr. S. Mitra, attended a Winter School on *Advances in Laser Spectroscopy and Applications* held in the Department of Physics, Banaras Hindu University (BHU), Banaras, during 22-28 March, 2014 under UGC networking program.

DEPARTMENT OF MATHEMATICS

Head : Prof. M. Ansari
Telephone : 2722713 (O) 9436163816 (M)
E-mail : mansarinehu@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	M. Ansari, Ph.D.	Theory of Relativity & Cosmology
Professor	H.K. Mukerjee, D.Phil.	Algebraic & differential Topology
Professor	K.K. Singh, Ph.D.	Fluid Mechanics
Professor	A.K. Das, Ph.D.	Group Theory
Associate Professor	P.K. Saikia, Ph.D.	Number Theory
Assistant Professor	Sanghita. Dutta, Ph.D.	Topology
Assistant Professor	A.M. Buhphang, Ph.D.	Ring Theory
Assistant Professor	John Paul Jala Kharbih, M.Sc.	Function rings
Assistant Professor	A.T. Singh, Ph.D.	Algebraic & Differential Topology
Assistant Professor	Phanjoubam Chinglensana M.Sc.	Algebraic Topology
Professor	S.S. Khare (NBHM Visiting Professor).	Algebraic & differential Topology
Professor	M.B. Rege (NBHM Visiting Professor).	Ring Theory

Thrust Areas of Research

Algebra, Algebraic and Differential Topology, Theory of Relativity & Cosmology, Number Theory

Relativity and Cosmology, Topology, Algebraic Topology, Differential Topology, Commutative Algebra, Character theory, p -adic Analysis.

Brief Statement of Academic Activities

- (i) The department continues to give quality and rigorous M.Sc./ M.Phil. and Pre Ph.D. courses on different subjects of Mathematics like Algebra, Analysis, Complex Function Theory, Differential Equations, Linear Algebra, Mechanics, Number Theory, Numerical Analysis and Computer Programming, Oceanography,

- (ii) Our department conducted regular seminar and colloquia on the topics in the thrust areas of research.
- (iii) Our students continue to perform well in qualifying the UGC/CSIR NET and obtaining Junior Research Fellowships and NET Lecturerships.
- (iv) Our department continues to follow the culture of all good universities in the

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world by 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' Profile Enrolment Capacity: M.Sc. – 36; M.Phil./Ph.D. –Variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Sc.	2	32	2	20	16	32	4	36
M.Phil.	0	0	3	3	0	0	3	3
Ph. D.	0	2	2	3	1	1	3	4

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Sc.	0	13	1	10	3	9	4	13
M.Phil.	0	0	0	0	0	0	0	0
Ph. D.	0	0	3	2	1	0	3	3

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Bineeta Nath	Shock Waves in Conducting and Non-conducting Non-ideal Gases	Prof. K.K. Singh
Kh. Herachandra Singh	Some Problems in Rings and Modules: A Study of Reduced Module, Zero-insertive Modules, Symmetric Module, and Other Related Classes of Rings and Modules	Dr. A.M. Buhphang
N. Jiban Singh	Some Problems in Low-dimensional Topology Related to Mapping Class Groups	Prof. H.K. Mukerjee

Placement of Students

Some of our students were appointed as lecturers in affiliated colleges of NEHU.

Semester-II : Elementary Graph Theory, Algebra, Topology, PDE, Analysis II.

Courses Conducted

Postgraduate

Semester- I : Analysis I, A.M.E.S., Linear Algebra, ODE, Classical Mechanics.

Semester-III : CFT, Tensor analysis/Theory of Field Extensions, ENT, Programming in C and Applications, Computer Programming Practicals.

School of Physical Sciences

Semester-IV : Computer Practicals, Numerical Analysis, Algebraic Topology, Ring Theory, Theory of Relativity.

M.Phil./ Ph.D.

Compulsory course

MTHMPC-1 : Research Methodology in Mathematics

Optional Courses

- MTHMPO-1 : Galois Theory
- MTHMPO-2 : Rings Of Continuous Functions
- MTHMPO-3 : Algebraic Geometry
- MTHMPO-4 : Commutative Algebra
- MTHMPO-5 : Advanced Ring Theory
- MTHMPO-6 : Magneto Fluid Dynamics
- MTHMPO-7 : Fluid Mechanics
- MTHMPO-8 : Advanced Algebraic Topology
- MTHMPO-9 : Differential Topology
- MTHMPO-10: Cosmology
- MTHMPO-11: Tensor Analysis And Theory Of Relativity
- MTHMPO-12: Analytic Number Theory
- MTHMPO-13: Algebraic Number Theory
- MTHMPO-14: Topics In Algebraic Topology
- MTHMPO-15: Topics In Differentiable Manifolds
- MTHMPO-16: Topics In Riemannian Geometry
- MTHMPO-17: Homological Algebra
- MTHMPO-18: Advanced Group Theory
- MTHMPO-19: Theory Of Characters
- MTHMPO-20: Topological Graph Theory
- MTHMPO-21: Application Of Linear Algebra
- MTHMPO-22: Advanced Topics In Discrete Mathematics
- MTHMPO-23: Computational Homology
- MTHMPO-24: Relativistic Mechanics

Seminars/Conferences/Symposia/ Extension Programmes etc.

Organized:

International ATM Workshop and Conference on *Surgery Theory and Classification of Manifolds*, held at North-Eastern Hill University, Shillong, in June 17-26, 2013.

International CIMPA Research School and Conference on *Fourier Analysis of Groups in Combinatorics*, held at North-Eastern Hill University, Shillong, in Nov. 18-30, 2013.

Attended:

Prof. M. Ansari attended the *International Conference on Differential Geometry and Relativity* (ICDGR) held at venuein November 9-11, 2013, and gave a talk entitled “Spontaneous symmetry breaking and inhomogeneous cosmological models”.

Prof. H.K. Mukerjee attended the *ATM International Workshop/Conference on Surgery Theory and Classification of Manifolds*, held at NEHU in June 17-26, 2013, and (i) gave a talk on “Morse Theory & the Conley index theory”, and (ii) gave a series of lectures entitled “Surgery theory and classification of manifolds on surgery below middle dimension”.

Prof. H.K. Mukerjee attended the CIMPA International Research School and Conference on *Fourier Analysis of Groups in Combinatorics* held at NEHU in Nov. 18-30, 2013.

Prof. A.K. Das delivered an invited talk entitled “Online resources in mathematics” at the State Level Workshop on *Using Open Source Educational Resources and Software in Mathematics* organized by the Dept.

of Mathematics, Lady Keane College, Shillong, in collaboration with the Dept. of Mathematics, NEHU, Shillong, on 4th and 5th July, 2013.

Prof. A. K. Das delivered an invited talk entitled “On genus of the unit graphs of rings and commutative graphs of groups” at the *International Conference on Recent Advances in Mathematics (ICRAM 2014)* held 20-23 January, 2014, at the Dept. of Mathematics, RTM Nagpur University, Nagpur.

Dr. A.M. Buhphang attended the *National Conference on Pure and Applied Mathematics* during 9-10 May, 2013, organized by the Department of Mathematics, Royal School of Engineering & Technology, Guwahati, and presented a paper entitled “On Dedekind finite rings and related rings”.

Dr. A.M. Buhphang attended the International ATM Workshop and Conference on *Surgery Theory and Classification of Manifolds* held at NEHU during 17-26 June, 2013, and presented a paper entitled “On reduced rings”.

Dr. A.M. Buhphang attended the UGC-sponsored National Seminar on *Mathematics: Its Interdisciplinary Approaches in Modern Curriculum* (30-31 August, 2013), organized by the Department of Mathematics, Devicharan Barua Girls’ College, Jorhat, Assam, and presented a paper entitled “Vanishing conditions on matrices”.

Dr. A.M. Buhphang attended the *International Conference on History and Development of Mathematics-2013* (held 29 November to 01 December, 2013), organized by JECRC, Jaipur, and presented a paper titled “Semi-commutative rings and their generalizations”.

Dr. S. Dutta attended the International ATM Workshop & Conference on *Surgery Theory and Classification of Manifolds*, held at NEHU, Shillong, in 17-26 June, 2013, and presented a paper titled “On rings of some classes of functions”.

Dr. S. Dutta attended the UGC-sponsored National Seminar on *Recent Trends in Mathematics and its Applications* (7-8 October, 2013), organized by Digboi College, Digboi, and presented a paper titled “On Bc-continuous functions”.

Dr. S. Dutta attended the *International Conference in Industrial Mathematics* (held 4-5 January, 2014), organized by Kalinga Institute of Industrial Technology, Bhubaneswar, and presented a paper titled “On supra- δ -open sets, $s\delta$ -continuous and $s\delta$ -perfectly continuous functions”.

Dr. S. Dutta attended the *International Conference on Frontiers of Mathematics and Applications* (held 29-31 January, 2014) organized by the University of Burdwan and presented a paper entitled “A note on $S\wedge$ -continuous functions in supra topological spaces”.

Dr. S. Dutta attended *Indian Women and Mathematics (IWM 2013)* held 23-28 December, 2013, organized by the Department of Mathematics, Mumbai University, and gave a talk on “Application of graphs to rings”.

Dr. A.T. Singh attended the *International Conference on Mathematics: Education and Mathematics in Engineering and Technology* organized by Mohandas College of Engineering and Technology, Thiruvanthapuram (17-20 December, 2013), and presented a paper entitled “Some continuous maps into linear groups”.

Dr. A.T. Singh attended the 41st Annual Conference of OMS and International Mathematics and Scientific Computing (ICIMSC-2014) organized by KIIT University, Bhubaneswar, January 4-5, 2014, and presented a paper entitled “On some differentiable one parameter mappings on subsets of Euclidean spaces”.

Dr. A.T. Singh attended the International Conference on Recent Advances in Mathematical Sciences and Applications (ICRAMSA-2013), organized by Rajiv Gandhi Prodyogiki Vishwavidyalaya, Madhya Pradesh, (24-26 December, 2013), and presented a paper entitled “Smoothness of some one parameter linear maps”.

Dr. A.T. Singh attended the International ATM Workshop and Conference on Surgery Theory and Classification of Manifolds (17-26^h June, 2013) organized by the Dept. of Mathematics, NEHU, Shillong, and presented a paper “On rational homotopy type of spaces defined by a map”.

Dr. A.T. Singh attended the National Workshop on Dynamical Systems held at the Dept. of Mathematics and Computer Science, Mizoram University, Aizawl (26-27 November, 2013) and delivered an invited talk.

Mr. J.P.J. Kharbhih attended the International School for Lectures (Topology) at Almora organized by ATM School during September-October, 2013.

Mr. P. Chinglensana attended the National Workshop on Dynamical Systems held from 26-27 November, 2013, at Mizoram University, Aizawl.

Publications

Research Papers

Published in India

Ansari, M.; Ali, A. (2014). Exact solutions of axially symmetric Bianchi type – I cosmological models in Lyra geometry. *IOSR Journal of Applied Physics*, 5: 01-05.

Ansari, M.; Rahman, A. (2013). Bianchi type - VI₀ Dark energy model with variable EOS parameter in a Saez-Ballester scalar-tensor theory of gravitation. *Journal of Mathematical Archive*, 4: 1-5.

Ansari, M., jointly with Rahman A., (2013) published a paper entitled “Anisotropic Bianchi type-III dark energy model with time dependent deceleration Parameter in Saez- Ballester theory, in *International Journal IOSR Journal of Applied Physics (IOSR-JAP)* e-ISSN – 2278-4861, Vol.-4, issue – 5 (Sept.-Oct., 2013) pp. 79-84.

Singh K.K., Gogoi, S., (2013), Self-similar flow of a dusty gas behind an exponential shock with heat conduction and radiation heat flux. ‘*Journal of Rajasthan Academy of Physical Sciences*. 12(4) : 419-436.

Saikia, P.K., Subedi, Deepak., (May, 2013). Bell numbers, determinants and series. *Proc. Indian Acad. Sci. (Math. Sci.)*, Vol. 123, No. 2, pp. 151-166.

Published Abroad

Ansari, M., jointly with Borah, B., (2014) published a paper entitled “Holographic Dark Energy Model with Time Varying G as well as C² Parameter” in *International Journal of Theoretical Physics*”, Vol. 53, page 1217-1224 (2014).

- Ansari, M., jointly with Asga, A. (2013) published a paper entitled "Bianchi type –I bulk viscous cosmological models in Lyra geometry" in *International Journal 'Prespacetime Journal*, Vol. 4, issue-5, p.p. 531-544, May, 2013.
- Ansari, M., jointly with Rahman, A., (2013) published a paper entitled "Some new LRS Bianchi type –I bulk viscous Cosmological models with Decaying Λ -term, in *International Journal 'Prespacetime Journal'* vol. 4, issue-9, October, 2013, pp. 871-883.
- Das, A.K., Jointly with Nath, R.K., Pournaki, M.R., (2013). Published a paper "A Survey on the estimation of commutativity in finite groups". *Southeast Asian Bulletin of Mathematics*. 37:161-180.
- Singh K.K., Nath, B., (2013). Propagation of a cylindrical shock wave generated by a moving piston in a rotational axisymmetric flow of a non-ideal gas. *Modelling, Measurement and Control B* (Mechanics and Thermics). 82(2) : 35-50 .
- Singh K.K., Gogoi, S., (2013), Propagation of strong spherical shock waves in a mixture of non-ideal gas and small solid particles. *International Journal of Applied Mathematics and Mechanics*. 9(14): 54-74.
- Singh, K.K., (2013). Propagation of a cylindrical shock wave in a dusty gas under the action of monochromatic radiation. *International Journal of Applied Mathematics and Mechanics*. 9(14) : 37-53.
- Singh K.K., Nath, B., (2013). Self-similar cylindrical ionizing shock waves in a rotational axisymmetric non-ideal gas with radiation heat flux. "*Universal Journal of Applied Mathematics*". 1(2) : 44-54.
- Bhattacharjee, D., Saikia, P.K., (2013) On Some New Class of Arithmetic Convolutions involving Arbitrary Sets of Integers. *Romanian Journal of Mathematics and Computer Science*, Vol. 2, Issue 2. Pp. 23-35.
- Buhphang, A.M., jointly with Hera Singh. K., Rege, M.B. , Halicioglu, S. Harmanci. A., and Kose. H.Y., (2013) published a paper entitled "On Rigid Modules" in *International Journal East-West Journal of Mathematics*, Vol. 15, No. 1 (2013) PP.71-85.

Funds Received from Agencies including NEHU/UGC

UGC SAP (DRS)

DST FIST

NBHM LIBRARY GRANT.

Other Activities

The Department of Mathematics, NEHU, Shillong, (with Prof. M.B. Rege as Co-ordinator) organized a week-long training programme at Women's College, Laitumkhrah, Shillong, from 27 January to 02 February, 2014, for the students of Meghalaya to appear in the Indian National Mathematical Olympiad.

DEPARTMENT OF PHYSICS

Head : Prof. Y.N. Tiwari
 Telephone : (0364) 272-2815/272-2801
 E-mail : yntiwari@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Dr. P. Shukla, M.Sc. (IIT Delhi), Ph.D. (Temple)	Condensed Matter Physics
	Dr. S. Kumar, M.Sc.(BHU), Ph.D. (Utkal)	High Energy Physics (Theoretical)
	Dr. D. T. Khathing*, M.Sc. (Delhi), D.Phil (Calcutta)	Nuclear Physics Experimental
	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), Ph.D. (Patna), LL.B. (Patna)	Atomic & Molecular Physics (Theoretical)
	Dr. A. Saxena, M.Sc. (Rohilkhand), M. Phil. (Meerut), Ph.D. (NEHU)	Nuclear Physics Experimental
	Dr. M. C. Mahato, M.Sc. (Ranchi), Ph.D. (I.I.Sc. Bangalore)	Solid State Physics Theoretical
Associate Professor	Dr. S. S. Khatri, M.Sc. (NEHU), Ph.D. (NEHU)	Laser Physics Experimental
	Dr. A. K. Biswas, M.Sc. (IIT Kharagpur), Ph.D. (IP, Bhubaneswar)	High Energy Physics Theoretical
Assistant Professor	Dr. S.S. Pohlong, M.Sc. (NEHU), Ph.D. (NEHU)	Solid State Physics Theoretical

*on lien: VC, Central University of Jharkhand and rejoined the Department on 3rd March, 2014

Thrust Areas of Research

Solid State Physics (Theoretical), High Energy Physics (Theoretical), Laser

Physics(Experimental) and Nuclear Physics (Experimental and Theoretical).

Brief Statement of Academic Activities

The main academic activity of the Department has been teaching M.Sc. (Physics) courses to a class of 32 (thirty-two) students each in M.Sc. (Physics) First and Second years. During the academic session 2012-13 the Department has started Ph.D. Course Work. In addition to

teaching M.Sc. and Ph.D. courses, members of the Faculty have been engaged in guiding research for Ph.D. scholars as well as carrying out their own research work. The faculty members visited various reputed national and international institutions to carry out their research collaborations and give talks on their research contributions.

Students' Profile *Enrolment Capacity: M.Sc. – 32; Ph.D. – Variable*

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Sc.		25	08	20	13	31	02	33
Ph.D.	-	06	-	05	01	06	-	06

Degrees Awarded:

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non Meghalaya	Total
M.Sc.	-	29	03	24	08	32	-	32
Ph.D.	-	01	01	01	01	02	-	02

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Mr. Ashok Kumar Jha	A Study of Elastic Scattering and Electron Capture Processes in Collisions of $^3\text{He}^{2+}$ Ion with CO Molecule below 5 KeV	Dr. Atul Saxena
Ms. Wandahun Longtraai Reenbohn	Study of Particle Motion in Under Damped Periodic Systems	Prof. M. C. Mahato

Courses Conducted

Post-graduate

Semester I : Classical Mechanics, Quantum Mechanics I, Mathematical Physics, Laboratory I.

Semester II : Electrodynamics, Electronics, Quantum Mechanics II, Laboratory II.

Semester III : Nuclear Physics I, Solid State Physics I, Atomic and Molecular Physics, Laboratory III, Environment

Semester IV : Thermal Physics, Computational Techniques and Numerical Methods, Computational Techniques-Laboratory, Optional Papers

School of Physical Sciences

on Solid State Physics II, High Energy Physics, Laser Physics and Nuclear Physics II.

Ph.D. Courses: Research Methodologies in Physics, Advanced Statistical Mechanics and Advanced Nuclear Physics.

Seminars/Conferences/Symposia/Extension Programmes etc.

Organised :

Refresher Course in Physics from 5th to 25th June 2013

Attended:

Prof. B. Jyrwa attended the *DAE-BRNS Workshop on Covariance in Nuclear Data* held in Mumbai from December 26-29, 2013 and presented two papers entitled (a) Importance of Errors for Covariance and (b) Role of EXFOR in Covariance

Prof. B. Jyrwa attend a *Winter School on Accelerator, Nuclear and Particle Physics* which was held at Banaras Hindu University Varanasi from March 29 to April 04, 2014, and presented two Posters entitled (a) "Determination of sodium and aluminium in the glass sample by neutron activation technique", and (b) "Determination of potassium and magnesium in the glass sample by neutron activation technique".

Prof. Y.N. Tiwari presented a paper entitled "Isotopic man effect in elution capture cross sections for $H^+ - D$ and $D^+ - H$ collision in Debye plasmas" at **ISAMP-TC-2013**, held at the Institute of Plasma Research, Gandhi Nagar, Gujarat).

Prof. Y.N. Tiwari attended a two-day *National Seminar on Commemoration of the*

Centenary Year of Bohr's Atomic Theory held at Lady Keane College, Shillong on 23–24 August, 2013

Prof. M.C. Mahato delivered an invited lecture on "Particle motion in driven sinusoidal potentials" at the Indian Statistical Physics Community Meeting, ICTS-IISc, Bangalore (February 1-3, 2014).

Dr. S.S. Khatri presented a paper entitled "Band shape analysis of Raman band of the C=O stretching vibration in molecules" in the *National Conference on Physical Sciences* organized by Department of Physics, D.H.S.K. College, Dibrugarh, on 13 and 14 September, 2013.

Dr. S.S. Pohlong attended a *National Seminar on Commemoration of the Centenary Year of Bohr's Atomic Theory*, at Lady Keane College, Shillong, during 23–24 August, 2013.

Publications

Khatri, S.S., (2013) *Developments in Raman Spectroscopy: A review*. Transient III: 149-156.

Dasari, S. and Biswas, A.K. (2013). *An Economic analogy to Electrodynamics. Modern Economy*. Vol. 4. No.11: 723 -732.

Research Papers

Published Abroad

Thongjaomayum, D., Shukla P. (2013) Effect of co-ordination number on nonequilibrium critical point, *Phys Rev E* 88:042138

Jyrwa, B., Suchiang, D. (2013). Excitation functions of (n, 2n) reactions for stable lead isotopes from reaction threshold to 20 MeV. *Annals of Nuclear Energy* 56:44-47.

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Jyrwa, B. et al. (2014). Excitation functions of the 90, 91, 92, 94, 96Zr (n, p) reactions from reaction threshold to 20 MeV. *Annals of Nuclear Energy* 65:97-100.

Reenbohn, W.L., Mahato, M. C. (2013). Relative stability of dynamic and stochastic resonance in a sinusoidal potential, *Phys. Rev. E*. 88:032143-1–032143-6.

Research Projects

New Projects

Sl. No.	Title of the Project	PI	Funding Agency	Amount
1.	EXFOR Compilations and participation in the measurement of high energy photon and neutron nuclear reaction cross-sections in structural materials (e.g. Fe, Co, Ni, Cr, Zr, etc) and materials related to medical isotopes (e.g.) Mo	Prof. B. Jyrwa	BRNS DAE	Rs.24,00,000/-

Completed during the year

Sl. No.	Title of Project	PI	Funding Agency	Amount
1.	EXFOR Compilation of Nuclear Data	Prof. B. Jyrwa	BRNS, DAE	Rs. 8,16,150/- only
2.	Study of Transport Properties in Driven Periodic Systems	Prof. M. C. Mahato	BRNS, DAE	NIL

Academic Collaborations

Prof. P. Shukla visited the International Centre of Theoretical Physics, *Trieste*, Italy, during Nov. 19 – Dec 19, 2013; and the Institute of Mathematical Sciences, Chennai, India, during Jan. 5 – Feb. 5, 2014, on their invitations for collaborative research work.

Prof. B. Jyrwa is engaged in close collaboration between NPD (Nuclear Physics Division) and RCD (Radio Chemistry Division) of BARC at Trombay, Mumbai, regarding experimental studies of nuclear reaction involving photon and neutron cross sections from Structural materials and the theoretical

interpretation of the data obtained thereby. There is also close collaboration with IAEA from Vienna regarding compilation of Nuclear Data and their evaluation by calculating the covariance matrices and studying the error propagation of the experimental results.

Honours /Awards/Recognitions

Prof. D.T. Khathing was Chairman, UGC Expert Committee, for selection of Post-Graduate for Professional Courses for SC & ST candidates for 2013 – 2014 from 11th – 13th March, 2013

School of Physical Sciences

Prof. D.T. Khathing was Chairman, AIU Committee, for synthesis of the recommendations arising from meetings of Vice-Chancellors at their respective Zonal Meetings on 7th March, 2014.

Other Activities

Prof. B. Jyrwa delivered a talk entitled “Applications of nuclear physics for the needs of the modern society” at Shillong College in July 2013 on the occasion of the Golden Jubilee Celebrations of the Science Department.

Prof. B. Jyrwa authored an article entitled “Particle therapy: A boon for cancer

patients” for the Golden Jubilee Souvenir of Shillong College, Shillong, published in 2013.

Dr. S.S. Khatri attended the 9th *Short Term Course in MATLAB* from 22– 27 July, 2013, organized by Academic Staff College, NEHU.

Dr. A.K. Biswas wrote a paper entitled “Graphical law beneath each written natural language”, arxiv: 1307.6235

Dr. S.S. Pohlong took part in the Short Term Course in MATLAB from 22–27 July, 2013, at NEHU.

DEPARTMENT OF STATISTICS

Head : Dr. B. K. Gupt
Telephone : 0364-2722901
E-mail : hodsta@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	G. Das, M.A. (Delhi), Ph.D. (NEHU).	Survey Sampling, Statistical Ecology.
Associate Professor	M. K. Das, M.Sc., Ph.D (Dibrugarh).	Bayesian Inference.
	T.K. Chakrabarty, M.Stat. (Agra); Ph.D, (Manipur)	Statistical Demography.
	B. K. Gupt, M.A. (Econ) (Rohilkand); M.Sc. (Stat) (AMU), Ph.D. (Gauhati)	Survey Sampling
	R. Singh, M.Sc, Ph.D. (Patna).	Econometrics, Poverty and Human Development, Demography.
Assistant Professor	S. K. Jha, M.Sc., Ph.D. (Patna).	Discrete Probability Distribution, Operations Research
	B. Das, M.Sc, Ph.D (Gauhati)	Distribution Theory and Actuarial Statistics

Thrust Areas of Research

Statistical Inference, Design of Experiments, Sample Survey, Statistical Ecology, Demography Econometrics.

Student Intake

Enrolment Capacity : M.Sc. 25; M.Phil. Variable; Ph.D. Variable

Actual Admission

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Sc	-	13	3	8	8	8	8	16
M.Phil								
Ph.D	-	-	1	1	-	-	1	1

School of Physical Sciences

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.Sc	-	8	1	5	4	3	6	9
M.Phil								
Ph.D	-	-	-	-	-	-	-	-

Courses Conducted

M.Sc.

Semester – I : Mathematical Analysis, Linear Algebra, Probability Theory, Distribution Theory I, Distribution Theory II, Distribution, Computing & Programming (Practical)

Semester – II : Sample Survey, Statistical Inference I, Linear Models & Regression Analysis, Sample Survey(Practical), Statistical Inference I & Regression Analysis (Practical), Introduction To probability Theory and Distributions, Introduction to Sample Survey, Linear Programming.

Semester – III: Design of Experiments, Statistical Inference II, Statistics for National Development & Environmental Statistics, Design of Experiments (Practical), Statistical Inference II (Practical), Introduction to Design and Analysis of Experiments, Introduction to Econometrics,/Survival Analysis.

Semester – IV : Applied Multivariate Analysis, Time Series Analysis & Forecasting, Stochastic

Processes, Applied Multivariate Analysis (Practical), Time Series Analysis and Forecasting (practical), Project Work, Statistical Computing, Population Dynamics and Demography, Population Dynamics and Demography (practical).

M.Phil/Ph.D Courses

Research Methodology in statistics, Applied Survival Analysis, Statistical Modeling.

Seminars/Conference/Symposia/Extension Programme etc.

Organised

Dr. T.K. Chakrabarty was Convener for a One day Workshop on *Censusinfo Software and Data Dissemination of Census 2011* held on 7th March, 2014 at the Department of Statistics, North Eastern Hill University in collaboration with the Office of the Director of Census Operation, Meghalaya.

Participated

Dr. T.K. Chakrabarty (a) Presented an oral paper entitled “Distributional aspects of anthropometric z-scores: Revisiting the nutritional deficits among Indian children under age five” in the Workshop on “Health Inequalities in India. Concept, Methods and Evidences” held at Institute of Economic

Growth, Delhi, during 23 – 24 April, 2013; (b) Presented an oral paper entitled “Measurement and estimation of prevalence of under nutrition among children from anthropometric z-scores using skew normal distribution” in the National Conference on “Recent Trends in Research in Biological Anthropology in Eastern and North Eastern India” held at Indian Statistical Institute, Kolkata during 21 – 23 November, 2013.

- Dr. B. Das (a) Presented a research paper entitled “Concomitant of Order Statistics and Record Statistics for Weighted Inverse Gaussian Distribution” in the National Seminar on “Recent Developments in Statistics and its Applications in Allied Discipline” organized by Department of Statistics, Dibrugarh University during 21st to 22nd March, 2014; (b) Participated in the North-East Workshop on “Statistical Pattern Recognition and data Mining” organized by Indian Statistical Institute, Kolkata and Department of Statistics, Gauhati University, held on 13th to 15th March 2013; (c) Participated in the National Seminar on “Ethnic Violence and Its Impacts on Demographics in North Eastern Region”

organized by Department of Statistics, Gauhati University held on 16th February to 18th February, 2013.

Publications

Published in India

Chakrabarty, T. K. (2013). Efficient estimation of tail probability for anthropometric z-scores using parametric bootstrap: Measuring under-nutrition prevalence among children under age five from North East India. *Assam Statistical Review*, 27: 96-115.

Singh, R. and Saikia, B. (2014). Ridge regression as an application to regression problems. *Journal of Environmental Research & Development*, 8: 726 – 733.

Academic Collaborations

Dr. T.K. Chakrabarty visited Applied Statistical Unit, Indian Statistical Institute, Kolkata during the period November 20, 2013 to January 31, 2014 for collaborative research in the area “Density estimation from retrospective duration data with selective recall errors”.

VII

SCHOOL OF SOCIAL SCIENCES

Dean : Prof. C. L. Imchen
Phone : 0364-272 3001
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The School of Social Sciences consists of Departments of Cultural and Creative Studies, History, Law, Political Science and Sociology. The Departments of History, Political Science and Sociology offer post graduate courses in their respective disciplines. The Department of Cultural and Creative Studies offer P.G. Diploma in Music, in Painting and in Folkloristics. The Department of Law offers a Five-Year Integrated programme of B.A., LLB (Honours). The Department of History is at the DSA-II stage of the UGC Special Assistance Programme, while the Departments of Sociology

and of Political Science received grants at the SAP-DRS level from the UGC. The faculty members of the School produced a significant number of books and articles emanating from their engagements in field based research works. The constituent Departments have organised Lectures, Symposiums, Seminars and International Conferences where eminent and renowned scholars were engaged. Most of the Departments have social outreach programmes of sponsoring academic bodies and networking with NGOs.

DEPARTMENT OF CULTURAL AND CREATIVE STUDIES

Head : Prof. Subrat Kumar Nanda
Telephone : 2723374, 2723371 and 2723372 (O) 09436702498 (M)
Email : nanda_subrat2@yahoo.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Desmond L. Kharmawphlang, Ph.D. (NEHU)	English
	Subrat Kumar Nanda, Ph.D. (JNU)	Sociology
Associate Professor	Lapynshai Syiem, Ph.D. (NEHU)	Music
Assistant Professor	Bedanta Kalita, M.F.A. (M.S. Univ. of Baroda)	Painting
Visiting Professor/ Fellow/Scholar in the Department	G. Badaiasuklang L. Nonglait, Ph.D. (NEHU)	Folkloristics
	Roplyneda Lyngdoh, Ph.D. (NEHU)	Folkloristics
	Benedict S. Hynniewta, M.F.A. (Viswa Bharati)	Painting

Thrust Area of Research

The major thrust area of research in the department is studying various theoretical, conceptual and contextual issues relating to different aspects of folklore, performing arts and visual arts.

Brief Statement of Academic Activities

The Department runs a regular M.A. Course in Folkloristics and P.G. Diploma Courses in Music and Painting. In addition, the Department offers 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 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:	PG Diploma Music	-	20
	PG Diploma Painting	-	10
	M.A. Folkloristics	-	30
	Ph. D.	-	Varies from year to year

School of Social Sciences

Actual Admissions

Degree/ Diploma	SC	ST	GEN	OBC	Male	Female	Meghalaya	Non- Meghalaya	Total
M.A. (Folk- loristics)	1	25	-	1	14	13	21	6	27
P.G. Diploma (Painting)	-	4	-		4	-	4	-	4
Ph.D.	1	2	-		3	-	2	-	3

Degrees/Diplomas Awarded

Degree/ Diploma	SC	ST	GEN	OBC	Male	Female	Meghalaya	Non- Meghalaya	Total
M.A. (Folk- loristics)	1	22	-	1	11	13	18	6	24
P.G. Diploma (Painting)		6	-	1	5	2	6	1	7
P.G. Diploma (Music)	-	9	1		3	7	8	2	10

Courses Conducted

M.A. (Folkloristics)

Semester-I : CCS(C)-101: Introduction to Folkloristics; CCS(C)-102: History of Folklore Studies; CCS(C)-103: Introduction to Semiotics; CCS(C)-104: Folklore Theories-I; CCS(C)-105: Field Methods and Studies.

Semester-II : CCS(C)-106: Folklore Theories-II; CCS(O)-108: Folk Literature-I; CCS(O)-109: Public Sector Folklore; CCS(C)-110: Introduction

to Visual Arts; CCS(C)-111: Urban Folklore.

Semester-III : CCS(O)-112: Ethnomusicology; CCS(C)-113: Folk Literature-II; CCS(C)-114: Introduction to Performing Arts; CCS(C)-115: Folklore of Northeast India-I; CCS(O)-116: Social Folk Custom.

Semester-IV : CCS(C)-118: Material Culture; CCS(C)-119: Language, Culture and Society; CCS(C)-120: Narratology, CCS(C)-121: Folklore of Northeast India-II, CCS(C)-122: Dissertation.

P.G. Diploma (Painting)

Semester-I : CCSC-106: Fundamentals of Visual Arts (Theory), CCSC-107: Introduction to Indian and Chinese Art (Theory), CCSC-108: Drawing and Colour Application (Practical), CCSC-109: Sculpture (Practical), CCSO-110: Introduction to Folk Art and Craft of Northeast India (Theory).

Semester-II : CCSC-206: Introduction to Western Art (Theory), CCSC-207: Print Making (Practical), CCSC-208: Creative Painting (Practical), CCSC-209: Enamel Painting in Glazing Technique (Practical), CCSO-210: Introduction to Indian and Western Aesthetics (Theory).

Ph. D. Course Work

Semester-I : CCS(C)-501: Research Methodology; CCS(C)-502: Recent Trends in Folkloristics; CCS(C)-504: Advanced Course in Performing Arts.

Educational Tour of Students

Teachers-in-Charge: Mr. Bedanta Kalita, Assistant Professor, Mr. Benedict S. Hynniewta, Visiting Fellow

Places/Institutions visited: Mumbai and Goa

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 India.

Seminars/Conferences/Symposia/Extension Programmes, etc

Organised

A National Seminar on *Inter-State Border Cultural Transactions: Exploring the Praxis of Folk Communicative Norms in Northeast India* sponsored by the Indian Council of Social Science Research was organized by the Department during May 2-3, 2013.

The Department also organised a Seminar titled “The Times They are a Changing” on 24th May 2013 as part of the universal celebration of the birthday of Bob Dylan, American musician, singer-songwriter, artist, poet and writer with the objective to benefit the student community through interaction with professionals from the field of music, art and literature. Professor Desmond L. Kharmawphlang was the Coordinator of the Seminar.

The Department in association with UGC-Academic Staff College, NEHU, Shillong organized a Refresher Course in “Folkloristics and Semiotics” from 22nd July to 11th August 2013. Prof. Desmond L. Kharmawphlang was the Coordinator and Prof. Subrat K. Nanda was the Co-coordinator of the Refresher Course.

The Department in collaboration with National Folklore Support Centre (NFSC), Chennai and supported by Sir Dorabji Tata Trust and the Allied Trusts, Mumbai organised the “NFSC Conference for Tata Fellows in Folklore” from 24-26 September, 2013 to sensitise the students and faculty and interested people for folklore research.

In collaboration with the Maulana Abul Kalam Azad Institute of Asian Studies

(MAKAIAS), Kolkata, the Department organized a two-day National Seminar on *Diaspora and Folklore: Exploring the Changing Dimensions of Folklore in Tribal Diaspora* on 27th and 28th March 2014. Professor Desmond L. Kharmawphlang and Prof. Subrat K. Nanda were the Coordinators of the Seminar.

Participated

Prof. Desmond L. Kharmawphlang (a) attended as Subject Expert a meeting of the Advisory Board of Tata Fellowships in Folklore of the Sir Dorabji Tata Trust and Allied Trusts held at Chennai on 17th June 2013; (b) chaired a Session on 24th September 2013 at the *NFSC Conference for Tata Fellows in Folklore* organized by National Folklore Support Centre (NFSC), Chennai in collaboration with Department of Cultural and Creative Studies, NEHU, Shillong-793022, Meghalaya and supported by Sir Dorabji Tata Trust and the Allied Trusts, Mumbai at NEHU, Shillong Campus from 24-26 September, 2013; (c) delivered a talk entitled “Between Lips: Poetry of Telling Identities” on 30th September 2013 at the Nehru Memorial Museum Library, New Delhi; (d) presented a paper entitled “U Ngat Puri Legends: An Ecocritical Discourse” on 23rd October 2013 at the International Seminar on *Folklore: Reinventing the Past through Folk Traditions* organized by Jawaharlal Nehru University, New Delhi; (e) presented a paper entitled “Dialogic Narration and the Discourse of Memory of U Manik Raitong” on 8th November 2013 at the International Seminar on *Cultures of Memory: Mnemocultural Praxis in South, Southeast and other Asian Countries* organized by The

English and Foreign Languages University, Shillong Campus; (f) participated in a Panel Discussion on *Celebrating the Himalaya Stories and Folklore* with Ms. Deepti Naval, noted film actor and writer, Mr. Kishore Thukral, writer and Researcher and Mr. R. Ramachandran, Executive Director, National Book Development Council, Singapore organized by Asian Confluence, Shillong, Meghalaya; (g) presented a paper entitled “Stories on Looms: Conversations, Epistemes and Praxis” on 7th January 2014 at the National Conference on *Threads of Change* organized by National Institute of Design, Ahmadabad and Indira Gandhi National Centre for the Arts, New Delhi; (h) presented a paper entitled “Strategizing Narratology: A Case of Some Oral Epics of North-East India” on 21st January 2014 at the International Seminar on *Genre Studies: The Epic* organized by Burdwan University, Burdwan, West Bengal; (i) attended as the Chief Guest in a Literary programme entitled *Ramdhenu* organized by the Assam Sahitya Sabha, Guwahati; (j) chaired a Session and presented a paper entitled “Ka Shad Lakhympong: Conversations, Identity and Emerging Realities” on 5th March 2014 at the National Seminar on *Peoples’ Art of North East India: History, Identity and Emerging Realities* organized by Rajiv Gandhi University, Itanagar and National Museum of Mankind, Bhopal, Madhya Pradesh from 5th to 7th March, 2014; (k) participated as Poet and Resource Person in *Sabad: A World Poetry Festival* organized by Sahitya Akademi, New Delhi and Ministry of Culture, Govt. of India; (l) chaired the 3rd technical session on 24th March 2014 at the National Seminar on *Reinterpretation of Sources*

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for *Writing Gender History: Creating an Alternative Narrative* organized by the Department of History, NEHU, Shillong, Meghalaya; (m) chaired a Session on “Diaspora and Folklore: Conceptual and Theoretical Issues” at the National Seminar on *Diaspora and Folklore: Exploring the Changing Dimensions of Folklore in Tribal Diaspora* organized by the Department of Cultural and Creative Studies, NEHU, Shillong.

Prof. Subrat K. Nanda (a) presented a paper on “Globalization, Marginalization and Social Exclusion: Situating India’s Northeast” at the National Seminar on *Marginalized Community, Social Exclusion and Globalization: Northeast Perspective* organized by the Department of Sociology, Assam University, Silchar, Assam during 22-24 April, 2013; (b) presented a paper titled “People on the Edge: Exploring Dimensions of Intercultural Relations among Ethnic Communities in the Border Areas of Northeast India” at the National Seminar on *Inter-State Border Cultural Transactions: Exploring the Praxis of Folk Communicative Norms in Northeast India* organized by the Department of Cultural and Creative Studies, NEHU, Shillong, Meghalaya during May 2-3, 2013; (c) chaired a Session on 25th September

2013 at the *NFSC Conference for Tata Fellows in Folklore* organized by National Folklore Support Centre (NFSC), Chennai in collaboration with Department of Cultural and Creative Studies, NEHU, Shillong-793022, Meghalaya and supported by Sir Dorabji Tata Trust and the Allied Trusts, Mumbai at NEHU, Shillong Campus from 24-26 September, 2013; (d) chaired a Session and presented a paper titled “Diaspora, Folklore and Identity: Some Conceptual and Theoretical Issues” at the National Seminar on *Diaspora and Folklore: Exploring the Changing Dimensions of Folklore in Tribal Diaspora* organized by Department of Cultural and Creative Studies, NEHU, Shillong, Meghalaya during 27-28 March, 2014.

Funds Received from Agencies including NEHU/UGC

Received Rs. 50,000/- from North Eastern Hill University, Shillong, Meghalaya and Rs.5,00,000/- from Maulana Abul Kalam Azad Institute of Asian Studies (MAKAIAS), Kolkata for organizing the *National Seminar on Diaspora and Folklore: Exploring the Changing Dimensions of Folklore in Tribal Diaspora* on 27th and 28th March 2014 at the Department at NEHU, Shillong.

Research Projects

Ongoing

Title of Project	PI/Co-PI	Funding Agency	Amount
Rice Myths of North East India Area Study	Professor D. L. Kharmawphlang, Professor S. K. Nanda, and Dr. Lapynshai Syiem Dr. L. Syiem	UGC – (under UPE Scheme)	Rs. 30 Lakhs

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Other Activities

Prof. Desmond L. Kharmawphlang (a) delivered two lectures on 18th May 2013 at the 24th Orientation Course organized by the UGC-Academic Staff College, NEHU, Shillong; (b) delivered two lectures on 21st June 2013 at the 25th Orientation Course organized by the UGC-Academic Staff

College, NEHU, Shillong; (c) delivered two lectures at the 26th Orientation Course organized by UGC-Academic Staff College, NEHU, Shillong; (d) delivered two lectures on “The Revenant: A Look at Some Urban Legends of Shillong” on 25th March 2014 at the Refresher Course organized by the Department of English at UGC-Academic Staff College, NEHU, Shillong.

DEPARTMENT OF HISTORY

Head : Prof. F.A. Qadri
Telephone : 2723019
E-mail : qadrifa@yahoo.co.in; hodhist@gmail.com
Faculty

Designation	Name and Qualification	Specialization
Professor	M. Momin, M.A/M.Phil/Ph.D. (JNU)	Ancient Indian History & Early Northeast India
	M. Sharma, M.A (Gau)/Ph.D. (NEHU)	Modern Indian History & Modern Northeast India.
	F.A. Qadri, M.A/M.Phil/Ph.D. (AMU)	Medieval Indian History & Northeast India.
	A.K. Thakur, M.A/Ph.D. (BU, Muzaffarpur)	Medieval Indian History & Northeast India
	V.R. Rengsi, M.A/M.Phil/Ph.D.(NEHU)	History of Sciences & Non-Indian History
	A. Passah, M.A./M.Phil/Ph.D. (NEHU)	History of South East Asia & Modern Northeast India
Associate Professor	C.A. Mawlong, M.A (NEHU), PG Dip. in Archaeology- (IoA, Delhi), Ph.D.(NEHU)	Archaeology & Early Northeast India
	T. Gurung Nag, M.A/M.Phil/Ph.D. (NEHU)	Modern Indian History & Northeast India
	S.N. Lamare, M.A/M.Phil/Ph.D. (NEHU)	Modern Indian History & Modern Northeast India.
	A. Mathur, M.A./Ph.D.(Rohilkhand Uni.)	Ancient Indian History, Culture& Archaeology.
Assistant Professor (Senior Scale)	M.S.N. Rahman, M.A/Ph.D. (Calcutta)	Medieval Indian History
	B. Dutta, M.A./Ph.D. (NEHU)	Modern Indian History

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 organising

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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: M.A. – 50; Ph.D. - Variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.		48	1	24	24	20	29	49
M.Phil.		3		1	2	2	1	3
Ph.D.		6	1	3	3	6	1	7

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A.		40		22	18	18	22	40
M.Phil.		2		1	1	1	1	2
Ph.D.		1	1	1	1	1	1	2

Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name(s) of Supervisor(s) Supervisor
Ms. Anjalee M. Shangpliang	Emergence and Role of New Social Forces in Khasi-Jaintia Society: 1826-1972	Prof. Manorama Sharma
Mr. Vimal Kant	Evolution of Caste Consciousness and Its Impact on Power Relations in Bihar: A Historical Study (1937-1967)	Prof. A.K. Thakur

Placement of Students

Students who have completed their Master's and Ph.D. programmes from the Department and cleared NET conducted by the UGC have found employment in various institutions of higher academics (in universities and colleges), research institutes, schools, civil administration, defence services, banking and business enterprises.

Courses Conducted

M.A.

Semester I : Historical Methods-I; Prehistoric to Ancient Societies; Modern Indian Society; Economy and Society in Ancient India; British Expansion and Imperial Policy in India; Technology in the Making of Early China; Social Movement in USA; The Rise of

Islam and the Early Caliphate; Economy and Society in Medieval India.

Semester II : Historical Methods-II; Feudalism; Ancient Indian Polity and Society; Colonialism, Imperialism and Economic Change in India; History of the Graeco-Roman Civilization; 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; Political Ideas and Institutions during the Sultanate Period; Ancient Indian Art and Architecture; History of Ideas in Modern India; Religion and Society in Medieval 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; Political History of the Mughal Empire; Political History of the Delhi Sultanate; Contemporary India; Socio-Economic History

of N.E.I. – The Early Period; The Rise of South Indian Civilization; Monarchies in Medieval North East India; Christianity in North East India.

M. Phil./Ph.D. : History and Theory, Research Methodology and Oral Tradition.

Field Trip

Dr. C. A. Mawlong took the students on a field trip, to a Megalithic site at Nartiang in June 2013 as part requirement of the course on “Archaeology: Methods and Approaches”.

Seminars/ Conferences/ Symposia/ Extension Programmes

Organized

Organised a National Seminar on “*Reinterpretation of Sources for Writing Gender History: Creating an Alternative Narrative*” sponsored by UGC-SAP DSA II (History) and ICSSR, New Delhi from 24th to 26th March, 2014 in the Department of History NEHU, Shillong. (Co-coordinator: Prof. Manorama Sharma).

Organised jointly the Sub-theme Panel on “Documenting Gendered Histories: Nation, State, Region and Local” in the National Conference of the Indian Association of Women Studies held on 4th to 7th February, 2014, at Gauhati University. (Co-coordinator: Prof. Manorama Sharma).

The Department organize a Refresher Course on the theme “Historiography: Trends, Prospects and Challenges” from 9th to 29th September 2013 (Coordinator: Dr. Aparna Mathur).

Attended

Prof. Mignonette Momin

National Seminar on *Reinterpretation of Sources for Writing Gender History: Creating an Alternative Narrative* organized by the Department of History, North-Eastern Hill University, Shillong, on 24th-26th March 2014. Presented a paper, "Exploring origin myths of select dynasties of Northeast India", and chaired the 3rd Academic Session.

National Conference on *Religion vis-à-vis Socio-Political, Ecological and Gender Issues: A Historical Perspective* organized by the Department of History, Synod College, Shillong, on 10th-11th October, 2013. Delivered the Introductory Address, "Theoretical issues in religion and society", and presided over the 1st Academic Session.

National Seminar on *Inter-State Border Cultural Transaction: Exploring the Praxis of Folk Communicative Norms in North-East India* organized by the Department of Cultural and Creative Studies, NEHU, Shillong, on 2nd - 3rd May 2013. Presented a paper, "Historical perspective of cultural transaction and the A·chik as reflected in the *Apasong Agana*".

Prof. Manorama Sharma

Attended as a Resource Person in a UGC sponsored State Level Seminar on "Women Empowerment" organised by Raid Laban College, Shillong on 13th September, 2013 and delivered a lecture on "Patriarchy and Women".

Attended a National Conference on *Religion vis-a-vis Socio-Political, Ecological and Gender Issues: A Historical Perspective*

organised by Synod College, Shillong on 10th -11th October, 2013, and moderated the session on "Religion and the Question of Gender" and delivered an invited lecture on "Gender and Religion".

Delivered the Keynote Address in the two day Workshop on *Customary Law, Law and Women in Northeast India* organised by the Indian Association of Women Studies in collaboration with Indian Council of Historical Research, NERC, Guwahati on 14th - 15th December, 2013.

Attended as a Resource person in a UGC sponsored Workshop on *Capacity Building for Women Managers in Higher Education* organised by Dept. of Anthropology, NEHU, and delivered the key lecture in the session on "Need for a Gender Friendly Environment on 13th June, 2013.

Prof. F. A. Qadri

National Conference on *Bihar Main Urdu Suhafat* organised by Samt-o-Raftar Al-Mansoor Foundation in collaboration with National Council for Promotion of Urdu Language (NCPUL) at Darbhanga and presented a paper on "Bihar Main Urdu Sahafat: Chand Tarikhi Pahlu", 1-2 March, 2014.

National Seminar on "Reinterpretation of sources for writing gender history: Creating an alternative narrative" and presented a paper on "Gender Relations in Islamic Religious Thought" and also presided over the Second Academic Session, UGC-SAP-DSA, Department of History & ICSSR, New Delhi, Shillong 24-26 March 2014.

Special invitee in the meeting of the Fourteenth Finance Commission, Govt. of India held at IIT, Guwahati on 12 June, 2013.

National symposium on “Social Science Research on Northeast India: Practices, Problems and Prospects”, UGC-SAP, Department of Political Science, North-Eastern Hill University, Shillong March 21-22, 2014 and presented a paper “Progress of Historical Research in Northeast India during Pre Colonial Period II (Medieval)”.

Prof. A. K. Thakur

National Symposium on *Social Science Research on Northeast India: Practices, Problems and Prospects* organized by UGC-SAP, Department of Political Science, NEHU, Shillong, on March 21-22, 2014, and presented a paper entitled “Contributions of NE I H A to the Social Science Research in Northeast India”.

34th Annual Session of North East India History Association, Manipur University, Imphal, Manipur, 11-13 November, 2013, and presented a paper entitled “Approaches to Study Technology of Northeast India”.

UGC-sponsored National Seminar organized by Department of History, Nowgong College, Nagaon, Assam, on *Writing Social History of Science, Technology and Medicine in the North East India* held on 24th and 25th September, 2013 and delivered the Keynote Address and chaired an academic session.

Government of Arunachal Pradesh sponsored Seminar on *Cultural Heritage of Arunachal Pradesh* organised by Directorate of Research (Culture, History, Archaeology, Museum, Archives & Philology) held at Itanagar on 26th of September, 2013, and acted as a Resource Person in the Seminar and presided an academic session and delivered a talk on the subject.

Prof. A. N. Passah

National Conference on *Religion vis-à-vis Socio-Political, Ecological and Gender Issues: A Historical Perspective* organized by the Department of History, Synod College, Shillong on 10th – 11th October 2013. Presented a paper entitled “It’s still a Man’s World: Religion and Gender in Khasi-Jaintia Hills”.

34th Annual Session of North East India History Association, Dept. of History, Manipur University, Imphal 11th – 13th November 2013 and presented a paper on “Women and Decision Making in Meghalaya”.

National Seminar on *Reinterpretation of Sources for Writing Gender History: Creating an Alternative Narrative* and presented a paper on “Gender history in Khasi-Jaintia Hills: a relook at oral traditions and literature”, Department of History, NEHU, Shillong. 24th-26th March 2014.

Dr. C.A. Mawlong

National Seminar on the theme Reinterpretation of Sources for Writing Gender History: Creating an Alternative Narrative, and presented a paper on Material Culture and Gender: A Study of the Iron Industry and Craft of Potting in Khasi-Jaintia Society” organised by the Department of History 24-26 March 2014.

Dr. T. G. Nag

National Seminar on the theme Reinterpretation of Sources for Writing Gender History: Creating an Alternative Narrative, and presented a paper on “Rethinking Nepali Migration in Colonial Assam: A Gender Perspective” organized by the Department of History, NEHU, Shillong on 24-26 March 2014.

Dr. A. Mathur

National Seminar on “Reinterpretation of Sources For Writing Gender History: Creating An Alternative Narrative” and presented paper titled as *Relooking Arthasastra: A Gender perspective* organized from 24th -26th march 2014 by Department of History, NEHU, Shillong.

Dr. M. S. N. Rahman

ICPR and UGC sponsored three day National Seminar on *Philosophical Wisdom of Umar Khayyam & Its Impact on Eastern and Western Philosophical Circles*, and presented a paper on ‘Umar Khayyam and Indian Thoughts’ (organized by the Department of Persian, Gauhati University, from 29th to 31st March, 2014).

National Seminar on *Inter-Religious Understanding*, and presented a paper on ‘Sufism as a Syncretic Force in Medieval Bengal’ (organized by Santiniketan Charitable Trust, Visva-Bharati, from 20th to 21st January, 2014).

74th session of Indian History Congress, Section II: Medieval India at Ravenshaw University, Cuttack 28-30 December, 2013 and presented a paper on “Vaishnavism as a Syncretic Force in Medieval Bengal”.

UGC Sponsored two-day National Seminar on Comprehensive History of Bengal after Independence, and presented a paper on ‘The Muslims of West Bengal after Independence’ (organized by Sripat Singh College, Jiaganj, Murshidabad, West Bengal, from 3-4 December, 2013).

34th Annual Session of North-East India History Association, and presented a paper on ‘Mughal-Ahom Political Relations’, at

Manipur University, Kanchipur, Imphal from 11th to 13th November, 2013.

Delivered a special lecture on ‘Disintegration of Mughal Empire with special reference to the role of Aurangzeb’ organized by the Department of History, St. Mary’s College, Shillong, on 31st July, 2013.

Delivered a special lecture on ‘Sufism in Indian Environment: History, Culture and Literature’ at the English and Foreign Languages University, Shillong on 12th April, 2013.

Dr. B. Dutta

International Conference on *Indian Freedom Movement and Partition of the Subcontinent* organized by the Deptt of History, Visva Bharati, February, 10-11, 2014. Presented a paper entitled “Un-heard Story of an Un-Spoken Partition: Recovering the Cultural History of Partition in Assam, 1947”.

International Seminar on *Ethnicity and Globalization* organized by the Deptt. Of Philosophy, Lady Keane College, Shillong, December, 4-5, 2013, and presented a paper entitled “Hill Station and the Globalized World: Making and Unmaking of cosmopolitan Shillong (1866-1992)”.

International Seminar on *Cultures of Memory* organized by the English and Foreign Language University, Shillong Campus, November, 7-9, 2013, and presented a paper entitled “Event, Memory and Lore: A Family Anecdote and Rewriting the History of Partition of Solonial South Assam-1947”.

International Seminar on *Continuities and Discontinuities of Asian Engagements: Borders, Mobility and Identity in North East India* organized by the Deptt. of Humanities and Social Sciences, IIT-Guwahati, October,

17-18, 2013, and presented a paper on “All For Neighbour’s Sake: Cachar, Partition of India and the politics of Refugee Rehabilitation 1947-1953”.

National Seminar on *Reinterpretation of Sources for Writing Gender History* organized by the Deptt. Of History, NEHU, Shillong, March, 24-26, 2014. Presented a paper entitled “Images of the Home and the World in Conflict and Beyond: A View through A Gendered Lens”.

National Seminar on *Gendering Modernity: Colonial and Post-Colonial Perspective* organized by Ramsaday College, Howrah and Paschim Banga Itihas Samsad, January 3-4, 2014, as Resource Person and presented a paper entitled “Forgotten Lands, Forsaken Men: Partition, Provincialism and Sylheti Government Servants in Post-partition Assam”.

National Seminar on *Inclusive Development - Bridging the Gap* organized by Deptt. of Social Work, St. Edmund’s College, Shillong, June, 7-8, 2013, as Resource Person and presented a paper entitled Between “Nehru’s Bewilderment and Elwin’s Exclusion: Inclusive Development and Construction of North East India’ Policy”.

Publications

Research Papers

Published in India

Momin, M. (2013). Antiquarianism, India and Northeast India: A Brief Note. *Aitiha Journal of Ancient History, Culture and Archaeology* [ISSN 2277-808X], 4: 140-153.

Dutta Binayak, (2013). Assam Code: Locating Law as the Instrumentality of Governance

in Colonial Assam, *Man and Society*. 10: 63-78.

Dutta Binayak, (2013). Review of book edited by Sagar Boruah, *Historical Studies in the Context of Globalization*, Khagarijan College, 2011, in *The NEHU Journal*, 10(2)

Book/Book Chapter/Proceedings

Sharmah, B. and Dutta, B. (2013) *History of the Judiciary in Assam*, DVS Publishers, Guwahati.

Dutta, Binayak, (2014), *Engendering a Family and Social History of Beltola Raj: Translating Madhuri Choudhury’s Rani Laxmipriya Devi aru Beltolar Itihas*, Madhuri Choudhury Trust Committee, Guwahati.

Passah, Amena., (2013). “Change and continuity in Khasi-Jaintia Society”, *Proceedings of North East India History Association*, Rajiv Gandhi University, Itanagar, pp. 662-670.

Thakur, Amrendra Kr (2014) Iron in the History of Northeast India: Awaiting Researches. In: Tiatoshi Jamir and Manjil Hazarika (eds.), *50 Years after Daojali-Hading: Emerging Perspectives in the Archaeology of Northeast India (Essays in Honour of Tarun Chandra Sharma)*, Research India Press, New Delhi, 2014, pp. 442-53. ISBN 978-81-891 31.

Thakur, Amrendra Kr (2014), “Creating Capital or Inviting Crises: Debating Some New Development Initiatives in Northeast India”, Hage Lasa, S. C. Nayak and Ngawang Thupten (Shakya) (eds.), *Tribal Area Development and Northeast India*, Adhyayan Publishers and Distributors, New Delhi, in association with Government College, Bomdila and Buddhist Culture

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- Preservation Society, Bomdila, Arunachal Pradesh, 2013, pp.20-38. ISBN 978-81-8435- 413-3.
- Thakur, Amrendra Kr (2014), “Role of Myth in the Reconstruction of Technological Past of Northeast India”, *Proceedings of North East India History Association*, 33rd session, Itanagar, 2012, published Shillong, 2013, pp. 13-24.
- Thakur, Amrendra Kr (2014), “Native Genius and Resource Utilization: The Adis of Arunachal Pradesh” *Souvenir Gooying Liidung, Poju Mimak Centenary Celebration, 2011-12: Kebang (1911-12 to 2011-12)*, Pasighat, Arunachal Pradesh, pp.13-16. 100th Year of Poju Mimak-1911-12 (The 4th & Last Anglo-Abor War).
- Thakur, Amrendra Kr (2014), Review of book by Tage Tada, Jagat C. Dutta and Nabajit Deori, *Archaeological Heritage of Arunachal Pradesh: Discoveries from 1991-2011*, Directorate of Research, Department of Cultural Affairs, Government of Arunachal Pradesh, Itanagar, 2012, pp. i-xviii +214 in *The NEHU Journal*, Vol. XI, No. 2, July 2013, pp. 89-92. Also published in *Puratattva*, No. 43, 2013, pp. 276-277, Journal of the Indian Archaeological Society, New Delhi.
- Lamare, S. N. (2013). ‘The Little War - The Jaintias and the British’ in Sanjoy Hazarika (ed), *Little Known Fighters Against the Raj: Figures from Meghalaya*, Centre For North East Sstudies And Policy Research, Jamia Millia Islamia, New Delhi, 2013, pp. 43-66.
- Lamare, S. N. (2014) *CRYING SKIES: A collection of Poems*, Eastern Book House, Guwahati-New Delhi, 2014 (ISBN:978-93-83252-10-7)
- Rahman, M. S. N. (2013). ‘Sufism in Indian History: Syncretism and Communal Harmony’ in *Religion and Culture in India Across the Ages Historical Reflection*, edited by Department of History, Ramakrishna Mission Vidyamandira & published by Principal, Ramakrishna Mission Vidyamandira, Belur Math, Howrah, West Bengal, April, 2013, pp.42-49, ISBN 978 - 81 - 92811-0-0.
- Rahman, M. S. N. (2013) ‘Hindu-Muslim Sauhardya O Jatiyo Sanghathir Proshnae Maulana Azad’, *Meghali*, Nikhil Banga Sahitya Sammalan Patrika, Shillong Branch (Bengali), October, 2013, pp. 44-45.
- Dutta Binayak, (2014). Education For Capability. In: *Social Change and Development*, Saswati Choudhury & Indranee Dutta (Eds.), DVS Publishers, 2013, Vol.XI.

Research Projects

Ongoing UGC-SAP-DSA II Coordinator Prof. F. A. Qadri

No.	Title of Project	PI/Co/PI	Funding Agency	Amount
1	Ongoing Research Project under UGC-SAP-DSA, Project, Department of History, NEHU, Shillong, on “Religion and Society in Arunachal Pradesh from Pre-Modern to Contemporary Times.	All faculty members are part of it.	UGC, New Delhi	

Other Activities

Prof. M. Sharma

Delivered a lecture on “Recent trends in Historiography with special reference to Gender Issues” in the UGC-ASC sponsored Summer School for College & University Teachers organised by Dept. of Education, NEHU, Shillong on 14th August, 2013.

Delivered a lecture on “Feminist Narratological Strategies in N.E.India” in the Refresher Course for College /University Teachers organised by Department of Creative and Cultural Studies, NEHU on 8th August, 2013.

Delivered two lectures on “Entrepreneurship and History” and “gender and Entrepreneurship” in the Refresher Course for College/ University teachers organised by the Department of , NEHU on 27th November, 2013.

Prof. F. A. Qadri

Delivered five lectures on “Education and Educational Institutions in India”, Orientation Programme, Academic Staff College, Mizoram University, Mizoram, October 14-15, 2013

Prof. A.K. Thakur

Delivered Lectures as Resource Person during Orientation Courses in at Academic Staff College, NEHU, February-March, 2014, on the themes Nation and National Integration.

Prof. A.N. Passah

Resource Person in the Refresher Course organized by the Department of Cultural and Creative Studies held in 22nd July 11th August 2013.

Dr. C. A. Mawlong

Resource Person in the Refresher Course organized by the Department of Cultural and Creative Studies held in 22nd July 11th August 2013.

Resource Person in the Refresher Course organized by the Department of Political Science on 18th November – 8 December 2013.

S. N. Lamare

Appointed as the Teacher-in-charge of Sports Department, NEHU from 11 October 2012 and as the Dean Students’ Welfare from 11 December 2013.

DEPARTMENT OF HISTORY AND ARCHAEOLOGY (TURA CAMPUS)

Faculty-In-Charge: Dr. Amit Kumar Upadhyay
Telephone : +91-9415682014
E-mail : historynehutura@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Assistant Professor	Amit Kumar Upadhyay (M.A., Ph.D.)	Numismatics, Epigraphy and Ancient Indian Culture
	Tilok Thakuria (M.A., Ph.D.)	Pre and Proto-historic Archaeology, Cultural Studies, Paleo-technology
	Doneti Sivaji (MA, M.Phil., Ph.D.)	Business History; Studies on Entrepreneurship; Intellectual History; Studies on Caste

Guest faculty (sanctioned against vacant post):

1. Dr. Tosabanta Padhan
2. Miss Benora Batemon Masharing

Thrust Areas of Research

The foremost concentration of the department is on research in history and archaeology. The goal is to promote research in history of ancient India and archaeology of Southeast Asia. The department gives particular interest to encourage research in history, numismatic, epigraphy, archaeology, ethno-archaeology and cultural studies of Northeast India. Beside these, it also aims to explore the research areas like history of entrepreneurship, intellectual history and caste system of India in general and Northeast India in particular.

Brief Statement of Academic Activities

The department undertakes both teaching and research in the areas of history and archaeology. The department provides both theoretical and practical training to Post Graduate students as part of teaching and training within the stipulated time. The department provides laboratory exposure to students in the areas related to field and conservation archaeology. In addition to these, the department also arranges field trip to archaeological and historical sites for training in documentation of archaeological and historical records along with other field based studies. Beside these, the faculty members often make visit to local historical and archaeological places to gather information on related areas.

Students' Profile

Enrolment Capacity: M.A. - 23; Ph.D. – Variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A		22	1	9	14	21	2	23

Study Tour/Field Trips of Students

Students were taken to archaeological and historical sites within west Garo Hills. Students have taken to the Early Historic fortified sites of Bhaitbari and Neolithic site of Selbalgre during the current academic year. The aim is to provide practical and physical exposure to students.

Attended National Seminar and 96th Annual Conference of Numismatic Society of India between 25th Dec to 27th December 2013 at Varanasi (U. P.) organized by Department of Ancient India History, Culture and Archaeology, Banaras Hindu University, Varanasi

Courses Conducted

M.A. in History and Archaeology

Semester-I : Historical Methods – I, Pre-Historic Society, Ancient Society, Archaeology: An Introduction, Social and Polity Formation in North-East India

Semester-II : Historical Methods – II, Pre-Industrial Society, Polity and Society in early India, Religion and Society in Early North – East India, The Neolithic Age in India

Dr. Tilok Thakuria

Presented two papers entitled “Pattanam stone beads 2007”, and “Style on bangles: a socio-economic indicator” in Seminar on *The Archaeology of Technology and Indian Ocean: Personal Adornment from Pattanam and Beyond* held at Pondicherry University organized by British Museum, KCHR and Pondicherry University from 15th to 19th August 2013.

Presented a paper entitled “Megalithic Culture of Central India: Some Issues of Chattisgarh and Vidarbha Megalithic Culture” in the *National Seminar on Art and Architecture of Central India with Special Reference to South Kosala* organized by Director of Culture and Archaeology, Raipur from 12th to 13th January 2013.

Seminars/Conferences/Symposia/Extension programme etc

Participated

Dr. Amit Kumar Upadhyay

Special Winter School equivalent to OC/RC: Organized by Academic Staff College, Banaras Hindu University, Varanasi between 20th Nov. to 12th December, 2013 on the theme “Peace, Hinduism and Gandhian Philosophy”.

Presented a paper by Tilok Thakuria, Shikhasree Ray and R. K. Mohanty entitled “Craft production and distribution at Coastal Odisha: assessment of shell Bengal manufacturing at Manikapatana” at the State level Seminar of the Odisha History Congress held at Vyasnagar College, Jaspur, Odisha from 16th to 17th February 2013.

Presented a paper by Shikhasree Ray, Tilok Thakuria and R. K. Mohanty entitled “Early Buddhism in Odisha: Monasteries at languid, Slanpur and Ayodhya” at the *International Conference on Buddhism* held at Udayagiri, Jajpur, Odisha from 1st to 3rd February 2013.

Presented a paper by Shikhasree Ray and Tilok Thakuria entitled “Early historic beads from excavations in Odisha: A Socio-cultural and economic implication” at the State Level Seminar of Odisha History Congress held at Vyasnagar College, Jaspur, Odisha from 16th to 17th February 2013.

Participated in the Workshop on “*Experimental Lithic Knapping and Microwear Studies*” organized by Department of History and Archaeology, Nagaland University from 15th to 22nd March 2014.

Dr. Doneti Sivaji

Presented a paper entitled “Apprehensions of entrepreneurship with reference to North East: a historical perspective” in the National Seminar on *Entrepreneurship: A Drive towards Socio-Economic Development of North East Region* organised by Department of Management, North Eastern Hill University, Tura Campus, Meghalaya on 4th June 2013.

Presented a paper entitled “Growth of women entrepreneurship in 20th century” in the National Seminar organised by Dept. of History, DAR College Nuzvid, sponsored by UGC in collaboration with Acharya Nagarjuna University (6th and 7th Sept. 2013).

Publications

Research Papers

Published in India

Mohanty, R. K., Smith, M. L. and T. Thakuria (2013). Excavations at Sisupalgarh: The Northern Gateway and Activity Areas outside the Rampart. *Man and Environment* 38(1): 55-65.

Doneti, S. (2013). Caste Tradition and its Legitimacy in Colonial India. *Manviki: A Journal of Humanities and Social Sciences* Vol. 6.

Doneti, S. (2013). Adi-Andhra Reform Movement in Colonial Andhra. Historical Perspective, *Journal of International Academic Research for Multidisciplinary* 1:33.

Published Abroad

Thakuria, T., T. P. Padhan, R. K. Mohanty and M. L. Smith (2013), Google Earth as an Archaeological Tool in the Developing World: An Example from India. *Archaeological Record* 13(1):20-24.

Books/Book Chapters/Proceedings

Sheel, R. and Upadhyay, A. K. (eds). *AKN Omnibus of Writings on Ancient History, Culture and Archaeology of South and Central Asia*. B. R. Publishers, New Delhi, 2013.

Singh, V. K. and Upadhyay, A. K. (eds). Souvenir Volume of Joint Annual Conference of Indian Archaeological Society, Indian Society for Prehistoric and Quaternary Studies, Indian History and Culture Society and Seminar on Recent Advances on Archaeological Science and Indian Archaeology, Published by Dept. of A.I.H.C. and Archaeology, B.H.U., Varanasi, 2013.

Mohanty, R. K. and Thakuria, T. (2014). Peninsular and Southern India. In *History of Ancient India, Vol-III: The Texts, Political History and Administration till c. 200 BC*. Dilip K. Chakrabarti and Makkhan Lal (Eds.). Vivekananda International Foundation and Aryan Books International, New Delhi: Chapter IV2, pp:343-378.

Thakuria, T. (2014), Hollowed Monoliths of North Cachar, Assam: Prospect for Archaeology and Ethno-history. In: *50 Years After Daojali-Hading: Emerging Perspectives in the Archaeology of Northeast India*. T. Jamir and M. Hazarika (Eds.). Research India Press, New Delhi: Chapter 20, pp:243-249.

Doneti, S. (2013). Growth of women Entrepreneurship in 20th century. In: Proceedings of National Seminar organised by Dept. of History, DAR College Nuzvid,

sponsored by UGC with the collaboration of Acharya Nagarjuna University, 6th and 7th Sept. p.4-7.

Other Activities

Dr. Amit Kumar Upadhyay performed editorial responsibilities for the following journals:

Singh, V. K., Mishra, N. K. and Upadhyay, A. K. (eds.), *Manaviki: A Journal of Humanities and Social Sciences*, Vol VI (published by Society for Education and Social Welfare, Varanasi, 2013).

Assistant Editor, *Journal of Numismatic Society of India*, Vol. LXXV (published by Numismatic Society of India, Varanasi, 2013).

Advisory Committee Member, *Research Today* – A Journal of Humanities and Social Sciences (Varanasi).

DEPARTMENT OF LAW

Head : Dr. J. J. Mozika
Telephone : (0364) 2723801
E-mail : j_mozika@yahoo.co.in

Faculty

Designation	Name and Qualification	Specialization
Associate Professor	Dr. J. J. Mozika LL.M, Ph.D. (Law)	Constitutional Law & Administrative Law
	Dr. Chintamani Rout M.A. LL.M, Ph.D. (Utkal Univ) (Law)	Commercial Law & Constitutional Law
Assistant Professor	Dr. R.K. Mishra LL.M, Ph.D, (Law) (BHU)	Intellectual Property Rights & Law of Crimes
	Dr. A.K. Singh LL.M (B.H.U.), Ph.D.(Law)	Criminal Laws & Human Rights
	Dr. Naveen Kumar LL.M (Jamia Milia Islamia), Ph.D.(Law)	Corporate Laws
	Dr. Ranjit Sil LL.M, Ph.D. (Law) (Burdwan)	
	Mr. Shishir Tiwari LL.M. (BHU), M.Phil. (JNU)	INTERNATIONAL LAW
	Mrs. Preeti Gupta M.Sc., LL.M	Environmental Law, Health Laws

Thrust Areas of Research

The Department of Law is at present offering only a Five year Integrated B.A. LL.B (Hons.) Programme. The Research Programme is likely to start in the near future. The programme aims to achieve the following objectives:

- To advance and disseminate knowledge of law and legal processes in the overall context of national and global developments;
- To develop a broad and holistic perspective which would help the students to understand

the intricate relationship of law with society, economy, polity and history;

- To develop the highest standards of professional skill, behavior and personal integrity.

Brief Statement of Academic Activities

The Department of Law is offering a Five Year Integrated B.A.LL.B (Hons.) Degree Course and is in its ninth year now with the second, fourth, sixth, eight & Tenth semesters in progress. The

NEHU Annual Report 2013-2014

Department has organized various competitions like debate, quiz and moot courts among the students during the academic year.

A team from the Department comprising Ms. Gabriella Sangma, Kimneichong and Shirly Shallam (9th Semester) and Ms. Pooja Agarwal (7th Semester) participated in the Surana and Surana National Trial Advocacy Moot Court Competition – North East Rounds held on 7-9

September, 2013 at NLUJAA, Guwahati and secured the fourth position as well as the ‘Spirit of Surana Award’

A team from the Department comprising Ms. Deepa Ojha, Meghali Pathak and Pooja Agarwal (8th Semester) participated in the Delhi University Law Centre I & NHRC National Moot Court Competition, 2014 held on 7-9 March, 2014 at New Delhi.

Students’ Profile

Enrolment Capacity: B.A. LL.B. - 60

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
B.A.LL.B.(H)	1	55	4	30	30	53	7	60

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
B.A.LL.B.(H)		27	5	13	19	24	8	32

Placement of Students

Many of the students from the Department have got placement in law firms, LPOs and banks etc. as legal officers. The rest are practicing advocates.

Publications

Research Papers

Published in India

Mozika, J. J. (2013). Judicial Review and Policy Decisions: Emerging Perspectives, *Indian Journal of Law and Justice*, 4: 49-70. ISSN – 0976 – 3570.

Mozika, J. J. (2013). Corruption and Human Rights: The Rights Based Approach Towards Corruption, *Indian Human Rights Law Review*, 4: 182-197. ISSN – 2230 – 7036.

Rout, Chintamani (2013). Uniform Civil Code and Gender Justice an Analysis under Customary Law. *IMPACT: International Journal of Research in Humanities, Arts & Literature*, 1: 29-34.

Rout, Chintamani (2013). Juvenile Crime and Punishment; An Overview. In: *The ICFAI University Press Law Review*, ISSN: 2231-3095, 3: 68-72.

Rout, Chintamani (2013). Human Rights and Constitutional safeguards for the Tribal People. *Orient Journal of Law and Social Sciences*, 6: 17-23.

Rout, Chintamani (2014). Doctrine of Pleasure and its Limitation: Protection of Civil Servants. *Best Journals*, ISSN: 2348-0521, 2: 13-20.

- Rout, Chintamani (2014). *Protection of Women from Domestic Violence. Orient Journal of Law and Social Sciences*, ISSN: 0973-7480, 8: 8-12.
- Rout, Chintamani (2014). Voices for Human Rights. *IMPACT: International Journal of Research in Humanities, Arts & Literature*, ISSN (P): 2347-4564, 2: 33-38.
- Rout, Chintamani (2014) Environmental Protection: Constitutional and Legal Provisions. *Scholar Journal of Arts, Humanities and Social Sciences*, ISSN (P) 2347-9493, 2: 110-115.
- Rout, Chintamani (2014). Right to Information Act: An Endeavour for Deepening Democracy. *IMPACT: International Journal of Research in Humanities, Arts & Literature*, ISSN (P): 2347-4564, 2: 65-71.
- Rout, Chintamani (2014). Role of Law in the prevention of Human Trafficking in India. *Orient Journal of Law and Social Sciences*, ISSN: 0973-7480, 8: 9-15.
- Rout, Chintamani (2014) State and Security Laws, Women's Perspective with Reference to State of Manipur. *Orient Journal of Law and Social Sciences*, ISSN: 0973-7480, 8: 26-31.
- Singh, A. K. (2013). Protection of Elderly Persons in India: A Psycho-Legal Analysis. *Ideal Journal of Legal Studies*, 4: 189-195, ISSN2231-0983.
- Singh, A.K. (2013). Mining and the Law: an Analysis with Special Reference to Meghalaya, *Vidhik Chetana: A Research Journal of Juridical Science*, 6: 118-124, ISSN 0976-9684.
- Singh, A. K. (2013). Decriminalization of Homosexuality in India vis-à-vis Gay's Rights. *Asian Journal of Human Development and Livelihood*, 3: 28-35, ISSN 2250-3161.
- Tiwari, Shishir, and Ghosh, Gitanjali (2013). Social Media and Freedom of Speech and Expression: Challenges before the Indian Law. *Aavartan*. 1: 1-13.
- Mishra, R.K. (2013). Parental corporal punishment as a tool of domestic discipline in India: a psycho-legal discourse. *Asian Review of Social Sciences*. 2:7-17.
- Mishra, R.K. (2013-14). Hi-tech crimes and police administration in India: problems and challenges. *Chotanagpur Law Journal*. 7: 144-159.
- Book/Book Chapter/Proceedings**
- Rout, Chintamani. (2014). *Personal Liberty and Human Rights*, Central Law Publications, Allahabad, ISBN: 978-9382676-51-5
- Rout, Chintamani. (2014). *Judicial Pronouncement and Stifling Prosecution*, SSDN Publishers and Distributors, New Delhi ISBN: 978-9138357-512-1 (111 pp.)
- Singh, Arun Kumar (Ed.).(2014). *Corporate Law and Governance*. Regal Publications, New Delhi, ISBN 978-81-8484
- Tiwari, Shishir, and Tripathi, Vikesh Ram (2013). Scope and Permissibility of Patent of Bio-technological Products (Micro-organism) in India. In: *Intellectual property Rights: Dimension and Issues*. Ed. O.N. Tiwari (Radha Publications, New Delhi) pp. 424-434.
- Rout, Chintamani (2013). *Reservation Policy in India*, Eds. B.C. Mohapatra & S.R. Mohapatra, (Research India Press, New Delhi).
- Mishra, R.K. (2013). Traditional knowledge in Meghalaya and intellectual property

rights: implications and impediments. In *Intellectual Property Rights: Dimension and Issues*. Dr. O. N. Tiwari (ed.), Radha Publications, New Delhi: Chapter 24, p. 314-351.

Singh, A.K. (2014). Partnership and Limited Liability: A Comparative Analysis of Indian Partnership Act, 1932 and Limited Liability Partnership Act, 2008. In: *Corporate Law and Governance*. Ed. Arun Kumar Singh. pp.29-39 (Regal Publication New Delhi) ISBN 978-81-8484.

Singh, A.K. (2014). Human Rights and Tribal in India: A Socio-Legal Discourse. In: *Human Rights and Social Justice*. Ed. Ajay Kumar Singh (VL Media Solution, New Delhi), pp.173-178. ISBN : 978-93-80820-84-2.

Singh, A. K. (2014). Legal; Education in India : Need for Reform. In: *Contemporary Issues on International Law (Environment, International Trade, Information Technology and Legal Education)*. Eds. B.C. Nirmal and Rajnish Kumar Singh (Satyam International Publisher), pp.639-646, ISBN 978-93-82823-08-7.

Tiwari, Shishir (2013). International Legal Framework for the Protection of Cultural Diversity. In *Ecology, Economy and Ethics* (Conference Proceedings). Rajiv Gandhi Indian Institute of Management (IIM) Shillong. McGraw Hill Education Private Ltd, New Delhi: pp. 176-185.

Seminar/Conference/Symposium/ Extension Programme etc.

Attended/Participated

Dr. J.J. Mozika

Participated and presented a paper titled “Higher Education and Private Universities” in

National seminar on “Education in the North East: Status and Perspectives” held on 3rd and 4th Sep, 2013 by Dept. of Education, NEHU, Shillong.

Participated and presented a paper titled “Social Security for Unorganised Workers with reference to Construction and other Buildings Workers: Problems and Initiatives” in the National Seminars on “Employment Laws in the Globalised Era. Changes and Trends in India organized by Dept. of Law, University of North Bengal on 23-24 November, 2013.

Dr. Chintamani Rout

Presented a paper titled, “Position and Status of Child under Indian Constitution; The role of State” at the North-Eastern Regional Seminar on the theme ‘Child Rights and Media’ as part of CHIME-2013 (Children in Media Experiments) being organised by the Department of Journalism and Mass Communication, EFL University, Shillong Campus, in partnership with UNICEF, Assam on 31 October and 1st November, 2013.

Presented a Paper entitled, “International Labour Organisation: Its Mission and Objectives with Global Reference” at the National Seminar on ‘Employment Laws in the Globalised Era: Changes and Trends in India’ held during 23-24 November, 2013 and organised by the Department of Law, University of North Bengal.

Presented a Paper entitled, “Uniform Civil Code and Gender Justice: An Analysis under Customary Law” in the two day Regional Workshop on ‘Customary Law, Law and Women in North East India’ organised by the Indian Association for Women Studies and Council of Historical Research,

School of Social Sciences

Guwahati from 14th -15th December, 2013 at ICHR-NERC, Guwahati.

Presented a paper entitled, “State and Security Laws: Women’s Perspective with Reference to State of Manipur, in the Subtheme No.9 in the XIV National Conference on Women’s Studies on ‘Equality, Pluralism and the State: Prospective from the Women’s Movement’ held in Gauhati University from 4th -7th February, 2014.

Presented a paper entitled, “Protection of women from Domestic Violence’ in the National Seminar on Gender and Democracy in North East India from 4-5 March, 2014 at Guahati University, Guwahati, organised by Department of Political Science.

Delivered a lecture on the topic, “Heritageage, Indigenous System and Protection” at the Refresher Course conducted by the Department of Cultural and Creative Studies, NEHU, Shillong on 24 July, 2013.

Delivered a lecture on the topic “Disaster Management Authority in India: Its Role and Function” at the Refresher Course conducted by the Department of Adult and Continuing Education, NEHU, Shillong on 1st November, 2013.

Dr. R.K. Mishra

Participated in the Refresher Course in Disaster Management and Community Participation (interdisciplinary) from November 18, 2013 to December 08, 2013 at UGC Academic Staff College, North Eastern Hill University (NEHU), Shillong-22 and presented seminar paper titled ‘Disaster Management Act, 2005 and Community Participation’.

Dr. A. K. Singh

Presented a paper titled “Offences against Women in India and the Legal Protection: A

Need to be Reformed” in a two day National Seminar on *Woman, Dalit and Human Rights in India* organized by All India Rights Organization in Association with Department of Human Rights Babasaheb Bhimrao Ambedkar University, Lucknow, on 8th and 9th March 2013.

Presented a paper titled “Human Rights and the Role of Judiciary: An Analysis with Special Reference to Education” in a two day ICSSR sponsored National Seminar on ‘Education and Human Rights in North East of India,, conducted by Department of Education , Raha College Nagaon, Assam on 21-22 December, 2013.

Mr. Shishir Tiwari

Presented a paper titled “Compliance with the Provisions of the JJ Act (2000), CPCR Act (2005) and POCSO Act (2012) in Meghalaya: Reflections and the Way Forward” in the *North-Eastern Regional Seminar on ‘Child Rights and the Media’*, at Department of Journalism and Mass Communication, EFL University, Shillong Campus, 31st October to 1st November 2013.

Presented a paper titled “Constructing a New Human and Labour Rights Lexicon: The ILO Instruments on Decent Work for Domestic Workers” in a *National Seminar on Employment Laws in the Globalised Era: Changes and Trends in India*, at the Department of Law, University of North Bengal, 23rd and 24th November 2013.

Presented a paper titled “The Role of International Humanitarian Law in Post-conflict Countries: A South Asian Perspective” at *ICRC’s Advance International Humanitarian Law South Asian Academics Training (AISAAT) Programme*, held at

National Law University, New Delhi, from 3rd- 5th March 2014.

Participated in a Symposium on ‘Juvenile Justice-Children in Conflict with Law and Children in Need of care and Protection: A Way Forward’, organised by the National Law University and Judicial Academy, Assam on 6th October 2013 at Guwahati, Assam

Participated in the one day ‘Workshop on Intellectual Property Rights’, organised by the National Institute of Electronics & Information Technology (NIELIT), Gorakhpur on 22nd December 2013 at Gorakhpur, Uttar Pradesh.

Other Activities

Mr. Shishir Tiwari

Invited as a Judge at the ‘Surana and Surana National Trial Advocacy Moot Court Competition-2013’, organized by the National Law University and Judicial Academy, Assam from 6th September to 8th September 2013 at Guwahati, Assam.

Accorded membership of the Asian Society of International law, Singapore in June 2013.

Dr Chintamani Rout

Actively participated in the Curriculum Development Workshop for training legal services providers to tribal and rural communities in India for preparing professionals to service the needs of rural and tribal communities, jointly organised by IBA-CLE chair, National Law School of India University Bangalore Menon Institute of Legal Advocacy training, Trivandrum in association with School of Law, Guru Ghasidas Central University, Bilaspur at Guru Ghasidas Central University, Bilaspur, from 12th -17th November, 2013.

Invited as a Resource person and delivered a lecture on “Judicial Independence and Accountability” in the Academic Staff College, Guwahati University on 5th March, 2014.

Invited as a Resource person and delivered a lecture on “Alternate Dispute Resolution; the Law and its Effect and Success” in Academic Staff College, Guwahati University on 5th March, 2014.

DEPARTMENT OF POLITICAL SCIENCE

Head : Professor R. Borgohain
Telephone : 2723035 (O), 9436111871 (Mobile)
E-mail : hodpolsc@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	R. Borgohain, M.A. & M.Phil. (JNU), Ph.D. (Gauhati)	Gender Studies, Indian Government & Politics
	L.S. Gassah, M.A., M.Phil. & Ph.D. (NEHU)	Government & Politics in North East India
	H. Srikanth, M.A. & Ph.D. (Hyderabad)	Political Theory, Political Economy, Social Movements.
	T. T. Haokip, M.A. & Ph.D. (NEHU)	Foreign Policy, Public Administration, North East India
Associate Professor	K. Debbarma, M.A., M.Phil. & Ph.D. (NEHU)	Politics of Migration in Northeast India, Human Rights, Development Administration
	S. Sen Gupta, M.A., M.Phil. & Ph.D. (NEHU)	Indian Politics, Politics of Northeast India
	R. K. Satapathy, M.A. & M.Phil. (Sambalpur), Ph.D. (NEHU)	International Politics, Political Theory and Electoral Politics.
	Munmun Majumdar, M.A., M.Phil. & Ph.D. (JNU)	South- East Asia
Assistant Professor	Biswajit Mohapatra, M.A. (Delhi), M.Phil. & Ph.D. (Jawaharlal Nehru University)	International Politics
	V. Bijukumar, M.A. (University of Kerala), M.Phil. & Ph.D. (JNU), BLISc. (University of Kerala)	Indian Politics
	Dr. S. Bhattacharjee, M.A., M.Phil. & Ph.D. (JNU)	International Politics

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 socially relevant and developing in the students an awareness of the basic issues and problems in the discipline so as to equip them intellectually to fulfill these needs.

With the strength of 11 faculty members, the department has 104 students on its roll at the

M.A. level. The department admits M.Phil and Ph.D scholars every year 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 67 research scholars who are engaged in M.Phil and Ph.D programme of the Department. The Department is in the Phase I of the SAP. The thrust area of SAP is “Democratic Governance, Extremism and Youth Movements in North East India (NEI)”.

Students' Profile

Enrolment Capacity: M.A. – 52; M.Phil./Ph.D. – Variable

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.A.	-	51	1	26	26	23	29	52
M.Phil.	1	4	2	2	5	-	7	7
Ph.D.	1	5	2	5	3	4	4	8

Degrees Awarded

Degree	OBC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.A.	1	45	2	19	29	18	30	48
Ph.D.	-	2	2	2	2	1	3	4

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Dakarupaya Olivia N. Rymbai	Changing Dimensions of Indo-US Relations (2000-2008)	Dr. B. K. Mohapatra
Rukchana Rahman	Youth Activism and Democratic Politics: A Study of the Assam Movement (1979-85)	Prof. A. K. Baruah
Robert Tuolor	Working of the North Cachar Hills Autonomous Council of Assam: 1995-2008	Dr. R. K. Satpathy
Pankaj Jyoti Gogoi	Role of the State in Human Security: A Study of Health Security in the Lakhimpur District of Assam	Dr. M. Majumdar

School of Social Sciences

Placement of Students

Students passing out from this Department are placed in high government services like the I.A.S., I.P.S. and State Civil Services and

in many research and teaching institutions including Central Universities and accredited colleges. The students are also placed in high posts in public sector and reputed private organizations.

Courses Conducted

Postgraduate

Semester-I : *All Core Courses are Compulsory* Credit

- | | | |
|---------------|---|---|
| 1. POL-C.101: | Liberal Political Theory | 4 |
| 2. POL-C.102: | Theory of International Politics | 4 |
| 3. POL-C.103: | Major Concepts and Issues in Public Administration | 4 |
| 4. POL-C.104: | Indian Political System | 4 |
| 5. POL-C.105: | State Politics in India with special reference to North-East Politics (I) | 2 |

Semester-II : *Three Compulsory, one Optional Core Courses and one Open Course*

Compulsory Core Courses:

- | | | |
|---------------|--|---|
| 1. POL-C.201: | Marxist Political Theory | 4 |
| 2. POL-C.202: | Problems of International Politics | 4 |
| 3. POL-C.203: | State Politics in India with special reference to North-East Politics (II) | 2 |

Optional Core Courses:

- | | | |
|---------------|---|---|
| 1. POL-C.204: | Third World Political Theory | |
| 2. POL-C.205: | Administrative Theory | 4 |
| 3. POL-C.206: | East and South-East Asian Political Systems | |
| 4. POL-C.207: | West Asian Political Systems | |

(Students to choose any one from the above)

Open Courses:

- | | | |
|---------------|--|---|
| 1. POL-O 208: | Government and Politics in N. E. India | |
| 2. POL-O 209: | Democracy in India | 4 |
| 3. POL-O 210: | Modern Indian Political Ideas. | |

(Students to choose any one from the above)

Semester-III :

Compulsory Core Courses:

- | | | |
|---------------|-------------------------------|---|
| 1. POL-C 301: | Contemporary Political Theory | 4 |
| 2. POL-C 302: | Research Methodology (I) | 2 |

Optional Core Courses:

- | | | |
|---------------|--|---|
| 1. POL-C 303: | Issues in Women's Studies | |
| 2. POL-C 304: | International Law and International Organisation | |
| 3. POL-C 305: | South Asian Political Systems | 4 |
| 4. POL-C 306: | African Political Systems | |

(Students to choose any one from the above)

Open Courses:

- | | | |
|---------------|----------------------------------|---|
| 1. POL-O 307: | Globalisation | |
| 2. POL-O 308: | Politics of Social Movements | |
| 3. POL-O 309: | Women and Political Theory | 4 |
| 4. POL-O 310: | Development Administration | |
| 5. POL-O 311: | Issues in Environmental Politics | |

(Students to choose any two from the above)

Semester-IV : *Three Compulsory and Two Optional Core Courses*

Compulsory Core Courses:

- | | | |
|---------------|-----------------------------------|---|
| 1. POL-C 401: | Major Debates in Political Theory | 4 |
| 2. POL-C 402: | Comparative Politics | 4 |
| 3. POL-C 403: | Research Methodology (II) | 2 |

Optional Core Courses:

- | | | |
|---------------|--------------------------------|---|
| 1. POL-C 404: | Political Ideology | |
| 2. POL-C 405: | Political Sociology | |
| 3. POL-C 406: | Foreign Policy of Major Powers | 4 |
| 4. POL-C 407: | Indian Political Economy | |
| 5. POL-C 408: | Human Rights | |

(Students to choose any two from the above)

M.Phil/Ph.D. Courses

Compulsory (1st Semester, with optional below)

1. PSc. M/P – I (c) - Research Methodology (4 credits)
2. PSc. M/P – II (c) - Issues and Processes in the Politics of North East India (4 credits)

Optional: Any One from the following: (4 credits)

1. PSc. M/P – III (o) : Issues in Indian Politics
2. PSc. M/P – IV (o) : Women and Politics in North East India
3. PSc. M/P – V (o) : Critical Perspectives on Knowledge and Power
4. PSc. M/P – VI (o) : Advanced Studies in International Politics
5. PSc. M/P – VII (o) : Environmental Politics.

Second Semester: Dissertation Work

**Seminars/Conferences/Symposia/
Extension Programmes etc.**

Organized

H. Srikanth organized a brainstorming session on the theme, "Vision for Democratic and Progressive Meghalaya: On and Beyond the Inner Line Permit", on behalf of Department of Political Science, in collaboration with ICSSR-NERC on November 27, 2013.

H. Srikanth coordinated a UGC-SAP National Symposium on *Social Science Research on Northeast India: Practices, Problems and Prospects* organized by the department on 21-22 March, 2014

K. Debbarma organized a UGC Sponsored Refresher Course in Political Science on *Democracy and Development: Issues and Challenges*, from November 18 to December 8, 2013, in Academic Staff College, NEHU, Shillong.

Attended/Participated

Borgohain, R. & Patgiri, Rimki presented Seminar paper on *Participation of Women in Rural Development: A Study of Mahatma Gandhi National Rural Employment Guarantee in Nalbari District of Assam*. IIPA, New Delhi, on 17th -18th April 2013.

Srikanth, H. presented a paper on *Ethnic Processes in Urban Space: A Tale of Two Cities*. International Seminar on "Ethnicity and Globalization" organized by Lady Keane College, Shillong on 4th December, 2013.

Srikanth, H. presented a paper on *Status of Political Science Research on Northeast India*. UGC-SAP National Symposium on the theme, "Social Science Research on Northeast India: Practices, Problems and Prospects" held on 21-22 March, 2014.

Haokip, T.T. presented a Paper on *Can Kuki Chiefship and Democracy Co-exist?* . Regional Seminar on Tribal Land Systems and Governance organized by Kuki Inpi, Meghalaya and Hill Tribal Council at Moreh from 11-12 October, 2013.

Haokip, T.T. presented a Paper on *BCIM Regional Cooperation and Northeast India*. National Seminar on BCIM organized by Indian Council of World Affairs, New Delhi on December 5, 2013.

Debbarma, Khakchang presented a Paper on *An Autonomy Arrangement to Address Tribal Aspirations in Tripura*. National Seminar on Autonomy Discourse: Ethnic Aspirations in India's Northeast, organized by Centre for Development and Peace Studies, Guwahati, from 18-19 August 2013.

Satapathy, R. K. presented a paper on *Inner Line Permit in Mizoram: My Encounter*. Seminar on Vision for Meghalaya: On and Beyond the Inner Line Permit organized by the Department of Political Science and the ICSSR-NERC, Shillong on November 27, 2013.

Satapathy, R. K. & Longmei Rimmei., Joint paper entitled *Politics of Non-State Activism: A Case Study of United Committee Manipur (2001-2013)*. Annual Conference of Indian Political Science Association, Nyderabad on 28th December 2013.

Sen Gupta, Susmita presented a Paper on *Nationality Question Vs. National Integration: Indian State in a Dilemma*. 3rd Annual International Conference Proceedings of PSSIR 2013, Global Science and Technology Forum, Singapore, August 26-27, 2013.

Sen Gupta, Susmita presented a Paper on *Transformation and consolidation of ethnic*

identity in Arunachal Pradesh: Exploring the role of the educated elite. ICSSR sponsored Conference on Continuities and Discontinuities of Asian Engagement: Borders, Mobility and Identity in Northeast India and Asia, IIT, Guwahati (in association with Institute of Chinese Studies, New Delhi), October 17-18, 2013.

Sen Gupta, Susmita presented a Paper on *Identity Assertion by the Bodos of Northeast India: Exploring the role of the educated middle class.* 2014 Bangkok International Conference on Social Science, Higher Education Forum, Bangkok, Thailand, January 18-20. Also chaired a session in the conference.

Majumdar, Munmun presented a Paper titled *ASEAN and Conflict management in the South China Sea.* International Conference on Security Challenges in an Evolving World Peace Science Society, International Studies Association and Cornivus University, Budapest, Hungary, June 27-29, 2013.

Mohapatra, Biswajit presented a Paper on *Safeguarding Traditional Livelihoods and Indigenous Peoples for Inclusive Development.* SAARC Regional Seminar on Traditional Knowledge and Traditional Cultural Expressions, 29-30 April 2013 at Sigriya, Colombo.

Mohapatra, Biswajit presented a Paper on *India's Look East Policy and Development of North Eastern India – Priorities and Prospect .* National Seminar organized by Dept. of Education, Mizoram University from 6-7 June, 2013 sponsored by ICSSR, New Delhi

Mohapatra, Biswajit presented a Paper on *Positive Discrimination and Political Empowerment of the Scheduled Castes:*

An Analysis. National Seminar on Social and Economic Status of the Marginalized Communities in Nagaland with special reference to the Scheduled Castes Groups organized by Patkai Christian College, Dimapur and ICSSR , 2-3 November, 2013.

Mohapatra, Biswajit presented a Paper on *Traditional Tribal Institutions and Inclusive Development: Perspectives on Empowerment and Mobilisation.* National Seminar on Democracy and Development in India's North-East: Challenges and Opportunities, organized by ICSSR-NERC, NEHU, Shillong, 6-7 December 2013.

Mohapatra, Biswajit presented a Paper on *Social Exclusion of Scheduled Castes and the Policy of Positive Discrimination in India – An Analysis.* UGC National Seminar on Dalit Issues: Strategies for Inclusive Growth and Development, University of Pune, 3-4 January, 2014.

Mohapatra, Biswajit presented a Paper on *Globalisation and the Challenges of Good Governance in Tribal Areas of North East India.* National Conference on Conceptualizing and Contextualizing Tribes in Contemporary India, Institute of Development Studies, Kolkata, 6-8 February 2014.

Bijukumar, V. presented a Paper on *Democracy and Development: A Theoretical Construct.* National Seminar on Democracy and Development in India's North-East: Challenges and Opportunities, organized by ICSSR (NERC), Shillong during 6-7 December, 2013.

Bhattacharjee, S. presented a Paper on *Geography as an Opportunity: North-East Connecting India with ASEAN.* International Seminar organized by ICSSR,

NERC in collaboration with NEC, Shillong on India's Look East Policy: Strengthening the Continental Route at NEC Auditorium, Shillong, March 21-22, 2013.

Publications

Research Papers

Published in India

Srikanth, H. (2013). Construction and consolidation of Telengana identity. *Economic and Political Weekly*. 48: 39-45.

Sen Gupta, Susmita., (2014) "Emergence of New Social Forces among the Khasis and the Bodos: A Comparative Study". *SAP Occasional Paper*, No. 13, UGC-DRS (Phase-1) Programme, Department of Political Science, NEHU, Shillong.

Majumdar, Munmun., (2013) "Issue of South China Sea: An Assessment". *OUCIP Journal of International Studies*, 1: 99-114.

Majumdar, Munmun., (2013) "Positioning Myanmar in India's Look East Policy". *FPRC Journal* (Focus: India-Myanmar Relation), July 2013(3) ISSN 227-2464, pp.218-232.

Majumdar, Munmun., (2013) "Engaging Myanmar and Thailand through India's Look-East Policy". *Journal of International Academic research for Multidisciplinary* (online), 1: 245-252.

Majumdar, Munmun., (2013) "Election in Myanmar: Will Myanmar's Fortune Change". *The Indian Journal of Political Science*, 74: 271-278.

Majumdar, Munmun., (2013) "Engaging Myanmar: Using the North-East India as a Crucible". *International Journal of South Asian Studies*, 6: 118-128.

Mohapatra, Biswajit., (2013) "Political Dynamics of Ethnic Conflicts & Peace Accords in India's North East. *Journal of Political Science*, 9: 90-97.

Mohapatra, Biswajit., "Leadership Change in China – Implications for Sino-Indian Relations". *Diplomatist*, Special Supplement, The China Decade, May 2013, pp. xxviii-xxix

Mohapatra, Biswajit., "IOR-ARC, the Dialogue Partners and the Emerging Regional Comprehensive Economic Partnership". *Diplomatist*, July 2013, pp. 18-21

Mohapatra, Biswajit. Indian Diaspora in Ghana – Their Role and Perceptions. *Diplomatist*, July 2013, p 98.

Mohapatra, Biswajit., "G-8 Summit 2013 – Agenda & Outcome – Syria and North Korea Dominate". *Diplomatist*, July 2013, p 15

Mohapatra, Biswajit., "India Prudent FDI Policy: Attraction for Thai Investments". *Diplomatist*, August 1, 2013 - Special Report, India-Thailand, 2013, commissioned by Embassy of India in Thailand, Bangkok, pp. 14-15

Mohapatra, Biswajit., "Local Self Governance and People's Empowerment – Challenges and Perspective" *Indian Journal of Public Administration*, 59: 824-831.

Mohapatra, Biswajit., "India's Look East Policy and Development of North Eastern India – Priorities and Prospects". *Search*, (ISSN: 0974-5416), January 2014, pp.65-70.

Bijukumar, V., (2013) "Social Exclusion in Deliberative Democracy". *Kerala Sociologist*, 41: 128-143.

Bijukumar, V., (2013) “Conceits of Arab Spring: Democratization in the Arab World”. *International Journal of South Asian Studies*, 6: 147-163.

Bijukumar, V., (2013) “Social Exclusion and Ethnicity in Northeast India”. *The NEHU Journal*, 9: .19-35.

Bijukumar, V., (2013) “Understanding Gender: An Intersectionality Perspective”. *Man and Society (A Journal of North-East Studies)*, 10: 32-52.

Bijukumar, V., (2013) “India and its Contractions: Growth and Poverty”. *Man and Society (A Journal of North-East Studies)*, 10: 139-155 (ISSN: 2229-4058).

Published Abroad

Sen Gupta, Susmita (2013) “Nationality Question and National Integration: Reflections on Paradoxes Confronting the Indian State”, *GSTF Journal of Law and Social Sciences*, Singapore, 3:1, pp.24-29

Majumdar, Munmun (2013) “India’s Stakes in the South China Sea” *International Journal of Humanities and Social Science*, 3: 242-247. (Centre for Promoting Ideas, USA)

Books/Book Chapters/Proceedings

Srikanth, H. (2013). Edited (main editor) and wrote Introduction to the book, *Vision for Meghalaya: On and Beyond Inner Line Permit*, ICSSR-NERC, Shillong. (ISBN 978-93-5156-627-4.)

Satapathy, R.K., (2014). (Ed.) *Globalisation and Traditional Institutions in North-East India*, New Delhi: Lakshmi Publication.

Mohapatra, Biswajit. (2014) “India & South East Asia – Expanding opportunities for Regional Integration and India’s Look East Policy”, for Alam M.B.(ed.), *Contours of Indian Foreign Policy: Changes and Challenges*, Published by ESS ESS Publications, New Delhi, pp. 186-201.

Debbarma, Khakchang., (2013) “An Autonomy Arrangement to Address Tribal Aspirations in Tripura”. *The Autonomy Discourse: Ethnic Aspirations in India’s Northeast*, Wasbir Hussain and Rani Pathak Das (eds.), Wordweaves India, Guwahati, Chapter 12, pp.89-101.

Satapathy, R.K., (2014) “Inner Line Permit and Beyond: A Perception”. H. Srikanth, C.J. Thomas and R.E.Kharbani (Eds.), *Vision for Meghalaya: On and Beyond the Inner Line Permit*, Shillong, ICSSR-NERC.

Sen Gupta, Susmita., (2013) “Regional Agenda and Assembly Elections in Meghalaya: A Historical Assessment”. *The Political Anvil (A Journal of the Department of Political Science, Synod College, Shillong)*, 2:1, pp. 1-12.

Sen Gupta, Susmita., Tunyi Zhoto (2013) “Nationality Question Vs. National Integration: Indian State in a Dilemma”. *3rd Annual International Conference Proceedings of PSSIR 2013*, Global Science and Technology Forum, Singapore, pp.82-88.

Funds Received from Agencies including NEHU/UGC

DRS-I SAP Project, Political Science Department for the year under report = Rs 8,27,844/-.

School of Social Sciences

Research Projects

Ongoing

Sl. No.	Title of Project	PI/Co-PI	Funding Agency
1	Educated elite and Gender in Meghalaya.	Borgohain, R.	UGC-SAP
2	Politics of Assam-Meghalaya Dispute.	Gassah, L.S.	UGC-SAP
3	Class formation in tribal societies and its political implications: A study of state of Meghalaya	Srikanth, H.	UGC-SAP
4	Interface of Kuki Chiefship with Constitutional Democracy in Manipur	Haokip, T. T.	UGC-SAP
5	Impact of Migration on the Borok Politics in Tripura.	Debbarma, K.	UGC-SAP
6	Ethnic Conflicts & Peace Process in Nagaland: Socio-Economic & Political Dynamics and Perspectives	Mohapatra, B.	UGC-SAP

Completed during Year

Sl. No.	Title of Project	PI/Co-PI	Funding Agency
1	Agrarian Relations in Meghalaya	Srikanth, H.	UGC-SAP
2	State of Democracy in South Asia (national project)	Satapathy, R.K. (State Coordinator)	Centre for the Study of Developing Societies, Delhi
3	Emergence of New Social Forces among the Khasis and the Bodos.	Sen Gupta, Susmita	UGC-SAP

Other Activities

Borgohain, R.

Delivered a lecture on “Theories and Approaches to Gender Studies”, in Orientation Course organized by Academic Staff College, NEHU on 18th May 2013.

Delivered a lecture on “Feminist Approaches: A Critique” in Orientation Course Academic Staff College, NEHU.

Delivered a lecture on “Contextualizing Grass-roots Democracy”, in Refresher Course

organized by Department of Political Science, NEHU on 22nd Nov. 2013.

Delivered a lecture on “Women in Panchayati Raj System in India”, in Refresher Course organized by Department of Political Science, NEHU on 5th Dec. 2013.

Delivered a lecture on “Engendering Grass-roots Democracy”, in Refresher Course organized by Department of Political Science, NEHU on 29th Nov. 2013

NEHU Annual Report 2013-2014

Gassah, L. S.

Joined as Honorary Director of ICSSR – North Eastern Regional Centre, Shillong on 14 June 2013.

Editor of *Man and Society: A Journal of North-East Studies*, ICSSR-NERC, Shillong since 2013.

Member of the Visiting Committee set up by ICSSR, New Delhi, to examine the academic as well as research capabilities of two Research Institutes at Koraput (Odisha) and Guwahati (Assam).

Delivered a lecture on “Centripetal Forces and Democracy”, in Refresher Course organized by Department of Political Science, NEHU on 19th Nov. 2013.

Delivered a lecture on “Centrifugal Forces and Indian Democracy”, in Refresher Course organized by Department of Political Science, NEHU on 25th Nov. 2013.

Lectures were delivered in the Refresher Course organized by Department of History, Anthropology and summer school conducted by department of Education, NEHU during academic year in 2013-2014. The broad topics of the lectures include the following:

“Effects of Modern Constitution Institution in Northeast India”.

“Ethnicity and the Issue of Ethnic movement in Northeast India”.

“India and United Nations”.

“Northeast and the Problem of Globalization”.

“Centrifugal Forces and the Socio-political Departments in India’s Northeast Politics”.

Srikanth, H.

Delivered two lectures on “Review of Literature in Academic Writings” in *National*

Workshop on Academic Writing and Publishing, organized by ICSSR-NERC on 10th September, 2013.

Delivered four lectures on “Marxist Dialectical Method”, “Structure of Academic Writing”, “Survey of literature” and “Publishing Academic Writing”, in *Capacity Building Workshop for Social Science Teachers*, organized by ICSSR-NERC, Shillong.

Delivered a talk on “Fighting Corruption”, in Orientation Programme (General) organized by Academic Staff college, NEHU, on 29th April, 2013.

Delivered a talk on “Dalit Question in India”, in Orientation Programme (General) Organized by Academic Staff College, NEHU, on November, 2014.

Delivered a lecture on “Caste System in India”, in Orientation Programme (General) organized by Academic Staff College, NEHU, on February 13, 2014.

Delivered two lectures on “Resource Mobilization theory of Social Movements” in Refresher course in Commerce, organized by Academic Staff College, NEHU, on November 26, 2013.

Delivered a lecture on “Feminist Methodologies”, in “Research Methodology in Social Sciences” course, organized by ICSSR-NERC in Shillong on 8th November, 2013.

Chaired a session in national Seminar on “Democracy and Development in India’s Northeast: Challenges and Opportunities”, organized by ICSSR-NERC on 6th December, 2013.

Chaired a session in international seminar on “Ethnicity and Globalization” organized by Lady Keane College, Shillong on 5th December, 2013.

School of Social Sciences

Invited as expert consultant for the state government project on “Alcoholism in Meghalaya: Magnitude, Physical and Social Impact”.

Invited as subject expert for evaluation of UGC Minor Research Projects in Political Science, at UGC Regional Office, Kolkata on January 23, 2014.

Haokip, T.T. delivered three lectures on “Democracy, Good Governance and Women’s Empowerment” in Political Science Refresher Course, Academic Staff College, NEHU, Shillong.

Debbarma, Khakchang., delivered two lectures on “Human Rights Issues” in the Orientation Course on 19th February 2014, in Academic Staff College, NEHU, Shillong.

Satapathy, R.K.

Delivered two lectures in University of Science and Technology, Meghalaya on “Postmodern Approach as Methodology” and “Sampling Technique in Research” on 9th and 10th December, 2013.

Delivered a lecture in the Department of Cultural and Creative Studies, NEHU, Shillong on “Multiculturalism in the Era of Globalisations”.

Sen Gupta, Susmita

Delivered the following lectures in a Refresher course organized by the Deptt. of Commerce, NEHU during November 18- December, 8, 2013 -

1. “Entrepreneurship: Different Ideological Perspectives”
2. “Entrepreneurship in Meghalaya”

Delivered a lecture on “Centre-State Relations” in Lady Keane College, Shillong on June 22, 2013.

Majumdar, Munmun was Visiting Fellow at the Defence Studies and Analyses, New Delhi from 19 December 2013 – 15 February 2014.

Mohapatra, Biswajit delivered an invited lecture on “Interrogating Peace in Meghalaya” at Malaviya Peace Research Centre, Banaras Hindu University, Varanasi on 19th December, 2013 at 11 a.m., Conference Hall, MCPR, FSS, BHU.

Bijukumar, V. delivered 4th B. Datta Ray Memorial Lecture on “India’s Uncertain Glory: Challenges to Indian Democracy”, organized by Department of Political Science, St. Edmund College, Shillong on 14th September, 2013.

Bhattacharjee, S.

Book Review of the book titled *United States and Central America* published in NEHU Journal, Vol.XI, No.2, July 2013.

Delivered a lecture on “Crowd Management in Mass Gathering” on Dec 6, 2013 in the Refresher Course organized by Adult & Continuing Education Department, NEHU, Shillong.

DEPARTMENT OF SOCIOLOGY

Head : Prof. Nikhlesh Kumar – Till 31st May, 2013
 Prof. I. L. Aier – From 1st June, 2013 onwards
Telephone : (364) 2723040
E-mail : hodsoc@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialisation
Professor	C.L. Imchen, M.A., M.Phil., Ph. D. (JNU);	Political Sociology; Polity Formation and Indigenous Peoples
	Lanu Aier, M.A., M. Phil., Ph. D. (NEHU);	Political Sociology; Polity Formation and Indigenous Peoples Political Sociology; Sociology of Religion; Ethnic Relations
	A. K. Nongkynrih, M.A., M. Phil., Ph. D. (NEHU);	Sociology of Kinship and Marriage; Sociology of Organisations, Sociology of Rural Development
	D. V. Kumar, M.A., M. Phil., Ph.D. (JNU);	Sociology of Modernisation and Ethnicity
Associate Professor	B. Panda, M.A., M.Phil. (Hyd.), Ph.D. (IIT Kanpur);	Sociology of Development; Voluntary Organisations, NGOs
Assistant Professor	Rekha M. Shangpliang, M.A., M. Phil., Ph.D. (NEHU)	Sociology of Environment
	Md Yusuf Khan, M.A. (AMU), M. Phil (DU)	Family, Kinship & Marriage

Thrust Areas of Research: Social Change

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 Department has developed research excellence in the studies of political dynamics and Social Movements, emerging accommodation between native systems and the Nation State, ethnic identity, Globalisation and its impact on the North-Eastern Region, land and privatization of communal lands, rural developmental schemes and policies and traditional political institutions, Non-Governmental Organizations.

School of Social Sciences

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 handicap in development.

Students' Profile

Enrolment Capacity: M.A. 50; Ph.D. – Variable

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A		50		7	43	14	36	50
M.Phil		2	3		5	2	3	5
Ph.D		4	1	3	2	2	3	5

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M.A		42		11	31	19	23	42
M.Phil		5	4		9	4	5	9
Ph.D		2			2	1	1	2

Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Ms Hannah Tia	Communatisation Programme in Nagaland; A Case Study of Khuzama and Khensa Villages”	Prof. I.L. Aier
Ms Sharalyne Khyriemujat	A Sociological Study of ka Niam Khasi	Prof. N. Kumar

Courses Conducted

Postgraduate

FIRST SEMESTER

- Sociological Theories – I
- Methodology of Social Research – I
- Sociology of Family and Kinship
- Indian Society – I
- Indian Society – II

SECOND SEMESTER

- Sociological Theories – II
- Methodology of Social Research – II
- Sociology of Religion
- Indian Society – III
- Open Course

THIRD SEMESTER

- Economy and Society

- ii. Political Sociology
- iii. Sociology of Development
- iv. Tribal Movements in India
- v. Open Course
- vi. Open Course

FOURTH SEMESTER

- i. Social Change
- ii. Sociology of Environment
- iii. Anthropological Theories
- iv. Industrial Sociology

M.Phil./Ph.D. Courses

- 1. SOC P01: Designing Sociological Research
- 2. SOC P02: Sociological Concepts
- 3. SOC P03: Advanced Sociological Theory

Educational Tour of Students

Teacher-In-Charge: Md. Yusuf Khan, Assistant Professor

Places/Institutions Visited: Mumbai and Goa

Duration of Tour: 13 days

Purpose of Tour: Study Tour

Publications

Research Papers

- Nongkynrih, A.K. (2013). Social science research In northeast India: The position of sociology. *The NEHU Journal*.2:1-18.
- Nongkynrih, A.K. (2013). Food Habits of Tribal Communities in North East India. *Journal of Northeast Indian Cultures*.1(1):76-91.
- Kumar, D. V. (2013). Contesting colonial origins of modernity. *Eastern Anthropologist*. 66: 437-447.

Panda, B., (2013). Role of Self-Help Groups in Promoting Development: An Empirical Exploration. *Eastern Anthropologist*, 66,(4) 485-499.

Panda. B., (2013). Malcom Harper, Lalitha Iyer and Jane Rosser: Whose sustainability counts? BASIX's long march from microfinance to livelihoods. *Sociological Bulletin* 62:501-503.

Panda. B., (2013). Sujit Kumar Choudhary: NGOs, education and social capital: A micro study of tribals. *Sociological Bulletin* 62: 521-522

Shangpliang ,Rekha . (2013).Forest Legislations and Livelihood Strategies:Khasi Women in Rural Meghalaya .*Sociological Bulletin* : 61: 479-493.

Book/Book Chapter/Proceedings

Shangpliang,Rekha .(2013).Socio-Economic Dimensions of Forest among the Khasis. NewDelhi:Concept Publishing Company Pvt. Ltd.

Nongkynrih, A.K. (2013). The fission and fusion process in the Khasi political system. In: *Early States in North East India*. J.B. Bhattacharjee and David R. Syiemlieh (Eds.).Regency Publications, New Delhi:Chapter 10, pp 137-151.

Nongkynrih, A.K.(2013). A Sociological Exploration of Indigenous Words. In *Linguistic Ecology*. Shailendra Kumar Singh and Saralin. A. Lyngdoh (Eds.). EBH Publishers, Guwahati: Chapter 3, p.38-49.

School of Social Sciences

Research Projects

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Urban Ethnicity and Social Power Spectrum. New Dimensions in Select Urban Centres of Nagaland	I. L. Aier	SAP-DRS-UGC	Rs.40,000
2	Voluntary Organisations in Meghalaya	A.K.Nongkynrih	DRS-SAP-UGC New Delhi	Rs.30,000/-
3	Urban Ethnicity : A Comparative Study of Telugus and Bengalis in Delhi	Prof. D. V. Kumar	SAP-DRS (Phase III).	Rs. 50000
4	The Lives of Older People and Changing Social Roles: A Sociological Study of Elderly in Odisha	Dr. B. Panda	DRS-SAP UGC, New Delhi	Rs. 35,000/-
5	A Sociological Study of Folk Medicine Among the Khasis	Dr. Rekha M Shangpliang	DRS-SAP UGC, New Delhi	Rs.15,000/-
	Forest and the livelihood of womenfolk in a Khasi village of Ri-Bhoi District of Meghalaya,	Rekha M Shangpliang	DRS-SAP UGC, New Delhi	Rs.25,000/-

Seminar/Conference/Symposium/Extension Programme etc.

Dr. B. Panda attended and presented a paper entitled “Community and Identity formation in the Era of Globalization: Some Sociological Reflections” at the International Seminar on “*Ethnicity and Globalisation: with reference to the Communities of South Asia*” organized by the Department of Philosophy, Lady Keane College, Shillong in Association with Indian Council of Philosophical Research, New Delhi, Indian Council of Social Science Research, New Delhi & Indian Council of Social Science Research, North-Eastern Regional Centre, Shillong held during 4-5 December, 2013.

Dr. Rekha M Shangpliang attended and presented a paper titled “Forest Management Issues in Meghalaya” at the National Seminar on Burning Environmental Issues: Risk to BioDiversity and Human Health With Special Reference to North East India, St. Mary’s College, Shillong on 15th and 16th May, 2013.

Dr. Rekha M Shangpliang was a Resource Person at the one day seminar on “Cultural Dimensions Of Ecology” organised by the Department of Sociology, Lady Keane College, Shillong on the 30th of August, 2013.

Md. Yusuf Khan attended and presented a paper entitled ‘Muslim Minority in Manipur: Prospects and Challenges of Development’ in the two-day National Seminar on

“Democracy and Development in India’s North-East: Prospects and Challenges” organized by ICSSR-NERC on 6th -7th December, 2013.

Other Activities

Prof. A.K. Nongkynrih

Moderator of the Panel Discussion on the theme “Inner Line Permit and Its Economic Implications in Meghalaya”, organized by Meghalaya Economic Association, 18th May 2013

Delivered a talk on the World Environment Day, organized by the National Service Scheme, NEHU, on 5th June 2013.

Resource Person for Panel Discussion – National Seminar on Inclusive Development – Bridging the Gap, organized by the Department of Social Work, St.Edmund’s College, Shillong, on the 8th June 2013.

Delivered a lecture on “Research Problems” in the workshop on “Research Methodology in Social Sciences”, organized by the Indian Council of Social Science Research North Eastern Regional Centre, Shillong, 8th November 2013.

Delivered a lecture on “Entrepreneurship: A Sociological Perspective”, in the Refresher Course organized by the Department of Commerce, NEHU, on 22nd November 2013.

Delivered a lecture on “Basic Sociological Concepts”, organized by the Department of Sociology, Shillong College, on 25th November 2013.

Delivered a lecture on “Team Building” in a Leadership Orientation Programme organized by Synjuk ki Seng Samla

Shnong, Upper Shillong Circle, 15th March 2014.

Life Member of Meghalaya Economic Association, Shillong, 2013.

Member for the NEIGRIMS Ethics Committee, (25th July 2013 -).

Dr. B. Panda

Delivered a lecture on “Dimensions of Social Change” at the Special Summer School for College & University Teachers on ‘Recent Advances in Natural Sciences and Social Sciences’ on 19.8.2013 organized by Department of Education, NEHU, Shillong in association with UGC-ASC NEHU Shillong.

Delivered a Lecture on “Sampling Design” on 6.11.2013 in ‘A 10 Day Workshop on Research Methodology in Social Sciences’ held during 5th-14th November, 2013, and organized by ICSSR-NERC.

Delivered a lecture on “Relationship between Empirical Research and Theory in Social Science Researches” in the Department of Sociology, Utkal University, Vanivihar, Bhubaneswar on 31st January, 2014.

Delivered a Lecture on “Sampling Design” on 6.3.2014 in a “Workshop on Capacity Building Programme for Social Science Faculty Members” organized by ICSSR-NERC Shillong held during 6th-19th March, 2014.

Dr. Rekha M Shangpliang

Moderator of Panel Discussion on the theme “Intergeneration Leadership” on the 24th of April, 2014, organised by YWCA, Shillong at the Working Women’s Hostel, Shillong.

VIII

SCHOOL OF TECHNOLOGY

Dean : Prof. P. V. Koparkar (From 22nd November 2013 onwards)
Telephone : 2723601(O); 2723603(O); 2723606 (Fax)
Email : deanst@nehu.ac.in; chimanee@gmail.com

The School of Technology was established in 2006. At present it consists of eight departments, namely, Electronics and Communication Engineering, Information Technology, Basic Sciences and Social Sciences, Energy Engineering, Biomedical Engineering, Architecture, Computer Applications and Nanotechnology. During the year under review, B.Tech. courses have started in Energy Engineering and Biomedical Engineering along with the already existing Electronics and Communication Engineering and Information

Technology. The students of the School of Technology organized a three-day Techno Cultural event “ANAKALYPSI-2014” from 26th to 29th March 2014.

M. Tech. and Ph. D. programmes have also been started in two departments, namely Electronics and Communication Engineering and Information Technology. The Ph.D. programme has also started in the Nanotechnology department. During the year the faculty members were actively involved in collaborative research along with the teaching activities in the departments.

DEPARTMENT OF ARCHITECTURE

Head : Mr. Banbhalang Swer
Telephone : (O) 0364 – 2724101; 4103 (M) 8794741771
E-mail : banbha13@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Assistant Professor	Mr. Banbhalang Swer, M.Arch.	Urban Design
Assistant Professor	Miss. Ibynta B. Tiewsoh, M.Des.	Product design
Assistant Professor	Mr. Rameez K. Gazi, M L.Arch.	Landscape

Brief Statement of Academic Activities

This department started functioning after the appointment of the three faculty members in April 2013. During the year of reporting, the faculty prepared the syllabus for the B.Arch. Course. The faculty prepared the regulations to be implemented to start the course in the University, in accordance with the Council

of Architecture Government of India. After getting it through the duly constituted BPGS of the department, it was placed in the School Board of the Technology for its approval. The School Board passed the regulations as well as the syllabus in its meeting in the month of December 2013. The faculty was also involved in design and planning of the Jowai campus in consultation with CDD.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Head : Mr. Nitin Sahai (from 01.04.2013 to 01.08.2013 forenoon)
 : Dr. Dinesh Bhatia (01.08.2013 forenoon onwards)
Telephone : 0364-2723853
E-mail : bhatiadinesh@rediffmail.com / dbhatia@nehu.ac.in

Faculty

Designation	Name & Qualification	Specialization
Associate Professor	Dr. Dinesh Bhatia, Ph.D (MNNIT, Allahabad), PDF (USA)	Biomechanics and Rehabilitation Engineering, Biomedical devices and signal processing
Assistant Professor	Mr. Nitin Sahai, M.Tech (MNNIT, Allahabad)	Biomechanics & Biomaterials
	Mr. Sudip Paul, Ph.D* (IIT-BHU), M.Tech (IT-BHU)	Electrophysiology, Biomedical Instrumentation, Artificial Organ and Rehabilitation system
	Dr. Manasjit Gogoi, Ph.D (IIT, Bombay), M.Tech (Tezpur University)	Bio nanotechnology, Nano medicine, Cancer drug delivery
	Mr. Gajendra Kumar Mourya, Ph.D* (CSIR-CSIO, Chandigarh), M.Tech (IIT-BHU)	Medical Image Processing
	Mr. Shyamal Mandal, Ph.D* (IIT, Kharagpur), M.Tech (IIT, Kharagpur)	Medical image processing, Nanotechnology, Biomaterials

* Pursuing degree

Thrust Areas of Research

- Biomechanics and Rehabilitation Engineering.
- Biomedical devices and signal processing
- Electrophysiology and medical Instrumentation.

Students' Profile

Enrolment Capacity: B.Tech. - 56

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
B.Tech 1 st year	04	34	18	39	17	02	54	56

Seminars/Conferences/Symposia/ Extension Programmes etc.

Organized

The Department organised a one-week National Workshop entitled "Advances in Computational Neuroscience" (Dr. Bhatia- Coordinator) in collaboration with Computer Centre, NEHU, Shillong, sponsored by Initiatives in Neuroinformatics and Computational Neuroscience Education (INCNE), National Brain Research Centre (NBRC), DBT, Govt of India from 24-29th March, 2014. All the faculty of the department were involved in various organisational aspects of this workshop.

Attended/Participated

Dr. Dinesh Bhatia

Invited as a speaker and chaired a Session in the *North East Conference on Rehabilitation of Persons with Multiple Disabilities* organized by Dept. of Disability Affairs, Ministry of Social Justice and Empowerment, at Guhawati, Assam, from 27-28th September, 2013.

Invited Speaker at *National Conference on Bio-Mechanical Sciences: Emerging Research Domain* (NCBMS 2014) held on 7th and 8th March, 2014, organized by Indian Society of Biomechanics and Centre of BioMechanical Science, Institute of Technical Education &

Research (ITER) Siksha 'O' Anusandhan University, Bhubaneswar, Orissa.

Mr. Nitin Sahai

Short term Training course in MATLAB, Computer Centre, North-Eastern Hill University, Shillong, Shillong, 2nd Oct., 2013.

Attended a Workshop on "Advances in Computational Neurosciences" (ACNE-2014), sponsored by INCNE, DBT and NBRC, at Shillong during 24th to 29th March 2014.

Mr. Sudip Paul

Participated in the Short-Term course in SPSS, UGC-Academic Staff College, North-Eastern Hill University, Shillong, from 02/12/2013 to 07/12/2013.

Paper presented in the *Conference on Rehabilitation of Persons with Multiple Disabilities* organized by Dept. of Disability Affairs, Ministry of Social Justice & Empowerment, Govt. of India and NIEPMD, Chennai, held at New Delhi from 27/11/2013 to 28/11/2013.

Participated and chaired a Session in the *North East Conference on Rehabilitation of Persons with Multiple Disabilities* sponsored by Dept. of Disability Affairs, Ministry of Social Justice & Empowerment,

Govt. of India and NIEPMD, Chennai, held at Guwahati from 27/09/2013 to 28/09/2013.

Dr. Manashjit Gogoi

Presented paper on “In vivo biocompatibility and biodistribution of magnetic nanohydrogel”, at the First Symposium on *Advances in Sustainable Polymers*, organised by IIT Guwahati, during 10-11th January, 2014.

Mr. Gajendra Kumar Mourya

Delivered an Invited talk on “Advance Medical Imaging Modalities and its Applications” in the Management Development Programme on “Operation & Repair of Biomedical Equipment” sponsored by Ministry of External Affairs (under ITEC/SCAAP), Govt. of India, organised by Indo Swiss Training Centre, CSIR-CSIO Chandigarh on 30-10-2013.

Delivered Invited talk on “Neuro-imaging using Statistical Parametric Mapping (SPM) in National Workshop on “Advances in Computational Neuroscience” sponsored by INCNE, NBRC and DBT, Govt. of India from 24th to 29th March, 2014, organized by Department of Biomedical Engineering & Computer Centre, NEHU Shillong.

Mr. Shyamal Mandal

Short-Term Training Course in MATLAB from 1st- 6th October, 2013 Computer Centre, NEHU, Shillong,

Attended and presented a paper on “Synthesis and characterization of uniform size gold nanoparticles by using different proteins like chymotrypsin and egg albumin” at 3rd International Conference on Advanced Nanomaterials & Nanotechnology, IIT-Guwahati, 1st to 3rd December, 2013.

Publications

Agarwal, A. and Bhatia, D. (2014), Quantitative measurement of CO level in closed environment. *International Journal of Medical Engineering and Informatics*, 6: 210-217.

Devender, Kaur, M, Bhatia, D. (2014). Design of smart FES for physically challenged person. *International Journal of Medical Engineering and Informatics* 6: 258-265.

Saini, A. and Bhatia, D. (2014). A smart door access system using finger print biometric system. *International Journal of Medical Engineering and Informatics* 6: 274-280.

Tyagi, A., Duhan, M., Bhatia, D. (2013). Impact of communication technology on human brain activity: Mobile phone v/s landline phone. *International Journal of Medical Engineering and Informatics*, 5: 20-30.

Kaushik, M., Bhatia, D., Arya, A. (2013). A comparative analysis for pre and post implication-effect of electrical stimulation on quadriceps in cerebral palsy kids” *International Journal of Biomedical Engineering & Computer Health Informatics* 5: 85-93.

Arya, A., Bhatia, D., Abdelghani, M. (2013). Lie detection using electromyography and electroencephalography. *International Journal of Biomedical Engineering and Computer Health Informatics*, Vol. 5

Godiyal, A. K., Sharma, R., Joshi, D., Bhatia, D. (2013). Feasibility of facial EMG in gender classification during speech production. *Journal of Medical Engineering and Technology*, 37: 86-90.

Bhatia, D. (2013). Growth of neural engineering and neuro-mechanics in India: Physically

- challenged looking towards a bright future. *International Journal of Medical Engineering and Informatics*, 5: 201-208.
- Joshi, D., Bhatia, D. (2013). Cross correlation evaluated muscle coordination for speech production. *Journal of Medical Engineering and Technology*, 37: 1-6.
- Paul, S., Bhattacharya, P., Pandey, A. K., Patnaik, R. (2014). Application of mathematical modeling as a tool to analyze the EEG signals in rat model of focal cerebral ischemia. *Journal of the Institution of Engineers. Springer*. DOI 10.1007/s40031-014-0072-5.
- Bhattacharya, P., Pandey, A. K., Paul, S., Patnaik, R. (2014). Melatonin renders neuro-protection by Protein Kinase C mediated Aquaporin-4 inhibition in animal model of focal cerebral ischemia, *Life Sciences*. 100: 97-109.
- Bhattacharya, P., Pandey, A. K., Paul, S., Patnaik, R., Yavagal, D. (2013). Aquaporin-4 inhibition mediates Piroxicam-induced neuroprotection against focal cerebral ischemia/ reperfusion injury in rodents. *PLOS ONE*. 8: e73481 (1-13).
- Bhattacharya, P., Pandey, A. K., Paul, S., Patnaik, R. (2013). Does Piroxicam really protect ischemic neurons and influence neuronal firing in cerebral ischemia? An exploration towards therapeutics. *Medical Hypotheses*. 81: 429-435.
- Pandey, A. K., Bhattacharya, P., Paul, S., Patnaik, R. (2013). Rhamnetin attenuates oxidative stress and matrix metalloproteinase in animal model of ischemia/reperfusion: A possible antioxidant therapy in stroke. *American Journal of Neuroprotection and Neuroregeneration*. 5: 49-55.
- Bhattacharya, P., Pandey, A. K., Paul, S., Patnaik, R. (2013). Neuroprotection by μ -Calpain and Matrix metalloproteinases inhibition by Piroxicam in cerebral ischemia: An in-silico study based novel hypothesis. *Medicinal Chemistry Research*. 22: 5112 - 5119.
- Pandey, A. K., Bhattacharya, P., Paul, S., Patnaik, R. (2013). Neuroprotective effects of Quercetin in chemical hypoxia: in-silico evaluation of the hypothesis exploring PKC inhibition mediated pharmacotherapy. *Medicinal Chemistry Research* 22: 4836-4841.
- Bhattacharya, P., Pandey, A. K., Paul, S., Patnaik, R. (2013). Aquaporin-4 in Cerebral Edema following Ischemia / Reperfusion Injury: Exploration of Novel Therapeutic Strategies. *American Journal of Neuroprotection and Neuroregeneration*. 4: 90-116.
- Gogoi M., Sarma H.D., Bahadur D., Banerjee R. (2013) Biphasic magnetic nanoparticles-nanovesicle hybrids for chemotherapy and self controlled hyperthermia. *Nanomedicine*, 9: 955-970
- Jaiswal M.K., Gogoi M., Sarma H.D., Banerjee R., Bahadur D. (2014). Biocompatibility, biodistribution and efficacy of magnetic nanohydrogels in inhibiting growth of tumor in experimental mice model. *Biomaterials Science*, 2: 370-380.
- Mohanty, S., Rameshbabu, A.P., Mandal, S., Bo Su, Dhara S. (2013) Critical issue in near shape forming via green machining of ceramics: A case study of alumina dental crown. *Journal of Asian Ceramics Society*, 34: 1-8.

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Books/Book Chapters/Proceedings

Dinesh Bhatia (2014) *Healthcare Informatics*
(Prentice Hall of India, Delhi)

Bhattacharya, P., Pandey, A. K., Paul, S.,
Patnaik, R. (2013). Attenuation of

Glutamate mediated neuronal insult by
Piroxicam in animal model of Focal
Cerebral ischemia: Possible involvement
of GABA agonism Poster Presentation.
Proceedings of *XXIth World Congress of
Neurology, Vienna, Austria.*

Research Projects

New Projects

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Design of Artificial Hand with Artificial Fingers	Mr. Nitin Sahai, Dr. Dinesh Bhatia, Mr. Sudip Paul, Dr. Suresh Verma, DCR University, Murthal, Haryana	Twinning projects for the NE-2013, Department of Biotechnology, Government of India	Rs 36 lakhs (approx.)
2	To study relief of muscle spasticity in CP kids by employing r-TMS from 2014-16	Dr. Dinesh Bhatia, Dr. Arun Mukherjee, NGO, UDAAN	SEED Division, (DST), Ministry of Science and Technology, Govt. of India.	Rs.48,08,545/- lakhs
3	Design of pulsed electrical Knee stimulator for osteoarthritis (OA) patients from 2014-16	Dr. Dinesh Bhatia, Mr. Sudip Paul	Department of Science and Technology (DST), Ministry of Science and Technology, Govt. of India.	Rs. 60 lakhs (approx.)

Ongoing

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Design of Smart FES System for Physically Challenged Person from 2012- 2014	Dr. Dinesh Bhatia, Dr. Suresh Verma, DCR University, Murthal, Haryana	(DST), Ministry of Science and Technology, Govt. of India	Rs. 42.91 lakhs

Academic Collaborations

The Department has academic collaborations with North Eastern Indira Gandhi Institute

of Regional Health Medical Sciences (NEIGRIHMS), Shillong, and Indian Institute of Technology, Guwahati.

Other Activities

Dr. Dinesh Bhatia

Invited as resource person for Short-term Course on “Research Methodology” held at

UGC Academic Staff College, NEHU, Shillong from 23-28th September, 2013.

Reviewer (Invited), Department of Science and Technology (DST) Research projects committees in 2013-14.

International Program Committee of CARDIOTECHNIX 2013 (International Congress on Cardiovascular Technologies), held 19-21 September, 2013, at Vilamoura, Algarve, Portugal (Invited)

Program Committee for International Conference on Physiological Computing Systems (PhyCS 2014) Lisbon, Portugal 7-9 January, 2014 (Invited)

Editor- “News in Engineering (NIE)” Sci Publications Thomson Ltd. Zilina, Slovakia (Invited), 2013- 2014

Reviewer, Journal of Medical Engineering and Technology (JMET), Taylor and Francis, UK, ISSN 0309-1902 (Invited) 2013- 2014.

Reviewer, iConcept Press Ltd. (Invited), June 2013, Hong Kong

Invited Editorial Board Member, International Journal of Informative and Futuristic Research (IJIFR), ISSN 2347-1697, 2013- 2014.

Invited Reviewer, International Journal of Biomedical Engineering and Technology (IJBET), U.K., ISSN (print) 1752-6418, 2013-2014.

Invited Reviewer, African Journal of Pharmacy and Pharmacology, Academic Journals, ISSN. 1996-0816, 2013-2014.

Invited Conference Advisory/Reviewer Committee for National Conference on Soft Computing (SCOMP 2014, sponsored by DST, Delhi) organized by Galgotia College of Engineering and Technology, Noida on 20-21 February, 2014.

Invited Reviewer South African Medical Research Council Grants Review Committee, January 2014.

Invited Program Committee member 7th International Joint Conference on Biomedical Engineering Systems and Technologies (BIOSTEC-14) 3-6 March, 2014, Loire Valley, France.

Invited Reviewer for IC-IMPETUS 2014 organized by PES Institute of Technology (PESIT) Bangalore on January 10–11, 2014 in Bangalore, Karnataka, India.

Invited Reviewer for International Journal of Computing and Digital Systems (IJCDS), Bahrain, 2013.

Invited Technical Program Committee Asia 2014 IEEE Innovative Smart Grid Technologies Conference (ISGT 14) from October 6-9, 2013 at Lyngby, Denmark.

Mr. Sudip Paul

Member in Board of Studies for Professional Course in Master of Computer Application (MCA) NEHU, Tura for a period of three years since 2012.

Member in the B.Tech. Admission Committee NEHU for 2013-2014.

DEPARTMENT OF BASIC SCIENCES & SOCIAL SCIENCES

Head : Prof. P. V. Koparkar Upto 22nd November 2013
 Dr. A. K. Das (22nd Nov. – 27th November 2013)
 Dr. M. M. Singh (27th November 2013 onwards)

Telephone : 0364-2723641/42

E-mail : hodbsss@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Prof. P.V. Koparkar; M. Sc., Ph. D.(N.U.)	Physics (Instrumentation Atmospheric Sciences/ Nanomaterials)
Associate Professor	Dr. A.K. Das; M.Sc. (IIT, Kgp), Ph.D. (CU)	Theoretical Physics
	Dr. M.M. Singh; M.Sc. (BHU), Ph.D. (PU)	Mathematics: Number Theory, Algebraic Number Theory, Numerical Analysis, Discrete Mathematics
	Dr. A. Sinha; M.Sc. (LU), Ph.D. (NEHU)	Chemistry (Physical)
Assistant Professor	Dr. M.D. Kushwaha; M.A. (BHU), Ph.D. (BHU)	Mathematics
	Dr. Hiranjit Choudhury; M.Sc. & Ph.D. (NEHU)	Botany (Plant Biotechnology)
	Dr. Regenel S. Kharwanlang; M.Sc. & Ph.D. (NEHU)	Theoretical Physics
	Dr. Phrangstone Khongjee; M.Sc. & Ph.D. (NEHU)	Statistics: Sampling Theory and Demography
	Dr. Krishna Upadhaya; M.Sc. & Ph.D. (NEHU)	Botany (Plant Ecology)
	Dr. (Mrs.) Jyoti Narayan; M.Sc. (KU), M. Phil. (KU), Ph.D. (KU)	Chemistry: Analytical/ Nanoscience & Nanomaterials
	Dr. Jibitesh Dutta; M.Sc. & Ph.D. (NEHU)	Mathematics
	Shri Sainkumar M.N. Mawiong; M.Sc. & M. Phil. (NEHU)	Mathematics
	Smt. Evapynhun Giri; M.A. & M.Phil. (NEHU)	English
	Dr. R. S. Singh; M.Sc. (Jadavpur), Ph. D. (CSIR-IICT, Osmania)	Chemistry (Organic/Bio-organic/ Soft materials)

Assistant Professor	Dr. M. Mahato; M.Sc. (Burdwan), Ph.D. (Calcutta)	Physics (Thin film/ Molecular Spectroscopy/ Nanobiotechnology)
	Dr. Munshi Ram; M.Com. (VBSPU), Ph.D. (BHU)	Commerce (Human Resource Management)

Thrust Areas of Research

Basic & Applied Mathematics, Basic & Applied Physics, Atmospheric Sciences, Chemical Sciences, Nanomaterials, Nanoscience and Nanotechnology, Basic & Applied Environmental Sciences, Biotechnology, Basic & Applied Economics, Applied Statistics, and Communicative English, with emphasis on interdisciplinary and multidisciplinary 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: Ph.D. : 20

Actual Admissions: Ph.D. 13 (6 from 1st April 2013-31st March, 2014)*

* Out of 13, 12 students admitted in other departments; one admitted in BSSS

Courses Conducted during the Year

The core courses pertain to basic sciences, humanities and commerce as taught for the

B.Tech programme of the University in 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, Engineering Physics Laboratory, 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 Electronics Laboratory and Engineering Graphics for ECE, IT BME and EE.

Semester III : Engineering Mathematics III, both for ECE & IT, Engineering Economics and

School of Technology

Financial Accounting for IT only, Discrete mathematics for IT only.

Semester IV : Statistics and Random Processes, for both ECE & IT.

Semester V : Industrial Economics and Management, for ECE only.

Management Information System for IT only.

Semester VIII : Bio-informatics (IT-721) for IT.

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Das A. K. presented two papers on (i) “Ionization of hydrogenic ions by the impact of electrons, protons and positrons” and (ii) “Electron impact ionization of atomic hydrogen using a model Hamiltonian via a projection operator” in the XXVIII *International Conference on Photonic, Electronic and Atomic Collisions* (ICPEAC-2013) held at Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China, during July 24 – 30, 2013.

Upadhaya K. presented a paper entitled “Traditional Management Practices and Biodiversity conservation in Meghalaya” in the Workshop on Evolving Strategies for Enhancing Conservation and Management of Private and Community Forests: Analysis of Policies and Programmes, organized by Regional Centre, National Afforestation and Eco-Development Board, North-Eastern Hill University, Shillong, 26-28th March, 2014.

Narayan J. (and Baruah J.M.) presented a paper entitled “Preparation and Characterization

of High Density Silver Nano Particle Thin Films” in the *International Seminar on Nanotechnology in Conventional and Alternate Energy Systems: A Global Status and Pathway* held at UPES campus, Dehradun, India, during 12-13 August 2013. Abstract pp. 15. (ISBN: 978-81-928068-0-8).

Dutta J. presented papers on (i) “Thermodynamics of the DGP Braneworld” in the National Conference on Pure and Applied Mathematics, at RGI, Guwahati, during 9-10th May, 2013 (ii) “Teaching and learning Mathematics with Technology and Applications” in the *International Seminar on Attracting Best Talents in Basic Sciences*, at Shillong College, Shillong, during 24-25th July, 2013, (iii) “Taxicab Geometry” in the National Seminar on Mathematics, “Mathematics: the need of the hour” at Shillong College, Shillong, during 5th July and 27th August, 2013 and (iv) “Thermodynamics of the DGP Braneworld with modified Hawking temperature” in the *International Conference on Differential Geometry and Relativity (ICDGR-2013)* at DDU Gorakhpur University, Gorakhpur, during 09-11 November.

Publications

Published in India

Choudhury, H., Tandon, P. (2013). Non-destructive assessment of growth performance of embryogenic suspension culture of *Pinus kesiya* (Royle ex. Gord.) in shake-flask and self-designed bubble bioreactor and successful regeneration of plantlets from the culture systems. *Proc. Natl. Acad. Sci., India, Sect. B Biol.* DOI 10.1007/s40011-013-0253-z.

NEHU Annual Report 2013-2014

Upadhaya, K., Thapa, N., Lakadong, N. J., Barik, S. K., Sarma, K. (2013). Priority areas for conservation in Northeast India: a case study in Meghalaya based on plant species diversity and endemism. *International Journal of Ecology and Environmental Sciences*, 39: 125-136.

Khongji, P. (2013). Determinants and trends of an ideal family size in a Matrilineal set up. *NEHU Journal*. 11: 37-54 (ISSN: 0972-8406).

Khongji, P. (2013). Levels and trends of infant and child mortality in Meghalaya (Results of life table and Hazard analysis), *Journal of North East India Studies*. 3: 1 – 14.

Books/Book Chapters/Proceedings

Koparkar, P. V. (2013) Fast track to the future of North East: Information and Communication technologies, In: *ICT in Education*. Ed. B.B. Kharbiryumbai (EBH Publishers, India); Vol. 2, pp. 76 – 84.

Research Projects

New Projects

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	Fragmentation of humid subtropical broad-leaved forests and its impact on plant diversity and ecosystem functions in Meghalaya, Northeast India.	PI: K. Upadhaya	Ministry of Environment and Forests, Govt of India. Duration: 3 Yrs (27.06.2013 to 26.06.2016)	Rs. 35.58 lakhs.
2.	Molecular characterization and chemoprofiling of two pharmacologically relevant species of <i>Dendrobium</i> found in Northeast India	PIs: S. Kumaria & S. Sailajan Co-PIs: H. Choudhury, S. Pednekar and S. Menon	Department of Biotechnology, Government of India. Duration: 3yrs (27.01. 2014 to 26.01.2017)	Rs. 26.25 lakhs

Ongoing Projects

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools	PI: S. K. Barik et al. Co-PIs: H. Choudhury, N. Venugopal and M. C. Das	Department of Biotechnology, Ministry of Science and Technology, Government of India. Duration: 5yrs (23.02.2012 to 22.02.2017)	Rs. 103.2985 lakhs

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2.	Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools, ,	PI: N. K. Chrungoo Co-PIs: K. Upadhaya and S. Kumaria	Department of Biotechnology, Ministry of Science and Technology, Government of India. Duration: 5yrs (23.02.2012 to 22.02.2017)	Rs. 82.578 lakhs
3.	Phytochemical profiling, molecular characterization and conservation of <i>Flemingia vestita</i> : Endemic medicinally important plant of Northeast India	PIs: S. Kumaria and S. Shailajan Co-PIs: H. Choudhury, S. Pednekar and S. Menon	Department of Biotechnology, Govt. of India. Duration: 2yrs (2.05.2012 to 1.05.2014)	Rs. 30.39 lakhs
4.	Skill mapping on enhancing employability among final year graduate and post graduate students: (A case study of some selected institutions in Sambalpur and Shillong)	PI: P. Khongji	The Kusuma Foundation, New Delhi in partnership with The Kusuma Trust (UK). Duration: 31.01.2014 to 30.09.2014.	Rs 1.5 Lakh

Projects Completed in Current Year

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	Micropropagation of <i>Nardostachys grandiflora</i> and <i>Malaxis wallichii</i> , two threatened medicinal plants of Northeast India	PI: P. Tandon Co-PIs: S. Kumaria and H. Choudhury	Department of Biotechnology, Ministry of Science and Technology, Govt. of India.	Rs. 28.05 lakhs

Academic Collaborations

Dr. M. M. Singh has collaborative research with Dr. B. Bhuyan, Department of Information Technology, NEHU, Shillong.

Dr. H. Choudhury has collaborative research with (i) Prof. P. Tandon and Dr. S. Kumaria of Department of Botany, NEHU, Shillong on “Micropropagation of *Nardostachys*

grandiflora and *Malaxis wallichii*, two threatened medicinal plants of Northeast India”, (ii) Prof. S.K. Barik, Prof. N. Venugopal and Dr. M. C. Das of Department of Botany, NEHU, Shillong, and Dr. A. Chettri, Sikkim University, Gangtok, Sikkim and Dr. K. K. Singh, GBPIHED (Sikkim Unit) Sikkim on “Preventing extinction and improving conservation

status of threatened plants through application of biotechnological tools”, and (iii) Dr. S. Kumaria of Department of Botany, NEHU, Shillong and Dr. S. Shailajan, Dr. S. Pednekar and Dr. S. Menon of Herbal Research Lab, Ramnarain Ruia College, Mumbai, on (a) “Phytochemical profiling, molecular characterization and conservation of *Flemingia vestita*: Endemic medicinally important plant of Northeast India”, and (b) “Molecular characterization and chemoprofiling of two pharmacologically relevant species of *Dendrobium* found in Northeast India”, and (iv) with Dr. S. Kumaria of Department of Botany, NEHU, Shillong, and Dr. P. Kumari of BSI, Howrah, West Bengal on “Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools”.

Honours/ Awards/ Recognitions

Dr. J. Dutta received “Young Relativist Award” at the *International Conference on Differential Geometry and Relativity* (ICDGR-2013), held on 09 – 11 November at DDU Gorakhpur University, Gorakhpur.

Other Activities

Prof. P. V. Koparkar (i) has been appointed as an executive member of the National Committee constituted to advise on the training in repairs and maintenance of Instruments in North Eastern Region, (ii) has been the Coordinator of the following schemes on behalf of the University pertaining to the XIIth Plan merged scheme: Remedial Coaching Scheme for SC/ST/OBC and Minority students at UG level in the School of Technology and (iii) has been

the Coordinator of the EDUSAT facility provided by CEC, New Delhi, from its installation in the premises of School of Technology, NEHU, Shillong. Mr. Wellson Kharjyomati of Department of BSSS is the technical staff for the above facility, besides his job in the Physics laboratory, in the Department of BSSS.

- Dr. M. M. Singh was invited as a resource person in Refresher Courses at- (i) the Department of Information Technology, NEHU, Shillong, held during July, 2013 and delivered a series of lectures on “Number Theory and its Application in Technology”, and (ii) the Department of Mathematics, NEHU, Shillong, held during April, 2013 and delivered a series of lectures on “Mathematical Logic and its Applications”.
- Dr. H. Choudhury has been invited as Guest Faculty for M. Sc. ‘Plant Molecular Biology Courses’ of Department of Botany, NEHU, Shillong (Academic session August-December, 2013).
- Dr. Phrangstone Khongji is (i) Research Consultant to the Research Agency Impulse NGO Network, Shillong in documenting the main findings of in-depth interviews, Focus Group Discussion, Closed Ended and Secondary Data analysis of the Project entitled “Needs Assessment Study to Identify Gaps in the Legal Empowerment of people in the eight North Eastern States of India”, Funded by National Mission for Empowerment of Women, Department of Justice, Ministry of Law and Justice, GOI and UNDP (Amount = Rs. 60 lakh, to be completed by July 2014). (ii) Programme Officer, NSS Unit, NEHU, (iii) currently undergoing a part time one year fellow program at International Institute for

School of Technology

Population Sciences (IIPS), Mumbai for the session 2013–2014.

Dr. (Mrs.) J. Narayan attended (i) UGC Sponsored “Short term course in MATLAB -I” from 22nd July to 27th July 2013 in ASC-UGC, NEHU Shillong, (ii) Workshop on “Advances in Computational Neuroscience” (ACNE-14) sponsored by INCNE, NBRC, Department of Biotechnology, Government of India, from 24th to 29th March, 2014, at Department of Biomedical Engineering NEHU, Shillong.

Dr. J. Dutta attended (i) International CIMPA Research School and Conference on Fourier Analysis of Groups in Combinatorics, NEHU, Shillong from 18th to 30th November, 2013, (ii) presented invited lecture at 41st KVS Jawaharlal Nehru Science, Maths

and Environment Exhibition, 8th October, 2013, held at Kendriya Vidyalaya NEHU, organized by Regional Kendriya Vidyalaya Sangathan (iv) presented invited lecture in the ‘Workshop for Creating Awareness about Mathematics’ amongst the secondary level students, 27 -29th March, 2014 at DebaKumar Memorial Hall at Bishnupur, Shillong, organized by Shillong Vidyalaya.

Dr. Mrityunjoy Mahato attended a short term training course in MATLAB, conducted by Computer Centre, NEHU, Shillong-793022, from 1st October to 1st November, 2013.

Dr. Munshi Ram attended faculty development program on entrepreneurship development organised by Faculty of Management Studies, BHU, from 16-28 Jan 2014.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Head : Dr. Subhash C. Arya
Telephone : 0364-272-3661
E-mail : hodece@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Associate Professor	Dr. Lairenlakpam Joyprakash Singh	Quantized Semiconductor Structures
	Mr. S. K. Dutta	Digital Electronics and Advanced Communication
	Dr. Subhash C. Arya	Optical Fiber Communication and Opto-Electronics Devices
	Dr. R. Subadar	Theory of Wireless Communication
Assistant Professor	Mr. Juwesh Binong	Communication Engineering
	Mr. Rajkishur Mudoi	Electronics Design and Technology
	Mr. Jaydeep Swarnakar	Control System
	Ms. Fidalizia Pyrtuh	Robotics
	Mr. Asif Ahmed	Mixed Signal CAD tool Development
	Mr. Pankaj Sarkar	Microwave Engineering
	Mr. Nipanka Bora	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, Mixed Signal CAD tool and VLSI Design, Qualitative Reasoning and Context Awareness

Brief Statement of Academic Activities

The Department currently runs three programmes i.e. B.Tech, M.Tech and PhD in ECE Engineering. In B.Tech Electronics & Communication Engineering Department admitted 60 students in vertical entry and 6 in lateral entry, respectively. In M.Tech, 18 students were admitted and 4 candidates got admission in PhD programme. 50 students successfully completed their B.Tech in Electronics & Communication Engineering degree.

School of Technology

Students' Profile

Enrolment Capacity: B.Tech: 66 (60 seats from Vertical and 6 seats from Lateral Entry)
M.Tech: 20 (18 seats +2 seats supernumerary)
PhD: Variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
B.Tech	8	23	29	45	15	7	53	60
M.Tech	5	6	7	12	6	6	12	18
Ph.D.	0	1	0	3	1	1	3	4

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
B.Tech	6	16	28	37	13	9	41	50

Placement of Students

Name of Company	Students placed	Date of joining	Place(City)
Tata Consultancy Services (TCS)	Navin Agrawal	04 August,2013	Guwahati
Hindustan Computers Ltd.	Nunazim Sheik Pranjal Talukdar	August,2013	Guwahati
CMC Ltd(A Tata Enterprise)	Simanta Haloi Bidisha Baisha	October,2013	Guwahati
Tech Mahindra	Namrata Das	October ,2013	Noida
Ericson	Bidyut Bikash Kalita MayankBagaria	December,2013	Guwahati
Aspiring Minds	Rajeev Kumar	March ,2014	Bangalore

Courses Conducted

B.Tech.

Semester II : Basic Electronics, Basic
Electronics Laboratory

Semester III : Electronic Devices and
Circuits, Signals and Systems,

Electrical Network Theory,
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, GP-III
- Semester VII : Introduction VLSI Design, Digital Communication, Data Communication Systems, Information Theory and Coding, VLSI Design Laboratory, Digital Communication Laboratory
- Semester VIII: Satellite and Optical Communication Systems, Mobile Communication, Architecture of Advanced Processors, Nanotechnology

Note: After the adoption of new B.Tech syllabus (2011), it is being implemented phase wise, therefore, presently for I to VI semesters, new

syllabus is implemented and in semester VII and VIII semesters, old B.Tech syllabus (2007) is followed.

M.Tech.

- Semester I : Advanced Engineering Mathematics, VLSI Device & Modelling, Digital IC Design, Microelectronics Technology and IC Fabrication, Lightwave Communication Systems, CAD Tools for VLSI Design Laboratory, Circuit Simulation Laboratory, Seminar-I
- Semester II : Processor Architecture for VLSI, Advanced Digital Signal Processing, Analog IC Design, Advanced Communication, Low Power VLSI Design, ADSP Lab., Seminar-II, General Proficiency

Ph.D.

- Semester I : Mathematical Modelling, Speech Processing, Advanced Optical Communication and Sensors

Seminars/Conferences/Symposia/Extension Programmes etc.

Organized

Dr. Lairenlakpam Joyprakash Singh, Mr. Sushanta Kabir Dutta, and Ms Fidaliza Pyrtuh organized a Workshop on “Multilevel Person Authentication Systems” organized by DeitY, Ministry of Communication & Information Technology, Govt of India, at Department of Electronics & Communication Engineering. School of Technology, NEHU on 28.09.2013.

School of Technology

Dr. Subhash C. Arya has organized an event to celebrate 125th Birth Anniversary of great scientist Sir C. V. Raman on 7th November, 2013 in the School of Technology, NEHU, Shillong.

Attended/Participated

Dr. Lairenlakpam Joyprakash Singh attended and delivered a talk on “Development of Manipuri Phonetic Engine” at the Diamond Jubilee Celebration of IETE, 1953-2013, Zonal Seminar organized by the Institute of Electronics and Telecommunication Engineers [IETE], Imphal Chapter, Imphal on May 3-4, 2013.

Dr. Lairenlakpam Joyprakash Singh attended and gave an invited talk on ”Basics of Computer and Network Topology” at the Annual technical workshop on the awareness of Computer and Telephone Networks, General Post Office [GPO], Shillong – 793 001 on August 19, 2013.

Dr. Lairenlakpam Joyprakash Singh attended and delivered two talks on a). “Speech Technology: Phonetic Engine and It applications”, and b). “Speech-Based Multilevel Authentication System in context to Voice Password” at the AICTE-sponsored *Technical Education Quality Improvement Programme (TEQIP)*, organized at North-Eastern Regional Institute of Technology (NERIST), Nirjuli, Arunachal Pradesh on July 25, 2013.

Dr. Lairenlakpam Joyprakash Singh attended a Workshop in Image and Signal Processing (WISP) – 2013 organized jointly by IIT Guwahati and Centre of Excellence in Signal Processing (CESP), IIIT Hyderabad on 13th and 14th of December 2013 at Indian Institute of Technology (IIT) Guwahati.

Dr. Lairenlakpam Joyprakash Singh attended a Winter School on Speech and Audio Processing (*WiSSAP*) – 2014 organized by International Institute of Information Technology (IIIT), Hyderabad during January 17-20, 2014.

Mr Sushanta Kabir Dutta participated in WISP,2013 at IIT Guwahati during December 13-14, 2013.

Mr. Sushanta Kabir Dutta participated in WISSAP,2014 at IIIT Hyderabad during January 17-20, 2014.

Dr. Subhash C. Arya attended a one day DeitY Workshop on “Multilevel Person Authentication Systems” organized by Department of Electronics & Communication Engineering, NEHU, Shillong on 28th September, 2013

Mr J Binong attended 5th Indian School on Logic and its Applications organized by Indian Logic Society at Tezpur University, Aasam, during 6 –17 January, 2014.

Mr. Rajkishur Mudoi participated in DeitY Workshop on “Multilevel Person Authentication Systems” organized by Department of Electronics & Communication Engineering on 28.09.2013.

Mr Jaydeep Swarnakar participated in DeitY Workshop on “Multilevel Person Authentication Systems” organized by Department of Electronics & Communication Engineering on 28.09.2013.

Mr Jaydeep Swarnakar participated in 15th National Workshop on “Computational Information Processing” organized by Electronics and Communication Sciences Unit Indian Statistical Institute (ISI), Kolkata & Department of Information

Technology, North Eastern Hill University (NEHU), Shillong from 03.12.2013 to 06.12.2013.

Ms Fidaliza Pyrtuh attended the 15th National Workshop on “Computational Information Processing” organized by Electronics and Communication Sciences Unit Indian Statistical Institute (ISI), Kolkata & Department of Information Technology, NEHU at Department of Information Technology, NEHU, Shillong from 03.12.2013 to 06.12.2013.

Mr. Pankaj Sarkar attended and presented two papers in IEEE International Microwave and RF conference (IMaRC-2013), 14-16 Dec 2013, New Delhi, India

Mr. Pankaj Sarkar participated in DeitY Workshop on “Multilevel Person Authentication Systems” organized by Department of Electronics & Communication Engineering, NEHU, Shillong on 28.09.2013

Mr Nipanka Bora participated in DeitY Workshop on “Multilevel Person Authentication Systems” organized by Department of Electronics & Communication Engineering on 28.09.2013.

Publications

Published in India

Arya, S. C., Pyrtuh, F., Swarnakar, S. (2013). Electronics Engineering with Green Features. *Journal of Electronic Design and Technology*, 2: 1-5 (ISSN: 2229-6980)

Published Abroad

Subadar, R. and Singh A. D. (2013). Performance of SC Receiver over TWDP Fading Channels, *IEEE Wireless Communication Letters*, 2: 267 – 270

Singh, A. D. and Subadar, R. (2014). Capacity analysis of M-SC receivers over TWDP fading channels, *AEU - International Journal of Electronics and Communications*, 68: 166–171

Ghatak, R., Pal, M., Sarkar, P., Aditya, A. K. and Poddar, D. R. (2013). Tri-band bandpass filters using modified tri-section stepped impedance resonator with improved selectivity and wide upper stopband. *IET Microwaves, Antennas & Propagation*, 7: 1187-1193.

Sarkar, P., Rakshit, I., Adhikari, S., Pal, M. and Ghatak, R. (2014). A band notch UWB bandpass filter using dual-stub-loaded multimode resonator with embedded spiral resonator *International Journal of Microwave and Wireless Technologies*, 6: 161–166.

Books/Book Chapters/Proceedings

Pyrtuh, F., Jelil, S., Kachari, G., Lairenlakpam, J. S. (2013), Comparative evaluation of feature normalization techniques for voice password based speaker verification, *Proceedings of Fourth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG)*, 2013, IIT, Jodhpur, from 18-21 Dec. 2013, pg: 1 – 4. ISBN: 978-1-4799-1586-6. DOI-10.1109/NCVPRIPG.2013.6776237, Publisher: IEEE.

Laishram, R., Salam, N., Kachari, G., Lairenlakpam, J. S., Dutta, S.K. (2013), Design of Manipuri Keywords Spotting System using HMM, *Proceedings of Fourth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG)*, 2013, IIT, Jodhpur, from 18-21 Dec. 2013, pg: 1 – 3.

- ISBN: 978-1-4799-1586-6. DOI- 10.1109/NCVPRIPG. 2013. 6776249, Publisher: IEEE.
- Rahul, L., Nandakishor, S., Singh, L.J., Dutta, S.K. (2013). Design of Manipuri Keyword Spotting System using HMM, Proceedings of NCVPRIPG 2013 at IIT Jodhpur, 18-21 December, 2013, published in IEEE Proceedings.
- Nandakishor, S, Rahul,L., Dutta, S.K. and Singh, L.J. Development of Manipuri Phonetic engine, Proceedings of two-day Zonal Seminar on 3rd & 4th May, 2013
- Arya, S. C. and Pyrtuh, F., (2013). Smart and Intelligent Library System using Advanced Communication Technology. In: *ICT in Education*, Brinda B. Kharbiryambai (Ed.) EBH Publishers, Guwahati, India: Chapter 18 , pp. 166-172, vol II, 2013. (ISBN No. 9789380261911)
- Binong, J. and Hazarika, S. M. (2013), Completion of qualitative spatio-temporal explanations using context” in: Proceedings of *International Advance Computing Conference (IACC)*, 2013 IEEE 3rd International Conference, pp. 1600 – 1605.
- Sarkar, P., Reddy, B.V K., Pal, M. and Ghatak, R. (2013). “UWB Bandpass Filter with Broad Notch Band and Ultra-wide Upper Stopband”, In: Proceedings of *IEEE International Microwave and RF Conference (IMaRC-2013)*, 14-16 Dec 2013, New Delhi, India.
- Ghatak R., Pal M., Sarkar P. (2013). “Compact Dual Band Bandpass Filter using Bamileke Fractal Architecture Shaped Resonator” in: *Proceedings of IEEE International Microwave and RF Conference (IMaRC-2013)*, 14-16 Dec 2013, New Delhi, India.
- Das M. K., Das, S., Sherpa, T., Sarkar, P. and Ghatak, R. (2014). “UWB Bandpass filter with multiple notch bands and wide upper stopband” in: Proceedings of IETE National Conference on *Materials, Devices and Circuits on Communication Technology (MDCCT-2014)*, pp. 27-30, 7-8 Feb-2014, Burdwan University, West-Bengal. ISBN-978-93-80663-20-3
- Islam I., Boro C., Kumar R., Sarkar P., Pal M. and Ghatak R., “A Dual-Mode Dual band Bandpass Filter with Improved out of Band Performance” in: Proceedings of IETE National Conference on *Materials, Devices and Circuits in Communication Technology (MDCCT-2014)*, pp.31-33, 7-8 Feb-2014, Burdwan University, West-Bengal. ISBN-978-93-80663-20-3
- Sarkar P., Chowdhury V. K., Goud P. S. K., Reddy B V K, Pal M. and Ghatak R., “UWB Bandpass Filter using Multiple Stub Loaded Uniform Impedance Resonator” in: Proceedings of IETE National Conference on *Materials, Devices and Circuits in Communication Technology (MDCCT-2014)*, pp.176-179, 7-8 Feb-2014, Burdwan University, West-Bengal. ISBN-978-93-80663-20-3

Research Projects

Ongoing

Sl. No	Title of Project	PI/Co-PI	Funding Agency	Amount
1	Development of Prosodically Guided Phonetic Engine for Searching Speech Databases in Indian Languages	Dr. L. J. Singh / Mr. S. K. Dutta	Department of Electronics and Information Technology (Deity), Ministry of Communication and Information Technology, Govt. of India, New Delhi.	30,01,500
2	Development and Deployment of Speech based Multi-Level Person Authentication System	Dr. L. J. Singh / Ms. F. Pyrtuh	Department of Electronics and Information Technology (Deity), Ministry of Communication and Information Technology, Govt. of India, New Delhi.	57,03,000
3	NPMASS programme to establish NPMASS MEMS Design Centre (National Centre)	Dr. L. J. Singh (Co-ordinator)	Aeronautical Development Agency (ADA) through IISc. Bangalore in the form of licensed software to design and simulate MEMS and then successful/realizable systems to fabricate at other laboratories with facilities to realize design into physical systems.	-----

Academic Collaborations

Dr. R. Subadar is guiding one Ph. D. Student at North Eastern Regional Institute of Science and Technology, NERIST, Nirjuli, Itanagr, Arunachal Pradesh

Technology (NERIST), Nirjuli, Arunachal Pradesh in the month of January 2014.

Honours/Awards/Recognitions

Dr. Subhash C. Arya is the DRC Committee Member in the Department of ECE, NIT, Meghalaya

Dr. Lairenlakpam Joyprakash Singh had been nominated and became a member (Alumni Representative) of Board of Management (BoM), North-Eastern Regional Institute of

Other Activities

Dr. Rupaban Subadar delivered lecture on “Mobile communication and related research areas on TEQIP FACULTY DEVELOPMENT PROGRAM” Advances in Electronics and Communication”, held in the Department of ECE, NERIST 22nd to 26th July 2013.

Dr. Lairenlakpam Joyprakash Singh gave two lectures on “Signal and Systems” at the Refresher Course organized by the

School of Technology

Department of IT, NEHU, Shillong during July 5-6, 2013.

Dr. Lairenlakpam Joyprakash Singh took two hands-on classes on “Basics of MATLAB” at the Refresher course conducted by the Computer Centre, NEHU, Shillong on July 22, and July 27, 2013.

Dr. Subhash C. Arya delivered lecture on Modeling using Simulink in a Refresher

course on Basics of MATLAB conducted by the Computer Centre, NEHU, Shillong during 22 to 27th July, 2013

Mr. Pankaj Sarkar took *two* hands-on classes on “Basics of MATLAB” at the Refresher course conducted by the Computer Centre, NEHU, Shillong on July 22, and July 27, 2013.

DEPARTMENT OF ENERGY ENGINEERING

Head : Dr. Samrat Paul
Telephone : 0364 – 2725953
E-mail : paulsamrat17@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Assistant Professor	Dr. Samrat Paul	Organic Solar Cell
	Mr. Manmit Saikia	Bioenergy
	Mr. Sanat Das	Propulsion Technology
	Mr. Samar Jyoti Hazarika	Energy Management

Thrust Areas of Research

Solar Photovoltaics, Bioenergy

Brief Statement of Academic Activities

The department is currently offering B.Tech Program in Energy Engineering.

Students' Profile

Enrolment Capacity: B.Tech. Yearly intake – 60

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
B.Tech 1 st Year	11	20	29	52	08	06	54	60

Courses Conducted

The core courses pertaining to basic sciences, humanities and commerce are taught for the B. Tech programme by the Department of Basic Sciences and Social Sciences for the students admitted during 2013-14 sessions. The details of the courses are as below:

Semesters I & II: Professional Communication Skills, Digital English Language Laboratory,

Engineering Mathematics I, Engineering Physics, Engineering Physics Laboratory, 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

School of Technology

Electronics, Basic electronics Laboratory and Engineering Graphics for ECE, IT BME and EE.

Publications

Bharali, P., Saikia, J. P., Paul, S., Konwar, B. K. (2013). Colloidal silver nanoparticles/

rhamnolipid (SNPRL) composite as novel chemotactic antibacterial agent. *International Journal of Biological Macromolecules* 61, 238-242.

DEPARTMENT OF INFORMATION TECHNOLOGY

Head : Dr. Hemanta Kumar Kalita
Telephone : 0364-2723611(O), 9436941213(M)
E-mail : hodit@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Goutam Saha, M.Tech (Calcutta); Ph.D.. (IIT, Kharagpur)	Bioinformatics and image Processing
Associate Professor	Md. Iftekhhar Hussain, M.Tech. (Tezpur)	Rural Wireless Networks, QoS in Computer Networks, Wireless Mesh Networks
	Bubu Bhuyan, M.Tech (Tezpur), Ph.D. (Jadavpur)	Information Security
	Hemanta Kumar Kalita, M.Tech (Tezpur), Ph.D. (Jadavpur)	Performance Engineering, Computer and Network Security, Wireless Sensor Network, Spatial Data Mining, Expert Systems
	Debdatta Kandar, M.Tech (Allahabad Agricultural Institute-Deemed Univ.), Ph.D. (Jadavpur)	Wireless Mobile Communication, Soft Computing, Artificial Intelligence, RADAR Imaging.
Assistant Professor	Swarup Roy, M. Tech. & Ph.D. (Tezpur)	Data mining, Computational Biology
	Arnab Kumar Maji, M.Tech (Bengal Engineering & Science Univ. (Now IEST, Shibpur)	Image Security, E-Commerce
	Sangita Neog, M.Tech. (Tezpur)	Theoretical Computer Science
	Sufal Das, M.Tech. (Tezpur)	Data Mining, Soft Computing
	Subhas Chandra Sahana, M.Tech, (Tezpur)	Cryptography and Network Security
	K. Amitab, M.Tech. (Punjab Engineering College)	Image Processing
	Amitabha Nath, M.Tech. (Tezpur)	Network Security

School of Technology

Thrust Areas of Research

Bioinformatics, Data Mining, Soft Computing, Rural Wireless Networks, QoS in Computer Networks, Wireless Sensor and Mesh Networks, Information & Networks Security, Image Processing, Performance Engineering, Spatial Data Mining, Expert Systems.

Brief Statement of Academic Activities

Currently, the department is conducting the B.Tech., M.Tech. and Ph.D. courses in Information Technology. The M.Tech and Ph.D. courses have been started from the current academic session (2013-14). All faculty members are actively involved in their own research & have published various

papers in reputed peer reviewed and refereed journals.

Currently, the department has two projects from DeitY, Government of India. In the current academic session, the department has organised a UGC sponsored refresher course in Information Technology (Convener: Dr. Swarup Roy) and a workshop on Computational Information Processing (Convener: Arnab Kumar Maji), in collaboration with ECSU, ISI, Kolkata. To provide quality education, department has invited Dr. P.K. Sinha, eminent IEEE fellow & Director, CDAC, Pune for a talk on Distributed Computing. Internationally recognized Professors Dr. Dipti Prasad Mukherjee and Dr. Aditya Bagchi of ISI, Kolkata have also delivered talks on different topics.

Students' Profile

Enrolment Capacity : B.Tech. – 60; M.Tech. – 18; Ph.D. – variable

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
B.Tech.	10	23	27	51	09	13	47	60
M.Tech	2	08	08	13	5	09	09	18
Ph.D.	01	-	03	04	-	0	4	04

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
B.Tech.	9	9	22	30	10	3	37	40

Placement of Students

B.Tech. (IT) students have been successfully placed in the following companies:

- IBM
- Infosys
- TCS

Courses Conducted

Undergraduate (B.Tech.)

Semester-II : Computer System and Programming, Computer System and Programming Lab.

Semester-III : Computer Graphics and Multimedia, Data Structures and Algorithms, Discrete

- Mathematics, Computer Graphics and Multimedia Lab, Data Structure Laboratory, Numerical Programming Laboratory
- Semester-IV : Data Communication, Formal Language and Automata Theory, System Programming, Computer Organization and Architecture, Systems Programming Laboratory, General Proficiency –II
- Semester-V : Information Theory and Coding, Object Oriented Programming and Methodology, Algorithm Analysis and Design, Computer Networks, Object Oriented Programming Laboratory, Computer Networks Laboratory
- Semester-VI : Operating System, Software Engineering, Relational Data Base Management System, Compiler Design, Mobile Computing, Cryptography and Network Security, Artificial Intelligence, Operating System Lab, Database Management System Laboratory, Compiler Design Laboratory, General Proficiency –III
- Semester-VII : Professional Ethics and IPR, Web technology, Distributed System, Soft Computing, Data Mining, Internet and its application Technology, Visual Programming Laboratory, Web technology Laboratory, Minor Project
- Semester-VIII : Internet Protocol, Electronic Commerce, Mobile Computing, Cryptography and Network Security, Bio-Informatics, Major Project
- Postgraduate (M.Tech.)**
- Semester-I : Mathematical Foundations of Information Science, Theory of Computer Science, Computer Architecture and Operating System, Advanced Database System, Cryptography, System Software Laboratory
- Semester-II : Algorithms & Complexity, Advanced Computer Networks, Information Theory and Coding, Data Mining & Data Warehousing, Network Security, Embedded Systems & Applications, Internet Technology Lab
- M.Phil/Ph.D. Courses**
- Course Work: Research Methodology, Design and Analysis of Algorithm, Soft Computing
- Seminars/Conferences/Symposia/Extension Programmes etc.**
- Organized**
- UGC-ASC Refresher Course in Information Technology from 1/7/2013 to 21/7/2013 (Co-ordinator: Dr Swarup Roy).
- National Workshop on Computational Information Processing in collaboration with Indian Statistical Institute, Kolkata from 03/12/2013 to 07/12/2013 (Co-ordinator: Arnab Kumar Maji)

Attended/Participated

Dr. Bubu Bhuyan, Md. Iftekhar Hussain, Dr. D. Kandar, Dr. Swarup Roy, Sangita Neog, Sufal Das, Subhas Sahana, Amitabha Nath, K. Amitab attended a workshop on Computational Information Processing from 3rd to 7th December 2013.

Iftekhar Hussain attended and presented a research paper in the *International Conference–Advances and Innovations in Mobile Computing* (AIMoC 2014), Kolkata, India, Feb. 27- Mar., 2014

Iftekhar Hussain attended and presented a research paper in the *National Conference on Emerging Global Trends in Engineering and Technology* (EGTET 2014), Guwahati, India, during Mar. 7-8, 2014.

Dr. Swarup Roy attended and presented his doctoral thesis at the 3rd International Conference on *Soft Computing for Problem Solving* (SocProS 2013), IIT Roorkee, Greater Noida Campus, India during December 26th to 28th 2013.

Arnab Kumar Maji attended and presented one research paper at 4th *International Conference on Technical and Managerial Innovation in Computing and Communications in Industry and Academia* (IEMCON 2013), held at Kolkata, India during August 23rd-24th, 2013.

Arnab Kumar Maji attended and presented one research paper at the 4th *IEEE International Advance Computing Conference (IACC-2014)*, Gurgaon, India in February 21st-22nd, 2014.

Publications

Research Papers

Published in India

Chowdhury, T., Choudhary, A., Patwari, P., Saha, G. (2013). Rules mining for the diagnosis

of Breast Adenocarcinoma using rough set theory. *International Journal of Advanced Technology & Engineering Research* 3: 14-21.

Ahmed, R., Hussain, I. (2013). An Empirical Analysis on Correlates of Information Technology, Business Process Reengineering and Organizational Culture. *International Journal of Applied Management Research*. 1: 75-99.

Maji, A. K., Jana, S., Pal, R. K. (2013). An Algorithm for Generating only Desired Permutations for Solving Sudoku Puzzle. *Procedia Technology Journal*, 10: 392-399.

Published Abroad

Mandal, S., Saha, G., Pal, R. K. (2013). Reconstruction of Dominant Gene Regulatory Network from Microarray Data Using Rough Set and Bayesian Approach. *Journal of Computer Science and System Biolog*. 6(5):262-270.

Kumar, D., Kandar, D., Sarkar, C. K. (2013). An Effective Approach of Various Routing Mechanisms to Optimize the MANET and VANET Performance. *European Academic Research* 1: 1073-1082.

Maji, A.K., Roy, S., Pal, R.K. (2013). A Novel Algorithmic Approach for Solving Sudoku Puzzle in Guessed Free Manner. *European Academic Research*. 1: 1126-1154.

Maji, A.K., Jana, S., Roy, S., Pal, R.K. (2014). An Exhaustive Study on different Sudoku Solving Techniques, *International Journal of Computer Science Issues* 11: 247-253.

Books/Book Chapters/Proceedings

Hussain, I., Saikia, D.K., Sarma, N., Ahmed, N. (2014). A Fine-tuned Packet Scheduling for WiFi-based Long Distance Networks.

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In: Proceedings of *IEEE Sponsored International Conference–Advances and Innovations in Mobile Computing (AIMoC 2014)*, Kolkata, India, Feb. 27- Mar. 1, p. 97-103.

Roy, S., Das, D., Choudhury, D., Gohain, G., Sharma, R., Bhattacharyya, D.K. (2013). Causality Inference Techniques for *In-Silico* Gene Regulatory Network. In: Proceedings of *Intl Conf. on Machine Intelligence & Knowledge Exploration (MIKE)*, LNAI, Springer Verlag, Vol: 8284, p. 432--443.

Maji, A. K., Jana, S., Roy, S., Pal, R. K. (2013). An Exhaustive Study on Elimination based Sudoku Solver, in Proceedings of the *4th International Conference on Technical and Managerial Innovation in Computing and Communications in Industry and Academia (IEMCON 2013)*, Kolkata, India, Aug. 23-24, p. 234-239.

Maji, A.K., Pal, R. K. (2014). Sudoku Solver using Minigrid based Backtracking. In: Proceedings of the *4th IEEE International Advance Computing Conference (IACC-2014)*, Gurgaon, Feb. 21-22, p. 36-44.

Maji, A. K. , Roy, S. , Pal, R. K. (2014). A Novel Steganographic Scheme using Sudoku, In: Proceedings of *IEEE International Conference on Electrical Information and Communication Technology (ICEICT 2013)*, KUET, Khulna, Bangladesh, Feb. 13-15, 2014, p. 116-121.

Roy, S., Bhattacharyya, D.K., Kalita, J.K. (2013). A New Gene Co-expression Networking Technique for *In-silico* Expression Data, extended abstract, Proceedings of *10th Bioinformatics and Biotechnology Symposium (BIOT 2013)*, Brigham Young University, USA, December 2013.

Research Projects

Ongoing

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1	QoS provisioning in Wifi based Long Distance Wireless Networks for Hilly Terrain Areas	I. Hussain, S. K. Dutta	DeitY, GoI	Rs. 67,08,000/-

Completed during Year

Sl. No.	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	Development of New Algorithm for Variable Key Cryptosystem	Dr. Bubu Bhuyan/ Dr. Swarup Roy	Department of Information Technology, GOI.	Rs.23,78,400/-

Honours/Awards/Recognitions

Prof. Goutam Saha selected as one of the member of the Sixth Reconstituted Task Force Committee on Bioinformatics, Computational and System Biology (BCSB) of DBT, Govt. of India. He is also nominated as a member of the Governing body of the RIST engineering college by the University.

Dr. Bubu Bhuyan selected as a member of Board of Research of National Institute of Technology, Arunachal Pradesh. He has been nominated as a Special Invitee to the meetings of Academic Council of Tezpur University, Tezpur for a period of two years with effect from 21.11.2013.

Dr. Swarup Roy received *Best Doctoral Thesis* award from IIT-Roorkee during Intl. Conf. SocProS-2013. He is an invited member of IDES- Institute of Doctors, Engineers and Scientists. He is also appointed as a reviewer of prestigious International Journals namely, IEEE/ ACM Trans. on Computational Biology & Bioinformatics, Computer Methods and Programs in Biomedicine (Elsevier) and Network Modelling Analysis in Health Informatics and Bioinformatics (Springer).

Arnab Kumar Maji becomes professional lifetime member of Association of Computing Machinery (ACM).

Other Activities

Under the Chairmanship of Prof. Goutam Saha BCA (Bachelor of Computer Application) the curriculum for the affiliated colleges under North-Eastern Hill University, Meghalaya was revised.

Under the chairmanship of Dr. Hemanta Kumar Kalita, the B.Sc. (Computer Science), curriculum for the affiliated colleges under North-Eastern Hill University, Meghalaya was revised.

Dr. Swarup Roy delivered lectures as resource person at the 23rd, 24th and 25th UGC-ASC Orientation Program 2013 and UGC Special Summer School on “Recent Advances in Natural Sciences and Social Sciences”.

Dr. Swarup Roy acted as Co-ordinator of UGC-ASC Refresher course in Information Technology from 1/7/2013 to 21/7/2013.

Arnab Kumar Maji acted as Convener of National Workshop on Computational Information Processing in collaboration with Indian Statistical Institute, Kolkata from 03/12/2013 to 07/12/2013.

The Department for the first time has been chosen as a Centre and hence takes pride in conducting GATE 2014 Examination in its lab infrastructure. TATA Consultancy Services Ltd (TCS) for the first time conducted BE OffCampus Examination for its students in the Department. In the year 2013-14 through a Facilities Agreement between NEHU and TCS, Department has also earned revenue of Rs Two Lakhs (approx) for University by conducting various online examinations on non-working days.

Dr. P.K. Sinha, distinguished IEEE fellow & Director, CDAC, Pune has delivered a talk on “Distributed Computing” at the Department on 23/09/2013.

DEPARTMENT OF COMPUTER APPLICATIONS (TURA CAMPUS)

Teacher-In-Charge : Mr. Ansuman Kumar
Telephone : +919089458911 / 03651-221407
E-mail : computerapplication.nehu@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Assistant Professor	Mr. Ansuman Kumar MCA, M.Tech (IT).	Web Services, Computer Networks
	Dr. Anindya Halder MCA, Ph.D. (Engineering)	Pattern Recognition, Soft Computing
	Mr. Rubul Kumar Bania MCA, M.Tech (IT)	Data mining

About the Department

The Department of Computer Applications established in the year of 2012, under the School of Technology, NEHU, funded by MHRD, Govt. of India, with a prime focus to impart quality, career/research-oriented course in computer application to produce best possible manpower in the field. The Department is presently offering three years Master of Computer Application programme since 2013. The core part of the curriculum embodies theoretical and practical knowledge basic to the industry/academic/research. In addition to the core courses the programme

also incorporates current and emerging technologies relevant to the field of computer application. To tackle theoretical and real life problems, the syllabus has been designed by balancing various core, specialized and elective courses. The syllabus also includes several practical papers and challenging projects. The curriculum is also enriched with management papers to give an exposure to student in the field of corporate management.

Thrust Areas of Research

Machine Learning, Pattern Recognition, and Data mining, Bioinformatics, Remote Sensing Image Analysis.

Students' Profile

Enrolment Capacity: MCA programme – 12

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
MCA	NIL	9	3	8	4	8	4	12

Courses Conducted

MCA Master of Computer Applications

Semester I : Digital Logic Design, Programming & Problem Solving through C, Organisational Behaviour, 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.

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organised

Dr. Anindya Halder collaborated as Program Committee Member with Indian Statistical Institute, Kolkata to organize the 5th International Conference on *Pattern Recognition and Machine Intelligence* (PReMI-13) organized by Machine Intelligence Unit (MIU), Indian Statistical Institute, Kolkata.

Attended/Participated

Dr. Anindya Halder

Participated and presented seminar titled “Recognizing Patterns” in the 45th Orientation Programme organized by UGC-Academic Staff College, Jadavpur University (JU) during June 17- July 13, 2013 at JU Salt Lake Campus, Kolkata.

Participated and presented paper titled “Domain adaptation for land-cover map

generation from multi-temporal remotely sensed images” in the 15th Workshop on Computational Information Processing organized by the ECSU, Indian Statistical Institute (ISI) Kolkata and Dept of IT, NEHU, Shillong, during December 03-06, 2013 at NEHU, Shillong.

Delivered invited talk “Semi-supervised land use map generation from remotely sensed images” in UGC sponsored National Seminar on “Contemporary Issues on Environment & Development in India and Adjacent Countries” organized by Kalyani Mahavidyalaya, Kalyani, West Bengal held during September 20-21, 2013.

Delivered invited talk “Introduction to Latex: A document preparation system” in UGC sponsored National Workshop on “ICT in Higher Education” organized by P.B. College, Gauripur, Dhubri, Assam held during September 28-29, 2013.

Delivered invited talk “Introduction to Latex: A document preparation system” in short term course on Research Methodology, organized by Dept. of RDAP, NEHU in collaboration with UGC Academic Staff College, NEHU, Meghalaya held during March 24-29, 2014 at NEHU, Tura Campus.

Mr. Ansuman Kumar

Attended the *Overall of Stock Exchange*, a National Symposium organized by the Department of Management, North-Eastern Hill University, in collaboration with National Stock Exchange of India Ltd., Kolkata, India. April, 2013.

Mr. Rubul Kumar Bania

Participated in the 15th Workshop on Computational Information Processing organized by the ECSU, Indian Statistical

Institute (ISI) Kolkata and Dept of IT, NEHU, Shillong, during December 03-06, 2013 at NEHU, Shillong, Meghalaya.

In Proceedings of the *1st International Conference on Automation, Control, Energy and Systems*. IEEE Computer Society Press.

Publications

Published in India

Halder, A. (2013), Semi-supervised landuse map generation from remotely sensed images of Kolkata, In Proceedings of the UGC sponsored *National Seminar on Contemporary Issues on Environment & Development in India and Adjacent Countries*. S. Majumdar (ed.), ISBN:978-81-92847-2-9, p. 82-90 .

Halder, A., Dey, S., Kumar, A. (2014), Active learning using fuzzy k-NN for cancer classification from microarray gene expression data, In Proceedings of the *National Workshop on Advances in Communication and Computing (WACC)* .

Published Abroad

Halder, A., Ghosh, S., and Ghosh, A. (2013), Aggregation pheromone metaphor for semi-supervised classification". *Pattern Recognition*, 46: 2239-2248.

Halder, A., Mishra, S. (2014), Semi-supervised fuzzy K-NN for cancer classification from microarray gene expression data,

Academic Collaborations

Dr. Anindya Halder performed collaborative research and published research articles with (i) Center for Soft Computing Research, Indian Statistical Institute, Kolkata, (ii) Dept. of Computer Science & Engineering, Jadavpur University, Kolkata and (iii) Dept. of Computer Science & Engineering, Academy of Technology, Aedco Nagar, Hooghly, West Bengal, India.

Other Activities

Dr. Anindya Halder

Member of Computer Science Teachers Association (CSTA), New York, founded by Association for Computing Machinery (ACM). Membership No: 1343757.

Member of International Association of Engineers (IAENG), Hong Kong, Membership No: 141351.

Acted as Reviewer in the IEEE Transactions on Geosciences and Remote Sensing Letters.

Acted as Reviewer in the IET Computer Vision.

DEPARTMENT OF NANOTECHNOLOGY

Head : Dr. L. Robindro Singh
Telephone : 0364 – 2723901/2723902
E-mail : robidnro001@yahoo.co.in/lrsingh@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Assistant Professor	Dr. L. R. Singh, Ph.D.	Material Science and Nanomaterials
	Mr. D. Pyngrope, M.Tech.	Nanoelectronics, Nanomaterials and Devices

Thrust Areas of Research

Optical and electrical properties of Nanoparticles, CNT, and Nanoelectronics.

Students' Profile

Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
Ph.D.	1	1		2	0	1	1	2

Seminars/Conferences/Symposia/ Extension Programmes etc.

Attended/Participated

Dr. L. Robindro Singh attended and presented a paper on “Bifunctional Hybrid Nanocomposite $\text{LaPO}_4:5\text{Eu}@\text{Fe}_3\text{O}_4$: Synthesis And Characterization” in the *3rd International Conference on Advanced Nanomaterials and Nanotechnology ICANN-2013*, held on December 1-3, 2013, at Indian Institute of Technology Guwahati.

Dr. L. Robindra Singh attended and presented a paper in the National School on Sustainable

Polymer and *First Symposium on Advances in Sustainable Polymers*, ASP-14, January 6-11, 2014, Indian Institute of Technology Guwahati.

Mr. Davidson Pyngrope attended and presented a paper on Luminescence studies on $\text{Y}_2\text{O}_3:\text{Eu}$ nanoparticles prepared by polyol method in the *3rd International Conference on Advanced Nanomaterials and Nanotechnology ICANN-2013*, December 1-3, 2013, Indian Institute of Technology Guwahati.

Research Projects

Ongoing

Sl. No.	Title of Project	PI/ Co-PI	Funding Agency	Amount
1.	Study particle size effect and role of sensitizers in the luminescence emission of nanoparticle oxide phosphors	PI	UGC	6 Lakhs
2	Preparation And Study On Effect/ Role Of Sensitizers On The Photoluminescence Properties Of Lanthanide Doped Gd_2O_3 And Y_2O_3 Nanocrystals: Dispersion In Organic Solvents	PI	DST	23 Lakhs
3	Characterization and investigation of luminescence properties of Zn^{2+} and sulphate based nanophosphors doped with lanthanide and metal ions for the feasibility on luminescence dosimetry application	PI		25 Lakhs

Academic Collaborations

The Department has academic collaboration with Bhabha Atomic Resrach Centre, Mumbai

and also with the Department of Physics, Manipur University.

IX

ADMINISTRATIVE DEPARTMENT

COLLEGE DEVELOPMENT COUNCIL

Director : Dr. C. R. Diengdoh
Telephone : 0364-2721201, 1202, 1203 (O)
E-mail : dircdc@nehu.ac.in; cdcnehu@gmail.com

The College Development Council is an intermediary between the University and the affiliated colleges admitted to its privileges. It plans for the integrated development of the affiliated colleges and provides them with the required 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 in the colleges. It provides a forum for taking necessary steps for the continuous promotion, coordination and raising the standards of education in colleges.

The Council is the Principal Advisory Body to the Executive Council and the Academic Council in all matters relating to affiliation. It is constituted every two years and has representatives comprising of university officials, faculty members, a representative of the State Government, principals and teachers of affiliated colleges.

The University has 64 affiliated Colleges, of which 32 are permanently affiliated and 32 are provisionally affiliated. The University also considers affiliating Minority Educational

Institutions located anywhere in the country as per the provisions of the National Commission for Minority Educational Institutions (NCMEI) Act.

The Council is the liaison body for the UGC in guiding the affiliated colleges recognized under Section 2(f) and 12(B) of UGC Act, 1956 with all the procedural formalities to send proposals to the UGC for obtaining funds under different schemes for the overall development of colleges, including minor/major research projects, the faculty development programme for college teachers pursuing M.Phil./Ph.D. etc.

The College Development Council nominates the NEHU representatives from among the academicians, to represent the University on the Governing Bodies/Advisory Committees of the affiliated colleges.

The Colleges visited by various Inspection Teams during the year 2013-14 are

1. Sankardev College, Shillong
2. Williamnagar Govt. College, Williamnagar, East Garo Hills

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3. Mawlai Presbyterian College, Shillong
 4. Durama College, Rongkhon, West Garo Hills
 5. Mendipathar College, Mendipathar, East Garo Hills
 6. Bormanik College, Upper Shillong
 7. Shillong College, Shillong
 8. Goodwill College, Shillong
 9. St. Dominic's College, Shillong
 10. Phukan Memorial College, Dalu, West Garo Hills
 11. Bissau College, Shillong
 12. Khadar Doloi Law College, Jowai, Jaintia Hills
 13. Jaintia Eastern College, Khliehriat, East Jaintia Hills
 14. St. Mary's College, Shillong
 15. Shillong College, Shillong
 16. NEIGRIHMS, Mawdiang-diang, Shillong
 17. Metas Adventist College, Surat, Gujarat
 18. Lady Keane College, Shillong
 19. North-East Adventist College, Thadlaskein, Jaintia Hills
 20. Nongstoin College, Nongstoin, West Khasi Hills
 21. Regional Institute of Science & Technology, Baridua, Ri-Bhoi
 22. Christian Academy College, Shillong
 23. Khrawsing Christian College, Mawngap, Mawphlang, East Khasi Hills
 24. Nongtalang College, Nongtalang, West Jaintia Hills
 25. Thomas Jones Synod College, Jowai, West Jaintia Hills
 26. NEIGRIHMS, College of Nursing, Mawdiang-diang, Shillong
 27. B. B. S. College, Shillong
 28. Mawsynram Border Area College, Mawsynram, East Khasi Hills
 29. Mairang Presbyterian Science College, Mairang, West Khasi Hills
 30. Morning Star College, Shillong
 31. Loyola College, Williamnagar, East Garo Hills
 32. Synod College, Shillong
 33. Union Christian College, Umiam Khwan, Ri Bhoi.
- Actions taken on Affiliation Matters during the year 2013-14**
- For considering grant of affiliation under the following categories are as follows:
- I. Provisional Affiliation to New Subject(s)/ Course(s) of study in an Affiliated College/ Institution:** 5 Colleges : 1) Thomas Jones Synod College, Jowai, West Jaintia Hills. 2) Loyola College, Williamnagar, East Garo Hills. 3) Synod College, Shillong. 4) Union Christian College, Umiam Khwan, Ri Bhoi. 5) Williamnagar Govt. College, Williamnagar, East Garo Hills.
 - II. Renewal of Provisional Affiliation :** 30 Colleges
 - III. Permanent Affiliation of Subject(s)/ Course(s) of study in permanently affiliated colleges :** Lady Keane College, Shillong

Administrative Department

IV. Permission to start New Subject(s)/ Course(s) of study in an Affiliated College : 4 Colleges : 1) Loyola College, Williamnagar, East Garo Hills. 2) Sohra Govt. College, Sohra, East Khasi Hills. 3) Shillong College, Shillong. 4) Lady Keane College, Shillong.

Two Colleges were reassessed and reaccredited by NAAC, Bangalore :

1. St. Mary's College of Teacher Education, Shillong with an 'A' Grade.
2. Women's College, Shillong with a 'B' Grade.

In 2013, an All India Survey on Higher Education (AISHE), conducted by the MHRD, Department of Higher Education, providing a data base on higher learning for the year 2011-12 was successfully uploaded for the University on the AISHE portal. The CDC also monitors the uploading of All India Survey on Higher Education (AISHE) data of the affiliated colleges.

In the year under report, the College Development Council has been instrumental in the convening of several Committees related to the implementation of the Semester System at the UG level in the affiliated Colleges under NEHU.

EXAMINATION DEPARTMENT

Controller of Examinations : Dr. L. Cajee
Telephone : 0364 2721211 / 1212, 9774026782 (mob)
Email : offcoe@nehu.ac.in

- During the Academic Year 2013, the Examination Department had effectively declared all Under Graduate results well in advance which have facilitated the students aspiring for admission to Post Graduate Programme of the University and outside as well. The Department has initiated measures for digitization of Tabulation and Grade Cards for all Post Graduate Programmes and Under Graduate Programmes respectively serviced by the University. In order declare all Undergraduate 2013 results expeditiously, the Examination Department had contemplated an innovative design of conducting Central Evaluation of answer scripts at various identified Evaluation Centres and as a result of which, substantial number of results of various streams have been declared within a record time.
- The Examination Department is mandated to operate round the year on matters pertaining to Under Graduate, Post Graduate and Professional Courses examinations including award of MPhil and PhD Degrees of various disciplines serviced by the University. With the increase in the number of affiliated colleges and Post Graduate Programme Departments, the Examination Department is gearing up with all logistical support with minimum manpower to meet the challenges ahead.
- Under the Choice Based Credit System, evaluation of answer scripts of Post Graduate Programme are currently been carried out internally. This has resulted in timely declaration of all PG results.
- The University has adopted the MPhil and PhD Course Work Examinations under the UGC guidelines and the examinations for the same have since been conducted in the month of February 2013 for which the results based on the UGC's 7 Point Scale have been declared.
- The Examination Department has successfully declared the results of final year MBBS examinations of MS serviced at NEIGHRIMS including that of MS & MD Degrees.
- Under the directive from the UGC, the University has initiated steps for introduction of the semester system at its Under Graduate level which is to be implemented from the academic session of 2015. In order to facilitate successful implementation of the semester system at the under graduate level, the Examination Department is making special effort with regard to infrastructural development by way of procurement of furniture, computers etc., so as to provide necessary logistical support to all concerned expected to be involved in the process of Evaluation and scrutiny of answer scripts concurrently with the Annual System of examinations.
- The Examination Department has been receiving substantial numbers of request

Administrative Department

from external agencies for verification and authentication of certificates / documents of this University in respect of students of this University seeking employment. The Department has made special efforts to respond to the requests expeditiously. Efforts are also being made to procure unique stationery along with security features to avoid faking and tampering of Certificates and Grade Cards.

- In deference to the austerity measures undertaken by the Government of India,

Examination Department as initiated steps on curtailment of expenditure with regard to UG and PG Examinations. The Examination Department also taking adequate steps to digitize all confidential records maintained by it since inception.

- The number of candidates receiving their degrees at the Twenty First Convocation on 22nd October 2013 in which Hon'ble President of India graced the occasion as the Chief Guest.

<u>Course</u>	<u>In Person</u>	<u>In Absentia</u>	<u>Total</u>
PhD	91	23	114
M.Phil	12	08	20
PG Degrees	505	445	950
Bachelor's Degrees	1849	5431	7280
Total	2452	5912	8364

- The Department has recently initiated steps towards organizing Workshops with respect to paper setting, evaluation and timely declaration of results with various stakeholders.
- The enrolment of students and results during the year under report are given at Annexure – A,B,C,D & E respectively.

FINANCE DEPARTMENT

Finance Officer : N. G. Marwein
Telephone : 2721021 (O)
Email : fo@nehu.ac.in

The Grant, Income and Expenditure account of the University for the year 2013-14 is as follows:

Receipt	Rs	Payment	Rs
Balance B/F	928800332		
Non-plan grants from UGC.	1140307000	Salary and wages	980996225
Interest Non-plan grants.		Pension	208389090
Plan/UPE.	350000000	Revenue	140518448
Interest Plan/UPE grants.	24422426	Capital	28120923
Ministry of women and Child development: <i>Interest only</i>	118243	Salary and wages	62706199
Ministry of Social justice: <i>Interest only</i>	355945	Revenue	27619201
Other special assistance scheme and sponsored programme.	57826834	Capital	599058601
TOTAL	2501830780	Other special assistance:	
		capital	26734594
		Revenue	65442412
		TOTAL	2139585694
		Balance carried forward	362245086
Internal receipt	76083679		
Interest on S.B. Account of other funds.	23073076		

PLANNING DEPARTMENT

Deputy Registrar : Mr. L. M. K. Lyngrah
Telephone : 272 1063
Email : lmklyngrah@nehu.ac.in

In the year 1978, North Eastern Hill University created the Planning Department, with the objectives, for designing and implementing as well, the vision plan, for the development in toto, of the university, in the field of Academic. Infrastructure and welfare. It is the central unit for budgetary planning of the university. On receipt of budgetary plan proposals from different Schools, Departments Centre etc duly scrutinize and finalize the fund allocations are use to be made to individual Schools, department, centres in specific and the whole university in general.

Out of the Proposal for XII Five Year Plan (2012-17) amounting to Rs.405, 44 lakhs submitted to UGC, New Delhi an amount of Rs.134 crores has been approved by the commission under the current plan period. During the year 2012-13 an amount of Rs.1132 lakhs has been released as the first installment against XII Five year Plan period grants. For the year 2013-14, the UGC has granted an amount of Rs.35 crores as next installment toward General Development Assistance under this XII Plan period, as per the details below:

(Rs. In Lakhs)

XII Plan Allocation	Name of the item	Head of Account	Grant already sanctioned	Grant now being sanctioned	Total grant
13400.00	Grants-in-aid General (Recurring) (31)	General I A (iv) (31)	200.62	1262.63	1463.25
		SC Component I A (v) (31)	84.38	200.00	284.38
		ST Component I A (vi) (31)	84.37	100.00	184.37
		Total	369.37	1562.63	1932.00
	Grants in aid salary (36)	General I A (iv) (36)	69.38	250.00	319.38
		SC Component I A (v) (36)	42.19	50.00	92.19
		ST Component I A (vi) (36)	42.18	46.25	88.43
		Total	153.75	346.25	500.00
	Grants of Capital Assets (Non-recurring) (35)	General I A (iv) (35)	296.00	1291.12	1587.12
		SC Component I A (v) (35)	156.44	200.00	356.44
		ST Component I A (vi) (35)	156.44	100.00	256.44
		Total	608.88	1591.12	2200.00
	Grand Total		1132.00	3500.00	4632.00

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It may be noted that the total Budget of the University for the XII Plan period has been reduced by one third of the proposed budget. This has impacted adversely on the General Development of the University, especially the

newly established departments in the School of Technology. For this reason, the University is writing to the UGC for additional grant specifically for the new Departments under the School of Technology.

BIOINFORMATICS CENTRE

Faculty

Thrust Areas of Research

Brief Statement of Academic Activities

community in the far-flung northeastern region of the country and to augmenting their research activities through information inputs. Rich in great variety of flora and fauna, the North-Eastern part of the country has been identified as one of the bio-diversity 'hotspots'. As a part of the National Bioinformatics Network, the Centre's mandate is Biodiversity Informatics, serving as an information base in various areas of Biosciences. The most important area of research relevant to the North-Eastern region being biodiversity, the facilities of the Centre are extensively used for preparation of databases. Besides, extensive work on parasite genomics, proteomics and metabolomics, evolutionary

bioinformatics and phylogeny have also been initiated, apart from providing support to all disciplines of research in biotechnology.

Publications

Published in India

Published Abroad

- Kehei, M., Kumaria, S., Tandon, P. and Ramchiary, N. (2014). Biotechnological advances on in vitro Capsaicinoids biosynthesis in Capsicum: A review. *Phytochem. Rev.* DOI 10.1007/s11101-014-9344-6
- Devi, S. P., Kumaria, S. Rao, S. R. and Tandon, P. (2014). Single primer amplification reaction (SPAR) methods reveal subsequent increase in genetic variations in micropropagated plants of *Nepenthes khasiana* Hook. f. maintained for three consecutive regenerations. *Gene* 01/2014; DOI:10.1016/j.gene.2014.01.028
- Singh, M., Roy, B., Tandon, V. and Chaturvedi, R. (2013). Extracts of dedifferentiated cultures of *Spilanthesacmella* Murr. possess antioxidant and anthelmintic properties and hold promise as an alternative source of herbal medicine. *Plant Biosystems* DOI:10.1080/11263504.2013.766278
- Kumar, S., Biswal, D. K. and Tandon, V. (2013). In-silico analysis of Caspase-3 and -7 proteases from blood-parasitic *Schistosoma* species (Trematoda) and their human host. *Bioinformation* 9:456-463
- Biswal, D.K., Ghatani, S., Shylla, J.A., Sahu, R., Mullapudi, N., Bhattacharya, A. Tandon, V. (2013). An integrated pipeline for next generation sequencing and annotation of the complete mitochondrial genome of the giant intestinal fluke, *Fasciolopsisbuski* 1: e207.
- Choudhury, H., and Tandon, P. (2013). Non-destructive assessment of growth performance of embryogenic suspension culture of *Pinuskesiya* (Royleex.Gord.) in shake-flask and self-designed bubble bioreactor and successful regeneration of plantlets from the culture systems. *Proc. Natl. Acad. Sci, India B Biol. Sci.* DOI 10.1007/s40011 -013-0253-z
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- Hajong, S., Kumaria, S. and Tandon, P. (2013). Comparative study of key phosphorus and nitrogen metabolizing enzymes in mycorrhizal and non-mycorrhizal plants of *Dendrobium chrysanthum* Wall. ex Lindl. *Acta Physiol. Plant*. DOI 10.1007/s11738-013-1268-z.
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Books/Book Chapter/Proceedings

- Shakti Kumar, D.K. Biswal, S. Aravamudhan and V. Tandon “CAVS (Computer-aided Virtual Screening): A command line program for automated virtual screening of large set ligands against multiple protein targets”. *Proceedings of International Conference on Health, Environment and Industrial Biotechnology* (ICHEIB) BioSangam-2013, 21-23 November 2013, Allahabad, Edited by Shivesh Sharma, McGraw Hill Education (India) New Delhi, ISBN(13):978-9-33-290137-7, 2013: 288-291.

Funds Received from Agencies Including UGC/NEHU

New Research Projects

Sl. No	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	DBT NER Twinning Project on Next Generation Sequencing (NGS)-based de novo Assembly of Expressed Transcripts and Genome Information of Orchids in North-East India	PI: Prof. Pramod Tandon Co-PI: Devendra Kumar Biswal Co-PI: Dr. D. Sundar, IIT, Delhi	Department of Bio-technology, Govt. of India	INR 273.05 Lakhs

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Ongoing Research Projects

No	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	Next Generation Sequencing and Genome Information of Parasite Biodiversity of Medico-Veterinary Significance in North-East India”	PI: Prof. Veena Tandon PI (Collaborating Institution): Prof. Alok Bhattacharya, School of Life Sciences, Jawaharlal Nehru University, New Delhi Co-PI: Mr. Devendra Kumar Biswal	Dept. of Bio-technology, Govt. of India	Rs. 78.80 Lakhs
2.	Establishment of Portal for Indian Bioresource Information Network	PI: Prof. Veena Tandon Co-PI: Mr. Devendra Kumar Biswal	National Bioresources Development Board, DBT, GOI	Rs. 31.84 Lakhs

Research Projects Completed during Year

No	Title of Project	PI/Co-PI	Funding Agency	Amount
1.	North-East Parasite Information and Analysis Centre (NEPIAC): an in silico approach”	PI: Prof. Veena Tandon Co-PI: S. Ramachandran, Institute of Genomics and Integrative Biology, New Delhi Co-PI: Mr. Devendra Kumar Biswal	Dept. of Information Technology, GOI	Rs. 130.14 Lakhs

Seminar/Conference/Symposium/Extension Programme etc.

Organized

Organized DIT-sponsored workshop on “*Recent Trends in Genome Analysis*” and launched the NEPIAC database developed in-house on the public domain during September 24-27, 2012.

Workshop on “*Next Generation Sequencing: Bioinformatics and Data Analysis*” during June 17-21, 2013

Attended

The Information Officer participated in the National Symposium on “*National Symposium on Bioinformatics: Role of Bioinformatics in biodiversity management*” on February 2nd, 2013 at NBRI, Lucknow and DBT BTISnet- Coordinator’s Meeting during February 03-04, 2013 CSIR-CIMAP, Lucknow

The Deputy Coordinator and Information Officer participated in the 19th DeLCON

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Nodal Officers meeting and Workshop, organized at IIT, Guwahati during October 28-29, 2013.

Meet and Symposium at Assam Agricultural University, Silchar, during MONTH 10-12, 2013

Biswal DK, Ghatani S, Shylla JA, Sahu R, Mullapudi N, Bhattacharya A, Tandon V. (2013) An integrated pipeline for next generation sequencing and annotation of the complete mitochondrial genome of the giant intestinal fluke, *Fasciolopsis buski* (Lankester, 1857) Looss, 1899. Oral presentation at INCOB 2013, Taicang, China

Biswal, D. K., Marbaniang V. J, Tandon, P. (2013). Age estimation for Asian *Cymbidium* (Orchidaceae: Epidendroideae) with implementation of fossil data calibration using molecular markers (ITS2 & matK) implying phylogeographic inference. Oral presentation at INCOB 2013, Taicang, China

The Deputy Coordinator presented a Keynote Address in the NEBINET Coordinator's

Academic Collaborations

- a) Collaborative project with JNU, New Delhi on "Next Generation Sequencing and Genome Information of Parasite Biodiversity of medico-veterinary significance in North-East India" to Veena Tandon (PI), Devendra Kumar Biswal (Co-PI) and Alok Bhattacharjee (PI), JNU, New Delhi under DBT NER Twinning Programme (2011-14) vide sanction no. BT/48/NE/TBP/2010 dated March 14, 2011.
- b) Establishment of Portal for Indian Bioresource Information Network (IBIN) – Veena Tandon (PI), Devendra Kumar Biswal (Co-PI) under National Bioresources Development Board (NBDB, DBT) (2011-2014) vide sanction no. BT/PR14571/NDB/52/187/2010 dated March 04, 2011.

CAMPUS DEVELOPMENT DEPARTMENT

University Engineer : A. M. Kharmawphlang
Telephone : 0364-272 2061
Email : cddue@nehu.ac.in

Sl. No.	Name of work	Allocated amount (in lakhs)	Completion cost (in lakhs)	Remarks
1.	Augmentation of Water Supply system of Zone B of Permanent Campus, NEHU, Shillong. S.H.: 1. Carrying out geophysical investigation for ground water prospects and drilling of a deep tube well for augmentation of the water supply system. S.H.: 2: laying of pumping main and sub main pipe lines, construction of a Pump House, supply and installation of the submersible pump for the deep tube well and other allied electrical works.	28.93	28.35	
2.	Augmentation of Water Supply system at Permanent Camus, NEHU, Shillong	96.95	Under progress	
3.	Construction of 2 (Two) Research Scholar's Hostels building at Permanent Campus, NEHU, Shillong. – One each for Boys and Girls (Civil, Electrical, Plumbing and furnishings)	440.50	406.23	
4.	Construction of Cluster of Class Room for Sciences and other than Sciences (Civil, Plumbing, Approach Road and furnishing)	2940.00	2677.44	Furnishing works are under progress
5.	Construction of one unit of L Type quarters at NEHU Tura Campus, Tura (Electrical works)	2.32	In progress	
6.	Construction of two units of Type III Quarters at NEHU Tura Campus, (Electrical works)	3.64	Under progress	
7.	Construction of Two Units of Type III Quarters at NEHU Tura Campus, Tura (Electrical works)	2.45	Under progress	

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8.	Construction of Administrative Building Phase I at NEHU Tura Campus (Electrical works)	24.01	Under progress	
9.	Improvement of football field at Permanent Campus, NEHU, Shillong	94.52	Under progress	
10.	Construction of Guest House Building near Borjhar Airport at Guwahati	625.84	Under progress	
11.	Construction of Cultural Park Building under NEICOD at Permanent Campus, NEHU, Shillong			Completed
12.	Construction of Auditorium Building under NEICOD at Permanent Campus, NEHU, Shillong			Completed
13.	Construction of MBA Boys' Hostel at Tura Campus, NEHU, Tura	419.15	In Progress	
14.	Providing Back up Power Supply for DG Set for School of Life Science, NEHU, Shillong	35.34		Completed

COMPUTER CENTRE

Head : Professor Asit K. Chandra
Telephone : 0364 2722622
E-mail : akchandra@nehu.ac.in

Faculty/Staff

Designation	Name and Qualification	Specialization
Professor	Prof. A. K. Chandra, Ph.D. (Burdwan Univ.)	Computational Chemistry
Associate Professor	Dr. T. K. Sinha, Ph.D. (NEHU)	Physics (Computational)
Senior System Analyst	P. P. Dey, B.Tech. (REC Warangal)	Programming
System Analyst	Ms. B. Rynjah, B.Tech. (JNTU College of Engineering, Kakinada), MBA (IIT Chennai) Mr. H. Kharshiing, B.Tech. (Jawaharlal Nehru Engineering College)	SPSS, Programming Programming, HPC
Computer Operator	Ms. Nirmala Dayanandan, B.Sc,B.Ed & DCA	Accounts
Data Entry Operator	P. Kharlukhi, BCA	Hardware Networking

Overview of Facilities and Services

(i) Providing computational facility to faculty members, research scholars and students of the University; (ii) Developing and maintaining software programs developed for in-house use; (iii) Assisting the Examination Section NEHU in Automation; (iv) Conducting training programmes in computer related subjects (both hardware and software).

2. MATLAB
3. C /C++Programming
4. Webpage Designing
5. Photoshop
6. Windows & MS-Office
7. Computer HW & Networking

Brief Statement of Academic Activities

We conduct Short Term Computer Courses in the following:

1. SPSS

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Students' Profile

Intake Capacity: Total 80 for Short Term Courses

The following Short Term Courses were conducted during April 2013-14:

Course Name	SC	ST	OBC	Gen	Male	Female	From Meghalaya	From Outside
Hardware & Networking	0	10	0	0	6	4	10	-
MATLAB	2	3	2	1	7	1	8	-
Windows & MS-Office	3	21	0	2	8	16	24	-
Photoshop	0	9	2	7	8	10	18	-
Data Analysis Using SPSS	1	10	1	8	6	13	19	-
Web Designing	1	5	1	5	10	2	12	-
Total								91

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized

The Centre organized and arranged lectures in a Short Term Course in Matlab from 22 to 27 July, 2013, organized jointly with Academic Staff College NEHU.

Prof.. A. K. Chandra was Co-Coordinator in organizing a Workshop on *Advances in Computational Neuroscience* (ACNS-14) from 24 to 29 March, 2014.

Attended/Participated

Dr T. K. Sinha and Sachinandan Chanda (Department of Mathematics, Shillong Polytechnic) presented a paper entitled "Selection-rejection in ecological system" in the 26th International Conference of Jangjeon Mathematical Society (South Korea), held in August 1-4, 2013, at

Acharya Institute of Graduate Studies, Bangalore.

Dr. T. K. Sinha chaired one Session of the 1st IEEE Sponsored International Conference in Computer Science (ICETACS-2013) 14 September, 2013, at Siloam, Umiam, Meghalaya.

Publications

Abroad

Sinha, T. K. and Chanda, S. (2014). Selection-Rejection in Ecological System. *International Journal of Pure and Applied Mathematical Sciences* 7: 121-127.

Sinha, T. K. and Chanda, S. (2014). Stair like Structures in the Hysteresis Profile of Anti-Ferromagnets with Extensive Interactions. *Global Journal of Pure and Applied Mathematical Sciences*. 1:43-46

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Sinha, T. K. and Chanda, S. (2014) Selection–Rejection Methodology in Hysteresis. *Global Journal of Pure and Applied Mathematical Sciences*. 1:47-51

Sinha, T. K. and Chanda, S. (2014) Solitons in DNA Lattice and its Genetic Implications *International Journal of Pure and Applied Mathematical Sciences*.1:155-162.

Sinha, T. K. and Chanda, S. (2014) Coupled Quadratic Map Picture of an Ecological System. *International Journal of Pure and Applied Mathematical Sciences*, 1: 113-120.

Research Projects

A Project entitled “Continuous Monitoring of Railway Track Integrity” was submitted by Dr. T. K. Sinha to DIT at IIT Guwahati on 31-Jan-2013

Other Activities

Dr. T. K. Sinha, Mr. P. P. Dey, Mr. H. Kharshiing and Mr. P. Kharlukhi delivered lectures in various Orientation Programmes/ Short Term Courses in Research Methodology at Academic Staff College, NEHU, Shillong.

The Centre conducted Course Work in Computer for Ph.D. students of the Hindi Department, NEHU.

Computer Centre maintains software of Salary Section and Fund Section, NEHU, and assists loan data processing for Finance Section, NEHU.

The Centre is actively involved in Automated Tabulation work, printing of tabulation sheets, Marksheets Generation Software for Postgraduate programmes, and the development of a web portal for the Examinations Section, NEHU.

The Centre assists Research Scholars in data analysis using SPSS/ MS-Excel etc.

The Centre helps Research Scholars in using the HPC Param Shreesh for heavy duty computational work.

The Centre generated a revenue of Rs.91,000/- (Rupees Ninety One Thousand Only) during 2013-14.

NEHU DATA AND VOICE NETWORK (NDVN)

Administrative in-charge	: Professor P. Nongkynrih
Telephone number	: (0364) 272-2831
NDVN Facility numbers	: 272-6195, 272-6196, 272-6197 and 255-1297
E-mail	: admin@nehu.ac.in
Technical Officer	: Mr. Ivan Lyngdoh
System Analyst	: Mr. S. Nongkhlaw

The NEHU Data and Voice Network (NDVN) Facility, commissioned in 2003 as VSAT Facility, continues to provide data (Internet) and voice (telephony) access to all academic and administrative departments.

New Implementations for 2013-2014.

- The rooms and buildings of the new departments belonging to the School of Technology have been provided both voice and data connections.
- An additional Media Gateway 450 for telephone access to new P-Type Quarter has been installed. This provides telephone connections to Type IV and Type III quarters.

Existing Components Providing Continual Services

1. Data Network

- a. The National Knowledge Network (NKN) of 1 Gbps 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.
- b. Data Network is available to all Departments, Centres and Administrative building with a capacity of over 3000 connections.
- c. NEHU Mail Server with nehu.ac.in domain, provides email facility to all faculty and officers of NEHU. The Mail Server is also functioning as an authentication server for WI-FI with LDAP service.
- d. All servers and applications which include DNS, DHCP Web Servers, Mail Servers, Proxy Servers, Gateway filtering for Viruses and Spams, Network Monitoring software and DHCP, run on HP Blade Chassis C7000 with 9 active Blade Servers. The other older Tower servers (IBM) are being utilized for voice IP-PBX management and backup.
- e. The Extreme Summit Black Diamond 8806 core switch provides connectivity, routing, vlans access to and from all layers 2 (L2) switches in all departments.
- f. All Departments are connected to the core switch with the Extreme Summit X150-24t & Extreme Summit X150-48t L2 switches with gigabit uplinks.

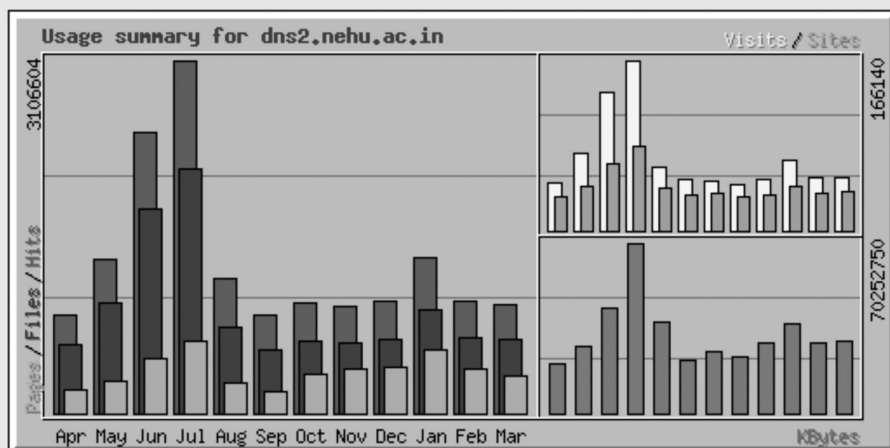
- g. Data/Internet connections to most departments having computer laboratory facilities is available with 30 numbers of 48 port L2 HP Procurve Switches.
- h. A Firewall with Unified Threat Management, Cyberoam1000i provides gateway protection with Antivirus, Antispyware and AntiSpam subscriptions.
- i. The Intranet and Internet access of the Digital Repository under the Library Digitalization Project of UPE is being provided through the network infrastructure of NDVN.
- j. The e-governance project with the University Management Software (UMS) runs on the Intranet network infrastructure of NDVN.
- k. Limited WI-FI access is provided to each department of the University including Multi-Use Convention Centre and Guest House.

2. Voice Network

- a. Voice Network is extended to all Departments, Centres, Administrative building and most residences quarters with a capacity of over 1500 telephone extensions.
- b. The Avaya S8730 server with G650 Media-gateways located in NDVN, Administrative Building and Political Science Dept. along with G450 Media-gateways located in the School of Technology and Old Guest House provides TDM backbone and IP enable switch architecture for the voice/telephony network. All the Media-gateways are connected to the server over IP and registered to the Server-over-IP-Back-Bone.
- c. The 2 Mbps PRI and 2 Mbps Level-DID leased lines from BSNL integrated with the IP –PBX Server provides incoming and outgoing telephone calls facilities to/from the network.

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Website Data.



Summary by Month										
Month	Daily Avg				Monthly Totals					
	Hits	Files	Pages	Visits	Sites	KBytes	Visits	Pages	Files	Hits
Mar 2014	30747	21205	10441	1684	38639	29610474	52229	323690	657384	953175
Feb 2014	35037	23666	13781	1849	36071	29075365	51778	385876	662672	981042
Jan 2014	44000	29389	18191	2209	42615	36719254	68486	563927	911089	1364023
Dec 2013	31832	20941	12902	1597	34270	29207253	49536	399988	649189	986796
Nov 2013	31131	20474	13211	1505	33427	23326367	45164	396347	614234	933934
Oct 2013	31405	20697	11138	1542	35836	25365168	47804	345279	641626	973577
Sep 2013	29052	18553	6502	1647	34864	21564500	49418	195064	556605	871571
Aug 2013	38178	24601	8859	1985	41109	37852220	61561	274644	762647	1183544
Jul 2013	100213	69565	20566	5359	82888	70252750	166140	637572	2156530	3106604
Jun 2013	82342	59926	15983	4468	64969	43282447	134048	479506	1797788	2470289
May 2013	43849	31475	9048	2407	42870	27676458	74618	280496	975742	1359327
Apr 2013	28912	20137	7114	1567	33613	20184801	47019	213440	604131	867367
Totals						394117057	847801	4495829	10989637	16051249

DATA AND VOICE NETWORK (TURA CAMPUS)

System Analyst (contract) : Mr. Deramun Ch Momin
Email Id : deramunmomin@gmail.com

The NEHU Tura Data and Voice Network (NDVN) Facility was commissioned in 2012 and continues to provide data (Internet) and voice (telephony) access to all academic and administrative departments.

New Implementations for 2013-2014

- Acquired Internet leased line connection of 16 mbps for Permanent Campus from BSNL and 4 mbps for Chandmary Campus in progress.
- Extension of LAN and IP Phone installation to newly constructed Administrative Building in Permanent Campus.
- Installation of IBM Server X3500M4 for Library Management System

Existing Components Providing Continual Services

1. Data Network

- a. The Extreme Summit Black Diamond 8810 core switch provides

connectivity with VLANtaggingto all the Departments layers 2 switches.

- b. All Departments are connected to the core switch with the Extreme Summit X150-24t L2 switches to corresponding VLAN with gigabit uplinks.
- c. Data network is secured with the Firewall Unified Threat Management Cyberoam300i which provides Web and Application Filter, Intrusion Prevention System (IPS), Gateway Anti-virus and Gateway Anti-Spam.

2. Voice Network

- a. The Avaya Server 8300 with G450 Media-gateways provide Core IP Base PBX Voice network
- b. IP Phones are installed in all the Departments.

STUDENTS' WELFARE CELL

Dean Students' Welfare : Dr. S. N. Lamare
Telephone : (0364) 272 1181
E-mail : dsw@nehu.ac.in

The Office of the Dean of Students' Welfare continued to serve 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 foreign students.

Residence in Hostels

In the Shillong Campus, the numbers of Students who were given hostel accommodation during the year 2013-2014 are as follows:

		ST	SC	GEN	OBC	Total
R. S.	Men	40	10	42	16	108
	Women	52	1	41	10	104
P. G.	Men	158	3	13	5	179
	Women	293	6	34	17	350
U. G.	Men	96	25	64	17	202
	Women	31	6	18	3	58
Foreign Students	Men			12		12
	Women			2		2
TOTAL		670	51	226	68	1015

Study Tours

The office coordinated the study tours of the following twelve academic Departments from Shillong Campus: (a) Philosophy; (b) Chemistry;

(c) Adult & Continuing Education; (d) Hindi; (e) English; (f) Sociology; (g) Economics; (h) History; (i) Commerce; (j) Education; (k) Political Science; and (l) Linguistics.

Additional Students' Activities

In order that the term of the NEHUSU and of the Academic Calendar coincide, Elections to the Union Executive Committee were held on 7th November, 2013, and the new office-bearers took charge soon thereafter. The DSW office supported the Annual Event of NEHUSU to showcase the talents of students of the university. The Varsity Week was held from 27 March 2014 to 16 April, 2014. Other events organized by the NEHUSU were the Parting Social, Freshers' Social and Advance Christmas Service. This office has also recently taken up a "Self-Defence Training" Programme for women students of the University.

Scholarships/Aid Fund

During 2013-14, 86 P.G. Students (including ST/SC) were awarded NEHU Post-graduate Merit

Scholarships @ Rs. 4200/- per student per year. 88 students (including ST/SC) were selected for the Students Aid Fund @ Rs. 3000/- per student for Post-graduate, and @ Rs. 4000/- per student for Under-graduate.

Fellowships to the M. Phil/Ph. D Students

During 2013-14, of the 504 (429 Ph.D. and 75 M.Phil) Research Scholars selected/provisionally selected for award of the UGC Non-NET fellowship, 22 Ph.D. scholars resigned essentially to avail of a better fellowship, thus bringing the number of awardees to 482. Each Ph.D. scholar was awarded Rs. 8000/- per month, while Rs. 5000/- per month was awarded to M. Phil scholars, along with Contingency for Ph.D. scholars @ 10,000/- p.a. for Sciences & Rs. 8000/- p.a. for Humanities & Social Sciences.

HEALTH CENTRE (SHILLONG)

The NEHU Health Centre, Permanent Campus, NEHU, caters to the health needs of teaching, non-teaching staff along with their dependants and the students as well. The Health Centre has the following staff members at present:

Chief Medical Officer: Dr. M. Marwein

Senior Medical Officer: Dr. C. Mukhim

Medical Officer: Dr. M. B. G. Momin

Medical Officer (Contractual basis): Dr. I. Hussain

The following facilities are available at the Health Centre:

- 1) **Consultation:** The Medical Officers are available for consultation at fixed hours as well as for emergency consultation outside duty hours.
- 2) **Pharmacy:** The required medicines are purchased from the wholesale suppliers and stocked 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 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:** We have 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 sport tournaments organized by the University.

HEALTH CENTRE (TURA)

Senior Medical Officer-in-charge : Dr. (Mrs.) Tangsil Dilme Ch. Momin
Telephone : 03651-224773 (O)
Mobile : 98625 74128

The Health Centre at the University Campus in Tura ministers to the health needs of the teaching and non-teaching staff, along with their dependents, as well as the students and scholars on campus. The Centre has Dr. Mrs. T. D. Ch. Momin as Senior Medical Officer and has an honorary visiting Medical Officer Dr. A. K. Pal Choudhury (a retired state government doctor). One peon serves on a permanent basis. The services of Staff Nurse, Pharmacist and Laboratory Technician are expected by contract appointment after a few months.

Consultation: The Senior Medical Officer is available for consultation in the Health

Centre at fixed hours, as well as for emergency consultations and advice outside office hours.

Outpatient Clinic: During morning hours, the Outpatient Clinic operates at the Permanent Campus (Chasingre) and during evening hours at the Chandmari campus.

Ambulance: Ambulance services are provided for transporting patients to Clinics/Hospitals.

Emergency and In-Patient Treatment: Patients requiring in-patient treatment are referred to hospitals/specialists within Tura and thereafter outside Tura depending upon need.

Sports: First Aid is provided at sports tournaments organised by the University.

HINDI CELL

Hindi Officer : Sri Rajendra Kumar Ram
Telephone. : 0364-2721331
Email : hindiofficer@nehu.ac.in

In pursuance of the Official Language Policy of the Government of India and to promote the progressive use of Rajbhasha Hindi, the Hindi Cell was established in this University. An Official Language Implementation Committee is already constituted in the University for proper implementation of Rajbhasha Policy and to review the same from time to time.

During the year, a Hindi Training Programme for the employees of this University was conducted under the aegis of the Government of India, Hindi Teaching Scheme, Shillong Centre. After completion of different courses, viz., Prabodh, Praveen and Pragya, cash awards were given to the successful employees and after passing the last course i.e. Pragya, the successful employees 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 Ministry of Home Affairs, Govt. of India. Besides this, three Hindi Workshops were conducted for University employees at the Shillong Campus as mandated by the Ministry of Home, Government of India.

During this period, the Hindi Cell also conducted Hindi Divas in both the Campuses, in the month of September, 2013, in which several Hindi programmes i.e. Hindi extempore speech, Handwriting, Noting & Drafting competitions were conducted. The winners of these competitions were awarded cash prizes with Certificate on the valedictory function.

During the year 2013-2014, Sri R. K. Ram, Hindi Officer, attended a One Day "Official Language Conference and Prize Distribution for Eastern Region & North East Region" on 18th April, 2013 in Kolkata under the aegis of Department of Official Language, Ministry of Home Affairs, Government of India, New Delhi.

The Hindi Cell is going to publish an In House Magazine for the University bearing the name "NEHU JYOTI" in Hindi shortly.

INTERNAL QUALITY ASSURANCE CELL

Under XI Plan, the University Grants Commission made a policy decision that all higher educational institutions may establish Internal Quality Assurance Cell (IQAC) to maintain the momentum of quality consciousness. The IQAC is conceived as a mechanism to build and ensure a quality culture at the institutional level. The IQAC is meant for planning, guiding and monitoring the Quality Assurance (QA) and Quality Enhancement (QE) activities of the institution. Accordingly, the IQAC, NEHU, aims at systematization of the efforts and measures of the University towards academic excellence. The following are the functions performed by the IQAC, NEHU during 2012-13.

1. The Coordinator IQAC participated in the Workshop for NAAC assessors held during February 2014 at NAAC, Bengaluru.
2. The IQAC enriched the database on the Journal Impact Factor in different disciplines. It also assisted the teachers in assessing their API and enhancing their information regarding the Journal Impact factor and Academic Performance Index (API) wherever such assistance was required.
3. The IQAC assisted the University in preliminary screening of applications made by the candidates for consideration for promotion under the Career Advancement Scheme (CAS) as an ongoing process.
4. The AQARs of the University for the years 2009-10, 2010-11 and 2012-13 were prepared.

CENTRAL LIBRARY

University Librarian : Dr. (Mrs.) I. Majaw (Retired 28th February 2014)
Phone : 364 272 1251
E-mail : fsumer@nehu.ac.in (In-Charge)

I. Introduction

The NEHU Central Library alongside its basic role to acquire, process and provide library services to its academic fraternity has also been focusing on other important areas to improve library services. It was realized that the manpower especially belonging to the lower cadre in the library needs to be trained and equip with formal skills to ensure that they are able to carry out their daily duties efficiently. To attain the objective, the central library took a bold initiative and relentlessly approached the Indian Association of Special Libraries and Information Centre (IASLIC), Kolkata for support. As a result, during the latter part of the year, this objective was achieved when the university approved and supported the commencement of a 4 months certificate course in library and information science. This course was successfully conducted by IASLIC, Kolkata

in collaboration with NEHU Central Library. Lower cadre staff working in NEHU Central Library and the affiliated colleges were imparted with skills related with library organization and housekeeping work and were trained with hands-on experience on the library management software, Barcoding and RFID solutions by the library officers and senior library staff of the NEHU Central Library. Based on their performance on the examination conducted at the end of the course, 29 successful candidates were awarded certificates by Prof. B. Myrboh, Pro Vice Chancellor, NEHU, Shillong Campus, who was the Chief Guest during the valedictory function held on 5th March 2014 in the NEHU Central Library. Prof. P.K. Panigrahi, General Secretary, IASLIC, Kolkata was also present during the function along with Dr. (Mrs.) I. Majaw former University Librarian, NEHU, and other dignitaries including library officers and staff of the library.

II. Progress During the Period

Library Budget

(Rs. in Lacs)

1.	Books	Non-Plan	10.00	10.72
		Plan	-	
		Hindi & General Books	0.72	
2.	Periodical	Sciences including Subscription to e-resources for School of Technology	80.00	111.88
		Humanities, Social Sciences etc.	19.28	
		Other Grant(Plan)	12.60	

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3	Common Services & General Charges” and ‘Common Capital Charges’ : Digitization	Non-Plan	5.00	5.00
4.	Recurring Expenditures & Contingency - Other Charges	Non Plan	4.75	4.75
Grand Total				132.35

Library Collection	:	2,74,751 Vols.
Data Bank (Government Publications, Reports & Ref. Books)	:	11,434 Vols.
Books added during the Year	:	1,122 Vols.

School-wise Break-Up

Social Sciences	Eco., Mngs. & Lib. Sc	Human & Env. Studies	Huma-nities	Edu-cation	Physical Sciences	Life Sciences	Tech-nology	Others (Thesis)	Total
230	78	12	175	111	59	35	150	272	1122

(IV) Periodical Subscription (Print)

(i) Foreign Journals:	129
(ii) Indian Journals :	130
Total :	259

3. Library User’s Enrolment (including usage of e-resources and other online services)

(I) Enrollment during the year	
(i) Under Graduate Students	: 1147
(ii) Post Graduate Students	: 1978
(iii) Research Scholars/MPhil	: 164
(iv) University Teachers	: 23
(v) Non-Teaching Staff	: 10
(vi) Technical Staff	: 06
(vii) Visiting Lecturer/Professors	: 01
(viii) Others (Including College Teachers)	: 06
Total No. of Registered Members	: 3335

(II) Daily Average No. of Books issued/return/renewal (including Law Dept.):	10,863
(III) Daily Average No. of users who availed consultation services :	7

Central Services

(IV)	Usage of Journals, Back Volumes & Theses:	
	Students, Research Scholars & Others	: 1782 per month
(IV)	Average internet users	: 732 per month
(V)	Photocopying services	: 48,782 copies*
(VI)	Printing Services	: 1643 copies*
(VIII)	NEHU usage of UGC INFONET Digital Library Consortium e-journals depicted by total articles downloaded during the period	: 40,000 articles

* till July '13 after which photocopying including printing services were outsource

4. Initiatives During the Period

(i) *Awareness/ Orientation/Internship Program for students and research scholars*

With the commencement of the new academic session 2013-14, the Documentation Section of the Library co-ordinated an awareness-cum-orientation programme during the August-September 2013 for the newly-enrolled students and research scholars of the university. The objective of this programme was to educate the users on how to acquire relevant information available either in print or electronic format. Officers of the library shared their experiences as resource persons on certain topics as part of the programme.

(ii) *Exposure to e-resources across the academic fraternity*

On invitation from various academic departments, the Library Officers delivered several presentations on scholarly e-resources and other subscription resources as part of the

course work of MPhil and PhD scholars. The Computer Unit of the Library from time to time provides assistance along with relevant information to the academic community of the university regarding access and usage of various e-resources available in NEHU. The Documentation Section widely publicized and support the online services available on indiastat.com from time to time.

(iii) *Subscription to e-journals, e-books and online databases*

The following subscribed online databases and e-journals were renewed during the period:

(a) Biological Abstracts (b) IndiaStat (c) OECD Education iLibrary (Online & Archive) (d) Library and Information Abstracts (e) IEL Online

5. Important Activities/Steps Accomplished Towards Improving Library Services

a. The library regularly attend to library members/visitors/scholars from other colleges/universities/institutions/ government departments from the

region and other parts of the country who visited the library to consult the available resources.

- b. The Documentation Officer was the Coordinator of the 4-month Certificate Course in Library & Information Science conducted by IASLIC, Kolkata in collaboration with NEHU Central Library from 28/10/2013 to 5/3/2014. The course targeted the lower cadre library staff working in NEHU and the affiliated colleges with the aim to improve their proficiency in providing better library services.
- c. During the period from October 2013 to 31st March 2014, a total of 483 book titles comprising of valuable, rare and out of copyright Books of the Private and Kaula Collection available in the library were Digitized i.e. scanned, edited, processed and uploaded into the digital repository by the Digitization Lab, NEHU Central Library.

6. Academic Contributions

Teaching & Research

(i) *Papers presented or published during the period*

- Dr. Lalhmachhuana, Documentation Officer, presented a paper in the *International Conference on Information Literacy in the Knowledge Society* organized by the Department of Library & Information Science, NEHU, Shillong, in collaboration with ICSSR, New Delhi during 6th – 8th March 2014.
- Shri Manoj Rana, Assistant Librarian published co-authored articles entitled “Job satisfaction in libraries: a review of literature” and “Personality Traits of

Library Professionals” in *Indian Journal of Experimentation and Innovation in Education (IJEIE)*, 2(5) and 2(6) respectively.

- Shri B. Sten, Information Scientist presented a paper entitled “Accessing and usage of electronic resources by the PhD Scholars of the North-Eastern Hill University, Shillong and Nagaland University, Department of Zoology and Botany” in the *International Conference on Information Literacy in the Knowledge Society* organized by the Department of Library & Information Science, NEHU, Shillong, in collaboration with ICSSR, New Delhi during 6th – 8th March 2014.

(ii) *Invitation as Resource Persons/Expert in Orientation Programme, Refresher Course, Committees etc.*

- Dr. (Mrs.) I. Majaw, University Librarian was invited as Resource Person and delivered lectures during the 4 months “*Certificate Course in Library and Information Science*” (28th Oct., 2013 to 15th Feb., 2014) at NEHU Central Library, Shillong, organized by NEHU Central Library in collaboration with Indian Association of Special Libraries and Information Centre, Kolkata, West Bengal.
- Shri F.R. Sumer, Deputy Librarian (a) delivered a total of 8 lectures during the 23rd, 24th, 25th & 27th Orientation Program conducted by UGC-Academic Staff College, NEHU during 3rd May 2013, 7th June 2013, 4th November 2013 and 20th March 2014 respectively. (b) Invited as an expert during 31st July to 3rd August 2013 to Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh assist a committee with

Central Services

- the opening, evaluating and finalizing of e-tenders related with the implementation of the RFID solution in the library. (c) Nominated by the Vice Chancellor, NEHU during the period to provide expert advice to the Raj Bhavan Secretariat related with the proposed introduction of ICT infrastructure in the Raj Bhavan library. (d) Nominated by the librarian to attend the Central University Libraries meeting organized by INFLIBNET Centre, Gandhinagar, on 27 September 2013 in Bangalore. (e) Attended, on invitation, DelCON Meeting in IIT Guwahati during 28-29 October 2013. (f) Nominated by Vice Chancellor as a member of the inspection team which visited Union Christian College, Umiam Khwan on 11th November 2013 related with affiliation matters. (g) Invited as a Resource Person for National Workshop and Training Programme on “Management of Libraries and Information Centers in Digital Era” (25th to 27th March 2014) at RGIIM, Shillong, Meghalaya, India organized by RGIIM, Shillong in collaboration with National Library Kolkata, Ministry of Culture, Govt. of India. (h) Delivered lectures during the 4 months “*Certificate Course in Library and Information Science*” (28th Oct., 2013 to 15th Feb., 2014) at NEHU Central Library, Shillong, Meghalaya, India organized by organized by NEHU Central Library in collaboration with Indian Association of Special Libraries and Information Centre, Kolkata, West Bengal.
- Dr. Lalhmachhuana, Documentation Officer delivered a lecture-cum-demonstration on Web Resources/UGC-Infonet to the M.Phil./Ph.D. scholars of the Department of English, NEHU, Shillong as part of the course work.
 - Shri Manoj Rana, Assistant Librarian was (a) invited as a Resource Person for 20th (16th May 2012 to 12th June 2012) Orientation Programme at NEHU, Shillong, organized by Academic Staff College, NEHU. (b) Invited as Resource Person for Refresher Course in English (18th March to 7th April 2013 and 10th March to 30th March 2014) at Academic Staff College, NEHU, Shillong, organized by Department of English, NEHU. (c) Invited as one of the experts of the university’s inspection team to NEGRIHMS, Mawdiangdiang, Shillong on 16th of July, 2012. (d) Was invited as subject expert for appointment of Library and Information Science Assistant in North Eastern Police Academy, Barapani, Shillong, Meghalaya held on 25th February 2014. (e) Delivered lectures during the 4 months “*Certificate Course in Library and Information Science*” (28th Oct., 2013 to 15th Feb., 2014) at NEHU Central Library, Shillong, organized by organized by NEHU Central Library in collaboration with Indian Association of Special Libraries and Information Centre, Kolkata, West Bengal. (f) Invited as Resource Person for National Workshop and Training Programme on “*Management of Libraries and Information Centers in Digital Era*” (25th to 27th March 2014) at RGIIM, Shillong, Meghalaya, India organized by RGIIM, Shillong in collaboration with National Library Kolkata, Ministry of Culture, Govt. of India.
 - Shri J. P. Nongbri, Assistant Librarian (Circulation Section) and Shri A. Blah, Assistant Librarian (Periodical Section) delivered lectures during the 4 month *Certificate Course in Library and Information Science* (28th Oct., 2013 to

15th Feb., 2014) at NEHU Central Library, Shillong, organized by NEHU Central Library in collaboration with Indian Association of Special Libraries and Information Centre, Kolkata, West Bengal.

- Shri B. Sten, Information Scientist was (a) invited as a Resource Person during the National Workshop and Training Programme on *Management of Libraries and Information Centers in Digital Era* (25th to 27th March 2014) at RGIIM, Shillong, Meghalaya, India organized by RGIIM, Shillong, in collaboration with National Library Kolkata, Ministry of Culture, Govt. of India. (b) delivered lectures during the four month *Certificate Course in Library and Information Science* (28th Oct., 2013 to 15th Feb., 2014) at NEHU Central Library, Shillong, organized by NEHU Central Library in collaboration with Indian Association of Special Libraries and Information Centre, Kolkata, West Bengal.
- Other senior staff of the library viz. Shri B.J.D. Wahlang, STA, Smti A.M. Giri, SPA, Shri E. Suting, SPA, Shri R. Rynjah, SPA, Smti A. Rajee, JLA, Smti N.L. Ranee, JLA, Shri C. R. Cajee. LDC, Shri P. Kuki, LDC and Shri T. Khongsai, DEO, shared their work experience and assisted the resource persons with the practical works which were conducted at the various sections and units of the library to fulfil the requirement of the 4 month *Certificate Course in Library and Information Science* (28th Oct., 2013 to 15th Feb., 2014) at NEHU Central Library, Shillong, organized by NEHU Central Library in collaboration with Indian Association of Special Libraries and Information Centre, Kolkata, West Bengal.

(iii) *As participants in workshops, seminars, trainings, meetings etc.*

Shri F.R. Sumer, Deputy Librarian, participated as a delegate and was invited as a Sessional Chairperson in the *International Conference on Information Literacy in the Knowledge Society* organized by the Department of Library & Information Science, NEHU, Shillong in collaboration with ICSSR, New Delhi during 6 – 8 March 2014.

Dr. Lalmachhuana, Documentation Officer, participated as a delegate and was invited as a Sessional Chairperson in the *International Conference on Information Literacy in the Knowledge Society* organized by the Department of Library & Information Science, NEHU, Shillong in collaboration with ICSSR, New Delhi during 6 – 8 March 2014.

Shri Manoj Rana, participated as a delegate, was invited as a sessional co-chairperson and presented a paper entitled “An Overview of Six Sigma and its application in Library and Information Services” in the *International Conference on Information Literacy in the Knowledge Society* organized by Department of Library & Information Science, NEHU, in collaboration with ICSSR, New Delhi from 6 - 8 March, 2014, at NEHU, Shillong.

Shri B. Sten, Information Scientist, (a) attended hands-on training in Koha – an open source integrated library management software at Firstray Consulting, Pune, from 30 July to 3 August 2013. (b) attended hands-on training on Radio Frequency Identification Devices (RFID) at Beegees Computers Pvt. Ltd. Mumbai from 5 to 7 August 2013.

Central Services

7. Other Information

(i) Library staff strength (Sanctioned Posts)

Librarian	=	1 (vacant)
Deputy Librarian	=	1
Assistant Librarian	=	4 (1 vacant)
Documentation Officer	=	1
Information Scientist	=	1
Other staff	=	42(9 vacant)

(Includes PA, SPA, JLA, Technical, secretarial)

(ii) Revenue generated during the year by the Library

Reprography services

Photocopying	: Rs.48,782
Printing :	: Rs. 1,643
Total above	: Rs 50,425/-*
Consultation fees	: Rs 8,300/-
Overdue fines(including Law Library)	: Rs 74,526/-
Total	: Rs 1,33,251/-

**till July '13 after which photocopying including printing services were outsourced*

(i) Special achievements

Mrs. S. Mitra, Professional Assistant who retired from service on 30th July

2013 received the North-Eastern Hill University “Appreciation Award” during the Foundation Day Celebration of the University.

CENTRAL LIBRARY

During the period 2013-2014, the Campus Library achieved outstanding progress in its collection. The Library system continued to offer services like Reference, Circulation, Bibliographic Services, OPAC,

online access to e-journals & databases and Internet browsing facilities to the students, Research Scholars, Faculty members and non-teaching staff of the campus. The Annual Report is detailed below:-

1. Allocation of Books and Periodicals during 2013-2014 (Non-Plan)

(i) Book Grant	= Rs. 3.00 Lakhs
(ii) Periodicals Subscription	= Rs. 6.00 Lakhs
(iii) Library Stationary & others	= Rs. 1.00 Lakhs

Total	= Rs. 10.00 lakhs
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2. Collection Development:

(a) *Total Book Collection up to 31.03.2014 = 23,315 Vols.*

(i) Purchased = 22,550

(ii) Gifted = 765

(b) *Books Added During the Year (2013- 2014) = 1235 Vols.*

(i) Purchased = 1197

(ii) Gifted = 38

(c) *No. of Journals Subscribed: = 140*

(i) Indian Journals = 112

(ii) Foreign Journals = 18

3. Library Membership Statistics:

(i) Students of 9(nine) PG Departments = 322

(ii) M. Phil = 09

(iii) Ph.D Scholars = 77

(iv) Faculty Members = 55

Central Services

(v) Guest Lecturers = 22

(vi) Non- Teaching Staff = 31

.....
Total = 516

4. Library Circulation Statistics:

(i) Books Issued = 13,163

(ii) Books Returned = 12,490

(iii) Consulted = 38,757

(iv) Internet Users (Average) = 35 per day

5. Statistics of Technical and Library Automation Units:

(i) Books Classified (2013-14) = 1235

(ii) Bar-coded = 19520 Vols.

(This includes both new books and retro-conversion)

6. Statistics of Reprographic Unit of Campus Library:

Total Number of Xerox Exposures = 32,438

7. Revenue Collected during the financial year 2013-14

(i) Reprography Services = Rs. 16,078/-

(ii) Overdue fines = Rs. 4,880/-

Total = Rs. 20,958/-

8. Activities by Library Staff:

(i) The Campus is still having a Library in Chandmari for the four new departments where Dr. A.K. Mondal, Sr. Prof. Asstt. is looking after the functioning of the library.

(ii) Library is using LibSys-4 software, for its computerized house-keeping operations. All the books are in the computer processed database and they are available on OPAC. Barcoding and computer processed Spine Label producing work of Campus and Management Library is in progress.

(iii) Library provided Orientation Programme to its new borrowers on the use of OPAC and introduced the library resources to them.

(iv) Five days “Workshop cum Training Programme” for library professional in Garo Hills Colleges was held during 22nd -26th July, 2013.

9. Library Staff:

(i) Permanent Campus Central Library:

(i) Mr. A. Jeevan Singh – Asstt. Librarian

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(ii) Mr. R.P. Yadav – MTS

(iii) Smt. Durga – MTS

(ii) Chandmari Campus Library:

(i) Dr. A.K. Mondal – Sr. Prof. Asstt.

(ii) Mr. Uday Naik – MTS

(iii) Smt. Sita Chetri – MTS

(iii) Management Dept. Library:

(i) Mr. B.K. Singh - MTS

(iv) Contract Staff:

(i) Smt. Meritha M. Sangma – MTS
(Management Dept. Library)

(ii) Smt. Shaira D. Sangma – MTS
(Central Library)

(iii) Mr. Jeraltus A. Sangama - MTS
(Central Library)

All efforts are being made to provide better services to students, research scholars, faculty members and staff of the Campus.

NATIONAL SERVICE SCHEME CELL

Programme Co-ordinator : Dr. Lakhan Kma
Telephone No : 2721151, 2721152, 2721153
Tele Fax : 2721151.
E-mail ID : nss.nehu@gmail.com
Postal Address : Programme Co-ordinator, NSS Cell, NEHU
Administrative Building, Umshing
Mawkynroh, Shillong -793022.

The National Service Scheme (NSS) of Government of India envisages the utilization of the free time of Higher 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 21437 comprising students from 38 colleges, 22 Higher Secondary Schools, 1 Medical Institute and 2 Post Graduate units with 90 Programme Officers.

1. Review Meeting :

A Review Meeting was held for NSS Programme Officers from East & West Khasi Hills, Jaintia Hills, Ri Bhoi and Garo Hills District on 10th May, 2013 at the Conference Room, Administrative Building, NEHU, Shillong. 43 NSS Programme Officers attended the meeting.

2. Blood Donation :

NSS Units from several institutions have conducted Blood Donation camps. A total of 381 volunteers have voluntarily donated

blood to the blood banks and for needy patients.

- i. The NSS unit of *St. Edmund's College* organized a blood donation camp at Regional Pasteur Institute, Shillong on 14th June, 2013. Thirty (30) donors donated blood on this day.
- ii. 1 NSS volunteer of *Umshyrpi College* donated blood for a needy patient at Nazareth Hospital on 7th August 2013.
- iii. *Union Christian College, Umiam* organized a blood donation camp at the college campus on 8th August, 2013. Eighty Eight (88) NSS volunteers donated blood.
- iv. 6 NSS volunteers of *St. Anthony's College* donated blood for emergency cases at NEIGRIHMS during the month of August.
- v. The NSS unit of *St. Anthony's College, Shillong* organized a blood donation camp at Nazareth Hospital on 23rd September 2013. Seventy (70) NSS volunteers donated blood.
- vi. The NSS unit of *Shillong College, Shillong* organized a blood donation

camp at the college campus on 6th September, 2013. Twenty one (21) NSS volunteers donated blood.

vii. The NSS unit of **P. G. Unit, NEHU Campus, Shillong** organized a blood donation camp at NEHU Health Centre, Permanent Campus on 9th September, 2013. Twenty one (21) donors donated blood on this day.

viii. 12 NSS volunteers of **St. Anthony's College** donated blood for emergency cases at NEIGRIHMS and Pasteur Institute on 26th and 29th September 2013.

ix. The NSS unit of **St. Edmund's College** organized a blood donation camp at college campus on 30th September, 2013. Seventy (70) donors donated blood on this day.

x. 1 NSS volunteer of **St Anthony's College** donated blood for needy patient at Nazareth Hospital on 5th November 2013.

xi. 6 volunteers of **UCC** donated blood for needy patients during June and August 2013 at NEIGRIHMS, Nazareth Hospital Shillong and GMC Hospital Guwahati.

xii. 9 volunteers of **Lady Keane College** donated blood At Don Bosco Youth Centre on the occasion of World Blood Donors Day, 14th June 2013.

xiii. 46 volunteers of **P.G unit NEHU Shillong** donated blood at the camp organized by the unit on 22nd March in collaboration with Regional Blood Bank, RRC and SBTC, Shillong.

3. NSS Mega Camp:

(i) 12 NSS volunteers and 1 programme Officer of St. Anthony's College, Shillong attended the NSS Mega Camp at Bangalore, 29th June-10th July 2013.

(ii) 11 volunteers and 1 Programme Officer of Sankardev College, Shillong attended the Mega Camp at Tezpur University, Assam from 12th -20th December, 2013.

4. Indira Gandhi National NSS Award:

Mr. Shaisngi Lyngdoh, NSS volunteer, Shillong College, and Ms. Dayomika Rhoda Kharsyntiew, NSS volunteer, St. Edmund's College, were conferred with the IG NSS Award on 19th November 2013 at New Delhi.

5. Republic Day Parade Camp :

i. A selection camp for Pre-Republic Day Parade Camp was held on 10th September, 2013 at Community Hall, NEHU Mawlai, Shillong. Around 44 NSS volunteers from different colleges participated in this camp.

ii. 10 NSS volunteers from different colleges along with one Programme Officer participated at the Pre-Republic Day Parade Camp held at Phulbagan, Kolkata from 21st-30th October, 2013.

iii. Badonbok Paliar NSS volunteer P.G. unit NEHU Shillong and Ms. Karisma Tongper, NSS volunteer, Thomas Jones Synod College, Jowai attended the Republic Day Parade Camp at New Delhi from 1st – 31st January, 2014.

6. National Youth Festival :

10 (ten) NSS volunteers from Durama College, Tura and Tura Govt. College

Central Services

alongwith Mr. K. Nengminza, PO, Durama College attended the National Youth Festival at Ludhiana, Punjab from 12th-16th January, 2014.

7. North East NSS Festival :

(i) 32 NSS volunteers and 2 Programme Officers from Jaintia Eastern College, Khliehriat of Meghalaya attended the North East NSS Festival held at Khuman Lampak Stadium, Imphal from 12th-16th November, 2013. Dr. L. Kma, Programme Coordinator also attended the festival as a special invitee.

(ii) 80 NSS volunteers and 20 NSS Programme Officers from various institutions of Meghalaya attended the NE NSS Festival at State Central Library, Shillong from 7th-11th January, 2014.

(iii) 31 volunteers from various colleges of Shillong alongwith Ms. V. Soanes, PO, Christian Academy College attended the Festival at Aizawl from 3rd – 7th February, 2014.

(iv) 33 volunteers of Shillong College and P.G.unit NEHU alongwith 2 PO's attended the Festival at Agartala from 12th -16th February, 2014.

8. Adventure Camp :

i. 9 NSS volunteers from Christian Academy College and P.G. unit NEHU alongwith Mr.G.Kharkongor, PO, St.Edmund's College and Ms. V. Soanes, Christian Academy College attended the winter adventure camp at Narkhanda, Himachal Pradesh from 22nd Feb – 3rd March, 2014.

ii. 19 volunteers from P.G unit NEHU Shillong alongwith Dr. P. Khongji, PO attended another camp at Solang, Manali, HP from 3rd -12th March 2014.

9. Special Camps: *Under the theme of "Healthy Youth for Healthy India"*

Special Camps were held at various places as given below :

i. P. G. Unit, NEHU, Shillong at *Nongkohlew Village, Mawtawar* from 18th-24th July 2013.

ii. Shillong College, Shillong at *Nongmadan Village*, from 18th-24th August 2013.

iii. St. Edmund's College, Shillong at *Mawkasiang Village* from 10th-16th October 2013.

iv. Thomas Jones Synod College, Jowai at *Pynthor Langtein Village* from 11th-17th October 2013.

v. St. Anthony's College, Shillong at *Nongjri Village* from 11th-17th October 2013.

vi. Shillong College, Shillong at *Nongtyngur Village* from 11th-17th October 2013.

vii. Jaintia Eastern College, Khliehriat at *Cham Cham Village* from 21st-27th October 2013.

viii. Mawsynram Higher Secondary School, Mawsynram at *Phud Phanblei Village* from 4th-10th November, 2013.

ix. Captain Williamson Memorial Government College, Baghmara at *Dabit Village* from 17th-23rd November 2013.

- x. Sngap Syiem College, Mawkyrwat at **Pawphlang Village** from 12th-18th November 2013.
- xi. Durama College, Tura at **Ganol Apal Village** from 18th-24th November 2013.
- xii. Shillong College, Shillong at **Mawjongka Village** from 18th-24th November 2013.
- xiii. Tura Government College, Tura at **Rombagre Village** and **Selbalgre Village** from 24th-30th November 2013.
- xiv. Women's College, Shillong at **Mawblang Village** from 25th-30th November 2013.
- xv. Christian Academy College, Shillong at **Nongmarboh Village** from 25th-29th November 2013.
- xvi. Lady Keane College, Shillong at **Pingwait village**, Mawkyrnrew block from 9th 15th December, 2013.
- xvii. Sankardev College at **Shankhla village**, Laitkroh from 1st- 7th December, 2013.
- xviii. Acheng Rangmanpa College, Mahendraganj at Daspara village from 23rd- 29th August, 2013.
- xix. Acheng Rangmanpa College, Mahendraganj at Chapahati village from 11th – 17th December, 2013.

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, 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.

10. Workshops/ Trainings/Orientations/ Seminars:

The NSS unit of Union Christian College, Umiam organized a two day training programme on "Disaster Risk Management" at the college Auditorium on 6th & 7th June 2013. 115 volunteers participated and 267 people from the community were benefitted.

The NSS unit of P. G. NEHU, Shillong in collaboration with the Rotary Club of Orchid City, Shillong organized a "No Tobacco" seminar at the Science Seminar Hall, NEHU on 17th June 2013.

11. NSS Day:

The NSS Cell NEHU in observance of 44th NSS Foundation Day organised a day long programme on 24th September 2013 at NEHU Convention Centre, Shillong. Around 600 volunteers along with Programme Officers from different institutions attended the programme. Shri. Paul Lyngdoh, MLA was the chief guest on the occasion in the presence of the Pro-Vice-Chancellor, NEHU, and Dr. H. Iangrai, SLO, NSS.

The University Level NSS Awards were also presented on the occasion. The best NSS Unit was awarded to **Women's College, Shillong** and the best Programme Officers were awarded to (i) **Mr. Cosmas Rynshon of Women's College, Shillong.** (ii)

Mr. Mardor Synrem of Shillong College, Shillong. The best NSS Volunteer Awards were given to **Mr. Jefferson Lyngkhai and Mr. Banshanmiki of St. Anthony's College, Shillong, Ms. Nasima Begum Choudhury of Shillong College, Shillong.** 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.

12. World Environment Day :

- i.** The NSS unit of P. G. NEHU, Shillong organized a **cleaning drive-cum-tree plantation** programme at the university campus followed by distribution of pamphlets in the neighbouring localities. About 70 NSS volunteers participated and 150 saplings were planted at the campus. The day also included talks by resource persons on environment.
- ii.** The NSS unit of Anderson Higher Secondary School organized a **tree plantation** in Mawkawah area (Nongstoin). 150 saplings were planted and 44 volunteers participated.
- iii.** The NSS unit of St. Anthony's organized a **poster and drawing competition** for school children at the adopted village (Nongjri).
- iv.** The NSS unit of Ri-Bhoi College, Nongpoh organized a **Quiz and Slogan writing competition** at the college campus. 80 volunteers participated.
- v.** The NSS unit of St. Edmund's College, Shillong in collaboration with the NOW Eco Club organized

various programmes like **Sit & Draw competition** for differently able school children, **open Quiz, Slogan writing, Photography and singing competitions.** The days highlight included "Adopt a Tree" programme whereby 50 saplings were distributed and the first ever Flash Mob performed by the volunteers.

- vi.** The NSS unit of Tura Government College, Tura organized an **awareness campaign** on this year theme "Think, Eat, Save".
- vii.** The NSS unit of Sankardev College organized a **tree plantation** at Kyrdem Khla Village, Mawjrong. 150 saplings were planted and 30 NSS volunteers participated.
- viii.** The NSS unit of Government Girl's Higher Secondary, School, Shillong observed the day by organizing a **cleaning drive** at Jail Road, Shillong.
- ix.** The NSS unit of Women's College organized a **tree plantation** on 15th June 2013 at the adopted village. 200 saplings were planted.
- x.** The NSS unit of Sngap Syiem College also organized a **tree plantation** at the college campus and Women's hostel, Mawkyrwat. 50 saplings were planted and 150 volunteers participated.
- xi.** The NSS unit of Shillong College in collaboration with the Shillong Academic Society organized a **cleaning drive** in the college campus on this day. About 200 volunteers participated.
- xii.** The NSS unit of Seng Khasi College in observance of Van Mahotsav Week organized a **tree plantation cum**

cleaning drive at the college campus and at the adopted village on 4th July 2013. 49 volunteers participated along with the Programme Officers. 70 saplings were planted.

xiii. The NSS unit of Women's College in collaboration with Salonsar Youth Welfare Organisation (SYWO) organized a *tree plantation and an awareness programme on HIV/AIDS* at Nongtraw village, Ri-Bhoi on 5th July 2013. 200 saplings were planted. 10 volunteers participated.

xiv. The NSS unit of Holy Child Higher Secondary School organized a *tree plantation* on 6th & 8th July 2013 at Salem School, Nongkrem and school premises. 17 volunteers participated and 30 saplings were planted.

xv. The unit of Mendipathar College organized a *drawing & painting competition* followed by a *tree plantation* programme at the college campus on 5th June. 234 students participated in planting more than 1000 saplings.

xvi. 130 volunteers of Nongstoin College attended an awareness programme at the college campus to mark the occasion of World Environment Day on 5th June. This was followed by a one day cleaning drive at the campus on 28th June where 105 volunteers took part.

xvii. The unit of Nongstoin College organized a tree plantation drive at the college campus on 18th July in observance of Van Mahotsav. 85 volunteers took part and 250 saplings were planted.

13. District Level NSS Meet :

The unit of Sngap Syiem College organized the first district level NSS Meet for students of South West Khasi Hills district at Mawkyrwat from 12-14 December, 2013. About 200 students attended the same.

14. Other Activities :

i) In observance of Swami Vivekananda's 150th Birth Anniversary the NSS unit of Nongtalang College in collaboration with the Vivekananda unit, Jowai, organized an *awareness programme* at the college conference hall on 18th April 2013. 200 volunteers participated.

ii) The Programme Coordinator and Programme Organiser attended the *NSS State Advisory Meeting* held at Main Secretariat, Shillong on 24th April, 2013.

iii) The NSS unit of St. Edmund's College, Shillong in collaboration with the NOW Eco Club, department of Environmental Science observed the *International Day on Biological Diversity* on 22nd May 2013 at the college auditorium. Various activities were organized based on this year's theme "Water & Biodiversity". 95 volunteers participated.

iv) The NSS unit of Tura Government College in collaboration with Social Forestry Division, West Garo Hills organized an *awareness programme* at St. Clare Secondary School, Ampati on the theme "Water & Bio-Diversity" on 22nd May 2013.

v) The Anthonian Youth Club in collaboration with the NSS unit of St. Anthony's College organized a

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- “World No Tobacco Day”** procession in Shillong City on 31st May 2013.
- vi) 5 NSS Programme Officers of different colleges attended a **blood donation and motivation programme** on 22nd May 2013 at Don Bosco Youth Centre organized by Meghalaya Aids Control Society.
 - vii) The NSS unit of Ri-Bhoi College, Nongpoh in collaboration with the Police Department, Ri-Bhoi, Nongpoh organized a **public rally** on 26th June 2013.
 - viii) The NSS unit of Jaintia Eastern College, Khliehriat in collaboration with Society of Urban & Rural Empowerment (SURE) and Police Department, Khliehriat organized a seminar on **“Drug Abuse”** followed by an interaction at the college premises on 26th June 2013. 155 volunteers participated.
 - ix) The NSS unit of Sngap Syiem College organized a one day **orientation programme** for the newly enrolled students and also inaugurated the spoken Hindi class on 1st July 2013 at the college campus. Around 300 students registered as Hindi learners.
 - x) The NSS unit of Holy Child Higher Secondary School organized a **trekking** to Krem Marai (Krem Pahsyntiew) at Nongkrem village on 3rd July 2013. 27 NSS volunteers along with the Programme Officer participated.
 - xi) The NSS unit of Sngap Syiem College revisited the adopted village (Phodjaud) on 8th July 2013 to assess the impact of activities conducted and constructed at the village during their period of Special Camping.
 - xii) The NSS unit of Sngap Syiem College, Mawkyrwat in collaboration with the Red Ribbon Club (RRC) unit organized a **motivation camp on blood donation** on 9th July 2013 at the college campus. 200 volunteers attended.
 - xiii) The NSS unit of Sngap Syiem College revisited the adopted village (Pawphlang) on 10th July 2013. **100 saplings of lagoon fruits** were donated by the District Horticulture officer, South West Khasi Hills to the unit and it was distributed to the villagers.
 - xiv) The NSS annual meet was organized by Sngap Syiem College at the college campus followed by an **awareness programme on “HIV/AIDS-Causes and impact on Society”** on 23rd July 2013 at the college campus. More than 100 volunteers attended.
 - xv) The NSS unit of St. Anthony’s College organized a **Food Fest** on 29th July 2013 to raise fund for the upcoming programme of the unit for the street children and in the orphanage.
 - xvi) The NSS unit of Holy Child Higher Secondary School in collaboration with Mission Trust Bawri Nethralaya, Shillong organized a **Free Eye-Check up camp** at Mawber village on 26th July 2013. 5 volunteers participated and more than 180 people benefitted.
 - xvii) The NSS unit of St. Anthony’s College organized a **trekking** to Nongkseh (Umlyngka) village, Shillong on 9th August 2013. 54 volunteers along with 4 Programme Officers participated.

- xviii)** The NSS unit of Seng Khasi College in collaboration with the Red Ribbon Club (RRC) organized an *awareness programme* on HIV/AIDS followed by a documentary film show “The Test” at the college Hall on 12th August 2013. 300 volunteers attended.
- xix)** The NSS unit of Shillong College organized an *awareness programme* in collaboration with New Hope Centre, Shillong on “*Drug Addiction and Alcoholism*” at the college campus on 14th August 2013. 150 volunteers attended.
- xx)** The NSS unit of Jaintia Eastern College and Shillong College observed the *Sadbhavana Diwas* at the college campus on 20th August 2013. 40 volunteers participated.
- xxi)** The NSS unit of Laban Bengalee Boys Higher Secondary School in collaboration with Bansara Eye Care organized a *Free Eye camp* at the school campus on 22nd August 2013. Around 600 students were benefitted.
- xxii)** The NSS unit of Sankardev College organized a one day training programme on *Mushroom Cultivation* for 60 volunteers and other members of Self Help Group at the adopted village (Kyrдем Khla), Laitkroh on 24th August 2013.
- xxiii)** The NSS unit of Union Christian College, Umiam organized a one day seminar on “*Human Trafficking*” on 30th August 2013 at the college Auditorium. 256 volunteers attended.
- xxiv)** The NSS unit of Union Christian College organized a drawing competition for school children on the topic “*Plant Trees Save Life*” on 6th September 2013 at the college campus. 20 volunteers participated.
- xxv)** The NSS unit of Tura Govt. College in collaboration with Social Forestry Division, West Garo Hills District and IPTAC observed the *International Day for Preservation of Ozone Layer* on the theme “*A Healthy Atmosphere, a Future We Want*” on 16th and 17th September 2013 at Rombagre and Boldamgre Deficit Secondary School.
- xxvi)** The NSS unit of Nongtalang College organized a *Social Work Day* on the 27th September 2013 in and around the college campus. 150 volunteers participated.
- xxvii)** The NSS unit of St. Anthony’s College organized the *annual cleaning drive* within the campus and the adjoining areas on 28th September 2013.
- xxviii)** The NSS unit of Sngap Syiem College in collaboration with State Council Science Technology & Environment (SCSTE), Shillong organized 2 days programme on environment by organizing various competitions like *drawing & painting, environmental exhibition, debate & essay competition* on 26th & 27th September 2013 at the college campus. More than 100 students participated.
- xxix)** The NSS unit of Umshyrpi College organized an *awareness programme* on HIV/AIDS and distribution of IEC materials in Laban area on 28th September 2013. 29 volunteers

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participated and 120 people were benefited.

xxx) The NSS unit of Umshyrpi College in collaboration with Nazareth Hospital organized an awareness programme on **“Safe blood donation”** on 1st October 2013 at Don Bosco Youth Centre. 23 volunteers attended the programme.

xxxii) The NSS unit of Nongtalang College celebrated the **144th Birth Anniversary of Mahatma Gandhi** by organizing various activities on 2nd October 2013 at the college campus. Around 150 volunteers participated.

xxxiii) The unit of Nongstoin College organized a one day **sensitization programme on blood donation** 25th October 2013 at the college premises. 72 NSS volunteers attended the programme.

xxxiiii) The NSS unit of St. Edmund’s College in collaboration with Reserve Bank of India (RBI) Shillong had organized a **workshop cum awareness programme** on financial inclusiveness and financial fraudulence at the college campus on 1st November 2013.

xxxv) Around 78 NSS volunteers attended a programme organized by Bansara Eye Care Centre on the occasion of **World Diabetes Day** at Dr. H. G. Gordon Robert Hospital on 14th November 2013.

xxxvi) The NSS unit of Seng Khasi College in collaboration with District Blindness Control Society, Shillong organized a **free eye check-up camp** on 19th November 2013 at the college

campus. Around 300 volunteers/faculty members availed the service.

xxxvii) The NSS Cell, NEHU in collaboration with the office of the Meghalaya Aids Control Society, Shillong organised a one day **State level Training of NSS/ RRC Nodal Officers & Peer Educators** at Don Bosco Youth Centre, Shillong. Around 80 NSS volunteers along with Programme Officers from different colleges attended the programme.

xxxviii) Around 206 NSS volunteers attended a programme organized by Meghalaya Aids Control Society, Shillong on the occasion of **World Aids Day Celebration** at Soso Tham Auditorium on 30th November & 1st December, 2013.

xxxix) The unit of Jaintia Eastern College organized a day long programme at the college campus in observance of **International Volunteers Day** on 5th December 2013. The programme included talks on the significance of “Volunteerism”, essay & quiz competition followed by a cleaning drive in the college campus.

xl) The unit of Jaintia Eastern College conducted an awareness programme on human rights violation and human rights as a career” on 10th December 2013 on the occasion of Human Rights Day. This was followed by a debate and extempore speech competition on violation of human rights.

xli) 10 volunteers of Nongstoin College attended a programme to mark the observance of Women’s Day on 15th March at D.C’s office, Nongstoin. The programme was conducted by the

District Legal Services Authority in collaboration with the Meghalaya State Legal Services Authority on the theme “Equality for women is progress for all”.

xli) The unit of Jaintia Eastern College conducted an *awareness programme on HIV/AIDS* and other related issues for youths at the Presbyterian HS School, Khliehriat on 15th March 2014.

xlii) The unit of Williamnagar college conducted a *cleaning drive* on the theme Clean Water & Sanitation at Chisobibra a tourist spot near Simsang river on 25th March 2014. 85 volunteers comprising students and PO’s undertook a cleaning of the entire area.

xliii) The unit of Shillong College organized an *adventure camp* on 15th March with a 10km trek from Nongtyngur (adopted village) to Byrdaw village. 57 volunteers actively participated in the programme.

xliv) 4 volunteers of Nongstoin College attended a three day *adventure programme* at Cherrapunjee organized by the Directorate of Sports & Youth Affairs and Meghalaya Adventurers’ Association from 15th – 17th April 2013.

xlvi) 70 NSS volunteers of Nongstoin College attended a two day *disaster management programme* at the college campus on 27th & 28th August 2013. Shri J. Mawthoh, ADPO, West Khasi Hills was the resource person on the occasion. The College Disaster Management Committee, FA/S&R team etc were also constituted following the programme. 10 volunteers were also selected to attend a three day training programme from 8th -10th Oct 2013

organised by the office of the Deputy Commissioner for the mega mock exercise on earthquake.

xlvi) 40 volunteers of Tura Govt. College, Tura and 20 volunteers of Shillong College participated at the Mega Mock Exercise on Earthquake organized by the district administration on 10th March 2014 at Tura and Shillong respectively.

Asset Creation:

NSS units have also constructed community assets through the labour of volunteers at the respective adopted villages during the course of the special camping programme:

i) The NSS unit of Shillong College constructed a village *foot path* (270 metres) at Nongmadan village and 3(three) **drinking water ponds** at Mawjongka village.

ii) The NSS unit of Mawsynram Higher Secondary School constructed a **concrete (cement) Dust Bin** at the school campus.

iii) The NSS unit of Women’s College constructed a **Drinking Water Pond** at Mawkyrdep (adopted village) on 4th and 8th October 2013.

iv) The NSS unit of St. Edmund’s College constructed a **Composting Pit** at Mawkasiang village.

v) The NSS unit of St. Anthony’s College constructed a *foot path* at Nongjri .

vi) The unit of Women’s College constructed a **bus shed** at Mawblang.

vii) A **mushroom shed** was also constructed by the unit of Sankardev College at Shankhla village.

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- viii)* The unit of Jaintia Eastern College, Khliehriat, constructed a **bus shed** at Cham Cham village.
- ix)* The unit of Sngap Syiem College constructed three community assets at Pawphlang village. These were washing place, public toilet and water harvesting.

Skills Development:

Training programmes on skill development were undertaken by five NSS units in areas such as mobile repairing, food preservation & food processing, mushroom cultivation, floriculture, bakery etc. 424 NSS volunteers and 60 local residents of the adopted village underwent the courses.

CAREER AND COUNSELING CELL, SHILLONG

Coordinator : Dr. B. Bhuyan, Associate Professor, Information Technology Department, NEHU (upto 20.5.14)
Dr. Dinesh Bhatia, Associate Professor and Head, Biomedical Engineering Department, NEHU (21.5.14 onwards)

Address (temporary) : Career and Counseling Cell,
School of Technology
North-Eastern Hill University (NEHU)
Umshing, Shillong 793022
(Meghalaya) India.

Telephone : (0364)272-3604 (Office), 3607 (Coordinator)

Fax : (0364)272-3607

Email : placement.nehu@gmail.com, placement@nehu.ac.in

The Career & Counseling Cell (CCC) which was established on 01 April 2008 is functioning from the School of Technology. 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 very 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 for students' if any such information from any quarter is forwarded to the Cell. The Cell also interacts with reputed industries, organizations, training centers and other entities for meeting the demands of the students. To facilitate the objectives, enrollment of representatives from all the departments of NEHU has been formulated of which the Committee consists of faculty and student

representatives, who coordinate the different activities of the Cell. Job-oriented awareness related 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 giving away placement training to the students. It disseminates the job opportunities related information in the concerned (related) centres / departments and also organizes job fairs / career related fairs, pool campuses for the job seekers in the university premises. 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 many companies/industries.

Activities carried out by the Career & Counseling Cell during 2013-14

1. Infosys Pvt. Ltd, Bangalore conducted a pool campus interview in Assam Engineering College, Guwahati, Assam on 12th and 13th June, 2014 where 30 of our eligible students attended out of which 02 of students got selected.
2. IBM Collabora, Bangalore conducted a campus drive to the students of School of Technology, NEHU, Shillong on 23rd and 24th June, 2014, where 15 students got selected by the company.
3. M/s Telperformance, Gurgaon, Manesar conducted campus drive at SOT, NEHU, Shillong on 25th and 26th June, 2014 wherein 20 students got placed.
4. ICICI Bank conducted a pool campus drive for the students of NEHU & affiliated colleges on 14th and 15th July, 2014. Few students got selected during drive.
5. Institute of Technology & Management (ITM), Mumbai funded and organized a two seminar on “Workshop on Value Proposition: Personality Development & Communication Skills” at NEHU, Shillong on 11th -12th September, 2014. More than 200 students of NEHU participated in this workshop.
6. Students attended a two day pool campus drive conducted by Tech Mahindra in Tezpur University, Tezpur Assam on 24 September, 2014 where 30 of our eligible students attended. 02 students got selected in the drive.
7. Around 30 students of the School of Technology, NEHU, Shillong were eligible to participate a pool campus conducted by IBM, Bangalore at Assam Engineering College on 21st & 22nd October, 2014 where 05 students got selected.
8. Motivation cum pre selection interviews conducted by the Indian Army, Shillong for the students of School of Technology on 3rd November, 2014 at Multi Conventional Hall, NEHU, Shillong. Around 200 students attended the seminar.
9. A seminar on “**Student Development Program**” was conducted by IBS (School of Indian Business) Guwahati & Hyderabad on 7th November, 2014 at Multi Conventional Hall, NEHU, Shillong where a more than 200 students attended the seminar.
10. M/s Talwandi Sabo Power Plant Ltd, Punjab conducted a recruitment drive on 17th November, 2014 for the B. Sc. students of NEHU and its affiliated colleges, wherein few students got selected.
11. Indian Army, Shillong conducted a campus drive on 29th November, 2014 for the pre final year B. Tech students of NEHU. Nearly 40 eligible students registered their names for the drive. The results are awaited from the Army.

PLACEMENT CELL (TURA CAMPUS)

Officer-in-charge : Dr. Abhigyan Bhattacharjee
Telephone : +919435017519
Email : abhigyan09@rediffmail.com
placementcellnehutura@gmail.com

The Cell carried out the following activities during the year (2013-14) under report.

1. Professional Assistance for Development Action (PRADAN) an NGO from New Delhi conducted recruitment drive where 2 students got placement as Development Apprentice.
2. Dabur India Ltd conducted placement drive on 16th and 17th July 2013. Altogether 16 students from MBA having Marketing specialisation participated. Two (2) students got placed as Sales Trainee.
3. A campus recruitment drive was held by Vodafone India Ltd on 26th and 27th March 2014 where students from Nagaland University and Mizoram University also participated. Out of 14 students of MBA, NEHU Tura Campus, 2(two) students got placement offers.
4. A campus placement drive was initiated by HIDE SIGN, a Puducherry based MNC. Altogether 6 (six) students of 4th semester MBA, NEHU Tura Campus were shortlisted for final placement offer as Management Trainees.

PUBLICATION UNIT

In-Charge : Prof. R. Khongsdier
Telephone : (0364) 272 1422
E-mail : rkhongsdier@hotmail.com
Publication Officer : Mr. B. Shylla
Telephone : (0364) 272 1423
E-mail : bmshylla21@gmail.com
Assistant Editor : Ms G. Umdor

The NEHU Publication Unit is mainly concerned with printing and promoting publications in various academic areas of the University. These include some undergraduate textbooks, official publications of the University like the Acts and Statutes, Ordinances, the *Annual Report*, *The NEHU Journal* (biannually) and the e-NEHU News (quarterly), Endowment Lectures, and supplementary reading materials. Apart from these, the Publication Unit is also functioning as the official printer of the University with the printing press attached to it. At present, the Press has been undertaking almost all printing jobs assigned to it by the Examination Department, the Centre for Distance Education and Printing & Stationary.

On the distribution front, it enters into contracts with major distributors and book sellers in and around Shillong and a few in Guwahati. During the period under report, the Unit had taken the initiative of taking the books to the local book stalls for sale, and it was successful. The Unit has also uploaded its publications on the website of the University for the general public to have a bird's eye view of the books available in the Unit.

Printing and publication of the following works were undertaken during the period 2013-2014:

Printing of items relating to Examinations Department, NEHU

Printing of items relating to Printing and Stationary Department, NEHU

Printing of items required for the 21st Convocation

Printing of *Annual Accounts* (2012-13) of Finance Department

Printing of booklets relating to Centre for Distance Education, NEHU

Printing of items relating to the Workshop on Advances in Computational Neuroscience (ACNE-14) for the Department of Biomedical Engineering

Printing of *The NEHU Journal* Vol. XI No. 1, Jan 2013, and Vol. XI No. 2, July 2013

Printing of draft and final copies of the Annual Report (2012-13) with layout and design

Publication of Engagement Pads and Calendars for the year 2014.

SOPHISTICATED ANALYTICAL INSTRUMENT FACILITY

Head : Professor K. M. Rao
Telephone : 2721801(O), 2550212 (FAX), 9436166937 (M)
E-mail : kmrao@nehu.ac.in

Thrust Areas of the Centre

The Department of Science and Technology (DST) is providing facilities of sophisticated analytical instruments to researchers through its Sophisticated Analytical Instrument Facilities (SAIF) Programme so that the non-availability of these instruments in the user institutes may not come in the way of scientists pursuing R&D activities requiring such facilities and they are able to keep pace with developments taking place globally.

Brief Statement of Activities

SAIF carries out analysis of samples received from the scientists/institutes, and provides facilities of sophisticated analytical instruments to scientists and other users from academic/ Research institutions, R&D laboratories and industries to enable them to carry out advanced research. It also acquires and develops capability for preventive maintenance and repair of sophisticated instruments, and organizes short-term training courses/workshops on the use and application of sophisticated instruments and analytical techniques. In addition, SAIF trains technicians for maintenance and operation of sophisticated instruments as well as undertakes design and development of instruments/accessories of existing instruments.

Scientific Staff

Sr. Scientific Officer Taposh Chakraborty, M. Sc. /Ph. D. (Physics, NEHU)

Scientific Officer Sudip Dey, M. Sc./Ph. D. (Zoology, NEHU)
Begonia Dkhar, M. Sc. (Zoology, NEHU), Ph. D. (GU)
Debashish Dey, M. Sc. (Chemistry, NEHU), Ph. D. (RDU)
P. S. Dkhar, M. Sc. (Biochemistry, NEHU), Ph. D. (Biophysics, NEHU)
S. K. Prasad, M. Sc.(Biochemistry, NEHU), Ph.D. (Env. Sci, NEHU)
J. M. Sohtun, M. Sc. (Biochemistry, NEHU)

Seminars/Conferences/Symposia/Workshops/Training

Organised

- (i) Workshop on “Workshop on Electron Microscopy in Physical Sciences” from the 4th to 6th March 2014. Number of participants: 22. Resource Persons: Dr. B. Satpati Dept. of Material Science Saha Institute of Nuclear Physics, Kolkata-700064; Dr. D. Mohanta, Dept. of Physics, Tezpur University, Napaam- 784028, Assam; Dr. Sudip Choudhury, Dept. of Chemistry, Assam University, Silchar-788011, Assam; Dr. A. Perumal, Dept. of Physics, IIT- Guwahati, Guwahati- 781039 and Dr. Sudip Dey, Scientific Officer, SAIF-NEHU, Shillong – 793 022.
- (ii) Workshop on “Mass Spectrometry and its applications”. From 18th to 21st March 2014. Number of participants: 26. Resource Persons: Manas Chakrabarty, FRSC (UK)

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Retired Senior Professor and Emeritus Scientist, Department of Chemistry, Bose Institute, Kolkata, Dr Gopal Vaidyanathan, Ice President, Mass Spectrometry, Waters India, Bangalore – 560058 and Mr. John Mario Sohtun, SAIF-NEHU, Shillong.

Publications

Published Abroad

1. A. Begum, U.C. Goswami, Sudip Dey, 2013. Ultramicroscopic structure of lens of *Anabas testudineus* and its significance: *The Clarion* .2,1, 52-55
2. E. Mary Pala, Sudip Dey, A. Borkotoki, 2013. Scanning electron microscopy of the scales of a fresh water fish, *Channa gachua* inhabiting a North –East Indian hill stream contaminated by municipal wastes and other pollutants: *J. Adv. Microsc Res.*8, 1, 21-26.
3. Utpal Rajguru, U.C.Goswami and Sudip Dey, 2013. Electron microscopic analysis of liver and muscle of *Puntius sophore* affected by paper mill effluents: *J. Adv. Microsc. Res.* 8, 2, 156-161
4. Bashida Massar, Sudip Dey, 2013. Ultra-structural Abnormalities in Liver of *Cyprinus carpio* L. caused by Municipal wastes and other pollutants in the reservoir, Umiam, India). *J. Toxicol. Health.* 103. 312-319
5. Eva M.Pala, Sudip Dey, A.Borkotoki and Kevin H. M. Pala, 2014. Ultra structural deformities in the gills of a fresh water fish *Channa gachua* inhabiting a North East Indian hill stream, Umkhrah, contaminated by municipal wastes: *J. Toxicol.Health.* 104,369-380.
6. A. Goldsmith, Sudip Dey, R. Boruah and R. Choudhury, 2014. Ontogeny of mouth part sensilla of muga silk worm: A Scanning Electron Microscopic study: *Microsc. Res. Tech* 77: 120-132
7. K. Neog, B.G. Unni, Sudip Dey, C.Z. Rentheil, S.G.E. Reddy, P. Dutta, P. Sonwal, R.K. Rajan, 2014. Studies on the endocrine regulation of reproduction and ultra structure of brain and reproductive organs of muga silk worm, *Antheraea assamensis* Helfer (Lepidoptera: Saturniidae): *World Journal of Pharmacy and pharmaceutical Sciences.* 3,1.

Book/Theses

1. Biochemical Responses and Ultra structural changes under Environmental stress in some hill stream fishes of Meghalaya

Name of the scholar: Mr. S. K. Prasad (Year of award: 2013)

Name of the Supervisor: Prof. O. P. Singh (Deptt. Environmental Sciences, NEHU)

Name of the Joint supervisor: Dr. Sudip Dey, SAIF NEHU, Shillong-22

2. Ultrastructural, biochemical and genotoxicity studies on common carp inhabiting the polluted lake, Umium.

Name of the scholar : Ms. Bashida Massar

Names of the Supervisors: Prof. K. Dutta (Deptt. of Zoology, Gauhati University) and Dr. Sudip Dey, SAIF, NEHU, Shillong-22.

Infrastructure Facilities

The following Sophisticated Analytical Instruments are available for analytical services:

- i. Scanning Electron Microscope (JEOL JSM 6360)
- ii. EDAX (Attached with SEM, Oxford INCA 350)

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- iii. Transmission Electron Microscope (JEOL JEM 2100)
- iv. FT-NMR 400 MHz (BRUKER AVANCE II-400)
- v. LC-MS Spectrometer (Waters ZQ-4000)
- vi. Graphite Furnace (Analytik Jena AG Vario 6)
- vii. Liquid Nitrogen Plant (Philips PLN 106)
- viii. Microscope with Image Analyser (LEICA DMRX)
- ix. A Seminar room (capacity: 50 seats) and a Conference room (capacity: 14 seats)

The Transmission Electron Microscope (JEOL JSM 100CX), Atomic Absorption Spectrometer (Perkin Elmer PE 3110) and CHN-OS Analyser (Perkin Elmer PE 2400), being very old are no longer functional.

Services Offered

Scanning and Transmission electron microscopic studies of biological and material science samples; 1-D and 2-D NMR spectra of biological and chemical samples in liquid/solution phase; Trace element analysis in biological, chemical and industrial samples; Mass spectra of compounds, and supply of liquid nitrogen to academic, research and industrial institutions.

Use of Instrumental Facilities

Instrument	Total number of samples Analyzed	Total number of Users utilizing the facility
Scanning Electron Microscope (JEOL JSM 6360)	946	141
EDAX (Attached with SEM, Oxford INCA 350)	62	14
Transmission Electron Microscope (JEOL JEM 2100)	1029	200
FT-NMR 400 MHz (BRUKER AVANCE II-400)	1618	56
LC-MS Spectrometer (Waters ZQ-4000)	489	58
Graphite Furnace (Analytik Jena AG Vario 6)	732	37
Liquid Nitrogen Plant (Philips PLN 106)	5288 lts	27

Total Revenue Earned: **Rs. 27,93,637.50**

External users: Rs. 20,98,093.00

Internal users : Rs. 6,95,544.50)

Other Activities

SAIF-NEHU hosted visits of (i) M. Sc. students of School of Crop Protection, College of Post graduate Studies, Central Agricultural University, Umiam Campus, Barapani, Meghalaya, (ii) B.

Sc. students of Lady Keane College, Shillong, Meghalaya, (iii) 2nd Year B. Sc. students of St. Mary's College Shillong, Meghalaya, and (iv) B. Sc. students of Guwahati College, Guwahati, Assam.

SPORTS DEPARTMENT

Teacher in- Charge : Dr. S. N. Lamare
Telephone : 0364-2307930 Extn-1381 (O)
Email : sholamare@rediffmail.com

The Department of Sports strives encourage students' participation in the sports, games and physical activities in order to promote sports and to tap the hidden talent of the students by giving them an opportunity in their all round development. The Department had organized Inter College Tournament in various disciplines for the session 2013-14, where several affiliated colleges and NEHU P.G. Team participated.

The Sports Department, North Eastern Hill University also organized the **First Jowai Zone Inter College Tournament** for Badminton (Men & Women), Table Tennis (Men & Women) and Chess (Combined) from 16th August to 21st August-2013. The inaugural function of the tournament was held at Khimusniang Indoor Stadium, Jowai where Prof. P. Shukla, the Vice Chancellor, of the North-Eastern Hill University, graced the occasion as the chief guest and Shri P.S. Dkhar, IAS, Deputy Commissioner of West Jaintia Hills District as the Guest of Honour. A total of four colleges comprising of 58 numbers of players participated in the Jowai Zone Tournament.

The Sports Department also organized the **Shillong Zone Inter College Tournament** for Badminton (Men & Women), Table Tennis (Men & Women) and Chess (Combined) from 21st August to 23rd August-2013. The Shillong Zone tournament began with an inaugural function at the Indoor Stadium, NEHU, and Prof. B. Myrboh, Pro. Vice Chancellor, NEHU,

Shillong grace the occasion as the Chief Guest. A total of 12 colleges comprising of 202 numbers of players participated in the Shillong Zone Tournament.

On 30th August 2013 the Department organized the **Inter Zonal Tournament for Badminton** (Men & Women), Table Tennis (Men) and Chess (Combined). A total of seven colleges comprising of 70 numbers of players participated in this Inter Zonal Tournament. The tournament ended with a closing ceremony where Prof. R.N. Sharan, Dean of Student's Welfare, NEHU, Shillong has grace the occasion as the chief guest.

The Sports Department in collaboration with the NEHU Students Union organized the **NEHU Open Marathon** on 6th September-2013 within the NEHU Campus and around 170 participants took part in the Marathon. Apart from the students, the teachers and non-teaching

The Staff also took part. The Vice Chancellor, Prof. P. Shukla, the Pro- Vice Chancellor Prof. B. Myrboh, The Dean of Student's Welfare Prof. R.N. Sharan along with the other Professors, not only took part in the event but also completed the Marathon in high spirit. Prizes and certificates were also given.

Further the Sports Department also organized the **Inter College Basketball (Men & Women) Tournament** from 7th October to 11th October 2013 at J.N.Sports Complex, Polo, Shillong. A total of 24 colleges both in the men and women section participated in the above said

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tournament. Dr. S.N.Lamare, Teacher In-charge, Sports Department, NEHU was the Chief Guest in the Closing Ceremony. St. Anthony's College of Shillong lifted the Championship trophy in the mens' section while St. Mary's College of Shillong lifted the Championship trophy in the womens' section.

The Sports Department also organized the ***Inter College Football (Men) Tournament*** from 15th October to 30th October 2013 at J.N.Sports Complex, Polo, Shillong. The Tournament began with an Opening Ceremony where Dr. S.N.Lamare, Teacher In-charge, Sports Department, NEHU was the Chief Guest. The Tournament ended with a Closing Ceremony where Prof. B. Myrboh, Pro-Vice Chancellor, NEHU was the Chief Guest and gave away the

trophies to the winner and runners up. Shillong College was the champion in the tournament.

From 4th to 11th November 2013 the Department organized the Inter College Cricket (Men) Tournament at Shillong Cricket Association Ground, Polo, Shillong. St. Edmund's College, Shillong lifted the championship trophy. The tournament ended with a closing ceremony where Dr. L. Cajee, Controller of Examination, NEHU, Shillong graced the occasion as the chief guest and gave away the trophies to the winner and runners up.

Further the Sports Department has given full support to the North Eastern Hill University Students' Union in the Varsity Fest 2014 by providing all the logistics support including referees & umpires.

Staff Members of Sports Department

Assistant Director of Sports : Mr. Nantu Das
Telephone : 0364-2307930 Extn-1383 (O)
Email : nantujm@gmail.com

Mr. Peter J. Lamare : Cricket Coach

Mrs. A. R. Synnah. : Basket Ball Coach

Mr. L. Darlong : Foot Ball Coach

Email of Sports Department: nehusports@gmail.com

UGC ACADEMIC STAFF COLLEGE

Director : Prof. Rakesh Mohan
Office : 0364-2721401/2721402; 2550103 (Fax)
Residence : 0364-2504319
Email : asc@nehu.ac.in; ascnehu@gmail.com

Faculty

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)	Zoology (Genetics)
Assistant Professor	Dr. (Mrs.) Kuheli Biswas Das M.Sc., Ph.D. (NEHU)	Zoology (Biochemical Adaptation)

Thrust Areas

The UGC-Academic Staff College (UGC-ASC) 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-ASC 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-ASC 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-ASC 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. During 2013-14, the UGC-ASC conducted a total of 5 OPs, 10 RCs, 2 Special Summer/Winter School and 4 Short-Term Course, and trained a total of 553 participants belonging to various universities and colleges recognized by the UGC. Further, the UGC-ASC 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

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of the University in information technology with special reference to teaching and research. The UGC-ASC 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.

Courses Conducted

The UGC-Academic Staff College conducted the following courses during the year 2013-14:

Sl. No.	Orientation Programme	Duration
1	23 rd Orientation Programme	22/04/2013 to 19/05/2013
2	24 th Orientation Programme	05/06/2013 to 02/07/2013
3	25 th Orientation Programme	21/10/2013 to 17/11/2013
4	26 th Orientation Programme	29/01/2014 to 25/02/2014
5	27 th Orientation Programme	20/03/2014 to 16/04/2014

Sl. No.	Refresher Courses	Duration
1	Refresher Course in Education	22 nd April to 12 th May, 2013
2	Refresher Course in English & Comparative Literature & Language	6 th May to 26 th May, 2013
3	Refresher Course in Physics	5 th June to 25 th June, 2013
4	Refresher Course in Information Technology	1 st July to 21 st July, 2013
5	Refresher Course in Folkloristics & Semiotics	22 nd July to 11 th August, 2013
6	Refresher Course in Disaster Management	18 th November to 8 th December, 2013
7	Refresher Course in Political Science	18 th November to 8 th December, 2013
8	Refresher Course in Commerce & Management	18 th November to 8 th December, 2013
9	Refresher Course in History	27 th February to 19 th March, 2014
10	Refresher Course in English	10 th March to 30 th March, 2014

Central Services

Sl. No.	Short-Term Course	Duration
1	9 th Short Term Course in Research Methodology	22 nd July to 27 th July, 2013
2	10 th Short Term Course in SPSS	2 nd December to 7 th December, 2013
3	11 th Short Term Course in Research Methodology	23 rd September to 28 th September, 2013
4	12 th Short Term Course in Research Methodology	24 th March to 29 th March, 2013

Sl. No.	Special Summer/ Winter School-2013	Duration
1	Special Summer School-2013	12 th August to 1 st September, 2013
2	Special Winter School-2013	2 nd September to 22 nd September, 2013

Study Tours/Field Trips

Name of Teacher-in Charge	Places/ Institutions Visited	Name of the Courses/ Programmes	Dates
Dr. Quendarisa Kharbuli	Siloam Mawlynnong	23 rd Orientation Programme	24 th April, 2013 4 th May, 2013
	DBCIC Siloam	24 th Orientation Programme	22 nd June, 2013 29 th June, 2013
	DBCIC Sohra	25 th Orientation Programme	9 th November, 2013 14 th November, 2013
	Siloam Mawlynnong DBCIC	26 th Orientation Programme	15 th February, 2014 22 nd February, 2014 24 th February, 2014
	Siloam DBCIC Sohra	27 th Orientation Programme	8 th April, 2014 12 th April, 2014 14 th April, 2014
Dr. I. Syiem	Mawlynnong	Refresher Course in Education	4 th May, 2013

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Dr. S. Roy	Sohra	Refresher Course in Information Technology	13 th July, 2013
Prof. Desmond L. Kharmawphlang	Laitkynsew	Refresher Course in Folkloristics & Semiotics	3 rd August, 2013
Dr. K. Debbarma	Sohra	Refresher Course in Political Science	23 rd November, 2013
Dr. Aparna Mathur	Sohra	Refresher Course in History	8 th March, 2014
Prof. J. Prodhani	Sohra	Refresher Course in English	17 th March, 2014

Purpose of Visits

These field trips and visits are a regular feature since they are included in the curriculum, designed for Orientation Programmes, 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 a 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 etc

Dr. (Mrs.) Quendarisa Kharbuli

Chaired Academic Session-III at the National Seminar on “Burning Environmental Issues; Risk to Biodiversity and Human Health with Special Reference to North East India” held at Saint Mary’s College from 15th – 16th May, 2013.

Chaired Academic Session–VII at the International Seminar on “Attracting Best Talents in Basic Sciences” held at Shillong College, Shillong from July 24-24, 2013.

Presented Paper entitled “PowerPoint Presentations: College and University Teachers’ Proficiency and Competency in teaching” in the International Seminar on “Attracting Best Talents in Basic Sciences” held at Shillong College, Shillong from July 24-25, 2013 organized by.

Presented Paper entitled “Exploring Trainee Teachers’ Use, Updating and Integration of Information Communication Technology in Teaching and Learning” in the National Seminar on “Education In The North East: Status and Perspective” held at NEHU, Shillong from September 3-4, 2013 organized by the Department of Education in collaboration with ICSSR New Delhi and ICSSR NERC Shillong.

Funds Received from Agencies Other than NEHU

The Academic Staff College was sanctioned Rs 1.00 Crore for the year 2013-14 from the University Grants Commission, New Delhi, for conducting

Central Services

Refresher Course and Orientation Programmes, Short-Term Courses/Workshops in approved subjects and for meeting other expenditures.

Infrastructure Added during the Period

The UGC-ASC installed a Wi-Fi Access Point (2 Nos.) for the lecture rooms, Dell Desktop Computer (2 Nos.), DLP/LCD Projector (2 Nos.), Novara sofa with cushion- 1 seater (1 No.), 4 Drawer Book Case (1 No.), Centre Table Glaze (1 no.), Corner Table Glaze (1no.), Computer Table Caliber 201 (2 Nos.), Exide Battery for online UPS (2x5000VA) (30 Nos.),

EPSON L550 CISS Printer (1 no.), Library books (68 nos.).

Other Activities

Workshop for Welfare of NER Students: The Academic Staff College, NEHU organized UGC Sponsored Workshop on 14th June 2013 to promote educational opportunities and welfare of students from North East Region belonging to SCs, STs and PwDs, which was attended by 141 delegates from all over N. E. States comprising of students, teachers and Public officials. The Workshop was coordinated by Prof. Rakesh Mohan, Director ASC as Nodal Officer.

WOMEN'S CELL

Chairperson : Prof S.M. Sungoh
Telephone Numbers : (O) 0364-2721071/2723347/ (M) 93436307570
Email : smsungoh@yahoo.com

Activities

- (i) Flower Show and Flower arrangement organized for Female Students of NEHU in the Department of Education, on June 5th, 2013.
- (ii) Two Lectures on “Legal Awareness on rights of Women” and “Awareness on

Sexual Harassment”, for students of NEHU, organized in the Department of Education on September 6th and 7th, 2013.

Complaints reported 2013 April to 2014 March: Nil

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 coordination with Establishment-I & II

Sections and Office of the Dean of Students' Welfare of the University.

As per the information collected by the Cell from the concerned Sections, the present position of SCs/STs at teaching and non-teaching levels and admission to various courses/degrees as on 31.03.2014, is as under:

(A) Teaching staff

Sl. No.	Name of the post	Total Post		In Position out of Total Filled						
		Sanctioned	Filled	Gen.	OBC	SC	ST	PWD	Total	Vacant
1.	Lecturer / Assistant Professor	205	189	133	19	21	15	1	189	16
2.	Reader/ Associate Professor	147	95	89	-	1	5	-	95	52
3.	Professor	93	60	58	-	1	1	-	60	33
4	Professor/ Reader	1	-	-	-	-	-	-	1	1

- Under General Category of 61, there are 35 belonging to ST category although not appointed against reserved category.
- With regard to Group- A Non-teaching posts, none of the cadres in Group-A

posts has sanctioned strength of 13 posts and therefore 13 point Roster is being maintained for identification of SC/ST posts. As per Roster point none of the vacant post falls under reserved category.

(B) Non-Teaching staff

Sl. No.	Name of the post	Total Post		In Position out of Total Filled						
		Sanctioned	Filled	Gen.	OBC	SC	ST	PWD	Total	Vacant
1.	Group-A	68	61	61	-	-	-	-	61	7
2.	Group-B	186	122	119	-	1	1	1	122	64
3.	Group-C	454	307	306	-	-	-	1	307	147
4	Group-D	323	221	216	-	-	-	-	216	102

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(C) Admission to various courses/degrees

Sl. No	Course/ Degree	Total Seats		In Position out of Total Filled						
		Sanctioned/ Approved	Filled	Gen.	OBC	SC	ST	PWD	Total	Vacant
1.	UG	500 +24*	1280	375	103	97	703	2	1280	11
2.	PG	1180	2280	240	24	41	1971	4	2280	59
3.	M.Phil	Unspecified	46	13	-	1	32	-	46	-
4.	Ph.D.	Unspecified	665	235	19	30	381	-	665	-
5.	Others	PG Diploma 60 + Unspecified	585	184	61	28	309	3	585	-

*24 seats are earmarked as **Lateral Entry**

XI APPENDIX

MEMBERS OF THE UNIVERSITY COURT

Constituted under Clause 10A of the University Statute

10A. (1) The Court shall consist of the following members, namely;

Ex-Officio members:

- | | | |
|---------------------------------------|---|--|
| (i) Chancellor, Ex-officio | - | Prof. André Betèille,
Chancellor,
69, Jorbag, Ground Floor,
New Delhi – 110003. |
| (ii) Vice-Chancellor, Ex-officio | - | Prof. P. Shukla,
Vice-Chancellor,
NEHU, Shillong. |
| (iii) Pro-Vice-Chancellor, Ex-officio | - | (a) Prof. B. Myrboh,
Pro-Vice-Chancellor
NEHU, Shillong.

(b) Prof. E.D. Thomas,
Pro-Vice-Chancellor,
NEHU, Tura Campus. |
| (iv) Dean of Students' Welfare, | - | Prof. R.N. Sharan, upto 16.12.2013
Dr. S.N. Lamare w.e.f. 17.12.2013 |
| (v) Registrar, Ex-officio | - | Mr. D. Deb, |
| (vi) Librarian, Ex-officio | - | Dr. (Mrs.) I. Majaw,
Librarian |
| (vii) Proctor | - | Dr. H. Kayang,
Proctor,
Department of Botany |
| (viii) Finance Officer, Ex-Officio | - | Finance Officer |

Representatives of Schools and Departments

- | | |
|--|---|
| (ix) Deans of Schools of Studies, Ex-officio | <ol style="list-style-type: none">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, |
| (x) All Professors of the Department/
Centre, NEHU, Shillong/Tura | - Member- Ex-officio, |
| (xi) Heads of Departments, who are
not Professors | - Member-Ex-officio, |
| (xii) Two Associate Professors who are
not Head of Department and two
Asstt. Professors to be appointed
by rotation in the manner prescribed
by the Ordinances | <p>Associate Professor</p> <ol style="list-style-type: none">1. Dr. Pramod K. Saikia,
Department of Mathematics,
NEHU, Shillong.2. Dr. R.K. Satapathy,
Department of Pol.Sc.,
NEHU, Shillong. <p>Assistant Professor</p> <ol style="list-style-type: none">1. Shri. R.S. Thakur,
Department of English,
NEHU, Tura Campus.2. Shri. J.P. Jaiswal,
Department of RDAP,
NEHU, Tura Campus. |

Appendix

Representatives of Affiliated Colleges

**(xiii) Seven Principals of
Colleges in the State of
of Meghalaya**

MEGHALAYA

1. Director,
MBBS College, NEIGHRIMS,
Mawdiangdiang, Shillong-793018.
2. Principal,
Nongrum College,
Zekabari, West Garo Hills District,
Meghalaya-794105.
3. Principal,
Khrawsing Christian College,
Mawngap, East Khasi Hills District,
Mawphlang-793121, Meghalaya.
4. Director,
Regional Institute of Science & Technology,
Raid Marwet Myllem Syiemship,
P.O. Killing Road- 793101, Ri-Bhoi District,
Meghalaya.
5. Principal,
St. Edmund's College,
East Khasi Hills District,
Shillong-793003, Meghalaya.
6. Principal,
St. Anthony's College,
East Khasi Hills District,
Shillong-793003, Meghalaya.
7. Principal,
Lady Keane College,
East Khasi Hills District,
Shillong-793003, Meghalaya.

**(xiv) Four teachers from affiliated Colleges nominated by the Visitor on the
recommendation of the Vice-Chancellor.**

1. Shri Syrpailin Lyngdoh,
Asstt. Professor,
St. Edmund's College Shillong.

2. Smti. Deilinda Mawthoh,
Asstt. Professor,
Kiang Nongbah College, Jowai.
3. Shri Kalyan C. Momin,
Asstt. Professor,
Donbosco College, Tura.
4. Smti. P.M.S. Diengdoh,
Tiro Singh Memorial College, Mairang.

Representatives of Parliament

- (xv) **Six representatives of Parliament, four to be nominated by the Speaker of the Lok Sabha from among the members thereof and two to be nominated by the Chairman of the Rajya Sabha from among the members thereof. However, in the event that a member of Parliament becomes a Minister or Speaker / Deputy Speaker / Lok Sabha, or Deputy Chairman, Rajya Sabha, her/his nomination/ election on the Statutory Body shall be deemed to have been terminated.**

LOK SABHA

- | | |
|--|--|
| 1. Shri Gurudas Dasgupta,
15 Canning Lane,
New Delhi – 1100 001.
OR
78, Chelta Road,
Kolkata – 700 027. | 2. Shri Biren Singh Engti,
ITI Colony,
(Rongmongwe)
P.O. Diphu – 782 460,
Distt. Karbi Anglong (Assam).
Tel. (03671) 272345 |
| 3. Smti. Bijoya Chakravarty,
House No. 39,
Srinagar Path,
Bye Lane – I,
Guwahati – 5,
Assam. | 4. Shri Sushil Kumar Singh,
27, Old Court Hostel,
New Delhi.
OR
“Singh Kjothi”,
Old GT Road,
Aurangabad – 824 101. |

RAJYA SABHA

- | | |
|--|--|
| 1. Dr. Balachandra Munekar,
901, Carnation, Dosti Acre,
Complex, Wadala(East),
Mumbai – 400037.
and
901, Brahmputra,
Dr. B.D.Marg, New Delhi - 110001. | 2. Dr. Janardhan Waghmare,
Shram Safalya Society,
Ambajogai Road, Latur.

and
179, South Avenue,
New Delhi – 110001. |
|--|--|

Appendix

Persons representing learned professions and special interests

(xvi) Ten members representing learned professions and special interests including representatives of industry, commerce, trade unions, banking and agriculture, to be nominated by the Visitor.

1. Prof.(Ms) Tapati Guha Thakurta,
Director, Centre for Studies in Social Sciences,
Kolkata-700029.
2. Dr. Chandra Shekhar Nautiyal,
Director, Centre Institute of Medical and Aromatics Plants,
CSIR Laboratory, Lucknow – 226015.
3. Prof. Arup Kumar Raychaudhuri,
Director, S.N.Bose National Centre for Basic Sc,
Kolkata – 7900098.
4. Shri Hemen Barooah,
Chairman of Managing,
Director B&A Ltd. Upto 30/7/2013,
(Tea Industrialist)
Indu Bhavan Industry,
Mahatma Gandhi Road,
Jorhat, Assam.
Shri. R.L. Sethia,
President wef 7/2/2014,
Meghalaya Chamber of Commerce,
Paltan Bazar, Shillong.
5. Dr. Sanjoy Hazarika,
Director, Centre of North East Studies & Policy Research,
Jamia Millia Islamia, New Delhi -110025.
6. Prof. S.N. Puri,
Vice-Chancellor, Central Agriculture University,
Iroisembha, Imphal – 785004.
7. Prof. Dilip Kumar Saikia,
Director, NIT Sohra, Meghalaya.
8. Prof. O.K. Medhi,
Vice-Chancellor, Gauhati University, Guwahati -781014.
9. Shri Falguni Rajkumari,
Former Secretary, North Eastern Council &
Chairman, Board of Governors, RG IIM-Shillong,
F2486, Ansal's palam Vihar, Gurgaon,
Haryana – 122017.

10. Dr. P.G.Rao,
CSIR Technical Consultant & Former Director,
CSIR-North East Institute of Science & Technology,
Jorhat – 785006.

Representatives of Students

(xviii) Four students to be nominated by the Vice-Chancellor.

1. Ms. Harsha Choudhury,
3rd Semester,
Department of Biotechnology & Bioinformatics,
NEHU, Shillong.
2. Ms. Nibedita Gogoi,
3rd Semester,
Department of Geography,
NEHU, Shillong.
3. Ms. Konthoujam Sarda,
Ph.D. Scholar,
Department of Political Science,
NEHU, Shillong.
4. Mr. Deiborlang Nongsiang,
Ph.D. Scholar,
Department of Mathematics,
NEHU, Shillong.

Other Members

(xix) (a) Not more than five persons to be nominated by the Visitor.

1. Shri Pranab Kumar
Barbora, Airmarshal(Retd)
Former Vice Chief of Air Staff C-1201,
Celebrity Home, Palam Vihar,
Gurgoan - 122017.
2. Dr. Helen Giri,
Former Professor & Head of the Centre for Creative & Cultural Studies,
NEHU, Shillong -793022.
3. Prof. Lokendra Arambam,
Sagalbal Meino Leirak, Imphal West,
P.O.Imphal -795001, Manipur.

Appendix

4. Prof. Udayon Mishra,
House No.3, Bylane/3, Naricolbari,
Zoo Narangi Road, Guwahati – 781024.
5. Prof. Pramod Tandon,
Deptt. of Botany upto 22/7/13,
NEHU, Shillong.
- Shri Mani Shankar Aiyar,
Hon'ble Member of Parliament
(Rajya Sabha), wef. 23/7/13
New Delhi- 110001.

(xix) (b) Not more than two persons to be nominated by the Chancellor.

1. Prof. Dipankar Chakravorty,
Emeritus Professor & INSA Honorary Scientist, MLS Professor Unit,
Indian Association for the Cultivation of Science,
2A & 2B Raja S.C.Nullick Road, Kolkata – 70032.
2. Prof. Abu Nasar Saied Ahamed,
2B Krishna Plaza, Banphul Nagar Path, Dispur Last Gate, Guwahati – 781006.

(xix) (c) Not more than two persons to be nominated by the Chief Rector.

1. Dr. (Mrs.) M.P.R. Lyngdoh,
Retd. Principal, (Retd),
Shillong College,
Shillong.
2. Prof. Caroline R. Marak wef. 9/6/2014,
Ring Rey Gittim 9/6/2014,
Near L.P.School, Tura,
West Garo Hills.

Representatives of the Non-Teaching Staff

(xx) Two members of non- teaching staff to be nominated by the Vice-Chancellor

1. President,
Non-Teaching Staff Association,
NEHU, Shillong.
2. 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. Shri F.R. Kharkongor, IAS,
Secretary Education Department,
Government of Meghalaya, Shillong.

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2. Shri. J.D. Sangma,(MCS),
Director of School Education & Literary,
Government of Meghalaya, Shillong.

(xxii) Members of the Executive Council, who are not otherwise members of the Court.

- | | |
|---|---|
| 1. Prof. Gautam Barua,
Indian Institute of Technology,
Amingaon, Guwahati -781039. | 2. Prof. Keya Sengupta,
Rajiv Gandhi Indian Institute of
Management,
Shillong-793014. |
| 3. Prof. M.P. Lama,
Former Vice-Chancellor,
Sikkim University,
Chairperson,
Centre for South, Centre &
South-east Asia Studies School of
International Studies, JNU,
New Delhi – 110067. | 4. Dr. Rafiquz Zaman, IAS(Rtd)-
Vice-Chancellor,
Assam Rajiv Gandhi University
of Co-operative Management,
Sivasagar, Assam – 785640. |
| 5. Shri.N. Parthasarathy,
Department of Philosophy,
NEHU, Shillong. | 6. Principal,
Raid Laban College,
Shillong. |
| 7. Principal,
Nongstoin College,
Nongstoin. | 8. Director,
Higher & Technical Education,
Govt. of Meghalaya,
Shillong. |

MEMBERS OF THE EXECUTIVE COUNCIL

CONSTITUTION OF EXECUTIVE COUNCIL NORTH-EASTERN HILL UNIVERSITY SHILLONG STATUTE-12 (1) OF THE NEHU ACT 1973

DETAILS

Clause 1(i)	1.	Prof. Probodh Shukla, Vice-Chancellor, NEHU.	Chairman	
Clause 1(ii)	2.	Prof. E.D. Thomas, Pro-Vice-Chancellor, NEHU, Tura Campus, Tura,	Ex-officio-member	
	3.	Prof. B. Myrboh, Pro-Vice-Chancellor, NEHU, Shillong.	Ex-officio-Member.	
Clause 1(iii)	4.	Prof. L.S. Gassah, (upto 6/8/13), Dean, School of Social Sciences	Prof. N.M. Panda, (wef. 7/8/13) Dean, School of Economics, Management & Information Sciences	Member
	5.	Prof. H. Lamin, Dean, School of Human & Environmental Sciences, NEHU, Shillong.	Member	
	6.	Prof. H.K. Mukherjee, Dean, School of upto 9/3/14 Physical Sciences NEHU, Shillong.	Prof. M.M. Singh Dean School of wef. 10/3/14 Education NEHU, Shillong	Member
	7.	Prof. A.K. Mishra, Dean, School of Life Sciences, NEHU, Shillong.	Member	

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Clause 1(iv)	8.	Prof. Probodh Shukla, Department of Physics, NEHU, Shillong.	Member
Clause 1(v)	9.	Dr. N. Parthasarathy, Department of Philosophy, NEHU, Shillong.	Member
Clause 1(vi)	10.	Principal Raid Laban College, Shillong.	Member
	11.	Principal, Tura Law College, Upto 26/9/13 Tura.	Principal Nongstoin College wef. 27/9/13 Nongstoin, Meghalaya
Clause 1(vii)	12.	Director, Higher & Technical Education, Govt. of Meghalaya, Shillong. Fax No. 22286015. Ph: 2226015 (M) 9863028845. e-mail:dhtermeghalaya@yahoo.com.	Member
Clause 1(viii)	13.	Prof. Arup Kumar Raychoudhuri, Director, S.N. Bose National Centre for Basic Sciences, J.D. Block, Sector –II, Kolkata – 700089, West Bengal.	Member
	14.	Prof. Sanjoy Hazarika, Director, Centre for North East Studies and Policy Research, Jamia Malia Islamia, New Delhi – 110025.	Member
Clause 1(ix)	15.	Prof. Gautam Barua, Indian Institute of Information Technology, Guwahati Ambari, GNB Road, Guwahati – 781001.	Member

Appendix

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| 16. | Prof. Keya Sengupta,
Rajiv Gandhi Indian Institute of Management,
Mayurbhanj Complex, Nongthymmai,
Shillong-793014. | Visitor's Nominee |
| 17. | Prof. M.P. Lama,
Former Vice-Chancellor,
Sikkim University
1327- Porbanchal,
JNU – New Delhi – 110067. | Visitor's Nominee |
| 18. | Dr. Rafiquez Zaman, IAS(Rtd)-
Vice-Chancellor,
Assam Rajiv Gandhi University
of Co-operative Management,
Sivasagar, Assam – 785640. | Visitor's Nominee |
| 19. | Finance Officer,
NEHU, Shillong, | Permanent Invitee |
| 20. | Registrar,
NEHU, Shillong. | Non-Member-Secretary |

MEMBERS OF THE ACADEMIC COUNCIL

CONSTITUTION OF ACADEMIC COUNCIL NORTH EASTERN HILL UNIVERSITY, SHILLONG STATUTES-14(1) OF THE NEHU ACT 1973

Members for the year 2013-2014

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. P.Shukla, Vice-Chancellor, NEHU, Shillong	- Chairman
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Prof. E.D.Thomas Pro-Vice-Chancellor, NEHU, Tura Campus.	- Member
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Pro. B. Myrboh, Pro-Vice-Chancellor, Shillong Campus.	- Member
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All Deans of Schools

All Professors

All Heads of Departments/Centres of Studies

Appendix

Dean Students' Welfare : Prof. R.N. Sharan (up to 16.12.2013)
Dr. S.N. Lamare (w.e.f. 17.12.2013)

Librarian : Dr (Mrs) I.Majaw

(ix) Six Principals of Colleges admitted to the privileges of the University, to be nominated by the University

1. Principal, St. Mary's College
2. Principal, Union Christian College
3. Principal, Shillong College
4. Principal, Tura Govt. College
5. Principal, Shillong Law College
6. Principal, Don Bosco College, Tura

(x) Five teachers of the University, other than those Under (i) to (viii) above, by rotation according to seniority of which two shall be Associate Professors and three Assistant Professors.

Associate Professors

1. Dr.R.K. Satpathy, Deptt. of Pol.Science.
2. Dr. Y. Kumar, Deptt. of Botany

Assistant Professors

1. Shri J.P. Jaiswal, Deptt. of RDAP, Tura
2. Shri Mohan Das Kushwaha, BSSS
3. Dr. E.R. Tongper, Deptt. of P

(xi) 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. Dr. Venkata Rao,
Vice-Chancellor,
National Law School of Indian University, Bangalore.
2. Prof. Ralte Lalthantluanga,
Vice-Chancellor,
Mizoram University, Aizawl.
3. Prof. Kasturi Data,
Professor, Environmental Sciences, JNU, New Delhi.

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4. Prof. A.K.Roy Chaudhuri, Director, S.N.Bose National Centre for Basic Sciences, Kolkata.

(xii) Six teachers of the affiliated Colleges admitted to the privileges of the University to be elected from amongst themselves.(under process)

Vacant

(xiii) Two Post-Graduate, students of the University one from Sciences and one from Humanities and one Research Scholar to be selected on academic merit in the manner prescribed by an Ordinance

1. Mr. Anuj Kumar Borah, Deptt. of Bio-Tech & Bio Informatics, NEHU, Shillong
2. Ms. Sharmin Akhter, Deptt. of Geography, NEHU, Shillong

Research Scholar

1. Ms. Tiewari Lyngdoh, Deptt. of Env'tl. Studies, NEHU, Shillong.

Permanent Invitees(s)

1. The Director, College Development Council
2. The Controller of Examinations
3. The Registrar, Ex-Officio-Secretary.

MEMBERS OF THE BOARD OF RESEARCH STUDIES

LIST OF MEMBERS OF THE BOARD OF RESEARCH STUDIES 2013-14

Mode of appointment	Name of Members
Vice-Chancellor,(Ex-Officio) Chairman	Prof. P. Shukla Vice-Chancellor, NEHU, Shillong.
Pro-Vice-Chancellor – Members	<ol style="list-style-type: none"> 1. Prof. B. Myrboh, Pro-Vice-Chancellor, NEHU, Shillong Campus. 2. Prof. E.D. Thomas, Pro-Vice-Chancellor, NEHU, Tura Campus.
Dean of Schools, (Ex-Officio) Member	<ol style="list-style-type: none"> 1. Dean, School of Life Sciences, NEHU, Shillong. 2. Dean, School of Humanities NEHU, Shillong. 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.
Heads of Departments and Centres of Studies,	(Ex-Officio) Members
All Professors, other than the Head of Departments and Centres	(Ex-Officio) Members

Six Associate Professors to be nominated by the Vice-chancellor, three of which to be from Humanities & Social Sciences and three from Sciences-

Members

1.	Dr. D.V. Kumar Department of Sociology NEHU, Shillong	upto 2.9.13	Dr. B. Panda, Department of Sociology NEHU, Shillong	wef. 3.9.14
2.	Dr. (Mrs) S. Bhattacharjee Department of English NEHU, Shillong		Dr. K.S. Nongkynrih Department of English NEHU, Shillong	
3.	Dr. C. Nongbri Department of Education NEHU, Shillong		Dr. Ibadani S. Syiem Department of Education NEHU, Shillong	
4.	Dr. S.R. Joshi Department of Biotechnology NEHU, Shillong			
5.	Dr. A.P. Pati, Department of Commerce, NEHU, Shillong.			
6.	Dr. J. Mawthoh, Department of Adult & Continuing Education, NEHU, Shillong.			

Four external experts two representing Humanities and Social Sciences and two representing Sciences to be appointed by the Vice-Chancellor

1.	Prof. Archana Barua, Deptt. of Humanities & Social Sc. IIT, Guwahati-781039	2.	Prof. Atal Chaudhuri, Deptt. of Computer Science and Engineering Jadavpur University, Jadavpur-700098
3.	Prof. N.K.Gogoi, Deptt. of Anthropology, Dibrugarh University, Dibrugarh-786004	4.	Prof. Saugat Ray, Strategic Management, Group, IIM Diamond Harbour Road, Joka, Kolkata-700104, West Bengal
Secretary (Ex-Officio)		Registrar, NEHU, Shillong.	

North-Eastern Hill University

Mawkynroh – Umshing, Shillong – 793 022

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