

North-Eastern Hill University



Thirty-ninth
Annual
Report

2012-2013

North-Eastern Hill University

Shillong

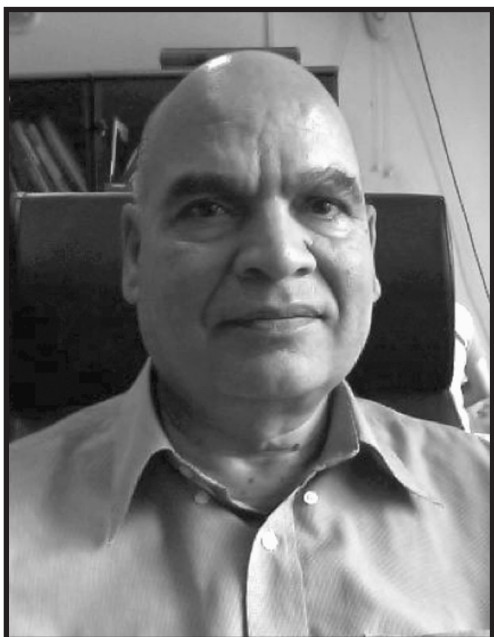
Thirty-Ninth

Annual Report



2012 – 2013

From the Vice-Chancellor's Desk



Greetings from North-Eastern Hill University!

As I look back at our performance during 2012-13, I have good reason to think that it has been fairly satisfactory in several areas. Our normal academic life continued without any interruption; distinguished academics from other universities and institutions visited our University and gave lectures, seminars and interacted with our students. The University organized several seminars and conferences, both national and international and with better facilities available on our campus, these seminars and conferences had a visibly more professional look. I have no hesitation to mention that the organizational professionalism was matched by the high quality of the deliberations.

A prominent event during the year was the Twentieth Convocation held on the 6th November '12 where Shri Vinod Rai, Comptroller and Auditor General of India was the Chief Guest.

The research performance of individual members of the faculty can be glimpsed from their publications during the course of the year. One can safely say that, even though some departments need to catch up in their research activities, the overall performance has been quite satisfactory. This is corroborated by the fact that the science departments of the University have also been included in the DST sponsored PURSE (Promotion of University Research & Scientific Excellence) programmes based on the overall index of their publications. The Friday Extension Regional Centre of the Indian Council of Social Science Research in research oriented academic activities contributed significantly in the overall academic environment of the University.

All things considered, we have not done so badly during the year under report. However, we should avoid complacency and strive to do better next year.

P. Shukla
P. Shukla

Executive Summary

The Annual Report is a compilation of the activities and achievements of the North-Eastern Hill University during April, 2012 to March, 2013. The University comprises of eight Schools that include 40 Departments and 2 Centres of Studies spread over two campuses in Shillong and Tura. Nine new Departments were added during the year. There are a number of affiliated colleges running both undergraduate and post graduate courses in various disciplines. In addition to the conventional degree courses, many colleges are also running vocational courses in the form of certificate courses. An important affiliating college is the North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences servicing MBBS and MS/MD programmes. The University was identified by the Government of India for affiliating minority educational institutions located in various parts of the country. Consequently, University has provided this facility to such institutions in places like Surat, Guwahati, etc.

In addition to this, the University has Academic Staff College, Bioinformatics Centre, Central Libraries both at Shillong and Tura campuses, Computer Centre, Placement Cell, Equal Opportunity Cell, Data and Voice Networks both at Shillong and Tura campuses, 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 Centre providing services for research, education, health, sports and general welfare of the University community.

During the period under report, the Faculty of the University was involved in 140 research projects funded by agencies other than the University. Of these projects, 31 projects were completed during the year, while 22 new projects were sanctioned. The University was able to attract Rs 19.5 crores by way of research funding during the year. Over 155 research papers were published in International Journals while 257 were published in Indian Journals. Fourteen books were authored by the Faculty while 12 edited books were published during the period. The Faculty contributed 176 chapters in edited books. Fifty seven Conferences were organized by the University. The Faculty members presented research papers in 394 National and International Conferences. The details of Faculty composition is provided in Table 1.

Table 1: Teachers in the University

Sl. No.	Name of the post	Gen.	OBC	SC	ST	PWD	Total
1.	Assistant Professor	133	17	15	13	Nil	178
2.	Associate Professor	93	-	1	5	Nil	99
3.	Professor	57	-	1	1	Nil	59

During the period, 822 students secured their PG, 99 B.Tech., 19 M.Phil. and 111 Ph.D. degrees. Detailed classification of various categories of students is presented in Table 2.

Table 2: Number of students of various categories awarded Degrees/ Diplomas

Degree	Category	SC	ST	Gen	Male	Female	Total
P. G.		08	729	85	269	553	822
B. Tech.		31	30	49	75	24	99
PG Dip. (Music)		00	12	01	04	09	13
PG Dip. (Painting)		00	09	00	06	03	09
M.Phil.		00	12	07	03	16	19
Ph.D.		03	64	42	57	54	111

During the same period, 1113 students for PG, 115 for B.Tech., 40 for M.Phil. and 253 for Ph.D. programmes were admitted in various Departments/ Centres. Detailed classification of admitted students is presented in Table 3.

Table 3: Number of students of various categories admitted to Degrees/ Diplomas

Degree	Category	SC	ST	Gen	Male	Female	Total
P. G.		15	948	150	371	742	1113
B. Tech.		14	42	58	88	27	115
PG Dip. (Music)		00	12	01	04	09	13
PG Dip. (Painting)		00	09	01	08	02	10
M.Phil.		00	30	10	20	20	40
Ph.D.		06	151	96	115	138	253

Research students were provided 60 Research Fellowships in the form of UGC/CSIR JRF/ NET, 05 as Maulana Azad National Fellowships, 137 Rajeev Gandhi Fellowships and 254 NEHU non-NET Fellowships. Besides this 223 research students were provided Fellowships through various Research Projects. Seventy three P.G. Students (including ST/SC) were awarded NEHU Post-graduate Merit Scholarships and 88 students (including ST/SC) were supported from the Students' Aid Fund.

A number of infrastructure development programmes were undertaken. These included construction of two lecture halls and laboratory complexes, hostels for research scholars and extension of building for Department of Law. These projects are at various stages of completion. The UGC released a sum of Rs. 1132 lakhs as first instalment under XII plan grant and this amount was utilised for various schemes of the University.

A large number of students were provided hostel accommodation on campus (Table 4).

Table 4: Number of students provided Hostel accommodation on campus

Category		ST	SC	GEN	OBC	Total
Research Scholars	Men	25	nil	23	4	52
	Women	97	7	52	36	192
P.G. students	Men	298	4	31	9	342
	Women	363	6	46	12	427
U.G. students	Men	158	47	137	35	377
	Women	102	17	38	12	169
Foreign Students	Men	NA	NA	10		10
	Women	NA	NA	02		2
TOTAL		1043	81	327	108	1571

A number of sports and other group activities were organized including Inter College Tournament in Badminton, Table Tennis, Chess, Basket Ball, Foot Ball and Cricket, awareness rallies on “Save Wah Umkhrah”, a Seminar on “Fresh Water Crisis, a challenge of the 21st Century”, “Climate change, the role of Christianity”, a street show on HIV/ AIDS programme, the International Day against Drug Abuse and Illicit Trafficking and a three day training programme on Disaster Management.

The University organized 4 Orientation courses and 11 Refresher courses during the period under report. Hindi Training Programme for the employees of this University was conducted under the aegis of the Government of India, Hindi Teaching Scheme. One employee completed Hindi Praveen course and 08 employees completed Hindi Pragya course. All of them were awarded cash incentives as per the Government of India Scheme.

Officers of North-Eastern Hill University

Visitor	HE Pratibha Devi Singh Patil
Chancellor	Prof. M. G. K. Menon
Chief Rector	HE Ranjit Shekhar Mooshahary
Vice-Chancellor	Prof. A. N. Rai
Pro-Vice-Chancellor (Tura Campus)	Prof. Eugene D. Thomas
Registrar	Shri Lambha Roy
Finance Officer	Shri Taliremba
Controller of Examinations	Professor K. Ismail
Librarian	Dr. I. Majaw
Dean Students' Welfare	Prof. R. N. Sharan
Dean, School of Economics, Management & Information Sciences	Prof. N. M. Panda
Dean, School of Education	Prof. P. K. Gupta
Dean, School of Human and Environmental Sciences	Prof. H. Lamin
Dean, School of Humanities	Prof. J. War
Dean, School of Life Sciences	Prof. B. K. Sharma (upto 14/1/2012)
	Prof. A. K. Misra (w.e.f. 15/1/2012)
Dean, School of Physical Sciences	Prof. H. K. Mukerjee
Dean, School of Social Sciences	Prof. L. S. Gassah
Dean, School of Technology	Prof. S. Choudhury

Members of the Editorial Board

A. K. Misra, Chairman
Nirankar Srivastav, Member
R. H. Duncan Lyngdoh, Member
F. A. Qadri, Member
Esther Syiem, Member
P. K. Gupta, Member
B. K. Tiwari, Member
L. J. Singh, Member
B. Shylla, Member

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Chapter I

SCHOOL OF ECONOMICS, MANAGEMENT & INFORMATION SCIENCES

Dean : Prof. N.M.Panda
Telephone : 2723131, 2551311

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 Agribusiness and Food Technology (Tura Campus) of which the last three came into existence just before the close

of the year under report. As is evident from the annual reports of the first four departments, the faculty members of the school through their active involvement in teaching, research and extension activities contributed appreciably towards knowledge advancement and social upliftment - the twin goal of Indian higher education.

DEPARTMENT OF COMMERCE

Head : Dr. K.C. Kabra
Telephone : 2723161
Email : hodcom@nehu.ac.in; kckabra@nehu.ac.in

Faculty

Designation	Name & Qualification	Specialization
Professor	N.M. Panda, M.Com. & LLB (Utkal), Ph.D. (Manipur), FDPM (IIMA)	Management Accounting & Entrepreneurship
Associate Professor	A.P. Pati, M.Com., Ph.D. & LLB (Utkal), ACWA (ICWAI), DBF (ICFAI)	Finance
	V.K. Shrotryia, M.Com, LLB, Ph.D (All from Rohilkhand Univ)	Organizational Behaviour, HRM & Strategy
	K.C. Kabra, M.Com., Ph. D. (JR Nagar Raj Vidyapeeth University, Udaipur)	Accounting & Statistics

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Assistant Professor	R.A.J. Syngkon, M.A., M.Com. & Ph D (NEHU)	Managerial Economics & Entrepreneurship
	S. Kharmawphlang, M.Com. (NEHU), DFM (NILEM, Chennai)	Entrepreneurship & Marketing
	Santi Gopal Maji, M.Com. & Ph.D (Burdwan Univ), DBM (ICFAI)	Accounting & Finance

Thrust Area of Research

The thrust areas of Research in the Department are Accounting & Finance, Entrepreneurship & Small Business and Organisational Happiness.

Brief Statement of Academic Activities

Currently the Department has 83 students on roll at M.Com. level including one Foreign National from Ethiopia and 20 students at doctoral level

including one Foreign National from Iraq. In addition to the regular teaching, the department conducts seminars, workshops, awareness programmes, career counseling sessions and discussions on contemporary topics like Union Budget, Global Economic Crisis, etc. for the students to enhance their understanding and presentation skills and to share the outcome of their project / field work.

Students Profile Enrolment Capacity: **M.Com. - 50** **Ph.D. Variable**

Actual Admission

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non- Meghalaya	TOTAL
M.Com.	0	40	12	25	27	32	20	52
P.h.D.	0	3	06	05	04	04	05	09

Degrees Awarded

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non- Meghalaya	TOTAL
M.Com.	0	10	06	08	08	13	13	16

Courses Conducted

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

School of Economics, Management and Information Sciences

Management, Project Planning & Control, Human Resource Management.

PhD. Course Work

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

Study tour / field trip of students

Name of the Teacher in- charge: Prof. V.K. Shrotryia

Places/ Institutions visited: Amul, Anand; IIM, Ahmedabad (Gujarat); Hindustan Zinc Ltd, Zinc Smelter, Debari; Secure Meters, Choudhary Construction and DNE Electricals Co. and Tourist Spots of Udaipur (Rajasthan).

Purpose of visit: To familiarize students with operations of Industries like; Mining, Smelting, Electrical Transformers, Electrical Meter Manufacturing, Tourism and Dairy Products under Co-operative form of Business Enterprises.

Seminars/Conference/Symposia/Extension Programmes, etc.

Organised:

Two days Notional Seminar on Entrepreneurship and Inclusive Growth held on 21st – 22nd March, 2013.

Attended:

Dr. N.M. Panda

Acted as a resource person in the workshop on Competition Law and delivered a talk on “Competition Law: Its impact on Consumers” on 25th May 2012, Department of Law, NEHU Shillong.

Participated in the Seminar on Foreign Direct Investment and Multi Brand Retail: Myth &

Reality organized by Department of Commerce, Dibrugarh University on 9th October 2012 and delivered a talk on FDI in Multi Brand Retail-the Implication for NE India.

Participated in the Annual Conference of All Orissa Commerce Association held at Chouduar on 11-12 January 2013 and acted as the Chairperson for the technical Session on “Natural Resource Management” and delivered a talk on “Management of Natural Resources in Orissa.”

Dr. Vijay Kumar Shrotryia

Attended 65th All India Commerce Conference held at the KPB Hinduja College of Commerce, Mumbai during Nov 9 – 11, 2012 and presented a paper entitled ‘Questioning Traditional Development Model – Alternative Strategies following Well-being approach’ in the Technical Session IV on the Theme: Global Turbulence – India’s Preparedness)

Dr. K.C. Kabra

Presented a paper ‘Fiscal Crisis in Higher Education: A Case Study of NEHU’ in the National Seminar-cum 20th Annual Conference of the NE India Education Society “Planning & Financing Education for National Development with special reference to NE India” organized by Department of Education, NEHU & NEIES on 8th - 9th November 2012.

Dr. S.G. Maji

Participated in Conference on Excellence in Research and Education 2012 (CERE 2012), organized by IIM Indore during 10-13th May 2012 at IIM Indore and presented a paper titled “Impact of Intellectual Capital on Firm performance: An Empirical Study on Chemical and Banking Sector”.

Participated in National conference on Redefining the DNA of Business: Challenges &

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Opportunities Ahead, organized by Department of Management Studies, Easwari Engineering College, Chennai, held on 2nd November, 2012 at Chennai and presented a paper titled “Intellectual Capital and its Measurement: A Critical Analysis”.

Publications

Published in India

Research Papers

Pati A. P. (2012). Regulation versus Outreach and Sustainability: A Study of the Performance of Microfinance Institutions in India, *The IUP Journal of Bank Management*, XI(4): 41-56.

Pati A. P. (2012). Corporate Governance and Indian Banking, *Kushagra International Management Review*, 2(1): Pp-11-20.

Shrotriya V. K. (2012). GDP vs Human Well Being- A Required Shift in Public Policy in India?, *SME World*, 5(11): 42-44 (ISSN 2319-1139).

Shrotriya V. K. (2012). Growth Numbed Under Numbers, *The Great Indian Dream*, July 2012, p 26-29 (ISSN 2249 5215).

Kabra K.C. and Bhattacharjee J. (2012). Crisis in Higher Education: A Cause of Concern, *Asian Academic Research Journal of Social Sciences & Humanities*, I(6): 57-70 (online ISSN-2278-859)

Maji S.G. and Ghosh S.K. (2012). Impact of Intellectual Capital on Firm performance: An Empirical Study on Chemical and Banking Sector, *Indore Management Journal, Special Issue*, Pp. 42-55.

Maji S.G. and Dey S. (2012). Intellectual Capital and its Measurement: A Critical

Analysis, Subrahmanian, M. 7 Udhayan, P (Edn.), *Redefining the DNA of Business*, Anuragam, 2012, Pp. 488-493,

Maji S.G. and Dey S. (2012). Cash Conversion Cycle, Size of Firms and Corporate Profitability: A Study on Indian Chemical Sector, *Journal of Management Research in Emerging Economies*, 2(2): 58-71.

Book Chapters

Panda N.M. (2012). Women Entrepreneurship and Empowerment: A Case Study of Micro Entrepreneurs in Shillong, In M. Sharma and P. Bharali (Eds.), *Empowering Youth Through Entrepreneurship*, Digboi College, (2012), pp.199-226.

Panda N. M. (2012). Global Economic Crisis and Human Resource Management: Challenges and Opportunities for the Organizations, In Bhattacharjee, Dey Wanniang, Sarma & Pathaw (Eds.), *Global Financial Crisis – Implications and Repercussions*, Eastern Book House Publishers, Guwahati, Assam, pp. 209 – 214 (ISBN 0978 93 80261 66 9).

Syngkon R.A.J. and Srivastav N. (2013), Globalisation, Intellectual Property Rights & North-Eastern Region of India: Some Issues In M C Behera (Ed.), *North – East and Globalisation Issues Betwixt and Between* DVS Publishers, Guwahati, (2013), Pp 198-209,

Maji S. G. and Maji A.K. (2012). An Information Technology based framework for improving Agricultural Credit delivery system in India, In Bhakar S.S., Singh T., Yadav K.K. & Mehra, A. (Eds.), *Transformation and Survival of Business Organizations: Challenges and Opportunities*, Macmillan Publication, ISBN No. 935-059-061-1, Pp. 523-530

School of Economics, Management and Information Sciences

Funds Received from Agencies other than NEHU

Agency	Amount
ICSSR, NER, Shillong	Rs. 50,000/-
MRB, Shillong	Rs. 34,000/-
SBI, Shillong	Rs. 15,000/-

Research Projects

Ongoing Projects

UGC Major Research Project under Dr. A P Pati titled "Capital Structure and Sustainability: An Empirical study on Indian Micro Financing Institutions," 2011.

Other Academic Activities

Prof. N M Panda

Participated as a Resource Person in the Refresher Course in economics and delivered talks on (i) University Accountability and (ii) Entrepreneurship (18th - 19th September 2012).

Participated as a Resource Person in the Refresher Course in Library & Information Science and delivered talks on "Time Management and Communicating Customers. (8th September 2012)

Dr. K. C. Kabra

Delivered seven lectures on "Tax Planning & Management" for MBA students at Department of Management, NEHU, Tura Campus, Tura from 25th - 26th October 2012.

Delivered two lectures on 'E-Commerce' at Refresher Course in the Department of Library & Information Science on 8th September 2012.

Dr. VK Shrotryia

Takes over as Member, Editorial Boards of Review of Management; The Journal of Management Scholars; Invertis Journal of Management and The Journal of Social Science Today.

Dr S.G. Maji

Participated in International conference on Marketing in Emerging Economics: An Agenda for the Next Decade, organized by Punjab Technical University, Amritsar, held on 15th - 16th December, 2012.

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DEPARTMENT OF ECONOMICS

Head : Prof. S.K. Mishra
Telephone : 2723175
Email : mishrasknehu@hotmail.com
Departmental Website : <http://www.nehu-economics.info>

Faculty

Designation	Name and Qualification	Specialization
Professor	S.K. Mishra, M.A. (Bhagalpur), M.R.P., Ph.D. (IIT Kharagpur)	Econometrics, Operations Research, Computer Applications, Planning
	N. Srivastav, M.A.(Rajasthan), Ph.D.(IIT Kanpur)	Industrial Economics
	E.D. Thomas, M.A. & Ph.D. (NEHU) – On Lien (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
Associate Professor	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
	P.S. Suresh, M.A. & M.Phil. (S.V.Univ.), Ph.D. (Hyderabad)	Financial Economics
	B.K. Dutta, M.A. & Ph.D. (NEHU)	Microeconomics, Indian Planning
	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

School of Economics, Management and Information Sciences

Students' Profile Enrollment Capacity P.G.: 55 , M.Phil.: 20, Ph.D.: 20

Actual Admissions

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non- Meghalaya	TOTAL
P.G.	01	46	08	15	40	26	29	55
P.h.D.	00	07	03	07	03	03	07	10

Degree Awarded

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non- Meghalaya	TOTAL
P.G.	00	40	03	19	24	27	16	43
P.h.D.	00	00	01	00	01	00	01	01

Details of Students Awarded Ph.D. Degree

Name of the Student	Title of thesis	Name of Supervisor
Ms. Moon Moon Hussain	Growth Pattern and Determinants of Public Expenditure in Assam.	Dr. P.S. Suresh

Courses Conducted during the Year

Analysis, Economy of North-Eastern Region.

M.A/M.Sc Courses

Core Courses: Microeconomics Analysis-I, Macroeconomic Analysis-I, Mathematics for Economists, Economics of Development-I, Public Economics, Microeconomic Analysis-II, Macroeconomic Analysis-II, Techniques of Statistical Analysis, Economics of Development-II, International Economics, Industrial Economics, Historical Perspective of Modern Economics-I, Indian Economic problems and policy, Historical Perspective of Modern Economics-II, Environmental Economics, Labour Economics, Financial Economics,

Open Course: Economics of Agriculture, Econometrics, Budgetary Theory and Practice, Economics of Social Sector, Computer Application in Economic

Pre-Ph.D. Courses

- (i) Research Methodology in Economics,
- (ii) Contemporary Economic Issues,
- (iii) Recent Advances in Economic Theory.

Seminars/Conferences/Symposia/Extension Programmes, etc

Organized

Dr. UK De organised (as a convener) the National Seminar on *Tourism: Economy and Environment in North-East India* on behalf of the North-East India Council for Social Science Research on 5-6 June, 2012 at Shillong.

Prof. B. Panda was the coordinator of the UGC Refresher Course on "Economics of Development: Theory, Practice and

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Policy” from 3rd of September, 2012 to 23rd September 2012 held in the ASC-UGC, NEHU, Shillong.

Dr. D. Nongkynrih coordinator for the National Workshop on the School for Doctoral Scholars in Economics from 26th Feb to 2nd March, 2013 (organized by the Dept. of Economics, NEHU and ICSSR-NERC; Funded by ICSSR, New Delhi)

Attended

Prof. SK Mishra attended the 44th Annual Regional Science Conference on 20-21 December 2012 at MG Kashi Vidyapith, Varanasi and presented a paper “Disparities in Globalization of the World Economies”, (coauthor: B. Kumar).

Prof. N. Srivastav

- (i) Chaired a technical session in four days workshop on ‘Experimental Design on Savings and Payments’ organised by the Yale Savings and Payments Research Fund under the Global Financial Inclusion Initiative, Yale University, U.S.A. at the Institute of Policy Studies of Sri Lanka, Colombo, September 10-13, 2012;
- (ii) attended two days National Seminar on ‘Problems of Industrial Labors in Assam’ and delivered the Keynote address to the inaugural session on ‘Contemporary Issues of Industrial Labour’ organised by ADP College, Nagaon, Assam in collaboration with the Department of Economic and Statistics, Government of Assam and sponsored by the UGC, New Delhi, September 28-29, 2012;
- (iii) attended the National Workshop on ‘Social Science Research Methodology’ and delivered a lecture on ‘Society and Economy of USA: Some Observations’ organised by

the ICSSR, NERC, Shillong and sponsored by the ICSSR, New Delhi, March 2013;

- (iv) attended the National Seminar on ‘Entrepreneurship and Inclusive Growth’ and Chaired the third session on ‘Women and Rural Entrepreneurship’ organised by the Department of Commerce, NEHU, Shillong, March 2013;
- (v) attended the National Workshop on ‘Social Science Research Methodology’ and delivered a lecture on ‘Approaches to Qualitative Research and Ethics in Research’ organised by the St. Anthony’s College, Shillong and sponsored by the ICSSR, New Delhi, March 2013.

Prof. P. Nayak participated as a Resource Person and chaired the third technical session in the

- (i) National Seminar on ‘Promotion of International Tourism Circuits in North East India: Prospects, Priorities and Strategic Options’ and presented paper co-authored by Prof. S.K. Mishra on ‘Problems and Prospects of Promoting Tourism in Meghalaya’ organized by the Dept. of Business Administration, Assam University, Silchar, Assam during 8-9 March 2013.
- (ii) National Seminar on ‘Problems of Industrial Laborers in Assam’ on 28.09.2012 at ADP College, Nagaon, Assam.

Dr. U.K. De participated and presented a paper on

- (i) “Sustainable Nature Based Tourism, Involvement of Indigenous Women and Development: A Case of North-East India” in the Joint World Conference on Social Work and Social Development: Action and Impact, Jointly organised by IASSW, ICSW and IFSW in Stockholm, Sweden, 8-12 July, 2012,

School of Economics, Management and Information Sciences

- (ii) “How far is India’s Look East under Globalisation Successful?” in the International Conference on “*Development, Environment and Sustainable Livelihood*” organized by Department of Economics, University of Burdwan, West Bengal, 18-19 January, 2013.
 - (iii) “Gender-wise Segregation in Tourism and Hospitality Sector: Evidence from Meghalaya” in the National Seminar on *Tourism: Economy and Environment in North-East India*, organised by NEICSSR on 5-6 June, 2012 at Shillong,
 - (iv) “Expectation of Tourists in Meghalaya and the Effect of Experience on their Visiting Decision” (co-authored with J. Nongbri) in the National Seminar on *Tourism: Economy and Environment in North-East India*, organised by NEICSSR on 5-6 June, 2012 at Shillong,
 - (v) “Globalization, Economic Growth and Human Development: A Cross Country Level Analysis” in the National Seminar on *Human Development in North-East India: Issues and Challenges*, organised by Barbhag College, Assam during 31-08-2012 to 01-09-2012,
 - (vi) “Promote and Strengthen Livelihood for Women: Tourism as an Alternative”, in the Regional Conference on “Women Empowerment – An Instrument for Poverty Reduction” organized by the National Commission for Women of India in collaboration with the Meghalaya State Commission for Women and State Resource Centre for Women on 16th November, 2012 at Pine Wood Hotel, Shillong,
 - (vii) “Ethnic Conflict in India and in the North-East India: A Close Look”, in the National Seminar on “Ethnic Violence and Its impacts on Demographics in North Eastern Region” organized by the Department of Statistics, Gauhati University during 16th -18th February, 2013.
- Dr. D. Nongkynrih presented paper on
- (i) “Financing Education: A Special Reference to Meghalaya” at the National Seminar on *Planning and Financing Education for National Development With Special Reference to North East India*, Organised by the Dept. of Education, NEHU, Shillong and NEIES on November 8-9, 2012,
 - (ii) “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. Daisy Das attended an international conference held by IIM, Shillong, 6-8th March, 2013 and presented the paper “Sustainable livelihood in rural areas: the study of ecotourism activities in Kaziranga National Park”.
- Prof. B. Mishra was invited as a resource Person and chaired one technical session on August 31, 2012 in the National Seminar on “Human Development in North-East India: Issues and Challenges” at Barbhag College, Kalang, Nalbari, Assam.

Publications

Research Papers

Published Abroad

- Mishra, S.K. (2013). Global Optimization of Some Difficult Benchmark Functions by Host-Parasite Coevolutionary Algorithm, *Economics Bulletin*, 33(1): 1-18.

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- Santos, C.A.G., Freire, P.K.M.M. and Mishra, S.K. (2012). Cuckoo Search via Lévy Flights for Optimization of a Physically-based Runoff-Erosion Model. *Journal of Urban and Environmental Engineering*, 6(2): 123-131.
- De, U.K. and Devi, A. (2013). Willingness to Pay Analysis for Recreation and Conservation of Nature. *International Journal of Ecological Economics and Statistics*, 30(3): 102-120.
- De, U.K. (2013). Infrastructural Growth, Farm Size and Pattern of Crop Diversification across the Districts of West Bengal. *Global Journal of Science Frontier Research*, 13(5:1): 7-33.
- De, U.K. (2013). Globalisation and Cointegration among the States and Convergence across the Continents: A Panel Data Analysis. *Economic Analysis and Policy*. (online).
- De, U.K. and Bhattacharyya, P. (2012). Factors Affecting People's Participation in MGNREGA: A Case Study of Morigaon, Assam. *Journal of Social and Economic Policy*, 9(2): 143-160.
- De, U.K. (2012). Livelihood, Dependence on Forest and its Degradation: Evidence from Meghalaya. *Environment and Natural Resources Research*, 2(3): 96-114.
- Published in India**
- De, U. K. and Bhattacharyya, P. (2013). Participation of Women in MGNREGA: How far is it Successful in Morigaon, Assam?. *Indian Journal of Economics and Development*, 1(2): 38-48.
- Mishra, S.K. (2012). A Note on Solution of the Nearest Correlation Matrix Problem by von Neumann Matrix Divergence. *IUP Journal of Computational Mathematics*, 5(1): 7-13.
- Hussain, M.M. and Suresh, P. Srinivasa (2012). Determinants of Public Expenditure: An Econometric Study. *International Journal of Business Management, Economics and Information Technology*, 4(2): 141-156.
- Books/Book Chapters/Proceedings**
- De, U.K. and Das, M. (Eds.) (2012) *Economy of North-East India: Challenges and Tasks Ahead*, Binapani Publishing House, Guwahati.
- Suresh, P. Srinivasa (2013). *Investment Behaviour in Indian Sugar Industry: An Econometric Study*, Global Research Publications, New Delhi.
- Suresh, P. Srinivasa (2013). *Production Functions In Sugar Industry: A Case Study of Chittoor District of Andhra Pradesh*, Serials Publications, New Delhi.
- Srivastav, N. and Ricky A.J.S. (2012). Emergence of Entrepreneurship in a Tribal Dominated Economy. in Behera, M. C. and Baruah, D. (Eds.) *Development Dynamics: Finance, Empowerment and Entrepreneurship*. DVS Publishers, Guwahati. 136-169.
- Ricky, A.J.S. and Srivastav, N. (2013). Globalisation, Intellectual Property Rights and North Eastern Region of India. in Behera, M. C. and Baruah, D. (Eds.) *Northeast and Globalisation: Issues Betwixt and Between*. DVS Publishers, Guwahati. 198-209.
- Das, M. and De, U. K. (2012). Spatio-Temporal Variation in Fish-Culture in Assam and the Reasons behind it. in De, U.K. and Das, M. (Eds.) *Economy of North-East India: Challenges and Tasks Ahead*, Binapani Publishing House, Guwahati. 169-183.

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De, U. K. (2012). Problems and Prospects of Panchayati Raj: An Evaluation in the Context of Tripura. in Ahmed, R. (Ed.) *Agri-Business and Rural Management*, Mittal Publications, New Delhi. 2121-2134.

Pala, V. and Khongjoh, I.P. (2012). Calorie Deficiency among Scheduled Tribes in the North-Eastern Region of India. in Nathan, D. and Xaxa, V. (eds.) *Social Exclusion and Adverse Inclusion: Development and Deprivation of Adivasis in India*, Institute for Human Development and Oxford University Press, New Delhi. 286-309.

Funds Received (from Institutions other than NEHU)

Dr. V. Pala received from Indian Institute of Dalit Studies, New Delhi; *Purpose*: Consultancy fee for a series of studies relating to social group disparities during the period 01-10-2011 to 30-09-2012. *Amount*: Rs. 2,50,000/-

Dr. V. Pala received from National Council of Applied Economic Research (NCAER), New Delhi, *Purpose*: Fee for data collection in Meghalaya, Manipur, Mizoram and Nagaland for the India Human Development Survey - II, 2012, *Amount*: Rs. 2,77,026/-

Research Projects

Ongoing Projects

- (i) 'Local Government Finance in Sixth Schedule Areas of Northeast India' funded by ICSSR, New Delhi (Project amount: Rs. 6.5 lakh), PI: Dr. S. Umdor.
- (ii) 'A study of Bank Credit Flow in Meghalaya' funded by State Level Bankers Committee and Government of Meghalaya. Amount received: Rs. 4 lakh, PI: Dr. S. Umdor.

(iii) 'Costs and Benefit of Protection: A Case Study of Kaziranga National Park' funded by UGC. Amount received: Rs. 2.17 lakh, PI: Dr. Daisy Das.

(iv) 'Adaptation to Climate Change: A Case Study of Flood Prone Areas of Assam, Funding Agency: ICSSR, Amount received: Rs. 2.78 lakh. PI: Dr. Daisy Das.

Completed Projects

- (i) Valuation of Some Tourist Sites in Khasi Hills of Meghalaya (May, 2012); PI/Coordinator: Dr. UK De, Funding Agency: UGC, Amount received Rs. 7.986 lakh.
- (ii) Determinants of Post-Higher Secondary Enrolment in India during 1993-94 to 2009-10 (January 2013), PI/Coordinator: Dr. V. Pala, Funding Agency: Indian Institute of Dalit Studies, New Delhi, Amount received: NA.
- (iii) Social Structure and Educational And Employment Achievements: A Study Of Disparities Across Different Social Groups In India during 1983 To 2009-10 (Dec. 2012), PI/Coordinator: Dr. V. Pala, Funding Agency: Indian Institute of Dalit Studies, New Delhi, Amount received: NA.

Honours/Awards/ Recognitions

Prof. N. Srivastav was nominated as member of a Sub-Committee under the 'Meghalaya Economic Development Council Secretariat for Road and Tourism Development' constituted by the Planning Department, Government of Meghalaya, Shillong, October, 2012.

Prof. B.Panda was appointed by Ministry of Rural Development, Govt. of India, a member of the expert committee on

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effective initiatives under Mahatma Gandhi NREGA administration.

Other Activities

Prof. S.K. Mishra continued to be a member on the RePEc Plagiarism Committee at IDEAS, hosted by Research Division of the Federal Reserve Bank of St. Louis, USA. He also continued to be on the Editorial Board of the Indian J. of Regional Science and Gitam Review of International Business. He served as referee to the *British Journal of Mathematical and Statistical Psychology* (Wiley), *Economics Letters* (Elsevier) and *Computational Statistics and Data Analysis* (Elsevier).

Prof. N. Srivastav (i) delivered two lectures on ‘Recent Societal Changes and Challenges to the Economy of U.S.A.: A Critical Appraisal’ in the UGC-ASC sponsored Refresher Course organised by the Department of Economics, Gauhati University, Guwahati, February 25, 2013.

Prof. P. Nayak delivered lecture on (i) “Human Development- Some Methodological Issues” in the National Workshop organized by NEHU and ICSSR-NERC, Shillong on the School of Doctoral Scholars in Economics during 2-3, March 2013, (ii) “Human Development- An Overview” in the UGC-ASC Special Summer School, Academic Staff College, NEHU, Shillong during 22.08.2012 to 11.09.2012, (iii) Human Development, Inequality, Poverty, and Multi-dimensional Poverty during 03.09.2012 to 23.09.2012 (four lectures on various aspects) in the U.G.C. Refresher Course on *Economics of Development: Theory, Practice and Policy*, organized by the Dept. of Economics, NEHU, Shillong.

Prof. B. Mishra (i) delivered 4 lectures on “Issues on Fiscal Federalism and Theory of Public Goods” in the UGC Refresher course in Economics (3rd September to 23rd September 2012) organized by the Department of Economics, NEHU, (ii) was invited as a Resource Person to deliver lectures in the Training Course on “Fiscal Issues and State Finances” organized by the Centre for Training and Research in Public Finance and Policy, Kolkata on 11th October 2012, (iii) Delivered one lecture on “Qualitative Research Methodology” in the National Workshop on the School for Doctoral Scholars in Economics (26th February to 2nd March 2013) organized by the ICSSR, NERC, Shillong, (iv) delivered 2 lectures on “Qualitative Research Methodology” on 8th March 2013 in the ICSSR funded Workshop on “Research Methodology in Social Sciences for PhD Students” organized by the Department of Economics, Assam University, Silchar, (v) was appointed as a visiting Professor by the Dibrugarh University and was invited to deliver lectures in the Department of Economics to the students of 4th semester and in the Pre-Registration course work for PhD students from 25th March to 31st March 2013.

Dr. U.K. De (i) delivered two lectures on each of the topics “Environment and Development” and “Globalisation, Economic Growth and Human Development: A Cross Level Analysis” and one lecture on “Sustainable Development” on 7-9-2012, 8-9-2012 and 12-9-2012 in the Refresher Course in Economics organised by the Department of Economics, NEHU Shillong during 3-9-2012 to 22-9-2012. (ii) Participated in one day National Workshop on e-Governance

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organised by the Computer Centre, NEHU and Department of Electronic & Information Technology, Ministry of Communication & Information Technology, Govt. of India on 9-4-2012. (iii) Participated in three days National Workshop on Techniques of Analysis of Demographic and Health Statistics and Application of Computer Software during 10-12, October, 2012 at Indian Statistical Institute, Kolkata. (iv) Participated in one day Workshop on “Data Dissemination of Houses, Household Amenities and Assets- 2011 Census” organised by the Directorate of Census Operations, Meghalaya, in collaboration with the Department of Geography, NEHU on 26-07-2012 at Shillong Science Centre, NEHU Campus. (v) Delivered one lecture on ‘Research Methodology in Environmental Economics and Application of computer program’ on 3-3-2013 in the Training Programme on Research Methodology for the PhD Scholars organized by the Department of Economics, NEHU and ICSSR-NERC during 26-2-2013 to 3-3-2013. (vi) Delivered two lectures on “Design of Sample Survey and Collection of Data” and “Time Series Analysis”, on 16-3-2013 in the Ten Days Training Programme on Research Methodology in Social Science held at Dept. of Economics, Bodoland University, Kokrajhar during 14-23, March, 2013. (vii) Delivered an invited lecture in a seminar on “Integration of States through Globalisation and Development across the Continents” at Economic Research Unit of Indian Statistical Institute, Kolkata in its invited seminar lecture series on 07-02-2013.

Prof. B. Panda, (i) attended and participated in the international workshop “ Greening

Rural Development Programmes in India” organized by UNDP and MORD, GOI on 14th May 2012 in India International Centre, New Delhi. (ii) Attended, as a member of the expert committee on effective initiatives under Mahatma Gandhi NREGA administration, MORD, Govt. of India, a five days evaluation and screening programme of presentations of district heads on performance of MGNREGA for the district award 2012-13 in Delhi from December 10-14th, 2012. (iii) Participated and delivered a lecture titled “ Evolution of Theory and Practice in Development Economics and MGNREGA” in the ICSSR sponsored doctoral programme held in shilling jointly organized by ICSSR, NERC and department of Economics, NEHU. (iv) Had a pre-field visit interaction with the deputy commissioner, his team of officers and Nokuma presidents and secretaries of East Garo Hills Districts with respect to implementation of MGNREGA in the district on the sidelines of the presentation of the deputy commissioner for 2012 MGNREGA district effective initiative award at, Williamnagar, Meghalaya. (v) Delivered two lectures entitled ‘Development, Globalisation and Governance’, in the Refresher Course organized by the Department of political science, 30th Nov and 1st December, 2012. (vi) Delivered two lectures on ‘Inclusive Development’ in the UGC-NEHU organized 20th Orientation Programme, 16th May to 12th June 2012, (vii) Delivered a lecture on ‘The Evolution of Development Theory, Practice and Approach’, 10th Sept’ 2012, in the Refresher Course for University and college Teachers organized by the Academic Staff College, NEHU, (viii) Delivered a lecture

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- on ‘Why Inclusive Development?’ in the UGC-NEHU organized 22th Orientation Programme, organized by UGC-ASC, NEHU, Shillong, (ix) Evaluated the performance of MGNREGA in the districts of Kanker in Chhatisgarh, Chandrapur in Maharashtra, Birbhum in West Bengal, East and West Garo Hills in Meghalaya as a member of the central expert team, MORD, Govt. of India during winter vacation of the University from 23rd December 2012 to 26th January 2013.
- Dr. S. Umdor (i) Attended as resource person National Workshop on Social Science Research Methodology organised by St. Anthony’s College, Shillong, (ii) Attended as resource person Staff Development Programme organised by St. Anthony’s College, Shillong. (iii) Delivered a two
- lecturers on Local Government in NE and Finances of Autonomous district councils in NE States in the Orientation Course organised by ASC, NEHU during 4.2.2013 to 3.3.2013 and 4.3.2013 to 31.3.2013.
- Ms. W. Tariang participated in a “Workshop on the Use of SPSS in Social Science Research” hosted by the Department of Economics, St. Anthony’s College, Shillong from November 30- December 6, 2012.
- Dr. V. Pala Co-ordinated the data collection process in Meghalaya, Manipur, Mizoram and Nagaland for the India Human Development Survey - II, 2012, conducted by the National Council of Applied Economic Research (NCAER), New Delhi and the University of Maryland, College Park, USA.

School of Economics, Management and Information Sciences

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

Head : Dr. Bikika Laloo
Telephone : 2723149(O)
Email : bikikalaloo@rediffmail.com & bikitariang@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	M. Masoom Raza, MSc, MLISc, Ph.D. (Panjab University)	Library management, Information retrieval, Information Sources and Services, Research methodology.
Associate Professor	Moses.M. Naga,MLISc (NEHU). Ph.D.(NEHU)	Management of Library and Information Systems Foundations of library & Information Science. Information Literacy
	Bikika Laloo, MLISc (NEHU), Ph. D. (GU), M.A. English (IGNOU)	Information Sources & Service Collection development, User Studies, Library and Information Science Education
Assistant Professor	Paokholun Hangsing, MLISc (Delhi), Ph.D. (NEHU), PGDCA (NEHU)	Library System Analysis & Design, Communication Technology, Digital Libraries
	Jacqueline Jeane Thabah.MLISc(NEHU)	Library classification & Cataloguing.
	Jiarlimon Khongtim, MLISc & PGDCA (NEHU)	Library Software packages Research methodology
	S. Ravikumar, MSc (Madrass); M.Phil- (Allagappa Univ), Ph.D. (Mizoram Univ); PGDCvt (Bhenthidarsan Univ)	Information Retrieval, Indexing, Webometrics.

Thrust Area of Research

The Department's thrust areas of research are- Information Retrieval, Information & Knowledge Management, Database Management Systems, Communication Technologies & Digital

Libraries, Measurement & Effectiveness of Information Services and Information Centres, Human Resource Management of Academic Libraries, Content Analysis, Marketing of Information Products and Services.

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Brief Statement of Academic Activities

Many journal articles and a book on Library and Information Science Education were published during the year. The students of the Department were no less fruitful - as many as 17 of them

passed the NET examinations. Many were also absorbed into libraries of various institutions in Meghalaya and other states during 2012-13. The Ph.D research scholars wrote articles for journals and presented papers at programmes in different parts of the country.

Students' Profile Enrolment Capacity: PG- 30 Ph.D.- variable

Actual Admissions

Degree	SC	ST	Gen	Males	Females	Meghalaya	Non- Meghalaya	TOTAL
P.G.	00	26	2	9	19	13	15	28
P.h.D.	00	13	11	12	12	11	13	24

Degrees Awarded:

Degree	SC	ST	Gen	Males	Females	Meghalaya	Non- Meghalaya	TOTAL
P.G.	00	18	Nil	4	14	13	05	18
P.h.D.	00	01	Nil	Nil	01	01	Nil	01

Details of Students Awarded Ph.D Degree:

Name of student	Title of thesis	Name of Supervisor & Jt. Supervisor
Mazeal Ampareen Lyngdoh.	"Influence of Media on Public Opinion during the Period of Social unrest: A study of Meghalaya"	Prof. Moses M. Naga, Supervisor Dr. P. Hangsing, Jt. Supervisor

Placement of Students

Students of the Department found placement at North East Space Application Centre(NESAC), National Institute of Technology(NIT), North East Regional Institute of Education(NERIE), Christian Academy, State Central Library, National Law University and Judicial Academy, Ri-Bhoi College, Woodland Institute of Nursing, University of Technology, Shillong Polytechnic, and Nongstoin School, etc.

Courses Conducted

MLISc

Foundation of Library and Information Science, Organisation of Knowledge (Theory), Organisation of Knowledge (Practice), Information Sources and Services, Introduction to Information Technology, Library System Analysis and Design, Organisation of Knowledge (Theory), Organisation of

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Knowledge (Practice), Library Software Packages (Practical), Library House Keeping, Information Retrieval, Research methodology in library and Information Science, Collection Development-I, Database Management System. Information Communication technology, Management of Library and Information Systems, Digital Libraries, Information users and their Needs, Collection Development-II, Dissertation.

Ph.D.

Research Methodology in Library and Information Science, Advance in knowledge management and Organizational Studies, Advance in library and Information management, Trends in Libraries and librarianship, Advances in Information System Studies, Literature Review.

Study Tours/Field Trips

Name(s) of the Teacher(s) Incharge: Prof. M.M. Raza.

Places/Institution: Nation Library, Jadavpur University, IIT Kharagpur, British Council, Asiatic Societies, ISI, Kolkata.

Duration of the tour/trip: 20th to 26th February, 2013.

Purpose of visit: The purpose of this educational tour is to acquaint and familiarize students with activities and functioning of different types of libraries, i.e. Academic, Special, national and Public.

Seminars/Conferences Symposia/Extension Programmes, etc.

Organized:

Dr. Bikika Laloo was convener Training Programme Cum Workshop on Information

Literacy held in the DLIS, NEHU, Shillong during 15-16 October 2012.

Attended

DR. B. Laloo attended the “International Conference on ICT Culture in Education”, New Delhi during 27-29 September, 2012 organized by the Educational Technology and Management Academy (ETMA), and presented a paper titled “Use of ICT in Library and Information Science Education”.

DR. P. Hangsing attended and presented a paper on “Preservation, Discography, and Cultural Crossings of north eastern Indian tribal folk music on free file hosting sites” in the National Seminar on Preservation of Information Resources in 21st century Organized by the Department of Library & Information, Mizoram University.

Publications

Research Papers

Published in India

Baruah, Bobby G., and Hangsing, P. (2012). Relevance of the Rising Job Market for LIS Professionals versus Competencies Needed with Reference to Indian Context. *Trends in Information Management*, 8(2): 54-74.

Books/Book Chapters/Proceedings

Raza, M.M. (2012). Measuring service quality in Dr. Zakir Hussain Library, J.M.I, New Delhi: A survey *Library Philosophy and Practice*, Paper 802:1-10.

Laloo B., “Essays on Library and Information Science Education,” published by Ess Ess Publications, New Delhi . 82 pages

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Raza, M.M. (2012). Communities of Practice: A knowledge Management Enabler for Academic Environment. International seminar on Digital Libraries for Digital Nation from 17th – 18th October.

Hangsing, P. and Singson, M. (2012). Preservation, Discography, and Cultural Crossings of north eastern Indian tribal folk music on free file hosting sites. In the proceedings of the National Seminar on Preservation of Information Resources in 21st century Organized by the Department of Library & Information, Mizoram University. p 139-150.

Sumer, F.R., Hangsing, P. and Prasad, A.R.D. (2012). A Comparative Study on the Performance of Three Indian ETD repositories using Apache JMeter. In the Conference Proceedings of the “International Conference on Trends in Knowledge and Information Dynamics” organized by DRTC, ISI Bangalore and held in Bangalore during 10-13 July, 2012.

Raza, M.M. (2012). Tools for knowledge Management: An overview. 29th Convention & Conference of SIS at NIT, Silchar from 26th – 28th November.

Naga, Moses M., I. Kharbudon and Z. Hkawng (2012), “Information Literacy and Digital Literacy”, In K. M. Bujarbaruah on Managing Libraries in Digital Era held on 10-11, August, 2012 at Assam Agricultural University, Jorhat, Assam.

Funds Received from Agencies other than NEHU

Agency

Indian Council of Social Science
Research (ICSSR)

Rs. 50, 000

Other Activities

Prof. Moses M. Naga

Delivered two lectures on “Information Literacy and Academic Libraries: Importance, Models and Implications” during the UGC-Sponsored Refresher Course in Library and Information Science, DLISc., NEHU, Shillong on 04-09-2012.

Delivered two lectures on “Resource Mobilisation for College Libraries” during the UGC-Sponsored Refresher Course in Library and Information Science, DLISc., NEHU, Shillong on 11-09-2012.

Delivered one lecture on “Information Literacy” during the two day workshop on Information Literacy organised by the DLISc, NEHU Shillong under the sponsorship of the ICSSR-NER, Shillong on 14-09-2012.

Delivered two lectures on “Information Literacy and Rural Development Programmes in North East India: Importance, Models and Strategies during the UGC-Sponsored Refresher Course in Political science, Department of Political Science, NEHU, Shillong on 30-11-2012.

Dr. B Laloo

Delivered two lectures on User Education on the 12th and 13th of September 2012 in the UGC ASC sponsored Refresher Course organized by DLIS, NEHU.

School of Economics, Management and Information Sciences

DEPARTMENT OF MANAGEMENT

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

Faculty

Designation	Name and Qualification	Specialization
Professor	G. Singaiah, M.Com., MBA (Andhra University), Ph.D. (Utkal University), FDP (SICI)	Cross Cultural Management, Marketing, Entrepreneurship Development
	J. U. Ahmed, M.Com., Ph.D, LL.B (Assam University), LL.M (GOU)	Finance, Banking and Statistical Methods
Associate Professor	A. Bhattacharjee, M.Com., B.Ed., Ph.D (Gauhati University)	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 Professor	D. Bhagat, MBA (Assam Agricultural University)	Agri-Business Management, Supply Chain Management & Quantitative Technique.
	Kh. Devananda Singh, PGDIBO, M.Com. MBA (IGNOU), Ph.D (Manipur University)	Accounting & Finance, Entrepreneurship and Agricultural Finance
	S.B.A. Mazumder, MBA (Assam University)	Marketing & Finance
	S.L.S. Akoijam, MBA (Amity University)	International Business & Marketing

Thrust Area 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, Bank Finance, Portfolio Management and Social Marketing.

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Brief Statement of Academic Activities

During the period under report, the faculty members published books and research papers in various national and international journals.

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

Students' Profile Enrolment Capacity: PG- 30 Ph.D.- variable

Actual Admissions

Degree	SC	ST	Gen	Males	Females	Meghalaya	Non- Meghalaya	TOTAL
MBA	01	25	07	18	15	20	13	33

Degrees Awarded:

Degree	SC	ST	Gen	Males	Females	Meghalaya	Non- Meghalaya	TOTAL
MBA	03	18	08	18	11	14	13	27
P.h.D.	00	00	01	01	00	00	01	01

Details of Students Awarded Ph.D degree:

Name of student	Title of thesis	Name of Supervisor & Jt. Supervisor
Md. Abdul Rashid	Institutional Financing of Small and Medium Enterprises: A Study in Garo Hills of Meghalaya	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 IDBI Bank, IOCL, BCPL, Nestle, Dabur, WIPRO, HDFC Bank, Axis Bank, LIC, AMUL, PRADAN, etc. showing keen interest in our department. The placement record has been cent per cent with average CTC offered being Rs. 4.00 lakhs.

Courses Conducted during the year

M.B.A.

The department offers 32 courses, out of which 20 are core courses and one project work equivalent to two courses. Besides these, 10 courses including 6 courses from major and 4 courses from minor specialisation 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.

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Ph.D.

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

Study Tours/Field Trips

Name(s) of the Teacher(s) Incharge: Dr. A. Bhattacharjee and Mr. Deepak Bhagat

Places/ Institutions visited: Kolkata, Mumbai and Goa.

Duration of the tour: 15 days (1st February to 15th February, 2013)

Purpose of visit: The industrial visit with the second semester students (28 students) of the department was carried out for practical industrial exposures. They visited some reputed industries/institutions like Indian Chamber of Commerce and Industry, ITC Ltd., and B. M. Birla Heart Research Centre among others.

Seminars/Conferences/Workshop/Extension Programmes

Organized:

The department in collaboration with MSME, Tura Branch organized one 'Management Development Programme' (MDP) during 9th April, 2012 to 17th April, 2012. Dr. J. U. Ahmed and Mr. Deepak Bhagat coordinated the programme.

Prof. G. Singaiah coordinated an HR Conclave entitled, "Human Resource Accounting" organised by the department held at Vivekananda Kendra, Guwahati on 12th May 2012. He also organised two IIE sponsored Entrepreneurship Skill Development Programme (ESDP), one is on 'Two Wheeler Repairing and Maintenance' held during 12th April -10th May 2012; and

another is on 'Screen Printing' held during 5th October- 27th October 2012.

The department organised SAP Programme for the students of 3rd semester during 5th-10th November, 2012. Dr. A. Bhattacharjee coordinated the programme.

The department was also organized 'MOSAIC 2012: A Management Fest' at NEHU, Tura Campus on 12th October, 2012. Mr. Sunildro L.S. Akoijam coordinated the Fest.

Attended

Prof. G. Singaiah presented a paper entitled, "The Interface of Culture and Motivation: A Case Study of Angamies in Nagaland" at the National Seminar on 'HRM Practices in Indian Society' held at Nagarjuna University, Guntur during 19-20th October 2012.

Dr. J. U. Ahmed presented

A paper entitled, "Performance Evaluation of Regional Rural Banks: Evidence from Indian Rural Banks" in the 6th International Business Research Conference on 'Strategies for Sustainability and Growth in the Economic Turndown' held at India Education Society, Mumbai during 21st and 22nd February, 2013.

A paper entitled, "Micro Finance in India: A Diagnosis on SHG-Bank Linkages Programmes" at the 5th International Conference on 'Management and Behavioural Sciences' organised by Society of Management and Behavioural Sciences (SMBS), Haridwar held at 23rd- 24th June 2012.

Dr. A. Bhattacharjee presented

A paper entitled "Entrepreneurial Avenues in Agro Horticulture Sector in North East

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India: An Analysis of Strawberry Crop of Meghalaya”; at the National Seminar organised by Department of Commerce, Manipur University, Imphal and IIPA, Imphal local branch during May 28-29, 2012.

He also presented a joint authored paper with Dr. J. U. Ahmed entitled “Micro Finance Towards Financial Inclusion: An Implication in the Indian Context” at the National Seminar on ‘Promoting Financial Inclusion for Inclusive Growth With Special Reference to North –East India’ held at Assam University, Diphu Campus during 23-24th November 2012.

Dr. K. C. Biswal presented

A paper entitled “Determinants of corporate Saving Behaviour in Indian Industry” at the 36th Indian Social Science Congress during 27th-31st December 2012, organized by KIIT University, Bhubaneswar.

A paper entitled “Industrial Rehabilitation and Displacement in Odisha” at the XXXIII Annual Conference of All Odisha Commerce Association organized by Choudwar college, Cuttack during 12th & 13th January 2013.

A paper entitled “Determinants of Corporate Saving Behaviour in Indian Industry is Creating the Financial Inclusion in Current Trend” at the National Conference on ‘E-commerce: The way forward for better financial Inclusion’ held at Institute of Public Enterprise, Hyderabad on 18th February 2013.

Mr. Deepak Bhagat presented a paper entitled “Conversion to Organic Farming: A Review” at the national seminar on Organic Farming organised at Assam Agricultural University (AAU) during November 16-17, 2012 by

SADBHAVANA (an NGO) in collaboration with Assam Agricultural University (AAU) sponsored by the Planning Commission, Government of India.

Dr. Kh. D. Singh presented

A paper entitled “Microfinance in Manipur: Problems and Prospects” in The National Seminar on ‘Entrepreneurship Development in North East India with Special Reference to Women Entrepreneurs of Manipur: Problems and Prospects’ organized by the Dept. of Commerce & IIPA, Imphal Local Branch held during 28-29 May, 2012 at Manipur University, Imphal.

A paper entitled “Promotional Agencies and Its Impact to Women Entrepreneurs in Arunachal Pradesh” at the 2 Days’ National Seminar on ‘Problems, Prospects and Opportunities of Women Entrepreneurship’ organized by Dept. of Commerce, Manipur University held during 21-22nd September, 2012.

Mr. Sunildro L.S. Akoijam presented

A paper entitled “Knowledge Management: An Initiative for Innovation in a Learning Organization” at the International Conference on ‘Technical Education: Experiences, Opportunities & Challenges’ organized by Siddhi Vinayak Groups of Institution, Yamunanagar, Haryana on April 7, 2012.

A paper entitled “Social Marketing: An Ethical Perspective” in the International Conference on ‘Management and Behavioural Science’ organized by Society of Technical and Management Professionals (STMP), New Delhi on June 3, 2012.

A paper entitled “Cross Cultural Issues in HRM” in the National Conference on ‘Human Resource Management’ organized

- by Management Development Research Foundation (MDRF), New Delhi on April 8, 2012;
- Two papers entitled, “Brand Management of MNCs: A Case Study of Selected FMCG Companies in India” and “ Surrogate Advertising: A Case Study of Indian Liquor Industry” in the International Conference on ‘Contemporary Business and Management’ organized by Chulalongkorn Business School, Chulalongkorn University, Bangkok, Thailand at Novotel Hotel, Bangkok during December 10-12, 2012.
- A paper entitled “Virtual Marketing: Opportunities and Challenges in Networked Marketplace” at the National Seminar on ‘Business Solutions for Sustainable and Inclusive Growth’ organized by Department of Commerce, Kurukshetra University during March 15-16, 2013.
- Publications**
- Research Papers**
- Published in India**
- Singaiah, G et al. (2012), “Conservation of Biodiversity in the Light of Local Marketing Success Story of an NGO in Garo Hills, *Transient*, II (April): 108-116.
- Ahmed, J. U and Bhandari, G.P (2012), “Productivity Analysis of Regional Rural Banks: A Case of Meghalaya Rural Bank”, *International Journal of Business Management Economics and Information Technology*, (ISSN: 0975-296X), 4(2): 167-178
- Ahmed, J. U., Mazumder, S.B.A. and Rashid, M. A (2012), “Institutional Financing of Small and Medium Enterprises in India: An Empirical Diagnosis in Garo Hills of Meghalaya”, *International Journal of Technology and Business Management*, (ISSN: 2319-6815), 1(1): 47-56 (July-Sept.)
- Ahmed, J. U, Purohit, V and Sangma, S. A.(2012), “Microfinance Towards Financial Inclusion of the Poor: An Indian Perspective”, *International Journal of Management & Behavioural Sciences (IJMBS)*, (ISSN 2278-5671), Vol-1 (June): 157- 165
- Ahmed, J. U., Rashid, M. A (2012), “Role of Financial Institutions in Financing Small and Medium Enterprises: A Study in Garo Hills of Meghalaya”, *Journal of Commerce and Accounting Research* (ISSN: 2277-2146), 1(4):7-13
- Ahmed, J. U (2013), “An Evidential Study on Asset Liability Management of Meghalaya Rural Bank”, *Indian Journal of Commerce and Management Studies*, (ISSN: 2249-0310), IV[1(1)]: 26-31 (January).
- Ahmed, J.U (2012), “Impact of Financial Sector Reform on the Working of Public Sector Banks: An Empirical Study in Barak Valley of Assam”, *Finance India*, XXVI (4):1335-1342 (December).
- Bhattacharjee, A. (2012), “Trade Opportunities among Neighbouring Nations: A North East India Perspective”, *Journal of North –East India Council for Social Science Research, Shillong*, 36(1):85-95.
- Biswal, K. C (2012), “Determinants of Internal Saving Behaviour in Indian Industry”, *Journal of Business Management & Research*, Vol-1, No-4, (December)
- Bhagat, D. & Dhar, U. R (2012), “Understanding Product Flow and Information Flow Dimensions in Cashew Nut Supply Chains”, *Productivity*, 52(273):136- 147.

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- Bhagat, D. & Dhar, U. R. (2012) "Study on Supply Chain Management in Pineapple- A Case Study of West Garo Hills of Meghalaya", *Indian Journal of Agriculture Marketing*, 26(2):76- 86.
- Bhagat, D. & Dhar, U. R (2012), "Analysing Relationship Dynamics in Cashew Supply Chains", *Journal of Supply Chain Management Systems*, 1(4): 1- 12.
- Bhagat, D. & Dhar, U. R (2013), "Dynamics of Areca nut Supply Chains in Garo Hills of Meghalaya: From a product flow and information flow perspective", *The IUP Journal of Supply Chain Management*, 10(1):44- 76.
- Bhagat, D & Dhar, U.R (2012), "Factors Affecting Market Accessibility of Small Farmers in West Garo Hills District of Meghalaya", *Management Convergence*, Mizoram University 3(1):47-56
- Singh, Kh. D (2012), "Entrepreneurship in North Eastern Region of India – the MSME Perspective", *The International Journal of Research in Commerce and Management*, (ISSN: 0976-2183), 3(12):117-121
- Singh, Kh. D (2012), "Entrepreneurship Development in Arunachal Pradesh-Br. MSME-DI, Itanagar, at Its Service", *North East Business Reporter*, (ISSN: 2249-0728), 3(5):32-33
- Singh, Kh. D (2012), "Poverty, Social Unrest and Its Long Term Strategy and Solutions", *The Brahmaputra-Rhythm of Promises*, (ISSN: 2278-246X), V (2): 16-18
- Singh, Kh. D (2012), "Bank Credit in Arunachal Pradesh-An Analytical Study", *The Invertis Journal of Management*, (ISSN: 0975-6310) Vol-2, No. 4
- Akoijam, L.S. S. (2012), "A Handloom Cluster Development Program: A Case Study", *Prabandhan: Indian Journal of Management*, 5 (8): 37-45
- Akoijam, L.S. S. (2012) "Branding: A Product Identity Strategy in Rural Marketing", *The Rural Marketing Journal*, 6 (2):12-13.

Published Abroad

- Akoijam, L.S. S. 2013, "Rural Credit: A Source of Sustainable Livelihood of Rural India" *International Journal of Social Economics*, Emerald Publications, UK, 40 (1):83-97

Books/Book Chapters/Proceedings

Published in India

- Ahmed J. U (2012), "Performance of Commercial Banks in India: The Profitability and Productive Efficiency", *Global Publishing House Pvt. Ltd*, Visakhapatnam, India, (ISBN: 978-93-81563-12-0).
- Ahmed, J. U (2012), "Priority Sector Advances by Commercial Banks: A Diagnostic Study in Barak Valley of Assam", in Rehman, A.R.M (ed), '*Contemporary Issues in Accounting and Finance*', Akanksha publishing House, New Delhi, (ISBN: 978-81-8370-325-3), pp-206-245.
- Ahmed, J. U (2012), "Micro and Small Entreprises in North Eastern Region", in Mandal, R.K (ed) '*Khadi and Village Industries in North East India: Challenges and Opportunities*', Concept Publishing Company Pvt. Ltd, New Delhi, (ISBN: 978-81-8069-880-4), pp-267-286.
- Singaiyah, G., Bhagat, D., Laskar, S. R. & Rouf, A (2012), "Impact of FDI in India's Retail Trade" In R. P. C. Rao & J. Williams

- (Ed) '*Emerging Trends in Indian Retail Industry*', Paramount Publishing House, Delhi, pp. 199- 212.
- Singaiah, G et, al. (2012), "Rural Entrepreneurship; "Innovation and its role in Rural Development" in D.C. Kalita & B.K. Misra (Ed) "*Sustainability and Eco-development in Hill Agriculture*", Bio-tech Book Publications, New Delhi, pp-418-430.
- Biswal, K.C. (2013), "Tribal Entrepreneurship: A Study of Meghalaya State" in Miryala, R.K.(Ed) *Changing Paradigms of Rural Management*, Zenon Academic Publishing, Hyderabad. Pp 147-154.
- Bhagat, D. & Dhar, U. R. (2012), "*Agribusiness Opportunities in Meghalaya: Some Facts and Emerging Issues*", In D.C. Kalita & B. K. Mishra (Ed) *Sustainability and Economic Development in Hill Agriculture*, National Fame Publisher (Biotech Book Publisher), New Delhi, pp. 30- 41.
- Singh, Kh. D (2012), "Role of Arunachalee Women in Economic Development: An Empirical Approach" in Binota, D. et. al. (ed) '*Women in Science and Social Science - Issues & Challenges in North East India*' (ISBN: 978-81-923048-5-4), pp-323-329.
- Akoijam, L.S. S. (2012) "Importance on Brand Equity", in K. Pongiannan (ed), '*Advertising and Brand Building: Principles and Case Studies*', (ISBN: 978-81-7708-315-6), New Century Publishers, New Delhi, July, pp.18-33.
- Akoijam, L.S. S. and Malik, S (2012) "Social Marketing: An Ethical Perspective", in A. Kumar et.al., (ed), '*Emerging Issues in Management and Behavioural Sciences*', (ISBN: 978-93-81212-17-2), Bharat Publications, Delhi, June, pp-277-284.

Published Abroad

- Ahmed, J. U and Rashid, M. A, (2012) "Institutional Finance for Micro and Small Enterprises in India: An Empirical Evidence" *LAP LAMBERT Academic Publishing*, Germany, (ISBN: 978-3-659-26161-9).

Research Projects:

Ongoing:

- The Project entitled, "Comparative Study on Micro and Small Enterprises in Imphal West District of Manipur And West Garo Hills of Meghalaya - The Entrepreneurial Perspective", funded by ICSSR, New Delhi, Principal investigator - Dr. Kh. D. Singh. Amount Rs. 7,00,000/- (Seven Lakhs) only.

Honours/Awards/Recognitions:

- Mr. Deepak Bhagat has been appointed as president of the North Eastern Region Chapter of the Institute for Supply Management(ISM) - India (An affiliate of ISM, USA).

Other Academic Activities:

- Prof. G. Singaiah chaired a technical session in a National Seminar on 'HRM Practices in Indian Society', organized by Nagarjuna University, Guntur during 19-20 October 2012.; delivered a lecture on 'Cross Cultural Management' at Gayatri College of Management, Visakapattanam on 25th August 2012; attended Assessor's Interaction Meeting conducted by NAAC, Bangalore held during 22-23rd July 2012. He has also conducted a 'Diagnostic Study of Cashew-nut Processing for Cluster Development in Garo Hills' for IIE, Guwahati.

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- Dr. J. U. Ahmed delivered a lecture on 'Feasible Course Curriculum' as a special invitee in the 'Curriculum Design Programme' at University of Science and Technology (USTM), Meghalaya on July, 2012; delivered a lecture on "Management Education: Problems and Future Challenges" at University of Science and Technology (USTM), Meghalaya on September 2012; delivered a talk as a resource person on "Governance: A Meghalaya Perspective" in the workshop organised by Integrated Basin Development and Livelihood Promotion Programme (IBDLPP), Meghalaya in collaboration with district administration, West Garo Hills held at Tura on 3rd April 2012. He also attended in an International Seminar on 'India's Look East Policy and the North Eastern Region: Strengthening the Continental Route' jointly organised by ICSSR-NERC and NEC, Shillong held at NEC Auditorium during 21st and 22nd March, 2013.
- Dr. K. C. Biswal delivered a lectures on "E-commerce Applications in the Business" on 17th January, 2013 at the Gokul Institute of Technology, A.P. He also delivered a lecture on "High Performance Computing on Financial Management" at the National Institute of Science and Technology, Berhampur, Odisha on 18th January, 2013.
- Mr Deepak Bhagat attended the AICTE sponsored Faculty Development Programme, organised by Royal School of Business, Gyan Sagar Foundation Group of Institutions, Guwahati from 4th to 16th June, 2012.
- Dr. Kh. D. Singh participated in an one day Workshop on "Research Proposal and Fulbright Fellowships Opportunities in United States" organized jointly by Manipur University, Imphal and United States-India Educational Foundation, Kolkata on 8th February, 2013, held at Manipur University, Imphal.
- Mr. Sunildro L.S. Akoijam attended a Management Teachers' Programme on Strategic Management organised by Indian Institute of Management, Bangalore (IIM-B) on April 2-6, 2012; a Faculty Development Programme (FDP) on Developing Research Instruments and Survey Scales organized by Apeejay School of Management, Dwarka, New Delhi on May 8, 2012; a Faculty Development Programme on International Business Strategy organized by Indian Institute of Foreign Trade (IIFT), New Delhi on June 18-22, 2012; a two weeks long Faculty Development Programme (FDP) on Research Methodology & Modern Pedagogy organized by Manipur Institute of Management Studies (MIMS), Manipur University on January 3-16, 2013; a workshop on Research Proposal & Fulbright Opportunities in US organized jointly by MIMS, Manipur University and USIED, Kolkata at Manipur University on February 8, 2013.

School of Economics, Management and Information Sciences

DEPARTMENT OF JOURNALISM & MASS COMMUNICATION

Head : Kamaljit Chirom
Telephone : 09615055950
Email : kchirom@nehu.ac.in

Faculty

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

Brief Statement of Academic Activities

There are three faculty members in the Department of Journalism and Mass Communication and they have been involved in establishing the Department. The draft syllabus for Open Papers has been prepared and has been submitted for approval. Book lists were prepared and sent to the Central Library for the

procurement so as to develop the library for academic purposes. Planning for developing a Masters course and also infrastructure like studios and other necessary.

Infrastructure Added during the Period, if any

Five Desktop Computers for the faculty and office.

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DEPARTMENT OF TOURISM AND HOTEL MANAGEMENT

Head : Dr. Saurabh Kumar Dixit
Telephone : 09436565964 (M)
Email : saurabh5sk@yahoo.com

Faculty

Designation	Name and Qualification	Specialization
Associate Professor	Saurabh Kumar Dixit, B.H.M. & C.T. (Dept. of Hotel Mgt., M.J.P.R.K. University Bareilly, U.P.), M.T.M. (I.G.N.O.U., New Delhi), Ph.D. (I.T.H.M., Bundelkhand University, Jhansi, U.P.), JRF-NET (Tourism Admn./ Management)	Hospitality / Tourism Management
	Mir Abdul Sofique, M.T.A. (A. P. University Rewa, M.P.), Ph.D. (Burdwan University, Burdwan, W.B.)	Tour Operations
	Punit Gautam, M.T.A. (Dept. of Tourism Mgt, Kurukshetra University, Kurukshetra, Haryana), D.Phil. (H. N. B. Garhwal University, Srinagar, Garhwal)	Tourism Management
Assistant Professor	Benjamin F. Lyngdoh, M.Com. (Gauhati University, Assam), Ph.D. (N.E.H.U., Shillong)	Accountancy and Finance
	Sharad Kumar Kulshreshtha, M.Com. (Aligarh Muslim University, Aligarh), PG Dip in EDP (Aligarh Muslim University, Aligarh), M.T.A. (Aligarh Muslim University, Aligarh), Ph.D. (B.R.A. University, Agra)	Event Management/ Service Marketing

Brief Statement of Academic Activities:
The faculty members engaged themselves in doing the arrangement of infrastructure for the department like faculty rooms, its furniture and library books of the concerned subjects. Besides, the staff committee also planned about the courses to be initiated

under the department in phased manner. In first phase the faculty members identified and designed the syllabi for four open courses in the department as under:

1. Tourism Marketing -2nd Semester
2. Travel Agency and Tour Operations Management-2nd Semester

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3. Hospitality Management-3rd Semester
4. Tourism Entrepreneurship-3rd Semester

Seminars/Conferences/Symposia/Extension Programme:

Attended

Dr. Benjamin F. Lyngdoh, (i) Presented paper titled Microfinance and Socio-economic Outcomes in Meghalaya: A Comparison of Women Client's of Non-SGSY and SGSY in National Seminar on Entrepreneurship for Economic Development in India with Special Reference to its North Eastern Region: Challenges and Opportunities, organized by Department of Management, Mizoram University, Aizawl dated 26th-27th February, 2013. (ii) Presented paper titled An Assessment of Tourism Attractiveness of Meghalaya in National Seminar on Entrepreneurship and Inclusive Growth, organized by Department of Commerce, NEHU, Shillong dated 21st-22nd March, 2013.

Dr. Sharad Kumar Kulshreshtha (i) Participated in 3rd India International Hotel Travel & Tourism Research Conference, 29-31 January 2013, organised by Banaridas Chandiwalla Institute of Hotel Management & Catering Technology, New Delhi. (ii) Participated in National Seminar on Entrepreneurship and Inclusive Growth, 21 March 2013 organised by The Department of Commerce, North-Eastern Hill University, Shillong. (iii) Participated in International Seminar on India's Look East Policy and The North Eastern Region: Strengthening the Continental Route 22 March 2013, Organised ICSSR-North Eastern Regional Centre, Shillong.

Dr. Punit Gautam, Participated in International Conference entitled Heritage and Tourism: Public, Potential & Problems organized by Institute of Tourism & Hotel Management, BRA University, Agra and ASI, Govt. of India from April 16-18, 2012.

Publications

Journal Article

Dr. Benjamin F. Lyngdoh, Does Microfinance Contribute towards Women's Empowerment? A Case of Meghalaya, The NEHU Journal, 10(2): 33-48

Book/ Book Chapter

Dixit S.K. (2012). Health & Wellness Tourism: A Promising Trend Of Indian Tourism, Dixit Manoj, S.M.H. Rizvi, Anupama Srivastava (eds), Challenges & Strategic Interventions for Tourism, , Royal Publications (India), Lucknow, pp 239-245 (ISBN No. 978-81-910072-6-8).

Dixit S.K (2013), Indigenous Tourism Vis-À-Vis Destination Sustainability: Case of Madhya Pradesh is accepted for publication, in Contemporary Trends in Tourism & Hospitality Management, Ashok Aima, Vinay Chauhan and Jaya Bhasin (eds), Primus Books, New Delhi, Pages135-142

Gautam P and Chourasia B (2012), Tourism Development vis-à-vis Indian Economy: A Prognostic Approach, Tourism And Hospitality Industry: An Insight, L K Bansal and Prashant Gautam (Eds), Neha Publishers & Distributors, New Delhi, pp- 10-14

Gautam P and Chourasia B (2012), Impact of TOURISM & Hospitality on Employment Generation in India, Employment

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Generation in Developing Countries: Challenges & Opportunity, A K Mishra and Anurag Agarwal (Eds), Mumukshu Publication of Humanities, Shahjahanpur (UP), pp-213-218

Gautam P and Chourasia B, Strategic Planning for Effective Academia Industry Interface, pp- 351-363, Tourism And Hospitality Industry: An Insight, L K Bansal and Prashant Gautam (Eds), Neha Publishers & Distributors, New Delhi.

Other Activities

Dr. Sharad Kumar Kulshreshtha (i) Participated in 'Conclave on Investment Tourism

Infrastructure' (CITI), 16-17 January 2013, Organised by Federation of Indian Chambers of Commerce and Industry (FICCI) New Delhi. (ii) Participated as a Resource Person in Directors' Conclave-2013 held at 2-3 February, 2013 at Indian Institute of Tourism & Travel Management, (IITTM), Gwalior (An Organization of Ministry of Tourism, Government of India). (iii) Participated in 21-days UGC-Refresher Course on Tourism & Hospitality conducted by Academic Staff College, BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (Haryana), Dec 17, 2012 to Jan 7, 2013.

Chapter II

SCHOOL OF EDUCATION

Dean : Prof. P. K. Gupta
Telephone : 2723590, 2723591 (O)
Email : deaneducation.nehu@gmail.com

The School of Education comprises of four departments/centres viz; Department of Adult & Continuing Education, Department of Education (both at Shillong & Tura Campus), Centre for Distance Education and Centre for Science Education. The Department of Education conducts M.A (Education) and Ph.D Programmes both at Shillong & Tura Campuses while M.Ed Programme is also conducted at Shillong Campus. The Department of Adult & Continuing Education, besides various kinds of training and extension activities, offers M.A, and Ph.D Programmes in Adult & Continuing Education.

The Centre for Distance Education offers various courses through distance mode viz: B.Ed (Special Education) P.G. Diploma in Special Education, PG Diploma in Entrepreneurship, Certificate and General Course in Floriculture, and Foundation Course on Education of Children with Disabilities. Currently more than 840 students are enrolled in the Centre for Distance Education for various courses.

The Centre for Science Education mainly concentrates on research & extension activities. It also works for the popularization of science in the North-East India.

Each departments/centres has its own identified thrust areas of research. At present about 41 (forty one) research scholars are working for their Ph.D in various departments/centres of the School. Under the School, 6 (six) research scholars have received Rajiv Gandhi National Fellowship, 16 (sixteen) students have cleared NET and 14 (fourteen) scholars were awarded Ph.D degree during the period under report. The Department of Education organized a National Seminar on “Planning & Financing Education for National Development with special reference to North East India” in November 2012.

As a monitoring institution the Department of Education at Shillong campus was involved in the Project Appraisal of Sarva Shiksha Abhiyan (SSA) of the Ministry of HRD New Delhi for the state of Meghalaya, during 2012-13.

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DEPARTMENT OF EDUCATION

Name : Prof. S.M. Sungoh
Telephone : 2723340
Email : hodedu@nehu.ac.in

Faculty

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

School of Education

Assistant Professor	Yodida Bhutia, M.A. (Eng. Litt. Madurai Kamraj Univ), M.Ed., (Mangalore Univ), M.A. (Edu), PGDHE, & Ph.D. (NEHU)	Mental Health Education, Educational Technology, Educational Psychology, Special Education Educational Testing and Evaluation and Research Methodology in Education.
	Rihunlang Rymbai, M.Sc. & M.Ed. (NEHU)	Teacher Education, Science Education, Methods of Teaching, Environmental Education.
	Ashok Kumar, M.A., M.Ed., M.Phil. (Edu), M.Sc., & Ph.D. (Andra University), M.A. English (Dr.B.R.Ambedkar Open University,) M.Sc. Zoology (Acharya Nagarjuna University)	Educational Psychology, Sociology of Education, Educational Testing
	Vandana, M.A. (English) & M. Ed. (BHU)	Research Method in Education, Sociology of Education, Methods of Teaching: Languages (English, Hindi)

Thrust Areas of Research:

System of Education in the North East, Correlates of Achievement, Test Construction and Standardization, Mental Health Education, Economics of Education

Brief Statement of Academic Activities

The Department of Education has been offering courses for M.A., M.Ed. and Ph.D. Programmes. The Department admitted 48 Students in the M.A. Programme and 23 in the M.Ed Programme during the year, 2012. Eight students passed out their NET (Lectureship) in 2012. 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. A National Seminar on Planning and Financing Education for National Development with reference to North East India was organized on 8th & 9th November 2012. A two day hands on Enhancement of life skills of students was conducted for the students of the Department. The department being the monitoring institution is also at present engaged in the Project Appraisal of Sarva Shiksha Abhiyan (SSA) of the Ministry of Human Resource Development, (MHRD), Govt. of India, for the State of Meghalaya during the year 2012-13.

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Students' Profile Enrolment Capacity: MA: 48, M.Ed: 23, PhD: 14

Actual Admissions

Degree	SC	ST	Gen	Males	Females	Meghalaya	Non- Meghalaya	TOTAL
M.A.	-	48	-	3	45	30	18	48
M.Ed.	-	20	3	6	17	21	2	23
Ph.D.	-	12	1+1*	2	12			14

1*: Foreign Student

Degrees Awarded

Degree	SC	ST	Gen	Males	Females	Meghalaya	Non- Meghalaya	TOTAL
M.A.	-	43	2	4	41	31	12	45
M.Ed.	Result Awaited							
Ph.D.	-	9	4	5	8	7	6	13

Details of Students Awarded PhD Degree

Name of the student	Topic of Thesis	Name of Supervisor
Ms. Berylda Hedi Pati Buam	“Teacher Effectiveness of Elementary School Teachers in Jaintia Hills District, Meghalaya ”	Prof. S.M.Sungoh
Mr. Shanti Ram Adhikari	“A Study of Emotional Intelligence among Secondary School Teachers of Sikkim in Relation to their Teaching Aptitude”	Prof. S.M. Sungoh
Mr. Atul Thakur	“Factors Influencing Emotional Intelligence Among B.Ed Students of Himachal Pradesh”	Prof. S.M.Sungoh
Mr. Andrew Wadlibor Warjri	“Personality Traits and Achievements Motivation of Secondary School Students from Matrilineal and Patriarchal Societies in East Khasi Hills District of Meghalaya”	Prof. S.M. Sungoh

School of Education

Ms. Jeemina Baglari	“A Study of Higher Education of Women in Bodoland Territorial Area Districts (BTAD) of Assam”	Dr. B.B.K. Rymbai
Ms. Claris Wallang	“A Study of Women Empowerment Through Education in the Matrilineal Society of Meghalaya”	Dr. C. Nongbri
Mr. Ngazekmi Vashum	Progress and Problems of Secondary and Higher Secondary Education and Higher Secondary Education in the Hill District of Manipur”	Prof. A. Henia
Ms. Treesa J. John	“Development of Programmed Instructional material on Structure of Atom in chemistry at Secondary Level and study of its Effectiveness at Different levels of Intelligence”	Prof. P.K. Gupta
Ms Neizo-ü-mero	“A Study of the Progress and Problems of Higher Education in Nagaland”	Prof. A. Henia
Mr. Loverwell Tham	“A Study of Mathematics Teaching for Primary School Students in East Khasi Hills District of Meghalaya”	Prof. S.M.Sungoh
Ms. Mistilia Dkhar	“Intelligence, Adjustment Patterns and Study Habits of High Average and Low Achievers of Class X Students in Ri Bhoi district of Meghalaya”	Prof. P.K.Gupta
Ms. Saru Joshi	“Effect of Home and School Environment on the Academic Achievement of School Going Children in the Ri-Bhoi District of Meghalaya”	Prof. P.K.Gupta
Ms. Geddellia Nongbri	“A Study of Academic Anxiety in relation to some selected Psycho-Educational Variables among Higher Secondary Students of Meghalaya”	Prof. S.M.Sungoh

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Courses Conducted

M.A. (Education)

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.

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.

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

Study Tours/Field Trips of Students -

Name(s) of the Teacher(s) in-charge: Dr. Ashok Kumar & Mrs. Vandana

Places/Institutions visited: Goa & Mumbai

Duration of the tour/trip: 14 (Fourteen) days

Purpose of visit: The Educational tour covered Goa and Mumbai for 6 days. Students visited major Educational Institutions to enable the students to come in contact with research workers, students and teachers in the field of Education in other Institutions so as to have an opportunity to interchange their views with them and also to carry out library work.

Seminars/Conferences/Symposium/ Extension Programmes, etc.

Organized

Prof. S.M. Sungoh organized the 20th Annual Conference of the North-East India Education Society, on 8th and 9th of November, 2012, held in the Department of Education, NEHU, Shillong.

Dr. I Syiem organized a National Seminar on Planning and Financing Education for National Development with reference to North East India on 8th & 9th November 2012.

Dr B.B.K. Rymbai organized an extension programme, for the M.A III Semester students to NEREI-NCERT Umiam Campus, for exposure to EDUSAT-Programme with head quater NCERT, New

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Delhi as a part of Educational Technology paper included in their course on the 20th of November, 2012

Dr. Yodida Bhutia organized one day seminar on Sexual Harassment and Women's Right. On 17th November 2012. Multi Convention Hall, NEHU. Women Cell, NEHU, Shillong

Attended

Prof. P.K. Gupta

Chaired the Academic Session of the Open Forum for Heads of Educational Institutions on "Mental Health of Adolescents" organized by SAN-KER Mawroh, Shillong at Pine Wood Hotel on 25th April, 2012.

Delivered Key Note Address on the theme "Planning & Financing Education for National Development with special reference to North East India" in a National Seminar organized by Department of Education NEHU, Shillong in collaboration with North East India Educational Society, (NEISES), Shillong on 8th Nov, 2012.

Presented a paper titled "Education for the Holistic Development of the North East" in a seminar organized by William Carey University, Shillong At Hotel Landmark, Nongrim Hills Shillong on 7th Dec, 2012.

Delivered Key Note Address on the theme "Continuous & comprehensive Evaluation : Towards Holistic Development of a Child" in a National Seminar organized by College of Teacher Education (PGT), Shillong on 7th March, 2013.

Prof. A Henia

Participated and presented paper entitled 'Problems of India's Elderly Population the 21st Century-Role of Education' in the International Symposium on Aging

(ISOA-2012), 16th Biennial Conference of Association of Gerontology (India) held at NEHU, Shillong. Date 1st – 3rd October, 2012. Organised by the Department of Biochemistry-NEHU, Shillong.

Participated and presented paper entitled 'Institutional Planning at Secondary and Higher Secondary Level of Education in India' in the National Seminar & 20th Annual Conference of North East India Education Society (NEIES). Date 8th – 9th November 2012. Organised by Department of Education, NEHU, Shillong.

Was a Pannelist as Resource Person in the Academic Session-III in the Panel Discussion on "e-Governance and Education: Inter Linkages – Career Opportunities & Research Opportunities". Date 9th April 2012 at Multiuse Convention Hall, NEHU, Shillong. Organised by Computer Centre, North-Eastern Hill University (NEHU) and National e-Governance Plan (NeGP), Department of Information technology. Sponsored by Ministry of Human Resource Development, New Delhi.

Chaired the Fourth Academic Session as Resource Person in the National Seminar & 20th Annual Conference of NEIES. Date 8th November, 2012. Organised by Department of Education, NEHU, Shillong.

Presented paper on "Need of Quality Research in Teacher Research in Teacher Education" in the NAAC sponsored National Seminar on 'Quality Assurance of Teacher Education: Initiatives and Mechanisms', organised by Department of Education, Modern Institute of Technology, Dhalwala, Rishikesh, Uttarakhand.

Participated and presented paper on 'Quality Improvement of Secondary Education

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- in North East India' in the International Seminar and 27th Annual Conference of the Council for Teacher Education (CTE) on the theme "Inclusion and Qualitative Challenges" held at Dibrugarh University, Assam, Date 7th – 9th Feb., 2013.
- Was Resource person and Panelist in the Academic Session on "Issues and Challenges of Inclusion and Qualitative Expansion in Education – a North East Perspective" in the International Seminar held at Dibrugarh, Date 8th Feb, 2013. Organised by Dibrugarh University in association with CTE(Assam Chapter).
- Participated and presented paper entitled "Vocationalisation of Higher Secondary Education in Meghalaya" in the National Seminar on 'Issues, Concerns and Challenges in Implementing RMSA in NE Region' Date March 12th -14th , 2013 held at Umiam, Shillong organised by NERIE-NCERT, Shillong, on 13th March, 2013
- Chaired the Third Academic Session in the National Seminar on 'Issues, Concerns and Challenges in Implementing RMSA in NE Region' Date March 13th , 2013 held at Umiam, Shillong organised by NERIE-NCERT, Shillong.
- Participated and presented paper entitled "Rural Women Entrepreneurship in North East India" in the National Seminar on Entrepreneurship and Inclusive Growth, 21st -22nd, March 2013, organised by the Department of Commerce, NEHU, Shillong.
- Prof S.M. Sungoh
- Chaired a session in a International Seminar on "Ageing" organized by department of Bio-Chemistry, held in NEHU, Shillong on 2nd October 2012.
- Chaired a session in an National Seminar on "Supervision and Planning Education with special reference to the North-Eastern Region" held in NEHU, Shillong on 8th November, 2012
- Attended a Seminar on Integrated Learning for Environmental Management, and presented a paper on "Environmental Psychology" on the 15th March 2013 at Hotel Landmark Hills, Nongrim Hills, Laitumkhrach, Shillong, organized by William Carey University, Shillong.
- Dr C. Nongbri
- Presented a paper on Critical Pedagogy in the Workshop on Critical Pedagogy and Political Text for Schools organised by the Department of Political Science on 22nd 6. 2012 at NEHU, Shillong.
- Presented a paper on Development of Leadership amongst Women in the International Convocation organized International Council of Unitarian Universalist women (ICUWW) held from October 4th -7th , 2012 at the Grand Hotel, Tirgu-Mures 540052, Romania.
- Presented a paper on Planning of Education in Meghalaya in the Twelfth Plan: The Priorities" in the National Seminar on Planning and Financing Education for Development with Special Reference to North East & 20th Annual Conference of North East India Society (NEIES) organized by the Department of Education, NEHU, Shillong in Collaboration with NEIES, Shillong, November 8th -9th, 2012.
- Chaired a session in the International Seminar and 27th Annual Conference Council for Teacher Education (CTE) India on Inclusion and Qualitative Expansion in Education organized by the Department

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of Education, Dibrugarh University in collaboration with council of Teacher Education (CTE) (Assam Chapter) on 7th & 9th February, 20-13.

Participated and presented a paper on “Implementation of the Right to Education (RTE) Act, 2009 in Meghalaya An analysis of SSA provisions vis-à-vis RTE norms” in the International Seminar and 27th Annual Conference of Council for Education organized by the Department of Education, Dibrugarh University in collaboration with Council of Teacher Education (CTE) (Assam Chapter) on 7th, 8th and 9th February, 2013.

Presented a paper on “Implementation RMSA in Meghalaya: Issues and concerns” in the Regional Seminar on “Issues, Concerns and Challenges in Implementing RMSA in the North Eastern region” organized by the North East Regional Institute of Education (NERIE), NCERT Shillong on March 12th -14th, 2013.

Chaired a second session on “Implementation RMSA in Meghalaya: Issues and concerns” in the Regional Seminar on “Issues, Concerns and Challenges in Implementing RMSA in the North Eastern region” organized by the North East Regional Institute of Education (NERIE), NCERT Shillong, on March-12th -14th, 2013.

Dr. I. Syiem

Presented “Status and Problems of the Aged in Shillong Town” International Symposium on Aging Organised by Department of Biochemistry, NEHU, Shillong 1st -3rd October, 2012

Presented “Emotional Intelligence : The Key to Better Planning” National Seminar & 20th Annual Conference of North East India

education Society (NEIES) Organised by Department of Education NEHU, Shillong 8th -9th November, 2012

Presented paper “ Emotional Intelligence: A Core Competency for Teachers in CCE Scheme of Evaluation” National Seminar Organised by College of Teacher Education (PGT) Shillong, 7th March 2013

Dr. Brinda Bazeley Rymbai

Presented a paper titled “Enhancing livelihoods through ICT” at the international Seminar on “Natural resources and rural livelihoods among tribes in hilly areas” held from the 22nd – 24th of March, 2012 organized by the Department of Geography NEHU, Shillong in collaboration with GIZ-Germany.

Presented a paper titled- “ *Status of the elderly in the society-Problems and prospects*” at the international symposium on Aging(ISOA-2012) 16th Biennial Conference of Association of Gerontology(India) on the theme-“ Problems and Prospects of elderly in today’s world” held from 1st - 3rd October, 2012 organized by the Department of Biochemistry, NEHU Shillong.

Presented a paper titled “ *Status of financing higher education in India*” at the National seminar & 20th Annual Conference of the North East India Education Society(NEIES) on the theme-“ Planning & Financing education for national development with special reference to North- East India” organized by the Department of Education, NEHU Shillong & NEIES from the 8th- 9th November, 2012.

Presented a paper titled –Issues and challenges of CCE in North East in a national seminar in the theme-CCE a holistic approach organized by PGT college from 7th -8th March, 2013.

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Presented a paper titled-Issues and challenges of implementing RMSA in North East, at the Regional seminar on the theme-Issues, Concerns and Challenges in implementing RMSA in NE Region, on the 14th of March 2013 at NEREI-NCERT, Umiam Shillong.

Presented a paper titled-Educating rural Women towards Entrepreneurship in a National seminar on “Entrepreneurship and inclusive growth” from 21st -22nd of March, 2013 organized by the department of Commerce, NEHU Shillong.

Presented a paper titled- “ *Enabling ICT in teacher education for quality improvement*” at the National seminar on Quality assurance for Teacher Education: initiatives and mechanism organized by Department of Education Modern Institute of Technology, Dhalwala, Rishikesh, Uttarakhand sponsored by NAAC on the 21st-22nd of April, 2012.

Dr. Yodida Bhutia

Presented a paper on Educational and Financial Management (2007-2011) in Sikkim. Theme was Educational and Financial management with special reference to North East India. Organised by Department of Education, NEHU and North East India Education Society, Shillong at NEHU from 8th- 9th November 2012.

Presented a paper on Rashtriya Madhyamik Shiksha Abhiyan (RMSA) in Sikkim: Its Problem and Prospects. Rashtriya Madhyamik Shiksha Abhiyan (RMSA). Organised by Department of Special Education, Banaras Hindu University from 24th- 25th November 2012.

Presented a paper on Tools for assessing co-scholastic areas in Upper Primary level. Continuous Comprehensive Evaluation for

holistic development of child. Organised by PGT College of Teacher Education, Shillong from 7th-8th March 2013.

Presented a paper on RMSA in North East India. Issues, Concerns and Challenges in Implementing RMSA in NE Region. Organised by NERIE, Umiam, Shillong from 12th-13th March 2013.

Rihunlang Rymbai

Presented Paper “Financial Management of Secondary Schools in Myllem Block”, presented in National Seminar and 20th Annual Conference of North East India education Society (NEIES) held on 8th and 9th of November 2012.

Dr. Ashok Kumar

Presented a paper entitled: “Representations: Ambedkar Agenda for Social Inclusion in India” in ICPR National Seminar on National Seminar on Dr. B. R. Ambedkar Idea and Thoughts (DBRAIT) organised by Dept. of Philosophy, North Eastern Hill University, during 11th - 12th March 2013, at Shillong.

Publications

Research Papers

Published in India

Gupta, P.K. (2012). Introducing Choice Based Credit System (CBCS) in Higher Education, Education: *North East –A Journal of the North East India Society*, 16(1): 1-5.

Gupta, P.K. (2012). Quality Assurance in Higher Education- The role of Stake holders, Education; *North East – A Journal of the North East India Society*, 16(2): 28-33.

Sungoh, S.M. (2012) Critical Thinking: A Higher Thinking Skill in Classroom

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- Teaching, *Journal of the North East India Education Society*, 16(1).
- Nongbri C. (2012). Why Communication Skills are so important? in Education:North East, a *Journal of the North East India Education Society*, 15(2): 79-83.
- K Rymbai B B. (2012). CCE Guidelines and grading System, *NEIES Journal* 15: 14-21.
- K Rymbai B. B. (2012). What is professionalism? Discussion of teachers and Professionalism in light of 6th pay commission” in the *NEIES Journal*, 16: 55-60.
- Bhutia, Y. (2012) Opinion toward Mathematics Subject of the Secondary School Students of Temi Block, South Sikkim. *Education: North East Journal*, 15: 41-44.
- Bhutia, Y. (2012). Education component of ICDS of South Sikkim. *Education: North East Journal*, 16(1): 78-84.
- Bhutia, Y. and Lobsang, J. (2012). Curiosity Level Of Government Elementary Schools of Dirang Block of West Kameng District, Arunachal Pradesh. *Education Plus: An International Journal of Education and Humanities*, Vol. I, No.1: 97-98.
- Bhutia, Y. (2012) Study Habits and Achievement of students in Mathematics in Secondary schools. *EDUTRACKS*, 12(4): 40-43.
- Bhutia, Y. (2012). Leadership skill of College Principals of Golaghat District, Assam. *Edu World*, 1(1): 173-177.
- Bhutia, Y. (2012). Problems of Women Scientist in Research Institute. *Journal of Applicable Chemistry*, 1 (5): 679.
- Books/Book Chapters/ Proceedings**
- Gupta P.K. (2013). *Improving the Quality of Education through ICT* . In Kharbiryumbai Brinda Bazeley (Ed), *ICT in Education*, 2013 (Vol-2) EBH Publishers India, Guwahati, Pages 51-58.
- Sungoh S.M. (2013). *ICT and the Teacher* . In Kharbiryumbai Brinda Bazeley (Ed), 2013, In *ICT in Education Vol, 1*. EBH Publishers, Guwahati.
- Henia A. (2012). Secondary Education: Access and Equity in the 21st Century. In Nikme S.S. Momin Madhusudan, J.V. (Ed) 2012 *Towards Universalization of Secondary Education in North East India*. Publishers: S.S.Prakashana, Gulbarga, Karnataka. pages 21-24.
- Henia A. (2013). *Role of ICT towards the millennium Developmental Goal-Indian Perspective*. In Kharbiryumbai Brinda Bazeley (Ed), *ICT in Education, Vol I*, 2012, EBH publishers(India) Guwahati. pp. 1-13.
- Henia A. (2012). *Need of Quality Research in Teacher Education* in the Souvenir – NAAC sponsored National Seminar on *Quality Assurance of Teacher Education: Initiatives and Mechanism*, 21st - 22nd April, 2012. Page No. 2-3.
- Henia A. (2012). Problems of Women in Higher Education’ in the Proceedings of the National Workshop on *Women in Scientific Research – Examining the Challenges and identifying their Needs*.
- Henia A. (2012). *Quality Education and School Management in Northeast India*. In J.K. Das (Ed) ‘Agenda for Assam and the North East: Issues and Trends’, Vol II, 2012. by EBH Publishers, Guawahati. Page No 1-6.

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- Henia A. (2013). *Quality Improvement of Secondary Education In North East India*. In the Souvenir -International Seminar and 27th Annual Conference of CTE on *Inclusion and Qualitative Expansion in Education-Issues and Challenges* Department of Education, DU, Feb.2013. Page No. 79.
- Nongbri C. (2013). *Information Communication Technology and Teacher Education*. In Kharbiryumbai B.B. (Ed.) *ICT in Education*. Vol. I. Page No 142-158.
- Nongbri, C. (2013). *Languages and the Realization of the Right to Education*. In S.K.Singh , Lyngdoh, S.A Linguistic Ecology, EBH Publishers(India) an imprint of Eastern Book House 136, M.N. Road, Panbazar, Guwahati.
- Syiem I. S.. (Ed) (2012). *Emotional Intelligence and its Relationship to Selected Personality Characteristics of Secondary School Students of Meghalaya* Published by Rajendra Mihan Sarma & Dr Rabindra Mohan Sarma, Gauhati.
- Syiem I. S. (Ed) (2012). *Guidance and Counselling*, Published by Akashi Book Depot, Shillong.
- Syiem I. S. (Ed) (2012). *Early Childhood Care and Education*, Shillong: Published by Akashi Book Depot.
- Syiem I. S. (2012). *Emotional Intelligence : The Difference it Makes*, Shillong: Published by Akashi Book Depot.
- K Rymbai, B.B. (Ed), 2013, *Globalization and Higher Education*, Eastern Book House Publishers (India) Guwahati.
- K Rymbai, B.B. (2012). In J.K. Das (Ed), *Through Distance Mode in North East-IGNOU – Agenda for Assam and North East Issues and Trends Vol-II* Eastern book house publishers, Guwahati. pp. 44.53
- K Rymbai, B.B. (2012). *Global Economic Meltdown – Its Effect in Higher Education* in the book *Global Financial Crisis- Implications and repercussion*. In Kharbiryumbai Brinda Bazeley , M.N. Bhattarcharjee, M.Dey, B. Wanniang, Sankar sarma, L. Pathaw (Ed) 2012, Eastern book house publishers, (India), Guwahati. Pp. 169-178.
- K Rymbai, B.B (Ed), (2013). *ICT in Education*, Eastern Book House publishers (India) Guwahati.
- K Rymbai, B.B. (2013). *Cloud Computing in Higher Education* in the book *ICT in Education*. In Kharbiryumbai Brinda Bazeley , (Ed), 2013, , Eastern Book House publishers, (India) Guwahati, p.1.
- K Rymbai, B.B. (2012). *Higher education : Teacher Educators* in the book *Teacher Education- Challenges and Expectations* Kharbiryumbai Brinda Bazeley, Dr. M.M. Pandey, Rajmesh Pandey, Pooja Tyagi (Ed), Omega publishers, New Delhi (India) pp. 203-213.
- Bhutia, Y. (2012). *Institutional Assessment of Colleges*. APH Publishing Corporation, Darya Ganj, New Delhi.
- Bhutia, Y. (2012). *Need of Life Skills in Education*. In Nikme S.S. Momin Madhusudan, J.V. (Ed) . *Towards Universalization of Secondary Education in North East India*. Publishers: S.S.Prakashana, Gulbarga, Karnataka Page No. 165-168.
- Bhutia, Y. & Syiem I. (2013). *ICT Awareness among post graduate students*. In

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Kharbiryumbai B.B. (Ed.) ICT in Education.
Vol. I. Page No 142-158.

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.

Research Projects

New Projects

Emotional Intelligence and its Relationship to Selected Personality Characteristics of Secondary School Students of East Khasi Hills District of Meghalaya, Dr. I. Syiem, UGC Delhi, Rs. 1.20 lakhs 2013.

Ongoing Projects

SSA for the State of Meghalaya, Prof. C. Nongbri, Monitoring Coordinator: The Department of Education being the Monitoring Institution for SSA is engaged in monitoring SSA Project under signed the MOU in September with the Ministry of Human Resource Development (MHRD) New Delhi for the whole State of Meghalaya since 2003 till date. Rs 9.60 lakh

Awards

Dr. B.B.K. Rymbai was Awarded Bharat Shiksha Ratan Award by Global Achievers Foundation, New Delhi on the 15th June 2012 at New Delhi.

Other Academic Activities

Prof P.K. Gupta

Delivered six lectures on the topics (i) Logical Method of Inquiry (ii) Scientific Method of Inquiry (ii) Experimental Method of Inquiry (iv) Why people behave as they do

(v) Mental Health and (vi) Psycho analysis in 19th Orientation Programme organized by UGC Academic Staff College of NEHU, Shillong on 10th, 11th, 22nd, 25th, 29th and 30th May, 2012.

As a member of NAAC's Peer Team visited Krishan College of Teacher Education Meerut (UP) and Yoginath Degree College, Baghpat (UP) from 17th to 21st April, 2012 and prepared their performance assessment report.

As a resource person delivered a lecture on "Macro Lesson Planning" for the faculty members of St Mary's College of Teacher Education (PGT), Shillong on 4th May, 2012.

Delivered six lectures on the topics Methods of Research Inquiry, Mental health and Psycho analysis in the 20th Orientation Programme organized by UGC Academic Staff College of NEHU, Shillong on 17th, 18th, 24th May and 5th & 7th June, 2012.

As a resource person participated in the workshop for the development of Course Outline for Certificate course in Teaching of Science, Social Science and Mathematics at Upper Primary & Secondary Level organized by North East Regional Institute of Education (NERIE) Barapani Campus, Shillong on 6th & 7th June 2012.

Delivered a lecture on Methods of Research Inquiry in a short-term course in Research Methodology organized by UGC-ASC, NEHU, Shillong on 10th Oct, 2012.

Delivered a lecture on Mental Health in a short term course of Academic Administrators organized by UGC-ASC, NEHU, Shillong on 11th Oct 2012.

Delivered three lectures on the topics (i) Good Teaching (ii) Why people behave as they do

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- and (iii) Mental Health in 21st Orientation programme organized by UGC- Academic Staff College, NEHU, Shillong on 26th Feb and 1st March, 2013.
- Delivered two lectures on the topics (i) Knowledge Commission Report on Higher Education and (ii) Mental Health in a Refresher Course for Academic Administration organized by UGC- Academic Staff College, NEHU, Shillong on 28th Feb and 1st March 2013.
- Delivered three lectures on the topics (i) Why people behave as they do (ii) Mental Health and (iii) Logical Method of inquiry in 22nd Orientation Programme Organized by UGC- Academic Staff College, NEHU, Shillong on 5th & 6th March 2013.
- Delivered three lectures on the topics (i) Logical Method of Inquiry (ii) Scientific Method of Inquiry (iii) Experimental Method of Inquiry in a Capacity Building Programme for faculty in Social Science organized by Equality Opportunity Cell, Tezpur University, Tezpur in collaboration of ICSSR-NERC, Shillong at Tezpur on 14th & 15th March, 2013.
- Delivered a lecture on 'Good Teaching' in a Refresher Course in English organized by the Department of English under the sponsorship of UGC- Academic Staff College NEHU, Shillong on 19th March, 2013.
- Prof A. Henia.
- Was a Resource Person in the Academic Session-III and Delivered lecture entitled "*e-Governance and Higher Education*" in the One Day National Workshop on *e-Governance*, in the Panel Discussion on "e-Governance and Education: Inter Linkages – Career Opportunities & Research Opportunities". Date 9th April 2012 at Multiuse Convention Hall, NEHU, Shillong. Organised by Computer Centre, North-Eastern Hill University (NEHU) and National e-Governance Plan (NEGP), Department of Information technology. Sponsored by Ministry of Human Resource Development, New Delhi.
- Was a Resource Person and Delivered Lecture on '*Issues of Higher Education*' in the IGNOU-ECP, REC, Shillong, 22nd May 2012.
- Was a Resource Person and Delivered Lecture on '*Globalisation and Privatization-what does this mean for Higher Education*' in the IGNOU extended contact programme, REC-Shillong, 26th May 2012.
- Was a Resource Person in the workshop for 'Developing the Course Outline for the Certificate Courses in Teaching Science/ Mathematics and Social Sciences (funded by North East Council) held at NERIE (NCERT), Umiam, Shillong, 7th June, 2012.
- Was a Resource Person in the Workshop entitled '*Piloting of UNESCO's -GEQAF Tools in Meghalaya*' held at North Eastern Council Hall, Shillong. Date 3rd – 8th September 2012. Organised by NCERT – NERIE, Shillong.
- Was a Resource Person in the National Workshop entitled 'A Study on the Problems and Challenges Related to the Process of Growing up amongst the Adolescents Students of Meghalaya' held at NERIE, Shillong. Date 25th – 28th September, 2012.
- Was a Resource Person in the two day National Workshop on 'Revision of Syllabus in Adult and Continuing Education' held at NEHU Conference Hall. Date 3rd and 4th October, 2012. Organised by DACE-NEHU, Shillong.

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- Was part of Teacher Team for M.A. IVth Semester students to NERIE-NCERT (ICT) on EDUSAT- Tele conference session with the New Delhi (NCERT-ICT) Shillong dated 20th November 2012.
- Was a Resource Person in the five day National Orientation-cum-Workshop for the Development of Secondary and Higher Secondary School Curriculum under the Nagaland Board of School Education. Organized by NCERT-NERIE, Shillong, 5th – 8th March, 2013.
- Attended and participated in the two day National Seminar on ‘Economy and Environment in North East India’. Date 5th - 6th June, 2012. Organised and held at Shillong by NEICSSR.
- Attended and participated in the Awareness programme on ‘Women Harassment in the Workplace’ held at NEHU multi-convention hall. Organised by Women Cell, NEHU, Shillong, dated 30th October 2012, Department of Education, NEHU, Shillong.
- Attended and participated in the National Seminar on ‘Environmental Ethics in Tribal Societies with Special Reference to North East India’ held at Shillong. Date 21st & 22nd November, 2012. Organised by Lady Keane College, Shillong.
- Attended and participated in the National Seminar on ‘Global Trends and Career Opportunities in Cloud Computing, Electronics & Communication Engineering’, held at Shillong. Date 30th November, 2012. Organised by University of Technology and Management, Shillong.
- Attended and participated the International Seminar on “Look East Policy” organised by NERC, ICSSR New Delhi and sponsored by NEC Shillong on 21st -22nd March, 2013.
- Prof. S.M. Sungoh
- Acted as a resource person for the following:
- UGC- ASC 19th Orientation Programme on 14th May and 17th -18th May, 2012
- UGC –ASC 16th Orientation Programme on 29th May and 4th -5th June 2012.
- UGC –ASC Special Summer School 30th August and 3rd September, 2012.
- Co-ordinator and Peer Team Member for NAAC college inspection in “Jenny”s College of Teacher Education”, Trichy, on 13th -15th September, 2012.
- Resource person for a workshop on “Critical Thinking in Teaching” organized by Lady Keane College, Shillong on 15th November 2012.
- Chairperson for NAAC College Inspection in Bonnie Foi College, Bhopal on 27th-28th December 2012.
- Delivered a Key Note Address in the Inaugural Session on 21st November, 2012 for the Third Post Doctoral Research Initiation Programme on 21st-22nd November, 2012 organized by ICSSR, NERC, Shillong.
- Delivered a Lecture in the Second Post-Doctoral Research Initiation Programme on 27th and 28th of March, 2013 Organised by ICSSR, NERC, Shillong.
- Resource person for 23rd to 24th May 2012 organised in Pragati Manor, Dispur Guwahati on ‘Training of Untrained Teachers’ organized by MHRD, New Delhi.
- Attended a “Consultation Meeting on Teacher Education System in the Country” with Justice JS Verma Commission, on 30th June, 2012 in NUEPA, NCERT campus, New Delhi, organized by Ministry of Human Resource Development, Department of School Education and Literacy, New Delhi.

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Resource person for a 5 days workshop on development of Training Module for Elementary School Teachers on 25th – 29th June, 2012 in the office of the State Project Director, Shillong.

Attended an International Seminar on India's Look-East Policy and the North-Eastern Region: Strengthening the continental route on 21st – 22nd March, 2012 at North Eastern Council Auditorium, Shillong, organized by ICSSR-NERC, Shillong.

Dr. C. Nongbri

Acted as a resource person for the following:.

UGC-ASC 21st Orientation Programme (General) 4th February to 3rd March 2012 on Curriculum Development on 21st and 22nd February 2013 organized by UGC-Academic Staff College, NEHU, Shillong.

UGC-ASC 22nd Orientation Programme (General) 11th February to 10th March 2013 on Curriculum Development on 27th February 2012. UGC-Academic Staff College, NEHU, Shillong.

6th UGC Sponsored Refresher Course in Education organized by the Academic Staff College, Manipur University, Canchipur from 14th January to 16th January 2013.

Delivered a lecture on 29th January, 2013 at the State Level Seminar on the topic "Girl Child and Education" on the occasion of National Girl Child Day at don Bosco Youth Centre, Laitumkhrah Shillong.

Dr. I.S. Syiem

Delivered lecture on "Micro- teaching at the Tertiary Level on 2nd March 2012, 5th to 7th March 2012 on the occasion of the 18th Orientation Programme which was held organised by the UGC- Academic Staff

College (UGC-ASC) NEHU Shillong on 23rd February to 21st March 2012.

Delivered lecture on "Continuous and Comprehensive Evaluation" organized by NCERT on the occasion of Training of Teacher educators on "Continuous and Comprehensive Evaluation" at the Primary Level 27th September 2012.

Participated in an awareness programme on sexual harassment conducted by Women Cell, NEHU, Shillong, on 30th October 2012.

Delivered a lecture on 29th January, 2013 at the State Level Seminar on the topic "Girl Child and Education" on the occasion of National Girl Child Day at Don Bosco Youth Centre, Laitumkhrah Shillong.

Participated in the " National Workshop on the use of SPSS in social Science Research" Organised by Dept of Economics, St Anthony's College, Shillong from 30th November-6th December, 2012.

Participated in the " National Seminar on Integrated learning for Environmental Management" organised by William Carey University, Shillong on 21st & 22nd March, 2013.

Attended a two day "International Seminar on "organised by ICSSR, NEHU, Shillong on 22nd -23rd March 2012.

Dr. B.B.K. Rymbai

Was a resource person on the PGDHE programme organized by IGNOU Regional centre Shillong on the 26th May 2012 at 10:30 A.M. on the topic "Issues of quality assurance in Higher Education".

Was a resource person on the PGDHE programme organized by IGNOU Regional centre Shillong on the 28th May, 2012 at 2:00 p.m.

School of Education

- on the topic “What is Professionalism? Discussion on teachers and professionalism in light of 6th pay commission”.
- Was a resource person to NERIE-NCERT Barapani campus on the 1st of June, 2012 for giving a lecture on “CCE-Co scholastic areas-part I”.
- Was a resource person to NERIE-NCERT Barapani campus on 2nd June 2012 for giving a lecture on “CCE-Co scholastic areas part-II”.
- Was a resource person to NERIE-NCERT Nongsder, on the 6th and 7th June, 2012 in a workshop for developing a course outline for certificate courses.
- Was a Resource person in 5 days workshop titled Orientation-cum-workshop for curriculum development in Nagaland at NERIE-NCERT Umiam Shillong from 5th – 9th March, 2013.
- Was a resource person in the national workshop of the project-co-ordinators of RIEs & RPs for the development of tools for “A study on the problems & Challenges related to the process of growing up amongst the adolescent student of Meghalaya” organized by NERIE-NCERT at their Guest house, Upper Nongrim Hills from the 25th – 28th September, 2012.
- Was invited as an expert for conducting viva in Guidance & Counselling on the 25th of September, 2012 at NERIE-NCERT, Nongsder, Shillong.
- Was invited as an expert for selection of B.Ed candidates for admission at PGTC-CTE on the 27th of September, 2012.
- Was nominated as subject expert by College Development Council (CDC) NEHU Shillong for selection of candidates for appointment at Bissau College on the 5th of December, 2012.
- Chaired two academic sessions on the 13th of March, 2013 at the Regional Seminar on Issues, Concerns and Challenges in implementing RMSA in NE Region, from 12th -14th of March, 2013 at NERIE-NCERT, Umiam Shillong.
- Was nominated as a subject expert by CDC, NEHU, Shillong as a member of inspection team to visit St. Dominics College for renewal of affiliation for B.A pass and honours course on the 26th of April 2013.
- Judged the extempore speech competition conducted on the 24/4/2013 at 1 PM in the science seminar hall on account of Annual Varsity Fest 2013, conducted by NEHU students union.
- Attended the e-governance workshop organized by the Computer centre, NEHU Shillong on the 9th of April, 2012.
- Attended the core committee meeting on the 13th of August, 2012 at Jyoti Soart School, Bethany Society conducted by NERIE-NCERT Shillong as a resource person in the workshop programme on General Education Quality.
- Attended a 6 days UNESCO-GEQAF workshop on 15 tools regarding quality issues in school education in Meghalaya from the 3rd-8th September, 2012 organized by NERIE-NCERT, Shillong.
- Attended a 6 days short term course in Research Methodology organized by the UGC-Academic Staff College, NEHU, Shillong from the 8th – 13th October, 2012.
- Attended the workshop programme on General Education Quality Analysis/Diagnosis Framework (GEQAF) participated as a core

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- committee member held at DERT, Shillong from the 12th-13th of July 2012 conducted by NEREI-NCERT.
- Attended a programme title “Awareness on Sexual Harassment” organized by the Department of Education, NEHU & Impulse(NGO) Shillong on the 30th of October, 2012 at the Multi-Convention Hall, NEHU, Shillong.
- Attended a National seminar on “Environmental Ethics in Tribal Societies : with special reference to North East India” organized by the Department of Philosophy, Lady Keane College, Shillong from the 21st -22nd November, 2012.
- Attended a National seminar on Cloud Computing, Electronics and Communication Engineering “Discover Global trends and Career opportunities” on the 30th of November, 2012 organized by University of Technology & Management (UTM), Bijni Complex, Shillong.
- Attended an International Seminar on Indias Look East Policy and the North Eastern Region: Strengthening the Continental Route on 21st – 22nd of March 2013 at North Eastern Coyuncil (NEC) Auditorium, Shillong organized by ICSSR-NERC and NEC, Shillong.
- Attended Sensitization programme on Sexual Harassment. Organised by Women Cell. Multi-Use Convention Hall, NEHU, Shillong on 11th November 2012.
- Dr. Y. Bhutia
- Acted as Resource Person in the Workshop for developing Course Outline for certificate course at NERIE, Barapani, Shillong. 6th -7th June 2012.
- Acted as Resource Person in training of DIET faculty and other KRPs/Teacher Educators on Population and Adolescence Education of the State of Meghalaya. NERIE, Umiam. 13th September 2012.
- Member of Working Committee for Tools and Techniques for Operationalisation of CCE in Meghalaya. 3rd September 2012.
- Attended Sensitization Programme on Combating Gender Based Violence for Teachers in charge of Women Cell/Women Study Centers of Colleges and Universities of Eastern India. Organised by National Institute of Public Cooperation and Child development (NIPCCD), Regional Center, Guwahati from September 26th -28th, 2012.
- Attended Sensitization programme on Sexual Harassment. Organised by Women Cell. Multi-Use Convention Hall, NEHU, Shillong.
- Attended Workshop on Statistical Computing and its Applications. Organised by Bayesian and Interdisciplinary Studies, ISI, Kolkata in collaboration with Department of Statistics, NEHU, Shillong from 29th Nov – 1st Dec 2012.
- Mrs. Rihunlang Rymbai
- Resource Person for Training of ICSE School Teachers of Meghalaya, 3rd September, 2012.
- Part of a Teacher-team organizing EDUSAT Tele-Conferencing Session on ICT in Collaboration with NCERT (NERIE), Shillong in NERIE Campus, Nongsder on 20th November, 2012, organized for M.A. IIIrd Semester Students as part of the Educational Technology Course.
- Attended a workshop on “Critical Pedagogy and Political Text for Schools”, organized

School of Education

- by Department of Political science, NEHU, Shillong on 22nd June, 2012, held in Academic staff College Seminar Hall, NEHU.
- Attended Short-term Course in Research Methodology with Special Reference to SPSS organized by Academic Staff College, North Eastern Hill University, Shillong from 30th July, 2012 to 4th August, 2012.
- Attended a Two-Day National Seminar on “Continuous Comprehensive Evaluation: Towards Holistic Development of a Child”, at College of Teacher Education (PGT), Shillong, on 7th – 8th March 2013.
- Attended a programme title “Awareness on Sexual Harassment” organized by the Department of Education, NEHU & Impulse(NGO) Shillong on the 30th of October, 2012 at the multi-Convention hall, NEHU, Shillong.
- Dr. Ashok Kumar
- Participated in an awareness programme on sexual harassment conducted by Women Cell, NEHU, Shillong, on 30th October 2012.
- Participated in NEIES-National Seminar on “Planning and Financing Education for National Development with special reference to North East India ” organized by Dept. of Education and NEIES, during 8th -9th Nov, 2012 at Shillong.
- Mrs. Vandana
- Went on an educational excursion as a teacher in charge with MA IV semester students to Mumbai and Goa in February 2013.
- As part of the teacher team, organizing a virtual class for MA IV in NERIE campus as a part of Educational Technology syllabus.
- Participated in NEIES-National Seminar on “Planning and Financing Education for National Development with special reference to North East India” organized by Dept. of Education and NEIES, during 8th -9th Nov, 2012 at Shillong.
- Attended an awareness program on Sexual Harassment organized by Women Cell.

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DEPARTMENT OF EDUCATION (TURA)

Head : Dr (Mrs) Nikme S. C. Momin
Telephone : 9436315571 (M)
Email : edntcnehu@gmail.com

Faculty

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

Thrust Area of Research:

Value and Peace Education, Teacher Education, Methods of Teaching at Tertiary Level, Special Education, and Elementary Education are the thrust areas of study and research in the department.

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.: 32** **Ph.D.: Variable**

Actual Admission

Degree	OBC	SC	ST	Gen	Males	Females	Meghalaya	Non- Meghalaya	TOTAL
M.A.	-	-	29	3	3	29	28	4	32
Ph.D.	1	1	3	-	1	4	4	1	5

School of Education

Degree Awarded

Degree	OBC	SC	ST	Gen	Males	Females	Meghalaya	Non- Meghalaya	TOTAL
M.A.	3	1	26	-	5	24	26	3	29
P.h.D.	1	-	1	-	1	1	1	1	2

Details of Students Awarded Ph.D.Degree:

Name of the Student	Title of Thesis	Name of Supervisor
Dr. Brian Sengsrang Ch. Marak	Primary Education in Rural Meghalaya: A Study in West Garo Hills District.	Dr. Madhusudan J.V.
Dr. Yensembam Raj Lakshmi Devi	Self-Concept and Adjustment of Physically Challenged Children in Integrated and Segregated Educational Settings of Meghalaya.	Dr. S.C. Subudhi

Courses Conducted:

M.A.

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.

Research Methodology (RES ED: 501), Data Analysis and Computer Application (RES ED: 502) Review of Related Literature (RES ED: 503)

Study Tours/Field Trips of the Student:

Name(s) of the in-charge: Shri. Lakson M. Marak; Shri. Talsrang M. Sangma

Places/Institutions visited: Goa University and Mumbai

Duration of the tour/trip: 13 days

Purpose of visit: Educating students about education pattern in the visited part of the country.

Seminars/Conference/Symposia/Extension Programmes etc.

Attended:

Dr. Nikme S.C. Momin presented

A paper entitled “Educational Stress and Strategies for Reduction: A Picture of Meghalaya” in a National Seminar on Human Resource Development in the Context of 21st Century, organized by the Department of Education, Guwahati University, Guwahati, Assam on the 5th -6th April 2012.

A resource paper entitled “Christian Educators and Understanding Psychology” in an Orientation Programme of the Sunday School Teachers, organized by Wadanang Baptist Church, Wadanang, Tura on 14th April, 2012.

A paper entitled “Planning, Decision Making and Management of School Finance by the School Heads of Meghalaya” with Mrs Pilne A Sangma in a National Seminar cum 20th Annual Conference of the North East India Education Society (NEIES) on Planning and Financing Education for National Development with Special Reference to North East India by the Department of Education, North Eastern Hill University, Shillong, Meghalaya on the 8th -9th November, 2012.

An invited paper entitled “Developing Core Critical Thinking Skills Amongst Elementary School Teachers.” in a training programme “Diagnostic Testing and Remedial Teaching” organized by District Institute of Education and Training (DIET), Tura, Meghalaya for the Elementary School Teachers of Lower Primary Schools of West Garo Hills District of Meghalaya from 10th to 14th December, 2012.

A paper entitled “Utilizing PRA to know a Community” in a Training cum Community Awareness Programme conducted by District Institute of Education and Training (DIET), Tura, Meghalaya from 7th January to 11th January, 2013 at Sesengpara Village of Dalu Block of West Garo Hills District of Meghalaya.

A paper entitled “Parents, Family, Community Involvement in Education” in a Training cum Community Awareness Programme conducted by District Institute of Education and Training (DIET), Tura, Meghalaya from 7th January to 11th January, 2013 at Sesengpara Village of Dalu Block of West Garo Hills District of Meghalaya.

A paper entitled “Being Goal Directed in Life- A Weapon to Survival” in a Training cum Community Awareness Programme conducted by District Institute of Education and Training (DIET), Tura, Meghalaya from 7th January to 11th January, 2013 at Sesengpara Village of Dalu Block of West Garo Hills District of Meghalaya.

A paper entitled “Awareness on Economics of Education- An Introduction with Villagers” in a Training cum Community Awareness Programme conducted by District Institute of Education and Training (DIET), Tura, Meghalaya from 7th January to 11th January, 2013 at Sesengpara Village of Dalu Block of West Garo Hills District of Meghalaya.

Research Projects

Ongoing

Dr. Madhusudan J. V.

Minor Research Project entitled “A Study on Learners’ Attitude and its impact on Sakshaar Bharat West Garo Hills, Meghalaya” sponsored by the State

School of Education

Resource Centre, North Eastern Hill University, Shillong, Meghalaya with the financial assistance of Rs 60,000/-.

Dr. B.C.Das

Entitled “A Study of the Organisation of Teacher Education Programmes for Secondary School Teachers in North-Eastern Region of India.” ICSSR - financial assistance of Rs 3,84,000/-.

Entitled “A Critical Evaluation of the Teaching-Learning Systems Adopted for the Management of Refresher Courses in the Academic Staff Collages in India.” ICSSR, New Delhi, financial assistance of Rs 5,40,000/-.

Completed

Dr. Nikme S.C. Momin Completed

UGC Major Research Project with effect from 1.2.2011 to 25.May.2013 with financial assistance of Rs.4, 47,000.00. The project is entitled as Teachers’ Personal Values and Teaching Competency as an Agenda towards Quality in Secondary Education of Garo Hills region of Meghalaya.

Completed a grant-in-aid Research Project under ICSSR, New Delhi of Rs. 2,90,250/- entitled ‘Maladjusted Adolescents of Meghalaya and the Need for Guidance and Counseling Services: A Cross-cultural Analysis’ on 25.03.2013.

A Minor Research Project entitled “A Study on the Implementation of Saakshar Bharat Programme and its Impact on Female Literacy in West Garo Hills District of Meghalaya” sponsored by the State Resource Centre, North Eastern Hill University, Shillong, Meghalaya on September, 2012 with the financial assistance of Rs 62,000/- . The Project was

Co-co-ordinated by Dr Madhusudan.J.V, Assistant Professor, Department of Education, NEHU, Tura Campus.

Dr. S. C. Subudhi

Completed Project, entitled, “Educational Facilities and Mental Health of Physically Challenged and Normal Children in integrated educational settings of North-East States of India”. Funded by ICSSR, New Delhi, Approved with Rs. 5, 75,120/-.

Dr. Madhusudan J. V.

Completed “A Study on the Implementation of Saakshar Bharat Programme (SBP) and its impact on female literacy in West Garo Hills District of Meghalaya” Financial Assistance of Rs. 67,000/- from State Resource Centre NEHU, Shillong. (Co Investigator along with Dr. Nikme S.C. Momin).

Publications

Madhusudan J. V. (2012). Poverty and Educational Participation among Muslims in India: Evidences from NFHS III, *The Journal of Avidance Education*, 1: 104-111 [ISSN 0974-6498].

Madhusudan J. V. (2012). Role of Teachers Attitudes and Socio- Political Concerns in India, *Dimensions of Education*, 1(4): 5-8 [ISSN-2249-2437].

Madhusudan J. V. (2012). Secondary Education in Rural Areas of North–East India, *Education India*, 1(3): 198-203. [ISSN2278-2435].

Funds Received from Agencies other than NEHU:

Agency	Amount
UGC- New Delhi	???
ICSSR- New Delhi	???
SRC, NEHU-Shillong	???

CENTRE FOR DISTANCE EDUCATION

Head : Dr. S.N. Sarma (till February 2013)
Prof. R. N. Rai (from March 1, 2013)
Telephone : 2226822 / 2228705
E-mail : mrai1957@yahoo.co.in

Faculty:

Designation	Name and Qualification	Specialization
Professor	R.N. Rai, M.A. & Ph.D. (BHU)	Psychological Testing and Social Psychology of Aging
Associate Professor	S.Wangu M.Sc. & Ph.D. (Kashmir University)	Floriculture
Assistant Professor	R.C.Pandey, M.A. & Ph.D. (Kumaon University)	Experimental Psychology & Statistics

Thrust Area

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. The Centre offers Degree, Diploma and Certificate Courses through distance mode relevant to the region.

Brief Statement of Academic Activities:

The Centre for Distance Education 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:

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

School of Education

Student s Profile

Enrolment Capacity:

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

Actual Admission:

Degree	Males	Females	ST	SC	Gen	OBC	Meghalaya	Non Meghalaya	Total
B.Ed.-SEDE	64	112	108	1	48	19	66	110	176
Foundation Course on Education of Children with Disabilities (FC-SEDE)	299	337	357	19	192	68	265	371	636
Post Graduate Professional Diploma in Special Education (PGPD-SEDE)	11	24	11	1	12	11	4	31	35

Degrees Awarded:

Degree	Male	Female	ST	SC	GEN	OBC	MEGH	NON MEGH	TOTAL
B.Ed.-SEDE	13	28	20	2	14	5	16	25	41
Foundation Course on Special Education of Children with Disabilities (FC-SEDE)	174	187	163	13	135	50	108	253	361
PGPD-SEDE	7	11	5	1	5	7	4	14	18

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)

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

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

School of Education

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

Seminars/Conferences/Symposia/Extension Programmes etc

Attended:

Dr.R.N.Rai

Chaired the Scientific Session on Applied Social Psychology in the 47th National & 16th International Conference of the Indian Academy of Applied Psychology (IAAP) organized by TOC H Institute of Science

& Technology (TIST) , Arnakkulam, Kerala from 15th June 17th June 2012.

Chaired a Session on ‘Child Rights and Abuse in Home and School’ in the three day National conference of Indian School of Psychology Association (INSPA) on School Psychology & Mental Health Challenges organized by the Department of Psychology University of Calicut on 22nd , 23rd and 24th November, 2012.

Publications

Rai, R.N. (2012) “Perceived Parental Rearing Style and Personality among visually Impaired and normal Khasi students’, *Disabilities and Impairments* Vol.26 (2), PP 1 & 7 – 150.

Pandey, R.C. (2012) “Perceived Parental Rearing Style and Personality among visually Impaired and normal Khasi students’, *Disabilities and Impairments*, 26 (2): 1 & 7 – 150.

Programme Guide and Study Materials for B.Ed-SEDE, PGPD-SEDE and FC-SEDE, NEHU, Shillong.

Academic Collaboration

India:

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

B.Ed.-SEDE

Post Graduate Professional Diploma in Special Education (PGPD-SEDE)

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

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Honors/Awards/Recognition

Dr. R.N.Rai is nominated as

Member of Editorial Board PSYBER NEWS, International Psychology Research Publication from April 2012, IOA, Veer Savarkar Block, Shakarpur, Delhi – 110 092
State Coordinator of Meghalaya from May 2012 for India School of Psychology Association, 7, 14th Street, Krishna Nagar, Puducherry – 605008.

Regional President of Indian Academy of Applied Psychology from June 2012, National Institute of Technology Teachers Training and Research (MITTTR) Taramani, Chennai – 600 113 India.

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 1200 distance learners are enrolled under this Study Centre.

Dr.R.N.Rai delivered a theme lecture in training programme of School Psychology in the INSPA Conference on Stress and Management of Stress organized by Department of Psychology, University of Calicut, on 23rd November 2012.

Dr.R.N.Rai delivered lectures in NEIGRIMS for B.Sc. Nursing 1st Year students from July 2012 to February 2013.

School of Education

CENTRE FOR SCIENCE EDUCATION

Head : Prof. M.S. Bisht
Telephone : 272-2950; 272-2951
Email : msbisht59@gmail.com; msbisht@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professors	Man Mohan Singh	
	Debashis Battacharjee, M. Sc. (NEHU), Ph. D. (Warsaw University, Poland)	Number Theory (Arithmetical Functions)
	M. S. Bisht, M. Sc. (Jodhpur University), Ph.D. (Delhi University)	Plant Sciences, Environment
	P. K. Patra, M. Sc. (Sambalpur University), Ph.D. (NEHU)	High Energy Physics/ Condensed Matter Physics (Nanophysics)

Thrust Area of Research

Research in Science Education, Development of Scientific temper among school/college/ University students and community at large, promotion of scientific awareness among youths, 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 sciences (physics and mathematics), biological sciences and on environmental issues. Faculty members have projects on various aspects where innovative tools and techniques are being developed to use the local neglected resources like bamboo, for the socio-economic development of the region. The Centre is also working on the burning issues of today like waste management. Simple

technique is being developed to recycle and use the organic garbage, in various forms like animal feed and compost, coming from every household. Faculty members of the Centre are also actively working on topics like number theory (arithmetical functions) and carbon nano-tubes which have direct applications in various fields of modern science. Like arithmetical functions are not only used in mathematics but also in computer science, computer engineering, neural computation, semiconductor design and automation.

Seminars/Conferences/Symposium/Extension Programmes etc.

Attended

Prof. M. S. Bisht chaired two technical sessions at National Seminar on, "Recent Advances in Natural Products Research (RANPR)", held at Department of Zoology, Pachhunga

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University College, Aizawl, Mizoram on November 29th- December 1st, 2012.

Publications

Published in India

Kumar S., Patra P.K. (2013). "Nonlinear approach to explain mechanical properties of carbon nano-tubes", *Indian Journal of Science and Technology*, 6 (S3): 5-6.

Published Abroad

Bhattacharjee D., Saikia P.K. (2012). "On some new class of arithmetic convolutions involving arbitrary set of integers", *Romanian Journal of Mathematics and Computer Science*, 2 (2): 23-35.

Books/Book Chapters/Proceedings

Bisht M.S., Nirmala C., Vyas P. (2012). Bamboo shoot a neglected natural resource: a source of food and prosperity for North-East India, Proceedings of the National Seminar, Recent Advances in Natural Products Research, The Mizo Post-Graduate Science Society, Aizawl, pp18-27.

Funds Received from Agencies other than NEHU

Agency	Amount
UGC, New Delhi	Rs. 4.22
MoPFI, New Delhi	Rs. 7.95
DST, New Delhi	Rs. 5.61

Research Projects

Ongoing Projects

Title	PI/Coordinator	Co-PI	Funding Agency	Funds Received in RS (Lakhs)
Novel Plant Genotypes for Predicted Climate Change 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 Prof. S. Rama Rao, Department of Biotechnology and Bio-informatics, NEHU, Shillong	Prof. M. S. Bisht Prof. S. Rama Rao, Department of Biotechnology and Bio-informatics, NEHU, Shillong	UGC, New Delhi	4.22
Organic Garbage Recycling for the Generation of Livelihood and Zero Waste	Prof. M. S. Bisht Prof. C. Nirmala	Prof. M. S. Bisht	UGC, New Delhi	-
Development of Processing Techniques for Preserving Juvenile Shoots of Nutritionally Rich Bamboos of Sub-Himalayan and North-Eastern Region of India	Botany Department, Panjab University, Chandigarh	Prof. M. S. Bisht	DST, New Delhi Ministry of Food Processing Industry, New Delhi	5.61 7.95

School of Education

Academic Collaboration

Faculty Member	Collaborator	Area of Collaboration
Prof. P. K. Patra	Prof. Satish Kumar, Department of Physics, NEHU, Shillong	Nanophysics, mechanical properties of carbon nanotubes
Prof. M. S. Bisht	Prof. S. Rama Rao, Department of Biotechnology and Bio-informatics, NEHU, Shillong	Molecular and cytogenetical analysis of Citrus plants in North-East India, Organic garbage recycling and reuse
Prof. M. S. Bisht	Prof. C. Nirmala, Botany Department, Panjab University, Chandigarh	Nutritional analysis of bamboo shoots, promotion of bamboo as health food in North-East India,

Other Activities

Prof. P. K. Patra delivered a series of lectures on “Group Theory and its Applications to Physics,” as a resource person at the, “National Workshop on Group Theory (NWGT-2012)”, held at Physics Department, Pachhunga University College, Mizoram University, Aizawl, Mizoram on December 3rd -7th, 2012.

Prof. P. K. Patra delivered an invited talk on, “SU Matrices and their Application to Quark Model”, at the “Workshop on

Particle Physics”, held at Department of Physics, St. Anthony’s College, Shillong on March 21st – 23rd, 2013.

Prof. M. S. Bisht delivered an invited plenary lecture on, “Bamboo Shoot a Neglected Natural Resource: A Source of Food and Prosperity for North-East India”, at National Seminar on, “Recent Advances in Natural Products Research (RANPR)”, held at Department of Zoology, Pachhunga University College, Aizawl, Mizoram on November 29th- December 1st, 2012.

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DEPARTMENT OF ADULT & CONTINUING EDUCATION

Head : Prof. E. Jyrwa
Telephone : (O) 272-3328 (M) 9436302933
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, MSW & Ph.D. (Kurukshetra)	Research Methodology, 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	W.S. Myllemngap, M.A. & M.Phil. (NEHU)	Introduction to Adult & Continuing Education, Social Development, Social Policy & Social Action & Material Development in Vernacular Language for Non-Formal Education Intervention.
	N.P. Goel, M.Sc. & MPS (IIPS, Mumbai), Ph.D. (NEHU)	Research Methodology, Adolescence Education & Population Education.
	J.I. Rapphap, MSW (Bombay)	Guidance and Counselling, Inclusive Education & Community Organisation in Adult and Continuing Education.
	E. Syngkon, M.A. & Ph.D. (NEHU)	Research Methodology, Educational Psychology of Adults, Extension Education & Women Education.
	N.S. Devi, M.Sc. (NEHU)	Extension Education, Group Work in Adult Education & Adult Education for Rural Development

School of Education

Thrust Area 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 Empowerment, (xi) Aged people and (xii) Rural Livelihood and Social Development.

Brief Statement of Academic Activities

The Department during 2012-13 concentrated on Teaching and Research programmes. In

order to have a fresh look on all aspects of Adult and Continuing Education a National Workshop for Revision of M.A syllabus in Adult and Continuing Education was organised on 3rd – 4th October, 2012 at NEHU, New Guest House, Shillong. Faculty members of the department acted as resource person in various training programme conducted by different agencies, government departments of the state of Meghalaya and also outside the state during the period 2012-13.

Students' Profile Enrolment Capacity: P.G.- 40 Ph.D.- 05

Actual Admissions

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non- Meghalaya	TOTAL
M.A	00	31	00	09	22	27	04	31
P.h.D.	00	04	01	01	04	04	01	05

Degrees Awarded

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	20	01	02	19	19	02	21
P.h.D.	00	01	00	01	00	01	00	01

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name of Supervisor
Phervision Nongtdu	Status of the Unorganised Coalmine Workers in Jaintia Hills District, Meghalaya	Dr. B.P. Sahu

Placement of Students

In the year 2012-13, seven students cleared the NET for lectureship examination and one student cleared the NET for Junior Research Fellowship. One PhD scholar also cleared the

NET (lectureship) examination. One student is practicing law at the BAR Association, Shillong and four students are employed as school teachers.

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Courses Conducted during the year

M.A. (Adult & Continuing Education):

- Semester I : Introduction to Adult & Continuing Education, Educational Psychology of Adults, Guidance and Counselling, Environmental Education, Adolescence Education.
- Semester II : National, Regional and International Strategies of Adult Education, Group Work in Adult and Continuing Education, Social Development, Social Policy and Social Action, Inclusive Education, Extension Education.
- Semester III : Research Methodology, Women Education, Management of Non-Governmental Organizations, Human Resource Development, Adult Education for Rural Development.
- Semester IV : Population Education, Working with Communities: Community Organization in Adult and Continuing Education, Entrepreneurship Development for Adult Learners, Material Development in Vernacular Languages for Non-Formal Education Intervention, Project Work.

Ph.D. Course Work (Adult & Continuing Education):

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

Seminars/ Conferences/Symposia/ Extension Programmes etc.

Organized

Organized National Workshop on Revision of M.A. Syllabus in Adult and Continuing Education from 3rd to 4th October, 2012 at NEHU New Guest House, Shillong. Organised by Prof. E. Jyrwa. Assistance provided by Dr. (Mrs.) E. Syngkon.

Attended

Prof. E. Jyrwa attended the UGC sponsored National Conference as Resource person on “Issues Ageing and Age Care in India” organized by the Centre for Lifelong Learning, Tata Institute of Social Sciences, Mumbai from 25th – 26th September, 2012 and Chaired the IIIrd Academic Session on “Social Security Measures for Deprived Elderly” on 26th September, 2012.

Publications:

Research Papers

Published in India

- Sahu, B.P. (2012). “Ills, Evils and Exploitation of the Coalmine Workers – A Study in Jaintia Hills District of Meghalaya”, *International Journal of Indian Ethos*, 2(2): 85-107.
- Sahu, B.P. (2012). “Socio-Economic Impact of Swarnajayanti Gram Swarozgar Yozana on Rural Poor – A Study of Haryana State”, *The NEF Journal of Commerce and Management*, 2(1): 1-17.

School of Education

Sahu, B.P. (2011). "Role of Rural Communities Towards Empowerment of Tribal Women Through Rural Development", *BSSS Journal of Social Work*, issue 1, Vol III: 144-153.

Sahu, B.P. (2012). "Working Conditions of the Unorganised Coalmine Workers in Jaintia Hills District of Meghalaya", *BSSS Journal of Social Work*, issue 1, IV(1): 144-153.

Sahu, B.P. (2012). "Extent and nature of people participation in Swaranjayanti Gram Swarozgar Yozana- A Study of Haryana State", *International Journal of Research in social science*, 2(4): 251- 265.

Books/Book Chapters/ Proceedings

Jyrwa, E. (2012): "Role of Education in Democratic Society", Neerja Sharma (Ed.) *Role of Education in Democratic Society*, Alfa Publications, New Delhi.

Sahu, B.P. (2011): *Human Resource Development for Tribals* published by Lakshi Publishers and Distributors, New Delhi, pp. 1-256. As first Author.

Sahu, B.P. (2012): *NGO in Rural Development*, published by Lakshi Publishers and Distributors, New Delhi, pp. 1-113. As first Author.

Sahu, B.P. (2012): *Unorganised Coalmine Workers in Meghalaya*, published by Lakshi Publishers and Distributors, New Delhi, pp. 1-417. As Second Author.

Sahu, B.P. (2012): *Teaching of Mathematics at Elementary Level-A Book for Teacher Educators*: Lakshi Publishers and Distributors, New Delhi, pp. 1-186. As second Author.

Sahu, B.P. (2012): *National Rural Health Mission in Meghalaya – A Study on Maternal and Child Health*, Lakshi Publishers and Distributors, New Delhi, pp. 1-156. As Second Author

Syngkon E. (2012) *Environmental Education-Knowledge and Attitude towards Environment Protection* LAP LAMBERT Academic Publishing GmbH & Co.KG, Germany

Honours/ Awards/ Recognitions

Prof. E.Jyrwa awarded "Tagore Literacy Award" for the 2012 from the Indian Adult Education Association, New Delhi.

Prof. E. Jyrwa elected as member of the Executive Committee of the Indian University Association for Continuing Education (IUACE) for the year 2013-15.

Dr. J. Mawthoh was elected as MLA.

Other Activities

Prof. E. Jyrwa, Dr. B.P. Sahu, Dr. J. Mawthoh, Mrs. W.S. Myllemngap, Dr. N.P. Goel, Ms. J.I. Rapthap, Dr. E. Syngkon and Ms. N.Shadani Devi participated as resource person in the National Workshop on Revision of M.A syllabus in Adult and Continuing Education on 3rd – 4th October, 2012, organised by the Department of Adult & Continuing Education, NEHU, Shillong.

Dr. B.P. Sahu delivered a lecture on Disaster management to the Refresher Course participants, Organised by Zoology Department, NEHU, 26th Nov to 16th Dec. 2012.

Dr. B.P. Sahu delivered a series of lectures on Disaster management to the Refresher

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- Course participants, Organised by Academic Staff College, Burdwan University, 26th March to 29th March 2012.
- Dr. B.P. Sahu acted as Resource Person of One day Coaching Class for NET for ST/SC/OBC teachers organized by Jaintia Eastern College, Khliehriat, 12th May 2012.
- Dr. B.P. Sahu delivered a lecture on Soft Skill training for health staff, Organised by CMAI, Shillong on 16th Nov. 2012.
- Dr. B.P. Sahu delivered a lecture on Foundations of Social Work to the students of MSW Programme, St. Edmund's College, Shillong, 19th Nov. 2011.
- Dr. N.P. Goel delivered a series of lectures to the participants of ICSSR-NERC's annual Workshop-cum-training on SPSS from 8-12 October 2012 organised by ICSSR-NERC, NEHU, Shillong.
- Dr. N.P. Goel delivered a series of lectures to the participants of Research Methodology for College/University Teachers and Research Scholars organized by Academic Staff College, NEHU, Shillong from 8th October to 13th October 2012.
- Dr. N.P. Goel delivered a series of lectures to the participants of ICSSR-NERC's annual Workshop-cum-training on research Methodology and SPSS from 12-20 February 2013 organised by ICSSR-NERC, NEHU, Shillong.
- Dr. N.P. Goel delivered a series of lectures to the participants of Capacity Building Programme for Faculty in Social Science, Tezpur University, Tezpur from 18th and 19th March 2013.
- Mrs. W. S. Myllemngap was invited to deliver a talk on Consumer Protection Act 1986 at Mawlong, Organised by Martin Luther Christian University in collaboration with the Office of the Deputy Commissioner (Supply), Government of Meghalaya on 3rd November 2012.
- Mrs. W.S. Myllemngap was invited to deliver a talk on Consumer Protection Act 1986 at NEIGRIMHS and Myllem, Organised by Martin Luther Christian University in collaboration with the Office of the Deputy Commissioner (Supply), Government of Meghalaya on 10th November 2012.
- Mrs. W.S. Myllemngap was invited to be one of the judges in the Flower Arrangement of the Varsity Fest 2012 by the NEHU Students Union on 24th April 2012 at Community Hall.
- Dr. J. Mawthoh presented a working plan on "Socio-Economic Survey" organized by Working Plan Officer, Government of Meghalaya, Shillong, 20th April 2012.
- Prof. E. Jyrwa attended a meeting of Stakeholders, intellectual and experts as a Resource person to discuss the "need of enacting and enabling legislation for lifelong learning and literacy in India" on 22nd February, 2013 at SRC, Bijni Complex, NEHU State Resource Centre, NEHU, Shillong.
- Prof. E. Jyrwa attended "a Stakeholders' Consultative Meet on New Vision International Obligations and Legislation for Adult Education" as a resource person on 24-25 March, 2013 at Hotel Tamil Nadu Beach Resort Complex, Kovalam Road, Mahablipuram organized by the NLMA, MHRD, Department of School Education & Literacy, New Delhi.

School of Education

Ms. J.I. Raptap facilitated and participated at the “Interactive session on Women and their Legal rights” on 28th March 2013 at Yalana Hotel, Laitumkhrah, Shillong, organized by the National Commission for Women, Delhi in collaboration with The State Resource Centre for Women Meghalaya.

Ms. S.N. Devi attended the “Three day Workshop on Statistical Computing and its Applications” on 29th November to 1st December, 2012 at the Department of Statistics, NEHU, Shillong, organized by Bayesian & Interdisciplinary Research

Unit (BIRU) Indian Statistical Institute (ISI), Kolkata & Department of Statistics, NEHU, Shillong.

Dr. B.P. Sahu attended the “Three day Workshop on Statistical Computing and its Applications” on 29th November to 1st December, 2012 at the Department of Statistics, NEHU, Shillong, organized by Bayesian & Interdisciplinary Research Unit (BIRU) Indian Statistical Institute (ISI), Kolkata & Department of Statistics, NEHU, Shillong.

Chapter III

SCHOOL OF HUMAN AND ENVIRONMENTAL SCIENCES

Dean : Prof. H. Lamin
Telephone : 2723221
Fax : 2550040
Email : hlamin3@hotmail.com

The School of Human and Environmental Sciences comprises five Departments – namely, Anthropology, Environmental Studies, Geography, Rural Developmental and Agricultural Production and Horticulture. There are 36 faculty members in the school. They were actively engaged in research and teaching programmes during the year under report. Several faculty members have collaborative

research programmes with prestigious national and international research institutes. Faculty members also carried out number of externally funded research projects. They attended training programmes, etc., abroad which will enable improved teaching and research. by Faculty members published many research papers in national and international journals.

School of Human and Environmental Sciences

DEPARTMENT OF ANTHROPOLOGY

Head : Prof. T.B. Subba (till October 9, 2012)
Prof. R. Khongsdier (since October 10, 2012)
Telephone : 2723102
Email : rkhongsdier@hotmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor :	T. B. Subba, M.A., & Ph.D. (North Bengal) (On lien from 15.10.2012 as Vice-Chancellor of Sikkim University)	Cultural Anthropology
	H. Lamin, M.A. & Ph.D. (NEHU)	Cultural Anthropology
	R. Khongsdier, M.Sc. & Ph.D. (NEHU)	Physical Anthropology
Associate Professors :	L. Zehol, M.A. & Ph.D. (NEHU)	Cultural Anthropology
	D.K. Limbu, M.Sc., Ph.D. (NEHU)	Physical Anthropology
	B. T. Langstieh, M.Sc.(NEHU), Ph.D. (Cal. Univ):	Physical Anthropology
	G. Ranjan, M.A. & Ph.D. (Lucknow Univ)	Cultural Anthropology
Assistant Professors :	V. Pakyntein, M.A. & M.Phil. (Delhi Univ):	Cultural Anthropology
	J.W. Dkhar, M.Sc. & Ph.D. (NEHU):	Physical Anthropology
	Q. Marak, M.A., (Gauhati Univ), Ph.D. (NEHU)	Archeological Anthropology
	Sudipta Ghosh, M.Sc. & Ph.D. (Delhi)	Physical Anthropology

Thrust Areas of Research

Population genetics including DNA studies with special focus on phylogenetic relationship of human populations and other related health issues; Biocultural aspects of human growth and nutrition; Demography, reproductive and child health; Gender issues Ethnicity and identity

Brief Statement of Academic Activities

The Department admitted 30 students for M.A./M.Sc. programmes and 13 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. One faculty member was promoted

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from Associate Professor to Professor and two Readers became Associate Professors. 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.

The Department is also undertaking one project entitled “Rice and Aba Cha’a: Stories and Practices from Garo Hills Meghalaya” sponsored by IGRMS, New Delhi. The faculty of the Department published more than 20 publications during the year under report. Dr. Tom D. Brutsaert, Chair, Department of Exercise Science & Anthropology, Syracuse University, New York, visited the Department for one month (March 2013) as a Fulbright Visiting Professor funded by the Fulbright Foundation under the Fulbright Specialist Program 2012-13.

Students’ Profile Enrolment Capacity: P.G.- 30 Ph.D.- Variable

Actual Admissions

Degree	Male	Female	ST	SC	Gen	Meghalaya	Non-Meghalaya	Total
P.G.	05	26	29	00	01	11	19	30
Ph.D.	04	09	09	00	04	03	10	13

Degree Awarded

Degree	Male	Female	ST	SC	Gen	Meghalaya	Non-Meghalaya	Total
P.G.	06	22	26	00	02	10	18	28
Ph.D.	01	05	04	00	02	02	04	6

Details of Students Awarded Ph. D. Degree

Name of the student	Title of thesis	Name of Supervisor
Mr. Lalgoin Chongloi	Marriage among the Thadou of Manipur: Anthropological Study	Prof. H. Lamin
Ms. Kobita Deka	Awareness and Attitudes towards Family Planning among the Adolescent Girls of Shillong	Dr. D.K. Limbu
Ms. Shangpam Kashung	Impact of Christianity on the Tangkhuls of Ukhrul Town, Manipur	Prof. L. Zehol

School of Human and Environmental Sciences

Ms. Deimaphishisha Sun	Differential Reproduction and Family Planning among the Khasis in the Myllem Development Block, East Khasi Hills District	Prof. R. Khongsdier
Ms. Anjali Haloi	A Study on Differential Fertility and Maternal Health of the Assamese Muslims of Kamrup District, Assam	Dr. D.K. Limbu
Ms. Pyngngad Kamar	Physical Growth and Nutritional Status among the Pnar Adolescent of Jaintia Hills, Meghalaya	Dr. J.W. Dkhar

Courses Conducted

Following courses were conducted for M.A./M.Sc. students:

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

Name of the Teacher in-charge: Prof Dr. D.K. Limbu

Places/ Institutions visited: Bolung village, Lower Dibang Valley District, Arunachal Pradesh.

Duration of the tour/ trip: 8th to 28th January 2013

Purpose of visit: For fieldwork training of 3rd semester students.

Seminars/Conferences/Symposia/Extension Programmes, etc.

Attended

Prof. T.B. Subba (i) participated in the roundtable on 'Environmental Governance in the Context of Sustainable Development in India: The Case of Mountain Ecosystems' organised by Tata Energy Research Institute and held at the Indian Institute of Advanced

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- Study, Shimla (July 29-31, 2012) and made a presentation on “Capacity of Policies for Environmental Governance”, (ii) attended the international seminar on ‘Nepali Diaspora’ held at the School of Anthropology and Museum Ethnography, Oxford University, UK (July 9-10, 2013) and presented the opening paper titled “Do Indian Nepalis constitute a diasporic society? Also chaired one session and served as discussant in one other session.
- Dr. L. Zehol attended (i) international seminar on ‘Natural resources and Rural Livelihoods among Tribes in Hilly Areas’ organised by the Department of Geography, NEHU, Climate Change Adaptation (CCA-NER)-GIZ and Greater Himalaya Bio-Cultural Society (GHBBS) Shillong (22-24 March 2012) and presented a paper on “Naga Women as Natural Resource Managers: Some Issues and challenges”, (ii) national seminar on ‘Uniqueness of the Naga and Its Relevance in the Present Context’ organised by the Naga Elders Forum, Shillong (June 16, 2012) and presented a paper titled “Uniqueness of the Naga and Its Contemporary Relevance: A Gender Perspective”, (iii) UGC-NU Capacity Building Sensitization/Awareness/Motivation Workshop on ‘Women Managers in Higher Education’ organised by Nagaland University, Kohima Campus, Meriema (July 16-20, 2012) and presented a paper entitled “Women Managers in Higher Education: Identifying Barriers”, (iv) national seminar on ‘Democratization Process and the Zomis’ organised by Siamsinpawipi Jt. Hqrs, Shillong (March 19-20, 2013) and presented a paper entitled “Gender in the Zomi Society: An Anthropological Perspective”, and (v) UGC-SAP national seminar on ‘Socio-Political Dynamics in the Northeast India’ organised by the Department of Political Science, NEHU, Shillong (March 25-26, 2013) and presented a paper titled “Experiencing Gender at the Cross Roads of Ethnicity.”
- Dr. D.K. Limbu attended a national seminar on ‘Development and Population Stabilization in India’ organised by Dooma College, Tinsukia (March 4-5, 2013) and presented a paper entitled “Reproductive Performance and ABO Blood groups Incompatibility among the Khongsai Kukis of Manipur, India.”
- Dr. B.T. Langstieh attended a national seminar on “Tribal Health and Genomics’ in the Department of Molecular Human Genetics, Jiwaji University, Gwalior (March 21, 2012) and presented a paper entitled “Are There Genetic Influences on Human Behavioral and Addictive Traits?”
- Ms. V. Pakyntein attended (i) the UGC sponsored national seminar on “Empowerment of Women in Rural India” organised by Bahona College Women Cell, Jorhat and Faculty of Home Science, Assam Agricultural University, Jorhat (August 10-11, 2012) and chaired a session on ‘Role of Rural Women on Health, Hygiene and Environmental Issues’, and (ii) the international interdisciplinary conference on ‘Issues of Legitimacy: Entrepreneurial Culture, Corporate Responsibility and Urban Development’ convened by IUAES Commissions on Urban Anthropology and Enterprise Anthropology in collaboration with the University of Naples Federico II, University of Naples 2, and others held on 10-14 September 2012 at Mostra d’Oltremare,

- Naples (Italy) and presented a paper titled "Peripheral Women Entrepreneurs in North East India: Perspectives from Matriarchal Societies" in Panel 15b: Women Entrepreneurs in a Globalizing World.
- Dr. Q. Marak attended (i) international symposium on 'Global Issues' organised by the Department of Anthropology, Delhi University, Delhi (April 1-3, 2013) and presented a paper titled "The Sacred Stones of Nongbah: A Post-Processual Approach to Megaliths", (ii) conference of Association of Social Anthropologists of the UK and Commonwealth held at JNU, New Delhi (April 3-6, 2013) and presented a paper titled "Displayed Carcasses: A Visual Impact of Shillong's Butchery Stalls", (iii) international seminar on 'Trans-Border Communities and Cultures in Asia: Issues and Perspectives' organised by the Anthropological Survey of India in collaboration with IGRMS, Bhopal (February 23-25, 2013) and presented a paper titled "The Dilemma of Traditional Food: The Case of the Garos of Assam and Bangladesh", (iv) SAP national seminar on 'Socio-Political Dynamics in Northeast India' at ICSSR-NERC, Shillong (March 25-26, 2013) and presented a paper titled "The Loss of Inheritance: The Case of the Matrilineal Garos."
- Publications**
- Published In India***
- Khamu, S. and Langstieh, B.T. (2012). Between tradition and adaptation: The case of the Sakachep in Meghalaya, India. *Man in India*, 92 (3-4):593-599.
- Khongsdier, R. (2012). Physical anthropology in Northeast India: An overview of approaches and models. In: T.B. Subba (Ed.), *Northeast India: A Handbook of Anthropology*. Hyderabad: Orient Blackswan, pp. 125-153.
- Khongsdier, R. (2012). Anthropometric assessment of growth and body composition. In: T.B. Subba (Ed.), *Northeast India: A Handbook of Anthropology*. Hyderabad: Orient Blackswan, pp. 181-209.
- Khongsdier, R., Bisai, S., Bose, K., et al. (2012). Nutritional Status based on anthropometry of tribal preschool children in Paschim Medinipur District of West Bengal, India. *International Journal of Innovative Research and Development*, 1: 61-79.
- Lamin, H., Lalmuanpuui, J. and Rosangkima, G. (2013). Ethno-medicinal practices among the Mizo ethnic group in Lunglei District, Mizoram. *Science Vision*, 13:24-34.
- Limbu, D.K. (2012). Dental Anthropology in Northeast India. In: T.B. Subba (Ed.), *North-East India: A Handbook of Anthropology*. Hyderabad: Orient Blackswan, pp. 239-256.
- Marak, Q. (2012). A note on kinship studies in North-East India. *South Asian Anthropologist*, 12 (1): 61-69.
- Marak, Q. (2012). Culture Change and continuity among the tribal communities in North-East India: An overview. *Journal of Indian Anthropological Society*, 47(2): 153-166.
- Marak, Q. (2012). Megaliths of North East India. In: T.B. Subba (Ed.), *North-East India: A Handbook of Anthropology*. Hyderabad: Orient Blackswan, pp. 34-35.
- Marak, Q. and Jangkhomang (2012). Matriliney and megalithic practices of the Jaintias of Meghalaya. *Indian Anthropologist*, 42(2):67-82.

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- Marak, Q and Jangkhomang (2012). The “Sacred Stones” of Nangbah: A post-processual cultural interpretation of Megaliths. *Journal of Social Sciences, Humanities and Literature*, 1 (2): 62-77.
- Marak, Q. and Ghimire S. (2012). How sacred are *Khloo Blai*? A look into the Pnar-Jaintia concept of sacred groves. *Eastern Anthropologist*, 65(3): 339-354.
- Ranjan, G. (2012). Bidesia: The saga of migration, separation and loss. *Eastern Anthropologist*, 65(2):231-236.
- Ranjan, G. (2012). Tribe as a category: Perspective from within and without. *Oriental Anthropologist*, 12(1):153-163.
- Subba, T.B. 2012. Review of *Cardamom and Class: A Limbu Village and Its Extensions in East Nepal* by Ian Carlos Fitzpatrick in *Himalaya*, 32(1-2):15-17.
- Published Abroad**
- Bisai, S., R. Khongsdier, R., Bose, K, and Mahalanabis, D. (2012). Double burden of malnutrition among urban Bengalee adolescent boys in Midnapore, West Bengal, India. *Nature Proceedings*, <http://hdl.handle.net/10101/npre.2012.7106.1>.
- Langstieh, B.T., Kumar, V., Aruna, M., Reddy, A.G., Dasgupta, S., Nirmala, A., Thangaraj, K., Singh, L. and Reddy, B.M. (2012). Molecular genetic perspectives on the origin of the Lyngngam tribe of Meghalaya, India. *Advances in Anthropology*, 2 (4): 181-197.
- Books/ Book Chapters/ Proceedings**
- Ghosh, S. (2012). Inheritance of Biological Traits from Parental to Filial Generations: Heritability of Biological Features among the Santals. Lambert Academic Publishing House, Germany.
- Subba, T.B. (Ed.). (2012). Northeast India: A Handbook of Anthropology. Orient Blackswan, Hyderabad.
- Khongsdier, R. (2012). Ka jingmih tnad Jaitbynriew: Khyndiat halor ka Jaitbynriew Khasi. In: *KJWA Coral Jubilee Celebration Souvenir (1977-2012)*. Shillong: Khasi Jaintia Welfare Association, pp. 25-35.
- Langstieh, B.T. (2012). Northeast India: Corridor or barrier for human migration. Abstract published in *Proceedings to the EurASEAA 14*, Dublin, Ireland, 18-21 September 2012.

Research Projects

Ongoing Projects

Title of the project	Name of PI/Co-PI	Funding Agency	Amount received during the year (Rs in lakh)
Nepal on the Move: Conflict, Migration and Stability	Prof. T. B. Subba and Dr. Ranjan Gupta	Danida Fellowship Centre, Denmark	18.54

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Rice and Aba Cha'a: Stories and Practices from Garo Hills Meghalaya	Dr. Q. Marak	IGRMS, New Delhi	2.1
Nude Images of Northeast India: Interpreting Verrier Elwin's Ethnographic Photographs	Dr. Q. Marak	ICSSR-NERC, Shillong	0.25
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	3.31

Completed Project

“Body composition in Relation to Obesity and Associated Factors among Adolescents in Two Geographical Areas: A Comparative Study” sponsored by UGC under Dr. D.S. Kothari Post-Doctoral Fellowship Scheme to Dr. Samiran Bisai under the mentorship of Prof. R. Khongsdier. Amount funded: Rs. 12. 25 lakhs.

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, for the project on psychogenetics, (ii) Prof. Donna Leonetti and Dr. Geoff Kushnick, Department of Anthropology, University of Washington, Seattle, for the project on human behavioural ecology.

Academic Collaborations

India

Dr. B. T. Langstieh corroborated with Dr. L. N. Lyngdoh, NEIGHRIMS, Shillong and Dr. K. Vasantha, NIIH, Mumbai, for DBT Twinning project for Northeast India.

Prof. R. Khongsdier corroborated with Dr. S. Bisai and Dr. K. Bose, Vidyasagar University, for the 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,

Prof. T.B. Subba and Dr. G. Ranjan corroborated with Dr. J. Seberg, Department of Anthropology, Aarhus University, Denmark, for the project titled “Nepal on the Move: Conflict, Migration and Stability.”

Honours/Awards/Recognitions

Prof. T.B. Subba was appointed Vice-Chancellor of Sikkim University.

Dr. B.T. Langstieh was awarded Fulbright-Nehru Senior Fellowship to University of Washington, Seattle for 8 month's duration (15th Sept 2012 – 15th May 2013).

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Other Activities

Professor T.B. Subba was the Editor of *The NEHU Journal* and Coordinator of NEHU Extension Lectures (till October 15, 2012). He also delivered a lecture on “Nepali Diaspora in India’s Northeast” organised by the Centre for Nepal Studies – United Kingdom at Crown House, North Circular Road, London NW10 7PN (July 12, 2012).

Prof. R. Khongsdier served as a member of the Editorial Board of the *Journal of Human Biology*, *Anthropologist Journal*, *Journal of Biological Sciences*, New Delhi and the *NEHU Journal* (till October 2012).

Prof. L. Zehol attended UGC-NEHU Capacity Building Workshop of Women Managers in Higher Education: Management Skills Enhancement Modules (1&2) organised by the Department of Khasi, NEHU, Shillong (November 19-24, 2012), (ii) delivered a lecture on “History of Social Forces and Social Mobilization with Special focus on North East India- Gender-Conceptual Issues” in the UGC-Refresher Course in History, UGC- academic Staff College, NEHU (November 27, 2012), (iii) delivered two lectures on “Gender and Development-Theory and Practice” in the UGC-Refresher Course in Economic, UGC-Academic Staff College, NEHU (September 8, 2012), and (iv) delivered a lecture on “Gender: A Conceptual Discussion” in the UGC-Refresher Course in English, UGC-Academic Staff College, NEHU (March 30, 2013).

Dr. B.T. Langstieh delivered a talk on: (i) “Northeast India: Corridor or Barrier for Human Migration?” at the 14th International European Association of Southeast Asian

Archaeologists Conference in Dublin, Ireland (September 18, 2012), (ii) “Peopling Northeast India: Bio-anthropological Research” at the Department of Anthropology (BASS), University of Washington, Seattle (October 24, 2012), (iii) three talks on (a) “Anthropology in Northeast India”, (b) “Bio-anthropological Research in Northeast India” and (c) “Human Behavioral Ecology: Current Research and Future Prospects” in the Department of Anthropology, Tacoma Community College, Tacoma, WA (February 25, 2013), (iv) attended the 111th American Anthropological Association Annual Meeting, San Francisco, CA (November 14-18, 2012), (v) attended the 11th Annual Symposium on ‘Primate Genomics’ at the University of Washington, Seattle (February 20, 2013), (vi) attended the Fulbright Enrichment Seminar on “Social Entrepreneurship: Doing Well by Doing Good” at Burlington, Vermont (April 10-13, 2013), and (vii) attended the North West Evolutionary Ecology and Human Behaviour Symposium 2013 at Idaho State University, Idaho (April 18-21, 2013).

Ms. V. Pakyntein participated in the UGC National Workshops on: (i) ‘Capacity Building for Women Managers in Higher Education-Sensitization/Awareness/Motivation (SAM)’ organised by Nagaland University, Kohima (19-20 July 2012) as a Resource Person. She also acted as Trainer Associate to facilitate the theme ‘Managing Personal and Professional Roles’ for three sessions, namely, (a) Introducing Personal and Professional Roles, (b) Work System and Professional System, and (c) Integration of Social and Professional Roles, (ii) ‘Capacity Building of Women Managers

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in Higher Education on Management Skills Enhancement Modules' which included Module I: Information and Communication Technology and Module 2: Recognition and Elimination of Sexual Harassment in Higher Educational Institutions, organised by NEHU at St. Edmund's College, Shillong (19-24 November 2012), (iii) 'Capacity Building for Women Managers in Higher Education-Training of Trainers' organised by Dibrugarh University, Dibrugarh (18-22 December 2012) as a Resource Person. She also acted as Master Trainer for future Trainers on the theme 'Managing Personal and Professional Roles' during the workshop, and (iv) 'Capacity Building for Women Managers in Higher Education-Training of Trainers' organised by Kurukshetra University, Kurukshetra, Haryana (18-23 March 2013)

as a Resource Person. She also acted as Master Trainer for future Trainers on the theme 'Managing Personal and Professional Roles' during the workshop.

Dr. Q. Marak delivered a talk on "Garo Culture in the Regional Programme on Tribal and Folk Culture" as part of 150th Birth Anniversary Celebrations of Swami Vivekananda organised by Ramakrishna Mission, Shillong (March 11, 2013). She also attended the workshop on "Anthropology and Museums" held at IGRMS, Bhopal (October 4-6, 2013).

Dr. Sudipta Ghosh delivered a lecture on "Human Adaptations to Altitude: An Overview" in Biological Anthropology Unit, Indian Statistical Institute, Calcutta (February 6, 2013).

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DEPARTMENT OF ENVIRONMENTAL STUDIES

Head : Prof. B. K. Tiwari (till 21.3.2013)
Prof. O. P. Singh (w.e.f. 22.3.2013)
Telephone : 2721159
E-mail : opsinghnehu@rediffmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	B. K. Tiwari, M.Sc. (Gorakhpur), Ph.D. (NEHU)	Natural Resource Management
	L. K. Jha, M.Sc. (Bhagalpur); Ph.D. (L.N.M.U.), Diploma(Two Years) 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
Associate Professor	D. Walia, M.Tech. (Dr H S G Univ), Ph. D. (Gauhati Univ)	Magnetotelluric, Seismotectonics, Radon monitoring studies in NER
	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, phytoremediation,

Thrust Area of Research

Biodiversity Conservation, Environmental Monitoring, Forest 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 and micro-seismicity of NE Region; Radon activity concentration in NER.

Brief Statement of Academic Activities

The Department organized several international and national workshops/seminars/ Training programs and undertook a number of research projects aimed at creating much-needed database for promoting ecologically sound and sustainable development of the hill regions of northeast India. The Department also contributed towards configuring the deeper crustal structure for understanding the crustal evolutionary

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processes, global positioning system studies and seismicity of the northeast India along with the radon activity concentration. The Department received grants from a number of national and international agencies viz., Ministry of Earth Sciences, GOI, New Delhi; Ministry of Environment and Forests GOI, New Delhi, North-Eastern Council, Shillong; Department of Science and Technology, GOI, New Delhi;

Ministry of Water Resources, GOI, New Delhi; University Grants Commission, New Delhi to support the research and other activities of the Department. The grants received from various external funding agencies were used to strengthen ongoing research and extension activities and in development of laboratory and other infrastructure.

Students' Profile Enrolment Capacity: P.G.- 25 Ph.D.- Variable

Actual Admissions

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non-Meghalaya	TOTAL
P.G.	01	18	06	09	16	12	13	25
Ph.D.	00	02	01	01	02	01	02	03

Degrees Awarded

Degree	SC	ST	GEN	MALE	FEMALE	Meghalaya	Non-Meghalaya	TOTAL
P.G.	00	21	00	11	10	16	05	21
Ph.D.	00	00	02	02	00	00	02	02

Ph.D Degree Awarded

Name of the student	Title of thesis	Name(s) of Supervisor(s) Supervisor, Jt. Supervisor
Nandu Giri	Study on Water Quality in Relation to Land Use Changes in Bhutan	Prof. O. P. Singh (Supervisor)
Kalyanjit Sarmah	Spatio-temporal changes in Land use pattern in Wah Shella and Wah Umbah watersheds in Meghalaya	Prof L.K. Jha: Supervisor and Professor B.K. Tiwari: Joint Supervisor

Courses Conducted during the year

Environment, Ecology and Ecosystem Dynamics, Plantation Forestry and Water, Environmental Pollution, Environmental Microbiology, Biotechnology and Toxicology, Environmental

Impact Assessment and Environmental Policies, Remote Sensing and Geographical Information System, Environmental Law, Environmental Geoscience and Energy, Research Methods, Techniques and Statistical Analysis, Disaster Management, Environmental Issues and

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Problems of North East India, Environmental Economics and Sociology, Forest Management and Biodiversity

Study Tours/ Field Trips of Students

1. **Names of the Teachers in-charge:** Prof B. K. Tiwari and Prof Devesh Walia

Places/ Institutions visited: Kolkata - Sundarban - Digha - Noonmati OIL Refinery (Guwahati)

Duration of the tour/ trip: 15 days

Purpose of visit: To acquaint the students with the environmental issues and problems, different ecological regions, geoenvironmental aspects and impact of industrialisation on environment and mitigation measures adopted by industries to control environmental pollution and degradation.

2. **Name of the Teacher in-charge:** Prof B. K. Tiwari

Places/ Institutions visited: Mawshun, East Khasi Hills, Meghalaya

Duration of the tour/ trip: 1 Day

Purpose of visit: To familiarise the students with concept of Joint Forest Management, Community forest Management, Sacred Grove and Agroforestry Systems and to conduct a socio-ecological study of the forest management systems prevalent in the state of Meghalaya

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized

Prof. B. K. Tiwari organised a “Symposium on biological and cultural diversity in North-east India” on 9th October 2012 as side event of Conference of Parties (COP 11)

to the Convention on Biodiversity related activities in Hyderabad.

Dr. Devesh Walia organised a National Seminar on “Challenging areas in Earth Sciences Research towards empowering the society” from 04 – 07 Jan 2013 at Kolkata.

Attended

Prof. B.K. Tiwari Chaired a session in Environment Safeguards Training Workshop for North Eastern Region Urban Development Programme (NERUDP), Shillong.

Presented invited talk in the Seminar on Integrated Learning for Environmental Management, William Carey University, Shillong 21-22 March, 2013.

Presented invited talk in the National Seminar on Status of Environment and Biodiversity: Rio+20 & Role of Space Technology, Haridwar, November, 2-3 2012.

Presented Valedictory Lecture and was Chief Guest in the 90th Orientation Programme for newly appointed teachers of University and colleges 12th February, 2013.

Presented invited talk in the Training Workshop on Jhum Cultivation vis-a-vis livelihood opportunities in N.E. India, Rain Forest Research Institute, Jorhat 26th February, 2013.

Presented an invited talk on “Future of non-wood forest products in Asia and the Pacific” in the 100th Session of Indian Science Congress held at Kolkata 3-7 January, 2013.

Prof. O. P. Singh delivered an invited lecture on ‘Reduction of Carbon Emission for Sustainable Development’ and Chaired a

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session in UGC sponsored National Seminar on “Conservation of Blue Carbon Sink: An Approach towards safe Environment” organized by Burdwan University during April 11-12, 2012 at Burdwan.

Attended 13th International Symposium on “Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP 2012) held during Nov. 28-30, 2012 in New Delhi and chaired a session and presented a paper on ‘Impact of Coal Mining on Water Resources and Environment in Meghalaya’ in the Symposium.

Attended Natl. Seminar on “Integrated Learning for Environmental Management” organized by William Carey University, Shillong during 21-22 March 2013 and delivered an invited lecture on ‘Natural Resource Conservation and Management with special reference to Water Resources’.

Dr. Devesh Walia attended *AOGS-AGU (WPGM) Joint Assembly, Singapore*; (August 2012) and presented paper entitled ‘Relationship between the radon variation in soil-gas and active tectonics of the Shillong Plateau’.

Attended 34th International Geological Congress, Brisbane, Australia; (August 2012). and presented papers on ‘Radon in Potable Water of Shillong Meghalaya, India’ and on ‘Radon Variation in Soil-Gas and Seismotectonics of the Shillong Plateau’.

Attended and presented paper and invited talks on ‘Radon Activity Concentration in Schools of Shillong City in Meghalaya’ and ‘Deep Geoelectric structure of the lithosphere over Barak valley region, Indo

Myanmar Orogen’ in *100th Indian Science Congress*, Kolkata, 3-7 January (2013).

Presented paper on ‘Radon Activity Concentration in soil-air environs of coal mining and its residential areas in Khleihriat (Meghalaya)’ in *National Workshop on Radiation - A Powerful Tool for Research in Physical, Chemical and Life Sciences*, Central University of Jharkand, Ranchi, February 13-15 (2013).

Attended and presented papers on ‘Radon Activity in Soil-air environment of Forest and Urban residential areas of Shillong, Meghalaya’ and ‘Radon Activity in and around Coal mining areas of Khleihriat (Meghalaya) and its potential health hazards’ in *National Conference on New Approaches of Basic Sciences towards the Development of Engineering and Technology* (NABSET), Guwahati (March 1-2, 2013),

Dr. S. S. Chaturvedi presented a paper “*Best practices for harvesting, processing and marketing of selected NTFP’s and medicinal plants in Arunachal Pradesh*” in UGC sponsored National Seminar on “Plant Resources of NR Region and their Bio prospecting” organized by Department of Botany, Gauhati University, 30th March 2013.

Publications

Research Papers

Published in India

Rymbai, P.N. and Jha, L.K. (2012) Population pressure resulting change in land use systems and forest cover in Meghalaya: A case study of Umbaniun micro-watershed, *NeBIO*, 3(2): 63-68.

- Petevino Chase, Singh O. P. (2012) People's Initiative for Conservation of Forests and Natural Resources: A Success Story of Khonoma Village Forest, Nagaland. *NeBIO*: 3 (3):61-67.
- Tynsong, H., Dkhar, M. and Tiwari B. K. (2012). Traditional knowledge based management and utilisation of bioresources by war khasi tribe of Meghalaya, North-east India. *Indian J. Innovations Dev.* ,1: 162-174.
- Sarmah Kalyanjit, Jha L. K. and Tiwari, B. K. (2012). Morphometric analysis of a highland microwatershed in East Khasi Hills District of Meghalaya, India: Using remote sensing and geographic information system (GIS) techniques. *Journal of Geography and Regional Planning* 5: 142-150.
- Sarmah Kalyanjit, Jha L. K. and Tiwari, B. K. (2012). A geospatial study on impact of urban area expansion on the vegetation structure in East Khasi Hills District: A Case Study of Shillong, India. *NeBIO*, 3: 44-52.
- Deb S., Lynrah Marbakor Mary and Tiwari B. K. (2013). Technological innovations in shifting agricultural practices by three tribal farming communities of Meghalaya, northeast India. *Tropical Ecology*, 54: 133-148.
- Lalnunsangi R. and Paul D. (2013) Seasonal variation in the duration of life cycle stages of *Hyblaea pueria* and *Diacrisia obliqua* in agroforestry systems of Mizoram *J. ent. Res.*, 37 (1) : 79-81
- Paul D. and Sokhlet Miranda D. (2012) Antifeedant, repellent and growth regulatory effects of four plant extracts on *Pieris brassicae* larvae (Lepidoptera : Pieridae) *J. Ent. Res.*, 36 (4) 287-293
- Marbaniang, D. and Chaturvedi, S.S. (2012) Phytoaccumulation of Zinc by *Scipus mucronatus* (L) Pall ex Kerner, *Keanean Journal of Science*, 1: 69-75
- Ghosh Chandan and Walia Devesh, (2013), Water induced hazard in Mountains – Case study of Leh cloud burst; A lead paper in Indian Mountain Initiative – Sustainable Mountain Development Summit 2; May 25 – 26, 2012; Compendium of Papers; Page 1-5.
- Maibam D., Sharma Y., Saxena A., Walia D. (2013). Radon Activity in Soil-air Environment of Forest and Urban Residential areas of Shillong, Meghalaya, *Indian Journal of Science and Technology*, 6:141-145
- Maibam D., Sharma Y., Shylla K., Saxena A., Walia D. (2013). Radon Activity in and around Coal Mining areas of Khleihriat (Meghalaya) and its Potential Health Hazards, *Indian Journal of Science and Technology*, 6: 146-151
- Maibam D., Sharma Y., Brahma T., Saxena A., Walia D., (2013). Potential Alpha Energy concentration in Schools of Shillong, India, *Indian Journal of Science and Technology*, 6: 152-15
- Rymbai P.N. and Jha L.K. (2012) Estimation of sediment production rate of the Umbaniun Micro-watershed, Meghalaya, India, *Journal of Geography and Regional Planning*, Vol. 5(11): 293-297.

Published Abroad

Jha L.K.(2012). *Study on growth and management of Melocanna baccifera*, *Bamboo Journal, Japan* 28 :22-31.

Prasad Shiv K., Dey Sudip, Singh O.P. (2011) A Scanning and Transmission Electron Microscopic Study on the Effect of Environmental Acid Stress on a Hill Stream Fish (*Brachydanio rerio*) Gill. *J. of Advanced Microscopy Research*, 6: 1-8.

Walia Devesh (2012), Climate Change and Water Resources: Modalities and Strategies *GEOVIEWS, V-1 pp 1-11*

Sarmah K., Jha L.K. and Tiwari B.K. (2012) *Morphometric analysis of a highland microwatershed in east Khasi Hills District of Meghalaya: Using remote sensing and GIS techniques*, *Journal of Geography and Regional Planning*, 5(5): 142-150

Tynsong H and Tiwari B.K. (2012) Contribution of NTFPs to cash income of War Khasi Community of Southern Meghalaya, North-East India. *Forest Studies in China*, 14: 1-8.

Tiwari B. K., Tynsong H., Lynrah M. M., Lapasam E., Deb S. and Sharma D. (2013). Institutional arrangement and typology of community forests of Meghalaya, Mizoram and Nagaland of North-East India. *Journal of Forestry Research*, 24: 179–186.

Books/Book Chapters/ Proceedings

Singh, O. P. (2012) Impact of Coal mining on Water resources and Environment in Meghalaya. *Proc. 13th Intl. Symp. Environmental Issues and waste Management in Energy and Mineral Production (SWEMP 2012, New Delhi), The Reading Matrix Inc., Irvine, CA, USA (ISSN: 2167 3365), pp 252-260.*

Singh, O. P. (2012) Acid Mine Drainage: A serious environmental problem of the mining areas of Meghalaya and its abatement. *Proc. Natl. Seminar on 'Status of Biodiversity in India: Conservation and Social Relevance with reference to North East India* (eds. Lyngdoh et al.). *Excel India Publishers, New Delhi (ISBN: 978-93-82062-24-0), pp 1-7.*

Paul, B. and Singh, O. P. (2012) Degradation in Water Quality in Coal Mining Areas of Nokrek Biosphere Reserve of Meghalaya. *Proc. Natl. Seminar on 'Status of Biodiversity in India: Conservation and Social Relevance with reference to North East India* (eds. Lyngdoh et al.). *Excel India Publishers, New Delhi (ISBN: 978-93-82062-24-0), pp 90-98.*

Singh, O. P., Lynser Marvellous B. and Tiwari B. K. (2013) Contribution of Forests and Forest resources in the Economy of Meghalaya. *In: Northeast and Globalization: Issues Between and Between* (ed. M. C. Behera). DVS Publishers, Guwahati pp 281-314.

Tiwari, B.K. and Tynsong, H. (2012). Traditional knowledge based forest management: the case of War tribe of Meghalaya, India. *In: (K.G. Saxena, Luohui Liang, Koji Tanaka, Shimako Takahashi Eds) Land Management in marginal Mountain Regions: Adaptation and Vulnerability to Global change*, Bishen Singh Mahendra Pal Singh, Dehra Dun, p 143-157.

Tiwari, B. K. (2012). Institutional arrangements for preservation and management of community forests of north-east India *Proceedings of the 99th Session of Indian Science Congress, Section: Environmental Science, Presidential Address: 1-24.*

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Funds Received from Agencies other than NEHU

Agency	Amount (in ` lakh)
Ministry of Environment and Forests, New Delhi	Rs. 8.930/-
Ministry of Water Resources, New Delhi.	Rs. 5.470/-
UGC	Rs. 3.500/-
DRDO	Rs. 3.140/-
Ministry of Earth Sciences	Rs. 21.898/-
North Eastern Council, Shillong	Rs. 55.000/-
National Biodiversity Authority, Chennai	Rs. 2.100/-

Research Projects

Prof Devesh Walia, NEC, Shillong; Rs. 123.70.00 lakhs.

New Projects

Impact of Mining on Water Resources of Jaintia Hills, Meghalaya sanctioned by Ministry of Water Resources, New Delhi. Principal Investigator- Prof. O. P. Singh; Total outlay of the project- Rs. 15,67,910/-.

Completed Projects

Remediation of Soil Affected by Coal Mining in Jaintia Hills, Meghalaya sponsored by University Grants Commission, D. Paul (Principal Investigator), New Delhi.

Ongoing Projects

Impact of Fire, and Grazing on the structure and function of grassland ecosystem of Cherapunjee, B. K. Tiwari Principal Investigator, Ministry of Environment and Forests, New Delhi, Fund released during 2012-2013: Rs. 893000/-.

Meagenomics of gut microflora implicated in cellulose digestion, D. Paul (Principal Investigator), NEC.

Academic Collaborations

Abroad

Prof. Devesh Walia has research collaborations with Dr P. Banerjee, NTU, Singapore.

Implication of soil faunal grazing on the N mineralization process of Forest and Agroecosystem soils, D. Paul (Principal Investigator) UGC, 10.66 Lacs.

Prof. B. K. Tiwari has research collaboration with Professor Wolfgang-Albert Flügel, Institut für Geographie, Lehrstuhl für Geoinformatik, Geohydrologie und Modellierung, Friedrich-Schiller-Universität Jena, Löbdergraben 32, 07743 Jena

Analysis of Lipids and fat soluble vitamins in some wild edible insects of Meghalaya, D. Paul (Principal Investigator) DRDO, 26 Lacs.

Magnetotelluric studies in NE India, Prof Devesh Walia. MoES, GOI, New Delhi; Rs113.00 Lakhs.

Other Activities

Prof. B.K. Tiwari participated in the workshop, "Towards Preparation of India's Third National Communication and Biennial Report: Consultation Workshop", New

Geophysical Studies in Southern part of Shillong Plateau using Micro-earthquake techniques;

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Delhi, 13-14 September, 2012 organised by UNDP in India. And in the Workshop on Assessment of Ecosystem Services of Sacred Groves, Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal, 14-16 December, 2012. Workshop on Space and Atmospheric Science Research North Eastern Space Application Centre Umiam, 28 September, 2012. First Regional Meeting of State Biodiversity Boards of North-East India, Shillong 4-5 May 2012. Attended Brain storming meeting of eminent persons/ leaders with National Security Advisory Board Chairman Naresh Chandra, Shillong 24th November, 2012. He also delivered two lectures in Refresher course in Geography on Modern Themes in Geography, Lecture 1: Shifting cultivation: Innovations, Lecture 2: Impact of Climate change on Forests of North-East India, 3rd November 2012.

Attended Symposium on biological and cultural diversity in North-east India” on 9th October 2012 Conference of Parties (COP 11) to the Convention on Biodiversity related activities in Hyderabad.

Prof. O. P. Singh delivered a lecture on theme of the World Environment Day 2012 “Green Economy: Does it include you” during the World Environment Day Celebration organized by NEEPCO, Shillong on 5th June 2012. Attended 13th International Symposium on “Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP 2012) held during Nov. 28-30, 2012 in New Delhi. Prof. Singh also delivered two lectures on ‘Climate Change: Sustainability Issues and Our Concerns’ in Short term course on Climate Change organized by Department of Environmental Science, Gauhati University

during Aug. 6-11, 2012. He also delivered two lectures on ‘Economic Development, Environment and Issues of Sustainability’ in Refresher Course organized by Department of Economics, NEHU on Sept. 11, 2012. Participated as a Resource Person in National Workshop on Revision of M.A. Syllabus in Adult & Continuing Education organized by Department of Adult & Continuing Education, NEHU during Oct. 3-4, 2012.

Attended as a Resource Person the National Workshop on revision of M.A. Syllabus in Adult & Continuing Education organized by the Department of Adult & Continuing Education, NEHU, Shillong during October 3-4, 2012.

Prof. Devesh Walia Attended the 7th Central Geological Planning Board (Group VIII- Geology and Mineral Resources of NER) meeting; *External expert during the Tern Review of Geological survey of India (FS 2012 - 2013)* meeting on 04- 05 March 2013 of Geological Survey of India- NER, Shillong; Attended and delivered lead lecture during the IMI Sustainable Mountain Development Summit 2012, Gangtok on 27th and 28th May 2012. Attended the meeting for review of work on Medical geology in NER, GSI on assessment of Arsenic/ Fluorine pollution and their geogenic effect with possible mitigation measures on 25.06.2012; Participated in the “Interest exploration meeting for Respond” held at I & PR Conference Hall, Aizawl on 18th July 2012, organised by SAC, Ahmedabad and MIRSAC, Aizawl. Delivered a lecture during the Training of State Government Officers on Hazard Specific (Earthquake Disaster

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Risk Mitigation) at MATI, Shillong on 29th August 2012 on “Earthquake forecasting and implications”. Workshop on Space and Atmospheric Science Research North Eastern Space Application Centre Umiam, 28 September, 2012. *External expert member during the Stage Review meeting of Geological survey of India* meeting on 29 - 30 October 2012, Geological Survey of India- NER, Shillong; Delivered two invited talk during the Training to the State Government Officer (Trainers) (Engineers and Architects) on Seismic Disaster Management and Mitigation programme on 20 and 21 November 2012 on “Seismic Vulnerability Mapping of NER and Probable magnitude of Earthquake “ and “Vulnerability of building to earthquake ground shaking – Generalized vulnerability assessment based on changes in a building’s elevation and floor plan”. Attended the *Industry – Academia workshop on Upstream Petroleum Technology- Geology and Geophysics* at OIL, Duliajan, 07th- 09th March 2013 organized by OIL, LKMT

and Petrofed. Delivered invited talk on Microzonation and wave theory on 13th March 2013 during Training program on Microzonation and site response studies organised by Geological Survey of India Training Institute, Shillong.

Dr. S. S. Chaturvedi attended Special Summer School organized by UGC-Academic Staff College, NEHU, Shillong from 22nd August to 11th Sept. 2012. He delivered invited talk on “Convergence of NAP with other Schemes for Sustainable Development” in Regional Workshop on “Experience Sharing on Success in Convergence of Afforestation Programmes with Other Schemes in Northeast India organized by RCNAEB, NEHU, Shillong, 6-7 March 2013. Dr. Chaturvedi also delivered invited lecture on “Sustainability of JFMCs during Post Plantation Period through Income Generating Activities” in two days Brain Storming Session on Sustainability of JFMCs during Post Plantation Period organized by RCNAEB, NEHU, Shillong, 8-9 March 2013.

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DEPARTMENT OF GEOGRAPHY

Head : Prof. Zahid Husain Qureshi
Telephone : 2723201, 2723209
Email : 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)	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
Associate Professors	N.K. Sinha, M.A. (GU), Ph.D. (NEHU) (Superannuated on 31.12.2012)	Economic Geography, Geography of India
	H. J. Syiemlich, M.A., M.Phil. & Ph.D. (NEHU)	Fluvial and Applied Geomorphology
	L. Cajee, M. Sc., & Ph.D. (NEHU) (on lien as CoE, NEHU)	Bio-Geography and Quantitative Techniques
	P. G. Momin, M.A. (JNU), M. Phil. (NEHU)	Climate and Ecology
Assistant Professors	P. K. Ryngnga, M.A. (NEHU), M. Phil, Ph.D. (JNU)	Regional Development, Urban Geography, Remote Sensing & GIS
	S. Purkayastha, M.A. & Ph.D. (NEHU)	Urban and Population Geography

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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

As many as sixteen candidates from the Department qualified in the UGC NET (11 Female and 5 male). The Department, apart from its usual teaching programme, organized a lecture delivered by eminent geographer Dr. Aleksandar Petrovic, Full Professor, Vice president of Man and Biosphere Committee, UNESCO, Serbia, and Secretary General of the Board for the work of Milutin Milankovic and Climate Change, Serbia Academy of science and Arts, University of Belgrade, Seminar for Social Science, Faculty of Philosophy Student, Republic of Serbia delivered a lecture on

‘Milankovic’s Orbital Forcing: Astronomical theory of Climate Change and Anthropology of Global Warming, on 16th October, 2012 in the Department. The Department organized an International and National School for Doctoral Scholars in Geography during the year under review. The faculty remained active in publication of research papers in a number of international and national journals as well as under 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 six research scholars were awarded Ph. D. degree. The research scholars of the Department took initiative to start a forum in the name of ‘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. The Department has Geographical Society of North-Eastern Hill Region (India) which publishes the journal “*Hill Geographer*” regularly. The Department also runs a self-financed P.G. Diploma in Geoinformatics

Students’ Profile: Enrolment Capacity P.G.- 38 M.Phil.- 8 Ph. D. : variable

Actual Admissions

Degree	Male	Female	ST	SC	Gen	Meghalaya	Non-Meghalaya	Total
M.A./M.Sc.	15	23	34	02	04	17	21	38
M. Phil	03	05	05	00	03	04	04	08
Ph.D.	03	05	04	01	03	04	04	08

Degrees Awarded

Degree	M	F	ST	SC	Gen	Megh	Non-Megh	Total
M.A./M.Sc.	13	16	26	00	03	12	17	29
Ph.D.	04	02	01	01	04	02	04	06
PG Diploma (Geoinformatics)	08	10	15	00	03	11	07	18

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Details of Students Awarded Ph.D. Degree

Name of the Student	Title of the Thesis	Supervisor
H. Laldinmawia	Urban-Rural Interaction in the City of Aizawl and its Hinterland	N.K. Sinha
J.C. Deka	Socio-Economic Study of Milk Producer Communities in Greater Guwahati Region	S. Singh
Prasenjit Das	Wastelands of Sonitpur District of Assam: A Geographical study	H.J. Syiemlieh
Ch. Chanu Mangalleima	Urban Water Supply in Imphal	Z.H. Qureshi
Laitonjam Basanta Singh	Distribution and Spread of HIV and AIDS in Manipur	A.C. Mohapatra
Nima Dola Lama	Tourism in Sikkim in Darjeeling Himalaya: Impact on Environment and Society	L. Cajee

Placement of Students

One student joined as a Lecturer in the Women's College, Agartala (Tripura)

One student joined as a Lecturer in Mangaldoi College, Mangaldoi (Assam)

One student joined as a Captain in the CISF, New Delhi.

Courses Conducted during the year

M.A./M.Sc.

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) Bio-Geography (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, Environmental Geomorphology, Applied Climatology, Integrated Area Planning, Agricultural Geography, Social Geography,

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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:** Prof. B. S. Mipun; Accompanying teacher: Prof D.K.Nayak
Places visited: Kutch-Kathiawar (Gujarat) region and Kolkata

Duration: Twenty days from 20th December 2012 to 8th January 2013

Purpose: All India Study Tour under Course No. GEOC 201- Geography of India, and attended the Indian Science Congress, Kolkata from 3rd to 7th January 2013

2. **Teacher In-Charge:** Dr. S. Purkayastha

Places visited: In and around Shella, East Khasi Hills District, Meghalaya

Duration: Ten days from 28th February, 2013 to 10th March, 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 Programme

Organised

International and National Schools for Doctoral Scholars in Geography, 5-15th March 2013 (Convener: Professor D. K. Nayak) (supported by ICSSR –NERC, Shillong)

Workshop on Data Dissemination of Houses, Household Amenities and Assets 2011 Census, 26th July, 2012 (Convener: Prof. B. S. Mipun), (sponsored by Directorate of Census Operations, Meghalaya, Shillong and Department of Geography, NEHU, Shillong)

Attended

Prof. A.C. Mohapatra : (i) delivered Presidential address to XXXIV Indian Geographer's Meet (Indian Institute of Geography), Organised by Centre for Earth Science Studies, Trivendrum, December 13-15, 2012; (ii) Invited as Chief Guest to International Seminar on Geography

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Teaching and Achieving Sustainable Development in India, organised by Department of Geography, BHU, Varanasi, October 29-31, 2012 and presented invited paper, “Science, Anti-Science and Geographic Pedagogy”; (iii) Presented invited paper on “Social Relevance of Geography in India: Perspectives on Teaching and Research” in symposium on *Geography Teaching and Research in India: Perspectives*, Organised by Centre for Earth Science Studies, Trivendrum, December 12, 2012.

Prof. Surendra Singh: (i) delivered University level lecture on Transformation of the Indian Agricultural Economy: Is India progressing in the Right Direction, Royal Melbourne Institute of Technology, Melbourne, Australia on 4th July 2012; (ii) Delivered Invited talk on Application of Statistical Techniques in Geography on occasion of celebration of the Centenary of the Theory of Continental Drift (Alfred Wegener 1912-2012), St. Mary’s College Shillong on 2nd June 2012; (iii) chaired a session and presented paper on Regional processes and Pattern of Agricultural Growth in India after Economic Liberalisation, 34th IIG Meet organised by Centre for Earth Science Studies, Trivendrum, December 13-15, 2012

Prof. B.S. Mipun: (i) chaired a session and Keynote speaker on Remote Sensing and GIS Application in Natural Resources and Environmental Management, National Seminar cum Workshop on Application of RS & GIS in Natural Resource Management, April 25-28, 2012, Kokrajhar Govt. College, Kokrajhar; (ii) Keynote speaker on the theme Urbanisation in

India Opportunities and Challenges, National Seminar on Urbanization and its impact in today’s World, organised by C.K.B Commerce College, Jorhat, 4th April, 2012; (iii) presented paper on Tools and Techniques in Geography Research, National Workshop on Research Methodology in Geography, B. Borooah College, Guwahati. 14-16th May, 2012; (iv) presented paper on Interpretation of Remote Sensing Data and its use in Social Science Research, National Workshop on Research Methodology, Monohari Devi Kanoi Girl’s College, Dibrugarh, Assam, 8th -10th Nov. 2012 and (v) chaired a session and also presented paper on . Paper presented Modelling of a New Habitat for Rhinos on the basis of a study on Rajiv Gandhi Orang National Park of Assam, 100th Indian Science Congress Association Conference, Calcutta University, Kolkata 3rd -7th Jan, 2013

Prof. D.K. Nayak: (i) Chaired a session and delivered special Lecture on Changing Spatial Pattern in Household Size in India: An Inter-State Comparison, 34th IIG Meet and National Seminar on Natural Resource Management and Decentralized Planning Centre for Earth Science Studies, Thiruvantapuram 13-15 Dec. 2012; (ii) presented a paper on “Are we Losing Regions as Focus of our Study? Some Reflections on Regional Perspectives in Geography”, National Brainstorming Workshop on Philosophy and Research Methodology of Geography, Centre for Earth Science Studies, Thiruvantapuram, 7-8 Dec. 2012; (iii) presented a paper on Trends and Patterns in Changing Household Size in India: An Inter-State Comparison (with Rabi Narayan Behera), National

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- seminar on *Results of the 2011 Census: Spatial Patterns and Implications* CSRD, JNU, New Delhi, 6-7 September, 2012; (iv) presented a paper on Need for Regional Perspective in Geographical Studies and Research”, National Symposium on *Curriculum Development in Geography*, Centre for Earth Science Studies, Thiruvantapuram, 12th Dec. 2012. (v) chaired a session and presented a paper on “On the Need for a Reassertion of Regional Perspective in Geography Curriculum” National Seminar on Reorienting Geography Education & Training for Sustainable Development in India, Banaras Hindu University, 29-31 October, 2012; (vi) chaired a session National Seminar on Sustainable Livelihood, Environment and Development, Department of Geography and Applied Geography, North-Bengal University, Siliguri, West Bengal, 2-3, March, 2013.
- Prof. Z.H. Qureshi: (i) Chaired II Technical Session in ‘National Seminar on Ecotourism in Assam’, organised by Jengraimukh College, Jengraimukh, Majuli (Assam), 18th - 19th December, 2012.
- Dr L. Cajee presented paper entitled ‘Challenges to Rural Development in Northeastern Region of India: A Geographical Perspective’ in the National Seminar on ‘Rural Development in North East India: Challenges and Opportunities’, organised by Women’s College, Shillong on 27th and 28th July, 2012.
- Dr. P.K. Rynnga: presented paper on Tourism for Sustainable Development, Tourism: Economy and Environment in North East India, organised by NEICSSR Raitong Building, Shillong, 5th-6th June 2012; and (ii) also presented paper on Emergence of Look East Policy and India’s North East Development: An Appraisal Study, International Seminar on Look East Policy, organised by ICSSR-NERC, Shillong 22nd-23rd March 2013.
- Dr. Subrata Purkayastha presented a paper entitled Ecotourism as an alternative development and conservation of the Dzongu in Sikkim in the National Seminar on ‘Tourism: Economy and Environment of Northeast India’ organized by NEICSSR at Raitong Building, Shillong, on 5th and 6th June 2012.

Publications

Research Papers

Published in India

- Singh, S. and Talukdar Moumita, (2012). Economic liberalisation and Agricultural Productivity- A case of Sadiya Sub-division of Upper Brahmaputra valley. *Agricultural Situation in India*, LXIX (6): 301-308.
- Deka, J.C. and Singh, S. (2012). Locational characteristics of Milk Producer Communities in the Greater Guwahati Region. *National Geographical Journal of India*, 58 (2): 77-88. ISSN 0027-9374/2012/1431-1444.
- Talukdar, M. and Singh, S. (2012). Crop diversification and farm productivity in Tinsukia District, Assam, *National Geographical Journal of India*, 58 (4):
- Singh S., Syiemlieh, H.J. and Dey, P.P. (2009-10). Weather Variability and Summer Rice Yield in Wet Monsoon Environment of Upper Brahmaputra Valley, *Vayu Mandal* (Bulletin of Indian Meteorological Society), 35&36 (1-4): 46-59. (A late publication).

- Nayak D. K. (2012). Are We Losing Regions as Focus of our Study?: Some Reflections on Regional Perspective in Geography. *Transactions, Journal of the Institute of Indian Geographers special issue on Philosophy and Research Methodology of Geography*: 55-63.
- Purkayastha, Subrata and Gautam, Gagan (2012). Demographic changes and its impact on the Society of Sikkim, *Journal of NEICSSR*, 36 (1): 37-46. ISSN No. 0970-7913.
- Published Abroad**
- Huda, Md. A. and Singh, S. (2012). Assessment of Runoff in the High Humid Food Hill Areas of Arunachal Himalayas Using Thornthwaite Equation. *Proceedings of Second International Conference on Geotechnique, Construction Materials and Environment* (Conference held at Kuala Lumpur 14-16 November 2012): 867- 871.
- Bhuyan, M. and Husain, Z. (2012). Water Resource Functioning in Jorhat Town, Assam. *International Journal of Innovative Research and Development*, 1(4): 343-353. (ISSN 2278-0211, Peer Reviewed Journal).
- Sarma, P.K., Mipun, B.S., Talukdar, BK. (2012). Assessment of Habitat Utilization Pattern of Rhinos (rhinoceros unicornis) in Orang National Park, Assam, India, *Pachyderm*, Journal of the African Elephant, African Rhino and Asian Rhino Specialist Groups, Nairobi, Kenya, 51: 38 - 44.
- Ryngnga, P.K. and Ryntathiang, Bring B.L. (2012). Periodic Market and Rural Development: An Appraisal Study of Cherrapunjee of Meghalaya. *International Journal of Social Science Tomorrow*, 1(9): 1-10.
- Ryngnga, P.K. and Ryntathiang, Bring B.L. (2013). Dynamics of Land Use/ Land Cover for Sustainability: A case of Shillong, Meghalaya, India. *International Journal of Scientific & Technology Research*, 2 (3): 235-239.
- Purkayastha, Subrata and Jordan, Clary (2013). Abode of Clouds- A Journey to Meghalaya India, *Earth Magazine*, American Geological Institute, U.S.A.: 46 - 51.
- Book**
- Ryngnga, P.K. (2012). *Indigenous Tourism in Meghalaya: A Case of Mawlynnong Village, East Khasi Hills*, Spring of Wisdom Library, Ri Khasi Press, Shillong.
- Book Chapters**
- Nayak D.K. (2012). Social Geography, in R.B. Singh (ed.) *Progress in Geography: A Country Report, 2008-2012*, Indian National Science Academy, New Delhi: 150-160.
- D.K. Nayak and Pradip Goswami (2013) "Language Retention and Change among the Immigrant Tea Garden Labourers of Assam" in Awadesh K. Mishra, Melissa G. Wallang and Ch. Sarajubala Devi (eds.), *Studies in Linguistics of the North-Eastern Languages* Lakshi Publishers, New Delhi. pp. 133-145.
- Bhuyan, M. and Husain, Z., 2012. Health Implications of Water Stress on Women in Slums of Jorhat Town, Assam. In S. Borthakur (ed.), *Gender Discrimination and its Impact on Socio-Economic Development*, Women Cell, Nazira College, Sivsagar. pp. 54-62. (ISBN: 978-81-924094-0-5).

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Fund Received from Agencies other than NEHU

Agency	Amount
DST-FIST: PURSE Programme	Rs. 2.50 Lakhs
International Seminar	Rs. 7.92 Lakhs
Individual Projects:	Rs. 17. 84 Lakhs

Infrastructure Added during the Period

Environmental Lab : Water Analyser Kit, Digital Precision Balance, Trinocular Microscope with CCD, BOD Incubator, Magnetic Stirrer with heater, Flame Photometer, Double Distillation Plant.

Research Projects

New Projects

‘Desertification Status Mapping of India (Second Cycle)’. P.I.: Professor B. S. Mipun. Funded by the MoEF, New Delhi through SAC, ISRO, Ahmedabad. Rs. 17. 84 Lakhs

Ongoing

‘Baseline Survey for Provision of Infrastructure (Sewerage and Solid Waste Management) for Greater Shillong Planning Area’. P.I., Prof. B.S. Mipun; Co-PI: Prof. D. K. Nayak. Funded by the Mot Macdonald, Ahmadabad.

Academic Collaboration

Indo-Japan Collaboration with Disaster Prevention Research Institute, Kyoto University (Japan), Team Member: Prof. H.J. Syiemlieh and Prof. L. Cajee and Prof. S. Singh. Fredrich-Schillar University, Jena, Germany, B.S. Mipun and B.K. Tiwari.

Other Academic Activities

Professor S. Singh visited Royal Melbourne Institute of Technology (RMIT) University

for 15 days from 2-17th July 2012 and delivered lecture at University forum; delivered lectures in Refresher Courses conducted in various Departments in NEHU; is nominated member of the Meghalaya State Watershed and Waste Land Development Agency, Government of Meghalaya, Shillong.

Prof. B.S Mipun delivered a series of lectures in Orientation Courses conducted in various Departments in NEHU.

Prof. D.K. Nayak: (i) delivered H.P. Das Memorial Lecture, Department of Geography, Gauhati University, Guwahati 4th June, 2012; delivered a series of lectures for state/district level officers, Govt of Meghalaya; and also delivered a series of lectures in UGC-ASC Special Summer School, Shillong, 22 August-11th September, 2012 and in Refresher Courses in History and Literary and cultural studies, ASC Shillong and also in ICSSR sponsored workshop on Research Methodology at Bodoland University, Kokrajhar, Assam on 19th March, 2013.

Professor H. J. Syiemlieh is a co-partner of Indo-Polish research program to work on fluvial processes in Meghalaya and is a team member of the Indo-Japan collaboration with Japanese scientists from Disaster Prevention Research Institute, Kyoto University; (ii) Evaluation of Centrally

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sponsored Watershed projects implemented by Soil & Water Conservation, Govt. of Meghalaya, in Jaintia Hills & West Khasi Hills and (iii) Member of Meghalaya Water Foundation, Government of Meghalaya, Shillong

Dr. L. Cajee is a team member of the Indo-Japan collaboration with Japanese scientists from Disaster Prevention Research Institute,

Kyoto University on Climate Change in South Asia.

Dr. S. Purkayastha delivered a few lectures as a Resource Person for the 4 credit course on 'Human Environment and Culture' in the Academic Summer Programme of Wooster College, Ohio (U.S.A.), in collaboration with St. Anthony's College, Shillong.

DEPARTMENT OF RURAL DEVELOPMENT AND AGRICULTURAL PRODUCTION

Head : Professor S C Srivastava
Telephone : +919436313370
E-mail : subhash58nehu@yahoo.co.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Dr. SC. Srivastava, Ph. D. (Allahabad University)	Regional Planning, Micro Planning, Development Studies, Rural Development
Associate Professor	Dr. D.C. Kalita, Ph. D. (Assam Agricultural University)	Project Planning and Management, Micro-credit and Micro-finance, Research Methodology
Assistant Professor	Sri J.P. Jaiswal, M. Sc. (Allahabad University)	Soil & Water Conservation
	Dr. B K Mishra, Ph. D. (Banaras Hindu University)	Dairy Technology
	Dr. Binu Mathew, Ph. D. (Bidhan Chandra KrishiVishwavidyalaya)	Fruits and Orchard Management
	Dr. Lolly S. Pereira, Ph. D. (Bidhan Chandra KrishiVishwavidyalaya)	Fruits and Orchard Management

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Trust Area of Research

The department mainly concentrates on multi-disciplinary research in the areas of 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 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. Programme and by way of undertaking research projects.

Students' Profile Enrolment Capacity: P.G. 25

Ph.D.: variable

Actual Admissions

Course	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M. Sc.		25		08	17			25
Ph.D.	01	04	03	04	04			08

Degree Awarded by Department: M. Sc. in Rural Development and Agricultural Production

Degree Awarded

Course	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	Total
M. Sc.	00	22	01	06	17			25
Ph.D.	00	01	00	01	00			01

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name of Supervisor
Md. Mokidul Islam	"Effects of Establishment Methods and Integrated Weed Management on Productivity and Resource use Efficiency of Wetland Rice"	Dr. D C Kalita

Placement of Students

The students are mostly placed with District Rural Development Agencies, Meghalaya

Integrated Basin Development and Livelihood Promotions Agency, etc.

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Courses Conducted during the year

M. Sc. (Rural Development and Agricultural Production)

Semester-I : General Aspects of Rural Development ; Introductory Agriculture and Agronomy; Fundamentals of Horticulture; Introduction to Animal Husbandry and Poultry; Soil Conservation and Watershed Management; Insect Pests of Field and Horticultural Crops and their Management.

Semester-II : Rural Development Approaches, Programmes and Policies; Package of Practices for Field Crops; Plant Propagation and Nursery Management; Dairy and Livestock Development; Diseases of Field and Horticultural Crops and their Management; Organic Farming.

Semester-III : Basic Statistics and Computer Application; Rural Development Organizations, Institutions and Administration; Production Technology of Fruits and Plantation Crops; Principles and Practices of Dairy Farm Management; Rural Development Planning and Project Management; Commercial Floriculture and Landscaping; Swine, Goat and Sheep Production; Dairy Farming and Rural Development.

Semester-IV : Rural Marketing and Entrepreneurship Development; Research Methods; Agricultural Surveying and Leveling ; Rural Credit and Micro-Finance; Production Technology of Vegetables and Spices; Processing of Livestock Products; IEC and Rural Development; Post-Harvest Management of Horticultural Crops; Rabbit, Fishery and Poultry Production; Micro-Enterprise and Non-Farm Sector Development ; Minor Horticultural Crops; Indigenous Dairy Products and Soya Milk.

Study Tour/Field Trips of Students

Name of the Teacher in-charges: Professor S C Srivastava

Places/ Institutions visited: Goa (Indian Council of Agricultural Research), Mumbai and Kolkata.

Duration of the tour/trip: 25-01-2013 to 09-02-2013

Purpose of visit: (a) to expose the students to various research and contributions made by ICAR, (b) to understand the livelihood system of the fishermen community in Mumbai, and (c) to understand the marketing process of SHG products in Kolkata.

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Attended

Dr. B K Mishra attended National Symposium on Importance of Livestock in Indian

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Agriculture at Mahatma Gandhi Chitrakoot Gramodaya Visvavidyalaya, Chitrakoot, Satna, Madhya Pradesh and presented a paper on Current Status of Milk and Dairy Products at Global and National Level during 23-24 March, 2013.

Publications

Journals

- Kalita, D.C. and Bhowmick, B.C., 2012. Sustainability under settled and shifting cultivation in hill agriculture of Assam. *Productivity*. 52(3):
- Sarma GandKalita D C 2012.Production Variability in Jute Between different Size Groups of Farms in Barpeta District of Assam – An Economic Analysis. *Productivity*. 52(3):
- Kalita, D.C. 2012. Quality of Rural People and Rural Development in North Eastern States. *Transient*. 2(126-134)
- Islam, M. and D. C. Kalita, 2012.Agro-input management for economic performance of wetland rice cultivation *Crop Res.* **44**(1&2): 5-10
- Mishra, B K., Common Dairy Operations, The Indian Cow Scientific and Economic Journal, Issue-32, April-June, 2012, pp13-24
- Kar, A. Deb and Mathew Binu (2012) Tea Industry in West Garo Hills district of Meghalaya – A micro Analysis. *Source*, Vol. 2, pp. 93-104.
- Ao, R. and Mathew B. (2012) Perspective of Naga Farmers Towards Pineapple Production. *Transient*, Vol. 2: 66-72.
- Suresh, C.P. B. Mathew, K.D. Bhutia, A. Roy and M. Hussain (2012) Efficiency of soil cover on weed control in banana plantation. *Transient*, Vol. 2: 7-12.

Books/Book Chapters

- Sarma, G.K., Baruah, P.S. and D.C. Kalita, 2012. Hill Farming in Udalguri District of Assam: An Economic Study. *Sustainability and Economic Development in Hill Agriculture*. Pp-89-108
- Sangtam, L.T. D.C. Kalita and R. Nakhro, 2012. Economics of Ginger Cultivation in Dimapur District of Nagaland. *Sustainability and Economic Development in Hill Agriculture*. Pp-75-81
- Kalita, D.C., B.C.Bhowmick, C.Hazarika and R.S.Saikia, 2012. An Economic Analysis of Maize in Assam. *Sustainability and Economic Development in Hill Agriculture*. Pp-138-142
- Sarma, G.K. and D.C. Kalita, 2012. An Economic Analysis of Jute Production in Barpeta District of Assam. *Sustainability and Economic Development in Hill Agriculture*. Pp-82-89
- Kalita, D.C., B.C.Bhowmick, C.Hazarika and R.S.Saikia, 2012. Price Spread of Rice in Assam. *Sustainability and Economic Development in Hill Agriculture*. Pp-130-137
- Momin, J.W. and D.C. Kalita, 2012. Impact of Shifting Cultivation on Sustainable Livelihood of Hill Tribes in North Eastern Region of India. *Sustainability and Economic Development in Hill Agriculture*. Pp-119-129
- #### Edited Book
- Kalita, D.C. and Mishra, B.K., 2012. Sustainability and Economic Development in Hill Agriculture. Bio-Tech Publication, New Delhi
- Mishra, B.K., SeilenkapHaokip and Sunil Kumar(2013), Production and Availability of Milk and Dairy Products, Conservation

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- Agriculture-The new Paradigm, Edited by Shobhana Gupta and NeerajHada, Published by BIOTECH BOOKS, New Delhi, pp-193-220
- Kumar, S., and B.K.Mishra (2013), Economic Importance of Milk Born Diseases, Conservation Agriculture-The new Paradigm, Edited by Shobhana Gupta and NeerajHada, Published by Biotech Books, New Delhi, pp-221-238
- Mishra, B.K., ,Sunil Kumar and C.S.Choubey (2013), Meat Industry, Its Scope and Future Prospects, Advances in Livestock Production and Management: Recent Trends and Future Prospects, Edited by Sunil Kumar and Birendra Kumar Mishra and Manish Kumar, Published by Jaya Publishing House, Delhi-110095, pp-209-224
- Ao, R. and B.K.Mishra (2013), Role of Livestock Sector in Rural Development, Advances in Livestock Production and Management: Recent Trends and Future Prospects, Edited by Sunil Kumar and Birendra Kumar Mishra and Manish Kumar, Published by Jaya Publishing House, Delhi-110095, pp-225-232
- Kumar, S., B.K.Mishra, ,Birendra Prasad and J.S.Yadav (2013), Hay: A modern Technique for Conservation Fodder and Forages, Advances in Livestock Production and Management: Recent Trends and Future Prospects, Edited by Sunil Kumar, Birendra Kumar Mishra and Manish Kumar, Published by Jaya Publishing House, Delhi-110095, pp-233-240
- Mishra, B K; (2013), Dairy Farm Management for Profit-An Overview, Edited by Sunil Kumar and Birendra Kumar Mishra, Published by New India, Publishing Agency, New Delhi-110034, pp-297-322
- Livestock Production and Management: Recent and Future Prospects, By Sunil Kumar and B.K.Mishra (eds), New India Publishing Agency, New Delhi-110034, ISBN:978-93-81450-70-3
- Advances in Livestock Production and Management, By Sunil Kumar, Birendra Kumar Mishra and Manish Kumar (eds), Jaya Publishing House, Delhi-110095, ISBN:978-93-83471-19-
- Kar, A Deb and Mathew Binu (2012) Biodiversity of Meghalaya- Status and Threats. In: The proceedings of the National Seminar on Status of Biodiversity in India: Conservation and Social Relevance with Reference to NE (North-East) India, held at Don Bosco College, Tura, Meghalaya. Proceedings of National Seminar on Status of Biodiversity in India, pp.99-105.
- Funds Received from Agencies other than NEHU**
- | Agency | Amount (in Rs. lakh) |
|-------------------------|----------------------|
| Wildlife Trust of India | Rs. 1.07 Lakhs |
- Research Project**
- New Project*
- Carbon red+ project in Garo hills, PI Professor S C Srivastava, Funded by Wildlife Trust of India.
- Other Activities**
- Dr. B K Mishra attended National Training on Innovative Trends in Dairy and Food Products Formulation under the aegis of Center of Advanced Faculty Training in Dairy Processing, Dairy Technology Division, National Dairy Research Institute, Karnal during October 10-30, 2012.

Chapter IV

SCHOOL OF HUMANITIES

Dean : Prof. Jagatpal
Telephone : 2723502
E.mail : jagat_pal1949@rediffmail.com

The School of Humanities has five Departments in Shillong Campus, i.e., English, Philosophy, Khasi, Linguistics and Hindi, and two Departments in Tura Campus i.e. English and Garo. All Departments conducted M.A. and Ph.D. Programmes during 2012-13. Some departments also ran M.Phil. programme during the year. Faculty members of the School were actively involved in teaching, guiding research, and other academic activities. Each department has its own identified thrust area 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 also have edited and written books and presented papers in seminars and conferences. A number of faculty members have been invited as Resource Persons as well as to Chair sessions in Seminar, Conferences, Workshops and Refresher Courses within and outside NEHU. Some departments also organized Study Tours for students taking them to various places in the Country and organized seminars. The School has made progress in diverse research fields.

DEPARTMENT OF ENGLISH

Head : Prof. Esther Syiem
Telephone : 2723503
E-mail : esthersyiem17@yahoo.co.in

Faculty

Designation	Name and Qualification	Specialization
Professor	E. Syiem, M.A. (Delhi), M.Phil. & Ph.D. (NEHU)	American Literature, Modern Fiction Folk Literature
	M. M. Mazumdar, M.A. & Ph.D. (NEHU), DDE (IGNOU)	Modern British Literature, Women's Writing, Translation and Tagore Studies
Associate Professor	M. Renganathan, M.A. (Madurai Kamaraj University), M.Phil. (Pondicherry University), Ph.D. (Madurai Kamaraj University)	Drama/Theatre (American & Indian); Indian Fiction in English; Women's Writing.
	S. Bhattacharjee, M.A., M.Phil. & Ph.D. (NEHU)	Critical Theory, Gender Studies
	U. G. Sewa, M.A., M.Phil. & Ph.D. (NEHU)	British Poetry Fiction
	K.S. Nongkynrih, M.A., Ph.D. (NEHU)	World Poetry/Poetry in Translation
	J. Prodhani, M.A. & Ph.D. (NEHU)	Theatre, Ethnic Studies, Translation
	N. Ganguly, M.A. (NEHU)	Modern British Fiction
	N. Syiem, M.A. (NEHU), M.Phil. (Delhi)	British Drama 16 th -17 th Century
	Ngangom R. Singh, M.A. (NEHU)	Indian Writing in English & World Literature in Translation & Modern Poetry
Assistant Professor	L.K.K. War, M.A. (NEHU)	Modern Fiction
	S. Choudhury, M.A. (Assam University), M.Phil. (Calcutta) (on Sabbatical)	Cultural Studies, Gender Studies
	Isawanda Laloo, M.A. (Delhi University)	Modern Fiction and Women's Writing in North-East India

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Thrust Area of Research

The thrust areas of research are Modern and Contemporary Literature; Literature in English and in Translation from North-East India; Comparative Literature constituting various literatures in translation; Gender and Cultural Studies as they may be linked to different texts and narratives and Theatre, placing special attention to the theatre traditions of North East India.

Brief Statement of Academic Activities

The Department conducted a Refresher Course from 18th March to 7th April 2013

on “Literature and the Margins: Trends and Perspectives” coordinated by Ms. N.Ganguly. Dr. Lalhmachuana, Documentation Officer, NEHU Central Library, delivered a lecture on Web accessing on 4.6.2012 to the Research Scholars of the Department. Faculty members presented papers on various themes, in India and abroad. The PLSI, Baroda, in collaboration with the English Department organised regional workshops on its ongoing project on language documentation in India. Students of the 4th Semester launched the department newsletter, “Writer’s Pub.” At the students’ seminar various papers were presented by students on topics related to the texts studied.

Students’ Profile Enrolment Capacity: P.G. 52 Ph.D. variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	49	03	16	36	27	25	52
Ph.D.	00	05	01	04	02	05	01	06

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	35	03	09	29	23	15	38
Ph.D.	00	01	04	02	03	01	04	05

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name of Supervisor
Jubanlak Sutnga	A Study of the Transcription of Identities in the Novels of Michael Ondaatje.	Prof. E. Syiem
Rita D. Nameirakpam	The Woman’s Voice : A Study of the Poems of Emily Dickinson	Dr. M. Renganathan
Sahab Uddin	Kamala Markandaya’s Search for Roots: A Critical Study	Dr. S.Bhattacharjee
Indrani Bhuyan	The Role of the Narrator in Selected Novels of Conrad, Melville and Bronte	Prof. E. Syiem
Sanjeeb Kumar Sarma	An East-West Interface: John Keats and Indian Thought	Dr. U.G. Sewa

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Placement of Students

Students have been placed in various capacities in governmental organisations and publishing houses; as teachers and administrators in universities, colleges and schools or with NGOs.

Courses Conducted during the year

M.A. (English)

- 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, 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.

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

(4 Credits)

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

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized

Prof. E. Syiem convened a workshop for all coordinators and participants of the PLSI team from North East India, as North East Coordinator on behalf of the Depts. of English, Khasi and Linguistics NEHU, Shillong, in collaboration with Bhasha Research Centre, Baroda on 4th & 5th May 2012, at the Conference hall of the New NEHU Guest House.

Attended

Prof. E. Syiem presented a Paper in absentia entitled "Recovering the Oral Histories of North-East India – A Study in the Khasi Context" at National Seminar on Recovering the Oral Histories of North-East India held on 31st October-1st November 2012 in Dimapur organised by INTACH Nagaland Chapter in collaboration with the Indian Institute of Advanced Study Shimla.

Prof. M.M. Mazumdar delivered an Invited Lecture titled "Frontiers of Aspiration in Tagorean Discourse: A Subaltern View" at the International Conference "Tagore: The Global Impact of the Writer in the Community", 4-6 May, 2012 at Edinburgh.

Dr. S. Bhattacharjee presented a paper entitled "Politics of the Gendered Space: Narratives of Resistance in North-East India" at the National Seminar on "State, Social Movements and Democracy in Northeast India" organized by the Department of

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- Political Science, Gauhati University (under UGC-SAP) and Indian Council of Historical Research- North East Regional Centre on 27, 28 February and 1 March 2013 with partial assistance from ICSSR, New Delhi and IDOL, Gauhati University.
- Dr. M. Renganathan presented a paper on “Narrating Violence and Memory: Contemporary Indian Women’s Plays” in IIAS, Shimla at the Associate Seminar, on 21.11.12.
- Participated in the “Alumni Theatre Workshop: Building Leadership Through Arts” organized by the American Center, Kolkata, on May 4, 2012 at Hotel Gateway Grandeur, Guwahati
- Dr. U.G. Sewa presented a paper, “Voicing Female Experience: Select Poems of Imtiaz Dharker”. UGC Sponsored National Seminar on Feminist Concerns in Indian Writing by Women during Post-Colonial Era at Barbhag College, Nalbari Assam (3rd to 5th Sept 2012).
- Dr. J. Prodhani presented a paper, “Failure of a Nation: Acts in History without the Language of its Own” in the National Seminar on “North East India in Transition: Patterns of Changes and Transformations Since 1985” held at North Gauhati College, North Guwahati on 22-23 June 2012.
- Presented a paper, “Dickens’s Construction of the Subaltern: Re-reading *Great Expectations*” in the National Seminar on “Dickens and the Long 19th Century” organized by Dept. of English, Visva Bharati, Shanti Niketan on 15 & 16 March, 2013.
- Dr. K. S. Nongkynrih attended the “Australia-India Literatures International Forum” organised by the Writing and Society Research Centre, University of Western Sydney, Sydney, Australia on 3rd-6th September 2012, and took part in a panel discussion on “Traditions of Poetic Imagination” and also read out a paper entitled, “The Writer and His Community: A Case for Literary Ambidexterity”, as well as self-composed poems.

Publications

Papers in Journal

- Prodhani, J. (2012) “Resonance of Identity in Rajbanshi Poetry” in *The NEHU Journal*, Vol. X No. 1 January, 2012, ISSN 0972-8406 : 41-55
- Prodhani, J. (2012) “Ethnicity in Contemporary Assamese Writings” in *Man and Society*, Vol. IX, Winter, 2012 ISSN 22294058: 146-153
- Sewa U.G. (2013). “Prosopopeia as Strategy of Protest: Thomas Hardy’s War Poetry”. English Forum: *Journal of the Department of English Gauhati University*, 1:114-117.
- Bhattacharjee S. (2012). “Gunabhiram Barua, *Ramnabami-Natak: The Story of Ram and Nabami*” (trans. T.Misra, 2007) *Indian Journal of Gender Studies* 19(3) 481–487, 2012 SAGE Publications Los Angeles, London, New Delhi, Singapore, Washington DC.
- Co-edited *Society, Representation and Textuality: The Critical Interface*, 2013 Sage.

Journal Editing

- Prodhani, J. (2012) Ed. *Protocol Journal of Translation, Creative and Critical Writings*, Vol. V, Nos. 1&2, Spring & Winter, 2011

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and 2012. Dept. of English, NEHU, Tura campus, Tura. ISSN 0973 9807.

Books/Book Chapters/ Proceedings

- Syiem Esther (2013). "Understanding Khasi Culture: The Dynamics of the Oral in a Changing World" In *Philosophy of Culture* Vanlalnghak & L. Lenka (eds), Akansha Pub House. pp 247-265.
- Syiem Esther (2013). "Transcribing Orality: A Study of *Ki Jingsneng Tymmen*" In *Society, Representation and Textuality The Critical Interface* Sukalpa Bhattacharjee & C. Joshua Thomas (eds), Sage Publications. pp 189-201. ISBN 9788132109532.
- Mazumdar M.M. (2013). "Between the Lines: Tagore and Shillong". In *Tagore: at Home in the World* Sanjukta Dasgupta and Chinmoy Guha (eds), Sage Publication. ISBN 978-81-321-1084-2 (H.B) pg 230-242.
- Renganathan M. (2013). "Contemporary Indian Drama: Trends, Perspectives, Problems of Transition". Eds. G. Saikia & S. Neog, Jorhat: Bedakantha, 2013, *Indian Drama: Tradition and Transition*. 17 – 34. ISBN. 978-93-82931-07-02.
- Sewa U.G. (2013). "Folklore and Folk Traditions as a Cohesive in Nepali Community in India". In *Representation and Textuality: The Critical Interface* Bhattacharjee, S. and, C.J Thomas (eds), Sage Publications, New Delhi.
- Prodhani, J. (2013) "Singing the Nation: Songs of Pratima Barua Pandey". In *Society, Representations and Textuality: The Critical Interface..* Sukalpa Bhattacharjee & C.J. Thomas (eds), Sage Publications, New Delhi. ISBN 9788132109532.
- Prodhani, J. (2012) "The Liminal Identity: Acts of Reconfiguration and Distillation of the Native Consciousness in Rajbanashi Poetry". In *Ethics and Identity: Contemporary Indo-English Poetry*. Arvind M. Nawale, Smita Jha and Anindita Chatterjee (eds) Authors Press, New Delhi, pp 102-119. ISBN 978-81-7273-654-5.
- Prodhani, J. (2012) "Folklore and the Mass Media: Experiences from the Fences of an Unknown Village". In *Lokasanskritir Subash D. Bhakat* (ed), Centre for Ethnic Studies and Research(CESR), Golakganj. ISBN 13-978-81-910859-8-3.
- Prodhani, J. (2012) 2012, *Creativity and Conflict in the Plays of Sam Shepard*, Authors Press, New Delhi, ISBN 978-81-7273-611-8.
- Prodhani, J. (2012) (Tr.) *Akbar- Birbal and the Stories of the River Nile* by Sarat Mahanta.. Bhabani Books, Guwahati. ISBN 978-93-82624-06-6
- Nongkynrih, Kynpham Sing (2012) *Hiraeth and the Poetry of Soso Tham: A Study of the Great Unconventional Elegy and the Poetry of the Khasi National Bard*. Ri Khasi Book Agency & North Eastern India for Indigenous Studies, Shillong.
- Nongkynrih, Kynpham Sing (2012) "Lines Written to Mothers Who Disagree with Their Sons' Choices of Women". In *These My Words: The Penguin Book of Indian Poetry*. Eunice De Souza & Melanie Silgado (eds), Penguin India, New Delhi.
- Nongkynrih, Kynpham Sing (2012) "Winter Weeds", "Beloved Is Thy Name", "The Colours of Truth", "Haikus". In *The Harper Collins Book of English Poetry* Sudeep Sen (ed), Harper Collins India, New Delhi.

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Nongkynrih, Kynpham Sing (2012) "Sundori", "The Ancient Rocks of Cherra". Ed. Viswanath Prasad Tiwari. *Samkalin Bharatya Sahitya*. Sahitya Akademi, New Delhi.

Ngangom R. Singh (2012) "Houses", "After 'Jashn-e-Azadi'", "September", "Ghazal", "My Invented Land". In *The Harper Collins Book of English Poetry* Sudeep Sen (ed), Harper Collins, Noida.

Ngangom R. Singh (2013) "With our Guns", "Curses", "Inventory", "Postcard: Mumbai, May 2001", "Nongpiur". 'Indian Literature' 274, Sahitya Akademi, New Delhi, March/April.

Ngangom R. Singh (2013) "Primary Schools", "To a Woman From Southeastern Hills", "Revolutionaries", "When you do not Return", "Last Word", "Flight", "Body", "Guitar", "Laitlum". In *The New Indian Poets* Jayanta Mahapatra & Y. Sharma (eds) Niriala Publications, New Delhi.

Honours/ Awards/ Recognitions

Esther Syiem was nominated member of General Council, Sahitya Akademi for five years from January 2013

Mala Renganathan completed the first spell of the IUC-IIAS Associateship in Indian Institute of Advanced Studies, Shimla for the year 2012 from 1 to 30 November 2012.

Other Activities

Prof. Esther Syiem read out self composed poems at a Meet organized by The Aroha Music and Cultural Society on 9th June 2012 at the Don Bosco Youth Centre, *To The Rest of India from Another Indian, Bordar*

Narrations –I, Who Rules the Roost, The Portentous Crowing.

Delivered a lecture on Scripting the Oral, Dept of Creative and Cultural Studies on 30th Oct 2012.

Participated as a panelist on 7 Feb 2013 at the New Delhi World Book Fair organised by National Book Trust of India on 'Indigenous Voices: Mapping India's Folk and Tribal Literature', 6-8 Feb 2013, New Delhi.

Prof. Moon Moon Mazumdar delivered lectures at the In-Service training Programme for NEHU employees held from April 9 to May 2, 2012.

Dr. Sukalpa Bhattacharjee participated in Panel Discussion at Sankerdev College on the "Regressive Attitude Towards Women" on the 7th of Aug 2012

Copy edited *Man & Society: A Journal of North-East Studies*, Volume IX, Winter 2012.

Delivered 2 lectures on "From a Postcolonial Critique to A Critique of the Postcolonial" at the Short Term Course on *The Futural Critical Constellations: The Cultural Politics of the Neo-Empire* at IIT Kharagpur from 3rd to 5th Sept 2012, organized by the Department of Humanities.

UGC-SAP Visiting Fellow at the Department of Political Science Delhi University from 21st January to 28th January 2013.

As a resource person, delivered a lecture on Gender in Academic Staff College, NEHU in Orientation Course, on 25 Feb 2013.

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As a resource person, delivered a lecture on Gender in Academic Staff College, NEHU in Orientation Course, on 5 March 2013.

As a resource person, delivered a lecture on Gender in Academic Staff College, NEHU in Orientation Course, on 4 & 7 March 2013.

Dr. Kynpham Sing Nongkynrih participated as a Resource Person at a *Poetry Workshop for School and College Students* organised by Sahaki Society, Shillong on 14 May 2012.

Attended a Sahitya Akademi Selection Committee as a Jury for selecting the Bhasha Samman awardee for Khasi language, Guwahati, December 2012.

Participated as a Resource Person and conducted a literary workshop at the *1st Sohra Literary Festival* organised by the East Khasi Hills District Arts & Culture Society, Government of Meghalaya, on 11 December 2012 at St. John Bosco Auditorium, Sohra.

Gave a lecture at the Refresher Course of the Khasi Department, NEHU, Shillong on 7 & 27 November 2012.

Dr. Jyotirmoy Prodhani participated in “North-East Poetry” in the RC on *Poetry Today* at North Bengal University, Siliguri, on 21 and 22 February, 2013.

“Rajbanshi Poetry” “North East Poetry” in the RC on *Marginal Literatures* at NEHU on 21 and 22 February, 2013

Ms. N.Ganguly Co-ordinated Refresher course in the Department from 18th March to 7th April 2013. The theme of the Refresher Course is Literature and the Margins: Trends and Perspectives.

Mr. Ngangom R. Singh Self-composed poems: Poems included in: *The New Indian Poets*, eds. Jayanta Mahatra & Yuyutsu Sharma, Niriala Publications, New Delhi, 2013

Delivered two lectures at the Refresher Course: “Northeast Poetry in English: An Alternative Tradition”

Ms. Isawanda Laloo attended the Department organized/conducted Refresher Course from 18th March to 7th April 2013 coordinated by Ms. N.Ganguly. The theme of the Refresher Course was “Literature and the Margins: Trends and Perspectives”.

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DEPARTMENT OF ENGLISH (TURA)

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

Faculty:

Designation	Name and Qualification	Specialization
Professor	Sujata Gurudev, M.A., M.Phil. & Ph.D. (NEHU).	American Lit., Modern British Fiction, Modern Poetry
Associate Professor	Angela R. W. Ingty, M.A. (Gauhati Univ.), M.Phil (Madras Christian College), PGDTE (CIEFL, Shillong), Ph.D. (NEHU)	Language & linguistics, British Poetry, Renaissance Drama
	Dwijen Sharma, M.A, M.Phil., Ph.D. (DU, Dibrugarh)	Indian English Lit., Literary & Cultural Theory
Assistant Professor	Raj Shekhar Thakur, M.A. (Patna University)	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 Univ.), 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 Area of Research in the Department

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

Brief Statement of Academic Activities

The Department is imparting M.A (Literature Course) and Ph. D. programme in English Literature. Student 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 the college

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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 and Workshops have been organized regularly. Regular film and audio-visual show are being held to give supplementary exposure to the students. Further, the Department has produced plays and dramas to promote social-cultural awareness.

Students' Profile: **Enrolment capacity:** **PG: 33**

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	20	02	06	16	20	02	22
P.h.D.	01	06	03	02	08	08	02	10

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	01	23	02	05	21	24	02	26
P.h.D.	00	04	00	00	04	04	00	04

Details of Students Awarded Ph. D Degrees

Name of the student	Title of thesis	Name of Supervisor
Ramona M. Sangma	A Study of Cross Cultural Conflict in V.S. Naipaul's Travel Writings on India	Prof. Sujata Gurudev
S. Alva B. Sangma	Rites of Passage in the Garo Oral Literature	Prof. Sujata Gurudev
L. K. Gracy	Exploration of the Self in Golding's Major Fiction	Prof. Sujata Gurudev
Lucy Marak	Myths and Archetypes in Garo Folk Narrative: A Select Study	Prof. J. Prodhani

Courses Conducted during the year

M.A.
Pre-Ph.D. Course work

Study tours/field trips of students:

Name of the Teacher in-charge: Mr. Zacharius Turkey

Places/Institution Visited: Kolkata, Hyderabad and Goa

Duration of the Tour/ trip: 15 Days

Purpose of Visit: The main objective of such excursions is to provide exposures to students. Students, by and large, experience the diversity and vastness of our country; it helps in promoting inter-cultural dialogue and harmony.

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

Dr. Ramona M. Sangma

Presented a paper titled "Forms of resistance in Garo Literature" at RSF-AKF and ICSSR National Seminar on *Contemporary Ways and Voices of Resistance/ Resilience*, English and Foreign Languages University, Hyderabad on 29th-30th June 2012.

Presented a paper titled "Nation and Alienation: V S Naipaul's Indian Trilogy" in the International Seminar on *Ethnicity, Identity and Literature*, Sibsagar College, Assam on 11-14 October, 2012

Publications

Sangma R.M. (2012). "Post Colonialism and Literature- An Overview" *Source: A Peer Reviewed Journal of Humanities and Social Sciences*, Vol. II, pp. 27-35

Gurudev S. (2013). "*Mansarovar*," (A collection of Poems.), Sanbun Publishers, New Delhi

Sangma R. S. (2013). Cultural Conflict in V S Naipaul's Indian Trilogy, Author Press, Delhi

Sangma R.S. (2013). "Modern Achik Poetry" *Muse India* e-journal, Issue 47, Jan-Feb 2013

Pathak N. (2013) 'Korzybski in the World of Theatre: "Structure" in Augusto Boal's *Theatre of the Oppressed*' in *Aneekant: A Journal of Polysemic Thought*, Vol. 1, pp. 93-98

Pathak N. (2012), "Performing the Self: The Politics of Power' in the Assamese Playwright Arun Sharma's Plays in *Negotiations*, pp. 107-115

Gracy L. K. (2012) "Evolutionary Thrust in Golding's *Lord of the Flies* and *The Inheritors* in *Protocol* Vol. V No.1&2, pp. 107-115

Gracy L. K. (2012) Posthumour Self in Golding's *Pincer Martin*, *Source*, Vol. 2 Issue 2, pp. 74-81

Funds Received from Agencies other than NEHU:

Rs. One Lakh from ICSSR for the publication of *Protocol: Journal of Translation, Creative and Critical Writings* published by the Department

Infrastructure Added during the Period

1. A Digital Projector with screen
2. A Multi-media set with microphone
3. A few sets of computers and a Xerox machine

Other Activities

Prof. Sujata Gurudev was Co-Editor of the biannual peer reviewed research journal with ISSN accreditation is being published by the Department, *Protocol: Journal of Translation, Creative and Critical Writings*. Delivered lecture on 'Existentialism' in the Refresher course on *English and Comparative Literature & Language* held from 6th to 26th May, 2013 jointly organised by the Departments of English and Garo, NEHU at Tura.

Delivered Lecture on "Postmodern English Fiction" in the Refresher course on *English and Comparative Literature & Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.

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- Mr. R.S Thakur delivered lecture on 'Main Elements of Formalism and Structuralism' in the Refresher course on *English and Comparative Literature & Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.
- Delivered Lecture on "Indian Poetics" in the Refresher course on *English and Comparative Literature & Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo at NEHU at Tura.
- Dr. Angela W. Ingty attended the NEICCYA (North East India Christian Council Youth Assembly) Conference held at Church of God Qualapaty from the 20th -22nd of April 2012 as a delegate from the SCMI-NEI.
- Attended several hearings and meetings of the State Women's Commission of Meghalaya, which meets at least once every month.
- Attended a meeting in a goodwill visit of the Meghalaya State Women's to the Assam State Women's Commission at the Guwahati Circuit House, on the 29th of June 2012 at 12.00 p.m. Also visited Kerala as a member of the State Women's Commission of Meghalaya.
- Delivered lecture on 'Phonetics, Phonetic Transcription' in the Refresher course on *English and Comparative Literature & Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.
- Delivered lecture on 'Rhetoric and Prosody' in the Refresher course on *English and Comparative Literature & Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.
- Dr. Ramona M. Sangma was Course Coordinator of the UGC sponsored Refresher Course organised by the Academic Staff College, NEHU, Shillong and jointly conducted by the Departments of English and Garo, NEHU, Tura Campus, Tura on the theme: *English and Comparative Literature and Language*, from the 6th to the 26th of May 2013.
- Dr. Jova C Marak participated in the Refresher course on *English and Comparative Literature and Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.
- Dr. Dwijen Sharma delivered lecture on 'Postcolonial Theory' in the Refresher course on *English and Comparative Literature and Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.
- Delivered lecture on 'Interrogating North-East Literature' in the Refresher course on *English and Comparative Literature & Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.
- Dr. Namrata Pathak participated in the Refresher course on *English and Comparative Literature and Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.
- Dr. L K Gracy participated in the Refresher course on *English and Comparative Literature and Language* held from 6th to 26th May, 2013 jointly organised by the Depts. of English and Garo, NEHU at Tura.
- A biannual peer reviewed research journal with ISSN accreditation is being published by the Department, *Protocol: Journal of Translation, Creative and Critical Writings*.

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Mr. R. S. Thakur was Co Editor of the biannual peer reviewed research journal with ISSN accreditation is being published by the Department, *Protocol: Journal of Translation, Creative and Critical Writings*.

Dr. Ramona M. Sangma was Editor of the biannual peer reviewed research journal with ISSN accreditation is being published by the Department, *Protocol: Journal of Translation, Creative and Critical Writings*.

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

Dr. Jova ch. Marak was Co-Editor of the biannual peer reviewed research journal with ISSN accreditation is being published by the Department, *Protocol: Journal of Translation, Creative and Critical Writings*.

Dr. Dwijen Sharma was Editor of Readers Guide Series, 2012-13

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DEPARTMENT OF GARO

Teacher In-charge : Dr. Dokatchi Ch. Marak
Telephone : 2041
Email : dokatchi10@rediffmail.com, fkmarak@gmail

Faculty

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

Trust Areas

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 is offering M.A. and Ph.D. course since 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 three Scholars are pursuing their Ph.D. programme. The

Department holds Class seminars regularly to impart research oriented interest among the Master's level students. Field Studies are conducted regularly and students are encouraged to make inquiries into the folk literature and culture of the people of Garo Hills. As there is a need to improve and preserve the language, literature and culture of the Garos (A·chiks), students are always encouraged to write articles, poems, short stories, essays, etc. Seminars and Workshops are conducted regularly. Visiting Professors/Fellows and Scholars are invited from other Universities for class lectures, where the students have freedom to discuss and interact with the professionals. At present the Department is running with four permanent Assistant Professors and three Guest Lecturers.

Students' Profile Enrolment Capacity: P.G.: 33 Ph.D.: 6

Actual admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	33	00	08	25	33	00	33

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Details of Students Awarded Ph.D. Degree

Name of the Students	Title of thesis	Name(s) of Supervisor(s)
Dr. Semeri Alva B. Sangma	Rites of Passage in the Garo Oral Literature. 2012	Prof. Sujata Gurudev.

Courses Conducted during the year

- Semester I : History of Garo Language and Literature, Poetry-I-Sacrificial Rites & Invocations, Drama-I, Linguistics-I: Basic Concepts, Definition and Scope of Linguistics, Garo Morphology & Semantics, Environmental Studies
- Semester II : Fiction-I, Literature in Translation, Prose-I, Linguistics-II- Phonetics & Phonology, Linguistics-III – Tibeto-Burman Languages of the North-East (Classification and Bodo group of Languages)
- Semester III : Literary Theory & Criticism, Epic as a Literary Genre, Drama-II, Linguistics IV- Language & Society, Folklore-I Definition, scope & different forms of folklore & field techniques
- Semester IV : Poetry-II: Poetry from 1881 to 1994, Folklore-II- Garo Folktales, Folksongs, Proverbs & Sayings, Tragedy as a Literary Genre, Indian Literature in English, Modern Poetry

Study Tour/ Field Trips of Students

Name of the Teacher in-charge: Mr. Crystal Cornelious D. Marak

Places/ Institutions visited: Bangalore & Mysore. The important places visited by the students were Christ University, Bangalore, Central Institute of Indian Languages (C.I.I.L), Art Gallery, Brindaban Garden, Mysore, Mysore Zoo etc.

Duration of the tour/trip: 19th Jan' - 4th Feb' 2013

Purpose of visit: The purpose of study tour was to expose the students to the coastal vegetation, make them aware of the difference from that of the Himalayan foothills/region to which the students belong, affect of human exploitation, research conducted in other institutions and the mangrove vegetation and plant species in maintained gardens.

In addition to above, Mr Colnat B. Marak, Guest Lecturer took II Semester P.G. Students for a field trip to Balpakram, South Garo Hills w.e.f. 16th – 18th April, 2013 in regard to Course No. GAR -203-Core: Prose I. IV Semester P.G. Students visited Nokrek Peak, West Garo Hills as one day field study on the 4th May, 2013 in regard to Course No. GAR-402-Core: Folklore II with Mr. Colnat B. Marak, Guest Lecturer.

Awards/Honours

Marak Crystal Cornelious D. received the State Literary Award on 17th February 2012 for his book Sing-kam, which was published in 2009.

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Seminars/Workshops/Conferences/Extension Programmes etc.:

Attended

Dr. Fameline K Marak, attended one day Seminar on D.S.Rongmuthu and presented the key note address on the theme 'A-chik Folklore and its importance in literature' on the 12th Dec. 2012 organised by ALS, Tura sponsored by Dept. of Art & Culture, Govt. of Meghalaya.

Publications:

Marak Dokatchi Ch (2011-12). Superstitions: The Native Universe of Meaning of the Garos (A·chiks), *Protocol: Journal of Translation, Creative and Critical Writings* vol. V, no.1& 2: 206-210. ISSN 09739807.

Marak Dokatchi Ch (2012). A·we, The Standard Language of the Garos (A·chiks) August 2012) 'Source': a *Journal of Humanities and social sciences*; vol.II, Issue 2: 55-63. ISSN 2250 – 0642.

Marak Dokatchi Ch (2012). Ka·donge Nisengsoani, (grp. work), *A·chik Ku·rang*-Vol I Issue 7: 26-28.

Marak Dokatchi Ch (2012). Am·pak Doka, *A·chik Ku·rang*-Vol I Issue 7: 14-15.

Kabe A·chik Folk Song, *Source*, Vol. 2: 198-207. ISSN 2250-0642

Marak Fameline K. (2012). Bimchipan' Gam (fruit of hard work), *Duramong* 2011-2012, pp. 16.

Marak Fameline K. (2012). Chra-angde Sio Jang·kepeng Den·a, Ma·a-Noni Janggina Ma·ringsala, *A·chik Ku·rang* Vol.I No. 7: 16-17.

Marak Fameline K. (2012). Chugan: A Dying Oral Tradition, *Protocol Journal of Translation, Creative and Critical Writings* Vol. V&VI, No.1 & 2: 211-218. ISSN 0973 9807

Marak Jacqueline R. (2012). Translated a story 'Nire Sinje', *Protocol: Journal of Translation, Creative and Critical Writings*, Vol V&VI: 245-249. ISSN 09739807

Chapters/Seminar Proceedings in Books

Marak Dokatchi Ch (2012). Cultural Memory in the Writings of D.S.Rongmuthu, In Post Colonial Writings in Tribal Languages of India (M.B.Jyrwa, ed), Society for Khasi Studies, Shillong pp. 89-94

Research Project

Completed

The Languages Spoken in the three districts of Garo Hills in Meghalaya (People's Linguistic Survey of India as part of the state of Meghalaya), Bhasha Research and Publication Centre Baroda Nov. 2011 – Dec 2012. PI Dr. Dokatchi Ch. Marak.

Completed a Research Project with IGNCA-ANWESHA as Nodal Member & Language Advisory Committee (Garo) for Developing Books for Children in the Languages of the North-East. Translation of stories from six different languages of the North-East, i.e. Assamese, Bodo, Garo, Khasi, Manipuri and Mizo. The complete translated version in English and Garo (30 books x 6 lang.=180 books in total) is under publication. PI Marak Fameline K. (2012)

Other Activities:

Participated in the Third Meghalaya Poetry Competition organized by Khasi Department on the 26th November, 2012

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and the Students of the Department won the 1st, 2nd & 3rd position (Category C –Garo).
Mr Crystal Cornelious D.Marak participated one Day Seminar on D.S.Rongmuthu on

12th Dec. 2012 organised by ALS, Tura sponsored by Dept. of Art & Culture, Govt. of Meghalaya.

DEPARTMENT OF HINDI

Head : Prof. M.P. Pandey
Telephone : 2723514
E-mail : hodhin@nehu.ac.in, mppnehu@yahoo.co.in

Faculty

Designation	Name and Qualification	Specialization
Professor	D.K. Choubey, M.A. (Gauhati), Ph.D. (Manipur University)	Medieval Literature, Comparative Study
Associate Professor	M.P.Pandey, M.A. & Ph.D. (Kashi Vidyapeeth)	Criticism, Poetics
Assistant Professor	B.P.Tripathi, M.A., M.Phil. & Ph.D. (J.N.U.)	Modern Poetry.

Thrust Area of Research

Modern Hindi Literature and Comparative Study.

Brief Statement of Academic activities

During the academic year, many scholars of National and International stature e.g. Prof. Mithilesh Mishra (University of Illinois at Urbana Champaign, USA), Prof. Divik Ramesh (Delhi University), Prof. Arun Hota (West Bengal State University, Barasat, Kolkata), Prof. Chandrakala Pandey (Calcutta University), etc. visited the Department and interacted with the students. Five Ph.D. and five M. Phil students presented their pre-submission

seminars in the Department and have been awarded their respective Degrees. During the academic session, the Department invited two Visiting Professors - Prof. Ajay Patnayak from Bhubneshwar, Odisha and Prof. Ramanuj Tiwari from Patna, Bihar. The Department also engaged two Guest Lecturers to fulfill the requirement of teaching in M. A. Courses. Department also conducted a study tour in which the students of 1st and 3rd semester of M.A. programme visited North and South India including several universities, cultural centres and places related to the growth and development of Hindi Language and Literature including the birth places of iconic Hindi writers and poets in Varanasi.

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Students' Profile Enrolment Capacity: M.A.- 55, M. Phil.- 10, Ph.D.- Variable

Actual Admission:

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A..	02	16	11	05	24	04	25	29
M.Phil.	00	01	04	02	03	03	02	05

Degrees Awarded:

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A..	01	13	09	01	22	09	14	23
M.Phil.	00	02	03	02	03	00	05	05
Ph.D.	00	01	04	03	02	01	04	05

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name of Supervisor
Shekharjyoti Seal	Adikalin Charya Padon ka Paravarti Hindi Sahitya Par Prabhav	Dr. M. P. Pandey
Shyam Babu Sharma	Bhumandlikaran aur Samkalin Hindi Kavita	Dr. M. P. Pandey
Jean S. Dkhar	Sumitranandan Pant our Khashi Kavi Sosotham ki Kavitaon ka tulanatmak Adhyayan	Prof. D. K. Choubey
Prianjan	Hindi Bhasha evam Sahitya ke Vikas men Swaichchhik Hindi Sansthaon ka Yogdan	Prof. D. K. Choubey
Kalpana Saikia	Hindi aur Asomiya ke Pramukh Anchalik Upnyson ka Tulnatmak Adhyayan	Prof. D. K. Choubey

Placement of Students

Some of students of M.A., M.Phil. and Ph.D. courses have been placed in various institutions like colleges, schools and offices (State and Central Govt. and Public Sector) in various parts of the country.

Courses Conducted during the year

M.A.

Semester I : Hindi Bhasha evam Uska Vikash, Bhartiya Kavyashastra-I, Aadhunik Kavya (Chhayavad tak) evam Paryavaran Parak Kavya,

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- Hindi Gadya Sahitya-I (Natak
evam Nibandh), Aadikalin
Hindi Sahitya ka Itihas.
- Semester II : Bhaktikalin Kavya, Bhartya
Kavyashastra-II, Hindi Gadya
Sahitya-II (Upanyas evam
Kahani), Aadikalin Kavya,
Prayojanmoolak Hindi.
- Semester III : Hindi Sahitya ka Madhayakal,
Ritikaleen Kavya, Hindi
Natak, Anuvad-Sidhant evam
Vyawhar, Lok Sahitya.
- Semester IV : Hindi Sahitya ka Aadhunikkal,
Chhayavadottar Kavya,
Paschatya Sahityalochana
evam Hindi Aalochana,
Bhasha Vigyan, Hindi
Nibandh.

M. Phil.

Anusandhan ki Pravidhi aur Prakriya, Hindi
Sahitya ki Vaicharik Prishthbhoomi, Sangosthi
evam Samiksha.

Study Tours/ Field Trips of Students

Names of the Teachers in-charge: Prof. D.K.
Choubey and Prof. M.P. Pandey

Places/ Institutions visited: B.H.U., Kashi
Nagri Pracharini Sabha, Varanasi, Anand
Bhawan, Allahabad, Rameshwaram, Vivekanand
Kendra, Kanyakumari, Trivendrum.

Duration of the tour/ trip: 29th January to 15th
February, 2012

Purpose of visit: Educational and cultural
exposure of the students of non-Hindi speaking
area to the Hindi speaking area and other non-
Hindi speaking area of the country.

Seminars/Conferences/Symposia/Extension Programmes etc.

Attended

Prof. D.K. Choubey attended National Seminar
on 'Purvottar Rajyon mein Hindi ki Sthiti
evam Sambhawanayen' organised by
Assam Rajya Bhasha Prachar Samiti held
on Dimapur (Nagaland) on 7.4.2012.

Attended National Seminar on 'Manakeekrit
Devnagari Lipi evam Vartanee ki
Vyawharikta' organised by Central Hindi
Directorate, Delhi and B. R. Ambedkar
University Muzaffarpur on 20.8.2012.

Attended National Seminar on 'Asom
Vidya' by Hindi Department, Gauhati
University and North-East India Network
for Academic Discourse (NEINAD) at
Guwahati University. Paper presented on
'Purvottar ki Bhoshae evam Hindi ka
Antarsambandh' on 18.11.2012

Attended National Seminar on 'Purvottar
Bharat ka Bhakti Andolan' organised by
Shabda Bharti and Central Hindi Institute,
Guwahati at Guwahati on 24.3.2013

Participated in Workshop on 'Purvottar
Rajyon mein Kendriya Hindi Sikshan
Sansthan ki Anusandhanatmak Bhumi-
ka' at Central Hindi Institute, Shillong on
14.3.2013

Dr. M.P. Pandey attended National Seminar
on 'Purvottar mein Rastrabhasha Hindi ki
Sambhavanayen' organized by Assam Rajya
Rastrabhasha Prachar Samiti, Jorhat on the
topic - during 7th & 8th April, 2012.

Chaired a session in a National Conference
and Seminar on 'Asom Vidya' organised
by North-East India Network for Academic
Discourse (NEINAD) in Department of
Hindi, Gauhati University and Presented

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a paper on 'Hindi Sahitya ke Visash mein Assam ka Yogdan' during 17 & 18.11.2012.

Attended National Semanar on 'Lok aur Shastra : Anvay evam Samanvay' organised by Vidyashri Nyas & Shri Baldev P.G. College, Varanasi and presented a paper on the topic 'Purvottar ke Sahitya mein Lok aur Shastra' during 13, 14 & 15th January, 2013.

Attended National Seminar on 'Purvottar Rajyon mein Kendriya Hindi Sansthan ki Anusandhanatamak Bhoomika' organised by Central Hindi Institute Regional Centre, Shillong on 14.3.2013.

National Semimar organize by 'Shabd Bharti' and presented a paper on the topic - Purvottar Bharat mein Bhakti Andolan : Prishtbhumii evam Prerna on 23 & 24 March, 2013.

Dr. B.P.Tripathi attended National Seminar on 'Hindi aur Purvottar ki Bhashyen' organised by Bhartiya Bhasha Parishad. Kolkata, and a presented paper on the topic - Meghalaya ki Bhashayen evam Unka Sahitya on 14th-15th July, 2012.

Publications

Research Papers

Published in India

Choubey D.K. (2012) Asom mein Hindi Sahitya ka Swarup, *Chintan Srijan, Delhi*, VII: 75-81.

Choubey D.K. (2012) Khasi Bhasha-Sahitya: Swarup Vivechan, *Meghalaya Darpan*, XV: 24-29.

Pandey M.P. (2012) Bhoomandalikaran evam Bhartiya Kisano ki Samsyayen, *Abhinav Kadam*, 27: 231-240.

Tripathi B.P. (2012) Hindi ks Bajarkal, *Vartman Sahitya, Volume?* : 15-19.

Tripathi B.P. (2012) Samkaleen Kahani ki Yuva Sadi, *Lamhi, Volume?* : 11-14.

Tripathi B.P. (2012) Anubhooti ke Shikhar par Srijan ka Nritya, *Lamhi, Volume?* :102-105

Tripathi B.P. (2013) Sidhi Lakir ke Sadhak, *Anhad, Volume?* : 23-29

Published Abroad

Pandey, M.P. (2013) Hindi Kahani: Andarsh se Yatharth ki Yatra, *Sahitya Vartika*: 24-29.

Books

Pandey M.P. (2012) Tat Par Pritiksha, Sahitya Academic, New Delhi

Choubey D.K. (2013) Edited Hindi-Garo-English dictionary, NEHU Publication, Shillong.

Tripathi B.P. (2012) Nayi Kalam: Itihas Rachne ki Chunouti, Anamika Prakashan, Allahabad.

Tripathi B.P. (2013) Srijan ki Ekkisvi Sadi, National Publishing House, New Delhi.

Book Chapter

Pandey M.P. (2012) Purvottar ka Sanskritik Vaividhya aur Hindi ki Bhumika' In 'Hindi: Vividh Ayam', Anand Patil (Ed), Takshila Prakashan, New Delhi. pp 220-225.

Research Projects

Completed

"Mahapursh Sankardev aur Madhavdev ke Vyaktitwa-Krititwa ki Samksha evam unki Kritiyon ka Lipyantran Sahit Anuvad",

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Principal Investigator: Dr. D. K. Choubey,
Amount Rs. 2,10,000

Honours/ Awards/ Recognitions

Dr. B. P.Tripathi awarded by 'Yuva Shikhar Sahitya Samman-2011', on May, 2012 at Shikhar Sanstha, Shimla (Himachal Pradesh).

Any other Activities

Prof. Mithilesh Mishra, University of Illinois at Urbana Champaign, USA delivered lectures to the students of 2nd and 4th semesters on the topic - 'America mein Hindi' on 24th May, 2012.

Prof. Divik Ramesh (Delhi University) delivered lectures to the students of 2nd and 4th semesters on the topic 'Samkaleen Kavita: Bhasha Sahitya evam Sanskriti ka Sandrabh' on 28.5.2012.

Prof. Arun Hota, West Bengal State University, Barasat, Kolkata delivered lectures to the students of 2nd and 4th semesters on the topic 'Sahitya ki Prayojneeyata : Kyon aur Kisliya' on 28.5.2012.

Prof. Chandrakala Pandey, Calcutta University, Kolkata has delivered lectures to the

students of 1st and 3rd semesters on the topic 'Sahitya ki Samajh' on 11.9.2012.

Dr. D.K.Choubey Chaired a technical session in National Seminar on Manakikrit Devnagari Lipi evam Vartani ki Vyavharikta, at B.R. Ambedkar University, Muzaffarpur on 21.8.2012.

Delivered lecture on Hindi Bhasha evam Sahitya ka Paripekshya our Purvottar Bharat in conference organised by Hindi Sahitya Parishad Portblair on 4.1.2013.

Participated as an expert in seminar of serial documentaries in Hindi & English languages at Door Darshan Kendra, Shillong on 2.5.2012.

Attended Central Hindi Directorate Grants Committee meeting at Guwahati on 21.5.2012.

Attended workshop cum syllabus preparation of State Eligibility Test of Maharashtra at Pune University, Pune, from 9th to 11th August, 2012.

Attended as member of coordination committee and Editorial Board of Samanway Purvottar at Central Hindi Institute, Shillong on 16.8.2012.

Dr. M. P. Pandey attended a Hindi Diwas seminar as Chief Guest organised by Power Grid, Shillong on 28th September, 2012.

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DEPARTMENT OF KHASI

Head : Prof. Antoinette Kharmalki
Telephone : 2723301 (O)
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).	Khasi Linguistics
	S. Dkhar, M.A., M.Phil. & Ph.D.(NEHU)	Khasi Drama
	A. Kharmalki, M.A. (NEHU), M.A. (Delhi), B.Ed., M.Phil. & Ph.D. (NEHU).	Khasi Linguistics
Associate Professor	D.R.L. Nonglait, M.A. & M.Phil. (NEHU), PGDTE (CIEFL), Ph.D. (NEHU)	Khasi Literary Criticism
Assistant Professor	B. Bairo, M.A.(NEHU)	Khasi Fiction
	M.M. Khymdeit, M.A.(NEHU), M.Phil. (G.U.)	Khasi Poetry

Thrust Area of Research

The Thrust areas of the Department 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:

Conducted Refresher Course in Khasi, by ASC-UGC, NEHU, on the theme “Evaluation and Interpretation of Texts” from 7th to 27th November, 2012 with Dr. D.R.L.Nonglait as the Programme Coordinator.

Students’ Profile **Enrolment Capacity:** **P.G.- 52 M.Phil – 10 Ph.D. – 08.**

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	52	00	09	43	52	0	52
M.Phil.	00	10	00	05	05	10	0	10
Ph.D.	00	08	00	04	04	08	0	08

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	44	00	05	39	44	0	44
Ph.D.	00	02	00	01	01	02	0	02

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Details of Students Awarded Ph.D Degree

Name of the student	Title of thesis	Name(s) of Supervisor(s) Supervisor, Jt.Supervisor
Ms.Rosa Mystica Mawlong	“Literature in Translation: A Critical Study of Selected works translated into Khasi”	Prof. B.War
Mr. W.Marchtime Kharryngki	“A Study of H.W.Sten’s Criticism on Khasi Poetry”.	Prof. M.B.Jyrwa.

Placement of Students

Ms. Rosa Mystica Mawlong as Lecturer in St.Edmund’s College, Shillong.

Mr. W.Marchtime Kharryngki as Lecturer in Synod College, Shillong.

Courses Conducted during the year

M.A.

- Semester I : Khasi 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 Literature-II and Khasi Drama – IV.

M.Phil./Ph.D.

Research Methodology, Seminar Papers - (Option A) Literary Theory and Criticism, (Option B) Literary Themes.

Study Tours/Field Trips of Students

Study Tour of the 3rd Semester Students

Name(s) of the Teacher(s) in-charge: Dr. D.R.L.Nonglait

Places/ Institutions visited: Mumbai, Goa and Kolkata.

Duration of the tour/ trip: 20th January to 1st February 2013

Purpose of visit: To acquire knowledge from inter state experiences

Field Trip 1 as part of the Course KHA 114

Name(s) of the Teacher(s) in-charge: Mr.M.M.Khymdeit

Places/ Institutions visited: Dainthlen, Sohra, East Khasi Hills

Duration of the tour/ trip: 14th April, 2012

Purpose of visit: To gain knowledge from nature and students may correlate the knowledge gained from classroom and the real experience from the place they visit.

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Field Trip 2 as part of the Course KHA 113

Name(s) of the Teacher(s) in-charge:
Mr.M.M.Khymdeit

Places/ Institutions visited: Dawki
Shnongpdeng, East Khasi Hills

Duration of the tour/ trip: 3rd November, 2012

Purpose of visit: Student will have a wide and broaden experience with regard to the areas located in the border of Meghalaya and to enable them to have ideas of the history of the past.

Seminars/Conferences/Symposia/Extension Programmes etc.

Attended:

Prof. B.War Chaired a session at the 34th All India Conference of Linguistics (34 AICL) organized by the Linguistic Society of India in collaboration with the Department of Linguistics, NEHU, Shillong held from the 1st – 3rd November, 2012.

Presented one lecture on “ Khasi Literature and Translation” in the Interactive Session on Khasi Literature and Translation organized by the Department of Khasi, Lady Keane College, Shillong on the 29th August, 2012.

Prof. S. Dkhar Chaired the inaugural function of the book release programme of Kitbor W. Nongrum held on 24th October, 2012 at Queens Resort, Phramer Upper Shillong. Organized by the author.

Prof. A. Kharmalki Chaired a session at the 34th All India Conference of Linguistics (34 AICL) organized by the Linguistic Society of India in collaboration with the Department of Linguistics, NEHU, Shillong held from the 1st – 3rd November, 2012.

Dr. D.R.L.Nonglait presented a paper on “Ka Postcolonial Theory bad Ka Jingpule halor ka Jingsynshar Nongwei ha ka Literashor Khasi” at the State Level Seminar organized by Thomas Jones Synod College, Jowai in collaboration with the Khasi Authors’ Society, Shillong on the 28th April, 2012 at the Thomas Jones Synod College, Jowai.

Publications

War B. (2012). “Ki Jainphong Khasi pateng la pateng”, *Ka Thwet Jingstad (Quest for Knowledge)* Vol.II (2): p.4-11 (ISSN No. 2278-6813)

War B. (2012). “Compounding in Khasi” *Ka Thwet Jingstad (Quest for Knowledge)* Vol.II(2) : p. 47-51 (ISSN No. 2278-6813)

War B. (2012). “Some Aspects of Khasi, an Austro Asiatic Language” In *A Glimpse of Language & Culture of North East India*, (Umesh Deka ed), Rajendra Mohan Sarma and Dr.Rabindra Sarma, Guwahati, p.20-28 (ISBN 978-93-244-0269-1)

Dkhar S. (2012). “Khasi-Jaintia Folktales” In *Khasi Jaintia & Garo folktales*, Directorate of Arts and Culture, Government of Meghalaya, Shillong, pp 1-12.

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- Khyndeit M.M. (2012). “Inanimate Gender in Khasi Language: A Gender of Matrilineal Society” In *A Glimpse of Language & Culture of North East India*, (Umesh Deka Ed.) published by Rajendra Mohan Sarma and Rabindra Mohan Sarma. p.78-84 (ISBN 978-93-244-0269-1)
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the journal *Ka Thwet Jingstad (Quest for Knowledge)* Vol.II No.2: p.66-67 (ISSN No. 2278-6813)

Honours/Awards/Recognitions

Prof. S.Dkhar Awarded “A Daughter of Himalayas” in the 9th International Poetry Meet held on 2nd July 2012 at Katmandu, Nepal.

Recipient of Meghalaya Tirot Sing Award, 2013 by the State Government.

Other Activities

Prof. B. War Acted as a Resource Person in the Refresher Course in Khasi organized by the UGC-ASC, NEHU held on the 7th – 27th November, 2012.

Attended as Chief Guest and Presented a speech in the book release of P.Kharakor’s *Ka Pajwa Ding*, on the 21st September, 2012 in the Department of Khasi, NEHU, Shillong.

Presented a speech on “Khasi authors of the past” on the book released of K.W.Nongrum’s *Kiba nga ieit bad niewkor* on the 24th October, 2012.

Attended as Chief Guest and presented a speech on Khasi language in the book release of Dr. A.Nongbri’s *Standardization of Khasi Language* on the 20th December, 2012 in Shillong College, Shillong.

Presented a speech on “Khasi culture” in the book release of *David Roy: A Khasi Remembered* on the 22nd December, 2012 at the Don Bosco youth Centre, Shillong.

Attended as Resource Person and presented speech entitled “The Practical steps to Creative Writing” in the Two-day Workshop on Creative Writing organized by the Full Gospel Fellowship Church, Mawlai,

Shillong, on the 30th and the 31st January, 2013.

Attended as Guest of Honour and presented speech entitled “ Rights and Privileges of Women in the Khasi Matrilineal Societ” in the International Women’s Day Celebration organized by the Meghalaya State Women’s Commission on the 8th March 2013 at Umlyngka, Shillong

Prof. S. Dkhar acted as a Judge in the “Phawar competition” of the Awareness campaign on Save Wahumkhrah and Umshyrpi River held on 21st April 2012 at J.N.Stadium, Polo, Shillong, organized by the Taskforce, Shillong.

Acted as a Resource Person and presented a paper on “Role of Women in bringing Peace and National Integrity” in the 8th International Conference of AIPC held in Garden Court Hotel, Cape Town, South Africa, on 23rd April 2012, organized by AIPC, India.

Acted as a Resource Person and delivered a presentation for the French Doctors on “The Practice of Marriage in the Matrilineal system of the Khasi: less genetic problems” held on 21st May 2012 in the Conference Room of the Department of Bio-Chemistry, St.Edmund’s College, Shillong, organized by the French Doctors’ Association, France.

Acted as a Special Guest in the international poets’ meet, held from 25th – 27th May 2012, delivered a speech in the inaugural function and read out 3 poems in the multilingual session: organized by Poorvotar Hindi Akademi, Shillong at Marwari Dharamshala Hall, Garikhana, Shillong.

Acted as a Resource Person in the sponsored orientation Course on 6th June 2012 at the Seminar room of the Academic staff

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College, NEHU and presented two series on the study of “Khasi Matrilineal System: Changes and the impact of Modernization on the indigenous practices.” Organized by Academic Staff College NEHU, Shillong.

Acted as a Resource Person and presented three poems in the 9th International Conference of AIPC held in Katmandu, Nepal, on 3rd July 2012, organized by AIPC, India.

Acted as a Chief Guest in the UGC-sponsored National Seminar on “Women Empowerment in Rural India” presented a keynote address in the inaugural function and chaired one session in the technical session, held on 9th and 10th August, 2012 at Bahona College, Jorhat.

Attended as the member and Resource Person in the celebration of the Literary Day organized by the Khasi Authors’ Society, Shillong and presented three poems on 11th September 2012.

Acted as the Regional Coordinator Northeast Region in the UGC-SAM Capacity Building of women Managers in Higher Education Workshop organized by Tezpur University from 3rd – 7th September 2012 and spoke on the Genesis of the Evolution of the UGC- Capacity Building of Women Managers in Higher Education Workshops in India with special reference to North-East.

Representing the State of Meghalaya in the Northeast Women Writers’ Meet held on 14th -15th September 2012, at NEZCC, Dimapur and presented a paper as a Resource Person on “Redefining Women in the 21st Century: role and Status” and read out four poems in the poetry reading sessions; organized by NEZCC, Dimapur, Nagaland.

Acted as a Guest of Honour in the Hindi Pakhwada Celebrating the Hindi week held at Kendriya Hindi Sansthan, Regional Centre, on 18th September 2012 and presented three Poems. Organized by Kendriya Hindi Sansthan and Shillong Hindi Poetry Academy.

Delivered a speech in the Book Release Programme of (Dr.) Sister Philomena Kharakor, *Ka Pajwa Ding*, organized by the Department of Khasi on the 21st September, 2012 at the Department of Khasi, NEHU, Shillong.

Acted as a Chief Guest in the Book Release Programme of Adalyne Khonglam, entitled *Ki Jingieit Bapher*, gave a book review and released the book held on 8th November 2012 at Jaiaw Community Hall, organized by the author.

Acted as a Guest Of Honour in the Multilingual poetry Readings Celebrating the 103rd Birth Anniversary of the Mahakavi Laximi Prasad Devkota, presented a Khasi poem “Ka Khana Bym Pat Kut” and three English poems entitled “You left the Scar of pain”, “Who are We” and “Exploitation” organized by Shillong Bhanu Jayanti Celebration Committee held on 11th November 2012 in the Gurkha Patchala auditorium, Shillong.

Acted as a Chairperson in the Poetry Competition held on 18th December 2012 for the Commemoration of the Death Anniversary of Soso Tham, at State Central Library Premises, organized by the Department of Art and Culture, Government of Meghalaya.

Coordinator of the UGC Capacity Building of Women Managers in Higher Education Management Skills Enhancement

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Workshop on “Information Communication Technology in Higher Education” and Elimination of Sexual Harassment in the work Place of Higher Education Institutions” organized by NEHU in collaboration with St.Edmund’s College, Shillong from 19th to 24th November 2012 at St.Edmund’s College Conference room.

Participated in the Poetry reading of the Alumni of Synod College, and read out four poems: “Ko Jingsuk”, “A poor She”, “The Pain”, “Why The Hill People” organized by the Synod College Alumni Association held on 24th November 2012 at Synod College Conference Hall.

Coordinator of the Third Meghalaya poetry Competition and Chaired the inaugural function and one technical session organized by the All India Poetess Conference, Meghalaya Chapter, in collaboration with the Government of Meghalaya under CMYDS scheme; held on 26th November 2012 at the Art and Culture Hall, Shillong.

Acted as a Resource Person in the International Seminar held at Dharan Nepal, and presented a paper on “Fear-ism: Challenges of socio-cultural Development in the 21st Century”; Organized by International Pradeshhi Literary Group, Dharan, Nepal, held from 5th – 7th February 2013 at Dharan, Nepal.

Acted as a Resource Person in the National Workshop on “Elimination of Glaucoma” and presented a paper on “The Role of Media and Civil society to sensitize the awareness of eliminating avoidable blindness with special focus on Glaucoma”. Organized by Health and Family Welfare, Government of Meghalaya in collaboration with Ophthalmology Department,

Government of Meghalaya held at Shillong Club, Shillong on 13th March 2013.

Acted as the Chairperson in one technical session and as a Resource person in the National Seminar on “Tagore and Contemporary India” and presented a paper on “Gurudev Rabindranath Tagore and North-East with special reference to Shillong” held on 22nd and 23rd March 2013 at Women’s College Auditorium organized by Women’s College, Shillong.

Prof.A.Kharmalki Acted as a Resource Person for the workshop on Teaching Khasi to Non-Khasi Speakers at DBCIC, Shillong, organized by the Department of Linguistics in collaboration with CIIL, Mysore from 2nd to 22nd July, 2012.

Acted as Resource Person for the workshop organized by CBSE, Delhi from 25th to 28th September, 2012.

Acted as Resource Person for the Refresher Course in Folk and Semiotics organized by ASC, NEHU for the Department for Cultural and Creative Studies from 5th to 15th October, 2012.

Acted as a Resource Person for the Refresher Course in Folkloristics and Semiotics organized by Academic Staff College, NEHU with the Department for Cultural and Creative Studies from 25th September to 15th October 2012.

Acted as a Resource Person in the Refresher Course in Khasi organized by the UGC-ASC, NEHU held on the 7th – 27th November, 2012.

Dr. D.R.L.Nonglait Acted as a Resource Person in one of the Sessions during the celebration of the World Environment Day organized by Wisdom Secondary School, Pariong in collaboration with the Office of the District

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Forest Officer, West Khasi Hills, Nongstoin, on the 5th June, 2012 at Pariong.

Participated as a Panelist in a Panel Discussion on “Freedom: The Spirit of Sacrifice” organized by Friends Connection, Shillong and Riti Academy of Visual Arts, Shillong in collaboration with the Directorate of Arts and Culture, Government of Meghalaya, Shillong on “U Tirot Sing Day” on the 17th July, 2012 at Shillong Club, Shillong.

Delivered a Speech as Chief Guest in a programme organized for launching of Sweetymon Rynjah’s book, *Beh Mrad Ha U Khasi* held on the 17th August 2012 at Mawkhar, Shillong.

Delivered a Speech on ‘Ka bynta jong ki Seng Bhalang (NGOs) ha kaba pynneh ĩa ka jinglong kyrpang ka kolshor Khasi’, during the occasion of Coral Jubilee Celebration of Khasi Jaintia Welfare Association, Shillong on the 20th August, 2012 at Dinam Hall, Jaiaw, Shillong.

Delivered a keynote address on the Literary Day of Khasi Authors’ Society, Shillong held on the 11th September, 2012 at Don Bosco Youth Centre, Shillong.

Addressed as Chief Guest during the Inaugural Session of the interactive programme on the theme “Markhmat bad ki Nongthoh” organized by Lady Keane College on the 18th October, 2012 at Lady Keane College, Shillong.

Delivered a speech on “H Lyngdoh’s Contributions towards the Development of Khasi Literature” and released a book

entitled, *Ka Jingim bad Jingtrei U Dr. Homiwell Lyngdoh* at the Inaugural Function of Dr.Homiwell Lyngdoh Centre for Indigenous Studies (HOLCIS) on the 24th October, 2012 at John Roberts Theological Seminary, Mawklot, Shillong.

Delivered a keynote address at the Seminar on “Ka Science bad U Khasi” organized by Tirot Sing Memorial College, Mairang in collaboration with the Khasi Authors’ Society, Shillong on the 27th October, 2012 at Tirot Sing Memorial College, Mairang.

Acted as Course Coordinator of a three week Refresher Course in the Department of Khasi, NEHU, Shillong on the theme “Evaluation and Interpretation of Texts” from 7th to 27th November, 2012.

Delivered three lectures during the Refresher Course in Khasi, Department of Khasi, NEHU, Shillong on 8th, 10th and 26th November, 2012 respectively.

Ms. B. Bairo delivered a Radio Talk on “V.G.Bareh kum u myllung” (V.G.Bareh as a poet), broadcast by All India Radio, Shillong on the 12/6/12

Mr. M.M. Khymdeit acted as Resource Person in the Workshop on Teaching Khasi to Non-Khasi Speakers organized by DBCIC, in collaboration with CIIL Mysore and Linguistics Department, NEHU, Shillong on 3rd to 20th July 2012.

Acted as Resource Person in the CBSE Workshop held from 25th to 27th September, 2012 at New Delhi.

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DEPARTMENT OF LINGUISTICS

Head : Dr. Umarani Pappuswamy
Telephone :
Office : (0364) 272 -3310
Mobile : +91-8974036356
Email : umaranip@gmail.com; umarani@nehu.ac.in

Faculty:

Designation	Name and Qualification	Specialization
Professor	Juanita War , M.A (English) Gauhati University; M.A (Linguistics) Delhi University; Ph.D (Linguistics) University of Edinburgh.	Applied Linguistics, Morphology, Psycholinguistics.
Associate Professor	Shailendra Kumar Singh , M.A (Linguistics) Delhi University; M.A. (Hindi) Karnataka State Open University, M.Phil and Ph.D (Linguistics), University of Hyderabad. Umarani Pappuswamy , M.A. and M.Phil (Linguistics), Bharathiar University, Ph.D (Linguistics) University of Mysore, Post-Doc, University of Antwerpen, Belgium.	Translation, Eco-linguistics, Sociolinguistics, Psycholinguistics, General Linguistics, Contact Linguistics. 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 (Linguistics), Delhi University, Ph.D (Linguistics), Delhi University.	Syntax, Typology, Language Ideology.
	Barika Khyriem , M.A. (Linguistics), NEHU; M.Phil (Linguistics), Delhi University.	Phonology, Dialectology, Sociolinguistics.
	Bijoy L. Dhanwar , M.A. (Linguistics), NEHU, M.Phil. (Linguistics), University of Hyderabad.	Tibeto-Burman Linguistics, Typology, Syntax, Lexicography, Historical Linguistics.

Thrust Area of Research:

The thrust area of the Department is to research in 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

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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 43 students to its M.A. programme and 12 students to its M.Phil Programme during the current year. 29 students successfully completed their M.A. programme and 2 passed the UGC Net examination. The department organized a series of programmes including International Conference, Refresher Course in Linguistics and Workshops, and brought in many international scholars from all the continents to the university.

Students' Profile:

Enrollment Capacity: M.A.: 45; M.Phil/ Ph.D: Variable.

Actual Admission: M.A.: 43; M.Phil: 12; Ph.D: -

Course	Males	Females	ST	SC	GEN	Meghalaya	Non-Meghalaya	Total
M.A.	18	25	42	-	1	32	11	43
M.Phil	5	7	12	-	-	3	9	12

Degrees Awarded:

Course	Males	Females	ST	SC	GEN	Meghalaya	Non-Meghalaya	Total
M.A.	11	18	27	-	2	14	15	29

Placement of Students:

Priti Raychoudhury, Linguist (Speech Data Evaluator), Google India, Bangalore.

Sociolinguistics; Lexicology and Lexicography; Syntax II; Language Technology and Text Analysis.

Courses Conducted during the year:

M.A.

Semester I : General Linguistics; Morphology; Syntax I; Phonetics and Phonology.

Semester II : Semantics (Part I); Linguistics and Environment (Part 2);

Semester III : Generative Phonology; Historical and Comparative Linguistics; South Asia as a Linguistic Area with special reference to North-east India; Readings in Linguistics-I, North-east India and Language Ideology.

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Semester IV : Structure of Tibeto-Burman/Austro-Asiatic Languages; Field Methods (Dissertation); Language Education; Translation Theory and Practice; Readings in Linguistics-II.

M.Phil/Ph.D Coursework

Research Methodology; Current Trends in Linguistics (Optional 1); Current Trends in North East Linguistics (Optional 2); Advances in Natural Language Processing (Optional 3); Seminar Paper.

Ph.D Submitted

Name of the Candidate	Topic of Research	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

Guest Lecturer:

Guigonpou Gonmei from August 1, 2012 to November 2012.

Seminars/ Conferences/ Workshop/ Extension programmes.

Organized:

Workshop on PRAAT. Coordinator: Barika Khyriem. Venue: Department of Linguistics, NEHU, Shillong from 4th -8th June 2012. Mr.Hiram Ring, Nanyang Technological University, Singapore was the chief resource person.

Workshop on Teaching Khasi to Non-Khasi Speakers, from July 3-20, 2012 in Collaboration with the Don Bosco Centre for Indigenous Cultures (DBCIC), Shillong. Venue: Don Bosco Centre for Indigenous Cultures (DBCIC), Shillong. Coordinators: Fr. Joseph Puthenpurakal, Director DBCIC and Dr. Umarani Pappuswamy, Head, Department of Linguistics, NEHU, Shillong.

UGC Refresher Course in Linguistics. In collaboration with the UGC-ASC at NEHU, Shillong, October 29 to November 18, 2012,

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Coordinator: Dr. Umarani Pappuswamy.
Resources persons included a few linguists from Africa and Europe.

‘34th All India Conference of Linguists’. In collaboration with the Central Institute of Indian Languages, Mysore, the Linguistic Society of India and the ICSSR, Delhi. Theme: Linguistic Diversity in India: Typologies, Cultures and Contacts. Venue: NEHU, Shillong. Dates: November 1-3, 2012. Coordinator: Dr. Umarani Pappuswamy; Organizing Secretary, Dr. S.A. Lyngdoh Organizing Committee: Prof. J.War, Dr.Uma Pappuswamy, Ms. S.A. Lyngdoh, Dr. S.K.Singh, Ms. Barika Khyriem and Mr.Bijoy L.Dhanwar. Prof. Gregory Anderson (University of Oregon, USA) delivered the keynote address; Professors K.V.Subbarao (India), Juanita War (NEHU, Shillong) and Jean-Luc Chevillard (University of Paris) were the plenary speakers. Professors Peter E. Hook (USA) and Prof. K.Ramasamy (India) led the invited colloquiums.

Linguistic/Phonetic Transcription Training-cum-Orientation Programme. In collaboration with the Language Division, Kolkata from December 14-24, 2012. Venue: NEHU, Shillong. Coordinators: Dr. Umarani Pappuswamy and Mr. Bijoy L.Dhanwar.

National Workshop on EILMT System. In collaboration with CDAC Pune on 22-25 January, 2013 at Pune. Coordinator: Dr. Shailendra K.Singh.

Workshop-cum-Training Program on EILMT System on March 16, 2013 at Guwahati, Coordinator: Dr. Shailendra K.Singh.

Attended/Presented:

Juanita War:

International:

Diversity and Contact in North-East India. Plenary Talk at the 34th All India Conference of Linguists, at NEHU Shillong on November 2, 2012.

A Phonological Typology of Khasi Dialects (with B.Khyriem) at the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Chaired a session at the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Session Manager, Parallel session held at the New Guest House, part of the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

National:

Presented an Overview of the UPE PROJECT on “Research in Tibeto-Burman and Austro-Asiatic Languages in NE India” as PI to the UPE Review Committee held in NEHU, Shillong on May 28, 2012.

Completed the Digital Language Map of NE India – Phase I (NEICOD PROJECT) and got it inaugurated by the UGC team on May 28, 2012.

Shailendra K.Singh

International:

Chaired a session at the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

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Umarani Pappuswamy

International:

KGLEX: A Computational Lexicon for Khasi and Garo (coauthor with Egira Shadap and Triksimeda Sangma) at the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Some Linguistic Aspects of Kullung (coauthor with Vidyarati Joshi) at the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Session Manager, Parallel session held at the Old Guest House (Auditorium), part of the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Chaired a session on Computational Linguistics at the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Saralin A. Lyngdoh

International:

Ergative-Absolutive in Halam and Biata (with C. Kharlukhi) In the 34th AICL “Linguistic Diversity in India: Typologies, Cultures and Contacts”, November 1-3, 2012.

Session Manager, Parallel session held at the New Guest House, part of the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Barika Khyriem

International:

A Phonological Typology of Khasi Dialects (With J. War) at the 34th All India Conference

of Linguists, at NEHU Shillong, November 1-3, 2012.

Session Manager, Parallel session held at the New Guest House, part of the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

National:

Participated in the 21st Orientation Programme at UGC-ASC, NEHU, Shillong from February 4-March 2, 2013.

Bijoy L. Dhanwar

International:

Numeral “one” in Karbi . at the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Session Manager, Parallel session held at the Conference Hall, Old Guest House, part of the 34th All India Conference of Linguists, at NEHU Shillong, November 1-3, 2012.

Publications

Research Papers

Published in India

Khyriem, Barika. 2013. Towards Introducing Nongtraï, Under Khasi Umbrella. In S.K. Singh, and S.A. Lyngdoh (Eds.) *Linguistic Ecology of Meghalaya*. pp 1-17. Gauhati: Eastern Book House.

Khyriem, Barika., and Sangma T. 2013. Consonant and Syllable Structure of Garo. In Juanita War, S.K. Singh, S.A. Lyngdoh and B. Khyriem (Eds.) *Tibeto-Burman Linguistics of North- East India*. pp 242-

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254. Gauhati: Eastern Book House. ISBN: 978 93 80261 90 4.
- Lyngdoh, Saralin. 2013. Explaining Languages: Its Limitations. In S.K.Singh, and S.A.Lyngdoh (Eds.) *Linguistic Ecology of Meghalaya*. pp 122-129. Gauhati: Eastern Book House. ISBN: 978 93 80261 96 6.
- Lyngdoh, Saralin. 2013. The Conceptual Metaphors of Time and Space in Khasi. In S.K.Singh, and S.A.Lyngdoh (Eds.) *Linguistic Ecology of Meghalaya*. pp 70-83. Gauhati: Eastern Book House.
- Lyngdoh, Saralin. 2013. Ergative-Absolutive in Halam and Biate (with C. Kharlukhi). In Juanita War, S.K.Singh, S.A.Lyngdoh and B.Khyriem (Eds.) *Tibeto-Burman Linguistics of North- East India*. pp 223-229. Gauhati: Eastern Book House. ISBN: 978 93 80261 90 4.
- Lyngdoh, Saralin. 2013. Noun-Verb Compounding in Gangte and Vaiphei (with C. Lalremzami and K. Suantak). In Juanita War, S.K.Singh, S.A.Lyngdoh and B.Khyriem (Eds.) *Tibeto-Burman Linguistics of North- East India*. pp 230-241. Gauhati: Eastern Book House. ISBN: 978 93 80261 90 4.
- Singh, S.K. and Atiqua Bano Morphology of Phom. 2013. In Juanita War, S.K.Singh, S.A.Lyngdoh and B.Khyriem (Eds.) *Tibeto-Burman Linguistics of North- East India*. pp 127-160. Gauhati: Eastern Book House. ISBN: 978 93 80261 90 4.
- Singh, S.K. and Parijat Narjari. Linguistics Ecology of Bodo. 2013. In Juanita War, S.K.Singh, S.A.Lyngdoh and B.Khyriem (Eds.) *Tibeto-Burman Linguistics of North- East India*. pp 33-53. Gauhati: Eastern Book House. ISBN: 978 93 80261 90 4.
- Singh, S.K. 2013. Revisiting TB Linguistics. 2013. In Juanita War, S.K.Singh, S.A.Lyngdoh and B.Khyriem (Eds.) *Tibeto-Burman Linguistics of North- East India*. pp ix-xxxxxiii. Gauhati: Eastern Book House. ISBN: 978 93 80261 90 4.
- Singh, S.K. Cognitive aspects of Processing Idioms in Second Language: A Study of Khasi English Bilinguals, 2013. In S.K.Singh & S.A.Lyngdoh (eds.) *Linguistics Ecology: Meghalaya*. Guwahati: Eastern Book House. pp: 233-246.
- Singh, S.K. and Georginia Shallam Linguistic Ecology of Meghalaya: Sustainability and Suitability. 2013. In S.K.Singh, and S.A.Lyngdoh (Eds.) *Linguistic Ecology of Meghalaya*. pp 233-246. Gauhati: Eastern Book House.
- Pappuswamy, Umarani. 2012. (Ed.) *South Asian Language Review* <http://journalsalr.com>; Volume XXII Nos. 1 & 2 (January & June 2012 combined Volume).

Books Edited

Published in India

- Juanita War, S.K.Singh, S.A.Lyngdoh and B. Khyriem. (Eds.). 2013. *Tibeto-Burman Linguistics of Northeast India*. Guwahati: Eastern Book House. ISBN: 978 93 80261 90 4.
- Shailendra K. Singh and S.A.Lyngdoh (Eds.). 2013. *Linguistic Ecology: Meghalaya 2013*. Guwahati: Eastern Book House. ISBN: 978 93 80261 96 6.

School of Humanities

Funds Received from Agencies other than NEHU

Agency	Amount	Year
Ministry of Communication & Information Technology	78.11 lakhs	2011-2014
ICSSR, New Delhi. CIIL	4.70 lakhs	2012

Research Projects:

Ongoing Project	Institution	Year
ELMTS-Bodo & Information Technology	Ministry of Communication	2011-2014

Investigator: Dr.S.K.Singh

Mother Tongue Survey of India: Phase III; In Collaboration with the Language Division, Kolkata. Coordinators: Dr. Uma Pappuswamy and Mr. Bijoy L. Dhanwar

Umarani Pappuswamy, Member, Advisory Committee, UGC-Academic Staff College, NEHU.

Academic/Professional Collaborations:

The faculty members 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; CDAC-Pune 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.

Any other Activities:

Juanita War

Delivered Inaugural Address at PLSI Workshop on May 4, 2012 at NEHU, Shillong.

Chief Guest, Workshop on Teaching Khasi to Non-Khasi Speakers, on July 3, 2012 in Collaboration with the Don Bosco Centre for Indigenous Cultures (DBCIC), Shillong. Venue: Don Bosco Centre for Indigenous Cultures (DBCIC), Shillong and delivered a special speech on the theme of the workshop.

Chaired the Inaugural Session of the UGC Refresher Course in Linguistics, NEHU, Shillong, October 29, 2012.

Chief Guest at the UGC Refresher Course in Khasi, NEHU, Shillong on November 7, 2012.

Lectures on 'Psycholinguistics' at the UGC Refresher Course in Linguistics, NEHU, Shillong on November 15, 2012.

Honours /Awards/Recognition:

Umarani Pappuswamy, Member of the Publication Committee, Indian Linguistics, Journal published by the Linguistic Society of India for the term January 2012 – December 2014.

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Delivered a talk on “Communicative Language Teaching” in the 21st Orientation Programme at UGC-ASC, NEHU, Shillong, February 2013.

Shailendra K. Singh

Lectures on Semiotics in Refresher Course conducted by Department of Cultural & Creative Studies, NEHU in 2012.

New World Order: Language and Globalization, Lecture in Refresher Course on ‘Globalization and Governance’ conducted by Department of Political Science, NEHU on 1st Dec, 2012.

Umarani Pappuswamy

Designed the curriculum for the Workshop on Teaching Khasi to Non-Khasi Speakers, on July 19, 2012 at the Don Bosco Centre for Indigenous Cultures (DBCIC), Shillong.

Delivered two lectures on Semiotics at the UGC Refresher Course in Folklore and Semiotics, NEHU, Shillong, October 2012.

Delivered lectures on ‘Computational Linguistics’ at the UGC Refresher Course in Linguistics, NEHU, Shillong, 2012.

Delivered two lectures on Corpus linguistics and discourse analysis at the UGC Refresher Course in English, NEHU, Shillong, March 2013.

Saralin A. Lyngdoh

Resource Person in the 5 Day Training Program on Pronunciation and Articulation (Khasi Phonetics) in All India Radio, Shillong from 8th to 12th, April, 2013.

Delivered two lectures on Some Aspects of Khasi Grammar in Workshop on Teaching Khasi to Non-Khasi Speakers, during July, 2012 at the Don Bosco Centre for Indigenous Cultures (DBCIC), Shillong.

Resource person for ‘Project Grammar’ Workshop from 6th-13th August 2012. Lady Keane College, Shillong.

Resource Person in the Refresher course conducted by the Department of Linguistics, October 2013 on *Lexical Representations*.

Barika Khyriem

Delivered two lectures on Pronunciation of Khasi Sounds in Workshop on Teaching Khasi to Non-Khasi Speakers, on July 19, 2012 at the Don Bosco Centre for Indigenous Cultures (DBCIC), Shillong.

Delivered a lecture at the Refresher Course in Linguistics on 30th October 2012 on ‘Basics of Phonetics and Phonology’ on 5th November 2012.

Delivered a lecture at the “Linguistic/Phonetic Transcription Training-cum-Orientation Programme” on ‘The Phonology of Austro-Asiatic languages’ on 19th Dec 2012 held at the Conference room of NEHU New Guest House, Shillong.

Participated in the 21st Orientation Programme at UGC-ASC, NEHU Shillong from 4th February- 2nd March, 2013.

Bijoy L. Dhanwar

Conducted Seminars at the Refresher Course in Linguistics on 18th November 2012 at UGC-ASC, NEHU.

School of Humanities

DEPARTMENT OF PHILOSOPHY

Head : Prof. Binod Kumar Agarwala
Telephone : 272 3552
E-mail : philodeptnehu@yahoo.co.in

Faculty

Designation	Name and Qualification	Specialization
Professor	Jagat Pal, M.A. (Allahabad), Ph.D. (IIT, Kanpur).	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.
Associate Professor	Xavier P Mao, M.A. (NEHU), M.Phil. (Delhi), M.Lett. (Sydney), Ph.D. (NEHU).	Existentialism, Ethics
	N Parthasarathy, M.A. & M.Phil. (Madras)	Areas of interest: 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.
	Uttam A Sharma, M.A. (Manipur University)	Logic and Epistemology.

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Thrust Area of Research

Philosophy of Culture with special reference to the tribal thought of the North-Eastern region.

research work. The faculty served as resource persons for refresher courses within and outside NEHU, Participated and presented papers at regional, national and international seminars/conferences.

Brief Statement of Academic Activities

The Faculty members published a number of papers in books and journals pertaining to their

Students' Profile Enrolment Capacity: PG-52 PhD- variable

Actual Admissions

Course	Males	Females	ST	SC	Gen.	Meghalaya	Non-Meghalaya	Total
M A	20	30	48	-	2	32	18	50
Ph D	2	5	4	-	2	3	4	7

Degrees Awarded

Course	Males	Females	ST	SC	Gen.	Meghalaya	Non-Meghalaya	Total
M A	8	19	22	-	4	16	11	27
Ph D	1	1	1	-	1	-	2	2

Details of Students Awarded PhD Degree

Name of the Student	Title of thesis	Name of Supervisor
Ms. WojanbeniShitiri	The Anthropocentric & Non Anthropocentric Moral Approaches to Environment: A Critical Study.	Prof. Jagat Pal
Mr. N.B. Chettry	Exploring Non-Violence in Contemporary Indian Context: A Philosophical Critique.	Dr. Prasenjit Biswas

Courses Conducted during the year

Indian Metaphysics, Western Metaphysics, Symbolic Logic, Philosophy of Religion, Indian Philosophy of Language-I, Ethics & Environment, Indian Epistemology, Western Epistemology, Indian Moral Philosophy, Indian Philosophy of Language-II, Philosophy of Social Science, Phenomenology & Existentialism, Philosophy of Post-Modernism, Analytic Philosophy, Contemporary Philosophy of Religion, Tribal Thought and Culture,

Modernism & Responses, Philosophy of Culture, Philosophy of Post-modernism-II, Western Moral Philosophy, Applied Ethics, Philosophy of Wittgenstein.

Study Tours/Field Trips of Students

Name of the Teacher in-charge: Prof. X. P. Mao

Places/Institutions visited: New Delhi & Agra

Duration of the tour/trip: 19th to 29th January, 2013

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Seminar/Conferences/Symposia/Extension Programmes etc.

Organized

Prof. Xavier P Mao organized a National Seminar on Dr. B R Ambedkar from 11-12 March 2013.

Attended

Prof. Jagat Pal presented a paper entitled “Social Thoughts of Baba Ambedkar” in a National Seminar on Dr. B R Ambedkar’s Ideas and Thoughts “oraginsed by the Department of Philosophy, NEHU, Shillong from March 11-12, 2013.

Prof. B K Agarwala delivered a talk “Thought of Bhagavadgita and Savarna in Contemporary Dalit Discourse: A rejection of Legacy of Ambedkar”, in a national seminar on Dr. B R Ambedkar’s Ideas and Thoughts, by the North-Eastern Hill University, Shillong, March 11 & 12, 2013.

Delivered a talk “Environmental Ethics of Three Old Words from the Hills,” National Seminar on Environment Ethics in Tribal Societies: With Special Reference to North-East India, Department of Philosophy, Lady Keane College, Shillong, 21 & 22 November 2012.

Prof. Vanlalnghak presented a paper “Applied Ethical Issues in Environment: General Observation” at the National Seminar on Environment Ethics In Tribal Societies: With Special Reference to North-East India” at Lady Keane College, Shillong during 21-22 November, 2012. Sponsored by Indian Council of Philosophical Research (ICPR), New Delhi.

Prof. Xavier P Mao presented a paper in a national seminar at St. Joseph’s College,

Zakhama, on the topic “Human Rights and Morality” in the month of August, 2012.

N. Parthasarathy presented a paper on “Ecological Reflections in Indian Tradition” in the ICPR National Seminar on ‘Shift from Anthropocentrism to Ecocentrism’ in connection with the observation of World Philosophy Day on 09th april 2012, at the Department of Philosophy held at TK Campus University of Madras, Chennai-600005.

Presented a paper on ‘Appar-Savant of Saivism’ at the UGC National Seminar on ‘MeikkandaSaattirangkal’ on 30th april 2012 organized by the Department of Philosophy, held at TK Campus, University of Madras, Cheenai-600005.

Presented a paper on ‘the ideology of peace as viewed by Prof. Murti’ in the National Seminar sponsored by CSC, New Delhi on the Philosophy of Professor K Satchitananda Murti organized by the Department of Philosophy, during 28-30 june 2012 held at TK Campus, University of Madras, Chennai-600005.

Presented a paper on ‘Corruption and the Pauranikalore’ at the ICPR International Conference on ‘Philosophical Exploration on corruption: A Challenge to human rights’ organized by the Department of Philosophy, during 25-27th april 2012 held at TK Campus, University of Madras, Chennai-600005.

Dr. P. Biswas delivered a Seminar entitled, “Heidegger-Derrida Interface and the Linguistic Turn: A Critique of Spirit” at Dept. of HSS at IIT Bombay on 8th August, 2012.

Delivered Keynote address entitled, “The Cultural Turn in Post-Structuralism” at a Short term Course on “Futural Critical

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Constellations: The Cultural Politics of the Neo-Empire” at Dept. of Humanities and Social Sciences, Indian Institute of Technology, Kharagpur on 3rd September, 2012.

Presented a paper entitled, ‘Un-Touch-Ability: Ambedkar and Jean Luc Nancy in Dialogue” at an ICPR National Seminar on “Relevance of B.R. Ambedkar’s Ideas” on 9th November, 2012. Presented a paper entitled, “Sacred Landscapes: Idea of Time in Cultural Contexts of Northeast India” at an ICPR sponsored national Seminar on “Environmental Ethics in tribal Societies: With Special reference to North-East India” on 21st November, 2012.

Presented a paper entitled, “Indian Practices of Secularism: From Individual to Group Right Discourse” at an ICPR sponsored national seminar on “Social Justice, Development and Secularism: Philosophical Reflection on Contemporary, National and Northeast Indian Scenario” at Aizwal on 29th November, 2012.

Presented a paper entitled, “Phenomenology of Personhood: Evidences from Neurosurgery” as an invited speaker at an International Conference on “Problems of the Self: Debates in Consciousness, Subjectivity and Otherness” at Centre for Philosophy, Jawaharlal Nehru University, New Delhi on 23rd January, 2013.

Presented a paper on “Spaces of non-Violence and human Rights” at a National panel Discussion on “Geographies of Violence” at the School of Development Studies, TISS, Mumbai on 9th February, 2013.

Dr. Basil Pohlong presented paper “Locating Environmental Ethics in Khasi Tradition”,

in a national seminar on Environmental Ethics in Tribal Societies, at Lady Keane College held on 21-22 November 2012.

Publications

Research Papers

Published in India

Pal Jagat (2012). “Conflict of Cultures, Secular Values and National Integration”, *Las perspectivas*, 1(1): 1-13.

Pal Jagat (2011). “The Idea of Natural Right”, *International Journal of Jurisprudence and Philosophy of Law*, Vol. V(1&2): 1-11.

Dr. P. Biswas

Journals in India:

Biswas Prasenjit (2012), “Re-Imagining India’s North-East: Beyond Territory and State” in *Journal of North East India Studies*, Vol. 2(1): 68-78.

Biswas Prasenjit (2012). “Time, Subject & Language: A Critique of Anthropocentrism”, *India Journal of Religion, Culture & Philosophy*, 2(1): 125-135.

Books/Book Chapters/Proceedings

Pal Jagat (2012). Justice, Equality and Morality, Madhava Books, Gurgaon, Haryana.

Pal Jagat (ed) (2013). Human Rights in Justice, Serial Publications, New Delhi.

Pal Jagat (2012). “Sankar’s view on the SrutiMahāvakyas”, In Language and Thought, Jyotish Chandra Basak and KausikaJoardar (eds.), Northern Book Centre, New Delhi, pp.110-121.

Vanlalnghak Lenka L. (eds)(2013). Philosophy of Culture (A Contemporary Understanding),

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Published by Akansha Publishing House, New Delhi, 2013.

Mao Xavier P. (2013). "Some reflections on Culture", In 'Philosophy of Cultures: A Contemporary understanding, Vanlalnghak and Lenka (eds), Akansha Publishing House, New Delhi.

Biswas P. and Thomas C. J. (2012) (Eds). Construction of Evil in North-East India: Myth, Narrative and Discourse, SAGE, New Delhi, 2012.

Biswas Prasenjit (2012). "The Idea of Evil in the Context of North East India" In Construction of Evil in North-East India: Myth, Narrative and Discourse, Prasenjit Biswas and C.J. Thomas (eds.), SAGE, New Delhi, pp. 1-14.

Biswas Prasenjit (2012). "Is 'Agency' Embedded in Consciousness? A Husserlian Critique of Contemporary Naturalism" in Self-Knowledge and Agency, Manidipa Sen (ed.), Decent Books, New Delhi, pp.185-224.

Lenka L. (2012). Book Review: Review of Chantal Bax's, 'Subjectivity after Wittgenstein: The Post-Cartesian Subject and the 'Death of Man' (Continuum, London and New York), *Philosophy in Review*, XXXII, No.5: 348-350.

Honours/Awards/Recognitions

Dr. P. Biswas was appointed as a Member of North East India Studies Committee of Indian Council of Philosophical Research since August, 2012.

Granted Visiting Fellowship by Tata Institute of Social Sciences, Mumbai to visit School of Development Studies at TISS, Mumbai in July-August, 2012.

Invited as Visiting Scholar at Indira Gandhi National Tribal University, Imphal campus to Lecture on Human Rights in September, 2012.

Other Activities

Prof. Jagat Pal Delivered one lecture on "General Ethics and Professional Ethics" as a resource person in the UGC-ASC special summer school organized by Dr. (Mrs) Quendarisa Kharbuli, Academic Staff College, NEHU, Shillong on 25.8.2012.

Delivered two lectures entitled "Value Education" and "General Ethics and Professional Ethics", as a Resource Person in the UGC-ASC orientation programme organized by (Mrs.) Quendarisa Kharbuli, Academic Staff College, NEHU, Shillong on 14th and 18th February, 2013.

Delivered one lecture on "Value Education" as a Resource Person in the UGC-ASC orientation programme organized by Dr. (Mrs) Kuheli Biswas Das, Academic Staff College, NEHU, Shillong on 15.2.2013.

Prof. X.P. Mao Delivered on Philosophy of Language as a resource person in the UGC-ASC refresher course organised by the Department of Linguistic Department, on 10.10.2012.

Dr. N. Parthasarthy Attended and took part as respondent to the special lecture on 'Dialectics of Power and Civilisation' by Prof. R P Singh, Chairperson, Centre for Philosophy, School of SS, JNU, ND on 03rd August 2012 organized by the Department of Philosophy, held at the TK Campus, University of Madras, Chennai-600005.

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Dr. P. Biswas acted as a Panel Speaker in Oxford University Press-TISS, Mumbai book discussion entitled, "The Cracked Mirror" and presented a lecture entitled, "Phenomenology of Un-touchability: A Critique of Guru-Sarukkai Debate" on 10th August, 2012.

Delivered pre-independence day Public Lecture entitled, "Dam, Development and Crisis in India's Northeast" at Conference Hall of TISS, Mumbai on 14th August, 2012.

Delivered Four Lectures entitled 1. Derrida-Habermas Alliance 2. Žižek's Real acts, revolt and revolutions 3. Agamben's (Im) Potencies 4. Empire and Multitude at HSS,

IIT Kharagpur in the Short term course of "Futural Critical Constellation" between 3-6th September, 2012.

Delivered six lectures in a UGC-ASC Refresher Course in Philosophy entitled, 1. Husserl's *Ideas*: A Reading 2. Intersubjectivity: A Critical Understanding through MerleauPonty, Heidegger and Jean Luc Nancy 3. Cognition, Thought and language: Chomsky's Contributions 4. Vision and Language 5. Introducing Deconstruction 6. The Idea of Language between 11-13th December, 2012 at Academic Staff College, Gauhati University, Gauhati.

Chapter V

SCHOOL OF LIFE SCIENCES

Dean : Prof. Arvind K. Misra
Telephone : 2722001, FAX: 2550108
E-mail : deansls@nehu.ac.in

The School comprises of Departments of Biochemistry, Biotechnology & Bioinformatics, Botany and Zoology and is located at the NEHU main campus. The School has a faculty strength of 47 which is engaged in high quality teaching and research activities. The School awarded 21 Ph.D. and 105 M.Sc. degrees during the year. The faculty published over 35 research papers in National and over 75 research papers in International Journals. Over Rs 840 lakh were mobilized as funds from sources other than NEHU for running over 29 research projects. Eleven new projects were awarded to the Faculty of the School and a total of 8 research projects were successfully completed during the year. In addition to Central Instruments facilities of individual Departments, the School maintains a Central Instruments Facility housing Nucleotide Sequencer, DNA

synthesizer, 2-D electrophoresis, RT-PCR and Confocal LASER Microscope, etc. This facility is funded by the Bioscience programme of the UGC's University with Potential for Excellence support granted to the University. The School offers a pre-Ph.D. course for all the research students of the School. This is in addition to the department level pre-PhD courses offered by the constituent departments. The constituent departments of the School have also secured additional support in the form of UGC Special Assistance at the level of CAS, DSA and DST-FIST etc. The research students in the School get financial support from various funding agencies in the form of Rajeev Gandhi National Fellowship for ST students, Maulana Azad National Fellowship for minority students, UGC NET and non-NET fellowships etc.

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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 University (On lien as Vice-Chancellor, NEHU since 2010).	Microbiology
	R. Sharma: M. Sc. & Ph. D. (BHU)	Development and Aging
	R.N. Sharan: M. Sc. & Ph. D. (JNU)	Cancer & Radiation Biology
	A. Alam: M. Sc. (AMU), Ph. D. (FTI, Moscow)	Immunology
	D. Syiem: M Sc. & Ph. D. (NEHU)	Protein Chemistry/ Enzymology and Medicinal Plant/ natural products study
	A.K. Singh: M. Sc. (Gorakhpur University), Ph. D. (Hyderabad Central University)	Microbiology
	M.B. Syiem: M. Sc. & Ph. D. (NEHU)	Microbiology
Assistant Professor	P.K. Ambasht: M. Sc. & Ph. D. (BHU)	Protein Chemistry
	L. Kma: M. Sc. & Ph. D. (NEHU)	Cancer & Radiation Countermeasures
	S. Bhan: M. Sc. & Ph. D. (BHU)	Medical Biochemistry
	T. Tripathi, M. Sc. (Univ. of Mysore), Ph. D. (JNU)	Molecular Biophysics

Thrust Area of Research:

Medical and Microbial Biochemistry
 Medical Biochemistry (Development & Aging, Medicinal Plants, Carcinogenesis and Radiation Biology, Drug Delivery and Tumor Immunology, Protein Chemistry and Enzymology and Neurobiochemistry).
 Microbial Biochemistry (Plant-Microbe Interaction, Cyanobacterial Nitrogen Fixation and Cyanobacterial Diversity).

Brief Statement of Academic Activities:

The Department admitted 21 students for M.Sc. and 8 students for Ph. D. programme. During this period 21 students successfully completed their M.Sc. and 3 students have been awarded Ph. D. degree. During 2012-13, students received Rajiv Gandhi National Fellowship for SC/ST (1) and NEHU non-NET Fellowship (7). The UGC-SAP (DRS II) program is continuing in the Department. The Department

School of Life Sciences

organized International Symposium on Aging & 16th Biennial Conference of Association of Gerontology during October 1-3, 2012. In

addition faculty members and research scholars participated in various seminars/workshops/conferences/symposia in India and abroad.

Students' Profile

Enrolment Capacity: P.G. 21 Ph.D. variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	00	19	02	02	19	16	05	21
P.h.D.	00	03	05	02	06	03	05	08

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	00	13	08	01	20	16	05	21
P.h.D.	00	02	01	00	03	02	01	03

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name of Supervisor
Ms. P. Dkhar	Carbonyl modification of proteins as a function of age in mice: its modulation by dietary restriction and hormonal treatments	Prof. R. Sharma
Mrs. J. Misra	Study on immunological activity of an overexpressed glycoprotein on hepatocytes in mice exposed to N-nitrosodibutylamine	Prof. A. Alam
Mrs. K. Kharkrang	Purification, kinetics and immobilization of alpha amylase from pearl millet	Dr. P. K. Ambasht

Placement of Students

Mr. K. Suchiang, research scholar of the department, has been appointed as Assistant Professor at the Dept. Biotechnology & Mol. Biology at Pondicherry University.

Mr. B. Kharwanlang, research scholar of the department, has been appointed Assistant Professor in the Dept. Biochemistry at Lady Keane College, Shillong.

Dr. Kerdalin Kharkrang, research scholar, has been appointed as Vice-Principal, Mangaldai Maharishi Vidya Mandir, P.O. Mangaldai, Gerimari, Dt. Darrang, Assam.

Courses Conducted during the year

M. Sc.

Semester I : Chemistry and Biomolecules;
Environmental Biochemistry

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	& Metabolic Pathways-I; Enzymology; Practicals.	16 th Biennial Conference of Association of Gerontology during October 1-3, 2012.
Semester II	: Techniques in Biochemistry; Physiological Chemistry; Microbiology; Practicals.	Attended: Prof. R. Sharma
Semester III	: Genetics; Medical Biochemistry; Environmental Biochemistry; nutritional and Clinical Biochemistry; Practicals.	Presented a paper-Aging Research in Indian Context: Dietary Restriction Benefits cholinergic deficits in aged mice. 35 th Annual Meeting of the Japan Society of Biomedical Gerontology. Toho University, Chiba, Japan, July 26-27, 2012.
Semester IV	: Molecular Biology; Bioenergetics; Immunology; Practicals.	Presented a paper-Healthy Aging. Guha Research Conference. NEHU, Shillong. November 28- December 02, 2012.
Ph. D.		Presented a paper-Dietary restriction and healthy aging. National Conference on Emerging Trends and Challenges in Basic and Translational Research in Biochemistry. CAS in Zoology, BHU, Varanasi. February 4-5, 2013.
Research Methodology, Topics in Biochemistry, Review of Literature and seminar.		Presented a paper-Epigenetic modifications of histones: effects of age and dietary restriction. International Symposium on Aging & 16 th Biennial Conference of Association of Gerontology. NEHU, Shillong, India. October 1-3, 2012.
Study Tours/ Field Trips of Students:		Prof. R. N. Sharan
Name(s) of the Teacher(s) in-charge: Dr. S. Bhan & Dr. T. Tripathi		Attended The Association of Radiation Oncologists of India (AROI) – NE Chapter annual conference as a Chairman of a scientific session and a ‘Faculty’ and delivered a talk titled “Radiation Mutagenesis and Carcinogenesis – An Overview” at NEIGRIHMS, Shillong. 5-6 October 2012.
Places/ Institutions visited: Delhi, Jaipur, Agra		Attended the 3 rd International Conference of the Carcinogenesis Foundation, Frontiers in Carcinogenesis & Preventive Oncology
Duration of the tour/ trip: 16 days		
Purpose of visit: During the entire period, the students visited premier academic Institutions which provided them the much needed scientific exposure in their field, and will definitely help them to decide about their future career in research and technology. They also visited historically important places which provided first hand exposure to students about the history and cultural diversity of our nation.		
Seminars/ Conferences/ Symposia/ Extension Programmes etc.		
Organized:		
Department of Biochemistry organized International Symposium on Aging &		

– Molecular Mechanisms to Therapeutics as Chairman of a scientific session and as a ‘Faculty’ at Dr. Ram Manohar Lohia Hospital & PGIMER, New Delhi. 19-21 November 2012.

Attended a National Seminar on Breast Cancer as a ‘Faculty’ and delivered a talk titled “A novel human cancer biomarker for clinical applications” at Patna. 4-5 August 2012.

Dr. L. Kma presented paper

Treatment with EUK-207 mitigates pneumonitis after single dose of total body irradiation and fibrosis after thoracic irradiation in rats. International Conference on Radiation Biology. ISRB, ACTREC, Mumbai. November 22-24, 2012.

Assessment of the anti-cancer properties of selected plant extracts in mice”. International Pharmaceutical Symposium. Panaji, Goa. February 15-17, 2013.

Publications:

Research Papers

Published in India

Kharkrang, K. and Ambasht, P.K. (2012) Purification and characterization of alpha amylase from seeds of pearl millet (*Pennisetum typhoides*). *J. Proteins & Proteomics*, 3:47-60.

Published Abroad

Sharma R. (2012) Aging research in Indian context: Dietary restriction benefits cholinergic deficits in aged mice. *Biomed. Gerontol.* 36(2): 34-37.

Saio V., Syiem D. and Sharma R. (2012). Effect of *Potentilla fulgens* on lipid peroxidation

and antioxidant status in alloxan-induced diabetic mice. *J. Basic Clin. Pharm.* 3(2): 249-254.

Sharan R. N., Mehrotra R., Choudhury Yashmin and Asotra K. (2012). Association of betel nut with carcinogenesis: Revisit with a clinical perspective (a systematic review). *PLoS ONE* 7(8): e42759.

Sahoo M. K., Sayoo L., Naik D. B. and Sharan R. N. (2012). UVC induced TOC removal studies of Ponceau S in the presence of oxidants: Evaluation of electrical energy efficiency and assessment of biotoxicity of the treated solutions by *Escherichia coli* colony forming unit assay. *Chem. Engineer. J.*, 213: 142-149.

Sahoo M.K., Sinha B., Marbaniang M., Naik D.B. and Sharan R.N. (2012). Transition metal catalyzed mineralization of Calcon and bioassay of the mineralized solutions by *E. coli* colony forming unit assay. *Chem. Engineer. J.*, 209: 147-154.

Sahoo M.K., Sinha B., Marbaniang M., Naik D.B. and Sharan R.N. (2012). Mineralization of Calcon by UV/oxidant systems and assessment of biotoxicity of the treated solutions by *E. coli* colony forming unit assay. *Chem. Engineer. J.*, 181–182: 206–214.

Syiem D and Lyngdoh W (2013). Glyco-and Lipo-regulatory effects of *Gymnopetalum cochinchinense*(Lour) Kurz in alloxan-induced diabetic mice. *The J. Ethnobiol and Traditional Med.* 118: 214-221.

Ali, A.E., Singh, A.K., Davenport, R. J., Head, I. and Werner, D. (2013) Biofuel components change the ecology of bacterial volatile petroleum hydrocarbon degradation in

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aerobic sandy soil. *Environ Pollut.* 173: 125-132.

Nongbri B. B. and Syiem M. B. (2012). Diversity Analysis and Molecular Typing of Cyanobacteria Isolated from Various Ecological Niches in the State of Meghalaya, North-East India. *Env Eng Res.* 17: 21-26.

Nongrum N.A. and Syiem M.B. (2012). Effects of copper ion (Cu^{+2}) on the physiological and biochemical activities of the cyanobacterium *Nostoc ANTH.* *Env Eng Res.* 17: 63-68.

Gao F., Fish B.L., Szabo A., Doctrow S.R., Kma L., Molthen R. C., Moulder J.E., Jacobs E.R. and Medhora M. (2012). Short-term treatment with a SOD/catalase mimetic, EUK-207, mitigates pneumonitis and fibrosis after single-dose total-body or whole-thoracic irradiation. *Rad. Res.* 178(5): 468-480.

Arya A.K., Pokharia D., Bhan S., Tripathi R. and Tripathi K. (2012). Correlation between IL-7 and MCP1 in diabetic chronic non healing ulcer patients at higher risk of coronary artery disease. *Cytokine.* 60(3): 767-71.

Funds Received from Agencies other than NEHU

Agency	Amount (in lakhs)
DST-PURSE	6.0
UGC-DRS-II	4.0
DBT	72.0
ICMR	8.5
DST-SERB	9.0
DST	5.57
BARC-BRNS	12.5
UGC	8.55
DBT Twinning projects	80.43

Infrastructure Added during the period, if any

UV/Vis Spectrophotometer, Lyophilizer, HP-TLC, X-ray chamber

Research Projects:

New Projects

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 the North-East India Following γ -Irradiation *Ex Vivo*: A Comparative Study, Prof. R. N. Sharan, International Atomic Energy Agency (IAEA), Rs. 20,00,000/-.

Study on the potentials of anti-diabetic plants of traditional use for the management of Alzheimer's Disease, Prof. D. Syiem, DBT Twinning project, Rs. 67,00,000/-.

Quantitative coupling of hydrocarbon degradation and bacterial communities in petroleum hydrocarbon impacted sediments undergoing bioremediation, Prof. A. K. Singh, DBT Twinning project, Rs. 37,03,000/-.

Strategy development for the mitigation of heavy metals in surface waters around coal mining areas using native cyanobacterial strains, Prof. M. B. Syiem, DBT Twinning project, Rs. 81,33,000/-.

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. 13,22,000/-.

An investigation into the role of solution variables in amyloidogenesis, Dr. T. Tripathi, SERB-DST, New Delhi, Rs. 19,00,000/-.

School of Life Sciences

Ongoing Projects

Studies on biomodulators of glucocorticoid receptor in mice, Prof. R. Sharma, DST, New Delhi, Rs. 20,97,200/-.

Enhancing functional repertoire of eukaryotic RNA Polymerase II, Dr. T. Tripathi, DBT, New Delhi, Rs. 1,20,00,000/-.

Identification, molecular characterization and structure determination of glutaredoxin system proteins from infectious flukes, Dr. T. Tripathi DBT, New Delhi, Rs. 75,00,000/-.

Molecular proteomic studies of the Glutathione S-transferase protein system of the giant intestinal fluke- *Fasciolopsis buski*, Dr. T. Tripathi, ICMR, New Delhi, Rs.10,00,000/-.

Completed Projects

Dietary and hormonal modulation of protein carbonylation in mice as a function of age, Prof. R. Sharma, UGC, New Delhi, Rs. 9,51,300/-.

Biodosimetry studies using cytogenetic and gene expression profiles in human peripheral blood lymphocytes exposed to gamma radiation *ex vivo*, Prof. R. N. Sharan/Dr. L. Kma, BRNS, BARC, Mumbai, Rs. 40,00,000/-.

Academic Collaborations

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: University of California, USA; Institute of

Enzyme Research, Japan; 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

President of the Association of Gerontology (India)

Member, editorial board of Biogerontology from Springer, The Netherlands

Member, editorial board of International Journal of Developmental Neurosciences, Elsevier, USA.

Member, editorial board of Frontiers in Aging research, Switzerland.

Dr. Timir Tripathi

Selected as a member of World Association of Young Scientists, UNESCO.

Selected as Webmed Central Biophysics and Biochemistry faculty.

Editorial Review Board member of International Journal of Biomedical Science (IJBS) and Scientific Journals International (SJI).

Other Activities

Prof. R. Sharma

Delivered invited lecture at the Christ College, Saurashtra University, Rajkot under DST-INSPIRE programme. May 08, 2012.

Delivered invited lecture at Indira Gandhi Institute of Developmental Research (IGIDR), Mumbai. May 11, 2012.

Attended IQAC meeting of Manipur University, Imphal. November 12, 2012.

Delivered invited lecture at the SVRM College, Andhra Univ., Nagaram, Guntur,

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AP under DST-INSPIRE programme. December 21, 2012.

Delivered two (2) lectures at Academic Staff College NEHU in orientation programme. May 19 - 20, 2012.

Delivered invited lecture under Skill Development Programme of IISc, Bangalore at NEHU. April 10, 2012.

Delivered four (4) lectures at Academic Staff College NEHU in Refresher course on Advances in Zoology. November 26- 30, 2012.

Delivered an invited lecture at School of Life Sciences, JNU, New Delhi. January 10, 2013.

Chairman-Organizing Committee of the International Symposium on Aging (ISOA2012) and 16th Biennial Conference of Association of Gerontology (India), Dept. Biochemistry, NEHU, Shillong. October 1-3, 2012.

Co-organized Guha Research Conference (GRC-2012) during November 28-December 2, 2012.

Prof. R. N. Sharan

Served as a resource person and delivered a lecture each in two orientation courses organized by the Academic Staff College, NEHU, Shillong on 12th and 19th May 2012, respectively.

Visited UK in June 2012 and delivered a special invited talk titled 'The ugly connection between betel (*Areca*) nut and cancer: What is the way forward?' at the Harm-Reduction Center, BAT, Southampton on 7th June 2012.

Attended the 8th Academic Council meeting of the Rajiv Gandhi University, Itanagar as Visitor's nominee on 31st July 2012.

Invited as an expert to attend the 1st Indian Cancer Congress (ICC 2013) workshop cum Coordination Committee meeting at India Expo Center, Greater NOIDA on 29 September 2012.

Served as a resource person in the Winter School on Inter-disciplinary Sciences organized by Lady Keane College, Shillong (29th Nov. to 13th Dec. 2012) and delivered a talk titled "DNA and its isolation".

Prof. A. Alam

Delivered a lecture in UGC-ASC 21st Orientation program (General). February-March, 2013.

Delivered a lecture in UGC-ASC 22nd Orientation program (General). February-March, 2013.

Dr. D. Syiem

Delivered lecture on Anti-diabetic plants. Department of Biotechnology, Tezpur University, Assam. April 4, 2012.

Organizing secretary of International Symposium on Aging-2012. Department of Biochemistry, NEHU. October 1-3, 2012

Member, Advisory Committee, Dept. of Biochemistry for UGC DRS -II (SAP) program. 2010-2013.

Member, Nodal committee for PURSE program funded by DST. New Delhi, 2011-13.

Coordinator, NEHU Alumni Association. 2011-13

Dr. L. Kma

Member (Treasurer)-Organizing Committee, ISOA-2012. October 1-3, 2012.

Participated in the National Seminar on Science for Shaping the Future of India:

School of Life Sciences

Focus on North-Eastern Region, organized by the Indian National Science Congress ISCA Shillong Chapter on 25th-26th September 2012 at NEHU, Shillong.

Appointed as Programme Coordinator, NSS, NEHU, 14th March 2013 for a period of 3 years.

Dr. PK Ambasht

Attended Special Summer School conducted by Academic Staff College, NEHU, Shillong. August 22- September 11, 2012.

Delivered invited talk as a Resource Person in Winter School conducted by Lady Kean College, Shillong. December 13, 2012.

DEPARTMENT OF BIOTECHNOLOGY & BIOINFORMATICS

Head : Professor Anupam Chatterjee
Telephone : 2722403/2401
E-mail : chatterjeeanupam@hotmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Anupam Chatterjee, M.Sc. (Burdwan), Ph.D. (BHU)	Genetics & Molecular Biology
	Satyawada Rama Rao, M.Sc./Ph.D. (Jodhpur Univ.)	Plant Cellular and Molecular Genetics
	K. Aguan, M.Sc. (IARI), Ph.D.(Univ. of Birmingham)	Genetics & Molecular Biology
Associate Professor	S.R. Joshi , M.Sc./ Ph.D. (NEHU)	Microbiology
Assistant Professor	S. Majaw, M.Sc./ Ph.D. (NEHU)	Immunology
	Atanu Bhattacharjee, M.Sc. (NEHU), M.Sc (Annamalai Univ.), Ph.D. (NEHU)	Bioinformatics & Microbiology
	Neha Chaurasia, M.Sc./ Ph.D. (BHU)	Environmental Biotechnology

Thrust Area of Research

Molecular Genetics and Applied Microbiology.

Brief Statement of Academic Activities

The department of Biotechnology & Bioinformatics at the North-Eastern Hill

University, Shillong was started in 2005. It offers Post Graduate (M.Sc. and Ph.D.) academic programmes. North Eastern Region of India is rich in flora and fauna and is in the region of hotspot of biodiversity. For the Bioresource development, its exploration, conservation and

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proper utilization, the need of trained manpower was felt in Biotechnology and the linkage of biotechnological work with bioinformatics network. Therefore, the Department of Biotechnology and Bioinformatics has initiated the 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 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 the four batches of M.Sc. students have successfully completed their M.Sc. degree and some of them have already joined in different IITs, IMTECH, AIIMS, IISc., etc. for their Ph.D. degree while many others

joined different National Biotech Companies. The department while giving importance to the global scenario, has the regional importance in research and development 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 the 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 the faculties comes from DBT, DST, UGC, BARC, DRDO, ICAR, etc.

Students' Profile Enrolment Capacity: **P.G.: 24** **Ph.D.: variable**

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	01	14	08	13	10	13	10	23
P.h.D.	00	01	05	04	02	02	04	06

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	02	10	08	07	13	07	13	20
P.h.D.	00	00	03	02	01	01	02	03

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name(s) of Supervisor(s) Supervisor, Jt. Supervisor
Santosh Kumar Sharma	Cellular and Molecular characterization of natural genetic variations in <i>Mantisia</i> and <i>Cymbidium</i> species	Prof. S.R.Rao (Supervisor) Prof. P.Tandon, Co-supervisor Dr.S.Kumaria, Co-Supervisor

School of Life Sciences

Rakshak Kumar	Characterization of metal tolerant bacteria from soils of Domiasiat area of Meghalaya	S. R. Joshi
Sharmila Thokchom	Studies on the microbiology of traditional fermented soybean foods of North-East India	S.R. Joshi

Courses Conducted during the year: M.Sc. (Biotechnology), Ph.D.

M.Sc.

- 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 offered open courses on Microbial Technology, Applied Molecular Genetics and Bioinformatics in Molecular and Cellular Biology under CBCS for M.Sc. 2nd and 3rd semester students.

Study Tours/ Field Trips of Students

Name of the Teacher in-charge: Dr. Atanu Bhattacharjee

Places/ Institutions visited: Kolkata Bose Institute, IIT, Kharagpur, IBG, Howrah

Duration of the tour/ trip: 9 days (9th February 2013 to 17th February 2013)

Purpose of visit: The academic study tour is a part of the academic curriculum of M.Sc. Biotechnology under course no. BIT-C-404. It is mandatory for the IV semester students to visit some important biotechnology institutions and industries of the country to full fill the requirement of the syllabus.

Paper presented in Seminars/Conferences/Symposia

Prof. A.Chatterjee

Delivered an invited Lecture in the 3rd International Cancer Research Symposium, 18-21 December, 2012, Swissotel, Kolkata.

Delivered an invited Lecture in the 32nd Annual Convention of Indian Association for Cancer Research, 13-16 Feb., 2013, University of Delhi, North Campus.

Prof. S.R.Rao presented following papers

‘Analysis of Variation in chromosome numbers in the genus *Ablemoschus*- Role of polyploidy in speciation’ at the National conference on Recent Trends on Plant Diversity and Conservation Strategies, held at Nagaland University, Lumami, India during 29th – 30th September 2012.

‘DNA fingerprinting of genus *Cucumis* using nuclear and Chloroplast DNA sequences’ at the International Conference on Biodiversity and Sustainable Energy Development held at International

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Convention Centre, Hyderabad, India during 14th -15th September 2012.

‘Rhizobial diversity associated with *Mimosa pudica* growing in north-eastern Himalayan regions of India’ at the 2nd Asian Conference on Plant-Microbe Symbiosis and Nitrogen Fixation held at Phuket, Thailand during 28th – 31st October 2012.

Dr. S.R.Joshi presented following papers

‘Bioremedial potential against organochlorine pesticide by actinomycetes isolated from Eastern Himalayan range’ at the 10th IAAM National Conference on “Exploring the potential of microbes for Bioscience, Biotechnology & Medicine”, during December 17-18, 2012 at SRM University, Chennai.

‘Microbial investigations on the bacterial biofilms of Mawjymbuin and Dam Caves in Meghalaya, India’: A baseline study to explore their biotechnological application in New Biology Section of the 100th Indian Science Congress held at University of Calcutta, Kolkata during January 3-7, 2013.

‘Biometric synthesis of antimicrobial and free radical scavenging silver nanoparticles by *Cryptosporiopsis ericae* PS4 isolated from an ethno-medicinal plant *Potentilla fulgens* L.’ at the 82nd Annual Session and National Symposium on “Nano-science & Technology for Mankind held during 29th Nov -1st Dec 2012 at Banaras Hindu University, Varanasi.

‘Potential plant growth promoting *Bacillus* and related genera from ‘Sacred Groves’ of Meghalaya, India’ at 100th Indian Science Congress, Kolkata during 3-7th January, 2013.

‘Effect of carbohydrate source, pH and temperature on EPS production by bacteria

associated with traditional foods’ at 100th Indian Science Congress, Kolkata during 3-7th January, 2013.

Dr.(Ms.) S. Majaw presented a paper on

‘Comparing the effect of *Potentilla fulgens* extract on the polyol pathway in alloxan-induced diabetic mice of two different age groups’ at the International symposium on aging (ISOA-2012) & 16th Biennial Conference of Association of Gerontology (India), organized by Department of Biochemistry, North-Eastern Hill University during Oct 1-3, 2012, at Shillong.

Publications:

Research Papers

Published in India

Khedasana R., Sharma S.K. and Rao S.R. (2013). Assaying polymorphism by intron targeted intron-exon specific junction (ISJ) DNA marker for genetic diversity diagnostics of the *Cucumis* L. taxa. *The Nucleus*, 56 (1): 15-21.

Thokchom Sharmila and Joshi S.R. (2012). Microbial and chemical changes during preparation in the traditionally fermented soybean product Tungrymbai of ethnic tribes of Meghalaya. *Indian Journal of Traditional Knowledge* 11(1):139-42

Rapsang George F. and Joshi S.R. (2012). Bacterial diversity associated with *tungtap*, an ethnic traditionally fermented fish product of Meghalaya. *Indian Journal of Traditional Knowledge*. 11(1):134-138

Kumar R., Acharya Celin and Joshi S.R. (2012). Diversity of uranium tolerating bacteria at Domiasiat, West Khasi Hills, Meghalaya.

- Assam University Journal of Science & Technology: Biological and Environmental Sciences*. 9(1): 186-190
- Bhattacharjee K., Banerjee S. and Joshi S.R. (2012). Diversity of *Streptomyces* spp. in Eastern Himalayan region- computational RNomics approach to phylogeny. *Bioinformation* 8(12): 548-554
- Thokchom S. and Joshi S.R. (2012). Probiotic and bacteriocin efficacy of lactic acid bacteria from traditionally fermented foods: a review. *Assam University Journal of Science and Technology: Biological and Environmental Sciences*, 10(1): 142-155
- Sarma Barnali, Acharya Celin 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, Sect. B Biol. Sci.* DOI 10.1007/s40011-012-0136-8.
- Saikia Purabi and Joshi S.R. (2013). 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, Sect. B Biol. Sci.* DOI: 10.1007/s40011-012-0143-9.
- Kumar Rakshak, Nongkhaw Macmillan, Acharya Celin, 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 Journal of Biotechnology*, 12: 115-119
- Bhattacharjee Kaushik and Joshi S.R. (2013). Phylogenetic rearrangement of *Streptomyces* spp. On the basis of Internal transcribed Spacer (ITS) region using molecular morphometrics approach. *Indian Journal of Biotechnology*, 12: 67-79
- Banerjee Subhro and Joshi S.R. (2012). Insights into cave architecture and the role of bacterial biofilm. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* DOI: 10.1007/s40011-012-0149-3
- Banerjee Subhro and Joshi S.R. (2012). Preliminary screening and compositional analysis of bacterial biofilm from hypogean environments of Meghalaya, India. *Keanean Journal of Science*, 1: 20-32
- Kumar Rakshak, Nongkhaw Macmillan, Acharya Celin, 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, Sect. B Biol. Sci.* DOI: 10.1007/s40011-013-0164-z.
- Devi Lamabam Sophiya, Bareh Donald A., and Joshi S.R. (2013). Studies on biosynthesis of antimicrobial silver nanoparticles using endophytic fungi isolated from the ethnomedicinal plant *Gloriosa superba* L. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* DOI: 10.1007/s40011-013-0185-7
- Nath Archana, 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, Sect. B Biol. Sci.* DOI: 10.1007/s40011-013-0184-8
- Tiwari Sandeep, Myllemngap Baphilinia Jones, Velmurugan Devadasan, Bhattacharjee Atanu (2013). Interactome analysis of devS protein involved in persistence of

- Mycobacterium tuberculosis* and design of inhibitor against its interacting persister protein: An approach to inhibit protein–protein interaction. *Indian Journal of Bioinformatics and Biotechnology*, 2: 57-64
- Paul D., Kharshiing Tory Kupar A. and Bhattacharjee Atanu (2012). Phylogenetic analysis of a gut bacteria of pine caterpillar: *Kunugia latipennis*. Walker. *Biotechnology*, 6:367-374
- Myllemngap Baphilinia Jones, Borthakur Angshuman, Velmurugan Devadasan and Bhattacharjee Atanu (2012). Insilico analysis and molecular docking of resuscitation promoting factor B (RpfB) protein of *Mycobacterium tuberculosis*. *Bioinformation*, 8(14):646-651
- Bhattacharjee Atanu, Myllemngap Baphilinia Jones and Velmurugan Devadasan (2012). 3D-QSAR studies on fluoroquinolones derivatives as inhibitors for tuberculosis. *Bioinformation*, 8: 379-385
- Published Abroad**
- Das A., Chaudhuri D., Mandal N. and Chatterjee A. (2012). Study of antioxidant and reactive species scavenging activity of the edible tuber of “Greater Yam”(Dioscorea alata L.) from North-East India. *Asian Journal Pharmaceutical and Clinical Research* 5: 74-84.
- Rai A.K., Freddy A.J., Banerjee A., Kurkallang S., Rangad G.M., Islam M., Nongrum H.B., Dkhar H. and Chatterjee A. (2012). Distinct involvement of 9p21-24 than 13q14.1-14.3 chromosomal region in raw betel-nut induced esophageal cancers in the state of Meghalaya, India. *Asian Pacific J Cancer Prevention* 13: 2629-2633.
- Radhika M., Ghoshal N., and Chatterjee A. (2012) Comparison of effectiveness in antitumor activity between flavonoids and polyphenols of the methanolic extract of roots of *Potentilla fulgens* in breast cancer cells. *Journal of Complementary and Integrative Medicine* 9(1): 1-14.
- Goswami L, Prasad,PK., Biswal D., Chatterjee A. and Tandon V. (2013). Crustacean-borne infections with microphallid metacercariae (Digenea:Microphallidae) from focal areas in Meghalaya, Northeast India. *J of Helminthology* 87: 222-229.
- Chatterjee A. (2013). Reduced Glutathione: A radioprotector or a modulator of DNA-Repair activity? *Nutrients*, 5: 525-542.
- 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* (Elsevier), doi: 10.1016/j.gene.2013.03.036
- Gehlot H.S., Tak N., Kaushik M., Mitra S., Wen-Ming Chen, Poweleit N., Panwar D., Poonar N., Parihar R., Tak A., Singh Sankhla I., Ojha A., Rao S.R., Marcelo F. Simon, Fabio Bueno dos Reis Junior, Perigolo N., Tripathi A., Janet I. Sprent, 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
- Bhagobaty R.K. and Joshi S.R. (2012). Enzymatic activity of fungi endophytic on five medicinal plant species of the pristine sacred forests of Meghalaya, India.

- Biotechnology and Bioprocess Engineering* 17:33-40
- S. Thokchom and Joshi S.R. (2012). Antibiotic Resistance and Probiotic Properties of Dominant Lactic Microflora from *Tungrymbai*, an Ethnic Fermented Soybean Food of India. *The Journal of Microbiology* 50(3): 535-539
- Nath Archana, Raghunatha Prajwal and Joshi S.R. (2012). Diversity and biological activities of endophytic fungi of *Emblia officinalis*, an ethnomedicinal plant of India. *Mycobiology* 40(1): 8-13
- Bhagobaty R.K. and Joshi S.R. (2012). Antimicrobial and antioxidant activity of endophytic fungi isolated from ethnomedicinal plants of the “Sacred forests” of Meghalaya, India. *Mikologia Lekarska* 19 (1): 5-11
- Devi Lamabam Sophiya and Joshi S.R. (2012). Antimicrobial and synergistic effects of silver nanoparticles synthesized using soil fungi of high altitudes of eastern Himalaya. *Mycobiology*, 40(1): 27-34
- Kumar R., Nongkhlaw M., Acharya C., and Joshi S.R. (2013). Uranium (U)-tolerant bacterial diversity from U ore deposit of Domiasiat in North-East India and its prospective utilisation in bioremediation. *Microbes and Environment*, 28(1): 33-41
- Banerjee S., Rai S., Sarma B. and Joshi S.R. (2012). Bacterial biofilm in water bodies of Cherrapunjee: the rainiest place on planet earth. *Advances in Microbiology*, 2:465-475. doi:10.4236/aim.2012.24060
- Saikia P. and Joshi S.R. (2012). Changes in microfungal community in Cherrapunji – the wettest patch on earth as influenced by heavy rain and soil degradation. *Advances in Microbiology*. 2: 456-464. doi:10.4236/aim.2012.24059
- Devi L.S., Khaund P., Nongkhlaw F.M.W. and Joshi S.R. (2012). Diversity of Culturable Soil Micro-fungi along Altitudinal Gradients of Eastern Himalayas. *Mycobiology* 40(3): 151-158
- Nongkhlaw M., Kumar R., Acharya C. and Joshi S.R. (2012). Occurrence of Horizontal Gene Transfer of P_{IB}-type ATPase Genes among Bacteria Isolated from the Uranium Rich Deposit of Domiasiat in North East India. *PLoS ONE* 7(10): e48199. doi:10.1371/journal.pone.0048199
- Lyngwi Nathaniel A., Koijam Khedarani, 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(1): 467-490

Funds Received from Agencies other than NEHU

Agency	Amount (in Rs lakh)
DBT, Govt of India	282.33
DST-FIST	51.00
DBT-Strengthening	04.00
DST-PURSE	06.00
ICAR/NAIP	12.30
DIT	54.10
NEC, DoNER	16.00

Research Projects:

New Projects

“Impact assessment of jhumming on native plants and soil microbiota and restoration of sustainable jhum agro-ecosystem in Northeast India”, Fundind

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Agency: Department of Biotechnology
Government of India. Amount Rs 55.48
lakhs.

“Protein-protein interface targetted drug
designing”. PI: Dr A Bhattacharjee & Prof.
Amit Das (IIT, Kharagpur) Co-PI: Dr.
Amarta Pal, Funding agency: DBT, Govt.
of India, Amount: Rs 57.11 lakhs.

Ongoing Projects

Allelic loss of mitotic checkpoint genes and
their expression level in oral and esophageal
cancer samples of raw betel-nut chewers in
Meghalaya”, Funding Agency : Department
of Science & Technology, Govt. of India,
Principal Investigator: Dr A Chatterjee.
Amount Received : Rs 30.0 Lakhs.

Purification and characterization of bioactive
natural antioxidant, immunomodulator
and anticancer products from *Dioscorea*
alata L., of North Eastern region of
India. Funding Agency : Department of
Biotechnology, Govt of India, Principal
Investigator : Dr A Chatterjee Amount
Received: Rs 3.81 lakhs.

Studies on antitumor and radioprotective
potential of *Potentilla fulgens* Wall ex
Hook. and characterization of its active
compounds, Funding Agency : Department
of Biotechnology, Govt of India, Principal
Investigator : Dr A Chatterjee, Amount
Received: Rs 3.90 lakhs.

Biosystematics of the genera *Vigna*, *Cucumis*
and *Abelmoschus* Consortium, Co-Principal
Investigator- S.R.Rao , ICAR/NAIP, Rs
12.30 lakhs.

Exploration and Germplasm Collection of
Citrus from the North-Eastern India and

Characterization of Genetic Variability
Using Cellular and Molecular Approaches,
PI- S.R.Rao, UGC, Amount received NIL.

Characterization of Rhizobia Associated with
Native and Wild Legumes of Northeast
India with Special Emphasis on Meghalaya,
PI- S.R.Rao, UGC, Amount received NIL.

Whole Genome and transcriptome changes as a
consequence of allo and auto polyploidy in
Vigna, PI- S.R.Rao, DBT, Amount received
Rs 67.21 lakhs.

Characterization of Metal Tolerant Microbes
from Soils Of Domiasiat-Wakhyn Area Of
Meghalaya, Sanctioned by Department of
Atomic Energy (DAE) Board of Research
in Nuclear Sciences (BRNS), PI; S.R.Joshi,
Amount received Rs. 44.879 lakhs.

Development of Web Based Microbial Database
(bacteria, actinomycetes and fungi) of
North-East India, Funding agency:
Ministry of Communication & Information
Technology Department of Information
Technology (DIT), PI: S.R.Joshi, Amount
received Rs 46.202 lakhs.

Isolation, characterization and anti-cancer
property of endophytic fungal metabolites
from North-Eastern India, Funding agency:
Ministry of Science & Technology,
Department of Biotechnology (DBT), PI –
S.R.Joshi, Amount received Rs.26.42 lakhs.

Genomic And Biochemical Activity
Characterization of Bacterial Community
Associated With Tungtap- A Traditionally
Fermented Fish Product Of Meghalaya.
Funding agency: University Grants
Commission, PI – S.R.Joshi, Amount
received Rs.19.312 lakhs.

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Completed Projects

Microclimatic characterization of microbial community from Cherrapunjee and adjoining sacred groves of Meghalaya PI : SR Joshi. Funding Agency : Department of Information Technology, Govt of India.

Characterization of metal tolerant microbes from Wakhyn-Domiasit area of Meghalaya . PI: SR Joshi. Funding Agency: Bhabha Atomic Research Centre, (BARC-BRNS) Mumbai

The use of Biodiversity as a source of new chemical entities against defined molecular targets for treatment of tuberculosis, PI: Dr. A Bhattacharjee (NEHU, Shillong) and Prof D. Velmurugan (University of Madras), Funding agency: DBT, Govt of India

Academic Collaborations

India

1. Bose Institute, Kolkata and Prof. A. Chatterjee.
2. NIPER, Chandigarh and Prof. A. Chatterjee.
3. National Bureau of Plant Genetic Resources, New Delhi (ICAR) and Prof. S.R.Rao.
4. A collaborative research work in the field of microbiology on characterization of novel metal tolerant gene(s) has been going on between Dr Celin Acharya of BRNS-BARC and Dr SR Joshi.
5. Indian Institute of Technology(IIT) Kharagpur and Dr. A.Bhattacharjee.
6. University of Madras and Dr. A. Bhattacharjee.
7. A collaborative research work in the field of microbiology-endophytes on

characterization of novel endophytes and their anti-cancer properties has been going on between Dr A Chattopadhyay of Visva-Bharati and Dr SR Joshi.

Honours/ Awards/ Recognitions

Prof. S.R. Rao was awarded Certificate of Appreciation from ICAR.

Dr. Atanu Bhattacharjee was awarded the DBT Associateship for training at Max Delbruck Centre for molecular medicine, Berlin, Germany, for three months.

Other Activities

Prof. S.R. Rao

Visiting Scientist at Wuhan Botanical Garden, Wuhan, Hubei Province, China Under INSA –Chinese Academy of Science International –Bilateral Exchange Program of 2012-2013.

Attended “First Regional Meeting of the State Bio-diversity Boards of North-Eastern India” organized by the Department Environment and Forest, Government of Meghalaya held at Pinewood Hotel, Shillong, India.

Delivered two Invited lectures on Biotechnology Innovations at Orientation Program of UGC-Academic Staff College, NEHU, Shillong on 19th Feb. and March 06; 2013.

Dr. (Ms.) S. Majaw

Participated in the International Workshop on Applications of Flow cytometry and Imaging in Cell Biology and Nano-Biotechnology held at Centre for Research in Nanoscience and Nanotechnology, University of Calcutta, Kolkata from 11-18th August 2012.

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Participated in the National Seminar on “Science for shaping the Future of India: Focus on North-Eastern Region” organized by the National Science Congress (ISCA), Shillong Chapter on 25-25th Sept 2012 at North-Eastern Hill University, Shillong.

Dr. S.R. Joshi

Delivered a lecture on “ Resource-Utilization in Teaching” at the 19th Orientation Programme at ASC-NEHU on 9th May, 2012.

Delivered a lecture on “Teaching strategies at Institution of Higher Learning :Challenges and Effectiveness “ at 20th Orientation Programme (General), at ASC- NEHU on 31st May, 2012.

Delivered a lecture on “DNA- plasmid/ genomic isolation, principles & quantification” at the Basic Biotechnological Techniques organized by St. Edmund College on 2nd August, 2012.

Delivered a lecture on “Interdisciplinary nature of Biological Sciences- Moving to larger Domain” at Lady Keane College On 6th Dec, 2012 .

Delivered a lecture on “Resources and in Teaching strategies” at the 21st Orientation Programme at ASC-NEHU on 6th Feb, 2013”.

Delivered a lecture on “Teaching in Colleges and Universities: Challenges and Effectiveness” at the 22nd Orientation Programme organized by ASC-NEHU on 12th Feb, 2013

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DEPARTMENT OF BOTANY

Head: Prof. N. Venugopal
Telephone: 2722201, 2722202
E-mail: headbotany@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	P. Tandon, M. Sc.(Lucknow); Ph.D. (Jodhpur)	Plant Physiology, Biochemistry and Biotechnology
	R. C. Laloo,* M. Sc. & Ph.D. (Gauhati)	Ecology
	A. K. Misra M. Sc. & Ph.D. (Meerut)	Cell and Molecular Genetics
	N. K. Chrungoo, M. Sc. & Ph.D. (Kashmir)	Plant Physiology, Plant Molecular Biology
	M. S. Dkhar, M. Sc. & Ph.D. (NEHU)	Microbiology and Microbial Ecology
	N. Venugopal, M. Sc. & Ph.D. (Madras)	Plant Anatomy and Reproductive Biology
	S. K. Barik, M. Sc. (Berhampur); Ph.D. (NEHU)	Forest Ecology and Management, Biodiversity Conservation and EIA
	Uma Shankar, M.Sc. (Agra); Ph.D. (NEHU)	Ecology, Biodiversity and Conservation
	H. Kayang, M. Sc. & Ph.D. (NEHU)	Microbiology and Microbial Ecology
	S. Kumaria, M. Sc. & Ph.D. (NEHU)	Plant Physiology and Biotechnology
Associate Professor	Y. Kumar, M.Sc. (Agra); Ph.D.(NEHU)	Plant Taxonomy and Biosystematics
	L. Kharlukhi, M. Sc. (NEHU); Ph.D. (IARI)	Plant Physiology
	P. Ramanujam, M. Sc. & Ph. D. (NEHU)	Plant Ecology, Algal Ecology
Assistant Professor	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

Thrust Area of Research

Plant and microbial diversity, characterization, conservation, assessment and bioprospecting

The various aspects of research under the programme include:

Structural and functional analysis of ecosystems.

Molecular profile based characterization, and documentation of plant genetic resources of north-eastern India.

Bioprospection of novel genes, promoters and biomolecules from the floral diversity of north-eastern India.

Conservation Biotechnology of rare and endangered plants of north-eastern India.

Algal and microbial diversity, inventory of forest, aquatic and agro ecosystems.

Electronic herbarium and computer aided storage and retrieval systems for plant genetic resources.

Reproductive biology of plants.

Establishment of seed banks.

Brief Statement of Academic Activities

The department has been recognized by UGC as Centre for Advanced Studies in Botany (Phase II). The department has also research collaborations with several international and national organizations. The department has generated a grant of Rs. 213.73 lakh during the year through CAS and three all-India coordinated research projects from different funding agencies other than NEHU. In addition, faculty members have been implementing several individual research projects funded

by various national and international agencies generating an additional grant of about Rs. 98 lakh. The faculty members were invited in various programmes to deliver lectures by different institutions in the country and abroad. Sixteen students were admitted to Ph. D. programme of the department during the year. Research students presented papers in seminars, symposia, workshops, training programmes organized by different institutions. During the period, ten students were awarded Ph.D. degree. A total of 30 students were admitted to M.Sc. (Botany) and 10 students to M.Sc. (Plant Molecular Biology) programmes. Thirty eight students were awarded M.Sc. degrees in Botany and Plant Molecular Biology. Besides regular teaching and research programmes, the Department has been engaged in several academic activities like organization of workshops, training programmes and invited lectures. Educational excursion for postgraduate students was undertaken during the year.

Distinguished visitors delivered lectures in the department from time to time. Dr. Sonali Sen Gupta of Bose Institute, Kolkata delivered a lecture on "Protein-nucleic acid interaction: Laboratory methods and implication" on 17th September 2012. She delivered another lecture on "The interactome; protein-protein interaction" on 18th September 2012. Prof. Paramjit Khurana, University of Delhi, South Campus, New Delhi delivered a lecture on "Advent of genomics implication for plant Sciences" on 21st September, 2012. Dr. S. Goel, Delhi University delivered an invited lecture on "Next generation sequencing (NGS) on 24th September, 2012 and delivered another lecture on Fluorescence in situ hybridization (FISH)".

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Students' Profile

Enrolment Capacity: P.G. 40 (M. Sc. Botany: 30, M.Sc. Plant Molecular Biology: 10
Ph.D.: Variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.(Bot)	00	27	03	12	18	25	05	30
M.Sc.(PMB)	00	08	00	02	08	06	04	10
Ph.D.	01	11	04	07	08	11	05	16

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.(Bot)	00	25	02	11	18	14	15	29
M.Sc.(PMB)	00	06	03	03	06	09	00	09
Ph.D.	02	06	02	04	06	05	05	10

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name(s) of Supervisor(s) Jt. Supervisor(s)
Ms. Evanylla Kharlyngdoh	Biomass and nutrient accumulation pattern, habitat specificity and growth behavior of <i>Phyllostachys manii</i> Gamble and <i>Sinarundinaria griffithiana</i> (Muro) Chao and Renvoize (01.05.2012)	Prof. S.K. Barik
Mr. Ratul Baishya	Carbon sequestration in the humid tropical and sub-tropical forests of Meghalaya (01.05.2012)	Prof. S. K. Barik
Mr. Mark Kordor Lyngdoh	Population ecology of threatened ethno-medicinal plant species in relation to forest fragmentation in Khanchendzonga Biosphere Reserve, Sikkim (18.06.2012)	Prof. S. K. Barik (Supervisor) Prof. H. N. Pandey (Jt. Supervisor)
Ms. Ibandarisuk Lyngdoh	Studies on the impact of coal mine drainage on microbial ecology of water bodies of Jaintia Hills, Meghalaya (22.06. 2012)	Prof. H. Kayang

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Ms. Preeti Ahuja	Reproductive Biology of <i>Panax wangianus</i> s.c. Sun (23.08.2012)	Prof. N. Venugopal
Mr. Bibhuti Bhashan Das	Studies on the rhizosphere microflora of soybean in Meghalaya and their effect on seedling growth under organic and inorganic farming practices. (26.09.2012)	Prof. M. S. Dkhar
Mr. Shrawan Kumar	Genetic variation assessment and <i>in vitro</i> propagation of <i>Jatropha curcas</i> Linn. from Meghalaya and Assam (26.10.2012)	Prof. Suman Kumaria (Supervisor) Prof. P. Tandon (Jt. Supervisor)
Ms. Meena Elangbam	Development of molecular markers for marker-assisted selection of catechin content in tea (<i>Camellia</i> spp.) (15.11.2012)	Prof. A. K. Misra
Ms. Neilhousano Nakhro	Dynamics of microbial populations and their activities in experimental paddy fields under organic and inorganic farming practices. (04.02.2013)	Prof. M. S. Dkhar
Ms. L. S. Songachan	Studies on diversity of arbuscular mycorrhizal fungi associated with <i>Flemingia vestita</i> benth. ex baker (04.02. 2013)	Prof. H. Kayang

Placement of Students

Ms. Ayam gangarani Devi has joined Agricultural Research Service of Govt. of India as Scientist B.

Dr. (Ms.) Nabanita Devadasan has joined Life Science Researcher (Scientist) at Texas A & M University, USA.

Dr.(Ms.) Vineeta Chauhan joined as DST Woman Scientist at Hyderabad Central University.

Dr. (Ms.) Ibandarisuk Lyngdoh joined as Assistant Professor, Shillong College, Shillong.

Dr. (Ms.) Preeti Ahuja joined as Post-doctoral fellow in North West University, South Africa.

Dr. (Mr.) Viki Manners joined as Assistant Professor, St. Edmund's College, Shillong.

Dr. (Mr.) Jeremy Dkhar joined as DST INSPIRE Faculty Fellow at JNU, New Delhi.

Dr. Bikarma Singh joined WAPOS (Ministry of Water Resources), New Delhi, as scientist.

Mr. Souravjyoti Borah joined the Botanical Survey of India (BSI), Itanagar as "Botanist" in 2012.

Courses Conducted during the year

M.Sc. Botany
M.Sc. Plant Molecular Biology
Ph.D. Course Work

Study Tours/ Field Trips of Students

Name(s) of the Teacher(s) in-charge: Prof. N. Venugopal and Dr. L. Kharlukhi

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Places/ Institutions visited: The coastal areas of the western ghats, ranging from Mumbai coast to Goa-Karnataka border, Indian Institute of Science (centre for ecological studies) and Lal Bagh Garden, Bangalore, University of Madras, and Natural Museum, Chennai; Botanical Garden, Museum and Science city, Mangrove vegetation, Kolkata.

Duration of the tour/ trip: 18 days

Purpose of visit: The purpose of study tour was to expose the students to the coastal vegetation, make them aware of the difference from that of the Himalayan foothills/region to which the students belong, affect of human exploitation, research conducted in other institutions and the mangrove vegetation and plant species in maintained gardens.

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized

Hands on Training workshop on “Techniques in proteomics” (July 17-22, 2012) under DBT project on Establishment of State level Biotech hub. Coordinator: Prof. N. K. Chrungoo.

Hands on training workshop on “DNA Cloning, sequencing and Sequence Analysis” (Sept. 10-15, 2012) under DBT project on empowerment of human resources of NER for Biotechnology Activities. Coordinator: Prof. N. K. Chrungoo.

Hands on Training workshop on “Real time PCR and its Applications” (Nov. 28-30, 2012) under DBT project on Establishment of State level Biotech hub. Coordinator: Prof. N. K. Chrungoo.

Training programme on ‘Ecological Niche Modelling and Population studies under

the programme on Preventing Extinction and Improving Conservation Status of Threatened Plants through Application of Biotechnological Tools’ organized at NEHU, Shillong from 20-21st December, 2012, Sponsored by Department of Biotechnology, Ministry of Science and Technology, Govt. of India. Coordinator: Prof. S. K. Barik.

Hands on Training workshop on “Techniques in Plant Tissue culture” (March 5-12, 2013) under DBT project on Establishment of State level Biotech hub. Coordinator: Dr. Meera Chetri Das.

Short term Training workshop on “Deciphering microarrays” (March 15-16, 2013) under DBT project on Establishment of State level Biotech hub. Coordinator: Prof. N. K. Chrungoo.

Attended

Prof. Pramod Tandon

Chaired the Science Awareness Programme of National Academy of Sciences, India at Vanapa Hall, Aizawl on 2nd May 2012 and addressed the school children.

Chaired the Technical Session on conservation and utilization of plant genetic resources of eastern and north eastern India at the National Seminar 2012 on Plant Genetic Research for Eastern and North-eastern India at ICAR Research Complex for NEH Region on 11th May 2012 and delivered an invited talk on ‘Plant resources of north east India: present perspectives for conservation & sustainable utilization’.

Was invited by the Romanian Academy, Bucharest - Institute of Biology, Romania and delivered a talk entitled ‘Phyto-diversity of Indian ‘Hotspot’: Prospects of

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Conservation and Value Addition' on 23rd July 2012.

Visited the Institute of Biology, Cluj-Napoca, Romania and had discussions with the scientists in areas of mutual interest on 25th July 2012.

Invited by the Babes-Bolyai University and Alexandru Borza Botanical Garden, Cluj-Napoca, Romania for holding discussions for development of scientific cooperation during 24-29 July 2012 and delivered a talk entitled 'Plant Resources of India: Prospects of Conservation and Utilization in Global Scenario' on 26th July 2012.

Delivered the Saligram Sinha Memorial Award Lecture of National Academy of Sciences, India entitled 'Science and Technology in shaping the future of North-East India' at the North-Eastern Hill University, Shillong on 29th September 2012.

Attended the InCoB2012 - 11th International Conference on Bioinformatics held in Bangkok, Thailand during 3-5 October 2012. A paper entitled 'Phylogenetic reconstruction in the Order Nymphaeales: ITS2 secondary structure analysis and in silico testing of maturase k (matK) as a potential marker for DNA bar coding was presented.

Delivered an invited plenary lecture entitled 'Biotechnology for Conservation of Plant Genetic Resources' at the 34th PTCA Annual Meeting and National Symposium on Plant Tissue Culture and Biotechnology for Food and Nutritional Security CSIR-CFTRI, Mysore on 11th March 2013.

Prof. A. K. Misra

Delivered invited talk on 'Genes: Why and How- The Magic of Life' in the National

Science Day celebrations at the Tezpur Central University on February 28, 2013.

Prof. N. K. Chrungoo

Delivered a talk on "Energy Transformations in Living Systems: Myths and reality" during the CSIR-NEIST, Faculty Training Programme at St. Edmund's College, Shillong on March 22, 2013.

Delivered an invited talk on "Bioinformatics in the "omics" era during the National Seminar cum Workshop on Applications of Bioinformatics in Molecular Biology" on 27th-28th Jan-2013 at Jiwajee University, Gwalior.

Delivered an invited lecture on "Role of Biotechnology in Food security" at Institute of Biotechnology, DY Patil University, Pune on Feb 23, 2013.

Prof. S. K. Barik

Delivered an invited lead talk on "Diverse view points on natural resource management" in the conference on "Environmental governance in the context of sustainable development in India: The case of mountain ecosystems" held at Indian Institute of Advanced Studies, Shimla during 29-31 July, 2012.

Delivered an invited lecture on "Risk Analysis of Invasives" at Punjab University, Chandigarh during 27 February to March 1, 2013 organized by IUFRO and chaired a technical session.

Delivered an invited talk on "Integrating Life-Science Teaching and Research in Indian Universities" at Tripura University, Agartala during August 2012.

Delivered the lead talk on "A profile of biodiversity of north-east India and challenges of conservation" on 9th October,

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2012 at Convention on Biological Diversity - COP-11, Hyderabad.

Delivered the lead talk on “Biotechnological approach to threatened species conservation” on 17th October, 2012 at Convention on Biological Diversity - COP-11, Hyderabad.

Delivered a talk on “Integrating medicinal plants in afforestation programmes” on 7th-8th November, 2012 at Itanagar.

Delivered a talk on “Driving sustainable growth through science and technology: Experiences from Rural Bioresource complex” on 19th -20th November, 2012 at Kohima.

Delivered two talks on “Methods for quantification of Nutrient cycling and Carbon sequestration by sacred groves” during 14-16 December, 2012 at Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal.

Delivered a talk on “Approaches and methods for identifying ecologically critical areas in Nagaland” on 12th February, 2013 at Kohima.

Prof. Uma Shankar

Presented a paper on “The challenge of assessing invasiveness of plants: developing methods” in International Conference on “Risk Analysis of Forest Invasive Alien Species – Insects, plants, pathogens, vertebrates and others” held during February 27-March 01, 2013 at Panjab University, Chandigarh, and jointly organized by IUFRO and the DNAES, Punjab University.

Presented a paper on “Quantifying plant resources of north-eastern region of India for conservation under changing climate” in International Conference on “Biodiversity Asia 2012 – Science, Policy and Governance – The 2nd Asia Regional

Conference of the Society for Conservation Biology” held during August 7-10, 2013 at Tata Auditorium, IISc, Bangalore.

Presented a paper on “Does seed size predict germination success?: Check in *Dipterocarpus macrocarpus* Vesque” in National Seminar on “Recent Trends in Ethnobotanical Research in North-East India” held during March 15-16, 2013 at Tripura University, Agartala, organized by UGC-SAP Department of Botany, Tripura University, Agartala.

Delivered a Keynote Address on “Ethnobotanical Researches: Recent Trends” in National Seminar on “Recent Trends in Ethnobotanical Research in North-East India” held during March 15-16, 2013 at Tripura University, Agartala, organized by UGC-SAP Department of Botany, Tripura University, Agartala.

Organized an International Symposium (one-session-long) on “Biodiversity in Changing Climate” in International Conference on “Biodiversity Asia 2012 – Science, Policy and Governance – The 2nd Asia Regional Conference of the Society for Conservation Biology” held during August 7-10, 2012 at Tata Auditorium, IISc, Bangalore.

Chaired a Technical Session on “Ethnobotanical Knowledge and Biodiversity Conservation” in National Seminar on “Recent Trends in Ethnobotanical Research in North-East India” held during March 15-16, 2013 at Tripura University, Agartala, organized by UGC-SAP Department of Botany, Tripura University, Agartala.

Prof. S. Kumaria

Delivered a lead talk on ‘Advances in micropropagation of orchids’ in the

National Dialogue on Orchid Conservation & Sustainable Development for Community Livelihood, Gangtok (Sikkim), March 8-9, 2013.

Presented the following papers (posters) during the *National Dialogue on Orchid Conservation & Sustainable Development for Community Livelihood*, Gangtok (Sikkim), March 8-9, 2013.

Efficiency of Start Codon Targeted (SCoT) polymorphism in analyzing the genetic diversity of *Dendrobium nobile*, a rare endangered, medicinal orchid. Paromik Bhattacharyya, Shrawan Kumar, Suman Kumaria and Pramod Tandon (p.143).

Analysis of genetic variation and identification of species-diagnostic DAMD markers in fifteen species of *Dendrobium* (Orchidaceae). Biswajit Bose, Paromik Bhattacharyya, Suman Kumaria and Pramod Tandon (p.144).

Genetic diversity and high gene in *Vanda coerulea* Griff ex Lindl (Blue Vanda), an endangered orchid species as revealed by molecular markers. Viki Manners, Suman Kumaria and Pramod Tandon (p.144).

Cryopreservation of protocorm-like bodies of *Dendrobium chrysanthum* pharmaceutically important orchid using encapsulation-vitrification method. P. Mohanty, M.C. Das, Suman Kumaria and Pramod Tandon (p.145) (Awarded Best Poster).

Publication

Research Papers

Published in India

Daimei P., Kumar, Y., Sheikh, N., Pfoze, N. L. and Paduna, S. (2012). The finest Lakadong

variety of turmeric from the Jaintia Hills of Meghalaya, India. *Pleione*, 6 (1): 141-148.

Kumaria S. and Misra A. K. (2012). Application of Molecular Marker in Plant Tissue Culture. In: *Plant Tissue Culture: Totipotency to Transgenic* (Sharma H.P, Dogra J.V.V. and Misra A.N. eds.) (ISBN No.: 978-81-7754-467-1) *Agrobios* (India), Jodhpur, pp 431-444 .

Kumaria S., Kehie M. , Bhowmik S. S. D., Singh M. and Tandon P. (2012). *In vitro* regeneration of *Begonia rubrovenia* var. *meisneri* C.B. Clarke—A rare and endemic ornamental plant of Meghalaya, India. *Indian Journal of Biotechnology* 11: 300-303.

Pfoze N. L., Kumar, Y. and Myrboh, B.(2012). Survey and assessment of ethnomedicinal plants used in Senapati district of Manipur state, northeast India. *Phytopharmacology*, 2 (2): 285-311.

Pfoze N. L., Kumar, Y., Sheikh, N. and Myrboh, B (2012). Assessment of local dependency on selected wild edible plants and fruits from Senapati district, Manipur, Northeast India. *Ethnobotany Research and Applications*, 10:357-367.

Tandon P. Kumaria S. and Das M. C. (2012). Plant Resources of India: Potentials for Future development. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* 82:283-289 doi 10.1007/s40011-012-0104-3. Springer.

Biate D. L. and Misra A. K. (2013). DNA Cassette for detection and IPR protection of transgenic *Cyanobacteria* and *Rhizobium* Strains. *Indian Journal of Biotechnology* 12: 103-108.

Yanthan M., Misra A. K. (2013). Molecular approach to the classification of medicinally

- important actinorhizal genus *Myrica*. *Indian Journal of Biotechnology*, 12: 133-136.
- Published Abroad**
- Biswal D., Debnath K., Kumar M, S. and Tandon P. (2012). Phylogenetic reconstruction in the Order Nymphaeales: ITS2 secondary structure analysis and in silico testing of maturase k (matK) as a potential marker for DNA barcoding. *BMC Bioinformatics*. 13(Suppl17):S26 doi:10.1186/1471-2105-13-S17-S26.
- Das B. B. and Dkhar M.S. (2012). Organic amendment effects on microbial population and microbial biomass carbon in the rhizosphere soil of soybean. *Communication in soil science and plant analysis*. 43: 1938 – 1948.
- Devi, S. P., Rao S. R., Kumaria S. and Tandon P. (2012). Mitotic chromosome studies in *Nepenthes khasiana*, an endemic insectivorous plant of Northeast India. *Cytologia* 77 (3):381-384.
- Dohling S., Kumaria S. and Tandon P. (2012). Multiple shoot induction from axillary bud cultures of the medicinal orchid, *Dendrobium longicornu*. *AoB Plants* 2012: pls 032; doi:10.1093/aobpla/pls032
- Gogoi K., Kumaria S. and Tandon P (2012). A comparative study of vitrification and encapsulation - vitrification methods on cryopreservation of *Cymbidium eburneum* L. protocorms, a threatened and vulnerable orchid of India. *Cryoletters* 33 (6): 443-452
- Lyngdoh I. and Kayang H. (2012). Physico-Chemical and Bacteriological Characteristics of Uiam Lake, Meghalaya, India. *International Journal of Advanced Life Sciences (IJALS)*, Vol 3: 27-34.
- Majumdar, K., Uma Shankar and Datta, B. K. (2012). Tree species diversity and stand structure along major community types in lowland primary and secondary moist deciduous forests in Tripura, Northeast India. *Journal of Forestry Research* 23(4): 553-568.
- Majumdar, K., Datta, B. K. and Uma Shankar (2012). Establishing continuity in distribution of *Diploknema butyracea* (Roxb.) H. J. Lam in Indian subcontinent. *Journal of Research in Biology* 2(7): 660-666.
- Mohanty P., Paul S., Das M. C., Kumaria S. and Tandon P. (2012). A simple and efficient protocol for the mass propagation of *Cymbidium mastersii*: an ornamental orchid of Northeast India. *AoB PLANTS* doi:10.1093/aobpla/pls023.
- Mohanty P., Das M.C., Kumaria S. and Tandon P. (2012). Cryopreservation of pharmaceutically important orchid *Dendrobium chrysanthum* Wall. ex Lindl using vitrification based method. *Acta Physiol. Plant.* DOI 10.1007/s11738-012-1163-z.
- Sharma S. K., Kumaria S., Tandon P. and Rao S. R. (2012). Spectrum of chromosome associations in synaptic variants of *Mantisia wengeri* (Zingiberaceae) – an endemic, critically-endangered and probable inter-specific hybrid. *Cytologia* 77 (3): 385-392. The Japan Mendel Society, Tokyo
- Sharma S.K., Kumaria S., Tandon P. and Rao S.R.. (2012). Comparative Karyomorphological Treatise of Some Indian *Cymbidiums* Sw., 1799 (Cymbidieae: Orchidaceae). *CompCytogen*.6(4):453-465. Doi:10.3897/compcytogen.v6i4. 3461.

- Singh B, Chettri A., Adhikari D. and Barik S.K. (2012). Taxonomic history, rediscovery, and assessment of threat status of *Streblus ilicifolius* (Moraceae) from India. *Journal of Botanical Research Institute Texas* 6(2): 611 – 614.
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Books/Book Chapters/ Proceedings

Barik S.K. and Darlong V.T. (2013). Managing sustainability in natural resource based rural development programmes. In: Behera MC

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Uma Shankar, Yadava A. S., Rai J. P. N. and Tripathi R. S. (2013). Status of alien plant invasions in northeastern region of India. Pages 174-188 in *Invasive alien plants: an ecological appraisal for the Indian subcontinent*. Bhatt, J. R., Singh, J. S., Singh, S. P., Tripathi, R. S. & Kohli, R. K. (eds.), CABI, UK

Funds Received from Agencies other than NEHU

Agency	Amount(in lakh)
DBT- Biotechnology	= 22.00
DBT-Empowerment	= 56.14
DBT-HUB	= 124.79
CAS	= 10.80

Total =	213.73

Research Projects:

New Projects

Title of the project	Name of the Principal Investigator(s)	Funding Agency	Amount received during the year in Rs lakh]
Phytochemical profiling, molecular characterization and conservation of <i>Flemingia vestita</i> : Endemic medicinally important plant of Northeast India.	Prof. S. Kumaria (PI) Dr. H. Choudhury (Co-PI) Collaborators: Dr. Sunita Shailajan (PI) Herbal Lab., Mumbai	Department of Biotechnology, Ministry of Science and Technology Government of India (sanctioned on 02/05/2012) under DBT's Twinning programme for the NE.	11.11(NEHU)

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Conservation of some <i>Paphiopedilum</i> species (orchid) of Northeast India through asymbiotic seed germination and cryopreservation	Dr. Meera Chettri Das (PI) Prof. S. Kumaria (Co- Investigator)	UGC, New Delhi	8,11,800
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Ongoing Projects

Title of the project	Name of the Principal Investigator(s)	Funding Agency	Amount received during the year in ` lakh]
Flora and fauna of Kylleng Pynden Sohiong Mawthabah uranium rich areas of West Khasi Hills, Meghalaya	Prof. H. Kayang (PI)	Board of Research in Nuclear Sciences (BRNS), Mumbai	12, 58,575
All India Coordinated Research Project on Reproductive Biology of Four Rare, Endangered and Threatened (RET) Tree Species namely: <i>Aquilaria malaccensis</i> (Thymelaceae), <i>Gymnocladus assamicus</i> Kanj. Ex.P.C. Kanjilal, (Caesalpinaceae), <i>Ilex khasiana</i> Purakaystha (Aquifoliaceae) and <i>Illicium griffithii</i> Hook.f. & Thoms (Illiciaceae) of North East India particularly in Arunachal Pradesh and Meghalaya	Prof. N. Venugopal (PI)	MoEF, New Delhi	9.03
Establishment of DBT's Rural Bioresource Complex in North-East India	Prof. P. Tandon (Coordinator) Prof. S.K. Barik (PI)	DBT, New Delhi	Nil

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Preventing Extinction and Improving Conservation status of threatened plants through application of biotechnological tools	All India Coordinator: Prof. S.K. Barik Sub-Project 1: Coordinator: Prof. P. Tandon PI: Prof. S.K. Barik Co-PIs: Prof N. Venugopal Dr. H. Choudhury Dr. M.C. Das Sub-Project 2: PI: Prof. N.K. Chrungoo Co-PIs: Prof. S. Kumaria Dr. K. Upadhaya Sub-Project 15: Coordinator: Prof. S.K. Barik Joint Coordinator: Prof. N.K. Chrungoo	DBT, New Delhi	28.78
All India Coordinated project on Sacred grove ecosystem service assessment in Meghalaya	All India Coordinator: Prof. S.K. Barik Co-PI: Dr. K. Upadhaya	Ministry of Environment and Forests, Government of India, New Delhi	Nil
Micropropagation of <i>Nardostachys grandiflora</i> and <i>Malaxis wallichii</i> -Two threatened medicinal plants of Northeast India.	Prof. P. Tandon (PI) Prof. S. Kumaria (Co-PI), Dr. H. Choudhury (Co-PI)	Department of Biotechnology, Ministry of Science and Technology Government of India (sanctioned on 20/09/2010).	6.81

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Functional Characterization of an endosperm specific promoter p1028 from common buckwheat and transfer of Bwleg1 gene coding for the buckwheat 26 kDa lysine rich seed storage protein to rice for nutritional enhancement of its grains	Prof. N. K. Chrungoo (PI) Prof. P. Tandon (Co-PI)	DBT	21.31
Establishment of state level biotech hub	Prof. P. Tandon (Coordinator) Prof N K Chrungoo (Co Coordinator)	DBT	124.79
Establishment of DBT centre for Empowerment of human resources of NER for Biotechnology activities	Prof. P. Tandon PI Prof. N K Chrungoo (Co-PI)	DBT	56.14
Biotech Strengthening	Prof. N. K. Chrungoo (PI) Prof. V. Tandon (Co –PI) Prof. R. Sharma (Co- PI) Prof. A Chatterjee (Co- PI)	DBT	22.00

Completed Projects

Title of the project	Name of the Principal Investigator (s)	Funding Agency	Amount received during the year in ` lakh]
DBT Mission for Quality Planting Material Production and Utilization for the north-east	Prof. P. Tandon (Coordinator) Prof. S.K. Barik (PI)	DBT, New Delhi	Nil

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Academic Collaborations

India

Jawaharlal Nehru University, New Delhi

Abroad

Feiberg University, Feiberg, Germany
University of Ljubljana, Slovenia

Other Activities

Prof. Pramod Tandon

Appointed Member, National Advisory Council of Govt. of India

Appointed as a member of Research Advisory Committee of the Uttarakhand Science Education and Research Centre, Council for Science & Technology, Government of Uttarakhand.

Visited the Institute of Biology, Cluj-Napoca, Romania and had discussions with the scientists in areas of mutual interest on 25th July 2012.

Invited by Prof. Doru Pamfil, Rector, University of Agricultural and Veterinary Sciences, Cluj-Napoca, Romania for holding scientific discussions in areas of mutual interest for scientific cooperation and visited the University and met him on 26th July.

N. K. Chrungoo

Member, Editorial Board, FAGOPYRUM

Member, DBT Task force on Biotechnology based programmes for women

Member, Board of Studies in Biotechnology, DY Patil University, Pune

Prof. S. K. Barik

Executive Committee Member, International Society for Tropical Ecology

Executive Committee Member, International Society of Environmental Botanists

Fellow, LEAD International, Rockefeller Foundation, USA

Member, Editorial Board, Journal of Biodiversity

Associate Editor, Tropical Ecology

Member, Scientific Advisory Committee, ENVIS, MoEF

Member, MAB Committee, MoEF

Member, DBT Task Force on Biodiversity Conservation and Environmental Biotechnology

Jury Member, India-UNDP Biodiversity Award-2012 of MoEF and UNDP

Member, Meghalaya State Biodiversity Board

Chief Technical Adviser, UNDP-MoEF Biodiversity Conservation Project, Arunachal Pradesh

Chief Technical Adviser, Indo-German Natural Resource Management Project, Tripura

Prof. Uma Shankar

Invited Expert in the Science Plan Meeting on “National Network of Long Term Ecological Observations”, held during May 28-29, 2012, New Biological Sciences building, IISC Campus, Bangalore, organized by the MoEF, New Delhi (Coordinator: Prof. R. Sukumar, CES, IISC).

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DEPARTMENT OF ZOOLOGY

Head : (L) Prof. B. Kharbuli (till 13th November, 2012)
 Prof. N. Saha (from 19th November, 2012)
Telephone : 2722301/2304(O)
E-mail : nsaha@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Professor	V. Tandon, M.Sc. & Ph.D. (Panjab Univ.)	Parasitology
	B. K. Sharma, M.Sc. & Ph.D. (Panjab Univ.)	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 Univ.), Ph.D. (NEHU)	Fish Biology
	A. K. Yadav, M.Sc. (Agra Univ.), 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. (Univ. of Calcutta)	Insect Endocrinology and Molecular Biology
	S. Ghosh, M.Sc. & Ph.D. (Univ. of 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 Univ.), Ph.D. (NEHU)	Biological Chemistry

Thrust Area 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

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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 offers M. Sc. and Ph. D. courses. During the year 2012, 30 students were admitted in M.Sc. programme and 12 students in Ph.D. programme. The Department organized various workshops such as on “Recent Trends in Genomics & Databases”, “Aligning Instructional Design to Students’ Learning Style”, “Science Awareness Workshop for School and College Students”, and “the Transferable Skills for Research Scholars of Life Sciences”, “the 13th International Rotifer Symposium”, INSA-sponsored National Lecture Series for NE Region Remote Areas, the 36th Refresher Course in Zoology on the

topic “Recent Advances in Zoology”, a DST-SERB School in Chronobiology, a National Seminar on Science for Shaping the Future of India: Focus on North-Eastern Region, and a “Lecture Series programme on Recent trends in Zoology”. One student of the Department got employment in a College. The Department has completed the second year of the DSA Phase II programme under the UGC Special Assistance Programme to promote higher research with special reference to the N.E. region. During the financial year 2012-13, the Department received grants of about Rs. 5.74 crores under extramural research projects sponsored by the DST, DBT, DAE-BARC, DIT, UGC and MoE&F. 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. One student qualified for GATE and one student qualified for SLET.

Students’ Profile: **Enrolment Capacity:** P.G.:30 Ph.D.: variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	00	29	02	06	25	18	13	31
Ph.D.	00	04	08	04	08	05	07	12

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	00	22	04	11	15	16	10	26
Ph.D.	00	03	02	01	04	03	02	05

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Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name(s) of Supervisor(s)
Ms. Jollin A. Shylla	Status of amphistomiasis and molecular taxonomy of paramphistomid parasites (Platyhelminthes: Trematoda: Paramphistomidae) in mammalian livestock in North-East India.	Supervisor: Prof. V. Tandon
Ms. Mahua G. Choudhury	Regulation and molecular characterization of different isoforms of nitric oxide synthase, nitric oxide production under environmental stress in the air-breathing catfish, <i>Heteropneustes fossilis</i>	Supervisor: Prof. N. Saha
Ms. Markiyoo Challam	An <i>in vitro</i> study on anthelmintic efficacy of some traditional medicinal plants in Meghalaya.	Supervisor: Prof. B. Roy Joint Supervisor: Prof. V. Tandon
Ms. Ramita Sougrakpam	Photoperiodic regulation of seasonality in reproduction in the yellow-breasted bunting, <i>Emberiza aureola</i> (Pallas).	Supervisor: Prof. A. S. Dixit
Mr. Namram Sushindrajit Singh	Role of photoperiod in timing seasonal breeding in the tree sparrow, <i>Passer montanus</i> (Linnaeus).	Supervisor: Prof. A. S. Dixit

Placement of Students

Dr.Khamtilin Kharshiing was appointed as an Assistant Professor in Lady Keane College, Shillong.

Semester III : Endocrinology & Reproductive Biology, Aquatic Biology & Fisheries, Animal Diversity.

Courses Conducted during the year

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 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

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Physiology, Molecular Cell
Biology and Immunology.

National Academy of Sciences India (NASI)
–NE Region Local Chapter, Shillong.

Study Tours/ Field Trips of Students

Name of the Teacher in-charge: Dr. B. Das

Places/ Institutions visited: Bhubaneswar, Konark, Chilka and Nandankanan in Odisha and various institutes in Kolkata.

Duration of the tour: 13th to 21st January, 2013.

Seminars/ Conferences/ Symposia/ Extension Programmes, etc.

Organized

A National Academies Workshop on Transferable Skills for Research Scholars of Life Sciences was conducted from 9-10 April, 2012.

DST-SERB School in Chronobiology was organised from 20 June – 3 July, 2012.

A Science Awareness Workshop for School and College Students was conducted on 21 September, 2012.

A Workshop on “Recent Trends in Genomics & Databases” was organized from 24–27 September, 2012 under the aegis of “North East parasite Information and Analysis Centre (NEPIAC): an in-silico approach.”

A National Seminar on Science for Shaping the Future of India: Focus on North-Eastern Region was organised on 25 - 26 September, 2012.

An INSA-sponsored National Lecture Series for Northeast India was organised on 29-30 October, 2012.

A Workshop on “Aligning Instructional Design to Students’ Learning Style” was conducted on 5-6 November, 2012 under the aegis of

The 13th International Rotifer Symposium, ROTIFERA XIII was organised from 18-24 November, 2012.

The 36th Refresher Course in Zoology – “Recent Advances in Zoology” was organized from 26 November - 16 December, 2012.

An INSA-sponsored National Lecture Series for Remote Areas was organised on 7-8 March, 2013.

One day “Lecture Series on Current Perspectives in Zoological Sciences” under the DSA Phase II program was conducted on 20th March, 2013.

Attended:

Prof. V. Tandon attended XIth European Multicolloquium of Parasitology, organized by European Federation of Parasitology and USAMV, Cluj-Napoca, Romania, 25-29 July, 2012 and delivered a keynote address on “Human trematodiasis in India: present situation” in “IV K.E. Mott Symposium on schistosomiasis and food-borne trematodiasis/ B. Foodborne trematodiasis” (SY07/6) and chaired the session “Biodiversity, health and environment” (SY19/1) on 26 July, 2012.

XIth International Congress of Bioinformatics at Bangkok (Thailand), 3-5 October, 2012 and presented a paper on “Phylogeography and genetic variation of *Paragonimus westermani* (Trematoda: Digenea) and its position within the genus *Paragonimus*: an in silico study using ITS2 sequences.”

The National Academy of Sciences India (NASI) 82nd Annual Session and

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National Symposium on “Nano-Science & Technology for Mankind” at BHU, Varanasi, 29 November –1 December, 2012 and presented a paper on “Molecular characterization and DNA barcoding of etiological agents of amphi-stomiasis in mammalian livestock.”

Workshop on “Women in Science & Technology: The path to an Empowered India”, Institute of Life Sciences, Ahmedabad University, Ahmedabad, 8-9 March, 2013 and delivered a keynote address on “Women in Science Research: present perspectives.”

National Workshop on “Computational Genomics & its Applications to Plant Biology,” organized by BTIS-NET Sub-Distributed Information Centre (Sub-DIC), National Institute of Plant Genome Research (NIPGR), New Delhi, 14-15 March, 2013 and delivered an inaugural address on “Molecular Biosystematics- A unifying approach from classical to modern”.

Prof. B. K. Sharma attended the 13th International Rotifer Symposium, “ROTIFERA XIII,” at the Department of Zoology, NEHU, Shillong, 18-24 November, 2012, chaired a session and presented three papers: (i) Northeast India- a biodiversity important region with its rich and interesting Rotifera diversity, (ii) Indian Lecanidae (Rotifera: Eurotatoria: Monogononta) and its distribution, (iii) Rotifer diversity in floodplain lakes of Majuli (the largest river island), Assam, Northeast India.

Prof. N. Saha attended

The “Silver Jubilee Lecture Series (1987-2012)” and delivered an invited lecture on “Biochemical adaptations to nitrogen

metabolism in Indian air-breathing catfish under environmental constraints” at the Directorate of Coldwater Fisheries Research, Bhimtal, 16-17 June, 2012.

The “National Conference on Emerging Trends and Changes in Basic and Translational Research in Biochemistry”; delivered an invited lecture on “Biochemical adaptational strategies related to nitrogen metabolism in Indian air-breathing catfishes” at the Department of Zoology, Banaras Hindu University, Varanasi, 4-5 February, 2013, and chaired a session.

Prof. A. K. Yadav attended the “TM’s 1st “Online World Virology & Microbiology Conference” organized by Target Meeting Team, Houston, TX, USA during 19-21 April, 2012 and chaired a scientific session and presented a paper, “Traditional Tribal Medicines in the Treatment of Gastro-intestinal Worm Diseases”

Prof. A. S. Dixit attended the “International Congress on Chronobiology” at the University of Delhi, 3-7 October, 2012, chaired a session and presented a paper on “Seasonal variation in sensitivity of the photoperiodic response system in regulation of seasonal cycles in the subtropical tree sparrow *Passer montanus*.”

Dr. B. Keshan attended the 36th Annual Conference of “Ethological Society of India” and National Symposium on “Live organisms and their expressions in the environment,” at University of Calcutta, Kolkata, 26-28 November, 2012 and presented a paper entitled “Heat stress induced response in silkworm, *Bombyx mori*.”

The 100th Session of the Indian Science Congress, 3-7 January, 2013 and presented

a paper on “The involvement of ecdysteroid induced early gene, E75A in silkworm, *Bombyx mori* under heat stress” in Section of Animal, Veterinary and Fishery Sciences.

The “International Symposium on Molecular Signaling”, at the Visva-Bharati University, Santiniketan, 18-21 February, 2013 and delivered one symposium lecture on “Ecdysone and insulin signaling in insects.”

Publications

Research Papers

Published in India

- Dominic, R. and Ramanujam, S. N. (2012). Traditional knowledge and ethnobotanical uses of piscicidal plants of Nagaland, North East India. *IJNPR*, 3: 582 – 588.
- Goswami, U. C., Rahman, M. and Saha, N. (2012). Functional ureogenesis and changes of amino acid metabolism in amphihaline shad hilsa (*Tenualosailisha*, Hamilton-Buchanan) while inhabiting in estuary and freshwater habitats. *Indian Journal of Experimental Biology*, 50: 652-659.
- Imkongwapang, R., Jyrwa, D.B., Lal, P. and Tandon, V. (2012). A checklist of helminth parasite fauna in anuran Amphibia (frogs) of Nagaland, Northeast India. *Journal of Parasitic Diseases*, DOI 10.1007/s12639-012-0180-6.
- Lalremsanga, H. T. and Hooroo, R. N. K. (2013). Observation on the normal development of Indian skipping frog, *Euphlyctiscyanophlyctis* (Anura: Dicroglossidae). *Proceedings of Bioresource and Traditional Knowledge of Northeast India*, 200-215.
- Mylliemngap, B. K., and Ramanujam, S. N. (2012). Morphological Changes in the Gills of *Heteropneustes fossilis* Exposed to Coal Mining Effluents water. *Journal of Environmental Biology*, 33: 735 – 739.
- Ramnath, Jyrwa, D.B., Dutta, A.K., Das, B. and Tandon, V. (2012). Molecular characterization of the Indian poultry nodular tapeworm, *Raillietinaechinobothrida* (Cestoda: Cyclophyllidea: Davaineidae) based on rDNA Internal Transcribed Spacer 2 region. *Journal of Parasitic Diseases*, DOI: 10.1007/s12639-012-0184-2.2.
- Sharma, B. K. and Sharma, S. (2012). Notes on some rare and interesting Cladocera (Crustacea: Branchiopoda: Anomopoda: Chydoridae) from Deepor Beel, Assam, India. *Journal of Threatened Taxa*, 4: 2304-2309.
- Sharma, B. K. (2012). Phytoplankton diversity of a floodplain lake of the Brahmaputra river basin, Assam, Northeast India. *Indian Journal of Fisheries*, 59: 131-139.
- Suchiang, P., Varkey, S., Gupta, B. B. P. (2012). Effects of glucocorticoids on plasma levels of thyroid hormones (T₄ and T₃) and testicular activity in catfish, *Clarias gariepinus* during different phases of annual breeding cycle. *Indian Journal of Experimental Biology*, 50: 398-403.
- Verma, A.K., Prasad, S. B. (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*. *International Journal of Bioassays*, 2: 527-530.

- Yadav, A. K. and Lalramliana (2012). Efficacy of indigenous entomopathogenic nematodes from Meghalaya, India against the larvae of taro leaf beetle, *Aplosonyxchalybaeus* (Hope). *Journal of Parasitic Diseases*, 36: 149-154.
- Yadav, A. K., and Lalramliana (2012). Evaluation of the efficacy of three indigenous strains of entomopathogenic nematodes from Meghalaya, India against mustard sawfly, *Athalia lugens proxima* Klug (Hymenoptera: Tenthredinidae). *Journal of Parasitic Diseases*, 36: 175-180.
- Yadav, A. K., and Lalramliana (2012). Soil moisture effects on the activity of three entomopathogenic nematodes (Steinernematidae and Heterorhabditidae) isolated from Meghalaya, India. *Journal of Parasitic Diseases*, 36: 94-98.
- Published Abroad**
- Amenla, Verma, A. K. and Prasad, S. B. (2013). Dietary ascorbic acid-mediated augmentation of anti tumour activity and protection against toxicity induced by cis-diamminedichloroplatinum-(II) in Dalton's lymphoma-bearing mice. *Journal of Cancer Research Update*, 2: 116-130.
- Choudhury, M. G. and Saha, N. (2012). Expression of inducible nitric oxide synthase and nitric oxide production in the mud-dwelled air-breathing singhi catfish (*Heteropneustes fossilis*) under condition of water shortage. *Nitric Oxide*, 27: 219-227.
- Choudhury, M. G. and Saha, N. (2012). Influence of environmental ammonia on the production of nitric oxide and expression of inducible nitric oxide synthase in the freshwater air-breathing catfish (*Heteropneustes fossilis*). *Aquatic Toxicology*, 116-117: 43-53.
- Das, B., Tandon, V., Saxena, J. K., Joshi, S. and Singh, A. R. (2013). Purification and characterization of phosphoenolpyruvate carboxykinase from *Raillietinae chinobothrida*, a cestode parasite of the domestic fowl. *Parasitology*, 140: 136-146.
- Dixit, A. S., and Singh, N. S. (2012). Seasonal variation in the sensitivity of the photoperiodic response system and the termination of photorefractoriness in the subtropical tree sparrow (*Passer montanus*). *Journal of Experimental Zoology*, 317A: 488-498.
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- Dixit, A. S., and Sougrakpam, R. (2012). Circadian rhythmicity in photoperiodic regulation of reproductive responses in the Yellow-breasted bunting, *Emberiza aureola*. *Biological Rhythm Research*, 1-12.
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Sequences submitted to the GenBank and accession numbers received:

By Prof. V. Tandon and others

Species	ITS2	18S	28S	COI
<i>Homalogasterpaloniae</i>	GU133056	*	*	*
<i>Calicophoroncalicophorum</i>	GU133057	*	*	*
<i>C. calicophorum</i> (Tripura)	*			*
<i>Orthocoeliumstreptocoelium</i>	GU133058	*	*	*
<i>Fischoederiuscobboldi</i> (Cow)	GU133059	*	*	*
<i>Fischoederiuscobboldi</i> (Goat)	GU133060	*	*	*
<i>Fischoederiuselongatus</i> (Goat)	GU133061	*	*	*
<i>Fischoederiuselongatus</i> (Cow)	GU133062	*	*	*
<i>Hymenolepisdiminuta</i>	FJ939132	-	-	-
<i>Taeniataeniaeformis</i>	FJ939133,	-	-	FJ939135
<i>Microphallid sp.</i>	FJ966111	-	FJ966109	-
<i>Lytocestusbirmanicus</i>	FJ957901	*	*	*
<i>Lytocestus. indicus</i>	FJ957902	*	*	*
<i>Fasciolopsisbuski</i>	EF027094	-	*	-
<i>Gastrodiscoideshominis</i>	E F 0 2 7 0 9 6 , EF027097, EU887295	*	*	EF027095, EU887293
<i>Paragonimusmacrorchis</i>	EF027099	-	-	-
<i>Calicophoronshillongensis</i>	*	*	*	*
<i>Cotylophoroncotylophorum</i>	*	*	*	*
<i>Leiperocotylemeghalayensis</i>	*	*	*	*
<i>Explanatumexplanatum</i>	*	*	*	*
<i>E.explanatum</i> (Pynursla)	*			*
<i>Orthocoeliumorthocoelium</i>	*	*	*	*
<i>O. sp</i>	*	*	*	*
<i>Olveriaindica</i>	*	*	*	*

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<i>O.bosi</i>	*	*	*	*
<i>Paramphistomumepiclitum</i>	*	*	*	*
<i>P. epiclitum (Tripura)</i>	*			*
<i>P. sp</i>	*	*	*	*
<i>Paragonimuswestermani</i>	KC297494.1	-	-	-
<i>Fasciolagigantica</i>	EF027103	-	*	-
<i>Artyfechinostomumsufrartyfex</i>	EF027100	-	-	EF027102

*Sequence deposited in Genbank; Accession nos. not yet released in public domain.

By Prof. N. Saha and others

Species	GenBank Accession No.	Region Amplified
<i>Clarias batrachus</i>	JQ740737	Glutamine synthetase (GS01) mRNA, complete cds, 1389 bp
<i>Clarias batrachus</i>	JQ740738	Glutamine synthetase (GS02) mRNA, complete cds, 1677 bp
<i>Clarias batrachus</i>	JQ753330	Ornithine carbamoyl transferase (OTC) mRNA, complete cds, 1256 bp
<i>Clarias batrachus</i>	JQ794876	Argininosuccinate lyase (ASL) mRNA, complete cds, 1737 bp
<i>Heteropneustes fossilis</i>	JQ825142	Ornithine carbamoyl transferase (OTC) mRNA, complete cds, 1204 bp
<i>Heteropneustes fossilis</i>	JQ965808	Argininosuccinate lyase (ASL) mRNA, complete cds, 1721 bp
<i>Monopterusuchia</i>	JX112754	Glutamine synthetase (GS03) mRNA, partial cds. 938 bp
<i>Heteropneustes fossilis</i>	JX131625	Glutamine synthetase (GS03) mRNA, complete cds. 1532 bp
<i>Clarias batrachus</i>	JX457351	Glutamine synthetase (GS03) mRNA, complete cds, 1719 bp
<i>Clarias batrachus</i>	JX915762	CPS III mRNA, partial sequence, 927 bp
<i>Clarias batrachus</i>	KC414932	GAPDH, complete cds, 1387 bp

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<i>Clarias batrachus</i>	KC507186	GDH mRNA, partial cds, 1872 bp
<i>Clarias batrachus</i>	KC665945	Glutathione-S-transferase mRNA, partial cds
<i>Heteropneustes fossilis</i>	KC689796	CPS III, partial cds, 534 bp
<i>Clarias batrachus</i>	KC736973	Glutathione peroxidase 3 (gpx3) mRNA, partial cds.

Books/Book Chapters/ Proceedings

Tandon, V., Roy, B. and Prasad, P.K., Liu D. (Ed.) (2012). Chapter 32. *Fasciolopsis*– In: “*Molecular Detection of Human Parasitic Pathogens*”, CRC Press, Boca Raton, Florida, USA. pp. 871.

Tandon, V., Yadav, A.K., Roy, B. and Pati, R.N. (Ed.) (2012). “Gastrointestinal helminth infections and herbal cures in the traditional medicine of tribal communities in Northeast India”. In: “*Biodiversity and Traditional Knowledge*”, Council for Tribal & Rural Development, Bhubaneswar, Odisha. Cambridge Scholar Publishing (U.K.)

Kalita S., Prasad S. B. and Verma A.K. (2013). Modulatory effect of Ascorbic acid (Vitamin- C) on Chlorambucil-mediated antitumor activity against murine ascites Dalton’s lymphoma. In: *Proceedings International Seminar on Bioresources and Human sustenance*. Cotton College, Guwahati, Saraighat Printers, Guwahati, India. Kalita J. (Ed), pp. 131-137. ISBN: 978-93-82384-36-6.

Verma A.K., Prasad S.B. and Bordoloi M. (2013). Anticancer and cytotoxic effect of *Mylabrischichori* extract against Dalton’s lymphoma ascites-induced tumor model. In: *Traditional Phytotherapy*, Buragohain J.

(Ed.), Daya Publishing House, New Delhi-2, pp. 68-78. ISBN: 978-81-7035-821-3.

Saha, N. (2012). Biochemical adaptations to nitrogen metabolism in Indian air-breathing catfish under environmental constraints. In: *Silver Jubilee Compendium on Coldwater Fisheries* Sarma, D., Pande, A., Chandra, S. and Gupta, S. K. (Eds), ICAR Publication, New Delhi, pp. 109-122.

Ramanujam S.N., Ratha, B.K. and Dominic R. (2013). Piscicidal plants in fish nursery management In: *Advances in Fish Research*, Goswami, U.C. (Ed.), Vol. V, Narendra Publishing House, Delhi, pp. 233 – 256

Funds Received from Agencies other than NEHU

Agency	Amount (in lakh):
UGC, DBT, ICMR-ICAR,	
MoE&F, DST	575.51

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Research Projects

New Projects

Title of the Project	Name of the Principal Investigator(s)	Funding Agency	Duration	Sanctioned fund (Rs. in lakhs)
“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	2012-2013	Rs. 12.76 lakhs

Ongoing Projects

Title of the Project	Name of the Principal Investigator(s)	Funding Agency	Duration	Sanctioned fund (Rs. in lakhs)
“Next Generation Sequencing and Genome Information of Parasite Biodiversity of medico-veterinary significance in North-East India.”	Veena Tandon (PI), Mr. Devendra Kumar Biswal, Information Officer, NEHU, Shillong (Co-PI) and Prof. Alok Bhattacharya JNU, New Delhi (Co-PI)	Department of Biotechnology, GOI- DBT- NER Twinning Programme	2011-2014	Rs. 78.80 lakhs
“Establishment of Portal for Indian Bioresource Information Network (IBIN): BRIC Biodiversity Informatics: Data Capture and Management – III” (for NEHU, Shillong).	Project Coordinator: Dr. K.N. Ganeshaiah University of Agricultural Sciences, GKVK, Bangalore and Dr. P. S. Roy, Dean Indian Institute of Remote Sensing (NRSC), Dehradun.	Bioresource Development Board (NBDB)” of Department of Biotechnology, GOI	2011-2014	Rs. 31.84 lakhs

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“Molecular characterization of food-borne trematodes and cestodes prevailing in Northeast India.”	Prof. V. Tandon (PI) and Dr. B. Roy, Prof. A. Chatterjee and Dr. R. Laha (Co-PIs)	ICMR-ICAR coordinated Joint project on Zoonoses	2011-2014	Rs. 17.01 lakhs per annum
“Bio-Informatics Centre” of the Department of Biotechnology.	Prof. V. Tandon (Deputy Coordinator)	DBT, New Delhi	(Sub DIC 1999- 2010; DIC- w.e.f. 2011)	Rs. 20.00 lakhs per annum.
‘Taxonomy of Indian Freshwater Cladocera (Crustacea: Branchiopoda) with special emphasis on faunal and ecosystem diversity in different states of North Eastern India.’	Prof. B. K. Sharma (PI)	Ministry of Environment & Forest		Rs. 6.54 lakhs
“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	2012-2013	Rs. 6.00 lakhs
“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), Dr. M. Santra, NCCS, Pune (CO-PI)	DBT, New Delhi	2012-2013	Rs. 48.41 lakhs

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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	3 years (w.e.f. 15.03.2011)	Rs. 8.61 lakhs
Diversity, distribution and habitat selection by pheasants in Mizoram, India.	Prof. S. N. Ramanujam (Co PI)	DST, New Delhi	3 years (w.e.f. 28.05.2012)	Rs. 18.60 lakhs
“Role of kisspeptin and GnIH in regulation of seasonal breeding in the tree sparrow.”	Prof. A. S. Dixit (PI)	DST, New Delhi	3 years	Rs. 48.91 lakhs
Insect hormones and insulin signaling in silkworm, <i>Bombyxmori</i> under fed and starved conditions: a study at molecular level.	Dr. Bela Keshan	DBT, New Delhi	3 years (2011-2014)	Rs. 55.57 lakhs
Comparative Proteomic and Transcriptomic Analyses of PEPCK under the influence of <i>Flemingiavestita</i> -derived Phytoestrogen (Genistein) (No. BT/PR12828/Med/30/221/2009 dated March 22, 2010)	Dr. B. Das (PI) Prof. V. Tandon (Co-PI) Dr. Amit Sharma (Co-PI)	DBT, New Delhi		Rs.130.93 lakhs
Analysis of molecular signalling proteins and epigenetic factors responsible for regulation of PEPCK expression (No.BT/103/NE/TBP/2010 dated March 16, 2011)	Dr. B. Das (PI and Coordinator) Prof. V. Tandon (Co-PI) Prof. K. Satyamoorthy (Co-PI)	DBT, New Delhi		Rs. 58.20 lakhs
Epigenetic status of pro/anti apoptotic activity of age-related genes involved in breast cancer (No. BT/253/NE/TBP/2011 dated May 07, 2012)	Dr B Das (PI and Coordinator) and Others	DBT, New Delhi		Rs. 36.23 lakhs

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Completed Projects

Title of the Project	Name of the Principal Investigator(s)	Funding Agency	Duration	Sanctioned fund (Rs. in lakhs)
North East parasite Information and Analysis Centre (NEPIAC)	V. Tandon (PI), Mr. D. K. Biswal, Information officer (Co-PI) NEHU, Shillong and Dr. S. Ramachandran, Scientist F, IGIB, New Delhi (Co-PI)	DIT, New Delhi	DIT/R&D/ BIO/15(13)/2008 dated 29/9/2008- till September, 2012	
Ichthyofaunal diversity and studies on the biology of some indigenous ornamental fishes of Meghalaya	Prof. S.N. Ramanujam (PI)	MoE&F, New Delhi	3 years 6 months (w.e.f. Oct. 2008 to March 2012)	

Academic Collaborations

India

Prof. V. Tandon collaborated with JNU, New Delhi; International Centre for Genetic Engineering and Biotechnology, New Delhi; Manipal Institute of Biomedical Sciences; Aravind Eye Hospital, Madurai.

Prof. R. N. K. Hooroo collaborated with Prof. S. K. Dutta, Department of Ecology, Indian Institute of Sciences, Bangalore.

Prof. N. Saha collaborated with Dr. Manas Kumar Santra, National Centre for Cell Sciences, Pune.

Prof. B. Roy collaborated with Dr. Rakhi Chaturvedi, IIT, Guwahati, Assam and Prof. S. P. Sinhababu, Visva-Bharati University, Santiniketan, West Bengal.

Prof. A. S. Dixit collaborated with Prof. Vinod Kumar, Delhi University, New Delhi and

Prof. Sangeeta Rani, Lucknow University, Lucknow.

Dr. B. Das collaborated with Dr. Amit Sharma, International Centre for Genetic Engineering and Biotechnology, New Delhi, Prof. K. Satyamoorthy, Manipal University, Manipal, Prof. S. Mishra, ILS, Bhubaneswar, Odisha, Dr. A. Katak, BCCI, Guwahati, Assam and North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences.

Abroad

Prof. R. N. K. Hooroo collaborated with Prof. I. Das, Sarawak University, Malaysia.

Prof. N. Saha collaborated with Prof. Dr. D. Häussinger, Department of Gastroenterology, Infectiology and Hepatology, Heinrich-Heine University of Dusseldorf, Germany.

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Prof. A. K. Yadav collaborated with Dr. Andreas-Schmidt Rhaesa, University of Hamburg, Germany.

Dr. B. Das collaborated with Dr. Rakesh Kumar, Professor and Chairman, Department of Biochemistry and Molecular Biology, Catharine Birch & William McCormick Chair, Director - Institute of Coregulator Biology, Washington, USA and Dr V. Ferro, SIPBS, Strathclyde University, Scotland, UK.

Honours/ Awards/ Recognitions

Prof B. K. Sharma was awarded 'Eminent Rotiferologist' at the 13th International Rotifer Symposium, ROTIFERA XIII.

Prof. N. Saha was appointed as a PAC member in the DST-SERB Animal Science group for a period of three years and also in the DST-SERB programme for Empowerment and Equity Opportunities for Excellence in Science for a period of three years.

Other Activities

Prof. V. Tandon (i) launched the website portals: The 'North East Parasite Information and Analysis Centre' [NEPIAC]- www.nepiacbic.ac.in, the Indian Bioresource Information Network-www.ibin.gov.in - a major activity of the XIth Meeting of Conference of Parties to the Convention on Biological Diversity (COP 11 event, 8-19 October) on 11 October, 2012 at Hyderabad International Convention Centre, Hyderabad, (ii) delivered a lecture-Molecular Taxonomy: a unified approach from classical towards modern" in "PROMALIA" Lecture Series on Animal Systematics and Biodiversity organized by Zoological Survey of India, Kolkata,

3 September, 2012, (iii) was invited as Guest of Honour at "Mathematical Year '2012'- National Seminar on Mathematics for School & College level to commemorate the 125th Birth Anniversary of Srinivasa Ramanujan." Theme "Mathematics, the need of the hour," organized by Department of Mathematics, Shillong College in collaboration with National Academy of Sciences India- NER Local Chapter, Shillong, 7 December, 2012 (iv) attended National Seminar on Science for shaping the future of India: Focus on the North-Eastern Region," organized by ISCA Shillong Chapter, 25-26 September, 2012, (v) attended "National Lecture Series for Northeast India," organized by ISCA Shillong Chapter and Department of Zoology, NEHU, Shillong, 29 October, 2012.

Prof. B. B. P. Gupta attended (i) INSA-sponsored National Lecture Series for Northeast India, Department of Zoology, NEHU, Shillong, 29-30 October, 2012, (ii) INSA-sponsored National Lecture Series for Remote Areas, Department of Zoology, NEHU, Shillong and K. N. Govt. College, Jowai, 7-8 March, 2013, (iii) Lecture Series on Current Perspectives in Zoological Sciences, Department of Zoology, NEHU, Shillong, 20 March, 2013.

Prof. R. N. K. Hooroo acted as a Co-ordinator in the 36th Refresher Course on "Recent Advances in Zoology" (26 November - 16 December, 2012). All the Professor and Associate professors of this Department acted as resource persons in the Refresher course. She also attended (i) the "Science Awareness Workshop for School and College Students" at the Department of

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Zoology, NEHU, Shillong, 21 September, 2012, (ii) The “National Seminar on Science for shaping the future of India: Focus on North-Eastern Region” organized by the Indian National Science Congress (ISCA) Shillong Chapter 25th in the Department of Zoology, NEHU, Shillong, 26 September, 2012, (iii) the “INSA–sponsored National Lecture Series for Northeast India” in the Department of Zoology, NEHU, Shillong, 29 October, 2012, (iv) The “Lecture Series Programme on Current Perspectives in Zoological Sciences” at the Department of Zoology, NEHU, Shillong, 20 March, 2013.

Prof. N. Saha attended (i) The “Science Awareness Workshop for School and College Students” at the Department of Zoology, NEHU, Shillong, 21 September, 2012, (ii) The “National Seminar on Science for shaping the future of India: Focus on North-Eastern Region” organized by the

Indian National Science Congress (ISCA) Shillong Chapter 25th at the Department of Zoology, NEHU, Shillong, 26 September, 2012, (iii) The “INSA–sponsored National Lecture Series for Northeast India” at the Department of Zoology, NEHU, Shillong, 29 October, 2012, (iv) The “Lecture Series Programme on Current Perspectives in Zoological Sciences” at the Department of Zoology, NEHU, Shillong, 20 March, 2013.

Dr. B. Keshan (i) attended the training course on Real Time PCR, held at Invitrogen Bioservices India Private Limited, Gurgaon, 11-13 April, 2012, (ii) acted as an Executive member (Local Committee) 36th Annual Conference of “Ethological Society of India” and National Symposium on “Live organisms and their expressions in the environment, 26-28 November, 2012, University of Calcutta, Kolkata.

Chapter VI

SCHOOL OF PHYSICAL SCIENCES

Name of the Dean : Prof. H.K. Mukerjee
Telephone Numbers : (O) 0364-2550486, 0364-272-2501
 (R) 0364-2550070, 0364-272-6714
 (M) 9436118439
Email ID : himadrinehu@gmail.com
 himadri@nehu.ac.in

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 chosen 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 got extra financial support from DST-FIST and UGC-SAP. Many faculty members have national and international collaboration.

DEPARTMENT OF CHEMISTRY

Head : Prof. R.A. Lal
Telephone : 2722601; 9436311770(M)
E-mail : 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

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Associate Professor	A. Lemtur, M.Sc. & Ph.D. (NEHU)	Physical Chemistry
	A.K. Chandra, M.Sc. & Ph.D. (Burdwan Univ)	Physical Chemistry
	H. Askari, M.Sc. & Ph.D. (AMU)	Physical Chemistry
	Ghanashyam Bez, M.Sc. & Ph.D. (Gauhati Univ)	Organic 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
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. & Ph.D. (IIT Roorkee)	Physical Chemistry
	Biplab Sarkar, M.Sc. (N. Bengal); Ph.D. (IIT Guwahati)	Physical Chemistry
	Amarta Kumar Pal, M.Sc. (Calcutta); Ph.D. (Kalyani)	Organic Chemistry

* On lien as Pro-Vice-Chancellor, NEHU 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

Brief Statement of Academic Activities

The Department offers the M.Sc. and Ph.D. programmes. 36 M.Sc. and 17 Ph.D. students

were admitted to the Department in 2012-2013. 21 of those admitted were awarded the M.Sc. degree. 10 students were awarded the Ph.D. degree. 1 student qualified for the CSIR NET Fellowship and 1 student got CSIR-SRF. The Department revised its M.Sc. Syllabus, implemented from the 2012 Batch. There are many individual research schemes funded by DST, UGC, CSIR, DRDO, DAE (BRNS), DBT and DIT.

Students' Profile Enrolment Capacity: M.Sc.- 36 Ph.D.- Variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	05	19	12	19	17	24	12	36
Ph.D.	00	06	11	10	07	07	10	17

School of Physical Sciences

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.Sc.	00	17	04	15	06	13	08	21
P.h.D.	00	04	06	07	03	02	08	10

Details of Students Awarded Ph.D. Degree

Name of the student	Title of Thesis	Name(s) of Supervisor(s)/ Joint Supervisor
Mr. Md. Rumum Rohman	“Study on the Synthesis of Substituted Benzils by Employing Selenium Dioxide; Development of New Synthetic Methodologies in Organic Synthesis”	Prof. B. Myrboh (Supervisor) Prof. A. T. Khan (Joint Supervisor)
Ms. Asem Satyapati Devi	“Green Approach to the Synthesis of N-heterocycles via Formylated Active Methylene Compounds”	Dr. R. L. Nongkhaw (Supervisor) Dr. J. N. Viswakarma (Joint Supervisor)
Mr. Mantu Rajbangshi	“Synthesis of Pyrazolopyrimidines/ Pyridines and other Heterocycles and Development of New Synthetic Methodologies”	Prof. B. Myrboh
Mr. Hormi Mecadon	“Synthesis of some substituted Pyrimidines, Pyridazines and other Heterocycles”	Prof. B. Myrboh
Mr. Anup Paul	“Molecular Assemblies based on Organotin(IV) Carboxylates: Synthesis, Structure and Biological Evaluation”	Dr. T. S. Basu Baul
Mr. Venkateswara Rao Anna	“Syntheses and Characterization of n^5 and n^6 -Cyclichydrocarbon Complexes of some Platinum Group Metals Containing N-Heterocyclic Carbenes as Ligands”	Prof. K. M. Rao

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Ms. Saphidabha Lyngdoh Nongbri	“Synthesis and Study of n^5 - and n^6 -Cyclichydrocarbon Complexes of some Platinum Group Metals with O, O- and N, O-Donor Ligands”	Prof. K. M. Rao
Mr. K. Vanlaldinpuia	“Sugar-derived Stereoselective Catalysts and their Applications in Organic Synthesis”	Dr. G. Bez
Mr. Lalthazuala Rokhum	“Synthesis and Applications of Polymer-bound Phosphine Reagents”	Dr. G. Bez
Ms. Takhellambam Inakhunbi Chanu	“Studies on the Emission Behaviour and Photocatalytic Activity of Colloidal Cadmium Sulfide Nano-particles in the Presence of Certain Biomolecules”	Dr. D. P. S. Negi

Placement of Students

Many M.Sc. students passing out from this Department have been placed as Teachers in various 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 as Research Associates.

Molecular Spectroscopy, Laboratory Course in Inorganic Chemistry. Topics in Organic Synthesis, Computer Programming in Chemistry, Organometallic Chemistry, Bioorganic Chemistry, Chemistry of Surfactants.

Courses Conducted

M.Sc.

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

Semester III : Inorganic Chemistry-III, Organic Chemistry-III, Physical Chemistry-III, Applications of Spectroscopic Methods, Laboratory Course in Physical Chemistry, Environmental and Analytical Chemistry, Photochemistry, Bioinorganic Chemistry, Natural Products Chemistry, Principles and Applications of Fluorescence Spectroscopy.

School of Physical Sciences

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 & Crystallographic Techniques in Chemistry, Advanced Inorganic Chemistry, Advanced Organic Chemistry, Advanced Physical Chemistry and Advanced Quantum Chemistry.

Study Tour of Students

Name of Teacher in-charge: Dr. M. K. Sahoo

Places/Institutions visited: (1) Satpada in Chilka (Odisha), an environmentally important site in India, (2) KIIT University, Bhubaneswar, (3) National Aluminum Company, Angul, (4) Some scientifically and historically important places in Kolkata (Science City, Victoria Memorial Museum etc.).

Duration of the tour: 31st January to 14th February 2013

Purpose of visit: To acquire knowledge about some scientifically, historically and environmentally importance places in Odisha and West Bengal.

Seminars/Conferences/Symposia/Extension Programmes, etc.

Organised

National Symposium on Radiation and Photochemistry in collaboration with the Indian Society of Radiation and Photochemical Sciences, held at North-Eastern Hill University, Shillong, during

March 20-22, 2013, with Dr. M. K. Sahoo as Convener.

An *Information Session of the European Union Awareness Raising and Information Campaign* for promotion of Research and Innovation Cooperation with India, held on 19th September 2012 at the Multi-Use Convention Hall, attended by over 200 Faculty and students, and convened by Prof. R. H. Duncan Lyngdoh

Attended:

Prof. R. H. Duncan Lyngdoh delivered an Invited Lecture entitled "Configuration of wobble base pairs with pyrimidines as anticodon wobble bases: Significance for codon degeneracy" at the Department of Chemistry, Pondicherry University, Puducheri, on 22nd October 2012,

Presented an Invited Lecture entitled "Computational chemistry and current research in the chemical sciences" at the *Workshop on Faculty Training and Motivation: Adoption of Schools and Colleges by CSIR Labs* held at St. Anthony's College, Shillong, organized by CSIR-NEIST, Jorhat, on 28th November 2012,

Dr. A. K. Chandra delivered an Invited Lecture at the Symposium on *Historical Aspects of Chemistry and its Future Perspectives* held 15th October 2012 at St. Edmund's College, Shillong.

Dr. M. K. Sahoo presented a paper (co-authored by L. Sayoo, D.B. Naik and R.N. Sharan) titled "UVC induced advanced oxidation and mineralization of Acid blue 29: Generation of eco-friendly effluent" at the *National Symposium on Radiation and Photochemistry*, held at North-Eastern Hill University, Shillong, on March 20-22, 2013.

Publications

Research Papers

Published in India

Chanu, O.B., Borthakur, R., Koch, A., Lal, R.A., Kumar, A. (2012). Synthesis and spectroscopic characterization of heterobimetallic dioxouranium (VI), triomolybdenum(VI) zinc(II), nickel(II), cobalt(II) and manganese(II) complexes derived from bis(2-hydroxy-1-naphthaldehyde)malonoyldihydrazone. *J. Indian Chem. Soc.*, 90:1-14.

Nongbri, S.L., Das, B., Mohan Rao, K. (2012). Study of η^6 -cyclic π -perimeter hydrocarbon ruthenium complexes bearing functionalized pyridyl diketones: isolation of complexes with κ^2 -NNO and κ^4 -NNO bonding modes of ligands. *J. Chem. Sci.*, 124:1365-1375.

Lalthazuala, R., Bez, G. (2012). A practical one-pot synthesis of azides directly from alcohols. *J. Chem. Sci.*, 124: 687-691.

Sanjoy, T.S., Mitra, S. (2013). Modulation of intramolecular charge transfer fluorescence of cinnamic acid derivatives in presence of serum albumins. *ISRAPS Bulletin*, 25:54-63.

Published abroad

Mukhim T., Ismail, K. (2012). Aggregation, counter ion binding and adsorption behaviors of cetylpyridinium chloride in water/glycerol media at 25 °C. *J. Surf. Det.*, 15: 47-51.

Chanda, S., Das, D., Das, J., Ismail, K. (2012). Adsorption characteristics of sodium dodecylsulfate and cetylpyridinium chloride at air/water, air/formamide and air/water-

formamide interfaces. *Colloid Surf. A*, 399:56– 61.

Koya A., Ismail, K., Kabir-ud-din (2012). Micellization and thermodynamic parameters of butanediyl-1,4-bis(tetradecyldimethylammonium bromide) gemini surfactant at different temperatures: Effect of addition of 2-methoxyethanol. *J. Sol. Chem.*, 41:1271-1281.

Singh, O. G., Ismail, K. (2012). Effect of sodium chloride on the aggregation, adsorption and counterion binding behavior of mixtures of sodium dioctylsulfosuccinate and sodium dodecylsulfate in water. *Colloid Surf. A*, 414: 209-215.

Das, D., Dey, J., Chandra, A.K., Thapa, U., Ismail, K. (2012). Aggregation behavior of sodium dioctylsulfosuccinate in aqueous ethylene glycol medium. A case of hydrogen bonding between surfactant and solvent and its manifestation in the surface tension isotherm. *Langmuir*, 28:15762-15769.

Koya, P. Ajmal, K., Ismail, K., Kabir-ud-Din, Wagay, T.A. (2013). Influence of 1,4- dioxane on the aggregation of bis(tetradecyldimethylammonium)butane dibromide gemini surfactant. *J. Mol. Liquids*, 177: 288-294.

Kharbangar, I., Rohman, M.R., Mecadon, H., Myrboh, B. (2012). KF-Al₂O₃ as an efficient and recyclable basic catalyst for the synthesis of 4H-pyran-3-carboxylates and 5-acetyl-4H-pyrans. *Int. J. Org. Chem.*, 2:282-286.

Das, G., Duncan Lyngdoh, R. H. (2012). Role of wobble base pair geometry for codon degeneracy: Purine-type bases at the anticodon wobble position. *J. Mol. Model.*, 18:3505-3820.

- Pachua, Z., Kharnaor, K.S., Duncan Lyngdoh, R. H. (2013). Isomerization of propargyl cation to cyclopropenyl cation: Mechanistic elucidations and effects of lone pair donors. *J. Chem. Sci.*, 125:365-378.
- Ahmed, A., Chanu, O.B., Koch, A., Lal, R.A. (2012). Synthesis, spectroscopic and electrochemical characterization of binuclear dioxomolybdenum complexes derived from disalicyldehyde succinoyldihydrazone. *J. Mol. Struct.*, 1029:161-168.
- Kumar A., Chanu, O.B., Borthakur, R., Lal, R.A. (2012) Characterization of hetero-bimetallic and mixed-valence complexes of molybdenum(V) derived from bis(2-hydroxy-1-naphthaldehyde) malonoyldihydrazone. *J. Struct. Chem.*, 53:866-875.
- Kar, N.K., Singh, M.K., Lal, R.A. (2012). Synthesis and spectral studies on hetero-bimetallic complexes of manganese and ruthenium derived from bis[N-(2-hydroxy-naphthalen-1-yl)methylene] oxaloyldihydrazide. *Arabian J. Chem.*, 5:67-72.
- Chandra, A.K., Zeegers-Huyskens, Th. (2013). Theoretical study of the cooperativity in substituted dimethyl ethers complexed with two water molecules. Red or blue shifts of the $\nu(\text{CH})$ vibrations? *Chem. Phys.*, 410: 66-70.
- Nam, P.C., Chandra, A.K., Nguyen, M. (2013). Performance of an integrated approach for prediction of bond dissociation enthalpies of phenols extracted from ginger and tea. *Chem. Phys. Lett.*, 555: 44-47.
- Chandra, A.K. (2012). Theoretical studies on the kinetics and mechanism of the gas-phase reactions of $\text{CHF}_2\text{OCHF}_2$ with OH radicals. *J. Mol. Model.*, 18:4239-4242.
- Basu Baul, T.S., Dutta, D., de Vos, D., Höpfl, H., Singh, P. (2012). Advancement towards tin-based anticancer chemotherapeutics: Structural modification and computer modeling approach to drug-enzyme interactions. *Curr. Top. Med. Chem.*, 12: 2810-2826.
- Basu Baul T.S., Kundu S., Mitra S., Höpfl H., Tiekink E. R. T., Linden A. (2013). The influence of counter ion and ligand methyl substitution on the solid-state structures and photophysical properties of mercury(II) complexes with (E)-N-(pyridin-2-ylmethylene)- arylamines. *Dalton Trans.*, 42:1905-1920.
- Basu Baul, T.S., Mizar A., Eng, G., Far, R., Linden, A. (2013). Synthesis and structural studies of dimethyltin(IV) 5-[(E)-2-(aryl)-1-diazenyl]quinolin-8-olates. *J. Coord. Chem.*, 66: 813-825.
- Basu Baul, T.S., Kehie, P., Chanu, O.B., Duthie, A., Höpfl, H. (2013). Synthesis and structural studies of diorganotin(IV) compounds derived from (E)-3-hydroxy-2-((2-hydroxybenzylidene)amino)propanoate and (E)-3-hydroxy-2-((1-(2-hydroxyphenyl) ethylidene) amino)propanoate. *J. Organomet. Chem.*, 733: 36–43.
- Basu Baul, T.S., Kundu, S., Höpfl, H., Tiekink, E.R.T., Linden, A. (2013). Synthesis, crystal structures and optical properties of mercury(II) halide compounds with (E)-N-(pyridin-2-ylmethylidene)arylamines: Effect of ligand R-group upon structure, *Polyhedron*, 55: 270–282.
- 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. *Sep. Purif. Technol.*, 106: 110-116.
- Sahoo, M.K., Marbaniang, M., Sinha, B., Naik, D.B., Sharan, R.N. (2012). UVC induced TOC removal studies of Ponceau S in the presence of oxidants: Evaluation of electrical energy efficiency and assessment of biotoxicity of the treated solutions by *Escherichia coli* colony forming unit assay. *Chem. Eng. J.*, 213:142-149.
- Sahoo, M.K., Sinha, B., Marbaniang, M., Naik, D.B., Sharan, R.N. (2012). Transition metal catalyzed mineralization of Calcon and bioassay of the mineralized solutions by *Escherichia coli* colony forming unit assay. *Chem. Eng. J.*, 209:147-154.
- Mitra, S., Singh, T.S. (2013). Studies on the inclusion complexation between intramolecular charge transfer probe *trans*-ethyl *p*-(dimethylamino) cinamate and β -cyclodextrin in presence of ionic and non-ionic surfactants", *J. Luminescence*, 143:120-127.
- Moyon, N.S., Islam, M.M., Phukan, S., Mitra, S. (2013). Fluorescence modulation and associative behavior of lumazine in hydrophobic domain of micelles and bovine serum albumin", *J. Photochem. Photobiol. B: Biol.*, 121:37-45.
- Phukan, S., Saha, M., Pal, A.K., Mitra, S. (2013). Synthesis and fluorescence behavior of photoactive polyhydroquinoline derivatives: A combined experimental and DFT study. *J. Mol. Struct.*, 1039:119-129.
- Saha, M., Phukan, S., Jamatia, R., Mitra, S., Pal, A.K. (2013). Solvent free Ni-nanoparticle catalyzed greener synthesis and photophysical studies of novel 2H-imidazo[2,1-b] phthalazine-trione derivatives. *RSC Advances*, 3:1714-1721.
- Phukan S., Mishra, B., Chandra Shekar, K.P., Kumar, A., Kumar, D., Mitra, S. (2013). Fluorescence spectroscopic studies on substituted porphyrins in homogeneous solvents and cationic micellar medium. *J. Luminescence*, 134:232-239.
- Phukan, S., Mitra, S. (2012). Fluorescence behavior of ethidium bromide in homogeneous solvents and in presence of bile acid hosts. *J. Photochem. Photobiol. A: Chem.*, 244:9-17.
- Mitra, S., Chandra, A.K., Gashnga, P.M., Jenkins, S., Kirk, S.R. (2012). Exploring hydrogen bond in the excited state leading toward intramolecular proton transfer: detailed analysis of the structure and charge density topology along the reaction path using QTAIM. *J. Mol. Model.*, 18:4225-4237.
- 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. *OCAIJ*, 9:257-266.
- Saha, M., Vishwakarma, J.N., Nongkhaw, R.L. (2012). A facile, efficient and green protocol for the synthesis of 1-(2-hydroxyethyl)-3-alkyl/aryl/aralkyl/hydroxyethyl-5-oxo-octahydroquinazolines and 3,3'-(alkanediyl)bis(1-(2-hydroxyethyl)-5-oxo-octahydroquinazolines). *J. Chem. Sci.*, 125:1-5.
- Negi, D. P. S. (2013). Photocatalytic degradation of rhodamine B dye using histidine-

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stabilized CdS quantum dots. *Asian J. Chem.*, 25:S1-S4.

Mithu, S., Nandi, S., Pal, A.K. (2012). Pd (0) NPS: A novel and reusable catalyst for the synthesis of bis(heterocycl)methanes in water. *RSC Advances*, 2: 6397-6400.

Mithu, S., Pal, A.K. (2012). Palladium (0) nanoparticles: A novel and reusable catalyst for the synthesis of various pyran derivatives. *Adv. Nanoparticles*, 1:61-64.

Mithu, S., Pal, A.K. (2013). Fermented baker's yeast: an efficient catalyst for the synthesis of pyran derivatives in water at room temperature. *Synth. Commun*, 43:1708-1711.

Books/Book Chapters/Proceedings

Chanda, S., Singh, O.G., Ismail, K. (2012). Micellization characteristics of sodium dioctylsulfo-succinate. An overview. *In Recent Trends in Surface and Colloids Science*, B. K. Paul and S. P. Moulik (Eds), World Scientific Pubs., Singapore, Chapter 9, p. 131-142.

Funds Received from Agencies including NEHU/UGC

- (a) From Individual Research Projects:
Research Projects funded by
DST/DAE/BRNS/CSIR/UGC/
DIT/DBT: Rs 132.0 lakhs
- (b) DST-PURSE: Rs 6.00 lakhs
- (c) Fund Received for holding
Symposium/Conference
For *National Symposium on Radiation
and Photochemistry*: Rs 6.00 lakh

Research Projects

New Projects

1. "Spectrofluorimetric investigation on model nitrogen containing heterocyclic drugs and their interaction with DNA nucleotides". Principal Investigator: Dr. S. Mitra. Sponsored by CSIR, New Delhi. Grant: Rs 13.50 lakhs
2. "Development of AChE (acetylcholine esterase) inhibitor for Alzheimer's disease: screening, designing, synthesis and biological validation using chemical library and North-East Indian plants". Co-Investigator: Dr. S. Mitra. Sponsored by DBT. Grant: Rs 100.00 lakhs.
3. "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. Grant: Rs 52.00 lakhs.
4. "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. Grant: Rs 15.30 lakhs.
5. "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. Grant: Rs 20.90 lakhs.
6. "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 DST SERB. Grant: Rs 26.00 lakhs.

7. "Protein-protein interface targeted drug designing". Co-Investigator: Dr. A. K. Pal. Sponsored by DBT, New Delhi. Grant: Rs 75.00 lakhs.

Ongoing:

"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.

"Computational elucidations on codon-anticodon pairing and the genetic code". Principal Investigator: Prof. R.H. Duncan Lyngdoh. Sponsored by CSIR, New Delhi.

"New synthetic aspects and catalytic study of late transition metal complexes bearing homo and heteroscorpionate and N-heterocyclic carbenes as ligands". Principal Investigator: Prof. K. M. Rao. Sponsored by UGC, New Delhi.

"Syntheses, reactivity and structural studies of platinum group metal complexes containing h^5 and h^6 -cyclic hydrocarbons 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: Dr. A. K. Chandra. Sponsored by CSIR, 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.

Completed

"Studies on fluoride contamination of drinking water in the region and development of a cost effective method for defluoridation using indigenous materials". Principal Investigator: Prof. K. Ismail. Sponsored by DRDO.

"Spectroscopy and dynamics of photoinduced processes in homogeneous and biomimetic environments". Dr. S. Mitra. Sponsored by UGC, New Delhi.

"Comparative studies on degradation and mineralization of some azo dyes by radiolysis and photolysis". Principal Investigator: Dr. M.K. Sahoo. Sponsored by BRNS, Mumbai.

Academic Collaborations

Prof. K. Ismail has academic collaboration with (i) Dr. P.A. Hassan and Dr. V.K. Aswal, Bhabha Atomic Research Centre, Mumbai, and (ii) Dr. S. Mahiuddin, North-East Institute of Science and Technology, Jorhat, Assam.

Prof. R.A. Lal is in collaboration with Dr. A. Kumar, Faculty of Science and Agriculture, The University of West Indies.

Prof. K. M. Rao has academic collaboration with Dr. Therrien Bruno, Institut de Chimie, Université de Neuchâtel, Switzerland. and Dr. Yurij Mozharivskyj, McMaster University, Ontario, Canada.

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Dr. A. K. Chandra has research collaboration with the Quantum Chemistry Group of the University of Leuven, Belgium.

Dr. T. S. Basu Baul has academic collaboration with Università di Palermo, Italy; Virije Universiteit Brussel, Belgium; University of Zurich, Switzerland; Pharmachemie BV, Haarlem, The Netherlands; Università di Camerini, Italy; The University of Texas at San Antonio, USA; University of Malaya, Malaysia; University of the District of Columbia, USA; Universiti Sains Malaysia, Malaysia.

Dr. M. K. Sahoo is collaborating with Prof. R. N. Sharan, NEHU, and with Dr. D. B. Naik, BARC, Mumbai.

Dr. S. Mitra has research collaboration with Dr. D. Kumar, BITS, Pilani, with Dr. A. Bhasikuttan, BARC, Mumbai, and with Dr. S. Jenkins, College of Chemistry and Chemical Engineering, Hunan Normal University, Changsha, Hunan 410081, China

Honours/Awards/Recognition

Prof. R. H. Duncan Lyngdoh was a Member of the Expert Committee for Evaluation of Major Research Projects in Chemistry and Polymer Sciences, University Grants

Commission, which met at New Delhi in August 2012 and January 2013.

Other Activities

A Refresher Course entitled "Recent Advancements in Chemistry" was conducted by the Department from 18th March to 7th April 2013 with Prof. A. K. Chandra as Coordinator. A total of 19 College teachers from different states participated in the programme.

Prof. R. H. Duncan Lyngdoh attended the *Theoretical Chemistry Symposium 2012* hosted by Department of Chemistry, IIT, Guwahati, on 19-21 December 2012.

Dr. M. K. Sahoo attended the *Second International Conference on Advanced Oxidation Processes* held at School of Environmental Sciences, Mahatma Gandhi University, Kottayam, Kerala, on October 5-8, 2012, where his students presented 2 Posters.

Mr. B. Sinha, Research Scholar, received the Young Investigator Award at the *Second International Conference on Advanced Oxidation Processes*, School of Environmental Sciences, Mahatma Gandhi University, Kottayam, Kerala, October 5-8, 2012.

NEHU Annual Report 2012-2013

DEPARTMENT OF MATHEMATICS

Head : Prof. M. Ansari
Telephone : 2722713 Mobile : 9436163816
E-mail : mansari@nehu.ac.in

Faculty:

Designation	Name and Qualification	Specialization
Professor	H.K. Mukerjee, D.Phil. (Allahabad University)	Algebraic & Differential Topology
	M. Ansari, Ph.D. (Gorakhpur University)	Theory of Relativity & Cosmology
	K.K. Singh, Ph.D. (Gorakhpur University)	Fluid Dynamics
	A.K. Das, Ph.D. (N.E.H.U.)	Group Theory
Associate Professor	1. P.K. Saikia, Ph.D. (Wisconsin University)	Number Theory
Assistant Professor	1. A.M. Buhphang, Ph.D. (N.E.H.U.)	Ring Theory
	2. A.T. Singh, Ph.D. (N.E.H.U.)	Algebraic & Differential Topology
	3. Sanghita Dutta, Ph.D. (N.E.H.U.)	Rings of Continuous Functions
	4. John Paul Jala Kharbhih, M.Sc. (N.E.H.U.)	Rings of Continuous Functions
	5. Ph. Chinglensana, M. Sc. (Delhi University)	Algebraic Topology

NBHM visiting Professors

S.S. Khare, D.Phil. (Allahabad University) Algebraic Topology
M.B. Rege, Ph.D. (Bombay University) Ring Theory

Thrust Area of Research:

Thrust areas of research in the department in alphabetical order are: Algebra, Algebraic and Differential Topology, Cosmology, Number Theory, and Oceanography.

Brief Statement of Academic Activities:

- (i) In the year under review, the department continues to give quality and rigorous M.Sc./M.Phil. and Pre Ph.D. courses of different subjects of mathematics like Algebra, Analysis, Complex Function Theory, Differential Equations, Linear Algebra, Mechanics, Number Theory, Numerical Analysis and Computer Programming, Oceanography, Relativity and Cosmology, Topology, Algebraic

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Topology, Differential Topology, Commutative Algebra, Character theory, p -adic analysis.

- (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 obtaining UGC/CSIR NET

Junior Research Fellowship and NET Lecturership.

- (iv) Our department continues to follow the culture of all the good universities of the world in 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: P.G. - 36 M.Phil. - variable Ph.D. - variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	00	18	18	22	14	19	17	36
M.Phil	00	00	01	01	00	00	01	01
Ph. D.	01	07	07	12	03	06	09	15

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non-Meghalaya	TOTAL
M.Sc.	00	17	01	11	07	14	04	18
Ph. D.	00	00	01	01	00	00	01	01

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name of Supervisor
Angom Tiken Singh	Some problems in Rational Homotopy theory related to structures and invariants of spaces	Prof. Himadri Kumar Mukerjee

Courses Conducted during the year

M.Sc.

Semester I : Linear Algebra, A.M.E.S., Analysis I, Classical Mechanics, O.D.E.

Semester II : Analysis II, Algebra, Topology, P.D.E.

Semester III : Computer Programming, E.N.T., Theory of Field Extensions, Tensor Analysis, C.F.T., Diff. Geometry, Programming in C.

Semester IV : Theory of Relativity, C.N.A., Numerical Analysis (Practical), Ring Theory, Algebraic Topology, p -adic Analysis

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Study Tours/ Field Trips of students:

Name(s) of the Teacher(s) in-charge:
Phanjoubam Chinglensana

Places/Institutions visited: Darjeeling & Sikkim. World Heritage sites in Darjeeling, St. Paul School, Sikkim University.

Duration of the tour/ trip: 13 days

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized:

Refresher Course in Mathematics, NEHU held in March, 2013

Organised a Symposium on “Algebraic & Differential Topology,” in the Annual Conference of IMS, held at BHU from 22nd January, to 25th January, 2013.

Attended

Dr. P.K. Saikia delivered six lectures in Refresher course in Mathematics held in NEHU on March, 2013.

Prof. H.K. Mukerjee delivered two invited lectures, “On Kervaire invariant one problem” at the Workshop on homotopy theory, May 14-19, 2012 preparatory to the Panorama lectures by Mike Hopkins, May 21-25, 2012, at Indian Statistical Institute, Kolkata.

Prof. H.K. Mukerjee delivered three invited lectures “Lecture on Algebraic Topology, Classification of Surfaces and Dynamical Systems”, at the Mathematics Department, Jadavpur University, Jadavpur, Kolkata, during January 7- 12, 2013.

Prof. H.K. Mukerjee delivered an invited lectures “On homology and Dynamical

systems”, at the 78 th Annual Conference of the Indian Mathematical Society, BHU, Varanasi, January 22 - 25, 2013. He also chaired a session.

Prof. H.K. Mukerjee delivered six lectures “Ważewski’s and Conley’s contributions to Dynamical Systems”, at the Refresher Course in Mathematics Department NEHU, Shillong, during March-April, 2013.

Dr. S. Dutta presented a paper on “Some properties of an Almost continuous function” during the National Seminar on Contemporary Issues of Math. & Stat. NSCIMS on March 22, 2013 at Gargaon College.

Dr. A.M. Buhphang presented a paper on “Abelian modules over matrix rings” during the National Conference on Algebra & Number Theory NCANT-2012 on August 17, 2012 at Cochin Univ. of Sc. & Tech.

Dr. A. M. Buhphang presented a paper on “Endomorphism rings of reduced modules” during the National Seminar on Current Research & Developments in Mathematics & Computing CRDMC-2012 on Oct. 3, 2012 at Aliah University.

Dr. A. M. Buhphang presented a paper on “Some properties of reduced modules” during the International Conference on History and development of Math. Sc. & Symposium on Nonlinear Analysis ICHDMS-2012 on Nov. 23, 2013 at Maharishi Dayadanand Univ. Rohtak.

Dr. A. M. Buhphang presented a paper at the National Seminar on Mathematics, “The need of the hour” organized by Shillong College, Shillong.

Dr. A. M. Buhphang presented a paper on “Left SDF rings” at the 2nd International

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- Conference on Mathematical Sc. & Applications, on Dec. 16, 2012 at India Intl. Centre, New Delhi.
- Dr. A. M. Buhphang presented a paper on “Abelian endomorphism rings of some modules” during the 6th Intl. Conf. on Mathematical Sciences & Tech. MSAST-2012, on Dec. 23, 2012 organized by Institute for Math., Bioinformatics, Information Tech & Comp. Sc., Kolkata.
- Dr. A. M. Buhphang presented a paper “On McCoy modules” during the 100th Indian Sc. Congress held at Kolkata Univ. on Jan. 5, 2012.
- Dr. A. M. Buhphang presented a paper during the National Conf. on Recent Advances in Mathematics & its Applications at Indian School of Mines, Dhanbad, on Feb. 15, 2013.
- Dr. A. M. Buhphang presented a paper during the National Conf. on Approaches of Basic Sc. Towards the development of Engineering & Tech. at Don Bosco College of Engg. And Tech. on March 1, 2013.
- Dr. A. M. Buhphang presented a paper “On n-Armendariz rings and modules” during the National Seminar on Contemporary Issues of Math. & Stat. NSCIMS on March 22, 2013 at Gargaon College.
- Dr. A. M. Buhphang presented a paper on “r-McCoy and m-McCoy modules” during the National Seminar on Advances in Research in Physical Sc. at Cachar College, Silchar.
- Dr. A.T. Singh presented a paper on “Some properties of regular rings” during the National Conference on Algebra & Number Theory NCANT-2012 on August 17, 2012 at Cochin Univ. of Sc. & Tech.
- Dr. A.T. Singh presented a paper “On the rank of $4 \times 3 \times 3$ -tensors” during the National Seminar on Current Research & Developments in Mathematics & Computing CRDMC-2012 on Oct. 3, 2012 at Aliah University.
- Dr. A.T. Singh presented a paper on “Rank of some tensors” during the International Conference on History and development of Math. Sc. & Symposium on Nonlinear Analysis ICHDMS-2012 on Nov. 23, 2013 at Maharishi Dayadanand Univ. Rohtak.
- Dr. A.T. Singh presented a paper on “Some properties of Armendariz modules” at the 2nd International Conference on Mathematical Sc. & Applications, on Dec. 16, 2012 at India Intl. Centre, New Delhi.
- Dr. A.T. Singh presented a paper on “Some properties of Gaussian rings” during the 6th Intl. Conf. on Mathematical Sciences & Tech. MSAST-2012, on Dec. 23, 2012 organized by Institute for Math., Bioinformatics, Information Tech & Comp. Sc., Kolkata.
- Dr. A.T. Singh presented a paper during the National Conf. on Recent Advances in Mathematics & its Applications at Indian School of Mines, Dhanbad, on Feb. 15, 2013.
- Dr. A. T. Singh presented a paper “On Gaussian rings” during the National Seminar on Contemporary Issues of Math. & Stat. NSCIMS on March 22, 2013 at Gargaon College.
- Dr. A.T. Singh presented a paper on “Armendariz modules” during the National Seminar on Advances in Research in Physical Sc. at Cachar College, Silchar.

Publications:

Research Papers

Published in India

- Buhphang A.M. (2013), Left SDF rings, *American Journal of Mathematics & Science*, No.1, Vol 2, 275-279
- Buhphang A.M. (2013), Endomorphism rings of Abelian Modules, *Proceedings of the national Conference on Recent Advances in Mathematics and its applications*. (RAMA-2013), pp 189-200
- Singh A.T. (2013), Some properties of Armendariz modules, *American Journal of Mathematics & Sciences*, No.1, Vol 1, 269-274
- Singh A.T. (2013), On ps-gaussian Rings, *Proceedings of the national Conference on Recent Advances in Mathematics & its applications*. . (RAMA-2013), pp 412-417
- Singh K.K. & Nath B. (2012), Magnetogasdynamic shock wave in a non-ideal gas under a gravitational field with heat conduction and radiation heat flux, *International Journal of Physics and Mathematical Sciences*, No. 2, Vol 2, 105-119.
- Singh K.K. & Gogoi S. (2012), A self-similar flow of a mixture of a non-ideal gas and small solid particles behind a spherical shock wave in the presence of a gravitational field, *International Journal of Physics and Mathematical Sciences*, No. 3, Vol 2, 9-21.
- Singh K.K. & Gogoi S. (2012), Self-similar flow of a dusty gas behind a shock wave with heat conduction and radiation heat flux under a gravitational field, *Journal of Rajasthan Academy of Physical Sciences*, No. 4, Vol 11, 317-338

Singh K.K. & Nath B. (2013), Self-similar cylindrical ionizing shock wave in a rotating axisymmetric gas flow, *Indian Journal of Science and Technology*, No. S3, Vol 6, 17-25.

Khare S.S. (2012), Span of specific manifolds, *The Mathematics Student*, Vol 81, 1-25.

Published Abroad

- Das A.K. & Nath R.K. (2012), A generalization of commutativity degree of finite groups, *Communications in Algebra*, No. 6, Vol 40, 1974-1981.
- Singh K.K. & Vishwakarma J.P. (2013), Self-similar flow of a mixture of a non-ideal gas and small solid particles behind a shock wave in presence of heat conduction, radiation heat flux and a gravitational field, *Meccanica*, No. 1, Vol 48, 1-44.
- Singh K.K. & Nath B. (2012), Magnetogasdynamic shock waves in a non-ideal gas with heat conduction and radiation heat flux, *Journal of Engineering Physics and Thermophysics*, No. 5, Vol 85, 1179-1188.
- Singh K.K. (2012), A self-similar flow behind a cylindrical shock wave in a self-gravitating rotating gas with heat conduction and radiation heat flux, *Modelling, Measurement and Control-B*, No. 1-2, Vol 81, 61-81.
- Baishya S.J. (2013), On finite groups with specific number of centralizers, *International Electronic Journal of Algebra*, No. 4, Vol 2, 53-62.
- Baishya S.J. (2013), On Finite C-tidy groups, *International Journal of Group Theory*, No. 4, Vol 2, 39-41.

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Funds Received from Agencies other than NEHU

Agency	Amount (in Rs lakh)
National Board for Higher Mathematics (Dept. of Atomic Energy, Govt. of India,) Library grant to Mathematics	11.25

Other Activities

Prof. M. B. Rege organized a week-long training programme for Indian National Mathematical Olympiad candidates in the Dept. of Mathematics, NEHU, Shillong, during January 28 to February 2, 2013.

Prof. H.K. Mukerjee was invited to attend ICTS programme groups, geometry and dynamics, held during December 3-16, 2012, at the Almora Campus, Kumaun University, Uttarakhand, Almora.

Prof. S.S. Khare gave two invited talks on “Taxicab Geometry and Calculus” in the Lecture Workshop on Topology jointly organized by all the three academics: Indian Academy of Sciences, Bangalore, Indian National Science Academy, New Delhi. And National Academy of Sciences, Allahabad on 29.6.2012 at Allahabad.

Prof. S.S. Khare gave talk on “Mathematics behind some number tricks and playing cards tricks” in the special summer School in NEHU organized by UGC Academic Staff College, NEHU, Shillong on 29.8.2012.

Prof. S.S. Khare gave an invited talk titled “Role of Mathematics in shaping future of

India” in the National Seminar on Science for shaping the future of India. Focus on N.E. Region, Organized by Indian Science Congress, Local chapter, Shillong on 26.9.2012.

Prof. S.S. Khare gave a key note address titled “Mathematics phobia and its remedy” in the Seminar to celebrate the National year of Mathematics, 2012 organized by Jail Road H.E. School, Shillong on 17.10.2012 to commemorate 125th Birth year of S. Ramanujan.

Prof. S.S. Khare gave an Invited talk titled “Playing with Mathematics”, in the seminar of Mathematics held on 16.11.2012, at Mawsynram Govt. H.E. School to celebrate the National year of Mathematics, 2012 and to commemorate 125th Birth year of S. Ramanujan.

Prof. S.S. Khare gave an Invited talk “Prof. B.L. Sharma Memorial lecture” on 22.11.2012 in the National Conference on Mathematics, in Ranchi, organized by the Jharkhand Mathematical Society.

Prof. S.S. Khare gave an Invited talk titled “Vector Fields on some standard Manifolds” on 23.11.2012 in the National Conference on Mathematics in Ranchi organized by the Jharkhand Mathematical Society.

Prof. S.S. Khare gave an Invited talk on “Recent Trends in finite group actions, cobordism and fixed point set” on 24.1.2013 in the Annual Conference of IMS held at BHU.

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DEPARTMENT OF PHYSICS

Head : Prof. B.M. Jyrwa
Telephone : 2722830
E-mail : bmjyrwa@nehu.ac.in

Faculty

Designation	Name and Qualifications	Specialization
Professor	P. Shukla, M.Sc. (IIT, Delhi), Ph.D. (Temple)	Solid State Physics Theory
	P. N. Pandita, M.Sc. & Ph.D. (Kashmir)	High Energy Physics Theory
	B. M. Jyrwa, M.Sc. & Ph.D. (NEHU)	Nuclear Physics Theory
	P. Nongkynrih, M.Sc. & Ph.D. (NEHU)	Nuclear Physics Experiment
	S. Kumar, M.Sc. (BHU), Ph.D. (Utkal)	High Energy Physics, Theory
	D. T. Khathing*, M.Sc. (Delhi), D. Phil. (Calcutta)	Nuclear Physics Experiment
Associate Professor	Y. N. Tiwari, M.Sc., Ph.D. & LIB. (Patna)	Atomic and Molecular Physics, Theory
	A. Saxena, M.Sc. (Rohilkhand), M.Phil. (Meerut), Ph.D. (NEHU)	Nuclear Physics Experiment
	M. C. Mahato, M.Sc. (Ranchi), Ph.D. (IISc Bangalore)	Solid State Physics Theory
	S. S. Khatri, M.Sc. & Ph.D. (NEHU)	Laser Physics Experiment
	A. K. Biswas, M.Sc. (IIT Kharagpur), Ph.D. (IP, Bhubaneswar)	High Energy Physics Theory
Assistant Professor	S.S. Pohlong, M.Sc. & Ph.D. (NEHU)	Solid State Physics

*On lien as Vice-Chancellor, Central University of Jharkhand

Thrust Areas of Research

Solid State Physics (Theory), High Energy Physics (Theory), Laser Physics (Experimental), and Nuclear Physics (Experiment and Theory).

Brief Statement of Academic Activities

The main academic activities of the Department include the M.Sc. (Physics) Course for a class of 32 students each in the First and Second years, and the Ph.D. Program. During the academic session 2012-13, the Department started Ph.D.

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course work. Besides teaching M.Sc. and Ph.D. courses, faculty members guide Ph.D. scholars and also pursue their own research work. Faculty

members have visited reputed national and international institutions to carry out research collaborations and give talks on their research contributions.

Students Profile: Enrolment capacity M.Sc.- 32; Ph.D.- Variable

Actual Admissions

Degree	Male	Female	ST	SC	Gen	Meghalaya	Non-Meghalaya	Total
M.Sc.	19	13	27	02	03	17	15	32
Ph.D.	06	05	09	00	02	09	02	11

Degrees Awarded

Degree	Male	Female	ST	SC	Gen	Meghalaya	Non-Meghalaya	Total
M.Sc.	15	07	20	00	02	20	12	22
Ph.D.	04	01	02	00	03	03	02	05

Courses Conducted

M.Sc.

- 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 on Solid State Physics II, High Energy Physics, Laser Physics, and Nuclear Physics II.

Ph.D.

Research Methodologies in Physics, Advanced Statistical Mechanics, and Advanced Nuclear Physics.

Study Tours/Field Trips of Students

Name of the Teacher in-charge: Dr. A. Saxena

Places/ Institutions visited: Delhi & Agra

Duration of the tour/ trip: January 14-26, 2013.

Purpose of visit: Inter University Accelerator Centre (Nuclear Science Centre) to familiarize students with Nuclear Energy Research.

Seminars/Conferences/Workshops/Extension Programmes

Attended

Prof. P. Shukla was a Member, Advisory Committee, for the *International Conference on Condensed Matter and*

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- Biological Systems* (CCMB 13) held Jan 11-14, 2013, at Banaras Hindu University, Varanasi, India and chaired a Session;
- Delivered an Invited Talk entitled “Non-equilibrium Phenomena in Complex Systems” (Foundation Day Lecture) at the Physics Academy of the North East, Guwahati, on April 6, 2012;
- Gave Invited Talks on “Effect of Quenched Disorder on Domains and Interfaces” (January 29 2013) and on “Voter Model Dynamics: Coarsening and Persistence” (January 31 2013) at the *Condensed Matter Physics Seminar* held at Harish-Chandra Research Institute, Allahabad (January 2013);
- Prof. S. Kumar chaired a Session and delivered an Invited Lecture in the *National Conference on New Approaches of Basic Sciences Towards the Development of Engineering and Technology* at Don Bosco College of Engineering and Technology, Guwahati on 2nd March, 2013.
- Saxena, A., presented a paper on “Measurement of Radon activity concentration and Radium content in soil samples of Nongrah, Shillong” at *99th Indian Science Congress*, Bhubaneswar, 3-7 January 2012.
- Presented paper ‘Relationship between the radon variation in soil-gas and active tectonics of the Shillong Plateau’, at *AOGS-AGU (WPGM) Joint Assembly* held at Singapore, 2012.
- Presented a paper ‘Radon in potable water of Shillong, Meghalaya, India’, at the *34th International Geological Congress*, held at Brisbane, Australia in August 2012.
- Presented paper ‘Radon variation in soil-gas and seismotectonics of the Shillong Plateau’ ed at *34th International Geological Congress*, held at Brisbane, Australia in August 2012.
- Presented two papers ‘Partial and total single electron capture cross sections in collisions of $^3\text{He}^{2+}$ ions with CO molecule in the keV region’ and ‘Total double electron capture cross sections in collisions of $^3\text{He}^{2+}$ ions with CO molecule in the keV region’, at *National Conference on New Approaches of Basic Science towards the Development of Engineering and Technology* held at Guwahati, Assam in March, 2013.

Publications

Published Abroad

- Reenbohn, W. L., Pohlong, S.S., Mahato, M. C. (2012). Periodically driven under-damped periodic and washboard potential systems: Dynamical states and stochastic resonance. *Phys. Rev. E* 85:0311144-1–0311144-12.
- Saikia S., Jayannavar, A. M., Mahato, M. C. (2012). Stochastic resonance in periodic potentials. *Phys. Rev. E*, 83:06112-1–06112-9.
- War, S. A., Nongkynrih, P., Khathing, D. T., Iongwai, P.S., Dkhar, L. M. (2012), Assessment of the radiological hazards of sand sediments collected from streams and streamlets of the uranium deposit areas in West Khasi Hills District, Meghalaya, India. *Environ. Earth Sci.*, 65:1695-1703.
- Badwar, S., Jyrwa, B. et al. (2012). Determination of sodium and aluminum in the glass sample by neutron activation technique. *J. Basic Appl. Phys.*, 1:69-72
- Ghosh, R., Jyrwa, B. et al. (2013). Determination of potassium and magnesium in the glass sample by neutron activation technique. *J. Basic Appl. Phys.*, 2:24-27.

Published in India

- Kumar, S., Patra, P. K. (2013). Nonlinear approach to explain mechanical properties of carbon nanotubes. *Indian J. Sci. Technol.*, 6:5-6.
- Tiwari, Y.N. (2012). High energy charge transfer cross sections in $H^+ - H(1s)$ collisions. *Int. J. Phys. Applic.*, 4:111-122.
- Tiwari, Y.N. (2012). Charge exchange cross sections in high energy proton-deuterium collisions. *Indian J. Energy*, 1:17-19.
- Tiwari, Y.N. (2012). Electron capture and elastic scattering in high energy $D^+ + D(1s)$ collisions. *Indian J. Energy*, 1:23-26.
- Tiwari, Y.N. (2012). Charge transfer cross-sections in $H^+ - Li(2s)$ collisions. *J. Appl. Phys.*, 1:08-13.
- Tiwari, Y.N. (2012). Electron capture cross sections in $D^+ + H(1s) + H^+$ collisions. *J. Appl. Phys.*, 1:39-42.
- Khatri, S. S. (2013). NO_2 ion in KI crystal and its motional states. *J. Chem. Bio. Phy. Sci. C: Physical Sciences*, 3:1457-1460.
- Saxena, A., Sharma, Y. (2013). Stopping power of aluminium for energetic ^{238}U ions using nuclear-track technique. *Indian J. Sci. Technol.*, 6:59-62.
- Gewali, J.P., Saxena, A. (2013). Annealing characteristics of 11.56 MeV/u ^{58}Ni irradiated Makrofol-E detector. *Indian J. Sci. Technol.*, 6:63-66.
- Maibam, D., Sharma, Y., Saxena, A., Walia, D. (2013). Radon activity in soil-air environment of forest and urban residential areas of Shillong, Meghalaya. *Indian J. Sci. Technol.*, 6:141-145.

Maibam, D., Sharma, Y., Shylla, K., Saxena, A., Walia, D. (2013). Radon activity in and around coal mining areas of Khliehriat (Meghalaya) and its potential health hazards. *Indian J. Sci. Technol.*, 6:146-151.

Maibam, D., Sharma, Y., Brahma, T., Saxena, A., Walia, D. (2013) Potential Alpha energy concentration in schools of Shillong, India. *Indian J. Sci. Technol.*, 6:152-155.

Book Chapter

Shukla, P. (2012). Domains and interfaces in random fields, in *Texts and Readings in Physical Sciences-II: The Physics of Disordered Systems*, Eds. G. I. Menon and P. Ray (Hindustan Book Agency), chapter 5, pp 141-157.

Funds Received

Prof. M. C. Mahato received Rs. 3,26,700/- from BRNS (Dept of Atomic Energy) as grant-in-aid for a Research Project.

Prof. B. M. Jyrwa received Rs. 4,36,025/- from BRNS (Dept of Atomic Energy) as grant-in-aid (2nd instalment) for a Research Project.

Research Projects

Completed

“EXFOR Compilation of Nuclear Data”. Principal Investigator: Prof. B. Jyrwa. Sponsored by BRNS-DAE (completed as on May 2013).

“Radon monitoring in groundwater of the Northeastern India region to study neotectonic activities and health hazards”. Principal Investigator: Dr. A. Saxena. Sponsored by BRNS-DAE.

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Ongoing

“Study of transport properties in driven periodic systems”. Principal Investigator: Prof. M. C. Mahato. Sponsored by BRNS-DAE.

Academic Collaborations

Prof. B. M. Jyrwa collaborated with Dr. H. Naik, Radiochemistry Division, and with Dr. Suryanarayana, Nuclear Physics Division, BARC, Mumbai, in generating nuclear data for compilation.

Prof. Satish Kumar collaborated, for research work with Dr. P.K. Patra, Centre for Science Education, NEHU, Shillong.

Prof. A. Saxena has collaborations with (a) R. J. Buenker and H. P. Liebermann, Bergische University, Wuppertal, Germany; (b) D. Walia, Department of Environmental Science, NEHU, Shillong; (c) K. K. Dwivedi (Vice-Chancellor, Apeejay Satya University, Gurgaon, Haryana).

Honours/Awards/Recognitions

Prof. P. Shukla was appointed as Member of the Editorial Board for *Pramana: Journal of Physics* (ISSN 0304-4289) in January 2013.

Was chosen as mentor for Dr Soumik Banerjee under the Dr D S Kothari Postdoctoral Fellowship awarded by the University Grants Commission, Govt. of India (February 2013).

Other Academic Activities

Prof. P. Shukla delivered a lecture at the Science Academies Refresher Course in Statistical

Physics, held at Nehru Science and Arts College, Kanhangad, Kerala, from April 29 to May 12, 2012;

Delivered an Invited Lecture on “Nanotechnology in Physics and Biology”, at Lady Keane College, Shillong, on November 5, 2012;

Was Chairman, Steering Committee for the 20th Convocation of the North-Eastern Hill University held on November 6, 2012;

Delivered an Invited Talk on “The Character of Barkhausen Noise” at the School of Physical Sciences, Mizoram University, Aizawl, on March 15, 2013.

Prof. B. Jyrwa with two Project Assistants attended and participated in (a) the *Workshop on Evaluation of Nuclear Structure and Decay Data* held at VECC, Kolkata, 26-29 November 2012; and (b) the *Workshop on EXFOR Compilation* held at BHU, Benares, held 18-22 February, 2013.

Dr. Y. N. Tiwari (a) attended the 3rd DAE-BRNS *Symposium on Atomic and Molecular and Optical Physics* held December 14-17, 2012, at IISER Kolkata, Mohanpur, Nadia, West Bengal; (b) attended the *National Conference on Recent Developments in Mathematics and Related Areas* held December 22-24, 2012, Post-Graduate Department of Mathematics, Patna Science College, Patna University, Patna.

Attended the *Conference on Global Meet for a Resurgent Bihar* in the Science Education Section (held 17-19 February, 2012).

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DEPARTMENT OF STATISTICS

Head : Dr. B. K. Gupt
Telephone : 2722901.
E-mail : hodsta@nehu.ac.in, statisticsnehu@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	G. Das, M.A. & Ph.D. (Delhi)	Sampling Survey, Statistical Ecology
Associate Professor	M. K. Das, M.Sc. & Ph.D. (Dibrugarh Univ.)	Bayesian Interference
	B. K. Gupt, M.A. (Rohilkand Univ.) M.Sc. (AMU), Ph.D. (Gauhati Univ.)	Survey Sampling
	T. K. Chakrabarty, M. Stat. (Agra Univ.), Ph.D. (Manipur Univ.)	Statistical Demography
	R. Singh, M.Sc. & Ph.D. (Patna Univ.)	Econometrics. Poverty & Human Development
Assistant Professor	S. K. Jha, M.Sc. & Ph.D. (Patna Univ.)	Discrete Probability Distribution, Operations Research

Thrust Areas of Research

Statistical Inference, Design of Experiments, Survey Sampling, Statistical Ecology, Demography, Econometrics.

Students' Profile Enrolment Capacity: **M.Sc.- 25, M.Phil.-Variable** **Ph.D.- Variable**

Actual Admissions

Degree	Male	Female	ST	SC	Gen	Meghalaya	Non-Meghalaya	Total
M.Sc.	02	08	06	00	04	02	08	10
M.Phil.	03	00	01	00	02	00	03	03
Ph.D.	01	03	00	00	04	00	04	04

Degrees Awarded

Degree	Male	Female	ST	SC	Gen	Meghalaya	Non-Meghalaya	Total
M.Sc.	12	06	15	00	03	06	12	18
Ph.D.	01	00	00	00	01	00	01	01

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Details of Students Awarded Ph.D. Degree

Name of Student	Title of Thesis	Name of Supervisor
Mr. B. K. Handique	“Studies on some aspects of multiphase sampling techniques in forestry”	Prof. G. Das

Courses Conducted during the year

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 Distribution; 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.

Research Methodology in Statistics; Bayesian Inference and Analysis; Econometrics

Seminars/Conference/Symposia/Extension Programs etc.

Organised

Dr. R. Singh organized a ‘Workshop on Statistical Computing and Its Application’ at Department of Statistics, NEHU, Shillong, jointly with Bayesian and Interdisciplinary Research Unit of Indian Statistical Institute, Kolkata, during November 29 to December 1 2012.

Attended

Prof G. Das Chaired the Session on “Environmental and Agricultural Statistics”, presented jointly with P. Khongli a paper titled “Studies on Some Preliminary Test Estimators in Double Sampling, and presented jointly with B. K. Handique a paper titled “A Ratio-Cum-Regression Estimator in Two-Phase

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- Sampling for Efficient Utilisation of Auxiliary Information from High Resolution Remote Sensing Data” at the *International Conference on Recent Advances in Mathematical Statistics and Its Applications in Applied Sciences* organized jointly by Department of Statistics, Gauhati University, and Indian Statistical Institute, Kolkata, during December 31, 2012, to January 2, 2013.
- Dr. B. K. Gupt Chaired a Session and presented jointly with M. Nagi a paper entitled “Estimation of Fertility Rates in Western Angami Block of Kohima Districts Nagaland” in *National Conference on Medical Statistics* and the *30th Annual National Conference of Indian Society for Medical Statistics* during 6-8 October, 2012, organized by Department of Community Medicine, Dayanand Medical College & Hospital, Ludhiana (Punjab);
- Delivered two Invited Lectures - one on “Survey sampling concepts and Designs” and the other on “Sampling Design and Sample size with Relevance to Sample Registration System” in the Refresher Training on Sample Registration System held from November 22 to 23, 2012, for Staff dealing with collection of data under Sample Registration System of Directorate of Census Operations, Meghalaya;
- Presented a poster with T. Roshan Singh entitled “Estimation of Fertility Rates in Semi-Urban areas of Thoubal Sub-division Manipur” at the *34th Annual Conference of Indian Association for the Study of Population* at Gokhale Institute of Politics and Economics, Pune, during December 13-15, 2012;
- Presented a paper entitled “Allocation of Sample Size for Separate Ratio Estimator under a Superpopulation Model” at *International Conference on Statistics and Informatics in Agricultural Research* during December 18-20, 2012, organized by Indian Society of Agricultural Statistics at Indian Agricultural Statistics Research Institute, ICAR, New Delhi;
- Delivered an Invited Talk entitled “Use of Auxiliary Information for Allocation of Sample Size in Stratified Sampling” in *National Conference on Recent Developments in Mathematics and Related Areas* on the occasion of the 125th birth year of S. Ramanujan organized jointly by the Department of Mathematics, Patna University and Patna Science College, Patna, during 22-24 December 2012;
- Presented as Invited Speaker two papers entitled 1. “Allocation of Sample Size in Stratified Sampling under a Superpopulation Model”, and 2. Gupt, B. K. and Nagi, M.: “A Demographic Survey in Western Angami Block of Kohima District, Nagaland” in the *International Conference on Recent Advances in Mathematical Statistics and Its Applications in Applied Sciences* organized by Department of Statistics, Gauhati University, in collaboration with Indian Statistical Institute, Kolkata, during December 31, 2012 to January 2, 2013;
- Dr. R. Singh presented jointly with B. Saikia a paper titled “Estimation of Coefficients in Ridge Regression When Explanatory Variables are Correlated” at the *49th Annual Conference of the Indian Econometric Society* organized by Department of Statistics, Patna University, Patna, during January 9-11, 2013;
- Presented a paper entitled “A Survey of Gender-related and Human Development Indices” at the *National Conference on Recent Developments in Mathematics & Related*

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Areas organized by Dept of Mathematics, Patna Science College, and Patna University, Patna, during December 22-24, 2012.

Publications

Research Papers

Published in India

Khongji, P. and Das, G. (2012), Studies on some preliminary test estimators in double sampling. *JISAS*, 66:381–390.

Singh, R. (2012), Origin of econometrics. *Int. J. Res. Commerce Econ. Manag.*, 2:62-66.

Singh, R. (2012), Ordinary least squares method and its variants, *Int. J. Res. Commerce IT Manag.*, 2:114–119.

Singh, R. (2012), Solution of multicollinearity by ridge regression. *Int. J. Res. Comput. Appl. Manag.*, 2:130–135.

Singh, R. (2012), Sustainable development in Northeast India. *Int. J. Res. Commerce Econ. Manag.*, 2:116–123.

Singh, R. (2012), Mitigation of poverty. *J. Social Econ. Policy*, 9:67–76.

Singh, R. (2012). A survey of statistical distribution of journal impact factors. *Int. J. Res. Commerce IT Manag.*, 2:103–105.

Books/Book Chapters/Proceedings

Gupt, B. K. (2012). Allocation of sample size in stratified sampling, Lambert Academic Publishing, GmbH & Co., Saarbrücken, Germany.

Khongji, P., Das, G. (2012), Preliminary test estimators in double sampling, Lambert Academic Publishing, GmbH & Co., Saarbrücken, Germany.

Singh, R. (2012). *An Introduction to Probability & Probability Distributions*. Books & Allied (P) Ltd., Kolkata.

Singh, R. (2012). “Generalized inverse regression as a solution of multi-collinearity” *In Proceedings of 6th International Symposium on Optimization & Statistics* A. H. Khan and H. Athar (eds), pp. 64–71.

Funds Received from Agencies other than NEHU

Agency	Amount (in lakhs)
Dept of Science & Technology (FIST Program)	Rs 6.75

Other Activities

Dr. B .K. Gupt Participated in 49th Annual Conference of the Indian Econometric Society organized by Department of Statistics, Patna University, Patna, during January 9-11 2013;

Attended the one-day Seminar on Applied Statistics on 22 March 2013 organized by Bayesian and Interdisciplinary Research Unit (BIRU), Applied Statistics Division, Indian Statistical Institute, Kolkata;

Participated in the three-day Workshop on Emerging Areas in Applied Statistics organized by BIRU, Indian Statistical Institute, Kolkata, during March 19-21, 2013.

Dr. T. K. Chakrabarty delivered lectures in a Short Term Training Program on Applications of Statistics in Engineering Management and Applied Sciences at Department of Mathematics, NIT, Silchar during October 11–15, 2012;

Delivered lectures in the UGC Sponsored Refresher Course in Mathematics organized by Department of Mathematics, NEHU, during March 18 to April 7, 2013.

Chapter VII

SCHOOL OF SOCIAL SCIENCES

Dean: Prof. L. S. Gassah
Telephone: 2723001, 2723002
E-mail: lsgassah@gmail.com

The School consists of the Departments of Cultural and Creative Studies, History, Law, Political Science and Sociology. Recently Department of History and Archaeology was included in this School. The School has total strength of 45 faculty members. Departments of Political Science, History and Sociology offered postgraduate courses in their respective disciplines and the Department of

Cultural and Creative Studies offered the same in Folkloristics and P.G. diploma in Music and Painting. The Department of Law offered a five year Integrated Programme of B.A., LL.B. (Honours). The various departments organized seminars, workshops and refresher Courses during the year. The departments of Political Science, History and Sociology received grants from the UGC under SAP.

DEPARTMENT OF CULTURAL AND CREATIVE STUDIES

Head : Prof. Desmond L. Kharmawphlang
Telephone : 2723374, 2723371 and 2723372
Email : desmondkharmawphlang@gmail.com

Faculty

Professor	Desmond L. Kharmawphlang, Ph. D. (NEHU)	Folkloristics
Associate Professor	Subrat K. Nanda, Ph.D. (JNU)	Sociology
	Lapynshai Syiem, Ph.D., (NEHU)	Music
Assistant Professor	Bedanta Kalita, M.F.A., (M.S. Univ., Baroda)	Painting

Visiting Professor / Fellow/Scholars

For M.A. (Folkloristics)	Dr. G. Badaiasuklang L. Nonglait
For P.G. Diploma (Music)	Dr. Polycarpus Ksoo, Shri Komik Khongjirem
For P.G. Diploma (Painting)	Shri Benedict S. Hynniewta

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Thrust Area of Research

The thrust area of research in the department is concerned with studying various theoretical, conceptual and contextual issues relating to 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. - Variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
PG Dip (Music)	00	12	01	04	09	11	02	13
PG Dip (Painting)	00	09	01	08	02	08	02	10
M. A.	00	30	00	16	14	26	04	30
P.h.D.	00	04	00	01	03	04	00	04

Degrees/Diplomas Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
PG Dip (Music)	00	12	01	04	09	11	02	13
PG Dip (Painting)	00	09	00	06	03			09
M. A.	00	27	00	10	17			27
P.h.D.	00	04	00	00	04			04

Details of Students Awarded Ph.D. Degree

Name of the Student	Title of Thesis	Name(s) of Supervisor(s)
Ms. Roplyneda Lyngdoh	A Study of Khasi Archery	Prof. Prabodh Jhingan

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Ms. Cherry K. A. Kharshiing	A Semiotic Study of the Ing Sad of the Khasis	Prof. Prabodh Jhingan
Ms. T. Neishoning Koireng	Folk Narratives of the Koireng (Koren) Community of Manipur: A Study	Prof. Desmond L. Kharmawphlang
Ms. Rimika Lanong	A Study of Traditional and Modern Khasi Riddles	Prof. Desmond L. Kharmawphlang

Courses Conducted During the Year

M.A. (Folkloristics)

Semester-I : Introduction to Folkloristics, History of Folklore Studies, Introduction to Semiotics, Folklore Theories-I, Field Methods and Studies.

Semester-II : Folklore theories-II, Folk Literature, Public Sector Folklore, Introduction to Visual Arts, Urban Folklore.

Semester-III : Ethnomusicology, Folk Literature-II, Introduction to Performing Arts, Folklore of Northeast India-I, Social Folk Custom.

Semester-IV : Material Culture, Language, Culture and Society, Narratology, Folklore of Northeast India-II, Dissertation.

P.G. Diploma (Music)

Semester-I : Brief History of Indian Classical Music (Theory), Introduction to General Musical Terms (Theory), Introduction to Indian Classical music (Practical),

Practical Training in Indian Classical music (Practical), Introduction to Western Musical (Staff) Notation (Practical). Second

Semester-II : Study of Selected Musical Instruments (Theory), Songs of Meghalaya (Practical), Rhythmic Pattern of Music of Meghalaya (Practical), Concept of Rhythmic Pattern of music of Meghalaya (Theory), Proficiency Western Musical Instruments (Practical).

P.G. Diploma (Painting)

Semester-I : Fundamentals of Visual Arts (Theory), Introduction to Indian and Chinese Art (Theory), Drawing and Colour Application (Practical), Sculpture (Practical), Introduction to Folk Art and Craft of Northeast India (Theory).

Semester-II : Introduction to Western Art (Theory), Print Making (Practical), Creative Painting (Practical), Enamel Painting

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in Glazing Technique (Practical), Introduction to Indian and Western Aesthetics (Theory).

Study Tour/Field Trips of Students

In January 2013 the M.A. Folkloristics students were taken on a fourteen-day study tour to Bombay and Goa under the supervision of teacher-in-charge Mr. Macdonald Rynthiang, Sr. Research Fellow. This tour was undertaken to enable the students to acquaint themselves with the folklore and other oral traditions and literature of the different communities in that part of India.

Seminars/Conferences/Symposia/Extension Programmes, etc

Organised

The Department of Cultural and Creative Studies organized a national workshop on “Paddy Culture” on 9th & 10th April 2012 at NEHU, Shillong under the coordination of Prof. Desmond L. Kharmawphlang in collaboration with the Indira Gandhi National Centre for the Arts, New Delhi.

The “North East Music Festival 2012” on the occasion of World Music Day was organized by the department in collaboration with North East Zone Cultural Centre, Dimapur at NEHU Convocation Hall, Shillong on 21st June 2013. The Festival coincided with the Silver Jubilee Celebrations of Zonal Cultural Centres and showcased performances by groups from all the North Eastern States. Prof. D.L. Kharmawphlang and Mr. Som Kamei, Director, NEZCC were Coordinators of the programme.

An international workshop on “Genres of Belief from Folkloristic Perspective” was organized by the department under the coordination of Prof. D.L. Kharmawphlang from 4th to 12th February 2013 in collaboration with the Department of Estonia and Comparative Folklore, University of Tartu (Estonia), the Centre of Excellence in Cultural Theory (CECT) and the Indian Council for Cultural Relations, Shillong Office. Besides scholars from the region and the rest of the country, as many as 16 scholars from countries such as USA, Ireland, Finland, Estonia, Latvia, Serbia and Russia participated in the workshop.

The department organized documentation of “Folktunes of Ri-Bhoi District of Meghalaya” on 14th & 15th March 2013 under the supervision of Prof. D.L. Kharmawphlang.

Attended

Prof. Desmond L. Kharmawphlang attended a two-day national seminar on “Literature of North East India and its Future Vision” organized by D M College of Arts in Imphal, Manipur on 6th & 7th July 2012 and presided over a session at the seminar.

He also presented a paper titled “The Paradigm of Restriction and Reckoning: North East India and South East Asia” in the international seminar organized by Anthropological Survey of India, Kolkata on 23-25 February 2013.

Prof. S.K. Nanda presented a research proposal titled “Paddy and Tribal Culture: The Case of Meghalaya” at the workshop on “Paddy Growing Cultures” organized by the Department of Cultural and Creative Studies on April 9-10, 2012.

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He presented a paper on “Genres of Folk Belief: A Multicultural Perspective” at the international workshop on “Genres of Belief from Folkloristics Perspective” organized by the Department of Cultural and Creative Studies, NEHU, Shillong in collaboration with the Department of Estonia and Comparative Folklore, University of Tartu, Estonia from 4th to 12th February 2013.

He participated in the UGC-SAP national seminar on “Socio-Political Dynamics in Northeast India” organized by the Department of Political Science, NEHU, Shillong on March 25-26, 2013 and presented a paper titled “Changing Trajectory of Ethnicity and Nationalism in Northeast India: Towards a Conceptual Clarification and Empirical Explication”.

Publications

Research Papers

Published in India

Kharmawphlang, D. L. (2012). “Nature as Mother Metaphor: Khasi Rice Myths (Perspectives)” *Marg: A Magazine of the Arts*, 4:6-8.

Kharmawphlang, D. L. (2012). “Oral Frames of References: Khasi Myth Chanting and Perspectives of Definition”. *Qinghai Academy of Social Sciences*, 5:270-275.

Books/Book Chapters/Proceedings

Kharmawphlang, D. L. (2012). “Poems”. In Sudip Sen (ed.) *The Harper Collins Book of English Poetry*. Noida: Harper Collins, pp.157-161.

Kharmawphlang, D. L. (2013). “The Revenant in Some Urban Legends of Shillong”. In

Sukalpa Bhattacharjee and C. J. Thomas (ed.) *Society, Representation and Textuality: The Critical Interface*. New Delhi: Sage Publications, pp. 227-234.

Kharmawphlang, D. L. (2013). “The Phawar in Context: The Politics of Tradition and Continuity”. In Margaret Zama (ed.) *Emerging Literatures from Northeast India: The Dynamics of Culture, Society and Identity*. New Delhi: Sage Publications, pp. 90-97.

Infrastructure Facilities

The department has modeling studio along with modeling stands, enamel furnace and accessories for conducting the practical training for P.G. Diploma course in painting. In addition to this, terracotta furnace along with shade is in place for the students admitted to this course. Besides, music practical class-room along with musical instruments and painting practical class-room along with easels and painting tables are available for the students studying the music and painting courses. Other infrastructural facilities include such things as class-room furniture for students of folkloristics, painting and music courses and for modeling studios.

Research Projects

Ongoing

“Rice Myth of North East India: Area Study”, research Project under UPE, Prof. Desmond L Kharmawphlang, principal investigators Professor S. K. Nanda and Dr. L. Syiem.

Other Activities

The department in association with UGC-ASC, NEHU, Shillong organized a Refresher Course in “Folkloristics and Semiotics”

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from 25th September to 15th October 2012. Prof. D.L. Kharmawphlang was the course coordinator and Prof. S. K. Nanda was the co-coordinator.

Prof. D.L. Kharmawphlang participated in a panel discussion on the event of “Publishing Next” organized by CINNAMONTEAL Publishers, India in Goa on 14-15 September 2012. He delivered a lecture entitled “Evaluation and Interpretation of Texts” at the Refresher Course organized by the Department of Khasi, NEHU, Shillong from 7th to 27th November, 2012.

Prof. D. L. Kharmawphlang participated in the “All India Poetry Festival” organized by Sahitya Akademi on 11th November 2012 at Guwahati. He was a Resource Person at the 21st and 22nd Orientation Programmes for college and university teachers organized by UGC-ASC, NEHU, Shillong from 4th February to 3rd March 2013.

Prof. D. L. Kharmawphlang was Chief Guest at the Western Music Concert entitled “Radio Mix” organized All India Radio, Shillong on 8th March 2013 at Soso Tham Auditorium.

Prof. D. L. Kharmawphlang delivered a lecture on “Literature and the Margins: Trends

and Perspectives” at the Refresher Course organized by the Department of English, NEHU, Shillong from 18th March to 7th April 2013.

Prof. S. K. Nanda delivered two lectures on “Objective and Ethical Neutrality in Folklore Research” on 26.9. 2012, two lectures on “Globalisation and Folk Culture” on 3.09.2012 and two lectures on “Sociolinguistics and Social Semiotics” on 29.9.2012 at the Refresher Course in “Folkloristics and Semiotics” organized by the UGC-ASC in association with the Department of Cultural and Creative Studies from 25th September to 15th October 2012.

Prof. S. K. Nanda delivered a lecture on “Social Semiotics” on 14.11.2012 at the Refresher Course organized by the UGC-ASC, NEHU and the Department of Linguistics, NEHU, Shillong from 29th October to 18th November 2012. He delivered a lecture on “Nationalism and Regionalism in India” on 4.12.2012 at the Refresher Course in History organized by UGC-ASC, NEHU in association with the Department of History, NEHU, Shillong from 19th November to 9th December 2012.

School of Social Sciences

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. (GU), Ph.D. (NEHU)	Modern Indian History & Modern Northeast India.
	F.A. Qadri, M.A., M.Phil. & Ph.D. (AMU)	Medieval Indian History & Northeast India.
Associate Professor	V.R. Rengsi, M.A., M.Phil. & Ph.D.(NEHU)	History of Sciences & Non-Indian History
	A.K. Thakur, M.A. & Ph.D. (BU, Muzaffarpur)	Medieval Indian History & Northeast India.
	A. Passah, M.A., M.Phil. & Ph.D. (NEHU)	History of South East Asia & Modern Northeast India
	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	M.S.N. Rahman, M.A. & Ph.D. (Calcutta)	Medieval Indian History & Islamic History & Culture

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 seminars, field and study tours, conducting Refresher Course for College/University teachers, and holding dialogues with colleagues engaged in undergraduate teaching within the region.

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Students' Profile: **Enrolment Capacity:** P.G.- 50 M.Phil. – variable Ph.D. – variable

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	50	00	21	29	19	31	50
M.Phil.	00	01	00	01	00	00	01	01
Ph.D.	00	04	06	06	04	02	08	10

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
M.A.	00	36	01	15	22	17	20	37
M.Phil.	00	02	01	01	02	02	01	03
Ph.D.	00	01	01	01	01	01	01	02

Details of Students Awarded Ph.D. Degree

Name of the student	Title of thesis	Name of Supervisor
Ms. B. Danibha Pyrbot	Unitarianism in the Khasi Jaintia Hills 1887-1995	Prof. D.R. Syiemlieh
Mr. Rahul S. Majumdar	Religious Institutions and Social Development in Assam, 1826-1952: A Study of the Satras.	Prof. Manorama Sharma

Placement of Students

Students who have completed their Master and Ph.D programmes from the Department and cleared NET conducted by the UGC, have found employment in various universities and colleges, research institutes, schools, civil administration, defence services, banking and business enterprises.

Courses conducted during the year

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;

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- 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.: Research Methodology, History and Theory, Oral Tradition.

Study Tours:

Names of the Teachers in-charge: Mr. Edmond Lamare and Mr. Saramwung Raikhan, (Research Scholars)

Places/ Institutions visited: Tamil Nadu and Karnataka.

Duration of the tour/trip: 6.2.2013 to 24.2.2013.

Purpose of visit: The places have rich historical importance for the students of ancient, medieval and modern histories including archaeology. The places visited gave first-hand experience and knowledge of the past developments preserved in architectural monuments and various museums located at the places. It is important for the students to see for themselves the historical heritage of India which they otherwise only read about in books.

Field Trip

Dr. C.A. Mawlong took the students on a field trip, to a Neolithic site at Cherrapunjee, Saitsohpen, Mawkisyiem, Nohkalikai in May 2012, as part requirement of the course on Archaeology: Methods and Approaches.

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized

Refresher Course in History from 19 November to 9th December 2012 on “History of Social Forces and Social Mobilisation in India with focus on Northeast India”. Dr. Amena Passah acted as the Course Coordinator. There were 29 participants.

Attended

Prof. Manorama Sharma attended National Seminar on “Class Formation in the Tribal Societies of North East India”, organized by the Tribal Studies Centre, Assam University, Diphu Campus, 22-23 Feb. 2013 and Presented a paper entitled “Class, Tribe and Gender: The Need for a Feminist Interrogation”.

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Attended National Seminar on “State, Social Movements and Democracy in Northeast India”, organised by Department of Political Science, Gauhati University (under UGC-SAP) & Indian Council of Historical Research- North East Regional Centre, 27, 28, February, 1st March, 2013 and made a presentation entitled “Middle Class Values and the Social Dynamics of Gender Relations in Assam” in the Panel discussion held and also chaired in Academic Session.

Delivered the Pratibha Devi Memorial Lecture, 2013, at the Department of History, Gauhati University, 20th March, 2013.

Participated as Resource Person in the U.G.C. sponsored National Seminar on Role of Asam Sahitya Sabha in the Development of Literature, Language and Culture of North East India” organized by B. Barooah College, Guwahati, on 27th-28th April, 2012 and also chaired a technical session.

Attended National Conference on “The Contributions of Madras Christian College in the Making of Modern India- A Historical Perspective” at Chennai on 25th – 26th October, 2012 and presented a paper entitled, “Dr. Chandran D.S. Devanesan’s Contribution to the Development of Higher Education in North East India”.

Prof. Amrendra Kr Thakur attended National Seminar on “Understanding Religion and Society of North East India” organised under UGC-SAP-DRS programme of Department of History, Dibrugarh University, Dibrugarh, Assam, 28th and 29th September, 2012. Presented a paper “Buddhism of Arunachal Pradesh: Some Aspects”. Attended 33rd Annual Session of North East India History Association, Rajiv

Gandhi University, Rono Hills, Itanagar, Arunachal Pradesh, 1-3rd November, 2012 and presented a paper on “Role of Myth in the Reconstruction of Technological Past of Northeast India”.

Attended National Seminar on “Pre-Colonial Society and Culture of the Tribes of Central Arunachal Pradesh” organised under UGC-SAP-DRS programme of Department of History, Rajiv Gandhi University, Itanagar 30th March, 2013, and delivered the Keynote Address “Technological Progress in Central Arunachal Pradesh: Some Issues”.

Attended National seminar on “The Problem of Peoples’ Ignorance about Historical Facts Leading to Ethnic Violence with Special Reference to North Eastern Region of India”, ICSSR sponsored and organised by SMD College, Charing, Sibsagar, 30-31 March, 2013, presented a paper on “Studying Ethnic Movement Through Namings and Re-namings: Arunachal Pradesh” and presided over an academic session.

Prof. A. Passah attended National Seminar on ‘Changing Relationship between Religious Institutions and Society in North-East India’ organised by Dibrugarh University, Dibrugarh 9th November 2012 and presented a paper, ‘ Presbyterian Church in the Khasi-Jaintia Hills: Interface with Society’.

Attended 33rd Annual Session of North East India History Association, Rajiv Gandhi University, Rono Hills, Itanagar, Arunachal Pradesh, 1-3rd November, 2012 and presented a paper ‘ Khasi-Jaintia Women: Change and Continuity’.

Dr. C.A. Mawlong:

Attended Regional Seminar on “Archaeology of North-East India”,

School of Social Sciences

organized by the Archaeological Survey of India (Guwahati Circle), Guwahati, 20-21 July, 2012 and presented a paper “The Khasi –Jaintia Megalithic Tradition: Problems and Perspectives”.

Attended National Seminar on “Socio-Political Dynamics in Northeast India” organized by the Department of Political Science, NEHU, Shillong, March 25-26, 2013 (NEHU and ICSSSR-NERC sponsored) and presented a paper “Exploring the Issue of the Khasi Identity: Some Observations”.

Dr. T.G.Nag attended National Seminar on “Socio-Political Dynamics in Northeast India” organized by the Department of Political Science, NEHU, Shillong, March 25-26, 2013 (NEHU and ICSSSR-NERC sponsored) and presented a paper “Autonomy Demand of the Gorkhas in Assam”.

Dr. S.N. Lamare attended National Seminar to commemorate “The 150th Death Anniversary of U Kiang Nangbah”, organised by the SEIN JAINTIA, Shillong in collaboration with St. Edmund’s College, Shillong on 11 August 2012 in St. Edmund’s College, Shillong and presented a paper “The Jaintia Resistance of 1860-1863 and the Role of U Kiang Nangbah”.

Attended Consultation on “Coal Mining in Meghalaya and its Social Impact: With Special Reference to Child Labour” organised by North Eastern Social Research Centre Guwahati on 3rd and 4th October 2012 at Guwahati and presented a paper on “Coal Mining and its Social Impact in Jaintia Hills”.

Attended International Seminar on Indo-Bangladesh Cultural Relations, organised

by the Institute of Social and Cultural Studies, Kolkata, on 10th October, 2012, at Sri Aurobindo Institute of Indian Culture, Shillong and presented a paper “The Jaintias and Their Cultural Interaction with the People of the Southern Plain: A Historical Perspective”.

Attended National Seminar on “Kiang Nangbah Resistance Movement Against British Raj”, organised by Seinraij, Jowai, in collaboration with Society for Arts and Culture, Jowai, West Jaintia Hills District, Meghalaya on 29th December, 2012 and delivered the key-note address “A Few Thoughts on The Jaintia Resistance of 1860-1863”. He also chaired a technical session.

Dr. Aparna Mathur attended U.P. History Congress, 07-08 October, 2012, in the Department of Ancient History and Culture, M.J.P. Rohilkhand University, Bareilly, U.P., and presented paper entitled ‘Power relations and emergence of Panchala’.

Dr. M.S.N. Rahman attended National Interfaith Dialogue, organized by Ramakrishna Mission, Laitumkharah, Shillong, on 29th, March 2013 and presented a paper ‘Universal Views of Islam’.

Attended National workshop on Research Methodology, organized by G.N.D.G. Commerce College, Nagaon, Assam (U.G.C. sponsored), on 22nd & 23rd March, 2013 and presented a paper ‘Research Methodology in History’.

Attended National Seminar on Dr. B.R.Ambedkar’s Ideas and Thoughts organized by Department of Philosophy, NEHU, Shillong, on March 11-12, 2013 and presented a paper ‘Ambedkar’s Struggles against Untouchability’.

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Attended National Seminar on Kiang Nangbah- Resistance Movement against British Raj, organized by Seinraij, Jowai in collaboration with Society for Arts and Culture, West Jaintia Hills District, Jowai, Meghalaya on the 29th December, 2012 and presented a paper 'Resistance Movements against the British Raj in North-East India with special reference to Barak-Surma Valley'.

Attended International Seminar on Indo-Bangladesh Cultural Relations, 'Indo-Bangladesh People to People Interactions', organized by Institute of Social and Cultural Studies, Kolkata held on 10th October, 2012 at Aurobindo Institute of Indian Culture, Shillong.

Attended International Seminar on "Role of Indigenous People in the Freedom Movement in the Eastern India, organized by the Asiatic Society, Kolkata, held on 17th April, 2012 and Presented a paper "The Jaintia Resistance against the British (1660-63)".

Publications

Research Papers

Published in India

Momin, Mignonette (2012). "Antiquarianism, Indian History and Northeast India", Dharmeswar Chutia and Romesh Buragohain (eds.) *Anusandhana Souvenir: Centenary Volume* (of the Assam Research Society), Guwahati, 3-12.

Sharma, Manorama (2012). "Interrogating Land Policies and Land Rights in Colonial Assam: The Need of a Gender Critique," *Aspects of Land Policy in Assam: Continuity and Change*, (VKIC, Guwahati.), 149-166.

Sharma, Manorama (2013) *History writing in North – East India: The Paths Little Traversed* (Memorial lecture published by Gauhati University).

Sharma, Manorama (2013) (Co- author, Apurba K Baruah). "Regional Politics, Ethnicity and the Asomiya Middle Class," Apurba K Baruah & Susmita Sen Gupta (eds.), *Social Forces and Politics in North East India* (DVS Publishers, Guwahati), 32-65.

Qadri, F.A.(2013). "Studies in State Formations in North East India", J. B. Bhattacharjee and David R. Syiemlieh (eds.), *Early States in North East India*, Regency Publication, New Delhi, 1-11, ISBN 978-81-89233-86-0.

Thakur, Amrendra Kr (2013). "Sat Rajas of Arunachal Pradesh: A Study", in J. B. Bhattacharjee and David R. Syiemlieh (eds.), *Early States in North East India*, Regency Publication, New Delhi, 190-211, ISBN 978-81-89233-86-0.

Thakur, Amrendra Kr (2013). "Iron and Social Change in Pre-Colonial Northeast India", *Social Change and Development*, Vol. X, No. 1, January, 15-36 (Journal of OKD Institute of Social Change and Development, Guwahati) ISSN: 0975-4016.

Thakur, Amrendra Kr (2013). "Education System of Pre-modern Assam: A Brief Study", *Quest*, Vol. VI, No. 2, January, 95-111, ISSN: 0976-0040 (Journal of Vivekananda Kendra, Guwahati, Co/ authorship Ms. Bobby Das).

Thakur, Amrendra Kr (2011-12). "Technology Aided Trade in Pre-Colonial Arunachal Pradesh", *Resarun*, Vol. 36 (60th Year

- Special Issue, Directorate of Research, Government of Arunachal Pradesh), Itanagar, 7-14.
- Thakur, Amrendra Kr (2012). "Studying Technology of Hill Societies of Northeast India: Problems and Prospects", *Proceedings of North East India History Association*, 32nd session, Agartala, 2011, Shillong, 38-46.
- Rengsi, V.R. (2013). "Pre-Colonial Mizo Society: A Transit Between Tribes and States", J. B. Bhattacharjee and David R. Syiemlieh (eds.), *Early States in North East India*, Regency Publication, New Delhi, 242-254, ISBN 978-81-89233-86-0.
- Passah, A. (2013). "Khasi –Jaintia Women: A Portrayal through Language and Literature of Khasi-Jaintia Writers", S.K.Singh and S.A.Lyngdoh (eds.) *Linguistic Ecology of Meghalaya*, E.B.H. Publishers, Guwahati, 349-363.
- Nag, T.G. (2013). "Crisis of Sustenance and Decline of the Ahom State in Eighteenth Century Assam", J.B.Bhattacharjee and D.R.Syiemlieh (eds.), *Early States in North East India*, Regency Publications, New Delhi, 152-177.
- Rahman, M.S.N. (2013). 'Vivekananda Islam Darshan'(Bengali), in Subrato Ray & Asok Ray (eds.), *Bahurupae Vivekananda*, Mitram, Kolkata, February, 163-174, ISBN: 978-93-80036-51-9.
- Rahman, M.S.N. (2013) 'Koch State Formation in the 16th Century', in J.B. Bhattacharjee and David R Syiemlieh (eds.), *Early States in North-East India*, Regency Publication, New Delhi, 50-61, ISBN: 978-81-89233-86-0.
- Rahman, M.S.N. (2013). "Inter-Community Relations in Medieval Bengal As Reflected in Contemporary Bengali Vernacular Literature", Sukalpa Bhattacharjee & C. Joshua Thomas (eds.) *Society, Representation and Textuality: The Critical Interface*, SAGE, New Delhi, 235-256 ISBN: 9788132109532.
- Rahman, M.S.N. (2012). "Sayyid Sultan's World View as Reflected in his Navi Vamsa", *Proceedings of North-East India History Association*, Thirty Second Session, Tripura University, Agartala, 2011 (published Shillong), 180-189.
- Rahman, M.S.N. (2012). "Bharatbarshae Sufibad: Samannay Sadhana O Sampriti Chetona"(Bengali), Bhabani Chakraborty and others (eds.), *Indigenous Traditions & Historical Forces: Impact of Bhakti Movement on Indian Nationalism*, Manav Prakasan, Kolkata, 23-36, ISBN-978-93-80332-33-8.

Research Projects

Completed Projects

Completed the Research Project under Indian National Science Academy, New Delhi, on "Technology of the Tribes of North East India with special Reference to Arunachal Pradesh", December, 2012, PI Prof. Amrendra K. Thakur.

Honours/ Awards/ Recognitions

Dr. S.N. Lamare received a cash award and a citation for research work and publications on the Jaintias on the Sesquicentennial Death Anniversary of U Kiang Nangbah from Sein Raj Shillong on 30th December, 2012.

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Other Activities

Prof. M. Sharma delivered two lectures on “Gender and Development” in the Refresher Course in Research Methodology (Social Sciences) organized by the UGC-Academic Staff College: Gauhati University on 6th February, 2013.

Delivered two lecture on “Gender History” & “Historiography of Colonial Assam” in the ICHR (NERC), Guwahati, organized workshop on “Historical Research Methodologies”, 5th February, 2013.

Delivered a lecture on “Gender and Society” in the Special Summer School organized by the Academic Staff College, NEHU, Shillong on 4th September, 2012.

Prof. F. A. Qadri was Chief Guest in a National Seminar on, “Position of women in Assam from pre-independence to post-independence Era”, D.C.B. Girl’s College, Jorhat, 28-30, September, 2012 and also chaired two academic sessions.

Attended the 60th session of Indian Historical Records Committee at U.P. State Archives, Lucknow as Govt. of India’s nominee and chaired first academic session.

Prof. Amrendra Kr Thakur delivered Lectures as Resource Person during Orientation Courses in at Academic Staff College, NEHU, February-March, 2013, on the themes Nation and National Integration.

Prof. A. Passah Member, Dr. Homiwell Lyngdoh Centre for Indigenous Studies, Shillong.

Dr. C.A. Mawlong attended UGC sponsored Management Skill Enhancement Module (MSEM) workshop under Capacity Building for Women Managers in Higher Education, organized by NEHU, Shillong 19-24th November 2012

Dr. T.G. Nag attended 7th Short-term Course in Research Methodology with special reference to SPSS organized by UGC Academic Staff College NEHU, Shillong-793022, 30th July-4th August 2012.

Attended UGC sponsored Management Skill Enhancement Module (MSEM) workshop under Capacity Building for Women Managers in Higher Education, organized by NEHU, Shillong 19-24th November 2012.

Attended UGC sponsored Training of Trainers (TOTS) workshop under UGC major programme on Capacity Building of Women Managers in Higher Education, organized by Dibrugarh University, Dibrugarh 17th – 22nd December 2012.

Was Trainer Associate in the UGC sponsored Sensitivity/Awareness/ Motivation (SAM) workshop under UGC major programme on Capacity Building of Women Managers in Higher Education, organized by Tripura University, Suryamanigar 30th March-3rd April 2013.

Dr. S.N. Lamare was appointed as the Teacher-in-charge of Sports Department, NEHU from 11 October 2012.

School of Social Sciences

DEPARTMENT OF LAW

Head : Dr. (Mrs.) J.J. Mozika
Telephone : 2723801
E-mail : j_mozika@yahoo.co.in

Faculty

Designation	Name and Qualification
Associate Professor	J.J. Mozika, Ph.D. (North Bengal).
	C. Rout, M.A. (Pol.Sc.), LL.M., Ph.D. (Utkal).
Assistant Professor	R.K. Mishra, Ph.D. & LL.M. (B.H.U.), P.G. Diploma in Criminology (Lucknow)
	A.K. Singh, LL.M. & Ph.D. (B.H.U.)
	Naveen Kumar, LL.M. & Ph.D. (Jamia Milia Islamia)
	Ranjit Sil, LL.M. & Ph.D. (Burdwan).
	Shishir Tiwari, LL.M. (BHU), M.Phil. (JNU),
	Preeti Gupta, M.Sc. & LL.M. (Indian Law Institute, New Delhi).

Thrust Area 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 expected to start soon. 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, behaviour 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 Department has organized various competitions like debate, quiz and moot courts among the students during the academic year. The Department organized a One-Day Workshop on Competition Law in collaboration with Competition Commission of India on 25th May, 2012. The Department participated in the 12th Henry Dunant Memorial Moot Court Competition in which the Department ranked fifth and Ms. Gitanjali Ghosh of 9th Semester was adjudged the 'Best Advocate'.

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Students' Profile Enrolment Capacity: B.A.LL.B (Hons.)- 60 + supernumerary

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
BA LLB (Hon)	03	56	03	23	39	57	05	62

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
BA LLB (Hon)	00	32	08	16	24	30	10	40

Placement of Students

Many of our students have got placement in law firms, LPOs and as law officers in banks. A number of them are pursuing LL.M from various universities and the rest of them are enrolled as advocates. A placement cell is working under the university and brings desired facilities for the placement of the students in various law firms.

Courses Conducted during the year

Five year Integrated B.A.LL.B (Hons.) Degree Course

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized

The Department organised a One Day Workshop on Competition Law in collaboration with Competition Commission of India on 25th May, 2012.

Attended

Dr. J.J. Mozika Presented a paper titled "Judicial Review and Policy Decisions – Emerging Perspectives" at the National Seminar on Judicial review of Legislative Powers and Privileges – A Constitutional Quandary

held on 8th & 9th September, 2012 organized by the National University of Study and Research in Law, Ranchi.

Presented a paper titled "The Fundamental Right to Education: Role of Law and the Judiciary" at UGC sponsored national seminar on Rights on Children to Free and Compulsory Education in India: Problems & Prospects held on 28th & 29th September, 2012 organized by the University Law College, University of Rajasthan, Jaipur.

Presented a paper titled "E-governance in Government Procurement" at International Conference on Transparency and Accountability in Governance: Issues and Challenges held on 13-14 October, 2012 organized by the National Law University, Delhi.

Presented a paper titled "Organ Transplantation: Issues and Challenges" at National Seminar on Science, Technology & Law Reform held on 3-4 November, 2012 organized by the Faculty of Law, Banaras Hindu University, Varanasi.

Presented a paper titled "Educational Planning and the Role of Law and the Judiciary" at National Seminar & 20th

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Annual Conference of North East India Education Society held on 8-9 November, 2012 organized by the Department of Education, NEHU & NEIES.

Presented a paper titled “The Forest Rights Act: Addressing the Issue of Development Induced Displacement of Tribals and Traditional Forest Dwellers” at International Conference on Good Governance, Sustainable Development and Environmental Justice in SAARC Region organized by the Department of Law, University of North Bengal.

Dr. Chintamani Rout Presented a paper titled, “Honour Killing: Descend and Dimensions at the National Seminar on Honour Killing vis-à-vis Human Rights: Contemporary Issues and Challenges, 12-13 May, 2012 organised by University Law college, Utkal University.

Presented a paper titled, “Right to Education Conceptual and Constitutional Dimensions at the National Seminar on Right to Education, 18-19 August, 2012 organised by Faculty of Law, the ICFAI Foundation for Higher Education, Hyderabad.

Presented a paper titled, “Human Rights of Industrial labour vis-à-vis the Indian constitution at the National Seminar on Human Rights of Industrial Labour in 21st Century, 13-14 October, 2012 organised by Shri.N.S.Patel Law College, Modasa, Gujarat.

Presented a paper titled, “Surrogacy – A conceptual and legal Analysis in 21st Century at the National Seminar on Science, Technology and Law Reforms, 3-4 November, 2012 organised by Faculty of Law, Banaras Hindu University, Varanasi.

Presented a paper titled, “Environmental Protection: Judicial Activism & Beyond” at the International Conference on Good Governance, Sustainable Development and Environment Justice in SAARC Region, 1-2 December, 2012 organised by Department of Law, University of North-Bengal.

Presented a paper titled, “Directive Principles of State Policy and Judicial Process” at the National Seminar on 63 years of Indian Constitution: Directive Principles of State Policy 9-10 February, 2013 organised by University College of Law, Osmania University, Hyderabad.

Presented a paper titled, “Environmental Protection: Judicial Activism and the Future we want” at the International Conference on International Environment Law, Information Technology Law and Legal Education, 2-3 March, 2013 organised by Faculty of Law, Banaras Hindu University, Varanasi.

Presented a paper titled, “Human Rights and Constitutional Reforms with special reference to abolition of untouchability and the Role of B.R. Ambedkar at the National Seminar on B.R. Ambedkar’s Ideas and Thoughts, 11-12 March, 2013 organised by Department of Philosophy, NEHU, Shillong.

Dr. A.K. Singh participated and presented paper in two days International Conference on ‘Good Governance, Sustainable Development and Environmental Justice in SHARC Region’ organized by North Bengal University, Darjeeling, West Bengal on 1-2 December, 2012. The title of the paper is “*Mining and the Environment*”.

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Participated and Presented paper in two days International Conference on International Environmental Law, Trade Law, Information Technology Law and Legal Education organized by Faculty of Law, Banaras Hindu University (BHU) Varanasi on March 2-3, 2013 the title of the Paper is Legal Education in India: A need to be Reformed, Also chaired the parallel Session three.

Participated and Presented paper as Resource Person and also chaired the Second Session, in two days National Seminar on the 'Charter of Human Rights Vis-Vis The Rural Sector' organized by Paschim barigog Anchalik Mahavidyalay, Kamrup, Assam on 23-24 April, 2013.

Dr Naveen Kumar presented a paper titled "Education to whom and by whom" in Regional Seminar on "Issues, Concerns and challenges in Implementing RMSA in North East Region" organized by North East Regional Institute of Education (NERIE), National Council of Educational Research and Training (NCERT) Umiam, Shillong on 12th-14th March, 2013.

Participated the 8th 3rd Week Refresher Course in "Human Rights & Social Inclusion" at Academic Staff College, Jamia Milia Islamia, New Delhi from 24th Aug – 13th Sep 2012.

Mr. Shishir Tiwari participated and presented a Paper entitled "International Legal Framework for the Protection of Cultural Diversity" at 3rd Annual International Sustainability Conference of the Indian Institute of Management, Shillong, held from March 6-8, 2013.

Mrs. Preeti Gupta presented a paper titled, "A Critique of the Existing Socio-Legal

Framework for Elderly in India" in the International Symposium on Aging and 16th Biennial Conference of Association of Gerontology held from 1-3rd October, 2012.

Publications

Published in India

Research Papers

Mozika J.J.(2012). "Human Trafficking" Violation of Human Rights", *Chotanagpur Law Journal*, Vol. 5(5): 93-110 [ISSN-0973-5858]

Mozika J.J. (2012). "E-governance in Government Procurement" Transparency and Accountability in Governance: Issues and Challenges *ICTAG*-pp. [ISBN: 978-81-923638-7-5]

Rout Chintamani (2012). Democratic Decentralization and Local Self Government Particularly Panchayat Raj – A Need, *Nav Pravah* Vol– III: 19-21.

Rout Chintamani (2012). Honour Killing: Descent and Dimensions *International Journal of Political Science, Law and International Relations*, 2(1): 18-25.

Rout Chintamani (2012). Social Justice and Welfare State: Reality or Myth, *The Legal Analyst* Vol. II(1): 99-102.

Rout Chintamani (2012). Position and status of child: A legal protection and judicial emancipation. *Shri Ji Socio–Legal Journal*, No. 3: 44-51.

Rout Chintamani (2012). Right to Establish Education Institution as a right to Occupation *Orient Journal of Law and social Science*, Vol VI(10): 36-41.

- Rout Chintamani (2012). Poverty Alleviation, Right to Development and Human Right. *Nav Pravah*. Vol. 4 &5: 24-26.
- Rout Chintamani (2012) Surrogacy – A Conceptual and Legal Analysis in 21st Century *Orient Journal of Law and Social Sciences*, Vol VI(12): 26-32.
- Mishra R.K. (2012). Computer Programme An Intellectual Property: with reference to Protection and Challenges before India, LAP-Lambert Academic Publishing, Germany, pp. 1-345 (ISBN: 978-3-8484-9138-4)
- Mishra R.K. (2012). “Intellectual Property Rights and Role of Judiciary in the Developmental Society in India”, *Intellectual Property Law*, Dr. P.K. Pandey (ed.), APH Publishing Corporation, New Delhi, 2012 pp. 277-296 (ISBN: 978-81-313-1500-2).
- Mishra R.K. (2012). “IPR Management of Indigenous Knowledge in Meghalaya An Analysis”, *The Legal Analyst*, Vol. II No. 1: 75-81 (ISSN: 2231-5594).
- Mishra R.K. (2012). “Women’s Human Rights Agenda in 21st Century Challenges before India”, In *Women Rights: Violence, Human Rights and Empowerment*, Dr. P.K. Pandey (ed.), Global Publishing House, Visakhapatnam, pp. 263-289 (ISBN: 978-93-81563-11-3).
- Mishra R.K. (2012). “Industry on Dam in Assam with special reference to Lower Subansiri Hydel Project A Socio-Environmental Study”, *Asian Journal of Social Science Review*, Vol. 2(2): 71-85 (ISSN: 2249-4634).
- Mishra R.K. (2010). “IPR Management of Indigenous Knowledge in Meghalaya A need for a thorough Look”, *Sri Lanka Journal of International Law*, Vol. 22(2): 69-116 (ISSN: 1391-5568). (Late Edition)
- Mishra R.K. (2012). “Foreign Direct Investment (FDI) in Retail in India” *Law Exam Times*, Vol. I: 5-7 (ISSN: 2319-9121)
- Singh A.K. (2012). “Human Rights an Prisoners in India: Myth and Reality” *Indian Human Rights Law Review* Vol. III(1): 113-131 ISSN 2230-7036
- Singh A.K. (2012). “A Socio- Legal Discourse on Rights of Muslim Women in India” *Vidhik Chetna A Research Journal of Juridical Science* Vol. V,:45-54, ISSN 0976-9684
- Singh A.K. (2012). “Judiciary vs. Executive: An Analysis with Special Reference to Land Acquisition in India” *Army Institute Law Journal*, Mohali, Vol.V.:32-40 ISSN 0975-8208
- Tiwari Shishir (2012). “Protection of Cultural Heritage during Armed Conflicts International Legal Response”, *Chotanagpur Law Journal*, 6(6): 210-251.
- Gupta Preeti (2012). “Revisiting the organ transplantation law in India”. *Himachal Pradesh journal of Social Science*, Vol. 2(1): 230-246
- Books/Book Chapters/ Proceedings**
- Mozika J.J. (2012). *Law and Protection of Right to Privacy*, R. Cambray & Co. Pvt. Ltd. Kolkata, pp. 314. [ISBN: 978-81-89659-16-5]
- Mozika J.J. (2012). “Regulatory Authority for Private Higher Educational Institution” In *B.P. Dwivedi, G. Chakraborty, R. Bandyopadhyay & Sujit Kumar Biswas*

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- (eds), *Privatization of Higher Education in India (Legal Challenges)*, Department of Law, University of North Bengal pp.208-229, [ISBN: 978-81-921285-1-1]
- Mozika J.J. (2012). An Introduction to Administrative Law Ombusman, *In* R. Bandyopadhyay & R.D. Dubey (eds), Paragon Publishers, New Delhi, pp. 319-329
- Rout Chintamani (2012). Working Women and Constitutional Protection Human Rights and Gender Justice *In* Dr. P.K. Pandey (ed), Dibrugarh University APH Publishing Corporation, New Delhi. ISBN 978-93-313-1683-7 pp. 131-139
- Rout Chintamani (2012). Right to Education – Conceptual and Constitutional Dimensions Privatization of Higher Education in India (Legal Challenges), Department of Law, University of North-Bengal ISBN 978-81 921285-1-1 PP. 12-17
- Mishra R.K. (2013). “Parental Corporal Punishment as a Tool of Domestic Discipline in India A Psycho-legal Discourse”, *Children’s Rights: Laws, Policies and Practice*, Dr. P.K. Pandey (ed.), Regal Publications, New Delhi, 2013 pp. 264-287 (ISBN: 978-81-8484-2340).
- Singh A.K. Affirmative Action and the Rule of Law: Politics and Practices’, *In An Introduction to Administrative Law*, Rathin Badopadhyay and Rajendra Dhar Dubey (eds), Paragone International Publication, New Delhi. pp.118-124 ISBN 98-81-89253-80-6
- Other Activities**
- Mr. Shishir Tiwari
1. Invited as a Judge at the Surana and Surana National Trial Advocacy Moot Court Competition-2012, organized by the National Law University and Judicial Academy, Assam from September 28 -30, 2012.
 2. Accorded Membership of Society of International Economic Law on 3rd December 2012.

School of Social Sciences

DEPARTMENT OF POLITICAL SCIENCE

Head : Professor R. Borgohain
Telephone : Office: 2723035 & 2723025
Email : roopaborg@gmail.com

Faculty

Designation	Name & Qualification	Specialization
Professor	R. Borgohain, M.A. & M.Phil. (JNU), Ph.D. (Gauhati University)	Gender Studies, Indian Government & Politics
	L.S. Gassah, M.A., M.Phil. & Ph.D. (NEHU)	Government & Politics in North East India
Associate Professor	H. Srikanth, M.A. & Ph.D (Hyderabad University)	Political Theory, Political Economy, Social Movements.
	T. T. Haokip, M.A. & Ph.D. (NEHU)	Foreign Policy, Public Administration, North East India
	K. Debbarma, M.A., M.Phil. & Ph.D. (NEHU)	Human Rights, Migration Politics in NEI & Development Administration
	S. Sen Gupta, M.A., M.Phil. & Ph.D. (NEHU)	Indian Government & Politics.
	R. K. Satapathy, M.A. & M.Phil. (Sambalpur University), Ph.D. (NEHU)	International Politics, Political Theory and Electoral Politics.
	Munmun Majumdar, M.A., M.Phil. & Ph.D. (JNU)	South- East Asia.
Assistant Professor	B.K. Mahapatra, M.A. (Delhi University), M.Phil. & Ph.D. (JNU)	International Politics
	V. Bijukumar, M.A. (University of Kerala), M.Phil. & Ph.D (JNU), BLISc. (University of Kerala)	Political Theory, Comparative Politics, Indian Politics, Political Economy
	Dr. S. Bhattacharjee, M.A., M.Phil. & Ph.D. (JNU)	International Politics

Thrust Area 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

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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 Ph.D

scholars every year who undergo course work for one semester followed by dissertation writing on proposals approved by the School Board of Social Sciences. The department also provides research facilities leading to Ph.D. degree. At present there are 60 research scholars who are engaged in 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)” (Assam and Meghalaya).

Student’s Profile: **Enrolment capacity: M.A.- 52; M.Phil. & Ph.D. - variable**

Actual Admissions

Degree	Male	Female	ST	SC	GEN	Meghalaya	Non-Meghalaya	Total
M.A.	20	32	20	00	00	16	36	52
Ph.D.	08	06	12	00	02	05	09	14

Degree Awarded:

Degree	Male	Female	ST	SC	GEN	Meghalaya	Non-Meghalaya	Total
M.A.	15	28	43	00	00	14	29	43
M.Phil.	00	02	02	00	00	01	01	02
Ph.D.	03	01	04	00	00	00	04	04

Details of Students Awarded Ph.D Degree

Name of the student	Title of thesis	Name(s) of Supervisor(s) Supervisor, Jt. Supervisor
Ms. Lalrammawii	Elections in Rural Mizoram: A Study of the 2003 Assembly Elections	Prof. B. J. Deb Supervisor
Mr. Paolenthang Khongsai	Working of Coalition Governments in Manipur (1990-2000)	Dr. T. T. Haokip Supervisor
Mr. Nehkhomang Haokip	Internal Displacement: A Study of the Kukis and the Nagas in Manipur	Dr. T. T. Haokip Supervisor
Mr. Gautam Chakma	Chakma Issue in the Politics of Arunachal Pradesh	Dr. K. Debbarma Supervisor

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 during the year

P.G.

Semester I : Liberal Political Theory, Theory of International Politics, Major Concepts and Issues in Public Administration, Indian Political System, State Politics in India with special reference to North-East Politics (I).

Semester II : Marxist Political Theory, Problems of International Politics, State Politics in India with special reference to North-East Politics (II), Third World Political Theory, Administrative Theory, East and South-East Asian Political Systems, West Asian Political Systems, Government and Politics in N. E. India, Democracy in India, Modern Indian Political Ideas.

Semester III : Contemporary Political Theory, Research Methodology (I), Issues in Women's Studies,

International Law and International Organisation, South Asian Political Systems, African Political Systems, Globalisation, Politics of Social Movements, Women and Political Theory, Development Administration, Issues in Environmental Politics.

Semester IV : Major Debates in Political Theory, Comparative Politics, Research Methodology (II), Political Ideology, Political Sociology, Foreign Policy of Major Powers, Indian Political Economy, Human Rights

M. Phil. /Ph.D.

Research Methodology, Issues and Processes in the Politics of North East India, Issues in Indian Politics, Women and Politics in North East India, Critical Perspectives on Knowledge and Power, Advanced Studies in International Politics, Environmental Politics, Dissertation Work.

Study Tours/Field Trips of students

Name of the Teacher in-charge: Dr. B. K. Mohapatra

Places/Institutions visited: Goa & Mumbai

Duration of the tour/trip: 5th to 19th February 2013.

Purpose of visit: During this study tour to Mumbai and Goa, it was proposed to familiarize the students by conducting visits to premier educational institutes and various IT destinations in these two cities and holding discussions with the relevant experts groups with the details about e-governance initiatives

at the state levels in these two states in the area of e-governance so as to be able to examine the practical implications of IT related issues in the area of Government and governance with the aim of improving services to the citizens. They were required to understand the current efforts of these governments to “reinvent government” by identifying breakthrough strategies that rethink the core value of key government services, deficiencies in the present day policies being followed by these governments to improve service delivery, reduce costs and redefine administrative processes.

**Seminars, Conferences and Workshops/
Extension Programmes etc.**

Organised:

SAP National Seminar on *Socio-Political Dynamics in North-East India* organized by the Department of Political Science, NEHU, Shillong at the Conference Hall of ICSSR-NERC, Shillong on March 25-26, 2013

Attended

Prof. R. Borgohain presented joint paper on “Self-help Groups under SGSY Programme in Churhandpur District of Manipur: A Comparative Study”, in National Seminar on *Socio-Political Dynamics in North-East India* organized by SAP, Department of Political Science, NEHU, Shillong on March 26, 2013.

Prof. H. Srikanth, presented a paper titled “Who in the Northeast is/is not Indigenous?” at a National Seminar on *Interrogating Indigeneity, Citizenship and the State: Perspectives from India’s North-East*, Tezpur University, Tezpur, March 7-8, 2013.

Prof. H. Srikanth, presented a paper titled “Agrarian Relations in West Khasi Hills”,

in National Seminar on *Socio-Political Dynamics in North-East India*, organized by Department of Political Science, NEHU on March 25-26, 2013.

Prof. T. T. Haokip, presented a paper titled “Inventing and Reinventing Identities in North East India: The Language Factor”, in National Seminar on *Socio-Political Dynamics in North-East India*, organized by Department of Political Science, NEHU on March 25-26, 2013.

Dr. K. Debbarma, presented a paper titled “Migration and its effects on Tripura Politics” in National Seminar on *Socio-Political Dynamics in North-East India* organized by Department of Political Science, NEHU on 26 March 2013.

Dr. R. K. Satpathy, presented a paper, “Social Capital and Civil Society in Traditional Society”, in National Seminar on *Socio-Political Dynamics in North-East India*, organized by Department of Political Science, NEHU on 26 March, 2013

Dr. Susmita Sen Gupta, presented a paper titled “Self-Determination and Ethnic Identity: Reflecting on the Perceptions of the Elite in Meghalaya and Arunachal Pradesh” at the International Seminar on *Ethnicity, Identity and Literature* (ISEIL) organized by Joysagar College, Sibsagar during October 11-14, 2012. (Also chaired a technical session on “Self-Determination” in this Seminar).

Presented a paper titled “State Autonomy and Federalism” at a National Seminar on *Federalism* organized by Centre for Culture and Development (CCD), Vadodara, in collaboration with ICSSR, New Delhi during August 24-25, 2012.

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- Presented a paper titled “Regional Agenda and Assembly Elections in Meghalaya – An Assessment” in a State-level Seminar organized by St. Edmund’s College, Shillong on August 4, 2012.
- Dr. Munmun Majumdar, presented a paper titled “ASEAN and Conflict Management in the South China Sea” at the Third Oceanic Conference on *International Studies*, Sydney, Australia, 18-20 July, 2012.
- Presented a paper titled “India-Myanmar Relations” at the International Conference on *India and Her Neighbours: Revisiting Relations with Nepal, Bangladesh, Bhutan, Myanmar, Sri Lanka, Maldives* organized by Jadavpur Association of International Relation (JAIR) supported by The Public Diplomacy Division, Ministry of External Affairs, Government of India and Maulana Abul Kalam Azad Institute of Asian Studies, Kolkata hosted by the University of Manipur, Imphal, 17-18 August 2012.
- Presented a paper titled “India, Japan and the South China Sea” at the International Conference on *India-Japan Relations Transforming into Potential Partnership*, Centre for Southeast Asian & Pacific Studies Sri Venkateswara University, Tirupati, 7-9 December, 2012.
- Presented a joint paper titled “ wooing Myanmar: India and China” at the International Conference on *Weaving the Asian Century: Challenges and Opportunities*, 17-19 December 2012, Kolkata organized by Indian Association for Asian and Pacific Studies (IIAPS). Presented a joint paper titled “India and Myanmar” at the International Conference on *India in World Affairs: The Next Decade*, 22-24 January, Osmania University Centre for International Programme (OUCIP).
- Dr. B. K. Mohapatra, presented a paper titled “Issues of Global Governance – Prospects and Challenges” for ICPR National Workshop on *Inter-Disiplinary Ethics*, Pondicherry University, Pondicherry, 2-3 August 2012.
- Presented a paper titled “Local Self Governance and People’s Empowerment: Challenges and Perspectives” in the International Conference on *Democratic Decentralization and Peoples Participation* organized by KILA & International Sociological Association, RC-10, December, 20-23, 2012.
- Presented a paper titled “Forced and Bonded Labour Assessing the Forms, Problems and Perspectives for its Eradication” Workshop on *Fundamental Principles and Rights at Work (FPRW) and Informal Economy in India*, organized by VVGNLI, Noida, New Delhi on 20th November 2012.
- Presented a paper titled “PESA and People-Centric Governance: Revisiting the Challenges and Strategies for Self Governance” National Seminar on *PESA and Self Governance: A Concern of 12th Five Year Plan*, February 25-26, 2013 at IIPA, New Delhi. Presented a paper titled “North-Eastern India and India’s Look East Policy – Need for Reinforcing a Broad Policy Framework” International Seminar on *India’s Look East Policy and the North Eastern Region: Strengthening the Continental Route*, March 21-22, 2013 at ICSSR-NERC, Shillong. Presented a paper titled “Political Dynamics of Ethnic Conflicts & Peace Accords in India’s North East” UGC-SAP National Seminar on *Socio-Political Dynamics in North East India*, March 25-26, 2013 organised by Department of Political Science, NEHU, Shillong at Conference Hall of ICSSR-NERC, Shillong.

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Dr. V. Bijukumar., presented a paper titled “Cultural Diversity and Institutional Accommodation in North-East India”, in SAP National Seminar titled *Socio-Political Dynamics in North-East India* organized by the Department of Political Science, NEHU, Shillong on March 25-26, 2013

Publications

Research Papers

Published in India

Borgohain, R. and Khobung, V. (2012), “Politics of Implementation: A Study of Rural Development Programme (SGSY) in the Hill Areas of Manipur with reference to Churachandpur District”, *International Journal of Advancements in Research & Technology*, Volume 1, Issue-2, July, ISSN 2278-7763.

Srikanth, H., (2012), “Multiculturalism and Aboriginal Peoples in Canada”, *Economic and Political Weekly*, Vol.XLVII, No.23, June 9, 2012, pp.17-21

Srikanth, H., (2012), “The Sino-Indian Border Dispute: Overcoming Nationalist Myopia”, *Economic and Political Weekly*, Vol.XLVII, No.39, 2012, pp.38-41

Haokip, T.T. (2012), “South China Sea: A Sea of Sovereignty Conflicts”, *Third Concept: An International Journal of Ideas*, July 2012 (ISSN 0970-7247), pp. 7-11.

Haokip, T.T. (2012), “Traditional Institutions of the Angami Nagas of Nagaland: A Study of Continuity and Change”, *Local Government Quarterly* (October-December 2012. (ISSN 0024-5623), pp.92-104.

Haokip, T.T. (2012), “Conceptualizing Internal Displacement” *Men and Society: A Journal*

of North-East Studies, Vol.IX, Summer 2012 (ISSN 2229-4058), pp.21-37.

Sen Gupta Susmita. (2013) “Extremist Politics: A Conceptual Analysis”, *UGC-DRS (Phase-I) Programme*, Dept. of Political Science, NEHU, Shillong.

Majumdar, Munmun. (2012) “Indonesia”, *International Affairs Watch*, Vol.1, May-August 2012, p.10.

Mohapatra, B.K., (2012) “Ethnic Conflicts, Politics of Regionalism and the Demand for NAGALIM: Perspectives on the Politics of Regional Accommodation and Autonomy”, *The Indian Journal of Political Science*, Vol. XXIII, No.2, April-June 2012, pp. 311-320.

Mohapatra, B.K., (2012) “Myanmar & United States Growing Bonhomie and Strategic Calculus”, *The Diplomatist Plus*, December 2012

Mohapatra, B.K., (2013) “Park Geun-Hye New High for South Korea”, *The Diplomatist Plus*, January 2013

Mohapatra, B.K., (2013) “Obama Nominates Senate Validates and the World Awaits”, *The Diplomatist Plus*, February 2013

Mohapatra, B.K., (2013) “BRICS-Confronting the Challenges: Understanding the Challenges before BRICS”, *The Diplomatist Plus*, Special Supplement, March 2013.

Books/Book Chapters/Proceedings

Books

Satpathy, R. K., (2012) *United States and Central America*, Published by Mittal Publication: New Delhi, 2012.

Sen Gupta Susmita, Baruah, A.K., (eds.), (2013), *Social Forces and the Politics of North East India*, DVS Publishers, Guwahati.

Book Chapters

Srikanth, H., (2012), Review the book of Gorky Chakraborty, *Assam Hinterland: Society and Economy in the Char Areas*, Akansha Publishing House, New Delhi in *Northeast Researches*, Vol.II, No.2, pp.117-121.

Srikanth, H., (2013), Wrote Foreword to the book of S. Thianlalmuan Ngaihte, *Elite, Identity and Politics in Manipur*, Mittal Publications, New Delhi.

Debbarma, K. (2012), "Demography and Social Change in the Tribal Society of Tripura" in D.V. Kumar (ed.), *Social Changes and Development*, Rawat Publication, New Delhi, pp.305-317.

Sen Gupta Susmita, (2013) "Social Forces and the Politics of Regionalism in Meghalaya" in Baruah, A.K. and Sen Gupta Susmita (eds), *Social Forces and the Politics of North-East India*, DVS Publishers, Guwahati, pp.80-95.

Majumdar, Munmun. (2013) "Peace Talks in Assam: A Perspective" in Baruah, A.K. and Sen Gupta (eds) *Social Forces and the Politics in North East India*, DVS Publishers, Guwahati, pp.215-239.

Mohapatra, B.K., (2012) "India-US Strategic Partnership and the Challenges of Enhanced Cooperation" in Alam M.B. (ed.), *Indo-US Relations: Dimensions and Emerging Trends*, Shipra Publications, New Delhi, pp.175-186

Mohapatra, B.K., (2013) "Cooperative Federalism, Competitive Regionalism and the Role of Regional Parties led Coalition Governments in the Present Era" in Lancy Lobo. (ed.), *India Federalism: Intergovernmental Relations Revisited: Towards a Fresh Balance of Power*, Sage Publication, New Delhi, in Press.

Bijukumar, V. (2013) "Ethnicity and Regionalism in North-East India: A Study of Two

Regional Political Parties – AGP and MNF", in Apurba K. Baruah and Susmita Sen Gupta (eds.), *Social Forces and Politics in North East India*, Guwahati: DVS Publishers, pp.191-214.

Bijukumar, V. (2013) "Globalisation, Modernity and Community: Some Reflections on Northeast India", in Behera M. C. (ed.), *Northeast and Globalisation: Issues Betwixt and Between*, Guwahati: DVS Publishers, pp.159-174.

Proceedings

Sen Gupta Susmita, 2013. "Self-Determination and Ethnic Identity: Reflecting on the Perceptions of the Elite in Meghalaya and Arunachal Pradesh", Anooradha Chakraborty Baruah and Hemanta Kr. Nath (eds), *Problematics on Ethnicity, Identity and Literature*, Pre-Conference Proceeding Volume, ISEIL, 2012, Sibsagar College, Assam. (ISBN:978-81-924140-5-8), pp.652-656.

Majumdar, Munmun. 2013. "India, Japan and the South China Sea" Conference Proceedings, International Conference on *India-Japan Relations Transforming into Potential Partnership*, 7-9 December 2012, pp.1-10.

Funds Received from Agencies other than NEHU

Agency:	Amount (in lakh)
UGC for DRS-I SAP Project	Rs. 5,19,983/-

Research Projects

Ongoing Projects

Borgohain, R : PI, SAP Project " Educated Elite and Gender in Meghalaya".

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Gassah, L.S. : SAP Project “Assam-Meghalaya Boundary Dispute”.

Srikanth, H. : SAP Project “Class Formation in Tribal Societies and its Political Implications: A study of State of Meghalaya”.

Haokip, T.T. : SAP Project “Interface of Kuki Chiefship with Constitutional Democracy in Manipur”.

Sengupta, Sengupta. : SAP Project “Emergence of new social forces among Khasis”.

Mahapatra, B.K., SAP Project “Ethnic Conflicts & Peace Process in North East India: A case study of Nagaland”.

Other Academic Activities

Prof. R. Borgohain, chaired 2nd Academic Session in National Seminar on ‘*Socio-Political Dynamics in North-East India*’ organized by SAP, Department of Political Science, NEHU, Shillong on March 25, 2013.

Prof. H. Srikanth, took Classes in Summer Course and also in the Refresher courses in Political Science, History, Anthropology organized by Academic Staff College, NEHU during 2012-13.

Invited lecture on “Marxism and Social Science Research’ in ICSSR-NERC sponsored course on Research Methodology in Social Sciences, February 14, 2013.

Prof. T.T. Haokip, - Co-ordinator of UGC sponsored Refresher Course in Political Science during November-December 2012.

Dr. K. Debbarma, – Delivered a lecture on “Contemporary Issues of Human Rights in Refresher Course organized by Academic Staff College, NEHU, Shillong on 19 February 2013.

Participated in National Security Advisory Consultation meeting in Shillong organized by National Security Advisory Board held on 20th November 2012.

Chaired 4th Academic Session in National Seminar on “Socio-Political Dynamics in North-East India organized by SAP, Department of Political Science, NEHU, Shillong on March 26, 2013.

Dr. R.K. Satpathy, delivered a lecture on “Globalisation and Multiculturalism”, in the *Refresher Course* organised by Department of Political Science, NEHU, on 27th Nov. 2012.

Delivered a lecture on “Fukuyama’s End of History”, in the *Refresher Course* organised by Department of History, NEHU, on 1st Dec. 2012.

Delivered a lecture on “End of Ideology Debate”, in the *Refresher Course* organised by Department of History, NEHU, on 3rd Dec. 2012.

Delivered a lecture on “Multiculturalism and Migration”, in the *Refresher Course* organised by Department of Culture and Creative Studies, NEHU, on 28th Sept. 2012.

Chaired 3rd Academic Session in National Seminar on ‘*Socio-Political Dynamics in North-East India*’ organized by SAP, Department of Political Science, NEHU, Shillong on March 26, 2013.

Dr. Susmita Sen Gupta delivered a lecture on “Social Forces and Ethnic Politics in Arunachal Pradesh - to the role of the students as an organized force” in UGC sponsored Refresher Course organized by the Department of History, NEHU, Shillong during November 19 – December 8, 2012

Delivered a lecture on “Social Forces and Politics of Regionalism in India w.s.r. to

School of Social Sciences

the role of the educated elite” in the UGC sponsored Refresher Course in History during November 19– December 8, 2012.

Dr. Munmun Majumdar, was Chairperson, national Conference on “Sixty years of

the Working of Parliamentary Democracy India: Experience and Prospects”, Synod College, 27-28 June 2012.

Visiting Professor, ASEAN Center, Chulalongkorn University, Bangkok, 7-18 January 2013.

DEPARTMENT OF SOCIOLOGY

Head : Prof. Nikhlesh Kumar
Telephone : 2723040
E-mail : ila@yahoo.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Nikhlesh Kumar, M.A. (Delhi) & Ph. D. (NEHU)	Sociology of Occupations and Professions; Medical Sociology.
	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; Sociology of Religion; Ethnic Relations
Associate Professor	A. K. Nongkynrih, M.A., M. Phil. & Ph. D. (NEHU)	Sociology of Kinship and Marriage, Sociology of Voluntary Organisations, Sociology of Rural Development
	D. V. Kumar, M.A., M. Phil. & Ph.D. (JNU)	Sociology of Modernisation and Ethnicity
	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
	Mr. Md. Yusuf Khan, M.A. & M.Phil. (Delhi)	Family & Kinship

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Thrust Area 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. 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. Mr. Md. Yusuf Khan joined the Department on 2nd July, 2012 as an Assistant Professor.

Students' Profile

Enrolment Capacity: **P.G. 50 M.Phil. 06 Ph.D. 36**

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	Total
M.A.	00	50	00	10	40	50	0	50
Ph.D.	00	06	01	02	05	04	03	17

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	Total
M.A.	00	44	00	08	36	44	0	44
M.Phil.	00	06	03	00	09	07	02	09
Ph.D.	00	01	00	00	01	00	01	01

Details of Students Awarded Ph.D. Degree:

Name of the student	Title of thesis	Name(s) of Supervisor(s) Supervisor, Jt. Supervisor
Ms. Hannah Tia	Communitisation Programme in Nagaland: A Case Study of Khuzama and Khensa Villages.	Dr. I.L. Aier

School of Social Sciences

Courses Conducted during the year

M.A.

- Semester I : Sociological Theories – I, Methodology of Social Research – I, Sociology of Family and Kinship, Indian Society – I, Indian Society – II
- Semester II : Sociological Theories – II, Methodology of Social Research – II, Sociology of Religion, Indian Society – III, Open Course
- Semester III : Economy and Society, Political Sociology, Sociology of Development, Tribal Movements in India, Open Course, Open Course
- Semester IV : Social Change, Sociology of Environment, Anthropological Theories, Industrial Sociology

M.Phil. / Ph.D.: SOC P 01: Designing Sociological Research, Sociological Concepts, Advanced Sociological Theory

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized:

Under the SAP-DRS Programme the Department organized a National Symposium on *Marginalization, Communalism and Religion* on 15th March, 2013 (Convener: Prof.I.L.Aier) in which Professor Rajni Palriwala, Department of Sociology, University of Delhi and Professor Rowina Robinson of Tata Institute of Social

Research, Mumbai were the resource persons. Coordinator: Prof. I.L. Aier.

Attended

Dr. A.K. Nongkynrih presented a paper on “Land Assessment on Meghalaya”, in a Seminar on Land Tenure System in Meghalaya, organised by Khasi Jaintia Welfare Association, 4th August 2012, Shillong.

Presented a paper on “ Political Parties and Electoral Politics: Views of Educated Youth”, in a Seminar on Electoral Politics in the State of Meghalaya, organised by the Department of Political Science, St.Edmund’s College, Shillong, 4th August 2012.

Dr. D.V. Kumar presented paper ‘Development in the North-East India: A Sociological Study’ along with P. Haokip at a National Seminar on Socio-political Dynamics in North-East India held on the 25th and 26th March, 2013 by the Department of Political Science, NEHU, Shillong

Dr. R.M. Shangpliang Chaired the one day National Symposium on “Marginalisation, Communalism and Religion” on the 15th of March, 2013, organized by the Department of Sociology, NEHU, Shillong.

Publications

Research Papers

Published in India

Aier I.L. (2012). “Politics and the Social Structure: Sociological Study of the Consequences of Insurgency in Nagaland” in the *North Eastern Research Bulletin*, Vol. XXI.

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Chiete Mero and Nongkynrih A.K. (2012). Shifting Cultivation: A Sociological Perspective, *The Eastern Anthropologist*, 65(3-4): 321-337.

Panda B. (2012). Civil society processes and the state: The Bharat Gyan Vigyan Samiti and the literacy campaigns, *Sociological Bulletin* 61(1): 161-163.

Shangpliang, Rekha. M. (2012) 'Forest Legislations and Livelihood Strategies : Khasi Women in Rural Meghalaya', *Sociological Bulletin* 61(3): 479-493.

Books/Book Chapters/ Proceedings

Nongkynrih, A.K. (2013) Development Planning for North-East India, in Kedilezo Kikhi(ed.): *The Dynamics of Development in North-East India* (73-105), Bookwell, New Delhi.

Nongkynrih, A.K. (2013) Is Dorbar Shnong Still a Traditional Institution, in Sarthak Sengupta (ed.): *Tribal Panorama of North East India*, Gyan Publishing House, New Delhi.

Kumar D. V. (2013) Tribal Development: Issues, Movements and Interventions, in *Encyclopaedia of Social Work in India* edited by Surendra Singh (Ed), ISBN 9789380685553 (Vol.S) PP.1598-1611-2012)

Shangpliang Rekha M. (2013). "Socio-Economic Dimensions of Forest among the Khasis". Concept Publishing Company Pvt. Ltd, New Delhi.

Funds Received from Agencies other than NEHU

Agency	Amount
SAP- DRS Phase III grant from UGC	Rs 5,20,000

Research Projects

Ongoing Projects

Voluntary Organisations in Meghalaya under the SAP-DRS (Phase – III), 2012-2013, Dr. A. K. Nongkynrih, Rs. 35,000

Traditional System of Forest Management among the Khasis under SAP-DRS-III of the UGC. Dr. R.M. Shangpliang, Rs. 25,000/-

Completed Projects

Tribalism and Ethnicity in the Frame of State Developmental Policy in Nagaland. Dr. I.L. Aier, Rs. 35,000/-

Urban Ethnicity: A Comparative Study of Telugus and Bengalis in Delhi under SAP –DRS-III of the UGC during 2012-2013, Dr. D. V. Kumar, Rs. 45,000/-

Aged and Their Problems under UGC- SAP-DRS Phase III., Dr. B. Panda, Rs. 35,000/-

Forest and the livelihood of Women Folk in a Khasi Village of Ri-Bhoi District. Source: SAP-DRS, Phase III(UGC)(2012-2013), Dr. R.M. Shangpliang Rs. 25,000/-

Other Activities

Professor Balgovind Baboo, Utkal University, Bhubaneswar and Professor (Mrs) Mita Bhadra, University of North Bengal, Siliguri, delivered lectures to the MA/Ph.D. students under the SAP-DRS Programme Phase III

Prof. Nikhlesh Kumar was Resource Person in the 7th Short-Term Course in Research Methodology with special reference to SPSS for College/University Teachers and Research Scholars organised by the

School of Social Sciences

Academic Staff College, NEHU, on 30th July 2012 and delivered a lecture on Introduction to Research Methodology.

Presented a paper, on 22nd Nov. 2012, titled “Governance in a Sixth Schedule State-A case of Meghalaya” in a National Seminar on “Governance, Socio-Economic Disparity and Social Unrest in the Scheduled Areas of India” organised by the Tata Institute of Social Sciences, Guwahati Campus, Guwahati from 22nd Nov., 2012 to 24th Nov., 2012.

Chaired a session on “Social Development - II” on 22nd Nov. 2012 in a National Seminar on “Governance, Socio-Economic Disparity and Social Unrest in the Scheduled Areas of India” organised by the Tata Institute of Social Sciences, Guwahati Campus, Guwahati from 22nd Nov., 2012 to 24th Nov., 2012.

Resource Person in a Workshop on Research Methodology organised by the NERC- ICSSR, Shillong and delivered two lectures: Philosophical Foundations of the Scientific Method on 13th Feb., 2013; and Techniques of data-collection in Social Science Research on 14th Feb., 2013.

Dr. A.K. Nongkynrih was Resource Person on the concept of Participation, organised by the State Resource Centre, North-Eastern Hill University, Shillong, 10th May 2012.

Was Resource Person on Organizational skills and Community Development, organised by Mawshynrut Area Development and Welfare Organization, Shillong, 17-19 May 2012.

Delivered a lecture on The Role of Youth in Environmental Management, organised

by Save Fishes, Save Rivers’ Campaign, Nongbareh Village, Jaintia Hills, 25th August 2012.

Delivered a lecture on Local Institutions and Good Governance, organised by the Samaritan Action for Social Transformation and The Grand Council of Chiefs of Meghalaya, Shillong, 27th September.

Guest Speaker at the facilitation of SSLC Meritorious students, organised by Officer’s Club Nongstoin, Nongstoin, 2nd October 2012.

Delivered a lecture on Markets and Indigenous Food Habits, organised by the University of Gastronomic Sciences, Italy and the Martin Luther Christian University, 21st November 2012, Shillong.

Was elected International Board Member of Board of the Indigenous Peoples Assistance Facility of the International Fund for Agricultural Development, Rome (2010 – 2013).

Delivered lectures in Orientation/ Refresher courses- Understanding Organizations , organised by the UGC- Academic Staff College, North-Eastern Hill University, Shillong, 27th August, 2012; Words and Meanings: A Sociological Inquiry, organised by the Department of Cultural and Creative Studies, NEHU, Shillong, 5th October 2012; Ki Kyntien, organised by the Department of Khasi, NEHU, Shillong, 20th October 2012; Globalisation and Local Governance, organised by the Department of Political Science, NEHU, Shillong, 26th November 2012; Ideology in the Context of North-East India, organised by the Department of History, NEHU, Shillong, 30th November 2012; Modern Organisations, organised by the UGC- Academic Staff College,

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North-Eastern Hill University, Shillong, 8th February 2013; Modern Organisations, organised by the UGC- Academic Staff College, North-Eastern Hill University, Shillong, 13th February 2013.

Was Member of the District Citizen's Committee, Superintendent of Police, East Khasi Hills, (2012); the Planning Committee, Khasi Hills Autonomous District Council, Shillong, (2011); State Advisory Group on Community Action of National Rural Health Mission, Department of Health and Family Welfare, Government of Meghalaya, 2011; State Level Monitoring Committee on Twenty Point Programme, Government of Meghalaya, Programme Implementation and Evaluation Department (2010).

Attended the Governing Board Meeting of the State Level Nodal Agency Meghalaya State Watershed and Wasteland Agency, Government of Meghalaya, 15th May 2012.

Advisor of Regional Cooperation for People's Empowerment, Guwahati (2010-2012).

Non-Official Member of the Advisory Committee on Codification of Customary Laws, Khasi Hills Autonomous District Council, Shillong, (2010).

Participated as a Panelist in the Seminar cum Workshop on Tribal Theology, organised by North Eastern Social Research Centre, Guwahati, 17-19 April, 2012.

Dr. B. Panda was invited as resource person to "A 10 days state level workshop on Methodology of Social Science Research" and delivered four lectures at the workshop held during 30th October-9th November, 2012 at Nagaland University organized by the Department of Sociology, Nagaland University.

Delivered a lecture at Refresher Course in History held during 19th November-9th December, at Academic Staff College, NEHU, Shillong.

Mr. Md. Yusuf Khan attended "Training Course on Research Methodology in Social Sciences" held during 11-20 February, 2013 at ICSSR-NERC Campus, Shillong.

Chapter VIII

SCHOOL OF TECHNOLOGY

Dean : Prof. S. Choudhury
Telephone : 272 3601, 272 3602
Fax : 272 3606
Email : deanst@nehu.ac.in

The School was established in 2006. It comprises of seven academic departments, namely, Electronics and Communication Engineering (ECE), Information Technology (IT), Basic Sciences and Social Sciences (BSSS), Biomedical Engineering (BME), Nanotechnology (NT), Energy Engineering (EN), and Computer Applications (CA) (Tura). Total strength of teaching faculties during the period reported is 32. Department of Architecture is going to start by next year. Department of EC and IT will start their M.Tech. and Ph.D. programmes

from coming academic session alongside with their B.Tech. programmes. Department of BM and EN will start their undergraduate B.Tech. programmes. Department of CA will start their MCA programmes whereas Department of NT will start Ph.D. programme. Faculties of the school published various research articles/book chapters in their respective field of study during the year and also attended several conferences/symposia. Some of them have delivered invited lectures. Members of the faculty have received extramural funds from various funding agencies.

DEPARTMENT OF BASIC SCIENCES AND SOCIAL SCIENCES

Head : Prof. P. V. Koparkar
Telephone : 2723642
E-mail : hodbsss@gmail.com

Faculty:

Designation	Name and Qualification	Specialization
Professor	P.V. Koparkar; M. Sc., Ph. D.(N.U.)	Physics (Instrumentation/ Atmospheric Sciences/ Nanomaterials)

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Associate Professor	A.K. Das; M.Sc. (IIT, Kgp), Ph.D. (C.U.)	Physics (Theoretical Physics)
	M.M. Singh; M.Sc. (BHU), Ph.D. (PU)	Mathematics (Number Theory, Algebraic Number Theory, Numerical Analysis, Discrete Mathematics)
	A. Sinha; M.Sc. (L.U.), Ph.D. (NEHU)	Chemistry (Analytical)
Assistant Professor	M.D. Kushwaha; M.A. & Ph.D. (BHU)	Mathematics
	Hiranjit Choudhury; M.Sc. & Ph. D. (NEHU)	Botany (Plant Biotechnology)
	Regenel S. Kharwanlang; M.Sc. & Ph. D. (NEHU)	Physics (Theoretical Physics)
	Phrangstone Khongjee; M.Sc. & Ph. D. (NEHU)	Statistics (Sampling Theory and Demography)
	Krishna Upadhaya; M.Sc. (NEHU), Ph.D. (NEHU)	Botany (Plant Ecology)
	Jyoti Narayan; M.Sc., M. Phil. & Ph.D. (Kashmir)	Chemistry (Analytical/ Nanoscience and Nanomaterials.)
	Jibitesh Dutta; M.Sc. & Ph. D. (NEHU)	Mathematics
	Sainkumar M.N. Mawiong; M.Sc.; & M. Phil. (NEHU)	Mathematics
	Evapynhun Giri; M.A. & M. Phil. (NEHU)	English
	R. S. Singh; M.Sc. (Jadavpur), Ph.D. (Osmania)	Chemistry (Organic/ Bio-organic)
	M. Mahato; M. Sc. (Burdwan), Ph. D. (Calcutta)	Physics (Thin film/ Molecular Spectroscopy/ Nanobiotechnology)
	Munshi Ram; M.Com(VBSPU), Ph.D. (BHU)	Commerce- HRM (Human Resource Management)

Thrust Area of Research:

The thrust areas of research of the Department of Basic Sciences & Social Sciences are the fields of Basic & Applied Mathematics, Basic & Applied Physics, Atmospheric Sciences, Chemical Sciences, 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

School of Technology

core courses of Basic Sciences, Humanities and Social Sciences which appear in the B. Tech curricula of Department of Electronics & Communication Engineering (ECE) and Department of Information Technology (IT) 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: P.G. NIL M.Phil. NIL Ph.D. 20

Actual Admissions: P.G. NIL M.Phil. NIL Ph.D. 07*

* Out of 7, six students are admitted in other departments, while one is admitted in BSSS

Courses Conducted during the year:

The Core Courses of Basic Sciences, Humanities and Social Sciences have been taught by the teachers of the Department to cater to the needs of B. Tech Programmes of ECE and IT Departments, School of Technology as per the details given below:

Semester I : Professional Communication Skills, Digital English Language Laboratory, Engineering Mathematics I, Engineering Physics, Engineering Physics Laboratory, Basic Electrical Engineering, Basic Electrical Laboratory, Engineering Mechanics, Workshop Practice for both ECE and IT.

Semester II : Engineering Mathematics II, Engineering Chemistry, Engineering Chemistry Laboratory, Basic Electronics and Basic Electronics Laboratory, Engineering Graphics, Computer Systems and Programming, Computer Programming Laboratory and

Elements of Environmental Sciences in both ECE & IT departments.

Semester III : Engineering Mathematics III, both for ECE & IT, Engineering Economics and 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 VII : Professional Ethics and IPR, both for ECE & IT;

Semester VIII : Bio-informatics (IT-721) for IT.

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized:

“Workshop on Maintenance of Electronic Laboratory Equipments for the technical

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staff of different science colleges affiliated to NEHU in collaboration with Western Regional Instrumentation Centre, Mumbai University at the Department of Basic Sciences and Social Sciences, School of Technology from 24th to 28th September 2012. Convener: Prof. P. V. Koparkar.

Attended:

Prof. P. V. Koparkar presented papers in (i) the “National Symposium on Instrumentation” organized by the Instrumentation Society of India, at CSIO Chandigarh from 30th October to 1st November 2012. Topic: *A novel technique for atmospheric vertical potential & point discharge measurements*, (ii) the “National Symposium on Instrumentation” organized by the Instrumentation Society of India, at CSIO Chandigarh from 30th October to 1st November 2012. Topic: *A cost effective alternative for landmine location using an infra red (IR) sensing radio controlled microcopter*, (iii) the “National Seminar on Green Technologies for Sustainable Environmental Management” organized jointly by DST, Govt. of India and Doon University, Dehradun from 22nd to 23rd March 2013. Topic: *Airborne afforestation using bamboo stakes for augmentation of forest cover in hilly and recalcitrant regions*.

Dr. A. K. Das presented papers in (i) “12th International Conference on Surface X-ray and Neutron Scattering”, organised by Saha Institute of Nuclear Physics, Kolkata, during 25 -28 July 2012. Topic: *Distribution of ambient gamma- and X-radiation in the space inside concrete building*. (ii) “3rd DAE-BRNS Symposium on Atomic, Molecular & Optical Physics, organised by Indian Institute of Science Education

and Research (IISER), Kolkata, during 14-17 December, 2012. Topic: *Indoor environmental gamma- and X-ray photons in a hall of concrete building: dose rates*. (iii) “3rd DAE-BRNS Symposium on Atomic, Molecular & Optical Physics, organised by Indian Institute of Science Education and Research (IISER), Kolkata, during 14-17 December, 2012. Topic: *Natural radionuclides U^{238} , K^{40} , Ra^{226} and Th^{232} in soil and nearby plant and vegetable media in the proximity of a uranium deposit site: transfer factors* (Authors: Das A.K., War S.A., Iongwai P.S., Narayan J., Kharbuli B., and Jha S.K.)

Dr. M. M. Singh delivered an invited lecture in “National Workshop on Trends in Cryptography and Network Security’ during June 14-16, 2012, held at the Department of IT, SoT, NEHU, Shillong and sponsored by Department of Information Technology (DIT), Govt. of India delivered. Topic: *Quadratic residues and its applications in cryotography*.

Dr. H. Choudhury presented a paper (i) in “100th Indian Science Congress”. January 3-7, 2013. Calcutta University, Kolkata, West Bengal. Topic: *Comparative assessment of growth performance of embryogenic suspension culture of Pinus kesiya (Royle ex. Gord.) in shake-flask and self-designed bubble bioreactor and regeneration of plantlets from the culture systems*. pp. 129. (ii) delivered an invited lecture in a seven-day training programme on “Techniques in Plant Tissue Culture” organised from March 05-12, 2013 under the DBT State Level Biotech Hub Project at the Department of Botany, North-Eastern Hill University, Shillong, Meghalaya. Topic: *Techniques in Protoplast Isolation*.

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Dr. P. Khongji presented a paper in “the International Conference on Global Public Health 2012” during December 3-4, 2012 held in Colombo, Sri Lanka, Co-hosted by ICRD, Sri Lanka and Umea University, Sweden. Topic: *Extrapolated trend of Cancer incidences in North Eastern States of India.*

Dr. M. Mahato presented a paper in “International Conference on Material Science (ICMS)” during February 21-23, 2013, organized by Dept of Physics, Tripura University. Topic: *Langmuir Blodgett Approach for the biosynthesis and Assembly of Silver Nanoparticle.*

Publications:

Research Papers

Published in India

Khongji, P and Das, G. (2012): Studies on Some preliminary test estimators in Double sampling, *Journal of Indian Society of Agricultural Statistics*, 66(3), 381 – 390. (ISSN: 0019-6363)

Khongji, P (2012): The NFHS-3 Data on Infant and Child mortality in Meghalaya: Result of Life table and Multivariate Hazard analysis, *NEHU Journal*, Vol X(2), 15 – 31. (ISSN: 0972-8406).

Published Abroad

Khongji P. (2013). Projection of populations by age and sex for Meghalaya State for 2001-2051, *Asian Academic Research Associates*, 1(8), 179- 204. (Online ISSN : 2319-2801)

Narayan J., Choudhary S. (2012). Synthesis and Characterization of Cu-Nano Wire Arrays by Using ITO Template. *International Journal of World Academy of Science, Engineering and Technology*, 67: 89-94.

Mahato M., Pal P., Tah B., Talapatra G. B. (2012). Hemoglobin-phospholipid interaction and biocomposite formation at air/water interface. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 414: 375-383

Mahato M., Pal P., Tah B., Kamilya T., Talapatra, G. B. (2012). Growth and time dependent alignment of KCl crystals in Hemoglobin LB monolayer. *Materials Chemistry and Physics*, 137: 665-672

Tah B., Pal P., Mahato M., Sarkar R., Talapatra G. B. (2012). The study of the Interaction between Catanionic Surface Micelle SDS-CTAB and Insulin at Air/Water Interface. *World Academy of Science, Engineering and Technology*, 70: 1044-1051

Books/Book Chapters/ Proceedings

Khongji P., Das G. (2013). Preliminary test estimators in Double Sampling, LAP Lambert Academic Publishing, Germany. ISBN: 978-3-659-36974-2

Research Projects:

Ongoing Projects

Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools, S. K. Barik *et al.* (PI) and H. Choudhury *et al.*, (Co-PI), Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India, Sanctioned on 23/3/ 2012, Amount: Rs. 103.2985 lakhs, Duration: 5 years.

Phytochemical profiling, molecular characterization and conservation of *Flemingia vestita*: Endemic medicinally important plant of Northeast India, S.

Kumaria and S. Shailajan (PIs) and H. Choudhury, S. Pednekar and S. Menon (Co-PIs), Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India under “Twinning programme for the NE - 2012”, Sanctioned on 2/5/2012. Amount: Rs. 30.39 lakhs, Duration: 2 years.}

Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools, N. K. Chrungoo *et al.* (PI) and K. Upadhaya *et al.*, (Co-PI), Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India, Sanctioned on 23/3/ 2012, Amount: Rs. 82.578 lakhs, Duration: 5 years.

Micropropagation of *Nardostachys grandiflora* and *Malaxis wallichii*, two threatened medicinal plants of Northeast India, P. Tandon (PI), S. Kumaria and H. Choudhury (Co-PIs), Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India, Sanctioned in 2010, Amount: Rs. 28.05 lakhs, Duration: 3 years

Academic Collaborations

India

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, Maharashtra on Phytochemical profiling, molecular characterization and conservation of *Flemingia vestita*: Endemic medicinally important plant of Northeast India.

Dr. K. Upadhaya has collaborative research with Prof. N. K. Chrungoo and 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:

M. Mahato was awarded the Degree of Doctor of Philosophy (Ph. D.) by Calcutta University for his work “Studies on Protein Conformation in Water and Air/Water Interface by Langmuir Blodgett Technique” on 8th March 2013, under the supervision of Prof. G. B. Talapatra, Department of Spectroscopy, Indian Association for the Cultivation of Science, Jadavpur, Kolkata from Calcutta University, WB.

Other Activities

Prof. P. V. Koparkar (i) has been the Coordinator of the following schemes on behalf of the University pertaining to the XIIth Plan merged scheme (a) Remedial Coaching Scheme for SC/ST/OBC and Minority students at UG level in the School of

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Technology (b) Instrument Maintenance Facility and (c) Basic Facilities for Women. (ii) 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.

Dr. A.K. Das attended (i) “National Workshop on e-Governance” during April 9, 2012 organised at North-Eastern Hill University, Shillong, under the sponsorship of Department of Electronics & Information Technology, Ministry of Communication & Information Technology, Govt. of India. (ii) “One-Day Symposium on Current Trends in Atomic, Molecular & Optical (AMO) Physics” in the memory of Prof. Kanika Roy, during January 18, 2013, held at Theoretical Physics Department, Indian Association for the Cultivation of Science, Kolkata.

Dr. M. M. Singh was invited as (i) guest faculty at the National Institute of Technology (NIT), Arunachal Pradesh, Yupia, and delivered a series of lectures on ‘ Graph Theory ’ to the 5th semester students of Computer Science and Engineering(CSE) during September 9-16, 2012, (ii) a resource person in five-day ‘ Orientation-cum-Workshop for the Curriculum Study of Nagaland (for secondary level)’ at North-Eastern Regional Institute of Education, NCERT, Umiam, Shillong during March 5-9, 2013 to analyze the curriculum, syllabi, text books and other available teaching learning materials, (iii) a resource person in the ‘Certificate course in Teaching Mathematics’ at NERIE, NCERT, Umiam, Shillong, and delivered a lecture titled ‘Number System’ on March 16, 2013, (iv) a

resource person in the UGC-ASC sponsored ‘Refresher Course in Mathematics’ held at Department of Mathematics, NEHU, Shillong, and delivered a series of lectures on ‘Mathematical Logic and its Applications’ during March, 2013.

Dr. H. Choudhury (i) attended “Centenary Session of Indian Science Congress” during January 3-7, 2013 held at Calcutta University, Kolkata, West Bengal, (ii) attended “Brainstorming Workshop on Developing R & D Proposals for States of North Eastern Region, India”, during October 18-19, 2012 organised by Tripura State Council for Science & Technology, sponsored by Department of Science & Technology, Government of India, held at Pragna Bhawan, Agartala, Tripura, (iii) is invited as Guest Faculty for M. Sc. ‘Plant Molecular Biology Courses’ of Department of Botany, NEHU, Shillong (Academic session February-July, 2013)

Dr. Phrangstone Khongji (i) Programme Officer, NSS Unit, NEHU (ii) participated and represented as Program Officer, NSS Unit of NEHU in “International Youth fellowship and Global Leadership Camp”, held in Seoul, South Korea, from 28 June to 14 July 2012.

Dr. K. Upadhaya attended “Short-term Course in Research Methodology with special reference to SPSS” organized by ASC- North-Eastern Hill University, Shillong, 30th July to 4th August 2012.

Dr. (Mrs) J. Narayan attended (i) UGC Sponsored ‘Special Summer School’ from 22nd Aug. 2012 -11th Sept.2012 in ASC, UGC, NEHU Shillong, (ii) Workshop on ‘Maintenance of Electronic laboratory Instruments’, during September 24 -28,

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2012, organized by Department of Basic Sciences & Social Sciences, SoT, NEHU, Shillong in collaboration with Western Regional Instrumentation Centre, Mumbai, National Facility Centre of University Grants Commission, New Delhi, and was also the member of the local organizing committee, (iii) Supervised summer intern, from SMIT, Manipal, during summer training programme, on “Nanoscience and Nanotechnology Instrumentation”, from 12th June to 20th July, (2012).

Dr. J. Dutta attended workshop on “Trends in cryptography and network security” during June 11-16, 2012, Organised by Department of Information Technology, NEHU, Shillong and sponsored by Department of Information Technology (DIT), Govt. of India.

Dr. Munshi Ram attended UGC sponsored 63rd “Orientation Course” from January 04th to 31st, 2013 held at BHU ASC, Varanasi, UP.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Head : Dr. L. Joyprakash Singh (till March 22, 2013)
Dr. Subhash C. Arya (from March 23, 2013)
Telephone : 2723661(O)
E-mail : aryasubh@yahoo.co.in

Faculty:

Designation	Name and Qualification	Specialization
Professor	Sushabhan Choudhury	Nanotechnology Wireless Sensor Networks
Associate Professor	L. Joyprakash Singh	Quantized Semiconductor Structures
	Sushanta K. Dutta	Digital Electronics and Advanced Communication
	Subhash C. Arya	Optical Fiber Communication and Opto-Electronics Devices
Assistant Professor	Juwesh Binong	Communication Engineering
	Rajkishur Mudoi	Electronics Design and Technology
	Jaydeep Swarnakar	Control System
	Fidalizia Pyrtuh	Robotics
	Asif Ahmed	Mixed Signal CAD tool Development
	Pankaj Sarkar	Microwave Engineering

School of Technology

Thrust Area of Research

Nanotechnology Wireless Sensor Networks, Digital Image and Speech Signal Processing, Quantized Semiconductor Structures, Microwave Engineering, Telecommunication Engineering, Optical Fiber Communication and Opto-Electronics Devices.

respectively for B.Tech in ECE during the year. 50 students successfully completed their B.Tech. Two projects: 1. Development of Prosodically Guided Phonetic Engine for Searching Speech Databases in Indian Languages and 2. Development of Speech based Multi-Level Person Authentication System whose PI is Dr. L. J. Singh are being in progress.

Brief Statement of Academic Activities

The department admitted 60 students in vertical entry and 6 in lateral entry,

Students' Profile

Enrolment Capacity: B.Tech: 66 (60 seats from Vertical and 6 seats from Lateral Entry)

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
B.Tech.	10	26	27	57	09	12	54	66

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
B.Tech.	18	09	17	37	13	8	42	50

Placement of Students: 05

Sl No.	Date of the Drive.	Name of the Organization	Name of the Student Selected	Year of Passing	Venue of the Drive
1	17 th . Dec,2012	Unisys Global Services.	1. Bhaskar Kalita. 2. Surbhi Sharma.	2013	AEC, Guwahati
2	5 th .April,2013	Dell India	1. Ankush Luitel 2. Mrinal Kumar Das	2013	AEC, Guwahati
3	16 th . April,2013	Tata Consultancy Services(TCS)	1. Navin Agarwal	2013	SOT, NEHU

Courses Conducted during the year

B.Tech. (Electronics and Communication Engineering)

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

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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	Laboratory, VLSI Design Laboratory, Digital Communication Laboratory
Semester V :	Microprocessor, Electronic Measurements and Instrumentation, Principles of Communication Systems, Power Electronics, Basic Control Engineering, Microprocessor Laboratory, Electronics Measurements and Instrumentation Laboratory, Communication Systems Laboratory	Semester VIII : Satellite and Optical Communication Systems, Mobile Communication, Architecture of Advanced Processors, Nanotechnology
Semester VI :	Advanced Microprocessors, Digital Signal Processing, Microwave Engineering, Computer Communications and Networks, Antenna, Advanced Microprocessor Laboratory, Digital Signal Processing Laboratory, Microwave Engineering Laboratory	Seminars/ Conferences/ Symposia/ Extension Programmes etc.
Semester VII :	Embedded Systems and Microcontrollers, Introduction VLSI Design, Digital Communication, Data Communication Systems, Information Theory and Coding, Embedded Systems and Microcontrollers	Organized: Dr. Subhash C. Arya has organized the national seminar on Dr. Ambedkar's Ideas and Thoughts (DBRAIT-2013) held on March 11-12, 2013 at NEHU Shillong in the capacity of Deputy Director of the national seminar. Attended Dr. L. J. Singh attended a workshop on Prosody Modelling held during October 25-28, 2012 at the International Institute of Information Technology, Hyderabad. He also attended a Workshop on Image and Speech Processing (WISP-2012) held on December 17, 2012 at the International Institute of Information Technology, Hyderabad and participated in the National Workshop on Development of Prosodically Guided Phonetic Engine for Searching Speech Databases in Indian Languages held during March 9-10, 2013 at Thapar University, Patiala, Punjab. Sushanta Kabir Dutta participated in Workshop on Image & Speech Processing (WISP), 2012 held on 17 th December, 2012 at IIIT, Hyderabad. He also participated in the National Workshop on e-Governance held on 9 th

School of Technology

April, 2012 at NEHU, Shillong, organized by Department of Electronics & information Technology, Ministry of Communication & Information Technology, Govt. of India.

Ms. Fidalizia Pyrtuh participated in the 21st Orientation Programme held from 4th, Feb. 2013 to 3rd March, 2013 at Academic Staff College, NEHU, Shillong.

She also participated in the 2013 Winter School on speech and Audio Processing held at IIT, Madras, Chennai during 22nd-25th.Feb,2013.

She also participated in the Workshop on Image & Speech Processing (WISP), 2012 held on 17th December, 2012 at IIIT, Hyderabad and also participated in the National Workshop on e-Governance held on 9th April, 2012 at NEHU, Shillong, organized by Department of Electronics & information Technology, Ministry of Communication & Information Technology, Govt. of India.

Mr. Jaydeep Swarnakar participated in National Workshop on e-Governance held on 9th April, 2012 at NEHU, Shillong, organized by Department of Electronics & information Technology, Ministry of Communication & Information Technology, Govt. of India.

He also attended Workshop on “NPTEL-Role of the Programme in Enhancing Engineering Education” organized by Centre for Education Technology, IIT Kharagpur from 20.09.2012 to 22.09.2012 and participated in DIT sponsored three day Workshop on “Trends in Cryptography & Network Security” organized by Department of Information Technology, NEHU, from 14.06.2012 to 16.06.2012.

Mr. Pankaj Sarkar participated and presented paper in 5th international Conference on Computers and Devices for Communication (CODEC-2012) held during 17-19 December 2012 at Hyatt Regency Kolkata, organized by Institute of Radio Physics and Electronics, University of Calcutta.

Publications:

Research Papers

Published in India

Arya, S. C. (2013). Understanding Plagiarism and maintaining research integrity through Ethics. *Journal of OmniScience: A Multi-disciplinary Journal*, (ISSN:2231-0398), 3: 26-29.

Arya, S. C. (2013). Ethics and Research Integrity, *Journal of OmniScience: A Multi-disciplinary Journal*, (ISSN:2231-0398), 3: 8-15.

Arya, S. C., Bhardwaj S. and Priye, V. (2012). Optimum Pumping Configuration for L-band EDFA incorporating Selective Wavelength Auxiliary ASE from C-band EDFA. *International Journal of Emerging Technology and Advanced Engineering*, (ISSN 2250-2459), 10(2): 505-512.

Arya, S. C. (2012).Comparative Analysis of Forward and Backward Auxiliary Selective ASE pumping for L-band EDFA. *Journal of Trends in Opto-Electro and Optical Communication(TOEOC)*, (ISSN: 2231-0401), 2: 17-30.

Arya, S. C. (2012).Characterizing L-Band EDFA for WDM Optical Communication using Implicit Analytical Model”, *Journal of Trends in Opto-Electro and Optical Communication,(TOEOC)*, (ISSN: 2231-0401), 2: 8-16.

Pal, M., Sarkar, B., Sarkar, P. and Ghatak, R. (2012). Compact Dual-Band Bandpass Filter Using Concentric Stepped Impedance Resonator, *CODEC 2012*.

Published Abroad

Pal, M., Sarkar, B., Sarkar, P. and Ghatak, R. and Poddar, D. R. (2013), Miniaturized UWB Bandpass Filter with Dual Notch Bands and Wide Upper Stopband. *Progress In Electromagnetics Research Letters*, 38: 161-170.

Books/Book Chapters/ Proceedings

Dutta, S. K., Singh, L.J. and Pyrtuh F. (2012). Robust Watermark for Speech Communication, *Proc. of ICCTD*.

Arya, S. C. and Pyrtuh, F. (2013), Smart and Intelligent Library System using Advanced Communication Technology, *ICT in Education 2*: 166-172. (ISBN No. 9789380261911),

Infrastructure Added during the period, if any

Speech and *Image* Processing Laboratory: 8 PCs with core i7 and i5 HP machines and one Voice Server connected to a Toll Free number to collect voice data for analysing various features of speech signals over mobile networks.

Research Projects:

Ongoing Projects

Development and Deployment of Speech based Multi-Level Person Authentication System, Principal Investigator: Dr. L. J. Singh, Co-Investigator: Ms. Fidalizia Pyrtuh, Funded by Department of Electronics and Information Technology (Deity), Ministry of Communication and Information Technology, Govt. of India, New Delhi.

Development of Prosodically Guided Phonetic Engine for Searching Speech Databases in Indian Languages, Principal Investigator: Dr. L. J. Singh, Co-Principal Investigator: Mr. S. K. Dutta, Funded by Department Information Technology (DIT), Ministry of Communication and Information Technology, Govt. of India, New Delhi.

Other Activities

Mao, X. P. and Arya, S. C. (2012) "Rise and Fall of the Father of Nation," *International conference on Gandhirama-2012*,

Mao, X. P. and Arya, S. C. (2012), "Relevance of Undelivered Presidential Address on "Annihilation of Caste" by Baba Saheb Dr. Ambedkar after 76 Years of its existence," *ICPR sponsored national seminar on Dr. Ambedkar*.

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DEPARTMENT OF ENERGY ENGINEERING

Head : Dr. Samrat Paul
Telephone : +91-9485043421
E-mail : samrat@nehu.ac.in

Faculty

Designation	Name and Qualification	Specialization
Assistant Professor	Samrat Paul, M. Tech. & Ph. D. (Tezpur University)	Solar Energy
	Manmit Saikia, M. Tech. (Tezpur University)	Bio-energy
	Sanat Das, M. Tech. (IIT Kanpur)	Aero-space engineering

Thrust Area of Research

The thrust area of the department are Solar energy and Bio-energy.

Brief Statement of Academic Activities

The Department is going to start B.Tech program from August 2013. Being a new department under the School of Technology, the faculty members have been engaged in preparation of scheme and detailed syllabus for B. Tech in Energy Engineering, procurement of text books, reference books and furnishing required for the program, setting up of laboratory experiments and preparation of list of equipments and instruments needed to run the laboratory courses.

Publications

Research Papers

Published in India

Paul S. and Samdarshi S.K. (2012). Development of Antioxidant Grafted Carbon Nanotube

Based Heterogeneous Catalyst for Biodiesel Storage. *International Journal of Innovative Research and Development*, 7:32-47.

Infrastructure Added during the period

Two laboratories of fluid mechanics and thermodynamics have been set-up, faculty rooms and class rooms have been partially furnished.

Other Activities, if any

Dr. S Paul attended 3 day workshop “Brain storming workshop for preparation of R&D Proposals” DST GoI, At Agartala, October 2012

Mr. M Saikia attended 3 day workshop “Brain storming workshop for preparation of R&D Proposals” DST GoI.

DEPARTMENT OF INFORMATION TECHNOLOGY

Head : Hemanta Kumar Kalita
Telephone : 272-3611
E-mail : hodit@nehu.ac.in

Faculty:

Designation	Name and Qualification	Specialization
Associate Professor	Iftekhhar Hussain, M.Tech. (IT)	Computer Networks, Mobile Computing
	Bubu Bhuyan, M.Tech (Tezpur University), Ph.D.(Jadavpur University)	Information Security
	Hemanta Kumar Kalita, M.Tech (Tezpur University)	Performance Engineering, Network Security, Wireless Sensor Network
	Debdatta Kandar, M.Tech. (Allahabad Agricultural Institute-Deemed University), Ph.D.(Jadavpur University)	Mobile Communication, Soft Computing.
Assistant Professor	Swarup Roy, M.Tech. (Tezpur University)	Data mining, Computational Biology.
	Arnab Kumar Maji, M.Tech. (Bengal Engineering and Science University, Shibpur)	Algorithm, Image Security.
	Sangita Neog, M.Tech. (Tezpur University)	Theoretical Computer Science.
	Sufal Das, M.Tech. (Tezpur University)	Soft Computing, Data Mining, Natural Language Processing.
	Subhas Chandra Sahana, M.Tech (Tezpur University)	Cryptography and Network Security.
	K. Amitabh, M.E.(Punjab Engineering College(Deemed University)	Information Security.
	Amitabha Nath, M.Tech (Tezpur University)	Network Security.

Thrust Area of Research

The faculty members of the Department are actively involved in research in various fields

related to Computer Science and Information Technology. However the major thrust area is Information Security, Networking, Algorithm, Data mining and Computational Biology.

School of Technology

Brief Statement of Academic Activities

The Department is presently offering a 4 years B.Tech programme in Information Technology. The Department is starting M.Tech and Ph.D.

programme in Information Technology from the current academic session. Besides, the Department also conducts value added courses for the benefit of the students time to time.

Students' Profile

Enrolment Capacity: B.Tech in Information Technology: 60 + 6 (Lateral Entry)

Actual Admissions

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
B.Tech.	04	15	30	31	18	04	45	49

Degrees Awarded

Degree	SC	ST	GEN	Male	Female	Meghalaya	Non- Meghalaya	TOTAL
B.Tech	13	11	25	38	11	06	43	49

Placement of Students

B.Tech. (IT) students are successfully placed in the following companies:

Accenture	BWS, Kolkata	SANPRO Technologies Inc.
Dell	AXA Tech	Areca Services
Tata Consultancy Service -ions	Mindtree Ltd.	TrustFort LLC
Maventic Systems	DWBI	MDS Online
Tele Services Limited (TTSL)	IL&FS Technologies Ltd	Digital Juice
Fujitsu Consulting India	SIRD	Winlineindia
Amazon.com	Wit Innovation Technologies	Expletus Consulting Services
iGATE Global Solutions	Pvt. Ltd.	Pvt. Ltd
Ionindea Interactive Pvt. Ltd	Zaloni	Indian Air force
Helix Enterprise	Infinite Computer Solutions	Indian Army
Revoluza.de		
Techedra Solution Pvt Ltd		

Courses Conducted during the year

Semester II : Computer Systems and Programming (*both for I.T. and ECE students*), Computer Programming Laboratory (*both for I.T and ECE students*).

Semester III : Discrete Mathematics, Data structure & Algorithm (*both for I.T. and ECE*), Numerical Lab, Data Structure Lab (*both for I.T. and ECE*).

Semester IV : Formal Languages and Automata Theory, Computer

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	Graphics & Multimedia, System Programming, Computer Organization & Architecture, Computer Graphics & Multimedia Lab, System Programming Lab, Computer Organizational & Architecture Lab.	Seminars/ Conferences/ Symposia/ Extension Programmes etc.
		Organized:
		Organized a three day workshop “Trends in Cryptography & Network Security” during 14th July’2012 to 16 th July ‘2012.
		Attended:
Semester V	: Object Oriented Programming and Methodology, Operating System, Data Communication, Object Oriented Programming (C++, Java) Lab, Operating System Lab	S. Roy presented paper in <i>16th Intl. Conf Knowledge-Based and Intelligent Information & Engineering Systems (KES 12), San Sebastian, Spain.</i>
Semester VI	: Computer Network, Compiler Design, Algorithm Analysis and Design, Information Theory and Coding, Relational Database System, Computer Network Lab, Compiler Design Lab, Database Lab.	A.K. Maji presented paper in <i>International Conference on Marketing in Emerging Economies - An Agenda for the Next Decade-2012, Punjab Technical University, Amritsar.</i>
		A.K. Maji presented paper in <i>National Conference on Research and Higher Education on Information Technology-2013, Assam University, Silchar.</i>
		Publications:
		Research Papers
		Published Abroad
Semester VII	: Professional Ethics & IPR, Web Technology, Software Engineering, Data Mining, Distributed Systems, Artificial Intelligence, Internet and Application Technologies, Web Technology Lab, Software Engineering Lab, Visual Programming Lab, Minor Projects	Roy S., Bhattacharyya D.K. & Kalita J.K. (2013), “CoBi: Pattern Based Co-Regulated Biclustering of Gene Expression Data”, <i>Pattern Recognition Letters, Elsevier.</i>
		Roy S. & Bhattacharyya D.K. (2013), “Mining Strongly Correlated Item Pairs in Large Transaction Databases”, <i>Intl. Journal of Data Mining, Modeling and Management, Inderscience</i> , Vol. 5, No. 1, pp.76–96.
Semester VIII	: Marketing Strategies and Planning, Mobile Communications, Internet Protocol, E-Commerce, Mobile Computing, Major project.	Books/Book Chapters/ Proceedings
		Roy S., Bhattacharyya D.K. & Kalita J. K.(2012), “Deterministic Approach for

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Biclustering of Co-Regulated Genes from Gene Expression Data”, In Proc. *16th Intl. Conf Knowledge-Based and Intelligent Information & Engineering Systems* (KES 12), FAIA-Vol: 243, IOS Press, , pp. 490—499, Spain

Maji A.K. & Maji S.G.(2012), “Implementation of Visual Cryptographic Secret Sharing Scheme in E-commerce”, *International Conference on Marketing in Emerging Economies - An Agenda for the Next Decade-2012*, pp 68-75, Punjab Technological University, Amritsar.

Maji A.K.(2013), “A New Visual Cryptography and Steganography based Model for securing E-commerce Transaction”, *National Conference on Research and Higher Education on Information Technology*, Assam University, pp. 225-235, Silchar.

Funds Received from Agencies other than NEHU

Agency	Amount (in ₹ lakh)
DIT, GoI	10.944

Research Projects:

Ongoing Projects:

Title: “QoS provisioning in wifi based Long Distance Wireless networks for Hilly Terrain Areas”, PI: I Hussain, Co-PI: S.K. Dutta, Dept. of ECE, Funding Agency: Department of Information Technology (CC&BT Division), Ministry of Communications & Information Technology, Govt. of India, New Delhi- 110003

Title: “Development of New Algorithm for Variable Key Cryptosystem” PI: B.Bhuyan, Co-PI: S. Roy, Funding Agency: Department of Communication & Information Technology, Ministry of Communications & Information Technology, Govt. of India, New Delhi- 110003, Amount received in lacks: 10.944 lacs

Other Activities

S. Roy received travel grant from DST, Govt of India to visit San Sebastian, Spain for attending KES 2012.

B. Bhuyan, S. Roy, A.K. Maji, S. Neog, S. Das, S. Sahana attended North East Workshop on Cryptology held at ISI Kolkata during 29th July and 30th July’2012.

DEPARTMENT OF NANOTECHNOLOGY

Head : Dr. L. Robindro Singh
Telephone : 9863331127/8729919064
E-mail : robindro001@yahoo.co.in; lrsingh@yahoo.co.in

Faculty:

Designation	Name and Qualification	Specialization
Assistant Professor	L. R. Singh, M.Sc. & Ph.D. (MU)	Nanoscience, Nanotechnology and Material Science
	D. Pyngrope, M.Tech. (Sikkim Manipal)	Nanoelectronics

Thrust Area of Research:

Preparation of small particle nanoparaticles by wet chemical method and preparation CNT at different temperatures. Study luminescence and electrical properties of such prepared nanoparticles at different particle sizes.

Brief Statement of Academic Activities

During this year syllabii for M. Tech. and Ph.D. Course Work were prepared, two times BPS meeting held during March to April, 2013. The Department shall admit students once the syllabi are approved by Academic Council of the University.

Students' Profile

Enrolment Capacity: P.G.: 17 Ph.D.: 2

Courses Conducted during the year

Will start from 2013-14 session

Publications

Research Papers

Published Abroad

Singh L.R. and Singh S.D. (2012). Particle size effect on TL emission of Zns nanoparticles

and determination of its kinetic parameters, *Journal of Nanomaterials* Vol. 2012 doi:10.1155/2012/239182

Singh L.R. Singh S.D. and R.K. Thapa (2012). Low-termpearature synthesis and particle size effect on photoluminescence of $YVO_4:Eu$ nanocrystals, *Experimental Nanoscience* Vol. 2012 doi.org/10.1080/17458080.2012.736638

Rai D.P., Shankar A., Sandeep, Singh L.R., Jamal M., Hashemifar S.J., Ghimire M.P. and Thapa R.K. (2012). Calculation of colomb repulsion (U) for 3d transition elements in Co_2YAl type Heusler Alloys, *American Journal of Physics*, 5: 105-110.

Research Projects

Ongoing Projects

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: Dr. L.R. Singh, Funding Agency: DST New Delhi under the scheme of DST Fast Tract young Scientist, Amount Received: Rs. 13.75 lakhs.

School of Technology

Characterization and Investigation of luminescence properties Zn^{2+} and Sulphate based nano phosphors doped with lanthanide and metal ions for the feasibility on luminescence dosimetry application. PI: Dr. L.R. Singh, Funding Agency: BRNS, Mumbai, Amount Received: Rs. 12.5 lakhs

Study particle size effect and role of sensitizers in the luminescence emission of nanoparticle oxide phosphors. PI: Dr. L.R. Singh, Funding Agency: UGC, New Delhi, Amount Received: 5.4 lakhs

Chapter IX

ADMINISTRATIVE DEPARTMENT

CAMPUS DEVELOPMENT DEPARTMENT

University Engineer : Mr. A.M. Kharmawphlang
Telephone : 2722061

The following construction projects were at various stages of completion during the period under report:

Construction of proposed extension of Law dept (right wing left wing and Central wing) at Permanent campus NEHU, Shillong

Construction of Cultural Park Under NEICOD (Civil, Plumbing & Internal Electrification works)

Construction of Laboratory complex

Construction of Auditorium Building

Construction of Butterfly Park

External Electrification to NEICOD

Approach road towards Bio park complex

Construction of Guest House Building near Borjhar Airport at Guwahati (Assam)

Additional work relating to construction RCC slab Culvert over the water way at the

entrance approach at NEHU Guest House at Guwahati

Construction of Main Gate and Circular Park at Tura campus, NEHU, Tura

Construction of RCC overhead tank of One lakh litre capacity for NEHU's Tura Campus at Tura

Construction of Administrative building Tura campus NEHU, Tura

Construction of quarters at Tura Campus, Tura

Construction of boys' Hostel and Warden's Residence at Tura Campus, NEHU, Tura

Construction of Hostel for MBA students including Warden's residence at Tura Campus, NEHU, Tura (electrical)

Construction of Research Scholars hostels building at NEHU Permanent Campus –one each for boys and girls

Construction of Cluster of Class rooms.

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 year and has representatives comprising university officials, faculty members, a representative of the State Government, principals and teachers of affiliated colleges.

The University has 63 affiliated Colleges, of which 32 are permanently affiliated and 31 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 liaisoning body for the UGC in guiding the affiliated colleges recognized under Section 2(f) and 12(B) of UGC Act with all the procedural formalities to send proposals

to the UGC for obtaining funds under the different schemes for the overall development of colleges.

The Colleges visited by various Inspection Teams during the year 2012-13 are

1. Seng Khasi College, Shillong
2. Jaintia Eastern College, Khliehriat,
3. Umshyrpi College, Shillong
4. Regional Institute of Science & Technology, Baridua, Ri-Bhoi
5. NEIGRIHMS, Shillong
6. Tirot Sing Memorial College, Mairang
7. Thomas Jones Synod College, Jowai
8. Nongstoin College, Nongstoin
9. St. Mary's College, Shillong
10. Lady Keane College, Shillong
11. Kiang Nangbah Govt. College, Jowai
12. Khad-Ar-Doloi Law College, Jowai
13. Sankardev College, Shillong
14. Ampati Degree College, Ampati
15. Loyola College, Williamnagar
16. Tura Law College, Tura
17. Synod College, Shillong
18. St. Anthony's College, Shillong

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19. Raid Laban College, Shillong
20. St. Edmund's College, Shillong
21. North East Regional Institute of Education, Ri-Bhoi

Actions Taken on Affiliation Matters during the year 2012-13

For considering grant of opening permission/affiliation under the following categories are as follows:

Opening permission to New College : Loyola College, Williamnagar, East Garo Hills

Provisional Affiliation to New Subject (s)/ Course(s) of study in an Affiliate

College/Institution: (1) Nongstoin College, West Khasi Hills

(2) NEIGRIHMS, Shillong

Renewal of Provisional Affiliation : 15 Colleges

Permission to start New Subject(s)/Course(s) of study in an Affiliated College : Ampati Degree College, West Garo Hills.

In the year under report, the College Development Council has been instrumental in convening several Committees related to the implementation of the Semester System at the UG level in the affiliated Colleges under NEHU.

In 2012, the MHRD, Department of Higher Education, Government of India, have initiated a proposal for setting up of Community Colleges, pertaining to skill oriented courses with multiple exit options after each level of certification under National Vocational Education Qualifications Framework (NVEQF) in one or more affiliated Colleges under NEHU. Four such affiliated Colleges, have submitted their proposals to the Government of India for grant, financial assistance, for the setting up of Community Colleges.

EXAMINATION DEPARTMENT

Controller of Examinations : Dr. L. Cajee
Telephone : 0364 2721211 / 1212.
Email : offcoe@nehu.ac.in

During the year under review, the Examination Department could declare the Under Graduate results well in advance so as to facilitate the admission process into the Post Graduate Programme of the University. The Department has initiated measures for digitization of Tabulation and Grade Cards for all Post Graduate Programmes and Under Graduate Programmes serviced by

the University as per relevant Regulations of the University. In order to ensure timely declaration of Under Graduate 2013 results, the Examination Department has organized the process of Central Evaluation at various identified Centres of various professional courses and Under Graduate Courses and consequentially a substantial number of results of various streams have been declared within a record time.

Administrative Department

The Examination Department is mandated to operate round the year on all matters relating to Under Graduate and Post Graduate examinations including Professional Courses, MPhil and PhD programmes. With the increase in the number of affiliated colleges and students in the Post Graduate Programme, the Examination Department is gearing up to meet the new challenges expected of this office.

Under the Choice Based Credit System, evaluation of answer scripts has been done internally with the cooperation of all academic faculty of the University which has resulted in timely declaration of the PG results.

The University has adopted the MPhil and PhD Course Work Examinations under the UGC guidelines and examinations for the same have since been conducted in the month of February 2012 for which the results based on the UGC's 7 Point Scale have been declared.

The Examination Department has successfully declared the results of 1st final year MBBS examinations of MS serviced at NEIGHRIMS including that of MS & MD Degrees.

The University under the direction from the UGC has initiated steps for the introduction of the semester system at the Under Graduate level in the affiliated colleges which is most likely to be implemented from the academic session of 2014.

In order to facilitate successful implementation of the semester system at the under graduate level, the Examination Department is gearing up with its 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 Central Evaluation of answer scripts of semester system to run concurrently with the Annual System of examinations.

The Examination Department has been receiving substantial numbers of request 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 view of the austerity measures under the direction of the Government of India, Examination Department is making special efforts for curtailment of expenditure with regard to UG and PG Examinations. The Examination Department is also taking adequate steps to digitize all confidential records maintained by it since inception.

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FINANCE DEPARTMENT

Finance Officer : Mr. Taliremba, IDAS
Telephone : 2721021
Email : fo@nehu.ac.in

The grants, Income and Expenditure account of the University for the year 2012-13 is as follows:

Receipt	Rs	Payment	Rs
Balance B/F	750274399		
Non-plan grants from UGC.	1278443000	Salary and wages	890305857
Interest Non-plan grants.	5792847	Pension	157733638
Plan/UPE.	263200000	Revenue	135787383
Interest Plan/UPE grants.	67889059	Capital	29578722
Ministry of women and Child development: <i>Interest only</i>	115250	Salary and wages	13124809
Ministry of Social justice: <i>Interest only</i>	397328	Revenue	29634571
Other special assistance scheme and sponsored programme.	58063228	Capital	186887850
TOTAL	2424175111	Other special assistance:	
		capital	16155933
		Revenue	36166016
		TOTAL	1495374779
		Balance carried forward	928800332
Internal receipt	67659419		
Interest on S.B. Account of other funds.	2572675		

Administrative Department

PLANNING DEPARTMENT

The Planning Department of the University was established in 1978 with the main objectives of designing as well as monitoring the implementation of vision plan for the overall development of the University, the academics, infrastructure development and welfare activities. It is the nodal centre for budgetary Planning where budgetary plan proposals received from different Schools Departments, Centres, etc are scrutinized and finalized and fund allocations made for the smooth running of individual schools departments, centres, in particular and the whole university in general. The proposal for XII Five Year Plan (2012-17) amounting to Rs.405,44 lakhs was submitted to UGC, New

Delhi for consideration, against which it is communicated to University that an amount of Rs.134 crores has been tentatively approved by the commission under the current plan period.

Meanwhile an amount of Rs.1132 lakhs has been released as the first instalment against the XII Five year Plan period grants.

Further a separate proposal amounting to Rs.50 crores for executing the Project “University Potential Excellence” Phase II, towards the research focus on Bio Science, Holistic Development and Area Studies, under the XII Five year Plan was submitted to UGC, New Delhi for consideration against which the UGC decision is awaited.

Chapter X

CENTRAL SERVICES

UGC ACADEMIC STAFF COLLEGE

Director : Prof. Rakesh Mohan
Telephone : 0364-2721401/2721402; 2550103 (Fax)
Email : asc@nehu.ac.in; ascnehu@gmail.com

Faculty

Designation	Name and Qualification	Specialization
Professor	Rakesh Mohan, M.Sc., Ph.D. (BCKV)	Agronomy
Associate Professor	Quendarisa Kharbuli M.Sc., Ph.D. Zoology , NEHU, Shillong	Zoology
Assistant Professor	Kuheli Biswas Das M.Sc., Ph.D. Zoology, NEHU, Shillong	Zoology

Thrust Area of Research

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, 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

During 2012-13, the UGC-ASC conducted a total of 4 OPs, 11 RCs, 1 Special Summer School and 3 Short-Term Course, and trained a total of 454 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, and associated peripherals. The Computer Lab is used for training the participants of the OPs and RCs as well as

Central Services

the faculty, research scholars and students 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 2012-13:

Orientation Programme	Duration
19 th Orientation Programme	07/05/2012 to 03/06/2012
20 th Orientation Programme	16/05/2012 to 12/06/2012
21 st Orientation Programme	04/02/2013 to 03/03/2013
22 nd Orientation Programme	11/02/2013 to 10/03/2013

Refresher Courses	Duration
Refresher Course in Library & Information Science	3rd September to 23rd September, 2012
Refresher Course in Economics	3rd September to 23rd September, 2012
Refresher Course in Folkloristics & Semiotics	25th September to 15th October, 2012
Refresher Course in Linguistics	29th October to 18th November, 2012
Refresher Course in Khasi	7th November to 27th November, 2012
Refresher Course in Political Science	14th November to 4th December, 2012
Refresher Course in History	19th November to 9th December, 2012
Refresher Course in Zoology	26th November to 16th December, 2012
Refresher Course in Mathematics	18th March to 7th April, 2013
Refresher Course in Chemistry	18th March to 7th April, 2013
Refresher Course in English	18th March to 7th April, 2013

Short-Term Course	Duration
Short Term Course in Research Methodology	8th October to 13th October, 2012
Short Term Course in Research Methodology with special reference to SPSS	30th July to 4th August, 2012
Short Term Course for Academic Administrators	11th October to 17th October, 2012

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Special Summer School-2012

Duration

Special Summer School-2012	22nd August to 11th September, 2012
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During the year, study tours and field trips to various places of importance were conducted.

The main purpose of these educational field trips is to expand the learning beyond the classrooms and to expose the participants coming from other parts of the country, to the mesmerizing scenic beauty of the State. Besides, regular study trips to Don Bosco Museum are conducted for the participants of the Orientation Programmes/ Refresher Courses where the participants get a glimpse of the treasure house of the cultural heritage of entire North-East India.

Seminars/ Conferences/ Symposia/ Extension Programmes etc:

Dr.(Mrs.) Quendarisa Kharbuli presented Paper in the International Conference on ICT Culture in Education, held at the Indian International Centre, New Delhi from September 27 – 29, 2012 organized by Educational Technology and Management Academy, Gurgaon.

Funds Received from Agencies Other than NEHU

The Academic Staff College was sanctioned Rs 40 Lakhs for the year 2012-13 from the University Grants Commission, New Delhi, for

conducting Refresher Course and Orientation Programmes, Short-Term Courses/Workshops in approved subjects and for meeting other expenses.

Honours/ Awards/ Recognition

NAAC assessment: The Academic Staff College, NEHU Shillong was reviewed and assessed by NAAC from 20th to 22nd February 2012 and was awarded 3rd Rank on national level.

Other Activities

Organized a three weeks Training programme/ Refresher Course for the officers and staff of the University of Group B, C & above w.e.f. 12th February to 4th March, 2013.

Dr.(Mrs.) Quendarisa Kharbuli delivered a talk on the API as applicable to the College Teachers of Meghalaya, organized by the IQAC, Lady Keane College, Shillong on the 9th July, 2012.

Delivered a talk on Faculty Development to the Teaching staff of St. Mary's College of Teacher Education on March 5, 2013.

Was Resource person for the Orientation – Cum – Workshop for Curriculum study of Nagaland from March 6-9, 2013 at NERIE, NCERT, Umiam.

Central Services

BIOINFORMATICS CENTRE

Name of the Coordinator : Prof. Pramod Tandon
Name of the Deputy Coordinator : Prof. Veena Tandon
Information Officer : Shri. Devendra K. Biswal
Distributed Information Centre Website: <http://bicnehu.ac.in>

Thrust Area of Research in the Centre

The Centre has been set up and funded by Department of Biotechnology (DBT), Ministry of Science & Technology under the Biotechnology Information System Network (BTIS) programme since November 1999 with a view to catering to the needs of the scientific 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 biodiversity 'hotspots'. Being a part of the national Bioinformatics Network, the Centre's mandate is Biodiversity Informatics and it serves as an information base in various areas of Biosciences. Some of the important areas of research are molecular characterization, genome organization and expression in plants, animals and microbes, oncology, parasitology, crop improvement, microbial genetics etc. The most important area of research relevant to the northeastern 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.

Brief Statement of Academic Activities

Information node of BTISnet: The Centre is part of the National Bioinformation Network

and functions as an information base in various areas of Biosciences and Biodiversity for the entire north-east ever since its inception.

Nodal centre of North East Bioinformatics Network (NEBInet): The BIC at NEHU serves as a nodal centre for the newly constituted NEBInet by DBT, GOI comprising 3 Sub-DIC's and 26 Bioinformatics Facilities through Biology teaching (BIF-BTBI) Centre's since 2008 spanning 8 states of North-East.

Nodal centre for operating DBT-sponsored Online Access Facility of Library Resources (OAFLR) for 36 Secondary and Senior Secondary Schools in North Eastern States of India through 8 BIF-BTBI Coordinators.

Identified as one of the 18 nodal Centre in North-East Region to operate and monitor the DBT e-Library Consortium (DeLCON) facility (that comprises a total of 917 selective Journals and a Database (SCOPUS) for NEHU).

DBT-sponsored Bioinformatics National Certification Examination Exam Centre (BINC): BIC, NEHU as one of the seventh Examination Centres for conducting BINC Exam (the year 2008 onwards).

Dissertation Training: Students pursuing post-graduation in any branch of biosciences are trained in Bioinformatics for a period of 3-6 months towards their dissertation work as a partial fulfillment of their M.Sc. degree.

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Research & Database development: Molecular characterization, functional and comparative genomics, proteomics, metabolomics, and evolutionary bioinformatics of pathogenic worm infections.

Bioinformatics Training Programmes: have always been an integral part of the Centre's activity, for which connoisseurs in the field are always invited to act as resource persons.

Identified for the first phase of Bio-Resource Information Centre (BRICs) and portal development under Indian Biodiversity Information Network (IBIN), DBT, Govt. of India.

Courses Conducted/Organized

Delivered lectures and conducted practical classes on "Bioinformatics and Molecular Taxonomy" for participants of Refresher Courses in Zoology, November, 2012 conducted by the Academic Staff College, NEHU, Shillong.

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.

Delivered lectures and conducted practical classes on "Bioinformatics and Molecular Taxonomy" for participants of Refresher Courses in Botany, April, 2012 conducted by the Academic Staff College, NEHU, Shillong.

Conducted NGS workshop under the DBT NER Twinning program during June 17-21, 2013.

Seminars/ conferences/ symposia/ workshops/ extension programmes etc Conducted/ Attended:

The Information Officer participated in a 10-day training program on Genome Informatics and HPCC at IIT, Delhi during August 16-25, 2012.

The Information Officer participated in the 18th DeLCON Nodal Officers meeting, organized at ICGEB, New Delhi on 4th July 2012.

Publications

Biswal DK, Debnath M, Kumar S, Ranganathan S, Tandon P. (2012) Phylogenetic reconstruction in the Order Nymphaeales: ITS2 secondary structure analysis and in silico testing of maturase k (matK) as a potential marker for DNA bar coding. *BMC Bioinformatics* 13(Suppl 17):S26 doi:10.1186/1471-2105-13-S17-S26

Biswal DK, Ramachandran S, Chatterjee A, Tandon V (2012). Phylogeography and genetic variation of *Paragonimus westermani* (Trematoda: Digenea) and its position within the genus *Paragonimus*: an in silico study using ITS2 sequences. (oral presentation at INCOB 2012, Bangkok, Thailand)

Goswami LM, Prasad PK, Biswal DK, Chatterjee A, Tandon V. (2012) Crustacean-borne infections with microphallid metacercariae (Digenea: Microphallidae) from focal areas in Meghalaya, north-east India. *Journal of Helminthol.* 22:1-8.

Infrastructure Facilities Available at the Centre

Computer & Communication facility

Leased Line Internet Connectivity (4 Mbps plus 2 Mbps through DeLCON w.e.f. December 2010)

Implementation of LAN on a Structured CAT 5 UTP Cabling Network using Switches and Hubs

Servers (3 nos.)

Central Services

PCs (20 nos.) & Workstations (2 nos.)	Facility procured through NER Twinning Next-Gen Sequencing Project:
Printers (3 nos.)	Apple Mac Pro (1 no.)
Scanner (1 no.)	10 kva UPS (1 no.)
UPS (4 nos.)	Apple iMAC 21" (6 nos.)
LCD Projector (2 nos.)	
Scientific Software packages	Facility procured through DBT, GOI sanctioned IBIN-BRIC Project:
• Accelrys Gene 2.5 (Sequence Analysis Work Bench)	Backup Device (1 no.)
• Matlab 7.0	Workstation (1 no.)
• Winspirc ver 4.1 for Biotechnological Abstracts	HP Procurve Switch (1 no.)
• Reference Manager	Cisco 1841 Router (1 no.)
Databases & other information resources	Server (2 nos.)
• Derwent Biotechnological Abstracts (July 1987 - March 2006)	Red Hat Enterprise Linux 6 Advance Platform (1 user)
• Reference Update Deluxe Edition (July 2002 - June 2004)	Microsoft SQL Server 2008 R2 Enterprise Edition (1 user)
• Parasitology Database (obtained through MOE&F)	
• Application Softwares from Microsoft, RHEL, SQL, Adobe and Apple etc.	
Facility procured through DIT sanctioned NEPIAC project:	Research Projects
• Apple Work Group 13 node Cluster (HPCC)	Completed
• Apple iMAC (7 nos.)	A database on medicinal plants (nearly 400 species) under the "Network project Development of database of the Indian Himalayan region" – Prof. S.K. Barik (PI), Dr. Umashankar (Co-PI), Prof. N. Chrungoo (Co-PI) and Prof. Veena Tandon (Co-PI) sanctioned by NMPB, Department of AYUSH, MH & FW, Govt. of India, (2008-2010).
• 40 kva UPS (1 no.)	
• SPSS	"North-East Parasite Information and Analysis Centre (NEPIAC): an <i>in silico</i> approach" – Veena Tandon (PI), Devendra Kumar Biswal (Co-PI) and S Ramachandran (Co-PI) in collaboration with IGIB, New Delhi and TCGA, New Delhi sanctioned by DIT (MCIT, GOI)(2008-2011).
• iWork, iNquiry softwares	
DeLCON facility through DBT, GOI – free access to 917 selected journals available to the potential users through University LAN.	

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Ongoing

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) under DBT NER Twinning Programme (2011-14) vide

sanction no. BT/48/NE/TBP/2010 dated March 14, 2011.

Establishment of Portal for Indian Bioresource Information Network (IBIN) under National Bioresources Development Board (NBDB, DBT) (2011-2014) vide sanction no. BT/PR14571/NDB/52/187/2010 dated March 04, 2011.

CENTRAL LIBRARY

(Shillong Campus)

University Librarian: Dr. (Mrs.) I. Majaw

The Central Library continues with its basic activity to strengthen its books and journals collection along with the reader's service with active involvement of the acquisition, technical, periodical and circulation section. Special mentioned may be made on the activity of the library to increase its Hindi books and journals collection as per Government of India direction. Overall library's continuous involvement during the period have resulted in timely procurement and processing of library resources, infrastructure enhancement including maintenance thereby resulting not only towards utilization of allocated budget but an overall improvement of library services. To supplement the specific information requirement of the research community the Documentation Section from time to time provides such information through its Data Bank available primarily in government organization published reports and IndiaStat online database. During the year, the Library provides links and organized access to the rich collection of e-resources available

through the UGC INFONET Digital Library Consortium, INDEST-AICTE Consortium and DeLCON-Consortium. Usage Statistics provided by UGC INFONET Digital Library Consortium indicate that the total number of full-text articles downloaded during the year was 1,79,554 articles with usage ranking at number 21 compared to other universities in the country. Though the library's main objective is to support the information requirement of its academic community, it also extends its library facilities to other users from outside the university averaging at 375 during the year.

As part of Radio Frequency Identification (RFID) System implementation requirement, SMART Identity Cards duly approved by the University are being processed and issued by the library to both students and employees of the university. With a sole objective to facilitate an overall efficient library user's services, the new ID cards issued presently will replaced the university's existing ID and Library cards

Central Services

issued earlier to students. The contribution of the Circulation Section as a whole regarding the processing and issuing/renewal of these ID cards to both students and employees along with its utilization to realize their potential to improve the issuing and returning of books is worth commenting.

Library Budget : 186.75 Lakhs

Library Resources

(I) Books Collection	: 2, 73,629 Vols.
(II) Data Bank (Government Publications & Reports)	: 11,082 Vols.
(III) Books added during the Year	: 6,162 Vols.
(IV) Periodical Subscription (Print)	
(i) Foreign Journals:	175
(ii) Indian Journals:	211
Total:	386

Library User's Enrollment Including Usage of E-Resources and Other Online Services

(I) Total No. of Registered Members:	1513
(II) Daily Average No. of Books issued/ return/renewal (including Law Dept.):	507
(III) Daily Average No. of users who availed consultation services:	375
(IV) Usage of Journals/ Back Volumes/Theses:	
Students:	520 per month

Research Scholars:	230 per month
Others:	68 per month
(V) Average internet users:	461 per day
(VI) Photocopying services:	77,723 copies
(VII) Printing Services:	4200 copies
(VIII) Resources sharing under UGC INFONET Digital:	326 articles
(IX) NEHU usage of UGC INFONET Digital Library:	1,79,554 articles

Initiatives during the Period

- (i) Awareness cum Orientation Programme for newly enrolled students and research scholars

After the commencement of the fresh academic session, the Documentation Section of the Library immediately co-ordinated an awareness-cum-orientation programme during the August 2012 for the newly-enrolled students and research scholars of the university. The objectives of this programme was to educate the potential users on methods and procedure to acquire relevant information available in the library and also to familiarize and equip them with latest information retrieval and resource sharing skills thus ensuring usage of resources available both in print and electronic format.

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.

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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. It also arranged trial access of various electronic resources, full text e-journals, abstracts, e-books for a period of one/two months depending on the offer of respective publishers. Hyperlinks were placed on the Library's webpage for the user's convenience. The unit co-ordinated a presentation of e- books published by Elsevier in the presence of research scholars and teachers. The presentation was delivered by Mr. Manik Sethi, Customer Development Manger, Elsevier (India) Pvt. Ltd, Gurgoan, at the Conference Hall, Central Library, on the 14th September 2012, from 11.00AM to 1.00PM.

- ii) New including renewals of 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 (1 user) (INDEST Consortium)

Important Activites/Steps Accomplished towards Improvement of Library Services

Reference Section added 106 new volumes and the section was reorganized and unusable documents removed from the shelves.

The officer in-charge and the staff of Documentation Section regularly attend to library members/visitors/scholars from other institutions/government departments.

A list of e- journals available under UGC INFONET Digital Library Consortium during the period were compiled by the Computer Unit

and forwarded to Heads of Department for their red reference. The unit further forwarded to INFLIBNET Centre, Ahmedabad soft copies(in pdf format) of Ph D Thesis(46 nos.) and Dissertations(36 nos.) received by the library during the period for uploading in ShodhGanga repository.

The Technical Section of the library undertook and accomplished the task of processing the books acquisition by the library during the period including Hindi books so as to ensure that they are made available for use by their potential readers.

The Periodical Section of the Library initiated the task of binding the loose issues of the journals into Bound Volumes. During the period a total number of 400 issues were bound. With a rich collection of print journals that the section housed for reference, sectional statistics recorded indicated that 90 journal issues were consulted by users from various academic disciplines of the university and a total of 253 issues of journals were send to the photocopying section of the library as per user's request. The user's mainly comprises of students, research scholars and faculty members of the university and from other institutions/universities. With the enhancement of necessary infrastructure(book shelves), the Social Sciences Back Volume stack area was re-organized and re-arranged in the alphabetical ascending order (from A to Z) of journal titles which will facilitate speedy retrieval of these documents. As a result of this, the said area received a face-lift for which earlier due to un-availability of proper infrastructure resulted in undesirable confined and un-uniformed shelved spacing, leaving the back volumes scattered. During the period, the section also shouldered the additional task of carrying out Stock Verification procedure of the Sociology Book Collection on account of

Central Services

the circulation section being involved in the processing and issuing of smart ID cards to both students and employees of the university.

Valuable, Rare and out of copyright Books which falls under the category of the North-East Collection have been digitized (table of contents only) and uploaded into the NEHU Digital Repository for visibility as part of digital information dissemination programme.

Academic Contributions

Teaching & Research

Paper Presented and published during the period

Shri Manoj Rana, Assistant Librarian published an article entitled "Open Access Initiative" an overview" in ICT in Education. Vol. 2 edited by Brinda Bazeley Kharrymbai published by EBH Publishers (India), Guwahati, 2012.

Shri F.R. Sumer, Deputy Librarian presented a paper entitled "A Comparative Study on the Performance of Three Indian ETD repositories using Apache JMeter" co-authored with Dr. P. Hangsing, Assistant Professor, NEHU and Dr. A.R.D. Prasad, Professor, DRTC, ISI, Bangalore which was published in the Conference Proceedings of the International Conference on Trends in Knowledge and Information Dynamics (ICTK) organized by DRTC, ISI Bangalore and held in Bangalore during 10-13 July, 2012.

Shri F.R. Sumer, Deputy Librarian attended and participated with paper presentation in the International Conference on Trends in Knowledge and Information Dynamics (ICTK) organized by Documentation Research and Training Centre, Indian

Statistical Institute, Bangalore and held in Bangalore during 10-13 July, 2012.

Other Activities

Shri F.R. Sumer, Deputy Librarian delivered 2 lectures during the 21st Orientation Programme conducted by UGC-Academic Staff College, NEHU on 4th February - 3rd March 2013 at NEHU, Shillong,

Dr. Lalhmachhuana, Documentation Officer delivered 9 lectures during the 19th, 20th & 22nd UGC Orientation Course(General) held during 7th May – 3rd June 2012, 16th May – 12th June 2012 and 11th February- 10th March 2013 respectively conducted by the Academic Staff College, NEHU, Shillong He also delivered 5 lectures during the 6th and 7th Short Term Course in Research Methodology conducted by the UGC-Academic Staff College in NEHU, Shillong during the period 30th July – 4th August 2012 and 8th October 2012 – 13th October 2012. He also delivered 2 lectures at UGC-ASC Special Summer School held during 22nd August – 11th September 2012 at Academic Staff College, NEHU.

Shri Manoj Rana, Assistant Librarian was invited as Resource Person for 20th (16th May 2012 to 12th June 2012) Orientation Programme at NEHU, Shillong, Meghalaya, India organized by Academic Staff College, NEHU. He was also Invited as Resource Person for Refresher Course in Botany (26th Sept. to 16th October 2012) at Academic Staff College, NEHU, Shillong, Meghalaya, India organized by Department of English, NEHU. Was Invited as one of the expert of the university's inspection team to NEGRIHMS, Mawdiang-diag, Shillong on 16th of July, 2012. Was invited as subject

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expert for appointment of College Librarian for Sngap Syiem College, Mawkyrwat, W K Hills on 26th June 2012. He was also invited as Resource Person for Refresher Course in English (18th March to 7th April 2013) at Academic Staff College, NEHU, Shillong, Meghalaya, India organized by Department of English, NEHU.

Shri B. Sten, Information Scientist was invited as Resource Person for a lecture-cum-demonstration on library management software and mode of accessing the

e-resources through the hyperlinks available on the Library's website. The above-mentioned UGC-MSEW Training Workshop on Information Communication Technology was organized by NEHU on the 22nd November 2012 at St. Edmund's College Seminar Hall, Shillong.

Other Information

Revenue generated during the year by the Library through Reprography, consultation and overdue fee : Rs 1,60,316

CENTRAL LIBRARY (Tura Campus)

In-Charge : Dr. A.K. Mondal
Asstt. Librarian : Mr. A. Jeevan Singh

During 2012-2013 (01.04.2012 to 31.3.2013) 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:-

Allocation of Books and Periodicals during 2012-2013 (Non-Plan)

(i) Book Grant	= Rs. 3.50 Lakhs
(ii) Periodicals Subscription	= Rs. 6.80 Lakhs
Total Allocation	= Rs. 10.30 lakhs

Collection Development

Total Books Collection upto 31.03.2013	= 22,080 Vols.
Purchased	= 21,353
Gifted	= 727

Books Added During the Year (2012 - 2013)	= 1084 Vols.
Purchased	= 1039
Gifted	= 45

No. of Journals Subscribed:	= 88
Indian Journals	= 75
Foreign Journals	= 13

Central Services

Library Membership Statistics:

Total memberships = 437

Library Circulation Statistics:

Books Issued = 12,117

Books Returned = 11,751

Consulted = 38,081

Internet Users (Average) = 20 per day

*(This also includes the statistics of Management Library)

Statistics of Technical and Library Automation Units:

Book Classified = 1084

Bar-coded = 3776 Vols.

*(This includes both new books and retro-conversion)

Statistics of Reprographic Unit of Campus Library:

Total Number of Xerox Exposures = 12206

Revenue Collected during the financial year 2012-2013

Reprography Services = Rs. 6041/-

Overdue fines = Rs. 4400/-

Total = Rs. 10,441/-

Activities by Library Staffs:

The Central Library was shifted to permanent campus on 17th December, 2012 and started functioning from February, 2013.

The Campus is still having a Library in Chandmari for the four new departments where Dr. A.K. Mondal, Sr. Prof. Asstt. is the In-charge.

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.

LibSys software engineers visited the Campus Library and rendered training to Library staff about the updating of LibSys S/W for better utility on February, 2012.

Library provided Orientation Programme to its new borrowers on the use of OPAC and introduced the library resources to them.

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COMPUTER CENTRE

Head : Professor Prabodh Shukla
Telephone : 2723751
E-mail : prabshukla@gmail.com

Faculty/Staff

Designation	Name and Qualification	Specialization
Professor/Head	P.Shukla	Physics
Associate Professor	T.K. Sinha Ph.D.(NEHU)	Physics (Computational)
Senior System Analyst	P.P.DEY, B.Tech. (REC Warangal)	
System Analyst	B.Rynjah, B.Tech (JNTU College of Engineering, Kakinada), MBA(IIT Chennai) Mr.H.Kharshiing, B.Tech	
Computer Operator	Nirmala Dayanandan, B.Sc,B.Ed & DCA	
Data Entry Operator	P.Kharlukhi, BCA N.L.Lyngdoh, M.Com	

Thrust Area of Research

(i) Providing computational facility to faculty members, research scholars and students of the University. (ii) Developing and maintaining software program developed for in-house use. (iii) Assisting Examination Section in Automation (iv) Conducting training programmes in computer related subjects (both hardware and software).

Brief Statement of Academic Activities

Short Term Computer Courses were conducted in the following :

SPSS

MATLAB

C Programming

MS-Access & Visual Basic Programming

Webpage Designing

Photoshop

Windows & MS-Office

Computer HW & Networking

Central Services

Students' Profile Intake Capacity : 80

Following Short Term Courses were conducted during 2012-13 :

Course Name	Male	Female	SC	ST	OBC	Gen	From Meghalaya	Non Meghalaya	Total
C++	10	7	0	4	2	11	17	-	17
C++& Java	6	5	6	0	2	3	11	-	11
Tally	3	0	0	3	0	0	3	-	3
MATLAB	2	0	1	1	0	0	2	-	2
Windows & MS-Office	18	22	0	33	0	7	40	-	40
Data Analysis	1	4	0	5	0	0	5	-	5
Total	40	38	7	46	4	21	78	-	78

Seminars/ Conferences/ Symposia/ Extension Programmes etc.

Organized

Organized in collaboration with NeGP, New Delhi organised a one day workshop on e-Governance on 9th April 2012, funded by DIET, Ministry of Communication and Information Technology, New Delhi.

Attended

Dr. T.K. Sinha attended International Conference, 17-19 December 2012, Vel Tech Dr.R R Dr.S R Technological University, Chennai.

International Conference on Mathematical Sciences, December 28-31, 2012 Nagpur, India

International Conference, JIS College of Engineering at Kalyani, West Bengal 11 -12 January 2013

International Conference on Applied Mathematics and Theoretical Computer Science (ICAMTCS 2013), Nagarcoil, Tamilnadu, India

Sinha T.K., Mathew J. (2012). *Harmonically Perturbed Soliton Solutions to Nonlinear Differential Equation*, accepted for oral presentation at International Conference, on 5th CHAOS 2012 International Conference June 12-15 2012, Greece.

Publications

Books/Book Chapters/ Proceedings

Shukla Prabodh (2012). Domains and interfaces in random fields, *In* Texts and Readings in Physical Sciences-II: The Physics of Disordered Systems G I Menon and P Ray (eds.), Hindustan Book Agency,2012.ISBN 978-93-80250-32-8. pp 141-157

Research Papers

Published Abroad

Sinha T.K., Mathew J. (2012). *Probabilistic Inverse Scattering*, accepted and presented at International Conference, on 17to 19 Dec 2012, Vel Tech Dr. R R Dr. SR Technological University Chennai ISBN- 978-81-925286-4-9.

- Sinha T.K., Sebastian M. (2012). *Path Integral Approach to Hysteresis*, accepted and presented at International Conference, on 17to 19 Dec 2012, Vel Tech Dr. R R Dr. SR Technological University Chennai ISBN -978-81-925286-4-9
- Sinha T.K., Chanda S., Mathew J. (2012). *Coupled Map Model Of Quasi Species Evolution*, accepted for oral presentation at International Conference, on 17 to 19 Dec 2012 , Vel Tech Dr. R R Dr. SR Technological University Chennai ISBN -978-81-925286-4-9
- Sinha T.K., Sebastian M. (2012). *Path Integral Approach To Hysteresis*, accepted for oral presentation at International Conference, on 17to 19 Dec 2012 ,Vel Tech Dr. R R Dr. SR Technological University Chennai. ISBN -978-81-925286-4-9
- Sinha T.K., Mathew J. (2012). *Long Wave Length Soliton Solutions of Sine Gordon Equation*, presented at International Conference on Mathematical Sciences, December 28-31, 2012 Nagpur, India and accepted for publication.
- Sinha T.K., Mathew J., Chanda S. (2012). *Domain Wall model of B DNA to Z DNA Transition*, presented at International Conference on Mathematical Sciences , December 28-31, 2012 Nagpur, India and accepted for publication in International Journal of Pure and Applied Mathematical Sciences. (Delhi)
- Sinha T.K., Mathew J. (2012). *Long Wave Length Soliton Solutions of Navier Stokes Equation*, presented at International Conference on Mathematical Sciences, December 28-31, 2012 Nagpur, India and accepted for publication in the Conference Journal.
- Sinha T.K., Mathew J. (2012). *Long Wave Length Soliton Solutions of KdV*, presented at International Conference on Mathematical Sciences ,December 28-31, 2012 Nagpur, India and Accepted for publication in Shekhar (New Series) Int. J. of Sci. &Tech. ISSN: 2277 – 8152 Allahabad.
- Sinha T.K., Sebastian M. (2012). *Transformation of Quantum mechanical operators to moving frame*, accepted for oral presentation at International Conference on Mathematical Sciences, December 28-31, 2012 Nagpur, India and accepted for publication by them (Nagpur).
- Sinha T.K., Mathew J. (2012). *Soliton Solution Of Nonlinear Differential Equation Via Lattice Discretization*, accepted for publication in Shekhar (New Series) Int. J. of Sci. &Tech. ISSN: 2277 – 8152 Allahabad.
- Sinha T.K., Mathew J. (2012). *Soliton Solution Of The Unperturbed Sine-Gordon And Perturbed Sine-Gordon Equation*, accepted for publication in Shekhar (New Series) Int. J. of Sci. &Tech. ISSN: 2277 – 8152 Allahabad.
- Sinha T.K., Sebastian M., Mathew J. (2012). *Long Josephson Junctions In Magnetic Field*, accepted for publication in Shekhar (New Series) Int. J. of Sci. &Tech. ISSN: 2277 – 8152 Allahabad.
- Sinha T.K., Mathew J. (2012). *Nonlinear Optical Filters*, accepted and presented at ICAMTCS 2013 (Nagarcovil TN ISBN 978-93-82338-30-7).
- Sinha T.K., Mathew J. (2012). *Role Of Solitons In Jumping Genes and onset of Cancer*,

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accepted and presented at ICAMTCS 2013 (Nagargoil TN ISBN 978-93-82338-30-7).

Sinha T.K., Sebastian M. (2012). *Evidence of Solitons in a spin labeled DNA Lattice*, accepted and presented at ICAMTCS 2013 (Nagargoil TN ISBN 978-93-82338-30-7)

Sinha T.K., Mathew J. (2013). *Long Wave Length Soliton Solutions of phi 4 equation*, presented at International Conference on Mathematical Sciences, December 28-31, 2012 Nagpur, India and published in International Journal of Pure and Applied Mathematical Sciences. ISSN 0972-9828 Volume 6, Number 2 (2013), pp. 127-133

Sinha T.K., Mathew J. (2013). *Massively Parallel Computing with Nonlinear Optical Crystals*, presented at International Conference, JIS College of Engineering at Kalyani, West Bengal 11 -12 January 2013. ISBN-13 978-1-25906393-0, ISBN-10 1-25-906393-3.

Other Activities

Dr. T.K. Sinha, Mr. P.P. Dey, Ms. B. Rynjah, Mr. H. Kharshiing, Mr. P. Kharlukhi

delivered lecture in various Orientation Programmes /Short Term Course in Research Methodology at Academic Staff College, NEHU, Shillong.

Ms. B. Rynjah attended the 8th Short Term Course for Academic Administrators conducted by UGC-Academic Staff College, NEHU.

The Centre conducted course work in Computer for PhD students of Hindi Department, NEHU.

Computer Centre maintains software of salary section, fund section and assists loan data processing for Finance Section, NEHU.

Centre is actively involved in Automated Tabulation work, printing of tabulation sheets, development of web portal for Examination Section, NEHU.

The Centre assists Research Scholars in data analysis using SPSS/ MS-Excel etc.

The Centre generated a revenue of Rs.78,100/- (Rupees Seventy Eight Thousand One Hundred Only) during 2012-13.

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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 (2012-13) under report.

The Placement Cell, Tura, had conducted four Campus Interviews during the year under report. IDBI Bank Limited, Professional Assistance for Development Action (PRADAN), NEW Delhi,

Bajaj Allianz Insurance Company Pvt. Ltd. And Prefetti Company, conducted the Campus interviews. 12 students were offered placement by the above companies. The Cell also organised a training for SAP 01-pre-specified e-module for the 3rd Semester MBA students.

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.

As per the information collected from the concerned Sections, the present position of SCs/STs teaching and non-teaching levels and admission to various courses/degrees as on 31.03.2013, is as under:

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.	Assistant Professor	204	178	*133	17	15	13	Nil	178	26
2.	Associate Professor	146	99	**93	-	1	5	Nil	99	47
3.	Professor	92	59	***57	-			Nil	59	33
4	PRO/ REA	1	-	-	-	1	1	-	-	1

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*Under General Category, out of 133 there are 57 belonging to ST category although not appointed against reserved category.

** Under General Category, out of 93 there are 17 belonging to ST category although not appointed against reserved category.

*** Under General Category, out of 57 there are 13 belonging to ST category although not appointed against reserved category.

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	69	65	***65	-	-	-	-	65	4
2.	Group-B	185	140	137	-	1	1	1	140	45
3.	Group-C	456	326	325	-	-	-	1	326	130
4	Group-D	323	247	247	-	-	-	-	247	76

*** under General category, out of 65 there are 36 belonging to ST category although not appointed against reserved category.

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	186 + B.Ed SEDE (Unspecified)	1082	294	63	72	653	*6	1082	-
2.	PG	1144	2215	217	26	29	1943	*7	2215	-
3.	M.Phil	Unspecified	38	13	-	-	25	-	38	-
4.	Ph.D.	Unspecified	620	243	19	13	345	-	620	-
5.	Others	P.G. Diploma=60 + unspecified.	737	219	75	24	419	-	737	-

*PWD is included in Total.

NEHU DATA AND VOICE NETWORK (NDVN)

Administrative in-charge : Professor P. Nongkynrih
Telephone : (0364) 272-2121
NDVN Facility numbers : 272-6195, 272-6196, 272-6197 and 255-1297
E-mail : admin@nehu.ac.in

Other Staff

Technical Officer : Mr. Ivan Lyngdoh
System Analyst : Mr. S. Nongkhlaw

The NEHU Voice and Data Network (NDVN) Facility, commissioned in 2003 as VSAT Facility, continues to provide data (Internet) and voice (telephony) access in a convergence mode to all academic and administrative departments besides other facilities/buildings on the campus.

New Implementations for 2012-2013.

A New Mail Server on open source has replaced the Lotus Notes Mail Server. The server also functions as anLDAP (Lightweight Directory Access Protocol) for required authentication for proxy server and wifi access.

Microsoft Campus License for Windows operating System and office software was renewed providing legal copies for Windows computers in the campus.

An additional Media Gateway 450 for telephone access to new P-Type Quarter has been installed. This will also provide telephone connections to Type IV and Type III quarters.

Existing Components Providing Continual Services

Data Network

The National Knowledge Network (NKN) of 1 Gbps link commissioned on 19th May 2010 providing Internet access and other related applications (Internet, IP authenticated e-journals from UGC-Infonet E-journal consortium, mail and web etc.)

Data Network is extended to all Departments, Centres and Administrative building with a capacity of over 3000 connections.

All servers and applications, which include DNS, DHCP Web Servers, Mail Servers, Proxy Servers, Gateway filtering for Viruses and Spams, Antivirus Distribution Server, Network Monitoring software and DHCP, runs on HP Blade Chassis C7000 with 9 active Blade Servers and beside these there are other Tower servers (IBM, Compaq & Wipro) being utilized as proxy for residence, voice applications and backup.

Central Services

The Extreme Summit Black Diamond 8806 core switch provides connectivity, routing, vlans access to and from all layer 2 switches in all departments

All Departments are connected to the core switch with the Extreme Summit X150-24t & Extreme Summit X150-48t L2 switches with gigabit uplinks.

Campus Antivirus, Trend Micro Office Scan, is implemented for all clients in the network.

A Firewall with Unified Threat Management, Cyberoam1000i providing gateway protection of Antivirus, Antispyware and AntiSpam is implemented in the Network.

The Intranet and Internet access of the Digital Repository under the Library Digitalization Project of UPE is through the network infrastructure of NDVN.

Limited WI-FI access is provided to each department of the University including Multi-Use Convention Centre and Guest House.

Data Connections of around 391 with 30 nos of 48 port Layer 2 switch to most departments

having computer lab facilities has been provided.

Voice Network

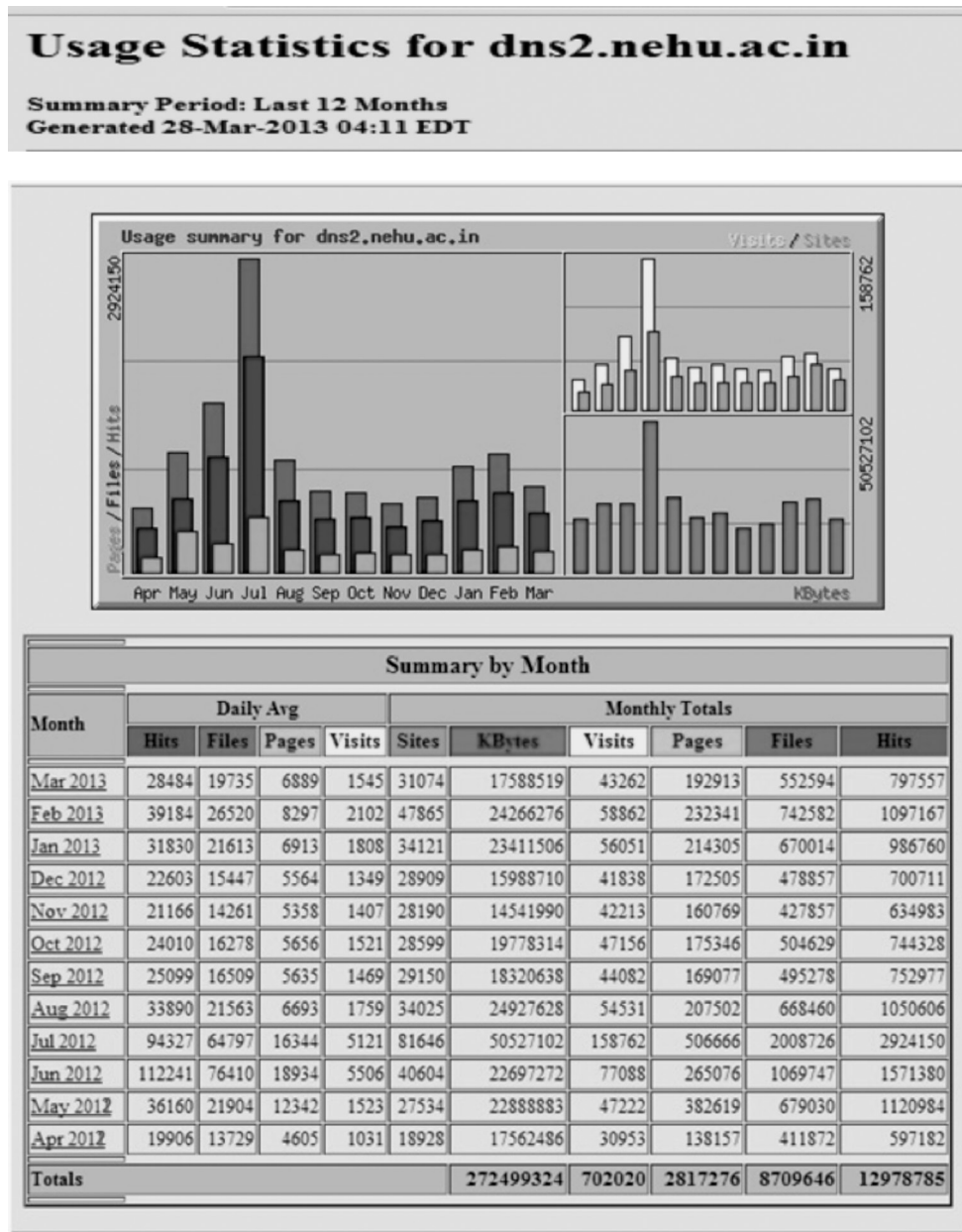
Voice Network is extended to all Departments, Centres, Administrative building and some residences quarters with a capacity of over 1500 telephone extensions.

The Avaya S8730 server with G650 gateways located in NDVN, Administrative Building and Political Science Dept. along with G450 located in the School of Technology and Old Guest House provides TDM backbone and IP enable switch architecture for voice/telephony. All these port networks are connected to the server over IP and registered to the Server-over-IP-Back-Bone.

2 Mbps PRI and 2 Mbps Level-DID leased lines from BSNL and integrated with the IP –PBX Server provides incoming and outgoing telephone calls facilities to/from the network

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Website Data.



Central Services

DATA AND VOICE NETWORK

(Tura Campus)

A Data and Voice Network similar to the one in the Shillong Campus is now commissioned in the permanent campus with the following components:-

Data Network

- 1 Nos CoreSwitch Extreme Black Diamond 8810 10 Slot chassis, 8 Port 1G SFP populated with 4 LX Mini GBIC, 48 Port 10/100/1000 Base-T RJ45 providing core switching facility with L3/L2 vlan routings across the network.
- 1 Nos Extreme Summit 450a 48 Port Switch.
- 9 nos Extreme Summit 200 24 port L2 Switches distributed to different departments.

Structured cabling with Cat6 cable, Racks, Jack Panels, LIU and optical fiber is implemented.

The data network at present has the capacity of supporting more than 400 connections.

Voice Network

AVAYA IP-PBX Server 8300 and Gateway G450 with 90 nos of IP Phones.

The Internet access through ERNET-VSAT is being distributed in the Network with appropriate vlans through the core switch and the Cyberoam Firewall appliance installed provides the required network security.

HINDI CELL

Hindi Officer : Sri Rajendra Kumar Ram.
Telephone : 0364 2721331

In pursuance of the Official Language Policy of the Government of India and to promote the Progressive use of Rajbhasha, a Hindi Cell is 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 under report a Hindi Training Programme for the employees of this University

was conducted under the aegis of the Government of India, Hindi Teaching Scheme. 01 employee has completed Hindi Praveen course and 08 employees in Hindi Pragya course. All of them were awarded cash incentive as per the Government of India's Order.

The Departmental Official Language Implementation Committee held all the mandatory meetings in every quarter. The Quarterly Report regarding Progressive use of Hindi was forwarded to the Ministry of Human

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Resource Development and Ministry of Home Affairs, Government of India in time. Besides, two Hindi Workshops for the employees were conducted at Shillong Campus. The Hindi Divas was celebrated at both the Campuses in the month of September, 2012. Several Hindi Programmes and Competitions for the employees were also conducted. The winners

of the competitions were awarded prizes on the valedictory function.

In the month of December, 2012 the Official Language Implementation Committee passed a resolution to publish a In-House Magazine namely “NEHU JYOTTI” in Hindi.

INTERNAL QUALITY ASSURANCE CELL

The University Grants Commission under XI Plan 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 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.

The IQAC assisted the University in scrutinizing and rationalizing the proposals of the memoranda of Understanding (MOUs) of the University (originating from different departments) and the

institutions in India / abroad desirous of having such MOUs with NEHU.

The IQAC assisted the University in preparing for an introduction of the Semester system at the Under-Graduate level in its affiliated colleges.

The IQAC participated in the Workshop for IQAC Coordinators held during 4-5 July 2012 at NAAC, Bangalore.

The IQAC enriched the database on the Journal Impact Factor in different disciplines. It also assisted the teachers for assessing their API and enhancing their information regarding the Journal Impact factor and Academic Performance Index (API) wherever such assistance was required.

The IQAC assisted the University in preliminary screening of applications made by the candidates for their promotion in the Career Advancement Scheme (CAS).

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NATIONAL SERVICE SCHEME

Programme Co-ordinator : Dr. Lakhan Kma
Telephone : No: 2721151, 2721152, and 2721153.
Tele Fax : 2721151.
E-mail : nss.nehu@gmail.com

The National Service Scheme (NSS) of Government of India envisages to utilize 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 current enrolment strength has reached 19212 comprising volunteers from 2 PG units, 38 colleges, 24 higher secondary schools, 1 medical institute and SOS Children's Village with 96 NSS Programme Officers.

Republic Day Parade Camp:

A selection camp for Pre-Republic Day Parade Camp was held on 15th September, 2012 at Community Hall, NEHU Umshing, Shillong. Around 49 NSS volunteers from different colleges participated in this camp.

9 NSS volunteers from different colleges along with one Programme Officer participated at the Pre-Republic Day Parade Camp held at Sarusajai Stadium, Guwahati from 21st – 30th September, 2012.

Mr. Joshua Kharnaor of Umshyrpi College and Ms. Lalchandami Marak of St. Mary's College attended Republic Day Parade Camp at New Delhi from 31st December 2012 – 31st January, 2013.

Youth Exchange Programme at China :

Ms. Palvy Dora Kharkongor, NSS volunteer of Shillong College was nominated by the Ministry of Youth Affairs & Sports to visit China as member of the Indian Youth Delegation from 16th – 22nd July, 2012.

Youth Festival:

40 NSS volunteers and 2 Programme Officers participated in the North East Youth Festival at Itanagar, Arunachal Pradesh from 7th – 9th November, 2012.

10 NSS volunteers from Shillong College participated in the Assam Youth Festival at Guwahati from 19th – 21st February, 2013.

Indira Gandhi National NSS Award:

Mr. Tara Prasad Upadhyay of Shillong College was conferred with the IGNSS award on 19th November 2012 at New Delhi.

NSS Mega Camp:

11 NSS Volunteers along with contingent leader attended the NSS Mega Camp held at Ranchi from 4th – 15th March 2013.

Adventure Programme:

NSS volunteers participated in the adventure programme at Nagaland, Arunachal Pradesh, Jaisalmer (Rajasthan) and Narkanda, (HP).

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15 NSS volunteers from different colleges along with 1 Programme Officer of Shillong College, Shillong participated at the Summer Adventure programme held at Patnitop (Jammu & Kashmir) from 29th June – 8th July, 2012.

Inter State Youth Exchange Programme:

NSS Programme Officers and volunteers from different colleges hosted the volunteers and Programme Officers from 8 states (including Jharkhand, Kerala, Maharashtra) during the Inter State Youth Exchange & Home Stay Programme held at Shillong from 22nd November – 1st December 2012.

Youth Integration Camp:

22 NSS volunteers from different colleges of Shillong participated in a Jamboree – Cum - Youth Integration Camp at Shillong from 12th – 14th December 2012. The event was organized by the Meghalaya Bharat Scouts & Guides in observance of Meghalaya Year of the Youth.

Special Camps:

18 (eighteen) Special Camps under the theme “Healthy Youth for Healthy India at 18 different villages adopted by the NSS Volunteers were conducted during the year under report.

Disaster Management Programme:

NSS volunteers attended a Master Trainers’ training programme on Search, Rescue and First Aid and a workshop on Disaster Management conducted by the Civil Defence & Home Guards. Besides a four day training on Disaster Risk Management at Meghalaya Administrative Training Institute, Shillong.

Training/Workshops/Meetings/Orientation:

4 NSS volunteers attended an evaluation meeting held at Bharat Scout & Guides office on

12th April, 2012 organized by the office of Civil Defence and Home Guards, Shillong.

Programme Coordinator attended a workshop on “Youth Policy” on 11th April, 2012 at Main Secretariat Building.

Around 40 NSS volunteers from different colleges of Shillong attended a workshop on “Literacy and Creative Arts Workshop” held at Don Bosco Youth Centre from 8th – 15th May, 2012.

Programme Coordinator attended a Review Meeting on 1st June, 2012 at Shastri Bhavan, New Delhi.

Mr. Gideon Kharkongor, NSS Programme Officer, St. Edmund’s College, Shillong attended the National Level Training and Workshop on Voluntary Blood Donation held on 7th and 8th June, 2012 at Gangtok, Sikkim.

1 Programme Officer of JNV, Nongstoin attended the NSS Orientation Course at TORC, Narendrapur from 23rd – 29th Sept, 2012.

The NSS Regional Centre in collaboration with the NSS Cell, NEHU and Meghalaya AIDS Control Society organized a two day peer educators training on HIV/AIDS on 13th & 14th September, 2012 at Science Centre, NEHU, Shillong. 50 NSS volunteers from different colleges.

The 32nd University Advisory Committee was held on 3rd December 2012 at NEHU.

3 NSS Programme Officers from Sngap Syiem and Shillong College attended Orientation Course at TORC, Narendrapur from 2nd December 2012.

4 NSS Programme Officers attended a Training of Trainer’s (TOT) on Social Harmony, National Unity and Human Rights at Don Bosco Institute, Guwahati from 18th – 24th January 2013.

Central Services

1 Programme Officer of Christian Academy, Shillong attended the NSS Orientation Course at TORC, Narendrapur from 17th – 23rd March, 2013.

Blood Donation Camp:

Eleven camps were organised during the year in different colleges of Shillong and Tura. During these camps as many as 381 (three hundred eighty one) volunteers participated and donated 381 (three hundred eighty one) units of blood.

Creation of Community Assets:

NSS units have also constructed community assets through the labour of volunteers at the various villages during the course of the special camping programme.

NSS DAY:

The 43rd NSS Foundation Day celebration was held at the Multi-Use Convention Centre, NEHU on 24th September, 2012. About 600 NSS volunteers from different institutions of Khasi, Jaintia, Ri-Bhoi and Garo Hills district attended the programme. The Vice-Chancellor,

NEHU Prof. A. N. Rai graced the occasion as the Chief Guest and the Registrar, NEHU Shri. L. Roy was the Guest of Honor. During the celebration University level NSS awards were given to meritorious NSS volunteers for their effective participation in community services.

The day ended with a variety programme which comprised songs, dances, skits and multi-varied cultural items.

Other Activities

NSS volunteers organized a mass awareness rally on “Save Wah Umkhrah”, a Seminar on “Fresh Water Crisis, a challenge of the 21st Century”, “Climate change the role of Christianity”, a street show on HIV/ AIDS programme.

Besides observing the International Day against Drug Abuse and Illicit Trafficking, NSS in collaboration with the Civil Defence Department organized a three day training programme on Disaster Management.

Apart from the above, NSS also organized free health camps, drawing and painting competitions, cleaning drives, etc.

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PUBLICATION UNIT

In- Charge	:	Prof. T.B. Subba April 2012 to 12.10.2012 Prof. R. Khongsdier from 10.12.12
Publication Officer	:	B. Shylla
Asstt. Editor	:	G. Umdor
Telephone	:	2721422
Email	:	bmsylla21@gmail.com

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 Status, Ordinances, the *Annual Report*, and *The NEHU Journal* (biannually) and the E-NEHU News (quarterly), Endowment Lectures, and supplementary reading materials. Apart from these, 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 Examinations departments, Centre for Distance Education and P&S.

On the distribution front, it is entering into contracts with some major distributors and book sellers in and around Shillong and Assam. The Unit has also flashed its publication in the website of the University for the general public to have a bird's eye view of the books available in the Unit.

With the shifting of the Unit from Bijni Complex to the Permanent Campus and the acquisition of the bi-colour demy offset printing machine, the Unit hopes to acquire other printing and binding equipments to enable it undertake printing

jobs emanating from all the departments of the University.

The printing and publication of the following works were undertaken during the period 2012-2013:

Printing of items relating to Examinations, NEHU

Printing of items relating to Printing & Stationery, NEHU

Printing of items related to the 20th Convocation

Printing of 24X7 Anti-Ragging Helpline booklets (bilingual)

Printing of Annual Accounts of Finance Department, 2011-2012

Printing of the draft and final copies of the Annual Report (2011-12) with layout and cover design

Printing of booklets relating to the Centre of Distance Education, NEHU

Printing of the Duty Leave Diary

Printing of the Garo-Hindi-English Dictionary

Printing of *The NEHU Journal*, Vol.X No.1 Jan 12, Vol.X No.2 July 2012.

Central Services

SOPHISTICATED ANALYTICAL INSTRUMENT FACILITY

Head : Professor B. B. P. Gupta (upto September 2012)
Professor K. M. Rao (from September, 2012 onwards)
Telephone : 2721801(O), 2550212 (FAX)
E-mail : kmrao@nehu.ac.in

Scientific Staff

Designation	Name and Qualifications
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)
	J. M. Sohtun, M. Sc. (Biochemistry, NEHU)

Thrust Area 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.

Seminars/Conferences/Symposia/Extension Programmes/ Workshops/ Training etc.:

Organised

Workshop on “Recent Trends in Biological Electron Microscopy” from the 5th to 8th March, 2013.

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Workshop on “Mass Spectrometry and its application in Physical and Life science”. from 12th to 14th March 2013.

Workshop on “Application of FT-NMR in Chemical & Biological Sciences” held from 19th to 22nd March.

Attended

Dr. T. Chakraborty, Dr. S. Dey, Dr. D. Dey, Dr. P. S. Dkhar and Mr. S. K. Prasad attended one day “National Workshop on e- Governance”, organized by the Computer Centre, NEHU and NeGP, Department of Electronics and Information Technology, Government of India, New Delhi, on the 9th April, 2012.

Dr. (Mrs.) B. Dkhar and Dr. D. Dey participated in the 8th Short-term Course for Academic Administrators, conducted by the UGC-Academic Staff College, NEHU, Shillong from 11th to 17th October, 2012.

Mr. N. K. Rynjah, completed a 45 day programme entitled “Short term training course in Hardware and Networking” conducted by the Computer Centre, NEHU, Shillong in May - June 2012.

Funds Received from Agencies other than NEHU:

DST, Govt. of India, New Delhi :

Non Plan : Rs. 5,00,000.00

Plan : Rs. 29,55,000.00

Infrastructure Facilities

The following sophisticated analytical instruments are available for analytical services:

Scanning Electron Microscope (JEOL JSM 6360)

Transmission Electron Microscope (JEOL JSM 100CX)

Transmission Electron Microscope (JEOL JEM 2100)

FT-NMR 400 MHz (BRUKER AVANCE II-400)

LC-MS Spectrometer (Waters ZQ-4000)

Atomic Absorption Spectrometer (Perkin Elmer PE 3110)

Graphite Furnace (Analytik Jena AG Vario 6)

CHN-OS Analyser (Perkin Elmer PE 2400)

Liquid Nitrogen Plant (Philips PLN 106)

Microscope with Image Analyser (LEICA DMRX)*

Image Analysis Microscope DMRX has been made functional from March 2013.

New Facility: One new Ultra microtome, A Gradient accessory board in the FT-NMR instrument were installed in 2012; an EDAX Oxford INCA 350 procured in 2012 is under installation with the Scanning Electron Microscope.

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.

Central Services

Instrument Uses

Instrument	Total number of samples Analyzed	Total number of Users utilizing the facility
Scanning Electron Microscope (JEOL JSM 6360)	923	97
Transmission Electron Microscope (JEOL JEM 2100)	748	151
FT-NMR 400 MHz (BRUKER AVANCE II-400)	899	43
LC-MS Spectrometer (Waters ZQ-4000)	383	59
Atomic Absorption Spectrometer (Perkin Elmer PE 3110)	50	1
Graphite Furnace (Analytik Jena AG Vario 6)	193	13
CHN-OS Analyser (Perkin Elmer PE 2400)	14	4
Liquid Nitrogen Plant (Philips PLN 106)	4381 Litres	33

Total Revenue Earned: Rs. 16,77,571.00

(External users: Rs. 13,79,771.00; Internal users: Rs. 2,97,800.00)

Other Activities

SAIF-NEHU hosted visits of (i) participants of Refresher Courses in Zoology, conducted by Academic Staff College, NEHU, Shillong. (ii) M. Sc. students of School of Crop Protection, College of Post graduate Studies, Central Agricultural University, Umiam Campus, Barapani, Meghalaya,

(iii) M. Sc. students of Department of Life Sciences, Dibrugarh University, Dibrugarh, Assam, (iv) 3rd Year B. Sc. students of St. Anthony's College Shillong, Meghalaya, (v) B. Sc. students of Guwahati Cotton College, Guwahati, Assam, (vi) Students of Pragjyotish College, Guwahati – 781 009, Assam, and (vii) Students of Fazl Ali College, Mokokchung, Nagaland.

SPORTS DEPARTMENT

Teacher in-Charge : Dr. S.N. Lamare
Telephone : 0364-2307930 Exten – 1381 (O)
Email : nehusports@gmail.com

Staff Members

Assistant Director of Sports : Mr. Nantu Das
Cricket Coach : Mr. Peter J. Lamare
Basket Ball Coach : Mrs. A.R. Synnah
Foot Ball Coach : Mr. L. Darlong

The Department of Sports, seeks to promote and encourage student's participation in sports and games activities in order to tap the hidden talent of the students by giving them an opportunity for their all round development. The Department had organized Inter College Tournament in various disciplines for the session 2012 – 13, these include Badminton, Table Tennis, Chess, Basket Ball, Foot Ball and Cricket where several affiliated colleges and NEHU P.G. Teams participated. On many occasions the Vice-Chancellor Prof. A.N. Rai was the Chief Guest.

NEHU Foot Ball team participated in the East Zone Inter-University Tournament organised by Burdwan University, West Bengal. The Table Tennis (women) team participated in the East

Zone Inter-University Table Tennis organised by Calcutta University, West Bengal.

The Department of Sports also assisted and gave all logistic and financial support to the NEHUSU in the Varsity Fest-2013.

The Department of Sports in consultation with the CDD, NEHU, has begun the project of developing the first phase of fencing and drainage of the NEHU ground and the work is in progress. Initiative is also being taken for the improvement of the basketball courts.

The Department of Sports at present is looking after the two gymnasiums meant for both boys and girls at the Fitness Centre and are fully functional.

Central Services

STUDENTS' WELFARE CELL

Dean Students' Welfare : Prof. R. N. Sharan
Telephone : (0364) 272 1181;
E-mail : dsw@nehu.ac.in
Provost : Prof. D.K. Nayak
Telephone : (0364) 272 1183
E-mail : dknak@gmail.com

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 Shillong Campus the number of Students who were given hostel accommodation during the year 2012-2013 are as follows:

		ST	SC	GEN	OBC	Total
R. S.	Men	25		23	4	52
	Women	97	7	52	36	192
P. G.	Men	298	4	31	9	342
	Women	363	6	46	12	427
U. G.	Men	158	47	137	35	377
	Women	102	17	38	12	169
Foreign Students	Men			10		10
	Women			2		2
TOTAL		1043	81	327	108	1571

Study Tour

The office coordinated the study tours of the following eleven academic Departments from Shillong Campus:

- | | |
|------------------|------------------------|
| (I) Education | (III) Khasi |
| (II) Linguistics | (IV) Political Science |
| | (V) History |
| | (VI) Philosophy |
| | (VII) Commerce |

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(VIII) Physics

(IX) Maths

(X) Chemistry

(XI) Biochemistry

Other activities

Scholarships/Aid Fund: During 2012-13, 73 P.G. Students (including ST/SC) were awarded NEHU Post-graduate Merit Scholarships @Rs. 3000 /- per student and 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 2012-13, Four hundred eighty five eligible Research Scholars were selected/ provisionally selected for the award of the UGC Non-NET fellowship. Each Ph. D. scholar was awarded Rs. 8000/- per month while Rs. 5000/- per month was awarded to M. Phil scholars.

WOMEN'S CELL

Chairperson : Prof. S.M. Sungoh

Telephone : 2721071 (O)

Email : smsungoh@yahoo.com

Members : Prof. R. N. Sharan (DSW, NEHU, Shillong) , Ms. Dina Barman, Ms. Bidisha Mahanta, Prof. Rupa Borgohain, Mr. N.K. Sinha, Mrs. Agnes Shangpliang, Mrs. Betrise Wahlang, Dr. Fenela Nonglait, Mrs. Hasina Kharbhih and Dr. J.J. Mozika.

During the year under report, the Cell organized Sensitization programme on Sexual Harassment at Multi-Use Convention Hall, NEHU, Shillong on 8th September. Then on 17th November, the Cell organized a programme on Women's right and Sexual Harassment for all the hostellers of NEHU at Multi-Use Convention Hall, NEHU. At that time, the Cell appointed Dr. Yodida Bhutia,

Assistant Professor of Department of Education to participate in Sensitization programme on Combating Gender Based Violence for Teachers in-charge of Women Cell/Women Study Centres of Colleges and Universities of Eastern India at National Institute of Public Cooperation and Child development (NIPCCD), Regional Centre, Guwahati from September 26th – 28th, 2012.

Central Services

HEALTH CENTRE

(Shillong Campus)

Chief Medical Officer & In-charge: Dr. M. Marwein,

Medical Staff

Designation	Name
Chief Medical Officer	Dr. M. Marwein
	Dr. I. Hussain
Senior Medical Officer	Dr. C. Mukhim
Medical Officer	Dr. M.B.G. Momin

NEHU Health Centre has two branches – one at Permanent Campus, Mawlai, Shillong and the other at Bijni Complex, Laitumkhrah, Shillong catering to the health needs of teaching, non teaching staff along with their dependants and the students.

The following facilities are available at the Health Centre:

CONSULTATION: Medical Officers are available for consultation at fixed hours as well as for emergency consultation outside duty hours.

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.

DRESSING ROOM: Dressings, injections and minor surgical procedures are carried out in the dressing room.

LABORATORY: Bio-Chemical and clinical pathology tests for blood and urine analysis are performed in the Health Centre.

IN-PATIENT TREATMENT: Patients requiring in-patients treatment are referred to the hospitals/ Specialist within Shillong thereafter outside Shillong depending upon the necessity.

AMBULANCE: Ambulance service is provided during emergency for transporting the severely sick patients from residents to Clinic/Hospitals.

EMERGENCY DUTY: The Resident Medical Officers and Resident Nurse are doing emergency duty outside duty hours whenever needed.

FIRST AID SERVICE: First Aid service is provided at sports tournaments and other big functions organized by the University.

CREDIT BILLING FACILITY: We have credit billing facility available for patients admitted in Nazareth and K.J.P. Hospitals in Shillong and C.M.C. Hospital, Vellore.

FREE MEDICAL CAMPS: We have been organizing various free medical camps on BMD Test, Haemoglobin Test etc. conducted by various medicine manufacturing companies from time to time, for the entire NEHU community.

HEALTH CENTRE

(Tura Campus)

Senior Medical Officer in-charge: Dr. (Mrs) Tangsil Dilme Ch.Momin

Health Centre at NEHU Tura campus caters to the health needs of teaching, non teaching staff along with their dependants and students with one regular Senior Medical Officer, Dr. (Mrs) Tangsil Dilme Ch.Momin and one visiting honorary Medical Officer, Dr. A.K. Choudhury, a retired state government doctor.

CONSULTATION: Senior Medical Officer is available for consultations in the Health Centre at fixed hours as well as for emergency consultations and advice outside duty hours.

AMBULANCE: Ambulance service is provided for transporting the sick patients to the Clinics/ Hospitals.

EMERGENCY & IN-PATIENT TREATMENT: Patients requiring inpatient treatment are referred to hospitals/specialists within Tura and thereafter outside Tura depending upon the necessity.

Sports: First Aid service is provided at sports tournaments organized by the campus.

Chapter XI
MEMBERS OF STATUTORY BODIES

THE ACADEMIC COUNCIL

CONSTITUTION OF ACADEMIC COUNCIL
NORTH EASTERN HILL UNIVERSITY SHILLONG
STATUTES-14(1) OF THE NEHU ACT 1973

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. A.N.Rai 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 Professors
All Heads of Departments/Centre/In-charge

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Dean Students' Welfare : Prof. R.N. Sharan

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. I.L.Aier, Department of Sociology
2. Dr. K.K.Singh, Department of Mathematics

Assistant Professors

1. Dr.N.K.Sinha, Department of Geography
2. Ms N.Ganguli, Department of English
3. Shri R.S.Thakur, Department of English, Tura

(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,Bengalore.

2. Prof. Ralte Lalthantluanga,
Vic e-Chancellor,
Mizoram University,Aizawl.

3. Prof. Kasturi Data,
Professor, Environmental
Sciences,JNU. New Delhi

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.

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

Vacant

Permanent Invitees(s)

1. The Director, College Development Council
2. The Controller of Examinations
1. The Registrar, Ex-Officio-Secretary.

The Board of Research Studies

THE BOARD OF RESEARCH STUDIES

LIST OF MEMBERS OF THE BOARD OF RESEARCH STUDIES

Mode of appointment	Name of Members
Vice-Chancellor,(Ex-Officio) Chairman	Prof. A.N.Rai Vice-Chancellor, NEHU, Shillong.
Pro-Vice-Chancellor – Members	1. Prof. B.Myrbob, Pro-Vice-Chancellor, NEHU, Shillong Campus. 2. Prof. E.D.Thomas, Pro-Vice-Chancellor, NEHU, Tura Campus.
Dean of Schools, (Ex-Officio) Member	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 Centre of Studies, (Ex-Officio) Members	
All Professors, other than the Head of Departments and Centres Ex-Officio- Members	

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(w.e.f 01.08. 2010)

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. (Mrs) J.J.Mozika,
Department of Law
NEHU, Shillong
2. Dr. A.P. Pati,
Department of Commerce,
NEHU, Shillong.
3. Dr. J. Mawthoh,
Department of Adult &
Continuing Education,
NEHU, Shillong.
4. Dr. D. Paul,
Department of Environmental Studies,
NEHU, Shillong.
5. Dr. P.K. Saikia,
Department of Mathematics,
NEHU, Shillong.
6. Dr. A.K. Dixit,
Department of Zoology,
NEHU, Shillong.

W.E.F. 01.10.2012

1. Dr. D.V.Kumar,
Deptt. of Sociology,NEHU,Shillong.
2. Dr (Mrs) S. Bhattacharjee,
Deptt. of English, NEHU, Shillong
3. Dr. C. Nongbri,
Deptt. of Education,
NEHU, Shillong
4. Dr. S.R. Joshi,
Deptt. of Bio-Technology &
Bio-Informatics, NEHU, Shillong.
5. Dr. L.J. Singh,
Deptt. of ECE, SOT, NEHU, Shillong.
6. Dr. D.C. Kolita,
Deptt. of RDAP, NEHU,Tura Campus

The Board of Research Studies

(w.e.f 01.08. 2010)

Four external experts two representing Humanities and Social Sciences and two representing Sciences to be appointed by the Vice-Chancellor,

1. *Prof. Akhilesh Choube,*
Department of Education
Lucknow University
Lucknow
2. Prof. Kapil Kapoor,
(Formerly Rector, JNU)
B.2/332, Ekta Gardens
No. 9, ZP Extension
New Delhi - 110092
3. Prof. L.C.Rai
Department of Botany
Banaras Hindu University
Varanasi-5
4. Prof. Diptiman Sen,
Centre for High Energy Physics
Indian Institute of Science
Bangalore – 560012

W.E.F. 01.10.2012

1. Prof. Archana Barua,
Deptt. of Humanities & Social Sc.
IIT, Guwahati-781039
2. Prof. Atal Chaudhury,
Ceptt. Of Comp. Sc.,
Jadavpur University, Jadavpur-700032
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.

THE EXECUTIVE COUNCIL

List of Executive Council Members (up to 31st March 2013)

Under Statute 12 (1) the Executive Council shall consist of the following members, namely:

- | | | | |
|-------|--|---|--|
| (i) | Vice-Chancellor, ex-officio | - | Prof. A.N.Rai
Vice-Chancellor |
| (ii) | Pro-Vice-Chancellors, ex-officio | - | 1. Prof. E.D.Thomas,
NEHU, Tura Campus
2. Prof. B.Myrboh,
NEHU, Shillong Campus |
| (iii) | Four Deans of School by
rotation according to seniority, -
to be nominated by the
Vice-Chancellor | - | 1. Prof. P.K.Gupta,
Dean, School of
Education
2. Prof. S.Choudhury
Dean, School of Technology
3. Prof. L.S.Gassah,
Dean,
School of Social Sciences
NEHU, Shillong
4. Prof. H.K.Mukherjee
Dean, School of Physical
Sciences, NEHU, Shillong. |
| (iv) | One Professor, other than a
Dean by rotation according
to seniority, to be nominated
by the Vice-Chancellor | - | Prof. P.Shukla
Department of Physics
NEHU, SHILLONG |
| (v) | One Associate Professor by
rotation, according to seniority,
to be nominated by the
Vice-Chancellor. | - | Shri N.Parthasarathy
Department of Philosophy
NEHU, Shillong. |
| (vi) | Two Principals, by rotation
according to Seniority, to be
determined with reference | - | 1. Principal
Tura Law College
Tura. |

The Executive Council

- | | |
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| to the date of establishment of the Colleges concerned to be nominated by the Vice-Chancellor. | 2. Principal
Raid Laban College
Shillong. |
| (vii) Director in charge of Collegiate Education in the State of Meghalaya. | - Director
Higher and Technical Education
Govt. of Meghalaya, Shillong. |
| (viii) Two members of the Court, to be nominated by the Visitor, none of who shall be an employee of the University or a college or an institution affiliated to or recognized by the University | - 1. Prof. L.K.Maheshwari
Vice-Chancellor BITS
and Director of BITS
Pilani Campus
Palani - 333031

2. Prof. G.C.Khilnani
Professor of Medical Sciences
NEW DELHI -10029 |
| (ix) Four persons to be nominated by the Visitor | - 1. Dr. D.K.Singh
Professor of French
Banaras Hindu University
VARANASI -221005

2. Dr. Mohandas A.
Professor Emeritus
School of Environmental Studies
Cochin University of Science &
Technology, COCHIN -22

3. Prof. S.S.Singh
Director
National Law Institute University,
BHOPAL -462044.

4. Prof. Virginius Xaxa,
Professor of Sociology
University of Delhi
DELHI - 110007 |

THE UNIVERSITY COURT

List of members of the University Court

(up to 31st March 2013)

Under 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.
(wef 3/10/2012) |
| (ii) | Vice-Chancellor | Prof. A.N .Rai |
| (iii) | Pro-Vice-Chancellors | 1. Prof. E.D. Thomas
NEHU, Tura Campus
2. Prof. B.Myrboh
NEHU, Shillong Campus |
| (iv) | Dean of Student's Welfare | Prof. R. Sharan |
| (v) | Registrar | 1. Shri L. Roy (upto 30.10.12)
2. Shri D. Deb (from 1.11.12) |
| (vi) | Librarian | Dr. (Mrs) I. Majaw |
| (vii) | Proctor | Prof. H. Kayang |
| (viii) | Finance Officer | Shri Taleremba |
| (ix) | Deans of Schools of
Studies, ex-officio, | Member |
| (x) | All Professors, ex-officio, | Member |
| (xi) | Head of Departments, who
are not Professors, ex-officio | Member |
| (xii) | Two Associate Professors
Who are not Heads of
Departments and two
Assistant Professors to be | 1. Dr. L.R.Saha
Department of RDAP
Tura Campus, Tura. |

The University Court

appointed by rotation in the manner prescribed by Ordinances.

(xiii) Seven Principals of Colleges by Rotation according to seniority, which shall be determined with reference to the date of establishment of the colleges concerned, to be nominated by the Vice-Chancellor.

2. Shri N.Parthasarathy
Department of Philosophy
NEHU, Shillong.
- 1 Principal,
Don Bosco College of
Teachers Education
West Garo Hills.
2. Principal,
College of Nursing
NEIGRIMS, Shillong.
3. Principal,
Mairang Pressbyterian Science College
West Khasi Hills
4. Principal,
METAS Adventist College,
Gujarat.
5. Principal,
Regional College of Higher Education,
Dispur.
6. Principal,
Ampati College,
West Garo Hills.
7. Principal,
METAS Adventist College,
Jharkhand.

(xiv) Four teachers from affiliated colleges to be 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,

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Donbosco College,
Tura.

1. Smti. P.M..S. Diengdoh
Tirot Singh Memorial College,
Mairang.

- (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 – 110 001		1.	Shri Gurudas Dasgupta 15 Canning Lane New Delhi – 1100 001	
2.	Shri Ramen Deka 158 South Avenue New Delhi – 110 011	upto 17 th	2.	Shri Biren Singh Engti ITI Colony (Rongmongwe) P.O. Diphu – 782 460 Distt. Karbi Anglong (Assam)	w.e.f. 18 th
3.	Smti Ranee Narah M-16, South Extension Part-II, New Delhi -110 049	Feb 2013	3.	Smti. Bijoya Chakravarty 2013 House No. 39, Srinagar Path, Bye Lane – I, Guwahati – 5, Assam.	Feb 2013
4.	Shri Susil Kumar Singh 24, Old Court Hostel New Delhi		4.	Shri Sushil Kumar Singh 27, Old Court Hostel New Delhi	

The University Court

Rajya Sabha

With effect from 18th February, 2013

- | | |
|--|---|
| 1. Dr. Balachandra Mungekar
901, Carnation, Dosti Acre
Complex, Wadala(East),
Mumbai – 400037 | 2. Dr. Janardhan Waghmare
Shram Safalya Society,
Ambajogai Road, Latur |
| And | And |
| 901, Brahmputra,
Dr. B.D.Marg,
New Delhi - 110001 | 179, South Avenue
New Delhi – 110001 |
| (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. T.P.Singh
Ex-Dean
Faculty of Law
Barkatullah University
Bhopal | 6. Shri Dileep Padgaonkar
Ex-Managing Editor
Time of India
Kolkatta – 700014 |
| 2. Prof. L.K.Maheshwari
Vice-Chancellor
BITS and Director of BITS
Pilani - 333031 | 7. Prof. S.Parasuraman
Director
Tata Institute of Medical Sciences
Mumbai |
| 3. Prof. G.C.Khilnani
Professor of Medical Sciences
NEW DELHI -10029 | 8. Sh Satish Chander Gupta
Chairman and Managing Director
United Bank of India
Kolkata – 700001 |
| 4. Dr. Mohandas A.
Professor Emeritus
School of Environmental Studies,
Cochin University of Science &
Technology,
COCHIN -22 | 9. Prof. P.Balaram
Director
Indian Institute of Science
Bangalore- 560012 |
| 5. Dr. Biswajit Dhar
Professor & Head Centre for WTO
Studies
IIFT, Sector-7
New Delhi -110016 | 10. Dr. Mangalal Rai
Director General Indian Council of
Agricultural Research
NEW DELHI - 110001 |

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(xvii) Six representatives of the Registered graduates of the University to be elected in the manner prescribed by Ordinances.

For the pursues of this Clause, students who have graduated as regular students from the colleges now affiliated to the University prior to the date of such affiliation, shall also be eligible to be registered.

(xviii) Four students to be nominated by the Vice-Chancellor.

- | | | |
|--|---|---|
| <ol style="list-style-type: none"> 1. Ms. Deepanjali Reang,
Department of Geography,
NEHU, Shillong. 2. Mr. Aruan Bahadur Gurung,
Department of Biotechnology & Bioinformatics,
NEHU, Shillong. 3. Ms. Shatabdi Bhattacharjee,
Department of Biochemistry,
NEHU, Shillong. 4. Ms. Ngakhainii Trune Pao,
Department of Environmental Studies,
NEHU, Shillong. | } | <p>with effect
from 21st
November
2013</p> |
|--|---|---|

(xix) (a) Not more than five persons to be nominated by the Visitor.

1. Prof. R.S.Dubey
Former Vice-Chancellor
Guru Ghasi Das University
Bilaspur -495009
2. Prof. Anil K.Singh
Professor, IIT, Powai
Mumbai- 400076
3. Prof. G.Padmanabhan
Deptt. of Biochemistry
Indian Institute of Science
Bangalore-560012
4. Prof. R.N.K.Bamezai
School of Life Sciences
JNU, New Delhi – 110067
5. Vacant

(b) Not more that two persons to be nominated by the Chancellor.

1. Prof. Amit Ghosh
Emeritus Scientist
ICMR
National Institute of Cholera and
Enteric Diseases
Beliaghata
Kolkata – 700010
2. Mrs. Manju Sharma
Vasant Kunj
New Delhi -110 070

(c) Not more that two persons to be nominated by the Chief Rector.

Not Nominated

(xx) Two members of non-teaching Staff to be nominated by the Vice-Chancellor.

The University Court

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| 1. President,
Non-Teaching Staff
Association
NEHU, Shillong | BITS and Director of BITS
Pilani - 333031 |
| 2. General Secretary
Non-Teaching Staff
Association
NEHU, Shillong. | 2. Prof. G.C.Khilnani
Professor of Medical Sciences
NEW DELHI -10029 |
| (xxi) Two representatives of the State of
Meghalaya to be nominated by the
Government concerned. | 3. Prof. S.S.Singh
Director
National Law Institute University
BHOPAL – 462044 |
| 1. Shri F.R.Kharkongor(IAS)
Secretary
Education Department
Govt. of Meghalaya
Shillong. | 4. Dr. Mohandas A.
Professor Emeritus, NCAAH
Cochin University of Science &
Technology
Fine Arts Avenue, PB No.2341
Cochin-682016,
Kerala, India |
| 2. Shri J.D.Sangma(MCS)
Director
School Education & Library
Govt. of Meghalaya
Shillong. | 5. Prof. D.K.Singh
Professor of French
Banaras Hindu University
Varanasi – 221005 |
| (xxii) Members of the Executive Council, who
are not otherwise members of the court. | 6. Prof. Virginius Xaxa
Professor of Sociology
University of Delhi
Delhi-110001 |
| 1. Prof. L.K.Maheshwari
Vice-Chancellor | |

North-Eastern Hill University

Mawkynroh – Umshing, Shillong – 793 022
Tel: +91 - 364 - 2721001, 2721002, 2721003, 2721004
Fax : +91 - 364 - 2721000
Website www.nehu.ac.in