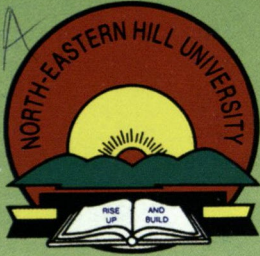


North-Eastern Hill University

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**Thirty-sixth**  
**Annual**  
**Report**



**2009-2010**



बहुयोजनी भवन  
MULTI USE  
CONVENTION CENTRE

# **North-Eastern Hill University**

## **Shillong**

### **Thirty-Sixth**

# **Annual Report**



**2009 – 2010**



# NORTH-EASTERN HILL UNIVERSITY

Website: [www.nehu.ac.in](http://www.nehu.ac.in)

Visitor	The President of India
Chancellor	Prof. M. G. K. Menon
Chief Rector	The Governor of Meghalaya
Vice-Chancellor	Prof. Pramod Tandon
Pro-Vice-Chancellor	Prof. S. S. Khare
Tura Campus, Tura	
Pro-Vice-Chancellor	Prof. R. Lalthantluanga
Shillong	
Registrar	Shri P. C. Majhi (w.e.f. 1.3.2009 to 26.4.2009) Prof. D. R. Syiemlieh (w.e.f. 27.4.2009 to 16.09.2009) Shri S. C. Gopalakrishnan (w.e.f. 17.09.2009 to 04.11.2009) Prof. D. R. Syiemlieh (w.e.f. 5.11.2009) Shri P. C. Majhi
Finance Officer	Prof. D. R. Syiemlieh
Controller of Examinations	Dr. I. Majaw
Librarian	
<b>Dean of School:</b>	
School of Humanities	Prof. T. Ao
School of Education	Prof. P. K. Gupta
School of Life Sciences	Prof. B. K. Sharma (w.e.f. 16.1.2009)
School of Physical Sciences	Prof. K. Ismail (up to 25.09.2009) Prof. R. K. Poddar (w.e.f. 26.09.2009)
School of Social Sciences	Prof. R. Borgohain (up to 14.09.2009) Prof. N. Kumar (w.e.f. 14.09.2009)
School of Economics, Management and Information Sciences	Prof. P. Nayak
School of Human and Environmental Sciences	Prof. B. S. Mipun
School of Technology	Prof. K. Ismail (up to 29.09.2009) Prof. R. Sharma (w.e.f. 30.09.2009)

## From the Vice-Chancellor's Desk



I am happy to present the 36<sup>th</sup> Annual Report (2009-2010) of the University signifying completion of another eventful year of the University. During the year under report admissions, teaching programme, and examinations were conducted in time as per the calendar of the University. The meetings of all statutory bodies were also held as per the schedule. The XVIII Convocation of the University was held on 6<sup>th</sup> November 2009 celebrating the achievement of over 4700 graduating students. The University got reaccredited by the NAAC with 'A' grade the only University in the region to achieve this distinction.

True to the motto of the University, "Rise up and Build", NEHU has been instrumental in moulding the intellectual growth of many young men and women of the State of Meghalaya and also of the entire North-East region. There is a steady but significant rise in the number of undergraduate, postgraduate and research students admitted to the various programmes offered by NEHU. The Choice-Based Credit System is enabling students to opt courses of their choice across the University in addition to the core courses. Our students are performing well in UGC-CSIR-NET, GATE and other competitive examinations of UPSC. Research fellowships are provided to all registered Ph.D. students. Students' welfare cell, sports department and NSS cell looked after the extra-curricular activities of the students. Counseling and Placement cell facilitated obtaining suitable placements for the students.

The research activities of the faculty members have been very impressive as evident from the publication of research papers and books, seminars/conferences/workshops organized and attended, and extra mural funding received for research from different funding

agencies. Several faculty members received recognitions/awards during the year. The University made significant progress in implementing the 'University with Potential Excellence' programme.

The Academic Staff College has been very active in organizing refresher courses in various subjects and orientation programmes on specific themes to the benefit of University and College teachers. The College Development Council has been functioning as an interface between the affiliated colleges and the University.

The University undertook a drive to fill in the vacant positions. The process is on for starting the six academic Departments sanctioned during XI Plan, viz., Bio-Medical Engineering, Energy Engineering, Nano-Technology, Architecture, Tourism and Hotel Management, and Journalism and Mass Communication. Construction of two clusters

of class rooms is in progress. At the Tura campus, construction of main and link roads (phase-I) has been completed, while construction works of academic and administrative buildings, library, hostels and phase-II of main and link roads have made much progress. First phase of digitization of the library has been almost completed. The process for implementing e-governance through a University Management System is in progress.

The data and information presented in the report depict a very impressive performance, growth and achievements of the University. I congratulate the University community for the same. I am sure that with collective efforts of all the members the University will keep doing even better in the years to come. I would like to place on record my appreciation of the efforts of the Editorial Board of the Annual Report for bringing out this report.



Pramod Tandon

# NORTH-EASTERN HILL UNIVERSITY

## AT A GLANCE

**T**he North-Eastern Hill University was established in the year 1973 by an Act of Parliament. The objects of the University are to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may deem fit; to pay special attention to the improvement of the social and economic conditions and welfare of the people of the hill areas of the North-Eastern region, and, in particular their intellectual, academic and cultural advancement. Every year 19<sup>th</sup> July is celebrated as the Foundation Day of the University.

The University has two campuses, one in Shillong (Headquarter) and another in Tura. It has now eight Schools of Studies comprising 34 Departments and 2 Centres. Tura campus has 4 Departments and the rest are in Shillong campus. Sixty six Colleges are affiliated to the University. Besides affiliating Colleges located within the State of Meghalaya, the University also considers affiliating Minority Educational Institutions located anywhere in the country under the NCMEI Act. Minority Colleges affiliated to the University at present are located in the States of Assam, Andhra Pradesh, Gujarat and Jharkhand.

The University has the distinction of having been recognized by the UGC as a “University with Potential for Excellence” and got reaccredited by the NAAC with ‘A’ grade. The University continues to receive grants from the UGC, DST, DBT, CSIR, DRDO, DAE, ICSSR, NBHM, NEC, Ministry of Environment and Forests, and Ministry of Social Justice and Empowerment for carrying out academic, research and developmental activities. Nine Departments (Botany, Biochemistry, Zoology, Chemistry, Mathematics, Physics, History, Political Science and Sociology) receive additional funding under the Special Assistance Programme of the UGC. Out of the nine Departments, Botany has been recognized at the level of Centre for Advanced Studies. Eight Departments (Biochemistry, Botany, Zoology, Chemistry, Physics, Mathematics, Statistics and Geography) also receive funds from the DST under the FIST programme.

During the period under report, (i) sixteen national seminars, one international seminar and fourteen workshops were organized on various themes by the

different Departments, (ii) twenty eight new research projects funded by different funding agencies have been implemented in addition to several ongoing research projects, (iii) 255 research papers and 31 books were published by the faculty, and (iv) 52 students were awarded Ph. D. degree in various subjects. The faculty members and research students attended different national and international conferences/seminars and presented their research findings.

The University organized the winter camp of the INSPIRE (Innovation in Science Pursuit for Inspired Research) programme of the DST, Ministry of Science and Technology during 14 -21 December 2009 by attracting a large number of school children from the region to the University campus to participate in the programme. These school students were exposed to various aspects of advances in science research through interactive sessions with renowned scientists.

The Academic Staff College of the University organized 13 Refresher Courses (Economics, Hindi, Geography, Sociology, Political Science, Chemistry, Zoology, Khasi, Education, Commerce, History, English, and Botany) and 3 Orientation Programmes for University and College teachers.

Students' welfare cell, sports department, and counseling and placement cell of the University carried out different activities like study tours, tournaments, trekking-cum-camping event and placement camps for the benefit of the students. The NSS cell of the University coordinated/organized different events like exchange programmes, youth festivals, adventure programme, summer camp, blood donation camp, etc., which involved participation of a large number of male and female volunteers (15,917 during 2009-2010) from PG units, different Colleges, and Higher Secondary Schools.

*Sophisticated Analytical Instrumentation Facility (SAIF)* of the University extended its service to all researchers of the University and region by providing instrumental analyses of the samples received. SAIF also conducted workshops, seminars and training programmes on different instrumental techniques for the benefit of the users.

The Scheduled Castes and Schedule Tribes Cell of the University performed all works related to the implementation of the Reservation Policies for SC/ST and other backward classes for the year 2009-2010 with respect to appointments/promotions to the Teaching and Non Teaching posts and admissions of students to various Post Graduate and Under Graduate programmes in the University and affiliated Colleges.

The Hindi Cell of the University coordinated several events and convened meetings of the Official Language Implementation Committee in order to promote progressive use of Hindi as Rajbhasha in the University.

The Examination Department conducted all the Under Graduate and Post Graduate examinations as per the schedule and efforts were made to remove/ minimize the delay in the declaration of results of the various examinations. The 18<sup>th</sup> Convocation of the University was held on 6<sup>th</sup> November 2009 and a total of 4797 candidates received their respective degrees in person.

By the end of the period under report (31<sup>st</sup> March 2010), there were 3515 students on roll for various courses in the University campuses and 35,996 students on roll for various courses in the affiliated Colleges.

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**2009 – 2010**

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## SCHOOL OF ECONOMICS, MANAGEMENT AND INFORMATION SCIENCES

**Dean** : Prof. P. Nayak  
**Telephone** : (0364) 2723183 (O), 2726183 (R), 9436111308 (M)  
**Email** : nehu\_pnayak@yahoo.co.in

**T**he School of Economics, Management & Information Sciences comprises four academic Departments: Commerce, Economics, Library & Information Science and Management. The first three Departments are located in Shillong whereas the Department of Management is located at Tura. In the current plan period two more Departments, viz., Tourism and Hotel Management and Journalism and Mass Communication are sanctioned for the Shillong Campus. The School admits students to the Masters, M. Phil and Doctoral Programmes.

During the year under report three scholars were awarded M. Phil degree and three doctoral degrees. Students got placements in various educational institutions, banking institutions and other commercial and government organizations. A good number of students qualified UGC-NET. Students of three Departments visited different places in India on study tours/industrial visits. Faculty members of the School were successful in getting good amount of research funding from various funding agents. They published six books and good number of research papers in national and international journals and contributed articles to a number of edited books. They presented research papers in a large number of regional, national and international seminars and conferences and were invited as resource persons in various refresher courses and orientation programmes organized within NEHU and outside the state of Meghalaya.

The Department of Commerce conducted one national seminar on 'Global Economic Crisis and Indian Economy' and organized a UGC Refresher Course on 'Commerce and Management in the new Environment: Research-Innovation-Practice.' The Department of Economics organized a UGC Refresher Course on

'Advancement of Economic Ideas.' Three research projects were completed and three new projects were received by the Department and provided consultancy/ research supports to UNDP, Ministry of Rural Development, Government of India and NIRD. The Department of Management conducted one National Seminar on 'Microfinance Revolution: Understanding its Success and Sustainability.' One research project was completed and one new project was received by the Department.

## DEPARTMENT OF COMMERCE

**Head** : Dr. V. K. Shrotryia

**Telephone:** (0364) 2723161(O), 2551990 (R)

**Email** : hodcom@nehu.ac.in and vkshro@gmail.com

**Thrust Areas of Research:** The thrust areas of research in the Department are (a) Accounting & Finance, (b) Entrepreneurship & Small Business, and (c) Organizational Happiness. The Department aims at imparting education needed for creation and management of business enterprises in an emerging economy. Keeping in view the importance of business research both at national and regional levels, it also conducts socially relevant research work.

**Brief Statement of Academic Activities:** Currently the Department has 95 students on roll at M.Com. level and 22 students at doctoral level. The Department, in addition to the regular teaching, conducts seminars, career counseling and discussions on contemporary topics for the students to enable them enhance their presentation skills and to share the outcome of their project/ field work.

### Faculty:

**Professor** : N. M. Panda, M.Com. (UU), L.L.B. (UU), Ph. D. (MU),  
F.D.P.M. (IIMA)

**Associate Professors** : A. P. Pati, M. Com., M. Phil., Ph. D., L.L.B.(UU),  
A.C.W.A. (ICWAI), D.B.F.(ICFAI)

**School of Economics, Management and Information Sciences**

V. K. Shrotryia, M.Com., LL.B., Ph. D (Rohilkhand)  
 K. C. Kabra, M.Com., Ph. D. (JR Nagar Raj Vidyapeeth)

**Assistant Professors :** R. A. J. Syngkon, M.A., M.Com., Ph. D. (NEHU)  
 S. Kharmawphlang, M Com., (NEHU), D.F.M. (NILEM, Chennai)  
 S. G. Maji, M.Com., Ph.D. (Burdwan), D.B.M. (ICFAI)

**Student Intake:**

Enrolment capacity : M.Com. : 50, Ph.D. : Variable

Actual Admission : SC ST Gen Male Female Meghalaya Outside Meghalaya

M.Com. - 44 6 25 25 42 8

Ph.D. - 3 5 3 5 3 5

**Degrees Awarded :** SC ST Gen Male Female Total

M.Com. - 23 5 9 19 25

Ph.D. - 2 2 2

Mr. A.N. Shankar, "Social Responsibility Reporting in Indian Corporate Sector: An Empirical Study." Supervisor: Prof. N.M. Panda.

Mr. Sabindra Rajbongshi, "Impact of Micro Credit Programme on the Growth and Development of Micro Enterprises: A Study on Meghalaya." Supervisor: Dr. A.P. Pati.

**Placement of the students:** Though there is no formal placement programme conducted by the Department, the teachers on a continuous basis provide counseling to the students so as to enable them compete in the job market. Past statistics suggest that, on average, within a period of 18 months, the graduating students are able to get suitable placement.

**Course conducted:**

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 (Open), NGO Management (Open), Management Thought (Open), Process and Practice (Open).

Semester III: Financial Markets and Instruments, Entrepreneurship, Cost and Management Accounting, Marketing Research (Open), Organizational Development and Change (Open), Management of Small Enterprise (Open).

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

### **Seminars/Conferences/Symposia/Extension Programmes:**

#### **Organized**

Dr. V. K. Shrotryia (seminar director) and Dr K. C. Kabra (seminar coordinator) organized a national seminar on 'Global Economic Crisis and Indian Economy' at NEHU Guest House during March 26-27, 2010.

#### **Attended**

Prof. N. M. Panda attended: (i) national seminar on 'Empowering Youth through Entrepreneurship in North East India' at Digbhoi College, Digbhoi, Assam, 30-31 October 2009, and presented a paper entitled "Women Entrepreneurship and Empowerment: A Case Study of Micro Entrepreneurs in Shillong", and (ii) national seminar on 'Rural Empowerment in NE India' organized by the Department of RDAP, NEHU at Tura, 26-27 November 2009, and presented a paper titled "Women Entrepreneurship and Empowerment: A Case Study of Micro Entrepreneurs in East Khasi Hills District of Meghalaya."

Dr. A. P. Pati attended: (i) national seminar on 'Role of Micro-Credit Institutions in Socio-economic Development of the Rural Poor in Assam' organized by the Department of Commerce and Economics, Lumding College, Assam, 29 May 2009, and presented a paper entitled "Managing the challenges in SHGs: An imperative for reshaping the social pyramid", (ii) national seminar on 'Micro-Finance evolution: Understanding its Success and Sustainability' organized by the Department of Business Administration, NEHU, 19-20 June 2009, and presented a paper entitled "Dynamics of SHG Management", (iii) the 62<sup>nd</sup> All Indian Commerce Association Conference at Maharshi Dayananda Saraswati University, Ajmer, 10-12 October 2009, and presented a paper entitled "Financial Inclusion, Women and Inclusive Growth: Empirical Evidence and

Future Strategies”, (iv) the 3<sup>rd</sup> international seminar on ‘Micro Finance’ organized by the Department of Commerce, Pondichery University, 22-24 January 2010, and presented a paper entitled “Microfinance Intervention and Socio-economic Transformation; An Application of Propensity Score Matching and Difference-in-Difference Techniques”, and (v) national seminar on ‘Global Economic Crisis and Indian Industry’ organized by the Department of Commerce, NEHU, Shillong, 26-27 March 2010, and presented a paper entitled “Global Financial Crisis: The Genesis and Prescriptions.”

Dr. V. K. Shrotryia: (i) delivered valedictory address entitled ‘Role of IT for Well-being and Inclusive Growth – A Response for Change’ in an international seminar on ‘Role of IT in shaping world economy’ at Swami Sukhdevanand P.G. College, Shahjahanpur, U.P., 20-21 December 2009, and (ii) attended national seminar on ‘Global Economic Crisis and Indian Industry’ organized by the Department of Commerce, NEHU, Shillong, 26-27 March 2010, and presented a paper entitled “Impact of Global Financial Crisis on Management of Human Resources.”

Dr. K. C. Kabra attended: (i) national seminar on ‘Rural Empowerment in Northeast India’ organized by the Department of RDAP, NEHU, Tura Campus, Tura, 26-27 November 2009, and presented a paper entitled “Rural Empowerment through Micro Industrial Enterprises in Mizoram”, (ii) national seminar on ‘Micro Finance Revolution: Understanding its Success and Sustainability’ organized by the Department of Management, NEHU, Tura Campus, Tura, 19 June 2009, and presented a paper entitled “Micro-Finance in West Garo Hills: Role of IFAD”, and (iii) regional seminar on ‘Services Sector in Mizoram’ organized by the Department of Commerce, Mizoram University, Aizawl, 18 March 2010, and presented a paper entitled “Marketing of Services in Rural India.”

S. Kharmawphlang attended a national seminar on ‘Rural Empowerment in NE India’ and presented a paper entitled “Women Entrepreneurship and Empowerment: A Case Study of Micro Entrepreneurs in East Khasi Hills District of Meghalaya”, 26-27 November 2009.

## **Publications:**

### **Published in India**

Kabra, K.C. 2009. Development of Trade & Commerce in Mizoram. *BHU Management Review*, 1:5-12.

Maji, S. G. 2010. Credit Card Frauds and the Means to Prevent Them. *SNS Journal of Marketing*, 1: 64-69.

Panda, N. M. and A. N. Shankar, 2009. Corporate Social Responsibility Concerns and Corporate Performance: Some Evidence from India. *GITAM Review of International Business*, 2(1): 93-111.

Panda, N. M. and A. N. Shankar, 2009. Corporate Social Performance Disclosure and Financial Performance: The Indian Experience. *Orissa Journal of Commerce*, 30(2): 110-123.

Pati, A. P. 2009. Addressing Challenges of Self Help Group Management. *Prabandhan*, 1(1): 76-88.

Pati, A. P. 2009. Enhancing Financial Inclusion: The Catalytic Role of SHGs. *The Management Accountant*, 44(5): 384-388.

Pati, A. P. 2009. Financial Exclusion to Inclusion-Do SHGs Help? Evidences from North east India. *Indian Journal of Commerce*, 62(3): 62-72.

Pati, A. P. 2009. Subsidy Impact on Sustainability of SHGs: An Empirical Analysis of Micro Lending through SGSY Scheme. *Indian Journal of Agricultural Economics*, 64(2): 276-288.

Pati, A. P. 2010. Scaling the Financial Sustainability of SHG-Bank Linkage Programme of Micro Financing in an Underdeveloped Region. *Prajnan*, 38(4): 253-267.

Shrotrya, V. K. 2009. Intangibles – Identification, Management and Future. *Invertis Journal of Management*, 1(1): 63-72.

### **Books**

Pati, A. P. 2009. *Financial Sustainability of Micro Financing*. Gyan Publishing House, New Delhi.

Kabra, K. C. 2009. A Study on the Problems of Business and Industry in Mizoram. In *Development Vision of North East India*, Ed.: J. U. Ahmed, Concept Publishing Company Pvt., New Delhi, 100-126

Kabra, K. C. 2009. Problems and Prospects of Rural Entrepreneurship with Special Reference to Mizoram. In *Development Vision of North East India*, Ed.: J. U. Ahmed, Concept Publishing Company Pvt., New Delhi, 155-172.

Pati, A. P. 2009. Does Micro Finance Bring Human Development? In *Growth and Human Development in North-East India*, Ed: P. Nayak, Oxford University Press, New Delhi, 217-232.

Pati, A. P. and B. F. Lyngdoh, 2010. Microfinance Intervention and Socio-economic Transformation: An Application of Propensity Score Matching and Difference-in-Difference Techniques. In *Macro Dynamics of Micro Finance*, Eds.: D. Lazar, P. Natarajan, and M. Deo, Excel Books, New Delhi, 343-358.

Shrotryia, V. K. 2009. Shift in the Measures of Quality of Life viz-a-viz Happiness: A Study of Phongmey Gewog and Trashigang Town in Eastern Bhutan. In *Gross National Happiness: Practice and Measurement*. Eds: Dasho Karma Ura and Dorji Penjore, The Centre for Bhutan Studies Thimphu, Bhutan, 525-547.

Shrotryia, V. K. and J. W. Dkhar, 2009. Tourism in Meghalaya – Policy, Problems and Prospects. In *Globalisation and Economic Development (Part 3)*, Ed.: Rais Ahmed, Mittal Publications, New Delhi, 1099-1107.

#### **Funds Received from Agencies Other than NEHU:**

ICSSR, New Delhi – Rs 0.70 lakh

#### **Honours/Awards/Recognition:**

Dr. A. P. Pati was awarded the Best Business Academic of the Year-2009 by All India Commerce Association.

Dr. V. K. Shrotryia was appointed as Guest Editor of Invertis Journal of Management.

#### **Other Activities:**

Prof. N M Panda acted as: (i) resource person in a special course organized by RTI (Indian Audit and Accounts Department), Shillong, 3-4 October 2009, (ii) resource person in Capacity Building Workshop for Academic Staff organized by the State Resource Centre, NEHU, Shillong, 27-28 October 2009, (iii) resource person and chaired the technical session in the UGC sponsored national seminar organized by the Digbhoi College, Digbhoi, Assam, 30-31 October 2009, (iv) resource person in a national seminar on 'Rural Empowerment in North East

India' organized by the Department of RDAP, NEHU at Tura, 26-27 November 2009, (v) resource person in the 12<sup>th</sup> Refresher Course in Commerce and delivered four lectures at Gauhati University, Guwahati, 12-13 February 2010, (vi) resource person in AICTE sponsored Faculty Development Programme organized by the Institute of Science and Management, Ranchi, 5-6 March 2010, (vii) chaired a technical session in the regional seminar on 'Service Sector in Mizoram: Opportunities and Challenges' at the Department of Commerce, Mizoram University, Aizawl, 18 March 2010.

Dr. A. P. Pati: (i) chaired a technical session in the national seminar organized by the Department of Commerce and Economic, Lumding College, Assam, 29 May 2009, (ii) chaired a technical session in the national seminar organized by the Department of Business Administration, NEHU, 19-20 June 2009, and (iii) coordinated the 2<sup>nd</sup> Refresher Course in Commerce, NEHU, Shillong, 26 November to 27 December 2009.

Dr. V. K. Shrotryia: (i) acted as a resource person for UGC-ASC Fourth Orientation Programme in Information Technology at UGC-Academic Staff College, NEHU, 23 March to 22 April 2009 and delivered lectures on 'Happiness in Nations' and 'Attaining Organizational Happiness', (ii) resource person in UGC-ASC Fourth Orientation Course, Department of Education, NEHU, 24 March to 23 April 2009 and delivered lectures on 'Happiness in Nations' and on 'Organizational Happiness', (iii) delivered a lecture on 'Happiness in Nations' in UGC-ASC Refresher Course of the Department of Economics, NEHU, 4 July 2009, (iv) delivered lectures on 'Human Resource Management' in an induction training programme for Direct Recruit Section Officers (Civil) on probation organized by Regional Training Institute, Indian Audit & Accounts Department, North Eastern Region, Shillong, 3 August 2009 to 31 October 2009, (v) delivered lectures on 'Motivation, Leadership Qualities and Effective Communication' in the six weeks Entrepreneurship skill Development Programme organized by MSME Development Institute, Shillong, 23-24 September 2009, (vi) attended regional seminar on the theme of 'Avenues for Entrepreneurs' held on 27 September 2009 organized by Martin Luther Christian University, Shillong, Meghalaya (delivered keynote address on the theme), (vii) resource person for a capacity building workshop organized by the State Resource Centre, NEHU, Shillong and delivered a lecture on Leadership on 27 October 2009 and on Decision Making on 28 October 2009, (viii) delivered a lecture on 'Management of Organizational Happiness in Educational Institutions' in the Principal's Workshop on Financial Management organized by UGC-Academic Staff College,

## School of Economics, Management and Information Sciences

NEHU, Shillong, 7-9 December 2009, (ix) chaired a technical session in the international seminar on 'Role of IT in Shaping World Economy' held at Swami Sukhdevanand P.G. College, Shahjahanpur, U.P., 20-21 December 2009, (x) resource person for UGC-ASC Orientation Course held at Baba Phul Singh Women University, Sonipat (delivered lecture on Happiness to Organizational Happiness on 5 Jan 2010), and (xi) resource person for Special Course on Human Resource Development, Organizational Behaviour, Leadership & Motivation for SOs to Sr. AOs (Audit & A&E) organized by the Regional Training Institute, Indian Audit & Accounts Department, North Eastern Region, Shillong, 15-20 February 2010 (delivered a lecture on Attitude, Job Satisfaction & Organizational Commitment on 17 February 2010).

Dr. K. C. Kabra was resource person (i) at the Training Programme in Financial Management for College Principals of Meghalaya conducted by the Academic Staff College, NEHU, Shillong (delivered a lecture on Fundamentals of Financial Management), 7-9 December 2009, and (ii) at the Refresher Course in Commerce conducted by the Department of Commerce, Mizoram University, Aizawl (delivered a lecture on Environmental Accounting), 19 March 2009. He participated in (iii) "Professional Development Programme: e-learning" at Maulana Azad National Urdu University, Hyderabad, 1-6 March 2010, and (iv) workshop on 'Value Added Tax to Goods & Services Tax and Financial Disciplines' organized by the Department of Taxation, Government of Meghalaya and Indian Chamber of Commerce, Guwahati, 9 July 2009.

Dr. R. A. J. Syngkon acted as: (i) resource person in the 6<sup>th</sup> Weeks Entrepreneurship and Skill Development Programme organized by the Br. MSME DI, Shillong at Beh-Syiem, Myllichem Block, EKH during 9 November to 18 December 2009, and (ii) resource person in 2 days workshop on 'Marketing Strategies for MSME' organized by the Shillong Commerce College, Shillong, 16-17 December 2009.

The Department organized (Coordinator: Dr. A.P. Pati) a Refresher Course for Commerce and Management Teachers on the theme of 'Commerce and Management in the New Environment: Research-Innovation-Practice' at the Academic Staff College, NEHU, Shillong, 27 November to 17 December 2009.

## DEPARTMENT OF ECONOMICS

**Head** : Prof. B. Mishra  
**Telephone** : (0364) 2723178(O), 2550391/2726178 (R)  
**E-mail** : bmishra\_nehu@hotmail.com

**Thrust Areas of Research:** (i) Economics of North East India with emphasis on Upland Economy, (ii) Economics of Agriculture, (iii) Small Scale Industry, (iv) Rural Development, (v) Human Development, (vi) Public & Financial Economics, and (vii) Quantitative Economics & Econometrics.

**Brief Statement of Academic Activities:** During the year, the Department concentrated on its post-graduate teaching programme and research. The faculty members participated in a number of regional, national and international seminars/conferences. They also published books and research papers in various national and international journals. Faculty members of the Department have been appointed members of Expert Committees and working groups set up by Government of India and Government of Meghalaya.

### Faculty

**Professors** : S. K. Mishra, M.A. (Bhagalpur),  
M.R.P., Ph.D. (IIT Kharagpur)  
N. Srivastav, M.A. (Rajasthan), Ph.D. (IIT Kanpur)  
E. D. Thomas, M.A., Ph.D. (NEHU)  
P. Nayak, M.A. (Utkal), Ph.D. (IIT Kharagpur)  
B. Mishra, M.A., Ph.D. (Utkal)

**Associate Professors** : U. K. De, M.Sc., Ph.D. (Burdwan)  
B. Panda, M.A. (Utkal), M.Phil. (Berhampur), Ph.D. (Utkal)  
P. S. Suresh, M.A., M.Phil. (S.V. Univ.), Ph.D. (Hyd.)  
B. K. Dutta, M.A., Ph.D. (NEHU)  
S. Umdor, M.A., Ph.D. (NEHU)

**Assistant Professors** : W. Tariang, M.A. (NEHU) D. Nongkynrih, M.A. (NEHU)  
D.W. Thangkhiew, M.A. (NEHU)  
D. Das, M.Sc. (Guwahati), Ph.D. (IIT Guwahati)  
Veronica Pala, M.A., Ph.D. (NEHU)

**Student Intake**

**Enrolment Capacity:** M.A. - 55, M.Phil. -20, Ph.D. - Variable

**Actual Admission:** SC ST Gen Male Female Meghalaya Outside Meghalaya

M.A. - 49 6 24 31 40 15

Ph.D. - 6 3 7 2 6 3

**Degrees Awarded:** SC ST Gen OBC Male Female Total

M.A. 37 3 2 12 30 42

M.Phil.

Ms. Bidisha Mahanta, "Women Empowerment in Assam: A Human Development Approach." Supervisor: Prof. P. Nayak

Ms. Rupa Bakor Kharshiing, "Public Expenditure and Human Development in Meghalaya." Supervisor: Prof. B. Mishra

Mr. Trailokya Dekka, "India's Look East Policy and the North East: Problems and Prospects of Regional Integration." Supervisor: Dr. B. Panda

Ph.D.

Mr. Santanu Ray, "Dynamic Links between Economy and Human Development: A Study of Indian States." Supervisor: Prof. P. Nayak.

**Course Conducted:**

M.A.

Core Courses: Micro-economic Analysis- I, Macro-economic Analysis- I, Mathematics for Economists, Economics of Development -I, Public Economics, Micro Economic Analysis -II, Macro-economic Analysis- II, Techniques of Statistical Analysis, Economics of Development- II, Economics of Environment and Social Sector and Indian Economic Policy.

Open Courses: Budgetary Theory and Practice, Computer Applications in Economic Analysis, Econometrics, Economics of Social Sector, Institutional Economics and Welfare Economics.

Optional Courses: Industrial Economics-I, Industrial Economics-II, Labour Economics-I, Labour Economics-II, Econometrics-I, Econometrics-II,

Demography-I, Demography-II, Economics of Agriculture-I, Economics of Agriculture-II, Economics of Gender and Development-I, Economics of Gender and Development-II, Computer Applications in Economics Analysis-I; Computer Applications in Economics Analysis-II, Economics of Infrastructure-I; Economics of Infrastructure-II; Economics of Law, Welfare Economics-I; Welfare Economics-II; Economy of North-Eastern Region; Economics of Development-I; Economics of Development-II, Financial Economics-I; Financial Economics-II; Budgetary Theory and Practice

M. Phil.

Recent Advances in Economic Theory; Scientific Methods and Quantitative Techniques; Major Issues of Indian Economy.

**Study Tours/Field Trips of Students:** In order to acquaint the students with the current research trends in Economics and to have an exposure to the socioeconomic and cultural conditions of the people beyond North-East India, Prof. P. Nayak took the third semester students to a study tour to Institute of Social and Economic Change at Bangalore, Small Scale Industry Centers at Kanyakumari, University of Madras, Chennai and major Industrial Houses at Kolkata from 4<sup>th</sup> January to 19<sup>th</sup> January 2010.

### **Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

#### **Attended**

Prof. S. K. Mishra presented a paper titled "On Harnessing Natural Resources for Sustainable Development" in UGC-sponsored national seminar on 'Environment Management - Role of Its Stakeholders' organized by Dimoria College, Khetri, Kamrup, Assam in collaboration with NEDFI, 8-9 January, 2010.

Prof. P. Nayak chaired the third technical session in the two days national seminar on 'Voluntary Sector, Civil Society and Social Transformation in India' organized by the Department of Sociology, NEHU, Shillong, 18-19 November 2009.

Prof. N. Srivastav attended: (i) national seminar on 'Micro-Finance Revolution: Understanding Its Success and Sustainability' and chaired the first Technical Session on 'Microfinance in India' organized by the Department of Management, NEHU Tura Campus, Tura, 19-20 June 2009, (ii) national

consultation seminar on 'Exploring and Identifying Research Areas on Labour and Employment on North-Eastern Region' and chaired a session and presented a paper on "Women Domestic Workers in Shillong: Some Socio-Economic Attributes" organized by V.V. Giri National Labour Institute, NOIDA, in collaboration with the State Institute of Public Administration and Rural Development, Agartala, Tripura, November 19-20, 2009.

Prof. E. D. Thomas attended the national conference on 'Strategies for Vitalising Female Literacy: Challenges of 21<sup>st</sup> Century' organized by SPACE & SRC for Adult & Continuing Education, Hyderabad, 9-10 February 2010 and presented a paper entitled "Review of Literacy Perspective in India."

Prof. B. Mishra presented a paper entitled "Public Expenditure and Rural Empowerment in North-East India" in national seminar on 'Rural Empowerment in Northeast India' organized by the Department of Rural Development and Agricultural Production, NEHU, Tura Campus, Tura, 26-27 November 2009.

Dr. U. K. De presented: (i) a paper on "Livelihood and Quality of Forest: A Case Study in Khasi Hills" in the national seminar on 'Conservation of Environment in North East India' organized by NEICSSR, Shillong, 5-6 June 2009, (ii) a paper with Neelanjan Sen and Bhola Nath Ghosh on "Gender Deprivation in Rural Jharkhand: A Case Study" in the Seventh Conference of IASSH on 'Health, Poverty and Human Development' at Banaras Hindu University, 5-7 March 2010, (iii) a paper on "Problem of Water for Domestic Use and Peoples' Willingness to Pay for It: A Study of Shillong Urban Area" in the international seminar on 'Water Crisis in the Indian Subcontinent: Issues and Challenges' organized by the Department of Geography, NEHU, Shillong, 23-24 November 2009.

Dr. B. Panda attended: (i) national brainstorming workshop on NREGA chaired by Honorable RD Minister, GOI and held at Vigyan Bhawan, 16 July 2009 and presented a talk on "NREGA and Improving the Quality of its Works", (ii) one day brainstorming workshop for project directors on rural development organized by the Ministry of Rural Development, Government of Meghalaya, 31 July 2009, and made a presentation on "Appraisal of NREGA in the State of Meghalaya", (iii) one day workshop for senior police officers on the 'Complexities of Law & Order' organized by the North Eastern Policy Academy, Shillong, 11 September 2009, and gave an invited talk on "The Fall Out on Nations Complex Law & Order Situations, Its Effect on Economy and Development", (iv) exploratory workshop on 'Identifying Region Specific Research Issues Relating to Labour

and Employment' organized by V.V. Giri National Labour Institute, NOIDA, held at Agartala, 19-20 November 2009 and presented two papers on "Growth, Composition and Determinants of Rural Non-Farm Employment in North East India" and "Impact of NREGA on Employment Generation in North East India", (v) workshop on 'Professional Support to NREGA' organized by UNDP, India and MORD, GOI, 27 November 2009, New Delhi and presented a paper on "Impact Assessment of NREGA in the State of Assam", (vi) workshop on the 'Findings of Professional Institutional Network Partners' organized by MORD, GOI, Vigyan Bhawan, Delhi, 5 March 2010 and presented a paper entitled "Lessons Learnt from NREGA-The Sikkim and Meghalaya Experimentation", (vii) roundtable with UNDP Administrator Ms. Helen Clark on 'Leveraging NREGA for Sustainable Development and Lessons for MDG intervention' organized by UNDP India and chaired by the Honorable Minister, RD, GOI, Dr. C.P. Joshi at Udaipur, 7 March 2010 and delivered a talk on "Governance and NREGA."

Dr. V. Pala (i) presented a paper entitled "Education and Unemployment in NE States: Security Implications" (with Amaresh Dubey) at the international workshop on 'The New Security Agenda in the North-East of South Asia' organized jointly by BASAS (British Association for South Asian Studies) and NEHU, Shillong, March 11–17, 2010 and also (ii) submitted a paper entitled "Calorie Deficiency among Scheduled Tribes in the North-Eastern Region of India" (with Ibalari Phylla Khongjoh) at the international seminar on 'Adivasi/ST Communities in India: Development and Change' organized by the Institute for Human Development, New Delhi, August 27–29, 2009.

## **Publications**

### **Published In India**

De, U. K. 2009. Extraction and Use of Coal and Limestone in Meghalaya: A Comparative Analysis", *Journal of NEICSSR*, 33(1):15-22.

De, U. K. 2010. Food Security in North-East India in the Post Globalisation Era. *The India Economic Review*, 7: 98-109.

Jamir, T. and Mishra, S. K. 2009. Economics of Higher Education: Micro-analysis of Private Colleges in Nagaland. *Fed Uni Journal of Higher Education*, 5(1-2): 41-62.

Mishra, S. K. 2009. A Note on the Ordinal Canonical Correlation Analysis of Two Sets of Ranking Scores. *Journal of Quantitative Economics*, 7(2):173-199.

Mishra, S. K. 2009. On Construction of Robust Composite Indices by Linear Aggregation. *IUP Journal of Computational Mathematics*, 2(3):24-44.

Mishra, S. K. 2010. Is Journal Impact Factor a Good Measure of Research Merit? *The NEHU Journal*, 8(1):107-122.

Mishra, S. K. 2010. Performance of Differential Evolution and Particle Swarm Methods on Some Relatively Harder Multi-modal Benchmark Functions. *IUP Journal of Computational Mathematics*, 3(1):7-18.

Suresh, P. S and Mishra, B. 2009. Capacity Utilisation in Private School Industry: A Case Study of Nagaland. *International Journal of Management Research and Technology*, 3(1):317-331.

Umdor, S. and Panda, B. 2009. An Assessment of SHGs under SGSY Programme: Evidence from Meghalaya. *Asian Economic Review*, 51(2):311-325.

### **Published Abroad**

Mishra, S. K. 2009. Representation-Constrained Canonical Correlation Analysis: A Hybridization of Canonical Correlation and Principal Component Analyses. *Journal of Applied Economic Sciences*, IV(7):115-124.

Mishra, S. K. 2009. A Note on Positive Semi-Definiteness of Some Non-Pearsonian Correlation Matrices. <http://ssrn.com/abstract=1419362>, SSRN, New York, 1-5.

Mishra, S.K. 2010. A Note on Empirical Sample Distribution of Journal Impact Factors in Major Discipline Groups. <http://ssrn.com/abstract=1552723>, SSRN, New York, 1-34.

Mishra, S. K. 2010. Empirical Probability Distribution of Journal Impact Factor and Over-the-samples Stability in its Estimated Parameters. <http://mp.ra.ub.uni-muenchen.de/20919>, MPRA, Munich, 1-8.

### **Books/Book Chapters**

Chakraborty, M., S. Das, and V. Pala, 2009. Income, Employment and Unemployment in Meghalaya. In *Meghalaya Human Development Report 2008, Chapter VI*, Planning Department, Government of Meghalaya, Shillong, 125-160.

De, U. K. 2010. Population Dynamics and the Demographic Dividend in Meghalaya. In *Population and Development in North-East India*, Ed.: B. J. Deb, Concept Publishing Company, New Delhi, 167-192.

De.UK and Das Manjit,2009.Ericulture as a Remedy of Rural Poverty in Assam:A Micro Level Study in Barpeta District.In Indian Handloom and Handicraft: Issue and Experience, Ed:D.Mukherjee,ICFAI University Press,Hyderabad , -170-192.

Mishra, B. and S. Umdor, 2009. Problems of Border Areas in North- East India (Meghalaya): Implications for the 13<sup>th</sup> Finance Commission. In: *Thirteenth Finance Commission Report, 2009, Chapter-3 (d)*, Government of India, New Delhi, 197-246.

Mishra,S.K.2010.Construction of an Index:A New Method. In Growth and Human Development in North –East India,Ed:P.Nayak,Oxford University Press,New Delhi,24-35.

Mishra, S. K. and P. Nayak, 2010. Facets and Factors of Human Development in Tripura. In *Growth and Human Development in North-East India*, Ed.: P. Nayak, Oxford University Press, New Delhi, 281-296.

Mishra, S. K. and P. Nayak, 2010. Human Development and its Correlates in Nagaland. In *Growth and Human Development in North-East India*, Ed: P. Nayak, Oxford University Press, New Delhi, 323-346.

Nayak, P. (Ed.), 2010. *Growth and Human Development in North-East India*, Oxford University Press, New Delhi.

Nayak, P. 2010. Human Development in North East India. In *Growth and Human Development in North East India*, Ed.: P. Nayak, Oxford University Press, New Delhi, 151-164.

Nayak, P. 2010. Human Development: Concept and Measurement. In *Growth and Human Development in North East India*, Ed.: P. Nayak, Oxford University Press, New Delhi, 3-18.

Nayak, P. and S. Ray, 2010. Inter District Disparities in Meghalaya: A Human Development Approach. In *Growth and Human Development in North East India*, Ed.: P. Nayak, Oxford University Press, New Delhi, 200-215.

Pala, V. 2009. Human Development: Concept and Measurement. In *Meghalaya Human Development Report 2008, Chapter*, Planning Department, Government of Meghalaya, Shillong, 17-30.

Pala, V. 2009. Labour and Employment. In *Meghalaya State Development Report, 2008-09, Chapter XII*, Planning Department, Government of Meghalaya, Shillong, 397-417.

Pala, V. and Shreeranjana, 2009. Social Sector in Meghalaya. In *Meghalaya State Development Report, 2008-09, Chapter XI*, Planning Department, Government of Meghalaya, Shillong, 347-396.

Panda, B. 2010. Economic Growth, Exclusion and Human Development in North Eastern Region of India. In *Growth and Human Development in North East India*, Ed: P. Nayak, Oxford University Press, New Delhi, 179-189.

Srivastav, N. 2009. Industrial Development in the Northeastern States of India: The case of Service Industries. In *Regional Disparities in India*, Ed.: H. J. Baxi, IB, I.U. Press, Hyderabad, 80-103.

Srivastav, N. 2009. Industrial Development in the Northeastern States of India: The Case of Service Industries. In *Regional Disparities in India*, Ed.: H.J. Baxi, IB, I.U. Press, Hyderabad, 80-103.

Srivastav, N. 2009. Role of Emerging Small Scale Industries in the Rural Development of North-Eastern States of India- An Analytical Approach. In *Co-operative Management and Development: Text and Cases, Part.III*, Ed.: Rais Ahmed, Mittal Publications, New Delhi, 694-711.

Srivastav, N. 2009. Severity of Poverty and Status of Public Services in North-Eastern States. In *Growth and Human Development in North-East India*, Ed.: P. Nayak, Oxford University Press, New Delhi, 166-178.

Suresh, P. S and B. Mishra, 2010. Public Expenditure and Human Development in North-East India: A Case Study of Meghalaya. In *Growth and Human Development in North-East India*, Ed.: P. Nayak, Oxford University Press, New Delhi, 233-243.

Umdor, S. and B. Panda, 2009. State of Infrastructure in Meghalaya. In *Meghalaya State Human Development Report 2008, Chapter 7*, Government of Meghalaya, Shillong, 161-184.

Umdor, S. and B. Panda, 2009. People's Participation in the Development Process in Meghalaya. In *Meghalaya State Human Development Report 2008, Chapter 10*, Government of Meghalaya, Shillong, 247-264.

**Funds Received from agencies other than NEHU:**

VGNLI, NOIDA	Rs. 5, 75,500/-
UGC	Rs. 6, 54,200/-

## Research Projects

### New

Growth, Composition and Determinants of Rural Non-Farm Employment in North East India. Project Coordinator: Dr. B. Panda. Sponsored by VGCLI, NOIDA.

Empowerment of Women in Rural Areas: A Comparative Analysis of Tripura, Meghalaya and Jharkhand. Collaborator Scientist: Dr. U. K. De. Sponsored by Indian Statistical Institute, Kolkata.

Valuation of Some Tourist Sites in Khasi Hills of Meghalaya. Principal Investigator: Dr. U.K. De. Sponsored by U

### Completed

Appraisal of National Rural Employment Guarantee Act (NREGA) in the states of Sikkim and Meghalaya. Project Director: Dr. B. Panda. Sponsored by UNDP, India.

Process of Empowerment of Women in Rural Areas: Case Studies in Jharkhand State. Collaborator Scientist: Dr. U. K. De. Submitted to the Indian Statistical Institute, Kolkata.

Dr. V. Pala coordinated the preparation of the *Meghalaya Human Development Report, 2008*, Planning Department, Government of Meghalaya, Shillong; a report prepared in collaboration with the Planning Commission, Government of India and the United Nations Development Programme (UNDP).

### Academic/ Professional Collaboration:

Dr. B. Panda continued to collaborate with: (i) UNDP, India, (ii) Ministry of Rural Development, Government of India, and (iii) NIRD, Hyderabad in terms of workshops, projects, conferences, brainstorming sessions and members of working committees and expert groups with respect to the design, working, evaluation, monitoring and improvement of National Rural Employment Guarantee Scheme(NREGA) of Government of India. He is also collaborating with V. V. Giri National Labour Institute, NOIDA, for participation in exploratory workshops and undertaking of research projects for the North East. He also continued his professional collaboration with IIM, Shillong in enriching their teaching curriculum in environmental economics as a visiting faculty.

**Infrastructure Facilities:**

Computer Lab furnished with 25 computers and internet connectivity.

**Honours/Awards/Recognition:**

Prof. B. Mishra was appointed member of the Meghalaya Commission on Resource Mobilisation, Government of Meghalaya, Shillong.

Dr. B. Panda was appointed: (i) member of the working committee on 'Capacity Building' in NREGA for the country by the Rural Development Ministry, Government of India, (ii) member of expert committee to formulate research methodology for studies on various aspects of NREGA constituted by Government of India, Ministry of Rural Development under the chairmanship of Shri B. N. Yugandhar, Ex Member, Planning Commission, GOI, and (iii) member, Ombudsman Selection Committee for the State of Meghalaya by Ministry of Rural Development, Government of India.

**Other Activities:**

The Department conducted a Refresher Course (Course Coordinator: Dr. U.K. De) on 'Advancement of Economic Ideas' from 17 June to 7 July 2009. Twenty eight participants from different Universities of India attended the programme.

Prof. P. Nayak delivered: (i) three lectures entitled "Human Development: Conceptual Issues" , "Human Development: Empirical Issues" and "Women Empowerment in Assam" in UGC-Refresher Course in Sociology, organized by the Department of Sociology, NEHU, Shillong, 5-7 September 2009, (ii) two lectures on "Development: Concept and New Trends-I" and "Development: Concept and New Trends-II" in UGC Refresher Course in Governance, Human Rights and Development, organized by the Department of Political Science, NEHU, Shillong, 14-15 October 2009, (iii) three lectures in UGC Refresher Course in Economics, organized by the Department of Economics, Gauhati University, Guwahati, 8-9 December 2009, (iv) four lectures in UGC Refresher Course in Economics, organized by the Department of Analytical and Applied Economics, Utkal University, Bhubaneswar, 24-25 December 2009, and (v) two lectures on "Human Development" and one on "Game Theory" in the Workshop for Doctoral Scholars in Economics, organized by ICSSR-NERC, Shillong, 22-31 March 2010.

Prof. N. Srivastav attended two days SCAPES regional workshop on 'Studying the Linkages between Ecosystem Services and Poverty Building Networks in South Asia' at Shillong sponsored by NERC, DFID, ESRC and the United Nations Environment Programme (UNEP) on 8-9 September 2009. He was the Principal Contributor to the 'Meghalaya State Development Report, 2008-09' prepared by the Planning Department, Government of Meghalaya, 2009. He delivered (i) two lectures on "The Economics of Happiness: An Interdisciplinary Approach" in the UGC-ASC sponsored 4<sup>th</sup> Orientation Programme in Information Technology organized by the Bio-Informatics Centre, NEHU, Shillong, 13 April 2009, (ii) two lectures on *Bharat mein Arthik Sudhar evam usake Prabhav: Ek Aalochnatmak Adhyayan* in the UGC Refresher Course organized by the Department of Hindi, NEHU, Shillong, 3-24 August 2009, (iii) two lectures on "Agribusiness and Rural Development" in the UGC Refresher Course organized by the Department of Commerce, NEHU, Shillong, November-December, 2009, and (iv) three lectures on "Behavioral Economics of Saving" and "Economics of Well-being" to the ICSSR School for Doctoral Scholars in Economics of NER organized by the ICSSRNERC, Shillong, 22-31 March 2010.

Prof. E. D. Thomas attended the international conference on 'Global Warming: Agriculture, Sustainable Development & Public Leadership' organized by Indian Society for Community Education, International School for Public Leadership, and Manthan Educational Programme Society, at Gujarat Vidyapith, Ahmedabad, 11-13 March 2010.

Prof. B. Mishra delivered: (i) one lecture on "Tax Efforts in North-East India" and one on "The Genesis of Environmental Economics" in the Workshop for Doctoral Scholars in Economics organized by ICSSR-NERC, Shillong, 22-31 March 2010, and (ii) an invited lecture under UGC Visiting programme on "Externality and Environmental Economics" in the Department of Economics, S.C.S. Autonomous College, Puri on February 5, 2010. He attended the 92<sup>nd</sup> Indian Economic Association (IEA) Conference organized by the School of Management, KIIT University, Bhubaneswar, 27-29 December 2009.

Dr. U. K. De delivered: (i) a lecture on, "Problems of Domestic Water Use in a Hill Town" on January 29, 2010 at Indian Statistical Institute, Kolkata, and (ii) two lectures on "Status & Privatisation of Education in India" and "Globalisation and Education in India" in UGC-ASC sponsored 4<sup>th</sup> orientation programme in 'Information Technology' at NEHU, Shillong, 23 March to 22 April 2009.

Dr. B. Panda: (i) participated and interacted by invitation in the national symposium on 'Reforms in Higher Education: North East Perspective' organized by NEHUTA in collaboration with ICSSR-NERC, October 29-30, 2009, (ii) attended and participated in the national annual conference of the North Eastern Economic Association held at IIT, Guwahati, 18-19 December 2009, (iii) attended and participated in the annual conference of Indian Economic Association held at KIIT Campus, Bhubaneswar, 27-29 December 2009, (iv) delivered ten lectures on "Environmental Economics" to the students of IIM, Shillong, in evening hours in September 2009, (v) prepared a project proposal entitled "Significance of Institutions in Promoting Sustainable Environment and Sustainable Development: The Case of U.K. and India" and interacted on it with the visiting team from GCU on 5 November 2009, (vi) participated and made a power point presentation in the final submission of the project work on 'NREGA Appraisal in the States of Meghalaya and Sikkim' organized by UNDP India in Vigyan Bhawan, Delhi on 7 August 2009, (vii) attended and participated with suggestions in the first meeting of the working committee on capacity building constituted by Government of India in the office of the planning commission, New Delhi on 12 March 2010, (viii) attended and participated with suggestions and went for field visits in the three days conference on capacity building in NREGA held in Hyderabad and organized by NIRD during 29-31 March 2010, (ix) delivered a lecture on "Business and Development" in the refresher course organized by the Department of Commerce, NEHU, Shillong, 30 November 2010, and (x) delivered three lectures entitled "Development and Diversification-The Case of the Rural Economy in India", "Dynamics of the theory and Practice of Development Economics" and "Research Agenda in Human Development and Growth in the North East" and interacted with the participants in the ICSSR-NERC School for doctoral students organized by ICSSR-NERC, Shillong during 24-26 March 2010.

Dr. P. S. Suresh delivered a lecture on "Reforms in the Stock Market" in the Refresher Course in Commerce, November-December 2009.

Dr. S. Umdor was the Principal Contributor to the 'Meghalaya State Development Report-2008-09, prepared by the Planning Department, Government of Meghalaya, 2009.

Ms. D. Nongkynrih attended a course on 'Quantitative Methods in Labour Research' at V. V. Giri National Labour Institute, NOIDA, Uttar Pradesh, 8-19 February 2010.

## DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

**Head** : Dr. Moses M. Naga  
**Telephone** : (0364) 2723141/2723142 (O), 2726142 (R)  
**Email** : [mosesmna@gmail.com](mailto:mosesmna@gmail.com)

**Thrust Area of Research:** The thrust areas of research of the Department are: Information Retrieval, Information & Knowledge Management, Database Management Systems, Communication Technologies & Digital Libraries, Measurement & Effectiveness of Information Services and Information Centres, Utilization of Information Resources both in Urban and Rural Settings, Utilization and Management of Human Resources in Libraries, Content Analysis, Marketing of Information Products and Services.

**Brief Statement of Academic Activities:** The Department has been involved in post-graduate teaching to the M.L.I.Sc. students, Ph.D. programme and co-curricular activities. Apart from attending to regular teaching and research programmes within the Department, the faculty members participated in various seminars and conferences and presented papers and delivered lectures. They also participated as resource persons in refresher and orientation courses conducted within and outside NEHU. As part of the course, the Department could also fruitfully conduct a study tour. The faculty members could publish a good number of their research outputs in leading professional journals and in seminar/conference proceedings at national and international levels.

### Faculty

**Associate Professors** : M. M. Naga, M.L.I.Sc., Ph. D. (NEHU)  
B. Laloo, M.L.I.Sc. (NEHU), Ph. D. (Gauhati)

**Assistant Professors** : P. Hangsing, M.L.I.Sc. (Delhi), PGDCA, Ph.D. (NEHU)  
J. J. Thabah, M.L.I.Sc. (NEHU)  
J. Khongtim, M.L.I.Sc., PGDCA (NEHU)

**Visiting Professors/Fellows/Guest Lecturers:** (i) Prof. H. R. Chopra and Prof. Amitabh Chatterjee (One month each), (ii) D. O. Jyrwa, Guest Lecturer, and (iii) J. Nongbri, Guest Lecturer.

### Student Intake

Enrolment capacity : M.L.I.Sc. – 32, Ph.D. – Variable

Actual Admission	SC	ST	Gen	Male	Female	Meghalaya	Outside Meghalaya
M.L.I.Sc.	-	20	10	14	16	20	16
Ph.D.	-	1	12	5	9	9	9
<b>Degrees Awarded</b>	<b>SC</b>	<b>ST</b>	<b>Gen</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>	
M.L.I.Sc.		19	2	7	14	21	

### Placement of Students:

Alma Mary Rynksai, Rokester Kharbihkhiew, Angie C. Marbaniang as Assistant Librarians, State Central Library, Shillong; Bariline Laitman as Reference Librarian (2009), State Central Library, Shillong; Balaker Nongbri as Librarian, Laitumkhrah Presbyterian Higher Secondary School, Shillong; Cliff Dkhar as Senior Library Assistant, RGIIM; Hanya Shylla as Deputy Librarian, Kiang Nongbah College, Jowai; Mangkhollen Singson as Assistant Professor, Pondicherry University, Pondicherry; Larisa Snabi as Senior Library Assistant, Central Agriculture University, Barapani, Meghalaya; Badarishisha Ryntathiang as Assistant Librarian, Martin Luther Christian University, Shillong; Mr. F. R. Sumer as Deputy Librarian, NEHU Central Library, Shillong; and Lawaka Kynjing as Assistant Librarian, Gauhati High Court, Shillong Branch.

### Courses Conducted:

Foundations of Library & Information Science, Organization of knowledge (Theory), Organization of knowledge (Practical), Information Sources & Services, Introduction to Information Technology, Database Management System, Organization of Knowledge(Theory), Organization of Knowledge(Practical), Library Software Packages (Practical), Library House Keeping Operations, Library System Analysis & Design, Information Users & Their Needs, Information Retrieval, Research Methodology in Library and Information Science, Management of Library & Information Systems, Information Communication Technology, Collection Development, Project Report/Dissertation.

**Study Tours/Field Trips of Students:** Ms. J. J. Thabah conducted a study tour of the students to Kolkata and Kharagpur with effect from 1<sup>st</sup> February to 10<sup>th</sup> February 2009.

### Publications

### **Published from India**

Laloo, B. 2010. Evaluation of Website, Used by Social Scientist of North East India. *Library Herald*, 48(1): 55-65.

### **Books/Book Chapters**

Lalditum, S. and P. Hangsing, 2009. A Preliminary View at the Concept of Semantic Web from the Perspective of Library Services. In *Preservation and Conservation of Information Resources in Knowledge Society: Issues, Challenges and Trends*, Ed.: Th. Madhuri and Ch. Ibohal Singh, Siroi Publications, Thoubal, 238-257.

Naga, M. M. and A. J. Singh, 2009. Universal Access through Common Services Centres (CSCs) for Rural Empowerment: A New Dimension to Librarianship. In *Preservation and Conservation of Information Resources in Knowledge Society: Issues, Challenges and Trends*, Ed.: Th. Madhuri and Ch. Ibohal Singh, Siroi Publications, Thoubal, 181-193.

Warr, H. and P. Hangsing, 2009. Open Source Digital Library software: A Literature Review. In *Preservation and Conservation of Information Resources in Knowledge Society: Issues, Challenges and Trends*, Ed.: Th. Madhuri and Ch. Ibohal Singh (Eds.), Siroi Publications, Thoubal, 238-257.

Laloo, B. 2009. *Shillong Vignettes: Not Your Regular Travel Guide*. Rilum Offset Printing House, Shillong.

Laloo, B. 2009. *Human Central: Die Laughing But Die Content*. Rilum Offset Printing House, Shillong.

Laloo, B. 2009. Preparing Students of Librarianship for the Digital Future: The Scenerio in a University of North East India. In *Proceedings of the National Seminars-Cum-Workshop on Managing of Libraries in Digital Environmentt*, Assam Agriculture Universtiy, Jorhat, 40-42.

### **Other activities:**

Ms. J. J. Thaba: (i) delivered a lecture on "Stress Management in the Perspective of Library environment" in the Orientation Programme for 'Key Resource Personnel from Libraries of SCERTs, SIEs, DIETs of North Eastern Region' held at NERIE, Shillong, November 16-20, 2009, (ii) acted as rapporteur during the 7<sup>th</sup> Convention Planner 2010 on "Re-engineering of Library and

## School of Economics, Management and Information Sciences

Information Services in Digital Era' organized by INFLIBNET & Tezpur University, February 18-20, 2010.

Dr. Moses M. Naga delivered: (i) two lectures on "Change Management and Libraries" during the Refresher Course in Library and Information Science organized by DLISc, Manipur University, July 25, 2009, (ii) four lectures on "Total Quality Management and its Applications in Library Services" and "Managing Change in a Library Setting" during the Refresher Course in Library and Information Science, organized by DLISc, Mizoram University, March 1-2, 2010.

Dr. P. Hangsing delivered lectures on "Applications of Computer" and "Communications and Internet" in the UGC-ASC 9<sup>th</sup> Orientation Programme (General) held at NEHU, Shillong, April 19 to May 16, 2010.

## DEPARTMENT OF MANAGEMENT

**Head** : Dr. K. Mishra  
**Telephone** : (03651) 224566/09436702080 (O), 9436702080 (R)  
**Email** : [kushendra78@gmail.com/mbanehu@jn.com](mailto:kushendra78@gmail.com/mbanehu@jn.com)

**Thrust Areas of Research:** The thrust areas of research in the Department are Cross-cultural Management, Entrepreneurship, Small Business Management, Tourism Management, Micro-Finance, Business Process Re-engineering, Banking Sector Reforms, Agri-Business and Rural Marketing. The Department aims to create knowledge in new frontiers of management.

**Brief Statement of Academic Activities:** The Department offers Master of Business Administration and Ph.D. programmes. Students are admitted into MBA programme based on MAT score and performance in Group Discussion and Personal Interview. In order to condition the students' mindset to become ethically driven Entrepreneurs and Managers a blend of traditional and modern teaching pedagogy is followed by conducting series of Lectures, Case studies, Quizzes, Presentations and Assignments besides exposing them to regular industrial visits. Apart from regular Faculty members, Practicing Managers, Guest and Visiting Faculty from premier institutes across the globe are invited to interact with our students and faculty for encouraging and strengthening business acumen.

### Faculty

Professor (SICI- : G. Singaiah, M.B.A. (Andh), Ph.D.(Utkal), F.R.P. McMaster)

Associate Professors : K. Mishra, M.M.S., Ph.D. (Lucknow)  
J. U. Ahmed, M.Com., Ph.D., L.L.B. (Assam)

Assistant Professors : B.F. Lyngdoh, M.Com. (Guwahati)  
D. Bhagat, B.Sc. (Agri.), M.B.A. (Assam Agri.)

**Visiting Professors/Fellows/Scholars:** The following Professors and scholars visited the Department during the year: Prof. Ranajit Chakrabarty, Prof. Rais Ahmad, Prof. Sujit Sikidar, Prof. Yogesh Upadhaya, Prof. S. S. Khanka, Prof. M. K. Awasthi, Prof. R. Borah, Prof. M. Sreemanarayan, Prof. A. Borthakur, Prof. Archana Baruah, Prof. A. K. Mishra, Dr. S. K. Nanda, Dr. Sharif Uddin, Dr. Nimit Choudury, Mr. Sitaram Prasad, Mr. Sunil Kumar Newar, Md. Abdul Rashid, Mr. Hemant Bayan and Mr. Debraj Roy.

### Student intake

Enrolment Capacity : M.B.A.: 33, Ph.D.: Variable

Actual Admission Outside Meghalaya	SC	ST	Gen	Male	Female	Meghalaya
M.B.A.	3	13	15	21	10	15
Ph.D.	-	7	8	10	5	9

Degrees Awarded	SC	ST	Gen	Male	Female	Total
M.B.A.	7	9	7	15	8	23

**Placement of Students:** The Department has a fully networked industry institute interface cell looking after the winter training and final placements of the students. The conscious efforts put in by the cell resulted in some of the biggest corporate recruiters like Price Waterhouse Coopers, WIPRO, ITC, HDFC, AMUL, RGVN, PRADAN, ICICI, etc., showing interest in our Institution and students.

**Courses Conducted:** The Department offers 32 courses, out of which 20 courses are core subjects and one project work equivalent to two courses.

Semester I – Principles and Processes of Management, Managerial Economics, Business Environment, Statistics for Managers, Computer Applications, Managerial Skill Development and Research Methodology.

Semester II – Organizational Behavior, Quantitative Methods, Operations Management, Human Resource Management, Financial Management, Marketing Management, Management Information System, Fundamentals of Agri- Business Management.

Semester III – Compulsory Papers – Strategic Management, Business Ethics and six Courses from Elective areas.

Semester IV – Compulsory Papers – Entrepreneurship Development and Small Business Management, Business Legislation and four courses from Elective areas besides Winter Project Work.

Specializations:

Marketing Management – Consumer Behavior, Sales and Distribution Management, Product and Brand Management, International Marketing, Advertising and Sales Promotion Management, Marketing of Services.

Human Resource Management – Human Resource Management-Policy and strategy, Human Resource Planning-Planning and Development, Management of Industrial Relations, Legal Framework Governing Human relations, Human Resource Accounting and Compensation Management, Industrial Psychology and Organization Dynamics

Financial Management – Security Analysis and Portfolio Management, Management of Financial Services, Project Planning, Analysis and Management, Strategic Tax Planning and Management, Financial Institutions and Markets, International Financial Management.

Agri-Business Management – Agro and Food Marketing, Agricultural Credit and Micro Finance, ICT in Agri-Business, Farm Business Management, Agriculture Project Management, Food Retailing.

**Study Tours/Field Trips of Students:** B. F. Lyngdoh and Gino A. Sangma took the students for industrial study tour to Mumbai, Goa and Kolkata from 2<sup>nd</sup> January to 17<sup>th</sup> January, 2010. A study tour of students to Balpakram was also conducted for three days by Ramona M. Sangma and Sahnaj R. Laskar.

**Seminars/Conferences/Symposia/workshops/extension programmes:**

#### **Organized**

The Department organized a national Seminar on 'Microfinance Revolution: Understanding its Success and Sustainability' during 19-20 June 2009. Dr. J. U. Ahmed was the Convener and Mr. Deepak Bhagat was the Joint Convener. The seminar was sponsored by ICSSR, New Delhi, NEC, Shillong, NABARD, Mumbai and NEDFi, Guwahati, Assam.

#### **Attended**

Professor G. Singaiah attended: (i) national seminar on 'Micro-Finance Revolution: Understanding its Success and Sustainability' organized by Department of Management, NEHU, Tura Campus, Meghalaya, 19-20 June 2009, and presented a paper entitled "Micro Finance for Micro Enterprise Development With special reference in Nagaon district of Assam", (ii) national seminar on 'Rural Empowerment in North East India' organized by the Department of RDAP, NEHU, Tura Campus, 26-27 June 2009, and presented a paper entitled 'Perspectives of Social Marketing: A Case Study of BAKDIL, Garo Hills, Meghalaya', and (iii) national seminar on 'Radiation Hazards and Management' organized by Dakuwa Khana College, Assam, October 2009, and presented a paper titled 'Management Interventions for Mitigating radiation Hazards.'

Dr. K. Mishra presented a paper entitled "Strong legal Institutions: A Precursor to Globalization and Development" in the Colloquium of Indian Tourism Congress on 'Issues and Trends of Tourism Development: Changes and Challenges', Bangkok, June 24-26, 2009.

Dr. J. U. Ahmed presented: (i) paper entitled "A Study on the Effectiveness of Credit Delivery Institutions in Spotlighting a Dynamic Farming Sector" in International Conference on 'Agri-preneurship and Rural Development' organized by Faculty of Management Studies, Banaras Hindu University, Varanashi, 5-6 December 2009, (ii) paper entitled "A Study on Priority Sector Lending by Commercial Banks" in International Conference on 'Indigenous Management Practices' organized by the Department of Business Administration, Annamalai University, 16th - 18th July, 2009, (iii) paper entitled "Impact of SHG based Micro Finance in Poverty Alleviation: A Study in Garo Hills Districts of Meghalaya" in National Seminar on 'Micro Finance Revolution: Understanding its Success and Sustainability' organized by the Dept. of Management, NEHU, Tura Campus, 19-20<sup>th</sup> June 2009, (iv) paper entitled "Micro Finance, Poverty Alleviation And Rural Empowerment In North-East India: Myth And Reality" in National Seminar on 'Rural Empowerment in North East India' organized by the Department of RDAP, NEHU, Tura Campus, 26-27<sup>th</sup> November 2009, (v) paper entitled "Perspectives of Ethnicity in the Context of Globalization" in National Seminar on 'Culture and Ethnic Persistence: Towards understanding Identities' organized by the Department of RDAP, NEHU, Tura Campus, 5-6<sup>th</sup> November 2009, and (vi) paper entitled "The Growth Performance of Micro and Small Enterprises in India: An Insight of its Status, Setback and Solution" in UGC Sponsored national Seminar, S.S. College, Hailakandhi, Assam, January 2010.

B. F. Lyngdoh attended: (i) 3<sup>rd</sup> International Conference on 'Microfinance' organized by the Department of Commerce, School of Management, Pondicherry University, Puducherry, 22-24 January 2010, and presented a paper entitled "Microfinance Intervention and Socio-economic Transformation: An Application of Propensity Score Matching and Difference-in-Difference Technique", (ii) national seminar on 'Micro-Finance Revolution: Understanding its Success and Sustainability' organized by the Department of Management, NEHU, Tura Campus, 19-20 June 2009, and presented a paper entitled "Microfinance in Meghalaya: Challenges and Policy Issues", (iii) national seminar on 'Rural Empowerment in North East India' organized by the Department of RDAP, NEHU, Tura Campus, 26-27 November 2009, and presented a paper entitled "Help Groups and Empowerment of Women: From Convention to Innovation", and (iv) national seminar on 'Voluntary Sector, Civil Society and Social Transformation in India' organized by the Department of Sociology, NEHU, Shillong, 18-19 November 2009, and presented a paper entitled "Non-Government Organisations and Inclusive Growth."

D. Bhagat attended: (i) national seminar on Microfinance Revolution: Understanding its Success and Sustainability” organized by the Department of Management, NEHU, Tura Campus, 19-20 June 2009, and presented a paper entitled “Regional Disparities In Microfinance- Analysing the SHG Bank Linkage Programme In North- East India”, (ii) national seminar on ‘Rural Empowerment in Northeast India’ organized by the Department of Rural Development and Agricultural Production, NEHU, Tura Campus, 26-27 November 2009, and presented a paper entitled “Agro-Food Chains for Farmers Empowerment: Issues, Approaches and Strategies for Small Holders of Meghalaya”, (iii) international conference on ‘Agripreneurship and Rural Development’ organized by Faculty of Management Studies, Banaras Hindu University, Varanasi, 5-6 December 2009, and presented a paper entitled “Agriculture Diversification Towards High-Value Crops, Agri-Business Opportunities and the Role of Small Holders: A Study in West Garo Hills District of Meghalaya”, and (iv) international conference on ‘Microfinance’ organized by the Department of Commerce, School of Management, Pondicherry University, Puducherry, 22-24 January 2010, and presented a paper titled “Microfinance and Rural Employment: A Study on Agro-Based Income Generating Activities Undertaken by SHGs in Jorhat District of Assam.”

## **Publications**

### **Published in India**

Ahmed, J. U. 2009. Extent of Deposit Mobilization and Its Determinants: An Exploratory Study on Commercial Banks. *ICFAI Journal of Financial Economics*, VII(1): 52-56.

Ahmed, J. U. 2009. Human Resource Accounting: Review of Valuation Models and Practices in India. *Indian Management Studies Journal*, 13(2):73-82.

Ahmed, J. U. 2009. Management of Non-Performing Assets of Commercial Banks in India. *The Management Accountant*, 44(6): 470-478.

Ahmed, J. U. 2010. An Empirical Estimation of Loan Recovery and Asset Quality of Commercial Banks. *The NEHU Journal*, 8(1): 37-58.

Mishra, K. 2009. Challenges of Media Education in India: An Analysis of Students’ Expectations and Aspirations in Pursuit of a Professional Career and Objective Reality. *The Asian Man*, 3(1): 9-13.

Mishra, K. 2009. Correlates of Business Process Reengineering: Issues and Challenges. *IEEE Journal of Information sciences*, 45: 63-72.

### **Books/Book Chapters**

Ahmed, J. U. 2009. *Efficiency of Commercial Banks in Backward Region*. ICFAI University Press, Hyderabad.

Ahmed, J. U. (Ed.), 2009. *Development Vision of North East India*. Concept Publishing Company, New Delhi.

Mishra, K. 2009. *A Text Book of Marketing of Services*. Routledge (Taylor & Francis Group), Cardiff University Press.

Mishra, K. 2009. *Human Resource Management in Services: Issues and Challenges*. People's Publishing House, New Delhi.

Mishra, K. 2009. *Performance Measurement in Services*. Serial Publication, New Delhi.

Bhagat, D. 2009. Agriculture Diversification towards High-Value Crops, Agri-Business Opportunities and the Role of Small Holders: A Study in West Garo Hills District of Meghalaya. In *Perspectives on Agripreneurship and Rural Development*, Ed.: R. K. Pandey, Concept Publishing Company Pvt. Ltd, New Delhi, 447- 456.

Bhagat, D. 2010 Microfinance and Rural Employment: A Study on Agro-Based Income Generating Activities Undertaken By SHGs in Jorhat District Of Assam” In *Macro Dynamics of Micro Finance*, Eds.: D. Lazar, P. Natrajan and M. Deo, Pondicherry University, Puducherry, 324-333.

Bhagat, D. 2010. Agricultural Extension and Farmers of North-East India: Application of Innovative ICT Tools and Unified Extension Model to Boost Agri-Business Development. In *Development vision in North East India*, Ed.: J. U. Ahmed, Concept Publishing Company Pvt. Ltd, New Delhi, 324- 333.

Bhagat, D. 2010. Microfinance and Rural Development: Analytical Issues for Model II. In *Development vision in North East India*, Ed.: J. U. Ahmed, Concept Publishing Company Pvt. Ltd, New Delhi, 47-57.

Lyngdoh, B. F. 2010. Microfinance Intervention and Socio-Economic Transformation: An Application of Propensity Score Matching and Difference-In-Difference. In *Macro Dynamics of Micro Finance*, Eds.: D. Lazar, P. Natrajan and M. Deo, Pondicherry University, Puducherry, 343 – 355.

Singaiah, G. 2009. Women Empowerment through Entrepreneurship in Rural Areas. In *Development Scenario of North East India: A Holistic Perspective*, Ed.: J. U. Ahmed, DVS Publications, Guwahati, 313-322.

Singaiah, G. 2010. People's Participation a Key for Effective Development: It's Relevance in Contemporary Nagaland. In *Development Vision in North East India*, Ed.: J. U. Ahmed, Concept Publishing Company Pvt. Ltd, New Delhi, 404-430.

**Infrastructural Facilities:** The Department is equipped with infrastructural facilities like Computer Lab with 30 PCs having Internet Facility and Library with 3300 books and 42 Journals. It has also started establishing Case Study Room and Audio-Video equipments for facilitating and strengthening learning systems.

### **Research Projects:**

#### **Ongoing**

Evolution of Entrepreneurial Motivation Process- A Cross Cultural study in North East India. Sponsored by UGC, New Delhi.

#### **Completed**

Evaluation Study on Rural Telephony. Sponsored by the Planning Commission, 2009.

### **Honours/Awards/Recognition**

Silver Medal for the paper "*Financial Inclusion, Women and Inclusive Growth: Empirical Evidence and Future Strategies*" was bestowed to Mr. B. F. Lyngdoh in 62<sup>nd</sup> All India Commerce Conference organized by MDS University, Ajmer, Rajasthan, 10–12 October 2009.

### **Other Activities:**

Prof. G. Singaiah acted as a resource person for the Entrepreneurship Development Programmes during May-June 2009 conducted by MSME, Tura, Meghalaya.

Dr. K. Mishra delivered lectures on 'Research Methods' in the Refresher Course organized by the Academic Staff College of University of Lucknow, January 09, 2010.

Mr. B. F. Lyngdoh: (i) attended Refresher Course in Commerce in UGC-Academic Staff College, NEHU, Shillong, 27 November to 17 December 2009,

and (ii) delivered lecture on “Microfinance and Empowerment of Women: An Overview” in the Regional Workshop on ‘Empowerment of Women through Development of Micro Enterprises for the Urban Poor in North-Eastern Region’ organized by Indian Institute of Entrepreneurship, Guwahati, 28 October 2009.

Mr. D. Bhagat: (i) participated in training programme on ‘Commodity Futures Market’ organized by the Department of Agricultural Economics, AAU, Jorhat in association with Forward Market Commission, Gol and National Commodity & Derivative Exchange Ltd at AAU, Jorhat, 8-9 February 2010, and (ii) resource person for the training of unemployed educated rural youth organized by Department of Agriculture, West Garo Hills, October 2009.

## II

# SCHOOL OF EDUCATION

**Dean** : Prof. P. K. Gupta (w.e.f. 12.03.2010)  
**Telephone** : 2723342 (O), 2228404 (R), 9436116725 (M)  
**E-mail** : pkgupta.nehu@gmail.com

**T**he School of Education was created during the year 2009 - 2010 and it consists of Department of Adult & Continuing Education, Departments of Education at Shillong and Tura Campuses, Centre for Distance Education, and Centre for Science Education. The Department of Education conducts M.A. (Education) and Ph.D. programmes both at Shillong and Tura campuses, while at Shillong campus M.Ed. programme is also conducted. The Department of Adult & Continuing Education offers P.G. Diploma in Adult & Continuing Education, P.G. Certificate in Disaster Management, and Ph.D. The Centre for Distance Education offers Certificate in Floriculture, P.G. Diploma in Entrepreneurship, B.Ed. (Special Education), Foundation Course on Education of Children with Disabilities, and P.G. Diploma in Special Education. The Centre for Science Education mainly concentrates on research and extension activities.

Besides the regular teaching and research programmes, the faculty members of all the Departments/Centres participated and acted as resource persons in various extension activities within and outside the University. During the year, one scholar was awarded Ph.D. in Education.

## DEPARTMENT OF ADULT & CONTINUING EDUCATION

**Head** : Dr. B. P. Sahu  
**Telephone** : 2723328 (O), 9436302933 (M), 2726028 (R)  
**Email** : [bishnusws@yahoo.com](mailto:bishnusws@yahoo.com)

**Thrust Areas of Research:** The thrust areas of the Department are (i) to strengthen the teaching learning process of teachers, students and other stakeholders through community participation, (ii) to establish closer linkage between formal and non- formal education, (iii) to identify the community needs, problems, issues, etc and (iv) to develop, establish and give an identity to the discipline of Adult and Continuing Education, Extension Education (Field Outreach), Literacy, Post Literacy and Universalization of Education. Department's other thrust areas include Education for Women Empowerment, Environmental Education, Human Rights, Workers Education, Migrants Education, Indigenous Education, Needs of the Aged, HIV/AIDS Education, Adolescence Education, Vocational Education and Training, Information and Communication Technology, Policy Advocacy on Transformation Adult Learning, Leadership Development and Capacity Building, Science for Masses, Learning Environment and Opportunities for the under privileged, Net Working, Voluntary Action and Action Research, Working with Children, Innovation and Good Practices in Adult Education, e-e-learning, Counseling and Guidance ( Pre-Marital, Career, HIV/AIDS/STDS etc), Teachers Training, Self Employment and Entrepreneurship and Family Life Education.

**Brief Statement of Academic Activities:** The activities of the Department are focused on Teaching, Research and Extension Education. Special attention is given to Adult and Continuing Education for University groups and to those groups who do not have access to university system. The Department offers the Open Course: Extension Education and Demography, which is opted by students of other Departments/Centres. The Department focuses on (i) innovative teaching method like e-learning, (ii) provision of Continuing Education in the changing socio-economic scenario, and (iii) cultivating the habit of self-education. The Department also undertakes projects for social change. The Department has thus designed need-based innovative academic and skill building programmes in tune with the changing and emerging needs. The Department has framed the

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course structure and syllabi for M.A. in Adult and Continuing Education, which will commence from 2010-2011.

**Faculty:**

- Professor : E. Jyrwa, M.A., Ph.D. (NEHU)
- Associate Professors : B .P. Sahu, MSW, Ph.D. ( Kurukshetra)  
J. Mawthoh, M.A., Ph.D. (NEHU)
- Assistant Professors : W. S. Myllemngap, M.A., M.Phil. (NEHU)  
N. P. Goel, M.Sc., MPS (IIPS, Mumbai), Ph.D. (NEHU)  
J. I. Rapphap, MSW (Bombay)  
E. Syngkon, M.A., Ph.D. (NEHU)

**Student Intake:**

- Enrollment Capacity : P.G. Diploma in Adult and Continuing Education : 40
- P.G. Certificate Course in Disaster Management : 45
- Ph.D. :

**Variable**

Actual admission	SC	ST	Gen	Male	Female	Meghalaya	Other States
P.G. Diploma in Adult & Continuing Education	-	38	2	4	36	37	3
P.G. Certificate Course in Disaster Management	-	43	1	10	34	38	6
Ph.D.	1	5	1	1	6	3	4

**Degrees Awarded:**

	SC	ST	Gen	Male	Female	Total
P.G.Diploma in Adult and Continuing Education	-	14	-	1	13	14

**Placement of Students:** The students are placed in NGOs, Schools, Hospitals (as Counselors), UNDP and other organizations.

**Courses Conducted** : P.G. Diploma in Adult and Continuing Education (CBCS)

Certificate course in Basic Computer Literacy (Non-Formal)

Certificate course in C Programming (Non-Formal)

Certificate course in Computer Application (Non-Formal)

Certificate course in Disaster Management (CBCS - Self Financing)

**Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

**Attended**

Prof. E.Jyrwa attended (i) the workshop on “Sixty Years of North-East: Revisiting the experience on Khasi - Jaintia Hills (under project Resurgent India) organized by Divya Jeevan Foundation at Aurobindo Institute of Indian Culture, Shillong from 12<sup>th</sup>-14<sup>th</sup> November 2009 and presented a paper on “District Councils: Concept, Objectives and its performance” and (ii) the 58<sup>th</sup> All India Adult Education Conference organized by the Indian Adult Education Association, New Delhi in collaboration with Gandhigram Rural University, Gandhigram and Peace Trust KanyaKumari, Tamil Nadu from 11<sup>th</sup> - 13<sup>th</sup> December 2009 held at Vivekananda Kendra, Vivekananpuram, KanyaKumari and delivered a talk on the “Functioning and activities of DACE, NEHU, Shillong”.

Dr. B. P. Sahu presented (i) a paper on “Population pressure in India and its impact on economy and environment” at the National seminar on “Menace of population pressure and its impact on environment and economy” held at Sankar Dev Mahavidalaya, Laksmipur from 23<sup>rd</sup>-24<sup>th</sup> Sept 2009, (ii) a paper on “Born to be labourers: A psychosocial study of youth in tea industries of Assam” at the 58<sup>th</sup> All India Adult Education Conference organized by the Indian Adult Education Association, New Delhi in collaboration with Gandhigram Rural University, Gandhigram and Peace Trust KanyaKumari, Tamil Nadu from 11<sup>th</sup> - 13<sup>th</sup> December 2009 held at Vivekananda Kendra, Vivekananpuram, KanyaKumari, (iii) a paper on “Role of Adult and Continuing Education Intervention in Environmental Conservation” at the national seminar on “ Environmental Conservation in North East India” organized by North East India Council for Social Science Research on 5<sup>th</sup> June 2010, and (iv) a paper on “Development of Social

Work terminology widely used in Hindi and the problems encountered” in the Seminar on “Scientific and Technical Terminology in Hindi and its relationship with other north east languages” organized by the Department of Hindi, NEHU, Shillong in collaboration with GOI, CSTT, Ministry of HRD from 25<sup>th</sup> -27<sup>th</sup> March 2010.

### **Extension Programmes:**

Dr. B. P. Sahu delivered (i) a lecture on “Orissa Super Cyclone Disaster: A case study” on 8<sup>th</sup> September 2009 in the “Training Programme on Hazard Specific- Cyclone Risk Mitigation & Management” for Officers of different Line Departments of State Government organized by Meghalaya Administrative Training Institute & NIDM, (ii) a lecture on “Role of Civil Engineers in Disaster Management” on 3<sup>rd</sup> August 2009 in the “Training Programme on Disaster Risk Management” for Junior Engineers of the State Govt. organized by Meghalaya Administrative Training Institute, Shillong, (iii) lectures on ‘Human Resource Management’, ‘Introduction to Organizational Behaviour , Approaches to Organizational Behaviour (Cognitive, Behaviouristic, Social Learning and Organisational Behaviour conceptual Framework)’, ‘Contemporary Human resource management Tools, Individual, Behaviour-Components, Biographical and Biological Characteristics’, ‘Nature and importance of Perception’ and ‘Meaning of Personality, Development of Personality, Development and major determinants of Personality’ in the “Special course on Human Resource Development, Organisational Behaviour, Leadership and Motivation” for SOs to Sr. AOs (Audit and Accounts) held at Regional Training Institute, Shillong from 15- 20 February 2010, and (iv) two lectures on “Life Skill Education” and “Development of personality” in the “Training programme on Life Skill Education and Training” held at Nehru Yuva Kendra, Nongstoin organized by District Youth Co-ordinator, NYK, Nongstoin from 22<sup>nd</sup> - 26<sup>th</sup> March 2010.

Dr. J. Mawthoh (i) organized and participated in the Review meeting of NSS Programme Officers on 10<sup>th</sup> May 2009 at Women’s College, Shillong in collaboration with NSS Cell, NEHU, (ii) organized Seminar on “Environment Conservation in Northeast India” on 5<sup>th</sup> June 2009 at Raitong Building, Shillong in collaboration with NSS & NEICSSR, (iii) delivered motivational talk on “Role of youth in society” on 30<sup>th</sup> July 2009 at Thomas Jones College and on 7<sup>th</sup> August 2009 at Sankardev College, (iv) delivered a talk on “School Disaster Management Plan” on 27<sup>th</sup> August 2009 at MATI in collaboration with Govt. of Meghalaya, MATI, (v) organized a Free Medical Health camp on 4<sup>th</sup> September

## School of Education

2009 at Mawlyngngad in collaboration with Presbyterian Church, Mawlyngad, (vi) delivered a talk on “Participation of youth in connection with National Voluntary Blood Donation Day” on 1<sup>st</sup> October 2009 at Pasteur Institute in collaboration with MACS & State Blood Transfusion Council, (vii) delivered a lecture on “Cultural Heritage of Northeast” at the Northeast Youth Convention from the 8<sup>th</sup> – 10<sup>th</sup> October 2009 at Kohima, Nagaland in collaboration with Ministry of Youth Affairs & Sports, Govt. of India, (viii) delivered a lecture on “School safety plan” in connection with training programme on Disaster Management from the 19<sup>th</sup> – 23<sup>rd</sup> October 2009 at DBYC in collaboration with UNDP, (ix) organized and participated in the “Review meeting of NSS Programme Officers” on the 24<sup>th</sup> October 2009 at Tura, Garo Hills in collaboration with NSS Cell, NEHU, (x) organized “Health Camp” on 7<sup>th</sup> November 2009 at Nongpyrdet in collaboration with Synjuk Seng Samla Shnong, (xi) delivered a lecture on “Rescue, Relief and Rehabilitation on Disaster Management” on 11<sup>th</sup> November 2009 at Meghalaya Administrative Training Institute, Govt. of Meghalaya in collaboration with UNDP, (xii) organized and participated in the “Training on Social Harmony and National Unity” from 12<sup>th</sup> – 16<sup>th</sup> November 2009 at NEHU in collaboration with Rajiv Gandhi National Institute of Youth Development, (xiii) delivered a motivational lecture on “Youth and Personality Development” on NYKS Foundation Day cum District Youth Convention on the 14<sup>th</sup> November 2009 at Youth Centre, NYK in collaboration with Nehru Yuva Kendra, (xiv) delivered a lecture on “Youth and Personality Development” on 12<sup>th</sup> December 2009 at Golflinks Community Hall in collaboration with Synjuk Seng Samla Shnong, (xv) delivered a motivational talk on the “Role of youth as change Agents” in connection with the State Level National Integration camp on 11<sup>th</sup> February 2010 at Youth Hostel in collaboration with Nehru Yuva Kendra, and (xvi) delivered a talk on the “Importance of Computer education” on 13<sup>th</sup> February 2010 at Umphyrnai, S.I Computer Institute in collaboration with S.J.C.I, Umphyrnai.

W. S. Myllemngap delivered (i) a lecture on “Gender dimension in Disaster Management” on 27<sup>th</sup> May 2009 in a Training Programme of Block Nodal Officers in Disaster Risk Management organized by Meghalaya Administrative Training Institute, Shillong, (ii) two lectures on “Working in and with the community and Strategy for winning their support and co-operation” on 3<sup>rd</sup> Aug 2009 in a Training of Field functionaries organized by World Vision India, East Khasi Hills ADP, (iii) a lecture on “Rights of Women” on 8<sup>th</sup> Mar 2010 organized by World Vision in Observance of International Women’s Day in Jatah, Lakadong, Mawkynew Block, EKH District, and (iv) two lectures on “Peer Pressure” on 5<sup>th</sup> Dec 2009 in

a Counseling Programme for Teenagers organized by Seng Samla, Nongthymmai, Shillong.

Dr. N. P. Goel delivered five lectures on the topics 'Summary Statistics using SPSS', 'Canonical Correlation', 'Factors Analysis using SPSS', 'Theory and Applications of Cluster Analysis' and 'Cluster Analysis using SPSS' as resource person in the "Capacity Building in Social Science Research Training Course" on SPSS organized by ICSSR – NERC, Shillong during 4<sup>th</sup> – 10<sup>th</sup> December 2009.

J. I. Rapphap delivered four lectures on the topics 'Concept & Meaning of Trauma, Duration and severity of trauma and factors affecting severity of Trauma', 'Levels of Victimization', 'Healing Process – Cognitive stage, Emotional stage, Managing Anger, Empowerment stage' and 'Concept of Counseling, Techniques & Method of Counseling & Group work' in a Training on Trauma Counseling on Disaster Risk Management organized by District Administration, East Khasi Hills District, Shillong on 10 – 11 December 2009.

#### **Honours/Awards/Recognition:**

Prof. E. Jyrwa was nominated (i) as UGC Member of the Expert Committee to examine the report of Sub-Committee of National Literacy Mission Authority on Strategies for Adult Education in X Plan and (ii) as Member of the CMC of the Shillong Centre of the Institute of North-East India Studies for the year 2009-2012.

Dr B. P. Sahu was nominated (i) as member of Meghalaya Disaster Management Committee for the year 2009-10 and (ii) as a member of EDUSAT committee for "Developing the contents for capacity building in Disaster Management for NEI " for broadcasting in collaboration with NEC, Shillong and North Eastern Space Application Centre, Umiam , Meghalaya.

#### **Other Activities:**

Prof E.Jyrwa acted as a resource person in the 14<sup>th</sup> Refresher Course in Education organized by ASC, NEHU and interacted with the participants on the topic "Conceptualization of Continuing Education and Extension in the Domain of Higher Education" on 26<sup>th</sup> November 2009. Prof. Jyrwa attended meetings at UGC, New Delhi as member of expert committees to review (i) the existing Adult, Continuing Education and Extension Centres and (ii) the performance of ACEEFOR.

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Dr. B. P. Sahu (i) acted as Guest Faculty in the School of Technology, NEHU for teaching Engineering Graphics, Organisational Management and Management Information System courses to the students of ECE and IT Departments, (ii) was empanelled as academic counselor for BSWE-001, BSWE—002, BSWE-004, BSWL-001 and BSW-002 for IGNOU, (iii) initiated literacy programme in the adopted village Arapara, South Garo Hills for the year 2009-10, and (iv) delivered two lectures during 28 – 30 November 2009 on the topics “Role of Education in Disaster Management” and “Prevention and Mitigation Strategies in Disaster Management” in the UGC Orientation Course organized by the Department of Education.

Dr. J. Mawthoh (i) attended and participated in the Advisory Committee Meeting of NSS State Liaison Officers on 11<sup>th</sup> May 2009 at TORC, R. K. Mission, Lokshiksha Parishad, Narendrapur, Dist South 24 Parganas in collaboration with TORC, Narendrapur, WB, (ii) participated as Expert in the National Conference of SRCs on the 13<sup>th</sup> & 14<sup>th</sup> May 2009 at Meghalaya Secretariat, Shillong in collaboration with DAE, MHRD, GOI, New Delhi, (iii) participated in “Stakeholders Dialogue and future strategies on Umiam Lake Conservation” on 22<sup>nd</sup> May 2009 at Raitong Building, Shillong in collaboration with People’s Learning Centre and Govt. of Meghalaya, and (iv) attended Workshop on “Capacity Development for effective implementation of community programmes” for Community Awareness Programme in connection with Urban Infrastructural Development on 9<sup>th</sup> and 10<sup>th</sup> September 2009 at Don Bosco Institute, Guwahati in collaboration with Snowy Mountain Engineering Company Ltd India, Consultancy network, Australia.

J. I. Rapphap attended Refresher Course organized by ASC, NEHU in collaboration with Department of Education, NEHU, Shillong from 10<sup>th</sup> Nov – 30<sup>th</sup> Nov 2009 on the theme “Higher Education in India”.

Dr. E. Syngkon attended Refresher Course organized by ASC, NEHU in collaboration with Department of Education, NEHU, Shillong from 10<sup>th</sup> Nov – 30<sup>th</sup> Nov 2009 on the theme “Higher Education in India”.

Dr N.P.Goel delivered (i) two lectures on “Basic Computer Operations: power point and excel work sheet” on 15<sup>th</sup> - 16<sup>th</sup> September 2009 in the Refresher Course organized by ASC, NEHU, (ii) two lectures on “Use of Computer by English Teachers” on 12<sup>th</sup> March 2010 in the Refresher Course organized by

ASC NEHU, and (iii) five lectures in the Refresher Course organized by ASC, NEHU on the topics 'Computer Application and Research Methodology', 'Computer Softwares I', 'Computer Softwares II', 'SPSS I', and 'SPSS II' during 19 – 22 March 201

## DEPARTMENT OF EDUCATION (Shillong)

**Head** : Prof. R.S.Wangu

**Telephone** : 2723340, 2723347(O) 2550495 (R)

**Email** : hodedu@nehu.ac.in

**Thrust Areas of Research:** System of Education in the North East, Correlates of Achievement, Test Construction and Standardization, and Environmental Education.

**Brief Statement of Academic Activities:** Besides the regular teaching and research work, the Department conducted course seminars in which students of both the semesters presented their papers on various topics. The Department being the monitoring institution was 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 2009-10. Besides other programmes, one month refresher course was organized on the theme "Higher Education in India" for the College and University Teachers of Education.

School of Education

**Faculty:**

**Professors** : R. S. Wangu, M.A., M.Ed., Ph.D. (Panjab)  
P. K. Gupta, M..Sc. (Agra), M.Ed. (Delhi), M.Phil.,  
Ph.D.(Merrut)  
A. Henia, M.A., (Gauhati), M.Phil., Ph.D. (JNU)  
S. M. Sungoh, M.A., M.Phil., Ph.D. (NEHU)

**Associate Professors** : K. M. Warjri\*, M.A., M.Ed., Ph.D. (NEHU)  
(\*Died on 10.03.2010)  
C. Nongbri, M.A., M.Ed., Ph.D. (NEHU)

**Assistant Professors** : I. Syiemlieh, M.A. (NEHU)  
B. B. Rymbai, M.A., Ph.D. (NEHU)  
Y. Bhutia, M.A., Ph.D. (NEHU)

**Student Intake:**

**M.A.** : Enrolment Capacity : 48

**Actual Admission** : 

ST	SC	GEN	Male	Female	Total
-	44	4	3	45	48

**M.Ed.** : Enrolment Capacity : 23

**Actual Admission** : 

ST	SC	GEN	Male	Female	Total
1	22	-	6	17	23

**Ph.D. : Enrolment Capacity** : Variable

**Actual Admission** : 

SC	ST	GEN	Male	Female	Total
-	7	6	4	9	13

**Degrees Awarded:**

Course	SC	ST	GEN	Male	Female	Total
M.A.	-	39	2	1	41	42
M.Ed.	-	15	1	3	16	19
Ph.D	-	2	1	1	2	3

Mr. P. Lyngdoh: Professional Education at the Degree Level: An Analytical Study. Supervisor: Dr. C. Nongbri

Ms. A. B. T. Nongbri: A Study of Special Education Programmes in Meghalaya. Supervisor: Prof. A. Henia

Ms. B. Baruah: A Study of the Problems of Higher Education in Arunachal Pradesh. Supervisor: Prof. A. Henia

**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. Economic of Education.

**M.Ed.**

Semester I : Foundations of Education, Educational Psychology, Research Method (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

**Seminars/Conférences/Symposium/ Extension Programmes:**

**Organized:**

Prof. R. S.Wangu organized (i) one day demonstration about the latest version of SPSS called PASW statistics 17.0 on 28<sup>th</sup> July 2009 where Mr, Raktin Banic, Statistician SPSS-South Asia was the resource person, and (ii) five day programme of professional development of teacher educators from the Colleges

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of Education, DIETs of the State of Meghalaya and University Departments of Education during 3-7 August 2009 in collaboration with NCTE-INTEL Dew Delhi.

### **Attended:**

Prof. P. K. Gupta (i) delivered 'Introductory Note' in the National Workshop on Teaching Technology in Higher Education organized at UGC Academic Staff College, Guwahati University on 17<sup>th</sup> May 2009, (ii) acted as resource person in the Seminar on Higher Education with the theme "Is Meghalaya Prepared for Education Reforms" organized by the P. N. Chaudhuri Birth Centenary Celebration Committee at Shri Aurobindo Institute of Indian Culture Shillong on 19<sup>th</sup> September 2009, (iii) delivered the Presidential-Cum-Key Note-Address and chaired a session at the 18<sup>th</sup> Annual Conference of North East Indian Education Society (NEIES) during 8 - 9 October 2009 organized by the Department of Education, Nagaland University at Kohima under the Sponsorship of NEC, Shillong and ICSSR-NEC Shillong, and (iv) delivered lecture on "Understanding Qualitative Research" in the Workshop on Research Methodology in Social Science organized by the ICSSR-NERC, Shillong from 12 to 16 October 2009.

Prof. A. Henia (i) delivered lectures on the topics 'Professionalism and Role of Teacher in Higher Education', 'Role and function of UGC in the present context', and 'Profile of an Indian College Student' during 18 – 22 May 2009 in the NERC-IGNOU Extended Contact Programme (ECP), Diploma Course on Higher Education held at Shillong – IGNOU-RC, and (ii) presented a paper on 'Important of Health Education in the Schools of North East India" and chaired a technical session in the Regional Seminar on the "Status, problem and Prospect of Health and Physical Education" organized by NCERT/NERIE and held at Shillong on 4 - 5 November 2009,

Prof. S. M. Sungoh (i) acted as a resource person for the Extended Contact Programme organized by IGNOU on Communication Skills for a Good Lecture Focusing on Different Skills and Individual Lecture for PGDHE on 17<sup>th</sup> May 2009, and (ii) chaired sessions on (i) Reasons for Crime against Women, (ii) Role of media in disseminating factual gender sensitive information and (iii) Crime against women with special reference to Assam in a National Seminar on "Crime Against Women: A Northeast Perspective" organised by Lady Keane College in collaboration with North East Network, Shillong on 27 - 28 August 2009.

Dr. C. Nongbri (i) acted as a resource person for the Extended Contact Programme organized by IGNOU and delivered a lecture on Principles of

Managing an Institution of Higher Education at PGDHE on 17<sup>th</sup> May 2009, (ii) presented a paper and chaired a session at the 18<sup>th</sup> Annual Conference of North East India Education Society (NEIES) on 8<sup>th</sup> October 2009 organized by the Department of Education, Nagaland University in collaboration with NEIES, Shillong under the sponsorship of NEC, Shillong and ICSSR, NERC Shillong at Kohima, and (iii) presented a paper entitled “Management of Teacher Education in Meghalaya: The quality concern” in the International Seminar Cum Annual Conference of the All India Association for Educational Research on Quality Concerns in Education at Lucknow University, Lucknow from 22<sup>nd</sup> to 24<sup>th</sup> December 2009.

Dr. B. B. Rymbai (i) delivered lectures on the topics “psycho-emotional needs of adolescents” and “need for guidance and counseling” in the IGNOU extended programme on 24<sup>th</sup> May 2009, (ii) presented a paper entitled ‘Quality assessment in higher education’ in the Seminar cum Conference held on the 8<sup>th</sup> - 9<sup>th</sup> October 2009 organized by North East India Education Society at Kohima, Nagaland, (iii) presented a paper on “Yoga-education” in the Seminar organized by NCERT/NERIE, Shillong with the theme “Physical education ” held on the 4 - 5 November 2009, (iv) chaired a technical session in the Regional Seminar on “Status, Problem and Prospect of Health and Physical Education in North East India” organized by NCERT/NERIE held on the 4 – 5 November 2009, and (v) presented a paper on “Impact of globalization on the youth of North-East India” in the National Seminar on “Social unrest and peace initiatives in North-East India” organized by SANSKRITI-SVD GUWAHATI at Donbosco Guwahati during 20<sup>th</sup>-22<sup>nd</sup> November 2009.

Dr. Yodida Bhutia (i) presented a paper entitled “Institutional Assessment of Government Colleges in Sikkim” in the Annual Conference of North East Education Society at Kohima from 8<sup>th</sup>-9<sup>th</sup> October 2009 organized by the Department of Education, Nagaland University. Kohima, (ii) presented a paper entitled “Archery in Physical Education” in the National Conference at North East Regional Institute of Education at Shillong from 4<sup>th</sup> to 5<sup>th</sup> November 2009, and (iii) presented paper entitled “Perception of students of class VIII of Government Schools, West Sikkim towards the Mathematics subject” in the International Seminar cum Annual Conference of All India Association for Education Research on Quality Concerns in Education at Lucknow University, from 22<sup>nd</sup> to 24<sup>th</sup> December 2009.

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### **Publications:**

Books/Book Chapters/Proceedings:

Nongbri, C., 2009. Women's Empowerment in Meghalaya. In *Meghalaya Human Development Report*, pp. 187-212.

Nongbri, C., 2009. Teacher's Professional Development. In Women's College, Shillong, pp. 17-20.

### **Funds received from agencies other than NEHU:**

MHRD, New Delhi    Rs. 1.65 lakhs

### **Research project:**

### **Ongoing Project:**

SSA Monitoring. Coordinator: Dr. C. Nongbri. Funded by Govt. of Meghalaya.

### **Other Activities:**

The Department conducted the 14<sup>th</sup> Refresher Course in Education from 10<sup>th</sup> – 30<sup>th</sup> November 2009 (Course Coordinator: Prof. A. Henia ), which was sponsored by UGC-ASC-NEHU. The theme of the Course was 'Higher Education in India' and delivered two lectures on 'Higher Education in India, Structure & Organization and 'Role of Teachers in Higher Education'.

Prof. R. S. Wangu (i) participated in two day seminar on "A vision of ICT in Education in North East" organized by Intel Education, New Delhi on 17<sup>th</sup> and 18<sup>th</sup> August 2009 at Pine Wood Hotel, Shillong, (ii) attended one day interaction on "10 years of Intel Education in India" at Hotel Taj Mahal, New Delhi on 2<sup>nd</sup> September 2009, (iii) attended one day advocacy programme on ERIC-functioning organized by NCERT at Guwahati on 13<sup>th</sup> October 2009, (iv) attended National symposium on "Reforms in Higher Education: North East Perspective at ICSSR-NERC, NEHU on 29 - 30 October 2009, (v) delivered four lectures in the UGC-ASC coordinated Refresher course in Education organized by the Department of Education NEHU, Shillong during 10<sup>th</sup> - 30<sup>th</sup> November 2009, and (vi) delivered weekly lectures in the College of Nursing at North India Indira Gandhi Regional Institute of Health and Medical Sciences, (NEIGRIHMS) Shillong.

Prof. P.K. Gupta (i) attended the National Conference on "Renewing Teacher Education : Towards a Policy Initiative" organized by the National Council of Teacher Education (NCTE), New-Delhi at Vigyan Bhawan, New Delhi on 29<sup>th</sup>

April 2009, (ii) attended five days “NCTE-INTEL Training programme for Teacher Educators” organized by Department of Education NEHU, Shillong from 3<sup>rd</sup> to 7<sup>th</sup> August 2009 in collaboration with NCTE-INTEL New Delhi, (iii) attended two days workshop on National Curriculum Framework for Teacher Education (NCFTE) at Indian National Science Academy from 12<sup>th</sup> to 13<sup>th</sup> Oct 2009, (iv) delivered a lecture on the Topic “Teacher as a Manager” at IGNOU Study Centre, Shillong on 20<sup>th</sup> May 2009 in the Contact Programme of PGDHE, (v) delivered two lectures on topics (a) Nature of Matter and (b) Structure of Atom in the Training Programme of Teachers for Enrichment of Teaching Concepts of Science at Elementary level on 30<sup>th</sup> July 2009 organized by NERIE, Shillong, (vi) delivered a lecture on the topic “Micro Teaching” at the Refresher Course in Hindi at Academic Staff College, NEHU Shillong on 13<sup>th</sup> August 2009, (vii) delivered two lectures on (a) Effective Teaching (b) Micro Teaching at the Refresher Course in Education at Academic Staff College Guwahati University, Guwahati on 5<sup>th</sup> Sept 2009, (viii) delivered two lectures on Logical Method of Inquiry and Effective Teaching in the orientation Course for College and University Teachers organized by Academic Staff College, Guwahati University on 13<sup>th</sup> November 2009, (ix) delivered six lectures in the “Refresher Course in Education for College and University Teachers” organized by Academic Staff College, NEHU Shillong from 10<sup>th</sup> to 30<sup>th</sup> November 2009, (x) delivered two lectures on Qualitative and Quantitative Methods of Research in Social Science and Experimental Methods of Inquiry at Assam University, Silchar during a Research Methodology Course organized by ICSSR-NERC, Shillong on 10<sup>th</sup> Feb 2010, (xi) delivered three lectures on the topics ‘Why people behave as they do’, ‘Mental Health’, and ‘Creativity’ in the UGC Sponsored Sixth Orientation Programme organized by Academic Staff College, NEHU, Shillong on 22<sup>nd</sup> and 23<sup>rd</sup> March 2010, and (xii) delivered six lectures in the 7<sup>th</sup> Orientation Programme organized by the Academic Staff College, NEHU Shillong during 26 - 30 March 2010.

Prof. A. Henia attended (i) the International Seminar on “Water Crisis in the Indian Sub-continent: Issues and Challenges” organised by the Department of Geography, NEHU in collaboration with ICSSR-NERC and NEC held at Shillong during 23<sup>rd</sup> – 25<sup>th</sup> November 2009, and (ii) the National Seminar on “Global Economic Crisis and Indian Industry organized by the Department of Commerce, NEHU, Shillong during 26<sup>th</sup> – 27<sup>th</sup> March 2010.

Prof. S. M. Sungoh (i) delivered a lecture on “Relevance of Setting up Women’s Cell in Higher Educational Institutions” on 19<sup>th</sup> June 2009 at Shillong College, Shillong, (ii) delivered a lecture on “Educational Guidance” on

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10<sup>th</sup> November 2009 in Shillong College, Shillong, (iii) delivered 6 lectures on Micro Teaching in the General Orientation Course on 3<sup>rd</sup> March 2010 organized by Academic Staff College, NEHU, and (iv) delivered a lecture on International Women's Day on 8<sup>th</sup> March 2010 at St Edmunds College, Shillong.

Dr. C. Nongbri was the Monitoring Coordinator, SSA for the State of Meghalaya. Dr. Nongbri (i) delivered a lecture entitled Sampling Design on 16<sup>th</sup> April 2009 in the 4<sup>th</sup> Orientation Course organized by the Department of Education, (ii) attended the Five-day NCTE-INTEL Training Programme for Teacher Educators organized by the NCTE-INTEL, New Delhi in collaboration with the Department of Education, NEHU, Shillong from 3<sup>rd</sup> to 7<sup>th</sup> August 2009, and (iii) delivered a lecture on Curriculum Development at the Higher Education level in the 14<sup>th</sup> Refresher Course in Education organized by the Department of Education, NEHU, Shillong.

Dr. B. B. Rymbai (i) delivered a lecture in the 4<sup>th</sup> Orientation Course entitled "Impact of Globalization in Higher Education" on 1<sup>st</sup> April 2009, and (ii) participated in the national seminar on "Global economic crisis and Indian Industry" held during 26 - 27 March 2010 organized by the Department of Commerce, NEHU Shillong.

Dr. Y. Bhutia (i) became a member of the committee for framing NEHU's Policy on Sexual Harassment and worked in framing the policy, (ii) conducted counselling class on Development of Education for the Masters in Distance Education course of IGNOU at the Bijni Study Centre, Shillong, and (iii) attended Orientation Course at JNU, New Delhi from 4<sup>th</sup> to 30<sup>th</sup> January 2010.

## DEPARTMENT OF EDUCATION (TURA)

**Head** : Dr. B. C. Das.

**Telephone** : 03651 – 220258 (O), 94363-13059/9862574721 (M)

**E-mail** : dasbishnucharan @ gmail.com

**Thrust Areas of Research:** Value and Peace Education, Teacher Education, Methods of Teaching at Tertiary Level, Special Education, and Elementary Education.

**Brief Statement of Academic Activities:** The Department has been offering two years M.A. Programme and Ph. D. programme in Education. Besides the regular teaching and research work, the department conducted course seminars in which students presented their papers on various topics. The Department was also engaged in Research Projects funded by the UGC and ICSSR, New Delhi.

### Faculty:

Associate Professor : B. C. Das, M.A. (Utkal), M.Phil. (DAV, Indore),  
Ph.D.(BHU)

Assistant Professors : N. S. C. Momin, M.A., Ph.D. (NEHU)  
S. C. Subudhi, M.A., M.Phil., Ph.D. (Kurukshetra)  
J. V. Madhusudan, M.Ed., M.Phil., Ph.D. (Gulbarga)

### Students Intake:

Enrolment capacity : M.A.: 30, Ph.D.: Variable

Actual Admission	OBC	SC	ST	GEN	Male	Female	Meghalya	Other States
M.A.	01	02	27	-	05	25	28	02
Ph.D.	-	-	01	01	-	02	01	01

### Degrees Awarded:

	OBC	SC	ST	GEN	Male	Female	Total
M.A.	-	-	27	-	03	24	27
Ph.D.				1			

Mr. P. Sonowal. A Study of the Sense of Accountability in relation to Job satisfaction, Socioeconomic status, qualification and Experience of Secondary School Teachers in Sivsagar District, Assam. Supervisor: Dr. B. C. Das.

**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/ Mental Health and Hygiene/Non-Formal and Adult Education, Teacher Education/ Education for the Gifted & the Creative/Special Education

Semester IV : Laboratory Practical, Higher Education in India, Guidance and Counseling/ Education for Rural Development/Experimental Education, Education for the Physically and the Cognitively Challenged/Methods of Teaching at Tertiary Level. Economic of Education

**Study Tours/Field Trips of Students:** Students visited Gangtok and Darjeeling and were exposed to the educational institutes, historical heritage and cultural diversities. Dr.B. C. Das accompanied the students.

**Seminar/Conferences/Symposia/Extension Programmes:**

**Attended:**

Dr. S. C. Subudhi (i) acted as a resource person in the training programme entitled "Institutional Planning and Management' organized by District Institute of Education and Training (DIET), Tura for the Head Teachers of Lower Primary Schools under Dadenggre Sub-Division of West Garo Hills District of Meghalaya, (ii) presented a paper on 'Teacher Education Curriculam: Problems and issues' in the National Seminar on Teacher Education Curriculam in the context of National Curriculum Framework 2005 at Army Institute of Education, Delhi cantonment, New Delhi on 2<sup>nd</sup> April 2009, (iii) presented a paper on 'Mid day

Meal programme for Rural Educational empowerment in Meghalaya' in the National Seminar at NEHU Tura Campus on 26 - 27 November 2009, (iv) presented a paper on "Supportive Instructions to Teachers for Longer Classroom Survival" in National Seminar at Sri Sai Group of Institute, Badhani-Pathankot on 12<sup>th</sup> December 2009 Topic entitled, (v) presented a paper on "Quality Improvement of Early Childhood Care and Education in Integrated Child Development Scheme" in National seminar on Right to Education; Problems and Challenges at Army Institute of Education, Delhi cantonment, New Delhi on 22<sup>nd</sup> December 2009, and (vi) presented a paper on 'Teaching Basic Mathematics to Rural Elementary School Children in Meghalaya Challenges" in National Seminar at IGNOU, New Delhi.

Dr. J. V. Madhusudan (i) presented a paper (co-authors: Kh. J. Singh and J. Yadav) on "Inequalities in School participation at Primary Stage among Muslims and Hindus in India: Evidences from NFHS III" in the National Seminar on 'Human Rights and Social Security in the Age of Globalisation' at Academic Staff College, Jamia Millia Islamia, New Delhi during 24-25 November 2009, (ii) presented a poster (co-author: B. P. Singh) on 'Can Schooling of Mothers Improve Child Health?' at the XXXI Annual Conference of IASP on "Population Disease Burden" at Sri Venkateshwara University Tirupati during 3-5 November 2009, (iii) presented a paper (co-authors: Kh. J. Singh and J. Yadav) on 'Recent Trends in Schooling among Muslims in major States in India; Evidences from National Family Health Survey and Some Implications' in the National seminar on 'Issues of Muslim Minority Education' at National University of Education Planning and Administration, New Delhi during 4-6 November 2009, (iv) presented a paper (co-author: S. Basavraj) on "Gender Difference in School Participation at Primary Stage: Evidences from NFHS" in the National Seminar on Human Rights and Gender Equality' at Karnataka State Women's University, Bijapur, Karnataka during 28-29 August 2009, and (v) acted as resource person for a topic entitled "The Value of School in the Community' in the Community Awareness Programme conducted by District Institute of Education and Training (DIET), Tura from 11<sup>th</sup> to 15<sup>th</sup> January, 2010 at Damal Asim Village of Dadenggre Block and from 25<sup>th</sup> to 29<sup>th</sup> January 2010 at Chenggapara Village of Gambegre Block, West Garo Hills District, Meghalaya.

### **Publications:**

Momin, N. S. C., 2009. Expectations and Responsibilities of Teachers: The Role of Teaching Competency and Personal Values. *University News*, 47: 14-18.

## School of Education

Momin, N. S. C., 2009. A Challenge for the Contemporary Society Towards Understanding values Across Cultures. *Vetri Education*, 4:16.

### **Books/Book Chapters/Proceedings:**

Madhusudan, J. V., 2009. "Schooling among Swiddeners: A Study of Amingokgre Village in Meghalaya" in Development Vision of North East India, Ed.: J. U. Ahmed, Concept Publishing Company Pvt., New Delhi.

### **Research Projects:**

#### **Ongoing:**

A critical Evaluation of Teaching-learning Process adopted for Management of refresher courses in academic staff Colleges in India. Principal Investigator: Dr. B. C. Das. Sponsored by UGC, New Delhi.

A study of the organization of secondary Teacher Education Programmes in the North eastern States of India. Principal Investigator: Dr. B. C. Das. Sponsored by ICSSR, New Delhi.

#### **New:**

Recent Trends and Current Challenges in Primary Schooling in the North Eastern States of India: A Study. Principal Investigator: Dr. J. V. Madhusudan. Sponsored by ICSSR, New Delhi.

#### **Completed:**

A Study of Training Needs and Motivation of special School Teachers of Meghalaya. Principal Investigator: Dr. S. C. Subudhi

#### **Other Activities:**

Dr. N. S. C. Momin and Dr. J. V. Madhusudan coordinated Orientation Programme of the UGC-ASC, NEHU, Shillong from 29<sup>th</sup> March to 26<sup>th</sup> April 2010 at the Department of Education, NEHU, Tura.

Dr. B. C. Das delivered six lectures in UGC-Refresher course in Education at Academic Staff College, NEHU, Shillong during 19 -21 November 2009.

Dr. N. S. C. Momin (i) attended in a workshop on "Achik Folklore Genre Classification " on 19<sup>th</sup> and 20<sup>th</sup> May 2009 organized by Achik Literature Society in collaboration with the Sahitya Academy, Guwahati at Tura Circuit House, Tura, (ii) attended a National Seminar on "Micro Finance Revolution: Undersatnding

and Sustainability” on 19<sup>th</sup> and 20<sup>th</sup> June 2009 organised by Department of Management, NEHU, Tura Campus, (iii) co-ordinated a “Field Study cum Community Extension Programme at Nokrek biosphere Reserve” for the Department of Education, NEHU Tura Campus on 8<sup>th</sup> May 2009, (iv) participated in a Workshop on “Translation of A’chik Folklore/Folktales” on 3<sup>rd</sup> April 2009 organized by the Department of Art and Culture, Government of Meghalaya at District Museum/District Library and Auditorium, Tura, (v) participated in a UGC sponsored Workshop on “Capacity Building for Women Managers in Higher Education” on 29<sup>th</sup> April to 3<sup>rd</sup> May’ 2009 in collaboration with NEHU at Hotel Rikman Tura, Meghalaya, and (vi) delivered a faculty Extension lecture on “Think Globally and Act Locally’ to the students of the Department on 22<sup>nd</sup> May 2009, a talk on “Micro-steps towards the WED theme, 2009 Your Planet Needs you Unite to Combat Climate Change” in NEHU Tura Campus on the occasion of World Environment Day, 5<sup>th</sup> June, 2009, and an extension lecture on ‘Values Across Culture’ to the students of the Department on 29<sup>th</sup> October 2009.

## CENTRE FOR DISTANCE EDUCATION

**Head** : Dr. R. N. Rai  
**Telephone** : 2226822, 2228705 (O), 2535151 (R)  
**Email** : rnrai1957@yahoo.com.in

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

## School of Education

**Brief Statement of Academic Activities :** The Centre offered (i) 6 months Certificate Course in Floriculture, (ii) 3 months General Course in Floriculture, (iii) 1 year Post Graduate Diploma Course in Entrepreneurship, (iv) 2 years B.Ed. - Special Education (B.Ed.-SEDE), (v) 3 months Foundation Course on Education of Children with Disabilities (FC-SEDE), and (vi) 1 year Post Graduate Professional Diploma in Special Education (PGPD-SEDE)

### Faculty:

Associate Professor : R.N.Rai, M.A., Ph.D. (BHU)  
S.Wangoo, M.Sc., Ph.D. (Kashmir)

Assistant Professor : S. N. Sarma, M.A., Ph.D. (Gauhati)  
R. C. Pandey, M.A., Ph.D. (Kumaon)

### Student intake:

Enrolment capacity: For Distance Education any number of distance learners can enroll

Actual Admission	SC	ST	Gen	Male	Female	Meghalaya	Other States
B.Ed.- SEDE	3	48	28	30	49	26	53
P. G. Diploma in 1 Entrepreneurship	-		7	-	2	5	6
Certificate Course in Floriculture	-	9	3	2	10	10	2
General Course in Floriculture	-	2	1	-	3	3	-
FC-SEDE	1	127	25	58	95	109	44
PGPD-SEDE	1	5	14	9	11	3	17
<b>Degrees Awarded</b>						<b>Total</b>	
B.Ed.- SEDE	-		24	7	7	24	31
Certificate Course in Floriculture	-	3	2	-	5	5	
General Course in Floriculture	-	1	-	-	1	1	
FC-SEDE	-	46	13	14	45	59	

### **Placement of students:**

The students who had done General and Certificate Courses in Floriculture are engaged in horticulture nursery and flower business of their own and also employed in industries. The students with B.Ed.-SEDE / FC-SEDE qualification have been recognized as a Government of India registered professional and giving their valuable services for the empowerment of Disabled.

### **Courses Conducted:**

Certificate Course in Floriculture; 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: Dynamics of Entrepreneurship, Entrepreneurial Qualities – Self Appraisal and Development, Small Business Policies and Programs, Institutional Framework of Small Business and Entrepreneurial, Ethics and Social Responsibility.

Venture Creation: Project Identification, Market Survey, Project Formulation, Project Appraisal and Enterprise Startup Process, Procedure.

Business Communication Skill: Introduction, Business Communication, Written Communication Skills, Non Verbal Communication Skills & Technological Aids for Communication.

Enterprise Management: Financial Management, Human Resource Management, Production, Marketing Management & Management of Accounts.

## School of Education

Strategic Management of Small Enterprise: Introduction, Environmental Analysis and Diagnosis, Strategy Formulation and Choice of Alternatives, Functional Strategy and Strategy Implementation and Evaluation:

Enterprise Control System: Analysis of Financial Statements, Cost and Cost Control, Cost Analysis for Enterprise Decisions, Enterprise Control & Use of Software Packages.

Export and Import Management: International Trade and Commercial Policy Instruments, India's Foreign Trade and Policy, Instruments of Export Promotion, Documentation and Financing & Management of Import.

Project Report: Conceiving a business idea, developing a business plan, conducting feasibility study of the business plan, preparing a tentative project report for presentation to a financing agency and preparation of final report and submission for evaluation by the university.

### **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/ Training in Mental Retardation/Training in 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 and Instructional Methods OR Mental Retardation: Its Multidisciplinary Aspects and Curriculum and Teaching Strategies OR Aural and Oral Rehabilitation of the Hearing Impaired and Methodology of Teaching Language and Other Subjects to Hearing Impaired

Practical: Work Experience/Art Education, Co Curricular and extra curricular activities, Project Work in Visual Impairment and Training on Equipment related

to Visual Impairment OR Project Work in Mental Retardation and Training on equipment related to Mental Retardation OR Project work in Hearing Impairment and Training on Equipment related to Hearing Impairment

**FC-SEDE:**

Course 1 (Block I): Developing broad positive perception of children with disabilities and intervention measures

Course 2 (Block II): Understanding education for the children with disabilities

Course 3 (Block iii): Understanding of early childhood development and intervention of children with disabilities

Course 4 (Block IV): Development of adaptive skills, assistive devices and special therapies for children with disabilities

Course 5 (Block V): Basic training for teaching children with special needs

**PGPD-SEDE:**

One Common Theory Course: Introduction to Disabilities

Three Specialized Theory Courses in any one optional Disability Area:

Specialty 1 - Visual Impairment: Introduction to the Education of Visually Impaired Children / Educational Perspectives on Visual Impairment / Instructional Methods

Specialty 2 - Mental Retardation: Identification and Assessment of Persons with Mental Retardation / Mental Retardation: Its Multidisciplinary Aspects / Curriculum and Teaching Strategies

Specialty 3 - Hearing Impairment: Foundation of Education for the Hearing Impaired / Aural and Oral Rehabilitation of the Hearing Impaired / Methodology of Teaching Language and Other Subjects to Hearing Impaired.

Four Specialized Practical Courses in any one opted Disability Area:

Specialty 1 - Visual Impairment: Training in Visual Impairment / Project Work in Visual Impairment / Training on Equipment Related to Visual Impairment / Teaching Practice in Visual Impairment

Specialty 2 - Mental Retardation: Training in Mental Retardation / Project Work in Mental Retardation / Training on Equipment Related to Mental Retardation / Teaching Practice in Mental Retardation

Specialty 3 - Hearing Impairment: Training in Hearing Impairment / Project Work in Hearing Impairment / Training on Equipment Related to Hearing Impairment / Teaching Practice in Hearing Impairment

**Field Trips of Students:**

Dr. S. Wangu and Dr. J. K. Durong took the Floriculture distance learners (i) to the Government Soil laboratory on 16<sup>th</sup> October 2009 to Sample Analysis and Government Farm and Nursery Laiturmukhrah for Grafting, Budding, Layering, Marking of soil beds, deferent types of ornamental plants and Tissue culture; (ii) to Upper Shillong on 27<sup>th</sup> October 2009 Floriculture Model Farm Bio Control Laboratory and Farmer's Nursery for studying different types of Orchids etc.; (iii) to Majai on 28<sup>th</sup> October 2009 to Shella to visit ex-student farm where Anthurium etc are grown; and (iv) to Umsning on 30<sup>th</sup> October 2009 to Dewlieh Government, Rose Garden for studying different types of cut flower and ornament flowers.

**Seminars/Conferences/Symposia/Extension Programmes:**

**Organized**

*The Induction Programme for the Floriculture students was organized in April 2009 and September 2009.*

The Induction Programme for Post Graduate Diploma in Entrepreneurship students was organized in September 2009.

Dr. S. Wangu conducted counselling for General and Certificate Courses in Floriculture from 18<sup>th</sup> May to 11<sup>th</sup> June 2009 and 7<sup>th</sup> to 31<sup>st</sup> October 2009.

**Attended**

Dr. R. N. Rai chaired a Session in the 14<sup>th</sup> International Conference of the Indian Academy of Applied Psychology on "Quality of Life and Globalization: Effective self care Interventions" organized by the Department of Psychology and Parapsychology, Andhra University, Visakhapatnam from 18<sup>th</sup> to 20<sup>th</sup> February 2010.

**Publication:**

Rai, R. N. and R. C. Pandey, 2009. A study of emotional maturity among Mizo adolescents. *Indian Psychology Review*, 72: 67-70.

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Rai, R. N. and R. C. Pandey, 2009. Perceived parental rearing style and personality among Khasi adolescents. *Journal of the Indian academy of Applied Psychology*, 35: 57-60 (Special Issue).

### **Academic/Professional Collaboration:**

The Centre has collaboration with the Rehabilitation Council of India, New Delhi for conducting B.Ed.-SEDE, PGPD-SEDE, and FC-SEDE Courses.

### **Honors/Awards/Recognition:**

Dr. R. N. Rai has been nominated a Founder Member of Indian School Psychology Association, Delhi from February 2010.

### **Other Activities:**

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

Dr. R. N. Rai delivered lecture on "Concept of Open & distance Learning (ODL)" on 23<sup>rd</sup> February 2010 in the Refresher Course organized by Department of Education, NEHU, Shillong.

Dr.R.C.Pandey attended Refresher Course in Psychology organized by Academic Staff College, Jai Narain Vyas University, Jodhpur from 9<sup>th</sup> - 29<sup>th</sup> November 2009.

## CENTRE FOR SCIENCE EDUCATION

**Head** : Prof. M. M. Singh

**Telephone** : 2722950 (O)

**Brief Statement of Academic Activities:** Offered Remedial Teaching Programme in Mathematics, Physics, Chemistry and Biology to Tribal students of Class XI & XII. Offered Remedial Coaching in Mathematics, Physics, Chemistry and Biology to students of SC/ST and Minority Communities of class XI

### **Faculty:**

**Professor** : M. M. Singh, Ph.D. (Kurukshetra)  
D. Bhattacharjee, M.Sc. (NEHU), Ph.D. (Warsaw)  
M. S. Bisht, M.Sc. (Jodhpur), Ph.D. (Delhi)

**Associate Professor** : P. K. Patra, M.Sc. (Sambalpur), Ph.D. (NEHU)

### **Seminars/ Conference/ Symposia/ Extension programmes etc:**

#### **Attended**

Prof. D. Bhattacharjee presented a paper entitled "On some new arithmetic convolutions in the theory of arithmetical functions" at the 5<sup>th</sup> Asian Mathematical Conference in Kuala Lumpur, Malaysia during 22 – 26 June 2009.

Dr. P. K. Patra (Co-author: S. Kumar) presented a paper entitled "Upper bound on the load on a cantilevered thick multi-walled carbon nanotube" at the International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2009) organized by IIT, Guwahati during 9-11 December 2009.

Dr. P. K. Patra (Co-author: S. Kumar) presented a paper entitled "Nonlinear approach to explain mechanical properties of thick multi-walled carbon nanotube" at the National Conference on Condensed Matter Physics held at the Department of Physics, NEHU, Shillong during 22-23 March 2010.

#### **Publications:**

Sharma, S. K., M. S. Bisht and M. K. Pandit, 2010. Synaptic mutation-driven male sterility in *Panax sikkimensis* Ban (Araliaceae) from Eastern Himalaya, India. *Plant Systematic and Evolution*, 287: 29-36.

Patra, P. K., L. J. Singh and S. Kumar, 2009. Calculation of strain energy of cantilevered thick multi-walled carbon nanotubes with varying forces at the free end. *Journal of Computational and Theoretical Nanoscience*, 6: 1039-1044.

**Books/Book Chapters/Proceedings:**

Bhattacharjee, D., 2009. On some new arithmetic convolutions in the theory of arithmetical functions. *Proceedings of the 5<sup>th</sup> Asian Mathematical Conference*, Malaysia, pp. 380-387.

**Academic/Professional Collaborations:**

Prof. D. Bhattacharjee has research collaboration with Dr. P. K. Saikia, Department of Mathematics, NEHU, Shillong.

Dr. P. K. Patra has research collaboration with Prof. S. Kumar, Department of Physics, NEHU, Shillong and Dr. R. K. Thapa, Department of Physics, Mizoram University, Aizawl.

**Other Activities:**

Prof. D. Bhattacharjee attended UGC-SAP Workshop on “Algebra, Algebraic Topology and Related Topics” in the Department of Mathematics, NEHU, Shillong during 15 – 20 March, 2010.

Dr. P. K. Patra (i) attended a National Workshop on Use and Deployment of Web and Video Courses for Enriching Engineering Education under National Programme on Technology Enhanced Learning (NPTEL) held at IIT Guwahati during 23 – 24 August 2009, (ii) attended an ISSS – NPMASS Workshop on Microsystem Technology at Department of ECE, NEHU, Shillong during 25 – 27 March 2010, and (iii) delivered a lecture on “Science of carbon nanotubes and its applications” at Department of Physics, Mizoram University, Aizawl on May 29, 2009.

### III

## SCHOOL OF HUMAN AND ENVIRONMENTAL SCIENCES

**Dean** : Prof. B. S. Mipun  
**Telephone** : 272 3221 (O); Fax: 2550040  
**Email** : bsmipun@hotmail.com

**T**he School of Human and Environmental Sciences comprises four Departments, namely, Anthropology, Environmental Studies, Geography and Rural Developmental and Agricultural Production. There are 32 faculty members in the School. Departments admit students to both Masters as well as to Doctoral programmes. All Departments have identified their thrust areas which include socio-cultural and biological variations of people of North-East India – Geomorphology, watershed management, regional development, land use planning, GIS and remote sensing, rural developments, horticulture, agronomy, forest management, integrated pest management, environmental monitoring, environmental impact assessment and geophysics. The faculty members of the School are actively engaged in research and teaching programmes. Several faculty members have collaborative research programmes with prestigious national and international research institutes. Faculty members were also carrying out a good number of externally funded research projects. Many research publications by individual faculty members were published in national and international journals.

## DEPARTMENT OF ANTHROPOLOGY

**Head** : Prof. R. Khongsdier (up to 16.12.2009)  
Prof. T. B. Subba (from 17.12.2009)

**Telephone** : 2723101, 2726106, 2551717

**Email** : [tbsubba@nehu.ac.in](mailto:tbsubba@nehu.ac.in)

**Thrust Areas of Research:** The Department aims to promote, consolidate and integrate anthropological teaching and research programmes by training students and creating expertise especially in the following thrust areas of research that are socially relevant and holistic in nature with special reference to Northeast India. Thrust areas of research include: (i) Population genetics including DNA studies with special focus on phylogenetic relationship of human populations and other related health issues, (ii) Biocultural aspects of human growth and nutrition, (iii) Demography, reproductive and child health, (iv) Gender issues, (v) Gerontology, and (vi) Ethnicity and identity.

**Brief Statement of Academic Activities:** The Department admitted 32 students for M.A./M.Sc. programmes and 14 students for Ph.D. Programme during the current year. Twenty six (26) students successfully completed their M.A./M.Sc., and one student was awarded Ph.D. degree. Six students passed the UGC NET Examinations during the year under report. One new faculty member joined the Department. The faculty remained active in publication of their research findings in book chapters and national and international refereed journals. The Department completed the "Evaluation Study of the Supplementary Nutrition Programme in Selected ICDS Projects of Meghalaya" in collaboration with the Directorate of Social Welfare, Government of Meghalaya. The project entitled "Culture, Genetics and Status of Health in Northeast India" under Area Studies of the University Potential for Excellence (UPE) Scheme of the University Grants Commission is ongoing.

### Faculty

**Professor** : T. B. Subba, Ph.D. (N. Bengal)  
H. Lamin, Ph.D. (NEHU)  
R. Khongsdier, Ph.D. (NEHU)

**School of Human and Environmental Sciences**

**Associate Professors :** L. Zehol, Ph.D. (NEHU) –  
 D. K. Limbu, Ph.D. (NEHU)  
 B. Langstieh, Ph.D. (ISI, Cal)  
 G. Ranjan, Ph.D. (Lucknow)

**Assistant Professors :** V. Pakyntein, M.Phil. (Delhi)  
 J. W. Dkhar, Ph.D. (NEHU)  
 Q. Marak, M.A. (Gauhati) –  
 Sudipta Ghosh, Ph.D. (Delhi)

**Visiting Professors/Fellows/Scholars:** Prof. Brian Hemphill of the Department of Sociology and Anthropology, California State University, USA, visited the Department and delivered a lecture on “A Dental Morphometric Investigation of the Population History of South Asia: A Rationale, a Case study and a Prospectus” on September 18, 2009.

**Student Intake**

Enrolment capacity : M.A./M.Sc. - 32; Ph.D. – Variable

Actual Admission : SC ST Gen Male Female Meghalaya /Outside  
 Meghalaya

M.A./M.Sc.	-	27	1	10	18	16	13
Ph.D.	-	12	2	7	7	5	9

**Degrees Awarded :** SC ST Gen Male Female Total

M.A./M.Sc.		23	3	8	19	26
Ph.D.		-	1	-	1	1

Ph D.

Ms. Dolly Gogoi, “Population Genetics of the Mishmis of Arunachal Pradesh.” Supervisor: Dr. D. K. Limbu.

**Courses Conducted:** The following courses were conducted for M.A./M.Sc. students:

Semester I – Palaeoanthropology, Archaeological Anthropology, Physical Anthropology, Social and Cultural Anthropology, Indian Prehistoric Archeology.

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- Semester II – Human Origin and Evolution, Fieldwork Methods and Techniques, Human Ecology and Adaptation (Open), Anthropology of Northeast India (Open), Asian Prehistoric Archaeology.
- Semester III – Social/Cultural: Anthropology of India, Anthropology of Gender, Culture, Health and Medicine, Language, Culture and Society (Open), Demography. Physical/Biological: Language, Culture and Society (Open), Demography, Human Genetics, Human Growth and Body Composition, Practical in Physical Anthropology – I.
- Semester IV – Social/Cultural: Theories in Anthropology, Economy and Culture, Development Anthropology, Biostatistics, Dissertation & Viva Voce. Physical/Biological: Biostatistics, Dissertation & Viva Voce, Biocultural Anthropology, Dental Anthropology, Practical in Physical Anthropology – II.

**Study Tours/Field Trips of Students:** Ms. Valentina Pakyntein took the III Semester students to Nangbah Village, Jaintia Hills, Meghalaya for their fieldwork training, which is a compulsory part of the curriculum, with effect from 5 to 23 January 2010.

### **Seminars/Conferences/Symposia/Extension Programmes:**

#### **Attended**

Prof. T. B. Subba attended: (i) national seminar on 'The Construction of the Idea of Evil' organized by the Indian Institute of Advanced Study, Shimla and Indian Council of Social Science Research, Shillong, at Kohima, March 31 to April 01, 2009 and chaired the inaugural and valedictory sessions, and (ii) national seminar on 'Democracy, Identity and Group Rights – Locating the Northeast Indian Experience in a Comparative Perspective' organized by Women's College, Shillong, 22-23 March 2010 and chaired the inaugural session.

Prof. H. Lamin attended the 2<sup>nd</sup> national conference organized by the Society for Indian Medical Anthropology, Kannada University, Hampi, 1-3 February 2009 and presented a paper entitled "Health Problems In the Coal Mining Areas of Jaintia Hills District of Meghalaya", and chaired one scientific session during the conference.

Dr. L. Zehol attended: (i) national seminar on 'Socio-cultural Dimensions of Ecology: The Context of North-east India', organized by the Department of Sociology, NEHU, 14-15 October 2009 and presented a paper entitled "Naga Women and Eco-system Management: Some Issues and Challenges", (ii) national seminar on 'Religion and Society in North East India' organized by the Department of History, NEHU, 18-28 November 2009 and presented a paper entitled "Naga Women and Christianity: A Critical Note", and (iii) workshop on 'Community Forests of North East India: Status and Strategies for Conservation' organized by Regional Centre, National Aforestation and Eco-development Board, NEHU, 10 December 2009 and presented a paper entitled "Undisturbed Forests (*bo kunyu wo*) of Nagaland".

Dr. D. K. Limbu chaired a technical session in the national seminar on 'Religion and Society in the Contemporary Time with Special Reference to the North East Tribes of India' organized by Silapathar College at Silapathar, 10-11 April 2010.

Dr. B. Langstieh attended: (i) international symposium on 'Ethics, Culture and Population Genomics' and 34<sup>th</sup> Annual Conference of the Indian Society of Human Genetics – 2009 held at Vigyan Bhawan, New Delhi, 17-20 March 2009 and presented a poster entitled "The Probable Origin and Ethnic Position of Lyngngam Among the Austro-Asiatic Khasi & Tibeto-Burman Garos in Meghalaya: Can Molecular Genetic Markers resolve?", (ii) national seminar on 'Cultures of North East India: Ethnic and Archaeological Background' organized by the Centre for Archaeological Studies and Training Eastern India (CASTEI) held at Indian Museum, Kolkata, 5-7 November 2009 and presented a paper entitled "Austro-Asiatic Tribes of Northeast India: Excerpts from DNA findings", (iii) national seminar on 'Global Warming, Human Factors and Environment' organized by the Department of Anthropology, Punjab University, Chandigarh, 16-17 February 2010 and presented a paper entitled "Prevalence of Dental Caries and some Dental Morphological Traits among the Gowda Caste of Kodagahalli, Mysore District, Karnataka" with Evelyn Ngaithianven.

Dr. G. Ranjan attended a national seminar on 'Global Warming, Human Factors and Environment' organized by the Department of Anthropology, Punjab University, Chandigarh' 16-17 February 2010 and presented a paper entitled "Impact of Industrialization on the Bhoksa Tribe."

Ms. V. Pakyntein attended: (i) national seminar on 'Women in Traditional Institutions and Worldviews with Special Reference to North-East India' organized

by North-East India Studies Programme, School of Social Sciences, Jawaharlal Nehru University, Delhi, Center for Manipur Studies and Centre for the Study of Social Exclusion and Inclusive Policy Manipur University at Manipur University, Imphal, 13-15 March 2009 and presented a paper entitled "Gender Roles in Khasi Kinship Structure", (ii) workshop on 'Capacity Building for Women Managers in Higher Education' organized by NEHU, Tura, 29 April to 3 May 2009 and facilitated three sessions on 'Managing Personal and Professional Roles' and 'Women and Research' in the capacity of Associate Trainer, (iii) participated as keynote speaker in the international conference on 'An(M)other World is Possible: Two Feminist Vision Matriarchal Studies and The Gift Economy' organized by the Association for Research on Mothering, York University, Toronto, 23-25 October 2009 and also presented a paper entitled "Khasi Matrilineality: Tradition Change and Persistence."

## **Publications**

### **Published in India**

Ghosh, S. and S. L. Malik, 2009. Assessment and Administration of Health in a Tribal Community of India. *The Internet Journal of Biological Anthropology*, 3(2).  
<[http://www.ispub.com/journal/the\\_internet\\_journal\\_of\\_biological\\_anthropology/volume\\_3\\_number\\_2\\_59/article/assessment-and-administration-of-health-in-a-tribal-community-of-india.html](http://www.ispub.com/journal/the_internet_journal_of_biological_anthropology/volume_3_number_2_59/article/assessment-and-administration-of-health-in-a-tribal-community-of-india.html).

Ghosh, S. and S. L. Malik, 2009. Understanding Morphological Changes From Parental To Filial Generations: A Case Study of Santhals. *Indian Anthropologist*, 39 (1&2): 129-46.

Ranjan, G. 2009. The Tharus of Nepal: An Ethnic Community in Turmoil. *Indian Journal of Nepalese Studies*, XV: 67-80.

Ranjan, G. 2009. Review of *Tribalism and the Tragedy of the Commons – Land, Identity and Development: The Manipur Experience*. Ed. Ch. Priyoranjan Singh. Akanksha Publishing House, New Delhi, 2009. *The NEHU Journal*, 7(1): 111-14.

Ranjan, G. 2010. Review of *Ageism – Problems and Prospects*. Eds. Ramesh Sharma and C. Joshua Thomas. Akanksha Publishing House, New Delhi. *The NEHU Journal*, 8: 123-27.

Zehol, L. 2009. Remembered Naga Heroes/Heroines of the Legendary Khezhakeno Village of Nagaland. *Indian Folklife*, 33: 14-17.

### Published abroad

Khongsdier, R., Chakraborty, R., Bose, K. and Bisai, S. 2009. Body Mass Index and Body Fat among Adult Bengalee Male Slum Dwellers in West Bengal, India. *Obesity Research and Clinical Practice*, 3:141-48.

### Books/Book chapters

Khongsdier, R. 2010. Use of Interpretation of Anthropometric Assessment of Growth and Body Composition. In *Anthropology Today: Trends and Scope of Human Ecology*. Eds.: M. K. Bhasin and Charles Susanne, Kamla-Raj Enterprises, New Delhi, 30-45.

Subba, T. B. 2009. Group Fieldwork: Revisiting an Old Anthropological Practice in India. In *Fieldwork: Social Realities in Anthropological Perspectives*. Eds.: Peter Berger et al., Weissensee Verlag, Berlin, 487-506.

Subba, T. B. 2010. Clear Mountains, Blurred Horizons: Limbu Perceptions of their Physical World. In *Culture and the Environment in the Himalaya*. Ed.: Arjun Gunerate, Routledge, London & New York, 114-31.

Subba, T. B. 2009. The Concept of Tribe in the Indian Context. In *The World of Dr. B. M. Das: A Tribute*, Eds.: Bapukan Choudhury and Pradip Jyoti Mahanta, Assam Academy of Cultural Relations, Guwahati, 399-413.

Subba, T. B. 2009. 'Are you from Nepal?' Interrogating the Monolithic Identity of Nepalis in India. In *Identity, Cultural Pluralism and State: South Asia in Perspective*, Eds.: N. K. Das and V. R. Rao, Macmillan Publishers India Ltd., New Delhi, 148-57.

Zehol, L. 2009. *The Legendary Naga Village: A Reader (Khezhakeno)*. Heritage Publishing House, Dimapur.

Zehol, L. 2009. Changing Khezha Culture, Christianity and Women: Some Observations. In *Christianity and Change in Northeast India*, Eds.: T.B. Subba, Joseph Puthenpurakal and Shaji Joseph Puykunnel, Concept Publishing Company, New Delhi, 331-346.

Pakynstein, V. and C. Nongbri, 2009. Women's Empowerment in Meghalaya. In: *Meghalaya State Human Development Report 2008, Chapter 8*, Government of Meghalaya, Shillong, 187-212.

**Funds received from agencies other than NEHU:**

ICSSR-NERC, Shillong

Rs. 0.95 lakhs

**Research projects**

**Ongoing**

UPE project titled "Culture, Genetics and Status of Health in Northeast India"

**Completed**

Evaluation Study of the Supplementary Nutrition Programme in Selected ICDS Projects of Meghalaya. Principal Investigator: Prof. R. Khongsdier. In collaboration with the Directorate of Social Welfare, Government of Meghalaya.

**Honours/Awards/Recognition:**

Prof. T. B. Subba was (1) nominated as a member, Editorial Board, *Asian Anthropology*, Chinese University of Hong Kong, (2) awarded the Baden-Wuerttemberg Fellowship at South Asian Institute, Heidelberg University, Germany tenable from 15 October 2010 to 15 January 2011, (3) nominated as a member, Academic Council, Sikkim University, and (4) nominated as a member, Indira Gandhi Rastriya Manav Sangrahalaya Samiti, Bhopal.

**Other Activities**

Prof. T. B. Subba continued as Editor, *The NEHU Journal* and Coordinator, NEHU Extension Lectures, and was also appointed as Coordinator, Equal Opportunity Cell. He delivered lectures on: (i) "Social and Cultural Change: Conceptual Issues" in Refresher Course Participants in Sociology on 1 September 2009, (ii) "Social and Cultural Change: Methodological Issues" to Refresher Course participants in Sociology on 4 September 2009, (iii) "Justifying Research" in Refresher Course participants in Geography, NEHU, 5 September 2009, (iv) "Linguistic Fieldwork" at a workshop on Mother Tongue Survey organized by Linguistics Department, NEHU, 17 September 2009, (v) "On Social Justice" in Refresher Course participants in Sociology on 19 September 2009, (vi) "Introduction to Research Methodology" at the workshop on 'Research Methodology' organized by the ICSSR-NERC, Shillong, 12 October 2009, (vii) "Research Design" at the workshop on 'Research Methodology' organized by the ICSSR-NERC, Shillong, 13 October 2009, (viii) participated in the panel discussion on 'Research Methodology' at the workshop organized by the ICSSR-

## School of Human and Environmental Sciences

NERC, Shillong, 16 October 2009, (ix) "Theory Building in Social Science Research" at the workshop on 'Research Methodology' in Social Sciences, Assam University, Silchar, organized by ICSSR-NERC, Shillong, 8 January 2010, (x) "Understanding Social Reality" in the workshop on 'Research Methodology' in Social Sciences' at Assam University, Silchar, 8 January 2010 organized by ICSSR-NERC, Shillong, (xi) "Philosophy of Tribal Worldview" in Refresher Course of English Department, NEHU, Shillong, 27 February 2010, (xii) "What is Tribe?" at the Institute of Advanced Study in Shimla Winter School on 'Tribes, Communities and Modernity' at ICSSR-NERC, NEHU Campus, 26 February 2010, and (xiii) "Are Tribes Communities?" at the Institute of Advanced Study in Shimla Winter School on 'Tribes, Communities and Modernity' at ICSSR-NERC, NEHU Campus, 2 March 2010.

Prof. R. Khongsdier served as a member of the Editorial Boards of the NEHU Journal, Journal of Human Biology, New Delhi, and the Anthropologist Journal, New Delhi. He served as a referee for the European Journal of Clinical Nutrition and British Medical Journal, UK. He also served as a member of the Technical Advisory Committee, Biological Divisions, Indian Statistical Institute, Kolkata, and a Vice-Chairman, State Resource Centre, NEHU.

Dr. L. Zehol delivered (i) one lecture on "Role of Myth in Understanding Naga Society and Culture" in Refresher Course organized by the Department of History, NEHU, September 6, 2009, (ii) one lecture on "Capacity building of Women Managers in Higher Education (Women & Research)" in UGC-Refresher programme for Trainer Associates organized by Women's Studies Centre, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi, September 14-16, 2009. She attended the National training programme on 'Empowerment of women Executives through self Awareness' organized by the Regional Head Quarter of Power Grid Corporation of India Limited at Shillong on April 7-9, 2010.

Ms. V. Pakyntein participated as Associate Trainer in UGC-sponsored Capacity Building of Women Managers in Higher Education Refresher's Programme organized by Foundation for Liberal Education and Management Education, Pune, and Bharati Vidyapeeth University Pune, 9-11 November 2009.

Dr. S. Ghosh was part of the SAP field work conducted by the Department of Anthropology, University of Delhi in Dharamshala, Kangra District, Himachal Pradesh for 15 days in March 2009.

## DEPARTMENT OF ENVIRONMENTAL STUDIES

**Head** : Prof. O. P. Singh (up to 22.03.2010)

Prof. B. K. Tiwari (from 23.03.2010)

**Telephone** : 2721158 (O), 9436100984 (M)

**Email** : bktiwarinehu@gmail.com

**Thrust Areas 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, Geophysical study of NE Region.

**Brief Statement of Academic Activities:** The Department organized several international and national workshops/seminars and undertook a good number of research projects aimed at creating much-needed database for promoting ecologically sound development of the hill regions of northeast India. The Department also contributed towards configuring the deeper crustal structure for understanding the crustal evolutionary processes and seismicity of the northeast India. The Department received grants from a number of national and international agencies viz., Ministry of Earth Sciences, GOI, New Delhi, Centre for International Forestry Research Indonesia, National Environment Research Council, United Kingdom, Department of Science and Technology, New Delhi; Ministry of Statistics and Programme Implementation, New Delhi and Department of Atomic Energy, GOI, New Delhi, University Grants Commission, New Delhi supported 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.

### Faculty

**Professor** : B. K. Tiwari, M. Sc. (Gorakhpur), Ph.D. (NEHU)  
L. K. Jha, M. Sc. (Bhagalpur), Ph.D. (LNMU),  
Dip. Forestry (FRI, Dehru Dun)  
O. P. Singh, M. Sc., Ph.D. (BHU)

**Associate Professors** : D. Walia, M. Tech., Ph.D. (Gauhati)  
D. Paul, M.Sc., Ph.D. (NEHU)

Assistant Professors : S. S. Chaturvedi, M. Sc. (Gorakhpur), Ph.D. (BHU)

**Visiting Professors/Fellows/Scholars:** Dr Alison Ormsby, Associate Professor, Eckerd College Florida, USA spent three months (October to December 2009) in the Department and worked with Prof. B. K. Tiwari in the capacity of Fulbright Nehru Scholar on Sacred Forests of Meghalaya and Karnataka: Biodiversity Conservation Traditions under Fulbright Fellowship of the United States India Education Foundation, New Delhi.

**Student Intake**

Enrolment capacity : M.Sc.: 25, Ph.D.: Variable

Actual Admission : SC ST Gen Male Female Meghalaya/ Outside  
Meghalaya

M.A./M.Sc.	-	22	3	15	10	22	3
Ph.D.	-	3	1	2	2	3	1

**Degrees Awarded:**

Ph.D.

Mr. Hero Tynsong "Plant Diversity and NTFP Management in Community Forests of War Area Meghalaya." Supervisor: Prof. B.K. Tiwari.

**Courses conducted:**

Environment, Ecology and Ecosystem Dynamics

Plantation Forestry for Environmental Conservation

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 Problems of North East India

Environmental Economics and Sociology

Forest Management and Biodiversity

**Study Tours/Field Trips of Students:** Dr. S. S. Chaturvedi guided the final year M.Sc. students for Study Tour from January 15 to 28, 2010. The students visited several academic institutions and places of biological and environmental interest such as, Annamalai University, Chennai, Crocodile Bank and Reptile Park, Chennai, Pondichery University, Pudduchery, Alipore Zoo, Kolkata and National Botanical Garden, Kolkata. Prof. O. P. Singh and Dr. S. S. Chaturvedi accompanied M. Sc. 2<sup>nd</sup> Semester students for Educational tour to learn the Pollution Control Measures/Equipments at Cement Manufacturing Corporation Ltd. (CMCL), Lumshnong, Jaintia Hills District, Meghalaya, 30 May 2009.

**Conferences / Seminars /Symposium/Extension Programmes:**

**Organized**

Prof. B. K. Tiwari organized: (i) SCAPES international workshop on 'Studying the Linkages between Ecosystem Services and Poverty; Building Networks in South Asia' in collaboration with the University of Liverpool, UK, and Institute for Sustainable Water Integrated Management and Ecosystem Services, UK, in Hotel Pinewood, Shillong, 8-9 September 2009, (ii) international workshop on 'Sustainable Land Management in Marginal Mountainous Region' at NEHU, Shillong, 9-11 November 2009, organized in collaboration with Jawaharlal Nehru University, New Delhi and United Nations University, Tokyo, (iii) workshop on 'Climate Change Adaptation in North east India' on 4 March 2010 at Hotel Pragati Manor, Guwahati in collaboration with KfW-German Development Corporation, Bonn and Indian Institute of Science, Bangalore, and (iv) workshop on 'Potential for NTFP based Livelihoods in North-East India' on 13 February 2010, NEHU, Shillong, which was sponsored by ACCESS, New Delhi.

Prof. O. P. Singh (Programme Director) organized the Training Programme on 'Environmental Economics, Environmental Accounting and Environmental Impact Assessment' for the 29<sup>th</sup> Batch of Indian Statistical Service (ISS) Probationers at North-Eastern Hill University, Shillong, 30 March to 3 April 2009, which was sponsored by Central Statistical Organization (CSO), Ministry of Statistics & Programme Implementation, Government of India, New Delhi.

Dr D. Walia coordinated the Group Monitoring Committee meeting, Seismology Division, Ministry of Earth Sciences, GOI, New Delhi, 21-22 June 2009, and was a member of the Sectional Committee (Earth System sciences) for 2010-2011 (98<sup>th</sup> Indian Science Congress).

### **Attended**

Prof. B.K. Tiwari attended: (i) national workshop on 'Indian Network of Climate Change- Assessment (INCCA)' organized by Ministry of Environment and Forests Government of India at The Ashok, New Delhi, 14 October 2009 and presented a paper entitled "Implications of Climate Change on North East Region: Opportunities and Constraints for Developing Adaptation Strategies", (ii) workshop on 'Managing Ecosystem Services for Poverty Alleviation. Linking Research, Practice and Policy' at Habitat Center, New Delhi, 20-21 October 2009 and presented a paper on "Ecosystem Services Emanating Forests of North-East India", (iii) acted as resource person in the Workshop on 'Ecological Modelling with Special Reference to Forestry Sector' at Indian Institute of Forest Management, Bhopal organized by IIFM, Bhopal and International Institute for Applied Systems Analysis (IIASA), Austria, 28-29 January 2010, (iv) presented a paper on "Climate Change and Forests of Northeast India" in the workshop on 'Climate Change and Forests' held at Indian Institute of Science, Bangalore, 19 February 2010, sponsored by Norwegian Embassy, New Delhi, (v) presented an invited paper entitled "Renewable Energy and Climate Change" at the national conference on 'Renewable Energy for Development of Underdeveloped Areas with Particular Reference to North East India" organized by Tezpur University, Tezpur, 23-25 March 2010, and (vi) presented a paper entitled "Traditional Knowledge Based Natural Resource Management Systems of North-East India" in the regional seminar on 'Man Forest Interface: Scenario in North East India' at Women's College, Shillong, 8-9 July 2009.

Prof. L. K. Jha presented a paper on "Land holdings, Modern Technology *vis-à-vis* Land Use Systems: Its Impact on Biodiversity, Sustainability of Society and Standard of Living of Peasants of Syntaxial Bend and North-East Himalayas" (discussion paper as subject expert) in international workshop on 'Land management in Marginal Mountain Areas: Vulnerability and Adaptation to Global Changes' at NEHU, Shillong, 9 November 2009, as part of collaborative programme between the Environment and Development Programme of the United Nations University (UNU, Tokyo) and School of Environmental Sciences, JNU, and (ii) acted as resource person in SCAPES regional workshop on

'Studying the Linkages Between Ecosystem Services and Poverty Building Networks in South Asia' organized by University of Liverpool and NEHU, 8-9 September 2009.

Prof. O. P. Singh (i) chaired a session in the seminar on 'Environmental Conservation in Northeast India' and presented a paper entitled "Challenges of Water Resource Management in Northeast India under Changing Environment" organized by the Northeast India Council for Social Science Research (NEICSSR), Shillong, 5 June 2009, (ii) attended national seminar on 'Acidity in Reservoir Water: A Challenge to Kopili HE Plant, NEEPCO" as a member of the Panel of Experts organized by North East Electric Power Corporation (NEEPCO), 11 November 2009, (iii) presented a paper entitled "Origin of Acidic Water and Its Implications in Jaintia Hills District, Meghalaya" and participated as subject expert in the Awareness Programme on 'Coal Mining and the Environment' organized by Meghalaya Pollution Control Board at Khliehriat, Jaintia Hills District, Meghalaya, 5 March 2010. He also delivered a lecture on "Mining Environment: Problems and Remedies."

Dr. D. Walia: (i) attended brain storming session on 'Landslide Problems of NE' organized by Nagaland University, Kohima, in collaboration with the Department of Science & Technology, New Delhi, 5-6 May 2009, and contributed towards developing suitable strategies to deal with the problems, (ii) attended the Second India Disaster Management Congress, New Delhi, 4-6 November 2009, on 'Recent Developments in Earthquake Forecasting' and presented papers on "Response Time for Earthquake Preparedness from Seismic Alert System in Shillong and Guwahati" and "Radon Variation in Soil Environment as Earthquake Precursor in and around Shillong Plateau", (iii) presented a paper entitled "Impact of Climate Change on the Fresh Water Resources" in the international seminar on 'Water Crisis in the Indian Subcontinent: Issues and Challenges' at NEHU, Shillong, 23-24 November 2009, (iv) presented a paper entitled "Geoelectric Structure over the Lushai Fold Belt, Surma Basin, Indo-Myanmar Orogeny" in national seminar on 'Geodynamics, Sedimentation and Biotic Response in the Context of India Asia collision' at Mizoram University, Aizawl, 26-28 November 2009, (v) presented an invited paper entitled "Characterization of Potential Nuclear Waste Disposal Site by using Magnetotelluric Techniques" in the Earth System Sciences Section of the 97<sup>th</sup> Indian Science Congress 2010, January 2010, and (vi) presented papers in national conference on 'Condensed Matter Physics' held at Department of Physics, NEHU, Shillong, 23-25 March, 2010.

Dr. D. Paul attended: (i) international conference on 'Recent Trends in Life Science Researches *vis-à-vis* Natural Resource Management, Sustainable Development and Human Welfare' at Vinoba Bhave University, Hazaribag, 27-29 June 2009 and presented two papers entitled "Traditional Knowledge on Insect-Pest Management in Meghalaya" and "Nutritive Values of Some Wild Edible Insects of Meghalaya", and (ii) national seminar on 'Population, Environment and Development in North-East India' at Assam University, Silchar, 4-5 March 2010 and presented a paper entitled "Ethno-Zoological Study of Wild Insects in East Khasi Hills District of Meghalaya and Evaluation of the Nutritive Values of Some of the Commonly Used Insects."

Dr S. S. Chaturvedi delivered an invited lecture on "Phytoremediation of Heavy Metals Polluted Water: Progresses and Prospective" in the international conference on 'Recent Trends in Life Science Research *vis-à-vis* Natural Resource, Sustainable Development and Human Welfare' held at Vinoba Bhave University, Hazaribag, 27-29 June 2009.

### **Publications:**

Walia, D. and B. S. Mipun, 2010. Hydrological Behavior of Umshing River, East Khasi Hills, Meghalaya. *Acta Geophysica* 58: DOI: 10.2478/s11600-010-0015-11.

Walia, D., A. C. Lyngdoh and A. Saxena, 2010. Seismotectonic Zones Demarcation in the Shillong Plateau Using the Microearthquakes and Radon Emanation. *Acta Geophysica*, 58: DOI: 10.2478/s11600-010-0015-8.

Gokarn S. G., G. Gupta, S. S. Sanabam and D. Walia, 2009. Tectonic and Crustal Evolution of the Lower Brahmaputra Valley and Shillong Plateau Deciphered from Magnetotelluric Studies. *Deep Continental Studies Newsletter*, 19: 11-16.

Bjork, P., S. B. Jin, J. Zhao, O. P. Singh, J.-O. Persson, U. Hellman and L. Wieslander, 2009. Specific Combinations of SR Proteins with Single Pre-messenger RNAs *in vivo* and Contribute Different Functions. *J. Cell Biol.*, 184: 555-568.

### **Books/Book Chapters**

Jha, L. K. 2009. Land fragmentation, Ecosystem Services, Biodiversity Conservation, and Food Security: What Ought to Be? How It Could Be? Are We

in Dilemma? In *Proceeding of Food Security and Sustainability in India*, Institute of Development Studies, Amritsar, 377-382.

Saikia, U. S., B. Goswami, K. K. Satapathy, O. P. Singh and S. V. Ngachan, 2010. Effect of different Growing Environments on Growth and Yield of Sali Rice in Mid-Hills (800-1400 m above msl) of Meghalaya. In *Proceedings of National Symposium on Climate Change and Rainfed Agriculture (Vol-I)*, CRIDA, Hyderabad, 132-134.

Saikia, U.S., A. K. Vishwakarma, B. Goswami, K. K. Satapathy, O. P. Singh and S. V. Ngachan, 2010. Weather Based Pest Forewarning System for Maize Cob Borer. In *Proceedings of National Symposium on Climate Change and Rainfed Agriculture (Vol- I)*, CRIDA, Hyderabad, 185-188.

Tiwari, B. K. and M. B. Lynser, 2009. Traditional Knowledge Based Natural Resource management Systems of Northeast India In *Man Forest Interface: Scenario in North East India*, Ed.: S. Paul, Women's College, Shillong, 5-15.

Tynsong H., B. K. Tiwari and R. K. Goswami, 2009. Canopy Bird as Wild Resource: An Indigenous Knowledge Approach to Sustainable Hunting. In *Sustainable Use of Forest Canopies*, Proceedings of 5<sup>th</sup> International Canopy Conference-2009, 129-130.

#### **Funds received from agencies other than NEHU:**

Ministry of Earth Sciences, GOI.                      Rs. 30.00 lakhs

#### **Research Projects:**

##### **Ongoing**

Remediation of Soil Affected by Coal Mining in Jaintia Hills, Meghalaya. Principal Investigator: Prof. O. P. Singh. Sponsored by UGC, New Delhi.

Study of Forest, Soil and Water Resources and Their Utilization and Mangement in Tribal Societies of NE India. Principal Investigator: Prof. O. P. Singh Co-Principal Investigators: Dr. D. Walia and Dr. S. S. Chaturvedi. Under UGC-Area Studies of University with Potential for Excellence Programme to NEHU, Shillong.

Radon Monitoring in Groundwater of the Northeastern India Region to Study the Neotectonic Activities and Health Hazard. Principal Co-Investigator: Dr Devesh Walia. Sponsored by DAE, BRNS- BARC, Mumbai.

## School of Human and Environmental Sciences

Age, Sr–Nd and Paleomagnetic Studies on Alkaline Complexes from Assam and Meghalaya, North Eastern India. Principal Investigator: Dr D. Walia. Sponsored by DST, GoI, New Delhi.

Landslide Mapping/Erosional, Aspects, Vulnerability and Risk Assessment of Shillong Urban Area with Special Reference to Umshing Micro Watershed. Principal Co-Investigator: Dr D. Walia. Sponsored by DST, GoI, New Delhi.

Hydrogeological Studies of the Proposed Uranium Mining Tailings Dam Site at Domiasiat. Principal Investigator: Dr D. Walia. Sponsored by DAE, BRNS-BARC, Mumbai.

Baseline Data of Domiasiat Ecosystem due to Natural Radiation Dose. Principal Investigator: Dr. S. S. Chaturvedi. Sponsored by DAE, BRNS- BARC, Mumbai.

### **New**

Magnetotelluric Studies in the NE Region. Principal Investigator: Dr. D. Walia. Sponsored by Seismology Division, Ministry of Earth Science, New Delhi (Rs 113.00 lakhs).

Extent, Status, Biodiversity Value and Strategy for Conservation of Sacred Groves of East and West Khasi Hills of Meghalaya. Principal Investigator: Prof. B.K. Tiwari. Sponsored by G.B. Pant Institute of Himalayan Environment and Development, Almora (Rs 7.98 lakhs).

Studying the Linkages between Ecosystem Services and Poverty; Building Networks in South Asia. Principal Investigator: Prof. B. K. Tiwari. Sponsored by SCAPES, Liverpool University, U.K. (British Pound: 20 thousand).

Vulnerability Assessment Methodology and Project Screening Criteria in the Context of Climate Change Adaptation Projects in North-East Region. Principal Investigator: Prof. B. K. Tiwari. Sponsored by German Cooperation Bank (KfW), Germany and Indian Institute of Science, Bangalore.

### **Completed**

Structural Mapping of the Area Around South of Tailing Pond Site, Domiasiat. Principal Investigator: Dr. Devesh Walia. Sponsored by DAE, BRNS- BARC, Mumbai.

### **Academic/ Professional collaboration:**

Prof. B. K. Tiwari has academic collaboration with following universities and institutes: (i) University of Liverpool, U.K. on 'Studying Linkages Between Ecosystem Services and Poverty Research Project', (ii) Eckerd College, Florida, USA: Fulbright exchange of faculty under the United States India Education Foundation, (iii) Indian Institute of Science, Bangalore: Climate Change Adaptation in North East Region of India, and (iv) Jadavpur University, Kolkata: Climate Change Adaptation in North East Region of India.

Prof. O. P. Singh has research collaboration with the Department of Molecular Biology and Functional Genomics, Stockholm University, Stockholm, Sweden.

### **Honours/ Awards/ Recognition:**

Prof. B. K. Tiwari was elected as Fellow of National Institute of Ecology, (FNIE), New Delhi.

Prof. O. P. Singh acted as Jury Member for Nominating Films on Environment and Wildlife to be shortlisted and awarded in the CMS Vatavaran Film Festival 2009. He attended the Jury Meeting at Centre for Media Studies (CMS), New Delhi, 28-31 July 2009.

Dr. D. Walia was offered Life Membership, Indian Seismological Research Society, ISR, Gandhi Nagar, and is elected as a member of the Sectional Committee (ESS) for 2010-2011 (98<sup>th</sup> Indian Science Congress). He also received the best poster presentation award during the National Conference on 'Condensed Matter Physics' held at Department of Physics, NEHU, Shillong, 23-25 March 2010.

Dr. S. S. Chaturvedi was awarded Prof. J. P. Dutta Munshi Gold Medal 2009 by International Society for Ecological Communications, Hazaribag, Jharkhand.

### **Other Activities**

Prof. L. K. Jha delivered two lectures entitled " Environment, Ecosystem Services and Land Uses : Farmers Dilemma" and "Rural development: Search for Sound Technology and Steps Needed to be Followed to Transfer Technology" in the Refresher course organized by the Department of Geography, NEHU, 31 August to 20 September 2009.

Prof. O. P. Singh delivered: (i) two lectures entitled “Quantitative and Qualitative Assessment of Water Resources” and “Environmental Impact Assessment” in Refresher Course organized by the Department of Geography, NEHU, Shillong, 31 August to 20 September 2009, and (ii) two lectures titled “Environment, Environmental Issues and Sustainable Development” and “Understanding and Combating Climate Change” in Refresher Course organized by the Department of Education, NEHU, Shillong, November, 2009.

Dr. D. Walia along with Y. Sharma, A. Saxena, D. Maibam, A. Lyngdoh and P. Wahlang has submitted a paper entitled, “Radon and Active Tectonics in the Shillong Area” in the 3rd International Earthquake Symposium, Bangladesh, Dhaka, March, 5-6 2010, (ii) attended the Project Advisory Committee meeting, Seismology Division, Ministry of Earth Science, GOI, CMLRE, Cochin, 25–26 August 2009, (iii) attended the Industry–Academia workshop on ‘Technology Imperatives for Exploration and Production of Oil and Gas, organized by ONGC and Petrofed, 17-20 March 2010, (iv) imparted training to Architects and Engineers on ‘Seismic Disaster and Its Mitigation’ organized by Meghalaya Administrative Training Institute and Shillong Polytechnic, Shillong, 14 April, 2009, and (v) delivered a talk on “Trace Elements and Theirs Applications in Geosciences” during the training program organized by SAIF, NEHU, 18 September 2009.

P. N. Rymbai (Supervisor: Prof. L. K. Jha) attended the international seminar on ‘Water Crisis in the Indian Subcontinent: Issues and challenges’ and presented a paper on “Impact of Geomorphology and Land Use Systems on Water Resource Management: A Case Study of Umbaniun Micro-Watershed of Meghalaya, a Hilly State of Syntexial Bend of Himalaya, 26 November 2009.

J. P. Marak (Supervisor: Prof. L. K. Jha) attended the international seminar on ‘Water Crisis in the Indian Subcontinent: Issues and Challenges’ and presented a paper on “Management of Water Resources: A Case Study in Ri-Bhoi District of Meghalaya with Special Reference to Ownership of Sources of Water”, 26 November 2009.

K. Sarmah (Supervisor: Prof. L. K. Jha and Prof. B. K. Tiwari ) attended the international seminar on ‘Water Crisis in the Indian Subcontinent: Issues and Challenges’ and presented a paper on “Water resource Assessment and Preparation of Management Plan using GIS and Remote Sensing - A Case Study of Wah Shella Micro-Watershed of Meghalaya”, 26 November 2009.

## DEPARTMENT OF GEOGRAPHY

**Head** : Prof. A. C. Mohapatra

**Telephone** : 2723201, 2723202 (O)

**Email** : acmohapatra@hotmail.com

**Thrust Areas of Research:** (i) Geomorphology with focus on Regional and Applied geomorphology, (ii) Environmental studies with focus on Climatology & Climate change, Water Resources and Hydrology, Bio-geography and Bio-diversity 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:** Mr. Rabi Narayan Behera, research scholar of the Department, received Young Geographers' Award from the Institute of Indian Geographers. As many as twelve candidates from the Department qualified in the UGC NET under Lectureship category. The Department, apart from its usual teaching programme, organized a series of lectures delivered by very eminent geographers drawn from various universities in the country. The Department organized International and National level seminars and workshops during the year. A Refresher Course for the College and University teachers was also organized by the Department. The faculty remained active in publication of research papers, books and book chapters. Most of the faculty members attended and presented research papers in National and International conferences. Very large number of research scholars attended and presented research papers in National and International Conferences. Two new Laboratories were established in the Department during the year: (a) Environmental Lab and (b) Geo-Informatic Lab with assistance under SAP-DRS-II plus Infrastructure Grant from the University Grants Commission.

### Faculty

**Professors** : A. C. Mohapatra, M.A., M.Phil. (JNU), Ph.D. (NEHU)  
S. Singh, M.A., Ph.D. (Meerut)  
B. S. Mipun, M.A. (JNU), Ph.D. (NEHU)  
D. K. Nayak, M.A., M.Phil., Ph.D. (JNU)  
Z. H. Qureshi, M.A., Ph.D. (Sukhadia University)

**School of Human and Environmental Sciences**

Associate Professors : H. J. Syiemlieh, M.A., M.Phil., Ph.D. (NEHU)  
 L. Cajee, M.Sc., Ph.D. (NEHU)  
 N. K. Sinha, M.A. (Gauhati), Ph.D. (NEHU)  
 P. G. Momin, M.A. (JNU), M.Phil. (NEHU)

Assistant Professors : P. K. Ryngnga, M.A. (NEHU), M.Phil., Ph.D. (JNU)  
 S. Purkayastha, M.A., Ph.D. (NEHU)

**Visiting Professors/Fellows/Scholars:** The following Professors visited the Department and delivered a series of lectures:

1. Prof. C.R.Pathak (Rtd) Professor, IIT, KGP, Oct 11-16, 2009 - five lectures on Regional Planning & Urbanisation
2. Prof. Ali Mohammad, Department of Geography, AMU, Aligarh, November 22-23, 2009 - two lectures on Agriculture and Food Security in India
3. Prof. J.Dikshit,(Rtd) March 6-17, 2010- Two lectures on Alexander von Humboldt
4. Prof K.R. Dikshit (Rtd), Department of Geography University of Pune, March 17, 2010 -Urbanisation in North-East India
5. Prof. Surya Kant, Department of Geography, Panjab University, Chandigarh, March 29-31, 2010 - three lectures on Indian Federalism, Sustainable Development etc.

**Student Intake**

Enrolment capacity : M.A./M.Sc. – 38, Ph.D. - Variable

Actual Admission : SC ST Gen Male Female Meghalaya/  
 Outside  
 Meghalaya

M.A./M.Sc. : - 30 3 17 16 17 16

Ph.D. : - 5 9 4 10 4  
 10

**Degrees Awarded** : SC ST Gen Male Female Total

M.A./M.Sc. : - 23 5 16 12 28

Ph.D. : 1 - 3 3 1 4

Ph.D.

Mr. U. Kumar: "Ecology, Conflict and Adaptation of the Jarawa in Nadaman Islands" Supervisor: Prof. Z. H. Qureshi.

Mr. A. C. Bora: "Introduction of Small Scale Tea Cultivation and its Impact on Landuse and Socio-economic Conditions of the People of Sivasagar District, Assam." Supervisor: Prof. B. S. Mipun.

Mr. N. Ambikapathy: "Urban Growth and Managing the Solid Waste: A Study in Environmental Sanitation of Shillong Urban Agglomeration" Supervisor: Prof. A. C. Mohapatra.

Ms. M. Satpati: "Demographic Consequences of Ethnic Conflict on Santhal Women in Bodo Areas of Assam: A Study of Kokrajhar District." Supervisor: Prof. D. K. Nayak.

**Placement of Students:** The students of the Department in this year joined various teaching and administrative positions available within the region.

**Courses conducted:**

The following courses were conducted for M.A. /M.Sc. students:

- 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, Cultural Geography, Population and Development.

The following courses were conducted by the Department for Ph.D. students:

Methodology and Research Methods in Geography, Regional Analysis, Evolution of Landforms, Drainage Basin and Water Resources, Geography of Settlements and its Application in Integrated Area Development, Population and Development, Advanced Agricultural Geography.

#### **Study Tours/Field Trips of Students:**

Dr. L. Cajee and Dr. S. Purkayastha conducted All India study tour 2009-10 during 2-24 February 2010 in Konkan and Malabar Coastal Areas for the 2<sup>nd</sup> Semester students. Dr. P. K. Rynnga and Dr. H. J. Syiemlieh took the 4<sup>th</sup> Semester students to Fieldwork at Cherrapunjee from 15 February to 1 March 2010.

#### **Seminars/Conferences/Symposia/Extension Programme:**

##### **Organized**

The Department organized (i) an International Seminar on 'Water Crisis in the Indian Subcontinent: Issues and Challenges', 23-25th November 2009 and (ii) BASAS U.K. and NEHU, Shillong Workshop on 'The New Security Agenda in the Northeast of South Asia', 12-17 March 2010p.

##### **Attended**

Prof. A. C. Mohapatra attended the international seminar on 'Water Crisis in South Asian Counties' at NEHU, Shillong, 23-24 November 2009, and chaired a session.

Prof. S. Singh attended: (i) international workshop on 'Sustainable Land Management in Marginal Mountain Region' at NEHU, Shillong, 9-11 November 2009, and presented a paper on "Socio-economic Determinants of the Use of Water and Fuel Resources in the Degraded Environment of Cherrapunji Landscape, India", (ii) national seminar on 'Research in Geography: Debate on Issues and Solutions' at Banaras Hindu University, Varanasi, 28-29 January 2010, and presented a key note paper on "Modeling and Simulation Techniques", (iii) national seminar on 'Population, Development and Environment' at Banaras Hindu University, Varanasi, 18-20 February 2010, and chaired a session on 'Development Disparities', (iv) national seminar on 'Ganga Delta: Planning Perspectives' at University of Calcutta, Kolkata 12-13 March 2010, and presented a paper on "Integrated Area Planning- A Concept of Locations of Activities", and chaired a session on 'Planning Strategies', (v) national seminar on 'Look East

Policy and North East India- Achievements and Constraints', NEICSSR, Shillong, 26-27 March 2010, and presented a paper on "Road Network and Developmental Patterns in North East in context of Look East Policy."

Prof. B. S. Mipun attended: (i) 7<sup>th</sup> IHDP Open Meeting 2009 and 2<sup>nd</sup> Indo-German Conference on 'Research for Sustainability: Energy and Landuse', BMBF United Nations Campus, Bonn, Germany, 26-30 April 2009 and presented a paper on "Landuse Change in Meghalaya", (ii) national seminar on 'Identification of Potential Forest Plantation Sites Using Remote Sensing and GIS with Special Reference to Assam' at Mangaldai College, Mangaldai Assam, 6-7 August, 2009 and presented a paper on "Remote Sensing, GIS and GPS Use in Forest Plantation, Forest Cover, Monitoring and Management", (iii) Map Asia 9<sup>th</sup> International Conference and Exhibition on 'Geographical Information Technology and Application', 18-20 August 2009, Singapore, GIS Development Pvt. Ltd. New Delhi and Land Survey Department, Singapore and presented a paper on "Health Status and Demographic Pattern of Population around Domiasiat Area, West Khasi Hills, Meghalaya", (iv) national seminar on 'Socio-cultural Dimensions of Ecology: The Context of North East India' organized by the Department of Sociology, NEHU, Shillong, 14-15 October 2009 and presented a paper on "Ecological Change and Socio-Cultural Transformation of Deori Tribe in Assam", (v) national seminar on 'Population and Environment Development in North-East India' at Arya Vidyapith College, Guwahati, 20-21, October 2009 and presented a paper on "Small Tea Cultivation and Sustainable Change in Assam", (vi) national seminar on 'Rural Empowerment in Northeast India' at NEHU, Tura campus, 26-27 November 2009 and presented a paper on "Tribal Women in Agricultural Sector in Assam with Special Reference to Dhemaji District", (vii) national seminar on 'Changing Face of Geography and Challenges Ahead' at Cotton College, 18-19 December 2009 and chaired a Session. (viii) national seminar on 'Wetlands and its Consequences and Development in North East India' at Kamrup College, Nalbari, Assam, 18-19 February 2010 and presented a paper on "Wetland: Consequences and Development (Human and Natural Resources)", and (ix) Ministry of Earth Sciences, Government of India sponsored workshop on 'Understanding Earth System Sciences' at Nagaland University, Dimapur Campus, 27-28 March 2010 and presented a paper on "Earthquake Monitoring and Evaluation-Its Effects and Mechanism."

Prof. D. K. Nayak attended: (i) the UGC national seminar on 'Strategy for Resource Functioning of India's North-East: A Geographical Perspective' at NN Saikia Government College, Titabar, Assam, 3-4 August 2009 and chaired a

session, (ii) 37th Congress of International Association of Hydrological Sciences and 37th Congress of the International Association of Hydrologists and international conference on 'Water: Vital Resource Under Stress- How Science Can Help' at Hyderabad International Convention Centre, Hyderabad, 6-12 September 2009 and presented a paper on "Role of Water Supply and Sanitation in Hill Area Development: A Case Study of Shillong Urban Agglomeration", (iii) XXVI International Population Conference, IUSSP, Marrakech, Morocco, 27 September to 2 October 2009 and presented a paper (with Aparesh Patra) on "Role of Water Supply and Sanitation in Hill Area Development Using GIS Techniques: A Case Study of Shillong Urban Agglomeration, India" (oral) and a poster entitled "Inter-Regional Variation in the Growth of Muslim Population in India: A Geographical Perspective", (iv) UGC sponsored national seminar on 'Population, Environment and Development in North-East India' at Arya Vidyapeeth College, Guwahati, 20-21 October 2009 and delivered a key note paper on "Demographic Dynamics and Climate Change: Does Size Matter?", (v) DST national workshop on 'Hydro-Geomorphic Hazards: Challenges for Science Communication, Department of Geography and Disaster Management' at Tripura University, 18-20 November 2009 and presented a paper on "Science Outreach and People's Participation in Challenging Hydro-geomorphic Hazards", (vi) national seminar on 'Rural Empowerment in North-East India' at NEHU, Tura, 26-27 November 2009 and presented a paper on "Gender Equality and Women's Empowerment: A Demographic Perspective with Special Reference to North-East India", (vii) national seminar on 'Changing Face of Geography and Challenges Ahead' and chaired a Session on Socio-Cultural Issues in North-East India, Cotton College, 18-19 December 2009, (viii) 31st IIG meet and international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru 19-21 March 2010 and chaired a session and presented a paper on "Gender Equality: A Demographic Perspective with Special Reference to North-East India", and (ix) UGC-SAP seminar on 'Geo-Hazards in the Sub-Himalayan North-Bengal' at North Bengal University, 6-7 March 2010 and chaired a field session on 6 March 2010.

Prof. Z. H. Qureshi attended the international seminar on 'Water Crisis in the Indian Subcontinent: Issues and Challenges Department of Geography' at NEHU, Shillong, 23-25 November 2009 and presented two papers jointly with A. C. Debnath on "Productive Use of Soil Moisture in the Flood Affected Areas of the Lower Kameng River Basin through Appropriate Crop and Water Management Practices" and "Harvesting of Water Resources of Kameng River and Its Utility in Agriculture: An Analysis."

Dr. L. Cajee attended: (i) 41st regional science conference of the Regional Science Association of India, Bomdila, Arunachal Pradesh, 3-5 March 2010 and presented a paper jointly with A. Sood on "Contribution of Hotel and Catering Industry in Shimla", and (ii) international conference on 'Environment, Resource and Regional Development' at Burdwan University, West Bengal, 8-9 March 2010 and presented a paper jointly with C Shiteo on "Cultural Tourism and Socio-Economic Development in Nagaland."

Dr. P. K. Ryngha attended: (i) national seminar on 'Environmental Issues' at NEICSSR, Shillong, 5-6 June 2009 and presented a paper on "Waste Management in Shillong: A Socio-Environmental Perspective", (ii) national seminar on 'Socio-Cultural Dimensions of Ecology' in the Department of Sociology, NEHU, 14-15 October 2009 and presented a paper on "Access to Natural Resources: Problems and Challenges in the Context of North East Tribes", (iii) national seminar on 'Population, Environment and Development in North East India' at Arya Vidyapeeth College, Guwahati, 20-21 October 2009 and presented a paper on "Environmental Education, Awareness and Training", (iv) international seminar on 'Water Crisis in the Indian Subcontinent: Issues and Challenges' at NEHU, Shillong, 23-25 November 2009 and presented a paper on "Water Scarcity and indigenous System of Water Harvesting in Meghalaya", (v) international conference on 'Challenges of Ethnicity: The Local and the Global' at Osmania University, Hyderabad, 25-27 November 2009 and presented a paper on "Ethnic Tension and Community Conflict in North East India: A Challenge to India's Integrity and Unity", (vi) IIG international conference on 'Environment, Agriculture and Food Security in India' at University of Bangalore, 19-21 Feb 2010 and presented a paper "The need of Land Information System in Municipal Planning", and (vii) national seminar on 'Look East Policy and North East India: Achievements and Constraints' at NEICSSR, Shillong, 26 -27 March 2010 and presented a paper on "Tourism: A link between India's North East and South East Asia."

Dr. S. Purkayastha attended: (i) international seminar on 'Water Crisis in the Indian Subcontinent: Issues and Challenges', Department of Geography, NEHU, Shillong, 23-25 November 2009 and presented a paper on "Water issues in Urban India- A Case Study of Shillong, Meghalaya", and (ii) national seminar on 'Environment and Conservation in North East India' at NEICSSR, Shillong, 5 June 2009 and presented a paper on "Urban growth and Water Pollution in Shillong."

**A. Yadav, Research Scholar, attended the international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Non-Timber Forest Products in Household Economics: A Case Study."**

**B. G. Pyngrope, Research Scholar, attended the international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Geomorphic Studies around Shella, East Khasi Hills."**

**B. Mawroh, Research Scholar, attended: (i) international seminar on 'Water Crisis in the Indian Sub-Continent, Issues and Challenges' at NEHU, Shillong, 23–25 November 2009 and presented a paper on "Scarcity of Water for Domestic Consumption in Cherapunjee", and (ii) international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Scarcity in Plenty : A Case study of Domestic Consumption of Water in the Rainiest Place of the Earth, Cherapunjee."**

**B. B. Ryntathiang, Research Scholar, attended the international seminar on 'Look East Policy and North East India, Achievements and Constraints' at NEHU, Shillong, 26-27 March 2010 and presented a paper on "Tourism: A Trade Link between India's North East and South East."**

**Ch. C. Mangalleima, Research Scholar, attended: (i) international conference on 'Land use Change, Biodiversity and Sustainable Resource Management' at CM Dubey PG College, Bilaspur, Chhatisgarh, 7-9 October 2009 and presented a paper on "Land Use Change, Biodiversity and Sustainable Resource Management", and (ii) international seminar on 'Water Crisis in the Indian Sub-Continent, Issues and Challenges' at NEHU, 23-25 November 2009 and presented a paper on "Inadequate Urban Water Supply in Imphal."**

**E. A. Kikon, Research Scholar, attended the international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Changing Land Use/ Land Cover Pattern in Upper Doyong River Catchment, Nagaland."**

**E. Al Huda, Research Scholar, attended: (i) international seminar on 'Water Crisis in the Indian Sub-Continent, Issues and Challenges' at NEHU, 23–25 November 2009 and presented a paper on "Floods in the Dikrong River Catchment", and (ii) international conference on 'Land use Change, Biodiversity and Sustainable Resource Management' at CM Dubey PG College, Bilaspur,**

Chhatisgarh, 7-9 October 2009 and presented a paper on "Hydrological Studies of Dikrong River Basin, North East India."

H. Laldinmawia, Research Scholar, attended the international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Urban Population and the Voting Behaviour in Mizoram, 2008."

K. C. Lalmalsawmzauva, Research Scholar, attended the 26<sup>th</sup> International Population Conference, IUSSP, Marrakech, Morocco, 27 September to 2 October 2009 and presented a paper on "Maternal Health Care Utilization in India: Role of Surface Road Networks."

K. Zou, Research Scholar, attended international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "A geographical Perceptive on HIV/AIDS Diffusion/Migration and Its Concept."

K. Z. K. Suante, Research Scholar, attended the international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Population Growth and Problems of Aizawl City."

L. T. S. Guite, Research Scholar, attended: (i) international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Internal Migration and Ethnic Conflicts among the Ethnic Groups of North East India", and (ii) national seminar on 'Environment and Conservation in North East India' at NEICSSR, Shillong, 5 June 2009 and presented a paper on "Strategies of Forest Conservation in Karbi Anglong."

M. Talukdar, Research Scholar, attended the international conference on 'Land Use Change, Biodiversity and Sustainable Resource Management' at CM Dubey PG College, Bilaspur, Chhatisgarh, 7-9 October 2009 and presented a paper on "Land Use Changes in Tinsukia District, Assam."

N. Kanungo, Research Scholar, attended the national seminar on 'Population, Development and Environment' at Banaras Hindu University, 18-20 February 2010 and presented a paper on "Perspectives on the Consumption of Urban Space in the Context of Liberalization: A Case Study of Shillong."

N. P. Meitei, Research Scholar, attended the international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University,

Bengaluru, 19-21 March 2010 and presented a paper on "Growth of Medical Facilities and Its Service Area in the Rural Areas of Imphal Valley, Manipur."

P. L. Gangte, Research Scholar, attended the international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Socio-Political Freedom and Participation and Quality of life: A Case Study of Churachanpur District, Manipur."

R. N. Behera, Research Scholar, attended: (i) international seminar on 'Water Crisis in the Indian Sub-Continent, Issues and Challenges' at NEHU, Shillong, 23-25 November 2009 and presented a poster on "Improved Drinking Water and Food Security: Inter and Intra-state Variation in Northeast India", and (ii) international seminar on 'Environment, Agriculture and Food Security in India' at Bangalore University, Bengaluru, 19-21 March 2010 and presented a paper on "Commercial Crops and Food Security Concerns in Rural Meghalaya."

### **Publications:**

#### **Published in India**

Lalmalsawmzauva K. C. and D. K. Nayak, 2008. Utilisation of Delivery Care in Champhai District: Role of Spatial Factors. *Geographic*, 3: 68-80.

Lalmalsawmzauva K. C. and D. K. Nayak, 2009. Determinants of Institutional Delivery in the Hill State of Mizoram. *Annals of the Association of Geographers, India*, 24 (1): 53-61.

Nayak, D. K. 2009. Book Review: Ageing in North-East India: Manipur Perspective, Vol. 5, edited by Sheikho hao Kipgen and Benjamin Natter and Ageing in Meghalaya, Vol.6 by Joshua Thomas and Fiasta T. Diengdoh, Akansha Publishing House, New Delhi. *The NEHU Journal* 7(1): 105-111.

Purkayastha. S. 2008. Population Dynamics and Distribution in North East India. *Hill Geographer*, 24 (1&2): 57-70.

Ryngnga, P. K. and I. Aier, 2009. Modeling Urban Sprawl of Shillong from 1971-2004. *Journal of North East India Council for Social Science Research*, 33 (1):52-57.

Ryngnga, P. K. and E. Khasyntiew, 2008. Development of Roads in Shillong. *Hill Geographer*, 24 (1&2):71-84.

### **Published Abroad**

Rekha Nianthi, K. W. G. and A. C. Mohapatra, 2009. Perceptions of the Paddy Communities Towards Climate Change in the Dry Zone of Sri Lanka. *Asian Journal of Environment and Disaster Management*, 1(2):165-179.

Walia, D. and B. S. Mipun, 2010. Hydrological Behavior of Umshing River, East Khasi Hills, Meghalaya, *Acta Geophysica*, online Vol-58, DOI: 10.2478/s11600-010-0018-5 Institute of Geophysics, Polish Academy of Sciences, Warsaw, 6572-6585.

### **Books/Book Chapters**

Mipun, B. S. 2009. Landuse Change in Meghalaya: Science and Technology-Drivers for a Common Future. In *Proceedings of the 2<sup>nd</sup> German-Indian Conference on Research for Sustainability: Energy and Landuse*, Federal Ministry of Education and Research, Bonn, 141-146.

Kumar, Y. and H. J. Syiemlieh, 2010. Vegetation and Plant Communities. In *Land Degradation and Ecorestoration in the Extremely Wet Monsoon Environment of Cherrapunji Area, India*, Eds.: S. Singh, S. Starkel and H. J. Syiemlieh, Bookwell Publications, New Delhi, 69-79.

Nayak, D. K. 2009. A Geographical Perspective on the Patterns of Aging in North-East India with Special Reference to the Tribal Areas. In *Ageism: Problems and Prospects*, Eds.: R. Sharma and C. Joshua Thomas, Akansha Publishing House, New Delhi, 135-162.

Purkayastha S. 2010. Population Growth of North East India: A Geographical Analysis. In *Population and Development in North East India*, Ed.: B. J. Deb, Concept Publishing Company, New Delhi, 85-98.

Ryngnga, P.K. 2010. Population Dynamics and Development Pattern in North Eastern Region: A Case Study of North East's Capital Towns. In *Population and Development in North East India*, Ed.: : B. J. Deb, Concept Publishing Company, New Delhi, 123-133.

Ryngnga, P. K. 2009. Bring Geography Alive at School Level vs Rediscovering Geography at Higher Educational level in India. In *Indian Geography in the 21<sup>st</sup> Century: The Young Geographers Agenda*, Ed.: : R. S. Singh, Cambridge Scholar Publishing House, UK, 128-145.

Singh, S., S. Starkel and H. J. Syiemlieh (Eds.), 2010. *Land Degradation and Eco restoration in the Extremely Wet Monsoon Environment of Cherrapunji Area, India*, Bookwell Publications, New Delhi.

Singh, S. 2010. Land Degradation in Degraded Hills- A Concept. In *Land Degradation and Eco restoration in the Extremely Wet Monsoon Environment of Cherrapunji Area, India*, Eds.: S. Singh, L. Starkel and H.J. Syiemlieh, Bookwell Publications, New Delhi, 1-27.

Singh, S. 2010. Modeling and Simulation Techniques- An Example from the Prediction of Summer Rice Yield in Upper Brahmaputra Valley. In *Proceedings, National Seminar on Research in Geography: Debate on Issues and Solutions*, Banaras Hindu University, Varanasi, 103-108.

Walia, D., B. S. Mipun, Th. Dolendro and K. Sharma, 2009. Morphometric Studies of Upper Umshing River Basin, East Khasi Hills, Meghalaya. In *Earth System Sciences, Vol. II*, Eds.: A. Kumar, R. S. Kushwaha and B. Thakur, Concept Publishing Company, New Delhi, 382-392.

#### **Fund received from agencies other than NEHU**

UGC (SAP) DRS           Rs. 3.5 lakhs

International Seminar   Rs. 2.25 Lakhs

#### **Infrastructure Facilities**

ArcGIS Master Lab Kit 8.4 Software-3 licenses, ERDAS Imagine 8.1 DIP Software-5 licenses, ENVI- 10 licenses, SPSS-5 licenses, A0 Colour plotter-1, Leica GPS56+ -1, Megallan HH GPS-1, 5 Mega pixel Digital Camera-1, A0 scanner, GARMIN 12 XL GPS. Soil and Water Testing equipment.

#### **Research Projects**

##### **Ongoing**

① Valuation of Community Natural Resources and Livelihood Systems. Principal Investigator: Prof. A.C. Mohapatra. Sponsored by UGC (under UPE).

② Studies on Health Status and Demographic Pattern of Population around Domiasat Area, West Khasi Hills, Meghalaya. Principal Investigator: B.Kharbuli (Co-Principal Investigators: Prof. D. K. Nayak and Prof. B. S. Mipun). Sponsored by BRNS, Mumbai.

Identification Strategy for Mapping of S&T Needs in Meghalaya. Co-Principal Investigator: Dr. H. J. Syiemlieh. Sponsored by Government of Meghalaya.

### **New**

Study of Women in Special Difficulties in Meghalaya—SWADHAR. Principal Investigator: Prof. A. C. Mohapatra. Sponsored by Department of Social Welfare, Government of Meghalaya, Shilong.

Role of Socio-Economic Determinants in Reproductive and Child Health care- A Case Study of Urban Poor Population of Shillong, Meghalaya. Principal Investigator: Dr. S. Purkayastha. Sponsored by UGC-SAP.

Traditional Periodic Market: An Appraisal Study of Cherrapunjee, Meghalaya. Principal Investigator: Dr. P. K. Ryngnga. Sponsored by UGC-SAP.

### **Completed**

Development of Data on Rainfall, Runoff and Soilloss Estimating SDSS for Extremely Humid Areas of the Central Meghalaya Plateau. Principal Investigator: Prof. S. Singh (Co-Principal Investigator: Dr. H. J. Syiemlieh). Sponsored by DST, New Delhi.

Landslide Mapping/Erosional Aspects, Vulnerability and Risk Assessment of Shillong Urban Area with Special Reference to Umshing Micro Watershed. Principal Investigator: Prof. B. S. Mipun. Sponsored by DST, New Delhi

### **Honours/Awards/Recognition:**

Mr. Rabi Narayan Behera, Research Scholar, received Young Geographers' Award for his research paper entitled "Commercial Crops and Food security in Rural Meghalaya: Percept and Implications from Social Geographic Perspective" from the Institute of Indian Geographers, in its 31st Annual Conference held at University of Bangalore, 19-21 February, 2010.

### **Other activities:**

The Department organized Refresher Course on Concepts and Methods in Geography, 31 August to 20 September 2009.

Prof. A. C. Mohapatra: (a) acted as chairperson, Curriculum Development Committee (CDC) Workshop of PG syllabus in Geography of Sikkim University, Gangtok, January 19-21 and February 14-15, 2010, (b) attended ICSSR sub-group meeting on '6<sup>th</sup> Round of Review of Research in Geography series' as

member (writer) on March 2, 2010, New Delhi, (c) delivered 5 lectures in UGC Refresher Course in Geography, ASC, NEHU, Shillong, September, 2009, and (d) attended the national seminar on 'Population, Environment and Development in North-East India' at Arya Vidyapeeth College, Guwahati, October 20-21, 2009.

Prof. S. Singh: (a) visited Krakow and Lublin, Poland under the Indo Polish Intergovernmental Program (October 2009) and delivered a few lectures on 'Agricultural Development in India' at Maria Curie Sklodowska University Lublin, Poland, 14-15 October 2009, (b) acted as coordinator, Refresher Course in Research Methods in Geography, (c) delivered a series of lectures on 'Advancement of Economic Ideas' in UGC Refresher Course in Economics at Academic Staff College, NEHU, Shillong, 10-30 June 2009, and (d) delivered lectures in 2<sup>nd</sup> Refresher Course in Geography and Earth Sciences, Academic Staff College, Banaras Hindu University, Varanasi, 28 January to 17 February 2010.

Prof. B. S. Mipun: (a) acted as convener of the workshop on "The New Security Agenda in the Northeast of South Asia" organized by BASAS U.K. and NEHU at NEHU, Shillong, 12-17 March 2010, (b) acted as resource person in the Summer School in Geography, Gauhati University and delivered two lectures on "Micro Level Area Study for Evolving Strategies for Sustainable Development", (c) delivered four lectures in the Refresher Course in Geography, NEHU, 15-18 September 2009, and (d) delivered 4 lectures on GIS and RS in the Refresher Course in Geography, Mizoram University, 17-18 February 2010 and 2 lectures on application of RS/GIS in Social Science Studies.

Prof. D. K. Nayak: (a) acted as resource person in DST Sponsored Summer School, Gauhati University, Guwahati, 7-28 July 2009 and delivered lectures on "Population Displacement and Associated Issues in Micro-regional Context and Micro-level Study of Socio-Economic Wellbeing: Concept, Approach and Case Study Approach", (b) delivered a lecture as a resource person in the Training Programme in Disaster Risk Management for nodal officers at MATI, Shillong, 25-29 May 2009, on "Earthquake: Causes, Mitigation Measures and Do's and Don't's", (c) delivered three lectures as a resource person in the Training on 'Hazard Specific Earthquake Risk Management for Principals/Vice Principals, Members of Management Board of Secondary and Senior Secondary Schools and Lecturers' at MATI, Shillong, 26-28 August 2009 on "Elementary Seismology", "Human Settlement Vulnerability and Risk Management" and "Can We Predict Earthquake", (d) delivered a series of lectures in Refresher Courses in

Geography, Sociology and Political Science, and (e) appointed UGC Nominee to the DRS-II Special Assistance Programme of the Department of Geography, North Bengal University.

Prof. Z. H. Qureshi: (a) acted as convener of the international seminar on "Water Crisis in the Indian Subcontinent: Issues and Challenges", Department of Geography, NEHU, Shillong, 23-25 November 2009, (b) acted as convener of the national seminar on 'Environment Degradation in North East India' at NEICSSR, Shillong, 5 June 2009, (c) convener of the national seminar on "Look East Policy and Northeast India: Achievements and Constraints" at NEICSSR, Shillong, 26-27 March 2010, and (d) delivered four lectures as a resource person in Refresher Course in 'Concepts and Methods in Geography', Department of Geography, NEHU, Shillong, August-September 2009.

Dr. H. J. Syiemlieh: (a) was one of the team members of the Indo-Japan Collaboration: from Disaster Prevention Research Institute, Kyoto University on 'Climate Change in South Asia', and (b) attended the international seminar on 'Environmental History and Politics in North-east India' at Assam University, Silchar, 25-26 February 2010.

Dr. L. C. Cajee was the Organising Secretary of the international seminar on 'Water Crisis in the Indian Subcontinent: Issues and Challenges' organized by Department of Geography, NEHU, Shillong, 23-25 November 2009 and delivered six lectures as a resource person in the Refresher Course on 'Concepts and Methods in Geography', Department of Geography, NEHU, Shillong, August-September 2009.

Dr. P. K. Ryngha acted as resource person in a Joint Programme of Spring of Wisdom Library in collaboration with IGNOU and State Council for Science, Technology and Environment (SCSTE) Meghalaya to celebrate the International Year of Astronomy on 14 November 2009 at KJP Institute of Technology, Shillong, and also delivered a lecture on "Astronomy and Mankind."

## DEPARTMENT OF RURAL DEVELOPMENT AND AGRICULTURAL PRODUCTION

**Head** : Prof. S. C. Srivastava (up to 21.09.2009)  
Dr. S. K. Nanda (from 22.09.2009)

**Telephone** : (03651)-221407 (O) 09436702498 (M)

**E-mail** : nanda\_subrat2@yahoo.com

**Thrust Areas of Research:** The Department primarily puts major thrust on interdisciplinary research pertaining to various aspects of rural development. It also emphasizes on research studies in the area of agricultural production, especially to the field of horticulture, agronomy, dairy development and animal husbandry. The basic objective of research programme in the Department is to contribute to the body of theoretical, conceptual and applied knowledge in the fields of rural development and agricultural production with special reference to Northeast India.

**Brief Statement of Academic Activities:** The Department undertakes both teaching and research programmes in rural development and agricultural production. The latter is mainly related to the fields of horticulture, agronomy, dairy and animal husbandry. Both theoretical and practical knowledge are imparted to the post graduate students admitted to the Department every year. Eligible students were admitted to the Ph.D. programme of the Department to do research in different areas of rural development, horticulture, agronomy, dairy and animal husbandry. In addition to this, the Department was also involved in carrying out consultancy services and project works. Besides, the third and fourth semester postgraduate students of the Department interacted with the people of several villages as resource persons under the Students' Outreach Programme which was introduced in 2007-08 to assist the local NGOs on issues relating to the implementation of various rural developmental programmes.

### Faculty

**Professors** : S. C. Srivastava, Ph.D. (Allahabad)

**Associate Professors** : L. R. Saha, Ph.D. (RAU)  
S. K. Nanda, Ph.D. (JNU)  
D. C. Kalita, Ph. D. (AAU)

Assistant Professors : J. P. Jaiswal, M. Sc. (Allahabad)  
 B. K. Mishra, Ph.D. (BHU)  
 B. Mathew, Ph.D. (BCKV)  
 L. S. Pereira, Ph.D. (BCKV)

**Student Intake**

Enrolment capacity : M.Sc.: 25, Ph.D.: Variable

Actual Admission : SC ST Gen Male Female Meghalaya/ Outside  
 Meghalaya

M.Sc. - 22 3 6 19 25 -

Ph.D. - 6 2 5 3 6 2

**Degrees Awarded** : SC ST Gen Male Female Total

M.Sc. - 18 - 8 10 18

**Placement of Students:** The Council for Advancement of People's Action and Rural Technology (CAPART), New Delhi, through its Guwahati Regional Centre has been regularly recruiting the students of the Department for jobs of Young Professionals since the first batch. On average, four students are recruited by the organization every year. In the academic session 2009-10, 5 out of 11 students were recruited by CAPART. Apart from this, some of the students of this batch were absorbed by different non-governmental organizations (NGOs), rural development societies, schools and colleges.

**Courses Conducted:**

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 Organisations, Institutions and Administration; Production Technology of Fruits and Plantation Crops; Rural Development Planning and Project management; Commercial Floriculture and Landscaping; Dairy Farming and Rural Development; Economic Reforms and Rural Development.

Semester-IV : Rural Marketing and Entrepreneurship Development; Research Methods; Agricultural Surveying and Levelling; Rural Credit and Micro-Finance; Production Technology of Vegetables and Spices; IEC and Rural Development; Post Harvest management of Horticultural Crops; Micro-Enterprise and Non-Farm Sector Development; Minor Horticultural Crops.

#### **Study Tours/Field Trips of Students:**

Dr. S. K. Nanda, as teacher-in-charge, accompanied the third semester students for their academic study tour to Bhubaneswar and Cuttack in Orissa from 31 January to 11 February 2010. The main purpose of the study tour was to acquaint the students with the rural development works and agricultural programmes at Orissa University of Agriculture and Technology and KIIT University in Bhubaneswar, Orissa. The students also visited some villages nearby Puri city to learn about rural entrepreneurship programmes.

As field trips are an integral part of the syllabus of the PG programme of the Department, the students periodically visited different villages to interact with the beneficiaries of various government programmes. They also visited several local organizations involved in implementations of various rural developmental, horticultural and livestock and dairy developmental programmes. Further, students were also taken to various commercial horticultural farms, orchards, organic farms, dairy and livestock units located in nearby places. All such visits were assignment-oriented and marks were awarded on the basis of the reports submitted by the students. The course-in-charges and the technical assistants of the Department were regularly associated with such types of visits.

#### **Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

##### **Organized**

The Department organized a national seminar on 'Rural Empowerment in Northeast India' on 26-27 November 2009. Dr. S. K. Nanda was the convener of the seminar. The seminar inter alia recommended the following: rural

empowerment should focus on enhancement of power in social, cultural, legal, political, educational, economic, technological, organizational, etc., dimensions; empowerment women and weaker sections, especially poorest of the poor, should be given top priority; self-help group is one of the effective mediums of rural empowerment in Northeast region; local traditional and modern self-governing units should be given more power in decision-making and participation of rural development programmes and finally the local cultural context should be paid more attention and empowerment should be context specific as there is no fixed model of empowerment.

### **Attended**

Dr. S. K. Nanda attended: (a) national seminar on 'Microfinance Revolution: Understanding its Success and Sustainability' on 19-20 June 2009 at the Department of Management, NEHU, Tura Campus and presented a paper on "Microfinance for Rural Development: Gender and Cultural Issues with Special Reference to Northeast India", (b) national seminar on 'Folklore and A'chik Literature' organized by the Department of Garo, NEHU, Tura Campus, 29-30 October 2009 and presented a paper entitled "Globalization and Folklore with Special Reference to Northeast India", (c) national seminar on 'Culture and Ethnic Persistence: Towards Understanding Identities' at the Department of English, NEHU, Tura Campus, 5-6 November 2009 and presented a paper entitled "Ethnicity in the Context of Northeast India: Towards a Conceptual Perspective", and (d) national seminar on 'Rural Empowerment in Northeast India' organized by the Department of RDAP, NEHU, Tura Campus, 26-27 November 2009 and presented a paper on "Rural Empowerment: Understanding its Theoretical Practical Dimensions."

Prof. S. C. Srivastava attended national seminar on 'Rural Empowerment in Northeast India' organized by the Department of RDAP, NEHU, Tura Campus, 26-27 November 2009 and chaired the technical session on "Women, Gender and Rural Empowerment."

Dr. D. C. Kalita attended national seminar on 'Rural Empowerment in Northeast India' held on 26-27 November 2009 and presented a paper on "Women Empowerment through Participation in Assam."

Dr. B. K. Mishra attended: (a) national seminar on 'Micro-Finance Revolution: Understanding its Success and Sustainability' organized by the Department of Management, NEHU, Tura, Campus, 19-20 June 2009 and presented a paper entitled "A Study of Performance Management and its

Relevance in Select Microfinance Institution”, (b) 12<sup>th</sup> Indian Agricultural Scientists and Farmer’s Congress organized by BIOVED, Research Institute of Agriculture and Technology, Allahabad, 20-21 February 2010 and presented a paper entitled “Setting-up and Management of Feasible Dairy Farms”, (c) 3-day training programme on ‘Development Livestock Management and Healthcare under SGSY’ organized by SIRD, Meghalaya at Tura Circuit House and presented a talk on “Management Development, Healthcare and Feeding of Livestock”, and (d) Indian Tourism Congress in Bangkok on 24-26 June 2009 and presented a paper entitled “Challenges of Promoting Rural Tourism in Garo Hills of Meghalaya.”

### **Publications:**

#### **Published in India**

Ghosh, S. N. and B. Mathew, 2009. Season of Cutting and Air Layering in Pomegranate cv. Ganesh Influenced by Season. *The Horticulture Journal*, 22 (1): 43-45.

Mishra, B. K. 2009. Scenario of Livestock and Dairy Development in North-East Region. *Journal of Natural Resource and Development*, 2(2):167-171.

Nanda, S. K. 2009. Nationalism in Global Era: A Case Study of Northeast India. *The NEHU Journal*, 7(1):43-66.

#### **Books/Book Chapters**

Mishra, B. K. 2010. Resource Potentiality and Production Efficiency: A Case Study. In *Development Scenario of Northeast India*. Ed.: J. U. Ahmed, DVS Publications, Guwahati, 376-381.

Mishra, B. K. 2010. Dairying as a Means of Livelihood for Rural Poor and Educated Unemployed Youth in N.E. Region of India. In *Development Vision of Northeast India*. Ed.: J. U. Ahmed, Concept, New Delhi, 279-304.

Nanda, S. K. 2010. Socio-Cultural Factors in Entrepreneurship Development in Northeast India: Some Reflections. In *Development Vision of Northeast India*. Ed.: J. U. Ahmed, Concept, New Delhi, 75-99.

Nanda, S. K. 2010. Sociology in Northeast India: A Synoptic View. In *Sociology in India: Intellectual and Institutional Practices*. Ed.: M. Chaudhuri, Rawat Publications, Jaipur, 139-154.

**Infrastructure Facilities:** The Department continues to maintain the farm, which contains an instructional dairy unit, fishery pond, areas for plantation and other horticultural crops and areas for field crops. One paddy straw shed was added to the existing facilities of vermin-compost unit, net house, poly house and heifer shed. During 2009-10, the dairy unit of the Department, in addition to its instructional role, produced nearly 37,000 litres of milk, which earned a total revenue of over Rs. 4 lakhs to the university.

### **Research Projects:**

#### **Ongoing**

Village Knowledge Connectivity. Coordinator: Prof. S. C. Srivastava  
Sponsored by DRDA, West Garo Hills, Meghalaya.

#### **Completed**

Studies on Effect of in situ Rainwater Harvesting Technique on Field Establishment and Growth of Mandarin Orange and Guava Sapling in West Garo Hills of Meghalaya, Principal Investigator: Dr. B. Mathew. Sponsored by UGC, New Delhi.

### **Academic/Professional Collaboration**

The Department has undertaken professional collaboration with (i) NIRD-Regional Centre, Guwahati and NIRD Headquarters, Hyderabad, (ii) CAPART and Institute of Applied Manpower Research, New Delhi, (iii) SIRD, Guwahati, and (iv) ICAR Research Complex, Northeast Hill Region, Barapani for practical experience and improvement of techniques relating to rural development and agricultural production. The Department has also developed networking with the local NGOs so as to enable the third and fourth semester postgraduate students to interact directly with the villagers in nearby areas.

### **Honours/Awards/Recognition:**

Dr. B. K. Mishra was conferred Young Scientist Award 2010 for his outstanding contribution to the field of Rural Development and Agricultural Production on the occasion of 12<sup>th</sup> Indian Agricultural Scientist and Farmers' Congress by BIOVED Research Society, Allahabad.

### **Other Activities:**

Dr. B. K. Mishra attended the Refresher Course in Agriculture conducted by UGC-Academic Staff College, BHU, Varanasi, 5-25 January 2010.

Dr. L. S. Pereira attended the 8<sup>th</sup> Orientation Programme (General) conducted by UGC-ASC, NEHU, 29 March to 26 April 2010.

## IV

# SCHOOL OF HUMANITIES

**Dean** : Prof. T. Ao

**Telephone** : 2723501 (O), 2550642 (R), 9436103239 (M)

**E-mail** : [deanshe@nehu.ac.in](mailto:deanshe@nehu.ac.in)

**T**he School of Humanities and Education has been bifurcated to create School of Humanities and School of Education. The School of Humanities now comprises the Departments of English (separate Departments at Shillong and Tura campuses), Garo (at Tura), Hindi, Khasi, Linguistics and Philosophy. Apart from the regular teaching and research work, the Departments have been organizing Refresher Courses, Seminars and Workshops in collaboration with outside agencies from time to time. The Department of English organized (i) a Refresher Course on "Philosophy of Literature, Language, Meaning and Ideology", (ii) a National Seminar on "Society and Literature: Interdisciplinary Transaction" in collaboration with the ICSSR (NERC), Shillong and (iii) a National Poetry Conference on Indian English Poetry: The Last Twenty Five Years" in collaboration with the Indian Association of Commonwealth Literature and Languages Studies (ICLALS) and Sahitya Akademi, New Delhi. The Department of Linguistics organized (i) a Workshop on "Mother Tongue Survey in India" in collaboration with Ministry of Home Affairs, Office of the Registrar General, Indian Language Division, Kolkata, and (ii) a Refresher Course on "Critical Tradition and Khasi Language and Literature". The Department of Hindi organized (i) a National Seminar on "Purvottar Ki Bhashaon Mein Takniki Shabd Anuprayog Evam Samashyen" in collaboration with the Commission for Scientific and Technical Terminology, MHRD, New Delhi, (ii) a National Seminar on "Dalit Vimarsh Aur Hindi Ka Sant Sahitya", and (iii) a Refresher Course on "Hindi Alochana".

## DEPARTMENT OF ENGLISH (Shillong)

**Head** : Dr. M. M. Mazumdar  
**Telephone** : 2723503, 2723513 (O), 9436104897 (M)  
**Email** : [moonzip2002@yahoo.co.in](mailto:moonzip2002@yahoo.co.in)

**Thrust Areas of Research:** Emerging trends in British Literature, Post-Colonial Literature, American Literature, New Literatures and Literature in Translation. The Department also focuses on engaging with theory for understanding and analyzing texts. Attempts are being made to study Literatures of North-East written in English. Comparative and Translation Studies are also being done. Interdisciplinary studies involving theatre, performance, music, history, anthropology and films have been carried out. Popular culture and folk traditions are also being studied.

**Brief Statement of Academic Activities:** The Department in collaboration with the Indian Association of Commonwealth Literature and Language Studies (IACLALS) organized a Poetry Conference on "Indian English Poetry: The Last Twenty Five Years" from 29-31 October 2009. The Conference celebrated on a large scale the entire vista of Indian English Poetry. Poetry readings along with critical works on Indian English Poetry were the primary foci of the Conference. Celebrated Indian English poets including Keki Daruwalla, Hoshang Merchant, Arundhati Subramaniam, Mamang Dai and many more read out their poems. Practising poets and scholars of the North East like Temsula Ao, Esther Syiem, Robin Singh, Ananya Guha also read out their compositions. The Department organized a Refresher Course on "Philosophy of Literature: Language, Meaning and Ideology". The Department in collaboration with the ICSSR (NERC), Shillong organized a National Seminar on "Society and Literature: Interdisciplinary Transactions". The Department collaborated with the Shillong Forum for English Studies and Cambridge University Press India Ltd. to successfully publish an Anthology of Poetry for Undergraduate Students (Pass and Honours) under NEHU, entitled The Looking Glass, in April 2010. The Department collaborated with the Shillong Forum for English Studies and Orient Black Swan India Ltd. to successfully publish an Anthology of Short Plays and Biographies for Undergraduate Students (Pass and Honours) under NEHU entitled Time's Inscriptions.

**Faculty:**

Professors : T. Ao, M.A. (Gauhati), DTE (CIEFL), Ph.D. (NEHU)  
E. Syiem, M.A. (Delhi), M.Phil., Ph.D. (NEHU)

Associate Professors : M. M. Mazumdar, M.A. (NEHU), DDE (IGNOU), Ph.D. (NEHU)

M. Renganathan, M.A. (Madurai), M.Phil. (Pondicherry), Ph.D. (Madurai)

S. Bhattacharjee, M.A., M.Phil., Ph.D. (NEHU)

U. Sewa, M.A., M.Phil., Ph.D. (NEHU)

K. S. Nongkynrih, M.A., Ph.D. (NEHU)

N. Syiem, M.A. (NEHU), M.Phil. (Delhi)

N. Ganguly, M.A. (NEHU)

Assistant Professors : Ng. R. Singh, M.A. (NEHU)

L. K. War, M.A. (NEHU)

N. Chaturvedi\*, M.A. (Delhi), M.Phil. (Delhi)

(\* resigned in May 2009)

S. Choudhury, M.A. (Assam Univ.), M.Phil. (Calcutta)

**Visiting Professors/Fellows/Scholars:** G. Chakrabarti from RLA College, University of Delhi (South Campus) visited the Department on 20.04.2009 and delivered a lecture on "Literature, Politics and Culture". Prof. H. S. Shivaprakash from JNU, Delhi visited the Department on 8.9.2009 and delivered a lecture on "Contemporary Indian Drama". Dr. Himadri Lahiri from Burdwan University visited the Department on 4.3.2010 and delivered a lecture on "Eco- criticism: Environment as Text".

**Student Intake:**

Enrolment capacity : M.A. : 50

Actual Admission : SC ST OBC Gen Male Female Meghalaya /  
Other States

M.A. : 01 49 - 02 10 42 33 19

M.Phil. : - 11 - 03 07 07 07 07

Ph.D. : - 11 - 02 06 07 10 03

**Degrees Awarded** : SC ST OBC Gen Male Female Total

M.A. : - 35 - 06 09 32 41

Ph.D.:

A. Datta, Writing Differences: A Feminist Reading of Women in Love, Tess of the D'Urbervilles and The French Lieutenant's Woman. Supervisor: Dr. Utpala Sewa

J. S. Wahlang, Momaday and the Land Ethic: A Study of his Writings with special reference to House Made of Dawn. Supervisor: Prof. T. Ao

**Courses Conducted:**

M.A. (Old Course)

Semester I : Poetry I, Fiction I, Drama I, Literary Theory & Criticism I

Semester II : Poetry II, Fiction II, Drama II, Environment & Indian Writing in English

Semester III : Poetry III, Fiction III, Literary Theory & Criticism II, Optionals: Commonwealth Literature /American Literature/World Literature in Translation

Semester IV : Shakespeare, Drama III, Literary Theory & Criticism III, Optionals: Women's Writing/American Literature II

M.A. (New Course)

Semester I : Poetry I, Fiction I, Drama I, Literary Theory & Criticism I, American Literature I

Semester II : Poetry II, Fiction II, Drama II, Literary Theory & Criticism II, Commonwealth Literature (Option A), World Literature in Translation (Option B)

Semester III : Poetry III, Shakespeare I, Literary Theory & Criticism III, American Literature II, Indian Fiction in Translation (Option A), Women's Writing (Option B)

Semester IV : Fiction III, Drama III, Shakespeare II, Literary Theory & Criticism IV, Environment & Indian Writing in English

**Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

**Organized**

The Department in collaboration with the Indian Association of Commonwealth Literature and Language Studies, IACLALS organized a Poetry

Conference on “Indian English Poetry: The Last Twenty Five Years” from 29-31 October 2009.

The Department in collaboration with the ICSSR (NERC), Shillong also organized a National Seminar on “Society and Literature: Interdisciplinary Transactions on 16-18 March 2010 (Academic Coordinator: Dr. S. Bhattacharjee)

### **Attended**

Prof. T. Ao (i) participated in the London Book Fair from 20<sup>th</sup> to 25<sup>th</sup> April 2009, presented a paper in the session Literature of Conflict and participated in Author Reading and Discussion at Derbyshire, (ii) participated in the Seminar “Turning Point: New Writings from the North East” 13<sup>th</sup>-14<sup>th</sup> October 2009 organized by Siyahi and India Habitat Centre and read own poems on at New Delhi, (iii) participated in the Seminar on “Indian English Poetry: the last 25 years and the North-East” from 29-31 October 2009 organized by the Department of English, NEHU and Poetry Society of India at Shillong and presented a paper on ‘North-East Poetry in English’ and read own poems, (iv) participated in the Writers’ Meet cum Seminar organized by Sahitya Akademi 6<sup>th</sup> and 7<sup>th</sup> January 2010, New Delhi and presented a paper on ‘Why Do I Write, How Do I Write?’, (v) chaired the inaugural Session of the 19<sup>th</sup> New Delhi World Book Fair on 30<sup>th</sup> January 2010 and delivered the Chairperson’s Remarks, (vi) presented a paper on ‘Ao Naga Language’ in the Seminar organized by Bhasha Research and Publication Centre, Baroda on Bharat Bhasha Confluence, Baroda during 7<sup>th</sup>-9<sup>th</sup> March 2010, (vii) attended International Symposium on “Inter-cultural Dialogue between North-East India and South-East Asia” organized by Indira Gandhi National Centre for the Arts, New Delhi and North-East India Studies Programme, Jawaharlal Nehru University, New Delhi during 17<sup>th</sup> to 20<sup>th</sup> March 2010 and presented a paper in the session on Orality and the Literary Traditions: Contemporary Literature of the North-East, and (viii) attended National Seminar on “Society and Literature: Interdisciplinary Transactions” organized by the Department of English, NEHU, Shillong in collaboration with ICSSR (NERC) and IAS, Shimla during 16<sup>th</sup> to 18<sup>th</sup> March 2010 and presented a paper on ‘Orality and Society’.

Prof. E. Syiem (i) acted as one of the panelists in the Fifth Plenary Session of the International Symposium on “Inter-Cultural Dialogue between North-East India and South-East Asia” organized by Indira Gandhi National Centre for the Arts (IGNCA), New Delhi and North-East India Studies Programme (NEISP), JNU, New Delhi on 17-20 March 2010 held in New Delhi, (ii) presented a paper

entitled "Navigating the Written, The Challenge to the Oral: the Origin Myth and the Lost Script of the Khasis" at the UGC-SAP DRS-II, CES, SLL & CS, JNU International Seminar on "Indian and Cross Cultural Approaches to Marginality" during 22-24 March 2010 at JNU New Delhi, (iii) presented a paper entitled "Scripting the Oral: Ki Jingsneng Tymmen" at National Seminar on "Society and Literature: Interdisciplinary Transactions" organized by the Department of English, NEHU in collaboration with ICSSR-NERC during 16 -18 March 2010, and (iv) chaired one session in the National Seminar on "Crime Against Women-A North East Perspective" organized by Lady Keane College, Shillong on 27<sup>th</sup> and 28<sup>th</sup> August 2009.

Dr. S. Bhattacharjee (i) presented a paper entitled 'Eastern Stereotypes in a Globalized World' at the International Workshop and Dialogues Session on "Social Theory and Asian Dialogues: Cultivating Planetary Conversations" held at Chulalongkorn University, Bangkok, Thailand on 14<sup>th</sup>-15<sup>th</sup> December 2009, (ii) presented a paper entitled 'Whose War? Whose Peace?: Issues of Boundary Crossings in Northeast India' at the National Seminar on "The Politics of Boundary Maintenance in Northeast India", held on 16-18 November 2009 at IAS Shimla, (iii) presented a paper entitled 'Swaraj in Ideas and the Body: Reading Irigaray, Cixous and Kristeva' at the National Seminar on "Swaraj, Culture and Education" held at Assam University on 7<sup>th</sup>- 9<sup>th</sup> January 2010, (iv) presented a paper entitled 'The Language of Rights and the Other' at the National Seminar on "Democracy, Identity and Group Rights: Locating the Northeast Indian experience in a Comparative Perspective" held on 22<sup>nd</sup> and 23<sup>rd</sup> March 2010 at Women's College Shillong, and (v) presented a paper entitled 'Religious Symbols and Cultural Discourses' at a National Seminar on "Religion and Society in North East India from the 18<sup>th</sup> Century to contemporary times" organized by the Department of History NEHU, Shillong on 26<sup>th</sup>-28<sup>th</sup> November 2009.

Dr. U. Sewa presented a paper entitled 'Constructing Identities through Folk Cultures: the Nepali Context' in the National Seminar on "Literature and Society: Interdisciplinary Transactions" organised by the Department of English during 16-18 March 2010.

Dr. K. S. Nongkynrih (i) attended as a resource person the "Free the Word Festival" organised by International PEN in London on 18 April 2009 and participated in a programme called "International Futures" at Shakespeare's Globe (Under Globe), (ii) attended as a resource person a "Workshop on Poetry" and read out self-composed poems in the Poetry Festival, "Reading by Welsh and Indian Poets" organised by Welsh Academi and Writers' Chain at the Wales

Millennium Centre, Cardiff on 24 April 2009, (iii) attended a Poetry Reading organised by the Collective Press in Abergavenny, Wales on 28 April 2009 and read out self-composed poems, (iv) performed a "Solo Poetry Reading" at the Dylan Thomas Centre organised by the Dylan Thomas Centre in Swansea on 1 May 2009, and (v) attended as a resource person the Workshop on "Encyclopaedia of Indian Poetics" organised by Sahitya Akademi in Shillong from 25 to 27 October 2009.

Mr. Ng. R. Singh (i) attended Seminar on "Writer's Response to the Contemporary Situation of North-East India" organized by the Department of Art & Culture, Govt. of Manipur and NEZCC, Dimapur on 28 June 2009 at Imphal and presented a paper entitled 'North-East Poetry and the Contemporary Situation', (ii) read poems in "All India Writers' Meet" organized by the Sahitya Akademi, from 12-13 August 2009 in Bangalore, and (iii) read poems in North-East Kavi Sammelan of "Octave 2010" organized by the North Central Zone Cultural Centre, Allahabad on 15 February 2010 in Lucknow.

#### **Publications:**

Ao, T., 2009. Heritage. *Indian Literature*, 254: 153-156

Syiem, E., 2009. U Ksuid Tynjang, Memoirs of a Distracted Lover, Only for the Bird-Brained. *Kavya Bharti*, 20<sup>th</sup> Anniversary Special-II: No. 21.

Bhattacharjee, S., 2010. Review Article of Aparna Basu and Malavika Karlekar eds. In *So Many Words: Women's Life Experiences from Western and Eastern India* (New Delhi: Routledge. 2008). *Indian Journal of Gender Studies*, 17: 175-183.

Bhattacharjee, S., 2009. Gendered Constructions of Identity in Northeast India. *Eastern Quarterly*, 5: 104-114.

Nongkynrih, K. S., 2009. Poem "Laitkynsew". *PEN International*, 59 (No. 1): 96.

Nongkynrih, K. S., 2009. Poem "Sundori". *The Little Magazine*, 8 (No. 1 & 2): 30.

Nongkynrih, K. S., 2009. English Translations of 5 of Soso Tham's Poems. *Indian Literature*, 250: 248.

Nongkynrih, K. S., 2009. Poems "The Fungus" & "The Colours of Truth". *The Literary Review*, 52 (No. 3): 224.

Singh, Ng. R., 2009. After "Jash-e-Azadi" 'Houses'. *The Literary Review: An International Journal of Contemporary Writing*, 52: No. 3.

**Books/Book Chapters/Anthology/Proceedings:**

Nongkynrih, K. S., 2009. Poems "Lawsotun" & "Forebodings". In *The Other Side of Terror: An Anthology of Writings on Terrorism in South Asia*, Ed.: N. Majumdar, Oxford University Press, New Delhi, p. 324.

Ao, T., 2009. *Laburnum for My Head (Short Stories)*. Penguin Books India, New Delhi.

Ao, T., 2009. 'Sonny' (a short story). In the book "Fear Factor: Terror Incognito". Ed.: M. Bharat, Sharon Rundle, Picador, London, pp. 89-103.

Syiem, E., 2009. Poetry Publication in Dancing Earth: An Anthology of Poetry from North-East India. *The Fable of the Mustard Seed, Suburban Friends*. Ed.: Ng. R. Singh and K. S. Nongkynrih, Penguin Books India.

Syiem, E. (Co-editor), 2010. *The Looking Glass NEHU Anthology for BA Pass and Major* Cambridge University Press India Pvt. Ltd.

Syiem, E. (Co-editor), 2010. *Time's Inscriptions NEHU Anthology for Literature*, Orient BlackSwan Pvt. Ltd.

Mazumdar, M. M., 2010. Rushdie, Aijaz Ahmed and the Question of Post Colonial Legitimacy. *Understanding India: Studies in Indian English Fiction*. Booksway Kolkata: pp. 93-100.

Mazumdar, M. M., 2010. Family and Sexuality in The God of Small Things. *Understanding India: Studies in Indian English Fiction*. Booksway Kolkata: pp. 124-130.

Renganathan, M., 2010. "To Keep My Light Burning: Representation of Women in Shashi Deshpande's *Intrusion* and Other Stories." *Understanding India: Studies in Indian English Fiction*. Kolkata. Booksway Kolkata: pp. 108-123.

Bhattacharjee, S., 2010. The Possibilities of Language: The 'Forked Paths of Meaning'. In *Materialism and Immaterialism in India and the West: Varying Vistas*, Ed.: P. Ghose, Vol. XII: Part 5 of History of Science, Philosophy and Culture in Indian Civilization, General Ed.: D.P. Chattopadhyaya, PHISPC, Centre For Studies in Civilizations, New Delhi, pp. 577-590.

## School of Humanities

Bhattacharjee, S., 2010. Global Transactions: Recasting the Kali. In *Literary Transactions in a Globalized Context: Multi-Ethnicity, Gender and the Marketplace*, Eds.: D. Lahiri et al., World View Publications, New Delhi, pp. 169-180.

Nongkynrih K. S., 2009. *Ka Jingiapeiñ jong ka Por: Ki Haiku bad Senryu*. Pine Cones & Ri Khasi Book Agency Shillong, 96 pages.

Nongkynrih K. S. (Co-editor), 2009. *Dancing Earth: An Anthology of Poetry from the Northeast*, Penguin, New Delhi, P 326.

Singh, Ng. R., 2009. "Poetry in a Time of Terror" and 'Native Land', in *The Other Side of Terror: An Anthology of Writings on Terrorism in South Asia*. Ed.: N. Majumdar, Oxford University Press, New Delhi.

Choudhury, S., 2009. Politics of Nation and Community in Selected Partition Narratives, in *Anxieties, Influences and After: Critical Responses to Post colonialism and Neocolonialism*. Eds.: B. Kaustav, S. Samrat, P. Subhadeep, Worldview Publications, Kolkata, pp. 386-393.

### **Honours/Awards/Recognition:**

Prof. T. Ao received Governor's Award (Nagaland) for Distinction in the field of Literature, 2009 on 26.1.2010 in Kohima.

### **Other Activities:**

The Department organized a Refresher Course (Course Coordinator: Dr. S. Bhattacharjee) on "Philosophy of Literature: Language, Meaning and Ideology from 23 February to 15<sup>th</sup> March 2010., Reader of the Department successfully conducted this Refresher Course.

Prof. E. Syiem (i) delivered two lectures, "Representing the North-East through Literature", in the UGC sponsored Orientation Course held by the Department of Education, NEHU, Shillong on 7<sup>th</sup> and 8<sup>th</sup> April 2009, (ii) delivered three lectures, Khasi Aesthetics, in the UGC sponsored Orientation Course held by the Department of Khasi, NEHU, Shillong on 12<sup>th</sup> - 14<sup>th</sup> November 2009, and (iii) was the Co-convener of the National Poetry Conference on Indian English Poetry: The Last Twenty-Five Years organized by the Department of English from 29-31 October 2009.

Dr. M. Renganathan delivered (i) A lecture on "MLA Style" in the Centre for Adult & Continuing Education, NEHU, Shillong on 22.03.2010, and (ii) represented

the Department and participated in the British Council's "Focus Group Discussion on Curriculum Development in Indian Universities" held on 17 September 2009 in British Council, Kolkata.

Dr. K. S. Nongkynrih (i) moderated the Seminar on "The Contribution of Newspapers to Khasi Literature" organised by Mawphor in Shillong on 2 October 2009, (ii) attended a meeting of the "Madhya Pradesh Government Award Committee" as one of the judges to select winners for the various national awards conferred by the state, (iii) delivered lectures at the Refresher Course of the Khasi Department on 16 and 17 September 2009, (iv) judged the *Phawar* (traditional Khasi gnomic poetry) Competition organised by Seng Khasi in Shillong on 21 November 2009, (v) attended a series of seminars, lectures and readings organised by British Council from 18 to 25 April at the London Book Fair 2009 and other external venues in London as part of the events entitled "India: Through Fresh Eyes", and (vi) attended the Workshop on "Teaching of Literature - Understanding Poetry" organised by Tirok Sing Memorial College, Mairang, on 14 November 2009.

Ms. S. Choudhury participated in CSSSC-NRT Annual Workshop on "Violence and Violation" for Doctoral and Post doctoral Scholars, 2009 held at the Centre for Studies in Social Sciences, Kolkata from 4 -10 November 2009.

## DEPARTMENT OF ENGLISH (TURA)

**Head** : Dr. J. Prodhani  
**Telephone** : 3651-223628 (O) 9436315650 (M)  
**Email** : rajaprodhani@gmail.com

**Thrust Areas Of Research:** Cultural Studies and Translation, Dalit and Ethnic Literature, Indian and Postcolonial Literature, Popular Culture, Film Studies, Contemporary Fiction, Narrative Studies, Women and Gender Discourse, Theatre Studies, Future Studies.

## School of Humanities

**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 imbibe research oriented interest among the Master's Level students. A research Journal Protocol, a journal for translation, creative and cultural 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. Poets meet and workshop on creative writing, and National Seminars 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 socio-cultural awareness.

### Faculty:

Professor	:	S. Gurudev, M.A., M.Phil., Ph.D. (NEHU)
Associate Professors	:	J. Prodhani, M.A. (Pune), Ph.D. (NEHU)
Assistant Professors	:	R. S. Thakur, M.A. (Patna)
		A. R. W. Ingty, M.A. (Gauhati), M.Phil. (Madras), PGDTE (CEIFEL, Shillong), Ph.D. (NEHU)
		R. M. Sangma, M.A. (NEHU)
		J. C. Marak, M.A., Ph.D. (NEHU)

### Student Intake:

Enrolement	:	30							
Actual Admission	:	SC	ST	Gen.	OBC	Male	Female	Meghalaya/Other States	
M.A.	:	3	45	8	2	18	40	56	2
Ph.D.	:	1	2	-	1	1	3	2	2
<b>Degree Awarded:</b>		SC	ST	Gen.	OBC	Male	Female	Total	
M.A.		3	45	8	2	18	40	58	

Ph.D.

B. S. Sangma, A'chick (Garo) Theatre: A case for Indian Folk Theatre. Supervisor: Dr. J. Prodhani.

L. Marak, Mynth and Archetype in Garo Folk Narrative: A Select Study. Supervisor: Dr. J. Prodhani.

P. Barman, The 'Inherited Loss' of Art, Culture and Identity in the Writing of Orhan Pamuk: A Study. Supervisor: Prof. S. Gurudev.

G. Ch. Barman, Emerging Dalit Identity & Literature: A Select Study of Five Autotrophies. Supervisor: Dr. J. Prodhani.

**Placement of Students:** Students are appointed as (i) Lecturers in Ampati College, Ampati, Garobadha College, Garobadha, Selsela College, Selsela; (ii) Teachers in Higher Secondary School at Bajengdoba, Garobadha, High School at Tura, Bajengdoba, Garobadha, ME School at Tura, Private School at Tura; (iii) News Paper reporter in Tura, (iv) office assistant in Govt. Medical Dep., Sarba Siksha Abhijan; and (v) as field worker and coordinator in NGOs.

### **Courses Conducted:**

M.A.:

Semester I : Poetry I, Fiction I, Drama I, Literary Theory & Criticism I, American Literature I

Semester II : Poetry II, Fiction II, Drama II, Literary Theory & Criticism II, Commonwealth Literature (Option A), World Literature in Translation (Option B)

Semester III : Poetry III, Shakespeare I, Literary Theory & Criticism III, American Literature II, Indian Fiction in Translation (Option A), Women's Writing (Option B)

Semester IV : Fiction III, Drama III, Shakespeare II, Literary Theory & Criticism IV, Environment & Indian Writing in English

### **Study Tour/Field Trips of Student:**

Students of third semester were taken for study tour to New Delhi, Agra and Jaipur by Mrs. R. M. Sangma.

### **Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

#### **Organized**

The Department organized a National Seminar on Cultural and Ethnic Persistence: Towards Understanding Identities in Collaboration with ICSSR, New

## School of Humanities

Delhi, ICHR, New Delhi, CIIL, Mysore, NEC, Shillong, ICSSR, NEC, Shillong on 5<sup>th</sup>-6<sup>th</sup> November 2009.

### Attended

Dr. J. Prodhani presented (i) a paper entitled 'Ethnicity in Contemporary Assamese Literature' in the National Seminar on Literary Trends: Northeastern Trends and Stream organized by the WB State University in collaboration with Sahitya Akademi at Bharatiya Bhasha Bhavan, Kolkata during 18<sup>th</sup>-19 August 2009, and (ii) a paper entitled 'Pratima Barua Pandey: Queen of the lost Lore' in the National Seminar on Society and Literature: Interdisciplinary Transaction organized by the Department of English, NEHU, Shillong in collaboration with ICSSR, NERC and IAS, Shimla held at ICSSR, NERC, Shillong on 16 - 18 March 2010.

Prof. S. Gurudev (i) delivered a lecture on 'Concept of Outsider' in the UGC-Orientation Course organized by the Department of Education, NEHU, Tura Campus on 29<sup>th</sup> March 2010.

Mr. R.S. Thakur (i) presented a paper entitled 'Thought on the need for studying Narrative Strategies of Garo Folk Tales' in the National Seminar on Garo Folk Literature organized by the Department of Garo, NEHU, Tura Campus in October 2009 and (ii) delivered a lecture on 'Poststructuralism' in the UGC-Orientation Course organized by the Department of Education, NEHU, Tura Campus on 29<sup>th</sup> March 2010.

Dr. A. W. R. Ingty (i) participated in a Translation Workshop organized by the Directorate of Art and Culture, Govt. of Meghalaya on the 3<sup>rd</sup> of April 2009 and translated a short story called Nonoi and Chenggari, the Cicada Sisters from A. Chik Golporang (Garo Folklore) Part 1 (1998) by D. K. Sangma, and (ii) presented a paper entitled 'Intelligibility of Indian English: With reference to pronunciation: Problems and Prospects with special focus on the Boro and Garo Languages of North-East India' in the Seminar on "Comparative Study on Boro – Garo group of Languages of N-E India" organized by the Department of Boro, Gauhati University in February 2010.

### Publication:

Prodhani, J. 2010. Book review: Ethnic life world in north east. *Protocol*, I & II: No. 1 & 2.

Sangma, R. M. 2009. Postcolonial perspective in the essays of V. S. Naipual. *Protocol*, II: No. 1 & 2.

Marak, J. C. 2009. Translation of Folk Tales: A Human Communication. *Protocol*, II: No 2.

**Book/ Book Chapters/Proceedings:**

Marak, J. C. 2010. Mulk Raj Anand: From Literary Naturalism to Hopeful Humanism, Eastern Book House, Guwahati.

**Other Activities:**

A biannual journal with ISSN accreditation, Protocol: Journal of Translation, Creative and Critical Writings is being published by the Department.

Dr. J. Prodhani delivered two lectures on 'Off Off Broadway Theatre and Sam Shepard' and 'Hastir Kanya: Pratima Barua Pandey' at the UGC-Refresher course on Philosophy of Literature: Language, Meaning and Ideology' organized by the Department of English, NEHU, Shillong from 25<sup>th</sup> February to 15<sup>th</sup> March 2010.

Prof. S. Gurudev the UGC Sponsored Workshop on Capacity Building of Women Managers from 29<sup>th</sup> April to 5<sup>th</sup> May 2009.

Dr. A. W. R. Ingty a two day Workshop on "A.chik Folklore Genre Classification" organized by the A.chik Literature Society and NEI-COL Sahitya Academy on 19 – 20 May 2009.

Dr. J. C. Marak (i) Sahitya Akademi Workshop on Achik Folklore Genre Classification on 19 – 20 May 2009, (ii) National Seminar on Rural Empowerment in Northeast India organized by the Department of Rural Development & Agricultural Production on 26 -27 November 2009 at NEHU, Tura Campus, and (iii) National Seminar on Folklore and Achik Literature organized by the Department of Garo, NEHU, Tura Campus on 29 – 30 October 2009.

## DEPARTMENT OF GARO (TURA)

**Teacher-in-charge** : Dr. J. R. Marak  
**Telephone** : 03651-220016 (O), 9436108468 (M)  
**Email** : jcqlnmarak@gmail.com

**Thrust Areas of Research:** To preserve and protect the rich tradition of Garo Language through translations, documentations and research in areas of Folklore and related genre, contemporary Garo Fictional Studies, Linguistics in relation to Garo Language, Cultural Studies and Archaic Representations in Garo Literature.

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**Brief Statement of Academic Activities:** Apart from conducting classes to students pursuing M.A. in Garo Literature and supervising Ph.D. scholars, the Department organizes workshops, extension lectures, and interactive sessions with visiting scholars and authors. Students are encouraged to make inquiries into the folk literature and culture of the people of Garo Hills, especially in the field of folk tales, folk social culture, balladic poetry and folksongs. The Department maintains a wall magazine to which students are encouraged to contribute their original creations and compositions.

### Faculty:

Assistant Professors : J. R. Marak, M.Ed. (Utkal) Ph.D.(NEHU)  
F. K. Marak, M.A., Ph.D. (NEHU)  
D. Ch. Marak, M.A. (Garo), M.A.(Linguistics),  
Ph.D.(NEHU)

**Visiting Professors/Fellows/Scholars:** Prof. Caroline R. Marak, Retired Professor, Department of Garo, NEHU, Tura Campus.

### Student Intake:

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

Actual Admission : ST (Male) ST (Female) Total (from Meghalaya only)

M.A.	21	12	33
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### Degree Awarded:

	ST (Male)	ST (Female)	Total
M.A.	9	11	20
Ph. D.		2	2

### Courses Conducted:

Semester I:

Core: History of Garo Language and Literature, Poetry-I Sacrificial Rites & Invocations, Drama-I, Linguistics-I: Basic Concepts, Definitions & Scope of Linguistics, Garo Morphology and Semantics, Environmental Studies

Semester II:

Core: Fiction-I, Literature in Translation,

Prose-I,

Linguistics-II: Phonetics and Phonology

Open: Linguistics-III, Tibeto-Burman Languages of the North-East (classification and Bodo group of Languages)

Semester III:

Core: Literary Theory & Criticism, Epic as a Literary Genre, Drama-II

Open: Folklore-I Definition, scope & different forms of folklore and field techniques

Semester IV:

Core: Poetry-II: Poetry from 1881 to 1944, Folklore-II Garo Folktales, Folksongs, Proverbs and Sayings, Tragedy as a Literary Genre, Indian Literature in English, Modern Poetry.

### **Study Tour/Field Trips:**

Dr. J. R. Marak took 4<sup>th</sup> semester students for a study tour to Gangtok and Darjeeling from 16<sup>th</sup> to 22<sup>nd</sup> February 2010. The students of 2<sup>nd</sup> Semester were taken for a field study to Balpakram and Siju, South Garo Hills from 28<sup>th</sup> April to 1<sup>st</sup> May, 2010. Mr. Carlos D. Sangma, Technical Assistant, RDAP, NEHU Tura Campus accompanied the students.

### **Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

#### **Organized:**

The Department organized a Seminar on “Folklore & A·chik Literature” on 29<sup>th</sup> & 30<sup>th</sup> October 2009, which was sponsored by NEC, ICSSR, Shillong and NEHU.

#### **Attended:**

Dr. J. R. Marak presented a paper on “The Myth in the Garo Folktale: Niba Jonja aro Aje Gilje Tira” at the seminar organized by the Department at New Circuit House Tura on 29 - 30 October 2009.

Dr. F. K. Marak presented a paper on “Wanbasala and Wankado: An Over View of the A·chik Festivals for Ushering Wealth” at the seminar organized by the Department at New Circuit House Tura on 29 - 30 October 2009.

Prof. C. R. Marak, Visiting Fellow, chaired the inaugural function of the Workshop on UGC-Capacity Building of Women Managers in Higher Education

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organized by NEHU, Shillong from 29<sup>th</sup> April to 3<sup>rd</sup> May 2009 at Rikman Hotel, Tura and presented a paper on "Folklore on A.chik Literature" at the seminar organized by the Department at New Circuit House Tura on 29 - 30 October 2009.

### Other Activities:

The students of the Department performed 'wangala' dance at the cultural programme of the seminars held by the Departments of MBA, English, RDAP and at the MOSAIC programme of MBA, Tura Campus.

## DEPARTMENT OF HINDI

**Head** : Dr. S. K. Sharma

**Telephone** : 2723514 (O), 2551987 (R), 9436105977 (M)

**Email** : sksharma19672@yahoo.com

**Thrust area of research in the Department** : Modern Hindi Literature and Comparative Study.

**Brief Statement of Academic Activities:** The Department conducted a Refresher Course on *Hindi Aalochana*. The Department organized two National Seminars, one in collaboration with the Commission for Scientific & Technical Terminology, MHRD, New Delhi on the topic 'Purvottar ki Bhashon mein Takniki Shabd : Anuprayog evam Samashayen', and another on the topic 'Dalit Vimarsh evam Hindi ka Sant Sahitya'.

### Faculty:

Professor : V. K. Srivastava, M.A., D.Phil. (Allahabad)

Associate Professors : D. K. Choubey, M.A., Ph.D. (Manipur)  
S. K. Sharma, M.A., M.Phil., Ph.D. (Delhi)  
M. P. Pandey, M.A., Ph.D. (Kashi Vidyapeeth)

Assistant Professors : B. P. Tripathi, M.A., M.Phil. (JNU)

MHRD Govt. of India at Delhi on 26.11.2009, (v) presented paper in the National Seminar on 'Adhunik Hindi Sahitya mein Patra-Patrikaon ka Yogdan' organized by Sahitya Academic, Kolkata and Department of Assamese, Dibrugarh University at Dibrugarh from 9.10.2009-11.2.2010, (vi) presented paper in the National Seminar on 'Purvottar mein Hindi Prachar ki Samasyaen evam Uska Samadhan' organized by Assam Rastra Bhasha Prachar Samiti, Guwahati from 13-14 February 2010, (vii) presented paper in the National Seminar on 'Agyeya ke Sahitya mein Prayogdharmita' organized by Deptt of Hindi Pune University at Pune from 26-27 February 2010, (viii) presented paper in All India Conference of Nagari Lipi on Purvottar ki Lipiyon ke liye Vaikalpik Lipiyan, by Nagri Lipi Parishad, Delhi at Purvotar Hindi Academi, Shillong on 20.3.2010, (ix) presented paper in National Seminar on 'The use of Technical Terminology in the Language of NE Region by Commission for Scientific and Technical Terminology and Department of Hindi at NEHU, Shillong from 25-27 March 2010, and (x) presented paper in the National Seminar on 'Antararastriya Parivesh mein Hindi ki Bhumika by Assam Rajya Rastra Bhasha Prachar Samiti, at Reginal Science Conference Hall, Guwahati on 28.3.2010.

Dr. S. K. Sharma (i) presented a paper entitled 'Purvottar ki Bhashayan aur Hindi ki Bhumika' in a National Seminar organized by Meghalaya Rashtra Bhasha Prachar Samiti, Shillong, on 12.9.2009, (ii) presented a paper entitled 'Bodo ki Vyakarnik Sanrachana, in a Nationa Seminar organized by Commission for Scientific and Technical Terminology MHRD, New Delhi at Mahatma Gandhi Antrarashtriya Hindi Vishwavidyalay, Wardha from 14-16 September 2009, (iii) presented a paper entitled 'Hindi ke Prachar mein Swaichchhika Hindi Sansthaon ka Yogdan' in a National Seminar organized by Central Institute of Hindi, Shillong at Tripura University, Agartala from 3-4 December 2009, (iv) presented a paper entitled 'Bhartiya Shiksha ki Avdharana : Prampara aur Pryog' in a National Seminar organized by U. P. Bhasha Shansthan, Lucknow at Varanasi from 14-15 January 2010, (v) presented a paper entitled 'Prayojan Mulak Hindi aur Vaigyanik Lekhan' in a National Seminar organized by Central Institute of Hindi, Agra at C & H, Agra from 19-20 January 2010, (vi) presented a paper entitled 'Purvottar ki Bhashayon mein Takniki Shabd Nirman evam Vaigyanik Lekhan' in a National Seminar organized by Commission for Scientific and Technical Terminology MHRD, New Delhi at Pandu College, Guwahati from 29-31 January 2010, (vii) presented a paper entitled 'Purvottar mein Hindi ka Vikas in a National Seminar organized by Department of Official Language, MHRD New Delhi at Assam Rifles, Shillong, from 4-5 February 2010, (viii) presented a paper entitled

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'Anuvad ka Vartaman Swarup aur Esake Bhavishya ka Disha Nirdesh : Purvottar ke Sandrbh mein' in a National Seminar organized by Assam Rashtra Bhasha Prachar Samiti, Guwahati at ARBPS, Guwahati from 13-14 February 2010, (ix) presented a paper entitled 'Kuruksheetra Shanti Parv ki Talash' in a National Seminar organized by UGC, New Delhi at Govt. P.G. College, Guna (M.P.) from 22-23 February 2010, (x) presented a paper entitled 'Sahityak Patri kaon ki Duravastha : Ek Chintan' in a National Seminar organized by UGC, New Delhi at Sadhuvasavani College, Bhopal on 24<sup>th</sup> February 2010, (xi) presented a paper entitled 'Vaidik Darshan aur Kamayani' in a National Seminar organized by UGC, New Delhi at Govt. P.G. College, Bhopal (M.P.) from 25-26 February 2010, (xii) presented a paper entitled 'Purvottoriya Bhashan aur Dev Nagari Lipi' in a National Seminar organized by Nagari Lipi Prishad, New Delhi at Purvottar Hindi Academy, Shillong from 20-21 March 2010, and (xiii) presented a paper entitled 'Bodo Bhasha ki Takaniki Shabdawali' in a National Seminar organized by Commission for Scientific and Technical Terminology MHRD, New Delhi at NEHU, Shillong from 25-27 March 2010.

Dr. M. P. Pandey (i) participated in the 4<sup>th</sup> World Bhojpuri Conference organized by the Indian Diaspora Centre in collaboration with the Ministry of Education, Culture and Human Resources, Govt. of Mauritius at Indira Gandhi Centre for Indian Culture, Phoenix, Mauritius on 29-30 August 2009 and presented a research paper entitled 'Viswa Patal par Bhojpuri', (ii) participated in two days National Seminar organized by Central Hindi Directorate and Department of Hindi, Tripura University and presented a paper on the topic 'Purvottar ki Shiksha pranali mein Hindi ki Sthiti' on 3-4 December 2009, (iii) participated in two days National Seminar in Hindi entitled 'Samakaleen Hindi Katha mein Navonmesh' organized by Department of Hindi, West Bengal State University Barasat, Barasat, Kolkata on 11-12 December 2009 and presented a paper on 'Hindi Katha Sahitya pur Bhumandali Karan ka Prabhav', (iv) participated in a three days National Seminar organized by Vidya Shri Nyas, Uttar Pradesh Bhasha Sansthan and Central Hindi Directorate, Agra, from 14-16<sup>th</sup> January 2010. in Varanasi and presented a paper titled 'Purvottar Bharat mein Hindi : Sthiti aur Sambhavanaye', (v) participated in two days National Seminar organized by Meghalaya Rastra Bhasha Prachar Samiti, Shillong on 12<sup>th</sup> & 13<sup>th</sup> September 2009 and presented a paper on the topic 'Purvottar ki Bhashaye aur Hindi ki Bhumika', and (vi) participated in three days National Seminar organized by Commission for Scientific and Technical Terminology MHRD, New Delhi at NEHU, Shillong from

25-27 March 2010 and presented a paper entitled 'Purvottar ki Bhashayon mein Takiniki Shavda : Aanuprayog'.

Shri B. P. Tripathi presented a paper entitled 'Takniki Sabdh Nirman' in a National Seminar organized by Commission for Scientific and Technical Terminology MHRD, New Delhi at NEHU, Shillong from 25-27 March 2010.

**Publications:**

Choubey, D. K., 2009. 'Asomya Samkalin Kahani ki Vikas Yatra'. Anbhaya Mumbai University, Joint issue 23-24.

Sharma, S. K., 2009, Sant Kavya ki Prampra aur Swarup, Shodharnav, Ori, 3(Issue 4): 105-110

Sharma, S. K., 2009, Punamchand Tiwari ki Samiksha Drishti, Shiksha Kalash, Sultanpur, 1 (issue 1): 84-88.

Sharma, S. K., 2009, Samkalin Hindi Sahitya mein Natak, Shodharnav, Ori, 4 (issue 1): 93-98.

Sharma, S. K., 2009, Vishwa Manch pur Hindi, Vishwa Bharti, Kolkata, 50 (issue 1-2): 58-63.

Sharma, S. K., 2009, Aadhunik Katha Sahitya mein Samaj Chitran, Hindustani Juban, Mumbi, 49 (issue 3): 60-66.

Sharma, S. K., 2009, Pragatishil Aalochana ke Itihas Purush, Samiksha, Delhi, 42 (issue 2): 34-36.

Pandey, M. P., 2009. "Stri-Vimarsh Banam Bharat mein Striyon ka Chehra" Vartaman-Sandarbh, p. 120-124.

Pandey, M. P., 2009, 'Hindi Kahani Aadarsh Se Yatharth ki Yatra'. Anbhaya Mumbai University, Joint issue 23-24,

Tripathi, B. P., 2010, Kalam Uthakar Larayee Larne ki Kasam' Paraspar, Ambikapur (M.P.) issue Feb.2010: p. 64-66.

**Books/Book Chapters/Proceedings:**

Pandey, M. P., 2009. 'Khasi', in "Bhartiya Lok Sahitya Kosh", Vol - 3, Ed.: S. Gautam and V. Gautam, pp. 1343-1348.

Pandey, M. P., 2009. 'Mizo' in "Bhartiya Lok Sahitya Kosh", Vol - 3, Ed. S. Gautam and V. Gautam, pp. 3235-3238.

**Research Project:**

Ongoing:

“Mahapursh Sankardev aur Madhavdev ke Vyaktitwa-Krititwa ki Samksha evam unki Kritiyon ka Lipyantran Sahit Anuvad”, Principal Investigator: Dr. D. K. Choubey, Sponsored by UGC, New Delhi.

**Awards :**

Dr. S. K. Sharma was awarded Dr. Maharaj Krishna Jain Smriti Samman by Purvottar Hindi Academy, Shillong in its 53 conference held at Shillong on 23<sup>rd</sup> May 2009.

Dr. S. K. Sharma was awarded Rastra Gaurav Samman by Akhil Bhartiya Rastra Bhasha Vikas Sangathan, Gazibad in its 17<sup>th</sup> conference held at Gazibad on 25<sup>th</sup> October 2009.

Dr. S.K. Sharma was awarded Vidya Sagar Upadhi by Vikram Shila Hindi Vidyapith, Bhagalpur in its 14<sup>th</sup> conference held at Bhagalpur on 26<sup>th</sup> December 2009.

Dr. M. P. Pandey was awarded ‘Karmayogi Sammari’ for contribution in the Development of Bhojpuri Bhasha by Indian Diaspora Centre and 4<sup>th</sup> Worlds Bhojpuri Sammelan Mauritius on 29<sup>th</sup> & 30<sup>th</sup> August, 2009 at Indira Gandhi Centre of Indian Culture, Phonix, Mauritius.

Shri. B. P. Tripathi was awarded Ambika Prasad Divya Rajat Alankaran - 2008 for the ‘Deshi Pahad Pardesi Log’ on 20<sup>th</sup> September 2009 at Bhopal (M.P.).

**Other Activities:**

Dr. D.K.Choubey (i) chaired the Session in National Seminar on ‘Agyeya ke Sahitya mein Prayogdharmita’ organized by Department of Hindi, Pune University at Pune on 27<sup>th</sup> February 2010, (ii) chaired the Session the formation of Technical Terminology in the context of Post Graduate level Teaching in N.E. Region by Commission for Scientific and Technical Terminology MHRD, Delhi on 25.3.2010 and (iii) delivered lectures as resource person in Refresher Course on Hindi Aalochana, organized by UGC, Academic Staff College, NEHU on 12-13 August 2009.

Dr. S. K. Sharma (i) delivered a lecture on ‘Tulanatmak Sahitya’ organized by Language Study Centre, Jiwaji University, Gwalior on 24.4.2009, (ii)

participated as resource person in workshop on 'Hindi ke Sankhya Vachak Shabdon ki Ekrupta' by Assam & Meghalaya Freniyer BSF, Shillong on 10.9.2009, (iii) participated as resource person in Workshop on 'Hindi mein Vaigyanik Lekhan' organized by Bhartiya Krishi Anusandhan Prishad, Shillong on 11.9.2009, (iv) chaired the Technical Session of National Seminar on 'Manviki Vishayon mein Takniki Sabdon ka Pryog of Commission for Scientific and Technical Terminology, MHRD, New Delhi at Mahatma Gandhi Antrarashtriya Vishwa Vidyalaya, Wardha on 15.9.2009, (v) participated as resource person in the workshop 'Rajbhasha ke Prayog ki Vyavaharik Samasyan' organized by Hindi Cell, NEHU, Shillong on 23.9.2009, (vi) participated as resource person in workshop on 'Hinditar Bhashi Chhatron ki Hindi Sambandhi Kathinaeyan' organized by North-Eastern Regional Institute of Education (NERIE) Shillong on 22.7.2009, (vii) delivered a lecture on 'Purvottar ka Bhashayi Sansar aur Anuvad' organized by Bhartiya Anuvad Prishad, New Delhi on 21.1.2010, and (viii) chaired the Technical session of UGC Sponsored Seminar on 'Chhayavadi Kavya aur Uske Kaviyon ka Avdan' on 25.2.2010 at Govt. P.G. College, Bhopal (M.P.).

Dr. M. P. Pandey (i) invited as Visiting Fellow to the Department of Hindi, Tripura University, Agartala to deliver lectures to the students of 3<sup>rd</sup> Semester and Research Entrance test (RET) scholars from 25<sup>th</sup> November 2009 to 4<sup>th</sup> December, 2009 and (ii) prepared one Unit in the subject Linguistics for Vardhamar Mahaveer open University, Kota for the Course MHD - 07, Unit - 24<sup>th</sup> from page no- 381 to 392 on the topic 'Shaili-Vigyan : Udhbhav evam Vikash'.

## DEPARTMENT OF KHASI

**Head** : Prof. S. Dkhar

**Telephone** : 2723301(O), 94361 17479 (M)

**Email** : s.dkhar@rediffmail.com; s.kharsyntiew@gmail.com

**Thrust Areas of Research:** Khasi Poetry, Khasi Fiction, Khasi Drama, Khasi Linguistics, Culture in Khasi Literature, Literature in translation, Environmental Awareness in Khasi Literature, Khasi Literary Theory and Criticism and Folklore in Khasi Literature.

**Brief Statement of Academic Activities:** The Department organized the UGC – sponsored Refresher Course from 5<sup>th</sup> to 25<sup>th</sup> November 2009 on the theme “Critical Tradition and Khasi Language and Literature”.

### Faculty:

**Professor** : B. War, M.A.(NEHU), M.A. (Delhi), M.Phil. (Delhi), Ph.D. (London)

M. B. Jyrwa, M.A. (Gauhati), M.Ed., TEO (Manchester), Ph.D. (NEHU)

S. Dkhar, M.A., M.Phil., Ph.D (NEHU)

A. Kharmalki, M.A. (NEHU), M.A. (Delhi), B.Ed., M.Phil., Ph.D. (NEHU)

**Associate Professors** : D. R. L. Nonglait, M.A., M.Phil. (NEHU), P.G.D.T.E. (CIEFL), Ph.D (NEHU)

**Assistant Professors** : B. Bairo, M.A. (NEHU)

M. M. Khyndeit, M.A. (NEHU) M.Phil. (Gauhati)

### Students Intake:

**Enrolment capacity** : 52

**Actual Admission** : **SC ST Gen Male Female From Meghalaya/Other**

<b>States</b>	M.A.	-	52	-
11 41	52	-		

**Degrees Awarded** : **SC ST Gen Male Female Total**

M.A.	-	49	-	12	37	49
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Ph.D.	-	1	-	1	-	-
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**Placement of Students:**

One in St.Edmund's College, Shillong, one in Khasi Department, NEHU, Shillong, one in St.Mary's College, Shillong, one Synod Higher Secondary School, Shillong and one in the State Government.

**Courses Conducted:**

- Semester I : Linguistics I, Khasi Poetry I, Khasi Literary Criticism, Khasi Fiction I and Khasi Drama I
- Semester II : Khasi Linguistics II, Khasi Drama II, Literary Theory and Criticism, Literature in Translation – I and Khasi Poetry II
- Semester III : Khasi Linguistics III, Khasi Drama III, Culture in Khasi Literature I, Khasi Fiction – II and Literature in Translation – II
- Semester IV : Linguistics IV, Khasi Fiction III, Environmental Awareness and Poetry III, Culture in Khasi Literature – II and Khasi Drama IV .

**Study Tours/Field Trips of Students:**

Study Tour in connection with Course on Environmental Awareness in Khasi Literature was conducted to Sohra, East Khasi Hills on 31<sup>st</sup> October 2009 under the charge of Mr. M. M. Khyndeit. Mr. M. M. Khyndeit also took the Students of M.A. 3<sup>rd</sup> Semester for a Study Tour from 15<sup>th</sup> to 30<sup>th</sup> December 2009 to Thiruvananthapuram, Mumbai and Kolkatta.

**Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

**Attended:**

Prof. B. War (i) presented a paper entitled "Culture and Tradition: The image of the suffering women in Khasi oral narratives" and chaired one session in the 2<sup>nd</sup> National Seminar on Tribal Literature with special reference to Languages of North-East India organized by the Department of Mizo, Mizoram University, Aizawl from 7<sup>th</sup> to 19<sup>th</sup> May 2009, (ii) attended as resource person and delivered a lecture on "Khasi language: Its present and future status" in a literary programme on the Status of Khasi Language organized by the Department of Khasi, Shillong College on 15<sup>th</sup> October 2009, (iii) presented a paper on "Folkloristic Allusion in Soso Tham's Poetry" in the National Seminar on Folklore and A'chik Literature organized by the Department of Garo, Tura Campus, NEHU on 29<sup>th</sup> October 2009, and (iv) delivered the key-note address as President of the Tribal Literary Forum of India in the inaugural function and presented a paper on "Translation and Khasi Literature" in the 3<sup>rd</sup> National

## School of Humananities

Seminar on Tribal Literature with reference to North-East India organized by the Department of Tenydie, Nagaland University from 11<sup>th</sup> to 13<sup>th</sup> March 2010.

Prof. M. B. Jyrwa (i) presented a paper on 'Khasi Language: Its Uses and Challenges' on 9<sup>th</sup> January 2010, in the Seminar organized by Jingiaseng Samla District, Nongthymmai, Shillong.

Prof. S. Dkhar (i) acted as chief guest in the celebration of the first death anniversary of Shanker Trivedi, a renowned Sanskrit poet held on 15<sup>th</sup> April 2009 and read out three poems entitled "Death, Horror of death and Victims of Innocence" at the Kendriya Hindi Sansthan organized by Kendriya Hindi Sansthan Regional Office, Shillong, (ii) attended as resource person in the 4<sup>th</sup> International Convention of All India Poetess Conference at Golden Beach Hotel, Beijing, China from 21<sup>st</sup> June to 1<sup>st</sup> July 2009 and presented a paper on "Khasi literature with special reference to Traditional Khasi Poetry called the Phawar" and read out her own composed poems, (iii) was a Guest of Honour in the Inaugural session of the Silver Jubilee Celebration of the Poetry Society (India) held at Lakshmi Bai College, Ashok Vihar, Phase III, New Delhi on 24<sup>th</sup> August 2009 organized by Poetry Society (India) in collaboration with Sahitya Akademi, New Delhi and presented a paper on "Making of Poetry" followed by interaction with participants, (iv) acted as resource person in the Panel Discussion and presented a paper on "Status of Khasi Drama in the Present Day" in the literary Programmes of the Shillong Book Fair organized by the National Book Trust, India in collaboration with the Directorate of Arts and culture, Government of Meghalaya held on 3<sup>rd</sup> September 2009 at the Art and Culture hall, State Central Library Campus, Shillong, (v) was a chief guest in the Poets Meet held on 30<sup>th</sup> September 2009 at Kendriya Hindi Sansthan, Shillong organized by Regional office of the Kendriya Hindi Sansthan, Shillong and read out the folk Poetry, (vi) presented a paper on 'U Synniang Ki Kot Khubor Khasi ha kaba kyntiew bad pynroi ia ka thoh ka tar bad pule puthi' (Contributions of Khasi Newspaper to the growth and development of Khasi Literature) in the Seminar on "Ka Jait Bynriew Khasi ha ka spah snem ba Arpew wei" (Khasi Race in the Twenty First century) organized by Mawphor Daily as part of the 20<sup>th</sup> celebration of Mawphor Daily held on 2<sup>nd</sup> October 2009 at Art and Culture Hall, Government of Meghalaya, (vii) was a guest of honour in the Punjabi Poetry Session, acted as a resource person in the Multilingual session and presented a poem "Evening shade of Colour" in the Decade's National Mega Convention of All India Poetess Conference held on 9<sup>th</sup>- 11<sup>th</sup> October 2009 at Aiwani-Ghalib, DDU Marg, ITO New Delhi. A book entitled *Ka Mahabharat (Translation in Khasi co-author)* was released by Padmabhushan Dr. Bindeswar Pathak and His Excellency Mookheshwur Choonee, High Commissioner of Mauritius (viii) acted as

Coordinator of the one day Regional Seminar on “Traditional Culture of the North-East in the 21<sup>st</sup> Century” and delivered the introductory address on Culture, organized by the North-East Zonal Cultural Centre, Dimapur in collaboration with Department of Art and Culture, Government of Meghalaya held on 16<sup>th</sup> October 2009 at Art and Culture Hall, Shillong, (ix) presented poems, “Meri Maa se ek Nivedan hei” (A Plea to my Mother) and “Lost Souls” in the “National Women Writers’ Meet” held at Patiala on 3<sup>rd</sup> November 2009 at Punjab University, Patiala and participated in the National Symposium on “Feminism and feminist writers of 21<sup>st</sup> Century” organized by Sahitya Akademi in collaboration with Punjab University, Patiala, (x) was Master Trainer in the Training of the Trainers (TOTS) of the Capacity Building Workshop of Women Manager in Higher Education held at IIBM, Guwahati organized by WSRC Gauhati University from 1<sup>st</sup> to 6<sup>th</sup> February 2010 and delivered a presentation on the Manual “Women and Research”, (xi) attended as a resource person the Nagaland Poetry Festival held at Kohima on 15<sup>th</sup> and 16<sup>th</sup> March 2010 organized by Poetry Society (India) in collaboration with the Assam Rifles, Nagaland, (xii) presented a paper on “The Importance of Hindi language in the Northeastern States” in the orientation Course of Hindi held on 18<sup>th</sup> March 2010 at Kendriya Hindi Sansthan organized by Central Institute of Hindi Regional Centre, Shillong, and (xiii) presented papers entitled “The Protection and Acts on Child’s Rights” and “The Problems of a Translator in translating Poetry from the original language to la Target Language” in the 3<sup>rd</sup> Northeast Poetry Festival held on 16<sup>th</sup> March 2010.

Prof. A. Kharmalki (i) a paper on “Cultural similarities between Achebe’s Things Fall Apart and Khasi Culture: A Cultural Literary perspective” in the National Seminar on “Tribal Literature with special reference to Languages of North-East India” organized by the Department of Mizo, Mizoram University, Aizawl from 7<sup>th</sup> to 9<sup>th</sup> May 2009, and (ii) presented a paper on “An Analysis on Ka Nam as a suffering women as reflected in the play Ka Nam written by E.Syiem’ in the National Seminar on Folklore and Achik Literature from 29<sup>th</sup> to 30<sup>th</sup> October 2009 organized by the Department of Garo, NEHU.

Ms. B. Bairo (i) presented a paper entitled “Reflection on Politics: A Glimpse into LO.H.Pde’s novel Tang Maphi Khun Baieid” at the 2<sup>nd</sup> National Seminar on ‘Tribal Literature with special reference to language of North-East India’ organized by the Department of Mizo, Mizoram University on the 7<sup>th</sup> – 9<sup>th</sup> May, 2009, (ii) presented a paper entitled “Mournful tears of a mother as projected in P.G.Gatphoh’s “U Sierlapalang” at the National Seminar on ‘Folklore and A’chik Literature’ organized by the Department of Garo, NEHU, Tura Campus on the 29<sup>th</sup> and 30<sup>th</sup> October, 2009, and (iii) presented a paper entitled “The Naming Ceremony as reflected in S. J.

Duncan's Short Story" at the 3<sup>rd</sup> National Seminar on 'Tribal Literature with special reference to languages of North-East India' organized by the Department of Tenydie, Nagaland University on the 11<sup>th</sup> – 13<sup>th</sup> March, 2010.

**Publications:**

Dkhar, S., 2009. Different Facets of Domestic Violence to Women of North-East. *Aurore*, (published by Women's College), pp. 13-14.

**Books/Book Chapters/Proceeding:**

War, B., 2010. The Image of the Suffering Woman in Khasi narratives. In *Tribal Languages and*

*Literature in North-East India*, Ed.: L. Kiangte, Department of Mizo, Mizoram University, Aizawl.

War, B., 2009. *Ki Sawa Bad Ki Dur Kyntien Jong Ka Ktien Khasi*, Ri-la-Dor Publishers, Shillong.

Jyrwa, M. B., 2010. *Ka Bishar Bniah: Ka Bynrap, Mang Computers*, Nongthymmai, Shillong.

Dkhar, S., 2009. Katto katne shaphang Ka Hok Long trai ki Nongthoh bad ki Nongpynmih kot. In *Ka Thup Sah Kynmaw Jubili Rupa* (Silver Jubilee Souvenir) of Khasi Book Stall, pp. 33-36.

Dkhar, S., 2009. *Na Thwei U Longshuwa* (Collection of Poems), Eses Plus Publication, Shillong.

Dkhar, S., 2010. *Ka Latympang* (A Poetic Drama ), Eses Plus Publication, Shillong.

Nonglait, D. R. L., 2009. *Kin Im Pat Kum U Kew*, Pariong Presbyterian, Pariong.

Nonglait, D. R. L., 2010. A Critical Assessment of the Sense of the Past in Soso Tham's "Ka Jingpynshai" in *His Ki Sngi Barim U Hynniew Trep*, Department of Mizo, Mizoram University, Aizawl.

Bairo, B., 2010. Reflection on Politics: A Glimpse of L.H.Pde Novel Tang Maphi Khun Baieid. In *Tribal Languages and Literature of North-East India*, Ed.: L. Kiangte, Department of Mizo, Mizoram University, Aizawl.

Khymdeit, M. M., 2010. Evolution of Tim Gambling In Meghalaya from the Traditional Archery of the Khasi, SMS High Impression, Shillong.

### **Research Projects:**

**Ongoing:** UPE in Collaboration with the Department of Linguistic, NEHU, Shillong.

### **Honours/Awards/Recognition:**

Prof. S. Dkhar (i) received the Award of Honour for the contributions to Khasi Literature by the All India Poetess Conference at the 4<sup>th</sup> International Convention held at Beijing, China on the 21<sup>st</sup> June 2009, (ii) was honoured and felicitated by the Khasi Students Union (NEHU Unit) for the contributions to Khasi Society at its function held on 17<sup>th</sup> September 2009 at Community Hall NEHU, Permanent Campus, (iii) was awarded the Kasturba Gandhi Samman 2009 by the Sulabh Sahitya Academy Award at the Decade's National Mega Convention of All India Poetess Conference held on 9<sup>th</sup> - 11<sup>th</sup> October 2009 at Aiwan-i-Ghalib DDU Marg, ITO, New Delhi, (iv) received the Award of Excellence for the exemplary and outstanding contribution to Poetry given by the Poetry Society (India) sponsored by Assam Rifles on its 175 years celebration held on 15<sup>th</sup> March 2010, at 16 Assam Rifles Auditorium, Kohima, Nagaland, and (v) was the Winner of the 3<sup>rd</sup> North East Poetry Competition 2010 for the poem "The Voice of Truth" organized by the Poetry Society (India) in the 3<sup>rd</sup> North-East Poetry Festival 2010, on the theme *The Voices of Truth*, held from 25<sup>th</sup> to 27<sup>th</sup> March 2010 at Shilpgram, Guwahati.

### **Other Activities:**

The Department organized the UGC sponsored Refresher Course on the Theme "Critical Tradition and Khasi Language and Literature" from 5<sup>th</sup> to 25<sup>th</sup> November 2009.

Prof. B. War (i) delivered a lecture on "The features of Austro-Asiatic Languages with special reference to Khasi" in the UGC-ASC Fourth Orientation Course organized by the Department of Education, NEHU on the 15<sup>th</sup> April 2009 (ii) attended as member in the Annual Combined meeting of Executive Board/ Governing Body of the North East Zone Cultural Committee, Ministry of Culture, Government of India at Dimapur, Nagaland on the 9<sup>th</sup> November 2009, (iii) delivered two lectures on "Khasi Language" and "Khasi Culture" in the UGC-sponsored Refresher Course on Tribal Studies organized by the Department of MIL, Gauhati University, Guwahati on the 17<sup>th</sup> December 2009, and (iv) delivered the Valedictory Address as Chief Guest at the Valedictory Function of the District Level Science Exhibition organized by the Inspectorate of Schools, East Khasi Hills District, Government of Meghalaya, on the 15<sup>th</sup> April 2010.

## School of Humananities

Prof. S. Dkhar (i) organized the UGC – Capacity Building Workshop of Women Managers in Higher Education held at Rikman Hotel, Tura from 29<sup>th</sup> April to 3<sup>rd</sup> May 2009, (v) acted as a Judge in the Annual Cultural Poetry Competition organized by Rama Krishna Mission held at Rama Krishna Mission Institute, Thana Road, on 25<sup>th</sup> July 2009, (iv) delivered two lectures on “Literary Criticism in Khasi” on the 11<sup>th</sup> August 2009 in the Refresher Course organized by Department of Hindi, NEHU, (vii) attended the Annual Lecture of Poetry Society (India) on *Bharatiya Kavita Ki Stithi* by Surinder Singh Noor held on 24<sup>th</sup> August 2009 at Ravindra Bhavan, organized by Sahitya Akademi and Poetry Society (India, (viii) was a Chief Guest in the Book Release of Mrs. H.C.Jana and released the Khasi Novel entitled *Tang Ma Phi* held on 29<sup>th</sup> August 2009 at K.J.P. Girls Higher Secondary School’s hall, Mission Compound, (ix) was the Guest of Honour in the Valedictory function of the Shillong Book Fair 2009, and delivered a speech on “The importance of reading Culture to the Students” organized by the National Book Trust, India in collaboration with the Directorate of Arts and Culture, Government of Meghalaya held on 6<sup>th</sup> September 2009 at the Art and Culture hall, State Central Library Campus, Shillong, (x) attended the Three Day UGC Refresher Programme for Trainer Associates on “Capacity Building of Women Managers in Higher Education” on 14<sup>th</sup> to 16<sup>th</sup> September 2009 at Shri Lal Bahadur Shastri Rasstriya Sanskrit Vidyapeeth, New Delhi, organized by Women Studies Centre, New Delhi, (xi) was the Chairperson/Speaker in the Inter College/University Debate competition held on 17<sup>th</sup> September 2009 at Community Hall NEHU, organized by KSU NEHU Unit and attended the Felicitation Programme, (xii) was Guest of Honour in the Valedictory function of the Training Workshop for Teaching Hindi to the Non-Hindi Speakers as part of celebration of Hindi Week held on 18<sup>th</sup> September 2009 at Kendriya Hindi Sansthan, Shillong organized by Regional office of the Kendriya Hindi Sansthan, Shillong, (xiii) was Chief Guest in the inaugural function of the Writers’ meet cum Book release and delivered an inaugural address on “The importance to meet the author face to face” then released of the book entitled *Ka Nong* written by W.D.Jyrwa organized by the Department of Khasi, Lady Keane College, Shillong, (xiv) was Special Guest in the Seminar on “Archery an Indigenous Sport Ka Thong ka Rong Biria” cum Inter College Indigenous Archery Competition held on 20<sup>th</sup> October 2009 at Sankardev College, organized by Seminar Committee Sankardev College, Shillong, (xv) was Chairperson in the closing function of the Refresher Programme of the School Teachers of Meghalaya organized by Central Institute of Hindi, Regional Centre, Shillong held on 28<sup>th</sup> October 2009 at the Regional office of Hindi Sansthan, Lachumere, Shillong, (xvi) delivered six lectures in the Refresher Course in Khasi held at the Department of Khasi from 5<sup>th</sup> to 125<sup>th</sup> November 2009 on the theme “Critical Tradition and Khasi Language and Literature”, (xvii)

delivered two lectures on “Managing Research Project, and “The importance of Patent and Intellectual Property Rights in Research” in the UGC Capacity Building Workshop of Women Manager in Higher Education held at K.C Das Commerce College, Chatribari, Guwahati on 20<sup>th</sup> November 2009, and (xviii) attended the Festivals of Letters and the Writers Meet at Ravindra Bhavan, New Delhi on 16<sup>th</sup> to 18<sup>th</sup> February 2010 organized by Sahitya Akademi, New Delhi.

Dr. D. R. L. Nonglait (i) coordinated the 6<sup>th</sup> Refresher Course in the Department of Khasi, NEHU from 5<sup>th</sup> to 25<sup>th</sup> November 2009.

## DEPARTMENT OF LINGUISTICS

**Head** : Dr. S. K. Singh

**Telephone** : 2723310, 2723311 (O), 9863279254, 9863261798 (M)

**Email** : [tosksingh@rediffmail.com](mailto:tosksingh@rediffmail.com)

**Thrust Areas of Research:** The thrust area of the Department is to carry out research in the numerous Tibeto-Burman and Austro-Asiatic languages/dialects of the North-East of India which are largely undescribed so far. The Department also aims to build up expertise for field work, data analysis, and descriptive linguistics by training students from MA level right up to the PhD level. Phonetic, phonological, morphological, syntactic, semantic and other levels of linguistic analysis will form the basis of teaching and research. Language related courses like Phonetics & Phonology, Morphology, Syntax, Lexicography, Translation, Language Education, Sociolinguistics, Languages of North-East India and language Ideology, Language Technology and Text Analysis etc are offered in order to give a wide option for students of Linguistics.

## School of Humanities

**Brief Statement of Academic Activities:** The Department runs the MA and Ph D Programmes.

### Faculty:

- Professor : J. War, M.A. (Gauhati), M.A. (Delhi), Ph.D. (Edinburgh)
- Associate Professors : S. K. Singh, M.A. (Delhi), M.A. (Karnataka SOU),  
M.Phil., Ph.D (Hyd.)  
U. Pappuswamy, M.A., M.Phil, (Bharathiar), Ph.D.  
(Mysore)
- Assistant Professors : S. A. Lyngdoh, M.A. (NEHU), M.Phil. (Delhi)  
B. Khyriem, M.A. (NEHU), M.Phil. (Delhi)  
B. L. Dhanwar, M.A. (NEHU), M. Phil. (Hyd.)

**Visiting Professors /Fellow/Scholars:** (i) Prof. Krishna Bhattacharjee, Calcutta University, (ii) Prof. T. Yashwantha Singh, Manipur University, (iii) Prof. Nicholas Evans, Australian National University, (iv) Dr. Graig Cooper, Australia University and (v) Dr. Temsu Jamir, EFLU, Hyderabad.

**Student Intake** :M.A. : 34

Actual Admission	SC	ST	GEN	Male	Female
M.A.	-	33	1	8	26
Ph.D.	-	5	1	-	6

### Degrees Awarded:

	SC	ST	Gen	Male	Female	Total
M.A.	-	33	2	4	31	35

### Placement of students:

T. Temsunungsang (2001 Batch) was recently appointed as Asst. Professor at EFLU, Shillong Campus.

### Courses conducted:

Semester I : Introduction to Linguistics; Morphology; Syntax 1; Phonetics and Phonology

- Semester II : Part 1 Semantics, part 2 Linguistics and Environment; Sociolinguistics; Lexicology and Lexicography, Syntax 11 and Language Technology & Text Analysis
- 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, Northeast India and Language Ideology
- Semester IV : Structure of TB/AA, Field Methods (Dissertation); Language Education; Translation Theory and Practice, Readings in Linguistics-II

**Study Tours/Field Trips of students:**

A Field Trip was conducted under the UPE Project to Lynshing Village, East Khasi Hills. Data collection was done on all areas of phonology, morphology and syntax.

**Seminars/ Conferences/Symposia/Workshop/Extension Programmes:**

**Organized:**

- (i) The Department organized a Workshop on “Tibeto-Burman Languages” under UPE programme.
- (ii) The Department also organized a National Workshop on “Mother Tongue Survey in India” during 17<sup>th</sup> September 2009 in collaboration with Ministry of Home Affairs, Office of the Registrar General, India Language Division Kolkata.-

**Attended:**

Dr. S. K. Singh presented (i) a paper on “Revisiting Linguistic Identity: Locating [...in-betweens] at the threshold of New World Order” in the International Conference on ‘Identity and Cultural Dynamics: Tribes of South Africa, Nigeria and east India’ held at Rajiv Gandhi University, Arunachal Pradesh during 28 – 30 October 2009, and (ii) a paper on “Revisiting Linguistic Identity: Towards Alternative Sociolinguistics” in the National seminar on ‘Language, Culture and Identity: Issues and Challenges’ held at the Department of linguistics, Aligarh Muslim University, Aligarh during February 8-10 2010.

Dr. U. Pappuswamy (i) presented an invited paper on “Knowledge Representation for Multilingual Intelligent Tutoring Systems” at the ‘*National Conference on Multimedia Enhanced Language Teaching*’, R.M.K. College of

Engineering and Technology, Puduvoyal, TamilNadu in August, 2009, (ii) delivered a lecture on “Typology of South Asian Languages” at the *Training Programme on MotherTongue Survey in India*, NEHU, Shillong in September 2009, and (iii) a paper on “Gender Assignment in Khasi (with Angeleena Kharkongor)” at the *9<sup>th</sup> International Conference on South Asian Languages*, Punjabi University, Patiala, January 2010.

**Infra structure Projects:** NEICOD Language Lab for Phonetics and Linguistic Training and building Lexical Resources.

**Research Projects:**

Ongoing

“Tibeto- Burman and Austro- Asiatic Languages in NE India-Phase 1”, UPE Project: Areas Studies – II in collaboration with the Department of Khasi, NEHU. Principal Investigator: Prof. Juanita War.

NELD Project under Central Institute of Indian Languages, Mysore: (i) *A Pedagogical Grammar of Phom* by Atiqua Banu under the Supervision of Dr. S. Singh, (ii) *Descriptive Analysis of Liangmai* by Amos Moita under the Supervision of Bijoy L Dhanwar, and (iii) *Syntax of Vaiphei* by Vanlalhruia under the Supervision of B. L Dhanwar

The Department in collaboration with Language Division, Kolkata has undertaken the Project entitled *Mother Tongue Survey of India* which is being funded by Ministry of Home Affairs, Government of India. 35 mother-tongues in Assam, Arunachal Pradesh and Meghalaya have been taken up by the Department of Linguistics, NEHU as part of the survey.

**Honours /Awards/Recognition:** Two students qualified for JRF from the 2007- 09 batch.

**Other Activities:**

Dr. S. K. Singh (i) was resource person in *Course Writer’s Meet for Translation* at Indira Gandhi National Open University, Delhi on 28<sup>th</sup> November 2009, (ii) was coordinator of MTS Workshop in NE Languages held at Department of Linguistics, Shillong on 17<sup>th</sup> -19<sup>th</sup> September 2009, and (iii) delivered lecture on *Dynamics of Conducting Mother tongue Survey in the North East Region* in the MTS Workshop in NE Languages.

Dr. U. Pappuswamy edited *South Asian Language Review*: January and June 2009.

S. A. Lyngdoh was resource person for Language Skills on Training Program organized by DIET, Nongstoin, West Khasi Hills from 21<sup>st</sup> to 23<sup>rd</sup> October 2009.

B. Khyriem attended the Training Program on Mother Tongue Survey organized jointly by the Language Division, Kolkata and Department of Linguistics, NEHU and appointed as Adm. Coordinator for MTSI Project for various mother-tongues to be surveyed in Assam, Arunachal Pradesh and Meghalaya.

B. L. Dhanwar was a resource person for NCERT Textbook Review & Training for English at High School Level, NERIE, Shillong held in March 2010.

## DEPARTMENT OF PHILOSOPHY

**Head** : Prof. B. K. Agarwala

**Telephone** : 2723552 (O)

**Email** : Philodeptnehu@yahoo.co.in

**Thrust Areas of Research:** Philosophy of Culture with special reference to the tribal thought of the North-Eastern region.

**Brief Statement of Academic Activities:** Both in teaching and research, special attention is given to the areas of analytic philosophy and philosophy of culture with special reference to the tribal thought of the North-Eastern region. The faculty served as resource persons for refresher courses in and out of NEHU, participated and presented papers in regional, national and international seminars/conferences. The faculty members published a good number of papers and books pertaining to their research work.

## School of Humanities

### Faculty:

- Professors** : C. R. Agera, M.A. (Madras), Ph.D. (Delhi)  
 J. Pal, M.A. (Allahabad), Ph.D. (IIT Kanpur)  
 B. K. Agarwala, M.A., M.Phil. (Delhi), Ph.D. (Lucknow)  
 Vanlalnghak, M.A. (NEHU), Ph.D. (IIT Kanpur)
- Associate Professors** : N. Parthasarathy, M.A. (SPGD) M. Phil. (Madras) (on leave)  
 X. P. Mao, M.A. (NEHU), M.Phil. (Delhi), M.Lett. (Sydney), Ph.D. (NEHU)  
 P. Biswas, M.A., Ph.D. (NEHU)  
 L. N. Lenka, M.A. (Utkal), M.Phil., Ph.D. (Hyd.)
- Assistant Professors** : E. R. Tongper, M.A., M.Phil., Ph.D. (NEHU)  
 B. Pohlong, M.A., Ph.D. (NEHU)  
 U. A. Sharma, M.A. (Manipur)

### Student Intake:

**Enrolment Capacity** : M.A. : 50, Ph.D. : Variable

**Actual Admission** :

	SC	ST	Gen.	Male	Female	Meghalaya	Other States
M.A.	-	43	7	17	33	26	24
Ph.D.				05	-	01	04

02 03

### Degrees Awarded:

	SC	ST	OBC	Gen.	Male	Female	Total
M.A.	-	22	1	1	3	21	24

### Courses Conducted:

Indian Metaphysics, Western Metaphysics, Symbolic Logic, Philosophy of Religion, Indian Philosophy of Language-I, Ethics and Environment, Indian Epistemology, Western Epistemology, Indian Moral Philosophy, Indian Philosophy of Language-2, Philosophy of Social Science, Phenomenology and Existentialism, Philosophy of Post-Modernism-I, Analytic Philosophy, Contemporary Philosophy of Religion, Tribal Thought and Culture, Modernism and Responses, Philosophy of Culture, Philosophy of Post-Modernism-2, Western Moral Philosophy, Applied Ethics, Philosophy of Natural Science.

## **Seminars/Conferences/Symposia/Extension Programmes:**

### **Attended :**

Prof. J. Pal (i) presented a paper "Religion and Morality" in a Regional Seminar on "Religion in Secular Indian: Role and Relevance" organized by the Department of Philosophy Gauhati University, Guwahati from 14<sup>th</sup> to 15<sup>th</sup> September 2009, and (ii) chaired an academic session in a National Seminar on "Scientific and Technical words" organized by the Department of Vajjnanic and Technical Sabdavali Commission, New Delhi and the Department of Hindi, NEHU, Shillong on 26<sup>th</sup> March, 2010.

Prof. Vanlalnghak (i) presented a paper on "A Descriptive Account of Hmar Religion: A Critical Note" in a Seminar on "Religion and Society in North-East India from 18<sup>th</sup> Century to Contemporary Times" organized by the Department of History, NEHU, Shillong during 26<sup>th</sup>-28<sup>th</sup> November 2009, and (ii) presented a paper on "Sustainable Resources Management and Conflict Resolution" in a Seminar on "Resources Management and Conflict Transformation" organized by Seven Students' association on 28<sup>th</sup> November 2009 at Shillong.

Dr. P. Biswas (i) presented a paper entitled, "The Animal that therefore I am" at French Embassy sponsored 5<sup>th</sup> Death Anniversary of Jacques Derrida held at School of Language in JNU, New Delhi on 8<sup>th</sup> September 2009, (ii) presented a paper entitled, "Problematique of Ethnic Persistence in India's Northeast" at the National Seminar on "Culture and Ethnic Persistence" held at NEHU, Tura Campus during 7<sup>th</sup> - 9<sup>th</sup> November 2009, (iii) presented a paper entitled, "Otherness and Rights" at the Indian Institute of advanced Study Conference on "Politics of Boundary Maintenance" held at Shimla, 16<sup>th</sup> - 17<sup>th</sup> November 2009, (iv) presented a paper entitled, "A Conceptual Study of the Bokar Religion: a Comparative Perspective" in SAP Seminar on "Society and Religion" held at Department of History, NEHU, Shillong during 26<sup>th</sup> - 28<sup>th</sup> November 2009, (v) presented a paper entitled "New Meanings of Universalism" at an ICPR-ICSSR sponsored National Conference on "Swaraj, Culture and Education" held at Assam University, Silchar during 8<sup>th</sup>-10<sup>th</sup> January 2010, (vi) presented a paper entitled, "Ethics in the marketplace of Media" at a National symposium held at Department of Mass Communication of Assam University, Silchar on 11<sup>th</sup> February 2010, (vii) presented a paper entitled, "Case Studies of endangered Languages of Barak Valley: Aimol, Chiru and Sairim" at the CIIL, Mysore sponsored national conference on "Endangered Languages of India" held at the Department of Linguistics at Assam University, Silchar during 13-14<sup>th</sup> January

2010, (viii) presented a valedictory paper entitled, "New Theories of India's Northeast as a spatial entity" at UGC sponsored national seminar on "Development of Northeast India: Problems and Prospects" on 17<sup>th</sup> February 2010 at S. S. College, Hailakandi, Assam, (ix) presented a paper entitled, "Apatanis, Hmongs and Hmars: Ethnophilosophy of Tribes of India's Northeast and Southeast Asia" at Asian Philosophy Congress held at JNU, New Delhi during 6<sup>th</sup> - 10<sup>th</sup> March 2010, and (x) presented a paper entitled "Social Theory and Development-ality: Sovereignty, Otherness and the Calling of Neoliberal World Order" at Forum for Asian Social theory held at Chulalongkorn University, Bangkok during 15-16 December 2009.

Dr. X. P. Mao presented a paper on "Philosophy and Culture- Asian and Non-Asian" in Asian Philosophy Congress held at Jawaharlal Nehru University, New Delhi during 6-9 March 2010.

#### **Publications:**

Agera, C. R. 2009. Scriptural Text and the Reader. *Journal of Indian Council of Philosophical Research*, 24:1, 155-173.

Agera, C. R. 2009. Postmodern Culture: A Reflection in Moving Images. *Vedânta Kesari*, 96:7, 266-278

Agera, C. R. 2009. Cultural Diversity and Bio-Diversity: A Study through Language Diversity. *The NEHU Journal*, 7:1, 17-42.

Agera, C. R. 2009. Faith and Truth: A Study in Tillich's Truth of faith. *The Journal of Religious Studies*, 38: 1&2, 1-19.

Agera, C. R. 2009. Review of Dancing to Diversity: Science-Religion Dialogue in India, (Ed.) Kuruvilla Pandikattu S.J. (New Delhi, Serial Publications, 2008). *Indian Theological Journal*, 3:1, 144-151.

Agera, C. R. 2009. Indra's Battle Against Vrtra: A Hermeneutical Study of Rg Veda. *Journal of Indian Council of Philosophical Research*, 25:1, 31-60.

Agera, C. R. 2009. Alternative Forms of Ethical Existence: A Study in Foucault. *Journal of Indian Council of Philosophical Research*, 25:3, 53-78.

Agera, C. R. 2009. University and Unity of Science. *Pratyaya*, 2:1-5.

Pal, J. 2009. Some Reflections on Nature of the Method of Philosophy. *Jnânânam*, II (No.1): 3-21.

Pal, J. 2009. Individual Property Rights, Economic Inequalities and Moral Obligation. *International Journal of jurisprudence and Philosophy of Law*, 2 (No.2): 167-175.

Pal, J. 2009. The Role of Philosophy in Science. *Pratyaya*, 2: 47-56.

Agarwala, B. K. 2010. What is the Mandate of North-Eastern Hill University? *The NEHU Journal*, III (No. 1): 95-106.

Agarwala, B. K. 2009. Philosophy of Culture: Confusion Confounded. *Journal of Indian Council of Philosophical Research*, 25 (No.4): 81-98.

Biswas, P. 2009. Proposed Reform in Higher Education by Yash Pal Report: A Critique. *Mainstream Weekly*, XLVII (No.41):56-9.

Biswas, P. 2009. Recognizing India's North-East: Sovereignty, Developmentality and Identity. *Indian Journal of Secularism*, 13(No.3): 9-24.

Biswas, P. 2009. Report of the Committee to Advise on Renovation and Rejuvenation of Higher Education, New Delhi. *Man and Society*, 6 (No.2): 120-27.

Biswas, P. 2009 The Idea of Justice: Book Review. *Summerhill, IIAS Review*, XV (No.1..Summer): 48-51.

### **Book/Book Chapters/Proceedings:**

Pal, J. 2010. Knowledge and Communication. In *Of Knowledge, Freedom and Reason*. Ed.: S. Goswami, Publication Cell, Dep. of Philosophy, Gauhati University, Guwahati in association with Bhabani Print and Publications, pp.20-29.

Pal, J. 2010. The Buddhist Doctrine of pancasilā. In *Dimension of Philosophy: Tradition and Modernity*, Ed.: S. Goswami, Publication Cell, Dep. of Philosophy, Gauhati University, Guwahati in association with Bhabani print and publications, pp.127-141.

Agarwala, B. K. 2009. Control of Power through Freedom: An Issue in Kant's Political Philosophy. In *The Modern Prince and the Modern Sage: Transforming Power and Freedom*, Ed.: A. K. Giri , SAGE Publication Pvt. Ltd., ISBN:9788178298276.

Biswas, P. 2010. Phenomenology of Autonomy in Genes: A Neurobiological Critique of Parallelism. In *Materalism and immaterialism in India and the West: Varying Vistas*, Ed.: P. Ghose, New Delhi: CSC and PHISPC, 709-722.

Biswas, P. 2010. Only the trade Question: Border and Bounty in the New Country, In

*India-China: Trade and Strategy for Frontier Development*, Eds.: G. Das and C. J. Thomas, New Delhi: Bookwell, pp. 327-348.

Biswas, P. 2010. Deep Problem of Intentionality. In *Of Knowledge, Freedom & Reason*, Ed.: S. Goswami, pp. 175-205.

### **Research Projects:**

#### **Ongoing**

UPE Project entitled "World-Views, Religion and Ideologies of Tribes and Ethnic Communities of North-East India and similar Societies of South-East Asia: A comparative Study". Principal Investigator: Prof. Vanlalnghak

#### **Honours/Awards/Recognition:**

Prof. Vanlalnghak was nominated (i) as a Member of the Council of the Indian Council of Philosophical Research by the Ministry of HRD, Government of India w.e.f. 19 September 2009, and (ii) as a Member of the Governing Body of the Indian Council of Philosophical Research w.e.f. 11 October 2009.

Prof. J. Pal was the Chief Editor of International Journal of Jurisprudence and Philosophy of Law, Vol. 2 (Serial Publication, New Delhi).

#### **Other Activities:**

Prof. J. Pal delivered (i) two lectures on "Indian Philosophical Traditions, Morality and Education" in an Orientation Course organized by Bio-informatics Centre, NEHU, Shillong on 4<sup>th</sup> and 6<sup>th</sup> April 2009, (ii) a lecture in jnanam Academy, Gauhati, as a Chief Guest on "Research Methodology in Philosophy" on 10.4.2009, (iii) two lectures in a Refresher Course on "The Indian Classical Thoughts" organized by the Department of Hindi, NEHU, Shillong on 4<sup>th</sup> August 2009, (iv) a lecture on "Philosophical Methodology and Research and Teaching of Philosophy in colleges" for the senior faculty of Universities and colleges in brainstorming symposium organized by the Academic Staff College, Gauhati University, Gauhati on 11<sup>th</sup> and 12<sup>th</sup> September 2009, (v) a lecture on "Philosophy of Value Education" on the International Philosophy Day as a chief Speaker organized by the Department of Philosophy, Gauhati University, Gauhati on 20.11.2009, (vi) six lectures on "Contemporary Indian and Western Ethics" in a Refresher Course organized by the Department of Philosophy, Gauhati University from 30<sup>th</sup>

November to 3<sup>rd</sup> December 2009, and (vii) a lecture on “The idea of Community” in a Winter School on “Tribes, Community and Modernity” organized by the Institute of Advanced Centre, Shimla on 3<sup>rd</sup> March, 2010.

Prof. B. K. Agarwala delivered (i) two lectures on “Two Conception of Culture” in Orientation Course in Political Science, UGC Staff College, Lucknow University, Lucknow, on 20-21 December 2009, and (ii) two lectures on “Dynamics of Rights” in Refresher Course on “Human Rights”, UGC Staff College, Lucknow University, Lucknow, 29-30 December 2009.

Prof. Vanlalnghak delivered (i) six lectures on “Philosophy of Culture and Postmodernism” for the senior Faculty of Universities and Colleges in “Brainstorming Symposium” organized by the Academic Staff College, Gauhati University, Gauhati during 10 – 12 September 2009, (ii) six lectures in a Refresher Course on “Contemporary Indian and Western Ethics” organized by the Department of Philosophy, Gauhati University, Guwahati during 1-3<sup>rd</sup> December, 2009, and (iii) a lecture on “Traditional Tribal Religion: Impact of Christianity and Modernity” in a Winter School on “Tribes, Community and Modernity” organized by the Indian Institute of Advanced Study, Shimla on 26<sup>th</sup> February, 2010.

Dr. P. Biswas delivered (i) four lectures on Richard Rorty, Jacques Derrida, Jean Baudrillard and Jean Luc Nancy at a IIT Kharagpur sponsored refresher course held at the Dep. of HSS during 16-18<sup>th</sup> June, 2009, (ii) two lectures entitled “Ethical Issues in Social Sciences” at NERC-ICSSR on 15<sup>th</sup> October 2009, (iii) three lectures in the Advanced Course for Doctoral Students in Political Science held at NERC, ICSSR on 30<sup>th</sup> November and 1<sup>st</sup> December 2009, (iv) two lectures entitled “Against Objectivity” and “Humiliation and Suffering” at an ICSSR national course on research methodology held at Assam University, Silchar on 10<sup>th</sup> and 11<sup>th</sup> January 2010, (v) four lectures at MHRD sponsored special course on “Modernist Writing, reading and Thinking” at HSS, IIT Kharagpur during 22-23 February 2010, (vi) three lectures on “Markets and Freedom: The New Normative Economics” in Advanced Course for Doctoral students in Economics held at NERC-ICSSR on 30<sup>th</sup> and 31<sup>st</sup> March 2010, and (vii) the Shri Golam Osmani memorial public lecture on “Goals of Higher Education” on 14<sup>th</sup> February at Sonal College, Silchar organized by Osmani Memorial Trust, Silchar, Assam.

Dr. B. Pohlong delivered a lecture on “Environmental Ethics” at Shillong College on 23 April 2009.

## V

# SCHOOL OF LIFE SCIENCES

**Dean** : Prof. B. K. Sharma  
**Telephone** : 2722001 (O), 9436110599 (M); Fax: 2550108  
**E-mail** : [deansls@nehu.ac.in](mailto:deansls@nehu.ac.in); [bksharma@nehu.ac.in](mailto:bksharma@nehu.ac.in)

**T**he School of Life Sciences comprises Departments of Biotechnology & Bioinformatics, Biochemistry, Botany and Zoology. All these four Departments offer postgraduate teaching and Ph.D. programmes. The faculty members in the School are actively involved in research, have received several awards, and have collaborative research programmes with national and international research groups. All the Departments have received substantial research grants from national and international funding agencies. The Departments of Botany (a Centre for Advanced Study), Biochemistry (UGC-DRS II) and Zoology (DSA) are supported by the UGC's SAP and also by the DST's FIST programme, while the Department of Biotechnology & Bioinformatics received funding from the DBT. The Departments of Botany and Zoology also received special grants in two phases from the UGC for improvement of the infrastructure. With the implementation of an MOU between NEHU and DRDO, several collaborative research projects in the fields of Life Sciences are in progress. Each Department has its identified thrust areas of research. Under the UPE scheme of the UGC, the integrative school-level research project on Biosciences is in progress with "Biodiversity: assessment, conservation and value addition as its thrust. Almost the entire faculty of the School is participating in this programme having a tenure of five years and the supporting man power recruited under the project includes 4 Senior Technical Assistants, 24 Junior Research Fellows and 5 Laboratory Attendants. Besides, a school-level central instrumentation facility has been set up with some state-of-the-art equipments. During the year, 76 students were awarded M.Sc. degree and 9 students Ph.D. degree. Five research students availed research assistance under UGC's special scheme and 4 research students were recipients of the Rajiv Gandhi National Fellowship.

## DEPARTMENT OF BIOCHEMISTRY

**Head** : Prof. A. Alam  
**Telephone** : 2722101, 2551409 (O), 2726115 (R)  
**E-mail** : [anisalam14@yahoo.com](mailto:anisalam14@yahoo.com)

**Thrust Area of Research:** Medical and Microbial Biochemistry are the thrust areas of research in the Department of Biochemistry. *Medical Biochemistry* (Development & Aging, Medicinal Plants, Carcinogenesis and Radiation Biology, Drug Delivery and Tumor Immunology, Protein Chemistry and Enzymology). *Microbial Biochemistry* (Plant-Microbe Interaction, Cyanobacterial Nitrogen Fixation and Cyanobacterial Diversity).

**Brief Statement of Academic Activities:** The Department admitted 19 students for M.Sc. and 3 students for Ph. D. programme during this year. During this period 18 students have successfully completed their M.Sc. and 4 students have been awarded Ph. D. degree. Six students cleared CSIR NET, two ICAR-ARS-NET and one cleared GATE. The UGC-SAP (DRS II) program is continuing in the department. During the period 5 new individual projects have been sanctioned by different funding agencies. All the faculty members are also involved as Project Investigators of the research focus 'Biosciences' under University with Potential for Excellence (UPE) scheme, funded by the University Grants Commission. The Department organized one seminar during the year. During this period, faculty members and research scholars also participated in various seminars/workshops/conferences/symposia, etc. in India and abroad.

### Faculty:

**Professor** : R. Lalthantluanga\*, Ph. D. (Pune)  
(\*Pro-VC, NEHU, Shillong)  
A.N. Rai\*\*, Ph. D. (Dundee)  
(\*\*on lien; VC, Mizoram University)  
R. Sharma, Ph. D. (BHU). FNASc  
R.N. Sharan, Ph. D. (JNU).  
A. Alam, Ph. D. (FTI, Moscow).

**Associate Professors** : D. Syiem, Ph. D. (NEHU).  
A.K. Singh, Ph. D. (Univ. Hyd.)  
M.B. Syiem, Ph. D. (NEHU).



4. Mr. D. Marbaniang, SBI, Shillong.
5. Mr. E. Passah, Ranger, Forest Dep., Meghalaya.

**Courses Conducted:** Following courses were conducted for M. Sc. Students:

Semester I : Chemistry and Biomolecules; Enzymology; Intermediary Metabolism; Practicals.

Semester II : Techniques in Biochemistry; Physiological Chemistry; Microbiology; Practicals.

Semester III : Genetics; Medical Biochemistry; Environmental Biochemistry; Nutritional and Clinical Biochemistry; Practicals.

Semester IV : Molecular Biology; Immunology; Bioenergetics; Practicals.

**Study Tour/Field Trips of Students:**

Dr. S. Bhan and Mr. T. Tripathi led the team of M. Sc. 2<sup>nd</sup> & 4<sup>th</sup> Semester students for study tour. They visited premier academic Institutions in Kolkata, Delhi and Chandigarh during the period from 17<sup>th</sup> July to 2<sup>nd</sup> August 2009, which provided them a good scientific exposure.

**Seminars/Conferences/Symposia/Extension Programs:**

**Organized:**

The Department organized a seminar on '*Bioanalytical Techniques*' under the aegis of UGC-DRS-II on 26<sup>th</sup> March, 2010.

**Attended:**

Prof. R. Sharma delivered an invited talk entitled 'Benefits of dietary restriction on healthy aging in post bioinformatics and proteomic era' in the Workshop on Applications of Bioinformatics and Proteomic Techniques in Neurobiology, Sept. 07-21, 2009, Centre of Advance Study, Dept. Zoology, BHU, Varanasi.

Prof. R. N. Sharan delivered 'Dr. S. S. Katoch Memorial Lecture' entitled "From mice to men: Biomarker for cancer detection" at Moti Lal Nehru Medical College, Allahabad under the aegis of "International conference on Frontiers in Prevention, Diagnosis & Therapy of Cancer (FPDTC – 2009)" held from 21-22 November 2009. He also chaired a scientific session during the conference. He was Chairman of Young Investigator's Awards Committee. He also delivered an invited talk entitled 'Fundamentals of Radiation Biology and Radiation Safety:

Good Laboratory Practices Perspective' in the "Symposium on Laboratory Safety and Waste Management" held at Department of Biotechnology, IIT – Madras, Chennai (26-28 Feb. 2010).

Prof. A. Alam was resource person in DBT sponsored Workshop on Analytical Techniques in Biological Sciences, Lady Keane College, Shillong, 25th Nov. 2009.

Dr. D. Syiem gave an invited talk in the Workshop cum Training Programme on Medicinal & Aromatic Plants- A career Oriented Approach, Union Christian College, Ri Bhoi District, Meghalaya, on 23rd September, 2009. He was resource person (i) in DBT sponsored Workshop on Analytical Techniques in Biological Sciences, Lady Keane College, Shillong, 25<sup>th</sup> Nov. 2009, (ii) in QIP Workshop: "Approaches to the Screening of Bioactive Molecules from Natural Resources" in Biotechnology Dept, IIT, Guwahati, on 6th July, 2009, (iii) in Seminar on planning the revival of indigenous traditional herbal healing practices for health access of Ford foundation, New Delhi, TDMS, Tezpur University, on 22 -23<sup>rd</sup> Aug, 2009, and (iv) in Workshop on community forest of North East India, Regional Centre, National Afforestation & Eco-Development Board, NEHU, on 10th Dec, 2009.

Dr. A. K. Singh attended and presented (i) a poster entitled "Population dynamics: *Alcanivorax* in marine oil spill" at 2nd International Symposium on Applied Microbiology and Molecular Biology in Oil Systems (ISMOS-2) held at Danish Technological Institute in Aarhus, Denmark from June 17-19, 2009, (ii) a paper entitled "Dynamics of *Alcanivorax* spp. in marine oil spill" at 15th Molecular Microbial Ecology Group (MMEG) meeting at University of Aberdeen, UK, held on 29th – 30th July 2009 and (iii) a paper entitled "Hydrocarbon pollution: response of specific microbial communities to bioremediation strategies" in seminar on Bio-Analytical Techniques, Department of Biochemistry, NEHU Shillong, 26<sup>th</sup> March 2010.

Dr. P. K. Ambasht presented a talk on "Enzyme Immobilization and Biosensors" in the seminar on Bio-Analytical Techniques, Department of Biochemistry, NEHU Shillong, 26<sup>th</sup> March 2010.

Dr. L. Kma presented (i) a paper entitled "Mitigation potential of Angiotensin Converting Enzyme inhibitors after total body irradiation-induced lung injury" during the Research Day celebration in the Medical College of Wisconsin, USA, September 22, 2009, (ii) a paper entitled "Angiotensin Converting Enzyme Inhibitors Mitigate Onset of Structural Fibrosis in the Lung after Ionizing Radiation"

in the 55<sup>th</sup> Annual Meeting of Radiation Research Society held in Savannah, Georgia, USA, October 4-7, 2009, and (iii) a paper entitled "Mitigation of Radiation-Induced Lung Fibrosis by Angiotensin Converting Enzyme Inhibitors" in the seminar on Bio-Analytical Techniques, Department of Biochemistry, NEHU Shillong, 26<sup>th</sup> March 2010.

## **Publications:**

### **Published in India**

Kayang, H., B. Kharbuli and D. Syiem, (2009). Litsea Wall.- An untapped economic plants species of Meghalaya. *Natural Product Radiance*, 8(1): 5.

Hynniewta, L., A. Pinokiyo and M. B. Syiem, (2009). Identification and documentation of two previously unreported foliose lichens from Meghalaya, North-East India. *Journal of Economic and Taxonomic Botany*, 33 (3): 589-593.

### **Published abroad**

Syiem D., R. Sharma and V. Saio, (2009). In vitro study of the antioxidant potential of some traditionally used medicinal plants of Northeast India and assessment of their total phenolic content. *Pharmacologyonline* 3: 952-965.

Bhattacharjee P. and R. Sharma, (2009). Antithetical effects of corticosterone and dibutyl cAMP on adenosine deaminase in the gastrointestinal tract of chicken during postnatal development. *Mol. Cell. Biochem.* 327: 79-86.

Choudhary Y. and R. N. Sharan, (2009). Altered p53 response and enhanced transgenerational transmission of carcinogenic risk upon exposure of mice to betel nut. *Environ. Toxicol. Pharmacol.*, 27:127-138, (DOI 10.1016/j.etap.2008.09.003).

Choudhary Y. and R. N. Sharan, (2009). Ultrastructural alterations in liver of mice exposed chronically and transgenerationally to aqueous extract of betel nut: Implications in betel nut-induced carcinogenesis. *Microscopy Res. Tech.*, (DOI 10.1002/jemt.20791).

Syiem D. and W. Lyngdoh, (2009). Hypoglycemic effects of *Gymnopetalum Cochinchinensis*. *Pharmacologyonline*, 2:728-738

Syiem D., P. Z. Khup and A. B. Syiem, (2009). Effects of *Potentilla fulgens* Linn. on carbohydrate and lipid profiles in diabetic mice. *Pharmacologyonline*, 2: 787-795.

Tripathi T., A. Roseler, S. Rahlfs, K. Becker and V. Bhakuni, (2010). Conformational stability and energetics of Plasmodium falciparum glutaredoxin. *Biochimie* 92(3): 284-291.

Tripathi T., B. K. Na, W. M. Sohn, K. Becker and V. Bhakuni, (2009). Structural, functional and unfolding characteristics of glutathione S-transferase of Plasmodium vivax. *Arch. Biochem. Biophys.* 487: 115–122.

**Book/Book Chapter:**

Sharma R. and C. J. Thomas (Eds.), 2010. Ageism: Problems and Prospects, Akansha Publishing House, New Delhi.

Stansfield W. D., J. S. Colome, R. J. Cano and R. N. Sharan, 2010. Molecular and Cell Biology – Schaum's Outline Series. (Special Indian adaptation), Tata McGraw Hill Education Pvt. Ltd., New Delhi, 2010 [ISBN (13): 978-0-07-015379-0].

Ranhotra H. S. and R. Sharma, 2010. *Modulation of serum biochemistry in aged khasis of high altitude location*. In *Ageism: Problems and Prospects*, Eds.: R. Sharma, and C. J. Thomas, Akansha Publishing House, New Delhi, pp. 54-68.

Sharma R., 2010. *Dietary restriction- a way to elixir of youth*. In *Ageism: Problems and Prospects*, Eds.: R. Sharma, and C. J. Thomas, Akansha Publishing House, New Delhi, pp. 13-24.

Odyuo M. M. and R. N. Sharan, 2009. *Quantitative evaluation of EDTA and ethanol for their ability to afford protection against °OH and ROS generating chemical system: DNA strand breaks in pMTa4 plasmid DNA in vitro*. In *Free Radical and Natural Products in Health*, Ed.: A. Kumar, Genius Publications, India, 2009 (ISBN: 978-93-80311-14-2), pp 150-160.

Sharan R. N., 2009. *Poly-ADP-ribosylation in cancer*, In *Cancer Epigenetics* (multi-author review), Ed.: T. Tollefsbol, Chapter 15, 2009, CRC Press, USA, pp. 265-279.

Singh A. K. and S. Becker, 2009. *Analysis of cyanobacterial diversity by denaturing gradient gel electrophoresis (DGGE) in Biology and Biodiversity of Microalgae*, Ed.: N. Anand, Akshara muthra aalayam, Chennai.

Khumanthem N., A. K. Singh, M. B. Syiem and A. N. Rai, 2009. Methyllummonium uptake in the thermophilic cyanobacterium, *Mastigocladus*

*laminosus*. In “*Biology and Biodiversity of Microalgae*”. Ed.: A. Anand, Akshara muthra aalayam, Chennai, pp. 331-340.

**Funds received from agencies other than NEHU:**

UGC-SAP (DRS-II)	Rs. 58.00 lakhs
DST-FIST-II	Rs. 2.60 lakhs
DST	Rs. 38.06 lakhs
BRNS, DAE	Rs. 30.00 lakhs
ICMR	Rs. 18.00 lakhs
UGC	Rs. 9.51 lakhs

**Infrastructure facilities:**

1. Protein blotter (Bio-Rad)
2. Fraction collector (Bio-Rad)
3. Tabletop cooling centrifuge (Sigma)
4. Electrophoresis and blotting apparatus (Bio-Rad)
5. Freezer (-50 °C) (LabTech)
6. Refrigerated airfuge (Sigma)
7. Spectrophotometer (Shimadzu)
8. Mini gel doc system (Bio-Imaging systems)

**Research projects:**

**Ongoing:**

‘Biosciences’ under UPE scheme, funded by UGC.

**New:**

Dietary and hormonal modulation of protein carbonylation in mice as a function of age. Principal Investigator: Prof. R. Sharma. Sponsored by UGC (Rs. 9.51 lakhs).

Studies on biomodulators of glucocorticoid receptors in mice. Principal Investigator: Prof. R. Sharma. Sponsored by DST (Rs. 18.06 lakhs).

## School of Life Sciences

Biodosimetry studies using cytogenetic and gene expression profiles in human peripheral blood lymphocytes exposed to gamma radiation *ex vivo*. Principal Investigator: Prof. R. N. Sharan (Co-Investigator: Dr. L. Kma). Sponsored by BRNS (Rs. 30 lakhs).

Molecular and immuno-chemical characterization of tumor associated antigens in mice exposed to nitrosamines. Principal Investigator: Prof. A. Alam. Sponsored by DST (Rs. 20 lakhs).

Study of relationship between poly-ADP-ribosylation (PAR) of blood lymphocyte proteins and cancers of breast, cervix and head & neck in humans: Exploring the potential of PAR as a biomarker for cancer detection. Principal Investigator: Dr. L. Kma (Co-Investigator: Prof. R. N. Sharan). Sponsored by ICMR (Rs. 18 lakhs).

### **Academic/professional collaborations:**

Faculty members have research collaborations at individual level with the following institutes:

University of Dundee, UK; Uppsala University, Sweden; 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; Medical College of Wisconsin, Milwaukee, USA; JNU, New Delhi and BHU, Varanasi.

### **Honours/ Awards/Recognition:**

Prof. R. N. Sharan has been granted an Indian Patent (PAT/4.18.2/08044) on the technology and clinical phase I study has been completed. Currently, multi-center 'proof of concept' research (clinical phase II study) has been initiated in collaboration with the 'Global Discovery Center' of ILS Bioservices, Gurgaon, an arm of a US-based multinational company.

Prof. R. Sharma has been (i) elected as Vice-President of the Association of Gerontology, India (2009-10) and (ii) nominated as member of Academic Council, Mizoram University, Aizawl (2009-12).

Dr. D Syiem has been appointed as reviewer for (i) Science Alert (2009) and (ii) African Journal of Pharmacy and Pharmacology (AJPP) (2009).

Dr. L. Kma has been appointed as a reviewer in Canadian Journal of Pure & Applied Sciences (2009 onwards).

### Other Activities:

Prof. R. Sharma delivered (i) an invited lecture titled "Dietary restriction as a route to healthy aging" at SRL- Ranbaxy, Mumbai on May 23, 2009; (ii) a lecture on "Protein structure and organization" at the summer school under NER-FIST, Dept. Botany, NEHU, Shillong on May 27, 2009; (iii) an invited lecture on "Structural organization of proteins and their targeting to various destinations" at the St. Edmund's College under an initiative for a Star College on Aug. 08, 2009; (iv) lectures (on aging, drug action and signal transduction) at the Dept. Life Sciences, Manipur Central University, Imphal on October 11 and 12, 2009; (v) lectures in Refresher Courses held in Zoology (Nov. 11 & 18, 2009) and Botany (Feb. 26, 2010) at NEHU, Shillong; (vi) lectures at the Dept. Biotechnology and Mol. Biology, Tezpur University (Nov. 13-14, 2009); and (vii) an invited lecture on "Why do we age: should we ask this question or not" in DST-INSPIRE programme on Dec. 19, 2009 at NEHU, Shillong.

Dr. D. Syiem was resource person (i) in Orientation programme in Education Dept. NEHU on April 20-21, 2009 and (ii) in Refresher Course in the Dept. of Botany, NEHU, on 16th March, 2010. Dr. D. Syiem was a Participant in Workshop on 'Basic Mass-spectrometer with special emphasis on GC-MS/MS and LC-MS/MS sponsored by Varian India Pvt Ltd, Kolkata & SAIF, NEHU on 9th March, 2010.

Dr. A. K. Singh completed the 2-year International Incoming Marie Curie Fellowship of European Commission in University of Cambridge, UK (2008-10). Dr. A. K. Singh attended (i) International symposium on Phycological Research held at BHU Varanasi on 25th Feb-27th Feb 2010 and (ii) one day workshop on "Identification of Sediment Research Challenges" organized at University of Newcastle upon Tyne, UK on 29th May 2009.

Dr. P. K. Ambasht took classes in "NET Coaching classes for SC and ST students", NEHU, Shillong (24.10.09-28.11.09) and attended the National Symposium on Reforms in Higher Education, held in NEHU Shillong, October 29-30 2009.

Dr. L. Kma completed one-year post-doctoral research at Department of Radiation Oncology, Medical College of Wisconsin, Milwaukee, USA (2009-10). Dr. L. Kma attended (i) a symposium on Medical Countermeasures against Radiological Terrorism held in the Medical College of Wisconsin, USA, April 1-2, 2009 and (ii) a seminar on Advances in Lung Research organized by Wisconsin Thoracic Society held in the Medical College of Wisconsin, USA, May 13, 2009.

Dr. M. B. Syiem attended (i) series of lectures on Basic Mass-Spectrophotometer with special emphasis on GC-MS/MS by Dr. Ben Baars of Varian, Netherlands, organised by Sophisticated Analytical Instrument Facility (SAIF), North Eastern Hill University, Shillong, 9<sup>th</sup> March, 2010, (ii) workshop on Atomic Absorption Spectroscopy: Basic Principles, Applications and Practical Demonstrations held at Sophisticated Analytical Instrument Facility, North Eastern Hill University, Shillong, 11<sup>th</sup> – 13<sup>th</sup> November, 2009, and (iii) workshop on Basic Principles, Preparatory Methods and Application in Scanning Electron Microscope held at Sophisticated Analytical Instrument Facility, North Eastern Hill University, Shillong, 3<sup>rd</sup> – 5<sup>th</sup> November, 2009.

## DEPARTMENT OF BIOTECHNOLOGY & BIOINFORMATICS

**Head** : Prof. S.Ramarao

**Telephone** : 2722401,2722402 (O)

**Thrust Areas of Research:** Molecular Genetics, Applied Microbiology

**Brief Statement of Academic Activities:** The Department has M.Sc. and Ph.D. programmes. 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. Some of the students after completion of M.Sc. had joined in different IITs, IMTECH and AIIMS for their Ph.D. degree, while many others had 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. From the students of M.Sc. Biotechnology 3 qualified in the NET, 4 qualified in the DBT-JRF and 3 qualified in the GATE.

**Faculty:**

- Professors : A. Chatterjee, M.Sc. (Burdwan), Ph.D. (BHU), *FNASc*  
 S. Rama Rao, M.Sc., Ph.D. (Jodhpur)  
 K. Aguan, M.Sc (IARI), Ph.D. (Birmingham)
- Associate Professors : S. R. Joshi, M.Sc., Ph.D. (NEHU)
- Assistant Professors : S. Majaw M.Sc. (Tezpur)  
 A. Bhattacharjee, M.Sc. (NEHU), M.Sc. (Annamalai),  
 Ph.D. (NEHU)  
 N. Chaurasia, M.Sc. (BHU)

**Visiting Professor/Fellows/Scholars:**

Prof K. J. Mukherjee from JNU visited the Department for teaching assignment and covered aspects of Bioprocess Engineering for final year students.

**Student intake:**

Enrolment capacity	:	M.Sc.: 30,	Ph.D.: Variable						
Actual admission		SC	ST	OBC	Gen	Male	Female	Meghalaya	Outside Meghalaya
M.Sc.		01	14	03	12	13	17	15	15
Ph. D.		01	01	-	03	02	03	01	04

**Degrees awarded:**

		ST	OBC	Gen	Male	Female	Total
M.Sc.		08	01	06	06	09	15

**Placement of students:**

Mr. V. V. Borah and D. Susangi joined Aurorobe, Ghaziabad. Ms. A. Das joined Reliance Life Science, Mumbai and M. H. Pyngrope joined Bharat Petroleum, Guwahati.

**Courses conducted:**

- Semester I : Cell Biology & Genetics, Biomolecules, Microbiology,  
 Semester II : Molecular Biology, Immunology, Microbial Technology  
 Semester III : Animal Cell Science & Technology, Genetic Engineering, Plant Biotechnology

Semester IV : Bioprocess Engineering & Technology, Environmental Biotechnology, Molecular Genetics, Applied Microbiology

The Department has offered open courses on Microbial Technology and Bioinformatics under CBCS in the 2<sup>nd</sup> and 3<sup>rd</sup> semesters.

**Study tours/field trips of students:**

Prof A. Chatterjee and Dr S. R. Joshi had taken students of IV Semester for study tour during February 2010 to Chandigarh and Delhi. They visited institutes like NIPER, Punjab University, IMTECH and Human Genome Center.

**Seminars/conferences/symposia/extension programmes:**

**Organised:**

Organised National Workshop in Microbial Diversity during 29-30<sup>th</sup> October 2009 which was participated by 38 researchers from all over the country.

**Attended :**

*Prof. S. R. Rao presented papers (i) on "Analysis of genetic variation among natural populations of two threatened plants of Indian Thar Desert" and on "Cytological analysis of Indian Squill to detect intraspecific variation" in the XVII International Chromosome conference held at University of Appalachian, Boone, North Carolina, USA, from June 23-27, 2009; (ii) on "Scanning electron microscopy of seed coat in the genus *Abelmoschus* Medik.: Taxonomic and phylogenetic implications" in the International Conference on Advances in Electron Microscopy and Related Techniques, Bhabha Atomic Research Center, Mumbai. March, 8-10, 2010; and (iii) on "Cytogenetical Studies of North-East Indian Orchids" in the National Conference on Orchids: Systematics and Diversity Analysis for Conservation and Sustainable Utilization, GB Pant Institute of Himalayan Environment, Almora. March 19-21, 2010*

*Dr. S. R. Joshi presented papers (i) on "Metal tolerant fluorescent pseudomonads from uranium rich site of Meghalaya" in the International conference on Emerging trends in Biotechnology at Banaras Hindu University, Varanasi, UP. (4-6 December 2009), and (ii) on "Beta-lactamase Producing Escherichia Coli Isolated From Retail Meat And Associated Environmental Samples Of Meghalaya, India" in the International Conference on Understanding and Managing Pathogenic Microbes, UMPM 2010 at the **Institute of Microbial Technology**, Chandigarh (January 22-24, 2010).*

## **Publications:**

### **Published in India**

Bhagobaty R. K., A. Ghosh and S. R. Joshi, 2009. Degradation of non-petroleum based natural and synthetic oil by lipase producing fluorescent pseudomonas spp. isolated from petroleum based hydrocarbon saturated soils of Shillong, Meghalaya, India , *Online Journal of BioTechnology Research* , 1 (3) : 78-83.

Bhattacharjee A., E. Annipindi, B. J. Myllemngap and P. Yadav, 2009. Structure based drug design for identification of novel drugs against UDP-3-O-acyl N-acetyl glucosamine deacetylase enzyme of the human pathogen *N. gonorrhoeae* FA1090. *Online Jour of Biotech Research* 1(1):33-37

Bhowmik S. S. D., S. Kumaria, S. R. Rao and P. Tandon, 2009. High frequency plantlet regeneration from rhizomatous buds in *Mantisia spathulata* Schult and *Mantisia wehgeri* Fisher and analysis of genetic uniformity using RAPD markers. *Indian Journal of Experimental Biology*, 47: 140-146.

Joshi S. R., P. Saikia and M. H. Pyngrupe, 2009. Microbial Communities Associated With Cave Systems In Meghalaya, India , *Online Journal of BioTechnology Research*, 1(3) : 84-92.

Rapsang G. F. and S. R. Joshi, 2009. Microbes in Food: Hazards and regulating factors. *Agrobios* 7(12): 15-17.

Sohliya I, S. R. Joshi, R. K. Bhagobaty and R. Kumar, 2009. *Tungrymbai*-Traditional fermented soybean food of the ethnic tribes of Meghalaya. *Indian Journal of Traditional Knowledge*, 8(4): 559-561.

Yadav P., B. J. Myllemngap, E. Annipindi and A. Bhattacharjee. 2009. Homology modeling and docking studies of Hemagglutinin protein of Influenza A (H1N1) virus with selected ligands-A computer Aided structure based drug design approach to find a suitable inhibitor. *Journal of Advanced Biotech* 9(5):28-30.

### **Published abroad**

Bewal, S., J. Purohit, A. Kumar, R. Khedasana and S. R. Rao, 2009. Cytogenetical investigation in Colchitetraploids of *Cyamopsis tetragonoloba* L. *Czech Journal of Genetics and Plant Breeding*, 45: 143-154.

Bewal, S., S. K. Sharma, A. Parida, S. Shivam, S. R. Rao and A. Kumar, 2009. Utilization of RAPD marker to analyze genetic variation in *Calligonum*

*polygonoides* L. – A key stone species of Thar Desert. *International Journal of Integrative Biology*, 5: 148-151.

Dkhar, J., S. Kumaria, S. R. Rao and P. Tandon, 2010. Molecular phylogenetics and taxonomic reassessment of four Indian representatives of the genus *Nymphaea*. *Aquat. Bot.*, doi: 10.1016/j. aquabot. 2010. 03. 010.

Joshi S. R., R. Kumar, P. Saikia, R. K. Bhagobaty and S. Thokchom, 2010. Impact of roadside pollution on microbial activities in sub-tropical forest soils of North-East India. *Research Journal of Environmental Sciences*, 4(3): 280-287.

Joshi S. R , P. Saikia and K. Koijam, 2009. Characterization of microbial indicators to assess the health of degraded soil in Cherrapunjee , India - highest rainfall area of the world. *International Journal of Biotechnology & Biochemistry*, 5(4): 379-391.

P. Pramod, V. Tandon, D. Biswal, L. Goswami and A. Chatterjee, 2009. Phylogenetic reconstruction using secondary structures and sequence motifs of ITS2 rDNA of *Paragonimus westermani* (Kerbert, 1878) Braun, 1899 (Digenea: Paragonimidae) and related Species. *BMC Genomics* , 10 (Suppl 3): S25

P. Geetanjali, A. Berni, F. Palitti, A. Chatterjee, 2009. Influence of glutathione level on radiation induced chromosomal DNA damage and repair in human peripheral lymphocytes. *Mutation Research*, 675: 23-28.

P. Geetanjali, A Sarma and A. Chatterjee, 2010. The influence of reduced glutathione on chromosome damage induced by X-rays or heavy-ion beams of different LET and on the interaction of DNA lesions induced by radiations and bleomycin. *Mutation Research*, 696: 154-159.

Rao, S. R., S. Trevedi, D. Emmanuel, K. Merita and M. Hynniewta, 2010. DNA repetitive sequences-types, distribution and function: A Review. *Journal of Cell and Molecular Biology*, 7 (2): 1-9.

Saikia P. and S. R. Joshi, 2010. Retail market poultry meats of North-East India- a microbiological survey for pathogenic contaminants. *Research Journal of Microbiology*, 5(1): 36-43

Sharma, S. K., R. Khedasana, S. Kumaria, P. Tandon and S. R. Rao, 2010. Karyo- morphological characterization of natural genetic variation in some threatened *Cymbidium* species of Northeast India. *Caryologia*, 63: 1-7.

### Books/Books Chapters/Proceedings:

Bhagobaty R. K., P. Biswa, and S. R. Joshi, 2009. Isolation of endophytic fungus from *Osbeckia stellata* Buch. Ham.ex D.Don, a medicinal plant of the Pine forests of Meghalaya, India. In *Biodiversity– Herbal Medicine*,. Akansha Publishing House, New Delhi, pp. 148-157.

Bhagobaty R. K. and S. R. Joshi, 2009. Endophytes: A biotechnological goldmine . In *Biotechnology Applications*. Eds.: C. S. K. Mishra and P. Champagne, IK International Publishing House, pp. 300-308.

Joshi, G., S. R. Rao, S.K. Sharma and R. Khedasana, 2010. Bioinformatics: a booster for biotechnology. In *Advances in Applied Biotechnology*. Eds.: P. Parihar and L. Parihar, Agrobios, Jodhpur, pp. 145-149.

Joshi S. R., 2010. Roadside pollution and microbial community of alder and khasi pine . In *Advances in Biotechnology and Microbiology*. Eds.: P. R. Jatkar, P. Parihar and L. Parihar, Agrobios, pp. 101-108.

Kumar R. and S. R. Joshi, 2009. Probiotics: Indigenous fermented foods as a source of potential medicinal microbes. In *Biodiversity– Herbal Medicine*, Akansha Publishing House, New Delhi, pp. 211-222.

Kumar R. and S. R. Joshi, 2009. Probiotics: Biotechnology in prolongation of life. In *Biotechnology Applications*. Eds.: C. S. K. Mishra and P. Champagne, IK International Publishing House, pp. 187-212.

Sharma, S. K., S. R. Rao, G. Joshi and S. Anju, 2010. DNA based molecular markers: concept, technique and comparison. In *Advances in Applied Biotechnology*. Eds.: P. Parihar and L. Parihar, Agrobios, Jodhpur, pp. 1-22.

Syiem R. M., A. Chatterjee, S. Majaw and S. R. Joshi, 2009. Study on the adaptogenic properties of *Clerodendron colebrokianum* walp. On cold stress induced–mice. In *Biodiversity– Herbal Medicine*. Akansha Publishing House, New Delhi, pp 134-139.

Tandon V., L. M. Goswami , P. K. Prasad and A. Chatterjee, 2009. Molecular characterization of intestinal Fluke. *Artyfechinostomum sufrartyfex* (Trematoda: Echinostomatidae) using PCR amplification of rDNA ITS regions. *Current Trends in Parasitology*. Eds.: V. Tandon, A. K. Yadav & B. Roy, Proceedings of the 20<sup>th</sup> National Congress of Parasitology, Shillong, pp. 153-162.

**Funds received from agencies other than NEHU:**

DBT	Rs. 11.35 lakhs
DAE - BRNS, Mumbai	Rs 10.15 lakhs
DBT/UGC (M.Sc.Support Programme)	Rs. 19.59 lakhs
DIT, Gol	Rs 127.89 lakhs
ICAR/NAIP/World Bank	Rs. 25.18 lakhs

**Research Projects :**

**Ongoing**

Status and PCR-based Molecular discrimination of Paragonimiasis and other Crustacea-born Trematode Zoonoses in Northeast India. Principal Investigators: Prof. V. Tandon and Prof. A.Chatterjee, DBT, New Delhi.

Role of glutathione regulatory pathways in the oxidative stress response of radio resistant Sf9 insect cells: comparison with mammalian cells. Principal Investigators: Prof. A. Chatterjee and Dr S. Chandna. Sponsored by DRDO, Institute of Medicine and Allied Sciences, Ministry of Defence, New Delhi,

Conservation Biotechnology of Some Rare and Endangered Plants of North-East India. Funded by UGC under UPE-Biosciences.

Biosystematics of the Genera *Vigna*, *Cucumis* and *Abelmoschus*. A World Bank funded consortium research project of ICAR/NAIP in collaboration with NBPGR, New Delhi and Shivaji University, Kolhapur.

Characterization of metal tolerant microbes from soils of Domiasiat-Wakhyn area of Meghalaya. Principal Investigator: Dr. S. R. Joshi (Co-Principal Investigator: Prof. A. Chatterjee). Sponsored by DAE-BRNS, BARC, Mumbai.

Study of the microbiology and biochemistry of *tungrymbai*- the fermented soybean food of Meghalaya. Principal Investigator: Dr. S. R. Joshi. Sponsored by DBT.

Microclimatic characterization and microbial indicator database creation for Cherrapunjee and adjoining Sacred Groves of Meghalaya. Principal Investigator: Dr. S. R. Joshi (Co-Principal Investigator: Prof. A. Chatterjee). Sponsored by DIT, Govt of India.\

Development of web based microbial database (bacteria, actinomycetes and fungi ) of North-East India. Principal Investigator: Dr. S. R. Joshi (Co-Principal Investigators: Prof. A. Chatterjee and Dr. A. Bhattacharjee). Sponsored by DIT, Govt of India.

### **New**

Loss of heterozygosity on specific chromosomal arms and influence of single nucleotide polymorphisms in XRCC1 and XPD genes in oral and esophageal cancers induced by raw betel-nut in Meghalaya. Sponsored by DBT (Rs. 21.15 lakhs).

### **Completed**

Comparative analysis of microbial community of Cherrapunjee (degraded land) and Mawsynram sacred grove of MEGHALAYA – A pilot study to generate microbial database matching landscape ecology. Principal Investigator: Dr. S. R. Joshi Sponsored by DIT, Govt of India.

### **Academic/Professional collaborations:**

A collaborative research work in the field of Molecular Genetics (DNA repair) has carried out under the Educational & Scientific Exchanges between Prof. A. Chatterjee and Prof. F. Palitti, University of Tuscia, Italy.

A collaborative research work in the field of Molecular Genetics (role of glutathione on cellular radiosensitivity) is in progress between Prof. A. Chatterjee and Dr. S. Chandna of Institute of Medicine and Allied Sciences, Ministry of Defence, New Delhi.

A collaborative research program on biosystematics of vegetable crop species has been initiated with National Bureau of Plant Genetic Resources, New Delhi and Shivaji University, Kolhapur with funding from ICAR/NAIP/World Bank.

A collaborative research work in the field of microbiology on characterization of novel metal tolerant gene(s) is in progress between Dr. C. Acharya of BRNS-BARC and Dr. S. R. Joshi.

### **Honours/Awards/Recognition:**

Prof. A. Chatterjee was recipient of International Cancer Fellowship from International Union Against Cancer (UICC), Geneva, 2009 and Yamagiwa-Yoshida Memorial International Cancer Study Grant for a project at Swansea University, UK.

Dr. S. R. Joshi was awarded the best speaker for his presentation on “Role of Space Science and Technology in Science Journalism: Science communicators in the new age” at the Science Communicators Meet during 97<sup>th</sup> Indian Science Congress at University of Kerala, Trivandrum and was awarded the Best Speaker Trophy by ISRO, Bangalore.

Dr. S. R. Joshi was awarded Dr. Ambedkar Fellowship National Award 2009 by Bharatiya Dalit Sahitya Akademi for literary and social services rendered for upliftment of under privileged by way of writing books for School curriculum in vernacular language.

Patent Application by Prof. A. Chatterjee: PCR based diagnostic markers from rDNA ITS region for species discrimination of zoonotic trematode parasites. IPR/4.22.17/09034.

**Other activities:**

*Prof. A. Chatterjee delivered (i) an invited lecture in the BioMedical Lecture Series at Swansea University, UK on 19<sup>th</sup> Nov., 2009, (ii) an invited lecture in the “Human Genome Center”, Punjab University, Chandigarh on 19<sup>th</sup> Feb., 2010, and (iii) one lecture in UGC-sponsored Refresher Course in the Department of Botany, NEHU, Shillong held during 26<sup>th</sup> Feb. – 11<sup>th</sup> March, 2010.*

Prof. S. R. Rao delivered (i) a lecture on Genome Structure and Analysis in Emerging Trends in Biotechnology, SKBR College, Amalapuram, (A.P.), India (1<sup>st</sup> -2<sup>nd</sup> Feb.2010) and (ii) three lectures in UGC refresher course organized by the Department of Botany on topics (a) Molecular Cytogenetics (March 10, 2010) (b) Artificial Chromosomes (March 11, 2010) (c) Laboratory exercises in cell and molecular Cytogenetics (March 13, 2010); coordinated activities in INSPIRE-Winter Camp-organized by the DST held at NEHU, Shillong as Chief Resource Person for Biological Science, 14<sup>th</sup> -21<sup>st</sup> December, 2009; chaired a session in the National Workshop on Microbial Diversity database held at NEHU, sponsored by Department of Information Technology, MCIT, Govt. of India, 29<sup>th</sup> - 30<sup>th</sup> October 2009; and participated in a seminar on IPR and Innovation management in Knowledge Era, NRDC sponsored Regional Seminar at Indian Institute of Technology, Gawahati, 5<sup>th</sup>-6<sup>th</sup> May, 2010.

*Dr. S. R. Joshi delivered (i) a talk on “ New Sciences and Environmental resources in Teaching at School Level “ at the workshop organised by IGNOU regional Centre , Shillong on 13<sup>th</sup> May 2009, (ii) a talk on “ Science Teaching and utilization of local resources” at a workshop for school teachers of Ri Bhoi district*

of Meghalaya organized by CTE(PGT), Shillong on 23<sup>rd</sup> June 2009, (iii) an invited talk on “ Dwindling forest cover : Loss of opportunities to bioprospect microbial resources and ecological support systems” at a National Seminar organized by Women`s College , Shillong 8-9 July 2009, (iv) a talk on “ Probiotics-Medicinal Microbes” at the Refresher Course organised by Botany Department, NEHU , 5<sup>th</sup> March 2010, (v) a talk on “ Teaching Resources in Teaching at School Level “ at the workshop organised by CTE(PGT) , Shillong for School teachers of Ri Bhoi district on 10<sup>th</sup> March 2010, (vi) a talk on “ Teaching strategies at College level “ at the orientation programme organised by ASC, NEHU, Shillong for college teachers, on 22<sup>nd</sup> March 2010, and (vii) a talk on “ Environmental resources in School teaching “ at the workshop organised by CTE(PGT), Shillong for School teachers of Jaintia Hills district on 24<sup>th</sup> March 2010. He was organizing Secretary, National Workshop on Microbial Diversity Database held at NEHU on 29<sup>th</sup>-30<sup>th</sup> October 2009 sponsored by The Department of Information Technology (MC &IT) , Govt. of India.

*Ms. S. Majaw* participated in the National Workshop on “Developing Quality Monographs for Pharmacopoeia for Herbs and Herbal Products” during January 16-17, 2010 being organized by School of Natural Product Studies, Jadavpur University, Kolkata.

*Dr. A. Bhattacharjee* delivered lectures along with practical sessions at a training Course on “Bioinformatics: A practical Approach” from April 20-22, 2010, held at the Bioinformatics Centre, NEHU, Shillong.

## DEPARTMENT OF BOTANY

**Head** : Prof. M. S. Dkhar  
**Telephone** : 2722201, 2722202 (O)  
**E-mail** : [headbotany@nehu.ac.in](mailto:headbotany@nehu.ac.in)

**Thrust area of research:** Plant Diversity Assessment and Conservation. The faculty members of the Department are actively engaged in the following research activities:

Ecological analysis of forest ecosystems of north-east India including plant biodiversity inventory and conservation.

Ecology of agro-forestry ecosystem; microbial diversity and its conservation.

Survey of plant genetic resources of the region, their taxonomic characterization and establishment of physical and electronic herbaria.

Conservation of plant diversity using both *in vitro* as well as *in vivo* technologies; cryo-preservation of genetic resources of the region; molecular characterization of rare, endangered and endemic plants of the region.

Establishment of gene bank of the region.

Documentation of plant genetic resources using molecular markers.

Identification and isolation of genes coding desirable traits and their use in plant improvement programmes.

Molecular phylogeny and ecology, marker assisted plant improvement, development of molecular markers for native and transgenic bio-inoculants with special reference to IPR issues.

These studies may help generate economic value in terms of extractable plant products, compounds, genes and species, for conservation of ecosystems and plant genetic resources for utilization and economic well-being of the people.

### **Brief Statement of Academic Activities:**

Besides its regular teaching and research programs, the Department has been engaged in organization of refresher courses, workshops, summer schools, invited lectures and other events to mark/celebrate specific days. The Department has been participating in the "Biosciences" research programme

under the UPE scheme of UGC. During the year, two students were awarded Ph.D. degree and the Department admitted ten students for the Ph. D programme. The Department has brought research funds worth Rs.178.43 lakhs through UGC-SAP and other research projects from different funding agencies. The Department has been identified as one of the units in the University for financial support by the Department of Biotechnology, Government of India for strengthening of infrastructure for Biotechnology teaching and research.

The Department organized an educational excursion for postgraduate students from 10<sup>th</sup> – 24<sup>th</sup> January, 2010. The students visited different places of Bangalore, Mysore, Ooty and National Institutes of Botanical interest. Local study tours for M.Sc. project students were also conducted in the districts of Meghalaya. Two students qualified NET.

#### **Faculty:**

Professors : P. Tandon<sup>#</sup>, M. Sc. (Lucknow), Ph.D. (Jodhpur),  
*FNASc(# currently VC, NEHU)*  
R. C. Laloo\* M. Sc., Ph.D. (Gauhati)(on E.O.L.,  
cabinet minister, Govt. of Meghalaya)  
A. K. Misra, M. Sc., Ph.D. (Meerut)  
N. K. Chrungoo, M. Sc., Ph.D. (Kashmir)  
M. S. Dkhar, M. Sc., Ph.D. (NEHU)  
N. Venugopal, M. Sc., Ph.D. (Madras)  
S. K. Barik, M.Sc. (Berhampur), Ph.D. (NEHU)  
Uma Shankar, M.Sc. (Agra), Ph.D. (NEHU)

Associate Professors : Y. Kumar, M.Sc. (Agra), Ph.D. (NEHU)  
L. Kharlukhi, M.Sc. (NEHU), Ph.D. (IARI)  
H. Kayang, M.Sc., Ph.D. (NEHU)  
S. Kumaria, M.Sc., Ph.D. (NEHU) P. Ramanujam,  
M.Sc., Ph.D. (NEHU)

Assistant Professor : M. C. Das, M.Sc., Ph.D. (NEHU)

#### **Visiting Professors/Fellows/Scholars:**

Prof A. N. Lahiri Majumdar from Bose institute Kolkata visited the Department as visiting faculty under DST-FIST NER programme. He interacted with the students and research scholars from 17<sup>th</sup> -30<sup>th</sup> May, 2009 and 14<sup>th</sup> – 21<sup>st</sup> June, 2009. He also delivered series of lectures on RNA interference in

gene expression: Mechanisms and application; Plant Biology in the current era: Plant Genomics and Biotechnology; Gene to Genomics: Antiquity and functional diversity of L-myo inositol phosphate synthase. Other distinguished visitors who visited the Department and delivered invited lectures include Prof. Ian Head, University of New Castle Upon Tyne, UK, Prof. S. B. Babbar, Prof. A. K. Bhatnagar and Prof. A. K. Pandey, Department of Botany, Delhi University, and Dr. Rakhi Chaturvedi of IIT Guwahati. Students from Department of Life Sciences, Dibrugarh University, Dibrugarh and Assam University, Silchar visited the laboratories and interacted with faculties and research scholars of the Department.

**Student intake:**

(a) **Enrolment capacity:** M. Sc.: 30, Ph. D.: Variable

(b) **Actual admission**

Degree	SC	ST	Gen	Male	Female	Meghalaya	Outside
Meghalaya							
M. Sc.	2	25	3	12	18	18	12
Ph. D.	-	5	5	2	8	8	2

**Degrees awarded:**

Degree	SC	ST	Gen	Male	Female	Meghalaya	Outside Meghalaya
M. Sc.	1	15	2	3	15	11	7
Ph. D.	-	1	1	1	1	1	1
Ph. D.							

Ms. Buromlang Gashnga, Study of soil microflora in two sacred groves of Meghalaya. Supervisor: Dr. H. Kayang

Mr. Sudipta Shekhar Das Bhowmik, Micropropagation and conservation of critically endangered *Mantisia spathulata* Schult. and *Mantisia wengeri* Fischer (Zingiberaceae) of northeast India. Supervisor: Prof. P. Tandon, Jt. Supervisor: S. Kumaria

**Placement of students:**

Mr. Panna Das joined the Department of Botany, Tripura University, Tripura as Assistant Professor. Mr. Ratul Baishya joined the Department of Botany, Delhi University, Delhi as Assistant Professor. Dr. Jenpuru Kamei joined Dadai

Christian College, Manipur as a Lecturer. Dr Nicolee Lyngdoh joined College of Forestry, Central Agricultural University, Pasighat, Arunachal Pradesh as an Assistant Professor. Dr Sudipta Shekhar Das Bhowmik joined IIT, Guwahati as a Research Associate. Dr Shiny Ch. Sangma, joined Bose Institute, Kolkata as a Post Doctorate Fellow. Dr Anusuya Rout joined National Plant Genome Research Centre, New Delhi as a Research Associate.

**Courses conducted:**

Semester – I : Mycology, Plant Pathology and Microbiology  
Mycology, Plant Pathology and Microbiology  
Algae, Bryophytes and Pteridophytes

Algae, Bryophytes and Pteridophytes  
Gymnosperms and Plant Anatomy  
Gymnosperms and Plant Anatomy

Semester –II : Plant Taxonomy and Economic Botany

Plant Taxonomy and Economic Botany

Plant Biochemistry and Molecular Biology  
Plant Biochemistry and Molecular Biology  
Stress Biology  
Rights and Issues in Biology  
Techniques in Molecular Biology

Semester– III: Genetics, Cytogenetics and Plant Breeding  
Genetics, Cytogenetics and Plant Breeding\  
Plant Physiology  
Plant Physiology

Biodiversity and Phytogeography  
Environmental Pollution and Conservation  
Biostatistics

Semester -IV: Plant Reproductive Biology and Biotechnology  
Plant Reproductive Biology and Biotechnology

Plant Ecology and Ecosystem Analysis

Plant Ecology and Ecosystem Analysis

Project Work

**Study tours/field trips of students:**

A group of M.Sc. students accompanied by Dr. Y. Kumar as teacher in-charge visited places of botanical interest at Bangalore, Mysore, Ooty and Kolkata from 10<sup>th</sup> January to 24<sup>th</sup> January 2010.

**Seminars/conferences/symposia/extension programmes:**

**Organized**

The Department conducted a Summer School for Under Graduate (Hons.) students from 19<sup>th</sup> May to 9<sup>th</sup> June, 2009. Dr. Suman Kumaria was the Course Coordinator. A total of thirty one students with honours in Botany/Biotechnology/Zoology from various colleges attended the course which was sponsored by the Department of Science and Technology, Government of India under NER – FIST Programme.

**Attended**

Prof. P. Tandon delivered (i) the Presidential Address on 'Plant Diversity: Perspectives of Conservation and Value Addition' on January 4, 2010 at the 97<sup>th</sup> Annual Session of Indian Science Congress at Thiruvananthapuram and (ii) an invited lecture on 'Implications of Climate Change on North East Region: Opportunities and Constraints for Developing Adaptation Strategies' at National Workshop to review the implementation of work programme towards a comprehensive assessment of climate change on October 14, 2009 in New Delhi.

Prof. A. K. Misra delivered (i) an invited lecture on 'Molecular studies on *Frankia* associated with actinorhizal trees from Sikkim' at a National Seminar on Seabuckthorn and Environment: High Altitude Perspectives, held at Defence Institute of High Altitude Research, Leh, Ladakh during September 25-27, 2009, (ii) an invited lecture on 'Establishing the evolutionary relationships' at a National Seminar on Utilization and strategy action plan for sustainable management of plant resources, held at Gauhati University, Guwahati on February 28, 2009 and (iii) two lectures on Molecular Phylogenetics and Systematics and Marker Assisted Selection for superior genotypes in UGC–PhD Scholars Programme

(Biological Sciences, IV) organized by UGC Academic Staff College, Gauhati University, Guwahati on October 23, 2009.

Prof N. K. Chrungoo delivered (i) two invited lectures at Northeast Regional Institute of Education, Shillong on July, 27-28, 2009 under the DIET training programme for teachers, (ii) two invited lectures on (i) Cloning techniques and (ii) Nutritional genomics in food security during the UGC –ASC, Guwahati programme for Ph.D. Research Scholars (Biological Sciences, IV) at Gauhati University on 20.10.2009, (iii) one invited lecture on Genetic Divergence in Buckwheat (*Fagopyrum* spp): Challenges and Opportunities in the 21<sup>st</sup> Century at the 97<sup>th</sup> Indian Science Congress held at Thiruvananthapuram on January 3-7, 2010 and (iv) two invited lectures on Bio-energetic pathways and energy conservation processes NET coaching programme for P.G students of Tezpur University on November, 13, 2009.

Prof N. Venugopal co-chaired a session in the UPE Lecture series (Biosciences) held on 8-5-2009, North-Eastern Hill University, Shillong-793 022 and delivered invited lecture on “Application of scanning electron microscopy in plant anatomy and Reproductive Biology” in the workshop organized by SAIF, NEHU on 4<sup>th</sup> November 2009.

Prof. S. K. Barik delivered (i) four invited lectures on Conservation Biology and Quantitative Ecology in a Workshop on Taxonomy, Ecology and Conservation in Delhi University, Delhi during 29<sup>th</sup> December, 2009 to 7<sup>th</sup> January, 2010 and (ii) three invited lectures on (i) Population Ecology (ii) Community Ecology (iii) Ecosystem Ecology in NET coaching programme for P.G students of Tezpur University on November, 14, 2009.

Prof U. Shankar attended Brainstorming meeting on ‘Invasive Alien Plants in India: Concerns and Solutions’ organized by Department of Botany, Panjab University, Chandigarh during May 22-23, 2009 and presented a concept paper on “Mapping Invasive Alien Plants in North Eastern India”. He also chaired a session on Biodiversity Conservation in National Seminar on Environment Conservation in North East India organized by NEICSSR, Shillong, Raitong Building on June 05, 2009.

Dr. Yogendra Kumar presented a paper entitled “Value addition to plant resources of Meghalaya, North East India” at NBRI, Lucknow from 12-14 November, 2009.

## **Publications**

### Published in India

Adhikari D., A. Chettri and S. K. Barik, 2009. Modeling the ecology and distribution of highly pathogenic avian influenza (H5N1) in the Indian subcontinent. *Current Science*, 97 (1):73-78.

Barik S. K., N. J. Lakadong, R. Baishya, A. Chettri, P. Das, H. Kayang and D. Marbaniang, 2009. A new record of *Monotropia hypopitys* L.: a myco-heterotrophic plant for India. *Journal of Bombay Natural History Society*, 106 (1): 127-129.

Bhowmik S. S. D., S. Kumaria, S. R. Rao and P. Tandon, 2009. High frequency plantlet regeneration from rhizomatous buds in *Mantisia spathulata* Schult. and *Mantisia wengeri* Fischer and analysis of genetic uniformity using RAPD markers. *Indian Journal of Experimental Biology*, 47: 140 – 146.

Chettri A., S. K. Barik, H. N. Pandey and M. K. Lyngdoh, 2009. Forest fragmentation and tree diversity in Khangchendzonga Biosphere Reserve, Sikkim. *Indian Forester*, 135(4): 459-470.

Das S. K, Samsad, L. K., Ramanujam P. and Adhikary S. P., 2009. Freshwater algae of Meghalaya. *Journal of Indian Botanical Society*, 88 (1&2): 102-108.

Deb P., Sundriyal R. C. and U. Shankar, 2009. Tree diversity and population structure in a lowland tropical rainforest in the eastern Himalaya, India. *Indian Forester*, (11): 1526 – 1544, (US054)

Kayang H., Kharbuli B. and Syiem D., 2009. *Litsea cubeba* Pers. – An untapped economic plant species of Meghalaya. *Natural Product Radiance*, 8 (1): 5.

Khan A, David D. Myrold and Misra A. K., 2009. Molecular diversity of *Frankia* from root nodules of *Hippophae salicifolia* (D. Don) found in Sikkim. *Indian Journal of Microbiology*, 49: 196 – 200.

Pandey A. K., M. Ajmal Ali, David L. Biate and Misra A. K., 2009. Molecular systematic of *Aralia Panax* complex (Araliaceae) in India based on ITS sequences of nrDNA. *Proceedings of National Academy of Science, India, Series B* 79 (3): 255 -261.

Ramanujam P. and Siangbood H., 2009. Diversity of Algal communities in Umiew river , Meghalaya. *Indian Hydrobiology*, 12(1): 65-73.

Sheikh Nilofer, Kumar Y., Misra A. K. and A. Punokiyo, 2009. Status documentation of *Dioscorea* L. (Dioscoreaceae) in Meghalaya: an approach towards food security. *Pleione*, 3 (1): 74- 82.

Tandon P., Kumaria S. and Nongrum I., 2009. Conservation and management of plant resources of Northeast India. *Indian Journal of Traditional Knowledge*, 8(1): 29-34.

### Published Abroad

Bhowmik S. S. D., Kumaria S. and Tandon P., 2010. Conservation of *Mantisia spathulata* Schult. and *Mantisia wengeri* Fischer, two critically endangered and endemic zingibers of Northeast India. *Seed Technology*, 32 (1): 57-62.

Chettri A., Barik S. K., Lyngdoh M. K. and Pandey H. N., 2009. Plantae, Magnoliophyta, Gentianales, Apocynaceae, Asclepiadoideae, *Ceropegia hookeri* Clarke ex. Hook. f.: Distribution and rediscovery in eastern Himalayas, Sikkim, India. *Check List*, 5 (3): 695-698.

Chrungoo N., Kreft I., Devadasan N., Gregori M., 2009. Identification and molecular characterization of granule bound starch synthetase (GBSS –I) from grains of common buckwheat (*Fagopyrum esculentum* Moench). *Journal of Agricultural & Food Chemistry*, 57: 1752 -1759.

Das P. and Kayang H., 2009. Arbuscular mycorrhizal association with *Blechnum orientale* Linn. in pine forest and anthropogenically disturbed areas of northeast India. *Archives of Agronomy and Soil Science*, 55(6): 623 -632.

Das P. and Kayang H., 2009. Arbuscular mycorrhizal fungi from northeast India. *International Journal of Agricultural Technology*, 5 (2): 291-298.

Das P., Chettri A. and Kayang H., 2009. Habitat preference of *Auriscalpium vulgare* Gray Inhabiting Slash and Burn Affected Khasi Pine Cones of India. *Our Nature*, 17: 32 – 38.

Dkhar J., Kumaria S., Rao S. R. and Tandon P., 2010. Molecular phylogenetics and taxonomic reassessment of four Indian representatives of the genus *Nymphaea*. *Aquatic Botany*, 93(2): 135-139.

Kamei J., Barik S. K. and Pandey H. N., 2009. Inter-specific variation in leaf litter production, decomposition, and N and P mineralization in a humid

subtropical forest ecosystem of north-east India. *Canadian Journal of Forest Research* 39 (10): 1797-1805.

Nongrum I., Kumaria S. and Tandon P., 2009. Multiplication through *in vitro* seed germination and pitcher development in *Nepenthes khasiana* Hook. F. a unique insectivorous plant of india. *Journal of Horticultural Science and Biotechnology*, 84 (3): 329-332.

Upadhaya K., Barik S. K., Adhikari D., Baishya R. and Lakadong N. J., 2009. Regeneration ecology and population status of a critically endangered and endemic tree species (*Ilex khasiana* Purk.) in north-eastern India. *Journal of Forestry Research*, 20 (3): 223-228.

References and further reading may be available for this article. To view references and further reading you must purchase this article.

#### **Books/ Book Chapters/Proceedings:**

Chrungoo N. K., Sangma S. Ch., Bhatt V. and Raina S. N., 2010. *Fagopyrum* . in *Wild Crop Relatives: genomic and Breeding resources*. Vol. I: *Wild relatives of Cereals*. Ed.: Kole C., Springer, Heidelberg, Berlin.

Shree R., Barik S. K. and Tariang C. L., 2009. Development and management of natural resources. In *Meghalaya State Development Report, 2008-2009*, Planning Department, Government of Meghalaya, Shillong.

Barik S. K., 2009. Environmental issues and management of natural resources: Community participation and government intervention in Meghalaya. In *Meghalaya Human Development Report*, Government of Meghalaya, Shillong.

#### **Funds received from agencies other than NEHU:**

CAS grant	Rs. 04.10 lakhs
DBT	Rs. 142.25 lakhs
UGC	Rs. 12.33 lakhs
MoEF	Rs. 03.72 lakhs
WAPCOS	Rs. 16.03 lakhs

#### **Research projects:**

## Ongoing

DBT Mission for Quality Planting Material Production and Utilization for the North East. Coordinator: Prof. P. Tandon, Principal Investigator: Prof. S. K. Barik. Sponsored by DBT

Species recovery programme for *Nepenthes khasiana*, *Mantisia spathulata*, *Nymphaea tetragona*. Principal Investigator: Prof. P. Tandon (Co-PIs: Prof. N. K. Chrungoo and Dr. S. Kumaria). Sponsored by DBT.

Development of molecular markers for characterization of accessions of buckwheat (*Fagopyrum* spp.) and quinoa (*Chenopodium* spp.), two important underutilized crops from Indian Himalayas. Principal Investigator: Prof. N. K. Chrungoo (Co-PI: Prof. P. Tandon). Sponsored by DBT.

Mapping and quantitative assessment of geographic distribution and population status of plant resources of Eastern Himalayan region. Coordinator: Prof. U. Shankar. Sponsored by DBT.

The impact of coal mining on water quality and microbial communities of Jaintia Hills district, Meghalaya. Principal Investigator: Dr. H. Kayang. Sponsored by MoEF.

Conservation of *Panax* species in north-east India: Characterization of niche and genetic variability, mapping of potential distributional area, establishment of field gene bank and micropropagation. Principal Investigator: Prof. S. K. Barik (Co-PIs: Prof. P. Tandon and Prof. A. K. Misra). Sponsored by DBT.

Ecological Studies on Teesta and Kameng river catchments in Sikkim and Arunachal Prade. Principal Investigator: Prof. S. K. Barik. Sponsored by WAPCos, Mins. of Water Res. Govt. of India.

Micropropagation of some medicinally important orchids of Northeast India. Principal Investigator: Dr. S. Kumaria. Sponsored by UGC.

Net work project on development of database on the medicinal plants of the Indian Himalayan region. Principal Investigators: Prof. S. K. Barik, Prof. N. K. Chrungoo, Prof. U. Shankar and Prof. V. Tandon, Sponsored by NMBP.

Development of integrated genetic linkage map and marker assisted selection in tea. Principal Investigator: Prof A. K. Misra. Sponsored by DBT.

## School of Life Sciences

Studies on diversity and productivity of algal communities from some selected streams of Meghalaya and the effect of anthropogenic activities. Principal Investigator: Dr. P. Ramnujam. Sponsored by UGC.

Role of Earthworms in soil microbial diversity and leaf litter breakdown in two forest stands of Meghalaya. Principal Investigator: Prof. M. S. Dkhar (Co-PI: Dr. H. Kayang). Sponsored by UGC.

Ecological Studies of Maw Hu, Dibbin, Kameng and Tawang River Catchments in Meghalaya and Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS.

Establishment of DBT's Rural Bio-Resource Complex for North-East India. Coordinator: Prof. P. Tandon, Principal Investigator: Prof. S. K. Barik. Sponsored by DBT.

Impact of NERCORMP-IFAD Intervention on Livelihood of forest dependent people in North-East India. Principal Investigator: Prof. S. K. Barik. Sponsored by IFAD-NEC.

Ecological Survey for Lachung HE Project. Principal Investigator: Prof. S. K. Barik, Sponsored by WAPCOS.

### **New**

Monsoon and post-monsoon ecological and carrying capacity studies in Lohit basin of Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya, Dr. D. T. Das). Sponsored by WAPCOS, Ministry of Water Resources, Govt. of India.

Monsoon and post-monsoon ecological and carrying capacity studies in Bichom basin of Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya, Dr. T. Das). Sponsored by WAPCOS, Ministry of Water Resources, Govt. of India.

Terrestrial ecological survey in Lohit and Bichom basin of Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Govt. of India.

Ecological studies in Western Ghats – Kali and Saravati rivers. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Govt. of India.

Ecological survey for the EIA study for Lower Kopili H.E. Project, districts Karbi Anglong and North Cachar Hill districts of Assam. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Govt. of India.

Ecological survey and carrying capacity studies in Bichom basin and Lohit basin in Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya, Dr. T. Das). Sponsored by WAPCOS, Ministry of Water Resources, Govt. of India.

Ecological survey in Dibang valley, Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya, Dr. T. Das). Sponsored by WAPCOS, Ministry of Water Resources, Govt. of India.

Environmental baseline ecological studies for the Demwe HEP in district Lohit of Arunachal Pradesh, a stretch from 590 meter to 300 meter of Lohit basin. Principal Investigator: Prof. S.K. Barik. Sponsored by Athena Demwe Power Private Limited.

### **Completed**

Mass micropropagation of *Jatropha* spp. of northeast India. Principal Investigator: Dr. S. Kumaria (Co-PI: Prof. P. Tandon). Sponsored by DRDO.

### **Academic collaboration:**

The faculty members of the Department have been collaborating with following National and International Institutes: Bose Institute, Kolkata, Tocklai experimental station of Tea Research Association, ICAR, Barapani, LEAD International, UK, Chinese Academy of Sciences (Shenzhen Botanical Garden), University of Ljubljana, Slovenia, KfW and gtz, Germany, United Nations Development Programme, New Delhi.

### **Honours/Awards/Recognition:**

Prof. Pramod Tandon was awarded the Aspire Skills Development Award for distinguished services to India by Mr. Kapil Sibal, Honourable Minister for Human Resource Development. He continued as a member of the (i) Scientific Advisory Committee to the Cabinet, Government of India; (ii) Board of Governors, National Institute of Technology, Srinagar, J&K, and (iii) Himalayan Biodiversity Centre for Excellence, Himachal Pradesh University, Simla. He was appointed as a member of (i) Court and Executive Council, University of Hyderabad; (ii) Executive Council, Central University of Orissa; (iii) Executive Council, Central

University of Rajasthan; (iv) Executive Council, Nagaland University; (v) Academic Council, Central University of Jharkhand, Ranchi; (vi) Academic Council, Central University of Kerala, Kasargod; and (vii) Empowered Committee of Experts, National Mission on Education through Information and Communication Technology, Ministry of Human Resource Development, Government of India. He was elected the Sectional President of the Plant Sciences the 97<sup>th</sup> Annual Session Indian Science Congress held at Tiruvananthapuram.

Prof. A. K. Misra was elected Fellow, Society for Environmental Sciences, Vinoba Bhave University, Hazaribagh.

Prof. N. K. Chrungoo was (i) nominated as the Asia Pacific representative to the editorial Board of the Journal *Fagopyrum*; and (ii) appointed as a member of the institutional biosafety committee of ICAR complex for NER.

Prof. S. K. Barik was appointed as (i) National Chief Technical Adviser to Indo-German NRM project in Tripura; (ii) Member, Environmental Biotechnology and Biodiversity Conservation Task Force of Department of Biotechnology, Government of India; (iii) Member, Expert Committee on Conservation of Threatened species constituted by Department of Biotechnology, Government of India; (iv) Technical Adviser to UNDP project on Biodiversity Conservation in Arunachal Pradesh, appointed by Ministry of Environment and Forests, Government of India; (v) Member, Meghalaya State level Expert Appraisal Committee (EIA) constituted by the Ministry of Environment and Forests, Government of India; (vi) Expert Committee Member for constitution of Medicinal Plant Conservation Areas in India; (vii) Member, National Technical Advisory Committee on Biodiversity ENVIS Centres, constituted by Ministry of Environment and Forests, Government of India; (viii) Member, National MAB Committee, constituted by Ministry of Environment and Forests, Government of India; (ix) Member of the Executive Council, International Society for Tropical Ecology; (x) Associate Editor, *Tropical Ecology*; and (xi) Member, Editorial Board, *Journal of Biodiversity*.

Mr Jeremy Dkhar was awarded best poster presentation entitled 'Molecular evidence for hybrid origin of *Nymphaea alba* var *rubra* based on nrDNA ITS and chloroplast *trnk* intron, *matk* and *rbcl* gene' at 97<sup>th</sup> ISCA, Thiruvananthapuram 3-7<sup>th</sup> January, 2010.

**Other activities:**

The Department conducted a Refresher Course (Course Coordinator: Prof. A. K. Misra) on "Recent Advances in Plant Sciences" in the Department from 26<sup>th</sup> February to 18<sup>th</sup> March, 2010.

Prof. P. Tandon (i) delivered a series of Science Awareness lectures under the aegis of National Academy of Sciences at various places in North East India; (ii) visited UK during 14-21 June 2009 in connection with India-UK Higher Education Leadership Programme and signed an MOU with Glasgow Caledonian University; and (iii) gave a talk '*Nymphaea tetragona*, a rare and endangered plant of Meghalaya, India'. Plant Talk (January 5, 2010), Eden Project, Cornwall, England.

Prof. A. K. Misra delivered a lecture in Refresher Course 2009 organized by Department of Zoology, NEHU, Shillong.

Prof N. K. Chrungoo delivered four invited lectures entitled (i) Signalling process in plants (ii) Harvesting the sun (iii) Cloning techniques and (iv) Energy transformation in living systems during the 7<sup>th</sup> Refresher Course in Botany organized by the UGC –ASC, Guwahati (Gauhati University, Guwahati) on March 11,-12, 2010.

Prof M. S. Dkhar delivered two invited lectures on the importance of Rhizosphere microflora and wood rotting fungi in Refresher Course organized by Department of Botany, Gauhati University, Guwahati on 5<sup>th</sup> March 2010.

Prof N. Venugopal delivered a lecture on Digestive enzymes secreted by glands in the Insectivorous plants of Meghalaya in Refresher Course 2009 organized by Zoology Department, NEHU.

Prof. S. K. Barik participated as an expert member in Brainstorming Workshop on Medicinal Plant Conservation Areas held in Bangalore during 19-23<sup>rd</sup> May, 2009 organized by MoEF and FRLHT.

Prof. U. Shankar (i) attended two project monitoring workshops organized by DBT under National Bioresource Development Board on October 12-13, 2009 and March 18-19, 2010, and reported the progress of his project "Mapping and quantitative assessment of geographic distribution and population status of plant resources of eastern Himalayan region"; (ii) participated in the interaction meeting on a workshop on 'Potential for NTFP – based live hoods in northeast India, on February 13, 2009; and (iii) delivered a speech on "Environment for all" in World Environment Day celebration at KV, NEHU, Shillong on June 05, 2009. He hosted a summer Research Fellow sponsored by the Indian Academy of Sciences,

Bangalore for two months from June 01 – July, 2009 (Dr A. Sarma from Assam was chosen as summer Research Fellow to work in the Department of Botany, NEHU, Shillong, who worked on “Extraction and screening of essential oil from *Artemisia* species”).

Dr. H. Kayang attended the 19<sup>th</sup> meeting of Research Advisory committee CMER & TI, Lahdoigarh on 13<sup>th</sup> October, 2009 held at Central Muga Eri Research and Training Institute, Central Board, Jorhat.

Dr. M. C. Das attended a training program ‘DBT sponsored short term training course on Application of molecular Tools for crop Improvement’ organized by Department of Biotechnology IIT, Guwahati from 16<sup>th</sup> – 21<sup>st</sup> November, 2009.

## DEPARTMENT OF ZOOLOGY

**Head** : Prof. R. N. K. Hooroo  
**Telephone** : 272 2301/04 (O)  
**E-mail** : rnkhnehu@hotmail.com; rnk@nehu.ac.in

**Thrust Area of Research** : The Department is engaged in research under the thrust area “Faunal Diversity and Ecophysiology” in various disciplines such as (i) Diversity of helminths and nematodes in N. E. region, and bioprospection of antihelmintic efficacy of plants used in traditional medicine, (ii) Biodiversity of freshwater zooplankton and fishes and limnological studies in N.E. region, (iii) Adrenergic signal transduction in pineal gland, hormonal regulation of oxidative metabolism, and breeding biology of endangered fishes, amphibians and birds, (iv) Mode of action of cisplatin an anticancer drug, and efficacy of putative anticancerous plants from N.E. region, (v) Biodiversity, ecology, breeding, and development of amphibians from N.E. region, (vi) Biochemical adaptations to nitrogen, carbohydrate, protein and oxidative metabolism, and nitric oxide signaling under various environmental stresses in air-breathing fishes, and (vii) Biodiversity of insects in N.E. region, and plant-based bio-pesticides, antidiabetic and anti-diarrheal compounds.

**Brief Statement of Academic Activities:** The Department offered M. Sc. and Ph. D. courses. During the year, 30 students were admitted in M.Sc. programme. The Department organized the “DST-sponsored “SERC School in Chronobiology” and the workshop on “Innovative Methodologies in Teaching of Life Sciences and Laboratory Course”. The Department organized the 33<sup>rd</sup> Refresher course in “Advances in Zoology”. Five students of the Department got employment in Colleges and Universities. The Department has completed the fourth year of DSA scheme under the UGC Special Assistance Programme to promote higher research with special reference to the N.E. region. Further, the Department received a special grant of Rs. 30.00 lakhs in the third phase from the UGC to upgrade the existing infrastructural facilities for the M.Sc. classes and the research laboratories. During the financial year 2009-10, the Department received grants of about Rs. 1.40 crores under extramural research projects sponsored by the DST, DBT, DAE-BARC, DIT and DoE&F. All these projects have a direct relevance to the socio-economic development of the N.E. region. The Department is actively participating in the research focus “Biosciences’ under UPE programme from UGC to NEHU. Five research scholars received the UGC Meritorious Fellowship and two research scholars have been awarded directly with the CSIR-SRF. Three students qualified in the NET conducted by the CSIR-UGC.

**Faculty :**

**Professors**

V. Tandon, M.Sc. (Hons.), Ph.D. (Panj.), *FNASc*  
 B. K. Sharma, M.Sc. (Hons), Ph.D. (Panj.)  
 B. B. P. Gupta, M.Sc., Ph.D. (BHU), *FNASc*  
 S. B. Prasad, M.Sc., Ph.D. (BHU)  
 R. N. K. Hooroo, M.Sc., Ph.D. (NEHU)  
 B. Kharbuli, M.Sc., Ph.D. (NEHU)  
 N. Saha, M.Sc., Ph.D. (NEHU), *FNASc*  
 S. N. Ramanujam, M.Sc. (Bangalore), Ph.D. (NEHU)

**Associate Professors**

A. K. Yadav, M.Sc. (Agra), Ph.D. (NEHU)  
 A. S. Dixit, M.Sc. (Gorakh), Ph.D. (BHU)  
 B. Roy, M.Sc. (NBU), Ph.D. (NEHU)  
 B. Keshan, M.Sc., Ph.D. (Cal.)  
 S. Ghosh, M.Sc., Ph.D. (Cal.)

## School of Life Sciences

<b>Assistant Professors</b>	S. Choudhury, M.Sc., Ph.D. (NEHU)						
	S. R. Hajong, M.Sc., Ph.D. (NEHU)						
	B. Das, M.Sc. (Berhampur), Ph.D. (NEHU)						
<b>Student intake:</b>							
<b>Enrolment capacity</b>	M.Sc. – 30; Ph.D. – Variable						
<b>Actual Admission</b>	SC	ST	Gen	Male	Female	Meghalaya outside	
M. Sc.	-	30	-	13	17	21	9
Ph. D.	-	13	10	10	13	13	10
<b>Degrees Awarded</b>	SC	ST	Gen	Male	Female	Total	
M. Sc.	-	24	2	9	17	26	
Ph. D.	1	1	2	2	2	4	

Ph. D.

P. K. Prasad - "Studies on the status and molecular characterization of paragonimiasis and other Crustacean-borne trematode zoonoses in North East India". Supervisors: Prof. V. Tandon and Prof. A. Chatterjee

P. S. Yongwai - "Study on the seasonal variations of trace elements in *Garra lamta* (Hamilton) from selected rivers of West Khasi Hills, Meghalaya". Supervisor: Prof. B. Kharbuli

B. Koch - "Antitumor and cytotoxic potentialities of novel series of diakyltin IV dichloride compounds of nitrogen donor ligands on mammalian cells". Supervisor: Prof. A. Chatterjee

G. Pujari - " Study on the role of endogenous glutathione in cellular damage induced by radiation of different qualities". Supervisor: Prof. A. Chatterjee

### Placement of Students:

(i) Dr. K. Biswas as an Assistant Professor in Academic Staff College, N.E.H.U., Shillong, (ii) Mr. J. L. Khongsngi as a Senior Technical Assistant in the Department of Zoology, N.E.H.U., Shillong, (iii) Mr. D. A. Rabha as a Lecturer in Zoology, St. Edmunds College, Shillong, (iv) Ms. K. Mihsel as a lecturer in Zoology, St. Anthony's College, Shillong, (v) Dr. A. J. langrai as a lecturer in Zoology, Synod College, Shillong

**Courses conducted:**

Semester I : Cell Biology & Immunology; Biological Chemistry & Molecular Biology; Genetics & developmental Biology.

Semester II : Animal Physiology, Parasitology and Entomology, Techniques in Biology

Semester III : Endocrinology & Reproductive Biology, Aquatic Biology & Fisheries, Animal Diversity

Semester IV : Biosystematics & Evolution; Techniques in Biology and (Old course) Biometrics; Special Paper\*.

\*Special Papers offered: Biochemical Adaptation and Metabolic Regulation, Developmental Biology and Differentiation, Endocrinology and Reproductive Physiology, Insect Physiology, Molecular Cell Biology & Immunology and Fish Biology

**Study Tour/Field Trips of Students:**

As a part of M.Sc. course, Dr. A. K. Yadav and Dr. B. Das took the M. Sc. (Zoology) 3<sup>rd</sup> semester students on study tour to Kolkata, Puri, Bhubaneswar, Chilka and visited various Academic and Research Institutes relevant to the courses in M.Sc. from 4-14 January, 2010.

**Seminars/conferences/symposia:**

**Organized**

(i) DST-sponsored "SERC School in Chronobiology" June 6-20, 2009. (ii) Workshop on "Innovative Methodologies in Teaching of Life Sciences and Laboratory Course" March 27, 2010.

**Attended:**

Prof V. Tandon attended (i) the Symposium on Parasite Taxonomy, Biodiversity and Fish Health: Environmental Impact [Focal Theme- Impact of Climate Changes on Emerging and Fish Parasitic and Infectious diseases] organized by the Department of Zoology, Andhra University, Visakapatnam, March 12-13, 2010, delivered a plenary lecture on "Current issues on parasite taxonomy: molecular and in-silico approaches to systematic position and phylogenetic relationships" and chaired a session on 'Taxonomy and Biodiversity-I', and (ii) the 8<sup>th</sup> International Conference on Bioinformatics, Biopolis, Singapore,

## School of Life Sciences

September 7-11, 2009 and presented a paper entitled "In-silico identification of giant intestinal fluke, *Fasciolopsis buski* (Lankester, 1857) Looss, 1899 using sequence motifs as barcodes and RNA secondary structures of ITS2 DNA.

Prof. B. K. Sharma attended (i) the UPE Lecture Series (Biosciences) organized by the School of Life Sciences, North-Eastern Hill University, Shillong, May 8-9, 2009, acted as a organizing secretary and chaired a session, (ii) International Seminar on 'Water Crisis in the Indian subcontinent: issues and challenges', organized by the Department of Geography, NEHU, Shillong, November 23-25, 2009, delivered key-note address on "Water: occurrence, distribution and management' and presented a paper "On certain aspects parameters of water quality of floodplain lakes of Assam and Manipur, N. E. India", and (iii) 22<sup>nd</sup> Annual Conference of National Environmental Science Academy at Jamia Hamdard University, New Delhi, December 27-29, 2009 and presented a paper on "Zooplankton communities of Loktak lake (a Ramsarsite), Manipur (N. E. India)".

Prof. R. N. K. Hooroo (i) attended the DST-sponsored SERC School in Chronobiology, at the Department of Zoology, NEHU, Shillong, June 6-20, 2009 and chaired a session, and (ii) acted as a resource person and delivered a lecture in the DST-sponsored 3<sup>rd</sup> SERC School of Herpetology, at the Arya Vidyapith College, Guwahati, November 2-17, 2009.

Prof. B. Kharbuli attended the Regional Seminar on "Environmental Problems: Extinction of Biological Species in North East India", at the Department of Zoology, Synod College, Shillong, September 17, 2009 and chaired a session.

Prof. N. Saha attended (i) the workshop on "Analytical Techniques in Biological Sciences", the Department of Biochemistry, Lady Keane College, Shillong, November 25-26, 2009 as a resource person and delivered lecture on "Protein sequencing", (ii) the 55<sup>th</sup> Annual Technical Session of Assam Science Society and delivered an invited lecture entitled "Biochemical adaptational strategies in Indian air-breathing catfishes while surviving in extreme habitats", at the Gauhati University, Guwahati, February 15-16, 2010.

Dr. A. K. Yadav attended (i) the 13<sup>th</sup> International Conference on Emerging Infectious Diseases in the Pacific Rim - Focused on Enteric Diseases: US-Japan Cooperative Medical Science Program, at the National Institute of Communicable & Enteric Diseases, Kolkata, April 06-09, 2009 and presented a paper entitled "Efficacy of Indian Traditional Herbal Medicines against Trichinellosis", (ii) participated in the 21<sup>st</sup> National Congress of Parasitology, at

the Panjab University, Chandigarh, November 14-16, 2009 and presented a paper entitled, "Anticestodal efficacy of *Zanthoxylum rhetsa* DC extract against experimental *Hymenolepis diminuta* (Cestoda) infections in rats, (iii) delivered an invited lecture on "Darwin and Darwinism" in one-day programme on "Understanding Evolution through Darwin" at the Shillong College, Shillong, October 9, 2009.

Dr. A. S. Dixit attended (i) the DST-sponsored SERC School in Chronobiology, at the Department of Zoology, NEHU, Shillong, June 6-20, 2009 and acted as a Coordinator, (ii) DST-sponsored SERC School in Chronobiology, at the Jawaharlal Nehru Center for Advanced Scientific Research, Bangalore, December 25, 2009 - January 7, 2010 and chaired various sessions, and (iii) XXI National Symposium on Chronobiology, at Jamshedpur, February 2-4, 2010 and presented two papers entitled "Role of photoperiod in control of seasonality in the tree sparrow (*Passer montanus*)" and "Photoperiodic regulation of seasonality in reproduction in the yellow-breasted bunting (*Emberiza aureola*)"

Dr. S. R. Hajong attended the Regional Seminar on Environmental problems: Extinction of Biological Species in North-East India, at the Department of Zoology, Synod college, Shillong, September 17, 2009 and presented a paper entitled "Ants (Hymenoptera-Formicidae) fauna in a forest ecosystem of West Khasi Hills, Meghalaya".

The following research students presented papers in the "21<sup>th</sup> National Congress of Parasitology" held at the Department of Zoology, Panjab University, Chandigarh, November 14-16, 2009: (1) L.M. Goswami (Supervisor: Prof. V. Tandon): paper entitled "Crustacea-borne metacercarial infection of a microphallid fluke (Trematoda: Digenea: Microphallidae) in focal areas of Meghalaya, Northeast India". (2) J.A. Shylla (Supervisor: Prof. V. Tandon): paper entitled "Molecular characterization of paramphistome flukes (Trematoda: Digenea: Paramphistomatidae) based on second internal transcribed spacer (ITS2) of rDNA". (3) C. Malsawmtluangi (Supervisor: Prof. V. Tandon): paper entitled "Morphological and molecular identification of the metacestode parasitizing the liver of rodents hosts in bamboo growing areas of Mizoram, Northeast India". (4) D. B Jyrwa (Supervisor: Prof. V. Tandon): paper entitled "Molecular characterization of *Lytocestus* spp (Eucestoda: Caryophyllidea) V. occurring in edible freshwater fishes in Meghalaya, Northeast India". (5) S. Thapa (Supervisor: Prof. V. Tandon): paper entitled "A new report on the occurrence of monogenean parasites (Monogenoidea) on gill filaments of freshwater fishes in

Meghalaya". (6) S. Ghatani (Supervisor: Prof. V. Tandon): paper entitled "Molecular characterization of the second internal transcribed spacer (ITS-2) of ribosomal DNA of pouched amphistomes, *Fischoederius cobboldi* and *Fischoederius elongatus* (Platyhelminthes: Trematoda: Digenea: Gastrothylacidae)". (7) M. Challam (Supervisor: Dr. B. Roy): paper entitled "Ultrastructural, histochemical and biochemical alterations on *Raillietina echinobothrida in vitro* treated with *Artemisia indica*".

The following research students presented posters in the "8<sup>th</sup> International Conference on Bioinformatics" held at Biopolis, Singapore, September 7-11, 2009: (1) L. M. Goswami, (Supervisor: Prof. V. Tandon): poster entitled "Molecular characterization of intestinal fluke, *Artyfechinostomum sufrartyfex* (Trematoda: Echinostomatidae) using a combinatorial approach of molecular morphometrics and CBC analysis in the internal transcribed spacer regions". (2) P. K. Prasad (Supervisor: Prof. V. Tandon): poster entitled "Phylogenetic reconstruction using secondary structures and sequence motifs of ITS2 rDNA of *Paragonimus westermani* (Kerbert, 1878) Braun, 1899 (Digenea: Paragonimidae) and related species".

P. K. Prasad (Supervisor: Prof. V. Tandon) presented (i) a paper entitled "PCR-based molecular characterization and analysis of food-borne trematode parasites *Paragonimus westermani*, *Fasciolopsis buski* and *Fasciola gigantica* from Northeast India using ITS2 rDNA region at the 79<sup>th</sup> Annual NASI meet, Calcutta University, December 14-16, 2009 and (ii) a poster entitled "Biological identification of *Gastrodiscoides hominis* through sequence motifs and secondary structures of ITS2 data of rDNA" at the Symposium on 'Frontiers in Computational Biology', C-DAC, Pune, July 23-24, 2009.

Th. N. Singh (Supervisor: Prof. B. B. P. Gupta) attended the National Symposium on Coldwater Fisheries Management: New Strategies and Approaches", organized by the Directorate of Coldwater Fisheries Research (ICAR), Bhimtal, October 2-4, 2009 and presented a paper entitled "Conservation of chocolate mahseer, *Neolissocheilus hexagonolepis* (McClelland, 1839) in Simsang river".

A. K. Verma (Supervisor: Prof. S. B. Prasad) attended the National seminar on recent trends in phytochemical and phytopharmaceutical research and future prospects Gauhati University, Guwahati, March 26-27, 2010 and presented a paper entitled "Anticancer activity of different fractions of *Mylabris cichorii* extracts in mice(C3H/He) bearing ascites dalton's lymphoma".

S. Sailo (Supervisor: Prof. R. N. K. Hooroo) – presented (i) a paper entitled “Habitat destruction and its impact on Amphibians” at the Regional seminar on Environmental Problems: Extinction of Biological Species in North-East India organized at the Department of Zoology, Synod College, Shillong, September 17, 2009, and (ii) a paper entitled “A note on the breeding behavior of some anurans in Mizoram” at the UGC sponsored National Seminar on Biodiversity Spectrum of North-East India, Department of Zoology, Arya Vidyapeeth College, Guwahati, September 18-19, 2009.

M. G. Choudhury (Supervisor: Prof. N. Saha) delivered the Young Scientist award lecture entitled “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*)”, at the 97<sup>th</sup> Indian Science Congress, Kerala University, Tiruvananthapuram, January 3-7, 2010

L. M. Jyrwa (Supervisor: Prof. N. Saha) presented a paper entitled “Influence of environmental hypertonicity on gluconeogenesis and on the expression of heat shock protein 70 in air-breathing walking catfish, *Clarias batrachus*”, at the 97<sup>th</sup> Indian Science Congress Kerala University, Tiruvananthapuram, January 3-7, 2010.

M. M. Devi (Supervisor: Prof. S. N. Ramanujam) presented a paper entitled “Distribution & Length-weight relationship of Study of Freshwater Fish, *Puntius shalynius* Yazdani and Talukdar (Cypriniformes: Cyprinidae) in Meghalaya”, at the XXII<sup>nd</sup> Annual Conference of National Environmental Science Academy (NESA), New Delhi, December 27-29, 2009.

S. Dey (Supervisor: Prof. S. N. Ramanujam) presented a paper entitled “Diversity and distribution of ornamental fishes in Meghalaya”, at the XXII<sup>nd</sup> Annual Conference of National Environmental Science Academy (NESA), New Delhi, December 27-29, 2009.

B. K. Myllemngap (Supervisor: Prof. S. N. Ramanujam) presented a paper entitled “Morphological changes in the gills of *Heteropneustes fossilis* (Bloch) exposed to coal mining effluents”, at the National Conference on “Advances in Biotechnology and its role in Aquatic Biodiversity Conservation and Fisheries”, Uttarakhand, India, March 17-18, 2010.

R. Sougrakpam (Supervisor: Dr. A. S. Dixit) presented a paper entitled “Photoperiodic regulation of seasonality in reproduction in the yellow-breasted bunting (*Emberiza aureola*)” at the XXI National Symposium on Chronobiology, Jamshedpur, 2-4 February 2010.

H. Kharbani (Supervisor: S. R. Hajong) presented a paper entitled "Ants (Hymenoptera-Formicidae) fauna in a forest ecosystem of West Khasi Hills, Meghalaya." Regional seminar on: Environmental problems: Extinction of Biological Species in North-East India, at the Department of Zoology, Synod college, Shillong, September 17, 2009.

A. K. Srivastava (Supervisor: Prof. B. Kharbuli) presented a poster entitled "Anopheline fauna of West Garo Hills District of Meghalaya" at the International Conference on Entomology, Punjabi University, Patiala, 2009.

P. S. Jongwai (Supervisor: Prof. B. Kharbuli) presented a paper entitled "Measurement of radionuclides and trace elemental concentrations and their transfer factors in environmental matrices around the proposed uranium mining, milling and tailing pond site at K.P. Mawthabah (Domiasiat), West Khasi Hills, Meghalaya" in the International Work Shop on Recent developments in radioecology related to environmental protection from ionizing radiation, organized by the Board of Research in Nuclear Science, Bhaba Atomic Research Centre, Mumbai, March 8-12, 2010.

### **Publications:**

#### **Published Abroad**

Biswas, K., J. L. Khongsngi, D. Häussinger, and N. Saha, 2009. Influence of cell volume changes on autophagic proteolysis in the perfused liver of air-breathing catfish (*Clarias batrachus*). *Journal of Experimental Zoology*, 311: 115-124.

Biswas, K., M. L. Jyrwa, D. Häussinger and N. Saha, 2010. Influence of cell volume changes on protein synthesis in isolated hepatocytes of air-breathing walking catfish (*Clarias batrachus*). *Fish Physiology and Biochemistry*, 36: 17-27.

Challam, M., B. Roy, and V. Tandon, 2010. Effect of *Lysimachia ramosa* (Primulaceae) on helminth parasites: motility, mortality and scanning electron microscopic observations on surface topography. *Veterinary Parasitology*, 169: 214-218.

Das, B., V. Tandon, L. M. Lyndem, A. I. Gray and V. A. Ferro, 2009. Phytochemicals from *Flemingia vestita* (Fabaceae) and *Stephania glabra* (Menispermaceae) alter cGMP concentration in the cestode *Raillietina echinobothrida*. *Comparative Biochemistry and Physiology*, 149C: 397-403.

Das, I., Rangad, D., R. K. Lyngdoh, K. Deuti and R. N. K. Hooroo, 2010. A new species of *Leptolalax* (Anura: Megophryidae) from the sacred groves of Mawphlang, Meghalaya, north-eastern India. *Zootaxa*, 2339: 44-56.

Dasgupta, S., B. Roy, and V. Tandon, 2009. Ultrastructural alterations of the tegument of *Raillietina echinobothrida* treated with the stem bark of *Acacia oxyphylla* (Leguminosae). *Journal of Ethnopharmacology*, 127: 568-571.

Goswami, L. M., P. K. Prasad, V. Tandon and A. Chatterjee, 2009. Molecular characterization of *Gastrodiscoides hominis* (Platyhelminthes: Trematoda: Digenea) inferred from ITS rDNA sequence analysis. *Parasitology Research*, 104: 1485-1490.

Imkongwapang, R. and V. Tandon. 2010. *Neoriojatrema mokokchungensis* n. g., n. sp. (Monogenea: Polystomatidae: Polystomatinae) from the urinary bladder of a megophryid frog, *Xenophrys glandulosa* from Nagaland, Northeast India. *Journal of Helminthology*, doi:10.1017/S0022149X10000040.

Jyrwa, L. M., M. Das, K. Biswas and N. Saha, 2010. Influence of environmental hypertonicity on gluconeogenesis in the air-breathing walking catfish, *Clarias batrachus*. *Journal of Experimental Zoology*, DOI 10.1002/jez.656.

Lalchhandama, K., B. Roy, and B. K. Dutta, 2009. Anthelmintic activity of *Acacia oxyphylla* stem bark against *Ascaridia galli*. *Pharmaceutical Biology*. 47: 578-583.

Lalramliana and A. K. Yadav, 2009. Effect of relative humidity on the emergence and reproduction of three entomopathogenic nematode species (Rhabditida: Steinernematidae and Heterorhabditidae) from Meghalaya, India. *Science Vision*, 9: 92-96.

Prasad, P. K., V. Tandon, D. K. Biswal, L. M. Goswami, and A. Chatterjee, 2009. Phylogenetic reconstruction using secondary structures and sequence motifs of ITS2 rDNA of *Paragonimus westermani* (Kerbert, 1878) Braun, 1899 (Digenea: Paragonimidae) and related species. *BMC Genomics*, 10 (Suppl 3): S25 doi:10.1186/1471-2164-10.S3-S25.

Prasad, P. K., V. Tandon, D. K. Biswal, L. M. Goswami, and A. Chatterjee, 2009. Use of sequence motifs as barcodes and secondary structures of Internal Transcribed spacer 2 (ITS2, rDNA) for identification of the Indian liver fluke, *Fasciola* (Trematoda: Fasciolidae). *Bioinformation*, 3: 314-318.

Prasad, S. B., B. M. Nicol, G. Rosangkima, and Amenla, 2010. Modulatory effect of ascorbic acid (vitamin C) on cyclophosphamide-mediated antitumor activity and mutagenicity in mice bearing ascites Dalton's lymphoma. *International Journal of Pharma and Bio Sciences*, 1: 1-20.

Prasad, S. B., G. Rosangkima, and A. Kharbangar, 2010. Structural and biochemical changes in mitochondria after cisplatin treatment of Dalton's lymphoma-bearing mice. *Mitochondrion* 10:38-45.

Prasad, S. B., G. Rosangkima, and T. Rongpi, 2009. Studies on the ethnomedical value of *Dillenia pentagyna* Roxb. in murine model. *Journal of Pharmacy Research*, 2: 243-249.

Renthlei, C. Z., A. R. Varman, B. Kharbuli, and S. Dey, 2010. Progressive chorion morphology during egg development in *Samia ricini* (Donovan): *Microscopy Research and Technique*, 73: 234-239.

Roy, B., S. Dasgupta, and V. Tandon, 2009. Ultrastructural Observations on *Fasciolopsis buski* and its alterations caused by shoot extract of *Alpinia nigra*. *Microscopy Research and Technique*, 72: 61-66.

Sailo, S., H. T. Lalremsanga, R. N. K. Hooroo, Lalrotluanga and A. Ohler, 2009. *Ingerana borealis* (Annandale, 1912): a new record from Mizoram (India), with notes on its systematic position and natural history. *Alytes*, 27: 1-12.

Song, F., S. Mahmood, S. Ghosh, D. J. Smiraglia, H. Nagase and W. Held, 2009. Tissue specific differentially methylated regions (TDMR): Changes in DNA methylation during development. *Genomics*, 93:130-13.

V. Tandon et al., 2009. Details of Sequences submitted to the Genbank:

<i>GenBank Accession No.</i>	<i>Species</i>	<i>Region Amplified</i>
GU133056	Homalogaster paloniae	ITS2
GU133057	Calicophoron calicophorum	ITS2
GU133058	Orthocoelium streptocoelium	ITS2
GU133059	Fischoederius cobboldi (Cow)	ITS2
GU133060	Fischoederius cobboldi (Goat)	ITS2
GU133061	Fischoederius elongatus (Goat)	ITS2
GU133062	Fischoederius elongatus (Cow)	ITS2

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FJ939132	Hymenolepis diminuta	ITS2
FJ939133, FJ939134, FJ939135	Taenia taeniaeformis	ITS1, ITS2, CO1
FJ966109, FJ966110, FJ966111	Microphallid sp.	28S, ITS1, ITS2
FJ957901	Lytocestus birmanicus	ITS2
FJ957902	Lytocestus. indicus	ITS2

N. Saha et al., 2009. Details of Sequences submitted to the Genbank:

- EU527190 : Clarias batrachus beta-actin mRNA, partial cds.  
EU527191 : Clarias gariepinus beta-actin-like mRNA, partial cds.  
GQ860954 : Heteropneustes fossilis fructose-1,6-bisphosphatase mRNA, partial cds.  
GU131155 : Heteropneustes fossilis glucose-6 phosphatase mRNA, partial cds.  
GU238268 : Clarias gariepinus glucose-6-phosphatase mRNA, partial cds.  
GU253692 : Heteropneustes fossilis endothelial nitric oxide synthase (NOS3) mRNA, partial cds.  
GU266770 : Heteropneustes fossilis neuronal nitric oxide synthase (NOS1) mRNA, partial cds.  
GU322465 : Heteropneustes fossilis nitric oxide synthase (NOS2) mRNA, partial cds.

### Published in India:

Kayang, H., B. Kharbuli, and D. Syiem, 2009. *Litsea cubeba* Pers. An untapped economic plant species of Meghalaya. *Natural Products Radiance*: 8: 5.

Malsawmtluangi, C. and V. Tandon, 2009. Helminth parasite spectrum in rodent hosts from bamboo growing areas of Mizoram, Northeast India. *Journal of Parasitic Diseases*, DOI 10.1007/s12639-009-0004-5.

Sharma, B. K. 2009. Diversity of Rotifers (Rotifera: Eurotatoria) of Loktak lake, North- Eastern India. *Tropical Ecology* , 50: 277-285.

Sharma, B. K. 2009. Phytoplankton communities of Loktak lake (A Ramsar site), Manipur (N. E. India): composition, abundance and ecology. *Journal of Threatened Taxa*, 1: 401-410.

Sharma, B. K. 2009. Richness, Abundance and Ecology of Rotifera of Loktak Lake (A Ramsarsite), Manipur, Northeastern India. *Ecological Environment and Conservation*, 15: 299-306.

Sharma, B. K. 2009. Rotifer communities of floodplain lakes of Manipur (North-East India): biodiversity, distribution and ecology. *Journal of Bombay Natural Historical Society*, 106: 45-56.

Sharma, B. K. and S. Sharma, 2009. Micro-Crustacea (Crustacea: Branchiopoda) of Deepor beel: Richness, Abundance and Ecology. *Journal of Threatened Taxa*, 1: 411-418.

Sharma, B. K. and S. Sharma, 2009. Biodiversity and distribution of freshwater rotifers (Rotifera, Eurotatoria) of Tamil Nadu. *Records of Zoological Survey of India*, 109:41-60.

Sharma, B. K. and S. Sharma, 2009. Diversity of microcrustacea (Crustacea: Branchiopoda) of Loktak lake, a Ramsar site, Manipur, India. *Journal of Threatened Taxa*, 1: 541-548.

Yadav, A. K. and V. Tangpu, 2009. Therapeutic efficacy of *Zanthoxylum rhetsa* DC extract against experimental *Hymenolepis diminuta* (Cestoda) infections in rats. *Journal of Parasitic Diseases* 33: DOI 10.1007/s12639-009-0007-2.

#### **Book/Book chapter/Proceedings publications:**

Tandon, V., A. K. Yadav, and B. Roy, 2009 (Eds). *Current Trends in Parasitology*. Proceedings of the 20<sup>th</sup> National Congress of Parasitology, India; November 3-5, 2008. Panima Publishing Corporation, New Delhi, p. 279 (ISBN 81-86535-69-1).

Maitra, G. and V. Tandon, 2009. *Travelling with Darwin: Evolution of an Evolutionary*. The National Academy of Sciences India, Allahabad, p. 78 (ISBN 978-81-905548-1-7).

Tandon, V. and G. Maitra, 2009. Darwin's theory of evolution: Survival of nature's fit. In *Nature at Work- the Ongoing Saga of Evolution*. Ed.: Sharma, V.P., Springer India, p. 400.

Tandon, V., L. M. Goswami, P. K. Prasad, and A. Chatterjee, 2009. Molecular characterization of intestinal fluke, *Artyfechinostomum sufrartyfex* (Trematoda: Echinostomatidae) using PCR amplification of rDNA ITS regions. In *Current Trends in Parasitology*. Eds.: Tandon, V., Yadav, A.K. and Roy, B., Proceedings of the 20<sup>th</sup> National Congress of Parasitology, India; November 3-5, 2008. Panima Publishing Corporation, New Delhi, pp. 153-162.

Thapa, S., D. B. Jyrwa and V. Tandon, 2009. Platyhelminth parasite spectrum in edible freshwater fishes of Meghalaya. In *Current Trends in Parasitology*. Eds.: Tandon, V., Yadav, A.K. and Roy, B., Proceedings of the 20<sup>th</sup> National Congress of Parasitology, India; November 3-5, 2008. Panima Publishing Corporation, New Delhi, pp. 113-125.

Malsawmtluangi, C. and V. Tandon, 2009. Occurrence of the metacestode of *Taenia* sp. And the nematode, *Capillaria hepatica* in liver of wild rodents from bamboo growing areas of Mizoram.. In *Current Trends in Parasitology*. Eds.: Tandon, V., Yadav, A.K. and Roy, B., Proceedings of the 20<sup>th</sup> National Congress of Parasitology, India; November 3-5, 2008. Panima Publishing Corporation, New Delhi, pp. 127-136.

Jyrwa, D. B., V. Tandon and R. D. Lyngdoh, 2009. Molecular characterization of *Lytocestus* spp (Eucestoda: Caryophyllidea) from *Clarias batrachus* (L.) in Meghalaya. In *Current Trends in Parasitology*. Eds.: Tandon, V., Yadav, A.K. and Roy, B., Proceedings of the 20<sup>th</sup> National Congress of Parasitology, India; November 3-5, 2008. Panima Publishing Corporation, New Delhi, pp. 137-146.

Lalramliana and A. K. Yadav, 2009. Compatability of chemical pesticides with locally isolated entomopathogenic nematodes (Steinernematidae and Heterorhabdidae) from Meghalaya, North-East India. In *Current Trends in Parasitology*. Eds.: Tandon, V., Yadav, A.K. and Roy, B., Proceedings of the 20<sup>th</sup> National Congress of Parasitology, India; November 3-5, 2008. Panima Publishing Corporation, New Delhi, pp. 261-267.

Tandon, V., D. K. Biswal, P. K. Prasad, and C. Malsawmtluangi, 2010. Systematic position and phylogenetic relationships of the cyclophyllidean cestodes: an in-silico study using ITS2 rDNA and sequence-structure alignment. BIOINFORMATICS 2010- International Conference on bioinformatics, pp. 1- 12.

Singh, Th. N. and B. B. P. Gupta, (2009). Induced breeding of the endangered chocolate mahseer, *Neolissocheilus hexagonolepis* (McClelland)

with Ovaprim. In "Fish and Fisheries in North East India: Recent Advances and Rebuilding". Eds.: R. N. Bhuyan, D. Ghosh and D. Sarma, pp. 212-217. (ISBN 81-902028-5-5).

**Funds received from agencies other than NEHU:**

DIT, New Delhi	Rs. 25.00 lakhs
UGC-DSA	Rs. 5.50 lakhs
UGC (Special assistance)	Rs. 30.00 lakhs
MoEF, New Delhi.	Rs. 13.00 lakhs
DBT, New Delhi	Rs. 48.00 lakhs
DST, New Delhi	Rs. 22.00 lakh

**Infrastructure facilities:** Research laboratories were renovated and a module consisting of four research laboratories and four faculty rooms was constructed.

**Research Projects:**

**Ongoing**

All India Co-ordinated Project on Capacity Building in Taxonomy - Helminths and Nematodes (AICOPTAX). Principal Investigator: Prof. V. Tandon. Sponsored by MoEF, New Delhi.

Bio-Informatics Centre (Sub DIC). Deputy Coordinator: Prof. V. Tandon, Sponsored by DBT, New Delhi.

North-East Parasite Information and Analysis Centre (NEPIAC): *an in silico approach*". Principal Investigator: Prof. V. Tandon (Co-PIs: Mr. D. K. Biswal, Information officer, BIC, NEHU, Shillong and Dr. S. Ramachandran, IGIB, New Delhi). Sponsored by DIT, MCIT.

Physiological significance of occurrence/expression of different types of nitric oxide synthases and production of nitric oxide under environmental constraints and pathological conditions in catfish, *Heteropneustes fossilis*. Principal Investigator: Prof. N. Saha. Sponsored by DST, New Delhi.

Expression and tissue distribution of different isoforms of nitric oxide synthases and production of nitric oxide under environmental constrains in air-breathing catfish, *Clarias batrachus*. Principal Investigator: Prof. N. Saha. Sponsored by UGC, New Delhi.

Measurement of radionuclides and trace elemental concentrations and their transfer factors in Environmental Matrices around the proposed Uranium Mining, Milling and Tailing Pond site at K.P. Mawthabah (Domiasiat), West Khasi Hills District, Meghalaya. Principal Investigator: Prof. B. Kharbuli. Sponsored by DAE-BARC, Mumbai.

Studies on health status and demographic pattern of population around Domiasiat area, West Khasi Hills, Meghalaya. Principal Investigator: Prof. B. Kharbuli. Sponsored by DAE-BARC, Mumbai.

Role of proximate factor(s) in timing the seasonal breeding in Passeriformes finches of North-East. Principal Investigator: Dr. A. S. Dixit. Sponsored by DST, New Delhi.

Ichthyofaunal diversity and studies on the biology of certain indigenous ornamental fishes of Meghalaya. Principal Investigator: Prof. S. N. Ramanujam. Sponsored by MoEF, New Delhi.

Molecular aspect of stress endocrinology: cross-talk between signaling molecules and gene expression in fat body and ovary following temperature stress in silkworm, *Bombyx mori*. Principal Investigator: Dr. B. Keshan. Sponsored by DST, New Delhi

**New:**

Comparative proteomic and transcriptomic analyses of PEPCK under the influence of *Flemingia vestita* derived phytoestrogen (Genistein)". Principal Investigator: Dr. B. Das (Co-PIs: Prof. V. Tandon and Dr. A. Sharma, ICGEB, Delhi). Sponsored by DBT, New Delhi (Rs. ~ 148.00 lakhs).

**Academic/Professional Collaboration:**

Prof. B. K. Sharma undertook work on Biodiversity of Zooplankton in floodplain lakes of Assam in collaboration with Zoological Survey of India, Kolkata/Shillong.

Prof. B. B. P. Gupta is collaborating with Prof. Dr. R. Spessert, Department of Functional and Clinical Anatomy, University of Medicine, Mainz, Germany to work on photoperiodic regulation of clock genes in mammalian retina.

Prof. N. Saha is collaborating with Prof. D. Häussinger, Director, Department of Gastroenterology, Hepatology and Infectious Disease, Heinrich-Heine University of Düsseldorf, Düsseldorf, Germany to work in the field of cell

volume and protein metabolism, molecular mechanism of bile acid excretion and hepatic encephalopathy.

Dr. B. Das is collaborating with Dr. A. Sharma, International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi to work on the effective modulators from medicinal plants of North East Region for Phosphoenolpyruvate carboxykinase, the enzyme of glycolysis in cestode parasites and of gluconeogenesis in higher vertebrates.

The Department has collaborative work with Dr. Rathinam and Dr. Gowri Priya of Aravind Eye Hospital, Madurai on identifying the causative agent of ocular granuloma in human subjects (in focal areas of Tamil Nadu) in which a cercaria (larval stage) of trematode flukes that occur in fish or avian hosts is suspected to be implicated.

#### **Honours/Awards/Recognition:**

Prof. B.B.P. Gupta was awarded with the DAAD fellowship for two months (December, 2009 to January, 2010) to work on photoperiodic regulation of clock genes in mammalian retina at the Department of Functional and Clinical Anatomy, University of Medicine, Mainz, Germany in collaboration with Univ. Prof. Dr. R. Spessert.

M. G. Choudhury (Supervisor: Prof. N. Saha): ISCA Young Scientists Award 2010 by the Indian Science Congress Association, Kolkata in "Animal, Veterinary and Fishery Sciences".

Dr. P. K. Prasad (Supervisor: Prof. V. Tandon): Swarna Jayanti Puraskar 2009 for best paper presentation in Biological Sciences during 79<sup>th</sup> Annual meeting of National Academy of Sciences, December 14-16, 2009, Calcutta University, Kolkata.

L. M. Goswami (Supervisor: Prof. V. Tandon): CSIR Senior Research Fellowship and Prof. M. B. Mirza Gold Medal for the best publications of research work done in India at 21<sup>th</sup> National Congress of Parasitology, Panjab University, Chandigarh, November 14-16, 2009.

J. A. Shylla (Supervisor: Prof. V. Tandon): Best Oral Presentation Award during 21<sup>st</sup> National Congress of Parasitology, Panjab University, Chandigarh, November 14-16, 2009.

C. Malsawmtluangi (Supervisor: Prof. V. Tandon): Best Poster Award during 21<sup>st</sup> National Congress of Parasitology, Panjab University, Chandigarh, November 14-16, 2009.

Dr. G. Rosangkima (supervisor: Prof. S. B. Prasad): UGC Post Doctoral Research Fellowship.

Ms. M. M. Devi (Supervisor: Prof. S. N. Ramanujam): Best Poster Presentation Award at the XXII<sup>nd</sup> Annual Conference of National Environmental Science Academy (NESA) held at Jamia Hamdard, New Delhi, December 27-29, 2009.

Ms. K. R. R. Mihsil received the Dr. Shankar Dayal Sharma Gold Medal (2008) and also the Late M. K. Khare Memorial Award (2008).

Ms. D. Syngkon received the Late M. K. Khare Memorial Award (2009).

#### **Other activities:**

The 33<sup>rd</sup> Refresher course on "Recent Advances in Zoology" was organized by the Department from 3-23 November, 2009 with Prof. S. N. Ramanujam as the course coordinator.

Prof V. Tandon attended (i) the 3<sup>rd</sup> Taiwan-India Joint Committee on Cooperation in Science and Technology meeting as a member of the Indian Delegation, January 14-16, 2010 in Taipei, Taiwan, (ii) the 21<sup>st</sup> National Congress of Parasitology held at Panjab University, Chandigarh, sponsored by Indian Society for Parasitology, November 14 -16, 2009- as President of Indian Society for Parasitology, with the entire research group, (iii) National workshop on Microbial Diversity Database, organized by Dept. of Biotechnology & Bioinformatics, NEHU, sponsored by DBT (GOI), October 29, 2009- as Guest of Honour, (iv) 79<sup>th</sup> Annual session of NASI and National Symposium on "Science and Technology and the Young (Career, Creativity, Excitement)", Calcutta University, Kolkata, December, 14-16 2009, and (v) the workshop on 'Analytical Techniques in Biological Science', organized by the Department of Biochemistry, Lady Keane College, Shillong, November 25-26, 2009- as Guest of Honour.

Prof. B. B. P. Gupta is appointed as the Head of Sophisticated Analytical Instrument Facility (SAIF), NEHU, Shillong.

Prof. N. Saha acted as a reviewer for the American Journal of Physiology, Journal of Experimental Biology and the Biochemie.

Dr. A. K. Yadav is appointed as Editorial Board Member of Journal of Parasitic Diseases (Springer, India).

Prof. B. Kharbuli is acting as a Director of Sports of this University.

## School of Life Sciences

Prof. S. B. Prasad attended the Consultative conference of the MHRD constituted task force to discuss the draft legislative bill of the National Commission for Higher Education and Research (NCHER), at Gauhati University, Guwahati, March 2, 2010.

Prof. R. N. K. Hooroo attended (i) the Regional Seminar on Environmental Problems: Extinction of Biological Species in North-East India as a Chief Guest, organized by the Department of Zoology, Synod College, Shillong, September 17, 2009, and (ii) the DST Workshop on Wildlife Research Initiative as a DST member at the Department of Zoology, at the Gauhati University, Guwahati, October 21-25, 2009,

Prof. B. Kharbuli attended the X<sup>th</sup> International Symposium on Vectors and Vector Borne Diseases” at the Goa University, Goa, November 4-6, 2009,

Dr. A. S. Dixit attended the workshop on Wildlife Research Initiatives in North-East India, at the Guwahati University, October 21-25, 2009, (iv) the workshop on Basic Principles, preparatory methods and application in scanning electron microscope, at NEHU, Shillong, November 3-5, 2009,

Dr. B. Roy attended the 21<sup>st</sup> National Congress of Parasitology at the Department of Zoology, Panjab University, Chandigarh, November 14-16, 2009.

Dr. B. Keshan delivered a lecture on “Molecular basis of the endocrine control of insect molting and metamorphosis” at the Central Sericultural Research & Training Institute, Berhampore, February 4, 2010; and attended (i) the UPE Lecture series (Biosciences), organized by the School of Life Sciences, North-Eastern Hill University, Shillong, May 8-9, 2009, and (ii) the workshop on “Innovative methodologies in teaching of life sciences laboratory courses” at the Department of Zoology, North-Eastern Hill University, Shillong, March 27, 2010.

Dr. S. R. Hajong attended the Regional Seminar on Environmental problems: Extinction of Biological Species in North-East India, at the Department of Zoology, Synod college, Shillong, September 17, 2009 and presented a paper entitled “Ants (Hymenoptera-Formicidae) fauna in a forest ecosystem of West Khasi Hills, Meghalaya”.

H. T. Lalremsanga (Supervisor: Prof. R. N. K. Hooroo) attended the “National Level Technical Workshop on Remote Sensing, GIS and GPS Application in Natural Resource Management” at the Department of Botany, Mizoram University, Aizawl, March 9-10, 2010.

D. Rangad (Supervisor: Prof. R.N.K. Hooroo) attended the workshop on "3<sup>rd</sup> SERC School in Herpetology" at Guwahati, November 2-17, 2009.

R. K. L. Tron (Supervisor: Prof. R.N.K. Hooroo) attended the workshop "3<sup>rd</sup> SERC School in Herpetology" at Guwahati, November 2-17, 2009.

L. M. Devi (Supervisor: Prof. R.N.K. Hooroo) attended (i) the Regional Seminar on Environmental Problems: Extinction of Biological Species in North-East India, at the Department of Zoology, Synod College, Shillong, September 17, 2009, (ii) the National Seminar on Biodiversity Spectrum of North-East India at the Department of Zoology, Arya Vidyapeeth College, Guwahati, September 18-19, 2009.

C. Thabah (Supervisor: Prof. R.N.K. Hooroo) attended (i) the Regional seminar on Environmental Problems: Extinction of Biological Species in North-East India organized by Department of Zoology; Synod College, Shillong on 17 September, 2009, (ii) the National Seminar on Biodiversity Spectrum of North-East India organized by the Department of Zoology, Arya Vidyapeeth College, September 18-19, 2009.

## VI

# SCHOOL OF PHYSICAL SCIENCES

**Dean** : Prof. K. Ismail up to 25.09.2009  
Prof. R. K. Poddar w.e.f. 26.09.2009

**Telephone** : 2722501 (O), 2722606 (O), 2550061 (R); Fax: 2550486

**E-mail** : rkpoddar@nehu.ac.in

**T**he School of Physical Sciences consists of Departments of Chemistry, Mathematics, Physics and Statistics. Before the recent reorganization of Schools, Centre for Science Education was also a component of the School. All the Departments are involved in post-graduate teaching and Ph.D. programme. In addition, Department of Mathematics conducts M.Phil. programme and Department of Statistics conducts a two-semester P.G. Diploma programme. 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 recognitions for themselves and also brought financial assistance to the Departments. The Departments of Chemistry, Mathematics and Physics get extra financial supports through the Special Assistance Programme of UGC. Many faculty members have collaborative research programmes with other national/international institutions.

## DEPARTMENT OF CHEMISTRY

**Head** : Prof. B. Myrboh  
**Telephone** : 2722601 (O), 9863021710(M)  
**E-mail** : bmyrboh@nehu.ac.in

**Thrust Areas of Research:** Chemistry of Surfactants, Theoretical Reaction Kinetics, Dynamics of Excited States, Photocatalysis, Coordination Chemistry, Theoretical Organic Chemistry, Natural Products Chemistry, Synthetic Organic Chemistry, Heterocyclic Chemistry, Organometallic Chemistry.

**Brief Statement of Academic Activities:** The Department offers M.Sc. and Ph.D. programmes. 36 M.Sc. and 10 Ph.D. students were admitted to the Department. 12 students were awarded the Ph.D. degree. 1 student qualified for the CSIR NET Fellowship and 2 students for NET Lectureship. UGC has continued its support to the Department under the SAP-DSA programme. Individual research schemes funded by DST, UGC, CSIR and DAE are in progress. The Department organized a two-day National Seminar on 'Recent Developments & Trends in Computational Chemistry'.

### Faculty:

**Professors** : K. Ismail, M.Sc., Ph.D. (AMU)  
R. K. Poddar, M.Sc., Ph.D. (IIT Kanpur)  
B. Myrboh, M.Sc., Ph.D. (NEHU)  
R. H. Duncan Lyngdoh, M.Sc. (NEHU), Ph.D. (IIT Madras)  
R. A. Lal, M.Sc., Ph.D. (BHU)  
K. Mohan Rao, M.Sc. (S.V. Univ.), Ph.D. (IIT Kanpur)

**Associate Professors** : A. Lemtur, M.Sc., Ph.D. (NEHU)  
A. K. Chandra, M.Sc., Ph.D. (Burdwan)  
Ghanashyam Bez, M.Sc., Ph.D. (Gauhati)  
H. Askari, M.Sc., Ph.D. (AMU)  
T. S. Basu Baul, M.Sc. (Jabalpur), Ph.D. (N. Bengal)

**Assistant Professors** : R. L. Nongkhlaw, M.Sc., Ph.D. (NEHU)  
E. K. Rymmai, M.Sc., Ph.D. (NEHU)  
D. P. S. Negi, M.Sc. (Roorkee), Ph.D. (IIT Roorkee)

School of Physical Sciences

S. Mitra, M.Sc. (Vidya Sagar), Ph.D. (IACS)

M. K. Sahoo, M.Sc. (Utkal), Ph.D. (Comenius,  
Czechoslovakia)

Biplab Sarkar, M.Sc. (N. Bengal), Ph.D. (IIT Guwahati)

Amarta Kumar Pal, M.Sc. (Calcutta), Ph.D. (Kalyani)

**Visiting Professors/Fellows/Scholars:** Dr. D. B. Naik, Scientist 'H', Radiation & Photochemistry Division, BARC, Mumbai delivered a talk on "High Energy Radiation-Its Applications". Prof. Dr. Michael Keusgen, Dean, Faculty of Pharmacy, Philipps University, Marburg, Germany delivered a talk on "Pharmaceutical Value of Onions (Allium) and Related Species of Middle Asia". Prof. S. P. Bhattacharyya (IACS, Kolkata) and Prof. Samaresh Bhattacharya (Jadavpur University, Kolkata) visited the Department as UGC Nominees for the Advisory Committee Meeting of the UGC-DSA-SAP programme.

**Student Intake:**

Enrolment capacity	:	M.Sc.:	36,	Ph.D.:	Variable			
Actual Admission	:	SC	ST	OBC	Gen	Male	Female	Meghalaya/Other States
M.Sc.	:	02	30	-	04	18	18	25 11
Ph.D.	:	-	06	-	04	02	08	06 04

**Degrees Awarded:**

	SC	ST	OBC	Gen	Male	Female	Total
M.Sc.	: 01	13	-	04	09	09	18
Ph.D.	: 01	02	-	09	07	05	12

Ph.D.:

Ms. Debajani Basumatary, "Synthesis and Structure of Manganese and Ruthenium Complexes Derived From Some Adipoyl Dihydrazones", Supervisor: Prof. R. A. Lal.

Mr. Deswyn Gordon, "Radiology and trace elemental studies in some environmental and biological samples from area in and around Domiasiat, West Khasi Hills, Meghalaya", Supervisor: Prof. R.K. Poddar, Joint Supervisor: Prof. P. Nongkynrih.

Mr. Surajit Chakrabarty, "Synthesis, characterization and structural assessment of some transition metal complexes with some Schiff base and N-donor multidentate ligands", Supervisor: Prof. R.K. Poddar.

Mr. Sanjesh Choudhury, "Synthetic and Structural Investigation of Copper, Molybdenum and Nickel Complexes Derived from Polyfunctional Disalicylaldehyde Oxaloyldihydrazone", Supervisor: Prof. R.A. Lal.

Mr. Mithun Chakrabarty, "Synthetic and Structural Investigation of Molybdenum, Nickel and Zinc Complexes Derived from Bis(2-hydroxy-1-naphthaldehyde) succinoyldihydrazone" Supervisor: Prof. R.A. Lal.

Ms. Snigdha Chanda, "A Study of Interfacial Properties of Micellar and Microemulsion Systems", Supervisor: Prof. K. Ismail.

Mr. Pushpak Mizar, "Development of novel methods for the Synthesis of N-substituted 3,4-dihydro-2H-benzo[1,4]oxazine [benzomorpholine], substituted 7-Methyl-6,7-dihydro-5H-pyrrolo[2,3-d]pyrimidin-2-ol, pyridazines and related Heterocyclic molecules", Supervisor: Prof. B. Myrboh.

Ms. Archana Mizar, "Synthesis, Structural investigations and biological evaluation of organotin(IV) complexes of 5-[(E)-2-(aryl)-1-diazenyl]quinolin-8-ol", Supervisor: Dr. T.S. Basu Baul

Mr. Rudolf Manton Manih, "New methods for the synthesis of substituted diazepines and other N-heterocycles", Prof. B. Myrboh.

Ms. Dipannita Das, "A study on the self-organizing behavior of surfactants in mixed solvent media", Supervisor: Prof. K. Ismail.

Ms. Juthika Das, "Physicochemical studies of Non-aqueous micelles and microemulsions", Supervisor: Prof. K. Ismail.

Mr. Siamkhanthang Neihial, "Quantum chemical studies on hydrogen-bonded base pair and backbone components of novel information-bearing macromolecular duplexes", Supervisor: Prof. R.H. Duncan Lyngdoh.

**Placement of Students:** Dr. Archana Mizar, joined a Post Doctoral Fellowship in the University of Lisbon, Portugal. Dr. Snigdha Chanda joined Donbosco College, Tura, Meghalaya as Lecturer in Chemistry. Dr. Juthika Das joined S.B.M.J. College, Bangalore as Lecturer in Chemistry. Dr. Siamkhanthang Neihial joined as Post-Doctoral Fellow (Research Associate) at Jawaharlal Centre for Advanced Scientific Research, Bangalore. Dr. R.M. Manih joined UCC, Barapani as Lecturer in Chemistry.

## School of Physical Sciences

Dr. Pushpak Mizar qualified for the IAS 2009 Batch, West Bengal Cadre. Many M.Sc. students passing out from this Department have joined this Department and other Institutes as Research Scholars.

### 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, Molecular Spectroscopy, Laboratory Course in Inorganic Chemistry. Medicinal Chemistry-I, Topics in Organic Synthesis, Computer Programming in Chemistry, Organometallic Chemistry, Bioorganic Chemistry, Chemistry of Surfactants, Solid State Chemistry
- Semester III – Inorganic Chemistry-III, Organic Chemistry-III, Physical Chemistry-III, Applications of Spectroscopic Methods, Laboratory Course in Physical Chemistry. Environmental and Analytical Chemistry, Medicinal Chemistry-II, Photochemistry, Bioinorganic Chemistry, Natural Products Chemistry, Principles and Applications of Fluorescence Spectroscopy, Computational Quantum Chemistry.
- Semester IV – Inorganic Chemistry-IV. Organic Chemistry-IV, Physical Chemistry-IV, Project Work in Inorganic, Organic and Physical Chemistry.

#### Ph.D.:

Research Methodologies in Chemistry, Spectroscopic & Crystallographic Techniques in Chemistry, Advanced Inorganic Chemistry, Advanced Organic Chemistry, Advanced Physical Chemistry and Advanced Quantum Chemistry.

**Study Tour/Field Trips of Students:** Prof. B. Myrboh took the M.Sc. students of III Semester for a Study Tour to Mumbai, Goa and Kolkata during the period 20<sup>th</sup> January to 6<sup>th</sup> February 2010. The team visited National Institute of Oceanography at Goa, Nicholas Parimal Industries at Mumbai and Indian Association for Cultivation of Science at Jadavpur. The team also visited places of historical importance at Goa, Mumbai and Kolkata.

## **Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

### **Organised:**

The Department organized a Two Day National Seminar on “Recent Developments & Trends in Computational Chemistry” during the period 12<sup>th</sup> to 13<sup>th</sup> March 2010.

### **Attended:**

Prof. K. Ismail delivered the B.N. Ghosh Memorial Lecture entitled, “Counterion Binding Behaviour of Ionic Micelles and Application of Non-Extensive Thermodynamics at the 14<sup>th</sup> National Conference on Surfactants, Emulsions and Biocolloids organized by the Department of Chemistry, University of Kashmir, Srinagar during July 28-30, 2009.

Prof. R. H. Duncan Lyngdoh (i) presented a paper entitled “Towards the Computational Design of Novel H-bonded Information-bearing macromolecular Duplexes” at the National Seminar on Computation Chemistry held at NEHU, Shillong during March 12-13, 2010 and (ii) delivered an Invited Lecture entitled “Wobble Base Pair Configurations and the genetic Code: Role of Purine Anti Codon Bases” at the Swineburne University of Technology, Melbourne, Australia on February 5, 2010.

Dr. A. K. Chandra delivered an invited talk at the National Symposium on Atomic and Molecular Spectroscopy organized by the Visva-Bharati, Santiniketan during March 27-28, 2010.

Prof. K. Mohan Rao (with coauthors K. T. Prasad and G. Gupta) presented (i) a poster entitled “Arene ruthenium complexes bearing tetradentate nitrogen bases: synthesis, spectral and structural studies” at the National Symposium on Modern Trends in Inorganic Chemistry held at IISc, Bangalore during December 7-10, 2009 and (ii) another poster (with coauthors K. T. Prasad, A. V. Rao and B. Therrein) entitled “Syntheses and characterization of mono and dinuclear complexes of platinum group metals bearing benzene-linked bis(pyrazolyl)methane ligands” at the National Conference of the Chemical Research Society of India held at IICT, Hyderabad during February 5-7, 2010.

Mr. Jahar Dey (Supervisor Prof. K. Ismail) presented a poster entitled, “Aggregation Adsorption and Counterion Binding Behaviours of AOT in Water + Ethylene Glycol Mixtures” at the 14<sup>th</sup> National Conference on Surfactants, Emulsions and Biocolloids held at the Department of Chemistry, University of Kashmir, Srinagar during July 28-30, 2009.

Mr. Sujit Das (Supervisor: Prof. K. Ismail) presented a poster, "Micellization of Sodium Deoxycholate in Water + Ethylene Glycol Mixtures" at the 14<sup>th</sup> National Conference on Surfactants, Emulsions and Biocolloids held at the Department of Chemistry, University of Kashmir, Srinagar during July 28-30, 2009.

Shokip Tumtin (Supervisor: Dr. R.L. Nongkhlaw) presented a poster on "One Pot synthesis of [1,3]-oxazine and [1,3]-thiazine derivatives under thermal and microwave conditions" at the International Conference on Materials for the Millennium MATCON 2010 held at Cochin University of Science and Technology during January 11-12, 2010.

### **Publications:**

#### **Published in India.**

Chanda, S. and K. Ismail, 2009. Surface potential and polarity at the micelle-solution interface in AOT + water system. *Indian J. Chem.*, 48A: 775-780.

#### **Published abroad**

Das, J. and K. Ismail, 2009. Aggregation, adsorption and clouding behaviors of Triton X-100 in formamide. *J. Colloid Interface Sci.*, 337: 227-233.

Das, J. and K. Ismail, 2010. Effect of propylene carbonate on the adsorption and aggregation of surfactants, *Colloid Polym. Sci.*, 288: 527-533.

Marbaniang, D. G., R. K. Poddar, P. Nongkynrih and D.T. Khathing, 2010. 210-Polonium studies in some environmental and biological matrices of domiasiat uranium deposit area, West Khasi Hills, Meghalaya, India. *Environ Monit Assess*, 162: 347-353.

Rohman Md., R. Mantu, B. M. Laloo, P. R. Sahu and B. Myrboh, 2010. Iodine-alumina as an efficient and useful catalyst for the regeneration of carbonyl functionality from the corresponding 1,3-oxathiolanes and 1,3-dithiolanes in aqueous system. *Tetrahedron letters*, 51: 2862-2864.

Lyngdoh, R. H. D. and H. F. Schaefer III, 2009. Elementary Lesions in DNA: Electron, Proton, Hydrogen Atom and Hydride Transfers. *Acc. Chem. Res.* 42: 563-572.

Pangamte, H. N. and R. H. D. Lyngdoh, 2009. Stability, Singlet-Triplet Splitting and Structure of Didehydrogenated Quinolynes and Isoquinolynes. *J. Phys. Chem. A* 114: 2710-2726.

Lal, R. A., S. Choudhury, A. Ahmed, M. Chakraborty, R. Borthakur and A. Kumar, 2009. Synthesis and spectral studies of nickel(II) complexes derived from disalicylaldehyde oxaloyldihydrazone. *J. Coord. Chem.* 62: 3864-3874.

Lal, R. A., M. Chakraborty, S. Choudhury, A. Ahmed, R. Borthakur, and A. Kumar, 2010. Synthesis and characterization of homobimetallic molybdenum(VI) complexes derived from bis (2-hydroxy-1-naphthaldehyde) succinoyldihydrazone, *J. Coord. Chem.*, 63: 162-175.

Lal, R. A., S. Choudhury, A. Ahmed, R. Borthakur, M. Asthana and A. Kumar, 2010. Synthesis of homobimetallic molybdenum(VI) complex of Bis (2-hydroxy-1-naphthaldehyde) molonyldihrazone and its reaction with electron and proton bases, *Spectrochimica Acta A*, 75: 212-224.

Gupta, G., B. Therrien and K. M. Rao, 2010. Half sandwich platinum group metal complexes containing tetradentate *N*-donor ligand bearing two pyrazolyl-pyridine units linked by an aromatic spacer. *J. Organomet. Chem.*, 695: 753-759.

Prasad, K. T., B. Therrien and K. M. Rao, 2010. Syntheses and characterization of mono and dinuclear complexes of platinum group metals bearing benzene-linked bis(pyrazolyl)methane ligands. *J. Organomet. Chem.*, 695: 1375-1382.

Gupta, G., K. T. Prasad, B. Das and K. M. Rao, 2010. Mononuclear complexes of platinum group metals containing  $\zeta^6$  and  $\zeta^5$  – cyclic  $\bar{I}$ -perimeter hydrocarbons and pyridylpyrazolyl derivatives: syntheses and structural studies. *Z. Anorg. Allg. Chem.*, 636: 758-764.

Prasad, K. T., B. Therrien, S. J. Geib and K. M. Rao, 2010. Mono and dinuclear half-sandwich platinum group metal complexes bearing pyrazolyl-pyrimidine ligands: Syntheses and structural studies. *J. Organomet. Chem.* 695: 495-504.

Prasad, K. T., G. Gupta, M. P. Pavan, A. K. Chandra and K. M. Rao, 2010. Spectral, structural and DFT studies of platinum group metal 3,6-bis(2-pyridyl)-4-phenylpyridazine complexes and their ligand bonding modes. *J. Organomet. Chem.*, 695: 707-716.

Gupta, G., K. T. Prasad, B. Das and K. M. Rao, 2010. Study of half-sandwich platinum group metal complexes bearing dpt-NH<sub>2</sub> ligand. *Polyhedron*, 29: 904-910.

Prasad, K. T., B. Therrien and K. M. Rao, 2009. Mono and dinuclear complexes of half-sandwich platinum group metals (Ru, Rh and Ir) bearing flexible pyridylthiazole multidentate donor ligand. *J. Organomet. Chem.*, 694: 226-234.

Lalrempuia, R., H. P. Yennawar and K. M. Rao, 2009. Mono- and di-nuclear azido  $h^6$ -p-cymene ruthenium(II) complexes; synthesis, reactivity, and structures. *J. Coord. Chem.*, 62: 3661-3678.

Nongbri, S. L., B. Das and K. M. Rao, 2009. Arene ruthenium b-diketonato triazolotoderivatives: synthesis and spectral studies (b-diketones: 1-phenyl-3-methyl-4-benzoyl pyrazol-5-one, acetylacetone derivatives). *J. Organomet. Chem.*, 694: 3881-3891.

Prasad, K. T., G. Gupta, A. V. Rao, B. Das and K. M. Rao, 2009. New series of platinum group metal complexes bearing  $h^5$  and  $h^6$ -Cyclichydrocarbons and Schiff base derived from 2-acetylthiazole: syntheses and structural studies. *Polyhedron*, 28: 2649-2654.

Devi, Kh. J., S. Parveen and A. K. Chandra, 2009. Theoretical studies on the kinetics and thermochemistry of the gas-phase addition and H-abstraction reactions of 4-picoline with OH radical. *Chem. Phys. Lett.*, 480:161.

Devi, Kh. J., S. Parveen and A.K. Chandra, 2009. Theoretical studies on kinetics and reactivity of the gas-phase addition and H-abstraction reactions of methylpyridine with atomic chlorine. *J. Mol. Struct. Theochem*, 910: 1.

Parveen, S., A.K. Chandra, and Th. Zeegers-Huyskens, 2009. Theoretical Investigation of the Interaction between Fluorinated Dimethyl Ethers ( $n_F = 1-5$ ) and Water. Role of the Acidity and Basicity on the Competition between OH...O and CH...O Hydrogen Bonds. *J. Phys. Chem. A*, 113: 6182.

Parveen, S. and A. K. Chandra, 2009. Theoretical studies on kinetics and reactivity of the gas-phase addition and H-abstraction reactions of pyridine with atomic chlorine. *J. Phys. Chem. A*, 113: 177.

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Baul, T. S. B., A. Mizar, A. Paul, G. Ruisi, R. Willem, M. Biesemans and A. Linden, 2009. Crystal and solution structures of di-n-butyltin(IV) complexes of 5-[(E)-2-(4-methoxyphenyl)-1-diazenyl]quinolin-8-ol and benzoic acid derivatives: En route to elegant self-assembly via modulation of the tin coordination geometry. *J. Organomet. Chem.*, 694: 2142–2152.

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Baul, T. S. B., P. Das and E. Rivarola, 2009.  $^{119}Sn$  Mössbauer, NMR ( $^1H$ ,  $^{13}C$  and  $^{119}Sn$ ) and infrared study of tetracoordinated tin(IV) complexes with 4-[(E)-1-{2-hydroxy-5-[(E)-2-(aryl)-1-diazenyl]phenyl}methylidene)amino]benzoates. *Hyperfine Interact.*, 194: 391–400.

Baul, T. S. B., S. Kundu, H. D. Arman and E. R. T. Tiekink, 2009. An orthorhombic polymorph of 5-[(4-methylphenyl)diazenyl]salicylaldehyde. *Acta Crystallogr.*, E65: o3061.

Linden, A., T. S. B. Baul and P. Das, 2010. Tetrakis(*i*2-4-aminobenzoato)di-*i*3-oxido-tetrakis[dibutyltin(IV)]. *Acta Crystallogr.* C66: m58–m61.

Baul, T. S. B., A. Paul and E. R. T. Tiekink, 2010. 4-[(E)-2-(5-tert-butyl-2-hydroxyphenyl)diazen-1-yl]benzoic acid hemibenzene solvate, *Acta Crystallogr.* E66: o540.

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Baul, T.S. B., P. Das, X. Song, G. Eng, C. K. Quah and H. K. Fun, 2010. Synthesis and structural studies on tetranuclear tin compositions containing tin  $\{[R_2Sn(LH)]_2O\}_2$  moieties (R = Bu or Oct and LH = 4-((E)-1-{2-hydroxy-5-[(E)-2-(aryl)-1-diazenyl]phenyl} methylidene)amino]benzoate). *Z. Anorg. Allg. Chem.*, 636: 851-856.

Baul, T.S. B., A. Paul E. R. T. Tiekink, 2010. An unprecedented trioganotin carboxylate structure – an isolated aggregate containing neutral and deprotonated forms of a carboxylic acid. *Z. Krystallogr.*, 225: 153-157.

Tumtin, S., T. Phucho, A. Nongpiur, R. Nongrum and R. L. Nongkhlaw, 2010. One pot synthesis of [1,3]-oxazine and [1,3]-thiazine derivatives under thermal and microwave conditions. *J. Heter Chem.*, 47: 125.

Dutta M. C., K. Chanda, R. L. Nongkhlaw and J. N. Vishwakarma, 2010. A facile microwave assisted one-pot strategy for the synthesis of bis-hexahydroquinazolin-5(6H)-ones. *E-Journal of Chemistry* 7: 281-286.

Vishwakarma J. N., M. C. Dutta, K. Chanda, B. Das, M. A. Laskar and R. L. Nongkhlaw, 2009. Synthesis and anti-bacterial activities of novel 5-isonicotinoyl-1,2,3,4-tetrahydropyrimidines and bis-(5-isonicotinoyl-1,2,3,4-tetrahydropyrimidines). *ARKIVOC (XIII)*, 131-141.

Phucho, T., A. Nongpiur, S. Tumtin, R. Nongrum and R. L. Nongkhlaw, 2009. Recent progress in the chemistry of dihydropyrimidinones (Review Article), *Rasayan J. Chemistry*, 2: 662-676.

Chanu, T. I. and D. P.S. Negi, 2010. Synthesis of histidine-stabilized cadmium sulfide quantum dots: study of their fluorescence behavior in the presence of aderine and guanine. *Chem. Phys. Lett.*, 491: 75.

Singh T. S. and S. Mitra, 2009. Fluorescence properties of trans-ethyl-p-(dimethylamino) cinnamate in presence of bile acid host, *J. Photochem. Photobiol. B: Biology*, 96: 193-200.

Singh T. S., N. S. Moyon and S. Mitra. 2009. Effect of solvent hydrogen bonding on the photophysical properties of intramolecular charge transfer probe trans-ethyl p-(dimethylamino) cinamate and its derivative, *Spectrochim. Acta A: Molecular and Biomolecular Spectroscopy*, 73: 630-636.

### Books/Book Chapters

Chandra A. K. 2009. "Fukui Function and Local Softness as Reactivity Descriptors" in *Chemical Reactivity Theory: A Density Functional View*, Ed. P.K. Chattaraj, CRC Press, N.Y., Chapter 12.

**Funds Received from Agencies other than NEHU:**

DST, New Delhi	: 12.73 lakhs
DAE/BRNS, Mumbai	: 35.73 lakhs
UGC-SAP-DSA Phase-III Programme	: 4.20 lakhs
UGC (Special assistance)	: 30.00 lakhs

**Infrastructural Facilities:** The following instrument has been acquired and installed:

Benchmark lifetime spectrophotometer

**Research Projects:**

**Ongoing**

Counterion binding - interfacial property correlation for AOT micelles. Principal Investigator: Prof. K. Ismail. Sponsored by DST, New Delhi.

Solid phase intramolecular Wittig reaction using novel triphenylphosphines: a study on synthesis of macrocyclic library. Principal Investigator: Dr. G. Bez. Sponsored by DST, New Delhi.

Construction and multisite commissioning multiple fluorescence correlation spectrophotometers (a single molecule biophotonic tool). Co-Investigator: Dr. S. Mitra. Sponsored by DIT, Ministry of Communications & Information Technology, New Delhi.

Spectroscopy and dynamics of photoinduced processes in homogeneous and biomimetic environments. Principal Investigator: 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.

**New:**

Fluorescence studies on representative intramolecular photoprocesses in homogeneous and continued environment. Principal Investigator: Dr. S. Mitra, Sponsored by DAE/BRNS, Mumbai.

**Completed :**

Design, synthesis and application on chiral Iminium salts for catalytic asymmetric epoxidation of olefins. Principal Investigator: Dr. G. Bez. Sponsored by UGC, New Delhi.

Synthesis, reactivity and structural studies of complexes of ruthenium and osmium containing  $\zeta 5$  and  $\zeta 6$ -cyclic hydrocarbons. Principal Investigator: Prof. K. M. Rao. Sponsored by DST, New Delhi.

Studies on the kinetics and mechanism of hydrogen abstraction reactions of halo-carbons with OH Radicals and Cl atoms. Principal Investigator: Dr. A.K. Chandra. Sponsored by DST, New Delhi.

Exploration on organotin carboxylates as a viable building block for constructing homo- and hetero-nuclear supramolecules: Synthesis, structures and biological properties. Principal Investigator: Dr. T. S. B. Baul. Sponsored by DST, New Delhi.

**Academic/Professional 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 has 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. Prof. R. H. Duncan collaborated with Prof. F. Wang of the Centre for Molecular Simulation, Swinburne University of Technology, Melbourne, Australia. Dr. A. K. Chandra has research collaboration with the Quantum Chemistry Group of the University of Leuven, Belgium. Dr. D. P. S. Negi has collaboration with Prof. P. Ramamurthy, National Centre for Ultrafast Processes, Chennai. Dr. T. S. B. 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 and Universiti Sains Malaysia, Malaysia. Dr. M. K. Sahoo is collaborating with Dr. D. B. Naik, BARC, and with Prof. B. S. M. Rao, National Centre for Free Radical Research, Pune University. Dr. S. Mitra has research collaboration with D. Kumar, BITS, Pilani and Dr. A. Bhasikuttan, BARC, Mumbai.

**Honours/Awards/Recognition:**

Prof. K. Ismail received the B.N. Ghosh Memorial Award from the Indian Society for Surface Science and Technology.

Mr. Jahar Dey (Supervisor: Prof. K. Ismail) received the J. K. Mittal Best Poster Award for his poster entitled, "Aggregation Adsorption and Counterion Binding Behaviours of AOT in Water + Ethylene Glycol Mixtures" at the 14<sup>th</sup> National Conference on Surfactants, Emulsions and Biocolloids held at the Deptt. of Chemistry, University of Kashmir, Srinagar during July 28-30, 2009.

Dr. T.S. Basu Baul was awarded a Research Fellowship and Joint Utilization of Advanced Facility jointly by DST (from Indian side) and EPFL (Swiss side) under Indo-Swiss Joint Research Programme (ISJRP). and visited the Institute of Organic Chemistry, University of Zurich, Switzerland to carry out research work for a month (February 24<sup>th</sup> to March 25<sup>th</sup> 2010).

**Other Activities:**

The Department conducted its 22<sup>nd</sup> Refresher course in Chemistry for College and University teachers during October 7 - 28, 2010 with Dr. G. Baz as the Course Coordinator.

Dr. A. K. Chandra was the convener of the National Seminar on "Recent Developments & Trends in Computational Chemistry" conducted by the Department during March 12 – 13, 2010.

Prof. R. K. Poddar was invited to the Department of Chemical Sciences, Tezpur University, Tezpur and gave a series of lectures on "Symmetry, Group theory and Application" during November 9 – 14, 2009.

Prof. R. H. Duncan was a Visiting Professor to Swinburne University of Technology, Melbourne, Australia during February 2010.

Dr. T.S. Basu Baul visited the Institute of Organic Chemistry, University of Zurich, Switzerland during February 24 to March 25, 2010 under ISJRP.

## DEPARTMENT OF MATHEMATICS

**Head** : Prof. H. K. Mukerjee  
**Telephone** : 2722714, 2722719 (O), 2550070 (R)  
**E-mail** : himadri@nehu.ac.in

**Thrust Areas of Research:** Algebra, Algebraic and Differential Topology, Cosmology, Number Theory, and Oceanography.

**Brief Statement of Academic Activities:** 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 Topology, Differential Topology, Commutative Algebra, Character theory,  $p$ -adic analysis. The Department conducted regular seminar and colloquia on the topics in the thrust areas of research. Students of the Department obtained UGC/CSIR NET Junior Research Fellowship and NET Lecturership.

### Faculty:

**Professors** : Prof. S. S. Khare\*, D.Phil.(Alld.), *FNASc*  
M. B. Rege, Ph.D. (Bombay)  
H. K. Mukerjee D.Phil.(Alld.)  
\* on deputation; PVC, NEHU Tura campus

**Associate Professors** : P. K. Saikia, Ph.D. (Wisconsin)  
C. R. Mondal, Ph.D. (V.B.)  
A. K. Das, Ph.D. (NEHU)  
M. Ansari, Ph.D. (Gorak)  
K. K. Singh, Ph.D. (Gorak)

**Assistant Professors** : A. M. Buhphang, Ph.D. (NEHU)  
A. T. Singh, M.Phil.(NEHU)  
S. Dutta, Ph.D. (NEHU)  
J. P. J. Kharbih, M.Sc. (NEHU)

**Visiting Professors/Fellow/Scholars:** Prof. A. R. Shastri, IIT, Mumbai, gave a series of talks on Characteristic classes. Prof. Parvathi Shastri, Bombay

University, Mumbai gave a series of talks on Modules over PID and Algebraic Number Theory. Prof. Sukanta Pati, IIT, Guwahati gave a series of talks on Poly's problems in combinatorics.

**Student intake:**

Enrolment capacity : M.Sc. : 36, M. Phil. : unspecified, Ph.D. : unspecified

Actual Admission : SC ST OBC Gen. Male Female Meghalaya Outside Meghalaya

M.Sc. : 0 32 - 04 27 09 27 09

M.Phil. : - 04 - 01 02 03 03 02

**Degrees Awarded:**

	SC	ST	OBC	Gen	Male	Female	Total
M.Sc.	0	08	-	01	04	05	09
M.Phil.	-	01	-	-	-	-	01

M.Phil.:

Mr. Sainkumar Mn Mawiong, "Some Problems and Applications of Computational Algebraic Topology – A Survey", Supervisor: Prof. H.K. Mukerjee

**Placement of Students:** 5 students got teaching jobs in different colleges in Shillong.

**Courses conducted:**

M.Sc.:

Semester I – Linear Algebra, A.M.E.S., Analysis I, Classical Mechanics, O.D.E.

Semester II – Analysis II, Algebra I, Topology, P.D.E.

Semester III – Computer Programming, C.F.T., Diff. Geometry, Topics in Algebra

Semester IV – E.N.T., C.N.A., Ring Theory, Algebraic Number Theory

## **Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

### **Organized:**

The Department organized a Workshop on “Algebra, Algebraic Topology and related Topics” during March 15 – 20, 2010 and a training programme for Indian National Mathematical Olympiad candidates during January 11-16, 2010.

### **Attended:**

Dr. K.K. Singh gave an invited talk on “Non-linear dynamical systems” in the Workshop on “Algebra, Algebraic Topology and related Topics” organized by the Department of Mathematics, NEHU, Shillong during March 15 – 20, 2010.

Prof. S. S. Khare (i) delivered Prof. J. N. Kapur Memorial Lecture titled “Fractional Calculus and its applications”, at Dr. B.R. Ambedkar University, Agra on 5.10.2009 and (ii) gave valedictory address titled “Teaching of Mathematics through Models and Projects” in the Workshop on Experiments in Physics and Chemistry conducted by the B.Ed. College, Tura on 13.06.09.

Prof. M. B. Rege delivered (i) six lectures in the training and selection camp for the International Mathematical Olympiad – 2009 held at Homi Bhabha Centre for Science Education, Mumbai during April-May 2009, (ii) four lectures in the training programme for the Indian National Mathematical Olympiad candidates at the Indian Statistical Institute, Kolkata in December 2009. and (iii) a series of lectures in a week-long training programme for Indian National Mathematical Olympiad candidates at NEHU, Shillong in January 2010.

Prof. H. K. Mukerjee (i) chaired a session in the Workshop/Discussion Meeting on “Advances in Mathematics: Focus on Women in Mathematics” held at the School of Physical Sciences, Jawaharlal Nehru University, New Delhi during October 5-7, 2009, and (ii) delivered an invited talk on “Homological Methods in Dynamical Systems” at the Department of Mathematics, University of Allahabad, Allahabad on 02.02.2010.

### **Publications:**

#### **Published in India**

Ansari, M., 2009. Emission of energy from schwarzschild black holes. *J. Tensor Soc.*, 3: 105-117.

Ansari, M., 2010. On wave solutions of Einstein's field equations of general relativity containing zero-rest mass scalar fields. *NEHU J.*, VIII: 89-93.

### Published abroad

Das, A. K. and R. K. Nath, 2009. On solutions of a class of equations in a finite group. *Commun. Algebra*, 37: 3904-3911.

Das, A. K. and R. K. Nath, 2010. On generalized relative commutativity degree of a finite group. *Internat. E. J. Algebra*, 7: 140-151.

Das, A. K., 2009. On finite groups having perfect order subsets. *Internat. J. Algebra*, 13: 629-637.

### Books/Book Chapters

Saikia, P. K., 2009. Linear Algebra, Pearson Education (India), Noida.

#### Fund received from agencies other than NEHU:

DAE – NBHM	:	Rs. 11.00 lakhs
UGC-SAP-DRS-I	:	Rs. 18.40 lakhs.
UGC (Special assistance)	:	Rs. 20.00 lakhs.

### Research Projects:

#### Ongoing

Some Classification Problems in Higher and Lower Dimensional Topology. Principal Investigator: Prof. H. K. Mukerjee. Sponsored by DAE – NBHM, Mumbai.

**Academic/Professional collaboration:** The Department has collaboration with University of Gorakhpur and Assam University Silchar.

#### Other activities:

Prof. M. B. Rege and Dr. A. M. Buhphang were the resource persons in the week-long training programme for Indian National Mathematical Olympiad candidates organized at the Department of Mathematics, NEHU, Shillong during January 11-16, 2010.

Prof. S. S. Khare, Prof. M. B. Rege, Prof. H. K. Mukerjee, Dr. A.K. Das, Dr. M. Ansari, Dr. S. Dutta, Dr. A.M. Buhphang, Dr. C.R. Mondal, Mr. A. Tiken Singh and Mr. J. P. J. Kharbhih participated in the UGC-SAP Workshop on “Algebra, Algebraic Topology and related Topics” organized by the Department of Mathematics, NEHU, Shillong during March 15 – 20, 2010.

## School of Physical Sciences

Dr. S. Dutta and Dr. A.M. Buhphang participated in the Advanced Instructional School in Algebraic Geometry at Bhaskaracharya Pratishthana Institute, Pune during Nov 30 - Dec. 19, 2009.

Mr. A. Tiken Singh participated in the Advanced Instructional School in Index Theorems at IIT, Bombay during July 6 - August 1, 2009.

Prof. S.S. Khare gave (i) the Key Note address in the National Seminar in Mathematics on 12.09.09 and the Inaugural Address in the District level Jawaharlal Nehru Science Exhibition on 6.8.09.

Prof. H. K. Mukerjee was an invited participant in the National Workshop on Aspects of Dynamical Systems at the Department of Mathematics, IIT Delhi during December 22-24, 2009 and also visited the Harishchandra Research Institute, Allahabad during January-February 2010.

## DEPARTMENT OF PHYSICS

**Head** : Prof. P. N. Pandita  
**Telephone** : 2722801 (O), 2550078 (R)  
**E-mail** : ppandita@nehu.ac.in

**Thrust Areas of Research:** Solid State Physics, High Energy Physics, Laser Physics, and Nuclear Physics.

**Brief Statement of Academic Activities:** The main academic activity of the Department has been teaching M.Sc.(Physics) courses to a class of 32 students each in first and second years. In addition to teaching, members of the faculty have been engaged in guiding research work of Ph.D. scholars and carrying out their research projects. The faculty members visited various reputed national and international institutions to carry out their research collaborations and to give talks on their research contributions.

**Faculty:**

**Professors** : P. Shukla, M.Sc. (IIT, Delhi), Ph.D. (Temple), *FNASc*  
 Y. S. Jain, M.Sc. (Agra), Ph.D. (IIT Kanpur)  
 P. N. Pandita, M.Sc., Ph.D.(Kashmir), *FNA, FASc*  
 B. M. Jyrwa, M.Sc., Ph.D. (NEHU)  
 P. Nongkynrih, M.Sc., Ph.D. (NEHU)  
 S. Kumar, M.Sc.(BHU), Ph.D.(Utkal)  
 D. T. Khathing\*, M.Sc.(Delhi), D.Phil.(Calcutta)  
 \* on lien; VC, Central University of Jharkhand

**Associate Professors** : M. C. Mahato, M.Sc.(Ranchi), Ph.D.(IISc. Bangalore)  
 S. S. Khatri, M.Sc., Ph.D. (NEHU)  
 Y. N. Tiwari, M.SC.(Patna), PH.D(Patna), LL.B.  
 (Patna)  
 A. Saxena, M.SC.(Rohilkhand), M.PHIL. (Meerut),  
 PH.D. (NEHU)  
 A. K. Biswas, M.Sc. (IIT Kharagpur), Ph.D.(IP,  
 Bhubaneshwar)

**Assistant Professors** : S. S. Pohlong, M.Sc., Ph.D. (NEHU)

**Student intake:**

**Enrolment capacity** : M.Sc.: 32, Ph.D.: Variable  
**Actual Admission** : SC ST OBC Gen Male Female Meghalaya/outside

**Meghalaya**

M.Sc.	:	-	29	-	03	24	08	24	08
Ph.D.	:	-	03	-	03	02	04	03	03

**Degrees Awarded:**

		SC	ST	OBC	Gen	Male	Female	Total
M.Sc.	:	-	16	-	02	14	04	18

## School of Physical Sciences

### Courses conducted:

M.Sc.:

Semester I – Classical Mechanics, Quantum Mechanics I, Mathematical Physics, Laboratory Course I.

Semester II – Electrodynamics, Electronics, Quantum Mechanics II, Laboratory Course II

Semester III – Nuclear Physics, Solid State Physics, Atomic and Molecular Physics, Laboratory Course III, Environment

Semester IV – Thermal Physics, Computational Techniques and Numerical Methods, Computational Techniques-Laboratory, Optional papers on Advanced Solid State Physics, High Energy Physics, Laser Physics, and Nuclear Physics.

### Seminars/Conferences/Symposia/Workshops/Extension Programmes:

#### Organised:

The Department organized “National Conference on Condensed Matter Physics” during March 22-23, 2010.

#### Attended:

Prof. P.N. Pandita presented (i) a colloquium on “Quarks and Leptons – what else?” at the Indian Institute of Science Bangalore on January 8, 2010, (ii) talk on “Sparticle Mass Relations in Grand Unified Theories” at the Centre for Theoretical Physics Jamia Millia Islamia, New Delhi on April 6, 2009 and at the Indian Association for Cultivation of Science, Jadavpur, Kolkata on May 5, 2009.

Prof. S. Kumar delivered an invited talk on “Nonlinear approach to explain mechanical properties of thick multi walled carbon nanotubes” at the “National Conference on Condensed Matter Physics” organized by the Department of Physics, NEHU, Shillong during March 22-23, 2010 and chaired a session in the same conference.

Prof. B. M. Jyrwa presented a paper on “The study of Low Energy Neutron Scattering from  $^{232}\text{Th}$ ” at the “National Conference on Condensed Matter Physics” organized by the Department of Physics, NEHU, Shillong during the period March 22-23, 2010.

**Publications:**

Shukla, P. and R. S. Kharwanlang, 2010. Hysteresis in random-field XY and Heisenberg models: Mean-field theory and simulations at zero temperature. *Phys. Rev. E*81: 031106.

Saikia, S. and M. C. Mahato, 2009. *Phys. Rev. E*80: 062101

**Funds received from agencies other than NEHU:**

CSIR	Rs.2.92 lakhs
DAE/BRNS	Rs. 12.40 lakhs
UGC (SAP)	Rs. 45.15 lakhs

**Research Project:**

**Ongoing**

Supersymmetric Models with Extended Gauge and Higgs Sectors. Principal Investigator: Prof. P. N. Pandita. Sponsored by CSIR, New Delhi.

**New**

Study of transport properties in driven periodic systems. Principal Investigator: Dr. M.C. Mahato. Sponsored by DAE/BRNS, Mumbai.

**Academic/Professional Collaboration:**

Prof. P. N. Pandita has collaboration with (i) Helsinki Institute of Physics, University of Helsinki, Finland, (ii) the Institute of Mathematical Sciences, Chennai, India, and (iii) the Indian Institute of Science, Bangalore. Prof. S. Kumar has collaboration with Dr. P. K. Patra of Centre for Science Education, NEHU in the area of Nanoscience.

**Honours/Awards/Recognition:**

Prof. P. N. Pandita was awarded the Sir J. C. Bose National Fellowship by the Department of Science and Technology, New Delhi.

**Other activities:**

Prof. P. Shukla visited (i) the Abdus Salam International Centre for Theoretical Physics during the period January 17-February 18, 2010 and (ii) the

## School of Physical Sciences

Institute of Mathematical Sciences, Chennai under the Theoretical Physics Seminar Circuit programme during the period February 11-18, 2010.

Prof. P.N. Pandita was visiting Professor at (i) the Institute of Particle Physics Phenomenology, University of Durham, U.K. during November, 2009 and (ii) the University of Helsinki, Finland during January-February, 2010. He was invited to attend the Homi Bhabha Symposium at the Tata Institute of Fundamental Research, Mumbai during the period December 3-5, 2009.

Prof. B. M. Jyrwa was a technical coordinator during the DST-INSPIRE programme organized by the North-Eastern Hill University during the period December 14-21, 2009.

Dr. S. S. Khatri was a member of the organizing committee of the DST-INSPIRE programme organized by the North-Eastern Hill University during the period December 14-21, 2009.

## DEPARTMENT OF STATISTICS

**Head** : Dr. T. K. Chakrabarty  
**Telephone** : 2722901 (O), 9436309433 (M)  
**E-mail** : hodsta@nehu.ac.in

**Thrust Areas of Research:** Statistical Inference, Design of Experiments, Sample Survey, Statistical Ecology, Medical Statistics and Economic Statistics

**Brief Statement of Academic Activities:** The Department offers M.Sc., P.G. Diploma in Statistics and M.Phil/Ph.D. programmes. It also offers a wide range of open courses under new CBCS curricula. The courses give emphasis on rigorous training in Statistical computing. The Department provides teaching support to the Department of Zoology for teaching the Techniques in Biology course. Department of Science and Technology, New Delhi, has approved under the FIST Programme – 2009 a grant of Rs. 30 lakhs for 5 years to the Department.

**Faculty:**

Professors : G. Das, M.A. (Delhi), Ph.D. (NEHU)  
 S. M. Bendre, M.Sc., M. Phil., Ph.D.(Pune)

Associate Professors : M. K. Das, M.Sc., Ph.D. (Dibrugarh)  
 T. K. Chakrabarty, M.Stat. (Agra), Ph.D. (Manipur)  
 B. K. Gupt, M.A (Rohilkand), M.Sc. (AMU), Ph.D.  
 (Gauhati)

Assistant Professors : S. K. Jha, M.Sc., Ph.D (Patna) R. Singh, M.Sc., Ph.D\ (Patna)  
 Ch. H. Singh, M.Sc.(Manipur), Ph.D. (IIPS, Mumbai)

**Visiting Professors/Fellows/Scholars:** Professor Alok Goswami, Indian Statistical Institute, Kolkata, was Visiting Fellow in the Department during October 21 – November 02, 2009. He delivered a series of lectures on 'Theory of Markov Chain and its Applications'.

**Student intake:**

Enrolment capacity :M.Sc.: 15, P. G. Diploma: 20 Ph.D.: unspecified

Actual Admission	SC	ST	OBC	Gen	Male	Female	Meghalaya/outside Meghalaya
M.Sc.	-	07	-	05	10	02	04 08
P.G. Diploma	-	12	-	-	09	03	11 01
Ph.D.	-	-	-	03	01	02	- 03

**Degrees Awarded:**

	SC	ST	OBC	Gen	Male	Female	Total
M.Sc.	-	05	-	02	05	02	07

**Courses conducted:**

M.Sc.:

Semester– I : Mathematical Analysis, Linear Algebra, Probability Theory, Distribution Theory I, Distribution Theory II, Distribution, Computing & Programming (Practical)

## School of Physical Sciences

Semester–II : Sample Survey, Statistical Inference I, Linear Models & Regression Analysis, Sample Survey (Practical), Statistical Inference I & Regression Analysis(Practical), Introduction to Probability Theory and Distributions, Introduction to Sample Survey, Linear Programming.

Semester–III : Design of Experiments, Statistical Inference II, Statistics for National Development &, Environmental Statistics, Design of Experiments (Practical), Statistical Inference II (Practical), Introduction to Design and Analysis of Experiments, Introduction to Econometrics, Biometry/ 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, Advanced Sample Survey (Theory and Practical)

P. G. Diploma:

Semester – I: Descriptive Statistics, Numerical Analysis and Elements of Probability Theory, Distribution Theory, Practical 1, Practical 2, Mathematics, Vital and Official Statistics, Biometry

Semester – II: Statistical Inference, Sample Survey Methodology, Analysis of Variance and Design of Experiments, Economic Statistics, Linear Algebra, Practical 1, Practical 2, Linear Programming, Introduction to Econometrics

Techniques in Biology (for 2<sup>nd</sup> Semester students, Department of Zoology)

**Seminar/conferences/symposia/workshop/extension programmes:**

**Attended**

Dr. B. K. Gupta presented (i) a poster entitled, “Tschuprow-Nayman Optimum Allocation under a Superpopulation Model” at the International Conference on “Frontiers of Interface between Statistics and Sciences” organized by the C. R. Rao Advanced Institute of Mathematics, Statistics and Computer Science and University of Hyderabad during 30<sup>th</sup> December, 2009 to January 2, 2010 and (ii) a paper entitled, “ Tschuprow-Neyman Optimum Allocation under a Superpopulation Model II at the Advances in Statistical Science (AISS 2010) – International Conference held at the Indian Statistical Institute, Kolkata during January 10-11, 2010.

**Publications:**

Singh Ch. H., 2009. Household use of Inpatient Healthcare Services in India. *World Health & Population*, 11: 30-40.

Singh Ch. H., 2009. The Public-private differential in Health Care Costs in India: the case of inpatients. *J. Public Health*, 17: 401-407.

Singh Ch. H., 2009. Inpatient length of stay: A finite Mixture Modeling Analysis. *European J. Health Economics*, 11: 119-126.

**Books/Book Chapters**

Arnold, B., U. Gather and S. M. Bendre, Eds., 2008, *Advances in Statistics*, Macmillan, New Delhi.

**Infrastructure facilities:**

Four more personal computers were added (total 29) to the statistical computing laboratories.

**Research Projects:**

**Ongoing**

Comparative study on some selected forest sampling techniques with satellite remote sensing inputs. Project Investigator: Prof. G. Das. Sponsored by the Department of Space, Government of India (under EOAM, in collaboration with NESAC, Shillong).

**Academic/Professional Collaboration:**

Prof. S. M. Bendre is collaborating with Central University of Rajasthan, Jaipur, for Curriculum Development, Course Structure & Syllabus for a 2-year M.Sc. Programme in Actuarial Statistics.

**Other activities:**

Prof. S. M. Bendre was appointed as UGC Visiting Fellow at the Department of Statistics, Shivaji University, Kolhapur during January 5 – 16, 2010 and gave lectures on 'Probability & Measure Theory' and seminar on 'Markov dependence and its Applications'.

Dr. S. K. Jha (i) was appointed as a member of the Core Group of the Regional Centre, National Afforestation and Eco-Development Board, North-Eastern Hill University, Shillong, w.e.f. November, 2009 for a period of one year,

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(ii) attended teaching programme as a Guest in IVth year Nursing Course in the College of Nursing, North East Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong between July 6-31, 2009 and (iii) attended as a participant the “Advance Training Programme (ATP) on Bayesian Statistics Theory and applications” organized by DST Centre for Interdisciplinary Mathematical Sciences, Banaras Hindu University, Varanasi during December 21-27, 2009.

Dr. B. K. Gupt attended as a participant the “Advance Training Programme (ATP) on Bayesian Statistics Theory and applications” organized by DST Centre for Interdisciplinary Mathematical Sciences, Banaras Hindu University, Varanasi during December 21-27, 2009.

Dr. Ch. H. Singh attended UGC sponsored Orientation Course organized by Academic Staff College, Jawaharlal Nehru University, New Delhi, during February 01 – 26, 2010.

## VII

# SCHOOL OF SOCIAL SCIENCES

**Dean** : Prof. R. Borgohain (till 14.09.2009)  
Prof. N. Kumar (from 14.09. 2009)

**Telephone** : 2723001, 2723002 (O), 2550652 (R)

**E-mail** : [archikans@yahoo.co.uk](mailto:archikans@yahoo.co.uk)

**T**he School of Social Sciences consists of the Departments of Cultural & Creative Studies, History, Law, Political Science and Sociology. The Department of Cultural & Creative Studies was established by abolishing the Centre of Cultural & Creative Studies. The faculty, staff, and all the infrastructure of the erstwhile Centre together constituted the new Department.

The School had a total faculty strength of 45 faculty members. Departments of History, Political Science, and Sociology offered courses for the postgraduate degree in their respective disciplines and a total of 152 students were admitted during the year while a total of 124 students passed their courses out of those who were admitted in the earlier years. The Department of Cultural & Creative Studies offered courses for the P. G. Diploma in Music, Painting, and Folkloristics and admitted 14, 11, and 20 students respectively. However, the Department of Law offers a 5-year integrated programme of B. A. LL. B. (Hons) and admitted 60 students to this programme.

Departments of Political Science and Sociology admitted 6 and 3 students respectively for the M.Phil. programmes. Departments of Cultural & Creative Studies, History, Political Science, and Sociology admitted 4, 8, 17, and 2 students respectively for the Ph.D. programmes. Ph.D. degrees were awarded to 1 student in Music, 3 students in History and 2 students in Political Science during the year.

Departments of History, Political Science, and Sociology organized 1, 1, and 3 seminars/workshops respectively while 1 Refresher Course each was organized by these three Departments during the year. Department of Cultural

## School of Social Sciences

& Creative Studies organized a Theatre Workshop, and its 6<sup>th</sup> Annual Art Exhibition.

Departments of Political Science (DRS Phase – I), Sociology (DRS Phase - III) and History (DSA) received grants from the UGC under SAP. Departments of Cultural & Creative Studies, History and Political Science have also been carrying out research projects under the UPE Scheme of UGC.

## DEPARTMENT OF CULTURAL AND CREATIVE STUDIES

**Head** : Prof. P. Jhingan  
**Telephone** : 2723372 (O)  
**Email** : hodcccs@nehu.ac.in

**Thrust Areas of Research:** Folkloristics, Performing Arts and Visual Arts.

**Brief Statement of Academic Activities:** In July 2009, the Centre was converted into the Department of Cultural & Creative Studies. The Department conducts three regular P.G. Diploma Courses in Music, Painting and Folkloristics. Ph.D. programmes in the fields of art, music and folkloristics are also offered by the Department. The Department has planned to start M.A. Course in Folkloristics from the next session.

### **Faculty:**

**Professor** : D. L. Kharmawphlang, M.A., Ph. D. (NEHU)  
P. Jhingan, M.A., Ph.D. (JNU)  
**Associate Professor** : L. Syiem, M.A., Ph.D. (NEHU)  
**Assistant Professor** : B. Kalita

### **Visiting Professors/Fellows/Scholars in the Department:**

For P.G. Diploma Course in Music:

Shri K. Khongjirem

Shri E. Shangpliang

For P.G. Diploma Course in Painting:

Shri B. S. Hynniewta

**Students Intake:**

Enrolment capacity: PG Diploma Music :20; PG Diploma Painting : 10;  
PG Diploma Folkloristics :20; Ph.D. - Variable

Actual Admission:	SC	ST	Gen	Male	Female	Meghalaya	Outside Meghalaya
P.G. Diploma: Music	-	14	-	12	2	14	-
Painting	-	10	1	8	3	9	2
Folkloristics	-	18	2	5	15	16	4
Ph. D.	1	3	-	-	4	2	2

**Degree Awarded:**

	SC	ST	Gen	Male	Female	Total
P.G. Diploma: Music	-	9	1	6	4	10
Painting	-	2	2	3	1	4
Folkloristics	-	5	-	2	3	8
Ph. D.	-	1	-	1	-	1

**Placement of Students:**

Folkloristics: One student placed in A.I.R., Shillong, two as Research Assistants in Don Bosco Centre for Indigenous Culture, Shillong.

Painting: One in Animation in Mumbai, one self-employed in Art Studio, one as teacher in K.V. NEHU.

Music: Six students are teaching in the Department of Music, Martin Luther Christian University, Shillong, one is teaching in Higher Secondary, two students are teaching (part-time) in the Department of Music, St. Anthony's College, Shillong, one is working in A.I.R., Shillong and another in Sur Bathiang Studio, Shillong.

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### **Courses conducted:**

P.G. Diploma in Music.

P.G. Diploma in Painting.

P.G. Diploma in Folkloristics.

**Study Tour/Field Trips:** The P. G. Diploma students of Music, Painting and Folkloristics were taken to Ranikor, West Khasi Hills on 24<sup>th</sup> & 25<sup>th</sup> October 2009 under the supervision of Dr. D. L. Kharmawphlang to study the folklore, arts & music of the area. On 3<sup>rd</sup> November 2009, P. G. Diploma students of Folkloristics were taken on a field trip to Nongkrem, Smit, under Dr. P. Jhingan to document and study the Nongkrem Dance Festival. On 1<sup>st</sup> February 2010, the students were taken on a field study to Raid Kyrdem, Ri-Bhoi District. Dr. D. L. Kharmawphlang was the teacher in-charge. The P. G. Diploma students of Music were taken on a field trip to Wahkhen, East Khasi Hills on 27<sup>th</sup> March 2010 to study the crafting of traditional musical instruments. Dr. L. Syiem was the teacher-in-charge.

### **Seminars/Conferences/Symposia/Extension Programmes, etc:**

#### **Organised**

The Department, in collaboration with the National School of Drama, New Delhi under the supervision of Dr. P. Jhingan conducted a month-long Theatre Workshop and play production from 24<sup>th</sup> June to 22<sup>nd</sup> July 2009. Mr. V. K. Sharma expert from NSD was the Workshop Director.

A Visual Documentation of Traditional Music was conducted by the Department under the supervision of Dr. L. Syiem on 24<sup>th</sup> September 2009.

The Department under the supervision of Mr. Bedant Kalita held its 6<sup>th</sup> Annual Art Exhibition from 3<sup>rd</sup> to 5<sup>th</sup> March 2010, exhibiting works on canvas, terracotta, enamel and assorted media by the art students.

#### **Attended**

Prof. P. Jhingan (i) chaired a session on a UGC sponsored National seminar on "Reforming and Revamping the Tourism Sector in North Eastern Region of India" : August 29, 2009, Jagiroad College, Assam, (ii) presented a paper (co-author: R. Lyngdoh) on 'Revitalisation of Traditional Khasi Archery for tourism' in the UGC sponsored National Seminar "Reforming and Revamping the tourism sector in the North –Eastern Region of India" organized by Jagiroad College at Jagiroad on 29<sup>th</sup> August 2009.

Dr. D. L. Kharmawphlang (i) attended the 15<sup>th</sup> Congress of the International Society for Folk Narrative Research in Athens, Greece: Narratives across space and time: Transmission and Adaptations from 21<sup>st</sup> to 27<sup>th</sup> June 2009 and presented paper on “Rice Myths of the Khasis of North East India”, (ii) chaired a seminar on Reforming and Revamping the Tourism Sector in North Eastern Region of India : August 28, 2009, Jagiroad College, Assam, (iii) chaired a seminar session on the Status of Folklore in North East India, Manipur University on November 16, 2009, (iv) presented a paper on “Collection and Codification of Tales : Configuring the Khasi Paradigm” in the National Seminar, North East India Studies Programme, Jawaharlal Nehru University, New Delhi : February 26, 2010, (v) presented a paper entitled “Colonial Myth-Making” in Nagaland University, March 12, 2010, (vi) presented a paper entitled “Another Narrative of the “Marina” in the National seminar on Society and Literature: Interdisciplinary Transactions held in the Department of English, NEHU, Shillong on 17<sup>th</sup> March 2010, and (vii) was discussant in the International Seminar on Cultural Dialogue between South East Asia and North East India, Indira Gandhi National Centre for the Arts and Jawaharlal Nehru University, March 20, 2010.

### **Publications:**

Syiem, L., 2009. Khasi Traditional Music: Interpreting Its Rhythmic Patterns. Sangeet Natak Akademi Journal, XLIII: No. 3.

### **Infrastructure facilities:**

An acoustically suitable hall for Theatre, performing Arts has been developed with proper theatre lights and music. A working stage with screens was also installed.

### **Research Projects:**

#### **Ongoing**

“Rice Myth of North East India”, Principal Investigator: Prof. D. L. Kharmawphlang (Co-Investigators: Prof. P. Jhingan and Dr. L. Syiem), under Area Study research Project funded through UPE.

### **Honours / Awards / Recognition:**

Students of the Department were awarded Third Prize for the Float that best depicts the theme ‘Enchanting Folklores’ during the Shillong Float Parade organized by the Meghalaya Tourism Development Forum as part of Autumn Festival, October 2009.

**Other Activities:**

Prof. D. L. Kharmawphlang was resource person (i) on Folk Literature in the Refresher Course organized by the English Department, NEHU, Shillong on 1<sup>st</sup> and 9<sup>th</sup> March 2010 and (ii) on Folklore and Heritage Issues in the Orientation Course of the Academic Staff College, NEHU on 12<sup>th</sup> and 13<sup>th</sup> March 2010.

Dr. L. Syiem was (i) resource person in the UGC-ASC Fourth Orientation Course on Cultural Heritage : Focus on Folk Music on 3<sup>rd</sup> April 2009, organized by the Department of Education, NEHU, Shillong for College and University teachers, (ii) jury member in the State Level Selection Committee of Handicraft items for National Award for the State of Meghalaya held on 24<sup>th</sup> June 2009 at the Office of the Development Commissioner (Handicrafts), Govt. of India, Shillong and (iii) resource person on Indian Classical Music and Education during the Workshop on Cultural Education organized by the Centre for Cultural Resources and Training (CCRT), New Delhi in Shillong on 12<sup>th</sup> November 2009.

B. Kalita organized the 6<sup>th</sup> Annual Art Exhibition of the Department which was held from 3<sup>rd</sup> to 5<sup>th</sup> March 2010 and took part in the 7<sup>th</sup> Orientation Program organized by the Academic Staff College, NEHU from 17<sup>th</sup> March to 14<sup>th</sup> April 2010.

## DEPARTMENT OF HISTORY

**Head** : Prof. Manorama Sharma

**Telephone** : 2723019 (O), 2551484 (R)

**E-mail** : manorama50in@gmail.com; hodhist@gmail.com

**Thrust Areas of Research:** The Department's thrust area is Northeast India. This is studied not as a separate entity but in relation to developments that have taken place at the spatial and temporal levels in South Asia, the regions beyond it and the world at large. The courses offered at the postgraduate level are designed to be socially relevant to the present-day contexts, to enhance the students' understanding of human relations, the interface of various ideas and cultures, and the working of institutions both 'traditional' and 'modern.' The training thus equips them with the necessary skills required at the research level to

undertake scientific studies of their own and 'other' societies and cultures. The thrust area is also reflected in the research of the faculty and scholars working for their doctoral degrees.

**Brief Statement of Academic Activities:** During the period 1<sup>st</sup> April 2009-31<sup>st</sup> March 2010 the History faculty had been involved in several academic and related programmes pertaining to both teaching and research: organizing seminars, field and study tours, conducting the Refresher Course for College/University teachers, and holding dialogues with colleagues engaged in undergraduate teaching within the region. Besides, as part of the UGC-SAP-DSA programme Mr. Danny Burke, a scholar from Ireland, had visited the Department to interact with the faculty and students.

**Faculty:**

- Professors : D. R. Syiemlieh\*, M.A., M.Phil., Ph.D. (NEHU) (on  
lien; COE, NEHU)  
M. Momin, M.A., M.Phil., Ph.D. (JNU)  
M. Sharma, M.A. (Gau), Ph.D. (NEHU)  
F. A. Qadri, M.A., M.Phil., Ph.D. (AMU)
- Associate Professors : C. A. Mawlong, M.A. (NEHU), PG Dip. (IoA, N. Delhi),  
Ph.D. (NEHU)  
V. R. Rengsi, M.A., M.Phil., Ph.D. (NEHU)  
T. G. Nag, M.A., M.Phil., Ph.D. (NEHU)  
A. K. Thakur, M.A., Ph.D. (BU, Muzaffarpur)  
S. N. Lamare, M.A., Ph.D. (NEHU)  
A. Passah, M.A., M.Phil., Ph.D. (NEHU)  
A. Mathur, M.A., Ph.D. (Rohilkhand)
- Assistant Professors : M.S.N. Rahman, M.A., Ph.D. (Calcutta)

**Visiting Professors/Fellows/Scholars in the Department:**

Mr. Danny Burke from Ireland spent a week in the Department as a Visiting Scholar and gave an interesting audio-visual presentation to the students, research scholars and faculty members of the Department on the megalithic burial structures of Ireland alongside the cists or ossuaries of the Khasi-Jaintia hills (with special reference to Jowai). It was essentially an attempt to highlight

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two megalithic cultures removed in time and space. The interaction with research scholars and faculty on these issues was helpful in the context of relating various aspects of historical interpretations to the archaeological sources.

### Student Intake:

Enrolment Capacity :	M.A : 50;		Ph.D : Variable				
Actual Admission	SC	ST	Gen	Male	Female	Meghalaya	Other States
M.A.	0	50	0	21	29	15	35
Ph.D.	0	06	02	04	04	03	05

### Degrees Awarded:

	SC	ST	Gen	Male	Female	Total
M.A.	0	43	0	21	22	43
Ph.D.	0	02	1	1	02	03

Ph.D.

Mr. M. B. Mitri, "Archaeological Investigation in the Khasi and Jaintia Hills: A Study on the Distribution Patterns of Neolithic Sites: (an Ethno-Archaeological Approach)". Supervisor: Dr. C. A. Mawlong.

Ms. D. Rynjah, "Pre-Colonial Economy of the Khasi-Jaintia". Supervisor: Prof. F.A. Qadri.

Ms. M. Bhattacharjee, "Gender in Silk Industry: A Study of Women Silk Weavers in Sualkuchi, Assam". Supervisor: Prof. M. Sharma.

### Courses Conducted :

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.

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; History of Modern USA; (Open Course):

Society, Technology and History: Prehistoric Age to Industrial Revolution.

- Semester III : Capitalism and Imperialism - I; Religion and Society in Ancient India; Indian Nationalism; Political Ideas and Institutions during the Sultanate Period; History of Ideas in Modern India; (Open Courses) Social Forces and Social Mobilization; Introduction to Gender History.
- Semester IV : (Old Course) Perspectives in the History of Northeast India: Sources, Tools and Techniques; Archaeology: Methods and Approaches; Colonialism, Communalism and Secularism; Ancient Indian Art and Architecture; Contemporary India 1947-2000; Political History of the Mughal Empire (1526-1707); Modern Indian Society.
- Semester IV : (New Course) Capitalism and Imperialism – II; Social and State Formations; Archaeology: Methods and Approaches; Colonialism, Communalism and Secularism; Political History of the Mughal Empire; Contemporary India; Socio-Economic History of N.E.I. – The Early Period; Christianity in North East India.

### **Study Tours/Field Trips of Students:**

Dr. C. A. Mawlong took the students on a field trip to a Neolithic site at Mawlyndep village in June 2009 as partial requirement of the course on Archaeology: Methods and Approaches.

### **Seminars/Conferences/Symposia/Workshops:**

#### **Organised:**

The Department organized (under the SAP-DSA project) a three day national seminar from the 26<sup>th</sup> to 28<sup>th</sup> November 2009 on the theme “Religion and Society in North East India from the 18<sup>th</sup> century to Contemporary Times”. (Co-coordinators of the seminar: Dr. S. N. Lamare and Dr. M. S. N. Rahman).

#### **Attended:**

Prof. D. R. Syiemlieh delivered (i) a lecture on “David Roy: Notes on the Khasis” in the Seminar on “Sixty Years of North East: Revisiting the Experience” at the Aurobindo Centre, Shillong, 12-14 November 2009, (ii) keynote address

entitled “History of Undivided Assam 1826-1972” at the Annual Conference, Assam Regional Branch, Indian Institute of Public Administration on 22<sup>nd</sup> April 2009, and (iii) inaugural address entitled “Role of History in Conflicts and Peace Processes in North East India” at the North East Social Research Centre, Guwahati, 27-28 October 2009.

Prof. M. Momin (i) attended the Annual Conference (30<sup>th</sup> Session) of the North East India History Association held at Khagarijan College, Nagaon, on 5<sup>th</sup> – 7<sup>th</sup> November, 2009, presented a paper on “Worship, Ethics and Religious Practices” and chaired two academic sessions; (ii) presented a paper titled “Rituals and Beliefs with special reference to the Garo” in the National Seminar on “Religion and Society in North East India from the Eighteenth Century to Contemporary Times” organized by the Department of History, NEHU, Shillong under the Department’s UGC-SAP-DSA programme on 26<sup>th</sup> – 28<sup>th</sup> November, 2009.

Prof. M. Sharma (i) participated in the National Seminar on “Socio-Cultural Dimensions of Ecology: The Context of North East India” organized by the Department of Sociology, NEHU, Shillong, 14<sup>th</sup> – 15<sup>th</sup> October 2009, presented a paper entitled “Towards a Gender-Just Society: Eco-Feminism and the Development Debate” and chaired an academic session; (ii) participated as a Resource Person in the UGC sponsored National Seminar on “Women Empowerment: The Present and the Way Forward” organized by Prateeti, The Women Forum of D. R. Golaghat College, Assam on 28<sup>th</sup> – 29<sup>th</sup> August, 2009 and chaired an academic session; (iii) presented a paper entitled “Historiographical Overview of Selected Works on Religion and Society in North –East India” in the national seminar on “Religion and Society in North East India 18<sup>th</sup> Century to Contemporary Times” organized by the Department of History, NEHU, Shillong, 26<sup>th</sup> -28<sup>th</sup> November, 2009; (iv) presented a paper entitled “Literature, Class and Hegemony: Need for a Gender Sensitive Window” in the National Seminar on “Society and Literature: Interdisciplinary Transactions” organized by the Department of English and ICSSR-NERC, 16<sup>th</sup> -18<sup>th</sup> March, 2010 and chaired an academic session; (v) delivered the Keynote address in the National Seminar on “Crime Against Women – A North East Perspective”, organized by Lady Keane College, Shillong, 27<sup>th</sup> -28<sup>th</sup> August, 2009 and chaired an academic session; and (vi) presented a paper entitled “Regional Politics, Ethnicity and the Asomiya Middle Class” (Co-author, A. K. Baruah) in the National Seminar on ‘Social Forces and Regional Politics in North East India’ organized by the Department of Political Science, NEHU, on 11<sup>th</sup> -12<sup>th</sup> March, 2010.

Prof. F. A. Qadri attended National Seminar on Religion and Society in North East India from 18<sup>th</sup> century to Contemporary Times organized by the Department of History, NEHU, Shillong during November 26-28, 2009 and presented paper on “Pangal Muslims of Manipur: Their Society and Ethnicity”.

Dr. C. A. Mawlong attended National Seminar on Religion and Society in North East India from 18<sup>th</sup> century to Contemporary Times organized by the Department of History, NEHU, Shillong during November 26-28, 2009 and presented a paper entitled “Significance of Bone Internment Ceremonies in Khasi-Jaintia Society”.

Dr. V. R. Rengsi attended the National Seminar on Religion and Society in North East India from 18<sup>th</sup> century to Contemporary Times organized by the Department of History, NEHU, Shillong during November 26-28, 2009 and presented paper entitled “Trajectories of Christianity in Mizo Society”.

Lallianzuali, research scholar of the Department (co-author: Dr. V. R. Rengsi) presented a paper entitled “Liandova te Unau” in the 30<sup>th</sup> annual conference of the Northeast India History Association held at Nagoan, Assam, from 5<sup>th</sup> to 7<sup>th</sup> November 2009.

Lalrinnunga Hmar, research scholar of the Department (co-author: Dr. V. R. Rengsi) presented a paper entitled “Pialral in Traditional Mizo Society” in the 30<sup>th</sup> annual conference of the Northeast India History Association held at Nagoan, Assam, from 5<sup>th</sup> to 7<sup>th</sup> November 2009

Dr. T. G. Nag presented a paper on “Neo-Vaishnavism and the Eighteenth Century Crisis in Ahom Social Formation” in the National Seminar on “Religion and Society in NE India from the 18<sup>th</sup> Century to Contemporary Times organized by the Department of History, NEHU, Shillong during November 26-28, 2009.

Dr. A. K. Thakur (i) attended the 30<sup>th</sup> Annual Conference of the North East India History Association, 5-7 November 2009 organized by Khagarijan College, Nagaon, Assam and presented a paper, “Salt: Sources and Struggle in Arunachal Pradesh”, (ii) attended National Seminar on “Religion and Society in North East India: 18<sup>th</sup> Century to Contemporary Times” organized by the Department of History, NEHU, Shillong during November 26-28, 2009 and presented a paper “Towards Reconstructing Religion and Society of Arunachal Pradesh: Past and Present”, (iii) attended National Seminar on “Buddhism and Buddhist Tribes of North East India” organized by the Department of History, Rajiv Gandhi University, Itanagar during January 29-30, 2010 and presented a paper entitled “Buddhist

Symbols in Arunachal Pradesh”, and (iv) attended National Seminar on “Doing Ethno-history in North East India: New Perspectives and Prospects” organized by ICHR, North Eastern Regional Centre, Guwahati during February 19-20, 2010 and presented a paper entitled “Technology Aided Trade: Relooking at Pre-Colonial Arunachal Pradesh”.

Dr. S. N. Lamare attended National Seminar on “Religion and Society in North East India from the 18th Century to Contemporary Times” organized by the Department of History, NEHU, Shillong during November 26-28, 2009 and presented a paper on “Understanding Conflict in the Jaintia Society: The Religious Perspective”.

Dr. A. Passah (i) attended the Annual Conference (30<sup>th</sup> Session) of the NEIHA held at Khagarijan College, Nagaon, from 5<sup>th</sup> -7<sup>th</sup> November, 2009 and presented a paper entitled “Khasi-Jaintia Women Seen Through Narratives”, and (ii) attended National Seminar on “Religion and Society in N E India from the 18<sup>th</sup> Century to Contemporary Times” organized by the Department of History, NEHU, Shillong during November 26-28, 2009 and presented paper entitled ‘Role of the Khasi-Jaintia Women in the Society: Some Perspectives.’

Dr. M. S. N. Rahman (i) presented a paper entitled “Inter-Community Relations as Reflected in Bengali Vernacular Literature” in the National Seminar on “Society and Literature: Interdisciplinary Transactions” organized by the Department of English, NEHU in collaboration with ICSSR (NERC), Shillong during March 16 -17, 2009, (ii) presented a paper entitled “Theory of Kingship under the Sultanate of Delhi (1206-1526): An Overview” in the National Seminar on “Politics & Administration in Medieval India: Concept of Kingship and Responsibilities of Muslim Rulers, 1206-1707 A.D” organized by the Department of Political Science and the Department of Islamic History & Culture, Maulana Azad College, Kolkata on 12<sup>th</sup> January, 2010, (iii) presented a paper entitled “Sufism as a Syncretic Culture in Medieval India” in the National seminar on “Swaraj, Education and Culture” organized by the Department of Philosophy in collaboration with the Department of Education, Assam University, Silchar during January 7-9, 2010, (iv) presented a paper entitled “Religious Syncretism in Barak-Surma Valley and its Adjacent Areas (16<sup>th</sup>-18<sup>th</sup> Century A.D.)” in the National Seminar organized by the Indian Institute of Advanced Study, Shimla in collaboration with the ICSSR, North Eastern Regional Centre, Shillong on “Politics of Boundary Maintenance: Inclusion-Exclusion Dynamics in North-East India” held at IIAS, Shimla during November 16-17, 2009, (v) presented a paper

entitled "Popular Religions in the 18<sup>th</sup> Century Barak-Surma Valley" in the National Seminar on "Religion and Society in North East India from the 18<sup>th</sup> Century to Contemporary Times" organized by the Department of History, NEHU, Shillong during November 26-28, 2009, and (vi) presented a paper entitled "Growth and Development of Bengali Language in Barak-Surma Valley" in the 30<sup>th</sup> Annual Conference of the North East India History Association held at Khagarijan College, Naogaon, Assam during November 5-7, 2009.

**Publications:**

Sharma, M., 2009. The Need for Gender Sensitive Reconstruction of History. Annual Journal of Women's College, (ISSN0975-3338) 2008-2009: 83-94.

**Books/Book Chapters/Proceeding:**

Rahman, M. S. N., 2009. Vaishnavite Elements in the Compositions of The Muslim Poets of Sylhet (16<sup>th</sup>-18<sup>th</sup> Centuries). In Proceeding of North East India History Association (29<sup>th</sup> Session, Dibrugarh University), Shillong, pp. 250-259.

Sharma, M., 2010. Construction of the Identity of the Asomiya Women: An Enquiry into Nineteenth Century Literary Sources. In Status of Women in Colonial Assam (Proceedings Volume of UGC & ICHR sponsored National Seminar), Ed.: S.Banu, pp.8-16.

Sharma, M., 2009. Gender History and the Necessity of a Multidisciplinary Approach. In Proceedings of North East India History Association (29<sup>th</sup> Session, Dibrugarh University), Shillong, pp.10-17.

Sharma, M., 2009. Gender History in North East India in the Post 1947 Period, Symposium on North East India. In Proceedings of North East India History Association (29<sup>th</sup> Session, Dibrugarh University), Shillong, pp.498-502.

Syiemlieh, D. R., 2009. History Writing on North East India: Periodization, Varieties, Concerns. In History of Science, Philosophy, and Culture, Ed.: B. Ray (General Ed.: D. P. Chattopadhyay), Vol.XIV, Part 4, Different Types of History, Pearson Longmans, New Delhi, pp. 229-244.

Thakur, A. K., 2009. Interwoven or Partitioned: Relooking the Societies of Arunachal Pradesh. In Ethnic Conflict and National Integration in North East India: Problems and Solutions, Ed.: R. Ahmed, Khagarijan College, Nagaon, pp.37-55.

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Thakur, A. K., 2009. The Institution of Slavery in the Chin Society: A Study. In Chin: History, Culture and Identity, Ed.: K. Robin, Dominant Publishers' and Distributors, New Delhi, pp. 217-238.

Thakur, A. K., 2009. Metal Culture in Pre-Colonial Arunachal Pradesh. In Proceedings of North East India History Association (29<sup>th</sup> Session, Dibrugarh University), Shillong, pp.260-268.

Thakur, A. K. and N. Gambo, 2009. Apatani Textiles: A Study in the Technology and Culture. In the Proceedings of North East India History Association (29<sup>th</sup> Session, Dibrugarh University), Shillong, pp. 403-409.

### **Funds Received from Agencies Other Than NEHU:**

UGC-SAP-DSA :	Rs. 6.10 lakhs
INSA, New Delhi:	Rs. 2.00 lakhs
ICSSR-NERC, Shillong	Rs. 0.63 lakhs

**Infrastructure facilities:** The PCs in the faculty rooms were upgraded. Laptop computers were acquired for the use of faculty and research scholars. A library –cum-seminar hall has been made ready under the SAP-DSA programme.

### **Research Projects:**

#### **Ongoing**

- (a) Projects under UPE scheme of NEHU: History, Culture and Society: North East India at the Cross-roads of Change. Principal Investigator: Prof. F. A. Qadri.
  - (i) Trade and Markets in North East India. Investigators: Prof. D. R. Syiemlieh and Dr. A. K. Thakur.
  - (ii) Emergence of Multi-Culturalism: Migration and Settlement of Non-Indigenous Groups in Assam, Manipur and Meghalaya. Investigators: Prof. F. A. Qadri and Dr. T. G. Nag.
  - (iii) Patterns of Social Organisation of the Khasi – Jaintias of Meghalaya. Investigators: Dr. C. A. Mawlong and Dr. A. Passah.
- (b) Projects under SAP-DSA : SAP Coordinator: Prof. M. Momin.
  - (1) Theme - Religion and Society and Intellectual History:

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- (i) Response and Revival: Christianity among the Hill Tribes of North East India. Investigator: Prof. D.R. Syiemlieh.
- (ii) Comparisons and Contrasts in Rituals and Symbols: Cultural Patterns in Pre-British Northeast India. Investigator: Prof. M. Momin.
- (iii) Sufi Legends and Islam in North East India. Investigator: Prof. F. A. Qadri.
- (iv) Megaliths, Rituals and the Making of a Social Landscape. Investigator: Dr. C. Mawlong.
- (v) Christianity and Mizo Society. Investigator: Dr. V.R.Rengsi.
- (vi) Religion and Society in Arunachal Pradesh from Pre-Modern to Contemporary Times. Investigator: Dr. A. K. Thakur.
- (vii) Totems, Taboos and Rituals in the Khasi and Jaintia Society. Investigator: Dr. S. N. Lamare.
- (viii) Religion and Society in Barak-Surma Valley (16<sup>th</sup>-18<sup>th</sup> Centuries). Investigator: Dr. M. S. N. Rahman.
- (2) Theme - Gender and Intellectual History:
  - (i) Between Myth and Reality: Gender Relations in Assam in the Nineteenth and Twentieth Centuries. Investigator: Prof. M. Sharma.
  - (ii) The American Baptist Women Missionaries in Northeast India: A Study of their Role in Education and Health of Indigenous Women. Investigator: Dr. T. G. Nag.
  - (iii) Khasi-Jaintia Woman: Some Insights on Past and Present Roles and Status. Investigator: Dr. A. Passah.
- (c) Project funded by Indian National Science Academy, New Delhi: Technology of the Tribes of North East India with special Reference to Arunachal Pradesh. Principal Investigator: Dr. A.K.Thakur.

**Honours/Awards/Recognition:** Dr. C. Mawlong has been appointed as a member of the State Committee for the implementation of the National Mission for Monuments and Antiquities, Govt. of India.

### **Other Activities:**

The Department conducted a Refresher Course for College/University teachers of the region during November 27 - December 17, 2009 on the theme

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“Recent Issues and Approaches in the Writing of History”. The Refresher Course was coordinated by Dr. T. G. Nag.

Some members of the History faculty were involved in editing the papers for the 29<sup>th</sup> volume of the Proceedings of the North East India History Association.

Prof. D. R. Syiemlieh delivered a talk on “Influence and Contribution of Bengali Settlers in Khasi Hills” at the Aurobindo Centre, Shillong on April 21, 2009.

Prof. M. Momin was resource person (i) at the Workshop on Historical Research Methodology organized by the ICHR-NERC at Guwahati during November 2009 and delivered lectures on the following topics: (a) “Ideology of Knowledge and Work as Reflected in Ancient Indian Sources”; (b) “History Writing on Early Northeast India” and (ii) at the UGC-sponsored Refresher Course on the theme Social Change, conducted by the Department of Sociology, NEHU in August 2009 and delivered three lectures on matters of Historical Sociology with particular reference to early India.

Prof. M. Sharma led the panel on Gender Issues in the First ICSSR Social Scientists’ Meet on 9<sup>th</sup> March 2010; and delivered (i) a lecture on “Autobiography, Biography and Expression of Life Experiences: The Story of Two Remarkable Women” in the UGC sponsored Refresher Course in English organised by the Academic Staff College, NEHU on 5<sup>th</sup> March, 2010, (ii) two lectures on “Gender justice” and Human Rights Education in the UGC sponsored Orientation Course organized by the Academic Staff College, NEHU, on 10<sup>th</sup> and 17<sup>th</sup> April, 2009, (iii) two lectures on “Politics of Gender” in the ICSSR-NERC organized ICSSR School for Doctoral Scholars on 27<sup>th</sup> November and 1<sup>st</sup> December, 2009, (iv) two lectures on “Methods of Reconstructing Gender History” and ‘Gender and the Writing of History in North East India’ in the ICHR Workshop on Historical Research Methodology, ICHR-NERC Guwahati on 24<sup>th</sup> November 2009, and (v) six lectures on “Gender and History” and “Historiography of Christianity” in the UGC sponsored Refresher Course in History organized by the Department of History and Ethnography, Mizoram University, Aizawl, on 18<sup>th</sup> -19<sup>th</sup> January, 2010.

Prof. F. A. Qadri delivered (i) two lectures on “Sufi Literature” in the UGC sponsored Refresher Course in English organized by the Academic Staff College, NEHU on 5-6 March 2010 and (ii) one lecture on “Medieval Historiography” in the ICHR Workshop on Historical Research Methodology, ICHR-NERC Guwahati on 21<sup>st</sup> November 2009.

Dr. A.K. Thakur delivered (i) two lectures in the UGC sponsored Refresher Course in English organized by the Academic Staff College, NEHU on the topic "Evolution of Language in Historical Perspective" on 26-27 February 2010 and (ii) two lectures in the Orientation Course at the Academic Staff College, NEHU on the topic "Indian Culture, Tradition and Identity," on 26-27 March 2010.

## DEPARTMENT OF LAW

**Head** : Dr. C. Rout  
**Telephone** : 2723801 (O), 9436336103 (M)  
**E-mail** : chintamanirout@rediffmail.com.

**Thrust Area of the Department:** Five year integrated B.A. LL.B (Hons.) programme. This programme aims to (i) advance and disseminate knowledge of law and legal processes in the overall context of national and global developments, (ii) develop a broad and holistic perspective which would help the students to understand the intricate relationship of law with society, economy, polity and history, and (iii) 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 fifth 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.

### Faculty:

**Associate Professors** : J. J. Mozika, Ph.D. (North Bengal)  
C. Rout, M.A., LL.M., Ph.D. (Utkal)  
**Assistant Professors** : R. K. Mishra, LL.M (BHU), PG Diploma in  
Criminology (Lucknow)

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A. K. Singh, LL.M (BHU), Ph.D.(R.M. Lohia-Avadh)  
N. Kumar, LL.M (Jamia Milia Islamia)  
R. Sil, LL.M, Ph.D.(Burdwan)  
S. Tiwari, LL.M (BHU), M.Phil. (JNU)  
P. Gupta, M.Sc. LL.M. (Indian Law Institute,  
N.Delhi)

**Visiting Professors/Fellow/Scholars:** Chairperson and a member of Women Commission of Meghalaya visited the Department on 10<sup>th</sup> November, 2009 to address the students on various issues relating to women and their development in our society.

### Student Intake:

Enrolment capacity : 60

<b>Actual Admission</b>	<b>: SC</b>	<b>ST</b>	<b>Gen</b>	<b>Male</b>	<b>Female</b>	<b>Meghalaya/</b>	<b>Other</b>
						<b>States</b>	<b>States</b>
B.A.LL.B (Hons.)	1	55	4	21	39	45	15

**Courses Conducted:** Five Year Integrated B.A.LL.B (Hons.) Degree Course

**Seminars/Conferences/Symposia/Workshops/Extension Programmes:**

### Attended:

Dr. J. J. Mozika presented a paper entitled 'Public Private Partnership in Healthcare Finance and Healthcare Administration and chaired a session in the National Seminar on Human Rights, Equality and Health: Role of State and the Citizen organized by the Department of Law, University of North Bengal on 27 – 28 March 2010.

### Publications:

Singh, A. K., 2010. Human Rights & Police Atrocity. Calcutta Law Times. Vol. I: pp. 1-10.

### Other Activities:

Dr. C. Rout delivered a lecture on "*Challenges in Legal Education*" to the Three-Year LL.B. students in Sheth M.N. Law College, Patan under Hemchanracharya North Gujarat University, Patan on 15<sup>th</sup> January, 2010.

R. K. Mishra participated (i) in a one week “National Workshop on E-Learning with focus on Educational Internet Domain” organized by the Centre for Adult and Continuing Education, NEHU, Shillong on March 23 -30, 2009 and (ii) in a three days National Seminar on Poorvottar Ki Bhashaon men Takniki Shabd: Anuprayog Evam Samasyaen at the Department of Hindi, organized by NEC, Government of India in association with Department of Hindi on March 25 – 27, 2010.

## DEPARTMENT OF POLITICAL SCIENCE

**Head** : Prof. B. J. Deb

**Telephone** : 2723035, 2723036 (O), 9436104329 (M)

**Email** : bjdeb1@gmail.com

**Thrust Areas of Research:** Contemporary Issues in Indian Politics and Politics of North East India

**Brief Statement of Academic Activities:** The Department aims at building an academic community of students, researchers and teachers devoted to an open, critical and analytical study of the discipline with an emphasis on inter-disciplinary approach. It also aims at making courses and research work socially relevant and developing in the students an awareness of the basic issues and problems in the discipline so as to equip them intellectually to fulfill these needs. With the strength of 14 faculty members, the Department has 102 students on its roll at the M.A. level. The Department admits M.Phil. students 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.

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### Faculty:

- Professors** : A. K. Baruah, M.A., Ph.D. (Punjab)  
R. Borgohain, M.A., M.Phil (JNU), Ph.D. (Gauhati)  
L. S. Gassah\*, M.A., M.Phil., Ph.D. (NEHU)(\*on Sabbatical leave)  
B. J. Deb, M.A.(Double), LL.B., Ph.D. (Gauhati)
- Associate Professors** : K. Debbarma, M.A., M.Phil., Ph.D. (NEHU)  
H. Srikanth, M.A., M.Phil., Ph.D. (Hyd.)  
P. Malngiang, M.A., M.Phil., Ph.D., LLB (NEHU), PGDTL (Institute of Taxation, Kerala)  
S. S. Gupta, M.A., M.Phil., Ph.D. (NEHU)  
R. K. Satapathy, M.A., M.Phil.(Sambal.), Ph.D. (NEHU)  
M. Majumdar, M.A., M.Phil., Ph.D. (JNU)  
T. T. Haokip, M.A., Ph.D. (NEHU)
- Assistant Professors** : B. K. Mahapatra, M.A. (DU), M.Phil., Ph.D. (JNU)  
V. Bijukumar, M.A. (Kerala), M.Phil., Ph.D. (JNU), BLISc. (Kerala)  
S. Bhattacharjee, M.A., M.Phil., Ph.D. (JNU)

**Visiting Professors/Fellow/Scholars:** Ms. Beth A. Payne, Consul General at the U.S. Consulate, Kolkata delivered a lecture on "Current Trends in U.S. - India Relations" on 3<sup>rd</sup> September 2009. Prof. John Harris of London School of Economics, London delivered two lectures on "Civil Society and Politics in India" and "Social Policy in the Neo-Liberal Era: Has the State delivered with Compassion and Justice?" on 9<sup>th</sup> March 2010. Prof. G. Haragopal, formerly Dean, School of Social Sciences, Hyderabad University delivered two lectures on "Sub-Regional Movement: The Unfolding Experience in the State of Andhra Pradesh" and "Human Rights Movement in India: A Case Study of APCLC" on 16<sup>th</sup> March 2010. Prof. S. Jacob George, formerly HoD Political Science, Hyderabad University delivered a lecture on "Issues in Human Rights: An Overview of North East India" on 25<sup>th</sup> March 2010.

**Student Intake:**

**Enrolment capacity:** M.A.: 52; M.Phil. & Ph.D: Variable

**Actual Admission:** SC OBC ST Gen Male Female Meghalaya Other

**States**

MA	-	-	49	3	26	26	33	19
M.Phil	-	1	5	-	2	4	4	2
Ph.D	1	-	13	3	11	6	4	13

**Degree Awarded:** SC ST Gen Male Female Total

M.A.	Nil	36	2	19	19	38
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**Ph.D.:**

Ms. A. Laldinpuii, Traditional and Modern Democratic Political Values and Process of Governance in Mizoram. Supervisor: Prof. A. K. Baruah

Ms. K. Nakhro, Socio-Political Institutions of the Angamis: A Study of Continuity and Change. Supervisor: Dr. T. T. Haokip

**Courses Conducted:**

**M.A.:**

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 : Compulsory Core Courses: Marxist Political Theory, Problems of International Politics, State Politics in India with special reference to North-East Politics (II)

Optional Core Courses: Third World Political Theory, Administrative Theory, East and South-East Asian Political Systems, West Asian Political Systems

Open Courses: Government and Politics in N. E. India, Democracy in India, Modern Indian Political Ideas

Semester III : Compulsory Core Courses: Contemporary Political Theory, Research Methodology (I)

Optional Core Courses: Issues in Women's Studies, International Law and International Organisation, South Asian Political Systems, African Political Systems

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Open Courses: Globalisation, Politics of Social Movements, Women and Political Theory, Development Administration, Issues in Environmental Politics

Semester IV : Compulsory Core Courses: Major Debates in Political Theory, Comparative Politics, Research Methodology (II)

Optional Core Courses: Political Ideology, Political Sociology, Foreign Policy of Major Powers, Indian Political Economy, Human Rights

M. Phil.:

Semester I:

Compulsory: Research Methodology, Issues and Processes in Politics of North-East India

Optionals: Issues in Indian Politics, Women and Politics in North-East India, Critical Perspectives on Knowledge and Power, Advance Studies in International Politics, Environment Studies

Semester II: Dissertation Work

### **Seminars/Conferences/Workshops/Extension Programmes:**

#### **Organized**

Prof. B. J. Deb organized a National Seminar in NEICSSR along with other G.B. members on “*Look East Policy & North East India: Achievements and Constraints*” at Raitong Building, Shillong on March 26-27, 2010.

Dr. H. Srikanth on behalf of NEHU Teachers’ Association (NEHUTA) organized a National Symposium on “*Reforms in Higher Education: Northeast Perspective*”, on October 29-30, 2009 in collaboration with ICSSR-NERC, Shillong.

Dr. S. Sengupta organized the SAP National Workshop on “*Social Forces and Politics of Regionalism in North East India*” in the Department of Political Science, NEHU, Shillong during March 11-12, 2010 as Coordinator.

#### **Attended**

Prof. B. J. Deb chaired Academic Sessions in (i) the Symposium on “*Environment Preservation in North East India*” organized by NEICSSR, Shillong on 5<sup>th</sup> June 2009 at Raitong Building, Shillong, (ii) the SAP National Workshop on *Social Forces and Politics of Regionalism in North East India* on March 12, 2010, organized by the Department of Political Science, NEHU at the NERC-

ICSSR Conference Hall, NEHU Campus, Shillong, and (iii) the National Seminar on *Look East Policy and North East India: Achievement & Constraints* organized by NEICSSR, Shillong on 26-27 March 2010 at Raitong Building, Shillong. Prof. B. J. Deb presented paper on "Look East Policy and Manipur: Prospects and Constraints" in a National Seminar on *Look East Policy and North East India: Achievement & Constraints* organized by NEICSSR, Shillong on 26-27 March 2010 at Raitong Building, Shillong. (Co-author: Ch. S. Kom).

Dr. K. Debbarma presented paper on "Role of Non-Governmental Organizations in the Development in North East India" in the National Seminar on *Voluntary Organization: The Third Sector* from 19<sup>th</sup>-20<sup>th</sup> November 2009 organized by the Department of Sociology, NEHU, Shillong and chaired Academic Session on "Role of Non-Governmental Organizations in the Development in North East India" in the National Seminar on *Voluntary Organization: The Third Sector* from 19<sup>th</sup>-20<sup>th</sup> November 2009 organized by the Department of Sociology, NEHU, Shillong.

Dr. H. Srikanth presented paper on (i) "Making and Maintenance of Ethnic Boundaries among Nagas and Kukis" in National Seminar on *Politics of Boundary Maintenance: Inclusion-Exclusion Dynamics in North-East India*, organized by IAS and ICSSR-NERC in Indian Institute of Advanced Studies, Shimla on November 16-17, 2009 and (ii) "Traditional Institutions, Economic Development and Growth of Private Property in the Hill Areas of North East India" in a National Seminar on *Local Governance and Rural Political Empowerment* organized by Department of Rural Development, NEHU, Tura on 26-27 November, 2009.

Dr. R. K. Satapathy presented paper on (i) "Civil Society and State: Public Domain Interface" in the National Seminar on *Voluntary Sector, Civil Society and Social Transformation in India* held on 18<sup>th</sup> and 19<sup>th</sup> November, 2009 organised by the Department of Sociology, NEHU, Shillong and (ii) "Civil Society and Social Forces: The Context of North-East India" in the SAP National Workshop on *Social Forces and Politics of Regionalism in North-East India* held on 11<sup>th</sup> and 12<sup>th</sup> March, 2010 organised by the Dept. of Political Science, NEHU, Shillong.

Dr. S. Sengupta presented paper on "Social Forces and Politics of Regionalism in Meghalaya" in the SAP National Workshop on *Social Forces and Politics of Regionalism in North East India* on March 12, 2010, organized by the Dept. of Political Science, NEHU at the NERC-ICSSR Conference Hall, NEHU Campus, Shillong.

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Dr. M. Majumdar presented paper on (i) “The Spratly Dispute in the South China Sea” at the International Seminar on *Armed Conflict and Peace Prospects* from 16-19 June 2009, Omeo Kumar Das Institute of Social Change and Development, Guwahati, Assam and (ii) “The ASEAN way in Decision –Making Process” at the International Symposium on *Intercultural Dialogue Between North-East India and South-East Asia*, 17-20 March 2010, Indira Gandhi National Centre for the Arts and Jawaharlal Nehru University, New Delhi.

Dr. T. T. Haokip presented paper on (i) “Interface between Democracy and Human Rights in North-East India,” at a Regional Training on *Democracy and Human Rights of the Indigenous Peoples of North East India*, jointly organized by the Indian Confederation of Indigenous and Tribal Peoples North East Zone (ICITP-NEZ) in collaboration with Taiwan Foundation for Democracy (TFD) at Guwahati from 7-12 July 2009, (ii) “Emerging Issues in Tribal Areas of Northeast India” at a national seminar on *Tribal Unrest and Empowerment for Self Rule* organized by the Indian Confederation of Indigenous and Tribal Peoples North East Zone (ICITP-NEZ) at International Youth Centre, New Delhi from 24-25 November, 2009, (iii) “The Kuki Chiefship and Democratic governance” at a SAP National Workshop on *Social Forces and Regionalism in Northeast India* organized by the Department of Political Science, NEHU, Shillong from 11-12 March, 2010, (iv) “Ethnic Diversity of Manipur” at a seminar on *Conflict Resolution in Manipur*, organized by the 57 Mountain Division at Leimakhong, Manipur on 15 March 2010 and (v) “Democracy and Group Rights: A Study of the Kukis of Manipur” at a national seminar on *Democracy, Identity and Group Rights: Locating the Northeast Indian experience in a Comparative Perspective* organized by Women’s College, Shillong in association with Indian Institute of Advanced Studies (IIAS), Shimla, March 22-23, 2010 .

Dr. V. Bijukumar presented a paper on “Social Exclusion in Deliberative Democracy” in 36<sup>th</sup> Annual Conference of Kerala Sociological Society. The Conference was held in Thiruvananthapuram during 20<sup>th</sup>-22<sup>nd</sup> November, 2009.

### **Publications:**

Satapathy, R. K., 2009. Meghalaya’s Verdict on Expected Line, *Economic and Political Weekly*, Vol. XLIV (No.39): September 26 – October 2.

Majumdar, M., 2008. Northeast India As a gateway to India’s Look East Policy. *International Journal of South Asian Studies*, Vol.1(No.2): pp.391-405.

Haokip, T. T., 2009. Traditional Self-governing Institutions and Democratic Governance in North-East India. *Local Government Quarterly: A Journal of All India Institute of Local Self-Government*, July-September: pp.30-36.

Haokip, T. T., 2009. Ethnicity and Ethnic Policies in Pakistan and Myanmar. *International Journal of South Asian Studies*, Vol.2 (July-December): pp.367-381.

Haokip, T. T., 2009. North-East India: Language politics and Ethnic Relations. *Indian Defence and Strategic Analysis (IDSA)*, Occasional Paper No.5: pp.1-24.

Bijukumar, V., 2009. Modernity, Liberal Democracy and Political Islam: A Critical Perspective. *International Journal of South Asian Studies*, Vol.2(No.1): pp.42-57.

**Books/Book Chapters/Proceedings:**

Deb, B. J. (ed.), 2010. *Population and Development in North East India*, Concept Publications, New Delhi, 483 pages.

Gupta, S. S., 2009. *Radical Politics in Meghalaya-Problems and Prospects*, New Delhi, Kalpaz Publications, 245 pages.

Srikanth, H., 2010. *Indigenous Peoples in Liberal Democratic States: Conflict and*

*Reconciliation in Canada and India*, Bauu Institute, Colorado, 247 pages.

Baruah, A. K., 2009. "Inter-community Conflicts and National Integration", in R. Ahmed (ed) *Ethnic conflicts and National Integration in North East India*, Khagarijan College, Nagaon, pp.11-33

Baruah, A. K., 2009. "Retreat of the State and Gongoization of the Globalized World" in M. N. Das and M. D. Bhuyan (eds) *Globalization and The State*, DVS, Guwahati, pp.23-24.

Baruah, A. K., 2010. "Politics of Human Development", in P. Nayak (ed), *Growth and Human Development in North-East India*, OUP, New Delhi, pp.129-138.

Srikanth, H., 2010. "Accommodating the Native Indians: Canadian Experience" in Abhik Gupta and

Dipendu Das (eds), *Ethnicity and Conflict: India and Canada*, Assam University Publications, Silchar, pp.33-43

Srikanth, H., 2009. "Political Autonomy and Economic Development of Indigenous Peoples: A Comparative Study of North-East India and British Columbia", in A. S. Narang (ed.), *State, Society and Economy in the Twenty-First Century, Canada-India Perspectives*, Manohar, pp.321-332.

Satapathy, R. K., 2009. "Mizoram: Renewed Mandate for the State Government" in *Electoral Politics in Indian States: Lok Sabha Elections in 2004 and Beyond*, Sandeep Shastri, K.C. Suri & Yogendra Yadav (eds), New Delhi, Oxford University Press.

Haokip, T. T., 2009. "Critically Assessing Kuki Land Systems in Manipur," Ch. Pryoranjana Singh, (ed.), *Land, Identity and Development: Tribalism and the Tragedy of the Commons*, Akansha Publishers, New Delhi, pp.304-327.

Haokip, T. T., 2009. "Contesting Nomenclatures: The Kuki-Chin-Mizo of India and Burma", K. Robin (ed.) *Chin: History, Culture and Identity*, Dominant Publishers & Distributors, New Delhi, pp.308-322.

**Funds received from agencies other than NEHU:**

UGC (SAP) : Rs. 1.00 lakh

NERC-ICSSR : Rs. 0.60 lak

**Research Projects:**

**Ongoing:**

The Department is pursuing the Project on *Democratic Governance, Extremism and Youth Movements in North East India* funded by the UPE scheme of NEHU. Principal Investigator: Prof. L. S. Gassah. ①

The Department is pursuing research on the Thrust Area *Social & Political Dynamics of North East India* funded by the UGC under the Special Assistance Programme (DRS-I). ②

*General Elections 2009: A Behavioural Study of Political Attitudes and Opinion in Meghalaya*. Principal Investigator: Dr. R. K. Satapathy. Sponsored by the UGC. ③

*Emergence of Social Forces among Khasi-Jaintias and the Bodos*. Investigator: Dr. S. Sen Gupta. UGC-SAP Project. ④

*Government responds to Extremist Challenge in Meghalay.* Investigator: Dr. S. Sen Gupta. UPE Project.

*Rise of Extremism in Meghalaya.* Investigator: Dr. T. T. Haokip. UPE Project.

*Interface of Kuki Chiefship with Constitutional Democracy in Manipur.* Investigator: Dr. T. T. Haokip. UGC-SAP Project.

**New:**

*Traditional Institutions and Democratic Governance: A Study of Northeast India.* Principal Investigator: Dr. T. T. Haokip. Sponsored by UGC.

**Other activities:**

Prof. A. K. Baruah delivered lecture on (i) *Relevance of Social Science Research* in a Workshop organized by the Gauhati University Research Scholars' Association at Gauhati University on 11<sup>th</sup> March 2010, (ii) "*Tribal Traditions and Liberal Democracy in North-East*" on 15<sup>th</sup> December 2009 at the Centre for Development Studies, Thiruvanthapuram, organized by the Indian Council of Social Sciences Research, New Delhi, under its Distinguished Lecture series, (iii) *Emerging Trends in Social Science Research*, on 5<sup>th</sup> October 2009 in a Research Methodology course organized by the NERC, ICSSR, Shillong, (iv) *Choosing Study Approaches*, on 6<sup>th</sup> October 2009 in a Research Methodology course organized by the NERC, ICSSR, Shillong, and on (v) *Importance of Theory in Social Science Research*, in the NERC Social Scientists Meet, Session I on 8<sup>th</sup> March 2010, Shillong. Prof. A. K. Baruah has been nominated as a member of Indo-Russian Joint Commission on Social Science Research.

Prof. R. Borgohain delivered four lectures on *Women and Human Rights and Feminist Methodology* in the UGC-sponsored Refresher Course in Political Science during October 5-26, 2009.

Prof. B. J. Deb delivered four lectures on *Green Political Theory and Environmental Governance* in the Refresher Course in Political Science, NEHU in October 5-26, 2009, and chaired (i) Interactive session and talk in the University on "*Current Trends in US-India Relations*" by Ms. Beth Payne, U.S. Consul General of the Consulate General, Kolkata on 3<sup>rd</sup> September 2009, (ii) Public Lecture on "*Social Policy in the Neo-Liberal Era: Has the State delivered with Compassion and Justice*" on 9<sup>th</sup> March 2010 in the Conference Room of the Dean, School of Social Sciences, NEHU, Shillong, and (iii) Public Lecture on

### School of Social Sciences

“Sub-Regional Movement: The Unfolding Experience in the State of Andhra Pradesh” by Prof. G. Haragopal on 16<sup>th</sup> March 2010 in the Conference Room of the Dean, School of Social Sciences, NEHU, Shillong, Prof. B. J. Deb has been elected (i) President of North East India Council for Social Science Research, Shillong 2009-2010, (ii) Chairman of Meghalaya Regional Branch of Indian Institute of Public Administration, 2009-10, and (iii) Co-Editor of Journal of *North East India Council for Social Science Research*, Vol.33.1, 33.2, 2009.

Dr. K. Debbarma coordinated a Refresher Course in Political Science on the theme “Governance, *Human Rights and Development* held from 5<sup>th</sup>-25<sup>th</sup> October 2009 in Academic Staff College, NEHU, Shillong.

Dr. H. Srikanth delivered (i) three lectures on *Theories of Social Movements and Social Change* in Refresher Course in Sociology organized by the Department of Sociology, NEHU in September 2009, (ii) one lecture in Workshop on Research Methodology in Social Sciences organized by ICSSR-NERC on October 12-16, 2009, (iii) three lectures in Advanced Course in Political Science under ICSSR School for Doctoral Scholars organized at ICSSR-NERC, Shillong from November 23 to December 2, 2009, (iv) two lectures on *Feminism* in Refresher Course in English Department on February 13, 2010 and (v) one lecture on Civil Society in Young Social Scientists Meet organized by ICSSR-NERC on March 8-10, 2010.

Dr. P. Malngiang delivered (i) Mavis Dunn Lyngdoh Memorial Lecture on *Women and Politics in Meghalaya* at St. Mary’s College, Shillong, 26<sup>th</sup> November 2009, (ii) lecture on *Role of Traditional Institutions in the Modern Context* at Shillong College, 9<sup>th</sup> September, 2009, (iii) lecture on *Youth and Political Parties in Meghalaya* in the SAP National Workshop organized by the Department of Political Science, NEHU, Shillong from 11-12 March, 2010, and (iv) 2 lectures on *Limitations and Prospects of Indian Democracy and Students and Politics* in the UGC-sponsored Refresher Course in Political Science during October 5-26, 2009 organized by the Department of Political Science, NEHU, Shillong.

Dr. R. K. Satapathy delivered four lectures in the Refresher Course in Sociology Department, NEHU on 12<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup> and 16<sup>th</sup> of September, 2009. Topics covered were *Postmodernism, Civil Society, Multiculturalism and Liberal-Communitarian Debate*.

Dr. S. Sen Gupta delivered three lectures in the UGC-sponsored Refresher Course in Political Science during October 5-26, 2009. The topics were – *Globalization and Human Rights in North East India, Global Ambitions and Local Compulsions in North East India, Liberalization and Electoral Politics in India.*

Dr. M. Majumdar delivered a lecture on “*Myanmar as a factor in India’s Look- East Policy: Implications for the North-East India*” in the Eastern Air Command, Commanders Conference, Shillong, 30- November-2009.

## DEPARTMENT OF SOCIOLOGY

**Head** : Prof. C.L. Imchen

**Telephone** : 2723040, 2723051 (O), 2550095 (R)

**E-mail** : hodsoc@nehu.ac.in

**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. Besides teaching and supervising research, the faculty engages in individual research activities. 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.

## School of Social Sciences

### Faculty:

Professors	: N. Kumar, M.A. (Delhi), Ph. D. (NEHU) C. L. Imchen, M.A., M.Phil., Ph. D. (JNU)
Associate Professors	: I. L. Aier, M.A., M. Phil., Ph. D. (NEHU) A. K. Nongkynrih, M.A., M. Phil., Ph. D. (NEHU) D. V. Kumar, M.A., M. Phil., Ph.D. (JNU) B. Panda. M.A., M. Phil. (Hyd.), Ph. D. (IIT Kanpur)
Assistant Professors	: R. M. Shangpliang, M.A., M. Phil., Ph.D. (NEHU)

**Visiting Professors/Fellow/Scholars:** Prof. Mita Bhadra of North Bengal University, Siliguri visited during 25<sup>th</sup> – 26<sup>th</sup> March, 2010 and delivered a number of lectures on emergence of an environmental Sociology, women and environment and preference and gender bias in society. Prof. Anup Dash of Utkal University, Bhubaneswar visited during 25<sup>th</sup>-26<sup>th</sup> March, 2010 and delivered lectures on the social limit to development and environment and development. Prof.

Ranajit Bhadra of North Bengal University visited during 26<sup>th</sup> March, 2010 and delivered a lecture on ethnicity in North-East India. Prof. R. K. Jain, Professor Emeritus of Jawaharlal Nehru University, New Delhi delivered a lecture on Diaspora, Trans-Nation and Nation in September, 2009. Prof. Avijit Pathak of Jawaharlal Nehru University, New Delhi delivered a talk on engaging with sociological theory in September, 2009

### Student intake:

Enrolment capacity : M.A.: 50, M.Phil. and Ph.D. : Variable

**Actual Admission** : SC ST Gen Male Female Meghalaya Other States

M.A. - 49 01 17 33 24 26

M. Phil. - 02 01 01 02 02 01

Ph. D. - 02 - 02 - - 02

**Degrees Awarded** : SC ST Gen Male Female Total

M.A. - 40 03 08 35 43

**Courses conducted:**

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: Anthropological Theories, Crime and Society, Ethnic Relations

SEMESTER III: Economy and Society, Political Sociology, Sociology of Development, Tribal Movements in India

Open Course: Gender and Society, Industrial Sociology, Peasant Movements in India, Sociology of Literature, Sociology of Rural Development in India, Urban Sociology

SEMESTER IV: Social Change, Sociology of Environment, Anthropological Theories, Industrial Sociology

Seminars/Conferences/Symposia/Extension Programme:

**Organised:**

The Department organized (i) a National seminar on Socio-cultural Dimensions of Ecology: The context of North East India on 14<sup>th</sup> and 15<sup>th</sup> October, 2009 (Conveners: Dr. R. M. Shangpliang and Dr. D. V. Kumar), (ii) a National seminar on Voluntary Sector, Civil Society and Social Transformation in India on 18<sup>th</sup> – 19<sup>th</sup> November, 2009 (Convener: Dr. B. Panda), and

(iii) a National Symposium entitled “Ethnic Identity and Political Processes in the Context of Change in North East India” on 29<sup>th</sup> March, 2010. (Convener: Dr. I. L. Aier).

**Attended:**

Prof. N.Kumar presented a paper on “Governance in a Hill State” on 27<sup>th</sup> August, 2009 in an International Seminar on Adivasi / ST Communities in India: Development and Change organised by the Institute for Human Development, New Delhi from 27<sup>th</sup> - 29<sup>th</sup> August, 2009.

Prof. C.L. Imchen presented (i) a paper entitled “Oral Tradition and Cultural Identity of the Nagas of India” in the 16<sup>th</sup> Congress of the International Union of Anthropological and Ethnological Sciences, Kunming, China, July 27<sup>th</sup>-31<sup>st</sup>, 2009 and (ii) a paper entitled “The Naga Students Federation” in a National seminar

### School of Social Sciences

on Voluntary Sector, Civil Society and Social Transformation in India, 18-19 November, 2009 in the Department of Sociology, NEHU.

Dr. I.L. Aier presented a paper titled “Interrogating Activism: The Naga Hoho in Nagaland” in a National seminar on Voluntary Sector, Civil Society and Social Transformation in India on 18-19 November, 2009 in the Department of Sociology, NEHU.

Dr. A. K. Nongkynrih presented (i) a paper on “U Synsar in the context of Ka Niam Khasi: A Sociological Interpretation”, in the National Seminar on Religion and Society in North-East India from the 18<sup>th</sup> Century to Contemporary Times, organized by the Department of History, Shillong, 26-28 November 2009, (ii) a paper on “Organisations in the context of Tribal Societies of North-East India”, in the National seminar on Voluntary Sector, Civil Society and Social Transformation in India organized by the Department of Sociology, NEHU, Shillong on 18<sup>th</sup> – 19<sup>th</sup> 2009, (iii) a paper on “ST, Census and Tribal Development in North-East India: A Sociological Enquiry” at the International Seminar on Adivasi/ ST Communities in India: Development and Change, organized by the Institute of Human Development, New Delhi, August 27-29, 2009, and (iv) a paper on “Development and Social Change in Meghalaya” at the Workshop on “Sixty Years of North-East – Revisiting the Experience” organized by Divya Jeevan Foundation, Shillong, 12<sup>th</sup> to 14<sup>th</sup> November, 2009. Dr. A. K. Nongkynrih delivered a talk on “Socio-Economic and Political Rights of Women Scenario of the North East in comparison” in the Regional Conference on Women’s Rights and organized by the National Commission for Women in collaboration with the Department of Social Welfare, Government of Meghalaya, Shillong, 18 February 2010.

Dr. D. V. Kumar presented a paper titled “The State and Civil Society in Mizoram: Situating the Young Mizo Association (YMA)” at a National seminar on Voluntary Sector, Civil Society and Social Transformation in India organised by the Department of Sociology, NEHU, Shillong on the 18<sup>th</sup> and 19<sup>th</sup> November 2009 at NEHU, Shillong.

Dr. B. Panda presented a paper “Voluntary Sector: Conceptual and Theoretical Issues” in a National seminar on Voluntary Sector, Civil Society and Social Transformation in India organized by the Department of Sociology, NEHU, Shillong on 18-19 November, 2009.

**Publications:**

Aier, I.L., 2009. Social Inequality in Traditional Naga Society: A Sociological Review. *Man and Life.*, 35:3-4.

Aier, I.L., 2009. The Dobashi Institution: A Sociological Study of Colonial Intrusion and Consequence in the Naga Tribal Structure. *North-Eastern Research Bulletin*. XVIII.

Nongkynrih, A. K., 2009. Problems of the Youth of North-East India: A Sociological Inquiry. *Sociological Bulletin*, 58(3):367-382.

Kumar, D.V., 2009. Explaining Mizo Ethnicity: The Relevance of Oppositional Approach. *Man in India*, 89(1-2): 37-50.

**Books/Book Chapters/Proceedings:**

Imchen, C.L., 2009. Tribal Identity, the State and the Nagas, In *Identity, Culture Pluralism and State: South Asia in Perspective*, Eds.: N. K. Das, et. al. Anthropological Survey of India in Association with Macmillan Publishers India Ltd. New Delhi, pp. 456-468.

Aier, I. L., 2010. Formulating a Coalition of People in North East India: An Inquiry. In *Issues in Contemporary India (A Festschrift in Honour of Prof. B.N. Borthakur)*, Ed.: J. Borbara, DVS Publications, Guwahati.

Nongkynrih, A. K., 2009. Meghalaya Human Development Report 2008: Quality of Governance, Decentralisation and Institutional Reforms in Meghalaya. Government of Meghalaya, Shillong, pp 265-288.

Panda, B., 2010. Non-Governmental Organizations and Participatory Development. In *Growth and Human Development in North-East India*, Ed.: P. Nayak, Oxford University Press, New Delhi, pp 190-200.

Shangpliang R. M., 2010. Forest in the Life of the Khasis. Concept Publishing Company Ltd., New Delhi.

**Funds received from agencies other than NEHU:**

NEC	Rs. 2.25 lakh
ICSSR (NERC)	Rs. 1.25 lakh
UGC-SAP-DRS III	Rs. 5.20 lakh

**Research Projects:**

5

**Completed:**

Under the SAP-DRS Phase III, the faculty members carried out different projects in their chosen areas of interest as follows:

Dr. I. L. Aier: "The Naga Village Authority: An Evaluation"

Dr. A.K. Nongkynrih: "A Study of Social Transformation and Tribes of North-East India: The Views of Tribal Youths"

Dr. D.V. Kumar: "Ethnicity, Famine and the State: The Context of Mizoram"

Dr. B. Panda: "Role of Self-Help Groups (SHGs) in Promoting Socio-Economic Development: A Study of SHGs in Meghalaya (Phase I)".

**Other Activities:**

The Department organized Refresher Course in Sociology from 1<sup>st</sup> to 21<sup>st</sup> September, 2009. The theme of the Course was Social Change. The Sociology faculty, colleagues from sister departments within the university and elsewhere delivered lectures. Dr. D.V. Kumar was the course coordinator.

Prof. N. Kumar (i) delivered lectures in the Orientation Course organized by the Department of Education, NEHU, Shillong on 8<sup>th</sup> April 2009 and in the Refresher Course organized by the Department of Hindi, NEHU, Shillong on 12<sup>th</sup> August 2009, (ii) attended a workshop, as an expert, on 4<sup>th</sup> August 2009 at Shillong organized jointly by the International Fund for Agricultural Development (IFAD) and International Centre for Integrated Mountain Development (ICIMOD), and (iii) was a Subject Expert on Research Methodologies and Field Techniques in the Quarterly Review Meeting of the Livelihood Improvement Project for the Himalayas of the Meghalaya Rural Development Society (a project jointly funded by the International Fund for Agricultural Development and the Govt. of Meghalaya), Shillong from 13<sup>th</sup> -15<sup>th</sup> April, 2009 held at NEHU, Shillong.

Dr. I.L. Aier attended National seminar on "Socio-Cultural Dimensions of Ecology: The context of North East India" on 14<sup>th</sup> October 2009, Department of Sociology, NEHU.

Dr. A.K. Nongkynrih (i) participated in the North-East Livelihoods Project launch workshop organized by the Ministry of Development of North Eastern Region, Government of India and the International Fund for Agricultural Development, Rome at New Delhi on 10-11 August 2009, (ii) delivered a lecture on "Developmental Issues from the Sociological Perspectives" at the Refresher Course organized by the Department of Education, NEHU, Shillong, 23<sup>rd</sup> April

2009, (iii) delivered a lecture on “Tribe, Development and Environment” at the Orientation Course organized by the UGC- Academic Staff College, NEHU, Shillong, 31<sup>st</sup> March 2010, (iv) delivered a lecture on “Women and Grassroots Institutions: A Generalist’s View’ organized by the Women Cell, Shillong College, 19<sup>th</sup> June 2009, (v) delivered a lecture on “Social and Political Development in North-East India” organized by the Northeast Regional Catholic Council, Guwahati, 13<sup>th</sup> September, 2009, (vi) delivered a lecture on “Sources of Data” in a workshop on Research Methodology in Social Sciences, organized by Indian Council of Social Science Research (North Eastern Regional Centre), Shillong, 12<sup>th</sup> October 2009, (vii) delivered a lecture on “Sociology and Community Development” for Students of Tata Institute of Social Sciences, North Eastern Region, Shillong, 21<sup>st</sup> October, 2009, and (viii) delivered a lecture on “Networking” in a workshop organized by the State Resource Centre, Shillong, 28<sup>th</sup> October, 2009. Dr. A.K. Nongkynrih has been (i) a Non-Official Member of the Advisory Committee on Codification of Customary Laws, Khasi Hills Autonomous District Council (KHADC), Shillong, (ii) a member of the Executive Board of North East Zone Cultural Centre, Department of Culture, Government of India, Dimapur, Nagaland, and (iii) a member of the Doctoral Committee, Martin Luther Christian University, Shillong.

Dr. D. V. Kumar attended a National seminar on “Socio-Cultural Dimensions of Ecology: The context of North East India” 14 October 2009, Department of Sociology, NEHU and was the Co-convenor of a National Seminar on Socio-Cultural Dimensions of Ecology: The Context of North-East India, organized by the Department of Sociology, NEHU, Shillong on 14<sup>th</sup> and 15<sup>th</sup> October, 2009.

Dr. B. Panda (i) attended a National seminar on Socio-Cultural Dimensions of Ecology: The Context of North-East India, 14-15 October, 2009, organized by Department of Sociology, NEHU, Shillong, (ii) convenor of the national seminar on “Voluntary Sector, Civil Society and Social Transformation in India” 18-19 November, 2009, and (iii) reviewed the book by G. R. Madan on Voluntary social organizations in India and development: A critical appraisal. New Delhi: Allied Publishers, 2008 in *Sociological Bulletin*, Vol. 58, No.2, 2009, pp.277-279, and (iv) participated in a Workshop on Capacity Building in Social Science Research Training Course on SPSS organized by ICSSR-NERC, Shillong held at ICSSR-NERC Complex, NEHU Campus, Shillong during 1-10 December, 2009.

Dr. R. M. Shangpliang attended a National seminar on Voluntary Sector, Civil Society and Social Transformation in India: held on 18<sup>th</sup> and 19<sup>th</sup> November, 2009, Department of Sociology, NEHU.

## VIII

# SCHOOL OF TECHNOLOGY

**Dean** : Prof. K. Ismail up to 29.09.2009  
Prof. R. Sharma w.e.f. 30.09.2009

**Telephone** : 2723601 (O), 2723602 (O), 2550900 (R), 9436117141 (M)

**E-mail** : rsharma@nehu.ac.in

**T**he School of Technology was established in the year 2006. It consists of the Departments of (i) Electronic and Communication Engineering (ECE), (ii) Information Technology (IT) and (iii) Basic Sciences and Social Sciences (BSSS). The Departments of ECE and IT offer B. Tech. programmes of 8 semester duration in ECE and IT, respectively, while the Department of BSSS offers the courses that are common to all the B. Tech. students. Admission of students to the two streams of B. Tech. programmes are done through a central counseling. Hostel facilities have been provided in the campus to all the outstation students. The faculty members are actively involved in teaching and collaborative research. The areas of specialization of the faculty members from the Departments of ECE and IT include Networking, Algorithm, Information Security, Robotics, Nanoelectronics and Communication, whereas faculty members from the Department of BSSS are specialized in different fields related to Humanities and Basic Sciences

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

**Head** : Dr. L. J. Singh

**Telephone** : 2723661(O), 9436349192(M)

**Email** : hodece@nehu.ac.in

**Thrust Areas of the Department:** The Department aims to train the students for Electronics and Communication industries and to develop their capacity for tackling engineering problems in the field of Electronics and Communication.

**Brief Statement of Academic Activities:** The Department has strengthened the infrastructure required for teaching the theory and practical courses of the B.Tech. programme. Although 60 students were admitted to the B.Tech., the effective strength remained at 55. Admission to the B.Tech. 3<sup>rd</sup> semester was also made through Lateral Entry. One Professor (Dr. S. Choudhury), one Associate Professor (Dr. S. Arya) and two Assistant Professors (F. Pyrtoh and J. Swarnakar) joined the Department. Campus interviews were arranged for the students. The Department organized (Convener: Dr. L. J. Singh) a Workshop on MEMS Technology and its Applications.

### **Faculty:**

Professor : S. Choudhury, M. Tech (Tezpur), Ph. D. (Jadavpur)

Associate Professors : L. J. Singh, M. Tech. (Tezpur), Ph. D.(Jadavpur),  
S. K. Dutta, M. Tech. (Manipal Institute of  
Technology)

S. Arya, Ph. D.(Dhanbad)

Assistant Professors : J. Binong, B. E. (Bhavnagar)  
R. K. Mudoj, M. Tech. (Tezpur)  
F. Pyrtoh, M. Tech. (IIIT, Allahabad)  
J. Swarnakar, M.E. (Jadavpur)

**Visiting Professors/Fellows/Scholars:** Dr. J. Ahmed, NEHU, Tura Campus and Mr. L. Lolit Kumar Singh, NERIST, Arunachal Pradesh visited the Department as Guest Faculties and delivered lectures to the B.Tech.(ECE) students. Dr. C. Rout from the Department of Law, NEHU had also been a Guest Faculty and delivered lectures on Professional Ethics and IPR.

## School of Technology

### Student intake:

Enrolment capacity	:	B.Tech.: 60						
Actual Admission	:	SC	ST	Gen	Male	Female	Meghalay Meghalaya	Outside Meghalaya
(a) B.Tech. (ECE)		08	20	27	43	12	13	42

**Placement of Students:** Mr. Johnson Taye was selected in Tata Tele services Ltd. in the campus interview/placement held on 19<sup>th</sup> March 2010. While Mr. Abhijit Bora, Mr. Banajit Boro, Mr. Basab Das, Mr. Santosh Kumar, Mr. Sarfraz Hussain, and Ms. Surabhi Prasad got through the Fast Track Screening Test of Indian Air Force for SSB examination.

### Courses Conducted:

Semester I : Basic Electrical Engineering & Basic Electrical Laboratory

Semester II : Basic Electronics, Basic Electronics Laboratory

Semester III : Analog Electronic Circuits – I, Digital Electronics, Signals and Systems, Electrical Network Theory, Analog Electronic Circuits – I Laboratory, Digital Electronics Laboratory

Semester IV : Electromagnetic Theory, Analog Electronic Circuits – II, Digital Systems Design, Linear Integrated Circuits and Systems, Analog Electronic Circuits – II Laboratory, Digital Systems Design Laboratory, Linear Integrated Circuits Laboratory

Semester V : Microprocessor, Electronics Measurements and Instrumentation, Principles of Communication Systems, Power Electronics, Basic Control Engineering, Microprocessor Laboratory, Electronics Measurements and Instrumentation Laboratory, Communication Systems Laboratory

Semester VI : Advanced Microprocessors, Digital Signal Processing, Microwave Engineering, Computer Communications and Networks, Antenna, Advanced Microprocessor Laboratory, Digital Signal Processing Laboratory, Microwave Engineering Laboratory

Semester VII : Embedded Systems and Microcontrollers, Introduction to VLSI Design, Digital Communication, Advanced Digital Signal

Processing, Digital Image Processing, Embedded Systems and Microcontrollers Laboratory, VLSI Design Laboratory, Digital Communication Laboratory and Minor Project

Semester VIII: Satellite and Optical Communication Systems, Mobile Communications, Cipher System, Nanotechnology and Major Project..

### **Seminars/Conferences/Symposia/Workshop/Extension Programmes:**

#### **Organized**

The Department organized a Workshop on Micro Electro Mechanical Systems (MEMS) Technology and its Applications in collaboration with the North Eastern Space Applications Center, Department of Space, Govt. of India, Umiam, Shillong during March 25-27, 2010. Dr. L. J. Singh was the Convener of the Workshop.

#### **Publication:**

#### **Books/Book Chapters/ Proceedings:**

Singh, L. J. and V. Kumar, 2010. "Utilities and IP Based World", in the Section of *Information and Communication Science and Technology*, Proceedings of 97<sup>th</sup> Indian Science Congress, p.46.

#### **Infrastructure facilities:**

A National MEMS Design Centre (Coordinator: Dr. L. J. Singh) has been established as a common facility for the users from the region.

#### **Other Activities:**

Dr. S. Arya attended a workshop on Advances in Image & Document Processing organized by CVPRU, Indian Statistical Institute, Kolkata & RG IIM, Shillong, from 16<sup>th</sup> to 20<sup>th</sup>, March 2010.

Mr. J. Binong participated in (i) the workshop on "Frontier in Electronics and Communication" organized by the Department of Electronics and Communication Engineering, NERIST in collaboration with UGC Networking Resource Centre in Physical Sciences in the Institute of Radio Physics and Electronics, University of Calcutta, from 7<sup>th</sup> to 9<sup>th</sup> August, 2009 and (ii) the National Workshop on "Design and Analysis of Algorithms, 2010." at Tezpur University from 22<sup>nd</sup> -23<sup>rd</sup>, January, 2010.

## School of Technology

Mr. R. K. Mudoj participated in the workshop on “Frontier in Electronics and Communication” organized by the Department of Electronics and Communication Engineering, NERIST in collaboration with UGC Networking Resource Centre in Physical Sciences in the Institute of Radio Physics and Electronics, University of Calcutta, from 7<sup>th</sup> to 9<sup>th</sup> August, 2009.

Dr. L. J. Singh gave two lectures in Orientation Courses conducted by the Academic Staff College, NEHU on 10<sup>th</sup> and 17<sup>th</sup> March 2010. He has also been selected as a Member of the Sectional Committee of the Section of Information and Communication Science & Technology (including Computer Sciences) for 2010-11 (98<sup>th</sup> Session of the Indian Science Congress Association).

Mr. S. De, Technical Officer, has taken the charge for Training & Placements of the students of this Department.

Dr. S. Choudhury chaired two sessions in the national conference held at SMIT, Sikkim and delivered invited talks on “Smart Sensors”.

## DEPARTMENT OF INFORMATION TECHNOLOGY

**Head** : Md. Iftekhar Hussain (till 22.03.2010)  
: B. Bhuyan (from 23.03.2010)

**Telephone** : 2723611 (O), 9436732296 (M)

**E-mail** : hodit@nehu.ac.in

**Thrust Areas of the Department:** Information Security, Networking, Data mining and Computational Biology.

**Brief Statement of Academic Activities:** The Department has strengthened the infrastructure required for teaching the theory and practical courses of the B.Tech. programme. Although 60 students were admitted to the B.Tech., the effective strength remained at 58. One Associate Professor (B. Bhuyan) and two Assistant Professors (S. Das and S. C. Sahana) joined the Department. Campus interviews were arranged for the students.

**Faculty:**

Associate Professors : I. Hussain, M.Tech.(Tezpur)

B. Bhuyan, M.Tech. (Tezpur)

Assistant Professors : S. Roy, M.Tech. (Tezpur)

A. Maji, M.Tech. (BESU, Shibpur)

S. Neog, M. Tech. (Tezpur)

S. Das, M.Tech. (Tezpur)

S. C. Sahana M.Tech. (Tezpur)

**Student intake:**

Enrolment capacity : B.Tech.: 60

Actual Admission : SC ST Gen OBC Male Female Meghalaya/Outside  
Meghalaya

(a) B.Tech. (IT) 11 21 22 04 43 15

**Placement of Students:**

Several organizations/companies like Indian Airforce, Tata Telecom Services Limited (TTSL), Bahniman group of companies visited the School of Technology campus for recruitment and already several students have got selected and many students are in the various stages of selection process.

**Course Conducted:**

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 Graphics & Multimedia, System Programming, Computer Organization & Architecture, Computer Graphics & Multimedia Lab, System Programming Lab, Computer Organizational & Architecture Lab.

## School of Technology

- Semester V – Object Oriented Programming and Methodology, Operating System, Data Communication, Object Oriented Programming (C++, Java) Lab, Operating System Lab.
- 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.
- 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
- Semester VIII – Marketing Strategies and Planning, Mobile Communications, Internet Protocol, E-Commerce, Mobile Computing, Major project.

### **Seminars/conferences/symposia/extension programmes:**

#### **Attended**

Sri B Bhuyan was invited as a resource person in the AICTE sponsored Faculty Development Program held at Bengal Institute of Technology and Management, Santiniketan during 5<sup>th</sup> April '2010 to 16<sup>th</sup> April '2010 and has delivered lectures on AVK based Security.

#### **Publications:**

##### **Published Abroad**

Das, S. and B. Saha, 2009. Data Quality Mining using Genetic Algorithm. *International Journal of Computer Science and Security*, 3(2): 105-112.

Rahman, M., S. Das and U. Sharma, 2009. Parsing of part-of-speech tagged Assamese Texts. *International Journal of Computer Science*, 6(1): 28-34.

#### **Books/Book Chapters/Proceedings:**

Roy, S. and D. K. Bhattacharyya, 2010. Finding Gene-Gene Network using Support based Correlation Mining Techniques. NWDAA '10, Narosha, India.

Das, S. 2009. Optimization of Association Rule Mining using Multi-objective Genetic Algorithm, in the Proc. of IEEE International Advance Computing Conference (IACC-2009), pp. 1664-1668, Thapar University, India.

Das, S., M. Rahman and A. Datta, 2009. Multi-objective Genetic Algorithm for Association Rule Mining, in the Proc. of National Seminar cum Workshop on Distributed Computing (NSDC-2009), Sikkim Manipal Institute of Technology, India.

### **Infrastructure Facilities:**

120 high end computers and 60 thin clients connected to SUN Fire server with solaris operating system.

### **Research projects**

#### **Ongoing**

Studies on health status and demographic pattern of population, around Domiasiat area, West Khasi Hills. Co-investigator: Mr. A. K. Maji. Sponsored by the Environment Assessment Division, BARC.

### **Honours/Awards/Recognition:**

Mr. S Roy has been selected as a Reviewer and Technical Committee Member of International Arab Journal of e-Technology (IAJeT).

### **Other Activities:**

B. Bhuyan has delivered two lectures on Information Security and Cryptography in 6<sup>th</sup> Orientation Programme on Information Technology organized by Academic Staff College, NEHU during 25<sup>th</sup> February to 26<sup>th</sup> March 2010.

Md. I. Hussain delivered three lectures on (i) Introduction to Information and Communication Technology, (ii) Computer Organization and Architecture, (iii) Current Trends in ICT in the 6<sup>th</sup> Orientation Programme on Information Technology for College/University Teachers, Academic Staff College, NEHU during 25<sup>th</sup> February to 26<sup>th</sup> March 2010.

S. Roy has delivered lectures as resource person on "Computer Aided Learning" & "Information Retrieval-Storage" in the UGC-ASC 6<sup>th</sup> Orientation Course organized by the Academic Staff College, NEHU, during 25<sup>th</sup> Feb. to 26<sup>th</sup> March 2010.

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S. Neog delivered a lecture on “Functions of Operating System” in the UGC-ASC 6<sup>th</sup> Orientation Course organized by the Academic Staff College, NEHU during 25<sup>th</sup> Feb to 26<sup>th</sup> March 2010.

S. Das delivered a lecture on “Introduction to Information Technology”, in the UGC-ASC 6<sup>th</sup> Orientation Course organized by the Academic Staff College, NEHU during 25<sup>th</sup> Feb to 26<sup>th</sup> March 2010.

## DEPARTMENT OF BASIC SCIENCES AND SOCIAL SCIENCES

**Teacher-in-charge** : Dr. A. K. Das (till 24.11.2009)  
Dr. A. Sinha (from 25.11.2009)

**Telephone** : 2723641, 2723642 (O), 9863095102 (M)

**E-mail** : hodbsss@gmail.com

**Thrust Areas of Research:** Basic & Applied Mathematics, Basic & Applied Physics, Chemical Science & Technology, 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 conducted all the core courses of Basic Sciences, Humanities and Social Sciences that appear in the B.Tech. curricula of Department of ECE and Department of IT of the School of Technology. In addition, the members of the Faculty have been engaged in research activity in their respective fields of interest and also in the interdisciplinary and multidisciplinary areas.

### **Faculty:**

Professor : P.V. Koparkar\*, M. Sc, Ph. D. (Nagpur)

\* (Adjunct Professor)

**Associate Professors :** Physics - A. K. Das, M.Sc. (IIT, Kgp), Ph.D. (CU)  
Chemistry - A. B. Chetry, M.Sc. (GU)

**Assistant Professors :**

(Higher Grade) Chemistry - A. Sinha, M.Sc. (LU), Ph.D. (NEHU)  
Mathematics - M. D. Kushwaha, M.A., Ph.D. (BHU)  
M. M. Singh, M.Sc. (BHU), Ph.D. (PU)

**Assistant Professors :**

Chemistry - Jyoti Narayan, M.Sc., M. Phil, Ph.D. (KU)  
S. Ghosh, M.Sc. (Visva-Bharati), Ph.D. (IITG)  
Mathematics - Sainkumar M.N. Mawiong, M.Sc. (NEHU)  
Jibitesh Dutta, M.Sc. (NEHU)  
Physics - Regeneel S. Kharwanlang, M.Sc. (NEHU)  
Statistics - Phrangstone Khongjee, M.Sc. (NEHU)  
Env. Science - Krishna Upadhaya, M.Sc., Ph.D. (NEHU)  
Biotechnology - Hiranjit Choudhury, M.Sc., Ph.D. (NEHU)  
English - Evapynhun Giri, M.A., M.Phil. (NEHU)  
Economics - Veronica Pala\*, M.A., Ph.D. (NEHU)  
(\* up to 18.01.2010)

**Courses Conducted :** The following core courses of the B. Tech. programmes of ECE and IT have been conducted:

Semester I : English & Communication Skills, Engg. Mathematics I, Engg. Physics I, Engg. Chemistry, Basic Electrical Engg., Elements of Biotechnology, Engg. Chemistry Laboratory, Basic Electrical Laboratory and Engg. Graphics

Semester II : Engg. Mathematics II, Engg. Physics II,  
Engg. Physics Laboratory, Basic Electronics and Basic Electronics Laboratory, Engineering Mechanics, Basic Mechanical Laboratory, Computer System and Programming, Computer System and Programming Laboratory and Environmental Sciences

## School of Technology

Semester III : Engineering Mathematics III, Discrete Mathematics, Organizational Management

Semester IV : Statistics and Random Processes, Organizational Structure

Semester V : Managerial Economics, Management Information System

Semester VII : Professional Ethics and IPR

### **Seminars/Conferences/Symposia/Extension Programmes:**

#### **Attended:**

Dr. K. Upadhaya (i) presented a paper in National Seminar on 'Socio-cultural Dimension of Ecology: The Context of North-East India. Organized by the Department of Sociology, North-Eastern Hill University, Shillong, 14<sup>th</sup> -15<sup>th</sup> October, 2009. Topic: Sacred Forests of Meghalaya: An Overview, and (ii) delivered a lecture in Workshop on 'Community Forests of North-East India: Status and Strategies for Conservation" Organized by Regional Centre, National Afforestation and Eco-Development Board, North-Eastern Hill University, Shillong, 3<sup>rd</sup> December, 2009. Topic: Sacred Groves of Meghalaya.

Dr. M. M. Singh was invited as a Resource person at the HRD sponsored Workshop on 'Scientific and Takiniki Shabdawali' held at Hindi Department, NEHU, Shillong, 25-27<sup>th</sup> March 2010. Topic: Relevance of Vedic Mathematics in the present Scenario.

Dr. S. Ghosh (co-authors: M. V. Nandakumar and C. Schneider) presented a paper at the 2<sup>nd</sup> German-Indian symposium. on "Frontiers of Chemistry," 16<sup>th</sup> to 19<sup>th</sup> September, 2009, Organized by University of Leipzig, Germany. Topic: Catalytic and highly enantioselective  $\alpha$ -amination of  $\beta$ -ketoesters.

#### **Publications:**

##### **Published Abroad**

Upadhaya, K., S. K. Barik, D. Adhakari, R. Baishya and N. J. Lakadong, 2009. Regeneration ecology and population status of a critically endangered and endemic tree species (*Ilex khasiana* Purk.) in north-eastern India. *Journal of Forestry Research*, 20 (3): 223-228.

Dutta, J. and S. K. Srivastava, 2009. Acceleration and Deceleration in the Curvature -Induced Phantom Model of the Late and Future Universe; Cosmic Collapse and its Quantum Escape. *International Journal of Modern Physics*, No.5, D, 18.

Shukla, P. and R. S. Kharwalang, 2010. Hysteresis in random field XY and Heisenberg models: Mean field theory and simulations at Zero temperature. *Physical Review*, E81: 031106.

Ghosh, S., M. V. Nandakumar, H. Krautscheid and C. Schneider, 2010. Copper–bipyridine-catalyzed enantioselective  $\alpha$ -amination of  $\beta$ -keto esters. *Tetrahedron Letters*, 51: 1860-1862.

Nandakumar, M. V., S. Ghosh, and C. Schneider, 2009. Enantioselective Synthesis of a Novel Chiral 2,9-Disubstituted 1,10-Phenanthroline and First Applications in Asymmetric Catalysis. *Eur. J. Org. Chem.*, 6393-6398.

Gregory P. T., S. Sadhukhan, R. R. Koner and S. Ghosh, 2009. The Syntheses and Applications of  $\alpha$ -Benzylmercaptoethylamine Derivatives. *Tetrahedron*, 65: 10515-10534.

#### **Books/Book Chapters/Proceedings:**

Choudhury, H., S. Goswami and D. R. Thangkhiew, 2010. Need to conserve natural ecosystem of Janiaw & Lawbah in Meghalaya as sacred landscape or protected fossil park- A preliminary case study with the perspective of conservation of nature and socio-economic up-liftment of the local people. In Development Scenario of North East India: A Holistic Perspective. Ed.: J U Ahmed, DVS Publishers, Pan Bazar, Guwahati.

#### **Infrastructure facilities:**

Laboratories of Chemistry, Physics, Basic Electrical Engineering, Engineering Graphics and Mechanical Engineering courses have been upgraded. A Computer Laboratory with 8 Workstations supported by 10KVA UPS has also been established.

#### **Research Projects:**

##### **Ongoing**

Measurements of radionuclides and trace elemental concentrations and their transfer factors in environmental matrices around the proposed uranium mining, milling and tailing pond site at K.P Mawthabah (Domiasiat), West Khasi Hills, Meghalaya. Principal Investigator: Prof. B. Kharbuli (Co-Investigators: Dr. A.K. Das and Dr. Jyoti Narayan). Sponsored by Department of Atomic Energy (DAE), Government of India.

## School of Technology

Studies on health status and demographic pattern of population around Domiasiat area, West Khasi Hills, Meghalaya. Principal Investigator: Prof. B. Kharbuli (Co-Investigators: S. K. Mawiong, Eva Giri, Prof. B. S. Mipun, Prof. D. K. Nayak, A. K. Maji, Dr. S. S. Chaturvedi). Sponsored by Department of Atomic Energy (DAE), Government of India .

### **New**

Monsoon and Post monsoon ecological and carrying capacity studies in Lohit Basin of Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Government of India.

Monsoon and Post monsoon ecological and carrying capacity studies in Bichom Basin of Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Government of India.

Terrestrial ecological survey in Lohit and Bichom basin of Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Government of India.

Ecological survey for the EIA study for lower Kapoli HEP, District Karbi Anglong and NC Hills of Assam. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Government of India.

Ecological survey in Dibang Valley of Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Government of India.

### **Completed**

Formulation of volume tables for important tree species of Meghalaya. Principal Investigator: Dr. K. Upadhaya Sponsored by Department of Forest & Environment, Government of Meghalaya.

Ecological studies on Mawhu, Dibin, Kameng and Tawang river catchments in Meghalaya and Arunachal Pradesh. Principal Investigator: Prof. S.K. Barik (Co-PI: Dr. K. Upadhaya). Sponsored by WAPCOS, Ministry of Water Resources, Government of India.

### **Academic/Professional Collaboration:**

Dr. A. K. Das and Dr. Jyoti Narayan have collaborative research works with Prof. B. Kharbuli of Department of Zoology, NEHU, Shillong and Dr. S. K. Jha of BARC, Trombay on study of Radionuclides and Trace Elements' concentrations in the Environmental Matrix around the Uranium mining sites at Domiasiat in Meghalaya.

Mr. S. K. Mawiong and Ms. Eva Giri have collaborative studies with (i) Prof. B. Kharbuli of Department of Zoology, NEHU, Shillong, (ii) Prof. B. S. Mipun and Prof. D. K. Nayak of the Department of Geography, NEHU, (iii) Dr. S. S. Chaturvedi of Centre for Environmental Studies, NEHU, (iv) Mr. A. K. Maji of the Department of Information Technology, NEHU, Shillong and (v) Dr. Mohan Chougongar of BARC, Trombay on health status and demographic pattern of population around Domiasiat area, West Khasi Hills, Meghalaya.

Dr. K. Upadhaya has collaborative studies with Prof. S. K. Barik of Department of Botany, NEHU, Shillong on Ecological studies on Lohit, Bichom, Dibang and Kapoli -river basins in Arunachal Pradesh and Assam..

### **Other Activities:**

Dr. A.K. Das attended Workshop on MEMS Technology and its Applications at the Department of ECE, NEHU, Shillong held on 25<sup>th</sup> -27<sup>th</sup> March 2010.

Dr. M. M. Singh visited Assam University, Silchar from 9.07.2009 to 18.07.2009 as a Guest Faculty at the School of Technology and delivered a series of lectures on Discrete Mathematics & Graph Theory to students of Information Technology. Dr. Singh was the Mentor in the DST sponsored INSPIRE Programme held at NEHU, Permanent Campus, Shillong, during 14<sup>th</sup> to 20<sup>th</sup> December 2009. He also attended (i) UGC-SAP Workshop on "Algebra, Algebraic Topology and Related Topics" at the Department of Mathematics, NEHU, Shillong held from 15<sup>th</sup> to 20<sup>th</sup> March, 2010 and (ii) Workshop on MEMS and its Applications at the Department of ECE, NEHU, Shillong held from 25<sup>th</sup> to 27<sup>th</sup> March, 2010.

Dr. A. Sinha attended (i) Workshop on "Atomic Absorption Spectroscopy: Basic Principles, Applications and Practical Demonstrations" organized by SAIF, NEHU, Shillong held at the Sophisticated Analytical Instrument Facility, NEHU, Shillong on 11<sup>th</sup>-13<sup>th</sup> November 2009, (ii) Lecture Series on 'Frontier Lecture Series in Chemistry' organized by JNCASR, Bangalore in collaboration with Department of Chemical Sciences, Tezpur University held at Tezpur University on 20<sup>th</sup> -22<sup>nd</sup> November, 2009 and (iii) Workshop on MEMS Technology and its

### School of Technology

Applications at the Department of ECE, NEHU, Shillong held from 25<sup>th</sup> to 27<sup>th</sup> March, 2010.

Dr. H. Choudhury attended (i) Refresher Course in Botany conducted by ASC-NEHU, 26<sup>th</sup> February-18<sup>th</sup> March 2010 and (ii) Workshop on MEMS Technology and its Applications at the Department of ECE, NEHU, Shillong held from 25<sup>th</sup> to 27<sup>th</sup> March, 2010.

Dr. J. Narayan attended (i) Workshop on 'Data Mining' in Department of Information Technology, School of Technology, NEHU held on 25<sup>th</sup> June 2009, (ii) Workshop on "Basic Principles, Preparatory Methods and Application in Scanning Electron Microscope" organized by SAIF, NEHU, Shillong held at Sophisticated Analytical Instrument Facility, NEHU, Shillong on 11<sup>th</sup>-13<sup>th</sup> November 2009 and (iii) Workshop on MEMS Technology and its Applications at the Department of ECE, NEHU, Shillong held from 25<sup>th</sup> to 27<sup>th</sup> March, 2010.

Dr. Subrata Ghosh attended Workshop on MEMS Technology and its Applications at the Department of ECE, NEHU, Shillong held from 25<sup>th</sup> to 27<sup>th</sup> March, 2010.

Mr. Jibitesh Dutta attended (i) National Workshop on "Use and Deployment of Web and Video Courses for Enriching Engineering Education" held from 23-24 August, 2009 at IIT Guwahati, (ii) Workshop on FOSS (Free and Open Source Software) conducted by Red Hat Linux India Pvt. Ltd. at St. Anthony's College, Shillong from 13<sup>th</sup> to 14<sup>th</sup> November, 2009, (iii) UGC-SAP Workshop on "Algebra, Algebraic Topology and Related Topics" at the Department of Mathematics, NEHU, Shillong held from 15<sup>th</sup> to 20<sup>th</sup> March, 2010 and (iv) Workshop on MEMS Technology and its Applications at the Department of ECE, NEHU, Shillong held from 25<sup>th</sup> to 27<sup>th</sup> March, 2010.

Mr. Sainkumar Mn. Mawiong attended (i) the "Annual Foundation School in Mathematics-II", supported by National Board for Higher Mathematics, held at Bhaskaracharya Institute of Mathematics Pune and in Pune University during 08<sup>th</sup> June to 4<sup>th</sup> July 2009, (ii) National Workshop on "Use and Deployment of Web and Video Courses for Enriching Engineering Education" held on 23<sup>rd</sup> and 24<sup>th</sup> August, 2009 at IIT Guwahati, (iii) National Workshop on "Some Aspects of Dynamical System" held on 22<sup>nd</sup> to 24<sup>th</sup> December, 2009 at IIT Delhi. and (iv) the 7<sup>th</sup> Orientation Programme conducted by the UGC Academic Staff College, NEHU from 17<sup>th</sup> March to 14<sup>th</sup> April 2010.

# IX CENTRAL SERVICES

## COMPUTER CENTRE

**Head** : Professor Y. S. Jain  
**Telephone** : 2723751 (O), 2550663(R)  
**Email** : ysjain@nehu.ac.in

**Thrust Area of the Centre:** (i) Providing computation facility to faculty members, research scholars and students of the University. (ii) Developing and maintaining software for the University. (iii) Conducting training programmes in computer related subjects.

**Brief Statement of Activities:** Research scholars and teachers/non-teaching staff of the University utilized the facilities of the Centre for computational work, documentation and internet browsing. Several short-term courses were conducted. The Centre assisted Finance section, Examination section, Administration and College Development Council of NEHU in computerization of the work. The Centre conducted CIC, BCA and MCA courses of IGNOU during the weekends and some holidays throughout the year.

### **Faculty/staff members:**

**Associate Professors** : T. K. Sinha, Ph.D. (NEHU)  
**Senior System Analyst** : P. P. Dey, B.Tech. (REC Warangal)  
**System Analyst** : B. Rynjah, B.Tech. (JNTU College of Engineering, Kakinada), M.B.A. (IIT Chennai)  
**Computer Operator** : N. Dayanandan, B.Sc., B.Ed. & DCA  
**Data Entry Operator** : P. Kharlukhi, BCA  
N.L. Lyngdoh, M.Com

## Central Services

### Student intake:

Enrolment capacity : 80

	OBC	SC	ST	Gen	Male	Female	From Meghalaya	From Outside
Windows & MS-Office	-	-	50	5	23	32	55	-
C-Programming	-	-	-	7	4	11	-	11
MATLAB	-	-	2	6	6	2	8	-
Data Analysis	4	-	20	2	11	15	26	-
FORTRAN	-	-	8	3	8	3	11	-
Networking	-	-	5	-	5	-	5	-

### Courses Conducted:

- Webpage Designing
- C programming
- C++ programming
- Java Programming
- MS-Windows & MS-Office
- MS-Access & Visual Basic Programming
- MATLAB
- Data Analysis
- Networking

### Seminars/Conferences/Symposia/Workshop/Extension programmes:

#### Attended

Dr. T. K. Sinha delivered a talk on *Solitons and Vortices in Carbon Nano Tubes* in "National Conference on Nano Materials" organized by the Department of Physics, NEHU during 22-23 March 2010.

#### Publications:

Jain, Y. S., 2009. Understanding of liquid helium after 100 years of its discovery, *Asian Journal of Physics*, 18: 255-262.

Gewali, J. P. and Y. S. Jain, 2009. Compressibility of liquid  $^3\text{He}$ , *Asian Journal of Physics*, 18: 263-268.

Jha, A. K., S. Dey and Y. S. Jain, 2009. Quantum dynamics of OCS molecule doped in superfluid  $^4\text{He}$  nanodroplets, *Asian Journal of Physics*, 18: 269-274.

Chutia, S. and Y. S. Jain, 2009. Surface tension and surface thickness of liquid helium-4 near  $\lambda$ -point, *Asian Journal of Physics*, 18: 299-304.

Chutia, S. and Y. S. Jain, 2009. Logarithmic singularities of specific heat and related properties of liquid helium-4 near  $\lambda$ -point, *Asian Journal of Physics*, 18: 305-312.

Dey, S., A. K. Jha and Y. S. Jain, 2009. Ro-vibrational dynamics of  $\text{N}_2\text{O}$  in superfluid  $^4\text{He}$  nano-droplets, *Asian Journal of Physics*, 18: 313-318.

#### **Other activities:**

Dr. T. K. Sinha delivered talks on (i) Selection Rejection Method and its Applications and (ii) Solution of Non Linear Differential Equation via Lattice Discretization in the Indo-German Conference 2009 on PDE Scientific Computing and Optimization Applications organized by IIT, Kanpur during 7-9 October 2009.

Ms. B. Rynjah attended a workshop on Bharat Operating Systems Solutions (BOSS) organised by C-DAC, Kolkata and St. Anthonys College, Shillong on 23<sup>rd</sup> October'2009.

Dr. T. K. Sinha and Mr. P. P. Dey (i) delivered lectures during March 2010 in the 6<sup>th</sup> Orientation Programme (Information Technology) at Academic Staff College, NEHU, Shillong; (ii) attended Workshop on MEMS Technology and its Applications organized by the Department of Electronics & Communication Engineering, NEHU and North Eastern Space Application Centre, Shillong during 25-27 March 2010; and (iii) attended Workshop on "The Future of Nano Electronics" organised by the Department of Electronics & Communication Engineering, NEHU and Sponsored by IEEE Electron Device Chapter on 29-March 2010.

The Computer Centre conducted Computer Typing Test for the post of Data Entry Operator of NEHU and NEIGRIMS.

The Centre generated a revenue of Rs.87,975.00.

## HEALTH CENTRE

**In-Charge** : Dr. I. Hussain

**Telephone** : 2721701, 2721703, 2550025 (O), 2591185 (R)

**Staff:**

**Sr. Medical Officers** : Dr. I. Hussain

Dr. M. Marwein

**Medical Officers** : Dr. T. D. Ch. Momin (Tura Campus)

Dr. C. Mukhim

In addition to Medical Officers, the Centre has two Pharmacists, three Nurses, one Laboratory Technician, one Laboratory Assistant and one Female Medical Attendant.

**Facilities:**

*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 wholesale suppliers and stocked at the Centre. These medicines are issued to the patients based on the prescription by the doctors.

*Dressing Room:* Dressing, injections and minor surgical procedures are carried out in the Dressing Room.

*Ambulance:* Ambulance service is provided during emergency for transporting the severely ill patients from residence to Clinic/Hospital.

*Laboratory:* Bio-Chemical and Clinical pathology tests for blood and urine analysis are performed in the Health Centre.

*In-Patient Treatment:* Patients requiring in-patient treatment are referred to the Hospitals within/outside Shillong depending upon the necessity.

*Credit Billing Facility:* This facility is available to patients admitted in Nazareth and K. J. P. Hospitals in Shillong and C.M.C. Hospital at Vellore.

The Centre always extends First Aid service at sports tournaments.

## NEHU PUBLICATION CELL

**In-Charge** : Prof. A. C. Mohapatra

**Telephone** : 2226316

**E-mail** : nehup@gmail.com

**NEHU Publication Unit** was established with a view to promoting and undertaking publications in various academic areas and for different target groups of the University. It has mainly concerned itself with the Publication of University and undergraduate textbooks, supplementary reading materials, reference books, research works particularly those relating to the North East, Endowment Lecturers delivered in the University and Official publications like the University Acts and Statutes, Ordinances, the Annual Report, NEHU News (quarterly) and The NEHU Journal (Biannually).

Apart from these, NEHU Publications 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 emanating from the various Departments and Centres of the University. The Unit has acquired a double colour demy offset-printing machine and other printing equipments as part of its endeavour to modernize the press.

Three staff of the Cell were deputed to attend the Auto Print Seminar held at Shillong Club premises, on 24<sup>th</sup> February, 2010 to update their knowledge on printing matters.

The Cell had donated free books (two books of each title) to most of the affiliated Colleges of the University with a view to add more titles to their libraries.

The following printing and publication works were taken up during the period under report:

NEHU News: Three issues (quarterly)

The NEHU Journal Volume VII No. 1, Volume VIII No. 1

PG Syllabus pertaining to the Geography Department

Composition, layout, and cover design of the thirty-fifth Annual Report (2008-2009)

Printing of items relating to the 18<sup>th</sup> Convocation

Printing items from exams, P&S, Finance, etc.

Printing of BA Syllabus.

## SOPHISTICATED ANALYTICAL INSTRUMENT FACILITY

**Head** : Professor B. B. P. Gupta  
**Telephone** : 2721801(O), 2550212 (FAX), 2550085 (R)  
**E-mail** : gupta@nehu.ac.in

**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 their institutes may not come in the way of scientists in 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 measurements for R&D work. It also acquires and develops capability for preventive maintenance and repair of sophisticated instruments, and organizes short term courses/workshops on the use and application of various instruments and analytical techniques. In addition, SAIF trains technicians for maintenance and operation of sophisticated instruments and undertakes design and development of instruments/accessories of existing instruments.

### Scientific Staff:

**Professor\*** : R. P. Bajpai, M.Sc. (AMU), Ph.D. (Glasgow)  
(\*Temporarily attached)

**Sr. Scientific Officer** : T. Chakraborty, M.Sc., Ph.D. (NEHU)

**Scientific Officer** : S. Dey, M. Sc., Ph. D. (NEHU)  
B. Dkhar, M.Sc. (NEHU), Ph.D. (GU)  
D. Dey, M.Sc. (NEHU), Ph. D. (RDU)  
P. S. Dkhar, M.Sc. (NEHU), Ph.D. (NEHU)  
S. K. Prasad, M.Sc. (NEHU)  
J. Sohtun, M.Sc. (NEHU)

## **Seminars/Conferences/Symposia/Extension Programmes/ Workshops/ Training:**

### **Organised**

Workshop on “Basic Principles, Preparatory Methods and Application in Scanning Electron Microscope”, 3<sup>rd</sup> - 5<sup>th</sup> November, 2009. Resource persons: Prof. Arun Chattopadhyaya, IIT, Guwahati; Prof. N. Venugopal, Department of Botany, NEHU, Shillong; Dr. S. Dey and Dr. R. Chakraborty, SAIF, NEHU, Shillong (Number of participants: 21).

Workshop on “Atomic Absorption Spectroscopy: Basic Principles, Applications and Practical Demonstrations”, 11<sup>th</sup> - 13<sup>th</sup> November, 2009. Resource persons: Dr. M. Kumar, Chemical Division, AMD, Shillong, Dr. G. C. Saikia and Dr. T. K. Sinha, Chemical Division, GSI, Shillong, Dr. A. Walia, Deptt. Environmental Sciences, NEHU, Shillong and Dr. P. S. Dkhar, SAIF, NEHU, Shillong (Number of participants: 20).

Workshop on “FT-NMR Spectroscopy: Theory, Application and Experimentation”. 16<sup>th</sup>-19<sup>th</sup> November, 2009. Resource persons: Prof. H. S. P. Rao, Department of Chemistry, Pondicherry University, Pondicherry; Prof. B. Myrboh, Prof. K. M. Rao and Dr. S. Aravamudhan, Department of Chemistry, NEHU, Shillong, and Dr. D. Dey, SAIF, NEHU, Shillong (Number of participants: 20).

Seminar on “Basic Mass spectrometer with special emphasis on GC-MS/MS and LC-MS/MS”, 9<sup>th</sup> March 2010 by Dr. Ben Barrs, Application Specialist, M/ S Varian Inc., Netherlands.

Training programmes were conducted on (i) “Application of SEM” for B. Sc. students of Chemistry Department, Shillong College, Shillong on the 16<sup>th</sup> September, 2009 and (ii) “Principle, Preparatory methods and Applications of SEM” for B.Sc. Zoology (Major) students of St. Anthony’s College, Shillong on 13<sup>th</sup> October, 2009.

### **Attended**

Dr. S. Dey attended the “National Seminar on environmental Management”, January 8<sup>th</sup> and 9<sup>th</sup>, 2010 at Dimoria College, Khetri, Kamrup and presented papers entitled (i) “Scanning Electron Microscopic Evaluation of abnormalities in common carp, *Cyprinus Carpio communis* inhabiting Umiam lake”, (ii) “A Transmission Electron Microscopic study on the effect of paper mill effluent in

## Central Services

the gonads of *Puntius sophore*” and (iii) “Possible impact of paper mill effluent on some fish tissue: An ultrastructural approach”.

### **Publications:**

#### **Published Abroad**

Dey. S., S. Singh, R. Chakraborty, R. N. K. Hooroo and K. S. Choudhury, 2009. A Scanning Electron Microscopic study on the cephalic cuticular sensillae of different larval stages of *Antherala assamensis*, an indigenous silkworm species of Northeast India. *Microscopy Research and Technique (USA)*, 72: 924 – 932.

Dey. S., B. Dkhar, R. Chakraborty, S. Choudhury and D. K. Sharma, 2009. Conventional Indoor rearing leads to abnormalities in the ultrastructure of Muga silkworm (*Antherala assemensis*) mid-gut cell microvilli. *Trends in Biosciences*, 2: 14 - 17.

Rentheil, C. Z., A. R. Varman, B. Kharbuli and S. Dey, 2010. Progressive Chorion Morphology: During Egg Development in *Samia ricini* (Donovan). *Microscopy Research and Technique (USA)*, 73: 234 -239.

#### **Funds Received From Agencies other than NEHU:**

DST, Govt. of India, New Delhi –	Non Plan	:	Rs. 13.25 lakhs
	Plan	:	Rs. 8.65 lakhs

#### **Infrastructure Facilities:**

The following fully functional sophisticated analytical instruments are available:

- i. Scanning Electron Microscope (JEOL JSM 6360)
- ii. Transmission Electron Microscope (JEOL JSM 100CX)
- iii. FT-NMR 400 MHz (BRUKER AVANCE II-400)
- iv. LC-MS Spectrometer (Waters ZQ-4000)
- v. Atomic Absorption Spectrometer (Perkin Elmer PE 3110)
- vi. Graphite Furnace (Analytik Jena AG Vario 6)
- vii. CHN-OS Analyser (Perkin Elmer PE 2400)
- viii. Liquid Nitrogen Plant (Philips PLN 106)
- ix. Microscope with Image Analyser (LEICA DMRX)

The process for procuring a new Transmission Electron Microscope (200 KV) fitted with a 7 Mega pixel CCD Camera (JEOL, Japan) was initiated.

**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.

**Instrument Uses:**

Instrument	Total number of samples analyzed	Total number of users utilizing the facility
Scanning Electron Microscope (JEOL JSM 6360)	709	70
Transmission Electron Microscope (JEOL JSM 100CX)	544	37
FT-NMR 400 MHz (BRUKER AVANCE II-400)	2134	23
LC-MS Spectrometer (Waters ZQ-4000)	687	58
Atomic Absorption Spectrometer (Perkin Elmer PE 3110) and Graphite Furnace (Analytik Jena AG Vario 6)	3305	33
CHN-OS Analyser (Perkin Elmer PE 2400)	159	10
Liquid Nitrogen Plant (Philips PLN 106)	~3500 litres	15

**Total Revenue Earned:** Rs. 11,08,862.00

**Research Projects:**

**Ongoing**

Endocrine Regulation of Reproduction and Enhancement of Facundity in the Muga Silkworm *Antharaea assamensis* Helfer. Principal Investigator: Dr. C. Z. Renthelei, Central Muga & Eri Research & Training Center, Jorhat, Assam; (Co-investigator: Dr. S. Dey). Sponsored by DST.

## Central Services

Khasi Traditional Edibles & Their Food-Value with Reference to Some Major Nutrients. Principal Investigator: Dr. Sudip Dey (Co-investigator: Dr. R Chakraborty and Dr. S. Singh). Sponsored by Ministry of Tribal Affairs.

### **Other Activities:**

Dr. S. Dey delivered invited talks on (i) “Role of Electron Microscopy in assessing environmental pollution” at the National Seminar on environmental Management, January 8<sup>th</sup> and 9<sup>th</sup>, 2010 at Dimoria College, Khetri, Kamrup; (ii) “Electron Microscopy and its use in Physical and Biological Sciences” in the DBT-sponsored Spring School in Physics, Department of Physics, St. Anthony’s College, Shillong, and acted as an expert in the Innovation of Science pursuit for Inspired Research (INSPIRE) programme of DST, co-ordinated by Indian National Science Academy (INSA) on 29<sup>th</sup> March 2010. Dr. S. Dey served as referee for the international journals Microscopy Research and Technique (USA), Journal of Entomology (U.K.), Journal of Structural Biology and Biophysics (U.K.), African Journal of Pharmacology (South Africa), Journal of Electron Microscopy (Japan) and Bio-architecture (USA).

SAIF-NEHU hosted visits of (i) M. Sc. (Zoology) students of NEHU on 24<sup>th</sup> June, 2009, (ii) B. Sc. students of the Department of Botany, Sibsagar College, Assam on 1<sup>st</sup> October, 2009, (iii) M. Sc. students of Central Agricultural University, Umiam Campus, Barapani, Meghalaya on 26<sup>th</sup> October, 2009, (iv) B. Sc. students of D. M. College of Science, Imphal on 2<sup>nd</sup> November, 2009, and (v) B. Sc. students of the Department of Botany, B. N. College, Dhubri, Assam on 15<sup>th</sup> December. During the visits, demonstrations of major instruments were organized and students were briefed about the principle of functioning of the instruments and their major usage for research in the fields of physical and life sciences.

## UNIVERSITY SCIENCE INSTRUMENTATION CENTRE

**Head** : Prof. P. V. Koparkar  
**Telephone** : 2721161 (O), 2551335 (R)  
**Email** : chimanee@sancharnet.in

**Thrust Area of Research in the Centre:** The main thrust area of research in the Centre is related to Instrumentation and its allied fields. At present Sophisticated Seismic Instrumentation and Radiation detection Instrumentation are in progress.

**Brief Statement of Academic Activities:** The Head and Technical officers of USIC have been taking theory and practical classes in the Departments of Basic & Social Sciences and Electronics & Communication Engineering, School of Technology, NEHU, respectively.

### Faculty:

Professor : P. V. Koparkar, M.Sc, Ph.D. (Nagpur)  
Technical Officers : S. De, M.Sc. (Gau), M.Tech.(Tezpur)  
F. Cajee, B.E., P. G. Diploma (Gau)

### Courses conducted:

Practical classes related to Mechanical and Carpentry Workshop are being conducted by the USIC staff for engineering students of the School of Technology. Prof. P. V. Koparkar, as Adjunct Professor in the Department of Basic Sciences & Social Sciences, has been teaching Physics (Optics, Atomic, Molecular and Laser Physics) to the 1<sup>st</sup> and 2<sup>nd</sup> Semester students of ECE and IT Departments. Mr. S. De and Mrs. Frieda Cajee have been teaching theory and practical papers to the students of different semesters of ECE and IT Departments.

### Seminars/Conferences/Symposia/Workshops/Extension Programmes:

#### Attended

Prof. P. V. Koparkar attended the International Conference on Instrumentation ICI 2009 and National Symposium on Instrumentation (NSI-34) from 21 – 23 January 2010 and presented two papers on “A compact Seismic Vertical Sensor for Seismic studies” and “Development of an UV Monitor for accurate measurement of radiation flux”.

## **Research Projects:**

### **Ongoing**

(1) Design and fabrication of a high resolution three axis laser based computerized seismometer; (2) Seismic optical sensor for the detection of Atomic Explosions; and (3) Piezoelectric powered Radiation Detectors. Principal Investigator: Prof. P. V. Koparkar (for all the three projects).

### **Honours/Awards/Recognition:**

Prof. P. V. Koparkar has been elected as the member of the Governing Council, Instrumentation Society of India for a period 2008 – 2010.

### **Other Activities:**

Prof. P. V. Koparkar delivered four lectures to the participants of the Refresher Course in English organized by the Department of English, NEHU from 25<sup>th</sup> February to March 18, 2009 on the topics: “A brief overview of Information Technology”, “Effective use of teaching aids in Teaching and learning English”, “Future trends in Education: The Cyber University” and “The Internet and Teaching today”. Prof. P. V. Koparkar attended in the Workshop on MEMS Technology and its Applications organized by the Department of ECE on March 25 – 27, 2010.

# X

## DEVELOPMENT DEPARTMENTS

### PLANNING DEPARTMENT

The Planning Department designs the Vision Plan for the overall development of the University with respect to academic programme, research activity, welfare programme, and infrastructure and also monitors its implementation.

During XI Plan period an amount of Rs. 12380.00 lakhs under the Head “General Development” was approved for the University. In addition, an amount of Rs. 517.50 lakhs was approved under the Head “Merged Scheme” and Rs. 800.00 lakhs for payment of Fellowship to M.Phil./Ph.D. students. The General Development Head includes items like construction of buildings, creation of six new Departments, viz., Bio-Medical Engineering, Energy Engineering, Nano-Technology, Architecture, Tourism and Hotel Management, and Journalism and Mass Communication, purchase of equipments and books, staff salary for teaching/non-teaching posts approved for creation during the XI Plan period, etc. The Merged Scheme includes funds for seventeen items for the entire plan period, which were earlier sanctioned by the UGC on year to year and item to item basis. Till the end of the year 2009-2010, the University received grants of Rs. 6615.85 lakhs under General Development, Rs. 517.50 lakhs under Merged Scheme and Rs. 314.36 for payment of Fellowship. The University is yet to start the new six Departments mentioned above for which process is on.

In addition to the XI Plan grants mentioned above, the University also received grants as mentioned below:

	Amount in lakhs approved	Amount in lakhs received up to 31.3.2010
1. North East India Centre for Diversity (NEICOD)	Rs. 1899.00	Rs. 1422.00

### Development Departments

2.	100 seated Guest House	Rs. 389.84	Rs. 345.00
3.	Development of Tura Campus	Rs. 4000.00	Rs. 1983.00
4.	Faculty of Engineering and Management	Rs. 1800.00	Rs. 1800.00

Construction works for items 1, 2 and 4 (Faculty of Engineering) are going on, whereas administrative process for items 3 and 4 (Faculty of Management) have already been taken up.

## CAMPUS DEVELOPMENT DEPARTMENT

The Campus Development Department is concerned with all the construction works and related services. The work/project report is as follows:

Sl. No.	Name of Work/Project	Status
1.	Construction of 7 (seven) Nos. warden's residence at Permanent Campus, NEHU, Shillong.	Work in progress
2.	Construction of 1 <sup>st</sup> Floor of Bio-Informatics Centre at Permanent Campus, NEHU (Civil & Plumbing works), Shillong.	Completed
3.	Construction of Extension Block of Department of Zoology and Botany at Permanent Campus, NEHU, Shillong.	Completed
4.	Construction of Extension Block of Department of Physics at Permanent Campus, NEHU, Shillong.	Completed
5.	Construction of 2 <sup>nd</sup> Floor over the existing Department of Bio-Technology at Permanent Campus, NEHU, Shillong	Completed
6.	Construction of 2 <sup>nd</sup> Floor over the existing Centre for Environmental Science Building at Permanent Campus, NEHU, Shillong.	Completed
7.	Construction of 7 Nos. 100 seated of Hostels Building at Permanent Campus, NEHU, Shillong.	Completed
8.	Construction of 100 seated Guest House Building at Permanent Campus, NEHU, Shillong.	Completed
9.	Construction of 42 units of Non-teaching Staff-Quarters at Permanent Campus, NEHU, Shillong.	To be Completed

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- |     |  |                  |
|-----|--|------------------|
| 10. | Raising of Additional Floor over the existing Building (Block No.4,5,6,7,8,9 & 10) for School of Technology at Permanent Campus, NEHU, Shillong. | Work in progress |
| 11. | Proposed Extension of Department of Law at Permanent Campus, NEHU, Shillong.   | Work in progress |
| 12. | Construction of Cluster of Class Rooms at Permanent Campus, NEHU, Shillong.  | Work in progress |
| 13. | Construction of NEICOD at Permanent Campus, NEHU, Shillong.  | Work in progress |

Sl.No.	Name of Work/Project	Status
14.	Construction of 16 Nos. of P-Type Teachers Quarters at Permanent Campus, NEHU, Shillong.	Work in progress
15.	Construction of 4 <sup>th</sup> Block (Six units) of International Student's Hostel at Permanent Campus, NEHU, Shillong .	Work in Progress

### TURA CAMPUS

- |     |   |                  |
|-----|---|------------------|
| 16. | Construction of Main Road and Link Road (Phase-I) at Tura Campus, NEHU.       | Completed        |
| 17. | Construction of Building for Academic Block at Tura Campus, NEHU.             | Work in progress |
| 18. | Construction of Building for Faculty Block (Management) at Tura Campus, NEHU. | Work in progress |
| 19. | Construction of Boy's Hostel Building at Tura Campus, NEHU.                   | Work in progress |
| 20. | Construction of Girl's Hostel Building at Tura Campus, NEHU.                  | Work in progress |
| 21. | Construction of Library Block at Tura Campus, NEHU.                           | Work in progress |
| 22. | Construction of Main Road and Link Road (Phase-II) at Tura Campus, NEHU.      | Work in progress |

## COLLEGE DEVELOPMENT COUNCIL

**Director** : Dr. C. R. Diengdoh  
**Telephone** : 2721201, 2721202, 2721203.  
**E-mail** : [dircdc@nehu.ac.in](mailto:dircdc@nehu.ac.in)

The College Development Council has the objectives to provide a leadership role and to extend help, guidance and advice to all the Colleges admitted to the privileges of the University. The Council is the Principal Advisory Body to the Executive Council, through the Academic Council, in all matters relating to the affiliated Colleges. The Council is constituted every two years with composition as described in NEHU Ordinance OB-7 and it has representatives from the Principals and teachers of the affiliated Colleges. The Council provides a forum for taking measures for continuously improving the general educational standards in the affiliated Colleges.

The University at present has 66 affiliated Colleges, of which 32 Colleges are permanently affiliated and 34 Colleges are provisionally affiliated. Besides affiliating Colleges located within the State of Meghalaya, the University also considers affiliating Minority Educational Institutions as per the provisions of the National Commission for Minority Educational Institutions (NCMEI) Act located anywhere in the country. At present, the Colleges affiliated under the provisions of NCMEI are located in the States of Assam, Jharkhand, Andhra Pradesh and Gujarat.

The College Development Council as per University Grants Commission rules appointed experts and Vice-Chancellor's nominees to represent the University as members of Committees for Selection and Placement of Lecturers in the affiliated Colleges. The College Development Council also takes measures to appoint NEHU representatives to the Governing Bodies of the affiliated Colleges.

The College Development Council also represented the University on Committees for (i) recommendation of College Lecturers for award of University Grants Commission Teacher Fellowship under Faculty improvement Programme for doing M. Phil/Ph.D.; (ii) physical verification of progress of Women's Hostel construction under the University Grants Commission funding scheme for Construction of Women's Hostel; and (iii) University Grants Commission Interface Meeting of College Principals for determining the XIth Plan allocation of funding to the permanently affiliated colleges under NEHU.

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The College Development Council functions as the liaison between the affiliated Colleges and the University Grants Commission in forwarding various proposals of Colleges to the UGC for obtaining funds under the different schemes for overall development of Colleges.

The actions taken on affiliation matters during 2009-2010 are as follows:

- (i) One College named Regional Institute of Science and Technology (RIST), Baridua, Ri-Bhoi District, Meghalaya was granted opening permission and provisional affiliation under the category of Minority Educational Institution.
- (ii) Nabon Synod College, Shillong was granted permanent affiliation.
- (iii) Provisional affiliation was granted to Post Graduate Courses, viz. Anaesthesiology, Pathology, Microbiology and Obstetrics & Gynaecology in the North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences (NEIGRIHMS), Shillong, which is a premier medical institute of the Ministry of Health and Family Welfare, Govt. of India.

- (iv) Several Inspection Teams were constituted to visit Colleges for considering grant of permission/affiliation under the following categories:

Opening Permission to New College	: 1 College
Provisional Affiliation to New Subject(s)/Course(s)	: 6 Colleges (1 PG & 5 UG)
Renewal of Provisional Affiliation	: 19 Colleges
Permanent Affiliation	: 1 College
Permanent Affiliation to Subject(s)/Course(s) of study in permanently affiliated Colleges	: 2 Colleges
Permission to start New Subject(s)/Course(s) of stWork in progress study in an affiliated College/Institution	: 2 Colleges

Colleges visited by various Inspection Teams during the year are (i) Women's College, Shillong, (ii) Morning Star College, Shillong, (iii) Goodwill College, Shillong, (iv) St. Dominic's College, Shillong, (v) Sankardev College, Shillong, (vi) Raid Laban College, Shillong, (vii) Umshyrpi College, Shillong, and (viii) Tirot Sing Memorial College, Mairang.

During 2009-2010, one of the permanently affiliated Colleges, St Edmund's College, Shillong, has been reaccredited by the National Assessment and Accreditation Council, Bangalore with Grade A.

## ACADEMIC STAFF COLLEGE

**Director** : Prof. Rakesh Mohan  
**Telephone** : 2721401/2721402 (O), 2504319 (R)  
**Fax** : 2550103  
**E-mail** : asc@nehu.ac.in; mohanrakeshdr@yahoo.co.in

**Thrust Area:** 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 conducts Refresher Courses (RCs) and Orientation Programmes (OPs) for the faculty of Universities and Colleges located in the North-Eastern region as well as in other parts of the country. RCs and OPs are conducted in subjects approved by the UGC, New Delhi, in order to update and acquaint the participating teachers with the latest developments and recent trends in the 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.

**Brief Statement of Academic Activities:** The UGC-ASC conducted a total of 13 RCs, 3 OPs and 1 Principal's Workshop, and trained a total of 390 teachers belonging to various universities and colleges recognized by the UGC. Further, the UGC-ASC established a Computer Laboratory with 24 numbers of state of the art PCs, a Server, Network Laserjet Printers, a DLP Projector, a Scanner, etc. The Computer Lab is used for training the participants of the OPs and RCs as well as the faculty, research scholars and students of the University in information technology with special reference to teaching and research.

### Faculty:

**Professor** : Rakesh Mohan, M.Sc., Ph.D. (BCKV)  
**Reader** : Quendarisa Kharbuli, M.Sc., Ph.D. (NEHU)  
**Assistant Professor** : Kuheli Biswas Das, M.Sc., Ph.D. (NEHU)

**Visiting Professors:** Following resource persons were invited to deliver lectures for the OPs and RCs (2009-10):

*Refresher Course in Economics* - Prof. Manoj Pal, ERU, Indian Statistical Institute, Kolkata; Prof. Soumyendra Kishore Dutta, Burdwan; Prof. R. N. Bhattacharjee, Kolkata; Prof. M. P. Bezbaruah, Gauhati University, Guwahati.

*Refresher Course in Hindi* - Prof. Bishwanath Prasad, Assam University, Silchar; Dr. Amulya Barman, Cotton College, Guwahati; Prof. N. K. Pandey, Rajiv Gandhi University, Itanagar; Prof. Devraj, Manipur University, Imphal; Prof. K. N. P. Magudh (Retd.); Dr. V. N. Tripathy, Delhi University, Delhi; Prof. A. K. Mishra, NERIE, NCERT, Shillong; Dr. O. P. Bharati, Shillong; Prof. Arun Prakash Mishra, S. P. University, V. V. Nagar; Prof. Arun Hota, West Bengal State University, Kolkata; Dr. Ved Prakash, Aligarh Muslim University, Aligarh.

*Refresher Course in Geography* - Prof. R. K. Rai, Sagar; Prof. A. K. Bhagabati, Gauhati University, Guwahati; Dr. Bimalkar, Gauhati University, Guwahati; Dr. Ratneswar Barman, Gauhati University, Guwahati; Prof. Suryakani, Punjab University, Chandigarh.

*Refresher Course in Sociology* - Prof. Ravindra K. Jain, ICSSR, Palamvihar; Prof. Shobhita Jain, Palamvihar.

*Refresher Course in Political Science* - Prof. Jaytilak Guha Roy, IIPA, New Delhi; Prof. M. Hussain, Gauhati University, Guwahati; Prof. G. Haragopal, University of Hyderabad, Hyderabad

*Refresher Course in Chemistry* - Dr. D. K. Das, Gauhati University, Guwahati; Dr. Ramesh Ch Deka, Tezpur University, Tezpur; Prof. P. S. Kalsi, Retd. Professor, Punjab Agriculture University, Chandigarh; Prof. P. J. Das, Gauhati University, Guwahati; Dr. C. R. Bhattacharjee, Assam University, Silchar; Dr. Nabin C. Barua, North East Institute of Science & Technology, Assam

*Refresher Course in Zoology* - Prof. D. Raychaudhuri, Calutta University; Prof. Abhik Gupta, Assam University, Silchar; S. Raani, Head, CPRS, Shillong; Dr. S. P. Biswas, Dibrugarh University, Dibrugarh; Prof. A. K. Ray, Visva Bharti University, Santiniketan.

*Refresher Course in Khasi* - Prof. K. C. Baral, EFL University, Shillong; Prof. Umesh Deka, Gauhati University, Guwahati; Dr. D. Knolie, Nagaland University, Kohima; Dr. O. D. V. Ladia, Shillong; Dr. (Sr.) P. Kharakor, Ex Principal, St. Mary's College, Shillong; Dr. B. R. Kharlukhi, Shillong; Dr. S. R. Lyndem, Principal, UCC, Umiam; Prof. H. Giri, Martin Luther Christian University, Shillong; Dr. O. L. Snaitang, Shillong; Dr. T. K. Bamon, EFL University, Shillong.

*Refresher Course in Education* - Prof. Swarnalata Das, Gauhati University, Guwahati; Prof. Dulal Mukhopdyay, Kalyani University, West Bengal; Dr. T. Lumding, Rajiv Gandhi University, Arunachal Pradesh; Prof. K. C. Kapoor, Rajiv Gandhi University, Arunachal Pradesh; Prof. S. K. Gupta, Nagaland University, Kohima.

## Development Departments

*Refresher Course in Commerce* - Dr. S. K. Mahapatra, Gauhati University, Guwahati; Dr. A. P. Singh, Gauhati University, Guwahati; Prof. V. N. Jha, IIM, Calcutta; M. Pariat, MD, Meghalaya Handicraft & Handloom Corporation; Prof. R. K. Bal, Utkal University, Bhubaneswar; Prof. S. Shahjahan, IIM, Shillong; Prof. A. Gupta, Vidyasagar University, W. B.; Mr. N. Uttam Singh, ICAR RC for NEH Region, Umiam; Dr. Sanjeeb Kakoty, IIM, Shillong; Mr. D. K. Areng, Director of Industries, Govt. of Meghalaya, Shillong.

*Refresher Course in History* -Prof. Ravindra Kumar, IGNOU, New Delhi; Prof. J. L. Dawar, Mizoram University; Dr. Sajal Nag, Assam University, Silchar; Mr. N. Uttam Singh, ICAR RC for NEH Region, Umiam; Dr. O. L. Saitang, Shillong.

*Refresher Course in English* - Dr. A. Das, Centre for Studies in Social Science, Kolkata; Dr. S. Mandal, Visva-Bharati, Santiniketan; Ms. P. Mukhim, Shillong Times, Shillong; Dr. N. N. Chakraborty, Rabindra Bharati University, Kolkata; Dr. Himadri Lahiri, Burdwan University, W. B.; Prof. Gautam Biswas, Assam University, Silchar; Prof. N. Hasan, Shillong; Dr. A. S. Guha, IGNOU, Regional Centre, Shillong; Dr. Bindu Puri, Delhi University, Delhi; Prof. Sujata Miri, New Delhi; Prof. P. C. Kar, Baroda; Prof. K. C. Baral, Director, EFL University, Shillong.

*Refresher Course in Botany* -Prof. Ian Head, University of Newcastle Upon Tyne, U.K.; Prof. A. K. Bhatnagar, University of Delhi, Delhi; Prof. A. K. Pandey, University of Delhi; Dr. S. B. Babbar, University of Delhi Delhi; Dr. R. Chaturvedi, IIT, Guwahati; Dr. N. C. Talukdar, IBSD, Imphal.

*6<sup>th</sup> Orientation Programme (IT)* - Mr. Timothy Dkhar, Technical Director & SIO, NIC, Shillong; Mr. Pyndaplang Nongpiur, Senior Systems Analyst, NIC, Shillong; Mr. Sabyasachi Choudhury, Scientific Officer, NIC, Shillong; Mrs. Candida Shadap, Senior Systems Analyst, NIC, Shillong; Mr. Chinmoy Bhattacharya, Principal Systems Analyst, NIC, Shillong; Mrs. Rosemary Maisnam, Scientific Officer, NIC, Shillong; Mr. Robert Tariang, Senior Systems Analyst, NIC, Shillong; Mr. Sekhar Dey, Principal Systems Analyst, NIC, Shillong; Dr. P. Manikandan, Head, Division of HRD, NAARM, Rajendranagar, Hyderabad; Ms. Tricel Nongkhlaw, Asstt. Programmer, NIC, Shillong; Mrs. Wanraplin Rynjah, Senior Systems Analyst, NIC, Shillong; Mr. Benos Lyngskor, Principal Systems Analyst, NIC, Shillong; Dr. T. K. Bamon, EFL University, Shillong; Mr. Nageshwar Nath, Maintenance Engineer, Consortium for Educational Communication, New Delhi.

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*7<sup>th</sup> Orientation Programme (General)* - Dr. P. Manikandan, Head of Division, NAARM, Hyderabad; Mr. Nageshwar Nath, Maintenance Engineer, Consortium for Educational Communication, New Delhi; Mr. P. Nongpiur, Senior Systems Analyst, NIC, Shillong; Prof. Debjani Roy, Officer on Special Duty, IGNOU, Shillong; Mrs. Rosemary Mainsnam, Senior System Analyst, NIC, Shillong; Dr. J. Chatterjee, EFL University, Shillong; Dr. T. K. Bamon, EFL University, Shillong; Mrs. Candida Shadap, Senior Systems Analyst, NIC, Shillong; Mr. T. Dkhar, SIO-Director, NIC, Shillong.

*8<sup>th</sup> Orientation Programme (General)* - Dr. A. Ranganath, Principal ICFAI, College of Education, Agartala; Prof. C. B. Sharma, IGNOU, New Delhi.

### **Courses Conducted:**

<u>Orientation Programme</u>	<u>Duration</u>	<u>No. of Participants</u>
6 <sup>th</sup> Orientation Programme (IT)	25 <sup>th</sup> Feb. to 25 <sup>th</sup> March, 2010	24
7 <sup>th</sup> Orientation Programme (General)	17 <sup>th</sup> March to 14 <sup>th</sup> April, 2010	43
8 <sup>th</sup> Orientation Programme (General)	29 <sup>th</sup> March to 26 <sup>th</sup> April, 2010	31

<u>Refresher Course</u>	<u>Duration</u>	<u>No. of Participants</u>
Economics	June 17 to July 7, 2009	28
Hindi	August 3 to August 24, 2009	22
Geography	August 31 to September 20, 2009	17
Sociology	September 1 to September 21, 2009	20
Political Science	5 <sup>th</sup> October to 26 <sup>th</sup> October, 2009	17
Chemistry	October 7 to October 28, 2009	26
Zoology	November 3 to November 23, 2009	17
Khasi	November 5 to November 25, 2009	32
Education	November 10 to November 30, 2009	20
Commerce	November 27 to December 17, 2009	24
History	November 27 to December 17, 2009	23
English	February 23 to March 15, 2010	25
Botany	February 26 to March 18, 2010	21

## Development Departments

**Seminars/Conferences/Symposia/Workshops/Extension Programmes:** The UGC-Academic Staff College organized the first ever Principal's Workshop on "Financial Management" from 7<sup>th</sup> - 9<sup>th</sup> December, 2009 in the Conference Hall of the Old Guest House, NEHU, Permanent Campus, Shillong. The Workshop was attended by 21 Principals from various affiliated colleges of NEHU, within Meghalaya. Mr. B. K. Mohanty, Accountant General (A&E) Meghalaya and Prof. Sujit Sikidar, Department of Commerce, Gauhati University, Guwahati were invited to deliver lectures in the workshop.

**Infrastructure Facilities:** The following equipments were procured: Laptop computers (1 No.), PC (9 Nos.), DLP Projectors (2 Nos.), LaserJet Printer (6 Nos.), Digital SLR Camera and Flash (1 No.), Amplifier (1 No.), Wired microphone (2 Nos.), Cordless microphone (2 Nos.), Lapel Microphones (1 No.), Speakers (1 pair), Insta-lock Projection Screen (2 Nos.), Spiral Biding Machine (1 No.), Lamination Machine (1 No.) and Coffee Vending Machine (1 No.). The UGC-ASC also has established a Guest House with 50 beds capacity for accommodating out-station participants of Refresher Courses and Orientation Programmes.

**Funds Received from Agencies other than NEHU:** The Academic Staff College was sanctioned Rs.55.00 Lakhs for the year 2009-10 from the University Grants Commission, New Delhi, for conducting Refresher Courses and Orientation Programmes in approved subjects and for meeting other expenditures.

## CENTRAL LIBRARY

**Librarian** : Dr. I. Majaw  
**Telephone** : 2721251 (O)  
**E-mail** : imajaw@nehulib.ac.in

The Library system continued to offer services to an increasing academic community consisting of students, research scholars and faculty members. As part of modernizing drive, efforts were made on proliferation of online related services in the form of e-journals, full text access and Inter Library Loan services through J-gate Custom Content for Consortia (JCCC). This was as per the guidelines laid down by UGC INFONET Digital Library Consortium. During this phase the library also strengthened the subscription to e-resources in the form of e-journals, databases and e-books. NEHU Library also enrolled as a member of the American Libraries in India for a period of three years. Related with new activities and services, a paradigm shift was imminent with the Library actively supporting the Library Digitization Project under UPE by allocating space within the Library and provision of highly skilled manpower for building up an Institutional Repository for NEHU. The Library also continued to extend its consultation services to students, research scholars, teachers from outside the university system including participants of various seminars, workshops, Refresher and Orientation courses as conducted by the University during this period.

### Progress during the period:

(i)	Library Budget		Rs. in lakhs	
1.	Books	Non-Plan	19.00	40.50
		Plan	21.50	
2.	Periodical	Sciences	76.00	
		Non-Sciences	20.00	96.00
3.	Other Charges			5.00
4.	Grant under Central Facilities for Infrastructure of new Department	Plan		75.00

## Development Departments

5. Grant Books and Journals Plan 100.00

Grand Total 316.50

(ii)	Library Collection	:	2,58,128 Vols.
(iii)	Book added during the Year	:	4257 Vols.
(iv)	Periodical Subscription	:	314
(i)	Foreign Journals	:	185
(ii)	Indian Journals	:	129

### Reader's including online services

#### (1) Enrolment

(i)	Under Graduate Students	:	684
(ii)	Post Graduate Students	:	2016
(iii)	Research Scholars	:	1227
(iv)	University Teachers	:	334
(v)	Non-Teaching Staff	:	334
(vi)	Technical Staff	:	89
(vii)	Visiting Lecturer/Professors	:	13
(viii)	Others (Including College Teachers)	:	59

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Total No. of Registered Members : 4941

(2) Daily Average No. of Books issued/return/renewal (including Law Dept.): 565

(3) Daily Average No. of users who availed consultation services

(including Law Dept.) : 380

(4) Daily average internet users : 40

(5) Photocopying services : 1,04,555 copies

(6) Printing Services : 9706 copies

(7) Resources sharing under UGC INFONET Digital : 575 articles

Library Consortium Inter Library Loan Services  
using JCCC dispatched to universities

- (8) NEHU usage of UGC INFONET Digital Library : 1,04,942 articles  
Consortium e-journals depicted by total  
articles downloaded during the period

**Initiatives during the period:**

(i) **Awareness cum Orientation Programme for General Users**

An awareness cum orientation programme was co-ordinated by the Documentation Section of the Library during August-September 2009 for the fresh admitted and research scholars of the university. The aim of this programme was to teach the potential users with methods and procedure to acquire relevant information and also to equip them with latest information retrieval and resource sharing skills. Users, after attending this programme were able to retrieve the various information resources available both in print and electronic formats, subscribed/purchased by the Library and also through the UGC INFONET Digital Library and INDEST-AICTE Consortium.

(ii) **Exposure to e-resources**

The Computer Unit of the Library from time to time arranged trial access to various electronic resources from various publishers in the form of full-text e-journals, e-books and databases for a period of two month or more depending on the publisher or as when requested by the users of NEHU. For the convenience of the users hyperlinks supplied by the publishers are placed on the Library's website (<http://www.nehu.ac.in/library>) for users benefit. During this period the following e-resources/publishers activated trial access for NEHU.

- (a) Emerald e-books (social sciences and Management Xtra 175
- (b) Springer E-books Collection
- (c) SIAM E-books

(iii) **Membership with American Libraries in India**

At the start of the period, Central Library, NEHU enrolled as a member of the American Libraries in India. This membership allows registered members of the Library to borrow information resources of various type that are available with American Libraries in India but not available in NEHU. This facility enables users in NEHU to gain access to the online catalogue of American Libraries in India and borrow either books, videos, etc. from them to supplement information required for teaching and research purposes. Though this service at present

## Development Departments

is available only for the faculty members of the university, it is likely to be extended to research scholars if demands arise. For the convenience of the users hyperlinks leading to the American Libraries in India online Catalogue have been provided on the Library's website (<http://www.nehu.ac.in/library>).

### (iv) **Subscription to e-journals and databases**

Through annual funds allocated to respective departments along with support from grant through central Facilities, the Library was able to subscribe to the following e-resources and database which were used by the users from various academic departments of the university.

- (a) Biological Abstracts
- (b) IEL Online (241 titles, single user) along with INDEST-AICTE Consortium membership.
- (c) Indian Statistical database (IndiaStat.com)
- (d) Gale Credo Reference
- (e) Academic Search Premier (EBSCO host database)

For the convenience of the users hyperlinks leading to the above respective home pages are being provided on the Library's website (<http://www.nehu.ac.in/library>) for the convenience of the users.

### **Improvements during the period:**

#### (i) **Procurement of additional furniture/equipments**

With funds made available for furniture/equipment to improve library services, the following furniture/equipment were procured during the period under Central Facilities.

(a)	Slotted Angle Racks	:	72 nos.
(b)	Wooden Chair with Padded Seats	:	30 nos.
(c)	Handheld Barcode Scanner	:	3 nos.
(d)	Laser Printers	:	4 nos.
(e)	SMF Batteries of 6KV UPS	:	16 nos.
(f)	Extension of UPS power points	:	25 points
(g)	Repair of 6KVA UPS	:	1 nos.

- (h) Summit X150-24t 24 10/100 computers : 5 nos.  
Networking Switch
- (i) 4 Port KVM Switch : 2 nos.
- (j) DDR RAM : 5 nos.
- (k) Patch Cords : 16 nos.

**(ii) Improvement of electrical power supply to Library**

The auto-generator (125KVA) for the Central Library installed during the year ensured un-interrupted lighting and was maintained in the library for the benefit of the readers and also to support the electrical power requirements for housekeeping works.

**(iii) Improvement of Internet Bandwidth in relation to library services**

The up gradation of the internet bandwidth from ERNET to 2MBPS along with the availability of another bandwidth of 8MBPS from BSNL enhanced speed access and usage of the e-journals subscribed by the library and those available through the UGC Infonet Digital Library Consortium. This was reflected in the usage statistics provided by INFLIBNET Centre, Ahmedabad for NEHU (total download for 2009 is 1,04,942 full-text article). These included articles downloaded from 22 publishers, 6 bibliographic database and open access journal available through the consortium.

**(iv) Important activities/steps accomplished toward improvement of library services**

The following tasks were taken up in this regard:

- (a) Information resources available in CD ROMS (300 Nos.) were catalogue and are Searchable through OPAC.
- (b) Data Entry of Back Volumes in the database of more than 12000 entries was completed.
- (c) Bar coding of new books started.

**Academic contributions:**

**(i) Teacher Assignments in academic departments during the period**

The following officers were engaged as Guest Lecturers during the period.

## Development Departments

Shri F. R. Sumer, Information Scientist taught a paper "Information Technology for Business" in the Department of Commerce, NEHU, Shillong.

### (ii) **As resource persons in Orientation Programme, Refresher Course, etc.**

The following officers were engaged as Resource Persons during the period.

(a) Dr. Lalmachhuana, Documentation Officer, Shri F. R. Sumer, Information Scientist and Shri M. Rana delivered lectures on topics related with information resources, retrieval methods, Digital Libraries and Internet Usage in various UGC sponsored Orientation & Refresher Courses conducted by the UGC-Academic Staff College, NEHU for various discipline during the period.

(b) Shri F. R. Sumer, Information Scientist was invited as a Resource Person for a tutorial "Building Digital Libraries" during a National Seminar cum Workshop under the theme "Management of Libraries in digital Environment" organized by Rev. B. M. Pugh Library, Assam Agricultural University, Jorhat, during 28-20 May 2009.

### (iii) **As participants to workshops, seminars, etc.**

Shri F. R. Sumer, Information Scientist was nominated from NEHU and attended the international Conference on Academic Libraries, 2009 (ICAL 2009) organized by the Delhi University Library system during 5-9 October 2009 in University of Delhi, New Delhi, India.

Shri M. Rana, Asst. Librarian participated in the National Seminar on "Global Economic Crises & Indian Industry" organized by Department of Commerce, NEHU during 26-27 March 2010 at NEHU, Shillong.

### (iv) **Training Imparted to other institutions**

The following staff was engaged as Resource Persons during the period:

Smt. N. L. Ranee, Junior Library Attendant, attended as Resources Persons in the Induction-cum-Orientation Programme for B.Ed. Teachers Trainees session conducted by PGT College, Shillong in their premises on February 2010.

### **Other information:**

#### **Revenue collected during the year**

Reprography revenue	:	Rs. 1,20,195.00
Consultation fee	:	Rs. 7960.00
Overdue fines	:	Rs. 7845.00

## LIBRARY (TURA)

Library, NEHU Tura Campus, is the only functional automated Library that not only caters to the needs of the faculty, research scholars, students and non-teaching staff of NEHU, but is also accessible to other neighboring academic institutions of the entire Garo Hills.

Books for both Tura Campus Central Library and Library of the Department of Management have been made available on 'On-Line-Public-Access Catalogue' (OPAC) through computer processed data base. Internet facilities are also extended to the students, research scholars and faculty members to access the desired reading materials for their academic enhancement.

### Library Budget (Non-Plan)

(i)	Book Grant	:	Rs. 3.90 lakhs
(ii)	Periodical Subscription	:	Rs. 7.35 lakhs
	11 <sup>th</sup> Plan Allocation	:	Rs. 3.00 lakhs

### Collection Development

(a)	No. of Journals Subscribed	:	113
	(i) Indian Journals	:	77
	(ii) Foreign Journals	:	36
(b)	Books Added	:	897 vols.
	(i) Purchased	:	656
	(ii) Gifted	:	241
(c)	Total Book collection upto 31.03.2010	:	18,578 vols.
	(i) Purchased	:	17,948
	(ii) Gifted	:	630

### Library Membership Statistics

(a)	Students of 5 (Five) P.G departments	:	280
(b)	Research Scholars	:	20
(c)	Faculty Members	:	34

## Development Departments

(d)	Guest Lectures	:	10
(e)	Non-Teaching Staff	:	34
			<hr/>
	Total		378

### Library Circulation Statistics

- \* (i) Books Issued : 27941
- \* (ii) Books Returned : 26434
- \* (iii) Consulted : 64,938

\* (This include the statistics of Management Library also)

### Reprography Unit of Campus Library

Total Exposures provided : 40,669

### Technical and Library Automation Unit

- (i) Books Classified : 656 vols.
- (ii) Data Base\* : 1026 vols.
- (iii) Bar-coded\* : 1026 vols.

\*(This includes both new books and retro-conversion)

### Activities by Library Staff:

- (i) Library is using LibSys-4 software, for its computerized house-keeping operations. At present 14,270 volumes are in the computer processed database and they are available on On-Line-Public-Access Catalogue (OPAC).
- (ii) Barcoding and Computer processed Spine Label producing work of Campus and Management Library are in progress.
- (iii) LibSys software engineer visited the Campus Library in August 2009 and rendered training to Library staff about the updating of LibSys S/W for better utility.
- (iv) Library provided orientation Programme to its new borrowers towards use of OPAC and introduced the library resources to them.
- (v) The Library started Bibliographic Services on demand to students and Research Scholars to speed up the research activities in the Campus.

**Publications:**

Kundu A. K. 2009. Facets of an Outstanding Teacher : Padamshree Prof. P.N. Kaula, *mLibrary Herald*, 47 (4): 305-312.

Kundu A. K. 2008. Information Management and transformation of society. *IJILIS*, 21 (1-2): 45-51.

Kundu A. K. 2008. Development of Information Resource Management, *IJILIS*, 28 (3-4): 181-185.

Kundu A. K. 2009, Cost Studies of Library Materials. *IJILIS*, 22(1-2): 57-63.

# XI

## EXAMINATION DEPARTMENT

**Controller of Examination** : Prof. D. R. Syiemlieh  
**Telephone** : 2721211, 2721212 (O), 9436103103 (M)  
**Email** : syiemlieh@hotmail.com

**T**he Examination Department operates round the year on all matters relating to Under Graduate and Post Graduate examinations and declaration of results of M.Phil. and Ph.D. programmes. During the year 2009-2010, the Examination Department could declare the Under Graduate results in time for the admission process into the Post Graduate programmes. Efforts are being made for the Post Graduate results to be computerized through the University Management System as and when implemented. The Choice Based Credit System (CBCS) is in its 2<sup>nd</sup> year of operation.

The 18<sup>th</sup> Convocation of the University was held on 6<sup>th</sup> November 2009. Candidates for 2 years, i.e., for the academic year 2007-08 and 2008-09 received their Degrees in person and in absentia. A total of 4,797 candidates received their Degrees in person.

The enrolment of students and the examination results during the year 2009-10 are given in Annexure A-F.

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**ANNEXURE "A"**

**ENROLMENT OF STUDENTS FOR THE ACADEMIC YEAR 2009-10 : University Teaching Department**

<b>COURSES</b>	<b>Gen M</b>	<b>Gen F</b>	<b>ST M</b>	<b>ST F</b>	<b>SC M</b>	<b>SC F</b>	<b>OBC M</b>	<b>OBC F</b>	<b>Total M</b>	<b>Total F</b>
<b>B A L L B (HONOURS)</b>										
FIRST YEAR	2	2	19	36	0	1	0	0	21	39
SECOND YEAR	1	6	25	25	0	0	0	3	26	34
THIRD YEAR	4	7	20	26	0	2	0	1	24	36
FOURTH YEAR	6	13	7	22	1	1	0	0	14	36
FIFTH YEAR	4	10	11	10	0	0	0	0	15	20
<b>TOTAL</b>	<b>17</b>	<b>38</b>	<b>82</b>	<b>119</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>100</b>	<b>165</b>

**B TECH**

FIRST YEAR	34	14	34	8	16	4	5	1	89	27
SECOND YEAR	30	11	27	7	25	9	10	1	92	28
THIRD YEAR	36	19	10	1	17	0	19	3	82	23
FOURTH YEAR	27	9	9	3	5	1	11	3	52	16
<b>TOTAL</b>	<b>127</b>	<b>53</b>	<b>80</b>	<b>19</b>	<b>63</b>	<b>14</b>	<b>45</b>	<b>8</b>	<b>315</b>	<b>94</b>

**B ED (SPECIAL EDUCATION)**

FIRST YEAR	8	8	14	20	1	2	2	3	25	33
SECOND YEAR	0	6	5	9	0	0	0	1	5	16
<b>TOTAL</b>	<b>8</b>	<b>14</b>	<b>19</b>	<b>29</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>30</b>	<b>49</b>

**M A**

FIRST YEAR	4	37	183	383	3	4	1	6	191	430
SECOND YEAR	10	24	174	409	3	0	2	8	189	441
<b>TOTAL</b>	<b>14</b>	<b>61</b>	<b>357</b>	<b>792</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>14</b>	<b>380</b>	<b>871</b>

**M SC**

FIRST YEAR	26	21	109	117	2	3	2	1	139	142
SECOND YEAR	24	29	88	92	1	0	0	1	113	122
<b>TOTAL</b>	<b>50</b>	<b>50</b>	<b>197</b>	<b>209</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>252</b>	<b>264</b>

**M COM**

FIRST YEAR	3	3	22	22	0	0	0	0	25	25
SECOND YEAR	2	1	22	12	0	0	0	0	24	13
<b>TOTAL</b>	<b>5</b>	<b>4</b>	<b>44</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>38</b>

## Examination Department

### M LIB INFO SC

FIRST YEAR	0	2	14	14	0	0	0	0	14	16
SECOND YEAR	0	0	7	13	0	0	0	0	7	13
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>21</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>29</b>

### M B A

FIRST YEAR	9	5	10	4	2	1	0	0	21	10
SECOND YEAR	18	3	2	0	3	0	0	0	23	3
<b>TOTAL</b>	<b>27</b>	<b>8</b>	<b>12</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>13</b>

### M ED

FIRST YEAR	0	0	6	16	0	1	0	0	6	17
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### M PHIL (ARTS)

NEWLY ENROLLED	2	2	12	17	0	0	1	1	15	20
PREVIOUSLY ENROLLED	5	1	7	8	0	1	0	1	12	11
<b>TOTAL</b>	<b>7</b>	<b>3</b>	<b>19</b>	<b>25</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>27</b>	<b>31</b>

### PH D (ARTS)

NEWLY ENROLLED	9	15	34	42	1	0	1	0	45	57
PREVIOUSLY ENROLLED	22	22	63	59	0	1	0	0	85	82
<b>TOTAL</b>	<b>31</b>	<b>37</b>	<b>97</b>	<b>101</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>130</b>	<b>139</b>

### PH D (SCIENCE)

NEWLY ENROLLED	10	18	10	19	0	1	2	0	22	38
PREVIOUSLY ENROLLED	45	34	47	48	3	0	4	4	99	86
<b>TOTAL</b>	<b>55</b>	<b>52</b>	<b>57</b>	<b>67</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>121</b>	<b>124</b>

### PH D (COMMERCE)

NEWLY ENROLLED	3	2	0	3	0	0	0	0	3	5
PREVIOUSLY ENROLLED	9	2	3	3	0	0	0	0	12	5
<b>TOTAL</b>	<b>12</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>10</b>

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### PH D (LIBRARY SCIENCE)

NEWLY ENROLLED	4	1	4	8	1	0	0	0	9	9
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### PH D (GRAND TOTAL)

NEWLY ENROLLED	26	36	48	72	2	1	3	0	79	109
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PREVIOUSLY ENROLLED	76	58	113	110	3	1	4	4	196	173
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TOTAL	102	94	161	182	5	2	7	4	275	282
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### P G DIPLOMA

FIRST YEAR	0	5	41	58	0	0	0	0	41	63
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### CERTIFICATE

FIRST YEAR	1	4	12	41	0	0	0	1	13	46
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**Examination Department**

**ANNEXURE “B”**

**ENROLMENT OF STUDENTS FROM DIFFERENT STATES FOR THE ACADEMIC YAR 2009-10 : UNIVERSITY DEPA**

	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
<b>B A L L B (HONOURS)</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>
Assam	10	26	4	6	1	2	0	2	15	36
Arunachal Pradesh	0	0	3	3	0	0	0	0	3	3
Bihar	0	2	0	0	0	0	0	0	0	2
Manipur	1	1	2	2	0	0	0	0	3	3
Mizoram	0	0	4	12	0	1	0	0	4	13
Nagaland	0	0	4	0	0	0	0	0	4	0
Tripura	0	0	3	1	0	0	0	0	3	1
West Bengal	0	1	0	0	0	0	0	0	0	1
Meghalaya	6	8	62	95	0	1	0	2	68	106

	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
<b>B Tech(ECE)</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>
Andhra Pradesh	0	0	0	0	0	0	1	0	1	0
Arunachal Pradesh	1	3	0	0	0	0	0	0	1	3
Assam	38	8	22	4	27	8	16	2	103	22
Bihar	6	1	0	0	0	0	1	1	7	2
Delhi	3	2	0	0	0	0	1	0	4	2
Jharkhand	1	0	0	0	0	0	0	0	1	0
Manipur	0	0	1	0	0	0	0	0	1	0
Uttar Pradesh	3	0	0	0	0	0	0	0	3	0
West Bengal	1	2	0	1	1	0	1	0	3	3
Meghalaya	12	7	18	2	3	1	0	2	33	12

	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
<b>B Tech(IT)</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>
Assam	48	24	26	6	28	4	23	3	125	37
Bihar	1	0	0	0	0	0	0	0	1	0
Delhi	1	0	0	0	0	0	0	0	1	0
Kerala	0	1	0	0	0	0	0	0	0	1
Manipur	3	1	1	0	1	0	1	0	6	1
Nagaland	1	0	0	0	0	1	0	0	1	1
Sikkim	0	1	0	0	0	0	0	0	0	1
Uttar Pradesh	2	0	0	0	0	0	0	0	2	0
West Bengal	1	0	0	0	1	0	0	0	2	0
Meghalaya	5	3	12	6	2	0	1	0	20	9

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<u>B Ed (Special Education)</u>	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
Assam	4	3	0	0	1	0	1	1	6	4
Manipur	1	4	0	1	0	0	1	2	2	7
Mizoram	0	0	9	5	0	1	0	0	9	6
Tripura	1	0	0	0	0	1	0	0	1	1
West Bengal	1	0	0	0	0	0	0	0	1	0
Meghalaya	1	7	10	23	0	0	0	1	11	31

<u>MA</u>	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
Arunachal Pradesh	1	0	6	22	0	0	0	0	7	22
Assam	7	10	8	3	1	0	1	4	17	17
Bihar	1	0	0	0	0	0	0	0	1	0
Germany	0	1	0	0	0	0	0	0	0	1
Karnataka	0	0	1	0	0	0	0	0	1	0
Manipur	2	5	65	34	1	0	0	1	68	40
Mizoram	0	1	27	35	0	0	0	0	27	36
Nagaland	0	1	37	92	0	0	0	0	37	93
Tripura	0	0	3	6	0	0	0	0	3	6
Uttar Pradesh	0	2	0	0	0	1	0	0	0	3
West Bengal	0	5	0	0	0	0	0	0	0	5
Meghalaya	3	36	210	600	4	3	2	9	219	648

<u>M Sc</u>	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
Arunachal Pradesh	0	0	2	1	0	0	0	0	2	1
Assam	5	6	1	0	2	0	1	1	9	7
Bihar	1	0	0	0	0	0	0	0	1	0
Bhutan	1	0	0	0	0	0	0	0	1	0
Kerala	0	1	0	0	0	0	0	0	0	1
Manipur	5	3	20	14	0	0	1	1	26	18
Mizoram	0	0	13	14	0	0	0	0	13	14
Nagaland	2	0	15	15	0	0	0	0	17	15
Punjab	1	0	0	0	0	0	0	0	1	0
Tripura	1	0	1	2	0	0	0	0	1	2
Uttar Pradesh	0	1	0	0	0	0	0	0	0	1
West Bengal	2	2	1	0	1	0	0	0	4	2
Meghalaya	32	37	144	163	0	3	0	0	177	203

## Examination Department

<u>M Com</u>	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
Arunachal Pradesh	0	0	1	0	0	0	0	0	1	0
As sam	0	1	0	0	0	0	0	0	0	1
Manipur	0	0	2	2	0	0	0	0	2	2
Nagaland	0	0	2	2	0	0	0	0	2	2
Meghalaya	5	3	39	30	0	0	0	0	44	33

<u>M Lib Info Sc</u>	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
Arunachal Pradesh	0	0	1	0	0	0	0	0	1	0
Assam	0	2	0	0	0	0	0	0	0	2
Manipur	0	0	2	1	0	0	0	0	2	1
Mizoram	0	0	1	1	0	0	0	0	1	1
Nagaland	0	0	1	3	0	0	0	0	1	3
Meghalaya	0	0	16	22	0	0	0	0	16	22

<u>M B A</u>	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
Assam	16	7	1	4	0	1	0	0	17	12
Bihar	5	0	0	0	0	0	0	0	5	0
Manipur	2	0	1	0	0	0	0	0	3	0
Nagaland	1	0	0	0	0	0	0	0	1	0
Uttar Pradesh	1	0	0	0	0	0	0	0	1	0
Meghalaya	2	1	10	0	5	0	0	0	17	1

<u>M Ed</u>	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
Meghalaya	0	0	6	16	0	1	0	0	6	17

<u>M Phil (ARTS)</u>	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
Mizoram	0	0	1	0	0	0	0	0	1	0
Nagaland	0	0	1	0	0	0	0	0	1	0
Assam	0	0	2	1	0	1	0	2	2	4
Meghalaya	7	3	15	24	0	0	1	0	23	27

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	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
<b>Ph.D</b>										
Andhra Pradesh	1	0	0	0	0	0	0	0	1	0
Assam	16	10	7	3	2	1	1	0	25	13
Bihar	2	0	0	0	0	0	0	0	2	0
<b>Bhutan</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
Karnataka	0	0	0	0	0	1	0	0	0	1
Kerala	0	1	0	0	0	0	0	0	0	1
Manipur	2	2	16	7	0	0	0	0	18	9
Mizoram	0	0	5	5	0	0	0	0	5	5
Nagaland	0	0	0	2	0	0	0	0	0	2
Orissa	1	0	0	0	0	0	0	0	1	0
Sikkim	0	0	0	1	0	0	0	0	0	1
Tamil Nadu	1	0	0	0	0	0	0	0	1	0
Tripura	0	0	1	0	0	0	0	0	0	0
West Bengal	0	3	0	0	0	0	0	0	0	3
Meghalaya	78	78	132	164	3	0	6	4	219	246

	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
<b>PG Diploma</b>										
Arunachal Pradesh	0	0	1	1	0	0	0	0	1	1
Assam	0	1	0	0	0	0	0	0	0	1
Manipur	0	0	2	1	0	0	0	0	2	1
Mizoram	0	0	1	0	0	0	0	0	1	0
Nagaland	0	0	0	2	0	0	0	0	0	2
Orissa	0	0	1	0	0	0	0	0	0	1
West Bengal	0	0	1	1	0	0	0	0	1	1
Meghalaya	0	4	35	53	0	0	0	0	36	46

	GEN	GEN	S. T.	S. T.	S. C	S. C	OBC	OBC	TOTAL	TOTAL
	M	F	M	F	M	F	M	F	M	F
<b>Certificate</b>										
Manipur	0	0	0	1	0	0	0	0	0	1
Mizoram	0	0	4	0	0	0	0	0	4	0
Nagaland	0	0	1	1	0	0	0	0	1	1
Meghalaya	1	4	7	39	0	0	0	1	8	44

**Examination Department**

**ANNEXURE "C"**

**ENROLMENT OF STUDENTS FOR THE ACADEMIC YEAR 2009-10:Affiliated Colleges**

COURSES	Gen		S T		S C		OBC		Total	Total
	M	F	M	F	M	F	M	F	M	F

**B A (PASS)**

FIRST YEAR	348	296	3980	4147	55	34	12	9	4395	4486
SECOND YEAR	158	215	1786	2274	14	18	17	26	1975	2533
THIRD YEAR	133	218	1312	1918	10	15	14	26	1469	2177
<b>TOTAL</b>	<b>639</b>	<b>729</b>	<b>7078</b>	<b>8339</b>	<b>79</b>	<b>67</b>	<b>43</b>	<b>61</b>	<b>7839</b>	<b>9196</b>

**B A (HONOURS)**

FIRST YEAR	202	243	1390	1938	12	16	6	22	1610	2219
SECOND YEAR	165	193	1105	1463	10	14	1	19	1281	1689
THIRD YEAR	144	151	896	1124	7	11	2	10	1049	1296
<b>TOTAL</b>	<b>511</b>	<b>587</b>	<b>3391</b>	<b>4525</b>	<b>29</b>	<b>41</b>	<b>9</b>	<b>51</b>	<b>3940</b>	<b>5204</b>

**B SC (PASS)**

FIRST YEAR	5	3	62	47	1	0	0	1	68	51
SECOND YEAR	5	4	30	31	0	2	0	0	35	37
THIRD YEAR	1	3	14	16	0	0	0	0	15	19
<b>TOTAL</b>	<b>11</b>	<b>10</b>	<b>106</b>	<b>94</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>118</b>	<b>107</b>

**B SC (HONOURS)**

FIRST YEAR	177	115	498	505	11	9	18	20	704	649
SECOND YEAR	106	98	268	235	7	8	2	9	383	350
THIRD YEAR	111	94	146	165	2	5	3	12	262	276
<b>TOTAL</b>	<b>394</b>	<b>307</b>	<b>912</b>	<b>905</b>	<b>20</b>	<b>22</b>	<b>23</b>	<b>41</b>	<b>1349</b>	<b>1275</b>

**B SC HOME SCIENCE (PASS)**

SECOND YEAR	0	0	0	1	0	0	0	0	0	1
THIRD YEAR	0	0	0	1	0	0	0	0	0	1
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>

**B SC HOME SCIENCE (HONOURS)**

FIRST YEAR	0	1	0	27	0	0	0	0	0	28
SECOND YEAR	0	0	0	17	0	0	0	0	0	17
THIRD YEAR	0	0	0	22	0	0	0	0	0	22
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>66</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>

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**B COM (PASS)**

FIRST YEAR	189	69	445	198	2	4	10	9	646	280
SECOND YEAR	122	60	185	91	5	1	5	6	317	158
THIRD YEAR	87	27	81	93	2	1	3	2	173	123
<b>TOTAL</b>	<b>398</b>	<b>156</b>	<b>711</b>	<b>382</b>	<b>9</b>	<b>6</b>	<b>18</b>	<b>17</b>	<b>1136</b>	<b>561</b>

**B COM (HONOURS)**

FIRST YEAR	181	97	365	192	8	8	15	10	569	307
SECOND YEAR	133	97	204	120	6	5	8	10	351	232
THIRD YEAR	68	39	123	53	7	3	2	4	200	99
<b>TOTAL</b>	<b>382</b>	<b>233</b>	<b>692</b>	<b>365</b>	<b>21</b>	<b>16</b>	<b>25</b>	<b>24</b>	<b>1120</b>	<b>638</b>

**B B A (HONOURS)**

FIRST YEAR	116	54	35	14	1	0	5	2	157	70
SECOND YEAR	130	70	39	15	2	2	4	3	175	90
THIRD YEAR	64	76	30	13	3	1	1	3	98	93
<b>TOTAL</b>	<b>310</b>	<b>200</b>	<b>104</b>	<b>42</b>	<b>6</b>	<b>3</b>	<b>10</b>	<b>8</b>	<b>430</b>	<b>253</b>

**B C A (HONOURS)**

FIRST YEAR	12	20	30	20	0	2	4	3	46	45
SECOND YEAR	43	32	20	9	2	2	8	1	73	44
THIRD YEAR	16	29	11	10	0	0	4	1	31	40
<b>TOTAL</b>	<b>71</b>	<b>81</b>	<b>61</b>	<b>39</b>	<b>2</b>	<b>4</b>	<b>16</b>	<b>5</b>	<b>150</b>	<b>129</b>

**B E (COMPUTER SCIENCE ENGINEERING)**

FIRST YEAR	56	13	8	1	8	0	12	3	84	17
SECOND YEAR	13	5	0	0	3	1	14	11	30	17
THIRD YEAR	18	8	6	4	4	0	9	2	37	14
FOURTH YEAR	16	8	6	0	3	0	12	2	37	10
<b>TOTAL</b>	<b>103</b>	<b>34</b>	<b>20</b>	<b>5</b>	<b>18</b>	<b>1</b>	<b>47</b>	<b>18</b>	<b>188</b>	<b>58</b>

**B E (ELECTRONICS & COMMUNICATION ENGINEERING)**

FIRST YEAR	48	16	1	1	2	0	18	7	69	24
SECOND YEAR	10	8	2	0	5	0	18	11	35	19
THIRD YEAR	22	6	5	1	1	0	18	3	46	10
FOURTH YEAR	28	4	2	1	4	0	11	2	45	7
<b>TOTAL</b>	<b>108</b>	<b>34</b>	<b>10</b>	<b>3</b>	<b>12</b>	<b>0</b>	<b>65</b>	<b>23</b>	<b>195</b>	<b>60</b>

## Examination Department

### **B E (INFORMATION TECHNOLOGY)**

FIRST YEAR	39	5	7	3	4	2	18	9	68	19
SECOND YEAR	17	4	6	0	4	2	10	6	37	12
THIRD YEAR	19	4	6	2	2	0	12	4	39	10
FOURTH YEAR	3	1	1	4	1	0	3	1	8	6
<b>TOTAL</b>	<b>78</b>	<b>14</b>	<b>20</b>	<b>9</b>	<b>11</b>	<b>4</b>	<b>43</b>	<b>20</b>	<b>152</b>	<b>47</b>

### **B ED**

FIRST YEAR	34	26	101	170	2	5	7	7	144	208
<b>TOTAL</b>										

### **B S W**

FIRST YEAR	2	12	19	81	1	1	0	1	22	95
SECOND YEAR	0	1	30	50	1	0	0	0	31	51
THIRD YEAR	2	2	26	28	1	0	0	0	29	30
<b>TOTAL</b>	<b>4</b>	<b>15</b>	<b>75</b>	<b>159</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>82</b>	<b>176</b>

### **B SC (NURSING)**

FIRST YEAR	0	2	5	41	1	8	0	1	6	52
SECOND YEAR	0	2	2	32	0	6	0	1	2	41
THIRD YEAR	0	4	6	46	0	3	0	1	6	54
FOURTH YEAR	0	4	3	23	0	0	0	0	3	27
<b>TOTAL</b>	<b>0</b>	<b>12</b>	<b>16</b>	<b>142</b>	<b>1</b>	<b>17</b>	<b>0</b>	<b>3</b>	<b>17</b>	<b>174</b>

### **L L B**

FIRST YEAR	12	12	151	104	1	0	1	0	165	116
SECOND YEAR	16	22	132	84	0	3	0	0	148	109
THIRD YEAR	24	20	84	50	2	2	0	0	110	72
<b>TOTAL</b>	<b>52</b>	<b>54</b>	<b>367</b>	<b>238</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>423</b>	<b>297</b>

### **M B B S**

FIRST YEAR	9	11	14	7	1	1	2	5	26	24
SECOND YEAR	16	13	13	8	0	0	0	0	29	21
<b>TOTAL</b>	<b>25</b>	<b>24</b>	<b>27</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>55</b>	<b>45</b>

### **M B A**

FIRST YEAR	16	18	1	0	1	0	3	2	21	20
SECOND YEAR	4	11	0	0	0	0	0	0	4	11
<b>TOTAL</b>	<b>20</b>	<b>29</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>25</b>	<b>31</b>

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**M C A**

FIRST YEAR	5	4	10	6	0	1	0	1	15	12
SECOND YEAR	5	5	9	6	1	1	0	0	15	12
TOTAL	10	9	19	12	1	2	0	1	30	24

**M SC (BIOTECHNOLOGY)**

FIRST YEAR	6	6	4	4	1	0	0	1	11	11
SECOND YEAR	5	6	5	4	1	0	0	0	11	10
TOTAL	11	12	9	8	2	0	0	1	22	21

**PG Anaesthesiology (Medical Science)**

FIRST YEAR	2	0	0	0	0	0	0	0	2	0
TOTAL										

**PG Microbiology (Medical Science)**

FIRST YEAR	1	0	0	0	0	0	1	0	2	0
TOTAL										

**PG OBS & Gynea (Medical Science)**

FIRST YEAR	0	2	0	0	0	0	0	0	0	2
TOTAL										

**PG Pathology (Medical Science)**

FIRST YEAR	2	0	0	0	0	0	0	0	2	0
TOTAL										

## Examination Department

### ANNEXURE "D"

#### ENROLMENT OF STUDENTS FROM DIFFERENT STATES FOR THE ACADEMIC YAR 2009-10 : AFFILIATE

STATES	GEN		S. T.		S. C		OBC		TOTAL	
	M	F	M	F	M	F	M	F	M	F
Andhra Pradesh	2	0	0	1	0	0	0	0	2	1
Arunachal Pradesh	33	21	239	232	8	6	3	2	283	261
Assam	389	236	183	139	54	30	163	103	789	508
Bihar	52	46	4	1	0	5	4	10	60	62
Chattisgarh	0	1	0	0	0	0	0	0	0	1
Delhi	2	0	0	0	0	0	0	0	2	0
Gujarat	231	184	0	0	0	0	0	0	231	184
Haryana	1	0	0	0	0	0	0	0	1	0
Himachal Pradesh	1	2	0	0	0	0	0	0	1	2
Jammu & Kashmir	0	1	0	0	0	0	0	0	0	1
Jharkhand	5	4	6	0	0	0	6	2	17	6
Kerala	11	7	1	1	0	0	1	1	13	9
Madhya Pradesh	0	0	2	0	0	0	0	0	2	0
Maharashtra	1	0	0	0	0	0	0	0	1	0
Manipur	71	51	978	801	24	24	3	10	1076	886
Meghalaya	2143	1841	10718	12863	70	111	127	156	13058	14971
Mizoram	13	15	664	655	30	2	0	0	707	672
Nagaland	60	38	783	730	30	17	1	0	874	785
NRI	1	1	0	0	0	0	0	0	1	1
Orissa	4	4	0	0	0	0	0	0	4	4
Punjab	0	1	0	0	0	0	0	0	0	1
Rajasthan	0	1	0	0	0	0	0	0	0	1
Sikkim	0	0	0	0	0	0	1	0	1	0
Tamil Nadu	1	0	0	0	2	0	0	0	3	0
Tripura	19	15	141	96	4	1	4	3	168	115
Uttar Pradesh	4	10	1	0	0	0	0	1	5	11
West Bengal	3	6	0	1	0	1	0	1	3	9
Foreign Countries	119	84	0	0	0	0	0	0	119	84
<b>GRAND TOTAL</b>	<b>3166</b>	<b>2569</b>	<b>13720</b>	<b>15520</b>	<b>222</b>	<b>197</b>	<b>313</b>	<b>289</b>	<b>17421</b>	<b>18575</b>





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<b>AWARD OF M PHIL / PH D DURING THE YEAR 2009</b>																				
<b>AWARD OF M PHIL</b>											<b>AWARD OF PH D</b>									
<b>Gen</b>		<b>S. T.</b>		<b>S. C.</b>		<b>OBC</b>		<b>Total</b>		<b>Gen</b>		<b>S. T.</b>		<b>S. C.</b>		<b>OBC</b>		<b>Total</b>		
<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	
<b>ARTS</b>	1	4	4	4	0	0	0	0	5	8	2	7	6	10	0	0	0	0	8	17
<b>SCIENCE</b>	1	1	0	0	0	0	0	0	1	1	6	1	6	2	0	0	0	0	12	3
<b>COMMERCE</b>	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0
<b>TOTAL</b>	<b>2</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>13</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>20</b>

## XII

### HINDI CELL

**In-charge** : Dr. R. K. Tiwari (Deputy Registrar)

**Telephone** : 2721093

**H**indi Cell was established to promote the progressive use of Hindi. The supervision of proper implementation of Rajbhasha Policy is done by an Official Language Implementation Committee (OLIC) of the University. OLIC consists of (i) Vice-Chancellor as Chairman, (ii) Hindi Cell In-charge as Member-Secretary, and (iii) all Statutory Officers, Librarian, Head of the Department of Hindi, all Deputy Registrars, and two office bearers of the Shillong Town Official Language Implementation Committee as the Members. Hindi Cell assists the OLIC in reviewing the progressive use of Hindi as Rajbhasha in this University.

The In-charge and the Hindi Translator of the Hindi Cell were invited to participate in the Rajbhasha Training Programme conducted by the Hyderabad Central University, Hyderabad on 14-15 October 2009 under the aegis of Hindi Advisory Committee constituted by the University Grants Commission, New Delhi.

A Rajbhasha Samelan of Ministry of Home Affairs, Govt. of India, New Delhi was held on 23-24 January 2010 at D.G.A.R., Laitkor, Shillong.

Two meetings of the OLIC were convened, one each in the months of March and June 2009.

The University celebrated the Hindi Fortnight w.e.f. 14<sup>th</sup> – 28<sup>th</sup> September 2009. Hindi Extempore Speech, Hindi Poem Recitation, Oral Translation, Hindi Handwriting, Noting and Drafting competitions were conducted during the Hindi Fortnight. Teaching and Non-Teaching staff members of the University actively participated in the above said competitions. Winners of the competitions were given 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and Consolation cash prizes and a Certificate. A Hindi Kavi Samelan was the main attraction of the Valedictory Function of the Hindi Fortnight which was held on 7<sup>th</sup> October 2009, wherein both Teaching & Non-Teaching staff members enthusiastically participated.

## XIII

# SCHEDULED CASTES AND SCHEDULED TRIBES CELL

The Scheduled Castes and Schedule Tribes Cell was fully engaged with works related to the implementation of the Reservation Policies for SC/ST and other backward classes for the year 2009 – 2010 with respect to appointments/promotions to the Teaching and Non Teaching posts and admissions of students to various Post Graduate and Under Graduate programmes in the University and affiliated Colleges. The Cell functions in coordination with the Dean Students' Welfare, Director of the College Development Council and various other sections of the University.

The SC/ST Cell in coordination with the Establishment I and II sections of the University has been corresponding with the University Grant Commission and Ministry of Human Resource Development for information and data required to be furnished in regards to position of the Teaching & Non Teaching reservation quota, of different categories, filling up of backlog vacancies of SC/ST, and other backward classes.

The University has appointed Smti. F. Syiem of English Department as Liaison Officer of the SC/ST Cell w.e.f. 13/5/09 for a period of 3 years. Reservation policies implemented in this University is as per the guidelines issued by the Ministry of Human Resource Development, Government of India from time to time. The commutative position for SC/ST Teaching and Non Teaching staff in NEHU as for the year 2009-2010 is provided in tables below:

### **Special Recruitment Drive 2009-2010 Progress Report:**

#### SPECIAL RECRUITMENT DRIVE

#### PROGRESS

(Consolidated information in respect of Autonomous Bodies)

**SC/ST Cell**

**PROFROMA - IIA**

Classification of Posts	Scheduled Castes			Scheduled Tribes			Other Backward Classes		
	No. of backlog vacancies identified as on	No. of backlog vacancies advertised	No of backlog vacancies filled	No. of backlog vacancies identified as on	No. of backlog vacancies advertised	No of backlog vacancies filled	No. of backlog vacancies identified as on	No. of backlog vacancies advertised	No of backlog vacancies filled
Professor	6	6	1	3	2	1	Nil	Nil	Nil
Associate Professor	8	8	1	2	2	2	Nil	Nil	Nil
Assistant Professor	15	15	4	No Backlog			18	18	3

**Non-Teaching Staff (as on 31.3.2010):**

Level of Post	Sanctioned Strength	Number of filled in Posts	Number of posts filled belonging to SC/ST			Vacant Post
			SC	ST	Total SC + ST	
Group A						
Group B	183	140	1	79	80	43
Group C	457	382	2	279	281	75
Group D	325	255	-	157	157	70

**NEHU Annual Report 2009-2010**

**ENROLEMENT OF STUDENTS (NEWLY ENROLLED) FOR THE ACADEMIC YEAR 2009-2010:**

**University Teaching Departments**

Courses	Ge	Ge	ST	ST	SC	SC	OB	OB	Total	
	n	n					C	C	M	F
	M	F	M	F	M	F	M	F	M	F
B.A.L.L.B.(Hons.)	2	2	19	36	0	1	0	0	21	39
B.TECH.	34	14	34	8	16	4	5	1	89	27
B.Ed. (Special Education)	8	8	14	20	1	2	2	3	25	33
M.A.	4	37	183	383	3	4	1	6	191	430
M.Sc.	26	21	109	117	2	3	2	1	139	142
M.Com.	3	3	22	22	0	0	0	0	25	25
M. Lib. Info. Sc.	0	2	14	14	0	0	0	0	14	16
M.B.A	9	5	10	4	2	1	0	0	21	10
M.Ed.	0	0	6	16	0	1	0	0	6	17
M.Phil.	2	2	12	17	0	0	1	1	15	20
Ph. D. (ARTS)	9	15	34	42	1	0	1	0	45	57
Ph. D. (SCIENCE)	10	18	10	19	0	1	2	0	22	38
Ph.D. (COMMERCE)	3	2	0	3	0	0	0	0	3	5
Ph. D. (Library Science)	4	1	4	8	1	0	0	0	9	9
Ph. D. (Grand Total)	26	36	48	72	2	1	3	0	79	109
P. G. Diploma	0	5	41	58	0	0	0	0	41	63
Certificate Course	1	4	12	41	0	0	0	1	13	46

**SC/ST Cell**

**PHYSICALLY CHALLENGED STUDENTS ENROLLED FOR THE ACADEMIC YEAR 2009-2010:**

Department	Gen		ST		SC		OBC		Total	
	M	F	M	F	M	F	M	F	M	F
Economics (MA FIRST YEAR)	0	0	1	0	0	0	0	0	1	0
Botany (M Sc FIRST YEAR)	0	1	0	0	0	0	0	0	0	1

**STUDENTS STAYING IN UNIVERSITY HOSTELS AS ON 31.03.2010**

Sl. No	Name	Staying as on 31/3/2010	ST	SC	OBC
1	Lasubon (U.G. Women)	3	2		
2	New Hostel (U.G. Women)	44	22	5	1
3	Miktoksi (U.G. Women)	2			
4	Persara (R.S. Women)	34	13	1	
5	New Hostel (P.G. Women)	102	92	2	1
6	New Hostel (P.G. Women)	113	97	1	5
7	Saramati (R.S. Men)	34	14	1	1
8	Kyllang (P.G. Men)	33	28	1	1
9	Balgito (R.S. Women)	14	5		
10	Sensiar (R.S. Women)	56	26	3	5
11	Chhinlung (R.S. Men)	21	9		1
12	Sohpetbneng (R.S. Men)	22	9	1	
13	Japfu (R.S. Men)	68	38	2	5
14	New Hostel (P.G. Women)	108	100	1	2
15	Arbella (U.G. Men)	2			
16	Symper (U.G. Men)				
17	Rengira (U.G. Men)	3			
Total		659	455	18	22

## XIV

# UNIVERSITY FINANCE

**Finance Officer** : Mr. P. C. Majhi, IA&AS

**Telephone** : 2721021 (O)

**Email** : fo@nehu.ac.in

Finance Department comprises of eight sections and the main function if the Department are as follows:

- (i) Preparation of the Budget of the University.
- (ii) Receipt and payments under the sponsored projects fellowships and scholarship.
- (iii) Payment of Salary, Bonus , Advance on Salary, leave encashment and other personal allowance .
- (iv) Preparation of the Account of the University.
- (iv) Maintenance of Providence fund , NDCPS fund and disbursement of long term advances to employees like house building, car, scooter, computer, etc.
- (v) Control of all recurring and non-recurring expenditure both under Plan and Non-Plan.
- (vi) Managing the fund flow and cash flow position of the University and investment of various funds.
- (vii) Conducting internal audit of the various Departments and Centres of the University.
- (ix) Pre-auditing of all proposals involving financial implication.
- (x) Payment of pensionary benefit to the retired/demised NEHU employees. During the year. Pensionary benefit and family pension in respect of 124 retired cases were finalized and revision of pension in respect of 265 cases of pre-2006 pensioners was also finalized. GPF final payments were also made against 30 retired personnels. In compliance of the guidelines issued

## University Finance

by the MHRD, Government of India, for adoption of the Common Format of Accounting, the University has been preparing the Annual Accounts in that format. The preparation of the Account and various stages of its process is governed by the schedule laid down by the MHRD. The Account for the year 2008-2009 was completed in time and underwent the various stages in time. It was submitted with Audit Report on 16.11.2009 to the MHRD and was laid before the Lok Sabha and the Rajya Sabha on 9<sup>th</sup> and 11<sup>th</sup> December 2009, respectively.

### **The Receipt and Payment Account of the University for the Year 2009-2010**

	Receipt (in Rs.)	Payment (in Rs.)
<b>Non-plan</b>		
Grant from UGC	106,39,43,000	Salary & Allowance: 75,81,80,275
Internal Receipt:	4,24,92,214	Pension/DCRG: 10,33,61,374
		Revenue: 15,68,78,034
		Capital: 2,82,79,127
Plan & UPE	67,33,00,000	Salary & Allowance 5,91,884
		Revenue: 5,99,34,430
		Capital: 40,16,92,383
Ministry of Social Justice:	2,73,26,245	Capital: 71,05,523
Ministry of Tribal Welfare:	74,969	Revenue: 1,81,381
Sponsored Project:	17,19,08,403	Revenue: 12,55,96,259
		Capital: 6,12,54,953

# XV

## STUDENTS' SERVICES AND AMENITIES

### STUDENTS' WELFARE CELL

**Dean Students' Welfare** : Prof. R. N. Sharan  
**Telephone** : 2721181, 2721182 (O)  
**E-mail** : dsw@nehu.ac.in  
**Provost** : Prof. D. K. Nayak  
**Telephone** : 2721183 (O)

**T**he office of the Dan of Students' Welfare continued to serve as the nodal agency for student services and their welfare. The major concern of the office have been the Management of the Hall of Residences of the post-graduate, under-graduate and research students, generating and issuing of computerized identity cards of all students, organizing academic study tours through the Departments, co-ordination of students' sports and cultural activities, conduct of election to the Student's 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 and their residence on the campus.

**Residence in Hostels:** The number of students who were given hostel accommodation during the year 2009-2010 is as follows:

		ST	SC	GEN	OBC	Total
Research scholars:	Men	35	04	30	04	73
	Women	29	02	25	04	60
Post Graduate	Men	181	02	20	04	207
Students:	Women	189	03	17	06	215
Under Graduate	Men	36	15	41	07	99

### Students' Services and Amenities

Student:	Women	24	05	19	01	49
	Total	494	31	152	26	703

**Study Tour:** The office coordinated study tours of the following eleven academic Departments from Shillong campus:

(i) Anthropology, (ii) Biotechnology, (iii) Botany, (iv) Biochemistry, (v) Environmental Studies, (vi) Chemistry, (vii) Geography, (viii) Khasi, (ix) Library & Information Science, (x) Economics, and (xi) Zoology.

**Sports Activities:** The following sports activities were conducted during the year 2009-2010:

(i) P. C. Lalmuanphui Inter-Hostel Basketball Tournament organized by Sensiar Hall of Residence, and (ii) Romengo Murry Memorial Inter-Hostel Table Tennis Tournament organized by Saramati Hall of Residence.

The DSW office supported the conduct of the following additional student' activities:

In order to coincide the term of the NEHUSU and of the Academic Calendar, the election to the Students Union Executive Committee were held in 27<sup>th</sup> November 2009 and the new office-bearers took charge soon thereafter. DSW office supported the annual event of NEHUSU to showcase academic, sport and cultural talents of the students of the University. The Varsity Week was held from 19<sup>th</sup> March 2009 to 24<sup>th</sup> April 2009 and the same concluded with a week of celebrations from 19<sup>th</sup> April 2009 onwards. Most of the final competition took place during this week. Other events organized by the NEHUSU were Parting Social, Fresher Social and Advance Christmas.

**Scholarships/Aid Fund:** During 2009-2010, 73 NEHU Post-Graduate Merit Scholarship (including ST/SC students) were awarded. For the Students' Aid, 25 students were recommended to the Deans Committee for approval.

## SPORTS DEPARTMENT

**In-charge** : Prof. B. Kharbuli  
**Telephone** : 2225110 (O)  
**Email** : bkharbuli@hotmail.com

The Sports Department worked in close association with the North Eastern Hill University Students' Union (NEHUSU), the wardens of various hostels and the Campus Welfare Committee of residents in the campus. The Indoor Stadium and Community Hall have been made available to students and campus residents. Gym stations and equipments were also made available to the residents.

The Department has been involved in assisting in the various events conducted by NEHUSU especially the Varsity Fest 2009 which was held from 19<sup>th</sup> March to 24<sup>th</sup> April 2009. His Excellency, the Governor of Meghalaya and Chief Rector of the University, Shri. R. S. Mooshahary was the Chief Guest in the closing ceremony of this Fest.

A trekking-cum-camping event was organized in collaboration with NEHUSU at Sa-i-mika Park, Sohra on 23-24 October 2009.

The events brought friendship, memorable moments, joy and sense of responsibility among our PG and UG students.

## NATIONAL SERVICE SCHEME

**Programme Co-ordinator** : Dr. Jemino Mawthoh  
**Telephone No** : 2721151,1152,1153  
**Tele Fax** : 0364-2721151  
**Email** : nssnehu@rediffmail.com

The National Service Scheme (NSS) of Government of India envisages to utilize the free time of higher secondary schools/colleges/university students for socially productive works. An important feature of the NSS is that programmes are organized by the student volunteers themselves under the guidance of their teachers as Programme Officers. The work undertaken by the College units are divided into Regular Activities and Special Camping. The total enrolment

## Students' Services and Amenities

strength of volunteers for the year 2009 – 10 was 15,917 (Male-6511, Female-9406) comprising volunteers from 32 colleges, 2 P.G Units and 3 Higher Secondary schools. The number of NSS Programme Officers was 61 out of whom 38 are trained.

Many activities were undertaken by the different NSS units and the details given below:

### **Republic Day Parade Camp:**

*Selection Camp for Pre Republic Day Parade Camp:* 74 NSS Volunteers from various Colleges of Meghalaya attended the camp at NEHU, Permanent Campus held on 11<sup>th</sup> of September 2009.

*Pre Republic Day Parade Camp:* 10 selected volunteers along with Ms. I. Nongbri, NSS Programme Officer, Sankardev College attended the camp at Guwahati from 22<sup>nd</sup> to 31<sup>st</sup> October, 2009.

*Republic Day Parade Camp:* Ms. I. Nongbri, NSS Programme Officer contingent leader North East Region along with 2 NSS volunteers, Ms. Geeta Das from UCC, Umiam and Mr. H. Lalremruata of Umshyrpi College, Shillong attended the Republic Day Parade Camp at New Delhi from 1<sup>st</sup> – 31<sup>st</sup> January, 2010.

### **Youth Exchange Programme at China:**

Ms. Baslianghun Khongstid, NSS volunteer of Shillong College was nominated by the Ministry of Youth Affairs & Sports to visit China as a member of the Indian Youth Delegation from 15<sup>th</sup> – 24<sup>th</sup> June 2009.

### **Inter State Youth Exchange Programmes:**

The first programme was held at Arunachal Pradesh from 9<sup>th</sup> to 18<sup>th</sup> November 2009. Eight NSS volunteers along with Mr. B. Thapa, NSS Programme Officer from BBS College, Shillong attended the programme.

Another programme was held at RGNIYD, Tamil Nadu from 1<sup>st</sup> to 10<sup>th</sup> March 2010. Nine NSS volunteers along with one Programme Officer from P. G. Unit, NEHU, Shillong participated in the programme.

### **National Integration Camp:**

Nine NSS volunteers from Synod College, Shillong along with one Programme Officer attended NIC at Gurgaon from 17<sup>th</sup> to 24<sup>th</sup> May 2009.

### **XV National Youth Festival:**

The XV National Youth Festival was held at Bhubaneshwar, Orissa from 8<sup>th</sup> to 12<sup>th</sup> January 2010. Ten NSS volunteers from Tura Government College, Tura along with one Programme Officer attended the programme.

### **North East Youth Festival:**

Six NSS volunteers from UCC and Sankardev College accompanied by Dr. Ashish Malhotra, NSS Programme Officer attended the programme at Kohima, Nagaland from 8<sup>th</sup> to 10<sup>th</sup> October 2009.

### **Summer Camp:**

Ten NSS volunteers from Shillong College along with one Programme Officer participated at the Summer Camp held at RGNIYD, Sriperembudur from 22<sup>nd</sup> June to 3<sup>rd</sup> July 2009.

### **Adventure Programme:**

Nineteen NSS volunteers from Sankardev College, Shillong and Sngap Syiem College, Mawkyrwat along with their respective Programme Officers participated at the Adventure Programme held at Manali, Himachal Pradesh, from 31<sup>st</sup> May to 9<sup>th</sup> June 2009.

Twenty NSS volunteers along with two Programme Officers from P. G. Unit, NEHU, Shillong participated in the Winter Adventure Programme at Ooty, Tamil Nadu, from 2<sup>nd</sup> to 9<sup>th</sup> March 2010.

### **Special Camps:**

During the year, fourteen institutions conducted Special Camps which are an integral part of NSS programmes under the theme “**Healthy Youth for Healthy India**” at their respective adopted villages as detailed below:

Institution: St. Edmunds College, Shillong; Place: Mawlynrei village; Duration: 25<sup>th</sup> September – 1<sup>st</sup> October 2009. 45 volunteers and 3 Programme Officers took part.

Institution: Sngap Syiem College, Mawkyrwat; Place: Photjaud village; Duration: 19<sup>th</sup> – 24<sup>th</sup> October 2009. 55 volunteers and 1 Programme Officer took part.

### Students' Services and Amenities

Institution: St. Anthony's College, Shillong; Place: Rtiang village, Ri-Bhoi District; Duration: 25<sup>th</sup> September – 1<sup>st</sup> October, 2009. 40 volunteers and 2 Programme Officers took part.

Institution: Mendipathar College, Mendipathar, Garo Hills; Place: Harinkata Kacharipara, village, East Garo Hills District; Duration: 11<sup>th</sup> – 17<sup>th</sup> December 2009. 88 volunteers and 2 Programme Officers took part.

Institution: Durama College, Tura; Place: Dura Kantragre village, West Garo Hills District; Duration: 7<sup>th</sup> – 13<sup>th</sup> December, 2009. 60 volunteers and 1 Programme Officer took part.

Institution: Don Bosco College, Tura; Place: Ranggira village, West Garo Hills District; Duration: 6<sup>th</sup> – 12<sup>th</sup> December, 2009. 76 volunteers and 4 Programme Officers took part.

Institution: Captain Williamson Memorial College, Baghmara; Place: Sibbari Higher Secondary School, Baghmara, South Garo Hills; Duration: 5<sup>th</sup> - 11<sup>th</sup> December, 2009. 50 volunteers and 2 Programme Officers took part.

Institution: Tura Government College, Tura, West Garo Hills; Place: Boldorenggre village; Duration: 5<sup>th</sup> – 11<sup>th</sup> December, 2009. 60 volunteers and 3 Programme Officers took part.

Institution: Umshyrpi College, Shillong; Place: Kyrdemkulai village, Ri Bhoi District; Duration: 15<sup>th</sup> - 21<sup>th</sup> December, 2009. 80 volunteers and 3 Programme Officers took part.

Institution: Union Christian College, Umiam; Place: Umsawkhwan Village, Ri Bhoi District; Duration: 20<sup>th</sup> - 26<sup>th</sup> December, 2009. 30 volunteers and 2 Programme Officers took part.

Institution: Sankardev College, Shillong; Place: Lumkyntung Village, Umtyngar, East Khasi Hills District; Duration: 28<sup>th</sup> September - 4<sup>th</sup> October, 2009. 40 volunteers and 2 Programme Officers took part.

Institution: Shillong College, Shillong; Place: Mawlyngot Village, East Khasi Hills District; Duration: 23<sup>th</sup> - 25<sup>th</sup> November, 2009. 50 volunteers and 3 Programme Officers took part.

Institution: Jaintia Eastern College, Khliehriat; Place: Lumputhoi Village, Jaintia Hills District; Duration: 9<sup>th</sup> - 15<sup>th</sup> November, 2009. 55 volunteers and 1 Programme Officer took part.

Institution: Mawsynram Border Area College, Mawsynram; Place: Mawkasain Village, West Khasi Hills District; Duration: 26<sup>th</sup> – 31<sup>st</sup> October, 2009. 80 volunteers and 3 Programme Officers took part.

### **Training/Workshops:**

NSS Review Meeting of Programme Officers was held at Women's College, Shillong on 9<sup>th</sup> May 2009 organised by NSS Cell, NEHU. About 35 NSS Programme Officers from different Colleges of 4 districts attended.

Ms. V. Momin, NSS Programme Officer, Tura Government College attended a training programme on Environment Education and Sustainable Development at RGNIYD, Tamil Nadu from 4<sup>th</sup> – 8<sup>th</sup> May 2009.

The NSS Cell, NEHU in collaboration with NEICSSR organized a Seminar on Environment Conservation in North East India on the 5<sup>th</sup> June 2009 in observance of World Environment Day.

Twenty two NSS volunteers of Umshyrpi College participated in the NCERT Workshop on Universal School Education held at P.G.T. College, Shillong on 5<sup>th</sup> June 2009.

28<sup>th</sup> UAC meeting was held on the 27<sup>th</sup> July 2009 at the Committee Room, Administrative Building, NEHU, Shillong.

Programme Coordinator attended a selection committee meeting for National Youth Awards at Additional Secretariat organized by the Directorate of Sports and Youth Affairs, Government of Meghalaya, on 28<sup>th</sup> August 2009.

Another programme was organized by Shillong Commerce College, Shillong at the College Campus on 14<sup>th</sup> September 2009.

Five volunteers of Umshyrpi College attended a workshop on Developing Personal & Interpersonal Skills at Umsawkhwan Village, Ri-Bhoi District from 26<sup>th</sup> – 28<sup>th</sup> September, 2009.

One hundred four NSS volunteers from 7 Colleges of Shillong attended a Training Programme on Disaster Management from 19<sup>th</sup> – 23<sup>rd</sup> October 2009 at Don Bosco Youth Centre, Shillong. This programme was organized by the Office of the Deputy Commissioner, East Khasi Hills, Shillong.

A Review Meeting for NSS Programme Officers of Garo Hills was held at Tura Government College, Tura on 24<sup>th</sup> October 2009. Programme Coordinator, NSS Cell, NEHU reviewed the status of activities in the presence of 14 Programme Officers and Deputy Programme Coordinator, NSS Garo Hills.

## Students' Services and Amenities

Ms. V. Momin, NSS Programme Officer Tura Government College attended the NSS Refresher Course at TORC, Narendrapur from 26<sup>th</sup> – 30<sup>th</sup> October 2009.

Five Programme Officers along with 2 NSVs attended a TOT on Social Harmony and National Unity organized by RGNIYD from 12<sup>th</sup> - 16th November, 2009 at NEHU New Guest House, Permanent Campus.

Five Programme Officers from different Colleges attended the NSS Orientation Course at TORC, Narendrapur from 10<sup>th</sup> – 19<sup>th</sup> December 2009.

A Training Programme on Disaster Management was held at Meghalaya Administrative Training Institute, Shillong from 18<sup>th</sup> – 22<sup>nd</sup> January 2010. About 30 NSS volunteers from St. Edmund's, St. Anthony's and Shillong Colleges attended the training.

### **Blood Donation Camp:**

Ten blood donation camps were conducted during the period (April 2009 to March 2010). The following Colleges participated in these camps:

- |       |                                      |   |
|-------|--------------------------------------|---|
| i)    | St. Edmund's College, Shillong       | 56 volunteers and 56 units of Blood donated |
| ii)   | St. Anthony's College, Shillong      | 47 volunteers and 47 units of Blood donated |
| iii)  | Umshyrpi College, Shillong           | 28 volunteers and 28 units of Blood donated |
| iv)   | Shillong College, Shillong.          | 6 volunteers and 6 units of Blood donated   |
| v)    | Sankardev College, Shillong,         | 3 volunteers and 3 units of Blood donated   |
| vi)   | Shillong Commerce College, Shillong, | 20 volunteers and 20 units of Blood donated |
| vii)  | BBS College, Shillong,               | 15 volunteers and 15 units of Blood donated |
| viii) | Lady Keane College, Shillong         | 8 volunteers and 8 units of Blood donated   |

Number of Student Volunteers : 183

Number of units of Blood donated : 183

### **Creation of Community Assets:**

NSS units have also constructed community assets with the labour of volunteers at the respective adopted villages during the course of the special camping programme:

- (i) The NSS unit of Shillong College constructed a Community Tourist Hut at Mawlyngot at the premises of the tea processing centre.
- (ii) A water tank was constructed by the unit of UCC at Umsawkhwan.
- (iii) The unit of St. Anthony's College constructed a footpath at Rtiang.
- (iv) A footpath was also constructed by the unit of Sngap Syiem College at Photjaud.

### **NSS DAY:**

The 40<sup>th</sup> NSS Foundation Day was celebrated on 24<sup>th</sup> September 2009. The Hon'ble Chief Minister of Meghalaya, Dr. D. D. Lapang graced the occasion as the Chief Guest and the Hon'ble Minister of Education was the Guest of Honor in presence of the Vice-Chancellor of NEHU, Prof. Pramod Tandon. The University Level NSS Award was also presented on the occasion. The best NSS Unit was awarded to St. Anthony's College, Shillong and Prof. S. F. Kynta was awarded the best NSS Programme Officer. The best NSS Volunteer Awards were given to Ms. Davida Paswett from St. Anthony's College and Mr. Bhakupar Lyngdoh from B. B. S. College. The awards were given on the basis of their committed and effective participation in community services. This was followed by a variety programme from about 30 groups of volunteers from the different Colleges. The variety programme comprised of songs, dances, skits and multi-varied cultural items. Around 500 NSS volunteers attended the day long programme held at Multi-Use Convention Centre, NEHU.

### **Other Activities:**

- (i) The NSS unit of Sngap Syiem College, Mawkyrwat conducted an "Awareness Programme on Rural Technology" on 29<sup>th</sup> August 2009 at the College campus in collaboration with SCST&E. About 220 volunteers attended.
- (ii) The unit of Sngap Syiem College organised a seminar on Drug Abuse & HIV/AIDS in collaboration with the CHC, Mawkyrwat at the College campus on 1<sup>st</sup> December 2009.

## Students' Services and Amenities

- (iii) Sngap Syiem College, Mawkyrwat organised a Free Eye Check-up Camp on 20<sup>th</sup> November 2009 in collaboration with Bawri Nethralaya Eye Care. About 352 people benefitted.
- (iv) The NSS units have also conducted various programmes in observance of International Youth Day, Gandhi Jayanti, World Aids Day, etc.
- (v) Programme Coordinator conducted a NSS Orientation-cum- motivational camp at Thomas Jones Synod College, Jowai on 30<sup>th</sup> July 2009 and also at Sankardev College on 7<sup>th</sup> August 2009.

## NEHU DATA AND VOICE NETWORK (NDVN)

**In-charge** : Prof. R. N. Sharan

**Telephone** : 2722121, 2726195, 2726196, 2726197, 2551297

**Email** : admin@nehu.ac.in

The NEHU Voice and Data Network (NDVN) Facility, commissioned in 2003 as VSAT Facility continues to give data (Internet) and voice (telephony) access in a convergence mode to all Academic and Administrative Departments, and to other establishments/buildings on the campus.

### **New Implementations:**

- (i) A new Campus Antivirus, Trend Micro Office Scan, is implemented for all clients in the network for a period of three years.
- (ii) A new Firewall with Unified Threat Management, Cyberoam 1000i, providing gateway protection of Antivirus, Antispyware and AntiSpam is implemented with three years subscription period for updates.
- (iii) Data and Voice Network extended to the Department of Environmental Studies, New Guest House and extended buildings of School of Technology.

### **Existing Components providing continual services:**

#### **Internet Access**

- (i) 2 Mbps Internet Leased Line: This connection, sponsored by the UGC-INFLIBNET for exclusive access to over 2500 scholarly periodicals available under INFONET scheme. It also supports general Internet browsing.

- (ii) 8 Mbps Internet Leased line from BSNL: This additional connection from BSNL, costing Rs.23 lakhs per annum, provides access to Internet to all users of NDVN.

### **Data Network (LAN)**

All server 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 run on HP Blade Chassis C7000 with 9 active Blade Servers. Beside these, there are other Tower servers (IBM, Compaq & Wipro) which are being utilized as proxy for residence, voice applications and backup.

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.

All Departments are connected over a Fibre Optics cable (FOC) backbone. Structured cabling for voice and data has been extended to all completed buildings.

Internet accesses as well as IP authenticated e-journals from UGC-infonet E-journal consortium, Library's OPAC software and 'sharing of resources' are the applications currently running on the network.

### **Voice Network**

The Avaya S8730 server with G650 gateway located in NDVN, Administrative Building and Political Science Department along with G450 located in the School of Technology and Guest House provide TDM backbone and IP enable switch architecture for voice/telephony. All these port networks are connected to the server-over –IP-Back-Bone.

## NEHU GUEST HOUSE

The University has Guest Houses at Shillong, Guwahati Airport and Tura Campus. The management of NEHU Guest House at Shillong is monitored by a duly constituted Guest House Management Committee. In the Shillong campus, the University is capable of accommodating more than 200 guests at a time. AC Suites, VIP Rooms, well-furnished rooms with intercom facility, television, etc are available in the Guest Houses at Shillong. The old Guest House at Shillong has Wi-Fi facility also.

Many National and International Seminars, Workshop, etc, were organized by various Departments of the University and NEHU Guest Houses at Shillong had been the venue for most of these seminars in view of its multiple advantages, such as accommodation, catering, Mini Conference Room, Auditorium and Internet facility.

The Guest House at Shillong had been able to make itself sustaining and bring in more improvements in the infrastructure from its own resources for providing better facilities and comfort to the guests of the University.

The Guest House at Guwahati Airport has now 9 AC rooms, 2 non AC rooms and a Mini AC Conference Room. The Guest House is self- sustained. Primarily, the Guest House also caters to the need of NEHU officials who pass through Guwahati, being the corridor between other parts of the country. The Guest House also caters to the need and extends common conferencing facilities not only to all other Central Universities of Northeast, but also to the Govt. of Meghalaya, Nagaland and Arunachal Pradesh besides RIIMS, AMC, DRL. During the period under report, a number of foreign guests were also provided accommodation in the Guest House.

The Guest House at Tura Campus functions from a hired building with a capacity of accommodating 12 guests at a time. Besides guests, Guest Faculties visiting various Departments for longer periods are also accommodated in this Guest House.

## UNIVERSITY TRANSPORT

The University has 17 buses, a water tanker and a mini truck. University bus is one of the essential services for the functioning of the University. The buses plying between the Shillong town and the University campus cater to the need of the students of the University and Kendriya Vidyalaya, staff and their dependents. All the commuters are charged bus fare yearly / monthly / per trip basis.

With the increase in the numbers of Departments, the numbers of students and staff have increased and the capacity in the buses is becoming inadequate. Alternative measures are being thought to tide over the problem.

The University is also providing the facility of water tanker and mini truck to carry out the essential services. These facilities are also made available to the staff on payment basis. Besides the facility of heavy vehicles, light vehicles are allotted to the University Officers /Academic Departments/Centres as and when required for performing official duties.

## COUNSELING AND PLACEMENT CELL

**Co-ordinator** : Prof. R. N. Sharan  
**Telephone** : 2722121, 2722122 (O); FAX: 2721018  
**Email** : placement@nehu.ac.in

The Counseling and Placement Cell (CPC) was established on April 1, 2008. The CPC endeavors to provide with the very best opportunities to NEHU graduate in terms of counseling & guidance, campus placements, etc. It envisions attracting national, international and multinational corporate/firms/companies to the campus with bags of opportunities for our graduates of different disciplines. To facilitate the objectives, an 'on-line registration portal' has been created on NEHU website (<http://www.nehu.ac.in>) wherein students can register themselves and upload a brief career profile for use by the CPC. Since its inception, five campus placement camps and five counseling sessions have been organized in the Shillong campus of NEHU. Seven of our graduates were

## Students' Services and Amenities

selected by three different corporate as their respective 'Trainee Executives' with handsome compensation package. It is expected that after successful completion of their training period of 6-12 months, they will all start their career as 'Executives'. Since its inception, 289 students participated in the counseling or placement camps and 51 students have been successful in obtaining job offers.

Highlights of the activities carried out by the CPC during the year:

- (i) AT &T, a multinational telecom company, organized a counseling session for all the students of NEHU on 3<sup>rd</sup> June 2009 where twenty five students participated.
- (ii) An interactive career counseling session was conducted by IIM, Kolkata at NEHU campus on 5<sup>th</sup> October 2009 on Doctoral Fellowship Programme of IIM. Forty three students from different streams attended the session.
- (iii) A two-day 'Job Fest' was conducted by Wipro BPO on 18<sup>th</sup> – 19<sup>th</sup> November 2009 for all the students in NEHU campus. The initiative taken by this firm is to provide enhanced employment opportunity. Thirty seven students attended the job fest out of which seven were offered initial appointment letters. The selected ones will have to go for an eighteen-week training programme.
- (iv) Indian Air Force organized a "Fast Track Recruitment Drive" on the NEHU campus on 13<sup>th</sup> March 2010 for engineering graduate (B. Tech. students of DIT & DECE). Fifteen students, who fulfilled the eligibility criteria, participated in the selection process (written test + interview) out of which eleven were selected for further, stage II, examination to be held at IAF Headquarters.

# XVI

## APPENDICES

### MEMBERS OF THE COURT

<p><b>Chancellor, Ex-Officio</b> Prof. M.G.K. Menon C-178, Sarvodaya Enclave New Delhi - 110 017 Ph, No. 01126966096 (O) 01126511454 (R)</p> <p><b>Vice-Chancellor, Ex-Officio</b> Professor Pramod Tandon, NEHU, Shillong.</p> <p><b>Pro-Vice-Chancellor, Ex-Officio</b> Professor R. Lalthantluanga NEHU, Shillong</p> <p>Professor S.S. Khare, NEHU, Tura Campus, Tura</p> <p><b>Dean, Students' Welfare, Ex-Officio</b> Professor R. N. Sharan NEHU, Shillong</p> <p><b>Registrar, Ex-Officio</b> Registrar, NEHU, Shillong</p> <p><b>Librarian, Ex-Officio</b> Mrs. I. Majaw NEHU, Shillong</p>	<p><b>Proctor, Ex-Officio</b> Dr. H. Kayang NEHU, Shillong.</p> <p><b>Finance Officer, Ex-Officio</b></p> <p><b>Deans of Schools, Ex-Officio</b></p> <ol style="list-style-type: none"><li>1. Dean, School of Humanities</li><li>2. Dean, School of Life Sciences</li><li>3. Dean, School of Physical Sciences</li><li>4. Dean, School of Social Sciences</li><li>5. Dean, School of Economics, Management and Information Sciences</li><li>6. Dean, School of Human and Environmental Sciences</li><li>7. Dean, School of Technology</li><li>8. Dean, School of Education</li></ol> <p><b>All Professors, Ex-Officio</b></p> <p><b>Department of Political Sciences</b></p> <ol style="list-style-type: none"><li>1. Prof. A.K. Baruah</li><li>2. Prof. Rupa Borgohain</li><li>3. Prof. L. S. Gassah</li><li>4. Prof. B.J. Deb (Head)</li></ol>
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## Appendices

### Department of Sociology

1. Prof. N. Kumar.
2. Prof. C. L. Imchen

### Department of History

1. Prof. D. R. Syiemlieh
2. Prof. M. Momin
3. Prof. Ivi. Sharma
4. Prof. F. A. Qadri

### Department of Economics

1. Prof. S.K. Mishra
2. Prof. Eugene D. Thomas
3. Prof. N. Srivastav
4. Prof. P. Nayak
5. Prof. B. Mishra

### Department of Commerce

1. Prof. N. M. Panda

### Department of Library and Information Sciences

NONE

### Centre for Science Education

1. Prof. M. M. Singh
2. Prof. D. Bhattacharjee
3. Prof. M. S. Bisht

### Centre for Distance Education

NONE

### Department of Environmental Studies

1. Prof. B.K. Tiwari
2. Prof. L. K. Jha
3. Prof. O. P. Singh

### Department of Bio-Chemistry

1. Prof. R. Lalthantluanga (PVC)
2. Prof. Ramesh Sharma
3. Prof. R. N. Sharan
4. Prof. Anis Alam (Head)

### Department of Botany

1. Prof. A. K. Mishra
2. Prof. N. K. Chrungoo
3. Prof. R. C. Laloo
4. Prof. M. S. Dkhar (Head)
5. Prof. N. Venugopal
6. Prof. S. K. Barik
7. Prof. U. Shankar

### Department of Zoology

1. Prof. V. Tandon
2. Prof. B. K. Sharma (Dean)
3. Prof. B. B. P. Gupta
4. Prof. S. B. Prasad
5. Prof. N. Saha
6. Prof. B. Kharbuli
7. Prof. R. N. K. Hooroo (Head)
8. Prof. S. N. Ramunanjam

### Department of Anthropology

1. Prof. T. B. Subba
2. Prof. H. Lamin
3. Prof. R. Khongsdier (Head)

### Department of Geography

1. Prof. A. C. Mohapatra (Head)
2. Prof. Surendra Singh
3. Prof. D. K. Nayak
4. Prof. B. S. Mipun (Dean)
5. Prof. Z. H. Qureshi

<p><b>Department of Chemistry</b></p> <ol style="list-style-type: none"> <li>1. Prof. K. Ismail (Dean)</li> <li>2. Prof. R. K. Poddar</li> <li>3. Prof. R. H. D. Lyngdoh</li> <li>4. Prof. B. Myrboh (Head)</li> <li>5. Prof. R. A. Lal</li> <li>6. Prof. K. M. Rao</li> </ol> <p><b>Department of Mathematics</b></p> <ol style="list-style-type: none"> <li>1. Prof. S. S. Khare (PVC, Tura)</li> <li>2. Prof. M. B. Rege</li> <li>3. Prof. H. K. Mukerjee (Head)</li> </ol> <p><b>Department of Physics</b></p> <ol style="list-style-type: none"> <li>1. Prof. P. Shukla</li> <li>2. Prof. P. N. Pandita (Head)</li> <li>3. Prof. Y. S. Jain</li> <li>4. Prof. B. M. Jyrwa</li> <li>5. Prof. S. Kumar</li> <li>6. Prof. P. Nongkynrih</li> </ol> <p><b>Department of English</b></p> <ol style="list-style-type: none"> <li>1. Prof. T. Ao (Dean)</li> <li>2. Prof. E. Syiem</li> </ol> <p><b>Department of Biotechnology &amp; Bio-Informatics</b></p> <ol style="list-style-type: none"> <li>1. Prof. A. Chatterjee</li> <li>2. Prof. S. R. Rao (Head)</li> <li>3. Prof. K. Aguan</li> </ol> <p><b>Department of Khasi</b></p> <ol style="list-style-type: none"> <li>1. Prof. B. War</li> <li>2. Prof. M. B. Jyrwa</li> <li>3. Prof. S. Dkhar (Head)</li> <li>4. Prof. A. Kharmalki</li> </ol> <p><b>Department of Linguistics</b></p> <ol style="list-style-type: none"> <li>1. Prof. J. War</li> <li>2. Prof. S. Kr. Singh (Head)</li> </ol>	<p><b>Department of Philosophy</b></p> <ol style="list-style-type: none"> <li>1. Prof. C. R. Agera</li> <li>2. Prof. Jagat Pal</li> <li>3. Prof. B. K. Agarwala (Head)</li> <li>4. Prof. Vanlalnghak</li> </ol> <p><b>Department of Hindi</b></p> <p>NONE</p> <p><b>Department of Education</b></p> <ol style="list-style-type: none"> <li>1. Prof. A. Henia</li> <li>2. Prof. P. K. Gupta</li> <li>3. Prof. R. S. Wangu (Head)</li> <li>4. Prof. S. M. Sungoh</li> </ol> <p><b>Department of BSSS</b></p> <ol style="list-style-type: none"> <li>1. Prof. P. V. Koparkar</li> </ol> <p><b>Department of Cultural and Creative Studies</b></p> <ol style="list-style-type: none"> <li>1. Prof. D. L. Kharmawphlang</li> <li>2. Prof. P. Jhingan</li> </ol> <p><b>Department of Law</b></p> <p>NONE</p> <p><b>Department of English, Tura Campus, Tura</b></p> <ol style="list-style-type: none"> <li>1. Prof. S. Gurudev</li> </ol> <p><b>Department of Garo, Tura Campus, Tura</b></p> <p>NONE</p> <p><b>Department of Education, Tura Campus, Tura</b></p> <p>NONE</p>
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## Appendices

<p><b>Department of Rural Development &amp; Agriculture Production, Tura Campus, Tura</b></p> <ol style="list-style-type: none"> <li>1. Prof. S. C. Srivastava (Head)</li> <li>2. Prof. R. Mohan</li> </ol> <p><b>Department of Business Management, Tura Campus, Tura</b></p> <ol style="list-style-type: none"> <li>1. Prof. G. Singaiah (Head)</li> </ol> <p><b>Department of Electronics &amp; Communication Engineering</b></p> <ol style="list-style-type: none"> <li>1. Prof. Sushabhan Choudhury</li> </ol> <p><b>Department of Information Technology</b></p> <p style="text-align: center;">NONE</p> <p><b>Sophisticated Analytical Instrument Facility</b></p> <ol style="list-style-type: none"> <li>1. Prof. R. P. Bajpai</li> </ol> <p><b>Department of Statistics</b></p> <ol style="list-style-type: none"> <li>1. Prof. G. Das</li> <li>2. Prof. S. M. Bandre</li> </ol> <p><b>Department of ACE</b></p> <ol style="list-style-type: none"> <li>1. Prof. E. Jyrwa</li> </ol> <p><b>Heads of the Departments who are not Professors (Ex-Officio)</b></p> <ol style="list-style-type: none"> <li>1. Head, Department of Commerce, NEHU, Shillong</li> <li>2. Head, Department of English, NEHU, Shillong</li> <li>3. Head, Department of Statistics, NEHU, Shillong</li> <li>4. Head, Department of Law, NEHU, Shillong</li> </ol>	<ol style="list-style-type: none"> <li>5. Head, Department of Education, NEHU, Tura Campus, Tura</li> <li>6. Head, Department of Hindi, NEHU Shillong</li> <li>7. Head, Department of Electronics &amp; Communication Engineering, NEHU, Shillong</li> <li>8. Head, Department of Information Technology, NEHU, Shillong</li> <li>9. Head, Department of Library &amp; Information Sciences, NEHU, Shillong</li> <li>10. Head, Department of Garo, NEHU, Tura Campus, Tura</li> <li>11. Head, Department of Basic Sciences &amp; Social Sciences, NEHU, Shillong</li> <li>12. Head, Department of English, NEHU, Tura Campus, Tura</li> <li>13. Head, Department of Adult &amp; Continuing Education, NEHU, Shillong</li> <li>14. Head, Department Cultural &amp; Creative Studies, NEHU, Shillong</li> <li>15. Head, Department of Management, NEHU, Tura Campus, Tura</li> </ol> <p><b>Two Readers who are not Heads of Department and two Lecturers to be appointed by rotation in the manner prescribed by Ordinance</b></p>
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<p><b>Readers :</b></p> <ol style="list-style-type: none"> <li>1. Dr. M. K. Das , Department of Statistics, NEHU Shillong</li> <li>2. Dr. L. R. Saha, Department of RDAP, NEHU, Tura Campus, Tura</li> </ol> <p><b>Lecturers :</b></p> <ol style="list-style-type: none"> <li>1. Dr. S. N. Sarma , Centre for Distance Education, NEHU, Shillong</li> </ol> <p><b>Seven Principals of Colleges in the State of Meghalaya</b></p> <ol style="list-style-type: none"> <li>1. Principal, Bormanik College, Shillong</li> <li>2. Principal, St. Dominic College, Shillong</li> <li>3. Principal, Shillong Engineering &amp; Management College, Shillong</li> <li>4. Principal, Williamnagar College, Williamnagar</li> <li>5. Principal, Christian Academy College, Shillong</li> <li>6. Principal, Mawlai Presbyterian College, Shillong</li> <li>7. Principal, K. L. Bajoria College, Shillong</li> </ol> <p><b>Four Teachers from affiliated Colleges of the State of Meghalaya</b></p> <ol style="list-style-type: none"> <li>1. Ms. Devaleena Bhattacharjee, Lady Keane College, Shillong</li> <li>2. Smt R. Merika Nongtdu, Jaintia Eastern College, Khliehriat</li> <li>3. Dr. Jaya. G. Choudhury, St.Mary's College, Shillong</li> <li>4. Shri Omprakash Sharma , Tura Law College, Tura</li> </ol>	<p><b>Four Lok Sabha Members to be nominated by the Speaker and two Rajya Sabha Members to be nominated by the Chairman of Rajya Sabha</b></p> <p><b>Lok Sabha:</b></p> <ol style="list-style-type: none"> <li>1. Shri Gurudas Dasgupta 15 Canning Lane New Delhi- 1100 001 OR 78, Chelta Road Kolkata-700 027</li> <li>2. Shri Ramen Deka 158 South Avenue New Delhi-110 001</li> <li>3. Smt Ranee Narah M-16, South Extension Part II New Delhi-110 049</li> <li>4. Shri Sushil Kumar Singh 27,Old Court Hostel New Delhi OR "Singh Kjothi" Old GT Road Aurangabad-824 101</li> </ol> <p><b>Rajya Sabha:</b></p> <ol style="list-style-type: none"> <li>1. Shri Rishang Keishing Mantri Pukhri Imphal Manipur &amp; 12,Talkatora Road New Delhi-110001</li> <li>2. Shri Matilal Sarkar Village Milan Sangha P. O. A. D. Nagar Agartala, Tripura</li> </ol>
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Appendices

<p style="text-align: center;">&amp;</p> <p>Flat No.107 &amp;504 V. P. House, Rafi Marg. New Delhi-11000</p> <p><b>Ten Members representing learned Professions and special interest to be nominated by the Visitor</b></p> <ol style="list-style-type: none"><li>1. Prof. T. P. Singh, Ex-Dean, Faculty of Law Barkatullah University, Bhopal</li><li>2. Prof. L. K. Maheshwari Vice-Chancellor, BITS and Director of BITS, Pillani Campus, Pillani</li><li>3. Dr. Biswajit Dhar Professor &amp; Head of the Centre Indian Institute of Foreign Trade New Delhi</li><li>4. Shri Dileep Padgaonkar Ex-Managing Editor Times of India</li><li>5. Prof. G. C. Khilnani Professor of Medicine All India Institute of Medical Sciences, New Delhi</li><li>6. Prof. S. Parasuraman Director Tata Institute of Social Science Mumbai</li><li>7. Shri Satish Chander Gupta Chairman and Managing Director United Bank of India, Kolkata</li><li>8. Prof. P. Balaram Director Indian Institute of Science Bangalore</li></ol>	<ol style="list-style-type: none"><li>9. Dr. Mangala Rai Director General Indian Council of Agricultural Research, New Delhi</li><li>10. Dr. A. Mohandas Professor Emeritus School of Environmental Studies Cochin University of Science &amp; Technology, Kochi</li></ol> <p><b>Four Students to be nominated by the Vice-Chancellor:</b></p> <p style="text-align: center;">Vacant</p> <p><b>Not more than five persons to be nominated by the Visitor</b></p> <ol style="list-style-type: none"><li>1. Prof. R. S. Dubey Former Vice-Chancellor Guru Ghasi Das University Bilaspur</li><li>2. Prof. Anil. K. Singh Professor Indian Institute of Technology Mumbai</li><li>3. Prof. G. Padmanabhan Department of Biochemistry Indian Institute of Science Bangalore-560 012</li><li>4. Prof. R. N. K. Bamezai Professor School of Life Science Jawaharlal Nehru University New Delhi</li><li>5. Prof. A. N. Rai Vice-Chancellor Mizoram University Aizawl</li></ol>
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<p><b>Two Persons nominated by the Chancellor</b></p> <ol style="list-style-type: none"> <li>1. Prof. Amit Ghosh Emeritus Scientist ICMR National Institute of Cholera and Enteric Diseases' P-33,CIT Scheme XM Beliaghata, Kolkata-700010</li> <li>2. Dr. Manju Sharma B9/6496 {FF} Vasant Kunj, New Delhi</li> </ol> <p><b>Not more than two persons to be nominated by the Chief Rector</b></p> <ol style="list-style-type: none"> <li>1. Shri I. K. Sangma Retd. Secretary of MBOSE Meghalaya, C/o Tetengol Tura</li> <li>2. Smt. M. Marwein Retd. Joint Director HTE Meghalaya, C/o Jaiaw Langsning Shillong-793002</li> </ol> <p><b>Two members of the Non-Teaching Staff nominated by the Vice-Chancellor</b></p> <ol style="list-style-type: none"> <li>1. President Non-Teaching Staff Association NEHU Shillong</li> <li>2. General Secretary Non-Teaching Staff Association NEHU Shillong</li> </ol> <p><b>Two representatives from the State of Meghalaya nominated by the State Government</b></p> <ol style="list-style-type: none"> <li>1. Shri W. Synrem IES Director Higher &amp; Technical Education Department of Education, Shillong</li> <li>2. Shri J. D. Sangma Director Elementary &amp; Mass Education, Shillong</li> </ol>	<p><b>Members of the Executive Council who are not otherwise members of the Court</b></p> <ol style="list-style-type: none"> <li>1. Director of Higher and Technical Education, Government of Meghalaya, Shillong</li> <li>2. Principal Seng Khasi College Shillong</li> <li>3. Principal Medipathar College, Medipathar</li> <li>4. Dr. A. K. Singh Professor of French Banaras Hindu University VARANASI-221005</li> <li>5. Prof. S. S. Singh Director National Law Institute University BHOPAL-462044 Madhya Pradesh</li> <li>6. Prof. Virginius Xaxa Professor of Sociology University of Delhi-110007</li> <li>7. Prof. L. K. Maheshwari Vice-Chancellor, BITS &amp; Director of BITS Pilani Campus</li> <li>8. Prof. G.C. Khilnani Professor of Medicine, All India Institute of Medical Sciences, New Delhi-110029</li> <li>9. Dr. Mohandas A. Professor of Emeritus School of Environmental Studies Cochin University of Science and Technology, Cochin-682022</li> </ol>
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## MEMBERS OF THE EXECUTIVE COUNCIL

**Professor Pramod Tandon  
(Chairman)**

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Officio-Member)**

Pro-Vice-Chancellor

NEHU, Shillong

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Dean, School of Economics,  
Management & Information  
Sciences,

NEHU, Shillong

**Prof. B. S. Mipun**

Dean, School of Human &  
Environmental Sciences,  
NEHU, Shillong

**Prof. T. Ao**

Dean, School of Humanities,  
NEHU, Shillong

**Prof. B. K. Sharma**

Dean, School of Life Sciences  
N EHU, Shillong

**Prof. R. P. Bajpai**

Sophisticated Analytical  
Instrument Facility, NEHU, Shillong

**Dr. M. K. Das**

Department of Statistics  
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