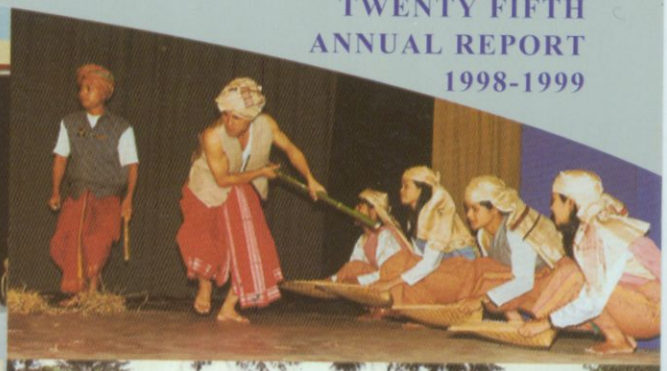
# NORTH - EASTERN HILL UNIVERSITY

















TWENTY FIFTH
ANNUAL REPORT
1998-1999

NEHU ANNUAL REPORT 1998-1999




The objects of the University shall be 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.

# North-Eastern Hill University
## Shillong

## Twenty Fifth
## ANNUAL REPORT

1998-1999

Compiled at Annual Report Cell, NEHU and printed at
NEHU Printing Press, Shillong-793003

# FROM THE VICE-CHANCELLOR'S DESK



The year under report marks the Silver Jubilee Anniversary of the North-Eastern Hill University which was formally inaugurated on the 19th of July, 1973. From its humble beginning of only two Departments and an office which functioned from rented buildings, the University can now boast of twenty-two Departments and four Centres of Studies at the Shillong Campus, five Departments and a University Under-Graduate College at Aizawl besides two Departments at the recently established Campus at Tura. The University also has now a 1024 acre Permanent Campus at Shillong besides two smaller Campuses in the City. At Aizawl too, the construction of the Campus there is almost completed.

As reported in the last year's Annual Report we have made proposals for vocational oriented departments during the IX Plan. The funds for the same are yet to be received and we hope that by the end of the next academic session, matters will take shape and we shall be able to start the Departments.

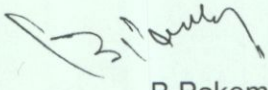
A significant decision which we have been able to take during the year was the restructuring of the Centres of Studies. Under the reorganisation of the Centres, the existing Centres now come under four Centres, viz., Centre for Cultural and Creative Studies, Centre for Supportive and Learning Systems, Centre for Environmental Studies and Centre for Applied Statistics.

On the construction front, we hope that the Social Science Departments will be able to move into the newly

constructed Social Science Complex before the start of the next semester. Other constructions like hostels and staff quarters are going on and plans have already been finalised for the construction of more staff quarters, academic buildings, administrative block and library building for the Shillong Campus. Plans have also already been drawn up for the academic buildings at Tura Campus as well as the academic-cum-recreation hall for Pachhunga University College and other buildings for the Aizawl Campus.

The total number of students in all faculties during the year was 25,616, of this 21,687 are Under-Graduates in Colleges affiliated to or maintained by the University, 2,561 in the Professional Courses and 1,368 in the Post-Graduate Departments.

I take this opportunity to thank the Members of the Editorial Board and their team who complied and edited this Annual Report and also the NEHU Publications for having seen it through its publication.



B.Pakem

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# NORTH-EASTERN HILL UNIVERSITY

**Visitor** : The President of India

**Chancellor** : Shri K R Narayanan
Vice-President of India (upto July 1997)
Shri Krishna Kant
Vice -President of India ( wef November 1998)

**Chief Rector** : The Governor of Meghalaya

**Vice-Chancellor** : Professor B Pakem

**Pro-Vice-Chancellors**

| | | |
|---|---|---|
| Mizoram Campus | : | Professor R Lalthangtluanga |
| Tura Campus | : | Professor Milton S Sangma |
| Shillong Campus | : | Professor (Mrs) K S Lyngdoh |

**Registrar** : Dr. A Patton (Acting)

**Finance Officer** : Sri L Nampui, IRS

**Controller of Examinations** : Dr. A Patton

**Deans of Schools** :

| | | |
|---|---|---|
| School of Humanities & Education | : | Professor N Malla |
| School of Life Sciences | : | Professor A Raghuvarman |
| School of Physical Sciences | : | Professor S S Khare |
| School of Social Sciences | : | Professor J P Singh |
| School of Economics, Management and Information Sciences | : | Professor S K Mishra |
| School of Human and Environmental Sciences | : | Professor A C Mohapatra upto 28.2.99.<br>Professor T B Subba from 4.3.99. |

# NEHU AT A GLANCE

North-Eastern Hill University was set up as a central university by an Act of Parliament and notified on 26th May 1973 and formally inaugurated on 19th July 1973. 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.

The jurisdiction of the University extended to the States of Meghalaya, Nagaland and the erstwhile Union Territories of Arunachal Pradesh and Mizoram and the headquarters of the University is located at Shillong as per the Act of Parliament. With the establishment of Nagaland University on 6th September 1994 the jurisdiction of NEHU over Nagaland ceased.

The University had opened Campuses at Shillong, Aizawl, Kohima and Medziphema. In addition, the University also started a pace-setting College in Mizoram in 1979 by taking over the Pachhunga Memorial Government College and renaming it as the Pachhunga University College. Initially, at Shillong the academic departments and administrative offices of the University started functioning in hired buildings and thereafter with the acquisition and purchase of the Mayurbhanj and Bijni Complexes most of the academic departments were shifted to these two Complexes. The Government of Meghalaya subsequently allotted land measuring approximately 1024 acres free of cost to the University for setting up its Permanent Campus. The survey and master plan of the site for the Permanent campus was taken up under the VI Plan. The VII Plan saw the beginning of the construction work with very limited grants from the University Grants Commission. By the year 1984 a number of constructions and Campus Development works like staff quarters, electrification, water supply, ring-road, USIC Workshop, Hostels (for men and women separately), Guest House and Seminar Complex and later RSIC Complex and the Science Complex were carried out. At the moment all the Science Departments except the Chemistry Department are functioning in the Permanent Campus. The Department of Education is also located in the Permanent Campus.

The headquarters of the University is also being presently housed in the RSIC Complex at the Permanent Campus. During the VIII Plan a sum of Rs. 200 lakhs was sanctioned by the University Grants Commission for construction work. Out of this allotted grant the construction for the Social Science Complex to house the Departments of Economics and Political Science have been taken up and the work is expected to be completed soon. During the IX Plan the University proposes to take up more construction projects and

developmental work in the Permanent Campus like the Administrative Block, Central Library Building, Social Science Lecture Hall, Education Department Block, Central School Building, Staff Quarters, Sports Complex, external electrification, fencing, water supply, etc. The Telecom Department has also set-up a fully automated telephone exchange in the University Campus, the first of its kind in any university in the region. In Mizoram the state government has leased about 980 acres of land at Tahnril, Aizawl. The construction work for the same consisting of the administrative block, class rooms and laboratories amounting to Rs.1,19,77,000 has been handed over to the State PWD. With the setting up of Nagaland University, NEHU's jurisdiction over the state of Nagaland ceased and the academic departments in the state of Nagaland were handed over to the Nagaland University. However, quite a number of employees who were earlier serving in our erstwhile Nagaland Campus have remained under North-Eastern Hill University. This has led to the addition of three more academic departments namely, the Departments of Commerce and Linguistics at Shillong and the Department of Geology at Aizawl. As the employees were retained by the Nagaland University on deputation and the teachers concerned have recently been repatriated to NEHU, two of these three Departments functioned only with effect from the 1996 academic session. In February, 1996 the University has set-up a Campus at Tura with the Departments of English and Garo to begin with.

Though the University is located in a remote corner of the country, it has been able to establish itself as an institution of repute with 28 Departments and 4 Centres of Studies under its six Schools, one institute and an under-graduate college. The prestigious Regional Sophisticated Instrumentation Centre funded by the Department of Science and Technology, Government of India is being run at this University. The University Sceince Instrumentation Centre which is directly funded by the University Grants Commission has also been recently upgraded to Level II. Three Departments of the University i.e. Department of Botany, Chemistry & History have been identified for the Special Assistance Programme by the University Grants Commission. Besides, the Chemistry Department was also getting a special grant under the COSIST programme of the UGC. The Department of Zoology has also been granted the second phase of the DRS project from UGC. In addition to this a huge number of research projects have been awarded to individual teachers notably by the CSIR, DST, DAE, UGC, Ford Foundation DBT, DF & E etc. including a Rs. 1.5 crore project from NEC. The University is also managing a number of endowments donated by various individuals & organisations including from His Excellency, Dr Shankar Dayal Sharma, former President of India, who was also the Visitor of the University, Justice Krishna Aier, besides others. The University was also awarded the prestigious Rajiv Gandhi Chair on Protective Discrimination for a period of five years.

On the achievements of individuals the notables are Professor M.K. Choudhury who was awarded the coveted " Shanti Sawroop Bhatnagar" Prize for his outstanding contribution to Scientific Research, Professor B Pakem the Pandit Jawaharlal Nehru National Award in Social Sciences, Professor P Tandon was selected as Fellow of the National Science Academy, Professor M.K. Choudhury, elected as FA.Sc, Professor R R Mishra, Professors S.S. Khare, S.R. Srivastava, R.S. Tripathi, FNA.Sc. Professor M.K. Choudhury FNSc, Professor (Mrs) K.S. Lyngdoh the Priya Darshani Award, Professor A.N. Rai Young

Scientist Award in Bio-Technology, Dr. Nirmalendu Saha the ISCA Young Scientist's Award, Dr. Vinod Singh, Career Award by the University Grants Commission, Professor M.K. Mahanti, the Rev. Fr. L M Yeddanapalli Medal & Prize. Many of our teachers are also involved in active research in collaboration with a number of Universities & Institutes abroad both in the developed & under-developed countries.

The University has also organised a number of National and Regional Conferences, Seminars and Workshops and in the recent past two International Conferences.

At the moment, there are sixty five under graduate colleges affiliated to the University including eight professional course colleges. The North East Regional Institute of Science and Technology is also affiliated to the University.

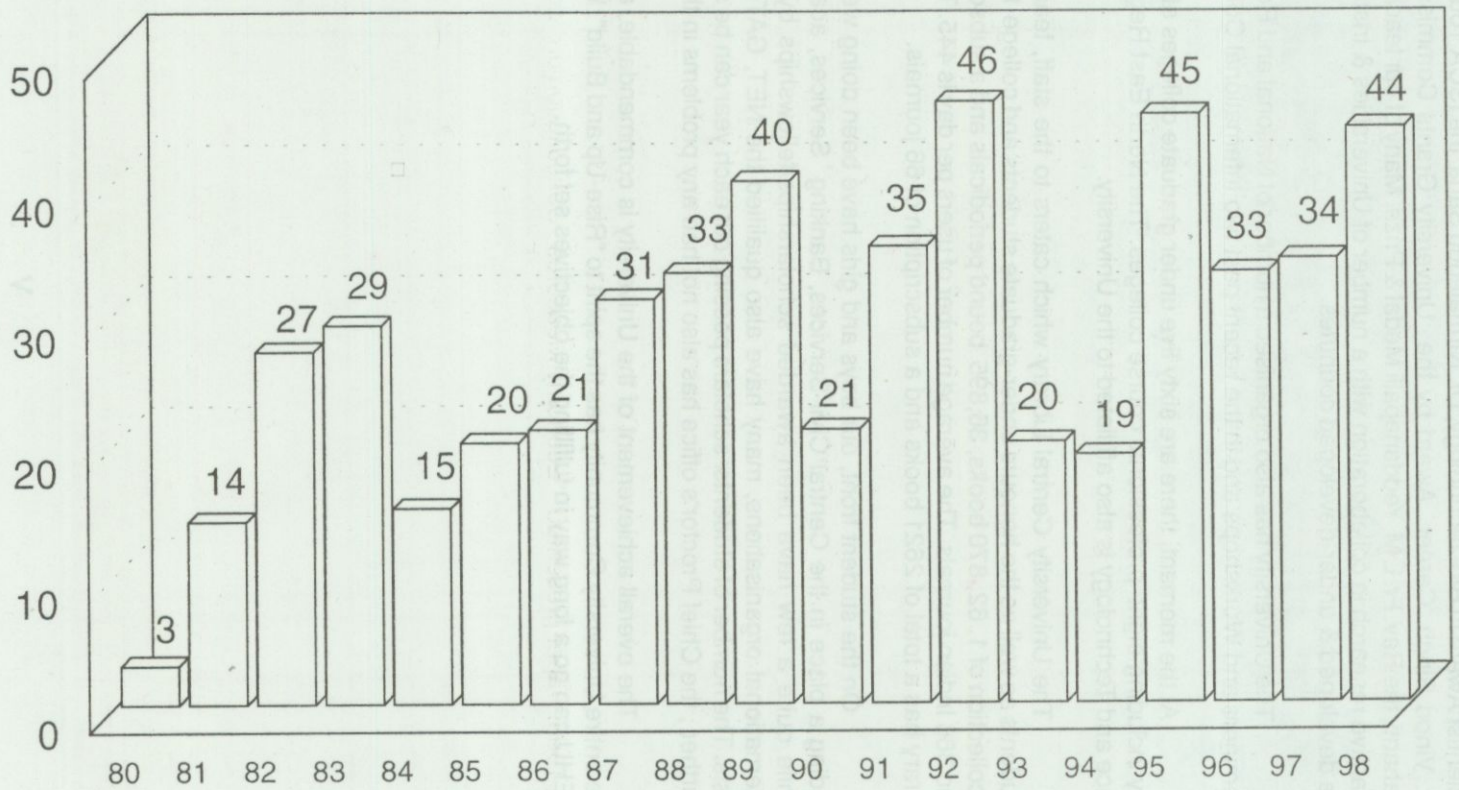
The University Central Library which caters to the staff, teachers, post-graduate students as well as the honours under-graduate students and college teachers can boast of a collection of 1, 62, 870 books, 36,895 bound periodicals and a subscription of 316 foreign and 366 Indian journals. The average number of users per day is 445. The Mizoram campus library has a total of 2621 books and a subscription of 66 journals.

On the student front, our boys and girls have been doing well with many of them finding a place in the Central Civil Services, Banking Services, academic positions etc, while quite a few have been awarded scholarships/fellowships by both national and international organisations, many have also qualified the NET, GATE and other national tests. The number of students/ scholars passing out each year can be seen at table I, II & III. Further , the Chief Proctor's office has also not had any problems in the recent past.

The overall achievement of the University is commendable, and true to our motto the entire University Community has the spirit to "Rise-Up and Build". With adequate grants NEHU can go a long way in fulfilling the objectives set forth.

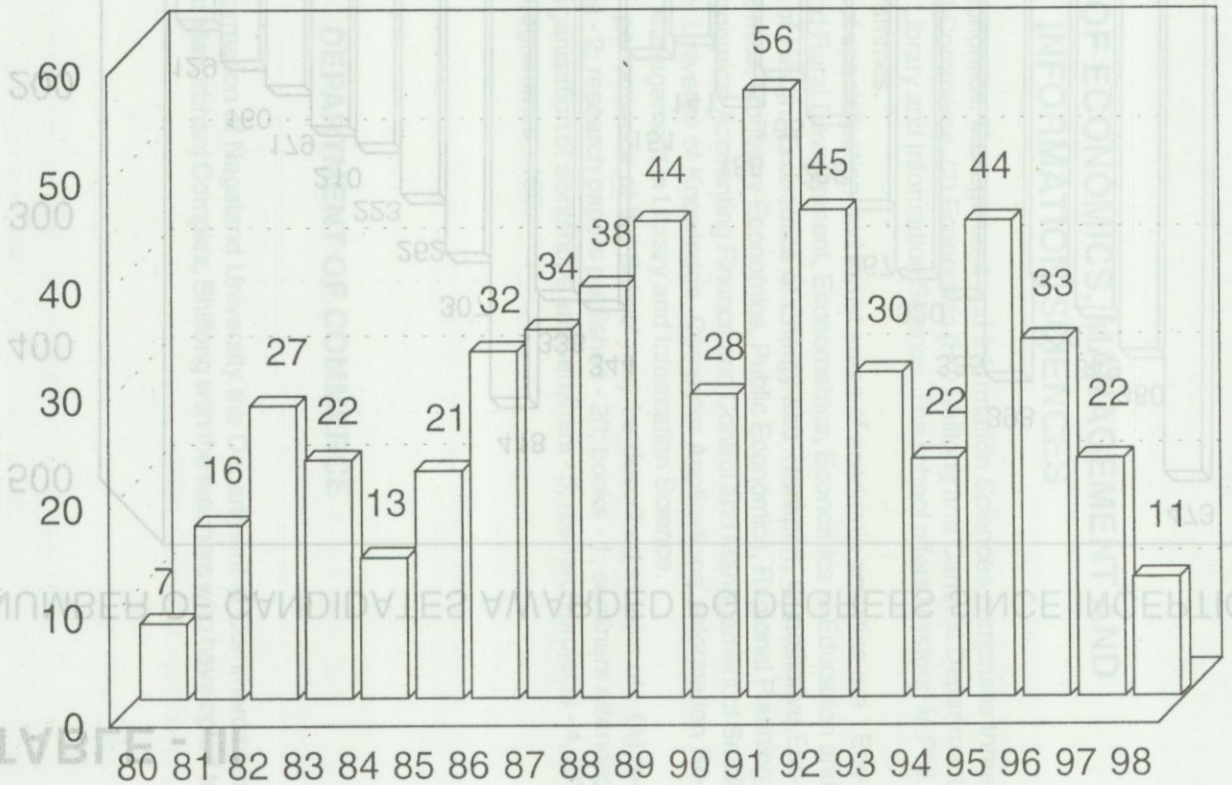
# TABLE - I

NUMBER OF CANDIDATES AWARDED Phd SINCE INCEPTION



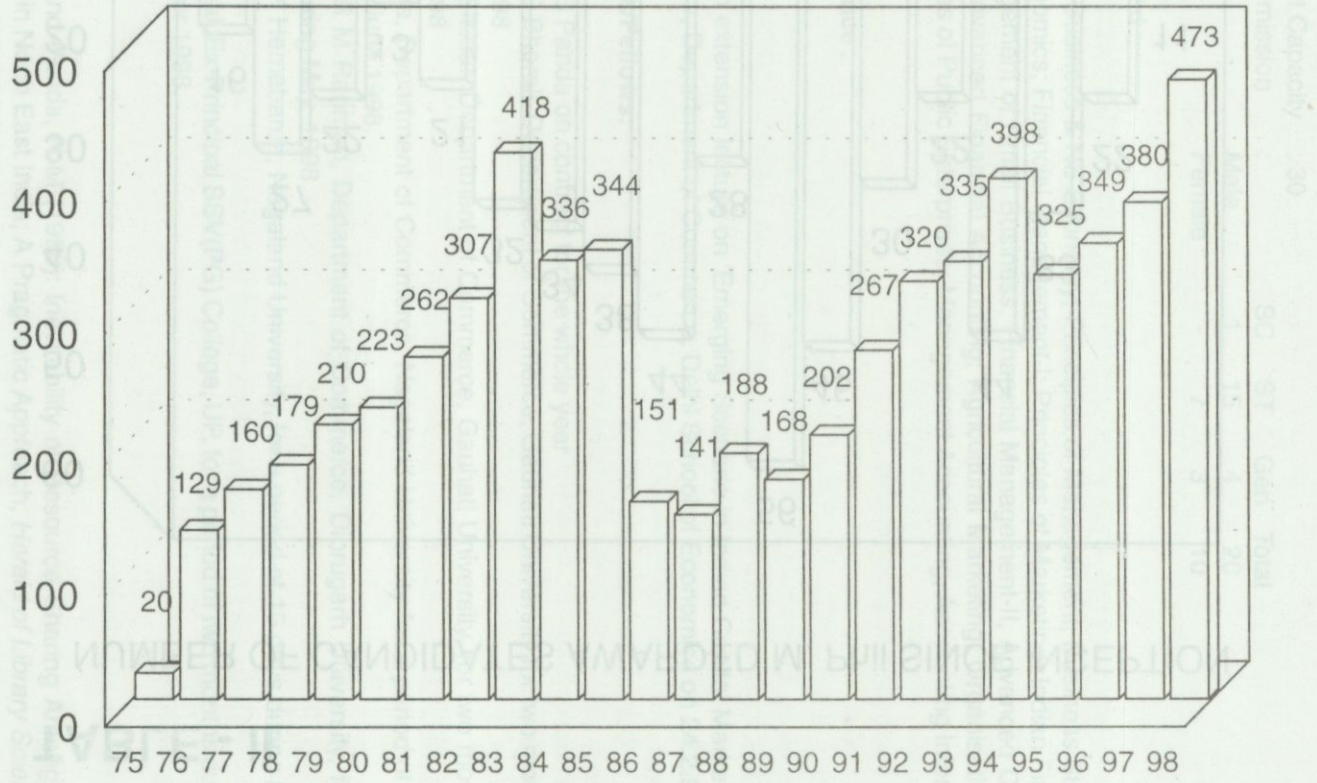
# TABLE - II

NUMBER OF CANDIDATES AWARDED M. Phil SINCE INCEPTION



# TABLE - III

NUMBER OF CANDIDATES AWARDED PG DEGREES SINCE INCEPTION



# SCHOOL OF ECONOMICS, MANAGEMENT AND INFORMATION SCIENCES

The School of Economics, Management and Information Sciences comprises three departments namely, (1) Commerce, (2) Economics (HQ Shillong and Campus Department at Aizawl, Mizoram), (3) Library and Information Science. The school offers Masters, M.Phil. and Ph.D. degree programmes.

The major areas of specialisation and thrust areas of academic activities are : Economics of Agriculture and Rural Development, Econometrics, Economics of Education and Manpower, Economics of Health, Economics of Energy and Transport, Quantitative Economics, Industrial Economics, Monetary Economics, Public Economics, Regional Planning, Urban Economics in Economics; Accounting Finance and Control and Management of Small Business in Commerce; Universe of Knowledge, Computer Applications, Information Retrieval, and Information Management in Library and Information Science.

During the year, performance of the School may be described in term of : (A) research : Ph.D.- 2; M.Phil - 2; research papers published - 20; books - 1; seminars attended and papers read - 12; organisation of workshops and seminars - 5; research projects - 4, (B) admission to masters programmes - 150.

## DEPARTMENT OF COMMERCE

Consequent to formation of Nagaland University the Department of Commerce has started afresh in 1996 at Mayurbhanj Complex, Shillong with the teachers who have opted to stay back with NEHU.

**Incharge**: N M Panda.

**Faculty :**

Lecturer : N M Panda, M.Com (Utkal) FDPM (IIM, Ahmedabad)

**Student Intake :**

(a) Enrolment Capacity : 30

(b) Actual Admission :

| | SC | ST | Gen | Total |
|---|---|---|---|---|
| Male | 1 | 15 | 4 | 20 |
| Female | - | 7 | 3 | 10 |

**Courses Conducted :**

Government Business & NE Economy; Principles of Management; Business Statistics; Business Economics; Financial Management-I; Principles of Marketing, Indian Financial System; Management of Small Business. Financial Management-II, Advanced Commercial Banking; Advanced Financial Accounting; Agricultural Marketing, Organisational Behaviour; Principles of Public Enterprises; Management Accounting, Accounting Information System.

**Seminars/Conference :**

*Organised*:

Organised an extension lecture on 'Emerging Scenario in Indian Capital Market' by Professor O P Gupta, Department of Commerce, Delhi School of Economics on 24.2.99.

**Visiting Professors/Fellows:**

Professor G S Panda on contract for the whole year

Professor D D Bhorali, Department of Commerce, Gauhati University for two months during June-July 1998

Professor S Sikidar, Department of Commerce, Gauhati University, for two months during June-July 1998

Dr. A K Mishra, Department of Commerce, Nagaland University for a period of two months during May-June 1998.

Professor A R M Rahman, Department of Commerce, Dibrugarh University, for a period of 15 days during May, 1998

Professor H K Hemabarua, Nagaland University, for a period of 15 days during May 1998

Dr O P Agarwal, Ex-Principal SSV(PG) College, UP, for a period of two months during November-December 1998.

**Publications :**

Kundu A K and Panda, N M (1998): Inevitability of Resource Sharing Among the University Libraries in North East India; A Pragmatic Approach, *Herald of Library Science*, 37(1-2), 56-69.

Panda, N M (1999) Activity Based Costing for Indian Industries, New Delhi, Mittal Publications.

**Thrust Area of Research :**

Accounting Finance and Control Management of Small Business.

**Other Activity:**

N M Panda participated as a resource person in two training programmes conducted by Regional Training Institute of Indian Audit and Accounts Department and delivered the following lectures

For the Section Officers (Nov, 1998): Responsibility Accounting

For the Senior Accounts Officers (March, 1999) Management Information System Motivating Middle Level Managers.

## DEPARTMENT OF ECONOMICS

***Aizawl***

The Department of Economics, NEHU, Mizoram Campus, Aizawl, started functioning in 1979 with just one teacher and a few students. However, since the last two years student intake has been on the increase.

**Head** : Professor Tlanglawma

**Faculty** :

| | | |
|---|---|---|
| Professors | : | Tlanglawma M.A. (Gauh) Ph.D. (NEHU) |
| | | K K Upadhyaya M.A., Ph.D. (Alld) |
| Readers | : | A K Agarwal M.A, Ph.D (Kanpur) |
| | | Lianzela M.A, Ph.D (Gauh) |
| | | Thangchungnunga M.A., Ph.D (Gauh) |
| Lecturer | : | S K Ghosh M.A (Saug), M. Phil. (NEHU) |

**Student Intake :**

| | | |
|---|---|---|
| (a) Enrolment Capacity | : | M.A. 50 |
| | | Ph.D 1 |

(b) Actual Admission: M.A.

| SC/ST | Gen | Male | Female | Total |
|---|---|---|---|---|
| 49 | 1 | 41 | 9 | 50 |

**Courses Conducted :**

Political Economy; Macro-economic Analysis-I; Mathematics for Economists; Statistical Analysis; Micro-Economic Analysis-II; International Trade; Economics of Health & Manpower; Monetary Economics-I, Econometrics-I.

**Seminars/Conferences :**

*Attended*

Lianzela: Regional seminar on "North-East India 1947-1997: Continuity and Change" - organised by Nagaland Gandhi Ashram and NEIBM, February 10-12, 1998. Paper presented on 'Economics Development of Mizoram during the last 50 years'. First Conference of the North-Eastern Economic Association, Guwahati, April 8-9, 1998. Paper presented on 'Fifty Years of Development in Mizoram'. "The Status of Social Sciences in Vernacular Languages in North-East India" by ICSSR-NERC, Shillong and Paper presented - 'Social Sciences in Mizo' on 30th Nov, 1998. Regional Conference on "In search of Sustainability and Ecological Security for Eastern Hills of India", December 8-9, 1998. Paper presented - 'The State of Environment in Mizoram'. Seminar on "Agricultural Marketing". Aizawl, September 2, 1998. Paper presented - 'How to market agricultural products of Mizoram'. Seminar on "Culture and Development" - organised by Mizoram Economic Association and Department of Economics, NEHU, Aizawl, May 28, 1998. Paper presented - 'Mizoram Development Status'. Seminar on "Overdraft Economy Measures & Resource Mobilisation, Aizawl, June 18, 1998. Paper presented - 'Economy Measures'. Consultation on "Education Policy for Mizoram", March 10-13, 1998. Paper presented - 'Education Policy : Its Aims, Objects, Goals and Purpose'. Conference organised by North-Eastern Economic Association, Margherita, February 10-12, 1999, Assam. Paper presented - 'Supply and Availability of Power and Basic Minimum Services in Mizoram'. Annual Conference of North-East India Education Society held at Hailakandi, February 26-27, 1999, Assam. Paper presented - 'Education and Rural Development with Special References to Mizoram'. Workshop on "Implementation of New Land-Use Policy" - organised by Rural Development Department, Government of Mizoram, Aizawl, March 4, 1999. Paper presented - 'Implementation of New Land-Use Policy in Mizoram'.

Thangchungnunga: Seminar on "Agricultural Marketing" at Aizawl, September 2, 1998. Paper presented - 'Finding a Marketing Outlet for Agricultural Products'.

Upadhyaya, K K: Second National Conference on "Economic Theory and Policy" at Jawaharlal Nehru University, New Delhi, October 8-10, 1998. Paper presented - 'Fitting the Market to Grind out more Output' - Focus: India, June,1998.

*Organised*:

Thangchungnunga: Extension lecture on "Population Education" at Aizawl, October 29-30, 1998. Extension lecture on Consumer Awareness and Women Issue", in the Department of Economics, NEHU, Aizawl, March 26, 1999.

Upadhaya, K K: Symposium on "Sen : Equality and Policy" on November 13, 1998 at the Press Club, Aizawl, under the auspices of the Circle for Contemporary Studies, NEHU, Aizawl.

**Publications:**

Agarwal, A K (1998) Changing Scenario of Indian Banks *Political Economy Journal of India.* 7(1&2) 68-71.

Agarwal, A K, "Sociological Constraint to Industrial Development in Mizoram", in B. Dutta Ray & Prabin Baishya eds. *Sociological Constraints to Industrial Development in North-East India,* New Delhi, Concept Pub. 1998. pp. 244-251.

Agarwal, A K, "Autonomous District Councils in Mizoram" in Bhupinder Singh ed.: *Antiquity to Modernity in Tribal India,* Vol. II, sponsored by ICSSR, New Delhi, InterIndia Pub, 1998, pp. 123-143.

Lawma, T(1997) Learning from Peoples' Experience : Successful Initiatives in the Fields of Education, Literacy, Community Development and Empowerment in Mizoram, *The Administrator, XLII,3,215-219.*

Lianzela, "Economy of Mizoram": *Mizoram Publication Board,* Mizoram, Aizawl, 1998.

Lianzela,(1998) Five Decades of Socio-Economic Development in Mizoram, *Economic Challenger,* 001, 001

Lianzela,(1998) Poverty Alleviation Programme in Mizoram: in *Administrative Review* (Special Issue on Modernization in Mizo Society Imperatives and perspectives) : Annual Journal of IIPA. Mizoram Regional Branch, 1996 & 1997 (two issues) published in 1998.

Thangchungnunga, (1998) Agrarian Change and Social Transformation among the Mizos" : *International Journal of Social Economics.* 25; 2,3 & 4.

**Thrust Area of Research :**

Development economics with special reference to the North East India.

***Research Programme/Research Project*:**

Professor Tlanglawma:

Project on Land-Use Planning : Nagaland

Project on Land-Use Planning : Arunachal Pradesh

Project on Land Relations & Agricultural Practices Among the Hill Tribes of North East India: Mizoram - sponsored by the Ministry of Rural Areas & Employment, Government of India and entrusted to OKD Institute of Social Change & Development, Guwahati, Assam.

## DEPARTMENT OF ECONOMICS
### *SHILLONG*

The Department of Economics established in 1974, is now part of the School of Economics, Management and Information Science. The main objective of this Department has been in imparting socially relevant education at post-graduate level by a judicious mix of empiricism and theory. The courses of study and research offered in the Department have been designed to meet this objective.

The Department has given adequate coverage to North-Eastern Region in its research programme. Students are offered a compulsory courses on North-Eastern Region and Environmental Economics.

The courses of study in the Department have been periodically updated to capture the latest developments in the discipline. An adequate exposure to quantitative techniques is compulsorily given to all students.

The students of this Department have researched extensively on Socio-economic problems of North-Eastern Region while working on their (a) term papers towards partial fulfilment of M.A programme and (b) M.Phil/Ph.D. thesis. Besides, the faculty have had studied almost entire North-East Region under various research projects and individual research efforts.

**Head** : Professor M Lalwani

**Faculty :**

| | | |
|---|---|---|
| Professors | : | S K Mishra M.A (Bhagal) ,Ph.D (IIT, Kharagpur) |
| | | M Lalwani M.A (Delhi ),Ph.D (Delhi ) |
| | | P M Passah M.A , Ph.D (Gauh). |
| Readers | : | N Srivastav MA (Raj), Ph.D (IIT, Kharagpur) |
| | | E D Thomas M.A , Ph.D (NEHU) |
| Lecturers | : | B Mishra M.A, Ph.D (Utkal) |
| | | A C Dube M.A (BHU), Ph.D (IIT, Bombay) |
| | | O J Kharpuri M.A (NEHU) |

**Student intake :**

| | | | | | | |
|---|---|---|---|---|---|---|
| a) Enrolment capacity : | M.A | = | 50 | | | |
| | M.Phil | = | 20 | | | |
| | Ph.D | = | 20 | | | |
| b) Actual admission : M.A | = | SC/S | | General | Male | Female |
| | | 5 | 36 | 09 | 25 | 25 |

**Degrees Awarded :**

*Ph.D:*

Rupam Kumar Brahma: "Demand of Petroleum Products in Assam: A Case Study of Kokrajhar, Bongaigaon and Dhubri Districts (Assam)". Supervisor: Professor K Bez (Retd.)

Bijit Kumar Dutta: "A Study on Theories of Share - cropping with Evidence from Karimganj District of Assam". Supervisors: Professor M. Lalwani and Dr. E D Thomas.

*M.Phil:*

Juthika Barman: "Instability in Assam's Agriculture and Inter-District Temporal Analysis of Foodgrain Crops", Supervisor: Professor M. Lalwani.

Simanta Poddar : "Population Structure on Assam from 1971 to 1991 "Supervisor: Professor P M Passah

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

The Department is in receipt of a grant amounting to Rs. 2,50,000/- (Rupees two lakhs fifty thousand only) from Madras School of Economics, Chennai, under the World Bank's Aided India Environmental Management Capacity Building Technical Assistance Project, for procurement of books, journals, reference materials, data base and back volumes of journals in the field of Environmental Economics.

**Courses Conducted:**

*M.A/M.Sc.*:Political Economy, Macro-Economic Analysis-I , Mathematics for Economists, Statistical Analysis, Macro-Economic Analysis - II, Micro-Economic Analysis - I, Public Economics, Economics of Development and Planning, Micro-Economic Analysis - II, International Trade, Indian Economy, Economy of North-Eastern Region.

*Optional Papers*: Theories of Industrial Economics, International Trade & Monetary Policy, Computer Programming for social Scientists, Static Optimisation Techniques, Industrial Organisation in India, Environmental Economics, Modern Growth Economics, Dynamic Optimisation Techniques, International Economics, Economics of Agriculture - I, Economics of Agriculture - II, Econometrics - I, Econometrics - II, Econometrics - III, Economics of

Human Resources - I, Economics of Human Resources - II, Mathematical Economics - I, Mathematical Economics - II, Economics of Third World - I, Economics of Third World - II, History of Economic Thought - I, Urban and Regional Economics - I, Urban and Regional Economics - II, Transport Economics - I, Transport Economics - II, History of Economic Development - I, History of Economic Development - II, Monetary Economics - I, Monetary Economics - II.

*M.Phil :* Major Issues in Indian Economy, Scientific Methods and Quantitative Techniques, Advanced Economic Theory, Institutional Economics

**Seminars/Conferences:**

*Attended:*

Prof essor M Lalwani: Co-chaired the session on "Human Resources Management" in ICAR's National Seminar on Management Strategies for North Eastern Hills Eco-System and read out the invited paper entitled, "Some Issues Concerning Management of Human Resources in India on 10.8.98". Presented the invited paper on ' Amartya Sen's Contribution to Economics and Public Choice Theory ' on 6th November 1998 at St. Anthony's College, Shillong.

E D Thomas: Attended a Public Hearing (Seminar) on Environment and Development at Shillong on July 3, 1998 organised by the Centre for Environment Education - North East (Supported by Darwin Initiatives, Govt. Of UK), and presented a paper entitled "Autonomous District Councils' Forest Management in Meghalaya".

A C Dube : Attended an International Seminar on Economic Reforms for the Poor, Rajiv Gandhi Institute for Contemporary Studies, New Delhi, December 6-7, 1998 and presented a paper on : "Poverty; What Do the Data Say".

**Publications :**

Lalwani, M. (1998), Economic Reforms, *New Patent Regime and Prospects of Indian Economic Development.* 11(1), 11-24.

Srivastav, N. Some Trends of Research in Economics in North-Eastern India in Singh, J.P. et al. Ed. *Trends in Social Sciences and Humanities in North East India (1947-1997)*, New Delhi, Regency Publications, 1998, pp. 47-67.

Srivastav, N.(1998), Renewable Energy Options in North-Eastern India; Some Possibilities, *Hill Geographer,* XIII (1&2), 38-47.

Thomas E D (1998). "Autonomous District Councils' *Forest Management in Meghalaya, A Report*" Centre for Environment Education, North East Regional Cell, Guwahati, pp.3-6.

Dubey, A. Urbanisation in Meghalaya "Growth and Prospects of Small Towns In B. Dutta-Ray, A K Neog and H K Mazhari ed. *Urban Development in North-East India, Development of Small Towns in the North-East,* New Delhi, Reliance Publishing House, 1998.

Dubey A and Gangopadhyay, S. Occupational Structure and Incidence of Poverty in Urban Sector by Size Class of Towns In M. Agarwal, A. Barua, S K Das and M Pant, ed. *Indian Economy in Transition*, New Delhi, Har-Anand Publications, 1998.

Dubey A and Gangopadhyay, S. Economic Reforms and Poverty In Bibek Debroy and Partha Shah, ed. *Agenda for Reforms.* New Delhi, Rajiv Gandhi Institute for Contemporary Studies, 1998.

Dubey A and Gangopadhyay, S. Poverty in India: Counting the Poor In R. Kapila and U. Kapila, ed. *Economic Development in India.* Delhi, Academic Foundation, 1998. Vol.10.

Dubey A and Gangopadhyay, S. (1998). Counting the Poor : *Where are the Poor in India (Monograph), Sarvekshana Analytical report No.1*, Department of Statistics, Ministry of Planning, Government of India, New Delhi.

**Thrust Area of Research:**

Economics of Agriculture, Economics of Rural Development, Econometrics, Economics of Health, Economic of Education and Manpower, Economics of the North-Eastern Regions, Economics of Energy and Transport, Quantitative Economics, Industrial Economics, Monetary Economics, Public Economics, Regional Planning, Urban Economics.

**Research Programme/Project :**

Dr. N Srivastav has undertaken a research project entitled "Review of Research Materials in Economics on North-East India generated during 1970-1990". The project is being sponsored by Indian Council of Social Science Research, North-Eastern Regional Centre, Shillong.

**Other activities :**

Dr. M Lalwani was appointed by the UGC as the subject expert to peer review the applications for the grant of minor research fellowships on 12th August, 1998.

Dr. A C Dube has been nominated as Member, Steering Committee on Time Use Survey, Government of Meghalaya (Survey is being conducted by the National Sample Survey Organisation, Department of Statistics, Government of India).

The Department of Economics, NEHU, Shillong, has been identified as one of the second group of interested institutions towards implementation of the Environmental Economics Programme by the Government of India, Ministry of Environment and Forests. In

this connection, Professor M Lalwani attended the meeting of the Project Launch workshop held at Madras School of Economics on October 14, 1998 at Chennai.

The Department organised a UGC sponsored Refresher Course form 16th November to 6th December, 1998 on the theme Review of Indian Economy : Recent Developments. Professor P M Passah was the Course Co-ordinator.

## DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

Since its inception from 1986, the Department has been stressing to give students an understanding of the basic principles of fundamental laws of Library & Information Science and acquaint them with the techniques and management of libraries keeping in view the changing social and academic set up. Teaching and research in thrust areas are given due priority.

During last thirteen years 260 students have got Masters Degree in Library and Information Science out of which 21 have cleared UGC-NET. Further, three students have been awarded Ph.D and other five are in the process of submitting their theses. The Department has successfully organised four national seminars, three workshops on computer technology and two refresher courses.

**Head** : Veena Saraf

**Faculty** :

| | | |
|---|---|---|
| Professor | : | J C Binwal M.L.I.Sc (Delhi) Ph.D (Karn) |
| Reader | : | Veena Saraf M.L.I.Sc (Delhi) Ph.D.(NEHU) |
| Lecturers | : | Moses M Naga M.L.I.Sc(NEHU) |
| | | Bikika Laloo M.L.I.Sc (NEHU) |

In addition to the above faculty members, Mr. P K Mitra, Assistant Librarian helped in teaching Library cataloguing (Practice) Senior library staff also help in giving on job training to the students.

**Student Intake** :

(a) Enrolment capacity = 20

(b) Actual Admission: M. Lib Sc.

| SC/ST | | Gen | | Total | | Grand Total |
|---|---|---|---|---|---|---|
| M | F | M | F | M | F | |
| 4 | 9 | 1 | 6 | 5 | 15 | 20 |

**Course Conducted** :

M.Lib.Sc: Library & Society, Organisation of Knowledge (Theory), Organisation of Knowledge (Practice), Information Services and Sources, Job Diary, Viva Voce and Study Tour Report, Library Management, Organisation of Knowledge (Theory) II, Organisation of Knowledge (Practice) II, Introduction to Information Technology, Information Sources on Environment, Universe of Knowledge, Structure and Development, Library System Analysis and Elements of Statistical Methods, Information Users and their needs, Information Retrieval Techniques, Computer applications in Library and Information Services, Project Report/Dissertation on some current problems in Library and Information Science.

*Optional Papers*: Information and Literature Sources in any one of the followings (a)Humanities, (b) Social Sciences (c) Natural Science
(a) Information systems and Services, Management of Information Systems.

**Visiting Fellows**:

Professor A S Chandel, Librarian, Dr.Y.S. Parmer University of Horticulture and Forestry, Solan, joined as visiting fellow for one month in June,1998.

Professor Amitabh Chattergee, Department of Library and Information Science, Jadavpur University joined as visiting fellow for one month in October, 1998.

**Seminars/Conferences**:

*Attended*:

Veena Saraf : Dynamics of the Information Technology and its implications for Library and Information Education in the new Millennium. Paper presented in a Seminar on Library Automation" organised by Dhaka University, Bangladesh on June 14th to 15th 1998. Seminar as a Resource Person on "Public Libraries Scenario in 21st Century held in Guwahati on 23rd to 24th April 1998 Sponsored by Raja Rammohan Roy Library Foundation and presented a paper on "Information Technology Strategy for Public Libraries in India".

*Organised:*

Veena Saraf : Organised a Refresher Course in the capacity of Course Co-ordinator for the School Librarians of Navodaya Vidyalaya Samiti Shillong on their behalf on June 1998.

**Publications** :

Saraf, Veena (1998) The Relationship between Information Needs, Channels and Sources. *Library Herald* 21, 2;

Saraf, Veena (1998). The Dynamics of Information technology and Its Implications for Library and Information Education in the Next Millennium, *Bangladesh Journal of Library and Information Science 1,1; 5-15*

**Thrust Area of Research :**

Universe of Knowledge : Structure and Development, Computer Applications and Information Technology, Information Storage, Organisation and Retrieval, Information Management.

**Other activities :**

Professor J C Binwal joined back w.e.f. October 1998.

# SCHOOL OF HUMAN AND ENVIRONMENTAL SCIENCES

This School comprises departments of Anthropology and Geography, and the Centre for Environmental Studies which was earlier known as Centre for Eco-Development. Albeit one of the smallest schools, its per capita output is not less than that of any other schools. Apart from MA/MSc, Certificate, and MPhil degree awardees five doctoral students were awarded this year. The department/centre under this School organised one refresher course, four workshops, and two seminars besides its faculty members participating in various regional, national and international seminars. Publication list of this School is also fairly impressive: six books and 29 research articles by a total faculty strength of 19. The faculty members under the School have also participated in various programmes of the University. One of the most important of these was organising two orientation courses for college lecturers on 'Man and Environment'. It may also be mentioned that the faculty members have served various regional and national agencies as experts besides providing administrative and academic support to the Regional Centre for National Afforestation and Eco-Development established by the Ministry of Environment and Forest, Government of India.

## DEPARTMENT OF ANTHROPOLOGY

The Department was established as the Department of Cultural Anthropology with just one teacher. It was subsequently in 1983 that it was renamed as the Department of Anthropology. In the last 15 years or so the Department has grown into a full-fledged department with facilities for specialisation in Social/Cultural as well as Physical streams and a broad orientation in other sub disciplines like Prehistoric Archaeology and Linguistic Anthropology. The number of faculty positions has also increased from one in 1981 to ten in 1997.

**Head** : Professor T. B. Subba
(Dr. H.Lamin, w.e.f. 16th March 1999)

**Faculty :**

| | | |
|---|---|---|
| Professor | : | T.B. Subba, M.A., PhD. (N.Bengal) |
| Reader | : | H. Lamin, M.A., Ph.D. (NEHU) |
| Lecturers | : | L. Zehol, M.A.,Ph.D. (NEHU) |
| | | V. Pakyntein, M.A.(NEHU), M.Phil. (Delhi) |
| | | R. Khongsdier, M.Sc.,Ph.D. (NEHU) |

**Student Intake** : MA

a) Enrolment capacity - 25

b) Actual admission -

| SC/ST | Gen. | Male | Female | Total |
|---|---|---|---|---|
| —/20 | 05 | 11 | 14 | 25 |

**Degrees Awarded :**

*Ph.D.*

J.W.Dkhar, "Age changes in somatotypes of 11 to 18 year old Pnar boys of Meghalaya". Supervisor : Dr. R.K. Pathak.

M.Bhowmik, "A bio-social study on Beta-Thalassaemia". Supervisor : Professor A.K. Ghosh.

**Course Conducted :**

Physical Anthropology, Social and Cultural Anthropology, Anthropology in India, Practicals in Physical Anthropology, Paleoanthropology and Prehistoric Archaeology, Methods in Anthropological Studies - I, Anthropological Theory, Practicals in Paleoanthropology & Prehist. Archaeology, Demography & Biostatistics, Methods in Anthropological Studies - II, Advance Anthropological Theory, Economic Anthropology, Demography & Biostatistics, Human Growth, Development & Physique, Human Genetics, Practicals in Advance Physical Anthropology (I), Fieldwork, Environment and Anthropology, Anthropology of Development, Tribes in India, Fieldwork, Environment and Anthropology, Human Ecology and Adaptation, Practicals in Advance Physical Anthropology.

**Seminars/Conferences :**

*Organised:*

The Department organised the following two seminars in collaboration with Indira Gandhi Rastriya Manav Sangrahalaya, Bhopal and Anthropological Survey of India, Calcutta respectively :

1. Physical and Cultural Ecology of North East India, September 8-9, 1998.
2. Anthropology & Allied Disciplines in the North East : The Last Fifty Years, March 26-27, 1999.

*Attended*:

Khongsdier, R. presented a paper titled "Measuring genetic drift in natural populations" at the seminar on Anthropology & Allied Disciplines in the North East : The last fifty years sponsored jointly by Anthropological Survey of India and NEHU, and organised by the Department of Anthropology, NEHU, Shillong on March 26-27, 1999.

Zehol, L. presented a paper titled "Tribal women in North East India : some observation" at the seminar on Anthropology & Allied Disciplines in the North East : the last fifty years organised by the Department of Anthropology, NEHU, Shillong on March 26-27, 1999. She presented one other paper titled "Situational analysis of women in North Eastern India" at the regional level training in Micro-Enterprise and small business development for women organised by the National Institute of Public Cooperation and Child Development, New Delhi held at Centre for Science Education, NEHU, on 22-26 March 1999.

**Publications** :

Khongsdier,R. and D,Basu. 1998. "A study of food and nutrient intakes among the Dimasa of North Cachar hills". *Journ. of Human Ecology*, 9:603-607.

Khongsdier,R. 1999. "A study on growth of children of two economic groups of War Khasi". *South Asian Anthropologist*, 20:15-18.

Lamin,H. "Christianisation and Change : The Pnars of Meghalaya". In. T.B.Subba ed. *Wonder That Is Culture*. New Delhi : Inter-India, 1999 : 97-108.

Pakyntein,V. "Gender preference in Khasi Society". In. T.B.Subba ed. *Wonder That Is Culture*. New Delhi : Mittal, 1999: 171-182.

Subba,T.B. "Regionalism in North East India : An Appraisal". In N. Malla ed. *Nationalism, Regionalism and Philosophy of National Integration*. New Delhi : Regency Publications, 1998 : 78-85.

Subba,T.B. "Gorkhaland Movement in West Bengal". In Bhupinder Singh, ed. *Tribal Self Management in North-East India*. New Delhi: Inter-India, 1998: 290-304.

Subba,T.B.: "The Nepalis in North-East India : Political Aspirations and Ethnicity". In. A.K. Danda et al eds. *North-East India: Ethno-cultural Perspectives and Process*. Calcutta : The Indian Anthropological Society, 1998: 39-48.

Subba,T.B. "Understanding tribal development in Arunachal Pradesh: Elwin-Furer Haimendorf-Rustomji". In. A.K. Danda et al eds. *North East India: Ethno-Cultural Perspectives and Process*. Calcutta: The Indian Anthropological Society, 1998: 121-128.

Subba,T.B. ed. *Wonder That Is Culture* : Festshrift to Professor P.K. Misra. New Delhi:

Mittal.

Zehol, L.T. "Reliving my first Research Experience". In. T.B.Subba ed. *Wonder That Is Culture*. New Delhi: Mittal, 1999 : 251-258.

Zehol, L.T. 1998. "Women's movement in Manipur: some observation". In . M.N.Karna ed., *Social Movements in North-East India*. New Delhi : Indus Publishing House.

**Study Tour/Field Trip :**

Professor T B Subba took the IVth Semester students for their fieldwork training to Katteri, Mandya District, Karnataka during January 11 - February 8, 1999.

**Thrust Area of Research :**

Socio-cultural and biological studies of the peoples of north-east India.

## CENTRE FOR ENVIRONMENTAL STUDIES

Availability of information about quality and quantity of various natural resources, and a cadre of trained manpower in the area of resource conservation and management are two fundamental requisites for scientific management of natural resources. Since its inception, the Centre has been working for fulfilling these two needs in the north-eastern hill region of India. Through a large number of research projects, it has generated a significant amount of knowledge about the natural resources of the region and gathered information required for planning and implementation of various developmental projects. A number of workshops, training programmes and awareness camps organised by the Centre have not only raised environmental awareness among the people of the region but have also produced a good number of trained people capable of managing the resources at the local level. Besides, a regular one semester certificate course in Eco-development is being run by the Centre to impart training to the local youths in the field of eco-development and environmental management.

In order to promote scientific management of natural resources and conservation of fragile ecosystems of the region, the Centre has identified environmental management, environmental impact assessment, biomass energy, conservation ecology, natural resource management, wastelands development, eco-development and biodiversity conservation as priority areas for research.

**Head :** Dr. B K Tiwari

**Faculty :**

Reader : Dr. B K Tiwari, M.Sc. (Gorakh.), Ph.D. (NEHU).
Lecturer : Dr. S K Barik, M.Sc. (Berham.), Ph.D. (NEHU).

**Courses Conducted :**

Certificate Course : Certificate Course in Eco-development

**Student Intake :**

| | SC | ST | Gen. | Male | Female | Total |
|---|---|---|---|---|---|---|
| I) Certificate course in Eco-development : | 0 | 6 | 2 | 3 | 5 | 8 |

| | SC | ST | Gen | Male | Female | Total |
|---|---|---|---|---|---|---|
| II) Ph.D.(Jointly with Department of Botany) : | 1 | 0 | 2 | 3 | 0 | 3 |

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

i) Department for International Development, British High Commission, New Delhi : Rs. 1.33 lakh

ii) M/s Lum Mawshun Minerals Private Limited Shillong : Rs. 0.80 lakh

iii) Ford Foundation, New Delhi : Rs. 0.80 lakh

**Extension Lectures :**

| Name of teacher | Date | Topic |
|---|---|---|
| Dr. B K Tiwari | 23.11.98 | Environment and Economics |
| | 3. 3.99 | Environmental consequences of human intervention |
| Dr. S K Barik | 1. 3.99 | Ecoenergetics |
| | 15. 3.99 | Environmental Pollution |
| | 4. 3.99 | Vulnerability of biosphere |
| | 5. 3.99 | Environmental problems of north-east India |
| | 17. 3.99 | Energy resources and flow of energy in eco system |
| | 18. 3.99 | Biodiversity and species extinction |

**Seminars/Conferences:**

*Organised:*

The Centre organised the following training programmes/workshops in collaboration with the Regional Centre, National Afforestation and Ecodevelopment Board, NEHU, Shillong.

1. Workshop for development of curriculum for Joint Forest Management (JFM) training in north-east India at Shillong on 4-5 May, 1998.
2. Workshop on Joint Forest Management in Nagaland organised at Kohima on 22-23 October, 1998.
3. Workshop cum training programme on JFM in Manipur organised at Imphal on 6.11.98.
4. Trainers' training programme cum workshop on Microplanning for Joint Forest Management in Assam organised at Guwahati during 29-31 December, 1998.

*Attended:*

Dr. B K Tiwari (i) participated as a resource person in the Department of Science and Technology: Science and Society Meeting cum workshop for the States of Meghalaya, Assam and Arunachal Pradesh held on 24-25 June, 1998 at Guwahati and delivered a talk on "Opportunities and constraints in development of rural north-east by providing scientific and technological inputs". (ii) delivered a talk on "Management of environment and natural resources among indigenous societies of north-east India" in the Orientation Course for field Officers of the Anthropological Survey of India at Shillong on 10th June,1998. (iii) delivered a talk on "Recent trends in Forest Management in north-east India held at Shillong on 8-9 September, 1998. (iv) presented a paper on "Forest research priorities for Meghalaya" in the workshop on Prioritisation of research areas for the Institute of Rain and Moist Deciduous Forest Research held at Jorhat on 24-27 February,1999. (v) Presented a regional paper entitled, "Non-timber forest products of north-east India" in the workshop on Sustainable management of non-timber forest product held at Indian Institute of Forest Management, Bhopal during 25-28 November, 1998. (vi) delivered a talk on "Working and principles of Joint Forest Management" in the workshop cum training programme on JFM in Manipur organised at Imphal on 6.11.98. (vii) delivered a talk on "Success stories of JFM in India" in the trainers' training programme cum workshop on Microplanning for JFM in Assam organised at Guwahati during 29-31 December, 1998. (viii) presented a paper on "Role of sacred groves in conservation biodiversity of Meghalaya" in the workshop on People's participation in biodiversity conservation at Shillong held during 4-6 March, 1999.

Dr. S K Barik (i) participated as a resource person in the national workshop on "Perspectives for planning and development in north-east India" organised by the G.B. Pant Institute of Himalayan Environment and development, Almorah at Itanagar during April, 27-29,1998 and delivered a lead talk on "Environmental Impact Assessment of limestone mining project". (ii) participated as a resource person in the workshop on "Forestry Research priority setting" organised by the Indian Council of Forestry Research and Education, held at State Forest Research Institute, Itanagar during 25 -26 May, 1998 and presented a paper

"Research requirements for community development and people's participation in forestry". (iii) delivered a talk on "JFM and its implementation in Nagaland" in the workshop on Joint Forest Management in Nagaland organised at Kohima on 22-23 October, 1998. (iv) delivered a talk on "Microplanning exercise for JFM" in the trainers' training programme cum workshop on Microplanning for JFM in Assam organised at Guwahati during 29-31 December, 1998. (v) A paper entitle "Fuelwood plantation in north-east India: Reorienting its management as a renewable energy resource" authored by Dr. S K Barik and Dr. V T Darlong was presented in a seminar on "Renewable Energy Resources management in North-East India" organised by the North-East India Council for Social Science Research at Shillong on 5th June 1998. (vi) participated as a resource person in the Planning workshop organised by the Indian Institute of Science, Bangalore at Sirsi during 16-21 November, 1998 and presented a paper on "Community forest management systems in Meghalaya : An ecological and economic analysis".

**Publications** :

Barik,S.K., Tiwari, B.K. and Tripathi, R.S. Plantation Technique, and Management and Growth features of Thysanoloanea maxima, a minor forest produce species of north-east India. In: M P Shiva and R B Mathur, eds. *Management of Minor Forest Produce for Sustainability.* Oxford IBH Publishing Co. Pvt. Ltd. New Delhi, 1996, pp.208-215.

Barik,S.K., Tiwari, B.K. and Tripathi, R.S. (1998) Sacred groves of Meghalaya. In: P.S. Ramakrishnan, K.G. Saxena and U.M.Chandrashekara, eds. *Conserving the sacred for biodiversity management.* UNESCO, Oxford and IBH Publishing Co.Pvt.Ltd. New Delhi. Pp. 253-262.

Barik,S.K.(1998) Sloping Watershed Environmental Engineering and Technology (SWEET)- A potential agricultural land technology for midhill regions of Arunachal Pradesh. In: M.C.Behera, ed. *Agricultural modernisation in Eastern Himalayas.* Commonwealth Publishers, New Delhi. pp. 113-125.

Tiwari, B.K., Barik, S.K. and Tripathi, R.S.(1998) Biodiversity value, status and strategies for conservation of sacred groves of Meghalaya, India. *Ecosytem Health* 4: 20-32.

**Research Programmes** :

The following research projects were undertaken during the year under report :

(i) Community forest management systems in Meghalaya sponsored by DFID, British High Commission, New Delhi. (ii) Application of SWEET in restoration of degraded jhum lands of Arunachal Pradesh funded by G.B.Pant Institute of Himalayan Environment and Development, Almora. (iii) Regeneration and ecology of Rattans in Arunachal Pradesh funded by Indian Council of Forestry Research and Education, Dehradun.

**Other activities :**

(i) Dr. B K Tiwari and Dr. S K Barik participated as expert members in the JFM Curriculum Development workshop held at Shillong during 4-5 May, 1998.

(ii) Dr. B K Tiwari participated as a resource person in the Exposure Training for north eastern states' forest officers held in West Bengal during 24-26 August, 1998.

(iii) Dr. B K Tiwari chaired a session in the seminar on Remote Sensing and GIS organised by NERDA at Shillong during 16-17 September, 1998.

(iv) Dr. B K Tiwari and Dr. S K Barik participated as expert members in the writing workshop for JFM Training Manual held at Shillong during 22-24 March, 1999.

## DEPARTMENT OF GEOGRAPHY

The Department of Geography was established in 1976 in the School of Environmental Sciences (now, the School of Human and Environmental Sciences). Twenty one batches of MA/MSc students (approx. 400) have since been passed out. The Department has also been offering research degrees leading to M.Phil and Ph.D. right from the inception. Nearly 75 M.Phil and 30 Ph.D. candidates have been awarded. During the relevant year, 17 new M.Phil and 5 Ph.D. candidates were registered along with nearly 40 on going Ph.D. registered candidates. The Department has also carried out a large number of major and minor research projects, numbering about 30, it also runs a collaborative programme with the Polish Academy of Sciences (through INSA) for a three year period.

**Head :** Professor R.Gopalakrishnan (till 18.12.98)
Professor A.C.Mohapatra (w.e.f. 19.12.98)

**Faculty:**

| | | |
|---|---|---|
| Professors | : | R.K.Rai, M.Sc.Ph.D.(Sagar) |
| | | A.C.Mohapatra, M.A. and M.Phil.(J.Nehru),Ph.D. (NEHU) |
| | | R.Gopalakrishnan, MA(Madras), M.Phil & Ph.D (J.Nehru) |
| Readers | : | Ali Ahmad, MA (Alig.), Ph.D.(J.Nehru) |
| | | S.Singh, MA, Ph.D. (Meerut) |
| | | B.S.Butola, M.A.,M.Phil., Ph.D.(J.Nehru) - on lien w.e.f. 16.11.98. |
| | | B.S.Mipun, M.A (J.Nehru), Ph.D.(NEHU) |
| | | D.K.Nayak, M.A.,M.Phil., Ph.D. (J.Nehru) |
| | | Z.H.Qureshi, MA, Ph.D.(Sukh.) |
| Lecturers | : | P.G.Momin, MA(J.Nehru), M.Phil (NEHU) |
| | | H.J. Syiemlieh, M.A., M.Phil, Ph.D (NEHU) |
| | | L.Cajee, M.Sc., M.Phil (NEHU) |

**Students Intake:**

| | | |
|---|---|---|
| MA/M.Sc. | : | 32 |
| M.Phil | : | 20 |
| Ph.D. | : | 15 |

*Admissions during 1998-99*

| | SC | ST | Gen. | Male | Female | Total |
|---|---|---|---|---|---|---|
| MA/M.Sc. | 0 | 32 | 2 | 25 | 9 | 34 |
| M.Phil | 0 | 8 | 6 | 7 | 7 | 14 |
| Ph.D. | 0 | 4 | 1 | 5 | 0 | 5 |

**Degrees awarded:**

| | | | | | | |
|---|---|---|---|---|---|---|
| *MA/M.Sc.* | 0 | 23 | 3 | 19 | 7 | 26 |

*Ph.D.*

1. L.Sunil Singh, "Role of Growth Centres in Agricultural Development in Imphal Valley", Supervisor: Dr.S.Singh.

2. H.J.Syiemlieh, "Geomorphology and Land Use Planning of Umran Basin, Meghalaya", Supervisor: Professor R.K.Rai.

3. K.Baruah, "Politics of Regional Development : A Case Study of Assam", Supervisor: Professor R.Gopalakrishnan.

**Courses Conducted :**

Apart from the regular courses, three new specialisation papers were offered at the MA/Msc level. These are Soil Geography, Hydrology and Bio-geography.

**Seminar/ Conferences :**

*Attended :*

A.C.Mohapatra. Presented a paper titled "Political Economy of Alternative Energy" at the Seminar on Alternative Energy Management in North-East India" organised by NEICSSR held on June 5, 1998, Shillong, India. Presented a paper titled "Valuing the River", at the national seminar on River Systems of North East India, organised by the Department of Geography, St.Mary's College, Shillong, Sept.22-23, 1998. Chaired a session.

D.K.Nayak National seminar on Physical and Cultural Ecology of NE India, September 8-9, 1998, NEHU, Shillong. Paper :"Prevalence of major disease with special reference to ARI diseases in Meghalaya". Seminar on Problem of Geography Education in NE India, Dec. 2, 1998, Gauhati University, Guwahati. Paper : "Problems of Geography Education in Meghalaya".

B.S.Mipun. "Land use over Mapping of the Garo Hills using Remote Sensing Data" in IGRMS-NEHU Seminar on "Physical and Cultural Ecology in North East India", held in Shillong on September 8-9, 1998.

H.J.Syiemlieh. "Concept of Environmental Protection among the Khasis", in IGRMS-NEHU, Bhopal & NEHU Seminar on Physical and Cultural Ecology of North East India, held in Shillong on September 8-9, 1998.

P.G. Momin, "The river system in North East India and its Impact on the Region's Environmental Development", presented at the national seminar on River Systems of North-East India, St.Mary's College, Shillong, 22nd to 23rd Sept.1998.

L.Cajee, "Farm Production System and Market Forces", in the IGRMS-NEHU Seminar on Concept of Environmental Protection among the Khasis, held in Shillong on September 8-9, 1998. "Conservation of Bio-diversity vis-a-vis sustainability of development in Meghalaya", Workshop on People's Participation in Bio-diversity Conservation, March, 4-6, 1999 organised by NERBC,NEHU and SSSS, Shillong.

*Organised* :

Convenor, Two-Day Workshop on, "Application of Remote Sensing and GIS on Natural Resource Mapping, Analysis and Management", September 16-17, 1998, organised by NERDA, Shillong and SCST&E (MEGH), Government of Meghalaya, Shillong.

**Publications**:

R.K.Rai. "Phyto-geomorphology of upper part of the Umiam Basin Meghalaya", *Hill Geographer,* 15 (1&2), 1998 : 96-102.

A.C.Mohapatra. "Northeast India : Half a Century of Teaching and Research in Geography (1947-97)", Paper presented in Seminar on *Trends in Social Sciences in North East India*, 1947-97, JP Singh et al (ed., Proc.) NERC-ICSSR, Shillong, 1998, pp 10-36.

A.C.Mohapatra. "Sectoral Linkages and Strategies of Development in North East India", *Indian Journal of Regional Science 30 (2), 1998 : 28-38.*

A.C.Mohapatra."Economic liberalisation and Affirmative Action", *Hill Geographer,* 8, 1997 : 73-78.

A.C.Mohapatra."Quality of Life of Urban Poor in Shillong", *Urban India*, 18 (1), 1998 : 63-84.

A.C.Mohapatra, Deforestation and Soil Erosion in Umiam Basin : *Peoples' Response to Ecological Issues*, IASSI Quarterly, 17 (1), 1998 : 100-113.

A.C.Mohapatra. *Regional Development and Planning* (ed.), Rawat Publications, Jaipur, 1998.

R.Gopalakrishnan. *Meghalaya: Land and People* (Revised and Enlarged edition), Omsons, New Delhi, 1998.

R.Gopalakrishnan. *Trends in Social Sciences and Humanities in North East India* (1947-97) (ed., joint), Regency, New Delhi, 1998.

D.K.Nayak. "Geographical Background to Tribal Situation in the North East", M.K.Raha and A.K.Ghosh (ed.), *North East India: The Human Interface*, Gyan, New Delhi, 1998: 163-178.

D.K.Nayak. "Pattern of Disease Prevalence and Related Environment in Meghalaya" in Jayashree Dey (ed.), Changing Pattern of Health in Developing Countries, *Proc. of International Geographical Conference*, Vadodara, India 19-26.

D.K.Nayak. "Role of Transport in the Process of Development in North East India" in B.C.Vaidya(ed.), *Readings in Transport Geography: A Regional Perspective*, Devika, New Delhi, 1998, 351-370.

Z.H.Qureshi. "Hill Town Planning", *Urban development in NE India - Potentiality and Problems,* (ed) B.Datta Ray et al , Reliance, New Delhi, 69-82.

Z.H.Qureshi. "The Nature of Border and Trade in NE India", in *Seminar Proc., NEICSSR*, Shillong (forthcoming)

S.Singh "Towns within the Town System: A case Study of NE Region", in B.Dutta Ray (ed.), *Urban development in NE India - Potentiality and Problems*, Reliance, New Delhi, 1998, 30-49.

S.Singh "Assessment of the Role of Transport in the Process of Development in NE India", in B.C.Vaidya(ed.), *Readings in Transport Geography : A Regional Perspective*, Devika, New Delhi, 1998, 351 - 370 .

S.Singh "Estimation of Soil Loss in Arunachal Himalaya", in R.C.Sundryal et al (ed.) *Proc., Himavikash Occa.Paper No.11*, G.B.Pant Inst., Almora, 1998, 73-78.

S.Singh "Preliminary observations on the Fluvial Processes in the Foot Hills of Arunachal Himalaya", *Hill Geographe*r, 14, 1998 : 64-80.

S.Singh "*Resource Atlas of Arunachal Pradesh*" Published by Government of Arunachal Pradesh, March 1999.

**Other Activities:**

1. Study Tours: (a) MA/M.Sc. II Semester students went on a study tour to Bombay, Anand (Gujarat) and Delhi during Dec-Jan, 98-99 led by Shri L.Cajee and Dr.B.S.Mipun. (b) MA/MSc III Semester students carried out fieldworks for the projects in two villages in East Khasi Hills and the Ri-Bhoi dists. during Feb 21-March 6, 1999 led by Dr.H.J.Syiemlieh.

2. ProfessorA.C. Mohapatra organised two five-day orientation courses for college teachers of NEHU on "Man and Environment" on March 1-5 and 15-19, 1999.

3. Shri L.Cajee, Lecturer attended a 4 week UGC Refresher Course at International Institute of Population Sciences, Deonar, Mumbai, November 2-28, 1998.

4. Professor Starkel of Polish Academy of Sciences visited the Department in November 1998 under the INSA-PAS programme and delivered a lecture.

5. Professor R.K.Rai has been sanctioned two major research projects,(a) Geomorphic studies and effects of rockmass strength etc., DST, GOI, (b) Hydrological Assessment of Optimal Watershed Management etc., UGC.

6. PG Momin attended the national workshop on Environmental Protection and Environmental Law, NCED, Lodi Road, New Delhi, May, 1998.

# SCHOOL OF HUMANITIES AND EDUCATION

The School of Humanities and Education consists of departments of Philosophy, Hindi, Linguistics, Education and the Centre for Supportive Learning. Besides, carrying on teaching and research programmes, the Centre for Supportive Learning system has been organising various extension programmes for the benefit of those who are not regular students of the University.

The Teachers of the School have been very active as could be seen from their academic activities mentioned under the achievements of their respective departments.

## DEPARTMENT OF ENGLISH

***AIZAWL***

The Department was established in 1979 with one Lecturer, and is at present functioning with one Reader and one Lecturer. Despite the obvious constraints posed by the shortage of faculty, the Department has through the year, made some modest contribution in research programmes in both the fields of English Language Teaching (ELT) and Literature relevant to the needs of the region.

**Head** : Dr. Margaret Ch. Zama.

**Faculty** :

Reader : Margaret Ch.Zama, M.A.,Ph.D.(NEHU)
Lecturer : Ramhmingthangi Ralte, M.A.,Ph.D.(NEHU)

**Student Intake** :

(a) Enrolment capacity : 25

(b) Actual Admission :

| ST | Male | Female | Total |
|---|---|---|---|
| 28 | 5 | 23 | 28 |

**Courses Conducted** :

Poetry, Fiction, Drama, Prose, Language, Indian Writing in English, Modern Literature, Literary theory & Criticism, Shakespeare, Tragedy, Environment Course.

***Visiting Professor/Fellows*** :

Visit of Professor S.C.Saha, Head of English Department, Assam University, Silchar, conducted valuable lectures for the duration of 1 (one) week in the month of April, 1998.

**Thrust Area of Research** : Modern Fiction.

**Research Programme/Project** :

Three research scholars have registered under the Department in the field of ELT and Mizo Literature.

## DEPARTMENT OF ENGLISH
### *SHILLONG*

The Department of English was the first Department to be established under the North-Eastern Hill University in 1973. The achievements of this department are the many students who have passed out from this department and have become able administrators, teachers and public leaders. Several of our students have successfully competed in the Indian Administrative Services and the Civil Services of all the north-eastern States. They are all doing very well in their respective services. Many other students have acquired M.Phil and Ph.D degrees and have become teachers in Colleges and Universities. A few of our students have moved into the corporate sector while some other have joined mass media both in the region and at the national level. So far, 8(eight) students of the Department have cleared the NET examination.

Quite a few of the faculty as well as the students have distinguished themselves by being awarded prestigious scholarships. Two faculty members and three students were recipients of the Commonwealth Scholarship. Another faculty member was awarded a Fullbright Scholarship. The department also has the distinction of having two members of its faculty as the Visitor's nominee for Central Universities. Another faculty member was appointed as an Adviser in the Selection Board of the UPSC in 1998. The department was also selected as one of the Regional Academic Centres for Katha during 1998. Three members of the faculty are creative writers, who have published volumes of poetry.

**Head** : Professor (Mrs) T. Ao

**Faculty :**

| | | |
|---|---|---|
| Professors | : | Noorul Hasan, M.A. (Alld), Ph.D. (Manchester) |
| | | Emmanuel N.Lall, M.A.(Patna), Ph.D. (Southern Illinois) |
| | | T. Ao, M.A. (Gauh.),PGDTE (CIEFL, Hyd.), Ph.D. (NEHU) |
| | | R.P. Sharma, M.A.,Ph.D. (Bihar) |
| Readers | : | S. Satpathy (on leave), M.A. (Samb.), Ph.D. (NEHU) |
| | | K.C. Baral, M.A. (Utkal), Ph.D. (NEHU) |
| | | S.N. Singh, M.A.,Ph.D. (Mag.) |
| Lecturers | : | N. Syiem, M.A. (NEHU), M.Phil. (Delhi) |
| | | E. Syiem, M.A. (Delhi), Ph.D. (NEHU) |
| | | Ng. Robin Singh, M.A. (NEHU) |
| | | N. Ganguly, M.A. (NEHU) |

**Student Intake :**

a) Enrolment capacity : 50

b) Actual admission :

| | SC/ST/Gen. | | Male/Female | Total |
|---|---|---|---|---|
| - | 33 | 13 | 7 | 39 | 46 |

**Degrees Awarded :**

*M.Phil*

Sivasish Biswas, "Rhetoric of Ambivalence : A Study of Thomas Clayton Wolfe's Short Stories". Supervisor, Dr. K.C. Baral.

*Ph.D.*

Mr. Niu Francis Whiso, "A Study of C.S.Lewis as a Literary Critic". Supervisor, Professor E.N. Lall.

**Courses Conducted :**

Poetry-I, Fiction-I, Drama-I, Literary Theory and Criticism-I, Poetry-III, Fiction-III, Literary Theory and Criticism-II.

*Optionals* - 1 : Language-I/American Literature-I/Commonwealth Literature.

*M.Phil* : Contemporary Criticism, European Literature, Modern Poetry and Modern Fiction.

*Ph.D.* : Open.

***Seminar/Conferences*** :

*Attended*:

T. Ao: Participated in the International Workshop in "Theories and Methods in the Study of Folklore" during 4-15th January, 1999 at Tezpur University, Tezpur, Assam and presented a paper.

K.C. Baral: As part of the Katha, Academic Regional Centre's programme conducted two Workshops on Translation for College and University teachers at Shillong and Guwahati during 24-25th September,98 and 8-9th January,99, conducted two Certificate Courses on Translation for College and University students at Shillong and Kohima during 7-17th September,98 and 1-8th November,98 and conducted sixty Culture-link Workshops for school children during 1998-1999. A volume of translated stories from North-East is under preparation for publication by Katha, New Delhi.

E.N. Lall: Resource person for Katha, Regional Academic Centre at its Workshop on Translation on 24th and 25th August, 1998. Delivered a lecture on Translation at the Certificate Course for College and University students, CIEFL, Shillong on September 7th, 98. Delivered two lectures at the Refresher Course organised by the Academic Staff College, Gauhati University, December, 1998. Delivered a lecture at an Orientation Course for College teachers in North East India, Sponsored by ICSSR, Shillong in October, 1998.

**Publications** :

Baral., K.C: "Imaging India : Nation and Narration" in N.Malla ed. *Regionalism, Nationalism and Philosophy of National Integration*, New Delhi : Regency, 1998, pp.67-77.

**Study Tour/Field trips** :

Dr. K.C. Baral escorted the III Semester students on Study Tour to Thiruvananthpuram - Kanyakumari - Pondycherry - Chennai during 12-30th January, 1999.

**Thrust Area of Research** :

Modern Literature and Post-Colonial Literatures.

**Other activities** :

T.Ao : Appointed as Advisor of Katha, Regional Academic Centre, Department of English, NEHU, Shillong.

K.C.Baral : Appointed as Associate Director, Katha, Regional Academic Centre, Department of English, NEHU, Shillong.

K.C. Baral :Prepared an Optional Course on Indian Fiction in Translation for M.A.

English students.

K.C. Baral : Devised a Course in Computer Application for Students of Literature and trained the III Semester students of the Department in collaboration with Library and Information Science, NEHU, Shillong during August-October, 1998.

## DEPARTMENT OF ENGLISH
### *TURA*

The English Department of NEHU, Tura Campus was established in 1996 with the objective of bringing higher education to the people residing in the remote hilly regions of Meghalaya. From a humble beginning with 1 Lecturer, the department has steadily developed. In the first year we could admit only 11 students, however, the second year could fill up our quota of 25 students. And last year i.e. in 1998, 23 students were admitted. Results of 1996 batch were declared and all 10 students successfully cleared their final examination. Out of 10 students 9 secured second class and 1 simple pass. During the year the department was also involved in extra curricular activities i.e. organising sports activities extention programme etc. The Library an important wing of any academic department has also been developing and it is now able to cater to the need of the students and teachers in Tura Campus.

**Head** : Professor S Ganguly

**Faculty** :

| | | |
|---|---|---|
| Professor | : | S. Ganguly, M.A.(Delhi), Ph.D.(Ranchi) |
| Reader | : | C.K. Naik, M.A.(Utkal), Ph.D.(NEHU). |
| Lecturers | : | K.C. Joseph, M.A.(Patna),Ph.D. (NEHU) |
| | | S. Gurudev, M.A.,M.Phil.,Ph.D. (NEHU). |

**Student Intake** :

(a) Enrolment capacity : 25 nos.

(b) Actual admission :

| SC/ST/Gen. | | Male/Female | | Total |
|---|---|---|---|---|
| 1 | 22 | 5 | 18 | 23 |

**Courses Conducted** :

Poetry I, Fiction I, Drama I, Literary Theory & Criticism I, Poetry II, Fiction II, Drama II, Environment Course (part A) & Indian Writing in English (Part B), Poetry III, Fiction III, Literary Theory and Criticism II & I., Shakespeare, Drama III, Literary Theory and Criticism III, Language II.

# DEPARTMENT OF EDUCATION

## *AIZAWL*

Though the North-Eastern Hill University, Shillong is celebrating its Silver Jubilee, the University in the Mizoram Campus is not yet twenty Five Years old. The department of Education was established in 1980 as the department of Educational Research and Studies to provide teaching for one year course leading to Master of Education (M.Ed) degree and to guide Ph.D. level research projects. Most of the students of the department were teacher educators and educational administrators working in different fields of education in the state. The Master's degree course was however replaced by two years full time M.A.(Education) course from 1986.

Besides teaching at Master's degree level, the faculty of the department have been engaged in writing research papers in books and journals of national and international repute.

**Head** : Dr. R.S.Wangu

**Faculty** :

| | | |
|---|---|---|
| Professor | : | K.P.Nath, M.A., Ph.D. (Gauh.) |
| Readers | : | R.S.Wangu, M.A.,M.Ed.,Ph.D.(Panj) |
| | | P.K. Gupta, M.Ed. (Delhi), Ph.D.(Meerut) |
| | | R.P. Vadhera, M.A., Ph.D.( Kuruk) |
| Lecturers | : | B.D. Chinara, M.A., Ph.D. (Panj) |
| | | Lalbiakdiki, M.A. (NEHU) |

**Student Intake** :

(a) Enrolment capacity : 20

(b) Actual admission :

| SC/ST/Gen. | Male/Female | Total |
|---|---|---|
| 20 - | 6 14 | 20 |

*Ph.D.* :

Mrs Rokhona Khati Iralu under Dr. P.K. Gupta "An Investigation into the problem of Educational wastage and internal efficiency of the system of primary education in Nagaland".

**Courses Conducted** :

Advanced Philosophy of Education; Advanced Psychology of Education; Research Methodology and Statistics in Education; Curriculum Development and Instruction; Educational Management and Change; Advanced Sociology of Education; Educational Testing and Evaluation; Environmental Education; Educational Technology; Educational System in a Comparative perspective; Economics of Education; Education of Creative and Gifted Children; Laboratory Practical; Higher Education in India; Early Childhood Education; Education of disabled and backward.

**Seminars/Conferences :**

*Attended*:

Dr. R.S.Wangu : Attended National Assessment and Accreditation workshop (organised by NAA Council, Bangalore.) at Shillong on 27.5.98. Seminar on Introduction of a Dynamic Local Government in Mizoram organised by Mizoram Public Administration Association on 20.10.98. Panel Discussion organised by Circle for Contemporary Studies in Aizawl on "Sen : Equality and Polity" on 13.11.98 at Press Club Aizawl. Attended and participated in discussion on the Extension Lecture by Mrs. I. Lall on "Consumer Awareness" organised by the department of Economics, NEHU, Aizawl in collaboration with Centre of Adult & Continuing Education, Shillong, on 25.3.99.

Dr. K.P.Nath : Attended an International Seminar on Poverty in SAARC Countries held at the Rajshahi University, Bangladesh on 19-20 April, 1998, and presented a paper titled 'Poverty Alleviation Programmes in Mizoram : An Appraisal'. Attended and participated in the National Seminar on the Influence of *Ramayana* in the North-East India, sponsored by the Bharatiya Itihas Sankalan Samiti (BISS) held at Silchar on 30-31 August, 1998. Attended the VIIIth Annual Conference of the North-East India Education Society, Shillong held at Dr.Bhashi Bhushan Institute of Education, Hailakandi on 26-27 February, 1999 and presented a paper titled 'Rural Development in Mizoram : the Role of Education'. Attended the Inaugural Ceremony of a Week-long National Integration Camp organised by the North-Eastern Regional Council for Socio-Economic-Cultural and Educational Development, Kohima, Nagaland as a Guest of Honour held on 21 March, 1999 at Zamira, Southern Assam.

Dr. P.K.Gupta : Attended the extension lecture on the theme "Consumer Awareness" delivered by Mrs Lal of Centre for Adult and Continuing Education, Shillong on 25.3.99 organised by department of Economics, NEHU (MC) Aizawl.

Dr. R.P.Vadhera : Participation in Panel Discussion : Acted as a Panelist in the Panel discussion on "Sen : Equality and Polity" organised by Circle of Contemporary Studies, NEHU, 13 November, 1998. Acted as a Resource Person and delivered a talk to T. Romana College student on, "Population Explosion : Socio-Cultural Perspectives". Organised by Adult and Continuing Education Centre of NEHU, November 1998.

**Publications :**

Nath,K.P., Lalsangzuala, "A Study of the Socio-Educational Background of Juvenile Delinguents in Mizoram", *Journal of the North-East India Education Society*, Shillong, Vol. IV-VI, 1998.

Nath,K.P., Illiteracy, Ignorance, Irrational Reliefs Vis-a-vis Rural Development, *Souvenir of the NEIES VIIITH Annual Conference* (26-27 Feb,1999).

Nath,K.P., Laskar,N.Y., Model Village Narainpur : A Case Study, *Souvenir of the VIIIth NEIES Annual Conference* (26-27 Feb,1998).

Nath,K.P., Chakrabarty,R., Poverty Alleviation Programmes : Their Achievement in Hailakandi District, *Souvenir of the VIIIth NEIES Annual Conference* (26-27 Feb. 1999).

Nath,K.P., Chakrabarty,J., Non-Conventional Energy Generation : Bio-Gas in Perspective. *Souvenir of the VIIIth NEIES Annual Conference* (26-27 Feb,1999).

Gupta,P.K., *Education for Creativity -Theory. Research and Implications*, Cosmo Publications, New Delhi (Accepted for publication).

Vadhera,R.P., "Students Evaluation of Teachers : An Opinion Survey of Teachers", *University News : A weekly journal of Higher Education,* Vol. 36 No. 30, July 27,1998, pp. 7-11.

Vadhera, R.P., "Positive Aspects of Students' Evaluation of Teachers what Teachers Think About them" *University News : A Weekly journal of Higher Education*, Vol.36, No.46, November 16,1998,pp.

Vadhera,R.P., "Students' Evaluation of Teachers : Why and Why Not ?". *The Educational Review*, December 1998, pp. 10-13.

**Thrust Area of Research :**

The Thrust Areas of Research in the department are - Drop-outs of Education & Drug Abuse, Pre School Education, Teacher Education, Educational Activities of Christian Missionaries, Standardisation of Psychological Tests

**Research Programme/Project :**

The faculty of the department has been guiding the following research projects

Dr.K.P.Nath.- Educational Activities of various Christian Denominations in Mizoram.

Dr.R.S.Wangu.- A Study of Socio-Psychological Factors of the Drop-outs (13-18 years) in relation to Drug Abuse in Mizoram. A Study of Vocational Interests and Occupational Aspirations of Class X students of district Headquarters of Mizoram as related to SES and Academic Achievement. Study of Professional Efficiency of Teacher Trainees in Mizoram in relation to Teacher Attitude. Adjustment and Intelligence.

Dr.P.K.Gupta. - "Construction and Standardisation of a verbal group test of intelligence in Mizo language for school going children of the age group 13+ and 16+ of Mizoram State".

Dr.R.P. Vadhera.- "An Analytical Study of Pre-School Education in Mizoram". "Child Rearing Practices and Parent Child Relationship in Mizo Family".

## DEPARTMENT OF EDUCATION
### *SHILLONG*

The department which was established in the year 1976 was offering courses for the degree of M.Ed., which involved teaching for two semesters. From the year 1982 - 83, M.Ed course was discontinued and M.A. Education (4 semester courses) is being offered. Also the department offers M.Phil and Ph.D. programmes in Education. A good number of students belonging to the region who had obtained various degrees from this department (M.A.,M.Phil, Ph.D. ) are employed in various capacities in the Universities, Colleges, SCERT, Schools and in the Administrative jobs including civil services. The department has produced a good number of M.Phil and Ph.D. degree holders who have covered among other areas, various emerging problems of education with special reference to North Eastern Region.

**Head** : Professor R. Bhattacharjee.

**Faculty** :

| | | |
|---|---|---|
| Professors | : | P.P. Gokulanathan, M.A.,Ph.D (Gauh.) |
| | | K.S. Lyngdoh, M.A (Gau.), Ph.D.(Bda) |
| | | M.S. Padma, M.Ed.(B'lore), Ph.D. (Bda) |
| | | K.K.Sharma, M.A.,M.Ed.(Panj.), Ph.D.(Bda) |
| | | M.A. Sudhir, M.A.,Ph.D.(Calicut) (on lien) |
| | | R.Bhattacharjee, M.A.(Gauh.), Ph.D.(NEHU) |
| Readers | : | P.K.Ganguli, M.Ed.,Ph.D. (Bda) |
| | | A. Henia, M.A.(Gauh), Ph.D.(J.Nehru) |
| Lecturers | : | K.M.Warjri, M.Ed.,Ph.D. (NEHU) |
| | | S.M.Sungoh, M.A.,Ph.D.(NEHU) |
| | | C.Nongbri, M.A.,Ph.D. (NEHU) |

**Student Intake** :

(a) Enrolment Capacity: M. A. (30)
M. Phil (10)

(b) Actual admission :

| | SC | ST | Gen. | Male | Female | Total |
|---|---|---|---|---|---|---|
| M.A. | - | 19 | 2 | 1 | 20 | 21 |
| M.Phil | - | 5 | - | 1 | 4 | 5 |

**Degree Awarded**

*M.Phil*

Sangita Baruah. "An Analytical Study of the Functioning of Jawaharlal Navodaya Vidyalaya in upper Assam." Supervisor, P.P.Gokulanathan.

Sukanta Bhattacharjee. "A study of Academic and Socio - Economic Problems of Secondary School Teachers of Greater Shillong." Supervisor, R. Bhattacharjee.

Bonti Duarah. "A study of the Neoliterates in Kamrup District of Assam." Supervisor, P.K.Ganguly.

Elevenstone Synrem. "Environmental Awareness and Attitude towards Environmental Education among the college students in Greater Shillong." Supervisor, P.K. Ganguly.

*Ph.D.*

Lalthansangi. "A study of Juvenile Delinquency in Mizoram with special reference to causative factors and curative measures."

**Courses Conducted**:

Advanced Philosophy of education, Advanced Psychology of Education, Research Methodology and Statistics in Education, Curriculum Development and Instruction, Educational Management & Change, Advanced Sociology of Education, Educational Testing and Evaluation, Environmental Education, Educational Technology, Educational System in a Comparative Perspective, Early Childhood Education, Teacher Education, Laboratory Practical, Higher Education India, Educational Guidance & Counselling, Methods of Teaching at Tertiary Level.

**Seminars/Conference**:

*Attended*

Bhattacharjee, R. : Participated and attended the 8th Annual Conference of North East India Education Society held at Hailakandi, Assam on 26-27 February, 1999. Participated in the National Workshop on Professional Development of Primary Education Person through Distance Education, organised by Distance Education Programme (DEP-DPEP) held in New Delhi, 22-24 March,1999. Acted as a Resource Person for the Extended Counselling Programme for Post-Graduate Diploma Course in Higher Education of IGNOU. Conducted by the IGNOU - Regional Centre, Shillong, during October- November, 1998.

Ganguli, P.K. : Participated in the North East Regional Orientation workshop for National Academic Resource group for Lokshala Programme (Elementary Education). Held at Guwahati from 1-3 April,1998. Participated in the North East Region Orientation workshop for National Academic Resource group for Lokshala programme (Elementary

Education). Held at Guwahati from 1-3 April, 1998. Attended and participated in 'One day Regional Meet' on the theme pressure on pre-school children which was conducted / organised by the Regional Centre of National Institute of Public cooperation and child development held on Gauhati on 26February,1999.

Gokulanathan, P.P. : Worked as Resource person in the extended counselling programme for Post graduate diploma course in higher education of IGNOU conducted by IGNOU - Regional Centre , Shillong during the October-November,1998.

Henia, A. : Participated the "Regional Workshop on Science Popularisation and Communication" held at Shillong on July, 14-15,1998 organised by the SCSTE- Meghalaya and NCST -New Delhi. Attended and participated the National Conference on "Management education and Expectation of the Indian Industry", organised by the AIMA, India and Ministry of Industry, Govt. of India, held in New Delhi on 23rd December,1998. Attended and participated the XII International congress and exhibition Focal theme : Research and Development vision -21st century. Held in New Delhi, during 15-16 January 1999. Organised by the Ministry of Science and Technology, Govt. of India. Participated and presented a paper titled 'Higher Education scenario in the 21st century- future and consideration', in the International Conference on 29th Annual Meet of the AIAET. Theme of the conference; educational culture in the 21st century, knowledge, teacher and technology. Held at Guwahati on 29-31 January 1999. Organised by AIAET, Centre for Educational Technology Regional\ Engineering College, Silchar sponsored by Ministry of Education, Govt. of Assam. Acted as Resource person in the "Extended counselling programme for the post graduate Diploma course in higher education- IGNOU" conducted by the IGNOU North East Regional Centre, Shillong during Oct-November 1998. Was a Resource person in the One Day Meet on pressure on pre-school school of North East Region and presented a paper titled "Need and importance of pre-school Education, Today". Was a Resource person in the Regional Level Training of Trainers in MICRO Enterprise and small business for women" and presented paper titled 'Economic empowerment of women in the North East, Organised by National Institute of Public co-operation and child development -New Delhi and Centre for Science Education, NEHU, held at Shillong during 22-26 March 1999.

Lyngdoh, K. S.: Participated in the Lokshala programme Nongsder, Umshing Block from 4-8 April,1998. Participated and presented paper titled "Problems of Women in the North-East" in the XV All India Women Conference- Andra Pradesh during 11-12 November, 1998. Participated and attended the Asian Regional Conference on "Learning the Treasure Within". Held in New Delhi during 27-28 January,1999. Participated and delivered Key note Address for Pre-School Children, IAPE. Held at Shillong on 25-27 February,1999. Participated and presented a paper titled " Role of Information Technology in the Education of Women in the North-Eastern Region" in the International Conference, held in New Delhi on 26-27 November, 1998.

Nongbri, C.: Participated and presented a paper titled "Decentralised Planning and Management of School Education in Meghalaya" in the National Conference on Management of School Education India. Organised by the National Institute of Educational Planning

and Administration, New Delhi. Participated & presented a paper titled 'Rights of women and women Empowerment' in the International Conference and 29th Annual Meet of the AIAET. Theme of the Conference : 'Educational culture in the 21st century, Knowledge, Teacher & Technology' held at Guwahati, on 29-31 January,1999. Organised by AIAET, Centre for Educational technology-Regional Engineering College, Silchar, sponsored by the Ministry of Education, Govt. of Assam. Participated and presented a paper titled " Women and Rural Development with special reference to Meghalaya" in the 8th Annual Conference of the NEIES held at Hailakandi-Assam, on 26-27th February,1999. Acted as Resource Person for "Training Course on Communication skills and Training Methodology". Organised by the State Institute of Rural Development, Nongsder, Meghalaya on 26-30 October, 1998. Attended and participated a " Workshop on Rights of Women Teachers" held at Guwahati during 16-20 November,1998 organised by National Institute of Public Co-operation and child Development, New Delhi. Acted as Resource person in the Meet on " Effect of Insurgency on Women and Children" and presented a paper on "Analysis of the state of women & children affected by insurgency" , held at Guwahati on 18-19 March, 1999, organised by NIPCCD-North East Regional Centre, Guwahati, Assam.

Padma, M. S : Attended and presided over the inaugural session of the IX National Level Conference -98 of the All India Association of Educational Research. Also chaired on academic session of the said conference. Held at Davanagere, May 1998. Participated and presented a paper titled, "In Service training for Improving Quality Education at Primary Level", at the National Workshop on Professional Development of Primary Education Personnel through Distance Education. Held in New Delhi, March,1999, organised by Distance Education Programme (DEP- DPEP), New Delhi. Was a Resource person in the "Extended Counselling Programme for the Post-Graduate Diploma Course in Higher Education - IGNOU, Conducted by the IGNOU, North East Regional Centre, Shillong during October-November,1998. Was a Resource person for UGC Sponsored Refresher Course in Education, Guwahati University, March, 1999.

Sharma, K.K. : Was a course coordinator at the extended counselling programme for post graduate diploma in higher education, IGNOU. Conducted by the Regional Centre IGNOU, held at Shillong during 30th October - 8th November,1998. Acted as Resource person in "Two Day Workshop for the functionaries at Teacher Training centre for primary teachers in NER under joint project of IGNOU and NCERT, New Delhi. Held at North East Regional Institute of Education, Shillong on 27-28 October,1998. Acted as resource person at workshop for Academic facilitators under National Open School, New Delhi, held at Regional Centre, IGNOU, Shillong through teleconferencing mode. Acted as programme Director kin seminar on Yogic systems and also delivered a talk on 'Science of life based on Ashtanga yoga (classical) of petanjali organised by Woman self Action group, Shillong on 28th November,1998. Acted as resource person at state level children's science congress, organised by Nagaland Institute of Health, Environmental and social welfare held at Kohima (Nagaland) from 24-25 November 1998. Delivered three lectures to teachers at Army school on (i) Motivation (ii) problems of Adolescent children and (iii) Instructional communication held at Shillong on 28th November,1998. Participated and presented a paper on 'Useful/ Desirability of admission test for pre-school children' at 'one day regional meet on the pre-

school children' at regional meet' on the theme -pressure on pre-school children at Regional Institute of public co-operation & child Development held at Guwahati on February, 26, 1999. Delivered lectures at Academic Staff College Gauhati University for 'Refresher Course for lectures in Education' during refresher course held at Guwahati University, on 10-11 March,1999. Chaired the Inaugural Session and presented a perspective on women's role in rural development at the regional level training of trainees in MICRO enterprise and small business of women. Organised by NIPCCD - New Delhi and Centre for Science Education, NEHU held during 22-26 March,1999. (1998): "Leadership Role of University in Creating Peace: A Spiritual Perspective" in Report of Regional meets on Role of Universities for creating Peace in North-Eastern Region in global perspective under UNESCO sponsored Seminar at the Dept. of Education, Nagaland University, Kohima (1997).

Sungoh, S.M.: Participated and presented a paper titled "co-operative Learning - a special application" at the 8th Annual Conference of North East India Education Society held at Hailakandi on 26-27 February,1999. Acted as Resource person for a Training Course for Secondary Teachers of Khasi and Jaintia Hills District. Organised by Khasi and Jaintia Conference of SDA, during 16-20 November, 1998.

Warjri, K. M. : Attended the Rajiv Gandhi Memorial Lecture series by Professor B. Pakem on the theme "Coalition politics in North East India" held at NEHU - Shillong organised by ICSSR - North East Regional Centre and NEHU on 26th - 28 November 1998.

**Publications:**

Bhattacharjee, R.& Paul, S.(1998-'1999) : 'A study of Teacher Attitude of secondary school Teachers of Cachar District of Assam'. *Journal of North East India Education Society* Vol.IV-VI, PP 24-30.

Bhattacharjee, R. (1998-1999) : "Classroom management and Teaching" *Journal of North East India Education Society* Vol.IV-VI, PP 41-43.

Ganguli, P.K. &. Syiem, E. (1998-'1999) : "Attitude of college students in Shillong towards Environmental Education", *Proceedings of North East India Education Society Seventh Annual Conference.* PP 80-83.

Gokulanathan, P.P. & Neingtim Kim : (1998-'1999) : 'Non cognitive parameters as desirable outcomes of higher education'. *Journal of North East India Education Society* Vol.IV-VI. PP 54-56.

Gokulanathan, P.P. (1998-1999) : 'Local initiatives as facilitators of development vis-a-vis spread of education in rural areas; A peep into the North East India situation', *Souvenir, NEIES VIII Annual Conference*, PP 12-15.

Gokulanathan, P.P.(1998-1999) : 'A Global face to Indian Higher Education: some reflections'. *Journal of Education*, Dibrugarh University, Sixth Issue.

Henia, A (1998-1999) :'Women's Empowerment and Education for 21st century in North East India perspectives', *Proceedings of North East India Education Society of the Seventh Annual Conference.* P.P.88-90.

Henia, A.(1998-1999) : Soil Conservation: Need and Education in the Hill areas of North East India' *Journal of North East India Education Society* Vol. IV-VI. PP 1-3.

Henia, A. (January'99) : 'Higher Education scenario in the 21st century-Future consideration', *Conference souvenir; International Conference and the 29th Annual Meet of the AIAET,* Guwahati, Assam. P.P.19-20.

Nongbri, C. (1998) : 'Decentralised Planning and Management of School Education in Meghalaya'. *Management of School Education in India - National Institute Report of Educational Planning and Administration*, New Delhi. P.P.51-59 .

Nongbri, C. (January '99 ) : "Rights of Women and Women Empowerment", *Conference Souvenir; International Conference & the 29th Annual Meet of the AIAET*, Guwahati, Assam. PP 59.

Nongbri, C. (1998-'99): "The Role of Distance Education Then & Now" *Journal of North-East India Education Society*, Vol. IV-Vi, PP. 57-60.

Padma, M. S. (June1998) : "Education of Girls : A Social Responsibility" *Journal of All India Association for Educational Research*, Vol-10, Nos. 1&2, March &June,1998.

Sungoh, S. M.(1998-99): 'Measurement and Evaluation in Higher Education', *Journal of North East India Education Society* Vol.IV- VI. PP.31-37.

**Study Tour/Field Trips** :

Students of the Department numbering 40, went on study tour to Guwahati-Howrah-Madras-Bangalore-Goa-Bombay under the supervision of Dr. S. M. Sungoh and Dr. C. Nongbri for the period from 2.9th December,1998 to 24th January,1999.

**Thrust Area of Research** :

(a) Educational Systems in North Eastern Region .
(b) Environmental Education.

**Research Programmes/Projects** :

Gokulanathan, P. P : " A Study of the Working and Management of Navodaya Vidyalayas in the North East Region" Final Report in Progress.

# DEPARTMENT OF GARO

This Department established in 1996, caters to the aspirations of students desiring to study Garo Language and Literature at a higher level. The Department is constantly making efforts to impart a sound knowledge of literary and linguistic concepts. Keeping section 4 of the NEHU Act, 1973 in view, the Department has stressed on instruction as well as intellectual advancement and improvement in academic performance and cultural awareness in students, which in turn may be disseminated to the society at large. The first batch of students passed out in 1998 with flying colours. The members of the teaching staff are sparing no efforts to acquire more teaching materials from various sources to supplement what is already available. Efforts are on to involve students in research work and to instil understanding of the Garo culture in order to widen their intellectual horizons.

**Head** : Professor (Mrs) Caroline R. Marak

**Faculty** :

| | | |
|---|---|---|
| Professor | : | Caroline R.Marak, M.A. (Gauh), Ph.D. (NEHU) |
| Lecturers | : | Fameline K.Marak, M.A. (NEHU) |
| | | Jacqueline R.Marak, M.Ed. (Bhubaneswar). |

**Student Intake** :

| | | | | | |
|---|---|---|---|---|---|
| (a) Enrolment capacity | : | M.A. 25 | | | |
| (b) Actual admission | : | SC/ST/GENL. | | MALE/FEMALE | TOTAL |
| | | 25 | — | 6 19 | 25 |

**Bridge Course in Garo :**

| SC/ST/Gen. | | Male/Female | | Total |
|---|---|---|---|---|
| — 11 | — | 5 | 6 | 11 |

**Courses Conducted** :

M.A. : History of Garo Language & Literature, Poetry I, Drama I Fiction I, Linguistics I, Poetry II, Drama II, Prose I, Linguistics II, Environmental Studies, Literary Theory & Criticism, Modern Poetry (1949-1985), Literature in Translation, Garo Folklore, Tragedy as a Literary Form, Indian Literature in English.

**Seminars/Conferences** :

*Attended*:

C.R.Marak presented a paper titled "Ramayana and the Legend of Dikki" in the National Seminar on Ramayana in the North-East organised by *Bharatiya Itihas Sankalan Samity*,

at Silchar on 30th & 31st August 1998.

*Organised*:

Extension lecture on "The English Language in Education; America and India" on 24.3.1999 by Robbins Burling, Professor of Anthropology, University of Michigan.

**Study Tour/Field Trips:**

Students and staff made field study trip to A'durage village at Arbella on 9-11-98.

**Thrust Area of Research**

Collection of Folklore materials, traditional oral poetry and culture.

**Other Activities** :

Students and staff organised a cultural show for the M.Phil. students and staff of Folklore Research Department of Gauhati University, Assam on 11th March 1999.

C.R.Marak went to Paris in the month of October '98 for research work under Indo-French Cultural Exchange Programme.

## DEPARTMENT OF HINDI

The Department of Hindi, established in 1996, has been offering regular classes at the M.A. level since its inception and attracting students from almost all the states of North-Eastern India. Keeping in mind the broader concept of Hindi literature and language, the Department wants to create awareness among the students in relation to the socio-cultural development of the region. The gradual increase in the number of students in the department is a testimony of the popularity of the subject and its utility and relevance in the North-Eastern region.

The Department is planning to start M.Phil and Ph.D. programmes as well as other research activities in the field of Hindi literature and language along with comprehensive and comparative study of Hindi and other regional languages of North-Eastern India in the near future.

**Head** : Dr. M P Pandey (i/c)

**Faculty** :

Lecturer : Dr. M.P.Pandey, M.A.,Ph.D. (Kashi V)

**Student Intake** :

(a) Enrolment capacity : M.A. 30

| (b) Actual admission : | SC | ST | Gen. | Male | Female | Total |
|---|---|---|---|---|---|---|
| | 1 | 5 | 23 | 10 | 19 | 29 |

**Courses Conducted :**

Aadhunik Kavita (Chhayabad Tak) aur Paryavaran parak Kavya, Hindi Gadya - Natak aur Nibandh, Hindi Sahitya Ka Itihas-One (Aadikal aur Bhaktikal), Bhartia Kavya Sastra (I), Chhayavadottar Kavita, Hindi Gadya : Upnyas aur Kahani, Hindi Sahitya ka Itihas (II) (Ritikal aur Aadhunik Kal), Bharatiya Kavya shastra & Smiksha sidhant, Aadhunik Kavya , Hindi Sahitya Ka Itihas, Hindi Nivandha, Bhartiya Kavya Shastra avm Smiksha Sidhanta, Chhayavadottor Kavita, Hindi Sahitya Ka Itihas (Ritikal aur Aadhunik kal), Special Study (Premchand), History of Sanskrit Literature.

**Seminars/Conferences** :

A "Gosthi" & 'Kavi-Sammelan' was organised on 21st November 1998 in the Department of Hindi to pay homage to 'Jana Kavi Nagarjun'.

**Visiting Professors/Fellows** :

Professor S.K.Mishra, M.A. D.Litt. (Patna)
Professor R.K.Verma, M.A. D.Phil. (Alld.) (upto 31st May 1998)
Professor S.N.Pandey, Ph.D. (BHU) (from 16th November 1998)

## DEPARTMENT OF KHASI

The Khasi Department came into being on the 29th September 1981, when it was formally opended as an Academic Department of the North Eastern Hill University. The first batch of students admitted were 35 (thirty five) in number, of whom 7 (seven) passed in the first Division, 28 (twenty eight) passed in the Second Division.

The core areas of study chosen by the Department were Khasi Literature, Khasi Linguistics and Khasi Culture. However, due to lack of good quality text books, particularly those in literary theory and literary criticism, the first syllabus of the Department had to incorporate a few courses in English Literature and English Literary Theory and Criticism. This was done with the view of making students aware of the great literary traditions of the Western World, particularly those of Greek, Latin and English. For some of these courses, the Department had to depend on the help of teachers from English Department, NEHU.

The Department has been able to hold 5 (five) Refresher Courses for University and College teachers. It has also held various seminars and workshops on the three core areas or study, namely, Khasi Literature, Khasi Linguistics and Khasi Culture.

**Head** : Dr. (Mrs) B.War

**Faculty** :

| | | |
|---|---|---|
| Professor | : | B.L.Swer, M.A. (Gau.), Ph.D. (NEHU) |
| Readers | : | M.B.Jyrwa, M.A. (Gau.), Ph.D. (NEHU) |
| | | B.War, M.A. (Delhi), Ph.D. (Lond.) |
| Lecturers | : | S. Dkhar, M.A.,Ph.D. (NEHU) |
| | | A.Kharmalki, M.A.,M.Phil. (NEHU) |

**Students Intake** :

a) Enrolment capacity : M.A. = 33

b) Actual admission :

| ST | Male | Female | Total |
|---|---|---|---|
| 33 | 5 | 28 | 33 |

**Degrees Awarded** :

*M.Phil :*

Ms.Ailynty Nongbri "Standardisation of Khasi". Supervisor, Dr. B.War.

Mr. Rockyer L. Nonglait : "A Study of Literary Criticism on the Khasi Novel". Supervisor, Dr. B.War.

Ms. Ibaphimon Liam : "Major Themes in Khasi Drama from 1980-1990 with special reference to R.Nongkynrih's Ka Bniat namar ka Bniat, R. Phankon's U Kiang Nongbah and Mynhynnin mynta Lashai and L.H.Pde's Yn Map?". Supervisor, Dr. B.War.

Ms. Pynhunlang Kharkulia : "Ka Samla Nongkyndong ka Bishar Bniah kum ka Saindur Thymmai". Supervisor, Professor B.L. Swer.

*Ph.D.*

Mr. Sylvanus Lamare, "Linguistics awareness among the Khasi" (Late) Professor H.W.Sten joint Supervisor Dr. M.B.Jyrwa.

**Courses Conducted** :

Linguistics I, Khasi Poetry from 1888-1940, Khasi Literary Criticism, Khasi Fiction I, Linguistics II, Khasi Drama I, Literary Theory to Criticism, Culture in Khasi Literature I, Literature in Translation, Linguistics III, Khasi Fiction II, Khasi Poetry II, Khasi Drama I, Culture in Khasi Literature II, Linguistics IV (Socio-Linguistics) & Environmental Awarness in Khasi

Literature.

**Seminars/Conferences**:

*Organised*:

Dr.B.L.Swer as President of Khasi Authors' Society organised a seminar in collaboration with the Planning Department Meghalaya on "Development of Khasi Language and Literature" on July 1998. "P.R.Pariat : An Unsung Khasi Playwright" Paper presented at the Symposium on "The Life and Words of Khasi Authors" organised by the Directorate of Art and Culture, Government of Meghalaya.

*Attended*:

Dr. B.War "Ka Jingpule ia ka ktien bad ka ktien Thoh ha ka Khasi" (Study of Language and Orthography in Khasi) Paper presented at the Seminar on Development of Khasi Language and Literature" organised by Khasi Authors' Society and Planning Department, Government of Meghalaya July 1998. "The Life and Work of Thomas Jones" Paper presented at the Symposium on The Life and Works of Khasi Authors organised by the Directorate of Art and Culture, Government of Meghalaya.

Dr. S. Dkhar (1) Paper presented at the Seminar on "Development of Khasi Language And Literature" on 11.7.98 organised by Khasi Authors Society And Planning Department, Government of Meghalaya, "Ka Kolshor U Khasi Kumba Ka Paw Ha Ki Drama Khasi. Symposium on the Life And Works of Khasi authors organised by the Directorate of Art And Culture, Meghalaya, Shillong on the 3rd & 4th November, 1998. Title of the paper Presented, "R.S.Lyngdoh : His Contribution to Khasi Literature and Politics". National Seminar on women writing In the North East on 11th & 12th March, 1999, organised by the CIEFL, regional centre, Shillong. Title of the paper presented, "Women and Translation in Khasi Literature".

**Publications** :

War,B. Ka Saia Jingtip (Co-authored) Published by *Syngkhong Kyntiew* Ri. 1998.

Jyrwa,M.B. Ka Saia Jingtip (Co-authored) *Syngkhong Kyntiew* Ri, 1998.

Swer,B.L. Halor Ki Siej Khongpong, Shillong 1998. Ka Saia Jingtip (Co-authored) *Syngkhong Kyntiew* Ri. 1998.

**Study Tour/Field Trips** :

Field Trip to Mawphlang Sacred Grove on 8th April 1998.

**Thrust Areas of Research** :

Khasi Linguistics, Khasi Literature, Khasi Culture and Folkloristics.

**Research Programme** : M.Phil and Ph.D. Programmes.

## DEPARTMENT OF LINGUISTICS

The Department of Linguistics which come into existence in 1988 was located in Kohima, Nagaland, till 1995. The two faculty members taught the Language Courses in the English Department in 1990-1992, with Professor J.War taking charge of the same department during the period. From 1993-95, the department undertook research, on Naga Languages and related issues. When the department shifted to Shillong in 1996 after the establishment of the Nagaland Central University, the M.A Programme was started. The department has been receiving an increasing number of applicants, but lack of infrastructure and staff has hampered research work, expansion and development. However, monographs on 'Language Policy in Education for Nagaland' and 'Language and Society in Nagaland' have been completed. Compiling and editing of 'Aspects of Garo' 'Nongtalang, a dialect of Khasi' 'Word and Sentence List in Naga languages' is underway as the department's contribution to the very limited research and materials on North East languages and related issues.

**Head** : Professor Juanita War

**Faculty** :

| | | |
|---|---|---|
| Professor | : | Juanita War, Ph.D (Edinburgh) |
| Reader | : | R. Sachdeva, Ph.D ( Pune ) |

**Student intake:**

a) Enrolment capacity : 30

b)Actual Admission :

| SC/ST | Gen | Male | Female |
|---|---|---|---|
| 29 | 1 | 5 | 25 |

**Courses Conducted** :

Introduction to Linguistics, Dialectology, Morphology and Introductory Syntax, Phonetics and Phonology, Semantics, Socio Linguistics & Sociology of Language, Psycholinguistics & Language Learning, Language Teaching and Testing, Advanced Syntax, Historical and Comparative Linguistics, South Asia as a Linguistics Area, Linguistics

Theory and Schools of Linguistics.

**Seminars/Conferences:**

Dr. R. Sachdeva participated as a Resource Personnel in the Workshop on Translation Studies organised by KATHA in collaboration with CIEFL.Shillong in Out,'98. Presented a paper on "Problems of establishing Semantic equivalence in translation"

Dr R. Sachdeva - Seminar on "Anthropology and Allied Disciplines in the North East : last fifty years". Presented a paper on "Language in North East" (26th - 27th March,'99 Department of Anthropology, NEHU, Shillong.).

**Visiting Fellows:**

1998 ; (1) Professor K.V.Subbarao, Delhi University
(2) Dr. G. Sengupta, Hyderabad Central University.
(3) Dr. L. Chhangte, -do-
(4) Mr. R. R. Mantri -do-
(5) Mrs T. K. Bamon -do-

**Floating Post:**

(1) Ms N. S. Mukherji, Lecturer.

**Publications:**

Dr. J. War. The Khasi Concept of Family: Changes in structure and Function. In P. M Chacko ed. Matriliny in Meghalaya; *Tradition and Change*, New Delhi, Regency Publications, 1998- PP. 16 - 30.

**Thrust Area of Research** : Tibeto-Burman (Garo)

**Research Programme/Project** :

Compiling a booklet on Aspects of Garo; 'Nongtalang, a dialect of Khasi' 'Word and Sentence list in Naga Languages'

**Other Activities** :

Professor J. War - Member of panel of Linguistics of (U.G.C).

# DEPARTMENT OF MIZO

The Department of Mizo, NEHU, Mizoram Campus established in 1997, is the first Mizo department in the Universities of the World. The Department was inaugurated by the Vice-Chancellor of NEHU, (Dr. Pakem) on 6th August 1997. It was started with four Guest Lecturers.

The Department aims at imparting to its students not only the ability to study language and literature, but also enable them to take a mature and balanced view of the world with special emphasis on socio-cultural, religions folkloristic, and linguistic excellence. The first regular Reader Dr. Laltluangliana Khiangte had joined the University on 8th February 1999 to take care of the newly established department.

**Head** : Dr. Laltluangliana Khiangte (Acting)

**Faculty** :

Reader : Laltluangliana Khiangte, M.A.,Ph.D. (NEHU), D.Litt. (I.U.Wash)
Lecturers : Guest Lecturers - 6

**Student Intake** :

(a) Enrolment capacity: M.A. 23
(b) Actual admission :

| SC/ST | Gen | M | F | Total |
|---|---|---|---|---|
| - | 23 | 12 | 11 | 23 |

**Seminars/Conferences** :

*Attended*:

Dr. Laltluangliana Khiangte, Resource person in Writers' Workshop, on June 1-3, 1999 at SCERT Auditorium, organised by Adult Education, Mizoram & State Resource Centre, Shillong. Presented documents in National Tribal Scholars' Workshop at Baroda on 20-21, March 1999, organised by the National Academy of Letters.

**Publications** :

Khiangte, Laltluangliana *"Pasaltha Khuangchera"* (Collection of Plays) : 1997. L.T.L. Publications, Aizawl.

Khiangte, Laltluangliana. "*Infiamna Khawvel Leh Rawngbawlna*" (Mission & Sports : Text book of Missionary training) 1998 : Synod Mission Board, Aizawl.

Khiangte, Laltluangliana. "*Mizo Folklore - I : Folktales of Mizoram*", 1997 : Art & Culture Department, Mizoram.

**Other Activities :**

Dr.Khiangte's book "Pasaltha Khuangchera" has been judged as the winner of Book of the Year - 1997 (Award). Out of 120 books published in Mizo Language in the year 1997 and was also awarded Doctor of Literature (D.Litt) by the International University, Washington D.C., 1999.

**Thrust Areas :**

Mizo Folk Literature & World Literature.

## DEPARTMENT OF PHILOSOPHY

The Department of Philosophy, a unit of the School of Humanities and Education came into existence in 1974. The same year it started its M.A. Programme. Only in 1979, the M.Phil Programme was introduced.

The objective of the Department has been to develop the logical and analytical ability of the students to critically reflect on various issues that confront them. The general direction of the Department has been to give, both in teaching and research special attention to such areas of philosophical thought as would facilitate the achievement of an authentic awareness among the students with regard to their own culture and tradition in the broader context of what is usually known as Indian Philosophy, Analytical Philosophy, Moral Philosophy, Logic, Philosophy of Religion and History of Western Philosophy.

The Department has been doing extremely well conducting research in tribal culture and tribal religion. Courses have been offered both at MA and M.Phil level, thereby making the tribal students of North-East appreciate their own tribal heritage.

**Head :** Professor (Mrs) S. Miri

**Faculty :**

| | | |
|---|---|---|
| Professors | : | Mrinal Miri, M.A.(Delhi), Ph.D. (Camb.)<br>(on deputation as Director, IAAS, Shimla.)<br>Mrs. S.Miri, M.A.,Ph.D. (Delhi)<br>N. Malla, M.A. (Utkal), Ph.D. (IIT Kanpur) |
| Readers | : | C.R. Agera, M.A.(Madras), Ph.D. (Delhi)<br>Jagat Pal, M.A. (Alld.), Ph.D. (IIT Kanpur)<br>S.C. Daniel, M.A. (Ann.), Ph.D. (NEHU) |
| Lecturers | : | X.P. Mao, M.A.(NEHU), M.Phil (Delhi), M.Litt. (Sydney)<br>E.R. Tongper, M.A.,Ph.D. (NEHU)<br>L. Lenka, M.A. (Utkal), Ph.D.(Hyderabad) |

**Student Intake :**

a) Enrolment capacity : 50

b) Actual admission :

| SC | ST | OBC | Gen | Male | Female | Total |
|---|---|---|---|---|---|---|
| 2 | 20 | 1 | 27 | 20 | 30 | 50 |

**Degrees Awarded :**

*Ph.D.*

Mitali Choudhury, "Some Problems in Applied Ethics". Supervisor, Dr. S.C. Daniel.

P.C. Biaksiama, "A Critical Appraisal from the Perspective of the Philosophy of Religion". Supervisor, Dr. C.R. Agera.

Joyanti Paul, "Some Central Problems in Philosophical Logic". Supervisor, Dr. S.C. Daniel.

**Courses Conducted :**

Symbolic Logic, Moral Philosophy-I and Environmental Ethics, Philosophy of M.K. Gandhi, Indian Metaphysics, Philosophy of Culture, Aristotle, Analytic Philosophy, Later Philosophy of Wittgenstein.

**Seminars/Conference :**

*Attended:*

Mrs. S. Miri: Attended a Seminar on "The Shared Social Ecology of the Seven Himalayan Countries" at Bhopal on 26-28 November, 1998.

Jagat Pal: Attended a Conference on "History and Testimony" North-East India History Association Kohima Session from 3rd December to 5th December, 1998.

C.R. Agera: Attended and delivered the key-note address in August, 1998 at the commencement of the Scholastic year of the Sacred Heart Theological College, Shillong.

**Publications :**

Malla, N., "*Nationalism, Regionalism and Philosophy of National Integration*" (ed) Regency Publications, New Delhi (1998).

Agera,C.R.. "Theology and Our Earth" (Address) in the *Diamond Jubilee Souvenir of the Sacred Heart Theological College*, Edt. Dr. Francis Fernandez, pp. 74-79.

Pal, Jagat., "Does the idea of Niskama Karma rest on a mistake?" *Journal of Indian*

*Council of Philosophical Research*, Vol.32, No.4, December, 1998.

Pal, Jagat., "The Right to Suicide", *Journal of Value Inquiry*, Vol.32, No.4, December, 1998.

Pal, Jagat., "The Concept of Nation" in N. Malla (ed). *Nationalism, Regionalism and Philosophy of National Integration*, Regency Publications, New Delhi, 1998.

Pal, Jagat., "History and Testimony" in the *Proceedings of North-East India History Association*, Kohima Session, 1998.

Tat Tvam Asi : The Universal Message in the Bhagavadgita, *Journal of Indian Council of Philosophical Research*, Vol.XVI, No.2, 1998.

Daniel,S.C., 'Ethnic Identity and Development in India's North-East : *A Conspectus' - In Liberalization and India's North-East* (ed) Gurudas and R.K. Purkayastha, Commonwealth Publishers, New Delhi, 1998, pp. 236-46.

Daniel,S.C., 'Philosophy of National Integration in Indian Context' - *In Nationalism, Regionalism and Philosophy of National Integration* (ed) N.Malla, Regency Publication, New Delhi, pp. 51-59.

Daniel,S.C., 'Emergency Trends in Philosophy : North-East India Scenario' - *in Trends in Social Sciences and Humanities in North East India,* (ed) J.P. Singh, R. Gopalakrishnan, L.S. Gassah, D.R.Syiemlieh, C.J.Thomas, Regency Publication, New Delhi, pp. 76-86.

Daniel,S.C., 'Sri Aurobindo's Theory of History : A Philosophical Investigation' - in *Proceedings of North-East India History Association,* (ed) D.R.Syiemlieh, Kamala Art Press, Wathapbroo, Shillong.

Lenka, L., "Foundationalism beneath Wittgenstein's Private Language Argument" The *Philosophical Quarterly*, Vol.IV, No.3-4, 1998, pp.135-148.

**Thrust Area of Research** :

Although the Department is cohesive in many ways, it is difficult to say that the faculty is or can be organised around a very specific area of philosophy, particularly in view of the extreme inter-connected news of the various areas. All that can be said is that there has been considerable work done on the tribal cultures; and on several conventional problem areas of Philosophy. The two projects under the Departmental Research Support Programme might enable us to crystalise a thrust area (s).

**Other Activities** :

The Department Weekly Seminar (on Wednesday).

## CENTRE FOR SUPPORTING LEARNING SYSTEMS

The Centre for Supporting Learning Systems consists of 3 units namely the Unit for Adult and Continuing Education, established in 1974 as a centre which is engaged in numerous activities not only in the three States of Meghalaya, Mizoram and Nagaland but also in the other North Eastern States as well with a view to bring about a meaningful and closer link between the University and the people of this region. The primary objective of the Centre is to create awareness on important issues at the grass root level with particular reference to overall and diverse learning needs of all segments of the people of the community and sensitise community leaders, administrators, political leaders and elders on issues relating to Adult literacy, Income generation, Status of women and Women studies, Skill Improvement Activities, Population Education, Consumer Protection. Besides, the Centre is also extending academic support in the development of teaching and learning materials pertaining to societal needs. It also organises programmes in collaboration with other sister departments of the University and also with State Government departments and other organisations both at the State and National level.

The other unit as the Unit for Distance Education, came into being in 1985 to organise and introduce Distance Education Programme in the University.

**Head** : Professor M C Pandey

**Faculty** :

| | | |
|---|---|---|
| Professors | : | M C Pandey,M.Sc ( Ranchi), Ph.D ( Minn) |
| | | B.Lyndem Laso, Ph.D. (NEHU) |
| Lecturer | : | H K Synrem, M.A.(Dib),Ph.D (NEHU) |
| Project Officers: | | E Jyrwa, M.A Ph.D (NEHU) |
| | | I Lall, M.A (Patna ),M.S (S.Ill) |

**Seminars/Conferences** :

*Attended*:

B Lyndem Laso : Education for Development CISEMT Seminar delivered a talk on the "Total Literacy Campaign in the NE Region of India." Reading University, London. Attended and presented a paper in the Summer Institute of Linguistics and Mutual Exchange with International Institute of Education at London University in U.K. and Kings College Education w.e.f. 7.5.98 to 27.5.98. Attended 5th Sub Regional workshops on the 'Development of Basic Literacy Learning Materials for Unreached Population in South Asia' held at Tehran, Iran, organised by 'Asia Cultural Centre & UNESCO w.e.f. 5.10.98 to 15.10.98. Attended as a Resource Person for 'Empowerment of Women' organised by Nyuuoung Maoh Women society, Wakching Mon District, Nagaland on 9th -11th January 1999.

E.Jyrwa: Attended the North East Zone meet of the North East Indigenous and Tribal People at the District Library Auditorium, Guwahati on 21st May 1998 and presented a paper

on 'The major ethnic issues in the Khasi and Jaintia Hills District of Meghalaya '. Attended the International conference on Environment and Health organised by the Parisara Vijnana Parishad, (Bangalore) and Karnataka Environment Research foundation, Bangalore at CSIC-IISC on 14th to 16th December, 1998 and presented paper on 'Solid waste Management - a case study of a Hill town Shillong in Meghalaya'.

*Organised*:

E.Jyrwa: Role of Women organisers for Rural development in collaboration with the State Institute of Rural Development for all the Seven Blocks of the East Khasi Hills District, Meghalaya at SIRD, Nongsder, Umiam on 16.7.98. Workshop on 'Role of forestry in environment Conservation' in collaboration with the Forestry Department, Aizawl at Forestry Department, NEHU Campus, Aizawl on 25.3.99.

H.K. Synrem : Organised workshop cum Symposium on 'Economic upliftment and Environmental Preservation' at Pomlum High School on 31.07.98. Workshop on 'Skill Improvement and observance of breast feeding week' on 18.8.98 at Kolasib, Mizoram. Workshop on 'the role of women organisers for rural development' in collaboration with the State Institute of Rural Development for the seven blocks of the East Khasi Hills District, Meghalaya at SIRD, Nongsder on 16.7.98.

**Research Programmes** :

Literacy & Population Education Project, Financed by Department of Education, Government of India, New Delhi.

**Course Conducted** :

Certificate Course on Adult Education : (Regular teaching course of the Centre) First Semester - 1998 (August - December 1998) Number of participants 5 : (Male 0 : Female - 5) ST-4, Others - 1.

Literacy Programme : Keeping in view the aims and objectives of the National Literacy Mission for the eradication of literacy in the State of Meghalaya, the Centre is involved in mobilising people's participation in the literacy programme. The Centre has also established J.S.N. as post literacy programmes. As of now 6 J.S.N. has been opened, 2 in Meghalaya, 2 in Mizoram and 2 in Nagaland.

**Population Education Resource Centre** :

The UGC-UNFPA project entered the third stage (Phase - III). The basic objective of Phase - III has been focused on important issues in the service area namely Drug and Drug abuse, AIDS and Environment in relation to growing population. The message will be communicated through Advocacy, awareness through extension lectures and short duration Certificate Course involving B.Ed and M.Ed students in Colleges located in remote areas.

**Material Development:**

Reading material on Adult Education - A.C.E Series IV, 1999

**Other Activities:**

Organised Programme on Improved Techniques of Cultivation followed by a Debate Competition at Kyiem, Mawphlang on 25.7.98.

Organised Poster Campaign and Extension Lectures on 'Environment, Drugs and Alcohol' at Laban on the 8.4.98.

Organised Awareness programme on Adolescent Education, Role of women in preservation of Environment at Smit on the 5.8.98.

Organised 'Run for a Cleaner Laban' on the 13.4.98.

**Educational Tour :**

Dr. M C Pandey attended and participated in the Evaluation of Population Education Programme in higher Education at Phillippines form June 16 to June 26 and Thailand from June 27 to July 2, 1998. The trip was sponsored by UGC-UNFPA. Organised Health and Nutrition Education Programme at Laitjem Village on 5.6.98. Staging of Drama based on a short play ' Ka borbah ki jingbam'. Population and Development at Ramana College, Aizawl, November 5,1998. AIDS-NEHU-P.G Economics Aizawl, November 6, 1998. Poster painting competition Aizawl North College, Mizoram. Consumer awareness and women empowerment at Aizawl, NEHU Campus, Mizoram on 26.3.1999. Health awareness programme at Mawlyndep on 30.3.99. Health awareness programme at Umsning on 27.3.99. Counselling on Drug addiction, Family problems and alcoholism. Concurrent Evaluation on total Literacy Campaign in Jaintia Hills District, Meghalaya.

The Centre organised short term courses on Adult Education at Tura and Shillong. And also short term courses on Population Education at Jowai, Kolasib, Tura, Aizawl and Shillong.

**Publications :**

Pandey M C.( 1998) Foodgrain production in the North Eastern Region, *Proceedings of the NEIHA*, 223-229.

# SCHOOL OF LIFE SCIENCES

The School of Life Sciences came into existence in 1974 with the establishment of the Department of Botany and Zoology. Later on, in 1982 the Department of Biochemistry was opened and subsequently the Department of forestry has been included in the School of Life Sciences.

There is a wide range of courses available which are constantly revised and reviewed. These are based upon a modern approach incorporating pure and applied aspects as well as recent developments. Biology is among the most rapidly changing and innovatory discipline in the Sciences with important advances in ecology and ecosystem dynamics, biotechnology, genetic engineering, immunology, molecular and cell biology, microbiology, physiology, experimental morphology, endocrinology, parasitology, entomology, pasasitology, cancer biology, freshwater biology, enzymology, betelnut carcinogenesis and nitrogen metabolism. Advances in these areas have profound implications for society in medicine, health care, environmental management, forestry and agriculture. The courses in the School of Life Sciences are taught by competent faculty members, a few of them commanding international reputation in their area of specialisation. The School provides good facilities and equipments needed for their specialised courses. At present, over seventy research scholars are working for their M.Phil. and Ph.D. degree programmes.

During the last twenty five years, the academic departments have made a notable impact on the chosen areas of activities with emphasis on the North-Eastern regional and national requirements. The School aims at being an active centre for post-graduate studies and research on the frontiers of biological sciences.

Thus during last 25 years the School of Life Sciences has emerged as a centre of excellence of higher education and research in the North-Eastern Region.

## DEPARTMENT OF BOTANY

The Department of Botany was established in 1974. Since its inception the Department has been conducting teaching and research in priority areas of regional and national importance. Forest Biology is the thrust area of research. During the past 25 years the department has made valuable contributions in different disciplines of Forest Biology. The department is fulfilling the regional aspirations through its well developed

teaching programme. The students passing out from the department are occupying important positions in prestigious educational institutions, research organisations both in the NE region and in the country.

The department is covered under Special Assistance Programme (SAP) of the U.G.C. Higher Plant Ecology and Microbial Ecology are the thrust areas under SAP. The department has also been extended assistance by the UGC for strengthening infrastructure under Science & Technology Infrastructure Development Programme (COSIST). Ecology, Biodiversity and conservation in NE India are thrust areas of the COSIST programme. Other major areas of research in which the department has made notable contributions are Plant Physiology, Experimental Morphology, Cytogenetics and Plant Taxonomy.

The department conducts U.G.C. refresher courses regularly for improving the teaching standards in colleges and universities of the region.

**Head** : Professor R. R. Mishra ( up to June, 1998)
Professor H.N. Pandey (w.e.f. July, 1998).

**Faculty** :

| | | |
|---|---|---|
| Professors | : | R. R. Mishra, M.Sc., Ph.D. (B.H.U.) |
| | | R. S. Tripathi, M.Sc.(Agra), Ph.D. (B.H.U.) |
| | | Y. S. Chauhan, M.Sc., Ph.D. (Agra) |
| | | P. Tandon, M.Sc. (L'now), Ph.D.(Jodh) |
| | | H.N.Pandey, M.Sc., Ph.D. (B.H.U.) |
| Readers | : | G.D.Sharma, M.Sc. (Meerut), Ph.D (NEHU) (on lien) |
| | | A.K. Misra, M.Sc., Ph.D. (Meerut) |
| | | R.C. Laloo, M.Sc., Ph.D. (Gau) (up to 23.3.99) |
| | | N.K.Chrungoo, M.Sc., Ph.D. (Kashmir) |
| | | (Miss) M.S. Dkhar, M.Sc., Ph.D. (NEHU) |
| Lecturers | : | Y. Kumar, M.Sc.(Agra),Ph.D. (NEHU) |
| | | L. Kharlukhi, M.Sc.(NEHU) Ph.D. (I.A.R.I) |
| | | N. Venugopal, M.Sc., Ph.D. (Madras) |
| | | H. Kayang, M.Sc., Ph.D. (NEHU) |
| | | (Mrs.) S. Kumaria, M.Sc., Ph.D. (NEHU) |

**Student Intake**:

(a) Enrolment capacity : M.Sc. - 20, Ph.D. - Not fixed

(b) Actual admission :

| SC/ST | | General | | Total |
|---|---|---|---|---|
| Male | Female | Male | Female | |
| 6 | 13 | 1 | - | 20 |

**Degree Awarded** :

*Ph.D.*

Babu John, " Dynamics of fine roots in pine forest ecosystem". Supervisor: Professor H.N. Pandey, Professor R.S. Tripathi (Joint Supervisor).

Varjinia Kalita, " Cryo preservation of germplasm of Pinus kesiya Royle ex. Gord - An important tree of north- east India". Supervisor : Professor. P. Tandon

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

| | |
|---|---|
| 1. Ministry of Environment & Forests, Govt. of India | Rs. 21.07 lakhs |
| 2. DST | Rs. 12.07 lakhs |
| 3. C S I R | Rs. 10.00 lakhs |
| Total | Rs. 43.14 lakhs |

**Courses Conducted:**

M.Sc. : Algae, Bryophyta & Pteridophyta; Gymnosperms & Plant Anatomy; Mycology & Plant Pathology; Plant Taxonomy & Biostatistics; Plant Biochemistry & Molecular Biology; Microbiology & Biotechnology; Genetics & Plant Breeding; Ecology & Environment; Plant Physiology; Morphology, Embryology & Differentiation; Ecosystem Analysis & Phytogeography.

Special Papers : Angiosperm Taxonomy; Biology of Reproduction in Angiosperms; Applied Molecular Biology.

**Seminars/Conferences:**

*Attended*:

Professor R.S. Tripathi delivered (i) an invited lecture on "Plant population ecology in India" at the national conference on "Ecology in India : Retrospects and Prospects" held at Banaras Hindu University, Varanasi during 12-13 March, 1999; he also chaired one of the Technical Sessions, (ii) attended the Seminar on "Protection and Management of National Parks and Sanctuaries" held during 17-18 April, 1998 at Indira Gandhi Institute of Development Research at Mumbai and sponsored by the AFC Regional Centre of National Afforestation and Ecodevelopment Board, Ministry of Environment and Forests, Government of India, and presented a paper on "Strategies for conservation of national parks and sanctuaries"; he also chaired one of the Technical Sessions at the said seminar, (iii) delivered invited lecture on opening day (9 March, 1999) of International Conference on "Geo-informatics : Beyond 2000" organised by the Department of Space, Government of India, at Indian Institute of Remote Sensing, Dehra Dun, (iv) participated in the workshop-cum training programme on "Joint forest management and microplanning" held at Guwahati during 28-29 December, 1998 and delivered a lecture on "Joint forest management in north-east India".

Professor P. Tandon delivered (i) an invited lead talk on "Role of biotechnology in conservation of phytodiversity of north-east India" at a workshop on "Perspective for Planning and Development in North- East India" organised by G. B. Pant Institute of Himalayan Environment and Development, North-East Unit, Arunachal Pradesh during April 27-29,1998,(ii) delivered a lecture on "Environmental Physiology & Biotechnology at High altitudes" during the meeting on Task Force for the Science at High Altitudes of Bose Institute held at Darjeeling during May 8-10,1998, (iii) delivered an invited plenary lecture on

"Conservation of phyto-diversity of north-east India using in Vitro technique" at National Seminar on "Management Strategies for North Eastern Hilly Ecosystem" at ICAR, Research Complex for NEH Region, Umiam, Shillong during August 8-10,1998, (iv) presented a paper entitled "'Somatic embryogenesis and plant regeneration in Pinus kesiya (Royle.ex Gord.) at IX International Congress on "Plant Tissue and Cell Culture Plant Biotechnology and In Virto Biology in the 21st Century", held at Jerusalem, Israel during June 14-19,1998.

Professor H.N. Pandey presented a paper "Recovery of degraded subtropical humid forest of north-east India" at the national conference on "Ecology in India : Retrospects and Prospects" held at Banaras Hindu University, Varanasi during 12-13 March, 1999. He also chaired the Valedictory Session at the said conference.

Dr. N. K. Chrungoo delivered an extension lecture on "Dehydrin like activity of seed storage proteins during seed maturation" in the Department of Biochemistry & Microbiology, University of Victoria, BC, Canada.

Dr. N. Venugopal presented a research paper on "Ecological and functional aspects of xylem structure in the mycoparasitic plant Cymbidium macrorhizon Lindl. (Orchidaceae)." at the national seminar on "Role of Microbes in Environmental Protection and Rural Development" during October 23-25,1998 at NEHU, Shillong.

*Organised*:

The Department organised a national seminar on the "Role of Microbes in Environmental Protection and Rural Development" during 23-25 October, 1998 in collaboration with International Society for Conservation of Natural Resources, Department of Botany, Banaras Hindu University, Varanasi. Dr(Miss) M.S. Dkhar and Dr. H.Kayang of the Department were the convenor and organising Secretary respectively.

**Publications**

Arunachalam, A., Maithani, K., Pandey, H.N. & Tripathi, R.S. (1998). Fine litter fall and nutrient dynamics during forest regrowth in the humid subtropics of north- eastern India. *Forest Ecology and Management* (The Netherlands),. 110 :209-219.

Arunachalam, A., Maithani, K., Pandey, H.N. & Tripathi, R.S.(1998). Leaf litter decomposition and nutrient mineralization patterns in regrowing stands of a humid sub-tropical forest after tree cutting. *Forest Ecology and Management* (The Netherlands).(accepted).

Chauhan, Y.S. and Katiyar, S.R. (1998). Effect of radiation and growth hormones on pollen germination, pollen tube growth and modulation of radiation responses of Pinus kesiya Royle ex Gord., *Cytologia*. 63: 341-348.

Dhyani, S.K.& Tripathi, R.S. (1998). Tree growth and crop yield under agri-silvicultural practices in north-east India. *Agroforestry Systems*, (The Netherlands). (accepted).

Dkhar,D.N., and M. S. Dkhar (1998). Earthworm population and enzyme activities of two pine forest stands. *In New Trends in Microbial Ecology* (eds. Bharat Rai & M.S. Dkhar).pp

150-157

Gajurel,P.R., Rethy, P. & Kumar Y. (1998). Piper lonchites Roem. & Sch. - A lesser known species of Piper from Arunachal Pradesh, India. *J. Econ. Tax. Bot.* 22(3), 1-3.

Govil, Sudha Rani & Pandey,H.N. (1998). Growth response of maize to crop density. *Indian Journal Plant Physiol.* 3 (4) NS :276-278.

Kayang, H.(1998). Effect of isopod grazing on microbial population and nutrient release in decomposing leaf litter of Alnus nepalensis D. don, In New trends in *Microbial Ecology* (eds. Bharat Rai & M. S. Dkhar.) pp. 137-149.

Kumar Y.1998. Future prospect of orchid cultivation as a horticulture industry in north-eastern India. In : *International Festival of Orchids* (ed. S. N. Hedge), SFRI, Itanagar, Arunachal Pradesh, pp. 88-92.

Maithani, K., Arunachalam, A., Tripathi, R.S. & Pandey, H.N.(1998). Nitrogen mineralization as influenced by climate, soil and vegetation in a subtropical humid forest in north-east India. *Forest Ecology and Management* (The Netherlands). (accepted).

Maithani, K., Arunachalam, A., Tripathi, R.S. & Pandey, H.N.(1998). of leaf litter quality on N-mineralization in soils of regrowing subtropical humid Influence forest. *Biology and Fertility of Soils* (U.K.), 27:44-50

Mishra, J., Pandey, H.N. & Tripathi, R.S. (1998). Population dynamics and growth of Galinsoga ciliata in relation to method of cultivation, crop type and altitude. *Indian Journal of Agricultural Sciences*, 68:28-32.

Rout, M.K. and Chrungoo, N.K. (1999). Proteolytic activity and mobilization of reserve proteins during early stages of germination in seeds of common buckwheat (Fagopyrum esculentum Moehch). *Biol. Plantarum*, 42 (1) :81-87.

Rout, M.K. and Chrungoo, N.K.(1998).The nutritionally rich 26kD seed storage legumin of common buckwheat: *A structural insight. Biochem. & Mol. Biol. Intl.* (Accepted).

Ranee, L. and M. S. Dkhar, (1998). Comparative study on fungal population of soil, casts and the gut contents of earthworm. In : *New Trends in Microbial Ecology* (eds.Bharat Rai & M. S. Dkhar ) pp. 158-169.

Sarma,G., A. Sen., R. Varghese and A. K. Misra (1998). A novel technique for isolation of Frankia and generation of single spores cultures. *Canadian J. Microbiol.*44:490-492.

Tandon, P., Ishikawa, M, Komamine, A. and Fukunda, F. (1999). Incorporation of Fluorescein conjugated anti mouse immmunoglobulin G intop permeablized Nicotiana tabacum By-2 cells. *Plant Sciences,* 140: 63-69.

Tandon, P, and Kumaria, S.(1998). Threats to plant diversity in high altitude of north-east India and conservation of rare and endangered plants using biotechnological approaches. In : Science at High Altitudes (eds. S. Raha, P.K. Ray and B. Sinha.). *Proceedings of the National Symposium*, Darjeeling, Allied Publishers Limited, 140-147.

Tiwari, B.K., Barik, S.K. & Tripathi, R.S. (1998). Biodiversity value, status and strategies for conservation of sacred groves of Meghalaya, India. *Ecosystem Health* (USA), 4:20-32.

Tiwari, B.K., Barik, S.K. & Tripathi, R.S.(1998). Sacred groves of Meghalaya. In : *Conserving the Sacred for Biodiversity Management* (eds. Ramakrishnan, P.S., Saxena, K.G. and Chandrashekara, U.M.), pp. 253-262. UNESCO, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.

Venugopal, N., (1999). An interesting observation on the epidermal digestive glands of Nepethes khasiana Hk.f,. *Current Science*, 76 (1), 31-33.

**Thrust Areas** : Forest Biology

**Research Programmes/Projects** :

A research project entitled "Study of impact of human activities on buffer zone ecosystems of Nokrek biosphere reserve" was sanctioned by the Ministry of Environment and Forests, Government of India, New Delhi to Professor R.S. Tripathi as Principal Investigator and Professor H.N. Pandey and Dr. S.K. Barik as Co-Investigators.

A research project entitled "A study on the environmental information in the tree rings of some north-eastern Himalayan tree species" was sanctioned by CSIR, New Delhi, to Dr. N. Venugopal.

A research project entitled " Assessment of moisture oriented feasibility for storage of seeds of timber yielding, wild tree species of Meghalaya was sanctioned by D.S.T., New Delhi to Dr. L. Kharlukhi.

**Other Activities**:

Professor Tripathi was nominated as a National Consultant to the Forestry Research Education and Extension Projects (FREEP) of the Indian Council of Forestry Research and Education (ICFRE) under World Bank Funds administered by Winrock International, USA and acted as national expert of the Institute Review Team for ICFRE Institutes. He was nominated by the Govt. of Meghalaya as a member of the Meghalaya State Pollution Control Board, Shillong. Professor P. Tandon visited a few research organizations and universities in Jordan and Israel. He was appointed as a member of monitoring-cum-evaluation committee of the review committee on genetic manipulation of department of Biotechnology, Ministry of Science & Technology, Government of India for a period of 3 years. He was elected as a member of the Council of The National Academy of Sciences, India. Dr. Y. Kumar participated in refresher course "Recent advances in life Sciences" during 20th Feb-

12 March, 1999 at Visva Bharti, Santiniketan.

Dr. A. K. Misra was the visiting faculty in the Department of Molecular Biology and Biotechnology, Tezpur Central University in March 1998.

Dr. N. K. Chrungoo worked as a visiting scientist at the Department of Biochemistry & Microbiology, University of Victoria, BC, Canada from Aug.1,1998 to Oct.31,1998. The programme was sponsored by the Department of Biotechnology, Govt. of India, New Delhi. Was also the visiting fellow at the International Centre for Genetic Engineering and Biotechnology, New Delhi from Dec. 1998 to Feb. 1999, under the INSA visiting fellowship programme.

## DEPARTMENT OF BIO-CHEMISTRY

The Department of Biochemistry became operational in 1982 with the intake of the first batch of M. Sc. (Biochemistry) students and research scholars. Since then, the department has been imparting high quality education in this subject and producing highly skilled technical personnel and researchers in the specialized disciplines of biochemistry. The department has so far produced 16 Ph. Ds. and 1 M. Phil. The courses and research areas offered are a judicious blend of the regional needs as well as the technological input and challenges of modern science. Thereby, the department has been meeting the needs and aspirations of the people of the region.

In its 17 years of existence, the department's quality services has been manifested by way of producing M. Sc. or Ph. D. students who have successfully competed/qualified in the National Entrance Test (NET) and GATE, and their placement in many reputed technical and scientific institutions of the State and the country. Our students are employed as teachers in several colleges besides Forensic Laboratory, Pasteur Institute in Meghalaya. At the same time, our students have been pursuing higher studies in the country's premier institutions like CCMB (Hyderabad), JNU (Delhi), TIFR (Bombay), IISc (Bangalore) and abroad. In addition to its human resource development activity, the members of the faculty are also involved in a number of collaborative research programmes with both national and international groups. Separate individual project inputs with funding from various agencies like DST, CSIR, UGC and NEC have contributed and enhanced the rapid growth and development of the Department.

**Head** : Dr. R. N. Sharan

**Faculty** :

Professors : R. Lalthantluanga, M. Sc.,Ph. D. (Pune)
A. N. Rai, M. Sc. (BHU), Ph. D. (Dun)

| | | |
|---|---|---|
| Readers | : | R. Sharma, M. Sc., Ph.D. (Ban)<br>R. N. Sharan, M. Sc., Ph.D. (J.Nehru)<br>A. Alam, M, Sc. (Alig.), Ph.D. (Moscow) |
| Lecturer | : | D. Syiem, M. Sc., Ph.D. (NEHU)<br>A. K. Singh, M. Sc. (Gorak), Ph.D. (Hyd.) |

**Student Intake:**

| | M. Sc. | M. Phil./Ph. D. |
|---|---|---|
| (i) Enrolment capacity | 10 | Open |
| (ii) Actual admission : | (SC/ST/Gen) | (Male/Female) |
| M. Sc. | 0 / 6 / 4 | 5 / 5 |
| Ph. D. | 0 / 0 / 3 | 0 / 3 |

**Funds received from agencies other than NEHU/UGC.**

DST (Indo-German Project): Rs. 8 Lakhs (approx.)

Financial assistance for International Conference & Indo-German Symposium : Rs. 15 lakhs (approx.)

**Courses Conducted:**

*M. Sc.*

Chemistry; Introductory Biochemistry and Environmental Biochemistry; Enzymology; Biochemistry Practicals (I, II, III & IV); Genetics; Medical Biochemistry; Biosynthetic Pathways; Techniques in Biochemistry; Physiological Chemistry, Bioenergetics Pathways; Molecular Biology, Microbiology and Immunology.

*M. Phil.*

Biological Research Techniques; Biophysics and Physiological Chemistry; Cellular and Molecular Biology.

*Ph. D.*

On the topics related to thrust areas.

**Seminars/Conferences.**

*Organised:*

"International Conference on Radiation Biology: DNA Damage, Repair and Carcinogenesis" and "Indo-German Symposium on Molecular Biology of Radiation Damage and Repair" were organized from April 07 to 10, 1998 with Dr. R. N. Sharan as the Organising Secretary and Dr. D. Syiem as the Treasurer. About 180 participants from 16 countries participated in the twin events which was a grand academic success. Several national and

international organisations jointly sponsored the conference and symposium.

*Attended:*

All members of the faculty. (Professor R. Lalthantluanga, Professor A. N. Rai, Dr. R. Sharma, Dr. R. N. Sharan, Dr. A. Alam, Dr. D. Syiem and Dr. A. K. Singh) were members of the organising committee of the International Conference on Radiation Biology : DNA Damage, Repair and Carcinogenesis and Indo-German Symposium on Molecular Biology of Radiation Damage and Repair (April 07-10, 1998). All attended the conference and participated in their proceedings.

Dr. R. N. Sharan presented a paper titled "Immunodetection of Cellular Poly-ADP-ribosylation" in the above international conference.

Dr. A. Alam presented two papers titled "Enhancement of radiomodulatory effect through liposome encapsulated radiomodifier on cancer bearing mice" and "Tumor-associated antigen expression in mice exposed to diethylnitrosamine" in the above international conference.

Dr. R. N. Sharan participated and presented an invited talk titled "7-Li Particle Induced Plasmid DNA Damage is Influenced by Nucleotide Sequence" in the 41st Japan Radiation Research Society meeting at Nagasaki (Dec. 02-04, 1998).

Dr. D. Syiem presented a paper titled "Medicinal plants and Herbal medicine : a case study in Meghalaya" in Biodiversity workshop, March 4-6, 1999, at NEHU, Shillong organised by the NEBRC on the theme "peoples participation in Biodiversity conservation".

**Publications**:

Sharan, R. N. "Trends in Radiation and Cancer Biology". *International Co-operation Bilateral Seminars series*, Vol. 29, Germany, Forschungszentrum Juelich GmbH, I998 [ISBN 3-89336-230-4].

Rai, A. N. and Borthakur, M. In: Verma, B.N. Kargupta, A.N. and Goyal, S.K, ed. *Advances in Phycology*, New Delhi, APC publications Pvt. Ltd.,1998, pp. 81-108,

Rai, A.N. "Cyanobacterial Nitrogen metabolism: Relevance in agricultural Biotechnology" In Subramaniam,G. Kaushik, BD and Venkataraman, G.S, ed. *Cyanobacterial Biotechnology,* Oxford, IBM publishing Co.Pvt. Ltd., New Delhi, 1998, pp. 223-232

Dey, S and Sharma, R. (1998). Hormonal regulation of the malate -aspartate shuttle enzymes during postnatal development of mice. *Indian Journal Biochem & Biophysics*. 35, 224-228.

Singh, L.S. and Sharma, R (1998) Alloxan diabetes regulates adenosine deaminase activity in mice: Tissue- and age-specific correlation. *Biochemistry Molecular Biology International*. 46, 55-61.

Pariat, T. & Sharan, R. N. (1998). Qualitative Changes in Mice Liver HMG Proteins

After Low Dose Chronic Administration of Aqueous Extract of Betel Nut and Diethylnitrosamine, *Hepatology Research*. 12 (3), 177-185.

Sharan, R. N., Schneeweiss, F. H. A., Saikia, J. R. & Feinendegen, L. E. (1998). Poly-ADP-ribosylation of Histone Proteins of Human Kidney T1-Cells in vitro Following Gamma-Irradiation. *Indian Journal of Biochemistry and Biophysics*. 35, 97-102,

Saikia, J. R., Schneeweiss, F. H. A & Sharan, R. N. (1998). Effects of Chronic Low-dose Arecoline Administration on the Macromolecular Components of Bone Marrow and Spleen Cells of Mice. *Cancer Journal* 11 (2), 94-98,

Humtsoe, J. O., Schrodeder, C. H. & Sharan, R. N. Is There a Relationship Between Nucleotide Sequence and Radiation Induced DNA Damage ? In Sharan, R. N, ed. Trends in Radiation and Cancer Biology. *International Co-operation Bilateral Seminars series*, Germany, Forschungszentrum Juelich GmbH, I998, vol. 29, pp. 29-32.

Sinha, T. K. & Sharan, R. N. A Model for DNA and DNA Repair. In Sharan, R. N. ed. Trends in Radiation and Cancer Biology. *International Co-operation Bilateral Seminars series,* Germany, Forschungszentrum Juelich GmbH, I998, vol. 29, pp. 128-134.

Pariat, T. & Sharan. R. N. Betel Nut and Diethylnitrosamine induced conformational changes in the liver HMG proteins In Vivo. In Sharan, R. N. ed. Trends in Radiation and Cancer Biology. *International Co-operation Bilateral Seminars series*.Germany, Forschungszentrum Juelich GmbH, I998, vol. 29, pp. 162-165.

Rapthap, C., Imliwati, L. K., Sharan, R. N. & ALAM. A. Tumor-associated Antigen Expression in Mice Exposed to Diethylnitrosamine. In Sharan, R. N. ed. Trends in Radiation and Cancer Biology. *International Co-operation Bilateral Seminars series*, Germany, Forschungszentrum Juelich GmbH, I998, vol. 29, pp. 177-180.

Sharan, R. N., Devi, B. J., Humtsoe, J. O. & Schneeweiss. F. H. A. "Immunodetection of Cellular Poly-ADP-ribosylation". In by Sharan, R. N. ed. Trends in Radiation and Cancer Biology. *International Co-operation Bilateral Seminars series*, Germany, Forschungszentrum Juelich GmbH, I998, vol. 29, pp. 240-243.

Rapthap, C, Imliwati, L. K, Sharan R. N. and Alam, A "Tumor-associated antigen expression in mice exposed to diethylnitrosamine" In Sharan, R N. ed. *Trends in Radiation and Cancer Biology*. 1998, vol 29, pp. 177-180.

**Study Tour/ Field Trips** :

The M. Sc. students participated in a study tour to visit and see institutes of higher learning at Bangalore and Mysore. The tour, lasting about 2 weeks, was headed by Dr. A. K. Singh. Lecturer in the Department.

**Thrust Areas of Research:**

Enzymology, Medical Biochemistry, Carcinogenesis, Molecular Radiobiology, Nitrogen Fixation, Protein Chemistry, Medicinal Plants and Drug Delivery system.

**Research Programs/ Projects:**

(i) Dr. R. N. Sharan: DST project (Indo-German Co-operative Research Program) on "Molecular Biology Of Radiation Damage And Repair" sanctioned [1998-2001]; approximately Rs. 8 lakhs from DST and approx. Rs. 15 lakhs from DLR, Bonn.

**Other Activities:**

Dr. R. N. Sharan was unanimously elected as "President-elect" of the Indian Society of Radiation Biology for the term of 2000-2002.

Professor A. N. Rai was invited as a Visiting Professor at Botaneska Institutionen, Stockholm Universitet, Sweden for 1 year from Nov., 1998. He is presently on study leave from NEHU.

Dr. R. Sharma has been included in the panel of experts for selection/assessment committees (1998-2000) in Biochemistry & Biophysics of CSIR (National Institute of Science Communication), New Delhi.

Dr. R. Sharma delivered extension lectures at the Department of Zoology, Guwahati University (Dec 23-24, 1998) and at the Department Life Sciences, Manipur University (March 17-19, 1999).

Dr. R. N. Sharan was a Visiting Professor at Institute of Medicine, FZ, Juelich (Germany) during July-August, 1998.

Dr. R. N. Sharan was an Invited Senior Scientist at the Faculty of Medicine, Osaka University, Osaka (Japan) under the auspices of "Research for the Future A new technology to evaluate the effects of environmental pollutants on humans" for 2 weeks (November-December, 1998). During the stay, two seminars titled "Betel nut of north-east India and carcinogenesis: What have we learnt? and "Low and high LET radiations and DNA: New insights from plasmid DNA model" were delivered at the Faculty of Medicine, Osaka University.

Dr. D. Syiem, was the organising secretary of the Workshop on "Peoples Participation In Biodiversity Conservation", March 4-6, 1999 sponsored by NEC.

# DEPARTMENT OF FORESTRY

The Department of Forestry was established in 1990 to bring out highly skilled technical, Extension and researchers in multi-disciplinary areas of Forestry for rendering valuable services to the people of this region. It started the M.Sc. programme from the year 1997. It offers specialisations in Agroforestry at masters level.

**Head** : Dr. Rakesh Mohan

**Faculty** :

| | | |
|---|---|---|
| Professor | : | L.K.Jha, M.Sc. (Bhagal), Ph.D.(L.N.Mith.) |
| Reader | : | Rakesh Mohan, M.Sc.(Kanpur), Ph.D. (B.C.K.V) |
| Lecturers | : | U.K.Sahoo, M.Sc.,M.Phil (Utkal), Ph.D. (NEHU) |
| | | D. Paul, M.Sc.,Ph.D. (NEHU) |

**Student Intake** :

a) Enrolment capacity : 6

b) Actual admission :

| SC | ST | Gen. | Male | Female | Total |
|---|---|---|---|---|---|
| - | 6 | 0 | 4 | 2 | 6 |

**Degrees Awarded** :

*Ph.D*

J.H.Lalramnghinglova "Studies on plants of ethnobotanical importance in the tropical wet evergreen forest of Mizoram", : Supervisor, Professor L.K. Jha.

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

Ministry of Environment & Forest, New Delhi Rs. 7,66,494/-.

**Courses Conducted** :

General Silviculture; Tree seed technology & propagation; Forest Policy, acts & law; Silvics of tree species; Forest Management; Pasture & Grassland Management; Forestry in watershed management; Tree Improvement; Soil science; Disease, pest & weed management; Research methodology, design analysis of field experiment & Computer programming; Principles of social forestry; Practice of Social forestry; Principles of Agronomy & Cropping systems; Research Project.

**Seminars/Conferences/Symposia:**

*Organised*:

The Department organised one-day Workshop on "Role of Forests in Environmental Conservation" in collaboration with Centre for Adult and Continuing Education, NEHU on 25.3.99.

*Attended*:

Rakesh Mohan : Attended 2nd International Conference on Land Degradation-"Meeting the Challenges of Land Degradation in the 21st Century" at KHON KAEN, Thailand during January 25-29,1999 and presented a paper entitled "Reconciling farmer's need and Government's action in controlling shifting cultivation in Mizoram".

LK Jha: Presented a paper entitled "Integrated Pest management in Agroforestry system" at National Symposia on Integrated Pest management in North East India, Department of Life Science, Assam University, Silchar (Assam) on 15-17 March, 1999. (ii) presented a paper entitled "Research Priority in Mizoram: An overview" at State level Workshop on setting Forestry Research Priority in Mizoram conducted by the Department of Environment & Forests, Government of Mizoram in collaboration with ICFRE, Dehradun on August 24-25, 1999.

U K Sahoo : Presented a paper entitled "Ecological concern in North East India and their impact on Society" on 12th September, 1998 organised by Aizawl Theological College in collaboration with North-East Students Christian Movement.

**Publications** :

Sahoo,U.K(1998) "Species composition and dynamics of soil seed bank in crop fields under terrace cultivation in Meghalaya". *Geobios New Reports*, 7:17-22.

**Study Tour/Field Trip** :

The students of this department visited Assam, Meghalaya and Mizoram forest areas for a period of 16 days from 26.10.98 to 10.11.98 to study the present aspect of Forest Management.

**Thrust Area of Research** :

Sustainable Hill Farming system, Ethnobotany, Agrogorestry and Watershed Management.

# DEPARTMENT OF ZOOLOGY

The department of Zoology was established in 1974 with a limited number of faculty and facilities. In the last two decades, this department has made all round progress and acquired a position among the leading Departments of NEHU and other Universities of India. It offers specializations in all major disciplines of Zoology. For the last many years, the Department has been selected by UGC for conducting Refresher Courses in Zoology for the college and university teachers. Several research students have qualified NET and GATE. A large number of its students are holding important faculty positions in the colleges, universities and research institutions of the N.E. region and other parts of our country.

**Head** : Professor B. K. Sharma.

**Faculty** :

| | | |
|---|---|---|
| Professors | : | K.Chatterjee, M.Sc., Ph.D. (Kal)<br>A. Raghuvarman, M.Sc.,Ph.D. (Madr)<br>V. Tandon, M.Sc.(Hons.), Ph.D. ,(Panj)<br>B.K. Sharma, M.Sc.(Hons.), Ph.D. Panj) |
| Readers | : | B.B.P. Gupta , M.Sc.,Ph.D. (Ban)<br>S. B. Prasad, M.Sc.,Ph.D. (Ban)<br>R.N.K. Hooroo, M.Sc.,Ph.D. (NEHU)<br>B. Kharbuli, M.Sc.,Ph.D. (NEHU)<br>N. Saha, M.Sc.,Ph.D. (NEHU) |
| Lecturers | : | A. Chatterjee, M.Sc.(Burd.), Ph.D. (Ban)<br>A.K. Yadav, M.Sc. (Agra), Ph.D.(NEHU). |

Vacant Posts : Professor (2); Lecturer (2)

**Students Intake** :

(a) Enrolment capacity : M. Sc. : 20

(b) Actual Admission :

| SC | ST | Gen | Male | Female | Total |
|---|---|---|---|---|---|
| - | 12 | 8 | 10 | 10 | 20 |

**Degrees Awarded** :

*M.Phil*

Ms. Sentimenla : "Studies on certain physiological and biochemical aspects of vision in the freshwater fish, Heteropneustes fossilis". Supervisor : Professor A. Raghuvarman.

Mr. R. Imkongwapang : "A study on the helminth parasite spectrum in anuran amphibia in Nagaland". Supervisor : Professor V. Tandon.

Ms. Mumubai Lakiang : "Composition and ecology of plankton in Thadlaskein lake

(Meghalaya)". Supervisor : Professor B.K. Sharma.

Ms. Jenifer Lyngdoh : "Species composition and ecology of Zooplankton in a sub-tropical lentic ecosystem of Meghalaya". Supervisor : Professor B.K. Sharma.

Ms. Icydora Nangtraw: "Composition and ecology of plankton in some fish ponds in Meghalaya". Supervisor : Professor B.K. Sharma.

Ms. Banridor Royce Nongbri : "Studies on structural and biochemical changes in tadpoles during metamorphosis and adult of Rana limnocharis". Supervisor : Dr. R.N.K. Hooroo.

*Ph.D.*

Mr. Summerland Lyngdoh : "Studies on some aspects of the biology and behaviour patterns of Anophiline mosquitoes". Supervisor : Professor A. Raghuvarman.

Ms. Papri Pal : "An in vitro study on the antihelmintic efficacy of the root tuber peel extract of Flemingia vestita against the cestode, Raillietina echinobothrida". Supervisor : Professor V. Tandon.

**Funds received from agencies other than NEHU/UGC** : Rs. 17.5 Lakhs

**Courses conducted** :

Cell Biology & Immunology; Molecular Biology ; Animal Physiology, Biological Chemistry; Genetics and Developmental Biology; Parasitology and Entomology, Ecology and Environmental Biology; Endocrinology and Reproductive Biology; Aquatic Biology and Fisheries, Biosystematics & Evolution; Techniques in Biology and Biometrics; Special Paper-I.

Special Papers offered : Biochemical Adaptation, Cell Biology & Immunobiology, Endocrinology and Reproductive Physiology; Entomology, Genetics.

**Seminars/Conferences** :

*Organised* :

Recent Advances in Zoology - I (3.8.98 to 24.8.98 ; Course Co-ordinator : Dr. R.N.K. Hooroo)

Recent Advances in Zoology -I I (23.11.98 to 14.12.98; Course Co-ordinator : Professor K. Chatterjee).

*Attended :*

Professor A. Raghuvarman attended the Intl. Conf. Radiation Biol., DNA damage, repair and carcinogenesis, April 7-10, 1998, NEHU, Shillong - 793 022, and presented a paper. Attended the Workshop on People's participation in Biodiversity conservation, March

4-6, 1999, Biodiversity Research Cell, NEHU Shillong - 793 022, and presented one paper. Attended the National Seminar on Role of Microbes in Environmental Protection and Rural Development, October 2-25, 1998, and presented one paper. Attended the National Symposium on Fifty Years of Zoology, February 13-14, 1999, and presented a paper.

Professor V. Tandon attended the National workshop on Prospectives for Planning & Development in North-East India, April 27-29, 1998, Itanagar, and presented a report. Attended the TCDC Intl. Workshop on Emerging Trends in Diagnosis of Infectious Diseases, December 7-12, 1998, CDRI, Lucknow, and presented a report.

Professor B.K. Sharma attended Natl. Conf. Sci. & Tech. in India in 50 Years with special reference to North-Eastern India, May 26-29, 1998, Shillong College, Shillong, Chaired a Session and presented a paper. Atended Workshop on People's participation in Biodiversity conservation, March 4-6, 1999, Biodiversity Research Cell, NEHU, Shillong - 793 022, and presented two papers.

Dr. S.B. Prasad attended the Intl. Conf. Radiation Biol., DNA damage, repair and carcinogenesis, April 7-10, 1998, NEHU, Shillong - 793 022, and presented a paper.

Dr. R.N.K. Hooroo attended Workshop on People's participation in Biodiversity conservation, March 4-6, 1999, Biodiversity Research Cell, NEHU, Shillong - 793 022, and presented two papers.

**Publications**:

Basu Baul, S., Basu Baul, T. Rivarola, E., Dakternieks, D., Tiekink, E.R.T., Syngai, C. and Chatterjee, A. (1998). Synthesis, characterization of Diorganotin (IV) complexes with N(2-pyridylmethelene) arylamines and in vivo mutagenicity testing of Et2SnCl2L4. *Applied Organometallic Chemistry*, 12, 503-513.

Chatterjee, A. and Chattopadhyay, A. (1998). Influence of buthionine sulfoximinemediated glutathione depletion on clastogenic activity of bleomycin and (-rays. *Current Science*, 75, 604-608.

Chatterjee, A., Hodgkiss, R.J. and Rojas, A. (1998). Induction of lethal mutations in experimental tumours after single and fractionated irradiations in vivo. *Int. J. Radiat. Biollogy*, 74, 119-128.

Chatterjee, A., Rojas, A. and Hodgkiss, R.J. (1999) Delayed expression of lethal mutation in experimental tumours that survive ionising radiation In R.N. Sharan ed. *Trends in Radiation and Cancer Biology*. Julich, Forschungszentrum, pp. 89-93.

Chatterjee, K. and Dey, M. (1998). Electrophoretic investigation on seven species of Indian frogs. *Cytobios*, 94, 25-30.

Chattopadhyay, A. and Chatterjee, A. (1999). Influence of buthionine sulfoximine on radiation induced chromosome aberrations in mammalian cells In F.H.A. Scheneewweiss and R.N. Sharan eds. *Recent Aspects of Cellular and Applied Radiobiology*. Julich, Forschungszentrum, pp. 89-93.

Deb, S. and Chatterjee, A. (1998). Influence of buthionine sulfoximine an reduced glutathione on arecoline induced chromosomal aberrations and sister chromatid exchanges in mouse bone marrow cells in vivo. *Mutagenesis*, 13, 243-248.

Dev Giri, S. and Chatterjee, A. (1998). Modulation of Mitomycin C induced sister chromatid exchanges and cell cycle delay by buthionine sulfoximine and reduced glutathione in mouse bone marrow cells in vivo. *Mutation Research*, 413, 227-234.

Dey, M. and Chatterjee, K. (1998). Expression of lactate dehydrogenase genes in the tree frog Polypedates leucomystax. *Cell and Chromosome Research*, 20, 1-7.

Dey, S., Hooroo, R.N.K. and Bhattacharjee, C.R. (1998). Electron microscopy and spectroscopical studies on the coloured patches on the wing of a butterfly, Graphium sarpedon (Lepidoptera : Papillionidae) with reference to their photobiological electrical properties. *Pigment Cell Research*, 11, 1-11.

Dey, S., Hooroo, R.N.K., Begum, A. and Goswami, U.C. (1998). Unique ultra structural features of photoreceptor cells and their functional significance in the retina of the frog, Rana limnocharis (Wiegmann). *Current Science*, 74, 502-504.

Giri, A., Khynriam, D. and Prasad, S.B. (1998). Vitamin C mediated protection on cis-platin induced mutagenicity in mice. *Mutation Research*, 421, 134-148.

Giri, A., Khynriam, D. and Prasad, S.B. (1999) Use of vitamin C against cis-platin induced mutagenicity and nephrotoxicity In R.N. Sharan ed. *Trends in Radiation and Cancer Biology*. Julich, Forschungszentrum, pp. 166-176.

Goswami, C. and Saha, N. (1998). Glucose, pyruvate and lactate efflux by the perfused liver of an air-breathing teleost, Clarias batrachus during aniso-osmotic exposure. *Comparative Biochemistry and Physiology*, 199A, 999-1007.

Gupta, B.B.P. and Lynshiang, D.S. (1998) Dose-dependent and temperature-independent calorigenic effects of monoiodotyrosine (MIT) and diiodotyrosine (DIT) in an airbreathing fish, Clarias batrachus In S. Kawashima and S. Kikuyama eds. Proc. *XIIIth International Congress of Comparative Endocrinology*, November 16-21, 1997, Yokohama (Japan). Italy, Monduzzi Editore, pp1097-1100.

Gupta, B.B.P. and Mahanta, A. (1998). In vitro effects of adrenergic agonists and antagonists on tissue respiration in Rana limnocharis and Rana cyanophlyctis. *Current Science*, 75, 958-960.

Imkongwapang, R., Tandon, V. and Roy, B. (1998) Surface fine topography of Diplodiscus spp. (Trematoda : Pramphistomidae) parasitic in anuran frogs. *Journal of Parasitology and Applied Animal Biology*, 8(1), 55-62.

Kharkongor, I.J. and Gupta, B. B. P. (1998). Study of prevalence of hypothyroidism in women of reproductive age in Meghalaya, North-Eastern India. *Current Science*, 75, 1390-1393.

Lyngdoh, R.D. and Tandon, V. (1998). Putative neurosecretory cells in the monozoic cestode, Lytocestus indicus (Caryophyllidea). *Acta Parasitologia*, 43(2), 216-220.

Pal, P. and Tandon, V. (1998). Anthelmintic efficacy of Flemingia vistita (Leguminoceae): Genistein-induced alterations in the activity of tegumental enzymes in the cestode, Raillietina echinobothrida. *Parasitology International*, 47, 233-243.

Pal, P. and Tandon, V. (1998). Anthelmintic efficacy of Flemingia vistita (Leguminoceae) : Genistein-induced alterations in the ultrastructure of the tegument in the cestode, Raillietina echinobothrida. *Journal of Parasitic Disease*, 22(2), 104-109.

Prasad, S.B., Giri, A. and Khynriam, D. (1998). Studies on the chromosomes of murine Dalton's lymphoma cells and the effect of cis-platin on chromosomes of these cells and bone marrow cells in vivo. *Cytologia*, 63, 405-413.

Raghuvarman, A., Dey, S. and Hermann, H.R. Jr. (1998). Acid mucopolysaccharides in the body cuticle of the peripatus, Typhloperipatus weldoni in relation to cutaneous mode of sperm transfer. *Journal of Endocrinology and Reproduction*, 1(2), 80-85.

Saha, N. and Ratha, B.K. (1998). Ureogenesis in Indian air breathing teleosts : Adaptation to environmental constraints. *Comparative Biochemistry and Physiology*, 120A, 195-208.

Saha, N., Das, L. and Dutta, S. (1999). Types of carbamyl phosphate synthetase and subcellular localisation of urea cycle and related enzymes in air breathing walking catfish, Clarias batrachus. *Experimental Zoology*, 283, 121-130.

Sengupta, U. and Chatterjee, K. (1998). Biochemical genetic studies on the chocolate mahseer Neolissocheilus hexagonolepis (McClelland). *Fish Genetics Biodiversity Conservation*, Natcon Pub., 05, 367-373.

Sengupta, U. and Chatterjee, K. (1998). Biochemical genetics of acid phosphatase and alkaline phosphatase in chocolate mahseer Neolissocheilus hexagonolepis (McClelland). In G.K. Manna and S.C. Roy eds. *Prospectives in Cytology and Genetics*, Vol. 9, 1998, pp. 269-272.

Sharma, B.K. (1998). Freshwater rotifers (Rotifera:Eurotatoria) from some domestic wells of Assam (N.E. India). *Journal of Bombay Natural History Society*, 95, 524-526.

Sharma, B.K. (1998). Faunal diversity in India : Rotifers In *Faunal Diversity in India.* ENVIS Centre, Zoological Survey of India, Calcutta, pp. 57-70.

Spessert, R., Gupta, B.B.P., Rimoldi, S. and Vollrath, L.The dual adrenergic signal transduction in rat pinealocytes via cAMP and cGMP involves a common pool of G-proteins In R.N. Saxena ed. *Proc. Natl. Symp.* "*Trends in Research on Hormones, Reproduction and Animal Productivity*", October 10-12, 1998, pp. 174-177.

Tandon, V., Lyndem, L.M. and Yadav, A.K. (1998).Hookworm infection : Influence of ambient climatic factors on the development and hatching of eggs and development and survival of infective larvae. *ICOPA IX 9th Intl. Cong. Parasitology*, August 24-28, 1998, Makuhan Messe, Chiba, Japan, pp. 791-794.

Tandon, V., Pal, P. and Saha, N. (1998). Anthelmintic efficacy of Flemingia vistita (Leguminoceae) : Genistein - induced alterations in the free amino acid pool of the cestode, Raillietina echinobothrida. *Journal of Parasitic Disease*, 22(2), 110-115.

**Study Tour/Field Trips** :

The M.Sc. students were taken on a study tour of 12 days (w.e.f. 14/1/1999 to 25/1/1999) to West Bengal and Orissa. The students collected specimen from different sites of the States and have prepared field reports.

**Thrust Area of Research** :

Environmental Biology.

**Other Activities** :

Professor K. Chatterjee became a member of the Research Advisory Committee, National Research Centre on Coldwater Fisheries, I.C.A.R.

Professor V. Tandon was awarded Fellowship to National Academy of Sciences, India, Allahabad.

Professor B.K. Sharma was awarded FUWAI by United Writer's Association, Chennai.

Dr. A.K. Yadav was awarded SERC Visiting Fellowship for three months to undertake research work at the Department of Zoology, Visva Bharati University, Santiniketan.

# SCHOOL OF PHYSICAL SCIENCES

The School of Physical Sciences was established in 1973 with Mathematics Department (starting from 1973), Physics Department (starting from 1976) and Chemistry Department (starting from 1976). Recently Centre for Applied Statistics has also been associated to this School.

The School aims at being a dynamic centre for post-graduate studies and research at the frontiers of physical sciences. The departments are devoted/committed for advanced research and teaching and have made notable strides in several frontier areas of Chemistry, Physics and Mathematics. Some of the faculty members have established strong interaction with premier research institutions in and abroad.

One of the significant yardstick of research activities of faculty members is the research grant they earn from different funding agencies. Many faculty members of this School have received significant sum as research grants from different funding agencies like - D.A.E., D.S.T., U.G.C., C.S.I.R., etc. Currently the total amount of on-going projects of several members of the School is running about Rs.80 lakhs.

## CENTRE FOR APPLIED STATISTICS

The Centre for Applied Statistics was established in 1984. Main objective was to conduct teaching, research and training programmes in the field of Applied Statistics.

**Head** : Dr. M K Das.

**Courses Conducted** :

Certificate Course in Statistics, Mathematics & Descriptive Statistics, Computational Techniques & Elements of Probability Theory, Probability Distributions & Vital Statistics Methods, Economic Statistics & Indian Official Statistics, Descriptive Statistics & Sampling Distributions, Statistical Methods & Practical Problems on the topics covered in Statistical methods, Sampling Techniques & Statistical Quality Control, Analysis of Variance & Experimental Designs.

**Student intake** :

a) Enrolment capacity : 20

b) Actual Admission :

| SC/ST | Gen. | Male | Female | Total |
|---|---|---|---|---|
| 5 | - | 5 | - | 5 |

**Faculty** :

Reader : M.K.Das, M.Sc., Ph.D (Dib.)

Lecturers : G.Das, M.Sc(Delhi), Ph.D. (NEHU)

B.K.Gupta, M.Sc (AMU)

**Extension Lectures** :

Mr. B.K.Gupta delivered a lecture on "Correlation and Regression in Life Science" in the U.G.C. Refresher Course in the Botany Department, NEHU, Shillong on 19.11.1998.

**Research Programmes** :

Mr. B.K. Gupta has registered for Ph.D. at Gauhati University.

**Other Activities** :

Dr. M.K.Das and Dr(Mrs) G.Das taught the Biometrics paper in 4th Semester M.Sc. Zoology.

## DEPARTMENT OF CHEMISTRY

The Department was established in 1976. Since that time, the academic activities have centred around the teaching and research programmes. The Department has made significant progress and has contributed immensely towards carrying out research work in the frontier areas of Chemistry. As a result of the good research output of the Department, the UGC had sanctioned both the COSIST and the Special Assistance Programmes (SAP), which have helped to strengthen both the teaching and research programmes. The instrumentation and library facilities of the Department have been utilised not only by all the Members of the Department, but also by research groups from various institutions throughout the Country. The Department has a number of research projects in progress, and continues to maintain scientific collaborations with leading institutions in India and abroad. Several Faculty Members of the Department have received awards and honours. A total of 82 research students have received their Ph.D. Degrees from this Department, and have been gainfully

employed in various capacities.

**Head** : Professor Mahendra K. Mahanti

**Faculty** :

| | | |
|---|---|---|
| Professors | : | H.Junjappa, M.Sc.,Ph.D.(Karn.) |
| | | S.N.Bhat, M.Sc.(Karn.), Ph.D. (IIT Kanpur) |
| | | M.K.Chaudhuri,(on lien) M.Sc. (Kal.), Ph.D. (IIT Kharagpur) |
| | | M.P.Mahajan, (on lien) M.Sc.,Ph.D. (Punj.) |
| | | M.K.Mahanti, M.Sc.(Madr.), Ph.D. (Berh.) |
| | | K.Ismail, M.Sc., Ph.D. (AMU) |
| Readers | : | R.K.Poddar, M.Sc.,Ph.D. (IIT Kanpur) |
| | | K.K.Dwivedi, M.Sc. (L.now), Ph.D. (IIT Kanpur) |
| | | H.Chandra, M.Sc.(L.now), Ph.D. (Punj.) |
| | | B.Myrboh, M.Sc.,Ph.D. (NEHU) |
| Lecturers | : | S.Aravamudhan, M.Sc. (S.V.Univ.), Ph.D.(IIT Kanpur) |
| | | A.Lemtur, M.Sc.,Ph.D. (NEHU) |
| | | R.H.Duncan Lyngdoh, M.Sc. (NEHU), Ph.D.(IIT Kanpur) |
| | | K.Mohan Rao, M.Sc.(S.V.Univ.), Ph.D. (IIT Kanpur) |

**Student Intake** :

Enrolment capacity : M.Sc. : 30
Ph.D. : 06

| Actual admission : | SC/ST/Genl. | | Male/Female | | Total |
|---|---|---|---|---|---|
| M.Sc. : | 24 | 06 | 24 | 06 | 30 |

**Degrees Awarded** :

*Ph.D.*

Suchandra Bhattacharjee, "Single Electron Transfer Reaction Studies by Optical and ESR Spectroscopy". Supervisor : Dr. H.Chandra.

Md.Nadeem Khan, "Single Electron Transfer Reaction Studies by ESR". Supervisor : Dr. H.Chandra.

A.Deb Roy, "Kinetics of Oxidation of Some Diols and Hydroxy Acids by Quinolinium Dichromate". Supervisor : M.K. Mahanti.

Sunita Dastupta, "Kinetics and Mechanism of Reduction of Some Metal Ions by Sodium Tetrahydroborate". Supervisor : Professor M.K. Mahanti.

Sontosh Dev, "Physicochemical Studies of Room Temperature Molten Salt Systems

Containing Hydrated Inorganic Salts and Organic Compounds". Supervisor : Professor K. Ismail.

Dipak Sinha, "Radiation Induced Modification on Some Dielectric Solids". Supervisor: Dr. K.K. Dwivedi.

J.R.Suresh, "Synthetic Studies on Heterocycles". Supervisor : Professor H. Junjappa.

**Funds received from agencies other than NEHU/UGC.**

Department of Science & Technology : Rs. 8.00 lakhs.

**Courses Conducted** :

*Compulsory*

Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Quantum Chemistry, Laboratory Course in Inorganic Chemistry, Chemical Binding and Molecular Spectroscopy, Laboratory Course in Organic Chemistry, Applications of Spectroscopic Methods, Laboratory Course in Physical Chemistry, Environmental Chemistry, Analytical Chemistry and Computers.

*Optional*

Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Project Work (Inorganic/ Organic/Physical Chemistry.

**Seminars/Conferences** :

*Attended:*

K.Ismail, (a) delivered Lectures (2 February 1999) in the Department of Chemistry, Mangalore University, Mangalore "On Effect of Acetate and Propionate Co-ions on the Micellization of Sodium Dodecyl Sulfate in Water", (b) attended a Conference on Thermophysical Properties of Solids and Fluids in the Department of Physics, Gauhati University, Guwahati (11-13 March 1999) and presented a Paper titled "Micellization of Surfactants in Acetamide Mlet".

M.K.Mahanti, (a) attended a National Symposium on "Frontier Areas in Chemical Dynamics" held at Rani Durgavati University, Jabalpur (5-7 February 1999) and delivered a Plenary Lecture titled "Novel features of quinolinium dichromate oxidations", (b) delivered an Invited Lecture at Utkal University, Bhubaneswar (16 February 1999) titled "Quinolinium dichromate oxidations", (c) attended a National Symposium on "Chemistry in the Next Century" held at Jai Narain Vyas University, Jodhpur (15-17 March 1999) and delivered a Plenary Lecture titled "Perspectives in Femtochemistry".

**Visiting Professors** :

Professor H.Suryaprakash Rao, Department of Chemistry, Pondicherry University, Pondicherry (Visiting Fellow, May and June 1998) delivered Lectures in the M.Sc. IV Semester Organic Chemistry Course.

Professor H.Suryaprakash Rao, gave a Seminar Talk titled "Synthetic Adventures with Chalcone" (19 June 1998).

Professor K.K.Banerji, Department of Chemistry, Jai Narain Vyas University, Jodhpur, gave a Seminar Talk titled "Correlation Analysis of Reactivity in some Nucleophilic Additions to Activated Alkenes" (19 August 1998).

**Guest Lecturers** :

1. Dr. Pradip C. Paul, Department of Chemistry, St.Anthony's College, Shillong (August-November 1998) delivered Lectures in the M.Sc. I Semester Inorganic Chemistry Course.
2. Dr. Irona Nongkynrih, Department of Chemistry, St.Mary's College, Shillong (August-October 1998) delivered Lectures in the M.Sc. III Semester Organic Chemistry Course.
3. Dr. T.S. Basu Baul, RSIC, Shillong, (October-November 1998) delivered Lectures in the M.Sc. III Semester Inorganic Chemistry course.

**Publications** :

Suchiang,E., Debroy,A. and Mahanti,M.K. (1998). Kinetics of oxidation of benzylamines by quinoliniumm dichromate, *Oxidation Communications*, 21, 376-380.

Kharmutee,R., Debroy,A. and Mahanti,M.K. (1998). Dual behaviour of quinolinium dichromate in the oxidation of hydroxyacids, *Oxidation Communications*, 21, 553-558.

Karim,E. and Mahanti,M.K. (1998). Kinetics of oxidation of serine and threonine by quinolinium dichromate, *Oxidation Communications*, 21, 559-564.

Paul,B.C., Islam,S.S. and Ismail,K. (1998). Effect of acetate and propionate co-ions on the micellization of sodium dodecyl sulfate in water, *J. Phys. Chem-B*, 102, 7887-7891.

Bhattacharjee,B. and Bhat, S.N. (1999). Viscosities of binary and ternary liquid mixtures of alkylbensenes wifh carbon tetrachloride in cyclohexane, *J. Ind. Chem. Soc.*, 76, 90-94.

Chaubey,G.S. and Bhat,S.N. (1999). Role of surfactants on the mutual solubility of phenol-water system, *J. Ind. Chem. Soc.*, 76, 138-141.

Bhattacharjee, B. and Bhat,S.N. (1999). Studies on molecular interaction of tetracyclines with adenine : A spectroscopic investigation, *J. Ind. Chem. Soc.*, 76, 243-247.

Dwivedi,K.K., Kulshreshtha,A. and Raju, J. (1998). Computer oriented numerical analy-

sis of nuclear track data, Int. J. Radiat. *Appl. Instrum (Part D) : Radiat. Meas*, 29, 165-171.

Sinha, D. and Dwivedi, K.K. (1998). Modification of radiation detection response of PADC track detectors, Int. J. Radiat. *Appl. Instrum. (Part C) : Radiat. Phys. Chem.*, 53, 99-105.

Dwivedi,K.K., Srivastava,A., Ghosh,S., Sinha,D., Singh,S., and Avasthi,D.K. (1998). Energy-loss of 12C ions in different polymeric materials, *Ind. J. Pure and Appl. Phys.*, 36, 361-365.

Sen,M., Mishra,R., Tripathy,S.P., Sinha,D., Kulshreshtha, A., Dwivedi,K.K., Deka,P. and Bhattacharjee, B. (1998). Assessment of Indoor Radon in Shillong. *Assam Sci. Soc. Journal,* 39, 104-113.

**Study Tour/Field Trips** :

The Department organised a study tour for the M.Sc. students during January 1999 led by Dr. R.H.D. Lyngdoh, Lecturer in the Department. 19 students participated. The team visited Bhabha Atomic Research Centre (BARC), Trombay, Tata Institute of Fundamental Research (TIFR) and several Chemical Industries in Mumbai, and the Chemical Laboratories of I.I.Sc., Bangalore.

**Thrust Areas of Research** :

Research activities in Organic Chemistry have focused attention developing newer synthetic methods for important heterocyclic and carbocyclic compounds of biological relevance. A number of such compounds are being screened for assessment of their activity. Synthetic and mechanistic studies on cycloaddition reactions of novel azadienes and oxyplumbation reactions are carried out. In Theoretical Organic and Bio-organic Chemistry, the research involves investigating the molecular basis of carcinogenesis, mutagenesis, and of the genetic code. Some activities on designing of DNA-like polymers and on time saving techniques in Computation Chemistry are also being pursued.

Research activities in Physical Chemistry include work on the properties of organic semiconductors, nuclear interactions involving charge-transfer complexes, hydrogen bonding and hydrophobic interactions, and on micelles. Research in Chemical Dynamics pertains to electron-transfer processes, the use of newer reagents for oxidation, and in the design of ions by sodium tetrahydroborate. Work on the transport behaviour of electrolytes in aqueous and molten media as a function of temperature and pressure are actively pursued. Theoretical studies on vibrationally excited states are in progress. ESR studies on single electron transfer reactions and free radicals using the spin trapping technique are being carried out. EPR studies on the oxidation products of metalloporphyrins and related bio-inorganic systems are also being conducted. Studies on the redox potential of porphyrins and metalloporphyrins using cyclic voltametry are also being pursued. Research in the area of determination and applications of contributions to shielding tensors is being conducted.

Research activities in Inorganic Chemistry address to the synthesis, characterisation and evaluation of molecular structures by different techniques. Studies on the reactivity of fluoro, peroxo/dioxygen and (-diketonatometallates, and fluoro and peroxo compounds of non metals, sulfoxide and arylazo complexes of transition metals are being carried out. Emphasis is also being given to studying the stabilization of unusual oxidation states of metals, and in the development of newer reagents and catalysts. Research work has been initiated pertaining to the synthesis and characterisation of organometallic compounds involving cyclopentadienyls, heterocycles, and aromatic half sandwich platinum group metal compounds. Research activities related to Nuclear and Environmental Chemistry include heavy ion range and energy loss in solids, and in the development of nuclear track microfilters. Studies are being done on fusion-fission and particle evaporation, radon monitoring and the measurement of trace pollutants in the environment.

**Research Programmes/Projects** :

The Department has several ongoing Research Projects, sponsored by different funding agencies. New Research Projects initiated during the period under report, are :

Dr. K.Mohan Rao, "Synthetic and Structural Studies on (cyclopentadienyl and Azacyclopentadienyl) Ruthenium (II) Bisphosphine complexes", by the Department of Science and Technology, New Delhi.

**Other Activities** :

Professor S.N.Bhat continued to be a Member of the UGC Chemistry Panel, and the Chancellor's Nominee to the West Bengal College Service Commission.

Dr. K.K.Dwivedi was appointed as the Vice-Chancellor of Arunachal University in January 1999.

Dr. B.Myrboh organised a Regional Workshop on "Peoples Participation in Biodiversity Conservation" under the auspices of the North Eastern Biodiversity Research Cell, NEHU, Shillong (4-6 March 1999).

## DEPARTMENT OF MATHEMATICS

The Department was established in 1974. The Department gives quality and rigorous M.Sc./M.Phil and Pre Ph.D. courses of the fundamentals of the core subjects of mathematics like algebra, analysis, differential equations, topology/geometry, number theory and their applications. It gives two computer courses in M.Sc. and also pursues research in computer aided approach to mathematical research (number theory, cosmology, algebraic and differential topology, oceanography etc.).

The great dearth of good mathematics teachers in the N.E. region at all levels of mathematics education by successful students and scholars of the Department.

The Department has successfully guided seven Ph.D. and eleven M.Phil students.

The Department has successfully completed research projects funded by Department of Atomic Energy, India and University Grant Commission.

**Head** : Professor H. K. Mukherjee.

**Faculty** :

| | | |
|---|---|---|
| Professors | : | S.S. Khare, M.Sc., Ph.D. (Allhd.) |
| | | M.B. Rege, M.Sc.,Ph.D. (Bom.Univ) |
| | | S.K. Srivastava, M.Sc., Ph.D. (Gorak) |
| | | H.K. Mukherjee, M.Sc., Ph.D. (Allhd.) |
| Readers | : | P.K. Saikia, M.Sc.(Delhi), Ph.D. (Wis.) |
| Lecturers | : | (Ms.) C.R. Mondal, M.Sc.,Ph.D.(V.B) |
| | | A.K. Das, M.Sc.,Ph.D.(NEHU) |
| | | R.P. Shukla,M.Sc.,Ph.D.(Alld.) |

**Student Intake** :

(a) Enrolment capacity : 30

(b) Actual Admission :

| M.A./M.Sc. | SC/ST | Gen | Male | Female | Total |
|---|---|---|---|---|---|
| | 15 | 9 | 17 | 7 | 24 |

**Courses Conducted** :

Linear algebra, Analysis I, Ordinary Diff. Equation, Mechanics, Analysis II, Topology, Partial Diff. Equation, Algebra I, Complex Function Theory, Computer Programming, Topics in Algebra, T.A.N.T-I., Functional Analysis, Elementary Number Theory, Computer Numerical Analysis, Ring Theory.

**Seminars/Conferences** :

Dr. A.K. Das attended "The Winter School on Transformation Groups" at Indian Statistical Institute Calcutta from 8th Dec. 1998 to 24th Dec. 1998 and delivered two lectures on the Theory of Bordism.

Professor S.K. Srivastava (I) attended the International Conference on Mathematical Physics, held at Nagpur University and delivered an invited talk on "Dual nature of the Ricci scalar and cosmological models" in Jan. 1999. (ii) Attended IAGRG meeting held at Gorakhpur University, Gorakhpur and gave an invited talk on "Kaluza-Klein Theory" in Jan. 1999.

Professor H.K. Mukherjee (I) attended Group monitoring workshop at Bombay University on Oct. 26, 1998 and presented report on the project "Computer aided approach to some classification problem in different topology". (ii) Attended Workshop on symplecfic

topology at IIT , Bombay, Nov. 30-Dec 6 1998 and delivered an invited talk on "Classification of manifolds-a brief survey;". (iii) Attended Winter School on Transformation group at ISI, Calcutta Dec 8-26 1998 and delivered three lectures on Bredon's, Floyd-Richardson' s, and Conner-Floyd's examples of non orthogonal actions. (iv) Attended Refreshers Course in Gauhati University and delivered two talks on Algebraic Topology in April 1998.

Professor S.S. Khare (I) attended Winter School on Transformation group at ISI, Calcutta Dec 8-26 1998 and delivered 3 talks on Equivariant Vector budles, Slice and Tube Theorem. (ii) Attended Refreshers Course in Gauhati University and delivered two talks on Algebraic Topology in April 1998.

**Visiting Professor/Fellows** :

(i) Professor Ramji Lal, Allahabad University , Allahabad.
(ii) Professor Avinoamann, Hevriew University, Jerusalem.
(iii) Professor Malay Dutta, Tezpur University.
(iv) Professor P.K. Jain, Delhi University.

**Publications** :

Das,A.K. (1999) : Bordism of Stable vector bundle with small cobcat. J. of Ind. Math. Skoc. Vol. 66

Srivastava,S.K. (1998) : "Dual nature of Ricci scalar and inhomogeneous cosmological models" IL *Nuovo Cimento* Vol.113B , No.10, pp. 1229-1251.

Srivastava,S.K. (1999) : "The riccion, instanton and primordial inflation" *Into J. Mod. Phys.* A. Vol 14, No.6, 875-884.

Books: Srivastava,S.K. (1998) "*Aspects of gravitational interaction*" Co-authored with Professor K.P. Sinha, Nova. Science Publishers, New York.

**Study Tour/ Field Trips** :

Went on a study tour to the Mawsynrem Hot spring in connection with the application of Mathematics in environmental Studies.

**Thurst Area of Research** :

Pure and Applied Mathematics.

**Other Activities** :

Professor H.K. Mukherjee has reviewed an article entitled 'Equivariant Hopf theorem' by Zalman Balanov, Nonlinear Analysis 30 (6)(1997), 3463-3474, for the Mathematical Re-

views of the American Mathematical Society.

Dr.R.P.Shukla visited Mehta Research Institute, Allahabad from January, 22nd to Feb. 15th (1999).

The pursuit of quality research by the faculty members of the department has got recognition from National and International Mathematics and physics communities. Faculty members of this Department were invited to deliver talks at National and International Conferences and Seminars at: Allahabad University; ISI, Culcutta and Bangalore; IIT Bombay; Ilsc Banagalore; IIT Delhi. They have also participated and delivered talks at the International Congress, (ICM), Berkeley, USA; Duke University at Durham, USA; University of Edinburgh, UK. They have been conferred with the following :

Faculty members have received both National and International recognition. These include, Meghnad Saha Award, Honourable mention by US Gravity Research Foundation to Professor S K Srivastava, the fellowship of National Academy of Sciences Professor S S Khare and Professor S K Srivastava, the Fulbright fellowship and Commonwealth academic exchange fellowship to Professor SS Khare, the Indo-French Cultural exchange fellowship, International Mathematical Union grant to participate in ICM-86 to Professor H K Mukherjee, and a research fellowship of the University of Wisconsin at Madison, USA, to Dr.P.K. Saikia.

The department has been organising and co-ordinating training programme and examinations of regional and National Mathematical Olympiad for last ten years. It has brought about awakening about problem-solving in mathematics at school level which will go a long way to produce good mathematicians.

## DEPARTMENT OF PHYSICS

The department of Physics was established in 1976 with a view to build scientific manpower in this part of the country consistent with the NEHU Act.

In the course of several years the Department could attract a wide spectrum of talented faculty and has identified Nuclear Physics (Experimental and Theoretical), Laser Physics (Experimental), Solid State Physics (Experimental and Theoretical) and High Energy/Particle Physics (Theoretical) as the thrust areas in its teaching and research programmes. These areas are included in the list of thrust areas by the Department of Science and Technology, Government of India. The Department conducts teaching and research programmes leading to MSc, M.Phil. and Ph.D. degrees. The Department plays, through the Board of Under Graduate Studies in Physics, a pivotal role in framing the physics syllabus for B.Sc.(Gen) and B.Sc. (Physics Major) programmes of affiliated colleges. Similarly, the Board of Postgraduate Studies in Physics monitors the M.Sc., M.Phil, and Ph.D. programmes including the framing of syllabi. The M.Sc. syllabus which was operating since 1985 was revised in 1996, within the general framework of UGC guidelines.

**Head** : Professor C S Shastry

**Faculty**:

| | | |
|---|---|---|
| Professors | : | A.L. Verma, M.Sc.(Lucknow), Ph.D.(IIT Kanpur) |
| | | C.S. Shastry, M.Sc.(Karn), D.Phil.(Calc) |
| | | Y.S.T. Rao, M.Sc.(And.), Ph.D.(Maryland) |
| | | P. Shukla, M.Sc.(IIT, Delhi), Ph.D.(Temple Univ. U.S.A) |
| | | R. Singh, M.Sc.(Alig.), Ph.D.(IIT Kanpur) (on lien) |
| | | K. Kumar, M.Sc.(Agra), Ph.D.(IIT Kanpur) |
| Readers | : | Y.S. Jain, M.Sc.(Agra), Ph.D.(IIT Kanpur) |
| | | *D.T. Khathing, M.Sc.(Delhi), D.Phil.(Calc) |
| | | P.N. Pandita, M.Sc. Ph.D.(Kashmir) |
| | | P.N. Ram, M.Sc.D.Phil.(Alld.) (on lien) |
| | | M.K. Parida, M.Sc. Ph.D.(Utkal) (on sabbatical leave) |
| | | Mrs. B.M. Jyrwa, M.Sc., Ph.D.(NEHU) |
| | | Ms. P. Nongkynrih, M.Sc, Ph.D. (NEHU) |
| Lecturer | : | P.K. Bajpai, M.Sc. Ph.D.(NEHU) (on lien) |

*On deputation from the Department, working as Head, Regional Sophisticated Instrumentation Centre (RSIC), NEHU, Shillong

**Students Intake:**

(a) Enrolment capacity : M.Sc. 26

(b) Actual Admission :

| SC/ST | | General | | Total |
|---|---|---|---|---|
| Male | Female | Male | Female | |
| 10 | 1 | 9 | 0 | 20 |

**Degrees Awarded**:

*Ph.D.*

Severine S. Pohlong "Dynamical Properties of Point Defects in Metals. Supervisor: Dr. P.N. Ram

**Courses Conducted**:

Classical Mechanics; Quantum Mechanics I; Mathematical Physics; Laboratory I; Electrodynamics; Electronics; Quantum Mechanics II; Laboratory II; Atomic & Molecular Physics; Solid State Physics; Nuclear Physics; Laboratory I,II,III; Thermal Physics; Experimental Techniques; Many Body Theory and Optional special papers on Laser Physics; Solid State Physics; Nuclear Physics; High Energy Physics; Environment.

**Seminars/Conferences**

*Attended :*

Professor A.L. Verma (I) delivered an invited Talk on "Dynamics of Energy Transfer

Near Reflecting Surfaces" in the National Laser Symposium held at Indian Institute of Technology, Kanpur from December 14-16, 1998. (ii) Delivered a talk on "Orientational Dynamics and Quantum Mechanical Tunneling of Molecular Ions in Solids" in the Sixth Asian Conference on Solid State Ionics held at Surajkund from November 29 to December 4, 1998.

Professor C.S. Shastry (I) contributed a paper (read by co-author B. Sahu) in International Workshop on Rare Nuclear Processes in Low Energy heavy ion physics, held at Nuclear Science Centre, New Delhi, in Nov 1998. Title: Asymmetric BarrierModel for heavy ion fusion and its relation to channel coupling.(ii) contributed a paper (read by co-author B. Sahu) at DAE Symposium on Nuclear Physics, Dec (1998) held at BARC, Bombay. Paper: Asymmetric Parabolic Barrier Model for heavy ion fusion. Ref. DAE symposium on Nuclear Physics 41B (1998) p140.(iii) gave a seminar on Barrier Region Resonances at Institute, Bhubaneshwar in Feb 99. (iv) read a paper on Accomplishment of Dept. of Physics, NEHU in the National Conference on 50 years of Science and Technology in the North East, held at Shillong College, May (1998) (v) chaired a session in the All India Amateur Astronomer's meet at Shillong in April-May 1998.

Professor Kamal Kumar contributed a paper in the National Laser Symposium Dec 14 -16, 1998 held at IIT Kanpur Arpita Das and Kamal Kumar. "Raman linewidth of the C=O stretching Mode: Solvent dependent studies in Benzoldehyde." pp 96-97. Proceeding of National Laser Symposium Dec. 14-16, 1998.

Dr. D.T. Khathing contributed the following papers read by authors : (I) Dwivedi, K.K., Ghosh, S., Fink, D., Mishra, R., Tripathy, S., Kulshreshtha, A., Khathing, DT (1998). "Modifications in Tract Registration Response of PADC detector by energetic protons", presented in the 19th International Conference on Nuclear Tracks in Solids, August 1-4, Besancon, France. (ii) Tripathy, S P, Mishra, R., Kulshreshtha, A., Dwivedi, K.K., Khathing, D T, Srivastava, Avasthi, D.K., Ghosh, S. and Fink, D. (1998). "Proton induced modification on track registration in PADC", presented in the International conference on Swift Heavy Ions in Materials Engineering and Characterisation, September 20-22, NSC, Delhi. (iii) Tripathy, SP, Mishra, R., Dwivedi, K.K., Khathing, DT (1998), "On the Isothermal and Isochronal Annealing of Znp glass tract detector", presented in the 19th International Conference on Nuclear Tracks in Solids, August 1-4, Besancon,France. (iv) Tripathy, S.P, Mishra, R., Mawar, A.K., Khathing, D T, Dwivedi, K.K., Srivastava, A., Avasthi, D.K, Ghosh, S. and Fink, D. (1998)". Investigation on carbon cluster formation in heavy ion irradicated polymers", presented in 11th National Symposium on SSNTDS, September 12-14, GNDU, Amritsar. (v)Shyam, S., Mishra, R., Tripathy, SP, Mawar, A.K., Dwivedi, K.K., Khathing, DT, Srivastava, A. and Avasthi, D.K. (1998). "Mean range and Energy loss of 28Si ions in some Makrofol track detectors", presented in 11th National Symposium on SSNTDS, September 12-14, GNDU, Amritsar. (vi) Mishra, R., Tripathy, SP, Kulshreshtha, A., Khathing, DT, Dwivedi, K.K., Ghosh, S. and Fink, D. (1998). "Effects of different doses of 2 MeV electron on PADC", presented in the International Conference on Swift Heavy Ion in Materials Engineering and Characterisation, September 20-22, NSC, Delhi. (vii) Tripathy, SP, Mishra, R., Kulshreshtha, A., Srivastava, A., Khathing, DT, Dwivedi, K.K. and Avasthi, D.K. (1998). "Range and Energyloss rate of 118MeV 28Si in some polymers", presented in Nuclear and Radiochemistry Symposium, January 19-

22, BARC, Mumbai (Oral Presentation - Awarded). (viii) Mishra, R., Tripathy, SP, Sinha, D., Khathing, DT, Dwivedi, K.K., Ghosh, S., Muller, M. and Fink, D. (1999). "Polymer Modification via Cluster Formation", presented in Nuclear and Radiochemistry Symposium, January 19-22, BARC, Mumbai (Oral Presentation- Awarded). (ix) Lotha, S., Khathing, DT, Ingale, A., Avasthi, D.K., Mittal, V.K., Mishra, S.,Rustagi, RC, Gupta, A., and Kulkarni, V.N. (1998). "Electronic Excitation Induced Transformation of C60", "SHIMEC" International Conference, October 19-22, NEC, New Delhi.

Mr. V.K.Lotha, teacher fellow under Dr. DT Khathing presented the following papers (i)Mittal, V.K., Lotha, S.* and Avasthi, D.K. (1998). "Ion track radium estimation by on-line hydrogen release measurement", Swift heavy ion in polymers and Insulating materials, Workshop, March , GNDU, Amritsar. (ii) Biswas, A., Lotha, S.*, Singh, JP, Avasthi, D.K., Awasthi, A.M., Bhardwaj, S. and Bose, SK (1998). "The Effects of Swift Heavy ion irradiation on the melting characteristics and crystallinity of PET", "SHIMEC" International Conference, October 19-22, NEC, New Delhi. (iii) Mittal, V.K., Lotha, S.*, and Avasthi, D.K. (1999). "Hydrogen loss under Heavy ion irradiation in Polymers". Rad. Eff. Def in Solid 147 (1999) 199
*Teacher Fellow under Dr. D T Khathing.

Dr. B.M. Jyrwa attended and presented a paper (I) with B.Lyngdoh (1998), "Application of Glauber Model to Low Energy Light Particles", at the Regional Conference on Physics Research in the North East, held at IIT Gauhati on 17th October. (ii) with B.Lyngdoh (1998), "Applications of Glauber Model to Low Energy Light Ions", at the Nuclear Physics DAE Symposium December, BARC Mumbai. (iii) with B.Lyngdoh (1998), "Determination of Correlation Matrix for a Simple System", at the Nuclear Physics DAE Symposium December, BARC Mumbai.Dr. P.Nongkynrih presented (1998) "Trace Elements Analysis in Rice Soils and Plants in Meghalaya", at the Regional conference in Physics Research in the North East, held at IIT Gauhati on 17th October.

**Visiting Professors**:

1. Professor L. Satpathy of Institute of Physics, Bhubaneshwar visited the Department during May, 1998 and gave a seminar on "Mass Formula Formula for Atomi Nucleus.

2. Professor Ms. Chatterjee from IIT Delhi visited the Department on 23.6.98 and interacted with several faculty members.

3. Professor Deepak Dhar of TIFR Mumbai visited the Department during September-October '98 and gave a seminar entitled "Biased Diffusion in Disordered Media Theory: Confront Simulation."

4. Dr. SK Gupta, Senior Scientist, BARC visited the Department during October 1998 for collaborative research and gave a seminar on "New State of Matter Quark Gluon Plasma"

5. Dr. Biswarup Mukhopadhya of Mehta Institute, Allahabad visited in March 1999 and gave a seminar on "Neutrino masses and supersymmetry - some

phenomenolo - logical implications."

**Publications**:

Ananthanarayan, B. et al. (1998). Beyond the Standard Model: Working Group Report. *Pramana* 51, 305 - 311.

Bhruguvansh, P., Singh, R.K., Asthana, BP, Singh, P.R., Chakraborty, T. and Verma, A.L.; (1998) "Estimation of Lorentzian Linewidth, Fractional Lorentzian Character, and Spectral Slit Width Using Different Raman Line Shape Parameters"; *Asian Journal of Physics*, 7,323-327.

Dash,S.K., Singh,R.K., Alapati,P.R. and Verma, (1998) A.L; "A Comparative Laser Raman Study on TB4A, TB7A, and TB10A Liquid Crystals"; *Liquid Crystals* 25, 459-465.

Dash, SK, Singh, R.K., Alapati, P.R. and Verma, A.L.; (1998) "Laser Raman Study of Terepthalydene-bis-p-n-Decyl-Aniline 9TBDA)"; *Mol. Cryst. Liq.Cryst.* 319, 147-158.

Das, Arpita and Kumar Kamal; (1998) "Micro-environment dependence of vibrational relaxation in P-methyl acetophenon"; *Spectrochim Acta* 54A, 793 798.

Dress, M., Ma, E., Pandita, P.N., Roy, DP and Vempati, S. (1998); "Light Higgs Bosons in Supersymmetric Models"; *Physics Letters* B433, 346 -354.

Huitu, K., Pandita, P.N. and Poulamaki, Kai (1998); "The Mass of LightestHiggs Boson in Supersymmetric Left-Right Models"; Physics Letters B423, 97 - 103

Jamir, I., Lyngdoh, E.F.P. and Shastry, CS;(1998) "Correlation between zeroes and poles of S matrix for complex potentials"; *Pramana* 50(1998)271

Lyngdoh, E.F.P., Jamir, I. and Shastry, CS, "Shrodinger equation with complex potentials: the phenomenon of absorption"; *Physics Education* July-Sept(1998)147

Nongkynrih, P.; (1998) "Biological Clock: Its Medical Utility", *News Letter, ISAS* Shillong Chapter, September.

Osland, P. and Pandita, P.N. (1999); "Measuring the Trilinear Couplings of MSSM Higgs Bosons in Electron - Positron Colliders"; *Physical Review* D59, 0550131-05501318

Pachuau, Z., Gurung, S., Thapa, R.K., Khathing, DT and Kar, N. (1999). "Photocurrent calculations in semiconductors using Kronig-Penney model". *Indian J.Phys.* 73A (2) 237-243.

Pandita, P.N. (1998); "Particle Mass Limits in Minimal and Nonminimal Super-symmetric Models"; *Pramana* 51, 169 - 180.

Sahu, Basudeb, Jamir, I., Lyngdoh, E.F.P. and Shastry, CS; (1998) "Fusion under a complex barrier; *Phys. Rev.* C 57, 1853

Shantha, P.K., Thanga, H.H. and Verma, A.L.; (1998) "Photoreduction of Fe(TPP)Cl in CH2Cl2 and DMSO in the Presence of, and in Neat 1,DimethylimidazoleWithout Alcohol: Evidence of a Photoreactive State from Resonance Raman and OpticalAbsorption Studies; *J. Raman Spectrosc.* 29,997-1001.

Shukla, P. (1998); "Metastability and Hysteresis in Random Field Ising Chains"; *Indian Journal of Physics*, 72A(5), 439-446. (invited article)

Singh, R.K., Asthana, BP, Verma, A.L. and Pathak, C.M.;(1998) "Raman Study of Concentration dependence of the Frequency Shifts and Linewidth Changes in (3-Cl-Pyridine + Methanol) System; *Chem. Phys. Lett.* 278, 35-40.

Singh, R.K., Asthana, BP, Singh, P.R., Chakraborty, T. and Verma, A.L.;(1998) "Raman Study of the Vibrational Relaxation of the (C N) Stretching Mode of Acetonotrile in Binary Liquid Mixtures with Hydrogen Donor Solvents; *J. Raman Spectrosc.* 29,561-566.

Verma, A.L.; "Orientational Dynamics and Quantum Mechanical Tunneli Molecular Ions in Solids; Solid State Ionics: Science & Technology Ed. by V.R. Chowdari et al., World Scientific Publishing Co., pp 525-536.

Verma, A.L., Zhang, Z., Tamai, N. and Ozaki, Y.; (1998) "Dynamics of Intra-, and Inter-layer Energy Transfer in Langmuir-Blodgett Films of 5-(4-N- Octadecyl-pyridyl)-10, 15, 20-Tri-p-Tolyl-Porphyrin Studied by Time-Resolved Fluorescence Spectroscopy; *Langmuir* 14, 4638 - 4642 .

Zhang, Z., Verma, A.L., Tamai, N. and Ozaki, Y.; (1998) "Excitation Energy Transfer in Langmuir-Blodgett Films of 5-(4-N-Octadecyl-pyridyl)-10, 15, 20- Tri-p-Tolyl-Porphyrin Studied by Time-Resolved Fluorescence Spectroscopy; *Thin Solid Films* 333, 1-4

Zhang, Z., Verma, A.L., Nakashima, K. and Ozaki, Y., (1998) "Thermal Behaviour of Langmuir-Blodgett Films of 5-(4-N-Octadecyl-pyridyl)-10, 15, 20-Tri-p-Tolyl-Porphyrin Studied by Ultra-violet-Visible and Infrared Spectroscopies; *Thin Solid Films* 333, 1-4.

**Study Tour/Field Trip** :

A study tour for M.Sc. students was organised under the guidance of Professor P.Shukla.Sixteen students visited Mumbai, Goa, Bangalore, Mysore and Chennaiduring the period Jan 17, 1999 to Feb 10, 1999. The students were also accompanied by Sri Lakshman Joshi, Technical Assistant, Physics Department, NEHU.

**Thrust Area of Research**:

Nuclear Physics, Laser Physics, Solid State Physics, High Energy Physics.

**Research Programmes / Research Projects**:

On-going sponsored research programmes include (I) DST (Rs.40.2 Lakhs) on resonance roman under Professor A.L.Verma, (ii) DST (Rs. 4.66 Lakhs) on optical model under Dr. B.M.Jyrwa, (iii) DAE (Rs. 4.63 Lakhs and Rs. 7.02 Lakhs) on Biological Clocks and micronutrients under Dr. P.Nongkynrih, (iv) DST & DAE projects under Dr. P.N. Pandita successfully completed projects under Dr. P.N. Pandita during the year under review include:

(i) Supersymmetry with Extended Gauge Groups (Department of Science and Technology)
(ii) Supersymmetric Grand Unification (Department of Atomic Energy)

A major research project entitled "Search for Higgs Boson at present and future colliders" was also sanctioned by the University Grants Commission to be carried out under the supervision of Dr. P.N. Pandita.

Dr. P.N. Pandita carried out collaborative research work with:

(i) Professor Per Osland, University of Bergen, Norway on physics of Higgs bosons.
(ii) Dr. K. Huitu and K. Poulamaki, Helsinki Institute of Physics, Finland on Supersymmetric Left-Right models.
(iii) Dr. B. Ananthanarayan, Indian Institute of Science, Bangalore, on Beyond the Standard Model.

**Other Activities**:

Professor A.L. Verma (I) acted as a member of the National Organising Committee for the National Laser Symposium held at Indian Institute of Technology, Kanpur from December 14-16, 1998. (ii) Professor Verma is having additional responsibility at Head of USIC, NEHU w.e.f. 25-8-1998.

Professor C.S. Shastry (I) visited Physics Department, Mangalore University in Jan 99 and gave a set of 10 lectures on Nuclear Structure to M.Sc. students/scholars. (ii) visited Institute of Physics, Bhubaneshwar in Jan-Feb 1999 for 3 weeks for collaborative research work. (iii) was a member of Advisory Committee of DAE Symposium on Nuclear Physics(1998) organised by DAE.

Professor P. Shukla was selected as a Senior Category Speaker under the Theoretical Physics Seminar Circuit Programme (TPSC) for the year 1998-2000. He was also appointed an Associate of the Institute of Mathematical Sciences, Chennai. Professor Shukla visited Institute of Physics, Bhubaneshwar (Dec 98); IIMSC, Chennai(Jan 99); and Banaras Hindu University (March 99) under the TPSC programme and gave talks on his current

research work. He also visited IIT, Madras and IGCAR, Kalpakkam in Jan 1999 and gave talks there.

Dr. P.N. Pandita (I) was invited by Deutsches Elektronen-Synchrotron (DESY), Germany to visit its Theory Group for two months from January to February 1999. (ii) was appointed as a Senior Associate of the Inter University Centre for Astronomy and Astrophysics, Pune, India, for three years (1998-2001). (iii) was elected as a National Organising Committee Member for the "Workshop on High Energy Physics Phenomenology-VI" to be held at the Institute of Mathematical Sciences, Chennai during January 2000.

# SCHOOL OF SOCIAL SCIENCES

The School of Social Sciences, NEHU, consisting of the Departments of History, Political Science, Sociology and the Centre for Cultural and Creative Studies at Shillong and the Department of Public Administration and Psychology at Aizawl, Mizoram, continued to function actively and discharge its academic duties. Many of the Departments held Seminars, Refresher Courses and organised Lectures during the academic year, in addition to their normal teaching and research. Some of the faculty members attended prestigious national and international Conferences and some even presided over them, others were nominated as members of prestigious national academic bodies. The Departments, and the School functioned successfully inspite of the locational difficulties of some of the Departments from the Head quarters, Shillong. The School continued its academic leadership in the region and outside in its thrust area i.e., the North East India.

## CENTRE FOR CULTURAL AND CREATIVE STUDIES

The Centre for Cultural and Creative Studies was established to promote art appreciation and art education in the region through various courses, workshops and seminars. A systematic approach to aspects of art with emphasis on its utility application and creativity informs the activities of the Centre.

**Head** : Professor (Mrs) Helen Giri.

**Faculty** :

| | | |
|---|---|---|
| Professor | : | Helen Giri, M.A.,Ph.D. (Gauh.) |
| Lecturers | : | D.L. Kharmawphlang, MA (NEHU) |
| | | M.H. Barbhuiya, B.Fine (VB) |
| | | P. Jhingan, M.A. (J. Nehru) |

**Extension Lectures** :

Dr. Nicole Revel, Director of Research, Centre National de la Recherche Scientifique,

Laboratory Langues et Civilisations a Traditions Orales, Paris, on Palawan Oral Literature : epics of the Palawan highlanders of the Philippines, 26th November, 1998.

**Seminars/Conferences** :

*Attended* :

Helen Giri : (1) Participated in a Seminar on "Churches of Indigenous Origins in the North East India" from 26th to 29th August, 1998 and presented (and submitted for Publication) a paper on "The Christ Church Mission in Khasi and Jaintia Hills (with special reference to Mawlai). (2) Participated as a Resource Person in a workshop on "Rights and Responsibilities of Journalists" : Shillong Press Club on 1st August, 1998.

M.H. Barbhuiya : Participated as a Resource Person in the Students Workshop on 'Visual and Fine Arts' organised by Kendriya Vidyalaya at Umroi-Barapani, Shillong from 27th - 29th March, 1999.

**Publications** :

Giri,Helen. : "*The Khasis under British Rule*" 1824-1947 (Revised Editions). Regency Publication, New Delhi, June 1998.

**Other Activities** :

Helen Giri : Served as judge of Folk Music Artists Audition, New Delhi for upgradation of' A Grade Artists to Top Grade - All India on 29.4.98. Feature programme on : Katto Katne ki Skit Tem Ksing Khasi, All India Radio, Shillong. Ki Skit a Pomblang Nongkrem, All India Radio, Shillong. Participated in the National Composers Meet, New Delhi on invitation from Sangeet Natak Akademi, from 9th to 12th March, 1999. Script writer and consultant for Documentary feature film "Lest we Forger" (Khasi Resistance Movement - First phase 1824 - 1839), DDI programme sponsored by the Ministry of Human Resources, New Delhi.

M.H.Barbhuiya : Exhibited 5 numbers of paintings at the Art and Craft Exhibition organised by the Creative Arts Unit, NEHU as part of the Silver Jubilee Celebration from 9th to 12th November, 1998. Organised a programme on 'Science Behind Miracles' in collaboration with Science and Mathematics Education Unit, NEHU on 4th December, 1998. Acted as Resource person in the Practising School of Art, organised by RITI Academy of Visual Art, Shillong in collaboration with the Directorate of Art and culture, Government of Meghalaya at State Museum Hall from 13th to 18th March, 1999. Participated in the Group Exhibition of paintings, drawings and graphic prints organised by the Meghalaya Contemporary Artists Group at Art & Culture Hall, Shillong from 25th to 29th March, 1999. Initiated a cultural programme on 24.4.98 in connection with India's Fifty Years of Independence. Organised a College-cum-University level Cultural Programme on 28.7.98 at State Central Library, Shillong, as part of the University's Silver Jubilee Celebration. Undertook a field work - an

audio documentation of folktales and stories current in Pahamskhen and Pahambir Villages on 29.10.98. Organised a three-day Exhibition of Painting, Wood-crafts, Graphic Prints etc. cum-Lecture series on Art Appreciation delivered by Professor Pranab Roy, a renowned Art Critic and Art Historian, with effect from 9th to 12th November, 1998 as part of the Silver Jubilee Celebration of NEHU. The Creative Arts Unit is translating some Khasi poems/songs (lyrics) into English version to be sent for subsequent translation into Bengali and other languages as desired by the Sahitya Akademi, Eastern Zone, vide their letter dated 9th Septembe1998.

## DEPARTMENT OF HISTORY

Established in 1974 the Department of History has been organised, as its placement in the School of Social Sciences would suggest on the concept of history as a Social Sciences. In character, distinguished by an emphasis on the study of peoples and regions with particular reference to social and cultural development is with special reference to India and within it, North East India. The Department's objectives of the academic programme is (1) to provide at the Master's level a broad knowledge of human history and particularly of the areas and themes of special concern to the Department and the modern approaches to its study through a suitably structured and balanced syllabus (2) to promote historical research in hitherto unexplored areas, especially in the North Eastern region through the M.Phil/PhD programmes and faculty member's research. The Department's major achievements have been in the areas of syllabi innovation and promotion of regional or north east India studies. New ground have been broken in the teaching and research in regional history and in the history of the bordering areas or countries through the researches of its faculty, its M.Phil and PhD programme and through the North East India History Association which it had helped establish, and nurtured for 20 years (1979-99), the department has played a crucial role in laying the foundation of regional studies. The Department is now recognised as the leading centre in the history for historical studies of north eastern region. In 1995/96 the department was brought under the Special Assistance Programme of the UGC and it is hoped will develop into a Centre of Advanced Studies in North East Indian Studies.

**Head** : Professor Imdad Hussain

**Faculty** :

| | | |
|---|---|---|
| Professors | : | J B Bhattacharjee, M.A.,PhD(Gau) |
| | | J P Singh, M.A.,PhD (BHU) |
| | | Imdad Hussain, M.A.,PhD (Gau) |
| Readers | : | D R Syiemlieh, M.A.,PhD (NEHU) |
| | | M Momin, M.A., PhD (J.Nehru) |
| | | M Sharma, MA(Gau), PhD (NEHU) |
| | | F A Qadri, M.A.,PhD (Alig.) |

Lecturers : C Mawlong, MA.(NEHU),Dip.Arch(Delhi)
V R Rengsi, M.A.,MPhil (NEHU)
A N Passah, M.A.,MPhil (NEHU)
T Gurung, M.A., PhD (NEHU)

**Student Intake** :

a) Enrolment Capacity MA 50
M Phil 15

b) Actual Enrolment:

| | | | | | |
|---|---|---|---|---|---|
| MA | 52 | MPhil | Nil | PhD | 9 |
| SC/ST | 49 | SC/ST | Nil | SC/ST | 9 |
| Others | 3 | Others | Nil | Others | Nil |

**Degrees Awarded:**

*MPhil:*

Ibetlin Kharumnuid, "Changing Status of the Khasi Syiems", Supervisor, Dr. DR Syiemlieh.

Md. Riazuddin Ansari, "1942 Movement in Darrang District with Special reference to Dhekiajuli", Supervisor Professor Imdad Hussain.

B Lalrinchhani, "Christianity and Women in Mizoram" Supervisor Dr Manorama Sharma.

**Course Conducted**:

*M.A.*

Historiography, Pre Historic and Proto Historic Societies, Ancient Societies, Pre Industrial Societies and Social Institutions, Capitalism and Colonialism 16th-19th Centuries, Imperialism and Nationalism in 1st half of the 20th Century, Evolution of Modern Indian Societies (1858-1947), Socio Economic and Political Development in N E India, Ancient Indian Social and Economic History, Political Theory and Institutions in Ancient India, Religion and Society in Ancient India, Introduction to Archaeology, History of the Guptas, Religion & Society in Medieval India, Economy and Society in India (650-1400 AD), Agrarian Unrest in Medieval India, British Expansion in India, Indian Nationalist, Economic History of Modern India, Peasant Movements in Modern India, British policy in N E India, Political Development in N E India, Government and Politics in N E India, Economic History of N E India, Polity Formation in N E India, Social Change in N E India, The Rise of Modern Japan, History of Sciences.

*M.Phil.*

1. Historical Thought
2. Historical Method
3. Dissertation by Research

PhD Thesis by Research

**Seminar / Conferences** :

Professor Imdad Hussain presented a paper "Borderlands and Recruiting Grounds : Eastern Assam in the early Nineteenth Century" to the 5th Session of the Indian History Congress held at Patiala.

Dr D R Syiemlieh attended and read paper at the following :

"Indigenous Roots : Hajom Kissor Singh and the Founding of Unitarianism in Khasi Jaintia Hills", Seminar on Churches of Indigenous North East India Project Consultation, 26-29 August 1998, Shillong.

"The Crown Colony Plan for the Hills of North East India : Concept to Collapse 1941-1946", National Seminar on Making of the Union : Integration of Indian States, Assam University, Silchar, 26 - 27 November, 1998.

"Status of Historical Writing in Khasi", Seminar on Status of Social Sciences in Vernacular Languages in North East India, Indian Council of Social Science Research, North Eastern Regional Centre, Shillong, 30 November, 1998.

"Indirect British Administration in North East India", 19th Session of the North East India History Association, Nagaland University, Kohima, 3 - 5 December 1998.

"The Crown Colony Plans : The British and the Hill Areas of North East India 1945-46", 59th Session of the Indian History Congress, Punjabi University, Patiala, 28-30 December, 1998.

Dr Manorama Sharma - Made a presentation on "Women and Empowerment" in Seminar on "Empowerment at Grass Root Level : Assam in 2000" organised by Assam Prakalpa at Dibrugarh University from 21st to 23rd January, 1999. Attended the 19th session of the North East India History Association held at Kohima 3 - 5 December, 1998.

Dr F A Qadri - Attended 59th Session of Indian History Congress at Punjabi University, Patiala 28 - 31 December as a delegate from NEHU and presented a paper on "Multitude in Solitude : The Phulwari Sharif Experiment in Sufism".

**Publications** :

*Books*

D R Syiemlieh. *They Dared to Hope : The Congregation of Holy Cross in India*, Bangalore, 1999.

D R Syiemlieh. Edited : *Proceedings of the North East India History Association*, Eighteenth Session, Agartala, 1997, Shillong 1998.

D R Syiemlieh. Edited with J P Singh et. al., *Trends in Social Sciences and Humanities in North East India* (1947-97), New Delhi 1998.

Dr. F A Qadri, *The Celebrated Garden* : A Study of Phulwari Sharif Family of Muslim Divines, NEHU Publications , 1998

Dr F A Qadri, *Tarikh-i-Mashrab-i-Shattar* : (History of Shethari Sufi Order in Urdu), Educational Book House, AMU, Aligarh, 1998.

*Articles*

D R Syiemlieh. "Mariamnagar : Cultural Integration : Social Seclusion", *Proceedings of the North East India History Association*, Eighteenth Session, Agartala, 1997, Shillong, 1998, pp.166-171.

D R Syiemlieh. "Portuguese Settlement in North East India", In Francis Fernandez and Joe Varickasseril eds. , *Mission A Service of Love : Essays in Honour of George Kuttappallil*, Shillong, 1998, pp 301 - 308.

Dr M Momin "Studies in the Political and Socio-Economic History of Pre-Ahom : Perspectives and Prospects", *NEHU Journal of Social Sciences and Humanities,* Vol. I, No.1, 1998, pp 1-20

Dr M Sharma History and History Writing in N E India, (Regency Publisher, New Delhi, 1998) "Writing of History the Colonial Bias" *Proceedings of the North East India History Association.*, 18th Session, Tripura 1997, Shillong 1998 pp54-60

Ms C Mawlong "Methods of Preservation Practised in Cherra State (Hima Sohra) some Insights", *Proceedings of the North East India History Association*, Eighteenth Session, Agartala, 1997, Shillong, 1998, pp 101-106

Ms A N Passah "The Welsh Presbyterian Mission in the Khasi and Jaintia Hills ; Early expansion into Sylhet, Cachar and Mizoram, *Proceedings of the North East India History Association*, Eighteenth Session, Agartala, 1997, Shillong, 1998, pp. 155-165.

Dr F A Qadri, Eighteenth Century Intellectual Legacy : A Brief Survey of Religio-Mystical Literature, *NEHU Journal of Social Sciences and Humanities* Vol.1, No.1. Jan-June 1998, pp. 47-56.

Dr F A Qadri, Piri-Muridi Relationship : A Study of Nizamuddin Dargah by Desiderio Pinto, Manohar Publishers and Distributors, New Delhi, 1995 Reviewed in *Journal of Historical Research*, Dibrugrh University, Dibrugarh, Vol.IX, 1999, pp.117-120.

**Study Tour / Field Trip** :

Ms Cecile Mawlong took 4th Semester students on a field trip to Pomsohmen,

Cherrapunji on 23rd March, 1998. The purpose was to study the megalithic remains in old Sohra.

**Thrust Area of Research** : Regional History / N E India

**Research Programme / Project** :

All the faculty members continued their research in the fourth year of the Special Assistance Programme, on specific projects to collectively prepare for a comprehensive history of N E India.

**Other Activities** :

The Department organised the Fifth H K Barpujari Endowment Lectures delivered by Professor Aniruddha Ray of the Department of Islamic History and Culture, Calcutta University between 22 September - 24 September 1998. Professor Ray delivered 3 lectures on "European Perceptions of Medieval North East India".

Two Refresher Courses for college and university teachers was conducted between August 20-17 September and 2 November - 23 November 1998. Dr D R Syiemlieh and M Momin co-ordinated these courses. Professor Imdad Hussain was re-elected for a third term as Executive Member of the Indian History Congress. Dr D R Syiemlieh was elected as Executive members of the North East India History Association. Dr Manorama Sharma was elected Joint Secretary of the North East India History Association. She was also elected as Convenor Shillong Chapter of the North East India Social Science Congress.

## DEPARTMENT OF POLITICAL SCIENCE

Established in 1974, the Department of Political Science 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 the inter-disciplinary approach. It also aims at making courses and research work socially relevant and to develop in the students an awareness of the basic issues and problems in the discipline and to equip them intellectually to fulfil those needs.

With a sanctioned strength of 13 faculty members the department has 80 students on its roll at the M.A. level. The department also provides research facilities leading to the M.Phil and Ph.D. degrees.

**Head** : Professor L.. S . Gassah.

**Faculty :**

| | | |
|---|---|---|
| Professors | : | R.L.Walli, M.A. (J&K), Ph.D. (J.Nehru) |
| | | A.K. Baruah, M.A.,Ph.D. (Punj.) |
| | | R. Borgohain, M.A. (J.Nehru), Ph.D. (Gauh.) |
| | | L.S.Gassah, M.A.,Ph.D. (NEHU) |
| Readers | : | B.J. Deb, M.A.,Ph.D. (Gauh.) |
| | | E.Laitflang, M.A.,Ph.D. (NEHU) |
| Lecturers | : | K.Debbarma, M.A.,Ph.D. (NEHU) |
| | | P.Malngiang, M.A.,Ph.D./L.L.B. (NEHU) |
| | | S.Sengupta, M.A.,Ph.D. (NEHU) |
| | | T.T. Haokip, M.A.,Ph.D. (NEHU) |
| | | B.K. Mahapatra, M.A. (Delhi), Ph.D. (J.Nehru) |

**Student Intake :**

a) Enrolment capacity 40

b) Actual admission :

| SC | ST | Gen. | Male | Female | Total |
|---|---|---|---|---|---|
| — | 35 | 3 | 16 | 22 | 38 |

**Degrees Awarded :**

*Ph.D*

Ms. Susmita Sengupta, 'Regionalism in Meghalaya'. Supervisor, Professor A.K. Baruah.

Mr. Chawngsailova, 'Mizo National Front and its Role in Mizoram Politics'. Supervisor, Dr. B.J. Deb.

Mr. Asiele Pusa, 'Politics in Naga Society - The Inter-Tribal Relations'. Supervisor, Professor A.K. Baruah.

Mr. R.K. Satapathy, 'The U.S. Involvement in Nicaragua during Sandinista Rule'. Supervisor, Professor R.L. Walli.

**Courses Conducted :**

Political Theory - The Classical Traditions, Theories and Concept in Public Administration, Government and Politics in India, Theory of International Politics, Political Theory - The Liberal Democratic theory and Conservatism, Issues in Public Administration, Socio-economic Basis of the Indian Political System, Problems of International Politics, Political Theory - Contemporary Marxist Theory, Modern Political Analysis.

*Optionals*

International Law, Traditional Government and Politics of the Hill Areas of North East India, Issues in Indian Administration and Research Methodology.

M.A. (Fourth Semester) Compulsory
Contemporary Political Theory : Major Issues, Comparative Politics.

(Optional Any Two)

International Organisation, Government and Politics of the Hill Areas of North East India, Modern Indian Political Ideas, Foreign Policy, Political Sociology.

**Seminars/Conferences** :

*Attended:*

LS Gassah -National Seminar on 'Perspective, Issues and Problems of Border Trade in North East India' 14-15 December, 1998. Seminar on 'Status of Social Sciences in Vernacular Languages in North-East India', held on 30.11.98 and presented a paper entitled 'Writings in Khasi Vernacular Pertaining to Socio-Political Issues', under the auspices of ICSSR-NERC, Shillong. Seminar on 'Challenges of Humans Disabilities in North-East India: A Study of Human Ecology'. 7-8 September 1998, NEICSSR, Shillong. Seminar on 'Renewal Energy Resource Management in North East India', 5th June 1998, NEICSSR, Shillong. Workshop on 'Research Methodology in Social Sciences with special reference to North East India' acted as one of the resource persons during the workshop (8-28 March 1998), organised by ICSSR-NERC, Shillong. Eighth Annual Conference of NEIPSA and National Conference on Human Rights in India Socio-Political and Legal Dimensions, 10-11 December 1998, J.J. College, Jorhat, Assam, and presented a paper on 'Child and Human Rights: An Insight'.

R Borgohain - Workshop on 'Research Methodology in Social Science with special reference to North East India' acted as one of the resource persons during the workshop (8-28 March 1998), organised by ICSSR - NERC, Shillong.

K Debbarma -Attended AIMED Seminar (International) on 'Micro-Economic Development'. November 20-26, at Bangalore. Attended and presented a paper in a National Seminar on Inter-and in a States Conflicts in South Asia - 18-20 February, 1999, University of Hyderabad, Hyderabad.

B.J. Deb- National Seminar on Renewable Energy Resource Management in North East India organised by NEICSSR, 5th June 1998. National Seminar on Perspective, Issues and Problems of Border Trade in North East India 14-15 December, 1998. National Seminar on Human Rights, J.B. College, Jorhat, 8th Annual Conference of North East India Political Science Association 10-11 December 1998.

B.K. Mohapatra - Participated in NEIPSA Conference on 'Human Rights' Held at Jorhat, 11-12, December, 1998.

Susmita Sengupta -Attended the Eighth Annual Conference of NEIPSA and National Seminar on 'Human Rights in India : Socio-Political and Legal Dimensions' held in J.B.

College, Jorhat on 10th and 11th December 1998. Presented a paper titled 'Women and Human Rights : an Analysis of Beijing Women's Conference'. Attended the National Seminar on the 'Recent Trends in the Indian Parliamentary Democracy - Need of an Alternative' held in Bahona College, Jorhat on19th and 20th February, 1999. Presented a paper titled 'Emerging Trends in Parliamentary Democracy in Uttar Pradesh - an Analysis'.

P Malngiang -Research Methodology Workshop Organised by ICSSR, on 18th May 1998, Shillong. Presented paper. Symposium on the Life and Works of Khasi Authors in the field of Khasi Literature, on 3-4 November, 1998. Department of Art and Culture, Government Meghalaya. Presented paper.

A.K. Baruah -International Conference on Regional Development in India and China November 19-20, 1998, Ministry of External affairs Government of India, Institute of Chinese Studies, New Delhi. Presented paper. Assam Beyond 2000 : Experimental the grassroots Level, Dibrugarh, January 22-23, 1999. Presented paper. Presented paper, NEIHA, Kohima, 3-5 December, 1998.

**Publications** :

Gassah,L.S. *Traditional Institutions of Meghalaya : A Study of Doloi and his Administration,* Regency Publications, New Delhi, 1998.

Gassah,L.S. 'Self - Management among Tribals in Meghalaya', *in Antiquity to Modernity in Tribal India.* Vol.II (Ed.) Bhupinder Singh, Inter-India Publications, New Delhi, 1998, pp. 91-122.

Gassah,L.S. et,al (Eds) - *Power to People in Meghalaya*, Regency Publications, New Delhi, 1998.

Gassah,L.S. et.al. (Eds.) - *Trends in Social Sciences and Humanities in North East India* (1947-97). Regency Publications, New Delhi, 1998.

Gassah,L.S. 'Liberalisation, Ethnic Idendity and Economic Development : A Case Study of Khasi and Jaintia Hills', *In Liberalisation and India's North-East* (Eds.) Gumdas Das & R.K.Purkayastha, Commonwealth Publishers, New Delhi, 1998, pp. 261-272.

Malngiang, P. 'The Federation of Khasi Jaintia and Garo People', In *NEIPSA Proceedings*, 1998, pp. 58-63.

Malngiang, P.'Electoral Politics in Meghalaya : A Study of the Meghalaya Federation and Congress Party in the 1993 Assembly Elections' in Phukon, Girin and Adil-ul-Yasin (Eds.) *Working of Parliamentary Democracy and Electoral Politics in North East India.* (South Asian Publishers, New Delhi, 1998), pp. 87-96.

Deb, B.J. 'Tribal Nation of Exploitation' in B.Dattaray (Ed.) *Sociological Constraints to*

*Industrial Development in North-East*, Concept, New Delhi, 1998, pp. 131-134.

Deb,B.J. 'Social Movement in Mizoram' in M.N.Karna (Ed.) '*Social Movement in North-East India'*, Concept, 1998, New Delhi, pp. 127-132.

Sengupta, Susmita. - 'Politics of Coalition in Meghalaya - Meghalaya United Parliamentary Party (MUPP) Coalition of 1990-91' in Girin Phukon and Adil-ul-Yasin (Eds.) '*Working of Parliamentary Democracy and Electoral Politics in North East India'*. (New Delhi 1998), pp. 201-209.

Sengupta, Susmita. 'Grass-roots Politics in Arunachal Pradesh - A Case Study of All Arunachal Pradesh Students' Union' in *Proceedings of the Seventh Annual Conference of NEIPSA* (Shillong, 1998), pp. 39-47.

Walli, R.L. - "Funtionsalism in World Politics", *Journal of Politics*, Vol. 48, No.1, pp. 35-53.

Baruah, A.K. - 'Centre - State Relations : The Case for a new Political Culture' in B.Hazarika (Ed.), *Socio-Economic and Political Change* : Some Issues, J.B. College, Jorhat, December 1998, pp. 50-58.

Baruah, A.K. 'On Approaches to the Study of History' *NEIHA Proceedings*, October 1998, pp. 21-25.

Baruah, A.K.: Assam Election 1996 : The Congress Debacle in *Working of Parliamentary Democracy and Electoral Politics in North East India*, (Eds.) Girin Phukon and Adil-ul-Yasin, South Asian Publishers, New Delhi, 1998, pp. 19-29.

**Study Tour/Field Trips** :

The Department of Political Science with two Teachers incharge - Dr. Debbarma and Dr. T.T. Haokip conducted a study tour during 11th January 1999 to 1st February 1999 to Bangalore and Bombay.

**Thrust Area of Research** :

M.Phil. - Government & Politics of North East India.
Ph. D. - Government & Politics of North East India.

**Research Programmes/projects** :

L.S.Gassah : Research Priority with Special Reference to Mizoram. Review of Research Priorities in Political Science in North East India (1970-1990)

A.K. Baruah : Politics in North East India, ICSSR, New Delhi.Youth Organisation in

North East India, ICSSR, NERC, Shillong.

**Other activities** :

The faculty members are actively involved in the North East India Political Science Association (NEIPSA).

## DEPARTMENT OF PUBLIC ADMINISTRATION

The Department of Public Administration, NEHU, Mizoram Campus, Aizawl started functioning with effect from June 1985. Teaching in the two Post-Graduate Programme in Public Administration began with effect from April 1987.

1. M.A.Programme of two year (four semester) duration.
2. Diploma Programmes of one year (two semester) duration.
3. M.A. via Diploma Programme of one year (III & IV Semester) duration started in 1989 meant for eligible Diploma holders.

Developmental themes receive emphasis on the over all structures of the three programmes with exposure to theoretical problems. Facilities for Ph.D. supervision are presently available in the Department.

**Head** : Dr. C. Lalkima

**Faculty** :

| | | |
|---|---|---|
| Professor | : | R. N Prasad, M.A.,Ph.D (Bihar) |
| Reader | : | C. Lalkima, M.A.(Osm), Ph.D. (Gauh.) |
| Lecturer | : | Lalrintluanga, M.A.,M.Phil. (NEHU) (E.O.L.) |

**Student Intake** :

a) Enrolment capacity : M.A. 50

b) Actual admission

| SC | ST | Gen. | Male | Female | Total |
|---|---|---|---|---|---|
| - | 50 | - | 37 | 13 | 50 |

**Courses Conducted** :

*M.A.*

Fundamentals of Public Administration. Indian Administration : Structure & Processes. Public Personnel Administration with reference to Britain, USA & France. Economic & Financial Administration in India. Development Administration in India. Environmental Admin-

istration in India. Theories of Bureaucracy. Government & Politics of the Hill Areas of North-East India: Administrative Thought, Public Policy Analysis, Political theory, Indian Government & Politics : Social Structure & Process, Comparative Public Administration, International Administration, Theory & Practice of Local Government, Social Administration in India.

The Department also conduct a Four-Week Practical Training (Non-Credit Component).

**Publications** :

Dr. C. Lalkima. "Integrated Child Development Service (ICDS) Problems and Progress" in Mizoram: *Dynamics of Public Administration Bi-Annual* Vol.2, Department of Public Administration. Lucknow University, Published in 1998.

Dr. C.Lalkima."Modernisation in Mizo Society", in *Administrative Review* (Annual Journal - Two issues of 1996 and 1997 of IIPA Mizoram Regional Branch published in December 1998.

Professor R.N. Prasad, *Public Administration in North-East India*, Vikas Publishing House (Pvt) Ltd. Delhi, 1998.

Professor R.N. Prasad, Edited Annual Journal of the Indian Institute of Public Administration, Mizoram Regional Branch - *Administrative Review* (Two Issues - 1996-97) Published in December, 1998.

**Publications of Articles/Papers** :

1. "Modernisation of the Mizo Society : Strategic Problems and Futuristic Introspection", in *Administrative Review* (Annual Journal - Two Issues 1996-97) of the Indian Institute of Public Administration, Mizoram Regional Branch, published in December, 1998.

2. "Our Goals For Twenty First Century : (a) Economic, (b) Social and (c) Administrative - Some Suggestions", in *Administrative Review* (Annual Journal of IIPA, Mizoram Regional Branch 1996-97 two issues) published in December, 1998.

3. "Prospects of Coalition Government in India" in Review of Politics, Vol.V., No.2, July - December 1997 (Published in later part of 1998). Bi-Annual Journal of the Department of Political Science, Veer Kunwar Singh University (V.K.S. University) Ara (Bihar)

**Seminars/Conferences** :

*Attended:*

(1) Delivered lecture on "National Agenda For Governance-BJP and Alliance Partners" in the Lecture-meeting jointly organised by IIPA, Mizoram Regional Branch and the Depart-

ment of Public Administration, NEHU, Mizoram Campus, Aizawl on 25.4.1998.

(2) Appointed to act as Resource Person for the Mizoram Civil Service Officer's Foundation Training Courses by Director, Administrative Training Institute, Government of Mizoram, Aizawl and delivered two lectures on "Civil Servants and their Constitutional Rights" and "Critical Study of the Provisions of the Sixth Schedule to the Constitution of India" in the MCS Foundation Training Course on 25.5.98 and 26.5.98 at A.T.I. Mizoram, Aizawl.

(3) Participated in the Seminar "Administration of Justice in Mizoram in Pre and Post Independence of India" organised by the Law Research Institute Eastern Region, Gauhati High Court, Guwahati on 17.7.98 in Aizawl.

(4) Presented a paper on "National Agenda of the New Government : Administrative Dimensions - An Appraisal" at the prelude conference on IIPA, New Delhi theme on "National Agenda of the New Government : Administrative Dimensions" for the 42nd Member's Annual Conference 1998, organised by IIPA, Mizoram Regional Branch, Aizawl on 6.10.98.

**Other Activities:**

(1) Coopted as member of the Executive Committee of New Public Administration Society of India, for the year 1998 by the New EC in its meeting held on 4.7.98 in Hyderabad.

(2) Continued to an Hony. Secretary of the Indian Institute of Public Administration, Mizoram Regional Branch, Aizawl.

(3) Continued to an editor of Administrative Review, Annual Journal of IIPA, Mizoram Regional Branch.

## DEPARTMENT OF PSYCHOLOGY

The Department came into existence in 1983. The Department is actively involved in teaching and research work. This way, a total of 54 students obtained M.A. Degree (27 in Ist Div). At present 20 students are continuing their Post Graduate studies. The product of the Departments are extensively involved in teaching and learning of psychology at higher level:- (1) Six students of the department have qualified the NET examinations for Lecturership and J.R.F., (2) Ten students are actively involved in extension of teaching and learning of psychology at higher levels including Psychological Services in the interest of the community (3) Four students are enrolled in the Department for their research work leading to Ph.D. Degree. Here it may be mention that one Ph.D. Degree is awarded (4) Six students are involved in teaching and learning of Psychology at +2 level and Regional Para Medical Institute.

**Head** : Dr. L.N. Singh.

**Faculty** :

| | | |
|---|---|---|
| Reader | : | L.N.Singh, M.Sc.,Ph.D. (BHU) |
| Lecturer | : | Zokaitluangi, M.A.,Ph.D.(NEHU) |

**Student Intake** :

(a) Enrolment capacity : M.A. 15

(b) Actual admission :

| SC/ST | Gen. | Male/Female | | Total |
|---|---|---|---|---|
| | | 4 | 11 | |
| 15 | | | | 15 |

**Courses Conducted** :

Learning and Memory, Research Methods and Statistics, Social Psychology, and Practicals, Cognitive Processes, Attention and Perception, Advanced Correlation Methods, Psychological Foundations of Behaviour, and Practicals, Psychology of Personality,Theories of Human Development, Psychopathology, and Practicals, Clinical Psychology-I, Clinical Psychology-II, Psychodiagnosis and Psychological Therapies,Neuropsychology/Dissertation and Practicals.

**Study Tour/Field Trip** :

Tour programme is a part of curriculum in the Fourth Semester for providing practical exposure to the students at specialised institutions of National importance, rendering professional services in the applied fields of psychology.

**Thrust Area of Research**

Experimental Psychology/Cross-cultural Psychology.

## DEPARTMENT OF SOCIOLOGY

The Department began instruction at M.A, M.Phil and Ph.D level in 1976 on a modest scale. There were then only five faculty members and 25 M.A. and M.Phil students. Since then nineteen batches of M.A., about five and half dozen of M.Phil and about a dozen of Ph.D students have been awarded degrees in Sociology. Keeping in mind article 4 of the NEHU Act (the socio-cultural development of the North Eastern Region) the Department decided to emphasise on Social Change as its academic thrust in which most of the researches are conducted. In this context, the academic thrust of the department has been split into : (a) Emerging Social Inequality; (b) Political Movement; (c) Occupational Differen-

tiation; (d) Social Movement; (e) Ethnic Identity and Relations; (f) Demography, Ecology and Environment.

**Head** : Professor M.N. Karna

**Faculty** :

| | | |
|---|---|---|
| Professors | : | M.N.Karna, M.A.,Ph.D.(Patna) |
| | | A.C. Sinha, M.A.(Ranchi), Ph.D. (IIT Kanpur) |
| | | C. Nunthara, M.A.,Ph.D. (Delhi) |
| Readers | : | P. M. Chacko, M.A.,Ph.D. (Delhi) |
| | | Nikhlesh Kumar, M.A. (Delhi), Ph.D. (NEHU) |
| | | C.L. Imchen, M.A.,Ph.D. (JNU) |
| | | I. Lanu Aier, M.A.,Ph.D. (NEHU) |
| Lecturer | : | A. K. Nongkynrih, M.A.,M.Phil. (NEHU) |

**Student Intake** :

Enrolment capacity : 40

| | SC/ST/Gen. | | Male/Female | | Total |
|---|---|---|---|---|---|
| Actual admission : | 36 | 4 | 7 | 33 | 40 |

**Degrees Awarded** :

*M.Phil.*

Ms. Gita Pyal. "Child Labour in Hyderabad City". Supervisor, Professor C.Nunthara.

Mr. Kewepfuzu Lohe. "Social Dynamics of Chizami Village Sociological Enquiry". Supervisor, Dr. CL Imchen.

Ms. Moushumi Choudhury. "Comparison of Marital Power relations among single and Dual Earner couples of Assamese Hindu Nuclear Families". Supervisor, Dr.C.L.Imchen.

Mr. L. Temsu. "Job Aspiration among Youth in Mokokchung town, Nagaland". Supervisor, Dr. I.L. Aier.

**Courses Conducted** :

*M.A.*

Sociology of Kinship; Sociological Theories I; Social Stratification in India; Methodology of Social Research I, Sociological Theory II; Methodology of Social Research II; Sociology of Religion; Urban Sociology. Polity and Society; Economy and Society; Tribal Movement; Industrial Sociology, Social Change; Sociology of Movement; Sociology of Entrepreneurship and Management; Theories of Social Anthropology.

**Seminars/Conferences:**

*Attended:*

Professor M.N. Karna presented a working paper at the XXV All India Sociological Conference, Aligarh, December 17-19, 1998 entitled "Language, Region and National Identity: A Precursory Probing". Delivered the Keynote Address entitled "Method of Social Science Research" at the Inaugural session of NE India Social Science Congress (Shillong Chapter) on December 12, 1998. Presented a paper entitled "Some Aspects of Human Disabilities in India" at the seminar on Challenges of Human Disabilities in North East India: A Study of Human Ecology, organised by NEICSSR, Shillong, 7-8 September, 1998.

Professor A.C.Sinha attended Seminar-cum-Exhibition on "Physical and Cultural Ecology in North-East India" jointly sponsored by North-Eastern Hill University and Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal at Shillong on August 8-9, 1998. Attended the International seminar on "Shared Social Ecology of seven Himalayan Countries" at the Indira Gandhi Rashtriya Manav Sangrahalaya at Bhopal on November 26-28, 1998. Attended International Seminar on "Alternative Development for a Culture of Peace and Non-violence" at Gujarat Vidyapeeth, Ahmedabad on February 22-24, 1999. Attended the National Seminar on "Indian Society at the Turn of the Century: Perspective from Below", at Jawaharlal Nehru University, New Delhi, on March 25-27, 1999. Worked as a Resource faculty for the Refresher course in Sociology at the Academic Staff College, Gujrat University, Ahmedabad February 4-20, 1999. Worked as Resource Faculty for the Refresher course in History, Department of History, North Eastern Hill University, Shillong, on August 20-17 September 1998 and November 2-23, 1998.

Dr. P.M. Chacko attended the International Sociological Conference held in Montreal, Canada, July 26-August 1, 1998. Participated as a convener of a session in the annual conference of the Indian Sociological Society, held in Aligarh in December 1998.

Dr. Nikhlesh Kumar, Resource person in Research Methodology Workshop in Social Sciences in the Context of North-Eastern India organised by the NERC-ICSSR, Shillong, May 1998. Attended XXV All India Sociological Conference at Aligarh Muslim University December 17-19, 1998. Resource person in Orientation Course on "Man & Environment" organised by the School of Human & Environmental Sciences, NEHU, Shillong, March 1999. Resource person in a workshop on "Folk and Tribal Music" organised by the Regional Training Institute, All India Radio, Shillong 05-04-99 to 09-04-99.

Dr. C.L. Imchen presented a paper, "The Tribal Frontier: Politics of Exclusioner Inclusion?" National Seminar on "Fifty years of Independence and India's North East, Dibrugarh University, 3-4 April, 1998. "Integration Vs. Independence : The Debate in Naga Hills", in National seminar on Making of the Union: Integration of Eastern and North-Eastern Areas with the Indian Union 1946-50, Assam University, Silchar, 26-27, November 1998.

Dr. I. Lanu Aier, "The Twilight Zone: Some Subaltern Cases", Seminar on "Political Processes of North-East India", organised by Department of History, Assam University, Silchar, October 1998.

**Publications** :

*Books*

Karna, M.N. et. al (ed) *Power to People in Meghalaya*, Regency Publications, New Delhi, 1998.

Karna, M.N. (ed) *Social Movements in North East India*, Indus Publishing Company, New Delhi, 1998.

Sinha, AC, Bhutan : *Ethnic Identity and National Dilemma*, Reliance Publishing House, New Delhi, 1998 (A Second Edition).

Chacko, P.M., Edited *Matriliny in Meghalaya*: Tradition and Change Regency Publications, New Delhi, 1998. 'Introduction' in *Matriliny in Meghalaya*, Regency Publications, New Delhi, 1998 pp. 1-9.

*Articles*

Karna, M.N. 'Socio-Economic Aspects of Ethnic Identity in North-Eastern India' in Gurudas Das & R.K. Purkayastha (eds), *Liberalisation and India's North East*, Commonwealth Publishers, New Delhi, 1998. pp. 223-235.

Karna, M.N. 'Social Resistance to Development : An Analysis of Situation of North-Eastern India' in B.Datta Ray and Prabin Baishya (eds) *Sociological Constraints to Industrial Development in North East India*, Concept Publishing Company, New Delhi, 1998. pp. 31-38.

Sinha, AC. "Social Stratification among the Tribes of North East India" in *Antiquity to Modernity in Tribal India* (ed) Bhupinder Singh, Inter-India Publications, New Delhi, 1998.

Sinha, AC. "Agenda of co-ordination between India's North East and its Neighbouring Countries" in *Man and Development* Vo. XX No.4. Chandigarh. Pp. 143-156.

Sinha, AC. "Ethnicity and Nation-Building in Mauritius" in *Wonder That is Culture*, (ed) TB Subba, Mittal Publications, New Delhi, 1999, pp 302-316.

Sinha, AC. "Threat to Shangrila Security" *IIAS News Letter*, Issue No. 16, Summer, 1998. pp. 15(Leiden, Netherland).

Chacko, P.M. 'Matrilineal System some Structural Implications' in *Matriliny in Meghalaya*, Regency Publications, New Delhi, 1998 pp 10-15.

Kumar Nikhlesh. "*Trends in Sociological Research in North-East India,* 1947-1997 in Singh, JP et al (ed), Trends in Social Sciences and Humanities in North-East India (1947-97), Regency Publications, New Delhi, 1998. pp .92-98.

Kumar Nikhlesh "A Study of Youth Movement as Social Movement", in Karna, M.N. (ed) *Social Movement in North-East India*, Indus Publishing Co., New Delhi, 1998. pp.33-40.

**Thrust Area of Research** :

The Department decided to emphasise on Social Change as its academic thrust, in which most of the researches are conducted. In this context the academic thrust of the department has been split into : (a) Emerging Social Inequality ; (b) Political dynamics ; (c) Occupational differentiation ; (d) Social Movements ; (e) Ethnic Identity and Relations and (f) Demography, Ecology and Environment.

**OtherAtivities**

Professor A.C. Sinha was appointed as a consultant to the Government of India sponsored Rapid Household Survey (Under nation-wide component of the Reproductive and Child Health Project (RCH) for the States of Assam, Meghalaya and Nagaland, conducted by TALEEM Research Foundation, Ahmedabad.

# INSTITUTE AND CONSTITUENT COLLEGES

## INSTITUTE OF SELF ORGANISING SYSTEMS & BIO-PHYSICS

The Institute was established in the year 1986 and is now in the process of closure. It was a purely research institute within the university system dedicated to pursue interdisciplinary research in newly emerging and unconventional areas. The primary aim of the institute was to investigate biological phenomena using techniques of physical sciences with a view to obtain an integrated vision of science. The Institute also trained students in new methodology and equipped them with skills to face challenges encountered in scientific endeavours. The institute admitted students from various science departments in its research activities. The research students could register in respective departments for their M.Phil. and Ph.D. degrees. The faculty members carried out research work in diverse fields and collaborated with other departments in the university and with national and international institutions. Its faculty members have been honoured in both national and international forums for doing original and quality work. The students trained by the institute have gained employment in prestigious institutions. One student received the young scientist's award on the work carried out for his Ph.D. dissertation.

**Head** : vacant

**Courses Conducted** : M.Phil. and Ph.D

*Ph.D.*

1. Miss. B.Borah on the dissertation entitled "Development of the Auditory System and Acoustically mediated Behaviour in Anurans"

2. Mr. Biswajit Pal on the dissertation entitled "Spectroscopic Studies of Proteins and Azo Dyes: Protein Secondary Structure, Structural Changes in Dyes and Dye-Protein interactions"

**Faculty** :

| | | |
|---|---|---|
| Professor | : | R.P.Bajpai, M.Sc.(Alig.), Ph.D.(Glas.) |
| Readers | : | Vinod Singh, M.Sc.,Ph.D.(Kanpur), |
| | | Dr.Satish Kumar, M.Sc.(Ban.), Ph.D.(Utkal) |
| | | Dr.Debjani Roy, M.Sc.(Gauhati), Ph.D.(NEHU) |

**Seminar/Conferences** :

Dr.R.P.Bajpai, (I) attended the International Symposium on Biophotons in Germany from Aug. 22- 26, 1998 and presented a paper entitled "Advantages with the description of Biophotons as squeezed state of light". (ii) Attended the International Symposium on Food Quality in Germany from Aug. 30- 31, 1998 and presented a paper entitled "Possible roles of Biophotons in food industry".

Dr. Debjani Roy, (I) attended the International Conference on Biodiversity Conservation Prioritisation Programme at WWF-Nature India, New Delhi from April 27-28, 1998 and presented a paper entitled "Prioritisation of Biodiversity Rich Sites in Meghalaya". (ii) attended the workshop on Peoples' Participation in Biodiversity Conservation at Shillong from March 4-6,1999 and delivered a talk entitled "Measures for Biodiversity Conservation and Role of NGO's".

**Publications**:

Bajpai, R P, Kumar,S., and Sivadasan, V.A. (1998). Biophoton Emission in the Evolution of a Squeezed State of Frequency Stable Damped Oscillator, *Applied Mathematics and Computation*. 93,277-288.

Bajpai,R.P. Coherent Nature of Biophotons: Experimental Evidence and Phenomenological Model: In Chang , J.J., Fisch,J., Popp,F.A. Ed. *Biophotons. Kluwer Acad. Pub*. 1998. Pp323-339.

Roy, D., Sarma, A., Borah,B., and Bannette, B.W.(1998). Significance of Biometric ratios and Bioacoustics Call Analysis in Amphibian Systematics, *Journal of Bombay Natural History Society*. 95 (1),19-32.

**Research Programmes** :

On going projects include those supported by DST, SERC and WWF India.

**Other Activities**:

1. Dr. S. Kumar taught "Quantum Mechanics I" to M.Sc. (Physics) in the department of Physics.

2. Dr. Debjani Roy (a) visited Smithsonian Institute Washington D.C. and the Smithsonian Tropical Research Institute, Panama from August1 - 31, 1998, (b) visited the Department of Zoology, University of Texas at Austin from Sept 1-5, 1998, (c) visited the Department of Zoology, University of Oxford from Sept6-14, 1998, (d) Participated in the meeting on Biotechnology for Woman : A vision for 21st Century, New Delhi on November 11, 1998, (e) Participated in the meeting on Using Satellite Imagery Data for Biodiversity Maps at IIRS, Dehradun from Dec. 8-10, 1998.

3. Dr. R.P.Bajpai visited the International Institute of Biophysics, Neuss Germany from August15-October31, 1998.

4. Dr. Vinod Singh (a) visited Protein Core Laboratory, Department of Biological Sciences, Wichita State University, Wichita KS from April6 to June 20, 1998, (b) visited Protein Core Laboratory, Department of Biological Sciences, Wichita State University, Wichita KS from February1 to March 31, 1999.

## PACHHUNGA UNIVERSITY COLLEGE

Pachhunga University College the oldest College in Mizoram was founded in 1958 and is now 41 years old. It was initially a Private College and in 1967 was made a Government College under the Composite State of Assam. It remained a Government College till 1979. When it was taken over as a Constituent College of North - Eastern Hill University, with a view to making it a pace-setting institution in the region. This is the Premier College in the State of Mizoram offering Pass & Honours undergraduate courses in eighteen subject of Sciences, Arts and Commerce.

The College occupies a land area of 730 acres with trees of many species. It is ideally located about three kilometres from the heart of the Aizawl town, and well connected by the public transport system.

**Courses of Graduate Studies** :

The pattern of courses in this College falls mainly into three broad categories : Arts, Sciences and Commerce. The College ran +2 level Arts, Sciences and Commerce courses till 1996 and since they have been dropped, as the +2 level in the State is shifted to Higher Secondary Schools.

At present the College offers Undergraduate Courses in Art, Science and Commerce. Under the Arts Courses, subjects covered are Literature (English/Mizo), History and Philosophy. Under Social Sciences come Economics, Sociology, Political Sciences, Geography, Education and Psychology. Under the Science stream, Physics, Chemistry, Mathematics, Geology, Botany, Zoology and Statistics are offered. Commerce subjects include Banking, Computer Science, Accountancy and Economics. It is noteworthy to mention that Honours level courses are offered in all the existing subjects in Arts, Sciences and Commerce, only in this College in Mizoram. The subject combination in Arts is not restricted and students are given wide options. In the Science stream subject combinations are restricted due to obvious reasons.

**Enrolment of Students** :

During the last five years (1992-96) the total enrolment of students per year is over 1200. The number of students in Science stream per year on the average is over 600. The enrolment in the Arts stream is gradually increasing, although it is also being introduced in number of Colleges of Mizoram. The Commerce stream in the College attracts only a few students and the enrolment remains the same over the years.

Ninty five percent of the students belong to schedule tribe and are from backward, and border areas of the State. The ratio of female students to male students is 1:3.

The admission of students to the different courses is generally based on merit. The minimum requirement for admission to Honours course in the degree level is 45% marks in the Higher Secondary Examination in the subject concerned. Each Science Department can accommodate 20 students in Honours/Major courses.

**Performance of the Students** :

Pachhunga University College has contributed immensely for the development of Higher Education particularly the Science Education in Mizoram. Till recently the College as the only institute providing +2 level course in Science to the students, who after completing the course entered the professional education namely Engineering, Medicine and Agriculture, and Veterinary. The graduates passed out from this College in Arts, Sciences and Commerce are of high quality who joined Civil/Administrative services, Teaching and other jobs. This College is an important feeder institution for the Post-graduate programme in Shillong and Aizawl Campuses of the University.

Over the last few years the pass percentage of the students in the University Examination at the degree level Honours courses have been increasing.

# STUDENT SERVICES AND AMENITIES

## STUDENTS' WELFARE

The Office of the Dean of Students' Welfare continued to serve as the nodal agency for student services and their welfare. Though largely concerned with the Shillong Campus, the Office co-ordinated student activities in the Aizawl Campus through teachers given charge of these functions. Throughout the period under review Dr. B. Kharbuli, Reader in Zoology, held charge as Dean Students' Welfare. As in previous years a major concern of the office was management of the residence of the post-graduate students and research scholars, the co-ordination of the NEHU Students' Union, cultural activities and admission to the post graduate and research programmes of the University and the award of PG Scholarships and Students' Aid Fund.

**Scholarships/Aid Fund**

During the period under review 85 NEHU P.G scholarships including 22 to ST/SC students were awarded. Six economically backward students were awarded NEHU Students' Aid Fund.

**Residence in Hostels**

In the Shillong Campus, Total Hostel admission is as follows :

| | Gen | SC/ST | Total |
|---|---|---|---|
| Hostel (Male) | 09 | 61 | 70 |
| Hostel (Female) | 13 | 103 | 116 |

**Students' Activities** :

Election to the Executive Committee of the NEHU Students' Union for the year 1998-99 and 1999-2000 was conducted on schedule.

The Office co-ordinated the Study tour of eight Academic departments, namely: Political Science, Physics, Education, English, Biochemistry, Zoology, Geography and Anthropology.

In addition to the Annual University Week which included Sports and Games and cultural programmes, the office also organised the following :

R.Murry Memorial Inter Hostel T.T. Tournament.

*Silver Jubilee Celebration (1998-99)* :

The following were included in the University's Silver Jubilee Celebration.

*Cultural Programme* :

(i) Debate, Extempore, Quiz, Photo Exhibition and Flower Show.
(ii) Painting Exhibition cum three day Lecture series with slide show.
(iii)One Act Play, music, fancy dress competition and Beauty contest.

*Golden Jubilee of India's Freedom (1998-99)*

The programmes taken up for the celebration of the 50 Years of India's Independence.

(i) Debate on the Topic - "50 Years of freedom has transformed N.E. India".
(ii) Open Quiz by NEHUSU.
(iii) On the Spot Essay writing competition (Open) by NEHUSU.
(iv) Cultural programmes by Assamese, Mizo, Naga, Manipur and Meghalaya PGSU.
(v) Career Councelling Session by Meghalaya PGSU.
(vi) Panel discussions by NEHUSU.
(vii) On the Spot painting competition by NEHUSU.
(viii) Golden Jubilee Fresher Social.

## SPORTS DEPARTMENT

During the year under report the following tournaments were conducted by the Sports Department under the Director of the Sports Board.

**One Zone Tournaments** : Basketball (M&W), Football (W), Hockey (M&W), Boxing, Judo (M&W), Best Physique (M), Weight Lifting (M).

**Zonal Tournaments** : Football (M), Table Tennis (M&W), Badminton (M&W), Volleyball (M&W) and Chess (Combined).

All the tournaments were held in either Aizawl, Tura or Shillong as decided by the Sports Board. This was the first time that tournaments were held at Tura - these were Volleyball (M&W), Basketball (M&W) and Chess (Combined).

**Inter University Tournaments** : East Zone and A.I.U.

This year, the University sent out teams to participate in Inter-University Football (M) and Hockey (M) Tournaments.

**Other Activities** :

As part of the University's Silver Jubilee Celebrations, the Sports Department assisted in the conduct of the Tennis Ball Cricket Tournament at NEHU Bijni Complex, Shillong on 14th November, 1998. The participating teams were NEHU Non-Teaching Staff Association, NEHU, Students' Union and Bijni Boys. The tournament was won by the Bijni Boys.

## NATIONAL SERVICE SCHEME

During the period under report, the enrolment of volunteers in Meghalaya reached 8222, covering 24 colleges and a Post-Graduate Unit, with a total of 38 Programme Officers.

NSS programmes in Meghalaya were adversely affected due to non-receipt of funds from the State Government. Programmes were, hence, centrally organised by the NSS office as there were no funds to release to the colleges for conducting activities in their respective colleges. Some of these programmes were :

1. To mark the occasion of World Environment Day, a tree plantation programme was held on 5th June, 1998 at the approach area to the NEHU Permanent Campus, Umshing. About 100 volunteers of the P.G. Unit participated.

2. As part of the NEHU Silver Jubilee Celebrations, the NSS Cell held a photo exhibition of activities during 9th - 14th November, 1998 at Bijni Complex.

Following the decision taken in the 16th University Advisory Committee meeting, a Local Advisory Committee to facilitate quick and ready advice to the Programme Co-ordinator was constituted in May 1998.

According to reports received till March '99 in Mizoram enrolment of volunteers has reached 13966, covering 29 colleges with a total of 59 Programme Officers. Most of the Programmes conducted in Mizoram centred round the Special Camp Theme 'Youth for Sustainable Development' with emphasis on Watershed Development and Watershed Management. Some of the activities involved were repair of roads, construction of waiting sheds and public benches, construction water-points and watertanks, drainage systems and public urinals. Under regular activities, the units participated in various activities such as development of College Campus, beautification and cleanliness drives, awareness programmes relating to AIDS, drug abuse and other issues, blood donation Camps.

Dr. Elizabeth Laitflang, Reader in Political Science, was Co-ordinator till March 1999 when Dr. R.N. Sharan, Head, Department of Bio-Chemistry took over as Co-ordinator. Shri U.R. Dutta, Programme Officer, Tura Government College has been appointed as Deputy Programme Co-ordinator, NSS, NEHU for supervision of NSS programme at Tura.

# CENTRAL SERVICES

## COMPUTER CENTRE

The Centre provides computation facility to faculty members, research scholars and students of the University, and conducts training programmes in computer related subjects and develops software for NEHU administration.

At present, there is a VAX 3100-40 computer system with nine terminals, one network server and nineteen personal computers connected on a LAN. Utilisation of the computer system is on an average 8 hours per day. The total number of users per day is more than fifteen. Ninety percent of the machine time is devoted to research and teaching, while ten percent is devoted to other work.

**Head** : Dr. S.N. Rai.

**Faculty** :

| | | |
|---|---|---|
| Director | : | Dr. S.N. Rai, Ph.D (BHU) |
| Lecturer | : | Dr. T.K.Sinha, Ph.D (NEHU) |
| Sr.Systems Analyst | : | Mr. P.P.Dey, B.Tech (Warangal) |
| System Analysts | : | Mr. S.Ghosh, ME (Jadavpur) |
| | | Ms. B.Rynjah, B.Tech (Kakinada) |

**Meetings** :

A meeting of the Management Committee was held on 26th August 1998 and decided to start three Certificate Courses of 6 month duration. These courses will commence during 1999.

**Courses Conducted** :

Computer Courses for IGNOU Students & Training of NEHU personnel. Conducted a Computer Appreciation Course for two persons from USIC, NEHU.

**Other Activities :**

The Centre assisted in computerised word processing for the Annual Report of NEHU 1998-99 in English and Hindi, and provided technical support for running the E-Mail facility of the University.

Dr. T.K. Sinha taught courses to the M.Sc. students in the Department of Physics, NEHU.

P. P. Dey maintained the software for the Finance Department of the University.

The Centre procured computers, printers, UPS, software from M/s Siemens Nixdorf Information Limited and IBM Inc. With the grants received from U.G.C. for modernisation and strengthening of Computer Centre. The computers from M/s Siemens Nixdorf has been installed in a client server model.

## LIBRARY

The University library system comprises of Central Library at Shillong. Campus library at Aizawl and campus library at Tura. Besides there are six departmental libraries located in Sociology, Education, Physics, Mathematics and Chemistry and in the School of Life Sciences the University library has currently 1,66,660 books and 36,895 bound volumes of Journals. The library maintains a special collection on North East India and special efforts are made to acquire all books published in English.

During the last twenty five years, an amount of about Rs. 10 crore has been spent on the collection development in the libraries. Currently, the Central Library has an annual allocation of Rs. 60 lakhs for periodicals and Rs. 10 lakhs for books spread over all subjects. The library remains open from 9 a.m. to 6 p.m.

The various sections of the library has been connected with Computer network. The library has CDNET, FAX, E-Mail scanner, reprographic facility and audio visual equipment. The library has also created Computer database of books having 25,000 records.

The library also brought out 4 (four) exhaustive bibliographical works on the North-Eastern Region during 1979-1983 which have proved a great help to the research scholars and teachers. These are :

1. Social Science Research on North-East India : a select bibliography, 1979.
2. Nagaland, Arunachal Pradesh, and Mizoram : a select bibliography, 1979.

3. Meghalaya, Manipur, and Tripura : a select bibliography, 1983.
4. Dissertations on North-East India, 1983.

*Summary of Basic Data as on 31/3/99 (Shillong Campus only)*

| | |
|---|---|
| Registered users | 3122 |
| Foreign Journals subscribed | 276 |
| Indian journals subscribed | 215 |
| Average No. of readers consulting the library daily | 445 |
| Average No. of Books issued daily | 373 |
| Books added during 1998-99 | 1184 |
| Bound volumes of Journals added | 131 |
| Sitting arrangement for Library users | 225 |
| Annual Budgetary allocation for Periodicals | Rs. 60 lakhs |
| Annual non-plan allocation for Books | Rs. 10 lakhs |
| Plan allocation for Books and Journals | Nil |

**Acquisition of Books and Journals**

A tentative cumulative break up of the collection upto 31st March 1999 is as follows :

| Major Areas | Volumes |
|---|---|
| 1. Humanities and Social Sciences, Environmental Sciences | 105053 |
| 2. Physical Sciences | 15835 |
| 3. Life Sciences | 13130 |
| 4. Others | 28852 |
| **Total No. of Books** | 162870 |
| 5. Bound Periodicals | |
| Total (Books and Bound Periodicals) | 199765 |

**Publications**

Dr. Lalit P Pathak, University Librarian

*Books* :

*Sociological Concepts and Terminology*. New Delhi, Anmol Publishers, 1998 : 484 p.

*Journal Articles :*

"Periodical subscription in the universities : some unsolved problems". *Herald of Lib.Sci.* 36 (3-4), 1997: 191-94.

**Seminars/Conferences :**

*Attended*:

Dr.Lalit P Pathak, University Librarian, attended a Seminar on Scenario of Public Libraries in the 21st Century organised by the Rajaram Mohunroy Library Foundation at Guwahati on 23 and 24 April 1998, and also read a paper "Type of Literature Required for Encouraging A Library Movement in India".

## HEALTH CENTRE

The Health Centre which was established in 1979, now has two branches (I) at Bijni Complex and (ii) at Permanent Campus, at Shillong and also a branch at Aizawl Mizoram.

The Health Centre caters to the health needs of nearly ten thousand beneficiaries (students, staff and their dependants). And is manned by two Doctors each at Bijni Complex and the Permanent Campus, and one Doctor at the Aizawl Campus. Besides, there are other para-medical staff also attended to each of the Centres.

**Facilities :**

Medical Officers are available for regular consultation at fixed hours as well as for emergency consultations. The Health Centres stock all necessary medicines and dispenses them. Dressings, Injections and Minor surgical operations are done. The regular Immunisation facilities are available and the Health Centre participates in the National Pulse Polio Programme every year. The patients requiring in-patient treatment are referred to the Local Hospitals recognised by NEHU. As all specialities are not available in Shillong, some cases are referred to the Hospitals out side the state.The Health Centre maintain the list of voluntary donors from among the NEHU community.

**Future Plans :**

There is a proposal to appoint Lab-Technician for doing Pathological and Bio-Chemical investigations. A proposal has also been made by the Health Centres to computerise the services at Health Centres. When the computer is available latest medical information will be tapped through the Inter-Net. A Computerised E.C.G. machine procurement is under process. A thirty bedded Hospital has also been proposed which is expected to come into being at the Permanent Campus, Mawlai.

## UNIVERSITY PUBLICATIONS

NEHU Publication Cell was established in 1983 as an autonomous but constituent unit of the University to promote and undertake publications in various areas and for different target groups. It has mainly been concerned with publication of university level textbooks, supplementary reading materials and reference books, research works particular those relating to the north eastern region, and the NEHU Journal of Social Sciences and Humanities. It has also taken up publication of endowment lectures delivered in this university and Official publications like the Acts, Statutes and Ordinances, the Annual Report and the Newsletter. Books of a more general nature have also been published. Though most of these publications are in English the Cell has also undertaken publishing in local languages. Negotiation are on to tie up distribution of these publications with a reputed distributor. With the installation of a press which became functional from 1991-92 printing of several publications have been done in house. In addition much of the University's requirements of stationery and various types of forms are printed in the press. The Unit is able to advise and assist the University in all matters relating to printing and publishing.

The management of the Cell is vested in a seven member Governing Board with the Vice-Chancellor as its Chairman, and the Director as Member Secretary. To assist and advise on all matters relating to the Press is a Press Advisory Committee consisting of persons with technical expertise from government and local presses.

NEHU Publications is a largely self financing unit, and has developed out of a small investment made at the time of its establishment. Proposals are underway for the proper utilisation of the UGC's publication grant under its Unassignment Grant Scheme. The Press for which there is a separate Press Revolving Fund, is also largely self financing.

The Cell sold books worth Rs. 2,78,504/- during the year under report.

## REGIONAL SOPHISTICATED INSTRUMENTATION CENTRE

The Regional Sophisticated Instrumentation Centre at the North-Eastern Hill University, Shillong was inaugurated on the 7th July, 1984. It is sponsored by the Department of Science and Technology, Government of India with the objective of extending sophisticated analytical services to and cultivating an instrumentation culture in the scientific community of the region.

In its 15 years since its establishment, the RSIC has succeeded in making a mark for itself. The Centre has given analytical services to almost all the scientific institutions in the region. These include all Universities, a large number of colleges, almost all Central R&D organisations (ICAR, AMD, RRL.), private institutions (Tea Research, Meghalaya

Electronics Development Corporation), and many individuals. The Centre has also been receiving samples from other parts of the country, which include Orissa, North Bengal, Jammu, Kerala, Bangalore and Chennai.

The Centre has been offering repair and maintenance services on instrumentation to the Shillong-based Departments. These include NEHU (from lasers to Photoacoustics), Pasteur Institute (IR, UV), hospitals (X-ray machines, lyophilisers, ECG units). The Centre also offers compressor based services (ACs, dehumidifiers, refrigerators, cold rooms,) as well as computer software and hardware support.

Its Human Resources Development programme has included training workshops and placement opportunities in its different sections for up-to two months duration.

In order to offer value added service to the end user, the staff are encouraged to undertake research. In addition to design and fabrication of small accessories to increase the versatility of specific equipment, progress has been made in sample preparation techniques, at least one of which has been included in international protocols. A patent application has also been successfully filed by one of the staff members.

Aside from being awarded research grants from the DAE, DST and CSIR, staff members have also been selected for prestigious fellowships like Australian Development Corporation Scholarship (ADCOS), Better Opportunity for Young Scientists in Chosen Areas of Science and Technology (BOYSCAST), Fellow of the Royal Microscopical Society (U.K.), and Fellow of the Indian Chemical Society. Staff members have published over 90 (ninety) research papers in international journals.

Staff members have been recognised to review top scientific journals such as Nature (UK), Synth. React. Inorg. Met.- Org. Chem., (USA), and J. Microscopy (Oxford).

**Head** : Professor Darlando Khathing

**Date of Meetings** :

(a) Centre Management Committee : 5th September, 1998 (27th CMC)

(b) Steering Committee : 24th August, 1998 at DST, New Delhi

**Other Activities** :

Organising workshops/providing analytical services to the scientist/researchers/R&D organisations/Universities in the region. Providing Maintenance Services to Institutions within Shillong. This includes Research Instruments, Computers, Chilling Units, A/Cs Refrigerators, cold rooms.

| | | |
|---|---|---|
| Senior Scientific Officer | : | T. Chakraborty - M.Sc., Ph.D. (NEHU) |
| Scientific Officers | : | T.S. Basu Baul - M.Sc. (Jab.), Ph.D.(N.Bengal) |
| | | S. Dey, M.Sc., Ph.D. (NEHU) |
| | | T. Job, M.Sc. (NEHU), M.Tech (I.I.Sc.) |
| | | B. Dkhar, M.Sc. (NEHU) |

**Funds received from agencies other than NEHU/UGC** : DST 100%

**Workshop Organised:**

A) A 3-day regional workshop on Trace Element Analysis was organised from 19th to 21st November, 1998.

B) A 3-day regional workshop on FT-NMR was organised from 23rd to 25th November, 1998.

C) A 2-day regional workshop on Scanning Electron Microscopy was organised from 27th to 28th November, 1998.

**Publications** :

1. Basu Baul, T.S. and Tiekink, E.R.T.(1998). The crystal and molecular structures of R2Sn(O2CR1)Cl: R=Me, tBu, and Ph; -O2CR1 = o -(2-hydroxy-5-methylphenylazo) benzoate, Z. Kristallogr., 211, 62-68.

2. Basu Baul, S., Basu Baul, T.S., Rivarola, E., Dakternieks, D., Tiekink, E.R.T., Syng-ai, C. and Chatterjee, A. (1998). Synthesis and characterisation of diorganotin(IV) complexes of N-(2-pyridylmethylene)- arylamines and mutagenicity testing in vivo of Et2SnCl.L4[L4=N-(2-pyridylmethylene)-4-toluidine], *Appl. Organometal. Chem.*,12, 503-513.

3. Dakternieks, D., Basu Baul, T.S., Dutta, S. and Tiekink, E.R.T.(1998). Synthesis, characterisation, and X-ray structures of diphenyltin (IV) N-(2-hydroxyacetophenone) glycinate, its 1:1 adduct with triphenyl tin (IV) chloride, and related systems, *Organometallics,* 17, 3058-3062.

4. Willem, R, Verbruggen, I., Gielen, M., Biesemans, M., Mahieu, Basu Baul, T.S., and Tiekink, E.R.T. (1998). Correlating Mossbauer and solution and solid state $^{117}Sn$ NMR data with X-ray diffration structural data of triorganotin 2-[(E)-2-(2-hydroxy-5-methylphenyl)-1-diazenyl]benzoates, *Organometallics*, 17, 5756-5766.

5. Basu Baul, S., Basu Baul, T.S. and Tiekink, E.R.T. (1999). Crystal structure of dichlorodimethyl [N-(2- pyridylmethylene)-3-toluidine]tin, C15H18Cl2N2Sn, Z. *Kristallogr.*214, 207-208.

6. Basu Baul, S., Basu Baul, T.S. and Tiekink, E.R.T. (1999). Crystal structure of

dichlorodimethyl[N-(2- pyridylmethylene)-4-toluidine] tin, C15H18Cl2N2Sn, *Z. Kristallogr.* 214, 209-210.

7. Basu Baul, S., Basu Baul, T.S., and Tiekink, E.R.T. (1999). Crystal structure of dichlorodimethyl [N-(2- pyridylmethylene)-2-toluidine] tin, C15H18Cl2N2Sn, *Z.Kristallogr.*, 214, 211-212.

8. Basu Baul, S., Basu Baul, T.S., and Rivarola, E. (1999).Organotin (IV) complexes of aromatic acid hydroxide: Preparation and Spectroscopic studies, Synth. *React. Inorg. Met. Org. Chem.*, 29, 215-231.

9. Dey, S. (1998). A Scanning Electron Microscopic study on the body cuticle and associated sensilla of an ant (worker) Tetraponera rufonigra, *Proc. Natl. Acad. Sci.* 68(B),1.

10.Raghuvarman, A.R., Dey, S.,Henry R., and Hermann, Jr.(1998). Acidmucopolysaccharides in the body cuticle of the peripatus, Typhloperipatus weldoni in relation to the cutaneousmode of sperm transfer, *J. Endocrinol. Reprod.* 1,2: 82-83, JER.10.

11. Singh,R.K., Asthana, BP, Singh, P.R., Chakraborty, T. and Verma, A.L. (1998). Raman study of the vibrational relaxation of the (CN) stretching mode of acetonitrile in Binary liquid mixtures with hydrogen donor solvents, *J. Raman Spectrosc.* 29, 561-566.

**Other Activities**:

*Patent Filed*

The process of producing the compound "Diethyldichloro(N-(2-pyridylmethylene)-4-toluidine tin) (IV)" is patented (No. awaited) with the help of Patent Facilitating Cell of the Department of Science & Technology, Government of India, New Delhi. The patent is filed in the name of the Registrar, North-Eastern Hill University, Shillong and Dr. T.S. Basu Baul, RSIC, Shillong as the inventor.

Dr. T.S. Basu Baul has delivered lectures on the course entitled "Applications of Spectroscopic methods - Application to Inorg. Chemistry" for the III semester M.Sc. students of Chemistry Department (October -November 1, 1998).

## UNIVERSITY SCIENCE INSTRUMENTATION CENTRE

The establishment of University Science Instrumentation Centre was approved by the UGC Visiting Team for the Fifth Five Year Plan. USIC facilities were envisaged to cater to the needs of different Science Departments and University Departments for repair and maintenance of equipment, fabrication of different gadgets for scientific research, fabrication of

different items of wood and other items in the Mechanical Section. USIC has a large number of sophisticated machines in the Mechanical and Carpentry Sections which have been installed, and are working satisfactorily. Over the years, USIC has been undertaking repair and maintenance of different items and fabrication of many accessories required by user departments. The Centre is well equipped for undertaking various types of jobs in different Sections, and the facilities are being utilised by different Departments of the University. Based on the infrastructure and facilities available, USIC facilities have been upgraded to Level - II based on the recommendation of UGC Visiting Team during 1994-95.

**Head** : Professor A L Verma

**Courses Conducted :**

*Certificate Course* :

USIC, NEHU jointly with Western Regional Instrumentation Centre, Mumbai conducted a Certificate Course/Training Programme on "Maintenance of Instruments" from 28th October to 3rd November, 1998.

**Students Intake** :

| SC/ST/Gen./OBC | | | Male/Female | | Total |
|---|---|---|---|---|---|
| 8 | 15 | 5 | 27 | 1 | 28 |

**Other Activities :**

*Electronics Section* :

The Electronics Section had carried out repair, fabrication of miscellaneous electrical and electronics items for different Science Departments and Sections of the University.

*Glass Blowing Section* :

This Section undertook repair of glasswares and fabrication of glass items for different departments.

*Mechanical Section* :

The Mechanical Section of USIC had fabricated some scientific parts for Science Departments, repaired some microscopes, and fabricated miscellaneous steel items for different sections of the University.

*Carpentry Section* :

This Section had fabricated miscellaneous wooden items for different departments of the University including repairing works.

**Faculty** :

Professor : A.L.Verma, M.Sc., Ph.D.

**Other Activities :**

USIC had organised a USIC Day on 8.6.98 as part of the year-long celebration of the 50th Anniversary of the Independence of India. Participants from different departments of the University had attended where demonstrations of the different machines were also conducted.

# DEVELOPMENT ACTIVITIES

## PLANNING

After the IXth Plan proposal was finalised and submitted to the U.G.C. The Plan proposal was to be bifurcated again by 2/3 and 1/3 rd as required by the U.G.C. However, the calculation was done and submitted to the U.G.C. The Plan proposal has now been approved and received by the University.

The headwise allotment of fund is as below :

| | | |
|---|---|---|
| 1. | Spill Over | Rs. 332.97 Lakhs. |
| 2. | New Construction | Rs. 765.60 Lakhs. |
| 3. | Teaching and Non-teaching (Tech) Staff. | Rs. 370.00 Lakhs. |
| 4. | Equipment and Teaching Aids | Rs. 145.00 Lakhs |
| 5. | Library Books | Rs. 81.80 Lakhs. |
| 6. | N.A.A.C. | Rs. 5.00 Lakhs. |

Allocation against item No.6 above, has been made to open a Cell for the National Assessment and Acredition Council in the University. The notification to open the Cell is due.

Out of the approved Plan grant the following amounts have already been sanctioned during the year.

| | | |
|---|---|---|
| 1. | 25.00 Lakhs | — for infrastructure Development - Mizoram Campus. |
| 2. | 16.00 Lakhs | — for upgradation of Computer Centre. |
| 3. | 20.00 Lakhs | — for Social Science Complex (Spill over). |
| 4. | 15.00 Lakhs | — — Do — |
| 5. | 170.00 Lakhs | — for IXth Plan General Development. |
| 6. | 170.00 Lakhs | — — Do — |
| 7. | 12.80 Lakhs | — for Spill over item (Mizoram) |
| 8. | 10.41 Lakhs | — — Do — |
| 9. | 6.54 Lakhs | — — Do — |

The IXth Plan fund as above was received before the approval of the Plan and as such the said fund could not be utilised for the purpose. However the UGC's approval has since been received and initial action to utilise the fund has been started.

The University is going to open departments of M.C.A. and M.B.A. Correspondence with the MHRD and the UGC continued during the year for a separate grant for construction of Central School. But reply is still awaited.

## CAMPUS DEVELOPMENT DEPARTMENT

*Construction of Social Science Complex (Phase I) :*

This is a project under the 8th Plan. The U.G.C. had agreed for an amount of Rs.200 lakhs for the proposed construction.

The Rear Block of Economics Department is 62% completed. Corridor Block of Economics Department and Political Science is 63% completed. Construction of retaining wall, steps, drain adjacent to the Rear Block of Political Science completed. And the work for external services, like External Electrification and one building for substation is also completed.

*Construction of Non-Teaching Staff Quarters on Permanent Campus, NEHU, Shillong :*

(a) Construction of Staff Quarters Type II for Grade IV Employees.Two Units have been completed in all respects including electrification and water supply.
(b) Construction of Staff Quarters Type IV for Section Officers.One unit has been completed in all respects including Electrification and water supply.
(c) Construction of Staff Quarters Type V for Registrar's residence. The work is in progress and 70% completed.

*Construction of 150 Staff Quarters on Permanent Campus, NEHU, Shillong :*

(a) Construction of P type quarters = 5 Units are in progress. The work of 4 quarters 90% completed and remaining 1(0ne) quarter 40% completed.

*Construction of 200 seated hostel and 50 Staff Quarters on Permanent Campus, NEHU, Shillong.*

(a) The remaining 3 Nos Wardens' Quarters is in progress and is 55% completed.

*Construction of Growth Room for Mass Propagation of Pinus Kesiya* :

The proposal has come from the Principal Investigator of the Scheme for construction of a building for Growth Room for Mass Propagation of Pinus Kesiya.

Plans and estimates have been prepared and approved. Tenders have been called. But the work cannot be taken up in view of the strict ban from the Supreme Court on felling of pine trees. Alternative site has been suggested to take up the work.

The Department is under active preparation for plans and estimates for the construction of few projects under the 9th Plan on top priority.

(a) Administrative Building
(b) Central Library.

**Mizoram Campus**

Construction of Administrative building at Tanhril, Mizoram which has been allotted to Mizoram PWD as a deposit work is 45% completed. Construction of Post Graduate Class Room with Laboratory is 70% completed. Construction of Post Graduate Class Room without Laboratory is 95% completed as intimated by the Mizoram PWD.

*Pachhunga University College at Mizoram, Aizawl.*

Recently sanction has been received from the U.G.C. for the Administrative Building for an amount of Rs. 45,00,000. The work will be taken up shortly.

**Tura Campus**

Since the Government of Meghalaya has not allotted land for Tura Campus so far no construction work has yet taken up by the Campus Development Department.

## COLLEGE DEVELOPMENT COUNCIL

During the year 1998-99 College Development Council has tried its best to develop the colleges under the following heads :

a) Appointment of qualified teachers as per norms of the University.
b) To build the libraries in the colleges inducting required number of books. For this the University grants as per norms are obtained under 9th Plan Developmental Assistance. The CDC has physically verified the proper growth of the libraries in the permanently

affiliated colleges through such grants.

c) The CDC has instructed the science stream of the colleges to equip with required number of equipment for which quite sizeble amount are managed from the UGC grants under 9th Plan to the eligible colleges.

d) At the instance of the CDC quite few colleges have been able to arrange seminars and conferences with the UGC assistance.

e) The teachers of the eligible colleges are encouraged by the CDC to submit Minor Research Project and quite a few projects are approved by the UGC.

f) CDC held conference with the principals of the affiliated colleges and discussed various problems faced by them in developing higher education particularly in Meghalaya and Mizoram and suggested possible ways and means to solve this problem. It was stressed in the Principals' Conference that colleges are the eyes and ears of higher education managed by the University and is functioning as a conduit of higher education. It was also stress to manage quality education in the colleges so that the higher education as a whole in the region becomes qualitative.

UGC assistance under the College Science Improvement Programme (COSIP) was managed by CDC for St.Anthony's College, Shillong. Besides, a good amount of grant was managed for St.Mary's College, Shillong under Women's Hostel Scheme. Some more grants for the colleges (St.Edmund's College, Lady Keane College and St.Mary's College) are expected under the special scheme of the UGC for the colleges completing, 75 years in case of men's colleges and 50 years in case of women's colleges.

During this year four new colleges were affiliated and a few new courses including Honours were permitted in the colleges.

## EXAMINATION DEPARTMENT

With 67 Under-graduate Colleges in the States of Meghalaya and Mizoram, affiliated to NEHU, the enrolment of students has increased under the year of report. Likewise enrolment of students in the post-graduate level has also increased with the coming up of new departments. Besides there are eight (8) professional course colleges i.e. B.Ed and Law and also the North Eastern Regional Institute of Science and Technology at Arunachal Pradesh which are affiliated to NEHU.

Considering the size and numbers of students enrolled, it is needless to say that the Examination Department has played a commendable role in conducting the examinations for the Under-graduate as well as the Post-graduate levels and the professional courses according to the schedule notified by it. With the efforts and endeavour of the staff, the

results in all the examinations were declared in time inspite of many constraints. The analysis of the enrolment of students and the examinations conducted during the period under report is given at Annexure I and II.

**Annexure - I**

**Enrolment of Students**

| | | |
|---|---|---|
| (a) Under-graduate | - | 26,845 |
| (b) Post-graduate | - | 691 |
| (c) M.Phil | - | 39 |
| (d) Ph.D | - | 26 |

**Annexure - II**

**Pre-University (Repeaters)**

| | Appeared | Passed |
|---|---|---|
| (a) Arts | 1206 | 618 |
| (b) Commerce | 55 | 28 |
| (c) Science | 136 | 58 |
| | | |
| (a) B.A. (Hons - R) | 1600 | 1024 |
| (b) B.A. (Hons) | 3251 | 1682 |
| (c) B.A. (Gen. - R) | 1662 | 758 |
| (d) B.A. (Gen) | 1815 | 1064 |
| | | |
| (a) B.Com. (Hons - R) | 28 | 23 |
| (b) B.Com. (Hons) | 110 | 88 |
| (c) B.Com. (Gen - R) | 88 | 65 |
| (d) B.Com. (Gen) | 217 | 164 |
| | | |
| (a) B.Sc. (Hons - R) | 188 | 91 |
| (b) B.Sc. (Hons) | 375 | 278 |
| (c) B.Sc. (Gen - R) | 86 | 44 |
| | | |
| (a) B.Ed. | 371 | 290 |
| (b) LL.B. | 341 | 81 |
| (c) M.Sc. | 66 | 53 |
| (d) M.A. | 295 | 261 |
| (e) M.Lib.Sc. | 27 | 24 |
| (f) M.Com. | 28 | 28 |

Thirty three students have been awarded the Ph.D. Degree.

# UNIVERSITY FINANCE

## I. Non Plan Receeipt

| | | |
|---|---|---|
| 1. | Grant received from UGC | Rs. 26,40,90,000/- |
| 2. | Interest on investment | 6,14,538/- |
| 3. | Internal Income :- | |
| | (a) Academic Fees | 15,15,655/- |
| | (b) Examination | 86,32,524/- |
| | (c) Others | 5,55,175/- |
| | (d) University Hostel | 94,688/- |
| 4. | Income from Building | 1,98,517/- |
| 5. | Income from Land | 12,000/- |
| 6. | Any other Misc. Receipt | 18,46,832/- |
| 7. | Publication | 7,84,569/- |
| 8. | Leave Salary/Pension contribution | 3,35,991/- |
| | **TOTAL :** | **Rs. 27,86,80,489/-** |

## Expenditure

| | | | |
|---|---|---|---|
| 1. | Salaries for Teaching Staff | | Rs. 5,08,32,577/- |
| 2. | Salaries for Non Teaching Staff | | 9,62,77,057/- |
| 3. | 12-Common Services & General charges | | 3,71,19,891/- |
| 4. | Pension/Family Pension/DCRG | | 1,06,47,012/- |
| 5. | Bodies & Committees (TA/DA) | | 10,22,505/- |
| 6. | NEHU Fellowship | | 17,21,414/- |
| 7. | Other charges :- | | |
| | (a) Exam. Deptt. | Rs. 1,00,74,886/- | |
| | (b) Sports Deptt. | 7,03,477/- | |
| | (c) CDC | 8,806/- | |
| | (d) Publication Cell | 7,346/- | Rs. 1,29,80,752/- |
| | (e) DSW | 3,45,829/- | |
| | (f) Health Clinic | 18,40,408/- | |
| 8. | Office Equipment/Furniture, etc. :- | | |
| | (a) Other Cap. Items | Rs. 14,48,291/- | |
| | (b) Lib. Periodicals/ Books & Journals | 41,08,038/- | |
| | | 84,43,132/- | |
| | (c) Books | 28,86,803/- | |

9. Other charges for Schools :-

| | | | |
|---|---|---|---|
| (a) Sch. of Soc. Sc. | Rs. | 35,117/- | |
| (b) Sch. of Phy. Sc. | | 13,56,223/- | |
| (c) Sch. of Life Sc. | | 31,03,046/- | |
| (d) Sch. of Human & Envt. Sciences | | 4,32,425/- | Rs. 50,41,671/- |
| (e) Sch. of Humanities & Education | | 83,722/- | |
| (f) Sch. of Eco. Management & Infor. Sc. | | 31,138/- | |

10. Other Charges of Centres :-

| | | | |
|---|---|---|---|
| (a) Centre for Eco.Dev. | Rs. | 32,444/- | |
| (b) Centre for Comp. Science | | 19,802/- | |
| (c) Centre for Dist. Education | | 1,014/- | 54,257/- |
| (d) Centre for ISOSB | | 997/- | |

11. Other charges for Acad. & Admn. Supports :-

| | | | |
|---|---|---|---|
| (a) Univ. Library | Rs. | 2,25,404/- | |
| (b) Hostel for Men | | 17,811/- | |
| (c) Hostel for Women | | 19,633/- | 2,78,802/- |
| (d) Proctors' Office | | 15,954/- | |

| | | |
|---|---|---|
| 12. | Remittance to Mizoram Campus | Rs. 2,17,26,841/- |
| 13. | Remittance to P.U.C. | 3,09,70,000/- |
| 14. | Remittance to Tura Campus | 71,59,282/- |
| 15. | Remittance to Kendriya Vidyalaya | 40,00,000/- |

**TOTAL : Rs.28,82,75,193/-**

## II. Plan

### Receipt

| | | |
|---|---|---|
| (a) | Const. of Social Science Complex | Rs. 15,00,000/- |
| (b) | Development Grant (IX Plan) | 1,70,00,000/- |
| (c) | Modernisation/strengthening of the Computer Centre | 16,00,000/- |
| (d) | Silver Jubilee Celebration | 5,00,000/- |
| (e) | Interest on investment | 27,76,433/- |
| | **TOTAL :** | **Rs. 2,33,76,433/-** |

### Expenditure

| | | |
|---|---|---|
| (a) | Remittance to Mizoram Campus | Rs. 12,00,000/- |
| (b) | Remittance to PUC for Silver Jubilee | 1,00,000/- |
| (c) | Remittance to Miz. Campus for Silver Jubilee Celebration | 1,50,000/- |
| (d) | Const. Of 150 staff Quarters | 21,47,375/- |
| (e) | Const. of 200 seated Hostel & 50 staff Quarters | 10,85,829/- |
| (f) | Shifting of Chem.Lab/Furnishing of V.C's Residence/E-Mail, etc. | 4,01,609/- |
| (g) | Purchase of Books | 27,247/- |
| (h) | Const. of Social Science Complex | 33,29,843/- |
| (i) | U.S.I.C. | 3,27,752/- |
| (j) | Sports Complex | 13,570/- |
| (k) | Books & Journals | 46,972/- |
| (l) | Equipment Grant | 12,600/- |
| (m) | External Electrification | 4,659/- |
| | **TOTAL :** | **Rs. 88,47,456/-** |

*N.B. :- The figures are provisional as the accounts for 1998-99 is yet to be finalised.*

# SCHEDULED CASTES/TRIBES

Since the creation or establishment of the SC/ST Cell in the University in the last part of 1983, the Cell has involved itself in dealing with all matters pertaining to implementation of the Government of India orders, UGC guidelines and other instructions issued from time to time on the subject or reservation. Besides, co-ordination, evaluation and monitoring of such directives and programmes contained in such orders and guidelines. SC/ST Cell is fully and actively engaged in getting reservation policy of the Government implemented by the University throughout the year. The activities of the Cell for the period may be enumerated as under :-

| | |
|---|---|
| a) Admission to Post-Graduate Department | : 50% (for both SC/ST students) |
| b) Admission to NEHU Hostels | : 40% (for both SC/ST students) |
| c) Staff quarters (for both Teaching and Non-Teaching staff) | :15% for SC and 7.5% for ST |
| d) Direct recruitment to Posts in Group C & D | : 1% for SC and 44% for ST (for the State of Meghalaya) |
| e) Direct recruitment on all India basis Other than by Open Competition through UPSC or by means of competitive test held by any other authority | : 16.2/3% for SC. 7.5% for ST. |
| f) Appointment of Lecturers | : 15% for SC, 7.5% for ST |
| g) Promotion | : 15% for SC, 7.5% for ST |

(Government of India orders).

The University has constituted a Standing Committee for SCs/STs to strengthen implementation, evaluation and monitoring of reservation orders/guidelines as stated above. The Third Meeting of the Committee met on 25.5.98. The University also constituted the Advisory Committee to study orders on revised reservation rosters and to recommend compilation of such rosters in regard to switching over from Vacancy-Based Rosters to Post-Based Rosters. The Advisory Committee met on 28.10.98.

As regards reservation in respect of OBCs, the matter has been referred to the State Government of Meghalaya and Mizoram for lists of OBCs duly identified. In the meantime the Executive Council has passed a resolution to adopt percentage of reservation in respect of OBCs as fixed by the Government of India for recruitment to 'B' posts.

Further the Executive Council in its 100th meeting held on 16.3.99 has recommended inclusion of SC/ST representatives in the Selection Committee for teaching posts not below the rank of a Reader. The Cell has accordingly sent a copy to the concerned Departments of

the University for further action.

Besides the above, the Cell also provide statistical and other requisite information relating to appointments, admissions, concessions and relaxations and other facilities as admissible to the SCs/STs. Other matters, viz., furnishing of replies to various questionnaires called for the U.G.C/M.H.R.D. for the Parliamentary Committee on reservation for SCs/STs, the Prime Minister's Secretariat and other reports are also attended to by the SC/ST Cell.

# MEMBERS OF THE COURT

Chancellor (Ex-Officio)
Shri Krishna Kant
Chancellor
North-Eastern Hill University
C/o Secretariat of the Vice-President
of India, New Delhi-110011 (India)

Vice-Chancellor (Ex-Officio)
Professor B Pakem
North-Eastern Hill University
Shillong.

Pro-Vice-Chancellors (Ex-Officio)
i. Professor R Lalthantluanga
NEHU, Mizoram Campus, Aizawl
ii. Professor Milton S Sangma
NEHU, Tura Campus, Tura.
iii. Professor (Mrs) K S Lyngdoh
NEHU, Shillong.

Dean, Students Welfare (Ex-Officio)
Dean, Students Welfare
NEHU, Shillong.

Registrar (Ex-Officio)
Registrar, NEHU, Shillong.

Librarian (Ex-Officio)
Librarian, NEHU, Shillong

Proctor (Ex-Officio)
Chief Proctor, NEHU, Shillong.

Finance Officer
Finance Officer, NEHU, Shillong.

Deans of Schools (Ex-Officio)

(1) Dean, School of Life Sciences, NEHU, Shillong.
(2) Dean, School of Humanities, and Education, NEHU,Shillong.
(3) Dean, School of Physical Sciences, NEHU, Shillong.
(4) Dean, School of Social Sciences, NEHU, Shillong.
(5) Dean, School of Economics, Management & Information Sciences, NEHU, Shillong.
(6) Dean, School of Human and Environmental Sciences,NEHU, Shillong.

All Professors (Ex-Officio)

Department of Geography, NEHU, Shillong.
a. Professor R K Rai
b. Professor A C Mohapatra
c. Professor R Gopalakrishnan

Department of Forestry, NEHU, Mizoram Campus, Aizawl
a. Professor L K Jha

Department of Education, NEHU, Shillong.
a. Professor (Mrs) M S Padma
b. Professor P P Gokulanathan
c. Professor R Bhattacharjee
d. Professor K K Sharma

Unit for Adult & Continuing Education, NEHU, Shillong.
a. Professor M C Pandey

Department of English, NEHU, Shillong.
a. Professor E N Lall
b. Professor N Hasan
c. Professor R P Sharma
d. Professor (Mrs) T Ao

Department of Khasi, NEHU, Shillong.

a. Professor B L Swer

Unit for Creative Arts, NEHU, Shillong.
a. Professor (Mrs) H Giri

Department of Library and Information Sciences, NEHU, Shillong.
a. Professor J C Binwal

Department of Botany, NEHU, Shillong.
a. Professor R R Mishra
b. Professor R S Tripathi
c. Professor P Tandon
d. Professor Y S Chauhan
e. Professor H N Pandey

Department of Zoology, NEHU, Shillong.
a. Professor A R Varman
b. Professor (Mrs) V Tandon
c. Professor K Chatterjee
d. Professor B K Sharma

Department of Linguistics, NEHU, Shillong.
a. Professor (Miss) J War

Department of Education, NEHU, Mizoram Campus, Aizawl
a. Professor K P Nath

Department of Biochemistry, NEHU, Shillong.
a. Professor A N Rai

Department of Physics, NEHU, Shillong.
a. Professor A L Verma
b. Professor P Shukla
c. Professor Y S T Rao
d. Professor C S Shastry
e. Professor Kamal Kumar

Department of Chemistry, NEHU, Shillong.
a. Professor S N Bhat
b. Professor K Ismail
c. Professor M K Mahanti

Department of History, NEHU, Shillong.
a. Professor J P Singh
b. Professor Imdad Hussain

Department of Philosophy, NEHU, Shillong.
a. Professor N Malla
b. Professor (Mrs) S Miri

Department of Political Science, NEHU, Shillong.
a. Professor R L Walli
b. Professor A K Baruah
c. Professor (Mrs) Rupa Borgohain
d. Professor L S Gassah

Department of Economics, NEHU, Shillong.
a. Professor P M Passah
b. Professor S K Mishra
c. Professor M Lalwani

Department of Sociology, NEHU, Shillong.
a. Professor A C Sinha
b. Professor M N Karna
c. Professor C Nunthara

Department of Anthropology, NEHU, Shillong.
a. Professor T B Subba

Department of Public Administration, NEHU, Mizoram Campus, Aizawl
a. Professor R N Prasad

Department of Economics, NEHU, Mizoram Campus, Aizawl
a. Professor K K Upadhyaya
b. Professor Tlanglawma

Department of Mathematics, NEHU, Shillong.
a. Professor S S Khare
b. Professor M B Rege
c. Professor S K Srivastava
d. Professor H K Mukherjee

Unit for Science Education, NEHU, Shillong.

a. Professor Man Mohan Singh

Institute of Self Organising Systems and Bio Physics, NEHU, Shillong.

a. Professor R P Bajpai

Department of Commerce, NEHU, Shillong.

VACANT

Department of English, NEHU, Tura Campus

a. Professor S Ganguly

Unit for Distance Education, NEHU, Shillong.

a. Professor (Mrs) B. Lyndem Laso

Department of Garo, NEHU,
Tura Campus

a. Professor C R Marak

Head, Department who are not Professors

a. Head, Department of Psychology, NEHU, Mizoram Campus, Aizawl.
b. Head, Department of Public Administration, NEHU, Mizoram Campus, Aizawl.
c. Head, Department of Bio-Chemistry, NEHU, Shillong.
d. Incharge, Department of Commerce, NEHU, Shillong.
e. Head, Department of Education, NEHU, Mizoram Campus, Aizawl.
f. Head, Department of English, NEHU, Mizoram Campus, Aizawl.
g. Head, Department of Forestry, NEHU, Mizoram Campus, Aizawl.
h. Incharge, Department of Hindi, NEHU, Shillong.
i. Head, Department of Library and Information Sciences, NEHU, Shillong.
j. Head, Department of Khasi, NEHU, Shillong.

Two Readers who are not Head of Department and two Lecturers to be appointed by rotation in the manner prescribed by Ordinances.

Readers:

a. Dr. S C Daniel,
Department of Philosophy, NEHU, Shillong.
b. Dr R S Wangu,
Department of Education, NEHU, Mizoram Campus, Aizawl.

Lecturers:

a. Shri S K Ghosh,
Department of Economics, NEHU, Mizoram Campus, Aizawl.
b. Smt. N Syiem,
Department of English, NEHU, Shillong.

Seven Principals of Colleges in the State of Meghalaya and three from Mizoram.

Meghalaya:

1. Principal,
Meghalaya College Teacher of Education, Shillong.
2. Principal,
Tura Law College, Tura.
3. Principal,
Upper Shillong College,
Kynton Shillong - 793005
4. Principal,
Durama College, Tura - 794001
5. Principal,
Captain Williamson Memorial College, Baghmara, Garo Hills.
6. Principal,
B.Ed. College, Tura.
7. Principal,

Budha Bhanu Saraswati College,
Shillong.

Mizoram:

1. Principal,
   Hnahthial College, Hnahthial - 796571
2. Principal,
   Zirtiri Women's College,
   Aizawl - 796001
3. Principal,
   Hrangbana College, Hrangbana,
   Mizoram

Four teachers from affiliated Colleges of the States of Meghalaya & Mizoram.

VACANT

Four Lok Sabha members to be nominated by the Speaker and two Rajya Sabha members to be nominated by the Chairman of Rajya Sabha.

Lok Sabha:

1. Shri H. Lallungmuana,
   M.P. (Lok Sabha), 22 South Avenue,
   New Delhi - 110 011
2. Shri Sanat Kumar Mandal,
   M.P. (Lok Sabha),
   18 Mahadev Road, New Delhi - 110 001
3. Dr. Jayanta Rongpi,
   M.P. (Lok Sabha)
   30, Meena Bagh, New Delhi - 110 003
4. Shri K.A. Sangtam,
   C-7/7, Humaon road,
   New Delhi - 110 003

Rajya Sabha:

1. Mr. O.L. Nongtdu
   Riatsiamthiah, Shillong -1 and
   9 Aurangabad Road, New Delhi
2. Shri Nebam Rebia
   Sonki Park, Itanagar
   Arunachal Pradesh and
   66 South Avenue, New Delhi

Ten members representating learned Professions and special interests to be nominated by the Visitor.

VACANT

Four Students to be nominated by the Vice-Chancellor.

1. Ms. Angela Golda Rangad,
   Department of Anthropology,
   NEHU, Shillong.
2. Mr. Lalnunpuia
   Department of Physics
   NEHU, Shillong.
3. Mr. Manti P. Khonglah,
   Department of Sociology,
   NEHU, Shillong.
4. Ms Crystine Syngai,
   Department of Zoology
   NEHU, Shillong.

Not more than five persons to be nominated by the Visitor.

VACANT

Two persons nominated by the Chancellor.

1. Dr Charan D. Wadhwa,
   Research Professor
   Centre for Policy Research
   Dharma Marg, Chanakyapuri
   New Delhi-110 021
2. Professor Ramakant Angiras,
   Professor of Sanskrit (Rtd.),
   Panjab University, 1605, Sector - 44B,
   Chandigarh-16

Not more than two persons to be nominated by the Chief Rector

VACANT

Two members of Non-Teaching Staff nominated by the Vice-Chancellor.

1. Mr. W. Diengdoh,
   President,
   Non-Teaching Staff Association
   NEHU, Shillong.
2. Mr. I.S. Syiemlieh
   General Secretary
   Non-Teaching Staff Association
   NEHU, Shillong.

Two representatives from the State of Meghalaya and one from Mizoram nominated by the State Government.

1. Shri C. Wolflang, Director
   Higher and Technical Education/
   Director, Educational Research and
   Training, Meghalaya, Shillong.
2. Shri T. Mark, Director,
   Elementary & Mass Education,
   Shillong.

Members of the Executive Council who are otherwise of the Court.

1. Director of Higher & Technical
   Education, Govt. of Meghalaya,
   Shillong.
2. Director of Higher and Technical
   Education, Govt. of Mizoram,
   Aizawl
3. Principal,
   Sankardev College,
   Shillong - 793004
4. Professor H L Duorah,
   Vice-Chancellor,
   Gauhati University, Guwahati - 781 014
5. Professor D N Buragohain,
   Director,
   Indian Institute of Technology,
   Engineers Building, Pan Bazar,
   Guwahati - 781 001
6. Professor A C Bhagbati,
   National Highway (By Pass) No. 37,
   Guwahati - 781 014
7. Professor I S Khaidem,
   Uripok Sinam Leikai,
   Imphal - 795001
8. Principal,
   Saiha College, Saiha,
   Mizoram, Aizawl.

## MEMBERS OF THE EXECUTIVE COUNCIL

1. Prof. B. Pakem
   Vice-Chancellor,NEHU,Shillong.

2. Prof. R.Lalthantluanga
   Pro-Vice-Chancellor, NEHU,
   Mizoram Campus, Aizawl.

3. Prof. M.S. Sangma
   Pro-Vice-Chancellor, NEHU,
   Tura Campus, Tura.

4. Prof. (Mrs.) K.S. Lyngdoh
   Pro-Vice-Chancellor, NEHU,
   Shillong.

5. Prof. J.P. Singh
   Dean, School of Social Sciences,
   NEHU, Shillong.

6. Prof. A. Raghu Verman
   Dean, School of Life Sciences,
   NEHU, Shillong.

7. Prof. N. Malla
   Dean, School of Humanities and
   Education,
   NEHU, Shillong.

8. Prof. S.S. Khare
   Dean, School of Physical Sciences
   NEHU, Shillong.

9. Prof. A.L. Verma
   Department of Physics,
   NEHU, Shillong.

10. Dr. R.S. Wangu
    Department of Education
    NEHU, Mizoram Campus, Aizawl.

11. Principal
    Sankerdev College, Shillong 793004.

12. Principal
    Saiha College, Saiha,
    Mizoram, Aizawl.

13. Director
    Higher and Technical Education
    Government of Meghalaya
    Shillong 793001

14. Director
    Higher and Technical Education
    Government of Mizoram, Aizawl.

15. Prof. H.L. Duorah
    Vice-Chancellor, Gauhati University
    Guwahati 781014.

16. Prof. D.N. Buragohain
    Director, Indian Institute of
    Technology, Engineers Building,
    Pan Bazar, Guwahati 781001.

17. Prof. A.C. Bhagabati
    National Highway (Bypass) No. 37
    Guwahati 781014.

18. Prof. I.S. Khaidem
    Uripok Sinam Leikai
    Imphal 795001.

19. Registrar
    NEHU, Shillong.

20. Finance Officer
    NEHU, Shillong.

# MEMBERS OF THE ACADEMIC COUNCIL

Vice-Chancellor (Ex-Officio)
Prof. B. Pakem
Vice-Chancellor
North-Eastern Hill University.

Pro-Vice-Chancellors (Ex-Officio)

1. Prof. R.Lalthantluanga
   NEHU, Mizoram Campus, Aizawl.
2. Prof. M.S. Sangma
   NEHU, Tura Campus, Tura.
3. Prof.(Mrs) K. S. Lyngdoh
   NEHU, Shillong.

Deans of Schools (Ex-Officio)

1. Dean, School of Life Sciences
   NEHU, Shillong.
2. Dean, School of Humanities and Education, NEHU, Shillong.
3. Dean, School of Physical Sciences
   NEHU, Shillong.
4. Dean, School of Social Sciences
   NEHU, Shillong.
5. Dean, School of Economics Management & Information Sciences
   NEHU, Shillong.
6. Dean, School of Human and Environmental Sciences
   NEHU, Shillong.

Dean, Students' Welfare (Ex-Officio)
Dr. B. Kharbuli
Dean, Students' Welfare
NEHU, Shillong.

Head of Department and Centre of Studies (Ex-Officio)

1. Head, Department of History, NEHU, Shillong.
2. Head, Department of Public Admn.
   NEHU, Mizoram Campus, Aizawl.
3. Head, Department of Pol. Science
   NEHU, Shillong.
4. Head, Department of Sociology
   NEHU, Shillong.
5. Head, Department of Psychology
   NEHU, Aizawl.
6. Head, Department of Economics
   NEHU, Shillong.
7. In-charge, Department of Commerce
   NEHU, Shillong.
8. Head, Department of Library and Information Sciences
   NEHU, Shillong.
9. Head, Department of Economics
   NEHU, Aizawl.
10. Head, Department of Bio-Chemistry
    NEHU, Shillong.
11. Head, Department of Botany
    NEHU, Shillong.
12. Head, Department of Zoology
    NEHU, Shillong.
13. Head, Centre for Environmental Studies, NEHU, Shillong.
14. Head, Department of Anthropology
    NEHU, Shillong.
15. Head, Department of Geography
    NEHU, Shillong.
16. Head, Department of Chemistry
    NEHU, Shillong.
17. Head, Department of Mathematics
    NEHU, Shillong.
18. Head, Department of Physics
    NEHU, Shillong.
19. Head, Centre for Applied Statistics
    NEHU, Shillong.
20. Head, Department of English
    NEHU, Shillong.
21. Head, Department of Khasi
    NEHU, Shillong.
22. Head, Department of Linguistics
    NEHU, Shillong.

23. Head, Department of Philosophy
NEHU, Shillong.
24. Head, Department of Education
NEHU, Shillong.
25. Head, Department of English
NEHU, Aizawl.
26. Head, Department of Education
NEHU,, Aizawl.
27. Head, Centre for Supportive Learning
Systems, NEHU, Shillong.
28. Head, Centre for Cultural and
Creative Studies, NEHU, Shillong.
29. Head, Department of Forestry
NEHU, Aizawl.
30. Head, Computer Centre
NEHU, Shillong.
31. Director, Institute of Self Organising
Systems and Bio-Physics
NEHU, Shillong.
32. In-charge, Department of Hindi
NEHU, Shillong.
33. Head, Department of English
NEHU, Tura Campus, Tura.
34. Head, Department of Garo
NEHU, Tura Campus, Tura.

Librarian (Ex-Officio)
Librarian, NEHU, Shillong.

Principal of Colleges maintained by the University (Ex-Officio)
Principal, Pachhunga University College, Aizawl.

Professors :

Department of Political Science, NEHU, Shillong.
1. Prof. R.L. Walli.
2. Prof. A.K. Baruah.
3. Prof. (Mrs) Rupa Borgohain.
4. Prof. L.S. Gassah.

Department of Public Admn. Aizawl.
1. Prof. R.N. Prasad.

Department of Sociology, NEHU, Shillong.
1. Prof. A.C. Sinha.
2. Prof. M.N. Karna.
3. Prof. C. Nunthara.

Department of History, NEHU, Shillong.
1. Prof. J.P. Singh.
2. Prof. Imdad Hussain.
3. Prof. J.B. Bhattacharjee.

Department of Economics, NEHU, Shillong.
1. Prof. S.K. Mishra.
2. Prof. M. Lalwani.
3. Prof. P. Passah.

Department of Economics, NEHU, Aizawl.
1. Prof. K.K. Upadhyay.
2. Prof. Tlanglawma.

Department of Commerce, NEHU, Shillong.
V A C A N T

Department of Library and Information Sciences, NEHU, Shillong.
1. Prof. J. C. Binwal.

Centre for Supportive Learning Systems, NEHU, Shillong.
1. Prof. M.C. Pandey.

Department of Bio-Chemistry, NEHU, Shillong.
1. Prof. A.N. Rai.

Department of Botany, NEHU, Shillong.
1. Prof. R.R. Mishra.
2. Prof. R.S. Tripathi.
3. Prof. P. Tandon.
4. Prof. H.N. Pandey.

Department of Zoology, NEHU, Shillong.
1. Prof. A.R. Varman.
2. Prof. (Mrs) V. Tandon.

3. Prof. K. Chatterjee.
4. Prof. B.K. Sharma.

Department of Anthropology, NEHU, Shillong.
1. Prof. T.B. Subba.

Department of Geography, NEHU, Shillong.
1. Prof. R.K. Rai.
2. Prof. A.C. Mohapatra.
3. Prof. R. Gopalakrishnan.

Department of Chemistry, NEHU, Shillong.
1. Prof. S.N. Bhat.
2. Prof. M.K. Mahanti
3. Prof. K. Ismail

Department of Linguistics, NEHU, Shillong.
1. Prof. (Miss) J. War.

Department of Philosophy, NEHU, Shillong.
1. Prof. N. Malla.
2. Prof. (Mrs) Sujata Miri.

Department of English, NEHU, Tura.
1. Prof. S. Ganguly.

Department of Garo, NEHU, Tura.
1. Prof. C.R. Marak.

Department of Hindi, NEHU, Shillong.
1. Prof. L. H. Tiwari.

Department of Education, NEHU, Shillong.
1. Prof. (Mrs) K. S. Lyngdoh.
2. Prof. (Mrs) M.S. Padma.
3. Prof. P.P. Gokulanathan.
4. Prof. R. Bhattacharjee.
5. Prof. K.K. Sharma.

Department of Education, NEHU, Aizawl.
1. Prof. K.P. Nath.

Centre for Cultural and Ctrative Studies, NEHU, Shillong.
1. Prof. (Mrs) H. Giri.

Department of Forestry, NEHU, Aizawl.
1. Prof. L.K. Jha.

Department of English,NEHU,Shillong.
1. Prof. Noorul Hasan
2. Prof. Emmanuel N.Lall
3. Prof. (Mrs) T.Ao
4. Prof. R.P. Sharma

Department of Mathematics,NEHU, Shillong.
1. Prof. S.S. Khare
2. Prof. M.B. Rege
3. Prof. S.K. Srivastava
4. Prof. H.K. Mukherjee

Department of Physics,NEHU, Shillong.
1. Prof. A.L. Verma
2. Prof. C.S. Shastry
3. Prof. Y.S.T. Rao
4. Prof. P. Shukla
5. Prof. R. Singh
6. Prof. K. Kumar

Principals of Colleges admitted to the privileges of the University-three from Meghalaya and one from Mizoram to be nominated by the Vice-Chancellor by rotation according to seniority.
(Principals of Affiliated Colleges).

Mrs. J.E. Shullai,
Principal, College of Teacher Education, Shillong, Meghalaya.

Fr. Stephen Mavely,
Principal, St. Anthony's College, Shillong, Meghalaya.

Shri Debasish Choudhury,
Principal, Women's College, Shillong,

Meghalaya.
Five teachers of the University, other than those under (1) to (viii) above, by rotation according to seniority of which two shall be readers and three Lecturers.
(Representatives of teachers of the University).

Dr. R.S. Wangu,
Reader, Department of Education,
NEHU, Mizoram Campus, Aizawl.

V A C A N T.

Dr. S. Aravaudmudhan,
Lecturer, Department of Chemistry,
NEHU, Shillong.

Shri. P. Jhingan,
Lecturer, Literary & Cultural Studies,
NEHU, Shillong.

Shri. P.G. Momin,
Lecturer, Department of Geography,
NEHU, Shillong.

Teachers of the Colleges admitted to the privileges of the University-three from Meghalaya, and two from Mizoram elected from amongst themselves.

(Representatives of teachers of affiliated colleges submitted to the privileges of the University.

Shri Bikash Roy,
Lecturer, Shillong College, Shillong.

Sri S. Bhattacharjee,
Lecturer, St.Anthony's College, Shillong.

Mr. Thanglura,
Government Zirtiri College, Aizawl.

Sri Rualkhuma Hmar,
Hrangbana College, Aizawl.
Permanent Invitee (s)

Director, College Development Council,
NEHU, Shillong.

Controller of Examinations,
NEHU, Shillong.

Secretary (Ex-Officio)

Registrar,
NEHU, Shillong.

# OFFICERS

| | |
|---|---|
| **Registrar** | : Dr A Patton |
| **Controller of Examinations** | : Dr A Patton |
| **Finance Officer** | : L Nampui, IRS |
| **Librarian** | : Dr L P Pathak |
| **Technical Consultant** | : B Kharmalki |

## Deputy Registrar :

| | |
|---|---|
| *Planning & Legal Cells* | : W M R Wallang |
| *Conference, Report Cell & Hindi Cell* | : J M S Khongwir |
| *Establishment II* | : B Bareh |
| *Finance* | : K M Deb |
| *Examinations* | : R K Tiwari |
| *Administration* | : L M K Lyngrah |
| *Establishment I* | : L Marbaniang |

## Assistant Registrars:

| | |
|---|---|
| *Transport & Administration* | : A Dkhar |
| *Examinations* | : L Zadeng & L D Nalle |
| *Finance* | : R C Chyne |
| *Establishment I & CRC* | : C D Rynjah |
| *Estate* | : K Nengnong |
| *Planning* | : PKD Purkayastha |
| *Printing and Stationery* | : N Purkayastha |
| *Establishment II* | : E P Philemon |

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| **Deputy Librarian** | : Icylda Majaw |
| **Dean Student's Welfare** | : B Kharbuli |
| **Executive Engineer** | : N P Garg |
| **Assistant Librarians** | : K K Das |
| | : M V Soanes |
| | : R Mishra |
| | : P K Mitra |
| **Assistant Director of Sports** | : P Blah |
| **Director, College Development Council** | : Professor B K Dev Sarma |
| **Director Computer Centre** | : Dr S N Rai |
| **Head, Regional Sophisticated Instrumentation Centre** | : Dr D T Khathing |
| **Head, University Science Instrumentation Centre** | : Professor A L Verma |

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| **Teacher in-charge Sports** | : Prof. E D Thomas |
| **Director Publications** | : Professor Imdad Hussain |
| **Co-ordinator, NSS** | : Dr Elizabeth Laitflang |
| **Chief Proctor** | : Dr S K Mishra |
| **Proctor (Campus)** | : Dr K Ismail |
| **Proctor (City)** | : Dr B Myrboh |
| **Vigilance Officer** | : J M S Khongwir |
| **Grievance Officer** | : Dr D R Syiemlieh |
| **Audit Officer** | : N Purkayastha |
| **Sr. Medical Officers** | : Dr V S V Prasad |
| | : Dr (Mrs) M Synrem |
| | : Dr I Hussain |
| **Medical Officer** | : Dr (Mrs) M Marwein |

## Mizoram Campus

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|---|---|
| **Deputy Registrar** | : L H Sailo |
| **Assistant Registrar** | : S. Sailo |
| **Assistant Director (Sports)** | : Dr F Lawnkima |
| **Assistant Librarian** | : K M Zakhuma |
| | : Lalriamsiami |
| **Senior Medical Officer** | : Dr D K Bhali |

## Tura Campus

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|---|---|
| **Deputy Registrar** | : J Nayak |
| **Assistant Librarian** | : A K Kundu |

## AFFILIATED COLLEGES

| Name of College | Principal | Year of Establishment | Level to which Affiliated |
|---|---|---|---|
| **Meghalaya** | | | |
| *1. St.Edmund's College, Shillong-793003. | Bro.E V Miranda | 1924 | Degree (Arts, Sci., & Commerce) |
| *2. St. Anthony College, Shillong - 3 | Fr.Stephen Mavely | 1934 | Degree (Arts, Science & Commerce) |
| *3. Lady Keane Girl's College, Shillong-1 | Ms. A M Marbaniang | 1935 | Degree (Arts & Science) |
| *4. St.Mary's College, Shillong-3 | Sr. Philomina Kharakor | 1937 | Degree (Arts & Science) |
| *5. Union Christian College, Barapani | Dr. R.N. Musahari | 1952 | Degree (Arts & Science) |
| *6. Shillong College, Shillong-793003 | Mrs P.R. Lyngdoh | 1956 | Degree (Arts, Science & Commerce) |
| *7. Tura Govt.College, Tura-794001 | Shri L D Shira | 1958 | -do- |
| *8. Sankardev College, Shillong-793004 | Smt. D Dkhar | 1962 | Degree (Arts & Science) |
| *9. Synod College, Shillong-793002 | Shri A Basaiawmoit | 1965 | -do- |
| *10.Kiang Nongbah Govt. College, Jowai-793150 | Dr. H L Deb Roy | 1967 | -do- |
| *11.Mendipathar College, Mendipathar-794112 | Shri B B Chakraborty | 1971 | Degree (Arts) |

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|---|---|---|---|
| *12.Seng Khasi College, Shillong-793002 | Ms. B.Tymthai | 1973 | Degree (Arts) |
| 13.Nongstoin College, Nongstoin-793119 | Sri B.K. Laitflang | 1986 | -do- |
| 14.Acheng Rangmanpa College, Mahendraganj 793119 | Sh.Dominic Ch. Marak | 1986 | P.U.(Arts & Science) |
| 15.Raid Laban College, Shillong-793004 | Sri S.Nongbri | 1985 | Degree (Arts, Science & Commerce) |
| 16.Ri Bhoi College, Nongpoh. | Sri R.I.Marsharing | 1986 | Degree (Arts) |
| 17.Sngap Singh Memorial College,Mawkyrwat-793114 | Sri S.B.Sohmat | 1986 | Degree (Arts) |
| 18.Shillong Commerce College, Shillong - 3 | Sri R Kharpor | 1987 | Degree (Commerce) |
| 19.Sohra College, Cherrapunjee - 793180 | Sri L Marbaniang | 1986 | Degree (Arts) |
| 20.Don Bosco College, Tura-794001 | Fr. V A Cyriac | 1987 | Degree (Arts & Science) |
| 21.Tirot Sing M.College, Mairang-793210 | Shri Kan Singh Marwein | 1967 | Degree (Arts) |
| *22.Women's College, Shillong-793003 | Sri D Choudhury | 1987 | -do- |
| 23.Tikrikilla College, Tikrikilla,W.Garo Hills | Sh. Nanda B Gaire (actg) | 1988 | -do- |
| 24.Kazi & Zaman College, New Bhaitbari,W.Garo Hills | Sh. Khairul Islam Mondal | 1992 | -do- |
| 25.Nongtalang College, Nongtalang,Jaintia Hills | Sri S.Bhattacharya | 1992 | -do- |
| 26. Jaintia Eastern College, Khliehriat. | Sri Phervision Nongtdu | 1992 | -do- |

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|---|---|---|---|
| 27.Upper Shillong College, Sanshnong High School, Shillong-793005. | Sri Oris Lyngdoh | 1992 | Degree (Arts) |
| 28.Durama College, Tura-794001. | Sri I.K.Sangma | 1993 | -do- |
| 29.Budha Bhanu Saraswati College, Mawprem, Shillong—2. | Dr. N.N.Bora | 1994 | -do- |
| 30.Morning Star College, Nongthymmai - 14 | Dr. S. Myrthong | 1994 | -do- |
| 31.Capt.Williamson M.College,Baghmara, W.Garo Hills. | Sh.Bonberd Sangma | 1993 | -do- |
| 32.Umshyrpi College, Laban,Shillong-4 | Dr. Rina Dhar | 1995 | Degree (Arts) |
| 33.Greater Mawlai College, Shillong. | Sri S Tariang | 1993 | -do- |
| 34.NERIST, Itanagar, Arunachal Pradesh | Prof. U.K. Sharma | 1990 | B. Tech. |
| 35.Bissau College, Shillong. | Dr. (Ms) S. Bawri | 1996 | Degree (Arts & Commerce) |
| 36. Thomas Joanes Synod College, Jaintia Hills | Sh.B N Lamare | 1998 | Degree (Arts) |
| 37. Mawsynram Border Area College, Mawsynram. Meghalaya | Sh. Glenn Joseph Nougkhlaw | 1998 | -do- |
| 38. St.Dominic College Pokhseh, Shillong-14 | Mrs J E Street | 1998 | -do- |
| 39. Nabon Synod College Jowai - 2 | Mes. S Sohkhlet | 1998 | -do- |
| 40. Post Graduate Trg. College, Shillong-793003. | Mrs. J.E.Shullai | 1964 | B.Ed. |

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| 41. Shillong Law College, Shillong-793003 | Sri H.Ahmed | 1964 | LL.B. |
| 42. Tura Law College, Tura-794001. | Sri L.Momin | 1975 | LL.B. |
| 43. B.Ed.College, Tura | Smt. C W Momin | 1993 | B.Ed. |
| 44. Khadardaloi Law College, Jowai | Shri C Kharkongor | 1986 | LL.B |

**Mizoram**

| | | | |
|---|---|---|---|
| **1.Pachhunga Univ. College, Aizawl-796001 | Dr. C Tlanthianga | 1968 | Degree (Arts, Science & Commerce) |
| *2.. Lunglei Govt.College, Lunglei-796701. | Sri J.S. Pandey | 1964 | -do- |
| *3. Serchhip College, Serchhip-796321 | Sri L.T. Muana | 1973 | -do- |
| *4.Champhai Govt.College, Champhai-796321. | Sri V Suakbuanga | 1974 | -do-- |
| *5. Aizawl Govt.College, Aizawl-796001 | Sri Lalruanga | 1975 | Degree (Arts) |
| *6. Kolasib College, Kolasib. | Sri T.B.C.Liandala | 1979 | -do- |
| *7. Saiha College, Saiha-796901 | Sri C.Zohupa | 1980 | -do- |
| 8. Hnahthial College, Hnahthial-796571 | Sri Sangthanga | 1979 | -do- |
| *9. Zirtiri Women's College,Aizawl-1 | Dr.Lalrimawia | 1980 | Degree (Arts & Home Science) |
| *10. Hrangbana College, Hrangbana, Aizawl | Sri R.Zatlaia | 1981 | -do- |

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|---|---|---|---|
| 11. Lawngtlai College, Lawngtlai-796891. | Sri T.Thangthuana | 1981 | Degree (Arts) |
| 12. J.Buana College, Lunglei. | Sri V T Zuala | 1983 | -do- |
| 13. Aizawl West College, Aizawl-796001 | Sri Vanlalkeuva | 1992 | -do- |
| 14. Saitual College, Saitual, Mizoram. | Sri Lalsiamhnuma | 1992 | -do- |
| 15. Mamit College, Mamit Mizoram. | Sri Y.N.C.Singh | 1992 | -do- |
| 16. Zawlnuam College, Zawlnuam, Mizoram. | Sr. Robert Laltinchhawna | 19923 | -do- |
| 17. Khawzawl College, Khawzawl. | Sri R.Lalrinltuanga | 1992 | -do- |
| 18. Aizawl North College, Aizawl-796001 | Mr.Lalrinawma | 1990 | -do- |
| 19. Lalmingthanga Memorial College, Durtlang, Mizoram | Sri H Vara | 1993 | -do- |
| 20. Bungkawn College, Bungkawn-796007 | Dr.H.Vanlalhluna | 1993 | Degree (Arts) |
| 21. North-Eastern College, Khawdungsei, Mizoram | Sri Modhu Singh | 1994 | -do- |
| 22. Johnson College Khatla, Aizawl-796001 | Prof. Darchhawna | 1996 | -do- |
| 23. T. Romana College Aizawl 796007 | Dr. J V Hluna | 1996 | -do- |
| 24. Bualpui College, Bualpui (NG) Chimtuipui Mizoram. | Shri L G Singh | 1993 | -do- |

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| 25. Regional Para Medical & Nursing Training Institute, Mizoram. | Dr B Thangdailova | 1997 | B.Sc (Nursing) |
| 26. Lunglei Morning College, Lunglei, Mizoram. | Sri R Roliana | 1996 | Degree (Arts) |
| 27. College of Teachers Education, Aizawl. | Dr. Varparhi Khiangte | 1975 | B.Ed. |
| 28. Aizawl Law College, Aizawl-796001 | Dr H C Thanhranga | 1993 | LL.B. |
| 29. Laldingpuia Law College, Aizawl | Shri L.H. Lianhrima | 1996 | LL.B |

**** Permanent Affiliated College.***
***** Constituent College.***

# EDITORIAL BOARD


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DEPARTMENT OF BIOCHEMISTRY, NORTH EASTERN HILL UNIVERSITY, SHILLONG, INDIA
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