

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 and nine personal computers. 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 (Ban.)

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)

Courses Conducted :

Computer Courses for IGNOU Students & Training of NEHU personnel. Conducted a Computer Appreciation Course for the Department of Linguistics.

Other Activities :

The Centre assisted in computerised word processing for the Annual Report of NEHU 1997-98 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 received grants from U.G.C. for modernisation and strengthening of Computer Centre.

LIBRARY

The Library at the Shillong Campus consists of the Central Library and six departmental libraries.

No. of registered users (in Shillong Campus only)	3103
No. of foreign journals subscribed	316
No. of Indian journals subscribed	366
Average No. of readers consulting the library daily	428
Average No. of books issued daily	347
Sitting arrangement for Library users	225
No. of books added during 1997-98	8950
No. of bound volumes of journals added	736
Total No. of Books	1,61,737
Total No. of Books & Bound Periodical	1,98,501

To cater to the needs of specific requirements of the students and research scholars, some special collections have been created. Some of these are : 1. Government publications and reports; 2. Census of India starting with 1872; 3. Text Book collection; 4. Books on North East India; 5. Theses; 6. Some collections on Indology. Inter-library loan facility is provided. COPSAT service of NCSI, Bangalore, is also being subscribed.

Hardware and Soft-ware for computerization have been installed. LIBSYS has also been installed. A basic data-base of about 25,000 books acquired during the last 6 years has been prepared. All sections of the library have been networked and a computer and modem also provided to about 25 teaching departments. Use of data base for issue and return of books, on-line access to the data-base, and conversion of the retrospective stock of almost 1,60,000 is to be taken up. A Database of the theses and dissertations in the library and books on N.E. India is already existing. About 25 databases in the form of CD's is also being used by the research scholars. The following facilities are being provided from the Computer Section of the Library :

- a. Searching of various CD databases on different subjects with the help of CD-NET
- b. Copying of the information from the databases on specific research topics
- c. Print-out facilities from the CD databases
- d. Providing the list of Books on North-East India from the LC databases
- e. Providing the list of dissertations on various topics from the Dissertation Abstract International on CD
- f. Bibliographical details about latest books from the OCLC data base
- g. Searching books on a research topic from the Library database of almost 25,000 books and thesis available on CDS/ISIS
- h. Information on latest journals in a particular field from the ULRICH Plus CD

These facilities are not only used by students, research scholars, Teaching staff members, affiliated college teachers of the North-Eastern Hill University, but research scholars from all other Universities and research institutions in the north-eastern region.

Seminars/Conferences Attended : Dr.Lalit P.Pathak attended (i) USIS organized Seminar on *Exploring the internet: recreating information services with new technology* at Calcutta on 21st February 1998.(ii) INFLIBNER organized CALIBER 1998, convention on *Information Management in Academic and Research Libraries* at Bhubaneshwar, on 3rd-4th March 1998; and (iii) Annual Convention of Society for Information Science, on *Virtual Libraries : Internet based Library and Information Services*, at University of Hyderabad, on 12-14 March 1998.

Dr.A.K. Kundu Attended (i) National Seminar on : Educational (University Education) Accountability and Development, Nagaland University, Kohima, 12-13 June, and presented a paper entitled "Accountability of Libraries in Higher Education". (ii) Chaired the 3rd working session of the National Seminar on Educational Accountability and Development at Nagaland University, Kohima on 13.6.96. (iii) Shri S.P.Mukherjee, Assistant Librarian (Rtd.) and Shri A.K. Mondal, Professional Assistant were co-authors for the paper presented by A.K.Kundu at the National Seminar on Educational Accountability held at Nagaland University, Kohima, 12-13, June, 1997.

Publications

Dr. Lalit P. Pathak *Population Studies:Development, Structure and Information System*. Jaipur, Rawat Publishers, Feb.1998: 400 p.

Campus Libraries

The Library at Aizawl, Mizoram Campus is also a part of the University Library. Another library at Aizawl, is in the Pachhunga(University) College. A Campus Library at Tura has been opened in 1997.

HEALTH CENTRE

All health facilities are provided through the Health Centres. The Shillong Health Centre has two branches; the main centre established in 1979 is located in the Bijni Complex and the other, a Sub-Centre, opened in 1990, is located in the Permanent Campus to cater to the resident University community. The Aizawl Health Centre was opened in 1984.

The Shillong Health Centre is manned by two Senior Medical Officers and the Sub-Centre by one Senior Medical Officer and one Medical officer. In Aizawl, also there is one Senior Medical Officer.

These Centre are supported by Para-Medical Staff of Nurses, Pharmacists and attendants. A proposal for a 30 seater hospital at Shillong have been made in the IX Plan.

Apart from the facilities provided at the health centres, the Centre at Shillong conducted a Blood Grouping and Donor listing programme during the year. The Centre also coordinated with the State Government in various national programmes such as measles vaccine campaign and pulse polio immunization.

UNIVERSITY PUBLICATIONS

The work of NEHU Publications may be conveniently grouped into (a) Publications and (b) Printing. The first relates mainly to the publications of monographs, lectures delivered in the University, reprint of new editions and important rare books and textbooks. Of these the following were taken up during the year under report.

1. *The Celebrated Garden* by Dr. F. A. Qadri
2. *The Sacred Science* by Prof. B. N. Saraswati
3. *The History and Culture of the Khasis (in Khasi)* by Prof. Helen Giri

The first is being printed by the NEHU Press. All these are expected to be released in the first half of 1998-99. In addition to these, printing of the following have been completed:

1. *Assam in the Days of the Company* by H.K. Barpujari
 2. *A Liberating Force and a Friend* by Daniel O'Connor
 3. *Thomas Hardy-A Ranging Vision* by Noorul Hasan
 4. *Anecdotes of an Indian Life* by Robert Lyndsay
- (edited by David R. Syiemlieh)

Among textbooks, the **Elements of Political Science** and **Dr Jekyll and Mr Hyde**, both prescribed for pre-university/Class XI and XII course were reprinted by the NEHU Press.

Further the printing of Volume II of the University Calendar was also taken up by the NEHU Publications.

Sales during the year relating to these categories of books are as follows:

1. Textbooks	Rs. 3,47,341/-
2. General Books	Rs. 54,765/-
3. Royalty received from Publications under subsidy scheme	Rs. 4,826.50

The NEHU Press also undertook printing of various stationery items, answer scripts and other requirements of the Examination Department. The publications of the revised Journal of Social Sciences and Humanities is also being taken up. As in the past year, an important printing job was the University's Annual Report. The total volume of work undertaken amounted to Rs. 17,13,898.00.

During the year, Professor Imdad Hussain was Director of NEHU Publications and Professor T.B. Subba joined as Editor.

REGIONAL SOPHISTICATED INSTRUMENTATION CENTRE

The RSIC-NEHU was established by the Department of Science & Technology, Government of India, to cater to the analytical requirements of the scientific community in the North-Eastern region. In addition to analytical services, the RSIC-Shillong conducts training workshops, offers limited repair and maintenance services in computer, instrumentation and compressor based systems (ACs, refrigerators, cold rooms).

Head : Professor Darlando Khathing.

Scientific Officers :

Sr.Scientific Officer : Taposh Chakraborty, M.Sc/Ph.D (NEHU)

Scientific Officers : T.S.Basu Baul, M.Sc(Jab), Ph.D.(N.Bengal)
Sudip Dey, M.Sc/Ph.D (NEHU)
Thomas Job, M.Sc.(NEHU), M.Tech. (I.I.Sc.)
Begonia Dkhar, M.Sc. (NEHU)

Funds received from agencies other than NEHU/UGC, if any : DST 100%

Seminars/Conferences :

Attended :

D.T.Khathing attended the seminar on "Development of Science and Technology in the last 50 years in India" held at Shillong College, Shillong (October 4, 1997).

D.T.Khathing, P.S.Dkhar and S.Changkija participated in the workshop on "Agriculture, Biodiversity and Climatic Change" held at NEHU, Shillong (March 9-10, 1998).

S.Dey, presented a paper on "Reversing the toxic effect of environmental pollutants in fish tissue by monitoring water pH" at the II Congress of Federation Indian Physiological Societies held at the Department of Zoology, Sri Venkateswara University, Tirupati (September 15-17, 1997).

Organised :
A 6-day regional workshop on Trace Element was organised from October 23-28, 1997.

A 4-day regional workshop on UV-vis-NIR was organised from November 10-13, 1997.

One day seminar on Internet Connectivity and Services was organised on December 16, 1997.

Publications :

Basu Baul, T.S. and Tiekink, E.R.T. "Crystal structure of trimethyltin 5-(2'-carboxyphenylazo) salicylaldehyde, $C_{17}H_{18}N_2O_4Sn$ " Z. Kristallogr. 212, 363-364 (1997).

Basu Baul, S., Basu Baul, T.S. and Tiekink, E.R.T. "Crystal structure of (N-o-tolylpyridine-2-carbaldimine) trichlorovinyltin (IV), $C_{15}H_{15}Cl_3N_2Sn$ " Z. Kristallogr. 213, 51-52 (1998).

Dey, S. "Possible involvements of surface ultrastructural features in utilizing the semiconductive properties of pigments in chemically coloured insect cuticle" Curr. Sci. 72, 366-367 (1997).

---- "Possible occurrence of a Fabry-Perot type of interference filter in a fish eye lens" Curr. Sci., 72, 785-787 (1997).

Dey, S., Bhattacharjee, C., Arjun, J., Das, M. and Choudhury, S. "Abnormalities in surface ultrastructural features and infrared absorption characteristics of the lens of albino mice born to females receiving oral doses of lead during pregnancy" Biomedical Letters, 55, 75-82 (1997).

Dey, S., Hooroo, R.N.K., and Bhattacharjee, C. "Electron Microscopy and Spectroscopical studies on the coloured patches on the wing of a butterfly, Graphium sarpedon with reference to their photobiological and electrical properties" Pigm. Cell. Res., 11, 1-11 (1998).

Dey, S., Hooroo, R.N.K., Begum, A. and Goswami, U.C. "Unique ultrastructural features of photoreceptor cells and their functional significance in the retina of the frog, Rana limnocharis (Weigmann). Curr. Sci. 74, 502-504 (1998).

Other Activities : Dr. Basu Baul was co-supervisor of Ph.D. students of NEHU and other Universities.

Visiting Fellows :

Dr. R.K. Bholia, Department of Zoology, Gauhati University, Guwahati (DST-SERC Visiting Fellow, September 1-December 31, 1997) visited this Centre to carry out R&D work.

UNIVERSITY SCIENCE INSTRUMENTATION CENTRE

The Centre started functioning as USIC Level-I from 1977. Based on the recommendations of an expert team from UGC, for upgradation of USIC to Level-II, a non-recurring grant of Rs. 3.5 lakhs to equip the Electronics and Glass Blowing Sections, and an annual recurring grant of Rs. 0.7 lakh for a period of 5 years (starting from the year 1997-98) towards consumables, contingencies, data-sheet references and seminars were given as part of upgradation to Level-II. In addition, 3 posts of Lecturer /Technical Officer-I and a post of Technician "C" in Glass Blowing were sanctioned.

Based on the recommendations of an expert committee specially constituted for the purpose, orders were placed for the purchase of miscellaneous items needed for modernising the Electronics and Glass Blowing Sections.

Head : Professor T.S.B.Narasaraju, M.Sc. (Ban), Ph.D. (Hamburg).

Seminars/Conferences :

Attended :

Professor T.S.B.Narasaraju attended (i) a National Symposium on Instrumentation held at Delhi, during October 1997, and presented two papers on "Fabrication of a filter-holder to collect particles contaminating atmospheric air" and "Fabrication of a hot-air blower for industrial use" and (ii) a Conference on Analytical Sciences and Instrumentation held at Mumbai during December 1997, and presented a paper on "Determination of Solubility Products of Phosphate and Arsenate Apatites of Strontium".

Other Activities :

The Centre carried out repairing of miscellaneous electrical and electronics equipment of different Science Departments of the University.

Fabrication of metal frames of 12 work benches of the Department of Zoology, and 6 tables and 12 metal stools for the Department of Mathematics, NEHU was done. Miscellaneous welding work of different academic Departments and Transport Section of the University was carried out. The Glass Blowing Section carried out fabrication and repairing of glass apparatus of different Science Departments.

Sri B.B.Lama, Technician Gr-I, USIC was sent to Western Regional Instrumentation Centre, Mumbai, for a one-month training programme in glass blowing during October, 1997.