सहायक सेवाएँ
SUPPORT SERVICES
Library and Technical Information Services

NPL library is a leading repository of publications in physics and related sciences in the country. During the year it expanded its collection by adding new books and journals on need basis. In this regard it spent Rs.85.16 lakh on journal subscriptions and Rs.1.96 lakh on book acquisition. It subscribed 116 journals and purchased 58 books. It also added 2 books in Hindi, and 77 bound volumes of journals. It also subscribed to four leading bibliographic databases: Current Contents: Physical, Chemical & Earth Sciences: Current Contents: Engineering, Technology & Applied Sciences: Materials Science Citation Index and INSPEC.

Named as KSK Library, in honour of the first director of the laboratory, late Sir K.S. Krishnan, the library is fast emerging as an electronic library. Its library and information services are accessible via NPL Intranet. The Intranet site offers access to information on current journals, new issues received during the week, and current contents of electronic journals, etc. It also offers Internet links to electronic journals, electronic libraries, publishing houses of leading journals, etc.

This year the library has started bar-coding its books and journals in-house. It is performing its house keeping functions on computer using a Library Management package developed in-house. It also continued to provide services like selective dissemination of information, in-house literature search, access to bibliographic databases, bibliography service, photocopying service, etc.

Publication and Reports

This cell is responsible for compiling, editing, printing, and distribution of Annual Reports and other documents on laboratory activities. This unit also compiles inputs for reporting the same to CSIR.

Scientific Support System

Planning, Monitoring & Evaluation

This group coordinates all the project-wise activities of the laboratory, including in-house, collaborative, sponsored and grant-in-aid projects. It keeps track of current manpower deployment. On these activities it collects information, analyses it and places it to the top management for decision making. This year the group handled work relating to 23 new projects, 59 on-going projects, and 9 completed projects. This group also handles matters relating to Research Council.

Marketing Group

This cell is responsible for marketing and liasoning of technological know-how transfer of the laboratory. It has marketed one technology this year, and five more technologies are in the pipeline.

Intellectual Property Right

Realizing the strategic importance of intellectual property in the ever-changing global economic scenario, this completely independent cell was created with the exclusive purpose of managing IP portfolio of the laboratory. This cell provides help to the scientists in filing patents of the R&D outputs. It also scouts around and explores every possibility to protect any R&D output, which the scientists might have missed for taking protection.

During this year five patent applications have been filed in India and eight in foreign countries. Besides, the two patents were granted in USA.

Human Resource Development Group

This group arranges in-house training programmes for the benefit of NPL staff and also offers in-house training courses for the benefit of industries in various areas of calibration. It also supports the organization of various symposia, conferences, etc. at NPL. It also attends to various public relations activities and follows up various MoUs with educational institutions in respect of doctoral, post-graduate and summer training programmes on reciprocal basis. It processes induction of JRFs, SRFs, Research Associates in NPL. It also pursues other schemes of CSIR on EMR and HRD activities. A list of training programmes and other events organized by the group is given in the respective appendices.
International Science & Technology Affairs Group (ISTAG)

This group maintains and processes applications of scientists for deputation abroad. It also arranges K.S. Krishnan Memorial lecture, invited talks, and special lectures delivered by visitors. ISTAG has processed applications for deputation of NPL staff to various international seminars/conferences/visits/exchange programmes, etc. Special lecturers organised this year are listed in the respective appendices.

Technical Support System

Responsibility of general maintenance of infrastructure like electricity, pumping, air-conditioning, telephones, fax, photography service, auditorium, maintenance of campus and colony, etc. lies with this section.

Central Workshop

NPL Central Workshop undertakes design, development and maintenance of work related to scientific equipment of the laboratory and assists the industry by accepting outside assignments on payment basis.

The Workshop is equipped with general purpose machines, CNC machines and has precision measurement facilities. CNC machines aided by computerized modeling enable the machining of complicated parts such as die cavities, moulds and punches.

Glass Technology Unit

Glass Technology Unit undertakes jobs relating to the design, development, fabrication of scientific apparatus and equipment. The Unit offers its services to internal customers and to external customers from the industry, R&D organizations, medical and educational institutions. This year the unit processed 217 jobs for NPL and 39 external jobs and earned a sum of Rs.1.89 lakh as ECF.

Central Computer Facility

Parallel Computing: A parallel computing environment was set up based on PVM (Parallel Virtual Machine). A number of ordinary PCs were connected on a 100 MBPS LAN. Examples from image processing and Fast Fourier Transforms are being programmed to test the set up. Such a computing environment would be cost effective for data analysis where the amount of data is very large and the analysis is amenable to parallelization.

Web Based Calibration Report Generation Facility:

This facility is being tried out to further increase the efficiency and introduce uniformity (to the extent possible) in generating and printing calibration reports for various items calibrated at NPL. The user would need to just complete a form online in a web browser (like Netscape or Internet Explorer) with all the calibration details and results. As soon as the form is submitted to a central server by clicking a button, a formatted report is generated which is suitable for either viewing on screen or printing on a local printer on NPL Calibration Report Forms. The facility would be available on all nodes of the NPL-LAN.

Rajbhasha Unit

This Unit helps the scientists in the Hindi transcription of their papers, articles, reports etc. This year also this unit arranged various training programmes and organized events for encouraging use of Hindi in all official proceedings and in writing research papers in Hindi for the benefit of the society. As per Government of India directives the unit arranges selection of NPL employees who have contributed most to the propagation of Hindi in office work. Cash awards are given to the winners in various categories. Detailed report of the unit is given in Hindi in the following pages.