

liquid nitrogen, demonstration experiments on magnetism, computer control of dynamic systems, just to mention a few. The young students found the laboratory visits so interesting, that in spite of the strong sun outside, they just kept moving from one building to the next.

After a long and tiring tour of all the exhibits, the visiting students and their teachers were served a sumptuous lunch. To help them remember what they had heard and seen on this day, informative pamphlets were given to the visitors describing RRCAT activities. It is certain that the day succeeded in winning at least a few young hearts and minds over to the pursuit of basic science.

The afternoon was kept for providing an opportunity to the family members of employees of RRCAT to visit the laboratories. A large number of employees brought their spouses and children. The staff members manning the exhibits were as enthusiastic in the afternoon as in the morning, in explaining their displayed setup in spite of the fact that they had already explained their exhibits to 87 school teams in the morning.

*Contributed by :
Anil Banerji (anilban@cat.ernet.in)*

N.4 : Women's Day 2007 celebration

For last three years, RRCAT has been celebrating women's day every year. This year, Women's Day was celebrated at RRCAT on 16th March 2007 in two sessions. In the morning session lectures by two eminent ladies were scheduled, followed by a literature oriented programme in the post-lunch session.

The first lecture was delivered by Dr. (Mrs) Akalpita Paranjpe, a multi-faceted personality who recently took voluntary retirement from BARC, Mumbai. In her presentation entitled "The Mighty Will : A Driving Force for Success", she described her philosophy of life, which was evident in her inspirational and informative talk covering life of Ahilyabai Holkar. After narrating her interesting findings related to homeopathy, she emphasized on the need of the hour for the women to do their part in building up of the nation. During the lunch and post-lunch session, women staff of RRCAT had discussions with her getting to know more about homeopathy and her other activities like social work.



N.4: Dr. (Mrs.) Akalpita Paranjpe addressing women staff of RRCAT

The second lecture was by Mrs. Rekha Raikar Kumar, Joint Controller of Finance and Accounts, RRCAT. As an ICAS officer (1996 batch), she talked about her journey into civil service. Her narration was listened with rapt attention, as different aspects of the journey got unraveled. She also gave important information about how one can apply and prepare for civil service and requested all to encourage their children to look at civil service as one of the career options.

The post lunch session had a literature oriented programme, wherein RRCAT women staff enthusiastically took to stage for poem reciting, mono-acting, singing, etc. The programme was successfully concluded with a tea session in the evening.

*Contributed by :
Alka Ingle (alka@cat.ernet.in)*

N.5 : National Laser Symposium NLS- 06 held at RRCAT

The Sixth DAE-BRNS National Laser Symposium (NLS-06) was held at the Raja Ramanna Centre for Advanced Technology, Indore, between 5th and 8th December, 2006. For last six years, this symposium is being sponsored by the Board of Research in Nuclear Sciences (BRNS). The earlier nine symposia (started in 1992) were sponsored by the National Laser Programme. The symposium is organized in collaboration with the Indian Laser Association (ILA). The Symposium, which is an established annual scientific event for last 15 years, gives the laser community all over the country an opportunity to meet

and interact with each other.

Shri U.Nundy was the Convener and Dr.T.Ganguly was the Secretary of NLS-06. The symposium was inaugurated by Dr.V.C.Sahni, Director RRCAT. The Chief Guest, Prof. Govind Swarup (NCRA, Pune) and the Plenary Speaker, Prof. B.M. Arora (TIFR, Mumbai) graced the occasion. In his inaugural speech, Dr. Sahni welcomed the participants to the Centre and acquainted them with the work being carried out in the Centre on lasers and the two synchrotron radiation sources : Indus-1 and Indus-2. Prof. B.M. Arora gave the keynote address. He spoke on "Progress in Semiconductor Diode Lasers" in which he gave a historical overview of the developments that have taken place in this important field. After the inaugural function, an exhibition of laser related products organized by the ILA was inaugurated by Dr. Sahni. In total, 29 companies participated in the exhibition, which continued on all the days of the symposium.

The technical sessions on the first three days covered the recent work carried out in various areas of lasers and their applications. These included sessions on 1) Semiconductor lasers, 2) Physics and technology of lasers, 3) Ultrashort and high intensity lasers, 4) Lasers in biology and medicine, 5) Laser spectroscopy and quantum optics, and 6) Applications of lasers in nuclear technology, industry and instrumentation. All the contributed papers in the NLS-6, totaling 240, were presented in the Poster Sessions on the first three days of the symposium.

A special issue of "Kiran, the Bulletin of Indian Laser Association"; consisting of the extended abstracts of the invited talks presented in the technical sessions was brought out at the time of the symposium, and distributed to the participants.

Three special lectures were arranged in the evenings. On the first day, Prof. Govind Swarup of NCRA, Pune, delivered a talk on "New challenges in the fields of science and technology in India: lessons from the GMRT". On the third day, Dr. A. M. Patankar of BARC, explained the importance of patents, and its role as a catalyst for R&D. This was followed by a talk by Dr. A. K. Nath of RRCAT, who presented the development and industrial applications of carbon-di-oxide and Nd:YAG Lasers.



N.5 : Prof. Govind Swarup delivering the evening talk.

The first session on the last day of the symposium was devoted to thesis presentations. A total of seven theses were presented. A panel of judges was formed to assess the thesis work in terms of quality of work and its presentation by the candidate, and select the best three theses for the awards.

This was followed by the concluding session, which was co-organized by the ILA. Shri U.Nundy, Convener NLS-06, gave a brief review of the symposium. Dr. P.D.Gupta, President, ILA addressed the audience with the details of the activities and the achievements of ILA. He also presented the "Best thesis" awards to P.K. Mukhopadhyay (RRCAT), S. Mukhopadhyay (IIT, Kharagpur), A. K. Sharma (RRCAT) and A. Shrivastava (IIT, Kanpur). Shri U. Nundy gave away the "Best Poster" awards.

Two cultural programmes were arranged during the symposium. Both the programmes were highly appreciated by the participants.

As in earlier years, the response to the symposium was overwhelming. About 260 papers were received; all of which were reviewed, and 240 papers were accepted for poster presentation. There were 442 registered participants, out of which 165 were students. Some collaborative work plans between institutes outside DAE and DAE institutes have been initiated, following the discussions that had taken place during the symposium.

On the whole, the symposium seems to have achieved its aim of bringing together researchers and

students of the laser community together in one platform and act as a catalyst for increased interaction and cooperation among the delegates.

*Contributed by :
T. Ganguly (tapas@cat.ernet.in) and U.Nundy*

N.6 : Fourth Asian Particle Accelerator Conference APAC-07 held at RRCAT

The Fourth Asian Particle Accelerator Conference (APAC-2007) was held at Raja Ramanna Centre for Advanced Technology, Indore from 29th January to 2nd February, 2007. It was the first time that APAC series conference was hosted in India. APAC-2007 was organized by RRCAT under aegis of Asian Committee for Future Accelerators (ACFA), in collaboration with various accelerator centres and R&D institutes in India like Bhabha Atomic Research Centre, Mumbai, Variable Energy Cyclotron Centre, Kolkata and Inter-University Accelerator Centre, New Delhi, with support from Department of Atomic Energy and Department of Science and Technology. The earlier APAC conferences were organized by KEK, Japan (APAC-98) followed by APAC-2001 conference at IHEP, China and APAC-2004 by PAL/POSTECH, Korea.

Dr. V.C.Sahni, Director RRCAT was the Conference Chairman. Shri S.Kotaiah, Project Manager Indus-2, was the Chairman of the Scientific Programme Committee and Local Organizing Committee, and Shri S.C.Joshi, RRCAT, was the Conference Coordinator.

The conference was inaugurated by Dr Anil Kakodkar, Chairman, Atomic Energy Commission and Secretary, Department of Atomic Energy. Scientists and engineers working in various fields of accelerator science and technology totaling 380, which include 171 participants from abroad participated in the conference. This conference covered various topics related to science, technology and utilization of accelerators. The Scientific Programme included 60 invited talks, 18 contributory oral presentations and 194 poster presentations. The invited and oral presentations were covered in plenary and parallel sessions which included accelerator technology, circular and linear colliders, synchrotron light sources and free electron lasers, hadron and lepton accelerators, beam dynamics and electromagnetic fields, beam instrumentation and feed back,



Fig: N.6 : Chairman AEC, Dr. Anil Kakodkar inaugurating APAC-07 by lighting a lamp.

applications of accelerator technology, technology transfer and industrial relations. There was a special session on building of international collaboration for mega accelerator projects. An industrial exhibition covering accelerator related components and sub-systems was held during the conference. A one day mini workshop on “Superconducting RF Cavities” was organised on 28th January, 2007, the day prior to this conference.

*Contributed by :
S.C. Joshi (scjoshi@cat.ernet.in) and S.Kotaiah*