

Addressing the TSOs, Dr. Sinha congratulated and welcomed the new-members to DAE family and also thanked them for competing the selection procedure and opting to join DAE. He advised TSOs that they should work for national pride, self-reliance and take pride in what they do. In carrying out work, the effect on environment should always be taken into account. He urged TSOs to work for DAE's vision and programmes. He also advised TSOs to devote 80% of their time to work which they have been assigned to do and remaining 20% time they should devote on works which involve innovation and which they always wanted to do. According to Dr. Sinha the requirements for success are curiosity, solid understanding of the subject, focused effort, hard work, and accountability. He also emphasized the role of collaborations with both national and international organizations. At the same time he cautioned that the collaborations should be established judiciously on equal terms. He wished all the TSOs a very successful professional career.

Dr. P.D. Gupta, Director, RRCAT presided over the function and delivered presidential address. Welcome address was given by Dr. P K Gupta, Chairman, Training School Committee. Dr. Arup Banerjee, Head, Training School proposed a vote of thanks.

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N.2: CAT-I and CAT-II Stipendiary Training Programme

In order to meet the requirements of Scientific Assistants (CAT-I) and Technicians (CAT-II) of the various Research and Development Projects at RRCAT, a Stipendiary Training Programme (STP) was started few years back. The programme was started in four disciplines, i.e., Electronics & Instrumentation Engineering, Electrical Engineering, Mechanical Engineering and Physics and is successfully functioning to meet the requirements of the centre. These CAT-I and CAT-II Stipendiary Trainees are selected through a written test followed by an interview and two years training is imparted to them. The training includes six months class room teaching and eighteen months on-job training. The classroom teaching consists of one month orientation course, one month general courses common to both CAT-I and CAT-II trainees and four months specialized courses relevant to their respective disciplines. During the on-job training, the trainees are not only learning the jobs, but also assisting the team at their

respective job places with great enthusiasm. So far thirty nine (CAT-I: 20 and CAT-II: 19) trainees have successfully completed their training and are placed to various Divisions/Sections of RRCAT. Another fifty six (CAT-I: 37 and CAT-II: 19) trainees are undergoing various stages of their training.

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N.3: Seventh International Accelerator School for Linear Colliders-2012

The Seventh International Accelerator School for Linear Colliders-2012 (IASLC-2012) was organized by International Linear Collider Global Design Effort (ILC GDE), Compact Linear Collider (CLIC) and International Committee for Future Accelerators (ICFA) Beam Dynamics Panel, ILC-India Forum and hosted by Raja Ramanna Centre for Advanced Technology, Indore, India during Nov 27 – Dec 8, 2012, at Hotel Radisson Blu, Indore. This is the first time that an International Accelerator School for Linear Colliders was held in India. Hosting of the school in India has offered a unique opportunity for participation of a large number of Indian participants from various Indian accelerators laboratories.

Out of total 45 participants, 17 participants were from Indian institutions. The school curriculum was designed for two special courses namely - Accelerator Physics and RF Engineering. A highly experienced team of 17 international accelerator experts delivered lectures in the school. On November 30, 2012 the participants of School visited Indus complex and BARC Training School at RRCAT for hands-on-experiments program.



Participants attending the Seventh IASLC-2012 during Nov. 27 – Dec. 8, 2012..

The School was inaugurated by Dr P D Gupta, Director, RRCAT on Nov 28, 2012. Dr D D Bhawalkar, former Director, RRCAT distributed the award certificates in the concluding session on Dec 8, 2012. Prof W Chou, Fermilab served as Chairman, Curriculum Committee and Shri S C Joshi, RRCAT as convener, Local Organizing Committee. Based on the overall performance, two of the Indian students Ms Rinky Dhingra and Shri Rahul Gaur were among the top 8 performers of the School.

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N4: Fourth SERC School on Laser produced Plasmas: Physics and Applications

The "Fourth SERC School on laser produced plasmas: Physics and applications" was held at Raja Ramanna Centre for Advanced Technology, Indore, from July 9-21, 2012. This school was fully sponsored by the "Science and Education Research Board" of the Department of Science & Technology. 45 students were selected for the School from among the 120 applications which were received from Ph.D. students and university / college teachers, with some background in laser produced plasma. Dr. P A Naik was the Director of the school with Dr. J A Chakera and Shri H S Vora as the Co-directors of the school.



Dr. P D Gupta, Director RRCAT addressing the participants during the inaugural session of Fourth SERC School on laser produced plasmas : Physics and applications

The school was inaugurated on July 9, 2012 by Dr. P.D. Gupta, Director, RRCAT. Dr. A.K. Das, Head, Laser and Plasma Technology Division of Bhabha Atomic

Research Centre (BARC) was the Guest of Honour. The format of school was a combination of class room lectures, evening lectures by eminent personalities, and hands-on experiment related to the subject to give the students exposure to higher level experiments, equipment. During registration, the participants were provided with books on Plasma and Laser, worth about Rs.1,800 each, along with printouts of the lecture notes of all the lectures, a CD containing lecture notes and other relevant reference material, printed handouts on the detailed instructions and guidelines related to the hands-on experiments, and the laser safety information sheets. There were total 42 lectures, including six tutorial lectures and one on laser safety, most of which were of black-board type. These lectures were given by 22 faculty members from RRCAT and outside. There were nine evening lectures by eminent persons related to the field of plasma or laser-produced plasma. These lectures were delivered by 1) Prof. P K Kaw, Institute of Plasma Research (IPR); 2) Dr. A K Das, BARC; 3) Dr. P D Gupta, RRCAT, 4) Dr. Anurag Shyam, BARC-Visakhapatnam; 5) Prof. G R Kumar, Tata Institute of Fundamental Research (TIFR); 6) Dr. L J Dhreshwar, BARC; 7) Dr. Amita Das, IPR; 8) Prof. M Krishnamoorti, TIFR; and 9) Dr. L M Kukreja, RRCAT. There were eight hands-on experiments, two laser related and six laser-plasma related. Students were divided in four batches. Each experiment was run for four days, with the four batches rotating to carry out the four experiments in each round, covering all the eight experiments in two rounds.

Another important feature of this school was hands-on training in simulations. Dr. S Sengupta of IPR gave two classroom lectures on plasma simulations, followed by hands-on training in Computer Centre, where each participant sat on a computer terminal and received practical training in simulation techniques. When one batch was undergoing training in simulation for one and half hours, the other batch was exposed to use of various indigenously developed data acquisition, image grabbing and image processing softwares by Shri H S Vora and Shri Rajiv Jain, who have written these software packages themselves at RRCAT.

Two cultural evenings were arranged for the students and the faculty members to showcase their cultural talent. The students and faculty members actively participated in these events. There was a one day excursion to Mandu. An