

and Dr. Shekhar Mishra. About 40 senior Indian scientists from various Indian laboratories, and about 50 scientists from RRCAT at took part in the deliberations.

Dr. P.D. Gupta, Director RRCAT welcomed the participants from Fermilab and India. Dr. S. Banerjee, Chairman, Atomic Energy Commission and Secretary,



Department of Atomic Energy in his opening remarks focused on the DAE perspectives on IIFC and he presented a talk on "Accelerators and Sustainable Nuclear Energy Programme of India". Dr. Anil Kakodkar, Member AEC and former Chairman, AEC gave a talk on "Indian Energy Program and IIFC". The potential role proton accelerators can play, in realizing the long terms energy needs of the country, was highlighted. Advances in accelerator technology showing closing gap between the requirements and the achievable targets in accelerator performance were presented by Fermilab Scientists.

Report on IIFC activities were presented by Dr. S. Kailas, Dr. Kanjilal, Dr. P.D. Gupta and Dr. R. Bhandari from BARC, IUAC, RRCAT and VECC respectively. Detailed discussions were held in the following two days. The presentations covered the various collaborative elements of SCRF technology, accelerator physics design and related infrastructure issues. Visits to various RRCAT laboratories for the meeting participants were also organized.

The talks presented at the meeting can be read at http://indico.fnal.gov/conferenceDisplay.py?confId=3659#2 010-11-19

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N.4: Topical conference on EM interaction with atoms, molecules, and clusters

The topical conference under the aegis of Indian Society of Atomic and Molecular Physics (ISAMP) is held once in every two years. The fifth conference in this series titled "Topical conference on EM interaction with atoms, molecules, and clusters" (TC-2010) was held in Raja Ramanna Centre for Advanced Technology (RRCAT), Indore during March 3 - 6, 2010. The conference was funded by BRNS, DST, BRFST, and UGC-DAE CSR. The conference was attended by scientists, researchers, and students from India and abroad. The total number of participant was around 150.

The conference covered various topics falling in the realms of interaction of EM radiation with finite-sized electronic systems like VUV, UV and IR spectroscopy of atoms and molecules, atomic and molecular structures, photoionization, photo-dissociation and photo-fragmentation, radiative and non-radiative processes, Spectroscopy of clusters, Multi-photon ionization and dissociation, Time resolved / pump-probe spectroscopy and biophysics. The highlight of the conference was a special session on the utilization of synchrotron radiation to study the physical and chemical properties of atoms, molecules, and clusters. This special session titled "Spectroscopy using synchrotron radiation" comprising of nine presentations by scientists from various synchrotron laboratories of the world was an important feature of TC-2010 as RRCAT houses two operating synchrotron radiation sources Indus-1 and Indus-2. This special session was also coupled with a visit to Indus-1 and Indus-2 by the participants of the conference. A special meeting for the potential users of Indus-1 and Indus-2 from various universities and institutes was organized to attract and enthuse them to conduct experiments on atomic, molecular, and cluster physics with synchrotron radiation. conference was inaugurated by Dr. P. D. Gupta, Director, RRCAT followed his address in which he elucidated various aspects of light-matter interaction and emphasized the importance and multi-disciplinary nature of this field. Prof. R. Srivastava, President of ISAMP addressed the gathering elaborating the various activities of the society. The key note address of the conference was delivered by Prof. Nigel Mason of Open University, UK and title of his talk was "Synchrotron Radiation - A perfect mimic of star light".

The scientific program of the conference comprised of 27 invited talks delivered by experts from abroad and India. Out of these 27 talks 11 were exclusively devoted to the application of synchrotron radiation. Remaining 16 talks covered various other topics mentioned above. Another feature of this conference was a session devoted to the presentations by young researchers specially focusing on their



doctoral thesis works. There were five presentations made in the above-mentioned session. Out of these five presentations two were selected for "best thesis presentation" award carrying a certificate and a cash prize of Rs. 5000/- each. These awards were bagged by Dr. Ashavari Rath of BARC, Mumbai and Dr. R. K. Khushwaha of Physical research laboratory, Ahmedabad

Besides invited talks, TC-2010 also organized two sessions for the poster presentations contributed by the participants of the conference. In total 90 posters were presented in the conference encompassing various topics listed above. To encourage the participants, four posters were chosen by the jury panel for "best poster" prize with each prize carrying a certificate and a cash prize of Rs. 2500/- . The posters of following four participants were chosen for the "best poster" prizes: Mr. Y. B. Kale (BARC, Mumbai), Mr. N. Bhargava Ram (TIFR, Mumbai), Ms. V. Shewale (H.P. T. Arts and R. Y. K. Science College, Nasik) and Mr. V. Sudhir (IIT Madras, Chennai)

The conference ended with a concluding session on 6th March 2010 in which prizes for "best thesis presentation" and "best poster" were given away by Prof. M. Barat and Prof. J. Fayeton of University of Paris, France. A feedback session was also conducted to gauge the success of the conference and also to get data for further improvements in future. It was concluded that the conference was very satisfying and productive in scientific contents. Large number of PhD scholars participating in TC 2010 expressed a strong desire to spend time at Indus 1 &2, for hands-on experience towards planning experiments on these mega science facilities. It was also felt by the participants that a follow-up meeting of Atomic and Molecular Physics synchrotron users should be organized, after receiving the scientific proposals.

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N5: 8th DAE-Vision for Information Exchange held at RRCAT

8th DAE - Vision for Information Exchange (DAE-VIE 2010) was held at Raja Ramanna Centre for Advanced Technology (RRCAT), Indore during Dec. 9-10, 2010. Sh. S. S. Bajaj, Chairman, Atomic Energy Regulatory Board (AERB), Mumbai was chief guest of the inaugural function held on 9th Dec. 2010 and Dr. P. D. Gupta, Director, RRCAT presided over the function. The keynote talk was delivered by Dr. R. Govindrajan, Chairman, Supercomputer Education and Research Centre (SERC), Indian Institute of science (IISc), Bengaluru. Dr. Anil Rawat, convener of the meet welcomed

the guests and participants. Dr. Rawat informed the audience the details of two day technical meet of IT Professionals of DAE.



Dr. P.D. Gupta welcomed Sh. S. S. Bajaj, Dr. R. Govindrajan, invitees and colleagues from various units of Department of Atomic Energy. In his presidential address, Dr. Gupta threw light on the activities being pursued in RRCAT related to non-nuclear front-line research areas of Lasers. Particle Accelerators and associated technologies. He mentioned that Information Technology has played a very crucial and important role for programmes at RRCAT and also for various research and development programmes of Department of Atomic Energy. He highlighted that it is practically impossible for any professional, be scientist or engineer, to work without use of Information Technology. He also mentioned that Computer Centre, RRCAT is an important wing of activities at RRCAT, which participates in R&D activities in various ways and they host high-end computing clusters for scientific and engineering applications, provide state of art facilities for email and internet access, ensure information security, develop and deploy information management systems for in-house applications and many other related tasks. He also informed that we are in the final stage of commissioning of High Density Data Centre Hall with racks capable of installing high-end computing clusters and servers. He expressed the need to ensure that IT infrastructure operates reliably and with proper fall back arrangement for uninterrupted services. He mentioned that Government of India has given special attention to usage of IT in education and research and National Knowledge Network (NKN) is an outcome of such initiatives. DAE is also playing a very major role in this initiative.

In his inaugural speech, Sh. S. S. Bajaj, AERB, Mumbai mentioned the importance of Software Quality Assurance (SQA) in the process of commissioning of nuclear power