

N.1: RRCAT gets a new Director

Dr. P. D. Gupta, Distinguished Scientist took over as the new Director of RRCAT from Dr. V. C. Sahni, the former director who retired on superannuation on July 31, 2009 after completion of an illustrious scientific career of 44 years in the Department of Atomic Energy. Dr. Sahni held the highest position of this Centre for over five and half years during which he was also the Director of the Physics Group, BARC, Mumbai.

N.2: One day seminar in the honour of Dr. V. C. Sahni

A one day seminar on “Accelerators, Lasers & Synchrotron Radiation Sources: Recent Technologies Advances & Applications” was organized on July 29, 2009 in honor of Dr. V. C. Sahni, the former Director of RRCAT. The seminar was convened by Dr. P. D. Gupta, the present Director of RRCAT.



Dr. P.D. Gupta and Shri C. K. Pithawa presenting a souvenir to Dr. V. C. Sahni and Mrs. Sahni

The seminar was inaugurated with the welcome speech by Dr. P. D. Gupta. He read the brief biodata and major achievements of Dr. Sahni. The seminar had four sessions.

The first session was chaired by Dr. Shekhar Mishra, Fermi National Accelerator Laboratory (FNAL), USA. In this session, there were presentations by Dr. R K Bhandari, Director, VECC Kolkata, Dr. Amit Roy, Director IUAC New Delhi and Dr. P Chaddah, Director UGC-DAE CSR Indore. The presentation of Dr. Bhandari was focused on the Cyclotrons at VECC. He gave a brief introduction of the machines developed at VECC and shared his experiences during the development work. Dr. Amit Roy talked about Superconducting Accelerators. He started his talk with the basics of superconducting accelerators and presented the state of the art technology at various laboratories abroad. He also discussed the work in the field of Superconducting accelerator at IUAC. The presentation of Dr. Chaddah was on Superconducting magnets in storage rings. He started his talk with the difference between curiosity and requirement driven research and stressed on research in basic science. He also explained how the practical problems are simplified in the text books, citing the example of theory related to dipole magnets.

The second session was chaired by Dr. R K Bhandari,

Director VECC Kolkata. The session had three presentations, one by Dr. Shekhar Mishra of FNAL, USA and other two by Dr. L. M. Gantayat and Shri S. Kailas respectively of BARC, Mumbai. The title of Dr. Mishra’s presentations was “The road we travel together”, where he discussed the collaboration between RRCAT and FNAL and shared his experiences and memories. Dr. Gantayat talked about the various power beam technologies developed at BARC and their applications. The presentation of Shri Kailas was on Ion accelerators and medical cyclotrons.

The third and fourth session had total six presentations, all from RRCAT. These presentations were by Dr. P. D. Gupta, Shri C. K. Pithawa, Dr. P. K. Gupta, Dr. S. M. Oak, Dr. S. B. Roy and Dr. G. S. Lodha. Dr. P. D. Gupta stressed on new frontiers in high field physics in his presentation. He discussed briefly the advances in laser technology and chirped pulse amplification. Shri C. K. Pithawa presented a talk “Indus Synchrotron Radiation Source (ISRC) – status report” and discussed the status of Indus I and Indus II with the recent results. Dr. P. K. Gupta gave a brief overview of the different research activities being actively pursued in the Centre in the field of the biomedical applications of lasers. His talk covered applications of optical spectroscopy and imaging for cancer diagnosis as well as the use of light for different therapeutic applications. He also mentioned various applications of optical tweezers. Dr. S.M. Oak presented a talk on material processing applications of solid state lasers. He discussed the various laser cutting and laser welding works carried out by lasers and manipulators, developed by solid state laser division, at nuclear plants. The presentation of Dr. S. B. Roy was on Superconducting material and he discussed the present status of the global research and compared that with the efforts at RRCAT. Dr. G.S. Lodha presented the results of recent studies using beamlines of Indus-I & Indus-II.

The seminar was attended by invitees from DAVV, SGSITS and a large number of RRCAT scientists.

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N.3: DAE-BRNS Indian Particle Accelerator Conference (InPAC) 2009

The Indian Particle Accelerator Conference (InPAC) is held once in two years. InPAC-2009, fourth in series was held at Raja Ramanna Centre for Advanced Technology (RRCAT), Indore during February 10-13, 2009. The main objective of InPAC series is to provide a forum for interaction and exchange of ideas amongst the scientists and engineers working in the rapidly growing field of particle accelerators.

Dr Anil Kakodkar, Chairman, AEC & Secretary, DAE presided over the inaugural function. In his presidential address he pointed out that the Indian particle accelerator community has arrived on the world stage in this area, with successful contributions to the mega international accelerator projects. He alluded to the role accelerators can play in the