N.1: Celebration of RRCAT Foundation Day

Raja Ramanna Centre for Advanced Technology (RRCAT) celebrated its 37th Foundation Day on Wednesday, 19th February 2020 at Homi Bhabha Auditorium, Convention Centre. Prof. R. B. Grover, Emeritus Professor, Homi Bhabha National Institute, and Member, Atomic Energy Commission, Department of Atomic Energy was the Chief Guest on the occasion. Prof. Grover visited laboratories in RRCAT on 18th February, 2020 and was apprised about various activities of the Centre. He appreciated and congratulated the scientists and engineers of RRCAT for their accomplishments over the years.

Prof. R. B. Grover delivering his talk.

He delivered a captivating talk on "The Science - Technology Relationship". In his talk, he elucidated the relationship between science and technology, and spoke about the methods of knowledge production. He presented paradigms tracing the evolution of science, technology, and their inter-relationship, starting from ancient to medieval to modern ages. He mentioned about 'Linear model' proposed in 1945 where knowledge was generated for the sake of knowledge, and technology was developed independent of science. This further led to a 'Reverse linear model', where it was argued that new scientific possibilities are created by technology. A two-dimensional model was subsequently proposed in 1997 linking 'consideration of use' and 'quest for fundamental understanding'. The hierarchical models evolved into non-hierarchical models with a blurring of distinction between science and technology, which led to an altogether different concept of Discovery-Invention Cycle proposed by Narayanamurti and Odumoso in 2016. This multifaceted relationship between science and technology, and the squeeze on funding of research as well as scrutiny by the society, have now led to new methods of knowledge production. He discussed about the missions of the university system which started since the beginning of the 20th century. The first mission was to teach, the second was research, and the third mission, which evolved over the last few decades, is focused on service to the industry. The Homi Bhabha National Institute aims to combine all these three missions in a single organization. He supported the use of simple categorization such as Academic Research (AR) and Post-Academic Research (PAR), and propounded a new model with a strong overlap between AR and PAR. Finally, he concluded that the researchers should prioritize working on problems facing their employing organizations, their country and also work for deployment of the results. On the other hand, the organizations and the country should create an ecosystem to facilitate such deployment.

Shri Debashis Das, Director, RRCAT presented major accomplishments of the Centre during last one year. Shri Das emphasized that two Synchrotron Radiation Sources, Indus-1 and Indus-2, which are National Facilities, are working in round-the-clock mode and are being extensively used by researchers and students from universities, national institutes and industries from all over the country. During last year, the number of experiments conducted using this facility has increased substantially. Two more beam lines of Indus-2 started their operations during this year, taking the total number of operational beam lines in Indus-2 to 16. Shri Das informed about the development of various type of lasers in RRCAT and their targeted applications. He elaborated on the societal applications of accelerators and lasers being pursued at RRCAT. In particular, Shri Das informed about the Oncodiagnoscope and Tuberculoscope, the two laser based health care diagnostics developed at RRCAT, and transferred to industry for commercialization.

Shri Debashis Das presenting a memento to Dr. R. B. Grover.

Dr. Anil Rawat, Director, Technology and Support Group delivered the welcome address and Shri Mahendra Lad, Associate Director, Proton Accelerator Group introduced the Chief Guest to the audience. Shri S.V. Nakhe, Director, Laser Group and Material Science Group proposed the vote of thanks. The program was conducted by Dr. Alpana Rajan, Head, Computer Division.

Reported by:
Mahendra Lad (ladm@rrcat.gov.in)