## NEWS



## N.2: National Science Day celebration

National Science Day is celebrated in India on 28<sup>th</sup> February of each year to commemorate the discovery of the Raman Effect by Prof. C. V. Raman. Raja Ramanna Centre for Advanced Technology (RRCAT) celebrates National Science Day every year on the last Saturday of February by holding an open house for school students, teachers, family members of staff members and invitees from public. This year the celebrations were planned for two days because of its popularity among students. On Saturday, February 25, 2017, school students of Class XI and teachers were invited for a full day visit and the next day, family members/guests of staff members visited RRCAT. A number of scientific exhibits were set up at 16 different laboratories to explain the scientific and technical activities of RRCAT and to demonstrate a few concepts in basic sciences. There were exhibits related to technologies of Accelerators, Lasers, Cryogenics, Superconductivity, Magnets, and demonstration of Fire & Safety aspects. Convener and Chairman of Coordination Committee Shri H. S. Vora and Shri Rajesh Arya made elaborate arrangements for the celebration, with the help and enthusiastic cooperation of the member of the Coordination Committee, sub-committees, volunteers, exhibitors, administrative staff, and security personnel.



Dr. P. A. Naik, Director, RRCAT addressing the gathering during celebrations of National Science Day (NSD-2017)

On the first day, about 1400 students and teachers of 105 schools from Indore and nearby places visited the exhibits. Dr. P. A. Naik, Director, RRCAT gave an overview of important activities at RRCAT in the field of Lasers and Accelerators and explained their utility and applications in his address. His simple and lucid explanations had a stimulating effect on the students and teachers. Deaf and mute students from schools of Indore and nearby places were also invited this year to participate in the celebrations and visit RRCAT. They were accompanied by interpreter-teachers from their schools. Dr. (Ms.) Rama Chari delivered a separate interactive talk, in presence of Dr. Naik, to these special

students with the help of interpreter-teachers.

After Director's address, all the students were taken to different laboratories in organized groups under the guidance of RRCAT volunteers. There were working exhibits on lasers like X-ray laser,  $CO_2$  laser and demonstrations on applications of lasers like: laser cutting, laser marking, laser additive manufacturing, use of light and lasers for biomedical applications etc. There were interesting experiments with liquid nitrogen; demonstration on glass blowing; Raman effect; water-jet cutting machine, working models on glow discharge, laws of motion, superconducting levitated magnetic train, magnetic hysteresis, induction heating etc. Videos on Indus Synchrotrons and their uses, development of SCRF cavities, indigenous 10 MeV linear accelerator, laser additive manufacturing etc. were shown.



Students watching a video on Indus accelerators

A "Make in India Gallery" was specially set up to showcase recent important scientific achievements and in-house technology developments carried out at RRCAT. An "Ask-a-Question Desk" was set up for the students with an aim to create an opportunity for free discussion between these young minds and working scientists. Several RRCAT scientists were available to interact with the students who were also encouraged to ask questions. Participation prizes were also awarded to students. The specially abled students also visited various laboratories and took part enjoyably in "Ask-a-Question" activity with great enthusiasm. Students and teachers went back full of admiration for the scientific activities being pursued by DAE in general, and RRCAT in particular. Snacks and lunch were served to all the students and teachers.

On the next day, the exhibits were kept open to the family members/guests of RRCAT staff and invitees from public. More than 2500 family members of staff and invitees from public visited the laboratories and expressed their joy on getting an opportunity to learn about the important R & D activities being carried out at the Centre.

Reported by: Rajesh Arya (rajarya@rrcat.gov.in)

**RRCAT** NEWSLETTER