

## N.1 : Technology Day celebration at RRCAT

RRCAT celebrated *Technology Day* on 25<sup>th</sup> May 2007. This day is celebrated in DAE institutes to mark the successful underground nuclear tests in May 1998. The function was held in the main auditorium of the Central Complex building. Shri. R.N. Jayaraj, Chief Executive, Nuclear Fuel Complex, Hyderabad, was the chief guest on this occasion.



Fig.N.1 : Shri Jayaraj giving his Technology Day lecture

Dr. P.D. Gupta, Head, Laser Plasma Division, gave the welcome address. This was followed by a talk by RRCAT Director, Dr. V.C. Sahni. In his talk Dr. Sahni outlined the main achievements of the Centre during the last one year. This was followed by the chief guest's lecture. Shri. Jayaraj gave a lecture entitled, "Fuel Cycle Activities at Nuclear Fuel Complex, Hyderabad". He described the historical background, which had led to the setting up of the Complex at Hyderabad, and gave a lucid account of the present activities being carried out at NFC. The function ended with a vote of thanks given by Shri. S. Kotaiah, Project Manager, Indus-2. Shri Jayaraj visited some of the laboratories of RRCAT in the afternoon.

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## N.2 : Dr. V. C. Sahni gets M. M. Chugani Award

Dr. V. C. Sahni, Director, RRCAT, was conferred the "Murli M. Chugani Award" for the year 2004, by the Indian Physics Association, in a function held on May 24, 2007, at Mumbai. The award consists of a citation, a gold medal and a cash prize of Rs. 1,00,000. The citation of the award reads as follows:

"Dr. Vinod Chandra Sahni has made outstanding and

sustained contributions to several research and development programmes of national importance in the Department of Atomic Energy. He is an accomplished theoretical solid-state physicist. Early in his career, he co-authored an excellent treatise on Lattice Dynamics. He, along with his colleagues, built the first indigenous laser Raman spectrometer in the country. He and his team also built facilities for Compton profile measurements, Auger Spectroscopy and Energy Dispersive X-ray Diffraction to pursue research in frontier areas. He led a team that studied superconducting materials, especially peak effect, and as a result, a U.S. patent for a superconducting switch was obtained.

He initiated and nurtured programmes to build many state of the art analytical systems. These included the country's first Inductively Coupled Plasma Source Mass Spectrometer with extremely high sensitivity; multi collector thermal ionization mass spectrometers as well as the only facility in the country to evaluate superconducting wires for their current carrying capacity. He led a group involved in making several radiation detectors for various technological applications and ultrahigh vacuum instruments for use on the synchrotron radiation sources. He also designed H<sub>2</sub>S gas sensors for DAE's Heavy Water Plants; and Pt/Pd catalyst bearing cards for safe recombination of hydrogen. Several of these technologies were transferred to the Indian industry.

Dr. Sahni was instrumental in commissioning of the Indus-2, the Indian Synchrotron Radiation Source (SRS) for research in experimental physics in 2005. During the process of setting up Indus-2, the country's biggest particle accelerator; Dr. Sahni ensured that most of the involved technologies were developed indigenously. He organized the entire task of assembling and commissioning of synchrotron radiation source, Indus-2, with great foresight and planning.

He also steered the Indian participation in the construction of world's biggest particle accelerator, Large Hadron Collider (LHC), at CERN, Geneva. His keen physical insight, exceptional ability to handle diverse problems and outstanding scientific leadership has contributed to the progress of many scientific and technological programmes.

Dr. Sahni is presently Director, Raja Ramanna Centre for Advanced Technology, (RRCAT), Indore and also Director, Physics Group, Bhabha Atomic Research Centre (BARC), Mumbai.

For his outstanding contributions to basic sciences as well as to the development of new technologies and their applications, the Indian Physics Association confers the Murli M. Chugani Award 2004 to Dr. Vinod Chandra Sahni."

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