

CENTRE FOR LASERS & PHOTONICS

Indian Institute of Technology Kanpur

R. R. Dasari Distinguished Lecture Series - 2016

"Lasers in Homeland Security and Defence"

By
Shri H.B. Srivastava
Director, LASTEC/DRDO

Date/Time: 17TH August @05:00 PM (Tea will be served at 04:30 PM)

Venue: L-17

Abstract: Lasers have been traditionally used in medical and industrial applications for long. The applicability of lasers in security and defence is now only gaining momentum. Non-conventional and invisible technologies are required that can detect threats, e.g. explosives, chemical and biological warfare agents. LASTEC has been experimenting with scattering and absorption based laser spectroscopy techniques to address these concerns. The talk will present the recent advances made at LASTEC in these areas. A few research areas of interest to defence scientists, which may become potential collaboration topics between LASTEC and IIT Kanpur communities, will also be presented.

The Speaker



Shri Hari Babu Srivastava took over as Director of Laser Science and Technology Centre, Delhi on 20th June 2014. At this Centre, he has been spearheading various laser technologies ranging from high power laser sources to chem.-bio LIDARs, explosive identification, laser countermeasures, electro-optical/laser equipment and various other innovative laser applications for use in low intensity conflicts and for armed forces.

He joined DRDO in 1984 at Instruments Research and Development Establishment (IRDE), Dehra Dun, after a brief stint (1983-84) in industry at M/S Hindustan Instruments Ltd., New Delhi. He took over as Director of Electronics and Computer Science at DRDO HQs on 18th April 2013, where he was instrumental in pushing a large number of DRDO projects of national importance. He was also associated with Kota Harinarayana committee, a committee set up by the Govt. of India, for studying organizational aspects and productionization of DRDO technologies. He was re-designated as Director Tech. (Electronics and Communication Systems) on restructuring of DRDO HQ on implementation of Rama Rao Committee recommendations. He is an alumnus of IIT Roorkee and IIT Kanpur from where he obtained his B.E. and M. Tech. degrees in Electrical Engg., respectively.

Dr. R. R. Dasari



Dr. Ramachandra Rao Dasari was born in India in Krishna District of Andhra Pradesh. He had all his education in India receiving B.Sc. in 1954 from Andhra University, M.Sc. in 1956 from Benares Hindu University and Ph.D. in 1960 from Aligarh Muslim University.

He joined the faculty of the Department of Physics at the Indian Institute of Technology Kanpur in 1962 and became a full professor in 1973. Prof. Dasari's major accomplishment at IIT Kanpur included the establishment of one of the largest Laser laboratories for university research in India. He left IIT Kanpur in 1978. After a couple of other stints, he joined MIT in 1980 as a visiting Professor of Physics. In 1981 he was appointed Principal Research Scientist in Spectroscopy Laboratory. In 1984 he was appointed as Assistant Director of the Spectroscopy Laboratory and later promoted as Associate Director in 1992. He oversees project coordination and facility developments of the National Institute of Health supported MIT Laser Biomedical Research Center and also coordinates research programs associated with the National Science Foundation supported Laser Research facility.