



# Indian Institute of Technology Kanpur Department of Electrical Engineering

**Professor KR Sarma Distinguished Lecture Series in Electrical Engineering**

**Shri Hari Babu Srivastava**

**Visiting Professor of Practice  
Indian Institute of Technology Kanpur**

**&**

**Former Distinguished Scientist and Director General, DRDO**

**on**

## **“Optics and Photonics: Applications in Defence and Security and Research Gaps”**

**Date: 04 March, 2024 (Monday)**

**Venue: L9**

**Time: 03:00 PM (Tea will be served at 02:45 PM)**

### ***About the speaker:***

Hari Babu Srivastava is a former Distinguished Scientist and Director General of Defence Research and Development Organization, Dept. of Defence R&D, Ministry of Defence, Government of India. He is an alumnus of IIT Roorkee and IIT Kanpur having obtained B.E. and M.Tech. degrees in Electrical Engineering in 1983 and 1989 respectively. In his last appointment at DRDO, he was responsible for revitalizing defence R&D ecosystem with academia, MSMEs and Startups. During his tenure as Director General Technology Management at DRDO, he established 15 DRDO Industry Academia Centres of Excellence (DIA CoEs), some by converting DRDO's existing Advanced Technology Centres and many more by establishing new ones. He was also responsible for many new policy approval of DRDO, like DRDO Chairs in IITs and Universities, Defence R&D through NRIs/OCIs/Foreign Nationals, DRDO's Technology Foresight for defence R&D by academia and industry, DRDO-Think Tank dialogues etc. In addition, in his other capacities over 39 years of tenure in DRDO as Director General Systems Analysis and Modeling, Laboratory Director (Laser Science and Technology Centre, LASTEC), Corporate Director (Directorate of Electronics and Computer Sciences at DRDO HQs) and research scientist (at Instruments Research and Development Establishment, IRDE), he made significant contribution in technology assessment and development, system development, integration and interfacing in weapon platforms, field evaluation etc. He has actively contributed in major national programmes like Main Battle Tank 'Arjun', Integrated Guided Missiles Development Programme (IGMDP) and indigenous ship building in the areas of Electro-Optical Fire Control and Surveillance Systems, High Power Fiber Laser development and applications such as active imaging, chemical-biological agent detection (LiDARs), explosive detection, laser countermeasures etc. Post superannuation, he has joined Centre for Sensors, Instrumentation and Cyber Physical Systems Engineering as Professor of Practice on full time basis. He has concurrently joined Centre for Photonics and Quantum Communication at IIT Roorkee as Visiting Professor of Practice. In addition, he has recently joined as Visiting Professor of Practice in Electrical Engineering Department at IIT Kanpur. He is also an honorary Distinguished Fellow at Vivekananda International Foundation (VIF India), New Delhi. VIF India is a think tank operating in policy domains towards national security, international relations, neighborhood studies, governance and political studies, economic studies, technological and scientific studies and historical and civilizational studies. His areas of interest include photonics, sensors, directed energy systems, control system, electro-optical fire control and surveillance technologies and policies for a vibrant defence R&D ecosystem in the country.

### ***Prof. KR Sarma Distinguished Lecture Series in Electrical Engineering***

Professor Kalluri Ramalinga Sarma, affectionately known as 'KRS', can be best described as a creator of institutions. He joined the Electrical Engineering Department at IIT Kanpur in 1961 after completing B.Tech (Hons.,1957), M.Tech (1958) from IIT Kharagpur and Ph.D (1961) from Cornell University. Working closely with Prof. Kelkar, the visiting Professors from KIAP program and young colleagues, Prof. Sarma put together a curriculum that became a bench-mark for other institutions in the country. He was the Dean of Research and Development at IIT Kanpur and was also the Head of EE-ACES (76-79). Professor Sarma strove to build the institute in its research activities. His contributions dot the campus in the form of ACES, LTP, CAD Centre and the Television Centre. His latest addition in this list is the Samtel Centre for Display Technology, a unique blend of academic, industrial, and government collaboration. In 1988 he moved to the DST in Delhi and played a key role as an advisor in National Programs in Instrumentation, Lasers and Robotics. From 1991-97 he was the Director of the Central Scientific Instrument Organization (CSIO), Chandigarh. After retiring from CSIR, Prof. Sarma joined the Samtel Group as an Advisor. Professor Sarma is a recipient of the first Outstanding Teacher Award at IIT Kanpur. In recognition of his outstanding contribution, the Board of Governors of IIT Kanpur conferred upon Prof. KR Sarma the title of Honorary Institute Fellow of IIT Kanpur in 2007. The Lecture series is instituted by Prof. Dr. K. Srinageswari, wife of Prof. KR Sarma as a recognition to his dedication to IIT Kanpur for 28 long years and which is still continuing. Srinageswari did her MBBS from Banaras Hindu University, MD from GSVM Medical College Kanpur in Physiology. She worked as Scientific Officer at IIT Kanpur, Scientist at Defence Institute of Physiology and Allied Sciences (DIPAS) and as Professor and Head of Physiology at Government Medical College Chandigarh and Hindustan Institute of Medical Sciences and Research, Greater Noida. She has done pioneering work on "Microwave Radiation Effects on Biological Systems" and "Medical Education" and has 50 publications, 4 awards and has written 4 books in Physiology.

