

## ***A brief biography of Shri Shankar V. Nakhe, Director, RRCAT***



Shri Shankar Vinayak Nakhe, Outstanding Scientist, is the Director of Raja Ramanna Centre for Advanced Technology, Indore, which is a unit of the Department of Atomic Energy of Government of India, engaged in Research and Development in non-nuclear front line areas of Lasers, Particle Accelerators and related technologies. Shri Nakhe is a leading laser expert of the country and is presently, the President of Indian Laser Association (ILA).

Shri Nakhe completed his Bachelors in Electronics Engineering from Walchand College of Engineering, Sangli, affiliated to Shivaji University, Kolhapur in the year 1985. He was the topper of his batch of Electronics Engineering in the University. Immediately after obtaining the Engineering Degree, he joined M/s Meltron Semiconductors Ltd., where he gained useful experience in the manufacturing and utilization of power semiconductor devices. After about a year of industrial experience, Shri Nakhe joined the 30<sup>th</sup> batch of the BARC Training School, Mumbai for one-year Orientation Course in Electronics Engineering. On successfully graduating from the BARC Training School, Mumbai, he joined Laser Programme of RRCAT in August 1987. Subsequently, he did his Masters in Engineering Sciences from the Indian Institute of Science (IISc), Bengaluru in the year 2002 with specialization in High Voltage Engineering. In the course of discharging various official responsibilities at RRCAT, both in Research and Development, and in Administration, he held various key positions in the Centre such as Head, Laser Systems Engineering Division; Head, Laser Control and Instrumentation Division; Director, Laser Group; Director, Materials Science Group, and finally, the Director of RRCAT, Indore, since June 01, 2021.

Since joining RRCAT in August 1987, Shri Nakhe has been actively involved in various R & D activities in the Centre and contributed significantly in the design, development and utilization of various laser and electronics systems. The major areas of his work have been high voltage pulse power supplies, electronic instrumentation, and control electronics for various laser systems. He has made immense contributions in the development of lasers as well as electronics and instrumentation systems intended for strategic applications in the nuclear program of the Department of Atomic Energy. Many laser and photonics systems developed under his leadership are being used at various institutes of the Country. He played a key role in the development and utilization of fiber Bragg grating inscription facility at RRCAT. This unique facility developed at RRCAT is being used for the development of specialized sensors in niche application areas of temperature and strain measurements. Shri Nakhe has, to his credit, around 80 peer-reviewed papers in various national and international journals and professional magazines and 130 papers in different conferences. Shri Nakhe is recipient of various awards that include DAE-ESET award as Group Leader, C. Ambasankaran memorial award, and several best poster awards in various conferences. He has taught at BARC training school at RRCAT. He has guided many M. Tech. students.

Shri Nakhe has spearheaded development of numerous technologies for medical and industrial applications. He played a pivotal role in the transfer of technology of various point-of-care biomedical instruments developed at RRCAT. Under his able leadership, an Incubation Centre has been set up at RRCAT to successfully transfer the scientific know-how and technologies developed to various industries in India to fulfill the mandate of "AtmaNirbhar Bharat" mission of the Government of India. He has provided exemplary leadership to many scientists of the Centre so that they can achieve their best and help the Centre excel in many domains.