Recipients for INSA Distinguished Lectures-2
(for INSA Fellows except those covered under IDL-1)
(for the year 2026)

Sectional Committee - I : *Mathematical Sciences: Applied Mathematics, Pure Mathematics, Theoretical Computer Science, Statistics and Operations Research*

Venkataramana, TN (*b* 14.02.1958), PhD, DAE Raja Ramanna Chair Professor, ICTS-TIFR, Bengaluru.

Professor Venkatramana has made transformative contributions to arithmetic groups, locally symmetric spaces, and geometric representation theory, publishing regularly in top journals including the Annals of Mathematics and Inventiones Mathematicae. His landmark 1988 paper extended Margulis's superrigidity and arithmeticity theorems to semisimple groups over local fields of arbitrary characteristic. He proved important cases of the Margulis-Zimmer conjecture and, with Clozel, established a Lefschetz-type theorem for Shimura varieties. His later work demonstrated that large classes of hypergeometric and Lauricella monodromy groups are arithmetic, and with Lubotzky resolved a forty-year-old problem on free groups. In 2014, he determined the image of the Burau representation of braid groups at roots of unity.

Sectional Committee - II : *Physics:*
Astronomy, Astrophysics, Nuclear and High Energy Physics, Atomic, Molecular and Optical Physics, Statistical Physics, Theoretical Physics, Mathematical and Computational Physics, Condensed Matter including Soft, Liquids and Nano Materials, Cosmic Radiation, Cosmology, Space Physics, Basic Planetary Sciences, Lasers and Optoelectronics, Plasma Physics, Solar Physics, Atmospheric Physics

Ravindra Kumar, Gattamraju (*b* 15.06.1961), PhD, Distinguished Professor-J, Tata Institute of Fundamental Research, Mumbai.

Prof. Ravindra Kumar of TIFR Mumbai is a leading experimental physicist in laser and plasma physics, known for pioneering work in high-intensity laser–matter interactions. His research focuses on the generation and application of ultrashort, high-power laser pulses to study extreme states of matter, including laser-produced plasmas and nonlinear optical phenomena. He has contributed significantly to the development of advanced laser systems and their use in probing strong-field physics, particle acceleration, and high-energy density conditions. His work bridges fundamental science and applications, including materials processing and photonics, and has helped establish state-of-the-art laser facilities and research programs in India.

Sectional Committee - III: *Chemistry:*
Analytical Chemistry, Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Theoretical and Computational Chemistry, Structural Chemistry, Chemistry of Materials, Medicinal and Pharmaceutical Chemistry, Bio-organic, Bio-inorganic and Bio-physical Chemistry

Tyagi, Avesh Kumar (*b* 25.06.1964), PhD, Dean, Homi Bhabha National Institute, Mumbai.

Avesh Kumar Tyagi developed nonequilibrium synthesis routes for advanced materials, enabling unusual oxidation states, tunable dielectrics, ionic conductors, photocatalysts, and hybrids, while contributing significantly to nuclear materials and technologies.

Sectional Committee - IV : *Earth & Environmental Sciences:*
Surface and Solid Earth Science, Applied Atmospheric Chemistry and Physics, Climate Sciences, Meteorology, Geo Engineering, Ocean Sciences, Geo Sciences and Applied Planetary Sciences

Bhandari, Narendra (*b* 10.10.1941), PhD, Professor, Physical Research Laboratory (PRL), Department of Space, Ahmedabad.

He has made seminal contributions in planetary exploration and science. He made pioneering contributions to India's First Mission to Chandrayan-I and other planetary missions of India.

Sectional Committee - V : *Engineering & Technology:*
Electrical Engineering, Telecommunication Engineering, Electronics and Optoelectronics, Chemical Engineering, Civil Engineering, Environmental Engineering, Mechanical Engineering, Aeronautical Engineering, Metallurgical Engineering, Computer Science and Engineering including Software and Data science, Information Science and Technology, Advanced Materials (such as Bio-materials, Hybrid Materials and Nano Materials), Polymer Science & Engineering

Govindarajan, Rama (*b* 26.08.1962), PhD, Senior Professor and Dean Academic, International Centre for Theoretical Sciences, Tata Institute of Fundamental Research, Bengaluru.

Prof. Rama Govindarajan has made outstanding contributions to fluid dynamics, advancing minimal models and fundamental theory in particle-laden and stratified flows. Her work reshapes sedimentation, turbulence, and flow stability understanding, with analytical breakthroughs, influential reviews, and a sustained impact across the fluid mechanics community.

Sectional Committee - VI : *General Biology:*
Taxonomy, Structure, Ecology, Environmental Biology, Evolution and Behaviour of Plants, Animals and Microbes including Unicellular Eukaryotes

Singh, Mewa (*b* 11.04.1951), PhD, INSA Distinguished Professor, University of Mysore, Mysuru.

He is recognised as one of the top wild life biologists of India and the world. He has had a long and distinguished career working on the ecology, behaviour, and conservation of a large number of wild organisms. His work has been recognised with a long list of honours from both national, and international organisations. He has mentored many wild life biologists from India and abroad. His work has had practical implications for conservation such as the establishment of sanctuaries for endangered primate species.

Sectional Committee - VII : *Molecular and Cellular Biology: Cell Biology, Physiology, Development, Genetics, Genomics and other Omics of Plants, Animals and Microbes including Unicellular Eukaryotes*

Dhawan, Jyotsna, (*b* 31.03.1959), PhD**,** Emeritus Scientist, CSIR- Centre for Cellular and Molecular Biology, Hyderabad.

Dr. Dhawan is known for her work in stem cell Biology and muscle development with significant contribution to understanding regeneration and ageing.

Sectional Committee - VIII : *Biomolecular, Structural Biology and Drug Discovery: Biochemistry, Biophysics, Molecular Biology, Pharmacology, Structural Biology, Bioinformatics, Computational Biology, System Biology*

Shukla, Arun Kumar (*b* 01.11.1981), PhD, Professor, Department of Bioscience & Bioengineering. Indian Institute of Technology-Kanpur, Kanpur.

Dr Shukla specializes in structural biology, particularly G-protein-couples receptors and β-arrestins. He works on structural basis of signaling of some non-canonical GPCRs and their interaction with β-arrestins. His work also led to visualization of atomic level structures of CXCR2 and CXCR3, critical for developing therapies against cancers and respiratory diseases.

He is a recipient of almost all awards in Indian Science including the Shanti Swarup Bhatnagar Prize in 2021 and the prestigious Infosys Prize in 2023 for his outstanding work on GPCRs.

He is definitely a worthy candidate for the INSA Distinguished Lecture-2.

Sectional Committee - IX : *Health Sciences: Basic and Clinical Medical Sciences–Communicable and Non-communicable Diseases, Epidemiology, Anthropology, Psychology, Cognitive and Neurosciences, Medical Genetics and Genomics, Public Health, Nutrition, Immunology*

Tandon, Nikhil (*b* 28.11.1963), PhD, Professor and Head Department of Endocrinology and Metabolism, All India Institute of Medical Sciences (AIIMS), New Delhi.

Nikhil Tandon, a clinician-researcher specializing in cardio-metabolic disease, is Professor, Department of Endocrinology and Metabolism and Dean (Academics) at the AIIMS, New Delhi. He has been involved in the conduct of large-scale epidemiology studies evaluating the cardio-metabolic disease and its risk factors. He is a founding investigator of the population-based CARRS Cohort evaluating prevalent and incident cardio-metabolic risk factors and disease in Delhi and Chennai with a follow up of more than 15 years. His group has been involved in creating and evaluating innovative use of technology and quality improvement strategies, such as use of a care coordinator, decision support software, clinic flow modifications, opportunistic screening and task sharing, to facilitate care delivery for people with diabetes and hypertension. This strategy is now part of India's National Programme for NCDs and has also been supported by the National Health Authority for integration with Electronic Health Records compliant with the Ayushman Bharat Digital Mission. Other areas of work include young onset diabetes, where he leads the ICMR National Registry and the area of diabetes prevention in women with a prior history of gestational diabetes.

Sectional Committee - X : *Agricultural Sciences:*
Agriculture, Horticulture, Forestry, Fisheries, Food Science, Veterinary Science, Pathogen Biology and Host Pathogen Interaction Both Plant and Veterinary Importance

Bagyaraj, Davis Joseph (*b* 09.10.1940), PhD, INSA Honorary Scientist & Chairman, Centre for Natural Biological Resources and Community Development, Bengaluru.

Dr. D.J. Bagyaraj has made pioneering contributions in agricultural microbiology. His research work on mycorrhizal fungi and their field application is well recognized. Active scientist in arbuscular mycorrhizal research.