

**Recipients of INSA Distinguished Lectures-1
(for current INSA Associate Fellows and INYAS only)
(for the year 2024)**

**(Subject to deliver the lecture during the
Anniversary General Meeting of the Academy)**

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

Sharma, Veerendra Kumar (b 09.08.1985), PhD, Scientific Officer (G), Solid State Physics Division, Bhabha Atomic Research Centre, Mumbai.

Outstanding contribution on the understanding of dynamical process in soft materials. Developed a model that captures the crossover from non Gaussian to Gaussian sub-diffusion in glass.

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

Dey, Ramendra Sundar (b 14.03.1983) PhD, Scientist-D, Institute of Nano Science & Technology, Mohali.

Recommended for his outstanding work on self-sustainable and low-cost energy storage and conversion systems, especially on O₂ electrocatalysis, biofuel cells, CO₂ and N₂ fixation, super capacitors and developing highly efficient catalysts for ammonia production, solving the problem of microsupercapacitors with laser-irradiated graphene.

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

Vikram, Vishal (b 12.07.1985), PhD, Associate Professor, Department of Earth Sciences, Indian Institute of Technology Bombay, Mumbai

Vikram Vishal built geologic CO₂ storage potential map based on basin-specific know-how; formulated new protocols for pore size estimation, and developed FEM-based volume correlation model for quantification of 3D strain in rocks.

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

Tanveer, M (b 18.04.1983), PhD, Associate Professor, Optimization for Machine Learning (OPTIMAL) Research Lab, Indian Institute of Technology, Indore.

The nominee has made outstanding contributions to machine learning research by developing novel shallow and deep learning algorithms for classification, regression, and clustering problems. The developed algorithms have been implemented for the diagnosis of Alzheimer's disease, Schizophrenia disease, Parkinson's disease, and Epilepsy.

Sectional Committee - VIII : Biomolecular, Structural Biology and Drug Discovery

Biochemistry, Biophysics, Molecular Biology, Pharmacology, Structural Biology, Bioinformatics, Computational Biology, System Biology

Panda, Jiban Jyoti (b 10.05.1982) PhD, Scientist E, Institute of Nano Science and Technology, Punjab.

Dr. Panda works in the area of nanomedicine wherein her group develops biomolecular self-assembled nanostructures for therapeutic applications. Her work effectively combines a variety of tools including biochemical, biophysical, molecular and cell biological approaches for potentially treating Brain/CNS associated disorders.

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

Sharma, Tarun Kumar (b 08.09.1985) PhD, Associate Professor and Head of Medical Biotechnology Department, Gujarat Biotechnology University, Gandhinagar, Gujarat.

Dr Sharma has been working in the field of aptamer technology, diagnostics and biosensing. He has developed a panel of aptamers that can accurately diagnose pulmonary and extrapulmonary TB, leading to several patents. In addition, he has developed an aptamer and paper-based microfluidic assay for the point-of-care detection of krait envenomation, and another assay that can differentiate the venoms of elapids (Cobra and Krait and vipers) and of vipers (Russell's and saw-scaled viper). In addition, he has been working on developing a novel biosensing strategy based on peroxidase-like activity of nanoparticles.

Sectional Committee - X : Agricultural Sciences

Agriculture, Horticulture, Forestry, Fisheries, Food Science, Veterinary Science, Pathogen Biology and Host Pathogen Interaction Both Plant and Veterinary Importance

Rai, Amit Kumar (b 20.07.1984) PhD, Scientist-D, National Agri-Food Biotechnology Institute, Mohali

Dr Rai has contributed in the area of Food Science and Biotechnology for the development of functional fermented products rich in bioactive peptides and isoflavones.