



# INSA News Letter



Issue 222

APRIL - JUNE 2024



## CONTENTS

	Page
Important Events/Meetings	2
Financial Assistance by INSA	5
LEADS-2024	5
INSA Distinguished Public Lecture Series	6
Recent Publications of The Academy	6
Indian National Young Academy of Science (INYAS) Activities	7
Obituary Notes	11
Annexures	12
HR Activities	20

INDIAN NATIONAL SCIENCE ACADEMY, NEW DELHI  
[www.insaindia.res.in](http://www.insaindia.res.in)

## Important Events/ Meetings

Professor Subramania Ranganathan Memorial Medal (2021) lecture on Reactive Organic Molecules: Tuning, Orthogonality and Exploitation was delivered by Professor Amit Basak, FNA at IACS, Kolkata on 15 January, 2024 under the aegis of INSA Chandigarh Local Chapter.

The meeting of the Search Committee to evaluate the nominations for recommending names for the election of INSA Fellowship under Search-cum-Selection Committee for New Category (i) Science in Translation was held online on 3rd April 2024, and (ii) Science & Society was held online on 23rd April 2024.

The Selection Committee for Foreign Fellowship was held online on 5th April 2024 to evaluate the nominations for recommending names for election of INSA Foreign Fellowship.

The 2nd meeting of the Sectional committees, SC-I to SC-X, was held in person / online / hybrid mode at Academy premises from 22nd to 25th April 2024 for recommending names for the election of INSA Fellowship/ INSA Distinguished Lecture Fellows (IDL-1 and IDL-2) / INSA Young Associates / INSA Associate Fellows to the Council.

The Academy nominated a three-member delegation comprising Professor Ashutosh Sharma, President of INSA, Professor Tarun Souradeep, Director, Raman Research Institute and Dr Richa Kumar, IIT Delhi to attend the BRICS Academies Forum Meeting to be held in Moscow, Russia from 29-30 May 2024.

The S20 Engagement Group Apex Committee nominated the two-member delegation comprising Professor Ashutosh Sharma, President INSA and Professor Shekhar C Mande, Council Member, to attend the S20 Final Summit 2024 to be held in Brazil from 1-2 July 2024.

The Academy nominated Dr Kalachand Sain, Director, Wadia Institute of Himalayan Geology, Dehradun to participate in the National Academy of Sciences of Sri Lanka (NASSL)-IAP-AASSA Project titled "Resilience to High Impact Low Occurrence (HILO) disasters: A cross-sector comparison" to be held in Colombo, during 5-7 September 2024.

On April 10, 2024, officials from INSA and DFG had an online meeting to refine the draft of the INSA-DFG Bilateral Scientific Cooperation Agreement. Discussion was held on the specific terms and conditions of the cooperation agreement, including areas of research focus, funding mechanisms, project management procedures, intellectual property rights, and mechanisms for monitoring and

evaluating the progress of collaborative initiatives.

The Academy submitted a proposal to the Inter Academy Partnership (IAP) to organize an INSA-AASSA Symposium in India from Oct 13-15, 2024, on the theme of 'Science Policy Futures for Asia'. The proposal has been accepted, and, in this regard, the academy submitted the first deliverable suggested by IAP on 13th April 2024.

Professor Narinder K Mehra, Vice President (international) INSA, participated in an online meeting conducted by the IAP secretariat on 18th April 2024 regarding the call on the expression of interest for hosting the IAP Conference and General Assembly. The interested academies asked questions and discussed specific matters related to hosting of the event.

INSA Council and General Body meeting was held during 8-9 May, 2024 respectively.

The following announcements were made on 9th May, 2024 during the General Body Meeting :

- Selection of Twenty INSA Young Associates and Twenty INSA Associate Fellows 2024 enclosed in Annexure-I and Annexure-II.
- Selection of Sixteen INSA Distinguished Lecture Fellows (IDL-1 : 7 and IDL-2 :9) 2024 enclosed at Annexure-III and Annexure-IV.
- Selection of four INSA Overseas Chairs 2024 at Annexure-V.
- The Academy nominated Dr Shishir Shrotriya, Faculty at the Research and Information System for Developing Countries (RIS) and Head of the Centre for Maritime Economy and Connectivity, New Delhi, to represent INSA in place of Dr Richa Kumar at the BRICS Academies Forum Meeting to be held in Moscow, Russia, from May 29-30, 2024. The change in delegation was due to modifications incorporated by the Russian Academy of Sciences in the meeting sessions.
- The Academy nominated Professor Ruchi Anand for the position of International Union of Pure & Applied Biophysics (IUPAB) Councillor.
- The Academy supported Dr Mosarrat Hossain Md. for attending the 4th URSI Atlantic Radio Science Meeting to be held during 19-24 May 2024 at Spain.
- The Academy nominated the following members who will be attending the IUNS Virtual General Assembly Meeting on June 20, 2024:

Dr G. Bhanuprakash Reddy (voting member): Chair,

#### INSA-IUNS National Committee

Dr S. Kowsalya (Observer): Member, INSA-IUNS National Committee

Dr Pranati Das (Observer): Member, INSA-IUNS National Committee

Dr A. Sundaravalli (Observer): Member, INSA-IUNS National Committee

Dr Sylvia Fernandez Rao (Observer), Member, INSA-IUNS National Committee

Dr G M Subba Rao (Observer), Secretary, Nutrition Society of India (NSI)

The Academy recommended the following three members of the INSA-ISC National Committee for the IUPAB council elections.

Dr Amitabha Chattopadhyay, FNA, Chair IUPAB National Committee

Dr Aravind Penmatsa, Member, IUPAB

Dr K.R. Mahenan, Member, IUPAB

Nominations were invited from the INSA fellowship for the suggestions for vacancies in sectional committees for the year 2025. The last date for receiving the nominations was 21 June, 2024.

An email sent on 30 May, 2024 to all INSA Fellows for E-voting on Modifications in INSA Rule Nos. 4, 6 (c) and 13 and addition of 2 new rules. This includes: to modify the Rule 4 (a new Vice President (Science Policy) in the INSA Council; two new members in the INSA Council; to include the rule for Election of Fellows for New Categories and to modify the Rule 13 (Proposal to increase in the INSA Foreign Fellowship number).

An email sent on 3 June, 2024 to all INSA Fellows for E-voting to cast the vote on election for the Council, Indian, and Foreign Fellows for the year 2025. The voting process will be closed on July 05, 2024.

The applications for INSPIRE Faculty Fellowship 2024 were invited from 1st June 2024, the last date of online submission of applications is 15th July 2024.

The Academy nominated three member delegated Professor Ashutosh Sharma, President, INSA; Professor Tarun Souradeep, Director, Raman Research Institute and Dr Shishir Shrotriya, Faculty at the Research and Information System for Developing Countries (RIS) and Head of the Centre for Maritime Economy and Connectivity, New Delhi, participated in the BRICS Academies Forum Meeting held in Moscow, Russia, from May 29-30, 2024.

The invitation letter has been sent to all the member academies of AASSA and the other invitees for the INSA-AASSA symposium to be organised by the academy during the 2-3 September 2024 at INSA, New Delhi.

Professor Narinder K Mehra Vice President (International), Dr Brajesh Pandey, Executive Director and Dr Brotati Chattopadhyay, AED-I (International) of INSA participated in the preparatory meeting held with Royal Society, UK virtually on June 18, to discuss the chairs, no. of participants and other logistic arrangements for the forthcoming Yusuf Hamied Bilateral Workshop. The workshop is to be jointly organized by INSA and the Royal Society (UK) during 26 and 27 November 2024 at the Royal Society in London, UK on the theme of Health: the science and technology base for improving access to healthcare; and Biodiversity: water for sustainability.

The Academy nominated following two candidates for 2024 IAP Young Physician Leaders (YPL) Programme. This prestigious event will be held on 11-13 October 2024, in conjunction with the World Health Summit (WHS) in Berlin, Germany, from 13-15 October 2024

Dr Samagra Agarwal, Assistant Department of Gastroenterology and Human Nutrition Unit, All India Institute of Medical Sciences, New Delhi.

Dr Manasa Reddy Vadhi, Assistant, Department of Paediatric Surgery, AIIMS, Bibinagar (HMR).

The Academy has nominated following 15 scientists in different commissions of the International Union of Pure and Applied Physics (IUPAP):

Professor Venu Gopal Achanta-C2: The commission on Symbols, Units, Nomenclature, Atomic Masses and Fundamental Constants-Member

Dr Abhishek Dhar-C3: The Commission on Statistical Physics-Member

Dr Pankaj Jain-C4: The Commission on Astroparticle Physics- Member

Dr Sakuntala Chatterjee-C6: The Commission on Biological Physics-Member

Dr Samit Ray-C8: The Commission on Semiconductors-Member

Dr Anil Prabhakar-C9: The Commission on Magnetism-Member

Dr Shobhana Narasimhan-C10: The Commission on Structure and Dynamics of Condensed Matter-Member

Dr Bedanga Mohanty-C11: The Commission on Particles and Fields-Member

Dr Ambarish Kunwar-C13: The Commission on Physics for Development-Member

Dr Arun Grover-C14: The International Commission on Physics Education-Member

Dr Urbasi Sinha-C15: The Commission on Atomic, Molecular, and Optical Physics-Member

Dr Amita Das-C16: The Commission on Plasma Physics-Member

Dr Parinda Vasa-C17: The Commission on Laser Physics and Photonics-Secretary

Dr Justin David-C18: The Commission on Mathematical Physics-Member

Dr Anupama GC-C19: The Commission on Astrophysics-Member

The Academy supported Dr Souvik Chatterjee's visit to attend International Conference on Magnetism (ICM), 30th June 5 July 2024, Bologna, Italy.

The Indian National Science Academy (INSA) and Department of Science and Technology (DST), Government of India organized a one-day 'National Brainstorming Session on Transforming Science, Technology and Innovation Ecosystem of India' on 22nd May, 2024 at the Indian National Science Academy (INSA). This session focused on enhancing India's science, technology, and innovation ecosystems, addressing key areas like research, equity, technology development, international cooperation, and governance. Professor Abhay Karandikar, Secretary of DST, highlighted DST's role in developing science and technology policies to facilitate R&D and the importance of agile and adaptive policies to keep pace with the rapidly transforming ecosystem. He emphasized the need for a robust basic science research ecosystem to drive discoveries and inventions. Professor Ashutosh Sharma, President of INSA, discussed the extensive stakeholder consultation involved in forming science, technology, and innovation policies. He stressed the importance of effective policies, citing the National Geospatial Policy's benefits. Dr Akhilesh Gupta, Senior Adviser at DST, outlined DST's policy research initiatives and the formulation of the Science, Technology, and Innovation Policy (STIP) 2020. The session aimed to develop a roadmap for national science policy, identify specific policy recommendations, foster collaboration among stakeholders, and establish a platform for ongoing dialogue and policy development.



*National Brainstorming Session on Transforming Science*

IIT Jodhpur and INSA jointly celebrated the 50th anniversary of Pokhran-I, India's historic nuclear test. Professor Avinash K Agarwal, Director, IIT Jodhpur and Dr V. M. Tiwari, Vice President, Publications, INSA, shed light on the pivotal contributions and shared insights on the remarkable journey. Dr Deepak Gopalani, Scientist 'G' at Defence Lab, Jodhpur, discussed the multifaceted applications and challenges of nuclear technology.



*50th anniversary celebration of Pokhran-I at IIT, Jodhpur*

### **Financial assistance by INSA for Participation in International Conferences Abroad**

Eight Indian scientists were supported by the Academy for attending the Non ISC (International Science Council) sponsored conferences abroad.

### **Leadership Development Program in Science & Technology (LEADS April-2024)**

Indian National Science Academy (INSA) and National Centre for Good Governance (NCGG) jointly organized Leadership Development Program in Science & Technology (INSA-NCGG LEADS April- 2024) from 1-7 April 2024 at INSA, New Delhi.

20th History of Science Project Investigators' Meet: The 20th project investigators' meeting, along with the Research Council and National Commission for History of Science was held at INSA in hybrid mode during 15-17 May 2024 to assess the progress of ongoing projects and consider the new proposals received for support. The commission recommended 06 new projects for financial support for 2024-25. It also renewed 20 ongoing projects for financial support on diverse topics like metals and metallurgy, mathematics and astronomy, ecology and forestry, art and architecture, science education and society, history, science and culture, critical study of manuscript-based study from Sanskrit, Malayalam, Persian and other sources. 13 projects were accomplished during the current financial year.



*The Inaugural session (LEADS April-2024)*



*20th History of Science Project Investigators' Meet*



*Valedictory Session LEADS April-2024*



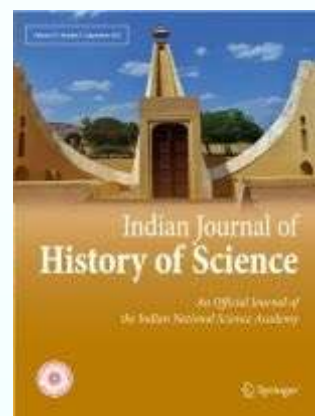
*Participants Leads April-2024*

## Recent Publications of the Academy

Proceedings of the Indian National Science Academy: Vol 90 No.2 (June 2024 issue): Special IUGS issue..

Indian Journal of Pure and Applied Mathematics, Vol 55 No. 2 (June 2024 issue).

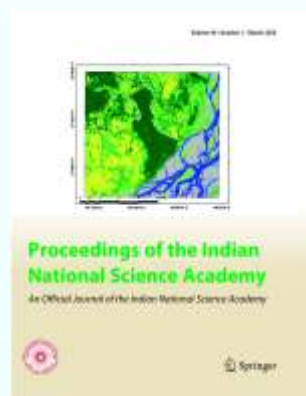
Indian Journal of Pure and Applied Mathematics (IJPAM), Vol 55(2) 2024 (June 2024 issue).



## INSA Distinguished Public Lecture Series

The Academy launched the “INSA Distinguished Public Lecture Series” an initiative aimed at promoting science and fostering intellectual discourse by hosting eminent scientists and researchers to share their insights with the wider community.

The fourth lecture of the INSA Distinguished Public Lecture Series was delivered by Professor Shekhar C. Mande, Former Director General CSIR and Secretary DSIR, Govt. of India, on "Viksit Bharat@2047, The Role of Science & Technology" on 26th April 2024 at 3:00 pm in INSA Auditorium.



*INSA Distinguished Public Lecture*

**The Indian National Science Academy established Indian National Young Academy of Science (INYAS) in December 2014. Following outreach activities have been carried out by INYAS members.**

**Event: Mental Health Training and Workshop for ASHA Workers, Date: April 4, 2024**

INYAS conducted an outreach (Remote, tribal village areas) activities in the Sirohi district of Rajasthan on 4th April. The seminar was conducted on the topic: "Scientific evidence based approach in mental health disorders in collaboration with National Mental Health Program (NMHP) Sirohi chapter. It was meant for 200 ASHA workers who were representative of 200 tribal villages in Rajasthan.



*Lecture for ASHA workers by INYAS*

**Event: Aahar Kranti - nutrition awareness camp, Date: April 5, 2024**

CCSHAU COA Bawal celebrated 3rd anniversary of Aahar Kranti- Nutrition Awareness Camp in collaboration with Indian National Young Academy of Science (INYAS)-INSA, New Delhi and 10th Anniversary Celebrations of VIBHA,



*Student demonstration during camp*

GIST. The main objective of this program was to make women and students aware about balanced diet.

**Event: Workshop on Food Innovation, Analysis and Patenting for Start-ups, Date: April 9, 2024**

Workshop on Food Innovation, Analysis and Patenting for Start-ups held on 9th April 2024 at Govt. Home Science College, Chandigarh. The workshop organized by IEP Cell and Indian National Young Academy of Science (INYAS), gave insights to students about product development, sources of finance available for entrepreneurs, how to get your business registered and patented. Approximately a total 75 students of Graduates and Postgraduates from various disciplines of Home Science participated in the workshop.

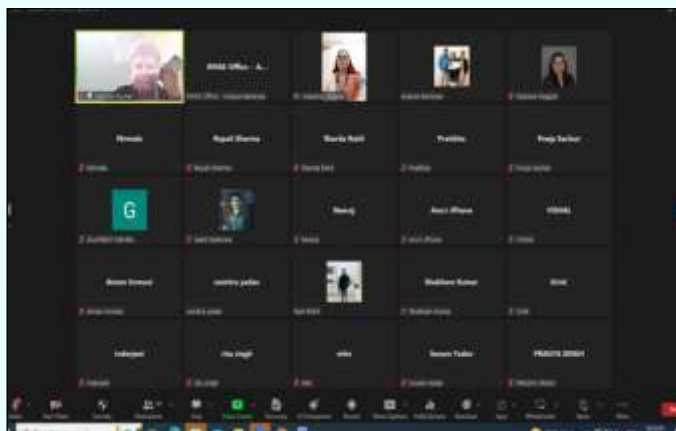
**Event: Lecture by an Industry expert on "Unravelling**



*Lecture session during the workshop*

**Dissolution: Navigating IVVC, Regulatory Considerations, and Biowaiver in Pharmaceutical Development.", Date: April 10, 2024**

An online Lecture on 'Unravelling Dissolution: Navigating IVVC, Regulatory Considerations, and Biowaiver in Pharmaceutical Development' was conducted by INYAS and AIP, Amity University jointly, on April 10th, 2024, from 2 PM onwards.



*Online participants during lecture*

**Event: Lecture for students on the Indian Scientific Expedition and developing interest in choosing research for their future career, Date: April 16, 2024**

The event focused on my Antarctica journey, aiming to inspire 11th-grade students' curiosity in science. Different career options in polar biology, showcasing the exciting opportunities available were discussed. Through engaging storytelling and visuals, attendees learned about the challenges and rewards of polar exploration. A key takeaway was the importance of interdisciplinary collaboration in addressing scientific questions and environmental issues in Antarctica. Overall, the event ignited students' passion for science and encouraged them to consider pursuing careers in polar research.



*Audience from Class XI onwards*

**Event: Slogan writing competition (Bengali, English, Hindi, Oriya and Urdu) and photography competition on the occasion of International Women's Day 2024, Date: May 4, 2024 (Online)**

Gender inclusivity is one of the sustainable development goals, as proposed by the United Nations. "Sustainable society with gender equality" was the theme where both school and college students have come forward to submit their innovations by penning creative slogans. Further, the students represented their thoughts through lenses for "When she rises, we all rise". The results were declared on 4th May (4-6pm), along with two enriching lectures by Dr Koushik Samanta, Associate Professor of IIT Bhubaneshwar and Dr Gitanjali Yadav, Scientist V at NIPGR, New Delhi. The slogans were evaluated by eight members and the photographs by four jury members. Participants were illuminated with inspiring views on the role

of women in breaking the techno patriarchy and how catalyzing gender equality can strike harmony in society.



*Webinar on the occasion of International Women's Day 2024*

**Event: NCR Zonal Science Week, Date: May 27, 2024  
Venue of the event: CCSHAU COA Bawal, Haryana**

Commemorating 10th year celebration of Indian National Young Academy of Science (INYAS), CCSHAU COA Bawal, Haryana and INYAS-INSA, New Delhi organised NCR Zonal Science week from May 02-07, 2024. During this week, various activities were organised such as a Science exhibition, hands-on Science experiments, visits to labs, interaction with scientists, expert lectures, poster-making competitions, and visits to ICAR-IARI, New Delhi. The main aim of this science week was to promote science education among students of different schools and to encourage them towards higher studies. The science camp, designed for grade 10 to undergraduate students in B.Sc. Agriculture provided an opportunity to explore science through models and lab experiments. It motivated students to pursue science in their higher studies, with many expressing interest in revisiting the labs to further understand the intricacies of agri-technology and organic farming instruments.



*Experimental demonstration*



**Event: Environmental Science Camp, Date: May 8, 2024, Venue of the event: Keniya Vidyalaya, Mayur Vihar Phase I, Khichripur, New Delhi**

An environmental science camp to spread environmental awareness to the students was organized to help create responsible and well-informed citizens. Students of Class IX of KV, Kichripur, Principal, Vice-Principal and teachers participated in the science camp. A brief introduction about the INYAS and its activities was deliberated by Dr Meher Wan. A lecture on Air Pollution and Climate Change and their interlinkages was delivered by Dr Sandhya Lakshmanan. Water Pollution and the calculation of TDS level ininking water and the ways to reduce them has been discussed in detail by Dr Ashwani Kumar Tiwari. Given the growing concern about climate change and other environmental problems, the event played a substantial role in sensitizing the students about sustainability issues and the self-responsible and natural ways to attain sustainability.



*Experimental Science Camp in NCR region*

**Event: Institutional Visit of students from rural area of Maharashtra, Date: May 13-15, 2024, Venue of the event: Vikram Sarabhai Space Centre/ISRO, IISER-Trivanum, Rajiv Gandhi Center for Biotechnology, National Institute for Interdisciplinary Science and Technology**

A group of 24 students and three teachers from rural Maharashtra visited leading scientific research institutes in Trivanum from May 12 to May 15, 2024, in collaboration with IISER-Trivanum and INYAS. On the first day, they toured the National Institute for Interdisciplinary Science and Technology (CSIR NIIST) and Rajiv Gandhi Centre for Biotechnology (RGCB). On the second day, they explored IISER Trivanum's physics, chemistry, mathematics,

biology, and ecology labs. The third day featured a visit to the Vikram Sarabhai Space Centre (ISRO), where they witnessed the launch of the RH 200 sounding rocket for upper atmosphere research. They also toured the VSSC Space Museum, which houses information on India's space history and future launch vehicles. Dr Ankush Bhaskar interacted with the students, discussing satellites, rockets, and space research, and answering their questions.



*Group photograph after the visit*

**Event: International Day of Light Celebrations, Date: May 16, 2024**

The International Day of Light 2024 was celebrated on 16th May, 2024 at Brilliant Public School, Aligarh under the auspicious occasion of 10th Anniversary of the Indian National Young Academy of Science (INYAS). More than 200 students from science stream attended the programme and gained awareness about International Day of Light and Scientific topics. Professor B P Singh, former Chairperson of the Physics Department at Aligarh Muslim University, delivered an enlightening talk on the topic "Light and Energy" within the theme "Light in our Lives" as advocated by UNESCO.



*Interactive QNA session*

**Event: Demystifying Science Olympiad, Date: June 6-7, 2024**

The experiments were performed with help of several student clubs in IITB, including Chemistry Club, ChemE-TL, Rocket Team, iGeM Bio team, and Tinkerer Lab. Such experiments are a part of the Science Olympiad program. Professor Shobhna Kapoor, the INYAS member and lead of this program, inaugurated the program while she introduced INYAS and IIT Bombay to the students, the accompanying science teachers. Professor Ruchi Anand, IIT, Mumbai, welcomed the students and encouraged them to explore options in science while following their curiosity. Next, the student Olympians Aditya and Rohinee introduced Astronomy, Astrophysics, and Mathematics Olympiad program to the participants. Professor Ankush Gupta initiated the discussion with the students while he provided an interactive overview of the Science Olympiad. Next day

the students visited the Chemistry Club and ChemE-TL labs and engaged with the student leaders enthusiastically.



*Lab visit during the workshop*

**Event: An introduction of eddy covariance technique from theories to instruments and to data processing Date: June 7, 2024**

ICAR-NRRI, Cuttack, in collaboration with Campbell Scientific India Pvt. Ltd., National Academy of Agricultural Science (NAAS), Cuttack-Bhubaneswar Chapter, Indian Society of Soil Science (ISSS), Cuttack Chapter and Indian National Young Academy of Science, East Zone organized a one day workshop and training on “An introduction of eddy covariance technique from theories to instruments and to data processing” in hybrid mode on June 07, 2024. A total of 27 participants attended the training program including faculty, students and technicians from ICAR NRRI and National Institute of Science Education and Research (NISER), Bhubaneswar. The program commenced with an inaugural session chaired by the Director of NRRI. The guests were welcomed by Dr Pratap Bhattacharyya (Convener), HoD, Crop Production Division.



*Group photograph after the session*

## Obituary Notes

### Fellows

#### **SURAJ NARAYAN GUPTA**

Suraj Narayan Gupta (*b* 01 December, 1924; *d* 04 July, 2021) obtained PhD from the University of Cambridge, UK specializing in quantum electrodynamics and high-energy physics. He was Distinguished Professor of Physics, Wayne State University, Detroit, Professor of Physics, University of Manchester, Visiting Professor, Purdue University. Professor Gupta was an Indian-born American theoretical physicist, notable for his contributions to quantum field theory. He worked in various areas of quantum field theory and elementary particle physics, including quantum chromodynamics and quarkonium.

Professor Suraj Narayan Gupta was elected as a Fellow of the Indian National Science Academy in 1960.



#### **NARAIN PANICKER KOCHUPILLAI**

NP Kochupillai (*b* 10 February, 1939 *d* 26 February, 2024) obtained MBBS and MD from AIIMS, New Delhi. He served Director, Endocrinology Metabolism & Diabetics, SRM Medical College, Emeritus, NAMS and Director, Medical Research at MS Ramaiah Medical College, Bangalore. Professor Kochupillai was an Indian clinical endocrinologist and contributed to the understanding of endemically prevalent endocrine and metabolic disorders.

Professor NP Kochupillai was elected as a Fellow of the Indian National Science Academy in 1991.



#### **MOHAN RAMCHANA WANI**

Mohan R Wani (*b* 01 January 1965; *d* 14 April, 2024) obtained PhD from University of London. Professor Wani was the Director, National Centre for Cell Science (NCCS), Savitribai Phule Pune University. He was an Indian cell biologist and immunologist. Professor Wani's research focus was in the fields of bone and cartilage cell biology, osteoimmunology, arthritis, stem cell science and regenerative medicine.

Professor Mohan R Wani was elected as a Fellow of the Indian National Science Academy in 2020.



### Foreign Fellows

#### **JOHN GRAHAM RAMSAY**

John Graham Ramsay (*b* 17 June, 1931; *d* 12 January, 2021) obtained D.Sc. University of London, UK specializing in Structural Geology, Tectonics. He was the Professor of Geology, Department of Earth Sciences, University of Cardiff, Zurich, Switzerland. Professor Ramsay was the first to establish the geometric properties of superimposed fold system and developed the application of mathematical techniques to the study of structures in deformed rocks.

Professor John Graham Ramsay was elected as a Foreign Fellow of the Indian National Science Academy in 1992.



#### **JAMSHED RUSTOM TATA**

Jamshed Rustom Tata (*b* 13 April, 1930; *d* 08 October, 2020) obtained D.Sc. University of Paris, France specializing Developmental and Molecular Biology. Professor Tata was the Head of Laboratory of Developmental Biochemistry, National Institute for Medical Research, London. Professor Tata discovered multiplicity of RNA polymerases in eukaryotes; established, with other workers, the basis of regulation of transcription by growth and development hormones.

Professor Jamshed Rustom Tata was elected as a Foreign Fellow of the Indian National Science Academy in 1978.



**RECIPIENTS OF INSA YOUNG ASSOCIATES (IYA)**  
(For the year 2024)

1. **Dr Gaurav Ahuja** (24.09.1987), PhD, Associate Professor, Indraprastha Institute of Information Technology, New Delhi.

Dr. Ahuja is a computational biologist who using a variety of approaches including AI/ML to identify alternative functions of cellular metabolites. His group has developed many tools, especially in the areas of olfaction and structure-activity relationships. His collaborative work in identifying human carcinogens using a multiparametric approach is noteworthy.

2. **Dr Mrinmoyee Basu** (17.08.1985), PhD, Assistant Professor, Department of Chemistry, Birla Institute of Technology and Science Pilani, Pilani.

Recommended for her outstanding work on **semiconductor**, especially on *nanomaterials* for photoelectrochemical reactions like water splitting, CO<sub>2</sub> reduction, and sensing, and vertically grown nanomaterials to enhance light-matter interaction and charge carrier properties.

3. **Dr Sayantani Bhattacharyya** (04.09.1981), PhD, Reader-F, National Institute of Science Education and Research Bhubneswar, Khurda.

Pioneering work on fluid-gravity correspondence.

4. **Dr Pankaj Chauhan** (08.04.1984), PhD, Associate Professor, Department of Chemistry, Indian Institute of Technology Jammu, J&K.

Recommended for his outstanding work in the field of **organocatalysis** is especially on enantio selective reactions, photochemical and electrochemical organic synthesis, synthesis of new polycyclic frameworks, atrop-/enantio-selective synthesis of medium-sized bridged biaryls, generation of remote stereogenic centers, photochemical generation of triplet carbene intermediates, and electro-organic synthesis of valuable building blocks and heterocycles, as well as the merger of chiral organocatalysis with photoredox catalysis and electrochemical synthesis to develop relay catalytic transformations.

5. **Dr Ved Vivek Datar** (13.11.1987), PhD, Assistant Professor, Department of Mathematics, Indian Institute of Science, Bengaluru.

For fundamental contributions to the differential geometry of Kähler manifolds that explore their connections to mathematical physics and complex algebraic geometry.

6. **Dr Sourav Dutta** (05.03.1984), PhD, Reader, Department of Nuclear and Atomic Physics, Tata Institute of Fundamental Research Mumbai, Mumbai.

Outstanding contribution to the understanding of cooling of trapped ions and experiments with strongly coupled atom-cavity systems.

7. **Dr Kalikrishna Hazra** (20.09.1984), PhD, Senior Scientist, Crop Production Division, ICAR-Indian Institute of Pulses Research, Kanpur.

Dr. Hazra developed sustainable phosphorus management modules. He has also carried work on mechanistic comprehension of c-sequestration and strategies for enhanced c-storage.

8. **Dr Neha Jain** (06.09.1981), PhD, Associate Professor, Department of Bioscience and Bioengineering, Indian Institute of Technology, Jodhpur.

Dr Jain has been working on understanding neurodegenerative disease, in particular on understanding the role of microbial amyloids in these diseases, deciphering the role of immune activation by hetero-amyloids and identifying strategies to combat the formation of amyloid.

9. **Dr Md Iqbal Raja Khan** (15.01.1987), PhD, Assistant Professor, Department of Botany, School of Chemical & Life Sciences, Jamia Hamdard, New Delhi.

Dr Khan has worked on GABA as a new significant plant signaling molecule. They have elucidated its role in mitigating salt and ER stress in wheat plants.

10. **Dr Veda Krishnan** (23.03.1986), PhD, Scientist (Senior scale), Division of Biochemistry, ICAR-Indian Agricultural Research Institute, New Delhi.

Dr Veda investigated the effect of genetic variability in staple crops like rice and pearl millet on carbohydrate quality and their glyceric potential using various *in vitro* digestion models.

11. **Dr Gaurav Majumdar** (07.08.1984), PhD, Assistant Professor, Department of Zoology, University of Allahabad, Prayagraj.

Dr Gaurav Majumdar has made significant contributions to the area of chronobiology in avian system. Notable findings include photoperiod impact on peptides in retinas, with which birds can differentiate between summer and winter seasons. Dr Majumdar studies on neuroplasticity have implication in neurodegenerative diseases.

12. **Dr Surendra Kumar Makineni** (27.06.1986), PhD, Assistant Professor, Department of Materials Engineering, Indian Institute of Science Bangalore, Bengaluru.

For pioneering contribution to the development of lightweight cobalt-base superalloys for high-temperature applications and advanced correlative microscopy techniques to study the atomic-scale structure and composition of defects, grain, and phase boundaries that control the overall properties of engineering alloys.

13. **Dr Awadhesh Narayan** (19.10.1988), PhD, Assistant Professor, Solid State and Structural Chemistry Unit, Indian Institute of Science Bengaluru, Bengaluru.

Recommended for his outstanding work in the field of **quantum theory of materials**, especially, on predictions of electrically tunable Berry curvature dipole in grapheneanalogs, discovery of a new two-dimensional structure of WS<sub>2</sub> with topological properties and a Berry curvature dipole, development of the theory of high critical temperatures in two-dimensional magnetic materials, demonstration of strain as a control parameter over polar metallicity, innovative approaches to control exceptional points in non-Hermitian quantum systems, machine-learning method for identifying non-Hermitian topological phases, and a new framework to classify exceptional points using techniques from tropical geometry.

14. **Dr Ratna Pal** (04.06.1987), PhD, Assistant Professor, Department of Mathematics, Indian Institute of Science Education and Research Mohali, Mohali.

For contributions to the area of higher dimensional complex dynamics, specially the relation between Hénon maps with bi-holomorphic escaping sets.

15. **Dr Bahni Ray** (26.04.1982), PhD, Associate Professor, Department of Mechanical Engineering, Indian Institute of Technology Delhi, New Delhi.

For her outstanding contributions to understanding micro-scale mechanisms of absorption of hydrophilic and hydrophobic particles through droplets for pollution mitigation.

16. **Dr Sriparna Saha** (19.01.1982), PhD, Associate Professor, Department of Computer Science and Engineering, Indian Institute of Technology Patna, Bihta.

For her significant contributions to multimodal information processing through deep-learning architectures, covering diverse applications, including sentiment and emotion-aware dialogue systems, disease prognosis, hate speech detection, depression detection, recommendation systems, and task-oriented dialogue systems in sales and healthcare domains.

17. **Dr Jogender Singh** (28.03.1988), PhD, Assistant Professor, Indian Institute of Science Education and Research Mohali, Mohali.

Outstanding work unveiling mechanistic underpinnings associated with reductive stress using *C. elegans* as a model system. Discovered the interplay between hypoxia and reductive stress.

18. **Dr Swatantra Pratap Singh** (15.08.1985), PhD, Associate Professor, Environmental Science and Engineering Department, Indian Institute of Technology Bombay, Mumbai.

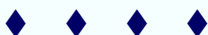
For his significant contributions to water and wastewater treatment and pollution control research, leading to cost-effective novel membrane technology and environmental nanotechnology-based solutions.

19. **Dr Rishitosh Kumar Sinha** (21.10.1987), PhD, Scientist/Engineer SE, Physical Research Laboratory, Ahmedabad.

Rishitosh Sinha has conducted detailed investigation of the morphology and topography of the landing sites of Chandrayaan-2 and 3. The Chandrayaan-3 Pragyan rover traverse map around the landing site was designed by him.

20. **Dr Surendra Nadh Somala** (20.08.1986), PhD, Associate Professor, Indian Institute of Technology Hyderabad, Sangareddy.

For his significant contributions to earthquake engineering, including seismic hazard assessment and performance assessment of critical infrastructure such as bridges and offshore wind turbines.



Annexure-II

### RECIPIENTS OF INSA ASSOCIATE FELLOWS (IAF) (For the year of 2024)

1. **Dr Tanushree Bhattacharya** (30.04.1979), PhD, Associate Professor, Department of Civil and Environmental Engineering, Birla Institute of Technology, Mesra, Ranchi.

Tanushree Bhattacharya contributed significantly to the monitoring, assessment and remediation of environmental pollutants that led to the appraisal of metal contamination in ground water and soils, and provided implications on health hazards.

2. **Professor Parag Ratnakar Gogate** (30.06.1975), PhD, Professor of Chemical Engineering and Controller of Examinations, Chemical Engineering Department, Institute of Chemical Technology, Mumbai.

For his significant contributions to the fundamental understanding of the governing mechanisms and the design of cavitation reactors for process intensification of different chemical, physical, and biotechnological applications.

3. **Professor Chidambaram Gunanathan** (05.06.1977), PhD, School of Chemical Sciences, National Institute of Science, Education and Research Bhubaneswar, Jatani.

Recommended for his outstanding work on ***catalysis and sustainable chemistry***, especially on efficient and selective catalytic transformations using bio-renewable alcohols and industrial feedstocks with no hazardous waste, chemoselective hydroelementation reactions, amine-amide metal-ligand cooperation in pincer catalysts for sustainable catalytic transformations, direct catalytic cross-coupling of secondary alcohols, alpha-alkylation and olefination of nitriles, ketazine synthesis, alpha-alkylation of ketones and beta-naphthol, N,N-dialkylation of acylhydrazides, selective hydrogenation of epoxides, self-coupling of secondary alcohols, alkenylation of organic compounds, cross-coupling of silanes and silanols, and selective reduction of esters, demonstrating his significant contributions towards advancing sustainable chemical transformations.

4. **Dr Anzar Ahmad Khuroo** (26.10.1974), PhD, Associate Professor, Centre for Biodiversity and Taxonomy, Department of Botany, University of Kashmir, Srinagar.

Dr Khuroo made extensive contributions to ecology of invasive alien species causing change in biodiversity pattern, and spread of exotic species as impacted by climate change in Kashmir mountains of the Western Himalayas.

5. **Dr Girdhari Lal** (09.08.1978), PhD, Scientist F, National Centre for Cell Science, Pune.

Dr Lal's laboratory is working on cellular and molecular mechanisms of inflammation and tolerance in relation to inflammatory diseases, autoimmunity and tumours. Further, they are investigating the role of chemokine receptors and their therapeutic importance in inflammation and autoimmunity.

6. **Dr Biswanath Maity** (26.12.1982), PhD, Associate Professor, Centre of Biomedical Research (CBMR), SGPGI Campus, Lucknow.

Dr Maity has made significant contributions towards understanding the impact of G-protein regulation in chemotherapy-induced heart complications, drug-induced liver injury, non-alcoholic fatty liver disease and disease, etc and on synthesis/ characterization of nanostructures that can help cell-selective delivery of drugs.

7. **Professor Sukhendu Mandal** (31.03.1977), PhD, Indian Institute of Science Education and Research Thiruvananthapuram, Trivandrum.

Recommended for his significant contributions in the field of metal **nano-clusters, inorganic materials, and solid-state chemistry** with especial focus on synthesizing new stable metal clusters and cluster-assemblies and exploring their physical and chemical properties; for example stabilization of Cu in a zero-oxidation state, synthesis of a new silver nanocluster with a hexagonal close-packed Ag<sub>14</sub> unit containing S<sub>2</sub>- templated Ag<sub>2</sub>S quantum dot-like core and a 2D cluster-assembled material, developing a nickel-based thiolate complex for electrochemical ammonia production from dinitrogen, and synthesizing a phosphine and halide-protected Au nanocluster useful for efficient Ullmann coupling reactions.

8. **Professor Supriyo Mitra** (12.11.1976), PhD, Department of Earth Sciences, Indian Institute of Science Education and Research Kolkata, Nadia.

Supriyo Mitra's seismological study revealed flexural underthrusting of India beneath Himalaya, thinned-continental crust beneath Shillong Plateau, and continent-oceanic transitional crust beneath Bengal Basin, and entire Indian crust seismogenic.

9. **Professor Vineeth N Balasubramanian** (29.11.1978), PhD, Department of Computer Science and Engineering, Indian Institute of Technology Hyderabad, Sangareddy.

For his outstanding contributions to the fields of deep learning, computer vision and explainable AI, especially in the development of fundamental methods for learning robust and reliable deep learning models in continually evolving environments.

10. **Dr Dimple Notani** (02.08.1976), PhD, Associate Professor, National Centre for Biological Sciences, TIFR Bangalore, Bangalore.

Outstanding contribution towards 3-D organization of genome that dictates spatio-temporal control of gene expression. Pioneering work identifying novel mechanisms that control enhancer promoter interactions.

11. **Professor Ajith Parameswaran** (27.05.1980), PhD, Professor (H), International Centre for Theoretical Sciences, Tata Institute of Fundamental Research Bengaluru, Bangalore.

Outstanding contributions on gravitational lensing of gravitational waves.

12. **Dr Manas Ranjan Sahoo** (12.06.1983), PhD, Associate Professor, School of Mathematical Sciences, National Institute of Science Education and Research Bhubaneswar, Khurda.

For contributions to study the initial boundary value problems extending earlier results for the pure initial value problem in the area of partial differential equations.

13. **Professor Raghunath Sahoo** (28.02.1976), PhD, Indian Institute of Technology Indore, Simrol.

Outstanding work in field of QGP & phenomenology specially in small systems with application of ML techniques.

14. **Professor Neelima Satyam** (06.08.1979), PhD, Department of Civil Engineering Indian Institute of Technology Indore, Simrol.

For her significant contributions to the field of geotechnical and earthquake engineering, including landslide hazard assessment, liquefaction studies, and seismic microzonation. The liquefaction hazard assessment tool developed by her has become an industry standard for assessing liquefaction susceptibility.

15. **Professor Kamal Priya Singh** (13.07.1979), PhD, Indian Institute of Science, Education and Research Mohali, Mohali.

Pioneering work on novel electronic, optical and magnetic properties of silk and implications on understanding proteins.

16. **Professor Kashmir Singh** (24.01.1976), PhD, Department of Biotechnology, Panjab University, Chandigarh.

Prof Singh has made significant contribution in the field of plant functional genomics and metabolic engineering with a special focus on important medicinal plants of Himalayan region.

17. **Professor Neetu Singh** (20.06.1979), PhD, Center for Biomedical Engineering, Indian Institute of Technology Delhi, New Delhi.

For her significant contributions to the development of new-age materials and technologies for healthcare, including a simple drug screening platform to monitor cancer cells and bacteria and a drug delivery platform with RBC membrane towards personalized medicine.

18. **Dr Sudhir Pratap Singh** (15.12.1977), PhD, Scientist-D, Center of Innovative and Applied Bioprocessing (CIAB), NABI, Mohali.

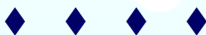
Dr Singh generated metagenomic resources from thermal spring, cold lake, ethnic fermented food products, and acidic mine, and discovered novel genes encoding enzymes with superior catalytic properties of high-value to agriculture biotechnology.

19. **Dr Surya Prakash Singh** (15.04.1978), PhD, Principal Scientist, Department of Polymers and Functional Materials, CSIR-Indian Institute of Chemical Technology, Hyderabad.

Recommended for his significant contributions in the field of **materials and molecules**, especially for the development of photonic devices such as organic thin-film solar cells (OPV), dye-sensitized solar cells (DSSC), and perovskite solar cells, design and development of new light-harvesters like small molecule electron donors, soluble fullerene and non-fullerene electron acceptors, photosensitizers, and hole-transport materials, resulting in power conversion efficiencies over 10% for non-fullerene acceptors, over 13% for DSSCs, and over 22% for perovskite solar cells, as well as indoor solar cells with a remarkable efficiency of 38%.

20. **Professor Timir Tripathi** (28.01.1981), PhD, Department of Zoology, School of Life Sciences, North-Eastern Hill University, Shillong.

Dr Tripathi is a molecular biophysicist interested in understanding protein function through its interactions and dynamics. He has published good quality work in multiple areas with a special emphasis on redox proteins from *Fasciolagigantica*, a disease causing organism in ruminants.



Annexure-III

**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**

**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**

**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 O<sub>2</sub> electrocatalysis, biofuel cells, CO<sub>2</sub> and N<sub>2</sub> fixation, super capacitors and developing highly efficient catalysts for ammonia production, solving the problem of microsupercapacitors with laser-irradiated grapheme.



### **Sectional Committee - IV : Earth & Environmental Sciences**

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

Vikram Vishal built geologic CO<sub>2</sub> 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**

**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**

**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**

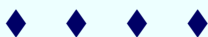
**Sharma, Tarun Kumar** (b 08.09.1985) PhD, Associate Professor and Head of Medical Biotechnology Department, Gujarat Biotechnology University, Gandhinagar, Gujarat.

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**

**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.



Annexure-IV

**Recipients of INSA Distinguished Lectures-2**  
(for INSA Fellows only except those covered under IDL-1)  
(for the year 2024)

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

### **Sectional Committee - II : Physics**

**Gopakumar, Rajesh** (b 14-12-1967), PhD, Senior Professor and Centre Director International Centre for Theoretical Sciences (ICTS-TIFR), Bengaluru.

Outstanding work on gauge string/gravity duality and quantum field theory

### **Sectional Committee - III : Chemistry**

**Natarajan, Srinivasan** (b 27.05.1960) PhD, Solid State and Structural Chemistry Unit, Indian Institute of Science, Bengaluru.

Recommended for his outstanding and consistent contributions in the area of **Inorganic Materials Chemistry**, especially on the basic understanding of framework structured compounds, identifying new intermediates and pathways for the synthesis of metal-organic frameworks (MOFs), investigating the role of kinetic and thermodynamic factors in their formation, pioneering the use of MOFs for applications in metal-centered luminescence, solvent-dependent room temperature ferroelectric behavior, heterogeneous catalysis, and as precursors for the synthesis of ceramics, work on Li-cathode battery materials, inorganic pigments, new electrocatalysts, and non-linear optical materials, and stabilization of transition metal ions in tetrahedral environments.

### **Sectional Committee - IV : Earth & Environmental Sciences**

**Gupta, Harsh Kumar** (b 28.06.1942), PhD, CSIR- National Geophysical Research Institute, Hyderabad.

Harsh Gupta discovered enormously thick (65-70 km) crust below the Himalaya and Tibetan plateau, and identified common characteristics of water reservoir triggered earthquake sequences, discriminated from the normal earthquake sequences.

### **Sectional Committee - V : Engineering & Technology**

**Pal, Sankar Kumar** (b 13.09.1950) National Science Chair, Gol Indian Statistical Institute, Kolkata.

The nominee has made fundamental contributions to machine intelligence research by developing various modern and classical approaches. He pioneered the development of fuzzy set theory, and neuro-fuzzy and rough-fuzzy computing and their applications in pattern recognition, image/video processing, machine learning, case-based reasoning, granular computing, data mining, machine-mind development, and knowledge-based systems.

### **Sectional Committee - VI : General Biology**

**Sharma, Eklabya** (b 11.05.1958), Strategic Advisor and Distinguished Senior Fellow, Ashoka Trust for Research in Ecology and the Environment (ATREE), Bengaluru.

Dr. Sharma has made highly impactful contributions to the biodiversity conservation, natural resource management, biogeochemical cycling, climate change impact assessment leading to the development of policies for sustainable management of Himalayan ecosystem.

### **Sectional Committee - VII : Molecular and Cellular Biology**

**Vaidya, Vidita Ashok** (b 15.11.1970), Professor (H), Department of Biological Sciences, Tata Institute of Fundamental Research, Mumbai.

Dr Vidita Vaidya for her path-breaking work towards understanding molecular, cellular, neurophysiological aspects of biology of anxiety and depression.

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

**Udgaonkar, JB** (b 22.03.1960), Indian Institute of Science Education & Research, Pune.

Prof. Udgaonkar is an outstanding scientist who has contributed immensely to our knowledge on protein folding using a variety of biophysical approaches. His group has extensively characterized folding, unfolding and aggregation pathways of multiple proteins, including prion proteins and alpha-synuclein, with important implications for understanding protein misfolding-based diseases.

### **Sectional Committee - IX : Health Sciences**

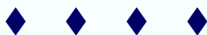
**Somasundaram, Kumaravel** (b 08.10.1962) PhD, Professor and Chair, Department of Microbiology and Cell Biology, Indian Institute of Science, Bengaluru.

Professor Somasundaram has made outstanding contributions to cancer genetics, particularly in relation to glioblastoma, the most common and aggressive brain tumor in adults, working in collaboration with clinicians. His work has led to identification of certain sub-types of this tumor with distinct characteristics and a better understanding of the genetic and biological mechanisms underlying the occurrence of this tumor.

### ***Sectional Committee - X : Agricultural Sciences***

**Lal, Rup (b27.09.1953), PhD**, INSA Senior Scientist, University of Delhi, New Delhi.

**Dr Ruplal explored physiology, genetics & Biochemistry of hexachlorocyclohexane (HCH) degradation (first to discovered associates in genes with IS6100. He is currently developing bioremediation tech for the remediation of HCH residues.**



Annexure-V

### **Recipients of INSA Overseas Chair 2024**

#### ***Sectional Committee - II : Physics***

**1. Prof. Chris Jarzynski**, Department of Physics, University of Maryland, College Park, MD 20742

Christopher Jarzynski, a Princeton University alumnus (1987) with a Ph.D. from UC Berkeley (1994), specializes in molecular-level statistical mechanics and thermodynamics. His research spans areas like nonequilibrium thermodynamics, biophysics, molecular machines, and quantum thermodynamics. He has received numerous awards including the 2019 Lars Onsager Prize, 2020 Guggenheim Fellowship, and was elected to the National Academy of Sciences in 2020.

#### ***Sectional Committee - III : Chemistry***

**1. Professor Varinder Aggarwal**, School of Chemistry, University of Bristol, UK

Varinder K. Aggarwal, a distinguished organic chemist, held professorial positions at Bath University, Sheffield University, and currently Bristol University, where he chairs the Synthetic Chemistry department. Elected as a Fellow of the Royal Society in 2012, his research focuses on developing innovative methods for synthesizing complex molecules, with applications ranging from medicine to vaccine development, particularly targeting diseases like tuberculosis.

#### ***Sectional Committee - IV : Earth & Environmental Sciences***

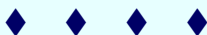
**1. Professor Mrinal K Sen**, Department of Earth and Planetary Sciences, Jackson School of Geosciences & Morgan J. Davis Centennial Chair in Geosciences

MrinalSen is a prominent figure in seismic wave propagation, renowned for his expertise in anisotropy and geophysical inverse problems. Sen has pioneered the application of global optimization techniques like simulated annealing and genetic algorithms in geophysical contexts and developed innovative approaches for characterizing uncertainties and probability distributions in model space. He has also contributed significantly to parameter estimation in anisotropic media and reservoir characterization using seismic and well log data, particularly focusing on high-resolution velocity estimation in structurally complex regions and model-based inversion for reservoir properties.

#### ***Sectional Committee - V : Engineering & Technology***

**1. Professor Rama Chellappa**, Departments of Electrical and Computer Engineering and Biomedical Engineering, Johns Hopkins University.

Rama Chellappa, a distinguished professor at Johns Hopkins University, is a renowned authority in artificial intelligence, specializing in computer vision, pattern recognition, and machine learning. His work encompasses diverse applications like biometrics, smart cars, forensics, and healthcare imaging, with notable contributions in advanced facial recognition systems and interdisciplinary collaborations. Recognized with prestigious awards from the IEEE, including election to the National Academy of Engineering, was shaped by early mentorship and a strong academic journey from South India to Purdue University.



## HR Activities

### Swachhta Pakhwara: Pledge ceremony

The staff of INSA took Pledge on Swachhta Pakhwara on 06.05.2024 at 4.00 PM in INSA Multipurpose Hall at ground floor Jubilee Centre and all old file/records etc. disposed /sold during Swachhta Pakhwara.



### Redeployment /Appointment of Vigyan Prasar surplus staffs

Redeployment/ Appointment of Smt. Sonu Bhatia, Assistant-I and Smt. Usha Kumari, Assistant-I, Vigyan Prasar surplus staffs in the academy on 03.06.2024.

### International Yoga Day

10th International Day of Yoga was celebrated by the Staff Members of INSA on 21st June, 2024 at Multipurpose Hall at 10.00 AM. Yoga session was organized in the campus. Yoga T-shirts were distributed to the staff members for Live Yoga.

