INDIAN NATIONAL SCIENCE ACADEMY
Bahadur Shah Zafar Marg, New Delhi 110002

Minutes of the General Body Meeting of the Indian National Science Academy held on 13 May 2026 in INSA premises in hybrid mode.

The following Fellows attended the meeting:

In person

1. Professor Shekhar C Mande, President, INSA
2. Professor UB Desai, Vice-President (Fellowship Affairs), INSA
3. Professor Indranil Manna, Vice-President (Science and Society), INSA
4. Dr Debashis Mitra, Vice-President (International Affairs), INSA
5. Dr VM Tiwari, Vice-President (Publications/Informatics), INSA
6. Professor Anil Kumar Tripathi, Vice-President (Science Promotion), INSA
7. Professor GD Yadav, Vice-President (Resource Generation & Management), INSA
8. Professor Madhoolika Agrawal
9. Professor DM Banerjee
10. Professor Manju Bansal
11. Professor Saroj Kanta Barik
12. Professor Jitendra Kumar Bera
13. Professor Anil Bhardwaj
14. Professor Supriya Chakraborty
15. Professor Sivaji Chakravorti
16. Professor Indranil Dasgupta
17. Professor Anil Kumar Gupta (Ahmedabad)
18. Professor Anil Kumar Gupta (Kharagpur)
19. Professor Santosh Kapuria
20. Dr Smita Dilip Mahale
21. Professor Ranjan Kumar Mallik
22. Professor Bedangadas Mohanty
23. Professor Manoj Prasad
24. Professor NV Chalapathi Rao
25. Dr Manjula N Reddy
26. Professor Maithili Sharan
27. Dr Tilak Raj Sharma
28. Professor Subrata Sinha
29. Professor Rajesh K Srivastava
30. Professor Prabodh Kumar Trivedi
31. Professor UV Waghmare

Online

1. Professor Anurag Agrawal, Vice-President (Science Policy)
2. Professor VG Achanta
3. Professor Amit Agrawal
4. Professor Faizan Ahmad
5. Professor Nahid Ali
6. Professor S Ananthakrishnan

7. Professor Md Zahid Ashraf
8. Professor Shally Awasthi
9. Dr Mahtab S Bamji
10. Professor Bijnan Bandyopadhyay
11. Professor AK Banerjee
12. Professor Soumitro Banerjee
13. Dr Anirban Basu
14. Professor Michael Batty
15. Professor Gautam Bhattacharyya
16. Dr Sujit Kumar Bhattacharya
17. Professor SS Bhattacharya
18. Professor SD Biju
19. Dr Naveen Chandra Bisht
20. Professor Asit Kumar Chakraborti
21. Professor Anupama Gadiyara Chakrapani
22. Professor V Chandrasekhar
23. Professor Mitali Chatterjee
24. Professor RP Chhabra
25. Professor BVR Chowdari
26. Professor Sampa Das
27. Professor Sarit Kumar Das
28. Professor BS Daya Sagar
29. Professor Suman Kumar Dhar
30. Professor Subhasish Dey
31. Professor VP Dimri
32. Dr NZ Ehtesham
33. Professor Aswini Ghosh
34. Professor Pradyut Ghosh
35. Professor PK Gupta
36. Professor Saman Habib
37. Professor Maneesha Shreedhar Inamdar
38. Professor Mukesh Jain
39. Professor ED Jemmis
40. Dr Rupinder Kaur
41. Dr DP Kasbekar
42. Professor Naima Khatoon
43. Professor Paramjit Khurana
44. Dr HN Kumara
45. Dr GC Kundu
46. Professor Sandeep Kunnath
47. Dr UC Lavania
48. Professor Uday Maitra
49. Professor Meena B Mahajan
50. Dr Prantik Mandal
51. Professor Narinder K Mehra
52. Professor Vimal Mishra
53. Professor Gadadhar Misra
54. Professor Sushmita Mitra
55. Professor Sanjay Mittal
56. Professor JN Moorthy

57. Professor Tapan Kumar Mondal
58. Professor Prasun Kumar Mukherjee
59. Professor Rahul Mukerjee
60. Professor Dhrubajyoti Mukhopadhyay
61. Professor K Muniyappa
62. Dr DA Nagegowda
63. Lt. Gen. (Dr) Velu Nair
64. Professor KM Venkat Narayan
65. Dr Shailesh Nayak
66. Professor Sankar Kumar Pal
67. Dr AB Pandit
68. Dr Amit Kumar Patra
69. Professor VB Patravale
70. Professor G Parthasarathy
71. Professor N Parthasarathy
72. Professor VK Pillai
73. Professor Dipendra Prasad
74. Dr Gangan Prathap
75. Dr Ayub Qadri
76. Professor LC Rai
77. Professor AS Raghavendra
78. Professor SA Rangwala
79. Dr Ch. Srinivasa Rao
80. Professor CP Rao
81. Professor DS Rawat
82. Dr SD Rindani
83. Dr Manmohan Sarin
84. Professor GN Sastry
85. Dr Devi P Shetty
86. Professor Ajit Iqbal Singh
87. Dr Kulinder Pal Singh
88. Professor RS Singhal
89. Professor Arun Kumar Shukla
90. Professor Pradeep Srivastava
91. Dr Rohini Srivathsa
92. Dr SK Subbarao
93. Professor MK Surappa
94. Professor KM Sureshan
95. Professor Qudsia Tahseen
96. Professor PN Takkar
97. Professor Avesh Kumar Tyagi
98. Professor TNC Vidya
99. Dr Sudhanshu Vrati
100. Dr Sudesh Kumar Yadav
101. Pradip
102. Akhilesh
103. Prof Sinha
104. Rishi
105. Giriraj
106. Chandrasekhar

Note: Some Fellows who joined the meeting with different names (reflected in the list like....Jayam, I phone (3), Ranbir's S25, Motorola edge 50 pro, Kms, VC, User, BITS, I Phone A, Iphone, IIT Kanpur)

President, INSA welcomed all the participant Fellows. Thereafter, the regular agenda items were taken up.

1. Condolence at the passing away of the following distinguished INSA Fellows:

The sad demise of Professor Harindra Singh Balyan, Professor Kasturi Datta, Professor Madhav Dhananjaya Gadgil, Professor Padam Chand Jain, Dr Shashishekhar Balkrishna, Dr Rameshwer Prasad Sharma, Fellows were reported. The obituary notes were read by Professor Shekhar C Mande, President, INSA and everyone present stood in silence for two minutes as a mark of respect to the deceased.

2. Confirmation of minutes of 91st Anniversary General Meeting held on 3rd December, 2025, at Jawaharlal Nehru University, New Delhi.

The minutes of the 91st Anniversary General Meeting held on 3rd December, 2025 were presented by Professor UB Desai, Vice-President (Fellowship Affairs), INSA. The minutes were already uploaded on the INSA website. No comments were received. Thereafter, the minutes were confirmed.

3. Announcement of names of recipients of the INSA Young Associates (IYA)/ INSA Associate Fellows (IAF), 2026.

Professor UB Desai, Vice-President (Fellowship Affairs), announced the names of twenty INSA Young Associates and twenty INSA Associate Fellows 2026 enclosed in ***Annexure-I, p/9-13*** and ***Annexure-II, p/14-18.***

4. Announcement of the names of recipients of the INSA Distinguished Lecture Fellows (IDL 1 and IDL 2), 2026.

Professor UB Desai, Vice-President (Fellowship Affairs), announced the names of nineteen INSA Distinguished Lecture Fellows (IDL-1: 9 and IDL-2: 10) 2026, enclosed in ***Annexure-III, p/19-21*** and ***Annexure-IV, p/22-25.***

5. Announcement of the names of recipients of the INSA Chairs for Inviting Overseas Scientists 2026.

Professor UB Desai, Vice-President (Fellowship Affairs), announced the names of five INSA Overseas Chairs 2026 at ***Annexure-V, p/26-28.***

6. Announcement of voting results regarding removal of Dr Ashok Pandey from INSA Fellowship.

President, INSA briefed the Fellows about Dr Ashok Pandey's case. He further informed that in view of the voting results and discussion, Dr Ashok Pandey has been removed from the INSA Fellowship. Dr Pandey will be intimated accordingly.

7. Announcement of voting results regarding Rule 6(b) and 13.

The amendments of INSA Rule Nos. 6 (b) and 13 were announced by Professor UB Desai, Vice-President (Fellowship Affairs), to all Fellows. It will accordingly be included in the INSA Yearbook 2027.

Existing Rule		Proposed Rule
ELECTION AND ADMISSION OF FELLOWS (except New Categories) 6. The election of Fellows shall be governed by Regulations framed by the Council, but these Regulations shall provide for the following points, from which a departure can be made only after reference to all the Fellows of the Academy: (a) Eligibility for election to the Fellowship shall be restricted to Indian citizens and any foreign scientist holding an OCI/PIO Card and working in India for at least 10 years. (b) The number of Fellows elected shall be limited to 100 annually. Among the total 100 Fellows, 20 Fellows will be elected from the two new categories Science in Translation and Science for Society, 10 each and remaining ten sectional committees will now elect up to 80 Fellows annually, till such time as the total number of living Fellows reaches 1500.		**ELECTION AND ADMISSION OF FELLOWS (except New Categories)** 6. The election of Fellows shall be governed by Regulations framed by the Council, but these Regulations shall provide for the following points, from which a departure can be made only after reference to all the Fellows of the Academy: (a) Eligibility for election to the Fellowship shall be restricted to Indian citizens and any foreign scientist holding an OCI/PIO Card and working in India for at least 10 years. (b) The number of Fellows elected shall be limited to 60 annually, including those elected under Science for Society category, until the total number of living Fellows reaches 1500.

Existing Rule		Proposed Rule
ELECTION OF FELLOWS FOR NEW CATEGORIES 13. The procedure of electing Fellows under new categories shall be as prescribed in the Regulations framed by the Council from time to time. The total number of Fellows shall be limited to 1500 (including fellows elected under regular sectional committees) and not more than twenty (ten in each category) will be elected each year. No admission fee or Fellowship subscription shall be due from the Fellows elected under new categories.		**ELECTION OF FELLOWS FOR SCIENCE FOR SOCIETY** 13. The procedure of electing Fellows under Science for Society shall be as that prescribed in the Regulations framed by the Council from time to time. The total number of Fellows shall be limited to 1500, including those elected under regular sectional committees. No admission fee or Fellowship subscription shall be due from the Fellows elected in the category of Science for Society.

8. Announcement of voting results regarding proposed resolution.

The addition of resolution was announced by Professor UB Desai, Vice-President (Fellowship Affairs), to all Fellows. The resolution will be included in the INSA Bye-laws accordingly.

Existing Resolution		Proposed Resolution
There is no rule mentioned in the current operating guidelines.		"Resolved that pursuant to the provisions of section 13 and 14 of the Societies Registration Act,1860, as applicable to the National Capital Territory of Delhi, the consent of the members of the Society be and is hereby accorded to insert a Dissolution Clause in the Memorandum of Association (MOA) and Bye laws of the Society. RESOLVED FURTHER THAT upon dissolution of the Society, all the debts and liabilities of the Society shall be fully discharged and satisfied in accordance with the law. RESOLVED FURTHER THAT no part of the property or assets of the Society shall be distributed or transferred to the members of the Society. RESOLVED FURTHER THAT the remaining assets and properties of the society, after satisfaction of all debts and liabilities, shall be transferred to another society having similar objects and registered under the Societies Registration Act, 1860, as may be determined in accordance with law. RESOLVED FURTHER THAT the Governing Body/Managing Committee be and is hereby authorized to make necessary amendments in the MOA and Bye-laws, to finalize the wording of the dissolution clause and to file requisite documents with the Registrar of Societies, Delhi. RESOLVED FURTHER THAT the Secretary/ Authorized Signatory be and is hereby authorized to do all such acts deeds and things as may be necessary to give effect to this resolution."

9. To read as required under Rule 40(c) the names of nominees for election as INSA Fellow and Foreign Fellow received from 24th November, 2025, to 30th April, 2026.

Professor UB Desai, Vice-President (Fellowship Affairs), read the names of nominees whose nominations were received for election as INSA Fellows during this period.

10. Revision in the guidelines for Indian Fellowship.

Professor UB Desai, Vice-President (Fellowship Affairs), apprised the Fellows about the revision in the guidelines for Indian Fellowship. According to this, the nominations will be considered from 2027 as per the new allocation of subject areas of Sectional Committees (9 SCs instead of earlier 10 SCs). For all the new nominations already received and carried forward for consideration for the year 2027, the proposers/seconders/nominees will be asked to revise their Sectional Committee as per new subject areas. It was also noted that the nominations received after 15th July, 2025 will be valid for a period of three years (instead of five years as per earlier guidelines) unless the proposer or seconder of the nomination withdraws it.

Nominations received after 15th July, 2025 will be valid for 3 years.

Nominations received before 15th July, 2025 will be valid for 5 years.

On the expiry of the validity of the nomination, a re-nomination can be made afresh only after a gap of one year.

11. The modification in the guidelines for selection of Foreign Fellows.

Professor UB Desai, Vice-President (Fellowship Affairs) informed the Fellows about the modification in the guidelines for selection of Foreign Fellows as given below:

(Exiting Guidelines)

…….

He or she should be a Fellow/Member of the National Academy of own country. ***Alternatively, he or she should be a Foreign Fellow/Associate of a foreign academy.*** Further, Council would consider those nominees who are awardees of Nobel Prize, Fields Medal or any other international award of equally eminent standing.

.....

(Approved Guidelines)

……..

He or she should be a Fellow/Member of the National Academy of own country. Further, Council would consider those nominees who are awardees of Nobel Prize, Fields Medal or any other international award of equally eminent standing.

……

12. Discontinuation of honorarium INSA Young Associates, INSA Associate Fellows, INSA Distinguished Lecture 1 & 2 with immediate effect from the year 2026.

President, INSA intimated the Fellows that as per DST directions, the honorarium given to the existing INSA Young Associates (IYA), INSA Associate Fellows (IAF), INSA History of Science Young Associates (IHSYA) and INSA Distinguished Lecture 1 & 2 will be discontinued with immediate effect from the year 2026. However, one time travel support of maximum of Rs. 1.5 lakhs will be reimbursed by the Academy to IYA/IAF/IHSYA to attend flagship international conference abroad (within two years, w.e.f. 1st January of the ensuing year). In this context, Professor GD Yadav, Vice-President (RGM), informed that DST has reduced the budget for INSA during this Financial Year, and there is a severe fund crunch at INSA. Further, he requested all Fellows to donate funds to INSA.

13. Induction of selected INSA Young Associates and INSA Associate Fellows in Annual General Meeting to be held in September each year.

It was announced that the induction ceremony of selected INSA Young Associates will be held at the Annual General Meeting in September each year. And INSA Associate Fellows will be inducted at the Annual General Meeting on 9th September 2026.

14. Discontinuation of INSA Associate Fellows (IAF) from 2027.

President, INSA informed the Fellows about the newly initiated programmes, namely INSA Young Associates (IYA), INSA History of Science Young Associates

(IHSYA), and INSA Associate Fellows (IAF) for scientists up to 40 years and 50 years of age, respectively. The average age of INSA Fellows at the time of election is quite high; therefore, these categories were introduced to encourage the participation of younger scientists in INSA programmes. In addition, it was noted that the number of women Fellows in INSA is also very low (around 10 percent). Hence, to promote gender balance, the Academy also created the INSA Women Associates (IWA) category. However, it was felt that there are now several categories, namely IYA, IAF, IHSYA, IWA, and INYAS, and that these categories may need to be reviewed before being continued further. After detailed deliberations, the Council decided to discontinue the INSA Associate Fellows (IAF) category from 2027 onwards. However, the INSA Young Associates (IYA) programme will continue, since it was created in place of the INSA Young Scientist Award, which was considered very prestigious.

15. Reinstatement of INSA Lectures.

President, INSA briefed the Fellows about the Reinstatement of INSA Lectures. He apprised that in the Council meeting held on 20th February, 2026, it was decided that all INSA awards that were discontinued since 2023 will be reinstated from the year 2026. However, it was suggested that all such “awards” be redesignated as “lectures” and be conducted without any honorarium. A committee was constituted comprises of Professor UB Desai (Chair), Professor GD Yadav, Professor Madhoolika Agrawal, Shri Sunil Zokarkar- Members and Dr Brotati Chattopadhyay, Member Secretary to look into the matter of reinstatement of various INSA lectures. The recommendations of the committee were placed in the Council meeting held on 12-13 May, 2026. The Council approved the recommendations of the committee. Further, the Council also finalized the guidelines for the distinguished lectures/orations/memorial lectures. The nominations for the lectures will be invited from all the Fellows in due course.

16. Any Other item.

President, INSA informed the Fellows about the 92nd Anniversary General Meeting to be held at the Infosys Campus, Mysore, from 9 to 12 December 2026. Shri N. R. Narayana Murthy and Ms. Sudha Murty have kindly agreed to attend the event on 10 December 2026. He further requested all Fellows to participate in the 92nd Anniversary General Meeting, Mysore.

The meeting ended with a vote of thanks to the Chair.

Annexure-I

RECIPIENTS OF INSA YOUNG ASSOCIATES (IYA)-2026

SECTIONAL COMMITTEE – I (*Mathematical Sciences)*

1. **Dr Dootika Vats** (13.02.1990), PhD, Associate Professor, Indian Institute of Technology Kanpur, Kanpur.

Dootika Vats has made significant contributions to Markov chain Monte Carlo re-search and revitalizing the area of Markov chain output analysis. She works at the interface of probability, computation, and statistics, with a sustained focus on the reliability of Markov chain Monte Carlo methods for large-scale Bayesian inference. She has developed a framework for output analysis in parallel MCMC, integrating theoretical, computational, and practical perspectives, and supported by widely used open-source software. Her contributions include variance estimation via coupled Markov chains using Poisson equation techniques, foundational work linking the GelmanRubin diagnostic with effective sample size, and methodological advances such as lugsail lag windows and improved autocovariance estimation. Her recent work extends these ideas to stochastic optimization and machine learning, further broadening the scope and impact of modern Bayesian computation.

SECTIONAL COMMITTEE – II (*Physics)*

1. **Dr Shilpi Jain** (18.02.1984), PhD, Reader – F, Tata Institute of Fundamental Research, Mumbai.

Dr. Shilpi Jain is an experimental high-energy physicist at TIFR working on the CMS experiment at CERN. Her research spans detector development and physics analysis at the LHC. She has made important contributions to calorimetry, including simulation and optimization of detector performance for particle identification and energy measurement. A key focus of her work is the CMS High Granularity Calorimeter (HGCAL) for the High-Luminosity LHC, where she has been involved in developing innovative testing and readout techniques for advanced electronics in challenging environments. On the physics side, she has contributed to precision measurements such as multi-boson production, testing the Standard Model and supporting searches for new physics.

2. **Dr Prabha Mandayam** (18.09.1983), PhD, Associate Professor, Department of Physics, Indian Institute of Technology Madras, Chennai.

Dr. Prabha Mandayam is a quantum information theorist at IIT Madras whose research spans foundational and applied aspects of quantum information science. Her work focuses on quantum error correction, including approximate and noise-adapted schemes crucial for fault-tolerant quantum computation. She has contributed to understanding quantum communication channels, including capacity limits in realistic settings such as queue-based decoherence models, and to quantum cryptography, including quantum key distribution protocols. Her research also addresses entanglement and quantum correlations, including entangling power of quantum gates and measurement incompatibility, as well as connections to uncertainty principles. More broadly, she has contributed to the mathematical structure of quantum information theory and the interface between quantum information, functional analysis, and emerging quantum technologies.

SECTIONAL COMMITTEE – III (*Chemistry)*

1. **Dr Veerabhadrarao Kaliginedi** (31.07.1987), PhD, Associate Professor, IPC Department, Chemical Sciences building, Indian Institute of Science, Bangalore.

Dr. Kaliginedi advances molecular electronics by developing cutting-edge junction techniques to probe charge and heat transport, enabling single-molecule actuation, interfacial chemistry insights, and electric-field and light–matter control of molecular properties.

2. **Dr Ananya Baksi** (06.06.1989), PhD, Assistant Professor, Department of Chemistry, Jadavpur University, Kolkata.

Ananya Baksi advances metal nanoclusters and amorphous materials, controlling heteroatom positioning, enabling unique optical and hydrogen-release properties, and developing catalysts for CO_2 conversion and electrochemical applications with mechanistic insights and novel functionalities.

SECTIONAL COMMITTEE – IV (*Earth & Environmental Sciences)*

1. **Dr Jayesh M Goyal** (01.11.1990), PhD, Reader-F, School of Earth & Planetary Sciences (SEPS), National Institute of Science Education & Research NISER (NISER), Odisha.

He has made seminal contributions in developing theoretical models to interpret the observations of Exoplanet atmosphere. His theoretical models are to be used by the researchers world-wide to interprete Hubbel and James Webb Space Telescope observation.

2. **Dr Rohit Pandey** (01.06.1989), PhD, Assistant Professor, Department of Geology, Institute of Science, Banaras Hindu University, Varanasi.

He has made seminal contributions in geochemistry and mantle derived rocks such as Kimberlites and carbonatites and metallogenic processes from the tectonic margin of Bastar craton and Eastern Ghat Mobile Belt.

SECTIONAL COMMITTEE – V (*Engineering & Technology)*

1. **Professor Sushmee Badhulika** (13.05.1985), PhD, Department of Electrical Engineering, Indian Institute of Technology Hyderabad, Telangana.

Prof. Sushmee Badhulika has made impactful contributions to flexible nanoelectronics, sensors, and energy devices, advancing sustainable nanofabrication and wearable technologies. Her innovations in smart textiles, eco-friendly materials, and scalable prototypes have driven translational research and industry-relevant applications.

2. **Dr Amit Sharma,** (13.11.1988), PhD, Principal Researcher, Microsoft Research, Bengaluru, Karnataka.

Dr. Amit Sharma has made foundational contributions to causal machine learning, advancing algorithms that improve generalization, robustness, and interpretability. His widely adopted tools and frameworks have significantly influenced research and real-world deployment of reliable, responsible AI systems.

3. **Dr Mahesh Vinyas,** (05.12.1991), PhD, Assistant Professor, Department of Mechanical Engineering, National Institute of Technology Silchar, Assam.

Dr. Vinyas Mahesh has made outstanding contributions in smart composite structures and sustainable materials. His pioneering work on energy-efficient magneto-electro-elastic (MEE) composites for real-time vibration control of aircraft structures has significant impact on next generation aircraft and defence applications.

4. **Dr Susmita Dash,** (27.01.1987), PhD, Associate Professor, Department of Mechanical Engineering, Indian Institute of Science, Bangalore.

Prof. Susmita Dash has made outstanding contributions in high heat flux thermal management through pioneering work on two-phase processes, engineered surfaces, and interfacial transport. She has translated two-phase flow science into impactful technologies for electronics cooling, desalination, micropropulsion, thermochemical energy storage, and evaporation-based diagnostics.

5. **Dr Nishant Kumar,** (05.01.1986), PhD, Assistant Professor, Department of Electrical Engineering, Indian Institute of Technology Jodhpur, Rajasthan.

Prof. Nishant Kumar has made outstanding contributions to renewable energy and power systems, advancing solar PV integration, intelligent control, and EV charging infrastructure. His innovations in grid-supportive technologies and sustainable maritime electrification have significantly enhanced efficiency and environmental sustainability.

6. **Dr Pooja Devi,** (20.01.1988), PhD, Senior Principal Scientist, CSIR-Central Scientific Instruments Organisation, Chandigarh.

Dr. Pooja Devi has made pioneering contributions to water pollution monitoring, nanomaterials, and sustainable energy technologies. Her innovations in sensor platforms, MXene-based catalysis, and green hydrogen generation, alongside successful technology transfer and translational research, have advanced environmental remediation and clean energy solutions.

SECTIONAL COMMITTEE – VI (*General Biology)*

1. **Dr K. S. Seshadri** (17.09.1987), PhD, Fellow in Residence (DST INSPIRE Faculty), Ashoka Trust for Research in Ecology and the Environment, Bengaluru.

Dr K S Sheshadri has studied a wide range of ecological systems ranging from amphibians to the forest canopy. All his research work has been in India. He has made outstanding contributions to

discovery of new species, novel behaviour, and understanding of evolutionary ecology. He has demonstrated a flair for teaching and has co-designed and taught hands-on training program for ecologists. His research has had direct implications for wetland conservation and his research on road ecology has resulted in regulating night time traffic inside a tiger reserve.

SECTIONAL COMMITTEE – VII (*Molecular and Cellular Biology)*

1. **Dr Debabrata Laha** (29.09.1986), PhD, Assistant Professor, Department of Biochemistry, Indian Institute of Science, Bangalore.

Dr Laha is an Assistant Professor in the Department of Biochemistry at IISc. His research focuses on cell signaling and molecular plant physiology, particularly the role of inosital phosphates and pyrophosphates signalling pathways in regulatory plant growth development and stress responses. His work contributes to understanding how plants adapt to environmental challenges.

SECTIONAL COMMITTEE – VIII (*Biomolecular, Structural Biology and Drug Discovery)*

1. **Dr Aditya Kumar Padhi** (21.02.1988), PhD, Assistant Professor Grade-1, School of Biochemical Engineering, Indian Institute of Technology (BHU), Varanasi.

He has made outstanding contributions by combining Protein Design. MD simulations, ML algorithms, QM/MM and mutational mapping data to predict and understand SAR-CoV-2 proteins and drug interactions.

SECTIONAL COMMITTEE – IX (*Health Sciences*)

1. **Dr Ajay Kumar** (15.02.1986), PhD, Associate Professor, Department of Zoology, Banaras Hindu University, Varanasi.

Dr Kumar has made a substantial contribution to the understanding of the complex interplay between tumor metabolism, pH homeostasis, and the immune microenvironment by employing an integrative approach to dissect the molecular and cellular mechanisms governing these interconnected processes, with a focus on identifying potential tumor biomarkers and targeted therapeutic interventions. His research also unravels the role of promising factors that mediate or moderate metabolic and pH regulatory adaptations in cancer cells, shedding light on their impact on disease progression and immune evasion. Considering his original contributions in Health Sciences to understand the role of the interconnected triad of tumor metabolism, pH homeostasis, and immune microenvironment in the growth and progression of cancer, which holds great promise for the development of innovative diagnostic and targeted or combinational therapeutic approaches for cancer.

SECTIONAL COMMITTEE – X (*Agricultural Sciences*)

1. **Dr Akanksha Singh** (29.04.1987), PhD, Senior Scientist, Division of Crop Protection and Production, CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow.

Dr Akanksha Singh has made a significant contribution in mapping the endomicrobiome in medicinal and aromatic plants. She had demonstrated the mechanistic details of host metabolism reprogramming

by beneficial endophytes. Her research has established a scalable framework which enhances phytochemical biosynthesis by modulation of chloroplast function.

2. **Dr Shaon Kumar Das** (25.12.1986), PhD, Senior Scientist, ICAR Research Complex for NEH Region, Sikkim Centre, Sikkim. **(WITHHELD)**

Dr Shaon Kumar Das has contributed to the area of low-cost farmer-friendly biochar production and co-composting technology. He developed best management practices for zero-budget natural farming and disseminated them in Sikkim to improve soil health and enhancing crop productivity. His research led to the application of carbon-negative biochar for the preparation of a hydrogel-biochar composite for controlled release of fertilizers and a low-cost technology for arsenic-remediation with locally available organic matter, phosphorus, and two bacterial strains from polluted soil.

3. **Dr Rakesh Shamsunder Joshi** (01.07.1987), PhD, Scientist, CSIR National Chemical Laboratory, Pune.

Dr Rakesh Joshi has made a significant contribution to the field of insects biology for sustainable crop protection. He unraveled species-specific features of enzymes in crop-feeding insect pests, enabling the design of substrate analogue-based inhibitors, which can be used as targeted insect-control agents. Also, his research on neuronal receptors like octopamine and allatostatin, involved in insects' nutrition, development, and behaviour, is significant for designing field-pest control strategies.

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Annexure-II

RECIPIENTS OF INSA ASSOCIATE FELLOWS (IAF)-2026

SECTIONAL COMMITTEE – I (*Mathematical Sciences*)

1. **Dr Swarnendu Sil** (09.05.1984), PhD, Assistant Professor, Department of Mathematics, Indian Institute of Science, Bangalore.

Dr. Swarnendu Sil's research contributions are in Calculus of variation, Partial differential Equations and Geometric analysis. Some of his important contributions are in developing tools of direct methods in calculus of variation in the context of differential forms, developing approximation results for the Yang-Mills functional in dimension 4, and developing regularity results for Hodge-Maxwell systems. His works have appeared in prestigious journals like the J. Eur. Math. Soc. (JEMS), Commun. Math. Phys, Adv. Math.,J. Funct. Anal, etc.

SECTIONAL COMMITTEE – II (*Physics*)

1. **Professor Sudipta Sarkar** (16.08.1981), PhD, Indian Institute of Technology Gandhinagar, Gujarat.

Dr. Sudipta Sarkar is a gravitational physicist at IIT Gandhinagar whose research focuses on black hole physics, gravitational waves, and quantum field theory in curved spacetime. His work has made important contributions to black hole thermodynamics, particularly in extending the laws of black hole mechanics and entropy to higher-curvature theories such as Lanczos–Lovelock and Gauss–Bonnet gravity. He has also explored connections between gravity and thermodynamics, including deriving gravitational field equations from thermodynamic principles. More recently, his research includes studies of photon spheres, black hole shadows, and gravitational wave signatures, providing observational probes of strong gravity. Overall, his work bridges classical gravity, quantum effects, and astrophysical observations, advancing our understanding of gravity beyond general relativity.

2. **Professor Sayantan Majumdar** (18.01.1980), PhD, Raman Research Institute, Bengaluru.

Dr. Sayantan Majumdar at the Raman Research Institute works in experimental condensed matter physics, with a focus on soft matter and statistical physics. His research explores glassy dynamics, jamming, and non-equilibrium behavior in systems such as colloids, granular materials, and active matter. Using advanced imaging and rheological techniques, he studies how disorder, fluctuations, and interactions give rise to emergent phenomena like slow relaxation, dynamical heterogeneity, and mechanical rigidity. His work also investigates active systems, where energy is injected at the particle level, leading to novel collective behavior. Overall, his contributions help uncover universal principles governing non-equilibrium and complex materials.

SECTIONAL COMMITTEE – III (*Chemistry*)

1. **Dr Ekambaram Balaraman** (01.06.1980), PhD, Associate Professor and Chair, Department of Chemistry, IISER Tirupati, Tirupati.

Prof. (Dr.) Ekambaram Balaraman has made pioneering contributions to non-precious metal catalysis, developing innovative systems for energy and environmental applications. His research focuses on hydrogen generation from sustainable feedstocks, green synthesis from renewable alcohols, and CO_2 valorization, addressing key challenges in energy efficiency and sustainability.

2. **Dr Tharamani C. Nagaiah** (15.05.1977), PhD, Associate Professor, Department of Chemistry, Indian Institute of Technology Ropar, Rupnagar.

Dr. Tharamani C. Nagaiah has made pioneering contributions to the development of non-noble metal catalysts with high activity for hydrogen generation from industrial H_2S and HCl electrolysis for clean chlorine production. She has also developed electrochemical sensors for detecting small cell lung cancer, cholesterol, and dopamine.

3. **Professor Ravi Prakash Singh** (15.12.1976), PhD, Department of Chemistry, Indian Institute of Technology Delhi, New Delhi.

Prof. R. P. Singh has made seminal contributions to asymmetric catalysis, photocatalysis, and catalytic C–H and C–F activation. His group has developed highly enantioselective catalytic systems, advancing vinylogous nucleophile chemistry and addressing key challenges in regioselective transformations.

SECTIONAL COMMITTEE – IV (*Earth & Environmental Sciences*)

1. **Dr Bhasker Kundu** (16.07.1984), PhD, Associate Professor, Department of Earth and Atmospheric Sciences, National Institute of Technology, Rourkela, Odisha

He has made outstanding contributions in solid earth geophysics, in general, and kinematic and dynamic models, in particular, in improving the understanding various geodynamics and geological process in Central India.

SECTIONAL COMMITTEE – V (*Engineering & Technology*)

1. **Professor Jitendra Shital Sangwai** (14.12.1977), PhD, Department of Chemical Engineering, Indian Institute of Technology Madras, Chennai.

Prof. Jitendra Sangwai has made outstanding contributions to petroleum engineering, advancing gas hydrate science, carbon sequestration, and enhanced oil recovery. His innovations in reservoir modelling, nanotechnology, and sustainable energy processes have significantly influenced both fundamental understanding and real-field applications.

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

Prof. Sriparna Saha has made significant contributions to multimodal AI and natural language processing, advancing models for healthcare, mental health, and low-resource languages. Her work is distinguished by large-scale datasets, interdisciplinary applications, and sustained impact across academia and industry.

3. **Professor Rahul Vaish** (15.12.1979), PhD, Dean Faculty, Indian Institute of Technology Mandi, Mandi.

Outstanding contributions in developing an excellent array of new multifunctional materials with impressive combination of piezoelectric and ferroelectric properties, including the microstructure-property correlation.

4. **Professor Sandip Kumar Saha** (13.02.1979), PhD, Department of Mechanical Engineering, Indian Institute of Technology Bombay, Mumbai.

Prof. Sandip Saha has contributed significantly to the fundamental understanding of transport characteristics in thermal energy storage for solar thermal and high-power electronics cooling applications. His unique design methodologies and innovative solution techniques for complex thermal systems have resulted in development of novel clean energy technologies.

SECTIONAL COMMITTEE – VI (*General Biology*)

1. **Dr Rohini Garg** (19.09.1982), PhD, Associate Professor, Department of Life Sciences, Shiv Nadar Institution of Eminence, Gautam Buddha Nagar, Uttar Pradesh.

Her research has established key epigenomic resources for rice and chickpea and revealed how DNA methylation, chromatin accessibility, and novel enhancers regulate stress responses and seed traits in crops. Her research has addressed the presence and role of alternative DNA secondary structures, relating molecular dynamics with functional plant traits, and other basic issues. She has contributed towards development of the first reference (de novo) transcriptome sequence assemblies and their annotation, in crops relevant to India. Her work has generated comprehensive genomic and epigenomic datasets, and the creation of a global gene expression atlas spanning multiple biological conditions, all of which have enhanced the precision and efficiency of breeding programs.

SECTIONAL COMMITTEE – VII (*Molecular and Cellular Biology*)

1. **Dr Amitesh Anand** (01.07.1985), PhD, Reader (Assistant Professor), Department of Biological Sciences, Tata Institute of Fundamental Research, Mumbai.

Dr Anand's research provides new understanding of microbial evolution and of how bacteria might adapt their respiratory mechanisms to survive in adverse conditions. His mechanistic investigations into the electron transport system of bacteria could help us to find new therapies against pathogens.

SECTIONAL COMMITTEE – VIII (*Biomolecular, Structural Biology and Drug Discovery)*

1. **Dr Debarka Sengupta** (29.11.1983), PhD, (Institute Chair Professor) Associate Professor of Computational Biology and Computer Science, Indraprastha Institute of Information Technology, Delhi.

His outstanding contributions are in the area of single-cell omics analysis, using Big Data techniques. He also has significant translational research in the field of cancer diagnosis and treatment. Also, AI based personalized anti-cancer therapy recommendations.

SECTIONAL COMMITTEE – IX (*Health Sciences*)

1. **Dr Ramachandran Thiruvengadam** (03.04.1983), PhD, Associate Professor, Translational Health Science and Technology Institute, Faridabad.

Dr Thiruvengadam contributed significantly in developing tools and interventions that can be deployed at public health scale to reduce the risk of adverse pregnancy outcomes such as preterm birth and foetal growth restriction. As part of the country's response to the COVID-19 pandemic, he

coordinated the effort to characterize the clinical and immunological aspects of the disease including the determinants of seroconversion, clinical profile and longevity of immune response and reinfection. Further, he contributed to the understanding of the effects of COVID-19 on pregnancy outcomes which has guided the immunization policy of pregnant women. He coordinated studies to evaluate the effectiveness of Covishield vaccines against delta and omicron variants of SARS-CoV-2.

2. **Professor Prosenjit Mondal** (04.05.1978), PhD, Indian Institute of Science Education and Research Berhampur, Odisha.

Dr Prosenjit's research efforts in the last ten years in India (IIT Mandi and IISER Berhampur) have been focused on understanding the pathogenesis of diabetes and Metabolic dysfunction-associated fatty liver disease(MAFLD), emphasizing the mechanisms of Inter-organ communication in maintaining systematic homeostasis in the body. He has developed experimental animal models to interrogate the phenotype, designed a cell-based study to analyze the mechanism, and finally, involved small molecules to rescue the phenotype *in vitro* and *in vivo*.

3. **Dr Savneet Kaur** (22.10.1978), PhD, Associate Professor, Liver Physiology and Vascular Biology Lab, Department of Molecular and Cellular Medicine, Institute of Liver and Biliary Sciences, New Delhi.

Dr Savneet's research has immensely contributed to the understanding of angiogenesis and lymphangiogenesis in liver physiology and pathology. She was the first one to document a paracrine role of bone marrow (BM)-derived endothelial progenitor cells (BM-EPC) in intrahepatic angiogenesis and fibrosis in patients with cirrhosis. Her studies have shown the therapeutic benefits of lymphangiogenesis in attenuating lymph drainage, portal hypertension and endotoxemia, and have provided a novel paradigm of treating advanced liver diseases. Savneet has carried out all her research projects in prestigious Indian labs by bagging competitive fellowships and grants. She has several patents and high impact publications both as first and lead authors and continues to bag competitive grants which places her in the top category of scientists.

SECTIONAL COMMITTEE – X (*Agricultural Sciences)*

1. **Dr Aashish Ranjan** (25.02.1982), PhD, Staff Scientist V, DBT-National Institute of Plant Genome Research, New Delhi.

Dr Aashish Ranjan has made notable contributions to understanding the genetic and physiological basis of photosynthesis, leaf development, and environmental adaptation in rice. His work identified photosynthetically efficient wild rice accessions and revealed key developmental and biochemical traits limiting photosynthesis in cultivated varieties. Through integrated phenotyping, transcriptomics, and genetic approaches, he uncovered regulators of leaf growth, sucrose partitioning, and stress-responsive pathways that influence yield and biomass accumulation. His research provides important strategies to optimize photosynthetic efficiency, source–sink dynamics, and crop performance under changing climatic conditions.

2. **Dr Prashant Misra** (07.02.1981), PhD, Principal Scientist, Plant Sciences and Agrotechnology Division, CSIR-Indian Institute of Integrative Medicine, Jammu.

Dr Prashant Misra has made significant contributions in the area of secondary metabolite synthesis in medicinal and aromatic crops at a molecular level. He has elucidated pathways involved in the synthesis of biomolecules of industrial importance in Cannabis and Cymbopogon. He has deciphered

regulatory network and identified key genes for improving trichome density and modulating essential oils and cannabinoids synthesis.

3. **Dr Ram Swaroop Meena** (19.05.1977), PhD, Associate Professor, Department of Agronomy, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi.

Dr Ram Swaroop Meena has made significant contributions to natural resource management and soil health. He has developed a new and affordable biochar separation technique and model for CO_2 sequestration in agricultural ecosystems. His research has led to the evaluation of the energy flow, atmospheric CO_2 capture and carbon credit in agriculture with a focus on nutrient dynamics in rice-based diversified cropping systems.

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Annexure-III

Recipients for INSA Distinguished Lectures-1
(*for INSA Young Associates, INSA Associate Fellows and INYAS Members (earlier or present) only – who has not attained the age of 50 years on 31st December of preceding year of the Lectureship*)
(for the year 2026)

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

Jakhar, Anuj (*b* 27.03.1992), PhD, Associate Professor, Department of Mathematics, Indian Institute of Technology–Madras, Chennai.

Dr. Anuj Jakhar is an accomplished mathematician specializing in algebraic and analytic number theory, valuation theory, and modular forms. His research uses valuation-theoretic methods to generalize classical irreducibility criteria and polynomial factorization results. He has determined discriminants and integral bases for broad classes of number fields, generalized Dedekind's criterion, and contributed to class field theory and monogenity. His work also includes asymptotic results for shifted convolution sums linked to L-functions and Hecke eigenforms, representing impactful contributions to contemporary number theory.

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

Parkar, Vivek Vijay (*b* 06.09.1980), PhD, Scientific Officer (F), Nuclear Physics Division, Bhabha Atomic Research Centre, Mumbai.

Dr. **Vivek Vijay Parker** is a nuclear physicist at BARC whose work focuses on both fundamental and applied aspects of nuclear science. His research spans nuclear reactions, structure studies, and radiation–matter interactions**,** with implications for reactor physics and nuclear technology.

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

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

Dr. Gunanathan advanced sustainable catalysis using earth-abundant metals, enabling efficient transformations of alcohols and ethers, selective deuteration, hydro

functionalization, and atom-economical reactions with hydrogen or water as benign byproducts.

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

Chakraborty, Kunal (*b* 23.09.1982), PhD, Scientist-F, Indian National Centre for Ocean Information Services (INCOIS), Ministry of Earth Sciences, Govt. of India, Hyderabad.

He has made significant contributions to marine science, in general, and ocean biogeochemistry, in particular, ecosystems modelling and marine forcasting for societal benefit.

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

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

Prof. Neelima Satyam Devarakonda has transformed geohazard science through physics informed models of landslides, debris flows, and co-seismic failures. Integrating field monitoring, remote sensing, and artificial intelligence, she developed early warning systems for Himalayan regions and advanced bio-geotechnics, seismic microzonation, and resilient infrastructure for disaster risk reduction.

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

Abhilash, PC (*b* 20.04.1978), PhD, Associate Professor, Institute of Environment & Sustainable Development (IESD), Banaras Hindu University, Varanasi.

His research spans field and policy areas of sustainable development, restoration of degraded ecosystems, and local food security. He has been using multipurpose plant species along with bio-residues and bio-inoculants as low-input biotechnology. He has also developed biophysical indicators for ecological profiling and sustainability analysis of degraded and polluted land. He has standardized various adaptive, climate-resilient, and sustainable agricultural practices in the drylands of eastern UP. He has explored neglected and underutilized wild plants for dietary diversification, and optimized cultivation practices for promising species. He is deeply involved in science popularization among students and school/college teachers and has been involved with Children's Science Congress at the district level.

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

Sharma, Mahak (*b* 23.04.1983), PhD, Professor, Department of Biological Sciences, Indian Institute of Science Education and Research-Mohali, Mohali

Recommended for her contributions in lysosome biology and protein trafficking.

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

Dey, Sucharita (*b* 20.11.1982), PhD, Assistant Professor, Department of Bioscience & Bioengineering. Indian Institute of Technology-Jodhpur, Jodhpur.

Dr Suscharita Dey has carried out outstanding work during her doctoral and extended post-doc stint at Weizmann. Since joining IIT-Jodhpur she has continued the work on studying oligomeric proteins to understand the features of subunit interfaces and their role in self-assembly across ferrotious superfamily. Also studied the presence of some motifs in globular proteins. She is a promising young bio informatics person and may be considered for IDL-1 Lecture.

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

Singh, Sudhir Pratap (*b* 15.12.1977), PhD, Professor, Department of Industrial Biotechnology, Gujarat Biotechnology University, Gandhinagar, Gujarat.

Dr. Singh has made an excellent contribution in area of industrial enzyme produced in microbial systems. Before this, he had engineered plants for cytoplasmic male sterility by expressing Beceline gene.

He has also achieved biosynthesis of high value molecules such as allulose, trehalose, turanose, D-allose, γ – aminobutyric acid etc.

Annexure-IV

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.

Annexure-V

RECIPEINTS OF INSA OVERSEAS CHAIRS 2026

SECTIONAL COMMITTEE - I: Mathematical Sciences

Prof. Jens Marklof, Henry Overton Wills Chair in Mathematics, School of Mathematics, University of Bristol

Prof. Jens Marklof, U Bristol (FRS), is a German mathematician working in the areas of quantum chaos, dynamical systems, equidistribution, modular forms and number theory. He is the president of the London Mathematical Society in the period 2023-2024.

SECTIONAL COMMITTEE - - II: Physics

Prof. Shivaji L. Sondhi, Wykeham Professor of Physics, University of Oxford, UK

Prof. Shivaji L. Sondhi is a distinguished theoretical physicist and currently serves as Wykeham Professor of Physics and Leverhulme International Professor at the University of Oxford. He obtained his Ph.D. in Physics from the University of California, Los Angeles, and completed earlier degrees at SUNY Stony Brook and Hindu College, University of Delhi. Prior to Oxford, he held long-standing faculty positions at Princeton University, where he is now Professor Emeritus.

Prof. Sondhi is internationally recognized for his pioneering contributions to condensed matter physics, particularly in quantum Hall effects, topological phases, and non-equilibrium quantum systems. His work on magnetic monopoles in spin ice and time crystals has been widely celebrated as major breakthroughs. A Fellow of the Royal Society (2025) and the American Physical Society, he has received numerous honours including the Humboldt Research Award and the Europhysics Prize.

Beyond research, he has played key roles in academic leadership, mentoring, and science-policy engagement, fostering collaborations across physics, policy, and global scientific communities.

SECTIONAL COMMITTEE - III: Chemistry

Dr. Muthiah (Mano) Manoharan, Senior Vice President of Drug Innovation, Alnylam Pharmaceuticals, USA

Dr. Muthiah (Mano) Manoharan is a globally renowned chemist and a pioneer in RNA therapeutics, serving as Senior Vice President of Drug Innovation and Distinguished Research Scientist at Alnylam Pharmaceuticals, USA. With a Ph.D. in Organic Chemistry from the University of North Carolina, Chapel Hill, and postdoctoral training at Yale University and the University of Maryland, he has led transformative advances in oligonucleotide chemistry and delivery systems.

A founding scientist at Alnylam, Dr. Manoharan played a central role in developing RNA interference (RNAi) therapeutics, including ONPATTRO®, the first FDA-approved RNAi drug. His innovations in GalNAc-conjugated oligonucleotides have revolutionized targeted drug delivery, enabling multiple approved therapies. He is the inventor of over 300 U.S. patents and author of more than 250 publications.

His contributions have earned numerous honors, including the ACS Lifetime Achievement Award in Oligonucleotide Therapeutics, reflecting his profound impact on modern drug discovery.

SECTIONAL COMMITTEE IV: Earth & Environmental Sciences

Dr. Richard Ernst, Scientist-in-Residence, Carleton University, Canada

Dr. Richard Ernst is an eminent geoscientist and currently serves as Scientist-in-Residence in the Department of Earth Sciences at Carleton University, Canada, and as Professor at Tomsk State University, Russia. He is internationally recognized for his pioneering research on Large Igneous Provinces (LIPs)—massive volcanic events that have shaped Earth's geological and environmental history. His work explores their links to mineral and hydrocarbon resources, supercontinent breakup, and major climate changes, including mass extinction events.

Dr. Ernst is the author of a widely cited textbook on LIPs (Cambridge University Press, 2014) and has published over 200 peer-reviewed papers along with more than 500 conference abstracts. His research has garnered over 15,000 citations, reflecting his global impact in Earth sciences.

He is a Fellow of the Geological Society of America (2024) and recipient of the 2022 Career Achievement Award from the Geological Association of Canada, among other honours recognizing his lifelong contributions to geoscience.

SECTIONAL COMMITTEE - V: Engineering and Technology

1. Prof. Gareth H. McKinley FRS, School of Engineering Professor of Teaching Innovation, Massachusetts Institute of Technology (MIT), USA

Prof. Gareth H. McKinley is a distinguished mechanical engineer and rheologist, currently serving as School of Engineering Professor of Teaching Innovation at the Massachusetts Institute of Technology (MIT). He holds a Ph.D. in Chemical Engineering from MIT and earlier degrees from the University of Cambridge. With nearly three decades on the MIT faculty, he has played a central role in advancing research and education in fluid mechanics, rheology, and complex fluids.

His research focuses on the behaviour of complex and non-Newtonian fluids, with wide-ranging applications in materials science, biotechnology, and industrial processes. He has authored over 390 peer-reviewed publications and holds numerous patents, reflecting his significant scientific impact.

A Fellow of the Royal Society (FRS), the American Physical Society, and the Society of Rheology, Prof. McKinley has received several prestigious honours, including the Bingham Medal and election to the U.S. National Academy of Engineering. He is also widely recognized for excellence in teaching and academic leadership.