# THE NATIONAL ACADEMY OF SCIENCES, INDIA



(The Oldest Science Academy of India)
Organízes



95th Annual Session and Symposium on

Healthy Brain, Mind and Cognition: From Computers to Clinics

Hosted by

# Indian Institute of Technology Guwahati (IITG), Assam

https://event.iitg.ac.in/nasi95/

#### -- Programme --

#### Day 1: Monday, December 08th, 2025

- **♣ Registration** (09:00–10:00): *Venue- Conference Centre Foyer*
- **♦ Coordinators:** Dr. Shirisha Nagotu, Dr. Kusum K. Singh, Dr. Sweta Tiwari, IITG

4 Children's So	cience Meet (10:00 – 11:30) Venue - Auditorium
Chairpersons	Prof. S.R. Joshi, (NEHU, Shillong) Prof. Anupam Saikia, (IITG)
Speaker-1	Prof. Pannalal Goswami Science Communicator & Award-winning Chemistry Teacher- Assam
Speaker-2	Mr. Rahul S. Chatterjee Science Communicator & National Award-winning Physics Teacher- Shillong

Inaugural Session (11:30–12:30) Venue – Auditorium

Lunch (12:30 -14:00) Venue- Lake View Lawn

Symposium Talks: Healthy Brain, Mind and Cognition: From Computers to Clinics

<b>♣</b> Session 01 (1	14:00–15:40): Symposium Talks Venue: Conference Hall 01
Chairperson Co-Chair	Prof. Balram Bhargava, Former Secretary ICMR; Past President, NASI Prof. Sanjay Behari, Director, SCTIMST, Trivandrum
(Co-Conveners) 14:00 – 14:10 (05 min each)	Genesis of the Symposium Prof. Jayesh R. Bellare, General Secretary, NASI Prof. Venkatasubramanian G, NIMHANS, Bengaluru
Speaker-1 14:10 – 14:40	Prof. Vatsala Thirumalai, NCBS, TIFR, Bengaluru Title: Generating and Using Predictions of the World: A Role for the Cerebellum
Speaker-2 14:40 – 15:10	Prof. Arjun Ramakrishnan, BSBE Department, IIT Kanpur Title: Neuroengineering for Mental Health: Understanding the Mechanisms Underlying Suboptimal Decision Making in Anxious Individuals.
Speaker-3 15:10 – 15:40	Prof. Vibin Ramakrishnan, BSBE Department, IITG  Title: Unconventional Therapeutic Strategies for Slowing Alzheimer's Progression

Tea Break (15:40 – 16:00): Venue-Foyer Conference Centre

<b>♣ Session 02</b> (16	5:00 – 17:00) Symposium Talks, Venue: Conference Hall 01
Chairperson Co-Chair	Prof. Ashok Puranik, Director, AIIMS, Guwahati Dr. Pratima Murthy, Director, NIMHANS, Bengaluru
Speaker-1 16:00 – 16:30	Prof. Neelam Sinha, Centre for Brain Research, IISc, Bangalore Title: Generative AI in Neurodegeneration Studies
Speaker-2 16:30 – 17:00	Dr. Shubhadeep Bhattacharjee, Electrical Eng. Dept., IIT Hyderabad  Title: The Deep Trouble with Deep Neural Networks (DNNs): A Hardware Perspective

<b>↓Session 03</b> (17	7:15-18:00) Foundation Day Lecture Venue: Auditorium
Chair	Prof. Ashok Misra, Convener & Past President-NASI
Speaker	Mr. Kris Gopalakrishnan, Co-founder, Infosys
	Title: Role of Academia in Creating Viksit Bharat

**4** Cultural Night (18:30 – 20:00) Venue- Auditorium

Coordinator: Dr. Meena Khwairakpam, IITG

Sattriya Dance (Performer: Dr. Anwesa Mahanta and Team)

*Dinner* (20:00 – 21:30) – *Venue: Lake View Lawn* 

### Day 02: Tuesday, December 09th, 2025

<b>↓Session 04</b> (09	9:00 – 10:30) Symposium Talks Venue: Conference Hall 01
Chairperson Co-Chair	Prof. Jayesh R. Bellare, General Secretary, NASI Prof. Ashis K Mukherjee, Director - IASST, Guwahati
Speaker -1 09:00 – 09:30	Dr. Sridharan Devarajan, Center for Neuroscience, IISc Bangalore Title: Computational Connectomics: Discovering Brain Network Bases of Health and Disease
Speaker-2 09:30 – 10:00	Prof. Venkatasubramanian G, NIMHANS, Bengaluru Title: Network Psychiatry: Translational Implications
Speaker-3 10:00 – 10:30	Dr. Nivethida T, BSBE Department, IIT Bombay Title: Redefining Targets in Neuromodulation: From Regions to Networks

#### **↓ Poster Session 01** (10:30 – 11:30): Venue-Foyer, Conference Centre

Chair/Coordinator (Sectional Presidents)

- Physical Sciences: Prof. Annapurni Subramaniam, Director, Indian Institute of Astrophysics, Bengaluru
- Biological Sciences: Prof. Sanjeev Misra, Vice-Chancellor, Atal Bihari Vajpayee Medical University, Lucknow

Tea Break (10:30 – 11:30) Venue -Foyer, Conference Centre

<b>Session 05</b> (11)	1:30 – 13:00) Symposium Talks Venue: Conference Hall 01
Chairperson Co-Chair	Prof. Rama Shanker Verma, Director, MNNIT Allahabad Prof. Krishanu Ray, Director, NBRC, Manesar
Speaker -1 11:30 - 12:00	Prof. Arun S P, Centre for Neuroscience, IISc, Bangalore Title: Neural Basis of Real-world Vision
Speaker -2 12:00 – 12:30	Prof. Thomas Gregor Issac, Centre for Brain Research, IISc. Bangalore Title: Understanding Aging Brain and Predementia Syndromes
Speaker-3 12:30 – 13:00	Dr. Palash Ghosh, Mathematics, IIT Guwahati  Title: Protecting Privacy in the Digital Journey: Differential Privacy  Solutions for Sensitive Binary Data from Humans to Computers.

## Lunch (13:00 – 14:00): Venue- Lake View Lawn

<b>↓ Session 06</b> (14	1:00 – 15:00) Symposium Talks Venue: Conference Hall 01
Chairperson Co-Chair	Prof. Amit P Sharma, Group Leader, ICGEB, New Delhi Prof. Ishan Kumar Patro, Former Dean, Jiwaji University, Gwalior
Speaker-1 14:00 – 14:30	Dr. Nikunj Arunkumar Bhagat, Electrical Eng. Dept., IIT Kanpur Title: Advancing Neuro-rehabilitation: The Role of Brain-Computer Interfaces
Speaker -2 14:30 – 15:00	Prof. Arpan Banerjee, National Brain Research Centre, Manesar Title: Understanding the Neural Dynamics of Affective Flexibility from Naturalistic Stimuli: A Key to Quantitatively Evaluate Well-being

# **↓ Poster Session 02** (15:00 – 16:00) Venue-Foyer, Conference Centre Chair/Coordinator (Sectional Presidents)

Tea Break (15:00 – 16:00): Venue- Foyer, Conference Centre

<b>Session 07</b> (16:00 –	17:00) Symposium Talks Venue: Conference Hall 01
Chairperson Co-Chair	Prof. Smita Mahale, Emeritus Scientist, ICMR- NIRRCH, Mumbai, India Prof. K.S. Rangappa, Former Vice-Chancellor, University of Mysore
Speaker-1 16:00 – 16:30	Mr. Krishna Veer Singh, TMC, Mumbai Title: Healthy Minds, Smarter Clinics: Using AI to Empower Therapists and Scale Child & Adolescent Mental Health
Speaker-2 16:30 – 17:00	Dr. Rimjhim Agrawal, Co-Founder & CTO, Brain Sight AI Pvt Ltd Title: Advances in AI-powered Neurotechnology: Translation in Clinical Applications

Session 08	(17:00 –17:30) Plenary Talk Venue- Conference Hall 01
Chair Co-Chair	Prof. Vinod K Singh, President, NASI Dr. Pratima Murthy, Director, NIMHANS, Bengaluru
Speaker	Dr. Swati Piramal, Vice Chairperson, Piramal Enterprises Limited
	Title: The Future of Health

Session 09	(19:00 –20:00) Plenary Talk Venue- Conference Hall 01
Chair Co-Chair	Prof. Venkatasubramanian G, Co-convener, NIMHANS, Bengaluru Prof. Jayesh R Bellare, Co-convener & General Secretary, NASI
Speaker	Prof. Mriganka Sur, Newton Professor of Neuroscience and Director of the Simons Center for the Social Brain at MIT, Cambridge, Massachusetts US Title: Neuroscience and Next Generation AI

# Dinner (20:00 – 21:30) Venue-Lake View Lawn

## Day 03 Wednesday December 10th, 2025

Scientific Sessions (	9:00 – 10:45)
Sectional President's	s Address
Chairpersons	Prof. Latha Rangan, Organizing Secretary, IIT Guwahati Prof. Daya Shankar Pandey, General Secretary, NASI
Sectional President (Physical Sciences)	Prof. Annapurni Subramaniam, Director, Indian Institute of Astrophysics, Bengaluru
,	Title: Astronomy from Ground and Space
Sectional President (Biological Sciences)	Prof. Sanjeev Misra, Vice-Chancellor, Atal Bihari Vajpayee Medical University, Lucknow
(Biological Sciences)	Title: Nurturing Innovations in Healthcare
Session 10-a Physical	Sciences – Conference Hall 01
Chairperson	Prof. Annapurni Subramaniam, Director, IIA, Bengaluru
Co-Chair	Prof. Ranjan K Mallik, IIT Delhi
	Prof. Tanusri Saha Dasgupta, Director, SNBNCBS Kolkata
Speaker-1	Title: Design and Understanding of Materials Physics: A Machine-
	learning Approach
	Prof. Dibyendu Nandi, CESSI, IISER Kolkata
Speaker-2	Title: Living with Stars: Understanding the Sun's Influence on Planet
	Earth
Session 10-b Biologic	eal Sciences – Conference Hall 02
Chairperson	Prof. Sanjeev Misra, Vice-Chancellor, ABV Medical University, Lucknow
Co-Chair	Prof. Ashok Puranik, Director, AIIMS, Guwahati
Speaker-1	Prof. Praveen Sharma, AIIMS Jodhpur
opeaker 1	Title: Clinical and Molecular Insights into Lead Toxicity
	Dr. Shirisha Nagotu, BSBE Department, IIT Guwahati
Speaker-2	Title: Parkinson's Disease: Novel Insights into the Cellular
	Alterations using a Yeast Model

Tea Break (10:45 – 11:00) Venue- Foyer, Conference Centre

session 11 &	12 11:00 – 12:30 – Young Investigator Talks (Oral Presentations)
Physical Scien	ces Venue: Conference Hall 01
Chairpersons/E	Svaluator(s) – Prof. Annapurni Subramaniam, Director, IIA, Bengaluru
	Prof. Ranjan K Mallik, IIT Delhi
Sessions 11-a	Talk 1: Ajit Kumar Maddheshiya, University of Allahabad, UP
	Talk 2: B.K. Tiwari, University of Amarkantak, MP
	Talk 3: Jyoti Prasad Deka, Assam Engineering College, Assam
Sessions 12-a	Talk 4: Manoj Kumar Gupta, CSIR-AMPRI, MP
	Talk 5: Ram Prakash Sharma, NIT Arunachal Pradesh
Biological Sciences Venue: Conference Hall 02	
Biological Scie	nces Venue: Conference Hall 02
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_	Evaluator(s) - Prof. Sanjeev Misra, VC, ABV Medical University, Lucknow
Chairpersons/	Evaluator(s) – Prof. Sanjeev Misra, VC, ABV Medical University, Lucknow Prof. Ashok Puranik, Director, AIIMS, Guwahati
Chairpersons/	Evaluator(s) – Prof. Sanjeev Misra, VC, ABV Medical University, Lucknow Prof. Ashok Puranik, Director, AIIMS, Guwahati  Talk 1: Debabrata Dash, Harisingh Gour Vishwavidyalaya, MP
Chairpersons/	Evaluator(s) – Prof. Sanjeev Misra, VC, ABV Medical University, Lucknow Prof. Ashok Puranik, Director, AIIMS, Guwahati  Talk 1: Debabrata Dash, Harisingh Gour Vishwavidyalaya, MP  Talk 2: Lekhan Lodhi, Gyanveer University, MP
Chairpersons/ Sessions 11-b	Evaluator(s) – Prof. Sanjeev Misra, VC, ABV Medical University, Lucknow Prof. Ashok Puranik, Director, AIIMS, Guwahati  Talk 1: Debabrata Dash, Harisingh Gour Vishwavidyalaya, MP  Talk 2: Lekhan Lodhi, Gyanveer University, MP  Talk 3: Pankaj Srivastava, University of Allahabad, UP

#### Discussion, Recommendations and Valedictory Session (12:30 - 14:00)

Chairpersons: Prof. Vinod K. Singh and Prof. Ashok Misra

Venue- Conference Hall 01

- Group Photo
- Lunch and Departure

Lunch (14:00 onwards) Venue- Lake View Lawn

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#### Miscellaneous Calendar-Based Activities/Meetings

- ♣ NASI Council Meeting (Only for the Council Members of NASI) December 09<sup>th</sup>, 2025 at 15:00 – 16:00 Venue- Board Room, Admin Building
- **Fellows Meeting** (Induction of Newly Elected Fellows)
  December 09<sup>th</sup>, 2025 at 17:30 − 18:30
  Venue: Conference Hall 01
- ♣ Annual General Body Meeting (AGM) Only Fellows and Members of NASI December 09<sup>th</sup>, 2025 at 18:30 – 19:00 Venue: Conference Hall 01