

Emerging Science, Technology and Innovation Conclave ESTIC 2025



Imagine. Innovate. Inspire
for
Viksit Bharat 2047

Program Schedule

DAY-1

Monday, 3rd November 2025

Inaugural Session

06:00 AM – 07:30 AM
Registration, Tea & Seating at the Plenary Hall (Level 3)

09:30 AM onwards | Plenary Hall (Level-3)
Inauguration of the Event and Inaugural address by Hon'ble Prime Minister

Tea Break and Networking

11:30 AM – 12:30 PM | Plenary Hall (Level-3)
Plenary Panel Discussion on Nurturing R&D and Innovation Ecosystem for 'Viksit Bharat 2047'
Chair : Prof. Ajay Sood, PSA to Gol

Panelist : Prof. Ashok Jhunjhunwala-IIT Madras, Shri Baba Kalyani-Bharat Forge, Prof. Govindan Rangarajan-IISc Bangalore, Lt. Gen. Madhuri Kanitkar-Maharashtra University of Health Science, Shri J D Patil-Indian National Academy of Engineering, Dr. Pawan Kumar Goenka-IN-SPACE, Dr. Soumya Swaminathan-Principal Advisor to National Tuberculosis Elimination Programme (NTEP), Ministry of Health and Family Welfare, Govt. of India

12:30 PM – 14:30 PM – Lunch

14:30 PM – 15:30 PM | Plenary Hall (Level-3)
Plenary Talk - 1 | Duration: 60 minutes
Speaker : Prof. Andre Geim, University of Manchester - Nobel Laureate

15:30 PM – 16:30 PM | Plenary Hall (Level-3)
Plenary Talk - 2 | Duration: 60 minutes
Speaker : Prof. Manjul Bhargava, Princeton University - Global Eminent Personality
Title : Zero and Beyond: A Survey of India's Contributions to Global Mathematics

16:30 PM – 17:00 PM – Tea Break and Networking

17:00 PM – 18:00 PM | Plenary Hall (Level-3)
Plenary Talk - 3 | Duration: 60 minutes
Speaker : Dr. Jean-Yves Le Gall, Former President of French Space Agency
Title: Exploiting lunar resources, The next chapter in space exploration.

DAY-2

Tuesday, 4th November 2025

09:00 AM – 10:00 AM | Plenary Hall (Level-3)
Plenary Talk - 4 | Duration: 60 minutes
Speaker: Prof. Hidetoshi Katori (The University of Tokyo Team Director, RIKEN Center for Advanced Photonics)
Title : From Precision Time Measurement to Spacetime Engineering

10:00 AM – 10:00 AM | Plenary Hall (Level-3)
A Platform Where Innovation Meets Investment - Multi-Purpose Hall - (Level 3) - Close Door Parallel Session

10:00 AM – 11:00 AM – Tea Break and Visit to Posters

Three Parallel Technical Sessions (11:00 AM – 13:00 PM)

Session I	Session II	Session III
Quantum Science & Technology Audi-1 (Level-2)	Bio-Manufacturing Audi-2 (Level-2)	Energy Environment & Climate Plenary Hall (Level-3)
11:00 AM – 11:05 AM Keynote Address Session Chair : Prof. Govindan Rangarajan (Director, IISc Bengaluru)	11:00 AM – 11:05 AM Keynote Address Session Chair : Dr. Rajesh Sudhir Gokhale (Secretary, DBT)	11:00 AM – 11:05 AM Keynote Address Session Chair : Dr. Aji Kumar Mohanty (Secretary, DAE)
11:10 AM – 11:30 AM Keynote Address Prof. Anil Prabhakar (Department of Electrical Engineering, IIT Madras) Title: Digital security through Quantum Secure Communications	11:10 AM – 11:30 AM Keynote Address Dr. Kallam Satish Reddy (Chairman, Dr. Reddy's Laboratories, Hyderabad) Title: Bio-manufacturing and India as a Biocountry	11:10 AM – 11:30 AM Keynote Address Dr. Vijay Kumar Saraswat (Member, NITI Aayog, New Delhi)
11:35 AM – 12:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Dr. Rajamani Vijayaraghavan (Tata Institute of Fundamental Research, Mumbai) Title: Quantum computers based on superconducting electrical circuits	11:35 AM – 12:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Dr. Ashvini Shete (Prominent Scientist, Ppti Industries, Pune)	11:35 AM – 12:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Smt. Rhea Mazumdar Singhal (Founder & CEO, Ecosare Solutions, New Delhi) Title: Innovation that Builds a Resilient Bharat
Dr. Gayathri Honnenahalli Niranjanamurthy (CEO, Quantum Technologies Pvt Limited, Bengaluru) Title: Building Quantum Hardware for India's Future: An Entrepreneurial Journey in Deep-Tech Innovation	Prof. Rekha Satishchandra Singhal (Institute of Chemical Technology, Mumbai) Title: Transforming Food Production and Processing through Biomanufacturing towards 'NetNegative'	Shri Anuj Sharma (CEO, Waaree Clean Energy Solutions Pvt. Ltd., Mumbai) Title: Green Hydrogen - The Key Link Between Clean Energy, Environment and Climate
Prof. Aditi Sen De (Bharati-Chandra Research Institute, Prayagraj) Title: Quantum Networks	Dr. Jayesh Kumar (CEO, MedGenome Labs Ltd, Bengaluru)	Dr. Dave Smith (National Technology Adviser (NTA) UK) (UK) Title: From Innovation to Impact: UK-India Collaboration
12:20 PM – 13:00 PM Panel Discussion Moderator: Prof. Urbasi Sinha (Raman Research Institute, Bengaluru) Title: Building India's Quantum Edge	12:20 PM – 13:00 PM Panel Discussion Moderator: Dr. Jitendra Kumar (CEO, BRAC, New Delhi)	12:20 PM – 13:00 PM Panel Discussion Moderator: Shri B. C. Pathak (CEO, NPCL)
Panelist: Dr. Sunil Gupta (Co-Founder & CEO, QAnu Labs Pvt. Ltd., Bengaluru) Dr. Nagendra Nagaraja (CEO & Chair, QPI AI, Bengaluru)	Panelist: Dr. Vedam Ramprasad (CEO, MedGenome Labs Ltd, Bengaluru) Dr. Sangeeta Srivastava (Executive Director, Gosavi Biorefineries Ltd, Mumbai)	Panelist: Shri Gaurdeep Singh (Chairman & MD, NTPC, Delhi) Shri. Amit Sharma (MD & CEO, Tata Consulting Engineers Ltd, Mumbai)
Prof. Kasturi Saha (Department of Electric Engineering, IIT Bombay)	Dr. Arun Harish (Chief Strategy Officer, CPEL UK)	Dr. Achish Lale (Co-Founder & CTO, BrainSignal, Bengaluru)
Dr. Sonma Mahajan (Scientist-G, Solid State Physics Laboratory, DRDO)	Smt. Supriya Kashkar (CEO, G4Next Genomics Pvt Ltd, Nagpur)	Shri Ajay Talegaonkar (Technical Member, Appellate Tribunal for Electricity (APTEL))

11:00 AM – 13:00 PM – Panel Discussion (Round Table) | MR-19 (Level-3)
Topic: AI & VAI/BAHAV in Health, Chair: Hon'ble S&T Minister (120 mins) Close Door Parallel Session

13:00 PM – 14:30 PM – Lunch

14:30 PM – 15:30 PM | Plenary Hall (Level-3)
Plenary Talk - 5 | Duration: 60 minutes
Speaker: Prof. Ganesh Ramakrishnan (IIT Bombay) - Global Eminent Personality
Title: Artificial General Intelligence and Sovereign Capability

15:30 PM – 16:00 PM – Tea Break and Visit to Posters

Three Parallel Technical Sessions (16:00 PM – 18:00 PM)

Session IV	Session V	Session VI
Artificial Intelligence Audi-1 (Level-3)	Blue Economy Audi-2 (Level-2)	Health & Medical Technologies Audi-2 (Level-2)
16:00 PM – 16:05 PM Keynote Address Session Chair : Shri S. Krishnan (Secretary, DBT)	16:00 PM – 16:05 PM Keynote Address Session Chair : Dr. M. Ravichandran (Secretary, MoES)	16:00 PM – 16:05 PM Keynote Address Session Chair : Dr. Vaidya Rajesh Koticha (Secretary, Mo Ayush) Co-Chair : Dr. Rajiv Bahi (Secretary, DHR & DG, ICMR)
16:10 PM – 16:30 PM Keynote Address Dr. Sridhar Vembu (Co-Founder and Chief Scientist, Zoho Corporation, Chennai)	16:10 PM – 16:30 PM Keynote Address Dr. Shailesh Nayak (Director, National Institute of Advanced Studies, IISc, Bengaluru) Title: Towards Ocean Science-led Blue Economy	16:10 PM – 16:30 PM Keynote Address Dr. Shiv Kumar Sarin (Director, The Institute of Liver and Biliary Sciences, New Delhi) Title: Fatty Liver Disease Demands Engineering Healthcare
16:35 PM – 17:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Dr. Geetha Manjunath (Founder, CEO & CTO, Niram Health Analytics, Bengaluru)	16:35 PM – 17:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Dr. R. Kallam Satish Reddy (Chairman, Dr. Reddy's Laboratories, Hyderabad) Title: The role of the fisheries sector in advancing India's blue economy	16:35 PM – 17:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Prof. Gaagandeep Kang (Scientist, ICMR, New Delhi) Title: The Bill and Melinda Gate Foundation, New Delhi Title: Developing point of care diagnostics for public health use
Dr. Sriram Raghavan (Vice President, IBM Research for AI, USA)	Dr. Ganesh Kamath (Director, Organica Biotech Pvt. Ltd, Mumbai) Title: Innovation-Driven Biotechnological Solutions for a Sustainable and Resilient Blue Economy	Prof. Tanuja Nesari (MD, Innovative Projects Private Ltd, Pimpri) Title: From blueprint to breakthrough: when precision becomes a national duty
Prof. Amit Sheth (NCSF Chair, Founding Director, AI Institute of South Carolina)	Smt. Minushri Madhumita (Co-Founder & Director, ThinkRaw Innovative Solutions Pvt. Ltd., Kallianhalli) Title: ThinkRaw Innovative Solutions: Catalyzing DiverseMitra for a Sustainable Blue Economy Revolution	C. V. Muralaeeharan (Scientist G (SG) & Associate Head, Biomedical Technology Wing, SCTMST, Trivandrum)
17:20 PM – 18:00 PM Panel Discussion Moderator: Shri Shaashi Shekhar Vempati (Co-founder, DeepTech for Bharat Foundation & Former CEO, Prasar Bharati)	17:20 PM – 18:00 PM Panel Discussion Moderator: Dr. Balakrishnan Nair (Director, NICOS, Hyderabad)	17:20 PM – 18:00 PM Panel Discussion Moderator: Dr. Jitendra Sharma (MD & Founder, CEO, Andhra Pradesh MedTech Zone, Visakhapatnam)
Panelist: Dr. Harickk Mayank Vin (CTO, Tata Consultancy Services, Mumbai)	Panelist: Dr. Seshagiri Raghukumar (MD, Ykts Tech Private Limited, Dona Paud)	Panelist: Dr. Bhushan Patwardhan (National Research Professor, Ministry of AYUSH, Pune)
Prof. Balaram Ravindran (Director General, National Informatics Centre and Additional Secretary, MeitY, New Delhi)	Shri Ambassador Rajiv Bhatia (Chair, FICCI Taskforce on Blue Economy and Distinguished Fellow at Gateway House)	Shri Subodh Pandey (Vice President, Technology & R&D, Tata Steel Ltd.)
Shri Abhishek Singh (Director General, National Informatics Centre and Additional Secretary, MeitY, New Delhi)	Shri Nirod K. Mohanty (MD & CEO, Core Carbon Solutions Pvt. Ltd., Hyderabad)	Prof. Mohanasankar Sivaprakasam (Director, Healthcare Technology Innovation Centre (HTIC) and Professor, Department of Electrical Engineering, IIT Madras)
Dr. Rinjhim Agrawal (Co-Founder & CTO, BrainSignal, Bengaluru)	Capt. S.J. Abul Kalam Azad (Naval Officer cum Additional DG, Mumbai)	Prof. Rahul Purwar (Department of Biosciences & Biengineering, IIT Bombay)
Smt. Debjani Ghosh (Distinguished Fellow, NITI Aayog, New Delhi, and Former President NASCOM, Noida)	Shri Rizwan Kotia (Chairman - NABH, Director - Koba Foundation)	
Prof. P. Venkat Rangan (Vice Chancellor Amrita Vishwa Vidyapeetham, Amritnagar PG, Coimbatore)		

18:00 PM – 19:00 PM – Break and Visit to Posters

19:00 PM – 20:00 PM – Dr. Ricky Kej, Musical Cultural Program | Plenary Hall (Level-3)

20:00 PM onwards – Dinner

09:00 AM – 10:00 AM | Plenary Hall (Level-3)
Plenary Talk - 6 | Duration: 60 minutes
Speaker: Prof. Masaru Tomita (Distinguished Professor, Keio University President & CEO, Tsuruoka Science Park)
Title: Synthetic Protein Materials: Industrializing Circular Biomaterials for Apparel and Beyond

10:00 AM – 11:00 AM – Tea Break and Visit to Posters

Three Parallel Technical Sessions (11:00 AM – 13:00 PM)

Session VII	Session VIII	Session IX
Advanced Materials & Manufacturing Plenary Hall (Level-3)	Digital Communications Audi-1 (Level-2)	Space Technologies Audi-2 (Level-2)
11:00 AM – 11:05 AM Keynote Address Session Chair : Dr. (Mrs) N. Kalaiselvi (DG, CSIR & Secretary, DSR)	11:00 AM – 11:05 AM Keynote Address Session Chair : Dr. Neeraj Mittal (Secretary, DoT)	11:00 AM – 11:05 AM Keynote Address Session Chair : Dr. A S Kiran Kumar (Former Secretary, DGS)
11:10 AM – 11:30 AM Keynote Address Prof. Giridhar Udapi Rao Kulkarni (Former President, ICMR, Bengaluru) Title: Unlocking Advanced Material Functionality for Product Realization	11:10 AM – 11:30 AM Keynote Address Prof. Kiran Kumar Kuchi (Department of Electrical Engineering, IIT Hyderabad) Title: "How to Realise the 6G Vision for Bharat" (Charting India's roadmap towards next-generation wireless connectivity and innovation.)	11:10 AM – 11:30 AM Keynote Address Dr. V. Narayanan (Chairman ISRO, Bengaluru)
11:35 AM – 12:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Shri Pawan Kumar Chandana (Co-founder and CEO, Skyroot Aerospace, Hyderabad) Title: Elevating Aerospace: The Frontier of Advanced Composites and 3D Printing	11:35 AM – 12:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Smt. Jayanthi Bhagatha (Co-founder & Director, Lekha Wires, Bengaluru) Title: Empowering India's Space Ecosystem: The Role of Women-Led MSMEs and Emerging Entrepreneurs in Building the Supply Chain for Space Missions	11:35 AM – 12:15 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Smt. Jayanthi Bhagatha (CEO, JBI Aerospace, Bengaluru) Title: Empowering India's Space Ecosystem: The Role of Women-Led MSMEs and Emerging Entrepreneurs in Building the Supply Chain for Space Missions
Smt. Rajashri Tall (MD, Innovative Projects Private Ltd, Pimpri) Title: From blueprint to breakthrough: when precision becomes a national duty	Dr. Kumar N. Sivarajan (Co-founder & CTO, Tejas Networks, Bengaluru) Title: Making India a Global Telecom Sector Leader by 2030	Dr. Jhon Paul (Founder & CEO, Myletech, Bengaluru)
Prof. T. Pradeep (IIT Madras, Chennai) Title: Matter Dreams at Scale: Creating the Future of Materials	Dr. Sanjay Mittal (Aerospace Engineering, IIT Kanpur)	Prof. Anand K. Bhat (Former Director General, ISRO, Bengaluru)
12:20 PM – 13:00 PM Panel Discussion Moderator: Prof. B S Murty (Director, IIT Hyderabad)	12:20 PM – 13:00 PM Panel Discussion Moderator: Dr. Rajkumar Upadhyay (CEO, C-DOT, New Delhi) Title: Taking Indigenous Technologies to the Next Level	12:20 PM – 13:00 PM Panel Discussion Moderator: Shri Shantanu Bhatwadekar (Senior Advisor, New Space India Ltd. Former Distinguished Scientist and Scientific Secretary, ISRO)
Panelist: Dr. Ramalingam Balaramurakrishnan (Director, DMR-ORIS, Hyderabad)	Panelist: Prof. Radhakrishna Ganti (Department of Electrical Engineering, IIT Madras, Chennai) Title: Extending the 5G Ecosystem in India and Preparing for 6G	Panelist: Shri A. Rajarajan (Director, Vikram Sarabhai Space Center, Trivandrum)
Shri Subodh Pandey (Vice President, Technology & R&D, Tata Steel Ltd.)	Prof. Panganamala Vijay Kumar (Department of ECE, IISc, Bengaluru) Title: Advancing Indigenous PM through the NextG L1 Signal and Beyond	Shri Rajeev Jyoti (Director Technical, Dept of Space, Govt of India, Ahmedabad)
Dr. Shailaja Donempudi (Distinguished Scientist and Head Business Development Group (BDG))	Shri A. Robert Jerard Ravi (Chairman & MD, ISRO, Delhi)	Shri Balaji N (General Manager (ASD), Aerospace Division, HAL)
	Dr. Parag Naik (Lead Scientist, EYP Tejas Networks, x-CEO Saarvya Labs) Title: Building Indigenous disruptive technology stacks: From D2M to 6g	Shri Karthik Govindhasamy (CO-FOUNDER & CTO, Airans Space)

13:00 PM – 14:30 PM – Lunch

14:30 PM – 15:30 PM | Plenary Hall (Level-3)
Plenary Talk - 7 | Duration: 60 minutes
Speaker: Group Captain Shubhanshu Shukla (India Air Force and ISRO)
Title: India in Orbit: Human Spaceflight as a Catalyst for Viksit Bharat 2047

Two Parallel Technical Sessions (15:30 PM – 17:30 PM)

Session X	Session XI
Emerging Agriculture Technologies Plenary Hall (Level-3)	Electronics & Semiconductor Manufacturing Audi-1 (Level-2)
15:30 PM – 15:35 PM Keynote Address Session Chair : Dr. Mangli Lal Jat (Secretary, DARE & DG, ICAR)	15:30 PM – 15:35 PM Keynote Address Session Chair : Dr. Samir V Kamat (Secretary, DDR&D, Chairman, DRDO)
15:40 PM – 16:00 PM Keynote Address Dr. Trilochan Mohapatra (Chairperson, Protection of Plant Varieties and Farmers' Rights Authority, New Delhi) Title: India's Agricultural Future: New Paradigms for a Sustainable Food System	15:40 PM – 16:00 PM Keynote Address Dr. Bobby Mitra (CEO and President of AI & Digital Transformation, Tata Electronics, Tamil Nadu) Title: AI-HRST Software Defined Semiconductor and Electronics Manufacturing
16:05 PM – 16:45 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Dr. Usha Barwale Zehr (Executive Director & Chairperson, Grow India Pvt.Ltd, Jaha) Title: Innovation for sustainability in Agriculture	16:05 PM – 16:45 PM Talks by Start-up CEO / Woman Entrepreneur / S&T Leader Shri G. S. Madhusudan (Founder & CEO, Incore and Semiconductors, Chennai) Title: Creating a holistic semiconductor eco system in India
Shri Sachin Hegdekduggi (Founder & CEO, Rooti Goods, Bengaluru) Title: From Fields to Futures: India's Global Digital OS for Food, Farmers, and Health (An Operating System for reimagining crop quality and food security)	Prof. Srinivasan Raghavan (IISc, Bengaluru) Title: Vision 2047: India's QAN Ecosystem Based on India's Own Indigenous QAN Materials-Devices and Systems Technology
Dr. Nachiket Kothaliwale (Director, ICAR, Ludhiana) Title: Automation and cognitive computing in Agricultural Production and Post-harvest sector: Precision for Progress and Prosperity	Dr. Suraj Rengarajan (Managing Director & Head Semiconductor Products Group (SPG), Applied Materials India) Title: Rise of Advanced Packaging
16:50 PM – 17:30 PM Panel Discussion Moderator: Dr. Shyam Narayan Jha (Deputy Director General Agricultural Engineering), ICAR, New Delhi)	16:50 PM – 17:30 PM Panel Discussion Moderator: Prof. Navakanta Bhat (Dean, Interdisciplinary Sciences Division, IISc, Bengaluru)
Panelist: Prof. K C Bansal (Adjunct Professor, Guru Jambheshwar University of Science & Technology, Haryana) Title: Genome Editing for Sustainable and Climate-Resilient Indian Agriculture: Fast-Tracking Viksit Bharat 2047	Panelist: Smt. Suma Varughese (Director General MED, CoS&CS, DRDO, New Delhi)
Dr. A. Bandyopadhyaya (Former ADG and Director, NBIC, Junagadh)	Prof. Udayan Ganguly (Department of Electrical Engineering, IIT Bombay)
Dr. Kesavan T. R (Group President, Tractors and Farm Equipment Ltd., Chennai) Title: Rethinking Farm Mechanization in India	Shri Amitesh Kumar Sinha (CEO, SMA, MERRY, New Delhi)
Shri Abhilash Sethi (Investment Director, Omnicore, Bengaluru) Title: Emerging technologies in agri, I can talk about biotechnology, digital technologies, satellite, robotics, sensors. Can also talk about post-harvest technologies	Dr. Vibhu Sharma (Chief Technology Officer, LET Semiconductors & Technologies)
Prof. Santanu Chaudhury (Department of Electrical Engineering, IIT Delhi) Title: AI for Prescriptive Agriculture	

17:30 PM – 18:00 PM – Tea Break

18:00 PM – 19:30 PM – Valedictory Session | Plenary Hall (Level-3)

Valedictory Session Program Schedule (Minute-to-Minute)

18:00 PM – 18:05 PM	Welcome Address - Prof. Abhay Karandikar, Secretary, DST
18:05 PM – 18:10 PM	Remarks - Principal Scientific Adviser to the Government of India
18:10 PM – 18:55 PM	Presentation of Recommendations - Thematic Chair of each Thematic Session (Approx. 5 minutes each for 11 themes)
18:55 PM – 19:05 PM	Prize Distribution - Poster Presenters
19:05 PM – 19:25 PM	Address - Hon'ble Minister of Science & Technology and Earth Sciences
19:25 PM – 19:30 PM	Vote of Thanks - Dr. Jyoti Sharma, Head, RCI Cell, DST