



Sardar Patel College
**Report on National Seminar on “ Empowering India’s Research
Future” at ESCI Hyderabad organised by Research Heights
Foundation**

Organized by: Research Heights Foundation

Date: 9th and 10th July 2025

Venue: Centenary convention centre, Engineering staff college of India (ESCI), Gachibowli, Hyderabad

Attended by: Dr. N. Hemalatha, Dr. N. Amarnath Sharma, Dr. Bindu Ambaru, Dr. Anupa Yadav, Dr. Pallavi

The theme of this national seminar was to enlighten about “Reforming Research Ecosystem under NEP 2020 and Viksit Bharat” with a special focus on University–Industry–Government collaborations for research innovations, role of industry in India’s research ecosystem, AI & emerging technologies for social good, climate action, circular economy, SDG-aligned research, digital research infrastructure, open science, and research ethics.

Day 1

Inaugural session:

The seminar opened with an inaugural session addressed by distinguished dignitaries. Sri M. Venkaiah Naidu, Former Vice President of India, stressed aligning research priorities with *NEP 2020* and *Viksit Bharat*. Dr. G. Sateesh Reddy (DRDO), Former Chairman, DRDO emphasized indigenous R&D, while Dr. S. Somnath (ISRO), Former Chairman, ISRO highlighted space research for societal benefit. Sri Guntha Laxman, Joint organizing secretary, ABRSM called for stronger academic and research institutions. Dr. Sanjeev Kumar Varshney, Former advisor and head, International cooperation, DST, underlined global research partnerships, and Prof. K. Ramgopal Rao (VC, BITS) along with Dr. B. S. Murty (Director, IIT Hyderabad) stressed the role of universities and industries in advancing innovation. The inaugural session set the tone for in-depth deliberations on research reforms, technology-driven innovations, and sustainable development goals in the forthcoming sessions.

Session 1:

Dr. G. Sateesh Reddy, Former Chairman of DRDO, delivered an insightful session on *“Strategic Research and Indigenous Innovation: Building India’s Self-Reliant R&D Ecosystem.”* He emphasized the importance of strengthening industry–academia collaborations and establishing research centers within institutes to promote cutting-edge innovations. Highlighting India’s progress in domains such as solar cells, lithium-ion batteries, sensors, and cyber-physical systems, he underscored the role of indigenous technology development in reducing import dependence. He also shared how DRDO has collaborated with over 400 institutes and set up 14 Centres of Excellence to promote fundamental research and nurture a culture of innovation across the country.

Dr. G. Sateesh reddy - Former Chairman, DRDO - Strategic research and indigenous innovation: Building India’s self-reliant R&D ecosystem

Session 2:

Dr. S. Somnath, Former Chairman of ISRO, spoke on *“Vision Beyond the Horizon: Space, Science, and Strengthening India’s Research Ecosystem from the Ground Up.”* He highlighted the need for substantial funding, stronger industry–academia linkages, and greater incentives to make research an exciting and rewarding career. Stressing the importance of nurturing curiosity, experiential learning, and research at the undergraduate level, he urged institutions to foster innovation in emerging areas such as MEMS, nanoscience, green technologies, and AI-driven solutions. He underlined the role of scientific leadership, policy support, and faculty as the backbone of national progress. The session concluded with a call to align research with tangible societal benefits, creating products, startups, and technologies that contribute to India’s growth and global leadership.

Session 3:

Prof. K. Ramgopal Rao, Vice Chancellor of BITS, delivered a session on *“Transforming Institutions into Innovation Powerhouses: A Blueprint for Research-Led Growth.”* He presented India’s global standing in higher education and research, noting strong positions in institutional numbers and research output but lower rankings in innovation, industry collaboration, and R&D funding. Emphasizing the need for deep-tech research and long-term product development, he highlighted the role of startups, aggregation models, and unicorns in shaping the innovation landscape. He urged institutions to build collaborative, interdisciplinary ecosystems through initiatives like FIRE (Faculty Innovation Research-based Entrepreneurship) and ANRF’s hub-and-spoke model, enabling faculty and students to engage in impactful research. The session concluded with a call to strengthen academia–industry partnerships, foster product-based companies, and design solutions that can create economic and societal value.

Session 4:

Dr. Sanjeev Kumar Varshney, Former Advisor and Head of International Cooperation, DST, spoke on *“Science Diplomacy and Global Gateways: Empowering Indian Institutions through DST and ANRF Collaborations.”* He highlighted the role of science diplomacy in fostering global networks, building partnerships, and creating a science ecosystem with a human face. Stressing challenges such as post-harvest food losses and the impact of industrialization on agriculture, he emphasized the need for precision agriculture and sensor-based solutions. He further underlined the importance of mapping national strengths and weaknesses and using both formal and informal platforms to strengthen collaborations for societal benefit.

Session 5:

Dr. B. S. Murty, Director of IIT Hyderabad, spoke on *“Building Next-Gen Research Ecosystems: Future Ready Institutions, Innovation Hubs, and Industry–Academia Convergence.”* He emphasized the need to create future-ready institutions by fostering innovation-driven hubs and strengthening collaboration between academia and industry. His talk highlighted the importance of building sustainable research ecosystems that can nurture talent, drive technological advancement, and contribute to national growth.

Day 2:

Session 1:

Dr. K. R. Murali Mohan (Scientist G, Retd., DST) delivered a session on *“Unlocking DST Missions: How Institutions and Researchers Can Lead India’s Frontier Tech Future.”* He emphasized the role of researchers and institutions in driving frontier technologies through active participation in DST missions and highlighted how collaborative efforts can accelerate India’s technological leadership.

Session 2:

Prof. Anil D. Sahasrabudhe (Executive Chairman of NAAC, NBA, NEFT) spoke on *“Enabling Research-Ready Institutions: Vision, Policy, and Pathways for a New India.”* He outlined the importance of institutional preparedness, strong policy frameworks, and visionary leadership in creating research-centric campuses that can contribute to innovation, national growth, and global competitiveness.

Valedictory session:

The National Seminar concluded with the valedictory session, where Sri D. Sridhar Babu, Honourable IT Minister, Government of Telangana, delivered the Vote of Thanks. He commended the organizers for bringing together leading scientists, academicians, and policymakers to discuss India's research and innovation ecosystem. The seminar, with its insightful talks and active participation, provided a valuable platform for knowledge exchange, inspired young researchers, and strengthened academia–industry–government collaborations for building a future-ready, self-reliant India.



