

INSA–IARI National Seminar: From STEM to STEAM

New Delhi, 04 December, 2025: The Indian National Science Academy (INSA), in collaboration with the ICAR–Indian Agricultural Research Institute (IARI), organized the INSA–IARI National Seminar “From STEM to STEAM” at ICAR–IARI, New Delhi, as part of the Celebration of Science Week at Delhi – 2025, with a focus on Agricultural Sciences.

The seminar underscored the urgent need to transition from traditional STEM approaches to a broader STEAM framework by integrating creativity, societal context and innovation to address challenges in agriculture, food security and sustainable development.

Welcoming the gathering, Dr. Anupama Singh, Dean & Joint Director (Education), ICAR–IARI, highlighted the importance of an organic transformation from STEM to STEAM. The inaugural session was convened by Dr. Veda Krishnan, Senior Scientist (Biochemistry), ICAR–IARI. Dr. Anil Dahuja, Coordinator, IARI IQAC, introduced the Chairman and Co-Chairs and facilitated the proceedings.

Dr. Brajesh Pandey, Executive Director, INSA and Co-Chair, traced the genesis of INSA’s initiative to decentralize its Annual General Meeting by spreading scientific engagement across institutions. He emphasized that hosting the seminar at IARI reflects INSA’s commitment to taking science beyond a single institutional space and strengthening national scientific outreach and collaboration.

Prof. Sneh Lata Singla-Pareek, Group Leader, ICGEB and Co-Chair, recalled IARI’s historic contributions to the Green Revolution and India’s food security. She highlighted the significance of organizing the seminar at IARI and congratulated the newly inducted INSA Fellows.

Chairing the session, Dr. Ch. Srinivasa Rao, Director, ICAR–IARI, hailed INSA’s pivotal role in advancing science in India and noted that the STEM to STEAM approach is both timely and necessary. Emphasizing that “everything can wait, but not food,” he underlined the central role of agriculture in nation building and *Viksit Bharat*. He pointed out that most Sustainable Development Goals (SDGs) are closely linked to agriculture and highlighted recent visits by the Hon’ble Prime Minister of India to IARI, showcasing work on Integrated Farming Systems (IFS), pulses and oilseed research, natural resource management and protected cultivation.

Dr. Rao drew attention to key challenges such as food wastage, greenhouse gas emissions, climate change, small landholdings and drudgery faced by farmers, the backbone of the country. He emphasized that agriculture and land-use systems are critical for achieving India’s net-zero targets and that innovations in mechanization, Integrated Farming Systems, resource-use efficiency and market stability are essential to produce more food with less water, fewer resources and lower greenhouse gas emissions. He also highlighted that more than 25 Government of India programmes are directly linked to agricultural development, reinforcing the sector’s pivotal role in improving the wellbeing of poor and vulnerable populations.

Highlighting ICAR’s presence in every district across the country, Dr. Rao expressed confidence that stronger collaboration with INSA and partner institutions can accelerate the development of impactful products, technologies and innovations. He thanked INSA for choosing IARI as the venue for the seminar and expressed optimism for deeper collaborative efforts in the future.

The seminar was organized with the academic partnership of Miranda House, University of Delhi; Jawaharlal Nehru University; Indian Institute of Technology Delhi; Amity University; SRM University; and Ashoka University, reflecting a shared commitment to advancing interdisciplinary education and research through mainstreaming 'Agricultural' for transforming the STEM to STEAM paradigm.

The programme concluded with a Vote of Thanks proposed by Dr. Veda Krishnan, Senior Scientist, Biochemistry, ICAR-IARI, who expressed gratitude to INSA, the Chair and Co-Chairs, dignitaries, partner institutions and participants for their valuable contributions and support in making the seminar a success.

