



R&amp;D IN INDIA

INNOVATIONS  
UNLOCKED

The 10th India International Science Festival (IISF) was held from November 30 to December 3, 2024 on the campus of the Indian Institute of Technology Guwahati, Assam. Organised by the Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India, in collaboration with the Department of Science and Technology (DST), Department of Biotechnology (DBT), Ministry of Earth Sciences (MoES), Indian Space Research Organisation (ISRO), and Vijnana Bharati, the festival is India's largest celebration of science and technology. IISF 2024 showcased 25 meticulously planned science and technology-based events. The festival witnessed enthusiastic participation from 7,000 delegates and 45,000 attendees, including students, entrepreneurs, science teachers, scientists, policy-makers, journalists, industry representatives, and start-ups.

The central theme of this year's IISF was "Transforming India into an S&T-driven Global Manufacturing Hub." As we know, India is the fifth-largest economy in the world, aiming for further growth. In this context, the country holds a significant position as a growing manufacturing destination to meet the requirements of cost-effective goods for both the Indian population and the global market. One of the key areas of manufacturing is electronics, which currently constitutes one of the largest imports in the country. There is an urgent need to manufacture electronic materials domestically to make India self-reliant in this sector. India is making strides towards the manufacturing of electronics, a move that also ensures employment generation for the youth in the electronics sector.

Prime Minister Shri Narendra Modi has set a target for the electronics sector to achieve \$500 billion in revenue by 2030. This goal includes \$350 billion in finished products and \$150 billion in the manufacturing of electronic components. Within India's electronics sector, innovation in manufacturing has been a significant focus, attracting numerous start-ups and young talent. In this context, hosting a programme like the India International Science Festival with a relevant theme of India as a manufacturing hub is highly pertinent. IISF promoted the idea of manufacturing electronics, space technologies, and various other S&T-based manufacturing sectors, inspiring young scientists and technologists to take up these challenges and contribute to employment generation for the country.

IISF 2024 provided a platform for discussions and engagements aimed at creating integrated ecosystems combining manufacturing, technology, and logistics, thereby enhancing India's role in the global supply chain and transforming the country into a global manufacturing powerhouse.



Dr. Jitendra Singh, Union S&amp;T Minister, addressing the inaugural session of IISF

# IISF 2024: Showcasing India's Scientific Prowess, Inspiring Global Collaboration

## WELCOME TO INDIA INTERNATIONAL SCIENCE FESTIVAL 2024



Dignitaries lighting the lamp to inaugurate the IISF

Chief Minister of Assam, Dr. Himanta Biswa Sarma, graced the inaugural session of the IISF on November 30, 2024 as the Chief Guest. He said that the India International Science Festival is a collective commitment and a powerful engine for the progress of our country. Hon'ble Union Science and Technology Minister

As the Chair of the "Science Institutional Leaders Meet - Vision Sansad" of IISF 2024, Prof. A.K. Sood, PSA to the Government of India, emphasised the role of scientific research institutions in India's aspiration to become a global manufacturing hub. Highlighting India's initiatives such as the Production-Linked Incentive Scheme,

Employment News has been at the forefront of science communication through its regular column, *R&D in India: Innovations Unlocked*, which highlights groundbreaking research and innovations across the nation. The latest edition featuring this column was unveiled during the IISF Media Conclave in Guwahati, underscoring its commitment to bridging the gap between science and the public. The launch event saw the participation of officials from the Publications Division, alongside scientists and other distinguished attendees, reflecting a collaborative effort to promote India's scientific achievements and inspire young minds.



(Independent Charge), Dr. Jitendra Singh, inaugurated the mega science festival. On the occasion, Dr. Singh said that the story of Viksit Bharat will be written in the alphabet of science. He added that our Prime Minister has taken six landmark decisions in the first five months of the present tenure to accelerate the scientific progress of India.

The science festival brought together luminaries from India's scientific community, including Dr. V.K. Saraswat, Member of NITI Aayog; Professor A.K. Sood, Principal Scientific Adviser (PSA) to the Government of India; Dr. N. Kalaiselvi, Director General of CSIR and Secretary, DSIR; Dr. S. Somanath, Chairman of ISRO and Secretary, Department of Space; Dr. Rajesh Gokhale, Secretary of the Department of Bio-technology; and Prof. Abhay Karandikar, Secretary of the Department of Science and Technology. Their presence motivated the audience, especially students, to engage with this platform for scientific innovation and collaboration.

increased infra-structure investments, and the rising innovation culture, he underscored the need to bridge the gap between academia and industry to catalyse industry-led research and development and accelerate the commercialisation of innovations. Prof. Sood added the 3I Strategy - Investment, Infusion, and Innovation - as essential for overcoming the middle-income trap, enabling technological advancements, and driving economic growth in the country.

The Museum of the Moon was a huge centre of attraction for all the visitors of the science festival. The Moon replica showcased stole the limelight and pulled the crowd. It was a huge 10-metre-high 'real surface' replica of the Moon erected at IIT Guwahati, showcasing India's advancement in space science. British artist Luke Jerram created this replica of the Moon.

The mesmerising 3D Laser Show on a water screen captivated the audience at IISF 2024. From dazzling visuals of India's scientific triumphs to breathtaking animations of S&T innovations, the nights during the mega science festival were alive with wonder.

ISRO Chairman Dr. S. Somanath addressed thousands of school students during the Young Scientist Conclave. He encouraged students to pursue careers in science and technology. Dr. Somanath said that students are the torchbearers of a brighter tomorrow and their contributions can significantly make India a global leader in science and technology.

This year, some new events were added to the IISF. Sagarika - The Tale of Earth Sciences event, as the name suggests, aimed to engage and educate people on different areas of earth sciences such as meteorology, oceanography, ecology, etc. Through this event, IISF sought to raise public awareness of environmental issues. The *Science Beyond Borders* event aimed

at fostering international collaboration, partnerships, and the exchange of dialogues among scientists and institutions to address global challenges in S&T.

Fusion Forum - The Atomic Assembly event discussed the current perspectives, future benefits, and pressing challenges in implementing nuclear energy in India for various sectors such as power, nuclear medicine, agriculture, and additive manufacturing. The event *Science Odyssey of the North East* addressed the challenges that hinder the growth of science and technology in the North East and discussed ways to promote science and technology in the region. A unique event of IISF 2024, called *Taste of the Hills - North East Food Street*, showcased the food heritage of the North East, where people enjoyed the traditional cuisines of the eight states in North-East India. The Food Street remained open throughout IISF 2024.

Two significant events in IISF 2024 discussed effective science communication and S&T media-related strategies. The first event was *Vigyanika* and the second was the *S&T Media and Communicators Conclave*. The *Vigyanika* event played a pivotal role in disseminating science in simple language to the masses, while the Media Conclave provided a platform for scientists, media professionals, and journalism students to share ideas, enrich the field, and formulate strategies to ensure the percolation of S&T information into society. Organised by CSIR-National Institute of Science Communication and Policy Research (NISCP), these two events aimed to bridge the gap between science communicators, scientists, journalists, and media professionals.

In her presidential address, Director General of CSIR and Chairperson of the Steering Committee, IISF 2024, Dr. N. Kalaiselvi remarked, "We have developed an action plan focussed on North East activities in this IISF 2024," and announced that the winners of the S&T Hackathon will receive support from CSIR. The Chief Guest of the valedictory session, Shri Keshab Mahanta, Minister for Science, Technology and Climate Change, Government of Assam, emphasised the importance of science and technology in driving the nation's growth. He added, "We are working



The replica of Moon installed at IIT Guwahati during IISF 2024

to establish a network for science communication, which includes setting up science centres in 219 development districts. Guwahati will soon have a science city. IISF has provided us with a very good platform to showcase scientific developments in the North-East region."

The key objective and philosophy of IISF is the celebration of science by all. Engaging common people with science in a joyful and entertaining manner is essential for a healthy, prosperous, and meaningful life. Through its creative programmes and activities, IISF provides opportunities for people and the scientific fraternity in the country and abroad to come together, work together, and experience the joy of doing science for the well-being of India and humanity. The tenth edition of IISF fulfilled the noble spirit and objective of IISF through its various events.

(Contributed by CSIR-National Institute of Science Communication and Policy Research)