

Monthly Summary
Department of Science and Technology
(April, 2023)

I. Important policy decisions taken and major achievements during the month:

A. Science for Society

1. The Hon'ble President of India presented 11th Biennial National Grassroots Innovation and Outstanding Traditional Knowledge awards in the annual Festival of Innovation and Entrepreneurship (FINE). This is the country's flagship initiative towards recognizing and rewarding creativity of common man.
2. Dr. Jitendra Singh, Hon'ble Minister of State (Independent Charge) Science & Technology inaugurated the "Vishwavidyalaya Anusandhan Utsav 2023" on April 24, 2023, at New Delhi by opening an exhibition that showcased universities research accomplishments, novel findings, and technologies under the common platform for knowledge sharing and the achievements of PURSE (Promotion of University Research and Scientific Excellence) supported universities.
3. To build the momentum for popularisation of millet and to make the International Year of Millet -2023 a huge success, a Millet Product Vending Machine has been installed in this Department at Technology Bhawan in association with NAFED.
4. The 2nd National Workshop on Technology Innovation in Cyber Physical Systems (TIPS) under National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) was conducted in New Delhi, with the objective to create a more equitable ecosystem for Cyber-Physical Systems in the country and help NM-ICPS to achieve its targets in a streamlined and time-bound manner. The Workshop also included three days Exhibition (Expo), where the achievements and impactful technologies/ technology products developed by each Technology Innovation Hub (TIH) were exhibited.
5. National Innovation Foundation (NIF), Ahmedabad, an autonomous body under the Department, facilitated granting of 5 patents for products and processes. NIF improved the designs of various equipment used by artisans and small scale industries. NIF facilitated testing of a farmer's bottle gourd variety 'Vandana' to be a higher marketable fruit yield with extra-long fruit length as compared to Pusa Navin and Pusa Samridhhi.

6. Aryabhata Research Institute of Observational Sciences (ARIES) is conducting ARIES Training School in Observational Astronomy (ATSOA) to provide young Indian students the necessary platform to develop an expertise/skill in astronomical data-analysis in optical wavelengths.
7. Technology Information, Forecasting and Assessment Council (TIFAC), New Delhi has assessed 02 new technologies and recommended the technology for manufacturing of laterite based organic media for removal of heavy elements like Arsenic for drinking water applications. The developed media will help provide arsenic free water to marginalised communities in the various parts of Eastern India.
8. Vigyan Prasar , published monthly magazines namely, Dream 2047 (Hindi), Dream 2047 (English), Gaash (Kashmiri), Tajassus (Urdu), Jigyasa (Punjabi), Jignyasa (Gujarati), Vigyan Vishwa (Marathi), Kutuhalli (Kannada), Ariviyal Palagai (Tamil), Vigyan Vani (Telugu), Vigyan Katha (Bengali), Xandhan (Assamese), Vigyan Ratnakar (Maithili), VIPNET news, etc.
9. The Science20, one of the Engagement group summits of G20 under India's presidency in the year 2023, coordinated by Indian National Science Academy (INSA), New Delhi as the Knowledge partner, supports G20 by fostering an official dialogue with scientific community of member states. The overarching theme is "Disruptive Science for Sustainable Development". The Subthemes are: "Clean Energy for Greener Future", "Universal Holistic Health", and "Science for Society & Culture". The First Science Thematic Conference on the theme "Clean Energy for greener Future" was held in Agartala.

B. Technology Development

1. Technology Development Board has signed agreements for supporting implementation of projects on "Cyber Threat Detection and Automated Response Security System (SIEM)" and "Development and Commercialization of Next Generation Technologies for Oil & Gas wells to boost Hydrocarbon production in India".
2. The technology of RT-LAMP detection kit for Tuberculosis, which was developed by Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Trivandrum, has been transferred to industry for commercial production.

C. Human Capacity Building

1. Under the INSPIRE MANAK Programme, five district level and one State level exhibition project competitions and two mentorship workshops were organized.
2. The Department has started a new programme 'WISE Internship in IPR (WISE-IPR)' to provide training in the area of Intellectual Property Rights to Women Scientists and Technologists.
3. In Mega Facilities for Basic Research (MFBR) scheme, about 80 research groups were involved in different mega projects which include about 200 faculty/engineers and more than 200 PhD students/post-docs. About 400 users utilized 26 research facilities/research infrastructures. Output includes 3 collaborative research publications, 8 research publications, 3 PhDs, one S&T Report/Analysis Note, and training of 12 technical human resource. One Industry Meet and 3 Outreach events were organized during the month.

D. Scientific Infrastructure Building

1. Under Mega Facilities for Basic Research (MFBR) scheme, different project activities including production of in-kind components for establishment of Facility for Antiproton and Ion Research (FAIR) and design and development of in-kind components for establishment of Thirty Meter Telescope (TMT) continued. Technology Development towards various Indian in-kind components continued in different mega projects which involved 48 Indian Industries. 29 Power Converters were sent to FAIR, Germany as Indian in kind contribution. Under TMT project, one Prototype, WFOS Science Instrument Calibration System, was developed.
2. R&D Support was provided for the following:
 - (i) Financial support was provided to National Institute of Technology Calicut, Kerala for developing "a framework for flood mapping and to prepare an early warning system in the occurrence of flood for the northern region of Kerala".
 - (ii) Financial support was provided to Karunya Institute of Technology and Sciences, Coimbatore, Tamil Nadu for "Development of Industrial Indoor Assets Positioning and Navigation System using Geospatial Analysis and Ultra Wide Band Technology".
 - (iii) Financial support was provided to International Institute of Information Technology (IIIT), Hyderabad for "IOT Enabled Smart Cities Pollution, Health and Governance".

(iv) Financial support was provided to Indian Institute of Information Technology Allahabad, Devghat-Jhalwa, Prayagraj, Uttar Pradesh for conducting classes on “Geospatial Science and Technology” under National Geospatial Program (NGP).

F. Implementation of National Geospatial Policy

1. First meeting of the Geospatial Data Promotion and Development Committee (GDPDC) under the National Geospatial Policy, 2022 was held on 27th April 2023 with the nodal departments/ Ministries to discuss the strategy for implementation of the Policy with a focus on development of the data sharing standards, interoperability, strengthening data sharing mechanism for ease of doing business and actionable points.
2. Third Programme Management and Monitoring Committee (PMMC) meeting of the National Centre for Geodesy (NCG) was held at Kanpur to strengthen the activities of the NCG/ RCGs focusing on Geodetic capabilities throughout the nation to meet the global requirements.
3. Expert Committee meeting on "Capacity Building and Training on Geospatial Science and Technology" of National Geospatial Program (NGP) was held for designing next level of Geospatial Capacity building programme.
