

Government of India
Ministry of Science and Technology
Department of Science and Technology
(CDN Section)

Technology Bhawan,
New Mehrauli Road
New Delhi-110016
Dated: 16.10.2021

OFFICE MEMORANDUM

Subject: Monthly Summary to the Cabinet for the month of September, 2021.

The undersigned is directed to enclose herewith a copy of the Monthly Summary of important policy decisions taken and major achievements of the Department of Science & Technology for the month ending 30.09.2021 for information.

2. This has already been approved by Secretary, DST.

(Pulok Sen Gupta)
Under Secretary to the Govt. of India

To,

All Members of the Council of Ministers (as per Annexure-I)

Copy with enclosures, forwarded to:-

- i. Vice Chairman, NITI Aayog, NITI Bhawan, New Delhi. (vch-niti@gov.in)
- ii. The Chairman, Union Public Service Commission (chairman-upsc@gov.in)
- iii. Chief Executive Officer, NITIAayog, NITI Bhawan, New Delhi (ceo-niti@gov.in)
- iv. The Principal Secretary to the Prime Minister, Prime Minister Office, South Block, ND (pkmishra.pmo@gov.in)
- v. All members of NITI Aayog, NITI Bhawan, New Delhi. (vk.saraswat@nic.in, rc.niti@gov.in, vinodk.paul@gov.in)
- vi. Secretary to the President of India. (secy.president@rb.nic.in)
- vii. Secretary to the Vice-President of India. (secyvp@nic.in)
- viii. Principal Scientific Advisor to the Govt. of India. (vijayraghavan@gov.in)
- ix. All Secretaries to the Government of India (secy-goi@lsmgr.nic.in)
- x. The Principal Director General, Press Information Bureau, Ministry of Information and Broadcasting. (pdg- pib@nic.in)
- xi. The Director, Cabinet Secretariat, New Delhi. (cabinet@nic.in)
- xii. Dr. Rabindra Kumar Panigrahy, Sc. 'E', DST for uploading the Monthly Summary on DST's website. (rabindra.p@gov.in)
- xiii. PSO to Secretary, DST. (anuj.tripathi@nic.in)
- xiv. AD (OL), DST for Hindi Translation (kn.singh65@gov.in)

Signed by Pulok Sengupta
Date: 16-10-2021 08:52:49
Reason: Approved

Department of Science & Technology

Monthly Report

September, 2021

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

A. Science for Society

- International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad developed CuO-Ag nanopowders by flame spray pyrolysis and during the month of September, 2021 supplied 500g of optimized powders to M/s. Resil Chemicals Pvt. Ltd., Bengaluru for the production of ten thousands numbers of Self-disinfecting COVID-19 masks.
- Indian Academy of Sciences (IASc), Bangalore has organised workshops on Plant Taxonomy and Biodiversity Conservation (3rd to 4th September, 2021), Diversified applications of machine learning algorithms (21st to 22nd September, 2021 and Recent trends of Spectroscopy in material, nanomaterial and biological Sciences (27th to 29th September, 2021).
- Novel pioneering initiative taken by TIFAC for validating tele diagnosis using sensor based medical devices. Three outreach centres (NIT- Manipur, Gorakhpur University and IIT-BHU) selected for coordinating activities in diagnosing patients and analyzing data thereof.
- TIFAC finalized the project on technology assessment for seaweed production – Monostroma and Gracilaria Dura - and creation of seedings - gracilaria & UIva – facility in collaboration with CSIR - CSMCRI and ICCSIR, Mundra.
- TIFAC under its Srijan Programme collected information on 80 technologies developed and patented by publicly funded universities and research labs which are being assessed in-house in terms of technology maturity, commercialization potential and relevance for market.
- To promote handicrafts, Terracotta, bamboo products, Yoga Met and honey production in north east region, officials from North East Centre for Technology Application and Reach (NECTAR), Shillong visited Patanjali, Haridwar to explore collaboration and marketing of these products.
- The award ceremony of the 8th NLEPC (National Level Exhibition and Project Competition) of the INSPIRE Awards – MANAK was conducted in a virtual mode by National Innovation Foundation (NIF)-India, Ahmedabad and top 60 students were conferred with an award by the Hon'ble Union Minister of State (Independent Charge) Science & Technology and Earth Sciences.
- Indian National Science Academy (INSA), New Delhi jointly with Science & Engineering Research Council (SERB) have initiated a series of programmes and one of them is under the Future Scoping Initiative. Through this initiative INSA & SERB jointly take up promising and emerging areas of the cutting edge science & technology and invite experts to delve into them deeply but in a way comprehensible to the non-experts too. In this pursuit, INSA organized a discussion on Gene Editing. This is a novel field, full of potential that can change the health care scenario in the world.
- National Innovation Foundation (NIF), Ahmedabad facilitated granting of 3 patents to its grass- root innovators on Herbal Preparation for Therapeutic Management of Neurological Disorders; Power Tiller Operated Turmeric Harvester; A System for Watering and Seeding the Farming Land; Arecanut Decorn-ing Device; and Detached Bed Cum Wheel Chair for Immobile Patient Movement.

- A total of 50 innovations related to Engineering domain were uploaded to the Innovations portal of NIF (www.innovation.nif.org.in) and design improvement of one new technology i.e. cactus harvesting tool was undertaken.
- As a part of the celebration of “Azadi ka Amrit Mahotsav”, SEED-SSTP division initiated a year-long program “Vigyan Utsav” starting from September, 2021 to August, 2022 to showcase the emerging Science, Technology and Innovation (STI) ecosystems at States/UTs and its contribution towards Atmanirbhar Bharat. The “Vigyan Utsav” programme was inaugurated by the Hon’ble Minister of State (Independence Charge) of the Ministry of Science & Technology, Dr. Jitendra Singh on 02.09.2021. This programme will depict the entire STI ecosystem through the twelve identified themes. During this month, the programmes were organized by the State Science & Technology Councils to portray the STI institutions in their respective states.
- A virtual meeting was held on 22.09.2021 with Department of Bio-Technology (DBT), Council of Scientific and Industrial Research (CSIR) of Ministry of Science & Technology (MoST) and Ministry of Earth Sciences (MoES) for initiating a programme TECH नीव@75 to showcase the delivery of Science, Technology and Innovation (STI) at community level in last 75 years as a part of celebration of “Azadi ka Amrit Mahotsav”.
- As part of “Azadi Ka Amrut Mahotsav”, a lecture was organized on "Build your Immunity using horticulture herbs and food" and national level training programme on Mera Mobile Mera Marketing --usage of [www. marketmirchi.com](http://www.marketmirchi.com) to promote rural digital marketing on 21.09.2021. More than 200 participants including rural women, SHGs etc. participated in the programme through virtual mode.
- Under the project “**Formulation of a Consistent Model for Entrainment in Atmospheric clouds**” implemented by IIT Delhi, an approach for estimating vertical profile of entrainment rate coefficient in volumetrically heated jets has been developed. This approach can be used by researchers to model Cumulus clouds in the presence of background stratification, without using an ad-hoc value for entrainment rate coefficient.
- Under the project “**Meso-scale subsurface mixing dynamics in the Indian Ocean region using Modular Ocean Model**” implemented by IIT Bombay, different vertical mixing dynamics schemes to capture the meso and submeso scale dynamics in the Bay of Bengal domain was tested. The Modular Ocean Model, which is used is now being considered by INCOIS for their Ocean Modelling and Forecasting studies.
- CCP Division supported establishment of Phase II of Task Force project under NMSHE on **Forest Resources and Plant Biodiversity** to Govind Ballabh Pant National Institute of Himalayan Environment (GBP-NIHE). The project aims to work on important aspect of Himalayan ecosystem such as distribution patterns and grid mapping, and assessment of endemic, threatened, economically important groups (medicinal and edibles), and invasive plants in the Indian Himalayan Region (IHR).
- Mahamana Centre of Excellence in Climate Change Research (MCECCR) at Banaras Hindu University, Banaras under NMSKCC mission studied the changes in spatial and temporal trends in Heat waves (HW) and severe heat waves (SHW) over the past seven decades in different meteorological subdivisions of India. This study published in the journal “*International Journal of Climatology*”, reveals that North-Western, Central, and further to south-central region of India are the new hotspot of intense heat wave events over the past half-century, and also there is an increase in deadly Indian heat waves in recent years. The study also highlights the need for developing effective heat action plans in the three heat wave hotspot regions with a focus on different vulnerabilities among the inhabitants.

- The project team of Department of Community Medicine and School of Public Health, Postgraduate Institute of Medical Education and Research (PGIMER) at Chandigarh supported by CCP Division examined the seasonal periodicities of airborne pollen spectrum and developed the first Pollen Calendar for Chandigarh city. This first pollen calendar, can identify potential allergy triggers and can provide a clear understanding for clinicians as well as allergy sufferers about their causes to help limit their exposure during high pollen loads. This will further help prepare early advisories and their dissemination.
- In order to seek start-up solutions to tackle COVID wave 2 related challenges, NIDHI4COVID2.0 call was initiated. The selected seven start-ups which could not be supported under N4C2 program due the shortfall in seed fund availability, have been considered for support under CAWACH available funds.
- The nano Mission of DST has initiated setting up of TBI at INST Mohali in Nano Biotech. Have recommended setting of the TBI through Nano Mission.
- The Thirteenth Meeting of The Board of directors of Gujarat University Startup and Entrepreneurship Council (GUSEC) was held on 8th September 2021 Hybrid Mode. The Governing Board reviewed the progress NIDHI-TBI established at GUSEC.

B. Technology Development

- International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad transferred Know-how for Easy-to-clean coating (super-hydrophobic) sol composition and coating technique for Solar Photovoltaic (PV) applications to M/s. Marichin Technologies LLP, Mumbai and the company has launched the product with the trade name “NOVUSCOAT”.
- Agreement for scale-up demonstration of ARCI’s Know-Hows (*Production of Carbon Coated Lithium Iron Phosphate Material- cathode powder* and *Production of Carbon Modified/Un-modified Lithium Titanate Anode Powders for Li ion battery applications*) signed with M/s. Innomet Advanced Materials Pvt. Ltd., Hyderabad.
- One patent granted to ARCI on “An Improved Process of Carbon - Metal Oxide Composites Prepared by Nano Casting of Wood and the Product Thereof”.
- Large scale production of oxide dispersion strengthened (ODS) iron aluminide rods for high temperature applications was carried out by high energy ball milling followed by hot extrusion process at ARCI.
- A patent titled "A Process for Preparation of Activated Carbon from Tea Waste" was granted to Institute of Advanced Study in Science and Technology (IASST), Guwahati.
- National Innovation Foundation (NIF)-India, Ahmedabad facilitated a Technology Transfer arrangement between the grassroots innovator for the technology "Tractor operated paddy transplanter with the John Deere India Private Ltd, one of leading multi-national agricultural machinery manufacturers.
- Researchers from Institute of Nano Science and Technology (INST), Mohali, developed a composite paper made of carbon (graphene oxide) loaded with preservatives that can be used as a wrapper to extend shelf life of fruits benefiting farmers & food industry.
- Technology to enhance biogas production of Fat-rich sludge from dairy industry. This technology has been developed by Dr. Sandeep N. Mudliar at CSIR-CFTRI Mysore with support from the Waste Management Technology (WMT) program of TDT Division, Department of Science & Technology (DST), with in-kind support from M/s Sun Enviro Technologies Pvt. Ltd. for the pilot-scale trials at a model dairy plant.
- A new method developed to convert poultry feather & wool waste to animal feed & fertilizer. This technology has been developed by Professor A. B. Pandit, Institute of Chemical Technology Mumbai, to convert the keratin waste to food for pets and fertilizers for plants with the support from the ‘Waste

Management Technology' (WMT) program of TDT Division, Department of Science & Technology (DST).

- Noise Control Sheet Absorber developed by mimicking bee hives. This technology has been developed by Dr. B. Venkatesham and Dr. Surya, faculty at Mechanical and Aerospace Engineering Department at IIT Hyderabad, with the support from Advanced Manufacturing Technologies (AMT) programme of TDT Division, Department of Science & Technology (DST).
- A meeting was held on 6th September, 2021 at India Habitat Centre (IHC) to discuss about the preparation of the Distribution System Operator (DSO) guidelines under the JCERDC Project entitled US-India CollAborative For Smart DiStribution System With SStorage (UI-ASSIST).
- 58th meeting of Standing Scientific Research Committee (SSRC) was held on 15th September 2021 through virtual chaired by Secretary, Ministry of Coal to discuss on New & Ongoing S&T proposals and thrust areas on future research related to the coal mining and other allied activities.
- A National Scientific Advisory Committee meeting was held on 17th September, 2021 at IIT Delhi to discuss on planning / implementation / roadmap for 2 India-EU projects supported under India-EU joint call on Integrated Local Energy Systems.
- Under NM-ICPS TIH at IIT Madras, RASA (Regenerative Agriculture Stack Architecture) is a proposed technology stack that will aid the farmers to monitor and fine-tune their cultivation and harvest process in a proactive manner so as to realize maximum benefits. The stack will comprehensively address the entire Farm-to-Kitchen cycle including pre-cultivation, cultivation, harvest, storage/shipment, marketing and payment.
- Under NM-ICPS TIH at Indian Institute of Technology Ropar has developed a first-of-its-kind Internet of Things (IoT) device - AmbiTag. The device records real-time ambient temperature during the transportation of perishable products, body organs, and blood, vaccines, etc. AmbiTag is a USB-shaped device that continuously records the temperature of its immediate surroundings from -40°C to 80°C in any time zone for a full 90 days on a single charge.

C. International Cooperation

- **Meeting of Hon'ble Minister for Science & Technology with Deputy Secretary, US, Department of Energy:** Meeting with a high-level US delegation, led by Deputy Secretary of Energy, David M. Turk, who called on Dr. Jitendra Singh, Union Minister of State (Independent Charge) Science & Technology was held on 14th September 2021 at CSIR, New Delhi. In the meeting, the Hon'ble Minister mentioned that India and the United States are revamping their strategic partnership to focus on clean energy sectors, such as biofuels and hydrogen. Mr. David M. Turk assured Dr. Jitendra Singh that America will deepen its collaboration with India in Nuclear Energy as there is a lot of complementarity between the two nations. Mr. Turk also promised deeper engagement with India in the Green Hydrogen sector as recently announced by the Indian Prime Minister in his Independence Day Speech. The visiting Energy Minister said that it is also imperative for Climate Change and mitigation-related issues. The two countries have also signed up for the transformation of the US-India gas task force. This will entail an emphasis on the intersectionality between bioenergy, hydrogen, and renewable fuels with natural gas.
- **Sixth BRICS Young Scientists Forum (YSF):** The Department of Science and Technology (DST), Government of India, and National Institute of Advanced Studies, Bengaluru hosted the Sixth BRICS Young Scientists Forum (YSF) from 13th - 16th September 2021. Dr. Renu Swarup, Secretary, DST and Department of Biotechnology (DBT) said "The theme of building better societies; today when we stand in this pandemic, we know exactly the role S&T innovation has played over the globe to fight the potent war.
- **5th BRICS Science Technology Innovation Entrepreneurship (BRICS-STIEP):** The 5th BRICS Science Technology Innovation Entrepreneurship (BRICS-STIEP) Working Group meeting was held on

29th – 30th September 2021 in virtual mode. The meeting was convened by the Department of Science and Technology, Government of India, and coordinated by the knowledge partner Indian Science and Technology Entrepreneurs Parks and Business Incubator Association (ISBA) Secretariat.

- **India-Finland High-Official Meeting:** A meeting between Secretary DST & DBT and H.E. Ms Ritva Koukku-Ronde, Ambassador of Finland to India was held on 21st September, 2021. During the meeting it was agreed to continue dialogue to pursue the establishing a Virtual Centre of Excellence in Quantum Computing; Renewal of MoU between DBT and Business Finland with focus areas such as bio banks, biofuels and sustainable bio based materials; and hosting the next Joint S&T Committee meeting in Finland during 2022.
- **India-Netherlands Joint Working Group Meeting:** India-Netherlands Joint Working Group (JWG) meeting was held virtually on 22nd September, 2021 under the Co-Chairmanship of Head, International Division, DST from Indian side and Head of Bilateral Innovation Corporation, Ministry of Economic Affairs from Dutch side. In the meeting, various opportunities for partnership under new instruments were presented by DST, DBT and NWO. Under the bilateral knowledge and Innovation Agenda, recommendations of roundtables on Water, Agriculture and Health were reported and discussed. Upcoming areas of collaborations like Key Enabling Technologies, Space Technology, Cyber Security, Green Hydrogen, and Visiting Doctoral programme were recommended.
- **The first meeting of the Indian Ocean Rim Association (IORA) Working Group Science Technology and Innovation (WGSTI):** The first meeting of the Indian Ocean Rim Association (IORA) Working Group Science Technology and Innovation (WGSTI) was held virtually on 30th September 2021. Head ICD, DST India chaired the session. The Meeting was held to assess the status of implementation of the work plan and consider any specific Member State project proposals, the AST Cluster meeting on the new high-level STI outcomes and activities for inclusion in the 2nd IORA Action Plan.
- **India-Canada High Official meetings:** The two virtual India-Canada high-official virtual meetings were held on September 7, 2021, and September 15, 2021 simultaneously. A draft Memorandum of Understanding (MoU) between the Department of Science and Technology (DST) & National Research Council (NRC), Canada, and between the Department of Science and Technology (DST), Department of Biotechnology (DBT), and Natural Sciences and Engineering Research Council of Canada (NSERC) was discussed during these meetings.
- **Interaction Session with CV Raman Awardees of the Republic of Togo:** A meeting of CV Raman Fellows was organized in High Commission of Togo to understand experience and expectations of Togo researchers and possibility to explore newer ways to strengthen S & T cooperation with Africa. Ambassador of India to Togo and Head, International Cooperation, DST also shared India's perspective with researchers from Togo.
- **Indo-German workshop on 'Artificial Intelligence':** A joint virtual workshop on artificial intelligence (AI) was organized by Indo German Science and Technology Centre (IGSTC) together with the German Federal Ministry of Education and Research (BMBF) and the Department of Science and Technology (DST) on 6th-7th September. Scientific experts from each side are invited based on 5 selected thematic areas of mutual interest such as AI for sustainability, Healthcare, Autonomous Robotics, trustworthy AI and Mathematical Foundation. In addition, there are two plenary lectures which were open to the Public of both countries.

D. Human Capacity Building

- A two-day policy dialogue on '**Localizing Climate Resilience Agenda: Vision 2050 and 2100**' under CAP-RES DST-GOI Project was organised by National Institute of Disaster Management (NIDM), Ministry of Home Affairs and DST in collaboration with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

- About 1500 participants including Urban Planners, Govt. Officials, Faculty members, Representative of NGOs, researchers, students among others benefitted from online training programmes, workshop and webinars conducted by NIDM, New Delhi supported by DST on issues related to climate change such as Disaster Resilient Infrastructure, Health Adaptation and Resilience: Advancing Strategies Knowledge and Capacities, Vulnerability Assessment and Resilience Development for Human Habitats Localizing Climate Resilience Agenda: Vision 2050-2100 etc.
- Virtual Meeting on ‘**Inter-Vulnerability Assessment**’ was organised by IIT-Guwahati on 7 September, 2021 to discuss on conducting district wise climate risk assessment for Himalayan States and non-Himalayan states under NMSHE and NMSKCC
- Second Project Steering Committee (PSC) Meeting for **Strengthening Climate Change Adaptation in Himalayas (SCA-Himalayas) Project** was held on 23rd September 2021. The meeting was conducted by Swiss Agency for Development and Cooperating (SDC) to update the committee on activities organized under the project under NMSHE during Jan-June 2021 and plan of action for July-December 2021.
- Conducted Study Audit of GLP Study at Bionees India Private Limited, Bengaluru on September 21, 2021 on Request of European Chemicals Agency (ECHA).
- Conducted a Training Course for Test Item Control Officers of GLP Test Facilities during September 8&9, 2021.
- **INSPIRE Awards-MANAK**: 8th National Level Exhibition & Project Competition (NLEPC) under INSPIRE Awards MANAK scheme has been organized during 04-08 September 2021, through virtual mode.

The eight edition of NLEPC corresponds to the students selected under MANAK program during FY 2019-20; a total of 3.92 lakh ideas and innovations were received from all States and UT's of the country. After a series of District and State Level Exhibition and Project Competitions, a total of 581 students participated in this 8th NLEPC (National Level Exhibition and Project Competition).

Hon'ble Minister of Science & Technology conferred the 60 national awards to young innovative students during the valedictory function on 8th September 2021.

E. Scientific Infrastructure Building

- A new class of smart window known as Microfluidic-Electrochromic smart windows designed at Centre for Nano and Soft Matter Sciences (CNSMS), Bangalore and demonstrated. Microfluidic based smart window's components (glasses) were studied. Aluminium anodization based transparent electrode were optimized and Polymer-Dispersed Liquid Crystals (PDLC) smart window application demonstrated.
- A perturbative analysis of quantum dissipation in a nanowire has been performed at Bose Institute (BI), Kolkata and nanowire being modeled as a one-dimensional tight-binding lattice. Results for the weak dissipation, shown here, seem to be relevant in applications to quantum devices with the objective to preserve quantum coherence to the extent possible by minimizing the dissipative influence of the surroundings.
- Zinc oxide nanoparticles (ZnONPs) have become material of interest to nano-biotechnologists due to their profound biomedical applications. Here, complete synthesis routes of ZnONPs have been reviewed at BI by physical, chemical, and biological pathways along with the outline of the advantages and disadvantages of the techniques.
- It has been reported that Papaya triggers food and respiratory allergy. BI identified chymopapain Carip 2 as an allergen that can sensitize atopic individuals through fruit consumption followed by respiratory

hazards through pollen exposure. Cari p 2 is found to be a newly characterized allergen with diagnostic and immunotherapeutic potential for managing allergic disorders in papaya sensitized individuals.

- Under research category, National Institutional Ranking Framework (NIRF) 2021 ranks Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore 19th among research institutions in the country.
- A research team from JNCASR along researchers from Indian Institute of Sciences (IISc) constructed a micrometer-sized stirling engine by confining a single colloidal particle with a laser trap. This insight will be essential for future construction of micro-machines that operate in complex biological environments and are becoming increasingly important in biomedical engineering.
- Raman Research Institute (RRI), Bengaluru successfully laser cooled and magneto optically trapped millions of neutral Sodium atoms, in their state-of-the-art indigenously developed experimental system. Further characterization and optimization of the experimental system is going on to use these ultra-cold atoms for fundamental studies on quantum technologies and quantum information processing.
- A comprehensive study of OJ287, a binary black hole system using data collected by multiple X-ray telescopes was undertaken by RRI astrophysicist and collaborators. The study revealed the complex nature of the source and placed constraints on its magnetic field strength and accretion rates.
- Calculating the Sorkin's spacetime entanglement entropy of a Gaussian scalar field for complementary regions in the 2d cylinder spacetime has revealed that it has the Calabrese-Cardy form. It was also shown by RRI that the relative size-dependent term exhibits complementarity.
- The displacement of a more viscous fluid by a less viscous fluid renders the fluid-fluid interface unstable and leads to intricate patterns called viscous fingers. Recent experimental work at the RRI has been towards recording and analyzing the interfacial fingering patterns that emerge when a Newtonian fluid (glycerol-water mixtures of different viscosities) displaces a shear-thinning viscoelastic fluid (aqueous cornstarch suspensions of varying concentrations). Results obtained from this study have potential implications for processes involving displacement of shear thinning slurries of viscoelastic materials such as mud and cement.
- Experimental observation of dynamic dipolar coupling induced magnon-magnon coupling and spin wave (SW) mode splitting in Ni₈₀Fe₂₀ cross-shaped nanoring array were conducted at S N Bose National Centre for Basic Sciences (SNBNCBS), Kolkata. Investigation of mesoporous CuO nanostructures for low-temperature CO oxidation were also conducted.
- Fabrication of color-saturated CsPbBr_{3-x}I_x (x=0-3)/ZnO heterojunctions based white light emitting diodes (LEDs) on a flexible platform conducted at SNBNCBS by utilizing the superior luminescence properties and high colour purity of inorganic perovskite nanocrystals (NCs). It can provide a promising platform to fabricate highly luminescent LEDs that may find perspective applications in high-resolution flexible display devices and wearable electronics.
- Under the Scheduled Caste Sub Plan (SCSP) scheme, Project Advisory Committee (PAC) meeting was held virtually on 28.09.2021 to evaluate 12 new project proposals and six new proposals on “Establishment of SC-ST Cell” at State Science & Technology Councils.
- The 1st meeting of the Expert Committee (EC) was held on 07.09.2021 in the virtual mode to evolve the Technological Advancement for Rural Areas (TARA) programme of SEED Division as per the need of changing STI ecosystem.
- A virtual meeting was held on 20.09.2021 with State/UT S&T Councils under State Science & Technology Programme (SSTP) to discuss the framework of the October month theme Human Resource Development for the “Vigyan Utsav”.

- Under the Tribal Sub Plan (TSP) scheme, Expert Committee meeting was held virtually on 23.09.2021 to evaluate 18 new proposals.
- **Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)**
 - The 6th interaction meeting of FIST was held on 16th September 2021, apprising the stakeholders of the recent changes incorporated in the FIST Program.
- **Promotion of University Research and Science Excellence (PURSE)**
 - a) A Webinar was organized by Jamia Hamdard under the aegis of DST PURSE program on “Recent Trends in Pharmacovigilance and Drug Safety” on 21 Sep, 2021 on the occasion of Celebration of National Pharmacovigilance Week 2021.
- **Sophisticated Analytical Instrument Facilities (SAIF)**
 - a) As a part of strengthening of Sophisticated Instrumentation Facilities at SAIF centres, following activities has been carried out in the month of September
 - Circular Dichroism Spectrometer instrument was successfully installed at the SAIF Centre at Karnataka University, Dharwad.
 - UV- VIS- NIR Spectrophotometer and CHNS/O Elemental Analyzer was successfully installed at SAIF Centre at Charutar Vidya Mandal, Vallabh Vidyanagar, Gujarat.
 - b) As a part of the mandate of SAIF scheme, the SAIF Centre at Karnataka University, Dharwad organized Training cum Demonstration session on use of the SAIF instruments on 16 Sep 2021.
- 8th Meeting of the Executive Committee on Climate Change (ECCC) held under the chairmanship of Principal Secretary to Hon’ble Prime Minister was held on 1st September, 2021 by Prime Minister Council for Climate Change (PMCCC).

Revision of the Mission documents for NMSHE and NMSKCC and their alignment with India’s Nationally determined contributions (NDCs) for the 2021-2030 period were done, as per the observations in the First Apex Committee for Implementation of Paris Agreement (AIPA) meeting.

- **Innovation in Science Pursuit for Inspired Research (INSPIRE) Scheme
Scholarship For Higher Education (SHE):**

- 1822SHE scholars received scholarship for pursuing B.Sc./M.Sc. Degree course in basic and natural sciences.

INSPIRE Fellowship:

- 441 INSPIRE Fellows received INSPIRE fellowship for Continuing their doctoral degree programme.
- 278 INSPIRE Fellows were awarded INSPIRE fellowship and received their 1st Installment for pursuing doctoral degree programme.
- Newton Bhabha Ph.D. placement program 2020 was uploaded on the INSPIRE Web-portal.

INSPIRE Faculty Fellowship:

- 107 INSPIRE Faculty Fellow’s fellowship grant was released for pursuing Post-doctoral programme.

