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

Technology Bhawan,
New Mehrauli Road
New Delhi-110016
Dated: 11.09.2020

OFFICE MEMORANDUM

Subject: Monthly Summary to the Cabinet for the month of August, 2020.

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 31.08.2020 for information.

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

(Tapan Kumar Sarkar)
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)
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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.Shri Sanjay Kumar Mishra, Sc. 'G', DST for uploading the Monthly Summary on DST's website. (sanjaykr.mishra@nic.in)
xiii.Sr. PPS to Secretary, DST. (anuj.tripathi@nic.in)
xiv.AD (OL), DST for Hindi Translation (kn.singh65@gov.in)

Department of Science & Technology
Monthly Report
August, 2020

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

A. Various Measures taken by DST for COVID-19

1. CAWACH, was launched as DST's program to support startups having indigenous developed products/ solutions to address COVID-19 crisis. Out of the 826 applications received, 51 Startups have been extended for first round of funding. These startups are in different domains viz. ventilators & medical devices, disinfectant, PPE kit, diagnostic and informatics.

2. Two Webinars have been conducted under INSA-INYAS VIGYAN SETU WEBINAR SERIES on Lessons from COVID-19 for science communication and Creating and Enabling Innovation Ecosystem For Translational Science.
3. Two special issues on COVID-19 (one text and one video) released on the occasion of Independence Day by Vigyan Prasar (VP). Book on "AWSAR awarded popular science stories: By scientists for the people - 2019" was released by Vigyan Prasar.
4. Modulus, a start up in IIT Madras research park, signed MoU with Sree Chitra Institute for Medical Sciences and Technology (SCTMIST), for a collaborative effort for developing deployable field hospital structures to combat Covid19.

SCTIMST-Modulus Medicab during deployment process at Wayanad

5. **India-US COVID-19 Ignition Grants 2020:** The India -United States Science & Technology Endowment Fund announced a Call for Proposals under the category of COVID-19 Ignition Grants in April 2020. The intent was to support promising joint U.S.-India S&T based entrepreneurial initiatives that address the development and implementation of new technologies, tools, and systems to address COVID-19 related challenges including monitoring, diagnosis, health and safety, public outreach, information and communication. After a rigorous binational review process, eleven bilateral teams proposing out-of-the-box,

innovative ideas to address the COVID-19 challenge were selected in August, 2020 for award. These teams will be working on solutions that range from novel early diagnostic tests, antiviral therapy, drug repurposing, ventilator research, disinfection machines, and sensor-based symptom tracking.

6. Remedial Action, Knowledge Skimming and Holistic Analysis of COVID-19 (RAKSHAK), will be a part of Technology Innovation Hub (TIH) set-up at IIT, Jodhpur under National Mission on Interdisciplinary Cyber Physical System (NM-ICPS).

B. Science for Society

1. The farmer's onion variety namely Kansi No. 1, upon evaluation conducted by National Innovation Foundation (NIF) during Rabi season 2019-20 gave significantly (10 percent) higher bulb yield, exhibited higher quality traits and average bulb weight in comparison with reference varieties.
2. In order to conduct dissemination trials of Ajitgarh Selection (cauliflower) variety in upcoming Rabi season 2020-21, the seeds were made available to 70 farmers of 11 districts- Gujarat (6), Bihar (1), Chhattisgarh (1), Karnataka (1), Rajasthan (1) and Andhra Pradesh (1) states by NIF. The nutritional analysis of harvested fruits of apple variety (HRMN 99) developed by innovator is found suitable for the commercial cultivation in the state of Manipur. HRMN-99 variety reported higher (more than 38%) production as compared to checks.
3. Thematic workshops were organized by Technology Information, Forecasting & Assessment Council (TIFAC) on a virtual platform in the focus areas such as i) Agriculture and Food Processing sector ii) Biopharma, Vaccines, Diagnostics and Medical Devices and iii) Machine and Manufacturing Sector.
4. TIFAC has also initiated the SAKSHAM project for creation of a portal for skill mapping of migrant labourers.
5. The National Academy of Sciences, (NASI) and its Chapters collaborated/organised 'WEBINARS/Online Workshops', in joint collaboration with several institutions for the UG/PG students and researchers.
6. Indian Institute of Astrophysics (IIA)-50 and DST-50 Commemorative Lecture series was launched on 26 August, 2020. The first talk (webinar) in this series was delivered by Prof. S. S. Hasan, former Director, IIA, Bengaluru.

7. Organised a DST Golden Jubilee Discourse Series "Remembering 50 Golden Years" Former Secretaries of DST participated and Secretary, DST moderated the event.
8. Worked with existing/ongoing projects for covering possible work related to COVID 19 and outreach activities on COVID-19 promoted.

9. A blog on Indigenous Air Unique-quality Monitoring (AUM) Photonic System developed for Real-Time Remote Monitoring of Air Quality has been created by DST and released by PIB.
10. A blog on Shades mart & Radiant Cooling technologies promote energy-efficient cooling in buildings has been created by DST and released by PIB.
11. The following projects running under Mission Innovation Challenge-Off Grid Access to Electricity were reviewed online. The project teams have finalized the designs as per the field survey , fabrication of system is in progress but

implementation in field have been severely affected due to limited mobility and state protocols to be observed in interstate movement due to COVID-19 Pandemic. The project extension is being sought for the period ranging from 6 month to 1 year as these are implemented in remote sites.

- A localized microgrid to power an off-grid locality (Andaman island)
- Design and Development of biomass –solar electricity and cooling solutions for Rural India (District Koraput, Odhisa).
- Efficient Portable Stand-Alone Vaccine Refrigerator for Rural Application (CDAC, Kerala)
- Development, Research and Pilot Scale installation of Solar-Hydro Pumped Storage Scheme in a Remote Village of Assam to ensure 24x7 Electricity (District Senapati, Manipur)
- Uneven Span Greenhouse integrated Semitransparent Photovoltaic Thermal (GiSPVT) System for Agricultural Applications(District Ballia , Uttar Pradesh)
- Sustainable Energy Storage suitable for Microgrid (SENSUM) (Border area of Sikkim)
- Cooperative Isolated Renewable Energy Systems for Enhancing Reliability of Power in Rural Areas (Bassi Tehsil, Rajasthan).
- Intelligent Off Grid system for Energy Sustainable Village (District Gulbarga, Karnataka).
- Design and Demonstration of Off-Grid Self-Healing & Sustainable DC Community Energy Solutions (District Piliibhit, Uttar Pradesh).

C. National Technology Mission

1. The 9 Technology Innovation Hub (TIH) approved by Mission Governing Board (MGB) **of** National Mission on Interdisciplinary Cyber Physical System (NM-ICPS) during the 4th meeting of MGB have submitted their acceptance for setting-up of TIH and the process of first release has been initiated for 8 Host Institutes (HIs).
2. The 4th Apex Committee meeting on National Mission on Quantum Technology & Application (NM-QTA) was held on 25th August 2020 through **Video Conferencing for Finalization of the Draft DPR of NM-QTA**. The members of DPR Advisory Committee (DAC) and DPR Drafting Committee (DDC) also attended the meeting and incorporated the inputs received from various members of the Apex Committee into the draft DPR.

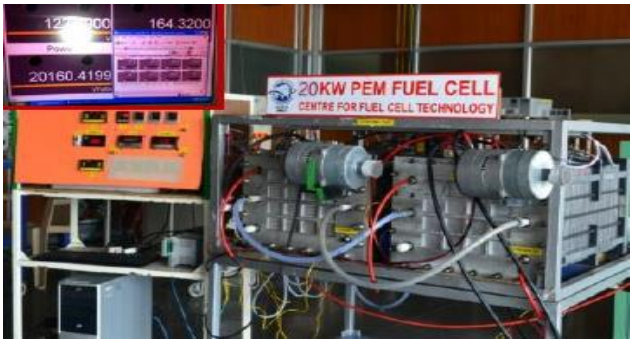
3. A meeting held with experts from Coal India Limited, Central Institute of Mining and Fuel Research, IIT(ISM) Dhanbad, Director of Mines Safety and Ministry of Coal to identify thrust areas for future research related to the coal mining and other allied activities.
4. Review of project on Development of Efficient Microwave Based Clean Coal Technologies for Grinding, Dewatering and Desulphurization of Coals Using Lab Scale Studies.
5. Review of "Development of new small molecules and device architectures for highly efficient and reliable organic solar cells"
6. Review of "Design and Development of Solar-Thermal and Thermal-Electrical Hybrid System"
7. Process has been initiated for the following project for final settlement and closure of the project:

- Integration and Intelligent management of Renewable Via ICT for Smart Micro-Grid Networks
- Hybrid perovskite films and nanoparticles for solar cell and optoelectronics applications.

8. Attended First Meeting of the Standing Committee on Hydrogen and Fuel Cells chaired by Secretary, MNRE on 27 August 2020 to suggest modalities for inviting innovative bids for deploying green hydrogen fuelled city transport buses which are cost competitive with conventional buses; and to advise Ministry on its plans, programmes, policies, and the proposed National Hydrogen Energy Mission for hydrogen energy development and deployment in the country.

D. Technology Development

1. International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) and Las Engineers and Consultants Pvt. Ltd. signed a know-how transfer agreement for Synthesis of Electro-catalysts for use in PEM Fuel cells.



2. Two Indian Patents were granted to ARCI on (i) An improved process of obtaining a transparent, protective coating on B-Aspheric plano/ convex lenses made of optical grade plastics for use in indirect ophthalmoscopy (ii) A novel laser modification technique for hardening steel.

3. An interaction meeting held with IIT Kanpur for the project entitled US-India Collaborative for Smart Distribution System with Storage to discuss on ongoing activities and future goals.
4. DST has supported new 8 projects received against WTI call 2019 on Water Energy Food Nexus :

   - IIT Roorkee led project has been supported titled “Wazirabad Blue-Green Infrastructure - an innovative environmental Network for Urban Risk Reduction in Gurugram, NCR” which aims on consortium building for Sustainable Water Management of Wazirabad watershed area.

5. Division has strengthened its support towards the multi institutional Water Innovation Centre – SUTRAM led by IIT Madras, partnering institutes Anna University, Chennai ; Vellore Institute of Technology, Chennai ; IIT Thirupathy, Andhra Pradesh ; CSIR-Central Leather Research Institute, Adyar, Chennai; CSIR-Indian Institute of Toxicology Research (IITR), Lucknow, UP; Institute of Science Education and Research (IISER), Bhopal, Madhya Pradesh; Ponnaiyah

Ramajayam Institute of Science and Technology (PRIST) University Thanjavur, Tamil Nadu, ; Kumaun University, Nainital, Uttarakhand,. The main objectives of this consortia include development of innovative and sustainable point of use technologies for treatment of water contaminated with natural and anthropogenic pollutants including emerging contaminants. Providing affordable and sustainable point of use purification devices for arsenic and fluoride free drinking water and designing clean water solutions during natural calamities.

6. A meeting for developing a workable and effective 'Technology Acceleration Platform for Rural Innovation and Social Entrepreneurship (TAP-RISE)' involving experts/accelerator agencies (working on rural products/starts up) was conducted virtually on 7th August, 2020. During the meeting, needs and avenues for platform development in collaboration with UNDP Accelerator Labs, S&T Park, IRMA, FICCI, Indigram Labs Foundation and IITs were discussed for its implementation.
7. A dedicated single window web portal is being designed and developed by Centre for Development of Advanced Computing (CDAC), NOIDA, for highlighting the achievements of State S&T Councils. A meeting was conducted on 11 August 2020 with the representatives of State S&T Councils, DST and portal development team of CDAC to discuss the methodology for data collection, collation and representation through this web portal. A beta version is now ready for testing.
8. A meeting to discuss and explore the possibility of developing Virtual FAB Lab in consultation with Virtual Reality/Augmented Reality (VR/AR) group was conducted on August 18, 2020 involving Core Groups, SEED Division, DST.
9. The 17th Programme Advisory and Monitoring Committee (PA&MC) Meeting of Technology Interventions for Disabled and Elderly Programme was held during 19-21 August, 2020. 25 proposals shortlisted under Intellectual Disability were evaluated and 4 proposals were recommended. The progress of 40 ongoing projects was also reviewed by the PA&MC.
10. The meeting of the Programme Advisory Committee for the Scheduled Caste Sub Plan was held on 28th & 29th August 2020 to evaluate the outcome of 15 completed projects under Scheduled Caste Sub Plan (SCSP) scheme of SEED division of DST. The progress of 6 ongoing projects was reviewed. Eight new projects were evaluated by the PAC and two proposals were recommended for support.

E. International Cooperation

1. **India-Belarus Joint S&T Commission meeting:** The Ninth Session of the India-Belarus Joint S&T Commission meeting was held on 5th August 2020 through virtual platform. The meeting was Co-chaired by Head, International Cooperation DST and Vice Chairman, State Committee on Science & Technology of the Republic of Belarus. The Joint Commission reviewed overall bilateral cooperation in Science, Technology and Innovation between the two countries and agreed future work plan for 2020-21. Both sides agreed to connect researchers through Webinars/ Workshops in the areas of (i) Energy (ii) Information and Communications Technologies (iii) Biotechnology, Medicine and Pharmacy (iv) Agro technology and Food Security (v) Clean Technology for Environment and (vi) Materials Sciences & Metallurgy followed by launching a Joint Call for proposals. The establishment of Virtual Joint Network Centre through proactive entity to

entity engagements between institutions/groups was also discussed and considered.

2. **India engagement in Science Technology and Innovation during its G20 Presidency:** A preliminary meeting to organise the G20 Presidency was held on August 17-21, 2020. India will assume the G20 Presidency in the year 2022 and will be part of the Troika team of G20 in the year 2021, along with Saudi Arabia, and Italy. The Department of Science and Technology (DST) will be the nodal agency to steer the G20 STI engagements in 2021-22.

3. In order to build opportunities for Cooperation in Quantum Technologies between India and Russia (Rosatom / Russian Quantum Center), a webinar was organised on 19th August, 2020. During the meeting, roadmaps on Quantum computing, Quantum communications, Quantum sensors etc. were presented by both Russian and Indian Researchers. Panel Discussion on opportunities for joint collaboration in the Quantum Technologies has also been organized during the webinar.

4. An interaction meeting held with experts from IIT Delhi and IIT Roorkee to discuss on Mission Innovation IC7: Affordable Heating and Cooling of Buildings ongoing activities and future roadmap.
5. An interaction meeting held with experts from IIT Madras to discuss on India - EU Joint call on Integrated Local Energy Systems.
6. A bilateral meeting of experts was scheduled to discuss modalities and research areas in Supercritical carbon dioxide power cycle for the next phase of PACE-R with United States of America.
7. DST re-launched Indo- Dutch call on Cleaning Ganga and Agri Water on 3rd August 2020.
8. DST jointly launched Accelerated CCUS Technologies (ACT 3) call act on 5th August 2020.

F. Human Capacity Building

1. **Webinars:** Webinars on "Green Energy for Self Reliant India" by Dr. N. Kalaiselvi, Director CSIR-Central Electrochemical Research Institute (CSIR-CECRI), "Impact of Ramanujan on Number Theory in India" by Dr. R. Balasubramanian, Institute of Mathematical Sciences, Chennai, "Science Behind What We Eat" by Dr. Sridevi Annapurna Singh, CSIR-CFTRI, "Optimisation of Attention and Situation Awareness of Aircraft Pilot and Crew Modern Cockpit Instrumentation" by Dr. Vinod Kumar, CSIR-CSIO have also been organized.
2. **Special Online Classes:** During August, 68 online classes have been conducted for girls selected under Vigyan Jyoti. These classes are aiming to build the academic strength and to help students in clarity of concepts and skills to face the competitive examinations. Besides classes, 2 online tests have been also conducted for all the Vigyan Jyoti students on 2nd and 16th August, 2020.
3. **Women Scientists Scheme:** During August, 82 Sanctions have been issued under WOS-A and WOS-B programmes.
4. **Science and Technology of Yoga and Meditation (SATYAM):** A virtual meeting was conducted with Principal Investigators of all the SATYAM projects sanctioned during 2019-20 on August 27, 2020. Since most of the SATYAM projects are implemented in hospitals, therefore, PIs are facing issues in implementation of projects due to Covid-19 pandemic. Their several queries about project

implementation, staff engagement, project duration, work plan, etc. have been resolved by DST officials.

5. Secretary, DST launched a brochure of NIDHI- EIR (National Initiative for Developing and Harnessing Innovations Program Entrepreneurs-in- Residence) Program and reviewed the progress of round 1 and round 2. The results of the two rounds of EIR call are as follow:

- 225 EIR fellows supported, these fellows represent 22 states of India
- 68% were below 30 years of age
- 146 companies formed (~ 65% conversion to startups) (Scheme document had listed 30% startups creation as success indicator.)
- 711 jobs created
- 65 patents, 45 trademarks, 19 copyrights created
- 146 initial prototypes developed
- DST investment in Round 1 and 2: Rs 874 lakhs
- Follow on funding raised by EIR fellows from non-NIDHI programs more than Rs 2300 lakhs

6. The Millennium Alliance initiated ceremony held on 18th August 2020, New Delhi to announce the award of ₹26.25 Crore (US$3.6 million) to 49 aspiring Indian social entrepreneurs for their innovative solutions to address Indian and global development challenges. Among them, 33 innovative solutions will focus on health, agriculture, clean energy, education, water and sanitation and disability and the remaining 16 solutions will respond to the challenges posed by the current COVID 19 crisis in India and Africa/South Asia. This is the 6th round of awards made by the Millennium Alliance Platform consisting of Department of Science & Technology, Government of India, US Agency for International Development, Department for International Development, UK Govt., FICCI, Facebook and Marico Innovation Foundation.

7. SERB has approved institution and implementation of a Scheme: SERB-POWER (**P**romoting **O**pportunities for **W**omen in **E**xploratory **R**esearch) to mitigate gender disparity in science and engineering research funding in various S&T programs in Indian academic institutions and R&D laboratories. SERB-POWER is specially designed to provide structured effort toward enhanced diversity in research to ensure equal access and weighted opportunities for Indian women scientists engaged in research and development activities.

Women Scientists in regular service in academic and research institution will be supported under two categories, namely, SERB –POWER Fellowship and SERB – POWER Research Grants. The Scheme will be launched soon.

8. 3rd meeting of the Technical Advisory Committee (TAC) of the project - **India Innovation and Systems Survey 2019** being implemented by UNIDO was held at UNIDO's New Delhi office on August 31, 2020.

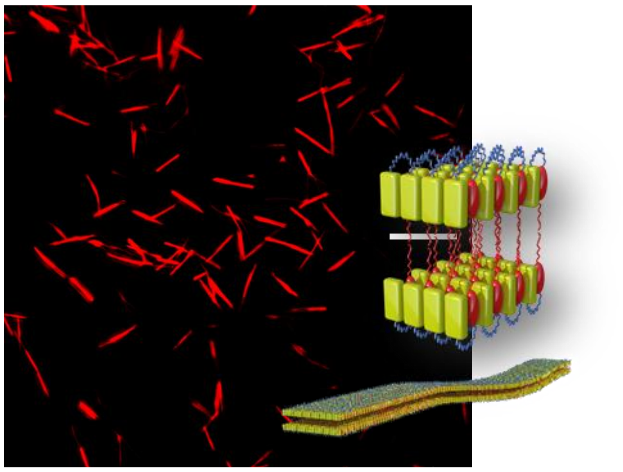
G. Scientific Infrastructure Building

1. Different project activities in Facility for Antiproton and Ion Research (FAIR), Thirty Meter Telescope (TMT) and India-based Neutrino (INO) projects continued.4 Indian Companies continued executing contracts worth Rs. 4.5 crores with CERN, Geneva. In addition, 5 Indian Companies submitted bids for CERN Tenders and Cable Sample sent by 1 Indian Company to CERN passed fire and safety tests and further tests are underway.

2. Raman Research Institute (RRI) theorists and collaborators have investigated the dynamics of the run-and-tumble particle, also known as persistent Brownian motion, in one-dimensional inhomogeneous media and have obtained analytical expressions for its position distribution and first-passage time distribution.
3. Analysis of thermonuclear X-ray bursts and a burst like event from a low mass X-ray binary Cyg X-2 has enabled RRI astronomers and collaborators to infer the evolutionary state, accretion disk geometry, coronal structure and rate of accretion to the component neutron star.
4. MACS-Agharkar Research Institute (ARI) discovered a plant species *Ischaemumjanarthanamii* from the Western Ghats, India and also discovered a new species of diatom from the eastern Himalayas, India.
5. Services of the National Fungal Culture Collection of India were rendered to academia, research centers and industry. Study of diversity and biogeography of diatom genus *Luticola* from the Western Ghats, India was also conducted at ARI.
6. Aryabhatta Research Institute of Observational Sciences (ARIES) astronomer's, using the extensive data with the 1.3m Devasthal Fast Optical Telescope (DFOT), trace the mystery behind dwarf galaxy aberrations of massive star formation.
7. Institute of Nano Science and Technology (INST) have developed an equipment-free fluoride ion detection and quantification in drinking water with the naked-eye. It can be operated by non-experts for household use to evade Fluorosis-based disorders.
8. INST developed nanorods from the nonsteroidal anti-inflammatory drug Aspirin, a medication used to reduce pain or inflammation and found it to be an effective non–invasive small molecule-based nanotherapeutics against cataract.
9. INST team has also developed a new nano-particle-based treatment for Kala Azar.
10. S. N. Bose National Centre for Basis Science (SNBNCBS) established that mice administered with C-Mn3O4 NPs showed no signs of a neurobehavioral disorder, but the NPs instead ameliorated Mn-induced neurotoxicity (Parkinson's-like syndrome) through the chelation of excess Mn ions and subsequent reduction of oxidative damage.
11. Scientists from S. N. Bose National Centre for Basic Sciences in collaboration with Saha Institute of Nuclear Physics have demonstrated the detection of HA-coated EVs as a potential colon cancer biomarker.
12. A series of 1,2-dihydronaphtho[2,1-b] furan derivatives were synthesized by Bose Institute (BI) and some showed promising anti-cancer potential. A peptide-PNA hybrid beacon was designed that exploits the dimeric nature of a target protein, S100B, a biomarker for brain trauma, to enhance binding affinity and specificity.
13. Tumor-targeted delivery of umbelliferone, via a smart mesoporous silica nanoparticles controlled-release drug delivery system for increased anticancer efficiency was developed by BI.
14. The Indian Institute of Astrophysics (IIA) Science Team for the Visible Emission Line Coronagraph (VELC) instrument for the Aditya-L1 Mission

contributed to finalising VELC observation sequences/logics, and defined Target of Opportunity (ToO) observations and continued participating in Science Working Group meetings involving other national institutes.

15. Using the magneto-hydrodynamic simulations of fluctuation dynamos, broad-bandwidth synthetic observations have been performed to investigate the properties of polarized emission and the role played by Faraday rotation in inferring the polarized structures in the intracluster medium (ICM) of galaxy clusters by IIA. These studies underline the need for high frequency observations with future radio telescopes to effectively probe the properties of polarized emission in the ICM.
16. Development of Fabry Perot etalon Interferometer (FPI) for studying atmospheric parameters is one of the inter-institute collaborations with Indian Institute of Geomagnetism (IIG), Mumbai. IIA-Optics division has taken up the responsibility of building and calibrating the interferometer in the laboratory and contribute the expertise during the sky testing. The first level of integration and testing have been completed. A different method for polishing of metal mirror sample has been tried in metal polishing machine by IIA.
17. Jawaharlal Nehru Centre for Advanced Science and Research (JNCASR), developed a synthetic mimic of redox-active biological assemblies, with precision structure and programmable dynamics, in a bid to comprehend the naturally occurring functional systems. Scientists illustrated that a redox-active synthetic monomeric molecular amphiphile can self-assemble to nearly monodisperse supramolecular polymers when coupled to a reduction-oxidation reaction network. The strategy represents a unique approach to precisely control supramolecular polymers at various length scales in the presence of redox cues, reminiscent of biological systems.



Transient dormant monomer states for supramolecular polymers with low dispersity. *Nat Commun* **11,** 3967 (2020).

18. JNCASR have carried out controlled experiments with the objective to understand the mechanism of polymer turbulent drag reduction used for saving pumping cost of crude oil. Scientists have studied formation & propagation of vortex rings (e.g., dolphin's bubble ring), which is a caricature representation of the turbulent vortices. It is demonstrated that when the relaxation time of the polymer used for TDR is same order of magnitude as the flow time scale, the elastic energy stored

in the stretched polymer is released back which reduces turbulent frictional loss in the flow.

19. A new initiative called JAI-AWSAR program for Ph. D. students of Aryabhatta Research Institute of Observational Sciences (ARIES) and IIA was announced, under the banner of DST-50 and IIA-50 celebrations.

20. SoI has submitted second Administrative Level Boundaries (SALB) data to UNGGIM as part of SALB Project.
21. SoI has provided administrative data to Delimitation Commission for delimitation of Parliamentary and Assembly Constituencies in respect of 04 States i.e. Assam, Arunachal Pradesh, Manipur and Nagaland & UT of J&K.
22. VC summit on UAV & Geo-spatial Technology-Changing the Business Paradigm organized by Geo-spatial Media and Communications on 6th Aug 2020. Sh Pankaj Mishra, Director, SGO participated as Moderator.

23. Irrigation Atlas of India – Twenty two (22) Maps and seventeen (17) write up completed.
24. Cultural Heritage Atlas: Completed scrutiny checking and incorporation scrutiny completed for all maps and write up.
25. Monograph: Delhi: The city of Cities – A Historical Review – Completed scrutiny of write up and maps.
26. Tribal Atlas: Write up of Eleven Maps completed.
27. Braille Atlas: State Atlas of Andhra Pradesh – Seventeen maps completed with in Braille script of English.

28. **Promotion of University Research and Scientific Excellence (PURSE)**

The Advertisement for inviting the fresh proposals for consideration of support under PURSE was launched in the DST Website and electronic project management system. The call of proposals is active till 15 October 2020.

29. **Sophisticated Analytical and Technical Help Institutes" - (SATHI)**

a) The 10th meeting of SATHI Ki BAAT held through video-conference (VC) by involving ongoing SATHI centres to review the work progress of recently supported SATHI centres.

b) Secretary DST released the logo of SATHI and also launched the website(s) of three SATHI facilities along with the directors/ Vice-Chancellor of respective institutes for wide outreach and publicity.

c) The first interactive meeting was held on 21st August 2020 through video-conference (VC) by involving the five invited institute / university for Setting-up of new Sophisticated Analytical and Technical Help Institutes (SATHI) Facilities of DST, in the country with a request for detailed proposal.

30. **Sophisticated Analytical Instrument Facilities (SAIF)**

a) Five (05) Webinars on Instruments and Techniques were organized by SAIF IIT Bombay in August, 2020.

b) A Coordinators meeting of all SAIF Centres was held on 27 Aug 2020 under Chairmanship of Head, R&D Infrastructure Division. The main agenda of the meeting was to discuss issues faced by SAIF Centre due to the ongoing Covid-19 situation. Discussion and planning about the Steering Committee meeting for SAIF was also done in the meeting. Total 13 out of 15 SAIF Centres attended the virtual meeting.