No. DSIR/MS/2023/06 Government of India Ministry of Science & Technology Department of Science & Industrial Research MONTHLY SUMMARY FOR THE CABINET (For the monthly of June 2023) (Part-I Unclassified)

Major achievements during the month of June 2023

Council of Scientific & Industrial Research (CSIR)

New Technologies/Processes Developed/Transferred

- CSIR-CFTRI
 - Developed following processes:
 - Malted ragi based ready-to-eat weaning food;
 - Instant finger millet halwa mix
 - Shelf stable jowar flour M/s Buhler (India) Pvt.Ltd, Bangalore.
 - RTS fruit juices and beverages M/s Trimadhura Foods & Beverages Pvt.Ltd., Padil Post, Mangaluru.
- CSIR-CIMFR
 - Improved Soft Coke Making Technology was transferred to Shree Balajee Industries, Mouza, Rohtas, Bihar.
- CSIR-IICT
 - Developed following processes:
 - Exploratory studies for the enrichment of fatty acid content and reduction of unsap in fatty acid distillates of Soybean Oil.
 - Know-how for preparation of carbon tetrachloride from chloroform by photochlorination.
 - Know-how for DCDA from Calcium cyanamide.
- CSIR-NAL
 - License Agreement signed with Triden Tech Engineering Private Limited, Chennai for manufacturing and commercial sale of 30 HP Wankel Rotary Engine suitable for civil & military applications on 06-06-2023.
- CSIR-NML
 - Licensing of knowhow for brass melting furnace to aquatic industries private limited, Bhubaneswar and IMMT, Bhubaneswar
- CSIR-NIIST
 - Know-how on the process for coloured terracotta tiles from ilmenite mud, a waste product discharged from the TiO2 pigment industry was successfully optimized and industry trials conducted to verify the products.
 - Bio-Eco Engineering system for greywater recycling

Collaborations/Agreements/MoUs Signed (National)

• CSIR-CBRI

- Signed an agreement with Uttar Pradesh RajkiyaNirman Nigam Ltd., Dehradun to undertake the quality control of school/college /institutional buildings under construction/to be constructed by UPRNN on June 6, 2023.
- Signed following MoUs with:
 - Marwadi University, Rajkot, Gujarat for research and Academic interaction in the area of Building Science & Technology on June 1, 2023.
 - National Institute of Technology, Hamirpur and Academic interaction in the area of Building Science & Technology on May 29, 2023

• CSIR-CCMB

• Collaborated with Padmaja Naidu Himalayan Zoological Park for the determination of diet of red panda (Ailurusfulgens) in the wild through scat analysis.

• CSIR-CDRI

- A Sponsored Agreement with Rabisan India Electrohomeo Pharma, Chamba on 22-06-2023 w.r.t. "Phytochemical and Immuno modulator standardization of Ega-001".
- An MoU executed with Indraprastha Institute of Information Technology, Delhi on 21-06-2023 to promote institutional linkage between CSIR-CDRI and IIIT-Delhi and to explore other avenues for possible collaboration.
- An MoU executed with KGMU, Lucknow on 29-05-2023 to explore for possible collaborative research programs in specific fields of interest.

• CSIR-CEERI

- Signed an MoU with 'DhirubhaiAmbani Institute of Information and Communication Technology (DA-IICT), Gandhinagar' for Academic and R&D Collaboration on 22-06-2023.
- Signed an MoU with Ganpat University U V Patel College of Engineering, Mehsana for Academic and R&D Collaboration on 22-06-2023.

• CSIR-CGCRI

• Signed an MoU with National Council of Science Museums on Creation of Panel Exhibition and Basic Multimedia Functionality for Atma Ram Memorial Museum and Archives.

• CSIR-CIMFR

- Signed an agreement for know How Transfer of Improved Soft Coke Making technology with Shree Balajee Industries, Mouza: Sakhara, Rohtas, Bihar on 01-06-2023.
- Tripartite Agreement between Western Coalfields Limited, Civil Lines, Nagpur and GMR Warora Energy Limited, Naman Centre, Bandra (East), Mumbai and CSIR-CIMFR, Dhanbad for Coal Sampling Work on 01-06-2023.
- Tripartite Agreement between Western Coalfields Limited, Civil Lines, Nagpur and Dhariwal Infrastructure Limited, CESC House, Chowringhee Square, Kolkata and CSIR-CIMFR, Dhanbad for Coal Sampling Work on 01-06-2023.

• CSIR-CLRI

- A collaborative agreement was signed with TATA International Limited (Leather Division) towards the Development of Technology for Preparation of Regenerated Leather from Tannery Solid Wastes.
- CSIR-CMERI

- Signed an MoU for joint projects on industrial solutions for various units of SAIL-DSP or other problems in different areas of SAIL-DSP to enhance its production & productivity (5 years)
- Signed an MoU for joint projects on industrial solutions for various units of SAIL-ISP or other problems in different areas of SAIL-ISP to enhance its production & productivity (5 years).
- Tripartite Agreement signed for project entitled 'Scientific Intervention for livelihood upliftment and creation of social enterprise for EWS communities in Jagatsinghpur and Koraput districts of Odisha on 01.06.2023.

• CSIR-CSIO

- Signed following MoU with:
 - GMCH Chandigarh for collaborative research in biomedical instrumentation.
 - HomiBhabha Cancer Hospital and Research Centre (Tata Memorial Center), Mohali for collaborative research in biomedical instrumentation.
 - Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Solan.
 - Pakka Foundation for joint skill development programmes for the students of Pakka Skills in the domain of Mechanical, Tool & Die, Die and mound, CAD/CAM etc.

• CSIR-CSMCRI

- o Signed Collaborative Project agreement on
 - Proof of concept and feasibility studies on the development of biodegradable sealable seaweed-based pods with Cirkla Technologies (P) Ltd, Mumbai.
 - Study the marine ecology of coastal water around marine discharge locations of Tata Chemicals, Mithapur with TATA Chemicals Ltd, Mumbai.
 - Feasibility survey and techno economic study for production of bromine with The Modern Salt Works Pvt Ltd., Mumbai

• CSIR-IICT

- Screening and development of novel solid forms of selected API (Agreement & firm name kept confidential as per clause)
- Consultancy services for step-up of lab scale Plastic to Fuel oil (Agreement & firm name kept confidential as per clauase)
- CSIR-IIIM
 - Signed an MoU's with Bharat Business Connect, Delhi and RockhillAgritechPvt Ltd., Dehradun on 04-06-2023 for joint R&D Development and Extension of targeted Medicinal Aromatic Plants under CSIR-Aroma Mission.
- CSIR-NAL
 - MoU signed with Amrita Vishwa Vidyapeetham, Coimbatore, Tamil Nadu for continuing cooperative programme in research and academic linkage on mutual interest by parties on 12-06-2023.
 - MoU signed with PSG College of Technology, Coimbatore, Tamilnadu for the purpose of establishing and strengthening research & academic linkage on mutual interest by parties on 19-06-2023.
- CSIR-NML
 - Signed Licensing agreement of knowhow for brass melting furnace to aquatic industries private limited, Bhuwaneshwar and IIMT, Bhuwaneshwar

• CSIR-NGRI

- Signed an MoU with University of Ladakh, Leh on 17.06.2023 for three years to coordinate and collaborate in the following areas:
 - Research and training in selected and advanced thrust areas of geophysics and geology.
 - Promoting CSIR-NGRI-UoL joint research programmes funded by outside agencies, such as the SERB/DST, Ministry of Earth Sciences, Department of Space, etc.
 - Consultancy& Intellectual Property Rights

• CSIR-NIIST

- Signed an Agreement Non-reactive coatings for hot metal transport with TATA Metaliks, Kharagpur for developing a non-reactive, non-wetting ceramic coats on metal pipelines where hot steel melt is transported.
- Collaborated with KSCSTE in the field of Science & Technology research and basic research, faculty and student exchange program for the mutual benefit by utilizing the expertise and infrastructure existing in both institutions.
- Establish a mutual framework governing the respective organizational relationships, responsibilities and activities Fatima Mata National College (FMNC).
- Evaluate a potential business relationship with SILRES Energy Solution Pvt Ltd.
- Indigenous development of processes and materials for highly efficient and stable perovskite solar cell technology HHVAT (HHV Advanced Technologies Private Limited).
- Hydrodynamic Cavitation Assisted Fractionation of Coconut Waste Shell to MCC and Its Conversion to LGO Coconut Development Board (CDB).
- CHEMICAL TESTING Envirodesigns Eco Labs for Science, Technology and Environment (KSCSTE)

• CSIR-NIO

 Signed an MoU with Thakur College of Science and Commerce to undertake collaborative research, development and innovation activities, leading to joint projects and R&D contracts and joint knowledge valorization, on the basis of complementary efforts in all areas of activity of both institutions, with special focus relating to Ocean Sciences on 12-06-2023.

• CSIR-SERC

- Signed an MoU with Larsen & Toubro Limited, Mumbai, for Precast Textile Reinforced Concrete U- Drains for Storm Water infrastructure (TRC U-drain) on 06 June 2023.
- Signed an MoU with Bhabha Atomic Research Centre (BARC), Mumbai, for Cyclic Fracture Studies on Dissimilar Pipe Girth Weldments at Operating Temperature on 28 June 2023.
- Signed MoA with Bhabha Atomic Research Centre (BARC), Mumbai, for Monotonic fracture tests on full scale notched pipe welds to study the effect of thermal ageing on its fracture behaviour on 28 June 2023.

Collaborations/Agreements/MoUs Signed (International)

• CSIR-CDRI

• Software License Agreement executed with Lhasa Limited, England on 06-06-2023 to receive and use the Lhasa Software at the Sites during the Trial Period solely for the purposes of the evaluation.

• CSIR-CRRI

 An agreement signed with Norwegian Geotechnical Institute (NGI), Norway for Enhancing risk management & resilience to natural hazards in India, Brazil & Norway through collaboration in education, research & innovation (NATRISK) on 02.06.2023.

• CSIR-NCL

 Processing of MoU between CSIR-NCL and ICMR-NIV for 'Discovery of Novel Class of Cysteine Protease Antiviral Agents' is in progress. Dr. Sanjayan's group at CSIR-NCL will design and synthesize novel cysteine protease inhibitors (antiviral agents). These antiviral agents will be tested against viruses containing cysteine protease such as Zika, Nipah, and Chikungunya at the facility of ICMR-NIV.

Patents Update

Patents Filed		Patents Granted		Patent Prosecutions	
India	Abroad*	India	Abroad*	India	Abroad*
17	22	13	09	14	137

* Data reported to IPU during June 2023 and may change later during national phase entries

High impact S&T services offered

- CSIR-CCMB
 - Provided Molecular Diagnostic Services for 203 Families Comprising of 218 Samples.
- CSIR-CDRI
 - Common Research and Technology Development Hub (CRTDH): Provided analytical services to MSME, and consultancy for new drug product development to two medium sized enterprise in the pharmaceuticals sector.
 - Animal Facility Laboratory: The CPCSEA (Committee for the Purchase of Control and Supervision of Experimental Animals) approved experimental animals (total no.409) were supplied to outside research organizations for research purpose having 153 rats, 166 mice, 80 golden hamster and 10 rabbits.
 - Sophisticated Analytical Instrument Facility: Provided service for analysis of sample by IR (Infrared), Mass, NMR (Nuclear Magnetic Resonance) and EM (Electron Microscopy). In the month of April, total 172 external samples have been analysed for 33 users.

• CSIR-CMERI

- Service suitability & health assessment study of 16 nos. vertical sluice gate Sponsored by Irrigation & Water Ways Dept., Govt. of WB, Durgapur Barage.
- Metallurgical Investigation into probable causes of failure of boiler Sponsored by Tenughat Thermal Power Station, Bokaro, Jharkhand.

• CSIR-CRRI

 Conducted Preliminary Inspection of Steel Bridges at SJVN Sites in Himachal Pradesh.

- Evaluation of Internal NDMC Roads/Lanes for Determining Suitable Maintenance Measures for New Delhi Municipal Council (NDMC), New Delhi
- Investigation on Strengthened Three-cell RCC bridge at Ch.53+005 of NH-11, Bikaner-Phalodi Highway for IRCON PB TOLLWAY LIMITED, Rajasthan
- To Investigate Causes of Damage to Flexible Pavements at Mathura Site B Industrial Area for Uttar Pradesh State Industrial Development Authority, Uttar Pradesh
- Mix Design for Granular and Bituminous Mixes for Runway Work at LEH (UT, LADAKH) for Military Engineering Services (MES), Ahmedabad.
- Development of Ready to Use Pot hole Mix using Iron and Steel Slag Aggregates for Ramuka Global Services LLP, Gujarat

• CSIR-CSMCRI

 Technology knowhow and demonstration for the production of Sap from Kappaphycusalvarezii and its application to Staron chemicals Private Limited, New Delhi on 17-06-2023 at CSMCRI, Marine Algal Research Station, Mandapam, Tamil Nadu. Demonstration was carried out using 100 kg Kappaphycusalvarezii and sap yield of 45% with 45 kg fresh residue was obtained.

• CSIR-IIP

Testing services offered under various ongoing projects of the institute, industrial clients and AcSIR activities. These tests include gaseous fuels (ASTM D7833, D5504), liquids fuels (D6730, UOP744, D5623, D4815, D6584 and IP 391), engine oils(ASTM D3524, D3525), lubricating oils(ASTM D7419), waxes (ASTM D5442), GC-MS and HRMS of petroleum fuels and general chemicals.

• CSIR-NAL

- Evaluation of flight control bearings National engineering industries ltd.
- $\circ\,$ Hansa NG second stage of development Mogas fuel, steerable NLG & IFR certification NAL.

• CSIR-NEERI

- Management Handling Utilization and Disposal of Phosphogypsum generated from phosphoric acid plant at Birla Copper, Dahej, Gujarat.
- Emission Inventory, Source Apportionment and carrying Capacity Studies of the Air Environment for Guntur City under National Clean Air Program.
- Study on the Assessment of Eco Zones/ Distances for Establishment of Red Orange, Green and White Category Industries within 10 Km Radius from the +5 cotour of Kolleru Lake.
- Environmental Assessment and Mitigation Measures for floating Solar Plant on the reservoir at the JSPL, Angul, Odisha.
- Use of Artificial Intelligence Machine Learning tool for vehicle counting by uploading the CCTV footage on cloud Platform.

• CSIR-NML

- Development of Process for Refining of Commercial Magnesium Metal through Vacuum Distillation
- CSIR-NIIST
 - S&T consultancy offered to Develop Brown fused alumina abrasives from nonmetallurgical grade India Bauxite. This activity is being carried out for the industry Innovation in Alumina Centre, Hindalco, Belgaum.

• S&T consultancy services to investigate the presence of high value minerals in the river sand was started with the funding from the external agencies.

• CSIR-SERC

- Integrity assessment of the prestressed Trunnion beams of the spillway structure of Polavaram dam project through Acoustic Emission (AE) and advanced non-destructive evaluation (NDE) Techniques.
- Residual stress measurement in Aluminium Bridge for Larsen and Toubro Defence, Pune
- Slosh and Vibration Studies on LCH Auxiliary Fuel Tank for Hindustan Aeronautics Limited, Bengaluru
- Calibration of MET Sensor in Wind Tunnel for the calibration of metrological sensor, velocity measured using cobra probe was taken as reference. As it was desired to calibrate the metrological sensor under uniform flow conditions, in the present experiment, the cobra probes were fixed at the upstream turn-table location of the test section and wind flow characteristics corresponding to uniform flow conditions were simulated.

Outreach Activities (Jigyasa, Skill Development, and others)

• CSIR-AMPRI

- Celebrated "World Environmental Day" on 5th June 2023 in which 1500 students and teachers participated and benefitted.
- Organized a "Summer Vacation Programme" during 12 to 16 June 2023 for school students in which 30 no of the students benefitted and completed a Mini project, Visited Labs, and Interacted with Scientists for one week.

• CSIR-CBRI

o Three days' skill development training programme on "Building Construction Systems" has been organized on June 14-16, 2023. This programme was attended by 32 trainees of different educational institutes across the Nation. The programme was aimed to upgrade the latest knowledge & skills of the participants using innovative tools & techniques in the area of Architecture Planning & Design, Building Foundations, Structural design, Good Construction Practices, Green Building Materials, Energy Efficiency and Fire Safety in buildings etc. In addition, participants also witnessed the R&D facilities and technologies showcased in Construction Technology Demonstration Park for better understanding of housing techniques & typologies for creating a safe and sustainable habitat.

• CSIR-CCMB

• The Gene-Health Connect mobile science exhibition developed by CCMB and VITM was at Regional Science Centre, Tirupati and visited 9 schools in Hyderabad, reaching out to 10,000 people altogether.

• CSIR-CDRI

- Student Scientist connect program was organized on:
 - 2nd June 2023 for the students of Department of Shubash Chandra Bose Institute of Higher Education, IIM road, Lucknow, UP. 61 students and 4 faculty actively participated.

- 5th June 2023 to commemorate World Environment Day 2023 for the students of Mahayogi Gorakhnath University, Gorakhpur, UP. 54 students and 6 faculty actively participated.
- 21st June 2023 to commemorate International Yoga Day 2023, for the students of B.N. College of Pharmacy, BKT, Lucknow, UP. 52 students and 2 faculty actively participated.
- 23rd June 2023 for the students of Faculty of Pharmacy, Dr. APJ Abdul Kalam Technical University, Lucknow, UP. 95 students and 5 faculty actively participated.

• CSIR-CECRI

- Training programme was organized on:
 - Solar Energy Technologies Fundamentals to Device Fabrication during 12.06.2023 - 16.06.2023. 38 participated.
 - Electroanalytical techniques for Electrocatalytic and Biosensing applications during 26.06.2023 - 30.06.2023. 65 participated.
- Summer Vacation Programme 2023 during 22.05.2023 to 09.06.2023. 9 Trainees participated.
- Organized twodays Teacher Training Programme in association with Royal Society of Chemistry (RSC) during 05.06.2023 to 06.06.2023.
 68 Teachers (TGT/PGT) from Govt./Government aided/Private schools got trained.
- Online Quiz was organized on the following National/ International Days during June 2023:
 - World Environment Day 05.06.2023.
 - World Food Safety Day 07.06.2023.
 - World Oceans Day 08.06.2023.
 - World Wind Day 15.06.2023.
 - International Yoga Day 21.06.2023.
 - 30 students and two faculty members from Alagappa University Learned Institute of Skills under Alagappa Skill Development Programme, Karaikudi on 08.06.2023.

• CSIR-CEERI

• 2 Weeks SDP on Semiconductor High Impact Learning Program (SHILP) conducted for BITS-Pilani Research Scholars and students.

• CSIR-CFTRI

- Program on Student as Scientist was conducted on 28.06.2023. 42 students and 12 teachers of Kendriya Vidyalaya and CFTRI School participated.
- Skill development program on Bakery Products Processing and Value Addition was conducted from 14th to 15th June 2023, 20 participated.

• CSIR-CGCRI

- Organized following skill development training programme:
 - Advanced instrumental analysis for chemical characterization of glass, ceramics and allied materials by modern instrumental methods of analysis during 20th to 23rd June 2023. 15students participated.
 - Soft Skills and Technical Skills Upgradation on Stoneware Crockery and Tableware Manufacturing at CSIR CGCRI Naroda Centre, Ahmedabad during 31 May to 02 June 2023. 28 industry persons participated.

 School visit Programme was organized at Bohichberia High School Nandakumar, Purba Medinipur, West Bengalon 2nd June, 2023 to promote scientific curiosity within the students' minds as well as to connect with the school children. 200 students and 15 Teachers participated.

• CSIR-CIMFR

- General Manager, Environment, SAIL, Dhanbad delivered the lecture on "An Overview of Coal Mining with special reference to environmental issues" on the occasion of World Environment Day on June 05, 2023.
- Organized a one-day workshop on training of Sparrow APAR. In this workshop, 10 delegates from CSIR-IMMT, Bhubaneswar and CSIR-NML, Jamshedpur, apart from CIMFR Dhanbad's Administration, Finance & Accounts, Stores & 100 members of purchase sections joined.

• CSIR-CLRI

- Organized one day visit for School students on 27 June 2023. Various demonstration sessions on Colouring of Leathers, Tannery Waste Management, Isolation of Natural Pigments, NMR Chromatography for Separation of Chemical Mixtures were conducted for the School students by CSIR-CLRI Scientists.
- 44 students of Mechanical Engineering department, Sri Sairam Institute of Technology, Chennai accompanied by 3 faculty members visited CSIR-CLRI on 22 June 2023 to understand the research programs of the institute.

• CSIR-CMERI

- Jigyasa programme was organized on 28.06.2023 for 25 students & 3 teachers of Nadiha High School on "Introduction to the fascinating world of Artificial Intelligence (AI)" & "Plastic Waste disposal & recovery of added product" followed by demonstration at respective sites.
- High-End Workshop (Karyashala) on 'Internet-of-Thing (IoT) & Artificial Intelligence (AI) with Industrial Applications' from June 26-July 02, 2023. It was sponsored by SERB, DST with aim of accelerating scientific knowledge & innovation among students.
- Skill Development Training Programme on "Transform your Imagination to Reality Using CAD packages" from 20th-26th June, 2023. 10 nos of 3rd year Mechanical Engg students of Jalpaiguri Govt. Engg. College participated.
- Jigyasa programme on "Plastic waste disposal & recovery of value added product" & "Energy literacy & Environmental sustainability" on 05/06/2023. 44 students & 5 teachers along with Principals of Durgapur Iswar Chandra Vidyasagar Public high &Jemua Bhadubala Bidyapith participated.
- Hands-on Training on Scientific Instrument usage for performance evaluation of Agricultural Machinery & Implements from May 29th-June 9th, 2023. 4th year undergraduate students of Uttar Banga Krishi Viswavidyalaya, Cooch Behar, W.B participated.

• CSIR-CSMCRI

 Organizing a Webinar on The Science behind Yoga for celebration of "Yoga for Vasudhaiva Kutumbakam" on 22 June, 2023

• CSIR-IHBT

• An exhibition stall of Centre for High Altitude Biology (CeHAB) of CSIR-IHBT was setup at Keylong on the occasion of World Environment Day on 05.06.2023 to

showcase research and extension activities of the institute. This was organized by Forest Department, Lahaul Forest Division and was inaugurated by Hon'ble MLA of Lahaul and Spiti, Sh. Ravi Thakur in the presence of Sh. Rahul Kumar, Hon'ble DC, Lahaul and Spiti, Sh. Mayank Chaudhary, Superintendent of Police, AC to DC, SDM Keylong, Commanding Officer, GREF (BRO) and along with Sh. AniketWanve, DFO. 50 students including faculty members from Talnoo Dharmshala visited PLP Herbarium and they were apprised of the role of Herbarium.

- 2 students and 1 teacher from International Sahaja Public School, Talnoo, Dharamashala (HP) visited on 01.06.2023.
- $\circ\,$ 16 teachers from Gyaananda School, Gurugram (HR) visited the Institute on 06.06.2023.
- In addition to this, 2 students (MA Education) Azim Premji University, Bengaluru, Karnataka also visited the Institute on 13.06.2023.
- One-month Skill Initiative Programme (Phase-II) on Summer Research Internship Program (SRIP) was organized from 23.05.2023 to 22.06.2023. The program was sponsored by GSBTM conducted at CSIR-IHBT, Palampur for 04 students.

• CSIR-IICB

• Students of Class XII of Jadavpur Vidyapith visited during 16, 19 & 21 June, 2023.

• CSIR-IICT

- An Orientation Program in Chemical Sciences was conducted in collaboration with Department of Chemistry Bhavan's Vivekananda College, Secunderabad on 23 June 2023. It was a comprehensive event aimed at providing a platform for learning, Networking in the field of Chemical Sciences. 230 students of various levels of education pursuing Bachelor's degree in Chemical and Life Sciences along with selected students of higher secondary school were participated.
- Prof. Pinaki Talukdar, Rahul Bajaj Chair Professor and Dean of Faculty, Indian Institute of Science Education and Research, Pune delivered a lecture titled "Development of Artificial Ion Channels for Targeting Cancer" at CSIR-IICT on 9th June, 2023.
- Director, Institute of Genomics and Integrative Biology and a distinguished alumnus of CSIR-IICT delivered a talk on " Correcting and Detecting Genes with Precision: An Indigenous Approach" on 13th June, 2023.

• CSIR-IIIM

- Celebrated One Week One Lab during 4-10 June, 2023.
 - Two days Student-Scientist connect program was organized, under the umbrella of OWOL campaign. The event was inaugurated by Dr Geetha Vani Rayasam, Head CSIR HRDG & Coordinator CSIR Jigyasa Programme. 130 students and accompanying faculties from different Schools of Srinagar and adjoining areas enthusiastically participated in the event. Various activities undertaken during the event included hackathon, science model competition, DIY activities, painting competition and visit to various labs of the Institute.
 - Four days OWOL campaign consisted of a skill development programme on high end research. It was attended by about 200 participants drawn from various divisions of different institutions such as AIIMS Jammu, Central University of Jammu, IIT Jammu, University of Jammu, SKUAST Jammu, Cluster University of Jammu and various Government Degree Colleges of

Jammu district. The participants were given hands-on training on the operation of sophisticated Instruments like HPTLC, HPLC, GC-MS/MS, LC-MS/MS, and NMR.

• CSIR-IIP

 Conducted Skill Development Training on 'Spectroscopic Analytical Techniques, IR-NMR' during 12-23, June, 2023.

• CSIR-NBRI

- Organized an awareness programme in association with Environmental Information, Awareness, Capacity Building and Livelihood Program Centre (EIACP) for students of Netaji Subhash Chandra Bose Government Girls Degree College, Lucknow. The objectives of Mission LiFE and activities of NBRI-EIACP Centre. Quiz competition, slogan writing and drawing competition on the theme of World Environment Day at the college.
- Following training programmes were also conducted:
 - Three days training programme on "Vertical & Roof Top Gardening training", from 24th to 26th May, 2023. 21 participants trained.
 - One day training programme on "Dehydrated Floral Craft", on 6th June, 2023.
 26 participants trained.
 - Twenty-five days training programme on "Bioinoculant producer for agriculture", from 5th to 30th June, 2023. 15 participants trained.

• CSIR-NCL

• As part of One week One Lab program, Dr. Udaya Kiran Marelli of Organic Chemistry division delivered a lecture on a topic " Quality control of honey".

• CSIR-NML

- Conducted Popular Lecture Series for School Students and Teachers on 27.06.2023.
 75 participated.
- Conducted NSDC Job activity training program on 23.06.2023. 50 participated.
- One-day lab visit program by WTP participants on 7.6.2023. 70 participated.
- Marketing activity training program on 6.6.2023. 50 participated.
- CSIR-NGRI
 - Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI) Valedictory training program conducted at CSIR-NGRI in association with NIT Warangal from 14.06.2023 to 21.06.2023, 28 participated from all over the country.
- CSIR-NIIST
 - Conducted KVS Scientist-Student Interaction program on June 24, 2023. Director, inaugurated the program and delivered a Popular Science Lecture. 140 Students & 10 Teachers from 7 KV Schools under Thiruvananthapuram Cluster participated.
 - Organized a visit of Scientists & Ph. D. Students of Department of Agricultural Extension Education, College of Agriculture, Vellayani on June 23, 2023.
 - Student Interaction Program as part of Kendriya Vidyalaya Cluster Level Science, Mathematics and Environment Exhibition for Children 2022-23 and 50th Rashtriya Bal Vaigyanik Pradarshani 2023 at Kendriya Vidyalaya, Pangode on 02.06.2023. 16 students and scientists visited the school and interacted with students.

• CSIR-NIO

 Organized Elementary Laboratory Practices in Ocean Sciences Programme on 27 June 2023.

• CSIR-URDIP

 Two days IP Filing Review Meeting was conducted by CSIR URDIP and CSIR-IPU. Head, CSIR-URDIP along with his team visited CSIR-NEIST from 19-20 June 2023 and CSIR-IICB from 26-27 June 2023 and conducted the program in 2 Break-out sessions to address the issues mainly on the inventions as pendencies for IP filing for 2022-2023 and to motivate and discuss on the potentially new inventions from the ongoing R&D that can be considered for patentability evaluation and filings for 2023-2024.

Major Conferences, Seminar/Webinars, Workshops organized

- CSIR-Hqrs.
 - CSIR alongwith DSIR, DPIIT and other partners, organized the Inaugural Function of Rashtriya Boudhik Sampada Mahotsav (RBSM)/National Intellectual Property Festival under Azadi Ka Amrit Mahotsavon 30th June'23 at CSIR-NPL Auditorium. Hon'ble Minister S&T (I/C) Dr. Jitendra Singh inaugurated the event.
 - CSIR organized second lecture of the CSIR AMRIT Lecture Series on 13 June, 2023. The Lecture on "Take up Impossible Goals: and then go all out to achieve it too" was delivered by Prof. Ashok Jhunjunwala, President, IIT Madras Research Park & IIT Madras Incubation Cell.
 - CSIR Hqrs celebrated International Yoga Day (IYD) on 21st June, 2023.
- CSIR-4PI
 - The OWOL curtain raiser event was launched on June 21, 2023, at CSIR-4PI by Dr. N Kalaiselvi, DG CSIR and Secretary, DSIR and Dr. Manoj Rajan, IFS, Commissioner KSDMA, Director, KSNDMC, and Special Secretary to Government of Karnataka (Food processing).
- CSIR-CCMB
 - Conducted 2nd CSIR-Instituted Pasteur Workshop during 14-16 June 2023.
- CSIR-CLRI
 - Organized a Seminar session (hybrid mode) on Trends in Enzymes for Leather Process Technology and Collagen Bio-products on 21 June 2023 to honourDr N R Kamini for her contributions in enzyme technologies for leather applications. 120 participated. The lectures delivered were as follows:
 - Seminar on the topic Enzymes for Leather: Challenges, Opportunities and Way Forward was delivered by Dr P Saravanan, Chief Scientist, CSIR-CLRI.
 - Seminar on Bioinnovation opportunities in India was delivered by Dr Kalaivani Ganesan, Scientist-F, Dept of Biotechnology, Ministry of Science & Technology, New Delhi.
 - Seminar on Collagen based biomedical devices: Potential Opportunities was delivered by Mr Kingshuk Poddar, Head, Medical Material & Devices, New Materials Business, Tata Steel Limited, Tata Centre, Kolkatta.
 - Seminar on Synthesis of green chemicals by multistep one pot enzymatic biotransformation process was delivered by Dr Ramalingam, Professor, Dept of Biotechnology, AC Tech, Anna University.

• CSIR-CSIO

- One-week one Lab was Organized during 26-30 June, 2023.
- Seminar on Road Map for Medical Devices towards Atmanirbhar Bharat 2nd Bilateral Meet on 'Innovations in Materials for Energy &Environmental Technologies'(i-MEET-2023).
- National Conference on Avionic Technologies & Display Systems Innovator & Startup Meet Roadmap to defence technologies and its manufacturing.

• CSIR-CSMCRI

- Conducted training program Phase II (14-26th, June 2023 and 21-22nd June 2023). 44 candidates participated from various states in this program.
- Organized Workshop on Electrochemistry Equipment, Software & its Application on 07.06.2023.
- Conducted two days hands-on training program on 17-18 June 2023 for coastal people living near the Mayabunder in middle Andaman.

• CSIR-HRDC

- Organized Awareness Programme for ICC members and Administrative staff on Gender Sensitization and Sexual Harassment of Women at Workplace: Prevention, Prohibition and Redressal during 13-14 June, 2023.
- Annual Meet cum Refresher Programme for Senior Officers of Stenographic Cadre during 23-24, June 2023.

• CSIR-NBRI

- Jointly celebrated World Environment Day along-with International Society of Environmental Botanists (ISEB), Lucknow on June 05, 2023. Prof. Venkatesh Dutta, School of Earth & Environmental Science, Baba Saheb Bhimrao Ambedkar Central University, Lucknow was the Guest Speaker and delivered the lecture on 'Restoration of Rivers of Ganga Basin-Strategic Approach'. While Dr. P.V. Sane, Former Director, CSIR-NBRI graced the occasion as Chief Guest.
- CSIR-NBRI and Mrs. Manju Seth Foundation for Advanced Research & Training jointly organized a public lecture programme on June 03, 2023 at CSIR-NBRI. The programme was organized to commemorate 14th Foundation Day of the Manju Seth Foundation. Padma Shri Prof. Balram Bhargava, Former DG, ICMR, New Delhi and Former Secretary, Ministry of Health & Family Welfare and Current Chief, Cardiothoracic Centre, AIIMS, New Delhi was the chief guest and deliver the lecture on 'India's Fight Against Covid19'.

• CSIR-NML

 The Indian Institute of Metals, Jamshedpur Chapter in association with Tata Steel Limited (TSL), CSIR-National Metallurgical Laboratory (CSIR-NML), National Institute of Technology (NIT), Jamshedpur and Academy of Scientific and Innovative Research (AcSIR) jointly organized the students' seminar Behind the Teacher's Desk (BTTD 2023) during June 08-09, 2023. 100 students of 40 colleges across the country participated.

• CSIR-IICT

- One-day joint Hindi workshop was organized on 13th June, 2023 under the joint aid of CSIR-NGRI, CSIR-CCMB & CSIR-ICT
- CSIR-IIIM

 Celebrated One Week One Lab Campaign June 4th to June 10th, 2023. The event marked the release of the brochure of the programme. During interactions with the media, DrZabeer Ahmed, Director of CSIR-IIIM, provided insights into the CSIR's nationwide theme-based campaign, "One Week One Lab."

• CSIR-IIP

 "World Environment Day" was celebrated on 5th June, 2023. This year the theme of World Environment Day was #BeatPlasticPollution. Sh. AnoopNautiyal, Founder-Social Development for Communities (SDC) Foundation graced the occasion as the Chief Guest and delivered his talk on "The Perils of Plastic Waste".

• CSIR-NIIST

- Celebrated World Environment Day on June 05, 2023. Model greywater recycling unit inaugurated in NIIST campus.
- Industry connect meeting for waste management in the hospitality sector June 27, 2023.
- Webinar on environmentally sound management of hazardous wastes and POPs in India, 26 June 2023.
- Conducted an interactive training session for scientists, technical staff and students on "Food Laws in India-Part 1" On 13th June 2026, . Dr. Lalitha Gowda, Retired Chief Scientist, CSIR- CFTRI & Lead Assessor, FSSAI- NRL Evaluation Committee to deliver an online interactive course during the program.
- A high-profile Industry connect meet on Rubber & Allied Industries was organized on June 19th 2023 to discuss the technological challenges and issues related to rubber plantations. The distinguished invitees from the rubber sector, tire manufacturing companies, rubber plantations and rubber products manufacturing MSMEs participated in the event.

Visit of high-level dignitaries to the Institute/Laboratory

• CSIR-AMPRI

- Shri Praveen Ramadas National Secretary, Director, Vibha Vani New Delhi, Visited on 16th June 2023
- CSIR-CDRI
 - The 2nd Sub-committee, Parliamentary Official Language Secretariat reviewed CSIR-CDRI on 22nd June 2023. The committee included; Sri BhartruhariMahatab, Hon'ble MP of Lok Sabha (Dy. Chairman), Prof. Rita Bahuguna Joshi, Hon'ble MP of Lok Sabha, (Convener). The members are Smt. Ranjanben Bhatt, Hon'ble MP of Lok Sabha, Smt. Mala Rajya Laxmi Shah, Hon'ble MP of Lok Sabha, Shri Manoj Tiwari, Hon'ble MP of Lok Sabha, Shri Sushil Kumar Gupta, Hon'ble MP of Rajya Sabha, Shri Durga Das Uikey, Hon'ble MP of Lok Sabha and Smt. Sangeeta Yadav, Hon'ble MP of Rajya Sabha. The officers of second sub-committee included; Shri DharmrajKhichi, Secretary (committee), Shri Manoj Kumar, Hindi officer, Shri Anup Shaw, Senior Hindi Translator, Shri. Mohammad Arif, Committee Reporter, Shri. Anil Kumar, Committee Assistant.

• CSIR-CFTRI

- Mr. Pradeep Sharma, Advisor to Hon'ble Chief Minister, Chhattisgarh & Dr. Kamal Preet Singh, Agriculture Production Commissioner & others explored the facilities of the institute on 09.06.2023 for millet cultivation & processing.
- Delegation from National Commission for Scheduled Castes led by Ms. Anju Bala visited the institute on 16.06.2023 to overview the welfare of SC/ST staff.
- The Curtain Raiser event of the One Week One Lab programme of the institute to be held from 3rd to 7th July 2023 was inaugurated by Dr. (Mrs) Kalaiselvi N, DG CSIR & Secretary, DSIR on 20.06.2023.

• CSIR-CLRI

 Members from Nelson Mandela African Institute of Science and Technology (NMAIST), Tanzania visited on 30 June 2023 and established a collaborative partnership. NMAIST showed interest in leveraging CSIR-CLRI's expertise in leather research and exploring avenues for joint research projects that could contribute to the development and growth of the leather industry in Tanzania.

• CSIR-CSMCRI

- o Hon'ble Minister Shri Jagdish Bhai Vishwakarma visited Lab on 30.06.2023
- CSIR-IIIM
 - Dr. Jitendra Singh, Hon'ble Minister of State for Science and Technology (I/C) and Prime Minister's Office; Personnel, Public Grievances and Pensions; Department of Atomic Energy and Department of Space visited the institute on 08-06-2023 and chaired the review meeting of Cannabis research project of the institute.

• CSIR-IIP

- Dr. N. Kalaiselvi, DG CSIR and Shri M K Gupta, Joint Secretary (Admin) visited the CSIR-IIP on 8th June 2023
- Shri Sandeep Kumar Gupta, CMD GAIL (India) Ltd. visited the laboratory on 28.06.2023.

• CSIR-NBRI

 Padma Shri Prof. Balram Bhargava, Former DG, ICMR, New Delhi and Former Secretary, Ministry of Health & Family Welfare and Current Chief, Cardiothoracic Centre, AIIMS, New Delhi visited CSIR-NBRI on the occasion of 14th Foundation Day of Manju Seth Foundation organized at CSIR-NBRI.

• CSIR-NGRI

 Dr Shailesh Nayak, Member, CSIR Society and Mentor CSIR-NGRI, visited CSIR-NGRI on 06.06.2023 and interacted with Project Leaders at CSIR-NGRI discussed the Way Forward for R & D at the institute.

• CSIR-NIIST

- Former Minister and at present the Vice Chairman, Kerala Khadi & Village Industries, Kerala visited NIIST for discussing the collaboration opportunities on Regional products in food sector.
- Mr. Rajeev, N.B, Chairman National Innovation Foundation visited NIIST and the MSTD displayed the Value-added products from the Industrial Wastes.

COVID related developments/research

• CSIR-IHBT

• Finalizing sampling transfer of remaining RT-PCR kits, cataloguing positive samples in the facility, coordination for sample relocation.

Details of events celebrated to mark India@75 or *Azadi Ki Amrit Mahotsav /* 75 Years of Indian Independence

• CSIR Hqrs

 Inaugural Function of Rashtriya Boudhik Sampada Mahotsav (RBSM)/National Intellectual Property Festival under Azadi Ka Amrit Mahotsav was organised on 30th June'23 at CSIR-NPL Auditorium. Hon'ble Minister S&T (I/C) Dr. Jitendra Singh inaugurated the Event.

• CSIR-CBRI

 International Yoga Day was celebrated in the institute on June 21, 2023, in which many members of the institute and their families participated enthusiastically. In which Mrs Yogini Varnika Mendiratta was invited as a yoga instructor. Inaugurating the ceremony, Dr. Pradeep Chauhan told about Yoga Day and the usefulness of yoga in life. Director Prof. R. Pradeep Kumar in his address, described various yoga philosophies, explaining the importance of yoga.

• CSIR-CECRI

- In association with SAEST monthly Lecture Series was organizing on Electrochemical Science and Technologies: A Path Forward to Sustainable Society.
- CLRI, Chennai Scientist delivered a lecture on "In pursuit of Sustainable Excellence: Events-filled Journey" on 22nd June, 2023
- International Day of Yoga was celebrated Mr. S. Kamaraj, Mahayogam Foundation, Karaikudi delivered a special lecture followed by a demonstration on basic yoga practice and breathing exercises.

• CSIR-CIMFR

- Celebrated 9th "International Yoga Day" on 21.06.2023. Mr. Rudra Narayan Yadav, Yoga instructor of Patanjali Yogpeeth conducted yoga session at CSIR-CIMFR Ground in which scientists, staff and women and children of the institute participated in large numbers.
- Celebrated "World Environment Day" on 05.06.2023.
- Delivered a lecture on "Life Style Management to prevent Non-communicable Diseases" by Dr. S. S. Sarkar, (Ex CMO BCCL & ECL), Wellness & Nutritional Consultant on 05.06.2023.
- CSIR-CLRI
 - Celebrated the world environmental day on 05 June 2023. The environmental day Theme Lecture was delivered by Dr. Sukumar Devotta, Professor of Eminence (Hon), Anna University & Former Director, CSIR - NEERI, Nagpur on the topic 'Beating the Plastic Pollution – Challenges'.
 - CSIR-CLRI observed World Blood Donor Day on 14 June 2023. The staff members of CSIR-CLRI took Pledge on World Blood Donor Day 2023.
 - Celebrated 'International Yoga Day 2023 on 21 June 2023. Yoga Acharya S. Ezhilarasi, Founder & Director, Yogalaya Health Care Institute delivered the Yoga demonstration Session. Swami Satyaprabhananda, Secretary, Ramakrishna Mission Students Home, Chennai delivered Yoga Day Lecture on the topic "Yoga with Lifestyle and Humanity".

• CSIR-CMERI

• Celebrated International Yoga Day, 2023 &Har Ghar Dhyan programme under "Azadi ka Amrit Mahotsav" on 21st June, 2023.

• CSIR-CRRI

- Celebrated 9th Annual international Yoga Day it its premise on the theme "Original Humanity". Prof. Manoranjan Parida, Director, CSIR-CRRI graced the occasion by his presence. This celebration was aimed to spread awareness about holistic nature of Yoga and promote it as a regular regime throughout the world for better health. On this occasion, staff members of the Institute performed the yoga exercise enthusiastically under the guidance of Smt. Shradha Singh, Yoga Instructor.
- Celebrated World Environment Day on 05th June, 2023. Dr. Nitish Dogra, Senior Advisor, TARU Leading Edge Pvt. Ltd. delivered the World Environment Day address on "Health Impacts on Traffic".

• CSIR-CSMCRI

o International Yoga Day was celebrated in the institute on June 21, 2023

• CSIR-IHBT

- Institute celebrated the International Yoga Day on 21.06.2023 with great enthusiasm.
- Director administered pledge to all the employees and scholars on World Blood Donor Day on 14.06.2023.

• CSIR-IICT

- CSIR-IICT took a pledge and also made a plantation drive on 5th June, 2023 the occasion of world Environment Day under "Mission Lifestyle for awareness (LiFE)".
- The scientists, students and employees of CSIR-IICT have taken pledge on 14th Jun 2023 to donate blood voluntary in the leadership of Honorable Director on World Blood Donor Day.
- On the occasion of 9th International Day of Yoga (dt. 21-06-2023) at CSIR-IICT, taking the concept of 'Yoga for Vasudhaiva Kutumbakam', a group yoga exercise was performed by scientists, researchers and personnel.
- Lecture titled "Medicinal and Process Chemistry Applications for sp2-sp3 and sp2-sp2 Coupling using the Newly Developed Pd Catalysis" was delivered by Dr. Thomas J. Colacot R&D Fellow and Director, Global Technology Innovation, Life Science Business, Merck, Milwaukee, WI on 12th June 2023.

• CSIR-IIP

 Pledge was taken by the Staff on the occasion of World Blood Donor Day (WBDD) on 14th June 2023 which was followed by a Lecture by Dr. Ghanshyam Thakkar, RMO

• CSIR-NBRI

- Organized a Yoga Session to commemorate the 9th International Day of Yoga on 21st June 2023. On this occasion, trained yoga experts from 'Diya Yog', Lucknow highlighted the benefits of yoga, tips for being healthy by adopting yoga in our daily lives to the participants. Various yoga exercises (yoga asana) were instructed by the experts. Scientists, students, staff and others of the institute participated in this yoga session with great enthusiasm.
- Director, NBRI administered the Pledge to all staff on the occasion of World Blood Donor Day on June 14, 2023.

• The first half-year meeting of the Official Language Implementation Committee for the year 2023-24 was held on 27.06.2023. The institute was honored for its excellent contribution in the implementation of the official language and for the publication of the official language magazine Vigyan Vani issue 27 of the year 2021

• CSIR-NGRI

• Blood Donation Camp conducted by Institute of Preventive Medicine (Govt. of Telangana) in the Community Centre of CSIR-NGRI, several staff members and students from the institute have donated the blood.

• CSIR-NIO

- On the occasion of World Ocean day 2023, A beach cleaning drive was organized at Caranzalem Beach, Goa on 8th June 2023 with an aim to maintain seashore clean and also to make awareness to the public about marine pollution. The Scientists, Technical staff, and students actively participated in the beach cleaning event and the collected wastes handed over to Corporation City of Panaji. The event was coordinated with the support from Ocean Society of India (OSI) and National Centre for Coastal Research (NCCR), MoES, GoI.
- International Yoga Day (IYD) was celebrated on 21st June 2023. On this occasion, Yoga teacher Shri Guirish S. Parulekar, Vice President, Patanjali Yogpeeth Goa conducted a Yoga demonstrated session.
- CSIR-NML
 - Celebrated International Day of Yoga at residential complexes by Mrs. Vineeta Sharma, Yoga Trainer.
 - Dr. Poulami Chakraborty, Postdoctoral Research Fellow, Basque Centre for Applied Mathematics (BCAM), Bilbao, Spain, delivered a talk on "Hydrogen interplay with defects in Al alloys" on 5th June (Monday) 2023 at CSIR-NML.
 - Pledge ceremony on the occasion of World Environment Day.
- CSIR-IIIM
 - Celebrated International Yoga Day Celebrations on 21-06-2023 to raise awareness about the various benefits of practicing yoga under theme - 'Yoga forVasudhaivaKutumbakam' i.e. yoga for the welfare of all in the form of 'One World-One Family'.

DEPARTMENTAL ACTIVITIES

DSIR's mandate is to promote Industrial Research and Development besides technology promotion, development and utilization. In order to promote and nurture Research and Development in the country, Industrial R&D Promotion Programme of the department gives recognition and registration to in-house R&D units of industries, not for profit Scientific and Industrial Research Organizations (SIROs), Public Funded Research Institutions (PFRIs) and periodically renews these recognition / registration under the respective Government Notifications (as amended from time to time), by virtue of which these organizations are able to obtain Customs duty exemptions and Weighted tax deductions on R&D by Industry (under section 35(2AB) of IT Act). This scheme helps in encouraging industrial R&D in the country.

Industrial R&D Promotion Programme (IRDPP)

Recognition/ Registration and renewal of In-house R&D in Industry

- 12 in-house R&D units of industries were granted Fresh Recognition and 12 were granted Registration certificates.
- 77 in-house R&D units of industries were granted Renewal of Recognition and 97 were granted renewal of Registration certificates.

Scientific and Industrial Organization (SIRO)

- 11 SIROs were granted Fresh Recognition and 4 were granted Registration Certificates.
- 16 SIROs were granted Renewal of Recognition and 7 were granted Registration certificates.

Fiscal Incentives for Scientific Research u/s 35(2AB) of ITAct 1961

- 5 Industries were approved for issuance of form 3CM and 26 industries were approved for issuance of extension of 3CM u/s 35(2AB) of IT Act for weighted tax deduction.
- 4 reports in Form 3CL submitted to CCIT (E) u/s 35(2AB) of IT Act for weighted tax deduction on industrial R&D involving a total amount of Rs 3934.46 Lakhs.

DSIR Central Sector scheme 'Industrial Research and Development (IRD)' comprise of the four sub-schemes i.e (i) Promoting Innovations in Individuals, Start-ups and MSMEs (PRISM), wherein financial assistance is extended to independent innovators for converting innovative ideas into demonstrable working models / prototypes / processes that may take the form of new or improved products, processes, or services; and assist them to become incubatees / technoentrepreneurs, (ii) Patent Acquisition and Collaborative Research and Technology Development (PACE), wherein support shall be provided to industries and institutions for development and demonstration of innovative technologies,(iii)Building Industrial R&D and Common Research and Technology Development Hubs (CRTDH) for use by entrepreneurs and industries and (iv) Access to Knowledge for Technology Development and Dissemination (A2K+) wherein studies and conferences in up-coming areas of industrial research shall be taken up besides undertaking a Technology Development and Utilization Programme for Women (TDUPW).

Promoting Innovations in Individuals, Start-ups and MSMEs (PRISM):

5 new innovation projects were sanctioned and 3 projects were successfully completed during the period.

Common Research and Technology Development Hubs (CRTDH) Scheme:

CRTDH –CSIR-IMMT, Bhubaneswar:

Third PGRC meeting to review the financial and technical progress of CRTDH supported to CSIR-IMMT, Bhubaneswar was conducted on 8th June, 2023 on Hybrid Mode from CSIR-IMMT, Bhubaneswar. PGRC was chaired by the Scientist 'F' &Member Secretary-CRTDH (DSIR) and attended by Representing Director, CSIR-IMMT, Bhubaneswar, Director, CSIR-CECRI, Karaikudi DSIR officers and external members from other government agencies and team members of CRTDH from CSIR-IMMT.PGRC deliberated on the progress of CRTDH-CSIR-IMMT in detail and also looked at the detailed presentation made by PI and CRTDH facility was visited. MSME who had taken the technology from IMMT was also heard and future aspect of the technology was discussed upon.

A2K+: Studies

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A Webinar on "Impact of IPR for TRL maturity" was held on 23rd June, 2023 under DSIR A2K+: Studies supported project "Techno-commercial assessment of TRL-6 and above technologies developed in India in academia, research labs and industry-Material & Manufacturing Sector" to Department of Mechanical Engineering, IIM-Jammu. The demand-driven webinar brought together key stakeholders including DSIR involved in identifying technologies in some key domains in TRL6 and above.

Technology Development and Utilization Program for Women - TDUPW /A2K+:

194 Women Beneficiaries have been trained under the various ongoing TDUPW projects aiming women empowerment through technology deployment and dissemination.

PUBLIC SECTOR ENTERPRISES

Central Electronics Limited (CEL)

CEL is an Enterprise under DSIR having an objective to commercially exploit the indigenous technologies developed by National Labs and R&D institutions in the country. CEL has developed a number of products for the first time in the country through its own R&D efforts and it continues to emphasize its leading role in the area of solar photovoltaic systems, electronic gadgets for Railway and other strategic electronic equipment/components among others.

- The company manufactured electronic components/systems/SPV products worth Rs. 1112.82 lakhs during June 2023.
- Sale of items worth Rs. 1221.24 lakhs was realized during June 2023.

National Research Development Corporation (NRDC)

NRDC continues to lay emphasis on broadening and strengthening the technology resource base by nurturing long-term relationships with R&D institutions as well as universities, technical organizations, industries and individual inventors.

- National Research Development Corporation (NRDC) has licensed one technology on Ayush- 82 to Amrit Pravah.
- NRDC has collected premia of Rs. 14.95 Lakhs from respective technologies during June 2023.