

No. DSIR/MS/2024/05  
Government of India  
Ministry of Science & Technology  
Department of Science & Industrial Research

(Part-I Unclassified)

Subject: MONTHLY SUMMARY FOR THE CABINET (For the month of May 2024)

Major achievements during the month of May 2024

COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH (CSIR)

**New Products/Processes/ Technologies developed**

- **CSIR-CEERI**
  - High-Performance MEMS-based Capacitive Accelerometer
  - Thermal ribbon aperture sensor system for leather lamination monitoring.
- **CSIR-CFTRI**
  - High-performance process for anaerobic digestion of food industry waste for enhanced biogas production using novel pre-treatment and bioreactor design.
- **CSIR-CMERI**
  - Electric Tiller as alternative to conventional diesel engine operated systems, utilization of renewable energy sources, suitable for small and marginal farmer segment.
- **CSIR-CSMCRI**
  - Developed a compound for the removal of arsenic in water and its method of preparation thereof
- **CSIR-IHBT**
  - Developed economical process for enhanced production of valerianic acid and its derivatives production using adventitious root culture of *Valerianajatumansi*
  - Endophytes-based microbial formulation for increased plant growth and enhanced secondary metabolite content in *Valerianajatumansi*.
- **CSIR-IICB**
  - Green synthesis of green fluorescent silver nano dots capped with Naringenin.
- **CSIR-IIP**
  - Naphthalene Recovery from LCO and CBFS
  - Desulfurization studies using bio based solvent
- **CSIR-NAL**
  - Method for manufacturing super elastic stent rings for a variety of stent-graft applications and stent rings.
- **CSIR-NIIST**
  - Development of dairy alternatives from plant derived sources (Butter substitute and dairy cheese alternatives for mozzarella, cheddar and feta types).

**Technologies licensed/transferred**

- **CSIR-CEERI**
  - Digital Minimal Invasive Hb Measurement System for Anaemia Detection & IoT Enabled Field Deployable Water Testing Kit to M/s Plasti Surge Industries Pvt. Ltd., Amravati, Maharashtra.

- **CSIR-CFTRI**
  - Process for the production of transglycosylating  $\alpha$ - glucosidase using novel fungal strain - M/s MCPI Private Limited, Kolkata
  - Food for Diabetes - Mr. Punna Bhavana Rushi & M/s Rushi Diabetic Foods, Nagole-Bandlaguda.
- **CSIR-CIMFR**
  - Automatic Dynamic Balancing of Pressure System to M/s. Intech Safety Private Limited, Madhurima House, Kolkata.
- **CSIR-CLRI**
  - Preparation of Pseudo-corium, leather like material to M/s. Ecosure Pulp molding Technologies Limited, Uttar Pradesh, on 22/05/2024.
- **CSIR-CRRI**
  - Design of Noise Barrier based on different frequencies - low, middle and high frequency configuration to Safe barrier International Pvt. Ltd., Maharashtra & Unitech Couplers India Pvt. Ltd., Tamil Nadu on 01/05/2024.
- **CSIR-IHBT**
  - Lavender Tea and Seabuck thorn tea Licensed to Prorima Health Care Jobner-Jaipur, Rajasthan, India.
- **CSIR-IICT**
  - Thermal Decomposition of Pinane by Continuous Vacuum Pyrolysis for Preparation of Dihydromyrcene to Arochema Ingredients Private Limited.
- **CSIR-NIIST**
  - Leather alternative (vegan leather) from pseudo stem and pineapple leaves to M/s Alter Wave Eco Innovations Pvt Ltd, Ernakulum.

#### Number of New Projects initiated (01/05/24-31/05/24)

Lab/Institute	CSIR	Ministry/Govt./PSU	Industry/sponsored/ Pvt
CSIR-CDRI	01	Nil	Nil
CSIR-CECRI	03	Nil	04
CSIR-CEERI	08	Nil	Nil
CSIR-CFTRI	19	02	01
CSIR-CGCRI	22	Nil	Nil
CSIR-CIMFR	03	02	06
CSIR-CLRI	07	02	03
CSIR- CMERI	05	05	Nil
CSIR- CRRI	Nil	01	04
CSIR- IGIB	01	Nil	Nil
CSIR- IHBT	Nil	01	Nil
CSIR- IICB	07	Nil	Nil
CSIR- IICT	Nil	Nil	03
CSIR- IIIM	11	Nil	Nil
CSIR- IIP	14	01	Nil
CSIR- NAL	11	05	02
CSIR- NCL	01	Nil	Nil
CSIR- NEERI	Nil	Nil	02
CSIR- NIIST	07	01	01
CSIR- NIO	06	04	01
CSIR- NML	Nil	Nil	01

### Number of Ph.D. scholars joined/ completed (01/05/24-31/05/24)

Lab/Institute	Joined	Completed
CSIR-CDRI	Nil	08
CSIR-CECRI	Nil	01
CSIR-CEERI	Nil	01
CSIR-CFTRI	Nil	05
CSIR-CLRI	Nil	01
CSIR-CMERI	Nil	02
CSIR-HRDC	Nil	01
CSIR-IGIB	Nil	04
CSIR-IHBT	Nil	01
CSIR-IICB	01	02
CSIR-IICT	Nil	11
CSIR-IIIM	Nil	05
CSIR-NEERI	Nil	02
CSIR-NEIST	Nil	03
CSIR-NGRI	Nil	01
CSIR-NIIST	Nil	03
CSIR-NIO	01	Nil

### National Collaborations/Agreements/MoUs Signed

- **CSIR-CBRI**
  - MoU signed with National Disaster Management Authority (NDMA), New Delhi on 29/05/2024 for Risk Assessment of Towns in Indian Himalayan Region: (Uttarakhand & Himachal Pradesh) & Method for Preparing Earthquake Risk Scenarios in States and UTs of India.
  - MoA signed with Hindalaco Industries Limited on 20/05/24 for Utilisation of discarded slag, Pb & Sn Slag and ETP Sludge generated from E-Waste and Secondary Copper Scrap Processing in Building Materials/ Products for Construction.
- **CSIR-CDRI**
  - MoU Signed with Amrita Institute of Medical Sciences & Research Centre, Kerala on 17/05/24 for possible collaborations.
  - MoA signed with DBT, New Delhi on 25/04/2024 for understanding the role of Wat1/mLst8, TOR complex protein in the regulation of mitochondrial integrity and calcium ion homeostasis.
- **CSIR-CEERI**
  - MoU signed with the University of Rajasthan for imparting skill training programs on 16/05/2024
- **CSIR-CFTRI**
  - MoU was signed with:
    - Grassroots Research and Advocacy Movement (GRAAM), Mysuru on 13/05/2024 to promote social entrepreneurship for livelihood generation.
    - Madras Diabetes Research Foundation (MDRF), Chennai on 13/05/2024 to undertake joint research projects through collaborations.
- **CSIR-CIMFR**
  - Agreement signed with:

- Syntron Industries Pvt. Ltd., Ahmedabad for Manufacturing and Marketing of “Dustron PC Coal” & “Dust and Fire Suppression Products” on 24/05/2024.
- Intech Safety Private limited, Kolkata for Automatic Dynamic Balancing of Pressure System on 24/05/2024.
- **CSIR-CLRI**
  - Consultancy agreement signed with:
    - M/s Vaibav Traders, New Delhi, for evaluating of the tannin extract from Cashew Nut Testa for leather application on 24/05/2024.
    - M/s. Thirumalai Chemicals Ltd, Ranipet, for evaluation and standardization of one of their products for leather processing on 28/05/2024.
- **CSIR-CMERI**
  - MoU signed with C-DAC, Kolkata, WB for long term & short-term exchanges of experts for purposes of research collaboration, exchange of documents & research materials on 02/05/2024.
- **CSIR-IHBT**
  - MoUs signed with:
    - Purvik Global for collaboration in the area of Essential oils.
    - SAMA Essentials S-18, CPL Mansion, Gurdaspur Road, Pathankot, Punjab for collaboration in Essential Oils on 11/05/2024.
- **CSIR-IIP**
  - An MoU signed with ICAR-Indian Institute of Maize Research, Ludhiana for the collaboration and promotion of maize based (both grain and biomass) biofuels and biobased products.
- **CSIR-NAL**
  - An MoU signed with M/s. Galax Eye Space Solution Pvt Ltd, Chennai for Integration of CSIR-NAL HAPS Platform with SAR Sensor to Develop and Offer Innovative Solutions in the Field of Persistent Surveillance on 20/05/2024
- **CSIR-NEERI**
  - An MoU signed with Central University of Rajasthan (CURAJ) & Central Pulp & Paper Research Institute, Ghaziabad (CPPRI) for collaborative research.
- **CSIR-NIIST**
  - MoU signed with:
    - M/s Thermax Ltd, Pune to evaluate 2GE technology acquired from another company, in Indian context through a consultancy project.
    - National Institute of Technology, Calicut to collaborate in the field of Science & Technology and basic research, faculty and student exchange program for the mutual benefit.

## Patents Update

Patents Filed			Patents Granted			Patent Prosecutions	
India	Abroad* (Unique Patent Application)	Abroad (Multiple Countries) *	India	Abroad* (Unique Patent Application)	Abroad (Multiple Countries) *	India	Abroad*
21	15	22	10	07	08	15	128

\* Data reported to IPU during May 2024 and may change later during national phase entries. The unique filed/ granted patent may appear in the next months also if its corresponding application is filed/ granted in the respective months.

## High impact S&T services

- **CSIR-CDRI**
  - Common Research and Technology Development Hub (CRTDH) at CDRI provided analytical services to 01 MSME.
  - Animal Facility Laboratory approved experimental animals (total no. 798) were supplied to outside research organizations for research purpose.
  - Sophisticated Analytical Instrument Facility service for analysis of samples (411) by IR (Infrared), Mass, NMR (Nuclear Magnetic Resonance) and EM (Electron Microscopy).
- **CSIR-CMERI**
  - Health assessment study through non destructive evaluation (18 nos.) supporting columns of walking beam structures of cooling bed of USM at SAIL-ISP.
- **CSIR-CRRI**
  - Consultancy services for Design and recommendation of pavement for Indo-Bangladesh Border Roads in the States of Tripura and Mizoram for CPWD.
  - Assessment of FDR related work executed on PMGSY road T-15 Raigarh to Zahi of 8Km length (Package UP29135) in PIU Ghazipur Uttar Pradesh for Rural Engineering Department.
  - Checking of Design and Drawings of Two ROB's on Fatehpur Bypass and Lalganj bypass of Rae Bareli-Banda Section of NH-232 From Km. 152.533 to 285.818 in the State of UP for National Highway Authority of India (NHAI).
  - Technical evaluation of Pavement classification number (PCN) and strengthening of HAL Airport (Runway, Taxiway; and Aprons) Bengaluru for Hindustan Aeronautics Ltd; Karnataka.
  - PCN Evaluation of MSPL Airport at Koppal Karnataka using Heavy weight deflectometer for MSPL Ltd. Karnataka.
- **CSIR-IHBT**
  - Evaluation of *Swertia chirayita*, *S purpuransces* and *S ciliata* for antidiabetic activity.
  - Targeted and non-targeted metabolomics of *Thalictrum foliolosum*, *Swertia* species and *Arnebiaeuchroma*.
  - Phytochemical investigation of *Parispolyphylla*, *Thalictrumfoliolosum* and *Swertia purpuransces*.
  - Conducted IAEC meeting and inspection of animal house of Abhilashi University, Mandi as the Main nominee for recommendations to the CCSEA Ministry of Fisheries, Animal Husbandry and Dairying, Governments of India.
- **CSIR-IIP**
  - Samples analyzed:
    - Gas chromatography (67), High-performance liquid chromatography (22), FTIR (84), Solid state NMR (59), ICP (10), TGA (27), AAS (05), SEM (55), physicochemical analysis (28)
  - Audit of RVSF conducted for M/s Pineview Sonipat and M/s Narang Scrap Baghpat
- **CSIR-NAL**
  - Development of intermediate modulus grade carbon fibers – NTTM
  - Zn-Ni plating component level process development – ADA
  - Electrospun nanofiber based personal protective equipment for active filtration of micro-organisms – DST
  - Experimental performance evaluation of the jet pump efficiency of primary heat exchanger and secondary heat exchanger. – ADA
- **CSIR-NCL**
  - Supplied industrially important microbial strains and provided microbial identification services to industries and academia.

- **CSIR-NEERI**
  - Assessment of Contamination and Delineation of Action Plan for Restoration/Remediation of Contaminated Soil, Surface Water and Groundwater at Paradeep Phosphates Ltd, Paradeep (Odisha)
  - Evaluation of Existing Environmental Management System and Suggestions for Improvement if any at Nayara Refinery Complex at Jamnagar.
- **CSIR-NML**
  - Thermo mechanical Processing and Cold rolling of Medium Carbon High Manganese Alloy steels.
- **CSIR-SERC**
  - Cyclic fracture studies on dissimilar pipe girth weldments at operating temperature at Bhabha Atomic Research Centre, Mumbai

#### **Outreach Activities**

- **CSIR-CBRI**
  - Organised visit to Rajkiya Government Intercollege Sikandarpur, Bhagwanpur & Doon Heritage School in Dehradun on 06/05/2024 & 13/05/2024.
  - Organised Lab Visit for IIMT University, Meerut.
  - Organised workshop on "Disaster Risk Reduction" for Army Public School (APS), Meerut on 16/05/2024.
- **CSIR-CDRI**
  - Organised scientists - students connect program for Aryakul College of Pharmacy, Lucknow, on 06/05/2024, 65 participants.
- **CSIR-CECRI**
  - Conducted Skill Development Training Programme on Chromatography and Spectroscopy 13-17/05/2024, 44 participants.
- **CSIR-CEERI**
  - Organised Lab Visit for 25 local tribal communities from 5 villages in the Jaisamand block of Udaipur district on 24/05/2024.
  - Organised Skill training program SHILP for DA IICT, Gandhinagar, Gujarat & JIET, Jodhpur during 13-24/05/2024 & 27/05/2024-07/06/2024, 24 & 14 participants respectively
  - Organized JIGYASA session for ATL Labs at Birla ShishuVihar, Pilani on 04/05/2024.
- **CSIR-CFTRI**
  - Organised scientists - students connect program on 20/05/ 2024, 19 participants.
  - Conducted Skill Development Training Programme on Fumigation, Prophylaxis and Pest Management Techniques for Stored Food Commodities from 31/05/2024- 14/06/2024, 45 participants.
- **CSIR-CGCRI**
  - Conducted Skill Development Training Programme on soft skills and technical skills upgradation on bone china crockery and tableware manufacturing at CSIR-CGCRI, Khurja Centre during 01-03/05/2024, 39 participants.
  - Organised Student-Scientist Connect program at Nasra High School, Ranaghat, Nadia West Bengal on 31/05/2024, 200 participants.
- **CSIR-CIMFR**
  - Conducted Skill Development Training Programme on Clean Coal Technologies- Theory and Practice during 27/05/2024-24/06/2024, 49 participants.
  - Organised Student-Scientist Connect program for school students to Inculcate Scientific Temperament and Innovative Thinking amongst Students during 27-31/05/2024.

- **CSIR-CLRI**
  - Conducted Skill Development Training Programme on Leather-Canvas Glove Making at CSIR-CLRI Regional Centre, Kolkata on 06/05/2024.
- **CSIR-CMERI**
  - Organised lab visit for the students of
    - NSHM Durgapur on 17/05/2024.
    - Durgapur Iswar Chandra Vidyasagar Public High school on 09/05/2024 & 16/05/2024, 41 & 42 participants respectively.
  - Conducted webinar for students of Army Public School on Municipal Solid Waste Management on 07/05/2024, 48 participants.
- **CSIR-CRRI**
  - Conducted Skill Development Certificate Course on Road Safety Audit and other Road Safety Engineering related aspects for the Highway Engineers/ Transportation Consultants.
- **CSIR-CSMCRI**
  - Conducted Training Program on Theory and Practical Aspects of Household Solar Thermal Gadgets during 15-17/05/2024 under, 31 participants.
  - Organised Summer Science Camp during 27-31/05/2024, 23 participants.
- **CSIR-IHBT**
  - Organised Lab Visit for
    - Spectrum School, Palampur, Neugal Public Sr. Sec. School, Bindraban, Palampur, Dhauladhar Convent School, Shaheed Bhagat Singh College of Pharmacy and SCVB Govt. Degree College, Palampur, Distt. Kangra (H.P.) on 29/05/2024, 250 participants.
    - Eternal University (Sirmaur) Baru Sahib (Sirmaur) & MCM DAV College, Kangra (H.P.) on 21/05/2024, 85 participants.
  - Organised Visit to the Bamboo Museum during the month, 228 participants.
  - Conducted Skill Development Training program on
    - "Gardener" at Station Headquarter Yol Cantt. Dharmshala from 06/05/2024 - 05/06/2024, 08 participants.
    - Agro and process technology of aromatic plants for Punjab female farmer on 02/05/2024.
- **CSIR-IICB**
  - Organised Lab Visit for Vidyasagar University on 25/04/2024, 11 participants.
- **CSIR-IIIM**
  - Conducted Training in collaboration with the Royal Society of Chemistry (RSC), UK for the capacity building of Science teachers at Army Goodwill School, Wyne Kupwara on 02-03/05/2024, 49 participants.
  - Organised the open day to mark significant convergence of academic institutions, signaling a collaborative effort towards advancing scientific understanding and innovation, 500 participants.
- **CSIR-IIP**
  - Organised Lab Visit for Oak Grove School, Mussoorie on 27/04/2024, 170 participants.
- **CSIR-NEIST**
  - Conducted student-scientist connect programs for Unity Christian School- Dimapur Nagaland, Airforce Jorhat, Sivasagar College-Joysagar, KV NEIST-Jorhat on 07, 09, 13 & 17/05/2024, 100 participants.
- **CSIR-NIIST**
  - Conducted Skill development course on Advances in polymer material science 27-29/05/2024.

- Conducted Scientist-Student Interaction program on 03-04/05/2024, 85 participants.
- **CSIR-NIO**
  - Conducted on Seaweed Cultivation and Processing Technology during 14-17/05/2024.
  - Conducted training programme for officials from Indian Bureau of Mines on 16 topics in various fields of oceanography 20-25/05/2024, 09 participants.

### **Conferences, Workshops, Major Events**

- **CSIR Headquarters**
  - 09<sup>th</sup> CSIR-AMRIT Lecture on Technique to Technology Transformation delivered by Prof. Aniruddha Bhalchandra Pandit, Vice Chancellor, Institute of Chemical Technology, Mumbai on 17/05/2024.
- **CSIR-CDRI**
  - Lecture delivered by Dr. Shinjini Bhatnagar, professor & Head, Paediatric Biology (THSTI), Faridabad on Research from evidence to clinical practice and policy: Identifying priorities early on 14/05/2024.
- **CSIR-CECRI**
  - Lecture delivered by Dr. Deependra Singh, Chairman & Managing Director, IREL (India) Limited, Prabhadevi, Mumbai on "Energy Transition Materials and Rare Earths" on 27/05/2024.
- **CSIR-CLRI**
  - Lecture delivered by Dr. R. A. Mashelkar, FRS, Former Director General, CSIR on Creating the Magic of Exponential Growth with Inclusive Development at GT@90 on 02/05/2024.
- **CSIR-IICT**
  - Lecture delivered by Professor Shishir Sinha, Director General, Central Institute of Petrochemicals Engineering and Technology (CIPET) under the Ministry of Chemicals and Fertilizers, GoI on Plastic Waste Management and An Overview of CIPET on 17/05/2024.
- **CSIR-NGRI**
  - Lecture delivered by Padma Shri Dr. H K Gupta on "Building Dakshin Gangotri in Antarctica: A Miracle" on 28/05/2024.
  - Talk delivered by Prof. Priyank Jaiswal, Oklahoma State University, USA on "Oklahoma's Intraplate Earthquakes: Insights from PAWNEE 3D Seismic" on 29/05/2024.
- **CSIR-NIIST**
  - Talk delivered by Dr. Prasad Krishna, Director, NIT Calicut on Food Processing and Climate Change on 16/05/2024.
  - Talk delivered by Prof. Dr. Istvan Pocsi from the University of Debrecen, Hungary on 20 years of Omics based research in the stress biology of the aspergilli.

### **Visit of high level dignitaries**

- **CSIR-CGCRI**
  - Mr. S. Krishnan, Secretary, MeitY, Govt. of India visited on 18/5/2024 to deliver lecture on "Economic Growth and Material Technology".
  - Dr. M. Ravichandran, Secretary to the Govt. of India, MoES visited on 14/5/2024 to deliver lecture on "Technology for Ocean Observation".

- **CSIR-CLRI**
  - Her Excellency Ms Marisa Gerards, Ambassador of the kingdom of Netherlands to India and Mr Sharad Thadani, Honorary Consulate of Netherlands in Lucknow, India visited CLRI CATERS Testing Laboratory at KLC Complex, Unnao (Kanpur) on 30/04/2024.
- **CSIR-NAL**
  - Hon'ble Vice-President of India Shri Jagdeep Dhankhar, Hon'ble Governor of Karnataka Shri Thaawarchand Gehlot and Hon'ble MP, Rajyasabha Shri Lehar Singh Siroya visited on 27/05/2024.

## **Honours/ Awards**

- **CSIR-CECRI**
  - Dr. Namrata Rastogi, Principal Scientist, Division of Medicinal & Process Chemistry, received the Bronz Medal Award 2024, by the society of Chirantan Rasayan Sanstha (CRS).
- **CSIR-CSMCRI**
  - Dr. Satish Lakkakula, Scientist, have been awarded as an "Associate Fellow of the Telangana Academy of Sciences" by the Telangana Academy of Sciences.
- **CSIR-IICT**
  - Dr. S. P. Singh, Principal Scientist has been selected for INSA Associate Fellow 2024 under Chemical Sciences category.
- **CSIR-SERC**
  - Dr. K. Lakshmi, Principal Scientist, selected for Outstanding Woman Structural Engineer Award 2023 by the Governing Council of IAStructE (Indian Association of Structural Engineers), New Delhi

## **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 (PFRI) 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 expenditures by Industry (under section 35(2AB) of IT Act).

### **Industrial R&D Promotion Programme (IRDPP)**

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

- 87 in-house R&D units of industries were granted renewal of Recognition and 87 were granted renewal of Registration certificates.

#### **Scientific and Industrial Organization (SIRO)**

- 1 SIRO was granted renewal of Registration Certificates

#### **Public Funded Research Institutes(PFRI)**

- 1 PFRI was granted renewal of Registration certificates.

**DSIR Central Sector scheme 'Industrial Research and Development (IRD)'** comprises 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 / techno-entrepreneurs, (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 Facilities (BIRD), wherein support shall be provided for creation of 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)**

Three innovation projects namely 'Iron flow meter', 'Redesign of the traditional handloom', 'Development of SRM for ev applicatons', were reviewed during the period.

### **Common Research and Technology Development Hub ( CRTDH) :**

---

Third Project Guidance cum Review Committee (PGRC) meeting for DSIR-Common Research and Technology Development Hub (CRTDH) set-up at CSIR-CSIO, Chennai in the area of Energy & Energy Infrastructure Instrumentation was held on 14<sup>th</sup>May, 2024 on virtual mode.

### **A2K+ Events:**

- A proposal from Acropolis Institute of Technology and Research, Indore for organizing 'KRIYETA 2.0, 48 hrs Hackathon' from 14/06/2024 to 16/06/2024 has been supported under A2K+Event program.
- The Technical Advisory Committee (TAC) meeting for A2K+ Events programme was held on 30th May 2024. Based on the presentation made by the applicant organizations and the discussions held, the Committee recommended 04 proposals.

### **A2K+ Studies:**

- The Technical Advisory Committee (TAC) meeting for A2K+ Studies program was held on 22<sup>nd</sup> May, 2024 to evaluate the applications received under A2K+ Studies. Eighteen (18)proposals were evaluated under two themes, viz, (i) Affordable and Clean Energy (Ensure access to affordable, reliable, sustainable and modern energy) – Research &

Development support and mobilization of public and private capital for innovation in clean and renewable energy and (ii) Funding mechanisms for strengthening Industrial R&D and Innovation landscape in India. Seven (07) proposals were recommended for funding under the program.

- The Project Guidance Cum Review Committee (PGRC) meetings/discussions of the following studies were conducted:
  - “Techno-commercial assessment of TRL-6 and above technologies developed in India in academia, research labs and industry”, supported to Foundation for Innovation and Technology Transfer (FITT), IIT Delhi under A2K+ Studies program was convened on 13<sup>th</sup> May, 2024.
  - “A detailed study for enabling access to knowledge on advanced building material & design towards energy efficient buildings”, supported to The Energy and Resources Institute (TERI), New Delhi under A2K+ Studies program was convened on 15<sup>th</sup> May, 2024.
  - “Machine learning in mechanic’s current status and future prospects”, supported to IIT, Tirupati held on 16<sup>th</sup> May 2024.
  - “A report on ICT tools catering to a wide range of learners, including children with special needs”, supported to SIMS, Pune under A2K+ Studies program was convened on 20<sup>th</sup> May, 2024.

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

- The Project Review Committee (PRC) Meeting to review the financial and technical progress of project entitled “Promotion of Stevia - A gift of Nature "0" calorie bio-sweetener - for Income Generation of Female Farmers in Chandrapur District”, supported to AFORD, Chandrapur Dist., Maharashtra under TDUPW programme of A2K+ Scheme of DSIR was held on 24<sup>th</sup> May, 2024 .
- A visit to the Project Implementation Site (Aluboni & Mudrajodi Villages, Baripada, Odisha) by PRC Experts was held on 14<sup>th</sup> May, 2024 to review the Technical Progress of the Project entitled “Women Empowerment through Silkworm Culture in Tribal Dominated Mayurbhanj District, Baripada, Odisha” undertaken by Mayubanj Biological Research (MBR), Baripada, Odisha under A2K+ TDUPW program.

173 Women Beneficiaries have been trained under the various on-going TDUPW projects aiming women empowerment through technology deployment and dissemination.

## **Asian and Pacific Centre for Transfer of Technology (APCTT):**

The Department submitted comments on the Explanatory Note of Government of Kazakhstan on the concept of UN-ESCAP Digital Solutions Centre for Sustainable Development (DSCSD) proposed to be established at Kazakhstan to Embassy of India, Bangkok, Department of Commerce and Ministry of External Affairs. The Department also provided comments on Astana Ministerial Declaration on Digital Inclusion and Transformation in Asia and the Pacific.

## **Swacchta Pakhwada:**

In an endeavour to promote cleanliness and hygiene awareness, the Department of Scientific and Industrial Research (DSIR) launched Swacchta Pakhwada campaign from May 1 to May 15, 2024. The Swacchta Pakhwada was inaugurated by Dr. N. Kalaiselvi, Secretary DSIR and DG, CSIR by Administering Swacchta pledge on 1<sup>st</sup> May 2024. The Department observed the cleanliness drive at PM Shri Kendriya Vidyalaya, Jawaharlal Nehru University (JNU), NCERT Campus, Delhi on 8th May, 2024.

## **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 through its own R&D efforts and 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.1433.10 lakhs during the month of May.
- Sale of electronic components/systems/SPV products worth Rs.1660.55 lakhs was realized during the month of May.

### **National Research Development Corporation (NRDC)**

The Corporation continued to lay emphasis on broadening and strengthening the technology resource base by nurturing long-term relationships with R&D institutions, Universities as well as industry.

- The Corporation Licensed nine technologies during the period:
  - Five technologies namely ROT-FIX- A Broad Spectrum Environment Friendly Formulation for Control of Disease in Mulberry, AMRUTH- eco-friendly formulation for the control of both the Grasserie and Flacherie diseases, UZITRAP- a unique eco-friendly formulation for attracting and killing the fly, NEMAHARI- An effective plant based formulation for control of root knot and Vijetha- A Silkworm Bed Disinfectant to M/s. Anil Industries, Karnataka
  - Two technologies namely UZITRAP- a unique eco-friendly formulation for attracting and killing the fly and SERICILLIN- Cost-effective silkworm bed disinfectant to M/s Rainbow Agro Vet Seri Technologies Pvt Ltd
  - One technology namely NAARI-infection preventing and biodegradable herbal sanitary napkins to M/s SS Creations (Femigiene), New-Delhi
  - One technology namely Hydroponic technology for stevia cultivation to Satvik Agritech Labs Pvt. Ltd.

- The Corporation signed 6 MoA's during the period with:
  - University of Allahabad
  - Bundelkhand University Jhansi
  - Project Concern International (PCI)
  - Kerala MedTech Consortium (KMTC)
  - Jamia Hamdard
  - Centre of Bio Medical Research
- NRDC and National Co-operative Consumers' Federation of India Ltd(NCCF), New Delhi, formalized a strategic collaboration by signing a Memorandum of Understanding (MoU) at the NCCF Headquarters
- NRDC Bhubaneswar conducted its maiden event of Roundtable on "Innovation Collaboration Opportunities" in association with UK IPO. The event was graced by Dr.Andrew Fleming, Dy High Commissioner of UK to India, CMD NRDC, Spl Secy Govt of Odisha
- NRDC shared insights on leveraging local ecosystems for tech validation and research commercialization was honoured at Workshop organised by NITI Aayog and CSIRO, Australia under the Indo-Australian RISE Accelerator Program.
- The corporation collected a premium of Rs 27.35 Lakhs towards licensing of technologies to industries during the month.

\*\*\*\*\*