

No. DSIR/MS/2024/06
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 June 2024)

Major achievements during the month of June 2024

COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH (CSIR)

New Products/Processes/ Technologies developed

- **CSIR-CLRI**
 - Developed process for the preparation of water soluble Gelatin Foam
- **CSIR-CSMCRI**
 - Developed process for the preparation of Loose nanofiltration membranes
- **CSIR-IHBT**
 - Developed technology for preparation of RTS beverage from Rhododendron arboreum flowers
- **CSIR-IICT**
 - Developed Process for Saflufenacil to AIMCO Pesticides
- **CSIR-IIP**
 - Developed technology for conversion of Diesel Genset to dual fuel mode (TRL 6 and above)
 - Process developed for Desulfurization studies using bio derived solvent Batch LLE
- **CSIR-NBRI**
 - Technologies developed for
 - Cultivation of Namoh -108 variety of Lotus, targeted for maximum flower production, petioles/peduncles and rhizomes production.
 - Apparel from lotus silk/fibre produced solely by hand and handcrafted through traditional looms.
 - Tea (Amrita) prepared from Lotus Namoh -108 Variety, Nymphaea petals and green leaf.
 - Fermented Health Drink (Amrit) having honey, water and lotus rhizome paste.

Technologies licensed/transferred

- **CSIR-CCMB**
 - Panel of micro RNAs useful for screening and detection of types, grades and stages of Human Breast cancer to Zeroharm Sciences Private Limited, Hyderabad.
- **CSIR-CFTRI**
 - Process of preparing Tutti fruity from Papaya & Carrot to M/s Navya Biotech, Bangalore.
 - Process of preparing Instant upma mix from millets and multi millets semolina to M/s Taproot Farms Private Limited, Hyderabad; M/s Mothers Agro Foods Pvt.Ltd, Kerala.
- **CSIR-CIMAP**
 - Process of preparing Anti Dandruff Shampoo (Geranium Active Shampoo) to M/s Ecobhumi Bioagri concepts Pvt. Ltd., Kolkata on 24/06/2024.
- **CSIR-CLRI**
 - Process for preparation of Pseudo-corium, a leather like material to M/s Majjix Vegan Leather Pvt Ltd, Vijayawada, on 27/06/2024

- **CSIR-CMERI**
 - Electric Tiller to M/s K.N. Biosciences India Pvt. Ltd., Hyderabad on 24/06/2024.
 - Compact Electric Tractor CSIR PRIMA ET-11 to M/s Sunrise Transmissions, Gujarat on 24/06/2024.
- **CSIR-CSMCRI**
 - Process KNOWHOW for the End-of-life Reverse Osmosis Membrane Rejuvenation to Membrane Engineering Private Limited, Delhi.
- **CSIR-IHBT**
 - Process for preparation of multigrain protein powder, of Energy/Granola bars (millet and cereal, protein based) and Iron, and Zinc enriched Spirulina base bars to M/S Good Food Boutique Pvt. Ltd, Ludhiana 24/06/2024.
- **CSIR-IIP**
 - Upgrading Raw Biogas to Pipeline Quality Bio-methane to Organic Recycling Systems Ltd., Navi Mumbai.
 - Dual Fuel engines using NG and Diesel (For stationary/Genset Application) to Upcharge Energy solutions on 24/06/2024.
- **CSIR-NCL**
 - Zeolite Technology to Thermax Ltd, Pune on 24/06/2024.
- **CSIR-NEIST**
 - Honeybee Box to Foundation for Integrated Support & Solutions (FISS), Guwahati on 10/06/2024.
- **CSIR-NIIST**
 - Manufacturing unit for the production of Leather Alternative (Vegan Leather) from Cactus to M/s Veganvista Corp Private Limited, Ahmedabad.
- **CSIR-NIO**
 - Microbial Consortium for waste management in Aquaculture ponds to Msortia LLP, Cochin, on 24/06/2024
- **CSIR-NML**
 - Efficient Iron Ore Processing with Column Flotation to M/s JSW Steel, Karnataka.

Number of New Projects initiated (01/06/24-30/06/24)

Lab/Institute	CSIR	Ministry/Govt./PSU	Industry/sponsored/ Pvt
CSIR-CDRI	Nil	Nil	05
CSIR-CCMB	02	01	Nil
CSIR-CECRI	03	02	01
CSIR-CEERI	Nil	Nil	01
CSIR-CFTRI	Nil	Nil	03
CSIR-CGCRI	01	Nil	01
CSIR-CIMFR	01	04	07
CSIR- CLRI	Nil	05	03
CSIR- CMERI	Nil	03	01
CSIR- CRRRI	01	08	02
CSIR-CSMCRI	01	Nil	Nil
CSIR- IHBT	01	Nil	Nil
CSIR- IICB	01	Nil	Nil
CSIR- IICT	Nil	12	03
CSIR- IIIM	04	01	Nil
CSIR- IIP	01	01	Nil
CSIR-IIITR	Nil	Nil	03
CSIR- NAL	01	02	03
CSIR- NCL	08	01	01

CSIR- NEERI	Nil	03	Nil
CSIR- NGRI	Nil	01	Nil
CSIR-NIIST	Nil	01	04
CSIR-NIO	01	Nil	Nil

Number of Ph.D. scholars joined/ completed (01/06/24-30/06/24)

Lab/Institute	Joined	Completed
CSIR-CDRI	Nil	08
CSIR-CECRI	Nil	03
CSIR-IHBT	Nil	01
CSIR- IICB	02	01
CSIR- IICT	Nil	09
CSIR-IGIB	Nil	01
CSIR-IHBT	Nil	05
CSIR-IIP	Nil	01
CSIR-IITR	17	02
CSIR-NCL	01	02
CSIR-NEERI	Nil	03
CSIR- NEIST	Nil	03
CSIR- NIIST	Nil	02

National Collaborations/Agreements/MoUs Signed

- **CSIR-CBRI**
 - MoUs signed with
 - National Education Society for Tribal Students (under MoTA) on 13/06/2024 for collaborative works towards development of Eklavya Model Residential Schools.
 - Uttarakhand Landslide Mitigation and Management Centre (ULMMC) on 05/06/2024.
- **CSIR-CCMB**
 - Agreements signed with
 - Rainbow Children Hospital, Hyderabad, to delve into the realm of neurology research.
 - Zeroharm Sciences Pvt. Ltd. Hyderabad, for licensing of the panel of microRNAs useful for screening and detection of types, grades and stages of Human Breast cancer.
- **CSIR-CDRI**
 - MoU signed with ICMR-National Institute of Virology, Pune and CSIR-CDRI, on 18/06/2024 to promote institutional linkage.
- **CSIR-CEERI**
 - Signed MoUs with
 - RMC Switchgears Limited, Jaipur for Institutional Collaboration on 05/06/2024.
 - Manipal University Jaipur on 10/06/2024 to empower students with cutting-edge expertise in semiconductor device fabrication and industrial IoT courses.
 - Arya College of Engineering and IT, Kukas, Jaipur on 24/06/2024.
 - Collaboration with the Society for Applied Microwave Electronics Engineering & Research (SAMEER) on 11/06/2024 for the indigenous development of Vacuum Electronics devices and components.
- **CSIR-CGCRI**
 - Signed MoA with NHPC Limited, Faridabad on 05/06/2024 for Development fiber optic sensors for health monitoring of power transfers and in some other applications.

- **CSIR-CIMAP**
 - Signed MoU with M/s Ecobhumi Bioagri concepts Pvt. Ltd., Kolkata on 24/06/2024 for Quality planting material of aromatic crops suitable for West Bengal.
- **CSIR-CIMFR**
 - Signed MoU with CMPDI, Ranchi on 21/06/2024 for Quality Evaluation of Coal Cores.
- **CSIR-CLRI**
 - Signed Technology Transfer agreement with M/s. Tata International Limited (Leather Division), Madhya Pradesh, on 04/06/2024 "Preparation of regenerated leather (Geno-Corium) from leather wastes".
 - Signed MoU with M/s. Hrida Eco Material LLP, on 14/06/2024 for Sharing of facility to manufacture vegan leather like material from rice straw.
 - Signed Consultancy agreements with
 - M/s. Atul Ltd (Industry), Gujarat, on 30/05/2024 for Treatment of secondary biological treated polymeric effluent for reduction of organics.
 - M/s. Sai Chamois Inc., Dindigul, on 13/06/2024 for wastewater treatment and reuse scheme in chamois manufacturing process of Sai Chamois Inc.
- **CSIR-CSMCRI**
 - Signed collaborative agreement with IIoT Innovation Private Limited, Jharkhand for Process development for micro algal based high value products.
- **CSIR-IHBT**
 - Signed MoUs with
 - M/s Live Naturally Limited, Pune on 12/06/2024 for collaboration in the area of Essential Oils.
 - M/s PARWAAZ ORGANICS, Jalandhar, on 21/06/2024 for collaboration in the area of essential oils.
- **CSIR-IIIM**
 - Signed MoA with Aromatic & Allied Chemicals, Bareilly, on 15/06/2024 to collaborate on the value addition of selected aromatic crops of the region of UT of Jammu & Kashmir and the joint development of innovative aromatic products.
- **CSIR-NEERI**
 - Signed MoU with Gondwana University to promote the collaborative efforts in research, innovation and training, academics, education and skill training.
- **CSIR-NGRI**
 - Signed MoUs with
 - Atomic Minerals Directorate (AMD), Hyderabad on 11/06/2024 for carrying out Heliborne Survey for Uranium Exploration in the country.
 - National Institute of Technology (NIT), Raipur on 27/06/2024.
 - Signed MoC with DRDO on 24/06/2024 for the development of an Early Warning System.
- **CSIR-NIIST**
 - Signed MoUs with
 - M/s PA Footwear Pvt. Ltd for sponsored research on animal leather trimmed waste into high-quality leather-like material.
 - AIIMS, New Delhi to collaborate in the field of management of pathogenic medical waste.
 - Signed agreement with
 - M/s Crown Tapes Pvt Ltd, Mumbai for the Development of two component polyurethane adhesives.
- **CSIR-SERC**
 - Signed MoUs with
 - Deputy Chief Engineer/Construction/IV, Eastern Railway, Howrah, on 04/06/2024 for assessment of Structural Integrity of the Super-Structure of the Identified Composite/Open Web Girder Bridges under Dynamic Loading Scenarios using Field Investigations and Numerical Simulations in Howrah Division of Eastern Railway.

- M/s. Pedvak Technologies Private Limited, Hyderabad, on 10/06/2024 for Developing Advanced Protective Structures/Components for Ballistic/Bulletproof/Baffle Range Products.

International Collaborations/Agreements/MoUs Signed

- **CSIR-NEERI**
 - Signed an MoU with Global Silicones Council (GSC) for “Phase-I Conduct of Scientific Workshop on Best Practices for Collection and Analysis of Silicones in different Environmental Matrices.”
- **CSIR-NIO**
 - Signed an MoU with Bangladesh Oceanographic Research Institute on 21/06/2024 for Joint Research on Oceanography of the Indian Ocean and Capacity Building.

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*
22	15	25	05	07	07	12	120

* Data reported to IPU during June 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-CCMB**
 - Molecular diagnostic services for 189 families comprising 201 samples.
- **CSIR-CDRI**
 - Common Research and Technology Development Hub (CRTDH) provided analytical services to MSME.
 - Animal Facility Laboratory approved 99 experimental animals & were supplied to outside research organizations for research purpose.
- **CSIR-CMERI**
 - Condition Assessment Through Non- Destructive Evaluation of 10 nos. TTs, Conveyor Galleries and SUL 1/2/3 Hoppers at VGCB (TSP-1541).
 - Weld Deposition Printing of the ‘R’word on the BMP shoe (TSP-1542).
 - Failure Analysis of Boiler Tube (TSP-1543)
- **CSIR-CRRI**
 - Mix Design of BC and FDR Layer for
 - Jamta to Birla Road, Nahan Division, HP PWD (Pkg No. HP-1-290) for PWD, Himachal Pradesh.
 - Road (i) Upgradation of Rampur Ghat Nawada to Khoranwala km 0/000 to 5/400 (Package No. HP-10-285) for PWD, Himachal Pradesh
 - Road (i) Upgradation of Kaffota Koti road Kando Cheog to Tons Bridge km 0/0 to 28/575 (Under PMGSY-III) (Batch-I) (2023-24) (Package No. HP-10-295) for PWD, Himachal Pradesh.
 - Investigation and Testing of Structures falling in the Stretch of 6-Lane Udaipur-Ratanpur-Shamlaji Section of NH-8 from Km. 333.585 to Km. 446.515 completed under NHDP Phase-V for National Highway Authority of India (NHAI)

- Analysis of Yamuna Bridge situated at Km 62 740 of NH-86 in District Hamirpur and Ganga Bridge at Km 76.563 of NH-27 in District Kanpur Nagar for National Highway Authority of India (NHAI)
- Evaluation of LCR/MIF Value (PP2020 and PP4040 Extruded geogrid) for TechFab India Industries Ltd. and Saint Gobian biaxial Polypropylene geogrid (SG2020PP) for Saint-Gobain ADFORS Grindwell Norton Ltd.
- Structural Safety Audit of the 5 nos. of minor bridges at km 21.717, km 23.150, km 88.300, km 92.100 and at Km 26+700 (Dhanikhadi in CRZ area) on NH-4 in the Union Territory of Andaman & Nicobar Islands on EPC mode for National Highways & Infrastructure Development Corporation Ltd.
- Laboratory Study of Performance Grade Bituminous Emulsion for Cold Recycling Technology for Low and High Traffic Pavement for Nouryon Chemicals India Pvt. Ltd.
- **CSIR-IHBT**
 - Fabricated Bio Dry Toilets (04 No.) with Free-Flowing Compost Booster technology were demonstrated and installed in the 4 different Societies, Mahila Mandals and Gram Panchayats of Lahaul Valley.
- **CSIR-IIP**
 - Samples analyzed:
 - GC (97), HPLC (16), FTIR (90), FTNMR solid (112), ICP OES (08), TGA DSC (31), AAS (05), FE SEM (45), Physiocochemical analysis (81).
- **CSIR-IITR**
 - Epidemiological survey of villagers living in surrounding of the power plant at PPGCL, Prayagraj, Uttar Pradesh undertaken as a sponsored project
- **CSIR-NAL**
 - Region Specific Smart Agro technologies for Enhancing Soiland Health (RSSA) – CSIR Hq.
 - Design and Fabrication of scaled model projects sanctioned by DRDO labs (except ADA) and VSSC; DRDO-VSSC
 - Mechanical characterization of glass epoxy composite material systems – ADA
 - Licensing of design know-how of fin & rudder parts/assemblies for series production of LCA-TEJAS. – HAL
 - Thermal performance evaluation of TVS-supplied heat exchangers – TVS motor
 - Upgradation, testing and maintenance of thermal performance test facility for CCLA & ACLC heat exchangers of LCA AF MK2 -ADA
- **CSIR-NCL**
 - Supplied industrially important microbes and identification services to industries and academia.
- **CSIR-NEERI**
 - Preparation of Riparian Ecosystem Conservation and Management Plan for the Jogba Nallah, Gara Sili Nallah and Rehar River around Gayatri UG Mine
 - Assessment and Regular Monitoring of Flora and Fauna, Fisheries and Bottom Sediments of the Rihand Reservoir and to Assess the Impact of Ash Pond Effluents/Ash Content of NTPC units of VSTPS and SSTPS
- **CSIR-SERC**
 - Quality Audit of steel portals of Mumbai Metro Line 2A (SSP- 354)

Outreach Activities

- **CSIR-CBRI**
 - Skill development programs on
 - Design, Construction and Systematic Operation of High Draught Brick Kilns on 09/06/2024.
 - Latest Trends in Building Technologies Trainee Students during 27-30/06/2024.
 - Organized a Scientists and Teachers Connect Program on 13/06/2024; 50 participants.

- **CSIR-CCMB**
 - Skill Development Training Programme on Basics of Flow Cytometry during 14/06/2024; 06 participants.
 - Organised school visit in collaboration with Byrraju Foundation of Gene-Health Connect bus for West Godavari district, Andhra Pradesh.
 - Organised Lab visit for school students SIF, Dubai.
- **CSIR-CDRI**
 - Organised Student Scientist connect programs for
 - Maharana Pratap School of Pharmacy, Lucknow (U.P.) on 10/06/2024; 53 participants.
 - Bansal Institute of Engineering & Technology, Sitapur Road, Lucknow (U.P.) on 21/06/2024; 61 participants.
- **CSIR-CECRI**
 - Organised Skill Development programs on
 - Basic of high resolution imaging techniques and their application to science and technology during 03-07/06/2024; 51 participants.
 - Paints and coatings for corrosion protection 10-14/06/2024; 49 participants.
 - Organised Reduce Energy Challenge and Energy Literacy Training Campaign for the staff on 11/06/2024.
 - Organised EPIC Hackathon for Oxford matriculation Higher Secondary School, Pattukkottai; 89 participants.
- **CSIR-CEERI**
 - Organised Skill development program on Semiconductor High Impact Learning Program (SHILP) for BITS-Pilani during 27/05/2024-07/06/2024; 89 participants
- **CSIR-CFTRI**
 - Organised Summer camp on Obesity for KV Mysuru and Chamarajanagar on 26/06/2024, 44 participants.
 - Organised Skill Development programs on
 - Sensory analysis of frozen potato- based snacks during 03-05/06/2024; 10 participants.
 - Strategies for probiotic Dairy Product Development during 19-21/06/2024; 06 participants.
 - Barista skills for a perfect cup during 24-28/06/2024, 16 participants.
 - Processing of Fruits and Vegetables, Millets and Value Addition 25-27/06/2024; 10 participants.
- **CSIR-CGCRI**
 - Organised Skill Development program on Instruments and classical methods of chemical analysis of glass ceramics and allied materials arranged during 25-28/06/2024; 30 participants.
 - Organised Science Summer Camp for Bishnupur Krittybas Mukherjee High School, Bankura on 28/06/2024; 150 participants.
- **CSIR-CIMAP**
 - Organised Training Programs on
 - Utilization of Offered Flowers for Making Incense Sticks and Fragrant cones for District Jail Sitapur (UP) and Malegaon, Maharashtra on 07/06/2024 & 21/06/2024; 40 & 55 participants respectively.
 - Processing and marketing of economically important Medicinal and Aromatic Plants suitable for the Sitamarhi district of Bihar State during 03-06/06/2024; 25 participants.
 - Cultivation, processing of suitable aromatic crops in Aizaw & Thenzawl (Mizoram) on 13/06/202 & 15/06/2024; 45 & 65 participants respectively.
 - Organised Skill Development programme on production, processing and value addition of essential oil for the women of Manipur during 22-24/06/2024.

- **CSIR-CIMFR**
 - Organised Students-Scientist Connect Program on Artificial intelligence and its Role in Academic Excellence: The Beginning of New Era at Utkramit Madhya Vidyalaya, Dhanbad on 21/06/2024; 53 participants.
- **CSIR-CLRI**
 - Organised Training Programs on
 - Quality upgradation of leather & canvas mixed industrial gloves used in steel industry and leather goods making at DSP Mahila Samaj, Durgapur during 10/05/2024-09/06/2024.
 - Cultivating Scientific Temperament through Innovative Leather Technology and Sustainable Practices 24-28/06/2024; 50 participants.
 - Organised Skill Development Program for KRM Public School, Chennai on 07/06/2024.
- **CSIR-CMERI**
 - Organised Summer Camp during 19-25/06/2024; 53 participants.
 - Organised Skill Development programme on Post-Harvest Management of Ginger & Turmeric and their Value Addition during 10-13/06/2024 at Reiek, Mizoram.
- **CSIR-CRRI**
 - Organised training programme on Latest Trends in the Design, Evaluation and Maintenance of Pavement during 20,22,24,26,28/06/2024; 29 participants.
 - Organised Re Boot Camp 2024 during 26-28/06/2024; 300 participants.
- **CSIR-CSMCRI**
 - Organised Skill Development Training Programs on
 - Seaweed Cultivation and Processing Technology during 24-26/06/2024 & 24-26/06/2024 (at Mandapam Centre); 19 participants & 27 participants respectively.
 - Fermentation Technology on 13-15/06/2024; 75 participants.
 - Theory and practical aspects of household solar thermal gadgets on 18 -19/06/2024; 88 participants
 - Solar energy based seaweed dry in solar seaweed dryer during 18-19/06/2024; 15 participants.
 - Organised Workshop on Energy and Energy Materials under One Week One Theme – Energy & Energy Devices (OWOT-EED); 35 participants.
- **CSIR-HRDC**
 - Organised Training Programmes on
 - Planning of Life After Retirement on 10-12/06/2024.
 - Record Management, Administration and Preservation on 20-21/06/2024.
- **CSIR-IHBT**
 - Organised lab visits for
 - Swami Vivekanand Sr. Sec. School, Ramnagar, Mandi (H.P.) on 25/06/2024; 49 participants.
 - CSKHPKV Palampur, Kangra (H.P.) on 24/06/2024; 32 participants.
 - HP Forest Academy, Sundernagar, Mandi, (H.P.) on 18/06/2024; 38 participants.
 - Organised Skill Development Training Programs on
 - Plant Tissue Culture Technician during 03/06/2024-26/07/2024; 09 participants.
 - Summer Research Internship Program during 03/06/2024-02/07/2024.
- **CSIR-IICB**
 - Organised skill development program on laboratory techniques during 03-14/06/2024; 107 participants.
- **CSIR-IICT**
 - Organised Skill Development Training Programs on Finishing School Program on Advance Synthetic Organic Chemistry during 03/06/2024-03/10/2024; 18 participants.
 - Organised Summer Internship on AGR Technology, Membrane technology for Water Purification, Pheromone Technology, Sustainable batteries, Lipids during 03-06/06/2024; 40 participants.

- Organised Scientist student connect program during OneWeekOneTheme (OWOT) under Energy and Energy Devices (EED) program on 25/06/2024.
- **CSIR-IIIM**
 - Organised Summer Science camp during 24-29/06/2024; 55 participants.
- **CSIR-IITR**
 - Organised Training program on Microbiology and Molecular Techniques on 18/06/2024; 29 participants.
- **CSIR-NAL**
 - Organised lab Visit of Students on 20/06/2024
- **CSIR-NBRI**
 - Organised lab visit for Navyug Kanya Mahavidyalaya, Lucknow on 05/06/2024; 45 participants.
 - Organised Skill Development Programmes on
 - Bio inoculant Producer for Agricultural Application during 04-05/06/2024; 29 participants.
 - Plant tissue culture Technician during 14/06/2024-12/07/2024; 16 participants.
- **CSIR-NEIST**
 - Organised student-scientist connect program for Behar Panchanan Barma University, Cooch Behar, West Bengal on 05/06/2024; 39 participants.
- **CSIR-NGRI**
 - Organised lab visit for IIT (ISM), Dhanbad and Andhra University on 14/06/2024; 26 participants.
- **CSIR-NIIST**
 - Organised Future Innovators Program for Kendriya Vidyalaya on 28/06/2024.
 - Organised Skill Development Programmes on
 - Structure elucidation of organic molecules by NMR.
 - Introduction to Life Cycle Assessment Studies On Bioprocessing and Chemical Engineering Phase I.

Conferences, Workshops, Major Events

- **CSIR Headquarters**
 - 10th CSIR-AMRIT Lecture on Oceans: Opportunities and Challenges delivered by Dr. M. Ravichandran; Secretary, Ministry of Earth Sciences on 21/06/2024.
 - CSIR launched the “One Week, One Theme” (OWOT) Program on 24 June 2024. Curtain raiser function was graced by Hon’ble Minister of State (Independent Charge) Science & Technology; Dr Jitendra Singh. In the CSIR OWOT Campaign, the Nodal CSIR laboratory and the participating CSIR labs under each of the eight themes of CSIR will organise a week long program starting in June 2024 and will continue till December 2024.
 - CSIR celebrated 10th International Yoga Day with all its laboratories/Institutes/Units at their respective centres on 21/06/2024.
- **CSIR-CBRI**
 - Hosted Industry Meet on Sustainable Construction using C&D Waste at Juniper Hall, Delhi on 14/06/24.
- **CSIR-CDRI**
 - Lecture delivered by Dr. Bushra Ateeq, Professor, Joy Gill Chair, Senior Fellow, DBT/Welcome trust India Alliance, Dept. of Biological Sciences and Bioengineering, Indian Institute of Kanpur, on Innovation in Healthcare lecture on 04/06/2024.
 - Talk delivered by Dr. Chetan Solanki, Professor, IIT, Bombay and Founder, Energy Swaraj Foundation on Climate Change and Corrective Actions on 11/06/2024.

- **CSIR-CECRI**
 - Organised Industrial conclave for “One Week, One Theme” (OWOT) under Energy and Energy Devices (EED) Theme on 27/06/2024.
- **CSIR-CEERI**
 - Organised event on World Environment Day 2024 in association with Vigyan Bharati, Rajasthan.
- **CSIR-CIMFR**
 - Organised Workshop on Challenges and opportunities in Gasification (CARING 2024) during 26-27/06/2024 Under “One Week, One Theme” (OWOT) initiative.
 - Celebrated World Environment Day on promoting awareness and sustainable solutions for facing environmental challenges on 05/06/2024.
- **CSIR-CLRI**
 - Lecture delivered by Shri Venkatadri Karuppampalayam Ranganathan, Chief Commercial Officer of TATA Chemicals, Mumbai; on Pioneering Sustainability: Bridging Tech & the Environment during National Technology Day & World Environment Day 2024 celebrations on 04/06/2024.
- **CSIR-CRRI**
 - Organised International conference on Steel Slag Road: A Sustainable Green Infrastructure Transforming Waste to Wealth on 29/06/2024.
- **CSIR-CSMCRI**
 - Lecture delivered by Prof. N C Desai (Ex. Senior Professor, Maharaja Krishnakumarsinhji Bhavnagar University) on Patent-An important tool for achieving sustainable development goals.
 - Organized a workshop on Energy and Energy Materials under CSIR “One Week, One Theme” (OWOT) program in Energy and Energy Devices (EED) on 27/06/2024.
- **CSIR-IGIB**
 - Organized workshop on Yoga for Harmony & Peace during 18-19/06/2024.
- **CSIR-IHBT**
 - Lecture delivered by Professor Sudesh Yadav, School of Environmental Sciences, Jawahar Lal Nehru University, New Delhi delivered on Sustainability and Life as a part of World Environment Day on 05/06/2024.
- **CSIR-IICB**
 - Organised workshop on GLP Principles during 25-27/06/2024.
 - Lecture delivered by Professor Uday Maitra, Department of Organic Chemistry, Indian Institute of Science (IISc), Bangalore, on ‘From a Chemical Curiosity to a Portable Device’.
- **CSIR-IIIM**
 - Organised workshop on Intellectual Property Rights (IPR), Entrepreneurship & Start-up Ecosystem on 05-06-2024.
- **CSIR-IIP**
 - Organised 3rd Indian Analytical Congress (An International Conference & Exhibition) IAC-2024 jointly with Indian Society of Analytical Scientists – Delhi Chapter 05-07/06/2024
 - Organised Valedictory Function of “One Week, One Theme” (OWOT) - (Energy & Energy Devices (EED) Theme at CSIR-IIP on 28th June, 2024 and showcased Technologies at the inaugural event of OWOT at CSIR-NCL, Pune on 24/06/2024.
- **CSIR-IITR**
 - Organized workshop on Microbiology and Molecular techniques during 18-21/06/2024.
- **CSIR-NAL**
 - Celebrated 65th NAL Foundation Day on 03/06/2024.
 - Celebrated Centenary of Dr S R Valluri, Former Director, CSIR-NAL on 25/06/2024.
- **CSIR-NBRI**
 - Launched Herbal health soft drink-PIO at Stein Auditorium, IHC, New Delhi during “One Week, One Theme” (OWOT) Campaign curtain raiser event on 24/06/2024.

- Organized the Bougainvillea Festival on 09/06/2024.
- Celebrated World environment day on 05/06/2024.
- **CSIR-NCL**
 - Organised symposium on Catalysis and renewable energy towards meeting SDG 27/06/2024.
 - Celebrated World environment day on 05/06/2024.
 - Organised the “One Week, One Theme” (OWOT) on Energy and Energy Devices Theme as Theme Nodal lab during 24-28/06/2024.
- **CSIR-NEIST**
 - Celebrated World environment day on 05/06/2024.
- **CSIR-NGRI**
 - Organized an Interaction Meet on Geothermal Energy during OWOT-Under the theme Energy and Energy Devices (EED) on 27/06/2024.
- **CSIR-NIIST**
 - Lecture delivered by Dr. V. Joy, former Chief Secretary of the Government of Kerala and Chairperson of the Kerala Public Enterprises Board, during World Environment Day celebrations on 05/06/2024
- **CSIR-NIO**
 - Celebrated World Ocean Day on 08/06/2024.
- **CSIR-NML**
 - Organised seminar jointly with the Indian Institute of Metals, Jamshedpur Chapter & Tata Steel Limited during 19-21/06/2024.

Visit of high level dignitaries

- **CSIR-CCMB**
 - Scientific delegates from UKRI, United Kingdom visited on 25/06/2024.
 - Scientific delegates from IAU, Dammanm, Saudi Arabia on 27/06/2024.
- **CSIR-CIMFR**
 - Honourable Shri Dhullu Mahato, MP, Dhanbad visited for International Yoga Day celebration on 21/06/2024.
- **CSIR-CMERI**
 - Prof. Shekhar C. Mande, former DG-CSIR visited for National Technology Day 2024 celebrations.
- **CSIR-NIIST**
 - Padma Shri Dr. S. Ayyappan, Chairman of NABL, Former DG of ICAR, Secretary DARE, visited CSIR-NIIST.
 - Shri. Himanshu Yadav DANICSS, Director, Dept. of S&T Lakshadweep administration visited on 14/06/2024 to discuss on implementing waste management and coir related technologies relevant for the island.

Honours/ Awards

- **CSIR-CCMB**
 - Prof. Amitabha Chattopadhyay, SSB fellow, became Editor-in-chief for the Journal of Membrane Biology
 - Dr. Raghunand Tirumalai, Sr Principal Scientist, elected Fellow of Telangana Academy of Sciences
- **CSIR-CRRI**
 - Certificate for “Most Innovative Environmental Project” by the Confederation of Indian Industry on 27/06/2024.
- **CSIR-IIP**
 - Dr Suman Lata Jain awarded SERB-POWER Fellowship 2024 in Chemical Science

- **CSIR-NIO**
 - Ms. Sadaf Ansari, has been awarded the prestigious Indo-German WISER Award 2024 by the Indo-German Science & Technology Centre.

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 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

- 7 in-house R&D units of industries were granted Recognition and 7 were granted Registration certificates
- 68 in-house R&D units of industries were granted renewal of Recognition and 68 were granted renewal of Registration certificates.

Scientific and Industrial Organization (SIRO)

- 6 SIRO were granted Recognition and 4 were granted Registration Certificates

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

- 4 in-house R&D unit of industry was granted Approval and 4 in-house R&D units of industries were granted Extension of Approval in Form 3 CM u/s 35(2AB) of IT Act 1961.
- 15 Reports in Form 3 CL certifying R&D expenditures of Rs 205.49 Crores were issued to CCIT (E) for benefits u/s 35(2AB) of IT Act 1961.

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)

Five innovation projects were reviewed during the period:

- “Anshaj Smart Bin”
 - “Development of Smart Vest, World’s First wearable Assistive Device with Real Time Speech Guided Navigation for the Blind & Visually Impaired People”
 - “Design and fabrication of an indigenous multicolor tunable photo-reactor with inbuilt stirrer”
 - “Comprehensive and Application-based Solution for Addressing Malnutrition (CASAM) by community health workers”
 - “To Demonstrate & establish Physical Stability of Orthopaedic Implant Coating”
-

A2K+ Studies:

The following studies were successfully completed during the period:

- The study entitled: “Techno commercial assessment of TRL-6 and above technologies developed in India in academia, research labs and industry” awarded to IIT Jammu. The study has scouted 102 technologies at Technology Readiness Level (TRL) Level 6 & above in Material and Manufacturing Sector from 55 Organizations.
- The Study Project titled “Techno-commercial assessment of TRL-6 and above technologies developed in India in academia, research labs and industry” awarded to Technology Information, Forecasting and Assessment Council (TIFAC), New Delhi. Technologies were identified from four domains, viz. chemical, pharmaceuticals, medical sciences and healthcare. Among 131 technologies received under the study, 50 (38.1%) technologies are from research labs, 43 (32.8%) are from start-ups/industry, and 38 (29%) are from academia.

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

A new project entitled- “Empowerment of Marginal Farmwomen of Western UP through small-scale enterprise development of value added products from Finger millet (Ragi, Eleusine coracana) and Black wheat (Tritium aestivum) cultivation and training on drudgery reducing agricultural technologies” was awarded to Amity Institute of Herbal Research & Studies (AIHRS), Amity University- Uttar Pradesh under TDUPW/A2K+ program of DSIR.

162 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 Secretary, DSIR visited APCTT’s office in New Delhi on 4th June 2024 and inaugurated APCTT’s renovated office. The Head, APCTT briefed about the activities being carried out by APCTT in association with member states.

Prof. Chetan Singh Solanki, Professor, IIT Bombay, Founder of Energy Swaraj Foundation and Brand Ambassador of Solar Energy for Madhya Pradesh visited APCTT on 7th June 2024 during his Energy Swaraj Yatra in a solar bus to create a public awareness and movement towards adoption of solar energy in the wake of serious and catastrophic climate change. The Solar Bus was demonstrated.

Other Activities of the Department:

DSIR celebrated 10th International Yoga Day on 21/06/2024.

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.1901.46 lakhs during the month of June.
- Sale of electronic components/systems/SPV products worth Rs. 2182.33 lakhs was realized during the month of June.

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 technology on “ SONAR (Indigenous Sub Bottom Profiler)” to M/s. Bharat Electronics Ltd for commercialisation.
- The Corporation signed MoA with Tribal Co-operative Marketing Federation of India (TRIFED) for Technology licensing and providing IPR assistance.
- The corporation collected a premium of Rs 12.51 Lakhs towards licensing of technologies to industries during the month.
