

**Subject: MONTHLY SUMMARY (For the month of January 2025)**

**Major achievements during the month of January 2025**

**Council of Scientific & Industrial Research (CSIR)**

**New Products/Processes/ Technologies developed**

- **CSIR-CBRI**
  - Developed process for Biomass Derived Construction Material
- **CSIR-CLRI**
  - Developed process for
    - Salt Free Preservation of Raw Hides/Skins
    - Non-Chrome Mineral Tanning of Hides/Skins
- **CSIR-CRRI**
  - Developed process for
    - Iron and steel slag aggregate based ready to use pothole Repair Mix
    - Development of Technical Textile using End-of-Life Plastic
- **CSIR-CSMCRI**
  - Developed process for
    - Extraction of uranium from seawater and its method of preparation
    - Mixed-mode solar dryer equipped with dual collectors
- **CSIR-IHBT**
  - Developed process for extraction of essential oil from peel of Citrus species via choline chloride: oxalic acid-based cosolvent.
- **CSIR-IIP**
  - Developed Process for the synthesis of Topanol-A via alkylation of 2,4-dimethyl phenol in the presence of an acid catalyst.
- **CSIR-IITR**
  - Developed Process for
    - Apatkaleen AHAAR is a compact, shelf-stable nutrition solution designed for emergencies.
    - NFit: Nutritious Food in Tablets is a compact SUPERFOOD solution
    - MIL-FiT: Millet-enriched All-in-one Tablets are a compact, nutrient-packed food solution
    - SenzSCAN: Point-of-Care Chromogenic Sensor for Sickle Cell
- **CSIR-NIIST**
  - Developed process for the production of MCT oil fractions from coconut oil Deodorizer distillate
  -
- **CSIR-NPL**
  - Developed technology for "Hogh Volume PM10 Sampler"
  - Developed process on calibration of angle block using two autocollimators

- **CSIR-SERC**
  - Developed technology for
    - Flex Heat Module
    - Paver Blocks with Recycled Aggregate

### Technologies licensed/transferred

- **CSIR-CFTRI**
  - Technology for
    - Dipping oil formulation for grapes transferred to M/s LRS Biosure, Belgavi. (KA).
    - Gluten free biscuit transferred to M/s SS Gas Lab Asia Pvt Ltd, Delhi.
- **CSIR-CDRI**
  - Technology for
    - TaqMan-like probes & primers for the detection of Chikungunya (CHIK) and Zika (ZIK) arbo-virus by RT-PCR” transferred to M/s Mylab Discovery Solutions Private Limited, Pune on 17/01/2025.
    - A Standardized fraction of Picrorhiza kurroa for the treatment of Non Alcoholic Fatty Liver Disease transferred to M/s Themis Medicare Limited, Mumbai on 17/01/2025.
- **CSIR-CEERI**
  - Technology for
    - IoT Enabled Portable Endoscope for Minimal Invasive Surgery transferred to M/s Yellow Medi Plus Pvt. Ltd., Ghaziabad,
    - IoT Enabled Patient Monitoring System and Software Solution for Colposcopy transferred to M/s Collateral Medical Pvt. Ltd., Mumbai,
- **CSIR-CFTRI**
  - Technology for
    - Green tamarind spice mix – paste & powder transferred to M/s Yallas Technology Solutions (OPC) Pvt.Ltd, Visakhapatnam, Andhra Pradesh.
    - Probiotic Carrot nectar transferred to M/s Guru Kiran Fruits & Vegetables, Mysuru.
- **CSIR-CIMAP**
  - Technology for
    - Medicated Sanitary Pad (NAARI) licenced to M/s Nalanda Balvikas and Magasvargiya Mahila Vikas Mandal, Dhule, Maharashtra on 17/01/2025.
    - Pain Balm, Relaxomap and Pain relieving Gel licenced to M/s Nayasa International, Ahmedabad on 17/01/2025.
- **CSIR-CRRI**
  - Technology for A Bituminous Rejuvenating Agent and a Process for Recycling of Bituminous Pavements transferred to M/s Ooms Polymer Modified Bitumen Private Limited, Haryana on 17/01/2025.
- **CSIR-CSIO**
  - Technology for
    - Anti-Collision Light for LCA to BEL Panchkula; PUPPM, AIQS, and Vaccine Chamber transferred to M/s Janani Envirotech, Coimbatore on 17/01/2025.
    - NILM-based e-Sense transferred to M/s Vellore Electronics, Vellore, boosting innovation and collaboration on 17/01/2025.
- **CSIR-CSMCRI**
  - Technology for *Kappaphycus alvarezii* Sap & its method of production from seaweed transferred to Brahma Kamal Research LLP, Bhubaneswar.



- **CSIR-IHBT**
  - Technology for
    - Herbal formulation for cartilage health transferred to M/s Auretics Ltd., New Delhi on 17/01/2025.
    - Full spectrum operations for preparation of biofertilizer using the desired microbe transferred to M/s Biomimicry Technologies Pvt. Ltd, Delhi on 27/01/2025.
- **CSIR-NBRI**
  - Technology for 90 K Cotton SNP Chip licenced to M/S Imperial Life Sciences (P) Limited, Gurgaon, Haryana on 19/01/2025.
- **CSIR-NIIST**
  - Technology for Vetiver grass based vegan leather transferred to Shrivani Estates LLP, Nagpur, Maharashtra
- **CSIR-SERC**
  - Technology for
    - High Velocity Multi-Hit Resistant Movable Protective Booth/Shack for Security Personnel licensed and Portable Lightweight Folding-type Modular System for Makshif Hospital and other Needs (Poli-Tal(M)) to M/s. Hemagni Build-Pro Industries Pvt. Ltd., Hosur, Krishnagiri, Tamil Nadu.
    - Emergency Retrieval System for Power Lines (ERS) licensed to M/s. Hi-Tech Systems & Services Ltd., White House, Kolkata.

#### Number of New Projects initiated (01/01/25-31/01/25)

Lab/Institute	CSIR	Ministry/Govt./PSU	Industry/sponsored/ Pvt
CSIR-CBRI	Nil	02	05
CSIR-CCMB	Nil	03	Nil
CSIR-CDRI	Nil	01	02
CSIR-CECRI	01	02	02
CSIR-CFTRI	Nil	Nil	02
CSIR- CGCRI	03	Nil	Nil
CSIR- CIMFR	Nil	02	09
CSIR- CLRI	Nil	01	02
CSIR- CRRRI	Nil	04	05
CSIR- CSMCRI	Nil	02	01
CSIR-IHBT	Nil	01	Nil
CSIR-IICB	Nil	Nil	01
CSIR- IICT	Nil	Nil	07
CSIR- IIP	Nil	02	01
CSIR-IITR	Nil	03	01
CSIR-IMMT	Nil	01	03
CSIR- NAL	Nil	02	02
CSIR-NBRI	Nil	02	Nil
CSIR- NEERI	Nil	01	06
CSIR- NIIST	Nil	03	07
CSIR- NIO	Nil	24	09
CSIR-NPL	Nil	Nil	01
CSIR-SERC	Nil	03	03

**Number of Ph.D. scholars joined/ completed (01/01/25-31/01/25)**

Lab/Institute	Joined	Completed
CSIR-CBRI	07	01
CSIR-CCMB	08	03
CSIR-CDRI	38	04
CSIR-CECRI	14	03
CSIR-CEERI	03	01
CSIR-CFTRI	15	Nil
CSIR-CGCRI	10	Nil
CSIR-CIMAP	30	02
CSIR-CIMFR	08	02
CSIR-CLRI	Nil	02
CSIR-CRRI	13	Nil
CSIR-CSIO	20	01
CSIR-CSMCRI	16	02
CSIR-IGIB	24	07
CSIR-IHBT	29	03
CSIR-IICB	22	08
CSIR- IICT	48	14
CSIR- IIP	09	Nil
CSIR-IITR	25	Nil
CSIR- NAL	10	02
CSIR-NBRI	19	02
CSIR- NCL	01	01
CSIR- NEERI	14	02
CSIR- NGRI	08	01
CSIR- NIIST	29	03
CSIR- NIO	14	01
CSIR-NPL	11	08

**National Collaborations/Agreements/MoUs Signed**

- **CSIR-CCMB**
  - MoU signed with District Collectorate Nandurbar, Maharashtra to extend the benefits of genetic screening, carrier detection, clinical and genetic counselling for Sickle Cell Anaemia (SCA) patients.
- **CSIR-CDRI**
  - Agreement signed with National Foods, Gujarat for FRNT-based in vitro screening of compound against DENV1-4 on 08/01/2025.
- **CSIR-CECRI**
  - MoU signed with Technoculture Research Private Limited, Bihar for R & D Collaborations in the area of Biosensors.
- **CSIR-CEERI**
  - MoU signed with
    - Banasthali Vidyapith, Banasthali, Jaipur Rajasthan & National Institute of Technology (NIT), Delhi for Institutional Collaboration on 30/12/25.



- **CSIR-CIMAP**
  - MoUs signed with
    - CSIR-NPL, New Delhi for development and/or production of Bharatiya Nirdeshak Dravyas (BND) on 04/01/2025.
    - Chamber for Advancement of Small and Medium Businesses (CASMB), Mumbai for herbal formulation on 17/01/2025.
- **CSIR-CLRI**
  - Consultancy agreements signed with
    - M/s. Ramsons Garment Finishing Equipment's Pvt. Ltd, Bengaluru for the efficiency of polypropylene drum in leather manufacturing processes on 06/01/2025.
    - M/s. Euphoric Innovations Pvt Ltd, Coimbatore to evaluate the design concepts of High-arch, Normal-arch and Flat-foot Profiles of Footwear Products On 17/01/2025.
- **CSIR-CRRI**
  - MoUs signed with
    - Institute of Technology (IIT), Bhubaneshwar for Odisha for Academic and research collaboration on 08/01/2025.
    - Bal Raksha Bharat), New Delhi to promote road safety, sustainable infrastructure, and child-friendly construction practices across India on 31/01/2025.
- **CSIR-CSIO**
  - MoUs signed with
    - IIT Mumbai to collaborate on joint research, promote innovation & start ups.
    - ELCIA & World Space Council to advance sensors & space R&D.
- **CSIR-IHBT**
  - MoU signed with Govt. Arya Degree College, Nurpur, Kangra (H.P.) for R&D and Academic Collaborations on 20/01/2025.
- **CSIR-IICT**
  - MoU signed with GIET University, Odisha to promote cooperative research on 22/01/2025.
- **CSIR-IIP**
  - MoU signed with Adobde Biotec India Private Ltd. Hyderabad for Industrial validation for production & down streaming at 2KL fermentor using RMIIP 32 MTCC25056 strain
- **CSIR-IITR**
  - MoA signed Farelabs Private Limited, Gurugram, Haryana for development of single element solutions for Certified Reference Material on 28/01/2025.
- **CSIR-IMMT**
  - MoUs signed with
    - Vedanta Limited, Sesa, Goa for Beneficiation Studies for the Recovery of Iron values from Low-Grade Siliceous Iron Ore
    - Fomento Resources Private Limited (FRPL), Uttar Pradesh for Mineralogical and Petrological studies for Girar Iron ore and Gold Block in Uttar Pradesh
- **CSIR-NAL**
  - MoU signed with Indian Air Force, New Delhi for mutual cooperation on development of advanced repair techniques on 21/01/2025.
- **CSIR-NBRI**
  - MoUs signed with
    - The Department of Horticulture and Food Processing, (DHFP) U.P. carry out collaborative work under the Floriculture mission on 15/01/2025.
    - The Genomic Foundation (TGF), New Delhi to promote joint collaborative scientific research on 19/01/2025.



- **CSIR-NGRI**
  - MoU signed with Geological Survey of India, Southern Region (GSI for Measurement of Temperature in Boreholes and Thermo physical Properties of Core Samples in Godavari Valley Coalfield, Telangana.
- **CSIR-NIIST**
  - MoU signed with the Department of Chemicals and Petrochemicals (DCPC) for setting up Centres of Excellence in the field of chemicals and petrochemicals.
  - Agreements Signed with
    - NS & Co, Tiruchirappalli, for sponsored research.
    - The Dalit Indian Chamber of Commerce and Industry (DICCI) for collaboration on research activities, technology incubation, diffusion & entrepreneurship development.
    - The Chamber for Advancement of Small and Medium Businesses (CASMB) for collaboration on research activities & entrepreneurship development.
    - Taiyo Kagaku India Pvt. Ltd. Repurposing Guar Gum Byproducts into Sustainable Products.
    - Akashganga Biosciences Pvt. Ltd., Maharashtra, signed for the manufacturing of innovative building materials from fine rock sand dust.
    - The Coconut Development Board (CDB) for collaborative research on IPR and related aspects.
- **CSIR-NPL**
  - MoU signed with CSIR-CIMAP, Lucknow for development and/or production of Bharatiya Nirdeshak Dravyas (BND) on 04/01/2025.
  - Agreements signed with
    - M/s Virayaa Green Energy Systems Pvt Ltd, Hyderabad for High through-plane electrically conductive composite plate from different conductive fillers for fuel cell application on 17/01/2025.
    - M/s Biomimicry Technologies Pvt. Ltd., New Delhi for High-Volume PM10 Sampler on 27/01/2025.

## 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*
28	15	24	07	05	08	05	181
Number of Copyright Applications filed						01	
Number of Trademark Applications filed						01	
Number of Design Applications filed						02	

\* Data reported to IPU during January 2025 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**
  - Provided molecular diagnostic services for 144 families comprising 161 samples



- **CSIR-CDRI**
  - Provided analytical services to one MSME during January 2025.
  - Supplied 543 experimental animals to outside research organizations for research purposes.
  - Provided service for analysis of sample by IR (Infrared), Mass, NMR (Nuclear Magnetic Resonance) and EM (Electron Microscopy); 388 external samples analysed.
- **CSIR-CRRI**
  - Checking adequacy of existing through type steel truss bridge over river Alaknanda on Hat Kaudia road, Pipalkoti, District Chamoli, Uttarakhand for THDC India Ltd.
  - Strengthening of Roads by cold Milling and Recycling process under Division East Road (M-212)/Sub Div-1 (Vikas Marg Road No. 75A & 75B through Falling Weight Deflectometer (FWD) & Traffic Survey for Public Works Department (PWD), Delhi.
  - Evaluation of NDMC Roads for Suggesting Recommendations for Suitable Maintenance and Rehabilitation Measures and Third Party Construction Quality Supervision
  - Structural Health Assessment of Existing Major Bridge of about 85m (7mx 12nos) at Km 63+604, part of 4 laning of NH-353B from Govindpur (MH/TG Border) Design Km 32.910 to Rajura Border, Design ch 89.090 in the state of Maharashtra for GR Govindpur Rajura Highway Pvt. Ltd.
  - Evaluation of Varanasi ring road (phase-II, Pkg-I) design chainage Km.00 to Km.16.40 in the State of UP under NHDP Phase-VII on EPC mode for National Highway Authority of India (NHAI)
  - Vetting of Pavement Design for Construction of Greenfield Mulapeta Port on an EPC Basis-Pavement Design and Utilization of Commercial Stabilizer (CCS) StabilRoad for Cementitious Bases in Internal and External Roads, Mulapeta Port, Andhra Pradesh for Vishwa Samudra Engineering Ltd.
  - Development of Customized Steel Slag Valorisation process for Technoeconomic Conversion of LD/BOF and EAF Steel Slag as Processed Steel Slag Aggregates of JSPL Raigarh and Angul Steel Plants and Construction of Steel Slag Roads for Jindal Steel & Power Limited
  - Visual Inspection of Second Vivekananda Bridge and Approaches on Hugli River, Kolkata for Second Vivekananda Bridge Tollway Company Pvt. Ltd.
- **CSIR-IHBT**
  - UPLC & UV analysis of 03 samples.
- **CSIR-IIP**
  - Testing evaluation of FRHF sample for Sterlite Lubricants Pvt. Ltd.
  - Low temperature torque studies of lubricating greases for M/s. Lubgraf Synoils Pvt. Ltd
- **CSIR-IITR**
  - Untargeted analysis of serum, plasma, OPS, CSF, Urine and Gastric Lavage samples for ICMR, New Delhi.
- **CSIR-NAL**
  - Development of optical clad layer coating on sintered silicon carbide mirror substrate for space telescope applications for ISRO
  - Matlab / Simulink to airworthy embedded hardware code generation for msdf algorithms and validation using real data for ADA.
- **CSIR-NCL**
  - Supply of microbial strains, microbial identification to industries and academia for research purpose



- **CSIR-NPL**
  - Technical services provided to M/s Biomimicry Technologies Pvt. Ltd.
  - Calibration and testing services for physico mechanical parameters to various stakeholders
- **CSIR-SERC**
  - Fatigue Life Evaluation of R260 and 1080HH Alumino-Thermit Welded Rail Joints for M/s. The India Thermit Corporation Limited, Rudrapur District, Uttarakhand
  - Root cause analysis and investigation of dislodged Bunker Hoppers and Supporting structures of Unit-1, Raichur Thermal Power Station (RTPS), Karnataka
- **CSIR-URDIP**
  - Provided IP analysis support services to CSIR laboratories.

#### **Outreach Activities**

- **CSIR-CBRI**
  - Organised a fire safety training to promote safety; 200 participants.
- **CSIR-CCMB**
  - Organised Young Innovators Program 2025; 24 schools participated
  - Organised Skill Development training Programmes on
    - Introduction to IPR and Patents during 08-10/01/2025.
    - NMR - based Metabolomics during 27-/01/ 2025; 24 participants.
- **CSIR-CDRI**
  - Organised Student Scientist connect programs for
    - Suyansh Institute of Pharmacy, Gorakhpur (U.P.) 02/01/2025; 35 participants.
    - Govt. High School, Biwipur, Lucknow (U.P.) 03/01/2025; 114 participants.
    - Sagar Public School, Bhopal (M.P.) 06/01/2025; 31 participants.
    - Jhunjunwal Institute of Medical Sciences, Ayodhya, 10/01/2025; 44 participants.
    - Govt. High School, Paharpur, Lucknow (U.P.). 21/01/2025; 172 participants.
    - Azad Institute of Pharmacy & Research, Lucknow (U.P.) 29/01/2025; 39 participants.
    - Department of Botany, University of Kashmir (J & K) 31/01/2025; 114 participants.
- **CSIR-CECRI**
  - Organised Industry Oriented Refresher Training Programme on Lithium-ion battery: Materials to Manufacturing during 20-24/01/2025; 13 participants.
  - Organised Skill Development Training Programme on Photolithography based Microfabrication of Sensors during 27-31/01/2025.
  - Organised Yusuf Hamied Chemistry Camp during 22-23/01/2025; 74 participants.
- **CSIR-CEERI**
  - Organised lab visit for Radha Krishan Birla School, Pilani & PM Shri G.S.S.S. Udaipurwati School, Jhunjhunu on 17/01/2025 & 23/01/2025; 84 &60 participants respectively.
- **CSIR-CFTRI**
  - Organised Skill Development Training Programmes on
    - Sophisticated analytical instruments in food applications GC- MS, LC-HRMSMS, FT-IR, NMR, E-Nose & E – Tongue during 06-10/01/2025; 06 participants.
    - Processing and value addition to pulses during 08-09/01/2025; 05 participants.
    - Value added product from minor millet during 20-23/01/2025; 19 participants.
    - Method validation of fortificants ie., Iron (FE), Vitamin B9 and B12 in fortified rice during 22-24/01/2025; 25 participants.
- **CSIR-CGCRI**
  - Organised Skill Development Training Programmes on



- Soft Skills and Technical Skills Upgradation on Stoneware Manufacturing and Processing at CSIR-CGRI Khurja centre during 08-10/01/2025; 12 participants.
- Instrumental Methods for Chemical Characterization of Ceramic Materials and Testing & Calibration Techniques Related to Temperature Measurement and Control centre during 14-17/01/2025; 23 participants.
- Scientist connect programs on 20/01/2025; 300 participants.
- **CSIR-CIMAP**
  - Organised Skill Development Training Programmes on
    - MAP crops at Jagroan village, Ludhiana, Punjab on 20/01/2025; 80 participants.
    - Aromatic plants at Mahakumbh, Prayagraj, UP on 24/01/2025; 60 participants.
- **CSIR-CIMFR**
- CSIR-CIMFR organized Workshop on "Sustainability in Coal Beneficiation: Challenges and Opportunities" on 29th January, 2025 at CIMFR, Digwadih Campus, Dhanbad.
- **CSIR-CLRI**
  - Organised lab Visits for
    - BJR Agricultural College in Sircilla, Telangana on 20/01/2025; 42 participants.
    - Gonzaga College of Arts & Science for Women in Krishnagiri District, Tamil Nadu on 28/01/2025; 56 participants.
- **CSIR-CMERI**
  - Organised Skill Development Training Programmes on
    - Bio Energy, Farm Machinery & Engineering Practices during 15/01/2025-14/02/2025.
    - Hands-on Training and Demonstration programme on Agricultural Machinery & Implements for Women Farmers on 22/01/2025.
    - CAD/CAE for Agri-Machinery Design during 27-31/01/2025.
  - Scientist connect programs for
    - APS Panagarh for Introduction of Artificial Intelligence & application in security and Surveillance on 20/01/2025; 74 participants.
    - JNV bankura for Internet of thing (IOT) and its Applications on 31/01/2025; 134 participants.
- **CSIR-CRRI**
  - Organised Skill Development Training Programmes on
    - Geo-Spatial Technology (GIS, GPS, RS, etc.) for Roads and Transportation during 06-09/01/2025; 13 participants.
    - Design, Construction and Quality Control in Flexible Pavements during 20-24/01/2025; 17 participants.
    - Quality Assurance, Health Assessment and Rehabilitation of Bridges during 30/12/2024-03/01/2025.
  - Organised Scientist connect programs for
    - KV Palwal, Haryana on 31/01/2025; 96 participants.
    - PM Shri KV Tughlakabad, New Delhi on 28/01/2025; 82 participants.
- **CSIR-CSMCRI**
  - Organised Training Programme at CSIR-CSMCRI MARS Mandapam for Dept of Fisheries, Tamil Nadu on 20/01/2025.
  - Organised lab visit for PM SHRI Kendriya Vidyalaya, Junagarh on 22/01/2025.
  - Organised Skill Development Training Programmes on
    - Microalgal Diversity and Their Biotechnological Potentials during 22-24/01/2025; 13 participants.
- **CSIR-IHBT**
  - Organised Skill Development Training Programmes on



- Agro and process technologies of floriculture, aromatic, medicinal, spices and plantation crops during 06-10/01/2025; 24 participants.
- Nanotechnology in Ayurveda during 06-11/01/2025.
- Plant Tissue Culture during 20-24/01/2025; 20 participants.
- Organised lab Visits for
  - Govt. Sr. Sec. School, Kangra, (H.P.) and PM SHRI Kendriya Vidyalaya No.-02, Pathankot (Pb) in January 2025; 590 participants.
  - MCM DAV College, Kangra (H.P.) during 27-28/01/2025; 85 participants.
- **CSIR-IICB**
  - Organised Skill Development Training Programmes on Different laboratory techniques during 06-17/01/2025; 90 participants.
  - Organised lab Visits for
    - Sitananda College, Purba Medinipur on 17/01/2025; 90 participants.
    - G.D. Birla Centre for Education on 29/01/2025; 100 participants.
- **CSIR-IICT**
  - Organised Skill Development Training Programmes on
    - Chemistry and Chemical Sciences for Telangana Tribal Welfare Residential Degree College for Women on 04/01/2025; 127 participants.
    - Chemical and Biological Sciences for Arasu College of Arts and Science for Women, Karur, Tamil Nadu on 22/01/2025.
    - Innovative & Sustainable Business Strategies (ISBS-2025) on 27/01/2025; 200 participants.
  - Organised Scientist connect programs on 20/01/2025; 60 participants.
- **CSIR-IIP**
  - Organised Skill Development Training Programme on Analysis using Elemental, Microscopic and Thermo-Gravimetric Tools during 06-17/01/2025; 90 participants.
  - Organised lab Visit for Ramnarain Ruia Autonomous College, Mumbai on 15/01/2025; 90 participants.
- **CSIR-IITR**
  - Organised lab Visit for students from Bhopal on 08/01/2025; 73 participants.
  - Organised Advanced Training Program on Processing of Plastics and Other Polymeric Products during 06-10/01/2025; 20 participants.
- **CSIR-IMMT**
  - Organised School Visit for
    - ATL School Visit PM Shri Kendriya Vidyalaya No-IV on 22/01/2025.
    - DAV Public School (Kalinga Nagar), PM SHRI KV& JNV (Rayagada) on 23/01/2025.
    - Rayagada Women Collage on 24/01/2025.
    - Intenational School, Khordha and KMBB Science Higher Secondary School, Cuttack on 27/01/2025.
    - Kendriya Vidyalaya Sangathan, Bhubaneswar on 28/01/2025.
    - ATL School Visit Sainik School on 29/01/2025.
- **CSIR-NAL**
  - Organised Lab Visit for PM Shri Kendriya Vidyalaya , Tumakuru and NTU, Singapore.
- **CSIR-NBRI**
  - Organised Lab Visits for
    - Cooch Behar Panchanan Barma University, West Bengal on 10/01/2025; 21 participants.
    - PM Shri Kendriya Vidyalaya, Ayodhya Cantt on 24/01/2025; 70 participants.



- **CSIR-NEERI**
  - Organised Skill Development Training Programmes on
    - Soil Quality Assessment and Land Management during 08-09/01/2025.
    - Water and Waste Water- Monitoring, Analysis and Treatment on 23/01/2025.
- **CSIR-NGRI**
  - Organised Skill Development Training Programme on Python in Geosciences during 02-10/01/2025.
- **CSIR-NIIST**
  - Organised Student Scientist Connect Programme at Bala Satra Congress 2024-25 during 02-03/01/2025; 98 participants.
  - Organised Skill Development Training Programme Introduction to Life Cycle Assessment on Chemical Engineering and Bioprocessing during 06-10/01/2025.
- **CSIR-NIO**
  - Organised lab visit for Cadets from the Indian Naval Academy during 13-17/01/2025.
- **CSIR-NPL**
  - Organised Skill Development Training Programme on Optical Radiation Metrology during 07-09/01/2025

### Conferences, Workshops, Major Events

- **CSIR-4PI**
  - Celebrated Vishwa Hindi Diwas on 10/01/2025.
- **CSIR-CBRI**
  - Organised Technology Transfer event at CSIR-Innovation Complex in Mumbai on 17/01/2025.
  - Organised foundation stone ceremony for the Model Resilient Village at Sil/Sunani Village, Solan District.
  - Organised Workshop on Structural Stability of Airport Buildings and Associated Infrastructure at New Delhi
  - Organised International Experts Lecture on Novel Glazing Technologies Toward Low/Zero Energy Buildings on 30/01/2025 in online mode.
- **CSIR-CDRI**
  - Organised Science Video Production workshop to train the research scholars to convert their research paper into impactful videos to reach mass audience.
- **CSIR-CECRI**
  - Organized International Symposium on Advances in Electrochemical Science and Technology (iSAEST-13) during 08-10/01/2025; 600 participants.
- **CSIR-CGCRI**
  - Organised XXVII International Congress on Glass 2025 during 20-24/01/2025.
- **CSIR-CIMFR**
  - Organised Workshop & ASNT India NDT Network Program on Advances in Non-Destructive Evaluation of Steel Wire Ropes in Mining and Aerial Installation on 10/01/2025.
- **CSIR-CLRI**
  - Organized workshop for Leather Musical Instrument Fabricators on 04/01/2025.
- **CSIR-CMERI**
  - Celebrated 76th Republic Day on 26/01/2025.
  - Organised Mini-Marathon for Bhagwan Birsa Munda "Maati ke Veer" on 12/01/2025.
- **CSIR-CRRI**
  - Organised National Road Safety Month 2025 during 01-31/01/2025.



- **CSIR-CSMCRI**
  - Celebrated Vishwa Hindi Diwas on 15/01/2025.
  - Celebrated 76th Republic Day on 26/01/2025.
  - Organised expert talk Ionomer Interfaces with Enhanced Hydration and Ion Conductivity beyond Bulk Membranes on 30/01/2025.
  - Organised lecture on Carbon capture utilization and storage (CCUS) and green hydrogen for net zero-opportunity & challenges for India Sukumar Devotta, Professor of eminence (Hon), Anna University on 16/01/2025.
  - Mobile Salt Quality Control & Iodination Van showcased during Fun Street-2025 on 12/01/2025.
  - Participated in Vibrant Bhavnagar Vision 2030.
- **CSIR-IGIB**
  - Participated in Innovation Technology Transfer Symposium from 28- 29/01/2025
- **CSIR-IHBT**
  - Organised a health awareness talk on Common Mental Health Problems and their Prevention by Dr. Pankaj Kanwar, Department of Psychiatry, on 23/01/2025.
  - Organised a Millett Fusion International conference on Millets Cultivating Sustainability and Nourishing Nations at Amity University, Noida during 22-24/01/2025.
- **CSIR-IICT**
  - Organised a National Workshop on Innovative & Sustainable Business Strategies (ISBS-2025) on 27/01/2025.
  - Hosted an engaging panel session on Empowering Grassroots Innovations for Economic Sustainability in Emerging Economies in 5<sup>th</sup> International Conference on Creativity and Innovation at/for/from/with Grassroots [ICCIG 5] at IIM Ahmedabad on 28/01/2025.
- **CSIR-IITR**
  - Organised Lecture on National Viral Hepatitis Control Program: Conquering Mount Improbable by Dr. Radha Krishan Dhiman, Director of SGPGIMS on 03/01/2025.
  - Organised Women in Academia, Research, and Management for Empowering Successful Transformations (WARMEST 2025) conference on 09/01/2025.
- **CSIR-IMMT**
  - Organised IC4M-2025 during 21-25/01/2025.
- **CSIR-NBRI**
  - Organised Rose and Gladiolus Show during 18-19/01/2025.
- **CSIR-NEERI**
  - Organized a Symposium on Environmental Biotechnology and Health on 16/01/2025.
- **CSIR-NIIST**
  - Participated at the Agriculture and Food Processing Growth Summit and Expo 2025 at NIFTEM Thanjavur, Tamil Nadu.
  - Organised 13th International Symposium on Advances in Electrochemical Science and Technology held at Thiruvananthapuram.
  - Celebrated 76th Republic Day on 26/01/2025.
- **CSIR-NPL**
  - Delivered Colloquium on Unveiling synergies in rocket science and solid-state physics – unlikely advantages of interdisciplinary in-house cross-pollination by Prof. Sangam Chatterjee (Justus Liebig University Giessen, Germany) on 09/01/2025.
  - Organised Ignite STEM Passion Teachers' Training Workshop on 16/01/2025, 100 participants.



- **CSIR-SERC**
  - Lecture delivered on 'Deep Ocean Mission and Blue Economy for Sustainable Development by Dr. M. V. Ramana Murthy, Director, National Centre for Coastal Research (NCCR), Chennai on 10/01/2025.

### Visit of high level dignitaries

- **CSIR-CGCRI**
  - Union Minister of State (I/C) for Science and Technology and Earth Sciences, Dr Jitendra Singh inaugurated the International Congress on Glass (ICG) on 20/01/2025.
  - Prof. Enrico Traversa Dept. of Chemical Science and Technology, University of Tor Vergata, Rome, Italy delivered 2nd Platinum Jubilee Distinguished Lecture on 30/01/2025
- **CSIR-CRRI**
  - Prof. P. Sikdar, Chairman, research Council visited BES division on 23/01/2025.
- **CSIR-CSIO**
  - Prof. Anil K Gupta (Padma Shri & Founder Honey Bee Network) delivered lecture.
- **CSIR-CSMCRI**
  - Dr. Neelam Patel, Senior Adviser (Agriculture & Allied Sectors), NITI Aayog, visited MARS Mandapam, CSIR-CSMCRI to review the seedling production in the lab and seaweed cultivation activities in the open sea on 31/12/2024.
- **CSIR-IHBT**
  - Padma Shri Prof. Pramod Tandon, Honorary Scientist, The National Academy of Sciences, India & Secretary, Plant Tissue Culture Association, India and Former, Vice-Chancellor, NEHU, Shillong, and Prof. Ashwani Pareek, Executive Director, NABI, Mohali, Punjab on 20/01/2025.
- **CSIR-IICT**
  - Dr. Duy Quang Dao from Duy Tan University, Vietnam, visited during 02-15/01/2025.
- **CSIR-IITR**
  - Union Minister of State (I/C) for Science and Technology and Earth Sciences, Dr Jitendra Singh to commemorate the Diamond Jubilee of CSIR-IITR, on 28/01/2025.
- **CSIR-IMMT**
  - Shri Dharmendra Pradhan, Hon'ble Minister of Education, Government of India 22/01/2025.
  - Dr Rajesh Gokhale, Secretary, Department of Biotechnology, Government of India 2/01/2025.
  - Shri V.L. Kantha Rao, IAS, Hon'ble Secretary, Ministry of Mines, Government of India 18/01/2025.
  - Shri. Balabhadra Majhi, Hon'ble Member of Parliament (Lok Shabha) Nabarangpur, Odisha 13/01/2025.
- **CSIR-NAL**
  - Air Vice Marshal KAA Sanjeeb VSM, Assistant Chief of Air Staff (Maint Plans), Air Headquarters, Indian Air Force, New Delhi.
- **CSIR-NIIST**
  - Dr. TRB Rajaa, Hon'ble Minister for Industries, Investment Promotion & Commerce, Tamilnadu visited to explore potential avenues for technology collaboration.
- **CSIR-NPL**
  - Prof. Veezhinathan Kamakoti (Director, IIT Madras) as Chief Guest during 79 Foundation day celebrations.



## Honours/ Awards

- **CSIR-CBRI**
  - Dr. Ajay Chourasia received "Disaster Risk Reduction (DRR) Award 2025" on 15/01/2025.
- **CSIR-IICB**
  - Dr. Subhajt Biswas, Principal Scientist, elected as fellow of West Bengal Academy of Science and Technology 2025
- **CSIR-NGRI**
  - Dr. Subash Chandra, Chief Scientist, CSIR-NGRI, Hyderabad, elected as a Global Vice-Chair of the Society of Exploration Geophysics (SEG)- Near Surface Geophysics Technical Section (NSTS)
- **CSIR-NPL**
  - Prof Venu Gopal Achanta, Director elected as Fellow of OPTICA (Optical Society of America) & Commission C2 of IUPAP.

## DEPARTMENTAL ACTIVITIES

DSIR is the nodal department for granting recognition to in-house R&D units established by corporate companies, Scientific and Industrial Research Organizations (SIROs) and registration to Public funded research Institutions like universities, IIT's, IISc, Regional Engineering College (RECs) other than hospitals. R&D units recognized by DSIR are eligible for customs duty and weighted tax deductions on R&D expenditures by Industry.

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

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

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

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

- 2 SIROs were granted Recognition and Registration Certificate.

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

- 25 PFRI's were granted renewal of Registration Certificates

#### **Fiscal Incentives for Scientific Research u/s 35(2AB) of IT Act 1961**

- 6 in-house R&D units of industries were granted Extension of Approval in Form 3 CM u/s 35(2AB) of IT Act 1961.
- 8 Reports in Form 3 CL certifying R&D expenditures of Rs 143.98 Crores were issued to CCIT (E) for tax 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) 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)**

One innovation project on Sustainable Power: revolutionizing Emission Control in Diesel Generators” was sanctioned during the month.

#### **A2K+ Studies:**

A Stakeholders meeting under DSIR sponsored project on “Indigenous Development of Membranes for Hospital Wastewater Treatment in India to promote its Recycle & Reuse” was held on 7th January 2025 at SRM IST, Vadapalani Campus, Chennai. The meeting focused on understanding the existing membrane and other technologies for the hospital wastewater treatment.

#### **A2K+ Events:**

The 27<sup>th</sup> meeting of the Technical Advisory Committee (TAC) of A2K+ Events was held online through a virtual platform. 26 proposals were discussed by the TAC and 5 proposals for convening various events were recommended for financial support. These events related to industrial research and technological innovation will provide a platform for the exchange of views, useful insights, and learning opportunities for industry, academia, consultancy, research organizations, and other stakeholders.

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

Around 223 Women Beneficiaries were trained during the month of January, 2025 in the field of Sericulture, Aquaculture, food fortification and processing, Ready to Eat food preparation & packaging, paper recycling, handicraft/handloom, agri-technology under various on-going projects supported under TDUPW/A2K+ sub-scheme of IRD Program of DSIR.

### **Foundation Day Celebration, DSIR**

The Department of Scientific and Industrial Research (DSIR) is a part of the Ministry of Science and Technology, which was announced through a Presidential Notification, dated January 4, 1985 (74/2/1/8 Cab.) contained in the 164<sup>th</sup> Amendment of the Government of India (Allocation of Business) Rules, 1961. The Department of Scientific and Industrial Research (DSIR) has a mandate to carry out the activities relating to indigenous technology promotion, development, utilization and transfer

The 40<sup>th</sup> Foundation Day of the Department of Scientific and Industrial Research (DSIR) was celebrated on 4<sup>th</sup> January, 2025 at Dr. Ambedkar International Centre, New Delhi. Dr. Jitendra Singh, Hon'ble Minister of State (Independent Charge) of the Ministry of Science and Technology was Chief guest. The Hon'ble Minister in his address highlighted the mandate to strengthen collaboration with industry partners to scale up innovations and drive technological growth. Prof. A.K. Sood, Principal Scientific Advisor to the Government of India, Guest of Honour addressed the gathering and



emphasized the need to transition from a service-based economy to a product-based economy and India's product economy should be built on indigenous designs.

The Foundation Day witnessed 16 technology transfers from CSIR labs to Laghu Udyog Bharati (MSME). The CSIO technologies focus on the design and development of scientific and industrial instruments, incorporating IoT-enabled solutions. The CEERI technologies cater to healthcare and societal applications. Additionally, an MoU was signed between CSIO and ELCIA, Bengaluru, to foster mutual collaboration in sensor development.

## **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. 3237.80 lakhs during the month.
- Sale of electronic components/systems/SPV products worth Rs. 3651.45 lakhs was realized during the month.

### **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 following technologies:
  - Roshini - Saline Water Lantern to M/s Bespace Advisor, Chennai
  - Antifungal Ointment for Domestic Animal to M/s Maniktsu Agro Pvt Ltd
  - Herbal formulation (nutraceutical) for improving Cartilage Health to M/s Auretics Limited, New Delhi
  - Poshan - a multivitamin formulation for mulberry to M/s Healthline Pvt. Ltd.
  - PAIN CHHOO – Herbal Pain Balm to M/s Nysa International
  - Relaxo-MaX – Anti-Inflammatory pain relief oil to M/s Nysa International
  - Painjaa – Anti-Inflammatory Pain Relieving Gel to M/s Nysa International
- The Corporation signed following MoA/MoU for Technology licensing and providing IPR assistance:
  - Elmentoz Research Pvt.Ltd., Bhubaneswar, Odisha
  - DBT APSCS&T CoE Arunachal Pradesh
  - Directorate of Technical Education and Training, Odisha
  - Indian Institute of Science (IISc), Bengaluru
  - CSIR-Mumbai Innovation Complex, Mumbai

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