No. DSIR/MS/2018/06

Government of India
Ministry of Science & Technology
Department of Scientific & Industrial Research
MONTHLY SUMMARY FOR THE CABINET
(For the month of **June 2018**)
(Part-I Unclassified)

<u>Ministry / Department</u>: Department of Scientific and Industrial Research (DSIR)

MAJOR ACHIEVEMENTS DURING THE MONTH OF JUNE, 2018:

DEPARTMENTAL ACTIVITIES

- 1. Industrial R&D Promotion Programme Recognition/ Registration and renewal of In-house R&D in Industry
 - 10 in-house R&D units of industries were granted recognition as well as registration certificates.
 - 115 in-house R&D units of industries were granted renewal of recognition and 114 were granted renewal of registration certificates.

Scientific and Industrial Research Organization (SIROs) Recognition/ Registration and Renewal of SIROs

 04 SIROs were granted recognition and 03 were granted registration certificates.

Fiscal Incentives for Scientific Research

- 22 industries were approved for issuance of form 3 CM under Section 35(2AB) of IT Act under weighted tax deduction.
- 62 reports in form 3CL submitted to CCIT under Section 35(2AB) of IT Act for weighted tax deduction on industrial R&D involving a total amount of Rs.133748.21 Lakhs.

AUTONOMOUS BODY

- 1. Council of Scientific & Industrial Research (CSIR)
- 1.1 CSIR-NEERI: Jointly developed 'GREEN DISPO-An Eco-Friendly Sanitary Napkin Incinerator.

CSIR-NEERI, Nagpur has launched Green Dispo – an eco-friendly sanitary napkins incinerator which has been jointly developed with ARCI, Hyderabad and Sowbel Aerothermics (SA). It is a very efficient batch type incinerator suitable for use in rural and urban schools, colleges, hostels, office and public/ community places. The device is a unique combination of ceramic processing and shaping expertise of ARCI, Hyderabad and innovative energy efficient design and manufacturing capability of M/s Sowbel Aerothermics and environmental engineering and gas emission control expertise of CSIR-NEERI, Nagpur.

1.2 CSIR-IICB : Designed Novel Gold Nanocomplex for Cancer Drug Delivery.

CSIR-IICB, Kolkata has designed an efficient drug nano carrier using gold nanoparticles coated with a simple organic molecule (porphyrin). The nano carrier was found to effectively deliver doxorubicin (anti-tumor drug) to the nucleus of the diseased cell and bring about programmed cell death.

1.3 CSIR-SERC : Developed Geopolymer Concrete Building Block Technology.

CSIR-SERC, Chennai has developed a geo-polymer concrete (GPC) building block technology. Fly ash obtained from thermal power stations that use coal, granulated slag from blast furnace and geoactivator are the major materials for making the blocks. It is a green alternative to cement. The technology has been transferred to M/s Kiran Global Geocements Ltd.,

1.4 CSIR Intellectual Property

The Patent position for this month is given below:

Patents Filed		Patents Granted	
India	Abroad	India	Abroad
16	28	12	48

1.5 Honors & Awards

- (i) Dr. Sai Prathima Parvathaneni, CSIR-IICT, Hyderabad has received Young Scientist Award from the Telangana Academy of Sciences, Hyderabad and also from AP Akademi of Sciences, Amaravati.
- (ii) CSIR-IIP, Dehradun has received Innovation Award for its innovative technology entitled 'Conversion of Waste Plastics to Value-Added Products. The award was given by the Hon'ble Governor of Uttarakhand.

1.6 Significant Events

(a) Conferences, Workshops Organized

- (i) CSIR has organized two days CSIR-Directors Industry Leaders Interaction Meet which has focused on theme entitled `Innovative Business Strategies and Technology Marketing Mechanisms'.
- (ii) CSIR has conducted two-days' workshop entitled `CSIR Technologies and Knowledgebase for creating and supporting Micro, Small & Medium Enterprises and Start-ups in North East region' in Guwahati with Federation of Industry & Commerce of North-Eastern Region (FINER) as the Industry Partner. This served as a unique initiative for Northeast entrepreneurs with an emphasis on urgent need of region to be exposed to innovative and cost effective technologies so that industry can be competitive on pan India basis.
- (iii) CSIR-CGCRI, Kolkata has organized jointly with Vivekananda Institute of Environment & Management, Kolkata, a two-day national conference on

- 'Engineering & Technology for Rebuilding India'.
- (iv) CSIR-IIP, Dehradun has organized two days National Technology Day Symposium on Shaping the Energy Future: Challenges and Opportunities (SEFCO-2018). The Institute also has conducted training programme from March 26-May 11, 2018 for Chemical Engineers of Indian Oil Corporation Limited (IOCL), New Delhi on Petroleum Refining Technology.
- (v) CSIR-IMT, Chandigarh has organized a one day symposium entitled 'Antimicrobial Resistance (AMR): Need for a united Front' which aimed at developing new collaborative research networks for building multiinstitutional projects with specific focus on the discovery of novel antibacterial, exploring policy measures and developing tools to tackle AMR issues in India.
- (vi) CSIR-NIO, Goa has organized three days Indo-USA Colloquium entitled` Earth Observations and Sciences for Society and Economy'

(b) Agreements/Memorandum of Understanding Signed

- (i) CSIR-CECRI, Karaikudi has signed an MoU with M/s Rassi Solar Power P Ltd., Bengaluru for the transfer of technology for India's first Li-ion battery project in the presence of Dr. Harsh Vardhan, Hon'ble Minister for Science and Technology and Earth Sciences. The Hon'ble Minister said this is a validation of the capabilities of CSIR and its laboratories to meet technology requirements of industries in critical areas.
- (ii) CSIR-CMERI, Durgapur has signed a MoU with ESSCI, New Delhi to set up Centre of excellence in Mechatronics.
- (iii) CSIR-IICT, Hyderabad has signed a MoU with M/s Maithri Aquatech Pvt. Ltd, Hyderabad for the development of low cost indigenous Atmospheric Water Generator (AWG).
- (iv) CSIR-IIP, Dehradun has signed a MoU with with Bharat Petroleum Corporation Limited, Noida for 'Development of Catalyst for Continuous Catalyst Regeneration (CCR) Reforming Process'; and for 'Study on Solvent De-asphalting of Vacuum Residue'.
- (v) CSIR-NPL, New Delhi and NRDC, New Delhi has signed a Technology Licensing Agreement with M/s Vizag Bio-Energy Fuel P. Ltd., Visakhapatnam for commercializing of Recycling of waste Plastic into useful Tiles.

2. Consultancy Development Centre (CDC)

- Study on "Need based Interventions for better marketability of handicraft clusters in U.P".- Office of Development Commissioner (DC) has accorded its acceptance on the Inception Report submitted by CDC.
- Contents development on the course 'Certificate Programme in Technology Management'. The final course material submitted by the consultant was circulated to Project Review Committee(PRC) and the same has been accepted.

PUBLIC SECTOR ENTERPRISES

1. National Research Development Corporation (NRDC)

- NRDC has been assigned eight technologies on (i) Catharanthus roseus leaf extract, method of producing Catharanthus roseus extract, and obesity improving agent (ii) Mechanism for enhancing stability in female bicycle on sudden braking by tilting saddle nose automatically (iii) Mechanism for enhancing stability of bicycle by steering back handlebar automatically (iv) Development of a continuous jaggery making machine (v) A portable optical fiber instrument for instant petrol purity detection (vi) Designed 2D graphitic sheet for viscous oil removal using magnet (vii) Integrated and automated set up for preparation and vending of panipuri (viii) Magnetic secondary nanostructure as contrast agent for Magnetic Resonance Imaging (MRI) by Tejpur University, Tejpur. NRDC has also been assigned four technologies on (i) A drilling machine and a method of drilling (ii) A plug guage (iii) A fitness bracelet (iv) Method of preventing baggage theft and facilitating hassle free collection of baggage at airports by Lovely Professional University, Punjab. NRDC has also licensed technologies on (i) 'Seaweed Extract Fertiliser' to M/s Dhruv Agro Industries, (ii) 'Geopolymer blocks' to M/s Kiran Global Geocements Limited and (iii) 'Recycling of Waste Plastic Bags into useful tiles' to M/s Vyzag Bio-Energy Fuel Pvt. Ltd., Vizag.
- NRDC has collected a premia of Rs. 17.00 Lakh from licensing of the technologies during June, 2018. NRDC has also collected a royalty of Rs. 49.08 Lakh during June, 2018 on account of commercialization of technologies assigned to NRDC by public funded research organizations and others.

2. Central Electronics Limited (CEL)

 Central Electronics Limited continued its activities in the area of solar photovoltaic systems, electronic gadgets for Railway and other electronic equipment/components etc. The company manufactured electronic components/systems/ SPV products worth Rs 1066.87 Lakhs and realized sale of such items worth Rs.940.66 Lakhs during June, 2018.
