

No. DSIR/MS/2018/11
Government of India
Ministry of Science & Technology
Department of Scientific & Industrial Research
MONTHLY SUMMARY FOR THE CABINET
(For the month of **November 2018**)
(Part-I Unclassified)

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

MAJOR ACHIEVEMENTS DURING THE MONTH OF NOVEMBER, 2018:

DEPARTMENTAL ACTIVITIES

1. Industrial R&D Promotion Programme

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

- 11 in-house R&D units of industries were granted recognition as well as registration certificates.
- 10 in-house R&D units of industries were granted renewal of recognition as well as renewal of registration certificates.

Scientific and Industrial Research Organization (SIROs)

Recognition/ Registration and Renewal of SIROs

- 03 SIROs were granted recognition and 01 was granted registration certificates.
- 07 SIROs were granted renewal of recognition and 04 were granted renewal of registration certificates.

Public Funded Research Institution (PFRIs)

Registration and Renewal of PFRIs

- 07 PFRIs were granted renewal of registration.

Fiscal Incentives for Scientific Research

- 15 industries were approved for issuance of form 3 CM under Section 35(2AB) of IT Act under weighted tax deduction.
- 100 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.557981.17 Lakhs.

AUTONOMOUS BODY

1. Council of Scientific & Industrial Research (CSIR)

1.1 CSIR-NCL : Developed Cellulose Nanofibres from Bagasse to Control Release of Pesticides

CSIR-NCL, Pune has developed an environment-friendly, controlled release formulation system for applying agrochemicals in agricultural fields. The

system has been developed by blending sugarcane bagasse with gelatinized maize starch and urea formaldehyde to form nano-composite granules. Dimethyl phthalate (DMP), an insect repellent and eco-parasiticide has been encapsulated within the granules. The granules were applied in the field, starch in them absorbs water, swells and release the pesticide at a controlled rate. Cellulose nanofibres from bagasse enhanced the efficiency of the system.

1.2 CSIR-NCL & IIT Roorkee : Organic Dyes Developed to Increase Efficiency of Solar Cells

CSIR-NCL, Pune in collaboration with IIT, Roorkee has developed organic dyes which enhances the efficiency of Dye-Sensitized Solar Cells (DSSC). The cost of DSSC is much lower than the earlier generations of photovoltaic.

1.3 CSIR-NEIST : Technology Transfer of Biofertilizer

CSIR-NEIST, Jorhat has transferred a technology on production of OP-12 Biofertilizer to M/s Yespie & Lyeon Mumbai. It contains rhizobacteria which increases nitrogen and phosphorous in normal and water deficit condition and it will help farmers to increase their income with increased productivity. It is suitable for application in crops viz., rice, potato, black gram, green gram, green pea, vegetable, tea and maize.

1.4 CSIR-NBRI : Developed Herbal Hair Colour

CSIR-NBRI, Lucknow has developed the composition of herbal hair colour as colouring agent for colouring the hairs. The composition comprises extracts/ herbal powder of plants blended at definite conditions. The technology has been licensed to M/s KTC Products Ltd., Baddi, H.P. The hair colour will also serve as a hair tonic for the natural growth of hairs. It is an antioxidant having anti dandruff properties and safe to use with no side effects on skin.

1.5 CSIR-IMTECH : Setting up of Academia-Industry-led 'High-End Skill Development Centre'

CSIR-IMTECH, Chandigarh signed an MoU with Merck, a leading German science and technology company, to establish a 'High End Skill Development Centre' in Chandigarh. Equipped with the next generation technologies, like gene editing and single-molecule biomarker detection, the centre will help accelerate healthcare research and train Indian students and researchers in latest life science technologies and make them industry ready. CSIR-IMTECH will use their expertise in Life Science to build a centre which will help researchers and students develop advanced competencies and analytical skills required for life science research. This will be a first of its kind, Academia-Industry-led, 'High End Skill Development Centre' laboratory in Chandigarh that has been established to

augment Government of India's initiative for skilling India in the area of Life Science

1.6 CSIR Intellectual Property

The Patent position for this month is given below:

Patents Filed		Patents Granted	
India	Abroad	India	Abroad
03	43	10	34

1.7 Awards

- (i) Prof. Sunil Kumar Singh, Director CSIR-NIO, Goa has been elected as a Fellow of the Indian National Science Academy (INSA), New Delhi.
- (ii) Prof. S. Venkata Mohan, Scientist, CSIR-IICT, Hyderabad has been selected for the prestigious Vasvik Award for the year 2018 in the category of Environmental Science and Technology.
- (iii) Dr. V. Saraswarthy, Scientist, CSIR-CECRI, Karaikudi has been given Corrosion Awareness Award-2018 by Nace Gateway India for her contribution in the field of Corrosion Science and Technology.
- (iv) Dr. Rajnish Kumar Chaturvedi, Scientist, CSIR-IITR, Lucknow has received UP Vigyan Ratna Award.
- (v) CSIR-NAL, Bengaluru received JEC Asia-2018 Innovation Award under Aerospace-Structure Category for the work related to Innovative Skin-Ribs Cocured Engine Bay Door.

1.8 Significant Events

(a) Conferences, Workshops Organized

- (i) CSIR-CIMAP, Lucknow has been designated as the co-ordination center for medicinal plants by Indian Ocean Rim Association-Regional Centre for Science and Technology Transfer (IORA-RCSTT).
- (ii) CSIR-CIMFR, Dhanbad organized a two-day workshop on 'Opportunities and challenges in beneficiation and carbonization of Low Volatile Coking Coals of India' and a two-day national seminar on 'Rock Blasting Techniques-Challenges and Opportunities' (RBT-2018).
- (iii) CSIR-IICT, Hyderabad in association with Biotech Research Society and International Bioprocessing Association organized an international conference on 'Biotechnological Research and Innovation for Sustainable Development'.
- (iv) CSIR-IIIM, Jammu organized a conference in association with Bombay Hemp Company on 'Cannabis R&D in India: A Scientific, Medicinal & Legal Perspective'.
- (v) CSIR-NIO, Goa jointly organized a SCOR-InterRidge workshop with ESSO-National Centre for Polar and Ocean Research, Goa on 'Mid Ocean Ridges and other Geological Features of the Indian Ocean'.

- (vi) CSIR-NEIST, Jorhat organized: (i) an awareness programme on 'Conservation, cultivation, sustainable utilization and nutritional value of sago palm pulp'; (ii) a training programme on 'Cultivation & processing of high-yielding Lemongrass and Citronella'; and (iii) a training programme on cultivation of mushroom and production of vermicompost.
- (vii) CSIR participated in 19th IUFOST World Congress Food Science held in Navi Mumbai and received Exhibitor Award for base content and information.
- (viii) CSIR-NIIST, Thiruvanthapuram organized Polymer Conference for Young Researchers.

(b) Agreements/Memorandum of Understanding Signed

- (i) CSIR-CIMAP, Lucknow has signed an agreement with US based Research Institute for Fragrant Materials (RIFM) on 'Improving the quality of fragrant oils'.
- (ii) CSIR-CECRI, Karaikudi has signed an MoU with Tata Chemicals Ltd on 'Scaling up of manufacturing cathode materials for lithium-ion cells.'
- (iii) CSIR-NEIST, Jorhat has signed Lease Agreement with M/s PS Enterprise, Jorhat for the technology on the production of Modular bricks from Brahmaputra River Bed Sand.

2. Consultancy Development Centre (CDC)

- Certificate Programme on Consulting on Franchise Scheme – Result announced for the Certificate Programme in Management Consulting conducted by Dronocharya Group of Institutions, Greater Noida from 25th to 28th September, 2018.

PUBLIC SECTOR ENTERPRISES

1. National Research Development Corporation (NRDC)

- NRDC has been assigned fifteen technologies by ICAR-Indian Institute of Spices Research (IISR), Kozhikode. NRDC has collected a royalty of Rs.110.43 Lakh during November, 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. 2336.92 Lakhs and realized sale of such items worth Rs.2284.16 Lakhs during November, 2018. CEL has reported major achievements during November 2018 for (i) Development of Soft Armour Panel and cover of Bullet Proof Jacket and Bullet proof vest and (ii) Development of Piezo Element (Fr=200 KHz) for Sonar Antenna Assy.
