

No. DSIR/MS/2019/03
Government of India
Ministry of Science & Technology
Department of Scientific & Industrial Research
MONTHLY SUMMARY FOR THE CABINET
(For the month of **March, 2019**)
(Part-I Unclassified)

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

MAJOR ACHIEVEMENTS DURING THE MONTH OF MARCH, 2019:

DEPARTMENTAL ACTIVITIES

1. Industrial R&D Promotion Programme

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

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

Scientific and Industrial Research Organization (SIROs)

Recognition/ Registration and Renewal of SIROs

- 2 SIROs were granted recognition certificates and one was granted registration certificate.
- 83 SIROs were granted renewal of recognition certificates and 68 were granted renewal of registration certificates.

Public Funded Research Institution (PFRIs)

Registration and Renewal of PFRIs

- 01 PFRI was granted registration.
- 02 PFRIs were granted renewal of registration.

Fiscal Incentives for Scientific Research

- 64 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.30284.55 Lakhs.

AUTONOMOUS BODY

1. Council of Scientific & Industrial Research (CSIR)

1.1 Hon'ble Vice President Visited CSIR-NIO, GOA

Shri Venkaiah Naidu, Hon'ble Vice President of India visited CSIR-NIO, Goa and addressed the gathering. He said that a focused approach in areas such as minerals and energy from oceans can help India become the third largest economy in the next 1-15 years. India should tap the enormous potential of 'blue economy' to achieve higher economic growth and initiate programs for sustainable harnessing of ocean resources, he added. However, while pursuing 'blue growth', every effort must be made by all

stakeholders, including private and public sectors, to prevent further degradation of the ocean and its ecosystems, the Vice President said.

Shri Naidu said there is a need to conserve oceans and the CSIR-NIO should play a major role in meeting the challenges to understand different ocean processes due to climate change.

1.2 CSIR-IIP : Design and Developed Safe Burners for PNG

CSIR-IIP, Dehradun has developed the country's first gas burner, specially designed for piped natural gas (PNG). The dedicated PNG domestic cooking burner is 20% more efficient than retrofitted LPG burner. The burner has been designed for power capacity options covering the entire range of domestic cooking burners available in Indian market. The key design modifications and dimensional changes allow it to be really fitted with conventional stove body. Its energy conservation potential has been demonstrated through successful trials which have been conducted at six different locations over a period of six months across Delhi-NCR region.

1.3 CSIR-NPL : Developed Green 'BIOCOAL'

CSIR-NPL, New Delhi has developed a process for conversion of paddy biomass into green 'biocoal' through the torrefaction process. The biocoal which has the calorific value equivalent to that of bituminous coal can be used as an alternative fuel in thermal power plants. If adopted, the technology can help reduce not only the consumption of fossil fuels but also cut down the environmental pollution and greenhouse gas (GHG) emission. Similarly, the residue of other crops like wheat, sugarcane, oilseed maize and cotton which is estimated to be around 500 million tonnes in the country, can be used as biocoal in thermal plants after torrefaction.

1.4 CSIR-NPL: Development of Low-Pressure Chemical Vapour Deposition (LPCVD) Device

CSIR-NPL, New Delhi has designed a low-pressure chemical vapour deposition (LPCVD) device that allows high quality, single-layer graphene measuring 4 inches in length and 2 inches in width to be grown. The single layer graphene is metrology-grade and can be used in next-generation quantum devices. The thickness of a single layer is 0.34 nanometer and the average grain size of graphene is 1-3 micrometers.

1.5 CSIR Intellectual Property

The Patent position for this month is given below:

Patents Filed		Patents Granted	
India	Abroad	India	Abroad
08	03	15	14

1.6 Honors & Awards

- (i) Dr. Prabhat Ranjan, Principal Scientist, CSIR-CDRI, Lucknow has received the Tata Innovation Fellowship for the year 2018-19 for his contributions in

research on cancer, osteoporosis, etc.

- (ii) Shri Sundaresh, Scientist, CSIR-NIO, Goa has been conferred with the Sir J.C. Bose Memorial Award.

1.7 Significant Events

(a) Conferences, Workshops Organized

- (i) CSIR-IHBT, Palampur organized a week-long capacity building programme for North Eastern Region Community Resource Management Project (NERCORMP) Communication on centralization of low chilling Varieties of apple and their post-harvesting management.
- (ii) CSIR-IMMT, Bhubaneswar organized a week-long skill development programme on "Mechanical characterization and Non-destructive Evaluation of Materials"
- (iii) CSIR-NEERI, Nagpur in collaboration with TiE organized a two-day Brainstorming event on "Water and Wastewater Start-ups Ideas" so as to encourage young entrepreneurs and start-ups in the water sector.
- (iv) CSIR-NISTADS, New Delhi jointly with Kaziranga University organized a three-day National Summit on Sustainable and Sustainable (NESIDS 2019) with the theme entitled "Bio-Economy for Sustainable and Inclusive Development of North-East".
- (v) CSIR-NML, Jamshedpur conducted a month-long welding training programme on 'Manual Metal Arc Welding and Gas Cutting'.

(b) Agreements/Memorandum of Understanding Signed

- (i) CSIR- IITR, Lucknow signed MoU with Gujarat University for collaboration in academic programmes through the exchange of students as well as faculty.
- (ii) CSIR-CBRI, Roorkee signed an agreement with the Research and Development Centre of Iron and Steel (RDCIS), Steel Authority of India (SAIL), Ranchi for Performance Evaluation of Fire Resistant Structures under fire condition.

PUBLIC SECTOR ENTERPRISES

1. National Research Development Corporation (NRDC)

- NRDC has been assigned eleven technologies by National Institute of Ocean Technology (NIOT), Chennai and one technology by S.N. Bose National Centre for Basic Sciences. NRDC has also licensed one technology to M/s S.S. Associates, Bangalore. NRDC has collected a premia of Rs. 2.00 Lakh and a royalty of Rs. 89.87 Lakh from licensing of technology during March, 2019.

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.7686.62 Lakhs and realized

sale of such items worth Rs.8276.95 Lakhs during March, 2019. Company has executed 24.565 MW Solar Power Project at different sites in Maharashtra during March, 2019.
