

No. DSIR/MS/2017/02
Government of India
Ministry of Science & Technology
Department of Scientific & Industrial Research
MONTHLY SUMMARY FOR THE CABINET
(For the month of **February 2018**)
(Part-I Unclassified)

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

MAJOR ACHIEVEMENTS DURING THE MONTH OF FEBRUARY, 2018:

DEPARTMENTAL ACTIVITIES

1. Industrial R&D Promotion Programme

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

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

- 04 SIROs were granted recognition and 03 were granted registration certificates.
- 03 SIROs were granted renewal of recognition and 02 were granted renewal of registration certificates.

Public Funded Research Institution (PFRIs)

Registration and Renewal of PFRIs

- 03 PFRI were granted renewal of registration.

Fiscal Incentives for Scientific Research

- 05 industries were approved for issuance of form 3 CM under Section 35(2AB) of IT Act under weighted tax deduction.
- 27 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.64221.41 lakhs.

AUTONOMOUS BODIES

1. Council of Scientific & Industrial Research (CSIR)

1.1 CSIR to set up its Centre in Amaravati

CSIR and Andhra Pradesh State Government will jointly establish a Centre for Scaling up and Demonstration of Relevant CSIR Technologies in Amaravati. CSIR Director General along with directors of CSIR laboratories

and senior scientists met Hon'ble Chief Minister Shri N. Chandrababu Naidu to work out the details. CSIR would submit a Detailed Project Report (DPR) for establishing the centre to the AP State Government.

1.2 CSIR-CIMAP : Developed New Varieties of Ashwagandha

CSIR-CIMAP, Lucknow has developed improved varieties of Ashwagandha with commercially accepted root quality and a new breed of mucuna (kewanch). Ashwagandha is a major natural source of withanolides, a life strengthening adaptogen.

1.3 CSIR-CRRI : Developed Highway Capacity Manual (Indo-HCM)

CSIR-CRRI, New Delhi has developed a Highway Capacity Manual known as Indo-HCM on the basis of an extensive, country-wide study of the traffic characteristics on different categories of roads like single lane, two lanes, multi-lane urban roads, inter-urban highways and expressways and the associated intersections on these roads. The Hon'ble Union Minister for Road Transport and Highways, Shri Nitin Jairam Gadkari has released country's first ever Highway Capacity Manual (HCM) which will guide road engineers and policy makers about road expansion. The study involved seven academic institutions including IIT Roorkee, IIT Bombay, IIT Guwahati, School of Planning and Architecture, Indian Institute of Engineering and Science and Technology, Sardar Vallabhai Patel National Institute of Technology and Anna University.

1.4 CSIR-NPL : New Process on Indigenous Anti-Counterfeiting Ink Developed

CSIR-NPL, New Delhi has developed a novel process for manufacturing a new type of security ink that can help prevent counterfeiting of currency. The ink eliminates the need for special surface. It is printable on all papers and surfaces. The ink can be tested under two types of lights: the normal ultraviolet (UV) light and under Infrared (IR) light. This dual-mode glowing adds to its secure nature. The ink is formulated from a cost effective, dual-mode luminescent composite pigment. Besides making currency secure, the novel ink can also be used in printing labels of pharmaceuticals or in printing important documents. The ink has been developed in response to 'Make-in-India'.

1.5 CSIR-NAL : Successful Test Flight of SARAS Aircraft

CSIR-NAL, Bengaluru has developed 14 seater - SARAS, an indigenous light transport aircraft which has completed two test flights successfully in Bengaluru. Hindustan Aeronautics Limited (HAL) has been identified as the production agency for the military version of SARAS. The Hon'ble Union Minister of Science & Technology and Earth Sciences, Dr. Harsh Vardhan witnessed the second test flight and said in his address that SARAS Mk-2 will be ideal for connectivity under Centre's UDAAN Scheme and for variety of other applications like air taxi, aerial search/ survey, executive transport, disaster management, border patrol, coast guard, ambulance and other community services. Dr. Harsh Vardhan also visited CSIR-NAL's Renewable Energy Farm and witnessed the Wind Solar Hybrid system and technologies developed by NAL for societal benefits.

1.6 CSIR Intellectual Property

The Patent position for this month is given below:

Patents Filed		Patents Granted	
India	Abroad	India	Abroad
8	8	13	10

1.7 Honors & Awards

Dr. Srinivavsa Reddy, Scientist, CSIR-NCL, Pune and Dr. Rajan Shankarnarayanan, Scientist, CSIR-CCMB, Hyderabad have received Sun Pharma Research Award in the field of pharmaceutical sciences

1.8 Significant Events

(a) CSIR in News

CSIR and its constituent laboratories have celebrated National Science Day on 28th February by organizing Open Day, Expert lectures, seminars, workshops, exhibitions etc

(b) Conferences, Workshops Organized

- (i) CSIR-CCMB, Hyderabad jointly with society for Mitochondrial Research and Medicine –India has organized a one-day mini-symposium on ‘mitochondrial medicine’.
- (ii) CSIR-CSIO, Chandigarh has organized 2nd Workshop on ‘Evaluation of Measurement Uncertainty and ISO-17025 for days.
- (iii) CSIR-CMERI, Durgapur has organized: (i) National conference on Advanced Materials, Manufacturing and Metrology (NACMM-2018) which provided opportunity of Industry – Academia research collaboration (ii) a National Conference on Graphene and Functional Materials (NCGFM-2018) with an objective to discuss the future trends and role of Graphene and smart functional materials in societal applications for sustainable developments. CSIR-CMERI Centre of Excellence for Farm Machinery (CoFEM), Ludhiana held a technology dissemination workshop on solid waste fermentation of kitchen waste using a biogas plant. An innovative biogas plant developed by CSIR-CMERI in association with CoFEM was also showcased during the workshop.
- (iv) CSIR-NEERI, Nagpur and BITS, Pilani have jointly organized a national symposium on ‘Emerging Environmental Challenge: An Engineering Approach (EEC-2018)’. The objective is to focus on emerging environmental issues in India and provide necessary and relevant engineering solutions for remediation.
- (v) CSIR-NIO, Goa has organized: (i) a Marine Robotics School for six days in which many academic institutes, research organizations, Indian Navy and Naval Research Laboratories participated; and (ii) a two-day interactive workshop on skill development in fisheries & agriculture with an objective to create awareness. A site visit to green mussel culture demonstration unit

was also initiated for hands-on training which was also a part of the workshop.

- (vi) CSIR-IGIB, New Delhi has organized a conference on 'Big Biological Data to Actionable Insights' with an objective to bring together personnel working in the field of genomics data.

© **Agreements/Memorandum of Understanding Signed**

- (i) CSIR-CIMAP, Lucknow has signed an MoU with the Indian Ocean Rim Association's regional Center for Science and Technology Transfer for designating CSIR-CIMAP as the coordinating Centre on Medicinal Plants.
- (ii) CSIR-IMMT, Bhubaneswar has signed an MoU with M/s ZeW GHZ technologies Pvt. Ltd New Delhi for R&D collaboration towards optimization of technology to control emission from fossil fuels used in thermal power plants of India.
- (iii) CSIR-NAL, Bengaluru has signed a non-exclusive license agreement with M/s Datasol, Bengaluru for production and Marketing of the desktop autoclave.

2. Consultancy Development Centre (CDC)

2.1 Funded Project

- Certificate programme on Technical Consulting was organized from 20th – 23rd Feb, 2018 at CSIR HRDC, Ghaziabad for scientists of various CSIR – Labs.

PUBLIC SECTOR ENTERPRISES

1. National Research Development Corporation (NRDC)

- NRDC has been assigned technology on 'Nano-Lubricant VGIS 68 Grade Oil' by NTPC, India. NRDC has licensed technologies on (i) 'Tutip Toilet' to M/s Natural Waste Management Pvt. Ltd , A.P. and M/s Fractal Enterprises, Vizag ; (ii) 'Seaweed Extract Fertiliser' to M/s Asia Dawn Biocare; (iii) 'Ayush-82' to M/S Herbal Ayurveda & Research and (iv) 'Nata-de-coco production from microbial fermentation of coconut water through enrichment techniques' to M/s Cavin Estates Pvt Ltd. NRDC has collected a premia of Rs. 23.00 Lakh from licensing of these technologies during February, 2018.
- NRDC has also collected a royalty of Rs. 21.92 Lakh during February, 2018.

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 has manufactured electronic components/systems/ SPV products worth Rs.1991.22 Lakhs and realized sale of such items worth Rs. 2261.14 Lakhs during February, 2018
