

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, 2017**)
(Part-I Unclassified)

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

MAJOR ACHIEVEMENTS DURING THE MONTH OF FEBRUARY, 2017:

DEPARTMENTAL ACTIVITIES

1. Industrial R&D Promotion Programme

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

- 17 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

- 06 SIROs were granted recognition and 03 were granted registration certificates.

Public Funded Research Institute (PFRIs)

Registration and Renewal of PFRIs

- 01 PFRI was granted registration certificate.
- 09 PFRIs were granted renewal of registration certificates.

Fiscal Incentives for Scientific Research

- 06 industries were approved for issuance of form 3 CM under Section 35(2AB) of IT Act under weighted tax deduction.
- 59 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.112642.10 lakhs.

2. Promoting Innovations in Individuals, Start-ups and MSMEs (PRISM)

- The projects on 'Vision Aid Electronic Wand' and 'Scaled prototype development for a functionally upgraded 72NM²/ day Bio-CNG Plant for Indian Conditions' supported under PRISM Scheme has been successfully completed.

AUTONOMOUS BODIES

1. Council of Scientific & Industrial Research (CSIR)

1.1 CSIR-CFTRI Developed Low Glycaemic Index Foods

CSIR-CFTRI, Mysuru has developed the technology to prepare low Glycaemic Index (GI) foods like bread, muffins, cookies, noodles etc. for gastronomic indulgence by hyperglycaemic diabetes patients without harming their health.

1.2 CSIR-CSIO Developed Prosthetic Device for Transfemoral Amputees

CSIR-CSIO, Chandigarh has transferred the electronic knee technology to M/s Walnut Medical Pvt. Ltd. Ambala City, for commercial manufacturing and the cost is low compared to imported devices. The device has a built in micro-controller and sensors to assist persons involved in activities requiring high level of stance stability. It is light weight and requires less effort on the part of the physically challenged. The device can help amputees walk at different speeds.

1.3 CSIR-CIMFR : Discovery of Shale Gas Reserves

CSIR-CIMFR, Dhanbad has discovered shale gas in two areas in the Gondwana basin in Central India and Godavari basin. The total shale gas discovered so far in the country in these two basins is estimated to be about 63 Trillion Cubic Feet (TCF). It is considered as one of the best sources of non-conventional natural gas.

1.4 CSIR-CECRI Developed Lithium-Ion Battery

CSIR-CECRI, Karaikudi has made and developed the first indigenous lithium-ion battery in the country. This may reduce dependence on imported batteries.

1.5 CSIR Intellectual Property

The Patent position for this month is given below:

Patents Filed		Patents Granted	
India	Abroad	India	Abroad
9	10	13	28

1.6 CSIR-800 Contributions

- (i) CSIR-CSMCRI, Bhavnagar has organized a one day special seaweed cultivation training programme for Punnakayal village women.
- (ii) CSIR-NEIST, Jorhat has organized: (i) a skill development training on Low dust chalk pencil, liquid & solid deodorant, Banana fibre extraction and 'Wood care' etc. at Itanagar. It was aimed at providing technologies for income generation and socio-economic development that are economical, affordable, and green and have low investment; (ii) two training programmes on commercial cultivation of mushroom at Bongalmara, Laluk,

Assam and Itanagar;(iii) Training programme on “Medicinal & Aromatic Plants Cultivation” organized at Krishi Vigyan Kendra, Kathua & Jammu respectively for two days.

1.7 Significant Events

(a) CSIR in News

CSIR and its constituent laboratories have celebrated National Science Day on 28th February, 2017 by organizing Open Day, Expert lectures, seminars, workshops, exhibitions etc.

(b) CSIR-NAL @ AERO INDIA 2017

CSIR-NAL, Bengaluru participated in the Eleventh edition of Aero India held at Air Force Station, Bengaluru for three days. CSIR-NAL showcased its technologies which included HANSA aircraft, 55hp Wankel Rotary Engine, mini UAV, Carbon Fibre Composite Materials, DHVANI for marksmanship training, DRISHTI for airport runway visibility measurements etc. Hon'ble Defence Minister, Shri. Manohar Parrikar and Hon'ble Minister for Civil Aviation, Shri Ashok Gajapathi Raju visited CSIR-NAL stall and appreciated all the exhibits displayed. The SARAS simulator was inaugurated by Shri. Parrikar. The Hon'ble Minister for Science & Technology and Earth Sciences, Dr. Harsh Vardhan also visited the CSIR-NAL stall.

(c) Conferences, Workshops Organized

- (i) CSIR-CFTRI, Mysuru has organized a two days conference on 'Strategies for sustainable spice processing'.
- (ii) CSIR-CGCRI, Kolkata jointly with Indian Ceramic Society has organized 2nd international conference on 'Alumina and other Functional Ceramics (AOF-2017) for three days.
- (iii) CSIR-CLRI, Chennai jointly with Indian Leather Technologists Association (ILTA) hoisted the XXXIV International Union of Leather Technologists and Chemists Societies (IULTCS) Congress with the theme 'Science and Technology for Sustainability of Leather' at Chennai for three days.
- (iv) CSIR-NCL, Pune has organized an one day symposium on 'Advances in Organic Synthesis (AOS-2017).
- (v) CSIR-NIO, Goa has organized: (i) 'National workshop on mud banks of Kerala: Status, Issues and Societal Concerns'; (ii) National workshop on "Recent advances and future studies on Coastal Processes and Beach Erosion' in Visakhapatnam to take the stock of the recent advances in the studies of coastal processes and beach erosion in the coastal waters of Andhra Pradesh, with a special emphasis on Visakhapatnam coast.

(d) Agreements/Memorandum of Understanding Signed

- (i) CSIR-CCMB, Hyderabad, has signed an MoU with the Department of Medical Education (DME) and its associated colleges in Telangana with an aim to combine clinical experience in medical colleges and hospitals with research institutions for improved treatment and better prognosis tools. As per the MoU, CSIR-CCMB would provide specific research programmes for faculty of both institutions.
- (ii) CSIR-IICT, Hyderabad has signed an agreement with: (i) Evolve, a leading

biotechnology drug discovery company, Switzerland to collaborate in medicinal chemistry and cell biology; and (ii) S R Rotary Ankleshwar, Gujarat (SRICT) to promote academic and research cooperation between the two institutes.

- (iii) CSIR-NIO, Goa has signed an MoU with: (i) Dnyanprassarak Mandal's college (D.M.C) of Arts, Science Commerce and Management Studies, Assagao-Goa for academic and research collaboration; (ii) National Research Institute of Sustainable Development Studies, France on Physical and Biogeochemical Oceanography, Meteorology and Climate Variability in the India Ocean.

(e) Honor & Awards

- (i) Dr. S. Chandrasekhar, Director, CSIR-IICT, Hyderabad has been awarded the 'Goyal Prize' in Chemical Sciences instituted by Kurukshetra University.
- (ii) Dr. Pratima Kassarkar and Dr. Abhishek Saha, Scientists, CSIR-NIO, Goa, have been selected to receive the National Geoscience Award and the National Geoscience Award (Young Scientist Category) respectively for the year 2016 by the Ministry of Mines, Government of India. While Dr. Kessarkar will receive the award in the category of ocean development and marine geology for her significant contribution in the field of earth sciences, Dr. Saha will receive the award in the category of Young Scientist Award for his significant contributions in Geosciences.
- (iii) Dr. Rakesh Kumar, Chief Scientist, CSIR-NML, Jamshedpur has received Indian Institute of Mineral Engineers (IIME) mineral/coal benefaction award for the year 2016 for his contribution in the field of mineral engineering.

PUBLIC SECTOR ENTERPRISES

1. National Research Development Corporation (NRDC)

- National Research Development Corporation (NRDC) has been assigned eight technologies by CSIR-NIO, Goa . The details are given below

S No.	Technology
1	Autonomous Vertical Profiler (AVP) for profiling coastal waters.
2	Controlled thruster driven Autonomous Underwater Vehicles (AUV) for oceanographic exploration and profiling.
3	Integrated Coastal Observation Network (ICON) with near real time reporting internet accessible weather station.
4	A novel system for seafloor classification using Artificial Neural Network (ANN) hybrid layout with the use of unprocessed multi-beam backscatter data.
5	Marine bacteria to decolorize and detoxify textile dyes.
6	Melanin from sponge associated bacteria .
7	Antibacterial molecule.
8	Low Cost Multipurpose Multichannel Data Logger Unit.

- NRDC has licensed three technologies and collected a premia of Rs.30.00 Lakh from licensing of three technologies during February, 2017. The details are as given below :

S No.	Licensee	Technology	Rs.
1	M/s Ridhi Sidhi Medicare	Ayush – SG	10,00,000
2	M/s Ridhi Sidhi Medicare	Ayush -82	10,00,000
3	M/s Ridhi Sidhi Medicare	Anti-Arthritis	10,00,000

- NRDC collected royalty of Rs.19.19 Lakhs during February, 2017.

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.3784.91 Lakhs and realized sale of such items worth Rs.3820.37 Lakhs during February, 2017. The company has developed Solar Golf Cart, Pedal Assisted Solar Rickshaw and installed aluminium module on corrugated roof.
