

No. DSIR/MS/2017/01
Government of India
Ministry of Science & Technology
Department of Scientific & Industrial Research
MONTHLY SUMMARY FOR THE CABINET
(For the month of **January, 2017**)
(Part-I Unclassified)

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

IMPORTANT POLICY DECISIONS TAKEN AND MAJOR ACHIEVEMENTS DURING THE MONTH OF JANUARY, 2017:

DEPARTMENTAL ACTIVITIES

1. Industrial R&D Promotion Programme

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

- 21 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

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

Public Funded Research Institute (PFRIs)

Registration and Renewal of PFRIs

- 14 PFRIs were granted registration certificates.
- 07 PFRIs were granted renewal of registration certificates.

Fiscal Incentives for Scientific Research

- 09 industries were approved for issuance of form 3 CM under Section 35(2AB) of IT Act under weighted tax deduction.
- 44 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.41, 237.35 lakhs.

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

- Around 15 innovators of PRISM Scheme participated in "Pride of India - Science Expo", which was concurrently organized during 104th session of Indian Science Congress, from 3rd to 7th January, 2017 at Sri Venkataeswara University, Tirupati. Innovators demonstrated various working models/prototypes of innovative technologies.

AUTONOMOUS BODIES

1. Council of Scientific & Industrial Research (CSIR)

1.1 CSIR Tableau at Republic Day Parade

Council of Scientific and Industrial Research (CSIR) showcased its tableau with the theme, 'CSIR@75: Touching Lives', as part of 68th Republic Day Parade on 26th January 2017 at Rajpath, New Delhi. CSIR presented the 75 years its journey of CSIR, with S&T and societal contributions to the nation. The CSIR tableau depicted its significant milestones since its inception.

1.2 CSIR-NBRI Developed New Varieties of Chrysanthemum

CSIR-NBRI, Lucknow has developed six new varieties of chrysanthemum of different colours and shapes. The varieties have been developed after research of over three years. Normally, chrysanthemum blooms in December but this variety is a late season variety that will bloom for two more months, till February. The six varieties are: Two of red colour with semi-tubular florets, brick red, bright yellow, light cream and dark yellow, light cream and dark yellow. All varieties were developed by using gamma radiation.

1.3 CSIR-NCL : Kashmiri Saffron Grown at Lab Level

CSIR-NCL, Pune has successfully grown saffron crocus in a greenhouse in Pune. The flowering was almost like that in Kashmir. The method for high-density greenhouse cultivation of saffron developed by CSIR-NCL is expected to benefit progressive farmers and agro-biotech industries. The method is suitable for places where the cool deficit is not too much as compared with Kashmir and can be managed by some degree of environmental control, using natural processes for cooling and some amount of freezing.

1.4 CSIR-CSIO Developed device for Microscopic Imagery

CSIR-CSIO, Chandigarh has developed a cost effective customised microprobe system (CMS) for application in high-end research. The device is used for microscopic image acquisition. The system enables optical and electro-optical testing of electronic and photonic components at the microscopic scale. The finished product and its technology have been handed over to Institute of Nano Science and Technology, Mohali, for laboratory use.

1.5 CSIR-CECRI developed Chemical treatment methodology to help Tamil Nadu Mineral's (TAMIN)

CSIR-CECRI, Karaikudi has developed a chemical treatment methodology for treating the 'tailing water' for Tamil Nadu Mineral's (TAMIN) Graphite beneficiation plant. The plant consumes about three lakh litres of water a day and struggled to operate the plant during drought. Adopting the 'simple method', CSIR-CECRI has demonstrated the efficacy of the technology in the plant and successfully converted about 45 lakh litres of tailing water. The recycled water was used in the plant and the quality of graphite concentrate

was not affected and there was also no harm to the employees, who dealt with the water. The plant produced 500 to 600 tonnes of graphite per month.

1.6 Portugal PM visited CSIR-NIO, Goa

Mr. Antonio Costa, Hon'ble Prime Minister of Portugal visited the CSIR-NIO, Goa and agreed upon to extend the existing collaborative research programmes as well as to initiate new programmes in the fields of marine robotics, global navigation systems and microbial biotechnology. The Prime Minister highlighted the cultural and scientific exchange with India and expressed keen interest in extending the joint research programmes between CSIR-NIO and Portuguese research institutions and assured his support in order to improve understanding of the oceanographic processes and utilization of its resources.

1.7 CSIR Intellectual Property

The Patent position for this month is given below:

Patents Filed		Patents Granted	
India	Abroad	India	Abroad
18	27	09	19

1.8 CSIR-800 Contributions

CSIR-NEIST, Jorhat has set up a Rural Technology Demonstration centre which was inaugurated by Prof CNR Rao, Eminent Scientist and Bharatratna. Low dust chalks, Banana fibre, Liquid deodorant cleaner and solid deodorant making machines were installed at newly built Rural Technology Demonstration centre. The technologies for the aforesaid products would be demonstrated to the rural entrepreneurs.

1.9 Significant Events

(a) Conferences, Workshops Organized

- (i) CSIR-AMPRI, Bhopal has organized two-day conference on 'Advances in Smart and Functional Materials culminated' at Bhopal.
- (ii) CSIR-CIMFR, Dhanbad has organized a five day training programme on new coal production technology.
- (iii) CSIR-NCL, Pune has organized the International conference on 'Sustainable development for energy and environment' 2017 (ICSDEE) in association with MIT Academy of Engineering, Alandi, Pune
- (iv) CSIR-NEIST, Jorhat has organized training programme on "Cultivation of Mushroom" for "Trinayan SHG" at Phulbari, Assam. About 25 nos. of farmers attended the programme.

(b) Agreements/Memorandum of Understanding Signed

- (i) CSIR-CSMCRI, Bhavnagar has signed an agreement with ONGC Energy Centre for Undertaking Collaborative R&D project entitled "Scale-up of I-S, ED based membrane processes for production and concentration of HI as Hydrogen source".

- (ii) CSIR-NML, Jameshedpur has signed agreement with Sri Lanka's John Keells Holdings plc for filing its first patent jointly with CSIR India, in the area of energy storage materials. The composite nanomaterial will be synthesized with raw materials found in Sri Lanka and has biocompatibility and low cost per unit of power stored as compared to similar materials.
- (iii) CSIR-IIP, Dehradun has signed an MoU with Bio-fuel Authority, State Government enterprise, Chhattisgarh for use of locally produced bio-fuel from the state as aviation fuel.

(c) Honors & Awards

- (i) Dr D. Ramaiah, Director, CSIR-NEIST, Jorhat has been elected Fellow of National Academy of Sciences India in the year 2016 for his important contribution in synthesizing near-infrared (NIR) absorbing squarines, porphyrins, chlorine and aza-BODIPY dyes for studying these as sensitizers and photodynamics therapeutical (PDT) applications.
- (ii) Dr Ram Avatar Maurya, Scientist, CSIR-NEIST Jorhat was awarded the NASI-Young Scientist Platinum Jubilee Award (2016) for his research work in Chemical Sciences by The National Academy of Sciences, India (NASI), Allahabad.

2. Consultancy Development Centre (CDC)

2.1 Funded Project:

NSIC (National Small Industries Corporation) - Applications being received from MSE (Micro & small enterprises) units and CDC is carrying out the Inspection for the same under the NSIC Single Purchase Registration (SPR) registration Scheme: Approx. 60 applications were processed during Jan, 2017.

PUBLIC SECTOR ENTERPRISES

1. National Research Development Corporation (NRDC)

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

Sr. No.	Technology
1	Small Tractor- Krishi Shakti
2	Pneumatic Precision Planter
3	Inter-Row Rotary Cultivator
4	Offset Rotavator for Orchards
5	Cotton Picking Head
6	Programmable Irrigation Scheduler
7	Cabinet dryer for ginger and turmeric
8	Rotary drum washer for ginger and turmeric

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

Sr. No.	Licensee	Technology	Premia (Rs)
1	M/s Altis Life Sciences	Ayush -SG	10,000,00
2	M/s Sanjeevan Anusandhan Pvt. Ltd	Ayush -82	10,000,00
3	Tropical Biosciences	Mosquito Larvicidal formulation of Bacillus Thuringiensis var	10,000,00

- NRDC collected royalty of Rs.172.77 Lakhs during January, 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.2791.01 Lakhs and realized sale of such items worth Rs.3177.78 Lakhs during January, 2017.
