

No. DSIR/MS/2017/06
Government of India
Ministry of Science & Technology
Department of Scientific & Industrial Research
MONTHLY SUMMARY FOR THE CABINET
(For the month of **June, 2017**)
(Part-I Unclassified)

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

MAJOR ACHIEVEMENTS DURING THE MONTH OF June, 2017:

DEPARTMENTAL ACTIVITIES

1. Industrial R&D Promotion Programme

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

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

Scientific and Industrial Research Organization (SIROs)

Recognition/ Registration and Renewal of SIROs

- 03 SIROs were granted recognition and 01 was granted registration certificate.
- 17 SIROs were granted renewal of recognition and 08 were granted registration certificates.

Fiscal Incentives for Scientific Research

- 11 industries were approved for issuance of form 3 CM under Section 35(2AB) of IT Act under weighted tax deduction.
- 51 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.61994.46 lakhs.

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

- The projects on 'Portable Chalk Board Eraser Cleaner' and 'Plasma Expressor Semiautomatic' supported under PRISM Scheme has been successfully completed.

AUTONOMOUS BODIES

1. Council of Scientific & Industrial Research (CSIR)

1.1 Prime Minister Visited CSIR-CDRI, Lucknow

Shri Narendra Modi, Hon'ble Prime Minister of India and President, CSIR Society visited the CSIR-CDRI, Lucknow and evinced keen interest in the research work conducted by the institute. During his nearly 50-minute stay at the institute, Prime Minister interacted with scientists, trying to understand work being done by them with regard to researches on new drugs for treatment of diseases like osteoporosis and malaria. The institute organized an exhibition for the Prime Minister to highlight its contributions in drug discovery and development. Earlier, he planted a sapling of a medicinal plant in the CDRI premises, flanked by the Hon'ble Governor Ram Naik and Hon'ble Chief Minister Yogi Adityanath of Uttar Pradesh. This is the first time that PM has visited any CSIR laboratory.

1.2 CSIR-CCMB : Developed New Method For Eye Care

CSIR-CCMB, Hyderabad has developed a method using protein based nanoparticles to treat fungal keratitis, a major cause of visual impairment. The nanoparticles based drug delivery system enhances the drug residence time by anchoring to the cornea. The system also regulates inflammation and releases the antifungal drug in a condition responsive manner. The efficacy of the system has been tested with human corneal epithelial cells and also on rat models.

1.3 CSIR-CECRI : Developed a Process to Recover Sulphur From Effluents

CSIR-CECRI, Karaikudi has developed a process to recover sulphur from a contaminated pond by an integrated approach of biological and electrochemical oxidation method. The sulphate in the water is converted into sulphite by specific bacteria and the sulphite then oxidised to elemental sulphur using an electrochemical process. This sulphur can be used in various applications such as production of sulphuric acid and liquid sulphur dioxide. Since the cost of pure sulphur is high, the new approach can help recover sulphur from waste and turn it into an important resource.

1.4 CSIR-NCL : Developed a Solution To Wash Off Germs From Fruits & Veggies

CSIR-NCL, Pune has developed a technology in which a two-minute wash with the organic solution, mainly made of vegetable oil extracts, will make food healthier for consumption. The solution is made up of glycolipid molecules which are capable of cleansing microbes and pesticide loaded on fruits and vegetables. The solution diluted in water and can be used to wash the fruits and vegetables. Thus it can prevent harmful chemicals from entering human body.

1.5 CSIR-CCMB to Set Up Atal Incubator for Biotech Start-Ups

CSIR-CCMB, Hyderabad will set up an incubation centre to support biotech start-ups with the help of NITI Aayog. It will create facilities and bring in stakeholders to implement innovative ideas. The CSIR-CCMB is one of the 10 organizations identified to host Atal Incubation Centres. The Government

will release Rs. 10 crore under the programme in the coming five years. The Incubation centre will engage with all stakeholders, including intellectual property agencies, regulators, seed funders, business developers, successful businessmen and research institutions.

1.6 CSIR-CBRI : Developed a Process to Convert Kota Stone Slurry into Building Material

CSIR-CBRI, Roorkee has developed a technology to convert the Kota stone slurry into building material. The technique developed will help manufacture bricks, tiles and building material using the waste stone slurry and small pieces of the stone generated during stone processing. The technology would help in reducing environmental and health hazards.

1.7 Ethiopian Team Visited CSIR-CSIO, Chandigarh

An eight member Ethiopian delegation from the fields of industry and academics led by Teshome Lemma, State Minister, Ministry of Education, Ethiopia visited CSIR-CSIO, Chandigarh. The visit was part of a twin agreement of CSIR with Metals Industry Development Institute (MIDI) of Ethiopia with financial outlay of 7 million dollars. The aim of this multilateral programme was to enhance the competitiveness of metals and engineering industries through a transformation MIDI into a globally competitive centre with the help of training imparted by scientists of CSIR. The delegation visited various facilities of CSIR-CSIO which were of relevance to the Ethiopian industries

1.8 CSIR Intellectual Property

The Patent position for this month is given below:

Patents Filed		Patents Granted	
India	Abroad	India	Abroad
15	33	8	23

1.9 Significant Events

(a) Conferences, Workshops Organized

- (i) CSIR-IMTECH, Chandigarh in collaboration with Elsevier has conducted one day “Author Workshop” dealing with various issues involved scientific publishing for scientists and researchers of the institute.
- (ii) CSIR-NCL, Pune has organized a two day conference on “Sustainable Catalytic Technologies”.
- (iii) CSIR-NPL, New Delhi has organized a two days National Conference on “Environmental Challenges: Solutions & Way Ahead”.
- (iv) CSIR and its constituent laboratories celebrated the third International Yoga Day- 2017 on 21st June.

(b) Agreements/Memorandum of Understanding Signed

- (i) CSIR, New Delhi has entered into an agreement with the Metals Industries Development Institute (MIDI), Ethiopia to implement a twinning programme. The same is aimed at R&D capacity building of MIDI. CSIR has been successful in getting this multi-million US dollar assignment through a process where many international organizations were considered. The twinning is one of the largest programmes (in terms of contractual amount) between CSIR institute and a foreign entity. It should also facilitate CSIR's future collaborations with African organizations.
- (ii) CSIR-CSIO, Chandigarh has signed an MoU with IIT, Ropar, Punjab for academics and advancement in science and technology and sharing of expertise and domain knowledge.
- (iii) CSIR-IMMT, Bhubaneswar has signed an MoU with Jindal Stainless Ltd., (JSL) for joint research and development for sharing resource management, environmental sustainability, better productivity and viability.
- (iv) CSIR-NEERI, Nagpur, has signed an MoU with Vidarbha Industries Association (VIA), to function as a help-desk centre for the industries of Nagpur region to provide them support in environment protection and pollution.
- (v) CSIR-NIO, Goa has signed an MoU with the Agricultural Skill Council of India (ASCI), a sector skill council on agriculture and allied sectors functioning under the aegis of National Skill Development Corporation (NSDC), Ministry of Skill Development and Entrepreneurship. As per the MoU, the two institutions would be collaborating in various areas of capacity building programmes by bridging gaps and upgrading skills of local workers in the field of aquaculture and fishery sciences.
- (vi) CSIR-SERC, Chennai has signed an MoU with M/s. Smart Built Prefab Pvt., Ltd., Hyderabad for technology transfer for manufacturing textile reinforced concrete (TRC) panels for the construction of cost effective toilets that weighs < 500 kg and has a life span of 25-30 yrs. It can be made *in-situ* and could be assembled in less than five hrs.

(c) Honour & Awards

Dr. U.N. Sinha Former Scientist, CSIR-NAL, Bengaluru has been awarded the Dr. APJ Abdul Kalam HPC lifetime Achievement Award, instituted by Cray, for his stellar and path-breaking contributions in high performance computing

2. Consultancy Development Centre (CDC)

2.1 Plan Projects

Software feature enhancement of CDC website and conversion of same in Hindi : Development of Administrator Platform of CDC Website in Hindi has been completed.

2.2 Funded Projects

Study on "Need based interventions for better marketability of Handicraft Clusters in Uttar Pradesh (Wooden crafts in Nagina and Zari/ Zardozi crafts in Varanasi) for Development Commissioner (Handicrafts) –The report has been submitted to Development Commissioner (Handicrafts).

PUBLIC SECTOR ENTERPRISES

1. National Research Development Corporation (NRDC)

- National Research Development Corporation (NRDC) has been assigned six technologies by CSIR-IHBT, Palampur .The details are given below :

S No.	Technologies Assigned by CSIR-IHBT, Palampur
1	A Room Temperature And Boiling Stable Superoxide Dismutase (SOD) Enzyme From Himalayan Bio-Resource: Production Technology
2	Agro And Processing Technology Of Stevia.
3	Tea Catechins: Extraction Technology
4	Tea Wine: Manufacturing Technology
5	Ethnic Cuisines Of Himalayas (Adaptable To Other Local Cuisines As Well).
6	Crispy Fruits

- NRDC has licensed three technologies to M/s Naturoveda Organics Pvt. Ltd. and two technologies to M/s. Hi7 Agri Bio Solutions, Banglore. NRDC has collected a premia of Rs.24.00 Lakh from licensing of these technologies during June, 2017. The details are as given below :

Sr. No.	Licensee	Technology	Rs
1	Naturoveda Organics Pvt. Ltd.	Acne Face Wash- Natural Formulation of Acne	10,00,000
2	Naturoveda Organics Pvt. Ltd.	Geranium Active-Hair Care Shampoo	5,00,000
3	Naturoveda Organics Pvt. Ltd.	Stress Relieving Oil	5,00,000
4	M/s. Hi7 Agri Bio Solutions, Bengaluru	A micronutrient composition for Black Pepper and a process for its preparation	2,00,000
5	M/s. Hi7 Agri Bio Solutions, Bengaluru	A micronutrient composition for cardamom and a process for its preparation	2,00,000
		Total	24,00,000

- NRDC has collected a royalty of Rs.13.85 Lakhs during June, 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.3224.82 Lakhs and realized sale of such items worth Rs. 4512.22 Lakhs during June, 2017.
