#### No. DSIR/MS/2017/10

Government of India
Ministry of Science & Technology
Department of Scientific & Industrial Research
MONTHLY SUMMARY FOR THE CABINET
(For the month of **October**, **2017**)
(Part-I Unclassified)

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

#### MAJOR ACHIEVEMENTS DURING THE MONTH OF October, 2017:

#### **DEPARTMENTAL ACTIVITIES**

- 1. Industrial R&D Promotion Programme Recognition/ Registration and renewal of In-house R&D in Industry
  - 12 in-house R&D units of industries were granted recognition as well as registration certificates.
  - 30 in-house R&D units of industries were granted renewal of recognition and 29 were granted renewal of registration certificates.

# Scientific and Industrial Research Organization (SIROs) Recognition/ Registration and Renewal of SIROs

 02 SIROs were granted recognition and 01 was granted registration certificate.

# Public Funded Research Institution (PFRIs) Registration and Renewal of PFRIs

04 PFRIs were granted renewal of registration.

#### Fiscal Incentives for Scientific Research

- 01 industry was approved for issuance of form 3 CM under Section 35(2AB) of IT Act under weighted tax deduction.
- 32 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.101694.20 lakhs.

#### **AUTONOMOUS BODIES**

- 1. Council of Scientific & Industrial Research (CSIR)
- 1.1 Third India International Science Festival (IISF)

The third edition of India International Science Festival (IISF) 2017 was organised at Anna University, Chennai from 13 to16th October, 2017 by National Institute of Ocean Technology (ESSO-NIOT). The focal theme of the Science Festival was "Science for New India". The events were held simultaneously at five venues namely, Anna University, ESSO-NIOT, CSIR-CLRI, CSIR-SERC and Indian Institute of Technology, Chennai. Dr. Harsh

Vardhan, Hon'ble Union Minister for Science & Technology and Earth Sciences inaugurated India International Science Festival, 2017 at Anna University, Chennai. Shri Y. S. Chowdary, Hon'ble Minister of State for Ministry of Science & Technology & Earth Sciences also graced the occasion. The Minister said that India is home to lakhs of grassroots innovators and it is important to empower them with modern entrepreneurial skills. The Hon'ble Minister said that the Grassroots Innovators Summit has been organized as a part of the festivaland is aimed to strengthening the grassroots technological innovations and outstanding traditional knowledge and providing a common platform for various stakeholders — from innovators, students, researchers to policy makers. He urged the scientific community to contribute towards realizing Prime Minister's vision of establishing 'A New India by 2022.' Detailing the initiatives launched by the Government in the last three years, Dr. Harsh Vardhan said there has been a 60 per cent hike in the budget for Science and Technology.

The Minister lauded the contribution of Shyama Prasad Mukherjee who laid the foundation stone for Central Leather Research Institute (CSIR-CLRI) and recalled the important role played by the country's first Prime Minister Jawaharlal Nehru in developing scientific institutions of repute. The Minister said eminent scientists like Sir C.V. Raman, Prof S. Chandrasekar, Sir Srinivasa Ramanujam, Dr. Abdul Kalam, contributed significantly to the advancement of science.

The various events organized during the festival included: (i) Science & Technology Ministers' Conclave; (ii) Sensitizing Youth to Flagship Programs of Government (SYPOG); (iii) Science Village- Parliament to Panchayat; (iv) Mega Science and Technology Expo; (v) Grassroot Innovators Summit; and (vi) Round Table Meet on "Mass Communication". Stake holders from academia, industry, government, social organizations, school teachers and students participated in the four-day event.

## 1.2 CSIR-NIIST : Developed an Organic Near-Infrared Filter

CSIR-NIIST, Thiruvananthapuram has developed an organic filter that allows only near-infrared (NIR) light to pass through. The filter can be used for night vision glasses, night photography, and will have applications in security and forensics such as identifying blood stains on a dark fabric. Currently available inorganic filters are expensive and brittle whereas organic filters are easy to process and flexible too.

## 1.3 CSIR-NIIST : Developed a Wearable Antenna

CSIR-NIIST, Thiruvananthapuram has developed a wearable WiMAX antenna, which is about 3 cm in length and nearly 4 cm in width, and is flexible, light weight and operates at around 3.37 GHertz. The Wearable Antenna embedded in multilayered polyester fabric is suitable for WiMAX (Worldwide Interoperability for Microwave Access) applications like telemedicine, defence and environmental monitoring.

# 1.4 CSIR Signs Letter of Intent (LOI) With Hiroshima University For

#### **Research Partnership**

CSIR has signed a Letter of Intent (LoI) with Hiroshima University (HU), Japan for research partnership. The LoI was signed by Dr. Girish Sahni, DG, CSIR and Dr. Mitsuo Ochi, President, HU. The synergistic partnership between the two organizations would leverage translational research in the cutting edge technology domains. The technology areas include: electronics, advanced manufacturing, environment and intelligent transportation.

# 1.5 Surat First to Undertake Aquifer Mapping Study : Survey by CSIR-NGRI

CSIR-NGRI, Hyderabad has launched a heliborne survey based on electroresistivity technology (ERT). The aquifer mapping survey would be carried out over river Tapi stretch from Magdalla in the downstream to Kamej in the upstream. The Surat Municipal Corporation (SMC) has become the first urban local body(ULB) in the country to undertake aquifer mapping study for its groundwater resources in river Tapi and identifying zones for drilling productive wells to meet water demand of the city.

### 1.6 CSIR Intellectual Property

The Patent position for this month is given below:

Patents Filed		Patents Granted	
India	Abroad	India	Abroad
15	20	20	36

#### 1.7 Honors & Awards

- (i) Prof. Vijaya Mohanan, K. Pillai, Director, CSIR-CEERI, Karaikudi has been elected as Fellow of the Indian National Science Academy for his important contributions to Materials, Electrochemistry and Energy Storage.
- (ii) Dr. Srinivasa Reddy, Senior Scientist, CSIR-NCL, Pune has been elected as a fellow at the National Academy of Sciences, India (NASI). He bagged the Organization of Pharmaceutical Producers of India (OPPI) Scientist award 2017 for his significant research work in the area of pharmaceutical sciences.
- (iii) Dr. Chitra Mandal, Scientist, CSIR-IICB, Kolkata has received OPPI Women Scientist Award 2017.

### 1.8 Significant Events

### (a) Conferences, Workshops Organized

- (i) CSIR-CSMCRI, Bhavnagar has conducted a 3 days National Workshop on Advanced Instrumentation.
- (ii) CSIR-IMTECH, Chandigarh has organized a three days' industry-academia meet to discuss about opportunities and challenges in anti-microbial drug discovery and human microbiome in health and disease and to engage

- industry and academic leaders to discuss current global medical needs.
- (iii) CSIR-IIP, Dehradun has organized a week long workshop on 'Energy from Economic Development and Welfare' under the Newton Bhabha programme sponsored by British Council and Royal Society of Chemistry.
- (iv) CSIR-NML, Jamshedpur has organized: (i) a four days training programme on Monitoring and Industrial Corrosion (MPiC) which addressed various aspects of metallurgical corrosion investigations and metallurgical failures due to corrosion; and (ii) Two days' workshop on 'Science and Technology Sensitization Program for the Women leading towards Excellence in Science' in collaboration with the National Academy of Sciences India(NASI).

## (b) Agreements/Memorandum of Understanding Signed

- (i) CSIR-CFTRI, Mysore signed an MoU with Akshaya Patra Foundation (APF) to enhance the nutritional content of midday meals for about 14,000 schools across 12 States.
- (ii) CSIR-CSIO, Chandigarh has signed an MoU with Agriculture Skill Council of India (ASCI) to train skilled manpower in agriculture and allied areas under Pradhan Mantri Kaushal Vikas Yojana (PMKVY)
- (iii) CSIR-CMERI, Durgapur has signed Tripartite License Agreement with two Indian Industries (i.e. M/s Baby Engineering Pvt.Ltd., Trichy, Tamilnadu and M/s Just In Pinnacle Technology (P) Ltd., Chennai) for transfer of 3 kWp Solar Power Tree and "KrishiShakti" Tractor technology to M/s K.N.Bioscience Pvt.Ltd. Hyderabad, Telangana.
- (iv) CSIR-IMTECH, Chandigarh, Drugs has signed MoUs with University of British Colombia, Oniosone Healthcare Pvt. Ltd, National Institute of Pharmaceutical Education, Mohali, Nectar Life Sciences Pvt. Ltd and Asian Institute of Public Health to discover new drugs and technologies in a collaborative mode.
- (v) CSIR-IICT, Hyderabad has signed a Tripartite agreement with DST, New Delhi and Bharat Biotech India Ltd. Hyderabad for a project entitled "Novel Adjuvants for Malaria vaccine development".
- (vi) CSIR- NCL, Pune and Indian Pharmacopoeia Commission (IPC) have signed an MoU for joint research collaboration. They will pool their respective capabilities in the area of synthesis of impurities of active pharmaceutical ingredient (API) standards as per requirements of IPC.

## 2. Consultancy Development Centre (CDC)

### 2.1 Plan Projects

- Content Development for the Course 'Certificate Programme in R&D Management': Course structure sent for further review by external experts.
- Content Development for the Course 'Certificate Programme in Technology Management': Revised course material received from consultant.

• Software feature enhancement of CDC website and conversion of same in Hindi: Contents are being uploaded in Hindi version of CDC website.

## **PUBLIC SECTOR ENTERPRISES**

### 1. National Research Development Corporation (NRDC)

 NRDC has licensed one technology to M/s. Pure Chemicals Laboratories Pvt. Ltd, Bangalore and one technology to M/s K.N. Biosciences. NRDC has collected a premia of Rs.9.5 Lakh from licensing of these technologies during October, 2017. The details are as given below:

Sr. No.	Licensee	Technology	Premia (Rs )
1	M/s Pure Chemicals Laboratories Pvt Ltd., Bangalore	ANKUSH- A Silkworm Bed Disinfectant	500000
2	M/s K.N. Biosciences	10 HP Tractor	450000
		Total	9,50,000

• NRDC has collected a royalty of Rs.67,500/- during October, 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.1678.64 Lakhs and realized sale of such items worth Rs. 1748.86 Lakhs during October`, 2017.

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