




Highlights of Annual Report 2015-16





Highlights

- i. DSIR is now an ISO 9001: 2008 certified department, as conferred on August 14th, 2015.
- ii. The department has successfully completed 10 on-going TePP projects supported during 11th five year plan. Some of the successfully completed projects are Computer interfaced Hi-fidelity affordable mannequin for Effective CPR, Indian sink utensils washer, Design and development of Fully Digital Anesthesia Work Station, Episomal self amplifying mammalian expression (eSAME) system and so on
- iii. A2K+ studies program under Access to Knowledge for Technology Development and Dissemination (A2K+) scheme, received 50 proposals out of which 10 were recommended with 2 studies being initiated, while A2K+ -Events program received 107 proposals. Under Technology Development and Utilization Programme for Women (TDUPW) 2 proposals were recommended by TAC and 4 projects were completed. Around 76 technologies developed under the scheme TDDP has been commercialized. Department has received a cumulative royalty of around Rs.33.77 Crore on the projects supported during 1997-2015. In current financial year, 31 projects were monitored and 15 projects were completed.
- iv. During the current year, CRTDH programme is in the process of setting up of 2 hubs in the sector of Affordable health at CSIR-IHBT, Palampur and CSIR-CCMB, Hyderabad and 1 hub in the sector of Environmental interventions at CSIR-NIIST, Thiruvanthapuram.
- v. DSIR is the nodal department for granting recognition to in-house research and development centres of industry. As on 31st December, 2015, there were 1800 in-house R&D centres with DSIR recognition of these, 99 companies incurred an annual expenditure of over Rs. 50 crores each, 488 companies incurred an annual expenditure in the range of Rs. 5 crore to Rs. 50 crores and 435 industries incurred an annual expenditure in the range of Rs. 2 crore to Rs. 5 crores.
- vi. Public funded research institutions, Universities, IITs, IISc and NITs registered under PFRI program of DSIR can avail customs duty and central excise duty exemptions under notifications 51/96-Customs and 10/97-Central Excise. During the period under

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- report 9 such institutions were newly registered with DSIR and 70 institutions were granted renewal of registration.
- vii. 43 new Scientific & Industrial Research Organisations (SIROs) were recognized by DSIR during the period under report.
- viii. Secretary DSIR, designated as the Prescribed Authority accorded fresh approvals to **121** companies under section 35(2AB) of Income-tax Act, 1961. The detailed R&D expenditure of the approved companies has been examined by DSIR and 334 reports valued at Rs. 9828 crores have been forwarded to DGIT (E) in Form 3CL, as required under the IT Act.
- ix. DSIR plays an active role in APCTT's functioning, particularly relating to its programmes and policies. DSIR has extended programme support towards the APCTT project entitled, "Promotion of National Innovation Systems (NIS) in Countries of the Asia-Pacific Region – Phase II".
- x. IT-eG division progressively implements e-Governance in the Department, which is in conformance to the National eGovernance Action Plan. A project entitled 'Design, Development, Implementation of Enterprise Application and Maintenance Support Services for DSIR' is ongoing.
- xi. The Right to Information Act 2005, has been implemented successfully in the department. The proactive disclosures are regularly updated and available on the DSIR Website. DSIR has received 235 Applications during 2015 and all the applications were registered and disposed off on RTI Request & Appeal Management Information System.
- xii. CSIR, an autonomous organization is placed at 84th among 4851 institutions worldwide and is the only Indian organization among the top 100 global institutions (Scimago Institutions Ranking World Report 2014). CSIR holds the 17th rank in Asia and leads the country at the first position.
- xiii. CSIR-IIP developed and transferred technology for state-of-the-art catalyst to reduce sulphur in LPG. Under the New Millennium Indian Technology Leadership Initiative (CSIR-NMITLI) Programme, along with CSIR-CGCRI has indigenously designed and developed the complex Broadband Confocal Microscope. This microscope was launched by Hon'ble Minister of Science and Technology, on 7th October 2014.
- xiv. CSIR and Oil and Natural Gas Corporation Ltd., (ONGC) has established unique public private partnership for exploration of natural resources for oil and gas from ONGC oil fields in the Krishna Godvari basin.
- xv. CSIR-CIMAP has successfully sequenced the genome of the tulsi plant, first report of complete genome sequence of a medicinal plant of India, using composite next generation sequencing technologies.
- xvi. CSIR-CLRI has developed a shoe sole that can withstand temperatures up to 250°C. The technology would enable indigenous production of safety shoes which are currently being imported.
- xvii. CSIR-IIP has developed a simple, pollution free and environment friendly process for the conversion of waste plastics (polyolefins) to value added hydrocarbons e.g. gasoline, diesel and aromatics. The



- technology provides for exclusive production of either gasoline or diesel or aromatics along with LPG from polyolefinic wastes (e.g. HDPE, LDPE, PP etc) and the liquid fuel meets Euro III specifications.
- xviii. CSIR-NAL in collaboration with CSIR-CGCRI has developed super-elastic NiTi wires suitable for bio-medical applications through vacuum process. The prepared alloy conforms to ASTM-2063 specification for Medical Devices and Surgical implants.
- xix. An Electronic Nose (E-Nose) to sniff out dangerous gases in the pulp and paper industry has been jointly developed by CSIR-NEERI and Centre for Development of Advanced Computing (C-DAC). The portable device uses intelligent software to identify, measure as well as odour intensity using an array of sensors that function on the principle similar to that of human olfaction (sense of smell).
- xx. CSIR, through its programme Traditional Knowledge Digital Library (TKDL) has foiled the attempt by consumer goods giant to patent a mouthwash formula containing herb extracts by citing ancient texts that show it was traditionally used in ancient medicinal practices. Proof submitted in the form of references from ancient books, which led to the withdrawal of patent application.
- xxi. CDC has taken an initiative to develop a virtual network “*Consulting Hub*” for gathering the information of consultants’s expertise and enable their interaction with clients anywhere anytime to provide their consultancy based on requirements.
- xxii. The National Research Development Corporation (NRDC) a premier organization under DSIR was assigned 47 new processes and signed 40 licence agreements. Corporation has earned a profit before tax of Rs. 330.04 lakhs.
- xxiii. Central Electronics Limited (CEL) is a Public Sector Enterprise under DSIR, has commissioned a fully automated state of the art module manufacturing production facility and was dedicated to nation by Hon’ble Minister of Science and Technology and Earth Science.
- xxiv. CEL has recorded production of Rs. 167.52 Crores and sales of Rs. 168.29 Crores including an export value of Rs. 1.08 Crores.