RDI e-Newsletter

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Research & Development by Industry

Department of Scientific & Industrial Research (DSIR), MoST, Govt. of India

Statistics (2014-15) of DSIR recognized In-House R&D units of Industry & SIRO:

Under its flagship programme-Industrial Research & Development Promotion Programme (IRDPP), the department endeavours the goal of promoting Industrial research in the Country through recognition of in-house R&D centres and provision of fiscal incentives for research & innovation. Nearly 2500 In-house R&D units established by over 1800 industries, 600 SIROs and 650 PFRI are recognized by DSIR till January, 2015.

Table 1: Sectorwise distribution of Industrial In house R&D units recognized during FY 2014-15

Research Sector	No. of Industrial in house R&D units
Agriculture , Food Processing & Biotechnology	12
Dyes, Chemicals & petrochemicals	12
Electronic System Design and Optical equipments	14
Engineering and Equipment Machinery	30
Healthcare (Pharmaceuticals, Biologics, Medical Devices)	40
Others (Textile, IT etc)	3

Table 2: Sectorwise distribution of SIROs recognized by DSIR during the FY 2014-15

Research Sector	No. of SIROs
Natural and applied sciences	19
Agricultural Sciences	0
Social Sciences	5
Medical Sciences	18

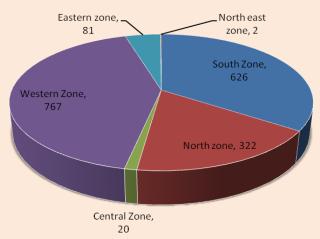


Fig 1: Zonewise* distribution of Industrial In house R&D units recognized by DSIR till March, 2015.

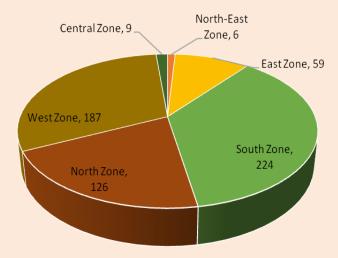


Fig 2: Zonewise* distribution of SIROs recognized by DSIR till March, 2015.

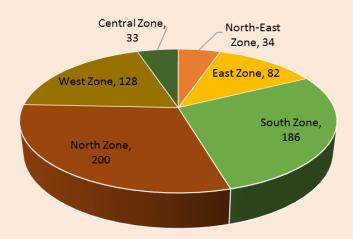


Fig 3: Zonewise* distribution of PFRIs registered by DSIR till March, 2015.

*Description of Zones

South Zone: Karnataka, Telangana, Andhra Pradesh, Kerala, Tamil Nadu, Andaman & Nicobar, Pondicherry
West Zone: Maharashtra, Gujarat, Goa, Rajasthan, Daman & Diu
North Zone: J&K, Himachal Pradesh, Punjab, Haryana, Chandigarh, Uttar Pradesh, Uttarakhand, Delhi.

Central Zone: Madhya Pradesh, Chhattisgarh.

East Zone: Odisha, West Bengal, Bihar, Jharkhand

NEWS Update:

development organization.

<u>Curadev Announces Research Collaboration and Licensing Agreement to</u> <u>Develop Cancer Immunotherapeutic</u>

Headquartered in New Delhi, Curadev Pharma Private Limited was founded in 2010. Curadev focuses on creation and out-licensing of pre-IND assets and IND packages for drug development. In April 2015, Curadev announced that it had entered into a research collaboration and exclusive license agreement with Roche, the global leader in oncology, for the development and commercialization of IDO1 and TDO inhibitors. The agreement covers development of the lead preclinical immune tolerance inhibitor and research collaboration with Roche's global research and early

Gujarat Alkalies- IICT ink pact for hydrate technology

CSIR-Indian Institute of Chemical Technology (CSIR-IICT), in an Industry-Laboratory collaboration initiative, have entered into agreement with Gujarat Alkalies & Chemicals Ltd, Vadodara (GACL) for the development of Hydrazine Hydrate technology. The Hyderabad-based CSIR-IICT has developed a benchscale process for manufacturing hydrazine hydrate. The company has also successfully demonstrated this technology on a pilot scale at GACL's Dahej complex. IICT in its press release has stated that GACL will shortly establish a commercial plant with an initial capacity of 8,000 tonnes a year of 80 per cent Hydrazine hydrate, based on its technology and detailed designs.

The two have reported to have initiated the process for filing a joint patent.

Suven Lifesciences- inroads into drug discovery

Suven Life Sciences Ltd has received product patents for the new chemical entities (NCEs), used for treatment of disorders associated with central nervous system (CNS), from Australia, Europe, Hong Kong, Israel and Norway. The claims of the granted patents include the class of selective 5-HT compounds discovered by Suven and being developed as therapeutic agents. These compounds are useful in the treatment of cognitive impairment associated with neurodegenerative disorders like Alzheimer's disease, Attention deficient hyperactivity disorder (ADHD), Huntington's disease, Parkinson and Schizophrenia.

News Update and research activities published are based on the information submitted by the concerned organizations. The information placed in the newsletter may not be considered as an endorsement or recommendation by DSIR.

Liquefied Natural Gas: IRCLASS participation in MAKE IN INDIA Initiative

IRCLASS (Indian Register Shipping, of recognized as SIRO by DSIR) is a classification which deals with the approval, certification and survey of maritime products & services worldwide. As the youngest member within the prestigious club of the International Association of Classification Societies (IACS), it is rapidly spreading its footprints to provide quality services in the maritime field and industrial fields.

Liquefied Natural Gas (LNG) as a cleaner and more efficient alternative to the conventional fuels like petrol and diesel. This is expected to find its applications for both domestic and industrial uses. To meet the demand for LNG, India needs to shore up its infrastructure. The infrastructure is enumerated in form of

- a. Ships for LNG transportation including LNG bunker barges
- b. Cargo handling facilities
- c. Domestic distribution

It is no secret that though LNG is an environmentally clean substance however possess safety hazard in terms of its combustibility/flammability hence needs to be handled with extreme care. Risk Assessment studies are required to ensure the highest levels of safety when handling LNG and also control options if the studies suggest insufficient safety levels.

This is where IRCLASS is working to evaluate the risks posed at different levels. IRCLASS has developed capabilities to investigate the structural integrity of ships carrying LNG in bulk (Liquefied Gas carriers). Within this, IRCLASS achieved the capabilities to evaluate critical components such as the containment systems, cargo handling facilities onboard ships. This is accomplished by evaluating the load levels to which the ship is subjected in extreme conditions. Such evaluations have been the fruit of the advanced research studies performed by IRCLASS in this field.

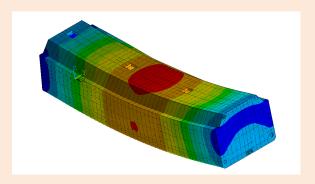


Fig: LNG Cargo Hold Structural analysis

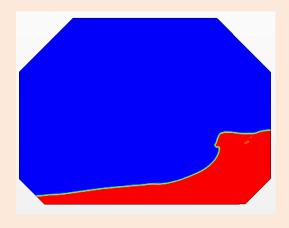


Fig: Sloshing impact load analysis for LNG tanks

As submitted by: IRCLASS

"INTELLIGENT POST TSUNAMI DAMAGE ASSESSMENT AND MONITORING OF RECONSTRUCTION IN NAGAPATTINAM AREA" Conducted by Dr. Sivanthi Aditanar College of Engineering (SACE)

In this work, a new remotely sensed solution for monitoring the recovery of tsunami-affected area is being developed. Nagapattinam province of Tamilnadu, which was strongly attacked by the 2004 Indian Ocean tsunami, was selected as the demonstration site. IKONOS sets acquired on June 10, 2003 (pre-tsunami); December 29, 2004 (immediate-tsunami); October 31, 2005 (post-tsunami) were used in this study. The proposed Architecture worked in three Tier Architecture format:

In the first Level Registration, Removal of Clouds was carried out. In the second level, Object based terminology was used to segment Building, Land, Sand, Vegetation and Water. In the Third Level, Change in detection of object based operation was performed. This method has given the solution for the building and infrastructural damages and monitoring of reconstruction work carried over the Nagapattinam area. The results proved that the proposed work has produced higher accuracy assessment when compared to earlier works. The overall accuracies of the classification in the proposed work is 99.84%. Following the classification, SIRO also conducted a comparison of pre and post Tsunami cover object based on change in detection methods. The results revealed a significant change in building after Tsunami as 25%, an increase in soil exposure as 59%, and an increase in the water within the soil and land as 7%.

(a) (b)





Figure (a) Classification output Results of Building region Red-color shows Collapsed Building region & Blue color shows developed Building (b) Classification output Results for Water Bodies Blue-color shows Collapsed water region & green color shows developed water region during Tsunami

As submitted by: SACE

In house R&D units of Industry recognized by DSIR during January-March, 2015

During January- March '2015, DSIR has granted fresh recognition to the in-house R&D units of the following firms:

Engineering & equipment machinery

- 1. M/s Unipatch Rubber Ltd., New Delhi.
- 2. M/s MMTC- PAMP India Pvt. Ltd., New Delhi
- 3. M/s Kalpatatru Power Tansmission Ltd., Gandhinagar
- 4. M/s Dhoot Transmission Pvt. Ltd., Pune
- 5. M/s FEV India Pvt.Ltd., New Delhi.
- 6. M/s Hero MotoCorp Ltd., New Delhi.
- 7. M/s Flleetguard Filters Pvt. Ltd., New Delhi
- 8. M/s Arihant Industrial Corporation Ltd., Mumbai.
- 9. M/s Speedofer Components Pvt. Ltd. Chennai
- 10. M/s Sieger Spintech Equipments Pvt. Ltd., Coimbatore
- 11. M/s S.V.A. Rikkon Lubes Pvt. Ltd., Chennai
- 12. M/s American Megatrends India Pvt. Ltd., Chennai
- 13. M/s Sun Edison Research Pvt. Ltd., Chennai

Dyes & Chemicals

- 1. M/s Sapala Organics Pvt. Ltd., Hyderabad.
- 2. M/s Krishna Antioxidants Pvt. Ltd., Mumbai.
- 3. M/s Jay Chemical Industries Ltd., Ahmedabad
- 4. M/s Croda India Company Pvt. Ltd., Mumbai
- 5. M/s Welspun Syntex Ltd., Silvassa.

Healthcare (Pharmaceuticals, Biologics, Medical Devices)

- 1. M/s XL Laboratories Pvt. Ltd., New Delhi.
- 2. M/s Robust Materials Technology Pvt. Ltd., Bangalore
- 3. M/s Mylan Pharmaceuticals Pvt. Ltd., Raigad
- 4. M/s Jubliant Genecis Ltd., Noida
- 5. M/s Nulife Global Medical Devices Pvt. Ltd., Mumbai
- 6. M/s Simplex Pharma Pvt.Ltd. New Delhi
- 7. M/s Ordain Health Care Global Pvt. Ltd., Chennai

Agriculture

1. M/s Barrix Agro Sciences Pvt. Ltd., New Delhi

Electronics and Optical Equipments

- 1. M/s Thotaka Technologies India Pvt. Ltd., Hyderabad.
- 2. M/s Viney Corporation Pvt. Ltd., Delhi.
- 3. M/s The Hi-Tech Rotoitic Systemz Ltd., Gurgaon
- 4. M/s Solus Security Systems Pvt. Ltd., Mumbai

Scientific & Industrial Research Organizations (SIROs) Recognized by DSIR during January – March, 2015

Fresh recognition as Scientific and Industrial Research Organizations (SIROs) was granted by DSIR to following organizations having well-defined research objectives. The recognition is valid up-to 31.03.2017

Natural & applied sciences

- 1. Aditanar Educational Institution, Chennai
- 2. Aditya academy, Kakinada
- 3. Gokaraju Rangaraju Educational Society, Hyderabad
- 4. KIIT-Technology Business Incubator (KIIT-TBI), Bhubaneswar
- 5. SRM University, Sonepat

Medical Sciences

- 6. Jubilee Mission Medical College and Research Institute (JMMCRI), Thrissur
- 7. Association for Research in Homoeopathy, Mumbai
- 8. Majumdar Shaw Medical Foundation, Bangalore
- 9. Samast Patidar Aarogya Foundation, New Delhi
- 10. The Voluntary Health Services, Chennai
- 11. YR Gaitonde Medical, Educational and Research Foundation, Chennai

Social Sciences

- 12. Gaudiya Mission, Kolkata
- 13. Institute for Development and Research in Banking Technology, Hyderabad

The Department has issued revised guidelines for Recognition of Scientific and Industrial research Organizations (SIROs). The revised guidelines can be accessed from the following link: http://dsir.csir.res.in/webdsir/#files/tpdup/irdpp/SIRO-revised-guidelines.htm

In house R&D units of Industry approved by DSIR during January-March 2015 for availing Fiscal Incentives u/s 35(2AB) of Income Tax Act, 1961

Dyes, Chemicals & Petrochemicals:

Company	Location	3CM validity
M/s Ultramarine & Pigments Ltd.	Ranipet (Tamilnadu)	01.04.2014 to 31.03.2015
M/s Sulphur Mills Ltd.	Navi Mumbai	01.04.2014 to 31.03.2016
M/s Gharda Chemicals Ltd.	Dombivli Thane & ii) Ratnagiri	01.04.2013 to 31.03.2016
M/s Meghmani Organics Ltd.	Ahmedabad	01.04.2010 to 31.03.2015
M/s United Phosphorus Ltd.	i) Vapi,ii) Thane, iii) Ankleshwar iv) GIDC Ankleshawar	01.04.2013 to 31.03.2017
M/s Bjaerolcher India Additives Pvt. Ltd.	Dewas (M.P.)	25.09.2014 to 31.03.2017
M/s Jesons Industries Ltd.	Navi Mumbai	01.04.2014 to 31.03.2015
M/s Berger Paints Ltd.	Howrah (W.B.)	01.04.2014 to 31.03.2016

Healthcare (Pharmaceuticals, Biologics & Medical Devices)

Company	Location	3CM validity
M/s Datt	Gurgaon	25.09.2014 to
Mediproducts Ltd.,		31.03.2017
M/s Twenty First	Roorkee	21.08.2014 to
Century		31.03.2017
Pharmaceuticals		
M/s Gracure	Bhiwadi,	01.04.2014 to
Pharmaceuticals	Dist. Alwar	31.03.2015
Ltd.		
M/s Virchow	Jeedimetia,	01.04.2014 to
Laboratories Ltd.	Hyderabad	31.03.2017
M/s Alken	Taloja, Dist.	01.04.2013 to
Laboratories	Raigarh	31.03.2017
M/s Advy	Thane	01.04.2013 to
Chemicals Pvt. Ltd.		31.03.2017
M/s Bliss GVS	Andheri(East),	01.04.2014 to
Pharma Ltd.	Mumbai	31.03.2016
M/s Alder	Ratnagiri	01.04.2014 to
Mediequip Pvt. Ltd.	(Maharashtra)	31.03.2016

Electronics, System Design and Optical equipments

Company	Location	3CM validity
M/s Ducom Instruments Pvt. Ltd.	Bangalore	01.04.2014 to 31.03.2015
M/s Bangalore Integrated Solutions Pvt. Ltd.	Bangalore	01.04.2013 to 31.03.2017
M/s Salzer Electronics Ltd.	Coimbatore	01.04.2013 to 31.03.2017
M/s JVS Electronics Pvt. Ltd.	J,P. Nagar, Bangalore	01.04.2014 to 31.03.2016

Engineering & equipment Machinery ____ Agriculture & Food Processing

Company	Location	3CM validity
M/s TVS Srichakra Ltd.	Madurai	01.04.2014 to 31.03.2017
M/s Precision Automation and Robotics India Ltd.	i) Pune and ii) Tal, Khandala, Satara	27.05.2013 to 31.03.2016
M/s Triton Valves Ltd.	Mysore	01.04.2014 to 31.03.2017
M/s Bimetal Bearings Ltd.	Coimbatore	01.04.2014 to 31.03.2015
M/s Kramski Stamping and Molding India Pvt. Ltd.	Vellore	01.04.2014 to 31.03.2016
M/s Metal Power Analytical India Pvt. Ltd.	Andheri (East), Mumbai	01.04.2013 to 31.03.2015
M/s ITL Industries Ltd.	Indore	01.04.2014 to 31.03.2017

Company	Location	3CM validity
M/s Heinz India Pvt.	Navi Mumbai	01.04.2014 to
Ltd.		31.03.2016
M/s Super Seeds	i) Hisar,	01.10.2014 to
Pvt. Ltd.	HaryanSeeds Pa & ii) Medak Dist. A.P.	31.03.2017
M/s Indfrag Ltd.	Krishnagiri	01.04.2013 to
	(Karnataka)	31.03.2017
M/s Advance	i) Gokul Thane ii)	01.04.2013 to
Enzyme Nagar,	Thane iii) Wagie,	31.03.2016
Technologies Ltd.,	Thane & iv)	
	Sinnar, Dist.	
	Nasik	
M/s Marico Ltd.	Andheri (East),	01.04.2013 to
	Mnmbai	31.03.2017
M/s Camson Bio	Bangalore	01.04.2014 to
Technologies Ltd.		31.03.2017

DSIR welcomes Feedback/suggestions for improvements. For any specific information on (a) Recognition of in-house R&D centres in industry, (b) Recognition of Scientific and Industrial Research Organisations, PFRI and (c) Fiscal incentives for scientific research and commercialisation of R&D, write to:

Shri K V S P Rao

Scientist 'G' and Head (RDI)
Department of Scientific & Industrial Research
Technology Bhawan, New Mehrauli Road
New Delhi-110 016

E-mail: rdi[at]nic[dot]in; Telefax: 011 26529745

Editor -in -chief:

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