

TIFAC-SIDBI Technology Innovation Programme (Srijan)
....Catalyzing scaling of technology innovations

Status

“	No. of proposals evaluated by TIFAC	:	88
“	No. of innovations recommended by TIFAC	:	37
“	No. of projects sanctioned	:	18
“	No. of innovations successfully scaled up	:	9
“	No. of ongoing projects	:	7
“	No. of projects under financial appraisal	:	11

A. Innovations successfully scaled up:

S. No.	Title of Project	Implementing / Collaborating Agency	State	Contact Person with Email	Support from revolving fund (Rs. in Lacs)	Impact
1.	Energy efficient cooling & heating systems (HVAC&R) with waste heat recovery	M/s. Mechworld Eco Pvt. Ltd., Nashik Technology transfer from IIT-Bombay	Maharashtra	Mr. Shrenik Shah (shrenik.shah@mechworldeco.com)	75.00	Simultaneous generation of hot water & cold air through heat pumps & desuperheater. Installed at 55 McDonald stores in Maharashtra and Infosys Training Centre, Mysore.
2.	Improved hybrid idlers for conveyor belt systems for application in steel, coke and cement industry	M/s. Jyoti Cero Rubber, Jamshedpur In collaboration with TATA Steel	Jharkhand	Mr. Manoj Kumar (cerorubber@yahoo.com)	95.00	New hybrid idlers with four fold increase in shelf life and improved productivity with reduced maintenance. Product already adopted by Tata Steel in its production line.
3.	Self-Grooving Rubber Rollers for Chromium free Cotton Ginning	M/s. Millennium Rubber	Maharashtra	Mr. Noby Joseph (md@mrtpl.in)	92.00	Provides eco-friendly environment to workers in

		Technologies Pvt. Ltd. Thrissur In collaboration with ICAR – CIRCOT, Mumbai				cotton ginning industry for producing chromium free cotton with higher productivity. Advanced ginning machine Kranti with rubber roller launched.
4.	Pouchable Grade battery separator with ribs and discrete dot configuration for flooded lead acid batteries	M/s. Raman FibreScience Pvt. Ltd., Bengaluru	Karnataka	Mr. Raghu Akella (raghu.akella@hovo.com)	95.00	Composite battery separator with improved efficiency at lower cost enhancing life of flooded lead acid batteries in two & four wheelers. Product being used by leading battery manufacturers.
5.	RFID tags for Solar PV module tracking	M/s. IAITO InfoTech Pvt. Ltd., Kanpur Incubated at SIDBI Innovation and Incubation Centre of IIT Kanpur	Uttar Pradesh	Mr. Mushir Siddique (masiddique@iaito.co.in)	52.00	Tags based on RFID technology for providing information on parameters like origin, date of manufacturing, initial efficiency etc. of solar cells and modules at Solar PV installations. It compliances the mandatory requirements of JNNSM under MNRE.
6.	Value added products derived from sea plants for agriculture, animal husbandry and human application	M/s. Aquagri Processing Pvt. Ltd. Manamadurai Technology transfer from CSIR - CSMCRI, Bhavnagar	Tamil Nadu	Mr. Abhiram Seth (abhiram.seth@aquagri.in)	100.00	First processing plant in India for producing value added chemicals like refined carrageenan from sea weeds. By ensuring buy back of sea weeds through organized cultivation enhances income of rural women in coastal Tamil Nadu.
7.	Single release liner carrying label stock on each side	M/s. Hassle Free Technologies, Greater	Uttar Pradesh	Mr. Anuj Bhargava (anuj@kumarlabels.co	100.00	The new technology reduces 50% raw material consumption

		Noida		m)		resulting in 50% less generation of liner waste material thereby solving disposal issues in labelling industry.
8.	Design & manufacturing of Inertial Navigation Sensors and Autopilot	M/s. Aeron Systems Private Ltd., Pune (A start up venture)	Maharashtra	Mr. Ashvani Shukla (ashvani@aeronsystems.com)	70.00	Indigenous production of low cost robust customized MEMS sensor system for applications in defence and automotive sector. Product already approved by DRDO, ARDE.
9.	Coil Edge Protector	M/s. Jyoti Cero Rubber, Jamshedpur In collaboration with TATA Steel	Jharkhand	Mr. Manoj Kumar (cerorubber@yahoo.com)	95.00	The new product with unique design minimizes damages of steel rolls during transportation by rail or road. Product already adopted by Tata Steel in transporting steel rolls with reduced damages at the customers end.

B. Innovations under Scaling:

10.	Standard rack mountable, SMPS based precision regulated high voltage power supplies	M/s. IONICS Power Solutions Pvt. Ltd., Hyderabad	Telangana	Mr. Arup Kar (info@ionics.co.in)	100.00	Indigenous production of Switch Mode Power Supply system for high voltage precision equipments used in lab. This will reduce dependence on imported products.
11.	Production of Low Lactose milk	M/s. Madhumita Dairy Products, Bengaluru	Karnataka	Mr. Padmanabhan Babu, (pbabu0@gmail.com)	100.00	Production of cow or buffalo milk with >0.1% lactose content using lactase enzyme for consumption by lactose

						intolerant population particularly kids.
12.	Table top automatic multi- variant dosa making machine	M/s. Mukunda Foods Private Ltd., Bengaluru (A start up venture)	Karnataka	Mr. Eshwar Vikash (eshwar@mukundafoods.com)	50.00	Table top automatic dosa making machine with capacity of making 1 dosa /minute. It standardizes process of making dosa and also makes dosa in hygienic condition aesthetically by restaurants, small caterers and houses.
13.	Upgradation of ROBOPLAZMA Structural cutting system	M/s. Plazma Technologies Pvt. Ltd., Pune	Maharashtra	Mrs. Arundhati Thomas (arundhati@plazmasolutions.com)	100.00	Precision robotic plazma based steel cutting machine enabling variety of job profiles in single system with 2D and 3D cutting.
14.	Processing of e-waste using thermal decomposition method for precious metal recovery	M/s. Revive Electronic Waste Pvt. Ltd., Navi Mumbai (A start up venture)	Maharashtra	Mr. Siddhrath Shiv Kumar (siddharth@revive-ewaste.com)	100.00	Modular size e-waste processing plant of 500 kg/day for recovering precious metals like gold, silver and copper from obsolete PCBs in an organized processing facility.
15.	Indigenous development and manufacturing of autopilot for Unmanned Aerial Vehicles (UAVs)	M/s. Sree Sai Aerotech Innovations Pvt. Ltd. Chennai (A start up venture)	Tamil Nadu	Mr. Sai Pattabiram (sai@muav.in)	68.00	Indigenously designed & developed app based low cost autopilot for easy operation of UAV and farm vehicles
16.	Resource recovery from Lithium, Lithium ion and Nickel Metal Hydride batteries by environmentally sound recycling technology	M/s. E - Parisaraa Pvt. Ltd., Bangalore	Karnataka	Dr. P. Parthasarathy (recycle@ewasteindia.com)	80.00	Recovery of precious metals and value added products like Cobalt from discarded mobile phone & laptop batteries.

C. Projects technically recommended & under financial appraisal of SIDBI

17.	RO-BOAT, an unmanned river surface cleaning robot	M/s. Omnipresent Robot Technologies Pvt. Ltd., New Delhi (A start up venture)	Delhi	Mr. Aakash Sinha (aakash.sinha@gmail.com)	96.00	A semi-autonomous robot to collect the surface trash floating on rivers and water bodies. This product is identified as a potential technology under National Mission on Clean Ganga.
18.	Extraction of Green Silica from Rice Husk Ash	M/s. Bridgedots Techservices Pvt. Ltd., Noida (A start up venture)	Uttar Pradesh	Mr. Tanmay Panday (tanmay.pandya@bridgedots.com)	100.00	Highly dispersible grade of silica extracted from waste material like rice husk ash for use as filler material in tyres to reduce rolling resistance of vehicles for improving fuel efficiency.
19.	Methanometer, LPG gas leak hunter and Manhole gas detector	M/s. Synchro Electronics, Kolkata	West Bengal	Mr. Indranil das (id@synchroelectronics.com)	40.00	Indigenously designed & developed portable low cost devices to detect leakage of hazardous gases e.g. methane, LPG etc. beyond safe threshold limits and raise alarm to save human lives while working in mines or underground drains.
20.	ChillerMate Desuperheater Unit for industrial and commercial operations in the Indian market	M/s. Promethean Energy Pvt. Ltd., Mumbai (A start up venture)	Maharashtra	Mr. K.P. Ashwin (aswinkp@prometheanenergy.com)	52.00	Waste heat recovery from industrial air conditioners and air compressors for converting it into useful energy resulting in energy efficiency.
21.	Long fibre thermoplastics for automobile applications	M/s. SKYi Composites Pvt. Ltd., Pune	Maharashtra	Dr. Sachin Jain (sachin.jain@skyi.co)	100.00	Indigenous technology for manufacturing high quality

		(A start up venture)		m)		reinforced long fibre thermoplastics to replace specific metal parts in automobiles for reducing body weight
22.	PLUGnCHILL Cold Chain products	M/s. Thermal energy service solutions Pvt. Ltd., Navi Mumbai	Maharashtra	Mr. Rajat Gupta (rajat@tessol.in)	100.00	Use of Phase Change Materials (PCM) in the refrigerated containers of reefer vans to avoid use of diesel for cooling in cold chain while transporting perishable foods & dairy products.
23.	Inflatable Technology for Water Body Cleaning	M/s. Agastya Buoyant Pvt Ltd., Kolkata (A start up venture)	West Bengal	Mr. Sandip Nair (sandip@agastyabuoyat.com)	80.00	Indigenously designed & developed Inflatable trash boom for collection of floating surface trash in water bodies / rivers and restricting it to spread across water body. A potential product demonstrated at Ganga Sagar Mela and Durga Puja immersion for collecting rejects of religious functions.
24.	Weigh Smart	M/s. Tiino Techmations Pvt Ltd, Coimbatore (A start up venture)	Tamil Nadu	Dr. V. Vijayaragavan (vijay@tiino.in)	100.00	New orthotropic mechanical structures for smart weigh bridge with energy efficient indicator system to make tamper proof weigh bridges. It reduces steel consumption and civil excavation work while constructing weigh bridge leading to carbon footprint reduction.

25.	Powdered Oil Based Mud Products (POLVO SERIES)	M/s. Gumpro Drilling Fluids Pvt. Ltd. Mumbai	Maharashtra	Mr. Vivek Gupta (vivekgupta@gumprodf.com)	100.00	Powdered form of emulsifier for use in oil drilling operations in sub-zero conditions to avoid preheating. It will reduce the logistic issues of recovering drums in case of liquid emulsifier used conventionally in remotely located oil fields.
26.	Production of Coenzyme Q10, Rapamycin and Mycophenolic acid: Fine Chemicals of High therapeutics and Nutritional Value for Human being	M/s. Agati Healthcare Pvt. Ltd., Navi Mumbai Technology transfer from IIT -BHU, Varanasi	Maharashtra	Dr. Mamta Sharma (ira91sharma@gmail.com)	100.00	Indigenously developed novel process based on Artificial Neural Network (ANN) for production of three products at lower cost presently being imported to India.

Recognition of Srijan recommended technology innovations:

1. M/s. Mukunda Foods Private Ltd. was selected in top 10 of DST-Lockheed Martin IIGP awards 2015 and was also selected for Start up Connect programme in USA during the visit of Hon'ble PM of India in the year 2016 for the innovative product Table top automatic multiple variant dosa making machine.
2. M/s. Bridgedots Techservices Pvt. Ltd. Noida was selected in top ten of DST-Lockheed Martin IIGP award 2015 and in top six finalists in the MSME-UNIDO Cleantech Programme 2015 for developing innovative process for extraction of high grade silica from rice husk ash for use in automobile tyres to improve fuel efficiency.
3. M/s. Promethean Energy Pvt. Ltd., Mumbai became one of the two winners of MSME-UNIDO Cleantech Programme 2015 and participated in global Cleantech competition in USA for the innovative product ChillerMate Desuperheater Unit for waste heat recovery in industrial chillers and air compressors. The innovator was also selected among top 30 start ups to showcase technologies in USA during the visit of Hon'ble PM of India.
4. M/s. Agastya Buoyant Pvt. Ltd., Kolkata was among the top three winners in the Govt. of West Bengal sponsored "Egiye Bangla" programme in 2016 for innovative product Inflatable trash boom for water body cleaning.

5. The innovative product RO-BOAT, a semi-autonomous river surface cleaning equipment developed by M/s. Omnipresent Robot Technologies Pvt. Ltd. New Delhi has been identified as a potential technology by the National Clean Ganga Mission.

6. M/s. Millennium Rubber Technologies Pvt. Ltd., Thrissur, Kerala was selected in top six finalists in the MSME-UNIDO Cleantech Programme 2015 for innovative product environment friendly self-grooving rubber roller for double roller cotton ginning machines.

7. M/s. Jyoti Cero Rubber, Jamshedpur got India SME giants awards in the year 2013-14 from the Indian SME Forum in Mumbai for development of new materials in the areas of abrasion and corrosion resistance.