

Technology Portfolio Workshop for MSMEs/Startups & Technology Transfer “Mercury –Free Plasma UV Lamp”

A technology portfolio workshop was organized at CSIR-CEERI's Incubation-cum-Innovation Hub, Jaipur on 23rd April 2018 for MSMEs/Startups followed by a Technology transfer function on “Mercury Free Plasma UV-Lamp Compatible to Advanced Photocatalytic Oxidation System Based Air Purifier”

The occasion was graced by Prof. Santanu Chaudhury, Director, CSIR-Central Electronics Engineering Research Institute, Pilani, Dr. H. Purushotham, Chairman and Managing Director, National Research Development Corporation (NRDC), New Delhi and Shri. M. K. Saraswat, Director, MSME-Development Institute (Ministry of Micro, Small & Medium Enterprises), Jaipur. Around 30 industries/startups participated in the event along with around 20 participants from Govt. Offices.

Dr. Ram Prakash, Scientist-in-Charge, CSIR-CEERI's Incubation-cum-Innovation Hub, Jaipur Centre delivered his welcome address and mentioned about this CSIR-CEERI's uniquely designed facility at Jaipur and its objectives. Immediately after the start of the function, an agreement for transfer of technology (ToT) on “Mercury Free Plasma UV-Lamp Compatible to Advanced Photocatalytic Oxidation System Based Air Purifier” was signed with M/s. Parappadi Technologies Pvt. Ltd. From CSIR-CEERI side Dr. S. A. Akbar, Head PMBD signed the document whereas from M/s. Parappadi Technologies Pvt. Ltd side Shri. Hari Prasad, Director signed the agreement. This ToT agreement was exchanged between Director, CSIR-CEERI and Director, M/s. Parappadi Technologies Pvt. Ltd. Trivandrum.

In his opening remarks, Prof. Santanu Chaudhury, Director CSIR-CEERI, mentioned about Mercury-free plasma UV-lamp technology and talked about the key feature of this technology and air purifier system. He mentioned that it enables rapid purification of air and does not use hazardous mercury in the UV-lamps, which is highly toxic and unsafe for environment. He also briefed audience about technology product portfolio available with CSIR-CEERI and highlight about the support system available with CSIR-CEERI for MSMEs/starups through its main centre at Pilani and its other centres at Jaipur, Delhi and Chennai. He announced that CSIR-CEERI has signed a MoU with National Research Development Corporation (NRDC), New Delhi to start CSIR-CEERI's Incubation Unit Facility Jaipur under the aegis of NRDC and

hoped that with this initiative a large number of industry startup's will be benefited in and around the state of Rajasthan.



Exchanging of ToT agreement between CSIR-CEERI and M/s. Parappadi Technologies (P) LTD.,

Dr. H. Purushotham, Chief Guest of the day gave an introduction to NRDC and its strategy for commercialization of Technologies by various R&D labs, universities and specially CSIR labs. Various services provided by NRDC New Delhi for supporting startups, MSME's, Corporates and Entrepreneurs were also discussed.

Shri. M. K. Saraswat, Director, MSME-Development Institute, Jaipur and guest-of-honour of the day presented an overview of the programmes and schemes for the development of MSME's in the state of Rajasthan. Shri Pradeep Ojha, Dy-Director MSME also discussed in detail regarding various financial schemes of Govt. of India for supporting MSME's. He also discussed regarding MSME Samadhan Portal for easy filing of applications and steps involved in the process.

A press briefing was organized after the inaugural session which was addressed by Prof. Santanu Chaudhury, Director, CSIR-CEERI and Dr. S. A. Akbar. They have spoken regarding various CSIR-CEERI technologies as well as regarding facilities at CSIR-CEERI's Incubation. Dr. Ram Prakash, mentioned about the CSIR-CEERI's Incubation Unit under the aegis of NRDC being setup at CSIR-CEERI's IIH, Jaipur Centre to support startups, and creative entrepreneurs. The startups incubated at CSIR-CEERI's IIH would receive, support from CSIR- scientists all over India including CSIR-CEERI as well as technologies developed by CSIR can also be

brought in for the benefit of the society. The support for patenting, market research, finances, angel investors, venture capitalists, other marketing issues, etc. for the incubates will be provided by NRDC, New Delhi.

The second session of the event began with the presentations made by CSIR-CEERI scientists regarding recently developed technologies, which are available for commercialization immediately. Shri. Navjot, Scientist, CSIR-CEERI presented different technologies available for detection of adulteration in Milk. He discussed regarding different types of adulterants in milk as well as technologies available at various scales from personal handheld detection to fast adulterant detection available for dairy industry. Dr. Ajay Agarwal, Area Coordinator, Smart Sensors Group, gave a presentation related to MEMS based gas sensors for environment monitoring. The talk included the need for gas sensors and its application particularly for the detection of poisonous gases in industries. He discussed various gas sensors designed and fabricated by CSIR-CEERI which was available for commercial exploitation by the industries.

Dr. Nikhil Suri, Scientist, CSIR-CEERI, presented his work related to Micro hot plate based advanced technologies for application in water heating, micro farming, etc. Shri. M. Santosh presented CSIR-CEERI's technologies of Solar PVT and Smart Solar Tree. He discussed various optimizations considered in the design of Smart Solar Tree. The Internet of Things (IoT) technologies incorporated with solar tree was also discussed along with various application opportunities related to Smart Solar Tree. Shri. Ajeet Dhakar, Senior Scientist, CSIR-CEERI, discussed about Solar Power Driven Pump and Solar Grid Tied Inverter. He also discussed about different Govt. subsidies and schemes available for promotion of solar power driven pumps and inverters. At the last Dr. Ram Prakash made technology presentation related to Mercury-free Plasma UV lamp based advanced photocatalytic Oxidation System for Indoor Air Purification.

The workshop was concluded with the vote of thanks proposed by Dr. S. A Akbar, Chief scientist and Head PMBD. He expressed his thankfulness to all the chief delegates, speakers and other participants present at the venue.