CSIR- NEERI set-up an eco-friendly sewage treatment plant at ARCI, Hyderabad

The First Phytorid- Scientific Wetland with Active Biodegradation (SWAB) based sewage treatment plant in Telangana was formally inaugurated by Dr. G. Padmanabham Director, International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad and Dr. Rakesh Kumar, Director, National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur on 11 February 2020.

This is a well-proven technology for sewage in Indian conditions with flexible in design according to user requirements, which mimics the natural environment, low in cost, low in energy consumption, and allows reuse of water. It has been commissioned at various places in the country, but this is the first plant in Telangana.

Sewage contains organic wastes, suspended solids, and pathogenic micro-organisms as the primary source of water pollution. In order to treat the sewage before it is discharged to the environment and to use the water efficiently, CSIR-NEER has developed a patented Phytorid technology based on the concept of engineered constructed wetland.

Dr. G. Padmanabham, Director-ARCI (Left) & Dr. Rakesh Kumar, Director-CSIR NEERI (Right) inaugurating the Sewage Treatment Plant at ARCI-Hyderabad

Speaking on occasion, Dr. G. Padmanabham Director, ARCI, emphasised the importance of scientific communities to evolve strategies to develop environment-friendly technologies as well to develop realistic and innovative systems for sustainable implementation. Dr. Padmanabhamalso expressed keen interest in collaborating with CSIR-NEERI in areas of development of materials for environmental technologies.

Dr. Rakesh Kumar, Director, CSIR-NEERI said that Phytorid is a well-proven technology for Indian conditions and is flexible in design according to user requirements. NEERI has already commissioned several Phytorid based sewage treatment plants across the country. The technology is approved by Swachh Bharat Mission, Government of India, Government of Maharashtra, and Government of Madhya Pradesh. He also appreciated ARCI for establishing the first Phytorid based Sewage Treatment Plant in Telangana.

Dr. Roy Johnson, Associate Director, ARCI, Hyderabad, highlighted the functioning of Phytorid sewage treatment plant, and he said that the treated water is currently used for gardening and greenery development in the campus. Dr Ritesh Vijay, Scientist & Head, CSIR-NEERI Mumbai Zonal Centre pointed out that Phytorid technologies are currently gaining prominence due to their inherent advantages such as mimicking the natural wetland ecosystem, their low cost, low energy consumption and because they enable reuse of water for floriculture, washing roads, flushing in addition to gardening and so on.

Dr. Tata Narasinga Rao, Associate Director, ARCI, Hyderabad, Dr.Shaikh Basha, Scientist & Head, Hyderabad Zonal Laboratory, Mr. M. Venkanna, Regional Officer, Telangana Pollution Control Board also spoke on the occasion. Mr.P. Nagarjuna Rao, M/s. Ayyappa Infra Projects Pvt Ltd, Hyderabad, and officials of ARCI and NEERI were also present during the occasion.

Phytorid Sewage treated water being used for gardening and greenery development at ARCI Campus