



INDIAN INSTITUTE
OF TECHNOLOGY
PALAKKAD

INSTITUTE COLLOQUIUM



Prof. Ligy Philip

Professor of Civil Engineering and Dean Planning at the Indian Institute of Technology Madras, Chennai

Ligy Philip is a professor of Civil Engineering and Dean Planning at the Indian Institute of Technology Madras, Chennai, India. She earned her Ph.D. from the Indian Institute of Technology, Kanpur in 1998. She has authored over 250 scientific papers including about 140 in International journals of repute and developed many technologies for the remediation of contaminated soil/aquifer/water/wastewater and air. She has already guided 20 Ph.D students and 11 students pursuing Ph.D with her. She is presently on the editorial board of three international journals and one national journal. Many of her technologies are already transferred to the industry/filed. The easy to use water quality test kit developed by her team is extensively used by UNICEF, many Panchayats and NGOs. The point of use filter and easy to use water quality test kit is being taken up by TFSC recently, for dissemination in various parts of the country. Prof. Ligy's research interests are in rural water supply, bioremediation of contaminated soil and aquifers, water and wastewater treatment, onsite and decentralized systems, recycle and reuse. She is the Coordinator for the Ministry of Urban development Centre of Excellence for Wastewater Management. She is also serving as the waste management area coordinator for Indio German Centre for Sustainability. She is the chairperson/ member of various state and central Government expert committees dealing with water and waste management. She is Fellow of National Academy of Engineering (FNAE) and Royal Society of Chemistry (FRSC).

Sustainable Wastewater Management: Challenges and Way Forward

Water is one of the world's most valuable resources which are under constant threat due to climate change and resulting drought, explosive population growth and waste. Consequent to rapid growth in population and increasing water demand, stress on water resources in India is increasing and per capita water availability is reducing day by day. An increase in urban water supply implies an increased wastewater generation. However, it is a major challenge for developing nations like India to meet the growing infrastructural requirements for the management of wastewater. Presently less than 35 % of the wastewater generated in India is getting treated. As a result, most of our water bodies including groundwater sources are getting contaminated. To tackle both the wastewater management problem and dealing with the water scarcity, a paradigm shift with respect to wastewater is needed. One needs to consider wastewater as a resource than a problem. This presentation will highlight the present status of wastewater management in India and associated problems. Also various simple and novel technologies which can be employed for effective recycle and reuse of wastewater will be discussed in detail.

13th Nov 2019 | 4 pm

**Venue: Auditorium,
Indian Institute of Technology Palakkad
Ahalia Integrated Campus, Kozhipara,
Palakkad - 678 557, Kerala.**