



## ABOUT OUR INSTITUTE & DEPARTMENT



**Prof. K.N. Satyanarayana**  
Director, IIT

The Indian Institute of Technology Tirupati (IIT Tirupati), established in 2015, is an autonomous Institute under Ministry of Education, Government of India. The Government of Andhra Pradesh is nurturing Tirupati as knowledge hub of the State.

The Department of Civil and Environmental Engineering is one of the earliest departments, which was set up in 2015 within the Institute. The Department offers numerous courses at the undergraduate and postgraduate level to introduce students to academic research and themes relevant to the civil engineering industry.

**OUR VISION:** To achieve excellence in pedagogy and research relevant to the natural environment as well as sustainable and resilient infrastructure, with a focus on quality-of-life initiatives of national and international importance.



## ABOUT THE WORKSHOP

This Workshop will address the innovative treatment options for wastewater. A dialogue concerning potential future directions for the wastewater profession is initiated by identifying principal challenges. It is an excellent opportunity for attendees to get the latest information on challenges and innovations for wastewater treatment, both current and longer term, and interact with professionals and experts from the eminent and prestigious IITs, and Government Authorities.

This Workshop will have a specific focus on sources of wastewater and their potential differences, sensors developed, conventional, and emerging treatment technologies, design of a potential wastewater treatment plant, sensors developed, and socio-economic, impacts, and opportunities. It will feature a great mixture of both academics and industry leaders, discussing the challenges, and innovations related to this topic, but also on other current challenges faced by the water sector.

### FOCUS OF WORKSHOP

- Wastewater Sources; and their Characterization and Significance
- Conventional vs Efficient Novel Wastewater Treatment Technologies
- Wastewater to Energy Conversion, Resource Recovery and Safe Reuse
- Wastewater Treatment Plant Design Aspects: Digitalization Approach (Software, Modelling, and Sensors)
- Nanotechnology Intervention in Wastewater Treatment
- Wastewater: Environmental/Social Footprint: Scope and Opportunities

### IMPORTANT DATES

**Workshop date:**  
1 - 2 December, 2023

**Registration deadline:**  
15 November, 2023

**Registration Link:**  
[Google form](#)

### REGISTRATION FEE

PARTICIPANTS	FEE (includes Food & Accommodation till 6 PM of Day - 2)
Students/Startups/Scholars	Rs. 1,500/-
Faculty/Industry/Working professionals	Rs. 5,000/-

### WORKSHOP HIGHLIGHTS

- ✓ Opportunity to network and forge alliances with the brightest minds from Government entities, NGOs, and Corporations.
- ✓ Hands-on experience and Interactive Workshop addressing the technical challenges faced by innovators in the water and wastewater.
- ✓ Site visit and showcasing Wastewater Recycling Technologies at IIT Tirupati (**visit to two wastewater treatment plants in IIT Tirupati (DAY – 2)**). Detailed explanation on Recycling and Reuse of Treated Wastewater for various purposes.

### OUR SPEAKERS



**Prof. Ligy Philip**  
Institute Chair Professor, IIT Madras, Dept. of Civil Engineering  
**Topics covered:**  
A) Wastewater Sources; and their Characterization and Significance  
B) Conventional vs Efficient Novel Wastewater Treatment Technologies



**Dr. Narendra Singh**  
Assistant Professor, IIT Tirupati, Dept. of Chemical Engineering  
**Topics covered:**  
Nanotechnology Intervention in Wastewater Treatment



**Prof. Brajesh Kumar Dubey**  
Professor, IIT Kharagpur, Dept. of Civil Engineering  
**Topics covered:**  
Wastewater to Energy Conversion, Resource Recovery and Safe Reuse



**Dr. Shihabudheen M. Maliyekkal**  
Assistant Professor, IIT Tirupati, Dept. of Civil & Environmental Engineering  
**Topics covered:**  
Wastewater: Environmental/Social Footprint: Scope and Opportunities



**Prof. Bhanu Prakash Vellanki**  
Professor, IIT Roorkee, Dept. of Civil Engineering  
**Topics covered:**  
Wastewater Treatment Plant Design Aspects: Digitalization Approach (Software, Modelling, and Sensors)



**Dr. Narasamma Nippatlapalli**  
Assistant professor, IIT Tirupati, Dept. of Civil & Environmental Engineering

**PROGRAM CONVENER**  
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