



## Familiarization, Handling and Training on Sophisticated Analytical and Energy Audit Instruments for Engineers (Virtual Mode)

(Under the KARYASHALA Scheme - A SERB initiative)

October 18<sup>th</sup> - 24<sup>th</sup> 2021

Funded By

Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India under Accelerate Vigyan Scheme

Organized by

Department of Energy and Environment, National Institute of Technology, Tiruchirappalli

### About the Institute and the Department

The National Institute of Technology Tiruchirappalli (formerly known as Regional Engineering College, Trichy) is situated in the heart of Tamil Nadu on the banks of river Cauvery. Since its inception in 1964, it has established itself as a premier institute imparting quality technical education and engaged in research and development in different fields. The institute offers ten Undergraduate programmes and twenty-seven Post Graduate programmes in Science, Engineering & Technology, besides M.S. (by Research) and Ph.D. in all the departments. NIT Trichy is located about 22 km from Tiruchirappalli Junction / Central Bus stand on the Trichy Thanjavur Highway. Department of Energy and Environment (DEE herein, formerly known as CEESAT) was established in 1995 under the UK India REC project. MTech. (Energy Engg.), an interdisciplinary full-time programme is offered since 1996. The research and development activities of DEE include CO<sub>2</sub> capture and sequestration, effluent treatment using solar energy / phytoremediation, energy modeling, Coal and biomass conversion, wind energy, Solar PV/ Thermal systems, energy-efficient building, and energy storage devices. The department is committed to convert its research into a real-time technology transfer to the society and industry where it meets out its ultimate objective.

### About the Course

'KARYASHALA' is aimed to provide hands-on experience to the students primarily from universities, colleges, private academic institutions and newly established institutes in handling / troubleshooting of high-end scientific instruments and such skill development on themes required for research work. The program is meant to support motivated PG and Ph.D. level students, who are having a strong willingness to get excel in their scientific and engineering research pursuits. Following are the objectives of this high end workshop:

1. Theoretical background and familiarization of the sophisticated analytical and energy audit instruments.
2. Hands-on training on sample preparation for testing in the analytical instruments.
3. Exposure to handling, troubleshooting, and first step maintenance of the analytical and energy audit instruments.
4. Data analysis and interpretation of results obtained from the tests.



**Who can attend:** Karyashala is open to research scholars/ postgraduate students from all Institutes, Colleges and Universities who want to develop hands-on expertise/skill to handle sophisticated analytical and energy audit instruments. **There is no registration fees. Limited seats are available, Allotment will be on first come first serve basis.**

**How to Apply?** <https://forms.gle/qfHtHNbDDY2gaNei8>

### Sessions from skilled experts

- **PerkinElmer:** DSC, FT-IR, NIR, TGA, TGIR, CHNO Analyzer
- **DEE:** Energy Audit & Calibration Session
- **Tech Science & Global:** ECM/Solar Simulator, Bomb Calorimeter, TOC
- **Metrohm:** Moisture Analyzer/Ion Chromatography
- **Academicians from reputed institutions**

### Important Dates

Registration opens

September 18<sup>th</sup>, 2021

Last date for application

October 10<sup>th</sup>, 2021

Announcement of shortlisted candidates

October 12<sup>th</sup>, 2021

Workshop dates

October 18-24, 2021

### Event Organizers

**Dr. Premalatha M,**  
Head of the Department, DEE

**Dr. Ruben Sudhakar D**  
Asst. Professor

**Dr. Jaganathan V M**  
Asst. Professor

**Dr. Kalaiselvan N (PDF)**

For further queries contact: +91 6260540607  
Email: [deenittrichy@gmail.com](mailto:deenittrichy@gmail.com)