



# SOPHISTICATED INSTRUMENTATION TECHNIQUES FOR ADVANCED RESEARCH (SITAR) 2026

(5 DAY SELF-SPONSORED WORKSHOP)

23 - 27 FEBRUARY 2026

Organized by  
The Sophisticated Instrumentation Facility (SIF), NIT Tiruchirappalli



## ABOUT THE INSTITUTE

National Institute of Technology Tiruchirappalli (NIT Trichy), established in 1964 and declared an Institute of National Importance in 2003, is one of India's premier engineering institutions. Spread across 800 acres in Tamil Nadu, the Institute offers undergraduate, postgraduate, and doctoral programs through 20+ academic departments. NIT Trichy is consistently ranked among the top engineering institutions in the country (NIRF 2025: 9th in Engineering, 31st overall).

A recognized hub for advanced research, the institute hosts multiple Centers of Excellence in areas such as AI, IoT, power systems, and sustainable energy, supported by major national funding agencies and strong international collaborations.

To further strengthen research and consultancy activities, NIT Trichy has consolidated its advanced analytical and characterization infrastructure under the Sophisticated Instrumentation Facility (SIF). The SIF operates on a shared-access model, enabling optimal utilization of state-of-the-art equipment while fostering interdisciplinary research, institutional collaboration, and industry-academia partnerships.

## ABOUT THE WORKSHOP

SITAR will provide participants with direct exposure to advanced research equipment, enabling them to understand operational principles, address common misconceptions, carry out data analysis, and systematically document and report results. The workshop will also facilitate professional interaction and networking among participants from academia and industry.

## TOPICS COVERED

Theory and Hands-on sessions on

- Field Emission- Scanning Electron Microscope (FESEM)
- X-Ray Diffraction – Basics and Data Analysis
- Inductively Coupled Plasma – Mass Spectrometry (ICP-MS)
- Differential Scanning Calorimetry (DSC)
- Thermogravimetric Analyzer (TGA)
- Electrochemical Workstation
- Fourier Transform Infrared Spectroscopy (FTIR)
- UV-Visible Spectroscopy

## REGISTRATION DETAILS

**Targeted Participants:** Faculty members, Research Scholars, PG and UG students.

**Registration Fee :**

Students/Scholars: Rs. 2500/-

Faculty and Others: Rs. 4000/-

**Link for Registration:**

<https://forms.gle/CbQ4wi4VsFCaG89B6>



Note: Payment Link will be shared with shortlisted candidates

**Registration opening date: 09/01/2026**

**Registration closing date: 26/01/2026\***

\* Only a limited number of seats are available and will be allotted on a first-come, first-served basis.

## EVENT ORGANIZERS

**Dr. M.Umapathy**

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