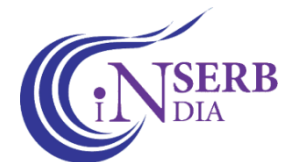


About the Institute:

National Institute of Technology, Tiruchirappalli (NIT-T), is one among the premier Institutions of India and is well known for its high standards in teaching and research. It offers 10 Undergraduate and 23 Postgraduate programmes in the disciplines of Engineering, Science, Architecture and Management. NIT-T retained its 1st position amongst its 31 counterparts in the country and 9th position among Engineering Institutions in the National Institutional Ranking Framework (NIRF) 2023 Ranking.

About the Department:

The Department of Instrumentation and Control Engineering (ICE) is interdisciplinary in nature. It has vibrant faculty members with research and teaching interests that cover a broad range of fields. The department offers B.Tech. Programme in Instrumentation and Control Engineering [Accredited by NBA for 6 years], M.Tech. Programmes in Industrial Automation and in Process Control and Instrumentation jointly with the Department of Chemical Engineering and research programmes (M.S. and Ph.D.) in the various fields of Instrumentation and Control Engineering. The department with its state-of-the-art laboratories has obtained various funded projects from government/private organizations and renowned industries. There are more than 10 patents that have been filed by the department members in the past.



SERB Sponsored

One day National Workshop on

Scanning Probe Microscopy – Technology and Applications

August 29th 2024 (Thursday)

Organized by



**Department of Instrumentation and Control Engineering
NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI - 620015**

Event Organizer:

Dr. Sri Ram Shankar R.,

**Assistant Professor, Instrumentation and Control Engg. (ICE),
NIT-Tiruchirappalli**

About the Workshop:

Scanning Probe microscopy is a versatile technique used for the characterization of topography and material properties at the nanoscale. It is compatible with a wide range of materials ranging from conductors to insulators, in environments ranging from vacuum to liquid medium. It also enables in-situ characterization of soft materials such as polymers, functional biomolecules and proteins. With these characteristics, the technique is widely employed in material characterization in many domains such as drug discovery, disease detection, batteries, novel materials and defect inspection in semiconductor devices.

The major topics to be covered in the workshop includes

- Fundamental of Scanning Probe Microscopy (SPM) Measurements
- Applications of Scanning Probe Microscopy in Functional Materials
- SPM Applications in Semiconductor Industry
- Advances in Nanomaterials
- Practical Demonstration of SPM Measurements And Data Analysis
- Interactive Sessions

This workshop is meant for PG students, research scholars and faculty members who are interested in the research of novel materials and their characterization, in the fields of Material Physics, Chemistry, Biology and various fields of Engineering. It provides an opportunity to gain insights on the technology and applications of Scanning Probe Microscopy from eminent speakers from India and abroad. Further, this workshop also provides a platform for the scholars to discuss and interact with experts leading to a collaborative research environment.

Schedule:

Workshop will be conducted in HYBRID MODE. Eminent Speakers from academic institutes and Industries will deliver lectures. The schedule of the programme will be shared to the participants through their registered email ID.

Organizing Committee :

Chief Patron : Dr. G. AGHILA

Director, NIT Tiruchirappalli

Patron : Dr. V. SANKARANARAYANAN

Dean (Research and Consultancy)

Organizer : Dr. SRI RAM SHANKAR R.

Prospective Participants

This workshop is open for participants from academic Institutions including Faculty members, Post-graduate students and Ph.D. scholars from Technical Institutions and Industry.

Registration:

- Registration Fee Rs. 250/-
- Use the below link for workshop registration on or before 27th August 2024. Proof of payment must be uploaded in the google form.

<https://forms.gle/szRDynDRPL3GCaQX6>



Mode of Payment:

Registration fee can be paid through State Bank of India **i-collect** using the link: <https://www.onlinesbi.sbi/sbicollect/>

[Educational Institutions -> Filter by state: "Tamil Nadu" ->

Search "Conference and workshop NIT Trichy" ->

Payment Category " ICE SCANNING PROBE MICROSCOPY 2024"]

Important Dates:

Last date for submission or Registration – **27th August 2024**

Confirmation of Participation will be emailed after receiving registration

Workshop Date – **29th August 2024**

Contact :

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Mrs. Bharathi S - 90475 05467

Dr. Sri Ram Shankar - 96111 91544 – srir@nitt.edu