



SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC



National Workshop on Experimental and Theoretical Approaches Towards Material Characterization

(Explore, Analyze, Innovate)

Organized by

Centre for Nanoscience and Nanotechnology &

Centre of Excellence for Energy Research

International Research Centre

Sathyabama Institute of Science and Technology, Chennai

7TH - 10TH OCTOBER, 2025

Who can attend?

Faculties, Scientists, Research Scholars and
UG/PG Students from Universities, R&D
Organizations and Industries can
participate.

- Certificate will be issued to all the participants.
- Bulk participation from the same institute will be preferred to arrange a separate training.
- Limited accommodation provided
- Participants will be encouraged with prizes at the end of sessions.

Account Name: Dean
(Publications &
Conferences), Sathyabama
Institute of Science and
Technology

Account Number : **891734627**

IFSC Code : IDIB000T020

Branch Code : 098

Bank & Address: Indian Bank,
Thousand Lights Branch, Chennai -
600006

LAST DATE FOR REGISTRATION
30/09/2025



REGISTRATION LINK
<https://forms.gle/CPkKiyUyBfpHH85t5>

CONTACT US

DR. SUBHA K RAO - 9962232940
DR. S. NELLAIAPPAN - 9994704930

UG/PG - Rs.2500/-
RESEARCH SCHOLARS/POSTDOC -
Rs. 3000/-
FACULTY/ INDUSTRY : Rs. 4000/-

EMAIL

programs.cnsnt.sist@gmail.com

ABOUT THE INSTITUTE

Sathyabama Institute of Science and Technology is a prestigious Institution which excels in the fields of Engineering, Science and Technology for more than three successful decades. It offers multi-disciplinary academic programmes in various fields of Engineering, Science, Technology, Law, Dental Science, Pharmacy, Nursing, Management, Arts and Science and Allied Health Sciences. It is established under Sec.3 of UGC Act, 1956 and is Accredited with 'A++' Grade by the National Accreditation and Assessment Council. The Institution has been Graded as Category I University by UGC under the UGC (Categorization of Universities (only) for Grant of Graded Autonomy) Regulations, 2018. The Institution has been ranked in 51st position by the National Institutional Ranking Framework (NIRF), Government of India among the Universities in India for the year 2023 and ranked one among the top 100 Universities for eight consecutive years. Sathyabama Institute of Science and Technology is ranked among the Top 5 Institutions in the Country for Innovation by ATAL ranking of Institution for Innovation Achievements, Govt. of India.

CENTRE FOR NANOSCIENCE AND NANOTECHNOLOGY

The Centre for Nanoscience and Nanotechnology was established in January 2006 at the University campus to accomplish the goal of enhancing advanced research in the areas of Nanoscience and Nanotechnology. The leading area of research includes nanomaterials, nanotechnology, nanocomposites, nanoelectronics, nanofabrication etc. In addition to research, the Centre also conducts training and awareness programmes, workshops national and international conferences on recent trends and developments of nanoscience & nanotechnology on various themes of national interests. The Centre is undertaking research and development projects from various agencies and is offering consultancy services to industries and research organizations in India and abroad. The Centre has several sophisticated instruments such as HRSTEM, FESEM, XRD, XPS, Raman, AFM, Hall Effect measurement system, UV-vis spectrometer, FTIR, EBPVD, RF/DC Magnetron sputtering, PLD, CVD, etc.

ABOUT THE WORKSHOP

The workshop will focus on exploring the structural, surface, and electronic properties of materials using cutting-edge techniques. Participants will learn how XPS helps analyze surface composition and chemical states, XRD provides insights into crystal structures and phase identification, DFT offers powerful computational tools to study electronic properties, and BET enables the evaluation of surface area, porosity, and adsorption characteristics. Through a perfect blend of expert lectures and hands-on sessions, this workshop aims to equip students, researchers, and professionals with the practical knowledge and technical skills required to apply these techniques effectively in research, development, and industrial applications. It promises to be an excellent platform to upgrade expertise, exchange ideas, and keep pace with the latest advancements in materials science and nanotechnology.

TECHNIQUES COVERED IN THE WORKSHOP

- X-Ray Photoelectron Spectroscopy- Basics, Hands-on, data interpretation
- X- ray diffraction - Basics, Hands-on, Rietveld refinement
- BET analysis – Basics, Hands-on, data interpretation
- Electrochemical workstation- Basics, Hands-on, Electrode coating technique, Various electrochemical measurements
- DFT modelling analysis- Basics, Hands-on, data interpretation



CHIEF PATRONS

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PATRON

Dr. T. Sasipraba, Director (Innovation)

ORGANIZING SECRETARY

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Dr. D. Dinesh Kumar, Associate Professor(Research) & Head, CNSNT

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Dr. G. Gopika, Assistant Professor(Research), CEER

Dr. Manjunath Kamath S., Assistant Professor(Research), CNSNT



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Mr. Subash J., Scientific Assistant, CNSNT

Mr. S. Ayyamperumal, Technical Assistant, CNSNT



MENTOR EXPERTS



DR. K. JEYADEEPAN

Associate Professor
SASTRA



DR. TANAY KUNDU

Assistant Professor
Dept. Of Chemistry
SRMIST



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DR. AMRITA PAL

Assistant Professor
Dept. Of Chemistry
SIST



DR. S. NELLAIAPPAN

Assistant Professor
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