

## About the Department of Chemistry, IIT Madras

The Department of Chemistry at the Indian Institute of Technology Madras (IIT Madras), established in 1959, is one of the institute's earliest and most accomplished departments. It has consistently attracted brilliant minds as faculty members and is proud of its involvement in addressing socially relevant scientific issues, such as water purification using nanotechnology. The Department is committed to maintaining state-of-the-art research facilities to conduct cutting-edge research. Among its facilities, the Department houses various sophisticated instruments, including NMR spectrometers (400 MHz and 500 MHz), AFM, ESR, fluorometers, UV-Visible spectrophotometers, FT-IR, MALDI, XRD, DSC, TGA, CHN analyzer, ESI-Mass, TPD & TPR, Chemisorption apparatus, GC-MS/MS, SEM, TEM, and HR-QTOF mass spectrometers. They are dynamic and attract excellent funding from both Government and Industry.

### Who Can Participate:

Participant from Post graduate students and research scholar in all Sciences

### For Further Details:



#### Co-Ordinators

**Dr. R. Baskar,**  
Technical Superintendent,  
IIT Madras - 6369025229



**Dr. V. Mohanraj,**  
Scientific Officer,  
TNSCST- 9787839085

## About The Council:

The Tamil Nadu State Council for Science and Technology (TNSCST), established in 1984 as an autonomous body is dedicated to advancing Science and Technology at the state level. As the apex body in the state the Council plays a pivotal role in initiating, supporting, and coordinating both fundamental and applied research programs in universities and colleges. It also identifies areas where Science and Technology can contribute to the state's development, particularly addressing challenges such as backwardness, rural unemployment, and poverty. Among its various schemes, the Council offers programs like S&T Projects, Student Projects and the Research Funding for Research Scholars in Colleges (RFRS). Under the RFRS scheme, research scholars in colleges receive financial support for conducting research in areas that are relevant to the state's needs. This initiative helps deserving students, particularly those pursuing Ph.D. program by providing them with resources to advance their research. The Council houses a Patent Information Centre and a SC & ST Cell to support the people of Tamil Nadu.

### Registration:

- **No Registration fee** for attending the workshop.
- Those who wish to attend kindly register using the QR Code.
- **Certificate will be provided.**
- Interested Participant may register.

### Location:

📍 Department of Chemistry, IIT Madras.



# Two day “Workshop on NMR Spectroscopy for Rural Students”

**23-01-25 and 24-01-25**

### Jointly Organized by

Tamil Nadu State Council for  
Science and Technology (TNSCST),  
Chennai-600 025

&

Department of Chemistry  
Indian Institute of Technology  
Madras (IITM), Chennai-600 036

## About the Workshop

Students of the science field are regularly exposed to hands-on training in these instrumental techniques, gaining comprehensive practical experience that is essential for their research. The two day workshop will be focused on rural level students doing post graduates and research in science. The number of higher educational and research institutions in our state is increasing every year; however, access to advanced research techniques remains limited for many research scholars in these institutions. Addressing this gap in research resources could open doors to innovative ideas and facilitates not only the collection of valuable research data but also the enhancement and development of scientific expertise. Colleges and institutions located in rural areas, in particular, face a significant disadvantage when compared to universities, which can attract state-of-the-art instrumentation and research techniques through various central funding schemes. In light of this, we are organizing a two-day workshop for postgraduate students and research scholars from colleges across our state.

A key area of research supported by the Council involves Nuclear Magnetic Resonance (NMR) techniques, which play a critical role in discovering new structures across disciplines like Chemistry, Physics, Botany, Zoology, Microbiology, Biotechnology, and Engineering. In this workshop may helpful to rural background students. This workshop is a unique opportunity for selected students from state colleges to access knowledge on NMR (Nuclear Magnetic Resonance) principles and applications at no cost. It will feature highly experienced professors who will provide both theoretical and practical demonstrations. Beyond gaining research skills, participants will have the opportunity to engage in socially relevant research, empowering them to make meaningful contributions to society.

### Registration QR Code



## Patron

**Prof. V. Kamakoti**  
Director,  
Indian Institute of  
Technology Madras  
Chennai - 600036



**Prof. Dr. S. Vincent**  
Member Secretary  
Tamil Nadu State Council  
for Science and  
Technology  
DOTE Campus,  
Chennai-25



**Prof. G. Sekar**  
Head Department of  
Chemistry  
Indian Institute of  
Technology Madras  
Chennai – 600 036



## Eminent Speakers



**Prof. N. Chandrakumar** : Principles of NMR  
Department of Chemistry Spectroscopy  
IIT Madras, Chennai - 36



**Professor Emeritus. S. Sankararaman** : One Dimensional NMR  
Department of Chemistry Spectral Analysis  
IIT Madras, Chennai - 36



**Prof. P. Venkatakrishnan** : Two Dimensional NMR  
Department of Chemistry Spectral Analysis  
IIT Madras, Chennai - 36



**Dr. R. Baskar** : NMR components and  
Technical Superintendent sample preparation  
Department of Chemistry (Hands on Training)  
IIT Madras, Chennai - 36