

**Online Short Term Course
on
Spectroscopic Techniques for
Materials Characterization**

4th – 8th January 2021

Sponsored by TEQIP-III



Organized by
Materials Research Centre

**Malviya National Institute of Technology Jaipur
JLN Marg, Malviya Nagar, Jaipur-302017**

www.mnit.ac.in

Objective of Course

The objective of the course is to acquaint the researchers with spectroscopic techniques for materials characterization. The course is designed to give broad prospective of basic principles, applications and interpretation of the data obtained using NMR, Mass, Raman, UV-visible, FTIR and Fluorescence Spectroscopy. Representative examples showing the interpretation of spectrums will be discussed.



Organizing Committee

Patron

Prof. Udaykumar R. Yaragatti
(Director, MNIT Jaipur)

Chairman

Dr. Kamlendra Awasthi (Head, MRC)

Conveners

Prof. Ragini Gupta
Prof. Kanupriya Sachdev

Coordinators

Dr. Bhagwati Sharma
Dr. Nisha Verma
Dr. Himmat Singh Kushwaha
Dr. Kamakshi

Student representatives

Ms. Surbhi Singh
Ms. Upasana Bhardwaj
Ms. Aditi Sharma

Contact Persons

Dr. Nisha Verma
Materials Research Centre, MNIT Jaipur
Email: nisha.mrc@mnit.ac.in
Mobile No: 9549650182

Dr. Bhagwati Sharma
Materials Research Center, MNIT Jaipur
Email: bhagwati.mrc@mnit.ac.in
Mobile No: 9549650012

About MNIT Jaipur

MNIT Jaipur is one of the premier NITs, designated with the status of “Institute of National Importance” by MHRD. The institute was established in 1963, and its campus spreads over 325 acres of lush green area in the central location of Jaipur city. The institute offers UG and PG courses (B.Tech., M.Tech. /MBA/ M.Sc. & Ph.D.) to about 5000 students, in leading fields of engineering, technology, architecture, management & sciences. The institute is actively engaged in research, consultancy and developmental activities, besides imparting regular teaching. MNIT Jaipur was ranked at 35th position in NIRF ranking 2020.

About Materials Research Centre

Materials Research Centre (MRC) aims to harness the talent resources of MNITJ for promoting interdisciplinary research in appropriate materials technologies. It has been created with an objective of providing a central facility of latest and advanced analytical instruments for research in the application areas of physical, environmental, chemical, allied and interdisciplinary sciences and Technology. MRC provides access to a wide range of state-of-the-art equipment necessary for materials characterization such as NMR, Mass, XRD, XPS, TEM, SEM, AFM etc. The Centre also offers Ph.D. programme and an interdisciplinary Masters Programme in Materials Science and Engineering.

Topics to be covered

The course is interdisciplinary in nature and will be beneficial to students/ researchers from diverse backgrounds working in the field of materials science and technology, chemistry, physics and other allied fields. The main topics to be covered in STC include:

- ^1H and ^{13}C NMR spectroscopy
- Basics of Solid state NMR
- Mass spectroscopy
- Raman spectroscopy
- Fourier transform infrared spectroscopy
- UV-visible spectroscopy
- Fluorescence spectroscopy

Resource Persons/ speakers

The resource persons for the course will be highly experienced faculty members from IITs, NITs, and Central universities, CSIR labs etc. working in the relevant areas.

Targeted participants

Faculty members from engineering institutes/ universities, Ph.D. research scholars and M. Sc./ M. Tech students.

Number of Participants

Number of participants is limited for the workshop. Application will be accepted on *first cum-first serve basis*.

Important Dates

Last date for online registration: 2.1.2021
Confirmation by email: 3.1.2021

How to Apply

Online Short Term Course

On

Spectroscopic Techniques for Materials Characterization

04th – 08th January 2021

Materials Research Centre, MNIT Jaipur – 302017 Rajasthan

Registration

Registration Fees

The participation fee including GST for different participants is:

1. MNIT Students (UG/PG/PhD): Rs.236/-
2. Other Institute Students (UG/PG/PhD): Rs. 354/-
3. Participants from Academia/ Industry: Rs. 590/-

Payment mode: NEFT/IMPS

Account Details: Registrar, MNIT Jaipur (TEQIP-III)

A/C No.: 36875887782, SBI, MNIT Campus, Jaipur, IFSC Code: SBIN0015921

Registration Link:

<https://forms.gle/FaapRKDXBmY4HME39>

*** The receipt of payment must be attached to the google form.**

***E-certificates will be provided only to registered participants with attendance more than 80%**