

Short Term Training Program on Synthesis and Characterization of materials for Bio Medical Applications

February 4-8, 2025



Organized by

Materials Research Centre

Malaviya National Institute of Technology Jaipur

JLN Marg, Malviya Nagar, Jaipur-302017

www.mnit.ac.in

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Dr. Nisha Verma
Head

Materials Research Centre, MNIT Jaipur

Coordinators

Dr. Bhagwati Sharma
Assistant Professor, Materials Research Centre
Prof. Kanupriya Sachdev
Professor, Materials Research Centre
Prof. Ragini Gupta
Professor, Materials Research Centre

Student Organizing Committee

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Kumawat, Mr. Kunal Rohilla, Ms. Preeti,
Ms. Rashmi Jairiya, Mr. Ankit, Mr.
Zainual Abedeen, and Ms. Manisha
Gautam

Resource Person



Prof. Ashok M.
Raichur, a renowned
faculty member at
the Department of
Materials
Engineering, IISc
Bangalore, leads a
research group

focusing on the application of application
of nanotechnology in biomedical and
environmental domains. His current work
includes developing next-generation drug
delivery systems for gene therapy and
anticancer drugs, creating
polyelectrolyte/nanoparticle multilayers
for environmental applications, and
designing nanostructured multilayers for
advanced sensing technologies.
Additionally, his group is pioneering the
development of 2D and 3D structures as
fillers in epoxy nanocomposites. Prof.
Raichur's contributions reflect his
expertise in material synthesis, surface
engineering, and innovative applications,
making him a key figure in
interdisciplinary materials research.

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 43rd position in NIRF ranking 2024.

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 in Materials Science and Engineering.

Techniques to be Covered

- Participants will gain hands-on experience in using advanced characterization techniques critical for understanding material properties.
- X-ray Diffraction (XRD) will be used for structural analysis, revealing crystalline phases and ensuring precise material composition.
- Scanning Electron Microscopy (SEM) will provide detailed insights into surface morphology.
- Atomic Force Microscopy (AFM) will enable nanoscale surface topography characterization.
- Fourier Transform Infrared Spectroscopy (FTIR) will be employed to identify chemical bonds and functional groups, and UV-Visible Spectroscopy (UV-Vis) will assist in studying optical properties, crucial for bioactive materials

Important Dates

Last date for online registration: 01.02.2024 (5 pm)
Registration confirmation will be intimated to participant via e-mail.

Contact Persons

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How to Apply

Registration is open to faculty members, PDF, RA, Ph.D., PG and UG students. You can submit your application through following link:

<https://forms.gle/dFTSHDjquQprH3Rm8>

The participation fees (including 18% GST) for taking the course is as follows:

- Participants from Industry/ Research Organizations: INR 2950
- Faculty Members from Academic Institutions: INR 2360
- Research Scholars: INR 1770
- UG and PG Students: INR 850

Payment mode: NEFT/IMPS

Account Details:

Registrar, MNIT Jaipur

Account No. 676801700388, ICICI Bank,
MNIT Jaipur,
IFSC: ICIC0006768