



భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Summer Training Workshop on Characterization Techniques for Cementitious Materials

Organized by the Department of Civil Engineering, IIT Hyderabad
July 9 and 10, 2025

The two-day summer training workshop will provide a comprehensive understanding of the most commonly used advanced characterization techniques for the study of cementitious materials. Material characterization techniques for cement and hydration related to microstructure, oxide and phase composition, and hydration kinetics will be presented. An in-depth coverage of the theory of the measurement technique and data interpretation will be provided. Detailed lectures and discussions on selected techniques, followed by demonstration sessions, are planned. In the practical sessions, participants will acquire knowledge of all relevant factors that need to be considered when conducting laboratory experiments. The participants will gain insights into the application and expected outcome of each characterization technique.

The following will be covered

1. X ray-based techniques (X ray diffraction and X ray fluorescence spectroscopy)
2. Calorimetry (Isothermal and Adiabatic)
3. Scanning Electron Microscopy (Imaging and energy dispersive spectroscopy)
4. Thermogravimetric Analysis (TGA) and Differential Scanning Calorimetry (DSC)



Academic Block B
Department of Civil Engineering
IIT Hyderabad

Pre-registration link: Limited Seats Available

<https://forms.gle/GKQtvGee1sfhzNhH6>

Last date for pre-registration: 28-02-2025

The registration link and the payment link will be forwarded to selected pre-registered individuals.

Registration fee:

Students: ₹2000 + GST

Researchers/Academicians: ₹10000 + GST

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9 and 10
July
2025



Prof. K.V.L. Subramaniam

IIT Hyderabad



Prof. Shashank Bishnoi

IIT Delhi



Prof. Manu Santhanam

IIT Madras



Dr. Meenakshi Sharma

IIT Hyderabad



Who should attend

- Researchers and doctoral students looking to understand the potential application of characterization techniques.
- Material scientists looking to understand the interpretation of characterization techniques applied to cementitious materials.



Query and Help

workshopctcm.info2025@ce.iith.ac.in

Scan to pre-register

