

REFRESHER COURSE (ONLINE) ON

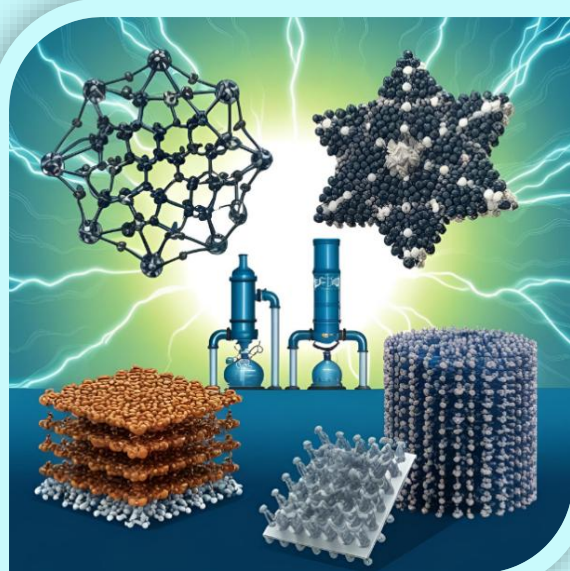
RECENT ADVANCES IN SMART MATERIALS FOR
ENERGY, ENVIRONMENT AND BIOMEDICAL
APPLICATIONS

Organized by: Indian Institute of Technology (ISM) Dhanbad

AUGUST 01-AUGUST 12, 2025

ABOUT THE COURSE

The objective of this course is to close the knowledge gap between conventionally accessible material systems and newly developed smart materials for sustainable technologies, highlighting the vital role that smart materials play in the global biomedical, energy and environment. From a materials perspective, the course will also highlight new developments in energy conversion, storage, reduction of toxic gases in the environment and biological applications like drug delivery, medical imaging etc. Participants will gain insights into the various methods and methodologies employed in developing smart materials and their use in energy and biomedical sectors, and understand the challenges and opportunities associated with each method. Through case studies, hands-on projects, and interactive discussions, participants will learn how to design, optimize, and manage energy systems and biomedical processes.



RESOURCE PERSONS

• Prof. Alok Shukla	IIT Bombay
• Prof. Brahmananda Chakraborty	BARC Mumbai
• Prof. Bhabani Shankar Mallik	IIT Hyderabad
• Prof. Ambarish Kunwar	IIT Bombay
• Prof. Prafulla K Jha	M.S. University of Baroda
• Prof. Chandra Sekhar Rout	CNMS, Jain University
• Prof. Ranjit K Nanda	IIT Madras
• Prof. Nihar Ranjan Jena	IIIT Jabalpur
• Prof. Padmaja P. Mishra	SINP Kolkata
• Prof. Utpal Sarkar	Assam University
• Prof. Pankaj Kalita	IIT Guwahati
• Prof. Avanish Singh Parmar	IIT BHU
• Prof. N. Samsudeen	NIT Tiruchirappalli
• Prof. Manorajan Kar	IIT Patna
• Prof. Ajay K Nayak	NISER, Bhubaneswar
• Prof. Saroj Kumar Nayak	IIT Bhubaneswar
• Prof. Umakanta Tripathy	IIT (ISM) Dhanbad
• Prof. G. P Das	TCG Crest
• Prof. H. Mishra	BHU
• Prof. S. C. Sahoo	CU, Keral
• Prof. Bibhu Ranjan Sarangi	IIT Palakkad
• Prof. R. P. Singh	IISER, Bhopal
• Prof. Bairagi, Ch. Mallick	CU, Jharkhand
• Prof. K. C. Sahoo	NIT Patna

ELIGIBILITY CRITERIA

- ✓ Faculty members from universities and colleges under Section 2(f) of the UGC Act.
- ✓ Teachers from colleges affiliated to a university for at least three years but not yet under Section 2(f) may also apply.
- ✓ Participation in the Faculty Induction Programme (FIP) is a prerequisite for admission.
- ✓ A one-year gap after FIP is required to opt for the refresher course.

SALIENT FEATURES

- ✓ Mode of Course: Online
- ✓ Free Registration.
- ✓ Certificate: Awarded upon successful completion.
- ✓ Duration: August 01-12, 2025 (two weeks)



IIT (ISM) Dhanbad

APPLICATION PROCEDURE

- ✓ Register at <https://mmc.ugc.ac.in/> using your email ID.
- ✓ Login as PARTICIPANT using credentials received on Email.
- ✓ Go to Dashboard, click on "Apply for Other Programmes" → Select "Refresher Course"
- ✓ Programme Name & Centre Name: "Indian School of Mines, Dhanbad (01/08/2025 - 12/08/2025)"
- ✓ Fill in the other required details, upload the NOC and click on Submit button.
- ✓ The format for NOC is available at following link:
https://mmc.ugc.ac.in/Uploads/MMTTP_Nomination%20LetterFormat.pdf
- ✓ **Application Deadline: July 20, 2025**

COURSE COORDINATOR

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