

ABOUT THE WORKSHOP

Advanced materials and manufacturing technologies play a vital role in the economic and societal growth of every country. New materials and manufacturing techniques open doors to develop completely new products with functionalities which may not be possible with the traditional materials. Thorough investigations of materials and manufacturing technologies are mainly required to extend the existing knowledge and to promote innovation and response to ever-increasing industrial requirements. The aim of the workshop is to provide an ideal platform to bring together researchers and practitioners from both academia and industry to meet and share cutting-edge developments in the fields. The lectures will be delivered by distinguished experts in the field of materials and manufacturing techniques, with special focus on their latest developments and applications. This five-day workshop will include theory lectures, special case studies and hands on laboratory classes.

CONTENTS OF THE WORKSHOP

- Advanced materials (Biomaterials, nanomaterials, smart materials, FGM, composite materials, metamaterials etc.)
- Advances in manufacturing (additive manufacturing, advanced joining, sustainable manufacturing processes etc.)
- Eco-friendly innovations in waste-to-value transformation
- Recent trends in material selection, testing and characterization.
- Mechanical, wear and corrosion behaviour of materials.

- Vibration analysis of composite structures
- Application of AI/ML for predicting novel materials with desired properties, and optimising fabrication procedures.
- Modelling and analysis of engineering materials using DIGIMAT, ANSYS, ABAQUS etc.

REGISTRATION & FEE PARTICULARS

Employees from the Industry and R & D Organizations (Online)	Rs. 1000/-
Faculty from Academic Institutions (Online)	Rs. 1000/-
Research scholars and students (Online)	Rs. 500/-

BANK ACCOUNT DETAILS

Account Name:	CONTINUING EDUCATION NIT ROURKELA
Account No.:	10138951784
Bank Name	State Bank of India
Branch:	NIT Rourkela Campus
IFSC Code	SBIN0002109

SCAN TO PAY



UPI ID: 01389517841@sbi

Merchant Name: Continuing Education NIT

IMPORTANT DATES

- Last date for submitting the online or offline form for registration: **18th March 2025**
- Event Date: **19th to 23rd March 2025**

WHO SHOULD ATTEND?

The participation in this workshop is open to faculty and students of recognized technical institutes, researchers from the research laboratory, engineers from industries and any other interested personnel. The successful participants will be given a participation certificate.

ORGANIZING COMMITTEE

Patron

Prof. K. Umamaheshwar Rao

Director, NIT Rourkela

Chairman

Prof. Saroj Kumar Patel

HOD, Mechanical Engg. NIT-Rourkela

Coordinator

Prof. Sandhyarani Biswas

Associate Professor

Department of Mechanical Engineering,

NIT Rourkela, Odisha

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biswas.sandhya@gmail.com

Laboratory Volunteers

Naveen Kumar Akkasali, Research Scholar

Kiran Suna, Research Scholar

Dhira Shankar Patra, Research Scholar

Revanth Tatipaka, M.Tech. Scholar

REGISTRATION FORM

Name:

Designation: (Student/Faculty/Industry)
.....

Organization:

Specialization:

Address:.....
.....

Mobile:

Email:

Registration Fee Details:

Amount: Rs

Transaction ID

Place:

Date: Signature of Applicant

To complete the registration, the participant need to fill the google form given below:

Google Form Link:

<https://forms.gle/Krxq7T8ZNAhVnw268>



ABOUT NIT ROURKELA

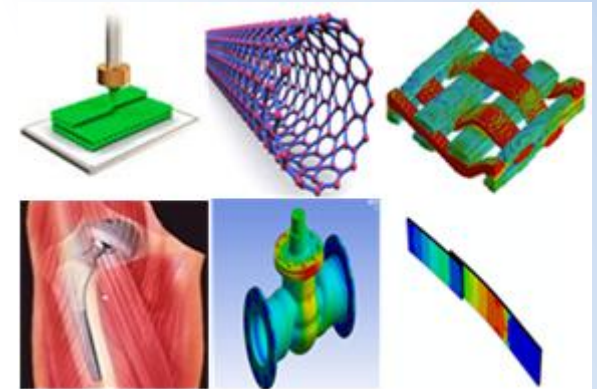
National Institute of Technology Rourkela is an Institute of National importance for technical education established by the Government of India. The institute is an internationally acclaimed institution of higher learning that serves as a source of knowledge and expertise for the society and is a preferred destination for undergraduate, postgraduate, and research students. Rourkela is well connected to all the major cities of India by railway network.



ABOUT DEPARTMENT OF MECHANICAL ENGINEERING

The Mechanical Engineering Department of NIT Rourkela is known for research in a variety of fields include additive manufacturing, mechanical vibration, composite materials, robotics, heat transfer, CAD/CAM, precision engineering, metal forming, CFD, industrial refrigeration, and cryogenics. The department at present has over one hundred research scholars pursuing research in diverse fields. Many research and development projects being pursued by the faculty are sponsored by government agencies and private industries. The major sponsors among these projects are ISRO, SERB, BRNS, DST, CSIR and DRDO.

Five Days Workshop on **Advances in Materials and Manufacturing: Modelling and Analysis (AMMMA- 2025)** (19th-23rd March 2025) (Online Mode)



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