NATIONAL INSTITUTE OF TECHNOLOGY

TIRUCHIRAPPALLI – 620 015

DEPARTMENT OF MECHANICAL ENGINEERING

Anusandhan National Research Foundation (ANRF) sponsored

Two-Day Workshop and One Day Training Programme

on **"Multi-AM Processing of Polymer Matrix Composites"**

In support of **"RP 3D Products, Chennai"**

30.04.2026 – 02.05.2026

About NIT Trichy

The National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli, situated in the heart of Tamil Nadu on the banks of the river Cauvery, was started as a joint and co-operative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to catering to the needs of manpower in technology for the Country. The College has subsequently been conferred with autonomy in financial and administrative matters to achieve rapid development. Because of this rich experience, this institution was granted Deemed University Status with the approval of the University Grants Commission, the All-India Council for Technical Education and the Govt. of India in the year 2003 and was renamed as National Institute of Technology Tiruchirappalli. NITT has carved a mark on the National scene last year by being ranked first among all the NITs and 9th among all the technical institutes in the country by the Institute Ranking framework (NIRF) of the Government of India. The institution offers Undergraduate Courses in ten branches and Post Graduate Courses in twenty-six disciplines of Science, Engineering & Technology besides M.S. (by Research) and Ph.D. in all the departments.

About the Department

The Mechanical Engineering Department of NITT, established in 1964 as one of the institute's first three departments, is among the finest in the country and committed to advancing science and technology. The department offers B.E. in Mechanical Engineering and M.Tech programs in Thermal Power Engineering and Industrial Safety Engineering. With 12 academic laboratories and 9 advanced research facilities, the department supports cutting-edge research and strong industry collaboration through consultancy and sponsored projects. It is ranked 401–450 in Mechanical Engineering in the QS World University Rankings and is the only NIT department to secure QS ranking for five consecutive years. The department is also a leading patent contributor and has received the Institute Best Department Award in 2019 and 2022.

Eligibility

- Faculty members and research scholars from Engineering and Science Institutions.
- Selection of the participants will be based on a first come first serve basis and their area of research work.

Information and Important Dates

- Registration fee is Rs. 2000/- (inclusive of GST) per participant.
- Food and Accommodation will be provided.
- No TA/DA will be provided.
- The last date for registration : 29.04.2026
- Event dates : 30.04.2026 to 02.05.2026 (3 Days)

How to make a payment?

The participants must deposit the registration fee through SBI Collect with the following steps as given below:

Step1: https://onlinesbi.sbi.bank.in/sbicollect/
Step2: Select Educational Institutions
Step3: Select state Tamilnadu and search for NIT TRICHY search bar. Then select CONFERENCE AND WORKSHOP NIT TRICHY
Step4: Select Payment Category as Mech 2026 - Multi-AM Processing
Step5: Proceed (Fill the required details and submit)

For Contact and Enquiry: 9543624740

Click the link for registration:

https://forms.gle/ESXP9LpjFwxVWt259

About the Programme

Additive Manufacturing (AM) has revolutionized modern manufacturing by enabling complex geometries, material customization, and rapid prototyping. The integration of Multi-Additive Manufacturing (Multi-AM) techniques with polymer matrix composites has opened new avenues for structural, functional, and sustainable engineering applications.

This ANRF Sponsored workshop and Training Programme aims to provide engineering faculty with in-depth knowledge and practical exposure to advanced multi-AM technologies for polymer composite fabrication. The programme bridges research innovation, industrial practice, and academic curriculum development through expert lectures and hands-on training sessions.

Programme Objectives

- To introduce fundamentals and emerging trends in multi-AM technologies
- To explore advanced polymer matrices and composite reinforcements
- To understand rheology, process optimization, and interlayer bonding
- To provide hands-on training in multi-material composite printing
- To discuss mechanical, thermal, and functional characterization methods

Key Highlights

- Expert lectures by academicians and industry professionals
- Multi-AM machine demonstrations
- Hands-on composite specimen fabrication
- Mechanical testing & performance evaluation exposure
- Design for Additive Manufacturing (DfAM) concepts
- Research proposal development guidance
- Certificate of Participation

Topics Covered

- Multi-AM Technologies (FDM, SLA, SLS, DIW & Hybrid Systems)
- Polymer Matrices & Composite Reinforcements
- Multi-Material Printing Strategies
- Rheology & Printability
- Interlayer Engineering
- Mechanical & Thermal Characterization
- AI/ML in AM Process Optimization
- Sustainable & Functional Composite Applications

Expected Outcome

Participants will gain the ability to:

- Implement Multi-AM techniques for polymer composites
- Optimize processing parameters
- Evaluate composite performance
- Integrate AM concepts into teaching & research
- Develop ANRF-aligned research proposals

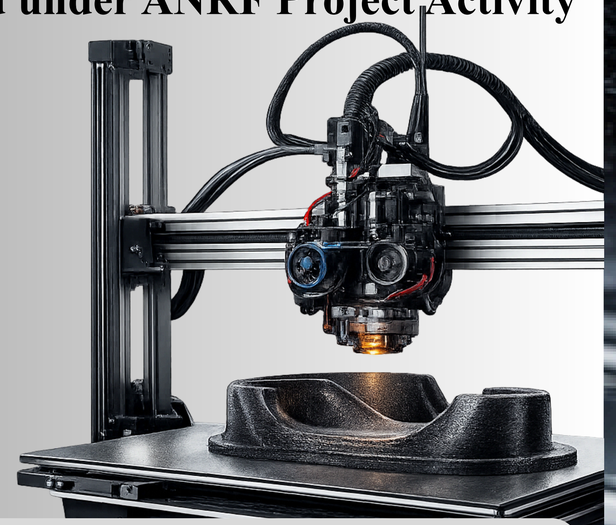
Organized by

Department of Mechanical Engineering

National Institute of Technology

Tiruchirappalli – 620 015

Sponsored under ANRF Project Activity



COORDINATOR

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