



MITs

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

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A Report on

Webinar on

“Recent trends and technological advancements in Additive Manufacturing”

Organized by

Department of Mechanical Engineering

on 02.02.2026



Event Coordinators: Dr. D. Arunkumar, Assistant Professor, Department of Mechanical Engineering; Dr. A. Pruthvi Deep, Assistant Professor, Department of Mechanical Engineering.

Resource Person Details: Dr. Ramesh R, Associate Professor, SRM University, Trichy, Tamil Nadu.

Venue: Seminar Hall A

Date: 02.02.2026 **Time:** 2.00 PM

Mode of Conduct: Offline

Report Received on 09.02.2026.

Overview

Additive manufacturing plays a crucial role in modern product development, advanced manufacturing, and Industry 4.0 applications, offering diverse and promising career opportunities for mechanical engineers. To create awareness among students about the latest developments, emerging technologies, and industrial applications in this domain, the Department of Mechanical Engineering, MITS, in association with the IEI Student Chapter, organized a webinar titled “Recent Trends and Technological Advancements in Additive Manufacturing.”



The Webinar aimed to familiarize students with current Additive Manufacturing industry trends, career pathways, and the relevance of mechanical engineering knowledge in manufacturing applications. A total of 54 students actively participated in the event.

Report

The webinar commenced with Dr. D. Arunkumar, Assistant Professor, Department of Mechanical Engineering, who introduced the relevance of the topic of the event for the current times and he welcomed the gathering and emphasized the importance of exploring multidisciplinary career opportunities beyond conventional mechanical engineering roles.

Subsequently, Dr. A. Pruthvi Deep, Assistant Professor, Department of Mechanical Engineering, formally introduced the Chief Guest, outlining the guest's expertise and professional contributions to the Additive Manufacturing field.

The Chief Guest delivered an insightful and engaging lecture on "Recent trends and technological advancements in Additive Manufacturing" Sector Opportunities and Career for Mechanical Engineers." The session provided a comprehensive overview of the Additive Manufacturing industry ecosystem. The Webinar on "Recent Trends and Technological Advancements in Additive Manufacturing" emphasized the critical role played by mechanical engineers in the design, development, and implementation of advanced manufacturing solutions across industries such as aerospace, automotive, biomedical, energy, and tooling sectors. The speaker highlighted emerging opportunities in metal and polymer additive manufacturing, advanced materials development, rapid prototyping, and customized production, along with the growing demand for skilled professionals in process optimization, quality assurance, inspection, and post-processing of additively manufactured components.

In addition, the lecture shed light on future-focused domains such as Industry 4.0 integration, digital manufacturing, generative design, sustainable manufacturing practices, and smart production systems, which are shaping the next generation of manufacturing industries. The Chief Guest further guided students on essential skill sets, relevant certifications, higher education pathways, and strategic career planning, enabling them to align their mechanical engineering background with the evolving needs of additive manufacturing technologies. The session encouraged students to explore interdisciplinary learning and prepare themselves for global career opportunities in advanced and additive manufacturing.

The session was interactive, with students actively participating by asking questions related to career prospects, industry expectations, and future technological advancements in the Additive Manufacturing domain.

The programme concluded with a Vote of Thanks delivered by Mr. Manoj Kumar S, Assistant Professor, Department of Mechanical Engineering, who expressed gratitude to the Management, Chief Guest, HOD & faculty members of Mechanical Engineering Department, IEI student chapter coordinators, and student participants for their enthusiastic involvement and support in making the Webinar a success.

Outcome of the Webinar:

- Students gained awareness of career opportunities in additive manufacturing and its relevance to mechanical engineering.
- Improved understanding of current trends, technologies, and industrial applications of additive manufacturing.
- Exposure to diverse domains such as 3D printing processes, advanced materials, rapid prototyping, and industrial-scale additive manufacturing.
- Motivation to pursue specialized skills, certifications, research, and higher studies related to additive manufacturing and advanced manufacturing technologies.

Summary:

The Webinar on Recent Trends and Technological Advancements in Additive Manufacturing successfully provided valuable insights into the latest developments, applications, and future scope of additive manufacturing technologies. With the active participation of 54 students, the event effectively achieved its objective of enhancing awareness and understanding of emerging trends and innovative practices in additive manufacturing relevant to mechanical engineering.