



Department of Mechanical Engineering
PSG Institute of Technology and Applied Research
Coimbatore - 641 062, Tamilnadu.

Organizes 3rd International Conference on

Materials, Design and Manufacturing for Sustainable Environment (ICMDMSE 2026)

13 - 14 March 2026

Theme: Digital Solutions for Sustainable Earth

About PSG ITECH

PSG Institute of Technology and Applied Research (PSG iTech) is committed to empowering youth through transformative technical education. The institution nurtures future-ready engineers with a perfect blend of academic excellence, innovation, industry exposure, and ethical values. Equipped with state-of-the-art laboratories and advanced research facilities, PSG iTech promotes hands-on learning, interdisciplinary projects, and consultancy activities that foster creativity and problem-solving.

The institute continues to build strong connections with industry and research organizations to address real-world challenges through technology and innovation. At PSG iTech, the focus is on developing competent, confident, and socially responsible engineers who can lead with purpose in the evolving digital and sustainable world.

About Department of Mechanical Engineering

The Department of Mechanical Engineering offers a comprehensive Bachelor's Degree program that integrates classical mechanical principles with modern advancements such as Additive Manufacturing, Automation, Robotics, Smart Materials, and Sustainable Design. Through value-added programs, skill-development initiatives, and industry collaborations, the department ensures students are equipped with cutting-edge knowledge and practical expertise aligned with current industrial demands.

Regular expert lectures, industrial visits, and certification courses bridge the gap between academia and practice, while the department's active research and consultancy projects contribute to innovation in materials, manufacturing, energy systems, and digital engineering. With a strong emphasis on sustainability, innovation, and social responsibility, the department prepares engineers to design, develop, and deliver solutions for a smarter and greener future.

Conference Overview

In the rapidly evolving post-pandemic world, research and innovation have taken center stage in addressing humanity's most pressing challenges such as climate change, sustainability, digital transformation, and the responsible use of advanced technologies. A significant portion of present-day research directly or indirectly focuses on developing new materials, optimizing product design, and adopting advanced and intelligent manufacturing systems for a resilient and sustainable future. The pursuit of sustainability is now intertwined with technological progress. From green manufacturing to artificial intelligence-driven design, and from additive manufacturing to smart materials and digital twins, the convergence of disciplines is shaping a more sustainable industrial and societal ICMDMSE 2026 aims to bring together researchers, technologists, innovators, and industrial experts from across the globe who are working towards sustainable technological solutions. The conference serves as a multidisciplinary platform for knowledge exchange, idea generation, and collaborative research all directed toward building a smarter, cleaner, and more sustainable world. On behalf of the organizing committee, we take immense pleasure in inviting academicians, scientists, industrialists, and students to participate in this global event, share their expertise, and explore emerging opportunities for collaboration and innovation.

PUBLICATION OPPORTUNITIES

All manuscripts submitted to the conference will undergo a rigorous peer-review process, ensuring the quality and integrity of the research presented. The conference proceedings will be published in reputable peer-reviewed journals (Scopus/SCI indexed), providing participants with an opportunity to share their research findings and contribute to the advancement of the fields of advanced materials, sustainable design, intelligent manufacturing, and digital solutions for a sustainable future.

<https://cmt3.research.microsoft.com/ICMDMSE2026>



Scan to submit your paper

Conference Themes

The conference tracks and subtopics include, but are not limited to, the following areas:

Track 1: Additive, Hybrid, and Digital Manufacturing

- Additive manufacturing and 3D printing technologies
- Hybrid manufacturing systems
- Design for additive manufacturing (DfAM)
- Functionally graded and multi-material printing
- Process monitoring, sensing, and optimization in AM
- Sustainable and recycled feedstock materials
- Digital twin and cyber-physical systems in manufacturing
- Virtual prototyping, CAD/CAM/CIM integration
- Industry 4.0 and Industry 5.0 applications

Track 2: Advanced Materials, Characterization, and Manufacturing Technologies

- Advanced composites and lightweight alloys
- Bio-based and biodegradable materials
- Automotive and aerospace materials
- Energy materials and storage systems
- Smart and functional materials
- Material mechanics and structural integrity
- Advanced characterization and testing of materials
- Material modeling and simulation
- Tribology, wear, and corrosion studies
- Micro and nano manufacturing techniques

Track 3: Thermal, Fluid, and Energy Conversion Technologies

- Computational fluid dynamics (CFD) and heat transfer analysis
- Thermal management in mechanical and electronic systems
- Cooling, heating, and ventilation systems
- Waste heat recovery and energy-efficient thermal processes
- Phase-change materials and thermal storage systems
- Energy conversion in renewable systems
- Advanced thermal materials and coatings

Track 4: Clean and Renewable Energy Systems for a Sustainable Future

- Renewable energy systems (solar, wind, biomass, geothermal)
- Green hydrogen and fuel cell technologies
- Waste-to-energy conversion and circular economy practices
- Smart grids and energy storage systems
- Life cycle assessment (LCA) and environmental impact studies
- Carbon capture, utilization, and storage (CCUS)
- Sustainable design, eco-innovation, and energy policy frameworks

Important dates

Event	Date
Full Manuscript Submission Deadline	31 st DEC 2025
Decision on the Manuscript	15 th JAN 2026
Submission of Revised Version	31 st JAN 2026
Early-Bird Registration	15 th FEB 2026
Conference dates	MARCH 13 - 14, 2026

Registration details:

Participants	Early Bird		Regular	
	National (INR)	International (USD)	National (INR)	International (USD)
Academicians / Faculty	₹5000	\$150	₹6,000	\$200
Students (UG / PG / Ph.D.)	₹3,500	\$125	₹4,500	\$175
Industry Delegates	₹3,500	\$125	₹4,000	\$175
Attendees / Listeners	₹1,000	\$75	₹1,000	\$75

*Inclusive of 18% GST

SPONSORSHIP

Platinum	Gold	Silver
Rs. 75,000/-	Rs. 50,000/-	Rs. 25,000/-
<ul style="list-style-type: none"> • 40 min talk in a session • Inclusion of promotional materials in conference bag • Logo and name in conference brochure and website • 5 complimentary registration • 1 stall • Banner/ flex display in all venues • Includes sponsor for pre-conference workshop 	<ul style="list-style-type: none"> • 20 min talk in a session • Inclusion of promotional materials in conference bag • Logo and name in conference brochure and website • 3 complimentary registration • 1 stall • Banner/ flex display in all venues 	<ul style="list-style-type: none"> • 10 min talk in a session • Inclusion of promotional materials in conference bag • Logo and name in conference brochure and website • 1 complimentary registration

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Contact for Sponsorship:

Dr. R. Avinash Kumar
 Assistant Professor, Department of Mechanical Engineering,
 PSG iTech
 Email id: avinash@psgitech.ac.in
 Mobile Number: 8943057433

KEYNOTE SPEAKERS



Dr. Magdalena Niemczewska-Wójcik
Professor,
Production Engineering, Cracow
University, Poland



Dr. P. Jeyaraj
Professor
Department of Mechanical Engineering
NIT Surathkal



Dr. T. Ram Prabhu
Scientist, CEMILAC,
DRDO, Bangalore



Dr. M. Uthayakumar
Professor, Department of
Mechanical Engineering,
Amrita Vishwa Vidyapeetham, Kerala



Dr. John Rozario Jegaraj
Scientist, DRDO
Hyderabad



Dr. Ganesh Natarajan
Professor,
Department of Mechanical
Engineering, IIT Palakkad

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Contact

Dr. K. Senthilkumar
Associate Professor
Department of Mechanical Engineering
PSG iTech
Email id: kmsenthilkumar@psgitech.ac.in
Conference Email id:icmdmse@psgitech.ac.in

Dr. J. Nagarjun
Assistant Professor
Department of Mechanical Engineering
PSG iTech
Email id: nagarjun@psgitech.ac.in
Conference Website Address: <https://sites.google.com/psgitech.ac.in/icmdmse2026/home>