

FOURTH

International Conference on Future Technologies in Manufacturing, Automation, Design & Energy

HYBRID MODE (OFFLINE & ONLINE PARTICIPATION)

11 - 13 DECEMBER 2024



ICOFT MADE 2024 WEB



Organised by
Department of Mechanical Engineering
NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY
An Institute of National Importance under Ministry of Education, Govt. of India

KEYNOTE SPEAKERS

Dr. V. Saraswathy

Corrosion and Materials Protection Division
Central Electrochemical Research Institute
(CECRI), Karaikudi, TN, India

Dr. S. Shiva

Department of Mechanical Engineering
Indian Institute of Technology Jammu,
Jagti, Nagrota, J&K, India

Dr. Dhanesh G. Mohan

Faculty of Technology,
University of Sunderland,
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Department of Mechanical Engineering
University of Porto, Porto, Portugal

Dr. Siew-Wan Ohl

Institute for Physics, Department of Soft Matter
Otto von Guericke University, Magdeburg,
Saxony-Anhalt, Germany

Dr. M. Surianarayanan

Cell for Industrial Safety & Risk Analysis,
CSIR – Central Leather Research Institute,
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School of Mechanical Engineering
Georgia Institute of Technology,
Atlanta, Georgia, USA

Dr. Pankaj Rohilla

School of Chemical & Biomolecular Engg.
Georgia Institute of Technology,
Atlanta, Georgia, USA

Dr. Shanmuga Sundar D.

School of Engineering, RMIT University
Melbourne, Australia

Category I (Abstract Only)	DATE	Category II (Full Paper)
Abstract submission deadline	Nov 25, 2024	Full paper submission deadline
Notification of acceptance of Abstract	Nov 25, 2024	Review comments to Authors
---	Nov 28, 2024	Revised manuscript submission
---	Nov 30, 2024	Notification of acceptance of paper
Registration for the conference	Till Dec 5, 2024	Registration for the conference

Dates are subject to change (Keep referring website from time-to-time)

Participant Type	FEE DETAILS			
	Indian Participant		Foreign Participant	
	Early Bird Fee	Regular Fee	Early Bird Fee	Regular Fee
	Before Oct-10, 2024	Till Nov 25, 2024	Before Oct-10, 2024	Till Nov 25, 2024
Students (Postgraduate/Ph.D.)	₹ 2,000* ₹ 6,500**	₹ 2,500* ₹ 8,000**	\$ 20* \$ 80**	\$ 25* \$ 85**
Delegates from Academic Institutes	₹ 2,500* ₹ 8,000**	₹ 3,000* ₹ 10,000**	\$ 40* \$ 95**	\$ 45* \$ 110**
Delegates from Industry/R&D Organization	₹ 2,500* ₹ 8,000**	₹ 3,000* ₹ 11,000**	\$ 40* \$ 95**	\$ 45* \$ 120**
Listener (Not presenting any study) or Accompanying Person	₹ 1,500	₹ 2,000	\$ 18	\$ 23

* Abstract Only Submission, ** Full Paper Submission, ₹ - INR, \$ - USD | Details subject to change, refer website.

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Scotland's Rural College, UK

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FOURTH International Conference on Future Technologies in Manufacturing, Automation, Design & Energy 2024

ABOUT THE CONFERENCE

ICoFT MADE 2024 marks the fourth installment in a series of annual conferences held at NIT Puducherry, Karaikal, India, dedicated to disseminating knowledge on the latest technological advancements and cutting-edge research in Manufacturing, Automation, Design, and Energy (MADE). This prestigious event brings together academicians, researchers, scientists, industry professionals, and entrepreneurs from around the globe.

The conference serves as the premier interdisciplinary forum in Mechanical Engineering, facilitating discussions on recent technologies, innovations, research findings, challenges, solutions, and future directions in the fields of Manufacturing, Automation, Design, and Energy. Through keynote lectures and paper presentations, participants will have the opportunity to engage with leading experts and peers. Young researchers are especially encouraged to participate, leveraging this platform to network and enhance their research capabilities and experience.

Since its inception in 2020, ICoFT has focused on the broad field of Mechanical Engineering, providing an ideal space for intensive networking among academicians, researchers, practitioners, industry personnel, and entrepreneurs worldwide. The conference aims to deliberate and disseminate the highest quality of technical knowledge, serving as a competent stage for experts from academia, research, and industry to network, share, and debate the latest developments in Manufacturing, Automation, Design, and Energy.

ABOUT THE INSTITUTE

National Institute of Technology Puducherry (NIT Puducherry) is the 31st institute of NIT Fraternity established in 2009, as a part of the Nation's Eleventh Five-Year Plan (2007–2012). It is officially recognized as an Institute of National Importance under the Ministry of Education, Government of India. The Institute is nestled in the coastal enclave of the Kaveri river basin in Karaikal, Union Territory of Puducherry. The campus is spread across 258 acres plot of land located near the village of Poovam and around 7 km from the city's heart. Currently, 61 faculty members and 31 non-teaching staff are employed for the overall strength of 939 students.

NIT Puducherry is committed to produce competent and responsible technocrats who can serve the nation on its journey to growth and prosperity. The Institute provides keen guidance to sculpt bright minds into professionally balanced individuals through expert and experienced faculty members and facilities. The Institute is constantly attempting to scale new heights by developing a synergy between academics, research, and practice. NIT Puducherry is ranked 136 under the Engineering Institutes category in the NIRF India Ranking 2021 released by the Ministry of Education, Government of India.

RATAN TATA DEPARTMENT OF MECHANICAL ENGINEERING

The Department was established in July 2014 with an Undergraduate Program and currently offers Postgraduate and Doctoral Program. New Education Policy (NEP) curriculum is implemented to ensure the core courses with the latest developments, social context, and environmental relevance of the present and future world. At present, 12 dedicated and competent faculty members with expertise in diverse domains of Mechanical Engineering such as Thermal and Fluid Sciences, Design, and Manufacturing. The specialization in the various fields of Mechanical Engineering such as Industry 4.0; Energy; Design Automation; New Materials and Manufacturing processes; Smart Manufacturing; Vehicle Dynamics; Liquid Spray characteristics; Computational Mechanics; Ergonomics; Welding; Vibrations contribute to the Department knowledge hub. The Department is actively conducting various sponsored projects from the agencies or schemes such as DST-SERB, DST-INSPIRE, DST-UKIERI, ARTPARK, BRICS, and providing consultancy services to organizations such as ONGC, CPWD, and CPCB. The Department is in the pursuit of establishing world-class academic and research facilities and emerge as a prominent source of practical engineering knowledge.

CALL FOR PAPER(S) - TOPICS

MANUFACTURING

Additive Manufacturing | CAD/CAM/CAE | Reverse Engineering
Composite and Polymer Processing | Machine Tool Design
Ergonomics in Manufacturing | Materials Technology
Machining, Forming and Joining Technology
Digital Manufacturing and Smart Systems
Green and Sustainable Manufacturing
Micro and Nano Manufacturing
Metrology and Quality Control
Precision and Surface Engineering
Modelling and Simulation in manufacturing
Non-Traditional / Advanced Machining processes

AUTOMATION

CAD and Automation; Design Automation
Process Automation & Monitoring
Sensor Technology; UAV, AUV
Manufacturing Automation
Industry 4.0; Industrial Internet of Things
Modelling and simulation; Optimization Algorithms
Augmented Reality (AR) / Virtual Reality (VR) in Automation

DESIGN

Design for Ergonomics | FEA and its applications
Bioengineering Design | Tribology | Vibration
Industrial Design; Mechanical Design
Design with Composite Materials
Vehicle Dynamics | Product Design and Development
Design for X and Additive Manufacturing | Aerospace Design

ENERGY

Design theory, Methodology and Management of Energy
Energy Modelling, Simulation & Optimizations
Energy Storage; Hydrogen and Fuel Cells
Micro & Nano Energy Materials
Energy Security & its policies
Net zero Energy concepts
Alternative Fuels
I C Engines | Heat Transfer & Fluid Flow
Renewable Energy Sources and its Technologies
Other Conventional Energy Sources and its Technologies
Cryogenic Engineering | Refrigeration & Air-Conditioning
Petroleum Engineering | Nuclear Energy | Power Plant Engineering

MANUSCRIPT / ABSTRACT SUBMISSION

ICoFT 2024 Full paper Manuscript or Abstract Submission will be done through Microsoft® Conference Management Toolkit (CMT). You have to create a new Microsoft® CMT account before submitting the Full Paper Manuscript or Abstract. More Details and links on the website.

SUBMISSION CATEGORIES

Abstracts and manuscripts should reflect a substantial advancement in the field of Mechanical Engineering.

Category I (Abstract Submission): The length of the abstract shall not exceed 300 words. The abstracts will be published in the Conference Souvenir. One of the authors is required to attend the conference to make a brief presentation of the submitted work. Submissions should highlight the novelty of the work.

Category II (Full Paper Submission): Regular paper submissions shall not exceed eight pages, including bibliography. One of the authors is required to attend the conference to make a complete presentation of the work.

FORMATTING INSTRUCTIONS

All manuscripts and presentations must be written in English Language only. **Only 'pdf' files (for Abstract / Full Paper) and 'ppt' files (for presentation) will be accepted** for the review process. Try to keep the **size of the 'pdf' file below 5 Mb** and **size of 'ppt' file below 10 Mb**. Download template for Manuscript and Presentation from the website.

POLICY OF PLAGIARISM

All submitted abstracts and manuscripts will be subjected to 'Similarity check' by a licensed version of 'iThenticate: Plagiarism Detection Software'. **Articles achieving a minimal similarity index (less than 10%) alone will be examined**, and those deemed unacceptable will be rejected/withdrawn without a formal review. **Submissions should also ensure less than 2% similarity from a single source.**

Authors are requested to refrain from plagiarism in any form. **Authors should submit their original and unpublished research work, which is not under consideration for publication elsewhere.** Manuscript with a higher similarity index will be rejected during any review stage. As per the copyright transfer agreement, authors are deemed individually and collectively responsible for the content of manuscripts published by them. Hence, it is the responsibility of each author to strive for the highest ethical standards concerning plagiarism.

REVIEW & PUBLICATION

Eminent experts from respective domains will perform peer reviews of the manuscripts. **At least one of the authors should register for each accepted paper and present the findings.**

Only the registered and presented manuscripts in the conference along with the acceptance of Session Chair(s) will be recommended for publication in one of the participating publications. Publications will conduct quality checks on the accepted papers and only papers that pass these checks will be published.