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# 14 to 16 Dec, 2022

**KEYNOTE SPEAKERS**

**14 DEC | 10:30 AM Prof. Gautam Biswas**  
Indian Institute of Technology Kanpur, India

**14 DEC | 02:30 PM Prof. Duc Truong Pham**  
University of Birmingham, UK

**15 DEC | 10:30 AM Prof. Jayashree Bijwe**  
Indian Institute of Technology Delhi, India

**15 DEC | 02:30 PM Prof. Surendra M. Gupta**  
Northeastern University, USA

**16 DEC | 10:30 AM Prof. S. Senthivelan**  
Indian Institute of Technology Guwahati, India

**16 DEC | 02:30 PM Prof. Gnanamoorthy**  
Indian Institute of Technology Madras, India

**IMPORTANT DATES****CATEGORY I****ABSTRACT SUBMISSION**

Abstract submission deadline **16 SEP**

**CATEGORY II****FULL PAPER SUBMISSION**

Manuscript submission deadline

Notification of acceptance of Abstract **16 OCT**

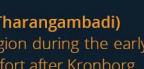
Review comments to Authors  
... **31 OCT** Revised manuscript submission

... **14 NOV** Notification of acceptance of manuscript

Registration for the conference **21 NOV** Registration for the conference

**NEARBY PLACES OF ATTRACTION**

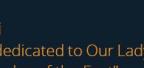
**Fort Dansborg (Danish Fort), Tranquebar (now Tharangambadi)**  
acted as the base for Danish settlement in the region during the early 17th century. The fort is the second largest Danish fort after Kronborg.



**Saniswaran Temple, Tirunallar**  
is dedicated to the Lord Darbharanyeswaran (a form of Lord Shiva). It is one of the nine temples in the Navagraha, representing planet Saturn.



**Basilica of Our Lady of Good Health, Velankanni**  
is also a minor basilica of the Latin Catholic Church dedicated to Our Lady of Good Health. The place has been called "the Lourdes of the East".



**Nagore Dargah (Syed Shahul Hameed Dargah), Nagore**  
is built over the tomb of the Sufi saint Shahul Hameed. The dargah is a major pilgrimage centre for both Hindus and Muslims, symbolizing peace.

for any clarification or further information contact

**Dr. A. Johnney Mertens**

Chairman, ICOFT 2022

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**THIRD**

International Conference on Future Technologies in

**Manufacturing, Automation, Design & Energy**

**iCoFT**

**MADE**  
**2022**



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

# THIRD International Conference on Future Technologies in Manufacturing, Automation, Design & Energy iCoft MADE 2022

## ABOUT THE CONFERENCE

ICOFT 2022 is third in the series of conferences intended to be held every year in India, aimed to disseminate knowledge on the latest technological developments and cutting-edge research in Manufacturing, Automation, Design, and Energy (MADE) among academicians, researchers, scientists, industry personnel, and entrepreneurs across the globe. This conference will provide the premier interdisciplinary forum relevant with Mechanical Engineering to discuss the recent technologies, innovations, recent research findings, challenges, solutions, and perspectives of the future directions of Mechanical Engineering in the field of Manufacturing, Automation, Design, and Energy through keynote lectures and paper presentations. **Young researchers are encouraged to participate and utilize the opportunity to network with others who seek to develop their research abilities and experience.**

## OBJECTIVE & SCOPE OF THE CONFERENCE

The objective of the ICOFT 2022 is to provide a platform to perceive, share, and exchange the recent trends related to various aspects of Mechanical Engineering. The scope of this conference is multidisciplinary in Mechanical Engineering and invites original work to be presented in multiple streams of Manufacturing, Automation, Design, and Energy (MADE).

## 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.

## MECHANICAL ENGINEERING DEPARTMENT

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 PAPERS

**Original research papers** on the topics of interest for submission include, but are not limited to the following domains

### 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  
Modelling and Simulation in manufacturing  
Non-Traditional / Advanced Machining processes  
Metrology and Quality Control | Precision and Surface Engineering

### AUTOMATION

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

### DESIGN

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

### ENERGY

Micro & Nano Energy Materials; Net zero Energy concepts  
Other Conventional Energy Sources and its Technologies  
Renewable (Green) Energy Sources and its Technologies  
Energy Storage; Hydrogen and Fuel Cells; Energy Security & its policies  
Energy Modelling, Simulation & Optimizations  
Artificial Intelligence (AI), Machine Learning (ML) and Computational Methods for Renewable Energy Sources

## MANUSCRIPT SUBMISSION

Authors are invited to submit their manuscripts through Easy Chair (web based conference management software) only. Link will be updated soon

## SUBMISSION GUIDELINES

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 8 (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 must be written in English and use templates that can be downloaded from the conference website ([www.icoft2022.com](http://www.icoft2022.com)). Only PDF files will be accepted for the review process.

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 15%) 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.

## POLICY OF PLAGIARISM

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 PROCESS

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.

## PUBLICATION

Only the registered and presented manuscripts in the Conference along with the acceptance of Session Chair(s) will be recommended for publication. (Publications details will be updated in the conference website: [www.icoft2022.com](http://www.icoft2022.com))