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National Institute of Technology Puducherry, India

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### Important Dates

Event / Process	Due Date
Abstract / Manuscript submission	October 31, 2021
Review report to the authors	November 10, 2021
Revised Manuscript submission	November 24, 2021
Registration for Conference	November 30, 2021

### Registration Fee Details

The details of the Registration fee and Mode of payment are available in the conference website: <https://www.icoft2021.com>

### For Further Information Contact

Dr.N.M.Sivaram  
Convener and Chairperson (ICOFT 2021)  
Department of Mechanical Engineering  
National Institute of Technology, Puducherry,  
Karaikal - 609 609, India  
Email: [icoft2021@nitpy.ac.in](mailto:icoft2021@nitpy.ac.in)  
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NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY

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# Welcome to ICOFT 2021



## About ICOFT

International Conference on Future Technologies (ICOFT) is a Conference Series organized by the Department of Mechanical Engineering, National Institute of Technology Puducherry, INDIA. ICOFT focuses on the broad field of Mechanical Engineering. Since its inception in the year 2020, ICOFT has aimed to be adequate space for intensive networking among academicians, researchers, practitioners, industry personnel and entrepreneurs across the globe to deliberate on the latest technological developments in Manufacturing, Automation, Design and Energy (MADE).

## Objectives of ICOFT 2021

- To deliberate and disseminate the highest quality of technical knowledge in the field of Mechanical Engineering.
- To serve as a competent stage for the experts from academia, research, and industry to network, share and debate on the latest developments in Manufacturing, Automation, Design and Energy.

## The Institute

National Institute of Technology Puducherry (NITPY) is one of the thirty-one National Institutes of Technology, the Institutes of National Importance under the Ministry of Education, Government of India. NITPY was approved in 2009 as part of the Nation's Eleventh Five-Year Plan (2007–2012). NITPY is nestled in the scenes of Karaikal, a coastal enclave in the basin of river Kaveri, is situated on 258 acres near village Poovam and Thiruvettakudy, Karaikal, Union Territory of Puducherry. NITPY is committed to producing competent and responsible technocrats who can serve the nation on its journey to growth and prosperity. The institute provides keen guidance in terms of experienced and expert faculty members and facilities to sculpt the bright minds into professionally balanced individuals capable enough to take up challenges of nature, society, and the world. The Institute is constantly attempting to scale new heights by developing a synergy between academics, research, and practice. NIT Puducherry is ranked 144 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 offering a Doctoral program. The curriculum ensure the courses blended with the latest developments, social context, and environmental relevance of the present and future world. The committed and competent faculty members with expertise in diverse domains of Mechanical Engineering such as Thermal and Fluid Sciences; Design and Manufacturing Engineering and specialized in Industry 4.0; Energy; Design Automation; New Materials and Manufacturing processes; Smart Manufacturing; Vehicle Dynamics; Liquid Spray characteristics; Computational Mechanics and Ergonomics 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 and providing consultancy services to organisations 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.

## Keynote speakers of ICOFT 2021

**Prof. Prabhakaran Ramamurthy**,  
Eminent Professor, Old Dominion University, USA  
**Prof. Wei Gao**,  
Professor, Tohoku University, Japan  
**Prof. T. S. N. Sankara Narayanan**,  
Research Professor, Chonbuk National University, South Korea  
**Prof. Vijay Kumar Thakur**,  
Professor, Scotland's Rural College, United Kingdom  
**Prof. Rajiv Prakash**,  
Professor and Dean (R&D), IIT (BHU) Varanasi, India  
**Prof. R Venkata Rao**,  
Professor, SVNIT Surat, India  
**Prof. Anil Kumar Sharma**,  
Professor, Jamia Millia Islamia University, India  
**Prof. S.Balasivanandha Prabu**,  
Professor, College of Engineering Guindy, India

## Call for Papers

Original research paper on all Mechanical Engineering subjects. Topics include, but are not limited to, the following domains:

### Manufacturing

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

### Automation

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

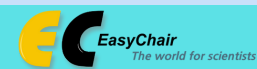
### Design

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

### Energy

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

## Manuscript Submission



Authors are invited to submit their manuscripts through Easy Chair  
<https://easychair.org/cfp/icoft2021>

## Submission Guidelines

Abstracts and papers must report a substantial advancement in mechanical engineering that is both original and significant.

**Category I (Abstract Submission)** : The length of the abstract shall not exceed 300 characters and shall be published in an abstract book. One of the authors is required to attend the conference to make a brief presentation of the work. Submissions should highlight the new results to allow the Program Committee to assess 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 papers must be written in English and use templates that can be downloaded from the conference website ([www.icoft2021.com](http://www.icoft2021.com)). Only PDF files will be accepted for the review process. All submitted abstracts and papers will be subjected to a 'Similarity check' by a licensed version of "iThenticate: Plagiarism Detection Software". Papers achieving a minimal similarity index, i.e. less than 15%, will only be examined, and those that are deemed unacceptable will be rejected/withdrawn without a formal review.

## Policy of Plagiarism

Authors are requested to kindly refrain from plagiarism in any form. Authors should submit their original and unpublished research work not under consideration for publication elsewhere. Manuscript found to be plagiarized during any stage of review shall be rejected. 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 double-blind peer reviews of the papers. At least one of the authors should register for each accepted paper and present the findings.

## Publication

Only the registered and presented papers in the Conference along with the acceptance of Session Chair(s) will be recommended for publication in 'Lecture Notes in Mechanical Engineering', Springer Nature.



 Springer

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## Disclaimer

Select papers from the conference will be published by Springer as a proceedings book volume. Springer will conduct quality checks on the accepted papers and only papers that pass these checks will be published.

For detailed information refer the conference website  
<https://www.icoft2021.com/>