



Second International Conference on



ADVANCES IN THERMAL SYSTEMS, MATERIALS AND DESIGN ENGINEERING (ATSMDE – 2024)



27th - 28th DECEMBER 2024

OFFLINE MODE



ORGANISED BY



Department of Mechanical Engineering

VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE (VJTI), Matunga, Mumbai
in Association with

Directorate of Technical Education, Maharashtra State
University of Mumbai

Institute of Chemical Technology, Mumbai

Mech. Engg. Dept. Indian Institute of Technology Bombay



Background:

The conference would be a two-day event aiming at building collaboration between the participants and research organizations and industries in order to develop better technological solutions for future needs. Research scholars, academicians, and working professionals will share their knowledge, experiences, innovations, and inventions. The event will include plenary sessions, invited talks by eminent personalities, along with technical paper presentations. The key objective of this conference is to provide an opportunity to participants to showcase their novel developments in the underlying research areas of mechanical engineering. VJTI successfully organized its first International Conference in 2017 and all accepted papers were published in SSRN Elsevier

(<https://www.ssrn.com/link/ATSMDE-2017.html>)

About VJTI:

With over 137 Years of service to mankind, Veermata Jijabai Technological Institute (formerly Victoria Jubilee Technical Institute) with a reputation has established a benchmark in the field of education, technology and research. The institute offers over twenty-seven courses in various disciplines of Engineering and Technology at number of stages ranging from Diploma, Degree, Post- Graduate and Ph.D. programs. VJTI is proud of its remarkable contribution for imparting quality technical education along with overall development of the society as well as impact educational heritage.

Who can attend:

Master students, research scholars, academicians and industrial personnel working in the fields of thermal systems, materials, manufacturing and design engineering can participate in this conference. This would bring researchers and experts on a common platform for sharing knowledge, expertise and experience in the latest technologies being adapted in the field of thermal systems, materials, manufacturing and design engineering which will help in bridging the gap between academic, research and industry.

Authors are requested to send their original papers based on research work/field experience in the categories listed above. **All the papers will be reviewed by referees and accepted papers will be published in the reputed Conference Proceedings.**

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CALL FOR PAPERS

Conference Theme:

The theme of the conference is “Advances in Thermal System, Materials and Design Engineering”. It emphasizes the need for advancements in the three basic directions of Mechanical Engineering and to establish their connection with real-life problems. The above theme encourages conference participants to think about this educational need in our increasingly complex everyday world.

Areas to be covered but are not limited to :

Track 1

Thermal Engineering

Renewable Energy Systems
Energy Storage
Modelling of Thermal Systems
Fluid Structure Interaction
Micro-fluidics
MultiPhase Flow and
Experimental Turbulence
Alternative Fuels for Combustion
Technology
Green Hydrogen
Low Temperature Refrigeration
and Cryogenics
Advances in HVAC Systems
Computational Fluid Dynamics
Advance Heat Transfer - Fins
application
Non Fourier Heat Transfer with
HMT
Automotive Technologies <
vehicle Dynamics
Hybrid and Electric Vehicles
Battery management for range
extenension
Vehicle Emmisions and new
norms for Pollution
High Speed Flows
Hydrogen Combustion
Thermal Protection Systems
Electronic/Data Center Cooling
systems
Digital Transformation

Track 2

Design Engineering

Robotics
Biomechanics and Engineering
Dynamics and control of Complex
Systems
Fracture Mechanics
Design of Experiments
Experimental and Computational
Methods
Design and Operation of
Transportation Systems
Drone Designing
AI and ML in hydrodynamically
lubricated and
elastohydrodynamically lubricated
contacts
Analysis and Synthesis of
mechanisms
Design of Defense systems
Desgin of Biomimetic devices
Noise,Vibration and Harshness
Product Design
Autonomous vehicle
Mechatronics
simulation and modeling
Reliability
Design of process equipment
Solid Mechanics
Design for Quality
Multi physics
Thin films
Theoretical geometry and Graphics

Track 3

Material Science and Manufacturing

Bio Materials
Additive and Sustainable
Manufacturing Practices
Advance Composites and their
Applications
Characterization and Microscopy
Additive Manufacturing/ 3D
Printing
Non Traditional Machining
Material Synthesis and Processing
Nanotechnology
Rapid Manufacturing
Intelligent Manufacturing Systems
Micro Manufacturing
Supply Chain Management
Optimization of Manufacturing
Processes
Smart Material
Manufacturing Processes for
Biomimetic devices
Machining of Hard and smart
Materials
Surface Integrity analysis during
machining
AI and Sustainable Manufacturing
Forming, Joining and
Characterization of sheetmetal
New Energy Material
Reverse Engineering
AL/ML& Intelligent mobility
Digital Twin, Cyber security, Cloud
Design, Modelling, CAE & Virtual
Simulations

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Important dates:

Submission of manuscript : 04th Nov. 2024
Communication of reviews : 15th Nov. 2024
Notification of paper acceptance : 30th Nov. 2024
Submission of camera ready manuscript: 15th Dec. 2024
Last date for Registration: 20th Dec. 2024

Registration fees:

Research scholar : Rs. 1000
Faculty : Rs. 2000
Industry : Rs. 3000
Foreign delegates : USD 200

Payment link for Participation/registration:

<https://www.onlinesbi.sbi/sbicollect/icollecthome.htm?corpID=365247>



Full length paper submission Link:

<https://forms.gle/2947wrRSepJiwxoC8>

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*Detail information about conference is available on
<https://vjti.ac.in/conference-announcement/>
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