



**Second International Conference
on**

**ADVANCES IN THERMAL SYSTEMS,
MATERIALS, AND DESIGN ENGINEERING**



Friday, December 27, 2024 (Sofitel Hotel, BKC)

08:30 09:30

Welcome, Registration, and Breakfast

(Sofitel Hotel, BKC)

Friday, December 27, 2024 (Sofitel Hotel, BKC)

09:30 11:00

Inaugural Session *(Inaugural Hall, Sofitel Hotel, BKC)*

11:00 11:30

High Tea *(Sofitel Hotel, BKC)*

11:30 12:10

Keynote -1: Prof. B. K. Mishra,
Former Director, CSIR, Former Director, IIT Goa, India

12:15 12:55

Keynote -2: Prof. Raman Singh,
Monash University, Australia

13:00 13:45

LUNCH *(Sofitel Hotel, BKC)*

Transport from Sofitel Hotel, BKC to VJTI, Matunga
(AC Bus Transportation for all participants pick up at 13.45)

Parallel Sessions (First Floor, Mechanical Engineering Department, VJTI)

14:30 16:00

Thermal Engineering	Design Engineering	Material Science & Manufacturing
Session -1 Experimental Analysis of Thermofluidic Systems Session Chairs: Prof. Arunkumar Sridharan (IITB) Prof. N. P. Gulhane(VJTI)	Session-1 Design of Thermofluidic systems Session Chairs: Prof. R. K. Pant (IITB) Prof. V. M. Phalle (VJTI)	Session-1 Nanomaterials and Advanced Composites Session Chairs: Prof. Shraddha Shirbhate (ICT) Prof. W.S. Rathod
TS-004 TS-019 TS-023 TS-035 TS-045 TS-052 (Mechanical Seminar Hall)	DE-008 DE-009 DE-011 DE-027 DE-028 DE-040 DE-047 (CL-101)	MM-004 MM-007 MM-019 MM-039 MM-042 MM-053 (CL-102)

16:00 16:15

Break

16:15 17:45

Session-2 Mathematical Modeling of Thermofluidic Systems Session Chairs: Prof. V. V. Rao (DIA-COE, IITB) Prof. P. A. Rajiwade (VJTI)	Session -2 Optimal Designs and Condition Monitoring Session Chairs: Dr. A. S. Patil (BARC) Prof. Sachin S. Naik (VJTI)	Session-2 Energy and Functional Materials Session Chairs: Prof. V. R. Gaval (ICT-Mumbai) Prof.V.B. Suryawanshi (VJTI)
TS-008 TS-012 TS-040 TS-046 TS-057 TS-068 TS-072 (Mechanical Seminar Hall)	DE-005 DE-010 DE-020 DE-033 DE-037 DE-046 DE-054 DE-055 (CL-101)	MM-008 MM-029 MM-041 MM-049 MM-062 MM-065 (CL-102)

END OF DAY 1 SESSIONS



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Saturday, December 28, 2024 (Mechanical Engineering Department, VJTI)

09:30 10:15

Keynote -3: Prof. S. P. Mahulikar, Iker Basque, Spain
(Mechanical Seminar Hall)

10:15 11:00

Keynote -4: Prof. V. V. Rao (Director, DIA-COE, IITB)
(Mechanical Seminar Hall)

Parallel Sessions (Mechanical Engineering Department, VJTI)

11:00 11:30

Tea Breakfast (Corridor Mechanical Seminar Hall, First Floor)

Thermal Engineering	Design Engineering	Material Science & Manufacturing
Session-3 Thermal Analysis of Renewable Systems Session Chairs: Prof. Sandipkumar Saha (IITB) Prof. A. V. Deshpande (VJTI)	Session -3 Design of Robotic Systems and Mechanisms Session Chairs: Prof. N. P. Yelve (IITB) Prof. A.S. Rao (VJTI)	Session-3 Optimization and Theoretical Modeling Session Chairs: Prof.S. P. Mahulikar (Iker Basque) Prof. S. G. Jadhav (VJTI)
TS-013 TS-020 TS-022 TS-043 TS-049 TS-059 (Mechanical Seminar Hall)	DE-001 DE-049 DE-051 DE-052 DE-056 DE-057 (CL-101)	MM-021 MM-024 MM-027 MM-031 MM-046 MM-054 MM-056 (CL-102)

11:30 13:00

13:00 14:00

Lunch (Corridor Mechanical Seminar Hall, First Floor)

Session-4 Title: Air-conditioning, and Refrigeration Systems Session Chairs: Prof. N. K. Chougule (COEP) Prof. M. V. Tendolakar (VJTI)	Thermal Engineering Session-6 Title: Miscellaneous Topics Session Chairs: Shri. Sunil Ganju (BARC) Prof. Abhijit Mitra (VJTI)	Session-4 Sustainable Materials and Recycling Session Chairs: Dr. Raju Kadam (Bharat Forge) Prof. H.P. Khairnar (VJTI)
TS-038 TS-042 TS-053 TS-061 TS-078 (Mechanical Seminar Hall)	TS-003 TS-006 TS-024 TS-064 TS-077 (CL-101)	MM-003 MM-011 MM-016 MM-044 MM-061 MM-066 (CL-101)

14:00 15:30

15:30 16:00

Break (Corridor Mechanical Seminar Hall)

Session-5 Title: Thermal Energy Systems Session Chairs: Dr. D. Mukhopadhyay (BARC) Prof. P. A. Wankhade (VJTI)	Session-6 (MM) Metal Forming and Machining Processes Session Chairs: Prof. Raju S. Pawade (DBATU) Prof. R.M. Tayade (VJTI)	Session-5 Additive Manufacturing and 3D Printing Session Chairs: Prof. Bhagwan F. Jogi (ICT) Prof. S. A. Mastud (VJTI)
TS-015 TS-031 TS-056 TS-058 TS-063 TS-065 (Mechanical Seminar Hall)	MM-013 MM-026 MM-032 MM-036 MM-040 MM-057 MM-058 (CL-101)	MM-010 MM-017 MM-018 MM-023 MM-025 MM-048 (CL-102)

16:00 17:30

END OF DAY 2 SESSIONS