Chief Patron

Dr. Achyuta Samanta Founder, KIIT and KISS Bhubaneswar

Patrons

Mr. Ashok Parija, Chancellor, KIIT Dr. S. K. Acharya, Pro-Chancellor, KIIT Dr. Sasmita Samanta, Vice-Chancellor, KIIT

Co-Patrons

Dr. Saranjit Singh, Pro-Vice Chancellor, KIIT Dr. J.R. Mohanty, Registrar, KIIT Dr. A. K. Sahoo, Director R&D, SOT, KIIT

Chairman

Dr. B. C. Routara, Dean, SME, KIIT Co- Chairman Dr. P. C. Mishra, Dean-Research, SME, KIIT

Conveners

Dr. Debjyoti Sahu, Asst. Prof., SME, KIIT Dr. Spandan Guha, Asst. Prof., SME, KIIT Secretary Dr. Gyan Sagar Sinha, Asst. Professor, SME, KIIT

Coordinators

Dr. Nitin Sharma, KIIT Bhubaneswar

- Dr. Ramanuj Kumar, KIIT Bhubaneswar
- Dr. Amlan Panda, KIIT Bhubaneswar

Editorial Board

Prof. (Dr.) Shripad Revankar, Purdue University, USA

Prof. (Dr.) Swarnendu Sen, Jadavpur University

Dr. Gyan Sagar Sinha, KIIT, Bhubaneswar

Dr. Debjyoti Sahu, KIIT, Bhubaneswar

Dr. Kamalakanta Muduli, PNGUT, Papua

New Guinea

International Advisory Committee

Dr. Shripad Revankar, Purdue University, USA

Dr. Sukanta Roy, Curtin University, Malayasia Dr. Shivaprasad KV, Durham University, UK Dr. M. M. Awad, Mansoura University, Egypt Dr. Kamalakanta Muduli, PNGUT

Submission of Papers

Prospective authors of contributory papers are requested to submit their full manuscripts limited to a maximum of 10 pages.

Paper Submission mail id secretary.kiitictms@kiit.ac.in

Important Dates	
Full paper submission ends (in template)	31-08-2023
Notification of acceptance/ registration starts	15-10-2023
Registration ends	05-11-2023
No spot registration allowed.	

Registration Details

The registration fee details are as follows:

Category	Fee
Indian delegates (Industry, R&D, Academia)	₹ 7,080/-
International delegates	\$ 300
Industry Sponsor	₹ 1,18,000/-
Spouse of delegate	₹ 3,920/-
No extra cost for sightseeing to Puri or Konark	

Payment towards registration fees should be made through on-line transfer. Beneficiary's Name: KIIT SCHOOL OF MECHANICAL ENGINEERING Beneficiary's Account No.: **1849010225359** IFSC code: **PUNB0184920** Punjab National Bank SWIFT code: PUNBINBBBBN Bank Address: KIIT UNIVERSITY CAMPUS, KHURDA, BHUBANESWAR 751024

Dr. Divakar Shetty, Univ. of Technology and Applied Sciences, Sultanate of Oman Dr. Nisith B. Desai, Technical University of Denmark Dr. Bale Reddy, OntarioTech. Engineering & Applied Sciences, Canada Dr. Nikhil Kumar, University of Warwick, UK **National Advisory Committee** Prof. Indranil Manna, BIT Mesra Prof. (Dr.) Avijit Ghosh, Honorary Secretary, IICHE Dr. R. K. Mishra, RCMA, DRDO Prof. (Dr.) P. G. Tewari, BVBCET Hubli Dr. S. Mukherjee, Kazi Nazrul University, W.B. Dr. S. Mohanty, CIPET Bhubaneswar Dr. Hakeem Niyas, RGIPT, Rae Bariely Dr. Anand M. Shivapuji, IISC Bengaluru Prof. (Dr.) B. B. Sahoo, VIT, Vellore, India Dr. S. Ganesh, Satyabhama Institute, Chennai Dr. Pradeep Jakkareddy, Amrita Vishwa Vidyapeetham, Bengaluru Dr. Saptarshi Basu, IISC Bengaluru Dr. Jyotsna Dutta Majumdar, IIT Khargapur

Dr. Ravi Kant, IIT Ropar Dr. D. B. Jani, GEC Dahod, Gujarat Dr. Pankaj Kalita, IIT Guwahati Prof. (Dr.) Sanjib Barma, Calcutta University Dr. Sudhansu Sekhar Sahoo, OUTR, Odisha Prof. Vinod Kotebavi, AVV, Bengaluru Prof. Santanu Das, Kalyani Govt. Engg. College Dr. A. R. Paul, MNIT Allahabad Dr. Saurav Datta, NIT Rourkella

Prof. (Dr.) T. Mohanty, KIIT, Bhubaneswar

Dr. M. Jena, KIIT, Bhubaneswar

Dr. R. K. Sarangi, KIIT Bhubaneswar

Dr. A.B. Harichandan, KIIT, BBSR

Prof. (Dr.) K. B. Sahoo, KIIT, Bhubaneswar

Prof. (Dr.) B.K. Nanda, KIIT, Bhubaneswar

Dr. S. P. Kar, KIIT, Bhubaneswar

Dr. Swarup Nayak, KIIT, Bhubaneswar

Dr. Vijay Mishra, KIIT, Bhubaneswar Dr. A.K. Rout, KIIT Bhubaneswar Dr. Gopal Pradhan, KIIT, Bhubaneswar Dr. P. Ghose, KIIT, Bhubaneswar



International Conference on Thermofluids and Manufacturing Science- 2024

24th-25th January, 2024



Organized by: School of Mechanical Engineering, KIIT Deemed University Bhubaneswar-24, Odisha, India

Contact Us: Dr. Gyan Sagar Sinha, & +91-9954918657 Dr. Spandan Guha, & +91-8777601029 convener.kiitictms@kiit.ac.in

Dr. Debjyoti Sahu, 📞 +91-8970863768 E-mail: secretary.kiitictms@kiit.ac.in Visit us: http://event.kiit.ac.in/kiittictms2022/



KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY (KIIT)
Deemed to be University U/S 3 of UGC Act, 1956

Aim & Scope

Pioneering research is being carried out by the researchers, scientists and engineers working in the area of Thermofluids. Thermofluids is the holistic study of heat transfer, fluid dynamics, thermodynamics and combustion. This area aims to achieve a carbon neutral world by generation of energy from sustainable resource and spending of energy in most efficient way possible.

Advancement of manufacturing technology have enabled us to scale up the production and transportation of equipment by less CO_2 emission. In future we need divergent ideas of sustainable growth to meet and make the world a better place to live. KIIT ICTMS 2024 will be a platform to showcase theoretical and experimental research.

KIIT ICTMS 2024 also offers excellent opportunities for the participants to forge research relations alongside finding partners for future collaborations. The conference has invited eminent speakers from industry and academia for said purpose. Given the challenges pertaining to Thermofluids and Manufacturing science that the industry is currently faced with, a combined effort involving and transcending thermal and manufacturing science is essential. Papers are invited on the following topics to be addressed (but not limited to) in accordance with the theme of the conference:

- Fluid Dynamics; Fluid Structure Interaction
- Phase change; Multiphase Flow
- Boundary Layer and Free Surface Flows
- Flow Control and Diagnostics
- High-Speed Flows; Shock waves
- Pumps, Blowers and Fans; Supercharger and Turbocharger
- Refrigeration and Air-conditioning
- Sustainable Energy
- Propulsion and Emissions
- Power Plants and Power Generation
- Energy, Exergy and Second Law
- Electronic Cooling
- Combustion & Automotive Engineering
- Heat management in electric vehicle
- Tribology and Lubricants
- Radiator and engine cooling
- Gasification and liquefaction
- Inverse heat convection
- Interaction of radiation and convection
- Conjugate heat transfer in spacecraft and energy applications.
- Nano-Fluid synthesis and characterization
- Semi solids; Molten metal and molten glass
- Process Control
- Lean Manufacturing
- Non-traditional Machining
- Additive Manufacturing
- Supply chain management

All submitted papers will be evaluated by the conference reviewer committee in terms of quality, originality of approach and relevance to the theme of the conference. *All accepted and registered papers will be published and to be indexed in SCOPUS and/web of science.*

Policy on PLAGIARISM

Authors are requested to strictly avoid 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 copyright transfer agreement, authors are deemed to be individually or collectively responsible for the content of manuscript published by them.



About KIIT

Kalinga Institute of Industrial Technology (KIIT) is a deemed to be university located at Bhubaneswar, Odisha, India. KIIT is unique among its peer institutions in having nineteen schools co-located on one contiguous campus offering more than 100 programs including UG/PG studies in the disciplines including engineering, management, medicine and law. KIIT has been awarded Tier-1 status by NBA (AICTE), accredited with Grade 'A' by NAAC (UGC), it is an **Institute of Eminence** and has been accredited by IET, U.K.

We also take pride in being home to the largest and first tribal university of the world Kalinga Institute of Social Sciences (KISS), a protégé of KIIT which is a noble initiative of our honourable founder (KIIT/KISS) Prof.. Achyuta Samanta. Recently, KISS has been selected to host the 19thInternational Congress of Anthropological and Ethnological Sciences (ICAES) in 2023. Detailed information about KIIT and KISS University can be obtained from: http://www.kiit.ac.in, http://www.kiss.ac.in/

Select proceedings of KIIT ICTMS 2022 are already published by Springer, IJECE (Begell House) and indexed in SCOPUS

About School of Mechanical Engineering, KIIT

The School of Mechanical Engineering, KIIT possesses highly qualified and experienced faculty members from various IITs, NITs and other reputed institutions. The current consultancy and research & development areas of the school include jet and spray impingement heat transfer, droplet and spray combustion, computational fluid dynamics, mechanical systems design & optimization, biomass and biofuels (synthesis, analysis and optimization), vibration and machine condition monitoring, meta machining, metal matrix/polymer matrix composites (fabrication and characterization), metal forming. We have to our credit a good number of publications in reputed SCI/Scopus indexed journals, patents and projects funded by bodies like AICTE, DST, DRDO, Institution of Engineers (IE), Govt. of India.

Bhubaneswar "Temple City of India"

With the architectural legacy of the Kalinga dynasty, Bhubaneswar boasts up with hundreds of temples including Lingaraj, Mukteswar, Raja Rani, Brahmeswar, Vital, etc. dating from 6th-13th century AD. Apart from remarkably sculptured temples, the Jain caves of Khandagiri and Udayagiri, Nandankanan zoological park, the peace pagoda 'Dhauli' on the bank of the river Daya attract visitors from all over the world. Besides, Puri, Konark along with capital city of Bhubaneswar form the three vertices of Golden Triangle of Orissa tourism circuit



How to reach us



Campus-8, School of Mechanical Engineering, KIIT, Bhubaneswar, Odisha. PIN: 751024

Nearest railway station and Airport

Bhubaneswar railway station: 12.5 km from KIIT.

Biju Patnaik International Airport, Bhubaneswar: 12.9 km from KIIT.

City bus service popularly known as 'Mo Bus' and App based cabs are frequently available from Airport & Railway Station.