

## Theme of the conference :

We are inviting for full paper article submission related to but not limited to the topics listed below. The paper will go through a rigorous review process by the submission committee and the authors will be notified.

### Recent advances in thermal infrastructure:

- Aerodynamics
- Renewable energy
- Computational Fluid Dynamics
- Carbon-dioxide Capture and Sequestration
- Energy and Thermofluids
- Fluid Dynamics
- Fuels and Combustion
- Heat and Mass Transfer
- Internal Combustion Engines
- Refrigeration and air-conditioning
- Building Energy Efficiency

### Recent advances in Manufacturing infrastructure:

- Green Manufacturing
- Instrumentation and Control
- Material processing and characterization
- Manufacturing Techniques
- Rapid Prototyping
- Polymers and composites

### Recent advances in infrastructure planning and Design:

- Applied Mechanics
- Bio-mechanics
- Computer aided engineering design
- Finite element analysis
- Industrial Tribology
- Machine Design
- Robotics and Automation
- Fracture Mechanics
- Dynamics and Vibration
- Industrial Engineering and optimization

## Conveners :

- **Dr. Saurabh Kumar Yadav**, Dept. of Mech. and Aero-Space Engg, IITRAM
- **Dr. Dileep Kumar Gupta**, Dept. of Mech. and Aero-Space Engg, IITRAM
- **Dr. Jagat Rath**, Dept. of Mech. and Aero-Space Engg, IITRAM
- **Dr. Soumya Gangopadhyay**, Dept., of Mech. Engg., IIT Bhilai
- **Dr. Anshul Faye**, Dept. of Mech., Engg., IIT Bhilai

## Co-Conveners :

- **Dr. Sumit Tripathi**, Dept. of Mech. and Aero-Space Engg, IITRAM
- **Dr. Kamlesh Joshi**, Dept. of Mech. and Aero-Space Engg, IITRAM
- **Dr. Ajit Kumar**, Dept. of Mech. and Aero-Space Engg, IITRAM

## Hospitality Committee:

- **Vijay Parmar**, Administrative Officer, IITRAM

## Important Dates:

- **Full Paper Submission Deadline** : 30/10/2022
- **Notification of Acceptance** : 25/10/2022
- **Registration Opens** : 30/10/2022
- **Registration Deadline** : 30/11/2022
- **Conference Dates** : 16/12/2022 to 18/12/2022

## Registration:

Category	Regular Registration
Indian Delegates	Rs. 8500/-
Foreign Delegates	150 USD
For Registration: <a href="https://iitram.in/icram21/index">https://iitram.in/icram21/index</a>	

## Publication:

All accepted and presented papers will be published in AIP Conference Proceedings. Indexed in leading databases-Web of Science, Scopus, Inspec, Chemical Abstracts Service (CAS), and Astrophysics Data System (ADS).

For more details: <https://aip.scitation.org/journal/apcl>.

Authors of selected papers from ICram 2022 will be invited to submit an extended and improved version to the special issue in "Heat Transfer Engineering", Taylor & Francis (SCI).  
<https://www.tandfonline.com/action/journalInformation?journalCode=uhte20>



# 4<sup>th</sup> International Conference on RECENT ADVANCES IN MECHANICAL INFRASTRUCTURE (ICRAM - 2022)

16 - 18 December, 2022



In collaboration with  
Department of Mechanical Engineering  
Indian Institute of Technology, Bhilai



Organized by  
Department of Mechanical and Aero-Space Engineering  
Institute of Infrastructure, Technology, Research and Management (IITRAM)

(An Autonomous University established by Government of Gujarat)  
Near Khokhra Circle, Maninagar (East),  
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## About IITRAM:

Institute of Infrastructure, Technology, Research and Management (IITRAM) is an Autonomous University as declared in the Gujarat Government Act no. 5 of 2013- broadly known as IITRAM Act, provides Engineering education with undergrad and post-grad courses in Civil, Mechanical, Electrical branches. It also offers Ph.D. programs in engineering branches of Civil, Mechanical and Electrical along with Physics, Chemistry, Mathematics, English, Sociology and Economics. It is an initiative of the Government of Gujarat to impart education in engineering fields which mainly focuses on Infrastructure and Infrastructure Management. To cultivate skill-based Engineers, IITRAM has an advanced curriculum, labs, and industry tie-ups to produce advanced, skilled, and trained professionals for a technologically advanced nation. IITRAM is striving hard to bring qualitative improvement in teaching and learning process and achieve excellence in the field of technical education which is capable of responding to the changing requirements of technical manpower

## About IIT Bhilai:

Indian Institute of Technology Bhilai (IIT Bhilai) was established in the state of Chhattisgarh by Ministry of Human Resource and Development in the year 2016. IIT Bhilai offers Bachelor of Technology (BTech), Master of Technology (MTech) and Doctoral programs (PhD) in various disciplines. The Institute made its modest start with introduction of BTech program in August 2016. The Institute is currently offering BTech and MTech programs in the discipline of Computer Science and Engineering (CSE), Data Science and Artificial Intelligence (DSAI); Electrical Engineering (EE), Mechanical Engineering (ME) and Mechatronics; and PhD program in the discipline of Chemistry (CY), Computer Science and Engineering (CSE), Data Science and Artificial Intelligence (DSAI), Electrical Engineering (EE), Mathematics (MA), Mechanical Engineering (ME), Mechatronics, EV Technology and Physics (PH). Department of Mechanical Engineering offers a thorough and well decorated academic structure for theoretical understanding and their practical applications. The department offers B.Tech, M.Tech and Ph.D program. We strive to contribute towards national progress by welding together the zeal and enthusiasm of the undergraduates with the knowledge and experience of the post-graduates. On the research front, department is actively involved in various research activities in all the traditional as well as modern areas of statics, dynamics, vibrations, structural analysis, materials, thermodynamics, fluid mechanics and heat transfer, thermal comfort, building energy efficiency, design and manufacturing etc.

## About Conference:

ICRAM-2020 provides a forum for discussion on issues, concepts, skill development and possible innovations in the mechanical infrastructure sector. This conference aims at bringing the best technical minds working in the field of mechanical engineering on a

common platform to share their knowledge of technical expertise, experience and forthcoming challenges in the development of infrastructure in the country. Moreover, it will be a great opportunity for enthusiastic students and research scholars to learn from the experiences and visions of eminent scientists and innovators. The conference is expected to include presentations on the latest research trends showcasing the important achievements and upcoming challenges in the development of the infrastructure sector pertaining to mechanical engineering. The conference invites researchers to showcase their work in any given area of mechanical engineering that somewhere relates to the overall progress of infrastructure development in the country.

## Advisory Committee:

- **Arvind Rajput**, Dept. of Mech. Engg., IIT Jammu
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- **Vivek Vitankar**, Director, Fluidimensions
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- **Prof. Rajiv Prakash**, Director, IIT, Bhilai
- **Prof. Sameer V. Dalvi**, Director, IITRAM

## Conference Chair(s):

- **Dr. Ajit Kumar Parwani**, Mech. and Aero-Space Engg., IITRAM
- **Dr. PL. Ramkumar**, Mech. and Aero-Space Engg., IITRAM
- **Dr. Kumar Abhishek**, Mech. and Aero-Space Engg., IITRAM
- **Dr. Udayraj**, Dept., of Mech. Engg, IIT Bhilai

## Key Note Speakers:

- **Seshasai Srinivasan, PhD, PEng**  
Chair, Software Engineering Technology  
W Booth School of Engg. Practice & Tech., McMaster University  
Hamilton, Ontario, CANADA L8S 4L8
- **Dr. Prabal Talukdar**  
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- **Prof. Faming Wang**  
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