



**ALLIANCE**  
**UNIVERSITY**

Private University established in Karnataka State by Act No.34 of year 2010  
Recognized by the University Grants Commission (UGC), New Delhi

**Alliance College of Engineering and Design**



University of  
**Strathclyde**  
**Glasgow**

# First Joint International Conference

on

## Advances in Mechanical

&

## Aerospace Engineering

(ATCON 2: ICAMAE 2023)

(Hybrid mode)

Revolutionizing Industries: Advancing Sustainable Development and  
Lightweight Structures in Mechanical and Aerospace Engineering

**November 28 – 30, 2023**

[alliance.edu.in/icamae-2023](http://alliance.edu.in/icamae-2023)

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## **ALLIANCE UNIVERSITY**

Alliance reimagines the idea of the university by creating a community that leads the charge against the complex challenges of the 21st century. The university conceives research to be the essence of all teaching and learning practices. A unity between research and teaching is promoted to extend the frontiers of knowledge in order to solve real world problems at the local, national, and global scale. For this purpose, the university seeks to be the nerve centre of interaction between the industry, the government, the civil society, and the community at large. In times when technological and social change is transforming the very idea of employability, the university embraces the increasing diversity of specializations while retaining the impulse to unify all knowledge.

## **ALLIANCE COLLEGE OF ENGINEERING AND DESIGN**

Alliance College of Engineering and Design is a prestigious educational institution at the forefront of world real-time research activities. With a commitment to engineering and design education excellence, the college has carved a niche by fostering an environment that encourages innovation, creativity, and cutting-edge research. The institution recognizes that research is vital in pushing the boundaries of knowledge and technology. Therefore, it provides ample opportunities for students and faculty members to engage in meaningful research. The collaboration with industry professionals and research organizations further enhances the research ecosystem at the college. By encouraging collaboration across various fields, the institution promotes a holistic approach to problem-solving and encourages students to think beyond traditional boundaries. The Mechanical Engineering Department at Alliance College of Engineering and Design, Alliance University provides a supportive and collaborative research environment for faculty members and students. Through research projects, publications, and collaborations with industry and research organizations, the department contributes to the advancement of mechanical engineering knowledge, fosters innovation, and prepares students to become skilled professionals in the field. Our research have yielded remarkable projects that span across diverse domains, from developing cutting-edge energy generation to lightweight structures that revolutionize efficiency of world real time applications.

## **UNIVERSITY OF STRATHCLYDE, UNITED KINGDOM**

The University of Strathclyde is respected as one the leading international technological universities in Europe and its technologies combine the creation and development of solutions for industry and society. Strathclyde is a multi-award-winning university. We are the only University to have won the Times Higher Education University of the Year award twice (2012 and 2019). Over the years, Strathclyde has been recognised across a variety of categories at the Times Higher Education awards.

Our Faculty of Engineering is a leading international centre for engineering research, which boasts multi-million pound investments by Research Councils, Government and companies, and it is at the forefront of engineering research.

Mechanical & Aerospace Engineering is one of the largest departments of its type in the UK and it is by far the largest in Scotland. It has the highest independently assessed standing in its discipline in Scotland for both teaching and research. Our mission is to advance knowledge and commerce in mechanical and aerospace engineering. Our research is carried out in award-winning and internationally recognised research centres in energy, aerospace, fluids and materials. The Department hosts a broad range of advanced research equipment including a £3 million investment in a state of the art advanced materials research laboratory which delivers a step change in multi-disciplinary experimental research capability. Our research programmes have delivered projects from marine turbines for clean energy to lightweight material for efficient transportation.

## **COLLABORATION BETWEEN ALLIANCE UNIVERSITY AND UNIVERSITY OF STRATHCLYDE**

Alliance University and the University of Strathclyde have entered into a dynamic partnership that extends across research, student exchange programs, and faculty collaborations. The two prestigious universities have come together to enrich research endeavours, leveraging their collective expertise to tackle complex challenges and push the boundaries of knowledge in various fields for the betterment of society at large. This collaborative approach enhances the quality and impact of the research output, thereby creating a robust academic ecosystem, which leverages excellence, innovation, and cross-cultural exchange.

## **CONFERENCE OVERVIEW**

The First Joint International Conference on Advances in Mechanical and Aerospace Engineering (ICAMAE 2023) will be an esteemed gathering of researchers, academics and professionals from all over the world. This conference is a platform for discussing the latest advancements, innovations, and research findings in the fields of mechanical and aerospace engineering. ICAMAE 2023 provides a unique opportunity for participants to exchange knowledge, ideas, and experiences on various topics related to these fields, including but not limited to, materials science, production, design, thermal, fluid flow, and aerospace engineering. ICAMAE 2023 aims to create a collaborative environment that fosters interaction and engagement among experts. The conference features keynote speeches, paper and poster presentations that cover a wide range of topics related to mechanical and aerospace engineering. It provides an opportunity to learn about cutting-edge research and technology, engage in lively discussions and debates with other experts, network with peers, gain new insights and knowledge, and contribute to the advancement of mechanical and aerospace engineering.

## OBJECTIVES

- To advance the understanding and application of mechanical and aerospace engineering principles, theories, and technologies with respect to real-world challenges.
- To foster interdisciplinary research and collaboration among researchers, academics and professionals in the field of mechanical and aerospace engineering.
- To identify emerging trends and future research directions in the fields of mechanical and aerospace engineering.
- To explore the application of cutting-edge technologies such as artificial intelligence, robotics and smart materials in the fields of mechanical and aerospace engineering.
- To promote the use of sustainable and eco-friendly technologies in mechanical and aerospace engineering, and encourage the development of green solutions.
- To promote international collaborations and partnerships in mechanical and aerospace engineering, and encourage the sharing of knowledge and resources.

## CALL FOR PAPERS

Papers are invited in accordance with the theme of the conference to submit original research studies, and case studies. The papers should present novel research findings, discuss emerging trends and research directions, or provide new insights into the application of mechanical and aerospace engineering principles and technologies to real-world challenges. Authors are required to strictly avoid plagiarism in any form. Authors should submit their original and unpublished work not under consideration for publication elsewhere. Manuscripts found to be plagiarized during any stage of review shall be rejected. As per the copyright transfer agreement, authors are deemed to be individually or collectively responsible for the content of the manuscript published.

## CONFERENCE THEMES

- Track 1: Materials Science
- Track 2: Production Engineering
- Track 3: Design Engineering
- Track 4: Fluids and Thermal Engineering
- Track 5: Aerospace Engineering

## AWARDS

- Best Oral Presentation
- Best Poster Presentation
- Most impactful Technology or Innovation

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## PUBLICATION OPPORTUNITIES

All manuscripts submitted to the conference will undergo a rigorous peer-review process, ensuring the quality and integrity of the research presented. The conference proceedings will be published in a reputable peer-reviewed journal (Scopus/SCI indexed), providing participants with an opportunity to share their research findings and contribute for the advancement of the field of mechanical and aerospace engineering. Selected papers from the conference will be considered for publication in high-impact peer reviewed academic journals in the field of mechanical and aerospace engineering. This will provide participants with an opportunity to publish their research in prestigious journals and increase the visibility and impact of their work.

## IMPORTANT DATES

Last date for submission of abstract	August 23, 2023
Notification of Acceptance of Abstract	September 1, 2023
Full manuscript submission deadline	October 15, 2023
Approval of paper and correction to authors	November 13, 2023
Conference Dates	November 28-30, 2023
<b>Early-Bird Registration and Payment</b>	
Start Date	September 1, 2023
End Date	October 18, 2023
<b>Regular Registration and Payment</b>	
Start Date	October 19, 2023
End Date	November 18, 2023

## REGISTRATION DETAILS

Participants	Early Bird		Regular	
	National	International	National	International
Students (UG / PG / Ph.D.)	Rs. 2,500	\$75	Rs. 3,000	\$80
Academic	Rs. 3,500	\$100	Rs. 4,000	\$105
Industry	Rs. 4,500	\$150	Rs. 5,000	\$155
Attending	Rs. 1,000	\$50	Rs. 1,500	\$55

**Note:** Publication charges are not covered in the above and will be charged based on the publisher norms.

## ABSTRACT SUBMISSION GUIDELINES

The abstract for the conference from research scholars, academics and industry/corporate experts from Indian, UK and other nationals are invited. The abstract should be submitted in the prescribed template.

## PRODUCT EXHIBITION

We are delighted to announce a grand product exhibition showcasing the latest innovations emerging from the fields of Mechanical and Aerospace Engineering across various industries. This exclusive event will bring together engineers, industry professionals, and enthusiasts to witness groundbreaking products that have the potential to reshape the landscape of technology and propel us into the future. The exhibition will feature a wide range of newly developed products that exemplify the ingenuity and expertise of Mechanical and Aerospace Engineering. These products have been meticulously designed and engineered to meet the ever-evolving needs of different industries, promising enhanced efficiency, improved performance, and groundbreaking advancements. The product exhibition will celebrate the exceptional achievements of Mechanical and Aerospace Engineering, showcasing the successful translation of theoretical concepts into tangible products with real-world applications. It is an opportunity to witness the transformative power of engineering in shaping our lives and industries.

## CORE COMMITTEES

Chief Patron	Patron		General Chair
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Conveners		Co-Conveners	
<b>Dr. Mohit Hemanth Kumar</b> Assistant Professor, Dept. of Mechanical Engineering, ACED	<b>Dr. Sasmita Bal</b> Associate Professor, Dept. of Mechanical Engineering, ACED	<b>Dr. Syed Alay Hashim</b> Associate Professor, Dept. of Aerospace Engineering, ACED	<b>Dr. Rakesha Chandra Dash</b> Assistant Professor, Dept. of Aerospace Engineering, ACED
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<b>Dr. Rajesh Kumar</b> Assistant Professor, Dept. of Mechanical Engineering, ACED	<b>Dr. Sourabh Mandol</b> Assistant Professor, Dept. of Mechanical Engineering, ACED	<b>Dr. Athul Joseph</b> Assistant Professor, Dept. of Aerospace Engineering, ACED	
<b>Prof. K. Vijayalakshmi Bharathi</b> Assistant Professor, Dept. of Aerospace Engineering, ACED		<b>Prof. Gisa G.S.</b> Assistant Professor, Dept. of Aerospace Engineering, ACED	
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## CONTACT

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### Central Campus

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