



**ICTAM 2024**  
THE 26<sup>TH</sup> INTERNATIONAL CONGRESS OF  
THEORETICAL AND APPLIED MECHANICS

[www.ictam2024.org](http://www.ictam2024.org)

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# ICTAM

## 2024 DAEGU, KOREA

25<sup>SUN</sup> – 30<sup>FRI</sup> AUGUST 2024

THE 100<sup>TH</sup> ANNIVERSARY OF ICTAM

### Special issues celebrating the centennial ICTAM



Acta Mechanica



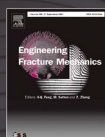
Archives of Mechanics



Biomicrofluidics



Computers & Fluids



Engineering Fracture Mechanics



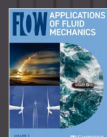
European Journal of Mechanics A-Solids



European Journal of Mechanics B-Fluids



Experimental Thermal and Fluid Science



Flow



Fluid Dynamics Research



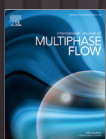
Frontiers in Materials



International Journal of Damage Mechanics



International Journal of Heat and Fluid Flow



International Journal of Multiphase Flow\*



International Journal of Solids and Structures



Journal of Applied Mathematics and Mechanics



Journal of Mechanical Science and Technology



Journal of Non-Newtonian Fluid Mechanics



Journal of Theoretical, Computational, and Applied Mechanics



Journal of Visualization



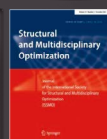
Meccanica



Physical Review Fluids\*\*



Physics of Fluids



Structural and Multidisciplinary Optimization

Pending official publication agreements. Additional journals are under consideration.

\* International Journal of Multiphase Flow will publish articles in regular issues with a heading that it is selected for publication from the presentation at the ICTAM 2024 after the same rigorous review process of the journal.

\*\* Physical Review Fluids — the official journal of the American Physical Society devoted to the discovery of new physical phenomena in fluid dynamics — will collaborate with ICTAM 2024 and publish a collection of papers by some of the invited speakers, spread over several regular issues.

ORGANIZER :  The Korean Society of Mechanical Engineers

**KCTAM**

HOST :  International Union of Theoretical and Applied Mechanics



Website



YouTube Channel

**ICTAM 2024 Secretariat**

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## Introduction

ICTAM has been held every four years since its establishment in 1924 and is known as the **Olympics of mechanics**, which is the core field of engineering. The conference is **the world's most prestigious conference with as many as 5,000 participants** and is systematically operated by an international organization called IUTAM.



## Important Dates

Extended Abstract Submission	September 1, 2023 ~ January 15, 2024
Notification of Acceptance	April 22, 2024
Program Open	May 31, 2024
Standard Registration Deadline	June 30, 2024



## Thematic Session & Mini Symposia Topics

### Thematic Session

#### Fluids topics

- FM01 Biological Fluid Mechanics
- FM02 Boundary Layers
- FM03 Zero-Emission Combustion
- FM04 Compressible Flow
- FM05 Convection
- FM06 Drops, Bubbles and Interfaces
- FM07 Multiphase and Particle-Laden Flows
- FM08 Flow Instability and Transition
- FM09 Thin film flows
- FM10 Geophysical and Environmental Fluid Dynamics
- FM11 Low Reynolds Number Flows and Suspension
- FM12 Micro- and Nano-Fluidics
- FM13 Non-Newtonian and Complex Fluids
- FM14 Computational Fluid Dynamics
- FM15 Turbulence
- FM16 Vortex Dynamics
- FM17 Waves in Fluids
- FM18 Electro- and Magneto-Hydrodynamics

#### Solids topics

- SM01 Biomechanics and Biomaterials
- SM02 Tribology-Contact and Friction
- SM03 Elasticity
- SM04 Damage & Fracture Mechanics
- SM05 Geomechanics and Geophysics
- SM06 Impact Mechanics and Wave Propagation
- SM07 Multi-Component, Composites and Hierarchical Materials
- SM08 Phase Transformations and Thermomechanical Phenomena
- SM09 Additive Manufacturing
- SM10 Multibody and Vehicle Dynamics
- SM11 Nanostructures and MEMS
- SM12 Plasticity, Viscoplasticity and Creep
- SM13 Stability and Instability of Materials and Structures
- SM14 Computational Solid Mechanics
- SM15 Vibrations and Control of Structures
- SM16 Soft Materials and Extremely Deformable Structures
- SM17 Metamaterials Architected Materials and Topology Optimization
- SM18 Nonlinear Dynamics for Design

#### Fluids/Solids topics

- FS01 Acoustics
- FS02 Emerging Experimental Techniques Across the Length and Time Scales
- FS03 Nonlinear Dynamics and Pattern Formation
- FS04 Porous Media and Liquid Foam
- FS05 Fluid Structure Interactions
- FS06 Granular Materials and Flows
- FS07 Optimization for Solids and Fluids
- FS08 Education in Mechanics
- FS09 Reduced Order Modeling of Fluids and Solids

#### Mini Symposia

- MS01 Chemo-Mechanics and Materials for Energy Conversion and Storage
- MS02 Soft Matter, Theory Meets Experiment
- MS03 Nonlinear Mechanical Models for Biological and Bioinspired Materials
- MS04 Mechanics in Health and Sport
- MS05 Data-Driven Mechanics and Artificial Intelligence
- MS06 Fluid Dynamics of Disease Transmission
- MS07 Non-Reacting and Reacting Fluid Dynamics for Sustainable Propulsion Systems
- MS08 Fluid Mechanical Challenges for Sustainability & Climate Change



## Venue & Attractions

## UNESCO World Heritages near the conference venue



#### Hahoe Village

Living Heritage which has well-maintained Korean traditional architecture.



#### Haeinsa Temple

Janggyeong Panjeon, the Depositories for the Tripitaka Koreana Woodblocks  
The world's only tripitaka depository

KOREA

DAEGU

#### Seokguram Grotto and Bulguksa Temple

A masterpiece that shows the essence of ancient Korean Buddhist art



## Conference Venue

**EXCO (Daegu Exhibition & Convention Center),**  
Korea's leading, purpose-built, world-class exhibition and convention venue.