ICTAM 2024

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THE 26TH INTERNATIONAL CONGRESS OF THEORETICAL AND APPLIED MECHANICS

ICTAM

25SUN - 30FRI AUGUST 2024 | DAEGU, KOREA

THE 100th ANNIVERSARY OF ICTAM

Call for Papers

ICTAM has been held every four years since its establishment in 1924 and is known as the Olympics of mechanics, 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 the international organization IUTAM. ICTAM 2024 invites you to submit an extended abstract for the upcoming world **conference, August 25-30, 2024 in Daegu, Republic of Korea.** Congress participants are encouraged to submit papers on innovative research in fluids, fluids-solids, and solids. The paper should present material that is novel and preferably unpublished at the time of the Congress. Submission of an extended abstract should be performed on the Congress website.

The extended abstract will be evaluated by the International Papers Committee. To ensure a fair and efficient evaluation process, we kindly request that **all extended abstracts are prepared in PDF format and adhere to a strict page limit of 2 pages.** To submit an extended abstract, use the **online paper submission** function on the Congress website at

www.ictam2024.org

A template for the extended abstract is provided on the website. If you cannot access the website, please ask for instructions by sending an e-mail to the secretariat (info@ictam2024.org).

Authors can **submit the extended abstract from September 1, 2023 to January 15, 2024.** Contributors will be **informed of the decision** of the International Papers Committee and the assignment of their papers to a session **after April 22, 2024.** Authors invited to present are expected to register and present papers in person at the Congress.

Congress special issues

The XCCC of IUTAM and LOC have decided to print special issues of prestigious journals. Therefore, authors whose abstracts are accepted for presentation at ICTAM2024 will be invited to submit a review article, full-length manuscript, or short communication for consideration of publication in these special issues.

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

Plenary Lectures

Opening Lecture
Distinguished Prof. Yoon Young Kim
Seoul National Univ, Korea
Exotic anisotropic metamaterials for novel manipulation of elastic waves

Closing Lecture
Dr. Berengere Dubrulle
CNRS, France
Turbulence at the Kolmogorov scale

Hill Prize Lecture (TBD)

Batchelor Lecture (TBD)

Sectional Lectures

Fluids

Prof. Anke Lindner (PMMH-ESPCI/Université Paris Cité, France)
Prof. Lydia Bourouiba (Massachusetts Institute of Technology, USA)
Prof. Haecheon Choi (Seoul National University, Korea)
Prof. Gautam Biswas (Indian Institute of Technology Kanpur, India)
Prof. Anne-Virginie Salsac (Université de Technologie de Compiègne, France)
Prof. Jacques Magnaudet (CNRS / IMFT, France)
Prof. Guowei He (Institute of Mechanics Chinese Academy of Sciences, China)
Prof. Gareth McKinley (Massachusetts Institute of Technology, USA)

Solids

Prof. Ellen M. Arruda (University of Michigan, USA)
Prof. Ferdinando Auricchio (University of Pavia, Italy)
Prof. Nicolas Moës (Ecole Centrale de Nantes, France)
Prof. Alan Cocks (University of Oxford, UK)
Prof. Claudia Comi (Politecnico di Milano, Italy)
Prof. Stanisław Stupkiewicz (IPPT PAN, Poland)
Research Prof. François Hild (University Paris-Saclay, France)
Prof. Henrik Myhre Jensen (Aarhus University, Denmark)

Thematic Sessions & Mini Symposia Topics

Thematic Sessions

Fluid 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

Solid 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 architectured materials and topology optimization
SM18 Nonlinear dynamics for design

Fluid/Solid 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