# Time and Venue of the 14th NCTAM

The congress will be held in hotel Hilton, Sofia, Bulgaria, 2-4 September, 2024. <a href="https://www.hilton.com/en/hotels/sofhihi-hilton-sofia/">https://www.hilton.com/en/hotels/sofhihi-hilton-sofia/</a>

	FEES		
	EARLY	Regular	On-place
Participants	450 EUR	500 EUR	550 EUR
Young Scientists (PhD students)*	300 EUR	380 EUR	380 EUR
Accompanying persons**	200 EUR	250 EUR	250 EUR

The congress fee includes conference materials, get together party (September, 2<sup>nd</sup>), the congress banquet, coffee breaks and lunches during the congress. Other important details will be given on the congress website.

### **ACCOMMODATION**

A wide range of hotels nearby the congress venue are available and suggestions will be provided later on the congress website.

## **IMPORTANT DATES**

Abstract Submissions	1 March 2024	
Acceptance Notifications	31 March 2024	
Early registration	30 May 2024	
Registration	15 July 2024	
Congress start	2 September 2024	
Journal Paper Submission	30 September 2024	

# **BANK ACCOUNTS:**

In EURO: IBAN: BG82CEC8979014H9590900; BIC: CECBBGSF IN BGN: BG41CECB979010H9590901; BIC: CECBBGSF



# **First Announcement**

# 14th National Congress on Theoretical and Applied Mechanics

2-4 September, 2024 Sofia, BULGARIA

#### **ORGANIZERS:**

National Committee of Theoretical and Applied Mechanics
–Institute of Mechanics, Bulgarian Academy of Sciences





<sup>\*</sup> The congress banquet is not included.

<sup>\*\*</sup> It includes get together party (September, 2<sup>nd</sup>), the congress banquet, and an excursion with lunch.

#### **CONGRESS TOPICS**

**General Mechanics** -- Analytical mechanics; Stability analysis and control theory; Dynamical systems; Thermodynamics and statistical mechanics; Theory of mechanisms and machines; Mechatronics; Computational mechanics; History of mechanics, Experimental Mechanics, High Performance Computing in Mechanics, etc.

**Solid Mechanics** -- Elasticity; Plasticity; Damage and fracture; Composite materials; Smart materials; Beams, plates and shells; Dynamics of structures; Nonlinear dynamics; Noise and vibrations; Contact problems; Impact and wave propagation; Seismic mechanics; Geomechanics; Multi-physics and Multiscale Modelling; Mechanics of Advanced Materials and Structures, Nanomechanics and Nanostructured Materials, Computational Solid and Structural Mechanics, etc.

**Fluid Mechanics** -- Viscous fluids; Conducting and magnetic fluids; Compressible and rarefied gases; Boundary layers; Bubbles and drops; Thin films and jets; Multiphase flows; Flow in porous solids; Waves; Turbulence; Heat and mass transfer; Combustion and flames; Microfluidics; Geophysical and environmental fluid dynamics; Experimental methods in fluid mechanics; Hydrodynamics, Fluid-structure Interactions, etc.

**Biomechanics** -- Biological flows; Mechanics of cardiovascular system; Biorheology; Molecular biomechanics; Tissue engineering; Mechanics of bones and tissues; Mechanics of cell membranes; Orthotics and prosthetics; Locomotion; Rehabilitation robotics; Human-robot interaction, etc.

Numerous mini-symposia in various thematic areas will be organized

#### **PLENARY SPEAKERS**

Marian Wiercigroch, University of Aberdeen, UK (opening lecture)
Alexander Rachev, Institute of Mechanics, BAS, Bulgaria
Jerzy Warminski, Lublin university of Technology, Poland
Dora Karagiozova, Institute of Mechanics, BAS, Bulgaria
Giuseppe Rega, Sapienza University of Rome, Italy (closing lecture)

#### **CONFERENCE LANGUAGE**

The official language of the congress is English.

#### **CONFERENCE PROCEEDINGS**

Extended abstracts accepted for presentation at the congress will be published in the congress abstracts booklet. Selected papers will be invited for publishing in special issues of peer-reviewed journals. The conference proceedings is foreseen to be published by reputable publisher after the congress. More details will be announced on the congress website.

#### **ORGANIZING COMMITTEE**

**Co-Chairmen:** Emil Manoach and Svetoslav Nikolov

**Secretary:** Maria Datcheva

Members: Nina Pesheva, Ana Yanakieva, Stefan Karastanev, Evgeni

Koytchev, Simona Doneva

A full list of the Scientific Committee members is given on the congress web site.

# **CORRESPONDENCE ADDRESS**

14<sup>th</sup> NCTAM24 Organizing Committee Institute of Mechanics Bulgarian Academy of Sciences Acad. G. Bonchev Street, block 4, 1113 Sofia, Bulgaria e-mail: congress@imbm.bas.bg

website:https://congress.imbm.bas.bg/