

Venue

The 11th National Congress on Theoretical and Applied Mechanics will be held in hotel Samokov in the beautiful mountain resort Borovets, Bulgaria. It is situated on the northern slope of the Rila mountain at an altitude of 1350 m, 70 km south-east of Sofia and at the foot of Mussala - the highest peak on the Balkan peninsula. The weather in September is quite suitable for mountain mini-tours and sightseeing.



Accommodation and Transport

Congress participants will be accommodated in the Samokov Hotel, Borovets, as well as in other nearby hotels. Please find more details on:

www.samokov.com

www.hotelscombined.com/City/Borovets.htm

Transport from Sofia to Borovets will be organized. Additional details on accommodation and transport will be available on the Congress webpage. Attendees from countries for which visa is required should contact the organizers for an invitation letter as soon as possible.

About NCTAM

Since its inception in 1969, the quadrennial congress organized by the National Committee of Theoretical and Applied Mechanics and the Institute of Mechanics - Bulgarian Academy of Sciences has become a major scientific event, gathering Bulgarian and foreign scientists and engineers from academia and industry. At the NCTAM Bulgarian scientists working in the field of mechanics and their colleagues from many foreign countries present the latest developments in their research and exchange ideas on all topics of theoretical and applied mechanics.

ADVERTISING OPPORTUNITIES, Call for sponsorship

Organizations, companies and individuals are invited to become sponsors of the NCTAM2009. The sponsors will have the good opportunity of placing their banner and text links on the website of the Congress as well as on the website of the Institute of Mechanics-BAS. They will be able to spread advertising leaflets, brochures to all the participants in the Congress and to organize exhibitions during the event. If you are interested in advertising, please, contact us via e-mail (congress@imbm.bas.bg) or phone (+359 2 979 6420).

Registration Fees

250 Euro paid before **15 July 2009**
280 Euro paid after **15 July 2009**
150 Euro – for an accompanying person

Members of the Bulgarian Society of Theoretical and Applied Mechanics:

100 BGN paid before **15 July 2009**
130 BGN paid after **15 July 2009**

Graduate and postgraduate students can apply for up to 50% reduction of the registration fee.

The regular fee will cover participation in all sessions, the Congress book of abstracts and the Congress proceedings, welcome reception, lunches and coffee breaks, banquet, excursions. Lunches for participants will be arranged at the Samokov hotel. The reduced fee will cover only participation in all sessions, the Congress book of abstracts and the Congress Proceedings, welcome reception and coffee breaks.

Social Programme

Visit to the famous Rila Monastery included in the World's heritage list will be organized for participants and accompanying persons. A social program will be arranged for the accompanying persons - mini-excursions, half-day tour to Sofia etc.



Secretariat

Ana Yanakieva
Robert Kazandjiev

Tel.: +359 2 979 2006;
+359 2 979 6402;
+359 2 973 3140
Fax: +359 2 870 7498
E-mail: congress@imbm.bas.bg



NCTAM2009

11th NATIONAL CONGRESS ON
THEORETICAL AND APPLIED MECHANICS

2 – 5 SEPTEMBER 2009
BOROVETS, BULGARIA

National Committee of Theoretical and Applied Mechanics
Bulgarian Academy of Sciences
Institute of Mechanics
Technical University of Sofia

<http://nctam.imbm.bas.bg>

General

The Organizing Committee is pleased to announce that the **11th National Congress on Theoretical and Applied Mechanics** will take place in the mountain resort Borovets, Bulgaria, 2-5 September 2009. The purpose of the Congress is to provide opportunities for scientists and engineers working in the field of mechanics to exchange new ideas, discuss current research and establish a basis for future collaboration. We believe that the beautiful nature of the mountain resort Borovets will contribute to the friendly and informal atmosphere of the event.



Congress Topics

General Topics in Mechanics

Analytical mechanics; Stability analysis and control of body motion; Computational mechanics; Control theory; Vibration; Dynamical systems, Theory of mechanisms and machines; Thermodynamics and statistical mechanics, History of mechanics.

Solid Mechanics

Elasticity; Plasticity; Damage and fracture; Composite materials; Smart materials; Material modeling; Beams, plates and shells; Dynamics of structures; Noise and vibrations; Contact problems, Coupled fields; Impact and wave propagation; Seismic mechanics; Micro- and nano-mechanics.

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 media; Waves; Turbulence; Heat and mass transfer; Combustion and flames; Microfluidics; Geophysical and environmental fluid dynamics; Experimental methods in fluid mechanics, Ship hydrodynamics.

Mechanics of Multi-Body Systems

Kinematics and dynamics of multi-body systems; Mechatronics; Robotics; Identification of mechanical systems; Control and optimization of structures and mechanisms; Micro- and nano-robotics; Mobile robots.

Biomechanics

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

Experimental Mechanics

Materials testing; Hybrid techniques; Non-destructive control methods and devices; Noise and vibration; Instrumentation.

OFFICIAL LANGUAGE: English

Conference Scientific Committee

Chairmen:

A. Baltov, Institute of Mechanics-BAS, Sofia, Bulgaria
St. Radev, Institute of Mechanics-BAS, Sofia, Bulgaria

Members:

V. Alexandrov (Higher School of Transport-Sofia)
St. Bachvarov (Technical University-Sofia)
B. Bankov (High. School Civ. Eng.-Sofia)
I. Baychev (UACEG - Sofia)
N. Boncheva (Institute of Mechanics-BAS)
E. Gdoutos (Democritus University of Thrace, Xanthi, Greece)
Yu. Engelbrecht (Inst. Cybernetics, Tallinn, Estonia)
V. Galabov (Technical University-Sofia)
E. Gorkunov (Institute of Engineering Science-RAS, Russia)
D. Gross (TU-Darmstadt, Germany)
Ts. Ivanov (Sofia University)
Ya. Ivanov (Institute of Mechanics-BAS)
J. Ivanova (Institute of Mechanics-BAS)
P. Kolev (Higher School of Transport-Sofia)
L. Lilov (Sofia University)
Y. Maximov (Technical University-Gabrovo)
M. Mihovski (Institute of Mechanics-BAS)
N. Minchev (Technical University-Varna)
K. Minkov (Institute of Mechanics-BAS)
Z. Mroz (IPPT, Warsaw, Poland)
F. Pastrone (Torino University, Torino, Italy)
M. Popova (University of Chemical Techn. and Metallurgy-Sofia)
A. Rachev (Georgia Institute of Technology, USA)
K. Hadjov (University of Chemical Techn. and Metallurgy-Sofia)
L. Tsenov (Centr. Lab. Seismic Mech.-BAS)
K. Vesselinov (Technical University-Sofia)
Yu. Yanovski (Inst. Appl. Mech.-RAS, Moscow, Russia)
G. Zachariev (Centr. Lab. Phys. Chemical Mechanics-BAS)
Z. Zapryanov (Sofia University)
V. Zhivkov (Technical University-Sofia)
A. Liolios (Democritus University of Thrace, Xanthi, Greece)

Local Organizing Committee

Chairmen: Ya. Ivanov, E. Manoach

Members: M. Datcheva, R. Iankov, D. Ignatova, St. Karastanev,
N. Pesheva, Sl. Slavtchev



Call for Contributions

Congress participants are encouraged to submit a paper. Papers are sought for (but not limited to) all topics listed in the Congress Topics. Authors wishing to contribute to the Congress are invited to register and submit electronically up to one-page plain text abstract (4000 characters). The abstract should contain title of the contribution, authors' names, authors' addresses, e-mails. Authors will receive notification of acceptance of their proposed contribution. The book of abstracts will include the accepted abstracts only. The full length papers will be required during the Congress to be reviewed. If accepted they will be published in the Congress proceedings. Author's instructions will be posted on the Congress webpage: <http://nctam.imbm.bas.bg> Each participant can submit not more than two abstracts (papers) as a single author or in co-authorship. Those who wish to organize mini-symposia on special topics should contact the Organizing Committee by 31 January 2009. The website for on-line registration and abstract submission will be available from 1 December 2008.



Deadlines

22 April 2009 - submission of proposals for parallel mini-symposia and sessions

22 April 2009 - on-line abstract submission

15 May 2009 - notification of abstract acceptance

15 July 2009 - early registration

Address for Correspondence

NCTAM2009

INSTITUTE OF MECHANICS-BAS

Akad. G. Bonchev St., Bl. 4

1113 Sofia, Bulgaria

Fax: +359 2 870 7498

E-mail: congress@imbm.bas.bg