General

The Solid Mechanics Conferences have been organized by the Institute of Fundamental Technological Research since 1953. The Conferences have maintained high scientific standard and served as a forum for the exchange of ideas and research information. Traditionally, invited lectures have been presented by outstanding researchers at these Conferences. The aim of the Conference is to bring together researchers from different countries and to create for them the possibility for the presentation and discussion of scientific results from a wide area of solid mechanics, including the topics:

- biomechanics
- computational aspects of mechanics
- continuum mechanics, elasticity and plasticity
- coupled problems and field theories of solids
- dynamics of solids and structures
- experimental mechanics
- fracture, damage and fatigue
- geomechanics
- interfaces, thin layers and contact mechanics
- mechanics of composites, porous media
- micromechanics & thermodynamics of materials
- nonlinear and stochastic dynamics
- optimization, sensitivity and reliability analysis
- phase transitions and microstructures
- shells and plates
- structural mechanics.

Oral and poster sessions are planned. The official language of the Conference is English.



Invited Plenary Lectures

Prof. Holm Altenbach, Germany

Mechanics of Nanostructures

Prof. Josef Eberhardsteiner, Austria

Mechanical Behaviour of Wood – a Bridge from Microstructure to Structural Applications by Means of Computational Methods

Prof. Narinder Gupta, India

Some Aspects of Large Deformations of Structures under Dynamic Loading

Prof. David Hayhurst, UK

High-temperature Continuum Damage Mechanics. Simulation of Materials and Components from Processing and Manufacture to Component Performance

Prof. Shaker Meguid, Canada

Multiscale Modelling of Multifunctional Nanocomposites for Aerospace Applications

Prof. Ryszard Pęcherski, Poland

Plastic Flow and Failure of Solids. Modelling Across Scales

Prof. Krzysztof Wiśniewski, Poland

Recent Improvements in Mixed/Enhanced Shell Elements with Drilling Rotation

Prof. Ramon Zaera Polo, Spain

Deformation of Dynamically Phase Transforming Metals in Adiabatic Conditions: Thermal Effects and Instabilities

Abstracts

Abstracts should be submitted electronically on-line via <u>http://solmech2014.ippt.pan.pl/</u>. Two-page cameraready extended abstracts in English in accordance with the Word template are due by **February 28, 2014**. We encourage all authors to submit **full length papers** after the Conference for publication in *Archives of Mechanics* or *Engineering Transactions*. The papers will be subjected to the usual peer-review procedure.

Scientific Committee

J.	Badur	P. Kowalczyk	W.	Pietraszkiewicz
Μ.	Basista	Z. Kowalewski	Μ.	Pietrzyk
Α.	Borkowski	J. Kubik	J.	Rojek
Т.	Burczyński	T. Łodygowski	В.	Skoczeń
Ρ.	Dłużewski	Z. Mróz	S.	Stupkiewicz
W.	Gutkowski	A. Nowicki	G.	Szefer
J.	Holnicki-Szulc	P. Perzyna	J.	Tejchman
M.	Kleiber	H. Petryk	Α.	Tylikowski
W.	Kosiński	R. Pęcherski	K.	Wiśniewski
Ζ.	Kotulski	E. Pieczyska		

Organizing Committee

Zbigniew Kowalewski – Chairman of the Conference Zbigniew Ranachowski – Scientific Secretary Agnieszka Rutecka, Joanna Żychowicz-Pokulniewicz, Jacek Widłaszewski, Dominik Kukla, Paweł Grzywna, Tomasz Libura – Managing Assistants Urszula Czubacka – Secretary

Registration

Registration for the Conference should be performed on-line using the registration form available at <u>http://solmech2014.ippt.pan.pl/</u>

Conference Fee

Registration fee:	before 31.05.2014	after 31.05.2014
Full	1800 PLN	2050 PLN
Student	1200 PLN	1450 PLN
Accompanying person	800 PLN	800 PLN

Registration fee includes:

- welcome reception, gala dinner, lunches, coffee and beverages during two breaks each day,
- admission to all sessions, conference materials,
- tour around Zakopane.

Student fee is eligible for junior scientists who have submitted an abstract and the Young Researcher Application Form, which should be sent to the Chairman of the Conference before May 31, 2014.

Venue

The conference will take place in the Hotel Belvedere, ul. Droga do Białego 3, Zakopane, near the Tatra National Park, 10 minutes walk from the town centre. John Paul II International Airport in Cracow-Balice is situated 100 km from Zakopane. Instructions how to reach Zakopane will be available on the Conference website.



Zakopane is located at the foot of the Tatra Mountains. It is famous for its breath-taking views, beautiful unspoilt nature, delicious food, folk music, architecture, and art.

Marian Smoluchowski, an outstanding Polish theoretical physicist, great intellectual personality, and Tatra mountaineer performed many of his scientific works here.



Marian Smoluchowski (1872-1917)

"All people, who personally knew Smoluchowski closer, loved in him not only a brilliant researcher, but also a noble, sensitive and friendly man" - Albert Einstein

Accommodation

Accommodation is not included in the Conference fee. A variety of hotels of different standards and convenient locations in Zakopane can be advised by the Conference Partner - Global Wings. Special conference rates are offered for rooms at selected hotels. Detailed information about the hotels location, room standards and prices can be found on Global Wings website.

Registered participants may reserve rooms at these hotels after login.



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POLISH ACADEMY OF SCIENCES



Institute of Fundamental Technological Research and Committee on Mechanics

39th SOLID MECHANICS CONFERENCE





Zakopane, Poland September 1-5, 2014



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