

Aims & Scope

The 36th Solid Mechanics Conference (SOLMECH) is the traditional non-profit conference which favours the exchange of ideas and experiences between scientists and researchers from different countries in a wide scope of solid mechanics areas: biomechanics, micromechanics, geo-mechanics, elastic-plastic continuum and other field theories of solids, fracture- and damage-mechanics and fatigue of advanced materials, thermomechanics of alloys, phase transitions and shape memory alloys, mechanics of structures and optimization, shells: theory and computations, coupled problems, thermodynamics of solid–fluid systems, computational aspects of solid mechanics and applications.

Results of research concerning the fundamentals of solid mechanics (including experimental, theoretical and numerical methods), and the applications of its up-to-date achievements in the analysis of phenomena occurring in advanced materials (nano-grained materials, thin and graded layers, new generation intermetallics, advanced composites, cellular materials, shape memory alloys, etc.), structures and mechanisms (including MEMS, active control of structures, synthesis methods, etc.) are invited for presentation.

The official language of the Conference is English.

Conference Site

Gdańsk, the nest of “Solidarity”, a beautiful harbor town of the famous North-European Hanseatic tradition, important industrial, scientific and cultural center, is located at Gdańsk Bay of Baltic Sea at the mouth of Vistula River. The middle-age old town with monumental buildings and churches, picturesque streets and squares, the historical harbor with the antique crane and granaries as well as boutiques offering amber jewellery attract thousands of tourists from many countries. Gdańsk is situated approximately 350 km (220 miles) northbound from Warsaw, the capital of Poland, and 12 km (8 miles) from the L. Wałęsa International Airport. All sessions will be held in the conference rooms of the House of Music located close to the old-town of Gdańsk.

Invited General Lectures:

- 1) **Franz D. Fischer**
Institute of Mechanics, Montanuniversität
Leoben, Austria
“Physics, Chemistry and Mechanics are Growing Together – The Role of Nonequilibrium Thermodynamics”
- 2) **Luigi Gambarotta**
DICAT - Dipartimento di Ingegneria Civile,
Ambientale e del Territorio, Università di Genova, Italy
“Modelling of deformation and damage of heterogeneous-engineering structures: masonry mechanics”
- 3) **Rimantas Kačianauskas**
Department Strength of Materials
Vilnius Gedyminas Technical University,
Lithuania
“The Discrete Element Method with Applications to Simulations of Granular Flow and Dynamic Fracture of Solids”
- 4) **Mariusz Kaczmarek**
Kazimierz Wielki University, Institute of
Environmental Mechanics and Applied Informatics,
Bydgoszcz, Poland
“Bio-poromechanics. Problems of modelling tissues and biomaterials”
- 5) **Bhushan Karihaloo**
Cardiff School of Engineering, Cardiff University, UK
“Theory of Elasticity at the Nano-scale”
- 6) **Robert O. Ritchie**,
Ernest Orlando Lawrence Berkeley National
Laboratory, USA
“On the Fracture Mechanics of Bone: Toughness and its Biological Degradation”
- 7) **Peter Wriggers**
Institut für Baumechanik und Numerische
Mechanik, Universität Hannover, Germany
“A multi-scale approach to the characterization of heterogeneous materials”
- 8) **Lallit Anand**
Massachusetts Institute of Technology, Cambridge,
USA
“A strain-gradient theory for isotropic elastic-viscoplastic materials”

Special Sessions

- 1) **BIOMECHANICS**
Session Chairmen:
1. K. Piechór, IPPT PAN
2. P. Kowalczyk, IPPT PAN
3. T. Lekszycki, IPPT PAN
- 2) **GEOMECHANICS**
Session Chairmen:
1. Z. Mróz, IPPT PAN
2. J. Tejchman, Gdańsk University of Technology
- 3) **ELASTIC-PLASTIC CONTINUUM AND OTHER FIELD THEORIES OF SOLIDS**
Session Chairmen:
1. P. Perzyna, IPPT PAN
2. R. Pęcherski, IPPT PAN
- 4) **FRACTURE AND DAMAGE MECHANICS AND FATIGUE OF ADVANCED MATERIALS**
Session Chairmen:
1. M. Basista, IPPT PAN
2. K. Doliński, IPPT PAN
- 5) **MICROMECHANICS**
Session Chairman:
1. H. Petryk, IPPT PAN
- 6) **THERMOMECHANICS OF ALLOYS, PHASE TRANSITIONS AND SHAPE MEMORY ALLOYS**
Session Chairman:
1. S. Stupkiewicz, IPPT PAN
- 7) **MECHANICS OF STRUCTURE AND OPTIMIZATION**
Session Chairmen:
1. W. Gutkowski, IPPT PAN
2. K. Dems, Łódź Technological University
- 8) **SHELLS: THEORY AND COMPUTATIONS**
Session Chairmen:
1. W. Pietraszkiewicz, IFFM, Gdańsk
2. K. Wiśniewski, IPPT PAN
- 9) **COUPLED PROBLEMS: SOLID-FLUID, THERMO-DYNAMICS**
Session Chairmen:
1. J. Holnicki-Szulc, IPPT PAN
2. W. Ostachowicz, IFFM, Gdańsk
- 10) **COMPUTATIONAL ASPECTS OF SOLID MECHANICS AND APPLICATIONS**
Session Chairmen:
1. T. Burczyński, Silesian Univ. of Technology
2. M. Pietrzyk, AGH, Kraków

Call for Abstracts

Two-page camera ready extended abstracts in English with the title, authors names and affiliation are due by **February 15, 2008** and should be submitted via solmech08.ippt.gov.pl page. Notification of acceptance will be sent within 2-3 weeks after receiving the abstract, not later than April 1, 2008. A book of all accepted abstracts will be distributed to the conference participants.

You may download the MS Word and LaTeX abstract template from our web site.

Final Registration Procedure

Please complete the on-line registration form with information on hotel reservation and payment procedure. This form can be found at <http://solmech08.ippt.gov.pl>

Organizing Committee

Chairman of the Conference:

W. Sosnowski

Z. Kotulski – Co-Chairman

Sz. Imiełowski, P. Kowalczyk, B. Lewandowska

K. Parkitna, J. Rojek, G. Starzyński, R. Stocki,

T. Szolc, K. Twarowska, T. Bednarek

Scientific Committee

M. Basista, A. Borkowski, T. Burczyński,

K. Dems, P. Dłużewski, A. Garstecki,

W. Gutkowski, M. Kleiber, W. Kosiński,

J. Kubik, T. Łodygowski, Z. Mróz,

W. K. Nowacki, J. Orkisz, J. Pamin, P. Perzyna,

H. Petryk, R. Pęcherski, W. Pietraszkiewicz,

M. Pietrzyk, B. Raniecki, K. Sobczyk,

W. Sosnowski, S. Stupkiewicz, G. Szefer,

J. Tejchman, A. Tylikowski

Conference Fee

Registration fee includes: welcome party, participation at all sessions, conference materials, coffee and beverages during two breaks and lunches each day. The estimated conference fee is:

Early registration fee: **230 €**

Standard registration fee: **280 €**

Conference Party fee: **50 €**

Accommodation

Accommodation is not included in the Conference fee. The organizers will provide help in choosing suitable hotels, see conference web page.

Conference Secretariat



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Venue of the Conference

House of Music (Dom Muzyka)

Łąkowa 1-2, 80-743 Gdańsk,

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Fax: (+48 58) 326 06 01

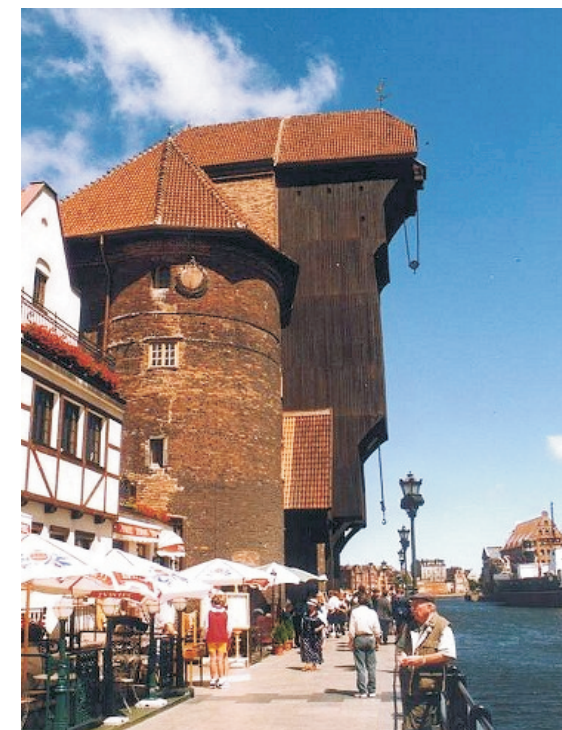
e-mail: biuro@dom-muzyka.pl

<http://www.dom-muzyka.pl>

FINAL ANNOUNCEMENT



36th SOLID MECHANICS CONFERENCE



Gdańsk, Poland
September 9-12, 2008



organized by
Institute of Fundamental
Technological Research, Polish
Academy of Sciences

<http://solmech08.ippt.gov.pl>