

## PLENARY LECTURES

Plenary lectures on the most recent achievements in the computational methods related to the following fields of mechanics will be given by:

- J.-S. Chen (*Numerical Methods in Mechanics*)  
F. Jouve (*Numerical Methods in Shape Optimization of Structures*)  
T. Kowalewski (*Fluid Mechanics*)  
G. Meschke (*Modelling of Complex Physical Phenomena in Structural Materials*)  
B. Schrefler (*Multiscale Modelling*)  
T. Uhl (*Identification and Inverse Problems in Dynamics*)

## CONFERENCE FORMAT

The Conference will begin in Warsaw with registration and a welcome reception at the main building of Warsaw University of Technology on Sunday evening, May 8, 2011. Plenary and keynote talks as well as oral presentations will be given during joint sessions, minisymposia and parallel sessions from Monday through Thursday in the auditoria and lecture rooms of the Conference venue.

## SOCIAL AND TOURISTIC PROGRAM

The social program of the Conference includes the banquet on Wednesday, May 11, 2011 in the Great Hall of the Warsaw University of Technology Main Building.

All participants of the Conference are kindly invited for the Warsaw Orientation Tour which is planned on Monday evening. The two-hour tour includes visits of all not-to-be-missed monuments and sights of Warsaw, like The Old Town, aristocratic residences, famous statues and historical sights.

Half-day, English guided Warsaw sightseeing tours are offered to accompanying persons.

- Old Town & Warsaw Uprising Museum Tour (The Old Town walk, The Royal Route drive, visit to the one of Poland's best museums, leading through the chronological story of the Warsaw Uprising),
- Wilanów Palace Visit (The Polish Versailles, wonderful baroque palace, beautiful garden and a park, royal summer residence of King Jan III Sobieski),
- Jewish Heritage Tour (Jewish Cemetery, Nożyk Synagogue, Jewish Historical Institute, sites related to the Ghetto Uprising of 1943).

The duration of each tour is 4 hours. The price (35 to 40 EUR) includes entrance fees, transportation and guide assistance. All tours are handled by a company experienced at organizing such events. Please refer to the Conference website for the complete description of events, conditions of participation and form of payment.

## IMPORTANT DATES

Deadline for registration	13 December 2010
Deadline for submitting two page abstract	13 December 2010
Notification of acceptance	24 January 2011
Deadline for early conference fee payment	28 February 2011
Deadline for submitting revised abstract	14 March 2011
Deadline for regular conference fee payment	11 April 2011
Deadline for submitting full paper (max. 8 pages)	11 April 2011
Beginning of the Conference	9 May 2011

## FEES

See the conference website for the updated information.

## ACCOMMODATION

Suggestions for the hotels nearby the Conference venue will be available on the Conference website.

## CONFERENCE VENUE

The main building of the Warsaw University of Technology. *Please note that the University venues are non-smoking.*

## 19th INTERNATIONAL CONFERENCE ON COMPUTER METHODS IN MECHANICS

9 – 12 May 2011, Warsaw, Poland

## ADDRESS OF THE CONFERENCE OFFICE

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## 19th INTERNATIONAL CONFERENCE ON COMPUTER METHODS IN MECHANICS



Under the auspices of:

European Community  
on Computational Methods  
in Applied Sciences

and

Central European Association  
for Computational Mechanics

Under the patronage of:

Michał Kleiber – President of the  
Polish Academy of Sciences

and

Włodzimierz Kurnik – Rector of the  
Warsaw University of Technology

Organized by:

Warsaw University of Technology  
Faculty of Civil Engineering

and

Section of Mechanics of Structures and Materials,  
Committee on Civil Engineering and Hydroengineering,

Section of Computer Methods in Mechanics,  
Committee on Mechanics,  
Polish Academy of Sciences

and

Polish Association  
for Computational Mechanics

## SECOND ANNOUNCEMENT

9 – 12 MAY 2011  
WARSAW, POLAND

<http://www.cmm.il.pw.edu.pl>

## SCOPE AND OBJECTIVES

The 19th International Conference on Computer Methods in Mechanics CMM-2011 continues the 38-year series of Polish conferences dedicated to numerical methods and their applications to the problems governed by the laws of mechanics.

These scientific meetings, organized since 1973 at regular two-year intervals, have common general objective – to provide a forum for presentation and discussion of new ideas referring to the theoretical background and practical applications of computational mechanics. The program of each conference reflects current extensive research in this field of science.

Conference sessions are supplemented by exhibitions and presentations of publishing houses and software companies.

## CONFERENCE TOPICS

Authors are invited to submit papers on all aspects of computer methods in mechanics. Topics of interest include, but are not limited to:

- adaptive materials systems, structures and smart materials
- artificial intelligence methods
- biomechanics
- contact mechanics
- computational intelligence
- concrete and ceramic materials
- coupled field problems
- dynamics of multibody systems
- experimental mechanics
- fluid mechanics, including modeling of blood flow
- geophysics
- growth phenomena and evolution of microstructures
- heat transfer
- industrial applications
- inverse problems and optimization
- mechanics of multiphase and porous materials
- mechanics of plates and shells
- meshless and related methods
- multiscale problems and nanomechanics
- numerical analysis of the initial and boundary value problems in mechanics
- parallel computing
- response of structures to extreme actions
- soft computing
- solid, structural and composite mechanics

## CONFERENCE PROCEEDINGS

Full papers accepted for the Conference will be available in electronic form (CD-ROM and web-site). Additionally, the print-outs of the plenary lectures, keynote presentations and abstracts will be handed over to the participants during the registration.

After the Conference it is planned to compile and publish several special volumes of high-profile scientific journals. They will contain the best contributions to CMM-2011.

Please, see the deadlines for submission.

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## THEMATIC SESSIONS

TS1: Dynamics  
TS2: Mechanics of Structures  
TS3: Material Properties  
TS4: Fluid Mechanics  
TS5: Damage and Failure  
TS6: Inverse Problems

## MINISYMPOSIA

The following minisymposia (names of organizers put in brackets) will run concurrently with the thematic sessions:

MS1. (M. Kuczma, R. Müller, J. Schröder, G. Szefer)  
*Computational Aspects of Smart Materials and Structures*  
MS2. (T. Łodygowski, J. Pamin, A. Rusinek)  
*Computational Mechanics of Materials*  
MS3. (M. Giżejowski, L. Kwaśniewski)  
*Structures Under Extreme Actions*  
MS4. (K. Dems, A. Garstecki, W. Gutkowski)  
*Identification and Optimization*  
MS5. (J.F. Ganghoffer, J. Sokołowski)  
*Growth Phenomena and Evolution of Microstructures. Applications in Solids*  
MS6. (A. Novotny, J. Sokołowski, A. Żochowski)  
*Asymptotic Analysis and Singular Perturbations in Solids. Applications in Topology Optimization and Inverse Problems*  
MS7. (D. Gawin, B. Schrefler, F. Pesavento)  
*Computational Mechanics of Multiphase Porous Materials Including Durability*  
MS8. (E. Majchrzak, B. Mochnacki)  
*Heat Transfer*  
MS9. (J. Frączek, W. Blajer)  
*Dynamics of Multibody Systems*  
MS10. (J. Szumbariski, J. Mizerski)  
*Modeling of Blood Flow*  
MS11. (T. Burczyński, M. Pietrzyk, P. Dłużewski)  
*Multiscale Modeling and Nanomechanics*  
MS12. (T. Burczyński, Z. Waszczyszyn, L. Ziemiański)  
*Artificial Intelligence Computational Methods in Mechanics of Structures and Materials*  
MS13. (J. Orkisz, J.S. Chen, S. Milewski)  
*Meshless and Related Methods*  
MS14. (J. Chróścielewski, W. Gilewski, I. Kreja)  
*Computational Mechanics of Plates and Shells*  
MS15. (W. Cecot, W. Rachowicz, G. Zboiński)  
*Adaptive Methods and Error Estimation*