

Call for Papers

Congress participants are encouraged to submit a paper. Papers are sought for all topics corresponding to **Pre-Nominated Session** or **Mini-Symposium** subject matters. If none of them seem suitable, the prospective author is encouraged to state a new topic name or provide relevant keywords. The paper must be in English and should present material that is novel and preferably unpublished at the time of the Congress. All papers presented at the Congress are by invitation based on the recommendation of the International Papers Committee. No author will be invited to present more than one paper. Prospective authors are asked to submit only one paper for consideration. Submission of a paper for consideration requires three steps:

1. Registration

All participants are requested to register themselves using *On-Line Registration Form*. After correct registration each participant is given a unique *Registration ID number*, necessary to submit a paper. To register use menu *Registration Form* of the World Wide Web at the URL: <http://ictam04.ippt.gov.pl>

2. Submission of a brief Abstract

The Abstract is limited to 150 words. It should not contain figures, drawings or extended references. It may contain equations in LaTeX format. Please submit the Abstract by using the *Paper Submission* menu of the World Wide Web at the URL: <http://ictam04.ippt.gov.pl>. Abstracts of all papers invited for presentation will be printed in the Abstract Book.

3. Submission of an Extended Summary

The Extended Summary will be used for evaluation by the International Papers Committee. It must have the same title and list of authors as the Abstract. An Extended Summary that does not match up with the submitted Abstract in terms of title or names of authors will not be considered. The Extended Summary has to be prepared in PDF format and is limited to two A4 or 8½×11 in. pages maximum. It should be prepared as attractively as possible, much like a manuscript for journal submission. The text must be 10 point or larger in size. To submit the Extended Summary use the *Paper Submission* menu on the World Wide Web at the URL: <http://ictam04.ippt.gov.pl>. If access to the World Wide Web is not available, please request instructions by sending e-mail to: ictam04@ippt.gov.pl

Submissions will be accepted after September 1, 2003. **The Abstract and Extended Summary must reach the Secretary General no later than Friday, January 9, 2004.**

Contributors will be informed of the decision of the International Papers Committee, and on the assignment of their paper to a session, by May 1, 2004. The author of a paper invited for presentation is expected to register and present the paper at the Congress.

Publications

The Abstract Book and the ICTAM2004 CD-ROM with the Extended Summaries of accepted papers will be distributed to participants registered at the Congress. A hardcover book of Proceedings will appear after the Congress. It will contain the text of the Opening, Closing and Sectional Lectures and the Introductory Lectures of the Mini-Symposia; a list of all contributed papers presented at the Congress (but not the Abstracts); a list of participants in ICTAM 2004; and a general report on the Congress. Authors of contributed papers presented at the Congress are encouraged to submit their work to appropriate journals for publication.

Support Grants

ICTAM2004 will have at its disposal limited funds to provide support to participants with accepted papers who are unable to secure adequate funds from their home countries. Prospective participants who wish to apply for financial assistance should request an application form from the Secretary General, who will provide further instructions.

Accommodation

The Congress will be held at Warsaw University of Technology. There is a choice of hotels of different categories, not far from the conference site. Many of them are listed on the web site of the Congress. There will be a relatively large number of rooms with baths and kitchen facilities at the student hostel of the Warsaw University of Technology. A room of a very good standard, with up to three beds, is 30 USD per day (at 2002 prices). Participants should make their own reservations using WWW links to the Mazurkas Travel Office.

Program for Accompanying Persons

Warsaw, the Capital of Poland since 1596, is an important center of science and the arts with many interesting historical places to visit. Among them are: the Royal Castle, St. Johns Cathedral, the Old Town Market Square, the Ghetto, the Opera House and many others. Not far from Warsaw, in Zelazowa Wola, it is possible to visit the charming place where Frideric Chopin was born and spent his childhood. More information on interesting places to visit can be found on the Congress web site. A comprehensive program of interest to accompanying persons will be available.

IUTAM

INTERNATIONAL UNION OF THEORETICAL AND APPLIED MECHANICS



21st INTERNATIONAL CONGRESS OF THEORETICAL AND APPLIED MECHANICS

15-21 August, 2004
Warsaw, Poland

First Announcement and Call for Papers

December 2002

<http://ictam04.ippt.gov.pl>

General Information

The 21st International Congress of Theoretical and Applied Mechanics (ICTAM) will be held from 15 to 21 August, 2004, in Warsaw, Poland. The Congress was invited by the:

- Polish National Committee of IUTAM
- Institute of Fundamental Technological Research of the Polish Academy of Sciences
- Warsaw University of Technology.

The venue is the Main Building of Warsaw University of Technology.

President of ICTAM 2004 and Chairman of the Local Organizing Committee is

Prof. Witold Gutkowski.

Co-Chairmen of ICTAM 2004 are:

**Prof. Michal Kleiber
and
Prof. Wlodzimierz Kurnik**

Secretary-General of ICTAM 2004 is:

Prof. Tomasz Kowalewski.

Correspondence related to the Congress should be sent to:

ICTAM04 Secretary-General

Prof. Tomasz Kowalewski

Institute of Fundamental Technological Research

Swietokrzyska 21, 00-049 Warszawa, Poland

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E-Mail: ictam04@ippt.gov.pl

All information on ICTAM 04, including forms to submit papers and to register, is available on the Congress World Wide Web site at:

<http://ictam04.ippt.gov.pl>

All information on transportation, accommodation and additional tourist program (for accompanying persons, pre- and post-conference program) is available at the ICTAM 04 **official Travel and Tourist Agency:**

Mazurkas Travel

Długa 8/14, 00-238 Warsaw, Poland

Phone: (+48 22) 635 6633, 536 4600

Fax: (+48 22) 831 5950, 536 4610

E-Mail: euromic@mazurkas.com.pl

Web site: <http://www.mazurkas.com.pl>

Scientific Program

The scientific program will start and end with the opening and closing lectures. The rest of the program will consist of sectional lectures, mini-symposia and contributed papers presented in lecture and seminar presentation sessions. Invitations to present contributed papers will be made on the recommendation of the International Papers Committee, based on their review of submitted abstracts and extended summaries.

Opening Lecturer

Leen van Wijngaarden (Netherlands)

Closing Lecturer

Kazimierz Sobczyk (Poland)

Sectional Lecturers

E. Arzt (Germany)

K. Bajer (Poland)

D. Beysens (France)

J.F. Brady (USA)

H.-J. Gao (USA/Germany)

T.J.R. Hughes (USA)

R. Keunings (Belgium)

E. Kreuzer (Germany)

P. Ladeveze (France)

M. Lesieur (France)

A. Neishtadt (Russia)

R.W. Ogden (U.K.)

A. Preumont (Belgium)

P.B. Rhines (USA)

E. Sackmann (Germany)

D.A. Saville (USA)

E.A. Spiegel (USA)

H.L. Swinney (USA)

Mini-Symposia and Chairs

Smart materials and structures

N. Sottos (USA) – Chair

J. Holnicki-Szulc (Poland) – Co-Chair

Tissue, cellular and molecular biomechanics

P. Janmey (USA) – Chair

D. Barthès-Biesel (France), A. Hoger (USA) – Co-Chairs

Mechanics of thin films and nanostructures

K.S. Kim (USA) – Chair

Z. Suo (USA), H.M. Jensen (Denmark) – Co-Chairs

Microfluidics

P. Tabeling (France) – Chair

R.J. Adrian (USA), J. Santiago (USA) – Co-Chairs

Microgravity flow phenomena

J.C. Legros (Belgium) – Chair

P. Neitzel (USA), J.I.D. Alexander (USA) – Co-Chairs

Atmosphere and ocean dynamics

J. Sommeria (France) – Chair

M.E. McIntyre (U.K.) – Co-Chair

Contributed Papers

These are intended to cover all aspects of mechanics. A list of topics selected for pre-nominated sessions is given below, but papers on other topics are equally welcome. Contributed papers will be presented either as lectures or as seminar presentations.

Pre-Nominated Sessions

Fluid Mechanics

Biological fluid dynamics • Boundary layers • Combustion and flames • Complex and smart fluids • Compressible flow • Computational fluid dynamics (jointly with IACM) • Convective phenomena • Drops and bubbles • Environmental fluid dynamics • Experimental methods in fluid mechanics • Flow control • Flow in porous media • Flow instability and transition • Flow in thin films • Fluid mechanics of materials processing • Granular flows • Low-Reynolds-number flow • Magnetohydrodynamics • Multiphase flows • Solidification and crystal growth • Stirring and mixing • Fluid mechanics of suspensions • Topological fluid mechanics • Turbulence • Vortex dynamics • Waves

Solid Mechanics

Computational solid mechanics (jointly with IACM) • Contact and friction mechanics (jointly with IAVSD) • Control of structures • Damage mechanics • Dynamic plasticity of structures • Elasticity • Experimental methods in solid mechanics • Fatigue • Fracture and crack mechanics (jointly with ICF) • Functionally graded materials • Impact and wave propagation • Material instabilities • Mechanics of composites • Mechanics of phase transformations (jointly with IACM) • Mechanics of porous materials • Mechatronics • Multibody dynamics • Plasticity and viscoplasticity • Plates and shells (jointly with IACM) • Rock mechanics and geomechanics • Solid mechanics in manufacturing • Stability of structures • Stochastic micromechanics • Structural optimization (jointly with ISSMO) • Structural vibrations • Vehicle dynamics • Viscoelasticity and creep

Topics involving both fluid mechanics and solid mechanics

Acoustics • Chaos in fluid and solid mechanics • Continuum mechanics • Fluid-structure interaction • Mechanics of foams and cellular materials • Multiscale phenomena in mechanics