

第 20 届国际理论和应用力学会议 (ICTAM 2000) 征文

The 20th International Congress of the International Union of Theoretical and Applied Mechanics (IUTAM) will be held August 27 to September 2, 2000, in Chicago, Illinois, USA.

Abstracts and Extended Summaries

Congress participants are encouraged to submit a paper. Papers are sought for all Pre-Nominated Session topics, the Mini-Symposium topics, and related areas. If none of the Pre-Nominated or Mini-Symposium topics 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The paper must be in English, and should present material that is novel and preferably unpublished at the time of the Congress.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, which is appointed by the Executive Committee of the Congress Committee of IUTAM. 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 requires two steps:

1. Electronic submission of a brief Abstract, and
2. Mailed submission of an Extended Summary

The Abstract and the Extended Summary must reach the Secretary-General no later than Monday, January 17, 2000. They may be submitted anytime after July 1, 1999. Format requirements are given below.

The Abstract

Abstracts of all papers invited for presentation by the IUTAM International Papers Committee will be printed in the Abstract Book, which will be distributed to all Congress registrants. The Abstract Book will be published as a special issue of the TAM Report series of the University of Illinois at Urbana-Champaign.

Your Abstract is limited to about 150 words. You cannot put figures or drawings in the Abstract, but you may include symbols and formulas if you enter them in LATEX format. You may also append up to 3 footnotes, each limited to about 30 words. To assure correct format-

ting, please submit the Abstract electronically by using the

World Wide Web Abstract Submission form (以下省略)

网址为:

<http://www.tam.uiuc.edu/ICTAM2000/papers/abstract.html>

The Secretary-General requests that prospective authors use the World Wide Web form for abstract submission. If access to the WorldWide Web is not available, please request other instructions by sending an e-mail request to ICTAM2000@tam.uiuc.edu. Please do not submit an Abstract in paper form.

Abstract submissions will be accepted between July 1, 1999, and January 17, 2000. Remember that an Extended Summary of your paper is also due by January 17, 2000.

The Extended Summary

The Extended Summary will be used for selection by the International Papers Committee, but will not be distributed at the Congress. It must have the same title and list of authors as the Abstract. Extended Summaries that do not match up with submitted Abstracts in terms of title or names of authors will not be considered.

The Extended Summary is limited to two A4 or 8.5 × 11 in. pages maximum. You should prepare the Extended Summary as attractively as possible, much like a manuscript for journal submission. You are encouraged to use figures, diagrams, and photographs in the Extended Summary. The text must be 10 points or larger in size. Mail seven copies of the Extended Summary to the Secretary-General:

Prof. James W. Phillips, ICTAM 2000 Secretary-General, Department of Theoretical and Applied Mechanics, University of Illinois at Urbana-Champaign, 216 Talbot Laboratory, 104 South Wright Street, Urbana, IL 61801-2983 USA

Extended Summary submissions will be accepted between July 1, 1999, and January 17, 2000. Remember that a 150-word Abstract must also be submitted before January 17, 2000.

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, 2000. The presenting author of a paper invited for presentation is expected to register and present the paper at the Congress.

Pre-Nominated Sessions

Contributed papers 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 (including those of the Mini-Symposia) are equally welcome. Contributed papers will be presented either as lectures or as seminar presentations.

Fluid mechanics

Biological fluid dynamics • boundary layers • combustion and flames • complex and smart fluids • compressible flow • computational fluid dynamics • convective phenomena • drops and bubbles • environmental fluid mechanics • experimental methods in fluid mechanics • flow control • flow in porous media • flow instability and transition • flows in thin films • fluid mechanics of materials processing • geophysical fluid dynamics • low-Reynolds-number flow • microfluid dynamics • multiphase flows • topological fluid mechanics • turbulence • vortex dynamics • waves

Solid mechanics

Biological solid mechanics • computational solid mechanics • computational strategies for multiscale phenomena in mechanics • contact and friction problems • control of structures • damage mechanics • dynamic plasticity of structures • elasticity • experimental methods in solid mechanics • fatigue • fracture and crack mechanics • functionally graded materials • impact and wave propagation • material instabilities • mechanics of phase transformations • mechanics of porous materials • mechanics of thin films and nanostructures • multibody dynamics • plasticity and viscoplasticity • plates and shells • rock mechanics and geomechanics • solid mechanics in manufacturing • smart materials and structures • stability of structures • structural opti-

mization • structural vibrations • viscoelasticity and creep

Topics involving both fluid and solid mechanics

Acoustics • cellular and molecular mechanics • chaos in fluid and solid mechanics • continuum mechanics • fluid-structure interaction • microgravity mechanics

Mini-Symposia

Six Mini-Symposia will be organized for ICTAM2000—three in fluid mechanics and three in solid mechanics. Each Mini-Symposium will consist of three invited introductory 50-minute lectures, in addition to contributed papers presented either as lectures or as seminar presentations. See also Pre-Nominated Sessions.

Fluid mechanics

MF1: Turbulent mixing MF2: Granular flows
MF3: Electromagnetic processing of materials

Solid mechanics

MS1: Damage and failure of composites
MS2: Mechanics of foams and cellular materials
MS3: Vehicle systems dynamics

The IUTAM Bureau Prize

Three prizes of \$ 500 each will be awarded by the IUTAM Bureau for outstanding presentations by younger scientists in different branches of mechanics. The winners will be announced at the Closing Ceremony of the Congress, and will receive in addition a plaque (approximately 13 in. by 6 in.) by Illinois ceramic artist Siti-Mariah Jackson.

To be eligible for a Bureau Prize, a presenter

- must be 35 years of age or younger at the time of the Congress, and

- must indicate on the Abstract Submission form that he or she wishes to be considered for a Bureau Prize

(摘自 <http://www.tam.uiuc.edu/ICTAM2000/>)