1060 Announcements

Wind-Excited Vibrations of Structures 21-25 September Coordinator: H. Sockel (Vienna) Non-Equilibrium Thermodynamics with Application to Solids 28 September-Coordinator: W. Muschik (Berlin) 2 October Numerical Methods in Theoretical and Applied Fracture Mechanics 5-9 October Coordinators: C. A. Brebbia (Southampton); V. Z. Parton (Moscow) Advances in Database Theory and Applications 19-23 October Coordinator: L. Tenenbaum (Moscow) **IUTAM International Summer School** Continuum Mechanics in Environmental Sciences and Geophysics 22-26 June Coordinator: K. Hutter (Darmstadt) Other Events Mechatronics 23-27 March Coordinator: J. R. Hewit (Loughborough) 9th CISM-IFToMM Symposium on Theory and Practice of Robots 1-4 September and Manipulators Chairmen: G. Bianchi (Milan); A. Morecki (Warsaw) Meetings Hosted by CISM Meeting of the EUROMECH Council 2 4 April Meeting in Stochastic Programming 13-18 September Coordinators: G. Andreatta (Padua); G. Salinetti (Rome); P. Serafini (Udine) Summer School on Logic and Artificial Intelligence 28 September --Coordinators: G. Amati (Rome); C. Sossai (Padova); 9 October D. Pedreschi (Pisa) EUROCODE '92 26-30 October Coordinator: S. Harari (La Garde)

# SECOND U.S. NATIONAL CONGRESS ON COMPUTATIONAL MECHANICS

16-18 August 1993

Hyatt Regency Hotel, Washington, DC

Sponsored by U.S. Association for Computational Mechanics (an affiliate of International Association for Computational Mechanics)
Hosted by the Center for Computational Structures Technology, University of Virginia

#### Scope of Conference

The meeting will cover all aspects of computational mechanics. Both the mathematical foundations and applications of computational mechanics will be treated. Also, the role of computational mechanics in aerospace, shipbuilding, automotive, electronic, nuclear and other high-tech industries will be addressed.

- High-Performance Computing and Future Computing Environments
- Algorithms for New Computing Systems
- Artificial Neural Networks
- Artificial Intelligence, Knowledgebased and Expert Systems
- Advances in Visualization Technology
- Advances in Mesh and Model Generation Techniques
- Smart/Intelligent Computational Algorithms
- Discretization Techniques (e.g. Finite Elements, Boundary Elements, Spectral Methods and Finite Difference Methods)
- Stochastic Modeling Techniques and Probabilistic Methods
- Hierarchical, Multilevel and Adaptive Strategies
- Advances in Commercial Mechanics Software
- Validation of Numerical Simulations
- Mechanistic Base for Constitutive Relations
- Computational Models for Material Processing and Response
- Stability and Bifurcation Problems
- Instability and Chaos
- Simulation of Local Phenomena in Fluids and Solids

## Topics

- Compressible, Incompressible and Transonic Flows
- Reacting Equilibrium and Nonequilibrium Thermodynamics
- Turbulence Modeling
- Computational Issues for Smart/Intelligent Material Systems and Structures
- Multibody Dynamics
- Computational Techniques for Energy and Environmental Systems (Nuclear, Solar and Wind Energy Systems)
- Computational Techniques for Earth Sciences (Geomechanics, Earthquake Mechanics, Oceanology and Meteorology)
- Computational Techniques for Thermal Sciences (Thermodynamics, Heat Transfer, Thermomechanics, Propulsion and Combustion)
- Computational Techniques in Biosciences (Skeletal Systems, Muscles, Tissues and Organs)
- Computational Aeroacoustics
- Computational Electromagnetics
- Multidisciplinary Interactions and Computations (Structures/ Controls/Aerodynamics/ Electromagnetics)

## **Submission of Abstracts**

Prospective authors should submit five copies of an extended abstract of about 1000 words including sample figures.

#### Dates

8 May 1992 Last date for submission of abstract
10 July 1992 Notification of paper acceptance

## Site of Conference

The conference will be held at the Hyatt Regency Washington on Capitol Hill. Hotel rooms will be available at a reduced rate of \$100 per night, single; \$110 per night, double.

#### **Format**

Exhibits of advanced products by both software and hardware vendors are planned. Plenary, regular and poster sessions are also planned.

## For information, please contact:

Professor Ahmed K. Noor Mail Stop 210 University of Virginia NASA Langley Research Center Hampton, VA 23665, U.S.A. TEL. (804) 864-1978; FAX (804) 864-8089