#### **ANNOUNCEMENT**

## POSTER SESSIONS FOR THE 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 Environment

- 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
- Commercial Software for Mechanics Applications
- Validation of Numerical Simulations
- Mechanistic Base for Constitutive Relations
- Computational Models for Material Processing, Response and Failure
- Computational Methods for Predicting Life and Failure of Structures
- Stability and Bifurcation Problems
- Chaotic Systems
- 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 Acoustics
- Computational Techniques in Biosciences (Skeletal Systems, Muscles, Tissues and Organs)
- Computational Electromagnetics
- Multidisciplinary Interactions and Computations (e.g. Structures/Controls/ Aerodynamics/Electromagnetics)
- Computational Methods for Inverse Problems
- Advances in Coupling of Computational Methods with Laboratory Experiments

Announcement Announcement

### **Submission of Abstracts for Poster Sessions** Dates

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

26 February 1993

Last date for submission of abstract 31 March 1993

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:

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