

# Call for Papers

## 23rd National Symposium on Fracture Mechanics

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Papers are sought for the 23rd National Symposium on Fracture Mechanics to be held 18–20 June 1991 in College Station, Texas. The symposium is sponsored by ASTM Committee E-24 on Fracture Testing in cooperation with Texas A&M University.

The symposium is intended to address any and all analytical, experimental, computational, and applied aspects of fracture mechanics, with a special emphasis on new areas and new materials. The goals of the symposium are twofold: (a) to provide a forum for presentation and discussion of major recent developments in both the theory and applications of traditional fracture mechanics; and (b) to chart directions for the future and highlight applications to new areas, particularly with regard to the characterization and failure mechanics of engineered materials.

Original papers are therefore sought in the areas of:

- Analytical/Computational Fracture Mechanics
- Dynamic Fracture Mechanics
- Micromechanical and Microstructural Aspects of the Fracture Process
- Nonlinear, Inelastic, and Time-Dependent Fracture
- Subcritical and Environment Assisted Crack Growth
- Fracture of Nonmetals and Engineered Materials
- Three-Dimensional Problems in Fracture Mechanics

Prospective authors are requested to prepare a 300–500 word abstract that includes a clear definition of the objective and approach and that presents sufficient results to allow careful assessment of suitability for this symposium. **Abstracts and an ASTM Paper Submittal Form are to be submitted by 14 September 1990** to the Symposium Chairman: Dr. Ravinder Chona, Department of Mechanical Engineering, Texas A&M University, College Station, TX 77843-3123 (409/845-1531 or 409/845-9440; FAX: 409/845-3081). Authors will be notified by 1 November 1990 of acceptance of their paper for presentation at the symposium.

A Special Technical Publication (STP) based on the symposium proceedings is anticipated by ASTM. **Final manuscripts of all papers to be peer reviewed for the STP will be due at ASTM by 29 March 1991.** This deadline will be strictly enforced, and all papers not submitted to ASTM by this deadline will not be accepted for the subject STP. Papers submitted after the deadline may, however, be forwarded to the appropriate ASTM journal to be considered for publication. The main author of each published paper (the author corresponding with the ASTM publications staff) will receive a complimentary copy of the STP. All published authors will have the opportunity to purchase reprints of their papers at cost.

Students or recent graduates in certified degree programs in science and engineering are encouraged to submit papers for the ASTM Committee E-24 Best Student Paper Award. This annual award consists of a \$500 prize and formal citation. To be considered, papers must be presented by students, and written manuscripts must be submitted prior to presentation. Highest preference will be given to sole authors or senior/principal co-authors. Recent graduates must present papers within one year of graduation. All student papers will be evaluated and an award selection made at the end of each calendar year. Authors seeking consideration for this award must check the appropriate space on the ASTM Paper Submittal Form. The symposium chairman will forward the formal application following finalization of the symposium program.

Additional information regarding the symposium and copies of the ASTM Paper Submittal Form are available from Dr. Chona or from Dorothy Savini, Symposia Operations, ASTM, 1916 Race Street, Philadelphia, PA 19103 (215/299-5413).

# Call For Papers

## Symposium on Multiaxial Fatigue

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Papers are sought for the Symposium on Multiaxial Fatigue to be held 14–15 October 1991 in San Diego, California. The Symposium will be sponsored by ASTM Committees E-9 on Fatigue, E-24 on Fracture Testing, and D-30 on Composite Materials.

The symposium will focus on recent developments in life prediction and mechanical testing for combined stress states. Papers in the following areas may be submitted:

- Life Prediction Theories/Methodologies
- Multiaxial Cyclic Stress-Strain Modeling
- Thermomechanical Multiaxial Fatigue
- Fatigue Crack Propagation in Biaxial Stress Fields
- Fatigue of Advanced Materials under Combined Stresses
- Novel Test Methods and Apparatus
- Component Verification of Predictive Strategies

Prospective authors are requested to submit a title, a 300-500 word abstract, and an ASTM Paper Submittal Form by **12 October 1990** to the Symposium Chairmen: Professor David L. McDowell, G. W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0405 (404/894-5128) or Rod Ellis, NASA Lewis Research Center, MS 49/7, 21000 Brookpark Road, Cleveland, OH 44135 (216/433-3340). Paper Submittal Forms are available from Dorothy Savini, Symposia Operations, ASTM, 1916 Race Street, Philadelphia, PA 19103 (215/299-5413).

A Special Technical Publication (STP) is anticipated by ASTM. Main authors will receive a complimentary copy of the STP. The main author is the author corresponding with the ASTM publication staff. All published authors may purchase reprints of the papers at cost.

Authors will be notified by the Symposium Chairmen of acceptance in the program by 14 December 1990. Final manuscripts are due at ASTM by **14 August 1991**. Papers not submitted to ASTM by the deadline will not be accepted for the STP. Papers submitted after the deadline may be forwarded to the appropriate ASTM journal for further publication consideration.

Additional information is available from Professor McDowell or Rod Ellis.

# Call For Papers

## Symposium on Thermo-Mechanical Fatigue Behavior of Materials

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Papers are needed for the symposium on Thermo-Mechanical Fatigue (TMF) Behavior of Materials sponsored by ASTM Committee E-9 on Fatigue. The symposium will be held 16 October 1991 in San Diego, California, in conjunction with the 14-17 October 1991 standards development meetings of Committee E-9.

Thermo-mechanical fatigue resistance of materials is a limiting factor in engineering components operating at high homologous temperatures, such as gas turbines, automobile engines, railroad wheels, pressure vessels, electronic devices, and structural components. The purpose of this symposium is to provide a forum for the exchange of ideas and new developments in thermo-mechanical fatigue damage studies and thermo-mechanical fatigue life modeling.

The symposium will cover a broad range of issues related to thermo-mechanical fatigue including life prediction (crack nucleation and crack growth approaches), damage modeling, and testing methods. Isothermal fatigue papers related to TMF will also be included in the symposium. Papers on thermo-mechanical fatigue of a broad range of materials (including metals, metal-matrix composites, and non-metal composites) are encouraged. Specific topics of interest are:

- Damage Mechanisms in Thermo-Mechanical Fatigue
- Thermo-Mechanical Fatigue Life Prediction Methods
- Micro-Mechanical Modeling, Constitutive Modeling
- Thermo-Mechanical Fatigue Testing Methods
- Microstructural Changes in TMF
- Crack Nucleation and Crack Growth under TMF
- Environment and Creep Effects on TMF

Prospective authors are asked to submit a title, a 300-500 word abstract and an ASTM Paper Submittal Form by **16 October 1990** to Dorothy Savini, Symposia Operations, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187 (215/299-5413). Paper Submittal Forms are available from Ms. Savini or from Symposium Chairman Professor Huseyin Schitoglu. Authors of selected abstracts will be notified by 16 December 1990 by the symposium chairman.

A Special Technical Publication (STP) based on the symposium proceedings is anticipated by ASTM. Main authors will receive a complimentary copy of the volume(s) containing their papers. The main author is the author corresponding with the ASTM publications staff. All published authors may purchase reprints of the papers at cost.

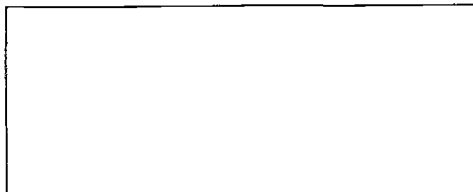
Final manuscripts for the STP based on this symposium are due at ASTM by **16 August 1991**. This deadline will be rigidly enforced. ASTM may print and distribute accepted abstracts with the approval of the symposium chairman.

More information is available from Professor Schitoglu, Department of Mechanical Engineering, University of Illinois, 1206 W. Green, Urbana, IL 61801 (217/333-4112).

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