researchers in computational methods from many diverse areas including civil engineering, computational fluid mechanics, computational structural mechanics, control theory, applied mathematics, and supporting areas. There will also be sessions on artificial intelligence, expert systems, parallel computing, and displays of new hardware and software by various commercial firms is expected. For more information write to WCCM/TICOM, The University of Texas at Austin, Austin, Texas 78712.

SECOND INTERNATIONAL CONFERENCE AND SHORT COURSE CONSTITUTIVE LAWS FOR ENGINEERING MATERIALS: THEORY AND APPLICATION

University of Arizona, Tucson, January 5–10, 1987

The importance of constitutive laws for reliable and realistic solutions from analytical and computational procedures has spurred significant research activity toward development and application of constitutive relations for various engineering materials. The models are based on various theories: elasticity, hypoelasticity, plasticity, viscoplasticity, endochronic and others. In addition to characterization of materials treated as solid continua, the subject of modelling for discontinuities such as contacts, interfaces, joints and fractures has also received significant attention. Models for different classes of materials often have similar or common basis of mechanics and mathematics.

The objective of the conference and short course is to provide a forum to bring together developments at the international level, leading to fruitful interchange of research results, cooperation, and transfer of basic research results for technological applications.

The conference will be held for four days during 5–8 January, 1987. The scope of the conference includes:
1. *Solids (metallic and geologic materials)* including factors such as volume changes; thermal changes; inherent and induced anisotropy; cyclic loading and seismic effects; stress on strain path; thermo- and fluid-mechanical coupling; liquefaction; micro-macro correlation; and unity in various models.
2. *Discontinuities* including contact, friction, fracture, interfaces, joints; modes of deformation; damage, softening and localization.
3. *Evaluation and Implementation* including models for different classes of materials, limits of applicability, computational characteristics, determination of parameters from laboratory and field tests, algorithms for nonlinearities, discontinuities, damage, finite strain, viscoplasticity, etc.

Short course on Implementation of Constitutive Models will be of two days' duration, 9, 10 January, 1987 and will involve presentations related to geologic and metallic materials. The main aim will be to provide to the participants information on those models that can be readily applied for practical problems. The criteria for presentations will be that (1) the models should be based on general and basic principles and at the same time sufficiently simplified, (2) significant constants should be identified and procedures for their determination from appropriate and common (laboratory) tests should be available, (3) models should have been implemented in solution (computational) procedures and shown successful and realistic predictions for boundary value problems, and (4) modulated subroutines should be available for use by the participants.

Comprehensive abstracts of papers are invited by 30 January 1986; send the abstract(s) and request for further information on the conference and short course to: Constitutive Laws Conference, Department of Civil Engineering and Engineering Mechanics (Room 207D), University of Arizona, Tucson, AZ. The completed manuscripts of accepted papers will be due by about 1 August 1986.