ANNOUNCEMENTS

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

BAIL III

The Third International Conference on

BOUNDARY AND INTERIOR LAYERS—
COMPUTATIONAL AND ASYMPTOTIC METHODS

20–22 June, 1984 in Trinity College, Dublin, Ireland
under the auspices of the Numerical Analysis Group
and cosponsored by the
American Institute of Aeronautics and Astronautics
American Meteorological Society
Irish Mathematical Society

and

ADVANCES IN COMPUTATIONAL METHODS FOR
BOUNDARY AND INTERIOR LAYERS
An International Short Course held in association with the
BAIL III Conference
18 and 19 June, 1984 in Trinity College, Dublin, Ireland

Aims and scope

Boundary and interior layers are of great practical importance. They arise in many problems in the aerospace industry, biological fluid flow, chemical engineering, combustion, meteorology, microstructured materials, nuclear engineering, petroleum reservoir modelling and semiconductor device simulation. In BAIL III particular emphasis will be placed on computational methods for solving these problems.

It is important to bring together engineers and scientists who encounter such problems, in order to avoid wasteful duplication of research effort. This is because the technical difficulties are frequently the same although the application areas are quite different. This becomes apparent when researchers, who are not normally in contact, have an opportunity to exchange information.

In order to preserve the intimate and informal atmosphere of the previous BAIL conferences, attendance at BAIL III will be limited to a maximum of 120 delegates.

Call for papers

Abstracts of papers on topics in the above or related areas are invited by 1 February 1984. Notification of acceptance will be sent by 1 March 1984. Abstracts should be at most one page in length.

For further information please contact
BAIL III Organising Committee
PO Box 5, 51 Sandycove Road
Dun Laoghaire, Co. Dublin, Ireland

INTERNATIONAL CONFERENCE SERIES ON ADVANCES IN NUMERICAL METHODS IN ENGINEERING THEORY AND APPLICATIONS

7–11 January 1985, at University College of Swansea, U.K.

Conference coordinators
O. C. Zienkiewicz (Chairman), G. N. Pande, J. Middleton.

Scope and objectives of the NUMETA Conference series

Numerical methods and related computer based algorithms now form the logical solution procedures for the many complex problems encountered in engineering. Owing to the versatility of numerical techniques they have continued to expand and diversify into all the major fields of scientific and engineering studies.

The objective of the 'NUMETA Conference' series is to cover a wide spectrum of 'numerical engineering' with particular emphasis being placed on the linking of new and recent advances in theory and application.

Areas of particular interest will be structural/soil/fluid mechanics etc., with special attention being afforded to those topics of high potential and activity such as transient/dynamic analysis, efficient numerical processes, nonlinear material behaviour and software developments for analysis and design.

The main objective of this conference series is to provide a forum for discussion between engineers and scientists developing new numerical techniques with those whose major interests are centred on actual application in engineering practice.

It is also a prime concern of the NUMETA series that areas of present and anticipated future potential are highlighted and given the earliest opportunity to influence those working in the many fields of numerical methods. In this respect four key topics, which are considered by the Conference Committee to be of particular importance, will form the basis of NUMETA85.

Transient and dynamic analysis: theory and applications
* Novel solution techniques for transient dynamic problems
* Soil/Structure, Fluid/Structure and Soil/Fluid interaction
* Analysis and design of structures subject to seismic, blast and impact loading
* Transient conduction, convection and diffusion including multi-phase flow
* Adaptive and moving mesh methods

Numerical techniques for engineering analysis and design
* Numerical models for computer aided analysis and design
* Optimization and interactive design systems
* Case histories of numerical applications
* Pre and post-processing techniques

Constitutive equations for engineering materials
* Theoretical aspects
* Experimental variation and determination of constitutive parameters
* Evaluation and comparison of constitutive equations
* Applications to the problems of monotonic, cyclic, transient and dynamic loading

Application of microcomputers and work stations in numerical methods
* Data and knowledge bases
* Vector and array processors
* Innovative graphics and interactive software
* Accuracies and errors in approximation processes.

Call for papers

If you would like to submit a paper for presentation in NUMETA85 please forward a summary of approximately 500 words by March 1984 of your proposed contribution. A decision on the acceptance of papers will be made by the reviewing panel and successful contributors will be notified by the end of May 1984. Completed manuscripts will be required by 1 September 1984 for inclusion in the conference proceedings which will be made available at the time of registration.

In order to pursue the aims of the conference to the full, priority will be given to those contributions which include new and recent advances in one of the four key conference topics. Also particular consideration will be given to papers where the emphasis is placed on the integration between theory and applications.

Abstracts and requests for further information to:

John Middleton
Dept. of Civil Engineering
University College of Swansea
Swansea SA2 8PP

COMPUTER 85

Second International Conference on Computer Aided Analysis and Design in Civil Engineering

A Second International Conference on Computer Aided Analysis and Design in Civil Engineering is being organized by Civil Engineering Department, University of Roorkee, Roorkee (U.P.) India in Jan. 1985. The themes of the conference are:

I Modelling of Civil Engineering Problems
II Software Development:
   a) Mini Computer and Computer Graphics
   b) Numerical Techniques
   c) Computer Aided Design
III Application to Civil Engineering Problems
   a) Structural Engineering
   b) Fluid Mechanics
   c) Water Resources Engineering
   d) Geomechanics

   e) Traffic-Transportation and Highway Engineering
   f) Environmental Engineering
   g) Survey and Photogrammetric Engineering
   h) Nuclear Engineering
   i) Off-shore Structures
Further information from:
        Dr. P. C. Jain,
        Secretary (Technical)
        Computer 85
        Civil Engineering Department,
        University of Roorkee, R
        Roorkee (U.P.) 247 667.

        Tel: 2407
        Telex: 0597, 201 UOR IN
            INDIA.