

## ANNOUNCEMENTS

THE SECOND INTERNATIONAL CONFERENCE

ON

NUMERICAL METHODS FOR NONLINEAR PROBLEMS

To be held at

UNIVERSIDAD POLTECNICA DE BARCELONA, SPAIN

9-13 April 1984

*Organizing committee*

E. OÑATE  
Technical University of Barcelona, Spain.

E. HINTON  
D. R. J. OWEN  
C. TAYLOR  
University College of Swansea, U.K.

*Objectives*

The objectives of this conference are to consolidate the advances made in the numerical modelling of nonlinear problems which were presented at the first conference in this series which was held at Swansea in 1980.

The use of numerical techniques, such as the finite element and finite difference methods, is essential for solving problems of extreme complexity or difficult mathematical representations, which can occur in a wide range of disciplines.

It is expected that this conference will continue the unifying theme of the previous conference in bringing together engineers and scientists to discuss nonlinear problems from a diverse spectrum of disciplines and produce a text on the latest 'state of the art'. Keynote speakers will present lectures on the diverse nature of the problems and the similarities of the solution techniques used will be emphasized.

*Call for papers*

Abstracts are invited on topics which deal with numerical methods of computation for solving nonlinear problems and also their applica-

tion to practical studies. Abstracts of approximately 500 words in length should be submitted before 31 July 1983. The authors will be informed by 31 August 1983 whether or not their papers have been accepted for presentation. Final manuscripts will be required by 1 December 1983, for inclusion in the conference proceedings. A text of the accepted papers will be available at the conference.

*Location*

The conference will be hosted by the Technical University of Barcelona in the cosmopolitan city on the north-east coast of Spain, within easy access of some splendid holiday resorts such as those on the Costa Brava. Barcelona itself is a fascinating city with a unique blend of historical tradition, exciting architecture, nightlife and haute cuisine.

A social programme for delegates will be arranged which will take the form of a reception and a banquet at a local place of interest. A full social programme will also be organized for accompanying persons.

*Correspondence*

Abstracts and requests for further information should be addressed to:

Dr. C. Taylor,  
Department of Civil Engineering,  
University of Swansea,  
Singleton Park,  
Swansea, SA2 8PP  
U.K.

## INTERNATIONAL CONFERENCE ON NUMERICAL METHODS IN THERMAL PROBLEMS

The University of Washington, Seattle, U.S.A.  
2-5 August 1983

### *Objectives*

The objectives of this conference are to consolidate the advances made in the numerical modelling of thermal problems which were presented at Swansea in 1979 and at Venice in 1981. The use of numerical techniques, such as the finite element and finite difference methods, is essential for solving problems of extreme complexity or difficult mathematical representations, which can occur in a wide range of disciplines.

It is expected that this conference will continue the unifying theme of the previous conferences in bringing together engineers and scientists to discuss thermal problems from a diverse spectrum of disciplines and ultimately produce a text on the latest 'state of the art'. Keynote speakers will present lectures on the diverse nature of the problems and the similarities of the solution techniques used would be emphasized.

A provisional list of possible areas of interest is as follows:

Heat Conduction  
Phase Change

Heat and Mass Transfer in Porous Bodies  
Geothermal Reservoir Simulation  
Thermal and Drying Stresses  
Industrial and Scientific Applications  
Solar Energy  
Turbulent Heat Transfer  
Fire and Combustion Simulation  
Coupled Conduction and Convection  
Mathematical and Computational Techniques  
Free and Forced Convection  
Nuclear Waste Disposal

### *Correspondence*

Requests for further information should be addressed to

Dr. R. W. Lewis  
Department of Civil Engineering  
University College of Swansea  
Singleton Park  
SWANSEA SA2 8PP  
UK

MAFELAP 1984

Conference on

## THE MATHEMATICS OF FINITE ELEMENTS AND APPLICATIONS

Brunel University, 1-4 May 1984

Following the four previous Brunel conferences on The Mathematics of Finite Elements and Applications, a fifth residential conference with the same title will be run at Brunel University at the beginning of May 1984. The aim will be to bring together again workers from different disciplines whose common interest is finite element methods. The programme will consist of invited lectures, contributed papers and poster sessions.

### *Topics*

The Mathematical Theory of Finite Elements  
Engineering and Scientific Applications of Finite Elements  
Computational Techniques for the Implementation of Finite Element Methods  
Boundary Element Methods and Their Application  
The Finite Element/Computer Aided Geometric Design Interface.

*Call for papers*

A limited number of contributed papers and papers for poster sessions will be accepted for the conference. Persons wishing to read a contributed paper or to have a paper in a poster session should submit abstracts of not more than two pages in length by the 31 October 1983, indicating the mode of presentation that they would prefer.

*Details*

Persons wishing further details or submitting abstracts should write to:

The Secretary  
The Institute of Computational Mathematics  
Brunel University  
Uxbridge, Middlesex, UB8 3PH,  
*United Kingdom.*

## INTERNATIONAL CONFERENCE ON NUMERICAL METHODS IN LAMINAR AND TURBULENT FLOW

The University of Washington, Seattle, U.S.A.  
8-11 August 1983

*Objectives*

The objectives of this conference are similar to those of the first held in Swansea, 1978, and the second, held at Venice, 1981. Again the main objective is to consolidate the recent advances in the application of numerical techniques, particularly finite difference and finite element methods, to solve laminar and turbulent flow problems. Both techniques have received considerable attention in recent years and their application and development is continually expanding. It is hoped that the conference will provide a forum for numerical analysts to present new numerical methods and applications and experimentalists to present a comparison between measured quantities and calculated values using standard numerical techniques. The subject matter should be of interest to both researchers and industry.

*Provisional session headings*

Laminar Flow

Lubrication  
Turbulent Flow  
Boundary Layers  
Flow with Separation  
Estuary and Coastline Hydrodynamics  
Flow in Rivers and Channels  
Turbo Machinery  
Meteorology  
Reactor Technology  
Free and Forced Convection  
Coupled Conduction and Convection  
Turbulent Heat Transfer  
Explosions  
Scientific and Industrial Applications

Requests for further information should be addressed to

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