

## ANNOUNCEMENTS

### 7TH INTERNATIONAL CONFERENCE ON NUMERICAL METHODS IN LAMINAR AND TURBULENT FLOW

15-19 July 1991, Stanford, California, USA

**Objectives.** The continuing rapid growth of research in CFD is manifest in the marked increase in innovative scientific papers that have been published recently. The stage has now been reached when industrial organizations are, with increasing confidence, using software, based on recently developed methodologies, to solve hitherto intractable problems. The transfer and dissemination of knowledge to effect a link between researchers and industry should be fostered and encouraged. It is evident, from the number of citations to the conference proceedings and usage of advocated techniques therein, that previous conferences in this series have played a significant role in such transfer and dissemination. They provide a forum for the presentation and, equally important, discussions between leading scientists, engineers and industrialists in order to initiate a cross fertilization of ideas from diverse disciplines.

Manuscripts that relate to computational methods in fluid dynamics, laminar and turbulent flow, are solicited. Earlier conferences in the series were consciously directed at manuscripts reporting innovative methods in CFD supported by theoretical or experimental studies. As in all engineering disciplines, innovation and application to solve industrial problems can be equally onerous regarding both ingenuity and effort. Therefore, the current conference organizers have placed equal emphasis on innovation and application. In this frame of reference, papers dealing with innovative concepts and their validation, or otherwise, by comparing new or previously advocated methodologies with physical measurements are actively solicited. The conference is intended to encompass the following subjects:

turbulence models; separation, circulation; vortex-dominated flows; Navier-Stokes solution algorithms; coupled solid/fluid interaction; forced convection—fluid and fluid/solid interaction; grid generation; acceleration techniques; treatment of near wall zones—transfer of shear and heat; aerodynamics—low-speed and hypersonic; non-Newtonian flow; external flows; turbomachinery; offshore and river hydrodynamics; meteorology; free surface flows.

**Call for papers.** Abstracts of approximately 500 words proposing papers in the above or related fields of study are invited immediately or at the latest by 20 December 1990. Notification of acceptance will be forwarded within one month of the above date. Coincident with the notification authors will be advised on the recommended format for the preparation of manuscripts and relevant material will be forwarded to the author(s). As during previous meetings, the proceedings will be available at the time of the conference and, therefore, will be a state-of-the-art publication, which will be distributed internationally. To meet the requirement, authors must return completed manuscripts by 1 April 1991.

**Abstracts.** The 500 word abstract should be sent to:

Professor C. Taylor  
Department of Civil Engineering  
University College of Swansea  
Swansea SA2 8PP, UK  
TEL: 44(0792) 295256  
FAX: 44(0792) 295676

## 7TH INTERNATIONAL CONFERENCE ON NUMERICAL METHODS FOR THERMAL PROBLEMS

8–12 July 1991, Stanford, California, USA

### Organizing Committee

J. H. CHIN	Lockheed Missiles and Space Co, Sunnyvale, USA
G. M. HOMSY	Stanford University, Stanford, USA
L. IMRE	Technical University, Budapest, Hungary
R. W. LEWIS	University College of Swansea, UK
K. MORGAN	Imperial College, London, UK
R. OHAYON	ONERA, Chatillon, France
B. A. SCHREFLER	University of Padova, Italy
J. F. STELZER	KFA Zentralabteilung Allgemeine Technologie, Julich, W Germany
H. TANIGUCHI	Hokkaido University, Sapporo, Japan

**Objectives.** This conference will be the seventh in the series entitled 'Numerical Methods for Thermal Problems'. The continuing objectives of this series is the provision of a forum of the presentation and discussion of recent advances in the development and application of numerical methods to the solution of heat transfer problems. Some key areas include:

conduction, natural and/or forced convection and radiation heat transfer; fire and/or combustion modelling/analysis; phase change problems; solidification and material modelling in casting processes; thermal/structures, interactions, modelling/analysis; computational algorithms and parallel computation; adaptive/hierarchical techniques in heat transfer; innovations in pre/post processing for thermal problems; computational aspects of heat transfer in composites, ceramics, fibres, plastics, etc.; CAD/FEM interface for thermal problems; software developments; thermal/electronic and electromagnetic problems.

The Organizing Committee will welcome the submission of papers describing recent work within the general area. It is expected that most submitted papers will report on recently developed computational techniques, in particular finite difference and finite element methods. However, papers dealing with the comparison of standard numerical models with experimental data are also welcome. Papers involving innovative methods in thermal problems and industrial applications are also strongly encouraged as in the previous conference.

**Call for papers.** Abstracts of approximately 500 words proposing papers in the above or related fields of study are invited immediately or at the latest by 20 December 1990. Notification of acceptance will be forwarded within one month of the above date. Coincident with the notification authors will be advised on the recommended format for the preparation of manuscripts and relevant material will be forwarded to the author(s). As during previous meetings, the proceedings will be available at the time of the conference and, therefore, will be a state-of-the-art publication, which will be distributed internationally. To meet this requirement, authors must return completed manuscripts by 1 April 1991.

**Abstracts.** The 500 word abstract should be sent to:

Professor R. W. Lewis  
Department of Civil Engineering  
University College of Swansea  
Swansea SA2 8PP, UK  
TEL: 44(0792) 295253  
FAX: 44(0792) 295676

Please indicate the general heading under which you require your paper to appear.

## INTERNATIONAL CONFERENCE OF NON-LINEAR ENGINEERING COMPUTATIONS

### Models, Software and Applications

16–20 September 1991, Split, Yugoslavia

#### **Organizers**

N. Bicanic University College, Swansea, UK  
P. Marovic Gradevinski Institute, Split,  
Yugoslavia

**Objectives.** This conference is the latest in the series of international conferences on numerical methods for non-linear problems. The first meeting was held in Swansea in 1980, the second in Barcelona in 1984 and the third in Dubrovnik in 1986. The proceedings of these conferences reflect the continuing advances made both in computer hardware and the development of solution procedures for non-linear engineering problems. The objectives of the present conference is to consolidate the further advances made in the field since the last meeting.

Numerical techniques, such as finite elements, finite difference and boundary element methods, are extensively employed for the simulation of non-linear problems and very often offer the only means of solution for practical engineering situations. It is therefore essential to ascertain that such techniques accurately model the physical process and that the numerical solution procedures developed are efficient and can be reliably employed in practical circumstances. Non-linear problems arise in an extremely diverse range of engineering situations which include both static and dynamic solid mechanics, transient forming and flow behaviours, viscous deformation and compressible and turbulent computational fluid dynamic problems. Whilst the computational techniques involved in solving different classes of non-linear problems may be particular to the application area concerned, there is, nevertheless a considerable overlap and commonality between

the fundamental numerical algorithms and element technologies employed. The conference will therefore act as a forum for engineers and scientists from diverse disciplines to discuss the computational aspects of non-linear engineering analysis in order that a cross-fertilization of ideas can be effected. It will address both the theoretical bases and the practical techniques involved in the numerical solution of engineering problems.

A series of technical sessions is envisaged, each initiated with an invited lecture by a distinguished contributor to that particular aspect of the subject. The presented papers will be collected in a proceedings volume that will be provided to the participants at the time of the conference. The spectrum of interest of contributors is expected to be wide and contributions are invited from all areas relevant to the general conference theme.

**Call for papers.** Abstracts on topics related to the theme of the conference as outlined in the preceding section, are invited by 1st November 1990. While not absolutely required, figures showing key results and reference to related work will be helpful to the selection committee. Notification of acceptance will be given by 1st February 1991 at which stage recommendations concerning the format of the papers will be sent to authors.

**Abstracts.** Abstracts should be sent to:

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