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PREFACE

Special Issue
Selected papers from
the Conference on Modelling Fluid Flow (CMFF'06)

In this special issue of JCAM we have the pleasure to feature articles based upon papers presented at the Conference on Modelling Fluid Flow (CMFF'06), held at Budapest University of Technology and Economics in September 2006. This conference was the 13th event in the International Conference Series on Fluid Flow Technologies held in Budapest, and attracted authors from more than 40 nations.

From among the 139 conference presentations, several regarded as being of particular interest to a wider audience were selected, and their authors were invited to extend the topic of their presentations into expanded articles for journal publication. We are therefore able to offer our readers a taste of the variety of CMFF'06, in the form of articles by authors from a number of nations dealing with various aspects of flow.

For the conference itself, papers were divided into two workshop sessions and nine parallel sessions. In this special issue we bring you papers representing a majority of the sessions: External Fluid Dynamics, Turbomachinery, Internal Flows, Flow and Acoustics, Multiple Phase Flows and Components, Turbulence Modelling and Numerical Methods, and the workshop session on the Modelling of Turbomachinery Aerodynamics. The authors represented in this volume are carrying out their research in universities across Europe, and we are pleased to present papers from Far-East Asian researchers as well.

The articles in this volume cover topics ranging from low Reynolds number flow around a cylinder to subsonic flow around an aircraft, and from computation of the acoustic field in a combustion chamber to an analysis of spray evolution in internal combustion engines. Flow is studied in turbomachines – a centrifugal fan, axial-flow fan, cross-flow fan, an axial compressor – in nozzles, and in channels, around cylinders – circular, square, orbiting, oscillating, installed in a cruciform arrangement – and even around an athlete's body. Studies feature both commercial and in-house codes, and include both two-dimensional and three-dimensional simulations.

In this issue readers can find many computational studies: Abboudi et al., Didier and Borges, Hős and Kullmann, Jia et al., Kadocsa et al., Karabelos and Markatos, Lewis, Punčochářová et al., Szász et al., and Younsi et al. Several of these compare their computational results with previously published measurements. Corsini and

Sheard present both computational and experimental results in their article, as do Klemm et al., while Koide et al. and Oggiano et al. present experimental studies.

With such a variety of topics and studies represented, we are sure that every reader will find something of interest in this issue, which is being published as Volume 8, Numbers 1 and 2.

Miskolc, 15 November 2007

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