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Preface

This book covers a wide range of edited papers in the areas of fluid mechanics presented at the Sixth International Conference on Advances in Fluid Mechanics held on the beautiful island of Skiathos, Greece, 8-10 May 2006. The conference was organized by the Wessex Institute of Technology, UK and Dalhousie University, Canada, and was sponsored by the WIT Transactions on Engineering Sciences.

The conference emphasizes the advancement of knowledge in fluid mechanics problems with novel applications. The basic mathematical formulations and their solutions by analytical and numerical methods are discussed together with physical modelling.

This conference has been reconvened every two years since 1996 and was motivated by the success of previous Meetings and the well-established book series, *Advances in Fluid Mechanics*. The Scientific Advisory Committee is composed of the experienced and professional Editorial Board Members of the book series.

The conference was first held in New Orleans, USA (1996), then in Udine, Italy (1998); in Montreal, Canada (2000); in Ghent, Belgium (2002), and in Lisbon, Portugal (2004). World renowned Scientists, Engineers and Professionals from around the world participated and presented their latest findings in various topics of Fluid Mechanics.

This book should be of interest to all researchers in fluid mechanics. It contains the following sections:

Computations methods in fluid mechanics; Experimental versus simulation methods; Hydraulics and hydrodynamics; Fluid structure interaction; Convection, heat and mass transfer; Boundary layer flow; Multiphase flow; Non-Newtonian fluids; Wave studies; Industrial applications; Turbulence flow; Biofluids and Permeability problems.

The Editors are very grateful to the contributors as well as to the Board Members for their enthusiastic support and participation in the Meeting. We are also thankful to the staff of the WIT Press for their excellent job in producing such a superb book.

The Editors
Skiathos, 2006

Contents

Section 1: Computational methods in fluid mechanics

The performance of drag models on flow behaviour in the CFD simulation of a fluidized bed <i>B. M. Halvorsen, J. P. du Plessis & S. Woudberg</i>	3
Solution of the incompressible Navier-Stokes equations via real-valued evolutionary algorithms <i>R. I. Bourisli & D. A. Kaminski</i>	13
A parallel computing framework and a modular collaborative cfd workbench in Java <i>S. Sengupta & K. P. Sinhamahapatra</i>	21
A parallel ILU strategy for solving Navier-Stokes equations on an unstructured 3D mesh <i>Ø. Staff & S. Ø. Wille</i>	31
On the mathematical solution of 2D Navier Stokes equations for different geometries <i>M. A. Mehemed Abughalia</i>	39
A computational method for pressure wave machinery to internal combustion engines and gas turbines <i>A. Fatsis, M. Gr. Vrachopoulos, S. Mavrommatis, A. Panoutsopoulou & F. Layrenti</i>	49
Aerodynamic flow simulation <i>R. W. Derksen & J. Rimmer</i>	59
Simulations of viscoelastic droplet deformation through a microfluidic contraction <i>D. J. E. Harvie, M. R. Davidson & J. J. Cooper-White</i>	69

Simulation of single bubble rising in liquid using front tracking method <i>J. Hua & J. Lou</i>	79
--	----

Section 2: Experimental versus simulation methods

Pilot simulation of the temperature field of a continuous casting <i>J. Stetina, F. Kavicka, B. Sekanina, J. Dobrovska & J. Heger</i>	91
--	----

Experimental and computational investigation of kinematic mixing in a periodically driven cavity <i>S. Santhanagopalan, A. P. Deshpande & S. Pushpavanam</i>	101
---	-----

Computational Fluid Dynamics (CFD) use in the simulation of the death end ventilation in tunnels and galleries <i>J. Torano, R. Rodríguez & I. Diego</i>	113
---	-----

Prediction of high-speed rigid body manoeuvring in air-water-sediment <i>P. C. Chu & G. Ray</i>	123
--	-----

Experimental study and modelling of the kinetics of drying of urban wastewater treatment plant sludge <i>H. Amadou, J.-B. Poulet, C. Beck & A.-G. Sadowski</i>	133
---	-----

Experimental investigation of grid-generated turbulence using ultrasonic travel-time technique <i>W. Durgin & T. Andreeva</i>	143
--	-----

Aluminized composite solid propellant particle path in the combustion chamber of a solid rocket motor <i>Y. M. Xiao & R. S. Amano</i>	153
--	-----

Simulation of unsteady muzzle flow of a small-caliber gun <i>Y. Dayan & D. Touati</i>	165
--	-----

Section 3: Hydraulics and hydrodynamics

Hot spots and nonhydraulic effects in surface gravity flows <i>T. B. Moodie, J. P. Pascal & S. J. D. D'Alessio</i>	175
---	-----

Finite amplitude evolution of frictionally destabilized abyssal overflows in a stratified ocean <i>G. E. Swaters</i>	185
---	-----

Watershed models and their applicability to the simulation of the rainfall-runoff relationship <i>A. N. Hadadin</i>	193
Dynamic pressure evaluation near submerged breakwaters <i>F. T. Pinto & A. C. V. Neves</i>	203
Mean flow effects in the nearly inviscid Faraday waves <i>E. Martín & J. M. Vega</i>	213
High frequency AC electrosprays: mechanisms and applications <i>L. Y. Yeo & H.-C. Chang</i>	223

Section 4: Fluid structure interaction

A structured multiblock compressible flow solver SPARTA for planetary entry probes <i>P. Papadopoulos & P. Subrahmanyam</i>	235
Eulerian simulations of oscillating airfoils in power extraction regime <i>G. Dumas & T. Kinsey</i>	245
Laboratory tests on flow field around bottom vane <i>M. M. Hossain, Md. Zahidul Islam, Md. Shahidullah, A. de Weerd, P. van Wielink & E. Mosselman</i>	255

Section 5: Convection, heat and mass transfer

Velocity vorticity-based large eddy simulation with the boundary element method <i>J. Ravnik, L. Škerget & M. Hriberšek</i>	267
Flow and heat transfer characteristics of tornado-like vortex flow <i>Y. Suzuki & T. Inoue</i>	277
Modeling fluid transport in PEM fuel cells using the lattice-Boltzmann approach <i>L.-P. Wang & B. Afsharpoya</i>	287
Painlevé analysis and exact solutions for the coupled Burgers system <i>P. Barrera & T. Brugarino</i>	297

Section 6: Boundary layer flow

New scaling parameter for turbulent boundary layer with large roughness <i>C. S. Subramanian & M. Lebrun</i>	307
Stratified flow over topography: wave generation and boundary layer separation <i>B. R. Sutherland & D. A. Aguilar</i>	317
Group analysis and some exact solutions for the thermal boundary layer <i>P. Barrera & T. Brugarino</i>	327

Section 7: Multiphase flow

Cavity length and re-entrant jet in 2-D sheet cavitation <i>I. Castellani</i>	341
Numerical results for coagulation equation with bounded kernels, particle source and removal <i>C. D. Calin, M. Shirvani & H. J. van Roessel</i>	351
Volume of fluid model applied to curved open channel flows <i>T. Patel & L. Gill</i>	361
Drag reduction in two-phase annular flow of air and water in an inclined pipeline <i>A. Al-Sarkhi, E. Abu-Nada & M. Batayneh</i>	371
Fluid flow simulation in a double L-bend pipe with small nozzle outlets <i>A. Rigit, J. Labadin, A. Chai & J. Ho</i>	381
Stability analysis of dredging the flow sediment regiment upstream a dam <i>G. Akbari</i>	389

Section 8: Non-Newtonian fluids

Viscous spreading of non-Newtonian gravity currents in radial geometry <i>V. Di Federico, S. Cintoli & G. Bizzarri</i>	399
Axisymmetric motion of a second order viscous fluid in a circular straight tube under pressure gradients varying exponentially with time <i>F. Carapau & A. Sequeira</i>	409

The flow of power law fluids between parallel plates with shear heating <i>M. S. Tshehla, T. G. Myers & J. P. F. Charpin</i>	421
---	-----

Section 9: Wave studies

Second-order wave loads on offshore structures using the Weber's transform method <i>M. Rahman & S. H. Mousavizadegan</i>	435
Rear shock formation in gravity currents <i>S. J. D. D'Alessio, J. P. Pascal & T. B. Moodie</i>	445
Nonlinear dynamics of Rossby waves in a western boundary current <i>L. J. Campbell</i>	457

Section 10: Industrial applications

Assessment of aerodynamic noise in an industrial ventilation system <i>A. M. Martins & A. C. Mendes</i>	469
Airflow modeling analysis of the Athens airport train station <i>M. Gr. Vrachopoulos, F. K. Dimokritou, A. E. Filios & A. Fatsis</i>	479
An industrial method for performance map evaluation for a wide range of centrifugal pumps <i>A. Fatsis, M. Gr. Vrachopoulos, S. Mavrommatis, A. Panoutsopoulou, N. Vlachakis & V. Vlachakis</i>	489
Large eddy simulation of compressible transitional cascade flows <i>K. Matsuura & C. Kato</i>	499
CFD modelling of sludge sedimentation in secondary clarifiers <i>M. Weiss, B. Gy. Plosz, K. Essemiani & J. Meinhold</i>	509
Hydro-power plant equipped with Pelton turbines: basic experiments relating to the influence of backpressure on the design <i>A. Arch & D. Mayr</i>	519

Section 11: Turbulence flow

CFD modelling of wall-particle interactions under turbulent flow conditions <i>M. Mollagee</i>	531
---	-----

Exact statistical theory of isotropic turbulence <i>Z. Ran</i>	541
The SGS kinetic energy and the viscous dissipation equations as closure relations in LES <i>F. Gallerano, L. Melilla & E. Pasero</i>	551
Deforming mesh with unsteady turbulence model for fluid-structure interaction <i>J.-T. Yeh</i>	561
Dispersion of solid saltating particles in a turbulent boundary layer <i>H. T. Wang, Z. B. Dong, X. H. Zhang & M. Ayrault</i>	571

Section 12: Biofluids

An exact solution of the Navier-Stokes equations for swirl flow models through porous pipes <i>N. Vlachakis, A. Fatsis, A. Panoutsopoulou, E. Kioussis, M. Kouskouti & V. Vlachakis</i>	583
Experimental investigation of flow through a bileaflet mechanical heart valve <i>J. Mejia & P. Oshkai</i>	593
Numerical analysis of blood flow in human abdominal aorta <i>M. Podyma, I. Zbicinski, J. Walecki, M. L. Nowicki, P. Andziak, P. Makowski & L. Stefanczyk</i>	603

Section 13: Permeability problems

Revising Darcy's law: a necessary step toward progress in fluid mechanics and reservoir engineering <i>C. Ketata, M. G. Satish & M. R. Islam</i>	615
Hydrodynamic permeability prediction for flow through 2D arrays of rectangles <i>M. Cloete & J. P. Du Plessis</i>	623
Analytical approach predicting water bidirectional transfers: application to micro and furrow irrigation <i>D. Crevoisier</i>	633

The meniscus depression of a porous spherical particle at the three phase contact line <i>P. Basařová, D. Horn & A. Capriotti</i>	643
Author index	653