

WSEAS Transactions on Fluid Mechanics

Contents: 2010

Print ISSN: 1790-5087

E-ISSN: 2224-347X

Acceptance Rate (for the years 2013 and 2014): 28.75%

Acceptance Rate = C/D where: C = the number of accepted papers, D= the number of submitted papers. Withdrawn Papers are not considered for the numbers C and D.

Editorial Board:

Editor-in-Chief

Professor Pradip Majumdar
Department of Mechanical Engineering
Northern Illinois University
DeKalb, Illinois 60115, USA
Email: pmajumdar@niu.edu

Associate Editors:

Prof. T. J. Chung, The University of Alabama in Huntsville, Huntsville, Alabama, USA

Prof. Nicolas Galanis, Universite de Sherbrooke, Sherbrooke, Montreal, Canada

Prof. Andrei G. Fedorov, Georgia Institute of Technology, Atlanta, Georgia, USA

Prof. Fotis Sotiropoulos, Georgia Institute of Technology, Atlanta, Georgia, USA

Prof. Qjinjun Kang, Earth and Environmental Sciences Division, Los Alamos National Laboratory, New Mexico, USA

Prof. Isaac Kuo-Kang Liu, University of Warwick, Coventry, UK

Prof. Merieme Chadid, Nice Sophia Antipolis University, Nice, France

Prof. Boming Yu, Huazhong University of Science and Technology, Hubei, China

Prof. A. C. Benim, Duesseldorf University of Applied Sciences, Duesseldorf, Germany

Prof. Wenchang Tan, Peking University, Beijing, China.

Prof. Joseph T. C. Liu, Brown University, Rhode Island, USA

Prof. Kai H. Luo, School of Engineering Sciences, University of Southampton,

Southampton, UK

Prof. Karan Kaler, University of Calgary, Calgary, Alberta, Canada

Prof. Oleg V. Vasilyev, University of Colorado, Boulder, Colorado, USA

Prof. Chang Kyun Choi, Seoul National University, Seoul, Korea

Prof. Oh-hyun Rho, Seoul National University, Seoul, Korea

Prof. Mahmoud Jamiolahmady, Heriot-watt University, Edinburgh, UK

Prof. Falin Chen, National Taiwan University, Taipei, Taiwan

Prof. Siavash Sohrab, Northwestern University, Illinois, USA

Prof. Bodo Ruck, University of Karlsruhe, Karlsruhe, Germany

Prof. Roger Grimshaw, Loughborough University, Loughborough, Leicestershire, UK

Prof. Alexander Doinikov, Belarusian State University, Minsk, Belarus

Prof. Vitoriano Ruas, Universite Pierre et Marie Curie (Paris VI), Paris, France

Prof. Gennaro Cardone, University of Naples (Napoli), Italy

Prof. David Katoshevski, Ben-Gurion University of the Negev, Beer-Sheva, Israel

Prof. B. C. Meikap, Indian Institute of Technology, Kharagpur, India

Dr. Ciprian Iliescu, Senior Research Scientist, Institute of Bioengineering and Nanotechnology, Singapore

Topics

Mathematical Modelling in fluid mechanics Simulation in fluid mechanics Numerical methods in fluid mechanics Convection, heat and mass transfer Experimental Methodologies in fluid mechanics Thin film technologies Multiphase flow Boundary layer flow Material properties Fluid structure interaction Hydrotechnology Hydrodynamics Coastal and estuarial modelling Wave modelling Industrial applications Environmental Problems Air Pollution Problems Fluid Mechanics for Civil Engineering Fluid Mechanics in Geosciences Flow visualisation Biofluids Meteorology Waste Management Environmental protection Management of living resources Mathematical models Management of Rivers and Lakes Underwater Ecology Hydrology Oceanology Ocean Engineering

Articles:

[Application of Euler-Euler Model for Numerical Simulation of a Radial Turbine Working in the Two-Phase Flow Regime](#)

Authors: Sebastian Schuster, Friedrich-Karl Benra, Hans Josef Dohmen

[A Review of Effects of Initial and Boundary Conditions on Turbulent Jets](#)

Authors: Adel Abdel-Rahman

[Performance of the Constants Couple of the Second Order Turbulence Model \(RSM\) Applied to an Axisymmetric Configuration](#)

Authors: M. Senouci, A. Bounif

[Contribution for the Vulnerability Assessment of Water Pipe Network Systems](#)

Authors: Jorge Pinto, Luis Afonso, Joao Varajao, Isabel Bentes, Humberto Varum, Antonio A. L. S. Duarte, Jitendra Agarwal

[Proper Orthogonal Decomposition Analysis for Unsteady Rotor-Stator Interaction in a Low Pressure Centrifugal Compressor](#)

Authors: Sterian Danaila, Mihai Leonida Niculescu

[Accessible Technical Solution for Normal Construction Apparatus Usage in Ex Classified Areas](#)

Authors: Jeana Ionescu, Lucian Moldovan, Sorin Burian, Marius Darie, Tiberiu Csaszar, Carol Zoller

[Energy Efficiency of Machinery Hydro-Pneumatic and Climate Impact](#)

Authors: Marius-Constantin Popescu, Nikos E. Mastorakis, Mircea Grigoriu, Jean-Octavian Popescu

[Aerodynamic Characteristics of Wing of WIG Catamaran vehicle During Ground Effect](#)

Authors: Adi Maimun, Saeed Jamei, Agoes Priyanto, Nor Azwadi

[Simplified Mesoscale Lattice Boltzmann Numerical Model for Prediction of Natural Convection in a Square Enclosure filled with Homogeneous Porous Media](#)

Authors: C. S. Nor Azwadi, M. A. M. Irwan

[Convection in Superposed Fluid and Porous Layers in the Presence of a Vertical Magnetic Field](#)

Authors: Hanadi M. Banjer, Abdullah A. Abdullah

[Determination of Optimal District Heating Pipe Network Configuration](#)

Authors: M. Jamsek, D. Dobersek, D. Goricanec, J. Krope

[Numerical Study on the Flow Characteristics of a Solenoid Valve for Industrial Applications](#)

Authors: Taewoo Kim, Sulmin Yang, Sangmo Kang

[Research Regarding the Use of New Systems to Control Fluid Flow in Pipelines](#)

Authors: Olimpiu Stoicuta, Marin Silviu Nan, Gabriel Dimirache, Nicolae Buda, Dan Liviu Dandea

[Modeling of Induced Circulation](#)

Authors: Lale Balas, Asu Inan

[Metallographic and Numerical Methods Investigations about Failure of a Kaplan Turbine Runner Blade](#)

Authors: Doina Frunzaverde, Viorel Campian, Dorian Nedelcu, Gilbert-Rainer Gillich, Gabriela Marginean

[Feasible Structural and Non- Structural Measures to Minimize Effect of Flood in Lower Tapi Basin](#)

Authors: Dhruvesh P. Patel, Mrugen B. Dholakia

[Hydraulic Performance of Double Slotted Barriers under Regular Wave Attack](#)

Authors: E. V. Koutandos

[A Study on Saline Water Intrusion and Fresh Water Recharge Relevant to Coastal Environment](#)

Authors: Sudip Basack, A. K. Bhattacharya, Chitta Sahana, Prabir Maity

[Computing of Cavitation Characteristic and Sensitivity Curves for Francis Pump-Turbine](#)

Authors: Anton Iosif, Ioan Sarbu

[Two Different Turbulence Models in Comparison with Experiments on Thermal Mixing Phenomenon in a Tee Piping](#)

Authors: Chao-Jen Li, Yao-Long Tsai, Tai-Ping Tsai, Li-Hua Wang

[Time-Varying Flow Investigation of Synthetic Jet Effects on a Separating Boundary Layer](#)

Authors: Francesca Satta, Daniele Simoni, Marina Ubaldi, Pietro Zunino, Francesco Bertini

[Synthetic Jet Design Criteria and Application for Boundary Layer Separation Control](#)

Authors: Francesca Satta, Daniele Simoni, Marina Ubaldi, Pietro Zunino, Francesco Bertini

[Scale-up of a Cold Flow Model of FICFB Biomass Gasification Process to an Industrial Pilot Plant – Hydrodynamics of Particles](#)

Authors: J. Mele, J. Oman, J. Krope

[Adjustment of Dissipative Terms to Improve Two and Three-Dimensional Euler Flow Solutions](#)

Authors: Seyed Saied Bahrainian