Guest editorial

9th International Conference on Computational Heat and Mass Transfer (ICCHMT2016)

Preface

This special issue presents 16 papers selected from IX-th International Conference on Computational Heat and Mass Transfer (ICCHMT2016) held in Cracow, Poland, 23-26 May 2016. The ICCHMT Conference series has been organized for over 15 years in various countries including Cyprus, Brazil, Canada, France, China, Turkey and Poland. The IX-th Edition of the Conference was organized by the Institute of Thermal Power Engineering from Cracow University of Technology, with the support of Schulich School of Engineering from the University of Calgary. The Conference was sponsored by COMSOL (developer of COMSOL Multiphysics Software) and STEAG GmbH Energy Services (developer of EBSILON® Professional software), as well as by the Kraków to Business (KRK2B) company.

Over 210 participants from China, South Korea, Poland, Romania, Germany, Australia, Sweden, France, Canada, Japan, Brazil, Finland, Belarus, Italy, Malaysia and India presented their contribution during 19 sessions including three keynote sessions and two poster sessions. The keynote lectures were delivered by Prof Michał Chorowski, Prof Wen-Quan Tao, Prof Rachid Bennacer, Prof Sang-Ho Suh, Prof Li-Zhi Zhang and Prof Ravipudi Venkata Rao. The Conference topics included: discrete methods; lattice Boltzmann method; molecular dynamics simulations; Monte Carlo method; cellular automata; recent developments on Navier–Stokes equations solvers; validation of computational methods, multi-phases, gas–liquid, liquid–solid, etc.; solidification and melting; complex chemical reaction modelling; reactive flows and combustion; internal flow and heat transfer; double-diffusive convection; porous media heat transfer; heat exchangers; steam and gas turbines; and other relevant topics related to computational heat and mass transfer.

Papers related to the numerical modeling of heat and fluid flow processes were selected for publication in the special issue of International Journal of Numerical Methods for Heat & Fluid Flow. The papers were peer reviewed by at least two referees. Therefore, we would like to thank the reviewers for their effort in helping authors to improve their papers.

We would like to warmly thank the Editor-in-Chief of the International Journal of Numerical Methods for Heat & Fluid Flow, Prof Roland W. Lewis and his editorial team including Dr Jianfeng Zou and Mr James Martin for accepting the special issue and for great help and support during the editorial process of this special issue. We hope this special issue will encourage the readers to participate in the next editions of the International Conference on Computational Heat and Mass Transfer.

Ioan Pop
Department of Applied Mathematics, Babes-Bolyai University, Cluj-Napoca, Romania

Jan Taler
Institute of Thermal Power Engineering, Krakow University of Technology, Krakow, Poland

Abdulmajeed Mohamad
Schulich School of Engineering, University of Calgary, Calgary, Canada, and

Pawel Oclon
Institute of Thermal Power Engineering, Krakow University of Technology, Krakow, Poland