PREFACE: HEFAT2014

This special issue of Computational Thermal Sciences contains some of the papers which were presented at HEFAT2014: The International Conference on Heat Transfer, Fluid Mechanics, and Thermodynamics, held on July 14–16, 2014 in Orlando, Florida. At the conference, a total of 300 papers were read, which included 11 keynote papers. From these papers, approximately 20 authors were invited to submit papers (most of the papers were amended since presentation) for consideration to be published in this journal. After being peer-reviewed, 14 papers were accepted for publication as two issues of this journal.


The goal of the HEFAT conferences is to provide a forum at which specialists in heat transfer, fluid mechanics, and thermodynamics from all corners of the globe can present the latest progress and developments in the field. The conferences have also served as a catalyst for discussions on future directions and priorities in the areas of heat transfer, fluid mechanics, and thermodynamics. Significant contributions have been made directly and indirectly to the challenges of society in terms of energy efficiency, global warming, greenhouse gas emissions, pollution, and effluents.

The conference organizers are grateful to all who enthusiastically contributed to the conference and to this special issue. Special thanks are due to the authors of the papers in this special issue, who worked diligently in meeting the review schedule and responding to the reviewers’ comments. As always, the reviewers played an important role in improving the quality of the papers and I have great appreciation for the very thorough reviews that were received. Feedback from a minimum of two reviewers was used as acceptance criteria.

Last but not least, I would like to thank Professor Graham De Vahl Davis, the Editor-in-Chief of Computational Thermal Sciences, for his encouragement to publish this special issue highlighting the current research going on worldwide. During the review process of the papers for these issues, Prof. De Vahl Davis (who was also the founding editor of Computational Thermal Sciences), retired and was replaced by Prof. Darell Pepper who assisted me in the completion of the review process.

Josua P. Meyer
Head, Department of Mechanical and Aeronautical Engineering
University of Pretoria
South Africa