

From the Guest Editor of Part I

The collection of the papers in the journal of *Thermal Science* is dedicated to the 29th international conference on Efficiency, Cost, Optimization, Simulation and Environmental impact of energy systems (ECOS), which was held in Portoroz, Slovenia, June 19-23, 2016. The ECOS series of annual conferences was established in the year 1987. The ECOS conferences offer a platform to engineers and scientists worldwide to meet annually and discuss developments in the fields of conversion, storage and transportation of energy, particularly the related thermodynamic, environmental, economic, and social issues.

This collection contains a selection of six papers presented at the ECOS 2016. The papers have passed the conference review process, were presented at the conference, and further improved and extended before submission to the journal.

These papers present the state-of-the-art and of modern developments in the fluid dynamics assessment of Tesla turbine rotor, numerical and experimental investigation of simultaneous heat and mass transfer within bio-based material as well as in a matrix heat exchanger, gasification and combustion reactor geometry design, design of a chemical reactor under microwave irradiation, and evaluation of entire flat plate collector with a serpentine flow system.

Our deep gratitude goes to the authors for their scientific contributions and to the reviewers for their valuable comments, which resulted in the improvement of the original papers. The publication of these ECOS 2016 papers would not have been possible without the significant technical assistance and support of the editorial office and the leadership of the Editor-in-Chief, Professor Simeon Oka. We want to thank all these persons for their engagement and collaboration.

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