

## From the Guest editor of Part two

The 16<sup>th</sup> Symposium on Thermal Science and Engineering entitled SIMTERM 2013 was held between October 22 and 25, 2013, in Sokobanja, Serbia. For the 5<sup>th</sup> consecutive time, the honour to organize the Symposium belonged to the Faculty of Mechanical Engineering in Nis, Serbia, which organized this conference in co-operation with the Society of Thermal Engineers of Serbia, with the support of the corresponding Ministry of Education, Science and Technological Development. It is an even greater pleasure that the organization of this Symposium took place in the year when the Society of Thermal Engineers of Serbia celebrated its jubilee – the 50<sup>th</sup> anniversary. The Symposium on Thermal Science and Engineering SIMTERM is a renowned international scientific conference which is held every two years.

More than 100 papers from our country and abroad were presented at SIMTERM 2013. In addition to the Serbian participants, the papers were also presented by participants from various countries. The activities of the Symposium, apart from the plenary session (where four invited speeches were given by eminent domestic and foreign experts) were conducted in eight sessions which encompassed the following thematic fields: Technologies and Plants, New and Renewable Energy Sources, Mathematical Modelling and Numerical Simulation, Experimental Investigation of Processes, Energy Efficiency in Industry, Civil Engineering, Communal Systems and Traffic, Expert Systems, Fluid Flow, Heat and Mass Transfer, Combustion, and Environmental Protection, as well as three poster sessions. During the Symposium a round table was also held on the topic of “Buildings Energy Efficiency”.

All of the papers presented at the Symposium were published in the Conference Proceedings in the electronic form, while the abstracts were published in the Book of Abstracts in the printed form.

The expert committee and the eminent experts who participated in SIMTERM 2013 selected some nine best papers presented at the conference, from various areas included in the Symposium program. The papers recommended to be published in the journal *Thermal Science* were specially prepared after the selection and further reviewed in line with the high standards of the journal.

This issue of the journal *Thermal Science* contains nine papers by the participants of the SIMTERM 2013. The authors of the papers are professors and assistants from the Faculty of Mechanical Engineering in Nis, but also from other faculties and institutes, as well as a great number of doctoral students who are actively involved in the scientific research and projects, and who are in the process of writing their doctoral dissertations at faculties in Serbia. The research conducted by these students served as the basis for numerous papers.

The papers presented in this issue of the journal include a wide spectrum of areas (automatic control and robotics with the application of thermovision, energy efficiency in civil engineering, numerical simulation in design and testing of specially designed heat exchangers, modelling of solar concentrators, mathematical modelling and simulation of thermal performances for heating closed swimming pools using solar energy, heat transfer in incompressible fluids in a magnetic field, CFD analysis in the reversible operation of the pump and turbine, numerical simulation of thermal processes during friction welding), while treating current, contemporary problems within various scientific disciplines. The papers present the most important scientific and professional results achieved in Serbia in the last several years in particular areas.

The bases of all papers, regardless of the scientific field, possess one common trait, and that is the consideration of thermal processes. This shows the extent to which thermal processes are present in all areas of research within various branches of engineering.

The publication of scientific research results in the journals at the international level represents a challenge for all researchers, both in the Republic of Serbia and the whole world, particularly when it comes to young researchers. By publishing their papers in international journals young researchers open a window into the world of science for themselves, and an opportunity is provided for them to present the results of their research to criticism from a wide circle of renowned experts. Thus, apart from appropriate recognition, they also receive replies and suggestions concerning the direction in which their further research, improvement and development should go.

I would like to take this opportunity to thank all of the reviewers who contributed significantly to the quality of the published papers by their reviews, useful comments and suggestions to the authors, which in turn constituted invaluable help in the preparation of this issue.

I would also like to take this opportunity to thank our renowned professors and prominent scientists, Prof. Simeon Oka, editor-in-chief of the journal *Thermal Science*, and Prof. Milan Radovanović, president of the Society of Thermal Engineers of Serbia, for showing great understanding in accepting the initiative to publish this nine papers (in the journal *Thermal Science*), presented at the **16<sup>th</sup> Symposium on Thermal Science and Engineering, SIMTERM 2013**, and selflessly and wholeheartedly provided assistance in its realization, which is of great significance for the Faculty of Mechanical Engineering in Nis. This will lead to the Symposium of Thermal Science and Engineering gaining, I hope, even greater renown and popularity in the coming period, thus attracting a larger number of participants in our country and abroad.

Guest editor

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