

From the Guest Editor

As usually, once in the year, an issue of *Thermal Science* scientific journal is again dedicated to the research in the field of energy efficiency in the field of transportation sector with special emphasis on thermal processes of internal combustion engines as the main factor in vehicle fuel consumption. As in the previous special issue of this journal devoted to internal combustion engines, also this time, according to the opinions of our reviewers (whose list is given at the end of this issue) we have chosen 31 papers from a large number (about 60) of submitted manuscripts on internal combustion engine problems. Unfortunately, a number of papers have not been accepted for publication because of their lack of scientific level, since they mainly have presented obtained experimental results without any original or new insights.

Presented papers in this issue suggest that, despite the global crisis in the field of manufacturing industries and vehicle production, research in the area of internal combustion engines are still very actual and intense. Of course, the current world energetic situation, global warming and air pollution affect also the intensive research in the transport sector. Therefore, these problems are represented in the papers of this issue.

The papers in this issue range from fundamental research of engine's thermal processes up to the effects of transport conditions on energy consumption and air pollution. Between these two extremes are, on the one side, experimental studies of engine flow processes, injection system behaviors and the effects of different interventions on exhaust emissions, and, on the other hand, computational methods of engine process simulation using CFD and phenomenological models. A section of this issue is also devoted to modern methods of prediction and optimization of engine parameters using artificial neural networks and other similar methods, while the another part is devoted to the actual utilization of various alternative fuels with special emphasis on the application of different biofuels from biodiesel to alcohols, as well as their blends and additive additions. In any case, the problems of energy efficiency and engine emissions dominate this issue.

Finally, I would like to express my gratitude to all the authors (originating not only from Serbia but also from India, Turkey, China, Iran, Italy, Romania, Poland, Hungary, and Slovenia) on their desire and interest to publish their research results in our journal. Owing to them the quality of our magazine is growing, which is reflected in its SCI factor. Also, in my own name and on behalf of all authors, I have to pay special appreciation to the reviewers (from eminent international institutions) for their cordial and serious qualitative comments and opinions, which strongly improve the level of this issue, but also essentially help authors to improve the quality of their papers.

Guest Editor

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List of reviewers involved in the choice of papers for this issue

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