

Special Issue on "Mechanical Engineering Research and Education"

International Review of Mechanical Engineering (IREME)

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This special issue "Mechanical Engineering Research and Education" publishes a collection of papers that have been selected among more than 100 scientific works of Russian scientists written in 2016-2017 years. Thus, only 12 papers of unique contributions, authored by research groups representing various universities and research institutes of Russia, have been chosen for inclusion.

Mechanical engineering is one of the oldest branches of engineering. It goes back to when the first wheels were put to practical use and the first primitive mechanisms like screw pumps were invented. During the Industrial Revolution with its widespread replacement of manual labor by machines the great rise has been achieved and machine tools were developed. Since then, Mechanical Engineering unites a set of industries that produce machines and carry out metal processing for the production of machines (creation of metal structures and products). Nowadays the field of Mechanical Engineering is very wide and expected to grow more and more. The development of Mechanical Engineering in future depends in many respects on the quality of education of technical workers of the industry.

The main aim of this Special Issue is to give the readers an overview of the latest and original achievements in Russia mostly devoted to the explorations in both fundamental and applied research areas of modern Mechanical Engineering across a variety of topics, including Wear resistance, Tribology, Dynamics and Control, Structural analysis, Gear Synthesis, Mechatronics, Theory of Alloys, Surface Technology and Education.

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