



EDITORIAL

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Editorial to special issue “Selected topics in solid and structural mechanics”

Received: 1 February 2021 / Accepted: 4 February 2021 / Published online: 1 March 2021
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The Special Issue “Selected Topics in Solid and Structural Mechanics” is aimed at highlighting and sharing the scientific results in the field of Solid and Structural Mechanics presented at the XII Russian Congress of Theoretical and Applied Mechanics. The main organizer of the congress was the Russian National Committee for Theoretical and Applied Mechanics established in 1956 to promote joining the International Union of Theoretical and Applied Mechanics (IUTAM) and organization of various scientific events in Russia.

The XII Russian Congress of Theoretical and Applied Mechanics was held in the city of Ufa, the capital of the Republic of Bashkortostan, on August 19–24, 2019. In order to get an idea about the scope and scientific level of the Congress it is worth mentioning the following fact. Altogether 1517 scientists from 70 cities of Russian Federation and other countries attended the Congress. The list of attendees included 32 members of Russian Academy of Sciences, about 1000 scientists of the PhD and Dr.Sci level and more than 300 young researchers. The Congress became the key scientific event bringing together fundamental researchers and leading specialists in aerospace, aviation, and oil&gas industry. During the Congress 1362 lectures were presented, among them 11 plenary lectures, 42 keynote lectures at different sections, 652 oral presentations, and 973 posters.

The works presented at the Congress reflected the range and diversity of modern mechanics. Following the tradition of Russian school in mechanics and by analogy with the International Congress of Theoretical and Applied Mechanics it was organized in three main Sections: General and Applied Mechanics, Fluid and Gas Mechanics, Solid Mechanics. Additionally, six interdisciplinary symposia were organized: Mechanics of natural processes; Biomechanics; Mechanics of oil production and oil transportation; Tribological lubricants; Mechanics of interaction of liquid, gas, and solid bodies. The IV School for Young Scientists working in the field of Mechanics was held within the framework of the Congress where 32 young scientists were awarded. The National Russian Exhibition of Technologies demonstrated the technical and technological potential of industry, universities, and research institutes.

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January 2021

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