Special Issue

Tribology and Computational Mechanics for Materials

Message from the Guest Editor

This Special Issue is devoted to advances in Tribology and Computational Mechanics of Materials. Tribology as a branch of science has received great attention from the materials community due to its interdisciplinary approach to control friction and wear in technical systems and its ability to enhance system performance and efficiency through the suitable monitoring of the superior mechanical and tribological properties of materials, from the monitoring of surface roughness and characteristics to the contact analysis of materials to yield better system performance. Friction and wear can be controlled through suitable surface engineering principles and lubrication approaches. The mechanics of materials, on the other hand, is not the only scientific discipline that governs the characteristics of engineering structures. It is often necessary to consider the interaction of several scientific fields such as chemistry, heat conduction and mechanics with the help of a multi-physics approach. With the advent and proliferation of digital computers, the branch of computation mechanics has evolved and has great impact on our understanding of the behaviours of materials and structures.

Guest Editor

Prof. Dr. Prasanta Sahoo

Department of Mechanical Engineering, Jadavpur University, Kolkata 700032, India

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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