

# Special Issue

## Advanced Materials, Structures, Symmetrical Design and Mechanism in Mechanical Engineering

### Message from the Guest Editors

Mechanical engineering is a field of basic research, which covers quite a lot of areas, such as materials science, machine design, physics, and of course mechanics. With the rapid development of computer technology, many advanced technologies have been applied to the field of mechanical engineering, such as rapid prototyping, numerical simulation, data-driven, evolutionary computation, and deep learning. Symmetry is a critical element in mechanical engineering, e.g., vehicle devices, heavy machinery, and engineering machinery, and has been exploited in the design and optimization process of materials, structures, and equipment. In the opinion of the , there are many theories and applications of advanced technologies in mechanical engineering that also need the theory of symmetry. This Special Issue on “Advanced Materials, Structures, and Design Methods in Mechanical Engineering” aims to incorporate the latest research progress in the field of mechanical engineering that includes advanced materials, structures, and design methods...

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### Guest Editors

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Prof. Dr. Yong Peng

Prof. Dr. Zhiwu Li

Dr. Amir M. Fathollahi-Fard

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### Deadline for manuscript submissions

closed (25 November 2024)



## Symmetry

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## About the Journal

### Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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### Editor-in-Chief

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