Special Issue

Symmetry in Thermal Fluid Sciences and Energy Applications

Message from the Guest Editor

Symmetry is a fundamental notion in thermal fluid sciences and energy applications. It is an important tool for elucidating the properties of complex systems. Thermal and fluid processes are applied in several modern energy-use technologies, basically consisting of the complex multidimensional interactions of fluid mechanics and thermodynamics. A comprehensive analysis of this topic involves vector and scalar quantities in the flow field, where symmetry is strongly considered in order to simplify geometric parameters. These requirements are therefore also applied to experimental techniques. The interconnection between experimental analysis and the numerical simulation of processes is also an important field. Thus, there are a wide range of symmetry solutions for this area of M research, the results of which contribute to the development of science and information for decisionmaking in industry.

Guest Editor

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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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