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## Carbon Neutrality and Symmetry in Power Engineering and Engineering Thermophysics

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### Message from the Guest Editors

Dear Colleagues,

Carbon neutrality and symmetry in power engineering and engineering thermophysics is a hot research topic receiving much attention, and it is rather significant in the development of power systems such as aero-engines and internal combustion engines. In response to global climate change, “carbon peak” and “carbon neutral” have become popular keywords. As one of the main contributors of carbon emissions, power systems are confronted with great challenges in terms of their energy conservation and emissions reduction. For example, improving power system efficiency and developing green alternative fuels are essential ways to reduce carbon emissions. In addition, the symmetrical design of power system structures has important influences on carbon neutrality, as do symmetry or asymmetric fluid properties and lightweight structure, with numerous studies exploring these topics in an attempt to address many novel questions. Given the strict requirements of carbon emission, a breakthrough is needed in the low-carbon technologies of power systems...



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## 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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