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# Symmetry Principles in the Nuclear Magnetic Resonance

Guest Editor:

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### Message from the Guest Editor

Dear Colleagues,

Symmetry is a theoretical concept with applications in all major scientific domains. The notion lies at the heart of fundamental laws of nature and serves as an important tool for understanding the properties of complex systems, both classical and quantum. In nuclear magnetic resonance, symmetry has been applied to both liquid and solid-state investigations. As an example, it has been used to classify NMR spectra in complex spin systems, the nature of long-lived nuclear spin probes, and it is at the very core of a number of relevant and cutting-edge techniques, such as PHIP, SABRE and DNP, currently used to elucidate a number of important problems. The aim of the present Special Issue is to emphasize the role of symmetry in modern NMR investigations. Specifically, it will consider how the manifestation of symmetry and symmetrybreaking laws can help in conceiving, designing and interpreting many important chemical and physical problems.









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## **Editor-in-Chief**

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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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