

# Special Issue

## Applications Based on Symmetry and Asymmetry in Polymer Science

### Message from the Guest Editors

- This Special Issue will focus on the latest advancements and emerging trends in polymer science where symmetry and asymmetry are applied as practical design tools to control structure, processing and performance. Symmetry expressed through regular repeat units, stereoregularity, periodic architecture and ordered self-assembly often enables predictable crystallization, phase behavior and reproducible properties. In contrast, asymmetry introduced through sequence gradients, block or graft arrangements, branching, anisotropy, interfacial heterogeneity, or layered and graded structures can unlock directional functions, hierarchical morphologies and multifunctionality that symmetric systems cannot readily achieve. Contributions should examine how balancing symmetry and symmetry breaking enhances mechanical robustness, thermal stability, flame retardancy, barrier performance, transport behavior, optical and electrical responses and long-term durability. Studies covering both conventional and sustainable polymer systems are welcome, including recycled polymers, biomass-derived polymers and green composite concepts using functional additives...

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### Guest Editors

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### Deadline for manuscript submissions

31 December 2026



# Symmetry

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Impact Factor 2.2  
CiteScore 5.3



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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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