Special Issue

Phase Transitions in Polymer Composites

Message from the Guest Editors

This Special Issue aims to explore recent advances in phase transitions of polymer composites, focusing on experimental, theoretical, and computational approaches. Key topics of interest include, but are not limited to:

- Crystallization behavior and kinetics in polymer matrix composites;
- Thermally and pressure-induced phase transitions in hybrid materials;
- Phase separation mechanisms in polymer blends and nanocomposites;
- The influence of fillers and reinforcements on phase transition behavior;
- Dynamic mechanical analysis of phase transition processes;
- Molecular dynamics and machine learning approaches to predict phase transitions;
- Applications of phase transition studies in functional materials, sensors, and energy storage.

Contributions covering fundamental studies, novel characterization techniques, and applications of phase transitions in polymer composites are welcome. This Special Issue provides a platform for researchers to advance the understanding of phase behavior and develop next-generation polymer composites with tailored properties for emerging applications.

Guest Editors

Dr. Ning Liu

Prof. Dr. Bin Yang

Dr. Zhongsen Zhang

Deadline for manuscript submissions

31 October 2025

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/235981

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)