



Synthesis, Structures and Properties of Polymer Nanocomposites

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Deadline for manuscript
submissions:

25 October 2024

Message from the Guest Editors

Dear Colleagues,

Polymer nanocomposites (PNCs) have emerged as cost-efficient, lightweight, and highly versatile materials for numerous technological applications in fields such as aerospace, automotive, membranes, optoelectronics, batteries, catalysts, and biomedical devices. These materials, which can be tailor-made for specific target functionalities, structures, properties, and performance criteria, have enabled rapid advances in frontier technologies beyond what polymers in their virgin formulations would provide. The aim of the current Special Issue is to disseminate recent progress made in the design, synthesis, characterization, manufacturing, and testing of PNCs for different technological applications. Submission of original works in all aspects of PNCs, such as chemistry, physics, rheology, multifunctionality, manufacturing, recycling, and product design, is welcome.





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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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