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Rheological, Thermal and Transport Properties of Polymeric Nanocomposites

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Message from the Guest Editor

Dear Colleagues,

In materials research, the development of polymer nanocomposites (PN) is rapidly emerging as a multidisciplinary research field with results that could broaden the applications of polymers in many different industries. PN are polymer matrices that have been reinforced with small quantities of nanosized particles, preferably characterized by high aspect ratios, such as layered silicates and carbon nanotubes. Thermal analysis (TA), rheology, and transport property measurements are useful tools to investigate a wide variety of properties of polymers that can be also applied to PN in order to gain further insights into their structure. This Special Issue will focus attention on the versatile applications of TA methods, rheology, and transport properties in the emerging field of polymer nanomaterial research. It wishes to present examples of some of the applications of these different techniques in the characterization of nanocomposite materials, focusing on the relationship between processing, structure, and properties. See more information in

<https://www.mdpi.com/si/66339>

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Guest Editor



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Special Issue



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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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