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## Ionic Interfaces in Smart Polymer Materials

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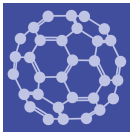
### Message from the Guest Editors

In recent years, the polymer materials community has put a great deal of effort into designing innovative polymer materials that are engineered to be multifunctional or task-specific, presenting enhancement in properties such as ionic conductivity, chemical and thermal stability, mechanical performance, fire retardancy, barrier properties, self-healing ability, and shape memory behavior. This can be effectively achieved by altering the interphase behavior of these polymer systems, both via chemical modification or incorporating additives/fillers such as block copolymers, ionomers, organic-inorganic hybrid materials, or inorganic-rich nano-objects. Among these, the application of (poly)ionic liquids, eutectic solvents, and eutectic molecular liquids have presented many new opportunities within the last decade, since small amounts of these compounds can impart dramatic interphase modifications to polymer materials due the production of vast physical interphase bonding, including the formation of ionic bonding.



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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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