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# Ionic-Liquid-Based Materials and Their Multi-functional Applications

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## **Message from the Guest Editors**

Dear Colleagues,

The smart and multifunctional materials field is steadily growing, with increasing impact in a significant number of application areas, such as sensors, actuators, transducers, energy harvesting and storage, among others. Among these materials, high-performance materials based on polymers and polymer-based hybrid materials are the most frequently used due to their processing versatility and tailorable response. Depending on the desired application, the development of hybrid polymer-based materials is often necessary in order to obtain the specific functionalities and characteristics of ionic liquids (ILs); these stand out due to their versatility in terms of functional responses, tuneability, and their ability to be integrated into polymer matrices.

In this context, this Special Issue will focus on the development of advanced polymer-based hybrid materials based on polymer matrices with different ionic liquids in order to tailor composites, blend characteristics, and functional responses for advanced applications.

**Keywords:** hybrid materials; composites and blends; ionic liquids; advanced applications



**Special**sue









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### Message from the Editor-in-Chief

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