Special Issue

Synthesis and Application of Epoxy-Based Polymeric Materials

Message from the Guest Editor

Epoxy-based polymeric materials are utilized extensively in various fields such as aerospace, automotives, energy, and electronics, as well as in building materials, due to their exceptional mechanical and electrical insulation, bonding capabilities, and chemical resistance. Currently, there is growing interest in developing high-performance epoxy polymers and composites that are environmentally sustainable; however, challenges remain, including the low toughness of conventional epoxy resins. We lack a systematic understanding of the properties of cross-linked networks, which limits our low-cost approaches to producing resins and their composites and leads to the inferior performance of new environmentally friendly epoxy resins compared to traditional ones, as well as degradation issues and recovery concerns.

This Special Issue recommends that authors investigate the fundamental molecular mechanisms of newly developed epoxy resin materials based on their properties to provide researchers with molecular design principles.

Guest Editor

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Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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