Special Issue

Toughened Thermosets

Message from the Guest Editor

Thermosetting resins are a class of materials with a growing importance: key technologies that are of utmost importance for facing the challenges of the future are impossible without the use of thermosets. Lightweight construction in transportation including using high performance adhesives or fiber-reinforced composites or the miniaturization of electronic devices is an excellent example. New technologies to harvest renewable energies like wind, solar, geothermal, or tidal need them as well. Thermosetting materials are characterized by the three-dimensional network formed upon curing. Close-meshed networks provide excellent mechanical performance, but unfortunately they significantly increase brittleness. To meet the demands of applications, nearly all modern resin systems are toughened. Various different technologies and approaches can be used to obtain tough and stiff materials. It is crucial to balance chemistry and morphology and maintain optimal processability of toughened resins. Consequently the choice of toughening technology often depends on the process and/or the application of the thermosetting material.

Guest Editor

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Deadline for manuscript submissions

closed (30 September 2020)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/43269

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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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