



Polymer Microcellular Foaming and Its Functionalization

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Message from the Guest Editors

Due to the special structures of microcellular polymeric foams, they have predominant advantages over traditional polymer foams, i.e., lightweight, material saving, superior comprehensive mechanical properties. With the introduction of different kinds of additives, such as carbons (carbon nanotubes, graphene, carbon nanofibers), conductive and electromagnetic interference shielding foams can be manufactured. Furthermore, microcellular-foamed polymers can also be used in absorption or desorption of oil or organic agents, with the presence of open cells and changing in contact angles. Other usages of microcellular foams are structural parts, tissue-engineering scaffolds, insulations of heat or sound, and so on.

Based on the potential and broadened applications of microcellular foams, this Special Issue addresses polymeric microcellular foams with regard to the processing and functional applications of both traditional thermoplastic and biodegradable materials, as well as their composites. Thermosets and elastomers are included, too. We cordially invite you to submit original research or review articles on this subject.





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