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Advanced Methods of Flame Retardant Treatment of Polymeric Materials

Guest Editor:

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Deadline for manuscript submissions:
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Message from the Guest Editor

Flammability reduction in polymer materials, or making them non-flammable, is of a special importance on account of the serious health and life hazards due to considerable emission of smoke and toxic compounds, during their thermal decomposition and combustion.

Various methods can be used to protect polymeric materials against fire. The most commonly-used approach to make thermally-stable and low-flammable materials is the incorporation of flame-retardant particles in the polymer matrix.

During the last few decades, a new class of fillers, commonly known as nano-fillers, have been extensively studied. The advantage of nano-fillers is that they are miscible with polymer matrix, exploiting unique synergism between the combined materials. Among others, a number of nano-particles such as clay, silica, carbon nanotubes, graphene or polyhedral oligomeric silsequioxanes decrease the flammability of polymer composites.

Research papers or reviews, presenting the latest achievements in the field of polymers or polymer composite flammability and methods of their retardation are invited for this Special Issue.

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Message from the Editor-in-Chief

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