

Special Issue

Advances in Flame Retardant Polymer Materials

Message from the Guest Editors

Over the last decade, numerous studies have focused on flame-retardant polymer and polymer composites both in the academic and industrial worlds. Halogen-free flame-retardant technology is attracting a large level of interest owing to the awareness of environmental and human health issues associated with its applications. In this context, highly efficient, eco-friendly, smoke-suppressed, and low-toxic polymers are leading topics in the field of flame-retardant polymers. Reactive and macromolecular organophosphorus structures, the variety of nanoparticles (LDHs, MOFs, organic-modified clays, POSS, black phosphorus, etc.), bio-based compounds (phytic acid, starch, α -CD, lignin, DNA, alginate, etc.), carbon materials (expandable graphite, graphene, carbon nanotubes, fullerene, etc.), boric compounds, and organometallic complexes greatly enrich the flame-retardant family, as well as synergetic systems. This Special Issue focuses on progress in the synthesis, functionalization, characterization, mechanism, and advanced technologies for halogen-free flame retardants.

Guest Editors

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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 4.9.

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

Prof. Dr. Alexander Böker

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