Special Issue

Structure, Characterization and Application of Bio-Based Polymers

Message from the Guest Editor

Bio-based polymers are produced from renewable resources, such as microorganisms, plant waste, and algae. As they accomplish sustainability principles, they are becoming increasingly widespread in the chemical industry as alternatives to polymers produced from non-renewable sources. Currently, production processes are not always competitive with those of conventional commodities and require significant innovations to reduce costs and environmental impact (with particular reference to biorefinery processes) and improve yields. To tackle this problem, different chemicals may have to be incorporated to attain the required performance for the intended applications, which could potentially impact ecotoxicological features or reduce biodegradability or compostability when these latter outcomes are inherent to the specific bio-based polymer.

This Special Issue aims to provide an overview of ongoing scientific and industrial research on recent discoveries in the synthesis, characterization, and application of bio-based polymers. Research and review articles are welcome.

Guest Editor

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Message from the Editor-in-Chief

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

Prof. Dr. Alexander Böker
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