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Structure, Characterization and Application of Bio-Based Polymers

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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.



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Special Issue



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Message from the Editor-in-Chief

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