Special Issue

Biodegradable Polymers for Sustainable Solutions: Innovations and Applications

Message from the Guest Editors

This Special Issue focuses on recent advances in the design, synthesis, characterization, and application of biodegradable polymers aimed at sustainable solutions across various sectors, including packaging, agriculture, biomedicine, and consumer products. The topics of interest include the following: the development of novel polymer architectures, bio-based feedstocks, degradation mechanisms, life-cycle assessments, and innovative processing technologies. Emphasis is also placed on interdisciplinary approaches that integrate materials science, chemistry, biotechnology, and engineering to overcome current limitations and scale up viable alternatives. By showcasing state-of-the-art research and emerging trends, this Special Issue seeks to foster dialogue within the scientific community and catalyze further innovation in creating polymers that meet both performance and environmental criteria. As global efforts toward a circular economy accelerate, biodegradable polymers will play an increasingly vital role in shaping a more sustainable future.

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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 4.7.

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

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