



Microbial Degradation of Biodegradable Polymers

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Message from the Guest Editors

Sustainable ecosystems are an increasingly critical global goal as the human population's demands increase, and climate change. Human-made polymers have become ubiquitous and quite problematic due to their slow recycling rates and impact when leaching to the environment. To alleviate this, considerable focus has been placed on green chemistry and easily recyclable biodegradable polymers that can replace, if not improve, the functionality of longer-lived polymers. The “new biodegradable plastics” include poly(lactic acid), starch blends, poly(butylene succinate), poly(butylene-co-adipate terephthalate), and polyhydroxyalkonates. All of these “new” plastics are biodegradable by microorganisms at a measurable human scale living rate. This Special Issue focuses on the degradation strategies of microorganisms, including the biochemistry of attachment to the polymer, depolymerization, bio-assimilation, degradation rates, and methods to enhance these rates. We encourage original research submissions, critical and systematic reviews, and interdisciplinary work spanning chemistry, microbiology, and ecology, focused on deep molecular research.





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Message from the Editor-in-Chief

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