



Microbial Degradation of Biodegradable Polymers

Guest Editors:

Prof. Dr. Terence L. Marsh

Department of Microbiology and
Molecular Genetics, Michigan
State University, East Lansing, MI,
USA

Prof. Dr. Rafael Auras

Department of Microbiology and
Molecular Genetics, Biomedical &
Physical Sciences, Michigan State
University, East Lansing, MI
48824-1223, USA

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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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Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

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*International Journal of Molecular
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MDPI, St. Alban-Anlage 66
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