Special Issue

Biodegradable Polymers: From Chemical Synthesis to Biodegradable Mechanism

Message from the Guest Editors

In recent years, there has been an increase in interest in biodegradable polymers. They are useful in agriculture, packaging, biomedical, and other areas, and represent the most acceptable means of solving the many environmental issues related to non-biodegradable polymers.

Three types of synthetic bio-composites that are commonly used in biodegradable polymers are the following: (1) polyesters, (2) polymers containing both ester and other heteroatom-containing linkages in the main chains, and (3) polymers with heteroatom-containing linkages other than ester linkages in the main chains.

This Special Issue welcomes an overview of the different biodegradable polymers, such as biodegradability, design and modification, structure, hydrolysis kinetics, and properties research, as well as new developments in their synthesis. All research should focus on providing insight into the molecular structure. Studies of the physical and chemical mechanisms by which the major classes of polymers are degraded are also welcomed.

Guest Editors

Dr. Ling-Ping Xiao Dr. Oana Lelia Pop

Prof. Dr. Gabrijel Ondrasek

Deadline for manuscript submissions

closed (30 August 2025)



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International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

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Message from the Editor-in-Chief

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Editor-in-Chief

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

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