

Special Issue

Design, Characterization, and Applications of Biodegradable Polymers

Message from the Guest Editors

The design, characterization, and applications of biodegradable polymers offer a sustainable solution to reduce environmental impact and promote a circular economy. Designing polymers that can decompose into harmless byproducts in short periods of time from different sources of natural resources makes it possible to significantly reduce plastic pollution, such as the presence of waste in our oceans and landfills, and, at the same time, incorporate them back into the ecosystem in a natural form. The characterization of these polymers is crucial to understanding their behavior and properties, which allows optimizing their performance and properties for various applications. From packaging materials to medical devices, biodegradable polymers offer a versatile and ecological alternative to traditional plastics, which is why it is important to promote research into functional changes in the structure of polymers, mixing different polymers, adding other compounds, and many other strategies that can generate biodegradable polymers to change to a greener and more sustainable future for generations to come.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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