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Natural-Based Biodegradable Polymeric Materials II

Guest Editor:

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Message from the Guest Editor

Biodegradable polymers are polymeric materials that degrade naturally through microbiological and chemical processes. Such materials have real-world applications in a variety of human activities.

First, the use of biodegradable materials is justified in the field of biomedicine, including for the controlled delivery of drugs and the creation of implants for tissue engineering. The scaffolds used for in situ tissue engineering include hydrogels, aerogels, films, nanoparticles, monolithic, fibrous, microporous, and 3D-printed scaffolds. Biodegradable materials may be functional at the time of implantation or have the ability to perform the intended function after implantation and integrate into the host.

Other applications are also relevant, such as environmental protection (packaging materials with controlled degradation rates) and agriculture. Edible and/or biodegradable packages formed from multiple compounds (composite materials) are being developed to exploit the functional properties of constituent materials and overcome their respective disadvantages.



Specialsue





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Message from the Editor-in-Chief

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