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Polymeric Biomaterials: Characterization and Application

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Message from the Guest Editors

Dear Colleagues,

Polymeric biomaterials have initially intended to achieve mechanical and structural compatibility and biological inertness. However, the search for ideal polymeric materials for the medical and surgical applications has led to the development of a family of biodegradable and biocompatible polymeric biomaterials. With the growing understanding of the research community of the biological response to current polymeric biomaterials, there is an increased interest in developing tailor-made polymers such as bioactive, biomimetic, and smart polymeric biomaterials.

With the advances in manufacturing technologies, there is an increased interest in developing complex three-dimensional (3D) polymeric biomaterials using additive-manufacturing for biomedical applications. As a result, polymeric biomaterials that replicate the function, structure and properties of the real human tissues could be realised, tested, and used in clinical applications.

This Special Issue will cover research related to the synthesis and characterisation, biodegradation, biocompatibility, finite-element analysis, mechanical properties of all types of polymeric biomaterials.













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Message from the Editor-in-Chief

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