

Special Issue

Synthesis, Biomanufacturing, and Bio-Application of Advanced Polymers

Message from the Guest Editors

Advanced polymers for biological applications represent foundational scaffold components in tissue engineering, regenerative medicine, and other medical fields.

Tailoring the advanced properties offered by the polymer's compositions, structures, and functionalities through biomanufacturing techniques to interface living matter has sparked remarkable interdisciplinary research interest. These techniques include, but are not limited to, 3D printing, electrospinning, microfluidics, injectables, patterning, and casting. Biomanufacturing techniques combine biomechanical modelling, engineering reformation, material functionalisation, and cell biology development to construct innovative results that could benefit clinical applications in the future. This Special Issue aims to showcase the state-of-the-art advances in polymer-related medical applications such as synthetic cell and tissue, coacervate, drug delivery, biomedical sensing and treatment, bio-inspired devices, biological interfaces, organoids, induced pluripotent stem cells, etc. We look forward to your submission of intriguing results that will enrich and inspire this interdisciplinary field.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the *Journal of Functional Biomaterials (JFB)* is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. *JFB* seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

Editor-in-Chief

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