



Synthetic Polymers for the Delivery of Vaccines and Therapeutics

Guest Editor:

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Message from the Guest Editor

Synthetic polymers have been widely explored for life sciences applications, including those for the delivery of therapeutic drugs and vaccines. Although only a small fraction of these polymers are currently approved for human use, the quest for novel multifunctional materials to satisfy unmet medical needs continues.

The aim of this Special Issue is to provide a comprehensive overview of biodegradable synthetic macromolecules for the delivery of biotechnological drugs and preventive vaccines, the development of polymers for biological interfaces, drug-eluting coronary stents and medical implants, and biologically active polymer-based materials for tissue repair and regeneration. The topics include the synthesis of biodegradable and bioactive polymers, the stability of biomaterials and mechanisms of their hydrolytic or enzymatic degradation, advances in modulated drug release, polymer self-assembly and supramolecular architectures, PEG alternatives, nano-engineering of coatings and three-dimensional matrices, multifunctional systems with targeting capabilities, smart delivery vehicles and polymers for image-guided therapies.





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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.

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