







Special Issue Reprint

# Biopolymers in Drug Delivery and Regenerative Medicine

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Biopolymers including natural (e.g., polysaccharides, proteins, gums, natural rubbers, bacterial polymers), synthetic (e.g., aliphatic polyesters and polyphosphoester), and biocomposites are of paramount interest in regenerative medicine, due to their availability, processability, and low toxicity. Moreover, the structuration of biopolymer-based materials at the nano- and microscale along with their chemical properties are crucial in the engineering of advanced carriers for drug products. Finally, combination products including or based on biopolymers for controlled drug release offer a powerful solution to improve the tissue integration and biological response of these materials. Understanding the drug delivery mechanisms, efficiency, and toxicity of such systems may be useful for regenerative medicine and pharmaceutical technology.

The main aim of the Special Issue on "Biopolymers in Drug Delivery and Regenerative Medicine" is to gather recent findings and current advances on biopolymer research for biomedical applications, particularly in regenerative medicine, wound healing, and drug delivery. Contributions to this issue can be as original research or review articles and may cover all aspects of biopolymer research, ranging from the chemical synthesis and characterization of modified biopolymers, their processing in different morphologies and hierarchical structures, as well as their assessment for biomedical uses.



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