



Biomedical Applications of Polymer-Based Nanomaterials

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Message from the Guest Editors

Dear Colleagues,

Antimicrobial resistance occurs when bacteria, viruses, fungi, and parasites evolve over time and become less drug-responsive, making infections more difficult to treat and raising the risk of sickness, severe illness, and death. Antibiotics and other antimicrobial drugs are rendered ineffective by drug resistance, and infections are becoming increasingly difficult or impossible to treat. Therefore, it is necessary to design and develop new compounds that overcome these limitations. Nanotechnology is assumed to be the subsequent industrial revolution and considered to have tremendous effectiveness on the community, economics, and the common world. Recently, nanomaterials based on polymers have received much attention in the medical field. Their application in nanomedicine can improve bioavailability, pharmacokinetics, and, therefore, the effectiveness of various therapeutics agents. Thus, nanomaterials based on polymers can be used for various biomedical applications. The focus of this Special Issue will be on the synthesis, characterization, antimicrobial, anticancer, antiviral, and antioxidant activities of polymer-based nanomaterials.





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