Special Issue

Polymeric Biomaterials for Drug Delivery

Message from the Guest Editor

Polymeric biomaterials have revolutionized drug delivery by enabling precise targeting, optimized dosing, and controlled therapeutic release. Their inherent structural versatility and chemical tunability facilitate the development of advanced delivery systems tailored to diverse clinical needs. Recent innovations include biodegradable polymers for localized and sustained drug release, stimuli-responsive materials that react to physiological cues, and nanoscale carriers engineered for site-specific accumulation. This Special Issue aims to highlight cutting-edge research on the design, synthesis, characterization, and application of polymeric biomaterials for the delivery of different types of drugs, ranging from small molecules to large biologics or nucleic acids. Topics of interest include, but are not limited to:

- Design and synthesis of novel polymeric drug carriers;
- Stimuli-responsive polymers;
- Biodegradable and biocompatible delivery platforms;
- Gene and nucleic acid delivery platforms;
- Polymeric nanoparticles, micelles, and dendrimers;
- Targeted delivery approaches for cancer, inflammation, and chronic diseases.

Guest Editor

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Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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