

Special Issue

Recent Advances in Polymeric Biomaterials

Message from the Guest Editor

Polymeric biomaterials—encompassing biopolymers, biocomposites, and bio-nanocomposites—are gaining prominence due to their versatility, biocompatibility, and cross-sector applications in medicine, agriculture, environmental science, and sustainability. Biopolymers derive from natural sources or renewable monomers, while biocomposites/bio-nanocomposites integrate biopolymer matrices with fillers (e.g., fibers, bioactive compounds, nanoparticles) to enhance mechanical strength, biodegradability, antimicrobial properties, and environmental responsiveness.

Recent innovations in material design, synthesis, and characterization have driven breakthroughs in drug delivery, tissue engineering, regenerative medicine, controlled-release fertilizers, soil remediation, and water purification. This Special Issue seeks cutting-edge contributions on advances in polymeric biomaterials, focusing on their design, synthesis, characterization, and multifunctional applications. We welcome research articles and reviews exploring how these materials revolutionize medicine, agriculture, and sustainability, offering eco-friendly solutions to global challenges.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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