

Special Issue

Bio-Based Polymer Composites and Functional Hydrogels for Active Packaging, Drug Delivery, and Wound Healing Applications

Message from the Guest Editor

This Special Issue focuses on recent advances in bio-based polymer composites and functional hydrogels designed for applications in active packaging, drug delivery, and wound healing. Emphasis is placed on sustainable materials derived from renewable resources, innovative fabrication, and modification strategies, and structure–property–function relationships. Contributions addressing antimicrobial, antioxidant, stimuli-responsive, and controlled-release functionalities are particularly welcome. Original research articles and comprehensive reviews that highlight material design, physicochemical characterization, and application performance are encouraged to advance the development of next-generation bio-based polymer systems for biomedical and packaging applications.

Guest Editor

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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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