

Special Issue

Recent Advances in Immobilization of Bioactive Molecules in Polymeric Materials

Message from the Guest Editors

The aim of this Special Issue of *Molecules* is to present high-quality research papers and reviews illustrating emerging trends in the immobilization of bioactive molecules through interactions with diverse polymer systems. Potential topics include, but are not limited to, the following:

- Immobilization of enzymes, proteins, peptides, antibodies, DNA/RNA, aptamers, hormones, drugs, and other natural or synthetic bioactive molecules.
- Polymer supports of natural, synthetic, or bioderived origin in micro-/nanoscale 1D, 2D, or 3D forms, including stimuli-responsive and molecularly imprinted polymer systems.
- Covalent coupling on polymer substrates using click chemistry, activated esters, carbodiimide chemistry, or related techniques enabling stable and stereoselective immobilization.
- Non-covalent binding via electrostatic forces, hydrogen bonding, hydrophobic interactions, or affinity motifs suitable for sensitive biomacromolecules.
- Encapsulation or entrapment in polymeric or hybrid matrices for protection and controlled release.
- Applications of polymer-immobilized biomolecules in biocatalysis, biosensing, gene/drug delivery, diagnostics, and related biotechnologies.

Guest Editors

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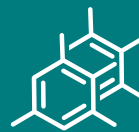
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About the Journal

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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