

Special Issue

Synthetic Chemistry in Drug Discovery: Novel Compounds for Antimicrobial and Antioxidant Applications

Message from the Guest Editor

This Special Issue focuses on recent advances in synthetic chemistry targeting the discovery of novel antimicrobial, antiproliferative, and antioxidant agents. The emergence of drug-resistant pathogens and oxidative stress-related disorders highlights the urgent need for innovative therapeutic strategies. Synthetic approaches enable the rational design and structural optimization of small molecules with improved efficacy, selectivity, and pharmacokinetic profiles. This Special Issue invites original research and review articles on the synthesis, characterization, and biological evaluation of active compounds with antimicrobial, antiproliferative, and antioxidant properties. Contributions exploring structure–activity relationships, natural product-inspired scaffolds, hybrid molecules, and mechanisms of action are encouraged. Studies employing *in vitro*, *in vivo*, or *in silico* methods to validate bioactivity are welcome. The goal is to provide a multidisciplinary platform integrating synthetic methodologies with pharmacological insights to accelerate the development of effective therapeutic candidates.

Guest Editor

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Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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