Special Issue

Synthesis and Biological Properties of Natural Product Analogues

Message from the Guest Editors

Natural products (NPs) from plants, microbes, and marine life are vital to drug discovery, forming the basis of many anticancer drugs. However, their clinical use is often hindered by poor solubility, toxicity, instability, or scarcity. The rise of multi-drug resistance and new diseases further demands improved NP-derived agents. Consequently, synthesizing and evaluating NP analogues has become a core strategy to overcome these limitations while leveraging their privileged scaffolds. This research focuses on rational design, biological profiling, and elucidating structure-activity relationships (SAR). This Special Issue, "Synthesis and Biological Properties of Natural Product Analogues," aims to overcome the challenges of native NPs and accelerate the development of novel therapeutics. It seeks to advance NP-based drug discovery against drug resistance and unmet medical needs. We welcome contributions from pharmacology, medicinal chemistry, natural product chemistry, and biotechnology.

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As the premier open access journal dedicated to molecular chemistry, now in its 29th 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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