Special Issue

Exploring Recent Research on Natural Compounds: From Biosynthesis to Application

Message from the Guest Editor

Recent studies on natural compounds highlight their biosynthesis and applications in medicine, agriculture, and industry. Advances in genomics, metabolomics, and synthetic biology have revealed key enzymes and gene clusters behind the production of alkaloids, terpenoids, flavonoids, and polyketides. This knowledge supports microbial engineering for large-scale compound production. Natural products show promise as antimicrobials, anticancer, and antioxidant agents, as well as biopesticides and growth enhancers. Research continues to improve yields and simplify complex biosynthesis.

This special issue invites articles on the role of molecules—organic compounds, proteins, phytochemicals, and microbial metabolites—in disease understanding, diagnosis, and treatment. Topics may include studies on individual compounds, plant extracts, or multi-component formulations targeting diseases like cancer, diabetes, hypertension, Alzheimer's, and Parkinson's.

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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