Special Issue

Molecular Insights into Bioactive Compounds from Agro-Industrial Waste Biomass

Message from the Guest Editors

We cordially invite researchers to contribute groundbreaking work that not only explores sophisticated extraction techniques for isolating these elusive bioactive molecules from agro-industrial waste biomass, but also delves into their molecular characterization and functional validation. We emphasize the importance of moving beyond basic component analysis to in-depth studies that elucidate the mechanisms underpinning their antioxidant, antimicrobial, or other health-promoting properties. By conducting both in vitro and in vivo experiments, we aim to bridge the gap between fundamental research and practical applications, ensuring that these discoveries translate into tangible benefits for society. Potential topics include, but are not limited to, the following:

Molecular characterization and purification of bioactive compounds from plant-derived waste; Elucidation of bioactive compound mechanisms via advanced spectroscopic and biochemical techniques; In vitro and in vivo assessment of the pharmacological, nutraceutical, and cosmetic potential of isolated bioactive molecules.

Guest Editors

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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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