

Special Issue

Phytochemical Innovations and Bioactive Compounds: From Characterization to Therapeutic Applications

Message from the Guest Editors

Phytochemicals, the cornerstone of plant-derived therapeutics, continue to revolutionize drug discovery and functional food development. This Special Issue, *Phytochemical Innovations and Bioactive Compounds: From Characterization to Therapeutic Applications*, seeks to advance research on cutting-edge methodologies for isolating, characterizing, profiling, and applying these bioactive molecules. Topics include novel extraction techniques (e.g., supercritical fluid extraction, ultrasound-assisted methods), computational approaches (molecular docking, QSAR modelling), phytochemical analysis and chemophenetics, and biotechnological strategies to enhance phytochemical production. Submissions may explore mechanistic insights into antioxidant, antimicrobial, and anticancer properties, clinical evaluations, or sustainable applications of nutraceuticals and functional foods. We encourage studies that bridges traditional knowledge with modern innovations to address global health challenges such as metabolic disorders, antimicrobial resistance, and chronic diseases.

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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