Special Issue

Research on Polyphenolic Compounds from Nature Products: Extraction, Analysis and Biological Properties

Message from the Guest Editor

Phenolic compounds are ubiquitous in plants that collectively synthesize several thousand different chemical structures characterized by hydroxylated aromatic rings. These compounds play several important functions in plants, representing a striking example of metabolic plasticity, enabling plants to adapt to changing biotic and abiotic environments, and conferring color, taste, technological properties, and putative health-promoting benefits on plant products. Phenolic compounds are the most studied phytochemicals and have been widely exploited as model systems in different areas of plant research. These components are known as secondary plant metabolites and also possess antimicrobial, antiviral, and anti-inflammatory properties, along with their high antioxidant capacity. Many efforts have been made to provide a highly sensitive and selective analytical method for the determination and characterization of polyphenols. The aim of this Special Issue is to provide information on the most recent developments in the chemical investigation of polyphenols, emphasizing the extraction, separation, and analysis of these compounds via chromatographic and spectral techniques.

Guest Editor

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As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th 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 multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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