Special Issue

Innovative Extraction Techniques to Sustainable Production in Food and Biotechnology

Message from the Guest Editors

Large amounts of agri-food by-products, non-edible food and waste are produced throughout the supply chain. The valorization of this biomass it is possible by extraction process to obtain high value-added compounds and the development and use of environmentally friendly assisted methods, since they improve extraction efficiencies while diminishing the degradation of solute compounds.
The classical extraction processes high environmental impact, require expensive safety measures owing to the toxicity and flammability of the solvents and involve high costs for solvent separation and purification and for the disposal of the solvent residues and spent solid. Supercritical fluid extraction (SFE), the use of hydrofluorocarbon solvents under subcritical conditions are examples of the most popular innovative extraction techniques owing to their high extractive yields, low environmental impact, and great process selectivity.
Keywords: Agri-Food By-Products; Biomass Valorization; Extraction Processes and Efficiencies; Organic Solvents; High Yields; Renewable Natural Products

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