

Special Issue

Essential Oils: Recent Advances in Extraction Processes, Fundamental Modeling, Chemical Analysis, and Applications

Message from the Guest Editors

The recent advances in conventional and traditional processes of essential oils (EO) extraction such as hydrodistillation, steam-distillation, hydro-diffusion, solvent, enfleurage, etc., have been recently used under various intensified routes (ultra-sound-assisted hydrodistillation, ohmic heating-assisted hydrodistillation, DIC, etc.). Other innovative and new processes have been studied and developed on an industrial scale. They have required fundamental analysis of physical transfer phenomena to use sub or supercritical-fluid extraction, microwave-assisted extraction, ultrasound-assisted extraction, DIC extraction, DIC-expansion-assisted hydrodistillation and steam-distillation, DIC-autovaporization, and MFA extraction. Specific advances in assessment by chromatography (SPME-GC, GC-FID, GC-MS, GC-MS/MS, etc.) were obtained. Studies, also, have included the impact of variability in varieties, environmental conditions, harvesting periods, etc. Therefore, one of the major emerging aspects in essential oil extraction from several plants has been to perform multi-valorization by extracting several non-volatile bioactive compounds such as antioxidants, etc.

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Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, *Foods* has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

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