A. Meullemiestre, C. Breil, M. Abert-Vian, F. Chemat

Modern Techniques and Solvents for the Extraction of Microbial Oils

Series: SpringerBriefs in Green Chemistry for Sustainability

A valuable reference presenting many processes that facilitate lipid extraction from microorganisms. Amongst the techniques included are Folch, Bligh and Dyer methods, and the Soxhlet technique as well as intensified green processes (ultrasound, microwave, supercritical fluid extraction, agro-solvent, accelerated solvent extraction, enzyme-assisted extraction, instant controlled pressure drop, pulse electric field). In addition to a section featuring the analysis of fatty acids by Gas Chromatography and lipids by High-Performance Thin-Layer Chromatography (HPTLC), this brief contains a valuable bibliography on microorganisms (classes, structures) and their applications as a source of value added oils and compounds for food and non-food applications such as biojet fuel.