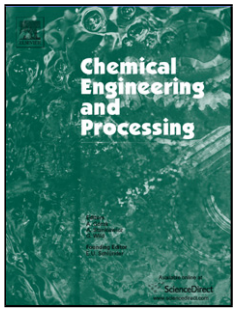

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Biodiesel production from *Neochloris oleoabundans* by supercritical technology

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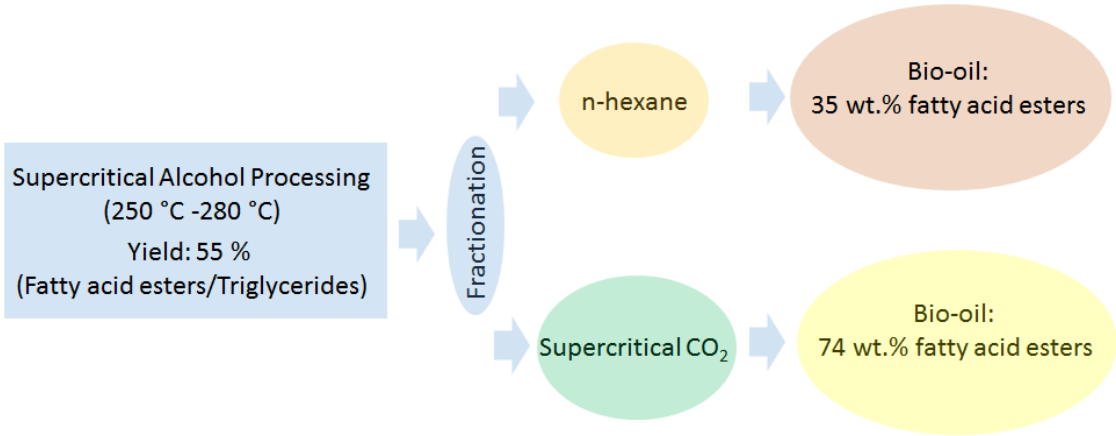
Graphical Abstract



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Highlights

- Fatty acid esters were obtained by supercritical alcohol processing of microalgae
- Products were sensitive to reaction conditions and solvent used in the fractionation
- Bio-oils with high fatty acid esters contents were obtained by supercritical CO_2.

Abstract. Oleaginous microalgae have been proposed as a sustainable alternative biomass to produce biodiesel in order to substitute conventional vegetable oils derived from oilseed crops. Particularly, recent studies pointed out the potential of *N. oleoabundans,* cultured in seawater or in anaerobically digested dairy manure, to produce triglycerides with high content of monounsaturated fatty acids. The supercritical technology has been recognized as a green