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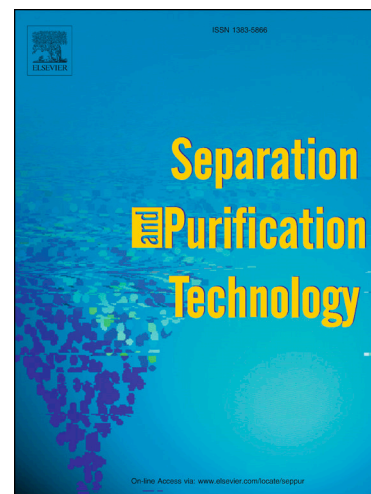
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# Demulsification of Water-in-Crude Oil Emulsions using Single Mode and Multimode Microwave Irradiation

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KEYWORDS: demulsification; petroleum; microwave radiation; applying mode.

## ABSTRACT

During petroleum production and refining, water-in-crude oil emulsions are formed in a desirable or undesirable fashion. However, for economic and operational reasons it is necessary to separate water from oil. In order to present an alternative to the currently available techniques used to solve such task, this study aims to analyze the influence of microwave application modes (multimode and single mode) on the breaking efficiency of a synthetic water-in-crude oil

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