

## Accepted Manuscript

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PII: S1383-5866(17)33412-3  
DOI: <https://doi.org/10.1016/j.seppur.2018.02.041>  
Reference: SEPPUR 14405

To appear in: *Separation and Purification Technology*

Received Date: 19 October 2017  
Revised Date: 20 February 2018  
Accepted Date: 20 February 2018

Please cite this article as: S. Mohsen Samaei, S. Gato-Trinidad, A. Altaee, The Application of Pressure-Driven Ceramic Membrane Technology for the Treatment of Industrial Wastewaters -A Review, *Separation and Purification Technology* (2018), doi: <https://doi.org/10.1016/j.seppur.2018.02.041>

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# The Application of Pressure-Driven Ceramic Membrane Technology for the Treatment of Industrial Wastewaters -A Review

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## Abstract

This paper presents a review of the previous laboratory analysis and case studies on the application of the pressure-driven ceramic membrane technology for treatment of industrial wastewaters. Ceramic membranes has attracted remarkable interests in recent decades for industrial wastewater treatment because of their superior characteristic such as high fluxes , reliable working lifetime under aggressive operating conditions and ease of cleaning. The literature review revealed that the efficiency of this technology has been proven in a wide variety of wastewaters from different industries and activities including pulp and paper, textile, pharmaceutical, petrochemical, food and mining. However, there are still challenges and questions for this technology that need to be addressed in future researches such as investment cost optimisation by introducing new fabrication technologies, selectivity, permeability and packing densities improvement, fouling minimisation and proposing scale up based on experimental research results.

*Keywords: Industrial wastewater, ceramic membrane, Microfiltration, Ultrafiltration, Nanofiltration*

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