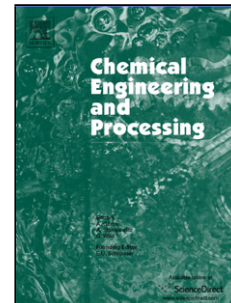


Accepted Manuscript

Title: Techno-economic feasibility study of membrane based propane/propylene separation process

Authors: Ung Lee, Jeongnam Kim, Il Seok Chae, Chonghun Han



PII: S0255-2701(16)30665-1
DOI: <http://dx.doi.org/doi:10.1016/j.cep.2017.05.013>
Reference: CEP 6997

To appear in: *Chemical Engineering and Processing*

Received date: 12-12-2016
Revised date: 21-2-2017
Accepted date: 20-5-2017

Please cite this article as: Ung Lee, Jeongnam Kim, Il Seok Chae, Chonghun Han, Techno-economic feasibility study of membrane based propane/propylene separation process, *Chemical Engineering and Processing* <http://dx.doi.org/10.1016/j.cep.2017.05.013>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Techno-Economic Feasibility Study of Membrane Based Propane/Propylene Separation Process

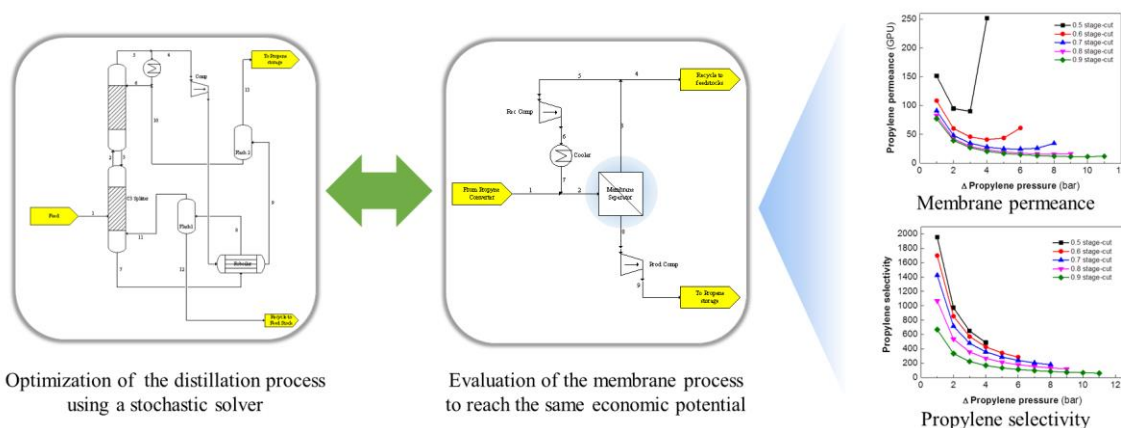
Ung Lee^{a†}, Jeongnam Kim^{b†} Il Seok Chae^{c*} Chonghun Han^{b*}

^aAVT Process Systems Engineering (SVT), RWTH Aachen University, Trumstrass 46, Aachen, 52064, Germany

^bSchool of Chemical and Biological Engineering, Seoul National University, Gwanak-ro 1, Gwanak-gu, Seoul 08826, South Korea

^cDWI Leibniz-Institut für Interaktive Materialien e.V., Forckenbeckstr. 50, Aachen, 52074, Germany

Graphical Abstract



Highlights

- Manuscript title: Techno-Economic Feasibility Study of Membrane Based Propane/Propylene Separation Process
- Ung Lee, Jeongnam Kim, Il Seok Chae, and Chonghun Han*
- Propose minimum specifications of economically attractive C3 separation membrane
- Techno economic optimization of the propylene separation process.
- Investigation of membrane specifications in terms of stage cut and pressure drop.
- Membrane specification changes are identified as the cost and feed condition varies

Corresponding Author:

Chonghun Han, Professor

School of Chemical and Biological Engineering and Institute of Chemical Processes,
Seoul National University, Gwanak-ro 1, Gwanak-gu, Seoul 08826, South Korea

Tel: +82-2-880-1887

Fax: +82-2-873-2767

E-mail: chhan@snu.ac.kr

[†]Both authors contributed equally

*Author to whom correspondence should be addressed.

Tel.: 82 (0)2/880-1887; E-mail: chhan@snu.ac.kr

Download English Version:

<https://daneshyari.com/en/article/4998194>

Download Persian Version:

<https://daneshyari.com/article/4998194>

[Daneshyari.com](https://daneshyari.com)