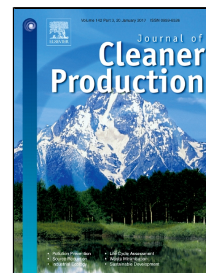


Accepted Manuscript

Characteristic of air separation in hollow-fiber polymeric membrane for oxygen enriched air clean combustion applications

Mohamed A. Habib, Medhat A. Nemitallah, Diao Afaneh, Khaled Mezghani



PII: S0959-6526(16)32080-7
DOI: 10.1016/j.jclepro.2016.12.025
Reference: JCLP 8600
To appear in: *Journal of Cleaner Production*

Received Date: 19 September 2016
Revised Date: 11 November 2016
Accepted Date: 06 December 2016

Please cite this article as: Mohamed A. Habib, Medhat A. Nemitallah, Diao Afaneh, Khaled Mezghani, Characteristic of air separation in hollow-fiber polymeric membrane for oxygen enriched air clean combustion applications, *Journal of Cleaner Production* (2016), doi: 10.1016/j.jclepro.2016.12.025

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.

The authors like to highlight the following points:

1. Characteristics of air separation in hollow-fiber polymeric membrane are studied.
2. Highly oxygenated air is obtained using polymers for clean combustion applications.
3. Detailed numerical study is presented for air separation using different polymers.
4. Effects of feed and sweep flows and pressure on permeation fluxes are investigated.
5. Targeting higher exit O₂ concentrations, multi-stage air separation unit is developed.

Download English Version:

<https://daneshyari.com/en/article/5481140>

Download Persian Version:

<https://daneshyari.com/article/5481140>

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