### Accepted Manuscript

#### Research Paper

Innovative propane-nitrogen two-phase expander refrigeration cycle for energyefficient and low-global warming potential LNG production

Muhammad Abdul Qyyum, Kinza Qadeer, Sanggyu Lee, Moonyong Lee

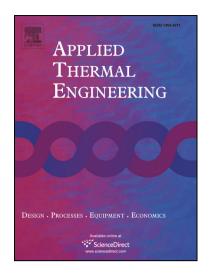
PII: S1359-4311(17)38155-3

DOI: https://doi.org/10.1016/j.applthermaleng.2018.04.105

Reference: ATE 12102

To appear in: Applied Thermal Engineering

Received Date: 25 December 2017 Revised Date: 18 April 2018 Accepted Date: 22 April 2018



Please cite this article as: M. Abdul Qyyum, K. Qadeer, S. Lee, M. Lee, Innovative propane-nitrogen two-phase expander refrigeration cycle for energy-efficient and low-global warming potential LNG production, *Applied Thermal Engineering* (2018), doi: https://doi.org/10.1016/j.applthermaleng.2018.04.105

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.

### **ACCEPTED MANUSCRIPT**

## Innovative propane-nitrogen two-phase expander refrigeration cycle for energyefficient and low-global warming potential LNG production

Muhammad Abdul Qyyum<sup>a</sup>, Kinza Qadeer<sup>a</sup>, Sanggyu Lee<sup>b</sup>, and Moonyong Lee<sup>a, \*</sup>

<sup>a</sup>School of Chemical Engineering, Yeungnam University, Gyeongsan 712-749, Rep. of Korea <sup>b</sup>Gas Plant R&D Center, Korea Gas Corporation, Incheon 406-130, Rep. of Korea

Submitted to: Applied Thermal Engineering

\*Correspondence concerning this article should be addressed to:

Prof. Moonyong Lee

Email: mynlee@yu.ac.kr

Telephone: +82-53-810-2512

#### Download English Version:

# https://daneshyari.com/en/article/7045105

Download Persian Version:

https://daneshyari.com/article/7045105

<u>Daneshyari.com</u>