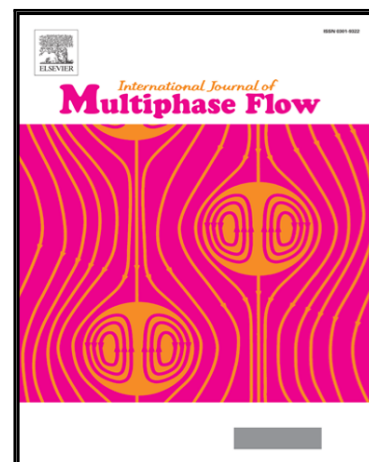


Accepted Manuscript

Numerical investigation of pool boiling on a staggered tube bundle for different working fluids

A. Ahmadpour , S. M. A. Noori Rahim Abadi , J.P. Meyer

PII: S0301-9322(17)30078-2
DOI: [10.1016/j.ijmultiphaseflow.2018.03.008](https://doi.org/10.1016/j.ijmultiphaseflow.2018.03.008)
Reference: IJMF 2763



To appear in: *International Journal of Multiphase Flow*

Received date: 1 February 2017
Revised date: 26 November 2017
Accepted date: 7 March 2018

Please cite this article as: A. Ahmadpour , S. M. A. Noori Rahim Abadi , J.P. Meyer , Numerical investigation of pool boiling on a staggered tube bundle for different working fluids, *International Journal of Multiphase Flow* (2018), doi: [10.1016/j.ijmultiphaseflow.2018.03.008](https://doi.org/10.1016/j.ijmultiphaseflow.2018.03.008)

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.

Research highlights:

- Pool boiling fluid flow and heat transfer was numerically investigated on a staggered tube bundle.
- Heat transfer coefficient increased with increase of the saturation temperature and pressure.
- *HTC* along the bundle increased when the heat flux was below 60 kW/m^2 for water.
- Bundle effect vanished at high values of heat flux.
- At the same saturation temperature, ethanol had a better thermal performance compared to water.

Download English Version:

<https://daneshyari.com/en/article/7060094>

Download Persian Version:

<https://daneshyari.com/article/7060094>

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