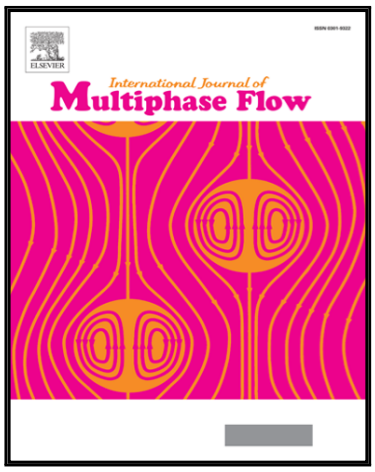
Accepted Manuscript



A Computational Approach to Predict External Spray Characteristics for Flashing and Cavitating Nozzles

Sampath K. Rachakonda, Yue Wang, Ronald O. GroverJr., Maryam Moulai, Eli Baldwin, Gaoming Zhang, Scott Parrish, Ramachandra Diwakar, Tang-Wei Kuo, David P. Schmidt

PII: S0301-9322(17)30368-3
DOI: 10.1016/j.ijmultiphaseflow.2018.04.012
Reference: IJMF 2791

To appear in: *International Journal of Multiphase Flow*

Received date: 31 May 2017
Revised date: 26 January 2018
Accepted date: 23 April 2018

Please cite this article as: Sampath K. Rachakonda, Yue Wang, Ronald O. GroverJr., Maryam Moulai, Eli Baldwin, Gaoming Zhang, Scott Parrish, Ramachandra Diwakar, Tang-Wei Kuo, David P. Schmidt, A Computational Approach to Predict External Spray Characteristics for Flashing and Cavitating Nozzles, *International Journal of Multiphase Flow* (2018), doi: 10.1016/j.ijmultiphaseflow.2018.04.012

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

Highlights

- Application of Liquid-gas interface area-density model to identity the spray plume boundary in flashing and cavitating nozzles.
- A detailed explanation of a computational approach to predict external spray characteristics like spray plume angle.
- The proposed approach offers a meaningful comparison to the experimental definition of spray plume boundary.
- Model predictions were validated against available experimental results.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/7060041

Download Persian Version:

https://daneshyari.com/article/7060041

Daneshyari.com