Accepted Manuscript

Comparative evaluation of phase-change mechanisms for the prediction of flashing flows

I.K. Karathanassis, P. Koukouvinis, M. Gavaises

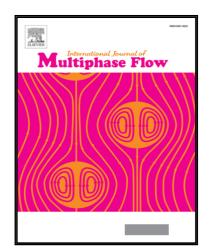
PII: \$0301-9322(16)30677-2

DOI: 10.1016/j.ijmultiphaseflow.2017.06.006

Reference: IJMF 2607

To appear in: International Journal of Multiphase Flow

Received date: 7 November 2016 Revised date: 6 June 2017 Accepted date: 11 June 2017



Please cite this article as: I.K. Karathanassis, P. Koukouvinis, M. Gavaises, Comparative evaluation of phase-change mechanisms for the prediction of flashing flows, *International Journal of Multiphase Flow* (2017), doi: 10.1016/j.ijmultiphaseflow.2017.06.006

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

- Numerical investigation of flash boiling in wall-confined flows.
- Different modelling approaches for predicting phase-change comparatively examined.
- Effect of nucleation-site density and thermal non-equilibrium on mass-transfer illustrated.
- Onset of flash boiling linked to compressible flow expansion downstream the nozzle outlet.
- Models based on the kinetic theory of gases capable of predicting flashing flow in all examined cases.

Download English Version:

https://daneshyari.com/en/article/4994880

Download Persian Version:

https://daneshyari.com/article/4994880

<u>Daneshyari.com</u>