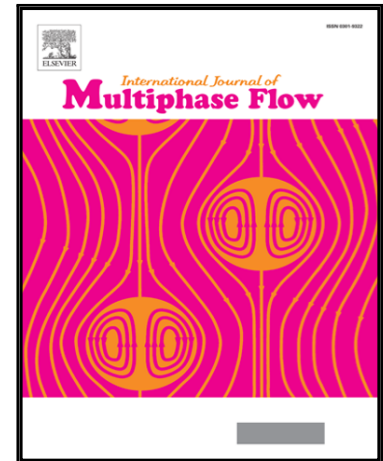


Accepted Manuscript

The significance of drop non-sphericity in sprays

Rainer N. Dahms, Joseph C. Oefelein

PII: S0301-9322(15)30104-X
DOI: [10.1016/j.ijmultiphaseflow.2016.07.010](https://doi.org/10.1016/j.ijmultiphaseflow.2016.07.010)
Reference: IJMF 2441



To appear in: *International Journal of Multiphase Flow*

Received date: 16 October 2015
Revised date: 7 July 2016
Accepted date: 10 July 2016

Please cite this article as: Rainer N. Dahms, Joseph C. Oefelein, The significance of drop non-sphericity in sprays, *International Journal of Multiphase Flow* (2016), doi: [10.1016/j.ijmultiphaseflow.2016.07.010](https://doi.org/10.1016/j.ijmultiphaseflow.2016.07.010)

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.

Highlights

- Multicomponent real-fluid thermodynamics facilitate accurate simulations of drop dynamics
- Large-eddy simulations capture the coupling with gas phase dynamics
- Effects of drop non-sphericity on drag, evaporation, and heating are quantified
- Models to extend existing spherical drop models to include drop non-sphericity are proposed
- A new set of equations is proposed to improve breakup modeling

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/666563>

Download Persian Version:

<https://daneshyari.com/article/666563>

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