Accepted Manuscript

Numerical simulation of axisymmetric drop formation using a coupled level set and volume of fluid method

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 PII:
 S0301-9322(15)30039-2

 DOI:
 10.1016/j.ijmultiphaseflow.2016.04.002

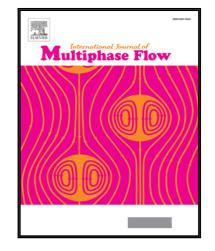
 Reference:
 IJMF 2370

To appear in: International Journal of Multiphase Flow

Received date:9 September 2015Revised date:2 February 2016Accepted date:3 April 2016

Please cite this article as: I. Chakraborty, M. Rubio-Rubio, A. Sevilla, J.M. Gordillo, Numerical simulation of axisymmetric drop formation using a coupled level set and volume of fluid method, *International Journal of Multiphase Flow* (2016), doi: 10.1016/j.ijmultiphaseflow.2016.04.002

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Highlights

- The axisymmetric formation of drops is presented numerically.
- An interface capturing code based on a CLSVOF method is used to perform numerical simulations.
- The present computations cover the rich dynamics of dripping, jetting and the transition of different responses.
- The present results are compared successfully with the experimental results of previous investigation.
- The present predicted results show more accurate than the numerical results obtained from 1D simulations of previous investigation.
- The existence of new dynamics period-2 with satellite (P2S) response is shown.

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