

Submission Metadata

Authors

Name	Thomas Ken Darmastono 
Affiliation	Sekolah Tinggi Teknologi Adisutjipto
Country	Indonesia
Bio Statement	—

Name	Bahrul Jalaali 
Affiliation	Sekolah Tinggi Teknologi Adisutjipto
Country	—
Bio Statement	—

Principal contact for editorial correspondence.

Title and Abstract

Title	LATTICE BOLTZMANN PSEUDO-POTENTIAL MODELLING OF MULTIPHASE DROPLET PHENOMENA
-------	--

Abstract	<p><i>The multiphase modeling of a droplet in a multiphase system is considered becoming a fundamental problem in fluid dynamics. A complex understanding of droplet behavior is critical to reveal a deeper insight into a more complex multiphase system. Droplet behavior studies are necessary to obtain a better understanding of solving multiphase problems in both the science and industrial aspect. The droplet behavior is characterized by a non-dimensional number such as the Eötvös number. In this study, numerical simulation was performed using the Lattice Boltzmann method. Parametric studies of Eötvös number was done. The parametric study of the Eo number is obtained using LBM. Based on the results obtained, it is concluded that the gravitational force influences the downwards rate of the droplet. Furthermore, the shape of the droplet during falling was depended on the Eo number as well. The higher Eo number means higher gravitational force, hence the velocity of the droplet is increasing as well as the reaction force of surface tension. This study is beneficial to give a deeper explanation of multiphase phenomena as well as contribute to the modeling of multiphase phenomena using an alternative numerical method of LBM.</i></p>
----------	---

Editor/Author Correspondence

Editor

[Delete](#)

2020-11-20 04:35
PM

<https://ejournals.itda.ac.id/index.php/compiler/author/deleteComment/835/706>

Subject: [Compiler] Editor Decision

Bahrul Jalaali:

We have reached a decision regarding your submission to Compiler, "LATTICE BOLTZMANN PSEUDO-POTENTIAL MODELLING OF MULTIPHASE DROPLET PHENOMENA".

Our decision is: Minor Revisions

Hero Wintolo

Sekolah Tinggi Teknologi Adisutjipto Yogyakarta

herowintolo@stta.ac.id

Reviewer A:

Relevance and Timeliness: Rate the importance and timeliness of the topic addressed in the paper within its area of research.:

Good

Technical content and scientific rigour. Rate the technical content of the paper (e.g.: completeness of the analysis or simulation study, thoroughness of the treatise, accuracy of the models, etc.), its soundness and scientific rigour:

Solid work of notable importance.

Novelty and originality. Rate the novelty and originality of the ideas or results presented in the paper.:

Significant original work and novel results.

Quality of presentation: Rate the paper organization, the clearness of text and figures, the completeness and accuracy of references.:

Well written.

Detailed Comments: Please elaborate your recommendation and suggest improvements in technical content:

The article LATTICE BOLTZMANN PSEUDO-POTENTIAL MODELLING OF MULTIPHASE DROPLET PHENOMENA can be accepted for publishing after some issues be explained.

1. "it can be seen that Case C will rapidly go downwards than both cases A and B " should be case A and B.
2. Does the air friction has a significant effect of the deformation of droplet during ?
3. The simulation result should be compared to previous researches.

Recommendation: How do you rate your recommendation?:

Accepted with minor revisions

Reviewer B:

Relevance and Timeliness: Rate the importance and timeliness of the topic addressed in the paper within its area of research.:

Acceptable

Technical content and scientific rigour. Rate the technical content of the paper (e.g.: completeness of the analysis or simulation study, thoroughness of the treatise, accuracy of the models, etc.), its soundness and scientific rigour:

Solid work of notable importance.

Novelty and originality. Rate the novelty and originality of the ideas or results presented in the paper.:

Some interesting ideas and results on a subject well investigated.

Quality of presentation: Rate the paper organization, the clearness of text and figures, the completeness and accuracy of references.:

Well written.

Detailed Comments: Please elaborate your recommendation and suggest improvements in technical content:

At the end, it is necessary to write down the limitations of this paper.

What about future research?

Recommendation: How do you rate your recommendation?:

Accepted with minor revisions

Compiler

<http://ejournals.stta.ac.id/index.php/compiler>

Editor

2020-12-07 08:31

AM

Delete

<https://ejournals.itda.ac.id/index.php/compiler/author/deleteComment/835/727>

Subject: [Compiler] Editor Decision

Bahrul Jalaali:

We have reached a decision regarding your submission to Compiler, "LATTICE BOLTZMANN PSEUDO-POTENTIAL MODELLING OF MULTIPHASE DROPLET PHENOMENA".

Our decision is to: Accept Submission

Hero Wintolo

Sekolah Tinggi Teknologi Adisutjipto Yogyakarta

herowintolo@stta.ac.id

Compiler

<http://ejournals.stta.ac.id/index.php/compiler>

Close

