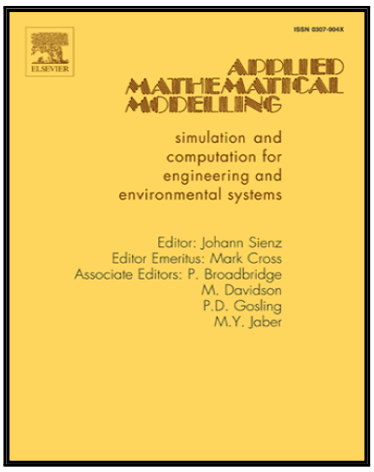
Accepted Manuscript



Suspension modeling using smoothed particle hydrodynamics: accuracy of the viscosity formulation and the suspended body dynamics

Pit Polfer, Torsten Kraft, Claas Bierwisch

PII: S0307-904X(15)00658-7
DOI: 10.1016/j.apm.2015.10.013
Reference: APM 10823

To appear in: *Applied Mathematical Modelling*

Received date: 19 March 2015
Revised date: 1 October 2015
Accepted date: 6 October 2015

Please cite this article as: Pit Polfer, Torsten Kraft, Claas Bierwisch, Suspension modeling using smoothed particle hydrodynamics: accuracy of the viscosity formulation and the suspended body dynamics, *Applied Mathematical Modelling* (2015), doi: 10.1016/j.apm.2015.10.013

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 modeling of suspensions with smoothed particle hydrodynamics.
- 3d simulations are carried out which include non-spherical suspended solids.
- Two different formulations for the viscosity in SPH are compared.
- Dynamics of the suspended solids under homogeneous shear is investigated.
- Guidelines for suspension modeling using SPH are given.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/10677515

Download Persian Version:

https://daneshyari.com/article/10677515

Daneshyari.com