Accepted Manuscript

Simulation of the Spherical Orientation Probability Distribution of Paper Fibers in an Entire Suspension Using Immersed Boundary Methods

Tomas Johnson, Pekka Röyttä, Andreas Mark, Fredrik Edelvik

PII:	S0377-0257(16)00004-5
DOI:	10.1016/j.jnnfm.2016.01.001
Reference:	JNNFM 3732

To appear in: Journal of Non-Newtonian Fluid Mechanics

Received date:	13 August 2015
Revised date:	7 January 2016
Accepted date:	9 January 2016

Please cite this article as: Tomas Johnson, Pekka Röyttä, Andreas Mark, Fredrik Edelvik, Simulation of the Spherical Orientation Probability Distribution of Paper Fibers in an Entire Suspension Using Immersed Boundary Methods, *Journal of Non-Newtonian Fluid Mechanics* (2016), doi: 10.1016/j.jnnfm.2016.01.001

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

- Transient modeling of the fiber suspension orientation density using the Fokker-Planck equation
- Computation of the two dimensional orientation density of paper fiber suspensions in the entire fluid domain
- Simulations possible for arbitrary geometries using immersed boundary methods
- Validation of the method using head-box geometry

Download English Version:

https://daneshyari.com/en/article/670449

Download Persian Version:

https://daneshyari.com/article/670449

Daneshyari.com