Accepted Manuscript

An experimental investigation of the motion of long bubbles in high viscosity slug flow in horizontal pipes

Kjell H. Bendiksen, Morten Langsholt, Lan Liu

 PII:
 S0301-9322(17)30773-5

 DOI:
 10.1016/j.ijmultiphaseflow.2018.03.010

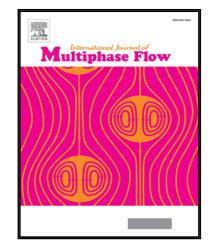
 Reference:
 IJMF 2765

To appear in: International Journal of Multiphase Flow

Received date:10 October 2017Revised date:6 February 2018Accepted date:8 March 2018

Please cite this article as: Kjell H. Bendiksen, Morten Langsholt, Lan Liu, An experimental investigation of the motion of long bubbles in high viscosity slug flow in horizontal pipes, *International Journal of Multiphase Flow* (2018), doi: 10.1016/j.ijmultiphaseflow.2018.03.010

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

- The effect of viscosity on slug bubble velocities has been quantified, based on a series of 240 experiments, in order to improve predictive models of slug flow in the laminar region.
- The dependency of individual slug bubble velocities on slug lengths and bubble nose shape and position has been investigated in detail for selected experiments.
- A new slug bubble velocity model is presented, incorporating viscosity, which compares well with available high viscosity slug flow data.

A

Download English Version:

https://daneshyari.com/en/article/7060092

Download Persian Version:

https://daneshyari.com/article/7060092

Daneshyari.com