Accepted Manuscript

Acceleration of instability during the capillary thinning process due to the addition of particles to a poly(ethylene oxide) solution

Jang Hoon Ock, Joung Sook Hong, Kyung Hyun Ahn

PII: S0377-0257(17)30522-0 DOI: 10.1016/j.jnnfm.2018.04.009

Reference: JNNFM 4008

To appear in: Journal of Non-Newtonian Fluid Mechanics

Received date: 15 November 2017 Revised date: 31 March 2018 Accepted date: 27 April 2018



Please cite this article as: Jang Hoon Ock, Joung Sook Hong, Kyung Hyun Ahn, Acceleration of instability during the capillary thinning process due to the addition of particles to a poly(ethylene oxide) solution, *Journal of Non-Newtonian Fluid Mechanics* (2018), doi: 10.1016/j.jnnfm.2018.04.009

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

- Particles accelerate the instability patterns in capillary thinning of suspension.
- Elevation in viscosity by particles has no effect on accelerating of instability.
- The local particle-concentration fluctuation causes flow heterogeneity in filament.
- The flow heterogeneity leads to the accelerated thinning at the neck.
- Non-uniformly distributed particles randomize the position of the first bead.



Download English Version:

https://daneshyari.com/en/article/7061066

Download Persian Version:

https://daneshyari.com/article/7061066

<u>Daneshyari.com</u>