

## Accepted Manuscript

Peristaltic Transport of Solid Particles Suspended in a Viscoplastic Fluid: a Numerical Study

N.P. Khabazi , K. Sadeghy

PII: S0377-0257(16)30135-5  
DOI: [10.1016/j.jnnfm.2016.08.001](https://doi.org/10.1016/j.jnnfm.2016.08.001)  
Reference: JNNFM 3822



To appear in: *Journal of Non-Newtonian Fluid Mechanics*

Received date: 19 December 2015  
Revised date: 2 August 2016  
Accepted date: 4 August 2016

Please cite this article as: N.P. Khabazi , K. Sadeghy , Peristaltic Transport of Solid Particles Suspended in a Viscoplastic Fluid: a Numerical Study, *Journal of Non-Newtonian Fluid Mechanics* (2016), doi: [10.1016/j.jnnfm.2016.08.001](https://doi.org/10.1016/j.jnnfm.2016.08.001)

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**

- Yield stress can have an accelerating effect on peristalsis of solid particle provided that the volume fraction is sufficiently large.
- Reynolds number can have an accelerating effect on a solid particle provided that it is sufficiently large and the Bingham number is sufficiently small.
- For viscoplastic fluids, peristaltic motion can induce larger velocity in the particle if the wave number is sufficiently large.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/4995645>

Download Persian Version:

<https://daneshyari.com/article/4995645>

[Daneshyari.com](https://daneshyari.com)