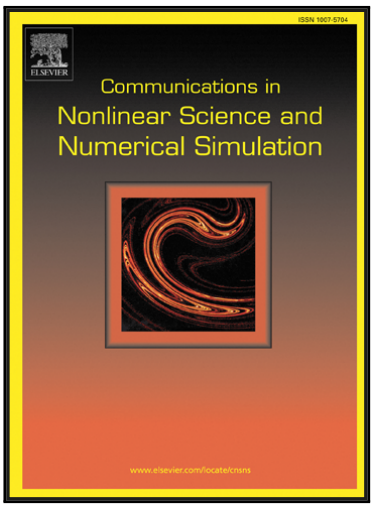

Simulations of variable concentration aspects in a fractional nonlinear viscoelastic fluid flow

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PII: S1007-5704(18)30157-6
DOI: 10.1016/j.cnsns.2018.05.012
Reference: CNSNS 4529

To appear in: *Communications in Nonlinear Science and Numerical Simulation*

Received date: 12 November 2017
Revised date: 16 April 2018
Accepted date: 16 May 2018

Please cite this article as: Amer Rasheed, Muhammad Shoaib Anwar, Simulations of variable concentration aspects in a fractional nonlinear viscoelastic fluid flow, *Communications in Nonlinear Science and Numerical Simulation* (2018), doi: 10.1016/j.cnsns.2018.05.012

Highlights

- A model for unsteady fractionalviscoelastic ow has been developed.
- Homogeneous-heterogeneous reactions has been included in flow.
- Variable concentrations sum is utilized to explore the behavior of reactions.
- Finite element-finite difference scheme is used for the simulations.
- Skin friction and concentration gradients are calculated at boundaries.