Accepted Manuscript

Effect of temperature dependent viscosity on entropy generation in transient viscoelastic polymeric fluid flow from an isothermal vertical plate

G. Janardhana Reddy, Mahesh Kumar, O. Anwar Beg

PII: S0378-4371(18)30789-1
DOI: https://doi.org/10.1016/j.physa.2018.06.065
Reference: PHYSA 19759

To appear in: *Physica A*

Received date : 14 January 2018
Revised date : 25 May 2018

Please cite this article as: G. Janardhana Reddy, M. Kumar, O. Anwar Beg, Effect of temperature dependent viscosity on entropy generation in transient viscoelastic polymeric fluid flow from an isothermal vertical plate, *Physica A* (2018), https://doi.org/10.1016/j.physa.2018.06.065

Highlights

- Entropy generation on unsteady flow of viscoelastic polymeric fluid is investigated.
- Temperature dependent viscosity effect is studied.
- Average momentum and heat transport coefficients have involved the investigation.
- Entropy and Bejan lines are discussed for different values of physical parameters.
- Flow-field profiles for second grade fluid differs with Newtonian fluids.