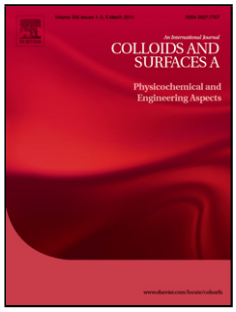


Title: Influence of Thermal Radiation and Viscous dissipation on Squeezed flow of Water between Riga Plates saturated with Carbon nanotubes

Authors: Naveed Ahmed, Adnan, Umar Khan, Syed Tauseef Mohyud-Din

PII: S0927-7757(17)30217-0
DOI: http://dx.doi.org/doi:10.1016/j.colsurfa.2017.02.083
Reference: COLSUA 21438

To appear in: *Colloids and Surfaces A: Physicochem. Eng. Aspects*

Received date: 25-1-2017
Revised date: 22-2-2017
Accepted date: 24-2-2017

Please cite this article as: Naveed Ahmed, Adnan, Umar Khan, Syed Tauseef Mohyud-Din, Influence of Thermal Radiation and Viscous dissipation on Squeezed flow of Water between Riga Plates saturated with Carbon nanotubes, Colloids and Surfaces A: Physicochemical and Engineering Aspects http://dx.doi.org/10.1016/j.colsurfa.2017.02.083

Influence of Thermal Radiation and Viscous dissipation on Squeezed flow of Water between Riga Plates saturated with Carbon nanotubes

*Naveed Ahmed, **Adnan, ***Umar Khan, *Syed Tauseef Mohyud-Din

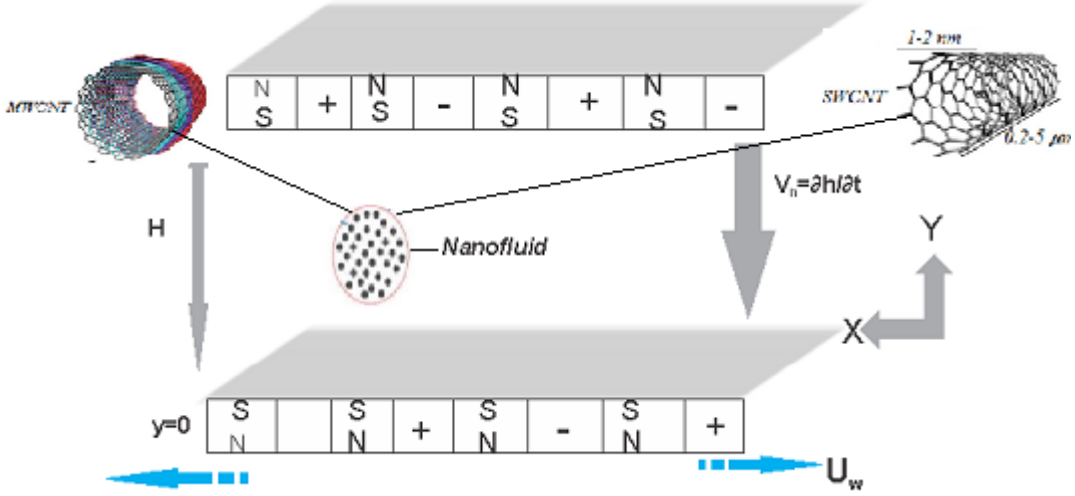
* Department of Mathematics, Faculty of Sciences, HITEC University Taxila Cantt, Pakistan

**Department of Mathematics, Mohi-ud-Din Islamic University, Narian Shareef, Azad Jammu and Kashmir, Pakistan

*** Department of Mathematics, COMSATS Institute of Information Technology Abbottabad, Pakistan

Corresponding Author (Umar Khan; umar_jadoon4@yahoo.com)

Graphical abstract



Highlights

- A novel analysis for the squeezed flow between two Riga plates is presented.
- Water is taken as the base fluid.
- Carbon nanotubes have been used as the nanoparticles.
- Analytical as well as numerical solutions for the problem are presented.
- Variations in rate of heat transfer are highlighted graphically.

Abstract: This article aims to explore the flow of water containing the Carbon nanotubes in the appropriate geometry of Riga plates. Thermal radiation and viscous dissipation effects are also taken into account. Resulting nonlinear flow model of nanofluid is obtained