

Look Up Full Text Full Text from Publisher Export... Add to Marked List

1 of 1

Mixed Convection Casson Fluid Flow over an Exponentially Stretching Sheet with Newtonian Heating Effect

By: Ahmad, K (Ahmad, Kartini)^[1]; Wahid, Z (Wahid, Zaharah)^[1]; Hanout, Z (Hanout, Zahir)^[2]

JOURNAL OF MECHANICS OF CONTINUA AND MATHEMATICAL SCIENCES

Pages: 203-214 Special Issue: 1
 DOI: 10.26782/jmcs.2019.03.00020
 Published: MAR 2019
 Document Type: Article

Abstract

This paper deals with mixed convection of Casson fluid which flows over a heated surface that has been stretched exponentially. The governing equations that govern the fluid flow are reduced to ordinary differential equations by imposing suitable similarity variables. Numerical computational was carried out to solve for the $f''(0)$ and $\theta(0)$ for some arbitrary values of the mixed convection parameter λ . Biot number Bi and Newtonian fluid parameter β when $Pr = 7$.

Keywords

Author Keywords: Mixed Convection; Newtonian Heating; Non-Newtonian Fluid

Author Information

Reprint Address: Ahmad, K (reprint author)

[1] Int Islamic Univ Malaysia, Dept Sci Engr, Kuliyah Engr, Selangor, Malaysia.

Addresses:

[1] Int Islamic Univ Malaysia, Dept Sci Engr, Kuliyah Engr, Selangor, Malaysia

[2] Int Islamic Univ Malaysia, Dept Mech Engr, Kuliyah Engr, Selangor, Malaysia

E-mail Addresses: kartini@iium.edu.my; zaharahwahid@iium.edu.my; zahir8@iium.edu.my

Funding

Funding Agency	Show details	Grant Number
Ministry of Education, Malaysia		FRGS 15-228-0469

View funding text

Publisher

INST MECHANICS CONTINUA & MATHEMATICAL SCIENCES, P-9-1, L I C TOWNSHIP, MADHYAMGRAM KOLKATA, WEST BENGAL, 700129, INDIA

Categories / Classification

Research Areas: Mechanics

Web of Science Categories: Mechanics

Document Information

Language: English
 Accession Number: WOS:000495477900020
 ISSN: 2454-7190
 eISSN: 0973-8975

Other Information

IDS Number: JI3J1
 Cited References In Web of Science Core Collection: 8
 Times Cited In Web of Science Core Collection: 0

See fewer data fields

1 of 1

Citation Network

In Web of Science Core Collection

0

Times Cited

Create Citation Alert

8

Cited References

View Related Records

Use in Web of Science

Web of Science Usage Count

0

0

Last 180 Days

Since 2013

Learn more

This record is from:

Web of Science Core Collection
 - Emerging Sources Citation Index

Suggest a correction

If you would like to improve the quality of the data in this record, please suggest a correction.