عنوان مقاله:

Newtonian and Joule Heating Effects in Two-Dimensional Flow of Williamson Fluid

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تعداد صفحات اصل مقاله: 7

نویسندگان:

T. Hayat - *Department of Mathematics, Quaid-i-Azam University ۴۵۳۲۰ Islamabad ۴۴۰۰۰, Pakistan*

A. Shafiq - *Department of Mathematics, Quaid-i-Azam University ۴۵۳۲۰ Islamabad ۴۴۰۰۰, Pakistan*

M. A. Farooq - *Centre for Advanced Mathematics and Physics (CAMP), National University of Sciences and Technology (NUST), Islamabad ۴۴۰۰۰, Pakistan*

H. H. Alsulami - *Nonlinear Analysis and Applied Mathematics (NAAM) Research Group, Faculty of Science, King Abdulaziz University, Jeddah ۲۱۵۸۹, Saudi Arabia*

S. A. Shehzad - *Comsats Institute of Information Technology, Sahiwal, Pakistan*

خلاصه مقاله:

In this article, we have studied the combined effects of Newtonian and Joule heating in two-dimensional flow of Williamson fluid over the stretching surface. Mathematical analysis is presented in the presence of viscous dissipation. The governing partial differential equations are reduced into the ordinary differential equations by appropriate transformations. Both series and numerical solutions are constructed. Graphical results for the velocity and temperature fields are displayed and discussed for various sundry parameters. Numerical values of local skin friction coefficient and the local Nusselt number are tabulated and analyzed.

کلمات کلیدی:

Heat transfer, Williamson fluid, Joule heating, Newtonian heating

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