World Academy of Science, Engineering and Technology
International Journal of Aerospace and Mechanical Engineering
Vol:17, No:04, 2023

Thermal Radiation and Chemical Reaction Effects on MHD Casson Fluid Past a Permeable Stretching Sheet in a Porous Medium

Authors : Y. Sunita Rani, Y. Hari Krishna, M. V. Ramana Murthy, K. Sudhaker Reddy

Abstract : This article studied effects of radiation and chemical reaction on MHD casson fluoid flow past a Permeable Stretching Sheet in a Porous Medium. Suitable transformations are considered to transform the governing partial differential equations as ordinary ones and then solved by the numerical procedures like Runge- Kutta – Fehlberg shooting technique method. The effects of various governing parameters, on the velocity, temperature and concentration are displayed through graphs and discussed numerically.

Keywords : MHD, Casson fluid, porous medium, permeable stretching sheet
Conference Title : ICEFMA 2023 : International Conference on Engineering, Fluid Mechanics and Applications
Conference Location : Boston, United States
Conference Dates : April 17-18, 2023