The Effects Of Magnetohydrodynamic And Radiation On Flow Of Second Grade Fluid Past An Infinite Inclined Plate In Porous Medium

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ABSTRACT

An analysis of the exact solutions of second grade fluid problem for unsteady magnetohydrodynamic (MHD) flows past an infinite inclined plate in a porous medium is presented. It is assumed that the bounding infinite inclined plate has a constant temperature with radiation effects. Based on Boussinesq approximation the expressions for dimensionless velocity, temperature and concentration are obtained by using Laplace transform method. The derived solutions satisfying the involved differential equations, and all the boundary and initial conditions. The influence of various parameters on the velocity has been illustrated graphically and analyzed.