

Natural convection flow of visco-elastic fluid along on an infinite vertical porous late effects on grashof number, magnetic field and visco- elastic parameter

ABSTRACT

Natural convection is widely studied heat transfer phenomenon. The reason for this particular interest is in the everyday importance of natural convection. An analysis is presented to study the effects on Grashof number, magnetic field and visco-elastic parameter on MHD natural convection flow with visco-elastic fluid. Results are presented for the zero order perturbation velocity profile, the first order perturbation velocity and temperature profiles with the help of Local nonsimilarity method. Numerical results show that effect of the dimensionless parameters have significant influences on the zero order perturbation velocity profile, the first order perturbation velocity and temperature profiles.