

Chemical Reaction In Unsteady Mixed Convective MHD Flow And Mass Transfer Past A Radiated And Accelerated Porous Plate

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ABSTRACT

The magneto hydrodynamic flow over an infinite accelerated porous plate with convective mass transfer, chemical reaction and radiation with suction has been studied. The system of non-linear partial differential equations has been obtained and transformed into a set of ordinary differential equations with the help of similarity transformation for the governing flow. This set of ODEs has been solved and results have carried out for different values of the various physical parameters involved in the problem. The results showing the effect of parameters on velocity profile, temperature and concentration have been obtained and represented graphically. The velocity profile decreases with increasing effects of suction, chemical reaction, Schmidt number and Prandtl number. The results show good agreement past study available in literature.

Key Words: MHD flow, accelerated plate, chemical reaction, suction, radiation