

عنوان مقاله:

Chemically Reacting MHD Boundary Layer Flow of Heat and Mass Transfer over a Moving Vertical Plate in a Porous Medium with Suction

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خلاصه مقاله:

A mathematical model is presented for a two-dimensional, steady, incompressible electrically conducting, laminar free convection boundary layer flow of a continuously moving vertical porous plate in a chemically reactive and porous medium in the presence of a transverse magnetic field. The basic equations governing the flow are in the form of partial differential equations and have been reduced to a set of non-linear ordinary differential equations by applying suitable similarity transformations. The problem is tackled numerically using shooting techniques with the forth order Runga-Kutta method. Pertinent results with respect to embedded parameters are displayed graphically for the .velocity,temperature and concentration profiles and were discussed quantitatively

کلمات کلیدی: free convection, Moving vertical plate, Chemical reaction, Heat and mass transfer, Magnetic field, Porous medium

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