[Effects of binary chemical reaction and activation energy on MHD boundary layer heat and mass transfer flow with viscous dissipation and heat generation/absorption](https://downloads.hindawi.com/archive/2013/284637.pdf)

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Description

We study an unsteady MHD free convection heat and mass transfer boundary layer incompressible fluid flow past a vertical porous plate in the presence of viscous dissipation, heat generation/absorption, chemical reaction, and Arrhenius activation energy. The plate is moving with uniform velocity. The chemical reaction rate in the function of temperature is also considered. The governing partial differential equations are reduced to ordinary differential equations by introducing local similarity transformation (Maleque (2010)) and then are solved numerically by shooting method using the Nachtsheim-Swigert iteration technique. The results of the numerical solution are then presented graphically as well as the tabular form for difference values of the various parameters.

Total citations

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