Abstract

Effects of variable viscosity and thermal conductivity on MHD convective flow through a porous medium with chemical reaction have been investigated. The governing equations have been expressed in non dimensional form using non-dimensional variables, constants and similarity parameters; the resulting boundary value problem has been solved using shooting method. Velocity, temperature and the concentration profile are presented graphically. The coefficient of skin friction, rate of heat transfer in form of Nusselt number and the coefficient of mass transfer in terms of Sherwood number are also obtained and presented in tabular form. The effects of all the parameters are significant.

References


Index Terms

Computer Science Applied Sciences

Keywords
