

Abstract

In the present thesis, we will present the Hydro magnetic free convection flow of a second grade fluid over an inclined infinite plate. Moreover, porous effects and influence of magnetic field fixed to the fluid or plate are accounted. Existing solutions of similar models can be recovered as the limiting cases of vertical plate from our generalized problem. Furthermore, the contribution of the system parameters to the fluid motion in question has been depicted graphically by using Computer software MATHCAD. The novelty of the present study is to analyze the effect of angle of inclination of the plate and the case when magnetic field is fixed relative to the fluid or the plate on the fluid motion.