

Abstract

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THE EFFECT OF VARIATION OF BASE FLUID ON NATURAL CONVECTION IN CAVITY FILLED WITH NANOFLUID IN THE PRESENCE OF MAGNETIC FIELD

The present study examines the natural convection in a cavity filled with Nanofluid and influenced by a magnetic field and different types of base fluid will be examined. Steady state laminar regime is considered and the transport equations for continuity, momentum, energy are solved. The numerical results are examined for the effect of Hartmann number and Prandtl number on the iso-contours of streamline and temperature. In addition, the predicted results for average Nusselt are presented for various parametric conditions.