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FREE AND FORCED CONVECTIVE HEAT TRANSFER THROUGH A NANOFLUID IN TWO DIMENSIONS PAST MOVING VERTICAL PLATE

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Abstract: The present paper aims to study the convective high temperature transfer of Nanofluids into which we use viscosity proposed with Einstein also with the thermal conductivity proposed by Corcione. Particularly in this paper discussion is about free and forced convective heat transfer in Cu – water Nano-fluid past permeable flat vertical semi-infinite moving plate due to high conductivity and occurrence in Cu-water Nanofluid with natural or forced convections in which we consider magnetic field and also heat source. The effect on various parameters were exhibited in graphs. The profile of every governing parameter is displayed for natural as well as forced convection by considering the Ar >> 1 and Ar << 1respectively.

Keywords and Phrases: Free and forced, Convective, Heat Transfer, Nano Fluid, Vertical Plate.