International J. of Math. Sci. & Engg. Appls. (IJMSEA) ISSN 0973-9424, Vol. 3 No. III (2009), pp. 185-194

## INCOMPRESSIBLE MHD FLOW OF n-RIVLIN ERICKSEN FLUIDS BETWEEN TWO POROUS INCLINED PLATES

## RAJNISH KUMAR, A. PANDEY, S. K. S. RATHORE AND C. L. VARSHNEY

## Abstract

In the present investigation we have discussed MHD flow of n-Rivlin-Ericksen fluids between two non-conducting inclined plates. The whole flow pattern is being acted under the periodic pressure gradient and the transient pressure gradient. Exact expression for velocity distribution and interface velocity, have been determined. We have established expressions for two fluids in the particular case. It is observed that velocity decreases by applying the magnetic field, which is clear from the graphs drawn for different numerical values of the parameters.

**Keywords** : MHD flow, n-Rivlin-Ericksen fluids, Pressure gradient, Kinematics viscosity, Phase angle.