The Effect of Radiation on Unsteady MHD Flow past a Vertical Porous Plate in the Presence of Heat Flux

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Abstract : In the present paper the effects of radiation is studied on unsteady flow of viscous incompressible electrically conducting fluid past a vertical porous plate embedded in the porous medium in the presence of constant heat flux. A uniform Transverse Magnetic field is considered and induced magnetic field is supposed as negligible. The non-linear governing equations are solved numerically. Numerical results of the velocity and temperature fields are shown through graphs. The results illustrates that the appropriator combination of regulated values of thermo-physical parameters is expedient for controlling the flow system.

Keywords : heat transfer, radiation, MHD flow, porous medium

Conference Title : ICPNSET 2015 : International Conference on Physical and Natural Science, Engineering and Technology **Conference Location :** Dubai, United Arab Emirates

Conference Dates : September 13-15, 2015