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(57) Abstract :

Numerical analysis is used to undertake a thorough investigation of the steady laminar flow with heat generation of an incompressible electrically conducting micro polar fluid impinging on a permeable flat plate. The plate is subjected to a normal, uniform suction or blowing while being kept at a consistent temperature. The viscous dissipation effect is considered as well as the application of a homogeneous magnetic field normal to the plate. Using similarity variables, the controlling partial differential equations are first converted to ordinary differential equations, which are then numerically solved using computer a language MATLAB. The effects of magnetic parameter on various profiles such as velocity and temperature have been studied and presented.

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