

عنوان مقاله:

Heat generation and radiation effects on steady MHD free convection flow of micropolar fluid past a moving surface

محل انتشار:

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خلاصه مقاله:

This paper was concerned with studying the magnetohydrodynamic steady laminar free convection flow of a micropolar fluid past a continuously moving surface in the presence of heat generation and thermal radiation. Similarity transformation was employed to transform the governing partial differential equations into ordinary ones, which were then solved numerically using the finite element method. Numerical results for the dimensionless velocity, microrotation and temperature profiles were obtained and displayed graphically for pertinent parameters to show interesting aspects of the solution. The skin friction and the rate of heat transfer were also computed and presented through tables. Favorable comparison with previously published work was performed.

کلمات کلیدی:

Free Convection, MHD, Radiation, Heat generation

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