Title of Article: Further Results on the Effects of Variable Viscosity and Magnetic Field on Flow and Heat Transfer to a continuous flat plate in the presence of heat generation and radiation with a convective boundary condition.

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Abstract: The steady, laminar boundary layer flow with a convective boundary condition, to a continuously moving flat plate is studied taking into account the variation of viscosity with temperature in the presence of a magnetic field, heat generation and thermal radiation. The fluid viscosity is assumed to vary as a linear function of temperature. The resulting, governing equations are non-dimensionalized and transformed using a similarity transformation and then solved numerically by sixth order Runge-Kutta method alongside with shooting method. Comparison with previously published work is performed and there was a perfect agreement at large value of the Biot number. A parametric study of all the embedded flow parameters involved is conducted, and a representative set of numerical results for the velocity and temperature profiles as well as the skin-friction parameter and the Nusselt number is illustrated graphically to show typical trend of the solutions. It is worth pointing out that, when the variation of viscosity with temperature is strong in the presence of the effect of a magnetic field, radiation, heat generation, the results of the present work are completely different from those that studied the same problem in the absence of magnetic field, thermal radiation and the heat generation. It is interesting to note that higher the values of Prandtl number lesser the effects of Biot number and the magnetic field intensity.