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Chemical Reaction Effects on Unsteady MHD Double-Diffusive Free Convective Flow over a Vertical Stretching Plate

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Abstract : A general analysis has been developed to study the chemical reaction effects on unsteady MHD double-diffusive free convective flow over a vertical stretching plate. The governing nonlinear partial differential equations have been reduced to the coupled nonlinear ordinary differential equations by the similarity transformations. The resulting equations are solved numerically by using Runge-Kutta shooting technique. The effects of the chemical parameters are examined on the velocity, temperature and concentration profiles.

Keywords : chemical reaction, MHD, double-diffusive, stretching plate
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