

Mixed Convection in a Vertical Porous Channel

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1. Equations (1) and (3) should be replaced by the following equation

$$g\beta(T - T_0) - \frac{1}{\rho_0} \frac{\partial P}{\partial X} + \frac{\mu_{\text{eff}}}{\rho_0} \frac{d^2 U}{dY^2} - \frac{\nu}{K} U - \frac{\rho C_F}{\rho_0} U^2 = 0$$

2. Equation (7) should be replaced by the following equation

$$\frac{d^4 U}{dY^4} = \frac{\beta g}{\alpha C_p} \left(\frac{dU}{dY} \right)^2 + \frac{1}{K} \frac{d^2 U}{dY^2} + \frac{\beta g}{\alpha C_p k} U^2 + \frac{C_F}{\nu} \frac{d^2 U^2}{dY^2}$$

3. Equation (10) should be replaced by the following equation

$$Re = \frac{U_0 D}{\nu}; \quad Pr = \frac{\nu}{\alpha}; \quad Br = \frac{\mu U_0^2}{k \Delta T}$$

4. The year publication to be introduced in the following two references
Srinivasan, V. and Vafai, K.: 1994, Analysis of linear encroachment in two-immiscible fluid systems, *ASME J. Fluids Eng.* **116**, 135–139.
Vafai, K. and Kim, S.: 1989, Forced convection in a channel filled with a porous medium: an exact solution, *ASME J. Heat Transfer* **111**, 1103–1106.

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5. Figures 2 to 7 should be replaced by the following graphs. Figures 8 to 10 should be removed.

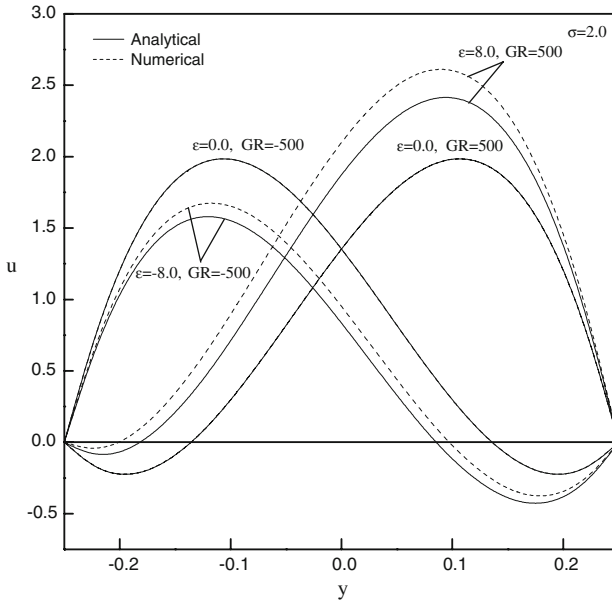


Fig. 2 Plots of u versus y in the case of asymmetric heating for different values of ϵ

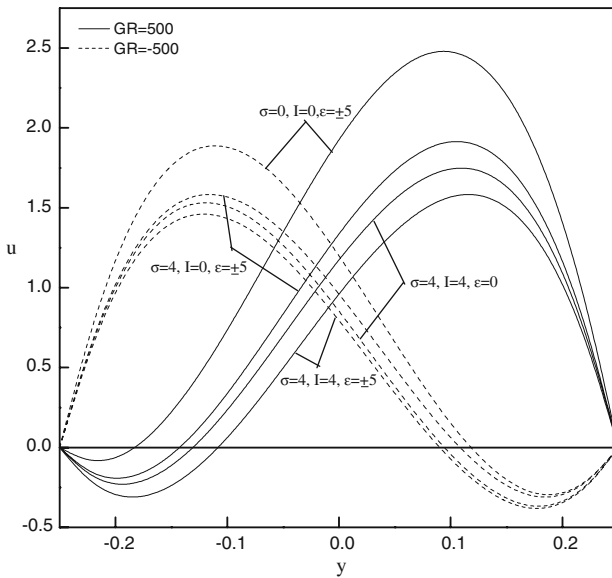


Fig. 3 Plots of velocity profiles versus y in the case of asymmetric heating for different values of σ , I , ϵ and GR

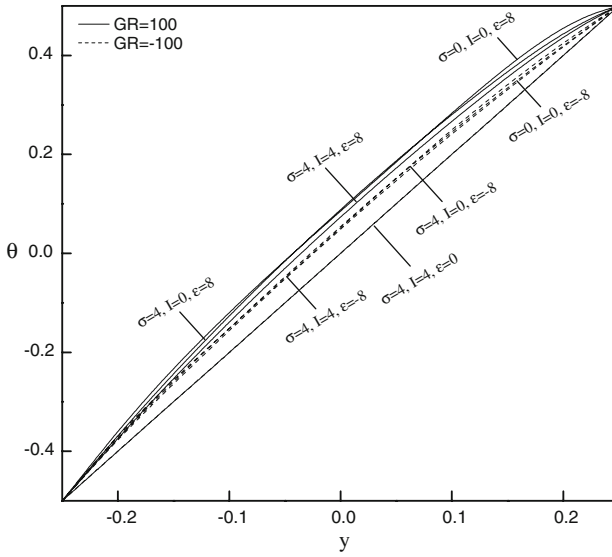


Fig. 4 Plots of temperature versus y in the case of asymmetric heating for different values of σ , I , and ϵ

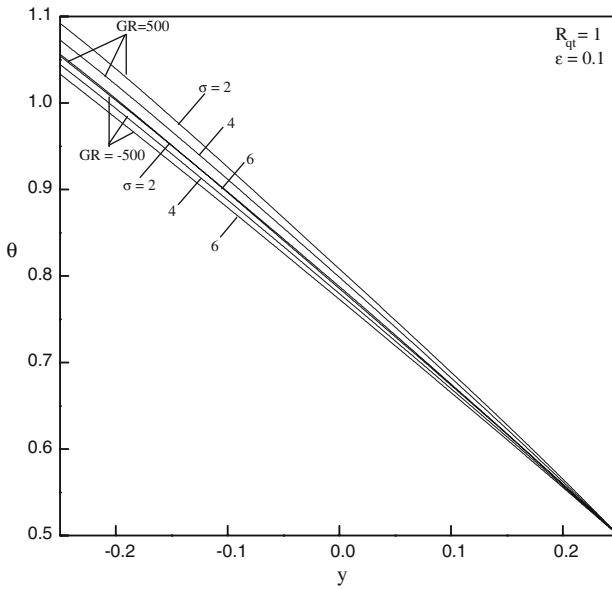


Fig. 5 Temperature profiles for different values of σ for isoflux–isothermal case

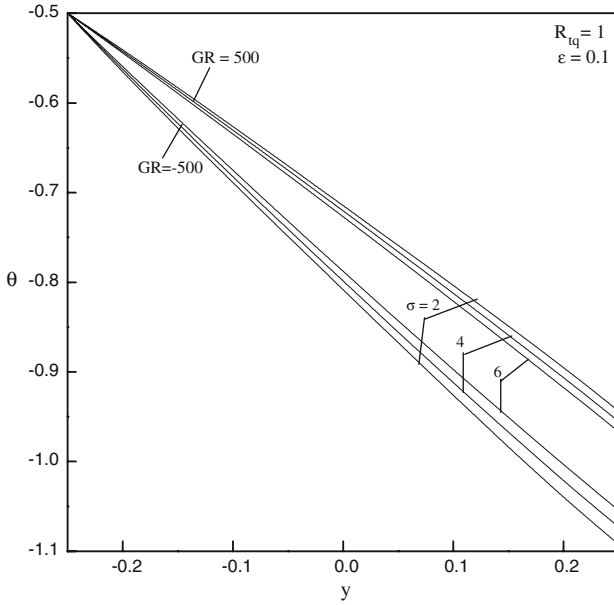


Fig. 6 Temperature profiles for different values of σ for isothermal-isoflux case

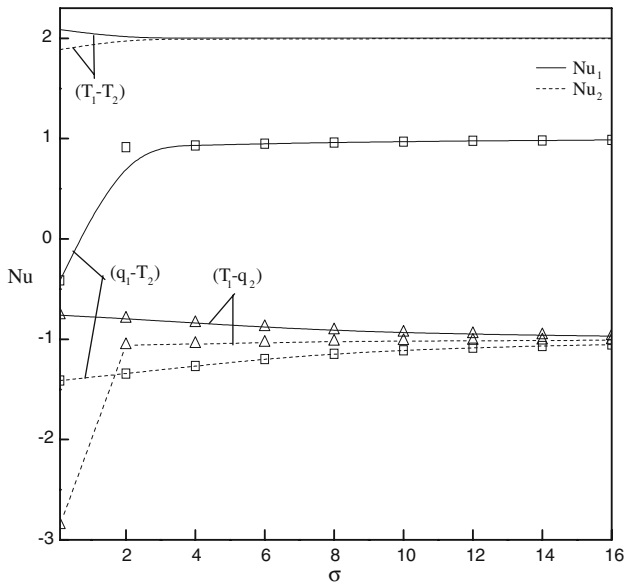


Fig. 7 Nusselt number for different values of σ