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**Entire solution of certain type of delay-differential equations**

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**Abstract**

The open‐ended vertical double‐passage annular space between three vertical concentric coaxial cylinders is an important physical configuration portraying many practical applications. Hence, in the present analysis, the developing buoyant convection in vertical double‐passage annuli filled with fluid‐saturated porous media is studied numerically by imposing unheated entry and unheated exit thermal boundary conditions. The numerical solutions of the mathematical model equations are found through finite difference technique. The velocity profiles in radial as well as axial directions and temperature profiles have been depicted for vast range of no dimensional numbers, baffle position, and heating and un‐heating ratio. The velocity and thermal gradients decreases as heating section length decreases. Maximum velocity and heat transport occurs in a narrow annular passage rather than equal or wider passages. The presence of porosity causes a reduction in flow velocities and thermal gradients.

**Keywords:**

Baffle, Convection, Grashof number, unheated entry and exit

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