Soret and Viscous Dissipation Effects on Convectively Heated Vertical Truncated Cone in a Micropolar Fluid Saturated Non-Darcy Porous Medium

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This paper emphasizes the Soret and viscous dissipation effects on mixed convection flow of an incompressible micropolar fluid over a vertical truncated cone in a non-Darcy porous medium subject to convective boundary condition. The set of reduced non-dimensional partial differential equations is solved using Spectral Quasi Linearization Method (SQLM). Several features emerging from various physical parameters on physical quantities of the flow are explored in detail.

***Keywords*:** Micropolar fluid, Non-Darcy porous medium, Soret and viscous dissipation effects, Convective boundary condition, Spectral quasi-linearization method,