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Stagnation Point Flow and Heat Transfer of a Micropolar Fluid in a Porous Medium

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**Abstract:** The steady laminar flow in a porous medium of an incompressible non-Newtonian micropolar fluid impinging on a permeable flat plate with heat transfer is investigated. A numerical solution for the governing nonlinear momentum and energy equations is obtained. The effect of the porosity of the medium and the characteristics of the non-Newtonian fluid on both the flow and heat transfer is presented and discussed.

 [Keywords](#)  
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**Key Words:** Stagnation point flow, Porous medium, Fluid mechanics, Heat transfer, Finite difference.



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