

## عنوان مقاله:

Effects of Through-Flow and Internal Heat Generation on a Thermo Convective Instability in an Anisotropic Porous Medium

## محل انتشار:

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## خلاصه مقاله:

A linear stability analysis is performed to study the effects of through-flow and internal heat generation on the preferred mode of stationary thermal convection in a variable viscosity liquid saturating an anisotropic porous medium. The Rayleigh-Ritz technique is used to obtain the eigenvalue of the problem. The influence of porous parameter, mechanical anisotropy parameter, Peclet number, thermal anisotropy parameter, Brinkman number and variable viscosity parameter on the stability of the system is analyzed. The problem suggests another method of controlling convection by externally controlling porous media damping and shear. This is in addition to the through-flow .mechanism of regulating convection

## کلمات کلیدی:

Anisotropy, Through, Internal heat generation, Flow, Porous medium, Thermal convection

## لینک ثابت مقاله در پایگاه سیویلیکا:

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