

## Accepted Manuscript

Fundamental solution of the steady oscillations equations in porous thermoelastic medium with dual-phase-lag model

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PII: S0167-6636(17)30807-4  
DOI: <https://doi.org/10.1016/j.mechmat.2018.08.008>  
Reference: MECMAT 2916



To appear in: *Mechanics of Materials*

Received date: 23 November 2017  
Revised date: 7 August 2018  
Accepted date: 17 August 2018

Please cite this article as: Siddhartha Biswas , Nantu Sarkar , Fundamental solution of the steady oscillations equations in porous thermoelastic medium with dual-phase-lag model, *Mechanics of Materials* (2018), doi: <https://doi.org/10.1016/j.mechmat.2018.08.008>

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**Highlights:**

- The propagation of plane waves in homogeneous porous medium with dual-phase-lag model of generalized thermoelasticity is investigated.
- The properties of plane harmonic waves are studied and the fundamental solution of the system of steady oscillations equations is constructed.
- The phase velocities, attenuation coefficients, specific losses and penetration depths are computed and presented graphically with respect to frequency.
- Phase velocities decrease rapidly and converge to zero with the increase of frequency.
- Attenuation coefficients increase rapidly with the increase of frequency but in low frequency region coincide with zero. In high frequency region attenuation coefficients for DPL model are higher than attenuation coefficients for LS model.

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