

PARAMETRIC STUDY OF FRACTIONAL BIOHEAT EQUATION IN SKIN TISSUE WITH SINUSOIDAL HEAT FLUX

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Abstract. This paper deals with the study of fractional bioheat equation for heat transfer in skin tissue with sinusoidal heat flux condition on skin surface. Numerical solution is obtained by implicit finite difference method. The effect of anomalous diffusion in skin tissue has been studied with different frequency and blood perfusion respectively, the temperature profile are obtained for different order fractional bioheat equation.

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