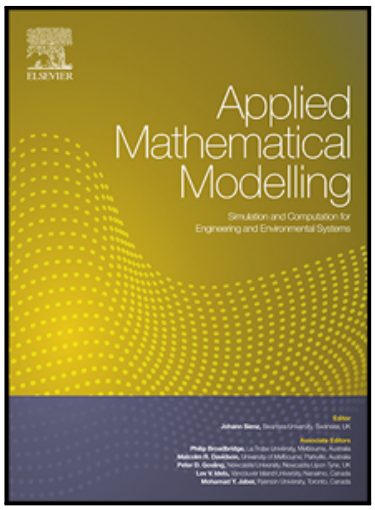

FREE VIBRATION ANALYSIS OF DOWELLED RECTANGULAR ISOTROPIC THIN PLATE ON A MODIFIED VLASOV SOIL TYPE BY USING DISCRETE SINGULAR CONVOLUTION METHOD

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Highlights

- There is a certain depth of soil beyond which frequency do not vary consistently
- Translational stiffness of Modified Vlasov soil is important in free vibration
- Rotational stiffness of Modified Vlasov soil is negligible in free vibration
- Dynamically activated depth affects frequency values for plates more than for beams
- By varying stiffnesses of edges of plates, proposed method allows to use same calculation code for all boundary conditions