

Review Form 3

Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	Ms_ARJOM_126149
Title of the Manuscript:	Dynamic Behaviours of Simply Supported Non-Uniform Rayleigh Beam under Variable-Magnitude Accelerating Masses and Resting on Non-Uniform Bi-parametric Foundation
Type of the Article	Regular Paper

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The paper is well presented and contains original results.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Yes	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The paper presents a good scientific topic.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	The literature review on other foundation models is very poor.	Adjusted

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	Based on my assessment, this paper is good in presentation and organization of the contents. The paper can be accepted for publication with a revision. 1) The scope should be highlighted in both abstract and introduction section. 2) In the introduction part, the authors should consider that:(i) an engineering application is described in detail that could benefit from the presented in the paper analysis and (ii) new phenomena that are specific for the structure is assumed to be made of are elucidated. 3) For general readers, authors are encouraged to discuss other kind of works on foundation models (Pasternak, visko, kerr...) such as: [(a) – Kadiri et al. (2024), “Wave propagation in FG polymer composite nanoplates embedded in variable elastic medium”, <i>Advances in Nano Research</i> , 17(3), 235-248.; (b) – Driz et al. (2024), “Dynamic response of imperfect functionally graded plates: Impact of graded patterns and viscoelastic foundation”, <i>Structural Engineering and Mechanics</i> , 91(6), 551-565.; (c) – Zerrouki et al. (2024), “Buckling behavior of nonlinear FG-CNT reinforced nanocomposite beam reposed on Winkler/Pasternak foundation”, <i>Computers and Concrete</i> , 34(3), 297-305.; (d) – Gawah et al. (2024), “An improved first-order shear deformation theory for wave propagation analysis in FG-CNTRC beams resting on a viscoelastic substrate”, <i>International Journal of Structural Stability and Dynamics</i> .; (e) – Lafi et al. (2024), “Combined influence of variable distribution models and boundary conditions on the thermodynamic behavior of FG sandwich plates lying on various elastic foundations”, <i>Structural Engineering and Mechanics</i> , 89(2), 103-119.; (f) – Tounsi et al. (2024), “Influences of different boundary conditions and hygro-thermal environment on the free vibration responses of FGM sandwich plates resting on viscoelastic foundation”, <i>International Journal of Structural Stability and Dynamics</i> , 24(11), 2450117.; (g) – Tounsi et al. (2023), “Free vibration investigation of functionally graded plates with temperature-dependent properties resting on a viscoelastic foundation”, <i>Structural Engineering and Mechanics</i> , 86(1), 1-16.; (h) – Tounsi et al. (2023), “Thermodynamical bending analysis of P-FG sandwich plates resting on nonlinear visco-Pasternak's elastic foundations”, <i>Steel and Composite Structures</i> , 49(3), 307-323.; (i) – Mudhaffar et al. (2023), “Impact of viscoelastic foundation on bending behavior of FG plate subjected to hygro-thermo-mechanical loads”, <i>Structural Engineering and Mechanics</i> , 86(2), 167-180.]. 4) The main contributions of the work should be clearly explained in both theoretical and practical aspects. 5) Fig. 5 should be more discussed. 6) Some physical explanation can be added to discussion.	Adjusted
Optional/General comments		

PART 2:

	Reviewer’s comment	Author’s comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	