## **Review Form 3**

Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	Ms_ARJOM_130796
Title of the Manuscript:	Oscillation behavior for a coupled nonlinear oscillators with delays
Type of the Article	Original Research Article

#### **General guidelines for the Peer Review process:**

This journal's peer review policy states that <u>NO</u> manuscript should be rejected only on the basis of '<u>lack of Novelty'</u>, provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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#### **Important Policies Regarding Peer Review**

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### **PART 1:** Comments

	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that
		part in the manuscript. It is mandatory that authors should write
		his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.		
Is the title of the article suitable? (If not please suggest an alternative title)		
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.		
Is the manuscript scientifically, correct? Please write here.		
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.		

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Is the language/English quality of the article suitable for scholarly communications?		
Optional/General comments	This paper presents an insightful analysis of the oscillatory behavior of solutions for a five-dimensional system of coupled van der Pol-Hamiltonian-Duffing oscillators with delays. The authors extend existing results from the literature in a meaningful way, particularly from a mathematical perspective, and provide a robust set of sufficient conditions for the oscillation of the solutions. These conditions are presented with clarity, and their implications for the stability and instability of the system are well-explored. The inclusion of computer simulations further supports the theoretical criteria, providing an effective verification of the proposed results.	
	Strengths of the paper include:	
	A thorough and mathematically sound investigation of the system's oscillatory behavior, particularly with respect to delays, a critical aspect of real-world applications.	
	Clear and concise derivations of sufficient conditions that guarantee oscillation.	
	The combination of theoretical results with numerical simulations, which enhances the practical understanding of the findings.	
	However, some areas could benefit from further clarification or elabor	

# PART 2:

		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)	

### **Reviewer Details:**

Name:	Sizar Abid Mohammed
Department, University & Country	University of Duhok, Iraq

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