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Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_42164
Title of the Manuscript:	Numerical Study of Viscous Dissipation and Temperature Dependent Viscosity on MHD Free Convection Flow Over a Sphere with Heat Conduction
Type of the Article	Original Research Article

General guideline for Peer Review process:

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

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PART 1: Review Comments

	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)
Compulsory REVISION comments	The letters MHD (magneto hydrodynamic) are not clarified in its first mentions, in the introduction (line 31 page 1) I suggest to include in the title as: Numerical Study of Viscous Dissipation and Temperature Dependent Viscosity on Magneto Hydrodynamic (MHD) Free Convection Flow Over a Sphere with Heat Conduction. And in the page 1 line 13 instead of line 31 page 1. Line 15 page 1: the expression: "suitable transformations", is ambiguous, must be more precise. The first paragraph of the introduction has not references for the applications and ideas presented by authors. The equations of energy, continuity and momentum, are presented without references, I suggest to include references of this equations. And make a mention of the coordinate systems used. Line 78 The methodology using finite differences method is well explained and detailed, but there is not mention about with programming code or software do the authors use to solve the system. I recommend the authors the end of the "method of Solution" section (line 136) include the software or programming language used: ex. Python, matlab, c++, fortran, etc. which one was used?, and the machine used as well, if that is a relevant factor in the research and code performing. Also the processing time will be interesting to see. Why the authors selected the sets of test values for the solutions, I mean the ranges of Prandl's numbe, temp, etc. why this particular ranges?. Is there some convergence behaviour, or a practical application between these values? (lines 138 to 146) In the conclusions there is not mentions about the figure results, please mention the figures that put in evidence the conclusions of the research.	
Minor REVISION comments	Line 13 page 1: the sentence: Viscous dissipation and magneto hydrodynamic due to over a sphere with temperature dependent viscosity are considered in this article. I think is not completely clear, it makes think the sphere is fluid, but I think the authors want to refer about the surrounding fluid. Please revise and correct if is the case. The expression: Attention has been focused, is not objective. In the same line the words "in terms" are present twice. Will be interesting to mention the reason why the transformations used were selected or formulated that way instead of another. This aiming to make the research reproducible by the readers.	



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Optional/General comments	I suggest to include mentions about practical applications of the model and how this can be applied in future developments. This can be helpful for authors when the results, analysis and conclusions are explained. By example the Prandl numbers are clearly related to velocity, but this relationship how will affect the phenomenon in a real system, not only numerically but phenomenologically the analysis can improve and be more precise, and deep.	
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Reviewer Details:

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