

## Review Form 1.7

Journal Name:	<b>Journal of Engineering Research and Reports</b>
Manuscript Number:	<b>Ms_JERR_101373</b>
Title of the Manuscript:	<b>Modeling rheological properties of High temperature and high pressure gas well cement slurries using artificial neural networks.</b>
Type of the Article	<b>Original Research Article</b>

### 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:

<https://www.journaljerr.com/index.php/JERR/editorial-policy> )

<b>PART 1: Review Comments</b>		
	<b>Reviewer's comment</b>	<b>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)</b>
<p><b>Compulsory REVISION comments</b></p> <p>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</p> <p>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</p> <p>3. <b>Is the abstract of the article comprehensive</b></p> <p>4. <b>Are subsections and structure of the manuscript appropriate?</b></p> <p>5. <b>Do you think the manuscript is scientifically correct?</b></p> <p>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></p> <p><b>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</b></p>	<p>1. <b>Yes</b></p> <p>2. <b>Not</b> <b>Artificial Neural Networks for Modeling Rheological Properties under High-Temperature and High-Pressure in Gas Well Cement Slurries</b></p> <p>3. While the abstract does provide an overview of the study and its findings, it lacks context, novelty, detailed methodology, and clear implications of the results. Providing these details would make the abstract more comprehensive and informative. 4 &amp; 5 Results sections need to be improved.</p> <p>6. Not sufficient</p>	
<p><b>Minor REVISION comments</b></p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	<p>Yes</p>	
<p><b>Optional/General comments</b></p>	<p>1.Comparative Analysis: It would be beneficial if the authors could provide comparative results to prove that the ANN model is superior or equivalent to other methods. The absence of a comparative analysis means that the reader has no frame of reference to judge the efficacy of their model.</p> <p>2.Methodology Clarity: The authors should ensure their methods are clearly outlined, including how</p>	

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	<p>the ANN was designed and trained, what the inputs and outputs were, and how they prepared their data.</p> <p>3..Model Validation: While the authors have reported errors for their models, it would be useful to include further model validation. They should ideally test the model on unseen data and provide metrics such as Mean Absolute Error (MAE), Root Mean Squared Error (RMSE), or R-squared to demonstrate the model's predictive power.</p> <p>4.Results Interpretation: More explanation or interpretation of the results could be beneficial. What do the results mean in the context of the broader field? Can these results be applied in real-world situations?</p> <p>5.Keywords: The authors might want to revise their keywords. Words like "Temperature" and "pressure" are rather generic and might not be very useful for someone searching for this paper.</p>	
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### **PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

### **Reviewer Details:**

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