

## Review Form 1.7

Journal Name:	<b>Journal of Engineering Research and Reports</b>
Manuscript Number:	<b>Ms_JERR_112009</b>
Title of the Manuscript:	<b>Artificial Neural Network Model for the Prediction of the Products of a Crude Distillation Column</b>
Type of the Article	<b>Original Research Article</b>

### 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)
<p><b>Compulsory</b> REVISION comments</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><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<p>1. Yes, the manuscript is important for scientific community. This study focuses on the development and application of an artificial neural network (ANN) model for predicting the flowrates and temperatures of products in a crude distillation column. The study showcases the application of the BRBP algorithm in predicting crucial parameters in the context of crude distillation columns, demonstrating innovation in the use of advanced modelling techniques. It employs a comprehensive methodology including training, validation, testing, and extrapolation, as well as detailed model evaluation. The study's significance is evident in its technical approach and potential practical implications.</p> <p>2. Yes, the title is suitable.</p> <p>3. The abstract is generally comprehensive, but there are a few areas can be improved for clarity and completeness. I suggest adding the following sentences at the end of the abstract: "While the ANN model accurately predicted product flowrates and temperature for interpolating data, its limited capacity for extrapolation suggests potential challenges beyond the training dataset. These findings emphasise the importance of cautious interpretation and application of the model in scenarios beyond the scope of the training data."</p> <p>4. Yes, subsections and structure of the manuscript are appropriate.</p> <p>5. Yes, the manuscript is scientifically correct.</p> <p>6. The references are all published before 2014. It is recommended to add some articles published in the last 5 years as references.</p> <p>7. Please keep the font consistent throughout the entire manuscript.</p> <p>8. Please pay attention to the correct usage of punctuation marks.</p>	
<p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	<p>A few minor grammar improvements are suggested to enhance the overall fluidity. Please refer to the detailed modifications I made in the manuscript.</p>	
<p><b>Optional/General</b> comments</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>	

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