

Review Form 3

Journal Name:	Asian Journal of Advanced Research and Reports
Manuscript Number:	Ms_AJARR_125044
Title of the Manuscript:	COMPARATIVE ANALYSIS OF OILFIELD CHEMICAL OPERATIONS USING DETERMINISTIC AND STOCHASTIC MODELS
Type of the Article	

PART 1: Review Comments

Compulsory REVISION 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. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	This manuscript provides valuable insights for the scientific community by comparing deterministic and stochastic models in oilfield chemical operations, specifically in demulsifying and matrix acidizing processes. It highlights the importance of incorporating probabilistic elements to manage uncertainties in project timelines, which is crucial in the oil and gas industry where real-world variability often impacts operations. I appreciate the manuscript's focus on practical applications, as it empowers decision-makers with evidence-based approaches to optimize project outcomes, improve risk management, and enhance operational efficiency. However, the study could further benefit from real-world case studies to illustrate the models' effectiveness in diverse scenarios.	
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.	The abstract of the article is fairly comprehensive, offering a clear overview of the study's goals, methods, and findings. It effectively outlines the comparison between deterministic and stochastic models for oilfield chemical operations and highlights key results, such as the advantages of the stochastic model in accounting for uncertainties.	
Are subsections and structure of the manuscript appropriate?	Yes, the subsections and structure of the manuscript are appropriate for a scientific study. The manuscript is well-organized, following a clear progression from the introduction of the topic to the methodology, results, discussion, and conclusion.	
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.	This manuscript appears to be scientifically robust and technically sound due to its clear and methodical approach to comparing deterministic and stochastic models for oilfield chemical operations. The use of established project management techniques such as the Critical Path Method (CPM) and Program Evaluation and Review Technique (PERT) ensures that the analysis is grounded in widely accepted scientific methodologies. Additionally, the inclusion of specific activity durations, network diagrams, and probabilistic calculations for both operations (demulsifying and matrix acidizing) demonstrates a thorough and detailed examination of the topic. The manuscript also provides a balanced discussion of the strengths and limitations of both models, which enhances its credibility and scientific rigor.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	The references in the manuscript are generally sufficient. However, there are some areas for improvement: some references are recent (e.g., Korhonen et al., 2023; Li et al., 2023), several others, like Heizer et al. (2017) and Cho & Eppinger (2005), are somewhat dated. Incorporating more recent studies (from 2020 and beyond) on stochastic modeling and project management in oilfield operations would strengthen the manuscript's relevance to current research. A more recent paper on the application of stochastic models in oil and gas operations could be beneficial, such as studies on predictive maintenance or risk mitigation in oilfield chemical operations. Consider adding a review or research paper on advanced simulation techniques in project management for oilfield operations to provide a broader perspective on modern techniques used in optimization.	

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Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	Yes	
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)	

Reviewer Details:

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