

Review Form 1.6

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_86652
Title of the Manuscript:	Empirical modeling and optimization of base activated Ngbo catalysts in esterification reaction using response surface methodologys
Type of the 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:

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

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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	<p>1.New contributions aren't clear. 2.Abstract needs to rewrite by focusing on new results. 3.Introduction shall modify.Authors didn't explain concept/benefit of optimization process.No indication to comparative stochastic optimization. I propose to see references: A. "Improving the Performance of a Catalytic Membrane Reactor via Stochastic Optimization", International Review of Chemical Engineering Journal, Vol.5, No.2, March 2013. B. " Improving Operability of Lab-Scale Spouted Bed Using Global Stochastic Optimization", Int. Journal of Engineering Research and Applications (IJERA), Vol.5,Jan.2015, pp.136 -146.</p> <p>4.Section 2.5 is weak. 5.Formulation steps of optimization model isn't clear. 6.For non-linear reaction system,it is better to implement stochastic optimization technique. 7.No validation for optimal results. 8.No comparison with other optimization algorithm. 9.Discussion of Fig.19 is weak. 10.Discussion of Fig.22 have conflicted conclusions. 11.Conclusions shall improve by explanation of new contributions when compared with the previous works.</p> <p>1.Abstract has rewrite. 2.Introduction needs to improve. 3.optimal results shall confirm with real data. 4.Improve of optimization technique by using non-linear stochastic method</p>	
Minor REVISION comments	<p>1.Enhance of introduction. 2.Citation of modern related references. 3.Figures shall re-plot with best style.</p>	
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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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