

Review Form 1.7

Journal Name:	Chemical Science International Journal
Manuscript Number:	Ms_CSIJ_104906
Title of the Manuscript:	Modeling and Optimization of Simultaneous Removal of Ions (H₂PO₄⁻, NO₃⁻ and Cd²⁺) by Adsorption on Clay in Aqueous Solution by Using Response Surface Methodology
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:

(<https://www.journalcsij.com/index.php/CSIJ/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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>For the manuscript in reviewing is titled "Modeling and Optimization of Simultaneous Removal of Ions (H₂PO₄⁻, NO₃⁻, and Cd²⁺) by Adsorption on Clay in Aqueous Solution by Using Response Surface Methodology", I have thoroughly reviewed the manuscript and believe that it makes a significant contribution to the field of environmental engineering. The research conducted in the article provides valuable insights into the simultaneous removal of ions from aqueous solutions using clay as an adsorbent. The findings presented on PAGE 9 demonstrate the effectiveness of the proposed methodology in achieving high abatement rates for dihydrogenphosphate, nitrate, and cadmium ions. Furthermore, the article adheres to the ethical guidelines and standards of academic publishing. The writing style is clear and concise, making it accessible to a wide range of readers. The references cited on PAGE 11 provide a comprehensive overview of the relevant literature in the field. Based on my evaluation, I strongly recommend the acceptance of this article for publication in Chemical Science International Journal. I believe that it will make a valuable addition to the journal and contribute to the advancement of knowledge in the field of environmental engineering.</p> <ul style="list-style-type: none"> the title of the article is suitable the abstract of the article is comprehensive I think the manuscript is scientifically correct the references are sufficient and recent and no need for additional references. 	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<ol style="list-style-type: none"> Can you explain the process of establishing the mathematical model? Were there any limitations or challenges encountered during the research? Can you elaborate on the significance of the chosen pH value (pH 5) in the experimental design How do the results of this study compare to previous research on the adsorption of these ions using clay as an adsorbent Can you provide more information about the NEMROD software used for modeling and optimization On PAGE 2, Can you provide more information about the characteristics of the clay used, such as its composition and specific surface area On PAGE 3, you mentioned that a Central Composite Design (CCD) was used to establish a mathematical model. Can you explain how the CCD was constructed and how it helped in determining the optimal conditions for adsorption? On PAGE 4, you presented the mathematical models for each response (YP, YN, YCd). Can you provide more details about the coefficients and their significance in these models? 	
<p>Optional/General comments</p>	<p>I recommend publication after minor revision.</p>	

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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>	

Reviewer Details:

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