

Review Form 3

Journal Name:	Chemical Science International Journal
Manuscript Number:	Ms_CSIJ_126246
Title of the Manuscript:	Sterilized Chicken Feather as Eco-friendly Corrosion Inhibitor for Mild Steel in a Water- Based Drilling Mud – Gravimetric and FTIR assessment
Type of the Article	Original Research Article

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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)
<p>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.</p>	<p>This manuscript introduces sterilized chicken feathers as an eco-friendly corrosion inhibitor, offering a sustainable solution for corrosion control. Utilizing waste materials like chicken feathers not only helps prevent corrosion but also promotes waste valorization, supporting environmental sustainability goals. This work is especially compelling as it combines environmental and engineering approaches, paving the way for innovative research in green chemistry and sustainable materials.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes, the title is suitable as it accurately reflects the content and is clear for scholarly communication.</p>	
<p>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.</p>	<p>The abstract lacks details on the preparation method for chicken feather powder as well as the obtained test results.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Section 2 (Experimental) could be revised to separately indicate the materials and the experiments (tests).</p>	
<p>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.</p>	<p>This manuscript effectively highlights the innovative use of chicken feathers as a corrosion inhibitor, emphasizing their potential to prevent environmental pollution by reducing waste disposal into soil. It contributes significantly to the field by demonstrating the feasibility of utilizing organic materials in industrial applications, aligning with current trends in green chemistry and eco-friendly practices.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The introduction section mentions only plant extracts used as inhibitors but does not address the use of chicken feathers. Therefore, it would be beneficial to add references regarding this.</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>		
<p>Optional/General comments</p>	<p>Some corrective measures needed in the manuscript are as follows:</p> <ol style="list-style-type: none"> 1. Figure 2 is not clearly visible; if possible, please provide a clearer version. 2. The corrosion mechanism, including how corrosion occurs and which elements cause changes in the sample, is not mentioned. Including this information would be beneficial for the readers. 3. The claim that chicken feather powder at concentrations above a certain level becomes easily infested with microbes, which enhances the corrosion rate of mild steel, requires further clarification and validation. 	

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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>	

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