

Review Form 3

Journal Name:	Chemical Science International Journal
Manuscript Number:	Ms_CSIJ_121094
Title of the Manuscript:	Investigating the Inhibition of Mild Steel Corrosion by Tectona grandis dye Extracts in Acidic Environments: Thermodynamics and Adsorption Properties
Type of the Article	

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

<https://r1.reviewerhub.org/general-editorial-policy/>

Important Policies Regarding Peer Review

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>

Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

[Review Form 3](#)

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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 is important because it shows how Tectona grandis dye extract can protect mild steel from corrosion, which is useful for many industries. The study uses different methods to explain how the extract works and proves it is effective and eco-friendly. It also finds that higher concentrations of the extract improve protection, but higher temperatures reduce it. Overall, this research helps in developing sustainable corrosion inhibitors.	
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.	Yes it is comprehensive.	
Are subsections and structure of the manuscript appropriate?	Yes, appropriate.	
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.	The manuscript demonstrates scientific robustness and technical soundness through its comprehensive literature review, which effectively contextualizes the research within existing knowledge. It employs rigorous methodologies, ensuring the reliability and validity of the findings. The data is meticulously analyzed with appropriate statistical methods applied to draw meaningful conclusions. Additionally, the discussion critically evaluates the results, acknowledging limitations and considering alternative explanations, which enhances the overall credibility and thoroughness of the research.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Sufficient	

Review Form 3

Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	Suitable	
Optional/General comments	<ol style="list-style-type: none">1. Composition of mild steel plate can be mentioned.2. Under materials and methods,3. a) Check the various temperature ranges which is repeated. b) What is the role of Ag nanoparticle here? Hope you have done the work with Tectona grandis dye extract.4. FT-IR Analysis-- unit must be cm^{-1}.5. What is the structure of the compound extracted from Tectona grandis dye?6. Why is the entropy negative? (Table-3)7. Fig 14(c) is not clear (blurred). <p>With the above minor corrections, the article can be accepted.</p>	

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:

Name:	K. Tharini
Department, University & Country	Government Arts College, India