

Review Form 3

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_129060
Title of the Manuscript:	Characterization and Development of Unified Cubic Relations of the Corrosion Rate Profiles of Psidium Guajava Extracts as a Green Corrosion Inhibitor in Industrial Environments
Type of the Article	Research article

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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:

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PART 1: 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. A minimum of 3-4 sentences may be required for this part.	This manuscript provides a novel approach to modeling corrosion inhibition behavior by developing unified cubic relations for the corrosion rate profiles of Psidium guajava extracts in industrial environments. It offers valuable insights into the extract's efficiency as a green inhibitor, bridging experimental findings with predictive mathematical models. The study contributes to advancing eco-friendly corrosion management strategies, promoting sustainable practices in industrial applications.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title may not fully align with the content of the manuscript. The authors have not done any characterization for Psidium Guajava Extracts by chromatography. I propose as a title "Mathematical Modelling and Corrosion Inhibition Studies of Psidium Guajava Extracts on Mild Steel in Industrial Environments"	
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 contains 373 words, it contains a lot of details and explanations about the model's equations used. I propose to summarize it and reduce its words to 250 words maximum	
Is the manuscript scientifically, correct? Please write here.	Yes, the manuscript is scientifically correct. It just needs a few improvements which I will mention in the "general comments" section.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are not sufficient. I propose to enrich this part with other articles which cover the same subject applied to other inhibitors.	
Is the language/English quality of the article suitable for scholarly communications?	The language can be improved. I also have a comment regarding the word "behaviour" in lines 85, 101, 145, and "behavior" in line 168. I suggest using one of the two forms of this noun	
<u>Optional/General</u> comments	<ul style="list-style-type: none"> The introduction part needs to be improved with further explanations regarding the mathematical models used by adding other references about other studies of green corrosion inhibitors. The authors can also highlight the importance of these models in predicting corrosion inhibitors. They can add that by modelling the response of systems, these models identify optimal conditions, guide researchers and engineers in making informed decisions about materials, inhibitors, and operating conditions in industrial environments, and reduces the need for extensive experimental testing, saving time, resources, and costs while improving experimental design. To improve the clarity and organization of the methodology section, I propose the dividing of the section « Preparation of the leaf extracts » into two distinct sections. <ol style="list-style-type: none"> Preparation of Psidium Guajava Leaf Extracts Corrosion Rate Determination I suggest adding the results obtained by mass loss (the initial weight and the final weight) obtained during the experiments during the 28 days. The discussion part also needs to be improved 	

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
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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