Review Form 1.6

Journal Name:	**Chemical Science International Journal**
Manuscript Number:	**Ms_CSIJ_89311**
Title of the Manuscript:	**Phytochemical Constituent and Anticorrosion Properties of the Root Extract of Phyllanthus mellerianus (Nvo-nkwu) Plant on Mild Steel in 1.5M HCl Medium**
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:

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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	Section 2.1 • Authors are required to include the preparation of the stock solution (the inhibitor). This section only provide the preparation of the crude extract. Section 2.2 • This section is not reproducible. Authors should provide information on how this phytochemicals were extracted. Section 2.3 • Why dissolve the crude extract in water? That wasn't the test solution. Do you not imagine a situation where the 1.5 M concentration of the HCl will be more diluted at various inhibitor concentrations? To maintain the acid concentration, it is advisable to dissolve the crude extract in same acid solution considered as the corrosion medium. Section 2.2: Corrosion reduction: Not necessary Section 2.4 • …. at different temperatures of 303 K, 313 K and 323 K you mean to say. Please check • The authors need to describe the weight loss procedure. Please include Section 2.5 • ….investigated inhibitors from 0.1 – 0.5 g … of 30 – 60 ^{o}C. Authors should be specific in the temperatures used. Else, we assume 30, 40 , 50 and 60 or 35, 40, 45, 50, 55, 60, etc. Section 2.6 – 2.11 • Authors are strongly advised to move these sections (2.6 – 2.11) to results and discussion where they will aid in supporting the data obtained. There is no experimentation in these. This is completely theory. Section 3.3 • Authors should consider stating sufficient reasons for the observations recorded from the experimental analysis. Discussion section is missing inclusively. Authors are strongly advised to visit the following published work and others and develop the result section and cite accordingly. Ugi, B. U., Obeten, M. E., Bassey, V. M., BoEkom, E. J., Omaliko, E.C., Ugi, F. B. & Uwah, I. E. (2021) Quantum and electrochemical studies of corrosion inhibition impact on industrial structural steel (E410) by expired amiloride drug in 0.5 M solutions of HCl, H_2SO_4 and $NaHCO_3$. *Moroccan Journal of Chemistry,* 9(*4*), 677-696 Ugi, B. U., Obeten ,M. E., Bassey, V. M., Hitler, H., Adalikwu, S. A., Omaliko, C. E., Nandi, D. O. & Uwah, I. E. (2022). Adsorption and Inhibition Analysis of Aconitine and Tubocurarine Alkaloids as Eco-friendly Inhibitors of Pitting Corrosion in ASTM – A47 Low Carbon Steel in HCl Acid Environment, *Indonesian. Journal of Chemistry, 22* (1), *1 – 16* Ugi, B.U., Bassey, V.M., Obeten, M. E., Adalikwu, S. A., Omaliko, C. E. & Obi, D. N. (2021) Acetylcholine and Rivastigmine as corrosion inhibitors of Cu – Sn – Zn – Pb alloy in hydrochloric acid environment: DFT & Electrochemical Approach. *Journal of Applied*	

	Science and Environmental Management, 25(*8),* 1441 – 1448 • As against the temperatures used in this work, why the information on 333 K in Fig. 1a & b? Check Section 3.4 • …adsorption mechanism. The increase in ΔG_{ads} at 343 K? where is this 343 K in Table 4? • Figs 2 – 5 could not have given the values in Table 4. Authors should redraw those Figs and work on the data in Table 4. • Do same for Fig. 6 Conclusion • The conclusion and abstract is the same. There is no conclusion. Authors are advised to provide conclusion for the manuscript.	
Minor REVISION comments		
General comments	• Cross check the section numbering of this manuscript. It is not serial. • Authors should be consistent in the use of temperature units either in ^{0}C or K. • Authors should read through the manuscript carefully again for both grammatical errors and inconsistencies. • There is need to go through the journal's author guide to prepare the list of references.	

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?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

Name:	**Ben Ugi**
Department, University & Country	**University of Calabar, Nigeria**