Review Form 1.7

Journal Name:	**Journal of Materials Science Research and Reviews**
Manuscript Number:	**Ms_JMSRR_95525**
Title of the Manuscript:	**EFFECT OF BASICITY ON ELECTROCHEMICAL CORROSION BEHAVIOUR OF ENANTIA CHLORANTHA ON THE CORROSION OF MILD STEEL IN ACID ENVIRONMENTS.**
Type of the 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://journaljmsrr.com/index.php/JMSRR/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)*
Compulsory REVISION comments 1. **Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) 2. **Is the title of the article suitable?** (If not please suggest an alternative title) 3. **Is the abstract of the article comprehensive?** 4. **Are subsections and structure of the manuscript appropriate?** 5. **Do you think the manuscript is scientifically correct?** 6. **Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**Yes, the research title is novel.** **Title should be recast. Preferably as: " Effect of Enantia chlorantha on the electrochemical corrosion of mild steel in HCl and H2SO4 solutions".** **The abstract requires slight modification.** **Yes** **Yes** **Recent reference are required as literature is scanty. Authors are strongly encouraged to consult the underlisted references:** **Ugi, B. U,** Obeten, M. E., Bassey, V. M, Louis Hitler, Adalikwu, S. A., Omaliko, E. C., 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* vol. 22 No. 1, Pp. 1 - 16 **Benedict Ushaka Ugi,** Mbang Obeten, Victoria Bassey, Ekerete BoEkom, Evaristus Omaliko, Frederick Ugi, Ikama Uwah (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, H2SO4 and NaHCO3. *Moroccan Journal of Chemistry,* Vol. 9, No. 4, Pp. 677-696 **Ugi B.U,** Bassey V.M, Obeten M.E, Adalikwu S.A, Omaliko C.E, Obi DN (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* Vol. 25, No. 8 pp. 1441 – 1448 **Ugi B. U.** Bassey V. M. Obeten M. E. Adalikwu S. A. Nandi D. O. (2020) Secondary Plant Metabolites of Natural Product Origin - Strongylodon macrobotrys as Pitting Cor-rosion Inhibitors of Steel around Heavy Salt De-posits in Gabu, Nigeria. *Journal of materials science and chemical engineering.* Vol.8. issue 5, 38 – 60 **B. U. Ugi** (2020) Effects of Nitrogen Atoms in Vindoline Alkaloids as Fe^{2+} Ions Inhibitor in Corrosion of Gray Iron in Dilute HCl Environment: Potentiodynamic Polarization, Gravimetric Analysis and SEM. *J. Mater. Environ. Sci.,* 2020, Volume 11, Issue 8, Page 1274-1285 • **In the abstract: … the effect of Enantia chlorantha (ET) stem backethanoic extract …** This is not clear. Did authors used both stem and bark of the plant? The result does not reflect that. • **The mild steel type should be stated.** • **Was ethanoic acid used in the extraction or ethanol? Why ethanioic extract?** • **Authors rewrite the first sentence of the abstract. It is clumsy.** • **Authors should include data in the abstract.** • **There is no specific part of the result that explains basicity. Why the interest in basicity** • **The section: solution preparation should be moved to Extract/Inhibiion preparation.** • **There is nothing like 0.0 to 2.0 g/L. serial concentrations should be listed. What is 0.0 g/L ?** • **No consistency in numbering of the sub-sections.** • **2.2 and 2.2.2 should be merged.** • **Equation monitor should be used in writing the equations.** • **Authors need to explain how the use of 0.5 and 1M H2SO4 and HCl solutions balances acid basity and strength for comparism.**	

	• **While I agree that electrochemical work was done, not much experimentation was carried out. Authors should improve on the experimentation.**	
Minor REVISION comments 1. **Is language/English quality of the article suitable for scholarly communications?**	• Slightly. However, the manuscript requires a lot of grammatical work. Authors should take more time to work on the grammar. • Authors should revisit the journal guideline and work on the references especially on the citation of the Figures and Table in the text.	
Optional/General comments		

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:	**Benedict Ugi**
Department, University & Country	**University of Calabar, Nigeria**