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SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Asian Journal of Applied Chemistry Research
Manuscript Number:	**Ms_AJACR_42725**
Title of the Manuscript:	**Inhibition of Mild Steel Corrosion in Acidic Medium by Telfairia occidentalis Rind Extract**
Type of Article:	**Original Research Article**

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	**Authors' response to final evaluator's comments**
Corrosion rate expressed in mmy^{-1} was calculated from weight loss measurements and percentage of inhibition efficiency was calculated from the corrosion rate values. Equations 1 and 2 establish the relation between rate of corrosion and inhibition efficiency with the weight loss of metal specimens. $\text{Rate of corrosion } W = \frac{K \times \text{wt loss in grams}}{\text{Area in sq.cm} \times \text{time in Hrs} \times \text{Density}}$ (1) Where 'K' =87600 (This is a factor used to convert cm/hour into mm/year), density of MS specimen= 7.88g/cc Percentage of inhibition or the inhibition efficiency (η) is given by $\eta = \frac{W - W'}{W} \times 100$ (2) where W & W' are the corrosion rates of the metal specimen in the absence and presence of the inhibitor respectively. In the first review comment, since the corrosion rates are expressed in mmy^{-1}, the constants K and density compulsorily taken for calculation. In that sense the equation for corrosion rate is correct. (The constants are not included in the equation). If all the coupons have same dimensions, the inhibition efficiency can be calculated form weight loss studies. In that sense authors are **correct.** **Authors Comment:** The extract, being in paste form, can be weighed to prepare the extract concentrations in g/L, which is mass concentration. The concentrations are not given in moles/L, which is molar concentration, since the molar mass of the extract is not known. For plotting the adsorption isotherm the concentration expressed in g/L. Then how ΔG^{o}_{ads} value expressed in kJ mol^{-1} ? (Molar mass of the extract is not known). Clarify.	

Reviewer Details:

Name:	***Shaju K Shanmughan***
Department, University & Country	***Government Engineering College, Thrissur , India***