



## ORIGINAL ARTICLE

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**INHIBITION OF MILD STEEL CORROSION IN  
NUTRAL CHLORIDE MEDIUM BY A  
MIXTURE OF ZINC PHOSPHATE,  
AMMONIUM MOLYBDATE AND IMIDAZOLE  
AND 2-METHYLIMIDAZOLE**

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G Veerapandian  
Jayalakshmi

### ABSTRACT

Mild steel was polarized vs. saturated calomel electrode (SCE) in naturally aerated 3% NaCl solutions (Blank) containing mixture of inhibitors of different concentrations. The results of weight loss measurement method showed that the amount of inhibitors increases in the form of mixture with increase the corrosion inhibition. The results of potentiodynamic polarization showed that corrosion current density,  $i_{corr}$ , decreases with increasing concentration inhibitors indicating a decrease in the corrosion rate as well

### Article Indexed in



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### Introduction

The inhibition efficiency[1-2] of the formulation consisting of imidazole, 2 – methyl imidazole, molybdate and Zn<sup>2+</sup> in controlling the corrosion of mild steel in 3% Sodium chloride medium has been evaluated [3] by the weight loss measurement method and potentiodynamic polarization measurements.

#### A Good Introduction :-

*Depict the significance (importance) of the study - why was this value doing in any case? Give a wide connection. Extremely briefly depict the exploratory configuration and how it achieved the expressed destinations.*

### Materials

The mild steel specimen was tested in the present study with its dimensions (1cm x 4.5cm x 0.2cm). The composition of the mild steel is as follows (wt%): C = 0.1- 0.2, S = 0.02 – 0.03, Mn = 0.4 – 0.5, P = 0.03 – 0.08 and the rest is Fe. The specimens were degreased by acetone solution for weight loss measurement.

#### A Good Materials :-

*Materials may be accounted for in a different passage or else they may be distinguished alongside your systems. In biosciences we habitually work with arrangements - allude to them by name and portray totally, including convergences of all reagents, and pH of watery arrangements, dissolvable if non-fluid.*

### Result

The results of weight–loss measurements in the absence of inhibition (blank) and in the presence of various compositions of Imidazole or 2 – methyl imidazole, Ammonium molybdate and Zinc phosphate are given in Table-1.

#### A Good Result :-

*Results are as per aims and objective and useful to further research .*

### Conclusion

From results of weight loss measurement and Potentiodynamic polarization, we may cover to the following conclusions.

#### A Good Conclusion :-

*The research have wider scope for new academician and research scholars.*

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#### A Good References :-

*There are Places where the Author G Veerapandian Jayalakshmi , G G Naganathan , S Musthafa Kani , G R Balaji Need to Cite a Reference, but Have Not*

**SUMMARY OF ARTICLE**

No.		Very High	High	Average	Low	Very Low
1.	Interest of the topic to the readers	✓				
2.	Originally & Novelty of the ideas	✓				
3.	Importance of the proposed ideas		✓			
4.	Timelines			✓		
5.	Sufficient information to support the assertions made & conclusion drawn		✓			
6.	Quality of writing (Organization, Clarity, Accuracy Grammer)		✓			
7.	References & Citation (Up-to-date, Appropriate Sufficient)	✓				

**FUTURE RESEARCH PLANNING:**

1. Related Research Areas : polymer chemistry, supramolecular engineering, physico-chemistry, polyelectrolytes.
2. 2014 International Conference on Electronics and Electrical Engineering (ICEEE 2014) Chennai, India <http://www.saise.org/iceee2014>
3. National conference on Physics and Chemistry of Solids (NCPCS-2014) Khammam, India

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The research paper is Original & Innovation it is done Double Blind Peer Reviewed. Your article is published in the month of **April** Year 2015.



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Editor-in-Chief

### REVIEWER COMMENTS

- Thought of these focuses will, I accept, lead to an enhanced report that better shows the key ideas and conclusions.
- Generally, this is a reasonable, brief, and elegantly composed original copy.
- The presentation is pertinent and hypothesis based.
- Sufficient data about the past study discoveries is displayed for perusers to take after the present study method of reasoning and strategies.

Authorized Signature

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