

SINI VARGHESE C. “ EVALUATION ON THE INHIBITIVE EFFECT OF HETEROCYCLIC DERIVATIVES AND POLYAMINO COMPOUNDS ON THE CORROSION OF CARBON STEEL AND COPPER IN ACID MEDIA.” THESIS. RESEARCH AND POSTGRADUATE DEPARTMENT OF CHEMISTRY, ST. THOMAS’ COLLEGE (AUTONOMOUS), UNIVERSITY OF CALICUT, 2019.

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LIST OF PUBLICATIONS

1. **Sini Varghese C**, Joby Thomas K, Vinod P Raphael, Binsi M Paulson, Ragi. K, “Electrochemically synthesized poly(2-aminobenzenesulphonic acid) – an efficient protection for carbon steel corrosion” *Oriental Journal of Chemistry*, 35(2) (2019) 678-683.
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LIST OF CONFERENCE PAPERS

1. **Sini Varghese C**, Joby Thomas K, Binsi M Paulson, Ragi. K, “Corrosion inhibition investigations on 2-pyridine carbaldehyde-2-aminophenol on carbon steel in 1M HCl” KSCSTE Sponsored National Seminar on *Recent Trends in Computational Chemistry and Drug Design*, St Joseph’s College (Autonomous), Irinjalakuda, 28-29 January 2019.
2. **Sini Varghese C**, Joby Thomas K, Ragi. K, Binsi M Paulson, “Corrosion inhibition investigations of 3-formylindole phenyl hydrazone on copper in nitric acid medium” DST Sponsored International Conference on *Chemistry and Physics of Materials*, St Thomas’ College (Autonomous), Thrissur, 19-21 December 2018.
3. **Sini Varghese C**, Joby Thomas K, Vinod P Raphael, Binsi M Paulson, “Pyridine-2-carbaldehyde derivatives as potential inhibitors against copper corrosion in 0.1M HNO₃” KSCSTE Sponsored National Seminar on *Interdisciplinary Chemical Research*, St Joseph’s College (Autonomous), Irinjalakuda, 15-16 February 2018.
4. **Sini Varghese C**, Joby Thomas K, Vinod P Raphael, Binsi M Paulson, “Interaction of two heterocyclic oximes on copper corrosion in nitric acid: electrochemical, surface morphological and quantum chemical investigations” 30th Kerala Science Congress, Brennan College, Thalasseri, Kannur, 28-30 January 2018.
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9. Aby Paul, Joby Thomas K, **Sini Varghese C**, Reeja Johnson, Binsi M Paulson, “Evaluation of anticorrosive properties of 3-formylindole-2-amino benzoic acid and 3-formylindole -3-amino benzoic acid: on copper in HCl media” UGC Sponsored National Seminar on *Advanced Topics in Chemistry*, Sree Narayana College, Nattika, 19-20 August 2015.
10. Ragi K, Joby Thomas K, Vinod P Raphael, **Sini Varghese C**, Binsi M Paulson, “Gravimetric and electrochemical investigations on corrosion inhibition of N,

N'- (5,5-dimethylcyclohexane-1,3-diylidene)dianiline on mild steel surface in 1M HCl" DST Sponsored International Conference on *Chemistry and Physics of Materials*, St Thomas' College (Autonomous), Thrissur, 19-21 December 2018.

11. Binsi M Paulson, Joby Thomas K, Ragi K, **Sini Varghese C**, Reeja Johnson, "Corrosion inhibition efficacy of 2-acetylpyridine phenyl hydrazone on mild steel in acid media: physicochemical and electrochemical investigations" DST Sponsored International Conference on *Materials for the Millennium MATCON 2019*, Cochin University of Science and Technology, 14-16 March 2019.

PAPERS COMMUNICATED / TO BE COMMUNICATED

1. "Investigations on the anticorrosive properties of heterocyclic imines derived from pyridine carbaldehyde" (communicated)
2. "Mitigation of corrosion inhibition efficiency of polymeric coatings by polyamino compounds: electrochemical and surface morphological investigations" (to be communicated)