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A New Insight into Corrosion Inhibition Mechanism of Copper in Aerated 3.5 % (by weight) NaCl Solution by Eco-friendly Imidazopyrimidine Dye: Experimental and Theoretical Approach

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ABSTRACT

A large number of mechanism were anticipated for copper since 1988 in NaCl medium. The detail electrochemical behavior leading to the anodic dissolution of copper, however, still remains uncertain. Herein, an Imidazopyrimidine Dye, named, 4-amino-3-(phenyldiazenyl)benzo[4,5]imidazo[1,2-a]pyrimidin-2(1H)-one, (APIP) has been used as a copper corrosion inhibitor in 3.5 wt. % (by weight) NaCl solution. The present investigation provides a

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