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Pyrazolopyrimidinone derivatives as corrosion inhibitors for carbon steel in acidic media

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Some Pyrazolop Pyrimidinone derivatives was synthesized, Purified, and evaluated as corrosion inhibitor by chemical and electrochemical methods at different inhibitor concentrations and temperatures. The inhibition efficiency for corrosion increased with increase in inhibitor concentration, but decreased with temperature. The obtained polarization curves indicate that these compounds act as mixed-type inhibitors. the adsorption process obeys Langmuir isotherm. Thermodynamic activation parameters were computed and discussed.

Keywords: Pyrazolopyrimidine; Corrosion; Inhibitors; Steel; Weight loss; polarization.

Biography:

Reda Abdel Hameed graduated with a degree in chemistry from Al-Azhar University, Cairo, Egypt. He has carried out research projects in applied organic chemistry, physical chemistry, and green chemistry. He has more than 20 years of teaching experience as a lecturer and associate professor in Egypt and the KSA. Reda has more than 43 research papers in various national and international journals. He is currently working as an associate professor of applied Physical Chemistry at Al-Azhar University. The current address Faculty of Science, Hail University, KSA.