

Study of corrosion inhibition property of metal oxides for carbon steel in acidic medium by gravimetric analysis

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Metal oxides (MO) due to their basic nature have been selected as corrosion inhibitor for carbon steel in 1 N hydrochloric acid solution. Metal oxide such as ZnO, NiO, Eu₂O₃ are used as corrosion inhibitors and the corrosion inhibition efficiencies were compared. The behavior of metal oxide, MO as a corrosion inhibitor for carbon steel in 1 N HCl acidic medium has been investigated by weight loss method at room temperature. The corrosion inhibition efficiency (IE) increased with increase in concentration of MO except NiO.

Keywords: Carbon steel, metal oxides, corrosion inhibition, weight loss method.
