Short Communication

Study on the Synergistic Effect of Iodide Ion with the Extract of *Artemisia Halodendron* on the Corrosion Inhibition

Hui Cang, Zhe Tang, Hengye Li, Lei Li, Jingling Shao, Huaihong Zhang*

College of Chemistry and Chemical Engineering, Yancheng Institute of Technology, Yancheng 224051, China

*E-mail: Canghui_ycit@126.com, zh5817@163.com

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The synergistic inhibition effect of iodide ion with the extracts of *Artemisia Halodendron* was studied by electrochemical potentiodynamic polarization methods. It was found that the inhibition efficiency increased with increasing the iodide ion concentration when fixed the concentration of the extract. But increased first and decreased then with increasing concentration of the extract when fixed the iodide ion concentration. The synergism parameters were evaluated from the inhibition efficiency values. SEM and EDX study confirmed the corrosion inhibition of the extract and iodide ion on the mild steel surface in HCl solution.

Keywords: Plant extract, Corrosion, Green inhibitor, Acid solution

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