**ABSTRACT**

The corrosion inhibition property of 1,3,4-oxadazoledimers have been investigated for mild steel in acidic environment using gravimetric method, Tafel polarization, electrochemical impedance spectroscopy(EIS), scanning electron microscope(SEM), atomic absorption spectroscopy (AAS) and adsorption isotherm. The results revealed that 1,3,4-oxadiazole dimers had excellent corrosion inhibition property for mild steel in 1M H2SO4 acid media and its inhibitive efficiency was more than 99% even with a low concentration of 1000ppm.The adsorption of the organic compounds on the mild steel surface obeyed Langmuir adsorption isotherm. IR spectra and SEM proved the adsorption of organic inhibitors and the formation of corrosion products on the mild steel surface.