

## Poster Presentations

### Gracilaria bursa-pastoris as eco-friendly corrosion inhibitor for mild steel in 1 M HCl media

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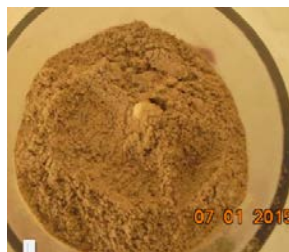
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#### Abstract

This work describes the successful performance of Gracilaria bursa-pastoris as an eco-friendly corrosion inhibitor for mild steel in HCl 1M solution. This study investigated by weight loss measurement, electrochemical impedance spectroscopy (EIS) and Tafel polarization. The inhibition mechanism is discussed considering thermodynamics of adsorption and kinetics of the electrochemical reactions. Gracilaria bursa-pastoris is a mixed-type inhibitor and the mode of inhibition results from the geometric blocking effect of physisorbed inhibitive species at the metal surface.



(a)



(b)

**Figure 1:** Gracilaria bursa-pastoris, a) plant, b) powder

**Key words:** Mild steel, Gracilaria bursa-pastoris, Plant, HCl, Corrosion, Green inhibitor.