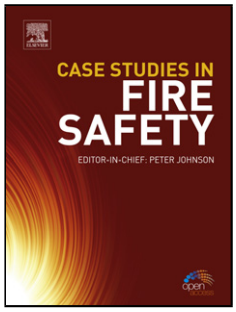

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Synergistic effect of molybdenum coating and SDS surfactant on corrosion inhibition of mild steel in presence of 3.5% NaCl

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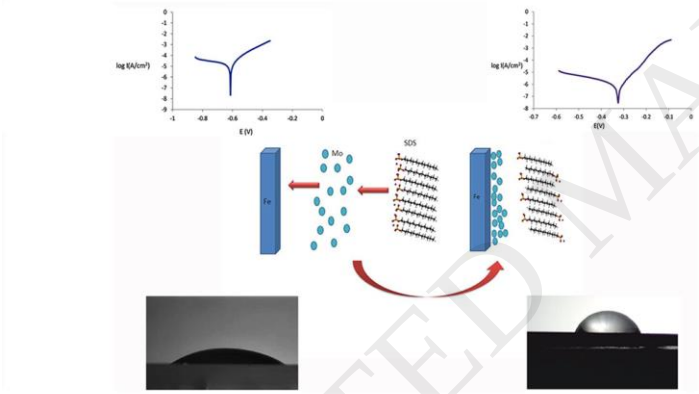
Graphical abstract



Highlights

- A novel method for inhibition of mild steel corrosion was represented by sputtering and surfactants.
- The efficiency of this method was investigated by polarization and EIS electrochemical techniques.
- The studies showed that Mo improves the adsorption of surfactant molecules on the surface.
- The SDS reduces corrosion not only kinetically but also thermodynamically.