

## عنوان مقاله:

Corrosion inhibition effect of an indole based corrosion inhibitor on mild steel in 1MHCl solution

## محل انتشار:

ششمین کنگره بین المللی رنگ و پوشش (سال: 1394)

تعداد صفحات اصل مقاله: 2

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## خلاصه مقاله:

Corrosion inhibition effect of Indole-3-carbaldehyde on mild steel in 1MHCl solution during 4hr immersion times was investigated by electrochemical impedance spectroscopy (EIS). Results showed that this component has corrosion inhibition effect on mild steel. By increasing the exposing time of mild steel samples to the inhibitor contained solution from 15 to 240 minute, polarization resistance increase. Using quantum chemical analysis software it was found that inhibitor molecules can adsorb on the surface of positively charged mild steel in 1MHCl solution through their .negatively charged benzene rings and positively charged N atoms in their structures

## کلمات کلیدی:

Corrosion inhibitor- Mild steel- Indole-HCl-EIS

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/424166>

