|  |  |
| --- | --- |
| **ABSTRACT**Inhibition efficiency of *Aster koraiensis* leaf extract toward corrosion of mild steel in 1 M H2SO4 solution was investigated using weight loss, electrochemical, FT-IR, SEM, and EDX methods The individual phenolic compounds present in *A. koraiensis* extract were identified. Maximum efficiency of 90.53% was achieved at 2000 ppm of the extract. The corrosion kinetic parameters determined from the polarization curves indicated that the extract acted as a mixed-type inhibitor. Adsorption of the inhibitor on the mild steel surface obeyed the Langmuir isotherm. SEM investigations confirmed the formation of inhibition layer unto the metal surface by compounds present in the extract. |  |