

Abbreviations and Symbols

ABBREVIATIONS AND SYMBOLS

FTIR	Fourier Transform Infrared Spectroscopy
$^1\text{H NMR}$	Proton nuclear magnetic resonance spectroscopy
SEM	Scanning electron microscopy
EDX	Energy Dispersive X-Ray analysis
IE	Inhibition efficiency
θ	Surface coverage
C	Concentration
$\Delta G_{\text{ads}}^{\circ}$	Free energy of adsorption
ΔH^*	Enthalpy of activation
ΔS^*	Entropy of activation
E_a	Energy of activation
I_{corr}	corrosion current
E_{corr}	Corrosion potential
EIS	Electrochemical impedance spectroscopy
R_t	Charge transfer resistance
R_s	Solution resistance
C_{dl}	Double layer capacitance
AFM	Atomic force microscopy
R	Gas constant
H	Planck's constant
K	Boltzmann's constant
K_{ads}	Equilibrium constant for adsorption
T	Temperature
N	Avogadro number
S_a	Average roughness
S_q	Root mean square roughness
CTAB	Cetyl trimethyl ammonium bromide

SDS	Sodium dodecyl sulphate
HOMO	Highest occupied molecular orbital
LUMO	Lowest unoccupied molecular orbital
S_s	Synergism parameter
E	Dielectric constant
ΔE	Energy gap
I	Ionization potential
χ	Electronegativity
η	Global hardness
σ	Global softness
Ppm	Parts per million
Hz	Hertz
TLC	Thin layer chromatography