

LIST OF FIGURES

LIST OF FIGURES

Figure No.	Title	Page No.
1	IR spectrum of HEBTA	53
2	IR spectrum of BBTA	54
3	IR spectrum of NBTA	55
4	Influence of concentration on IE of HEBTA for brass in 3% NaCl at various times of immersion	58
5	Effect of concentration on IE of BBTA in 3% NaCl on brass	58
6	Variation of IE with time on brass in 3% NaCl at various concentration of NBTA	59
7	Comparisons of IE obtained for different inhibitors on brass in 3% NaCl.(15 Days study)	59
8	Variation of IE with time of immersion (HEBTA on brass in 3% NaCl)	61
9	Variation of inhibition efficiency at various time intervals (NBTA in 3% NaCl)	61
10	Effect of concentration on IE of BBTA in 3% NaCl on brass	61
11	Trends in inhibition efficiency as a function of temperature in the presence of HEBTA on brass in 3% NaCl.	70
12	Pictorial representation of IE Vs temperature as a function of concentration of NBTA in 3% NaCl.	70
13	Role of temperature on temperature on the IE of BBTA on brass in 3% NaCl.	70
14	Temkin plots for different inhibitors	72

15	Langmuir adsorption isotherms plots for BTA derivatives in 3% NaCl	72
16	Change in free energy of adsorption with temperature in the presence of HEBTA on brass	75
17	$-\Delta G$ as a function of temperature in the presence of BBTA in 3% NaCl	75
18	Change in free energy of adsorption with temperature in the presence of NBTA on brass	75
19	Polarization curves for brass in the presence of HEBTA in 3% NaCl	84
20	Polarization curves for brass in the presence of BBTA in 3% NaCl	84
21	Polarization curves of brass in the presence of NBTA in 3% NaCl medium	85
22	Comparisons of IE of BTA derivative in 3% NaCl. By various methods.	85
23	Nyquist plots for brass in 3% NaCl in the presence of HEBTA	87
24	Bode plot of brass in the presence of HEBTA in 3% NaCl	87
25	Nyquist plots for brass in 3% NaCl in the presence of BBTA	88
26	Bode plot of brass in the presence of BBTA in 3% NaCl	88
27	Nyquist plots for brass in 3% NaCl in the presence of NBTA	89
28	Bode plot of brass in the presence of NBTA in 3% NaCl	89
29	Cyclic voltammogram for brass in the presence of 3% NaCl blank	92
30	Cyclic voltammogram for brass in 3% NaCl and in the presence of BBTA	92

31	Cyclic voltammograms for brass in 3% NaCl and in the presence of HEBTA	93
32	Cyclic voltammograms for brass in 3% NaCl and in the presence of NBTA	93
33	Optical micrograph of brass exposed for 15 days in 3% NaCl in the presence of HEBTA	95
34	Optical micrograph of brass exposed for 15 days in 3% NaCl in the presence of BBTA	96
35	Optical micrograph of brass exposed for 15 days in 3% NaCl in the presence of NBTA	97