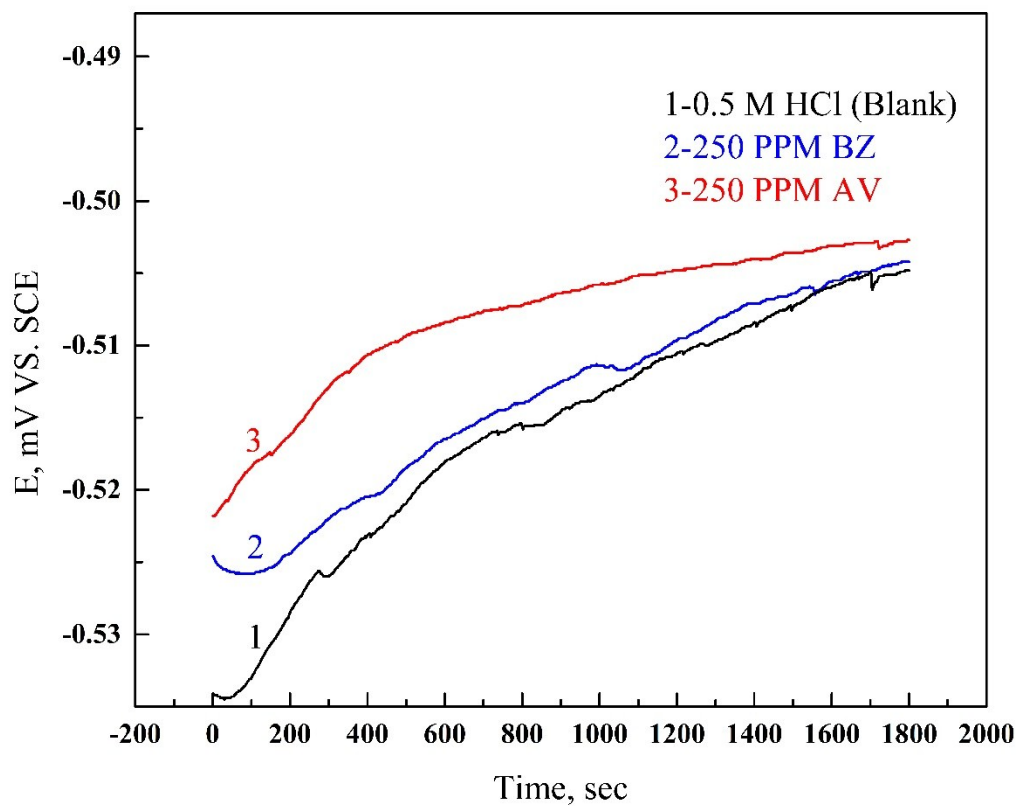
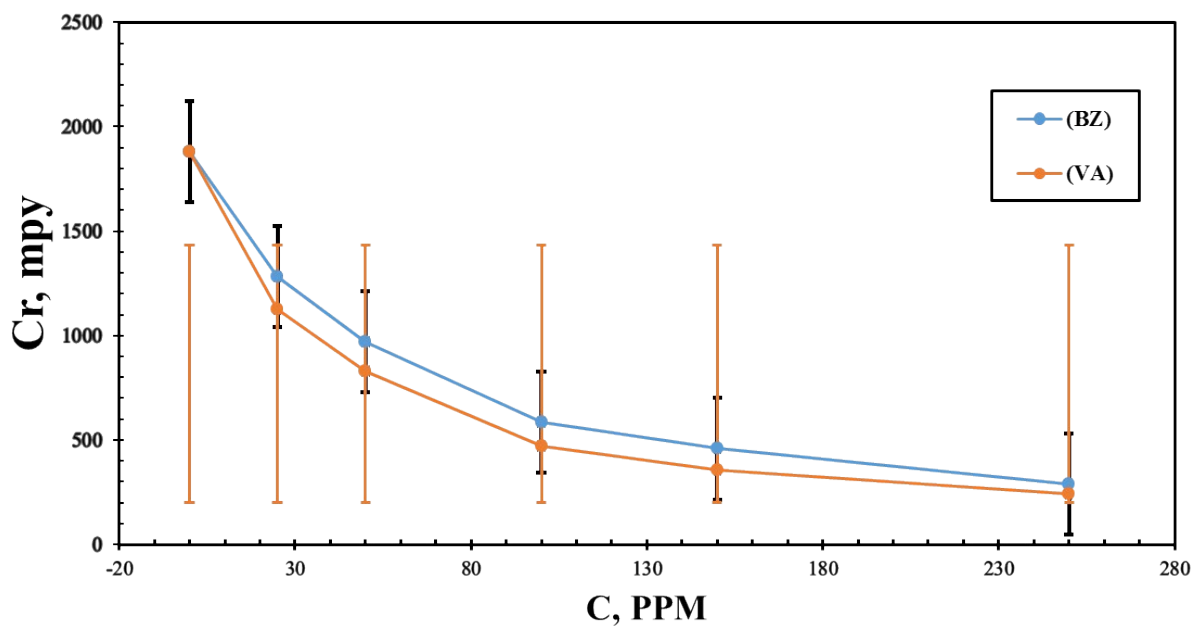


**Fig. S1-** <sup>1</sup>H NMR spectra of (VA) compound



**Fig. S2.** The change for open circuit potential (E, mV) of mild steel with the time (sec.) in 0.5M HCl solution without (1) and with the optimum concentration (250 PPM) of BZ (2) and AV (3) respectively.



**Fig S3. Relation between corrosion rate (Cr, mpy) and concentration (C, PPM) with standard deviation error bar.**

**Table S1-Langmuir isotherm type for the adsorption of Bz and VA of the MS at 298 K**

Inhibitor	Method								
	Tafel			EIS			W1		
	R <sup>2</sup>	K, (L.mg <sup>-1</sup> )	-ΔG (kJmol <sup>-1</sup> )	R <sup>2</sup>	K, (L.mg <sup>-1</sup> )	-ΔG (kJmol <sup>-1</sup> )	R <sup>2</sup>	K, (L.mg <sup>-1</sup> )	-ΔG (kJmol <sup>-1</sup> )
BZ	0.994	0.022684	24.85	0.994	0.016798	24.10	0.998	0.018767	24.38
VA	0.998	0.030041	25.54	0.997	0.02128	24.70	0.999	0.02693	25.27