

Additional material

Supplementary Table A, is the correlation values between logarithmic concentration of the inhibitor and your efficiency (η), associate at the Fig. 4.

Table A.- Correlation values between Ln (Conc) vs η

Extracto	pend	OO	R ²
PFE	3.0224	75.51	0.9428
PLE	11.224	8.497	0.9742

Supplementary Table B and C indicate de values used in the Fig. 5 (a,b) and (c,d), respectively.

Table B.- Tafel values for the PFE extract, at 1000, 100 and 20 mg L⁻¹

Conc. (mg L ⁻¹)	T (K)	Tc inh (mm yr ⁻¹)	jcorr (mA cm ⁻²)	η (%)
Blank	298	15.18	1.35	-
	303	21.08	1.91	-
	313	52.62	4.47	-
	323	227.28	19.73	-
	333	249.57	21.01	-
1000	298	0.50	0.04	96
	303	1.46	0.13	93
	313	5.28	4.54	90
	323	43.14	3.71	81
	333	56.82	4.89	77
100	298	1,38	0.14	90
	303	8.97	0.72	62
	313	19.42	1.78	60
	323	93.47	8.04	59
	333	139.00	12.00	42
20	298	2.49	0.23	84
	303	6.29	0.54	72
	313	23.08	1.99	56
	323	137.10	11.86	40
	333	210.15	18.08	21

Table C.- Tafel values for the PLE extract, at 1000, 100 and 20 mg L⁻¹.

Conc. (mg L ⁻¹)	T (K)	Tc inh (mm yr ⁻¹)	jcorr (mA cm ⁻²)	η (%)
Blank	298	23.58	2.03	-
	303	26.08	2.24	-
	313	40.15	3.49	-
	323	137.14	11.48	-
	333	192.06	17.15	-
1000	298	2.62	0,13	93
	303	2.88	0,24	89
	313	9.74	0,84	76
	323	39.98	3,44	70
	333	52.76	4,54	73
100	298	5.43	0,47	77
	303	9.88	0.85	62
	313	18.44	1.59	54
	323	89.35	7.69	59
	333	139.00	12,00	49
20	298	9.50	0,82	59
	303	17.97	1,55	31
	313	28.32	2,44	30
	323	106.32	9,15	20
	333	195.87	16,86	2

Supplementary Figure A, is the Langmuir isotherm plot for PFE

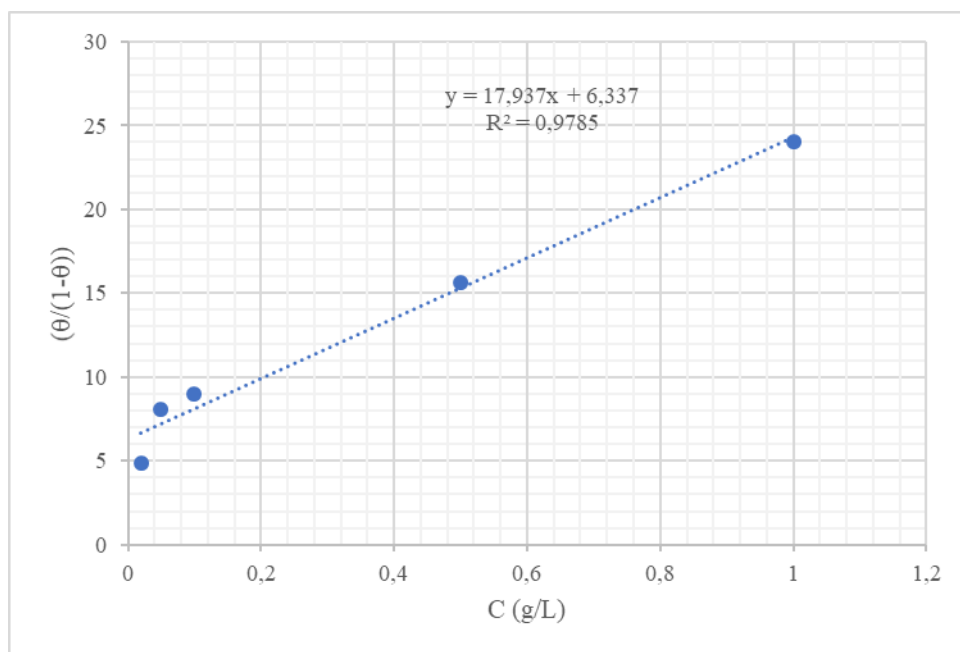


Figure A.- Langmuir isotherm plot for PFE

Supplementary Figure B, is the Flory Huggins isotherm plot for PLE

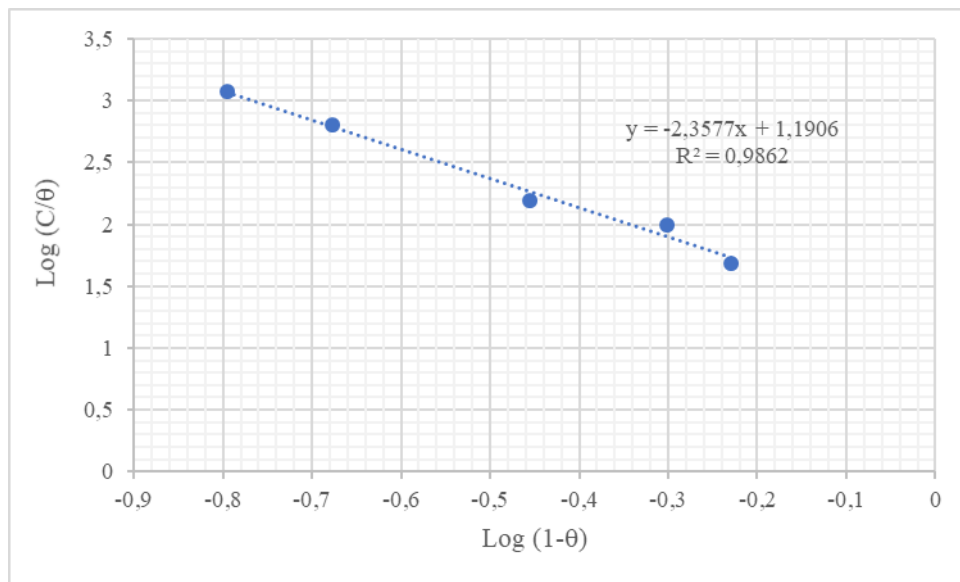


Figure B.- Flory Huggins isotherm plot for PLE

Supplementary Figure C, is the graphic of Eoc vs time

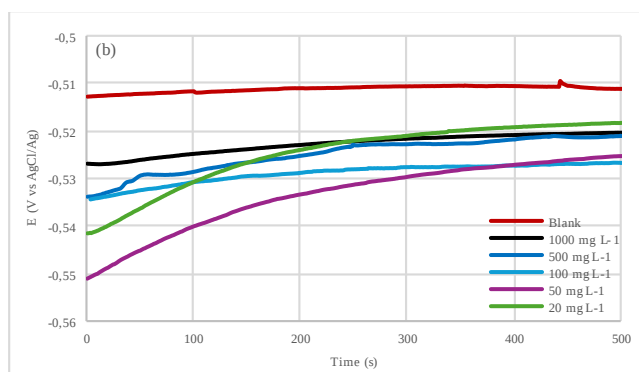
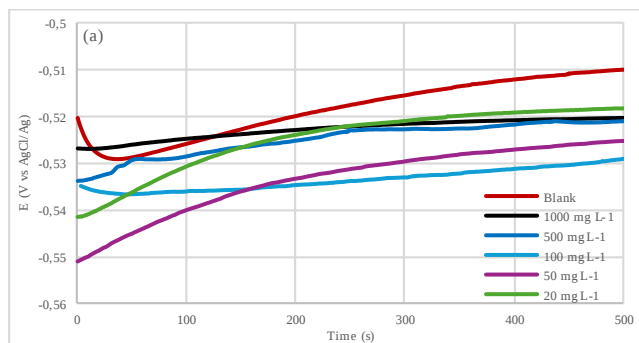


Figure C.- Example of Eoc vs time, for a) PFE y b) PLE

Supplementary Figure D, is the example of the fitting of Randles model in EIS

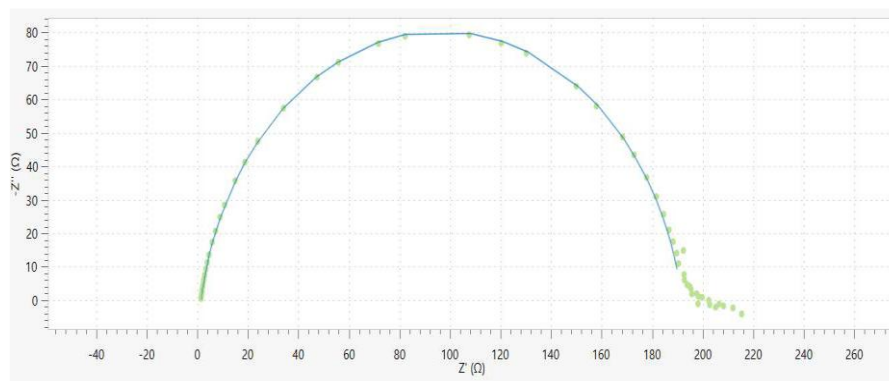


Figure D1.-Fitting of Randles in the EIS for PFE at 1000 mg L⁻¹

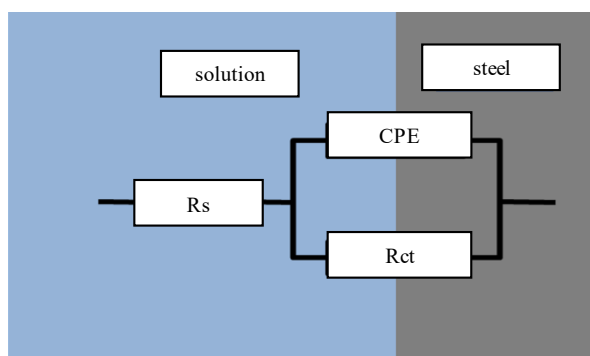


Figure D2.- Schematic circuit of Randles