Electronic Supplementary Information

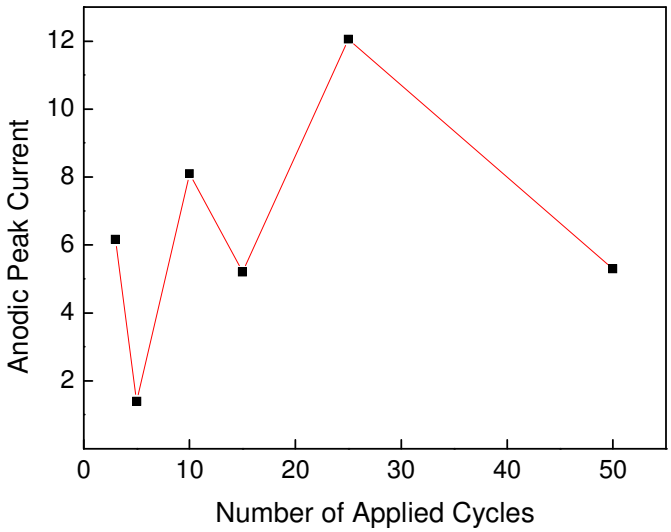

Figure 1S – Anodic peak current in function of number of applied cycles on electropolymerization step. Peak current of the coated electrode was obtained in aqueous solution (KCl 0.5 mol L^{-1}).

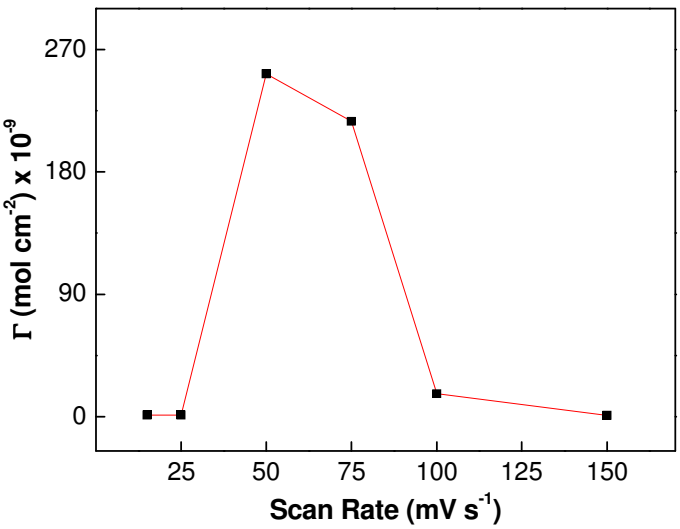

Figure 2S – Surface coverage values in function of scan rate used on electropolymerization stage.

Table S2 – Values of anodic potential observed to poly[Ni_2(*bisalphen*)] obtained in different scan rate used on electropolymerization

Scan Rate of Electropolymerization (mV s^{-1})	Peak potential (*E*/ mV)[a]			Γ (mol cm^{-2})[b]
	I	II	III	
15	- 586	-86*	456	1.25 x 10^{-9}
25	-415	37*	542	1.28 x 10^{-9}
50	-567	-370	436	2.52 x 10^{-7}
75	-434	-	452	2.17 x 10^{-7}
100	-509*	-342	552	1.70 x 10^{-8}
150	-631	-74*	-	8.65 x 10^{-10}

*potential peak with low current values; [a]potential values *versus* SCE; [b] values canceled to first anodic peak from Equation 1.

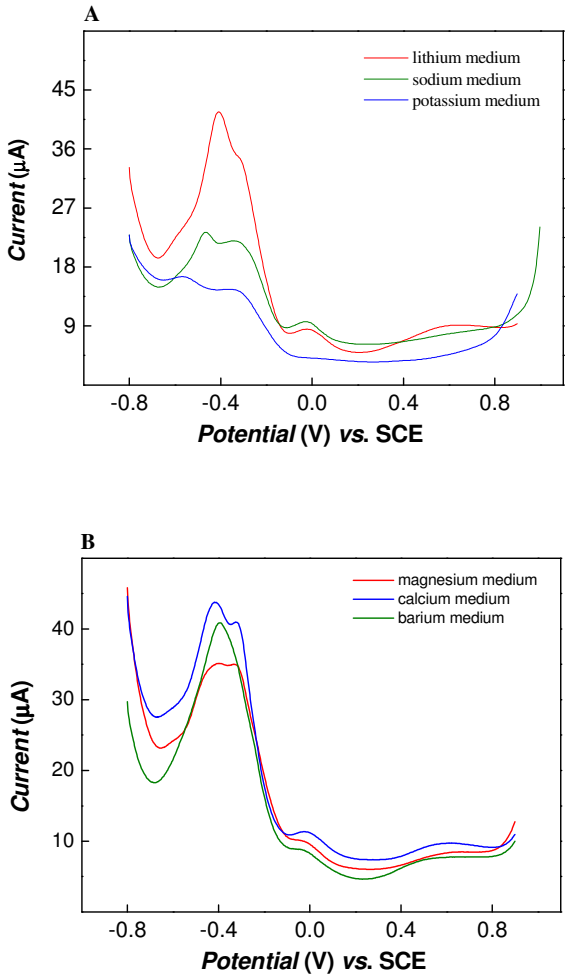

Figure 2S – Differential pulse voltammogram of poly[Ni_2(*bisalphen*) modified electrode in presence of different cations: (**A**) alkaline and (**B**) alkaline earth. (pulse = 50 mV; scan rate = 5 mV s^{-1}).