Supporting Information

Investigation of the Oscillatory Electro-dissolution of the Nickel-Iron Alloy

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Figure S1. Chronoamperogram for the Ni-Fe 80-20 electrode, with $R_{\text{cat}} = 588 \: \Omega \: \text{cm}^2$ and $E = 2.2 \: \text{V vs. SCE}$, for the rotation rates: a) 500 rpm and b) 2500 rpm.

Figure S1a shows the time-series for the anodic dissolution of the Ni-Fe 80-20 alloy with an electrode rotation of 500 rpm. It is possible to observe that many cycles take place along 1000 s (displayed in the figure) and persist for more than one hour. Contrarily, Figure S1b shows that only six cycles could be observed when the electrode rotation is switched to 2500 rpm. In this case, the time-series did not persist for more than 1000 s as shown. Therefore, Figure S1 depicts experiments, confirming that the higher the rotation rate, the less durable the oscillations are for the Ni-Fe alloy dissolution.