

Supporting Information

On the Non-Ideal Behaviour of Polarised Liquid-Liquid Interfaces

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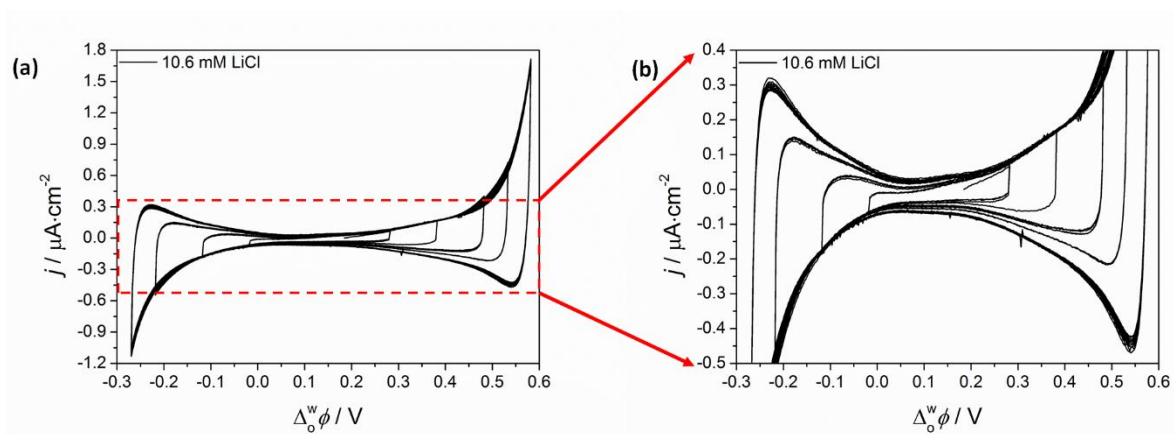


Fig. S1. (a) Cyclic voltammetry (CV) at different potential ranges when the aqueous electrolyte is 10.6 mM LiCl in Scheme 1, main text. The scan rate used is $25 \text{ mV}\cdot\text{s}^{-1}$. (b) Zoom-in on low current density region of Fig S1.

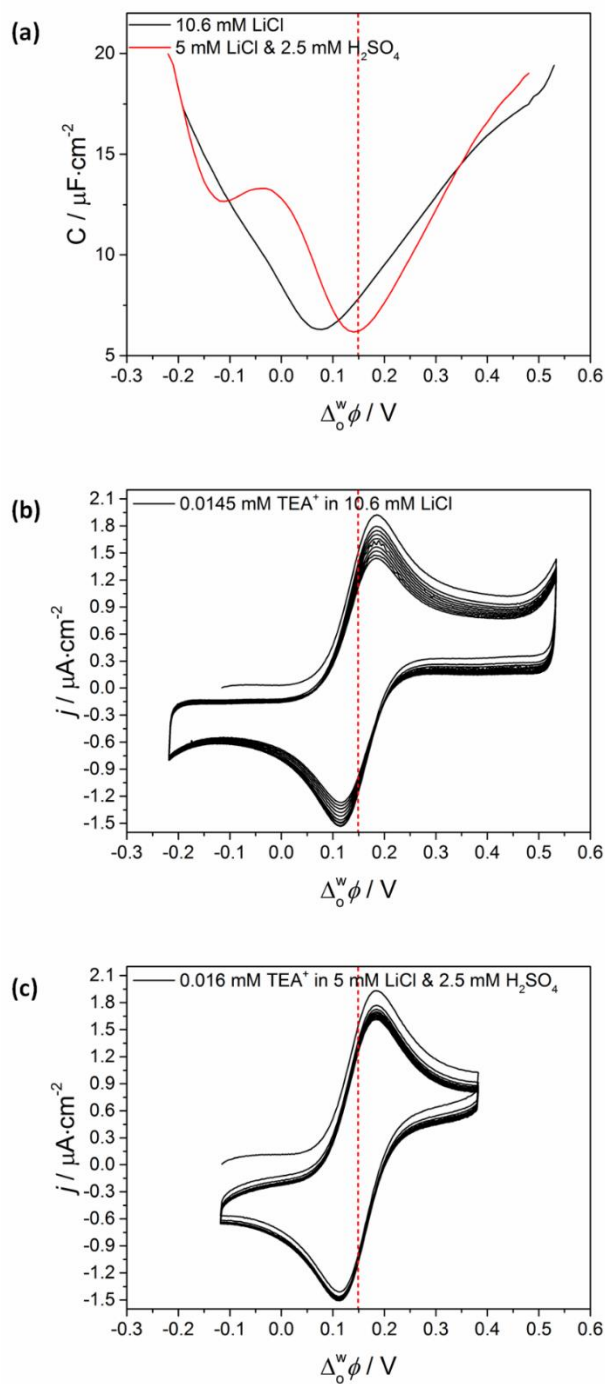


Fig. S2. (a) Differential capacitance curves when the aqueous electrolyte in Scheme 1, main text, was either (black line) 10.6 mM LiCl or (red line) 5 mM LiCl & 2.5 mM H_2SO_4 . The dashed red line represents the formal ion transfer potential of tetraethylammonium cations (TEA^+) on the Galvani scale (0.149 V). CVs with TEA^+ in the aqueous phase when the aqueous electrolyte in Scheme 1, main text, was either (b) 10.6 mM LiCl or (c) 5 mM LiCl & 2.5 mM H_2SO_4 . Ten cycles at a scan rate $25 \text{ mV}\cdot\text{s}^{-1}$ are shown.