

**Electronic supplementary material for “Highly Luminescent Ru(II) Metallopolymers;
Photophysics and Electrochemistry in Solution and as Thin Films”**

James J. Walsh,[†] Qiang Zeng,[†] Robert J. Forster* and Tia E. Keyes*

National Centre for Sensor Research,
Biomedical Diagnostics Institute,
Dublin City University, Dublin 9, Ireland

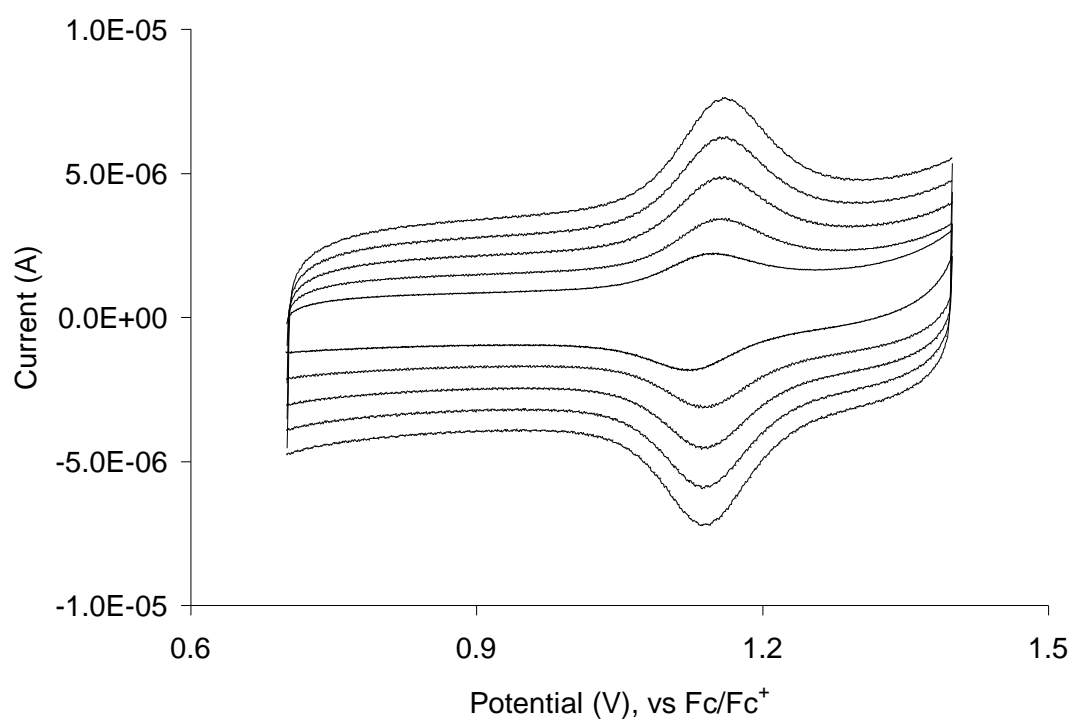


Fig S1: Cyclic voltammograms of a drop-cast thin film of $[\text{Ru}(\text{bpy})_2(\text{CAIP co-poly})_7]^{2+}$ on a glassy carbon working electrode ($A = 0.0717 \text{ cm}^2$) with 0.1 M HClO_4 in MeCN as electrolyte. Scan rates (from lowest) were 100, 200, 300, 400 and 500 $\text{mV}\cdot\text{s}^{-1}$. The reference electrode was an Ag wire (+ 400 mV vs Fc/Fc^+) and the counter electrode was a Pt wire.

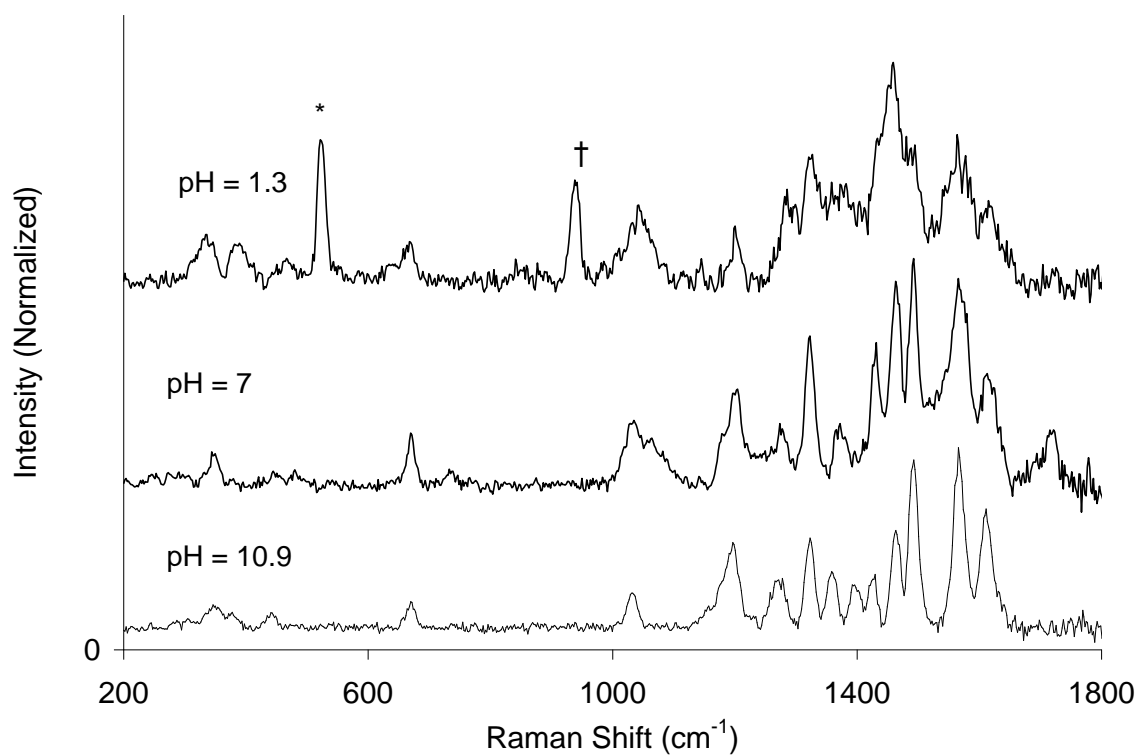


Fig S2: Resonance Raman spectra of thin films of $[\text{Ru}(\text{bpy})_2(\text{CAIP co-poly})_7]^{2+}$ in its various protonation states drop-cast onto silicon wafer under 488 nm irradiation. * silica mode; † HClO_4 mode.

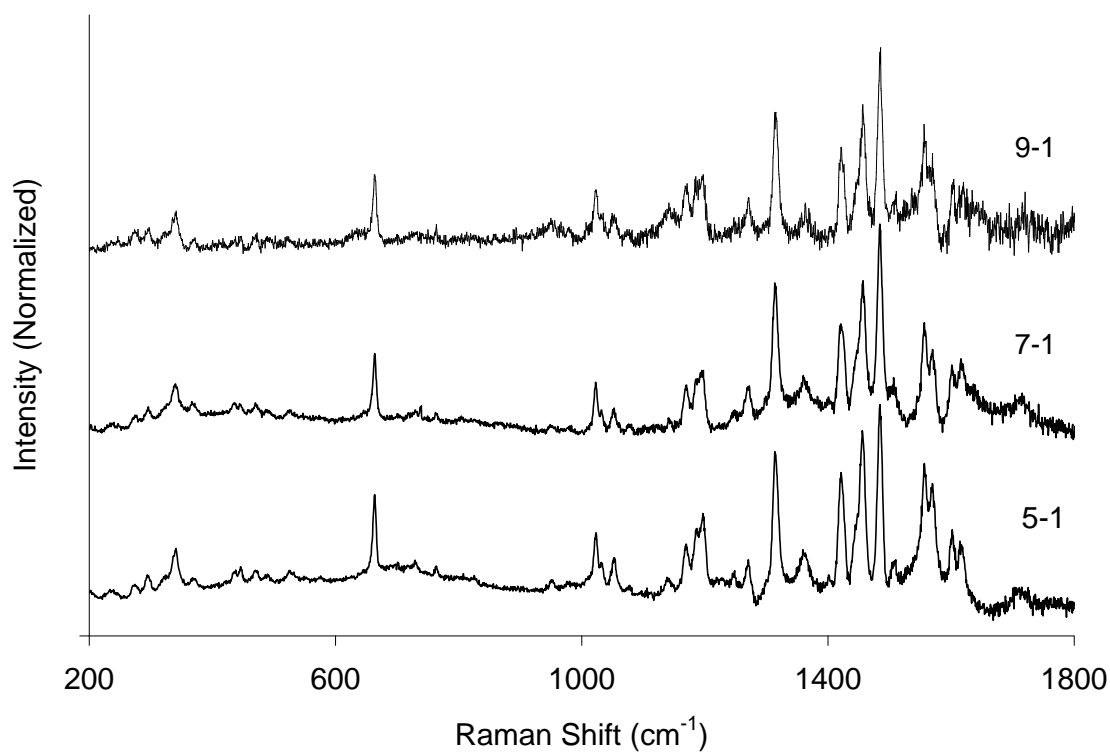


Fig S3: Resonance Raman spectra of all three metallopolymers under 458 nm irradiation.