

Supplementary Information

Electrogenerated chemiluminescence of tris(2,2'-bipyridine)ruthenium(II) using common biological buffers as co-reactant, pH buffer and supporting electrolyte

Noah Kebede, Paul S. Francis,* Gregory J. Barbante and Conor F. Hogan*

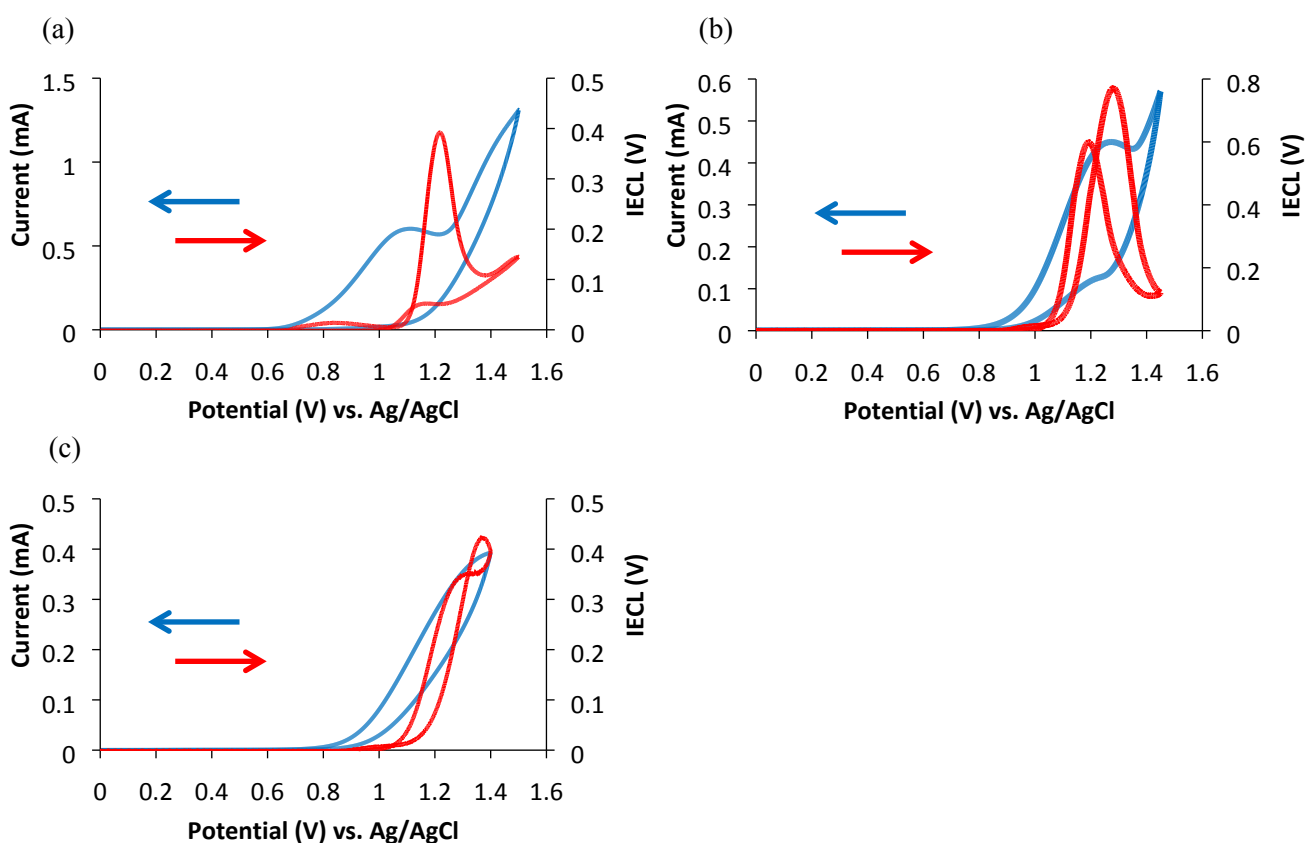


Figure S1. Cyclic voltammogram of the generated current (blue) and the corresponding ECL intensity (red) from the 1 μM $[\text{Ru}(\text{bpy})_3]^{2+}/0.1 \text{ M}$ Buffer system, obtained at a scan rate of 0.05 V/s. (a) POPSO sesquisodium salt; (b) HEPES sodium salt; (c) EPPS

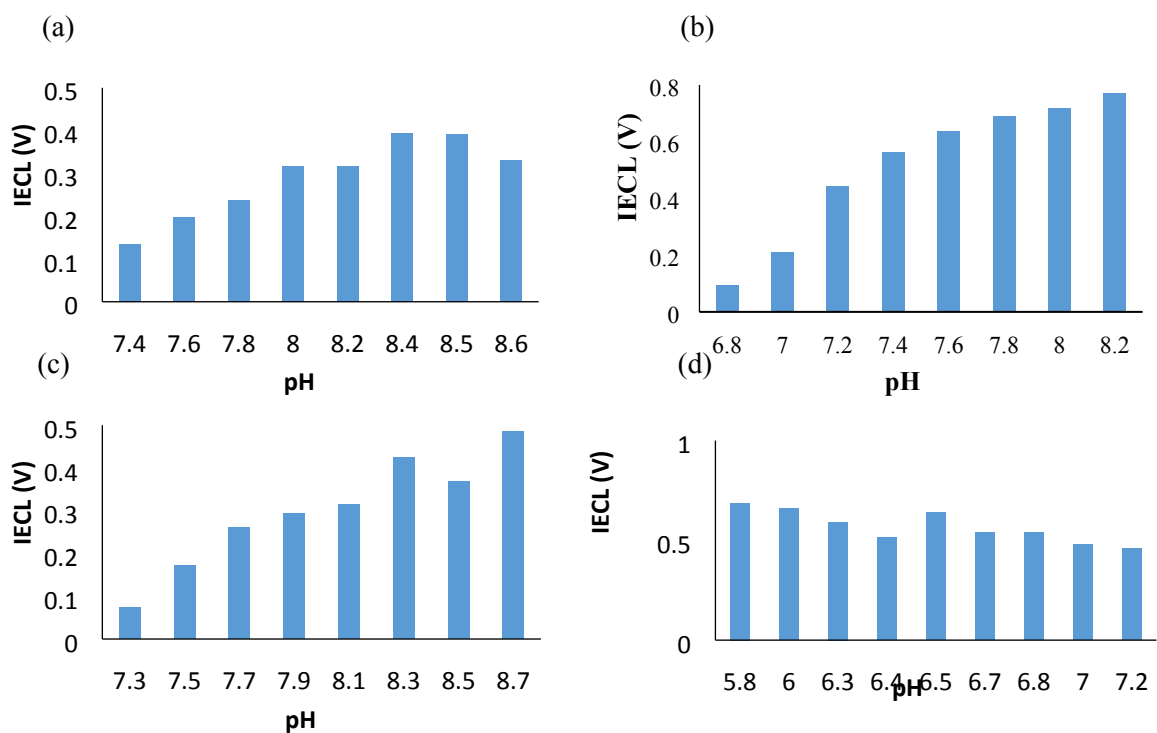


Figure S2. Peak ECL intensities generated from 1 μM $[\text{Ru}(\text{bpy})_3]^{2+}/0.1$ M biological buffer, obtained through cyclic voltammetry at a scan rate of 0.05 V/s within the useful pH range of each buffer used in the study: **(a)** POPSO sesquisodium salt; **(b)** HEPES sodium salt; **(c)** EPPS; **(d)** BIS-TRIS hydrochloride

Keywords: electrogenerated chemiluminescence; electrochemiluminescence; ruthenium, ‘Good’ buffer; co-reactant