Supplementary information for:

Electrochemiluminescence of surface bound microparticles of ruthenium complexes

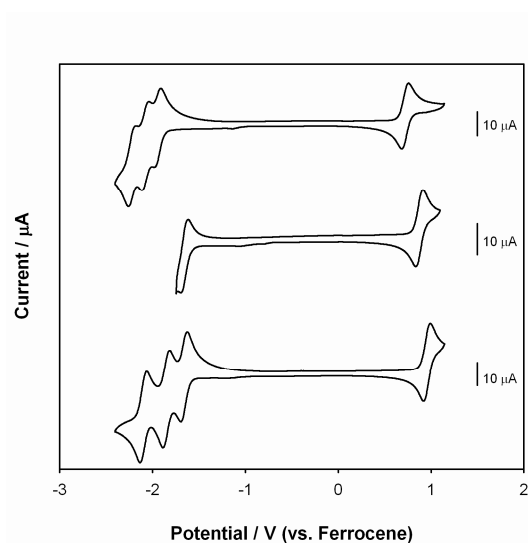**Gregory J. Barbante, Conor F. Hogan,* Adam Mechler and Andrew B. Hughes**

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Table A Solution phase electrochemical, spectroscopic and ECL properties of ruthenium diimine complexes.

	E^o / V (vs Fc)				$10^6 D$ / $cm^2 s^{-1}$	λ_{ECL} / nm^c	λ_p / nm^c	Φ_{ECL}	Φ_{em}	λ_{abs} / nm
	I	*II*	*III*	*IV*						
Ru(dpp)₃²⁺	0.85	-1.70	-	-	1.3	616	616	0.24[a]	0.300[a]	464
Ru(tmp)₃²⁺	0.68	-2.03	-2.16	-2.31	3.7	595	595	0.01	0.026	439
Ru(phen)₃²⁺	0.97	-1.74	-	-	3.7	600	600	0.02	0.030	446
Ru(bpy)₃²⁺	0.89	-1.75	-1.94	-2.18	5.8	620	620	0.05[b]	0.060[c]	452

[a]Ref. 1, [b]Ref. 27. [c]Values of λ_{max} are corrected for variation in PMT response with wavelength.

Supporting Figure A Solution phase cyclic voltammograms of (top to bottom), Ru(tmp)₃²⁺, Ru(dpp)₃²⁺ and Ru(bpy)₃²⁺ at 0.1 V/s using a 3 mm GC electrode. 1 mM solutions in acetonitrile containing 0.1 M [Bu₄N][PF₆] as supporting electrolyte.

Note: A composite movie of the morphological changes seen in the *in situ* electrochemical AFM experiment is also available.