

Electronic Supporting Information for:

Considering the chemical energy requirements of the tri-*n*-propylamine co-reactant pathways for the judicious design of new electrogenerated chemiluminescence detection systems

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Table S1. Data for Figures 1-6: metal complexes in acetonitrile solution.^{1, 2}

Complex	$E_{\text{ox}} / \text{V (vs Fc}^{0/+}$)	$E_{\text{red}} / \text{V (vs Fc}^{0/+}$)	$\lambda_{\text{max}} / \text{nm}$
[Ru(bpy) ₃] ²⁺	0.89	-1.75	620
[Ir(ppy) ₂ (phen)] ⁺	0.77 ^a	-1.85 ^a	606
[Ir(ppy) ₃]	0.33	-2.67	530
[Ir(df-ppy) ₃]	0.68	-2.53	492
[Ir(df-ppy) ₂ (ptb)] ⁺	1.17	-2.14	455
[Ir(pmi) ₃]	0.22	^b	384
[Ir(pq) ₂ (tmd)]	0.53 ^a	-2.01 ^a	615
[Ir(pq) ₂ (acac)]	0.61 ^a	-2.05 ^a	609

^aReported in original work¹ in V vs SCE and referenced to Fc^{0/+} using a conversion factor of -0.38 V.³ ^bBeyond the potential window of the solvent.

Table S2. Data for Figure 7: metal complexes in aqueous solution.⁴

Complex	$E_{\text{ox}} / \text{V (vs Ag/AgCl)}$	$E_{\text{red}} / \text{V (vs Ag/AgCl)}$	$\lambda_{\text{max}} / \text{nm}$
[Ir(df-ppy) ₂ (pt-PEG)] ⁺	1.43	-1.69	456
[Ir(df-ppy-SO ₃) ₂ (ptb)] ⁻	1.47	-1.69	462

References

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