

SUPPLEMENTARY INFORMATION

On the photophysics of *fac*-[Re(CO)₃(NN)(bpa)]⁺ complexes: a theoretical/experimental study

S. F. Sousa, N. M. Barbosa Neto, A. E. H. Machado and A. O. T. Patrocínio

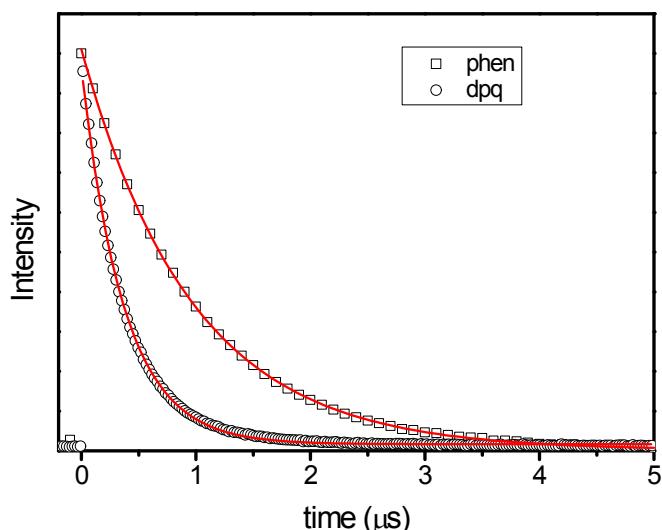


Figure S1. Emission decay curves of *fac*-[Re(CO)₃(NN)(bpa)]⁺ in acetonitrile solutions (T = 298 K) fitted to single exponential decay. $\lambda_{\text{exc}} = 355$ nm; $\lambda_{\text{em}} = 550$ nm.

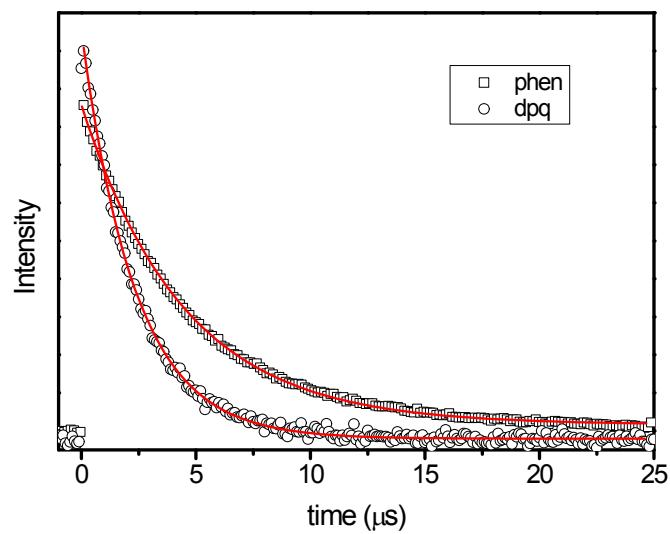


Figure S2. Emission decay curves of *fac*-[Re(CO)₃(NN)(bpa)]⁺ in PMMA films (T = 298 K) fitted to single exponential decay. $\lambda_{\text{exc}} = 355$ nm; $\lambda_{\text{em}} = 500$ nm.

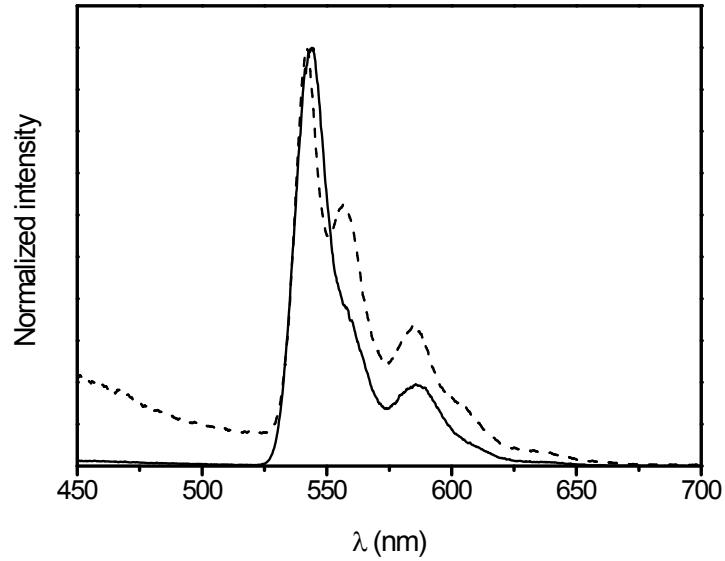


Figure S3. Emission spectra of *fac*-[Re(CO)₃(dppz)(bpa)]⁺ (—) and free dppz (----) in 4:1 ethanol/methanol (T = 77 K). $\lambda_{\text{exc}} = 380$ nm

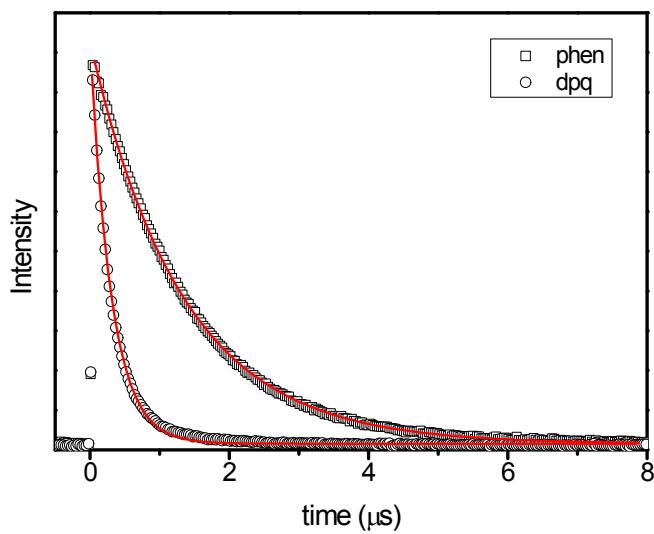


Figure S4. Emission decay curves of $\text{fac-}[\text{Re}(\text{CO})_3(\text{NN})(\text{bpa})]^+$ in 1:1 water/acetonitrile solutions ($T = 298 \text{ K}$) fitted to single exponential decay. $\lambda_{\text{exc}} = 355 \text{ nm}$; $\lambda_{\text{em}} = 550 \text{ nm}$.

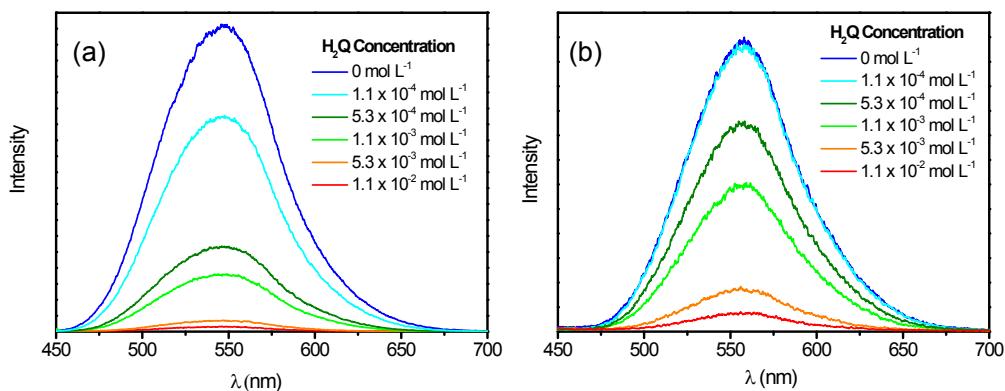


Figure S5. Emission spectra of $\text{fac-}[\text{Re}(\text{CO})_3(\text{phen})(\text{bpa})]^+$ (a) and $\text{fac-}[\text{Re}(\text{CO})_3(\text{dpq})(\text{bpa})]^+$ (b) in 1:1 water/acetonitrile solutions of hydroquinone at different concentrations ($T = 298 \text{ K}$).

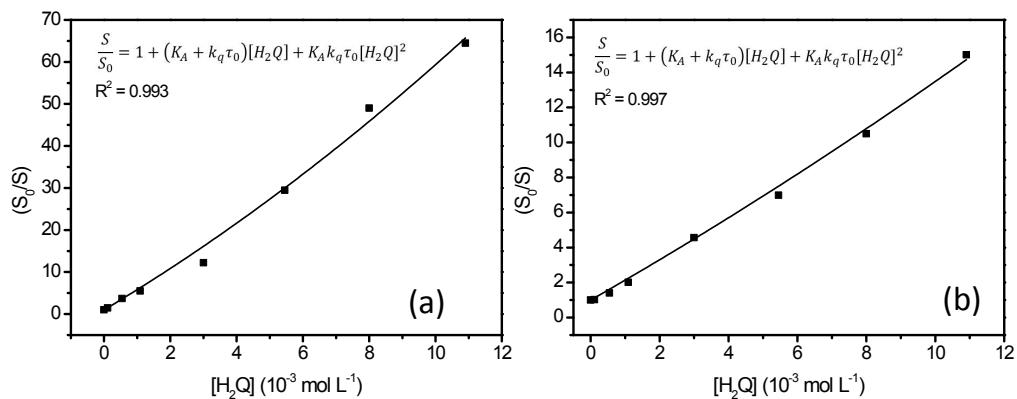


Figure S6. Changes in the emission intensity (S_0/S) of *fac*- $[\text{Re}(\text{CO})_3(\text{phen})(\text{bpa})]^+$ (a) and *fac*- $[\text{Re}(\text{CO})_3(\text{dpq})(\text{bpa})]^+$ (b) as a function of hydroquinone concentration in 1:1 $\text{CH}_3\text{CN}/\text{H}_2\text{O}$ fitted to the quadratic equation shown as inset.