Supporting Information for

Hydroxamate Anchors for Improved Photoconversion in Dye-Sensitized Solar Cells

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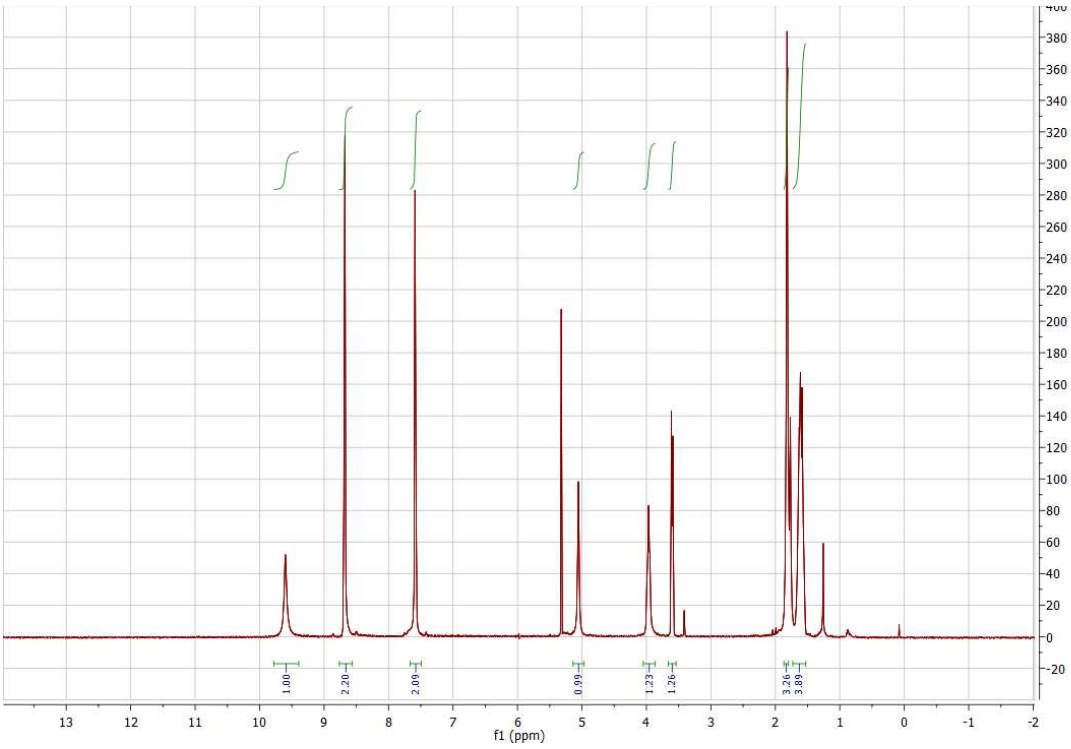
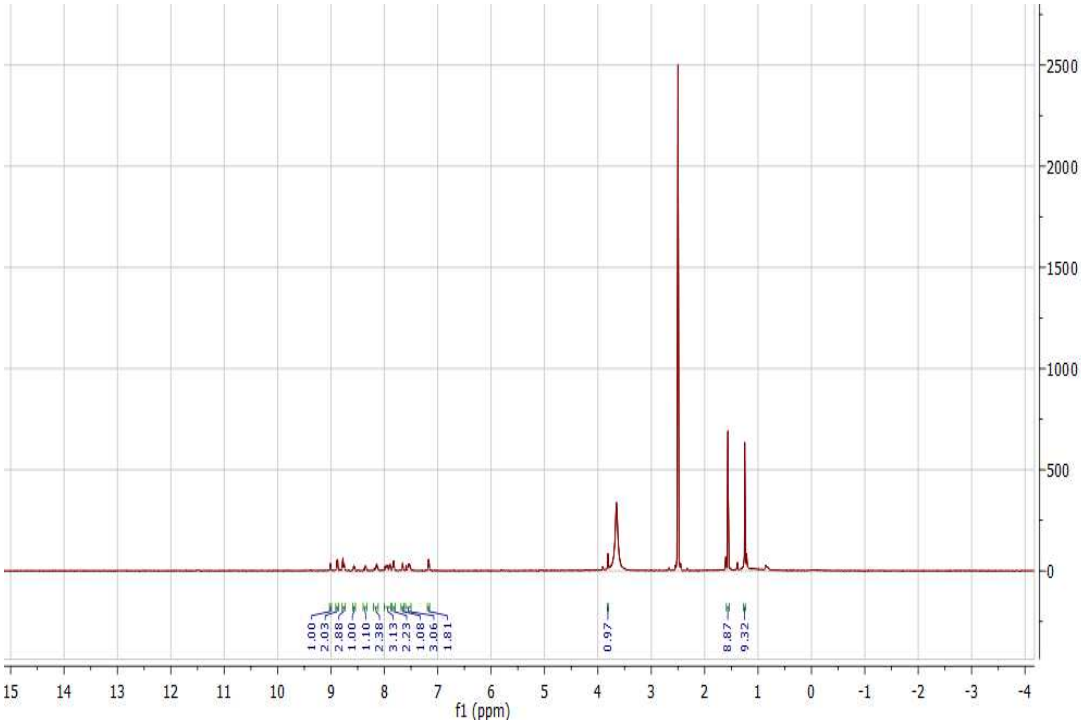
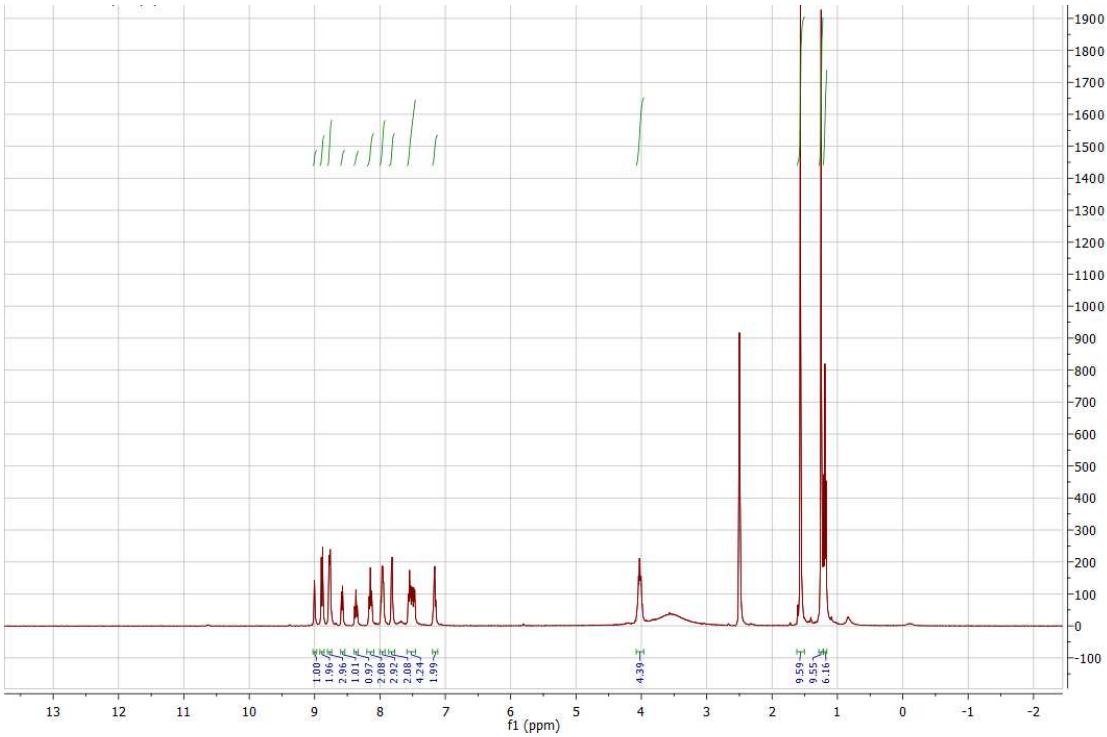


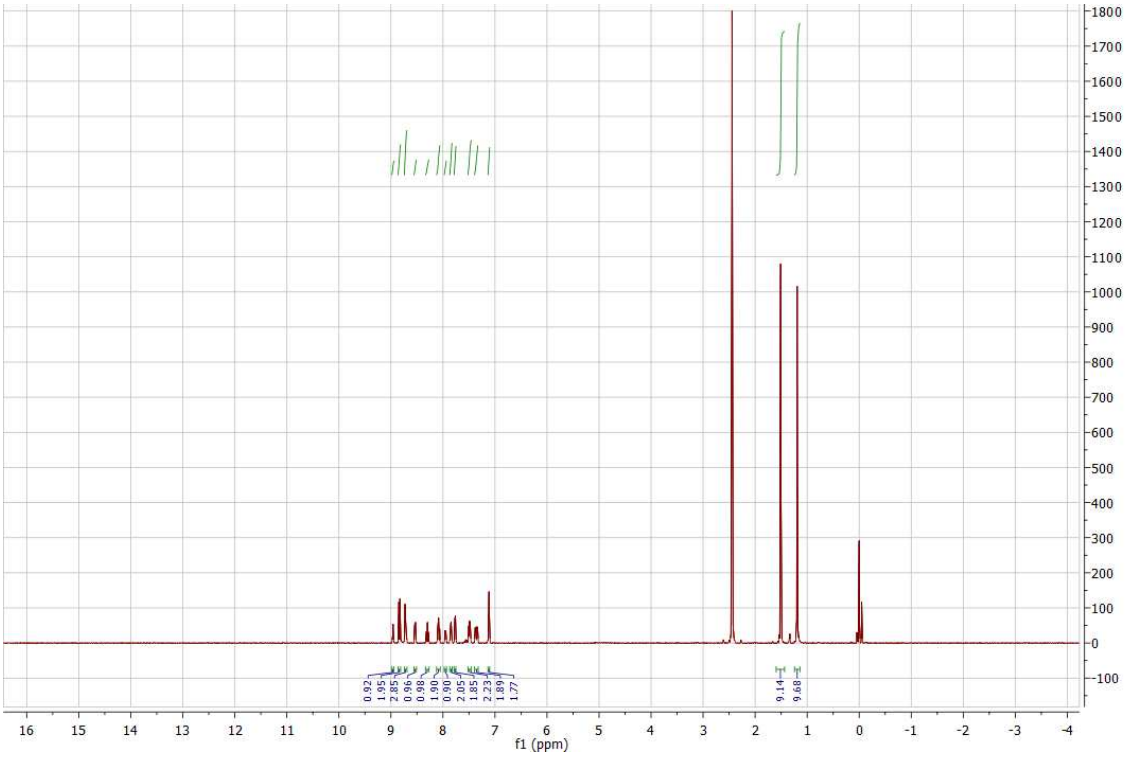
S1. ^{1}HNMR Spectra of N-((tetrahydro-2H-pyran-2-yl)oxy)isonicotinamide



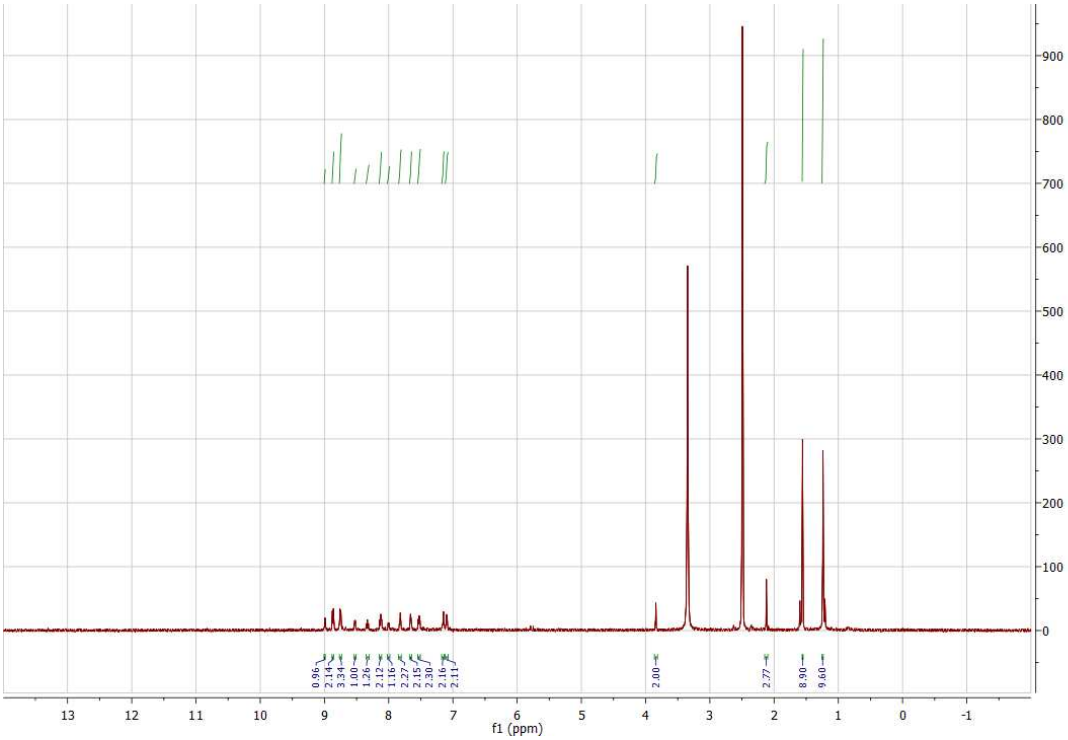
S2. ^{1}HNMR Spectra of $[Ru(terpy)(tbbpy)(pyr\text{-}hydrox)][BF_4]_2$ (**4**)



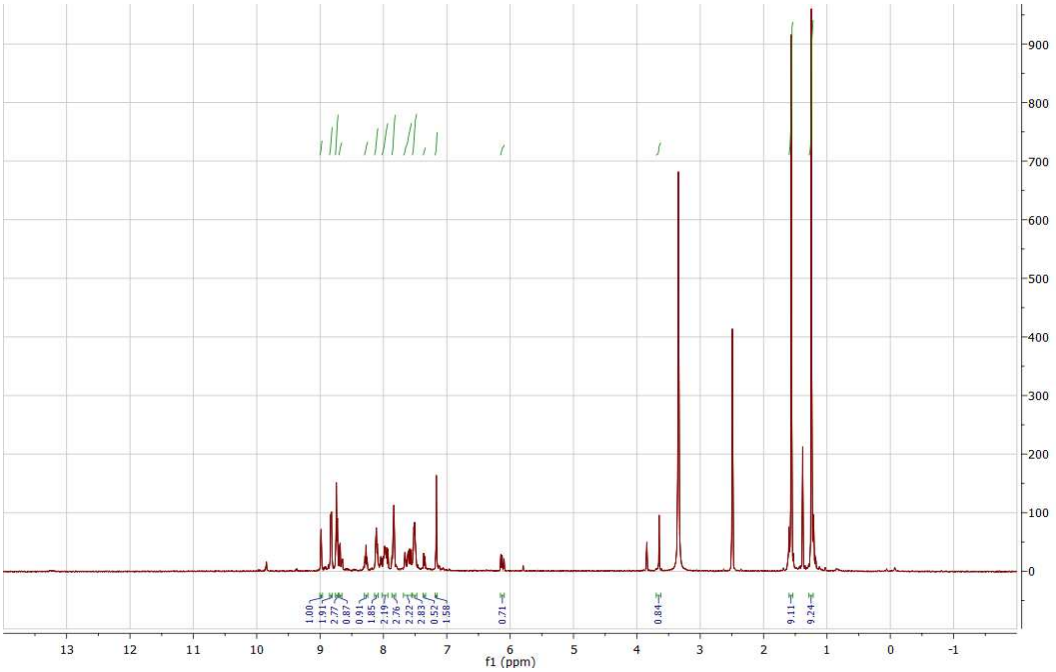
S3. ^{1}HNMR Spectra of [Ru(terpy)(tbbpy)(pyr-PO(OEt)$_2$)][BF$_4$]$_2$ (**5**)



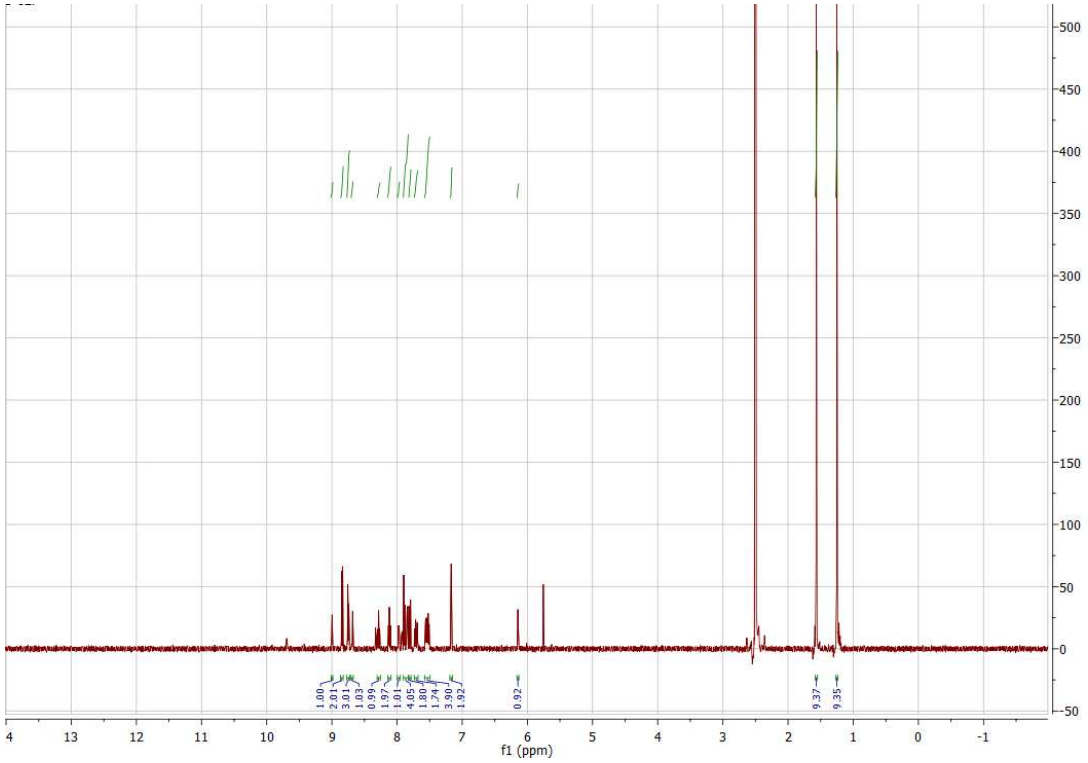
S4. ^{1}HNMR Spectra of [Ru(terpy)(tbbpy)(pyr-phos)][BF$_4$]$_2$ (**6**)



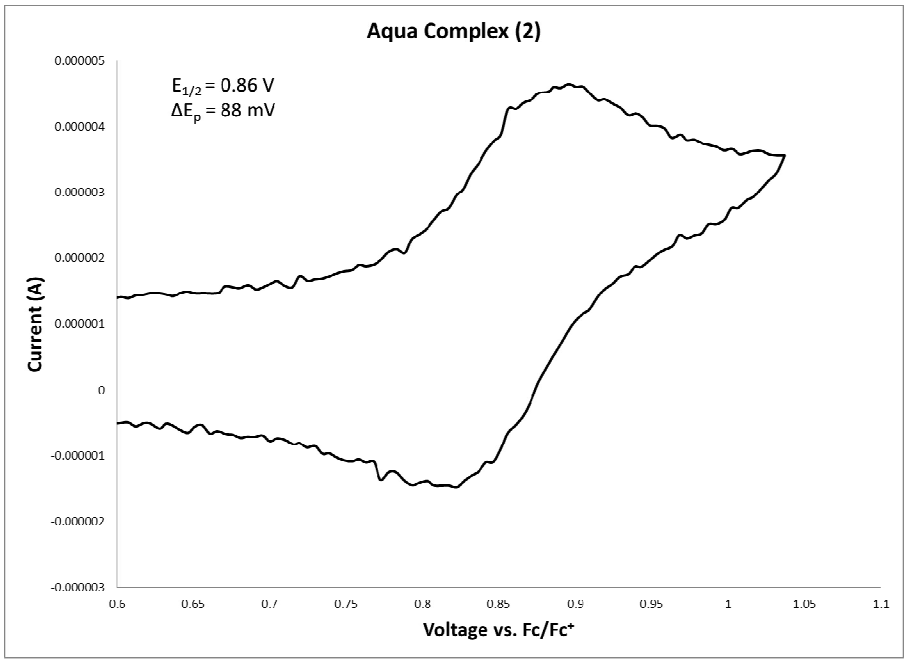
S5. ^{1}HNMR Spectra of [Ru(terpy)(tbbpy)(pyr-acetone)][BF_4]$_2$ (**8**)



S6. ^{1}HNMR Spectra of [Ru(terpy)(tbbpy)(im-ph-hydrox)][BF_4]$_2$ (**12**). Extra peaks are water at δ 3.3 and methanol at δ 1.5 and 3.8.



S7. ^{1}HNMR Spectra of [Ru(terpy)(tbbpy)(im-ph-phos)][BF_4]$_2$ (**15**). Extra peak at δ 5.7 is dichloromethane.



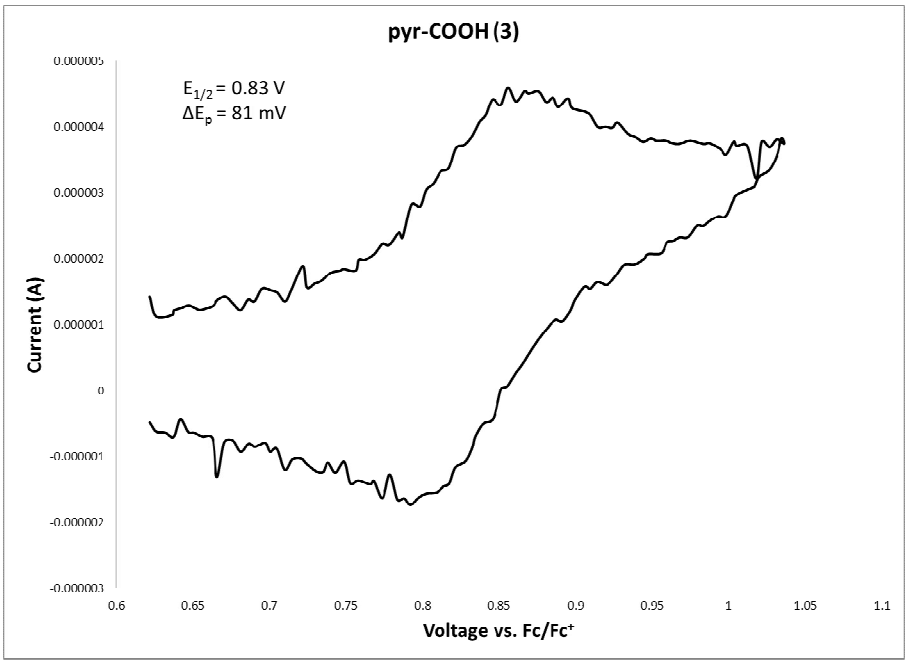
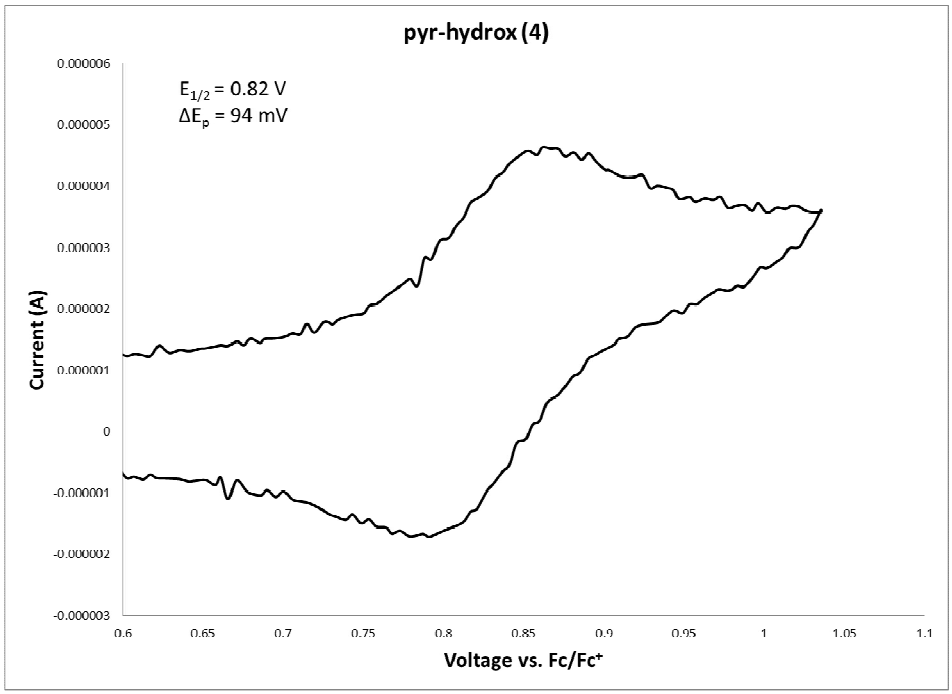


Figure S8. Cyclic Voltammetry of **2** and **3** in 0.3 mM acetonitrile solution using 0.1 M NBu_4BF_4 as supporting electrolyte.



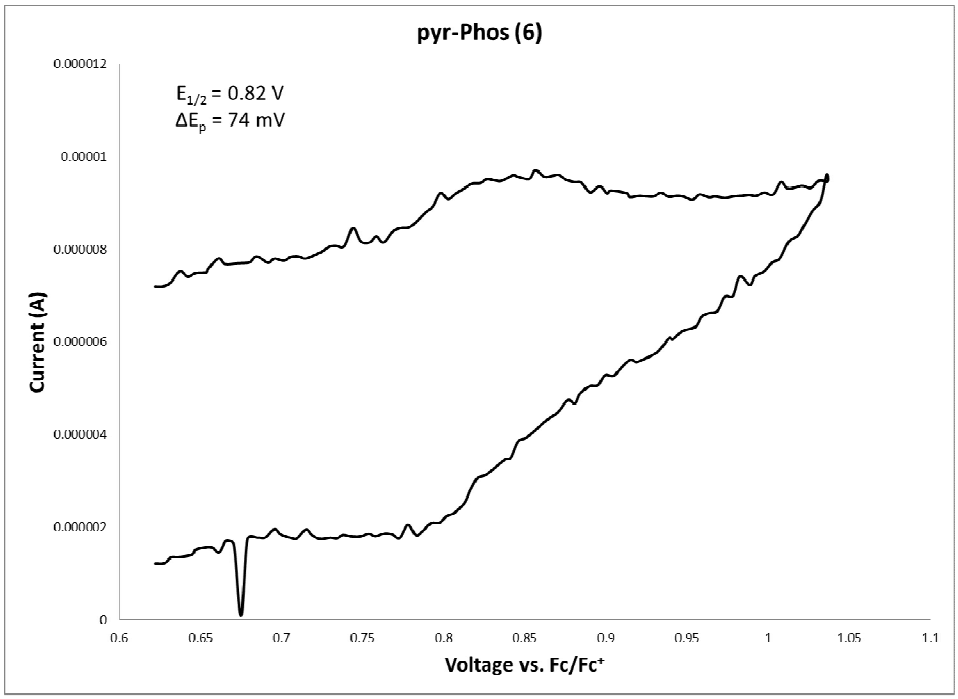


Figure S9. Cyclic Voltammetry of **4** and **6** in 0.3 mM acetonitrile solution using 0.1 M NBu_4BF_4 as supporting electrolyte.

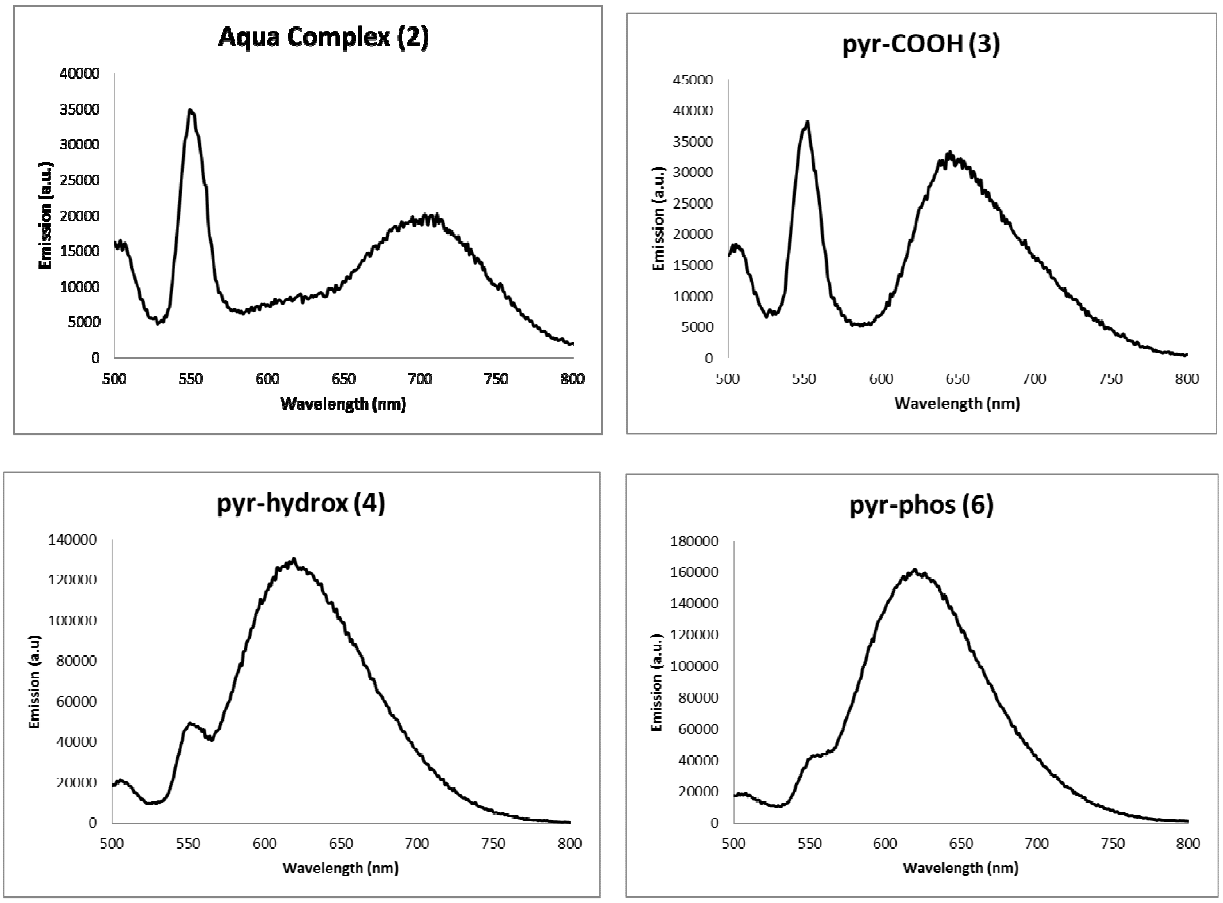


Figure S10. Emission spectra of **2**, **3**, **4**, and **6** as 0.1 mM solutions in ethanol. λ_{max} for the lowest energy features are at 695 nm (**2**), 640 nm (**3**), 619 nm (**4**), and 619 nm (**6**).