Supporting Information for: Photoinduced Electron-Transfer within Osmium(II) and Ruthenium(II) bis-Terpyridine Donor Acceptor Dyads

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1). Transient absorption spectra of Ru(tpy)$_2^{2+}$-benzoquinone dyad 5 and Os(tpy)$_2^{2+}$-benzoquinone dyad 8.

**Figure S1.** A series of representative transient absorption spectra are shown for 5 in acetonitrile as a function of time.
Figure S2. A series of representative transient absorption spectra are shown for 8 in acetonitrile as a function of time.
2) Time-resolved spectra of Ru(tpy)$_2^{2+}$-benzoquinone dyad 5 at 515 nm (growth) and 600 nm (decay).

**Figure S3.** Time-resolved spectra taken at 515 nm ($\lambda_{ex}$ 500 nm) for 5 in acetonitrile as a function of time.

**Figure S4.** Time-resolved spectra taken at 600 nm ($\lambda_{ex}$ 500 nm) for 5 in acetonitrile as a function of time.
3) Time-resolved spectra of Ru(tpy)$_2^{2+}$-benzoquinone dyad 6 at 515 nm (growth) and 600 nm (decay).

**Figure S5.** Time-resolved spectra taken at 515 nm ($\lambda_{ex}$ 500 nm) for 6 in acetonitrile as a function of time.

**Figure S6.** Time-resolved spectra taken at 600 nm ($\lambda_{ex}$ 500 nm) for 6 in acetonitrile as a function of time.
4) Time-resolved spectra of Os(tpy)$_2^{2+}$-benzoquinone dyad 7 at 430 nm (decay), 520 nm (growth) and 600 nm (decay).

**Figure S8.** Time-resolved spectra taken at 430 nm ($\lambda_{ex}$ 480 nm) for 7 in acetonitrile as a function of time.

**Figure S9.** Time-resolved spectra taken at 520 nm ($\lambda_{ex}$ 480 nm) for 7 in acetonitrile as a function of time.
**Figure S10.** Time-resolved spectra taken at 600 nm (λ<sub>ex</sub> 480 nm) for 7 in acetonitrile as a function of time.
5) Time-resolved spectra of Os(tpy)$_2$$^{2+}$-benzoquinone dyad 8 at 430 nm (decay), 520 nm (growth) and 600 nm (decay).

Figure S11. Time-resolved spectra taken at 430 nm ($\lambda_{ex}$ 480 nm) for 8 in acetonitrile as a function of time.

Figure S12. Time-resolved spectra taken at 520 nm ($\lambda_{ex}$ 480 nm) for 8 in acetonitrile as a function of time.
Figure S13. Time-resolved spectra taken at 600 nm ($\lambda_{ex}$ 480 nm) for 8 in acetonitrile as a function of time.