

## **Perylenediimide – Metal Ion Dyads for Photo-Induced Electron Transfer**

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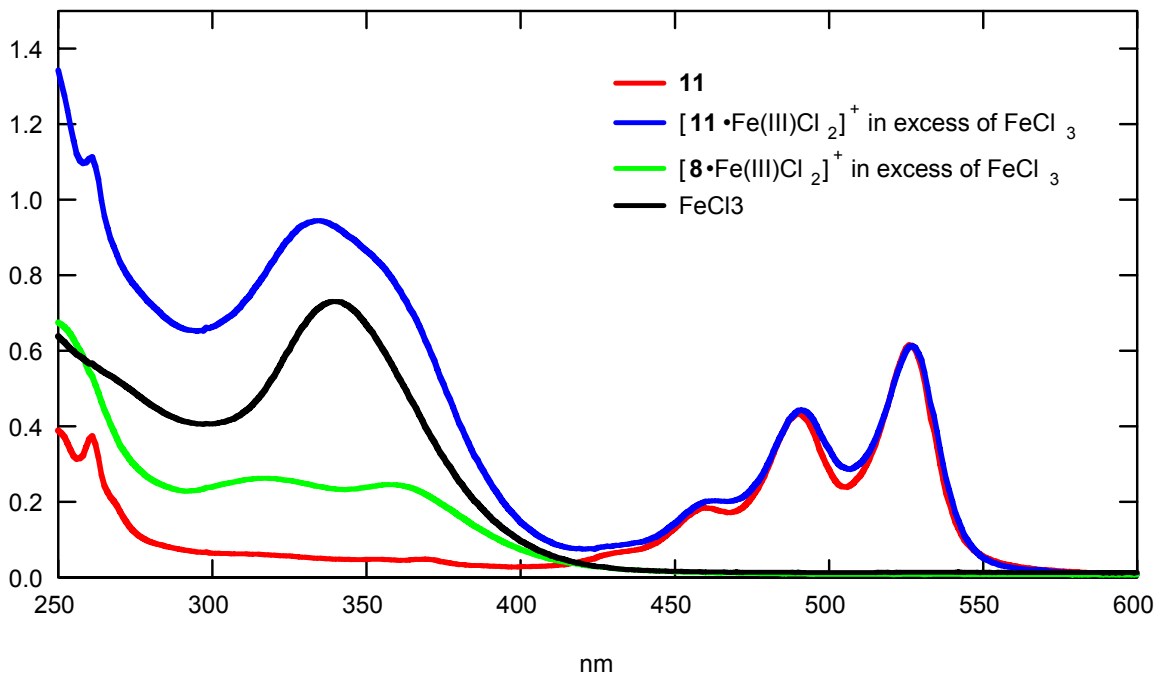
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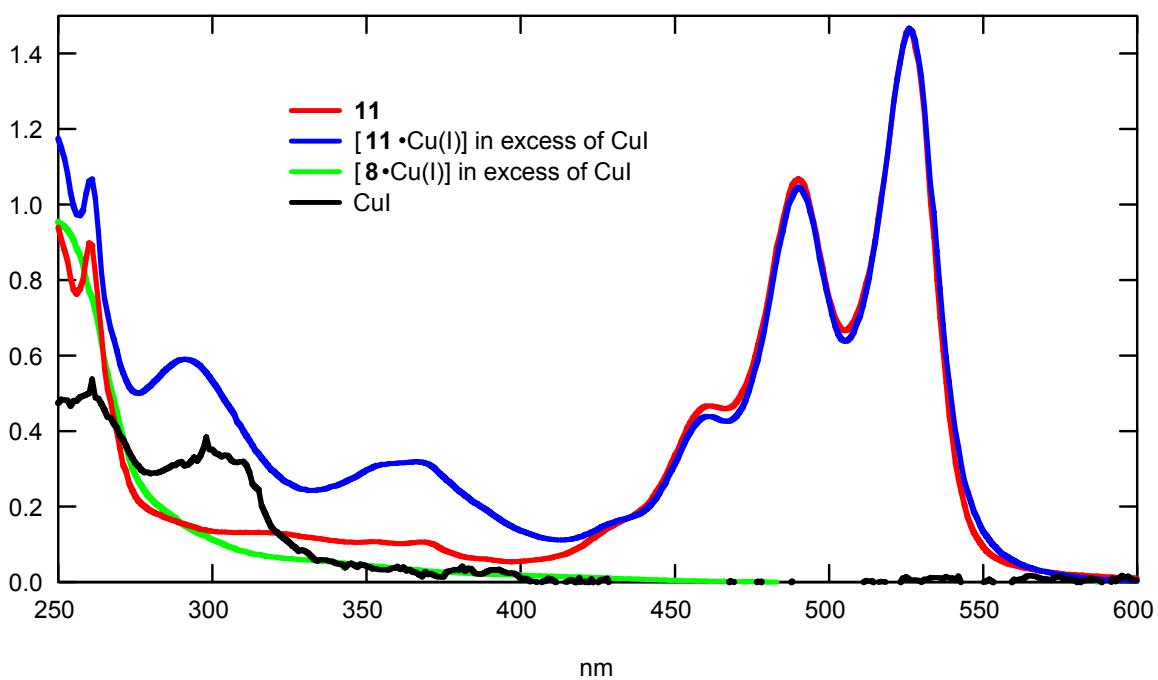
## **Supplementary Data Information**

### **Absorption and Fluorescence Spectra**

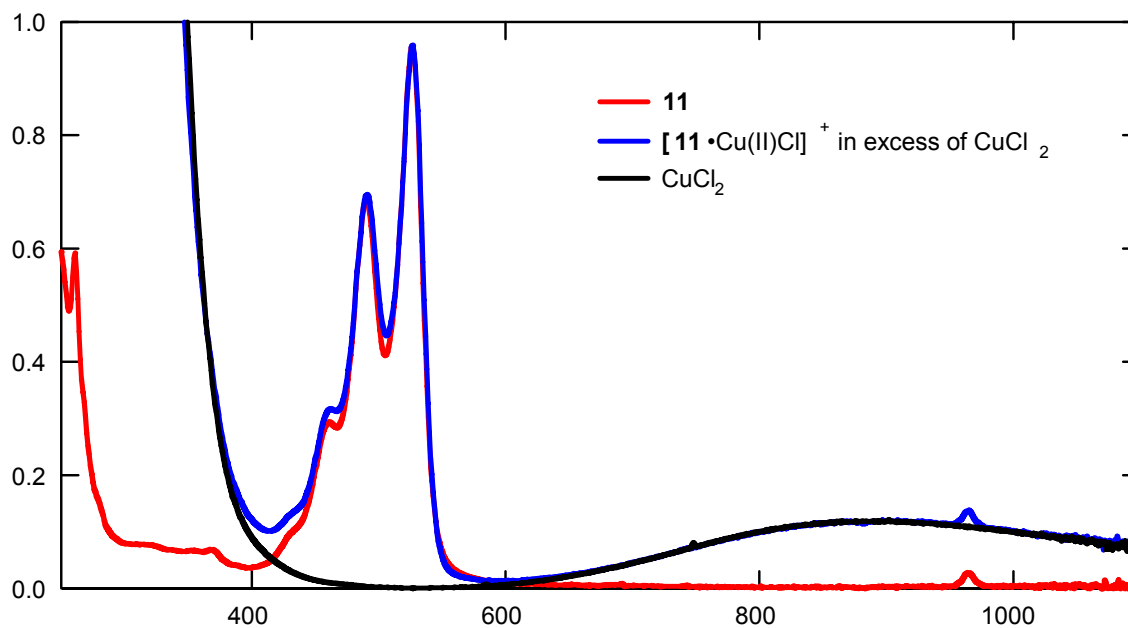
Absorption spectra of complexes formed from **11** and **8** in excess of FeCl<sub>3</sub> together with spectra of **11** and FeCl<sub>3</sub> in CH<sub>2</sub>Cl<sub>2</sub>/MeOH (25:1):



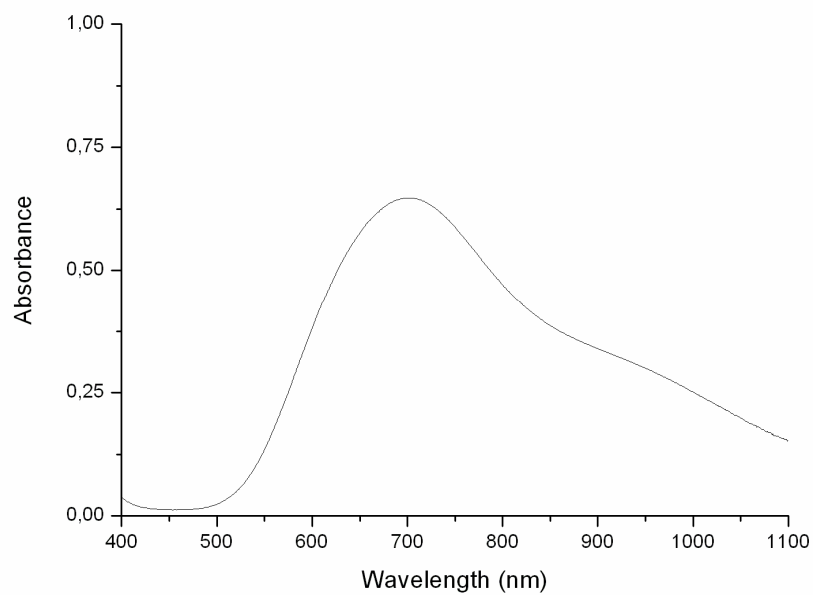
Absorption spectra of complexes formed from **11** and **8** in excess of CuI together with spectra of **11** and CuI in CH<sub>2</sub>Cl<sub>2</sub>/MeOH (25:1):



Absorption spectrum of the complex formed from **11** in the presence of a large excess of  $\text{CuCl}_2$  together with the spectra of **11** and  $\text{CuCl}_2$  in  $\text{CH}_2\text{Cl}_2/\text{MeOH}$  (25:1):

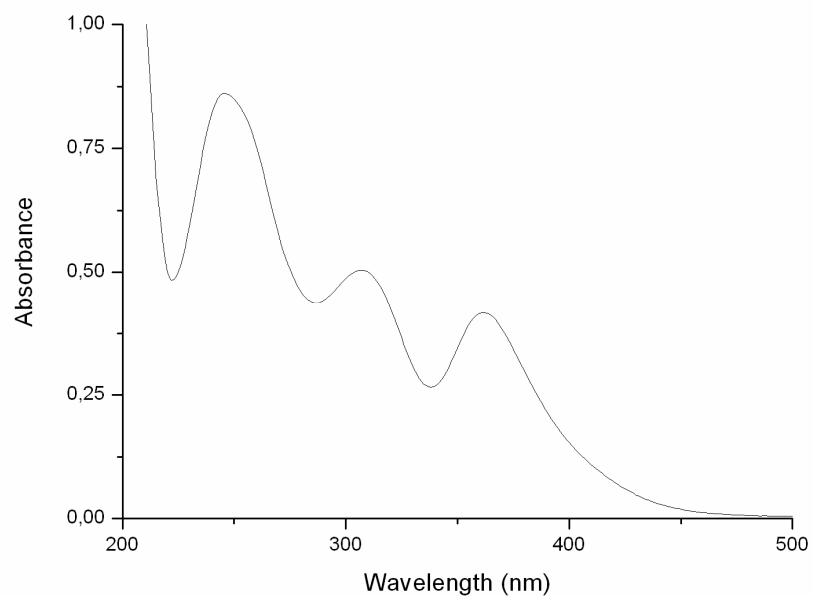


Absorption spectrum of  $[3\bullet\text{Cu(II)Cl}]\text{ClO}_4$  (4.22 mM) in MeCN:



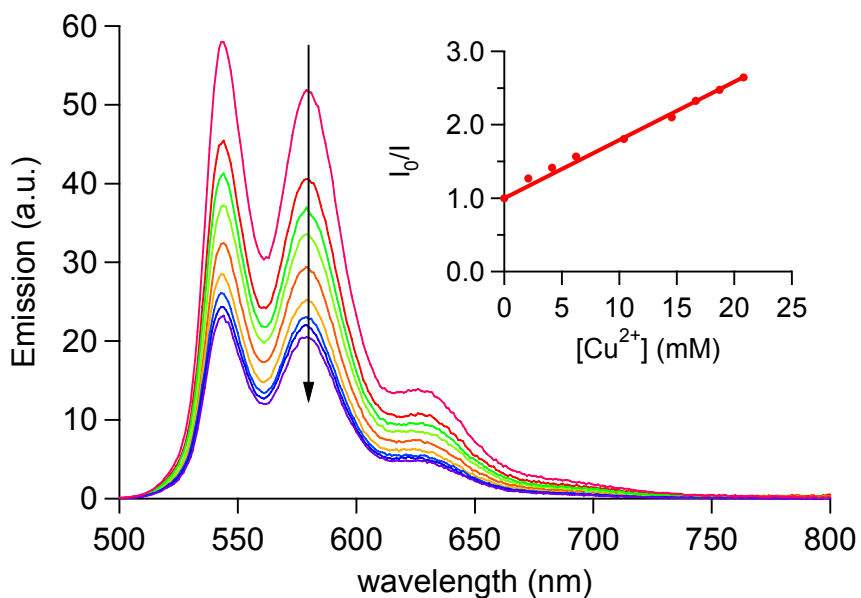
$\lambda_{\text{max}} / \text{nm} (\epsilon / \text{M}^{-1}\text{cm}^{-1})$ : 702 (154)

Absorption spectrum of  $[4\bullet\text{Fe(III)Cl}_2]\text{FeCl}_4$  (0.336 mM) in MeCN:



$\lambda_{\text{max}} / \text{nm} (\epsilon / \text{M}^{-1}\text{cm}^{-1})$ : 246 (2563), 307 (1498), 361 (1243)

Fluorescence behaviour upon titration of a dilute solution ( $\text{CH}_2\text{Cl}_2 + 10\% \text{ MeOH}$ ) of **11** ( $10^{-5} \text{ M}$ ) with  $\text{Cu}^{2+}$  ions ( $\text{CuCl}_2$ ). The arrow represents increasing concentration of  $\text{Cu}^{2+}$ .



Fluorescence behaviour upon titration of a dilute solution ( $\text{CH}_2\text{Cl}_2 + 10\% \text{ MeOH}$ ) of **11** ( $10^{-5} \text{ M}$ ) with  $\text{Fe}^{3+}$  ions ( $\text{FeCl}_3$ ). The arrow represents increasing concentration of  $\text{Fe}^{3+}$ .

