

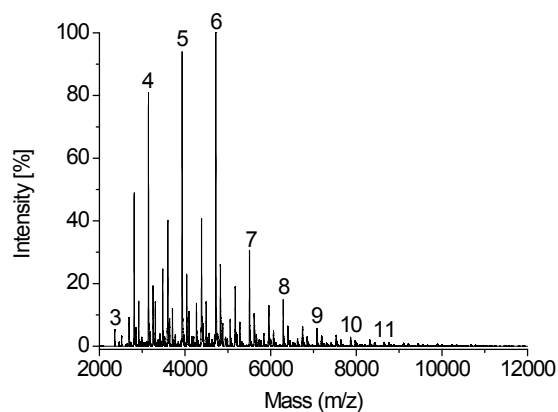
## Supporting Information

# Polyiminofluorene with Conjugated Benzimidazolylpyridine Substituent Groups: Optical Properties, Ionochromism and Coordinative Self-Assembly into Electrochromic Films

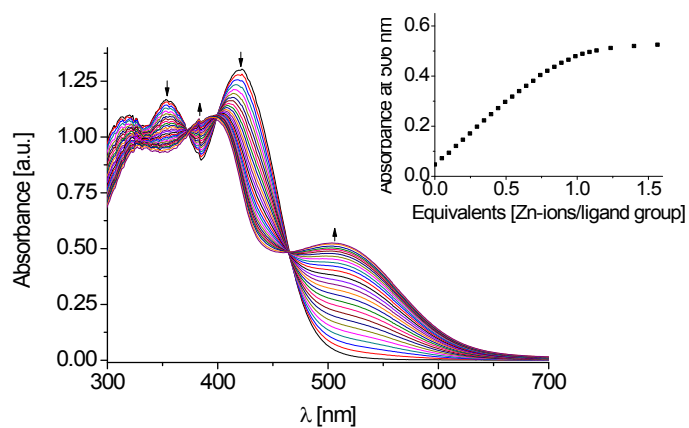
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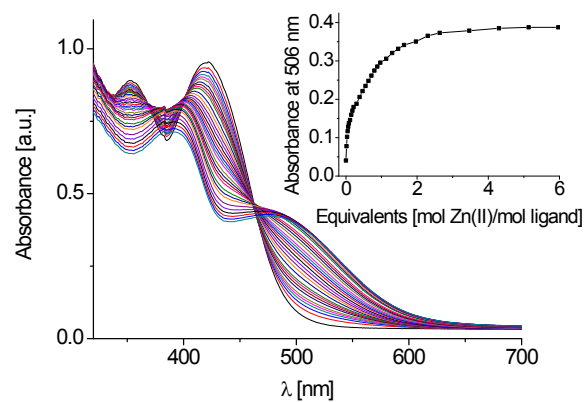
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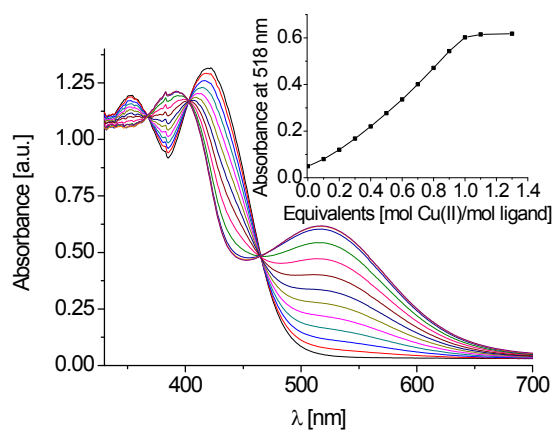
**Figure S1:** MALDI-TOF spectrum of **P1**.



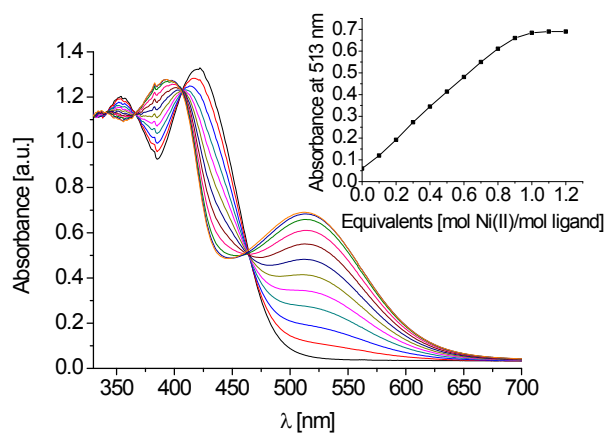
**Figure S2:** UV-Vis-spectra of the titration of **P1** with  $\text{ZnCl}_2$  in toluene/methanol 50:1 until the mono-complex is formed. Plots of the absorbance at specific wavelengths vs. equivalents of Zn-ions added are shown in the inset.



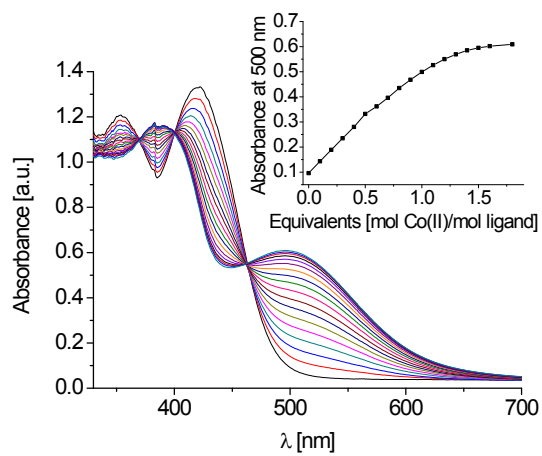
**Figure S3:** UV-Vis-spectra of the titration of **P1** with  $\text{Zn}(\text{OAc})_2$  in toluene/methanol 50:1 until the mono-complex is formed. Plots of the absorbance at specific wavelengths vs. equivalents of Zn-ions added are shown in the inset.



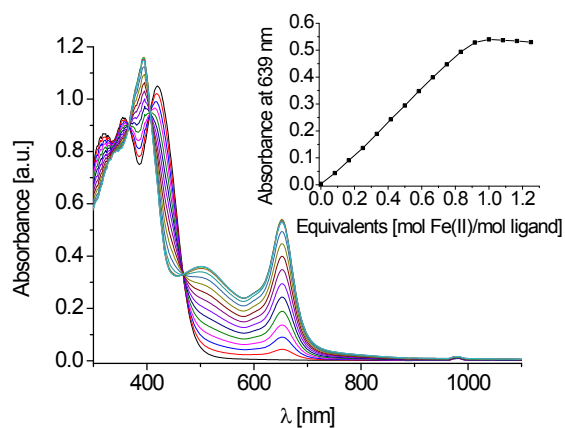
**Figure S4:** UV-Vis-spectra of the titration of **P1** with  $\text{CuCl}_2$  in toluene/methanol 50:1 until the mono-complex is formed. Plots of the absorbance at specific wavelengths vs. equivalents of Cu-ions added are shown in the inset.



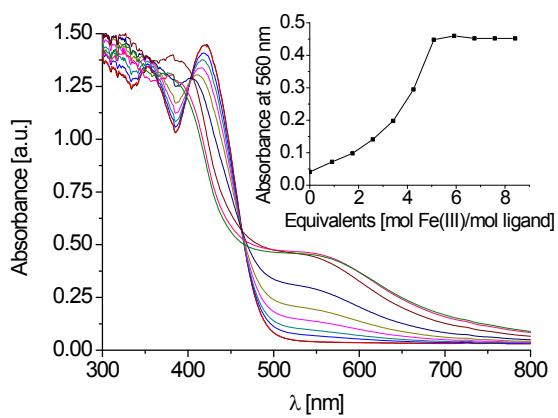
**Figure S5:** UV-Vis-spectra of the titration of **P1** with NiCl<sub>2</sub> in toluene/methanol 50:1 until the mono-complex is formed. Plots of the absorbance at specific wavelengths vs. equivalents of Ni-ions added are shown in the inset.



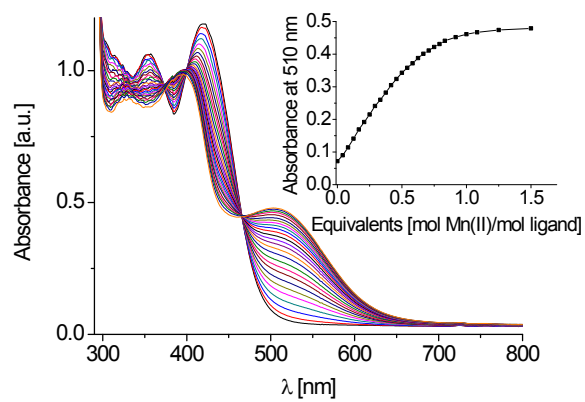
**Figure S6:** UV-Vis-spectra of the titration of **P1** with CoCl<sub>2</sub> in toluene/methanol 50:1 until the mono-complex is formed. Plots of the absorbance at specific wavelengths vs. equivalents of Co-ions added are shown in the inset.



**Figure S7:** UV-Vis-spectra of the titration of **P1** with  $\text{Fe}(\text{ClO}_4)_2$  in toluene/methanol 50:1 until the mono-complex is formed. Plots of the absorbance at specific wavelengths vs. equivalents of Fe-ions added are shown in the inset.



**Figure S8:** UV-Vis-spectra of the titration of **P1** with  $\text{FeCl}_3$  in toluene/methanol 50:1 until the mono-complex is formed. Plots of the absorbance at specific wavelengths vs. equivalents of Fe-ions added are shown in the inset.



**Figure S9:** UV-Vis-spectra of the titration of **P1** with  $\text{MnCl}_2$  in toluene/methanol 50:1 until the mono-complex is formed. Plots of the absorbance at specific wavelengths vs. equivalents of Mn-ions added are shown in the inset.