

Supporting Information:

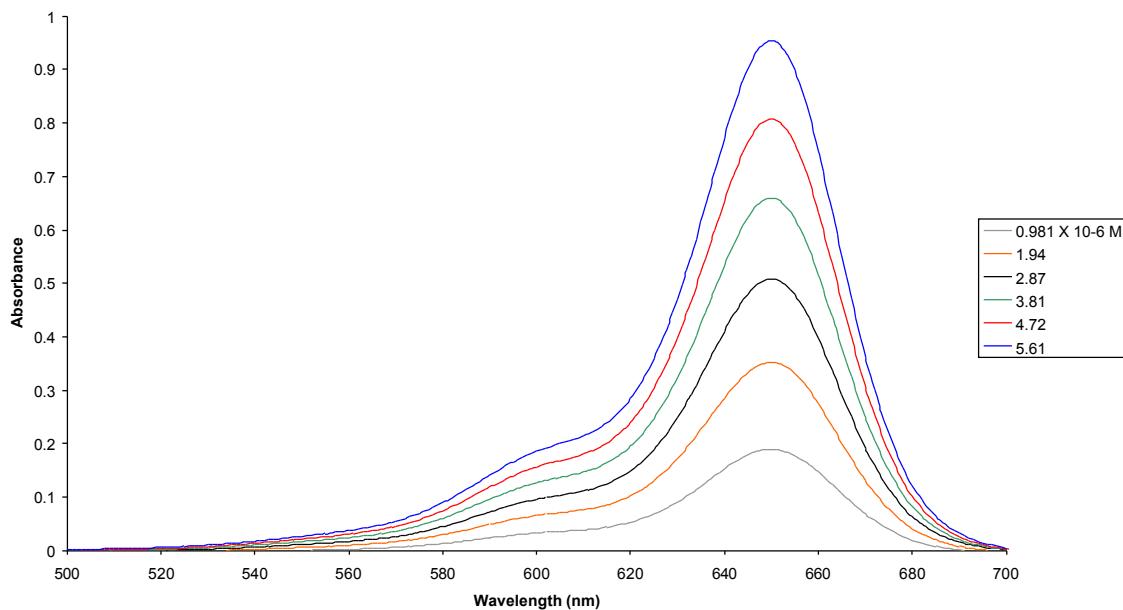
A Squaraine Chelator for the Detection of Iron(III)

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Absorbance of Dye (1) at Various Concentrations

A)



B)

Molar extinction coefficient of Dye (1)

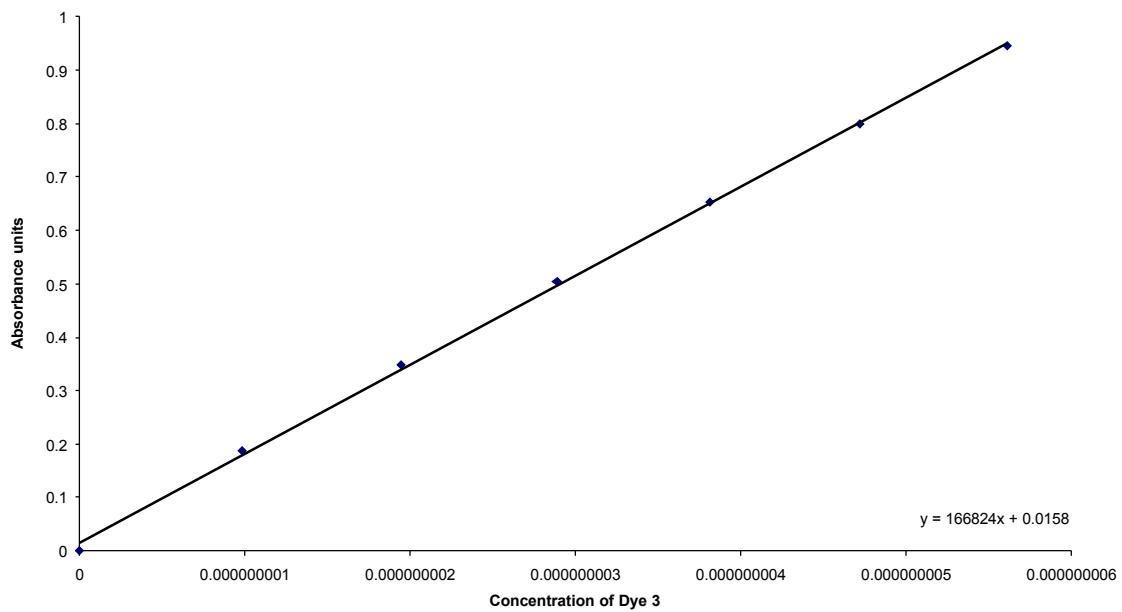


Figure S1: (A) UV-vis spectra of Dye (1) at various concentrations (B) Plot of absorbance Vs intensity to calculate the extinction coefficient.

Squaraine Dye (1) in DMSO before and after the addition of DBU

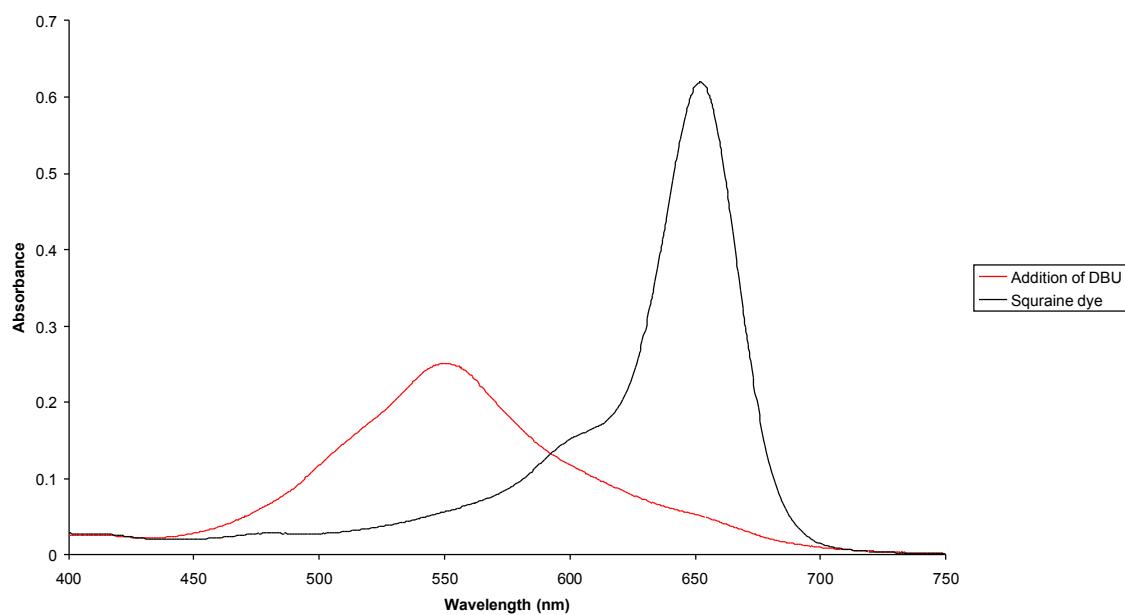
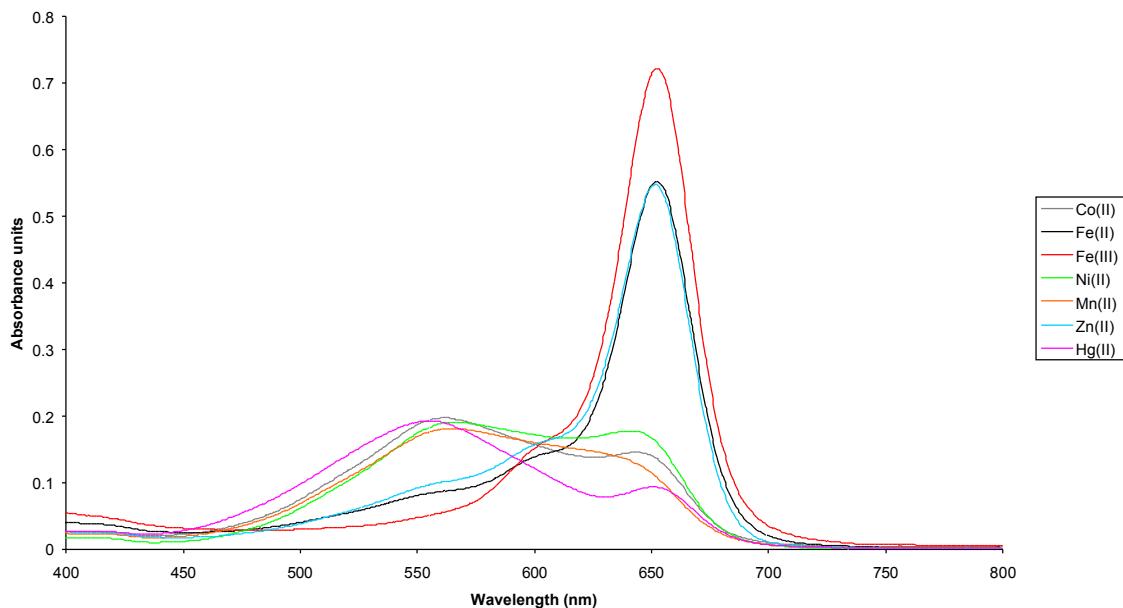


Figure S2: The UV-Vis spectrum of Dye(1), concentration 5×10^{-5} mol dm $^{-3}$ and the spectra on the addition of 1 equivalents of DBU.

1 equivalent of metal salt add to Dye (1)

A)



B)

3 equivalents of metal salt added to Dye (1)

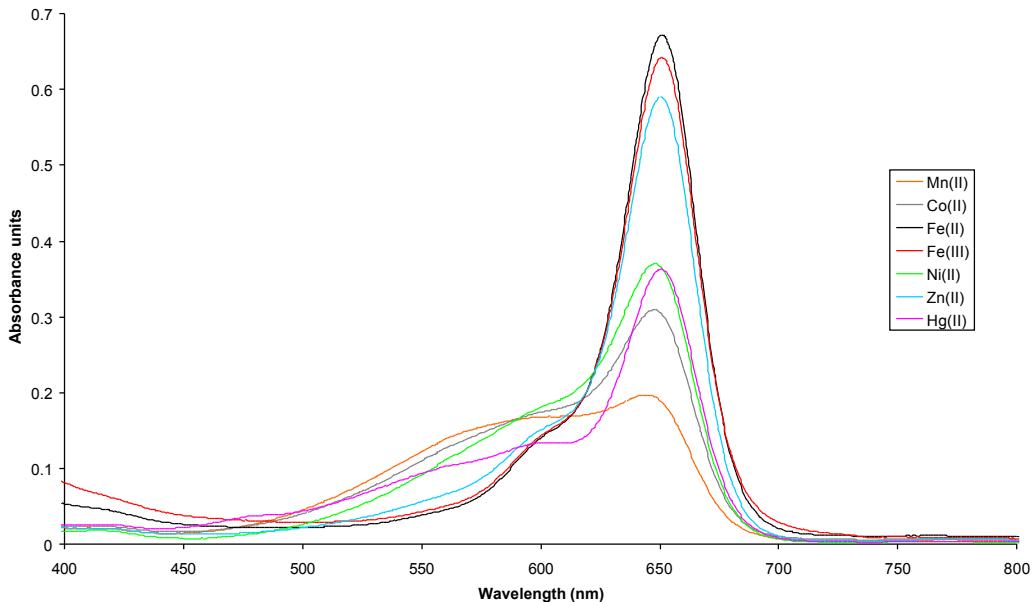


Figure S3: The UV-Vis spectrum of Dye(1), concentration 5×10^{-5} mol dm $^{-3}$ on the addition of A) 1 equivalent and B) 3 equivalents of various metal II salts.

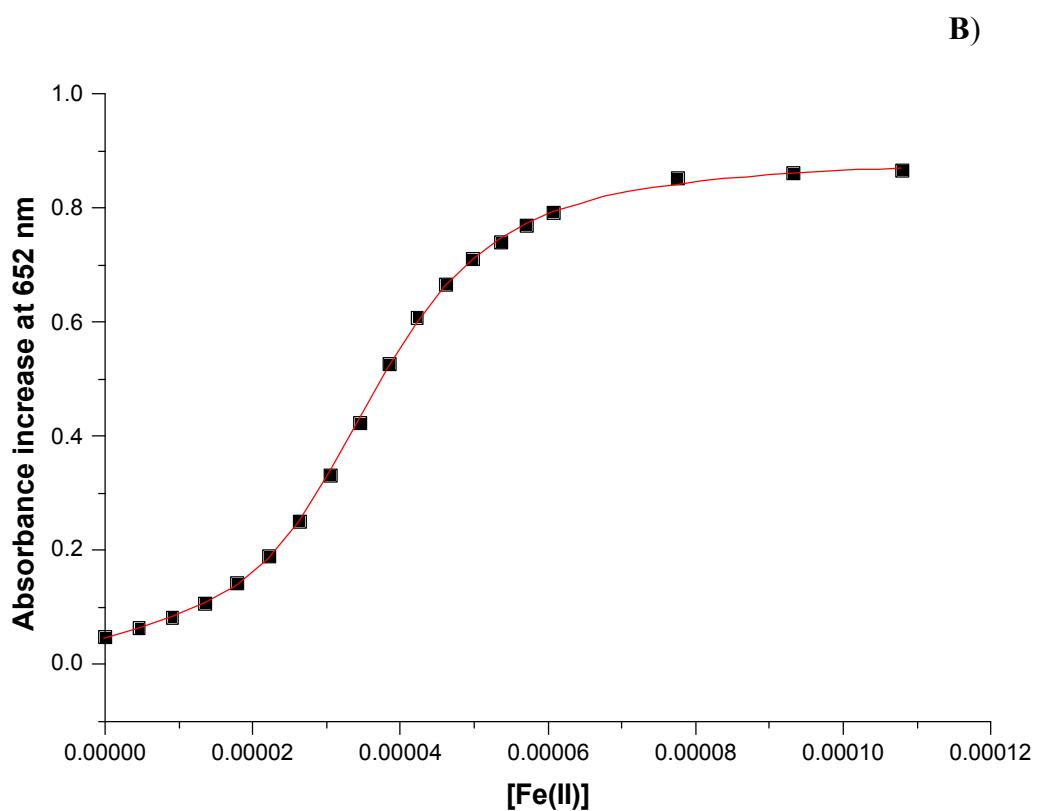
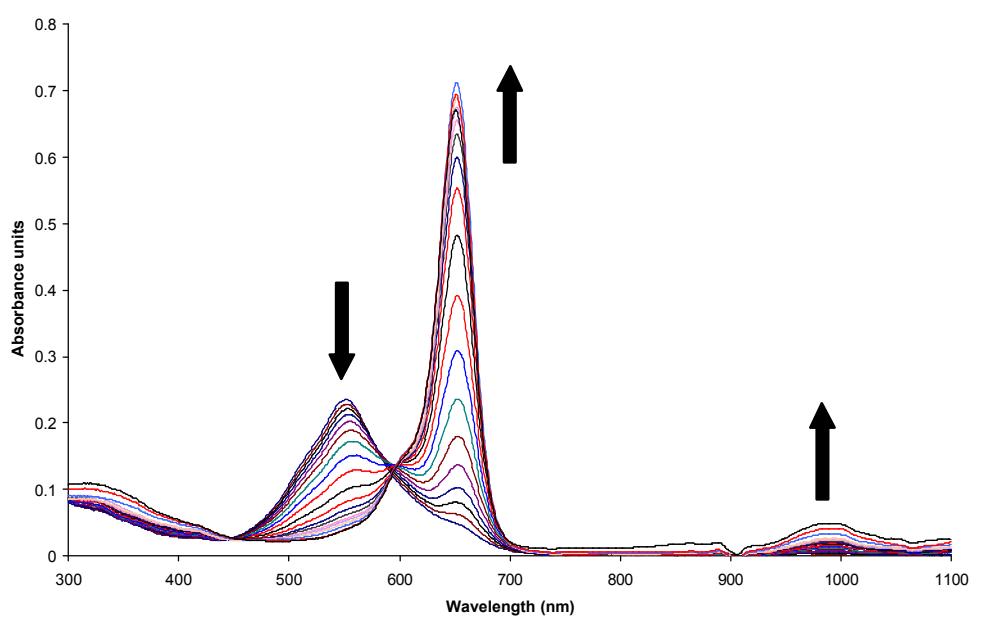


Figure S4: A) The UV-Vis titration of **1**, concentration 5×10^{-5} M dm^{-3} on the addition of Fe^{II} salt. B) Isotherm showing experimental and calculated line.

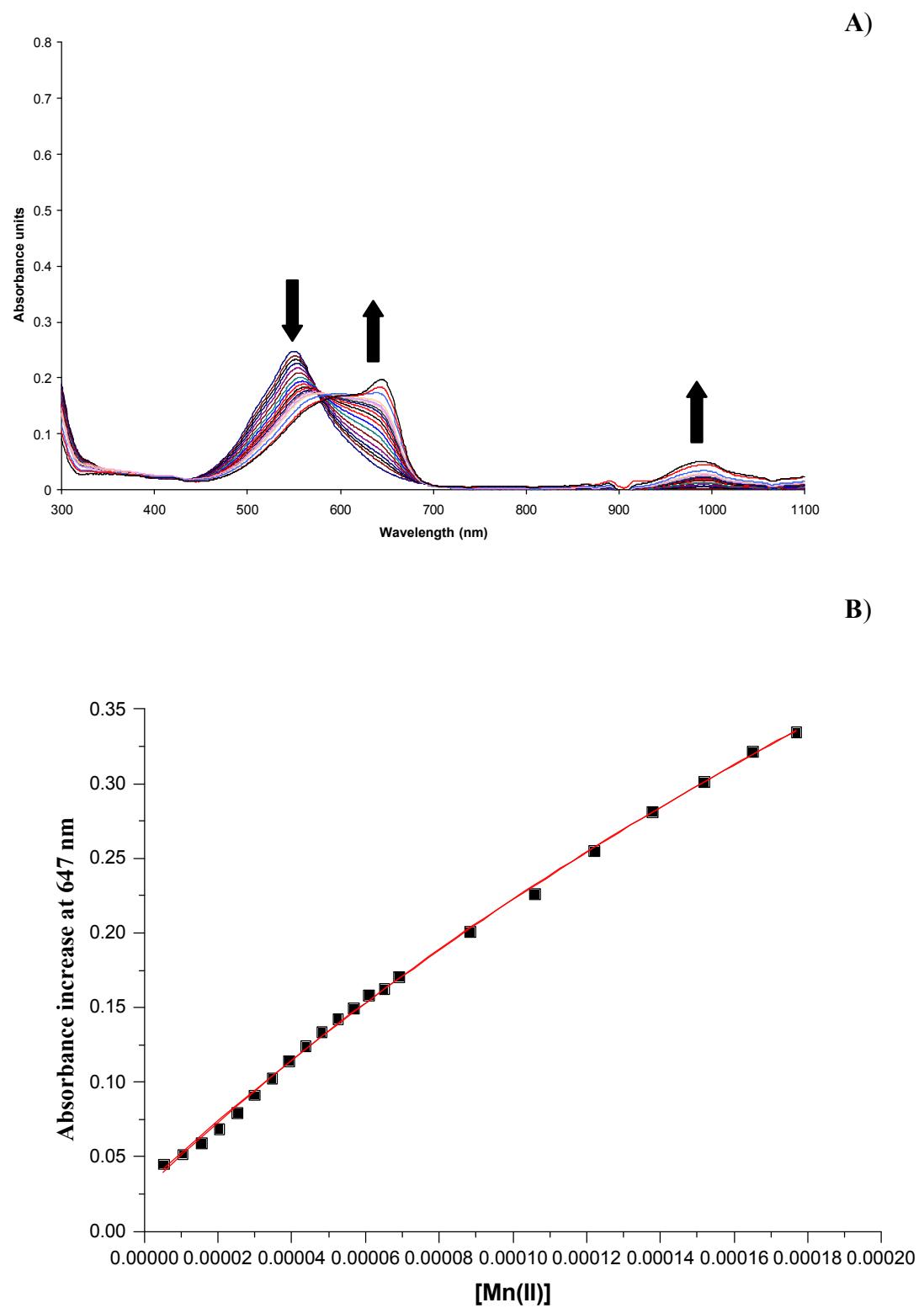


Figure S5: A) The UV-Vis titration of **1**, concentration 5×10^{-5} M dm^{-3} on the addition of Mn^{II} salt. B) Isotherm showing experimental and calculated line.

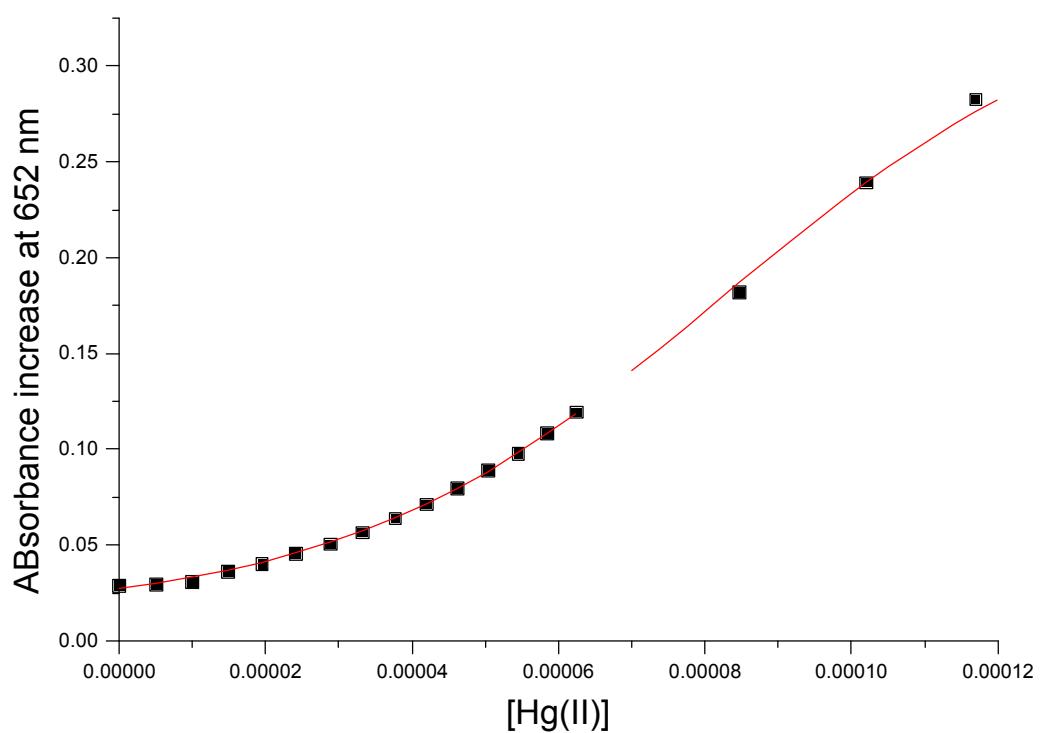
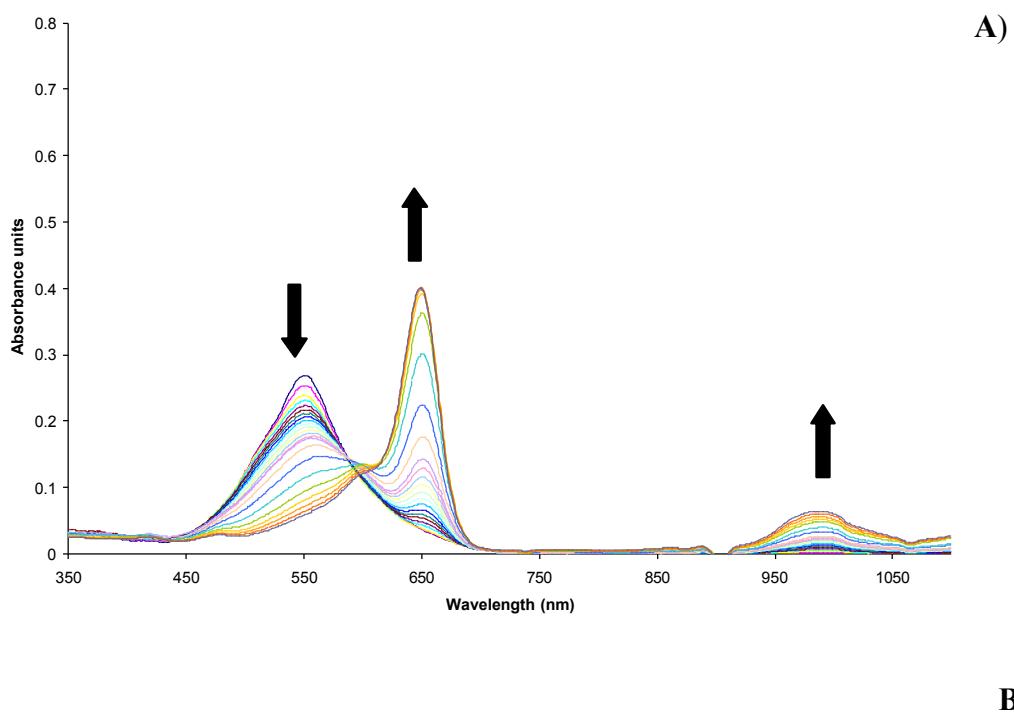


Figure S6: A) The UV-Vis titration of **1**, concentration 5×10^{-5} Moldm $^{-3}$ on the addition of Hg^{II} salt. B) Isotherm showing experimental and calculated line.

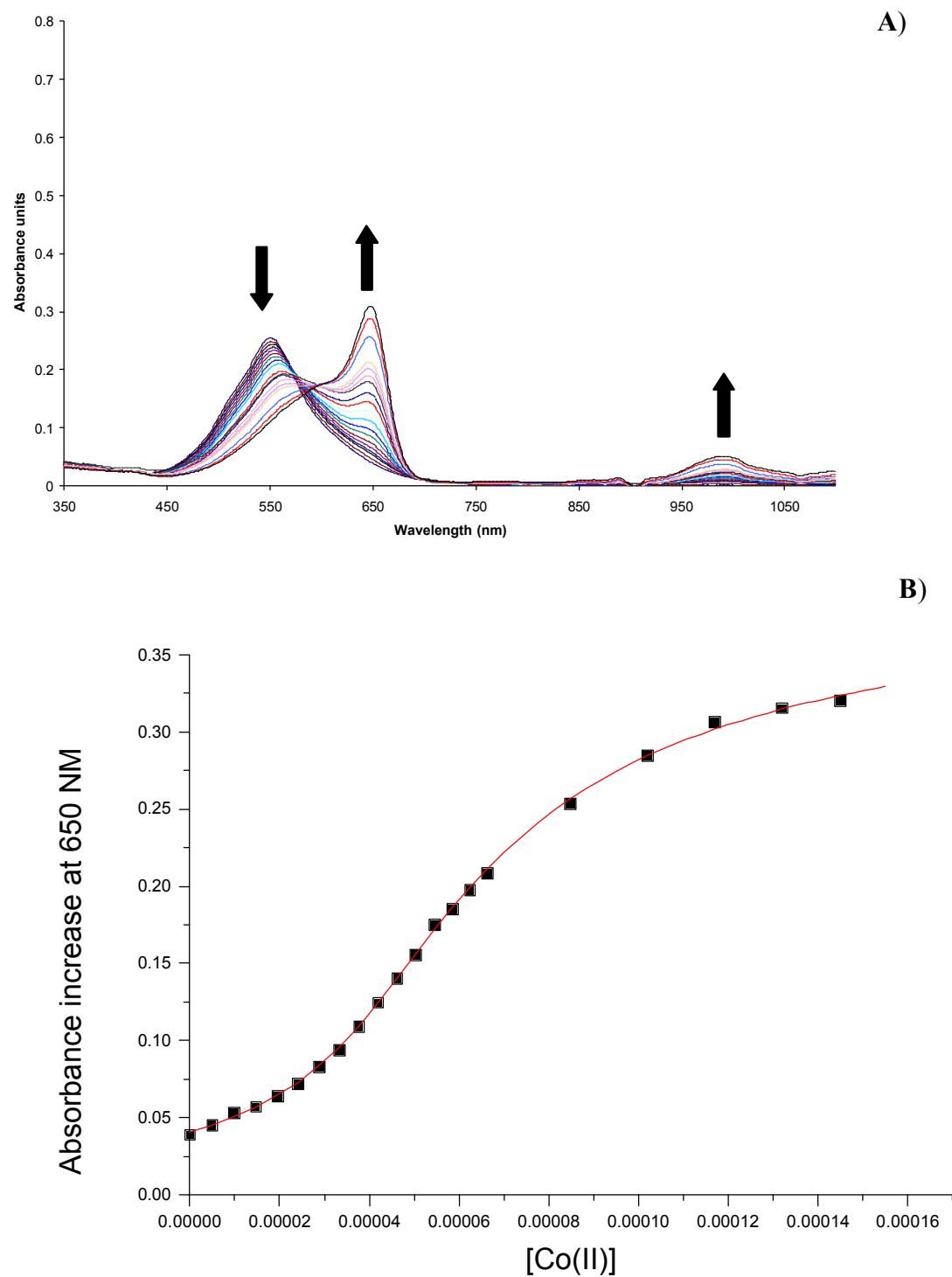


Figure S7: A) The UV-Vis titration of **1**, concentration 5×10^{-5} M dm^{-3} on the addition of Co^{II} salt. B) Isotherm showing experimental and calculated line.

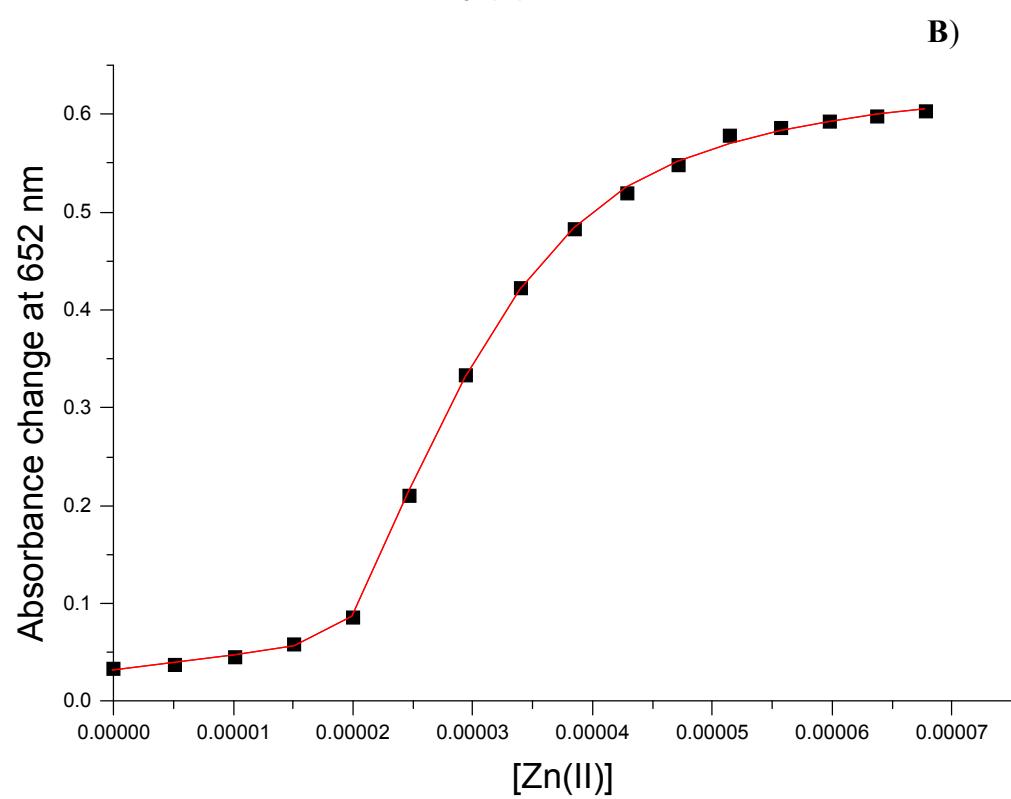
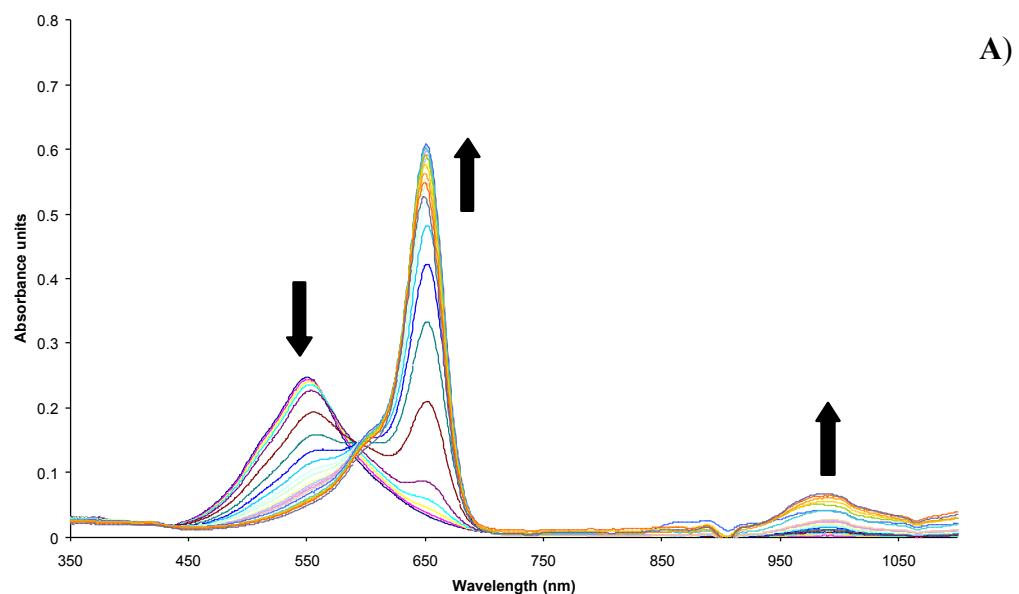


Figure S8: A) The UV-Vis titration of **1**, concentration 5×10^{-5} M dm^{-3} on the addition of Zn^{II} salt. B) Isotherm showing experimental and calculated line.

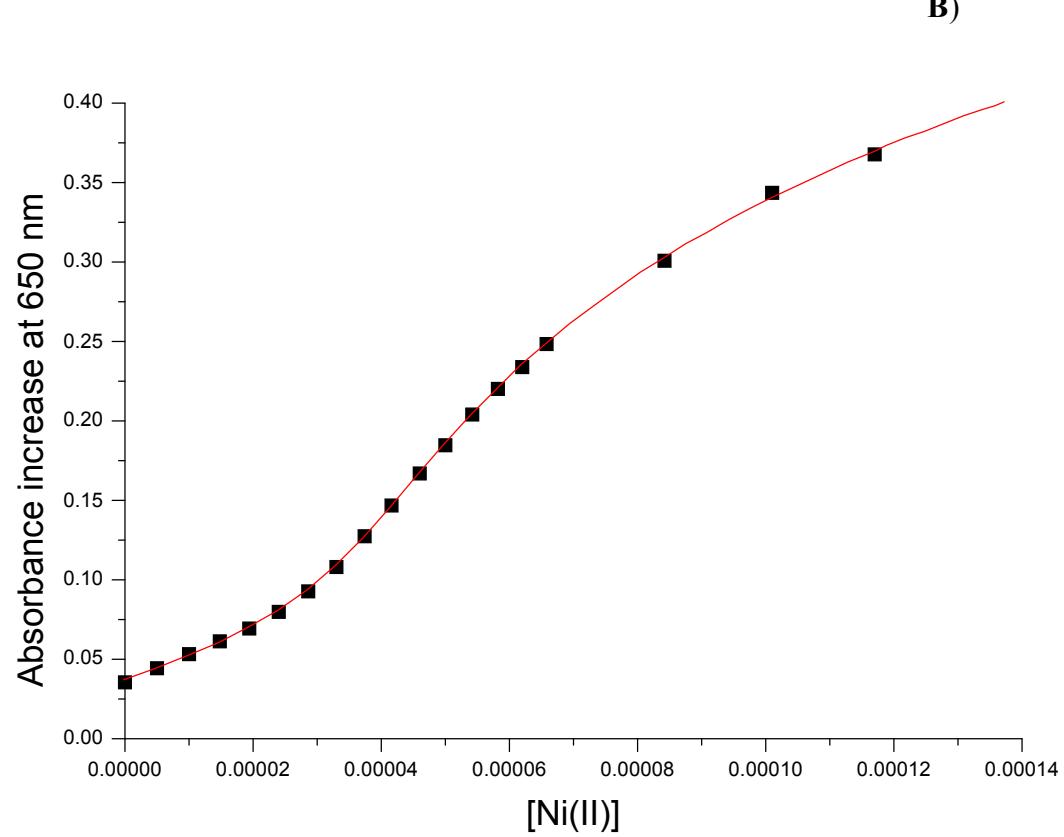
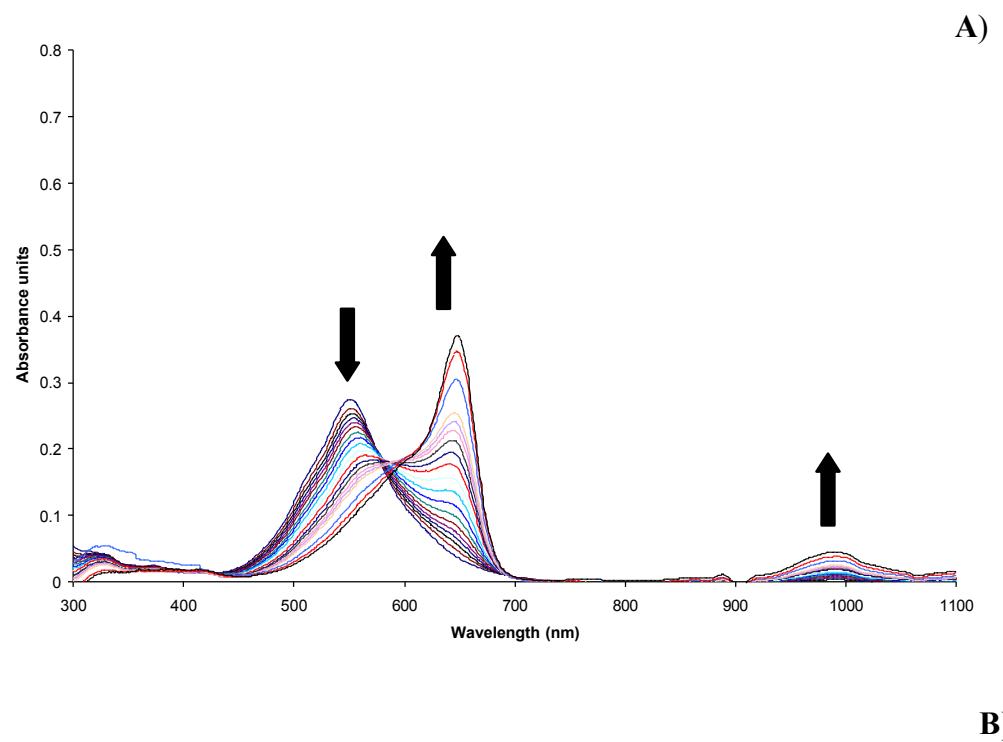


Figure S9: A) The UV-Vis titration of **1**, concentration 5×10^{-5} Moldm $^{-3}$ on the addition of Ni II salt . B) Isotherm showing experimental and calculated line.