

Colorimetric recognition of Cu(II) by (2-dimethylaminoethyl)-amino appended anthracene-9,10-diones in aqueous solutions – Deprotonation of aryl amine NH responsible for colour changes

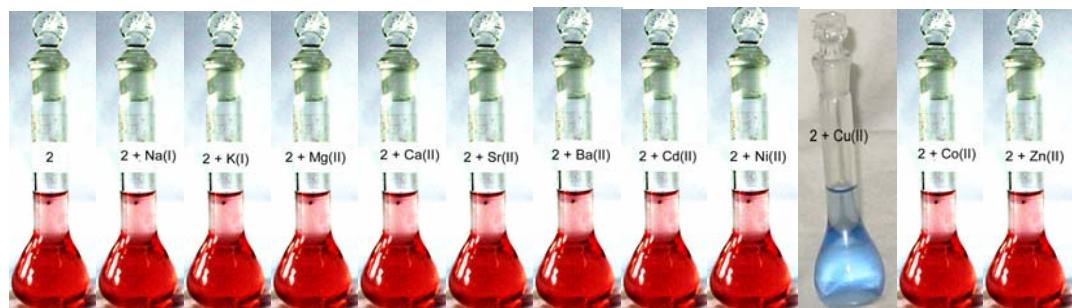
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Electronic Supplemental Information

1.1. Visual changes in 2 with selected Metal ions

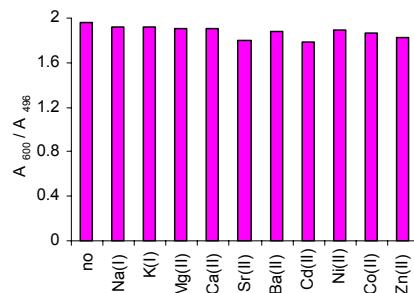


1.2. Visual changes in 3 with selected Metal ions

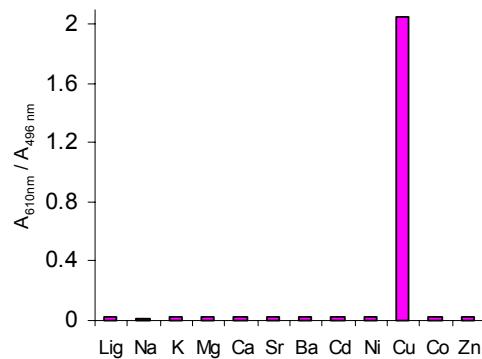


2. 1 Selected Absorption plots of 2

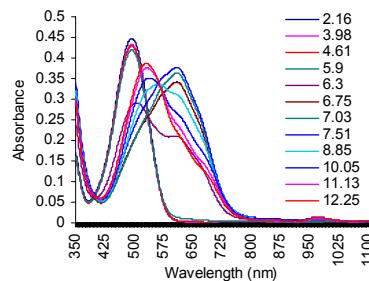
Ratiometric plot of 2 with Cu(II) (100 μ M) in the absence and presence of other metal ions (1000 μ M) CH₃OH :H₂O 1:1, pH 7.0 + 0.1 [10 mM HEPES]



Ratiometric plot of 2 (100 μ M) for different metal ions (100 μ M)

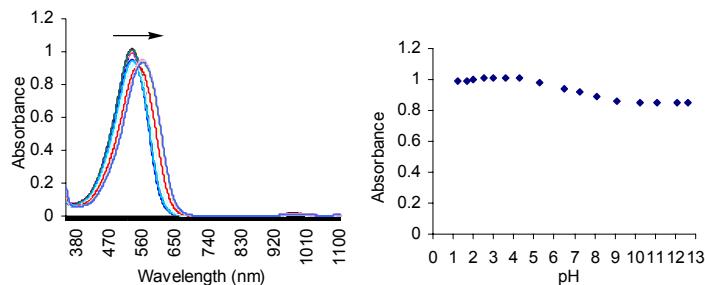


pH titration of 2 + Cu(II) (1 :1) in CH₃OH : H₂O 1:1

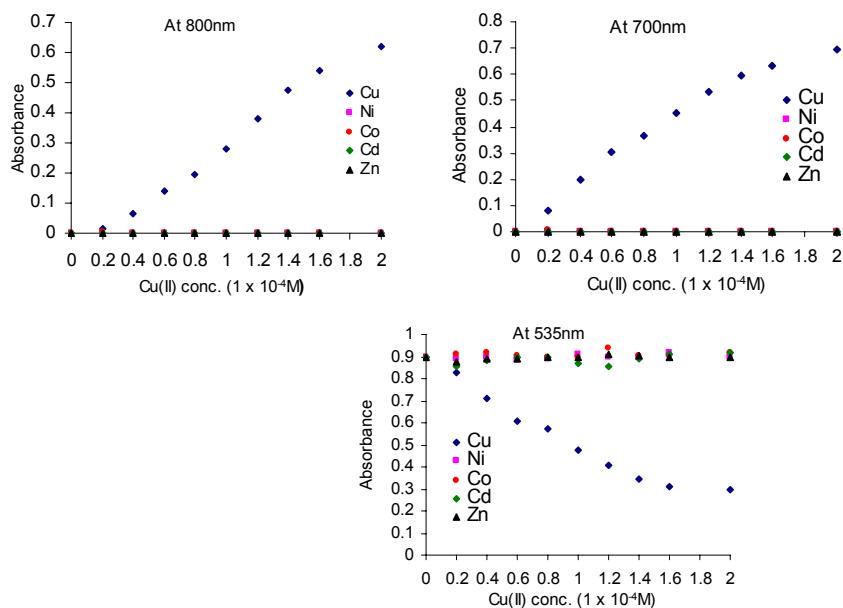


2.2 Selected Absorption plots of 3

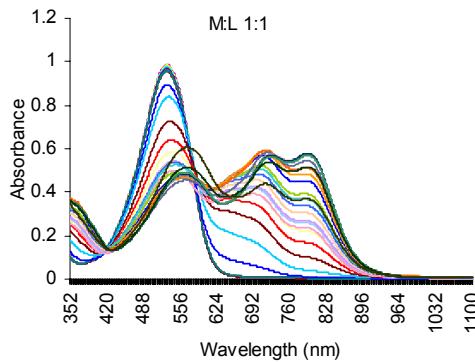
pH titration of 3 in $\text{CH}_3\text{OH} : \text{H}_2\text{O}$ 1:1



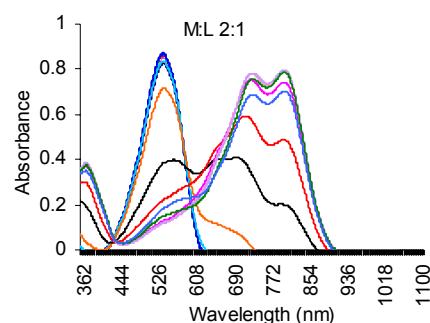
Titre of 3 against different concentrations of Cu(II), Ni(II), Co(II), Cd(II) and Zn(II)



pH titration of 3 + Cu(II) (1 :1) in $\text{CH}_3\text{OH} : \text{H}_2\text{O}$ 1:1



pH titration of 3 + Cu(II) (1 :2) in CH₃OH : H₂O 1:1



**Titre of 3 against different concentrations of Cu(II),
Plot of ratio of intensities at 715 and 800 nm vs. Cu(II) concentration**

