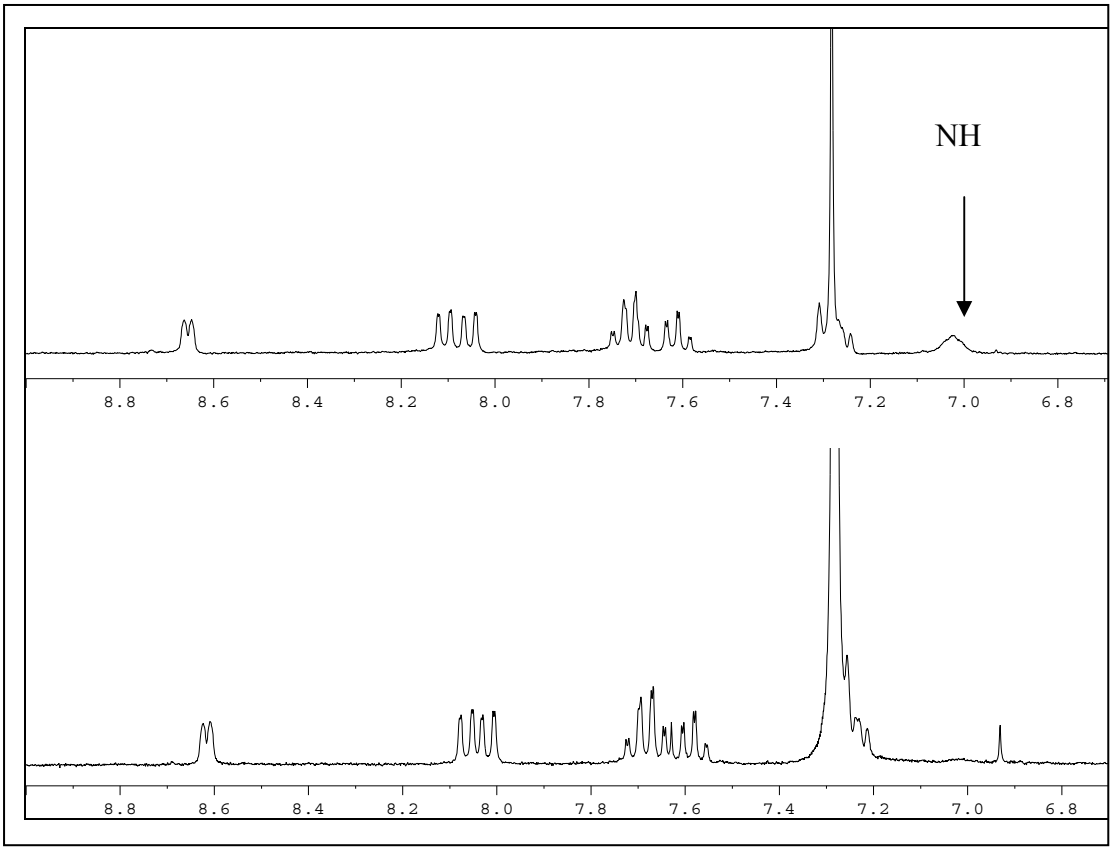
Electronic Supplementary Information for Dalton Transactions

Supporting Information

For

Colorimetric sensing of Cu(II) by 2-methyl-3-[(pyridin-2-ylmethyl)-amino] -1,4-naphthoquinone: Cu(II) induced deprotonation of NH responsible for color change .

Contents



Figre S1. ^{1}H NMR spectra of **1** (top) and its mixture with CN^- (bottom) in chloroform.

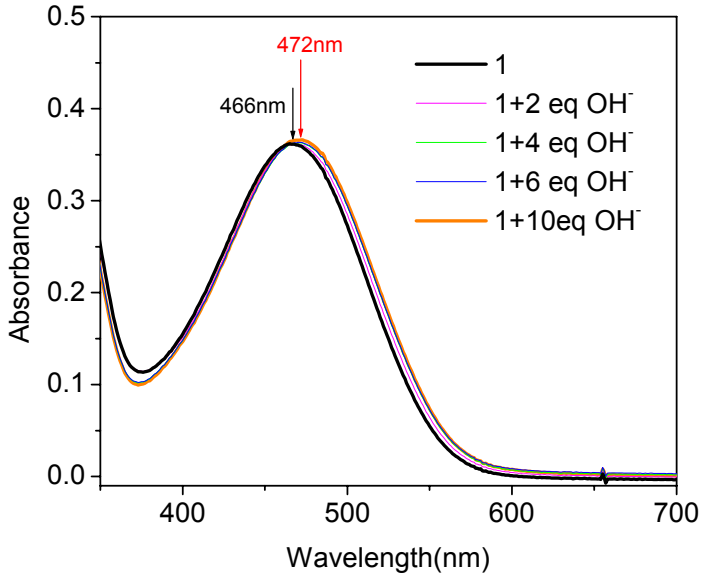
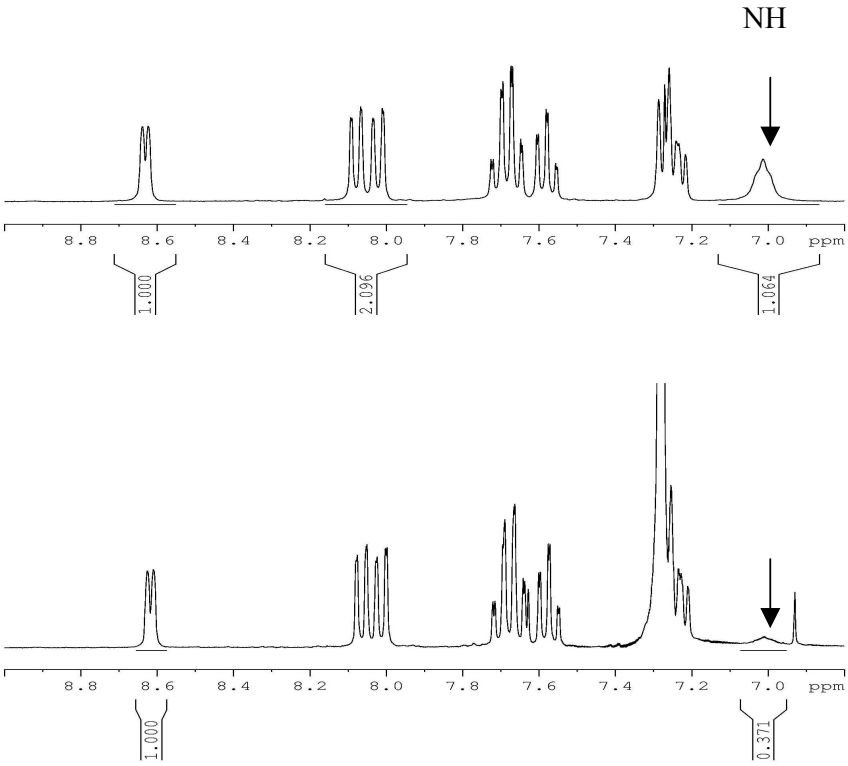


Figure S2. Absorption spectra of **1** (100 μM) with different equivalent amounts of OH^- in chloroform.



Figre S3. ^1H NMR spectra of **1** (top) and its mixture with OH^- (bottom) in chloroform.

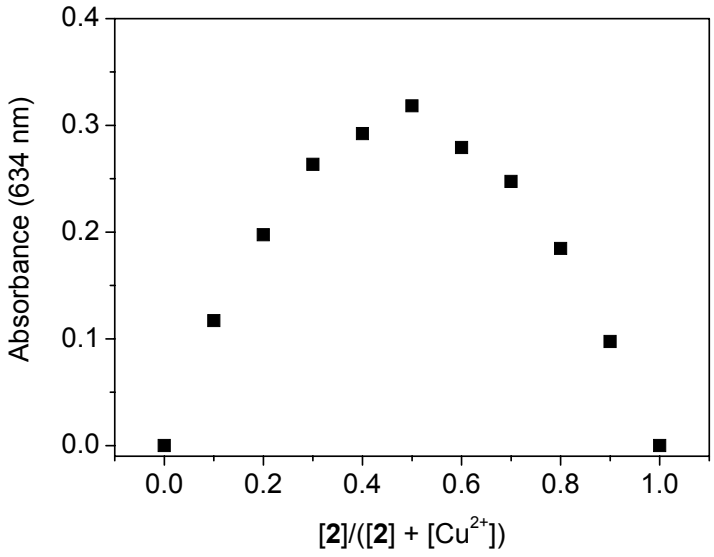


Figure S4. Job's plot of a 1:1 complex of **2**-Cu^{2+}, where the absorbance at 634 nm was plotted against the mole fraction of Cu^{2+} at a constant total concentration of $2.0*10^{-4}$ M in methanol.

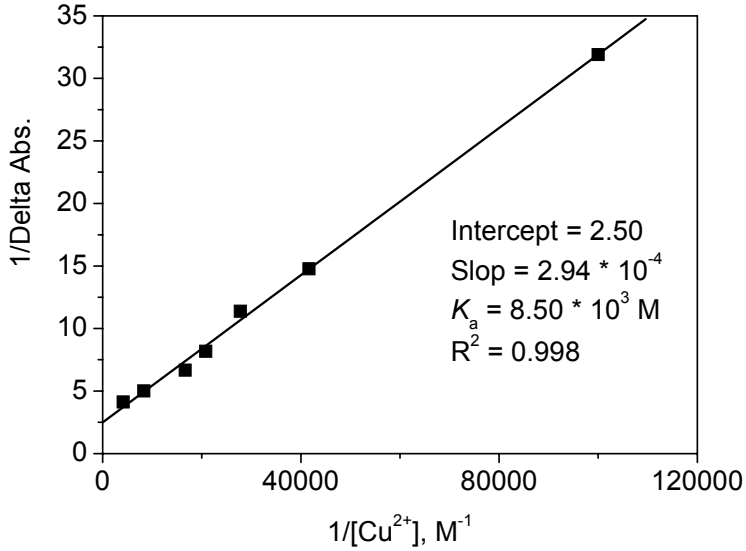


Figure S5. Benesi-Hilderbrand plot of **2** with $Cu(BF_4)_2$.

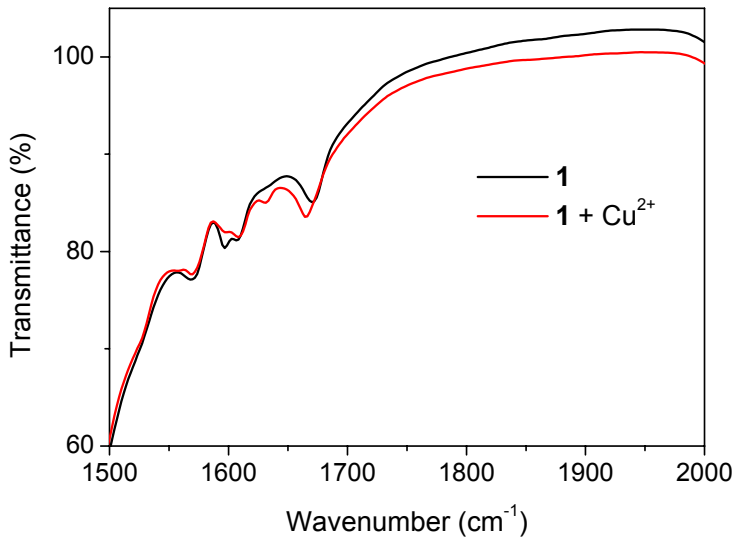


Figure S6. IR spectra of **1** (0.1 M) and its mixture with Cu(II) (0.1 M) in methanol.

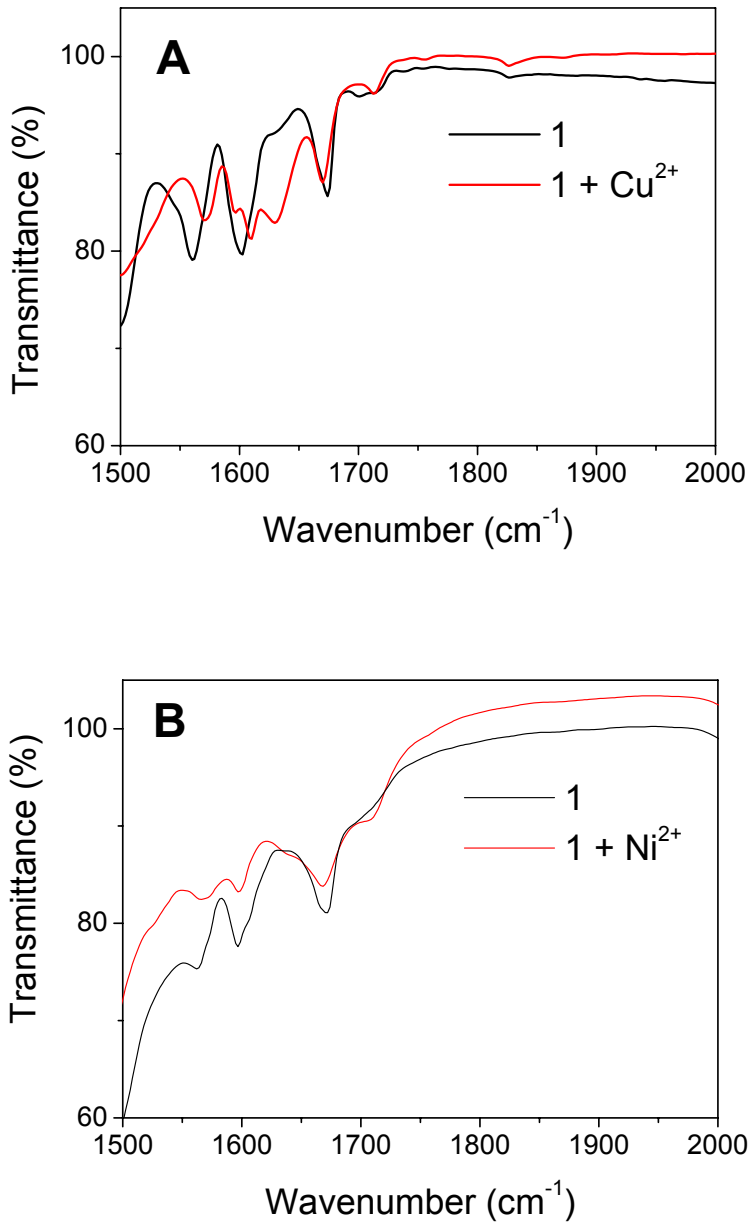


Figure S7. (A) IR spectra of **1** (0.1 M) and its mixture with Cu(II) (0.1 M) in CH_3CN. (B) IR spectra of **1** (0.1 M) and its mixture with Ni(II) (0.1 M) in methanol.