Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry

Supporting Information

Discovery of a sensitive Cu(II)-cyanide "off-on" sensor based on new *C*-glycosyl triazolyl bis-amino acid scaffold

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S-1. Figure S1-S3

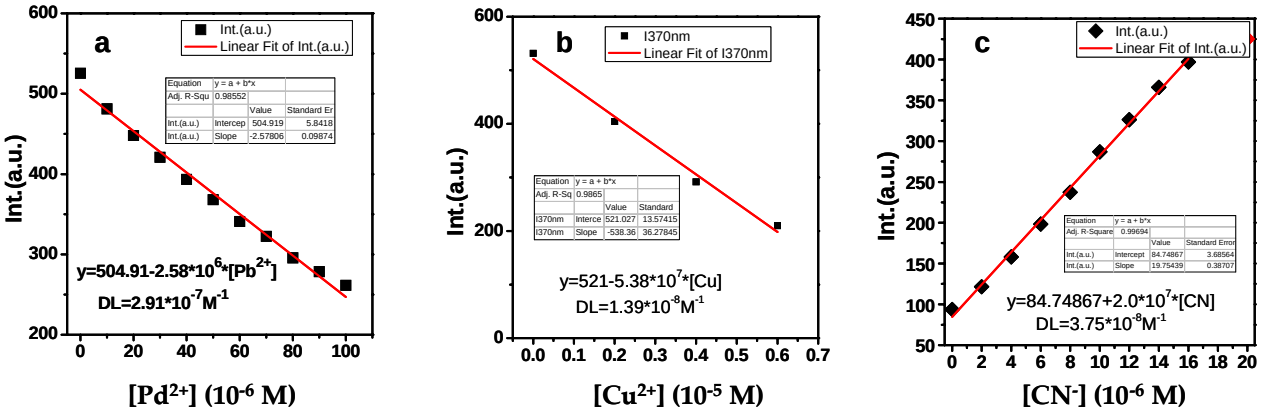


Figure S1 Plots of change in fluorescence intensity of (a) **4** (10 μM) against varied concentrations of Pd^{2+} (λ_{ex} = 242 nm); (b) **5** (10 μM) against varied concentrations of Cu^{2+} (λ_{ex} = 242 nm); (c) **5**-Cu^{2+} complex (10 μM) against varied concentrations of CN^- (λ_{ex} = 242 nm). The Standard Deviation (σ = 0.25) was obtained by fluorescence responses (7-times of consecutive scanning on the Varian Cary Eclipse Fluorescence spectrophotometer.). The detection limit was calculated by the formula ($3\sigma/k$).

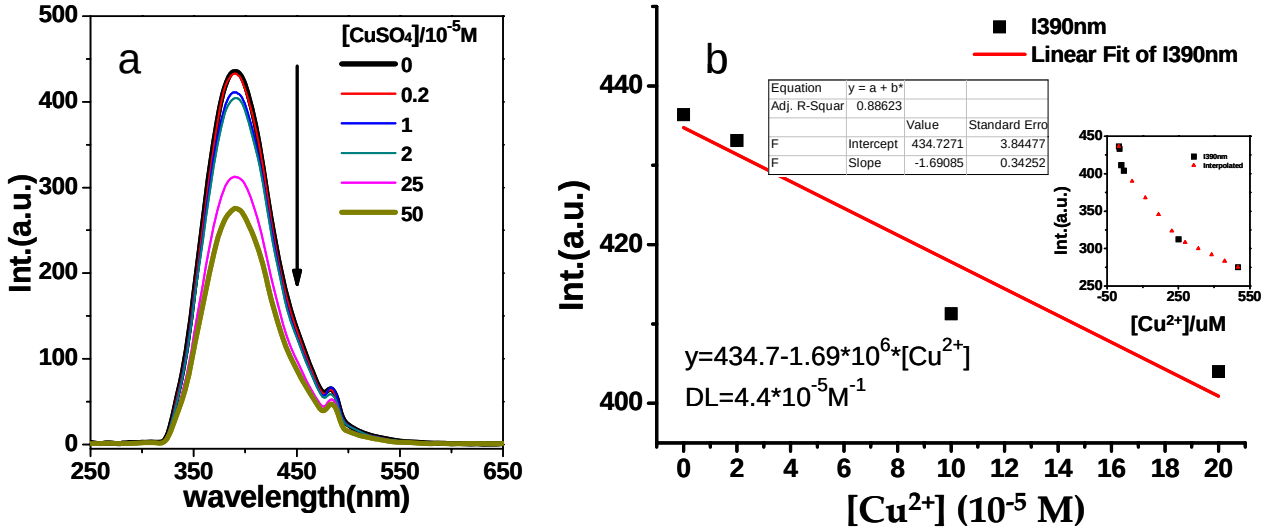


Figure S2 (a) Fluorescence titration spectrum of **5** (10 μM) against varied concentrations of Cu^{2+} (λ_{ex} = 242 nm) in water; (b) Plots of change in fluorescence intensity of **5** (10 μM) against varied concentrations of Cu^{2+} (λ_{ex} = 242 nm) in water. The detection limit was calculated by the formula 3σ/k (σ = 0.25).

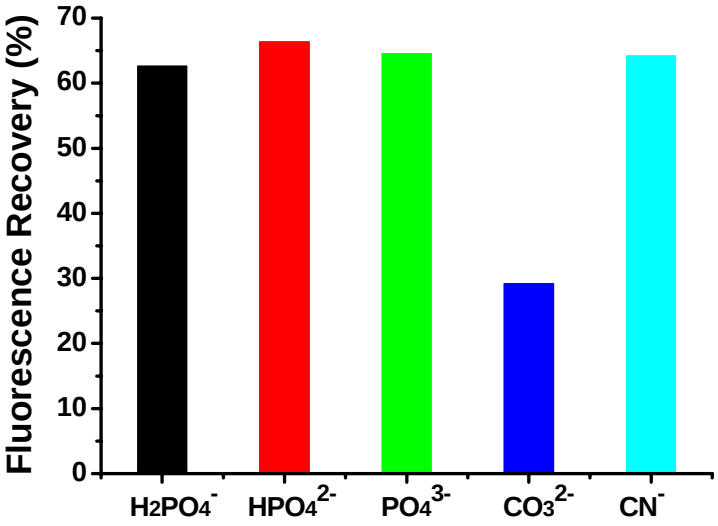
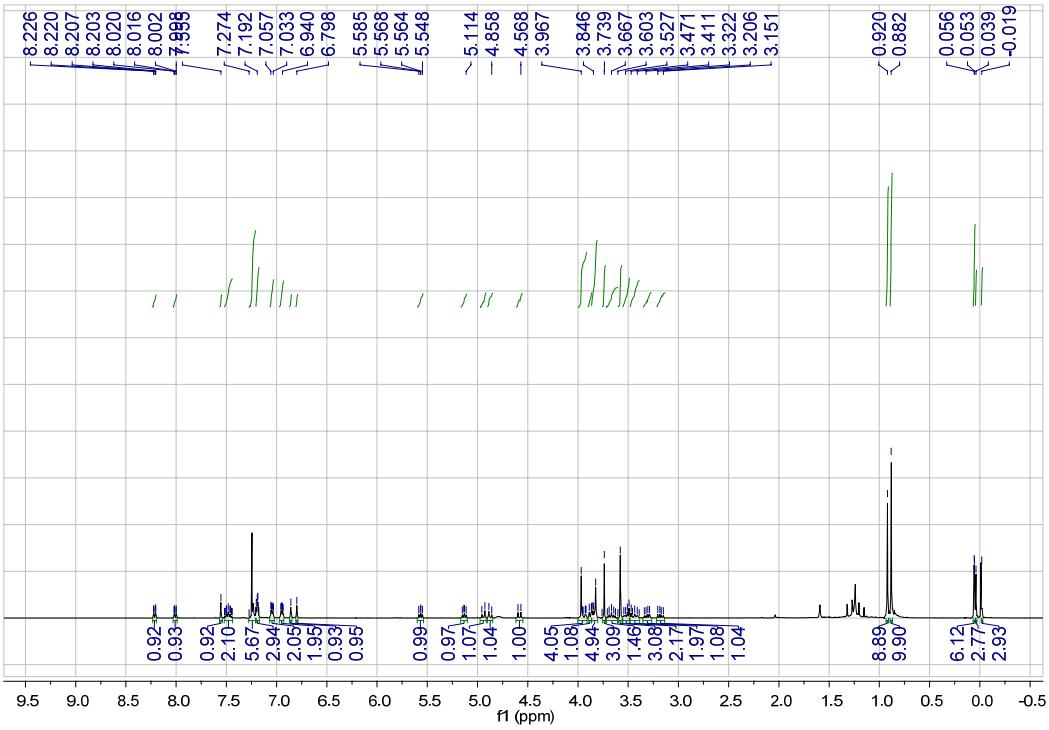


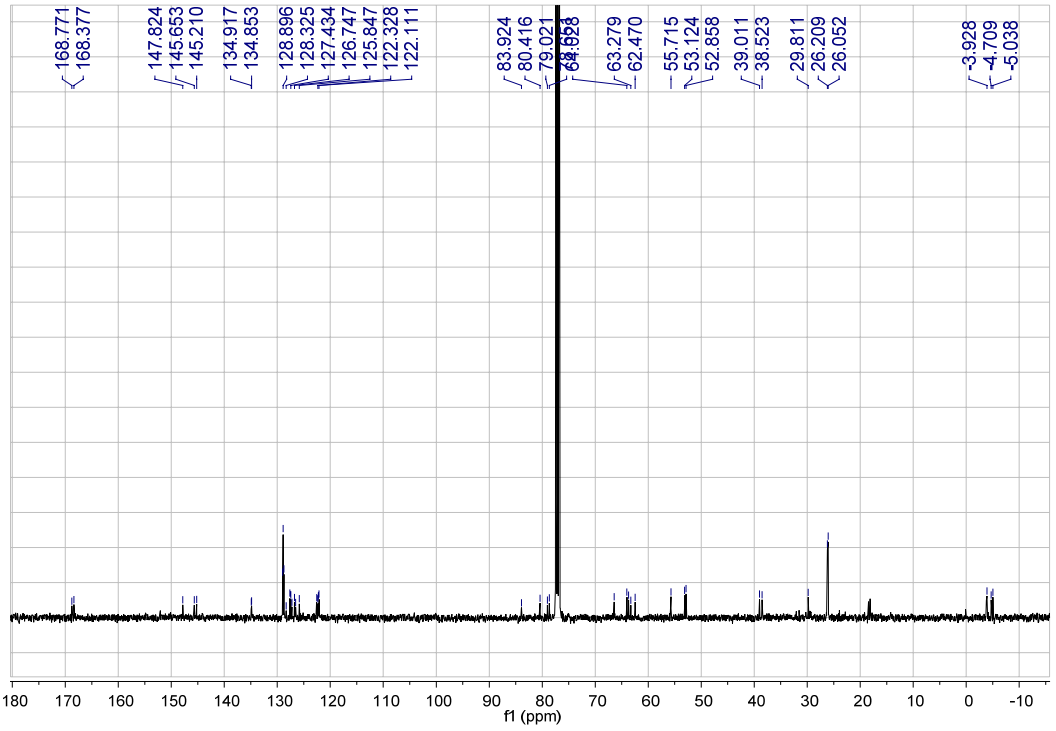
Figure S3 Change in fluorescence intensity of **5**-Cu^{2+} complex (10 μM) in MeOH/water (90/10, V/V) against excessive phosphates and CO_3^{2-}, and 3 equiv. of CN^-.

S-2. NMR Spectra of compouds 3-5

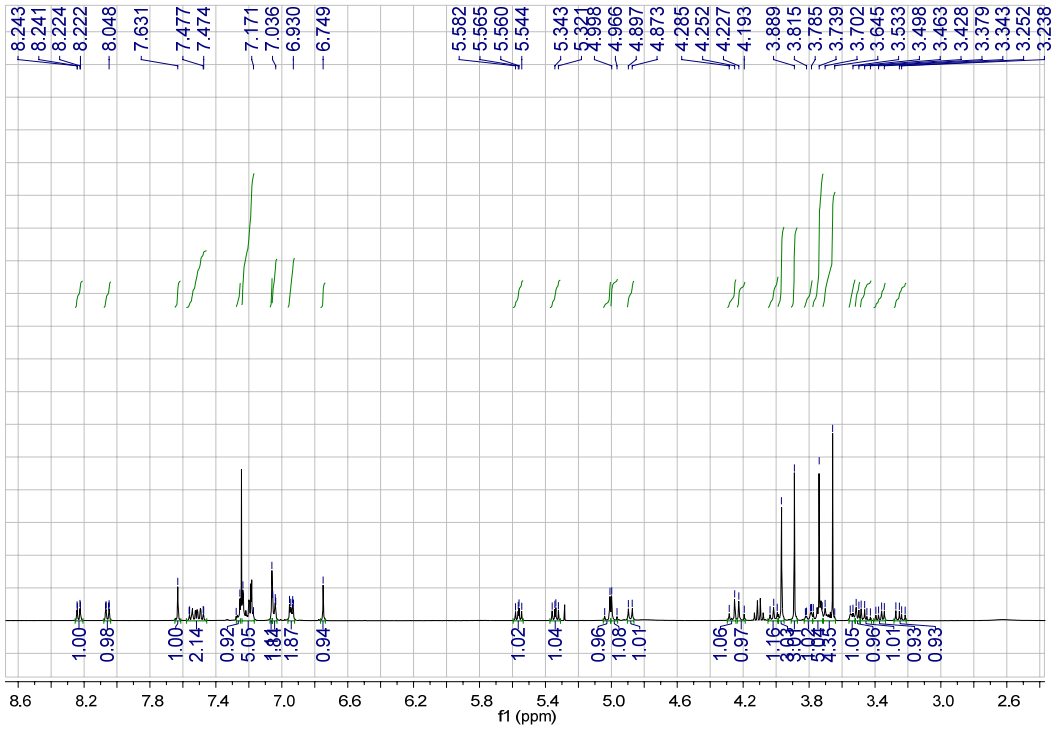
^{1}H NMR of **3**



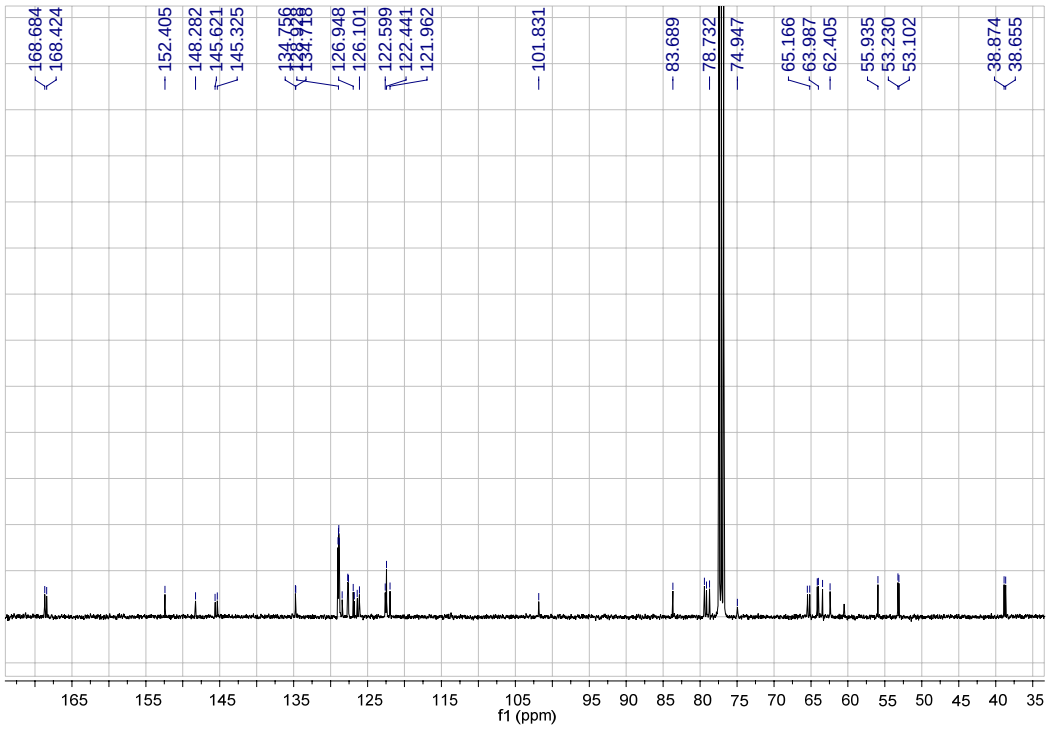
^{13}H NMR of **3**



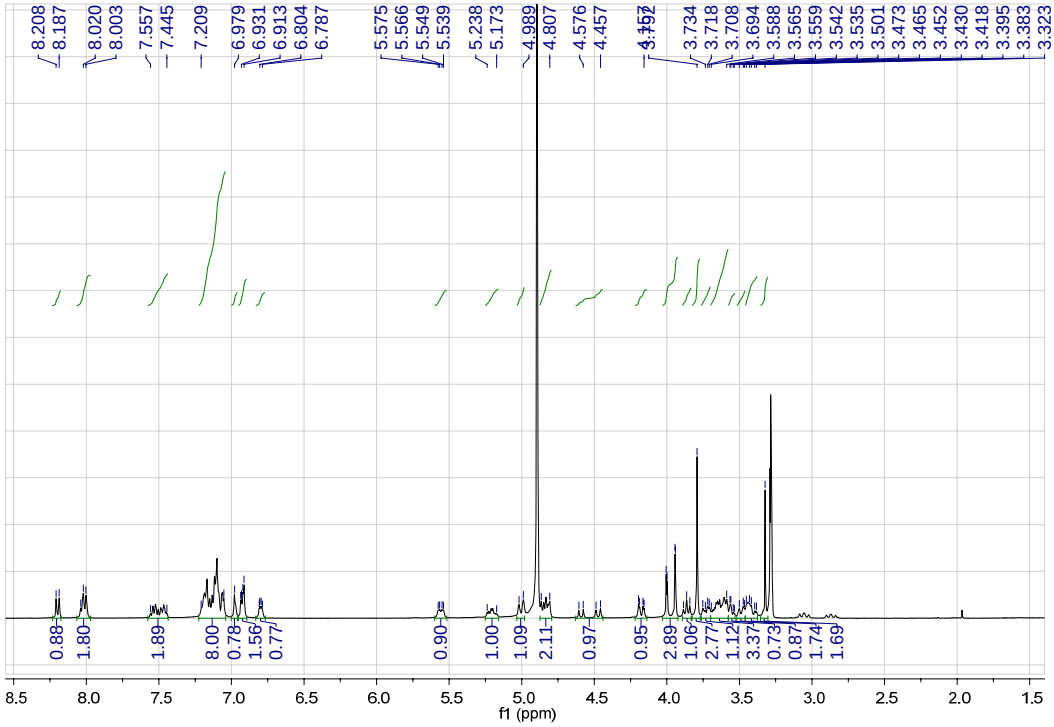
^{1}H NMR of **4**



^{13}H NMR of **4**



^{1}H NMR of **5**



^{13}H NMR of **5**