Supplementary Material (ESI) for New Journal of Chemistry

Supporting Information for

Chromogenic and fluorescent chemodosimeter for fluoride ion based on novel anion-catalyzed intramolecular hydrogen transfer

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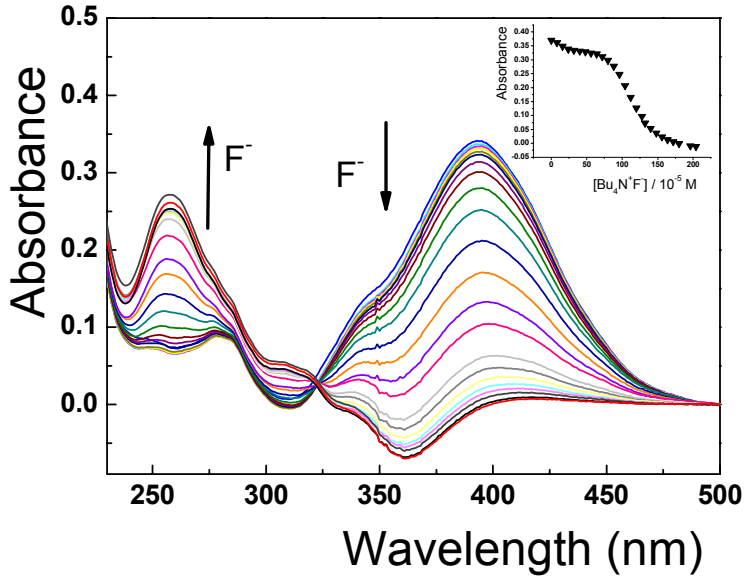


Fig. S1. UV-vis titration of **3** (20 μM) with $Bu_4N^+F^-$ in CH_3CN. Arrows show changes due to increasing concentration of F^-. The inset shows the absorbance at 390 nm as a function of $[F^-]$. F^-(equiv) = 0, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100.

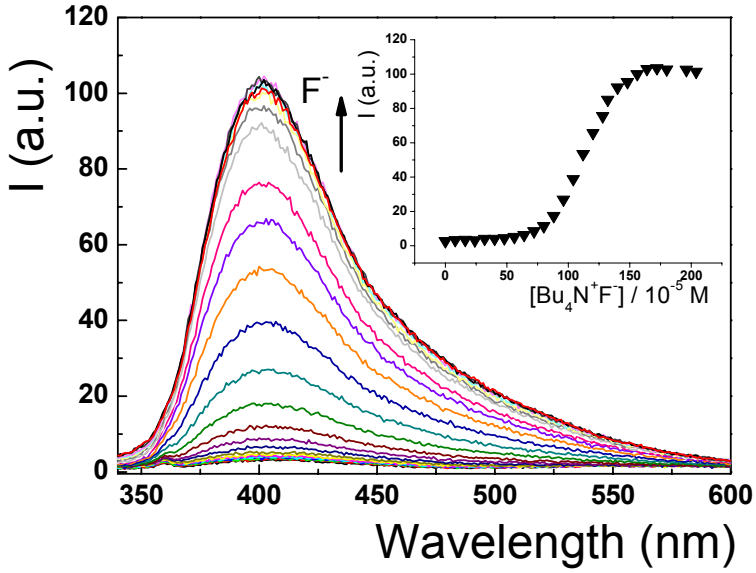


Fig. S2. Increase in fluorescence emission intensity (λ_{ex} = 324 nm) when sensor **3** (20 μM in CH_3CN) is titrated with increasing concentration of F^-. F^-(equiv) = 0, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100.

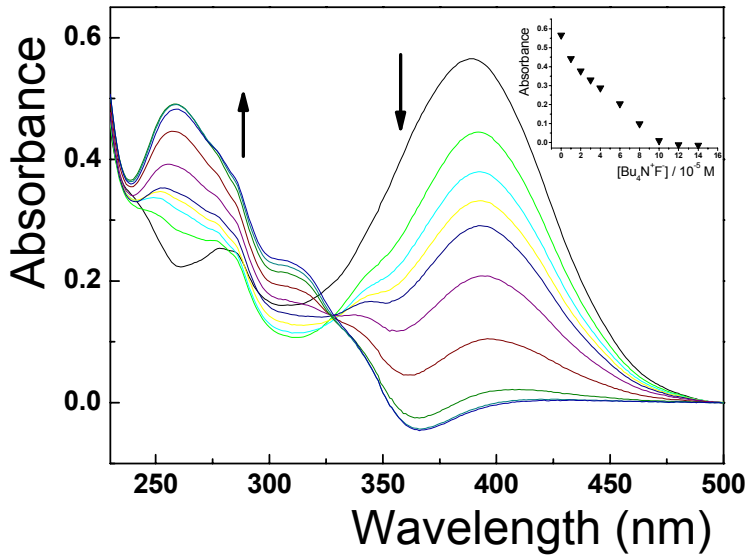


Fig. S3. UV-vis titration of **3** (20 μM) with $Bu_4N^+OH^-$ (10% aquous) in CH_3CN. Arrows show changes due to increasing concentration of OH^-. The inset shows the absorbance at 390 nm as a function of $[OH^-]$. OH^-(equiv) = 0, 0.5, 1, 1.5, 2, 3, 4, 5, 6, 7.

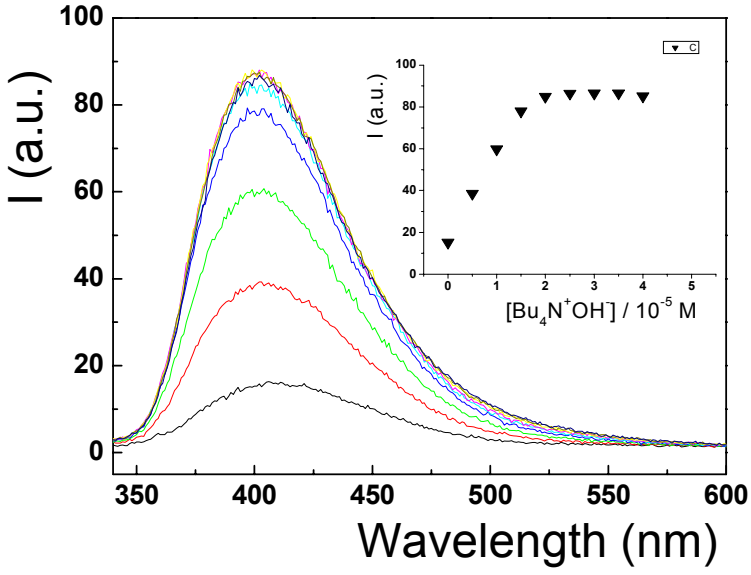
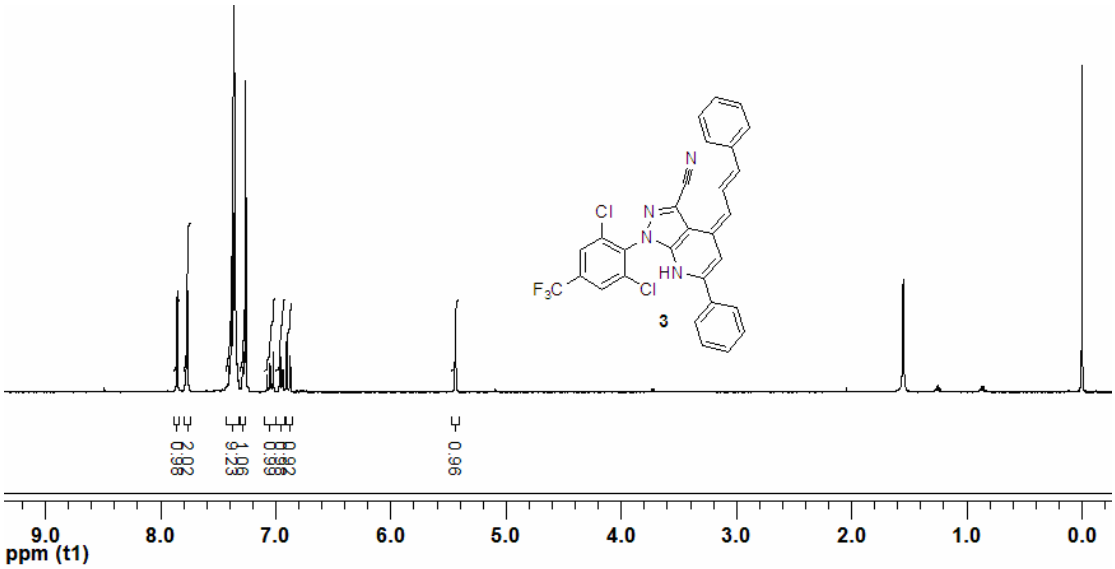
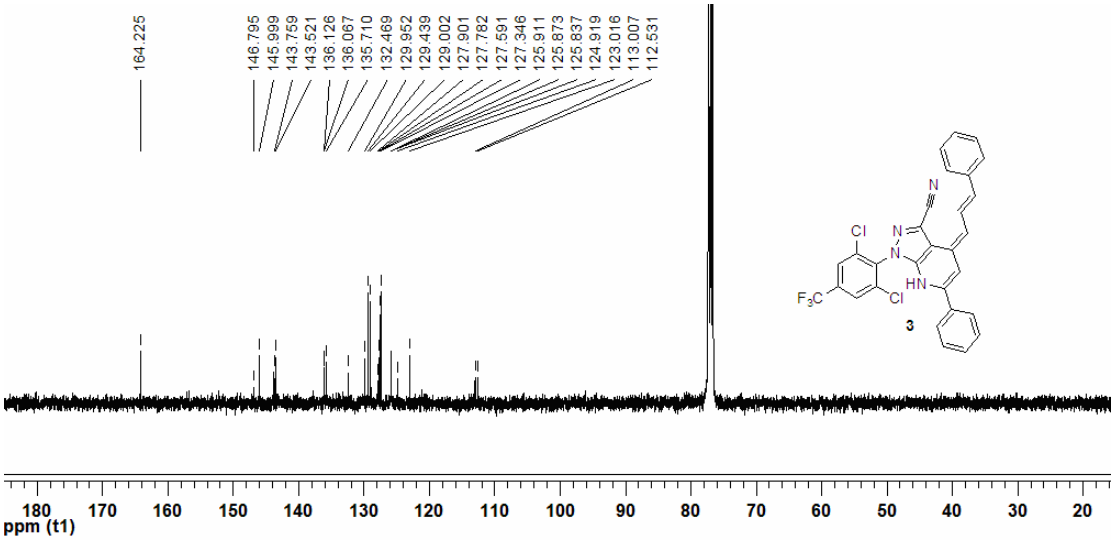


Fig. S4. Increase in fluorescence emission intensity (λ_{ex} = 324 nm) when sensor **3** (20 μM in CH_3CN) is titrated with increasing concentration of OH^-. OH^-(equiv) = 0, 0.5, 1, 1.5, 2, 3, 4, 5, 6, 7.

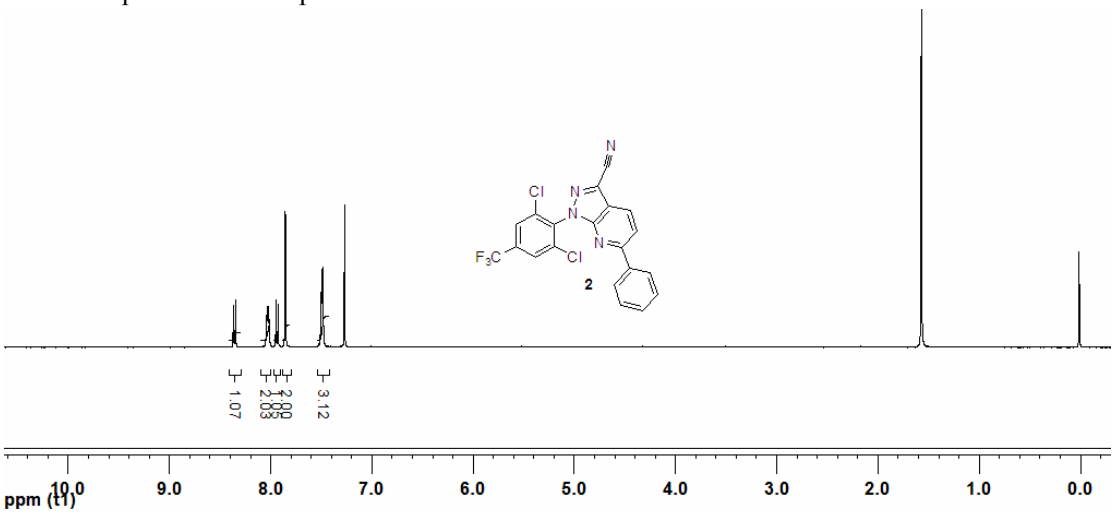
^{1}H NMR spectrum of compound **3**



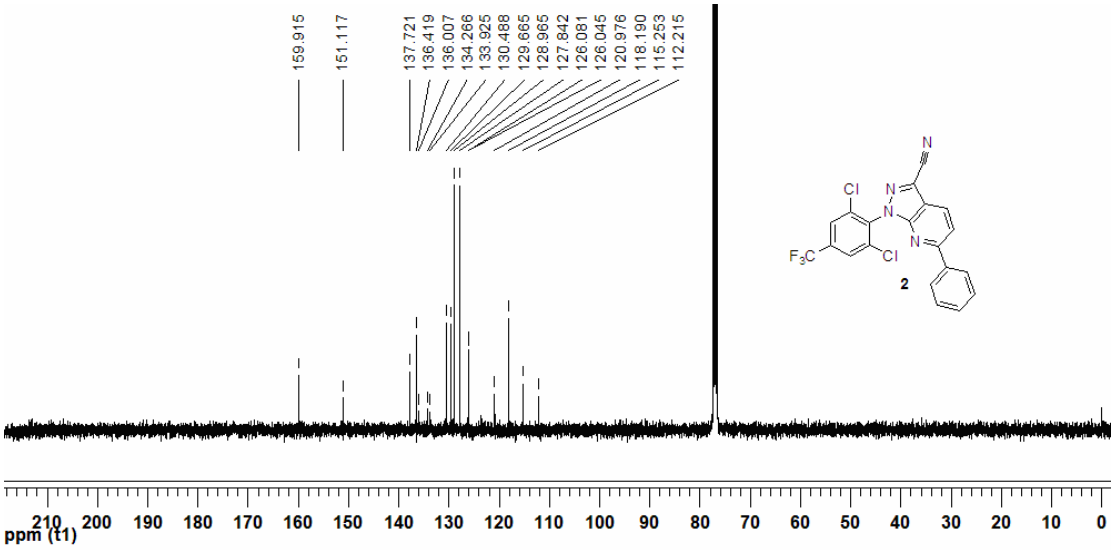
^{13}C NMR spectrum of compound **3**



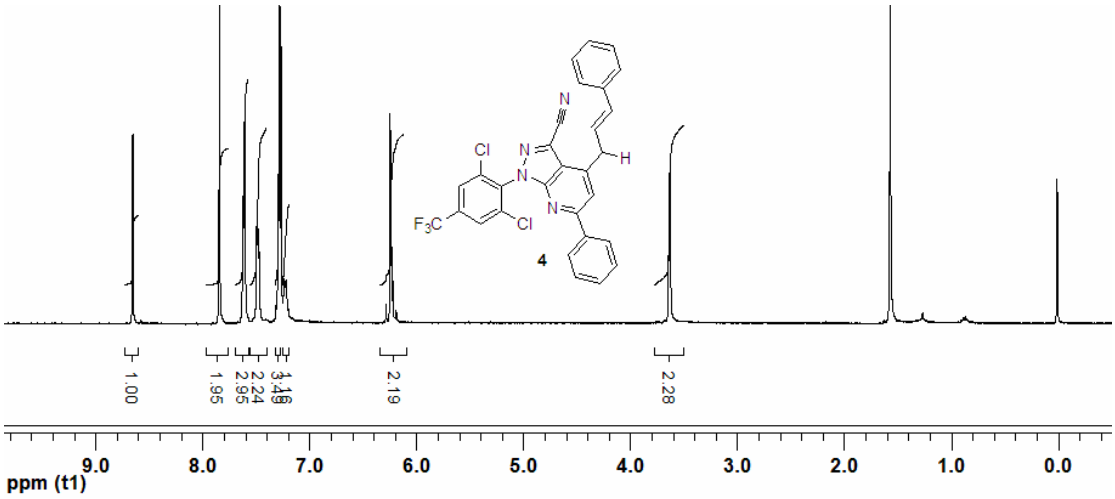
^{1}H NMR spectrum of compound **2**



^{13}C NMR spectrum of compound **2**



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



^{13}C NMR spectrum of compound **4**