

**A dual response UV-vis and fluorescence receptor based on
acetylenic-indole conjoined silatrane for selective recognition of
Co²⁺ and Cu²⁺ ions, and *in silico* antidiabetic activity**

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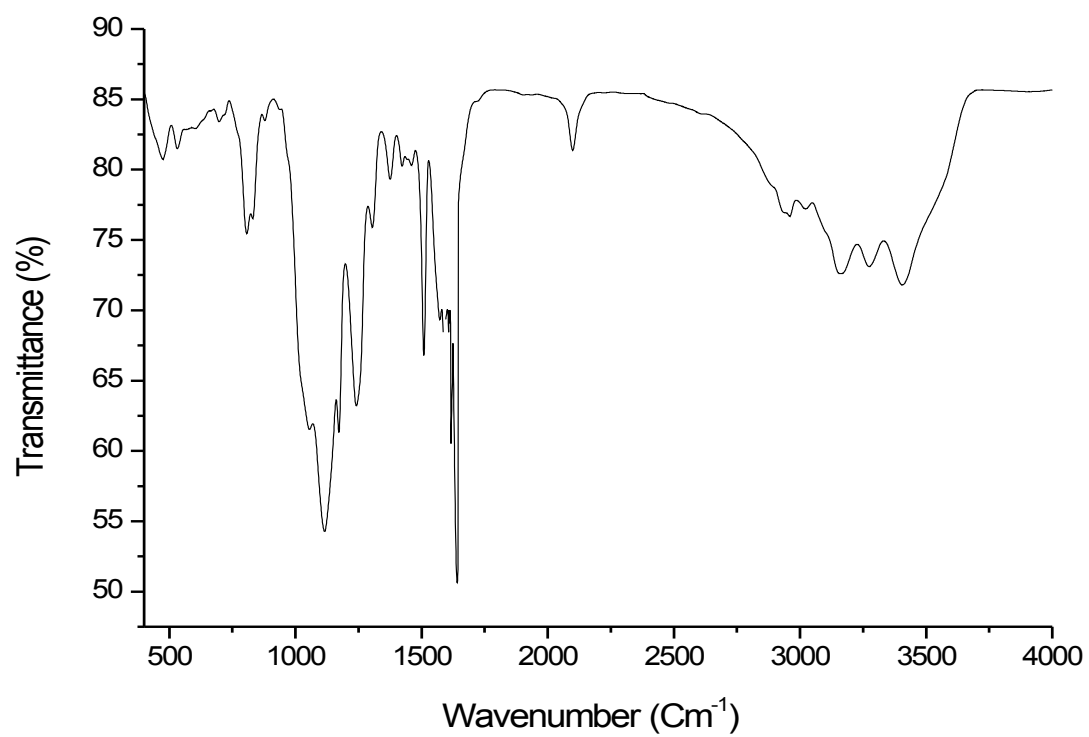


Fig. S1. IR spectra of compound 4.

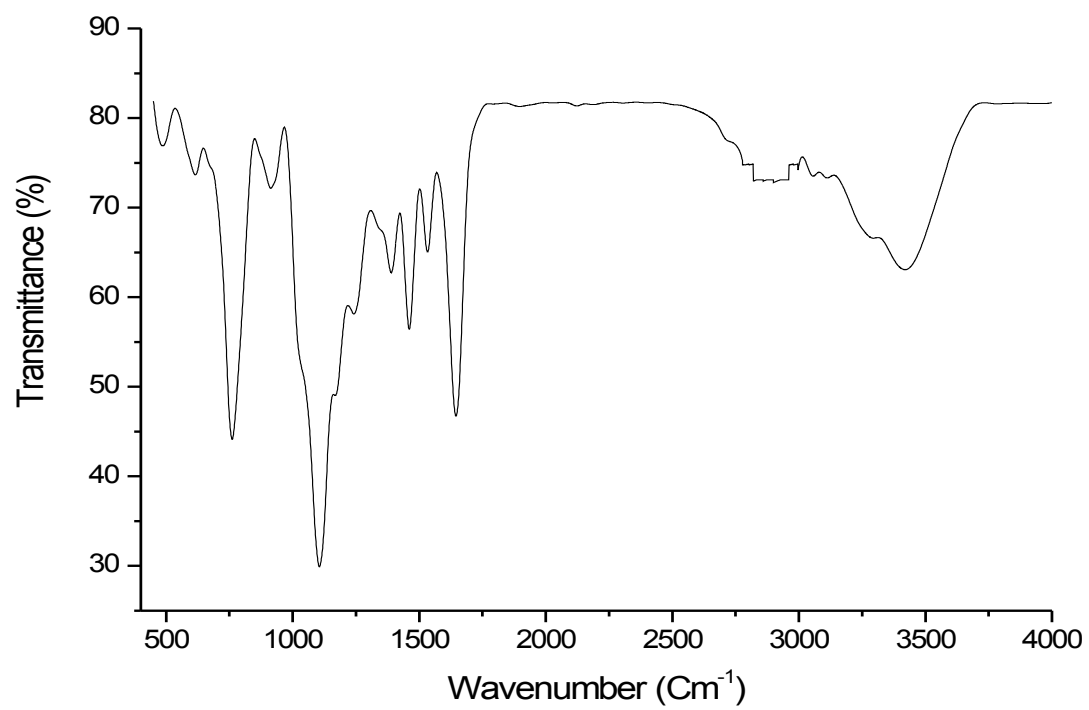


Fig. S2. IR spectra of compound 5.

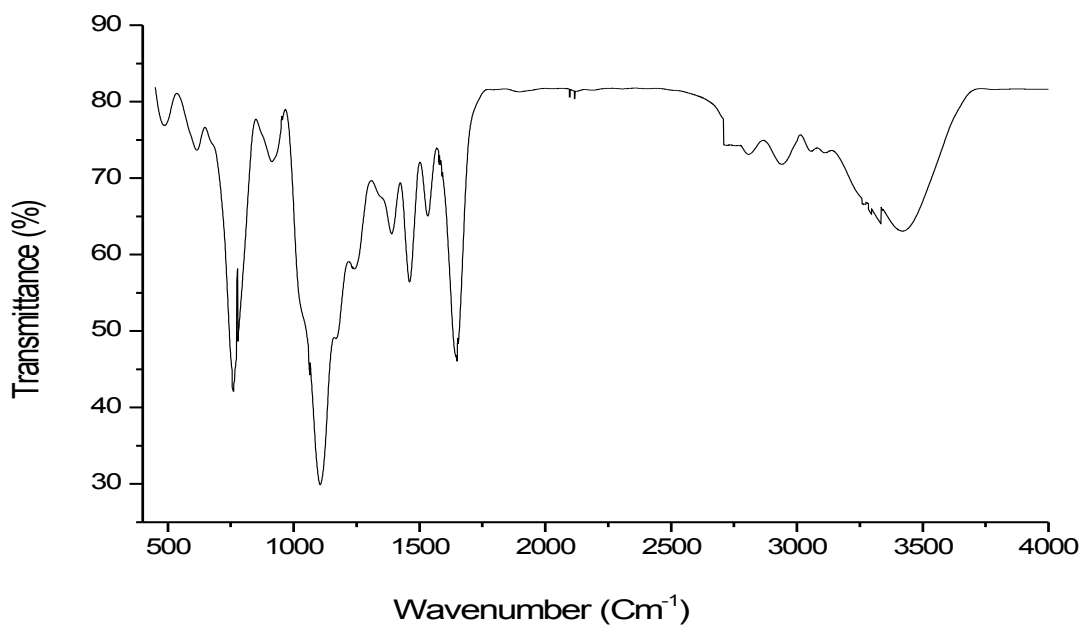


Fig. S3. IR spectra of compound 6.

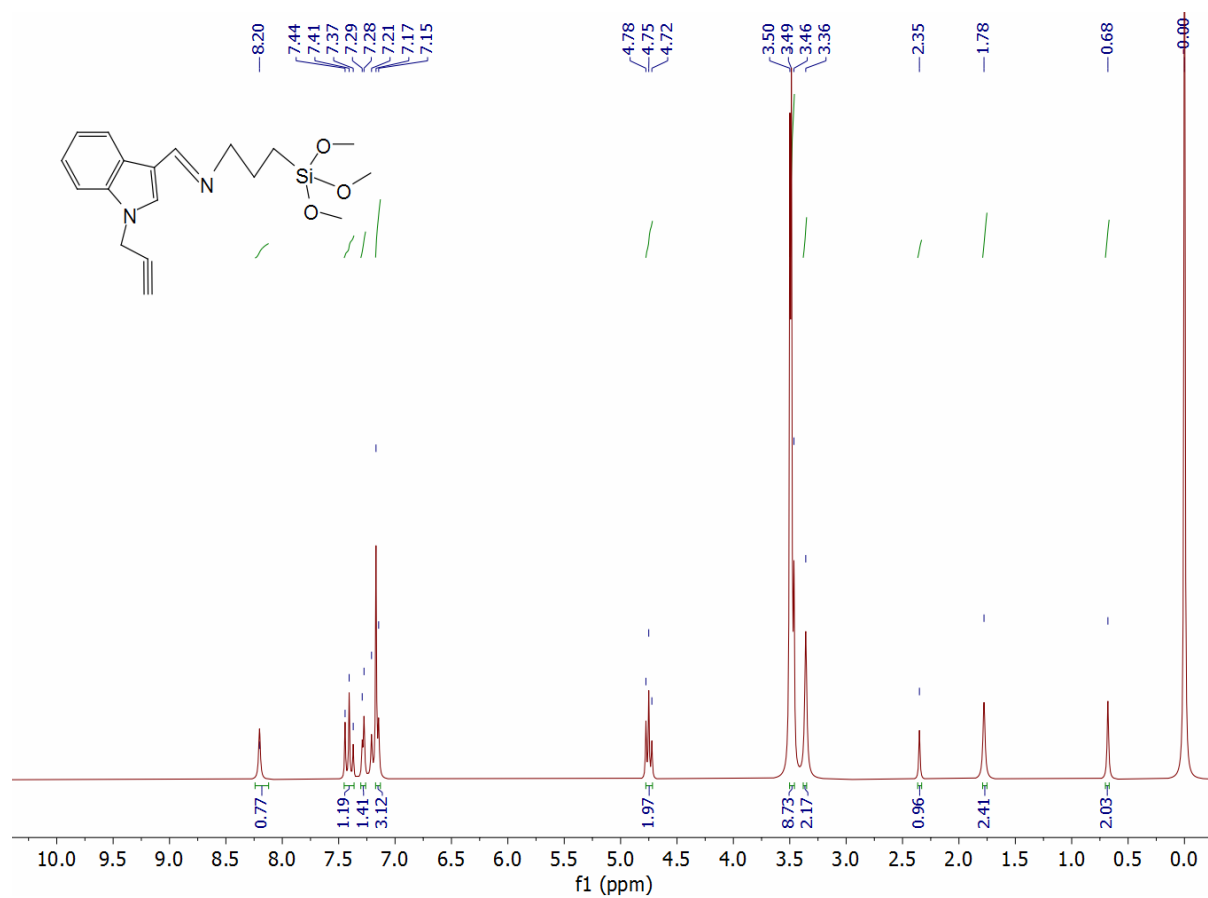


Fig. S4. ¹H NMR spectra of compound 4.

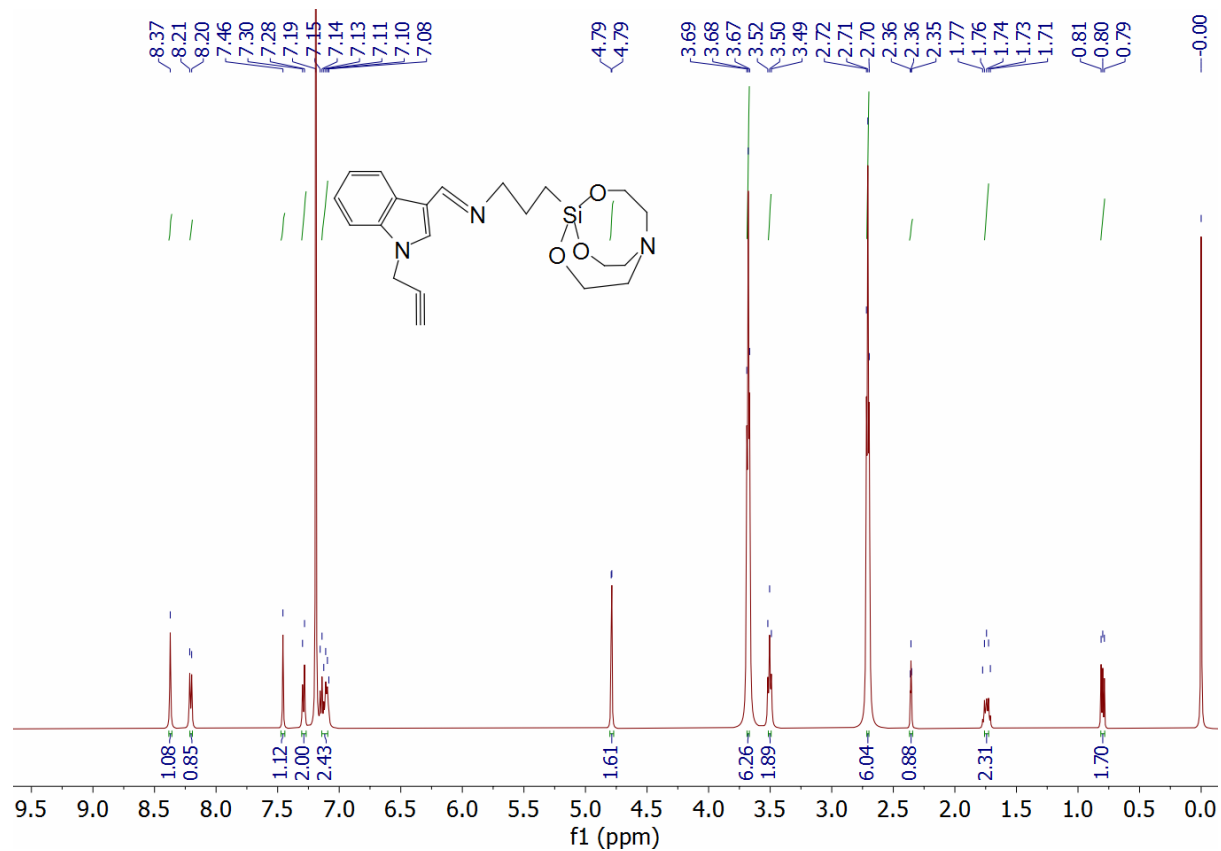


Fig. S5. ^1H NMR spectra of compound 5.

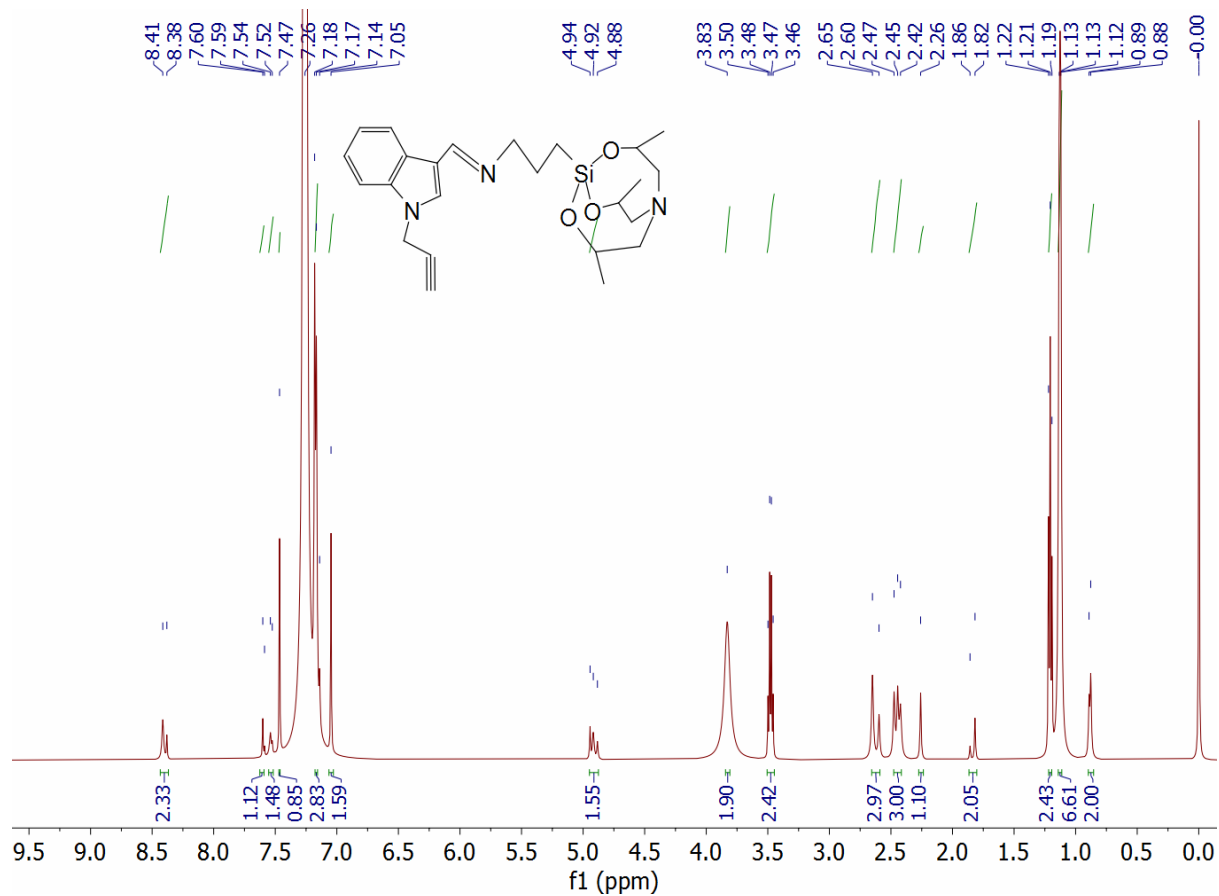
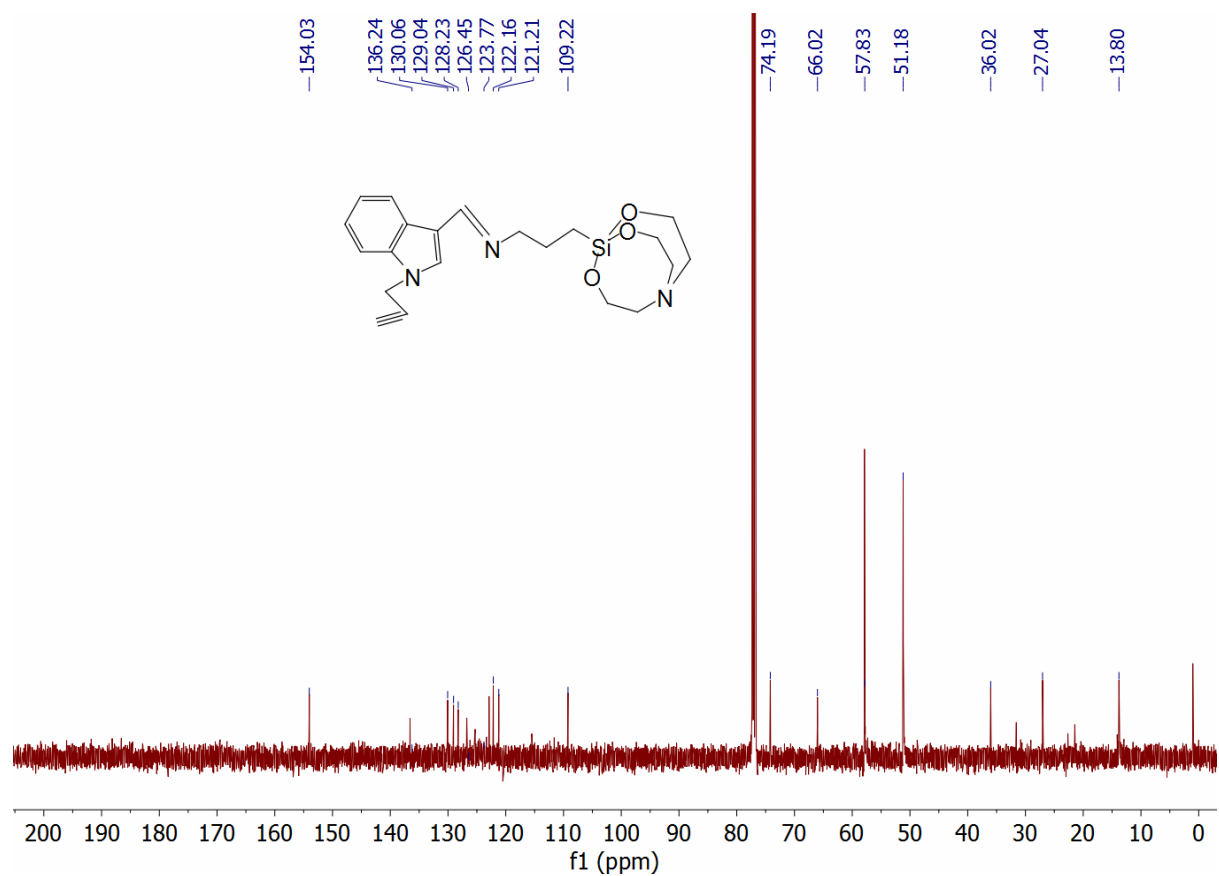
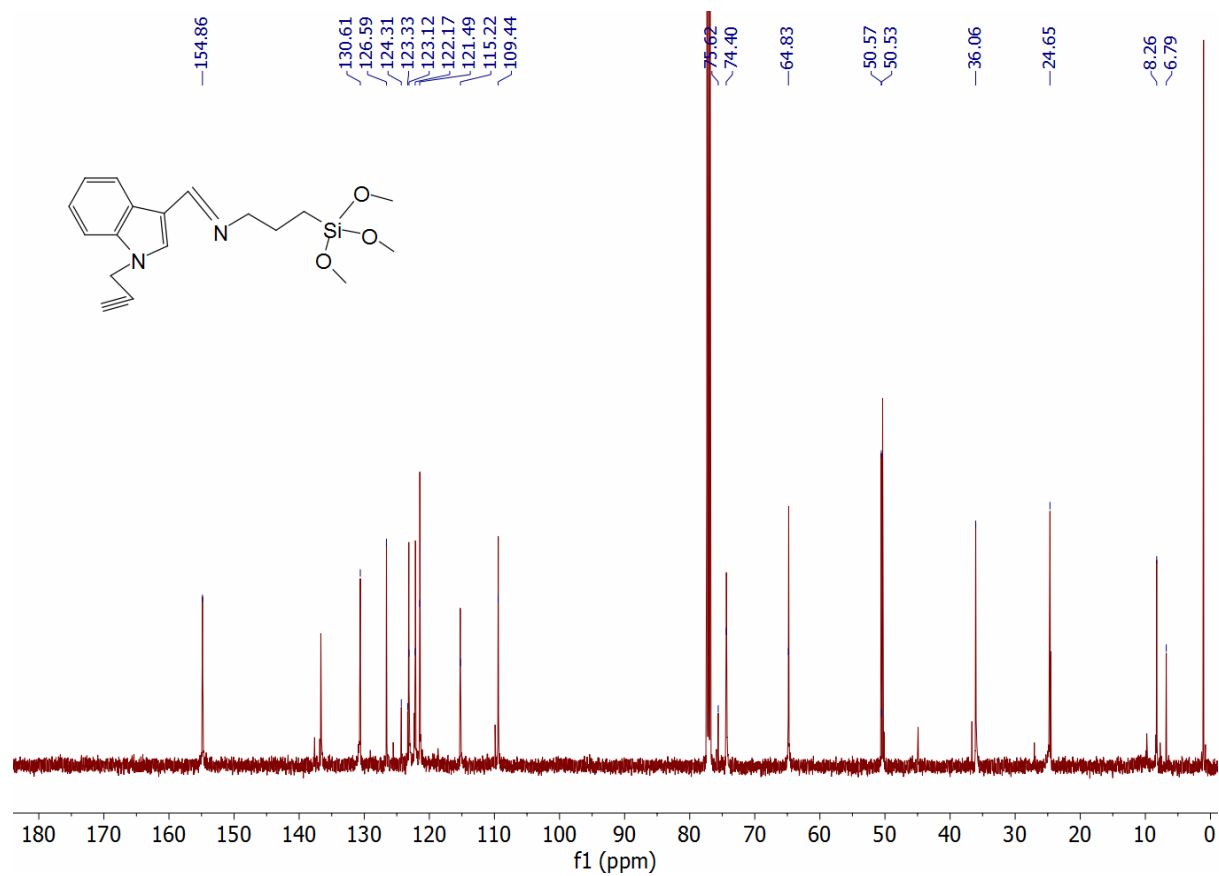


Fig. S6. ^1H NMR spectra of compound 6.



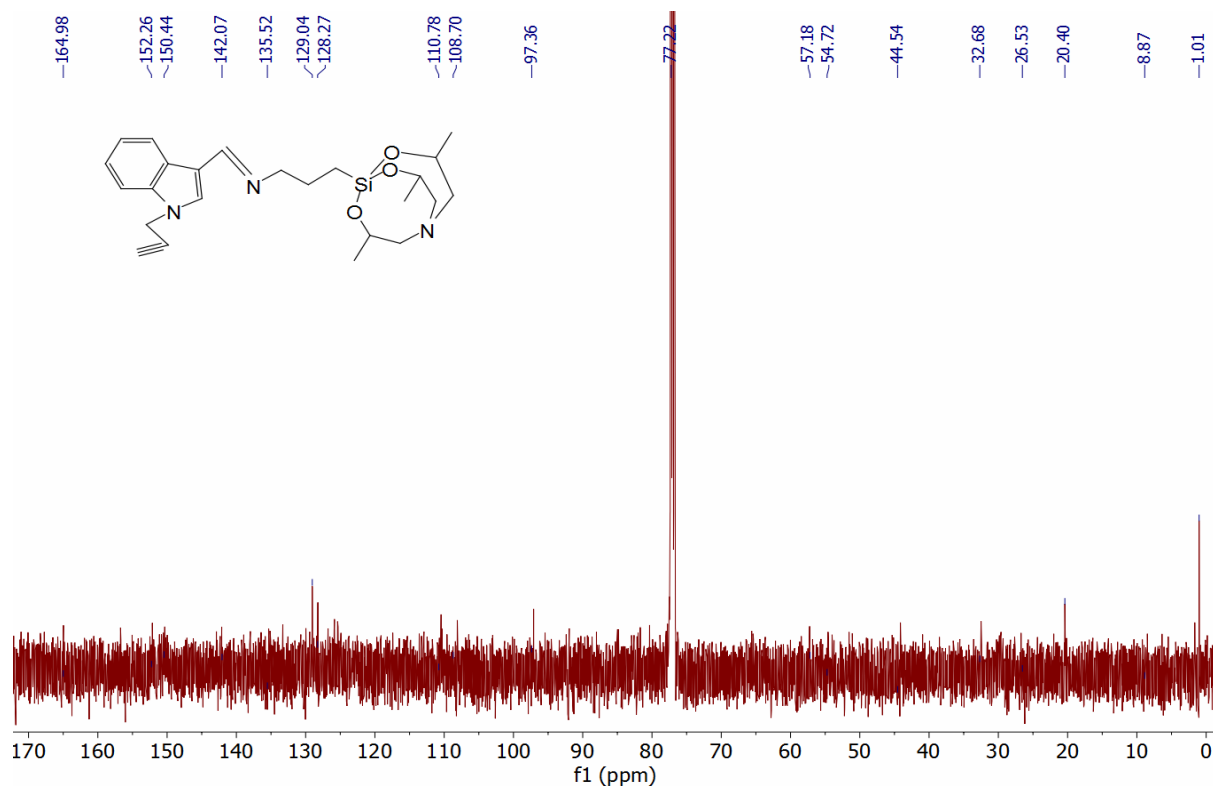


Fig. S9. ¹³C NMR spectra of compound 6.

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SUSHMA INNH2SIL 8 (0.171) Cm (8)

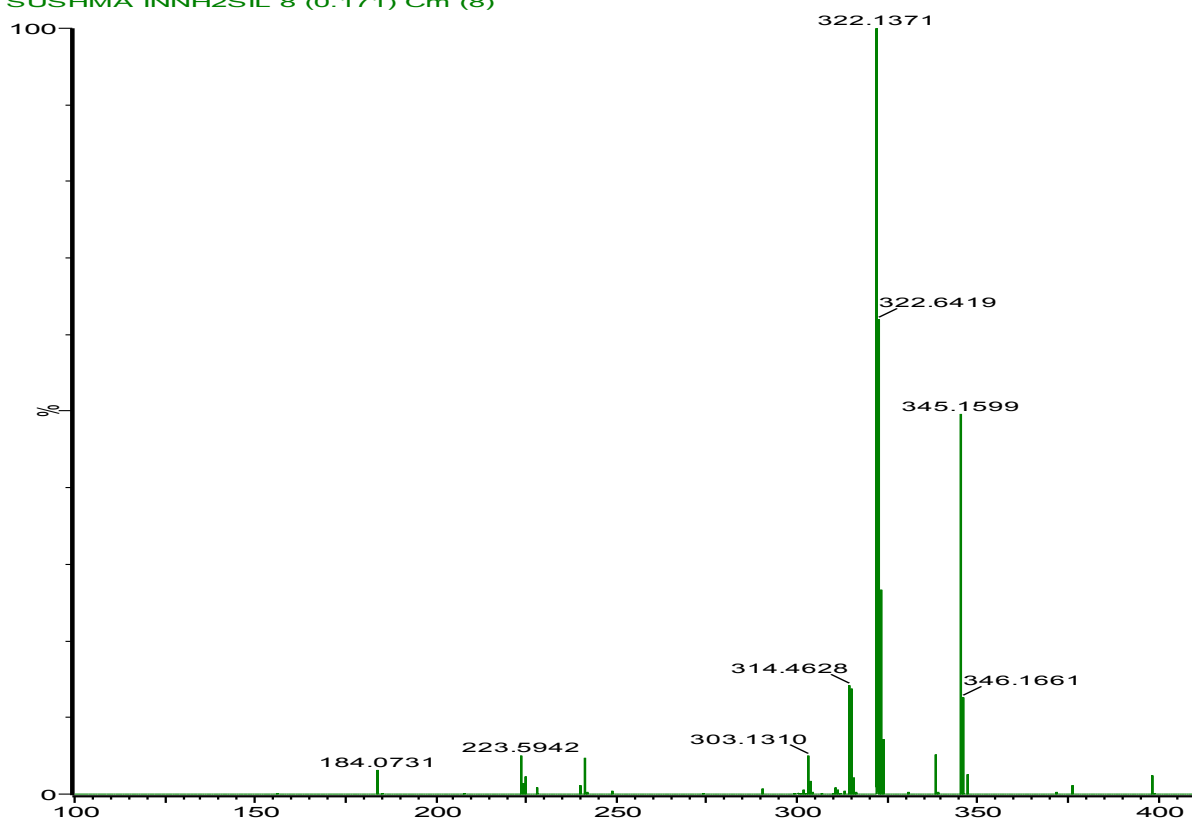


Fig. S10. HRMS of compound 4.

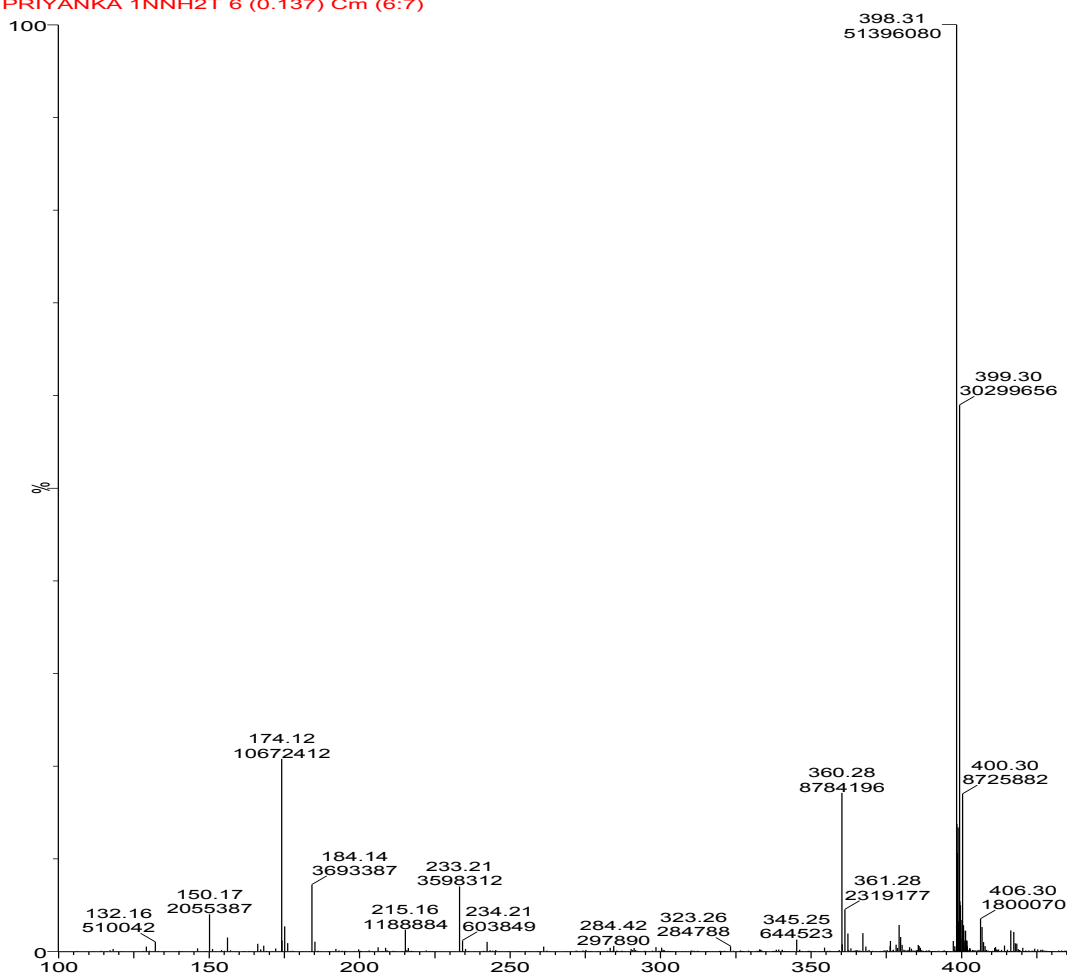
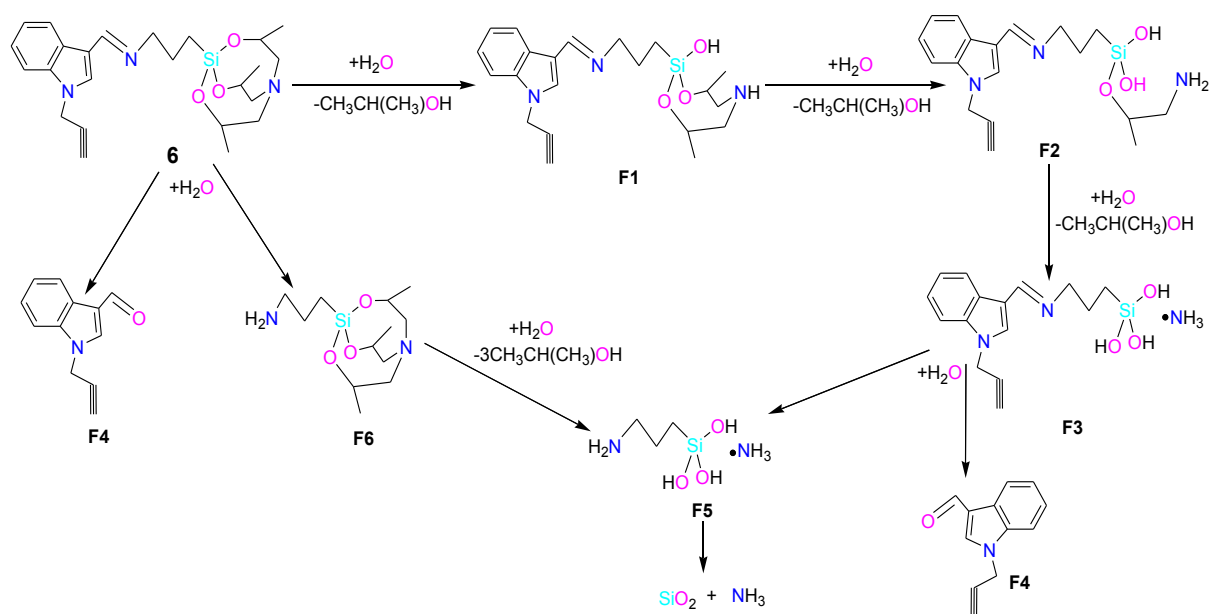
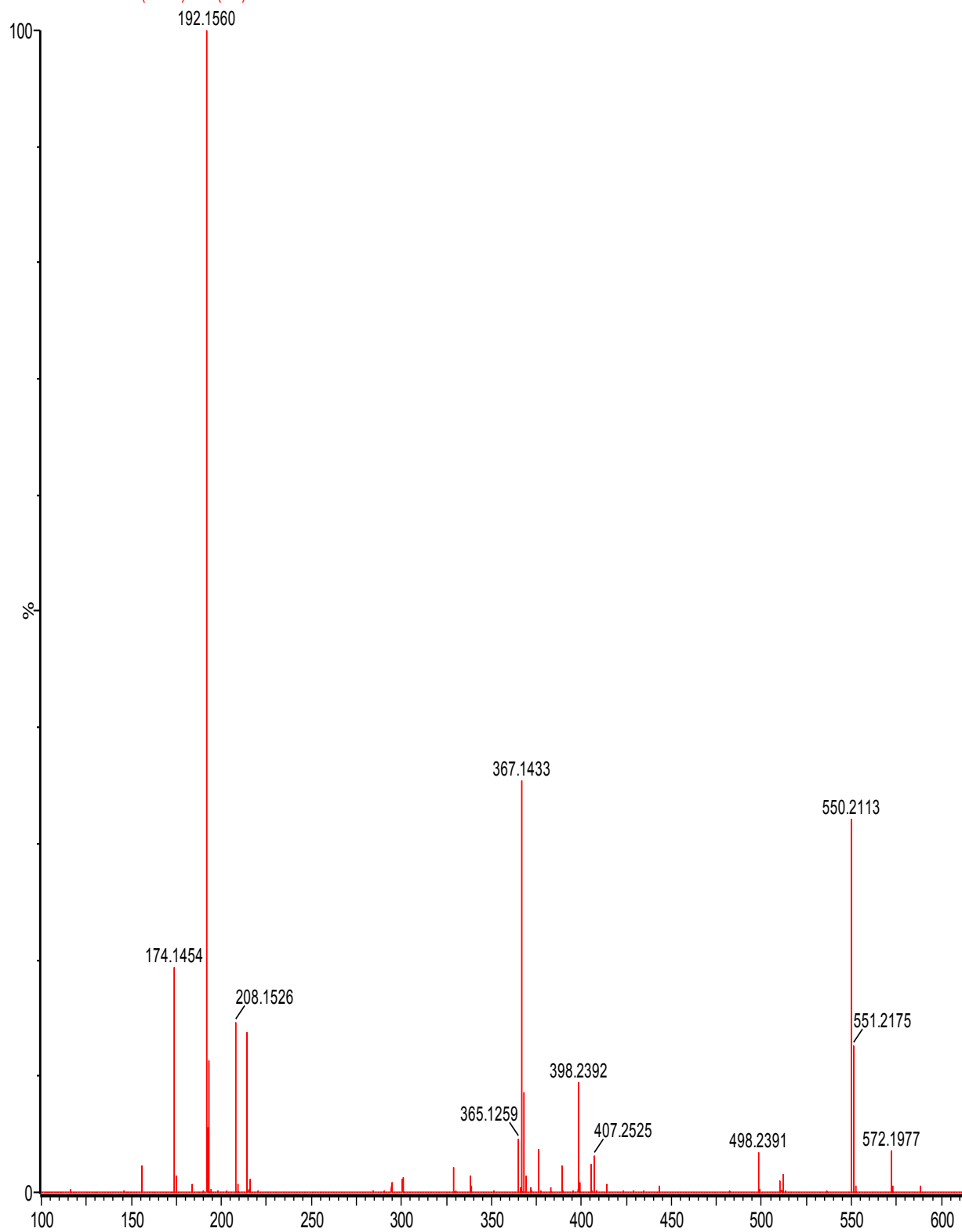


Fig. S11. Mass spectra of compound 5.



Scheme S1. Mass fragmentation pattern for synthesized silatrane 6.

SUSHMA INTIPA 8 (0.171) Cm (7:8)

**Fig. S12.** HRMS of compound **6**.

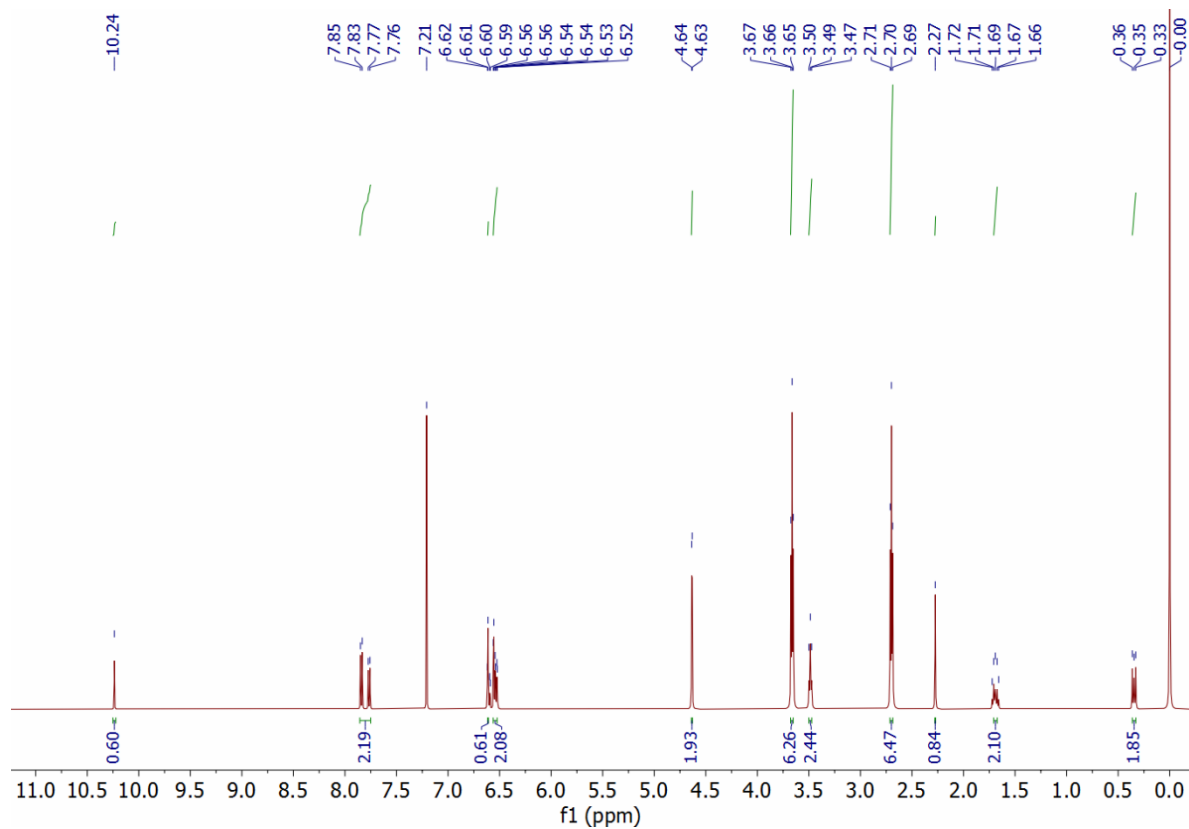


Fig. S13. ^1H NMR spectra of **5**- Co^{2+} complex.

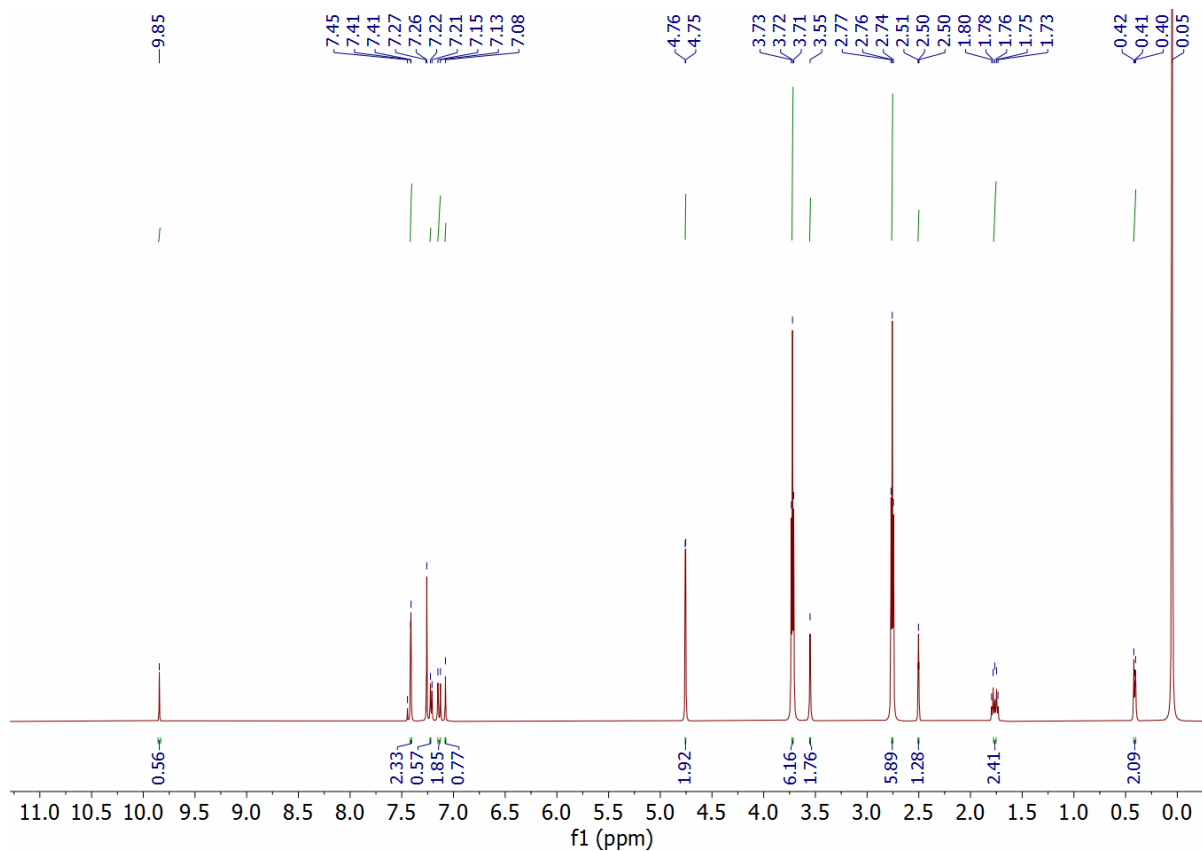


Fig. S14. ^1H NMR spectra of **5**- Cu^{2+} complex.

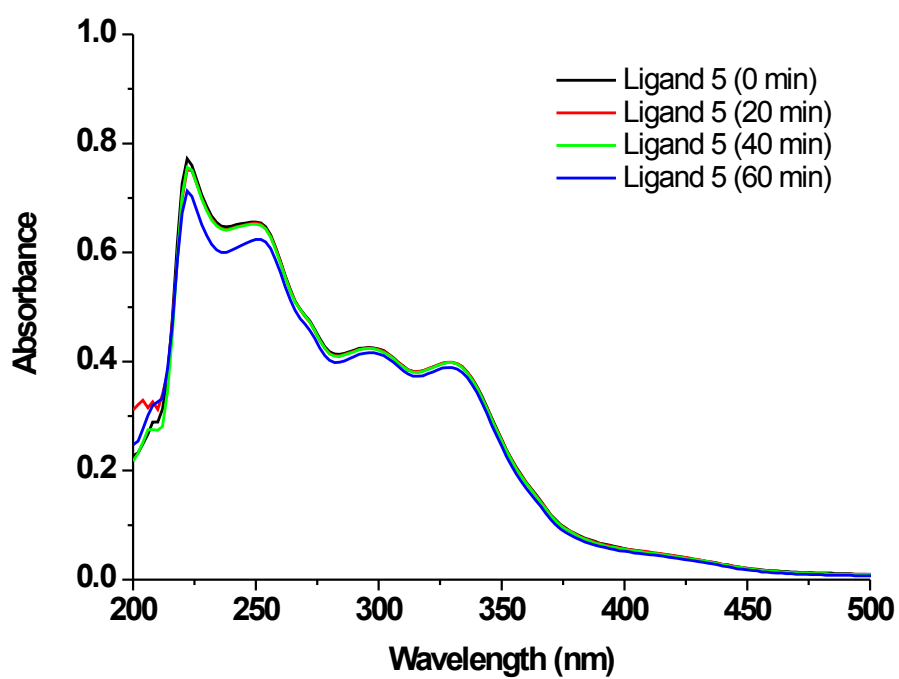


Fig.

S15. Time dependant UV-vis profile of ligand 5 in acetonitrile solution.

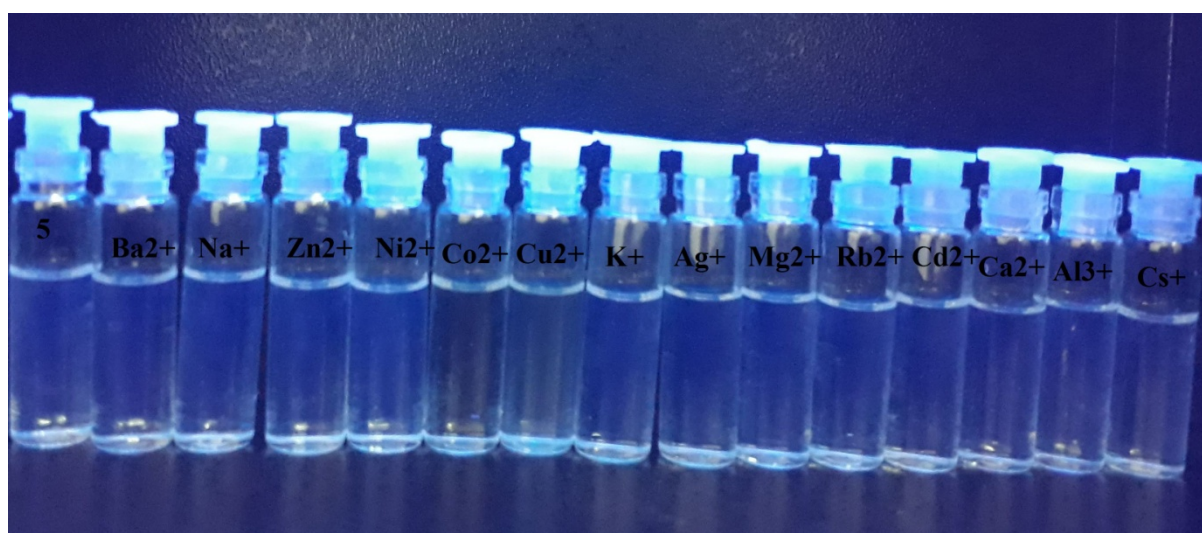


Fig. S16. Picture of ligand 5 in the presence of different metal ions under the UV-vis light.

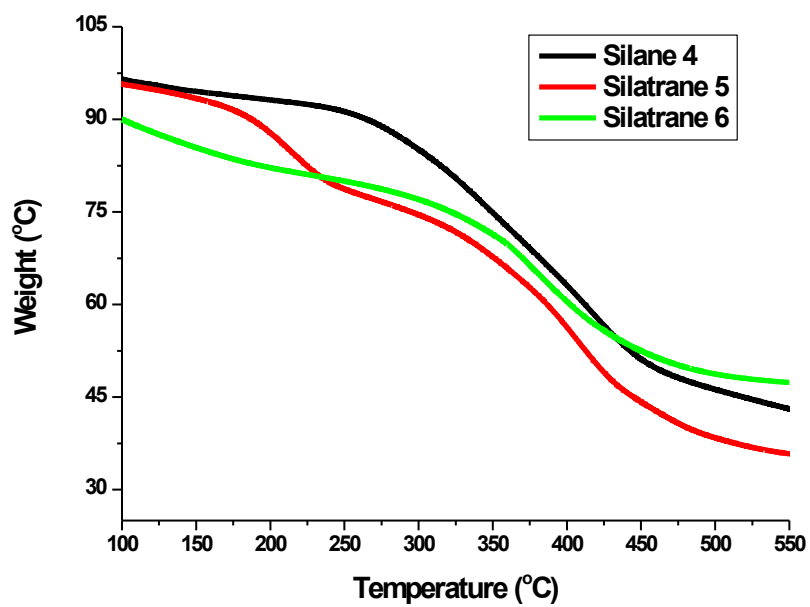


Fig. S17. Thermogravimetric curves of compounds (4-6).