

**Organosilanes and their Magnetic Nanoparticles as Naked Eye Red Emissive Sensors
for Ag⁺ ions and Potent Anti-oxidants**

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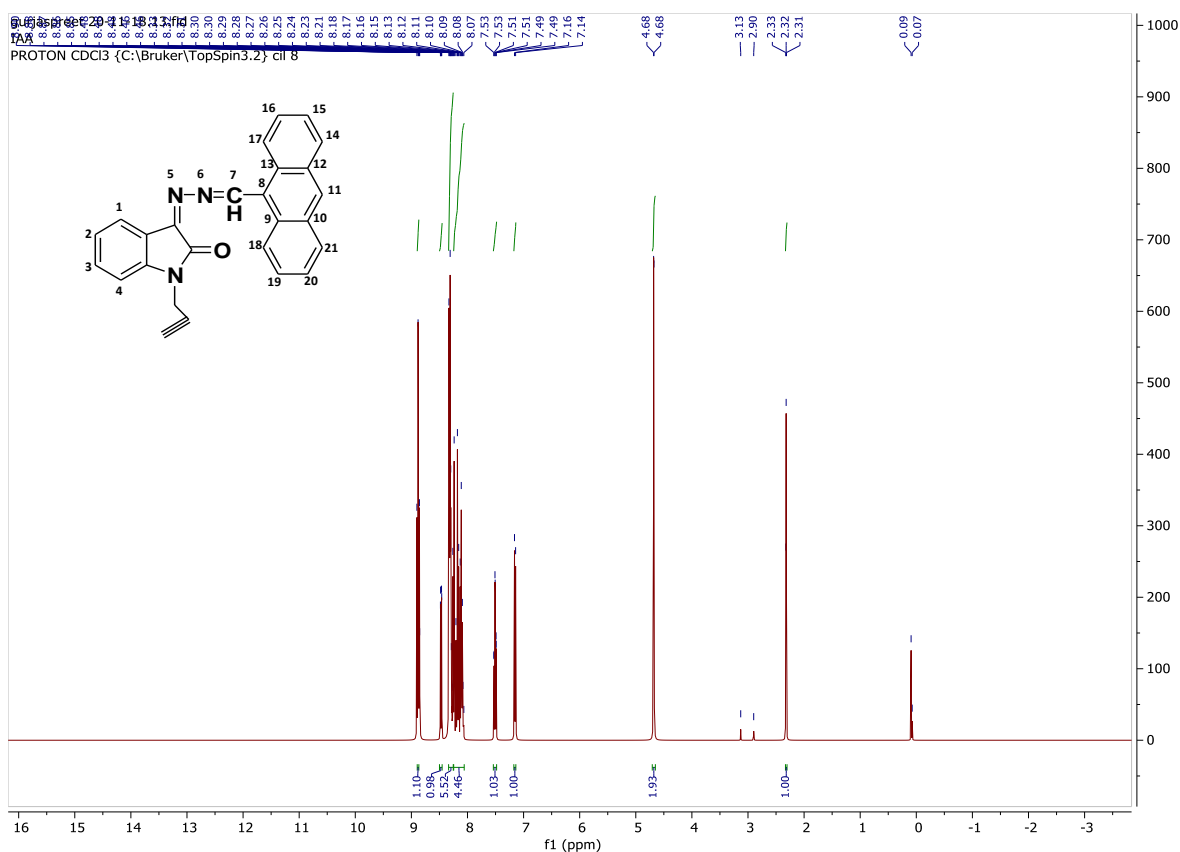


Fig.S1 ¹H NMR spectrum of compound 7a

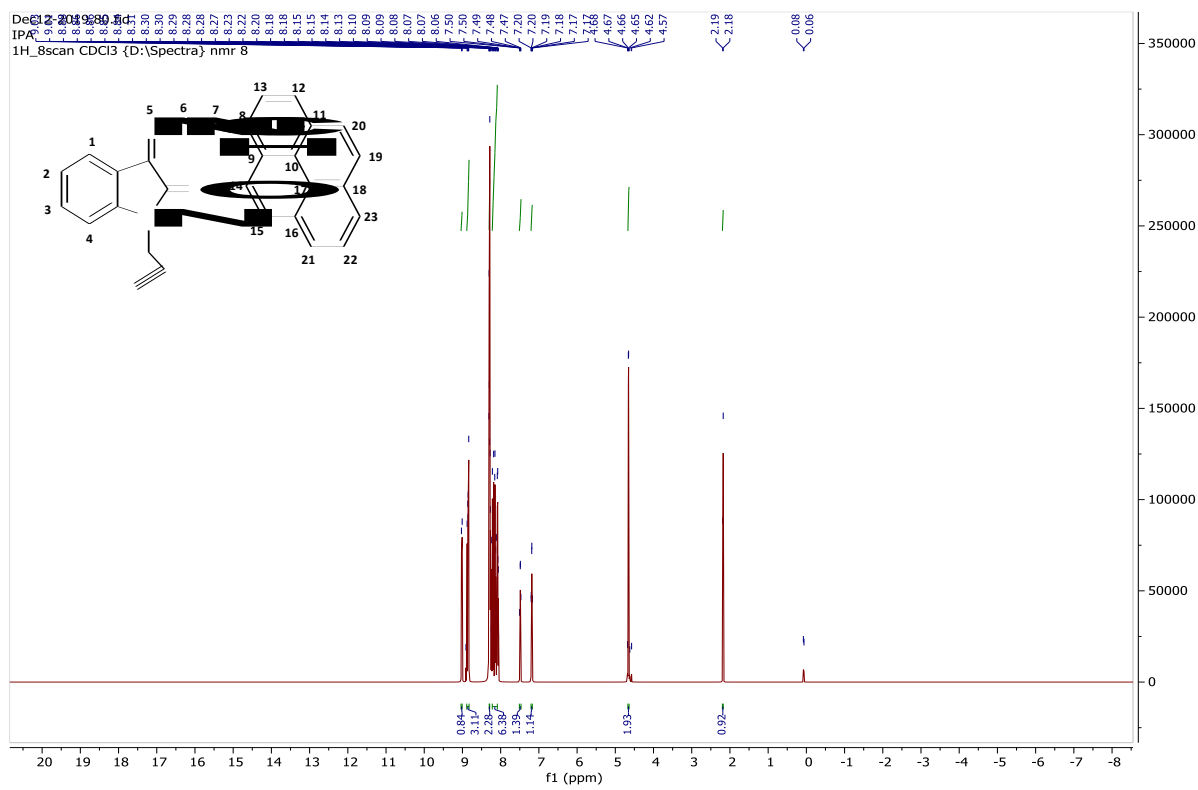


Fig.S2 ¹H NMR spectrum of compound 7b

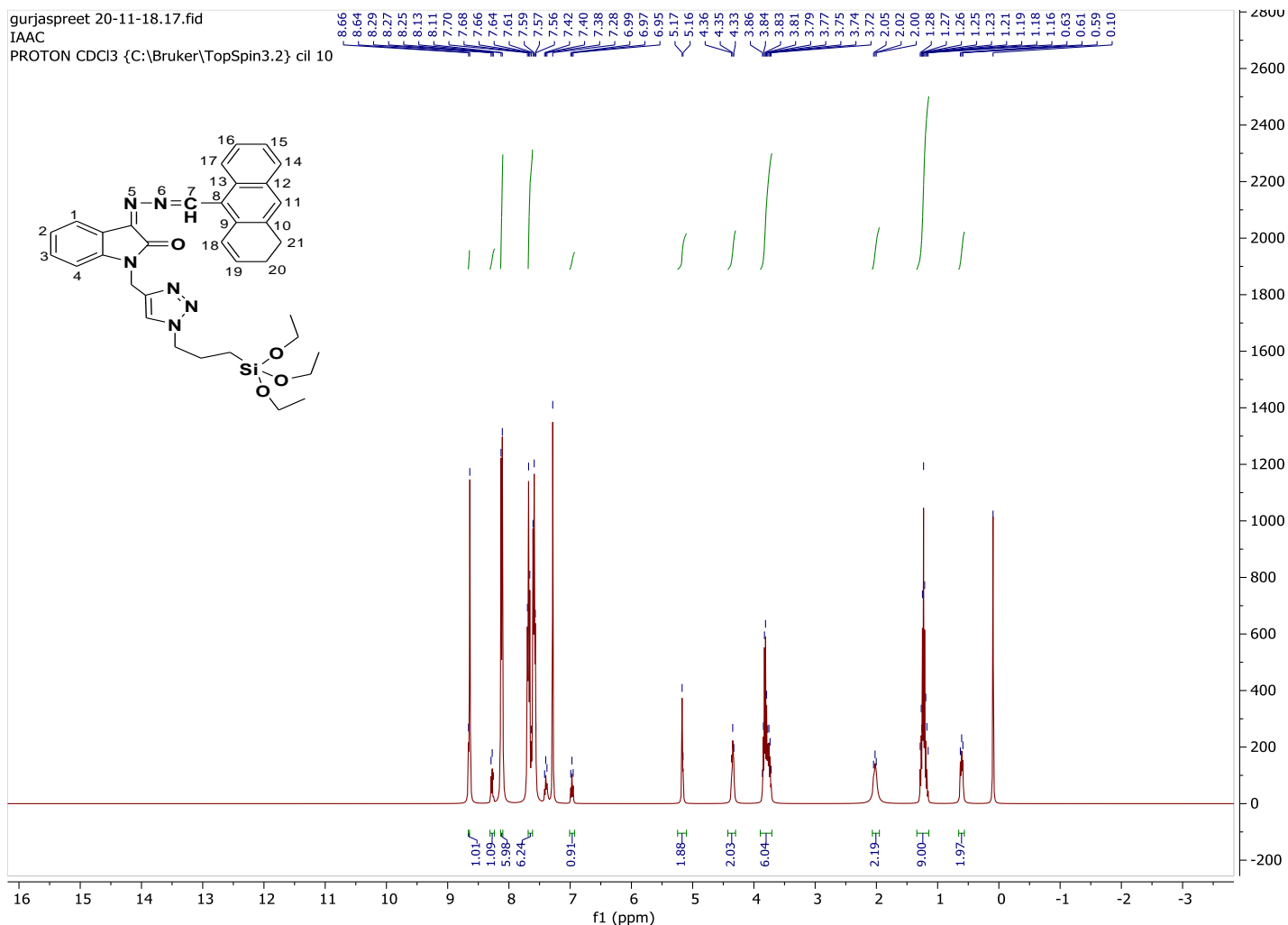


Fig.S3 ¹H NMR spectrum of compound 8a

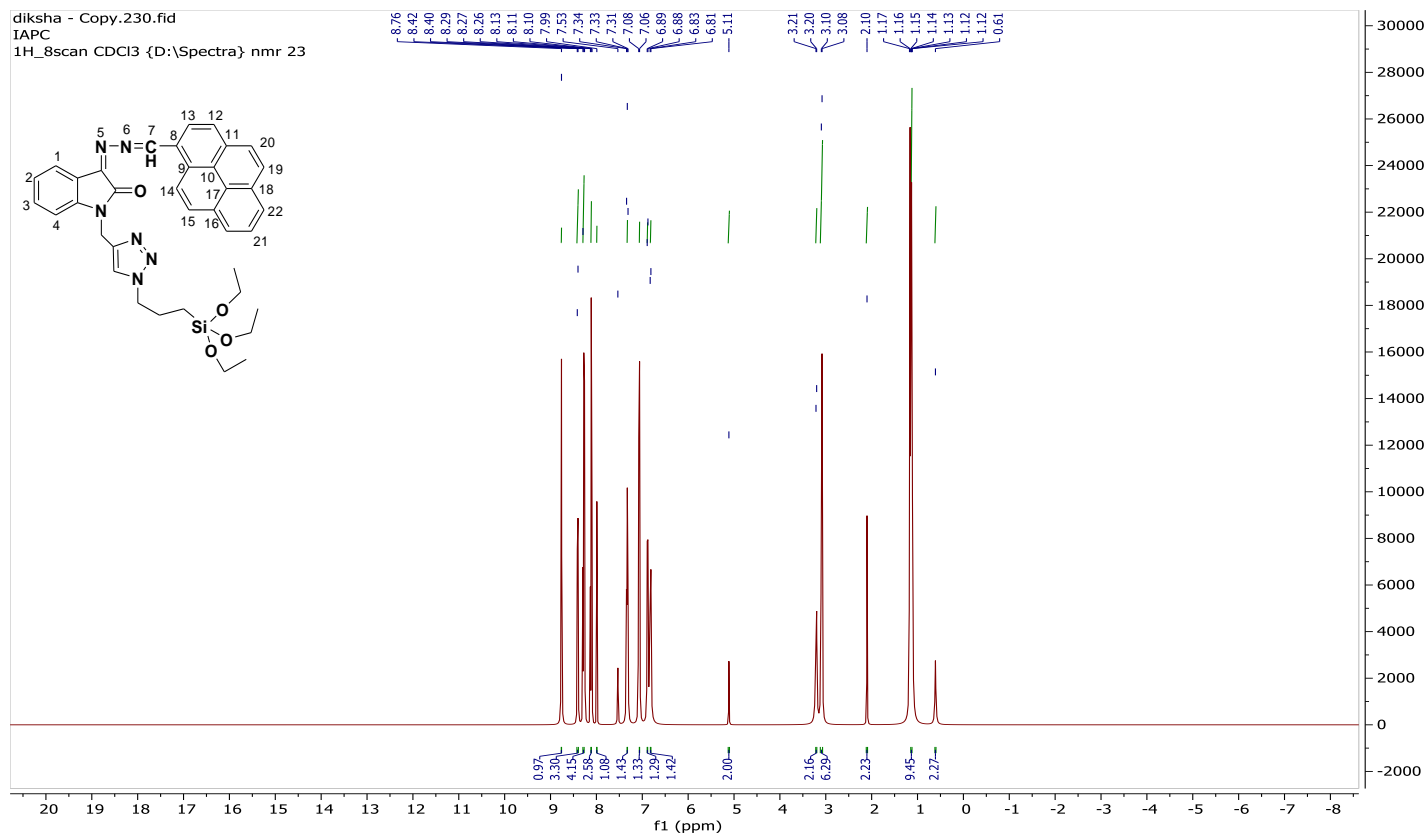


Fig.S4 ¹H NMR spectrum of compound 8b

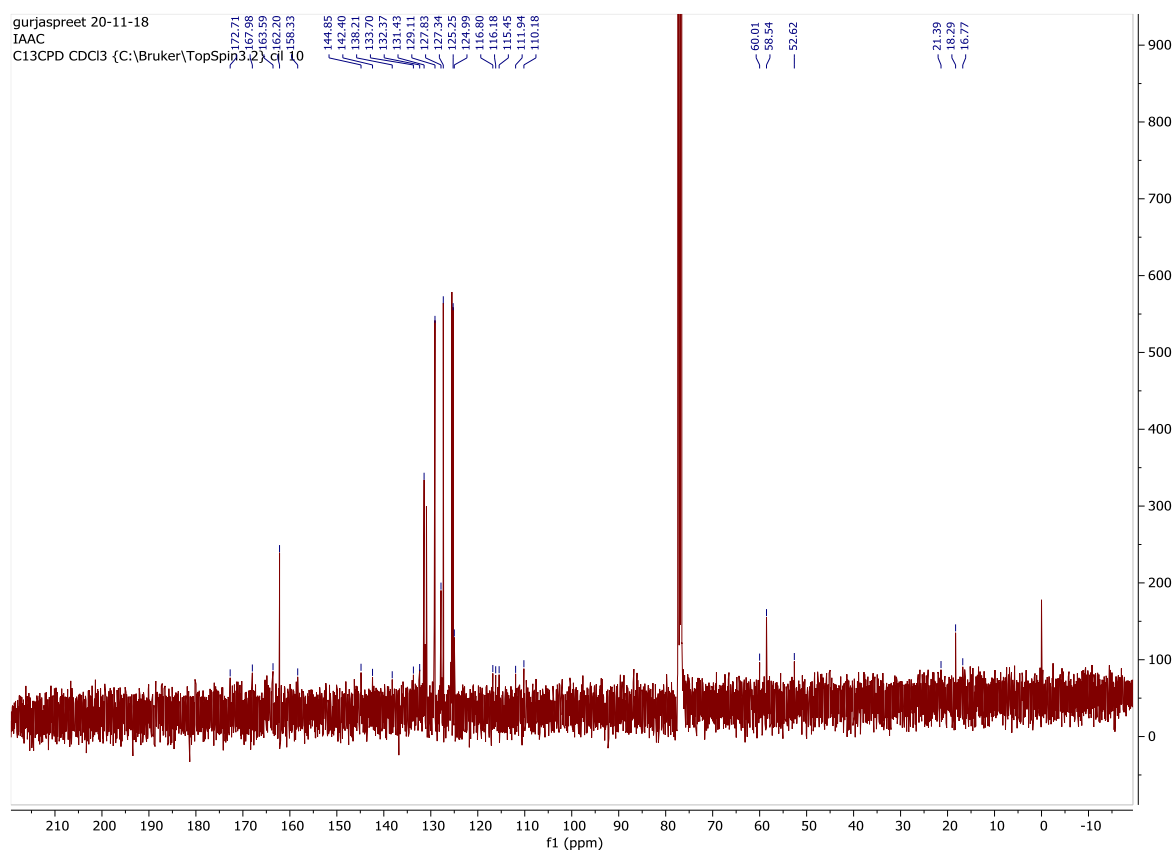


Fig.S5 ^{13}C NMR spectrum of compound 8a

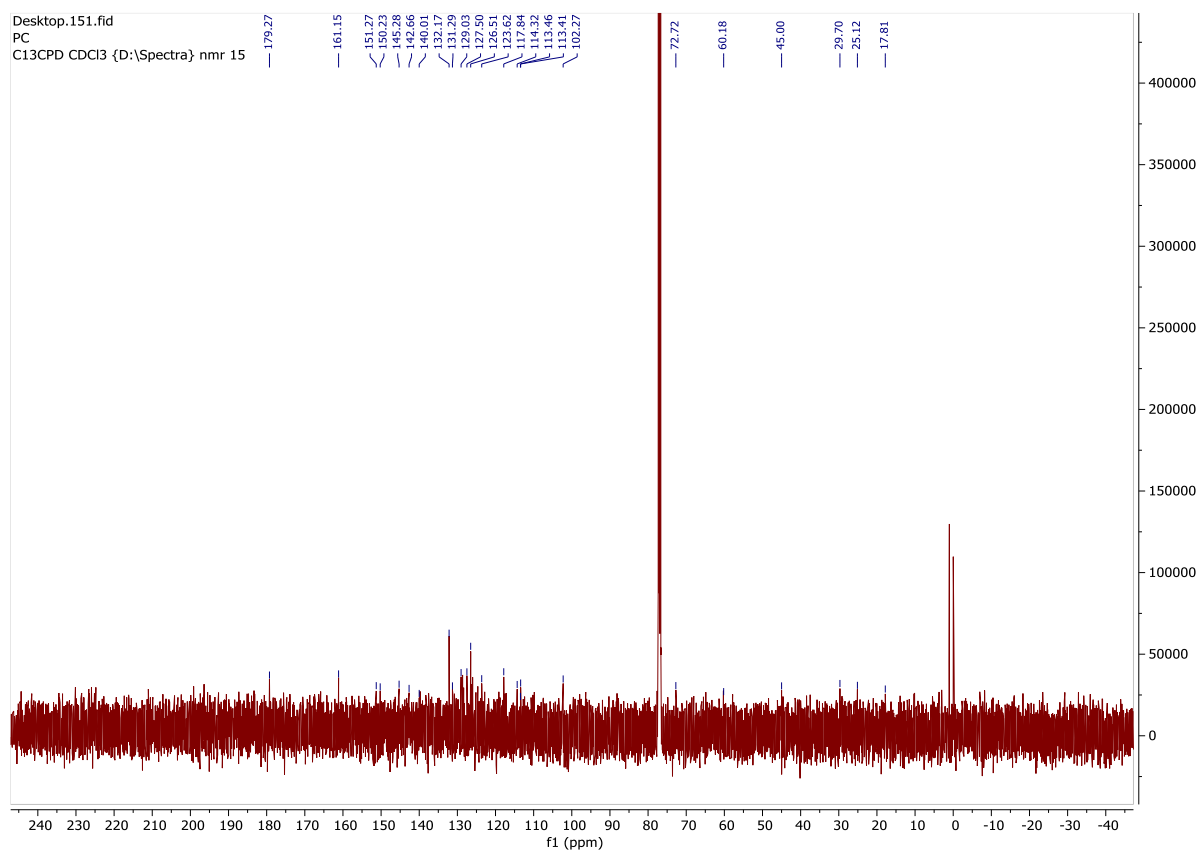


Fig.S6 ^{13}C NMR spectrum of compound 8b

WATERS,Q-TOF MICROMASS (ESI-MS)
DIKSHA IAC 6 (0.163) Cm (4:10-12:28)

SAIF/CIL,PANJAB UNIVERSITY,CHANDIGARH
TOF MS ES+
3.94e3

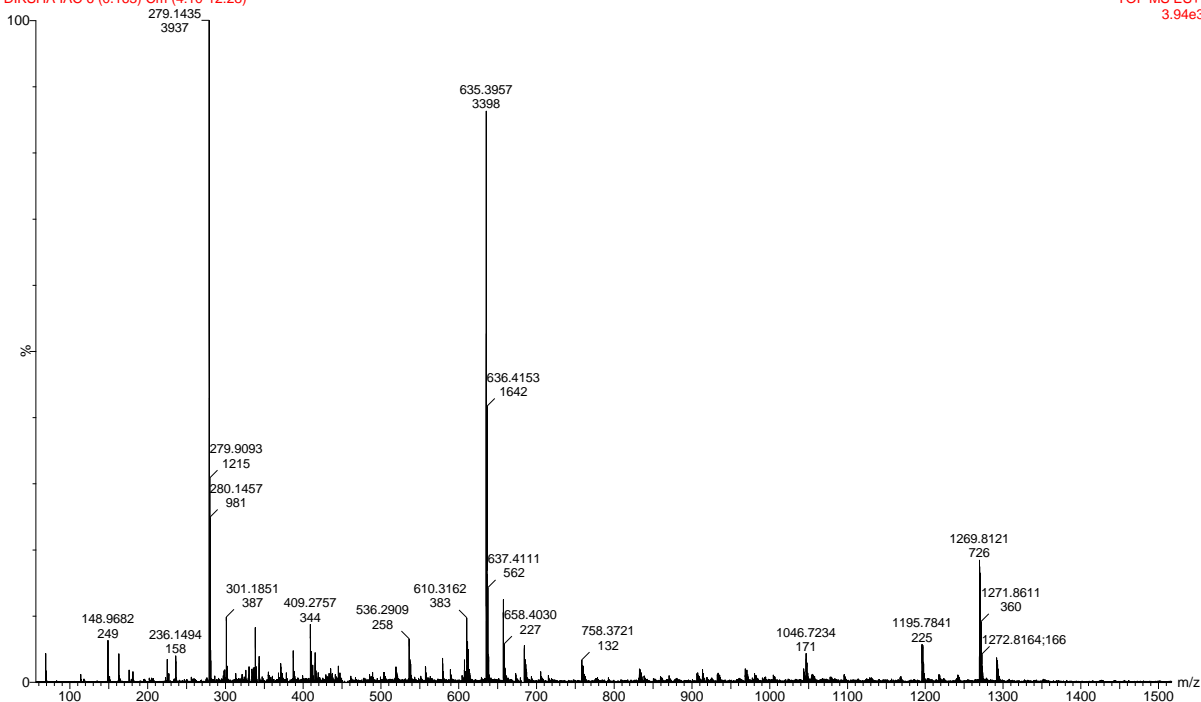


Fig.S7 Mass spectrum of compound 8a

WATERS,Q-TOF MICROMASS (ESI-MS)
DIKSHA IPC 8 (0.234) Cm (1:17)

SAIF/CIL,PANJAB UNIVERSITY,CHANDIGARH
TOF MS ES+
3.35e3

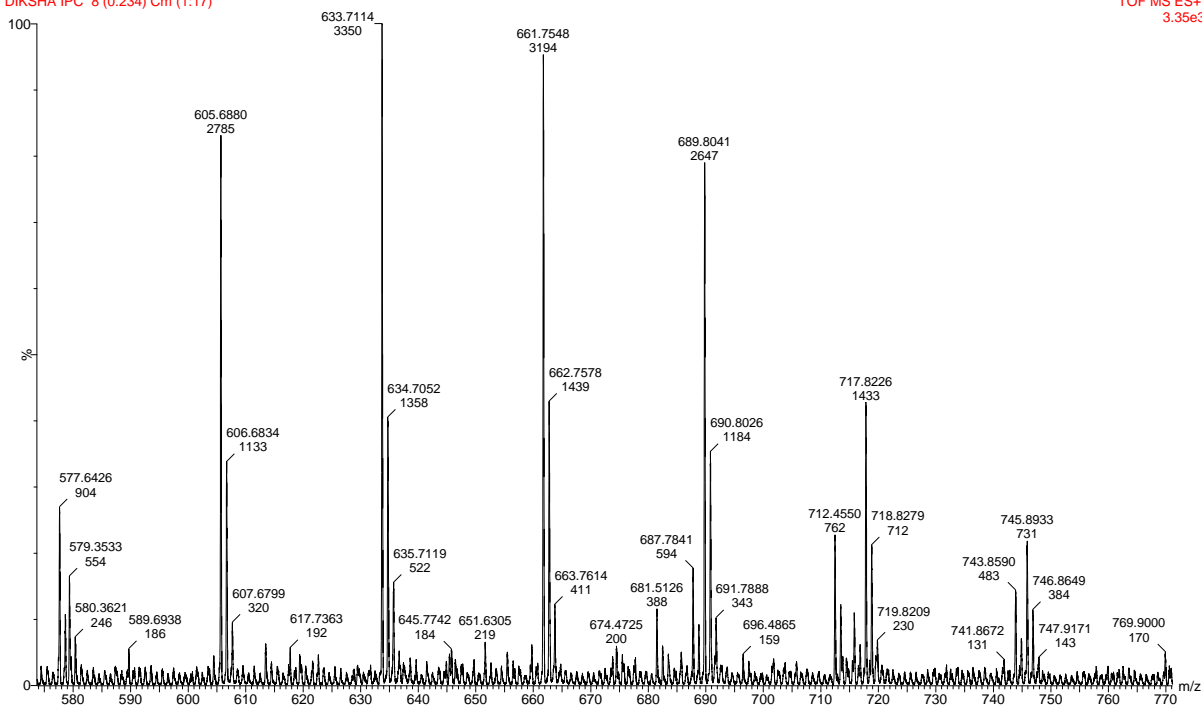


Fig.S8 Mass spectrum of compound 8b

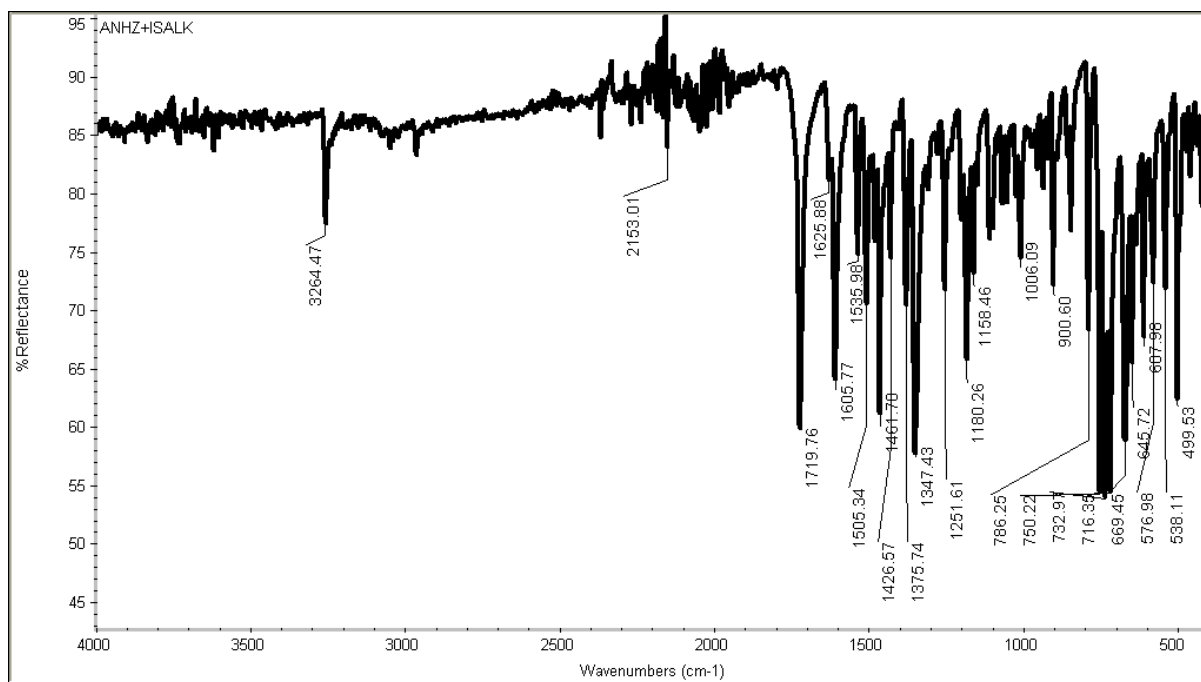


Fig.S9 IR spectrum of compound 7a

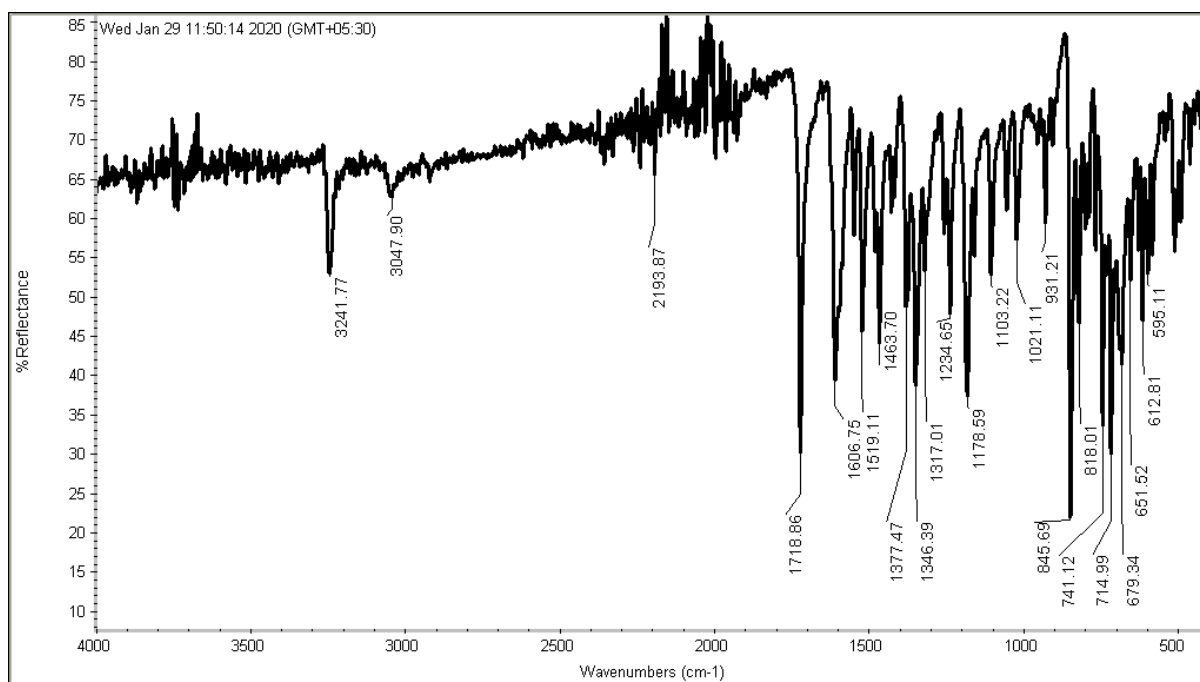


Fig.S10 IR spectrum of compound 7b

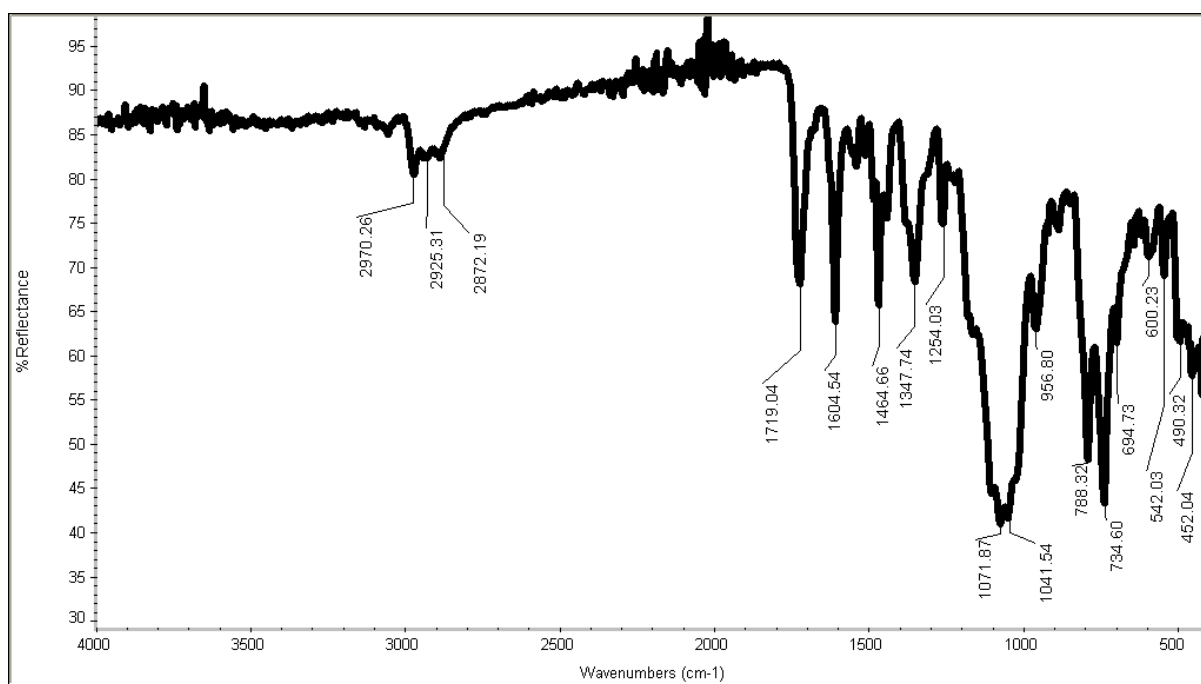


Fig.S11 IR spectrum of compound 8a

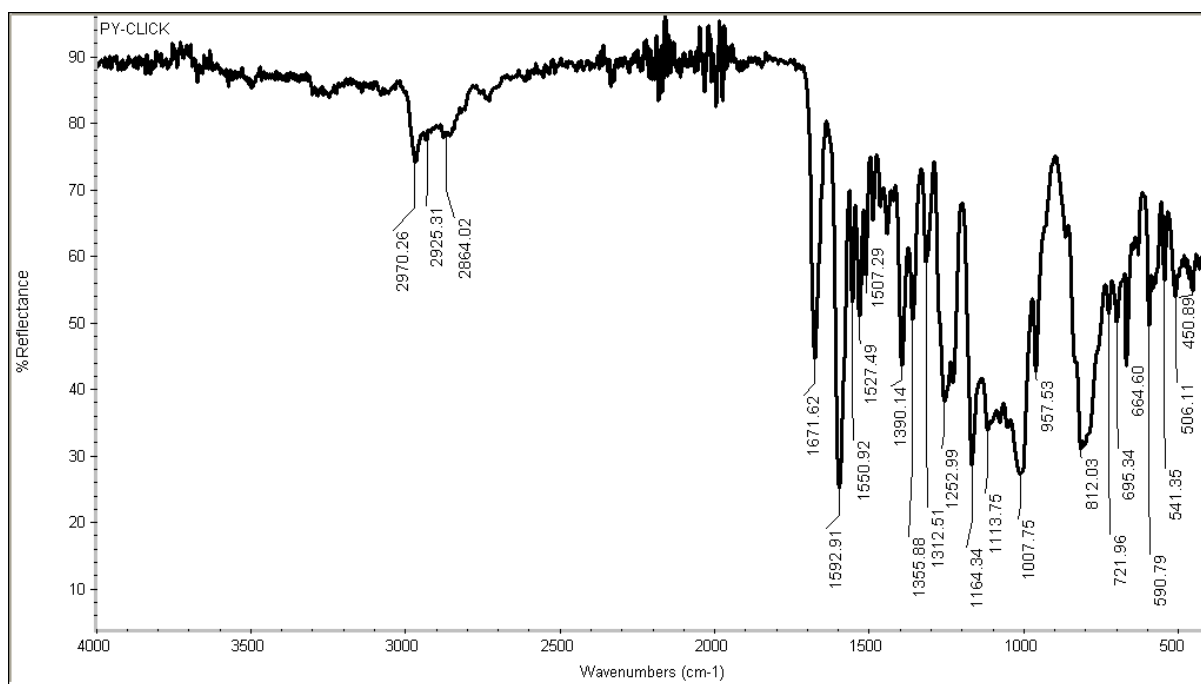


Fig.S12 IR spectrum of compound 8b

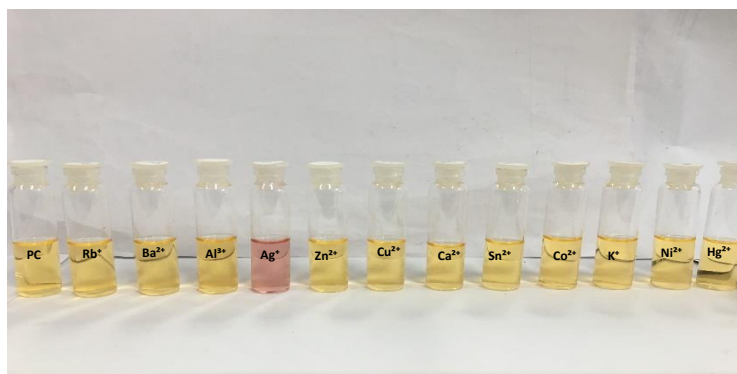


Fig S13. The photograph of visual colour change of receptor upon addition of methanolic solution of different metal ions

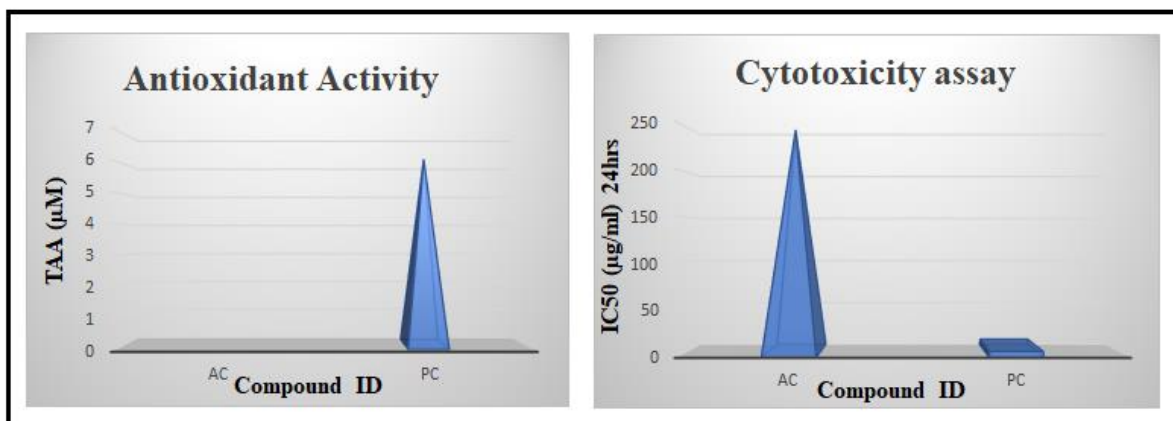


Fig S14. Antioxidant activity of compounds AC and PC

Fig S15. Cytotoxicity assay of compounds AC and PC against HeLa cell

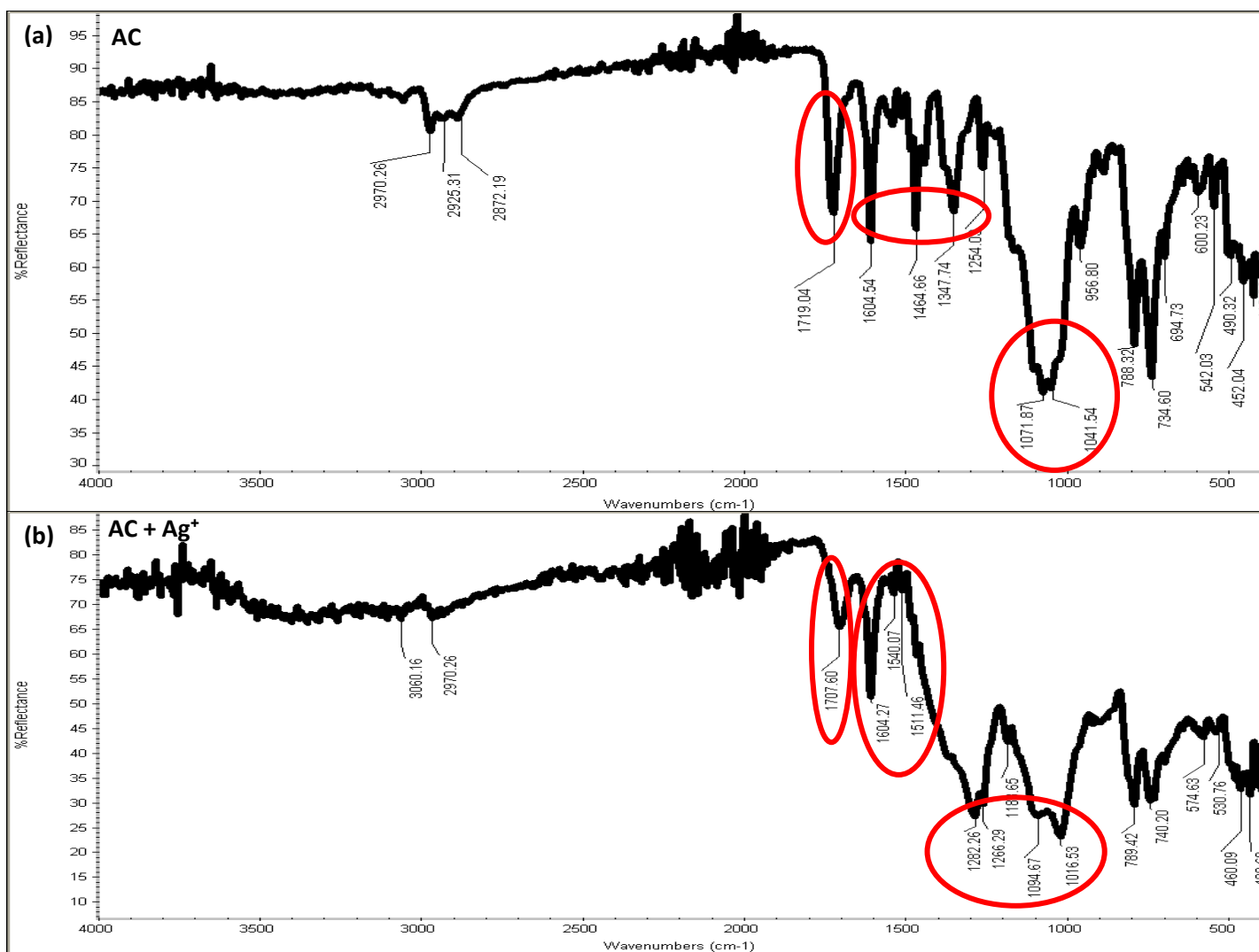


Fig S16. FT-IR spectra of (a) AC (b) AC + Ag complex

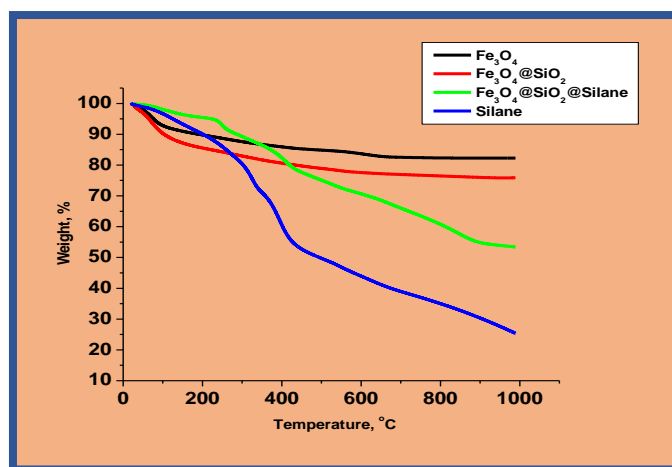


Fig S17. Thermogravimetric curves of Fe_3O_4 ; $\text{Fe}_3\text{O}_4@SiO_2$; $\text{Fe}_3\text{O}_4@SiO_2@Silane$; Silane

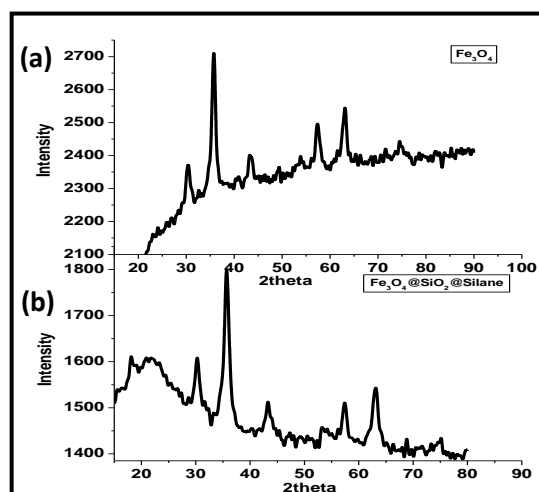


Fig S18. XRD pattern of (a)Fe₃O₄ (b)Fe₃O₄@SiO₂@Silane



Fig S19. FESEM images of Fe₃O₄@SiO₂@Silane at different magnifications

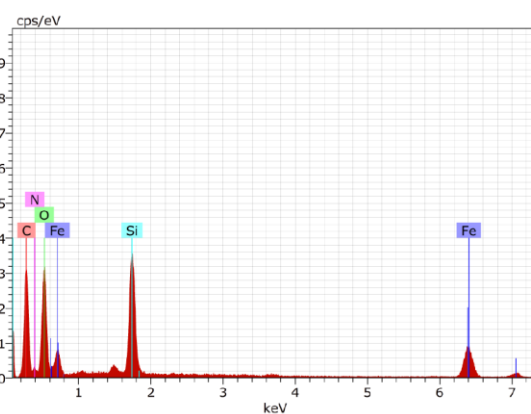


Fig S20. EDX pattern of Fe₃O₄@SiO₂@Silane

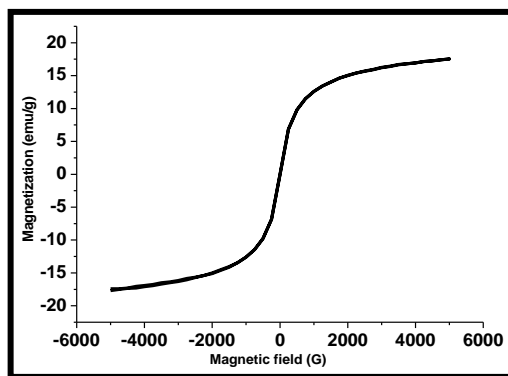


Fig S21. VSM graph of $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{Silane}$