

Supplementary documents

A new Schiff base and its metal complex as a fluorescent-colorimetric sensor for rapid detection of arginine

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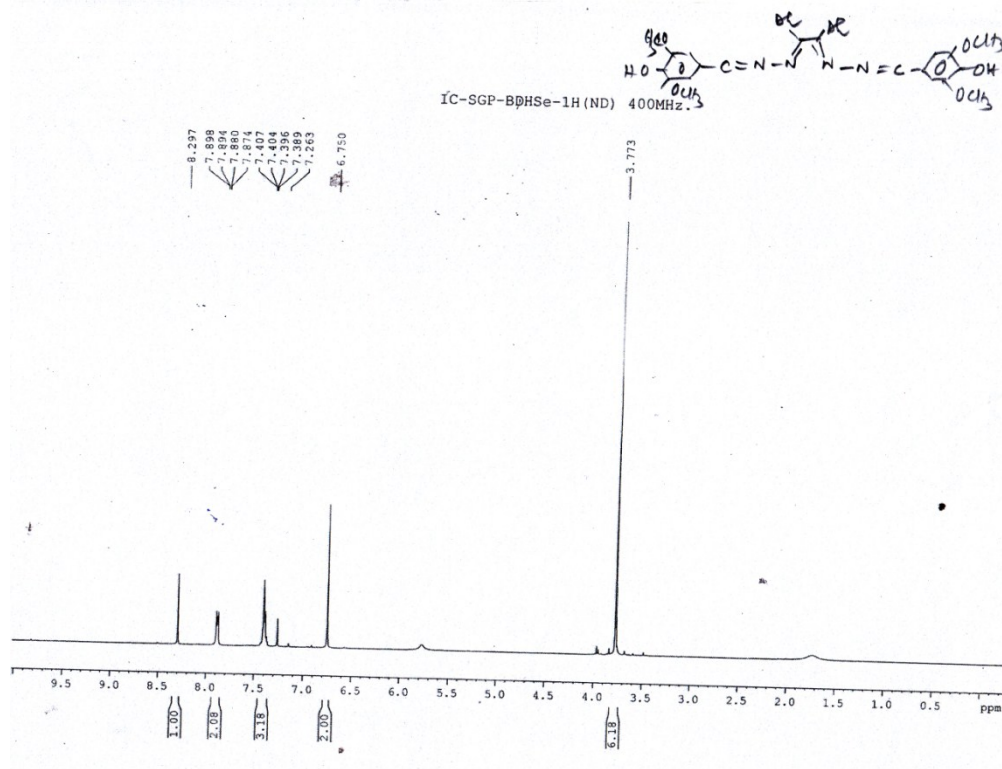


Fig. S1 ¹H NMR spectra of L in CDCl₃.

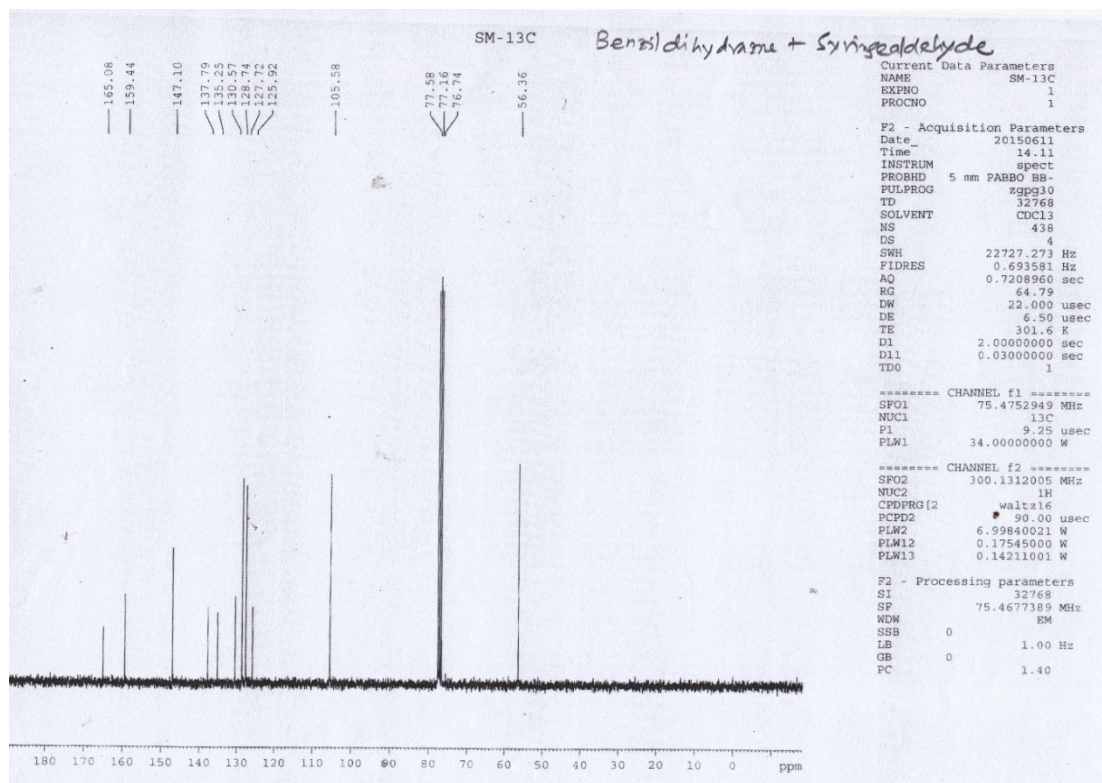


Fig. S2 ¹³C NMR Spectra of L in CDCl₃.

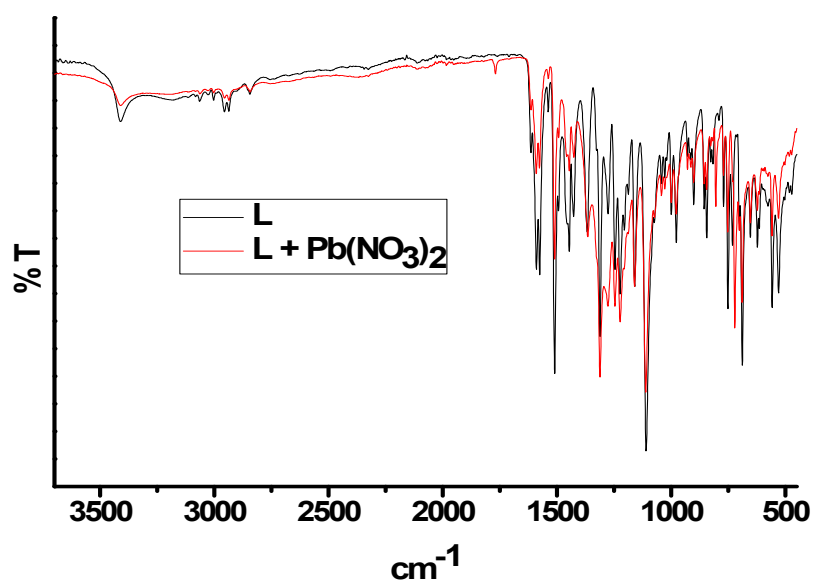


Fig. S3 Overlaid FTIR spectra of L and [PbL₂]²⁺

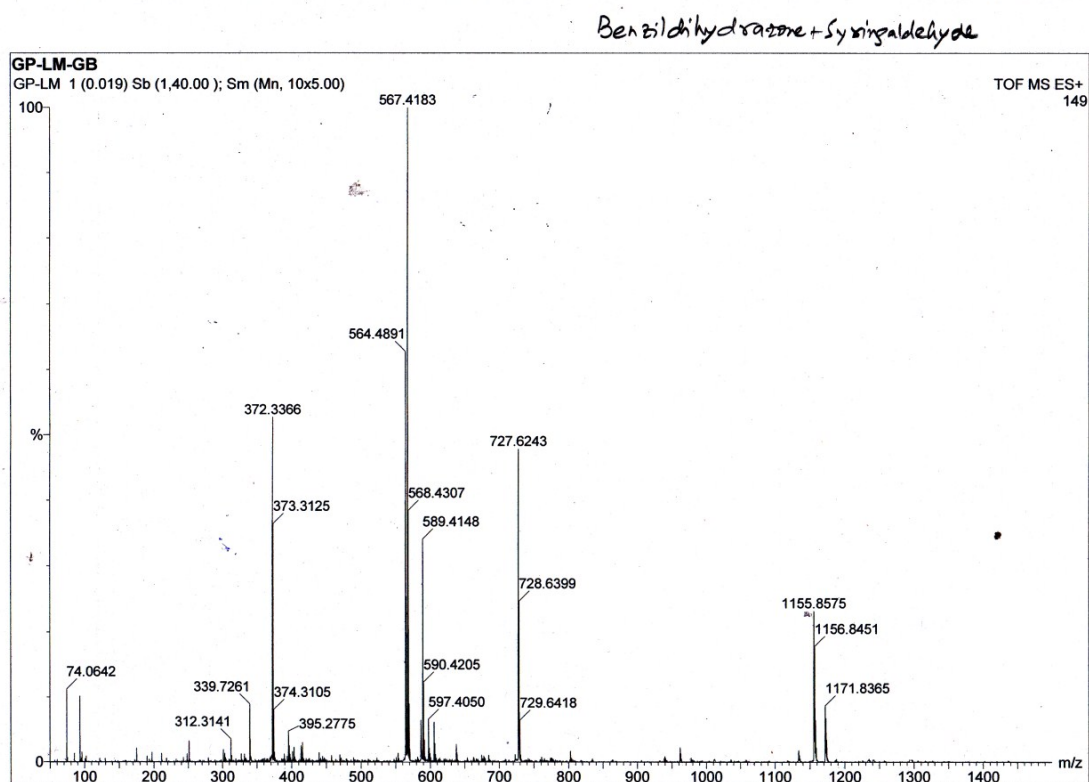


Fig. S4 Mass spectra of L.

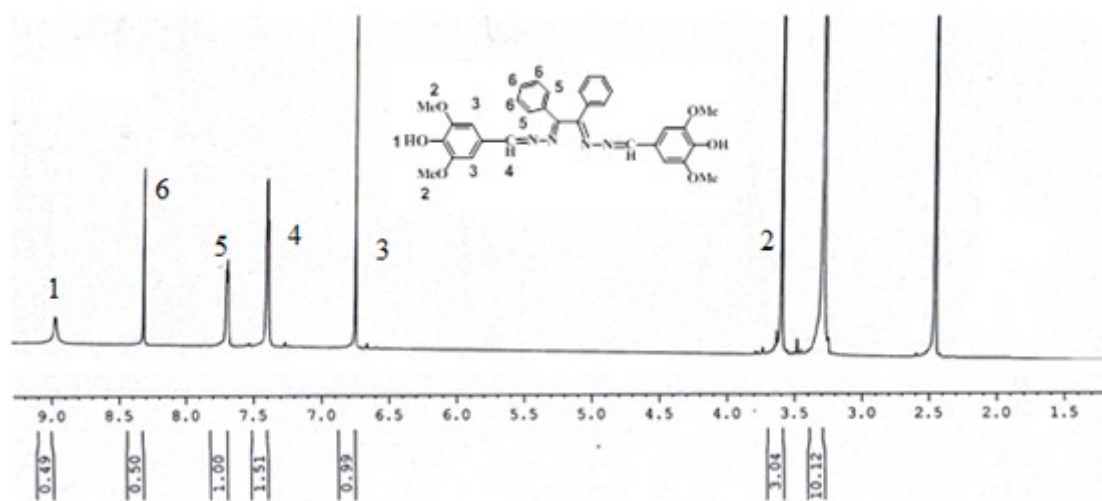


Fig. S5 ^1H NMR spectra of $[\text{PbL}_2]^{2+}$ in d_6 -DMSO.

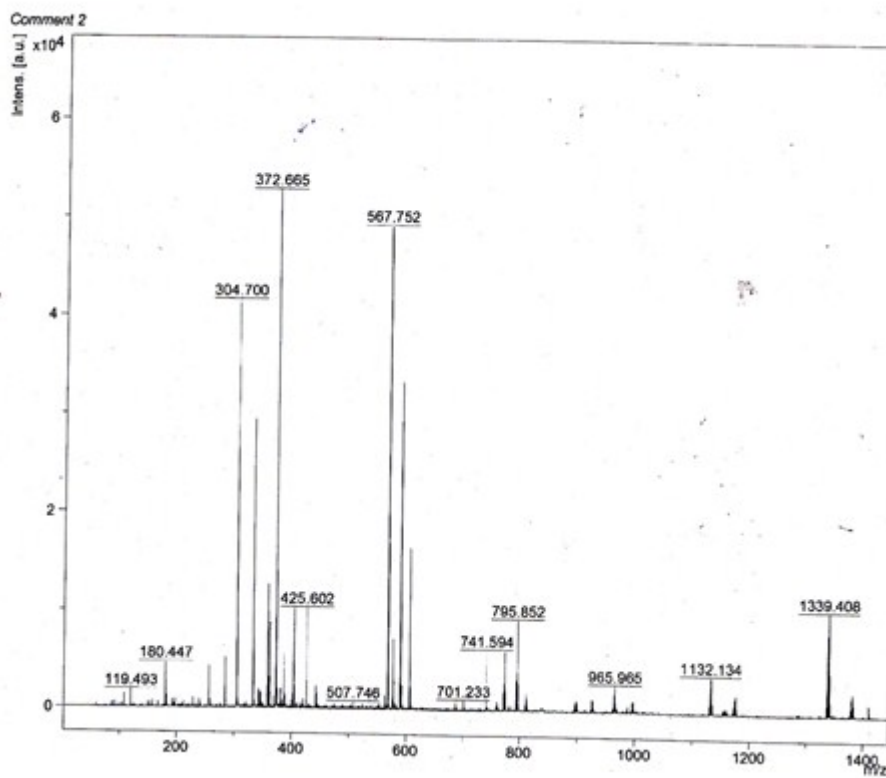


Fig. S6 Mass spectra of $[\text{PbL}_2]^{2+}$.

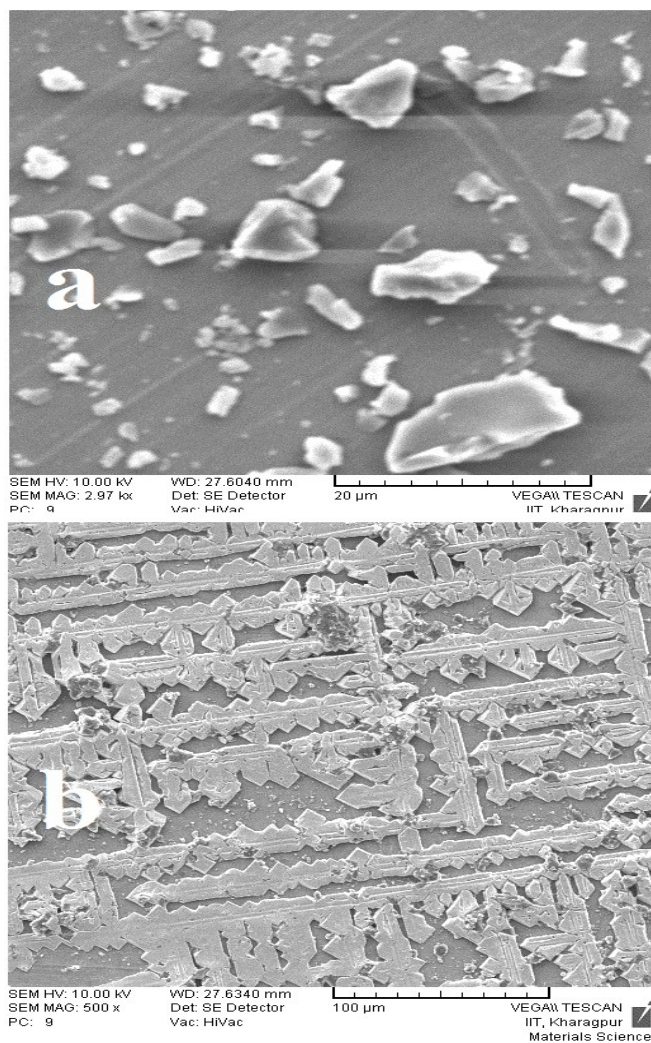
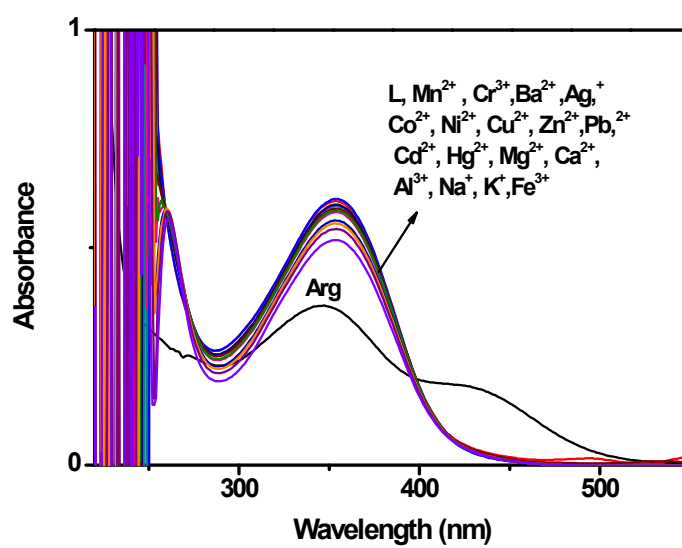
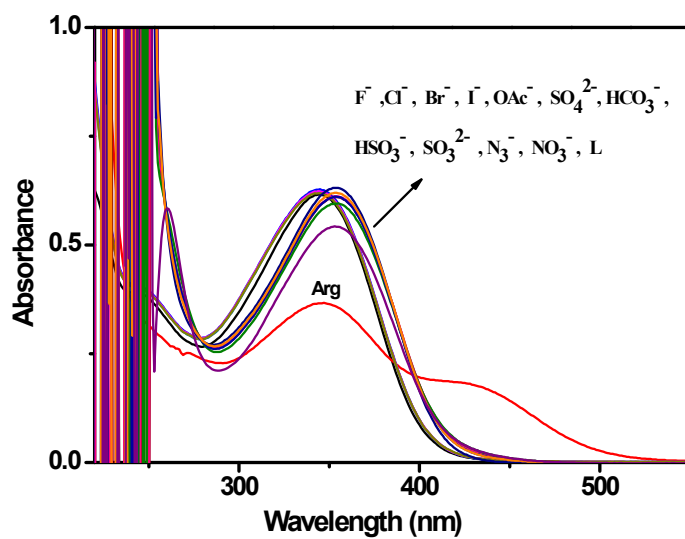


Fig. 7 (a) SEM image of **L** (b) SEM image of the $[\text{PbL}_2]^{2+}$ complex.



(a)



(b)

Fig. S8 Change of absorbance spectra of L on addition of different (a) cations and (b) anions.

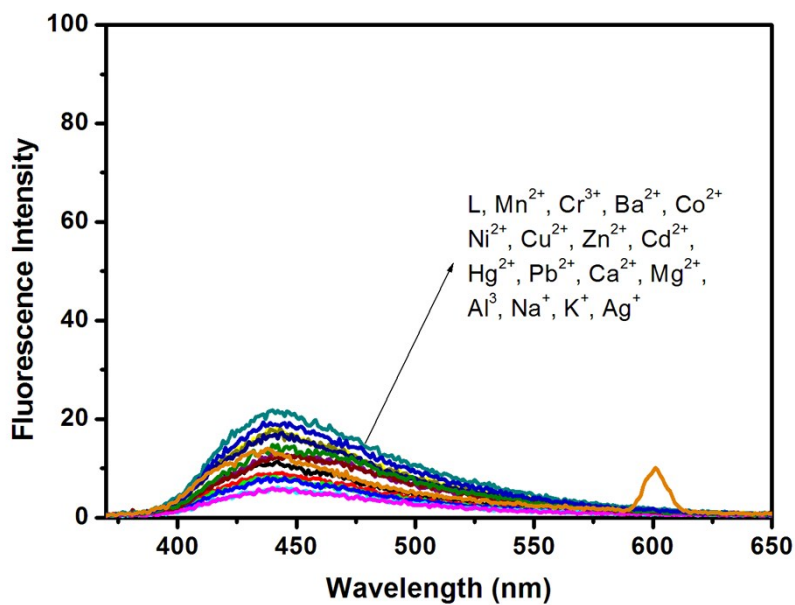


Fig. S9 Change of emission spectra of L on addition of different (a) cations and (b) anions.

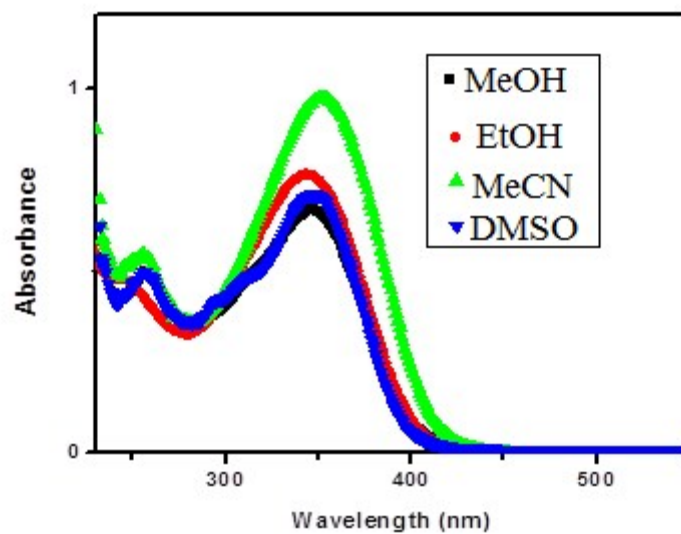


Fig. S10 Absorbance spectra of L in different solvents.

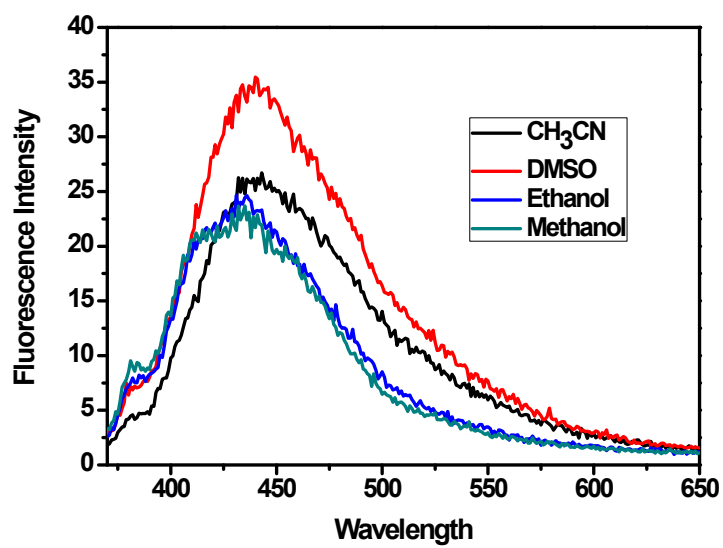
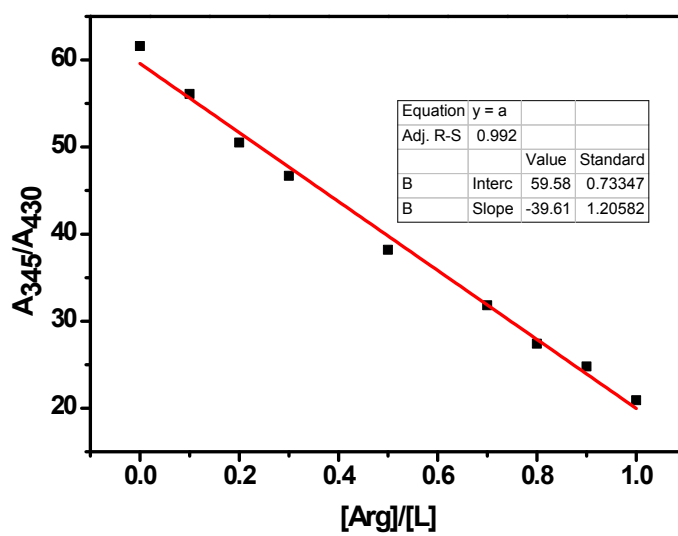
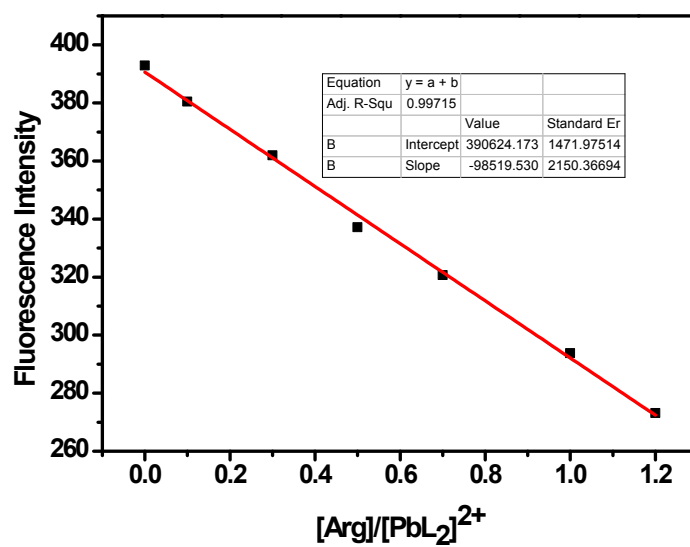


Fig. S11 Emission spectra of L in different solvents.



(a)



(b)

Fig. S12 Detection limit for (a) L and (b) $[\text{PbL}_2]^{2+}$.

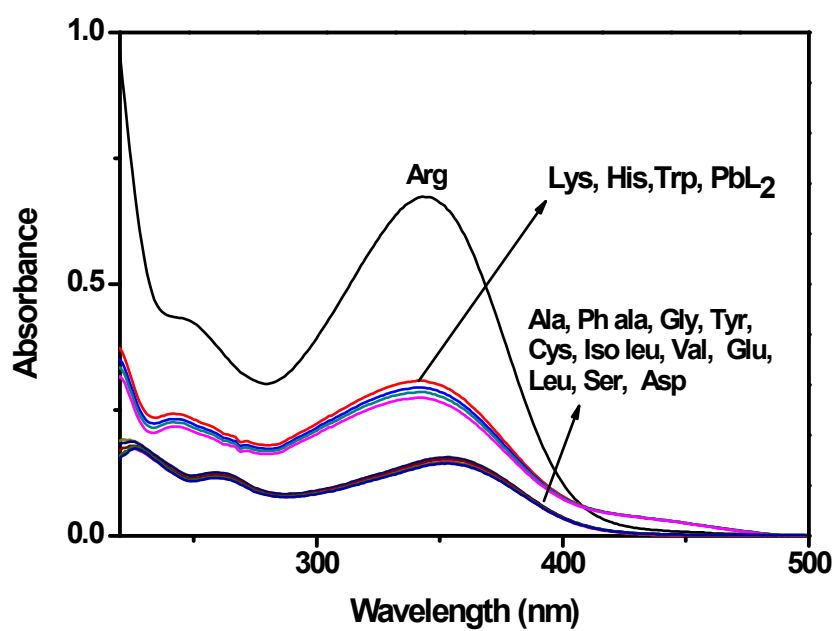


Fig. S13 Change in absorbance spectra of $[PbL_2]^{2+}$ on addition of different amino acids.

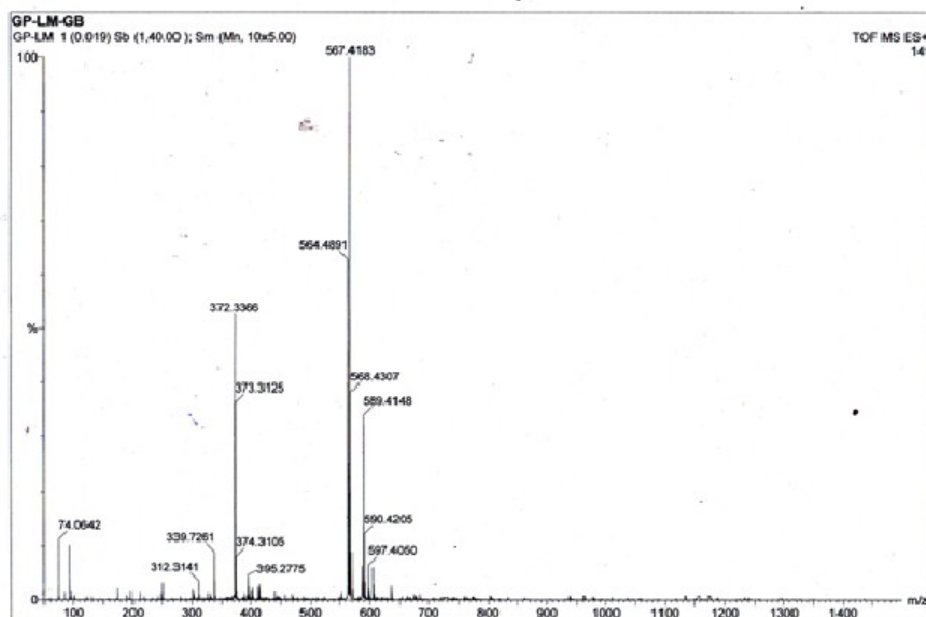


Fig. S14 HRMS Spectra of L-Arg adduct

