Supporting Information

A Quinazolin-based Schiff-base chemosensor for colourimetric detection of Ni^{2+} and Zn^{2+} ions and '*turn-on*' fluorometric detection of Zn^{2+} ion

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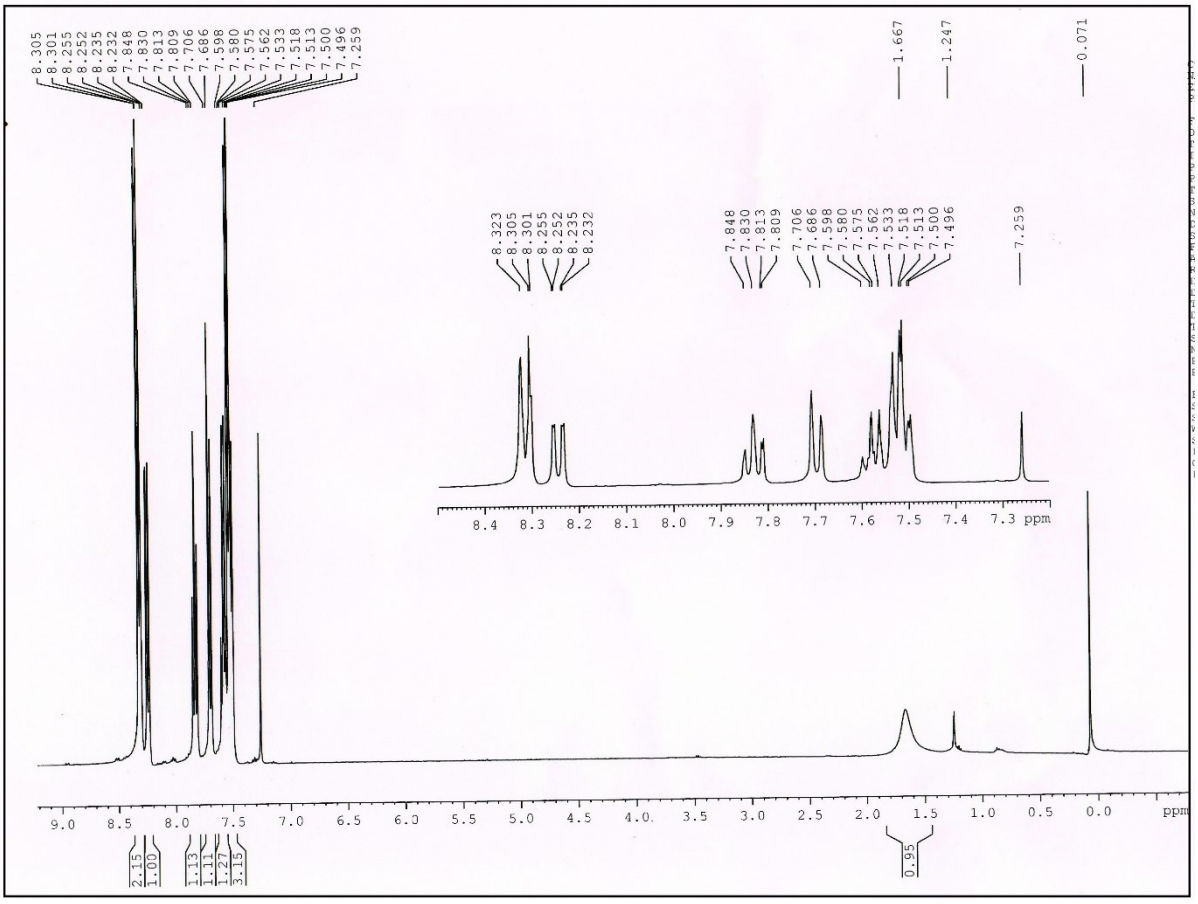

Fig.S1. ^{1}H NMR spectra of **1** in $CDCl_3$.

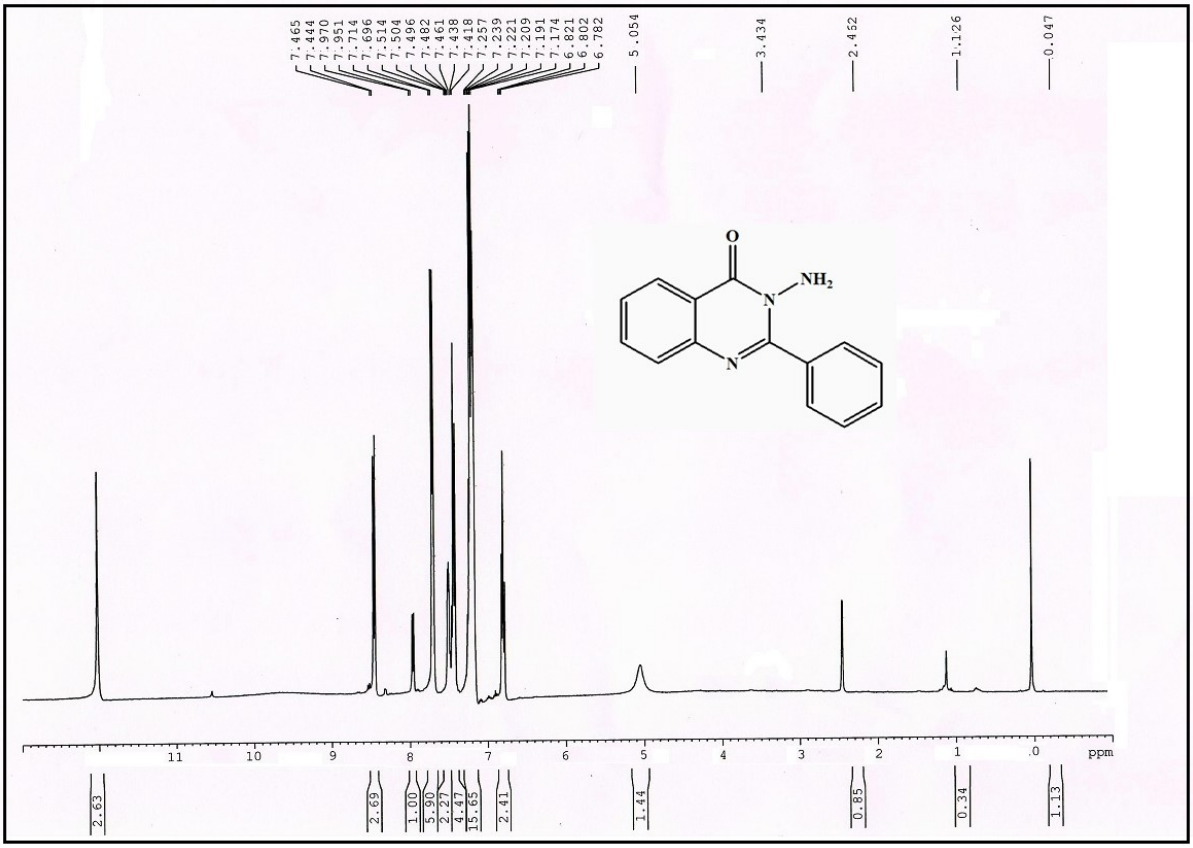

Fig.S2. ^{1}H NMR spectra of **2** in $CDCl_3$.

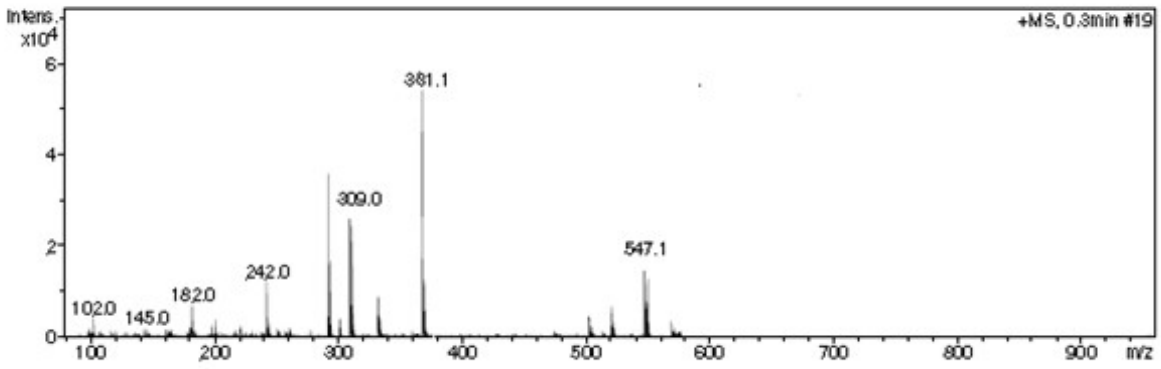

Fig. S3. ESI-mass spectra of **L**

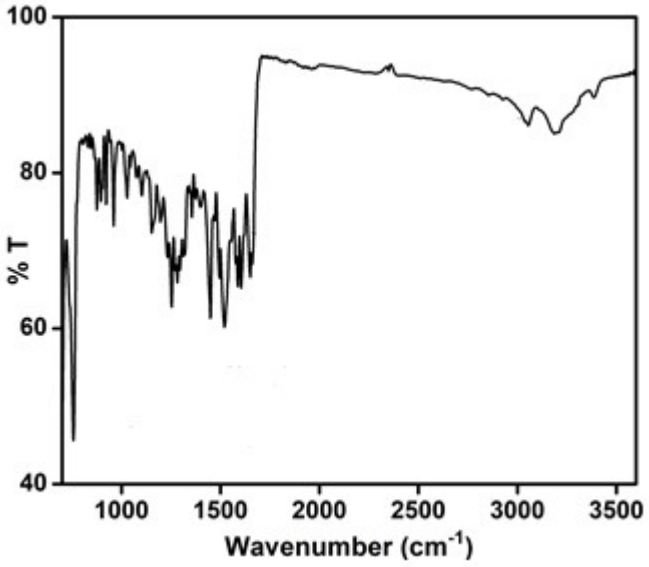

Fig. S4. FTIR spectra of **L**

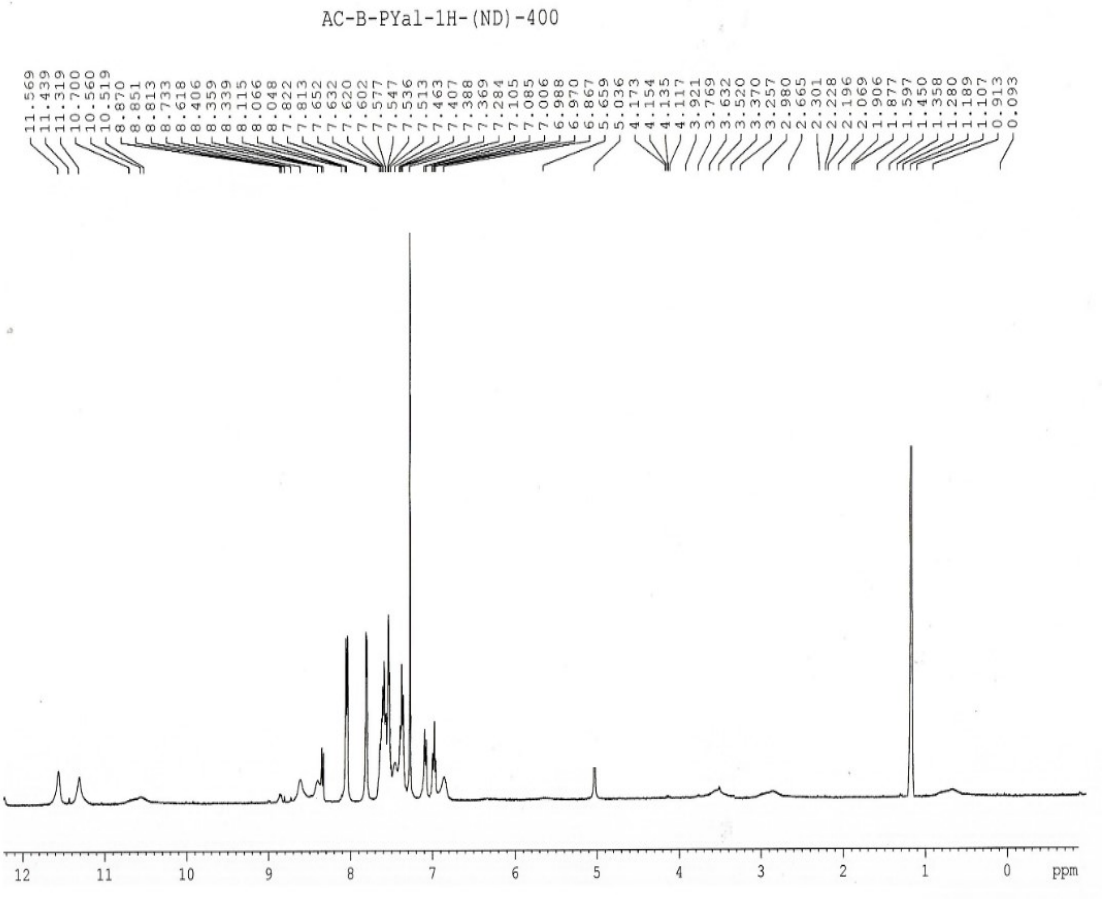

Fig.S5. ^{1}H NMR spectra of **L** in $CDCl_3$

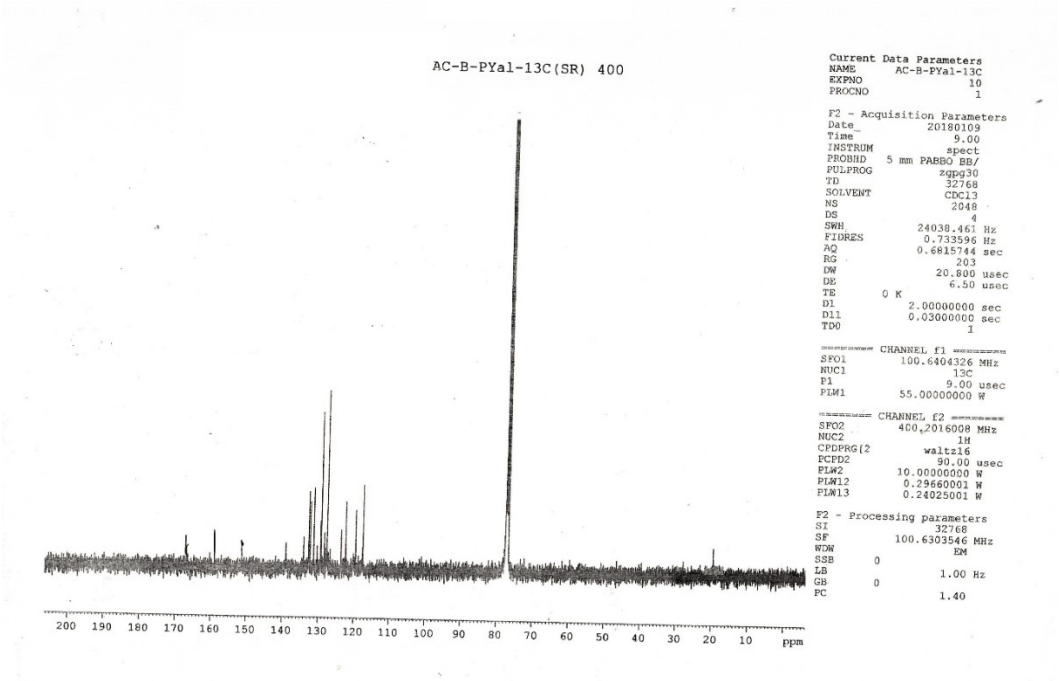

Fig.S6. ^{13}C NMR spectra of **L** in $CDCl_3$

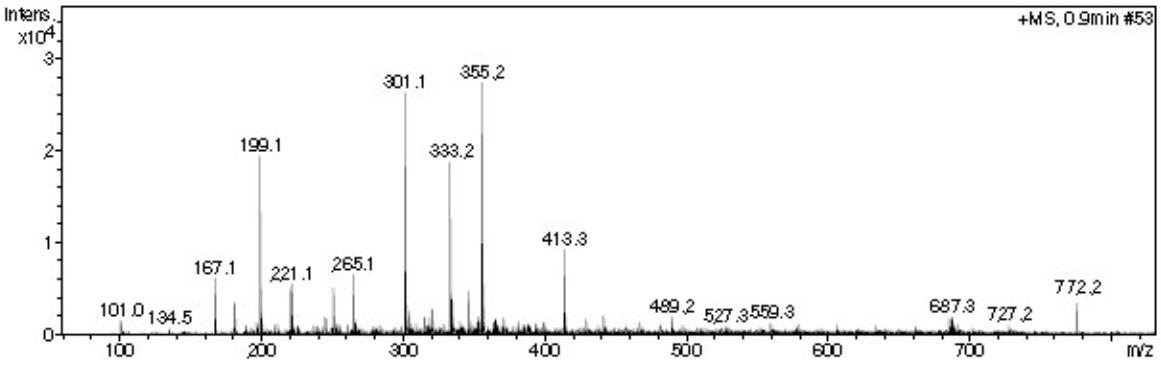

Fig. S7. ESI-mass spectra of NiL_2 **(3)**

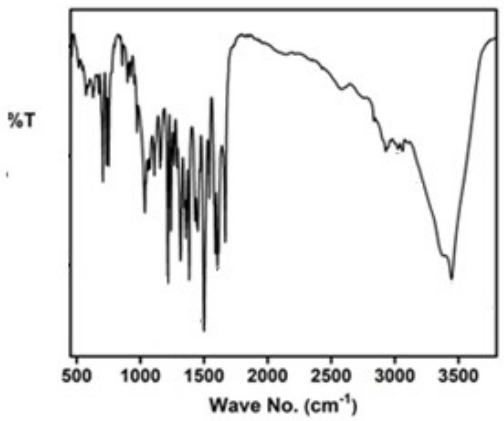

Fig. S8. FTIR spectra of NiL_2 **(3)**

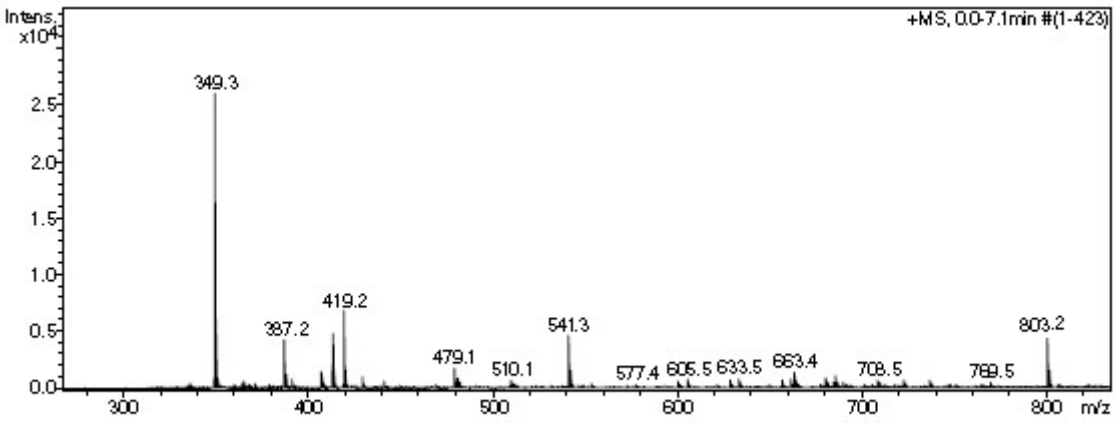

Fig. S9. ESI-mass spectra of ZnL_2 **(4)**

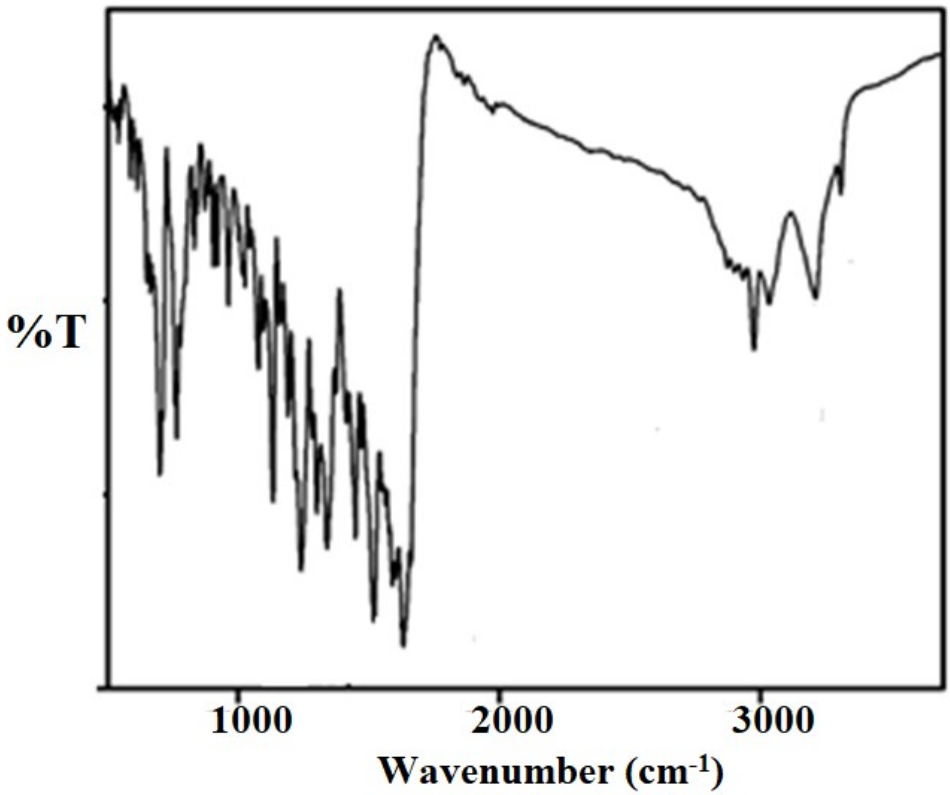

Fig. S10. FTIR spectra of ZnL_2 **(4)**

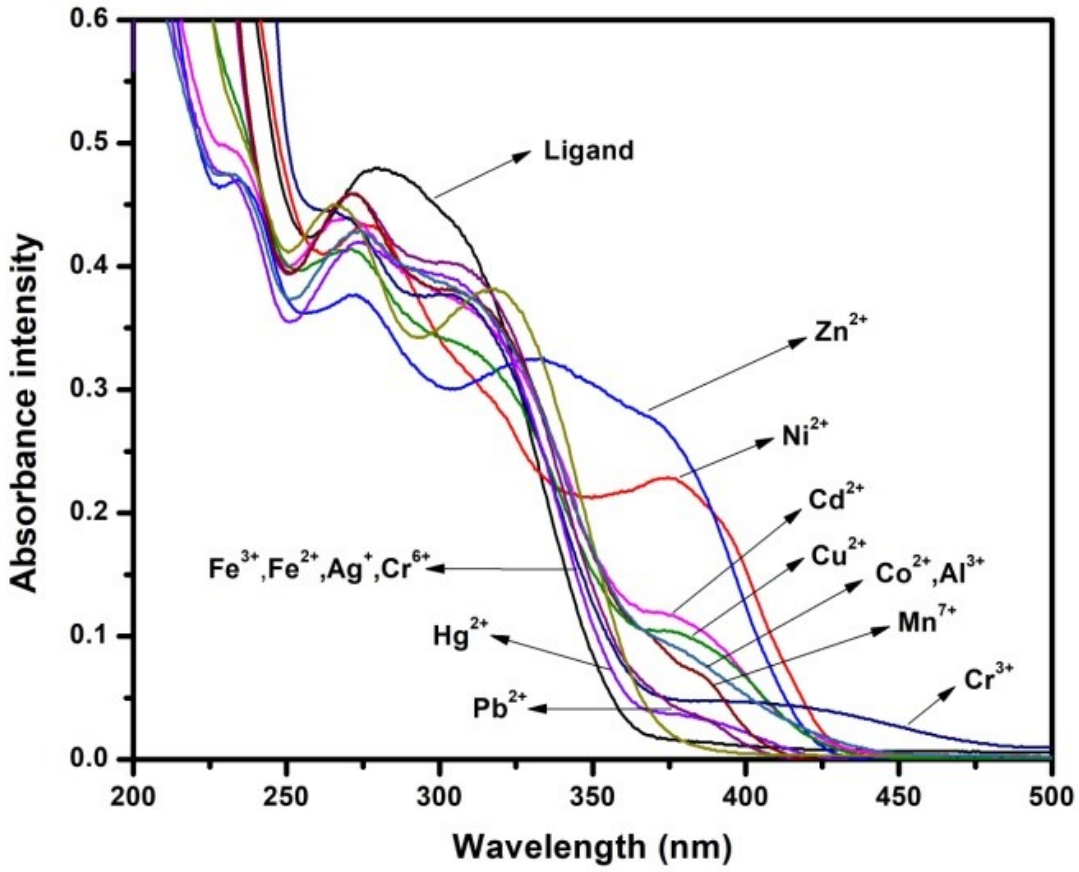

Fig. S11. Change in absorption spectra of **L** (10 μM) in presence of 2 equiv. of different metal ions in methanol-tris-HCl buffer (1:1 v/v, pH 7.2) at room temperature.

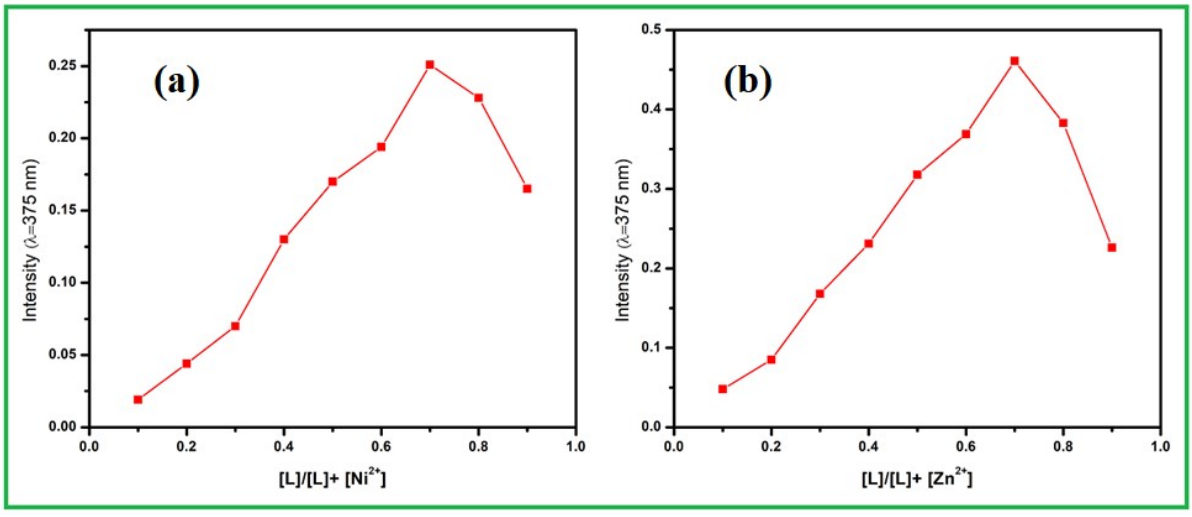

Fig. S12. Job's plot for (a) Ni^{2+} and (b) Zn^{2+}.

Table S1. Selected Bond Lengths for **3**

Atom	Atom	Length/Å
Ni(1)	O(2)[1]	2.053(5)
Ni(1)	O(2)	2.053(5)
Ni(1)	N(1)[1]	2.112(6)
Ni(1)	N(1)	2.112(6)
Ni(1)	N(2)	1.979(5)
Ni(1)	N(2)[1]	1.979(5)

[1]1-X,+Y,3/2-Z

Table S2. Selected Bond Angles for **3**

Atom	Atom	Atom	Angle/°
O(2)[1]	Ni(1)	O(2)	89.3(3)
O(2)[1]	Ni(1)	N(1)[1]	154.73(18)
O(2)	Ni(1)	N(1)[1]	96.3(2)
O(2)	Ni(1)	N(1)	154.73(18)
O(2)[1]	Ni(1)	N(1)	96.3(2)
N(1)	Ni(1)	N(1)[1]	89.1(3)
N(2)[1]	Ni(1)	O(2)[1]	75.8(2)
N(2)	Ni(1)	O(2)	75.8(2)
N(2)[1]	Ni(1)	O(2)	104.2(2)
N(2)	Ni(1)	O(2)[1]	104.2(2)
N(2)[1]	Ni(1)	N(1)[1]	79.0(2)
N(2)	Ni(1)	N(1)[1]	101.1(2)
N(2)[1]	Ni(1)	N(1)	101.1(2)
N(2)	Ni(1)	N(1)	79.0(2)
N(2)	Ni(1)	N(2)[1]	179.9(4)
C(8)	O(2)	Ni(1)	111.1(4)
C(5)	N(1)	Ni(1)	111.6(5)
C(1)	N(1)	Ni(1)	127.6(5)
N(3)	N(2)	Ni(1)	120.4(4)
C(6)	N(2)	Ni(1)	118.1(5)

[1]1-X,+Y,3/2-Z