Supplementary material

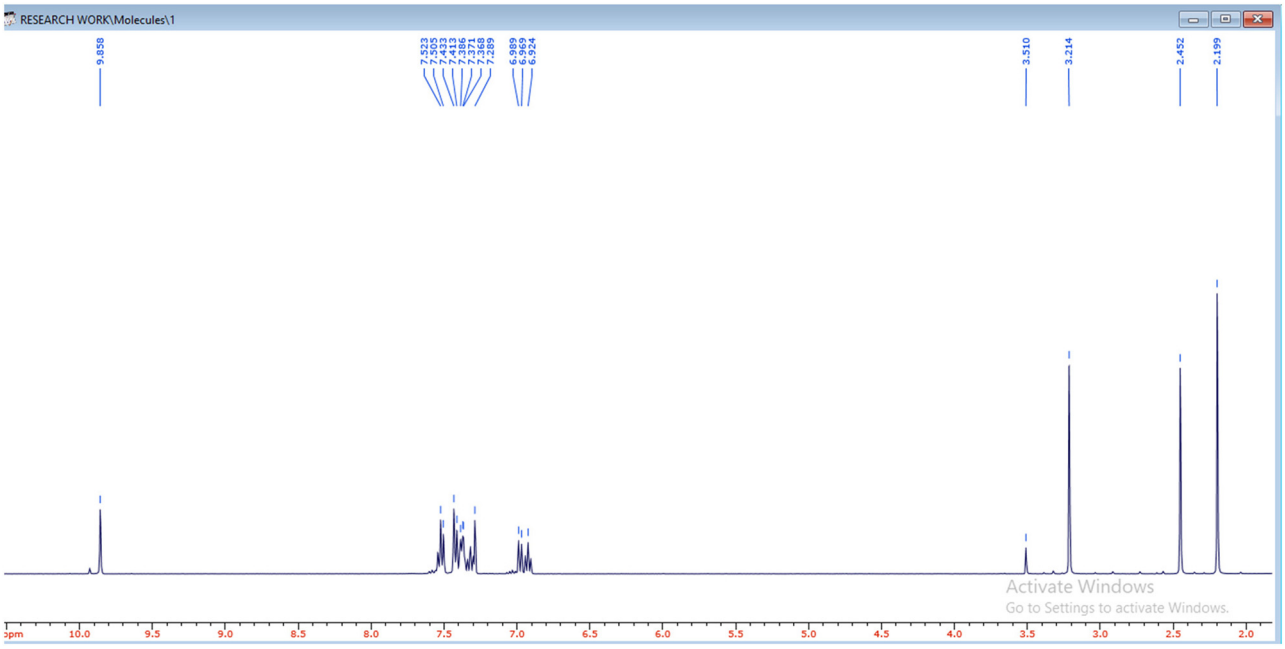

Figure S1: ^{1}H-NMR spectrum of H-NAPP ligand.

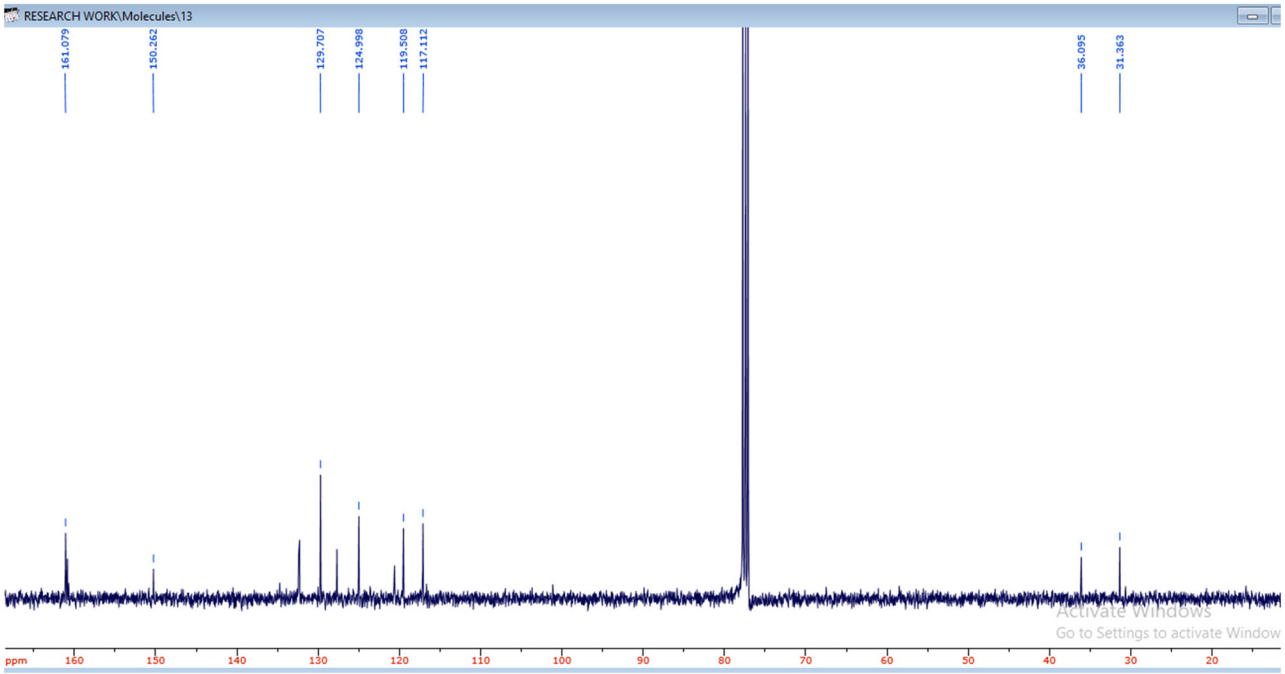

Figure S2: ^{13}C{^{1}H}-NMR spectrum of H-NAPP ligand.

Figure S3: IR spectrum of H-NAPP ligand.

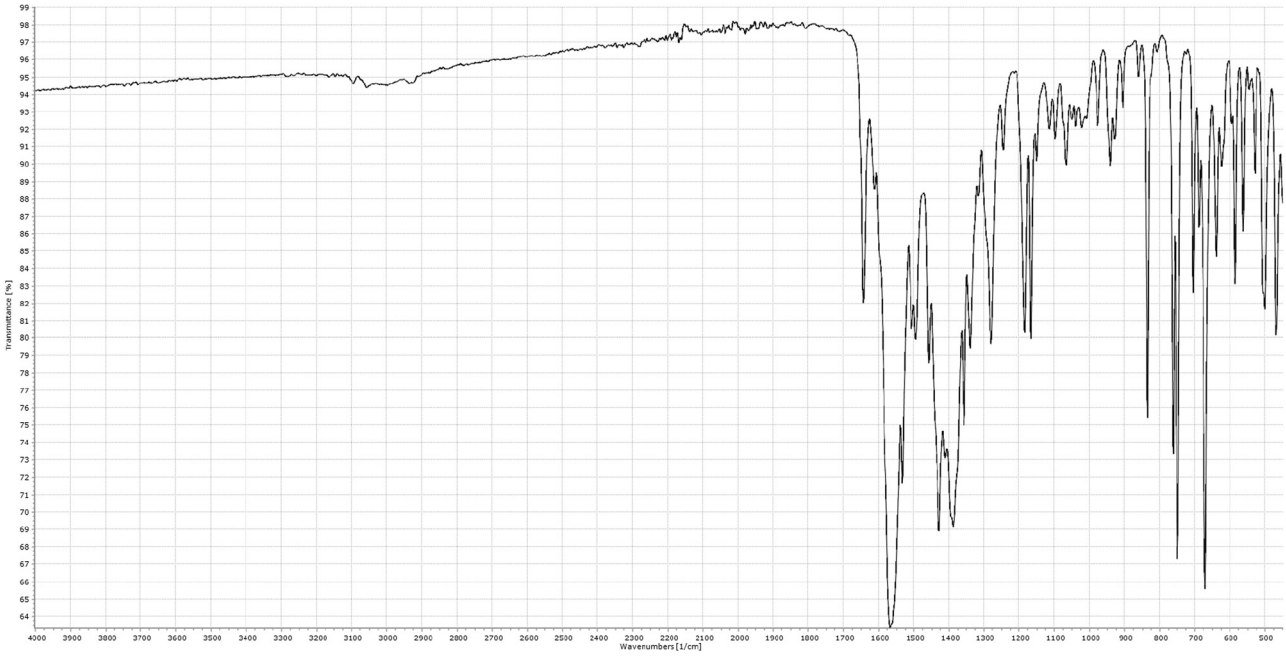

Figure S4: IR spectrum of Co-NAPP metal complex.

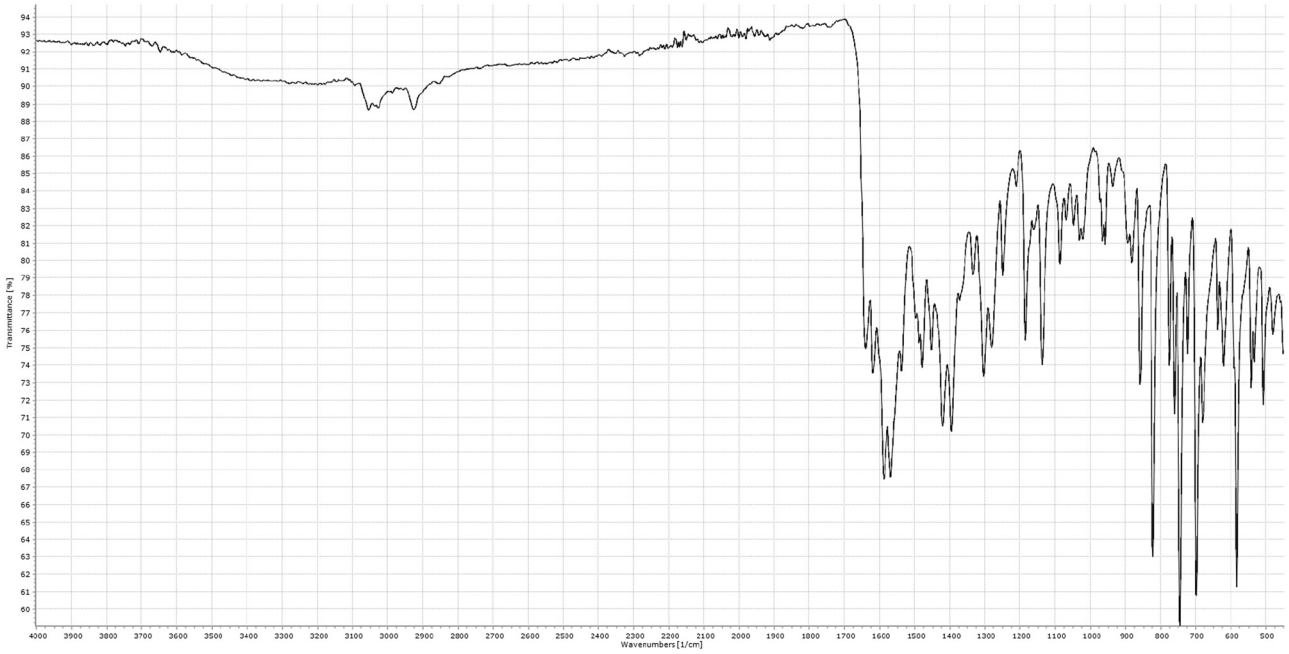

Figure S5: IR spectrum of Ni-NAPP metal complex.

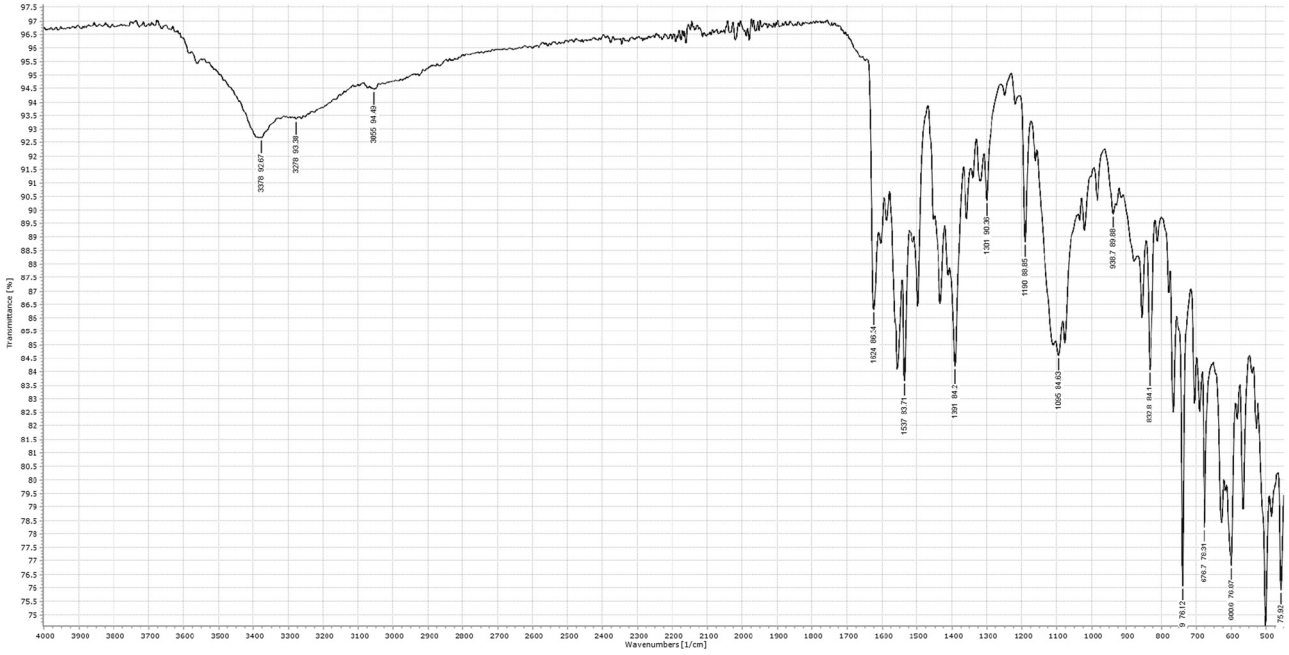

Figure S6: IR spectrum of Cu-NAPP metal complex.

Figure S7: IR spectrum of Zn-NAPP metal complex.

Table S1: Crystal data and structure refinement parameters for H-NAPP

Sample code	H-NAPP
Empirical formula	$C_{22}H_{19}N_3O_2$
Formula mass	357.40
Temperature	170(2) K
Wavelength	0.71073 Å
Crystal system, space group	Orthorhombic, *P 21 21 21*
Unit cell dimensions	a = 8.6418(17) Å, α = 90°
	b = 14.409(3) Å, β = 90°
	c = 14.624(3) Å, γ = 90°
Volume	1821.0(6) $Å^3$
Crystal size (mm)	
Z, Calculated density	4, 1.304 Mg m^{-3}
Absorption coefficient	0.085 mm^{-1}
F(000)	752
Θ range for data collection	3.124° to 25.017°
Limiting indices	−10<=h<=10,
	−17<=k <=17,
	−17<=l<=16
Measured reflections	13002
Independent reflections	3211
R_{int}	0.4204
Refinement method	Full-matrix least-squares on F^2
Data/restraints/ parameters	3211/ 0 / 249
$R[F^2 > 2\sigma(F^2)]$	0.0953, wR(F^2) = 0.234

Table S2: Selected bond lengths and bond angles of H-NAPP Schiff base ligand (Å, °)

Selected bond lengths of H-NAPP Schiff base ligand

Moiety	Bond Length, Å	Moiety	Bond Length, Å
O(1)-C(7)	1.248(7)	N(1)-C(6)	1.412(8)
O(2)-C(14)	1.363(8)	N(2)-C(9)	1.337(8)
N(1)-C(7)	1.383(8)	N(3)-C(12)	1.311(8)
N(1)-N(2)	1.403(7)	N(3)-C(8)	1.365(8)
N(2)-C(11)	1.445(8)	C(1)-C(6)	1.369(9)
C(1)-C(2)	1.388(9)	C(2)-C(3)	1.394(11)

Selected bond angles of H-NAPP Schiff base ligand

Moiety	Bond Angle, °	Moiety	Bond Angle, °
C(7)-N(1)-N(2)	108.8(5)	C(7)-N(1)-C(6)	128.3(5)
N(2)-N(1)-C(6)	121.3(5)	C(9)-N(2)-N(1)	108.6(5)
C(9)-N(2)-C(11)	128.3(6)	N(1)-N(2)-C(11)	119.8(5)
C(12)-N(3)-C(8)	122.4(5)	C(6)-C(1)-C(2)	120.3(6)
O(1)-C(7)-N(1)	122.8(6)	C(5)-C(6)-N(1)	120.0(6)
N(1)-C(7)-C(8)	105.7(5)	O(1)-C(7)-C(8)	131.5(6)
N(3)-C(8)-C(9)	123.0(5)	C(1)-C(6)-N(1)	119.2(5)
N(3)-C(8)-C(7)	129.3(5)	C(9)-C(8)-C(7)	107.3(5)
N(2)-C(9)-C(8)	109.5(5)	N(2)-C(9)-C(10)	123.4(6)
C(8)-C(9)-C(10)	127.1(6)	O(2)-C(14)-C(15)	117.0(6)