

Supplementary information

Table S1. Comparison of crystal parameters of compound **2** with the already reported compound

Crystal Parametres	2	CCDC 1852819
Emprical formula	C ₅ H ₆ Cl ₂ ZnN ₂	C ₅ H ₆ Cl ₂ N ₂ Zn
Formula weight	230.39	230.39
Temperature (K)	100.0	103.0
Crystal system	Monoclinic	Monoclinic
Space group	<i>Cc</i>	<i>Cc</i>
<i>a</i> /Å	13.6324(10)	13.6431(10)
<i>b</i> /Å	7.5986(6)	7.6070(3)
<i>c</i> /Å	8.3812(6)	8.3818(8)
α °	90	90
β °	116.926(2)	116.946(10)
γ °	90	90
Volume (Å ³)	774.07(10)	775.45(10)
<i>Z</i>	4	4
Calculated density (g/cm ³)	1.977	1.973
Absorption coefficient (mm ⁻¹)	10.113	Not available
<i>F</i> (000)	456.0	456.0
Crystal size (mm ³)	0.32× 0.23 × 0.17	0.10×0.05×0.03
Index ranges	-16 ≤ <i>h</i> ≤ 15, -9 ≤ <i>k</i> ≤ 9, -9 ≤ <i>l</i> ≤ 9	-17 ≤ <i>h</i> ≤ 15, -9 ≤ <i>k</i> ≤ 9, -10 ≤ <i>l</i> ≤ 10
Reflections collected	4757	1542
Unique data(<i>R</i> _{int})	1330	1541
Refinement method	Full-matrix least-squares on <i>F</i> ²	Full-matrix least-squares on <i>F</i> ²
Data / restraints / parameters	1330/2/93	Not available
Goodness-of-fit on <i>F</i> ²	1.072	1.115
Final <i>R</i> indices[<i>I</i> > 2σ (<i>I</i>)] <i>R</i> 1/ <i>wR</i> 2	0.0282/0.0729	0.0167/0.0453

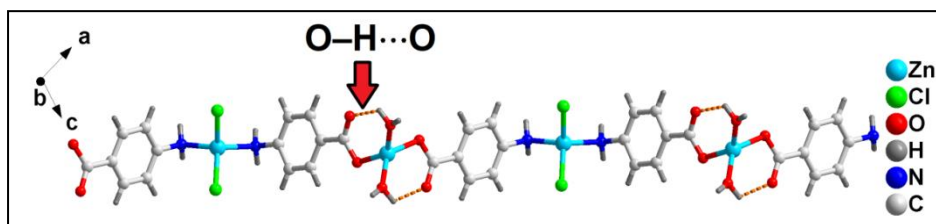
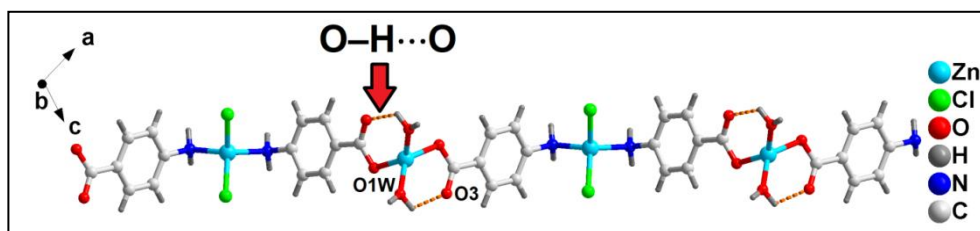


Figure S1 1D polymeric chain of compound **1** assisted by intra-molecular O–H...O hydrogen bonding interactions.



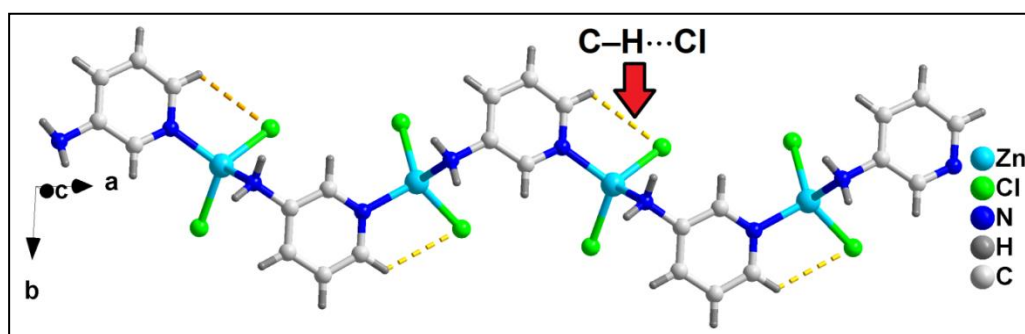


Figure S2 1D polymeric chain of compound **2** stabilised by C-H...Cl hydrogen bonding interactions.

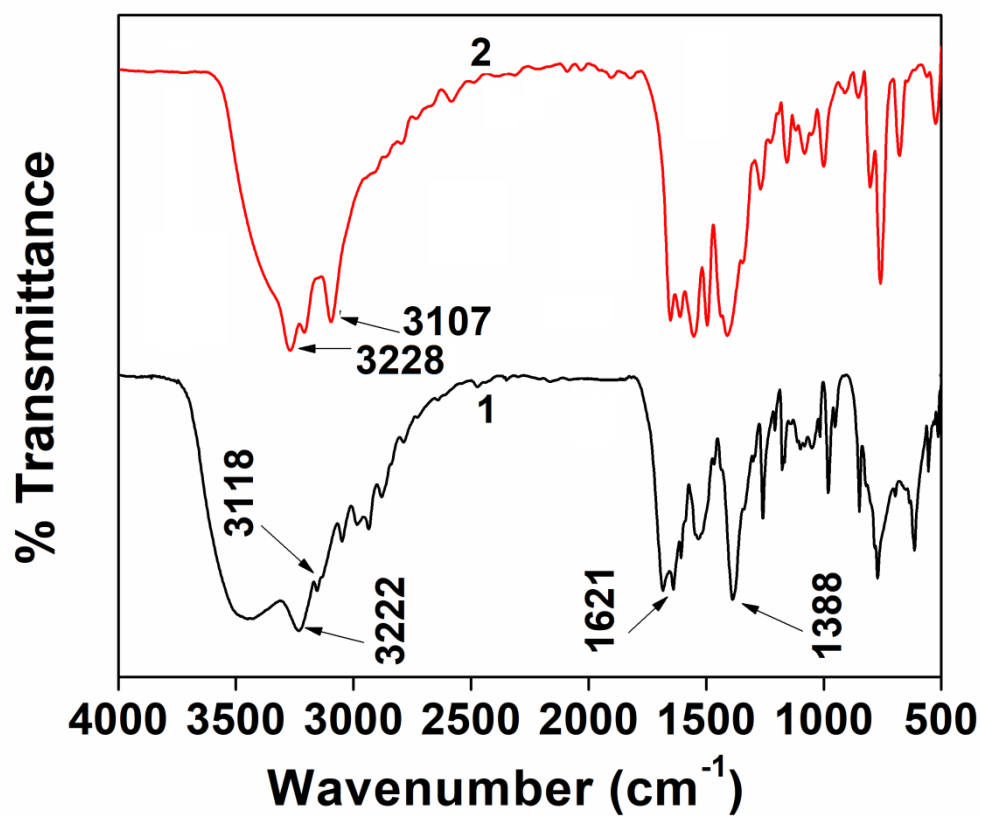
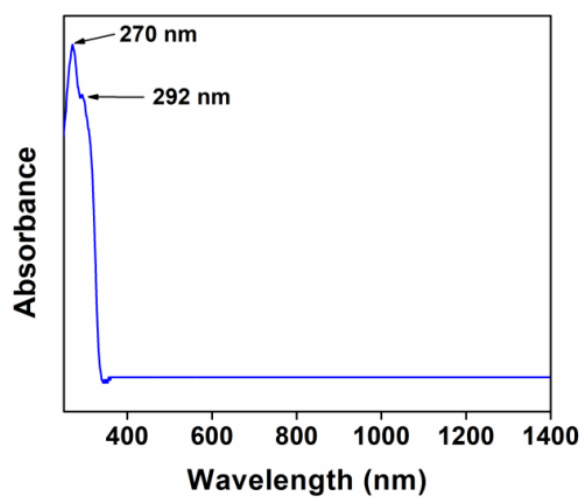
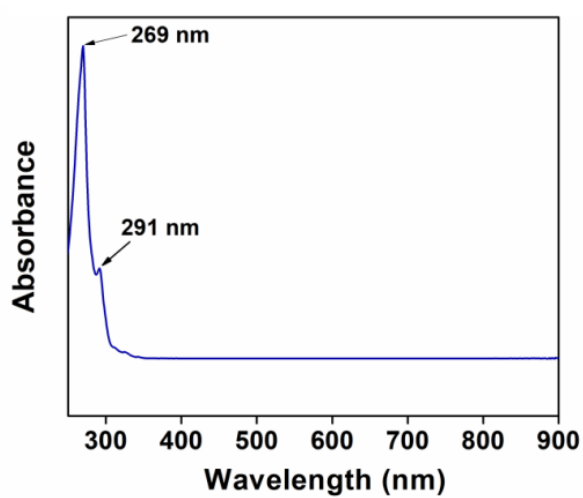


Figure S3 FT-IR spectra of the compounds **1** and **2**.

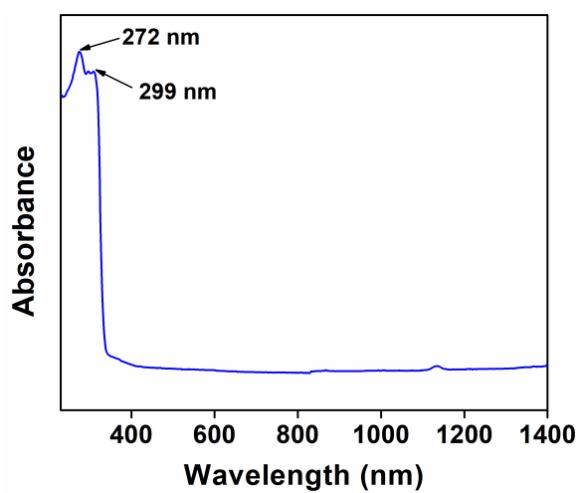


(a)

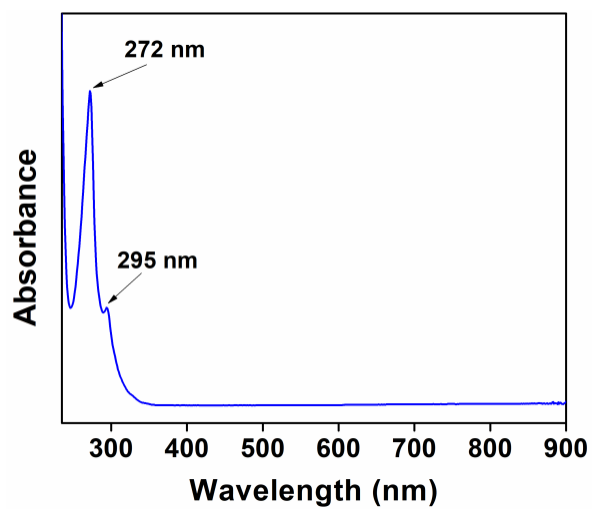


(b)

Figure S4(a) UV-Vis-NIR spectrum of **1**; **(b)** UV-Vis spectrum of **1** in water (10^{-3} M).



(a)



(b)

Figure S5(a) UV-Vis-NIR spectrum of **2**; **(b)** UV-Vis spectrum of **2** in water (10^{-3} M).

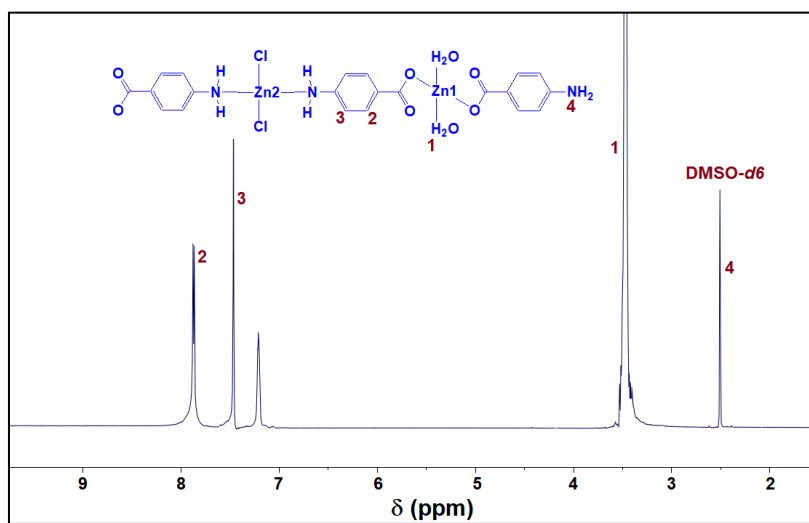


Figure S6 ^1H -NMR spectrum of compound **1** in $\text{DMSO-}d_6$.

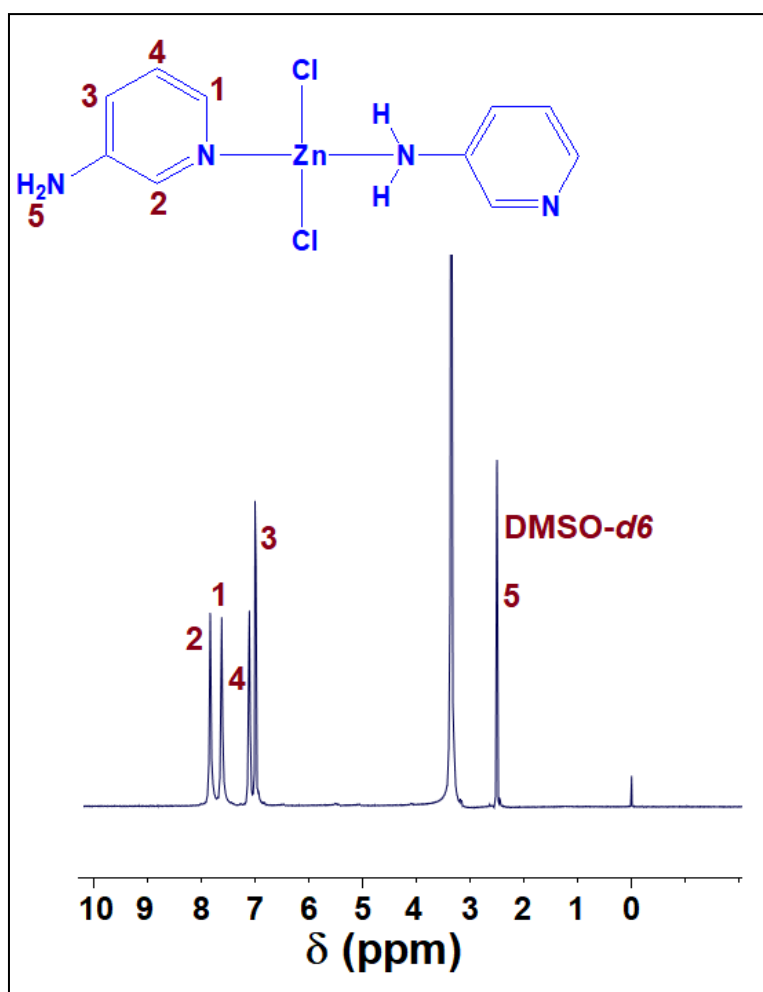


Figure S7 ¹H-NMR spectrum of compound **2** in DMSO-*d*₆.

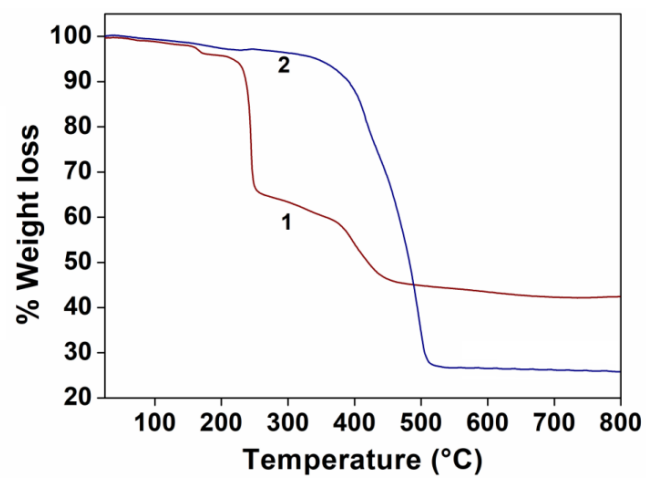


Figure S8 Thermogravimetric curves of the compounds **1** and **2**.

Table S2 IC₅₀ values (in μM) of compounds **1**, **2**, ligands and metal salt calculated using dose response curves.

Sl. Nos.	Drug candidates	Cell lines	Nature of cell lines	IC ₅₀	Error (S.E.)
1.	Cisplatin (Reference)	DL	Malignant cancer	0.61	0.32
2.	Compound 1	DL	Malignant cancer	5.8	0.42
3.	Compound 2	DL	Malignant cancer	16.80	0.38
4.	ZnCl ₂	DL	Malignant cancer	64	0.87
5.	4-AmBz	DL	Malignant cancer	318	2.52
6.	3-AmPy	DL	Malignant cancer	410	3.21
7.	Compound 1	PBMC	Normal cell	310	2.42
8.	Compound 2	PBMC	Normal cell	380	2.92
9.	ZnCl ₂	PBMC	Normal cell	398	3.56
10.	4-AmBz	PBMC	Normal cell	418	3.55
11.	3-AmPy	PBMC	Normal cell	450	4.22