

Supporting Information

A Series of Silver(I) Coordination Polymers of A New Linear 4- ((Pyridin-4-ylthio)methyl)pyridine Ligand: Role of Organic and Inorganic Anions

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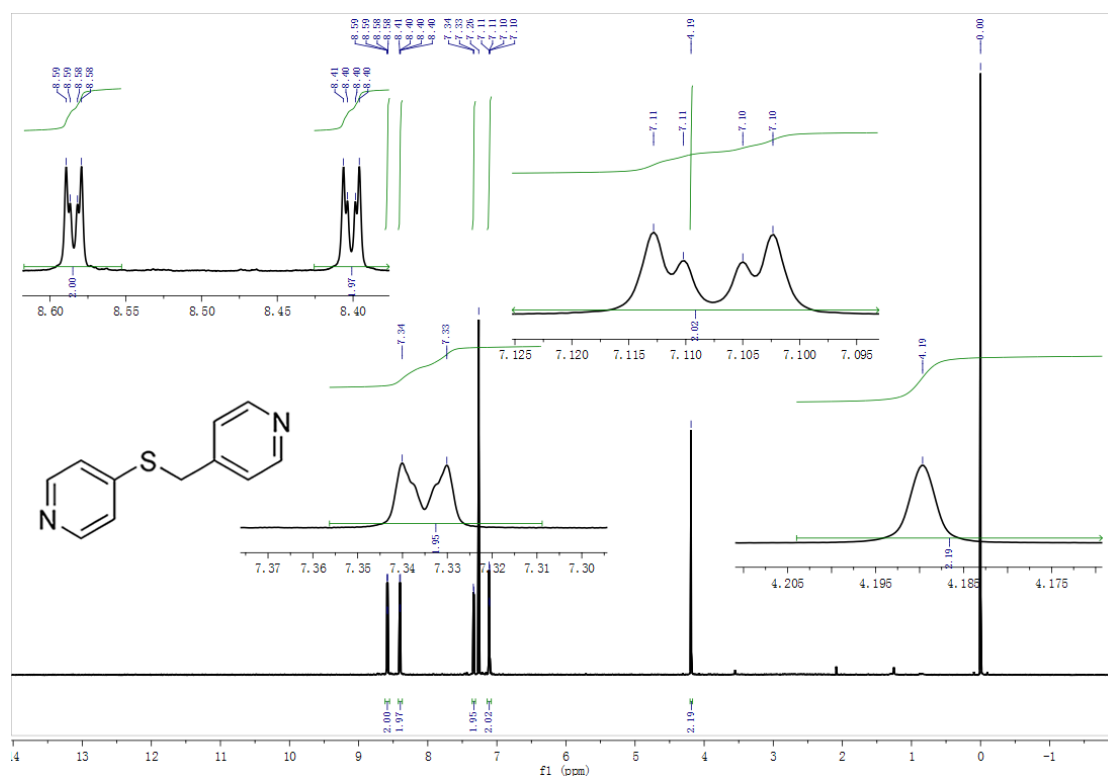


Figure S1. ¹H-NMR spectrum of the PTMP ligand in this study.

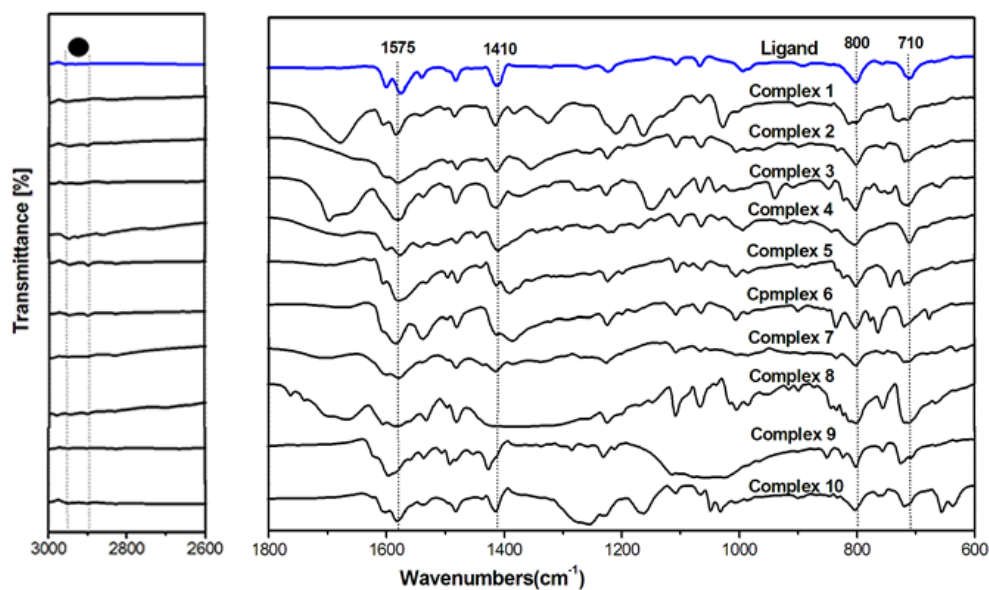


Figure S2 FT-IR spectra of complexes **1** to **10**. The bands of C–H stretching of methylene group are marked with the black dot around 2950 and 2900 cm⁻¹.

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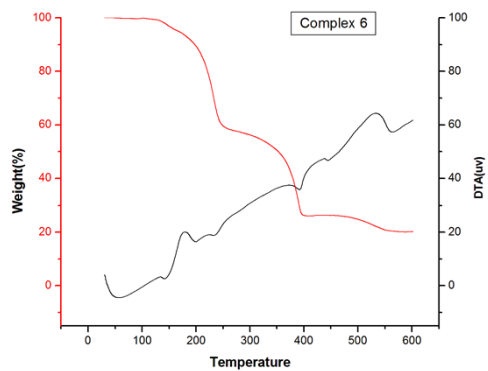
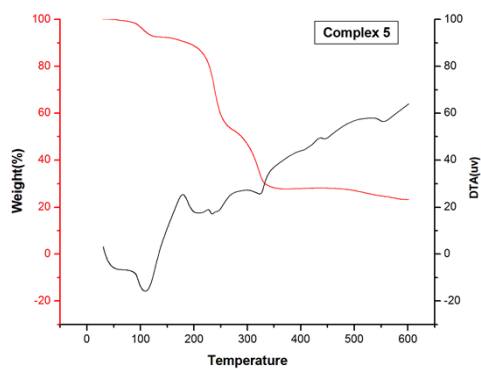
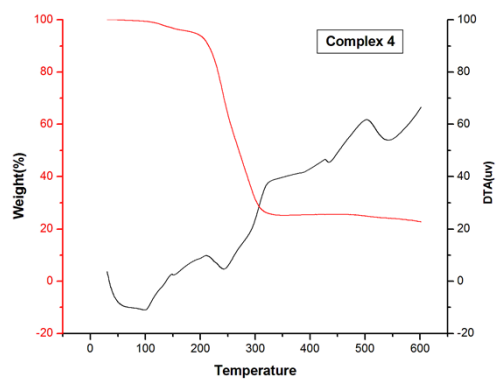
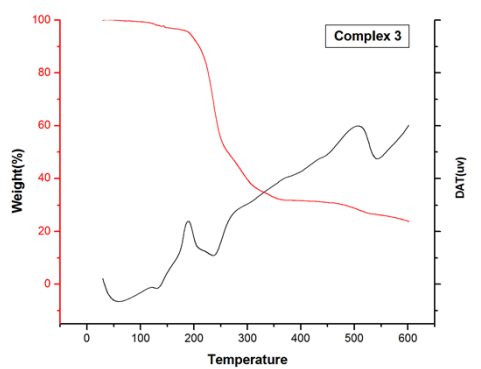
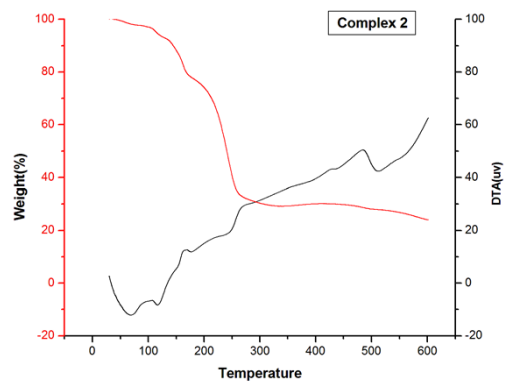
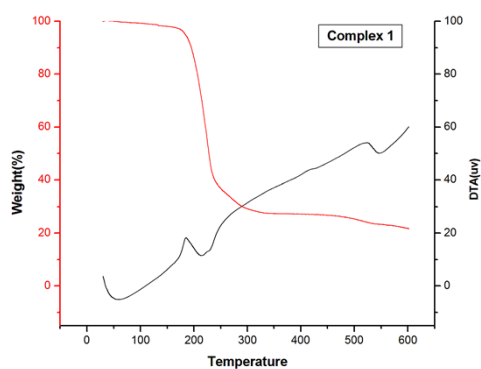
Table S1 H-Bonding Parameters in Complexes **2**, **4** and **5**.

Complex	D-H...A	D-H (Å)	H...A (Å)	D...A (Å)	D-H...A (°)
2	O1W-H1WA...O3	0.89	2.08	2.917(2)	156
	O2W-H2WA...O1W	0.93	2.01	2.934(2)	171
	O2W-H2WB...O4 ^{#1}	0.89	1.98	2.810(1)	154
	O3W-H3WB...O4W ^{#2}	0.89	2.31	2.817(2)	116
	O3W-H3WA...O1W	0.90	1.90	2.765(4)	159
	O4W-H4WB...O2	0.79	1.68	2.392(2)	152
	O4W-H4WA...O2W	0.79	1.95	2.673(2)	153
	O5W-H5WB...O4 ^{#3}	0.86	2.20	2.653(2)	113
	O5W-H5WA...O7W	0.75	1.79	2.538(1)	154
	O6W-H6WB...O3 ^{#4}	0.88	2.17	2.617(2)	111
	O7W-H7WA...O6W	0.89	2.00	2.934(2)	162
4	O1W-H1WB...O2W	0.89	1.97	2.770(3)	147
	O1W-H1WA...O2 ^{#5}	0.90	2.06	2.721(2)	129
	O2W-H2WB...O3W	0.91	1.70	2.614(2)	177
	O2W-H2WA...O4W	0.90	1.86	2.754(3)	176
	O3W-H3WB...O1 ^{#6}	0.92	2.00	2.923(2)	175
	O3W-H3WA...O3	0.88	1.91	2.796(3)	176
	O4W-H4WB...O1W ^{#7}	0.90	1.88	2.781(3)	176
	O4W-H4WB...O5W	0.89	2.11	2.790(2)	133
	O5W-H5WB...O2	0.89	2.11	2.642(1)	118
5	O1W-H1WB...O2	0.90	2.05	2.787(4)	138
	O1W-H1WA...O1 ^{#8}	0.91	1.85	2.755(3)	174
	O2W-H2WA...O2	0.89	2.31	2.908(2)	124
	O2W-H2WB...O1 ^{#9}	0.89	2.43	3.291(2)	162

Symmetry codes: #1: -x+2, y-1/2, -z+1; #2: -x+2, y-1/2, -z+1; #3: x, y-1, z+1; #4: x, y-1, z+1; #5: x-1/2, -y+1/2, z-1/2; #6: x-1/2, -y+1/2, z-1/2; #7: -x+3/2, -y+1/2, -z; #8: -x+1, -y, -z+1; #9: x+1, y,

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Z.



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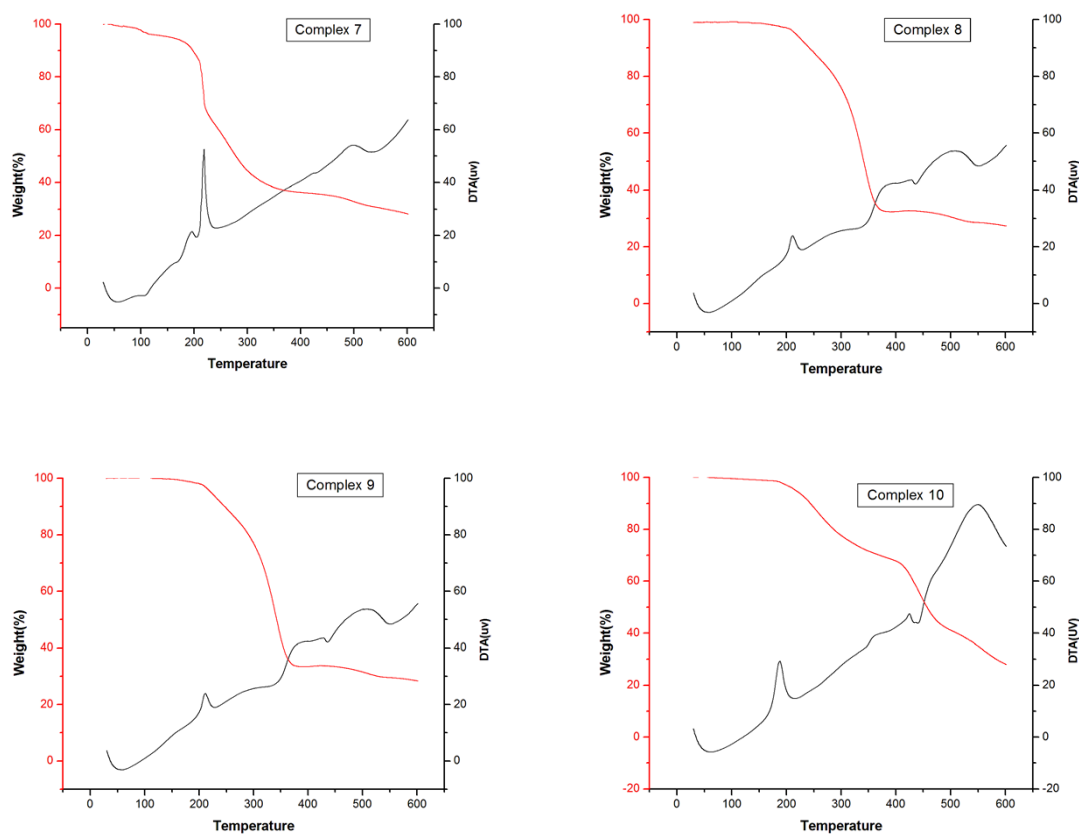


Figure S3: Thermogravimetric Analyses of Complexes **1-10** with Temperature Range of 25°C to 600 °C.