Supplementary Information

Structural Invariance of a Zn^{II} Coordination Polymer with 5-Aminoisophthalic Acid under Different Synthetic Conditions

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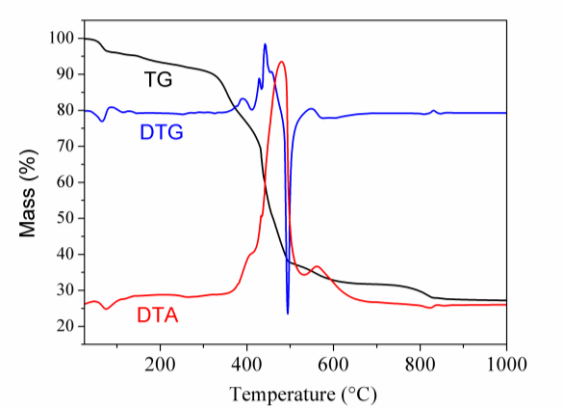
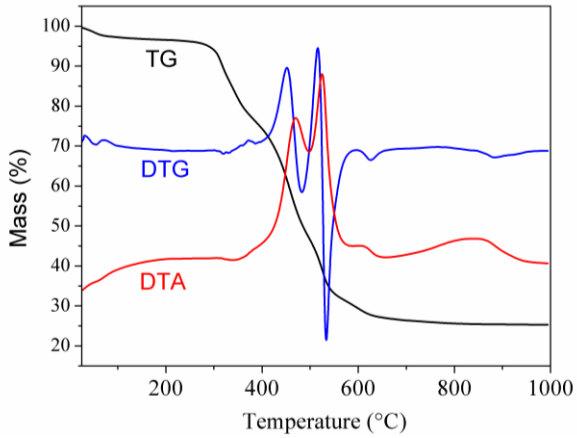


(a)



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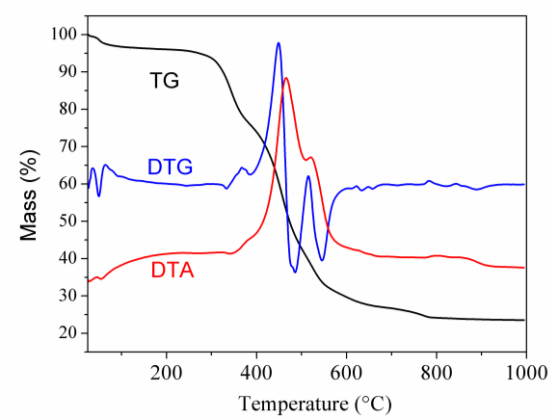

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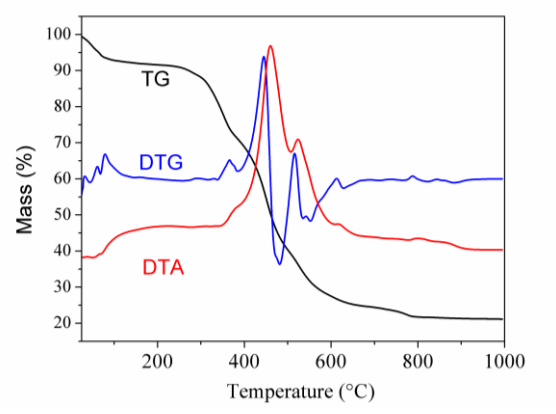

(d)

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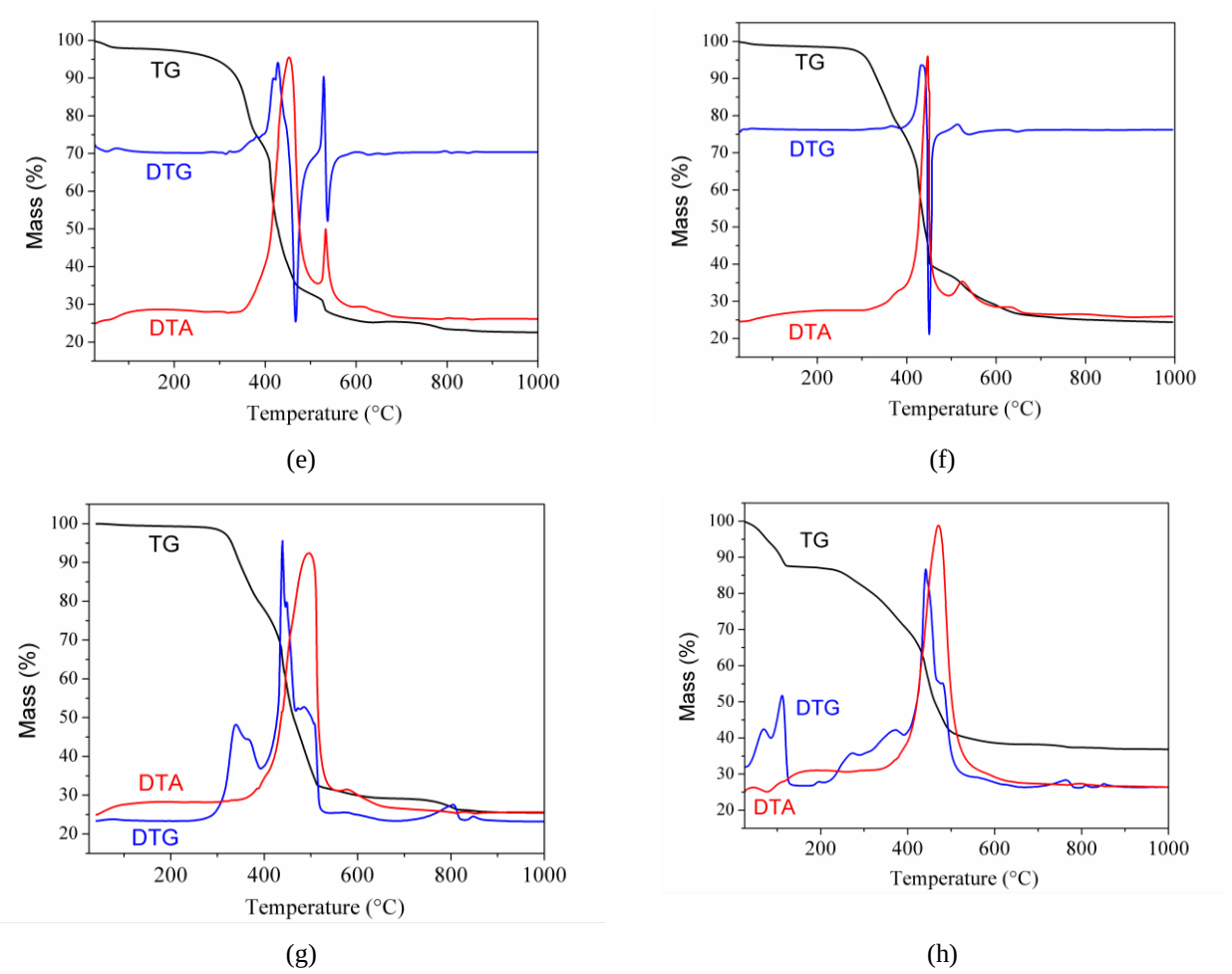
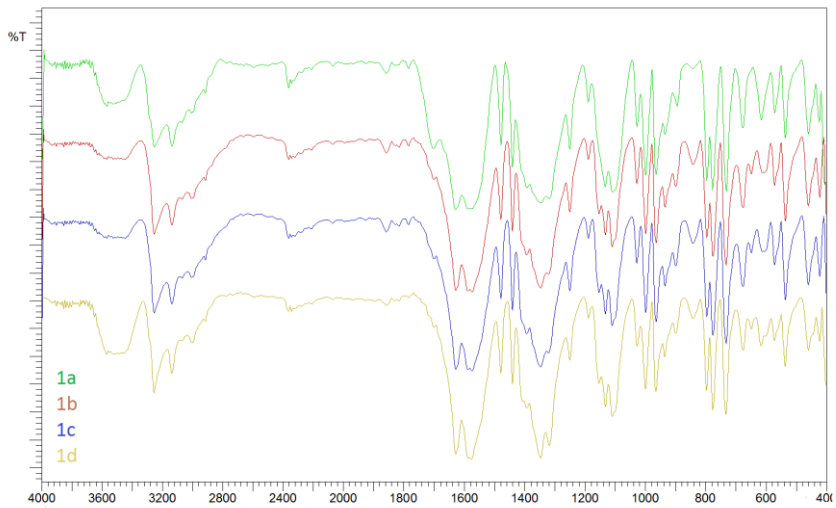


Figure S1. TG, DTG and DTA curves of products (a) **1a**, (b) **1b**, (c) **1c**, (d) **1d**, (e) **1e**, (f) **1f**, (g) **1g** and (h) **1h**.

(a)



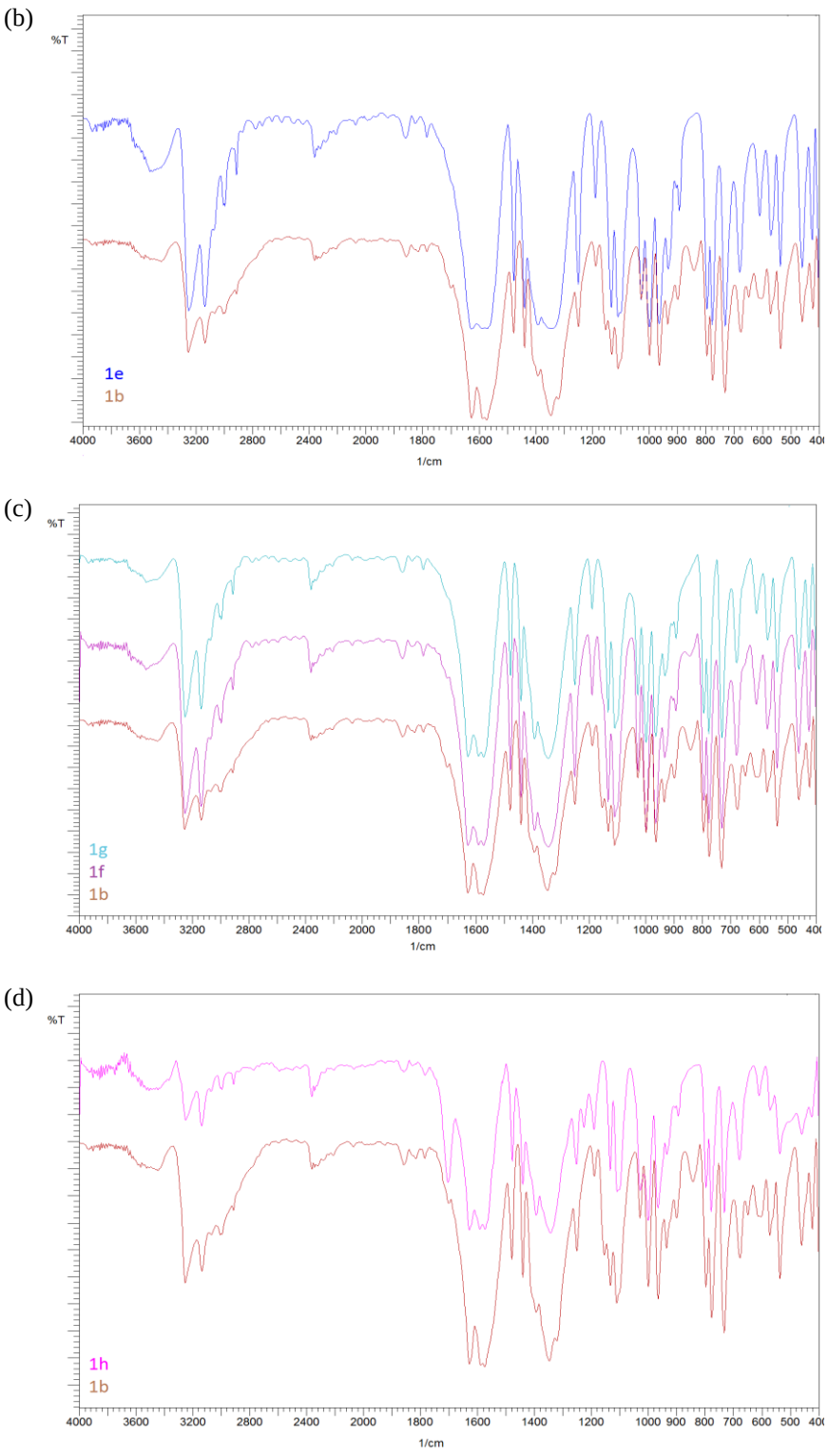


Figure S2. Spectral data for the products by (a) method A (**1a**-**1d**), (b) method B (**1e**), (c) method C (**1f** and **1g**) and (d) method D (**1h**). The **1b** spectrum is repeated in (a), (b), (c) and (d) for comparison.

Crystal data

Table S1. Hydrogen bonds for **1**

		d(D–A) / Å (Angle / degree)		
N1–H1A···O1[a]	0.85(5)	2.19(5)	3.021(3)	165(4)
N1–H1B···O3[b]	0.85(5)	2.21(5)	2.994(4)	154(4)

[a] –x, y + 1/2, –z + 1/2; [b] –x, y – 1/2, –z + 1/2; D: donor and A: acceptor.

Table S2. Shortest (d_1) and longest (d_2) interlayer distances for compound **1** and the CPO-8-L2 analogues

	d_1 / Å	d_2 / Å
[Zn(aif)(dmso)] (**1**)	4.128	5.688
[Zn(aif)(H_2O)][1]	4.031	2.426
[Zn(aif)(def)][2]	3.995	7.251
[Zn(aif)(dma)][3]	3.965	6.139

Table S3. Distances of Zn–O and Zn–N for compound **1** and the CPO-8-L analogues

	Distance / Å (Angle / degree)						
	CPO-8-DMSO(**1**)	CPO-8-H_2O[1]	CPO-8-DEF[2]	CPO-8-DMA[3]	CPO-8-ATZ[4]	CPO-8-IMZ[5]	CPO-8-PHE[6]
Zn–O (or N) (L)	1.970(2)	1.965(3)	1.983(5)	1.9733(16)	1.9979(19)	1.983(3)	2.271(7) 2.176(6)
Zn–O(1)	1.998(2)	1.954(4)	1.981(4)	2.0158(15)	1.9700(12)	1.989(2)	2.140(4)
Zn–O(4)	1.931(2)	1.973(4)	1.929(3)	1.9458(16)	1.9661(14)	1.997(2)	2.136(5)
Zn–N(1)	2.054(3)	2.031(4)	2.047(8)	2.0408(19)	2.0613(16)	2.082(3)	2.255(6)

Table S4. Torsion angles for compound **1** and the CPO-8-L analogues

Compound	θ_1 / degree	θ_2 / degree
CPO-8-DMSO (**1**)	7.63	177.51
CPO-8-H_2O[1]	8.02	–179.04
CPO-8-DEF[2]	6.32	174.69
CPO-8-DMA[3]	–6.86	179.19
CPO-8-ATZ[4]	5.09	177.15
CPO-8-IMZ[5]	–176.06	–173.39
CPO-8-PHE[6]	–163.16	176.47

References

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