

Supplementary Information

Salts and Co-crystalline Assemblies of Tetra(4-pyridyl)ethylene with Di-carboxylic Acids

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Table S1. Crystallographic Data

Co-crystal	7·(oxalic acid) ₂ ·7H ₂ O	7·(malonic acid) _{1.5}	7·(fumaric acid) ₄
Formula	C ₂₆ H ₃₄ N ₄ O ₁₅	C _{26.5} H _{21.5} N ₄ O ₆	C ₃₈ H ₃₂ N ₄ O ₁₆
FW	642.57	491.98	800.67
Crystal System	orthorhombic	monoclinic	triclinic
Space group	Pccn	C2	P-1
<i>a</i> /Å	11.023(2)	25.104(4)	9.0527(18)
<i>b</i> /Å	11.472(2)	8.6758(13)	9.4176(19)
<i>c</i> /Å	22.497(5)	11.0877(16)	11.031(2)
α /°	90	90	88.94(3)
β /°	90	94.115(5)	80.30(3)
γ /°	90	90	81.21(3)
<i>V</i> /Å ³	2844.9(10)	2408.6(6)	916.1(3)
<i>Z</i>	4	4	1
<i>D</i> _{calc}	1.496	1.357	1.451
μ (mm ⁻¹)	0.124	0.098	0.115
<i>T</i> /K	293(2)	190(2)	293(2)
No. of reflections	9984	13939	11622
No. of unique reflections	2918	4791	4216
No. of reflections with <i>I</i> > 2σ(<i>I</i>)	2189	4513	2978
<i>R</i> ₁ [<i>I</i> > 2σ(<i>I</i>)]	0.0390	0.0310	0.0422
<i>wR</i> ₂	0.1126	0.0770	0.1228
CCDC No.	1590576	1590577	1590578

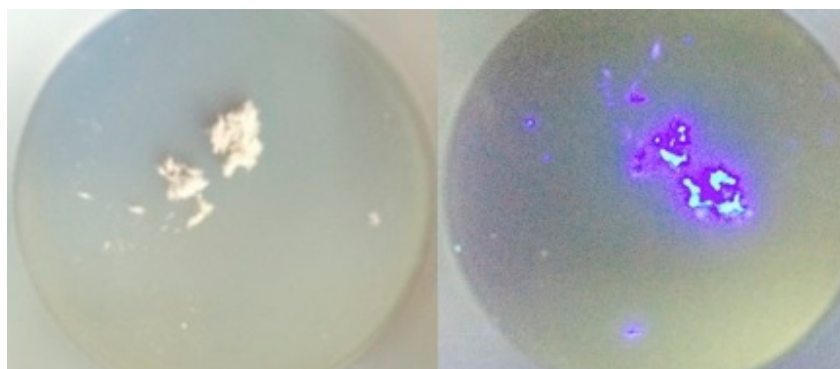


Figure S1. Luminescence of $7 \cdot (\text{oxalic acid})_2 \cdot (\text{H}_2\text{O})_7$ as shown in photographs of microcrystalline samples taken under ambient light (left) and UV light (365 nm, right).

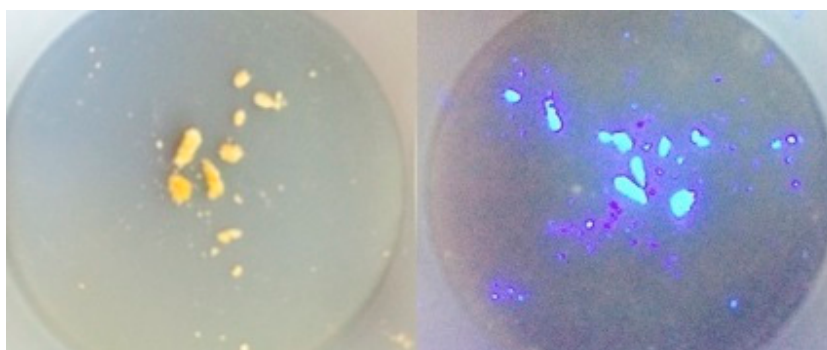


Figure S2. Luminescence of $7 \cdot (\text{malonic acid})_{1.5}$ as shown in photographs of microcrystalline samples taken under ambient light (left) and UV light (365 nm, right).