

A mixed-linker porphyrin framework with CdI₂-type topology

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Synthesis

A mixture of $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ (0.02 mmol), zinc 5, 10-di(carboxyphenyl)-15,20-diphenylporphyrin (0.01 mmol), 4,4'-bipyridine (0.02 mmol), N,N-diethylformamide (0.75 mL) and ethanol (0.25 mL) was added to a small capped vial, heated at 80°C for 24 hours, and then cooled to room temperature over 9 hours. The resulting dark blue, plate single crystals were isolated by filtration. The product is insoluble in common organic solvents.

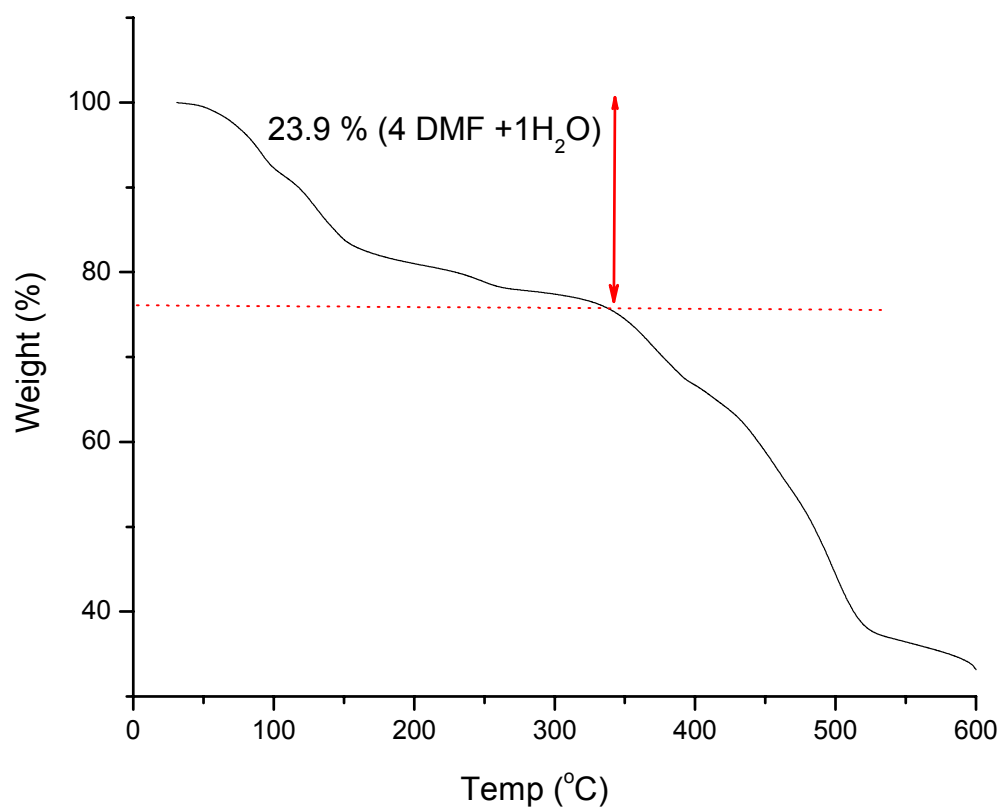


Figure S1. TGA data for PPF-6.

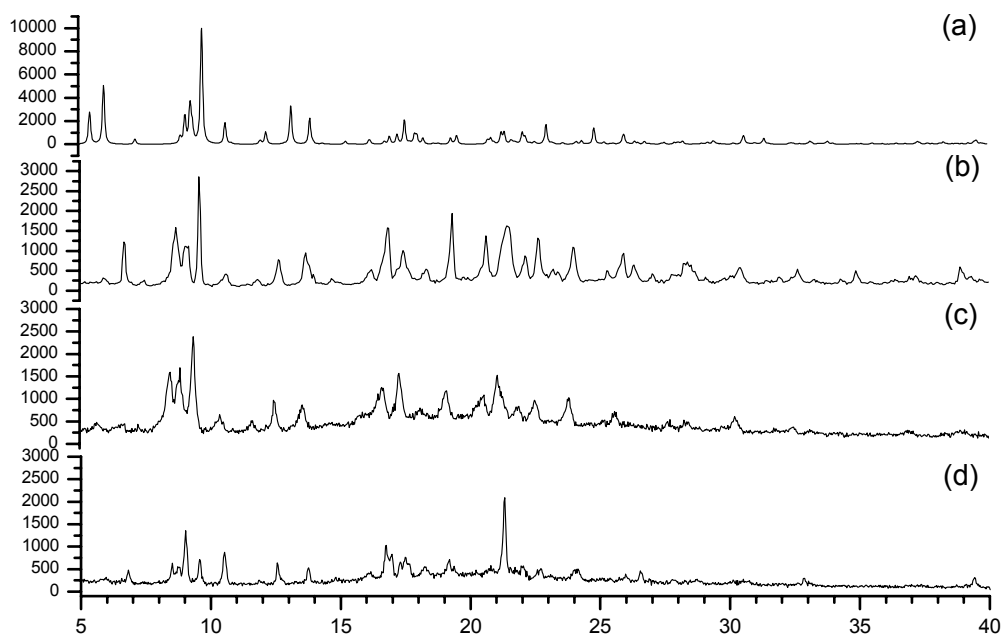


Figure S2. X-ray powder diffraction pattern of (a) the simulated pattern from single crystal data, (b) Zn/cis-DCPP/bpy system, (c) Zn/cis-ZnDCPP/bpy system, and (d) as synthesized PPF-6. Cell parameters from Zn/cis-DCPP/bpy system by single crystal x-ray diffraction: $a = 32.789(14) \text{ \AA}$, $b = 16.546(7) \text{ \AA}$, $c = 12.554(6) \text{ \AA}$, $\beta = 91.134(6)^\circ$, $V = 6809(8) \text{ \AA}^3$.