Supporting Information

Three Novel 3D Metal-organic Frameworks with 1D Ladder, Tube or Chain as Assembly Units

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General Information. Commercially available reagents were used as received without further purification. The H_3TMBTC ligand was synthesized according to the literature.[1] Elemental analyses (C,H,N) were obtained on a Perkin-Elmer 240 elemental analyzer. Thermal gravimetric analysis (TGA) was performed under N_2 on a TGA/SDTA851 instrument. Solvent-accessible volume was calculated using PLATON.[2]

References

1. S. V. Kolotuchin, P. A. Thiessen, E. E. Fenlon, S. R. Wilson, C. J. Loweth, S. C. Zimmerman, *Chem. Eur. J.* 1999, **5**, 2537.

2. A. L. Spek, PLATON, A Multipurpose Crystallographic Tool, Utrecht University, The Netherlands, 2006; available via http://www.cryst.chem.uu.nl/platon (for unix) and http://www.chem.gla.ac.uk/~louis/software/platon/ (for MS Windows).

Figure S1. TGA of **1**.

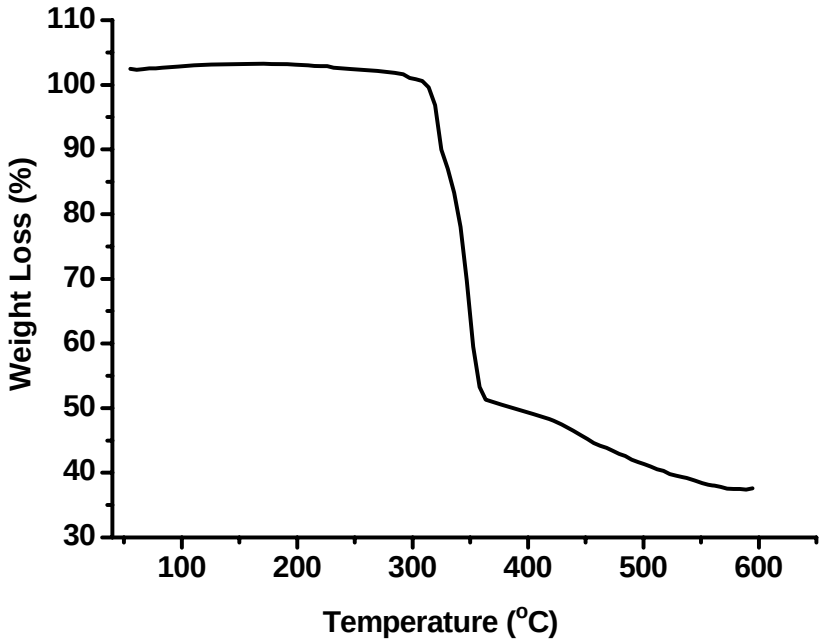

Figure S2. TGA of **2**.

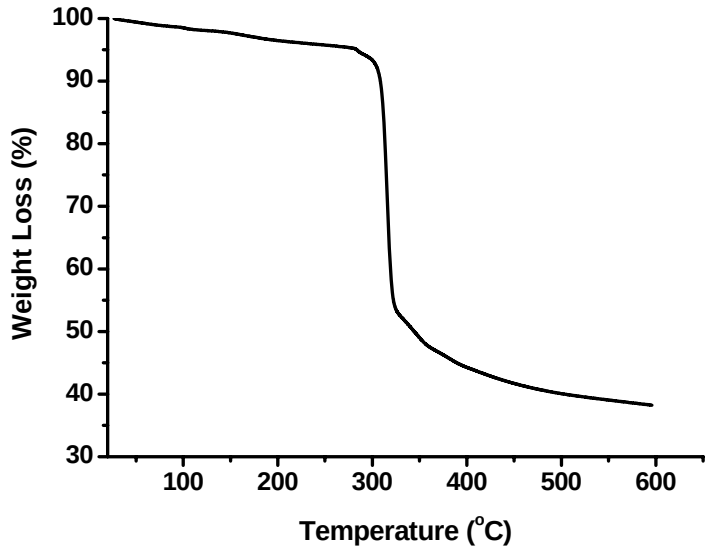

Figure S3. TGA of **3**.

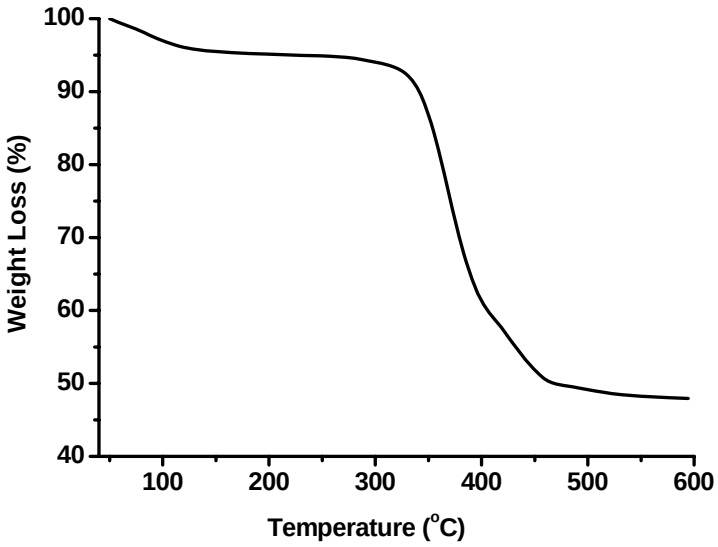

Figure S4. X-ray powder diffraction of **1**: simulated from single crystal data (green), observed (red) and after heated to 250°C (black).

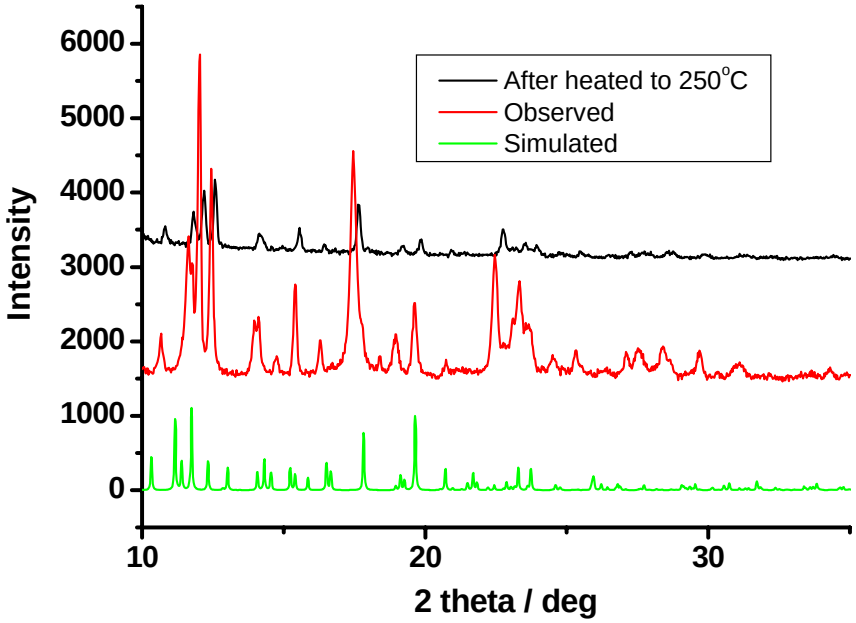

Figure S5. X-ray powder diffraction of **2**: simulated from single crystal data (green), observed (black) and after heated to 250°C (red).