

SUPPORTING INFORMATION

to the paper entitled

3–D Lanthanide Metal–Organic Frameworks: Structure, Photoluminescence and Magnetism

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Figure S1. Experimental (—) and Theoretical (—) X-ray Powder Diffraction Patterns for **1**.

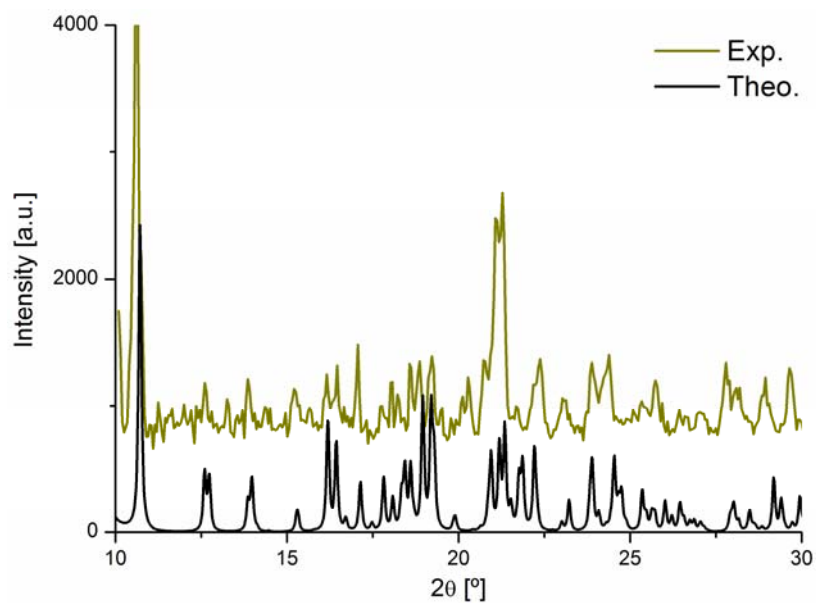


Figure S2. Experimental (—) and Theoretical (—) X-ray Powder Diffraction Patterns for **2·2dmf**.

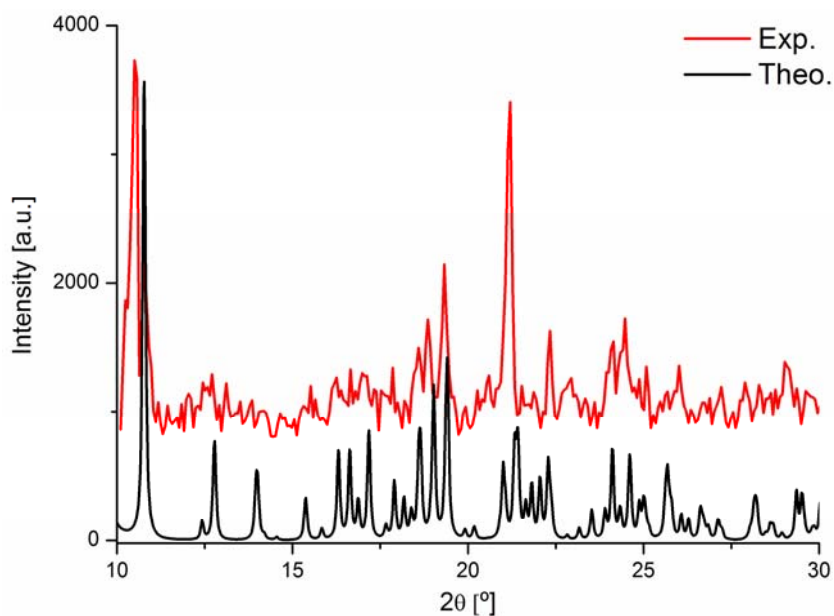


Figure S3. Experimental (—) and Theoretical (—) X-ray Powder Diffraction Patterns for **3**.

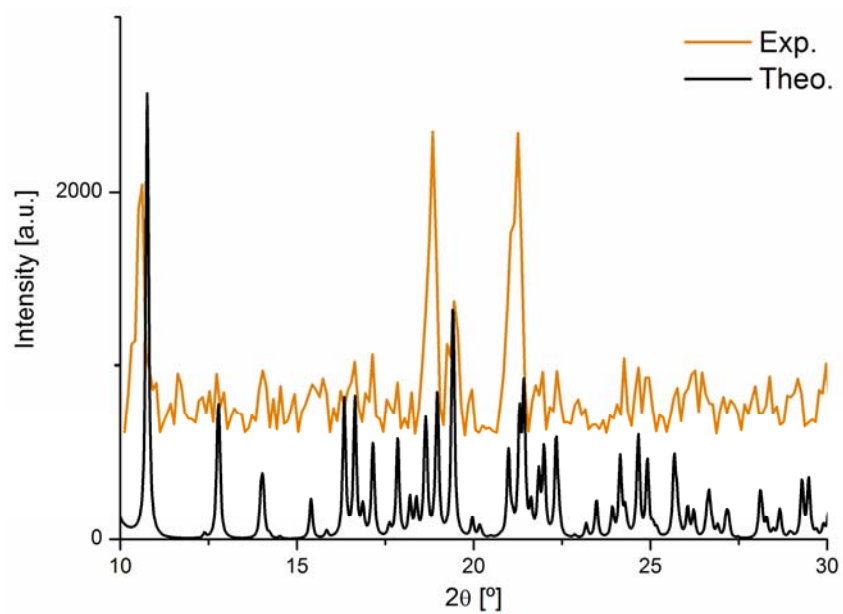


Figure S4. Experimental (—) and Theoretical (—) X-ray Powder Diffraction Patterns for **4·2dmf**.

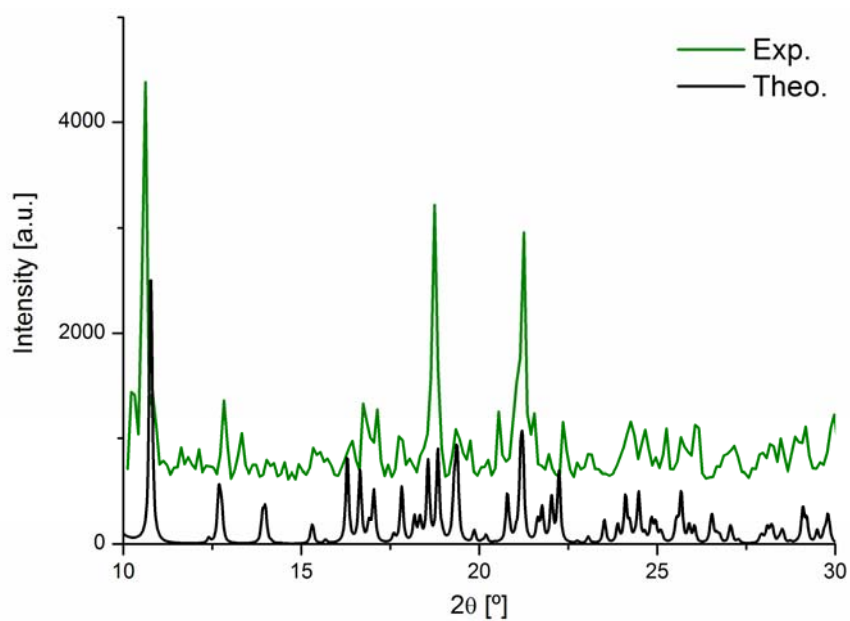


Figure S5. Experimental (—) and Theoretical (—) X-ray Powder Diffraction Patterns for **5·2dmf**.

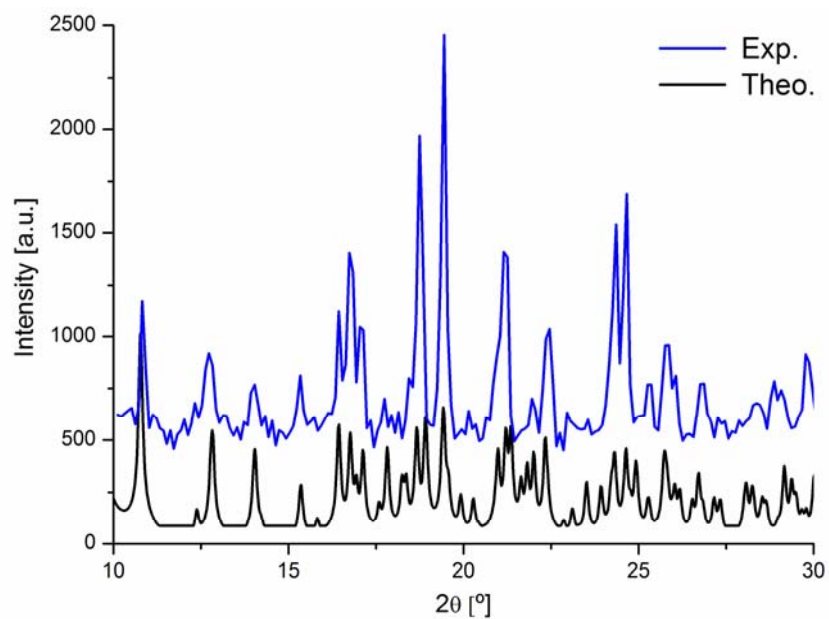


Figure S6. Ball-and-Stick view of the π - π and hydrogen-bonding interactions in **2·2dmf** (Symmetry codes: A $1 - x, 1 - y, 1 - z$; B $-x, 1 - y, 1 - z$. Colors: Purple: Eu; Red: O; Blue: N; Grey: C; Green: ring centroid.

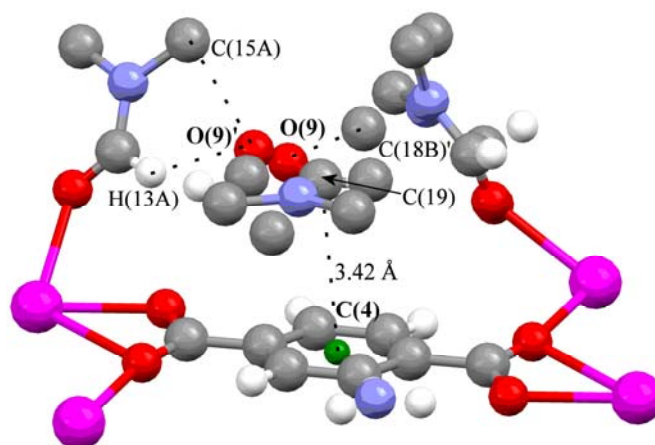
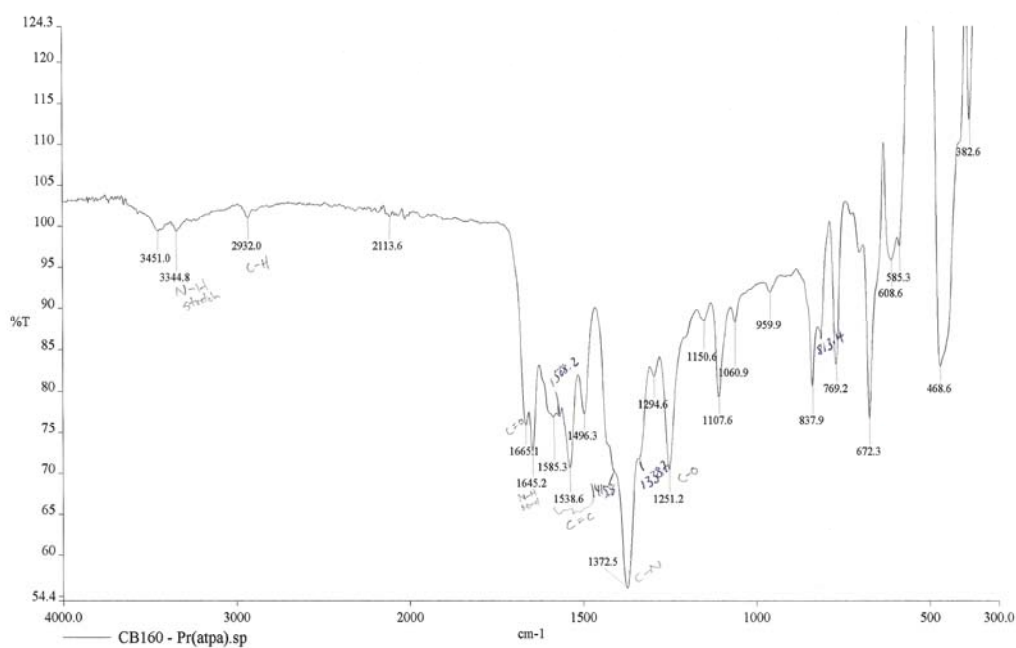
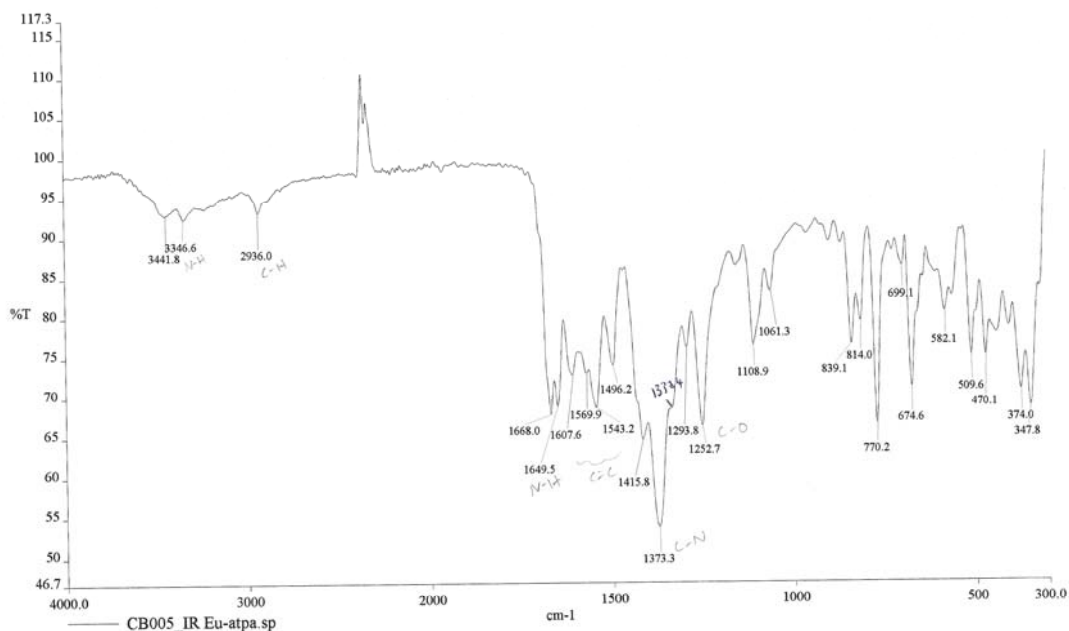


Figure S7. IR spectrum of compound $[\text{Pr}_2(\text{N-BDC})_3(\text{dmf})_4]_\infty$.



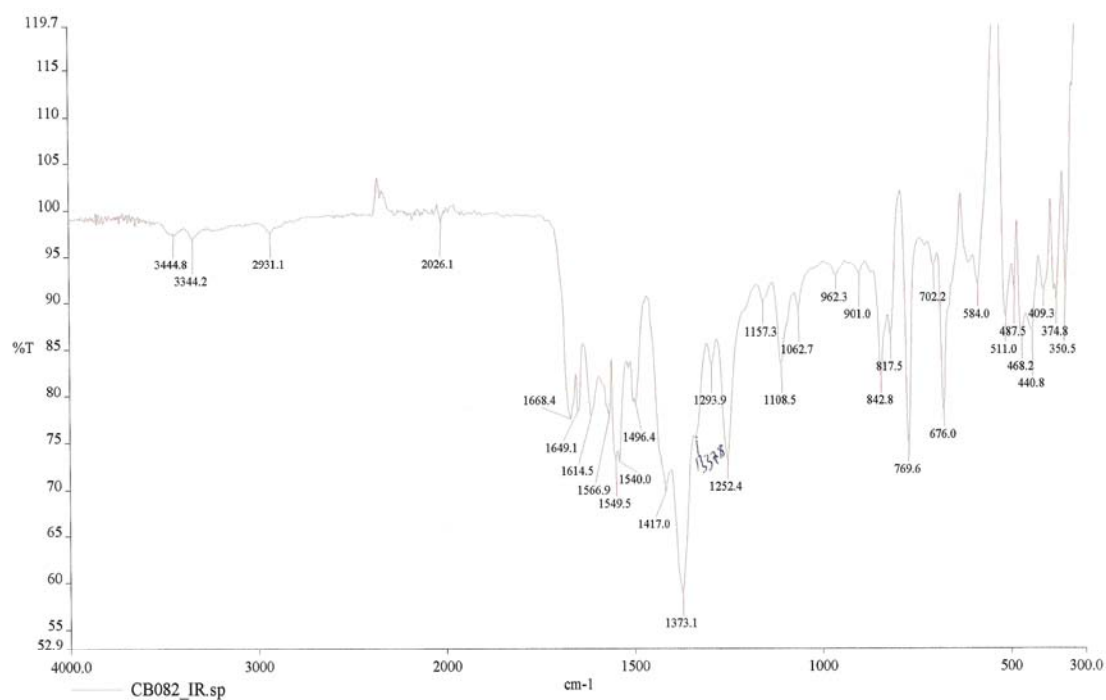
Date: 4/24/2008 Date: 4/24/2008 Description Spectrum Name

Figure S8. IR spectrum of compound $\{[\text{Eu}_2(\text{N-BDC})_3(\text{dmf})_3] \cdot 2\text{H}_2\text{O}\}_\infty$.



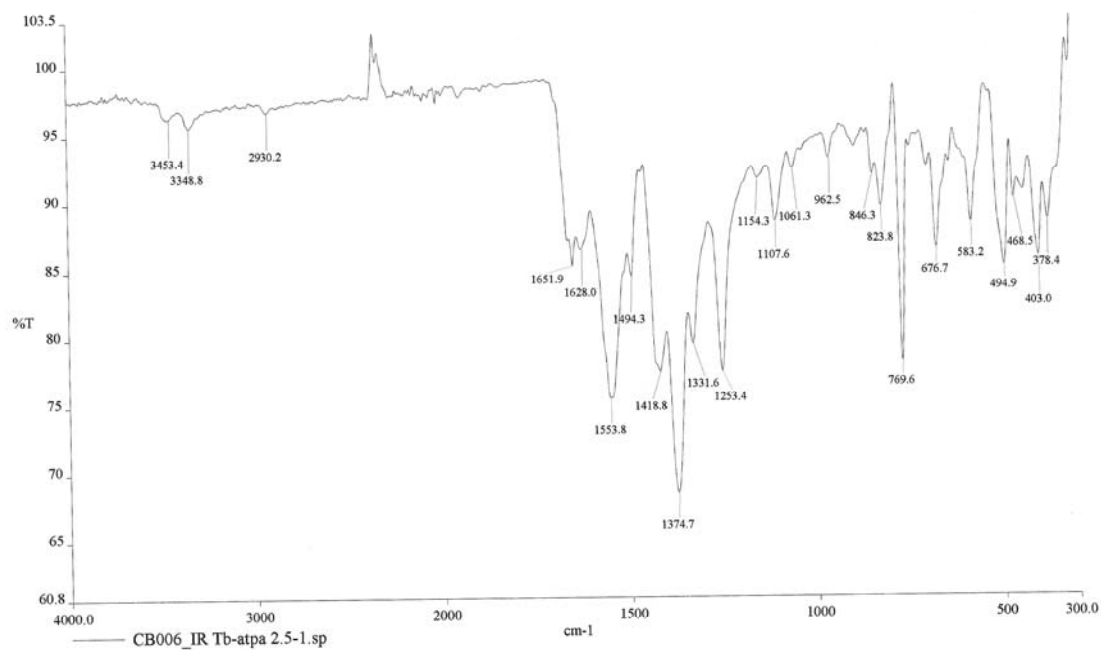
Date: 6/27/2007 Date: 6/27/2007 Description Spectrum Name

Figure S9. IR spectrum of compound $[\text{Gd}_2(\text{N-BDC})_3(\text{dmf})_4]_\infty$.



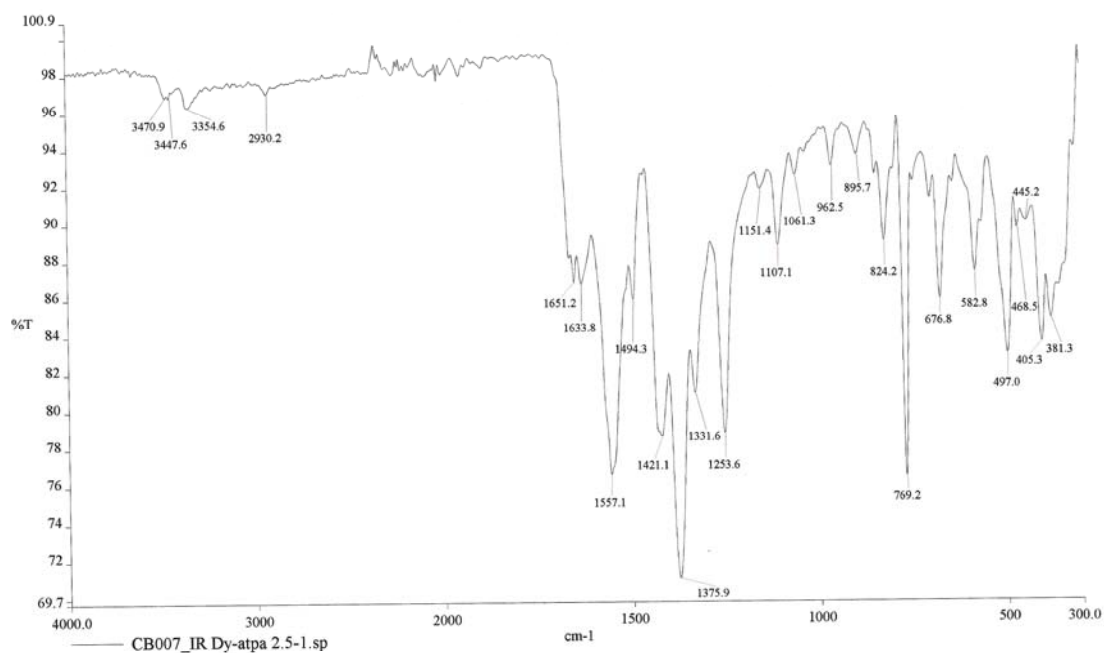
Date: 10/8/2007 Date: 10/8/2007 Description Spectrum Name

Figure S10. IR spectrum of compound $[\text{Tb}_2(\text{N-BDC})_3(\text{dmf})_4]_\infty$.



Date: 6/27/2007 Date: 6/27/2007 Description Spectrum Name

Figure S11. IR spectrum of compound $[\text{Dy}_2(\text{N-BDC})_3(\text{dmf})_4]_\infty \cdot \text{H}_2\text{O}$.



Date: 6/27/2007 Date: 6/27/2007 Description Spectrum Name

Figure S12. Thermogravimetric analysis of compound **1**.

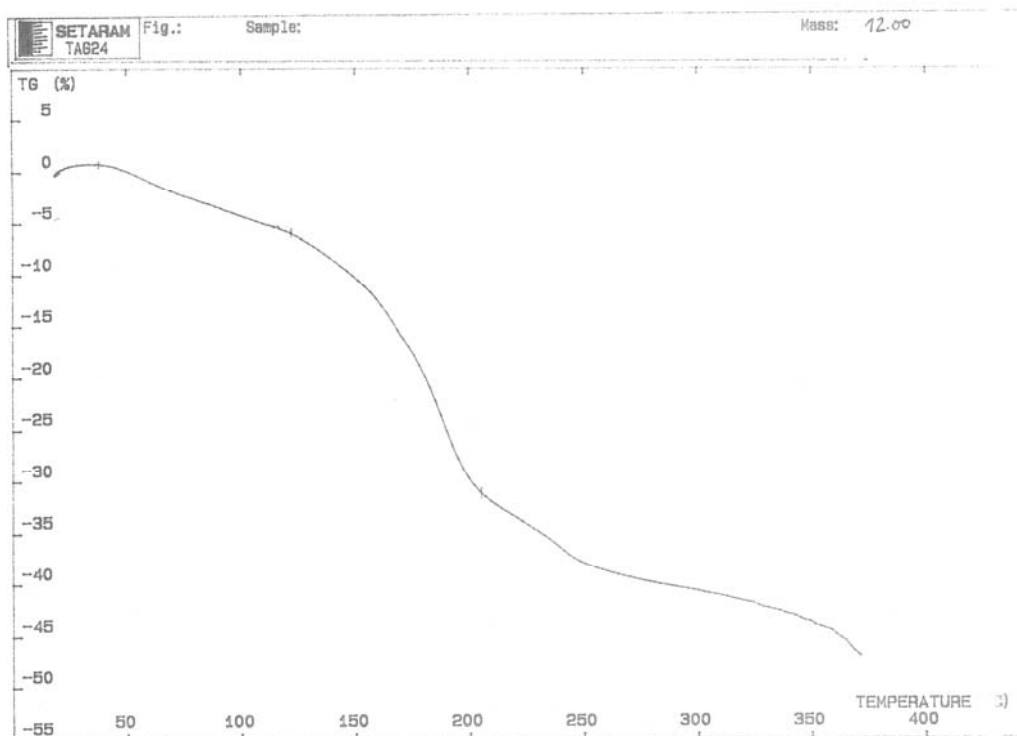


Figure S13. Thermogravimetric analysis of compound **2·2dmf**.

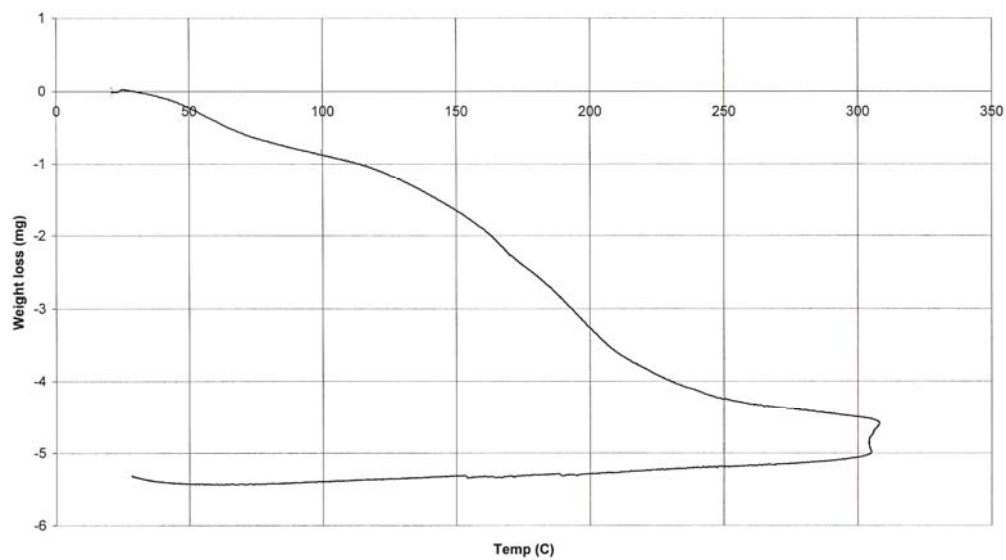


Figure S14. Thermogravimetric analysis of compound **3**.

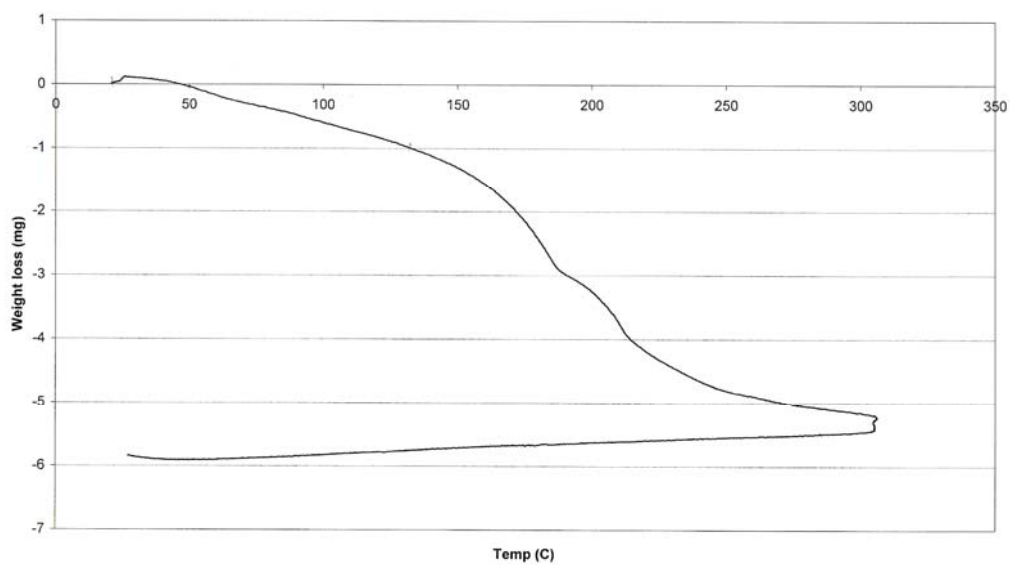


Figure S15. Thermogravimetric analysis of compound **4·2dmf**.

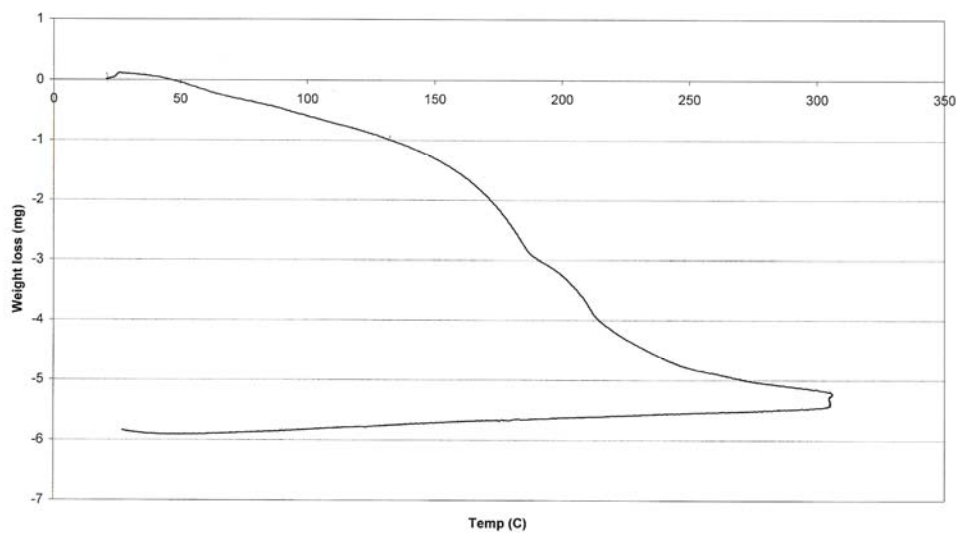


Figure S16. Thermogravimetric analysis of compound **5·2dmf**.

