

Electronic Supplementary Information

for

1D Hacksaw Chain Bipyridine-Sulfonate Schiff Base-Dicopper(II) as a Host for Variable Solvent Guests

Susanta Hazra,* M. Fátima C. Guedes da Silva,* Anirban Karmakar and Armando J. L. Pombeiro*

Centro de Química Estrutural, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1049-001, Lisbon, Portugal. E-mail: h.susanta@gmail.com, fatima.guedes@tecnico.ulisboa.pt and pombeiro@tecnico.ulisboa.pt.

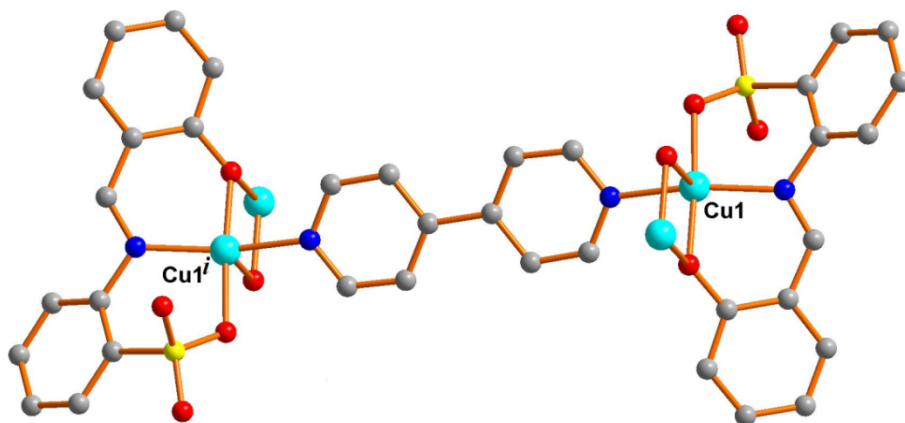


Figure S1. Idealized ball and stick presentation of the crystal structure of $[\text{Cu}_2\text{L}_2(4,4'\text{-bipy})]\cdot 2n\text{MeOH}$ (**5**). All hydrogen atoms are removed for clarity. Symmetry: *i*) $-1-x, 1-y, 2-z$; *ii*) $1-x, -y, 1-z$.

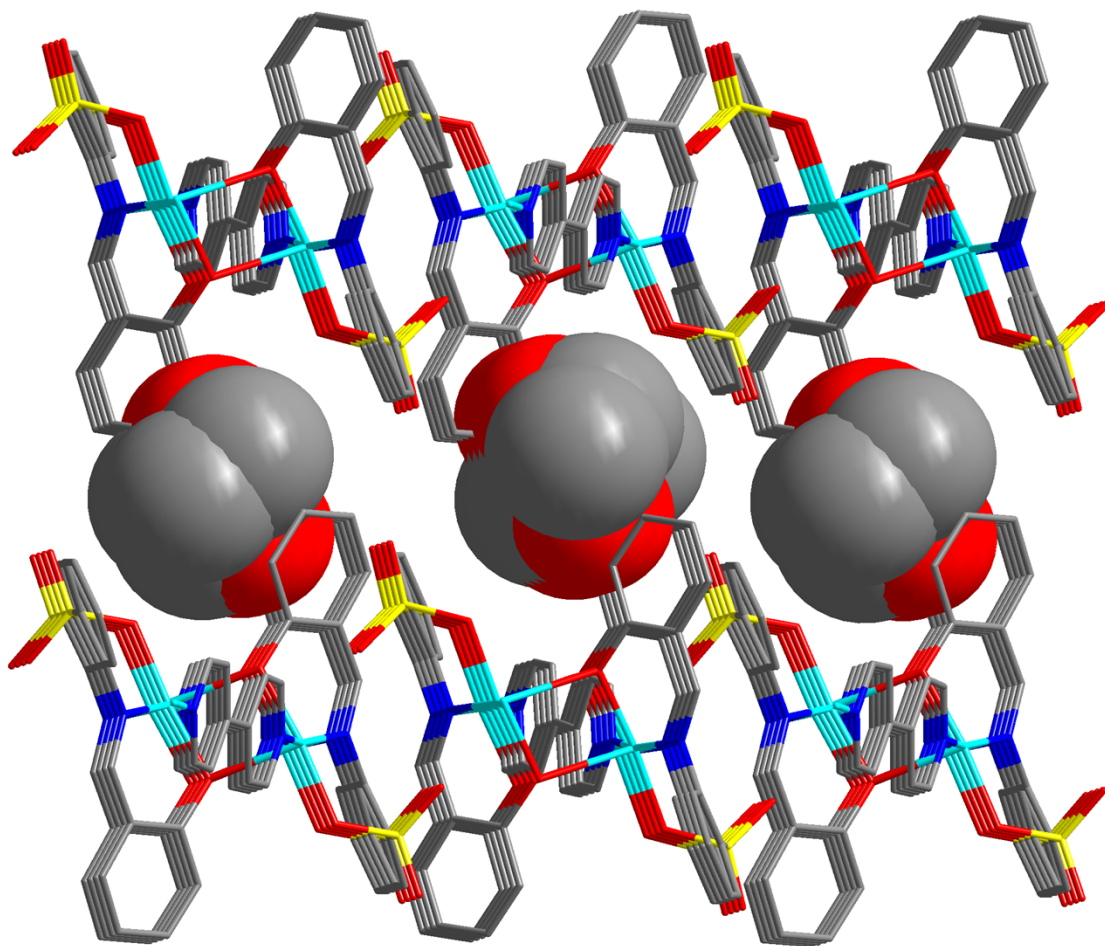


Figure S2. Solvent packing of the compound **5**. All hydrogen atoms are omitted for clarity. Solvent molecules are presented as idealized space fill model.

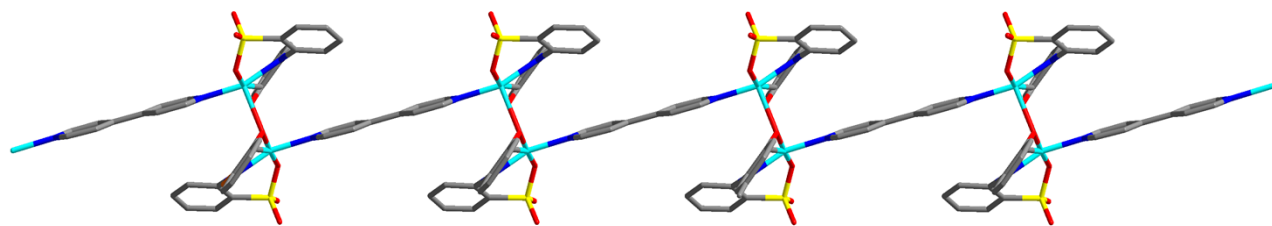


Figure S3. Perspective view of the hacksaw chains in polymers **1–6**.

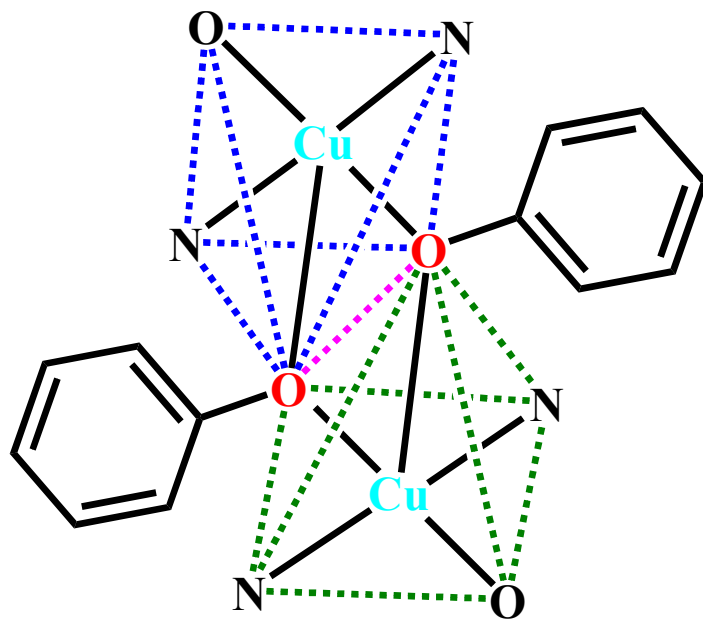


Figure S4. Facial edge-sharing (pink dotted line) inverted diphenoxo bridged square pyramidal copper(II) geometries in **1–6**.

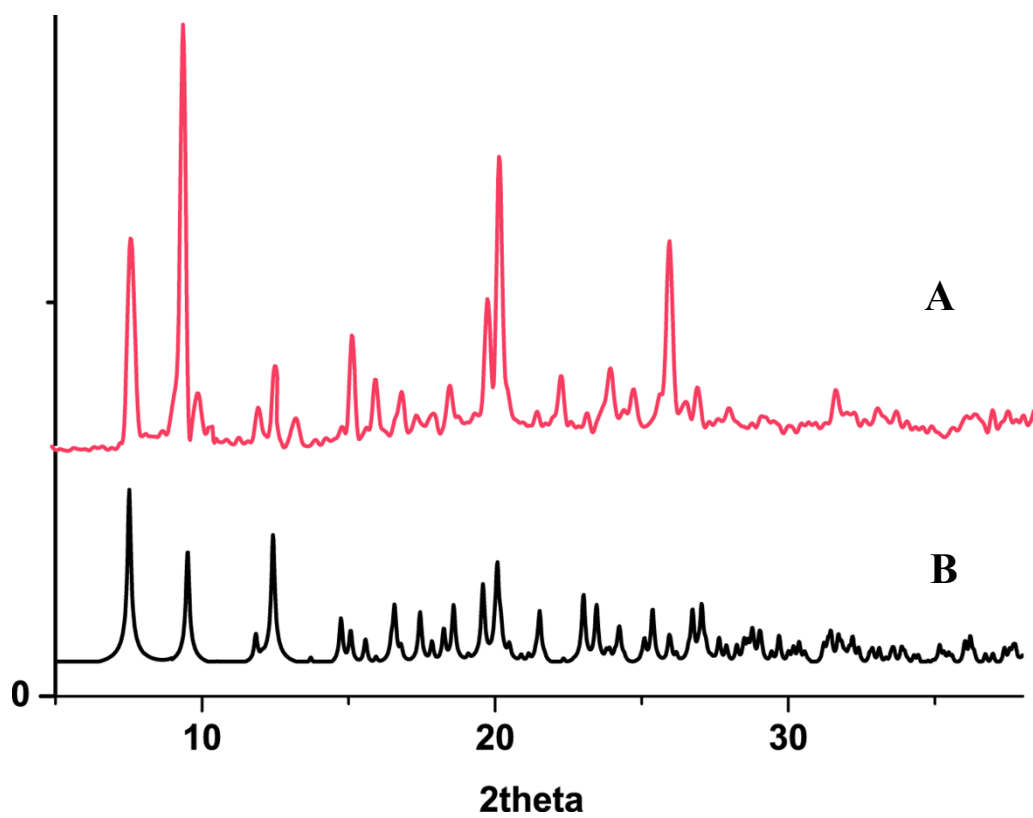


Figure S5. PXRD diffractograms of compound **1**: **A**) obtained from **4**, and **B**) calculated using the respective CIF file

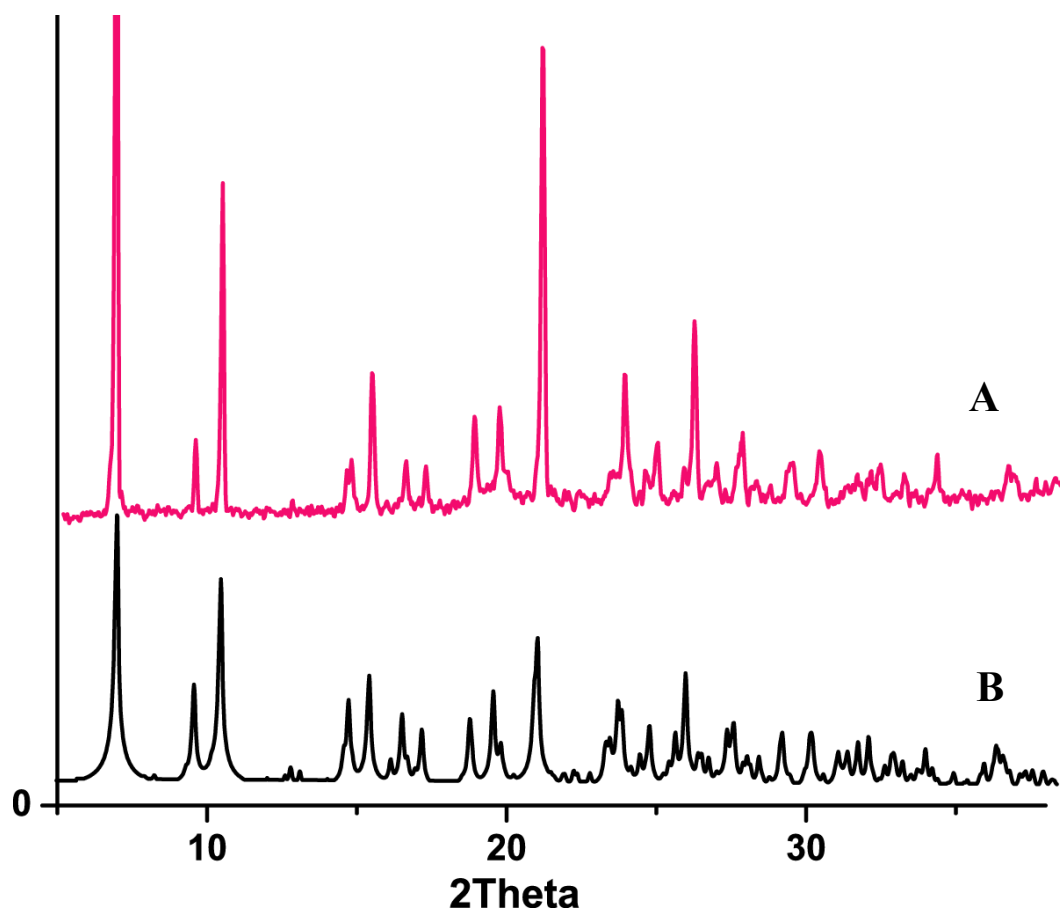


Figure S6. PXRD diffractograms of compound **2**: **A**) obtained from **3**, and **B**) calculated using the respective CIF file

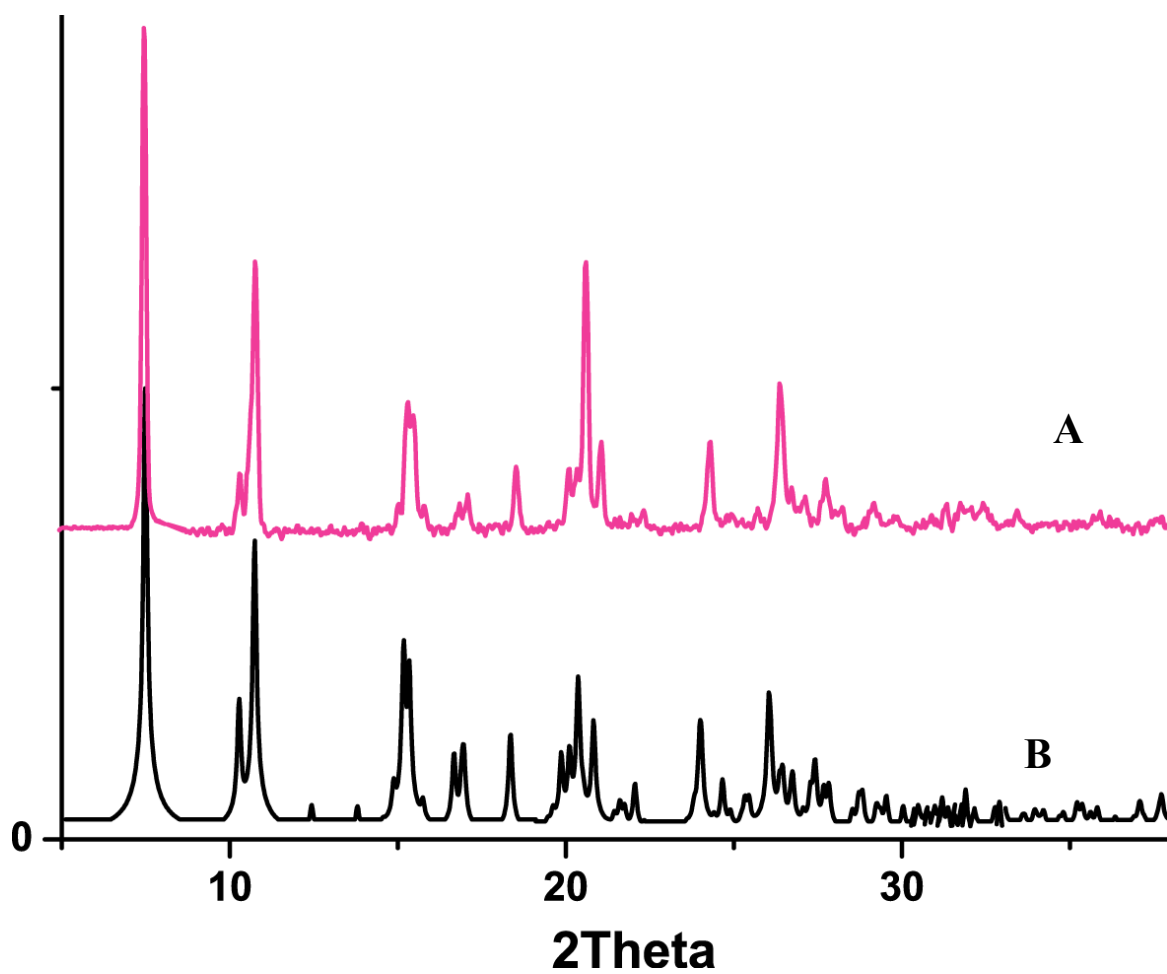


Figure S7. PXRD diffractograms of compound **3**: **A**) obtained from **2**, and **B**) calculated using the respective CIF file

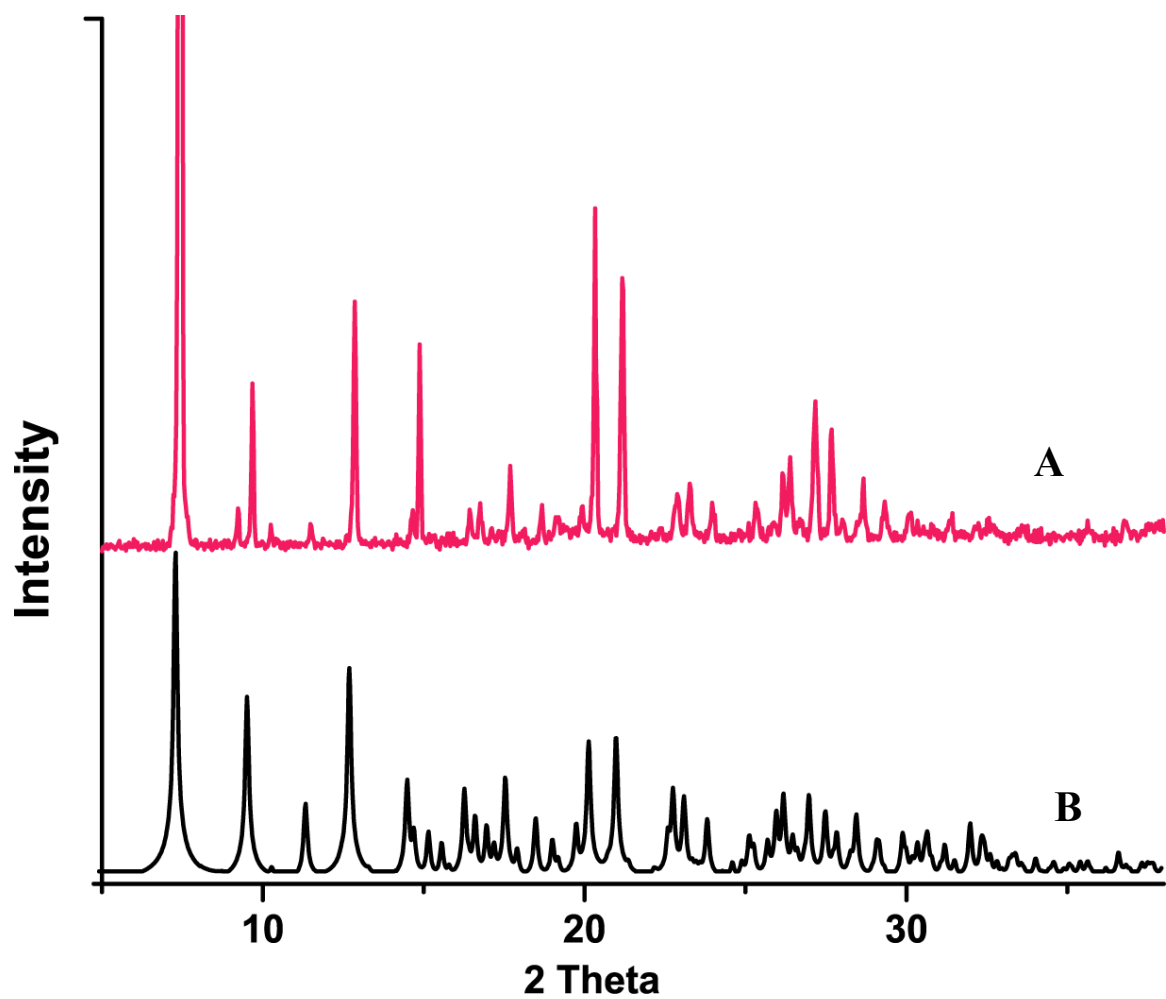


Figure S8. PXRD diffractograms of compound **4**: **A**) obtained from **1**, and **B**) calculated using the respective CIF file

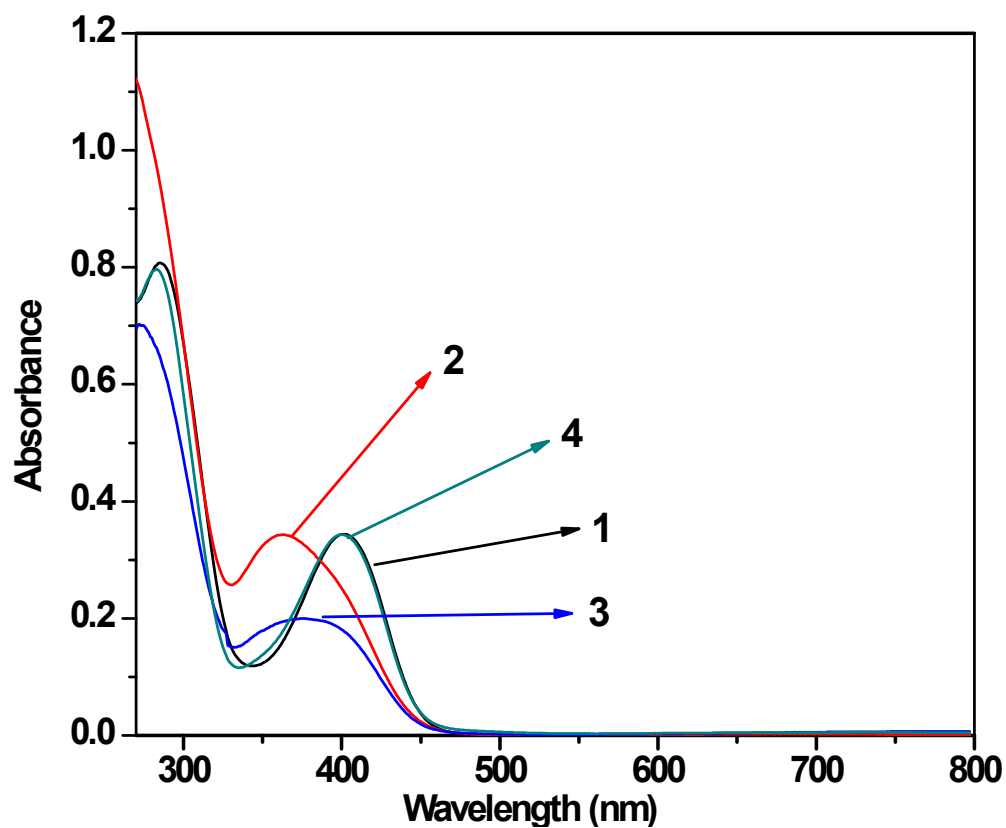


Figure S9. UV-vis spectra (270–800 nm) of **1–4** at room temperature.

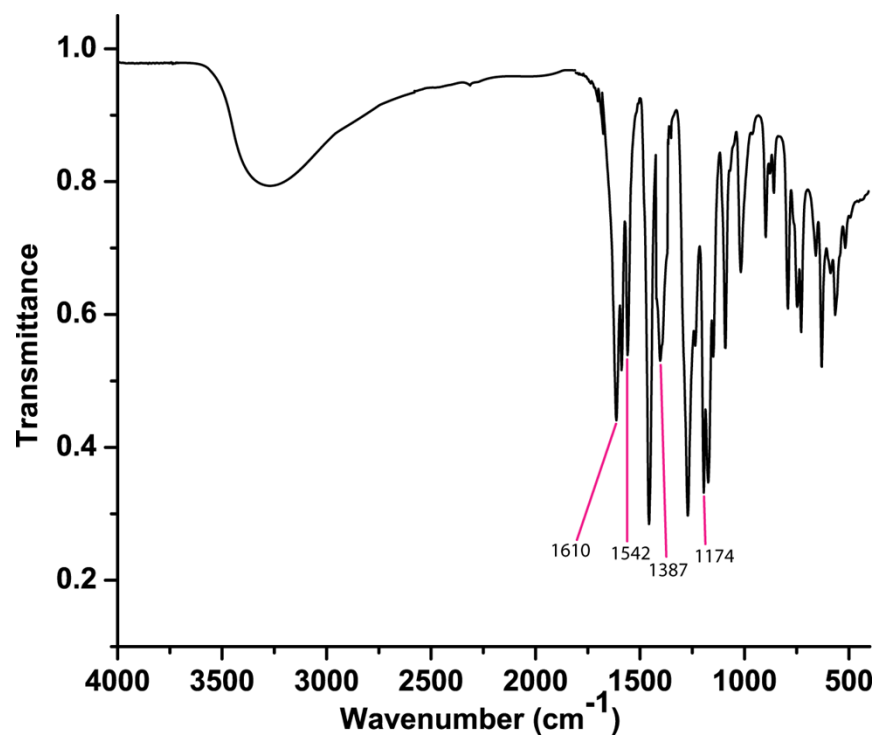


Figure S10. FT-IR spectrum (4000–400 cm⁻¹) of **1**.

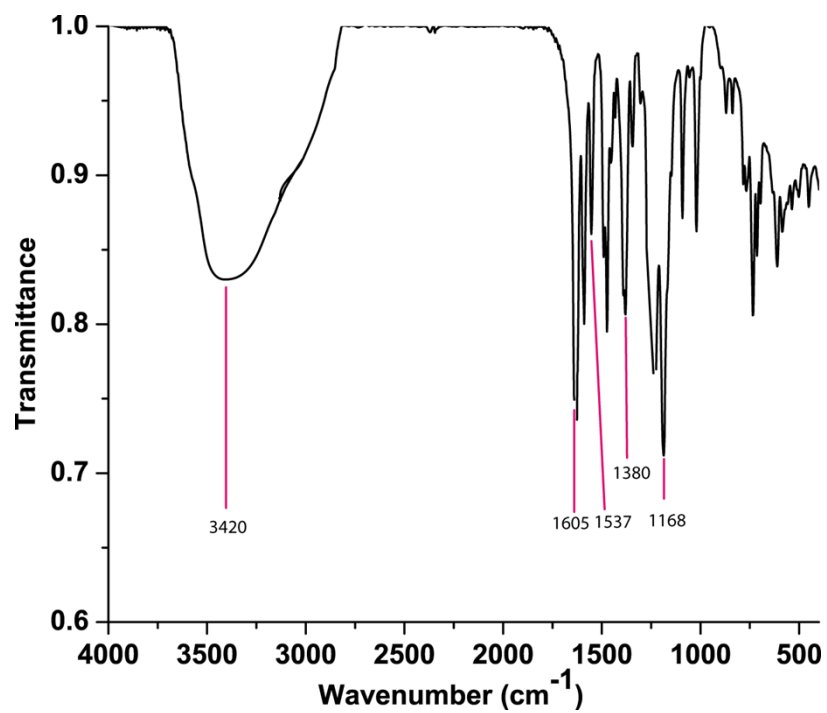


Figure S11. FT-IR spectrum (4000–400 cm⁻¹) of **2**.

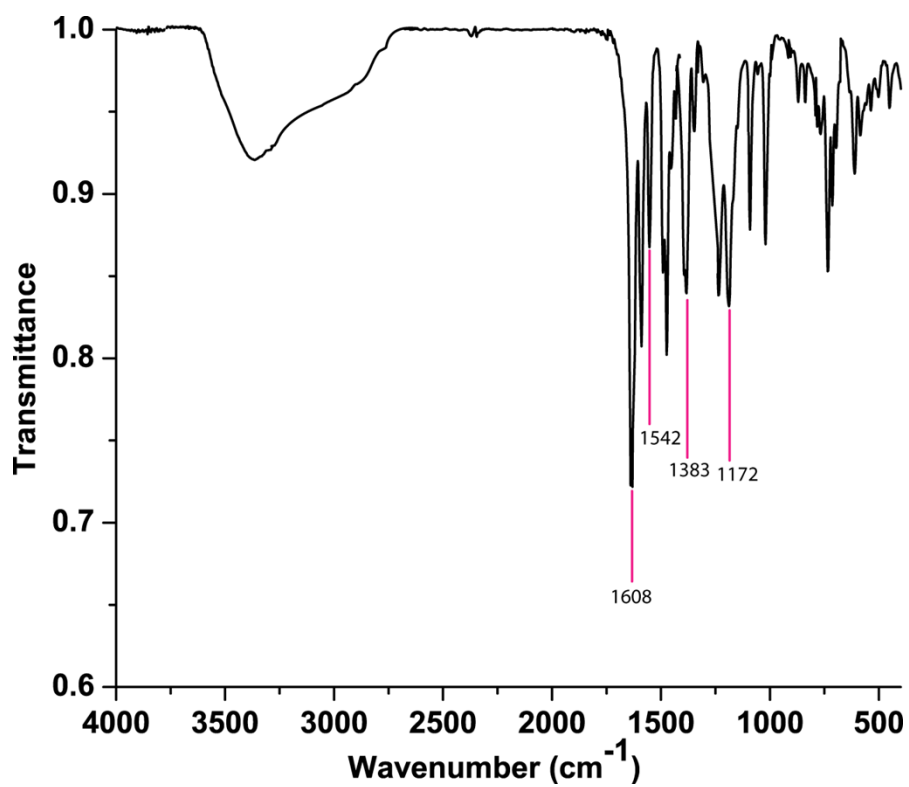


Figure S12. FT-IR spectrum (4000–400 cm⁻¹) of **3**.

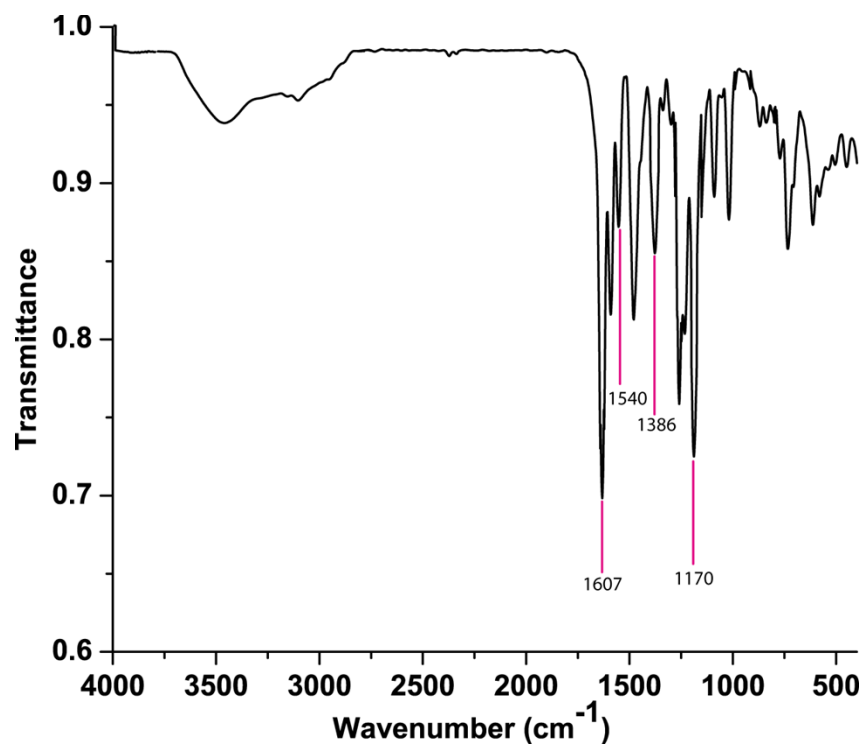


Figure S13. FT-IR spectrum (4000–400 cm⁻¹) of **4**.

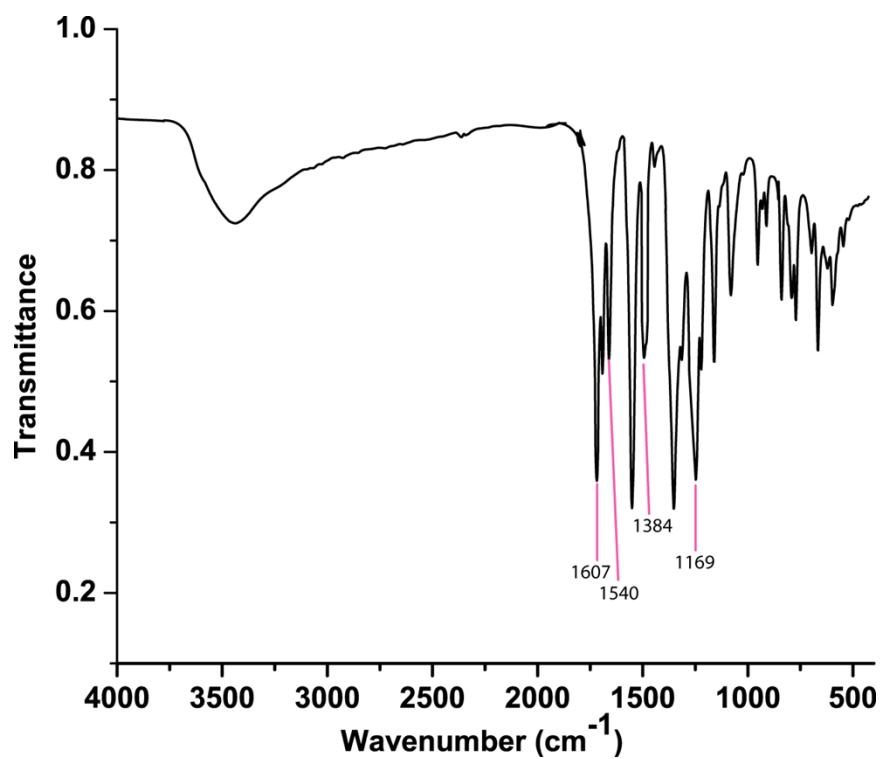


Figure S14. FT-IR spectrum (4000–400 cm⁻¹) of **5**.