

Silver(I) and Copper(I) Complexation with Decachloro-*closo*-decaborate
Anion

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ELECTRONIC SUPPORTING INFORMATION

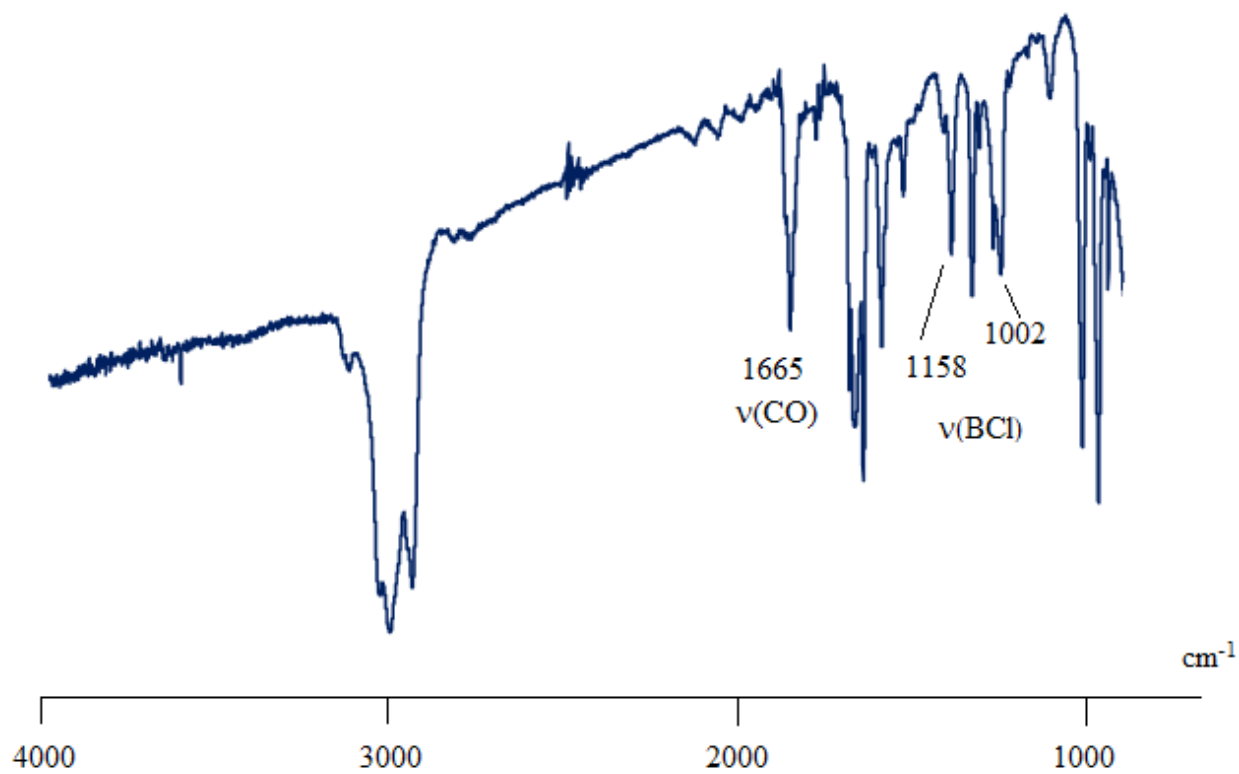


Fig. S1. IR spectrum of complex $[\text{Ag}(\text{PPh}_3)_2(\text{DMF})_2]_2[\text{B}_{10}\text{Cl}_{10}]$ ($1 \cdot 2\text{DMF}$).

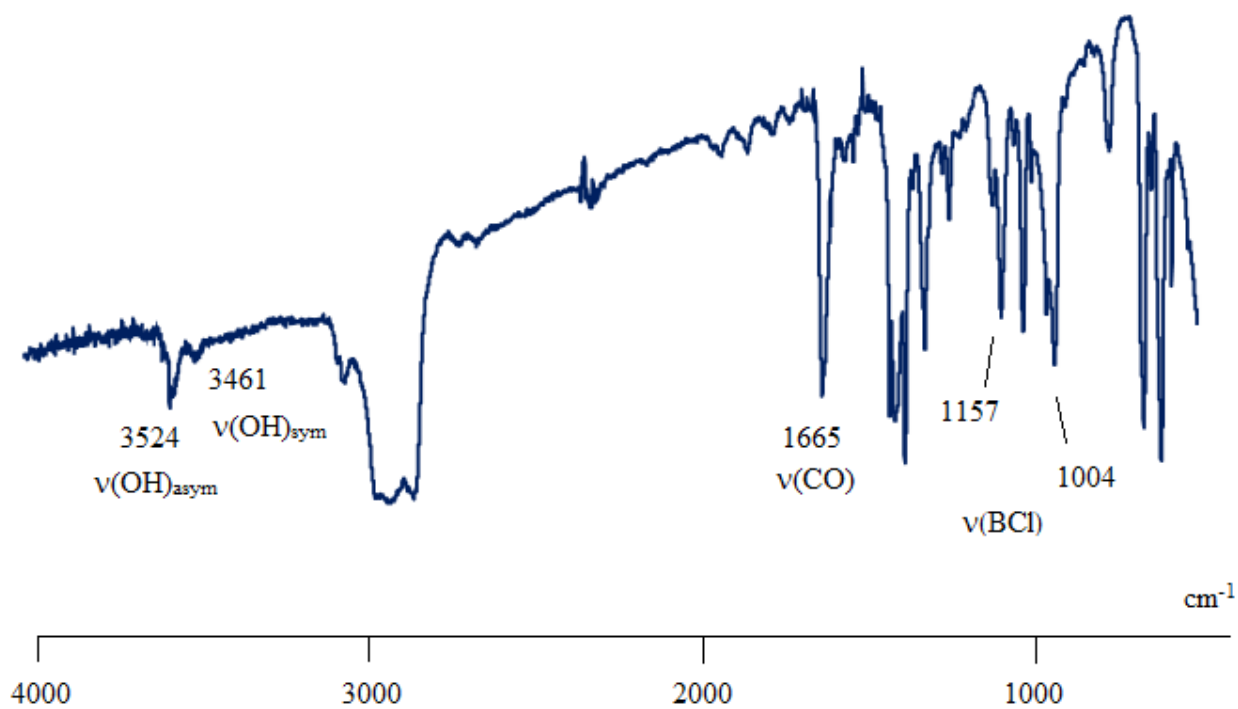


Fig. S2. IR spectrum of complex $[\text{Ag}(\text{PPh}_3)_3(\text{H}_2\text{O})_2]_2[\text{B}_{10}\text{Cl}_{10}]$ ($2 \cdot 4\text{DMF}$).

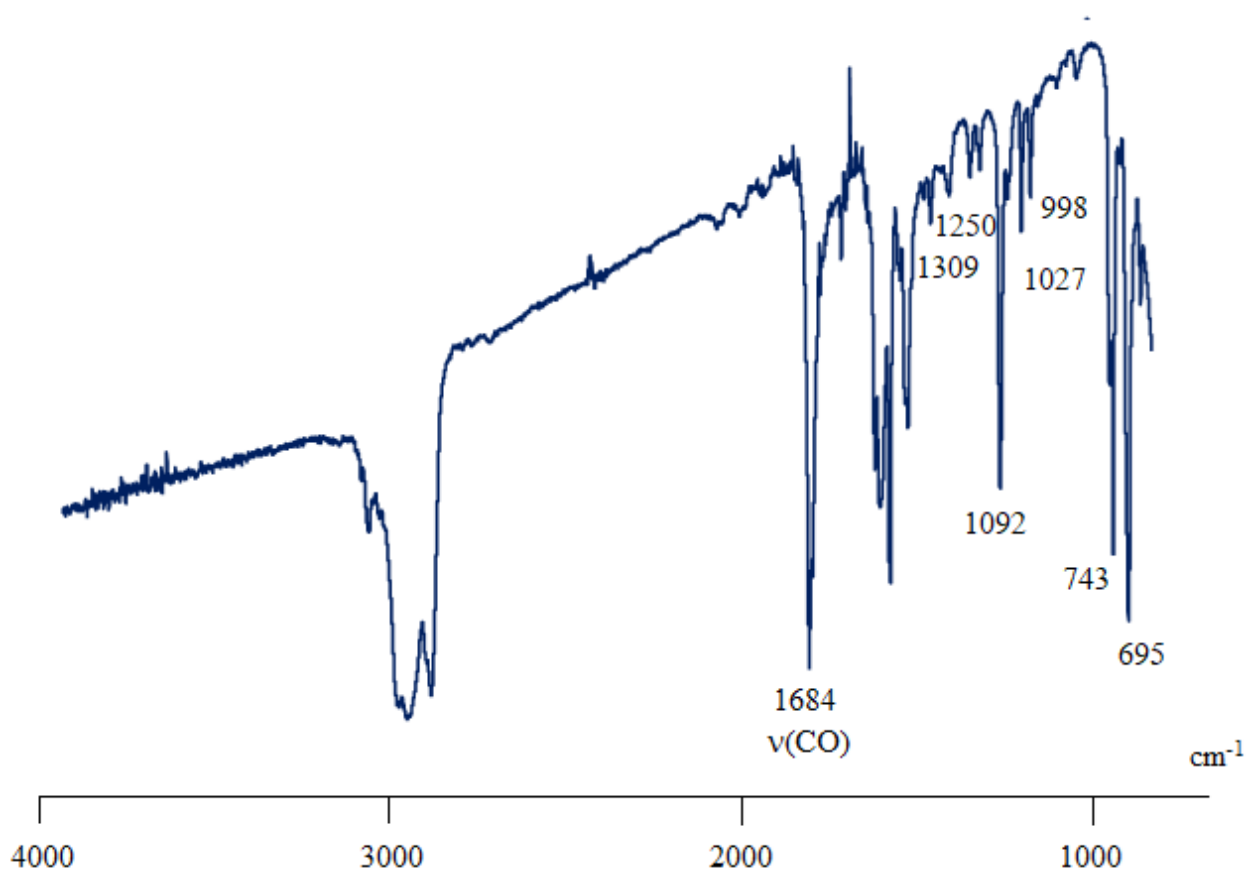


Fig. S3. IR spectra of a mixture of copper complexes **3** · 2DMF and **4**.

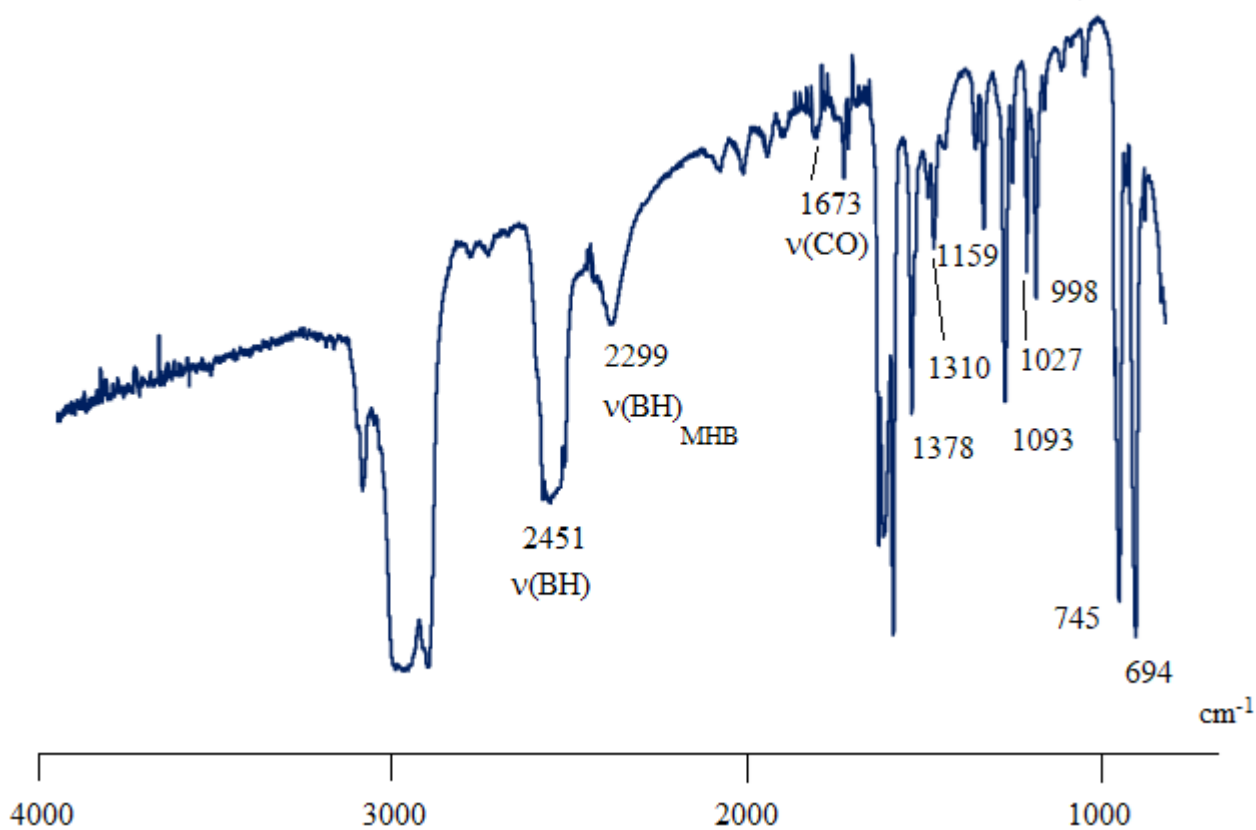


Fig. S4. IR spectrum of complex $[\text{Ag}(\text{Ph}_3\text{P})_4][\text{Ag}(\text{Ph}_3\text{P})_2[\text{B}_{10}\text{H}_{10}]]$ (**5** · 0.1 H_2O).

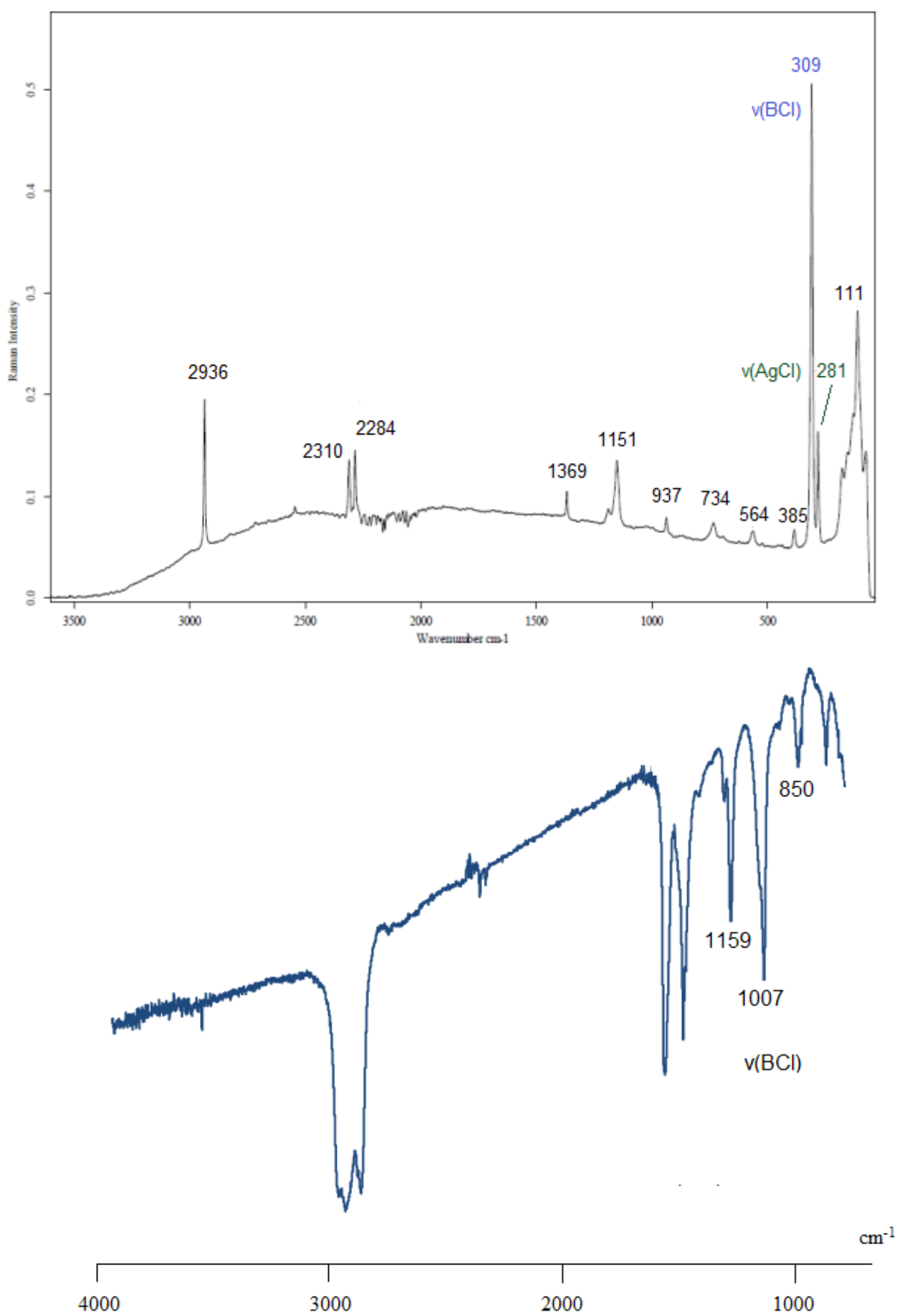


Fig. S5. Raman (above) and IR (below) spectra of complex $[Ag_2[B_{10}Cl_{10}]]$ (6).

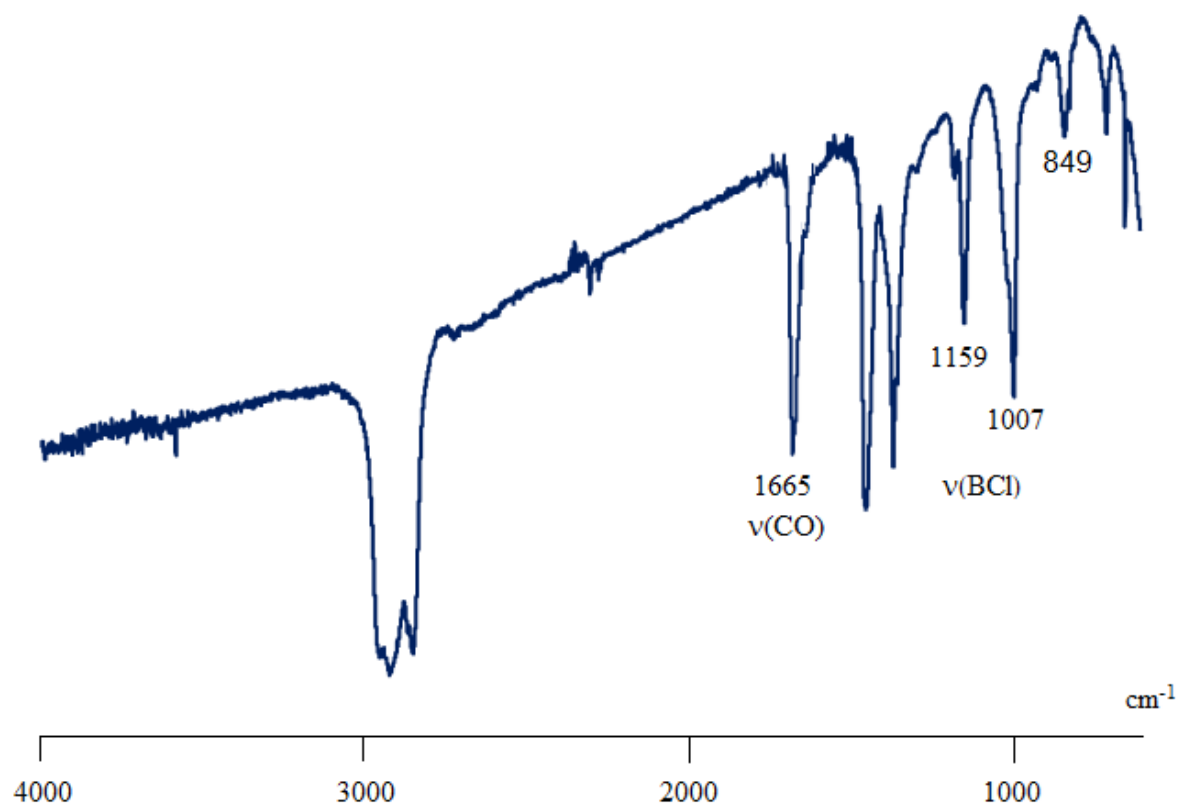
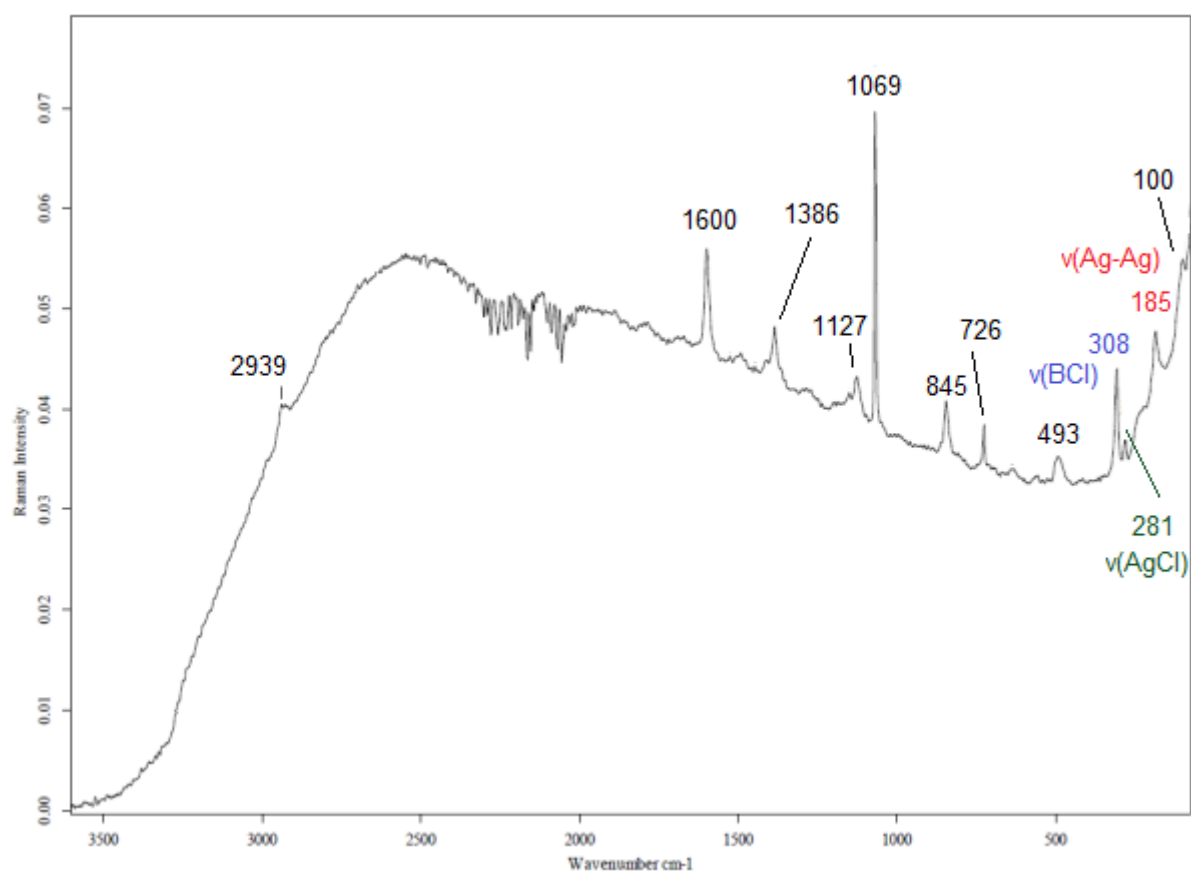


Fig. S6. Raman (above) and IR (below) spectra of complex $[\text{Ag}_2(\text{DMF})_2[\text{B}_{10}\text{Cl}_{10}]]_n$ (**7**).

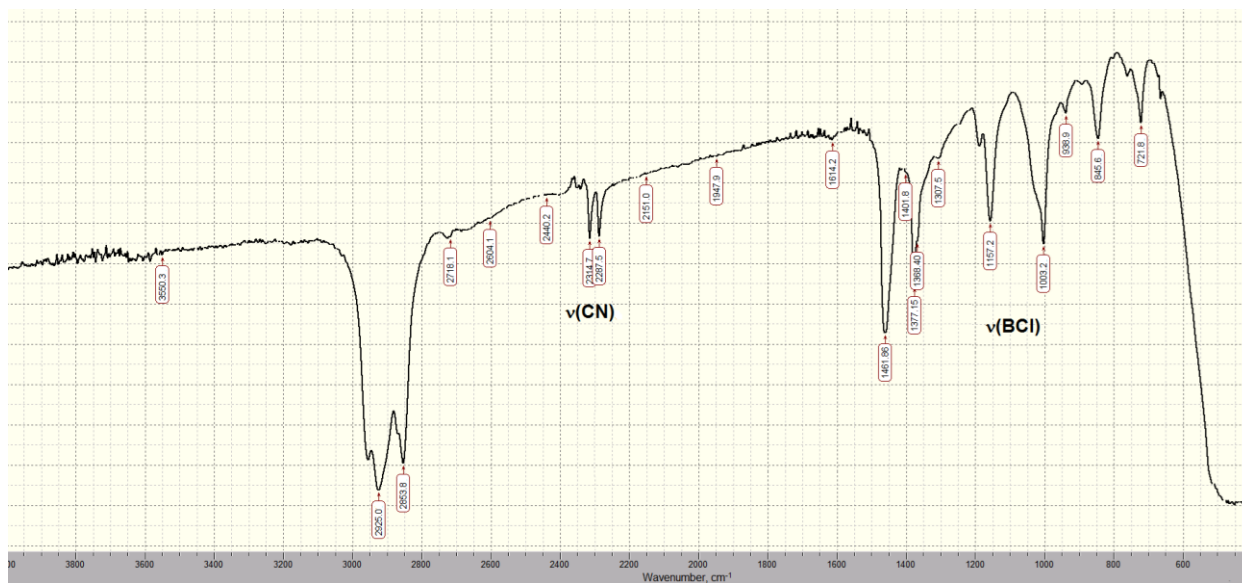
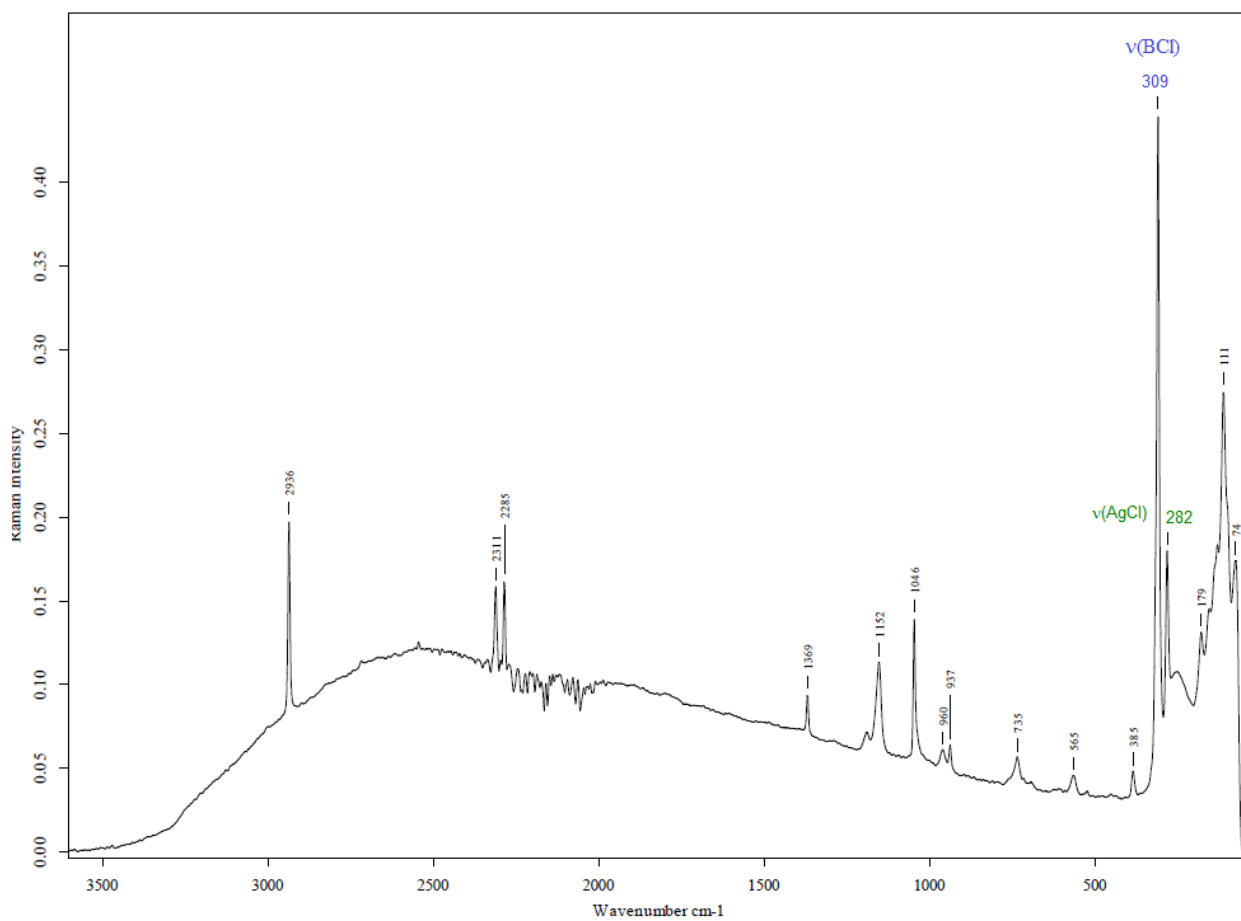


Fig. S7. Raman (above) and IR (below) spectra of complex $[Ag_2(CH_3CN)_2[B_{10}Cl_{10}]]_n$ (**8**).

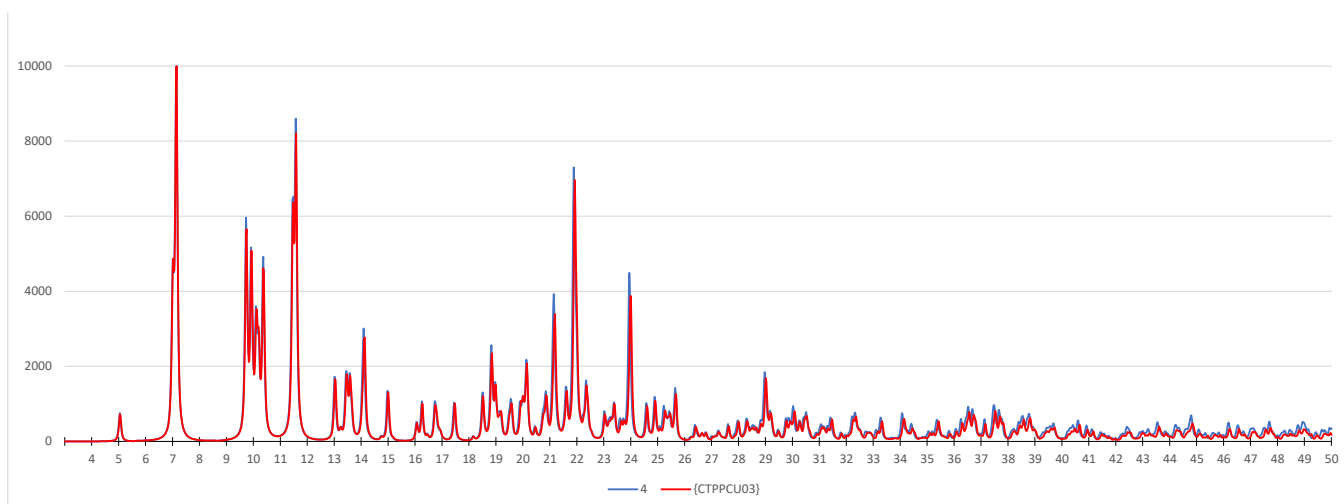


Fig. S8. Calculated X-ray diffraction patterns for **4** and {CTPPCU03}.

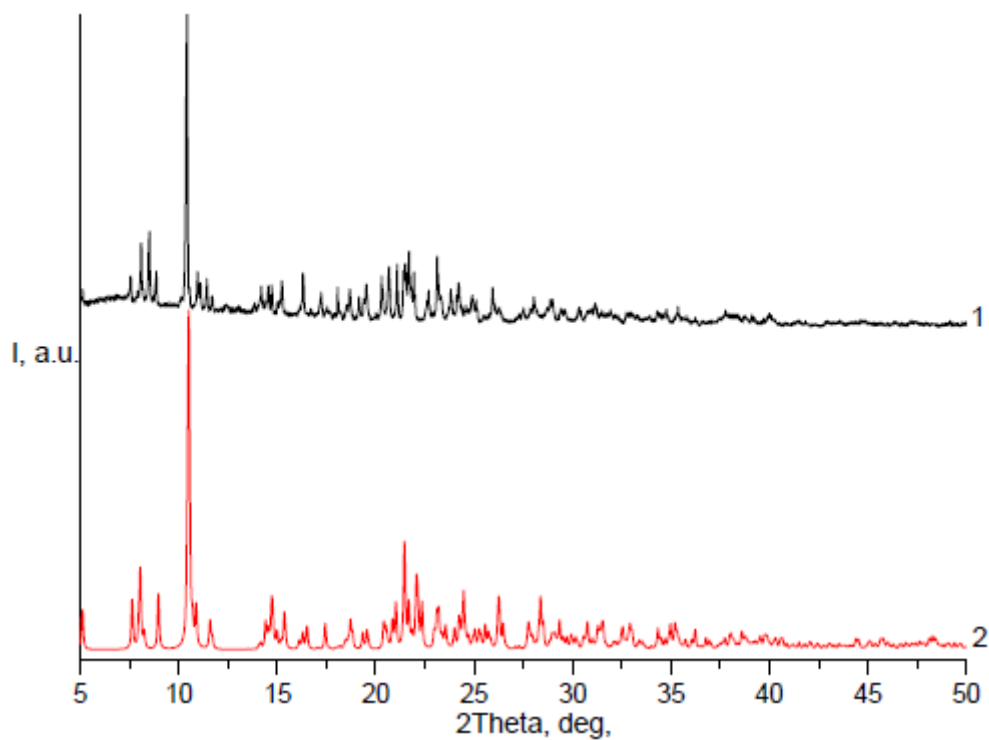


Fig. S9. (1) Experimental and (2) calculated X-ray diffraction pattern for **1** · 2DMF.

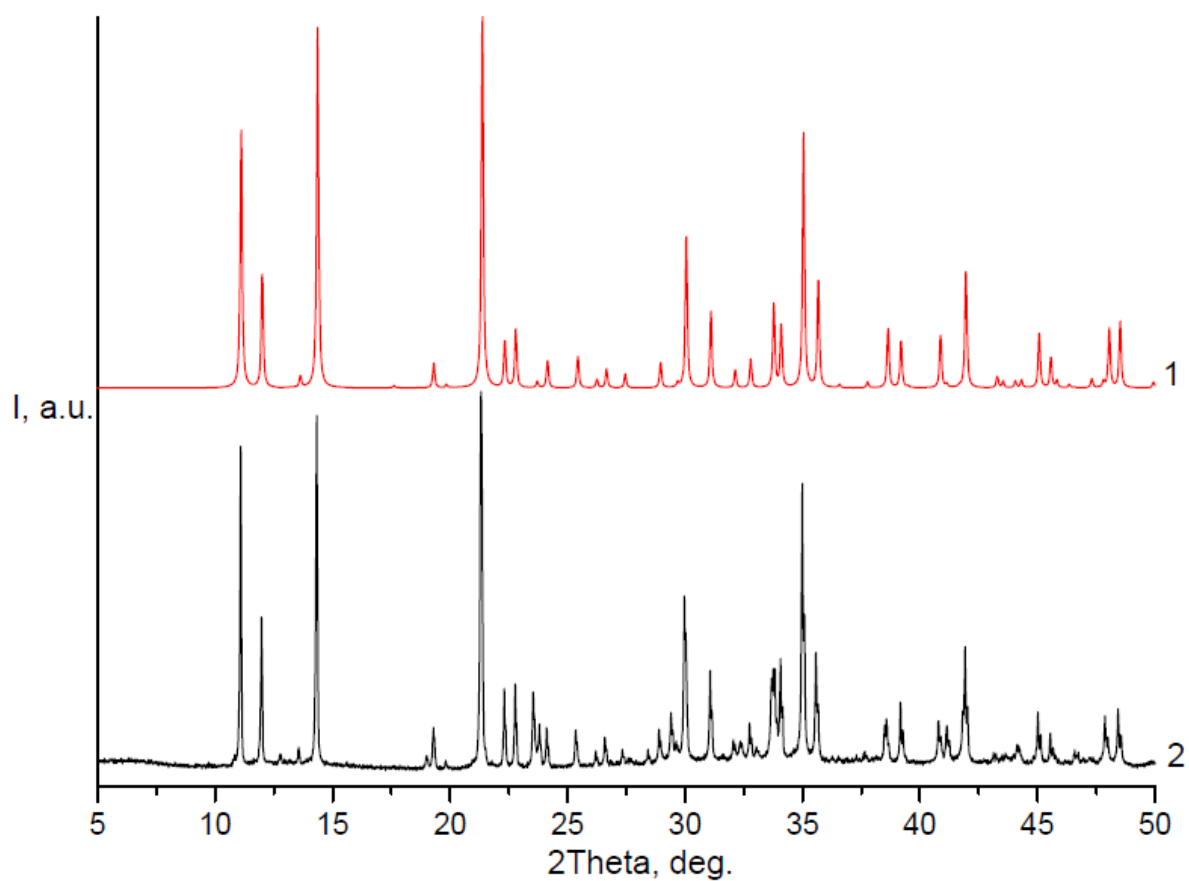


Fig. S10. (1) Experimental and (2) calculated X-ray diffraction pattern for complex 6.

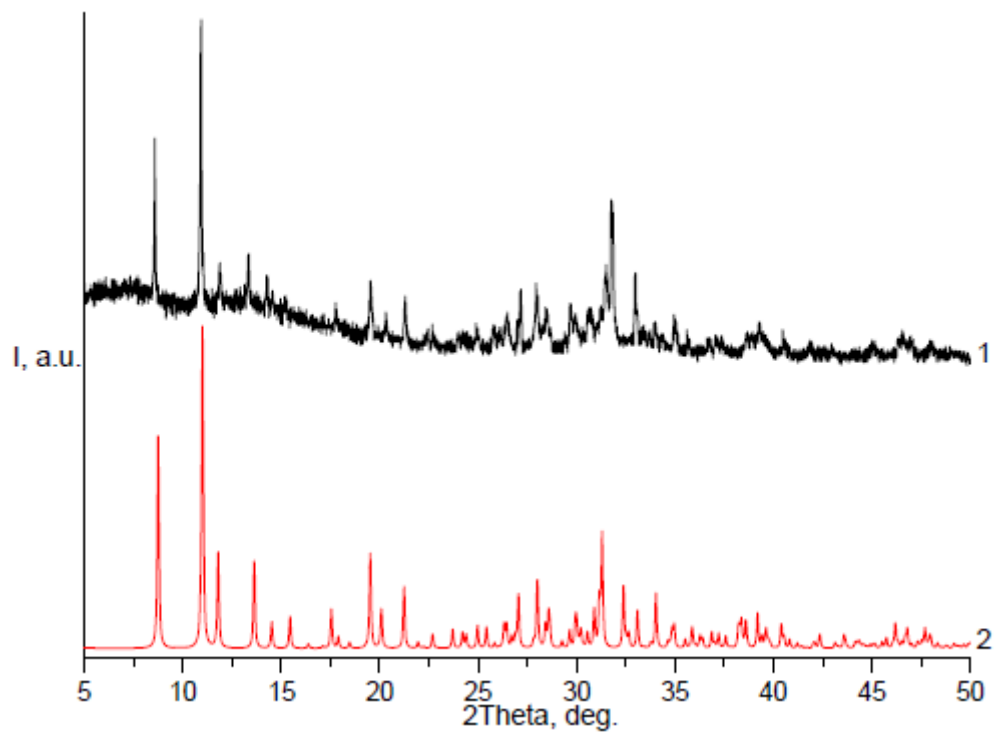


Fig. S11. (1) Experimental and (2) calculated X-ray diffraction pattern for complex 7.

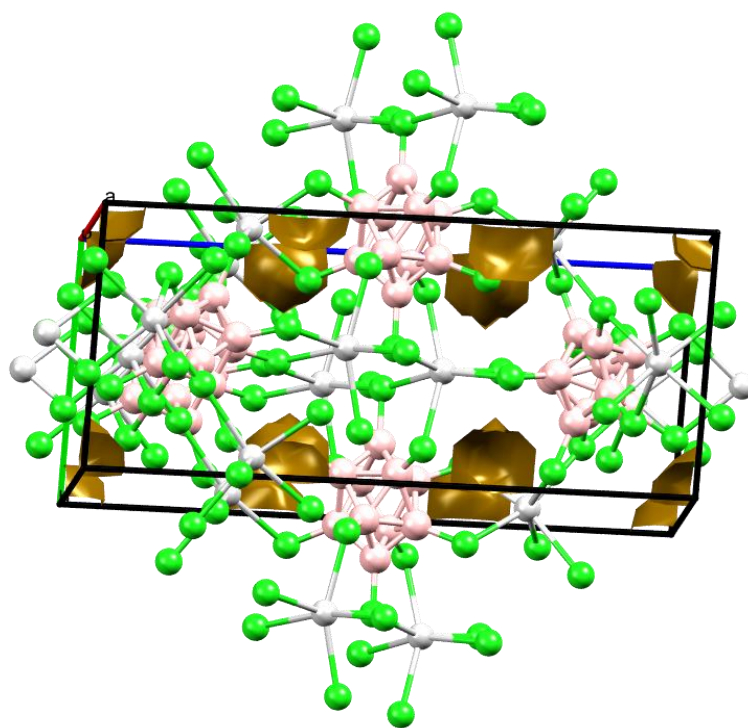


Fig. S12. Calculated voids in solid **6**.