Table S1. Results of SQUEEZE procedure for crystals of **1**-**3**.

	Calculated accessible volume for solvent (Å^3)	Calculated electrons per asymmetric unit	Suggested chemical identification of solvent molecules	Electrons per asymmetric unit
1	157	67	1 CH_3OH, 4.5 H_2O	63
2	174	45	4.5 H_2O	45
3	238	114	3 CH_3OH, 6 H_2O	114

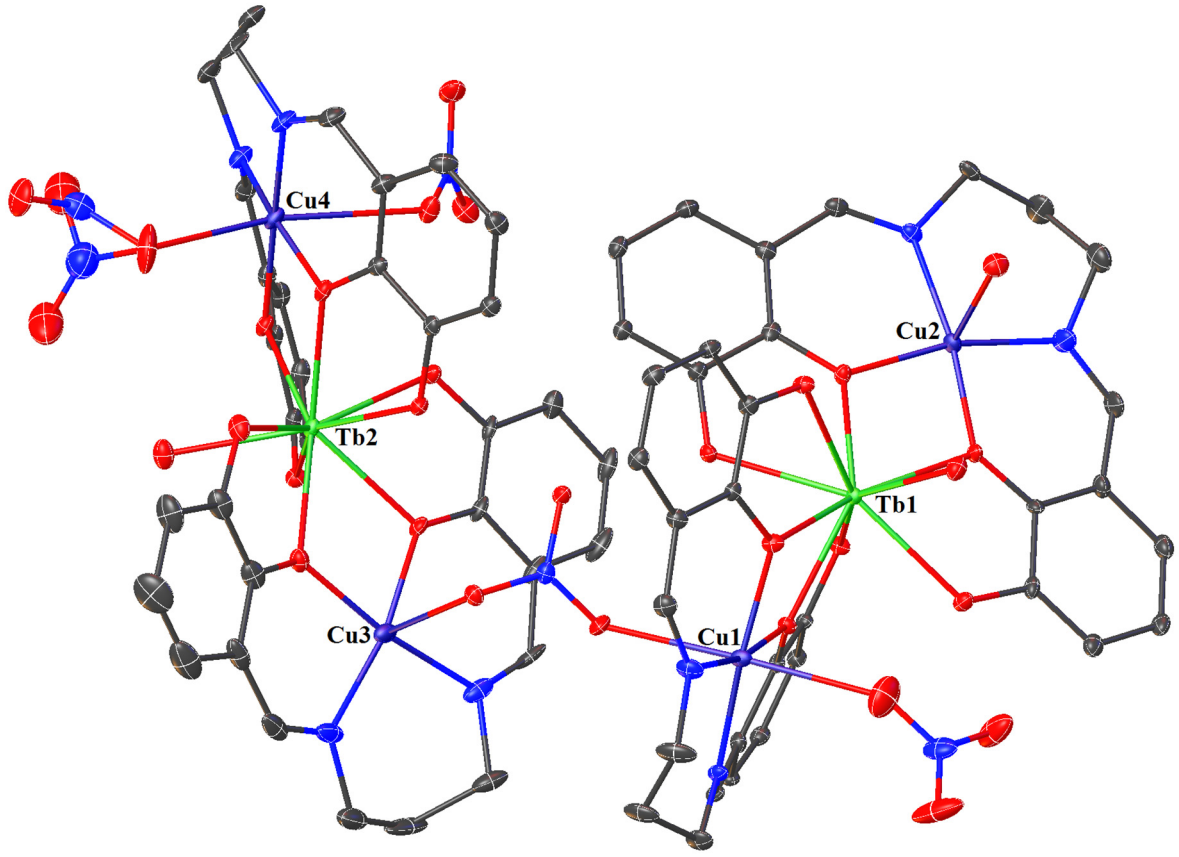

Figure S1. The molecular structure of **1**. Displacement ellipsoids are drawn at the 30% probability level. For clarity, the H atoms, counter ions and the noncoordinated solvent molecules are omitted.

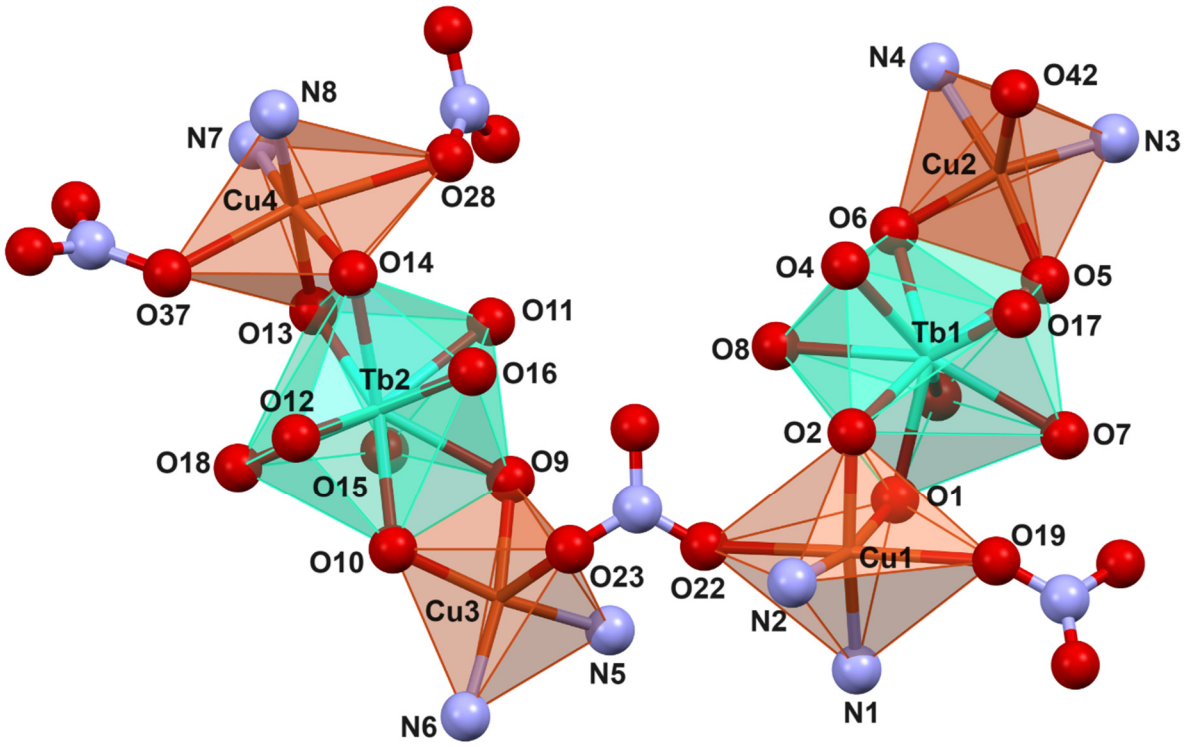

Figure S2. Coordination environment of Cu(II) and Tb(III) ions in compound **1.**

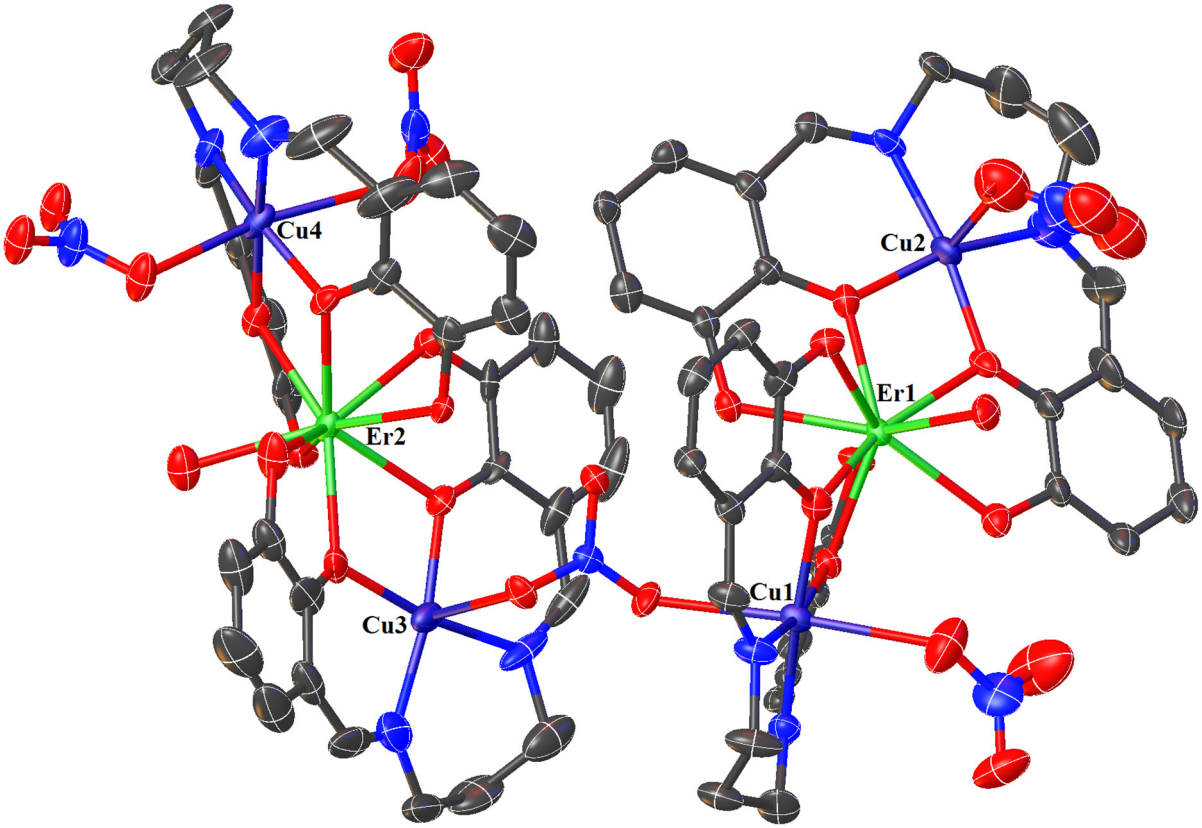

Figure S3. The molecular structure of **3**. Displacement ellipsoids are drawn at the 30% probability level. For clarity, the H atoms, counter ions and the noncoordinated solvent molecules are omitted.

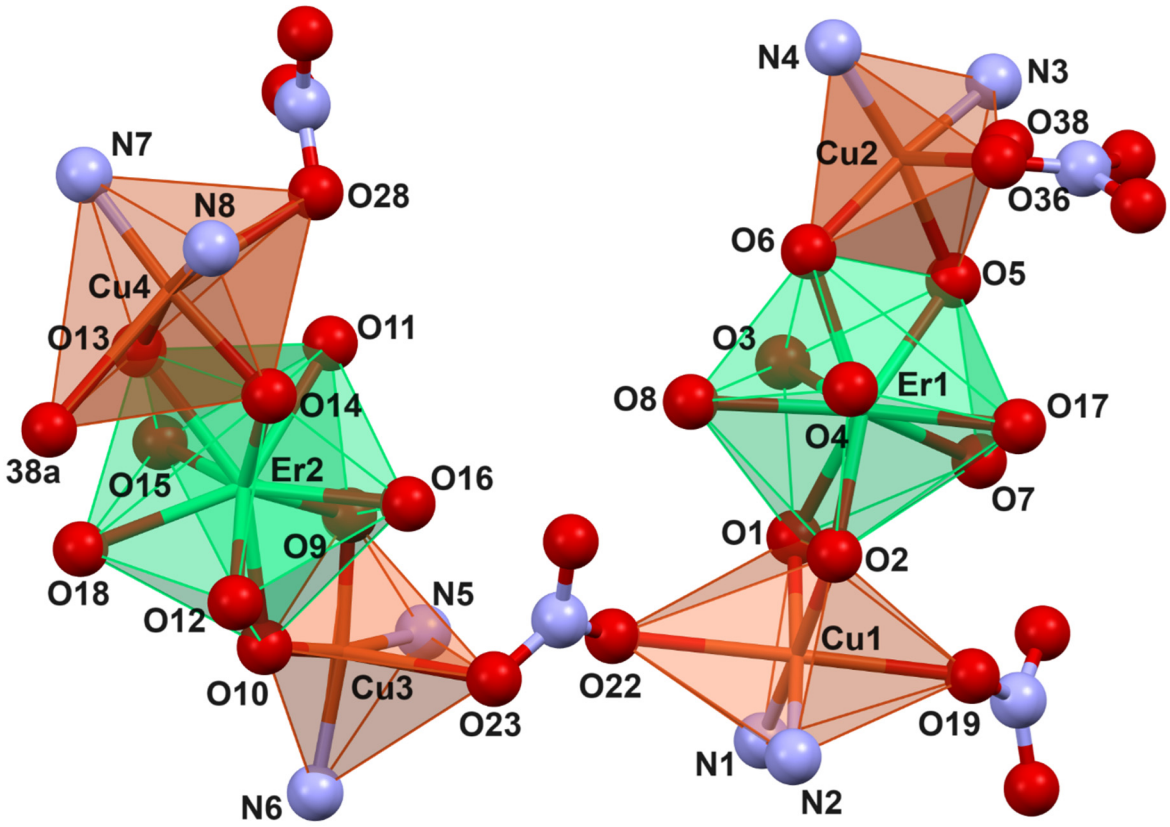

Figure S4. Coordination environment of Cu(II) and Er(III) ions in compound **3.**

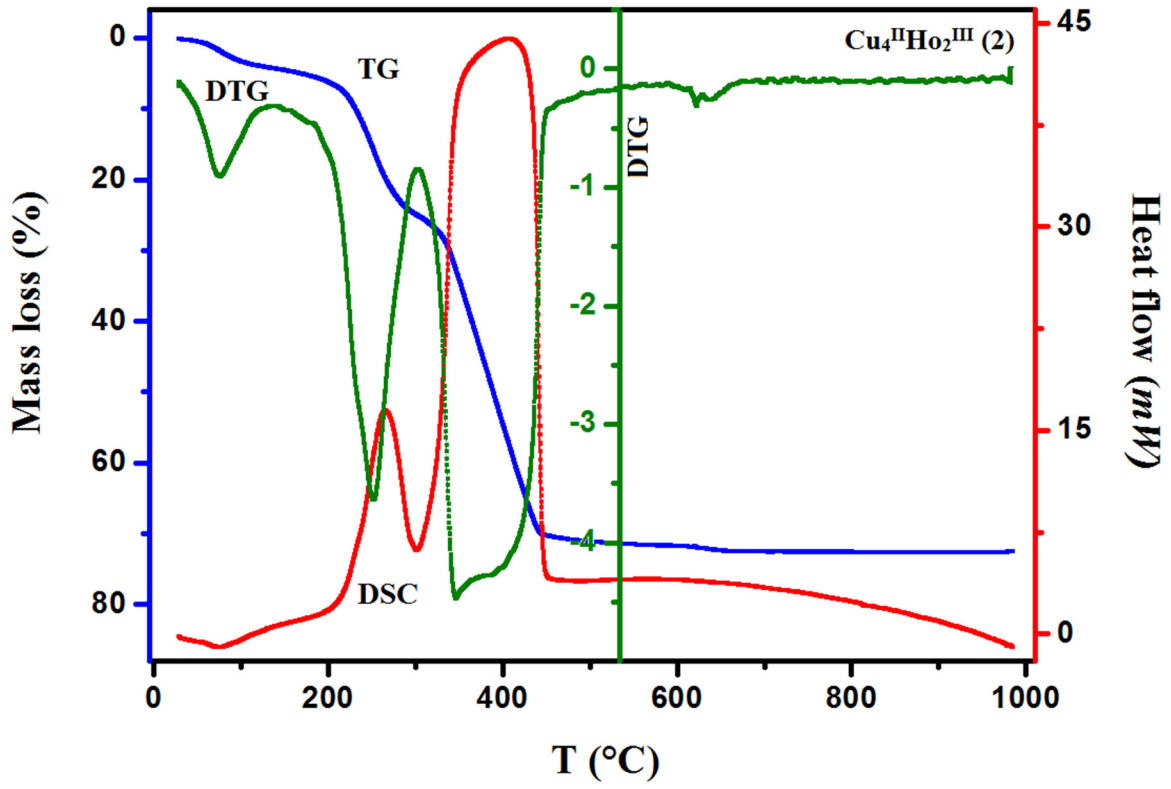

Figure S5. TG, DTG and DCS curves of thermal decomposition of the complex **2** in air.

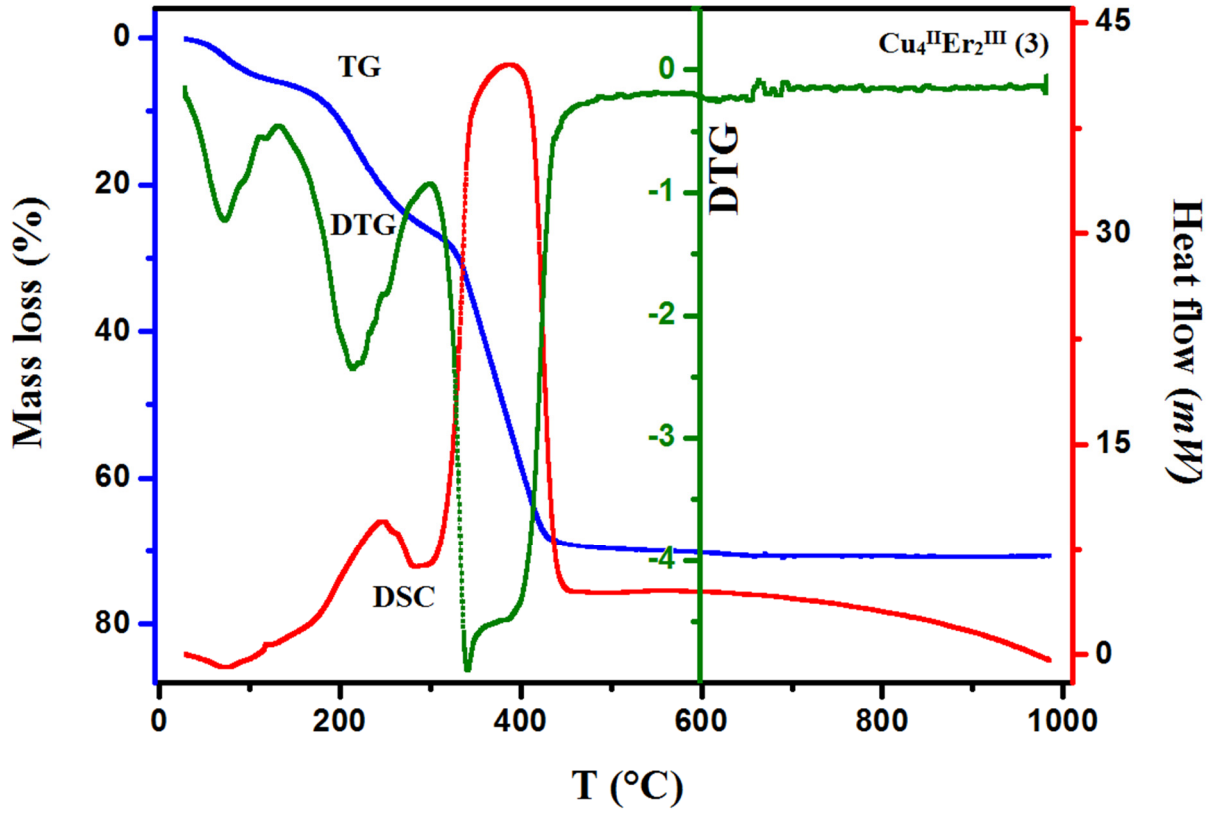

Figure S6. TG, DTG and DCS curves of thermal decomposition of the complex **3** in air.