Electronic Supplementary Material (ESI) for CrystEngComm

A novel 1-D Telluridoindate based on rare tetramer $[In_4Te_{10}]^{4-}$ unit with photocatalytic properties

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Table S1 The selected bond lengths and angles of **1**.

In(1)-Te(1)	2.7839(13)	In(2)-Te(3)	2.7858(11)
In(1)-Te(1)#1	2.7839(13)	In(3)-N(2)	2.263(17)
In(1)-Te(2)	2.7943(12)	In(3)-N(1)	2.323(12)
In(1)-Te(2)#2	2.7943(12)	In(3)-N(1)#3	2.323(12)
In(2)-Te(2)#2	2.7768(11)	In(3)-Te(3)#3	2.7254(10)
In(2)-Te(2)	2.7768(11)	In(3)-Te(3)	2.7254(10)
In(2)-Te(3)#2	2.7858(11)		
Te(1)-In(1)-Te(1)#1	99.26(5)	Te(2)#2-In(2)-Te(2)	99.91(5)
Te(1)-In(1)-Te(2)	114.860(15)	Te(2)#2-In(2)-Te(3)#2	116.156(14)
Te(1)#1-In(1)-Te(2)	114.860(15)	Te(2)-In(2)-Te(3)#2	116.156(14)
Te(1)-In(1)-Te(2)#2	114.860(15)	Te(2)#2-In(2)-Te(3)	116.156(14)
Te(1)#1-In(1)-Te(2)#2	114.860(15)	Te(2)-In(2)-Te(3)	116.156(14)
Te(2)-In(1)-Te(2)#2	99.06(5)	Te(3)#2-In(2)-Te(3)	93.51(5)
N(2)-In(3)-N(1)	73.1(3)	N(2)-In(3)-Te(3)	120.17(3)
N(2)-In(3)-N(1)#3	73.1(3)	N(1)-In(3)-Te(3)	98.41(15)
N(1)-In(3)-N(1)#3	146.2(6)	N(1)#3-In(3)-Te(3)	98.41(15)
N(2)-In(3)-Te(3)#3	120.17(3)	Te(3)#3-In(3)-Te(3)	119.66(5)
N(1)-In(3)-Te(3)#3	98.41(15)	N(1)#3-In(3)-Te(3)#3	98.41(15)

Symmetry transformations used to generate equivalent atoms: (#1) $-x+1, -y+1, -z+1$; (#2) $-x+1, -y+1, z$; (#3) $-x, -y+1, z$.

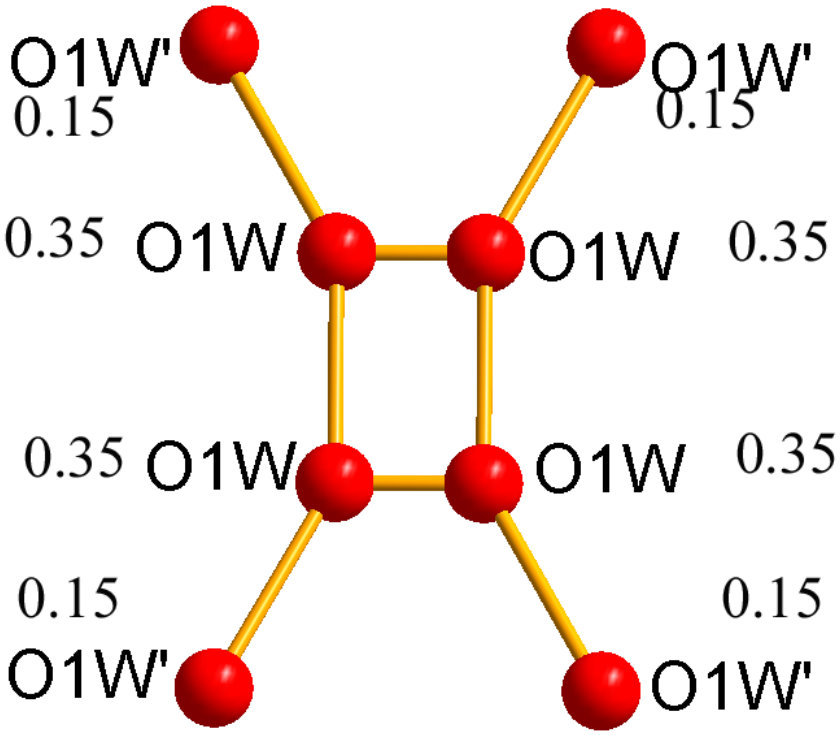

Figure S1 The disordered model of two O atoms with site occupation factors.

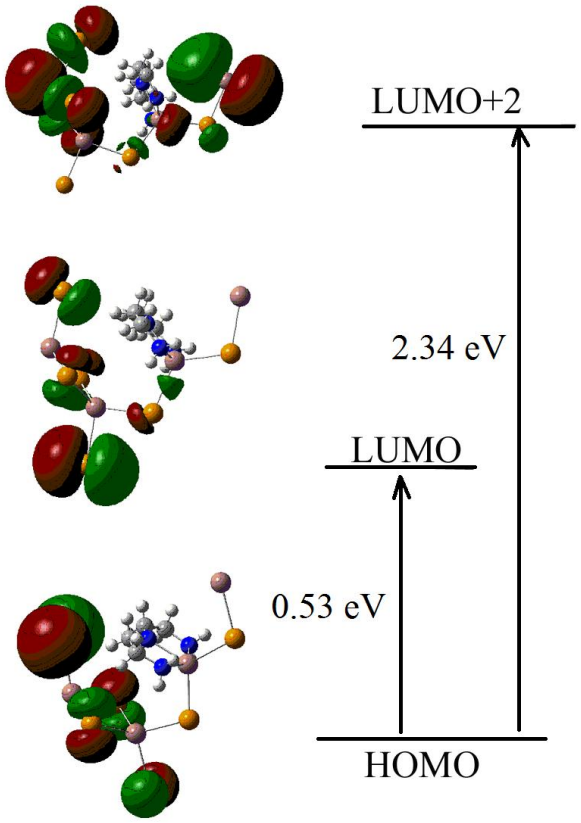

Figure S2 Calculated electronic band structure and the HOMO, LUMO and LUMO+2 population of the $[In_3Te_5(dien)]$ species.

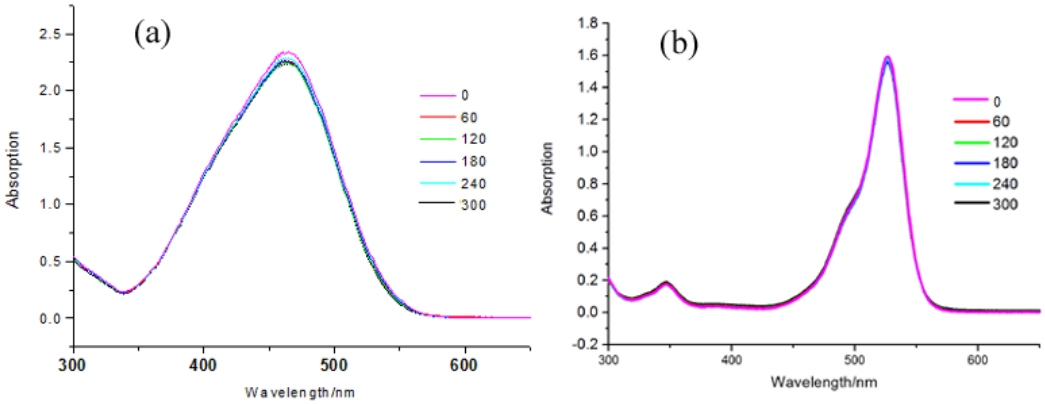

Figure S3 Absorption spectra of the solution of MO (a, 5mg/L, 100ml) and RhB (b, 5mg/L, 100ml) in the absence of **1** under exposure to UV light.

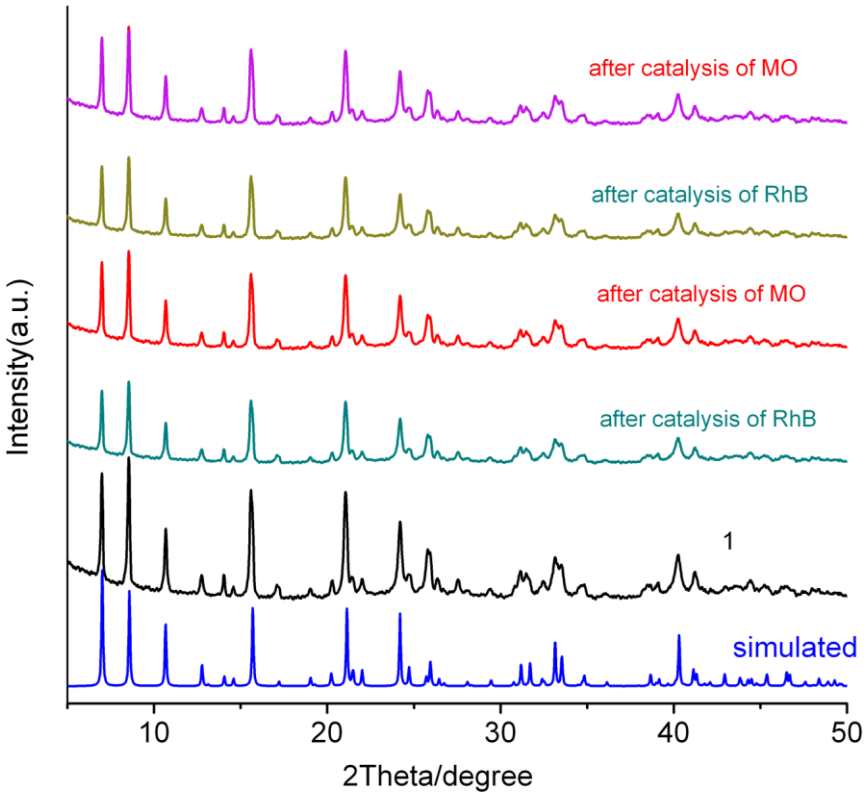

Figure S4. Simulated, experimental and after catalysis of RhB or Mo powder XRD patterns of **1**.

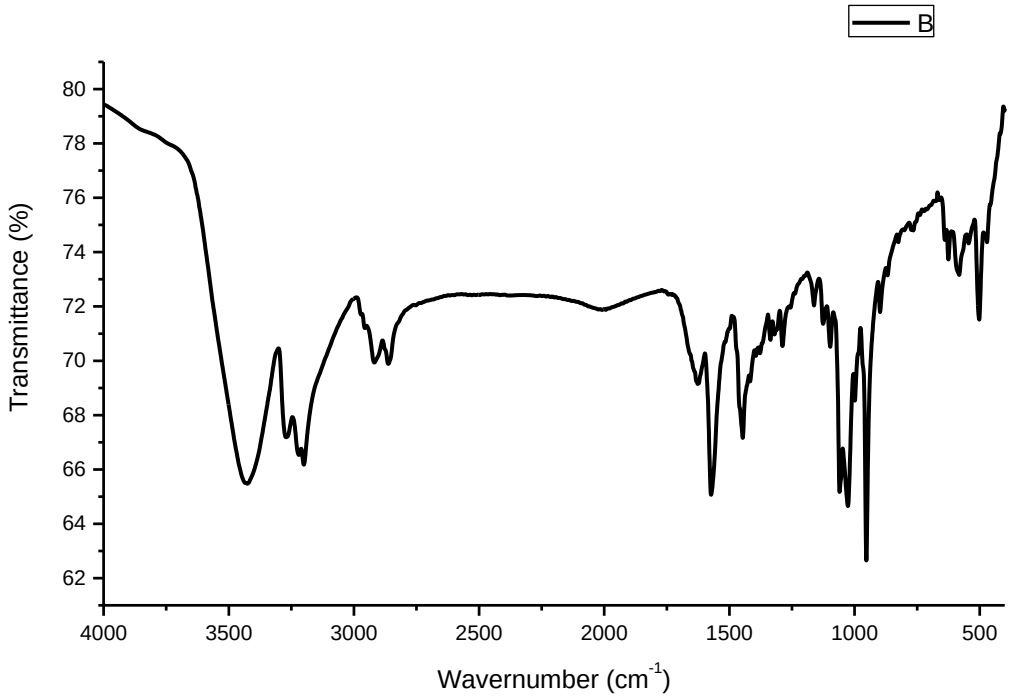

Figure S4 IR spectrum of **1**.