

Trilacunary A - β -Keggin tungstogermanates and – silicates functionalized with phenyltin(IV) electrophiles

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Supporting Information

Fig. S1. ^{183}W -NMR spectrum recorded on a reaction mixture of **1** after approximately two days.

Fig. S2. Infrared spectra of **Cs-1**, **Cs-2**, **Cs-3** and **Cs-4**.

Fig. S3. Thermogravimetric curves of **Cs-1**, **Cs-2**, and **Cs-4**.

Fig. S4. ORTEP view and labeling scheme for the two independent polyanions **1** in the asymmetric unit of **Cs-1**; 50 % probability displacement ellipsoids; hydrogen atoms have been omitted for clarity.

Fig. S5. View of the crystal packing of **Cs-1** along the crystallographic b axis together with a detail consisting of a projection of a layer of chains of **1** on the (001) plane. Hydrogen atoms, cesium cations, and hydration water molecules have been omitted for clarity. Color code: WO_6 octahedra, grey; $(\text{C}_6\text{H}_5)\text{SnO}_5$ octahedra, white; C, black; O, dark grey; Ge, light grey.

Electronic Supplementary Information for Dalton Transactions
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Fig. S6. View of the crystal packing of **Cs-2** along the crystallographic *b* axis together with a detail consisting of a projection of a layer of **2** on the (100) plane. Hydrogen atoms, cesium cations, hydration water molecules, and phenyl rings in the detail have been omitted for clarity. Color code: same as Fig. S4.

Fig. S7. Solution ^1H -NMR (top) and ^{13}C -NMR (bottom) spectra for **1** recorded on redissolved samples.

Fig. S8. ORTEP view and labeling scheme of the two independent polyanions **3** in the asymmetric unit of **Cs-3**; 50 % probability displacement ellipsoids; hydrogen atoms have been omitted for clarity. *Symmetry code:* i) $-x+1, -y+2, -z-1$; ii) $-x+2, -y+2, -z$.

Fig. S9. ORTEP view of the $[\gamma\text{H}_2\text{GeW}_{10}\text{O}_{36}]^{6-}$ polyanion in $\text{Cs}_6[\gamma\text{H}_2\text{GeW}_{10}\text{O}_{36}]\cdot 8\text{H}_2\text{O}$; 50 % probability displacement ellipsoids; color code: Ge, dark grey; W, grey; O, light grey.

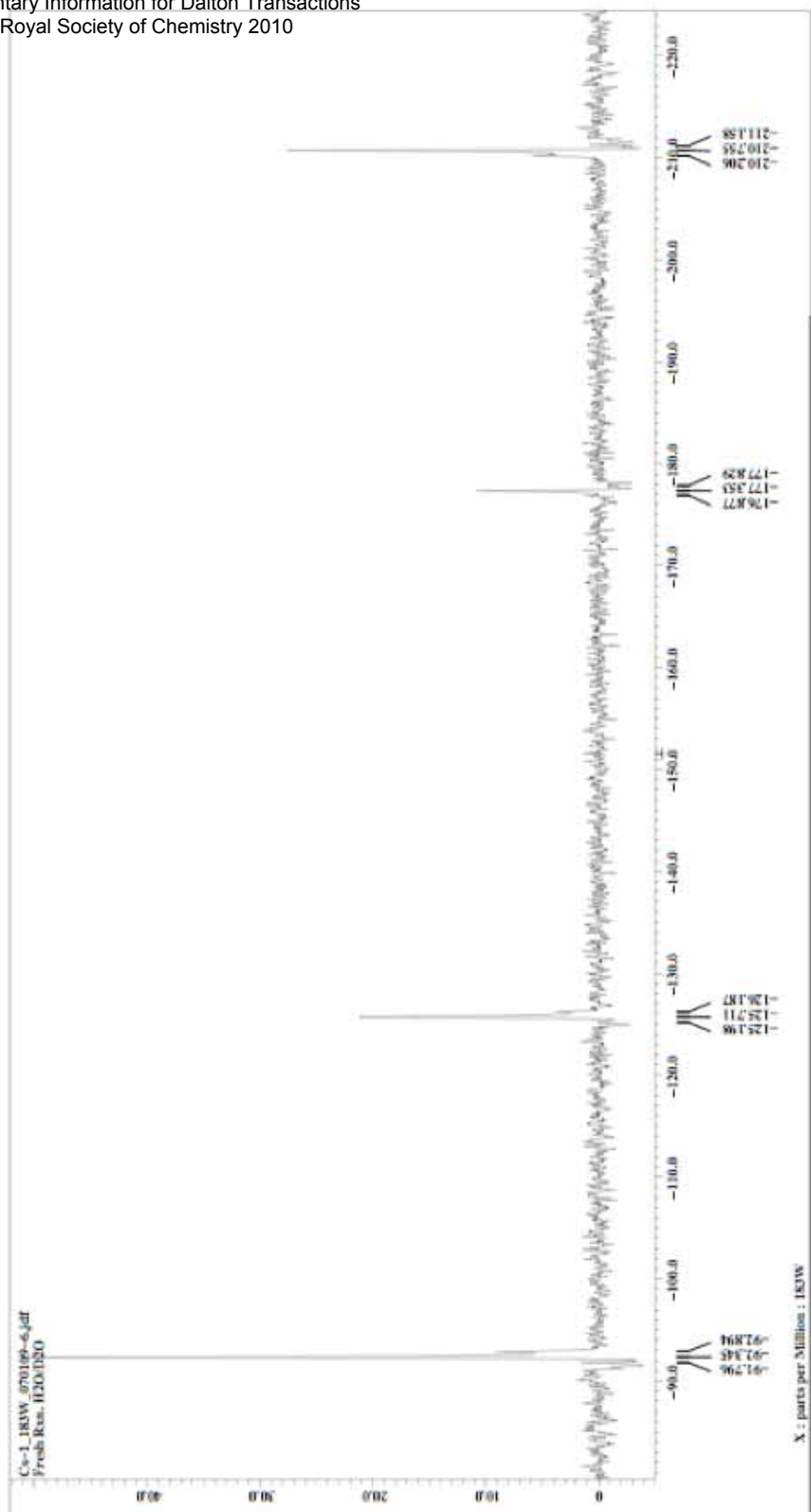


Figure S1

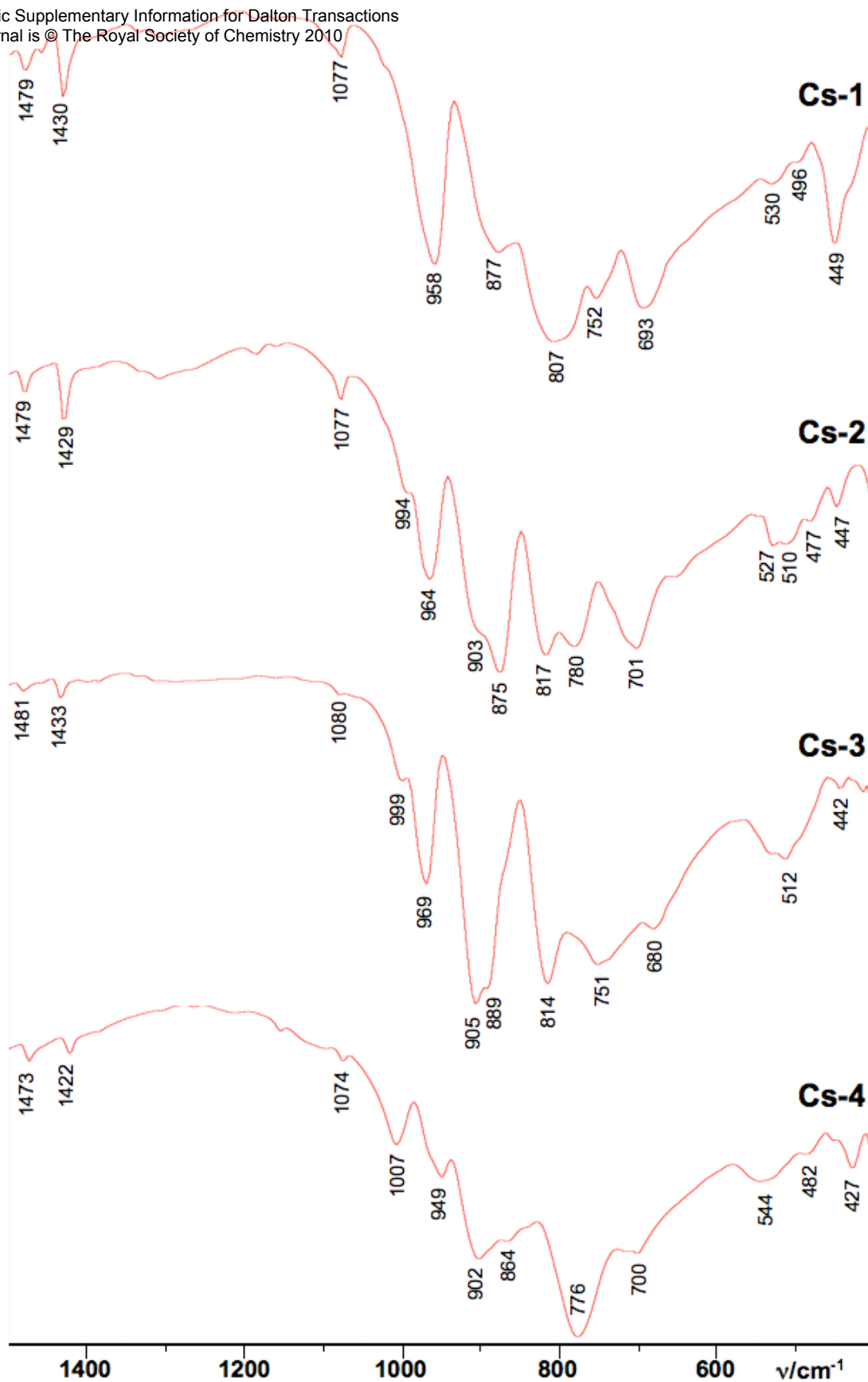


Figure S2

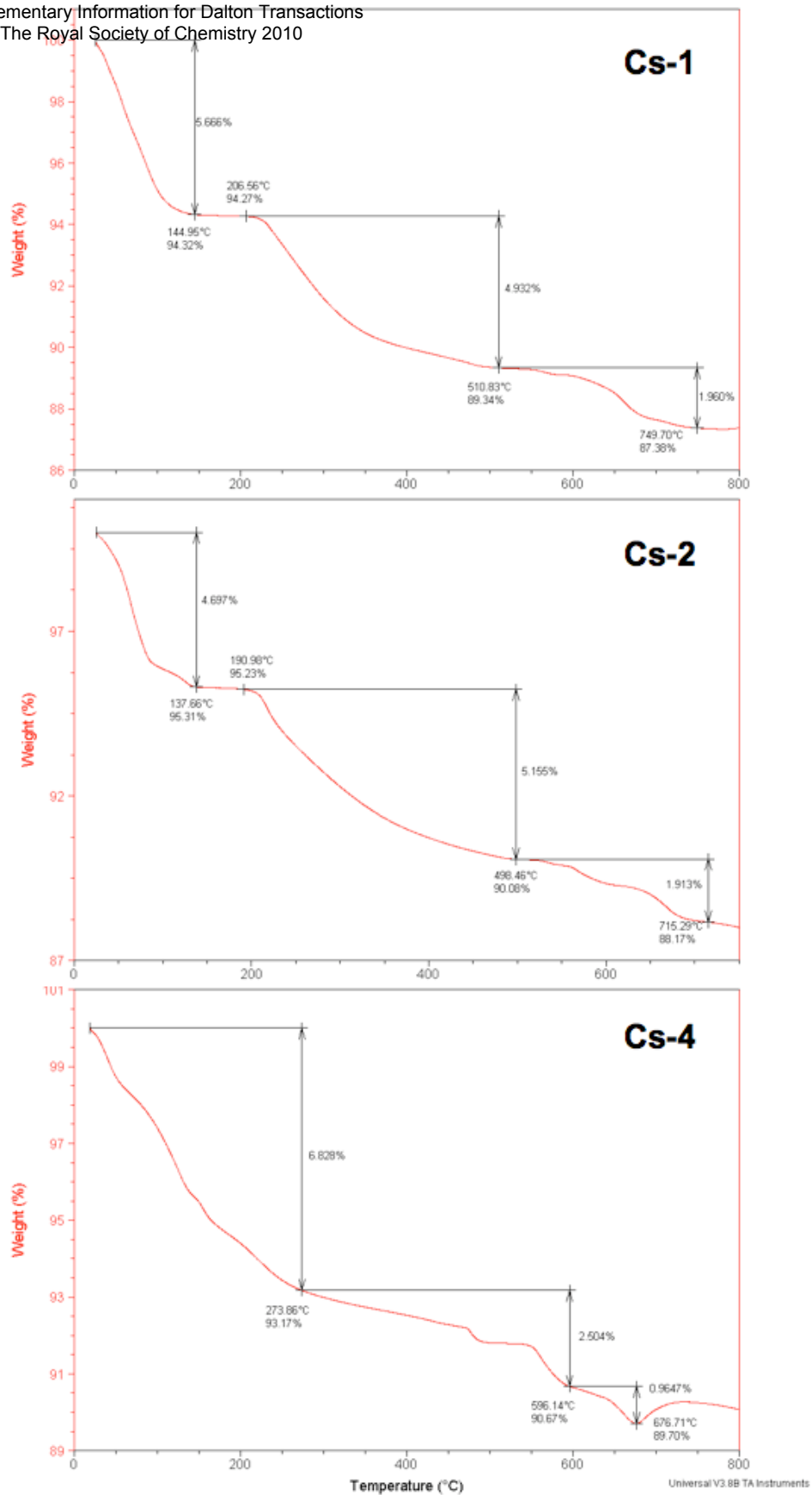


Figure S3

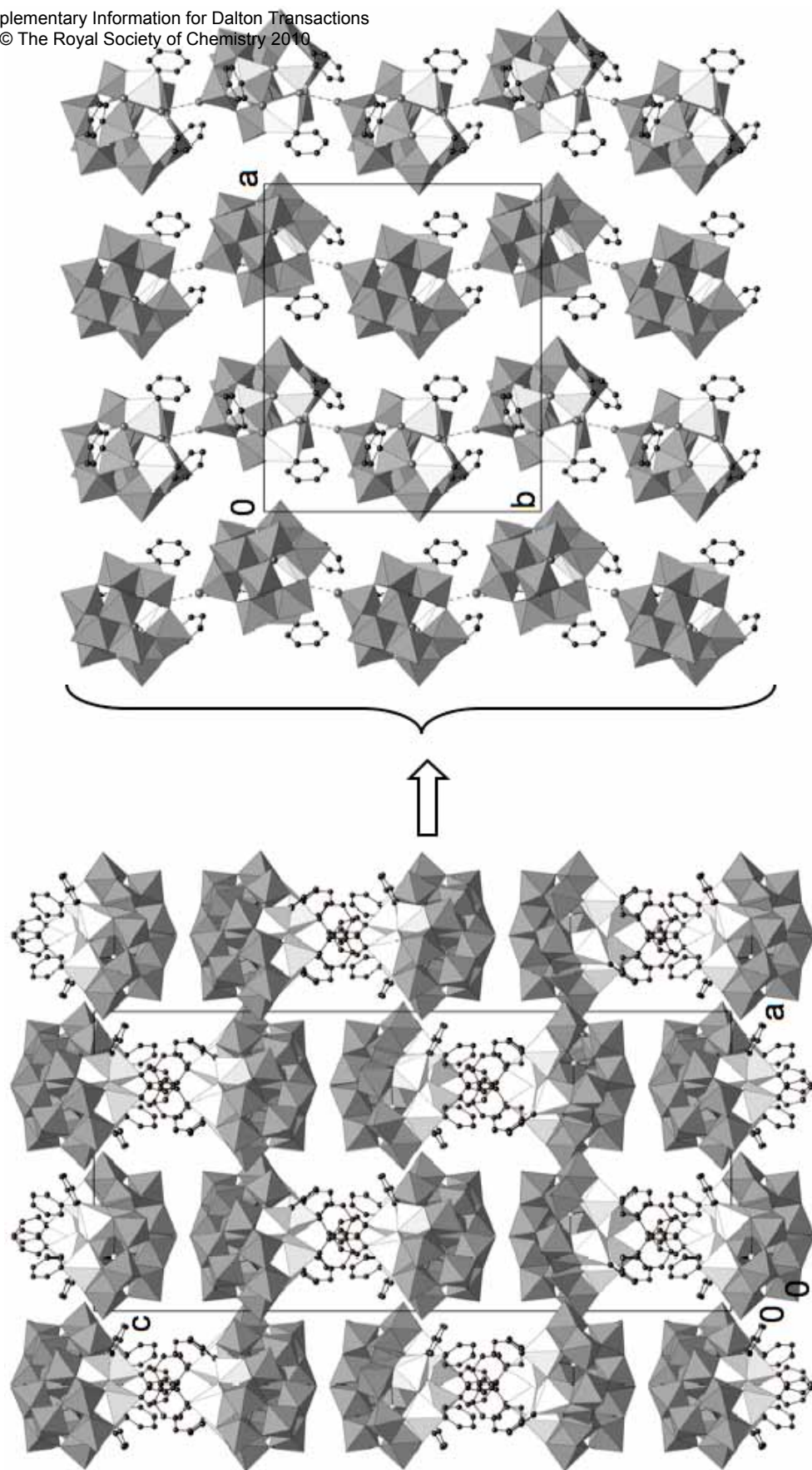


Figure S5

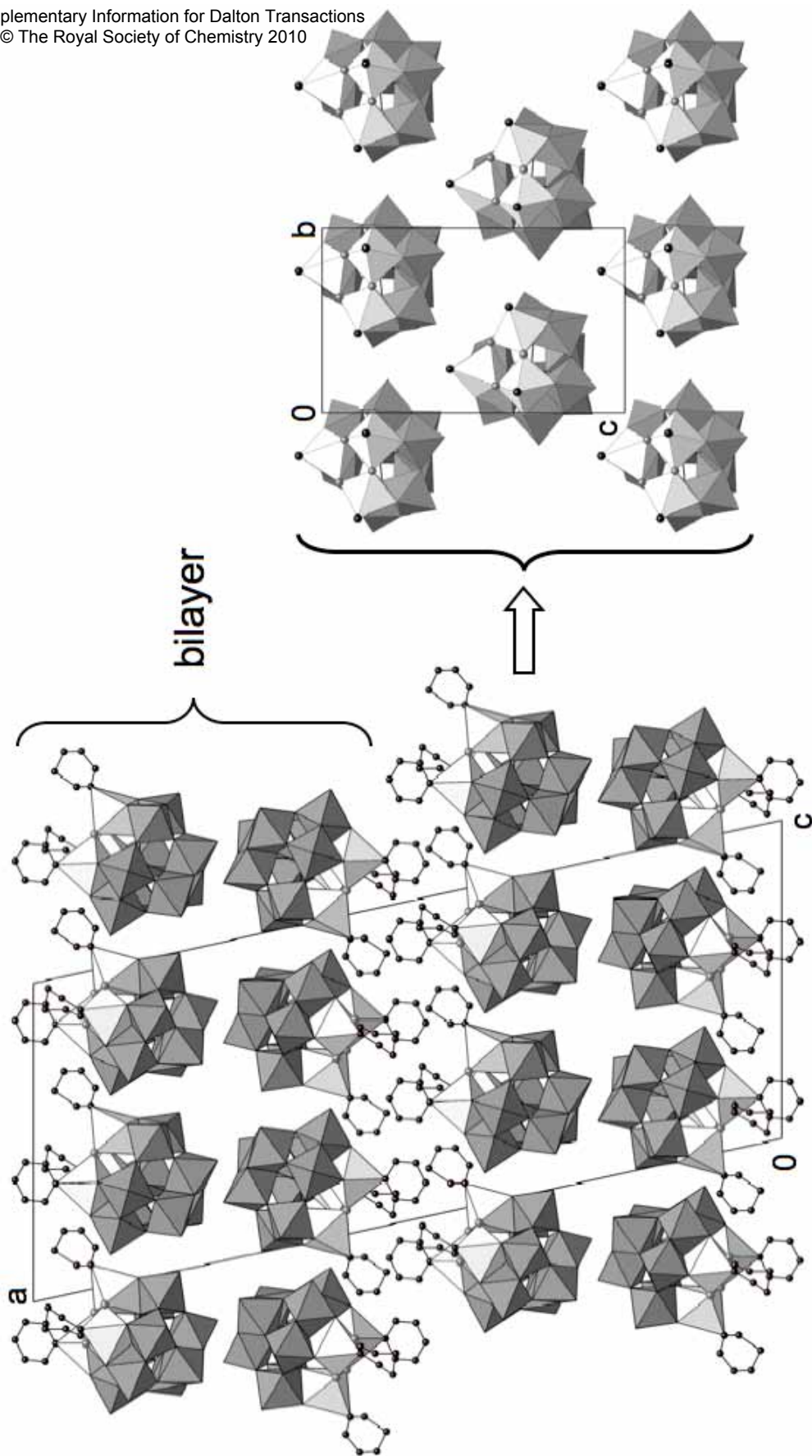


Figure S6

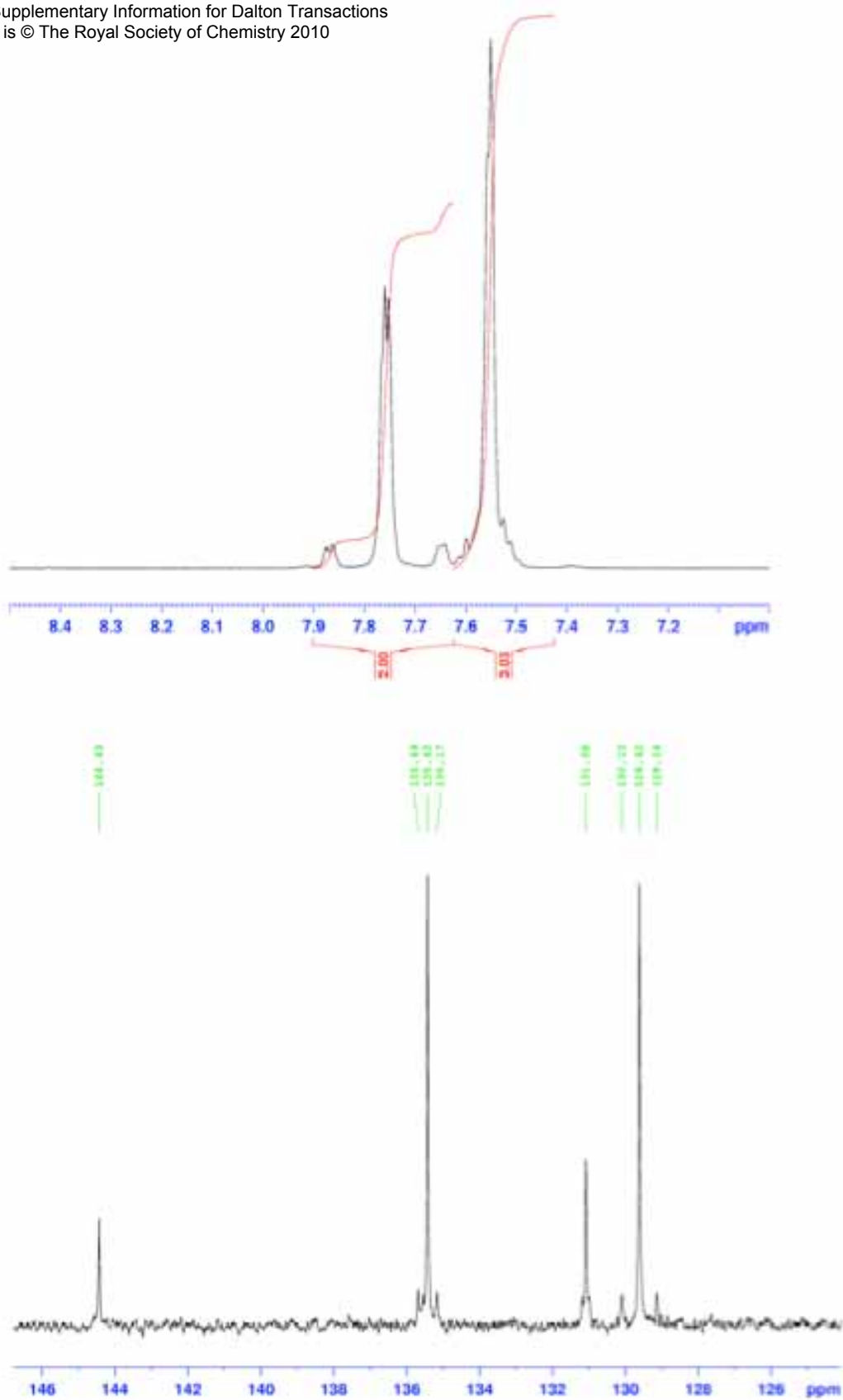


Figure S7

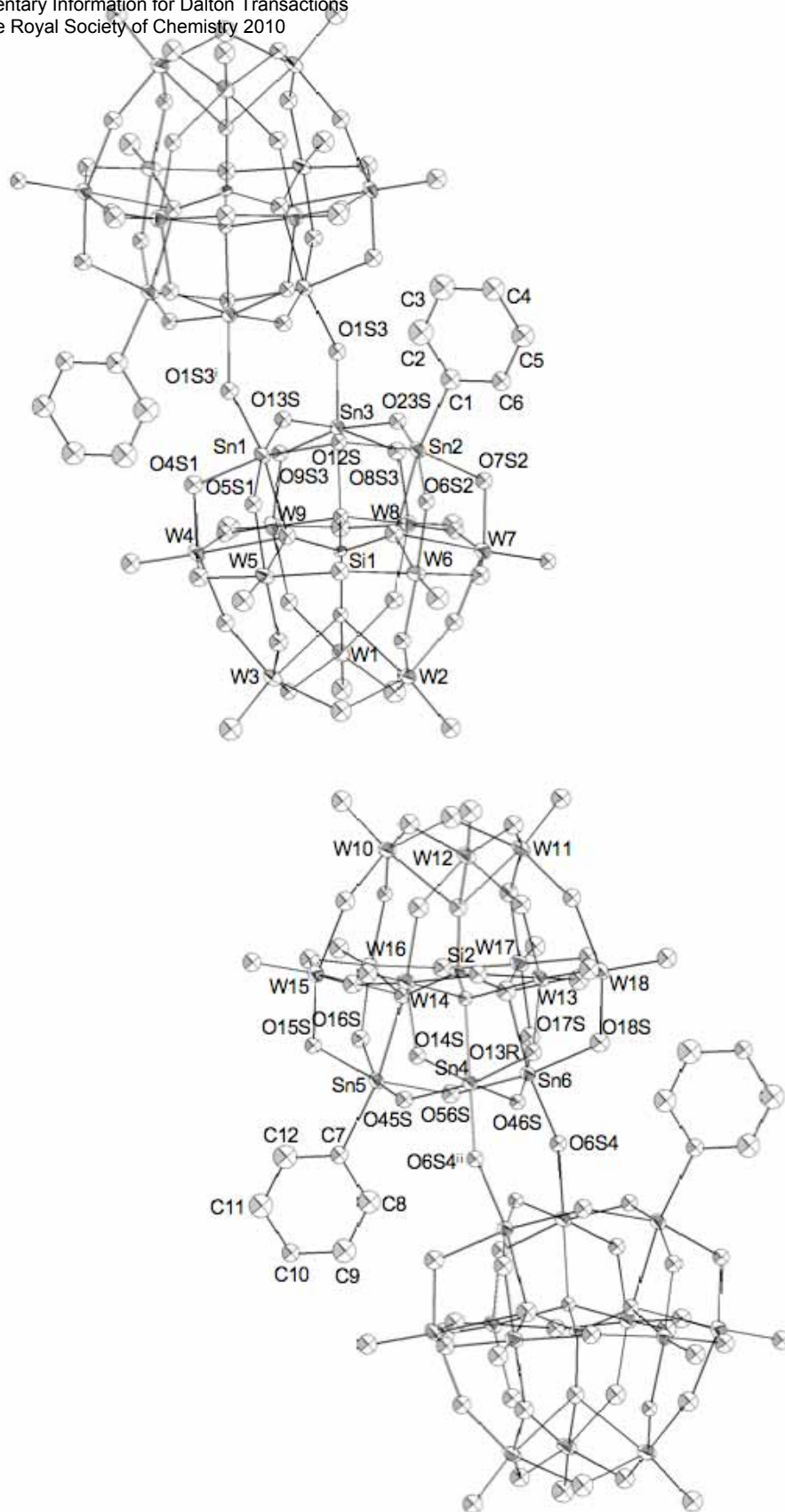


Figure S8

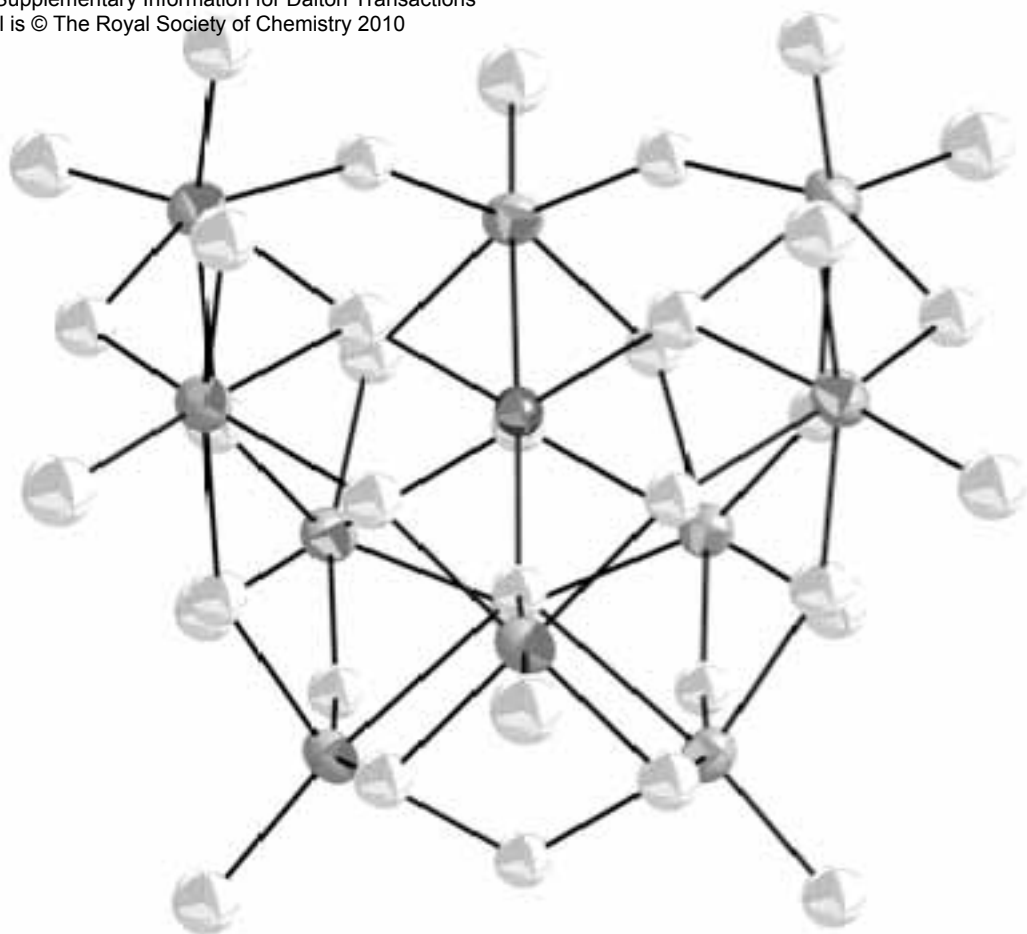


Figure S9