

Supplemental Information

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Structure Plots of tin alkoxides: Heteroleptic

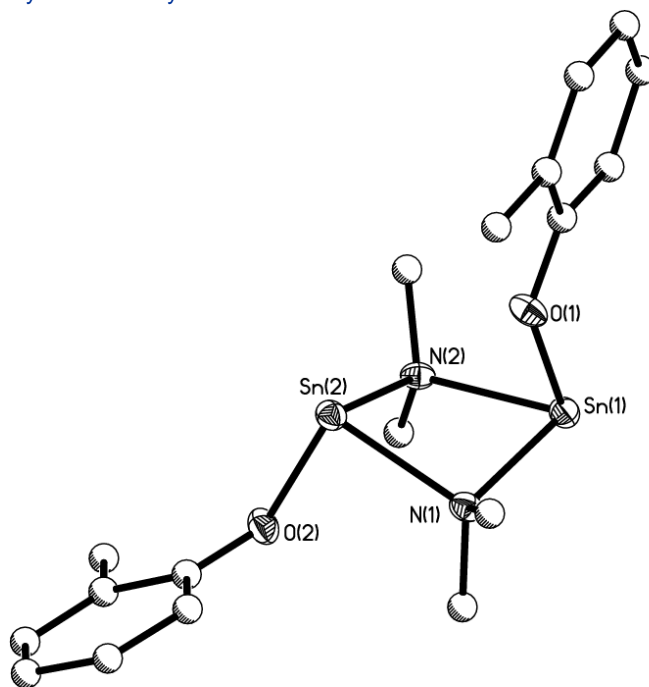


Figure S1. Structure plot of **1**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

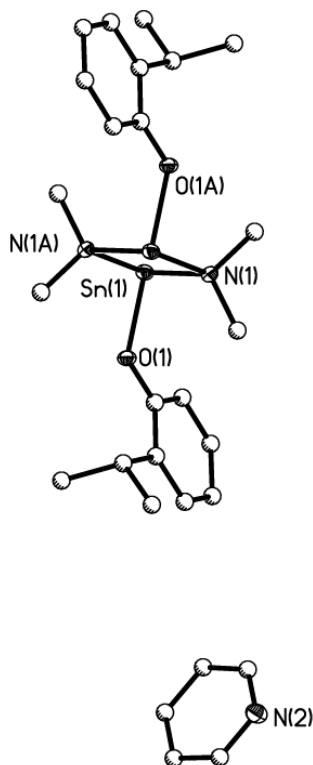


Figure S2. Structure plot of **2**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

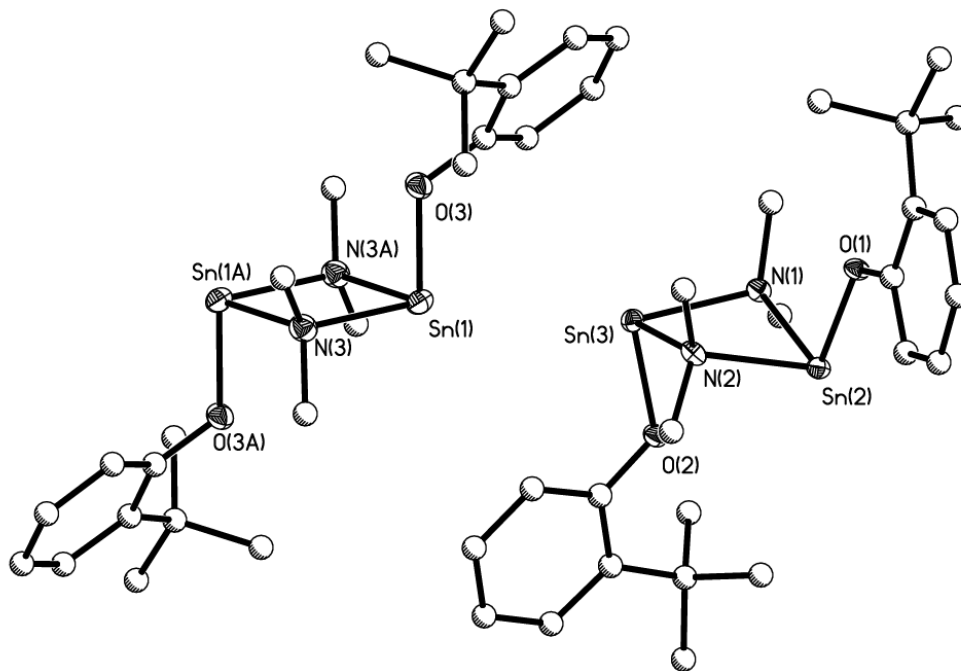


Figure S3. Structure plot of **3**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

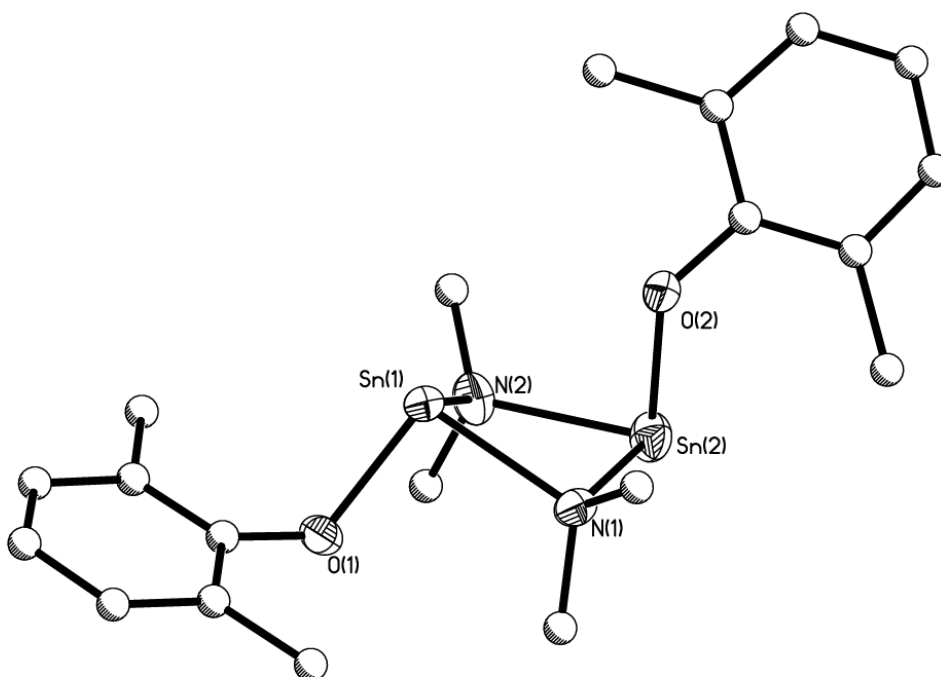


Figure S4. Structure plot of **4**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

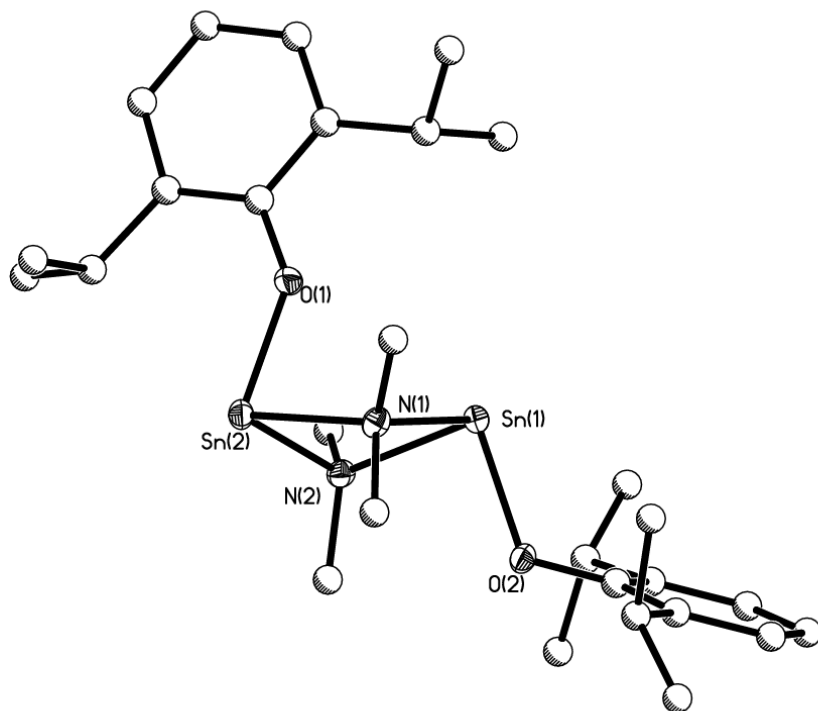


Figure S5. Structure plot of **5**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

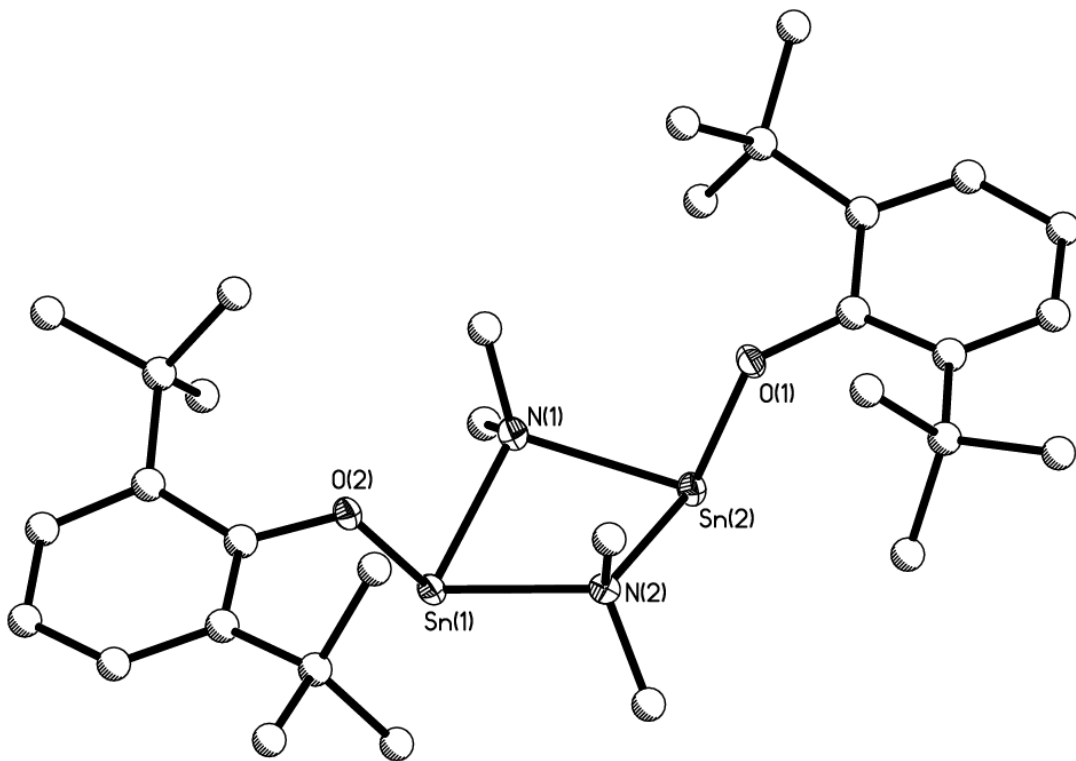


Figure S6. Structure plot of **6**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

Structure Plots of tin alkoxides : Homoleptic

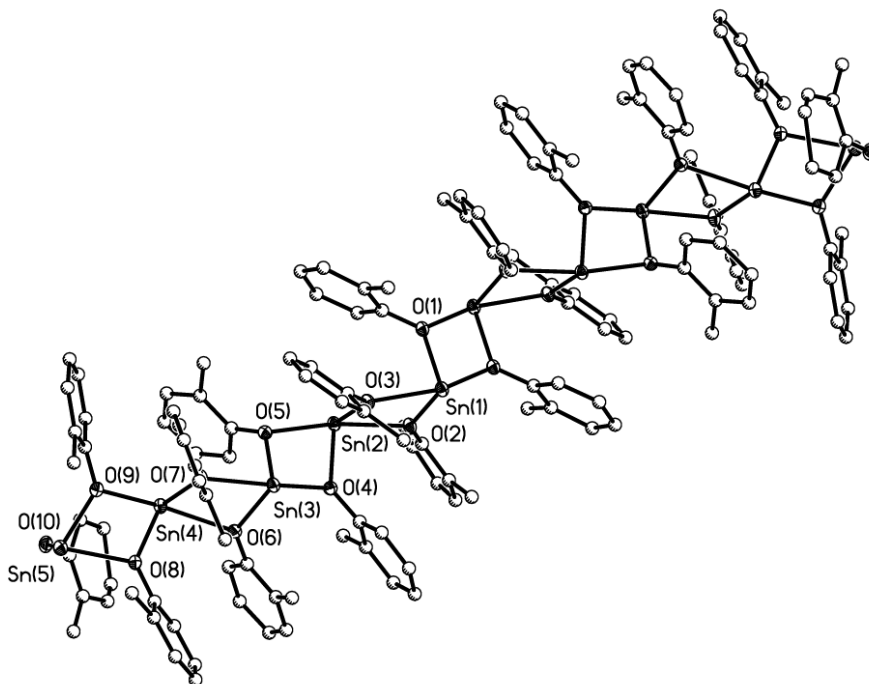


Figure S7. Structure plot of **7**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

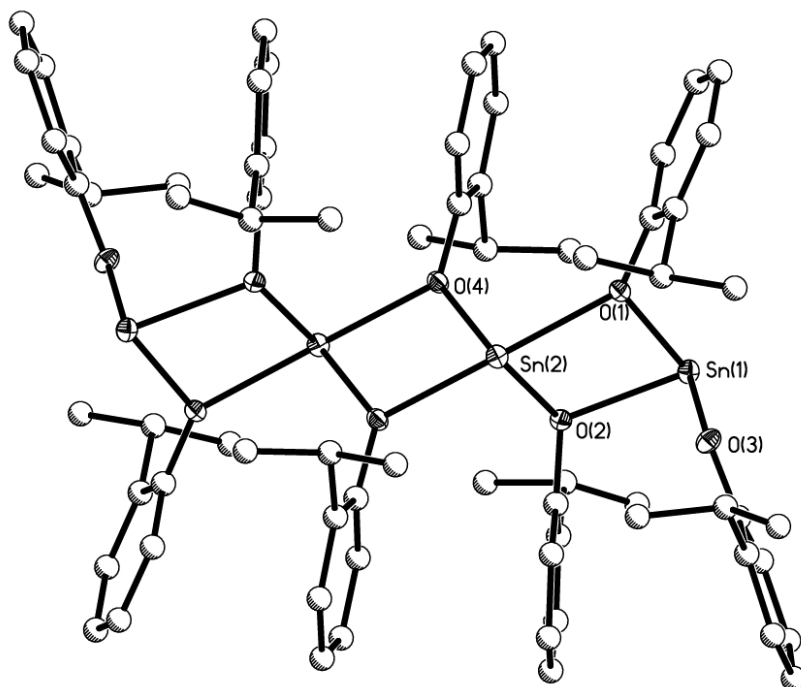


Figure S8. Structure plot of **8**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

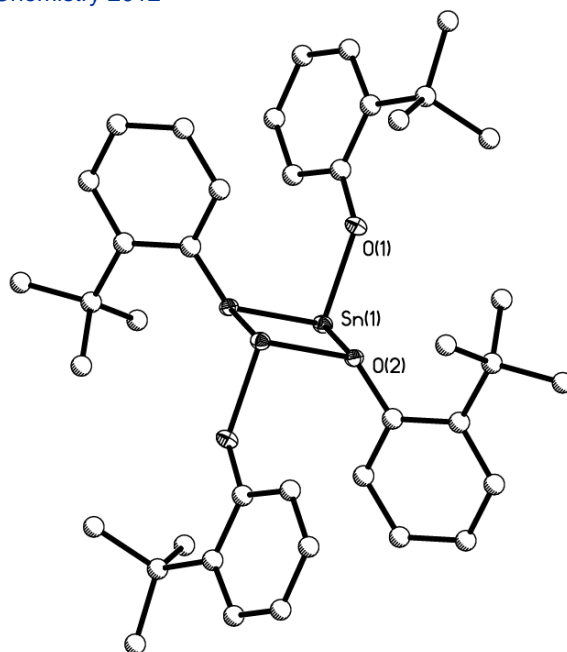


Figure S9. Structure plot of **9**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

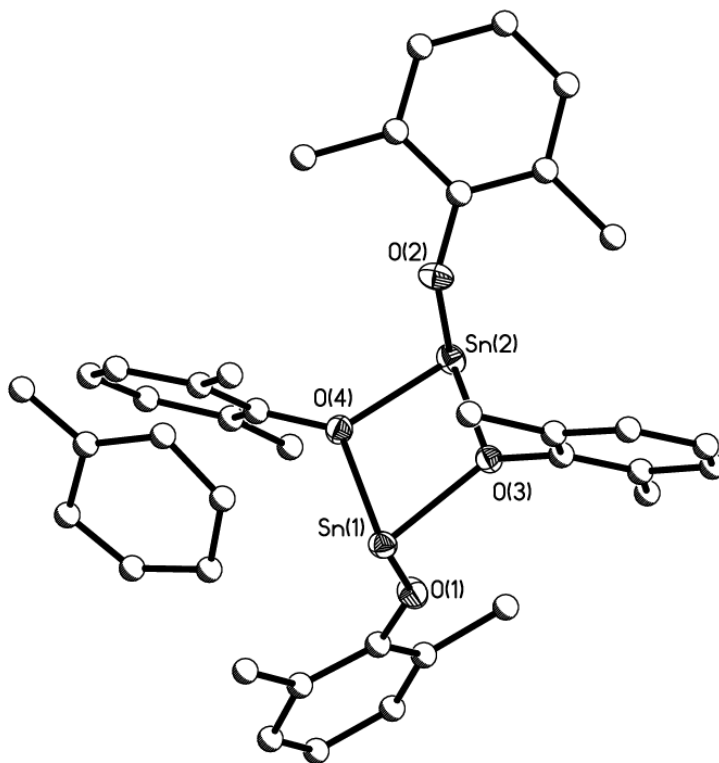


Figure S10. Structure plot of **10**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

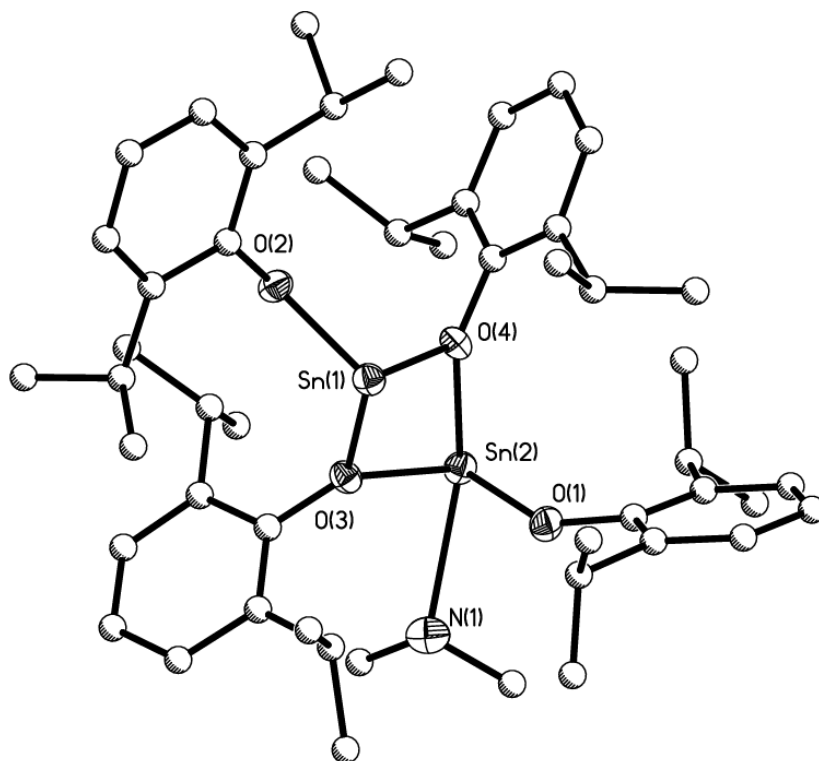


Figure S11. Structure plot of **11**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

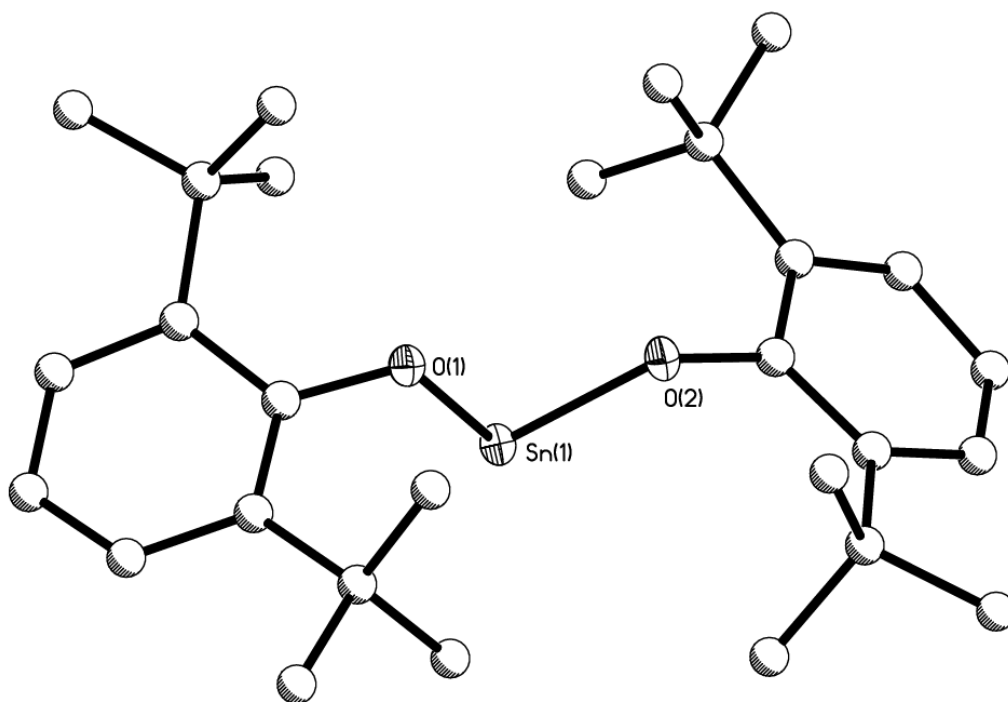


Figure S12. Structure plot of **12**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

Structure Plots of tin alkoxides: Oxides

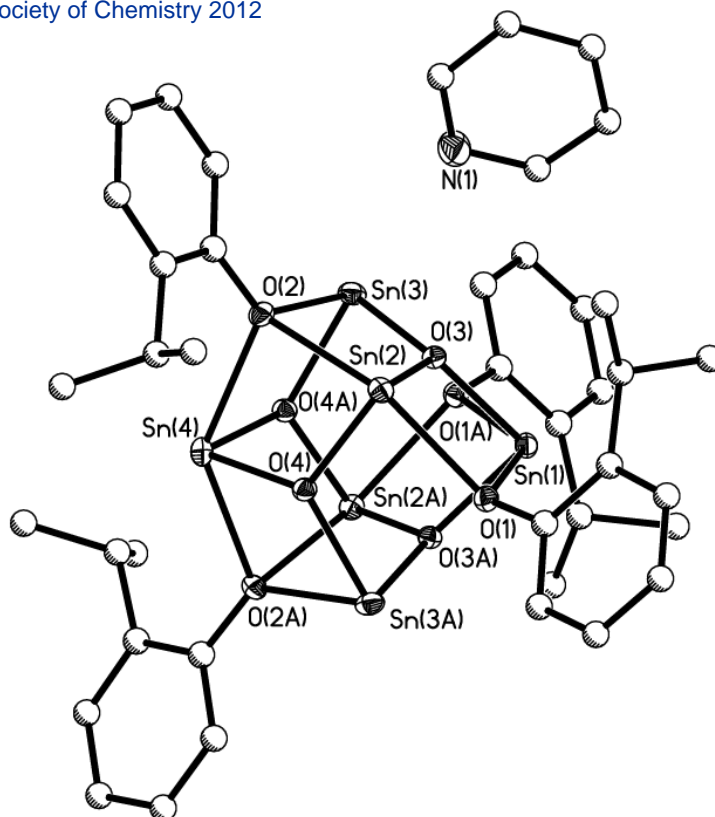


Figure S13. Structure plot of S1. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

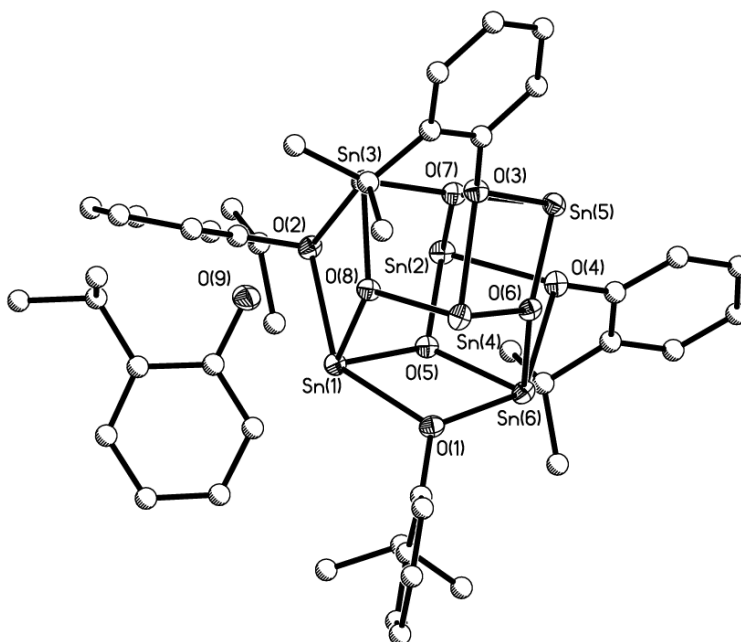


Figure S14. Structure plot of S2. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

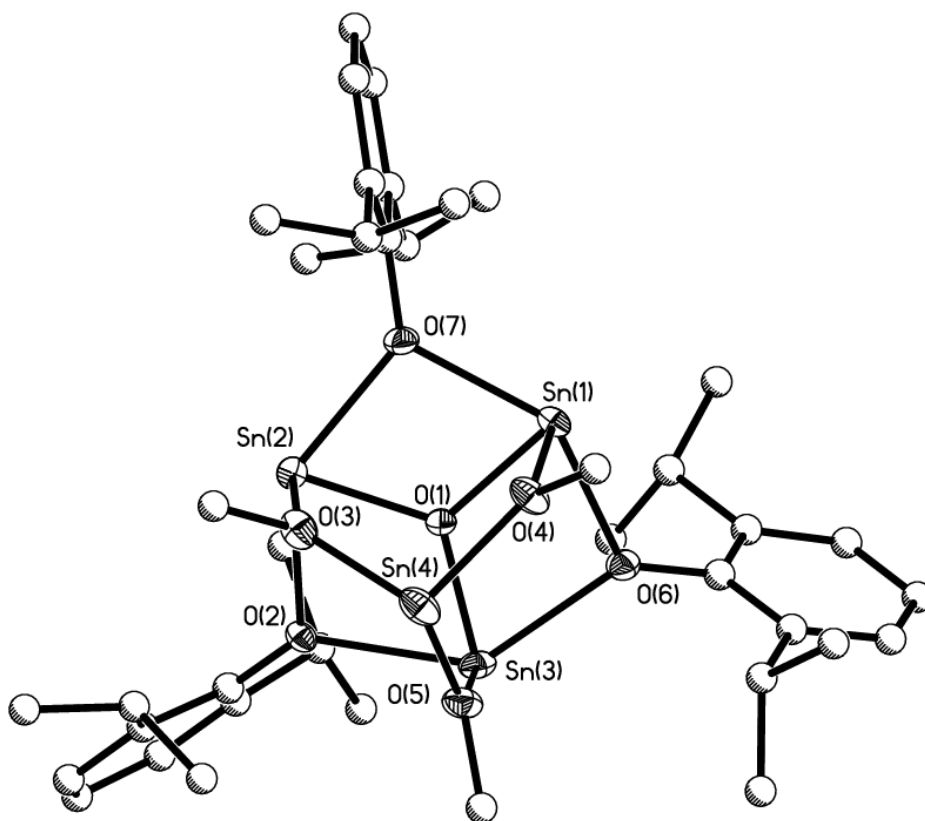
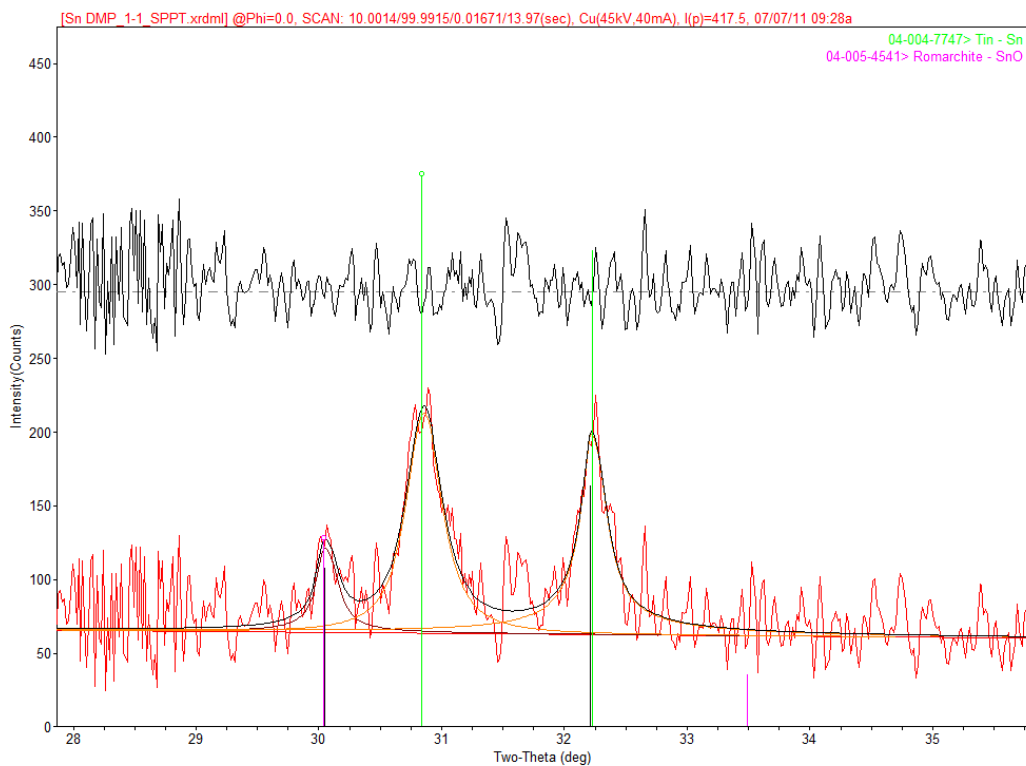


Figure S15. Structure plot of **S3**. Thermal ellipsoids of heavy atoms are drawn at the 30% level and carbon atoms are shown as balls and sticks for clarity.

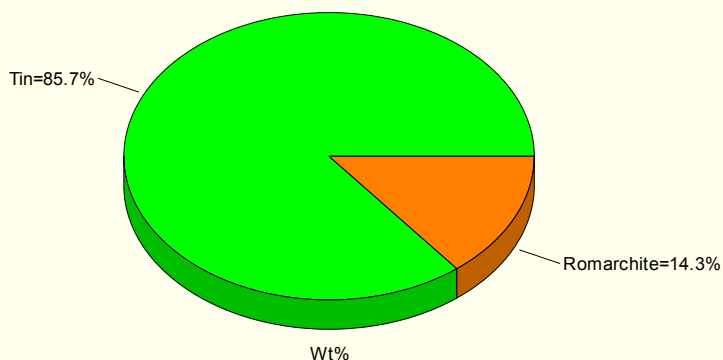
Quantitative analysis of PXRD of material from solution precipitation



Sandia

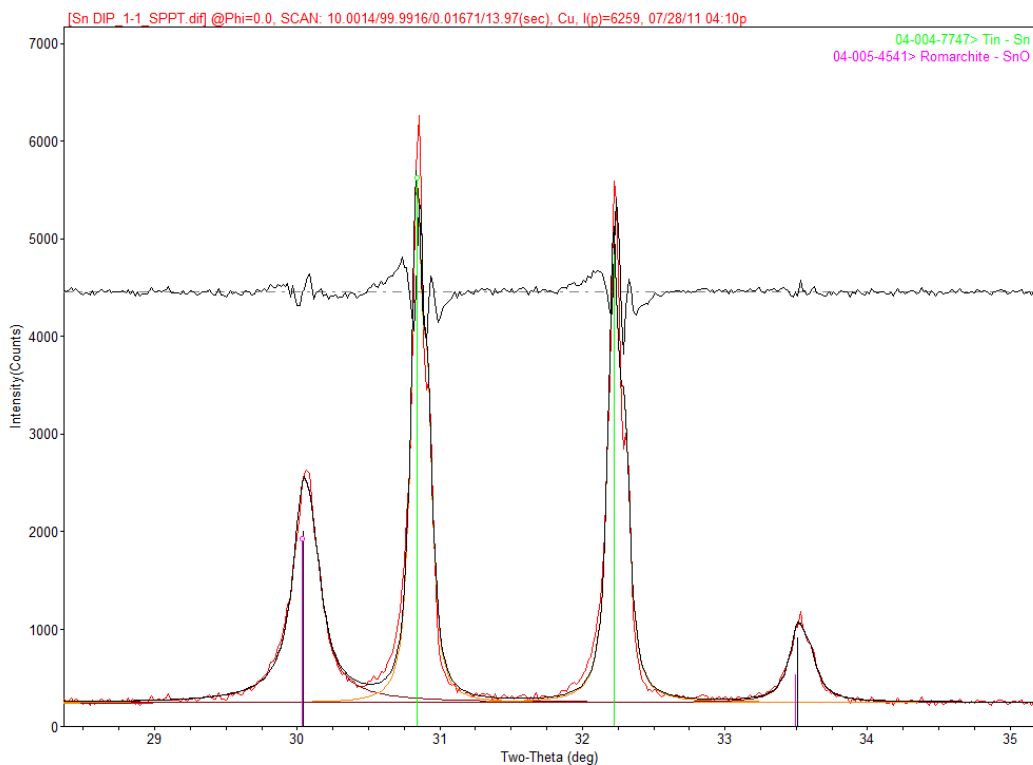
[S930003]marodri@c:\Users\marodri\Documents\Data\customer\Doan> Thursday, July 28, 2011 04:24p (MDI/JADE9)

Tin - Sn <Wt%=85.7(30.8)>
Romarchite - SnO <Wt%=14.3(5.1)>



Quantitative Analysis from Profile-Fitted Peaks

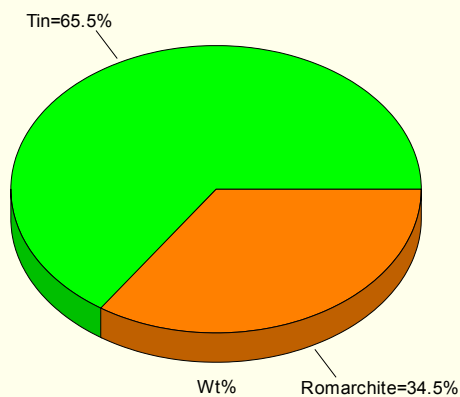
Figure S16. Quantitative analysis of material generated from solution precipitation of **4**. Plot (top) shows PXRD pattern for Sn and SnO fitted to experimental peaks. Graph (bottom) shows percent composition of Sn and SnO in material.



Sandia

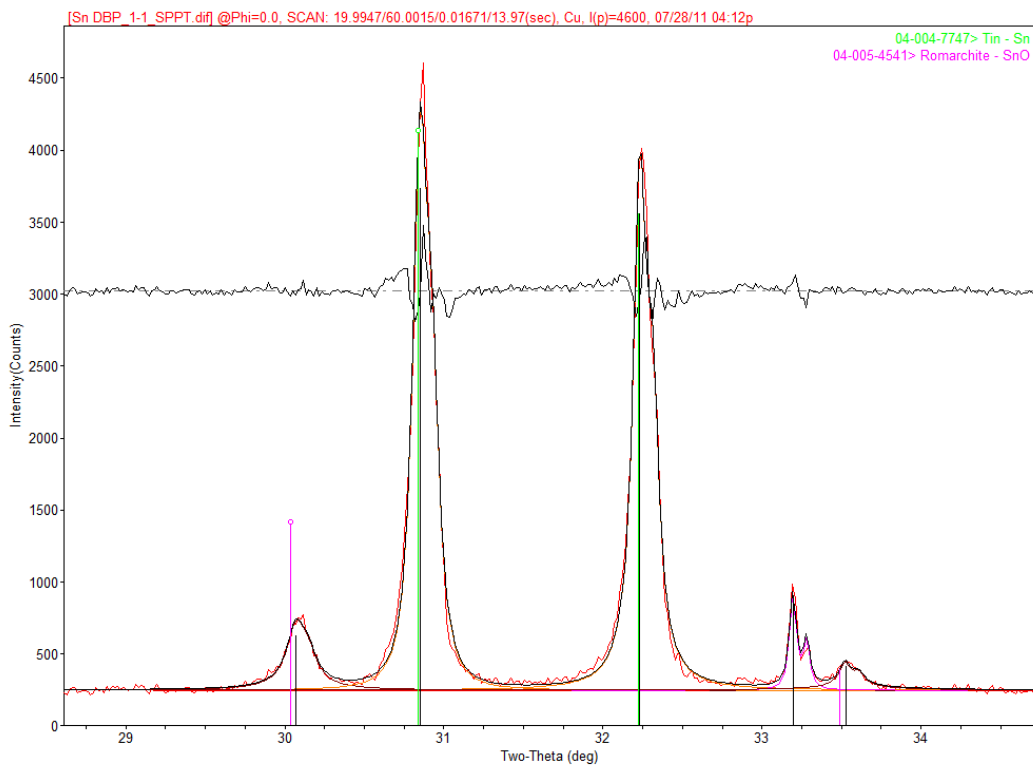
[S930003]marodn|cc:\Users\marodn\Documents\Data\customer\Doan> Thursday, July 28, 2011 04:16p (MDI/JADE9)

Tin - Sn <Wt%=65.5(3.8)>
Romarchite - SnO <Wt%=34.5(2.0)>



Quantitative Analysis from Profile-Fitted Peaks

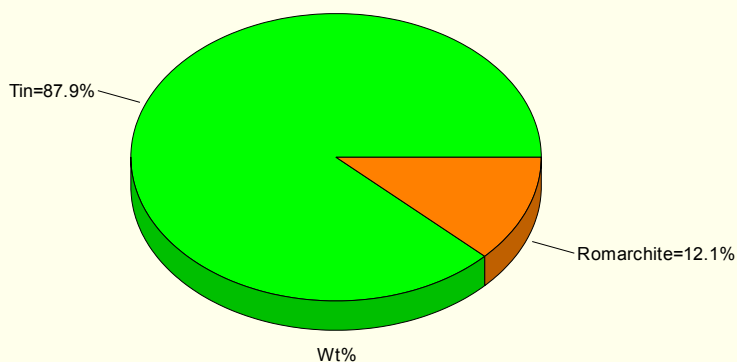
Figure S17. Quantitative analysis of material generated from solution precipitation of **5**. Plot (top) shows PXRD pattern for Sn and SnO fitted to experimental peaks. Graph (bottom) shows percent composition of Sn and SnO in material.



Sandia

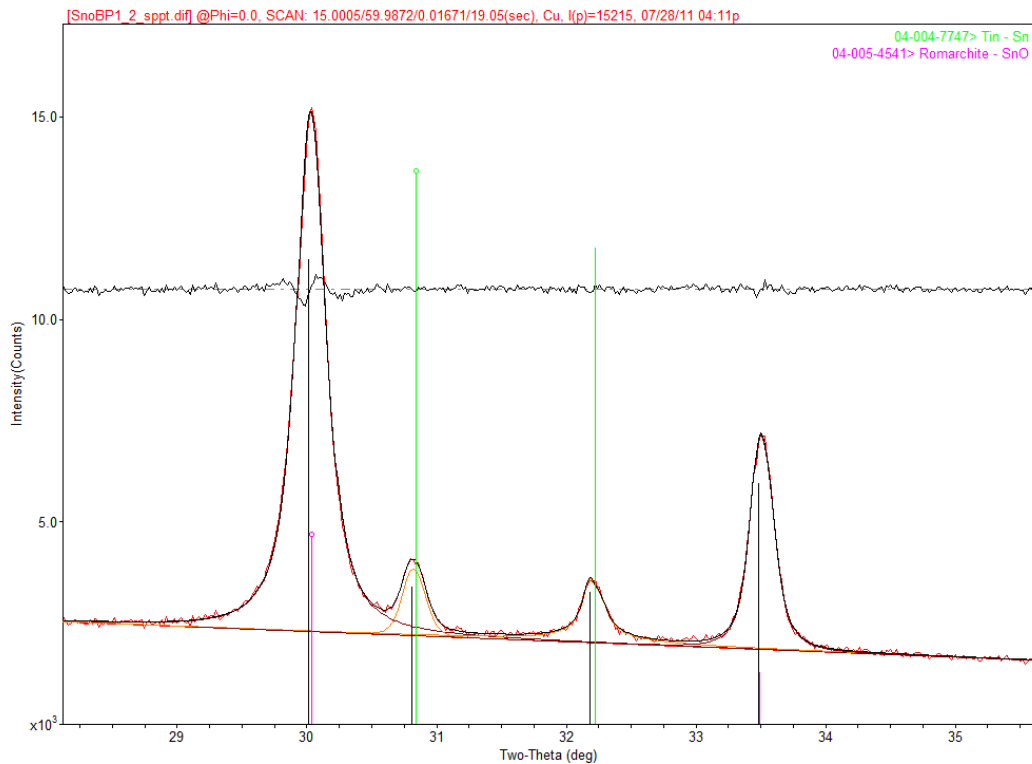
[S930003]marodn|cc:\Users\marodn\Documents\Data\customer\Doan> Thursday, July 28, 2011 04:14p (MDI/JADE9)

Tin - Sn <Wt%=87.9(8.6)>
Romarchite - SnO <Wt%=12.1(1.2)>



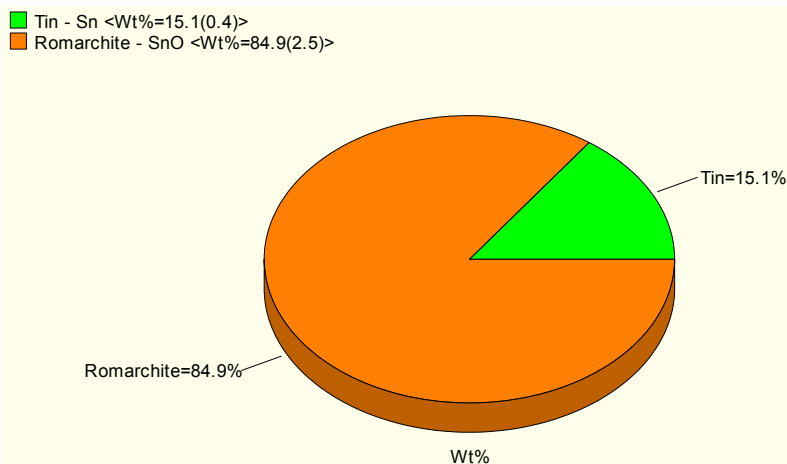
Quantitative Analysis from Profile-Fitted Peaks

Figure S18. Quantitative analysis of material generated from solution precipitation of **6**. Plot (top) shows PXRD pattern for Sn and SnO fitted to experimental peaks. Graph (bottom) shows percent composition of Sn and SnO in material.



Sandia

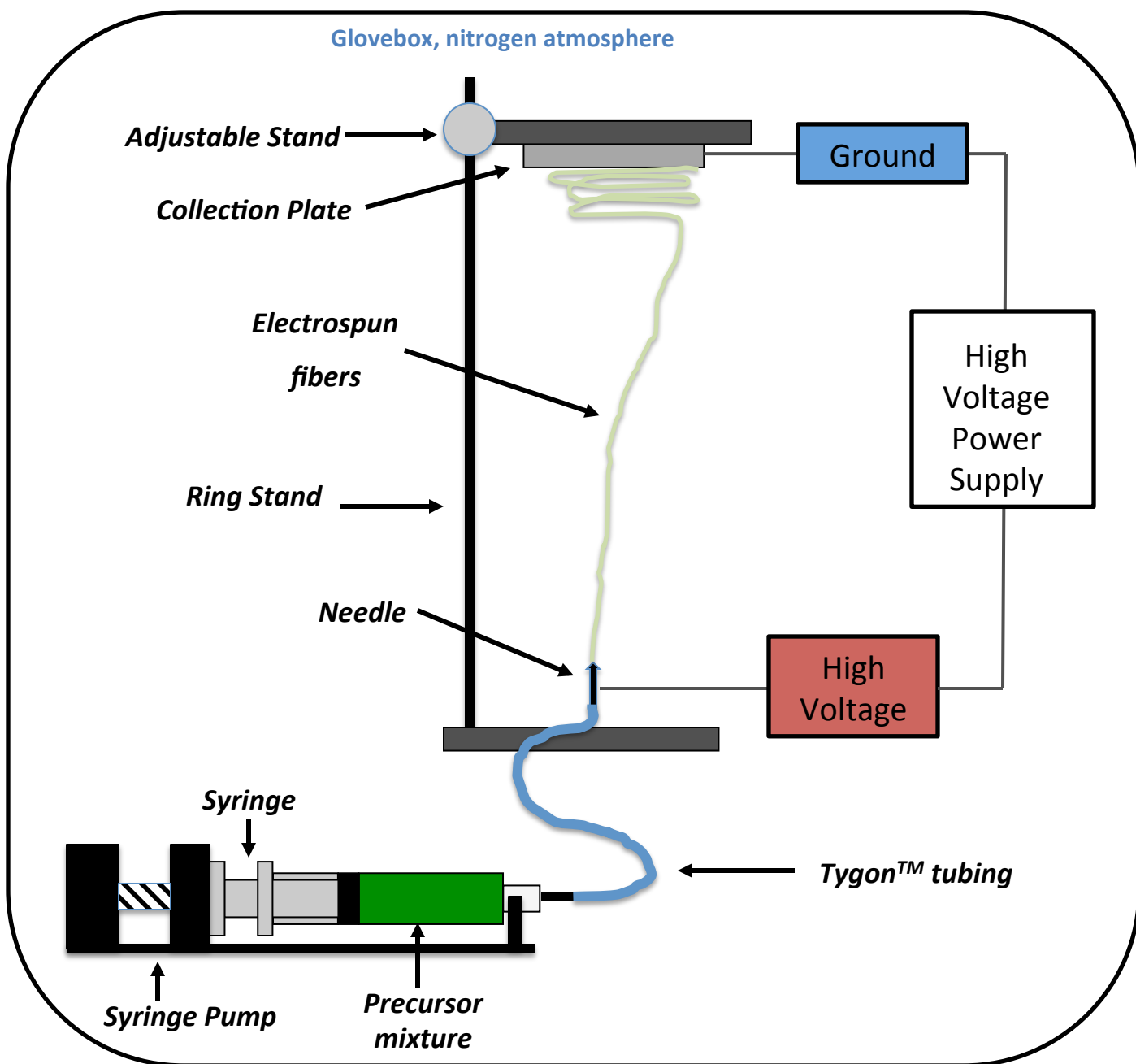
[S930003]marodri\cc:\Users\marodri\Documents\Data\customer\Doan\ Thursday, July 28, 2011 04:20p (MDI/JADE9)



Quantitative Analysis from Profile-Fitted Peaks

Figure S19. Quantitative analysis of material generated from solution precipitation of **9**. Plot (top) shows PXRD pattern for Sn and SnO fitted to experimental peaks. Graph (bottom) shows percent composition of Sn and SnO in material.

General Electrospinning (ES) Setup



Experimental Parameter Settings

- 0.200 mmol Precursor
- 3 mL THF
- 15 kV
- 60 mins.
- 0.9 mL/h
- 15 gauge needle
- Inverted Setup
- Nitrogen atmosphere

Figure S20. Electrospinning setup with labeled components and experimental parameters