

Supplementary information for:

Fluorescent organotin compounds as dyes in silk fibroin (*Bombyx mori*): Ultrasound and Conventional Synthesis, Chemo-Optical Characterization, Cytotoxicity, and Confocal Fluorescence Microscopy

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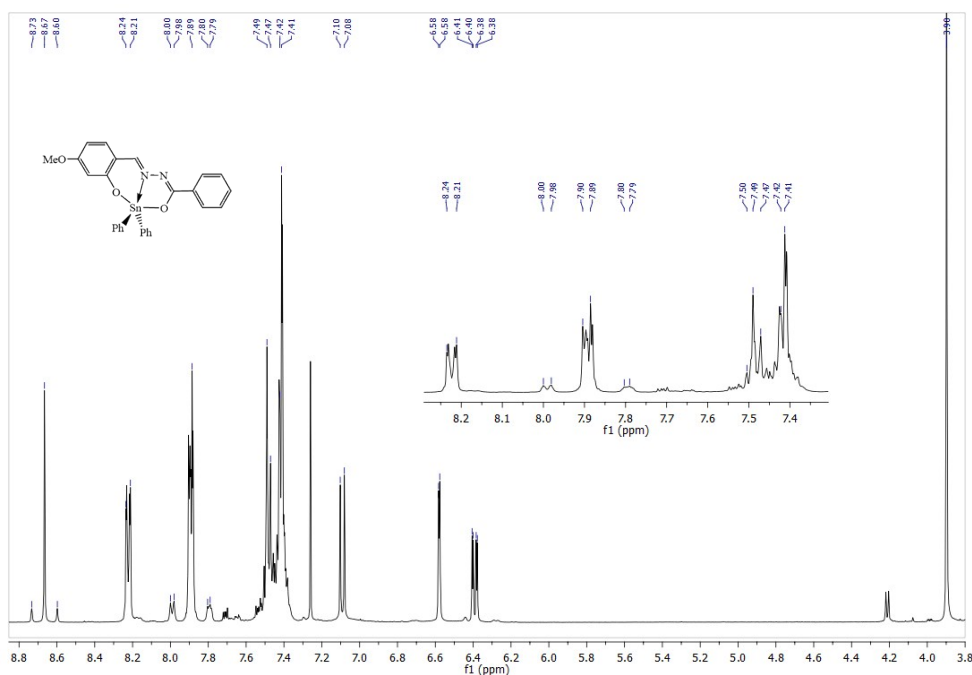


Fig. S1. The ¹H -NMR (400 MHz, CDCl₃) spectrum of compound 1.

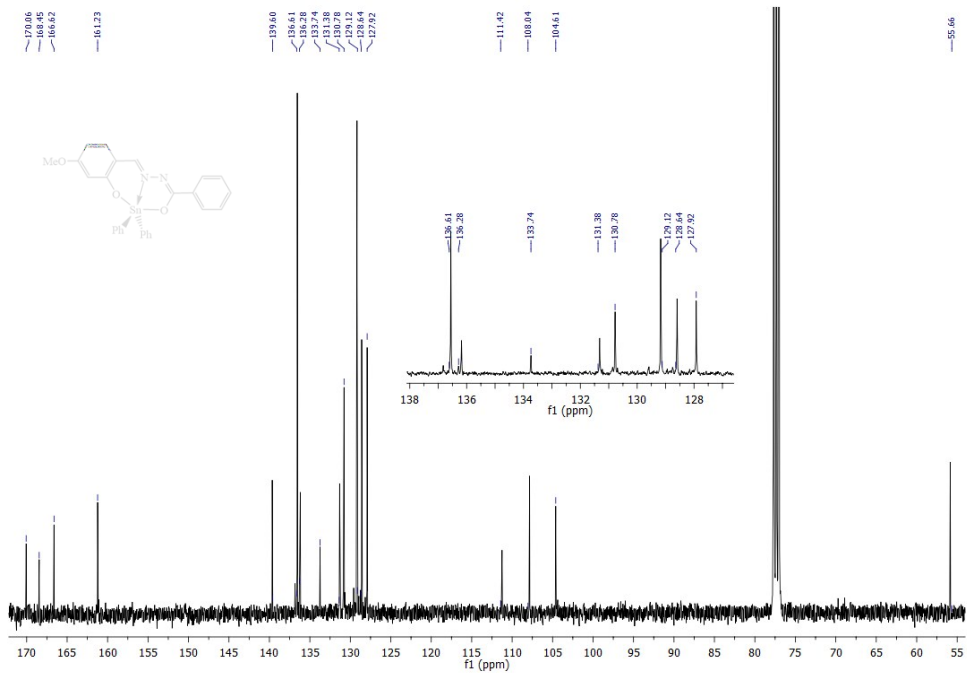


Fig. S2. The ¹³C-NMR (100 MHz, CDCl₃) spectrum of compound **1**.

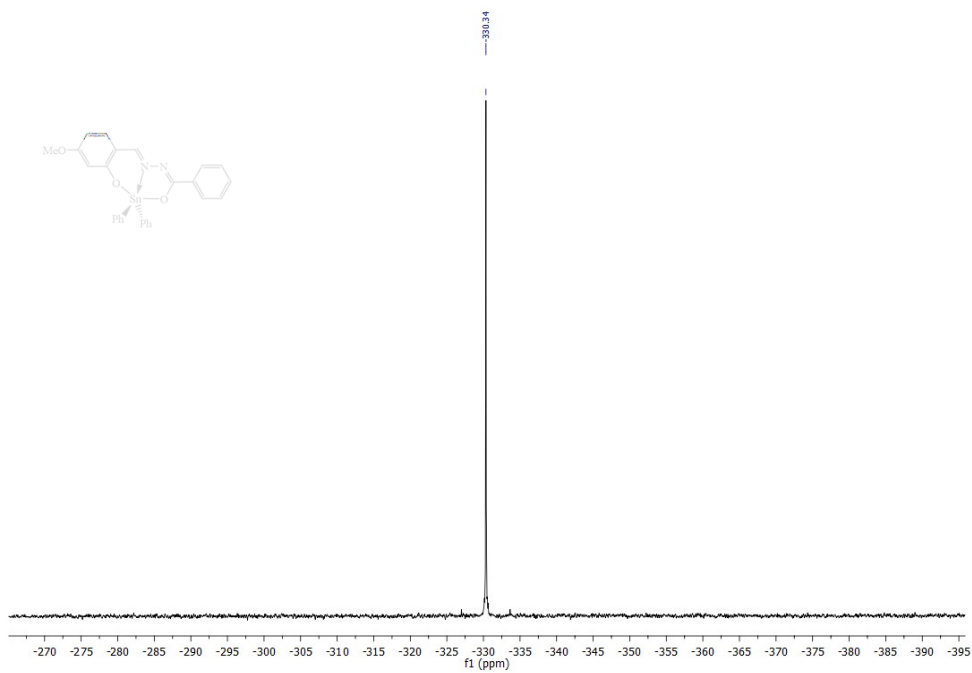


Fig. S3. The ¹¹⁹Sn-NMR (149.14 MHz, CDCl₃) spectrum of compound **1**.

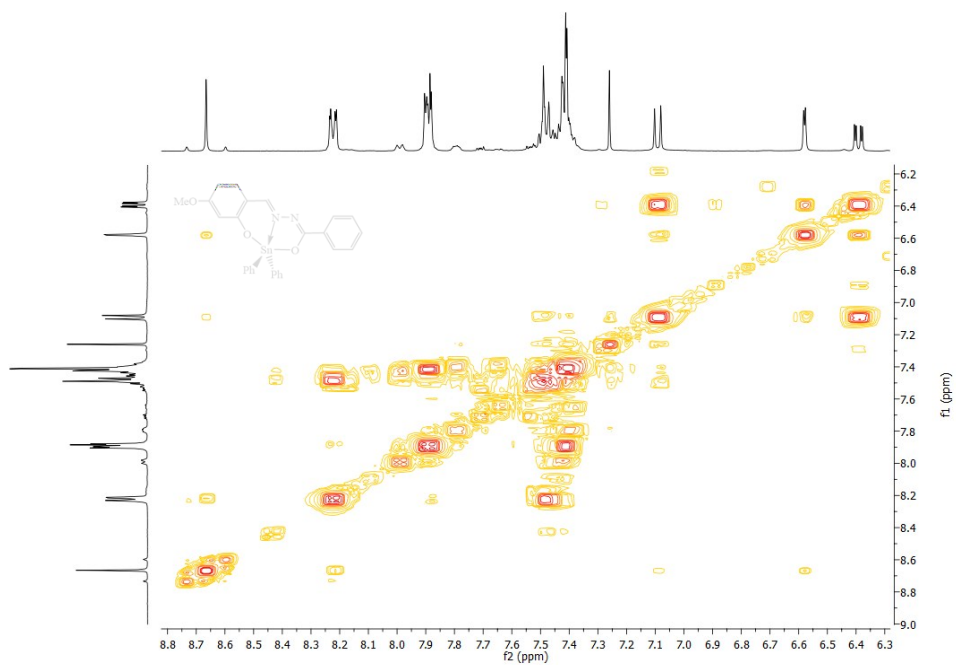


Fig. S4. The $^1\text{H}/^1\text{H}$ COSY spectrum of compound **1**.

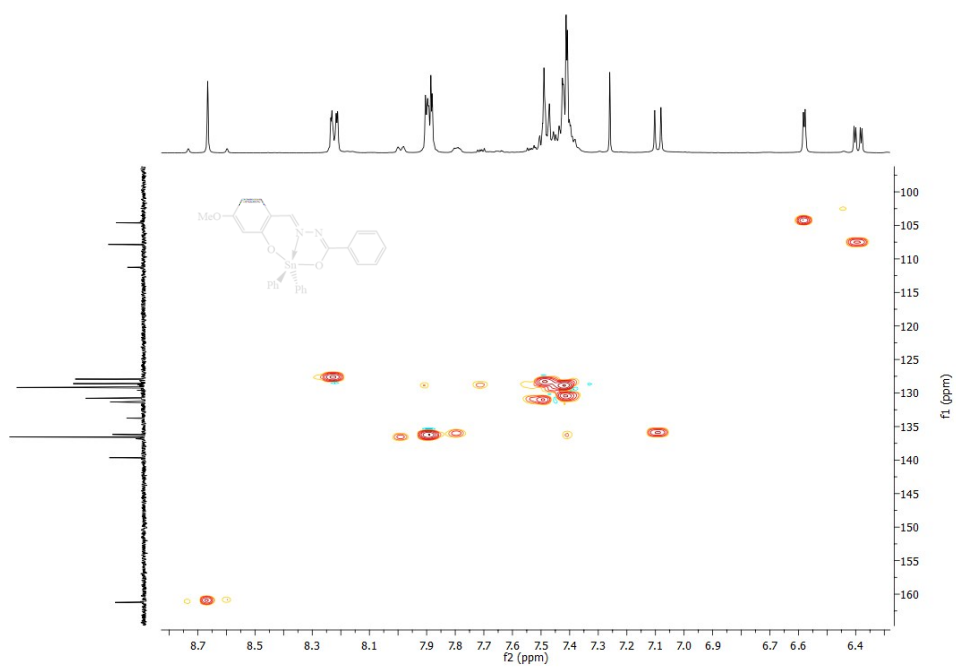


Fig. S5. The $^1\text{H}/^{13}\text{C}$ HETCOR spectrum of compound **1**.

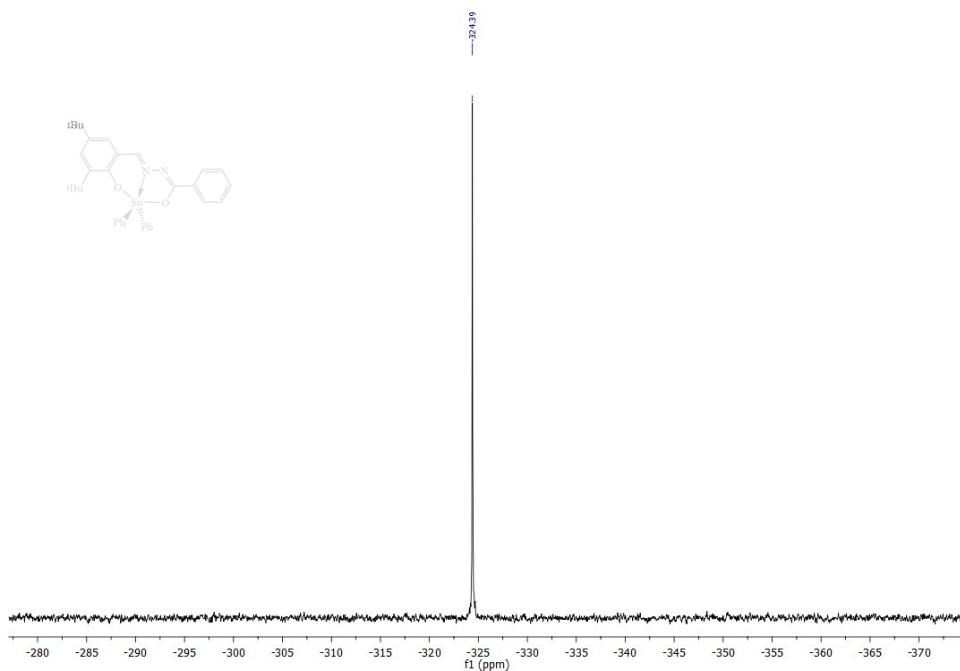


Fig. S8. The ^{119}Sn -NMR (149.14 MHz, CDCl_3) spectrum of compound 2.

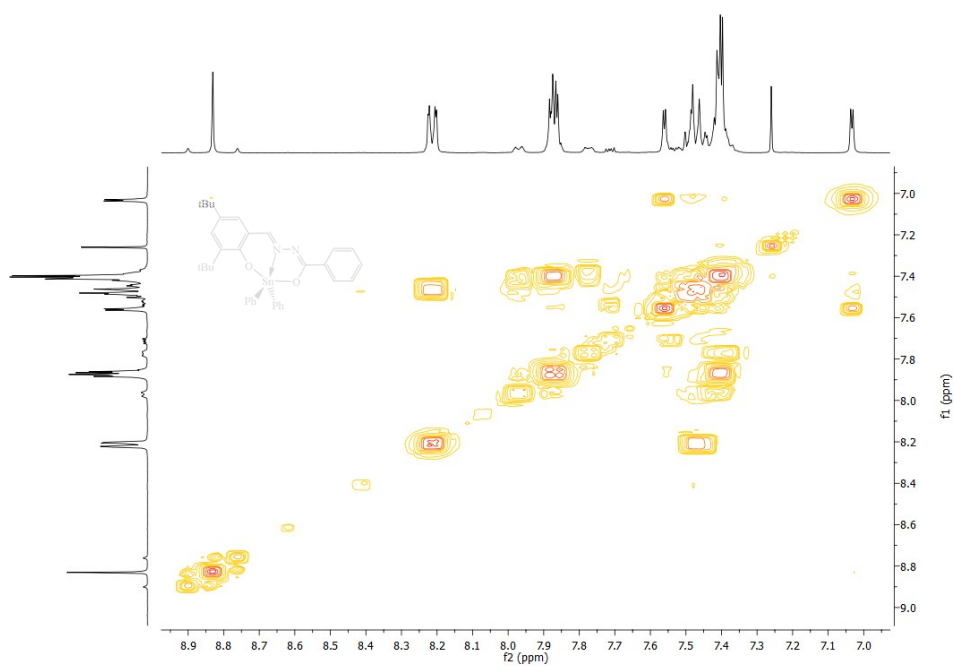


Fig. S9. The $^1\text{H}/^1\text{H}$ COSY spectrum of compound 2.

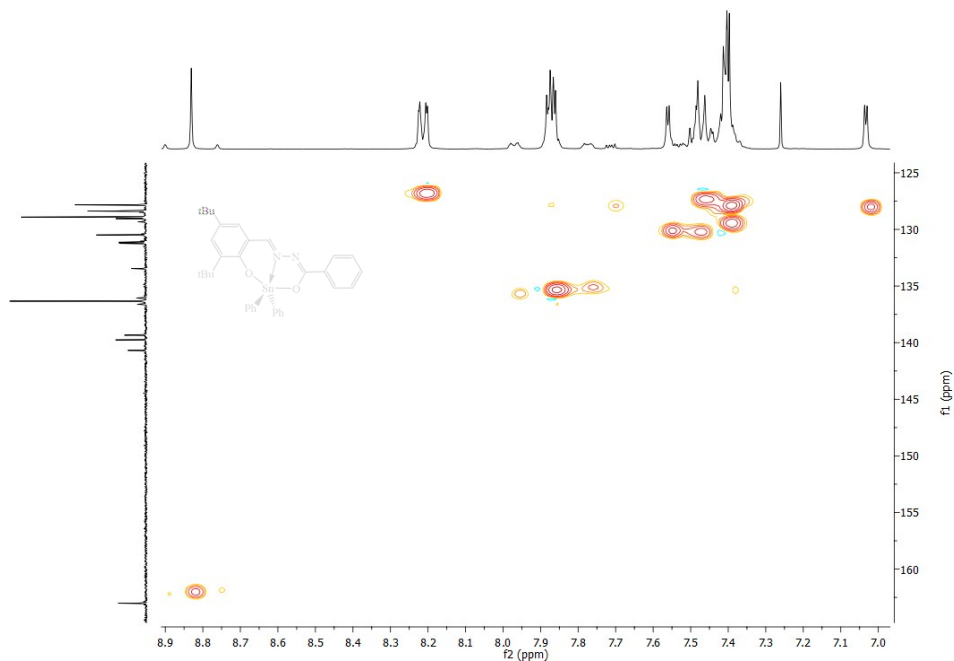


Fig. S10. The $^1\text{H}/^{13}\text{C}$ HETCOR spectrum of compound **2**.

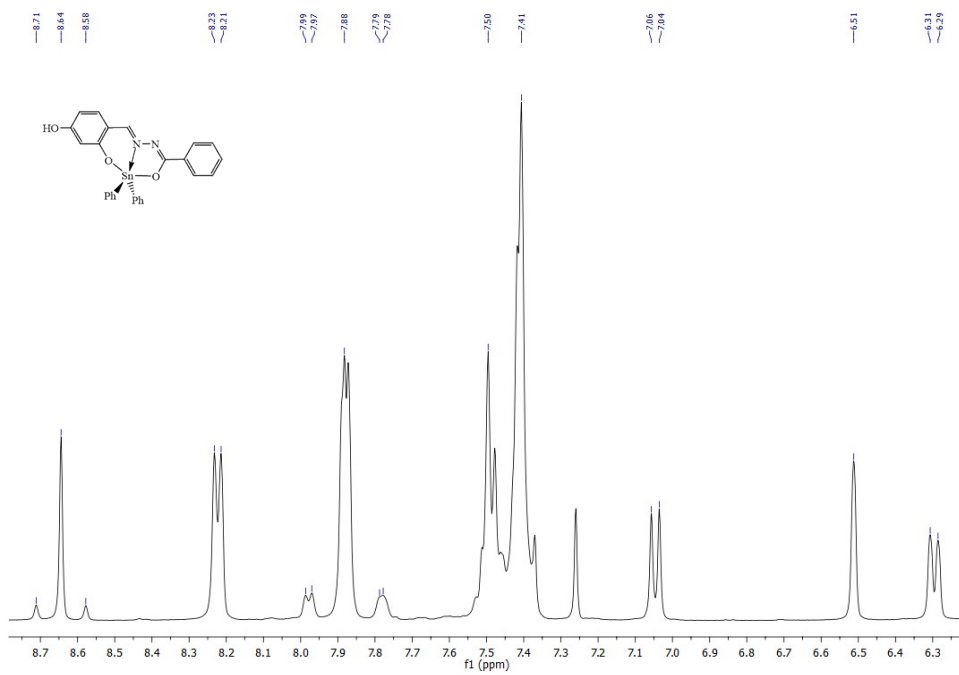


Fig. S11. The ^1H -NMR (400 MHz, CDCl_3) spectrum of compound **3**.

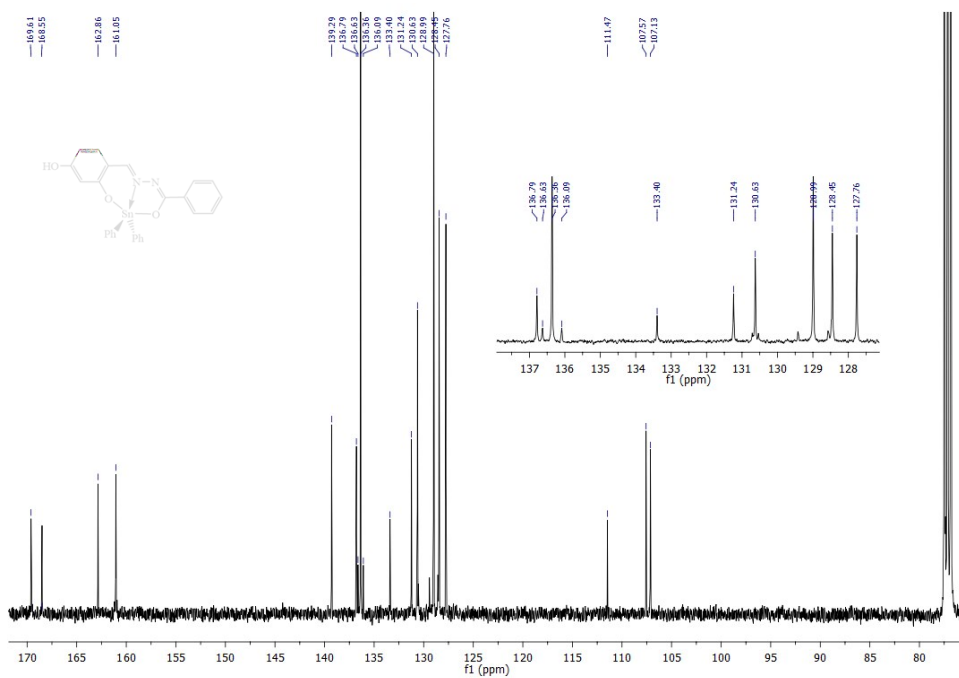


Fig. S12. The ¹³C-NMR (100 MHz, CDCl₃) spectrum of compound **3**.

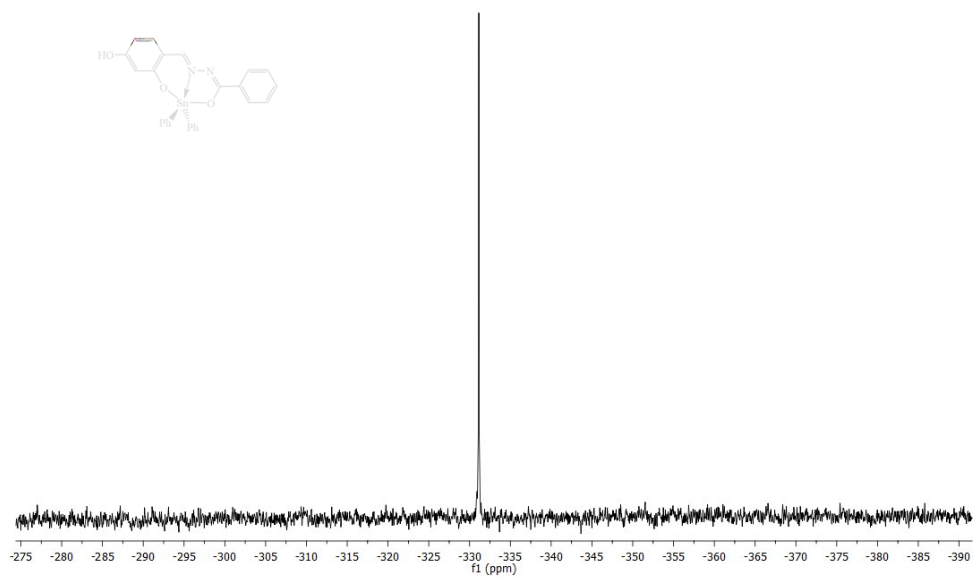


Fig. S13. The ¹¹⁹Sn-NMR (149.14 MHz, CDCl₃) spectrum of compound **3**.

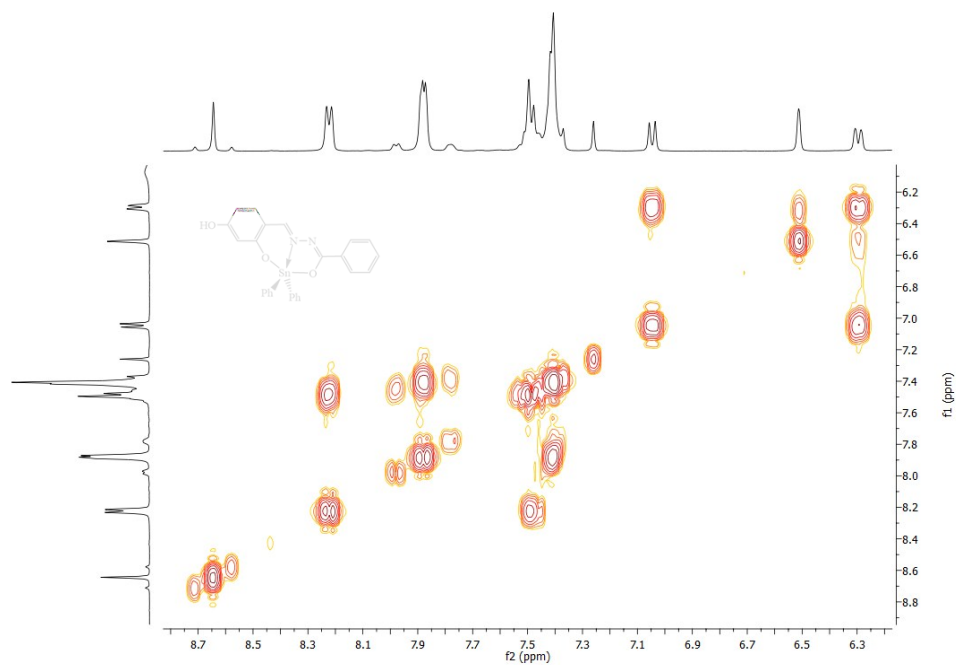


Fig. S14. The $^1\text{H}/^1\text{H}$ COSY spectrum of compound **3**.

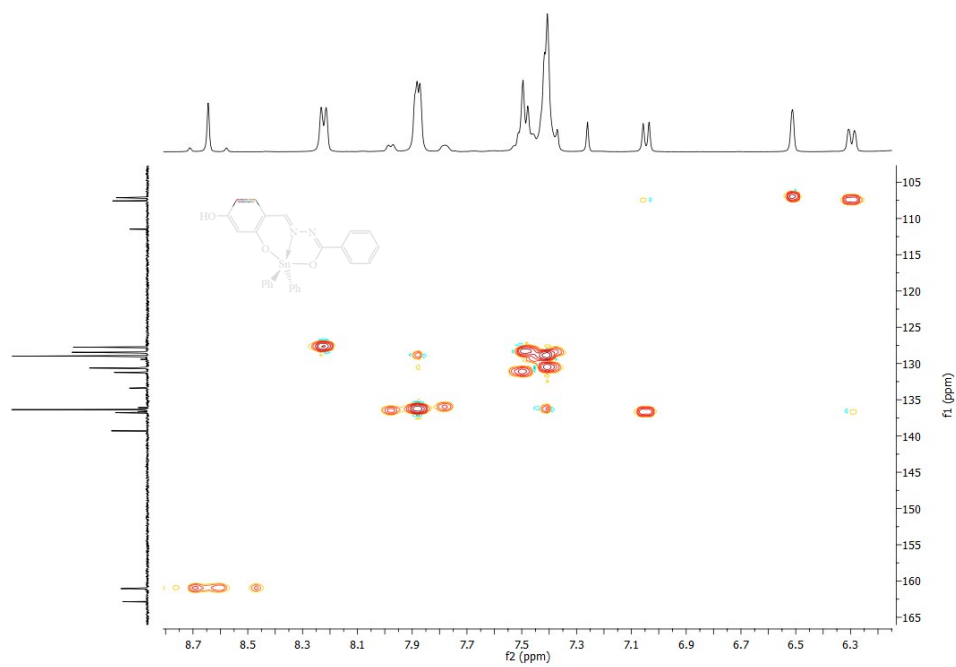


Fig. S15. The $^1\text{H}/^{13}\text{C}$ HETCOR spectrum of compound **3**.

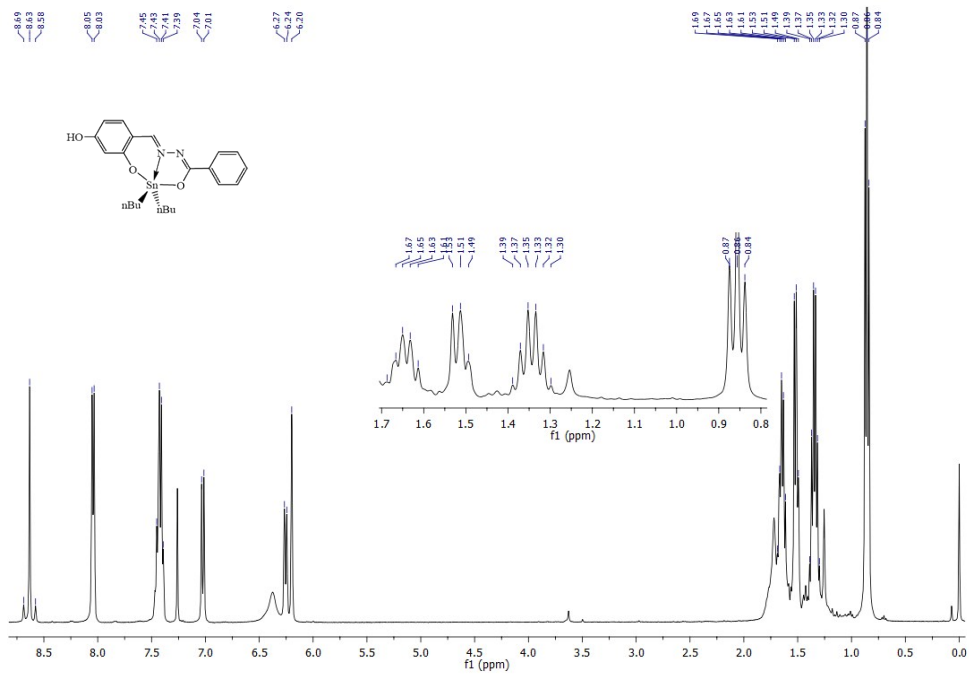


Fig. S16. The ¹H-NMR (400 MHz, CDCl₃) spectrum of compound 4.

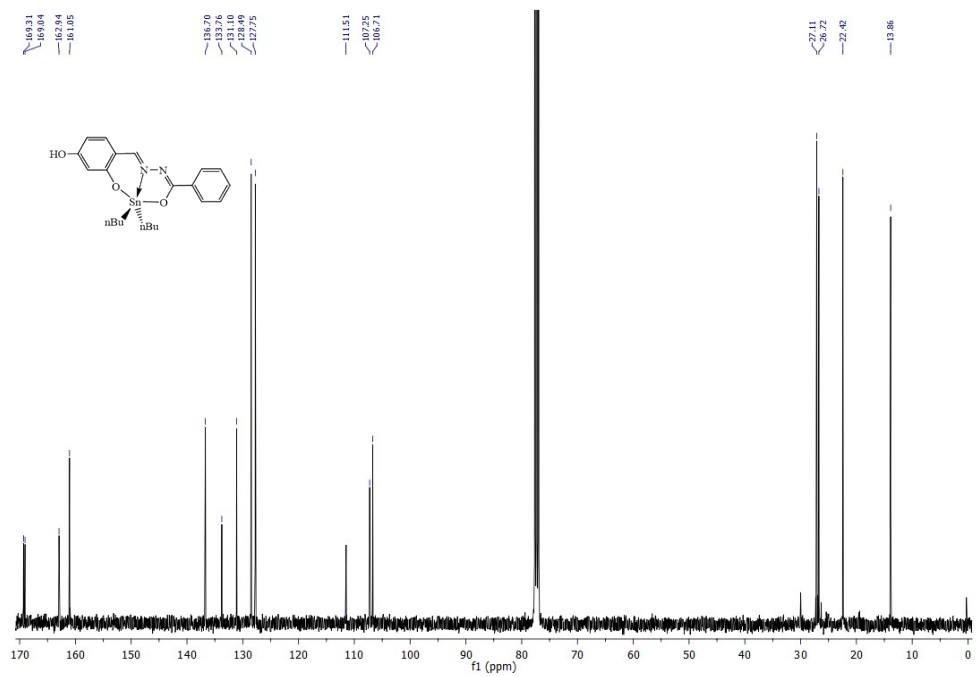


Fig. S17. The ¹³C-NMR (100 MHz, CDCl₃) spectrum of compound 4.

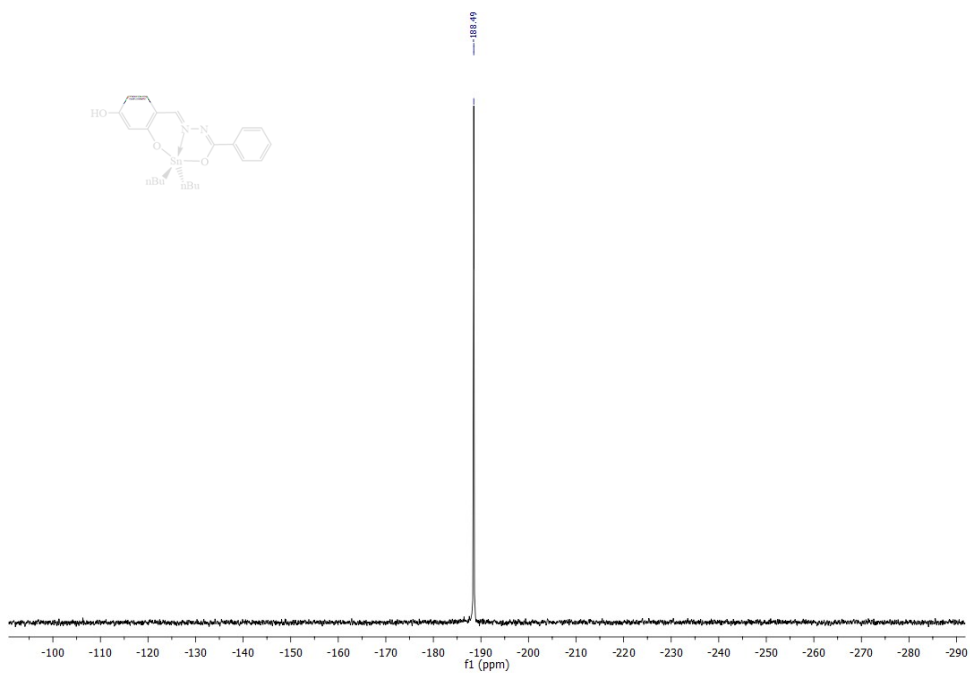


Fig. S18. The ^{119}Sn -NMR (149.14 MHz, CDCl_3) spectrum of compound 4.

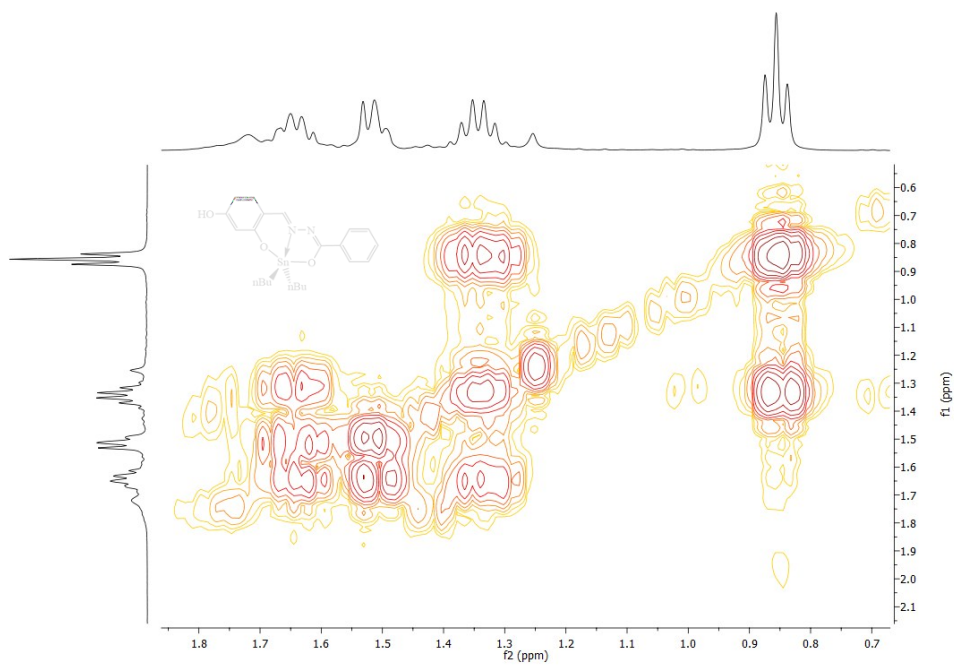


Fig. S19. The $^1\text{H}/^1\text{H}$ COSY spectrum of compound 4 (aliphatic region).

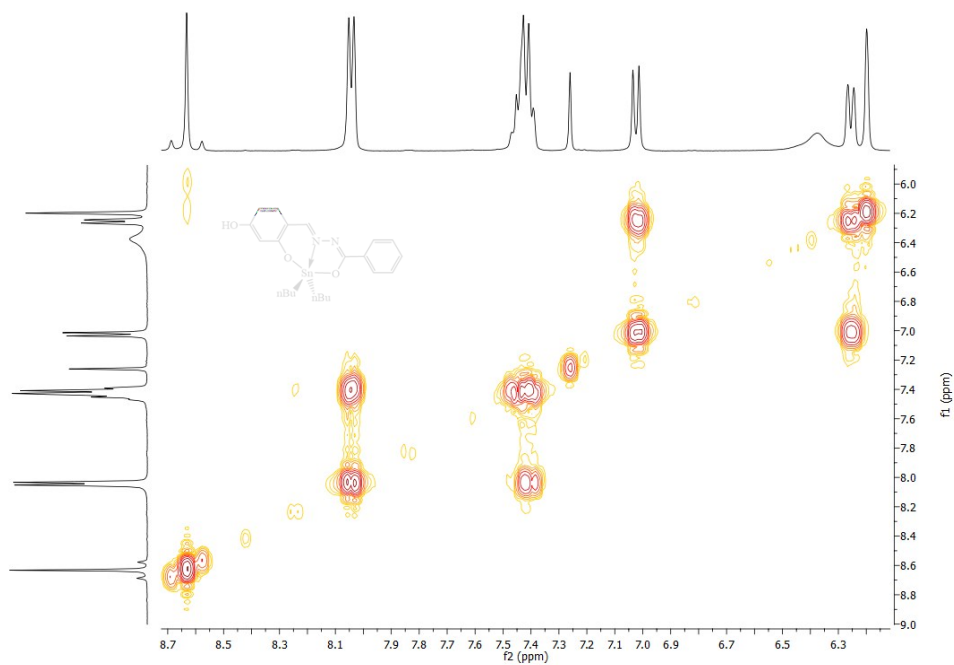


Fig. S20. The $^1\text{H}/^1\text{H}$ COSY spectrum of compound **4** (aromatic region).

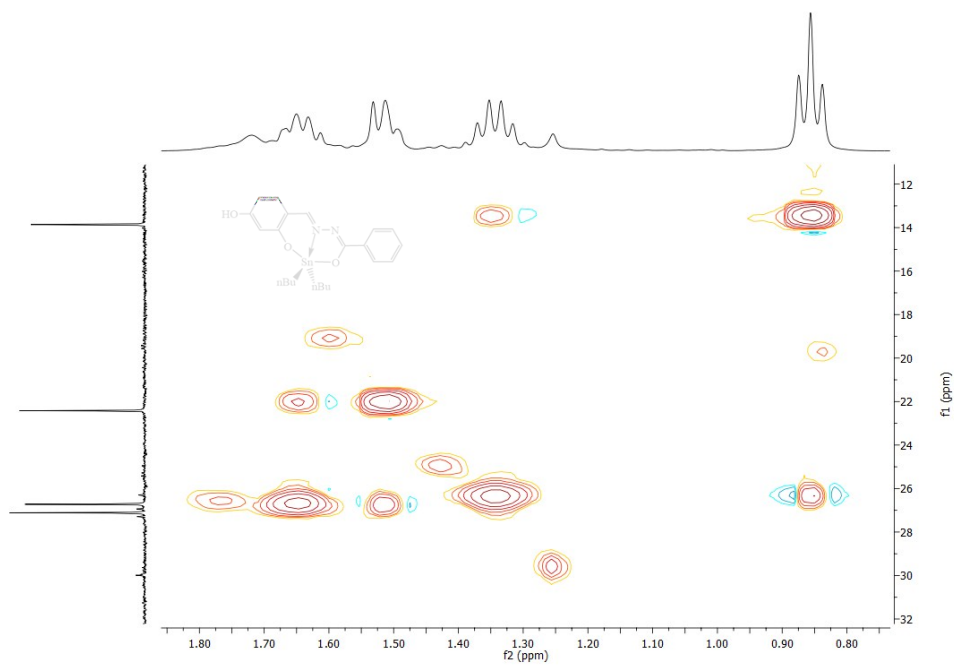


Fig. S21. The $^1\text{H}/^{13}\text{C}$ HETCOR spectrum of compound **4** (aliphatic region).

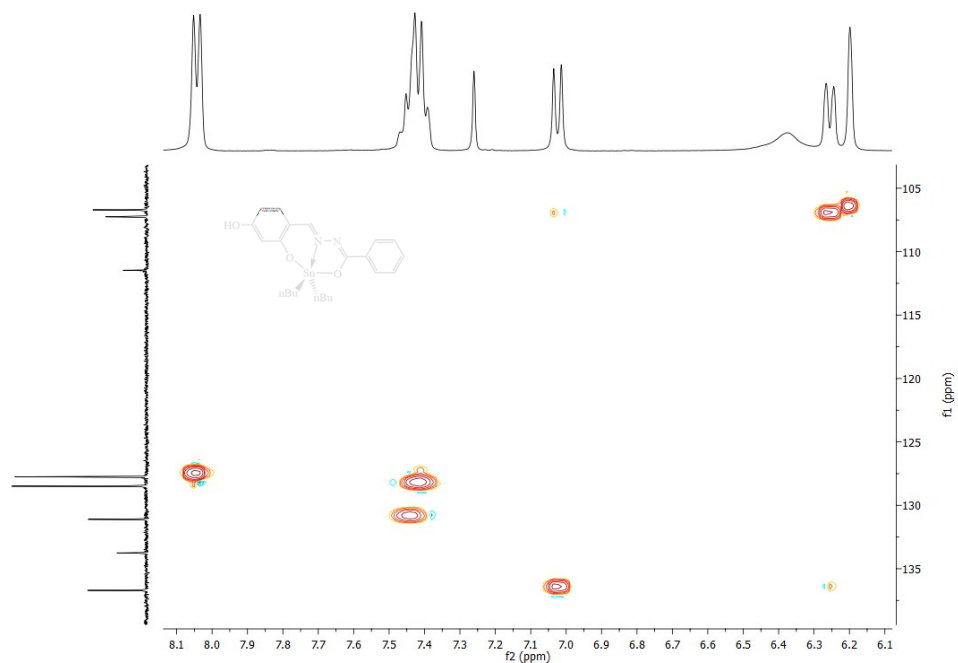


Fig. S22. The $^1\text{H}/^{13}\text{C}$ HETCOR spectrum of compound 4 (aromatic region).

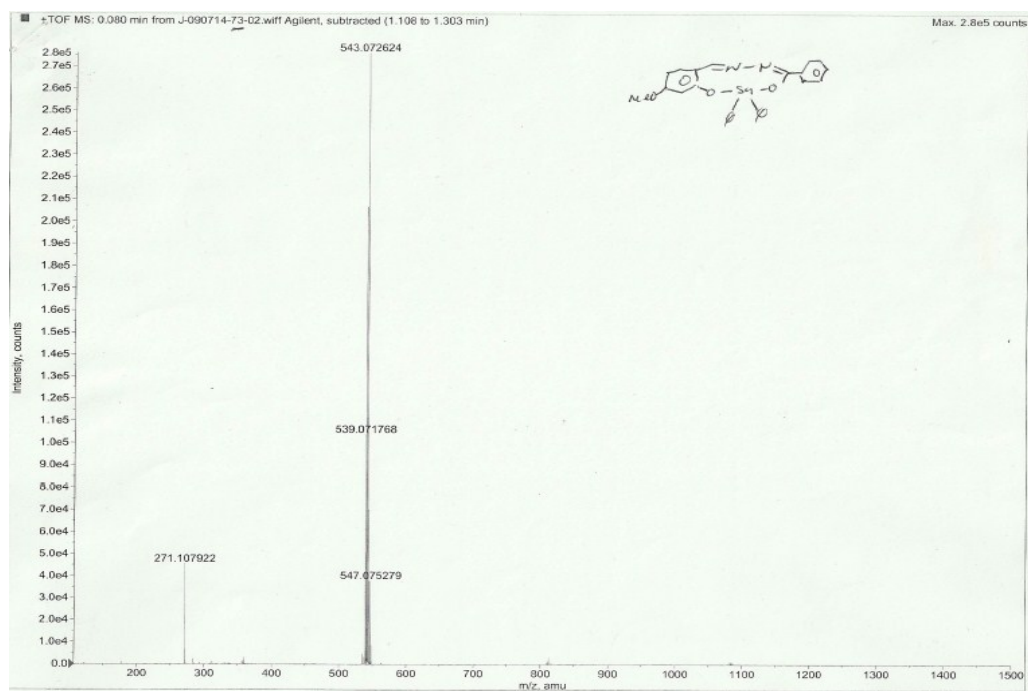


Fig. S23. The Mass spectrum of compound 1.

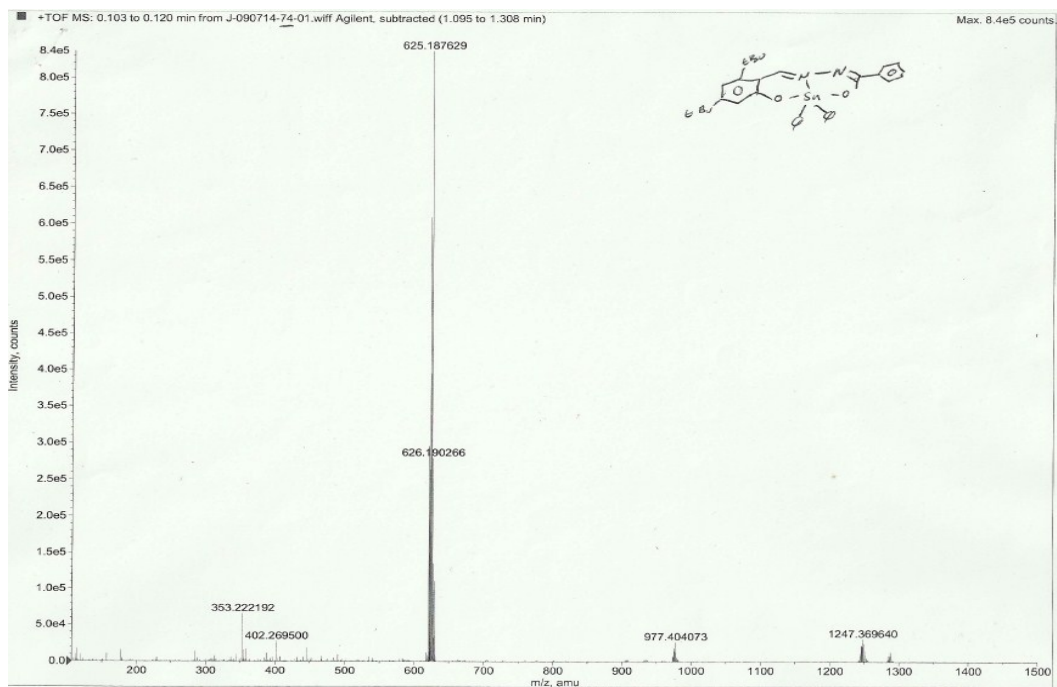


Fig. S24. The Mass spectrum of compound 2.

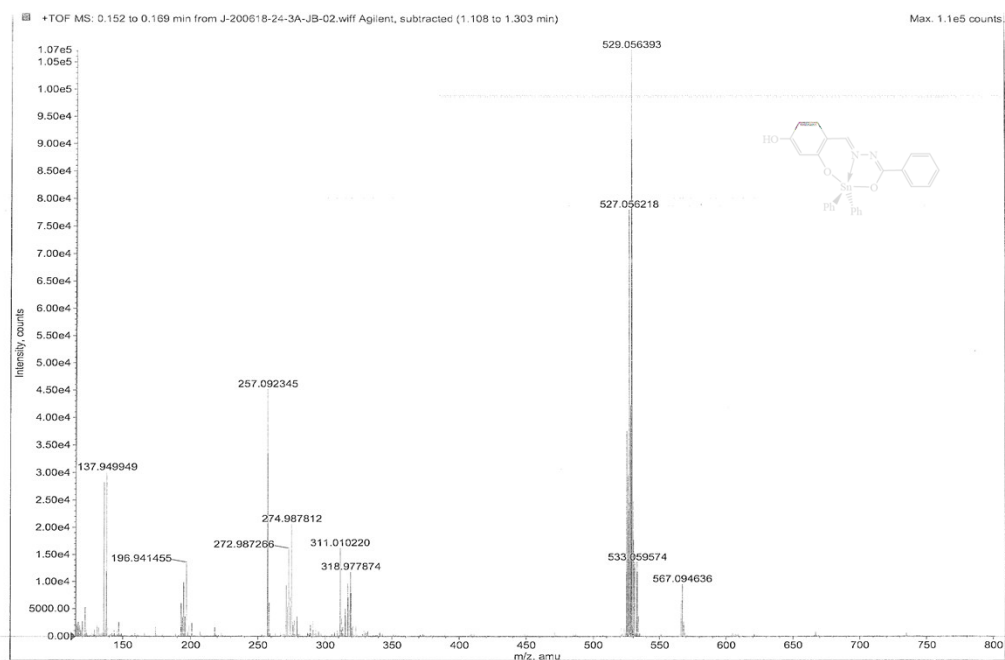


Fig. S25. The Mass spectrum of compound 3.

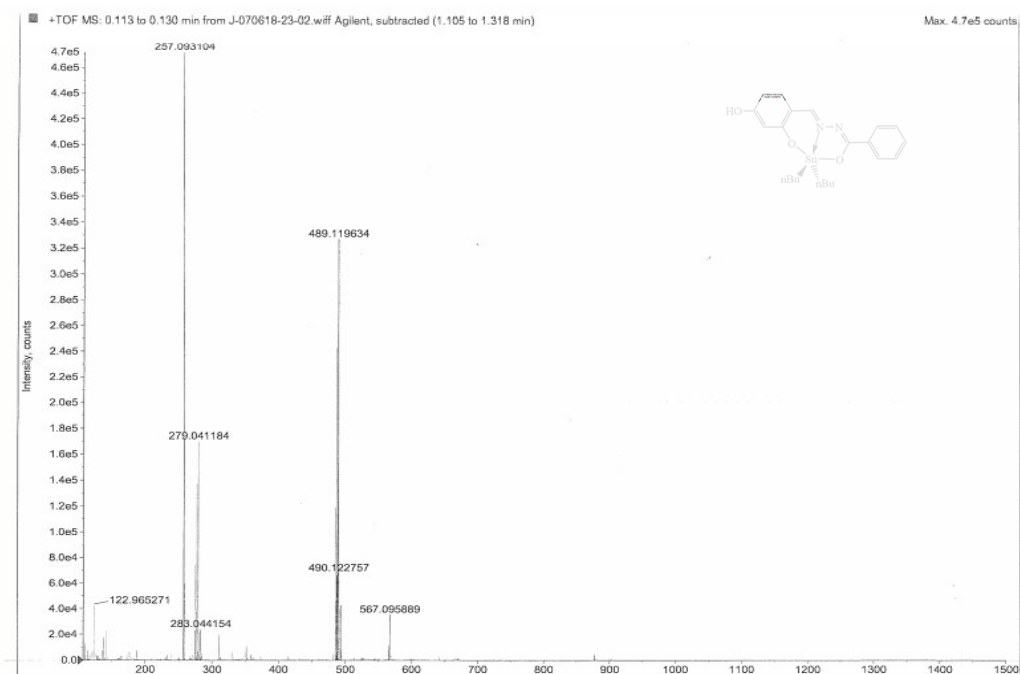


Fig. S26. The Mass spectrum of compound 4.