

Supplementary electronic information for

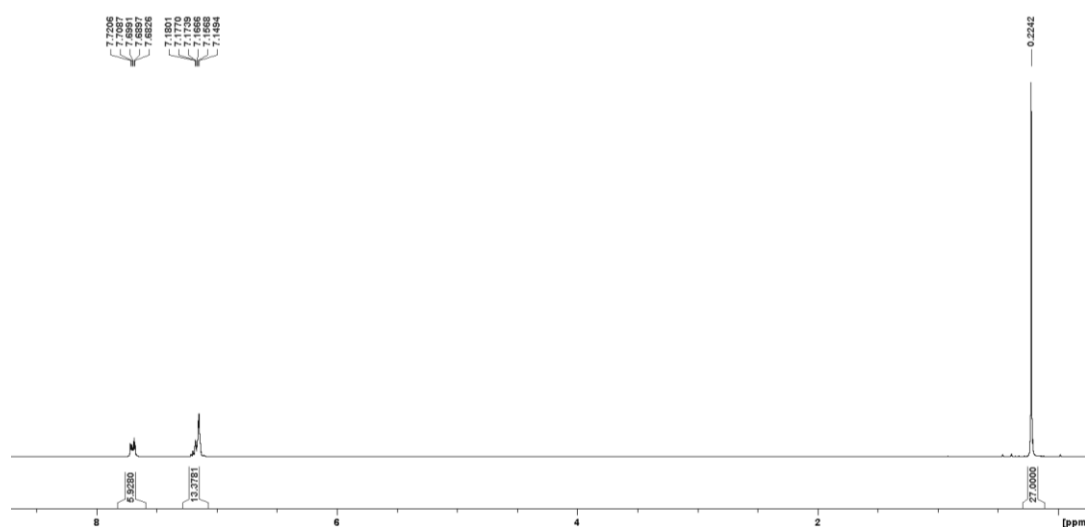
Si(SiMe₃)₂SiPh₃ – A Ligand for Novel Subvalent Tin Cluster

Compounds

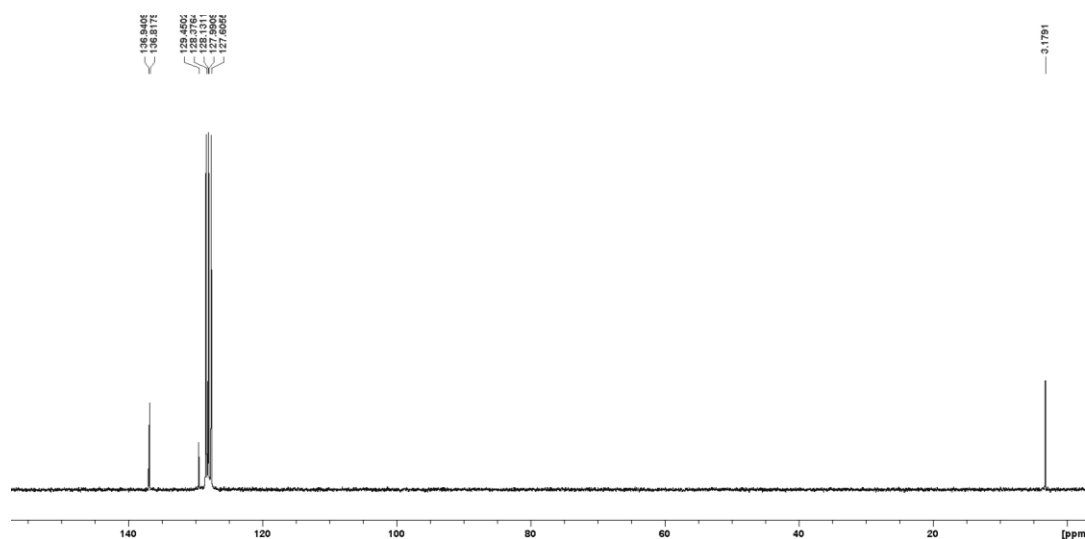
Raphael Klink, Claudio Schrenk and Andreas Schnepf

1.) NMR Spectra of Si(SiMe₃)₃(SiPh₃) (2)

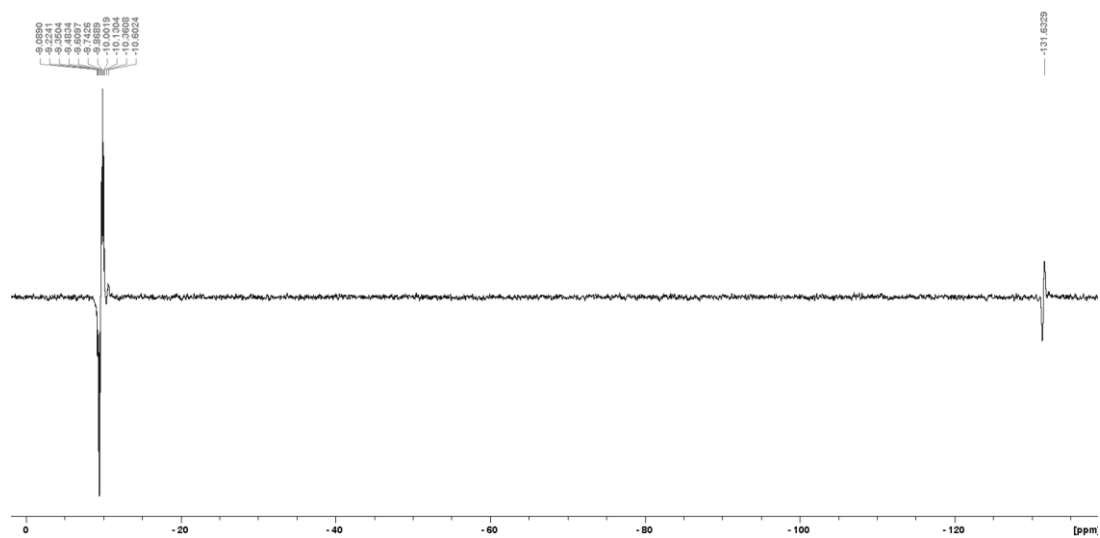
1.1) ¹H-NMR (250 MHz, C₆D₆)



1.2) ¹³C{¹H}-NMR (63 MHz, C₆D₆)

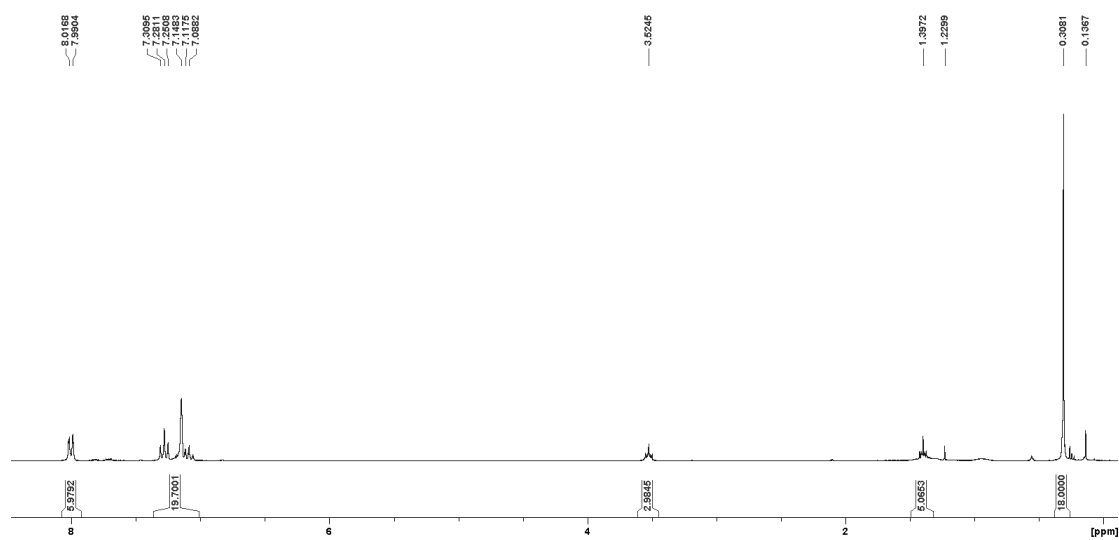


1.3) ^{29}Si -NMR (50 MHz, C_6D_6)

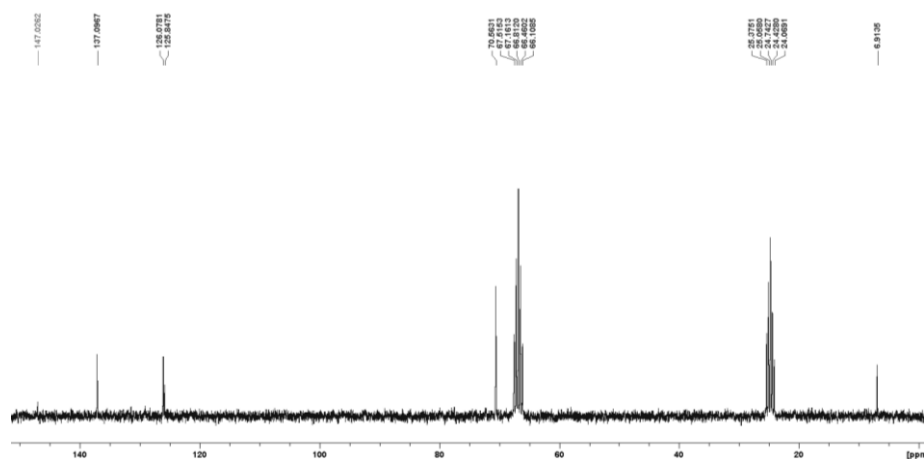


2.) NMR spectra of $\text{KSi}(\text{SiMe}_3)_2(\text{SiPh}_3) \cdot \text{thf}$ (**3K**)

2.1) ^1H -NMR (250 MHz, C_6D_6)

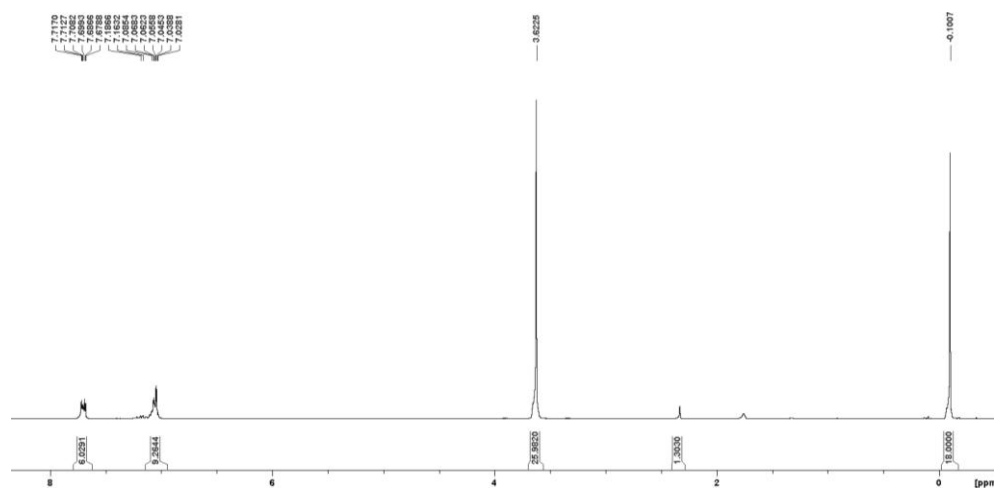


2.2) $^{13}\text{C}\{^1\text{H}\}$ -NMR (63 MHz, C_6D_6)

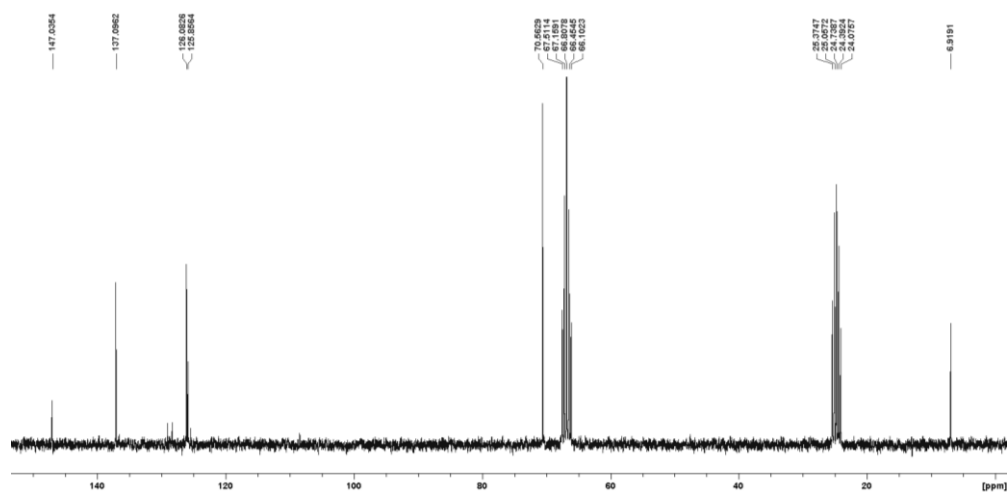


3.) NMR spectra of (18-crown-6) $\text{KSi}(\text{SiMe}_3)_2(\text{SiPh}_3)$ (3_{KC})

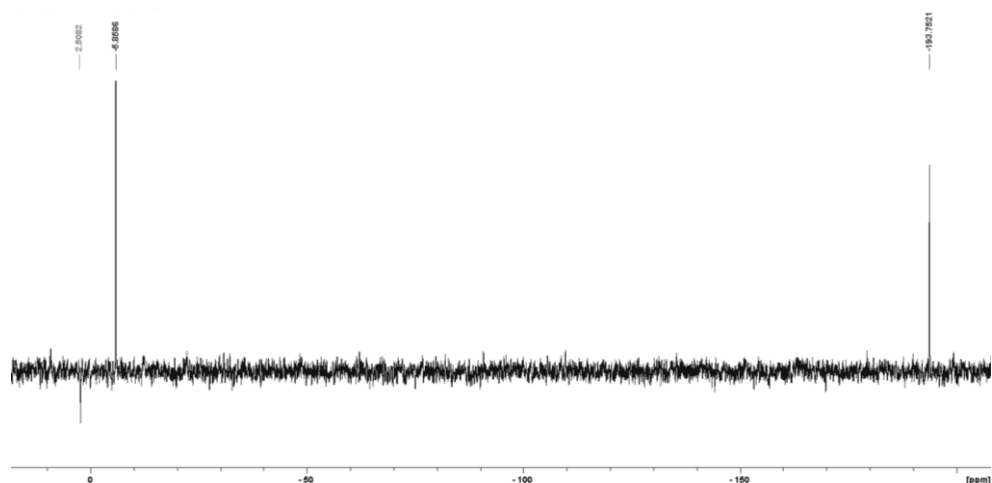
3.1) ^1H -NMR (250 MHz, thf-d_8)



3.2) $^{13}\text{C}\{^1\text{H}\}$ -NMR (63 MHz, thf-d_8)

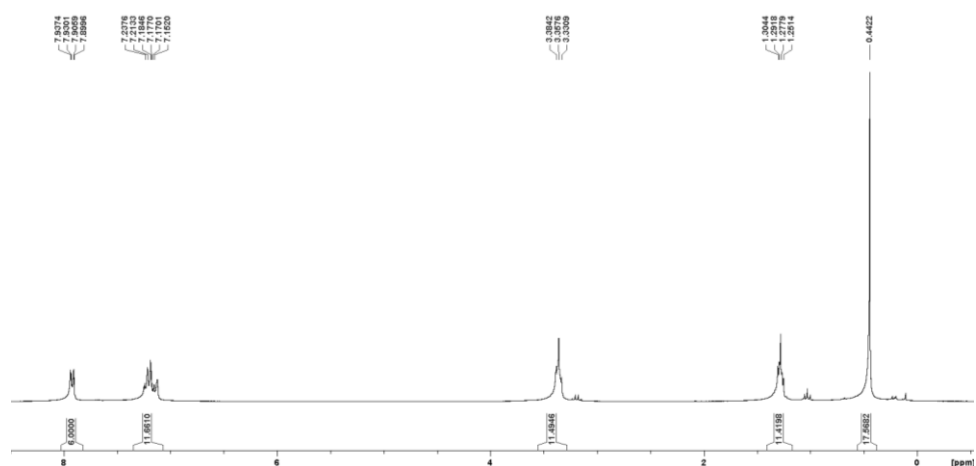


3.3) $^{29}\text{Si}\{^1\text{H}\}$ -NMR (50 MHz, thf- d_8)

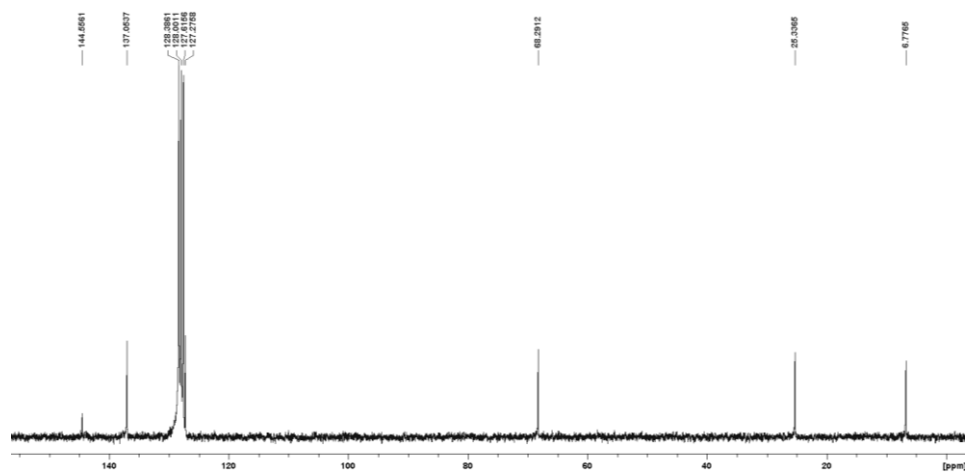


4.) NMR spectra of $\text{LiSi}(\text{SiMe}_3)_2(\text{SiPh}_3) \cdot 3 \text{ thf}$ (3Li)

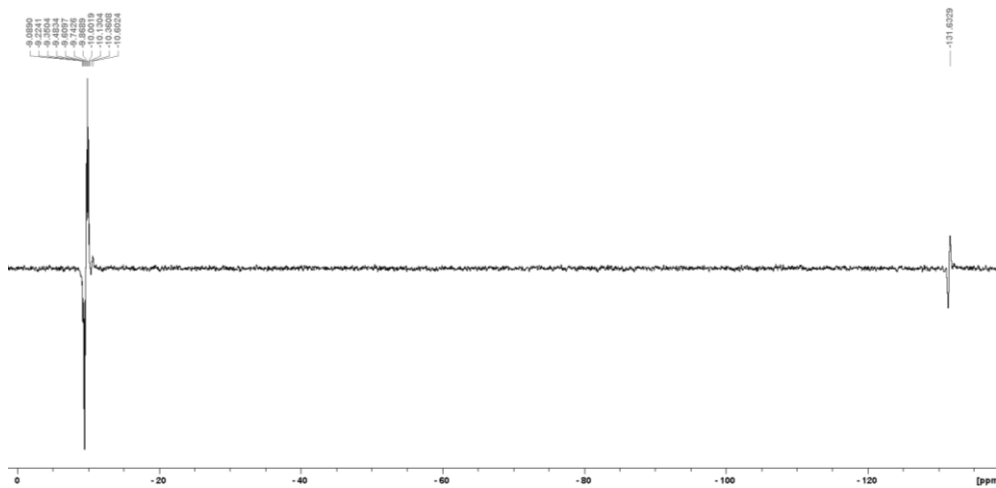
4.1) ^1H -NMR (250 MHz, C_6D_6)



4.2) $^{13}\text{C}\{^1\text{H}\}$ -NMR (63 MHz, C_6D_6)

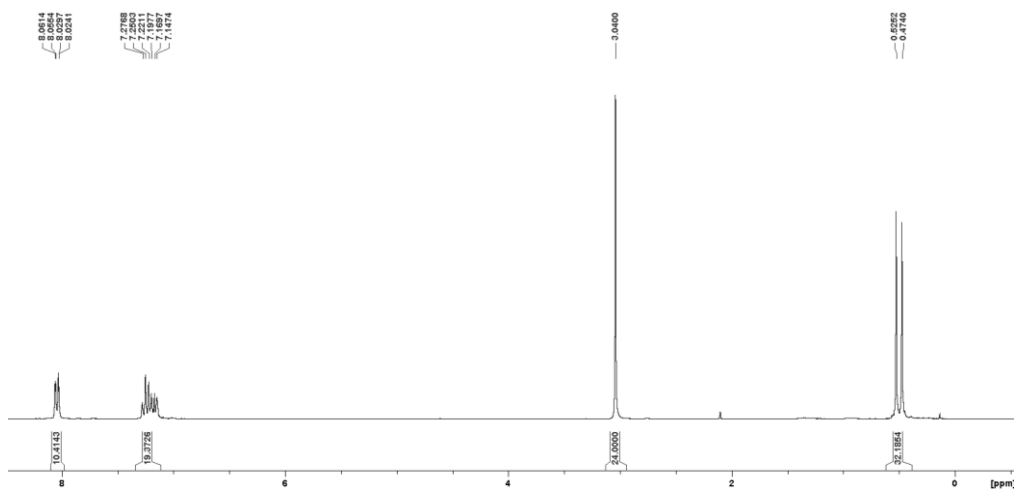


4.3) ^{29}Si -NMR (50 MHz, C_6D_6)

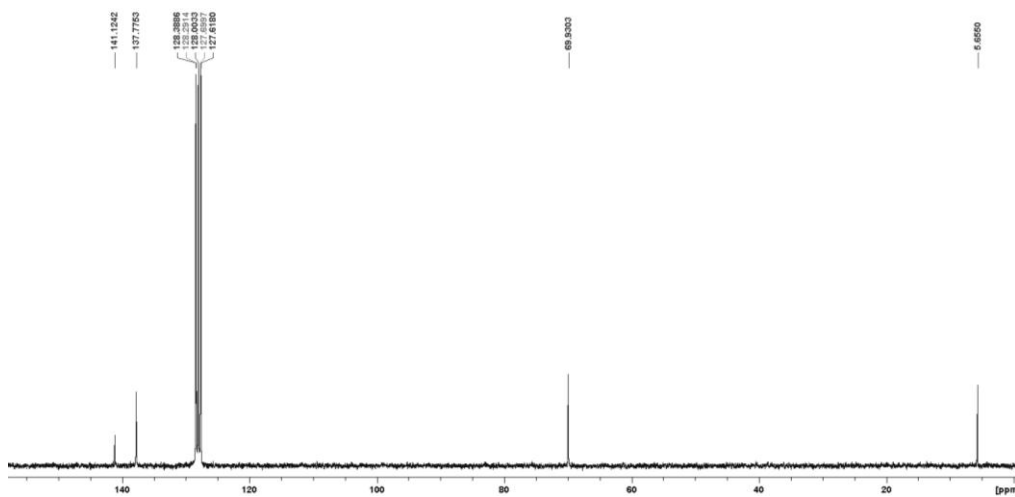


5.) NMR spectra of (18-crown-6)KSn[Si(SiMe₃)₂(SiPh₃)₂]Cl (4)

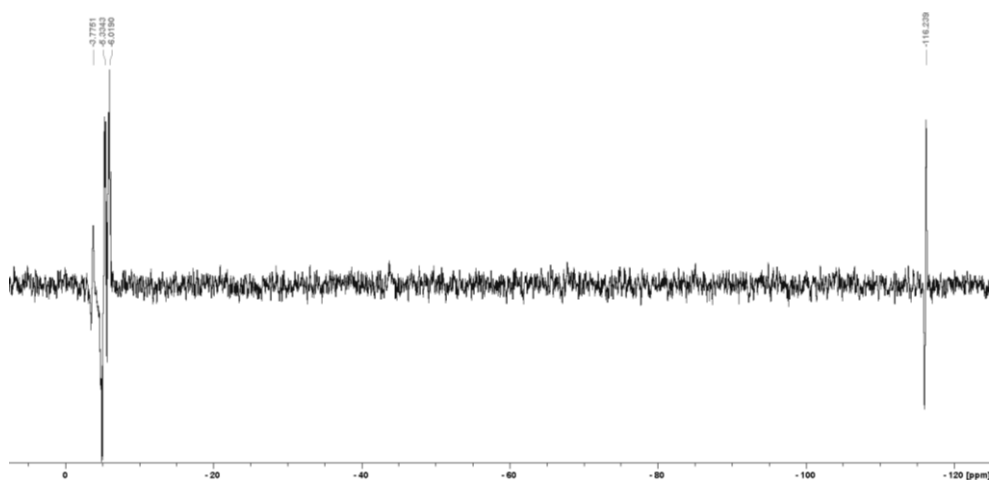
5.1) ^1H -NMR (250 MHz, C_6D_6)



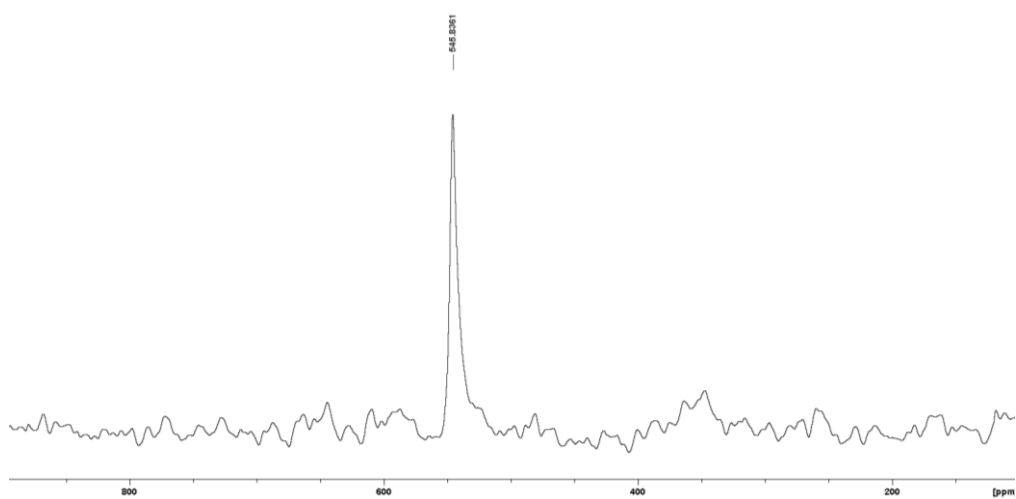
5.2) $^{13}\text{C}\{^1\text{H}\}$ -NMR (63 MHz, C_6D_6)



5.3) ^{29}Si -NMR (50 MHz, C_6D_6)

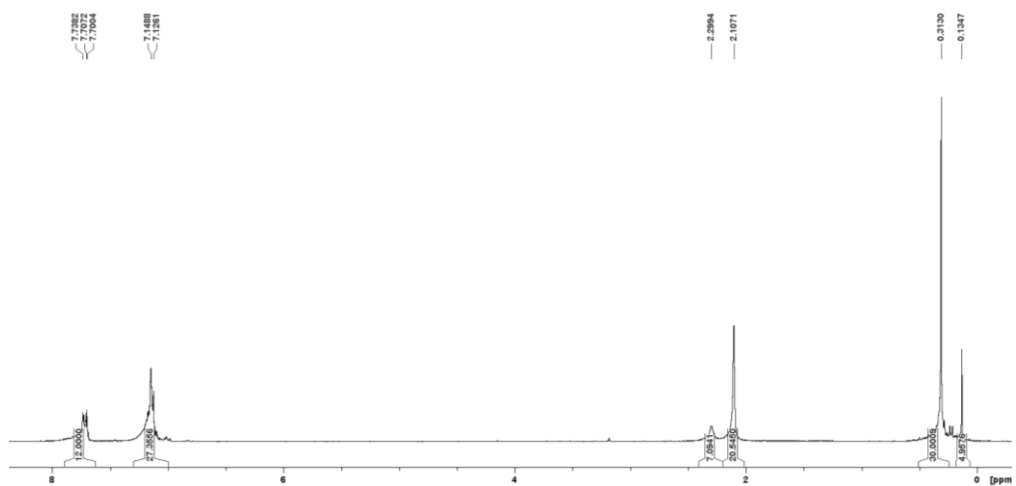


5.4) ^{119}Sn -NMR (93 MHz, C_6D_6)

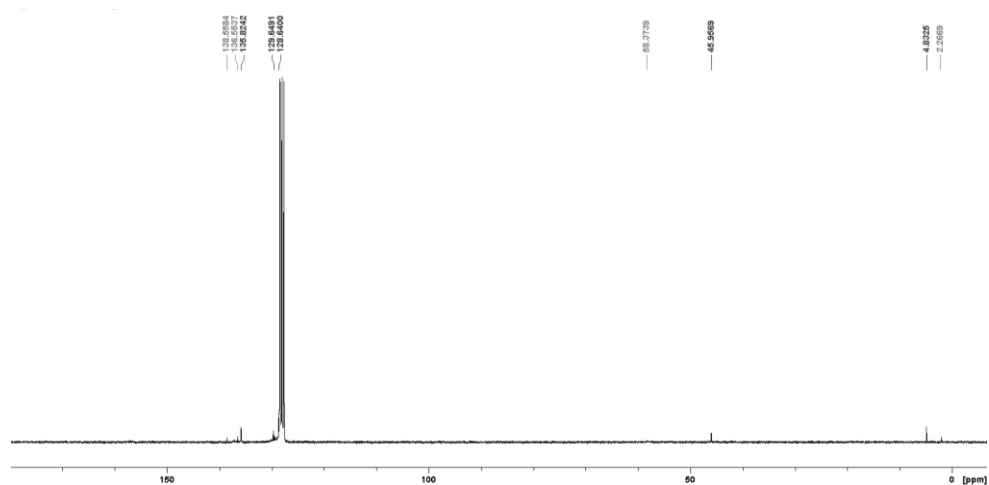


6.) NMR spectra of $(\text{tmeda})_2\text{LiSn}[\text{Si}(\text{SiMe}_3)_2(\text{SiPh}_3)]_2\text{Cl}$ (6)

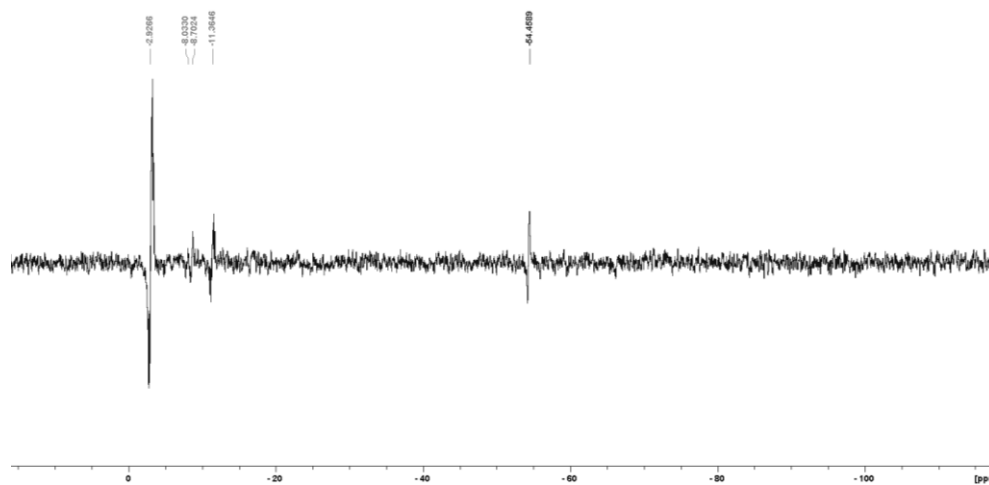
6.1) ^1H -NMR (250 MHz, C_6D_6)



6.2) $^{13}\text{C}\{^1\text{H}\}$ -NMR (63 MHz, C_6D_6)



6.3) ^{29}Si -NMR (50 MHz, C_6D_6)



7.) $^1\text{H-NMR}$ Spectra of the crude reaction mixture of the reaction of 3_{K} with SnCl_2 (the signals of the stannide **4** are emphasized by an ellipse).

