

ESI for:

**New Synthetic Strategies Leading to [RPNR]<sup>-</sup> Anions and Isolation of the [P(Nt-Bu)<sub>3</sub>]<sup>3-</sup> Trianion.**

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**NMR spectra of studied compounds.**

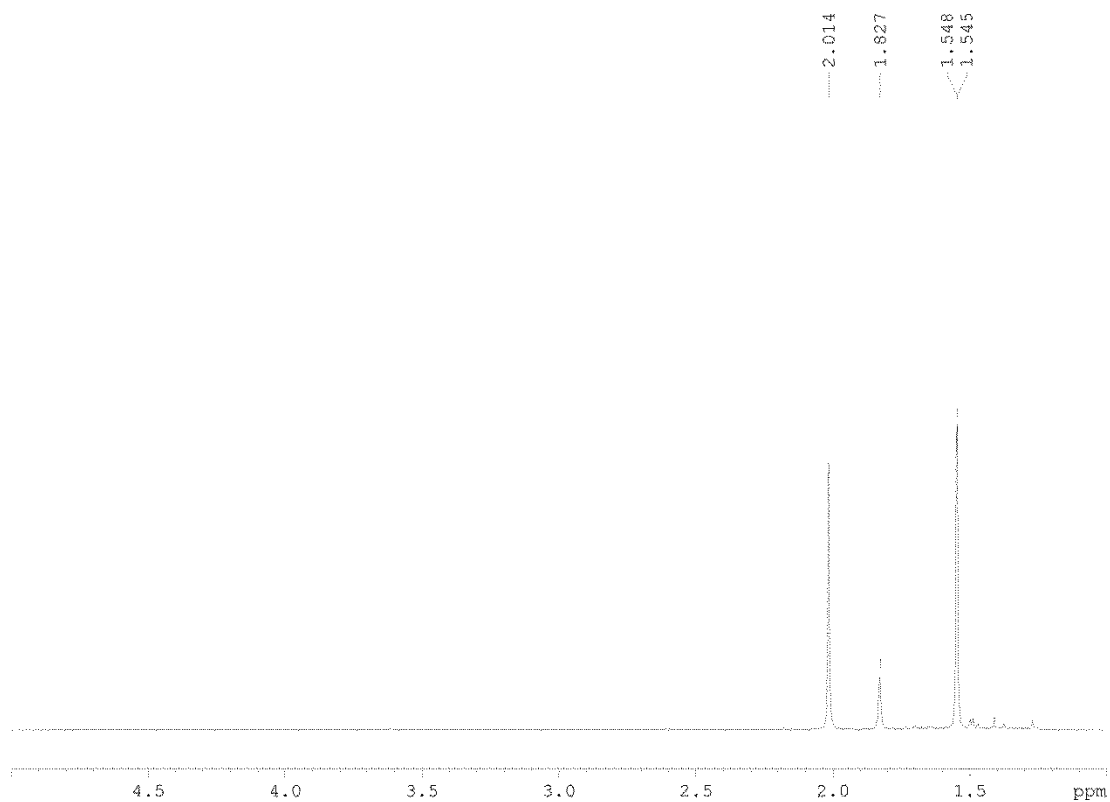


Figure S1:  $^1\text{H}$  NMR spectrum of compound **1** acquired in  $\text{C}_6\text{D}_6$ .

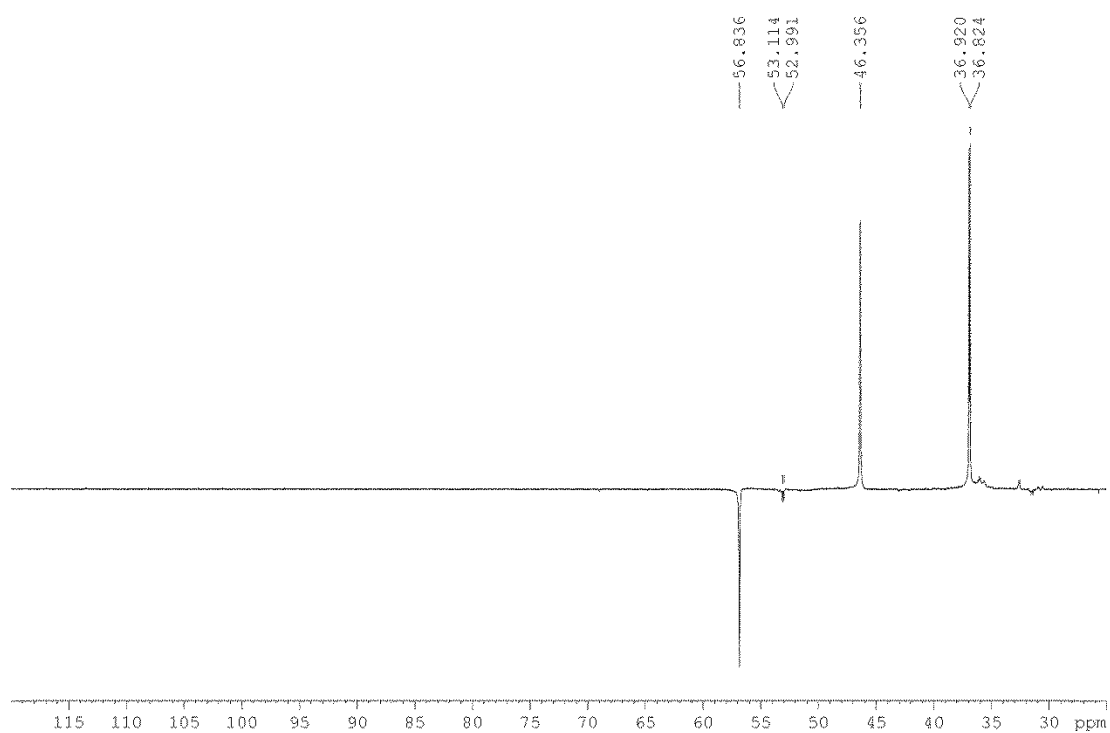


Figure S2:  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **1** acquired in  $\text{C}_6\text{D}_6$ .

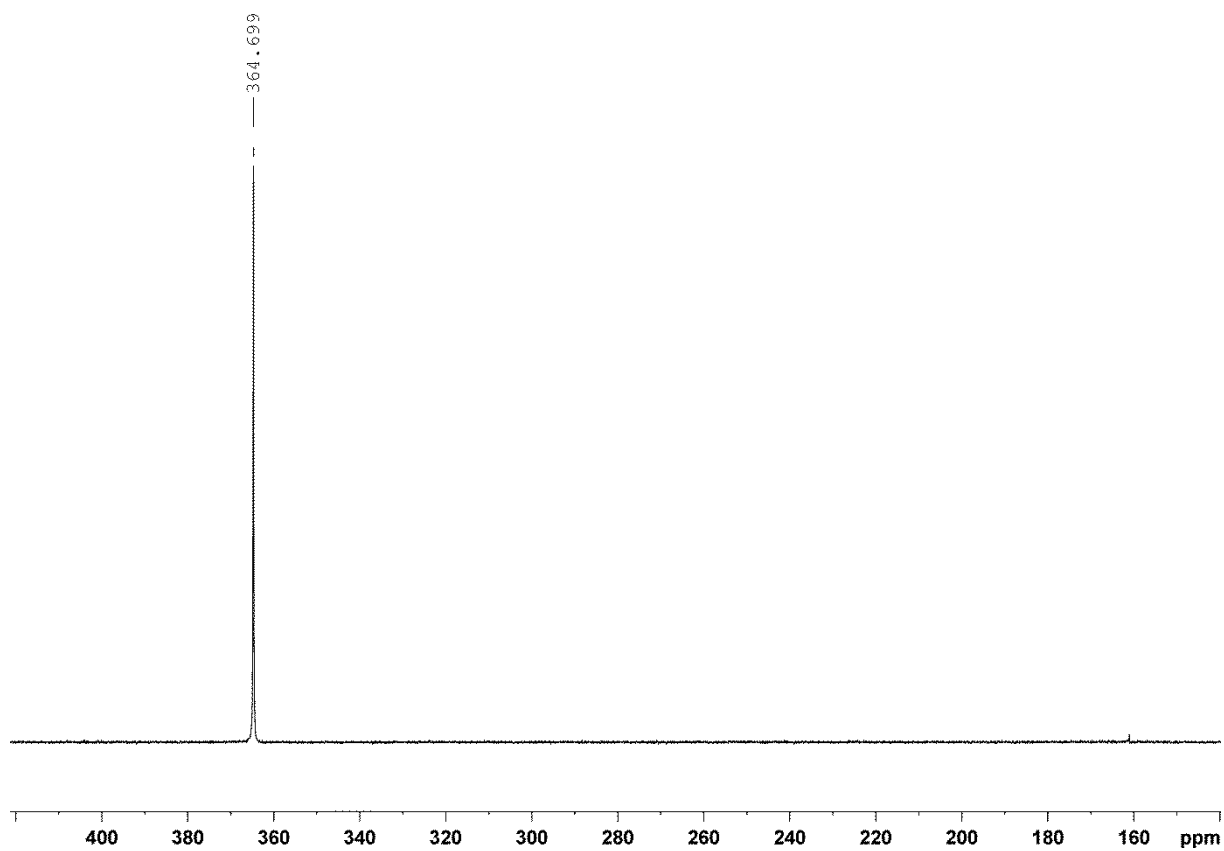


Figure S3:  $^{31}\text{P}\{^1\text{H}\}$  NMR spectrum of compound **1** acquired in  $\text{C}_6\text{D}_6$ .

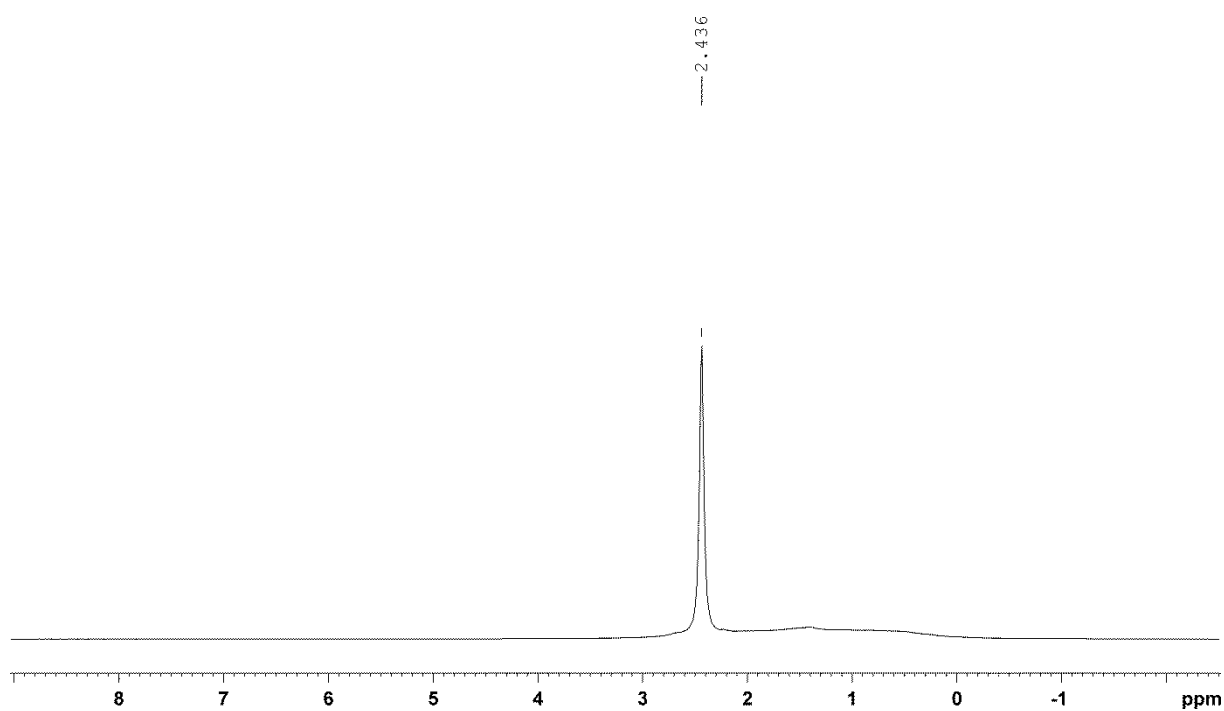


Figure S4:  ${}^7\text{Li}\{{}^1\text{H}\}$  NMR spectrum of compound **1** acquired in  $\text{C}_6\text{D}_6$ .

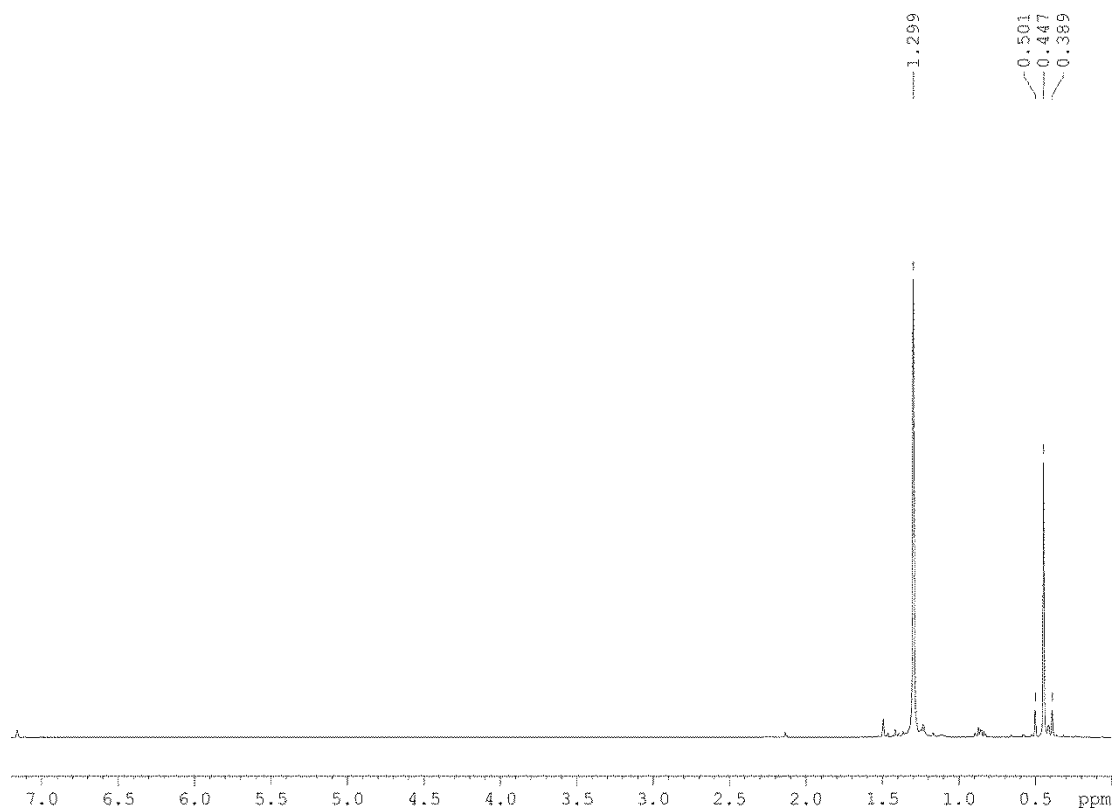


Figure S5:  ${}^1\text{H}$  NMR spectrum of compound **3** acquired in  $\text{C}_6\text{D}_6$ .

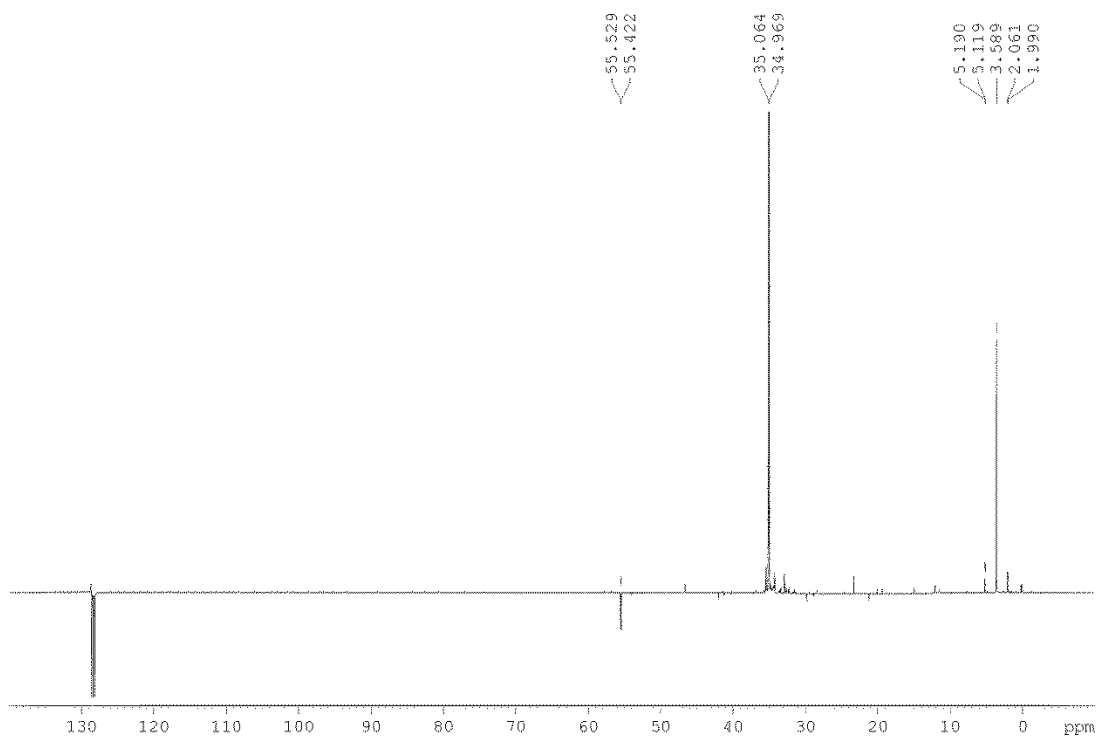


Figure S6:  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **3** acquired in  $\text{C}_6\text{D}_6$ .

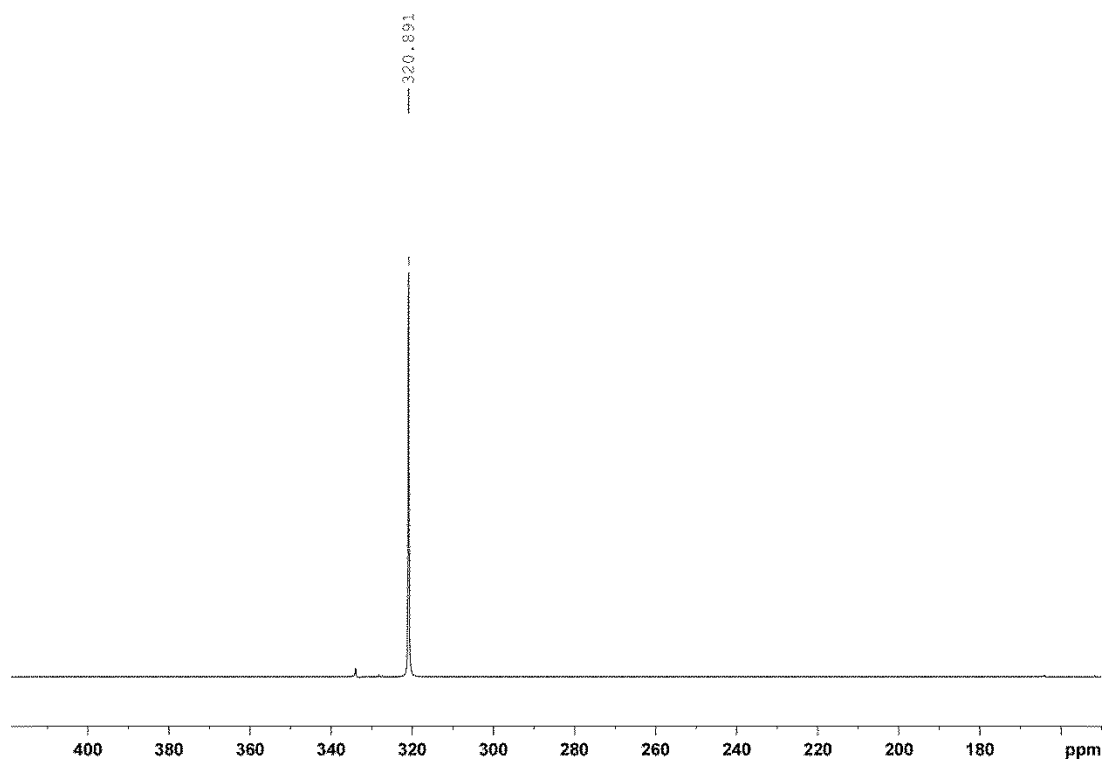


Figure S7:  $^{31}\text{P}\{^1\text{H}\}$  NMR spectrum of compound **3** acquired in  $\text{C}_6\text{D}_6$ .

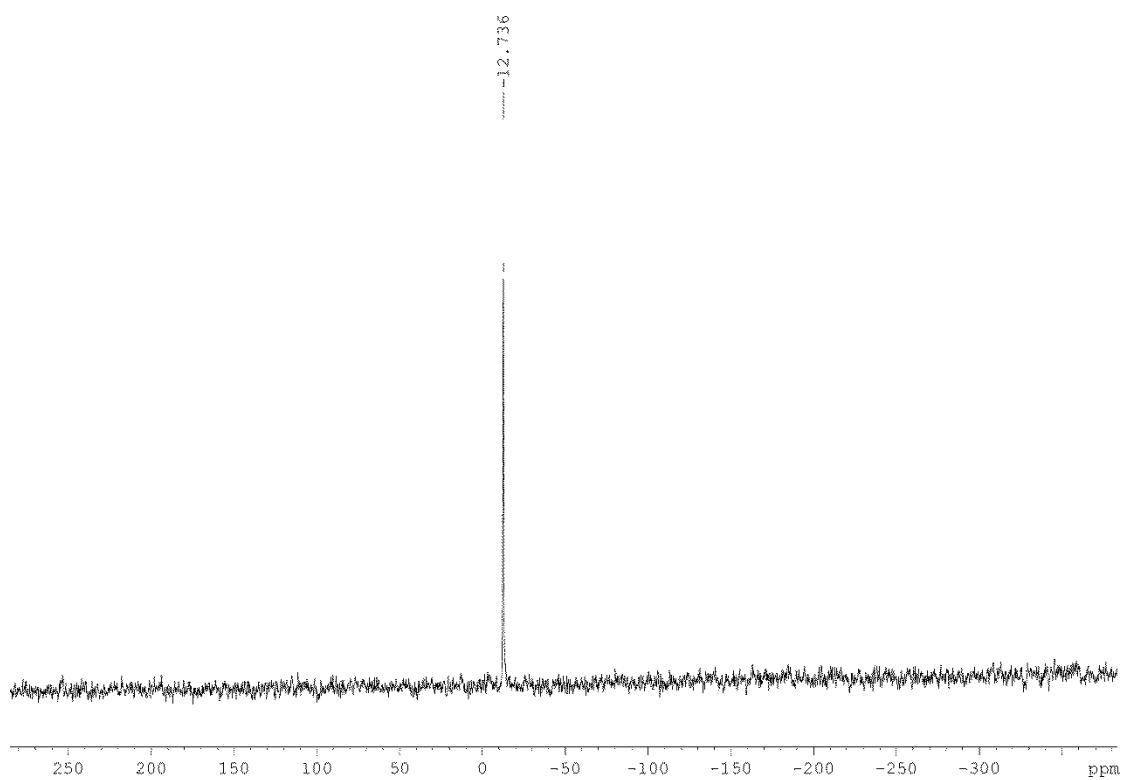


Figure S8:  $^{119}\text{Sn}\{^1\text{H}\}$  NMR spectrum of compound **3** acquired in  $\text{C}_6\text{D}_6$ .

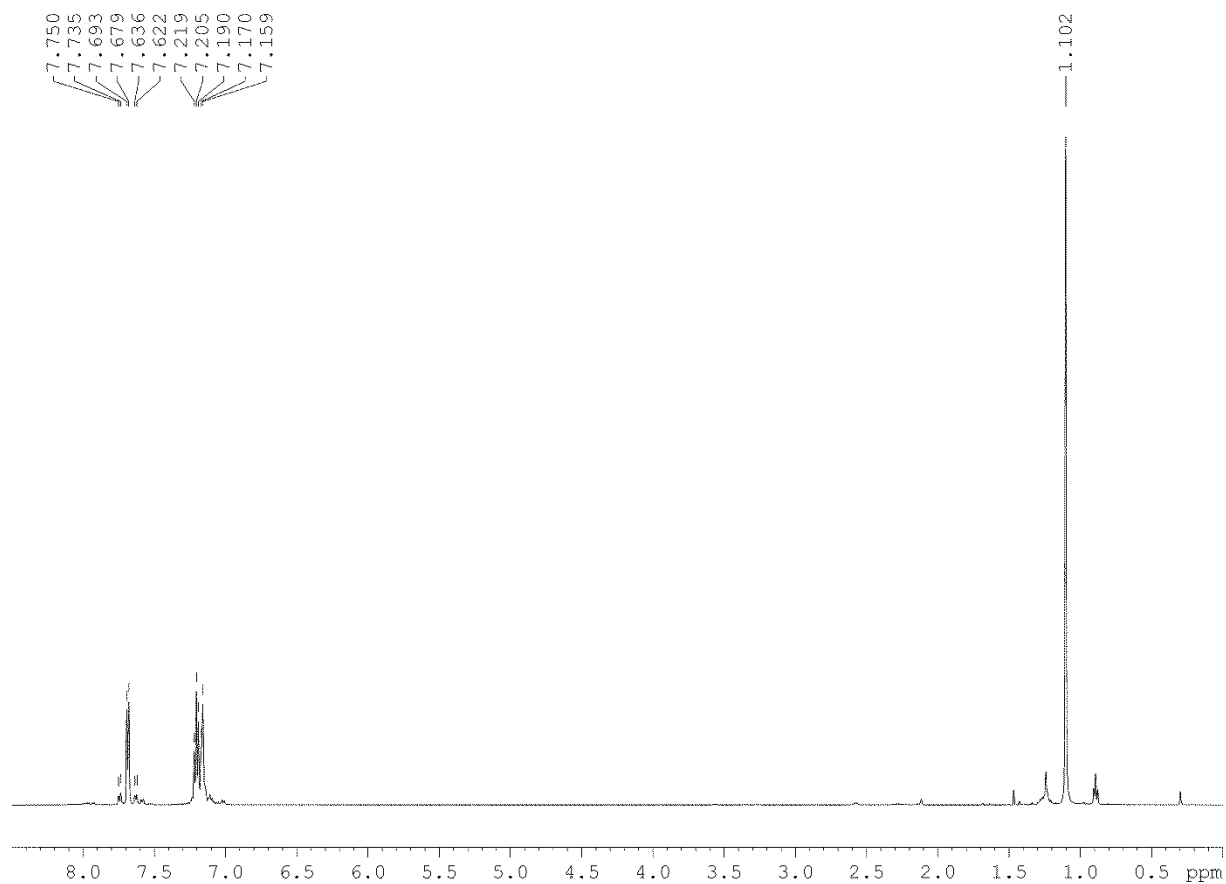


Figure S9:  $^1\text{H}$  NMR spectrum of compound **4** acquired in  $\text{C}_6\text{D}_6$ .

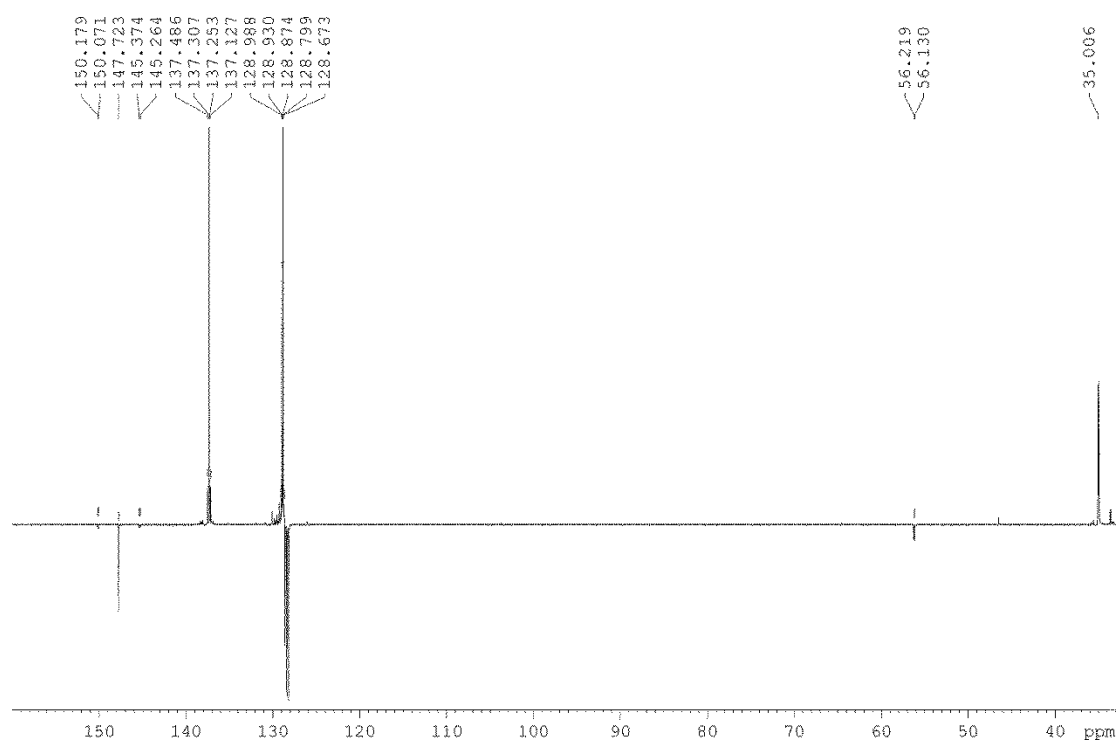


Figure S10:  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **4** acquired in  $\text{C}_6\text{D}_6$ .

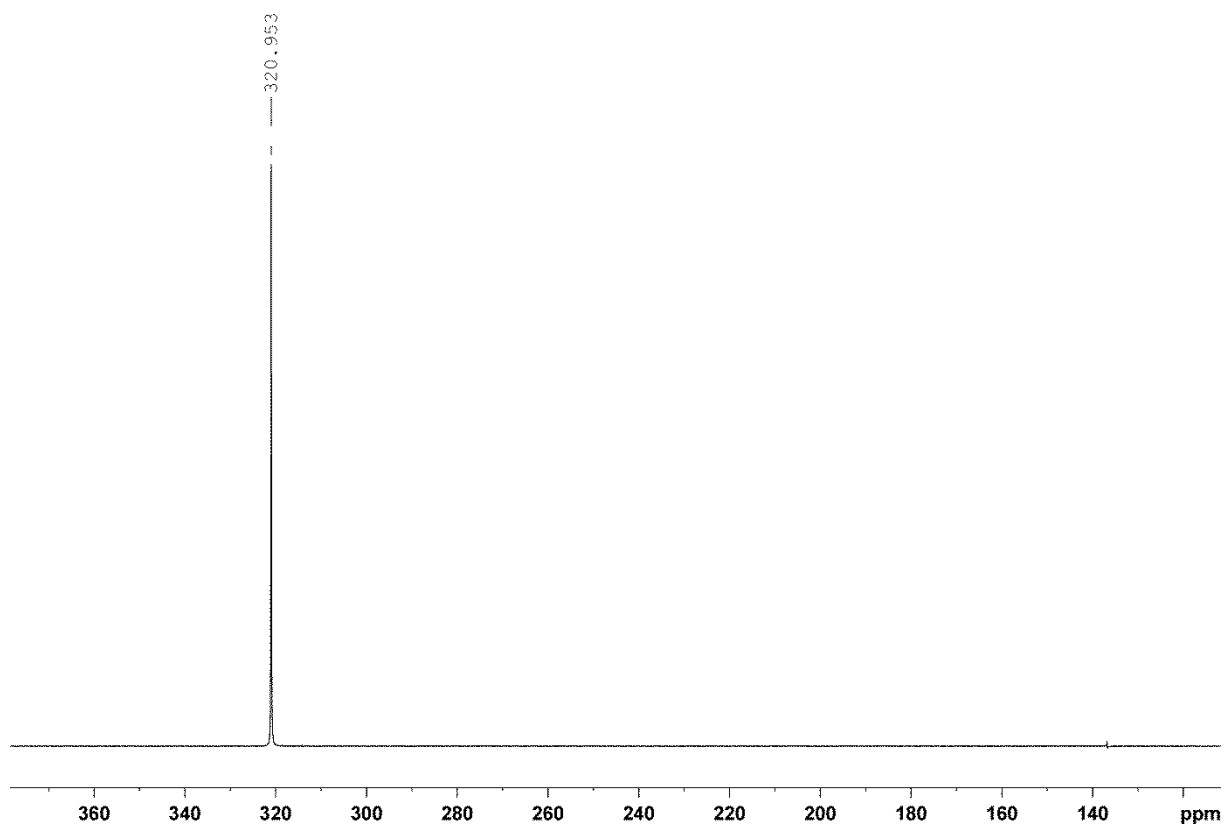


Figure S11:  $^{31}\text{P}\{^1\text{H}\}$  NMR spectrum of compound **4** acquired in  $\text{C}_6\text{D}_6$ .

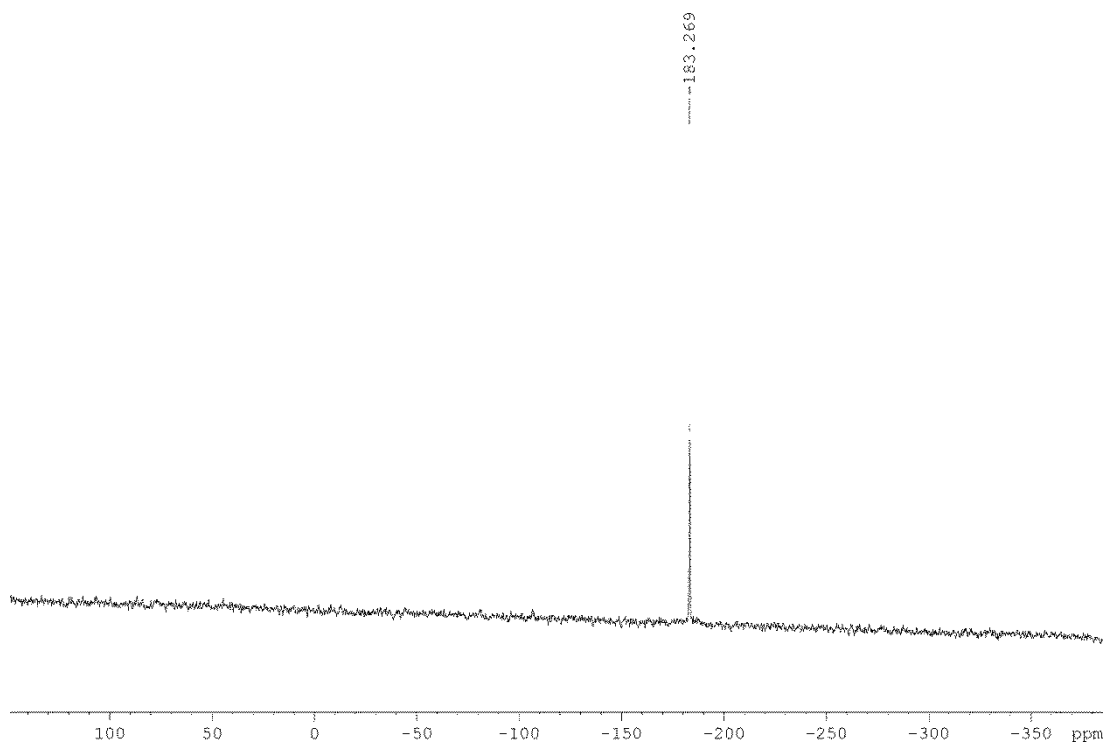


Figure S12:  $^{119}\text{Sn}\{^1\text{H}\}$  NMR spectrum of compound **4** acquired in  $\text{C}_6\text{D}_6$ .

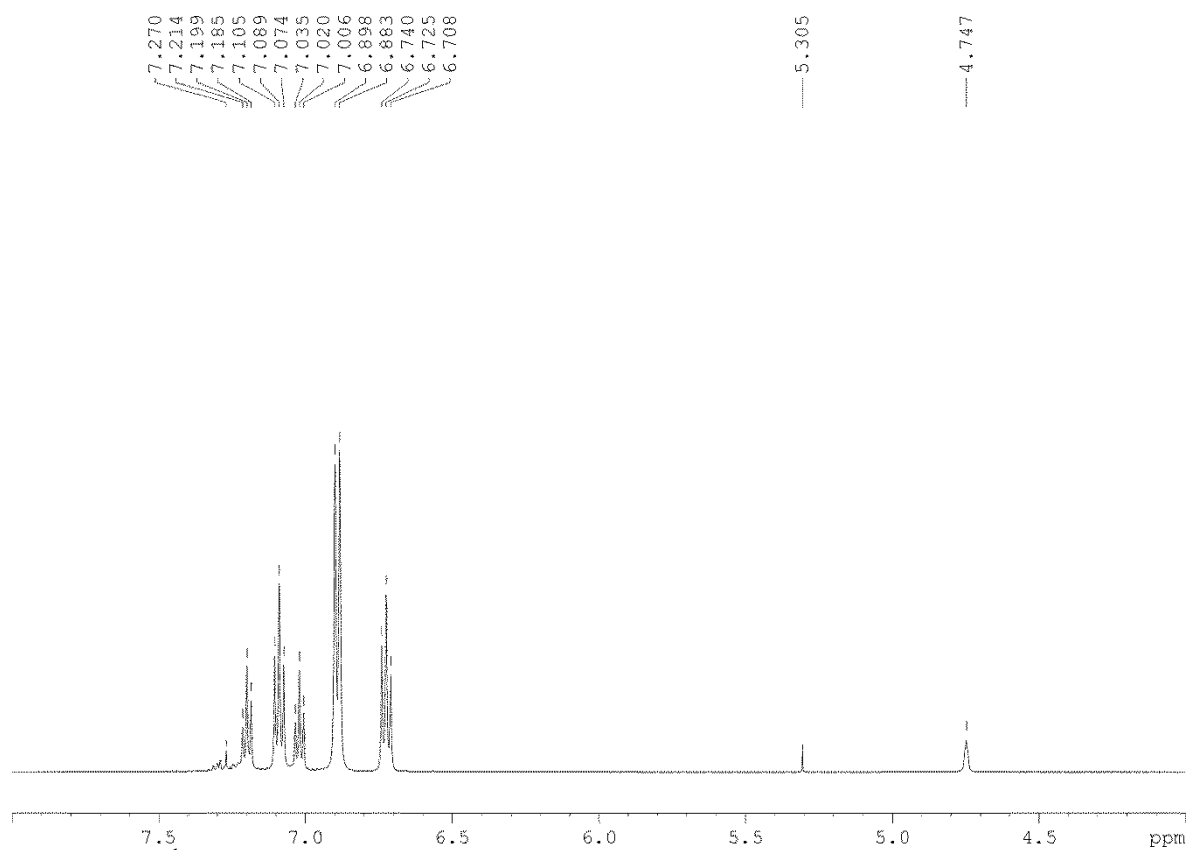


Figure S13:  $^1\text{H}$  NMR spectrum of compound **5** acquired in  $\text{C}_6\text{D}_6$ .

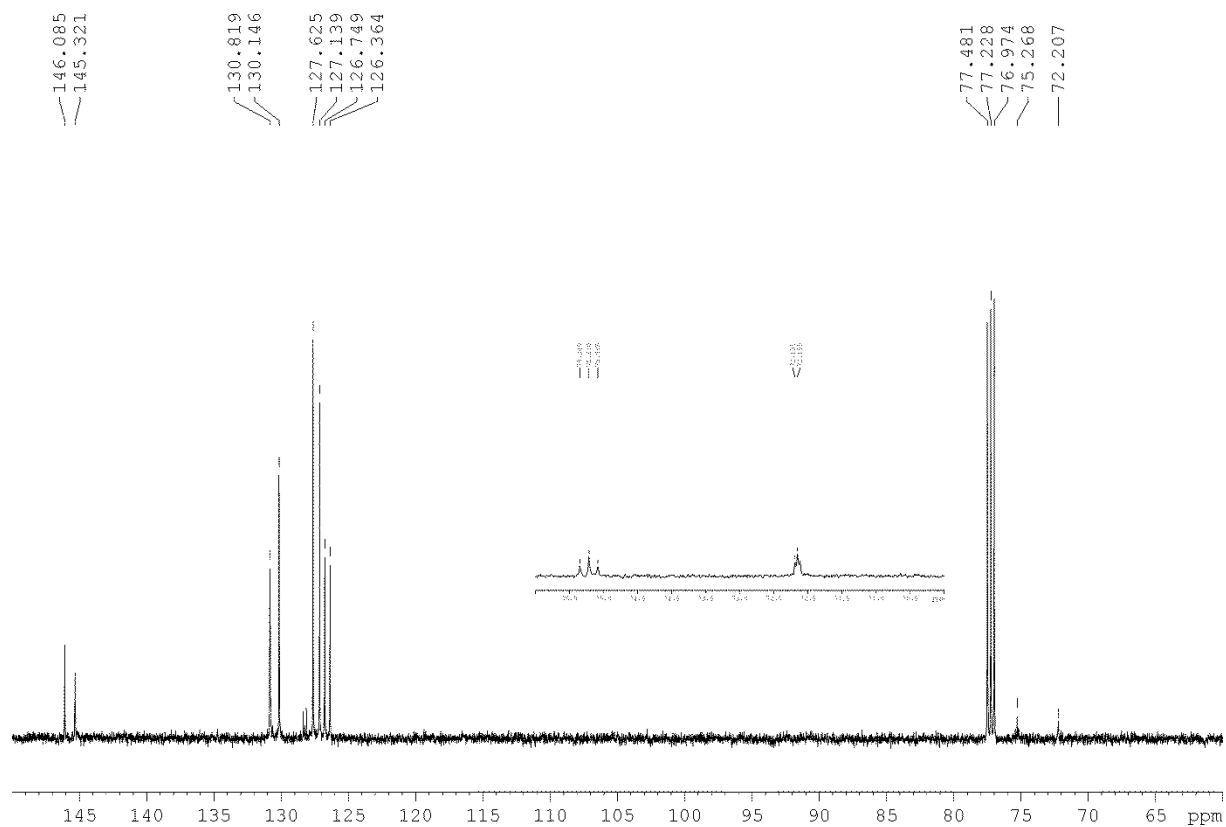




Figure S14:  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **5** acquired in  $\text{C}_6\text{D}_6$ .

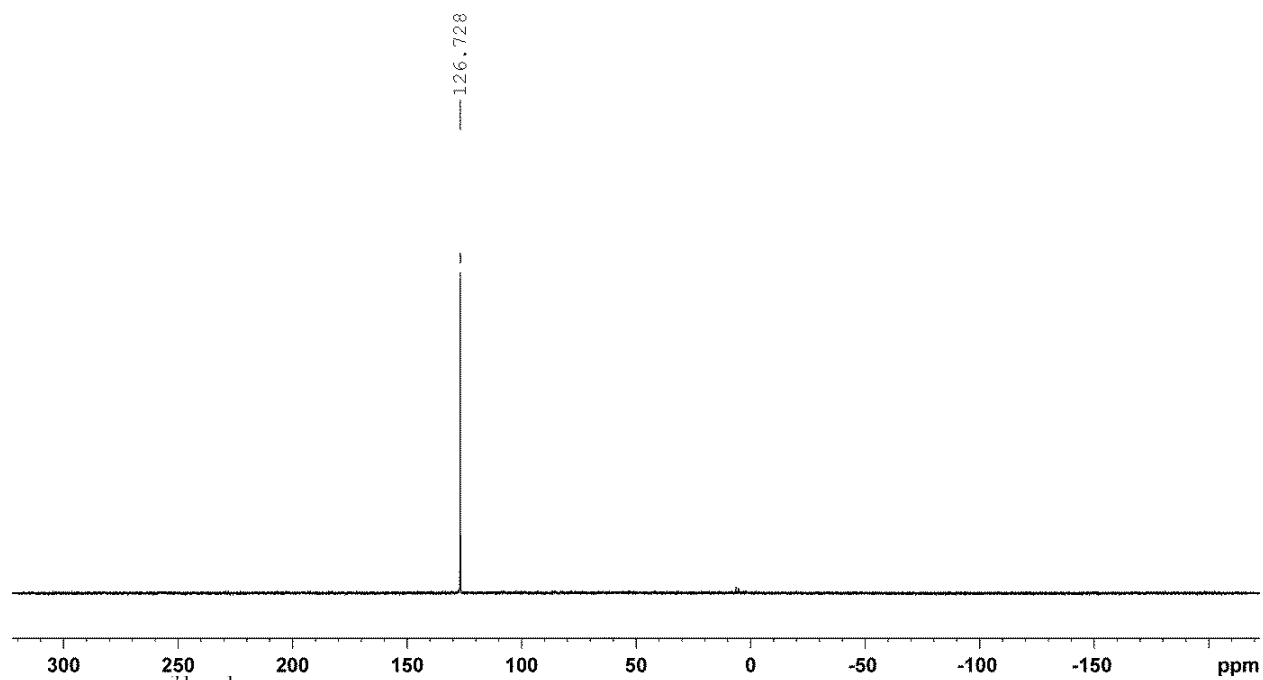


Figure S15:  $^3\text{P}\{^1\text{H}\}$  NMR spectrum of compound **5** acquired in  $\text{C}_6\text{D}_6$ .

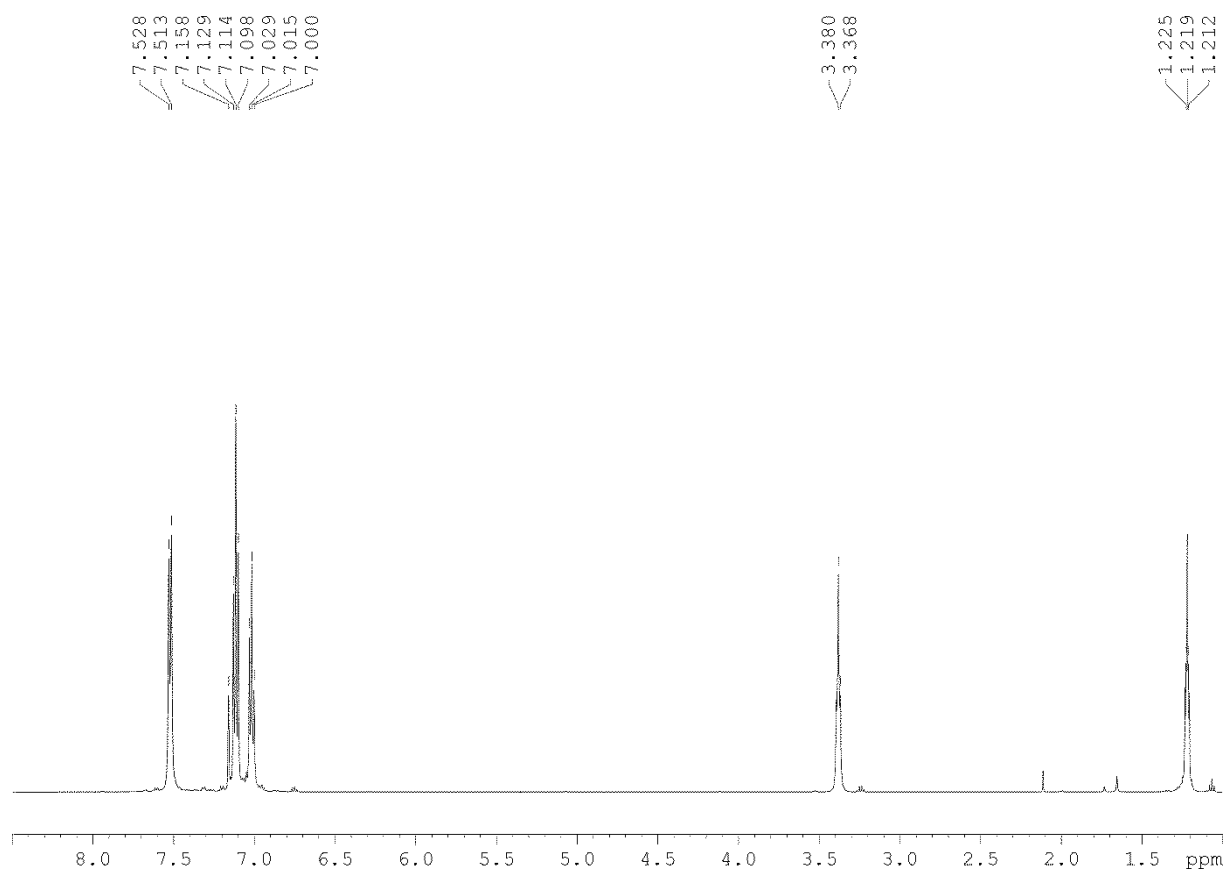


Figure S16:  $^1\text{H}$  NMR spectrum of compound **6** acquired in  $\text{C}_6\text{D}_6$ .

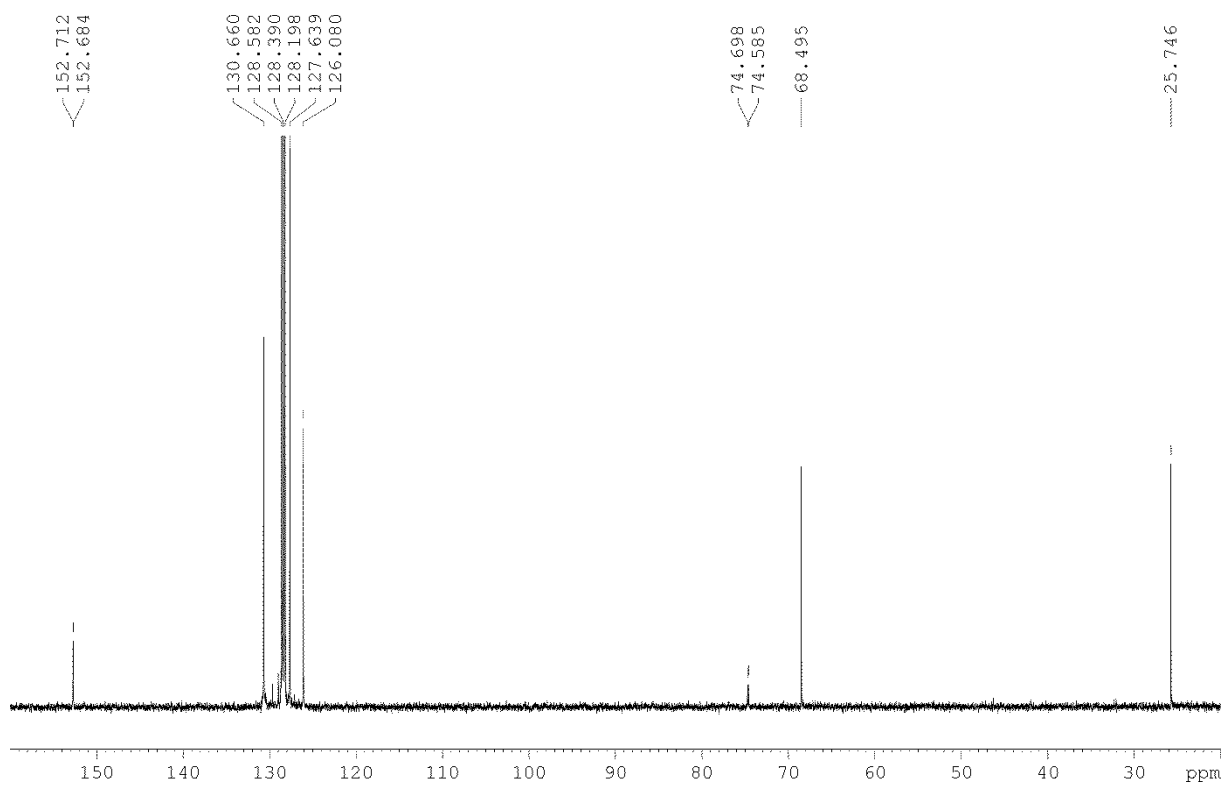


Figure S17:  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **6** acquired in  $\text{C}_6\text{D}_6$ .

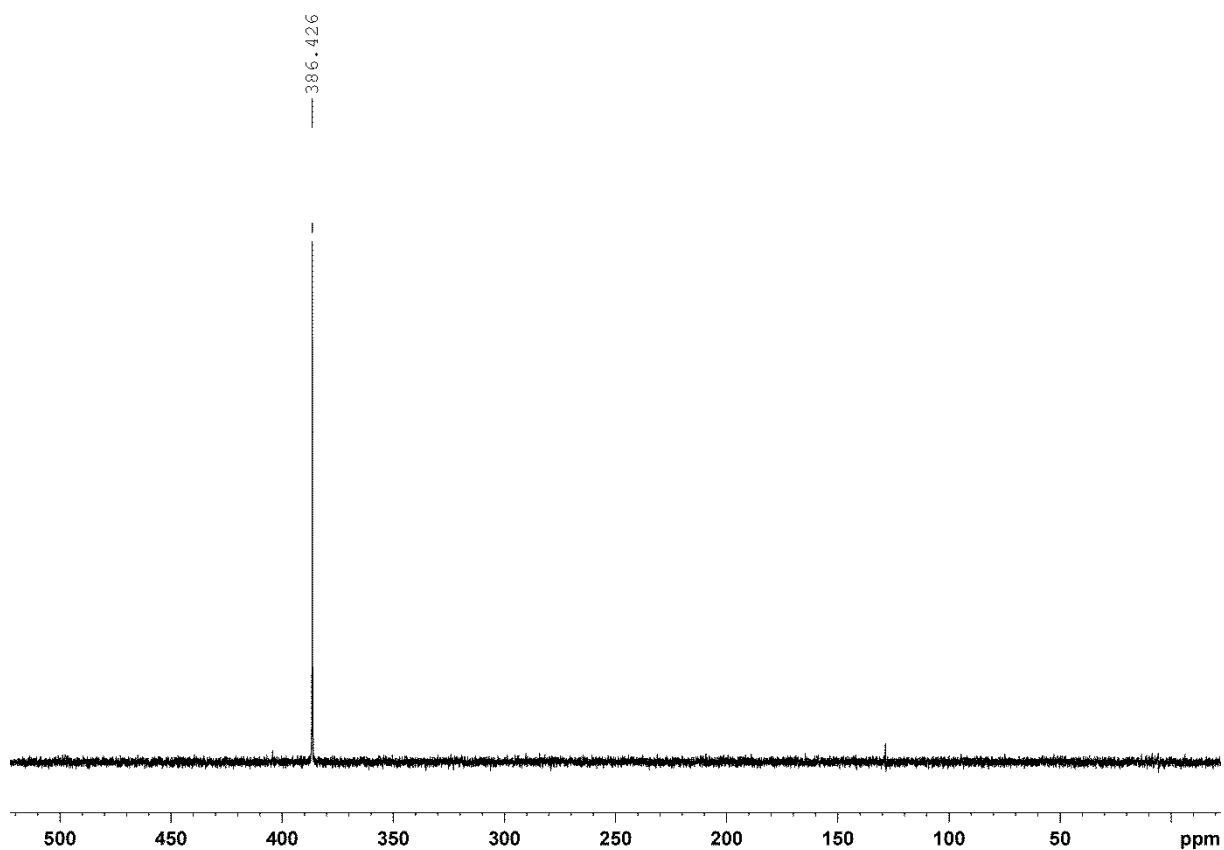


Figure S18:  $^{31}\text{P}\{^1\text{H}\}$  NMR spectrum of compound **6** acquired in  $\text{C}_6\text{D}_6$ .

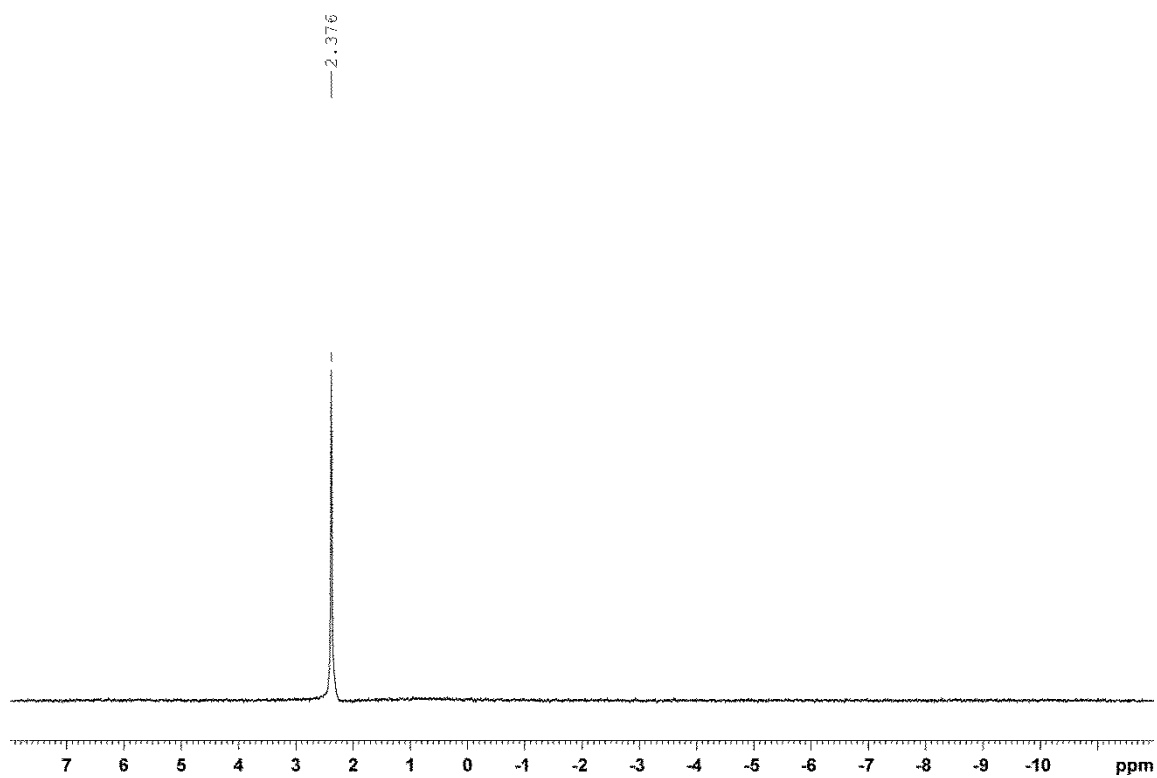


Figure S19:  ${}^7\text{Li}\{{}^1\text{H}\}$  NMR spectrum of compound **6** acquired in  $\text{C}_6\text{D}_6$ .

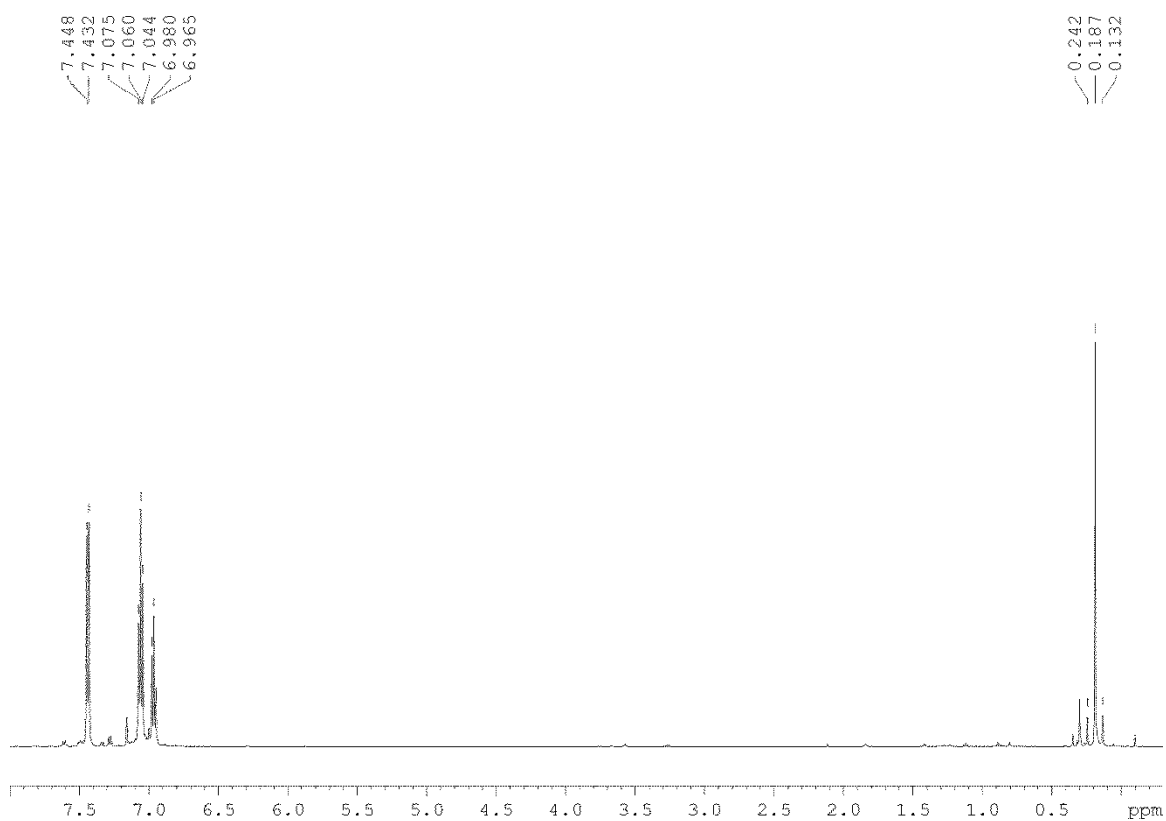


Figure S20:  ${}^1\text{H}$  NMR spectrum of compound **7** acquired in  $\text{C}_6\text{D}_6$ .

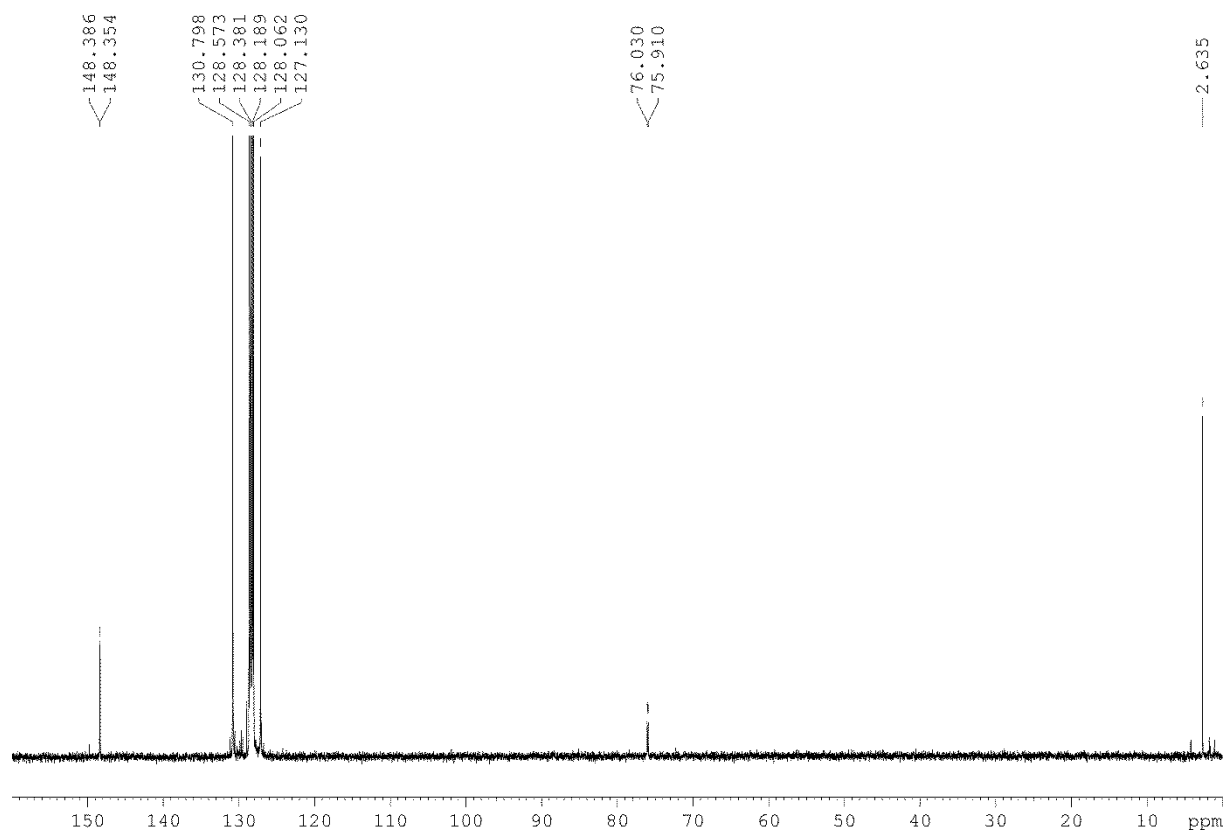


Figure S21:  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **7** acquired in  $\text{C}_6\text{D}_6$ .

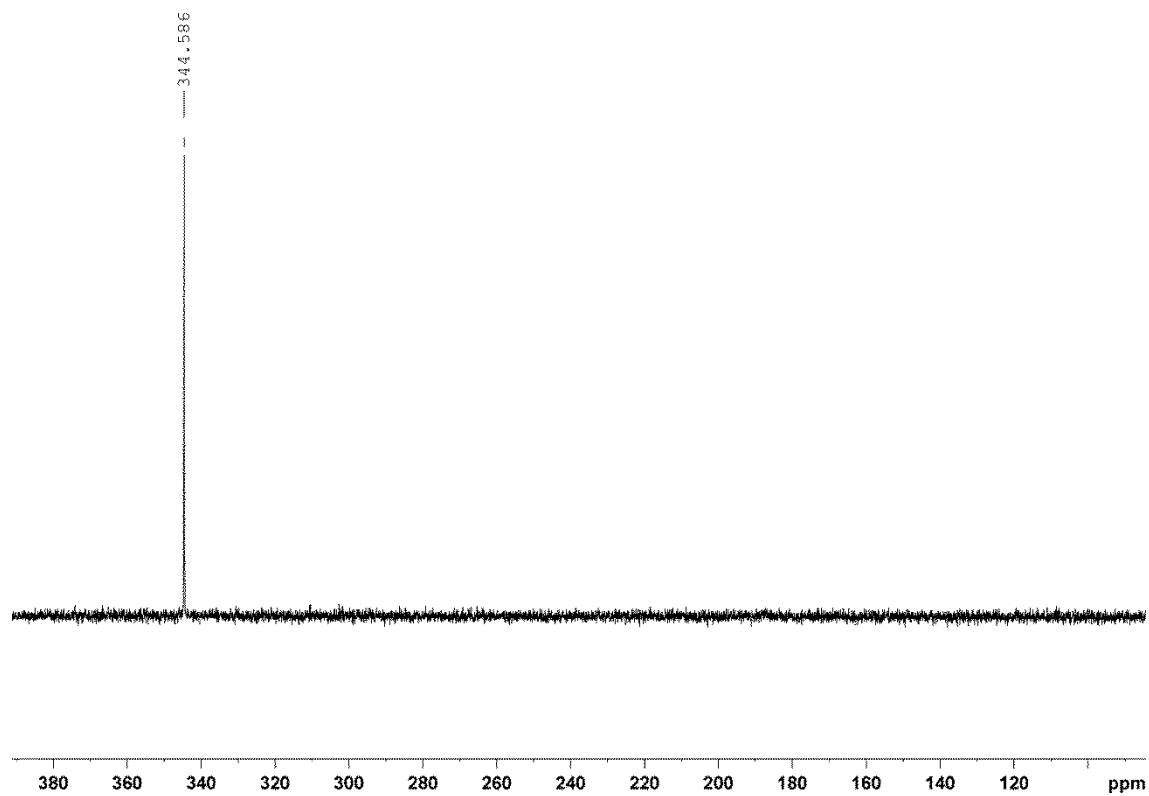


Figure S22:  $^{31}\text{P}\{^1\text{H}\}$  NMR spectrum of compound **7** acquired in  $\text{C}_6\text{D}_6$ .

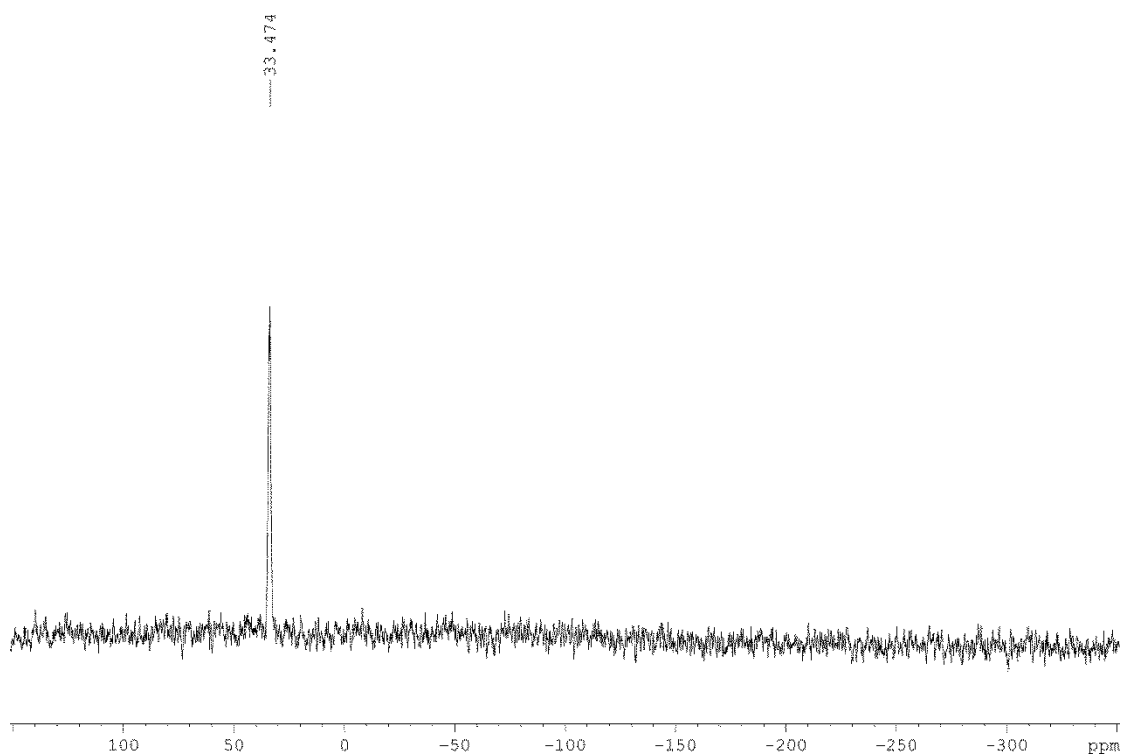


Figure S23:  $^{119}\text{Sn}\{^1\text{H}\}$  NMR spectrum of compound **7** acquired in  $\text{C}_6\text{D}_6$ .

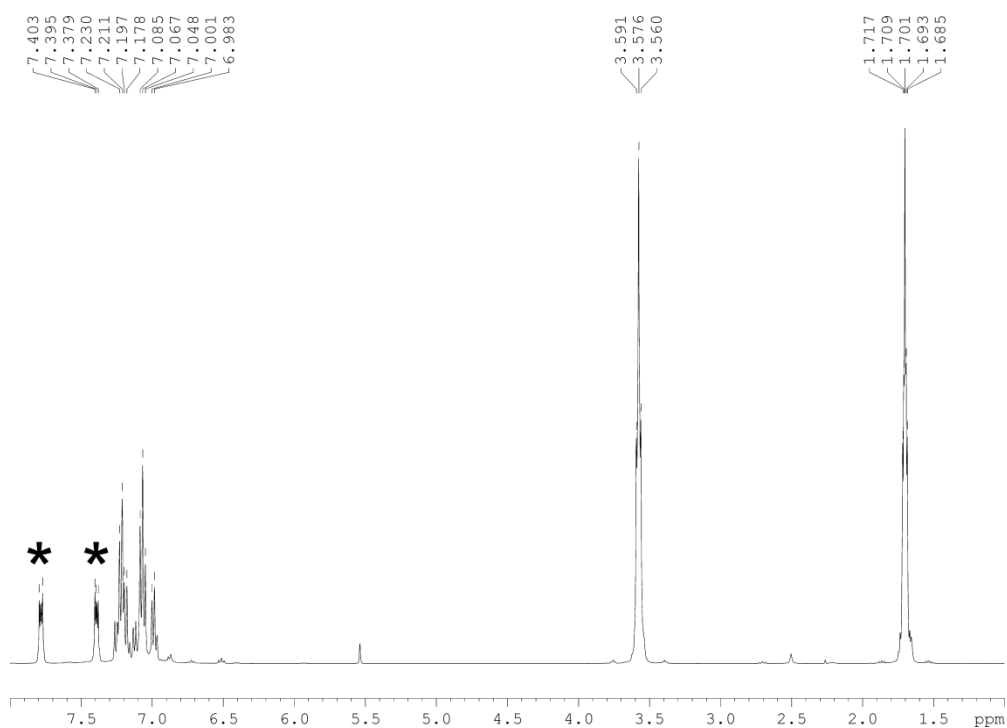


Figure S24:  $^1\text{H}$  NMR spectrum showing the crude reaction mixture of **5** with 2eqs. of sodium naphthalenide acquired in thf-D8. Signals of the naphthalene as a byproduct are marked with \*.

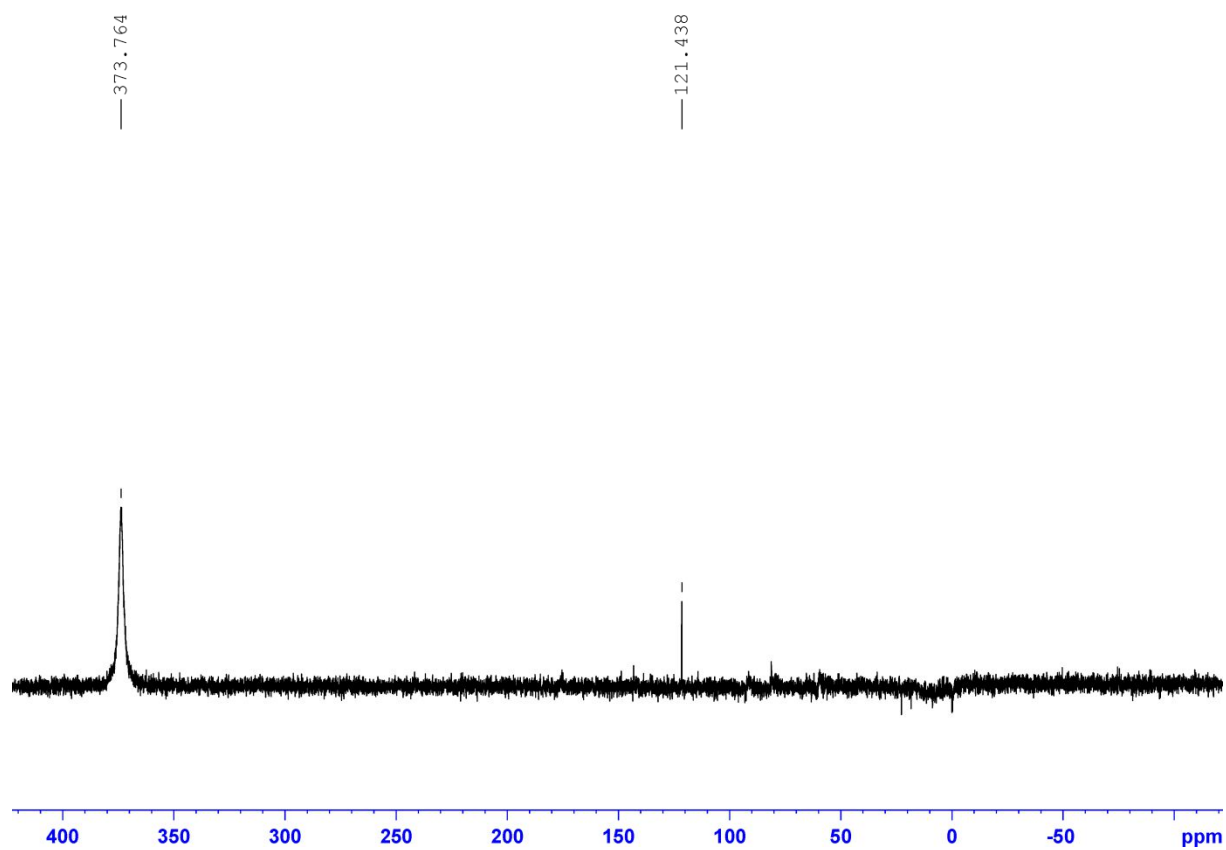


Figure S25:  $^{31}\text{P}\{^1\text{H}\}$  NMR spectrum showing the crude reaction mixture of **5** with 2eqs. of sodium naphthalenide acquired in thf-D8. Signals of the naphthalene as a byproduct are marked with \*.

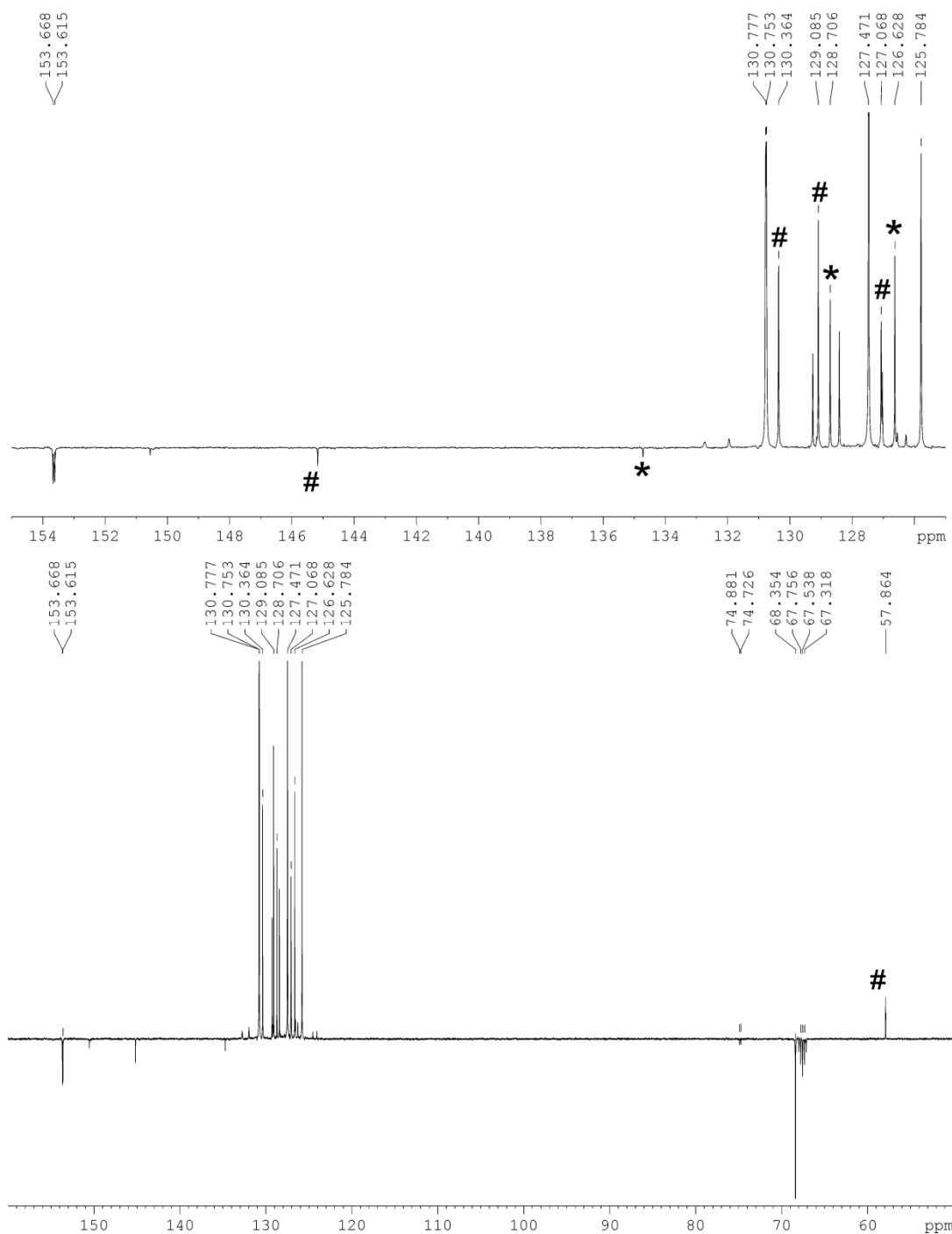


Figure S26.  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum showing the crude reaction mixture of **5** with 2eqs. of sodium naphthalenide acquired in thf-D8. Signals of the naphthalene as a byproduct are marked with \*. While signals due to the  $\text{Ph}_3\text{CH}$  formed by the hydrolysis  $[(\text{Ph}_3\text{C})\text{Na}(\text{thf})_3]$  (**9**) present always in the reaction mixture (see the discussion in the main article) are marked with # (for comparison of NMR spectra of  $\text{Ph}_3\text{CH}$  recorded in thf-D8 see reference S1).

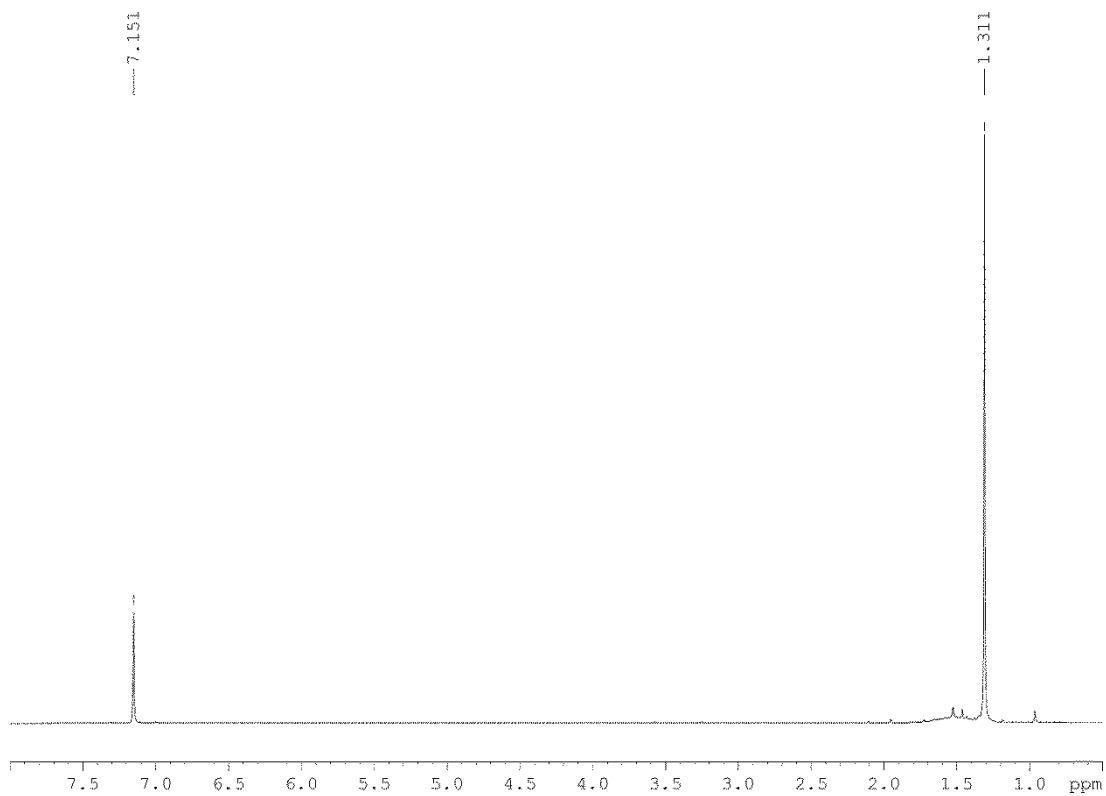


Figure S27:  $^1\text{H}$  NMR spectrum of compound **10** acquired in  $\text{C}_6\text{D}_6$ .

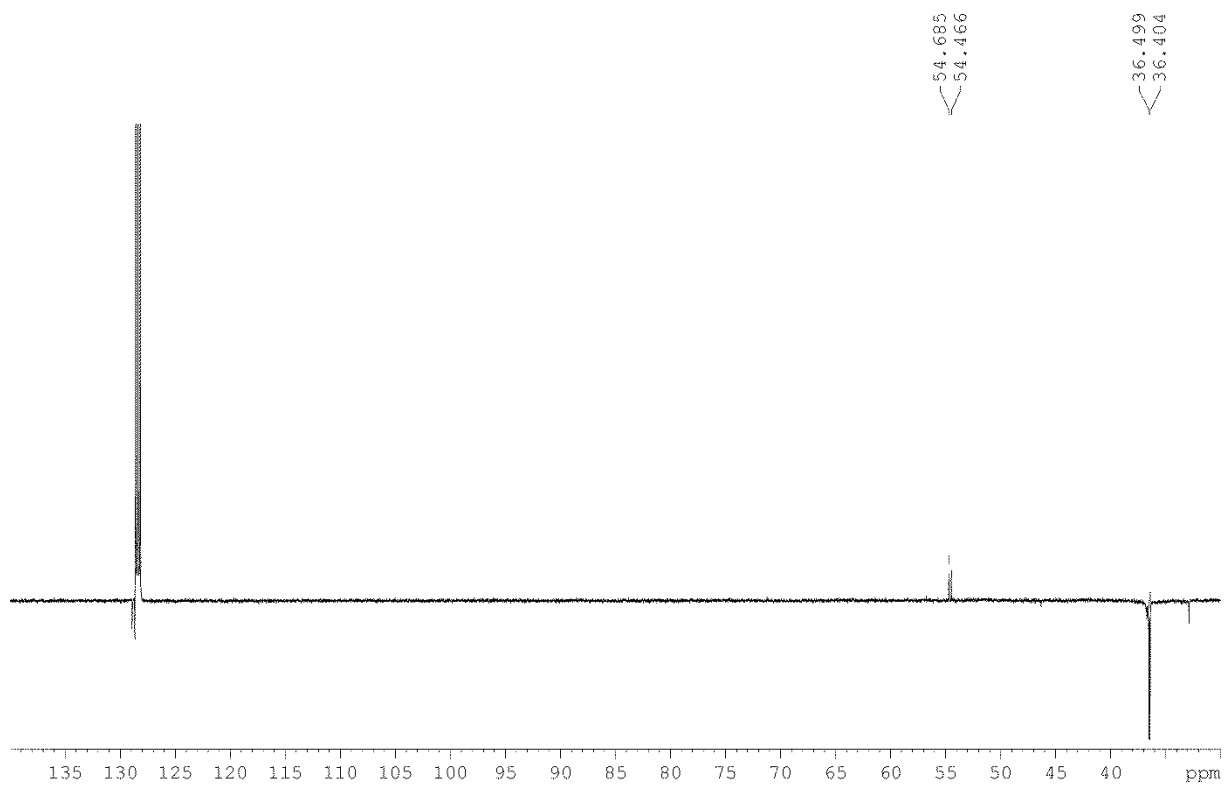




Figure S28:  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **10** acquired in  $\text{C}_6\text{D}_6$ .

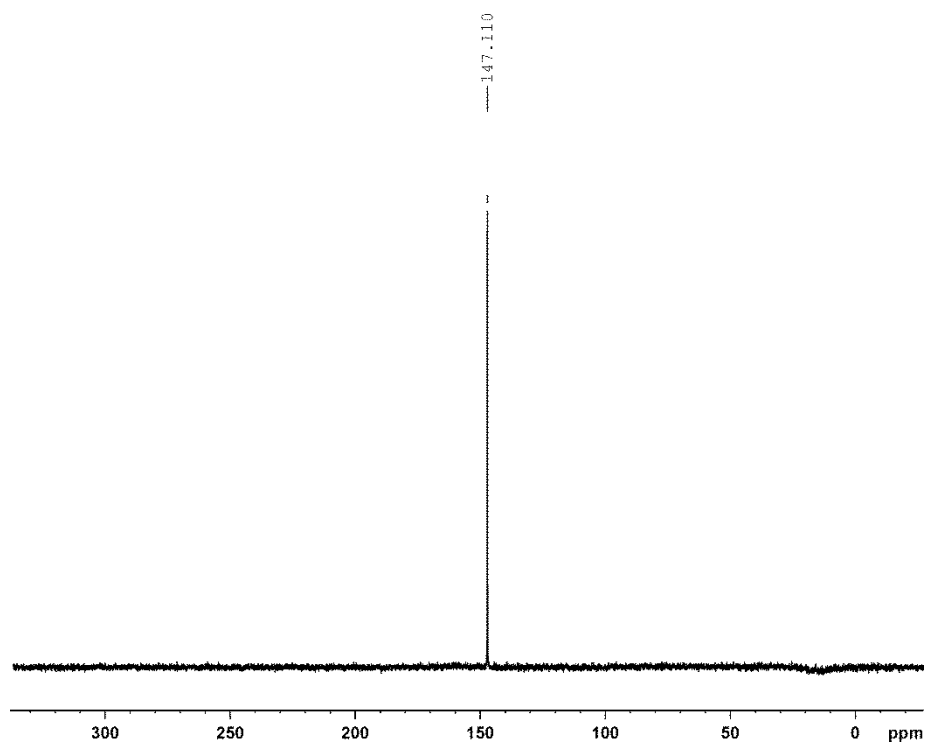


Figure S29:  $^{31}\text{P}\{^1\text{H}\}$  NMR spectrum of compound **10** acquired in  $\text{C}_6\text{D}_6$ .

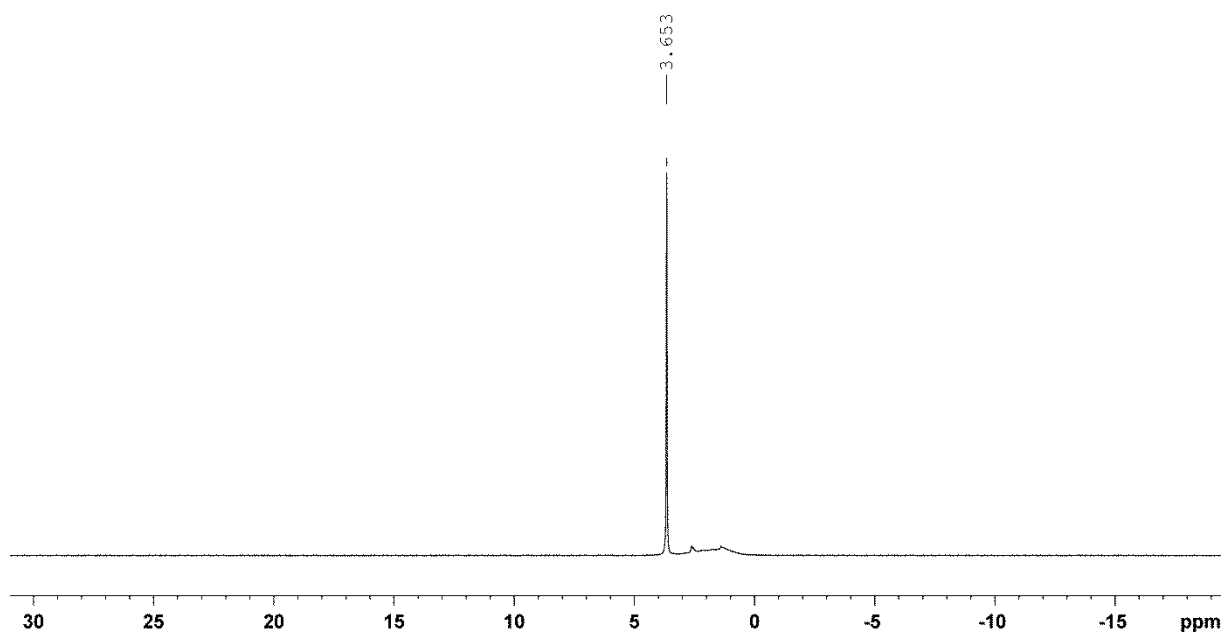


Figure S30:  $^7\text{Li}\{^1\text{H}\}$  NMR spectrum of compound **10** acquired in  $\text{C}_6\text{D}_6$ .

References:

S1 E. Buncel, T.K. Venkatachalam, B. Eliasson and U. Edlund, *J. Am. Chem. Soc.*, 1985, **107**, 303-306.