

# Supporting Information

## Complexes of the Tripodal Phosphine Ligands $\text{PhSi}(\text{XPPH}_2)_3$ ( $\text{X} = \text{CH}_2, \text{O}$ ): Synthesis, Structure and Catalytic Activity in the Hydroboration of $\text{CO}_2$

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### ESI: NMR spectra

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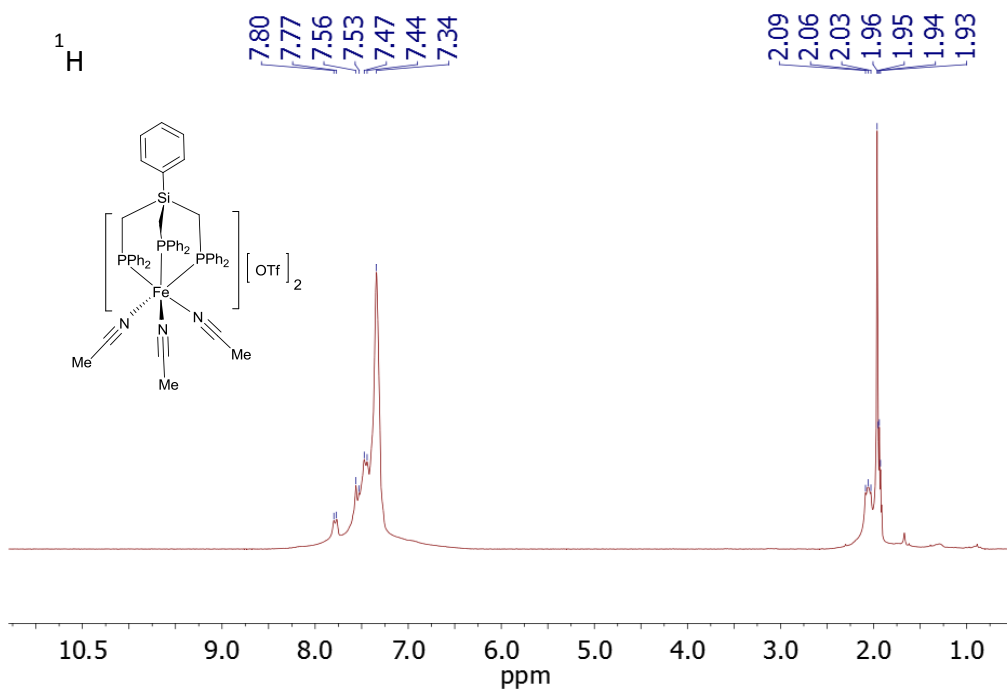


Figure S1: <sup>1</sup>H NMR of **3** in *d*<sub>3</sub>-acetonitrile

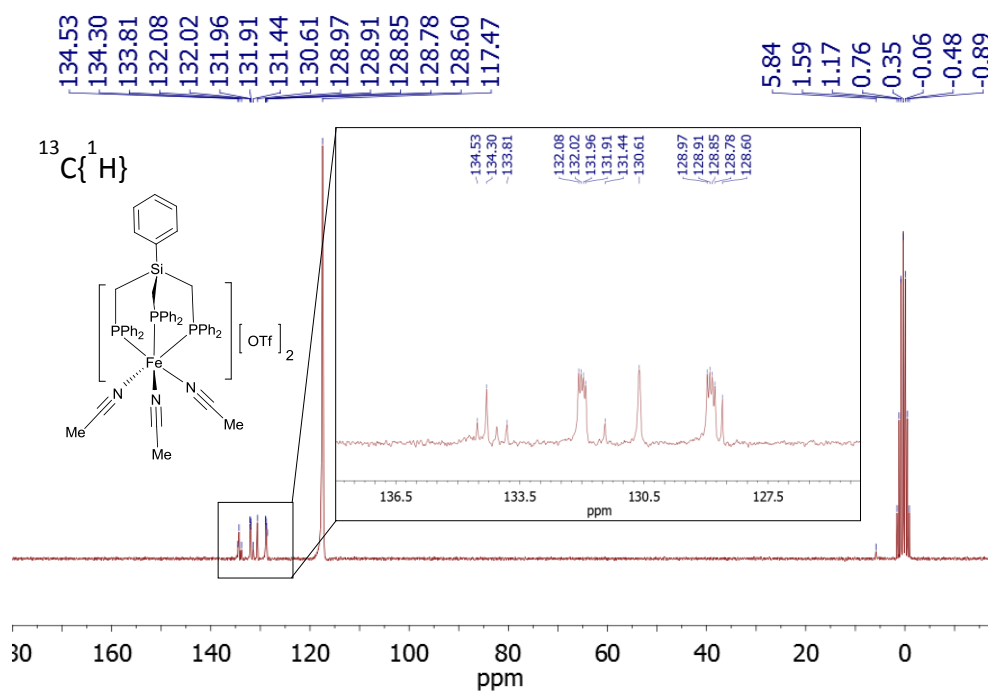
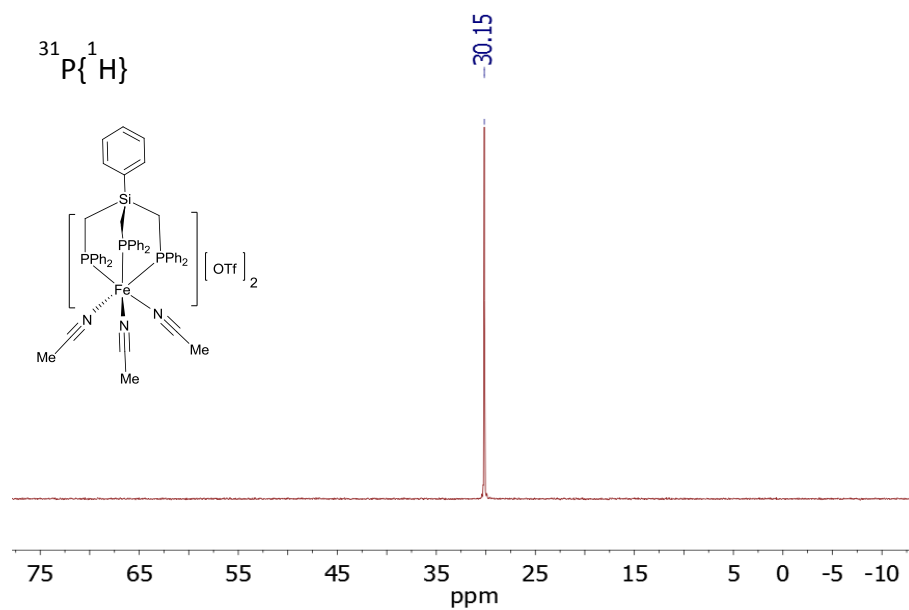
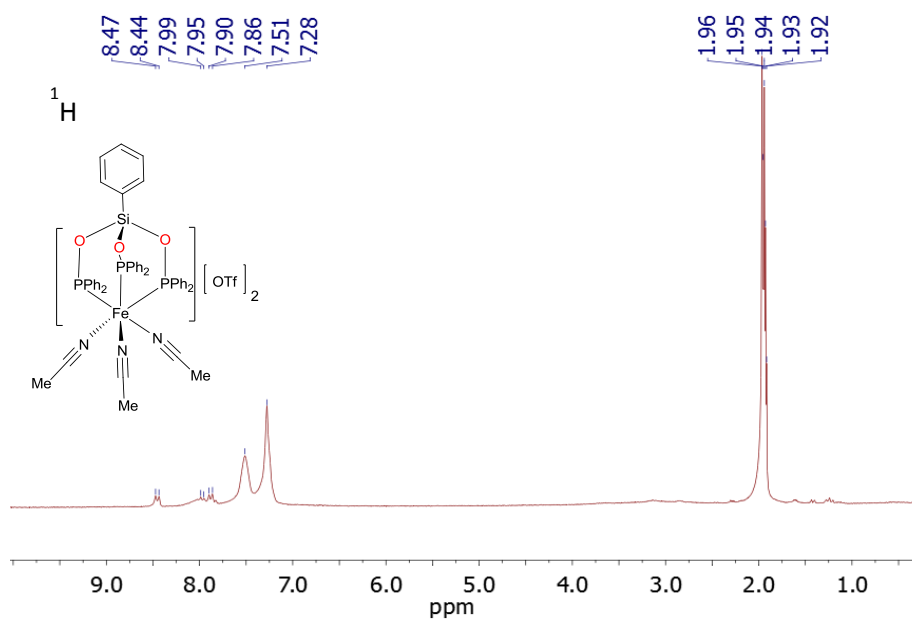


Figure S2: <sup>13</sup>C {<sup>1</sup>H} NMR of **3** in *d*<sub>3</sub>-acetonitrile



**Figure S3:**  $^{31}\text{P}\{^1\text{H}\}$  NMR of **3** in  $d_3$ -acetonitrile



**Figure S4:**  $^1\text{H}$  NMR of **3'** in  $d_3$ -acetonitrile

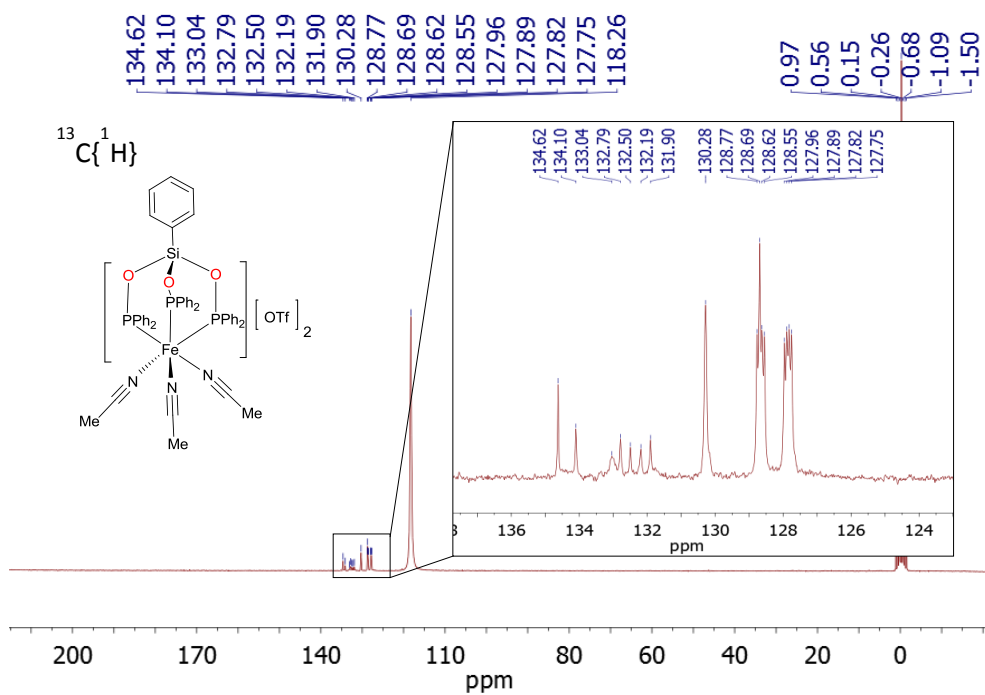


Figure S5:  $^{13}\text{C}\{^1\text{H}\}$  NMR of **3'** in  $d_3$ -acetonitrile

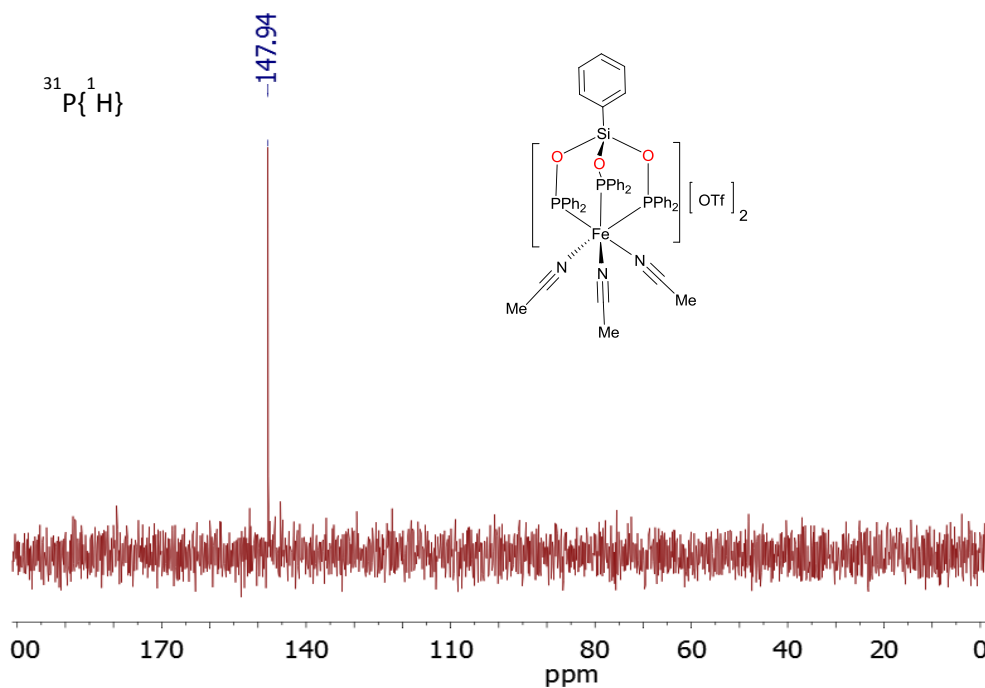


Figure S6:  $^{31}\text{P}\{^1\text{H}\}$  NMR of **3'** in  $d_3$ -acetonitrile

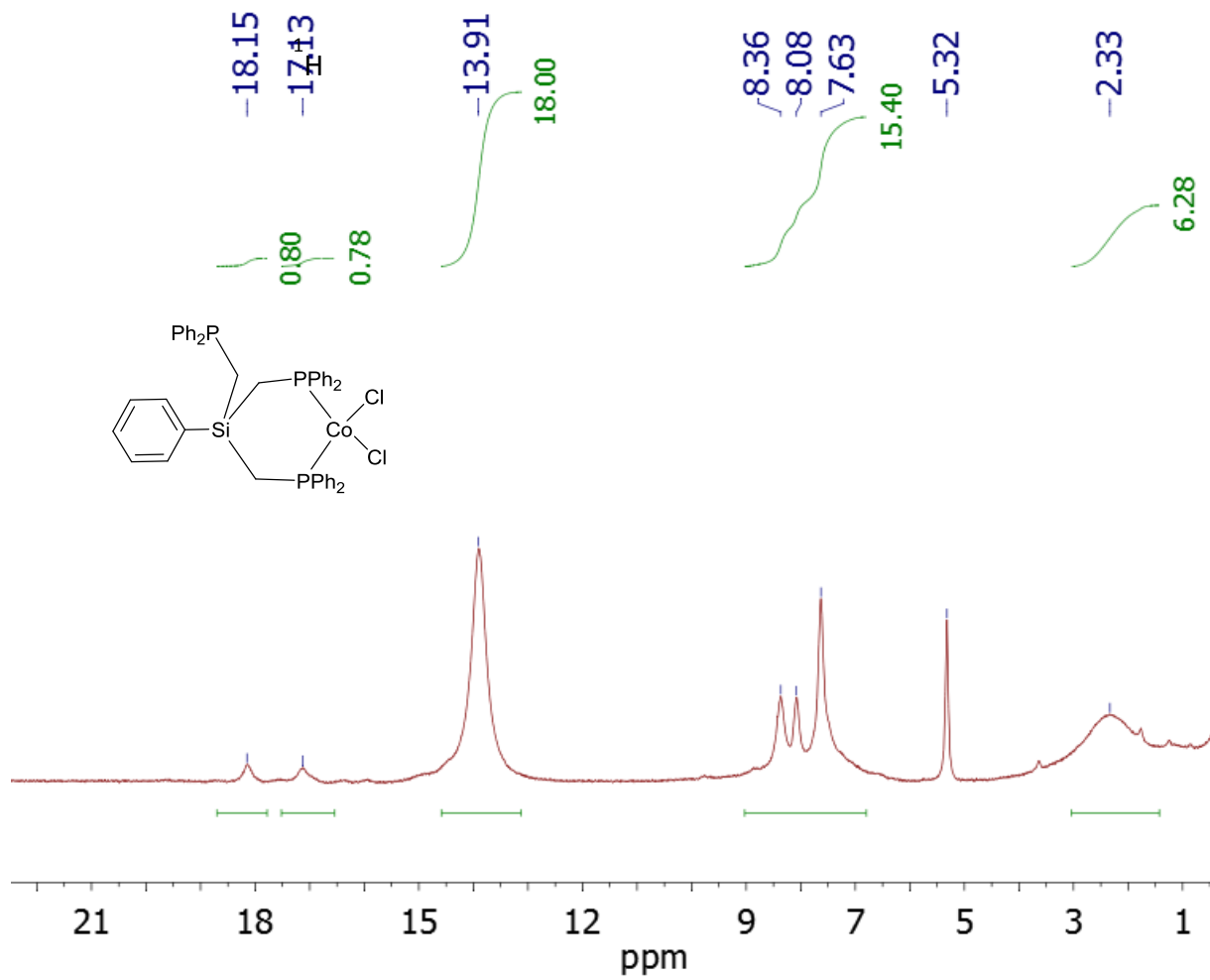


Figure S7:  $^1\text{H}$  NMR of 4 in  $d_8$ -THF

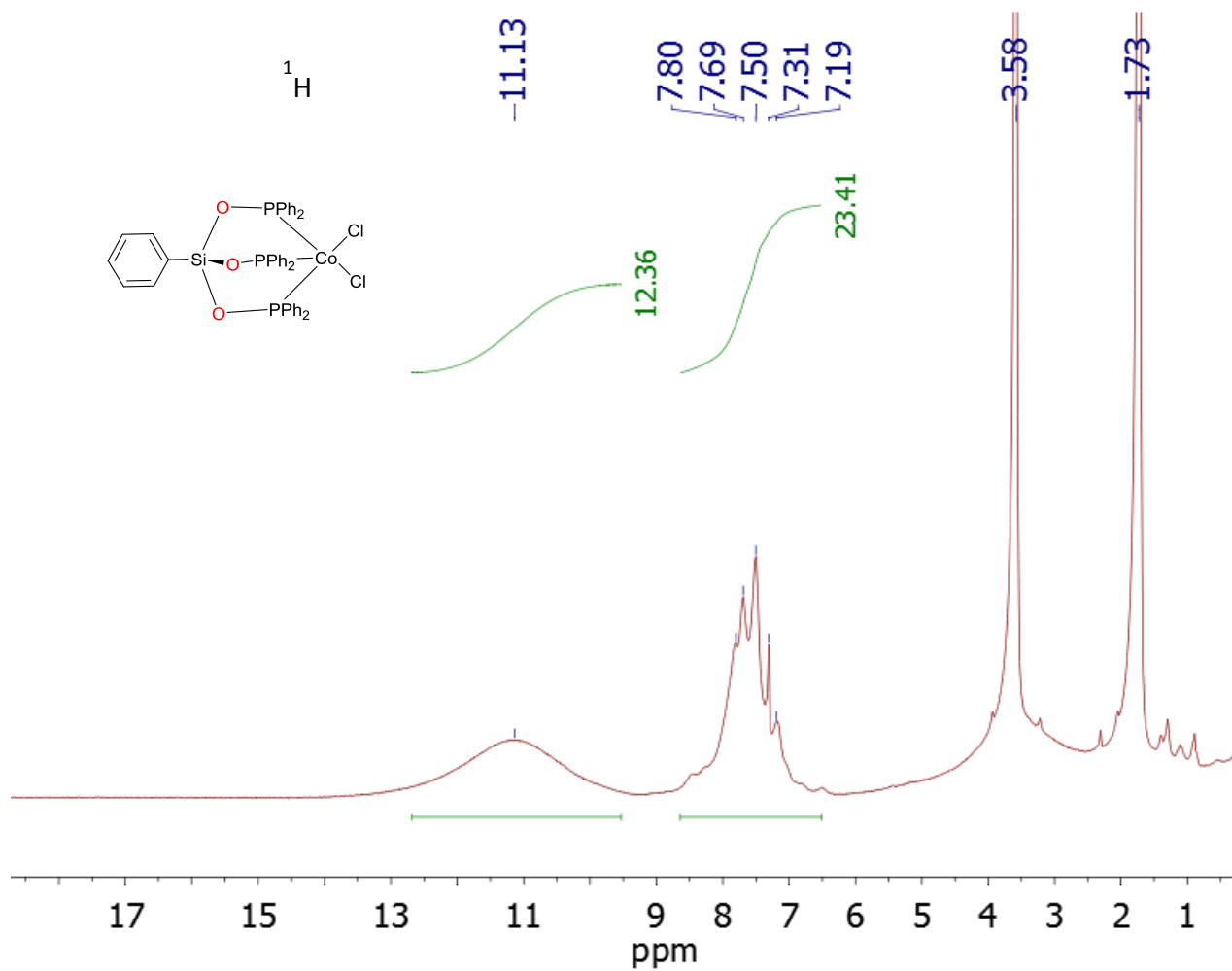


Figure S8: <sup>1</sup>H NMR of 4' in *d*<sub>8</sub>-THF

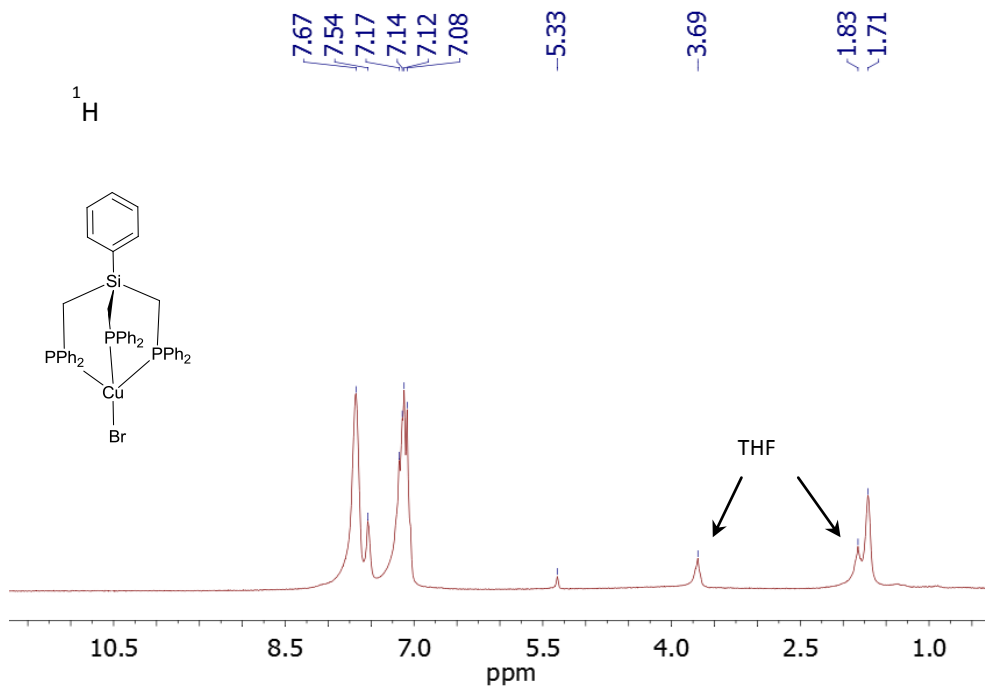
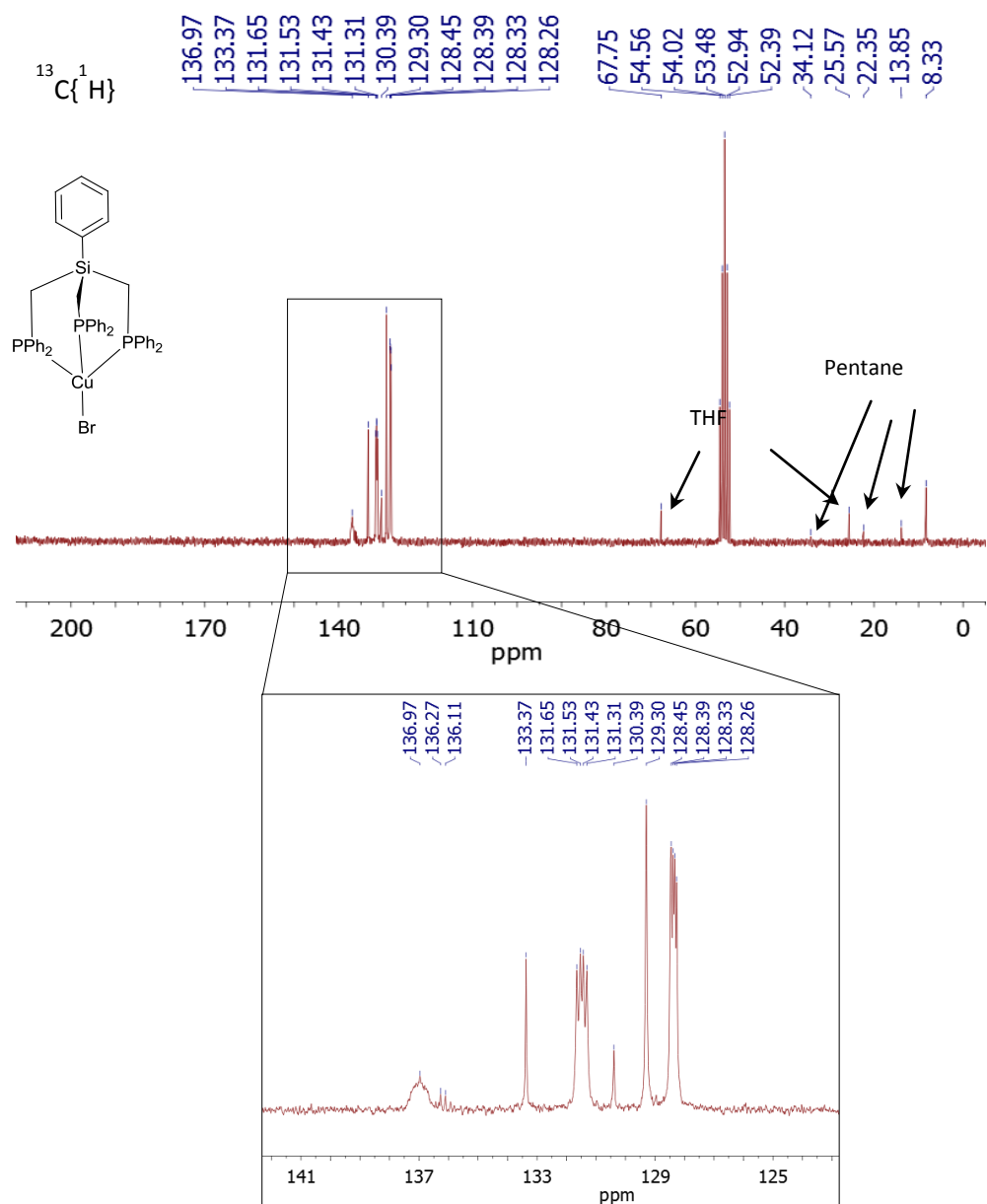


Figure S9: <sup>1</sup>H NMR of 5 in *d*<sub>2</sub>-CH<sub>2</sub>Cl<sub>2</sub>



**Figure S10:**  $^{13}\text{C}\{^1\text{H}\}$  NMR of 5 in  $d_2\text{-CH}_2\text{Cl}_2$



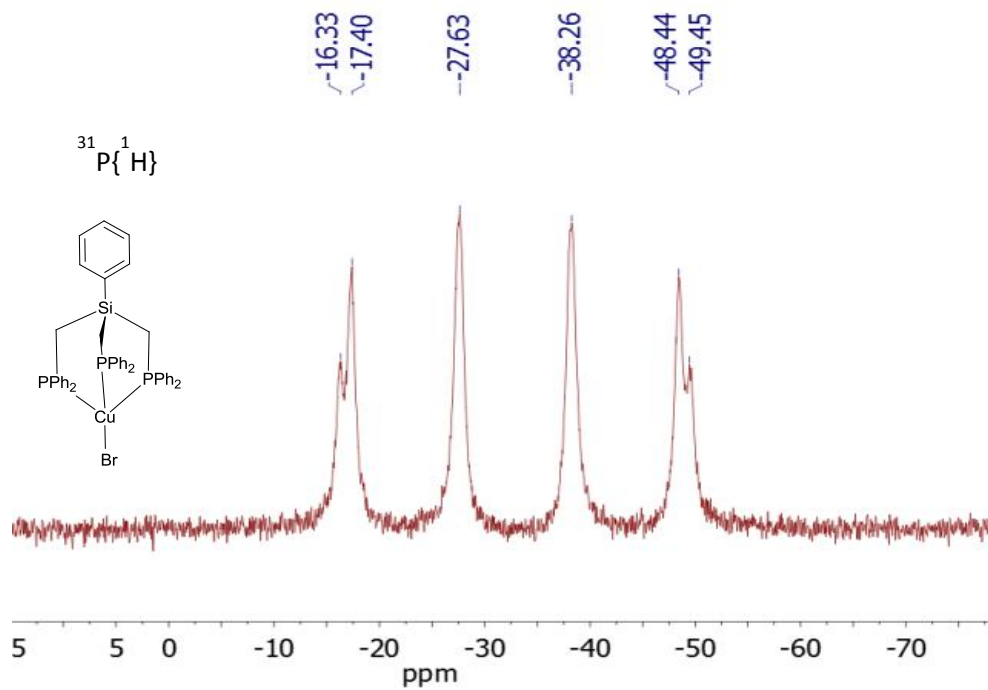


Figure S11:  $^{31}\text{P}\{^1\text{H}\}$  NMR of 5 in  $d_2\text{-CH}_2\text{Cl}_2$

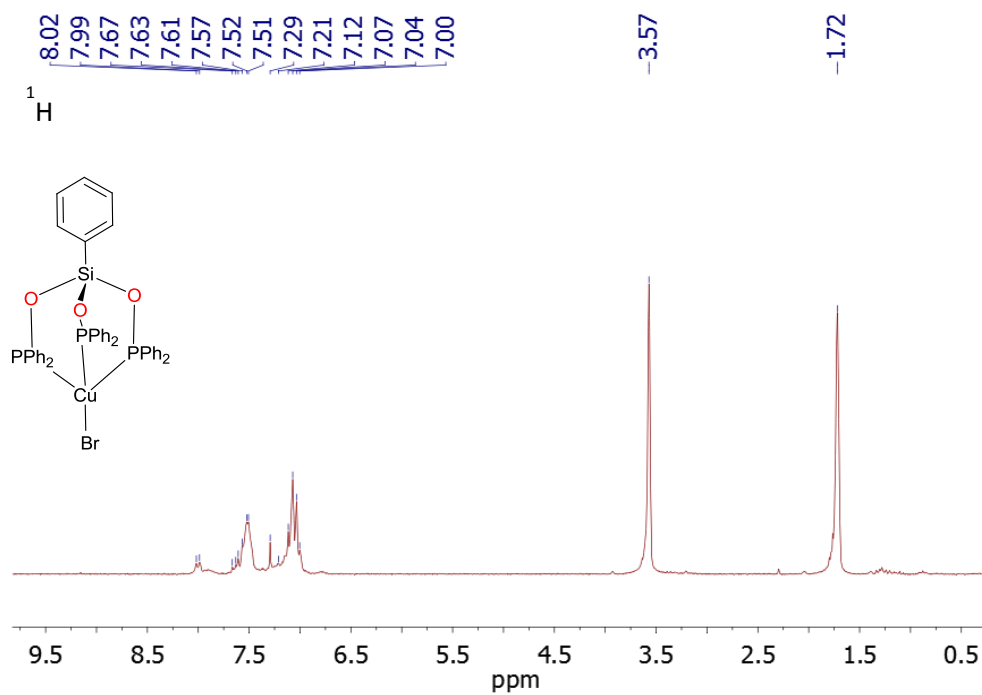


Figure S12:  $^1\text{H}$  NMR of 5'' in  $d_8\text{-THF}$

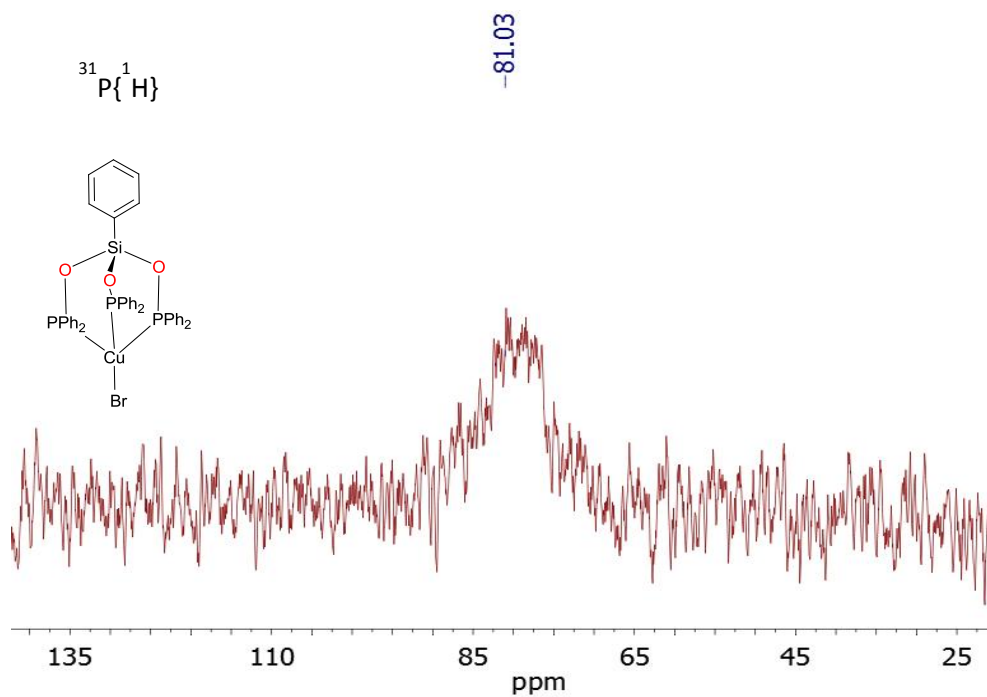


Figure S13:  $^{31}\text{P}\{^1\text{H}\}$  NMR of **5''** in  $d_8$ -THF

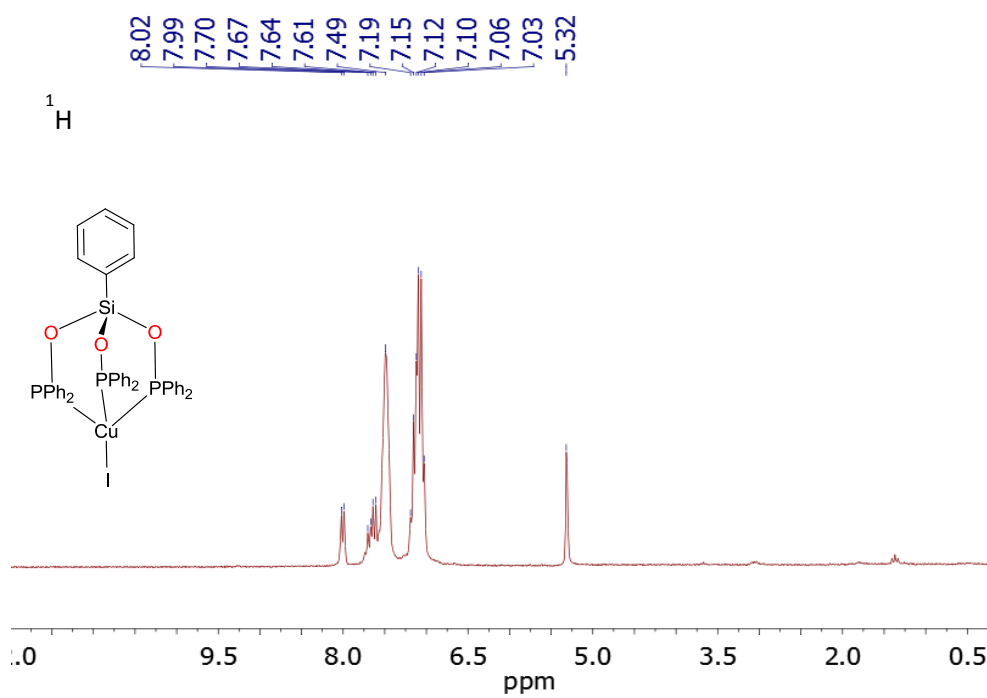
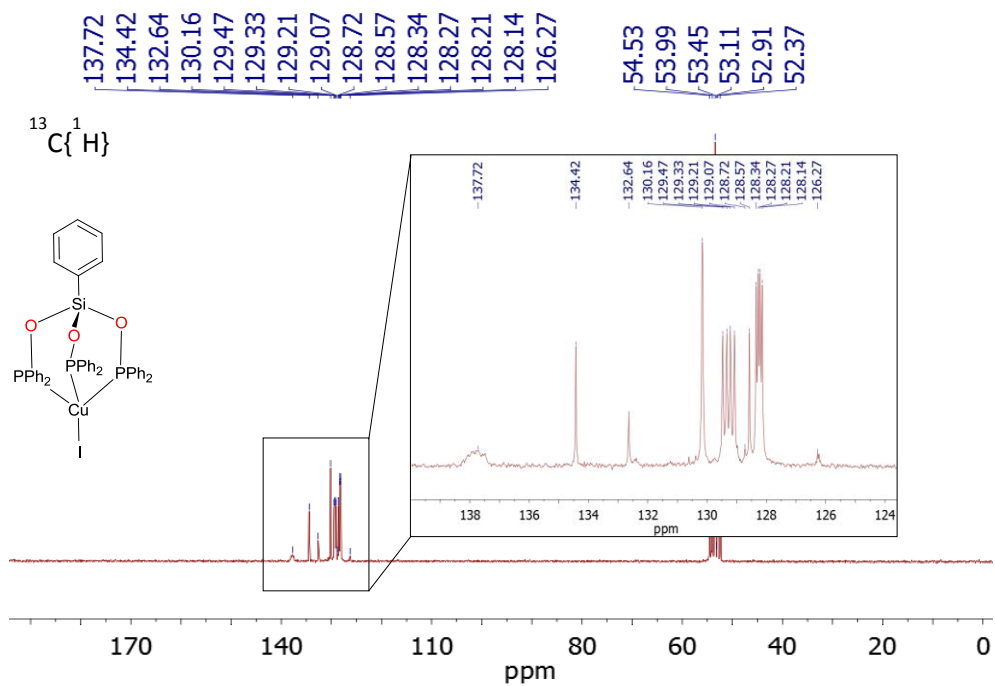
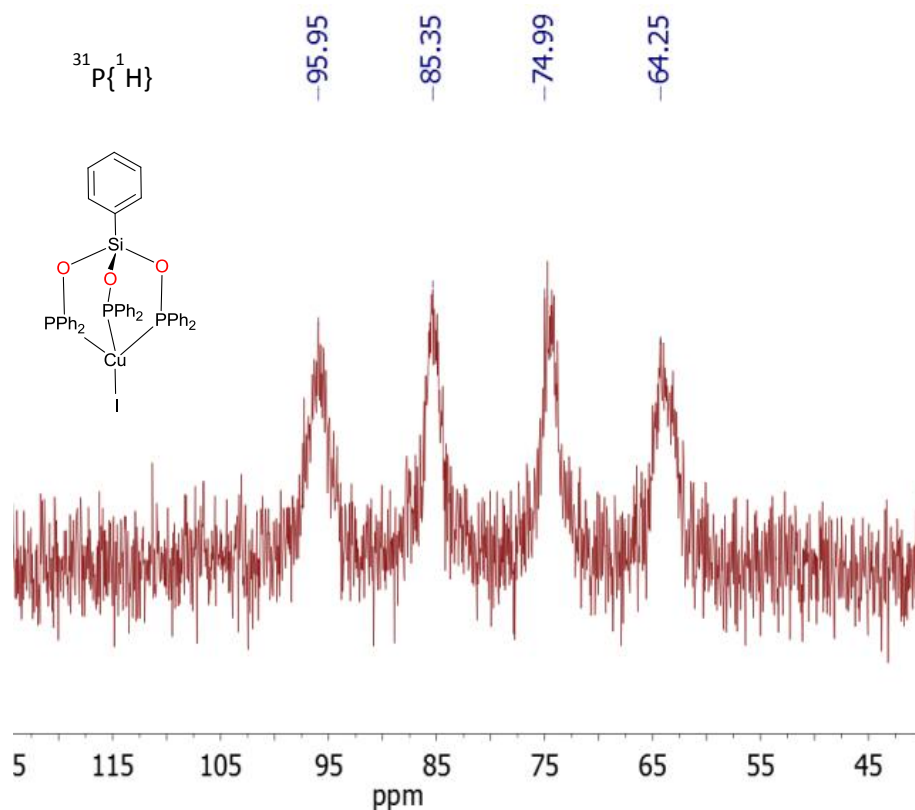


Figure S14:  $^1\text{H}$  NMR of **5'** in  $d_2$ - $\text{CH}_2\text{Cl}_2$



**Figure S15:**  $^{13}\text{C}\{^1\text{H}\}$  NMR of **5'** in  $d_2\text{-CH}_2\text{Cl}_2$



**Figure S16:**  $^{31}\text{P}\{^1\text{H}\}$  NMR of **5'** in  $d_2\text{-CH}_2\text{Cl}_2$

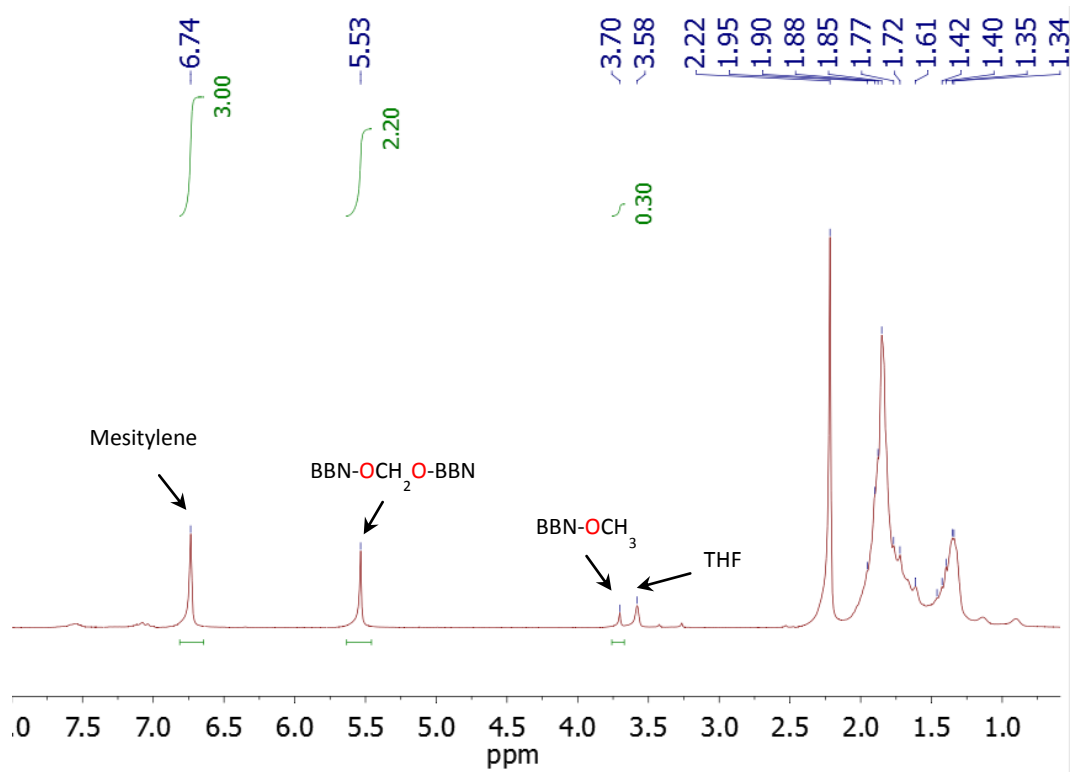


Figure S17:  $^1\text{H}$  NMR for catalytic run of entry 4 (Table 4) in  $d_6$ -THF