

## Research Article

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# Syntheses and crystal structures of ethyltin complexes with ferrocenecarboxylic acid

## Supplementary material

### S1 IR of compounds 1–3: $\text{Et}_2\text{Sn}(\text{OC(OFc)})_2$ (1), $[(\text{Et}_2\text{SnOC(OFc)})_2\text{O}]_2$ (2), and $[\text{EtSn(O)OC(OFc)}]_6$ (3)

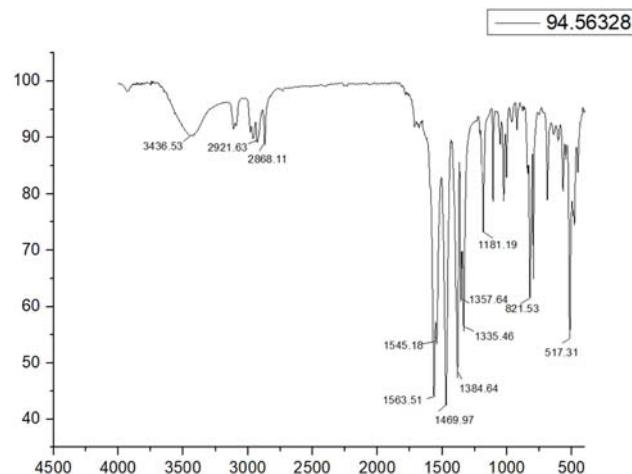


Figure S1: IR of compound 1 in KBr.

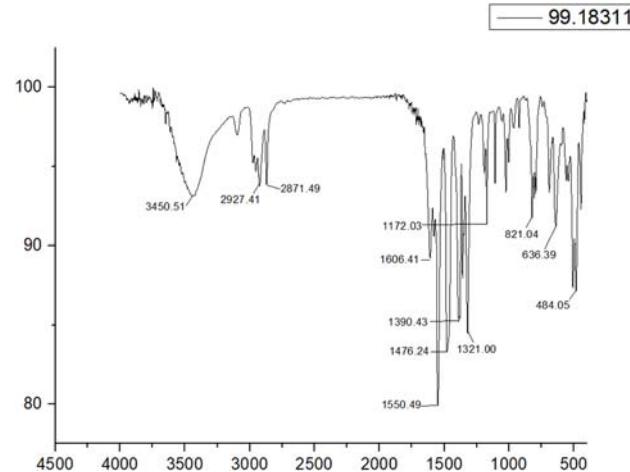


Figure S2: IR of compound 2 in KBr.

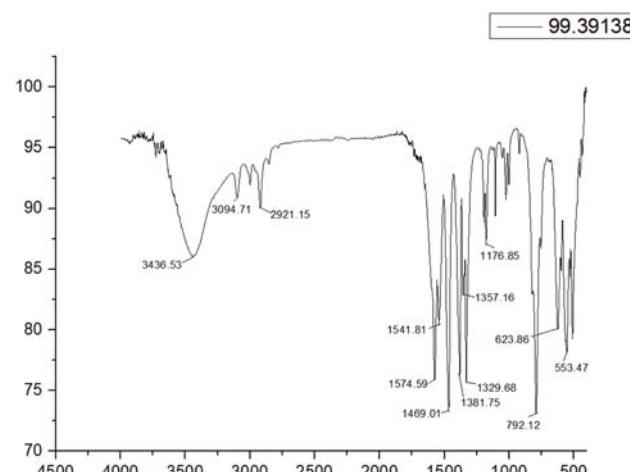
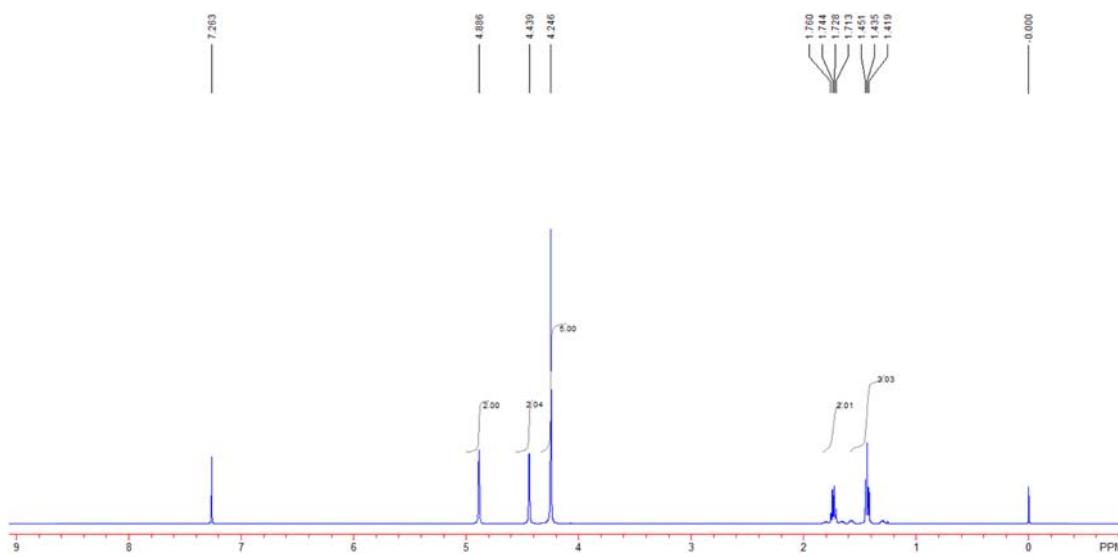


Figure S3: IR of compound 3 in KBr.

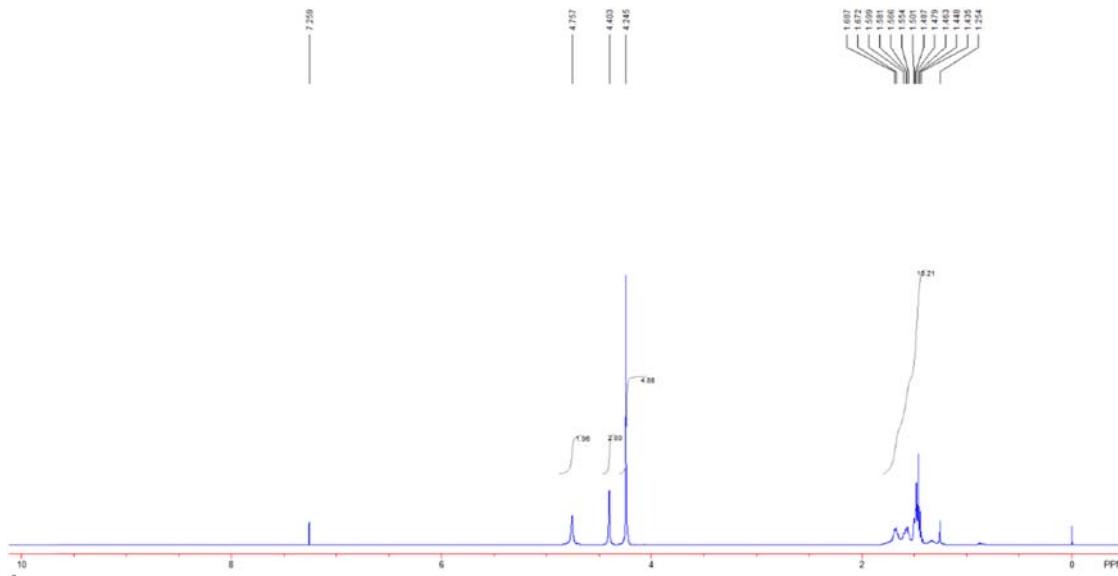
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**S2**  $^1\text{H}$  NMR of compounds 1–3

**Figure S4:**  $^1\text{H}$  NMR of compound 1 in  $\text{CDCl}_3$ .



**Figure S5:**  $^1\text{H}$  NMR of compound 2 in  $\text{CDCl}_3$ .

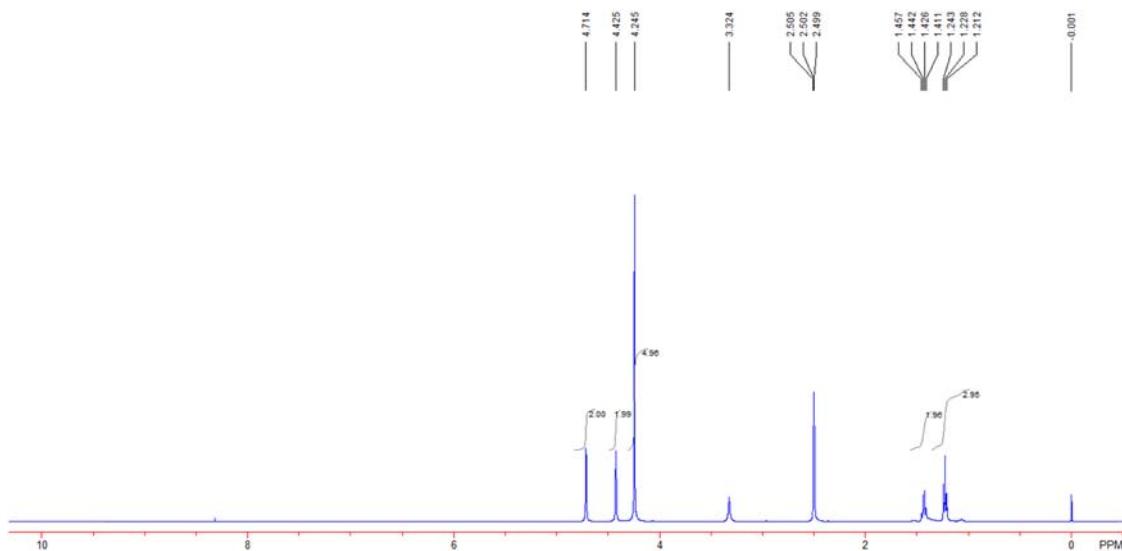


Figure S6:  $^1\text{H}$  NMR of compound 3 in  $\text{DMSO-}d_6$  (DMSO residual peak:  $\delta$  2.5,  $\text{H}_2\text{O}$ :  $\delta$  3.3).

### S3 $^{13}\text{C}$ NMR of compounds 1 and 2

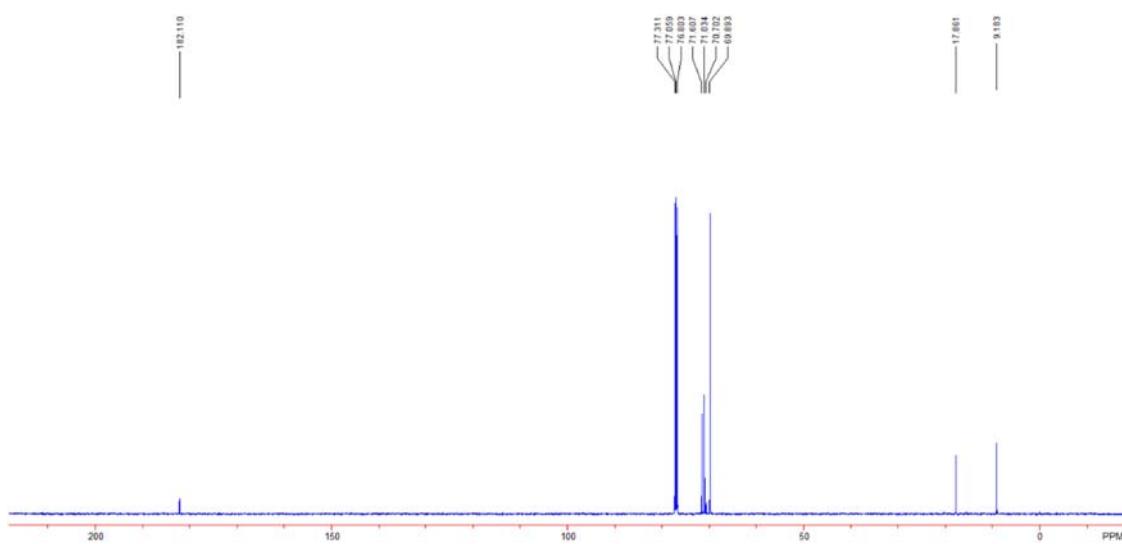
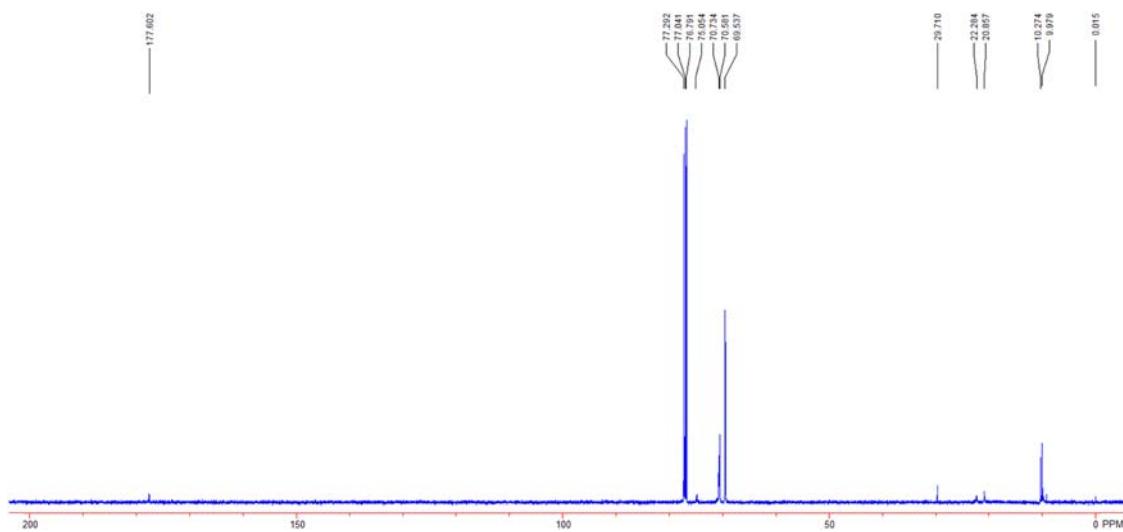
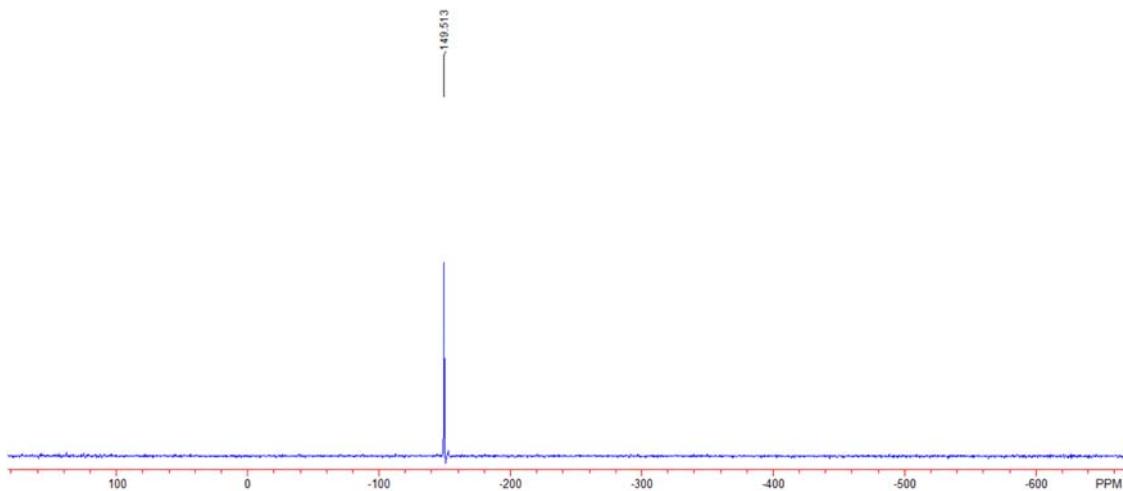


Figure S7:  $^{13}\text{C}$  NMR of compound 1 in  $\text{CDCl}_3$ .

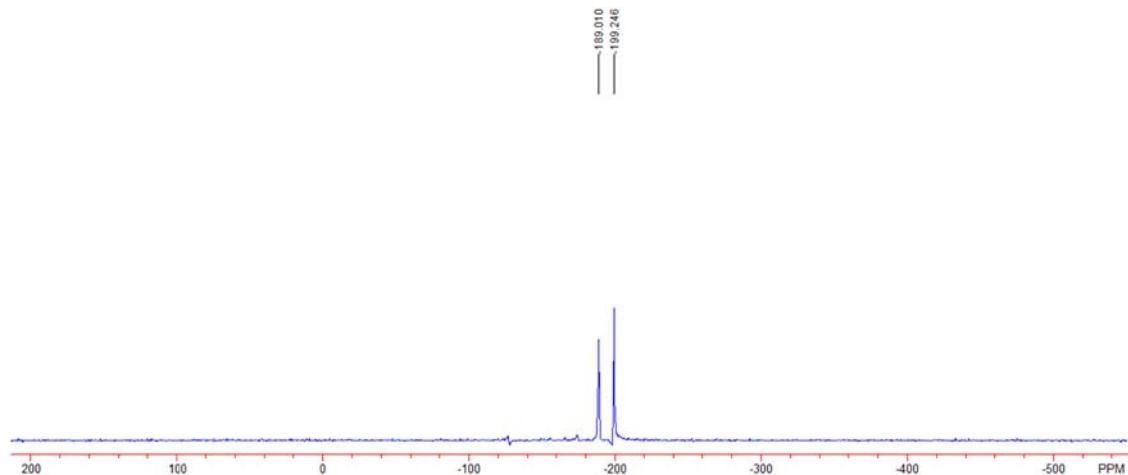


**Figure S8:**  $^{13}\text{C}$  NMR of compound 2 in  $\text{CDCl}_3$ .

#### S4 $^{119}\text{Sn}$ NMR of compounds 1 and 2



**Figure S9:**  $^{119}\text{Sn}$  NMR of compound 1 in  $\text{CDCl}_3$ .



**Figure S10:**  $^{119}\text{Sn}$  NMR of compound 2 in  $\text{CDCl}_3$ .