

## Neutral zinc, lower-order zincate and higher-order zincate derivatives of pyrrole: synthesis and structural characterisation of zinc complexes with one, two, three or four pyrrolyl ligands

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WestCHEM, Department of Pure and Applied Chemistry,

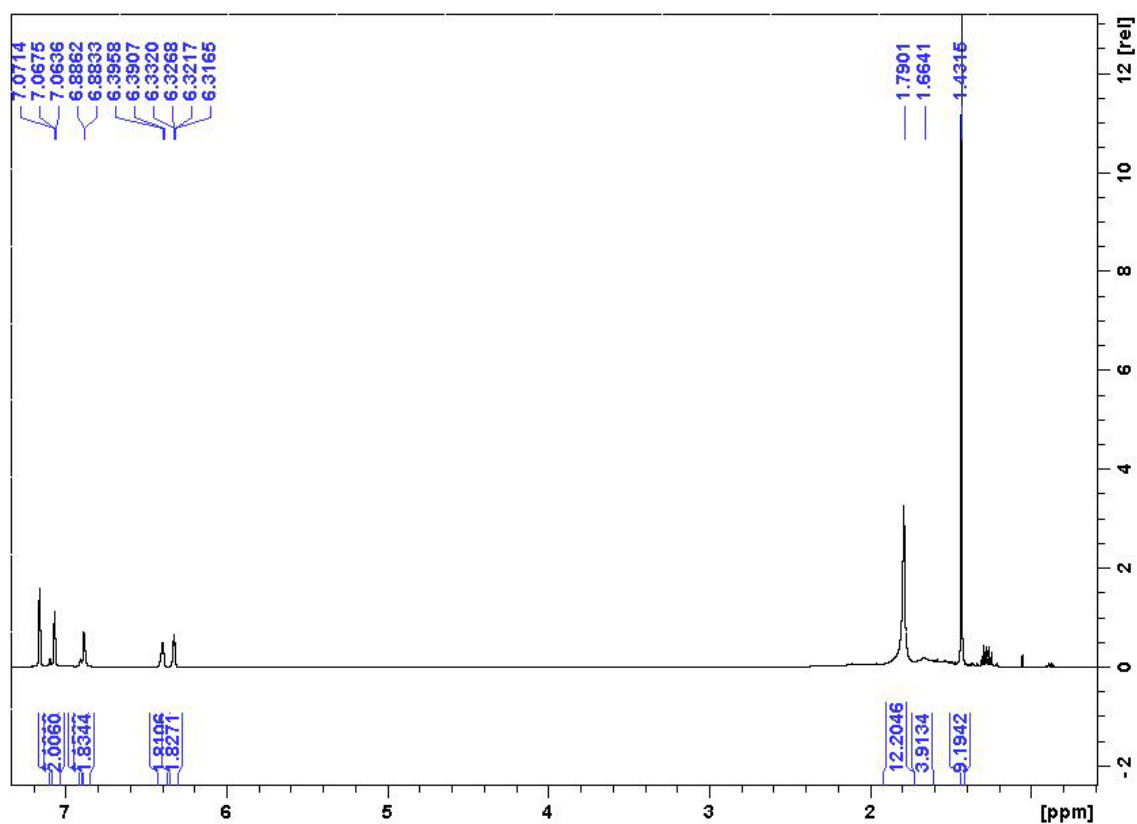
University of Strathclyde, Glasgow UK G1 1XL.

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### NMR Analysis

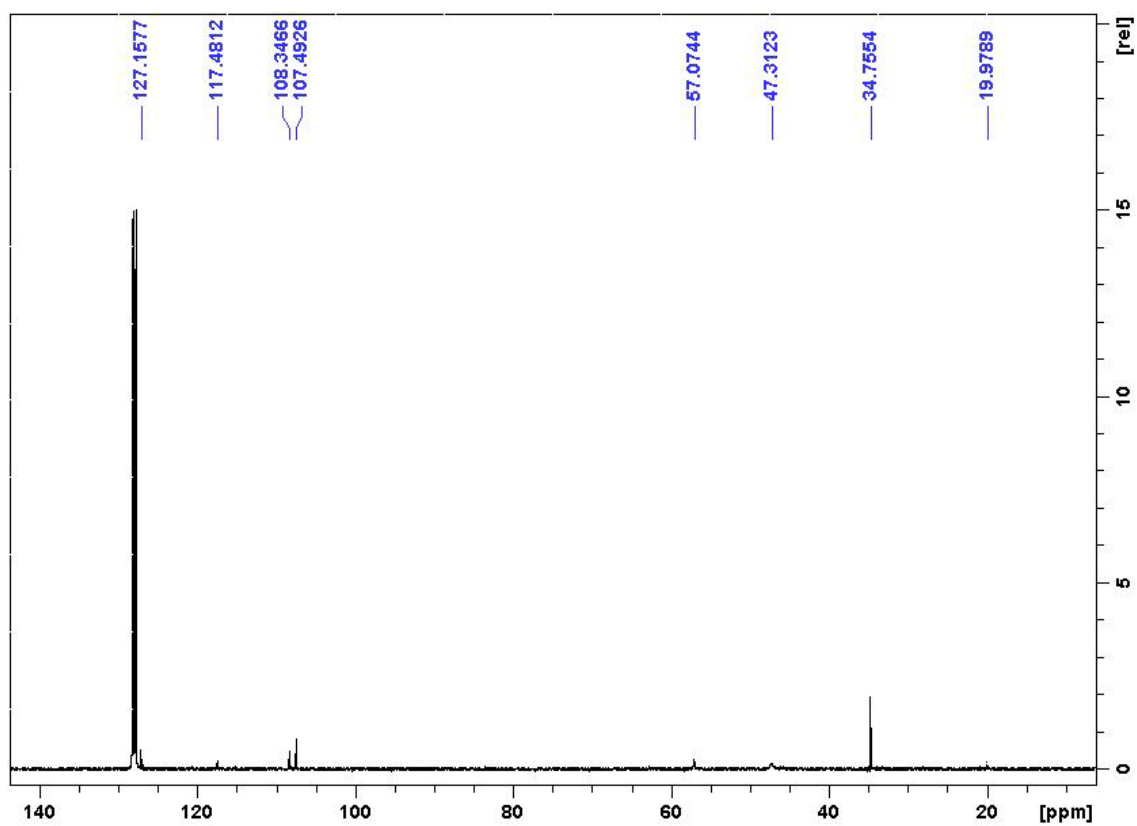
[<sup>4</sup>BuZn(NC<sub>4</sub>H<sub>4</sub>)(TMEDA)•HNC<sub>4</sub>H<sub>4</sub>] (1)

<sup>1</sup>H NMR Spectrum



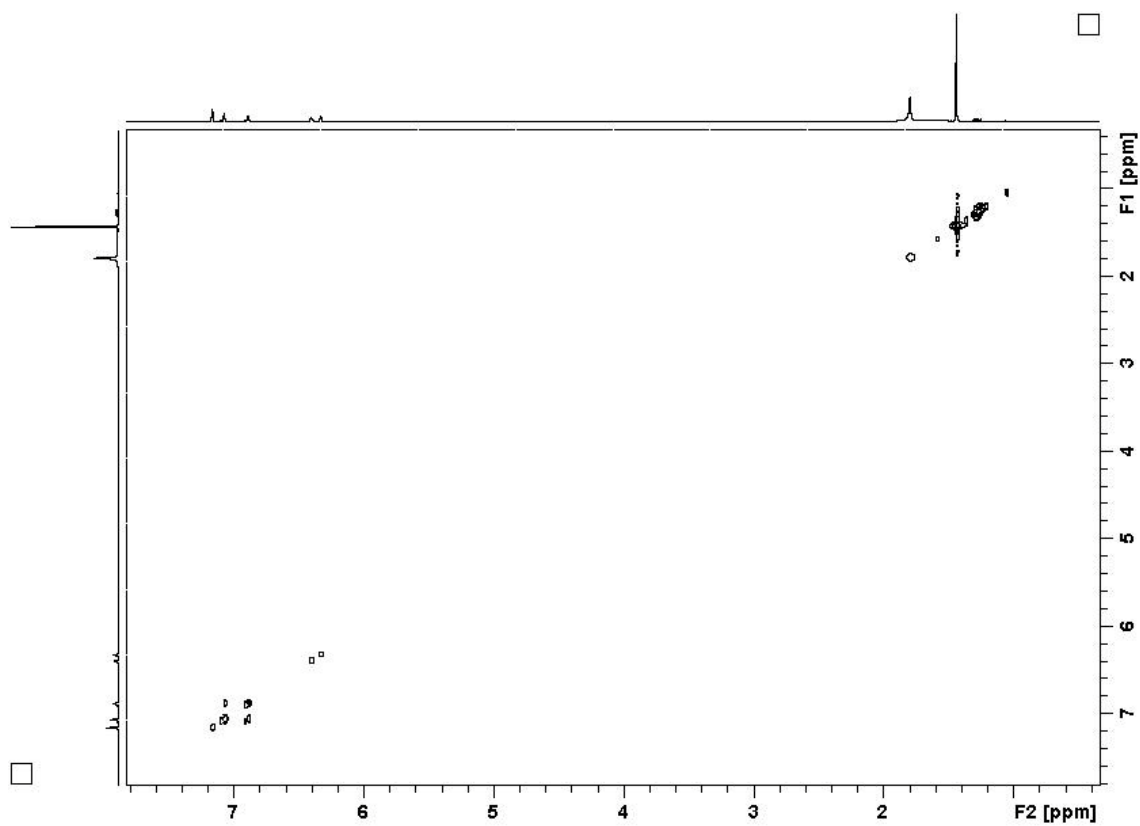


$^{13}\text{C}$  NMR Spectrum



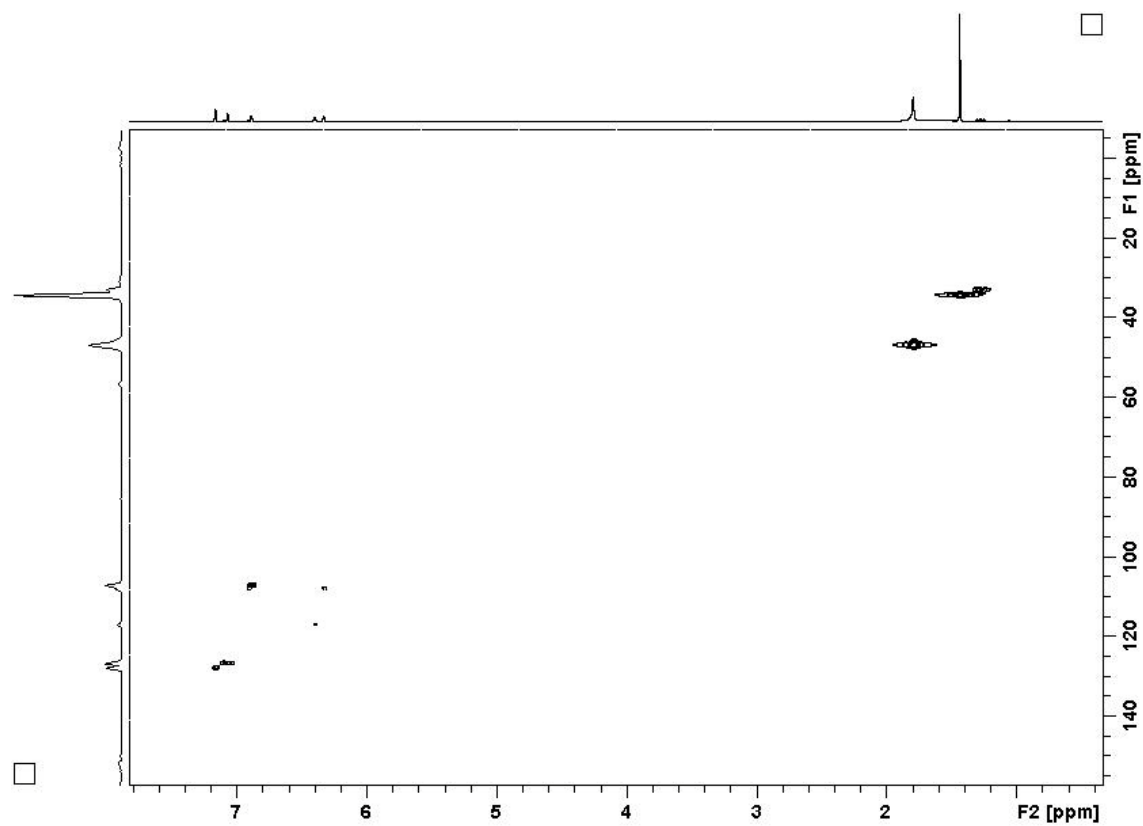


COSY NMR Spectrum



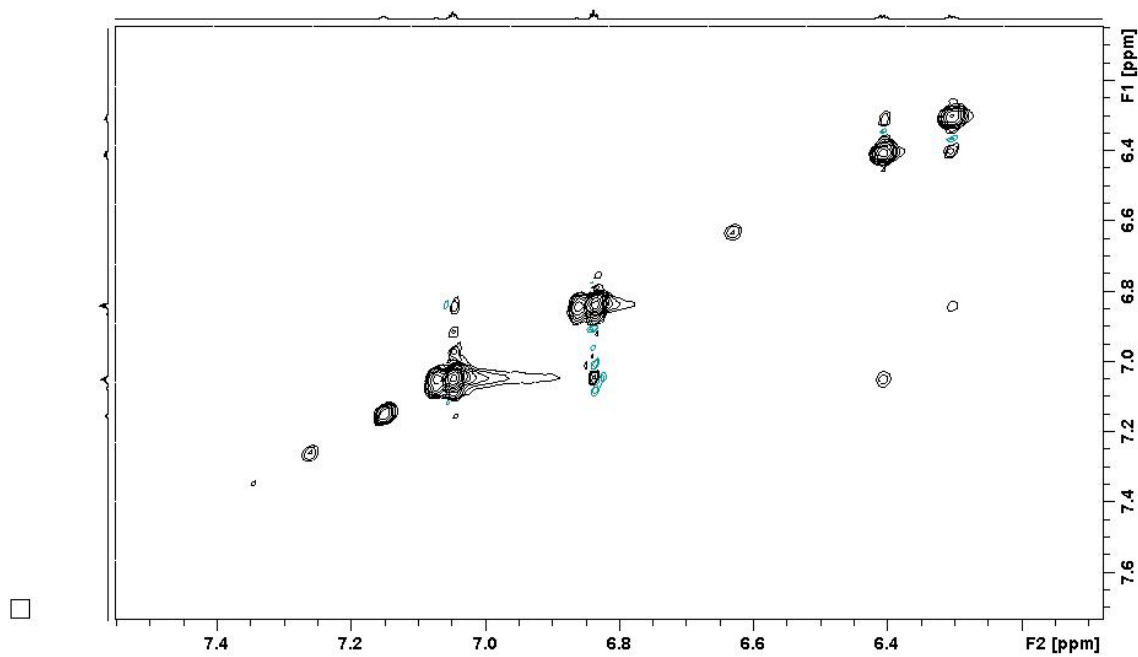
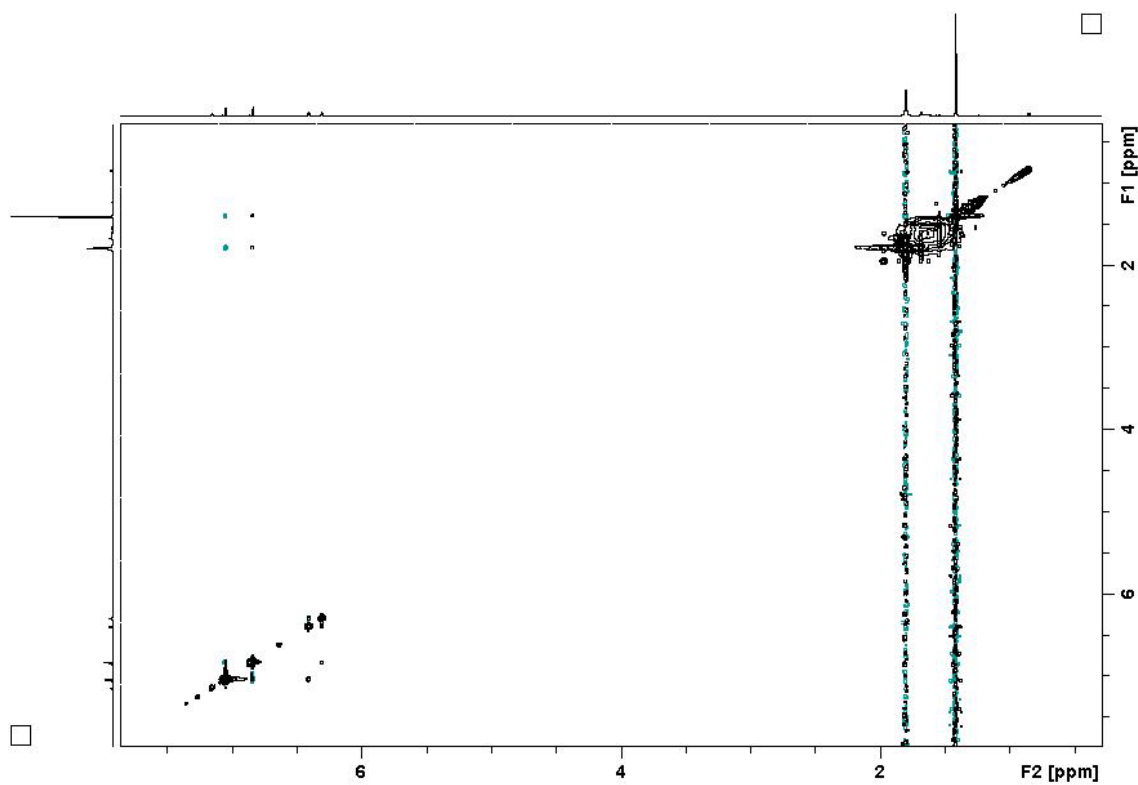


HSQC Spectrum



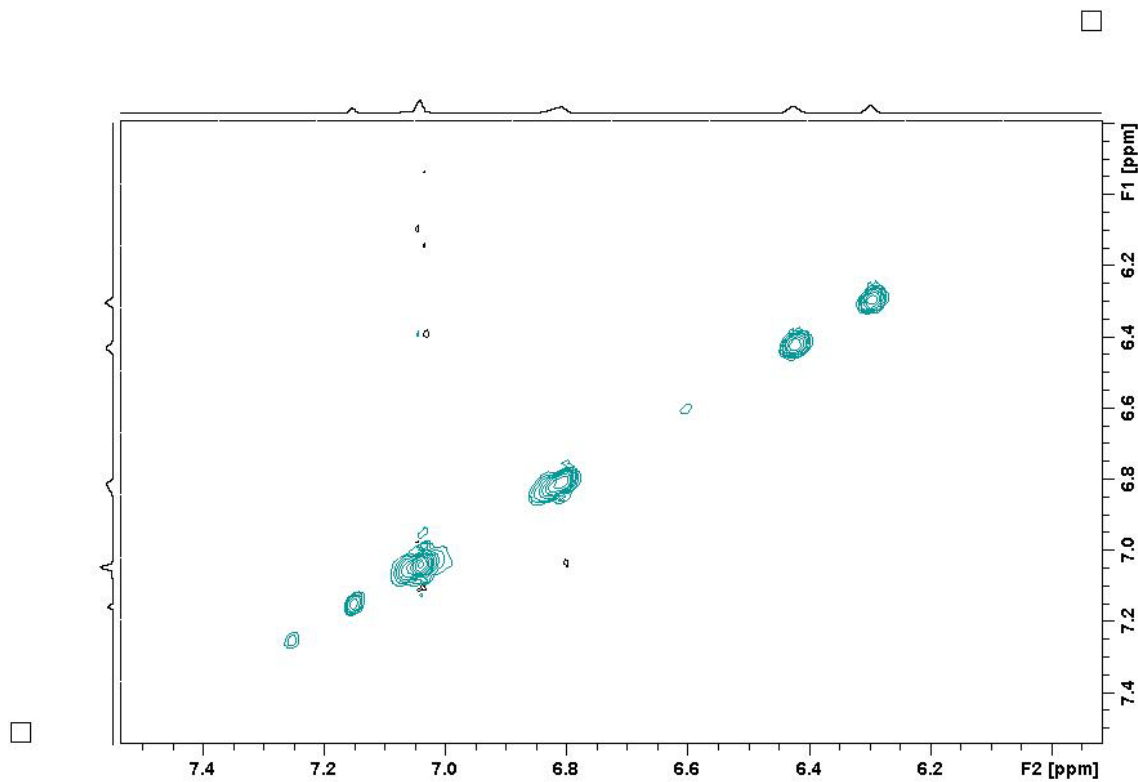


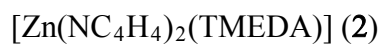
NOESY NMR



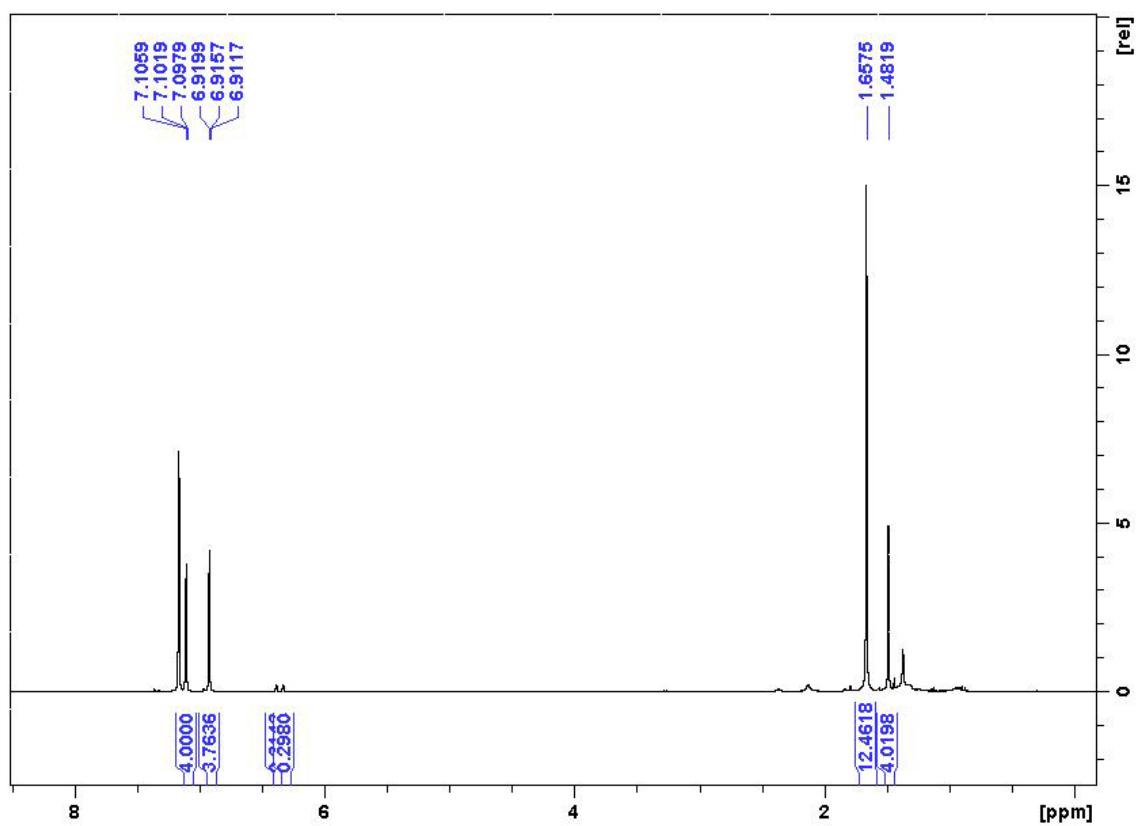


ROESY NMR



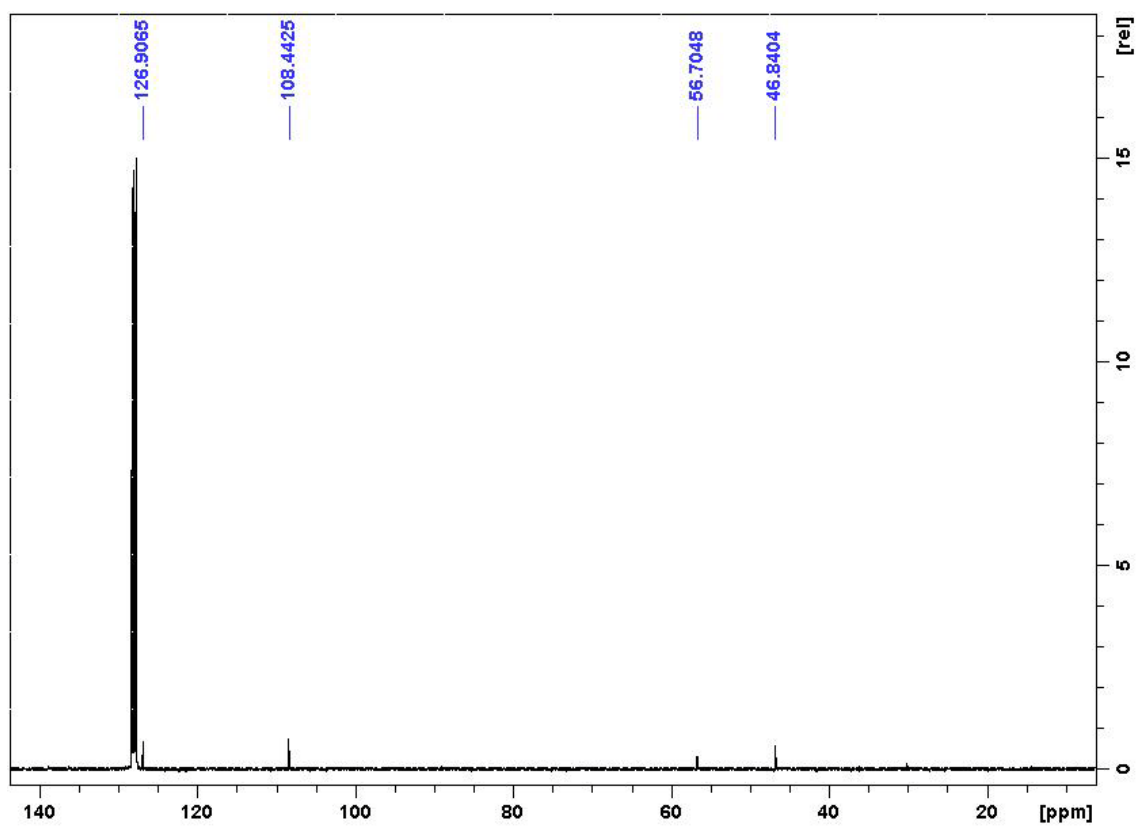


<sup>1</sup>H NMR Spectrum



[Zn(NC<sub>4</sub>H<sub>4</sub>)<sub>2</sub>(TMEDA)] (2)

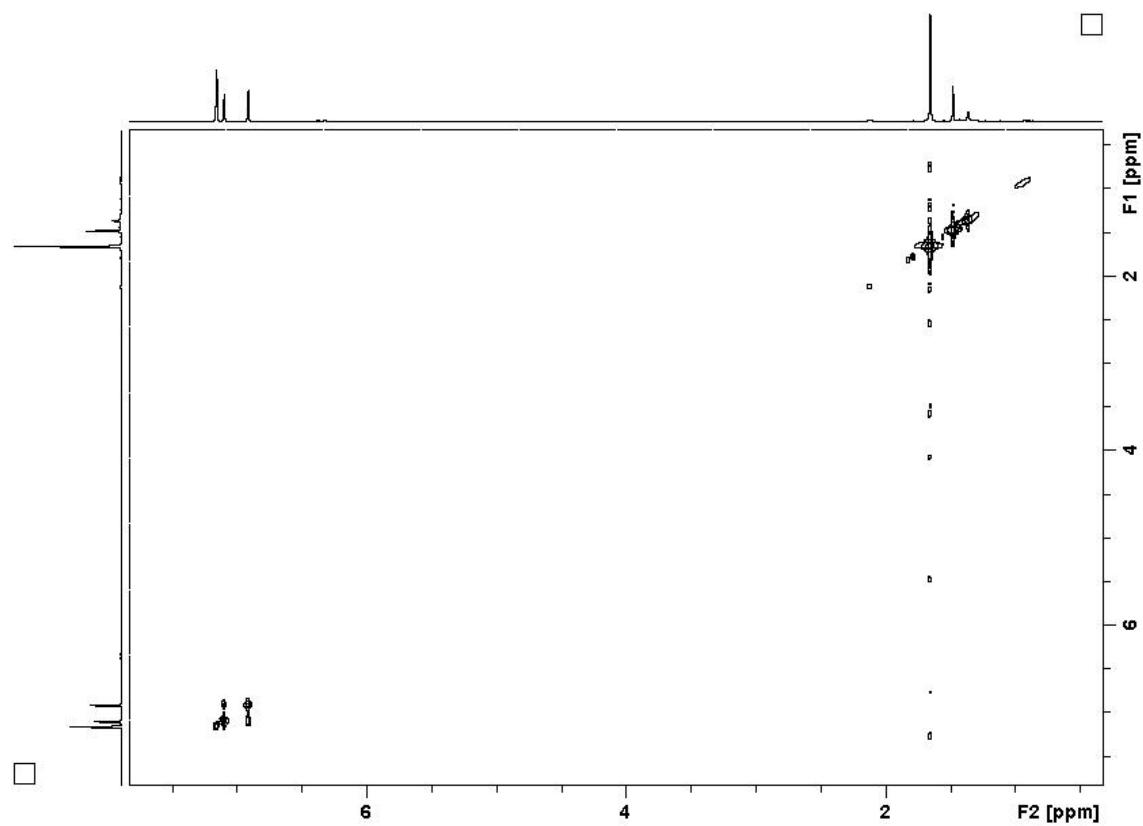
<sup>13</sup>C NMR Spectrum

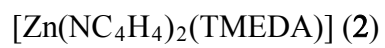




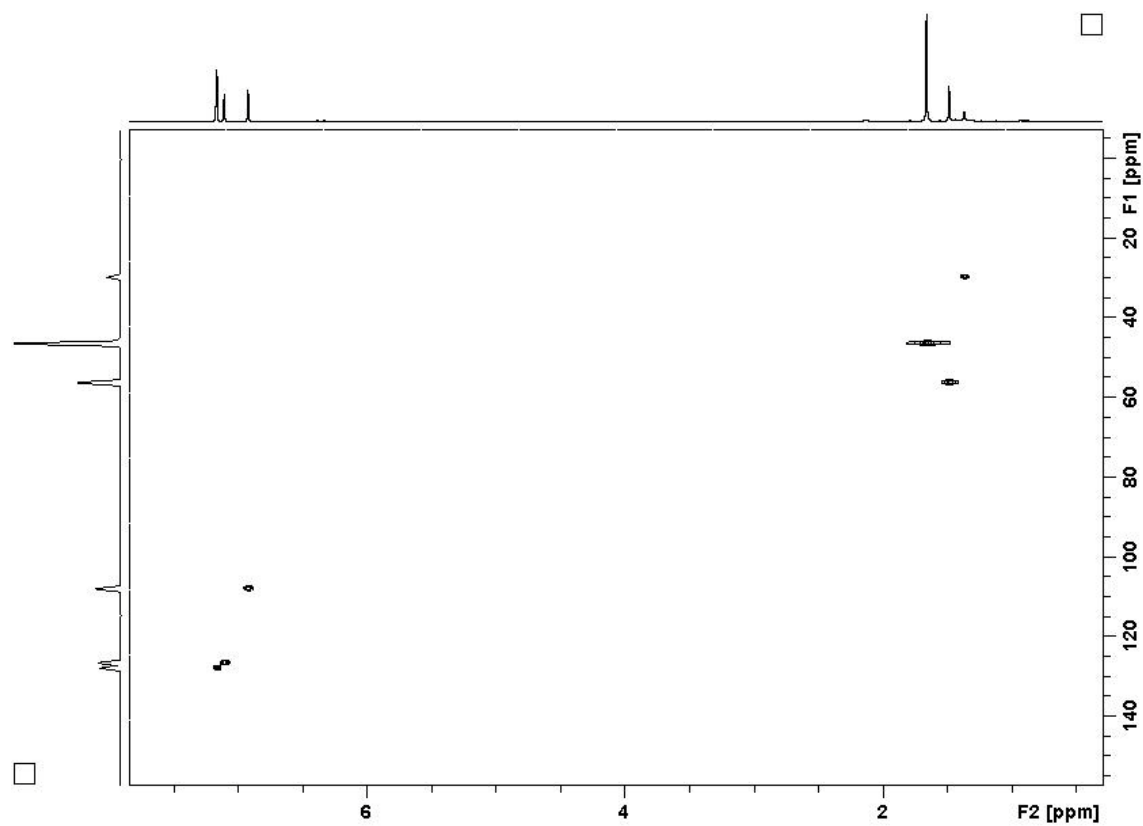
[Zn(NC<sub>4</sub>H<sub>4</sub>)<sub>2</sub>(TMEDA)] (2)

COSY Spectrum



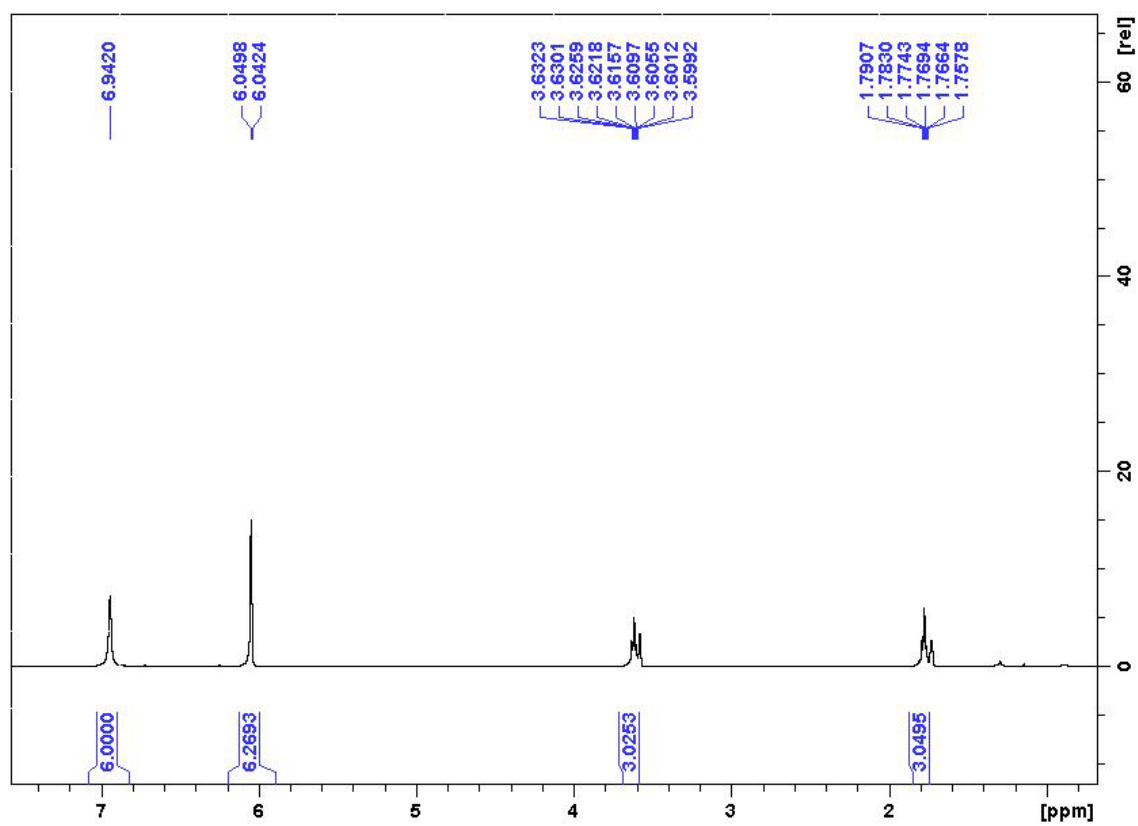


HSQC Spectrum



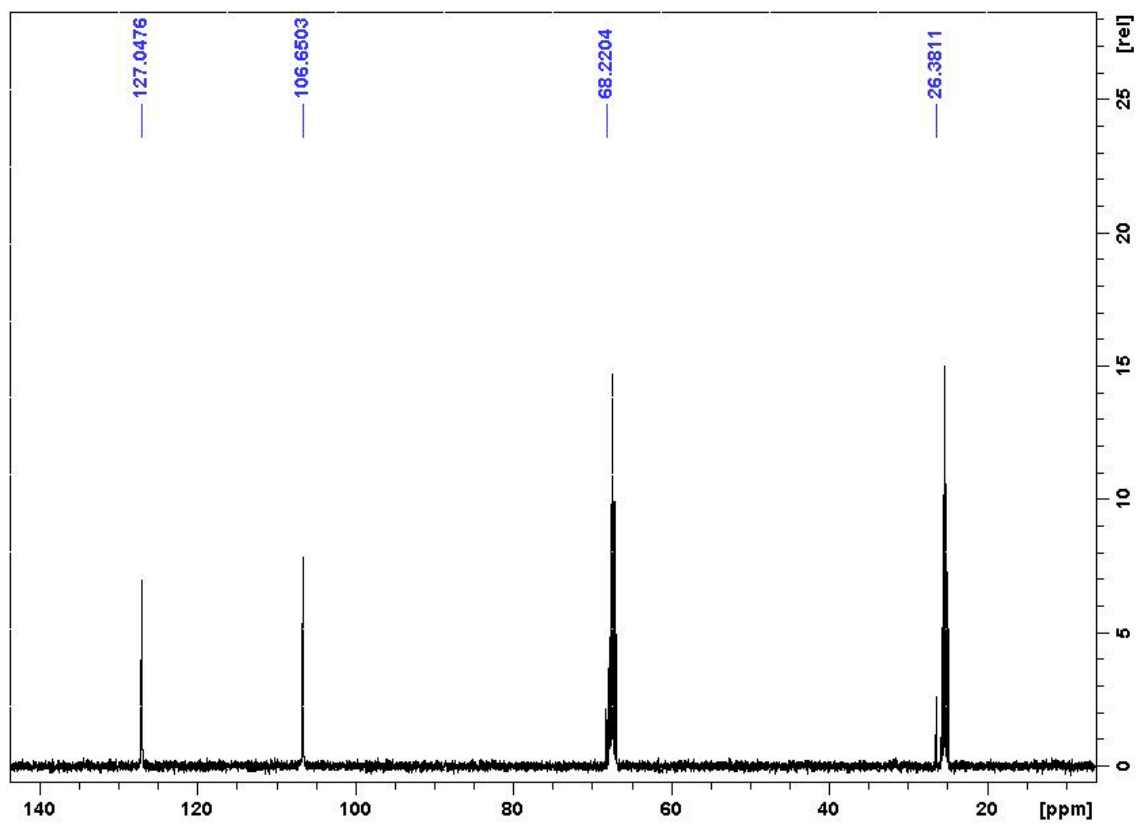


$^1H$  NMR Spectrum



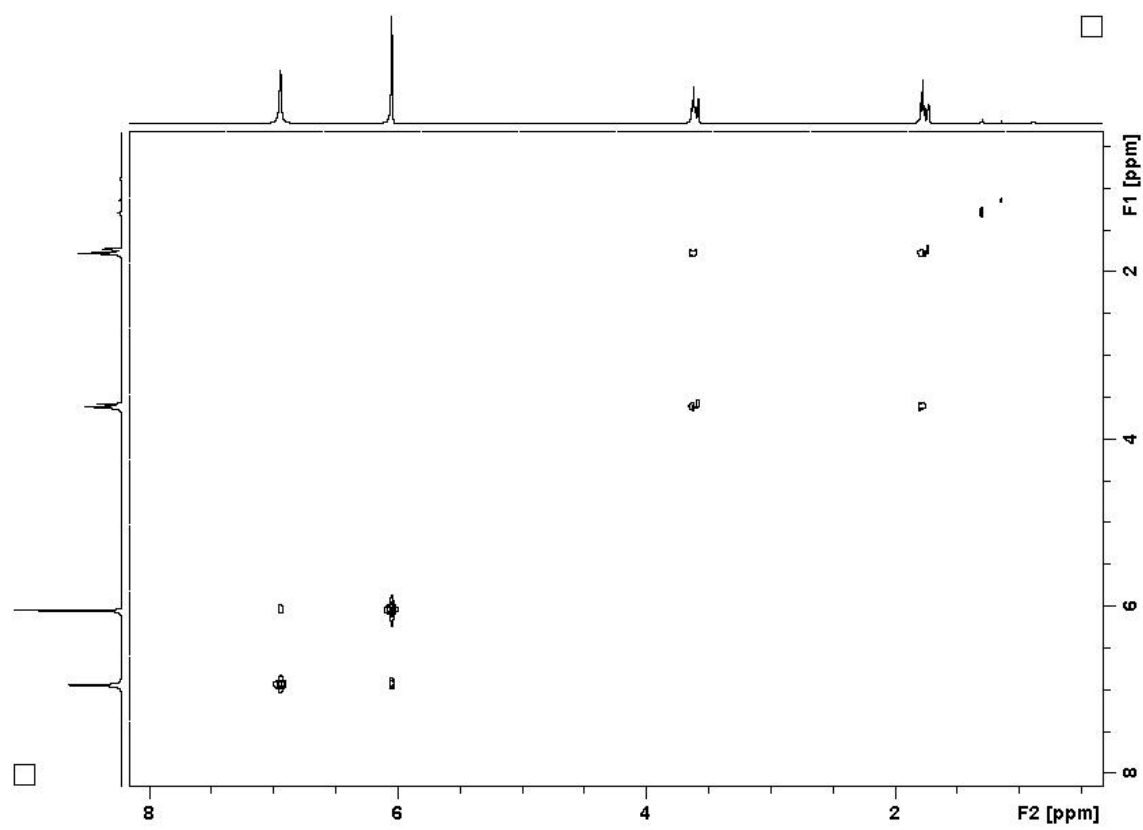


<sup>13</sup>C NMR Spectrum



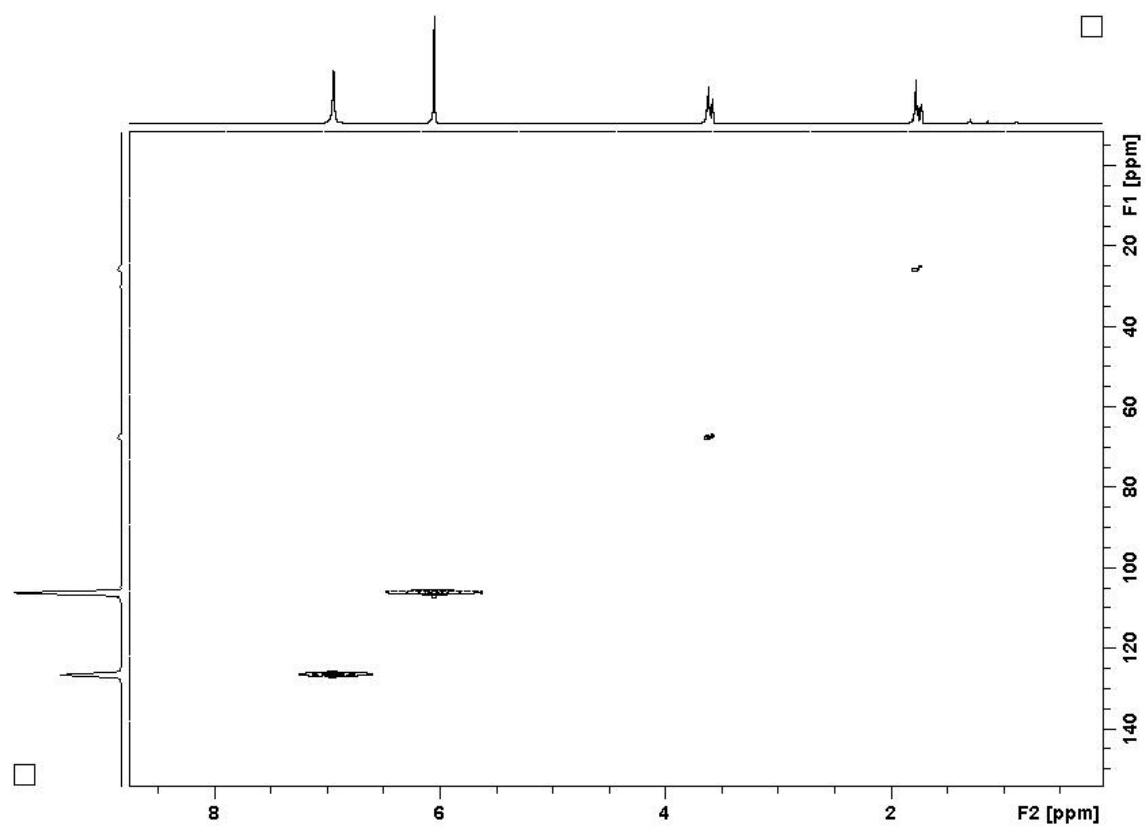


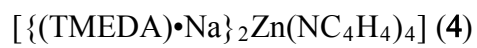
COSY Spectrum



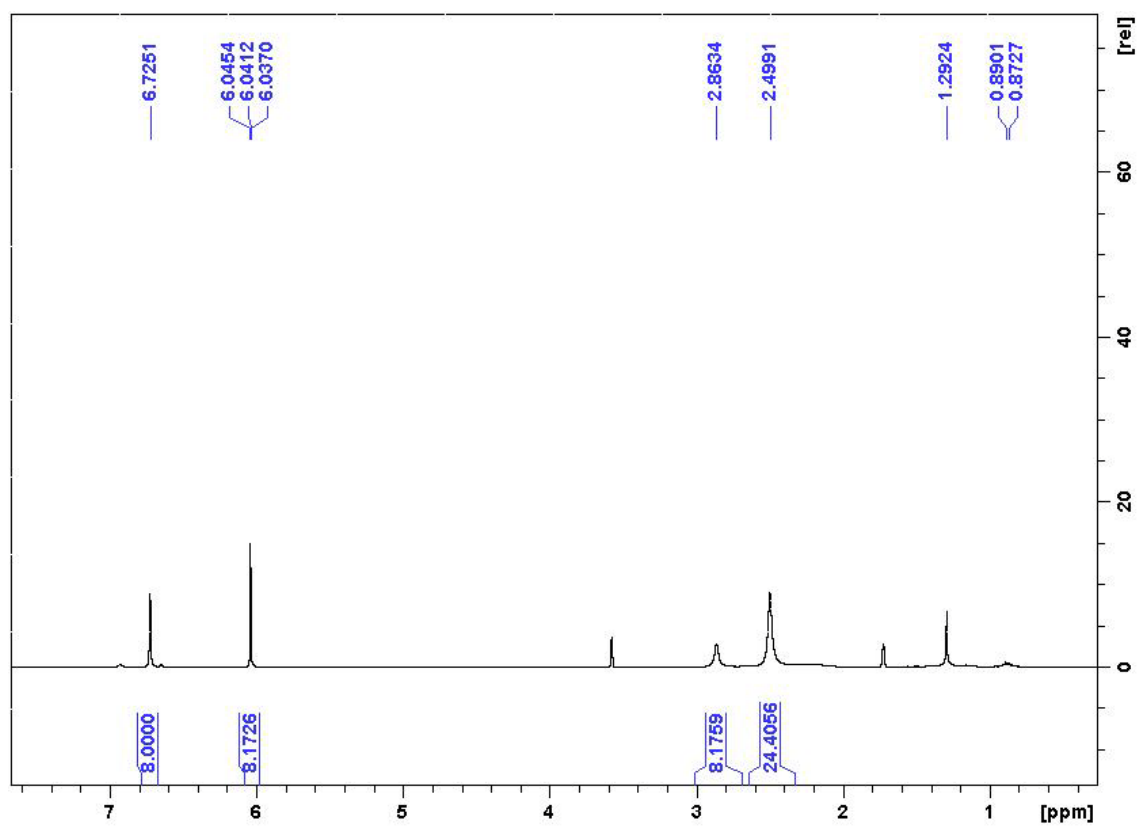


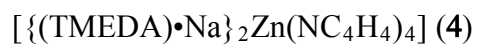
HSQC Spectrum



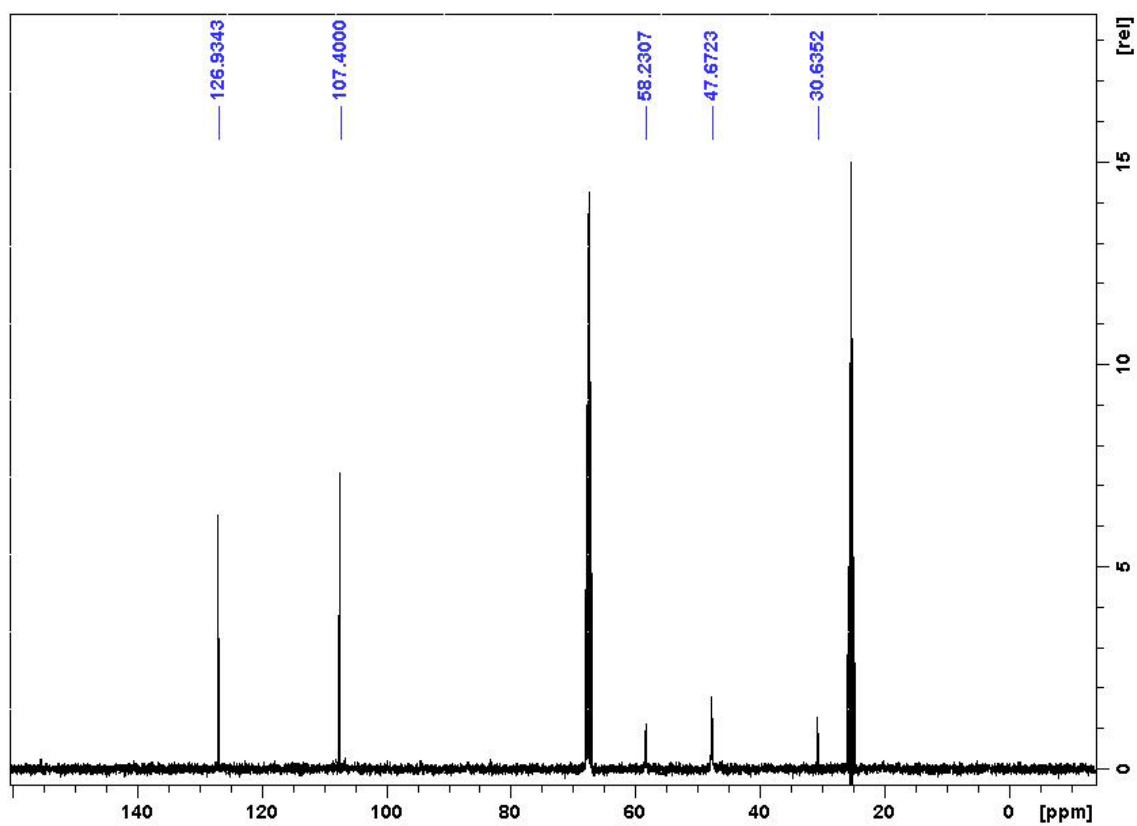


<sup>1</sup>H NMR Spectrum

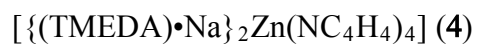




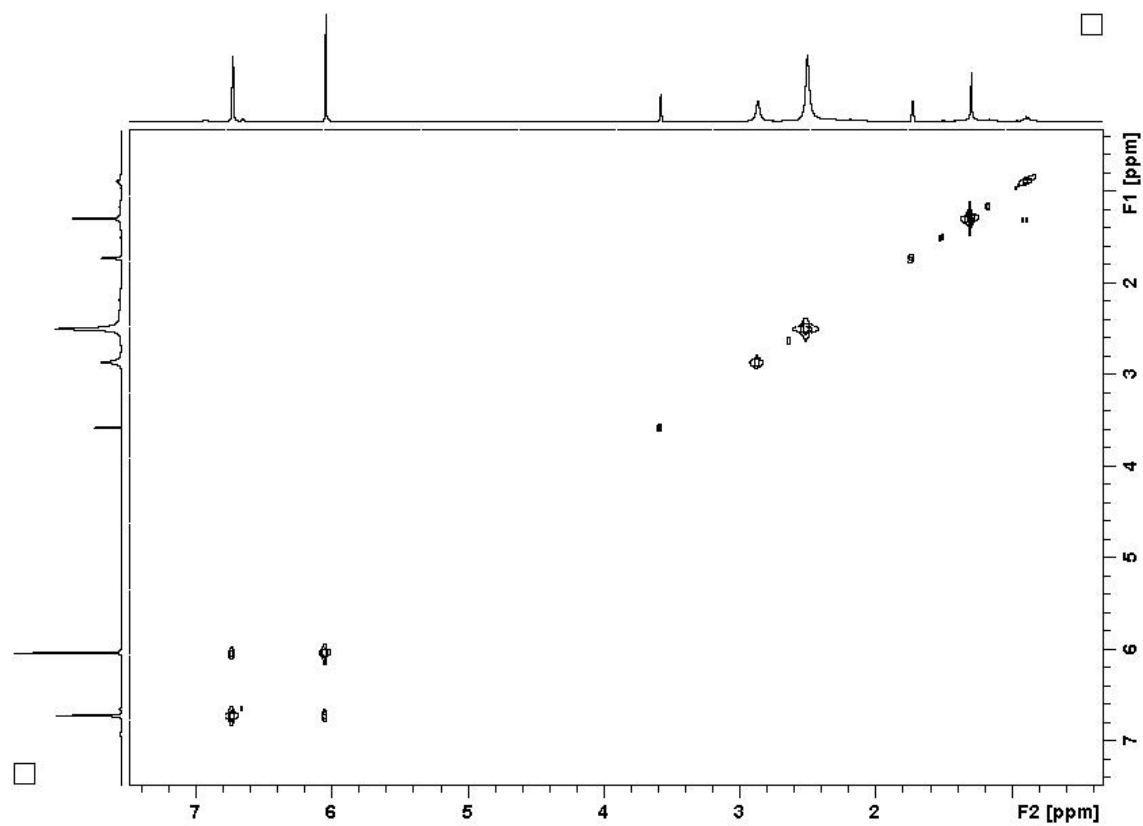
$^{13}C$  NMR Spectrum

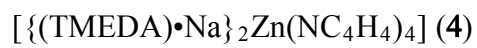




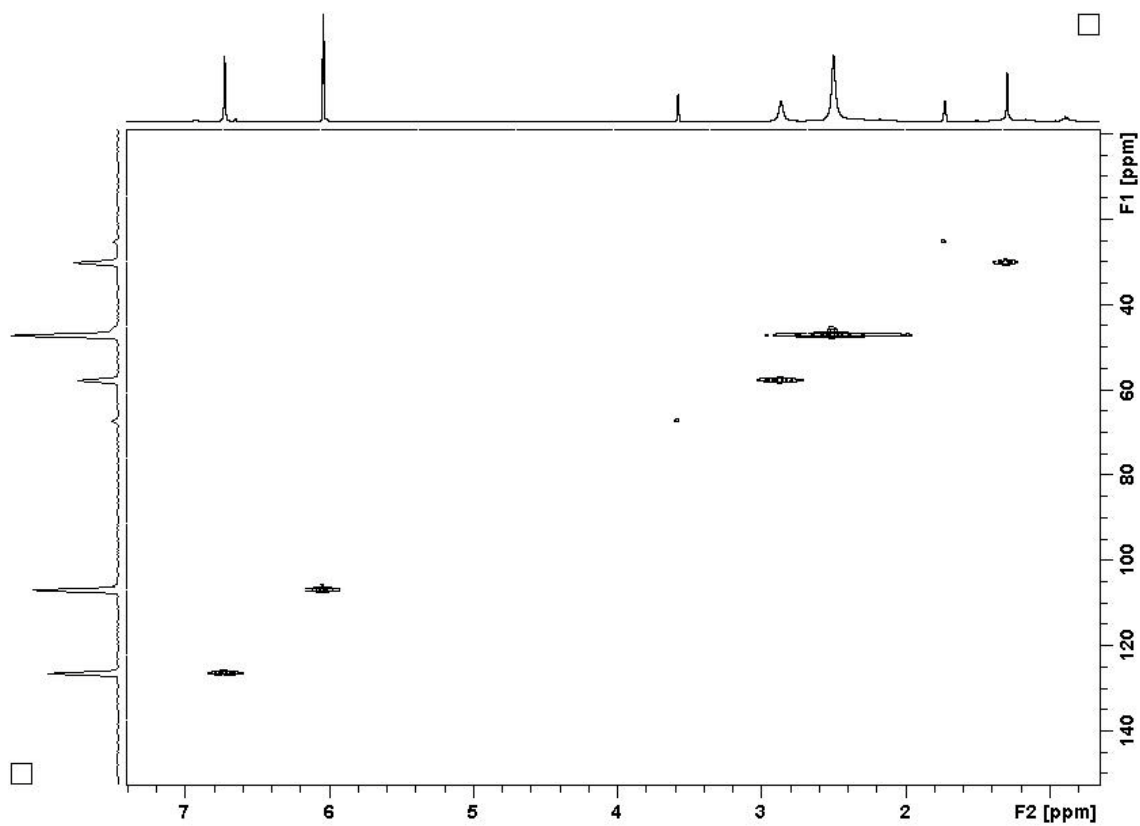


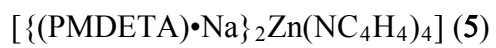
COSY Spectrum



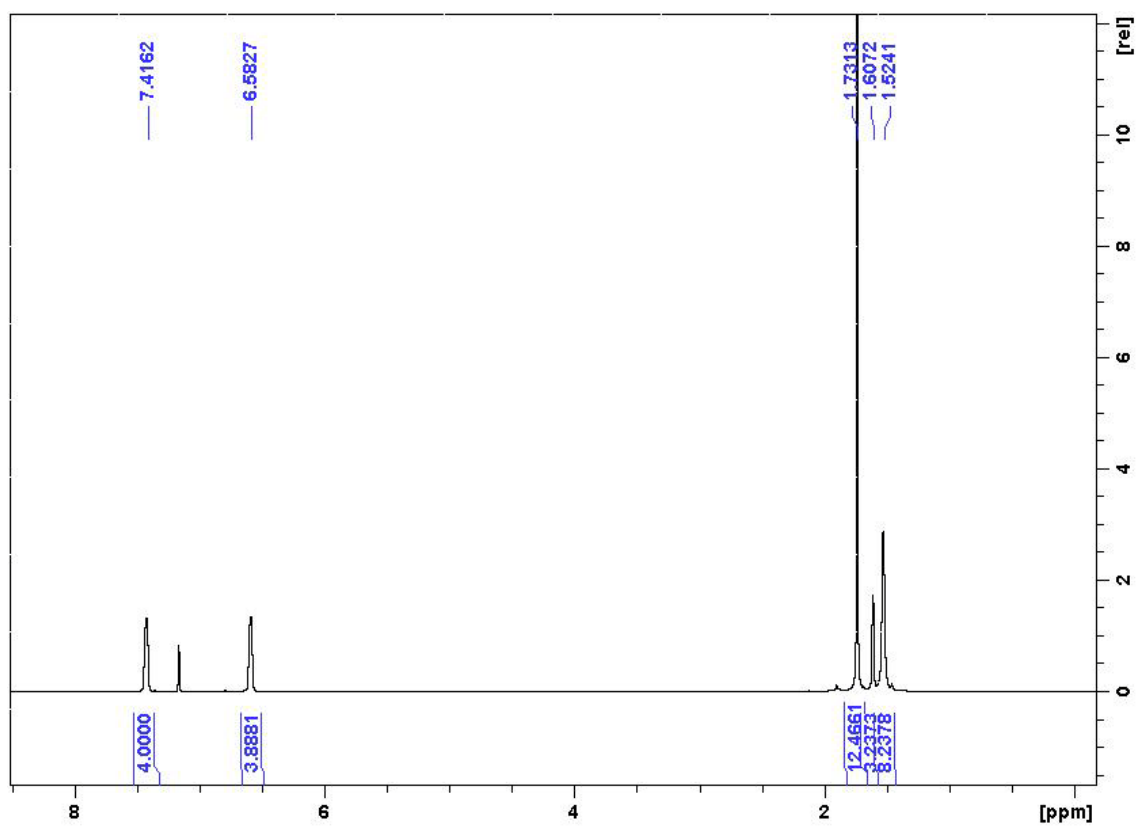


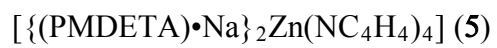
HSQC Spectrum



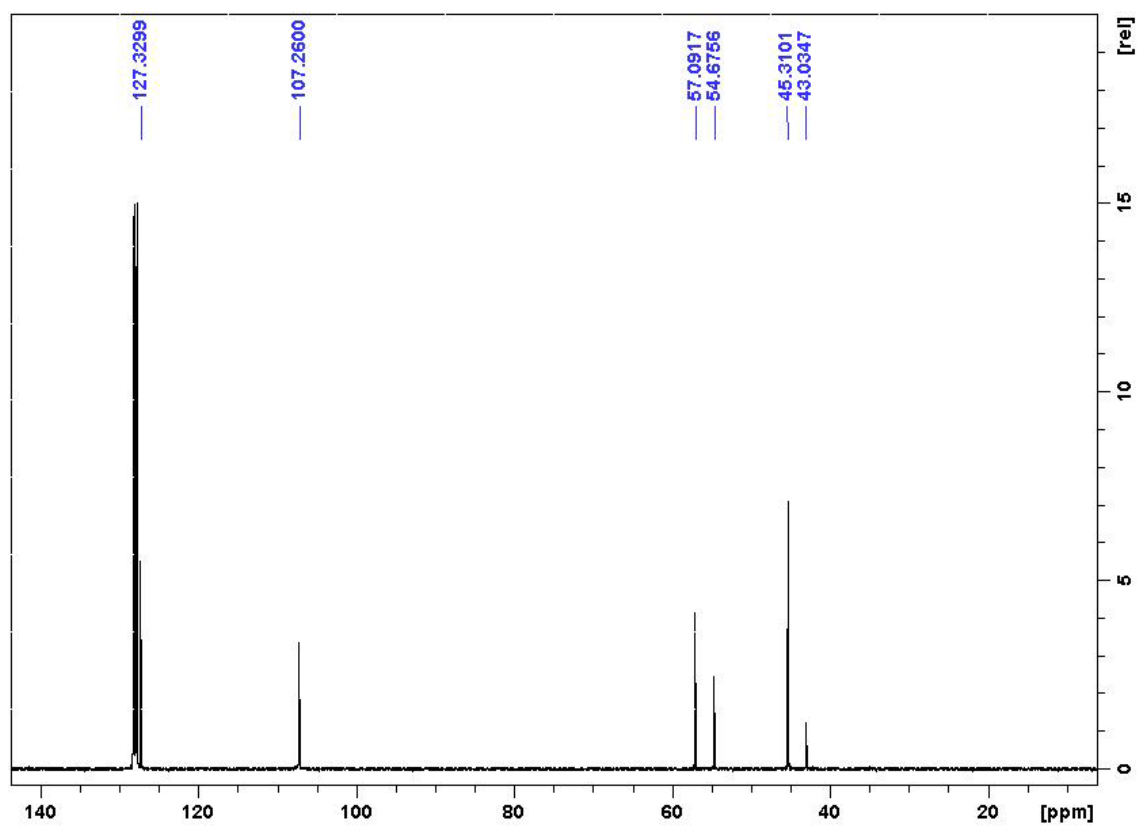


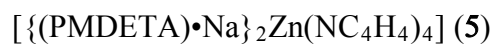
<sup>1</sup>H NMR Spectrum



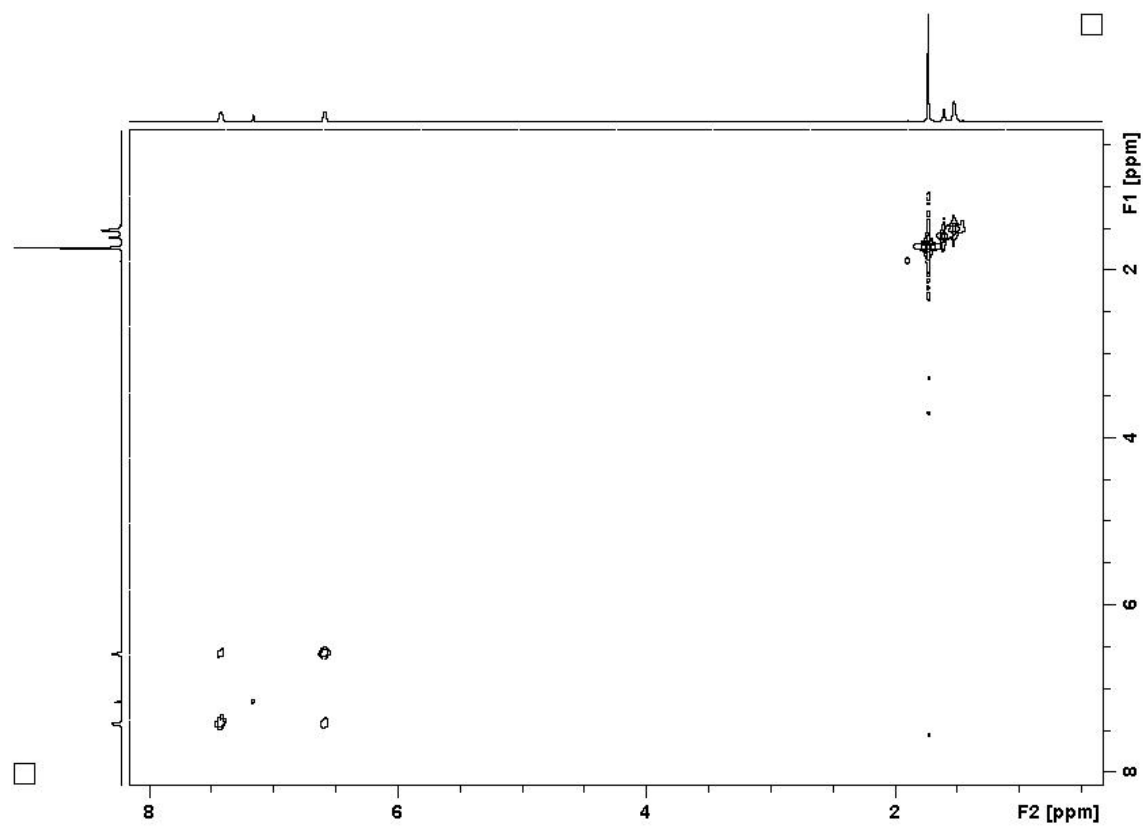


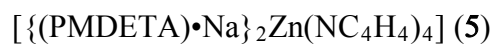
<sup>13</sup>C NMR Spectrum



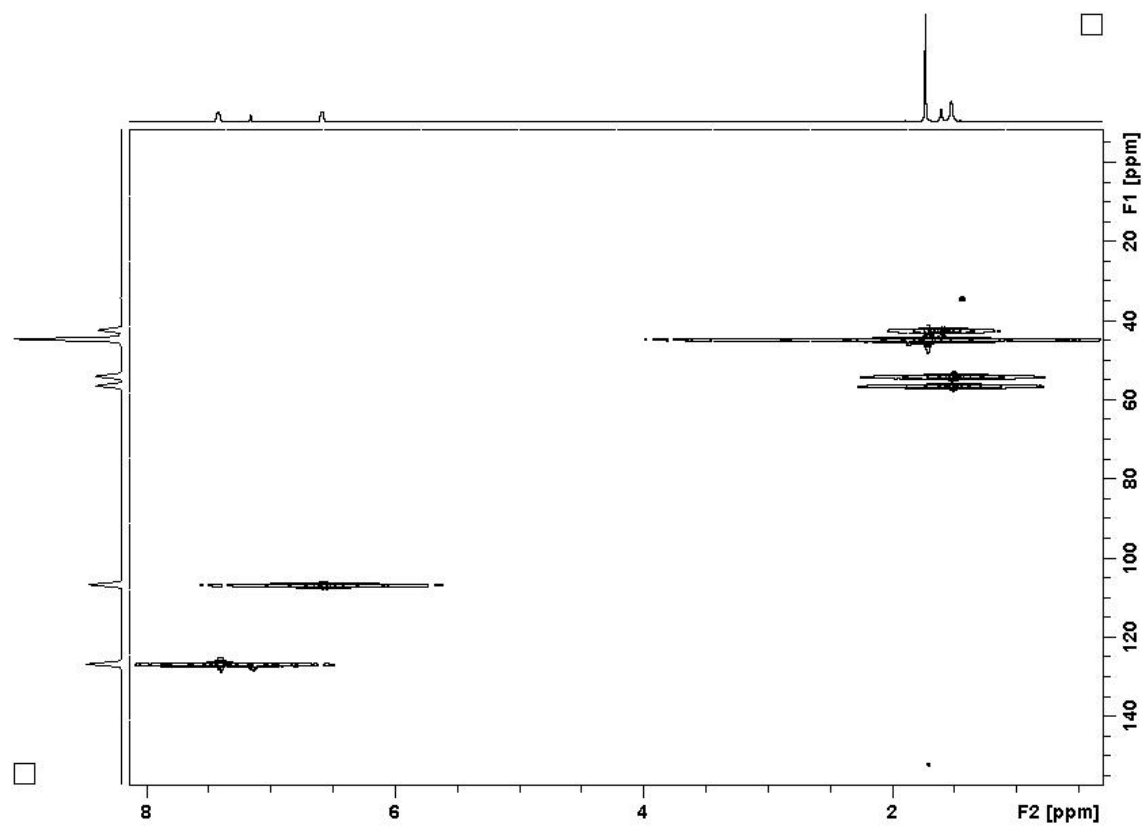


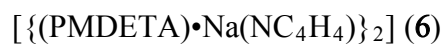
COSY Spectrum



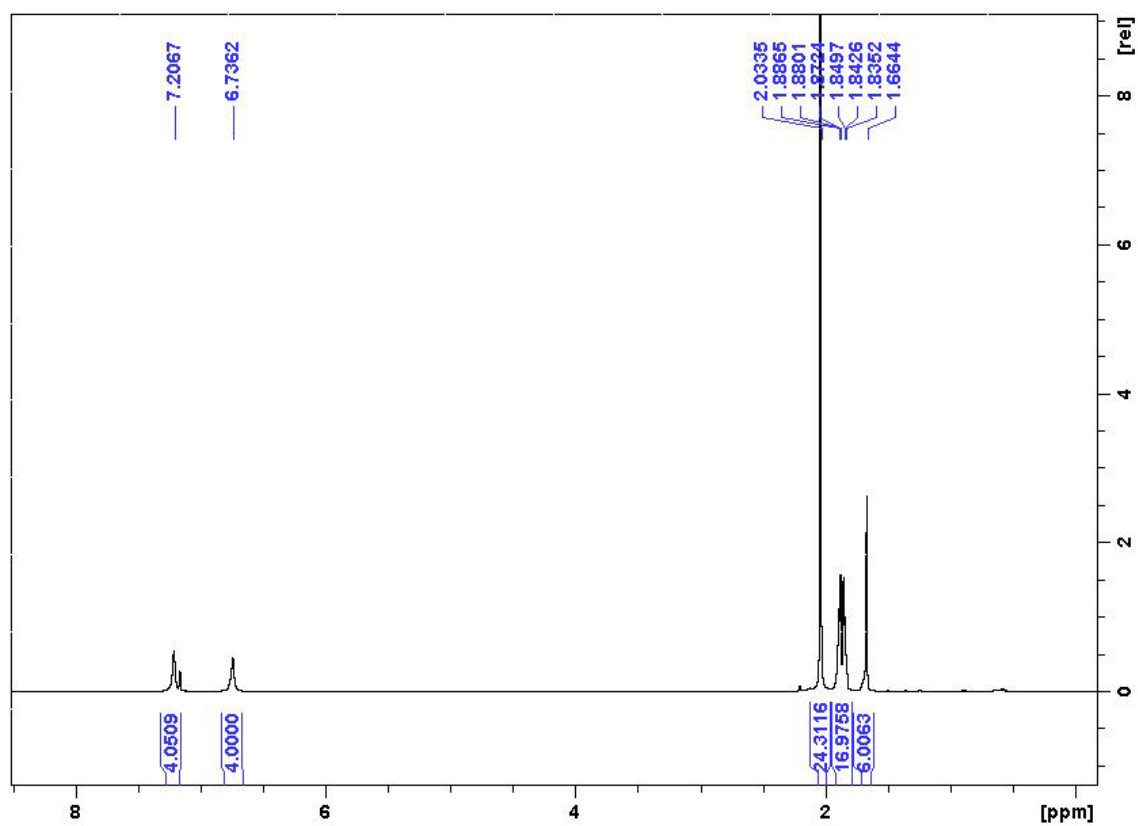


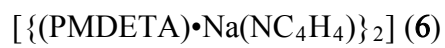
HSQC Spectrum



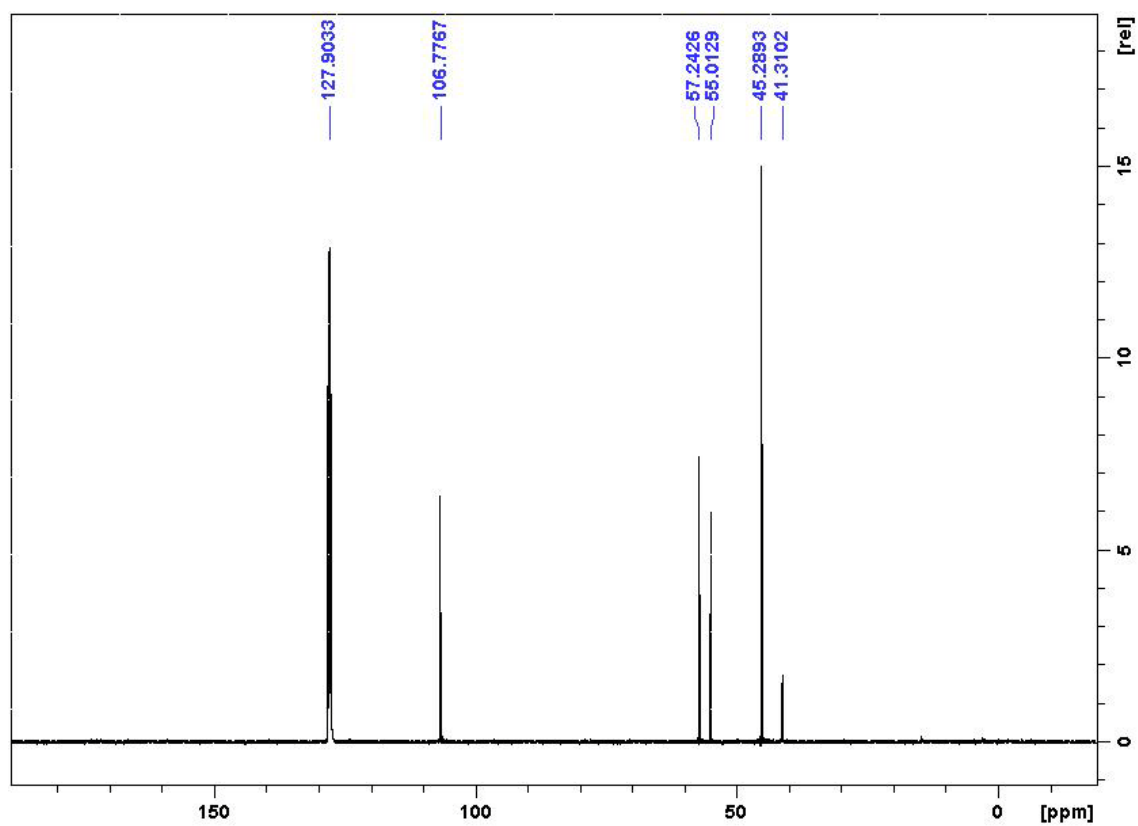


$^1H$  NMR Spectrum

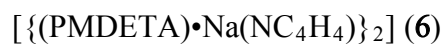




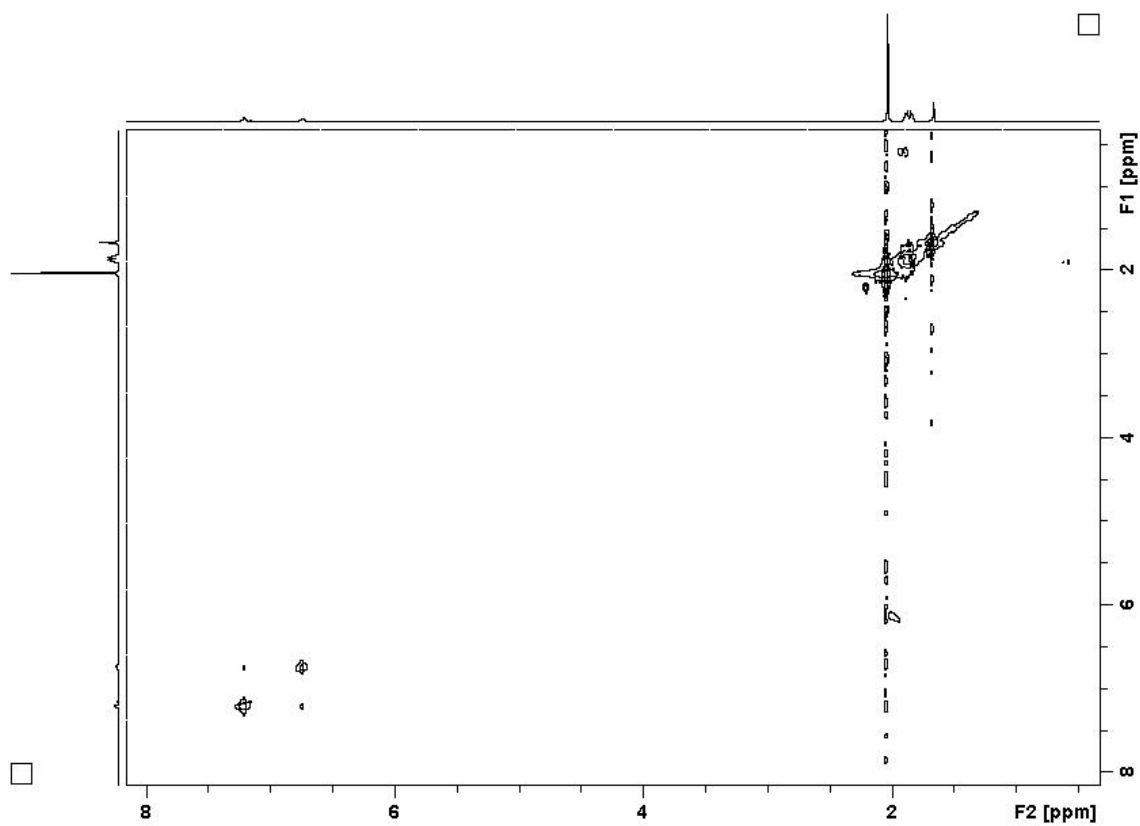
<sup>13</sup>C NMR Spectrum

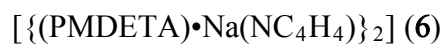






COSY Spectrum





HSQC Spectrum

