

# Supporting Information

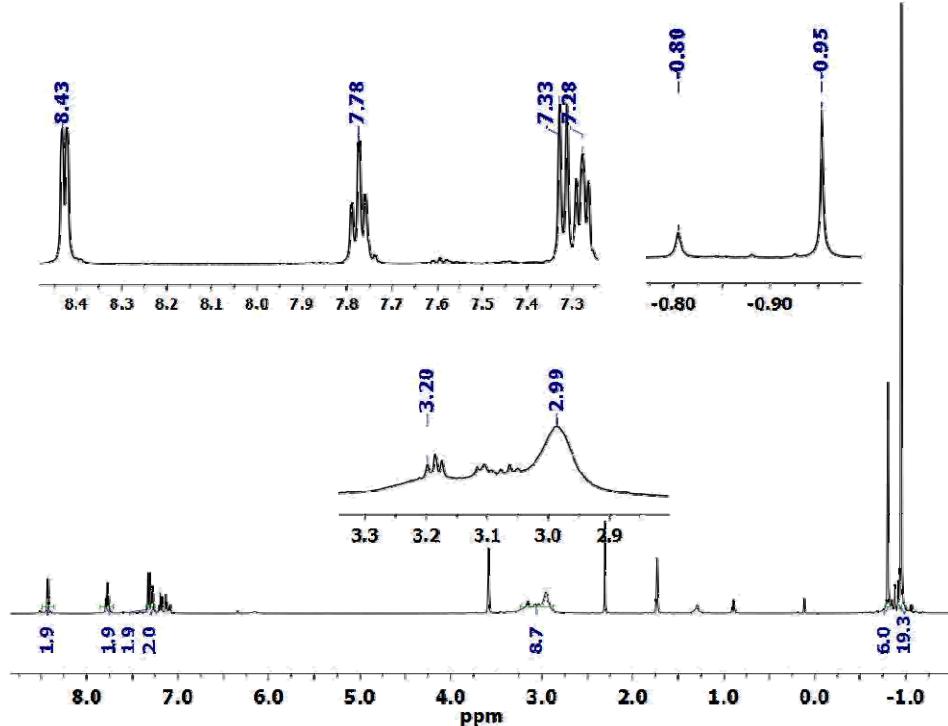
## Trinuclear pyridyl functionalised hydroxylaminato complexes of aluminium, gallium and indium

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Additional NMR spectra of compounds **1**, **2** and **3** at various temperatures and in different solvents are given.

[Al(CH<sub>3</sub>)<sub>2</sub>ON(C<sub>2</sub>H<sub>4</sub>-*o*-py)<sub>2</sub> · 2 AlMe<sub>3</sub>] (1):



**Figure 1:**  $^1\text{H}$  NMR spectrum in  $[\text{D}_8]\text{thf}$  of **1** at rt.

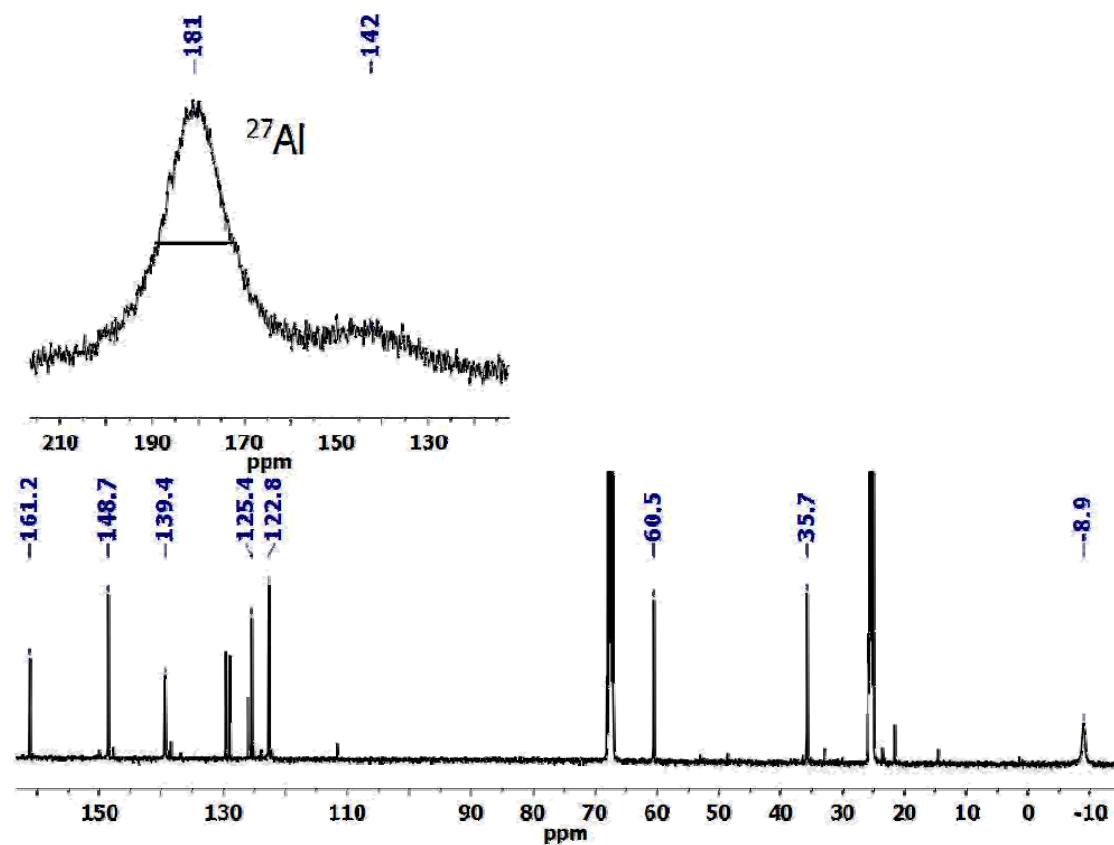


Figure 2:  $^{27}\text{Al}$  and  $^{13}\text{C}$  NMR spectra in  $[\text{D}_8]\text{thf}$  of **1** at rt.

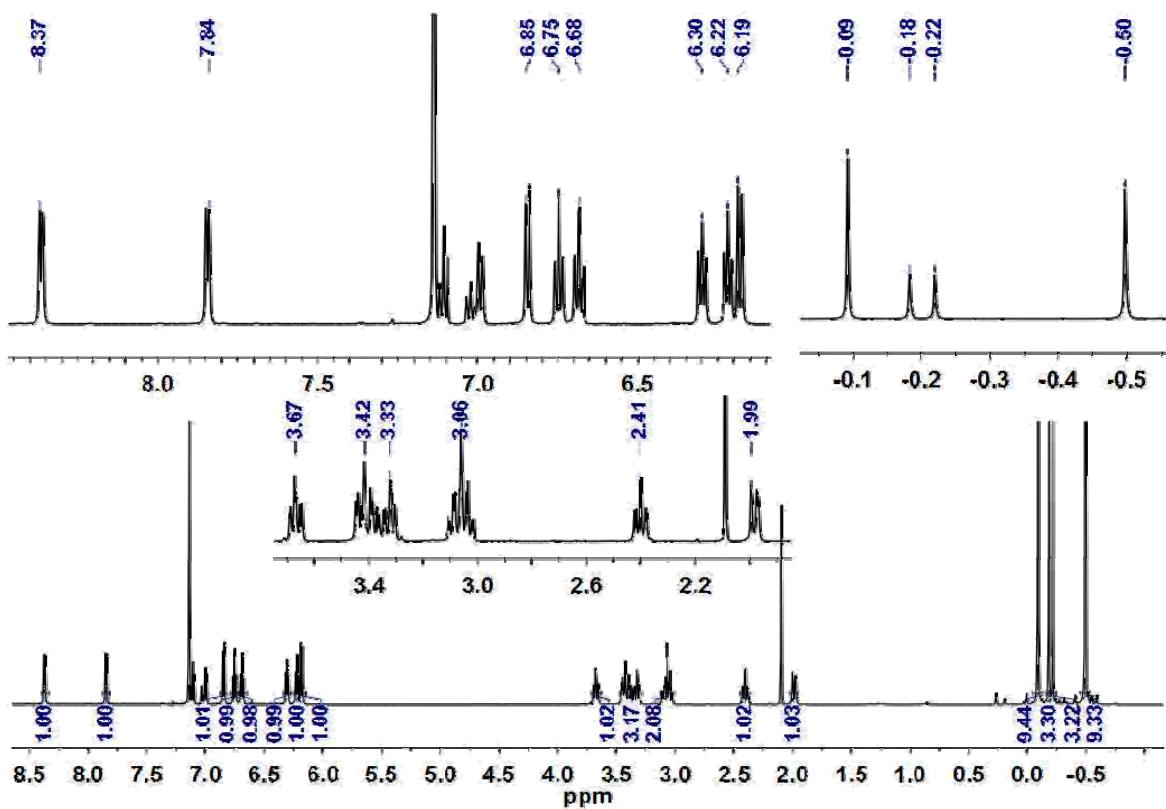
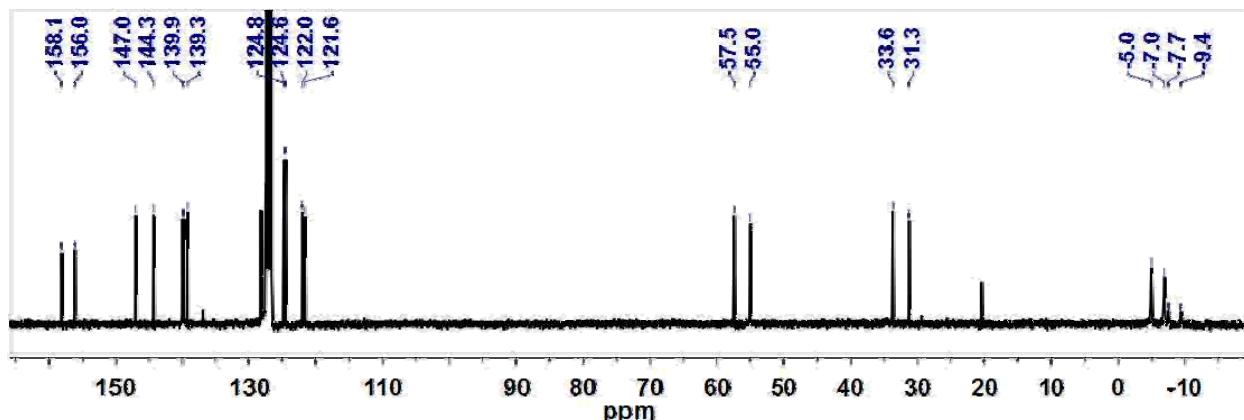
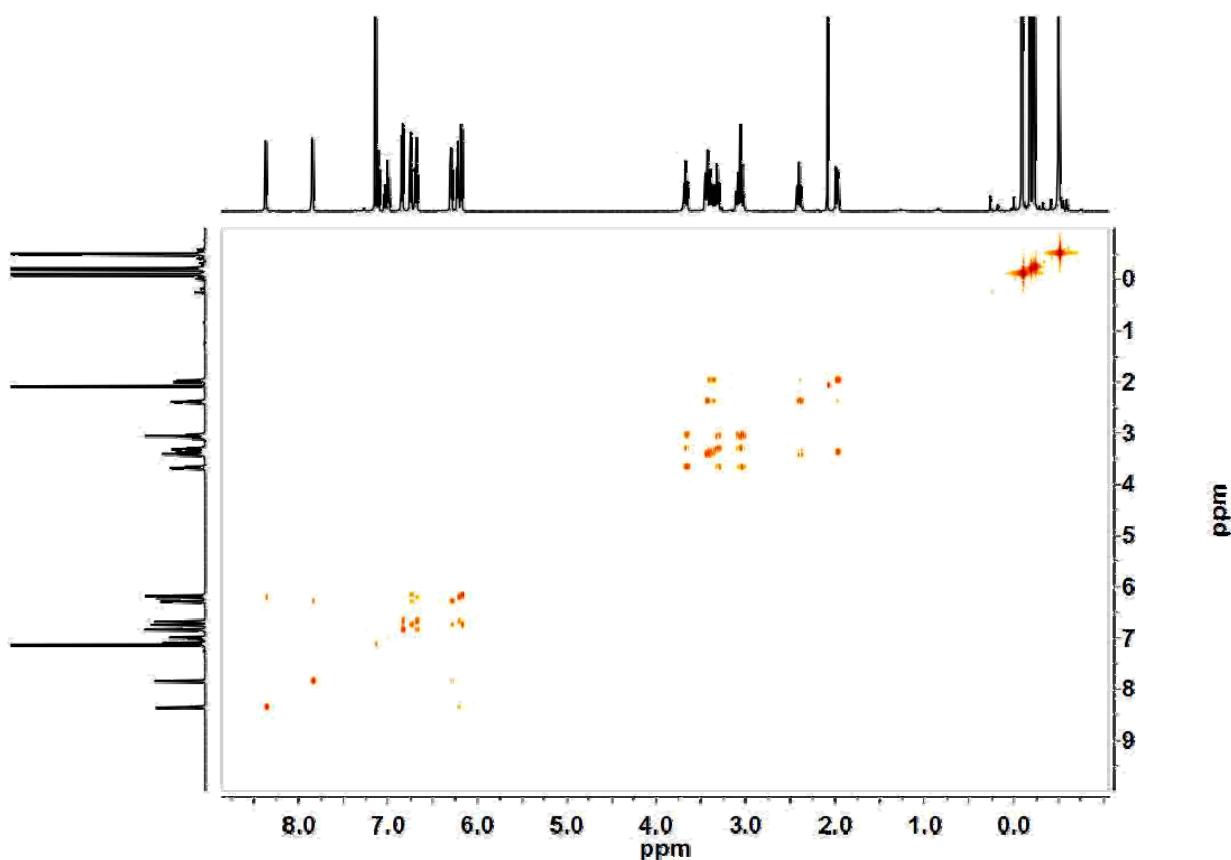


Figure 3:  $^1\text{H}$  NMR spectra in  $[\text{D}_6]\text{benzene}$  of **1** at rt.



**Figure 4:** <sup>13</sup>C NMR spectra in [D<sub>6</sub>]benzene of **1** at rt.



**Figure 5:** <sup>1</sup>H-<sup>1</sup>H COSY NMR spectra in [D<sub>6</sub>]benzene of **1** at rt.

[Ga(CH<sub>3</sub>)<sub>2</sub>ON(C<sub>2</sub>H<sub>4</sub>-*o*-py)<sub>2</sub> · 2 AlMe<sub>3</sub>] (2):

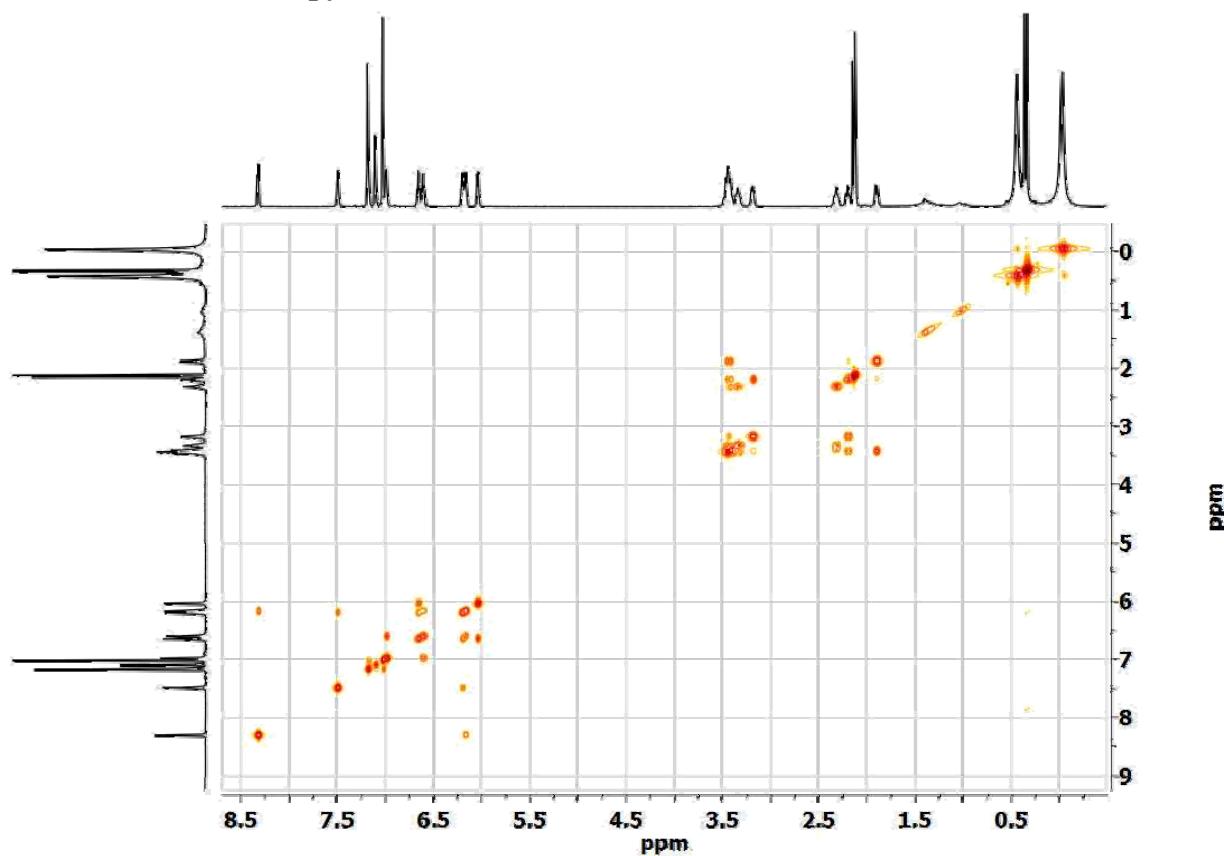


Figure 6: <sup>1</sup>H-<sup>1</sup>H COSY NMR spectra in [D<sub>8</sub>]toluene of 2 at -60° C.

[In(CH<sub>3</sub>)<sub>2</sub>ON(C<sub>2</sub>H<sub>4</sub>-*o*-py)<sub>2</sub> · 2 InMe<sub>3</sub>] (3):

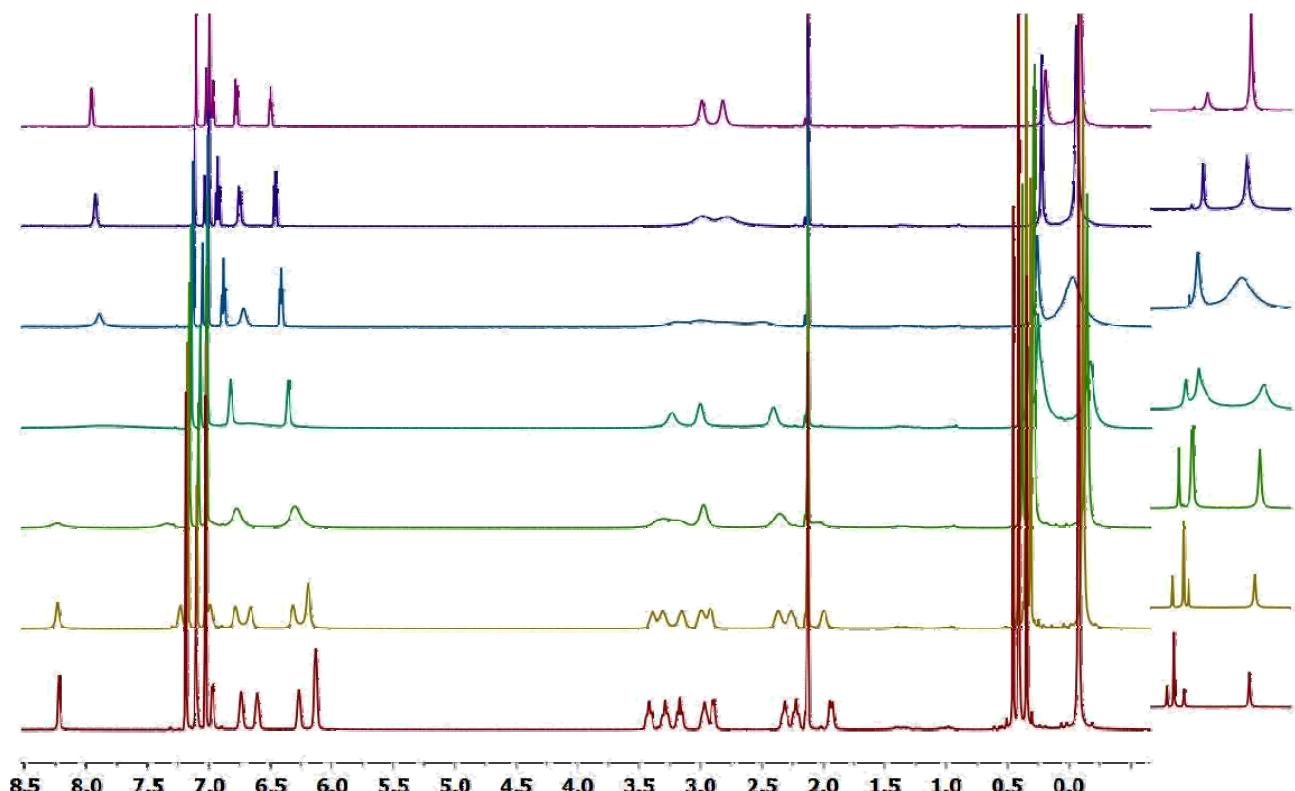


Figure 7: VT <sup>1</sup>H NMR spectra in [D<sub>8</sub>]toluene of 3 at from 60° C to -60° C. For clarity a section of the spectra from 0.5 to -0.3 ppm can be found expanded on the right side.