

## Supplementary Information

### Efficient synthesis of acylated, dialkyl $\alpha$ -hydroxy-benzylphosphonates and their anticancer activity

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<sup>4</sup>*Eötvös Loránd Research Network (ELKH), Research Group of Peptide Chemistry, Eötvös Lorand University, 1117 Budapest, Hungary*

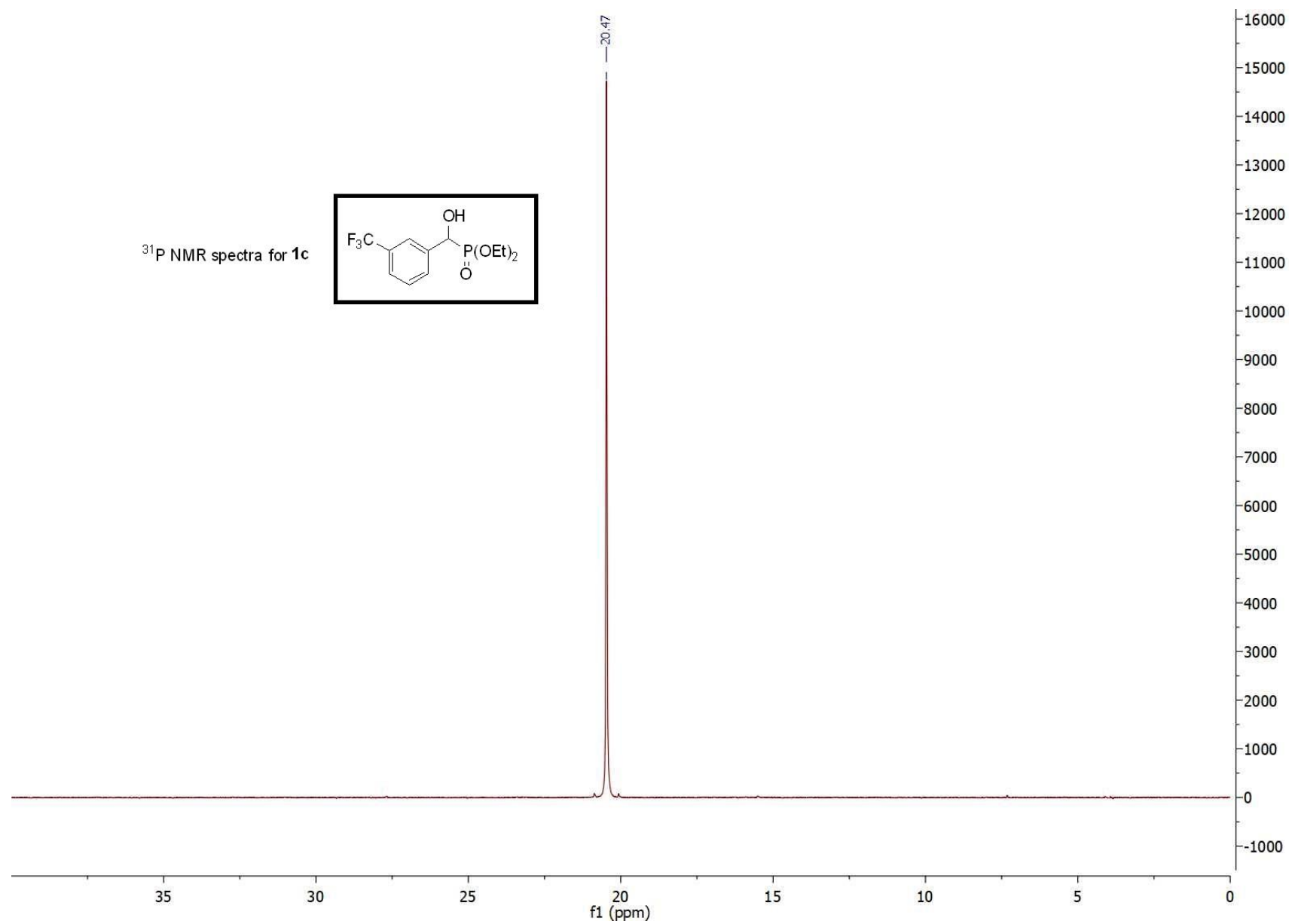
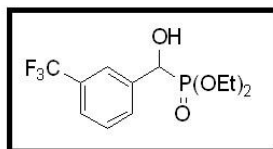
<sup>5</sup>*Research Centre for Natural Sciences, MS Proteomics Research Group, 1117 Budapest, Hungary*

#### **EXPERIMENTAL**

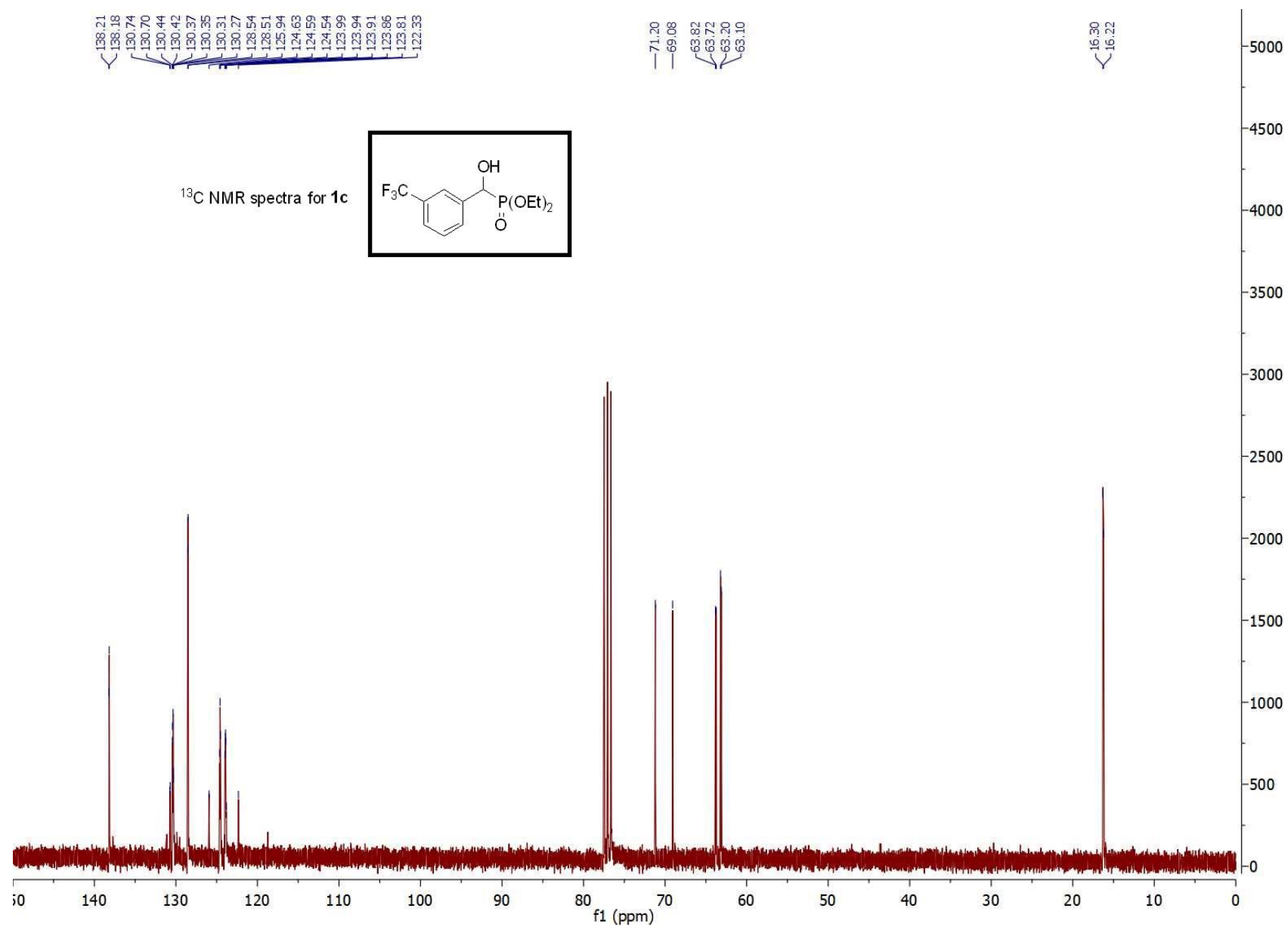
All chemicals were purchased from Sigma-Aldrich.

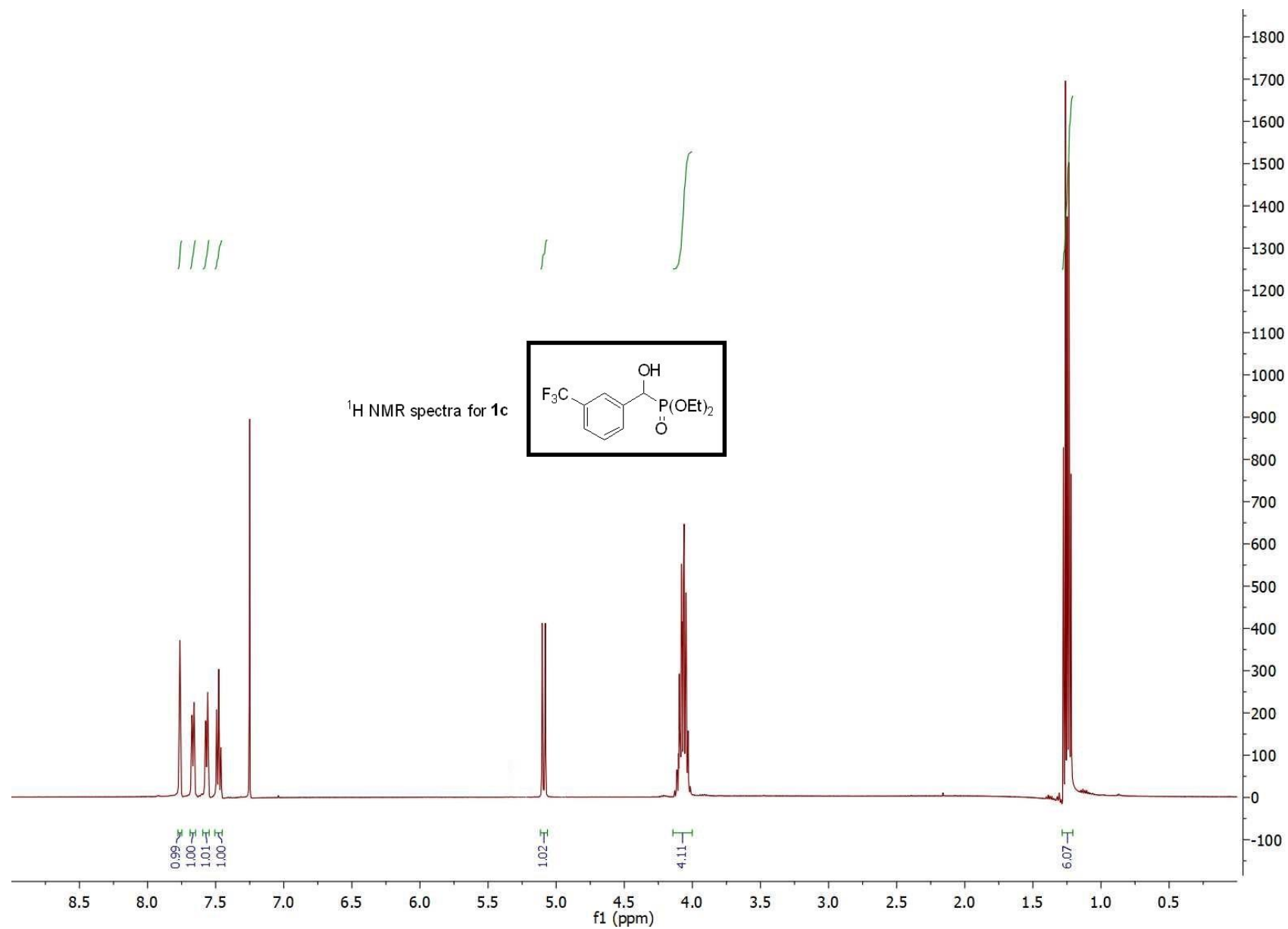
#### **<sup>31</sup>P, <sup>13</sup>C and <sup>1</sup>H NMR spectra**

$^{31}\text{P}$  NMR spectra for 1c

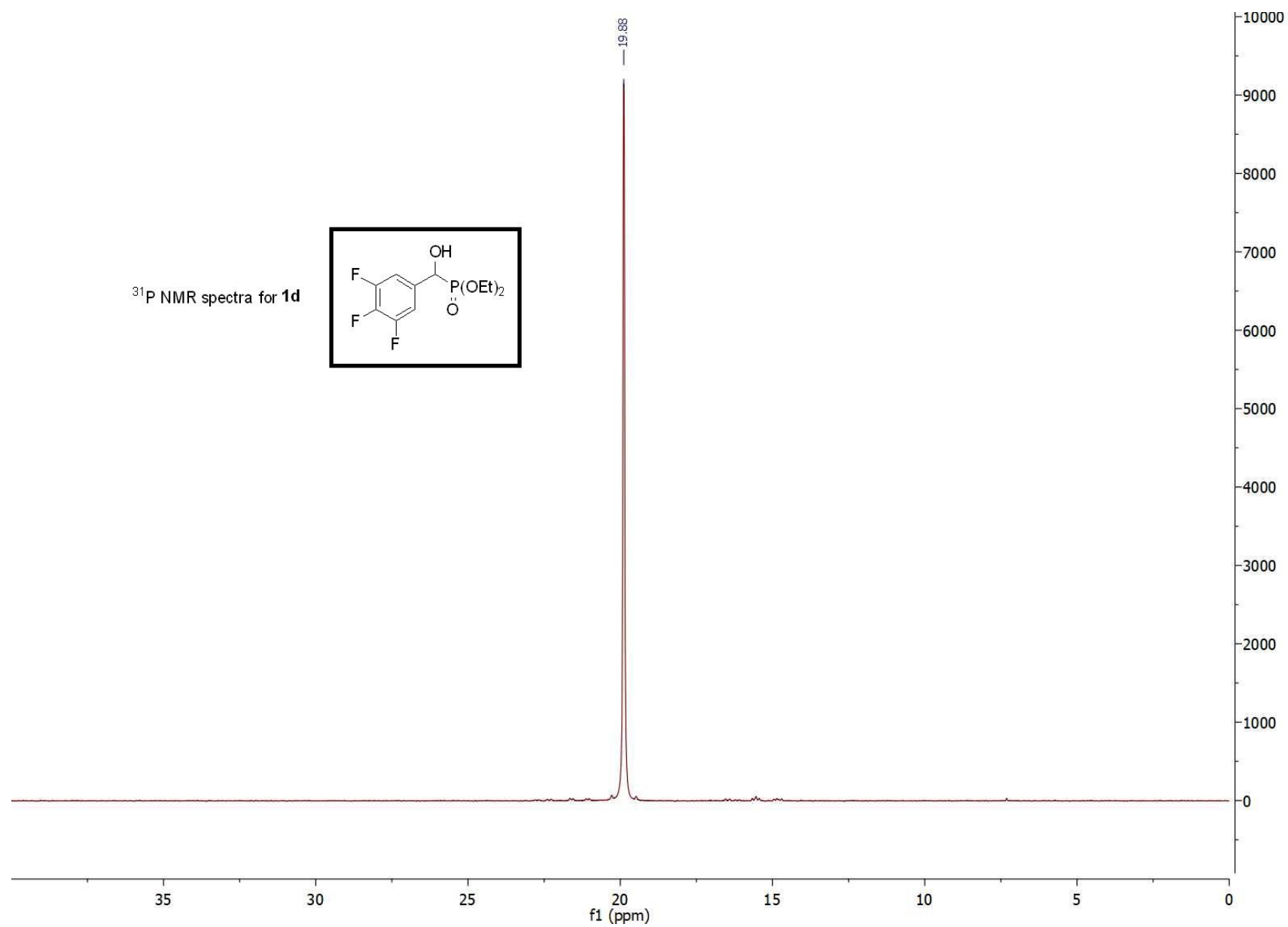
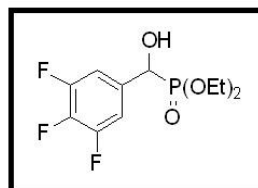


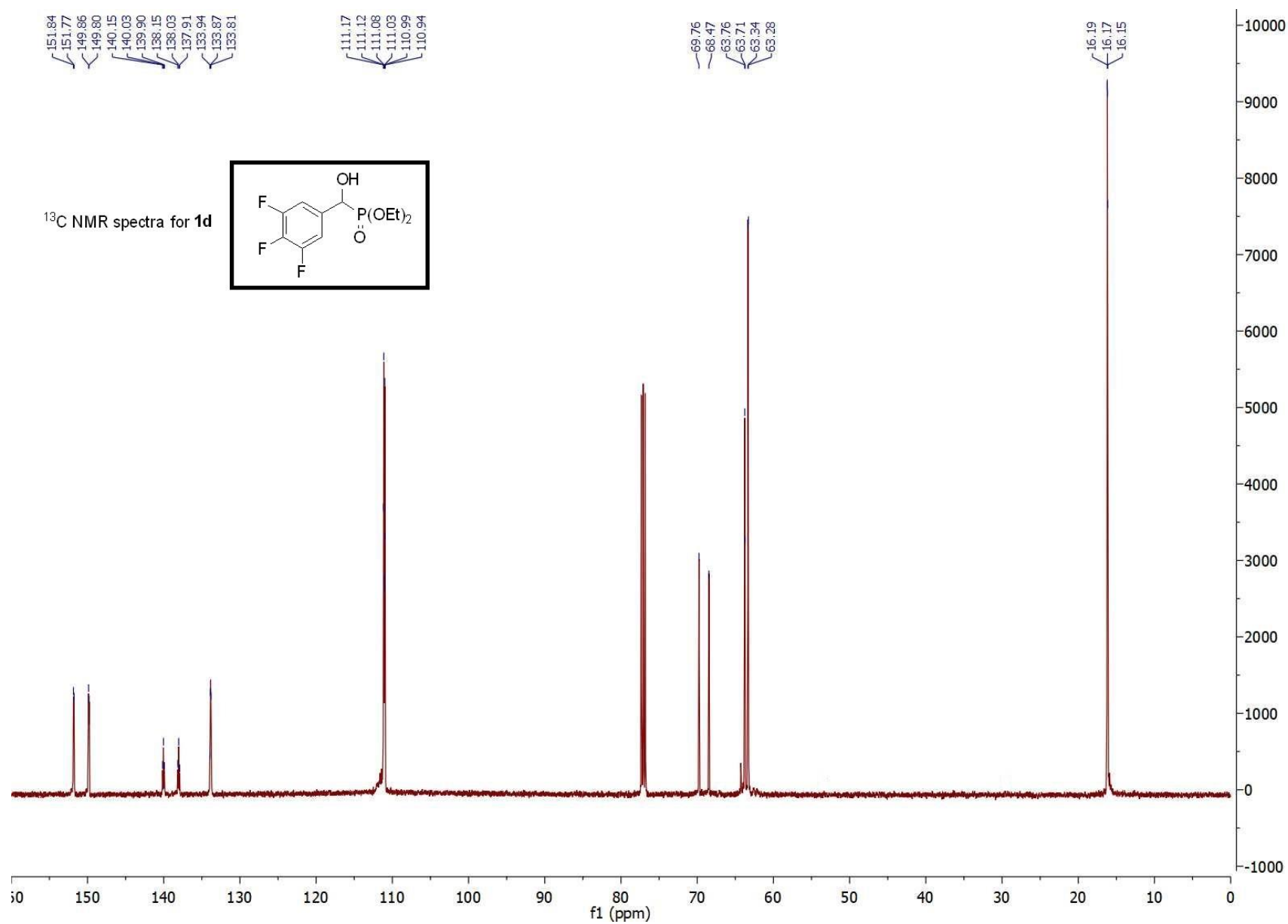
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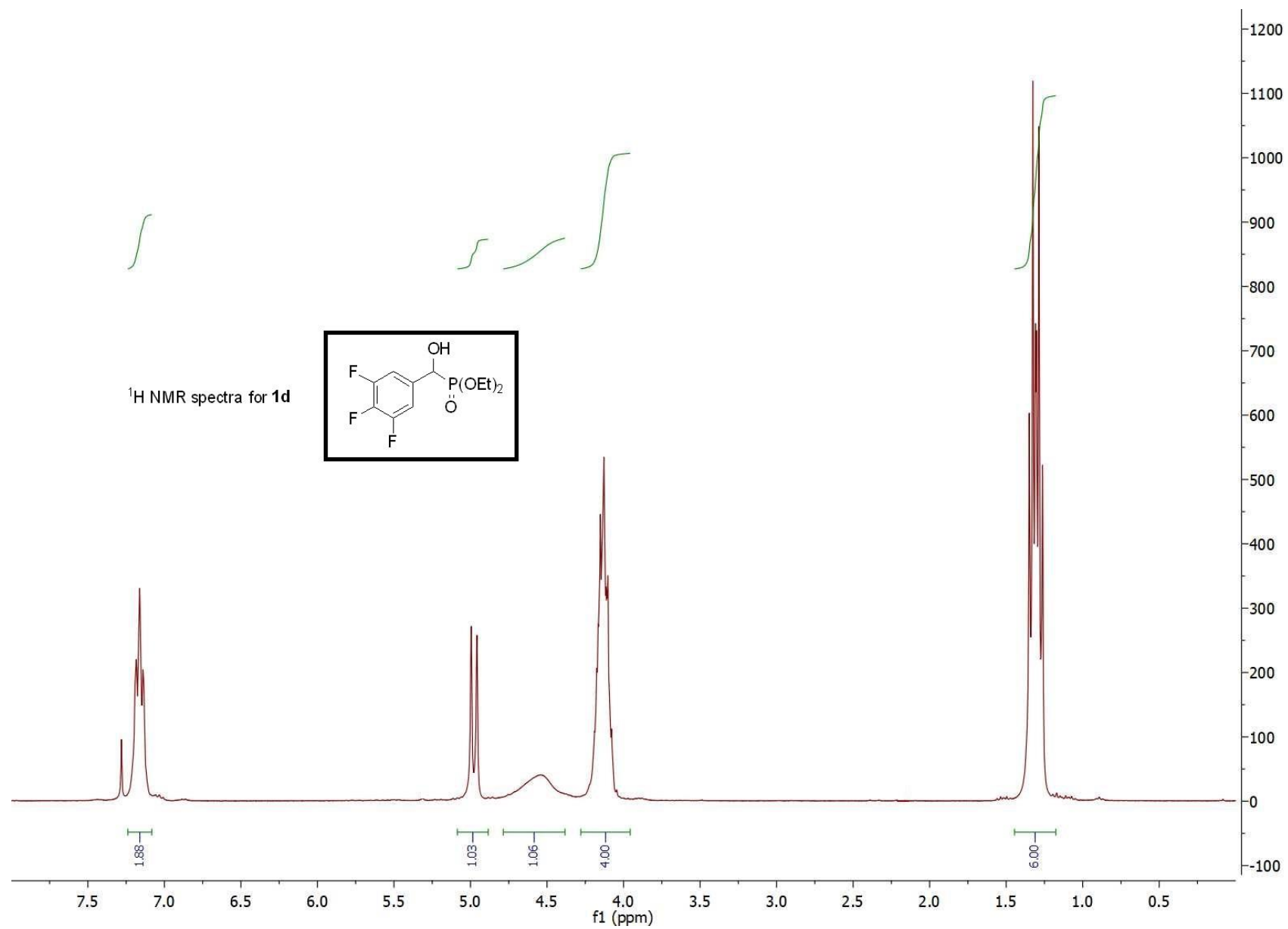




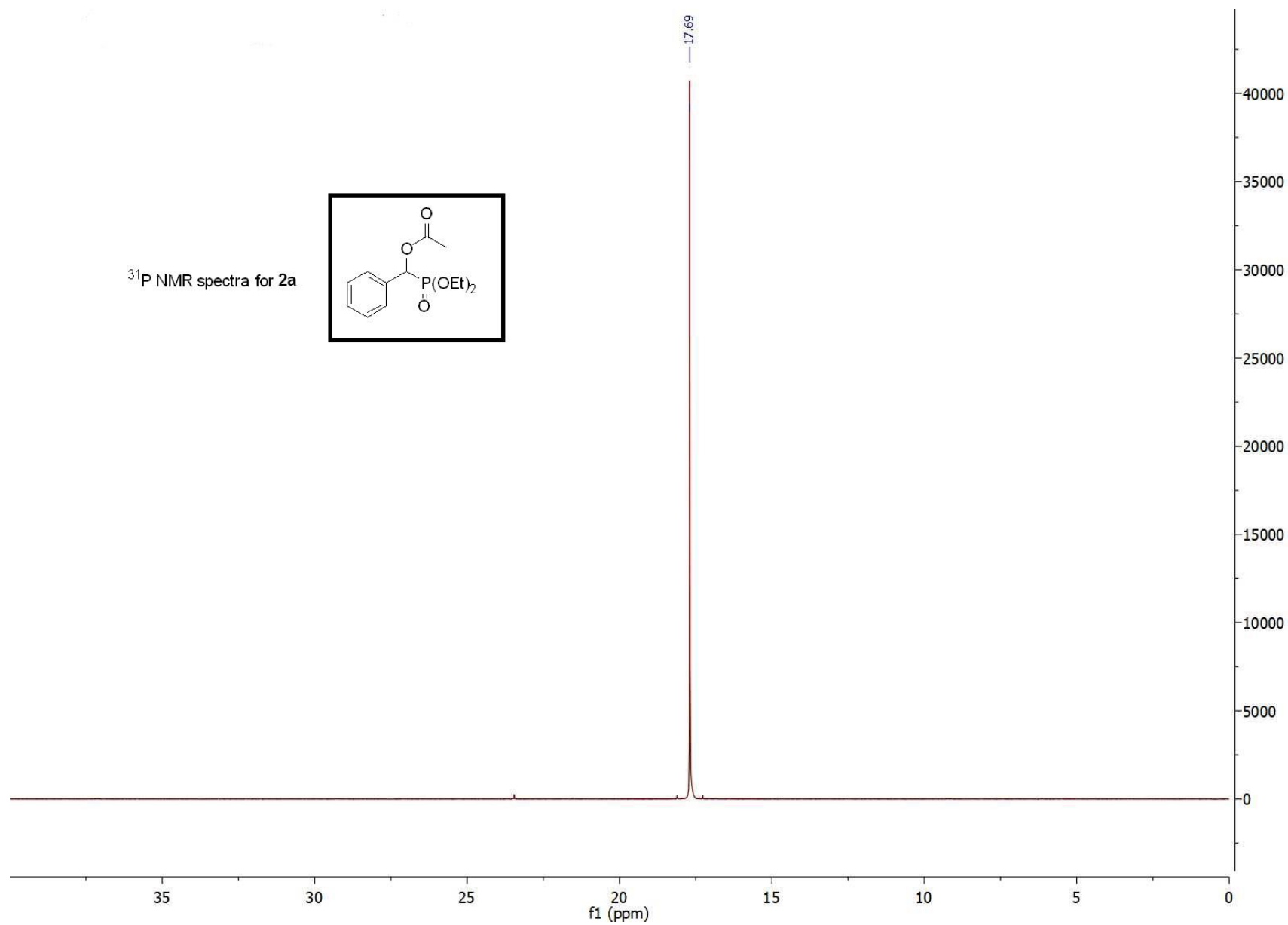
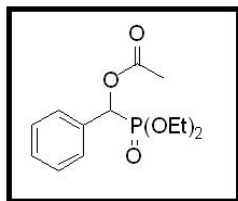
$^{31}\text{P}$  NMR spectra for **1d**





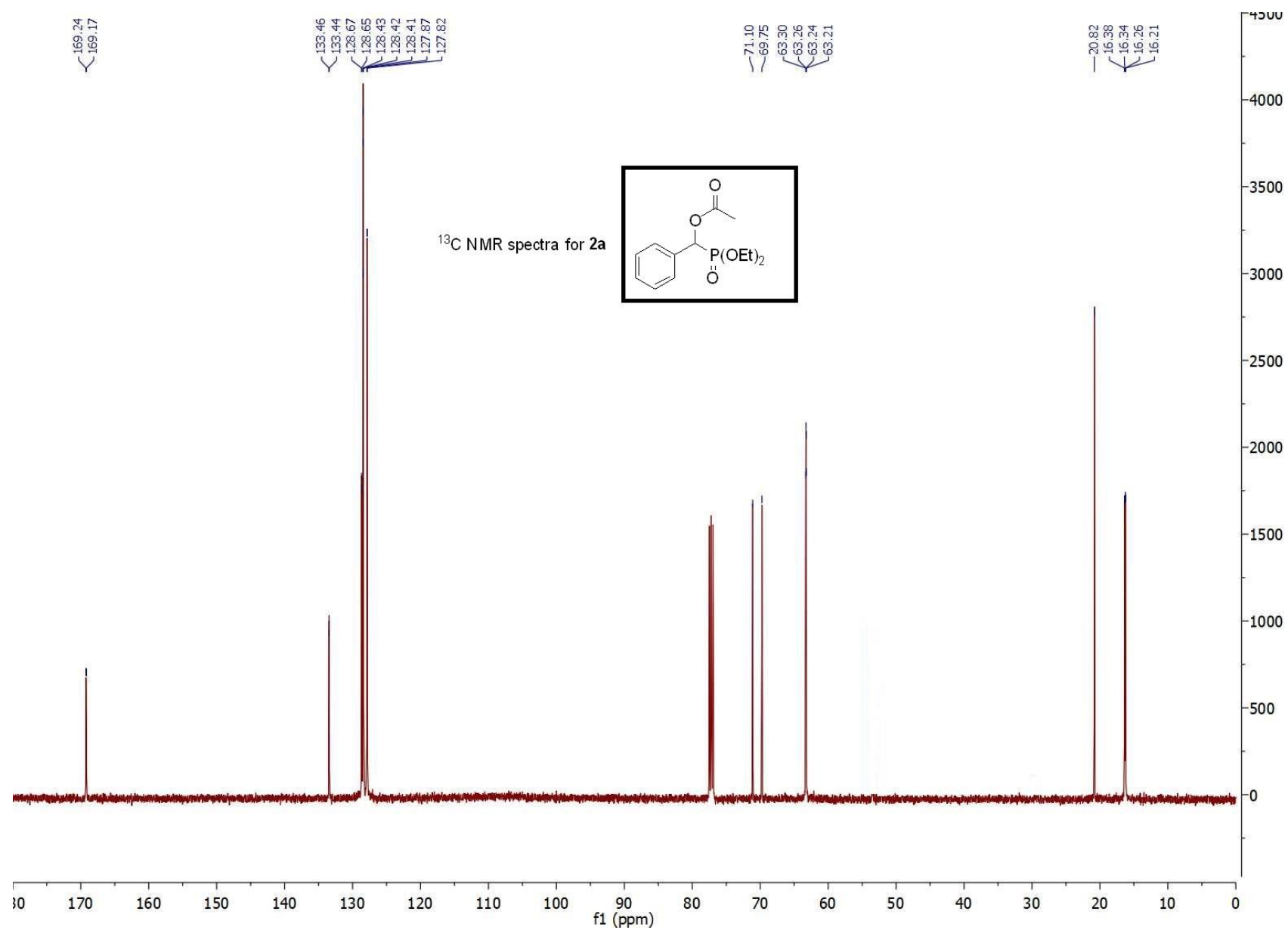


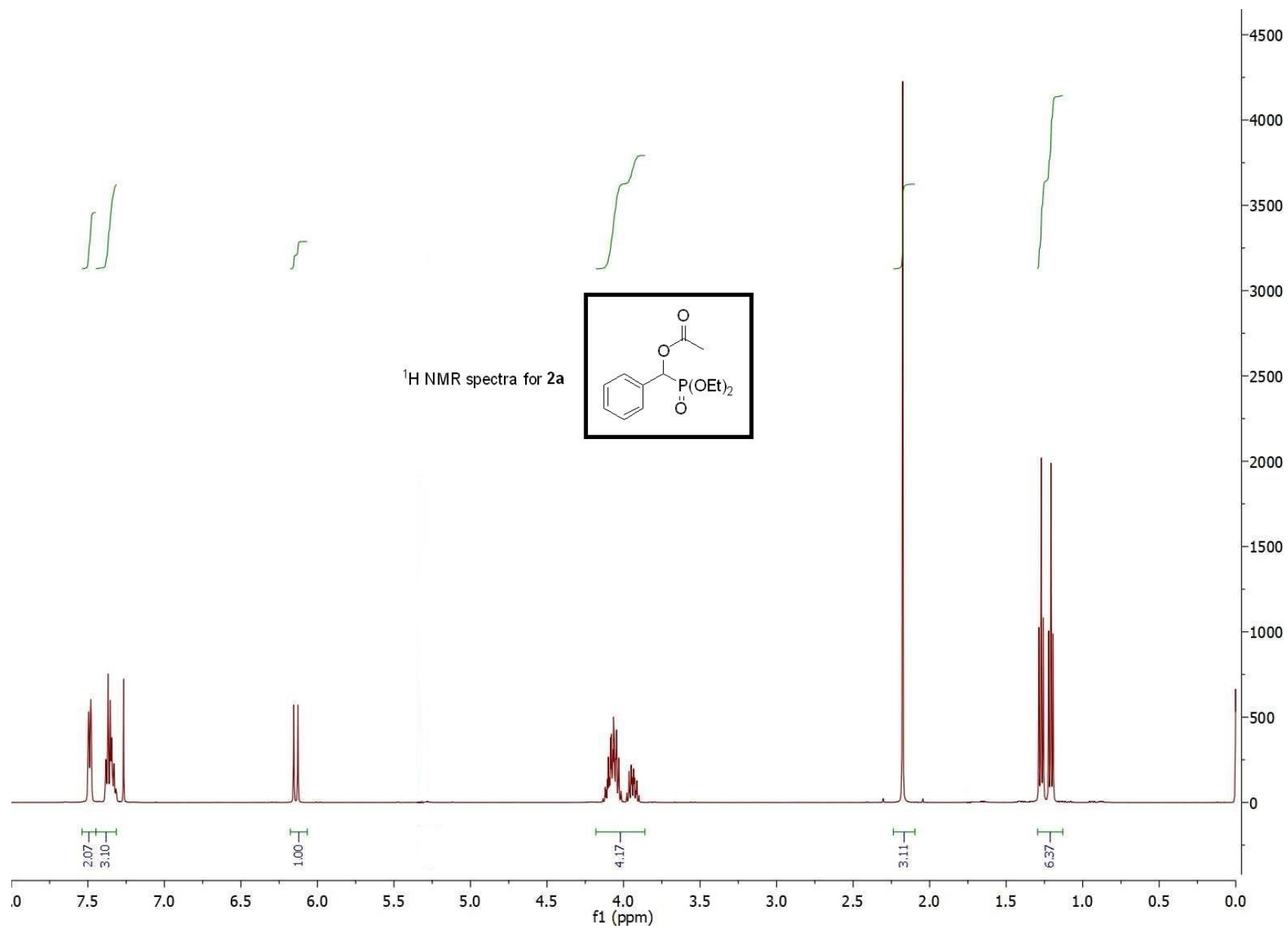
$^{31}\text{P}$  NMR spectra for 2a



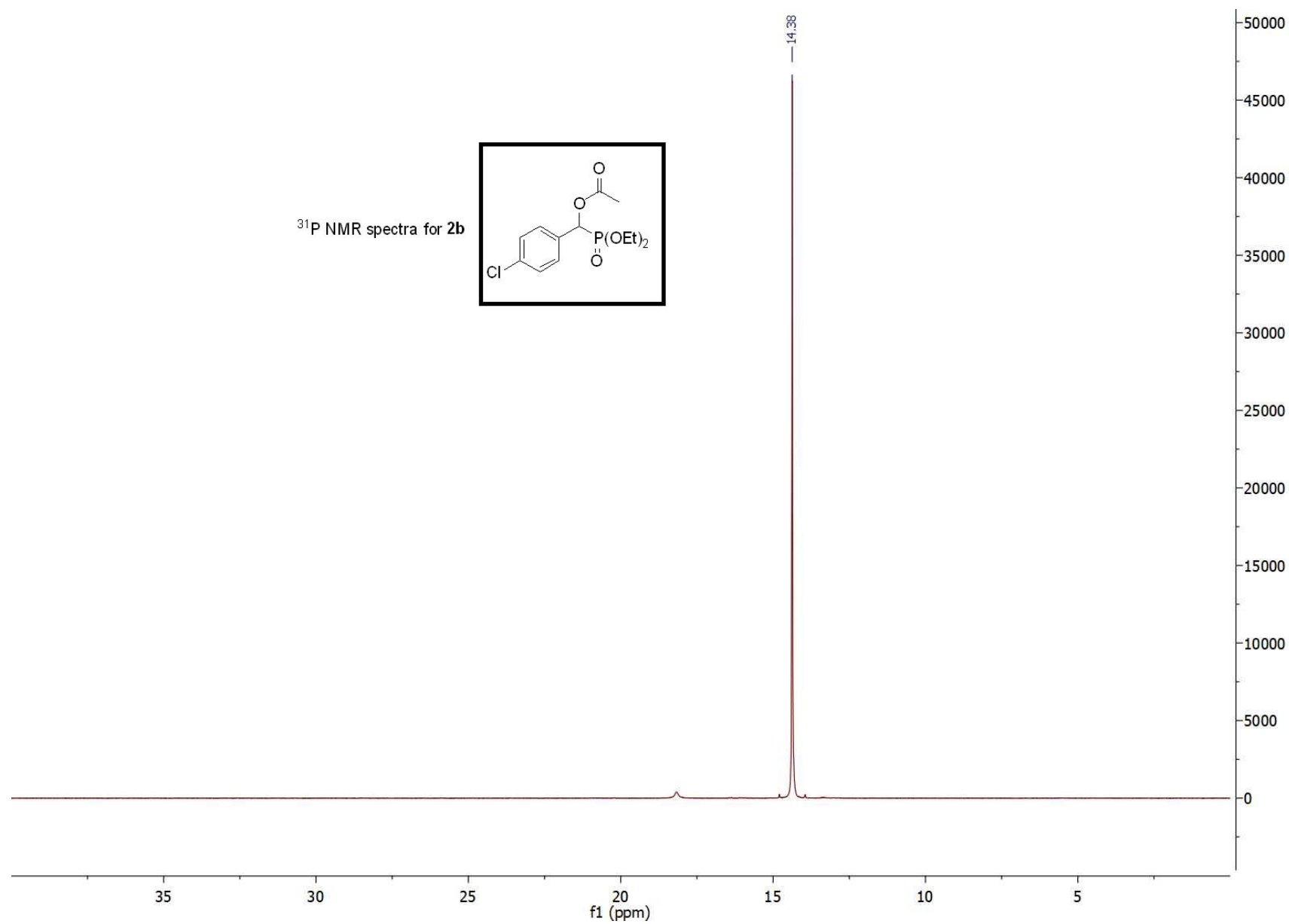
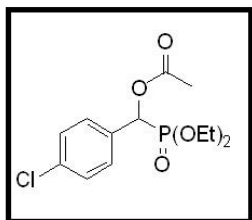
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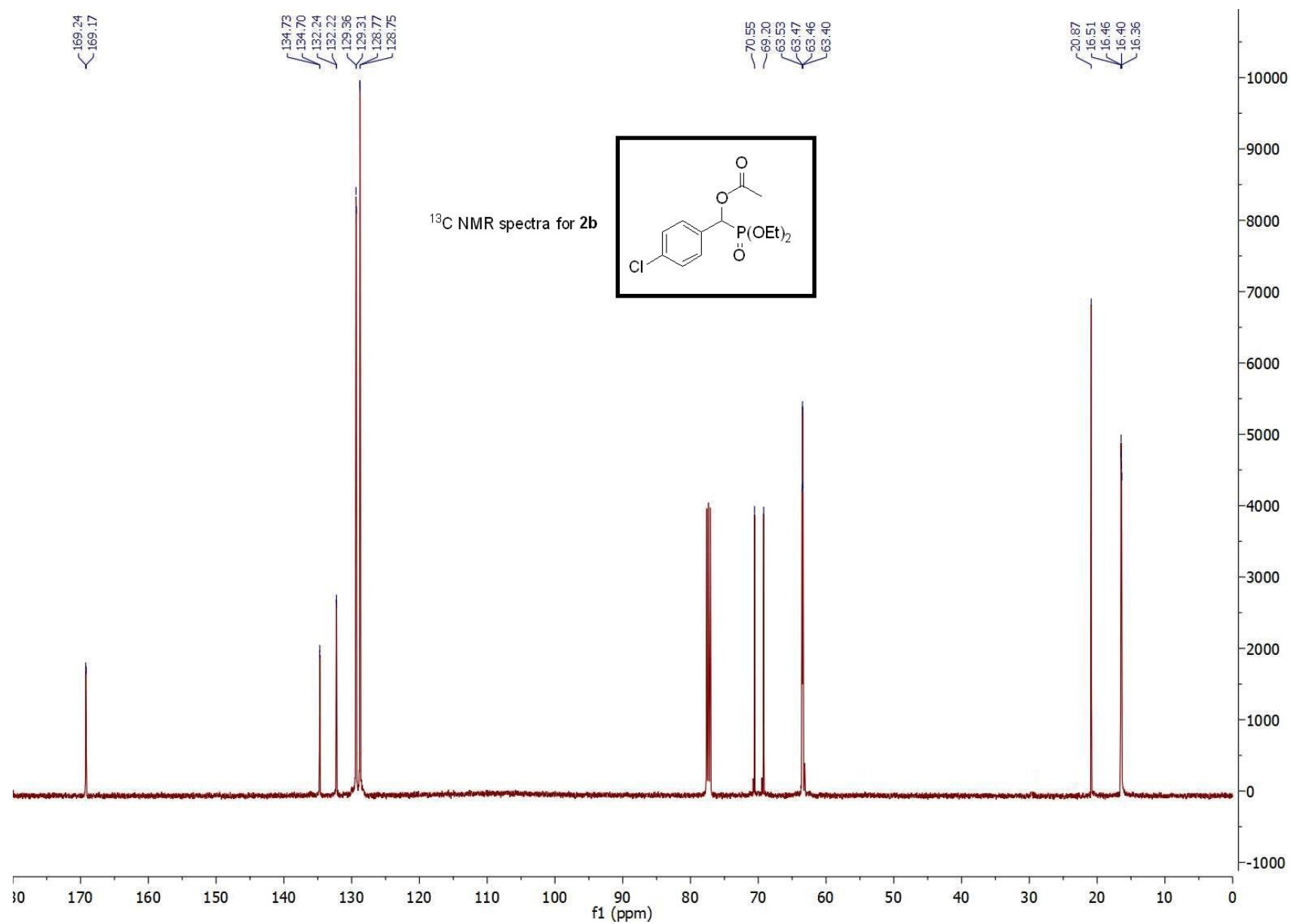


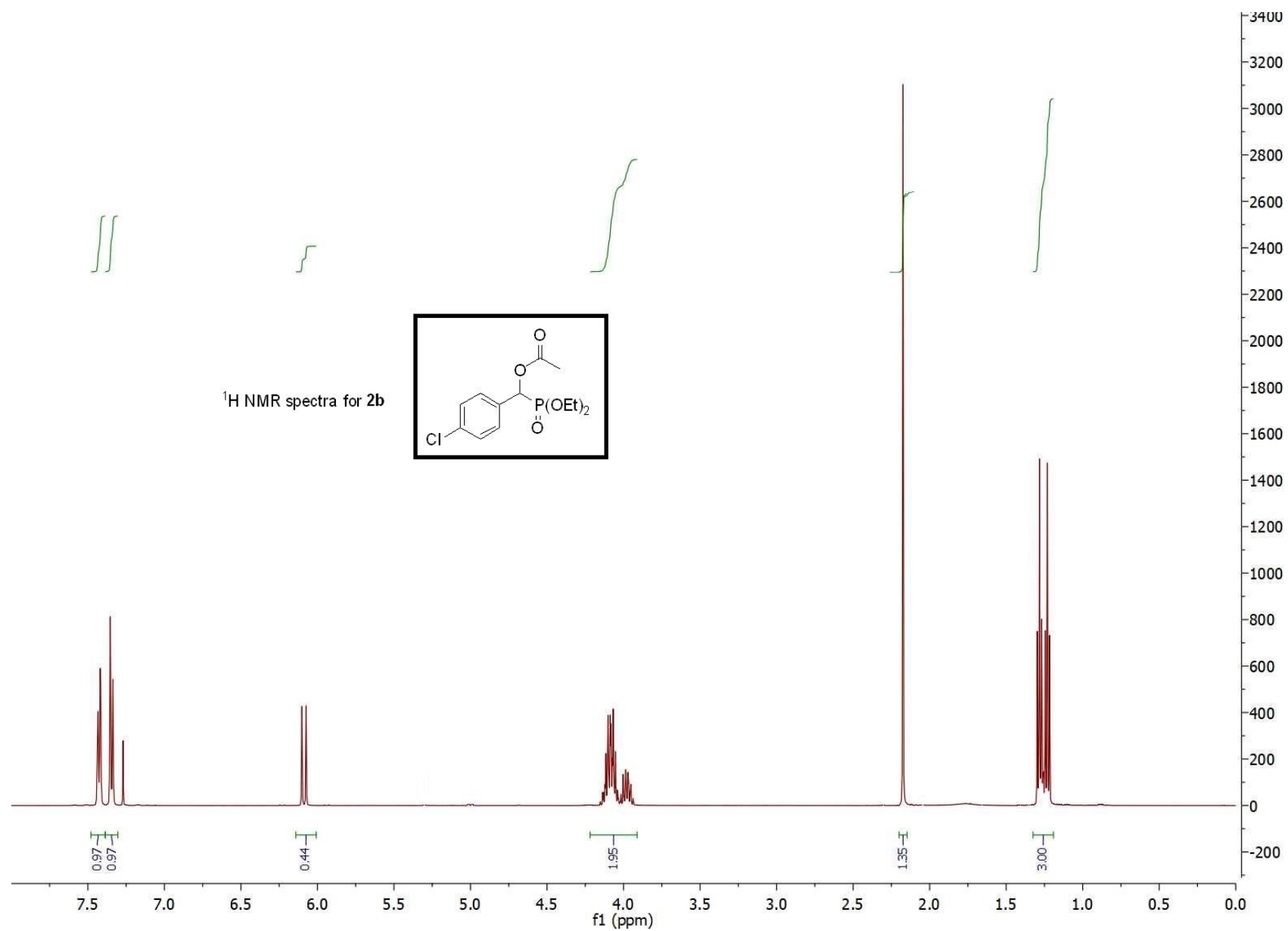


$^{31}\text{P}$  NMR spectra for **2b**

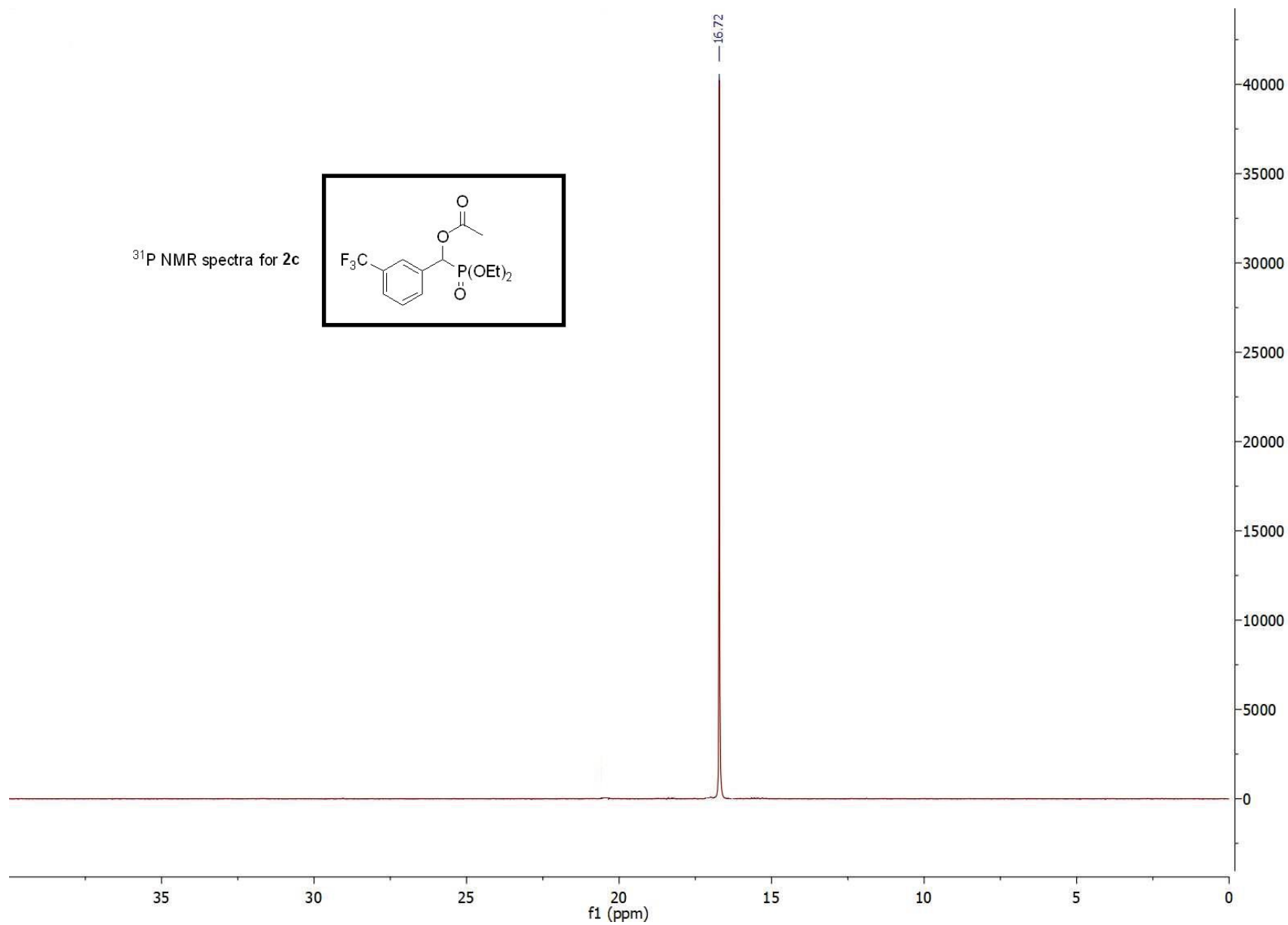
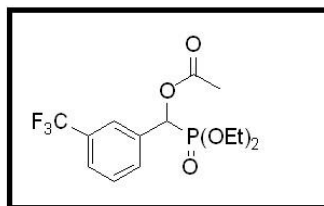


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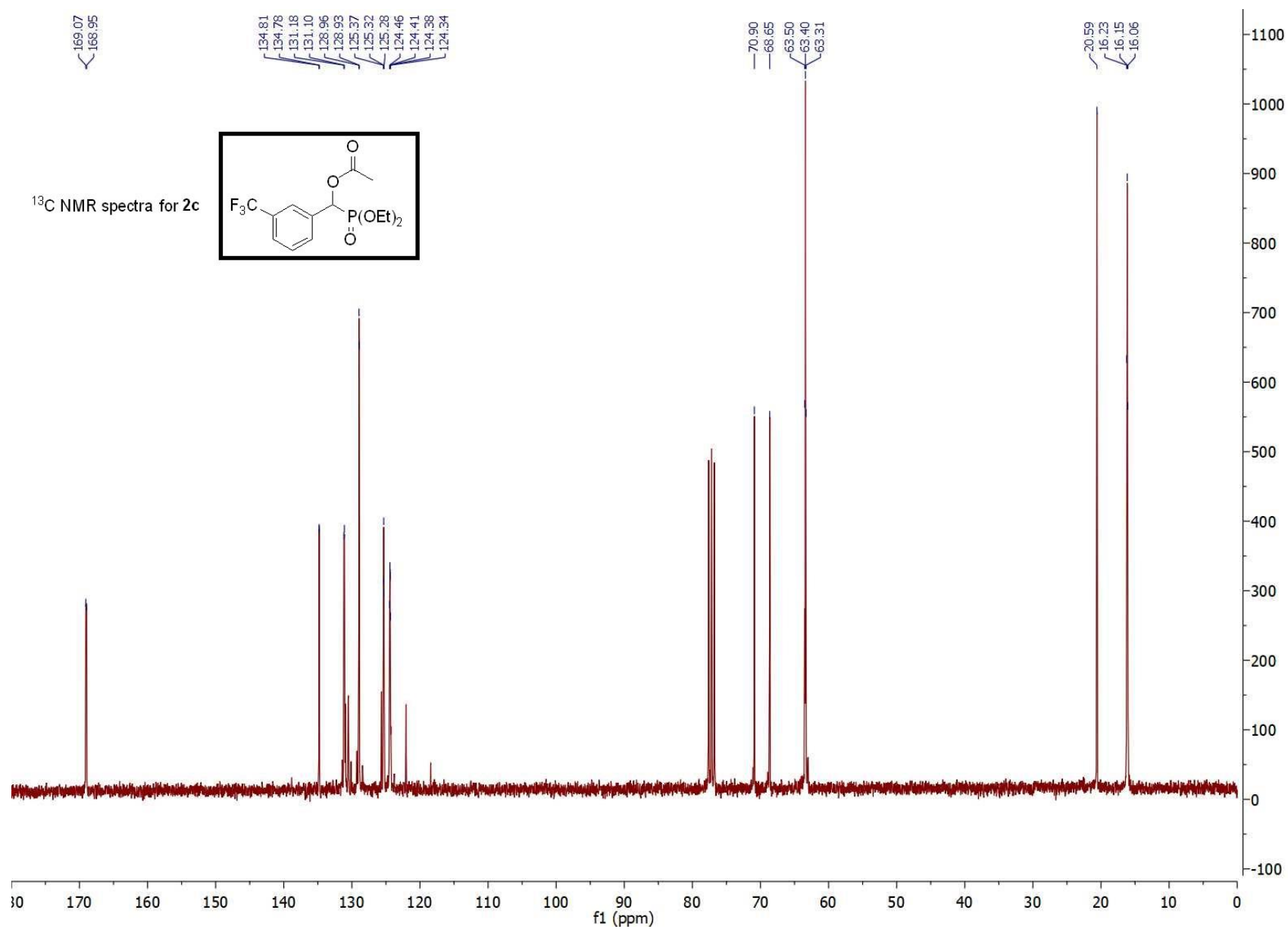


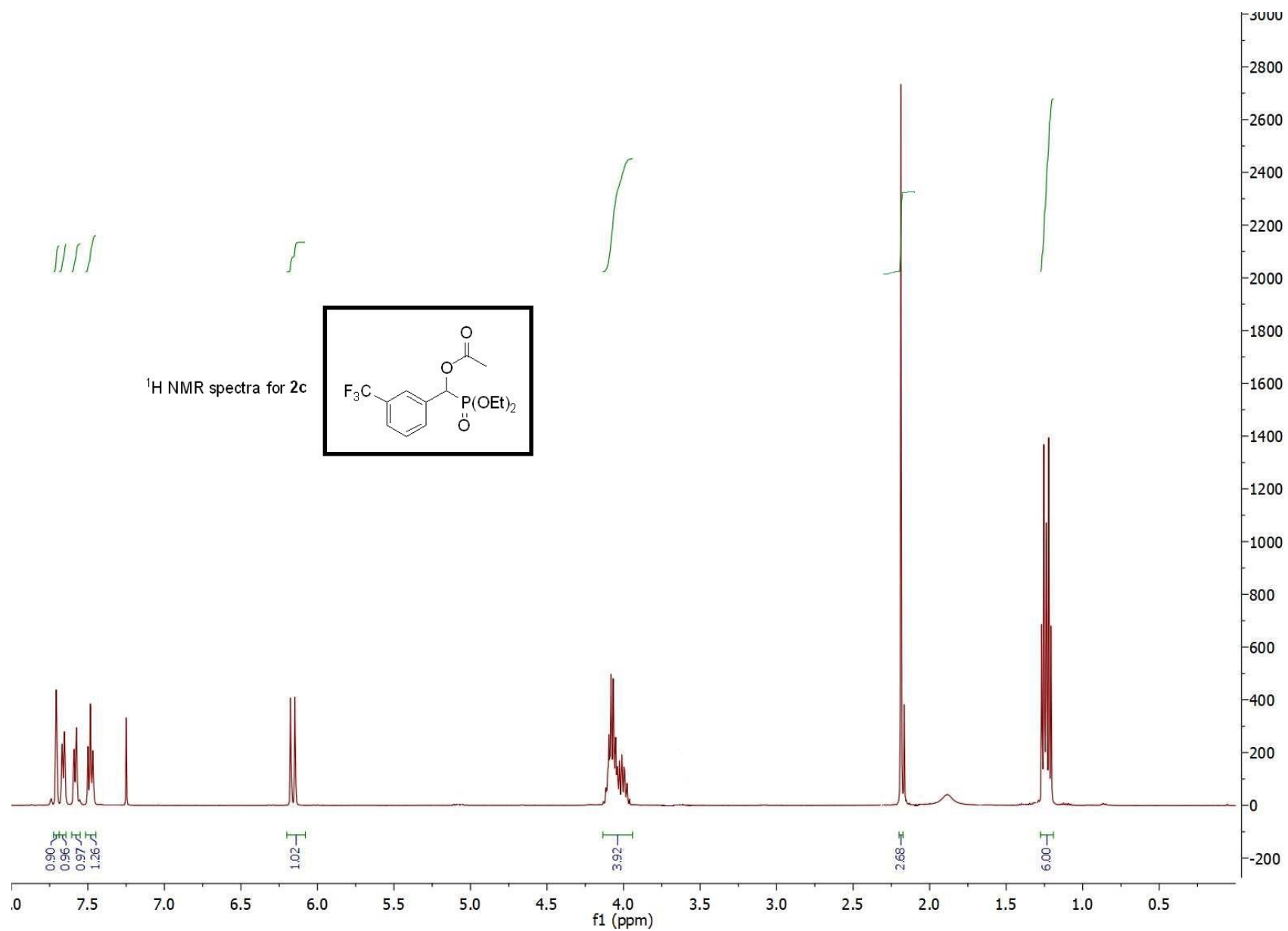


<sup>31</sup>P NMR spectra for 2c



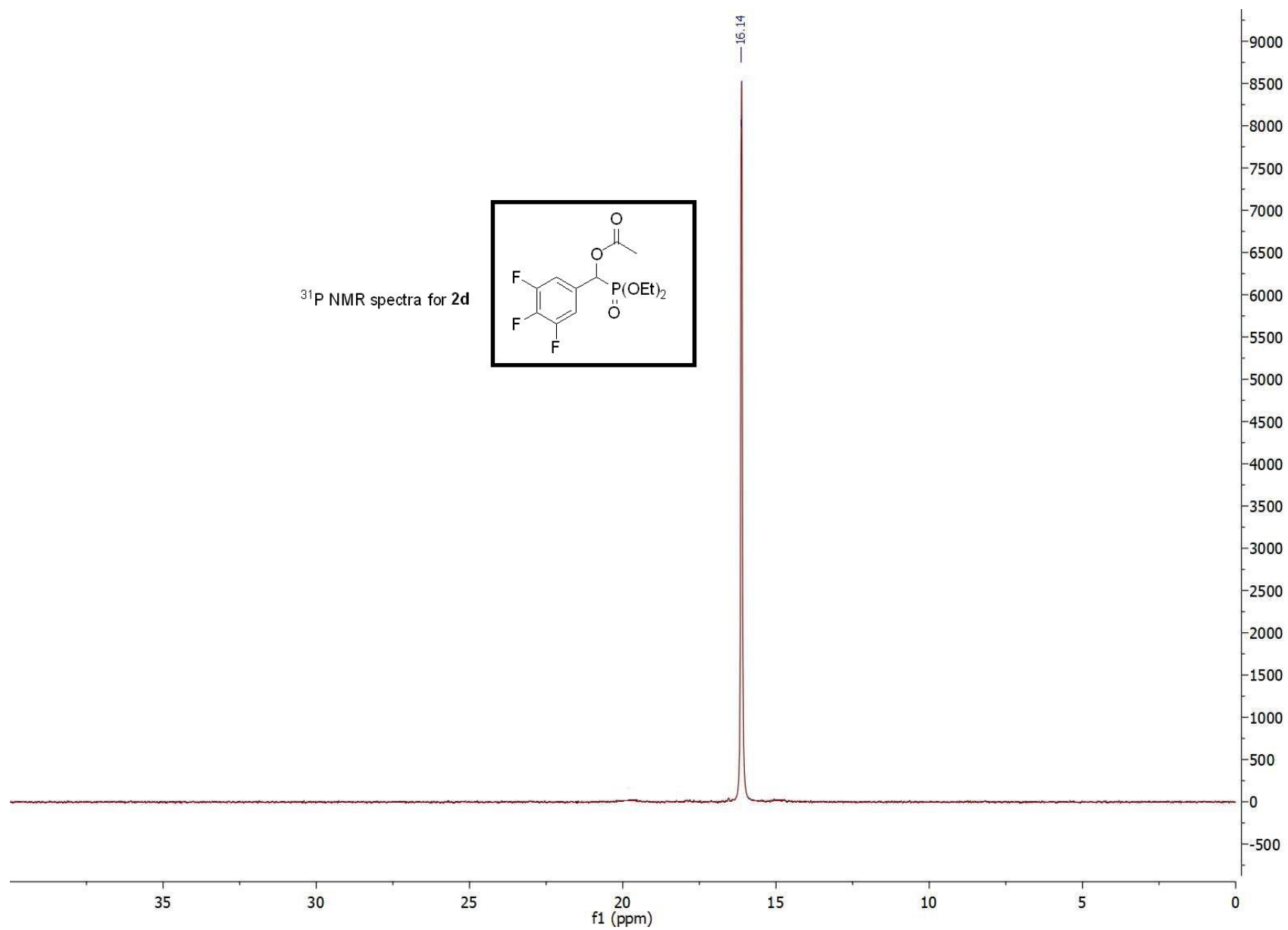
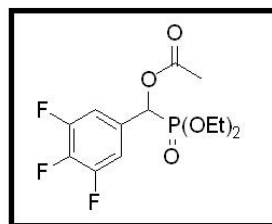
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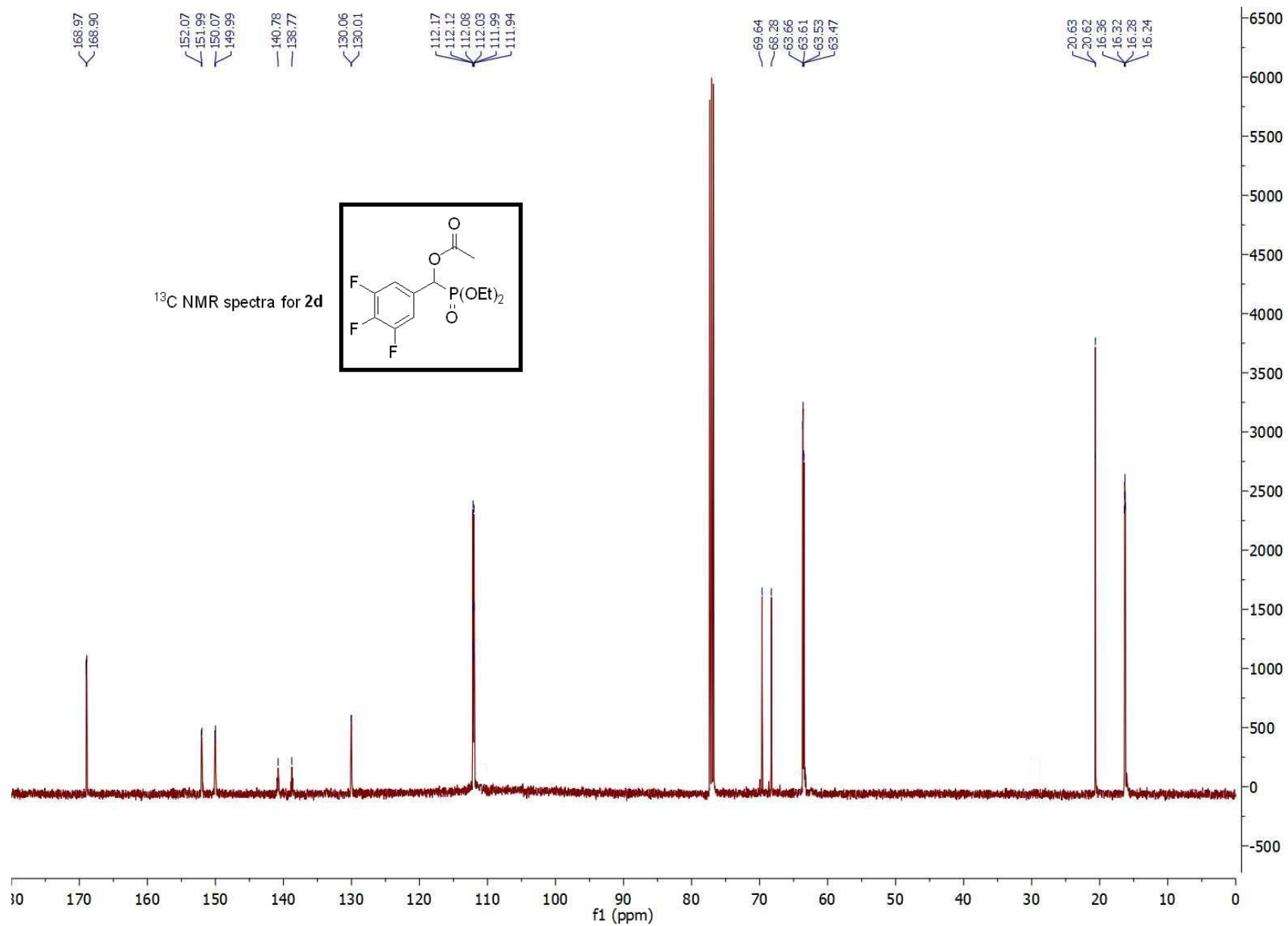


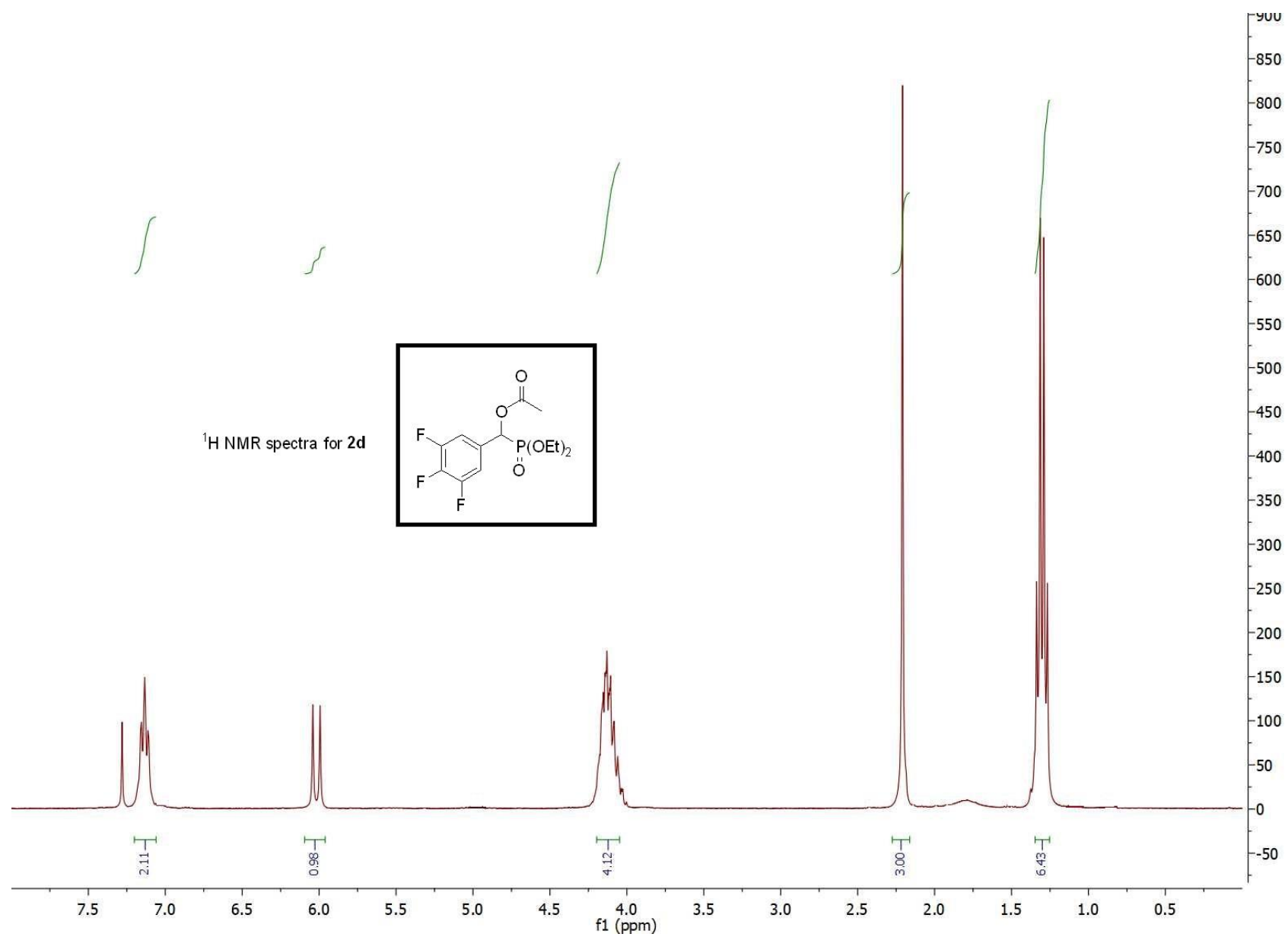




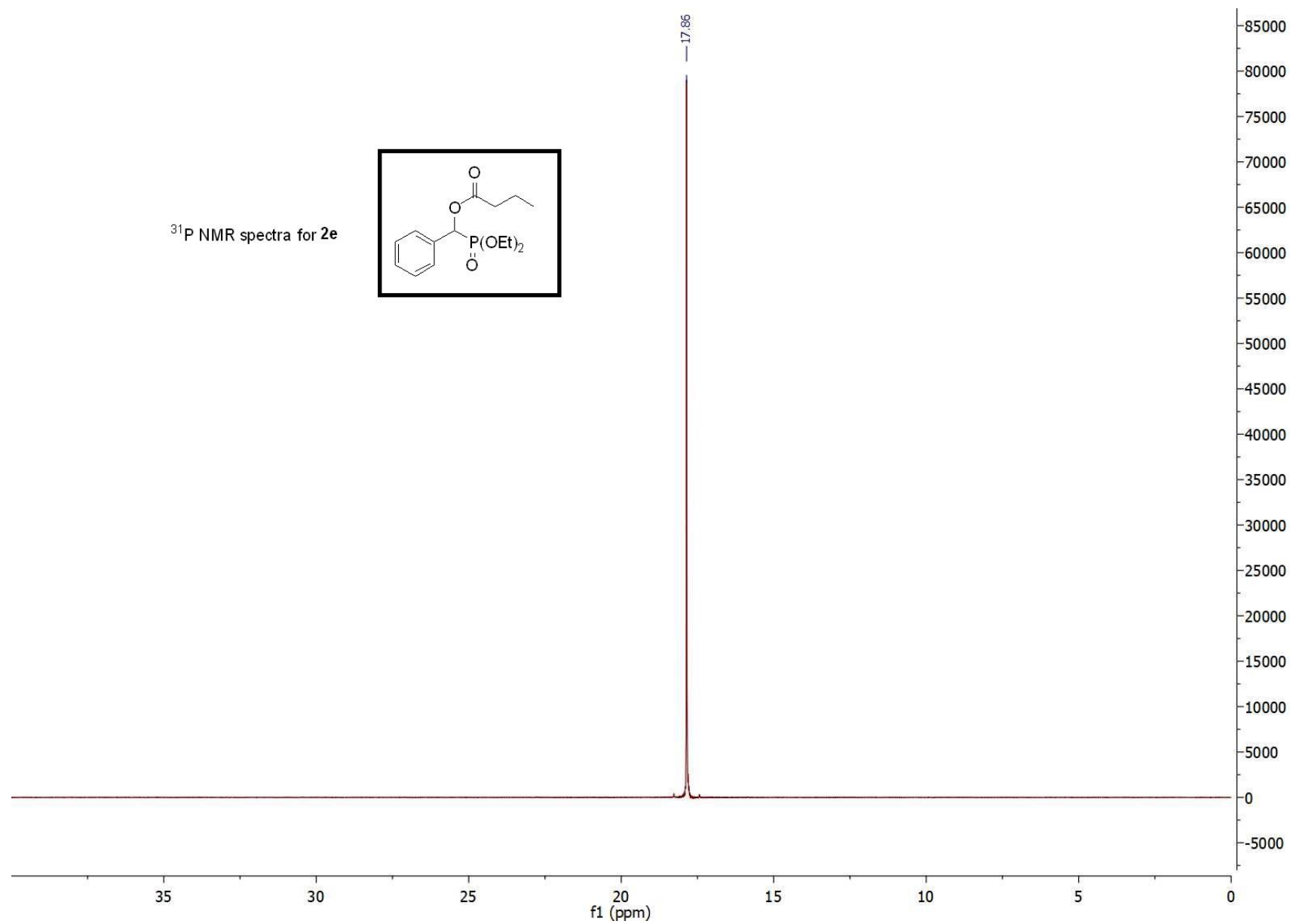
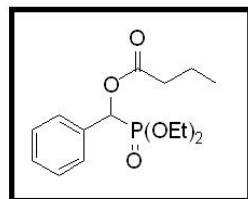
$^{31}\text{P}$  NMR spectra for 2d



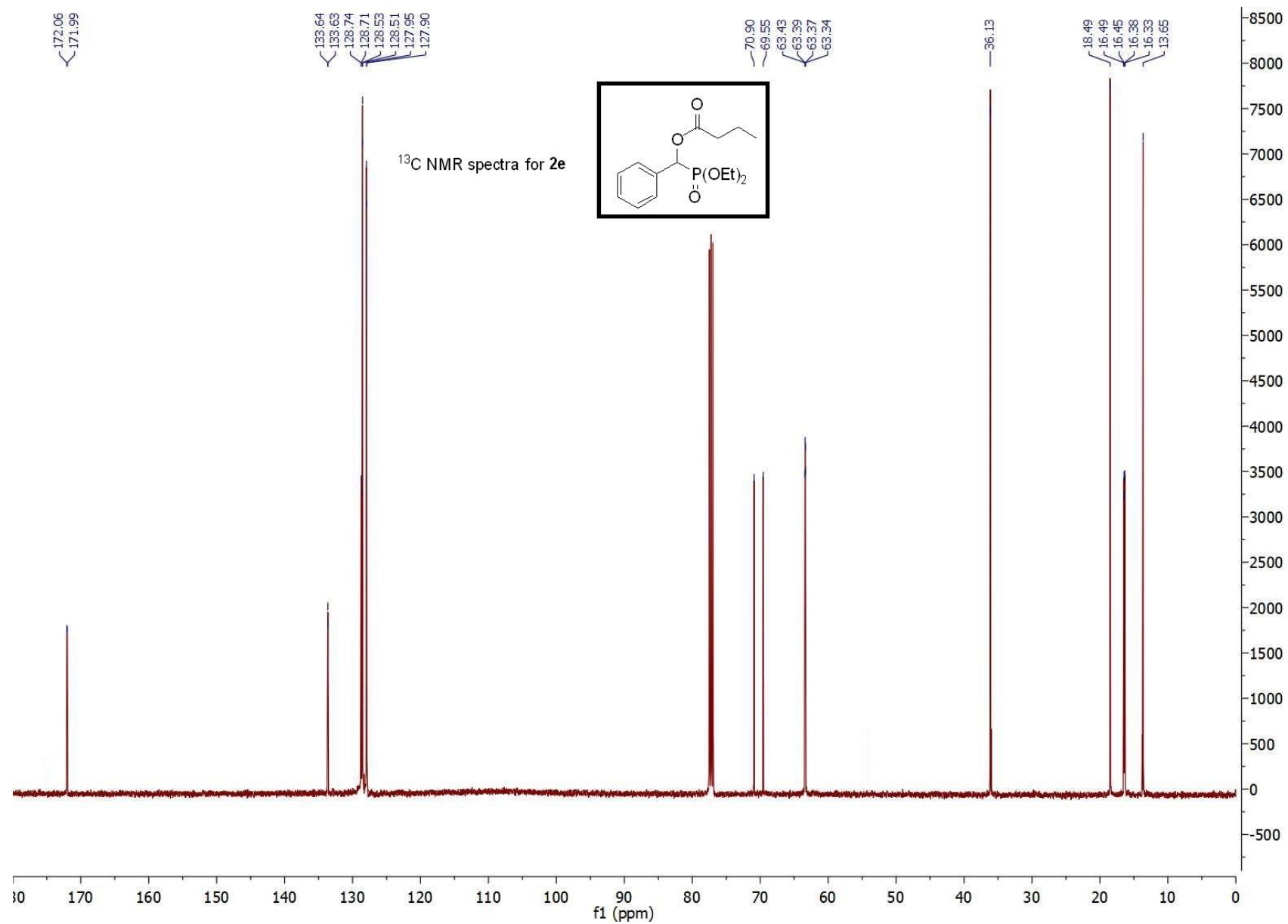


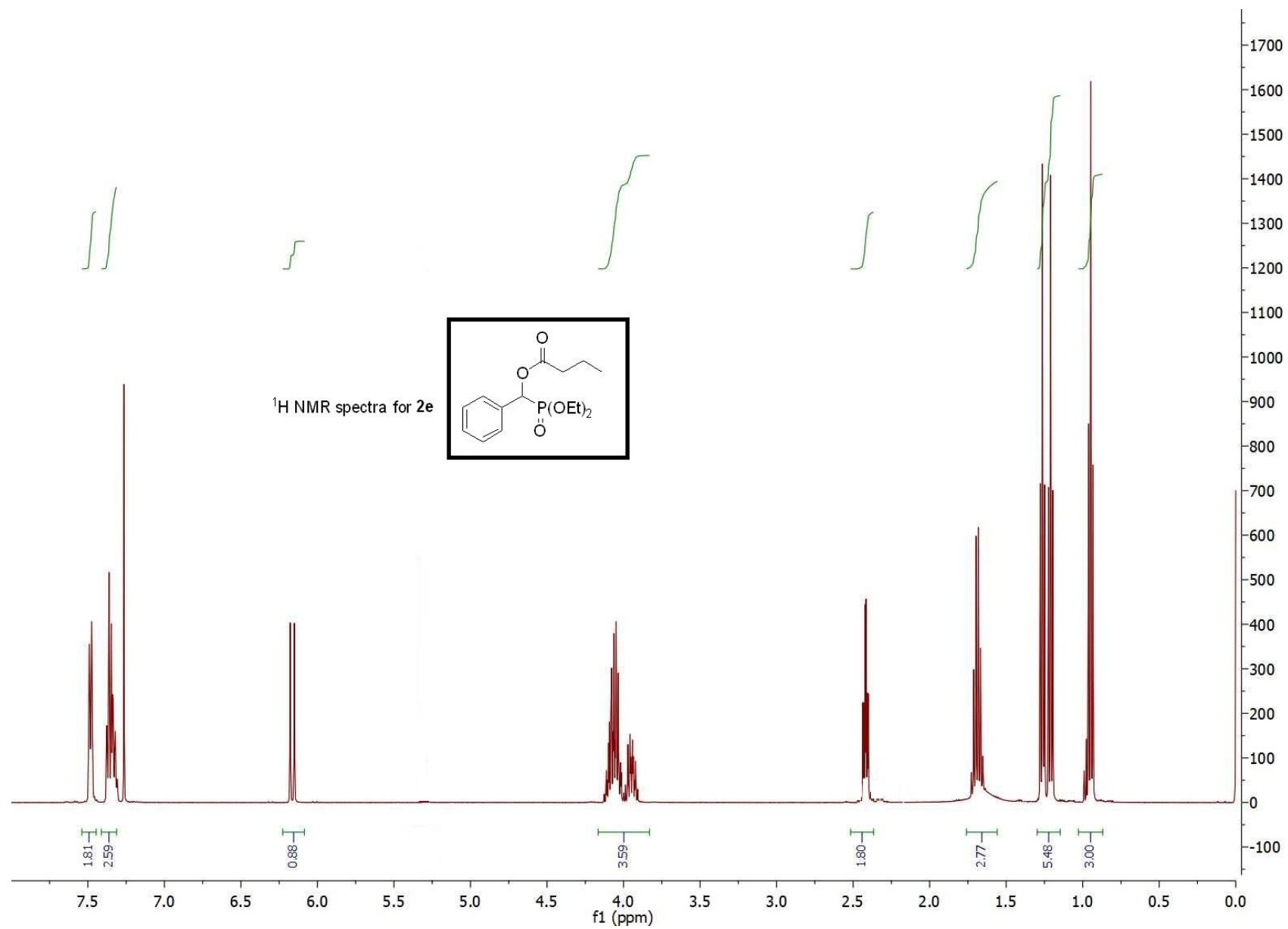


$^{31}\text{P}$  NMR spectra for 2e

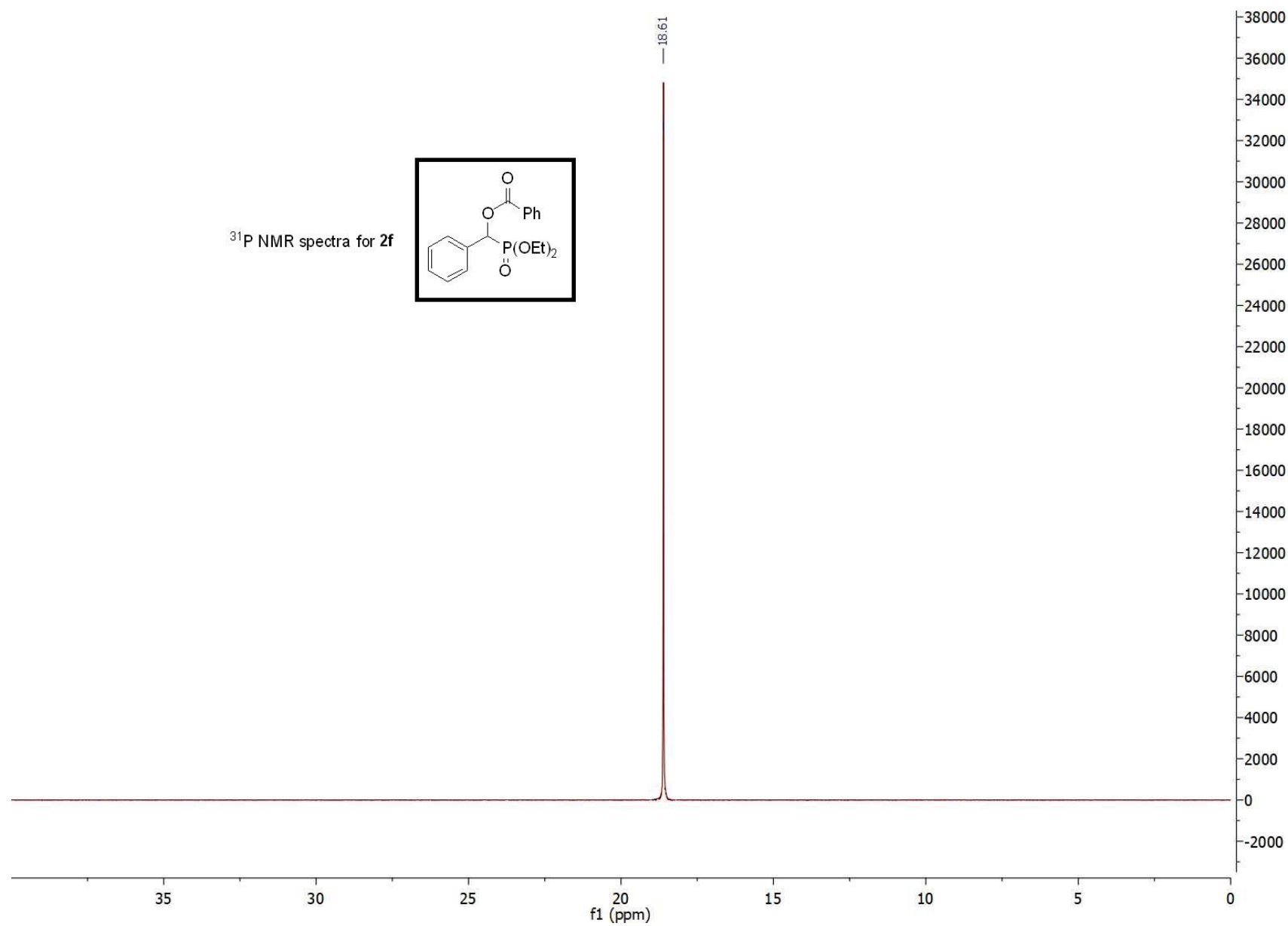
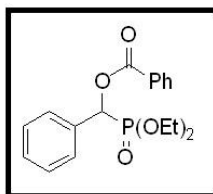


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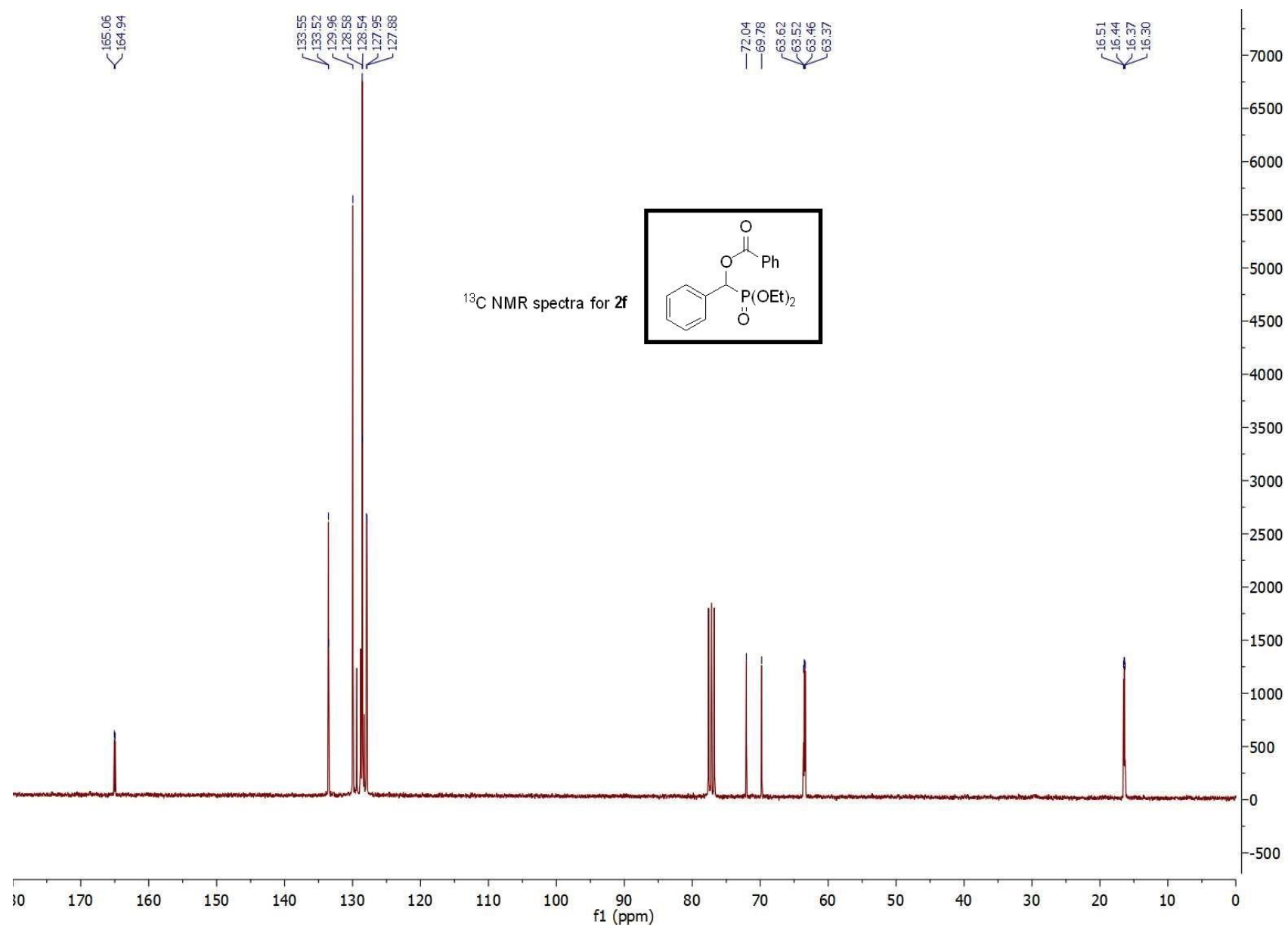




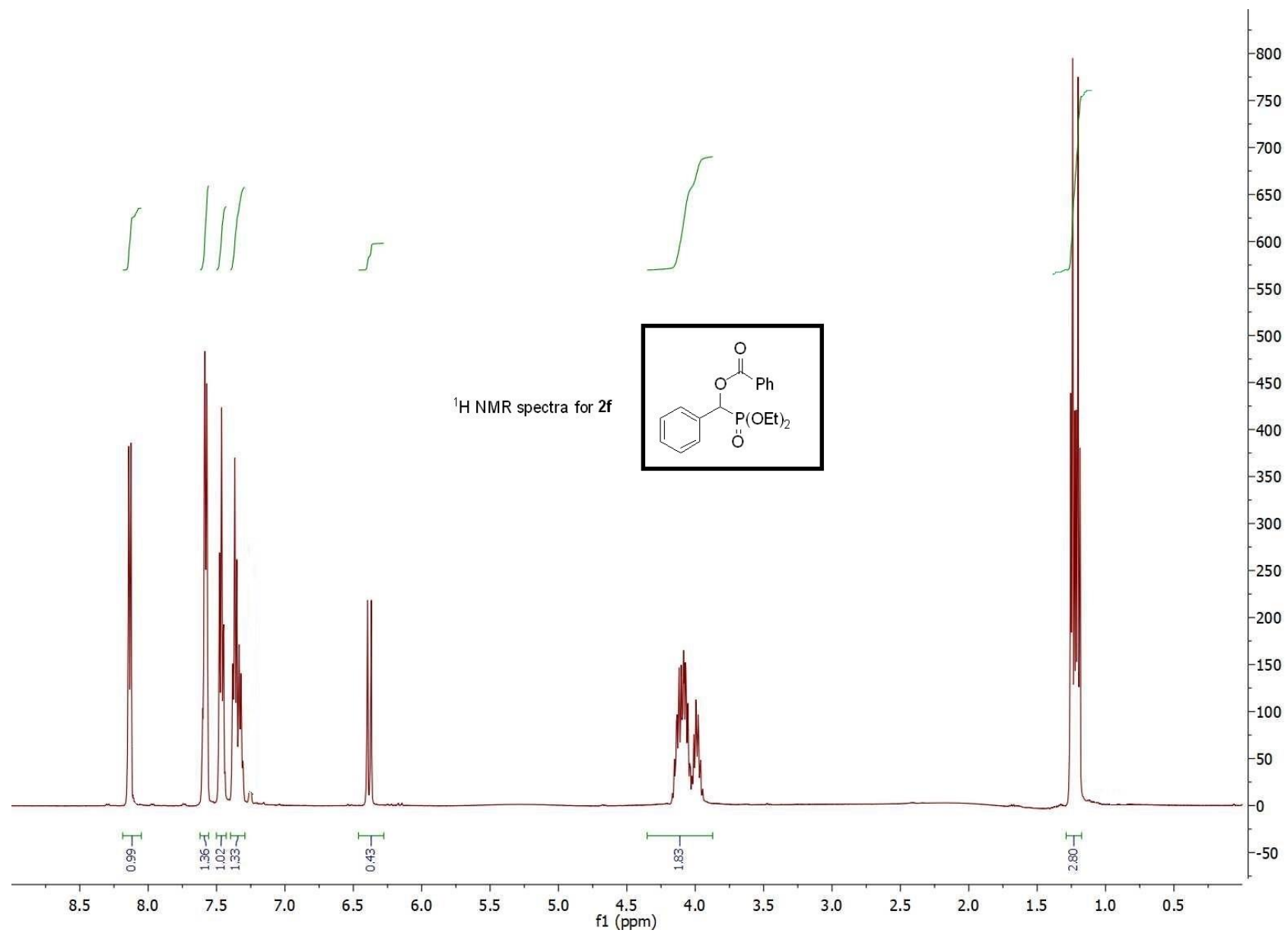
<sup>31</sup>P NMR spectra for 2f



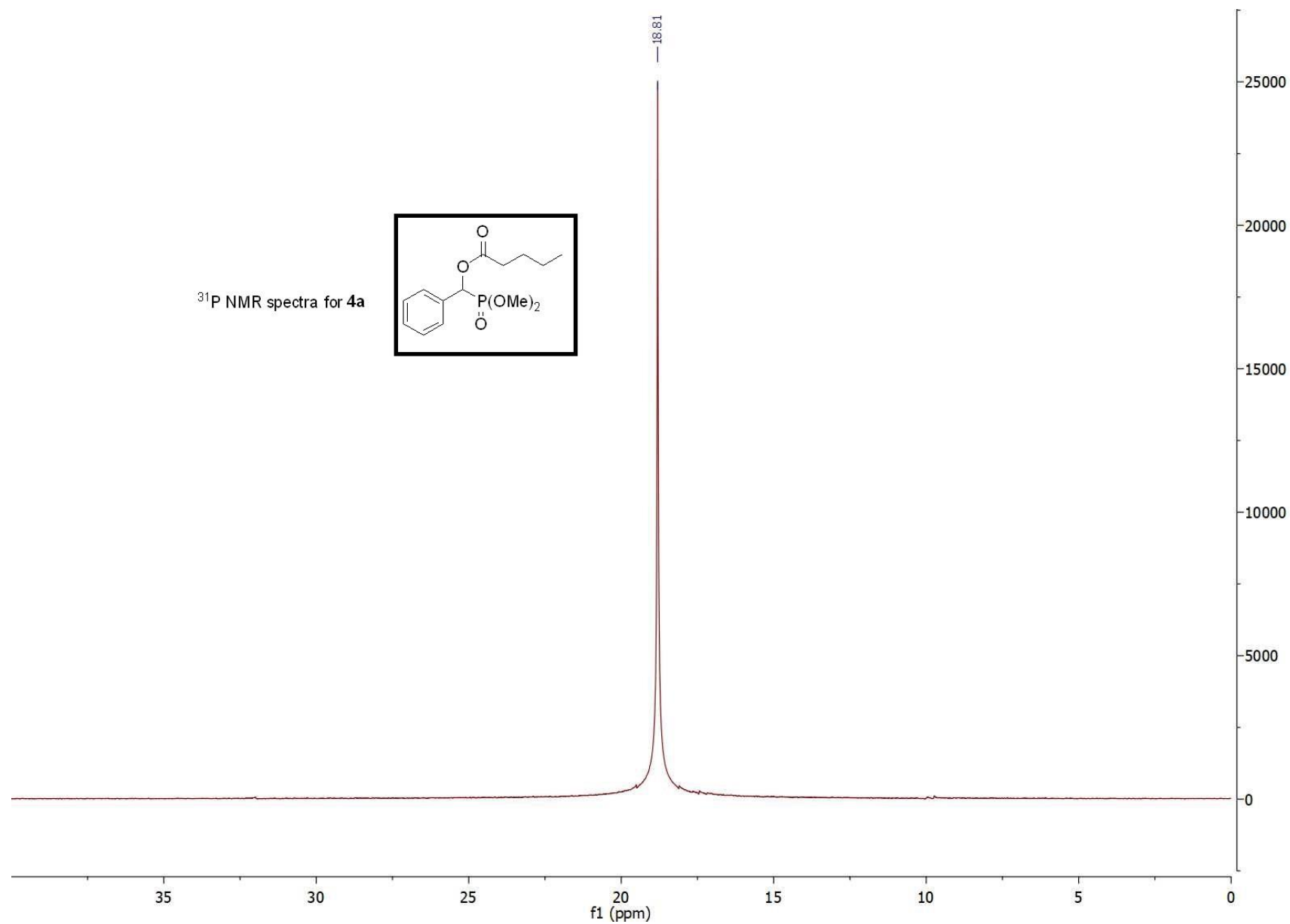
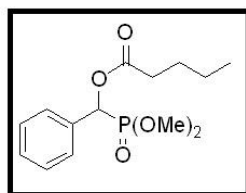
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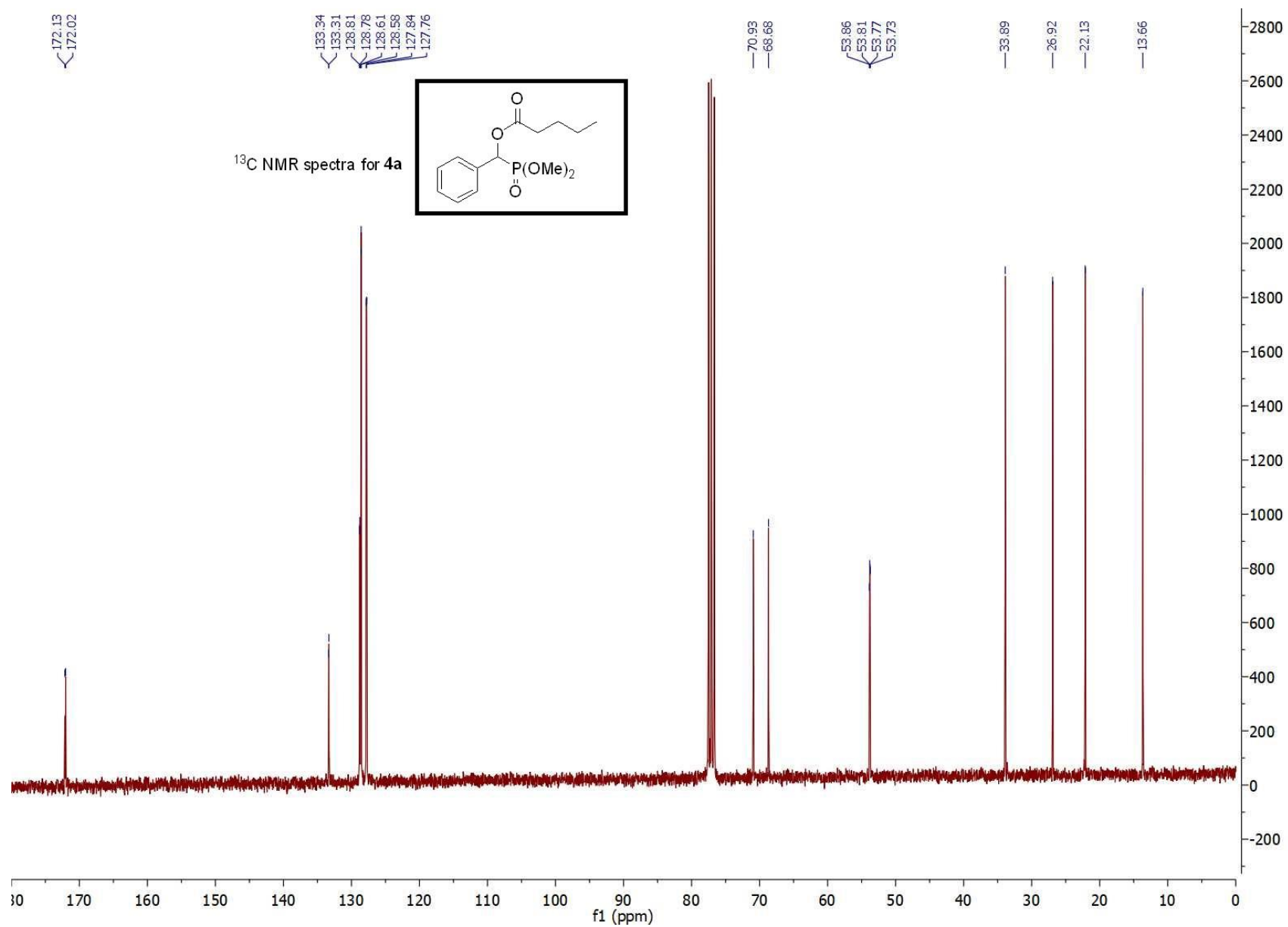


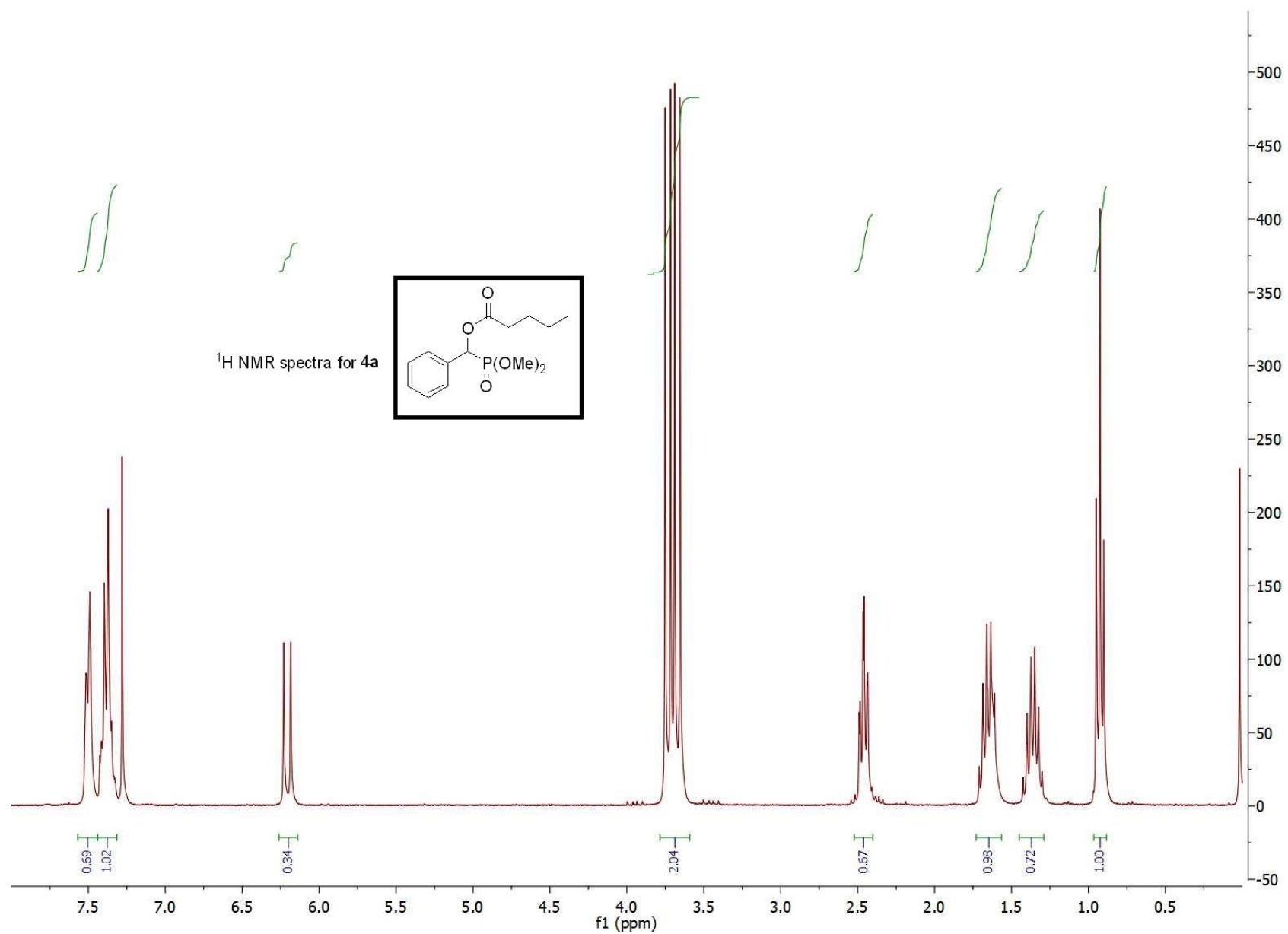


$^{31}\text{P}$  NMR spectra for **4a**

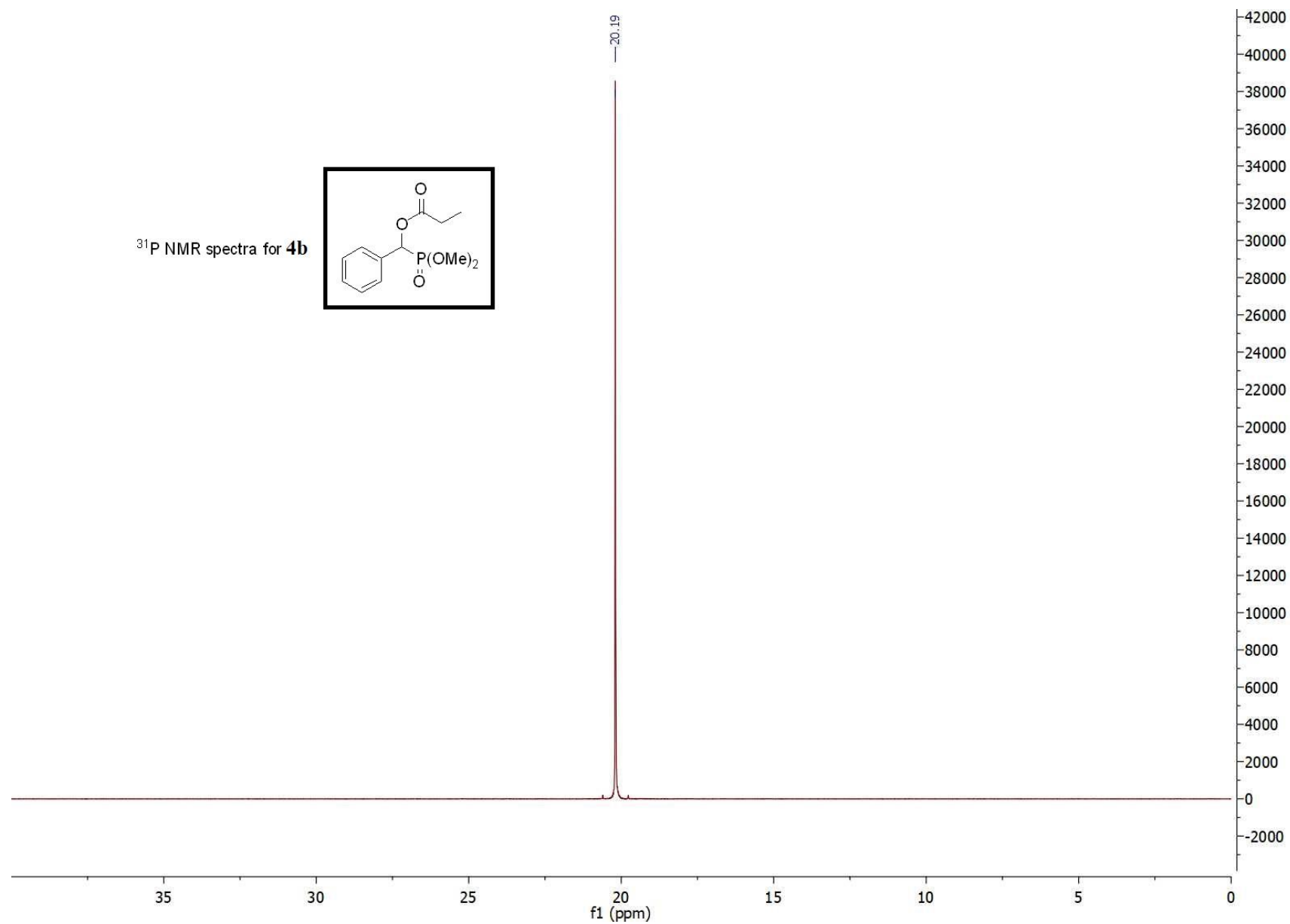
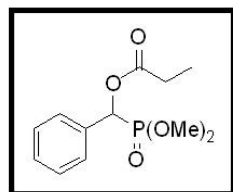


S26

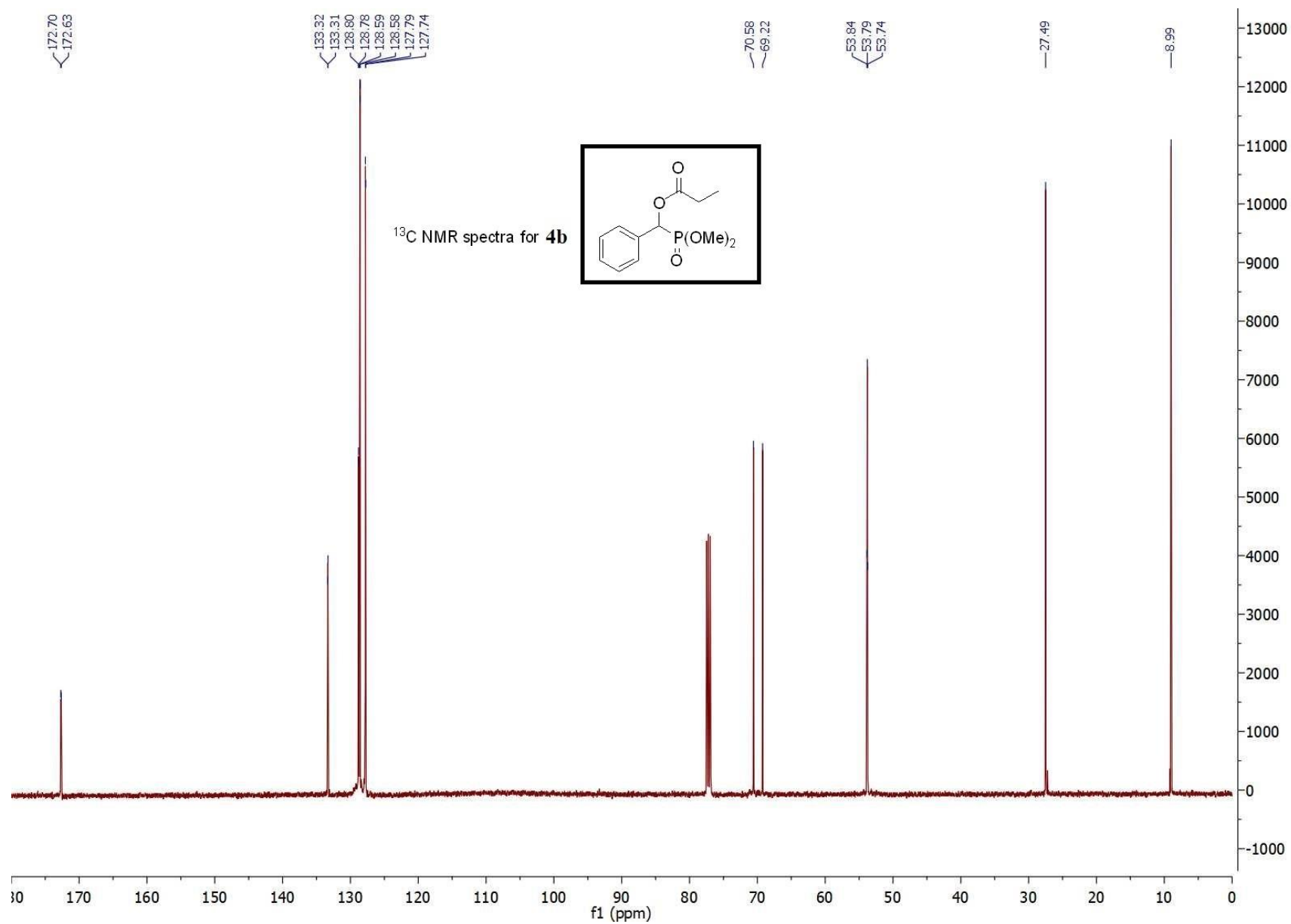


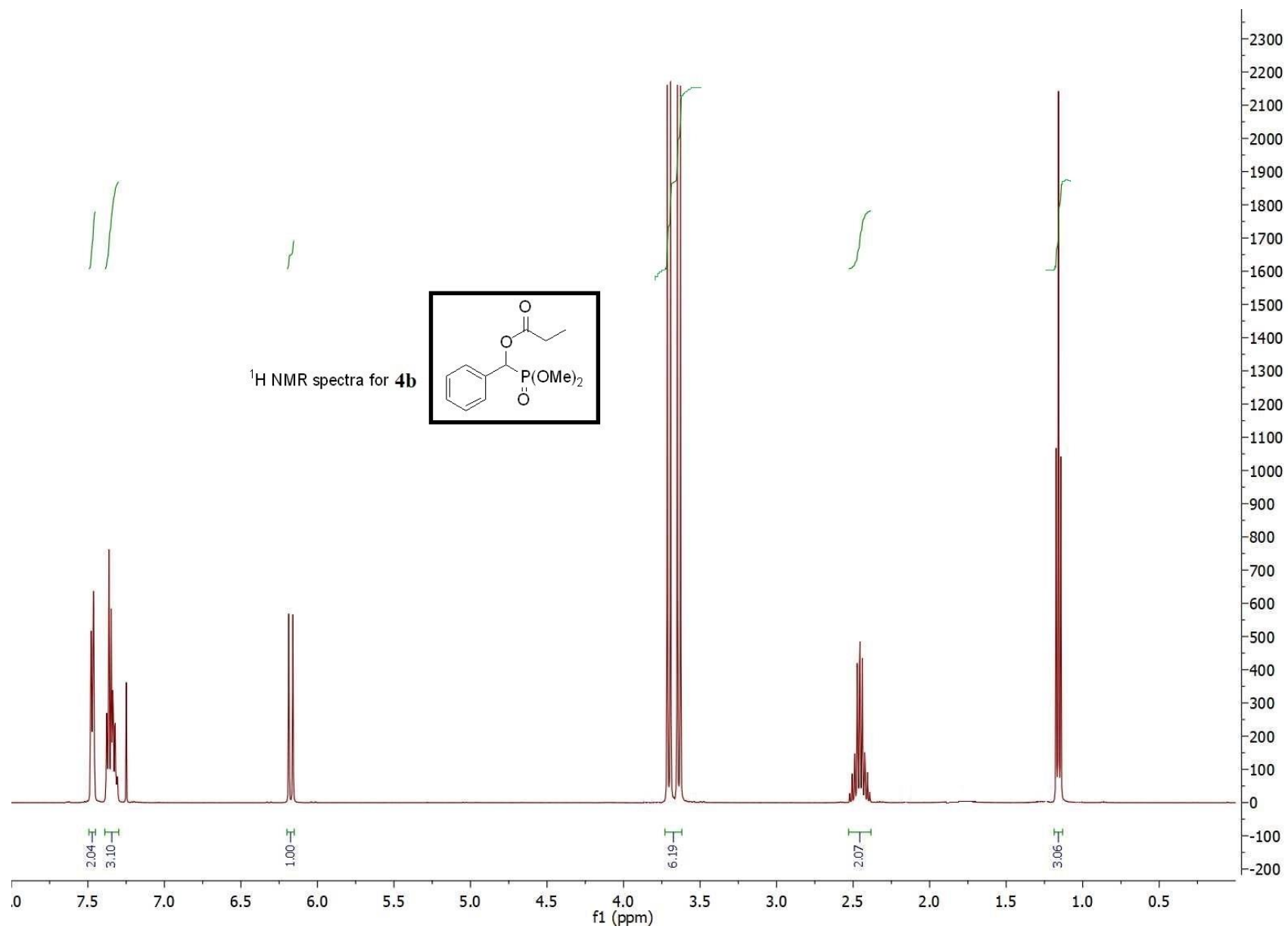


$^{31}\text{P}$  NMR spectra for **4b**

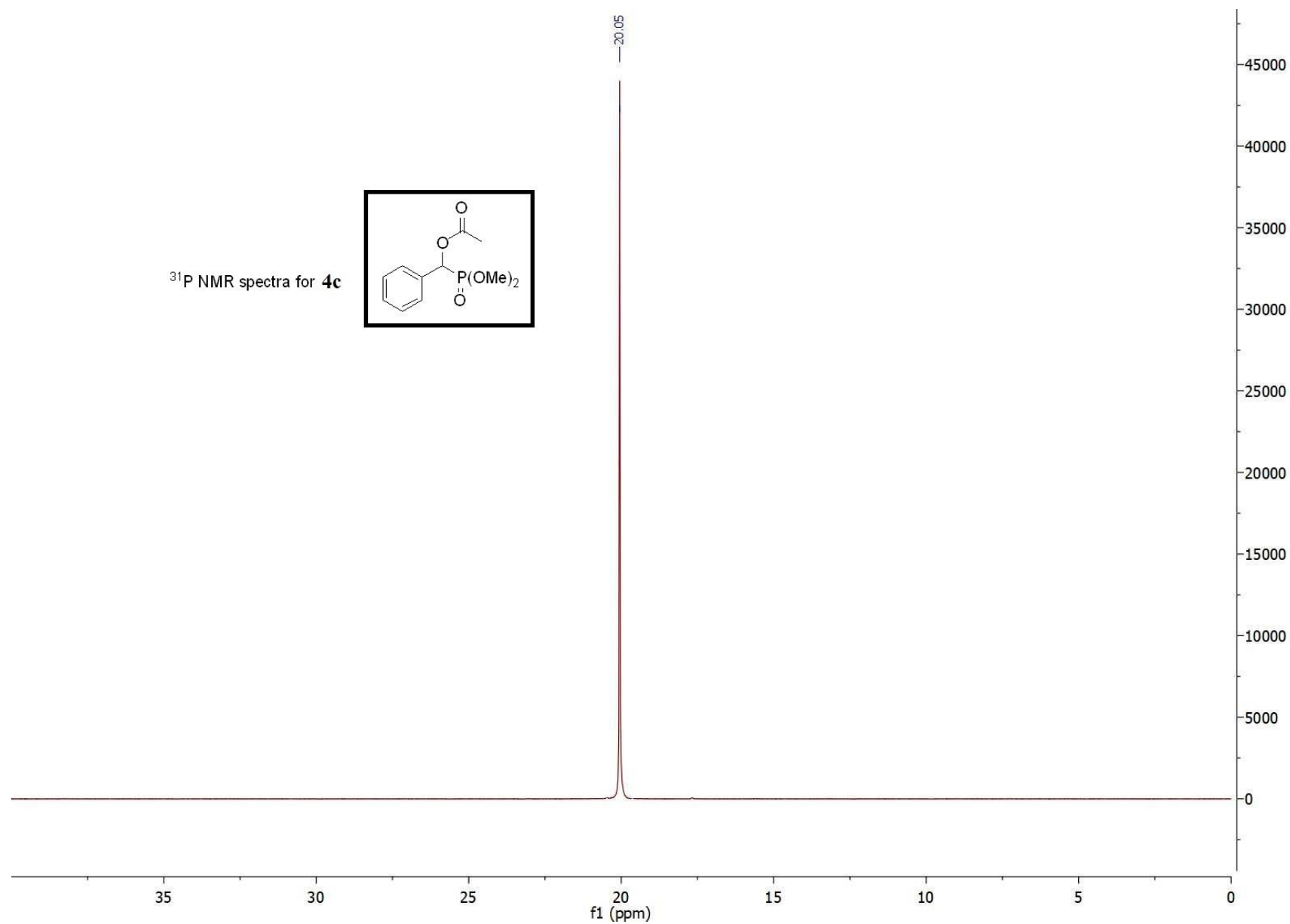
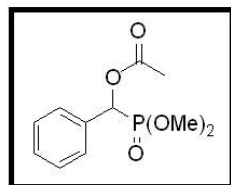


S29



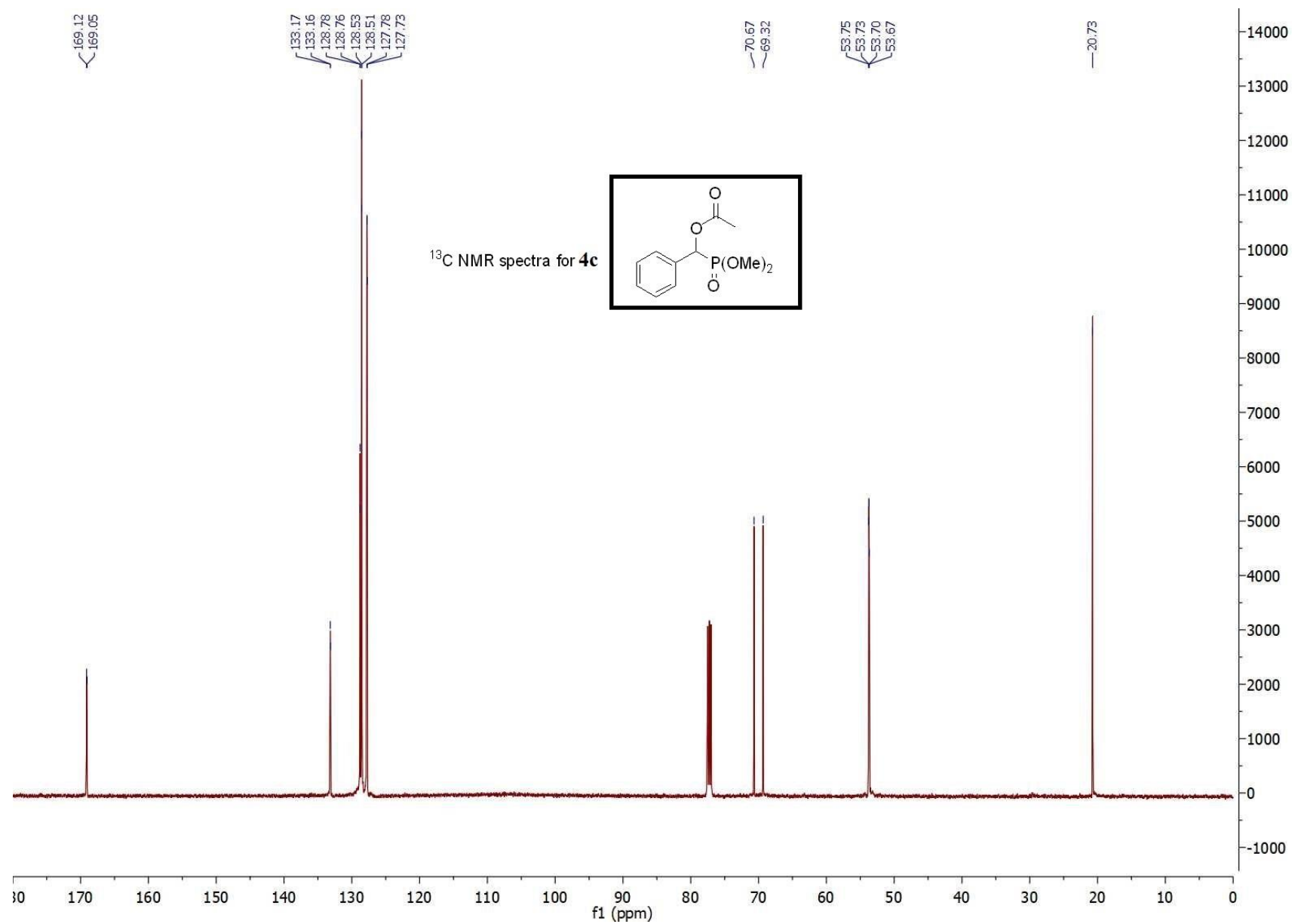


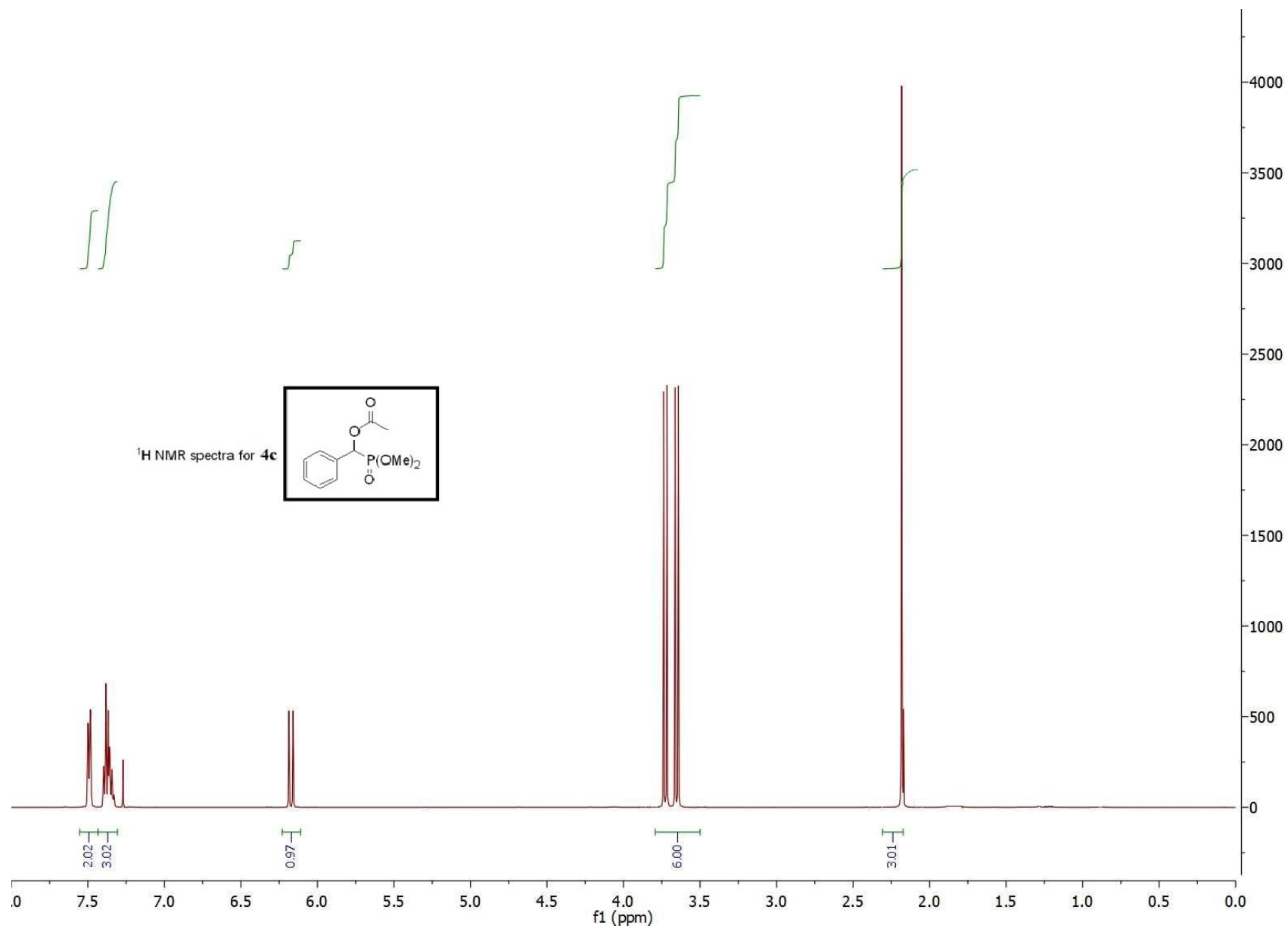
$^{31}\text{P}$  NMR spectra for **4c**



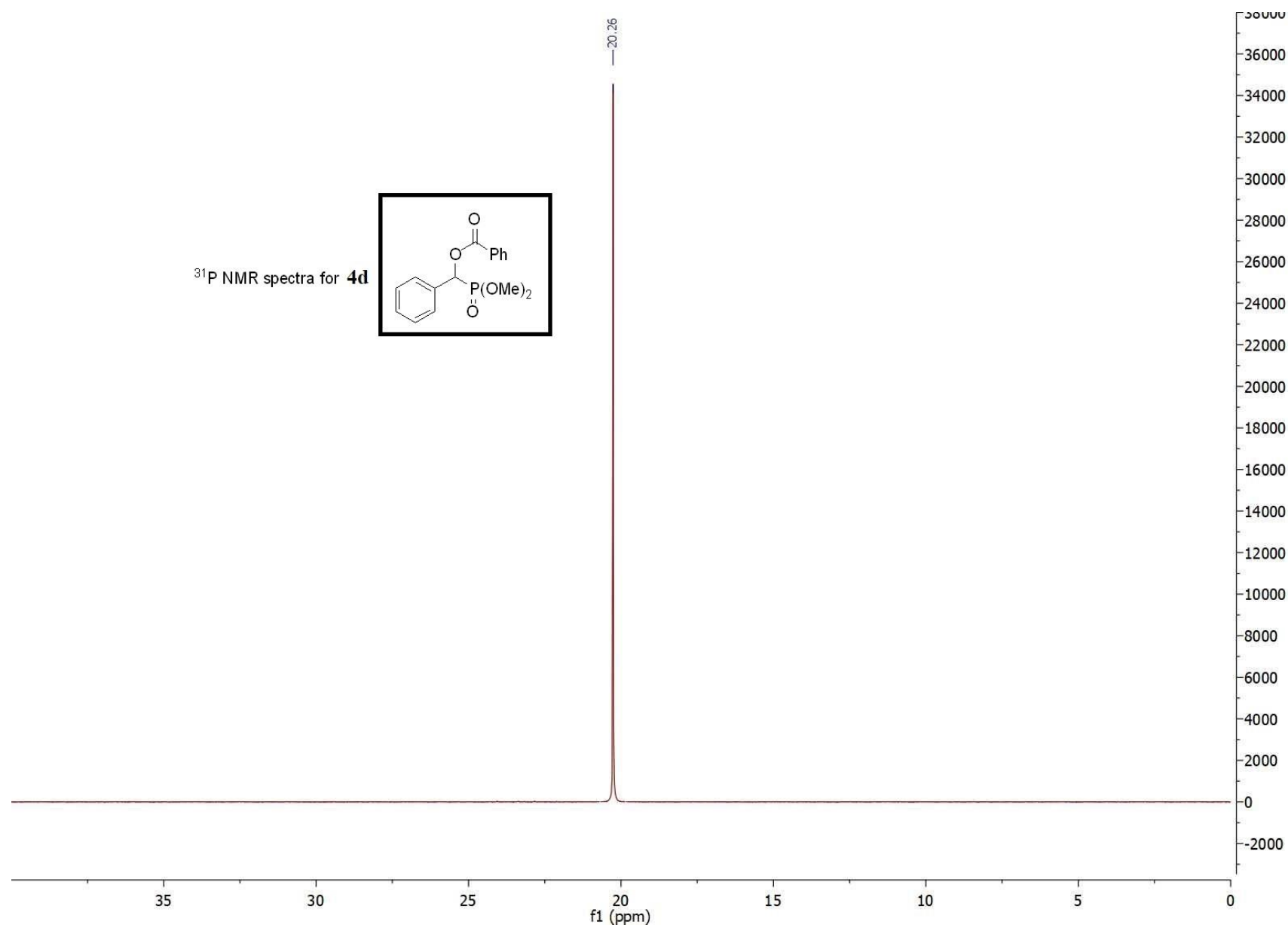
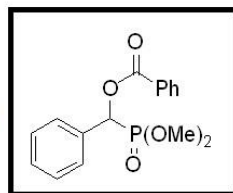
S32







$^{31}\text{P}$  NMR spectra for **4d**



S35

