

## Supporting Information

# **Pd-Catalyzed Hirao P–C Coupling Reactions with Dihalogenobenzenes without the Usual P-Ligands under MW Conditions**

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György Keglevich<sup>1\*</sup>**

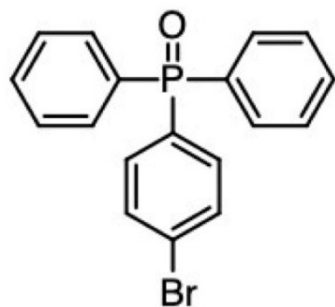
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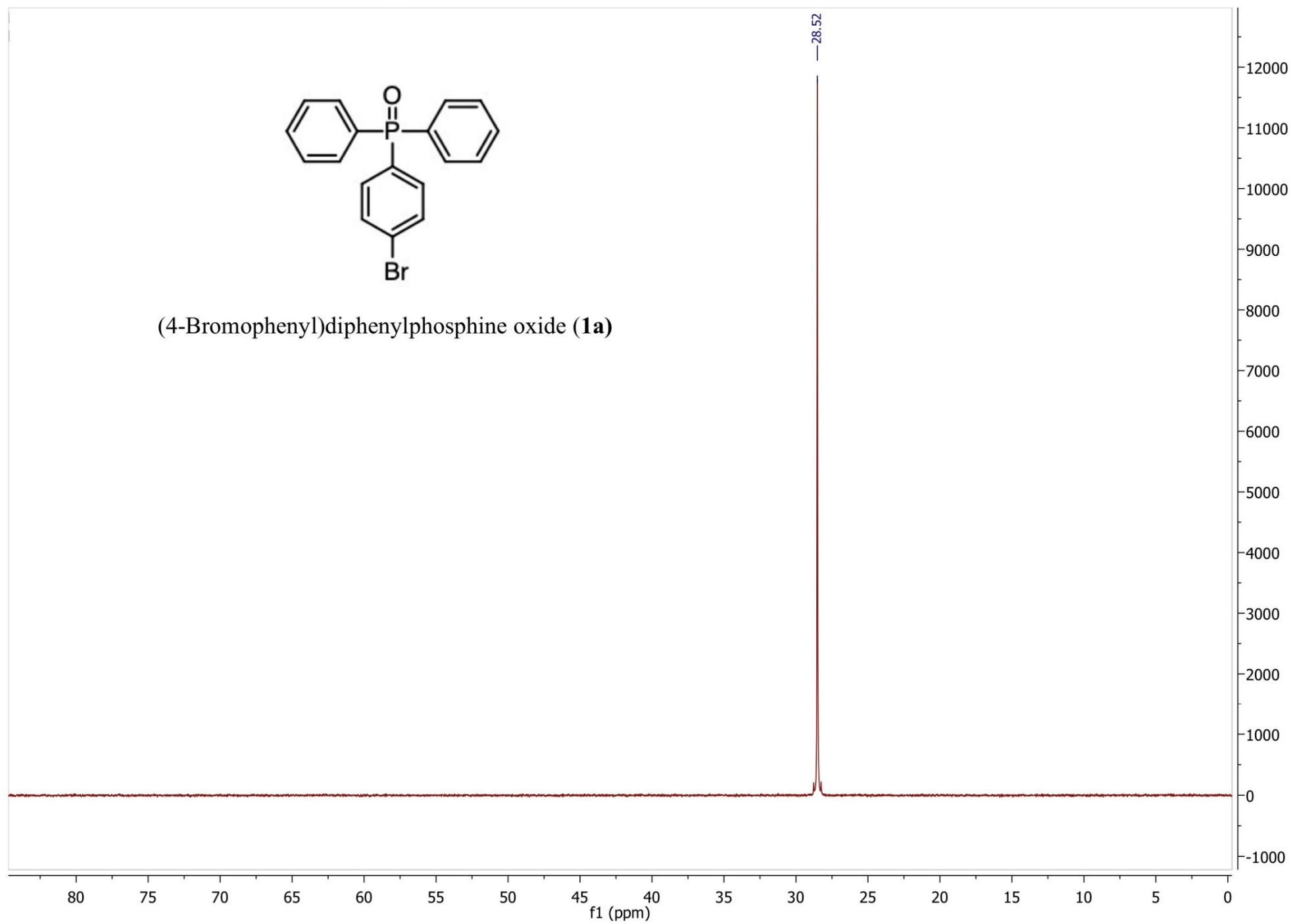
<sup>3</sup>MS Proteomics Research Group, Research Centre for Natural Sciences, Hungary

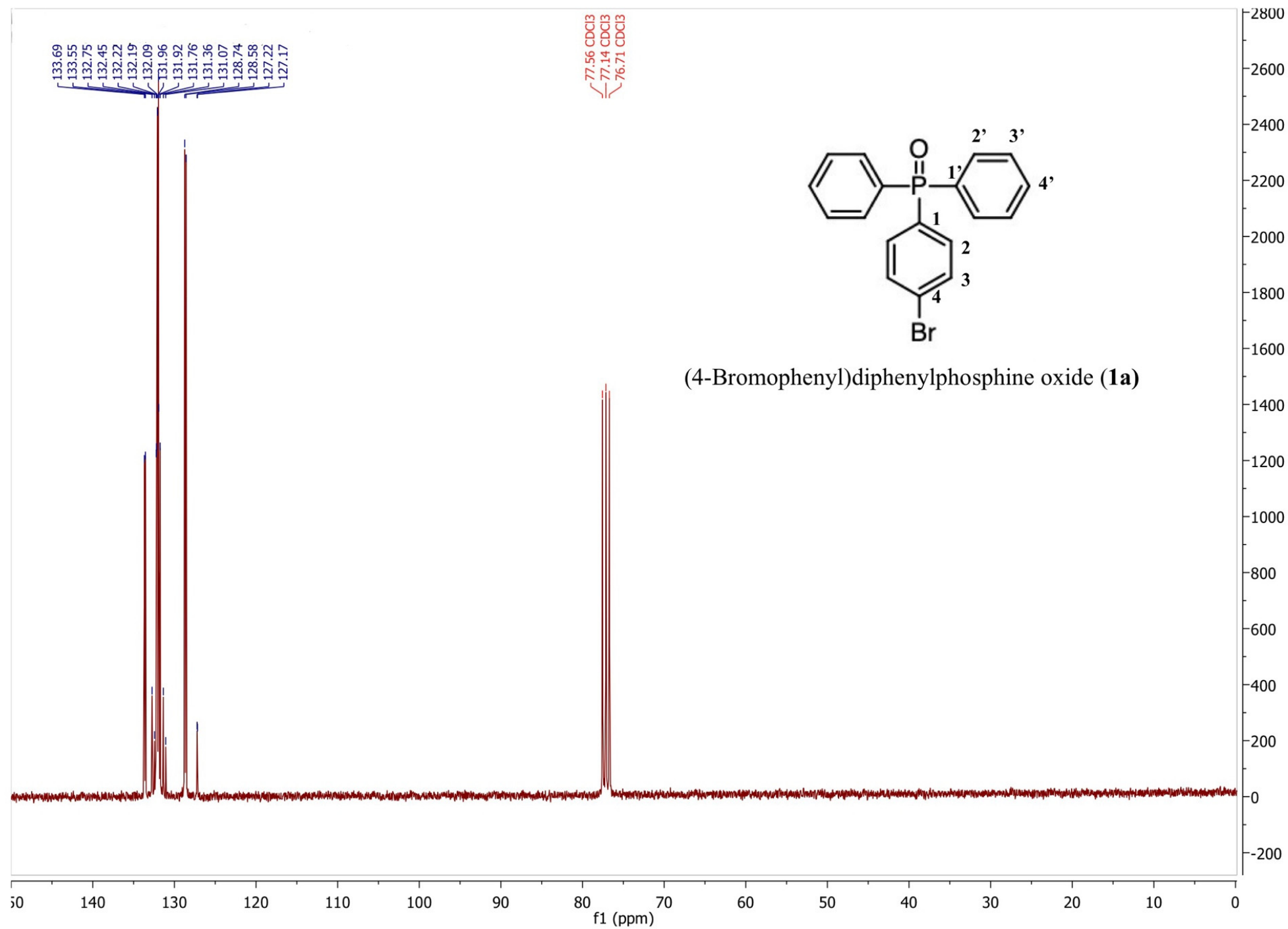
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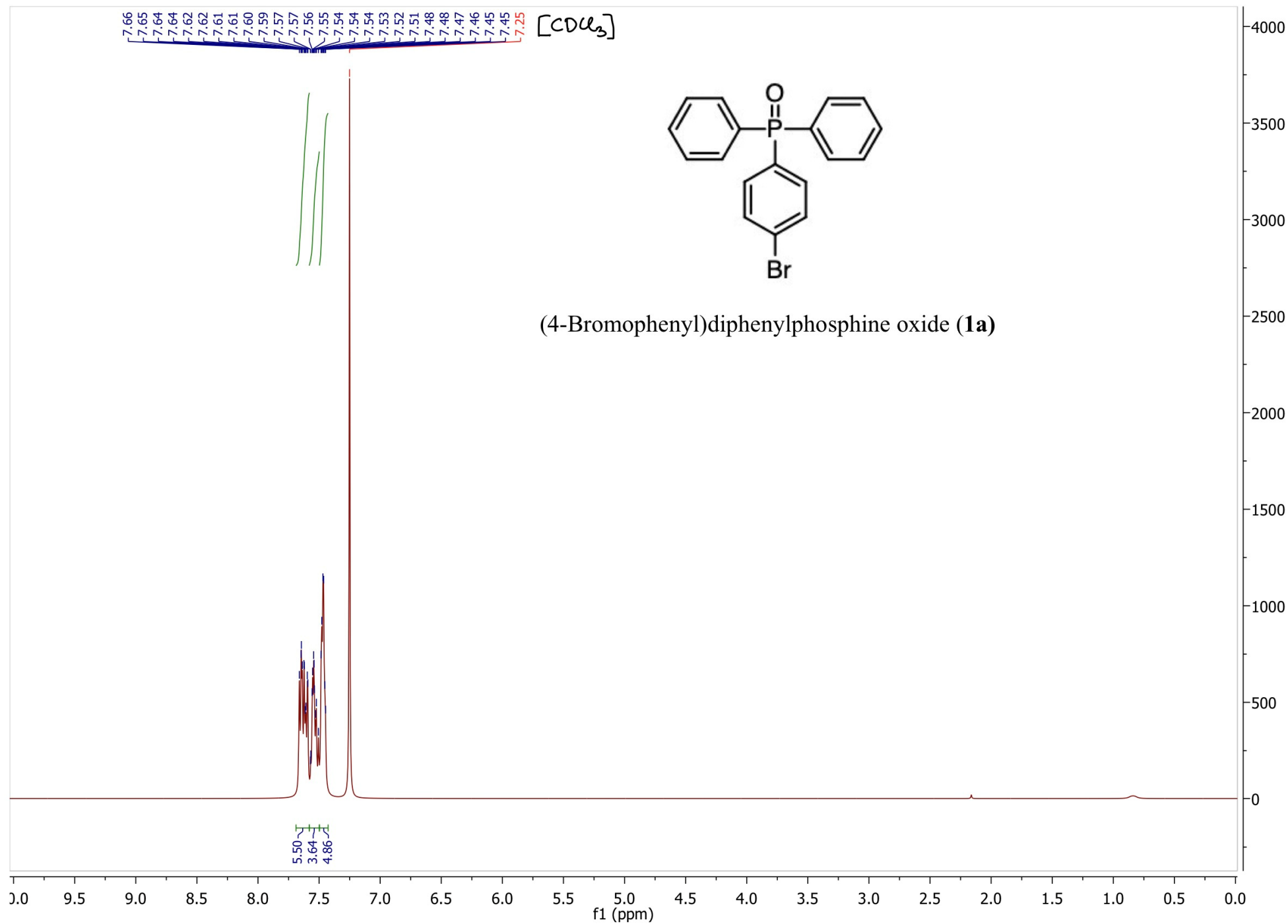
- |   |           |
|---|-----------|
| 1. NMR spectra for compounds <b>1–9</b> | pg. 1–37. |
|---|-----------|



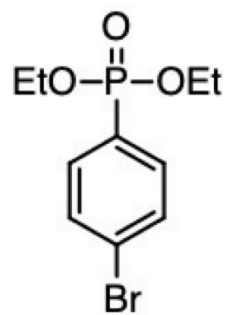
(4-Bromophenyl)diphenylphosphine oxide (**1a**)



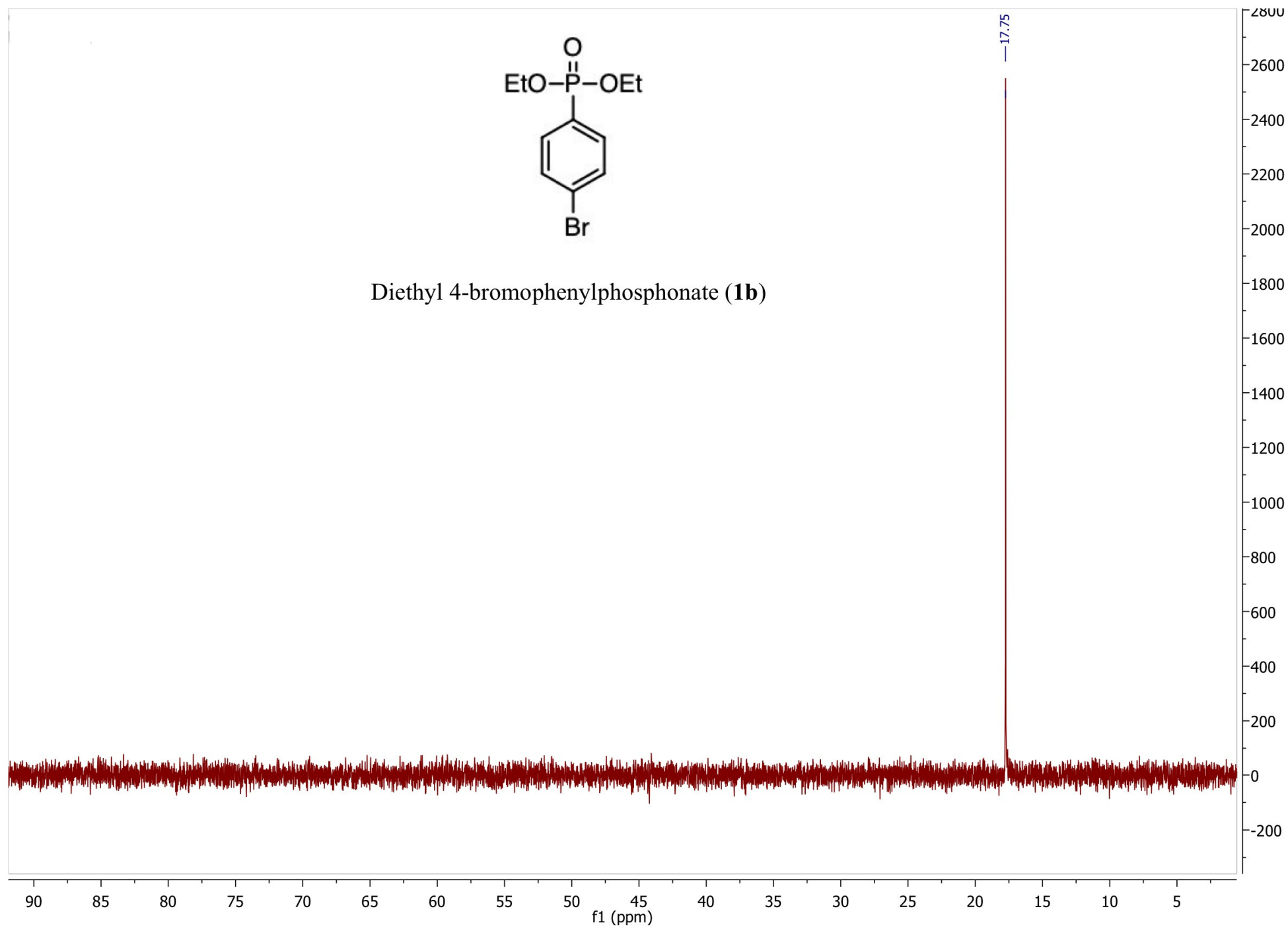


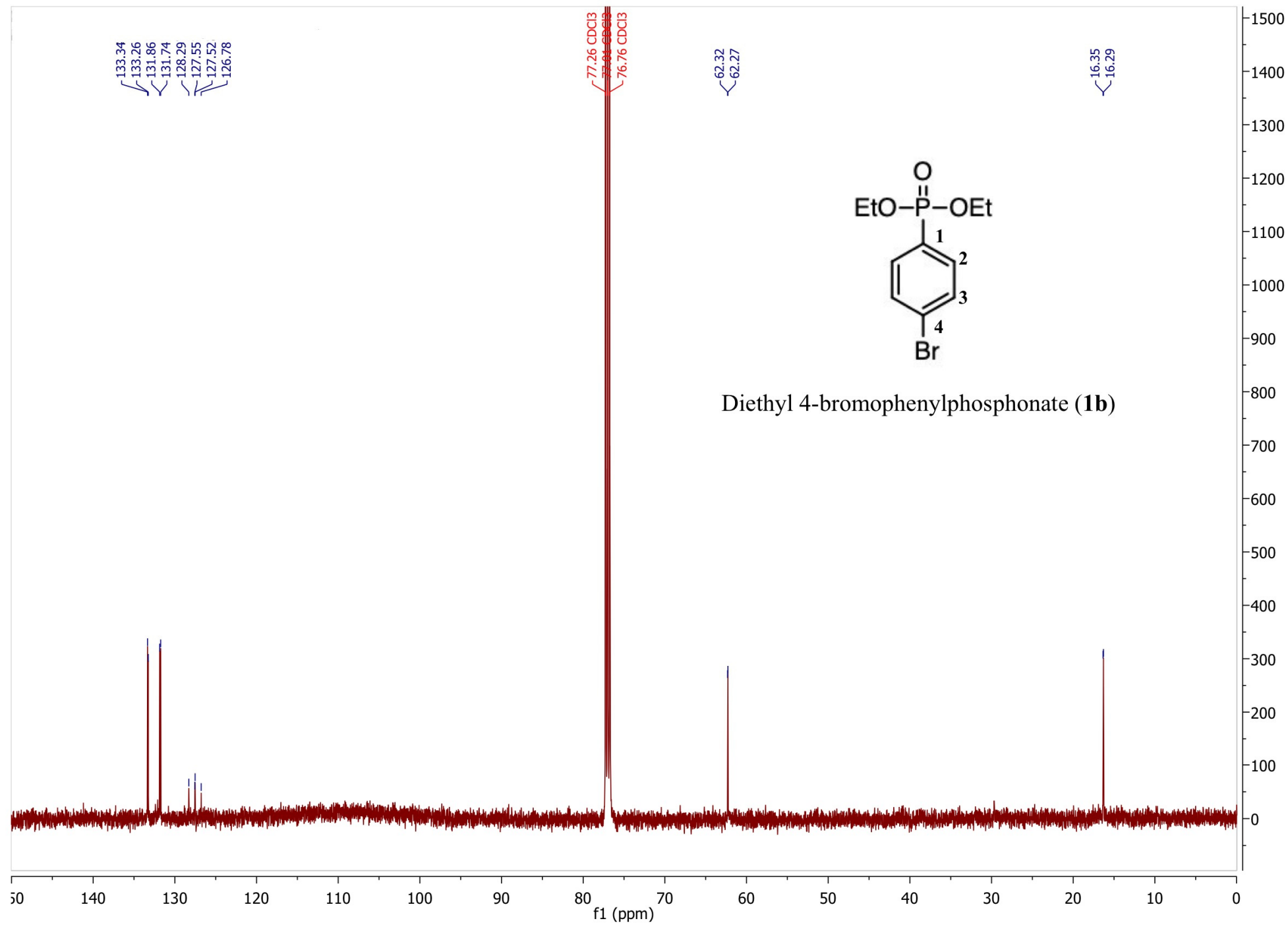


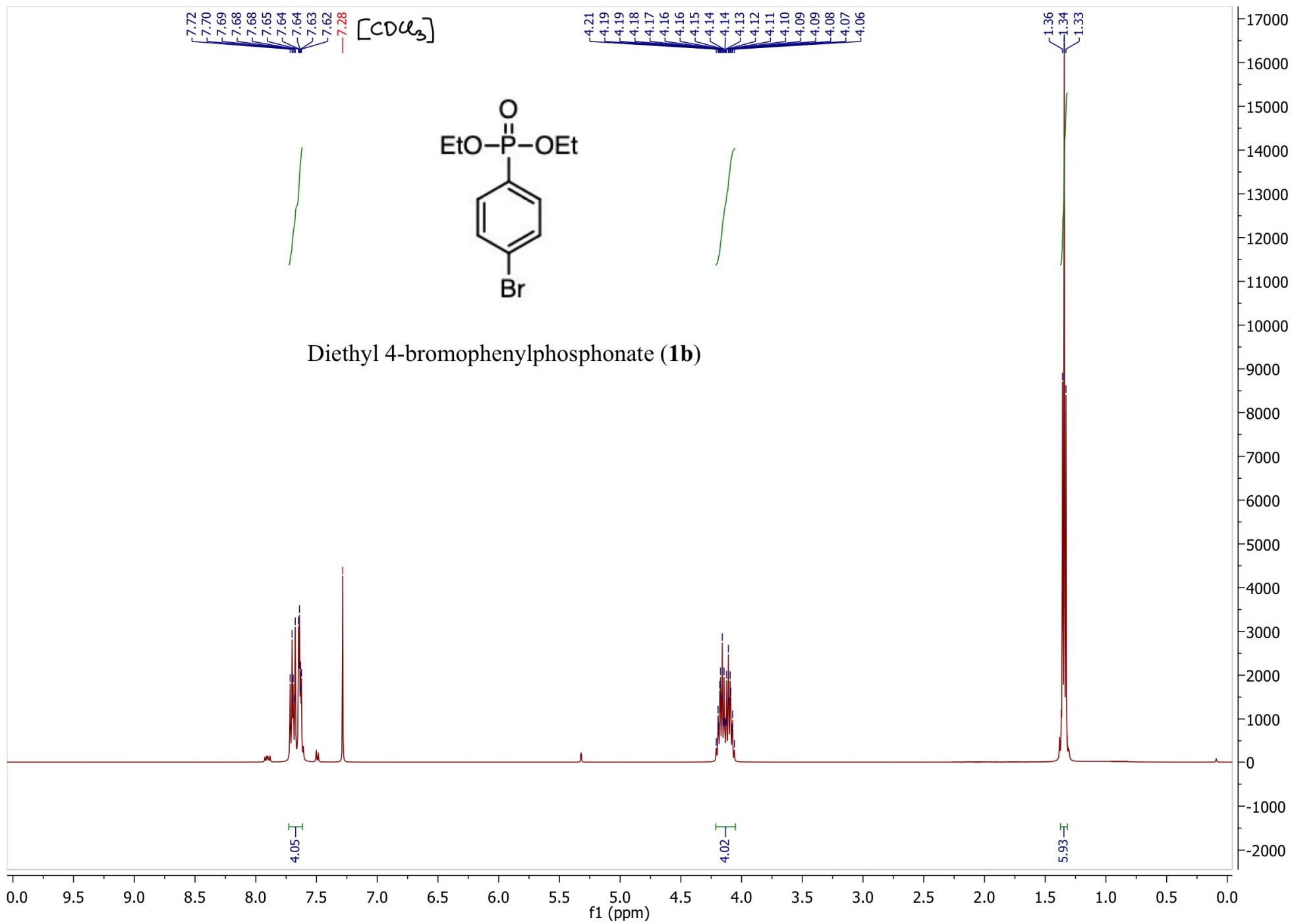


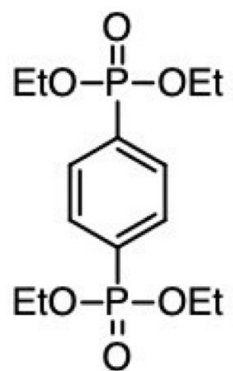


Diethyl 4-bromophenylphosphonate (**1b**)

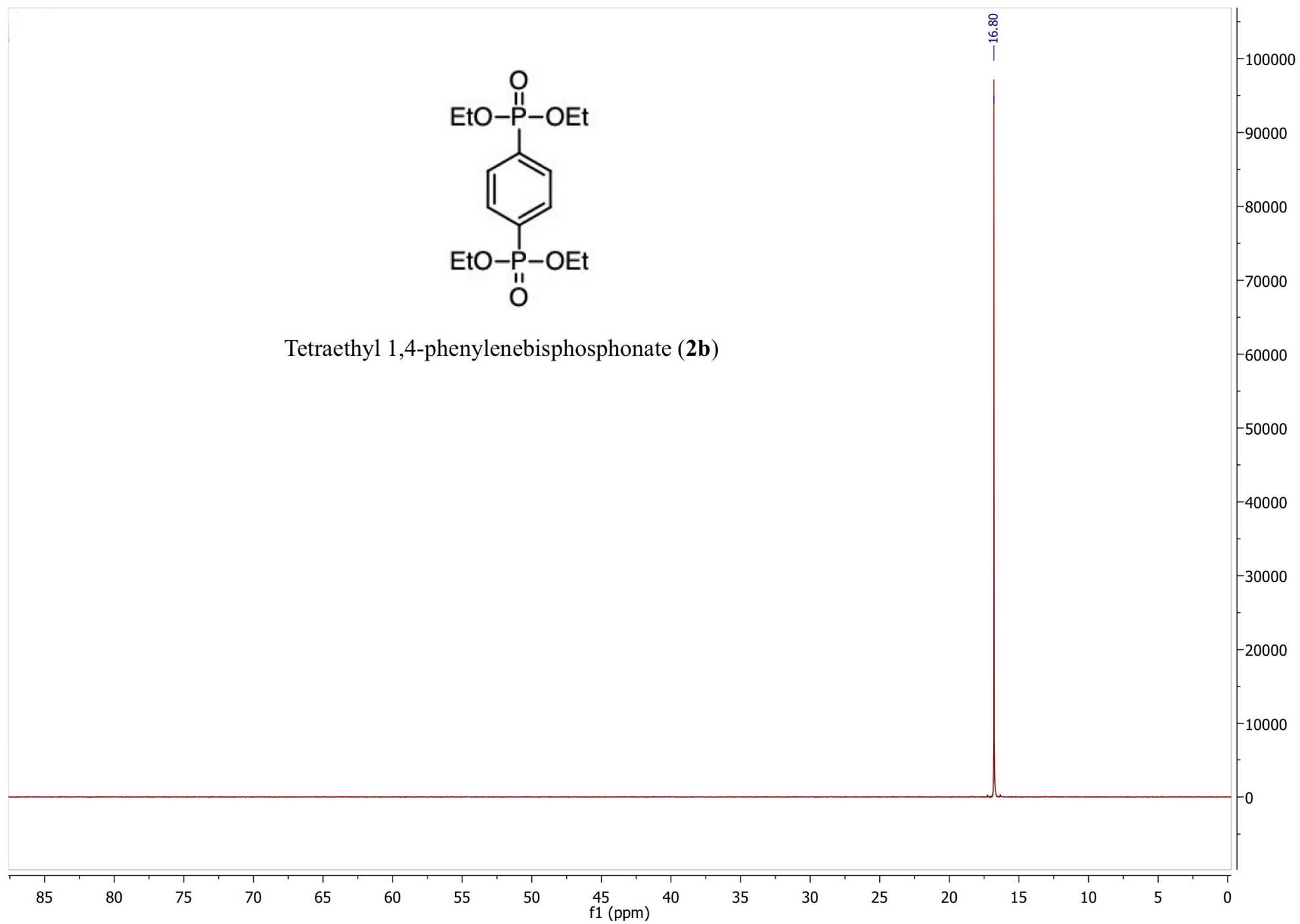


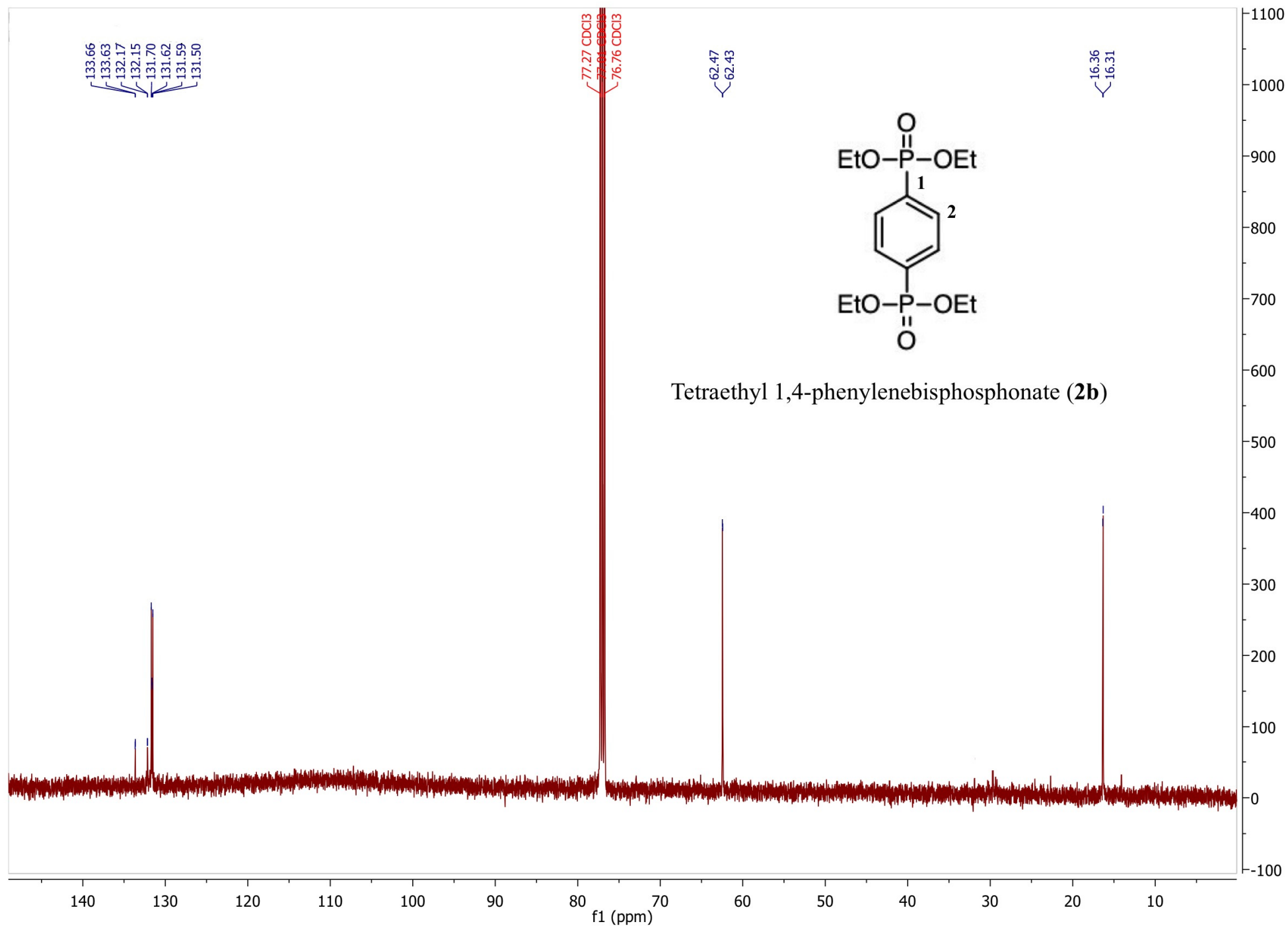


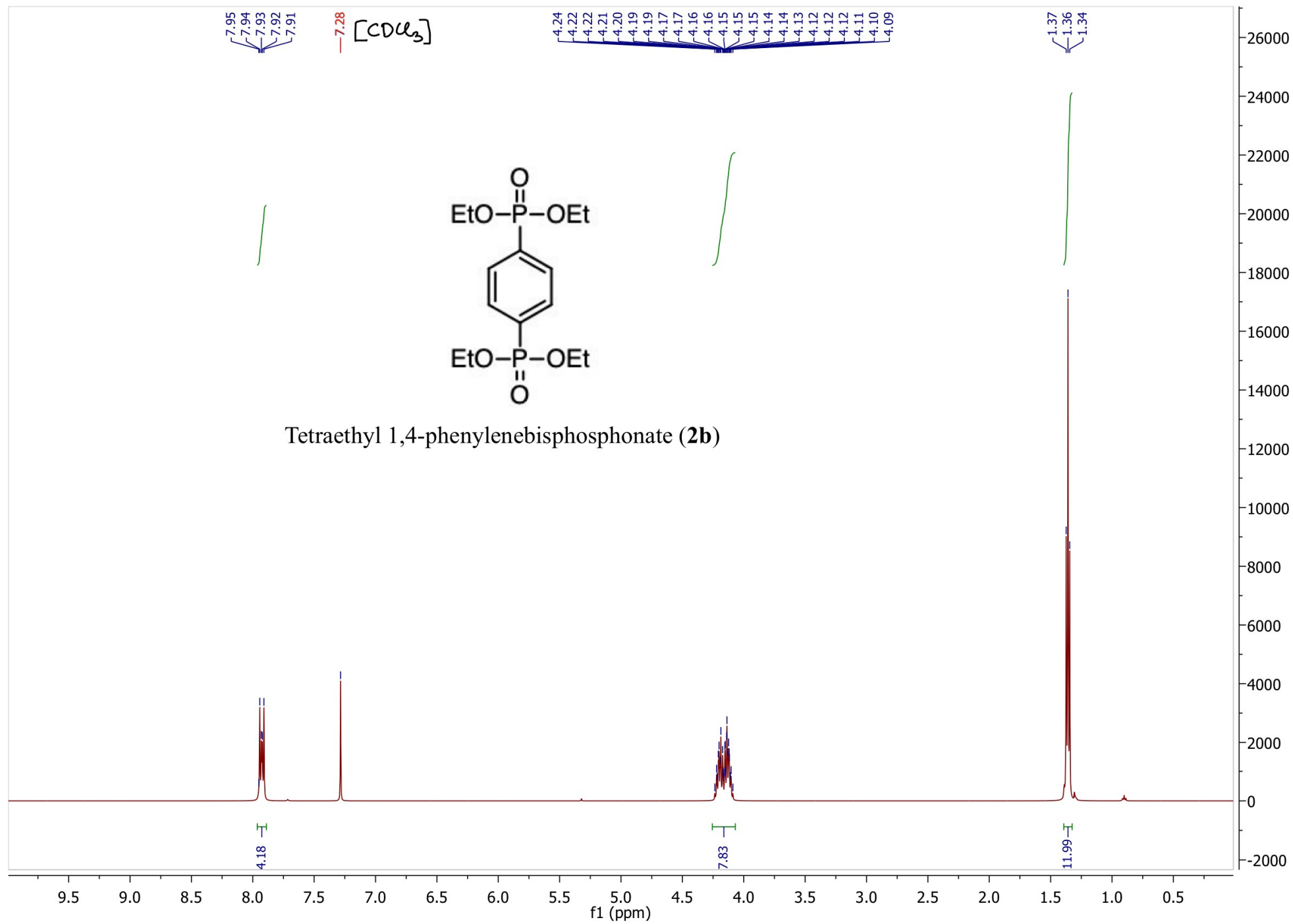


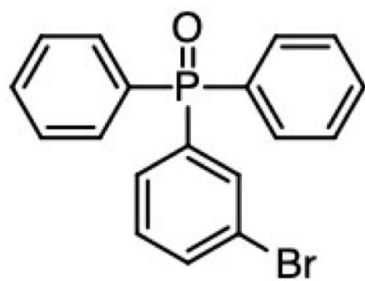


Tetraethyl 1,4-phenylenebisphosphonate (**2b**)

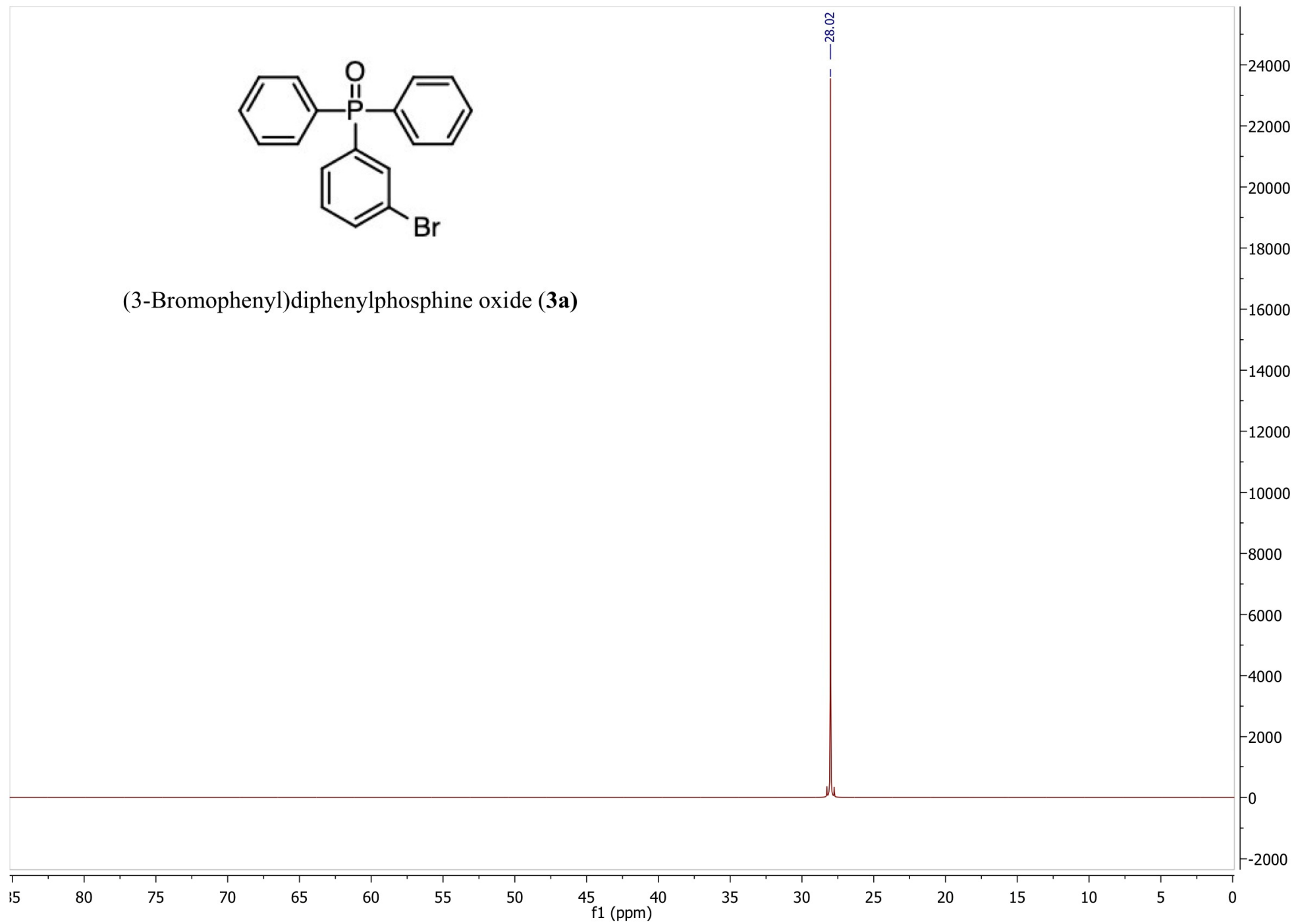


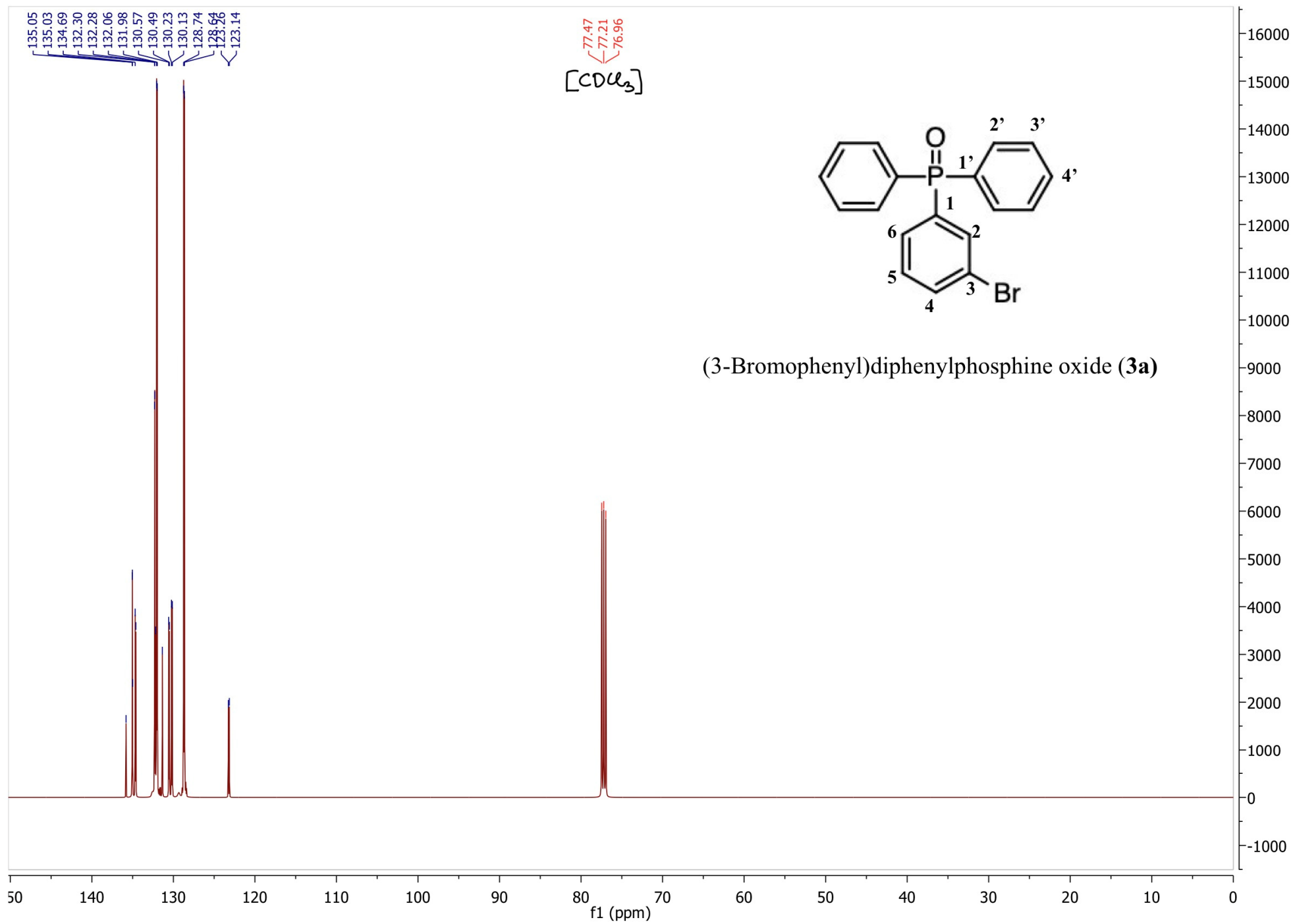




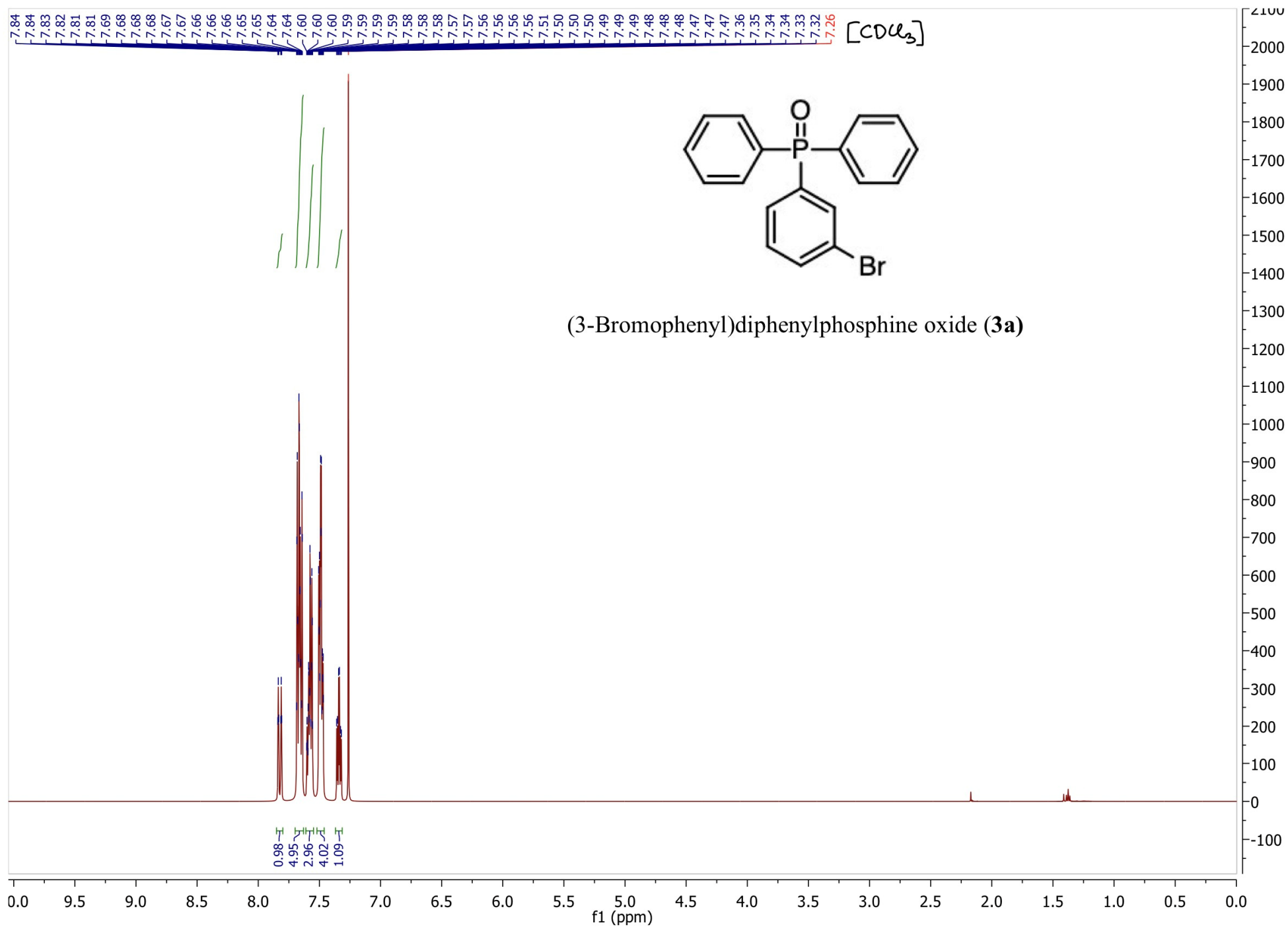


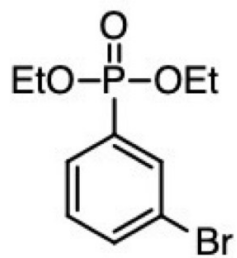
(3-Bromophenyl)diphenylphosphine oxide (**3a**)



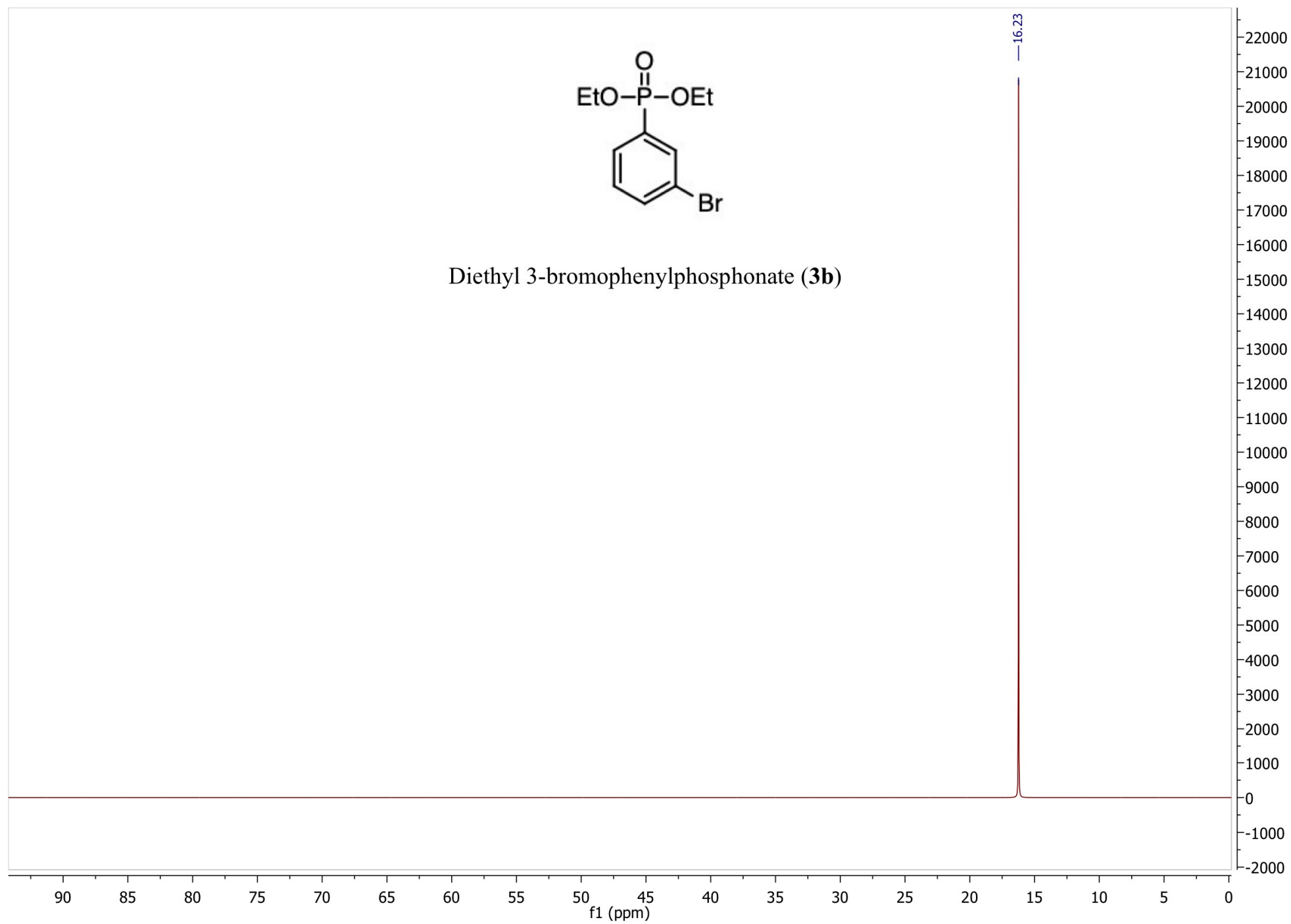


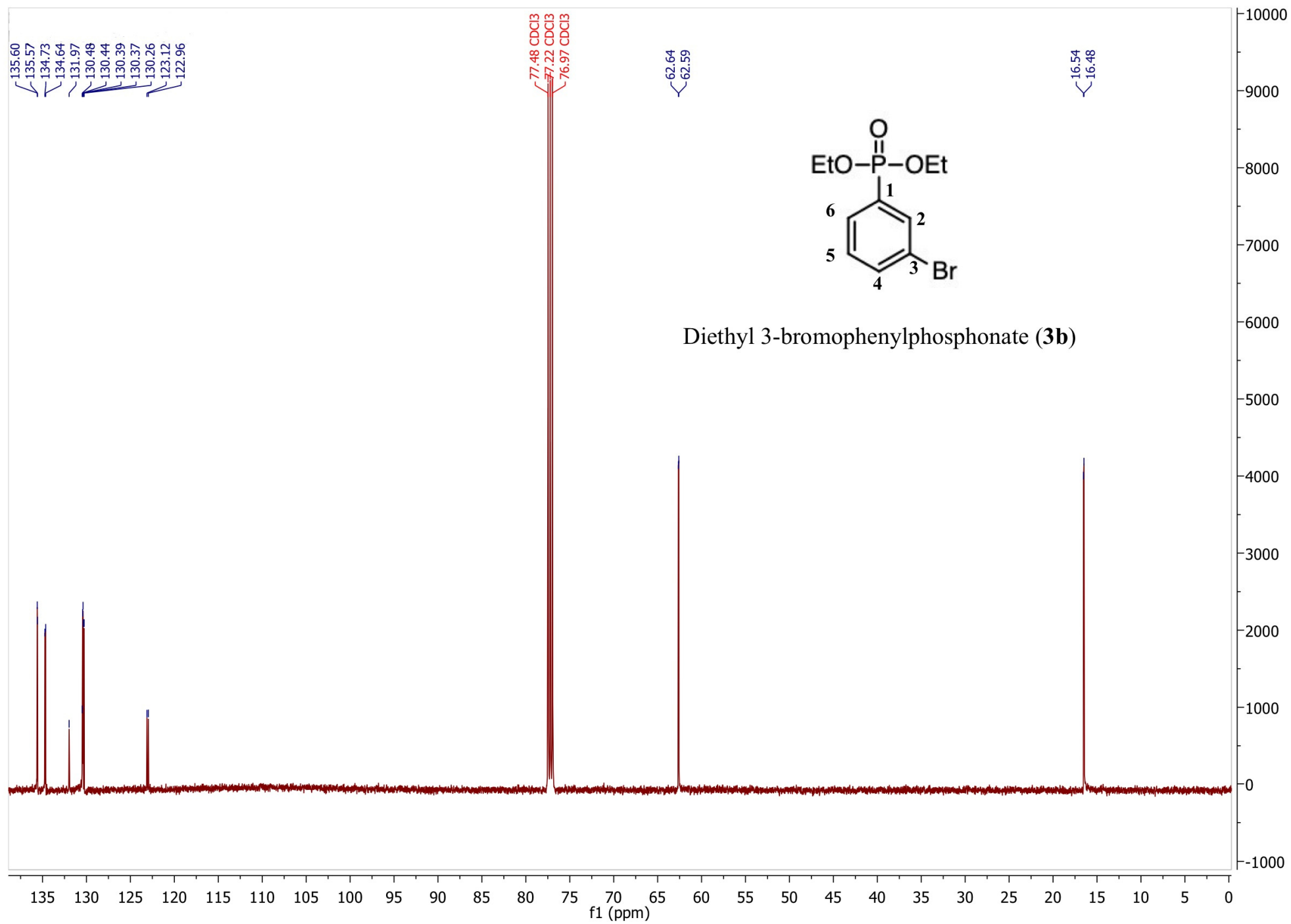


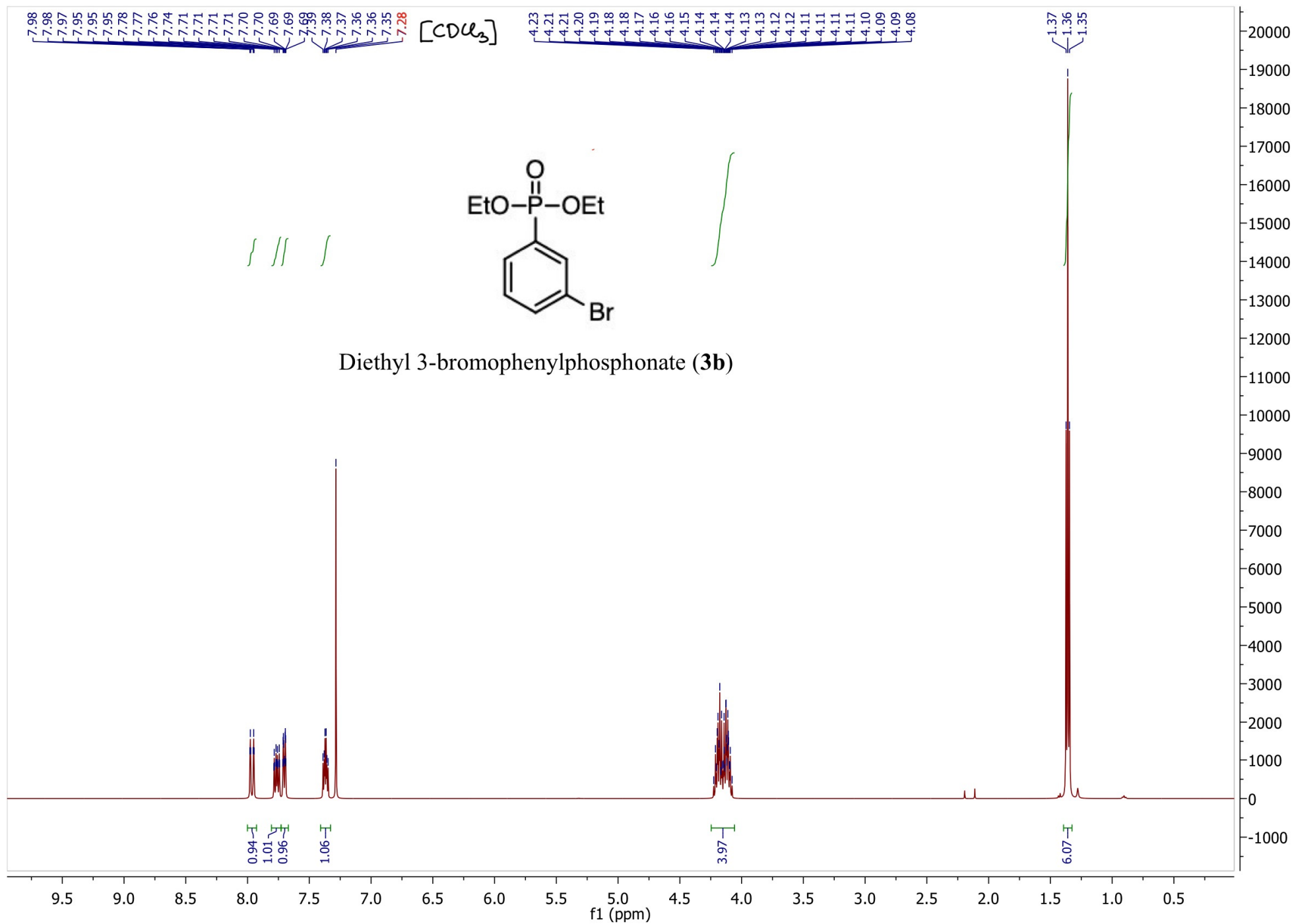


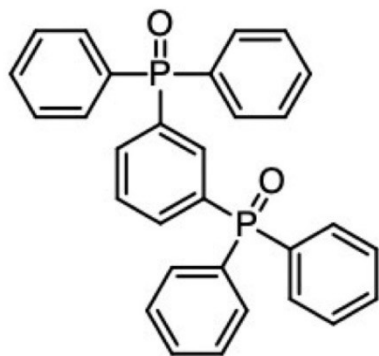


Diethyl 3-bromophenylphosphonate (**3b**)

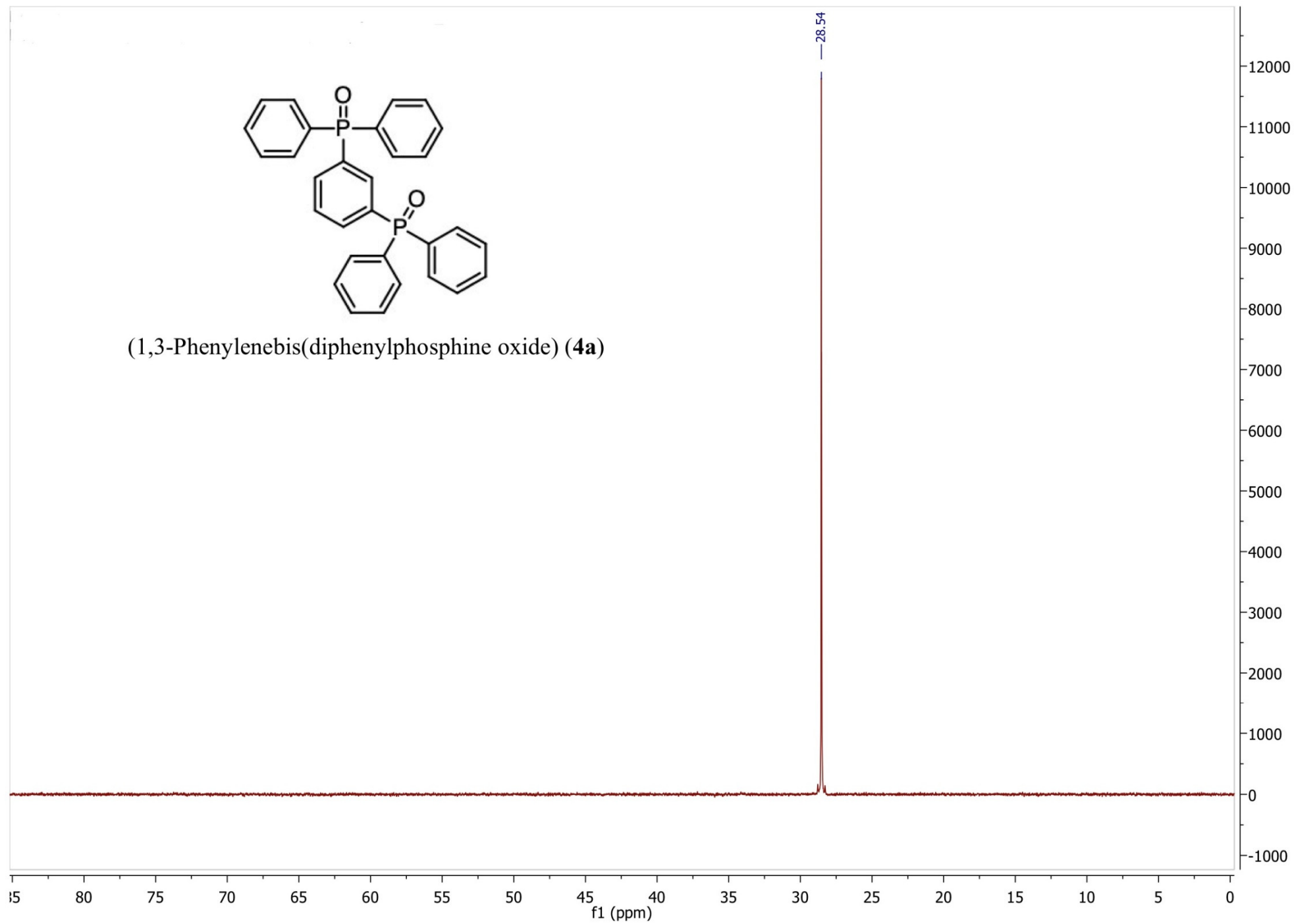


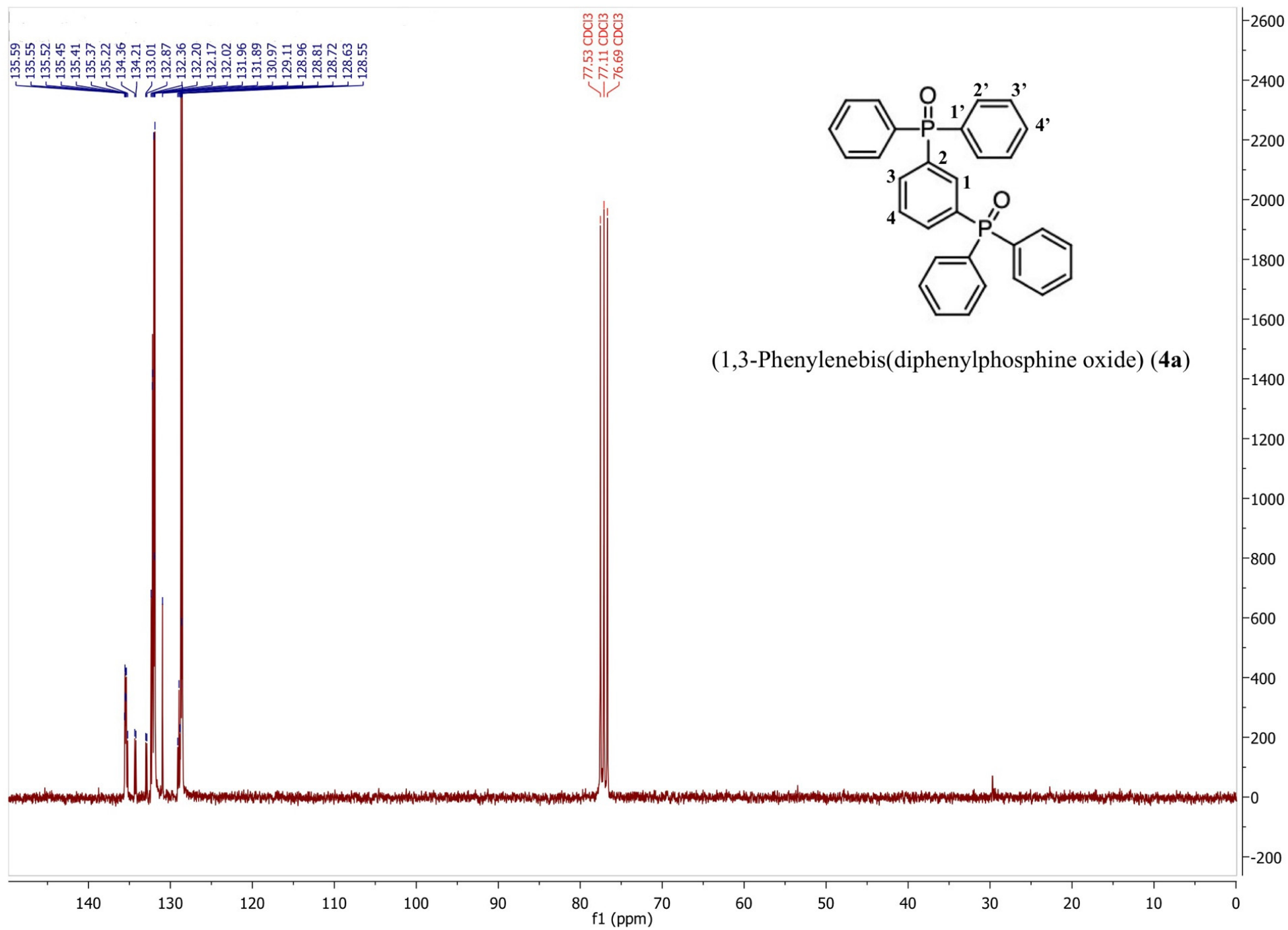


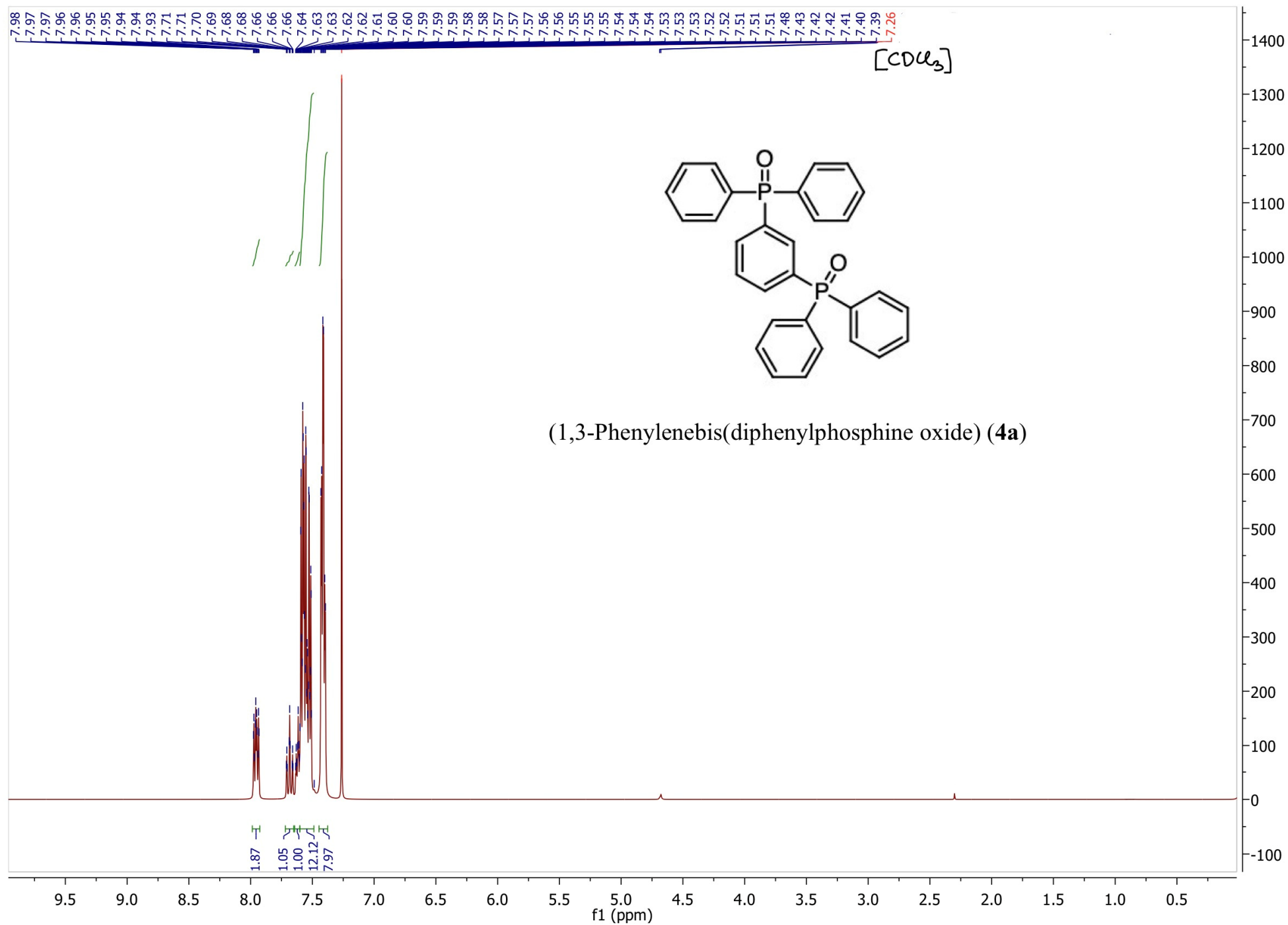


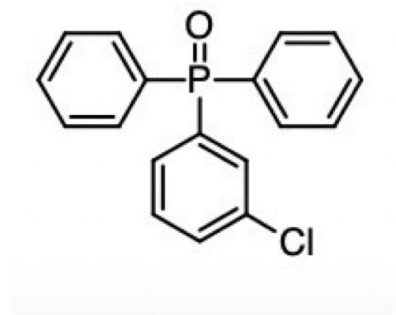


(1,3-Phenylenebis(diphenylphosphine oxide) (**4a**)

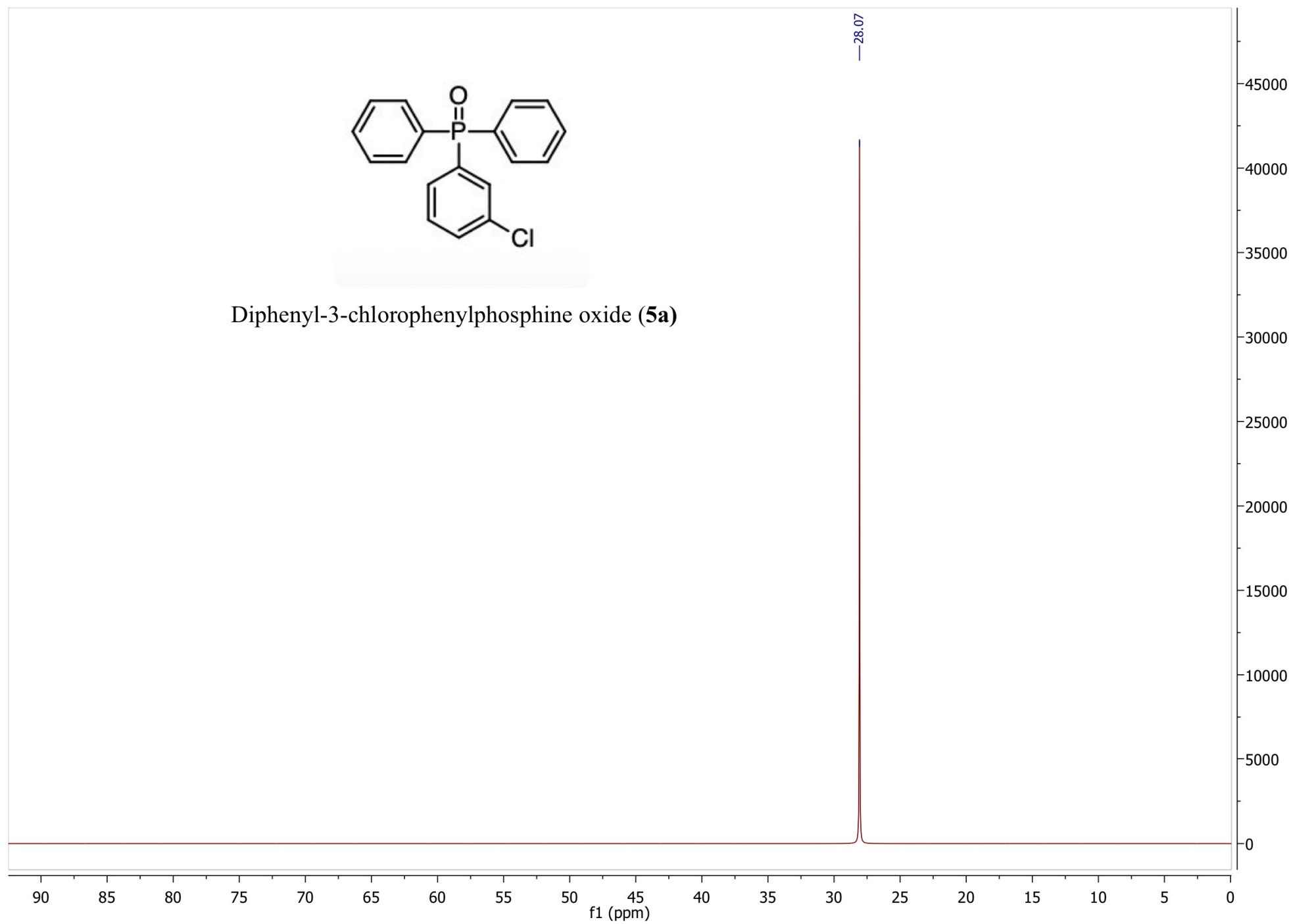




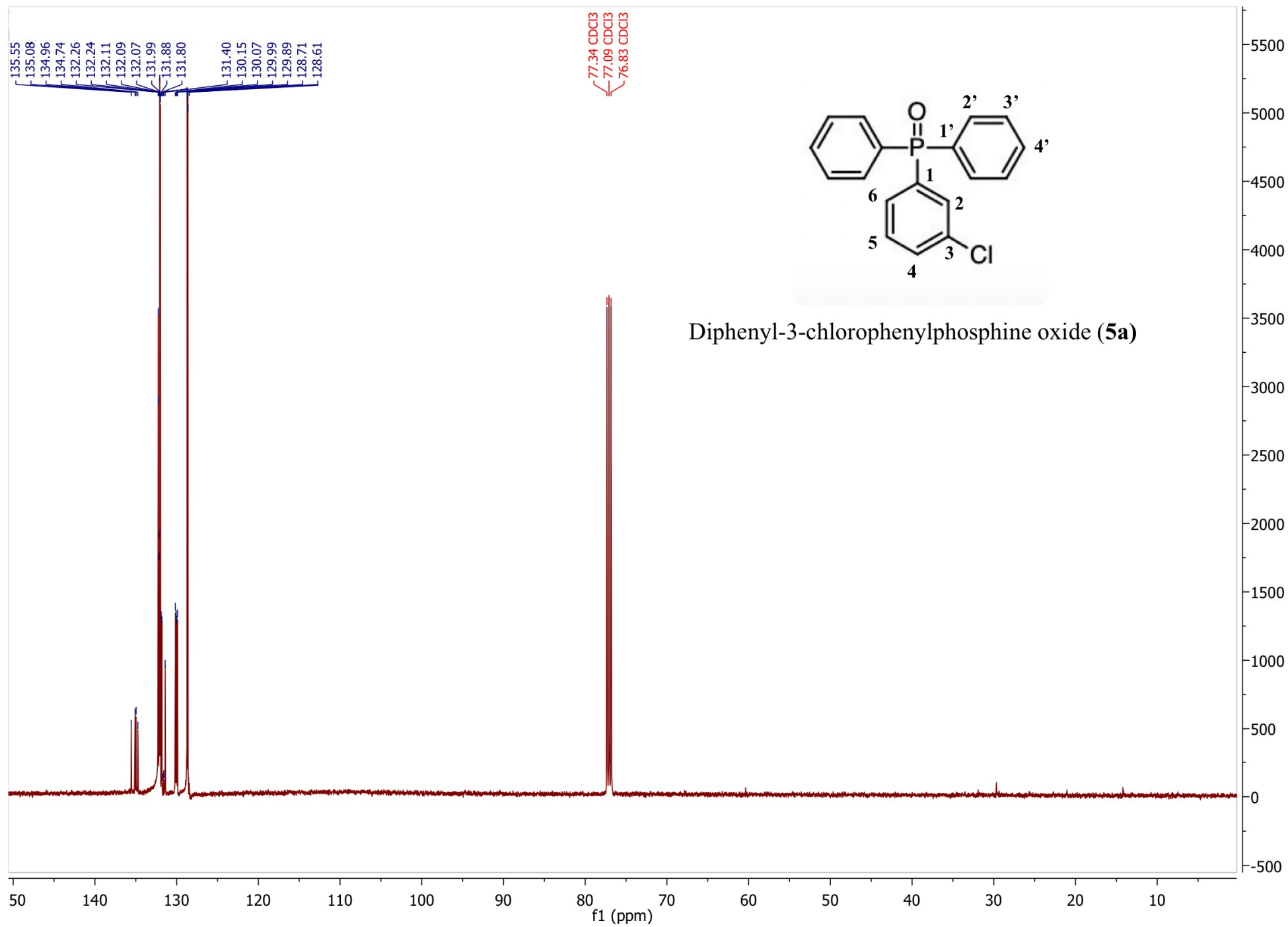


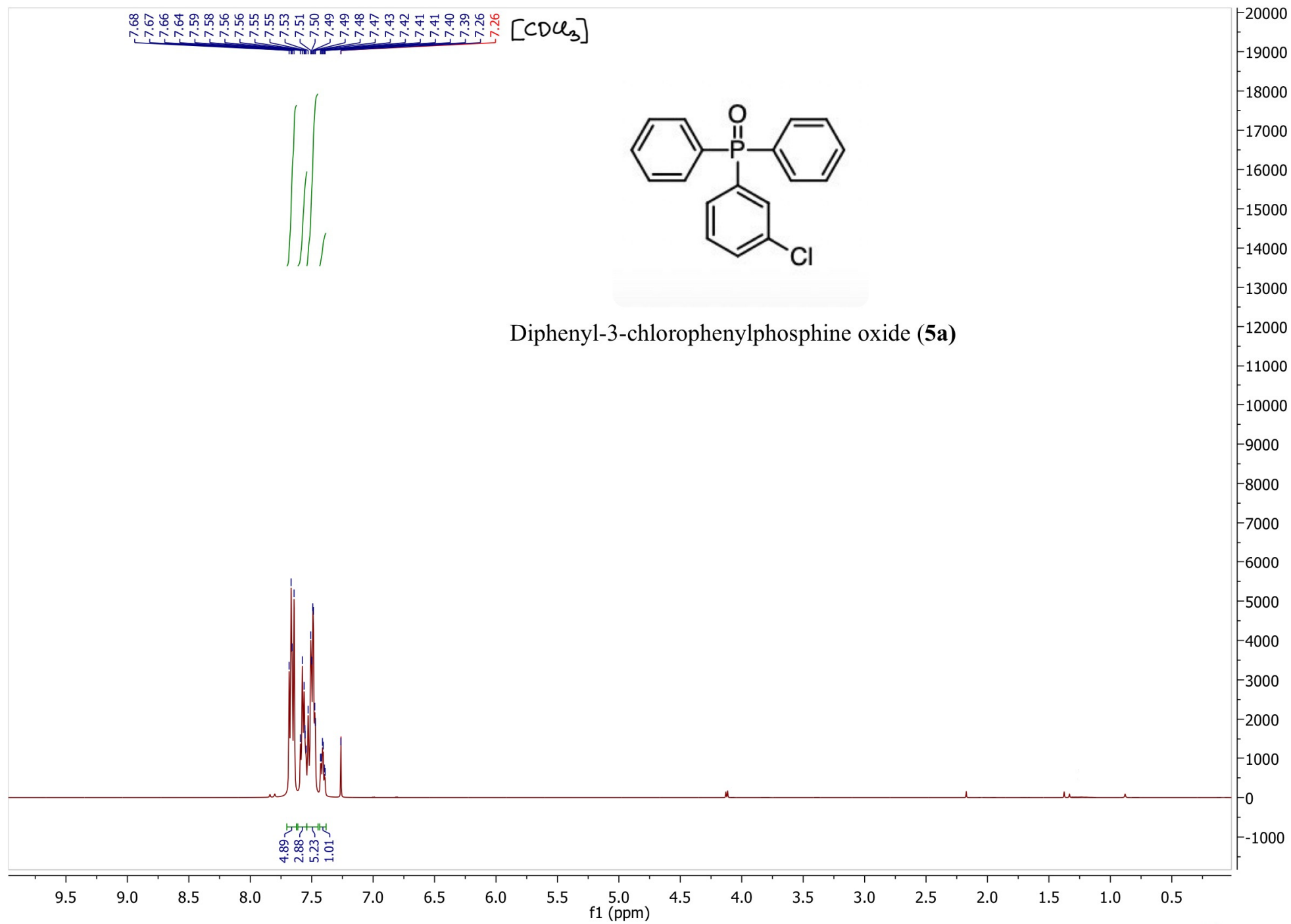


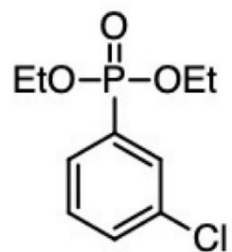
Diphenyl-3-chlorophenylphosphine oxide (**5a**)



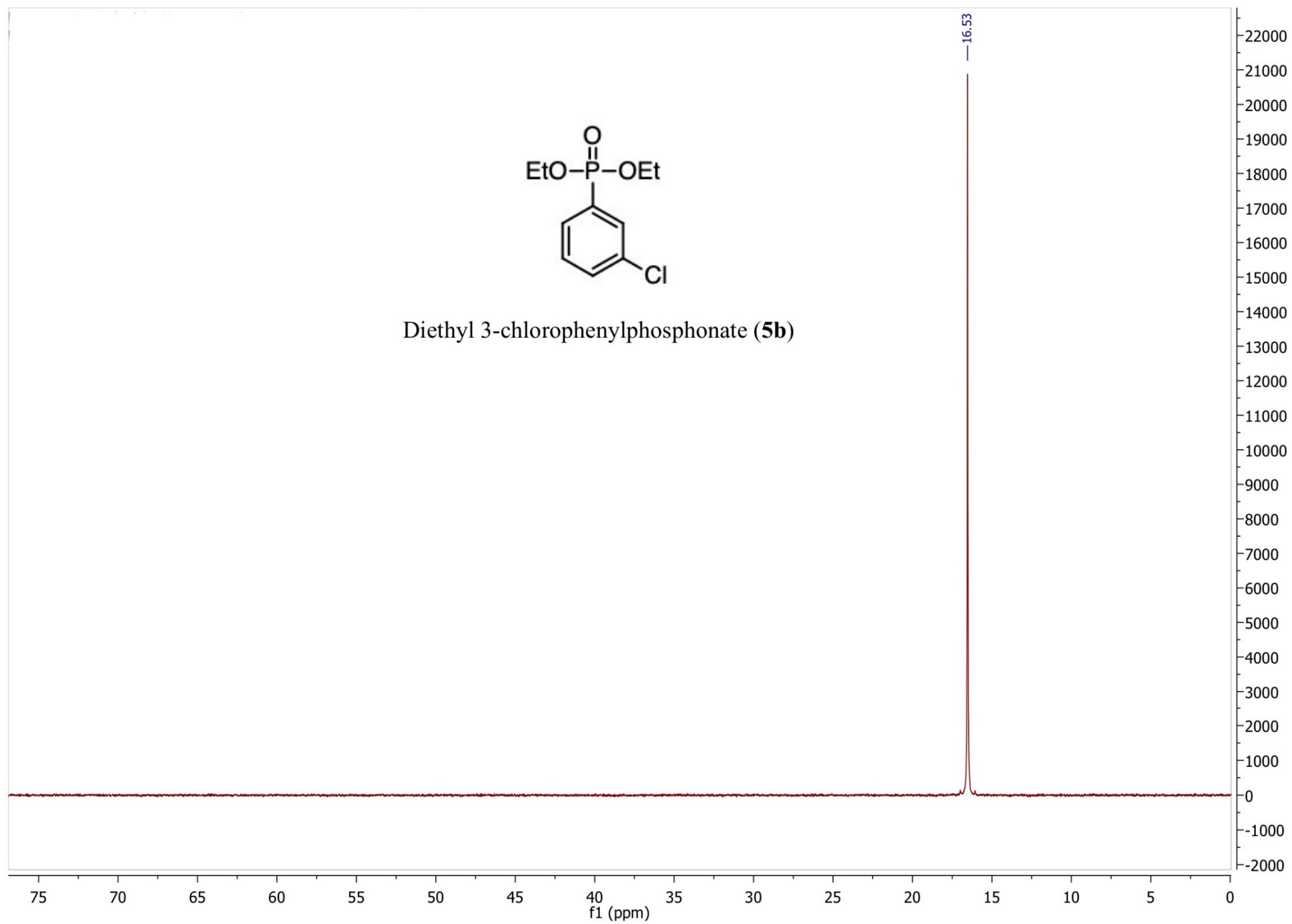


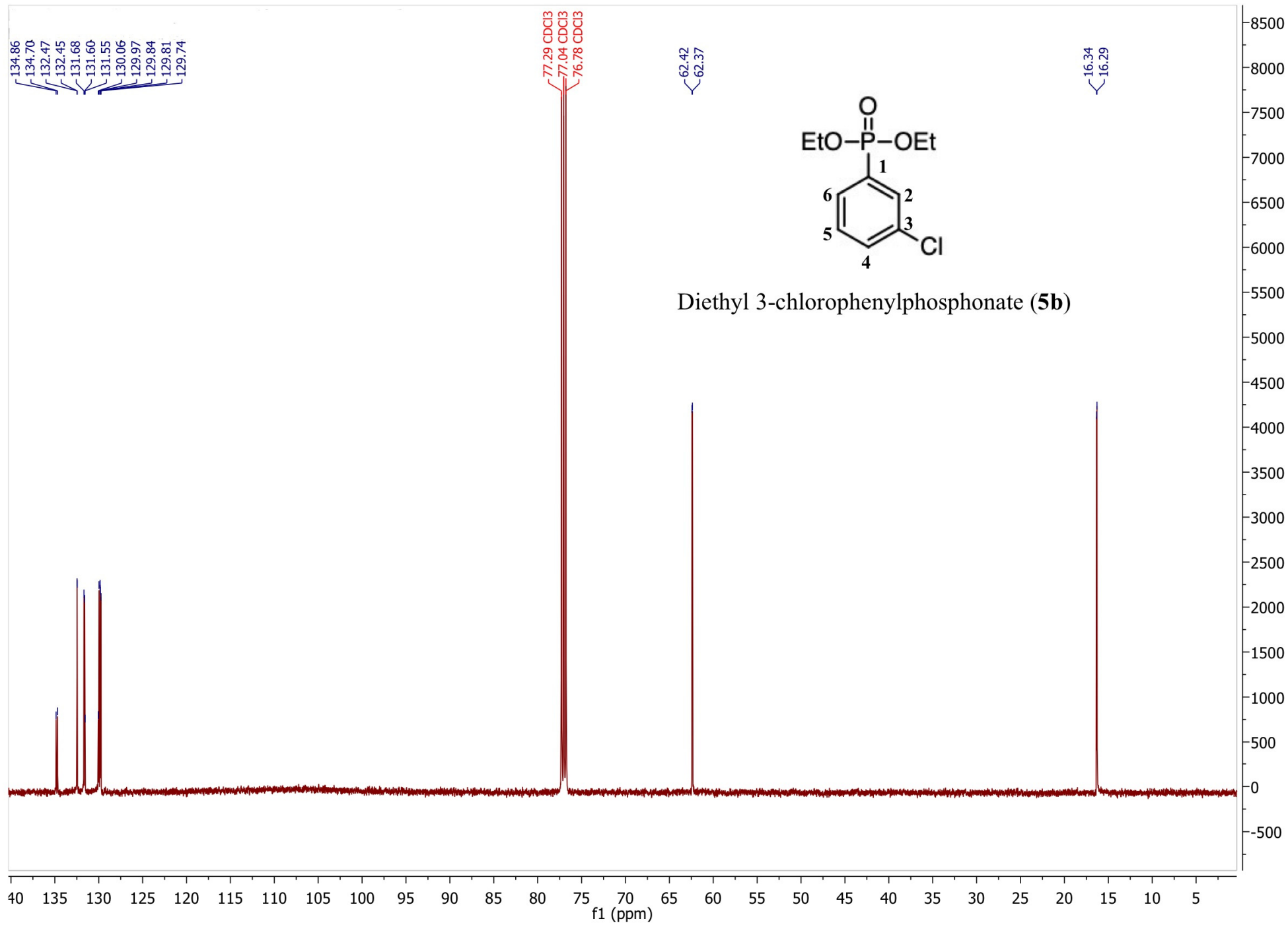


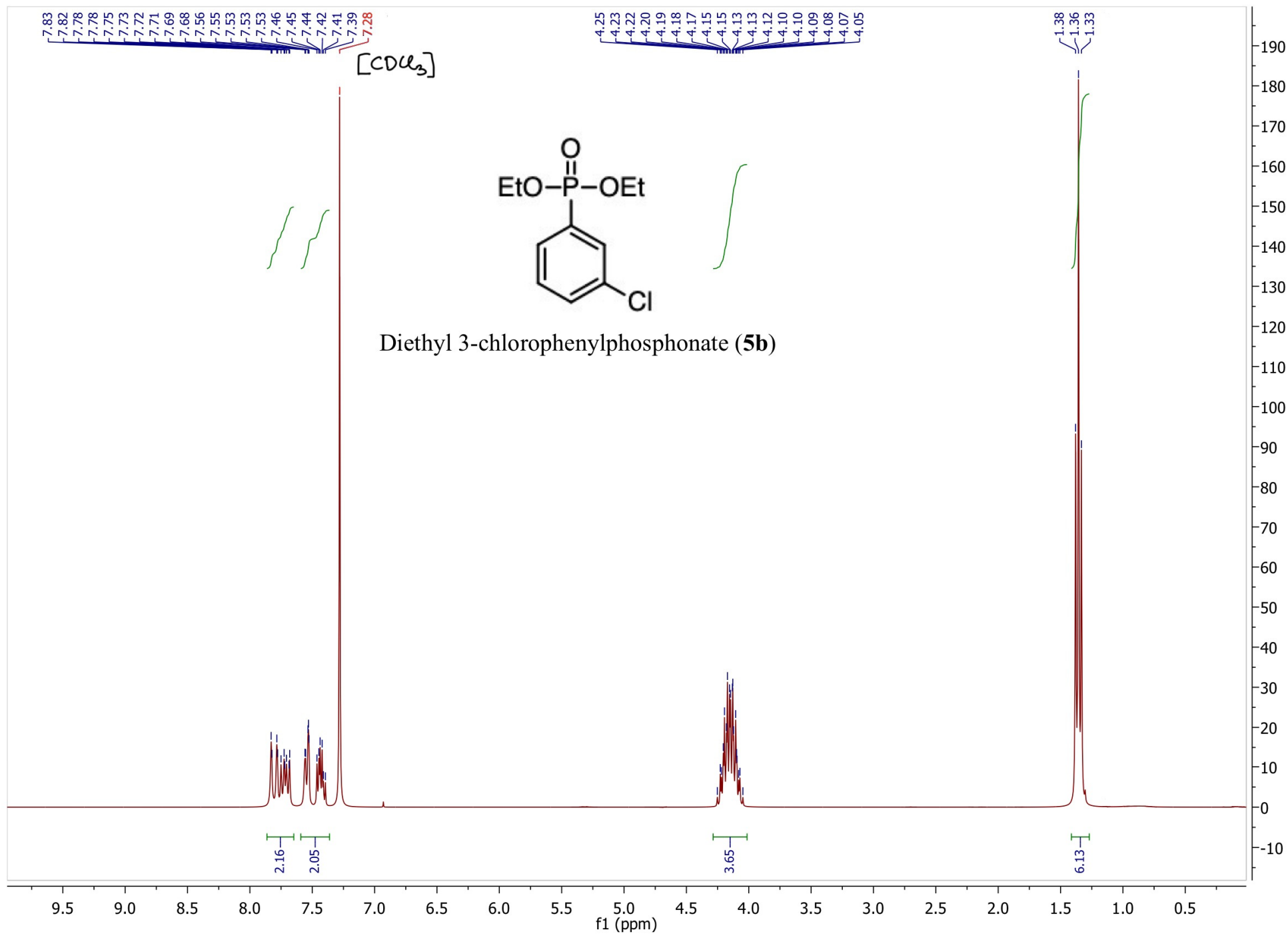


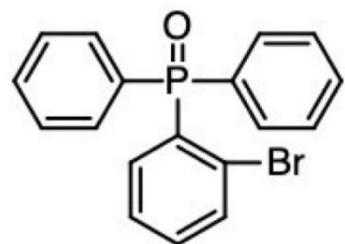


Diethyl 3-chlorophenylphosphonate (**5b**)

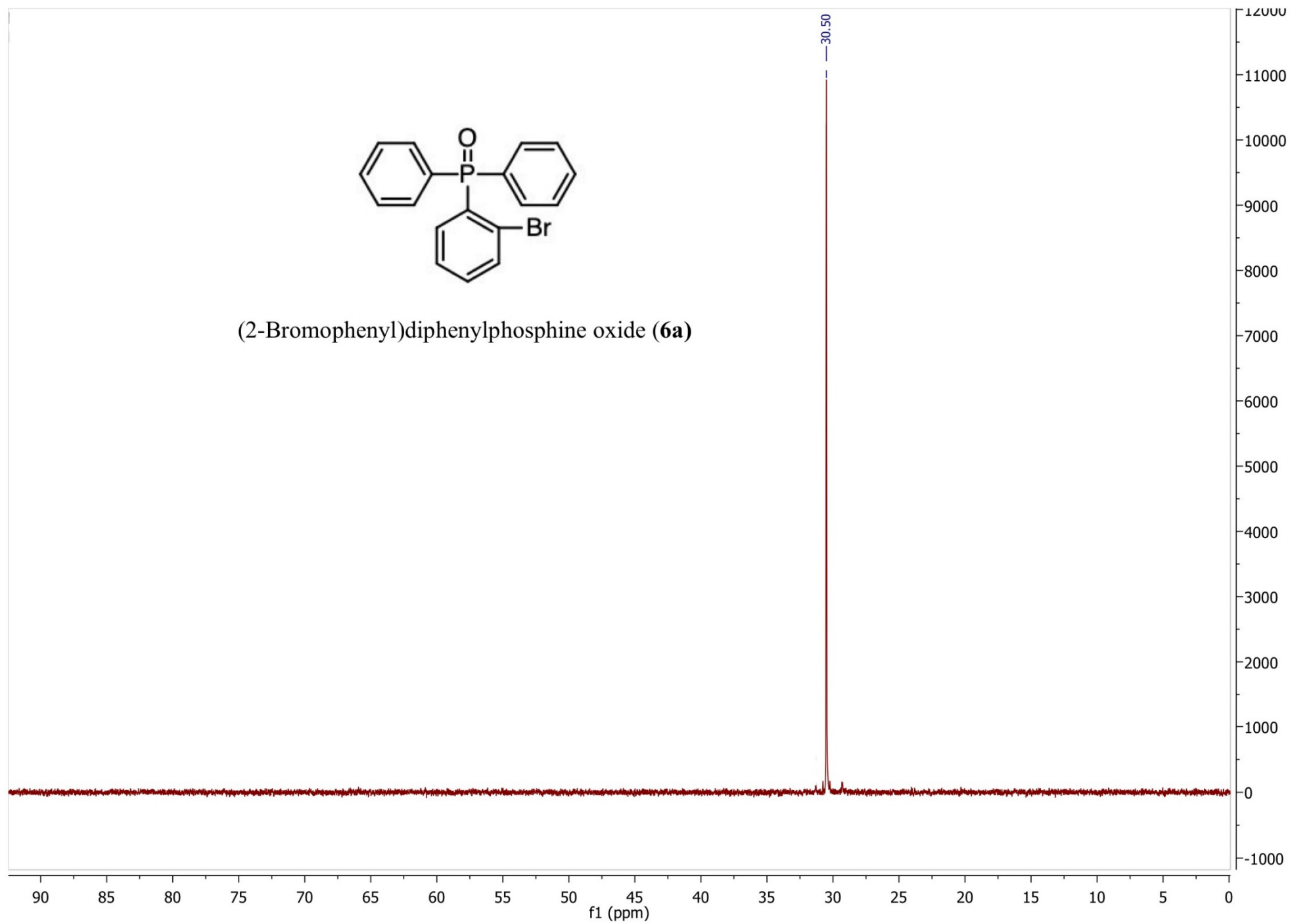


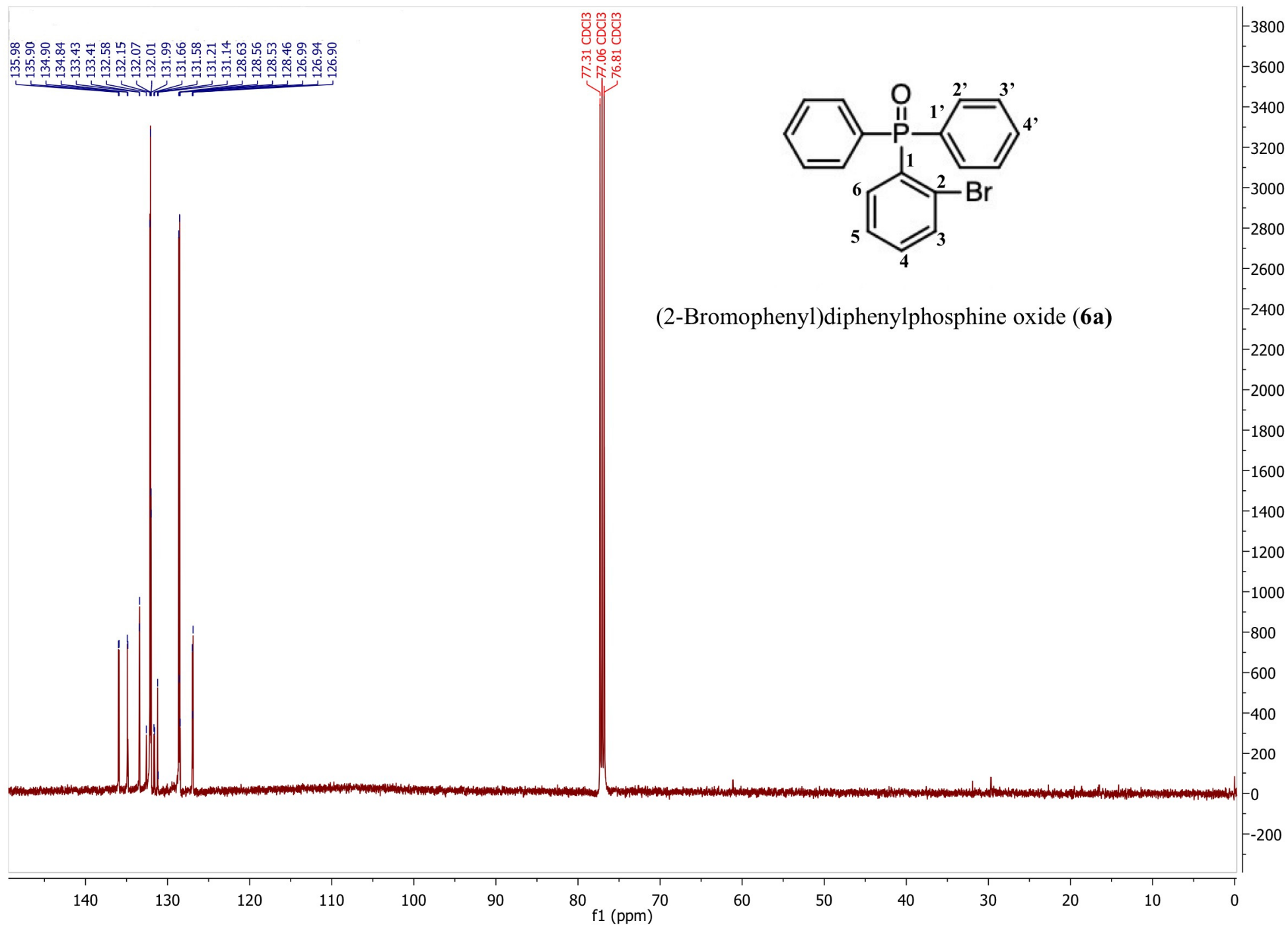


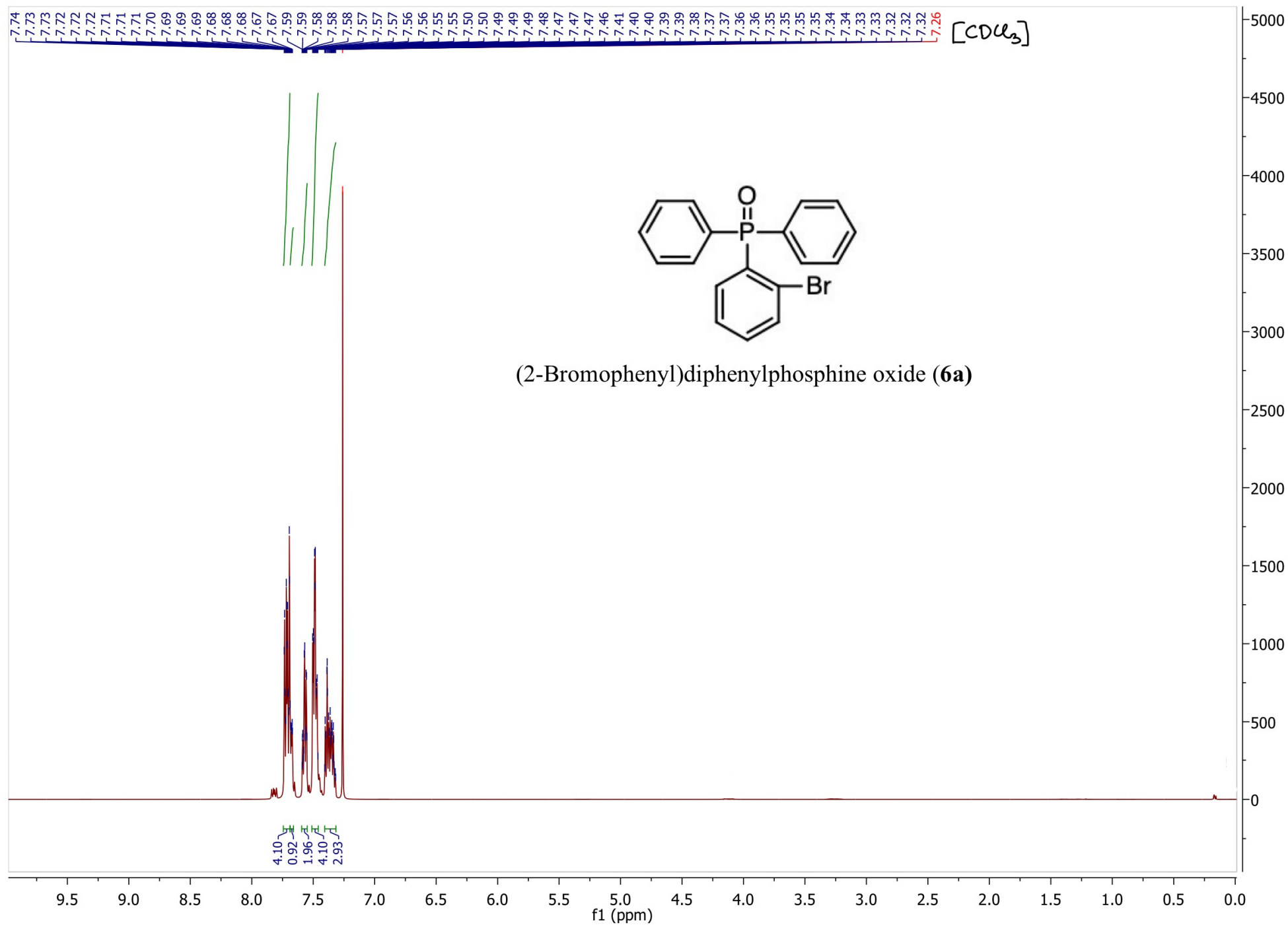




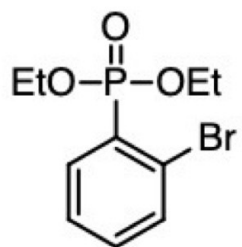
(2-Bromophenyl)diphenylphosphine oxide (**6a**)



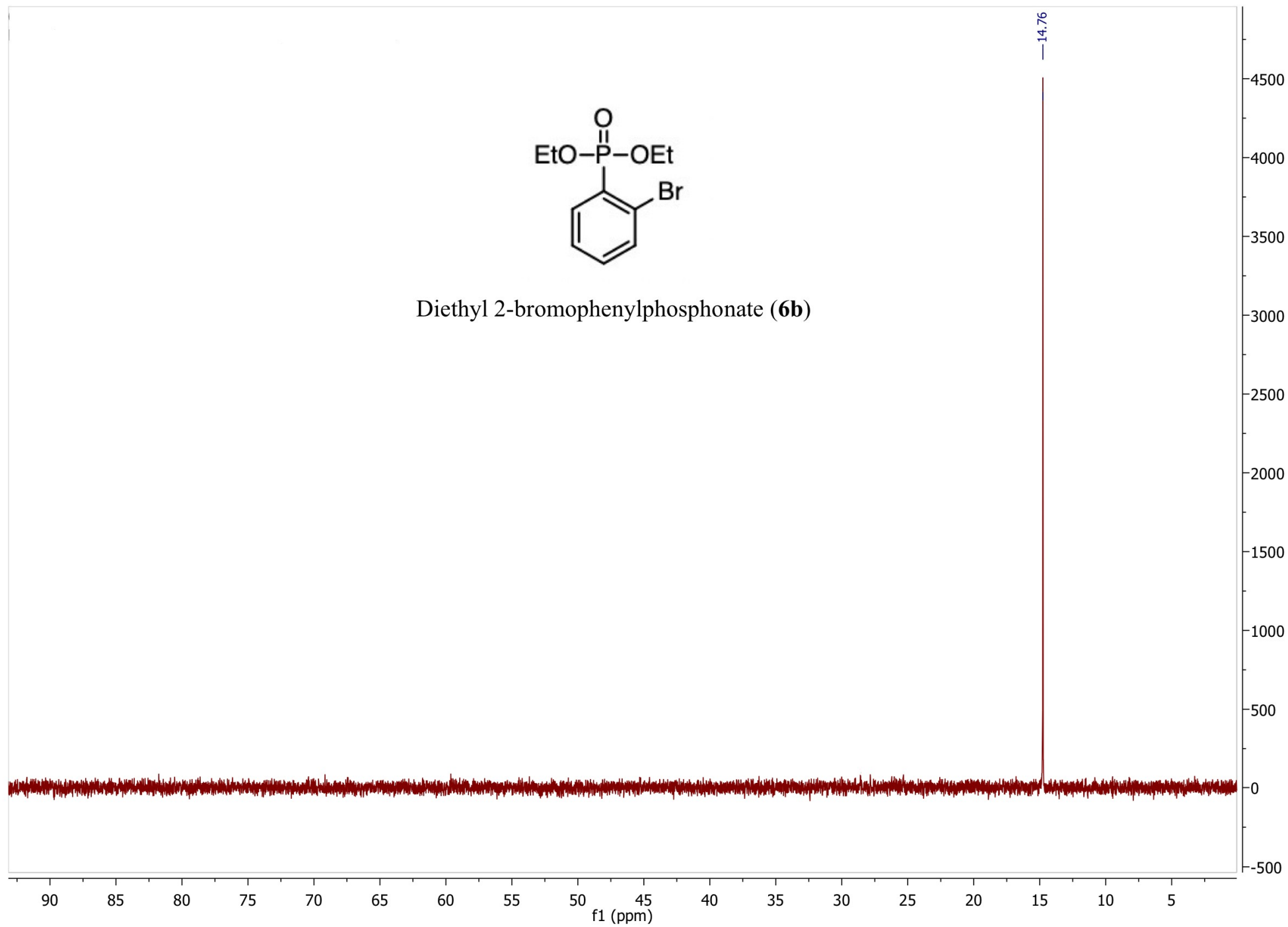


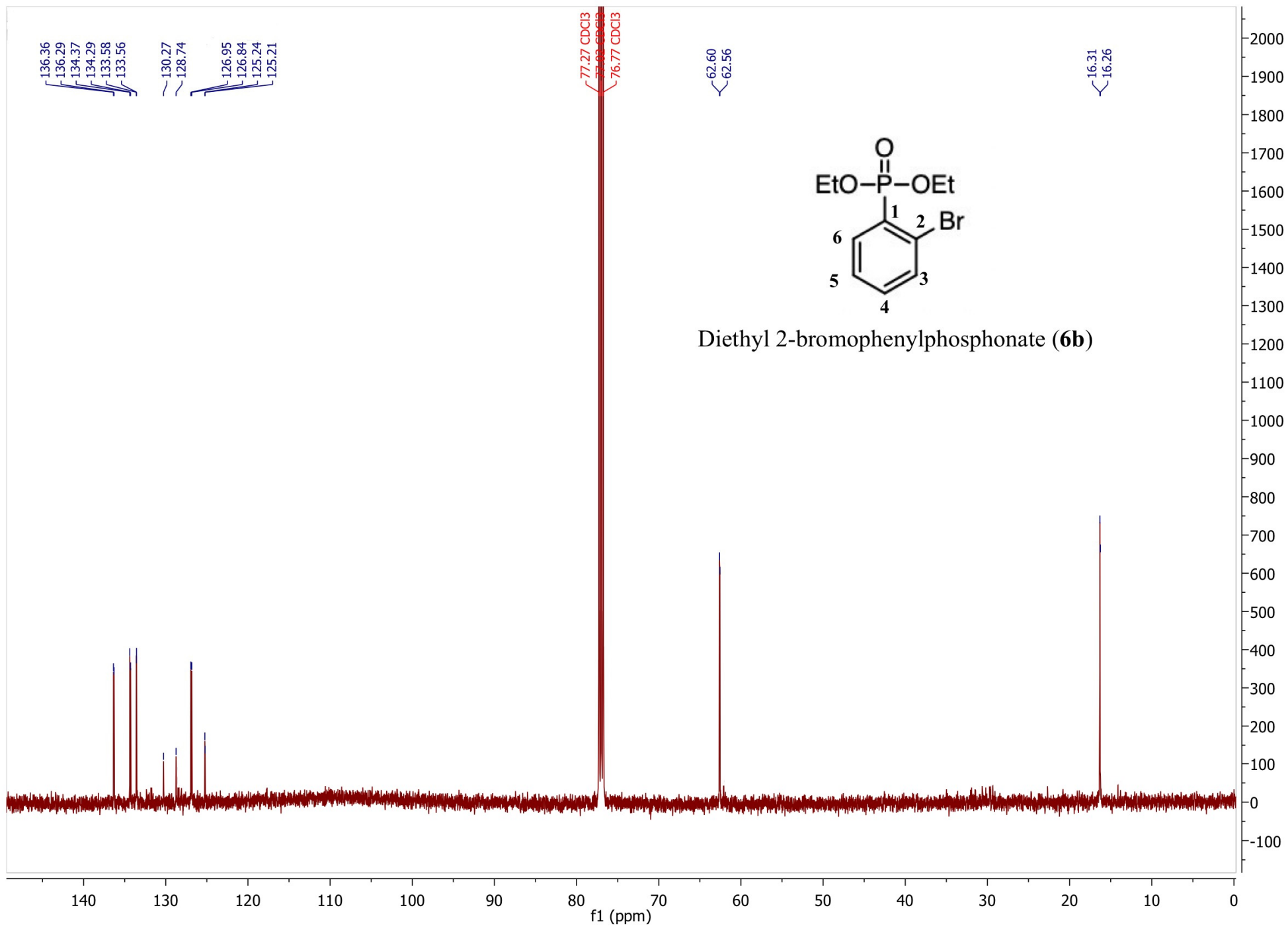


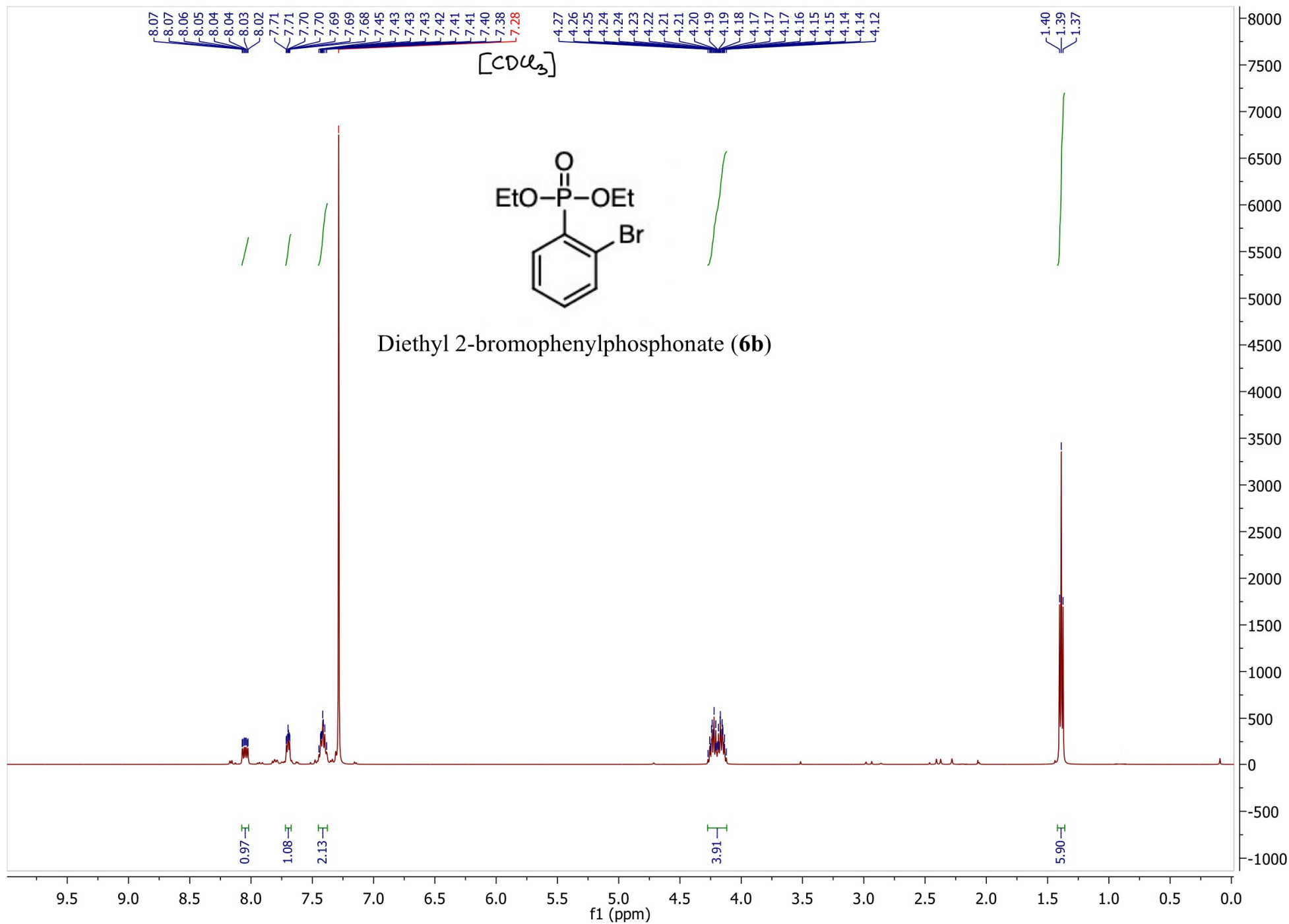


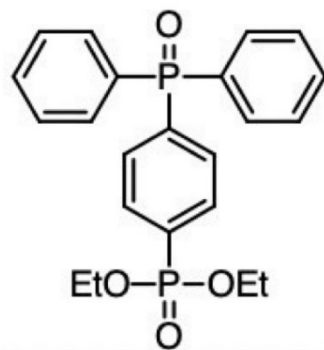


Diethyl 2-bromophenylphosphonate (**6b**)

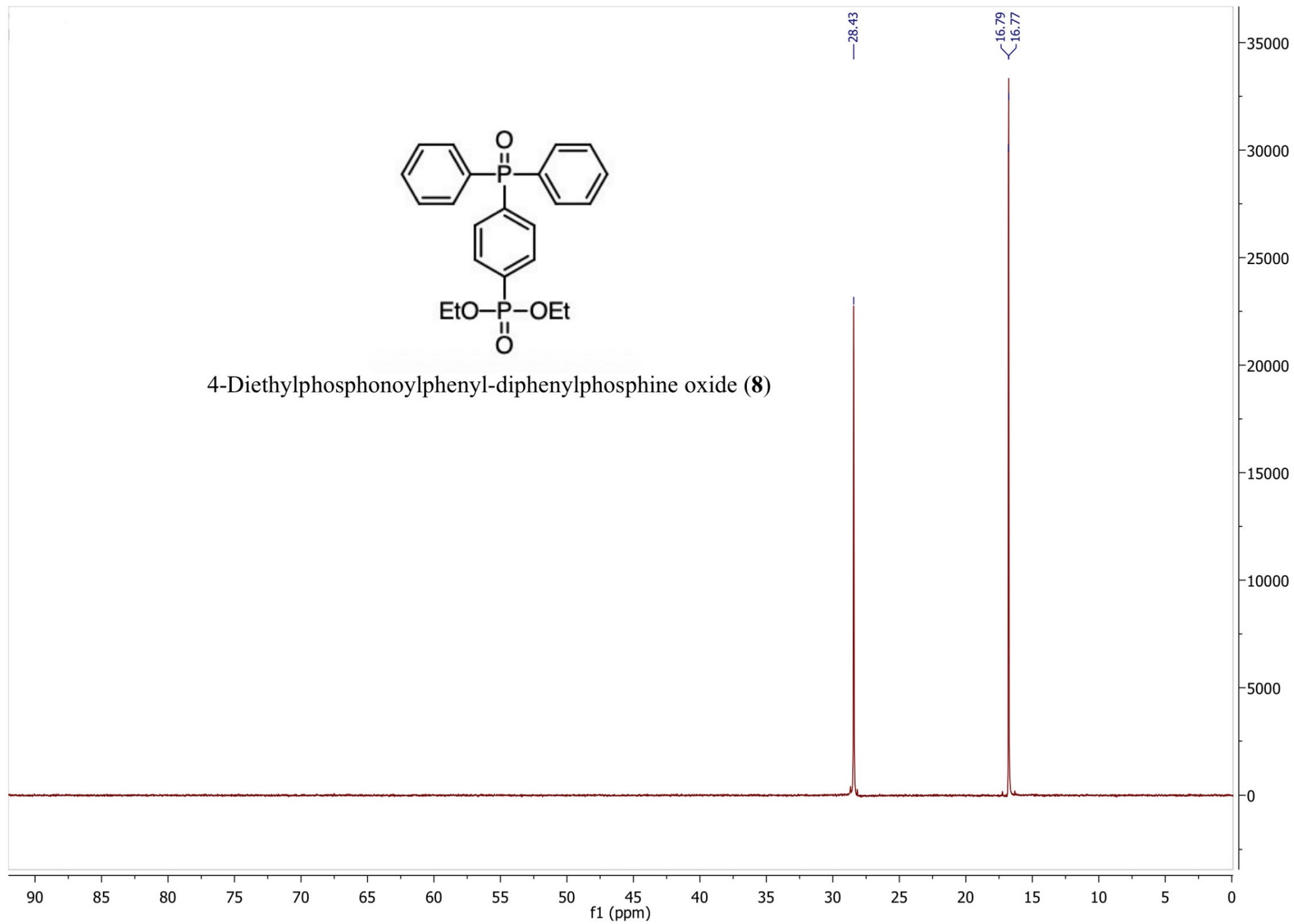


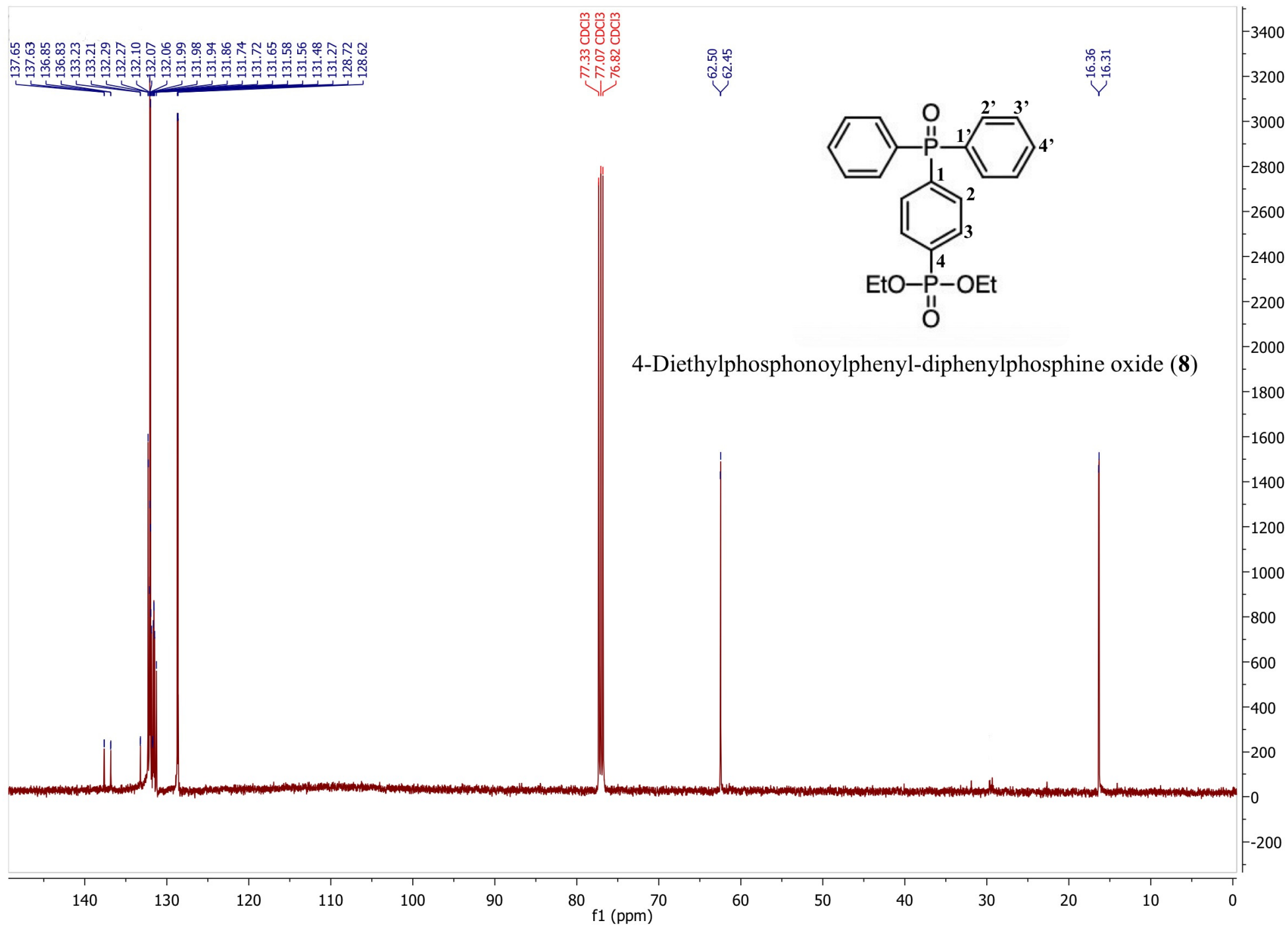


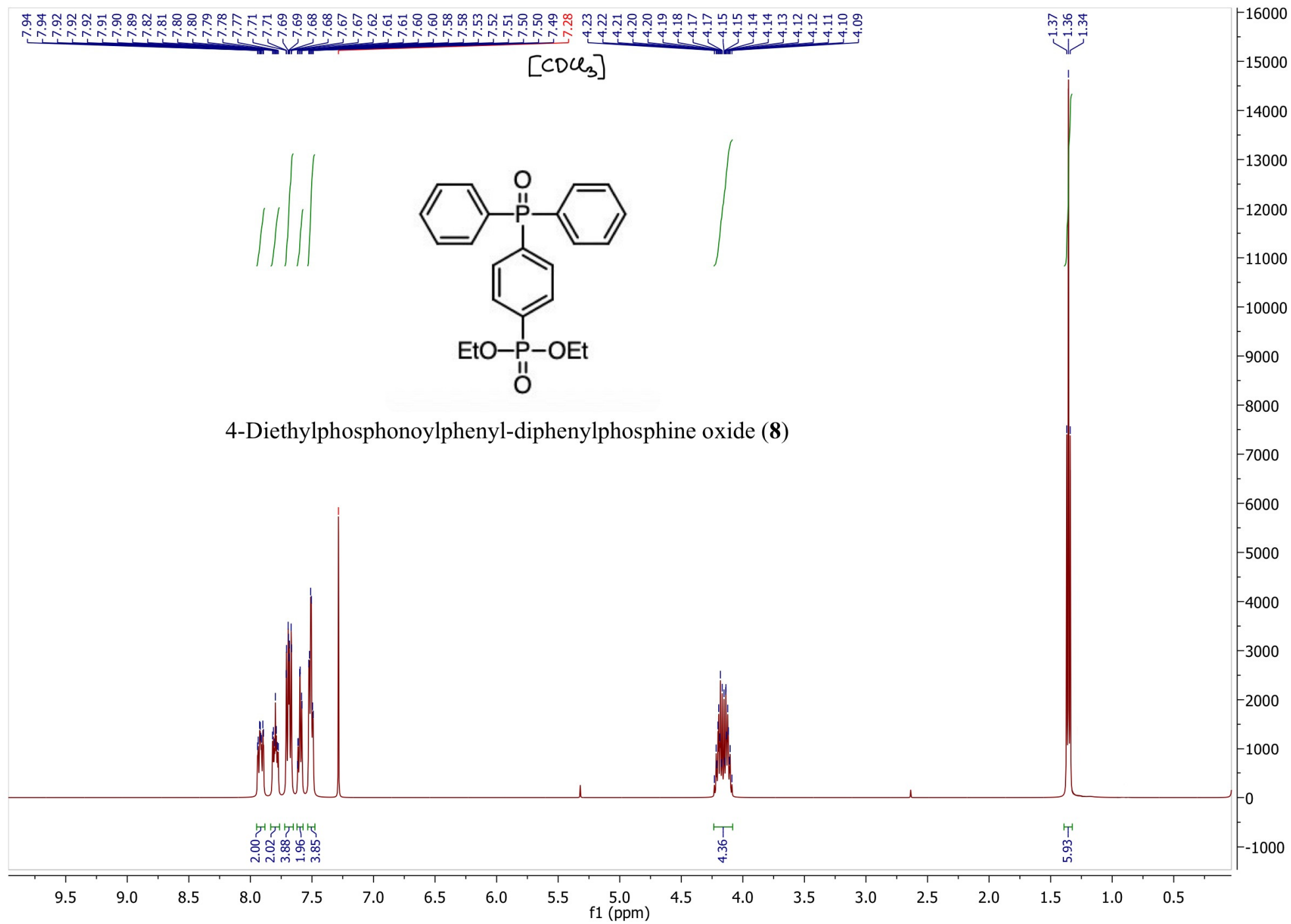
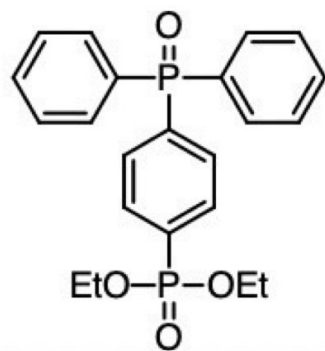


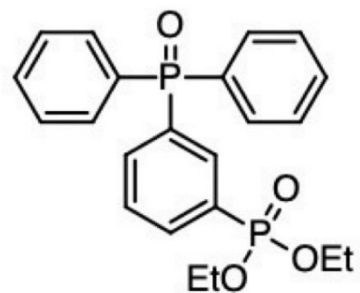


4-Diethylphosphonoylphenyl-diphenylphosphine oxide (**8**)





4-Diethylphosphonoylphenyl-diphenylphosphine oxide (**8**)



3-Diethylphosphonoylphenyl-diphenylphosphine oxide (**9**)

