

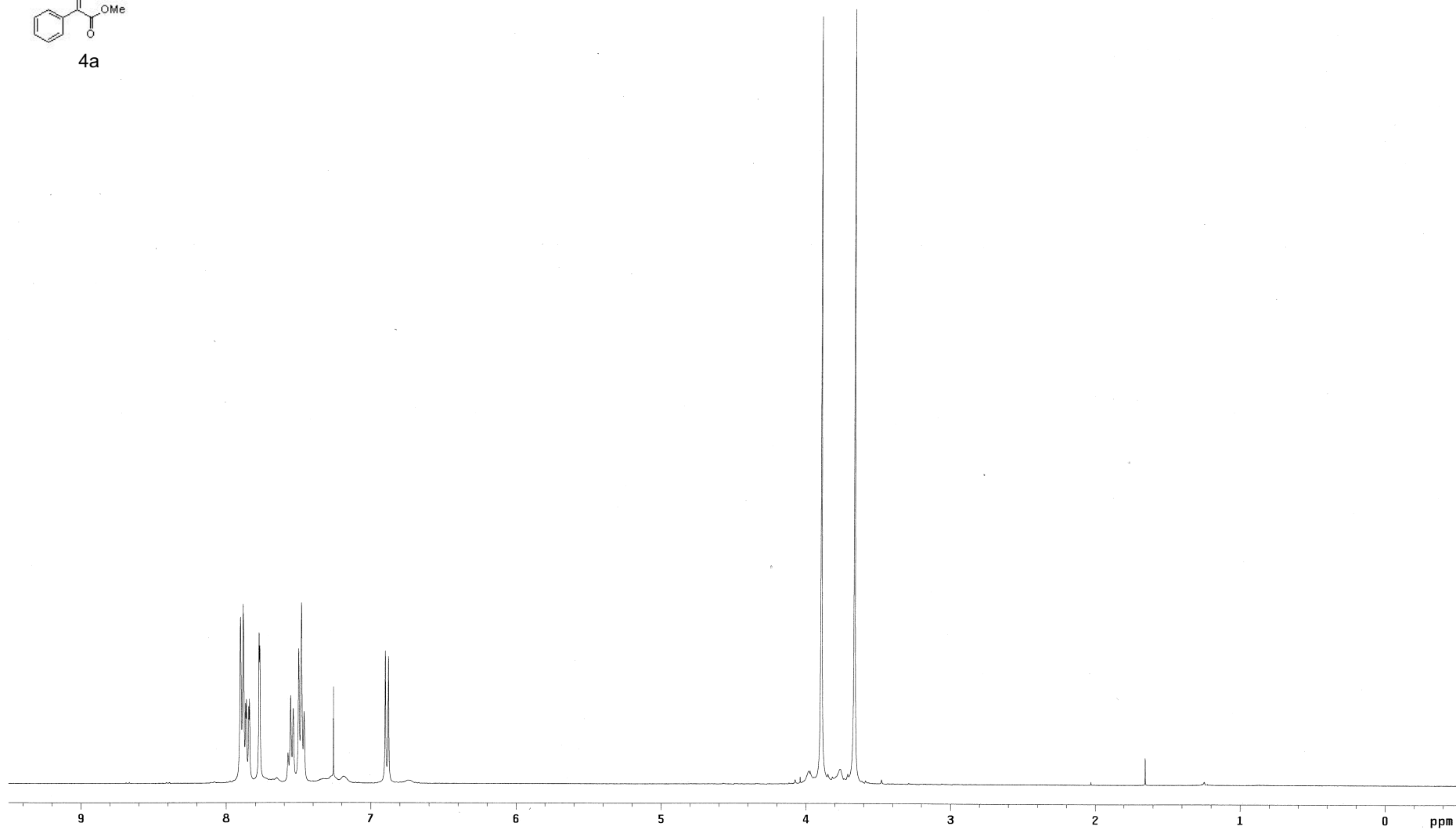
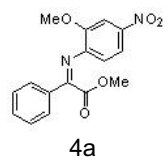
**Ag-Catalyzed Diastereo- and Enantioselective Vinylogous
Mannich Reactions of α -Ketoimine Esters.
Development of a Method and Investigation of its Mechanism**

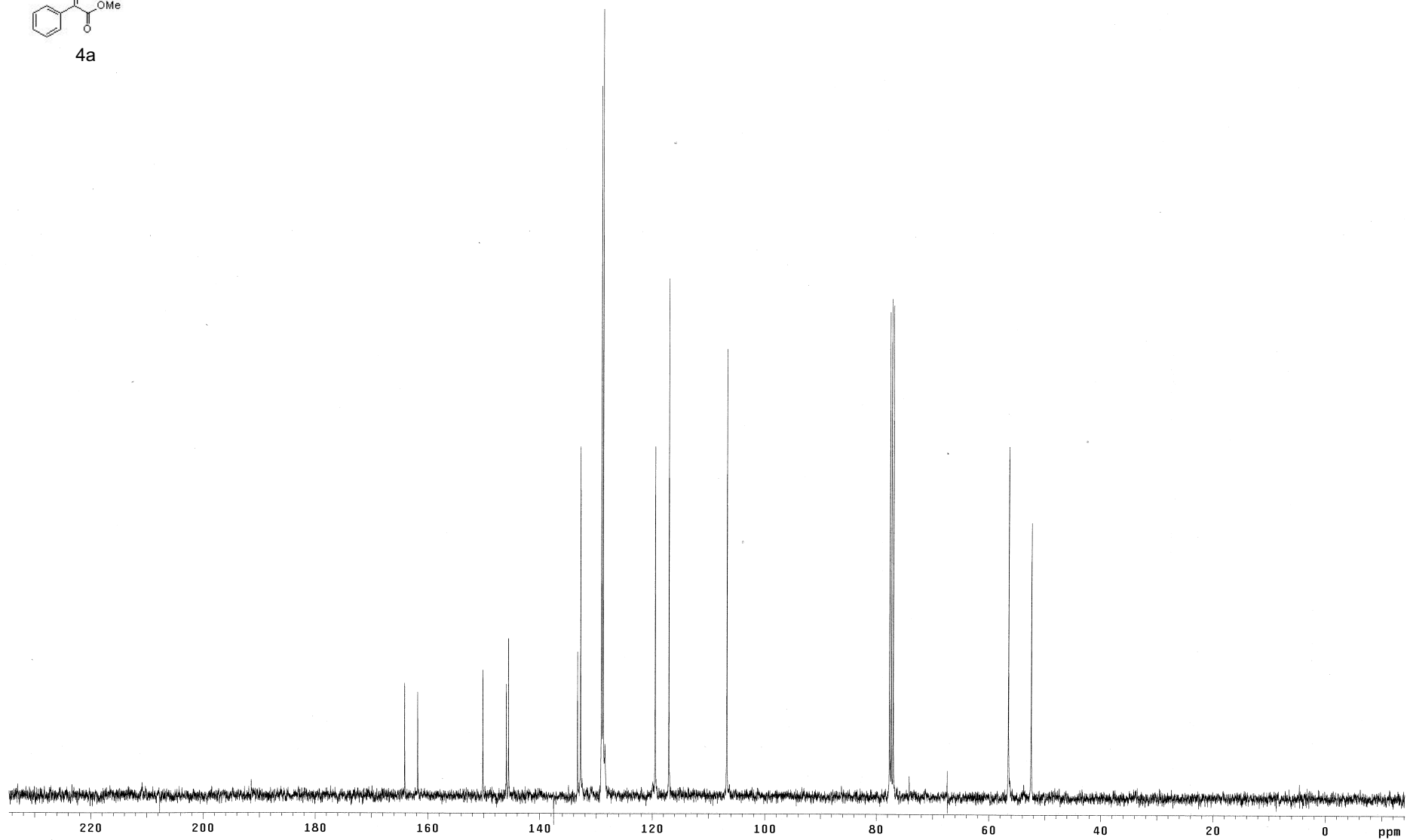
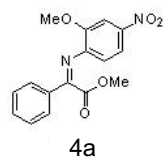
Laura C. Wieland, Erika Vieira, Marc L. Snapper*, and Amir H. Hoveyda*

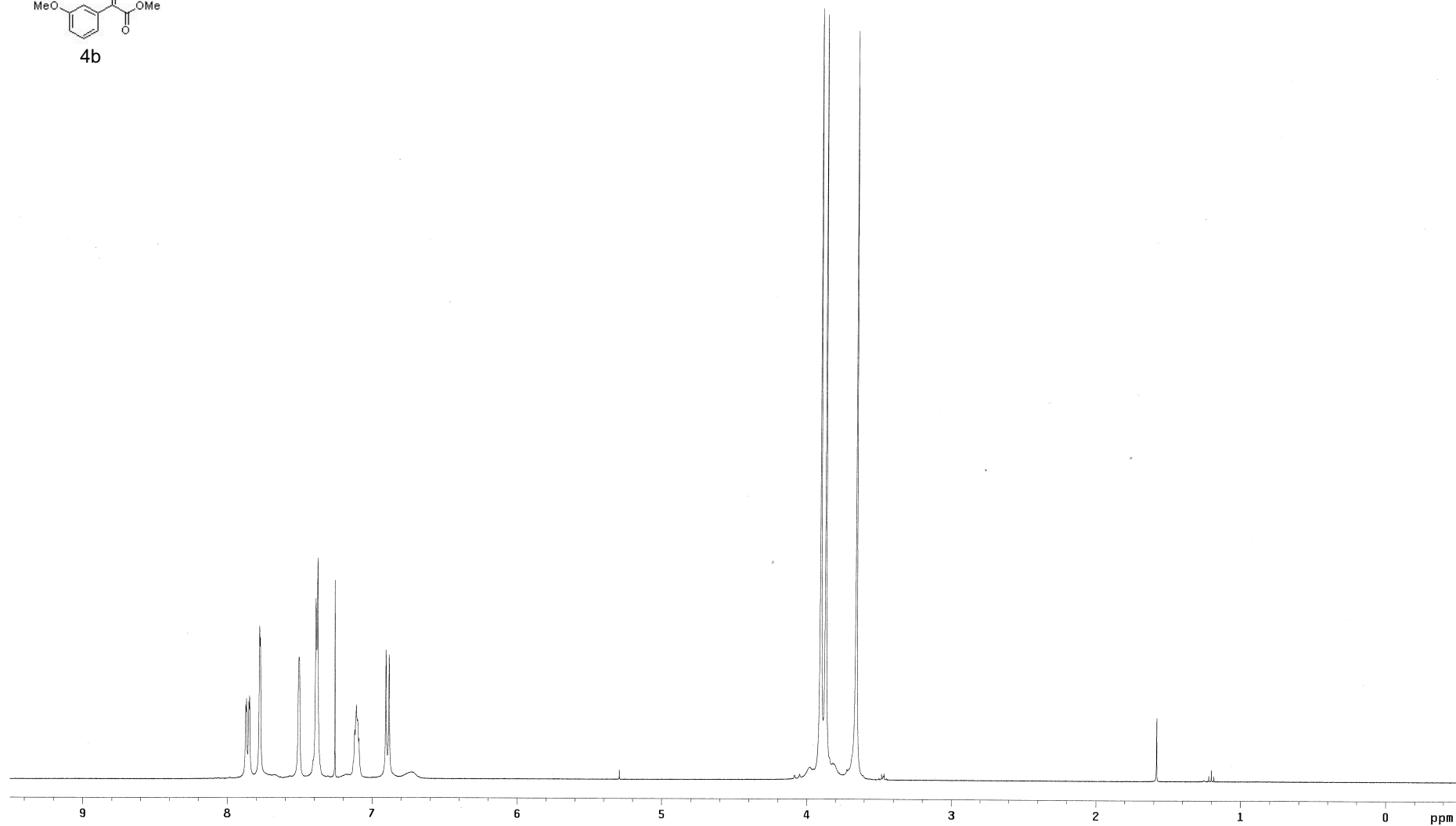
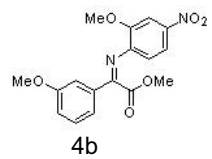
Department of Chemistry, Merkert Chemistry Center, Boston College, Chestnut Hill, Massachusetts 02467

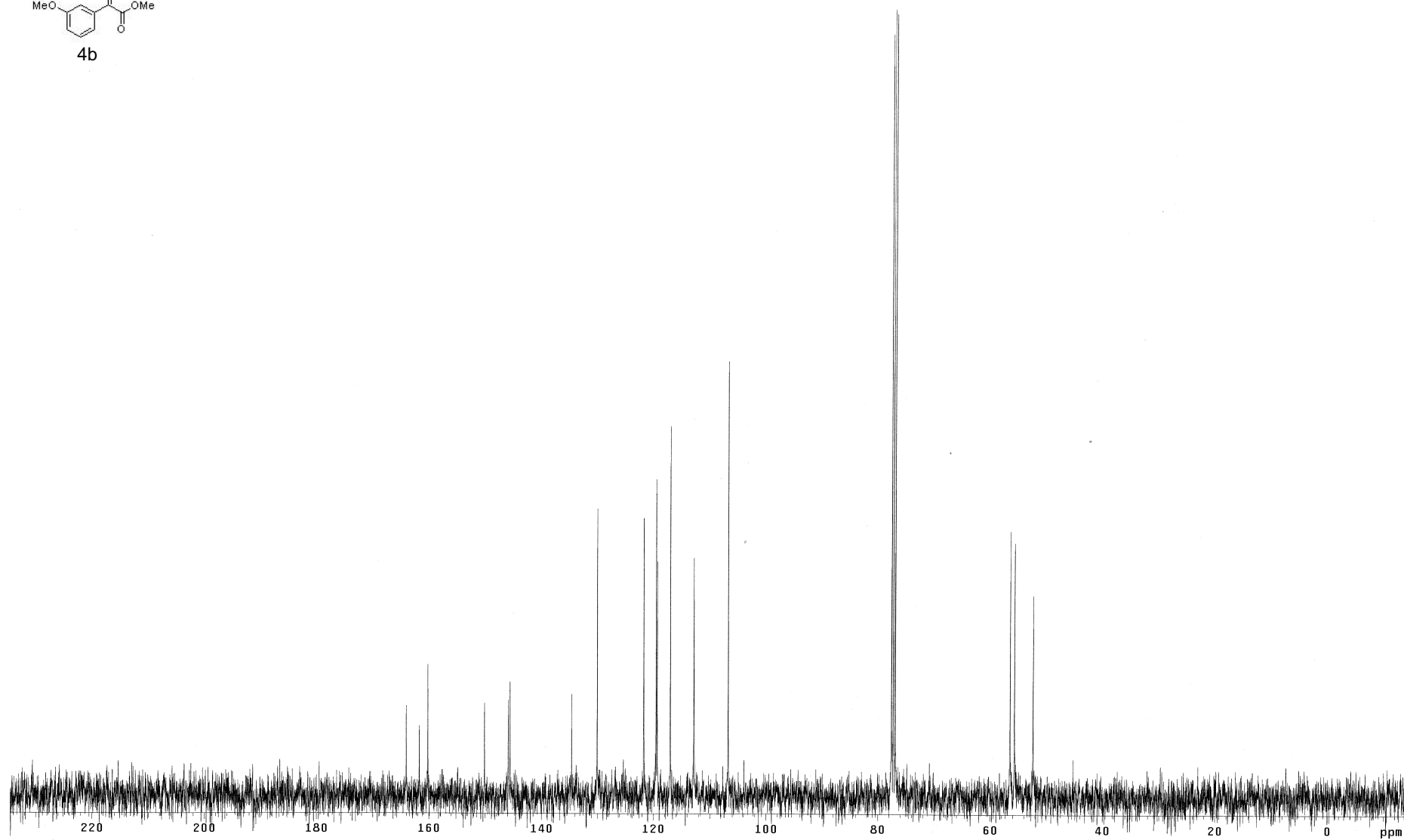
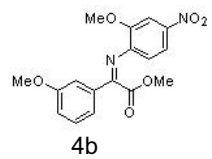
SUPPORTING INFORMATION, PART 2

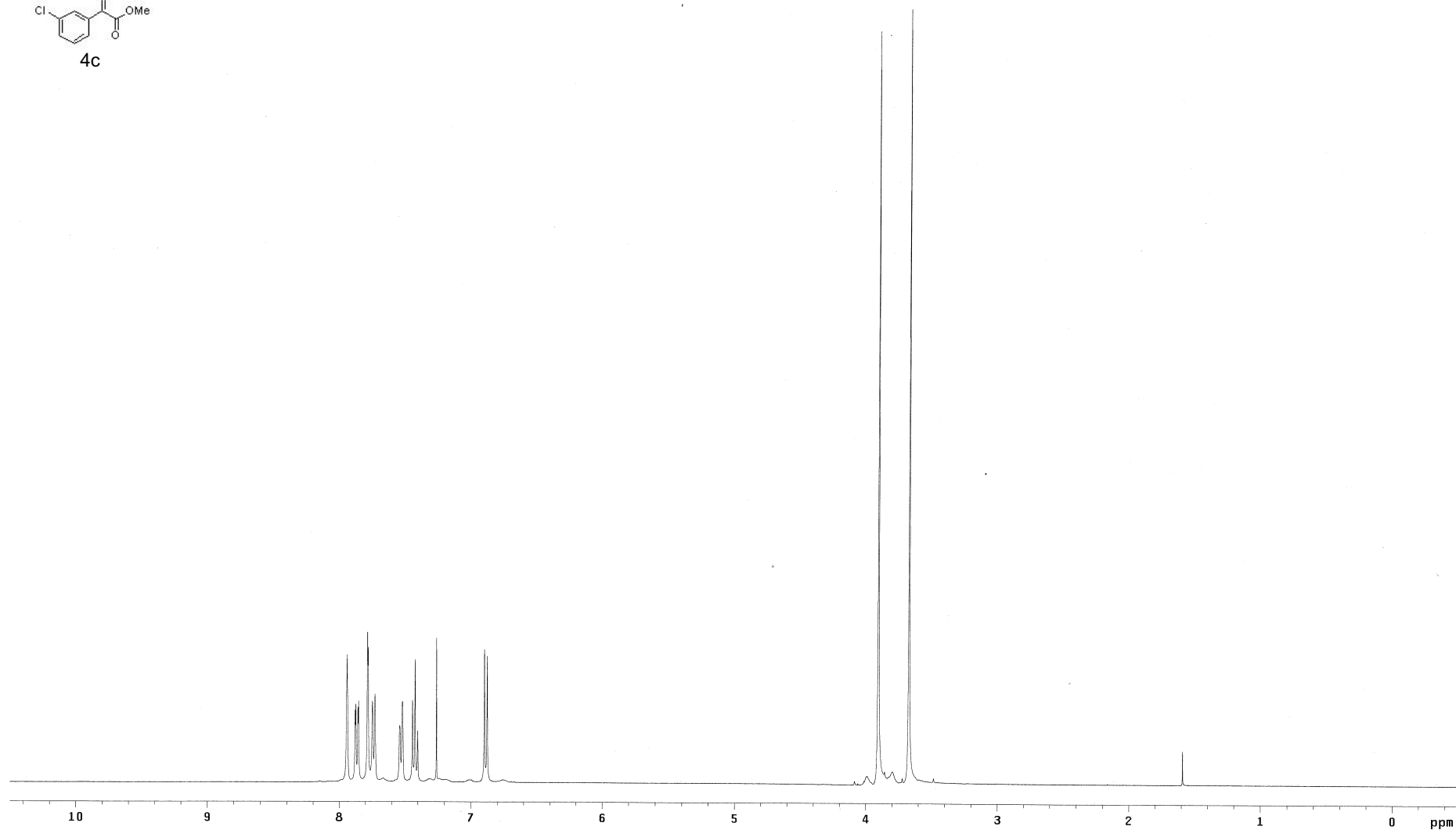
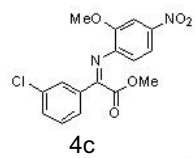
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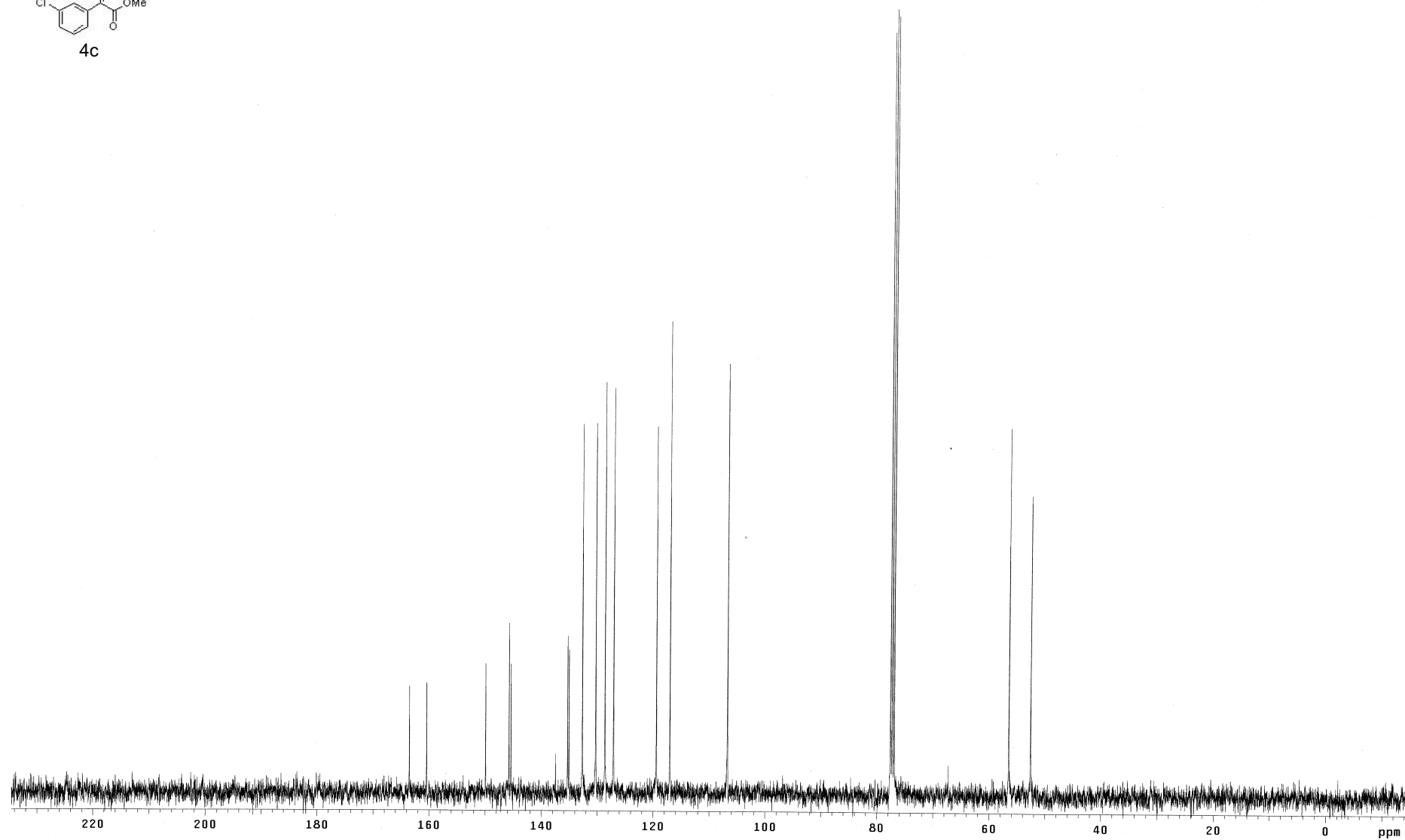
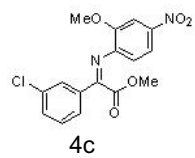


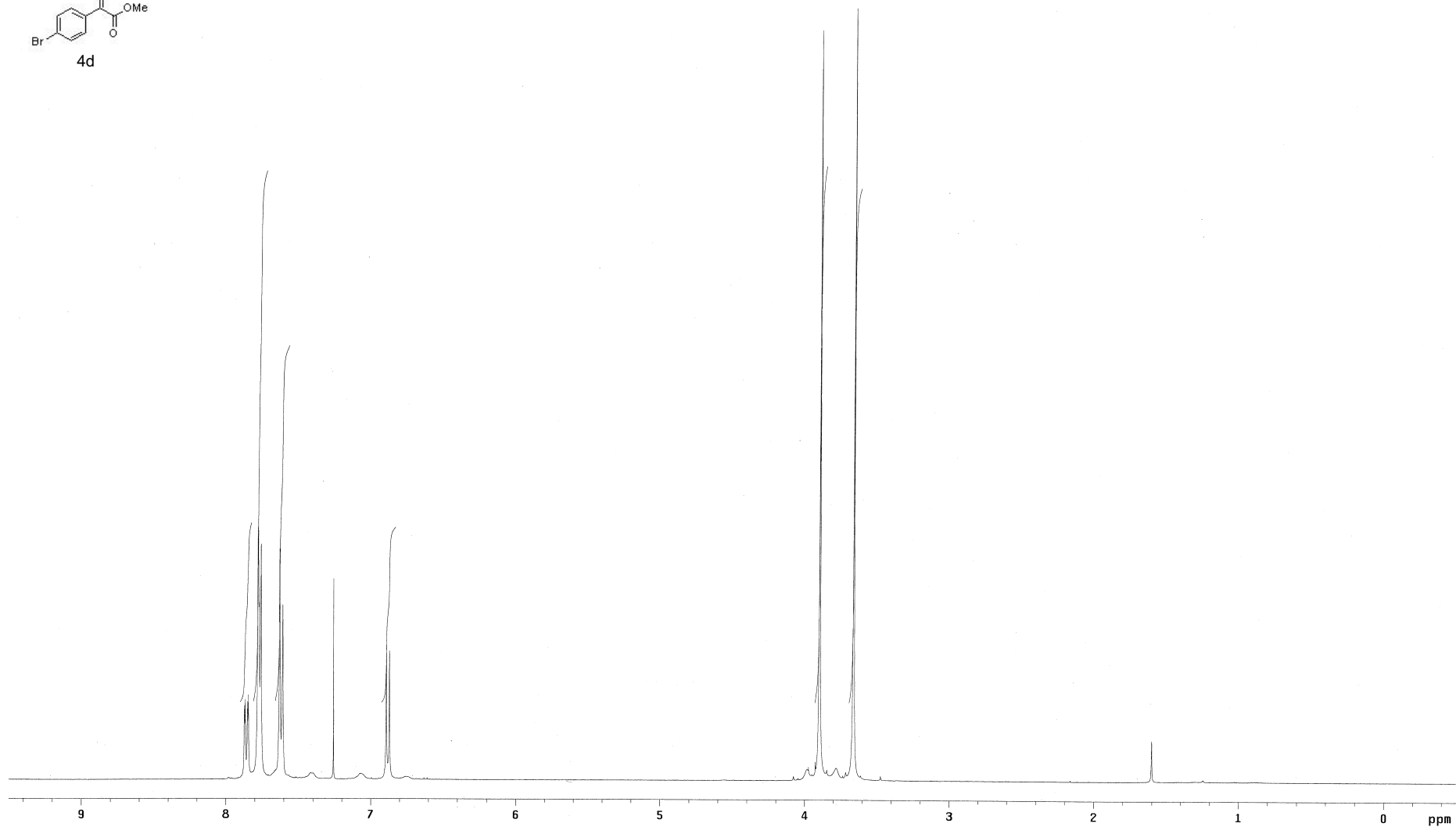
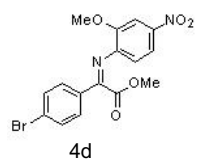


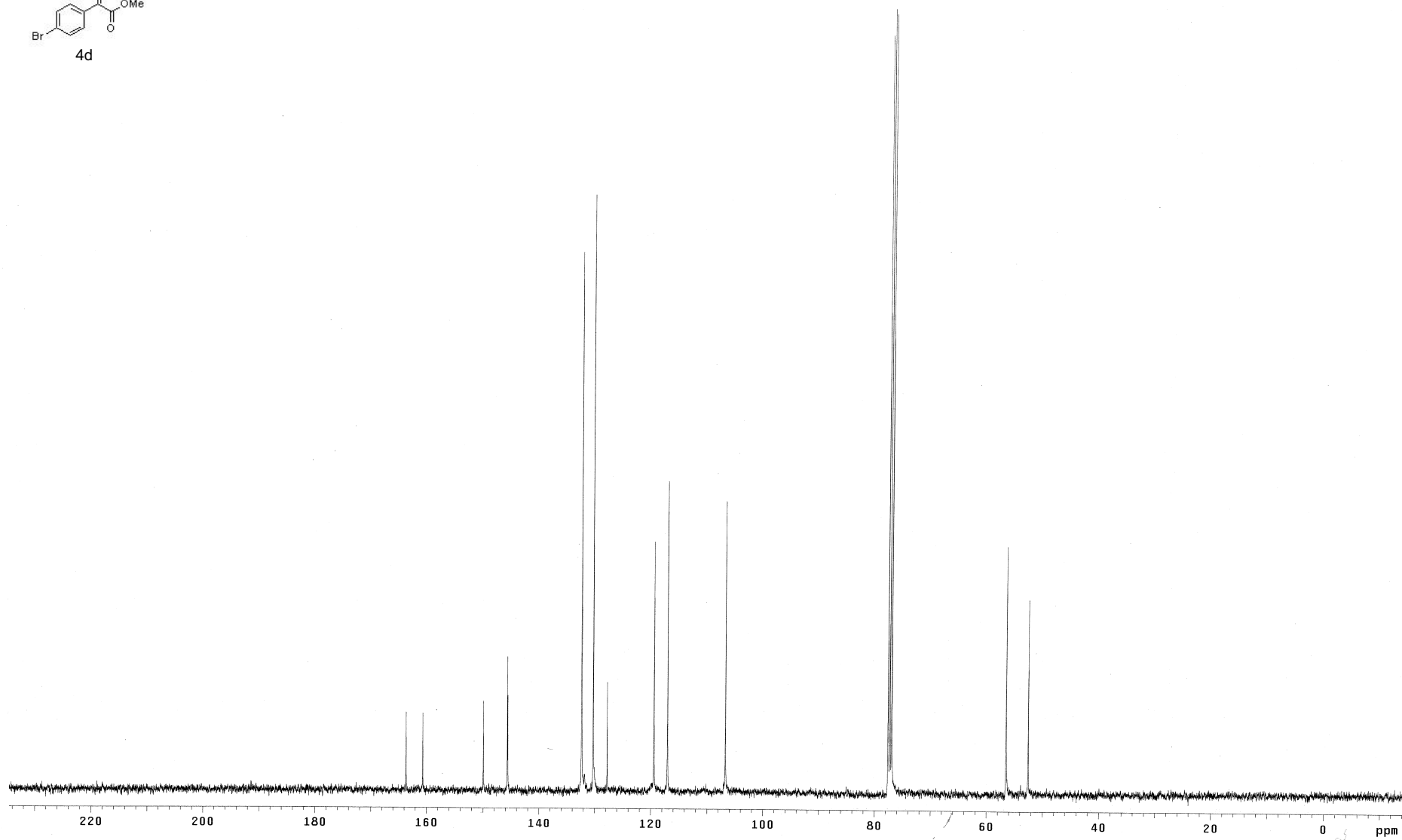
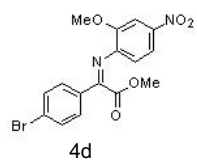


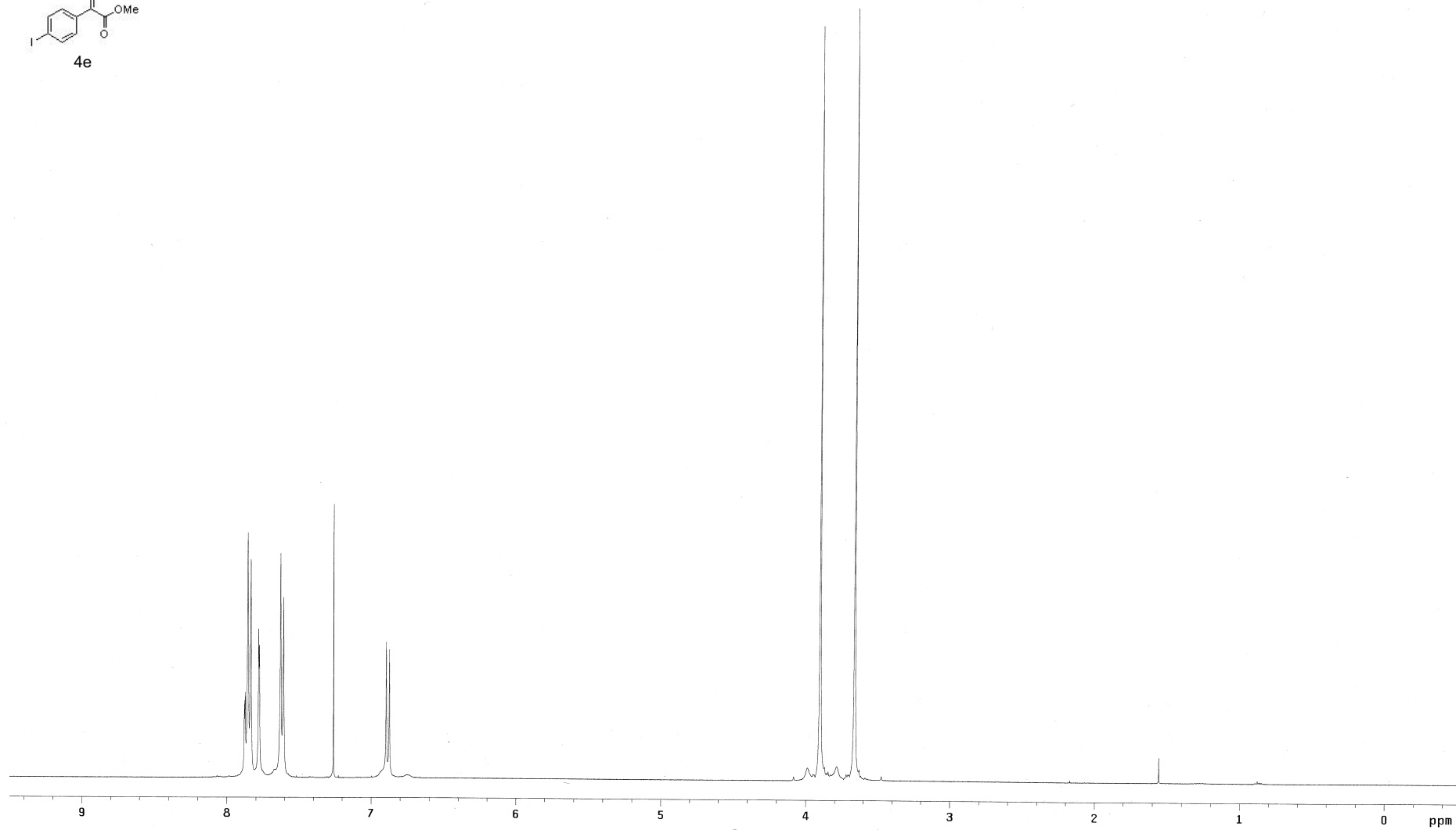
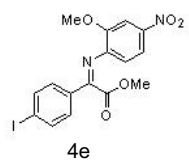


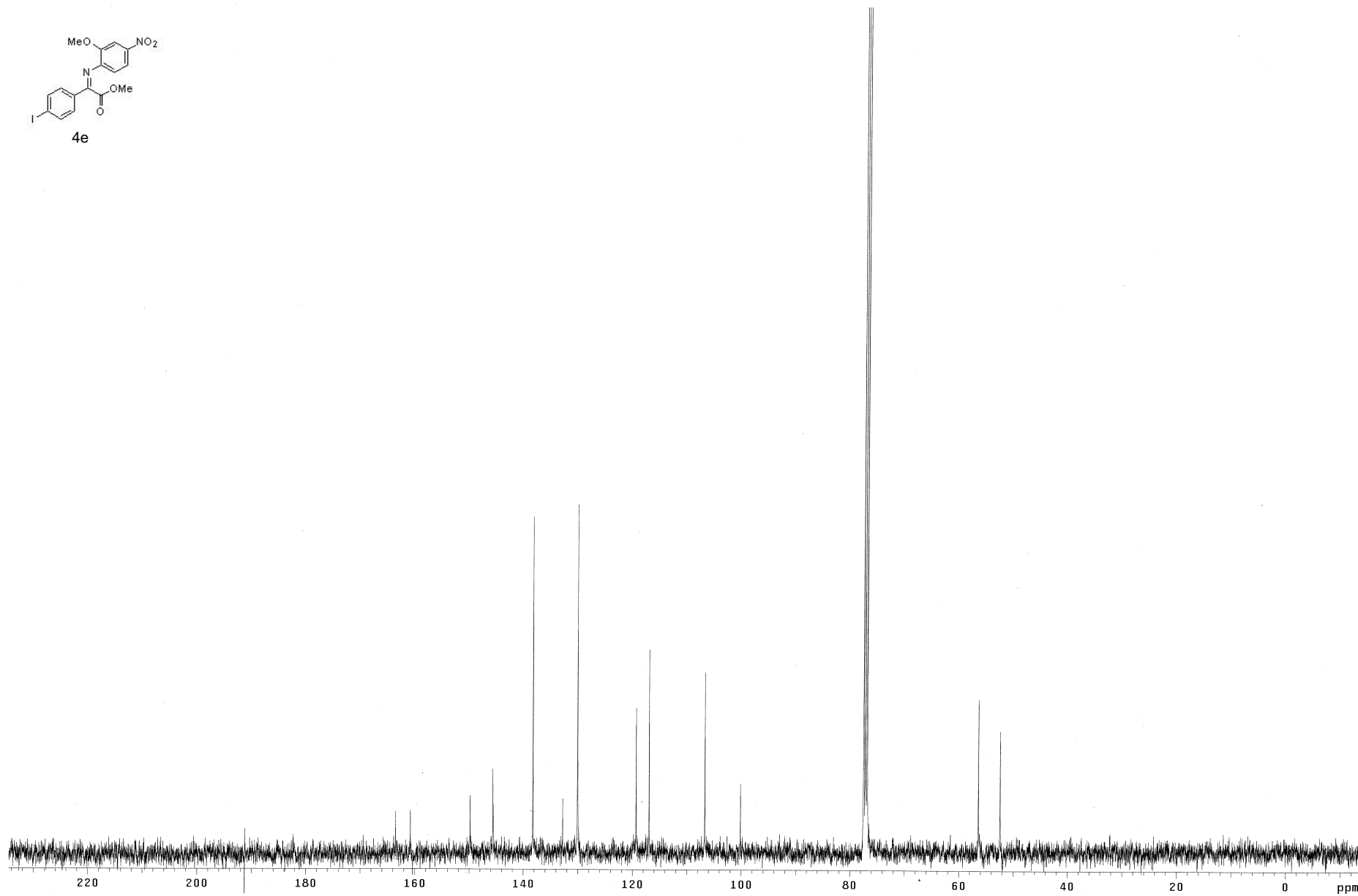
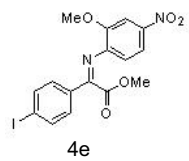


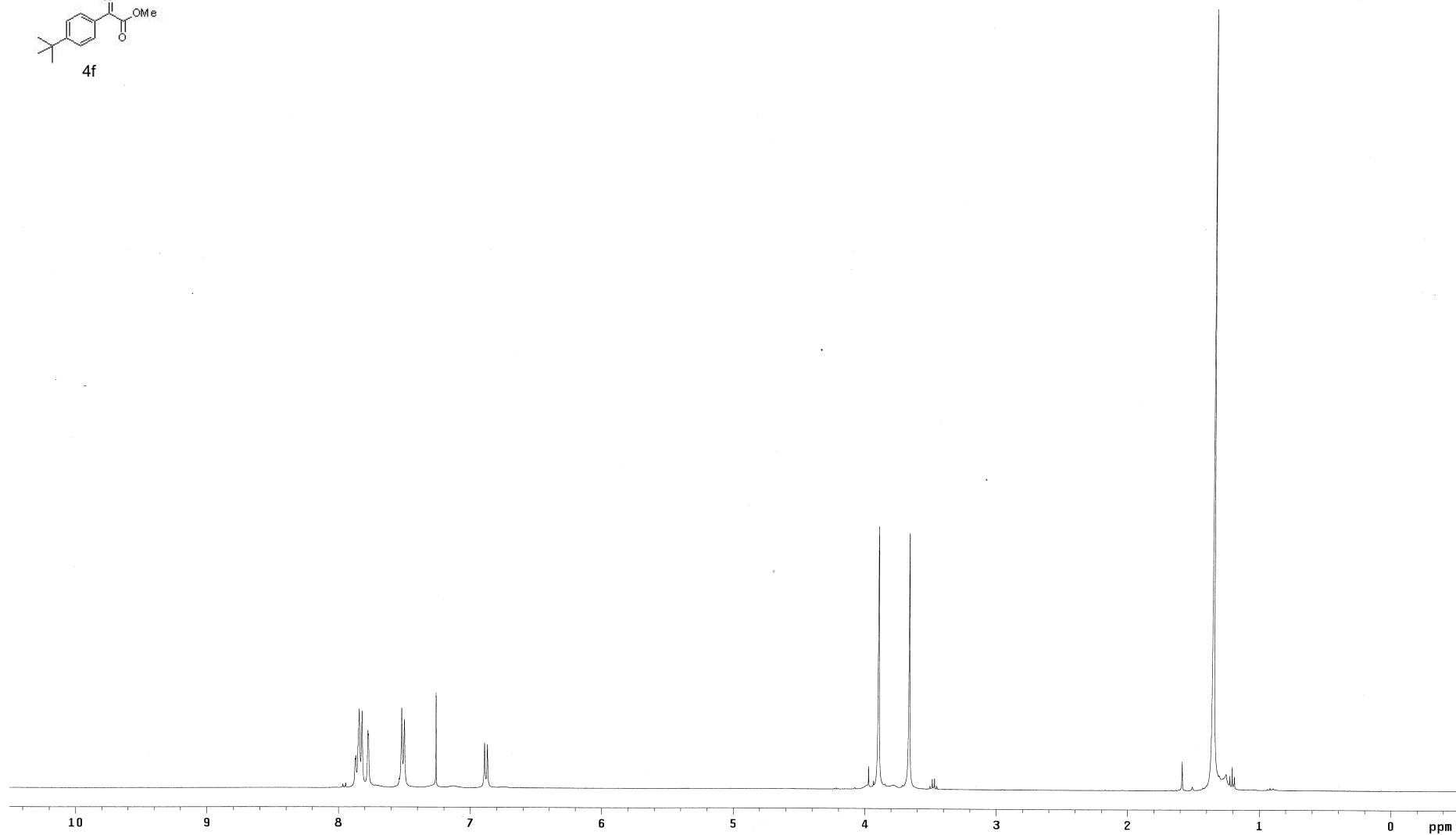
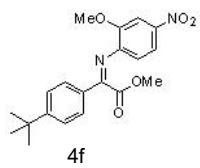


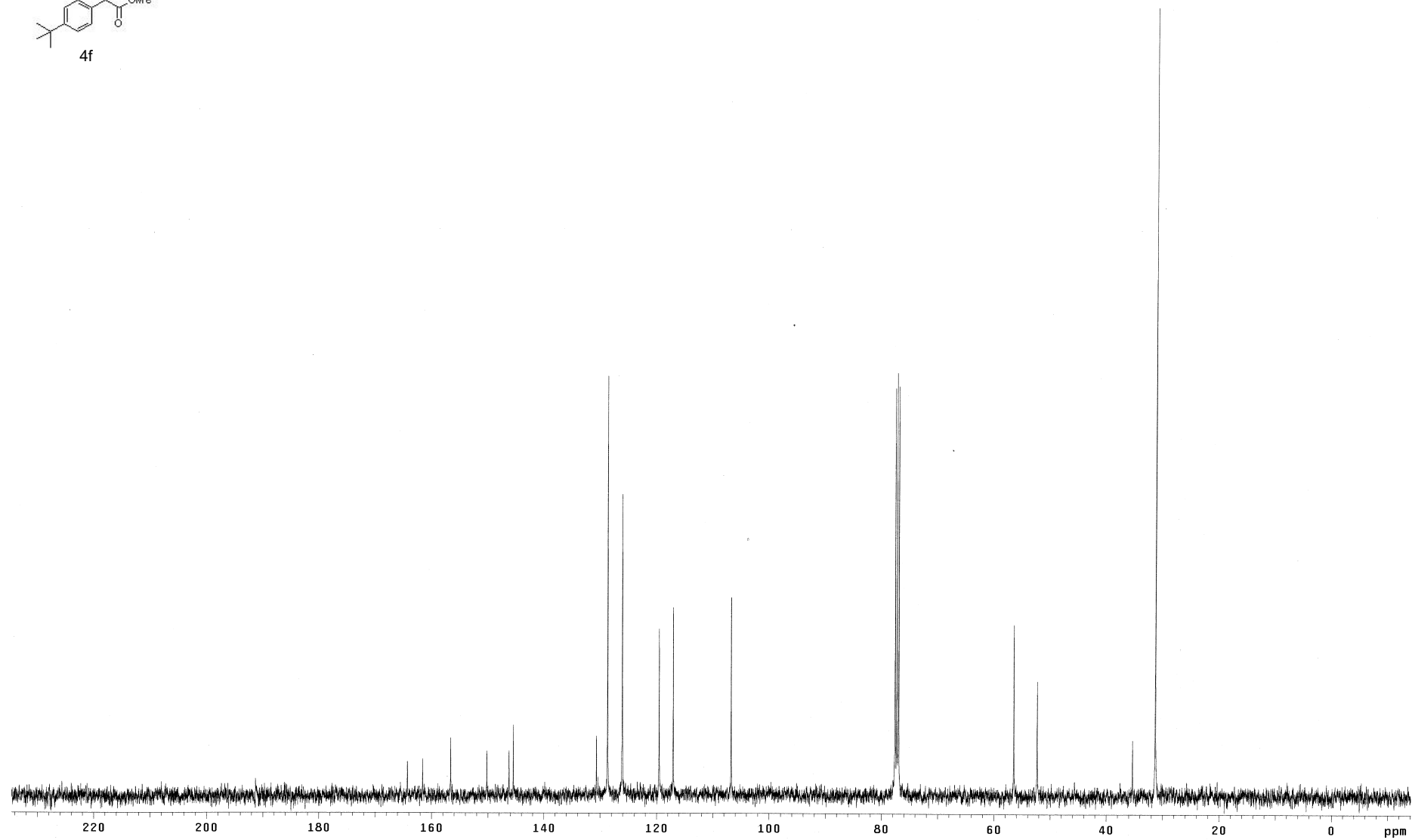
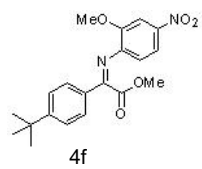


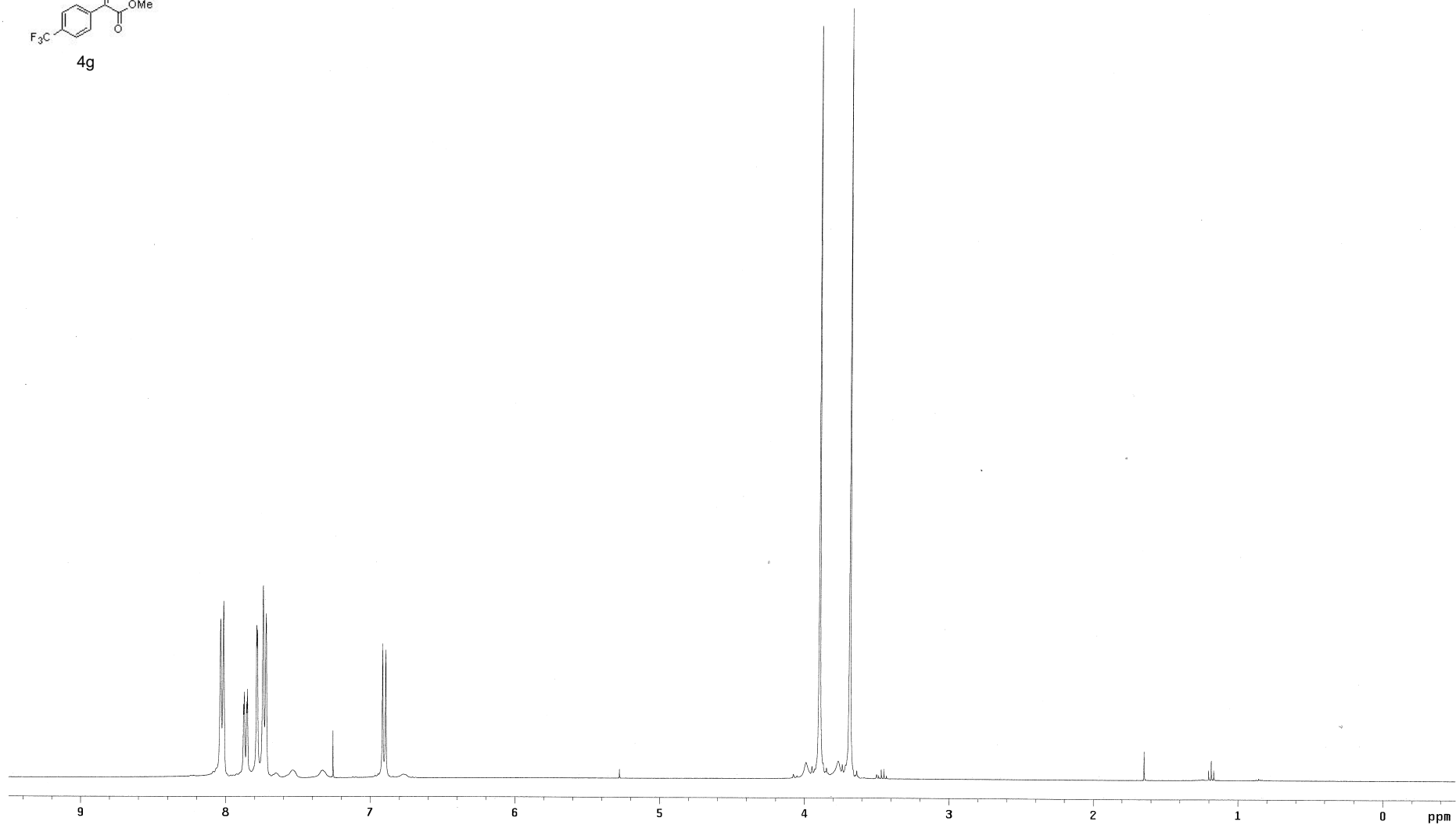
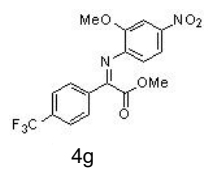


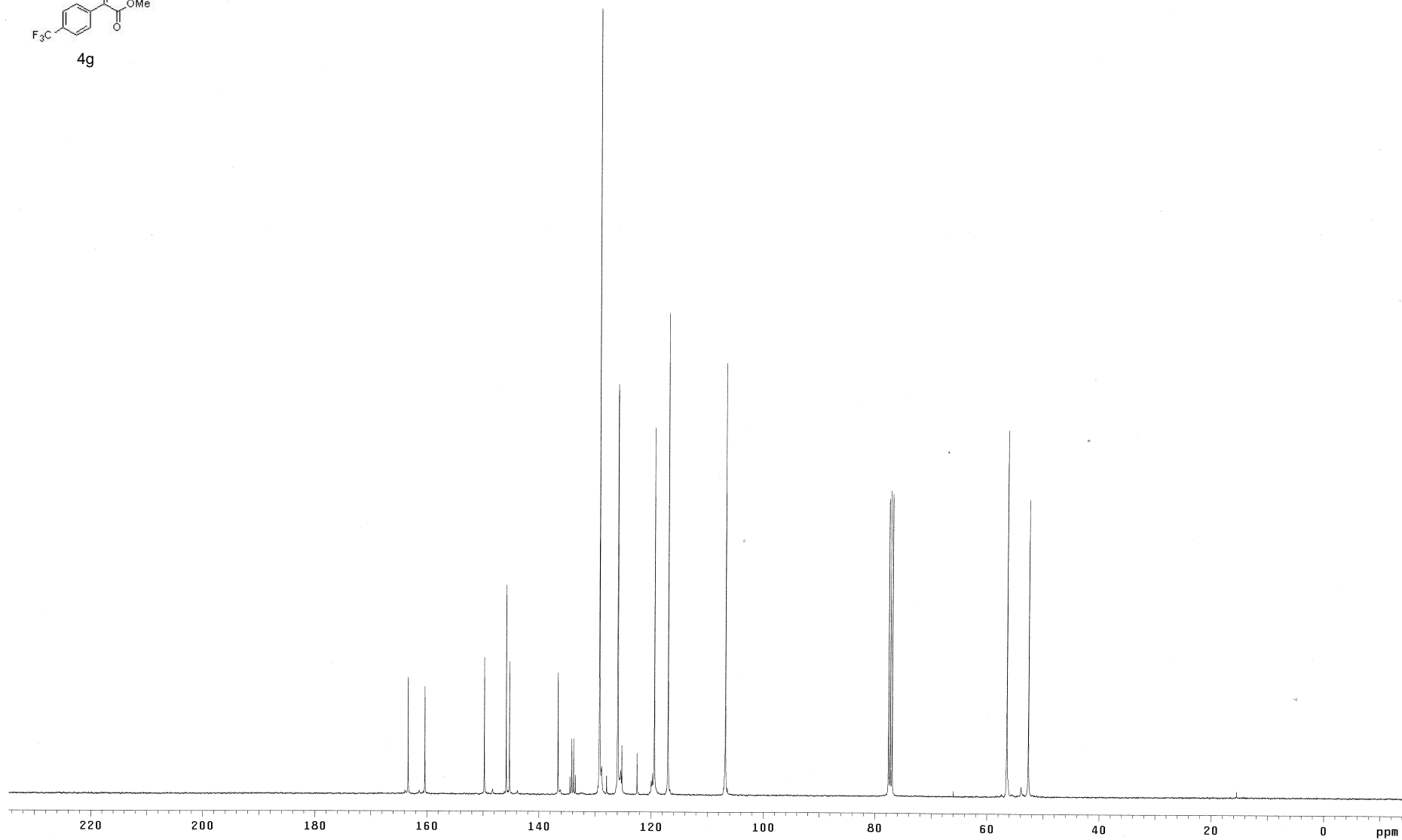
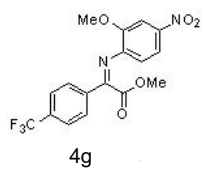


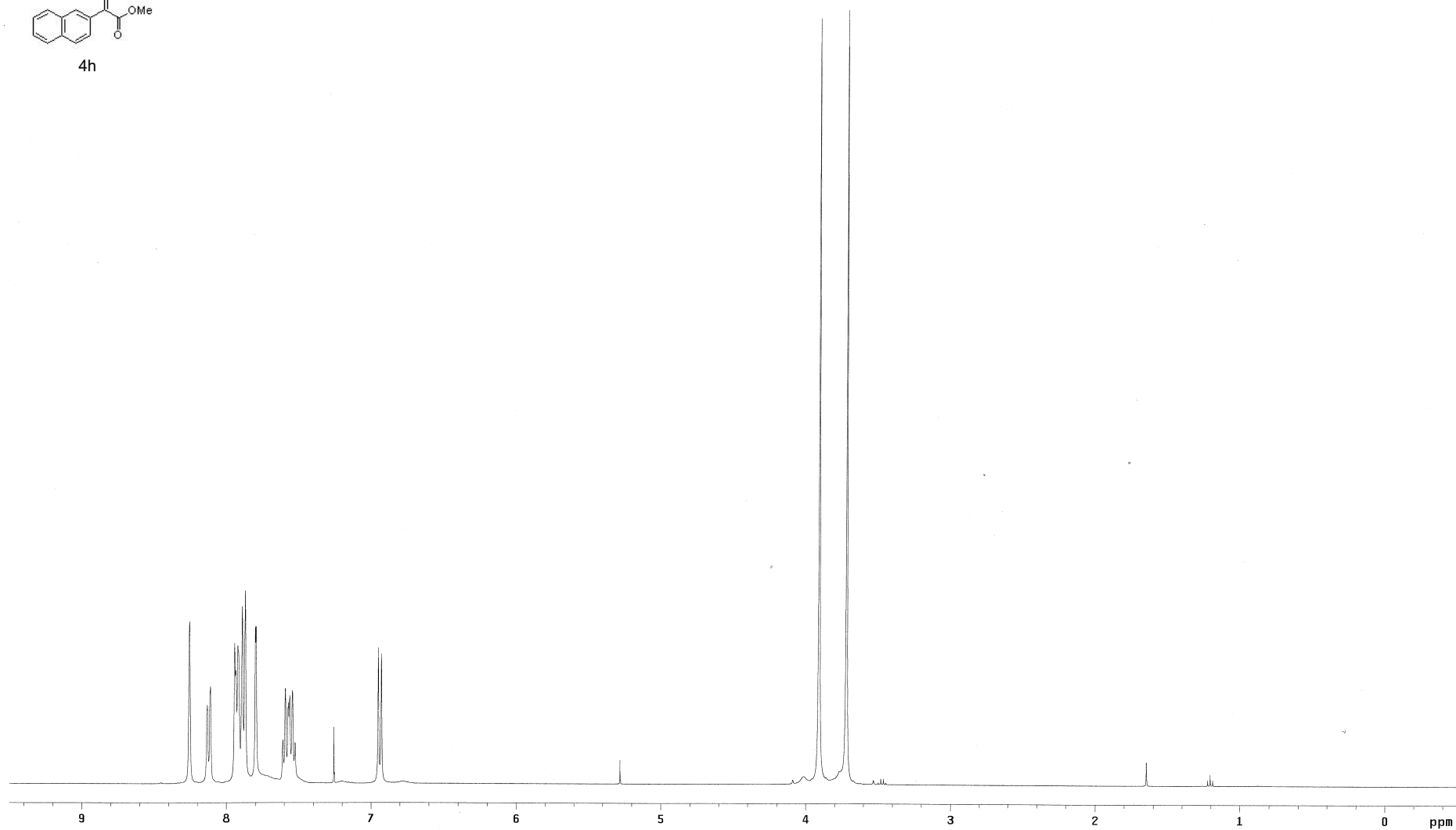
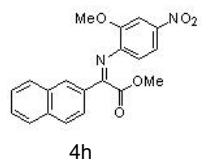


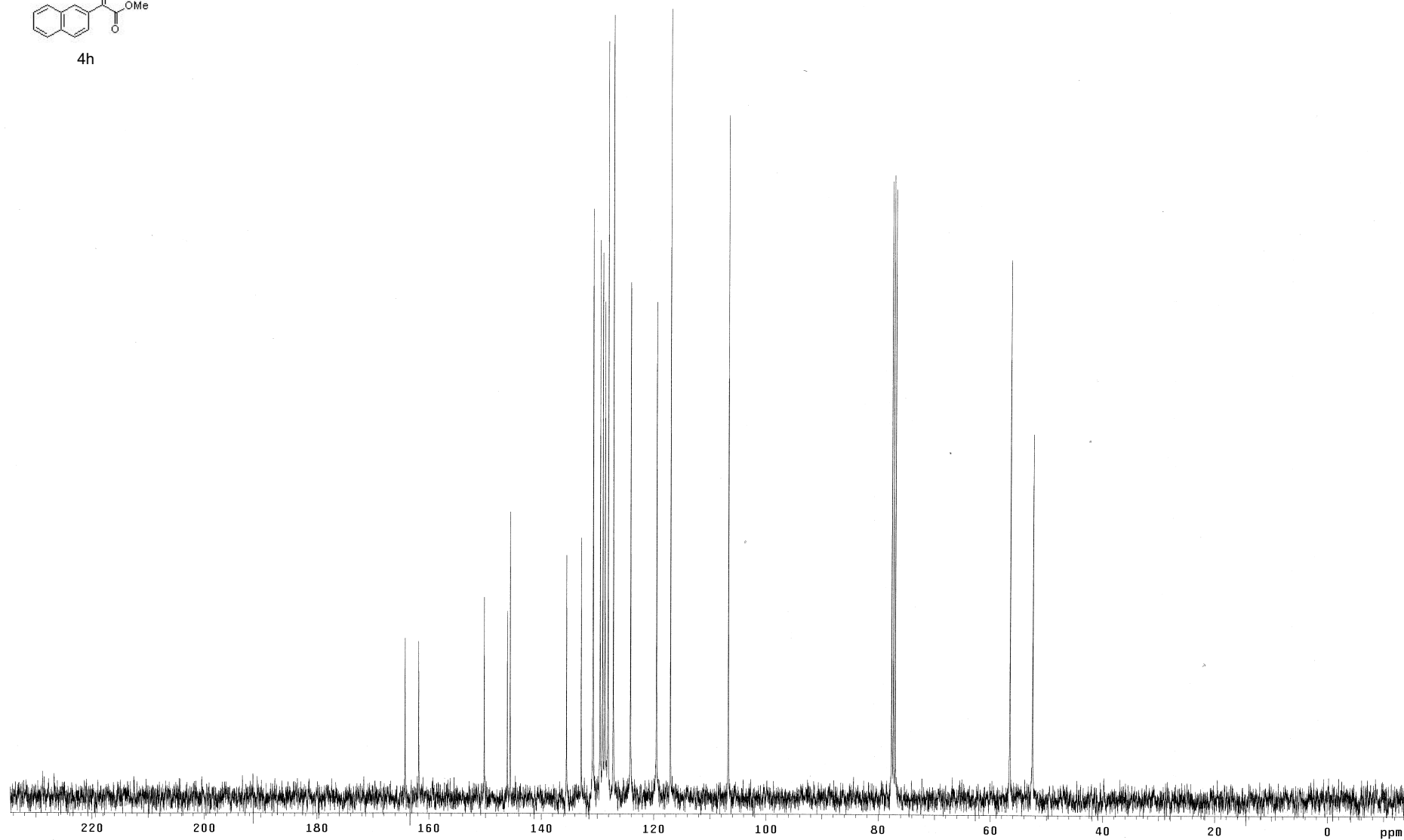
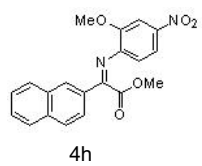


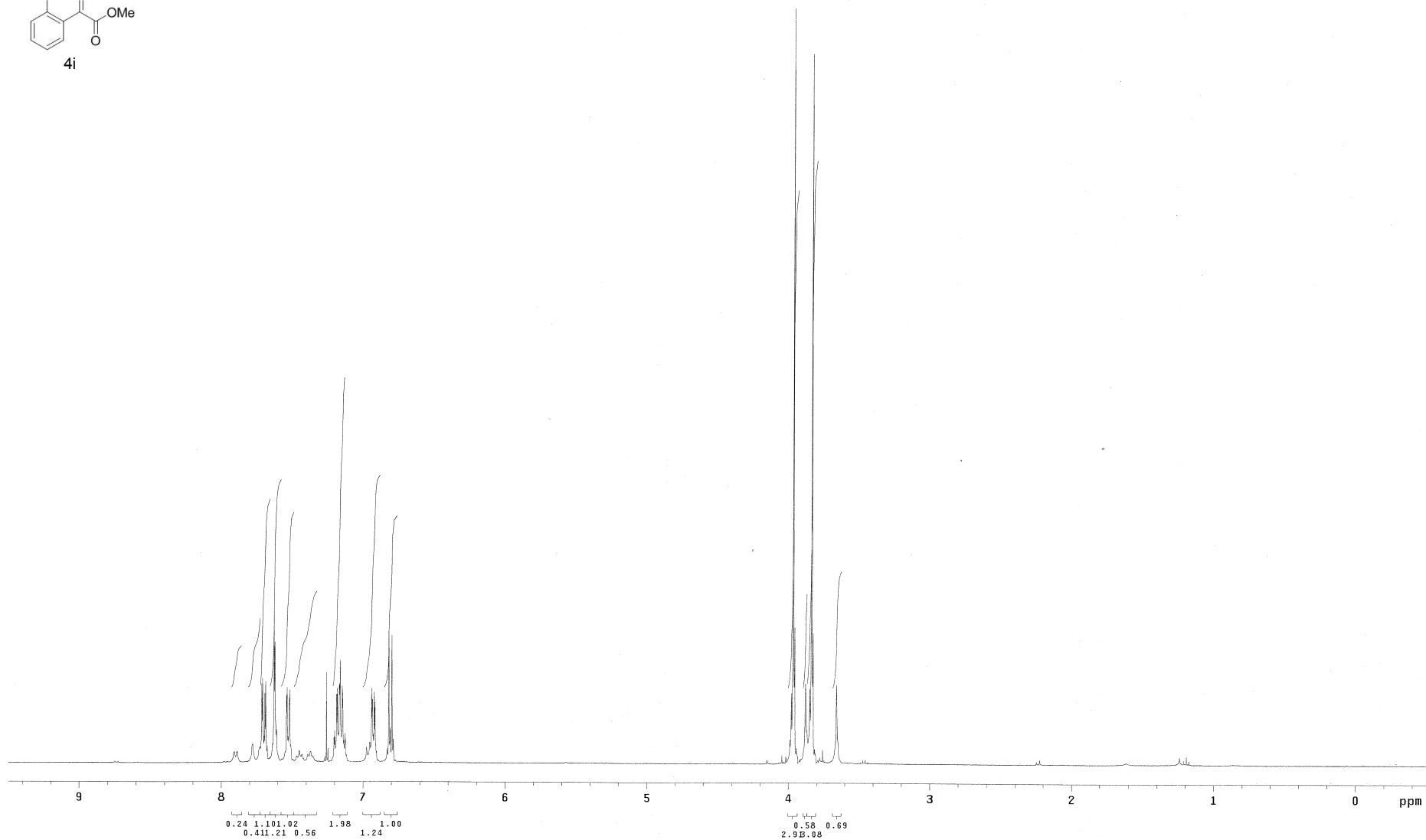
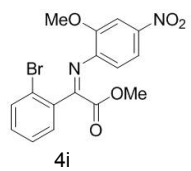


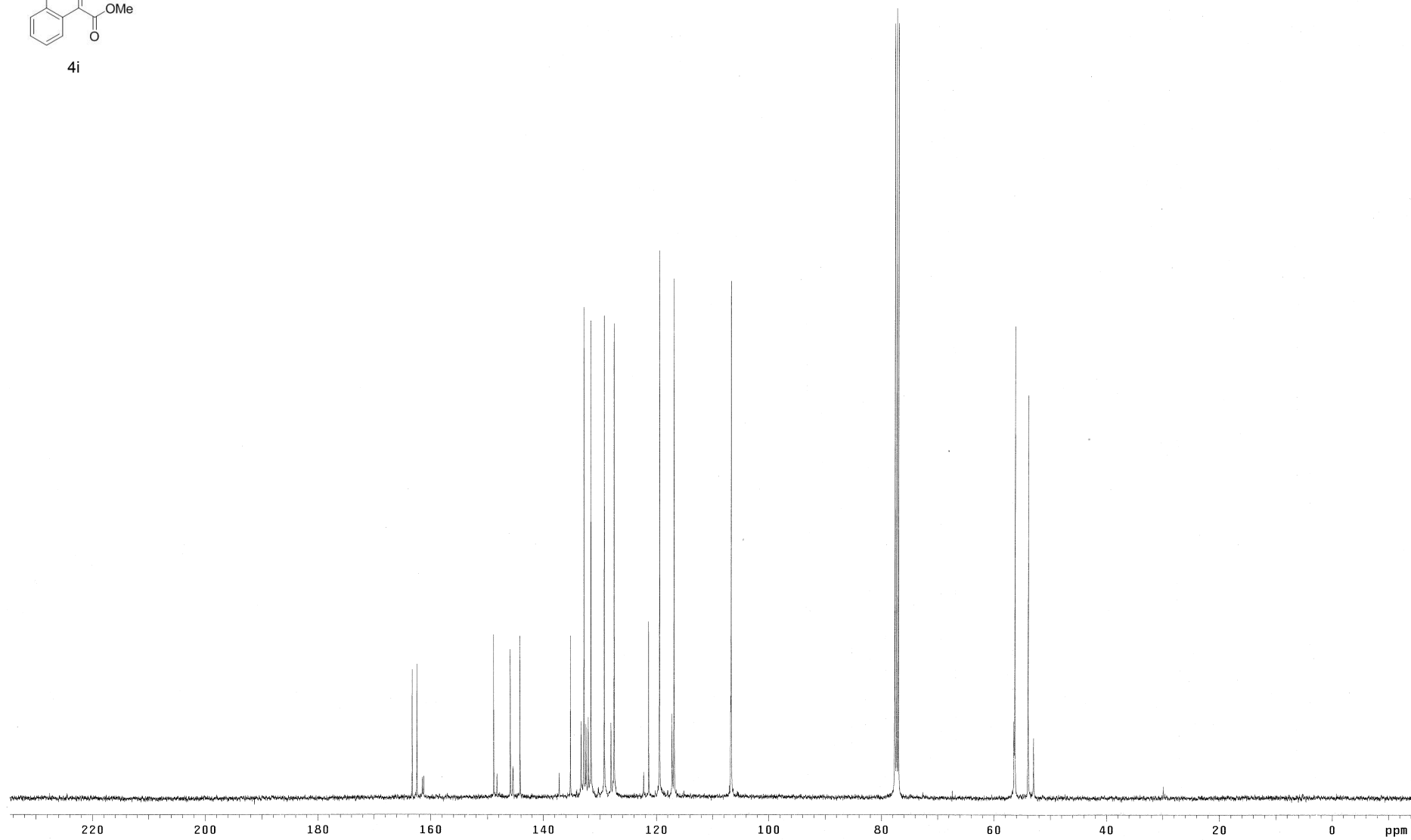
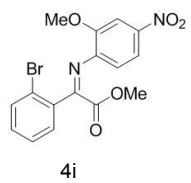


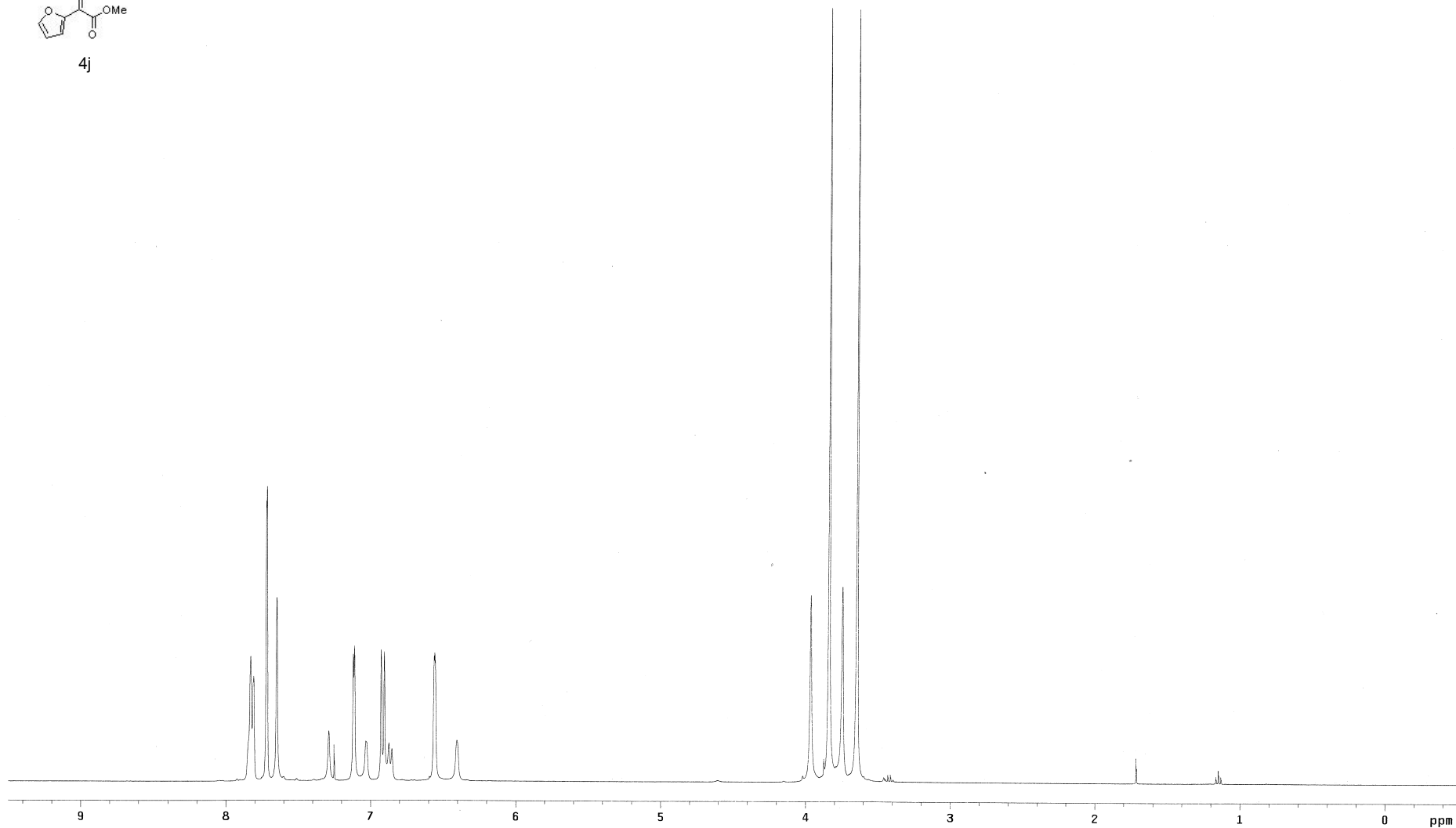
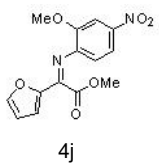


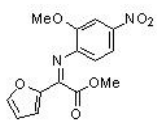




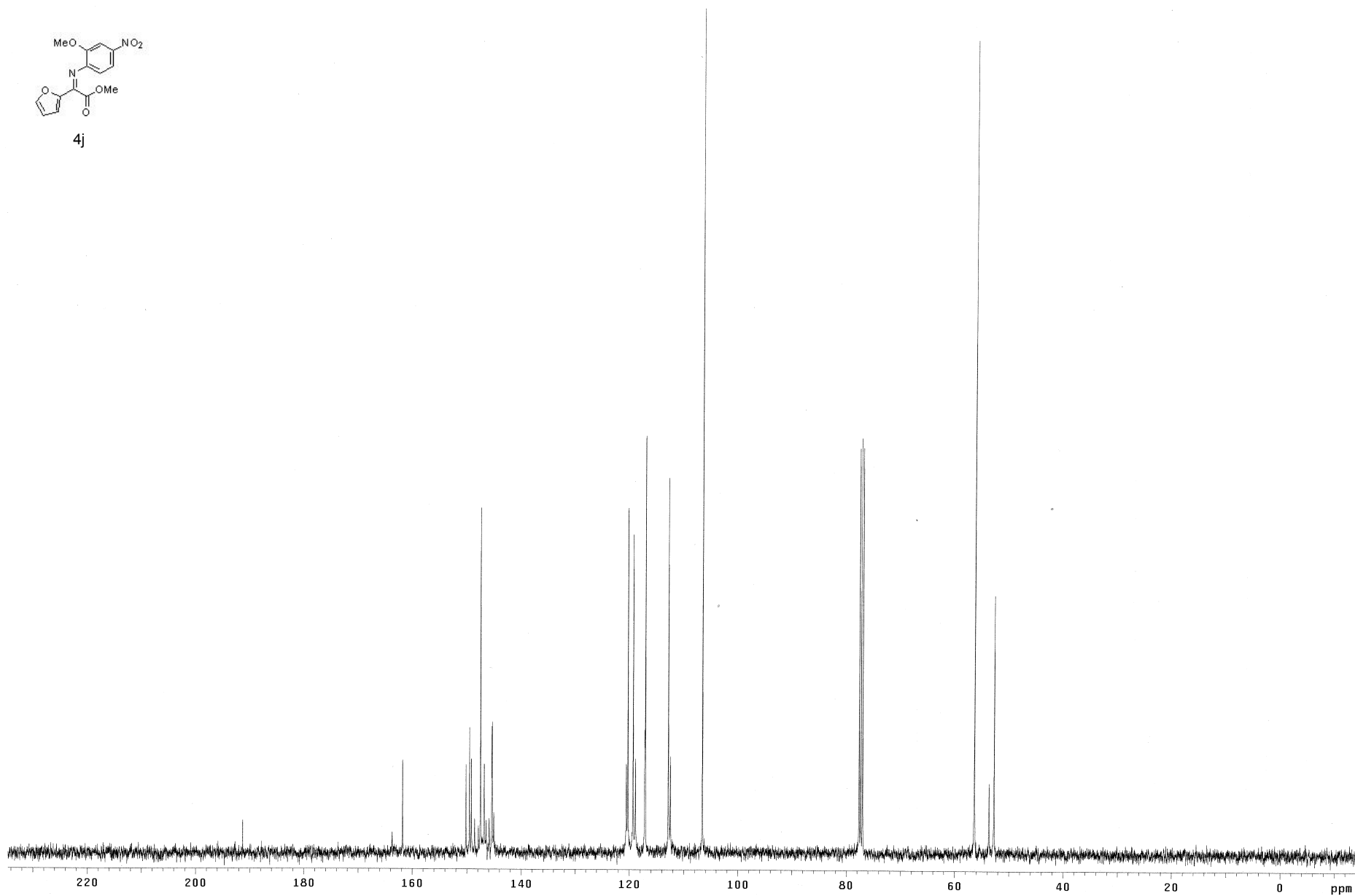


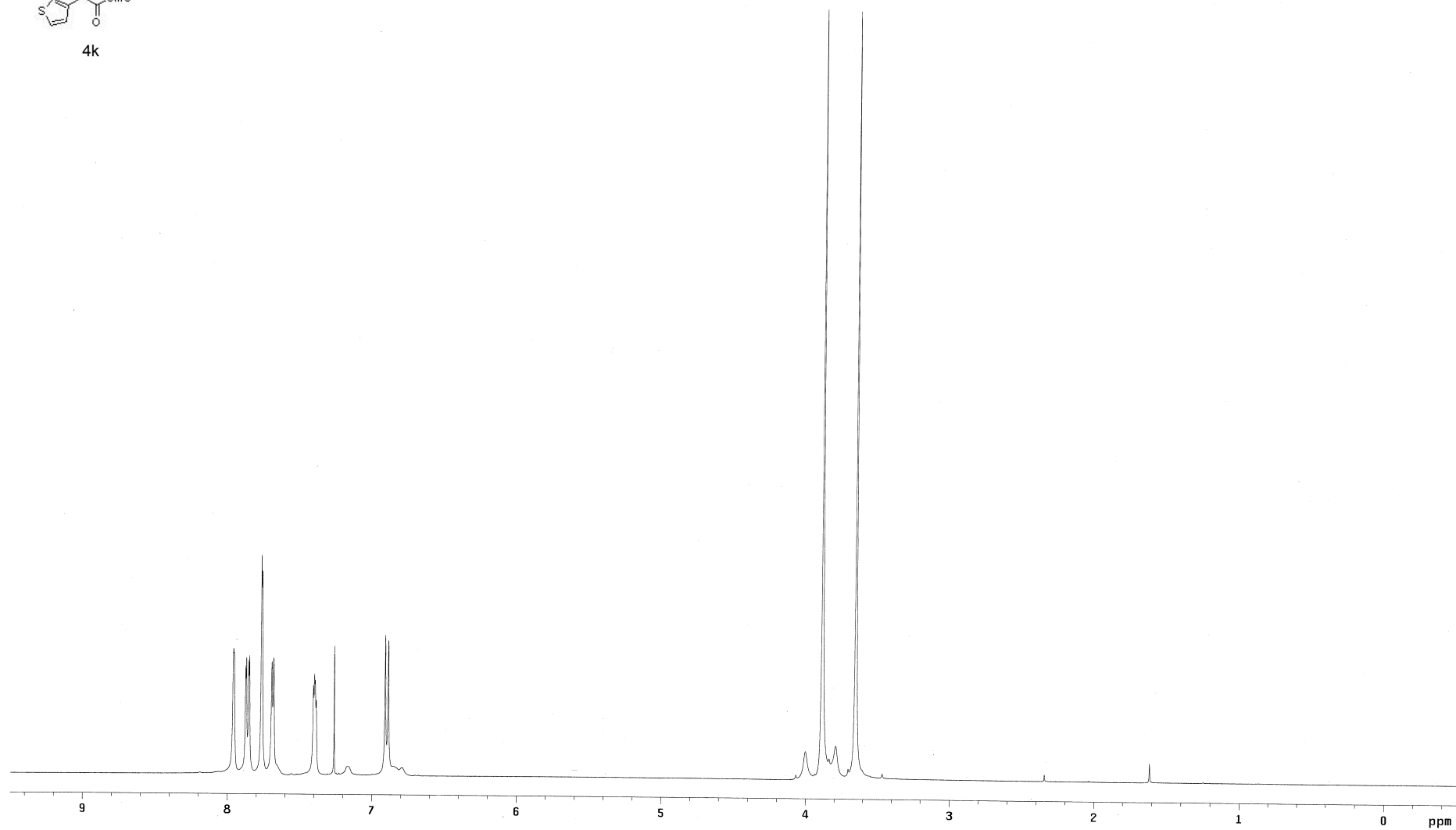
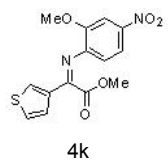


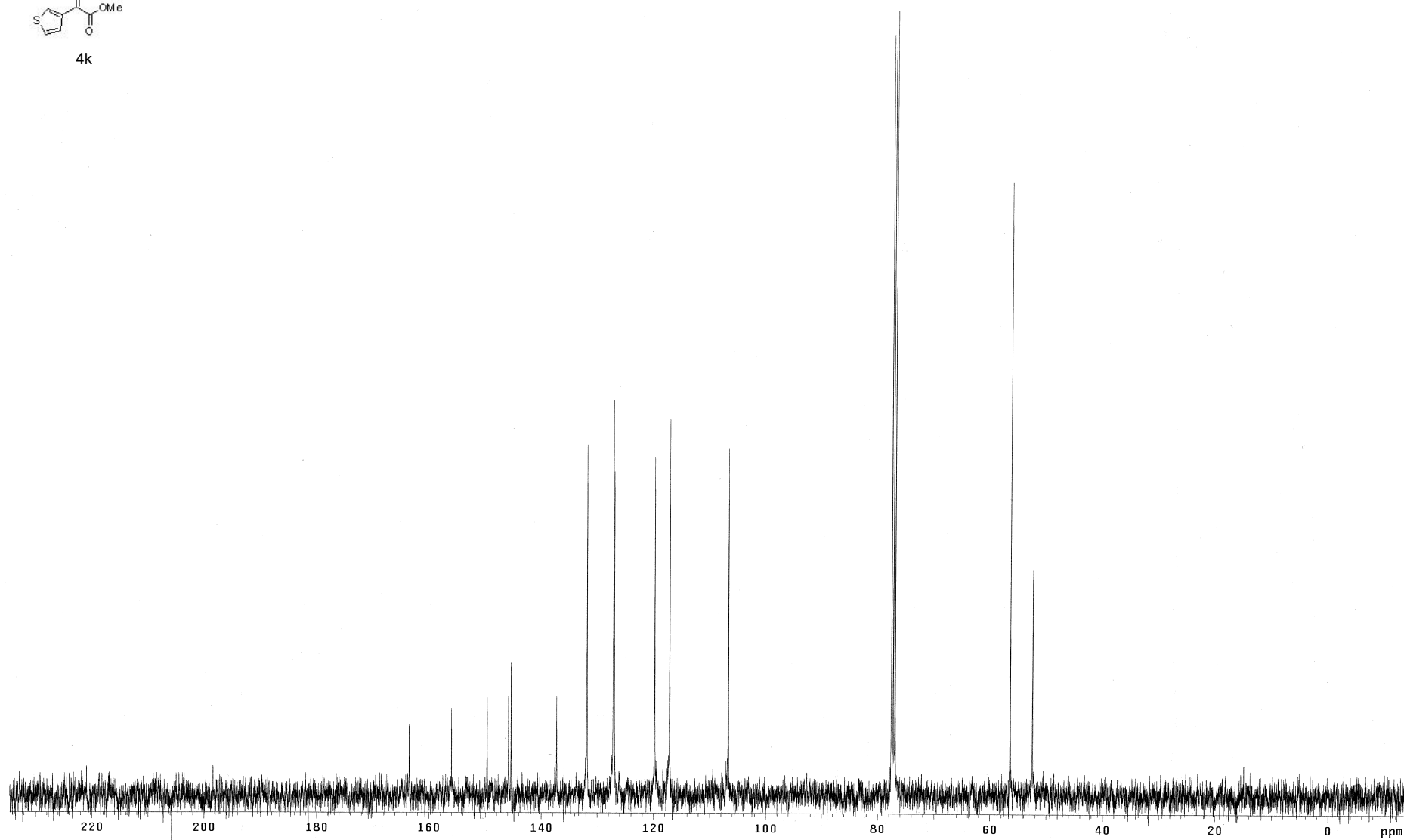
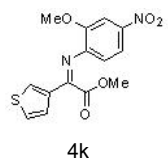


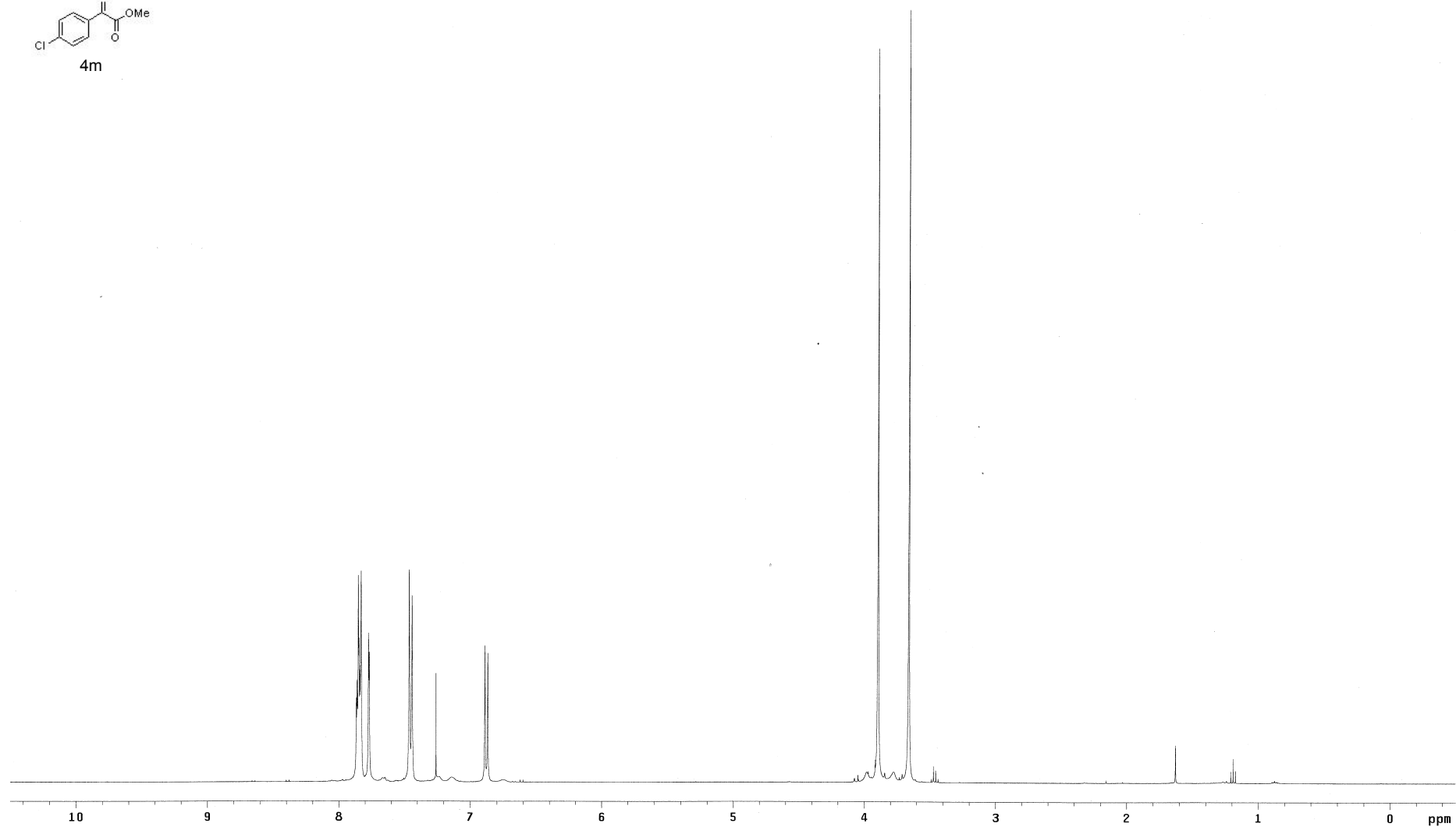
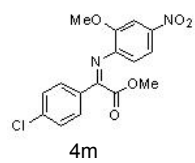


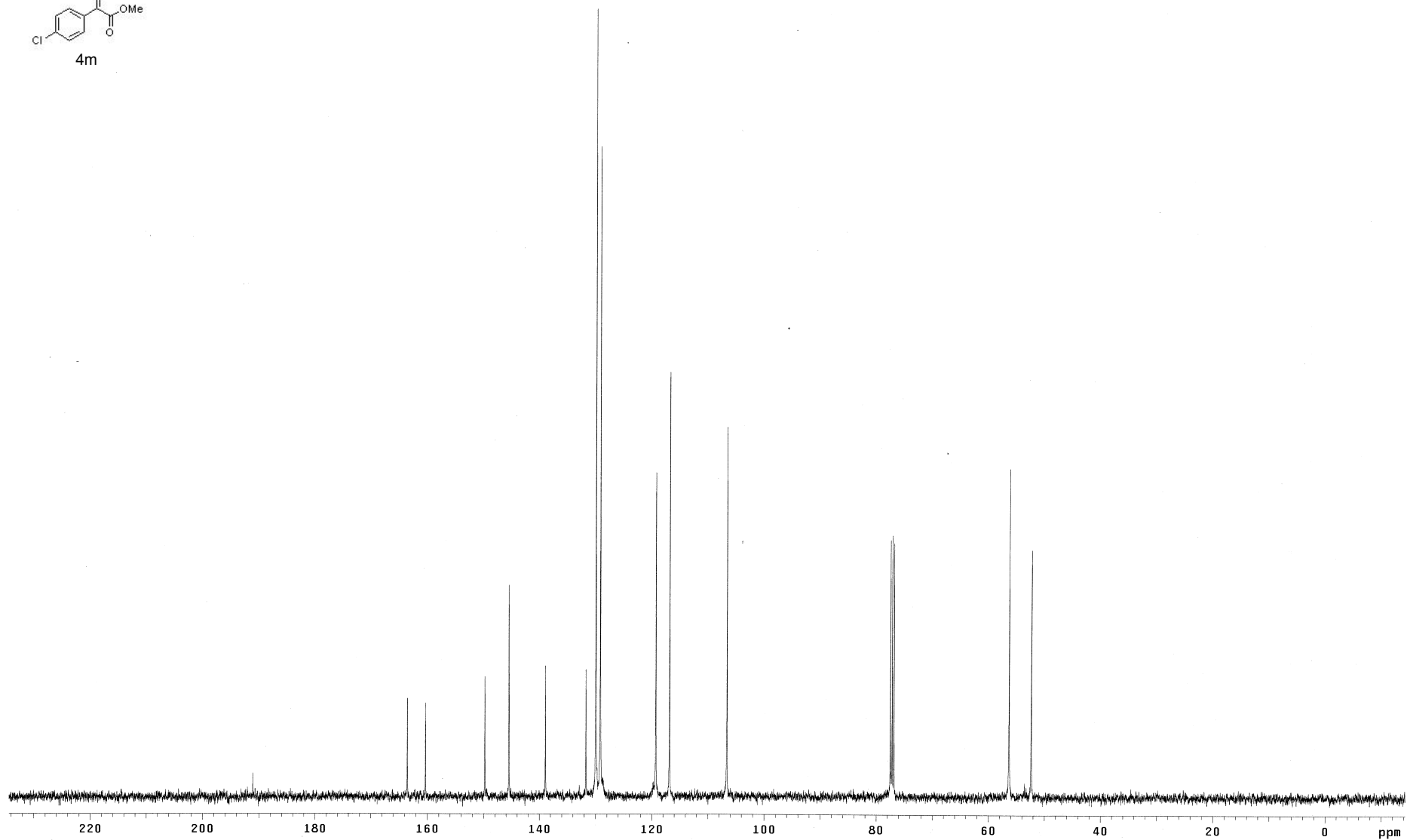
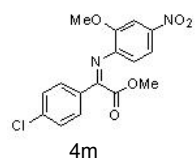
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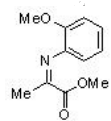




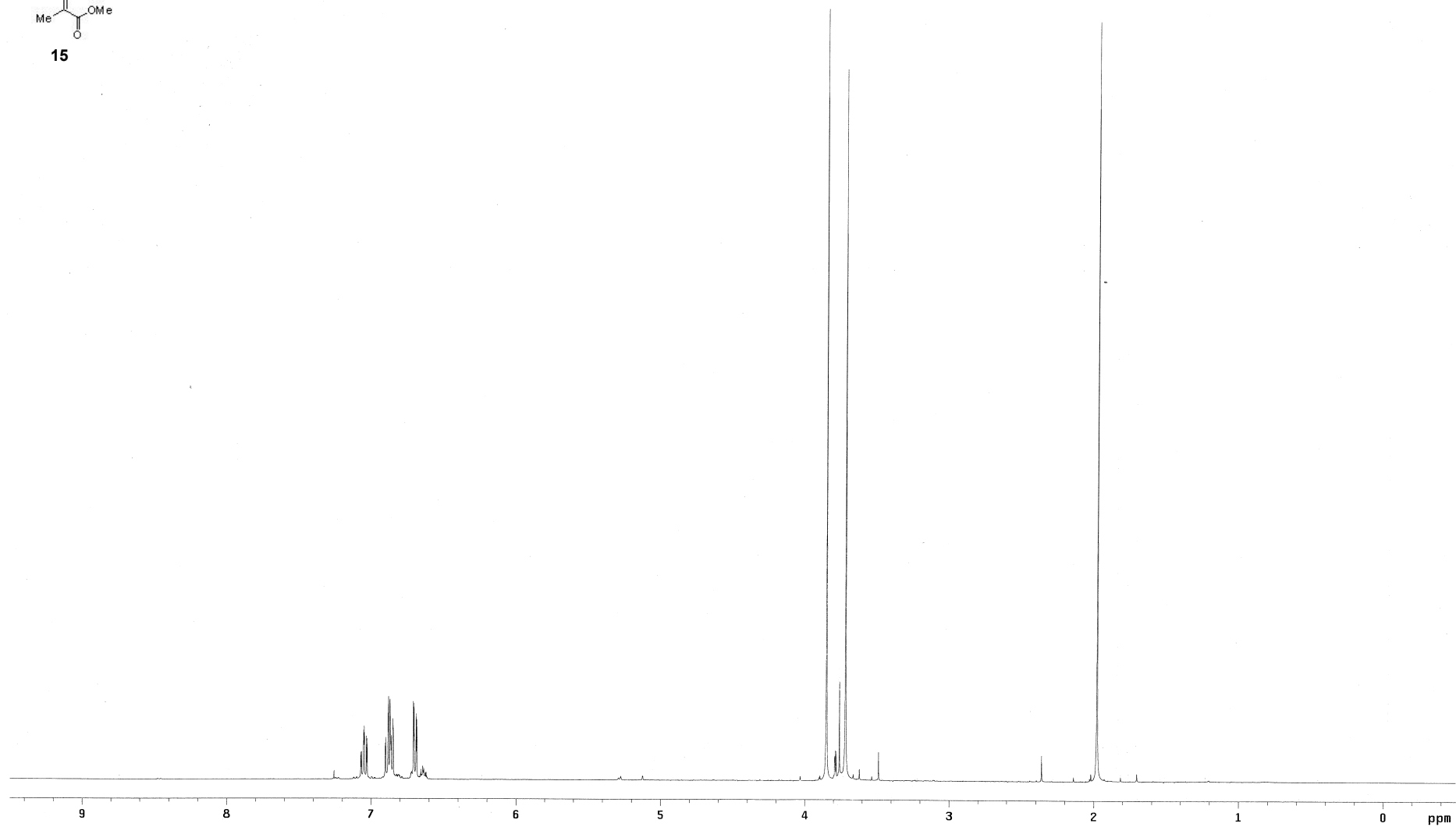


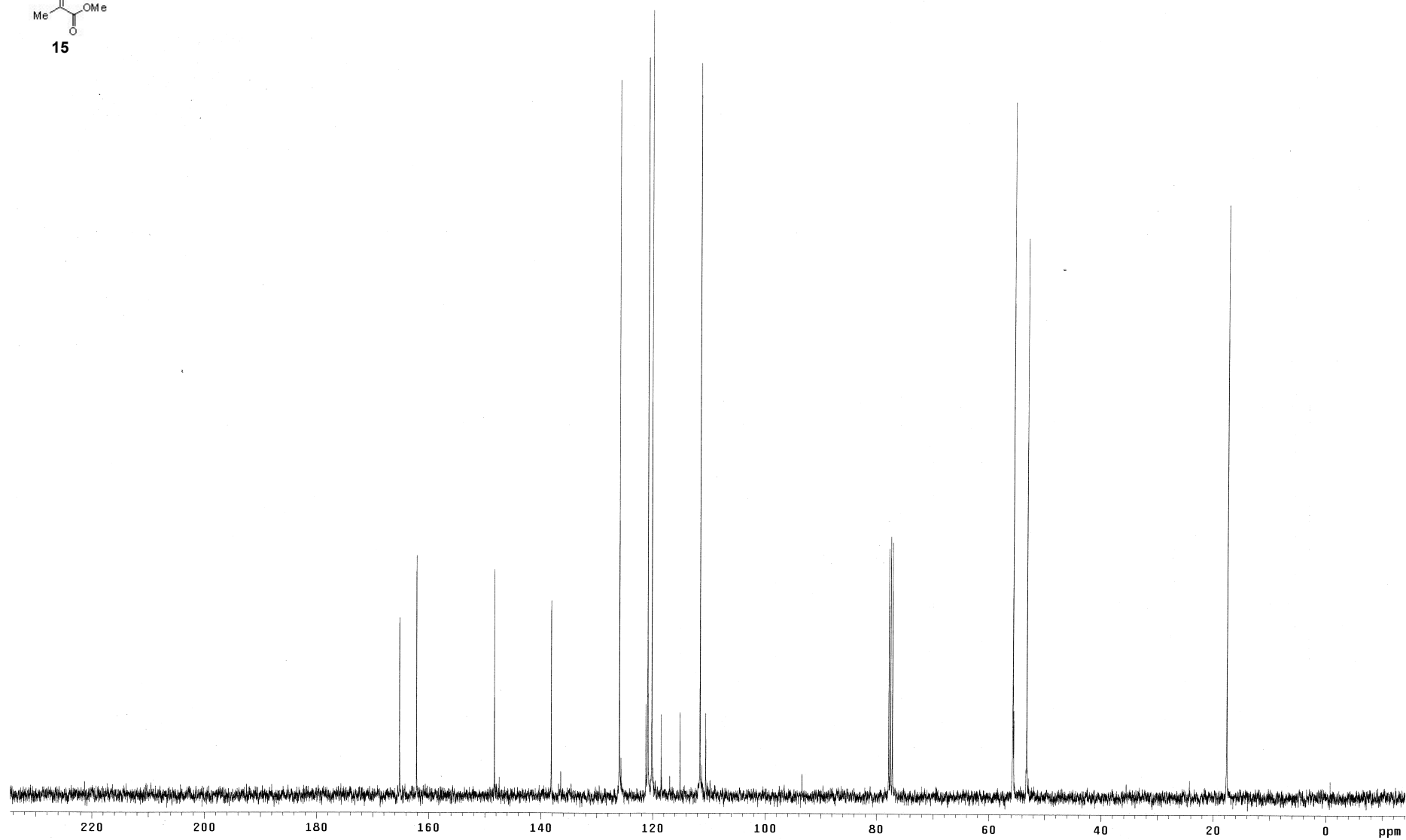
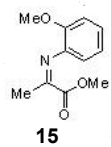


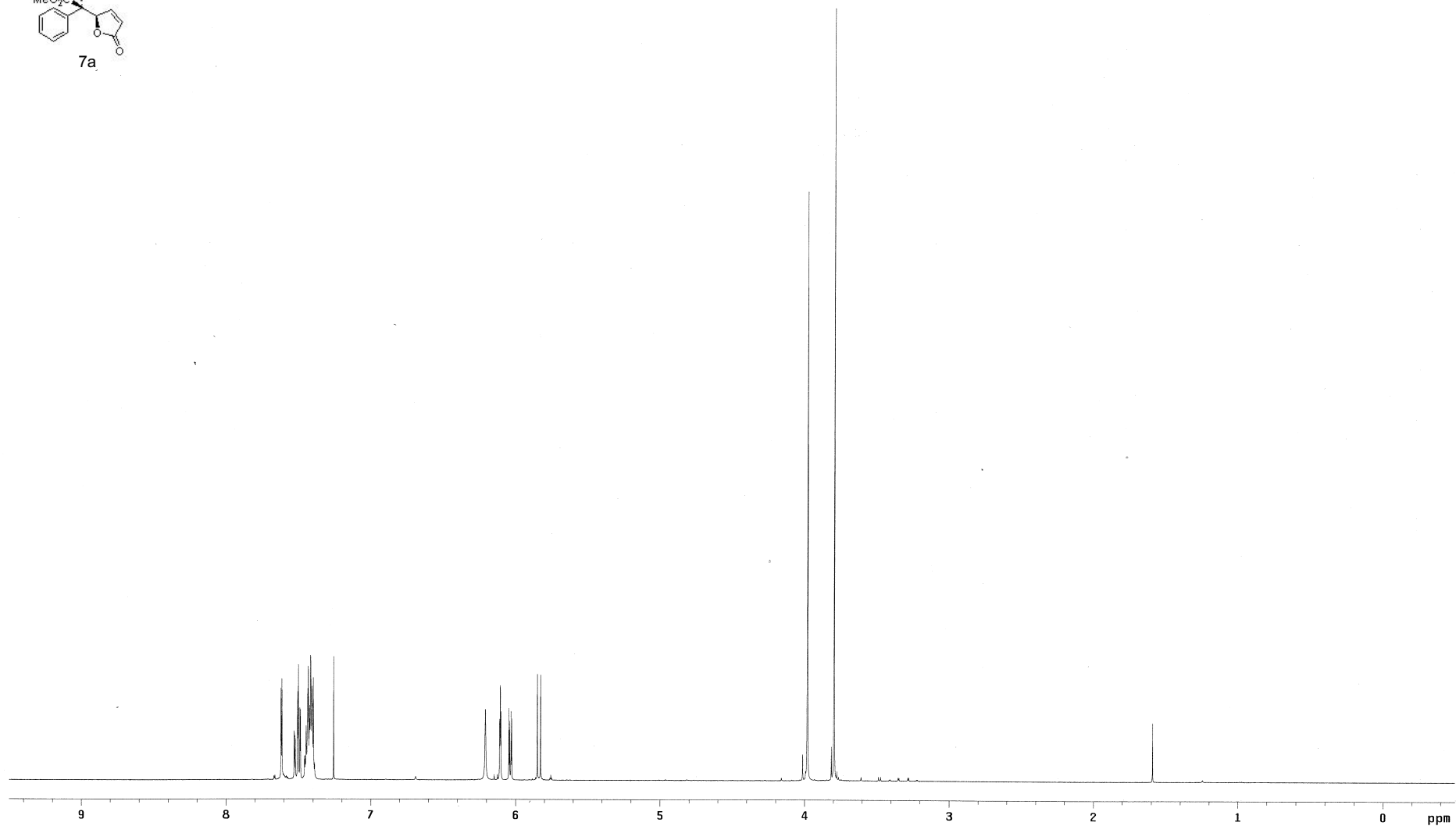
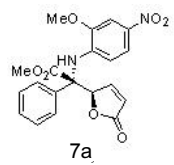


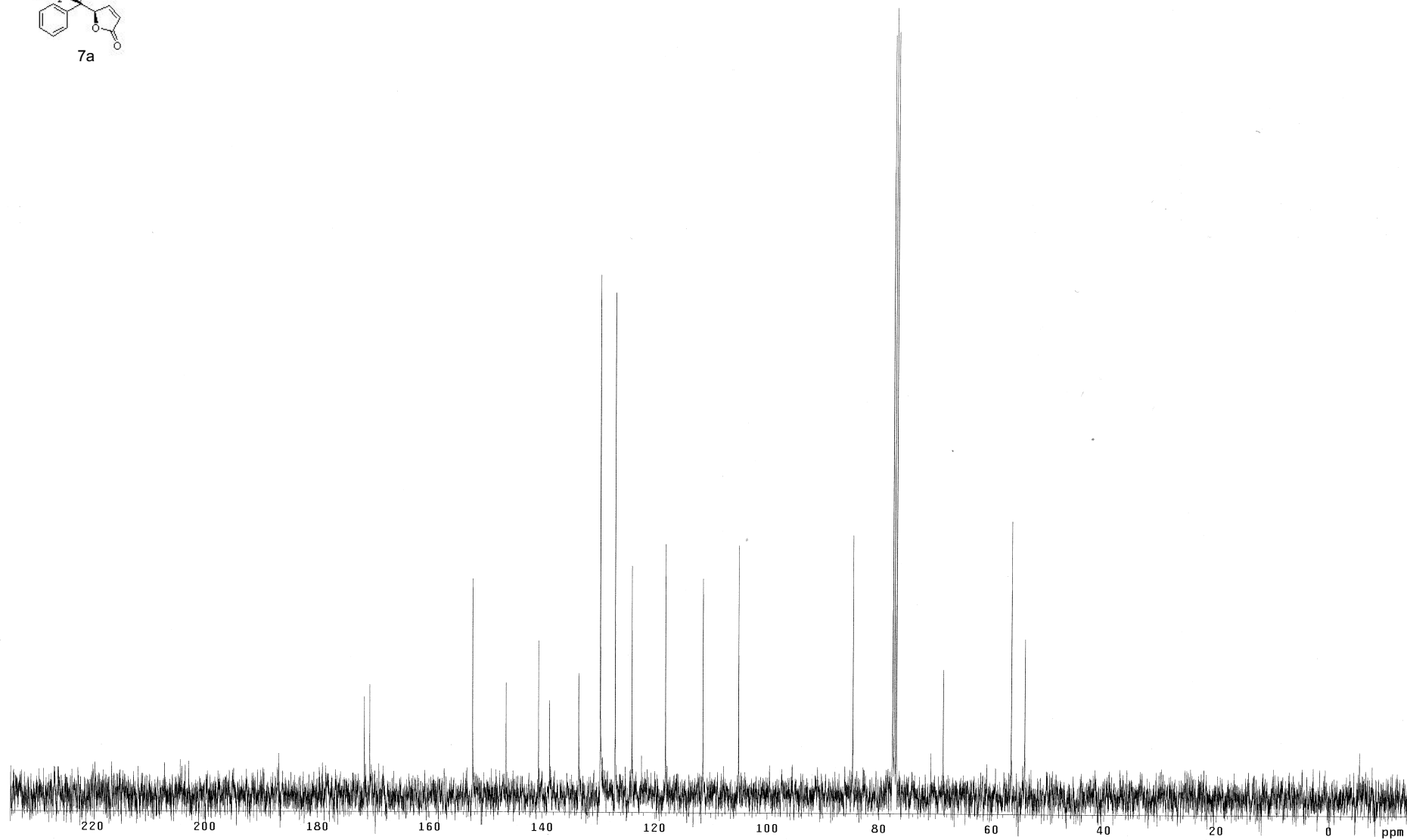
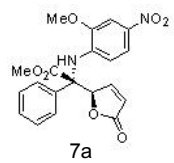


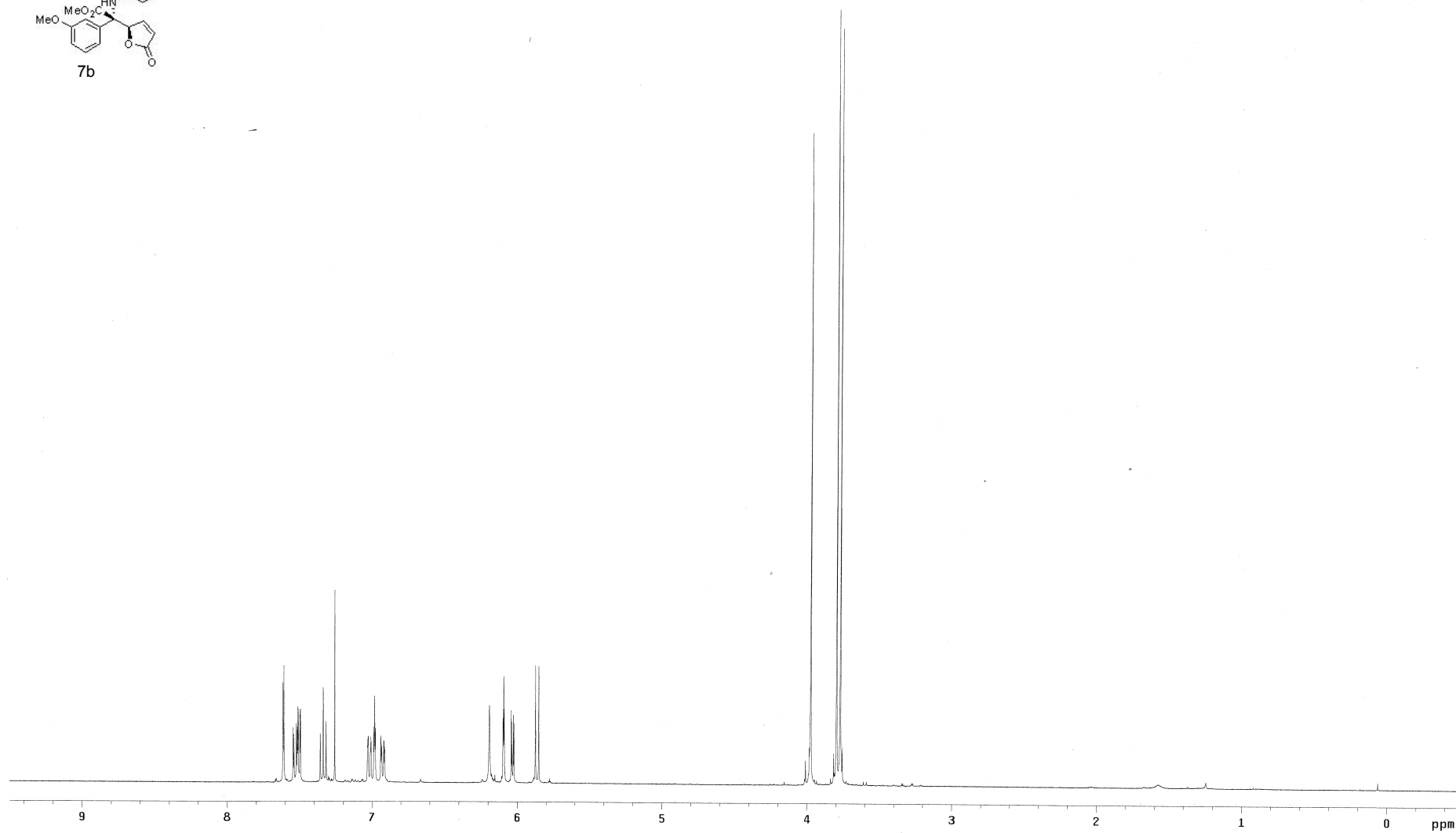
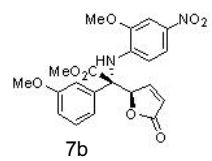
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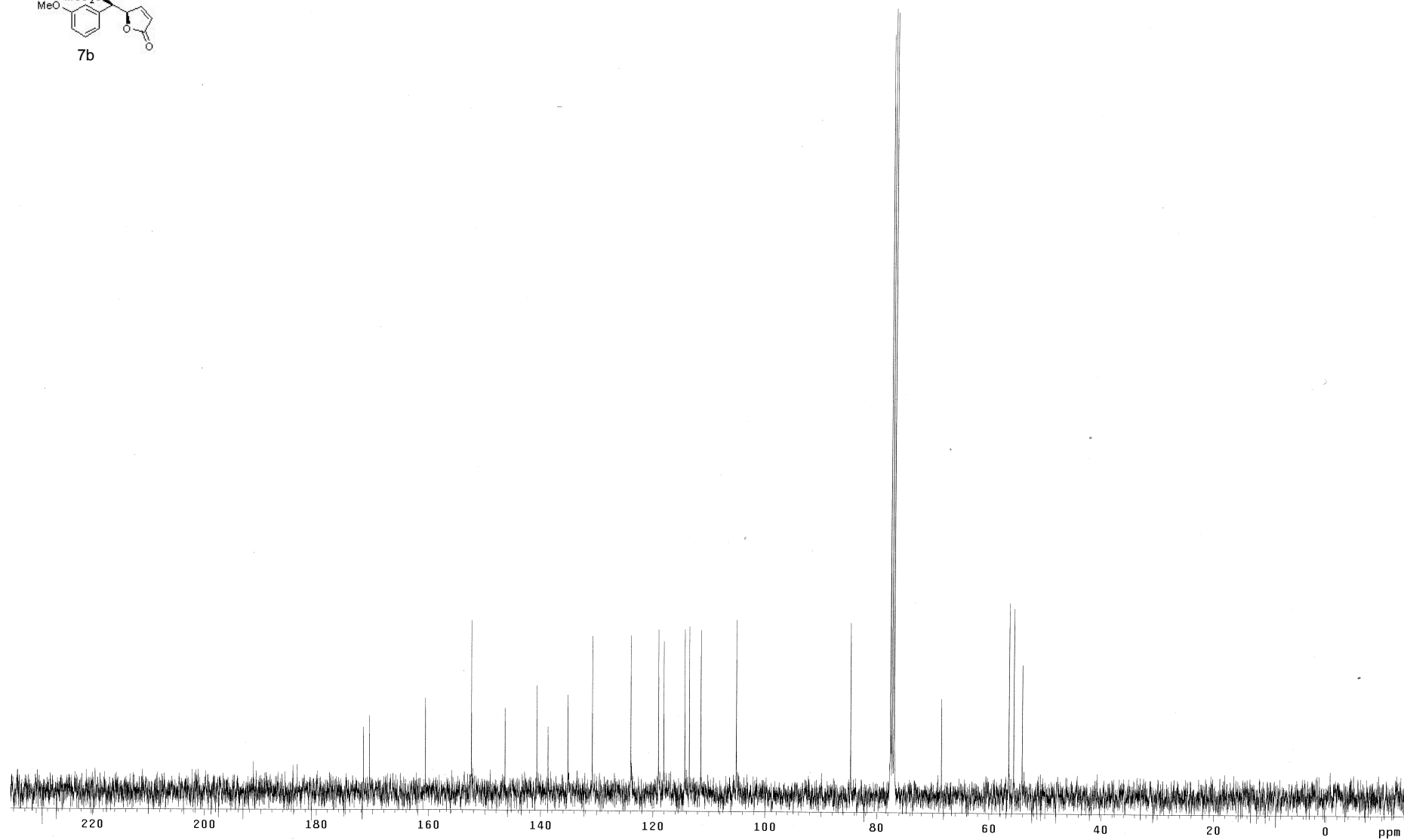
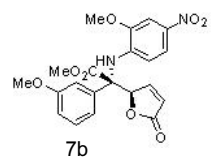


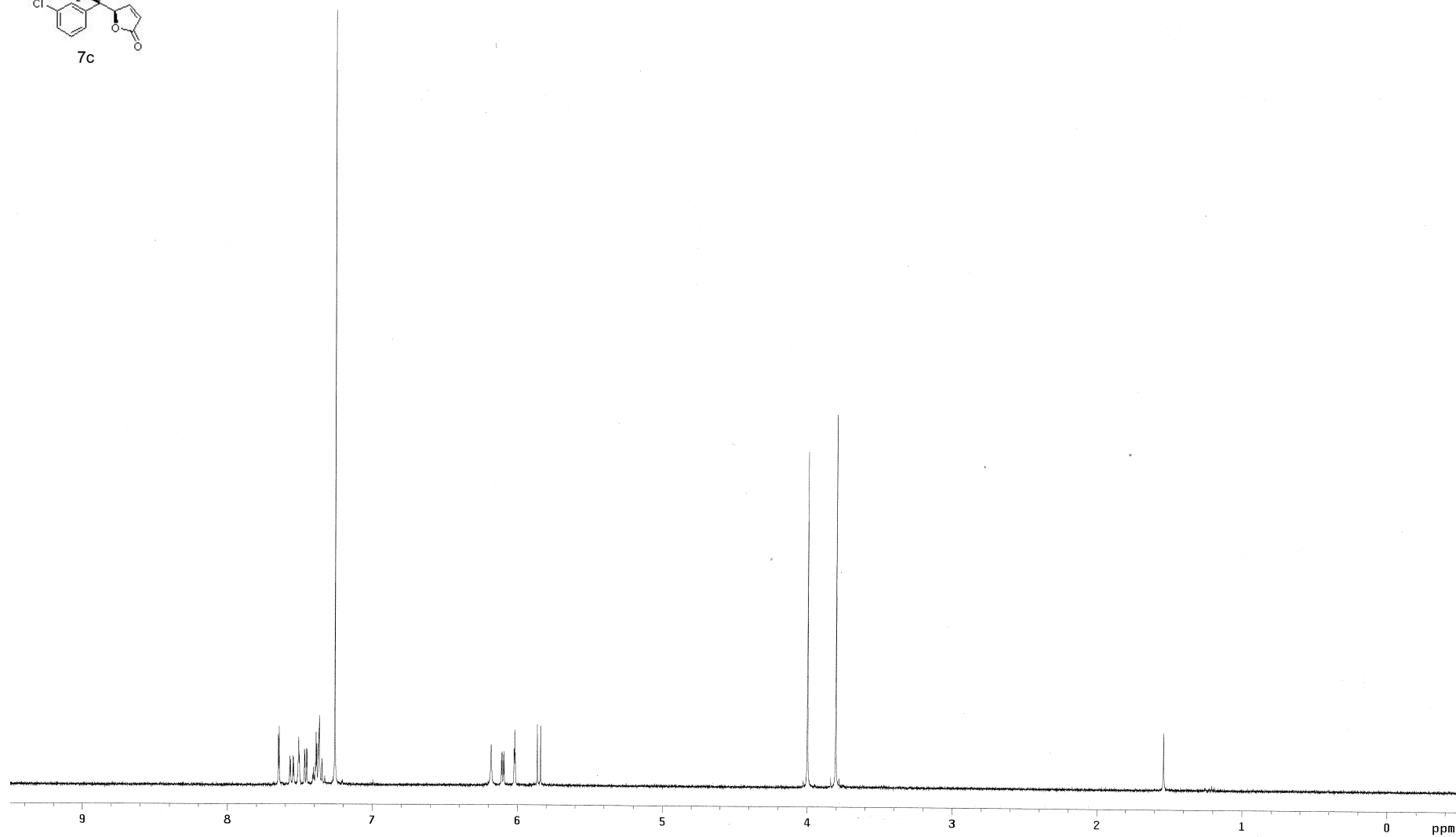
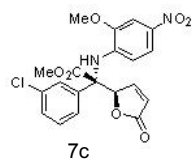


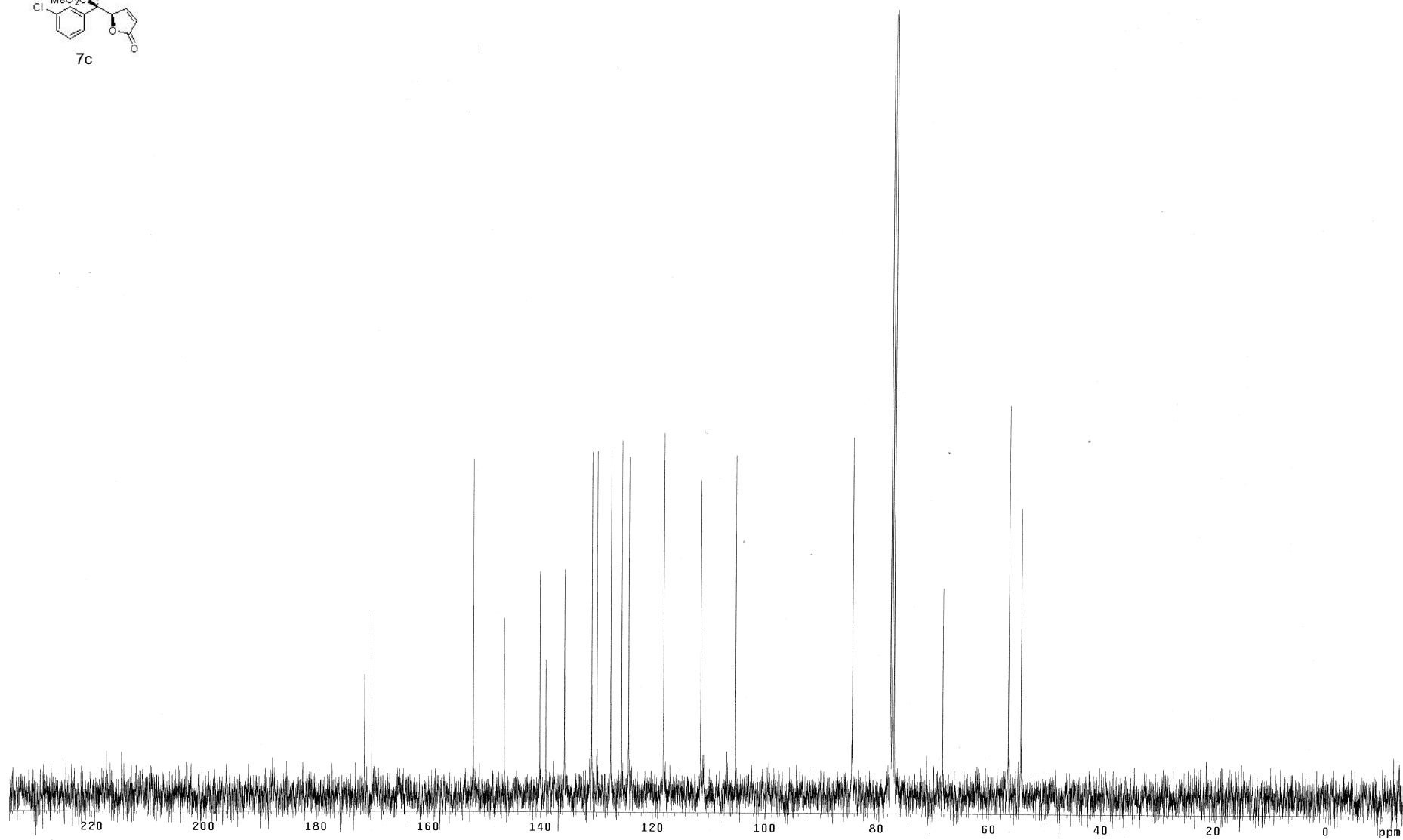
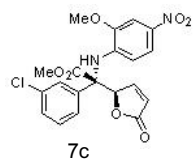


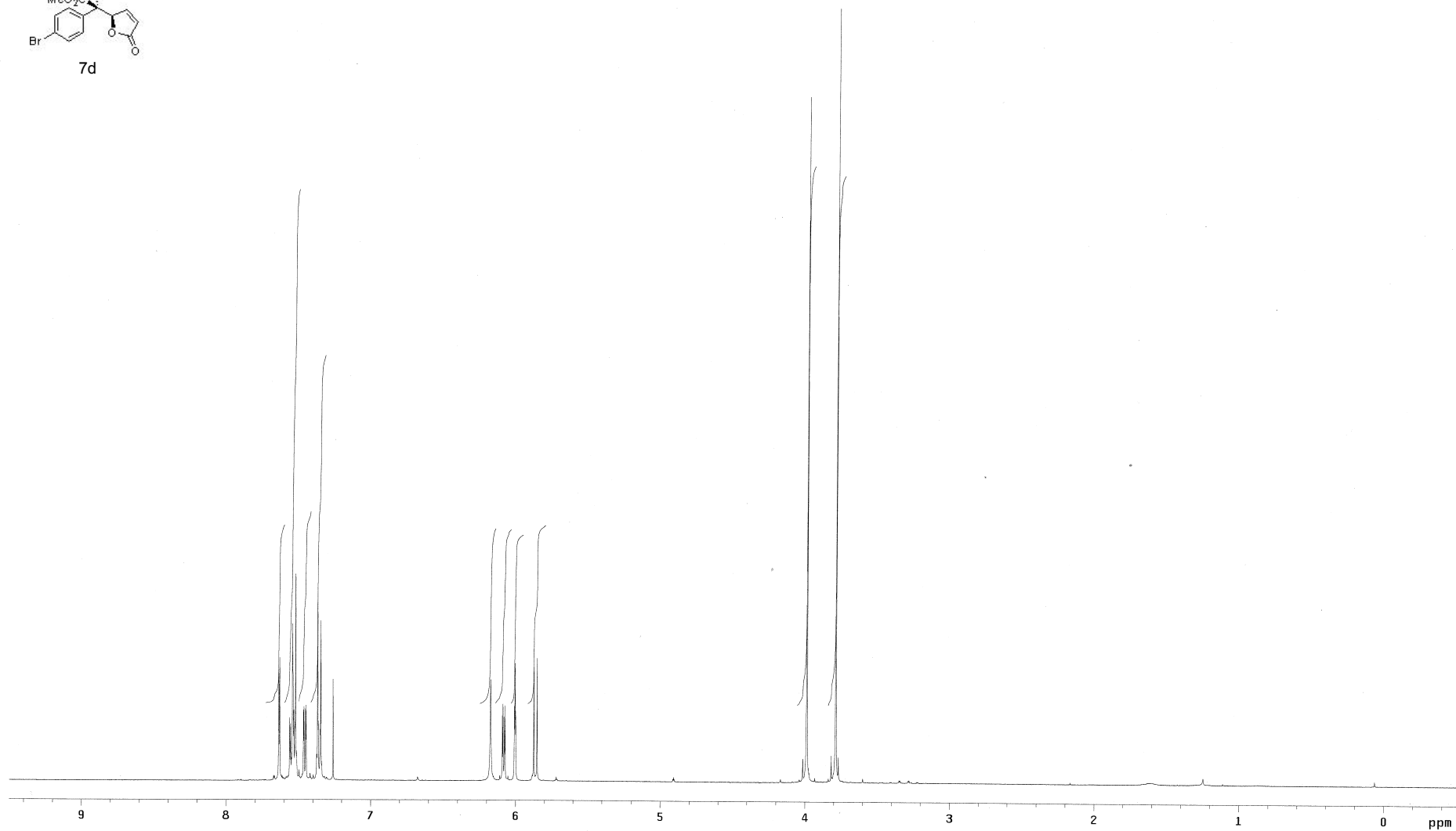
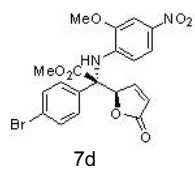


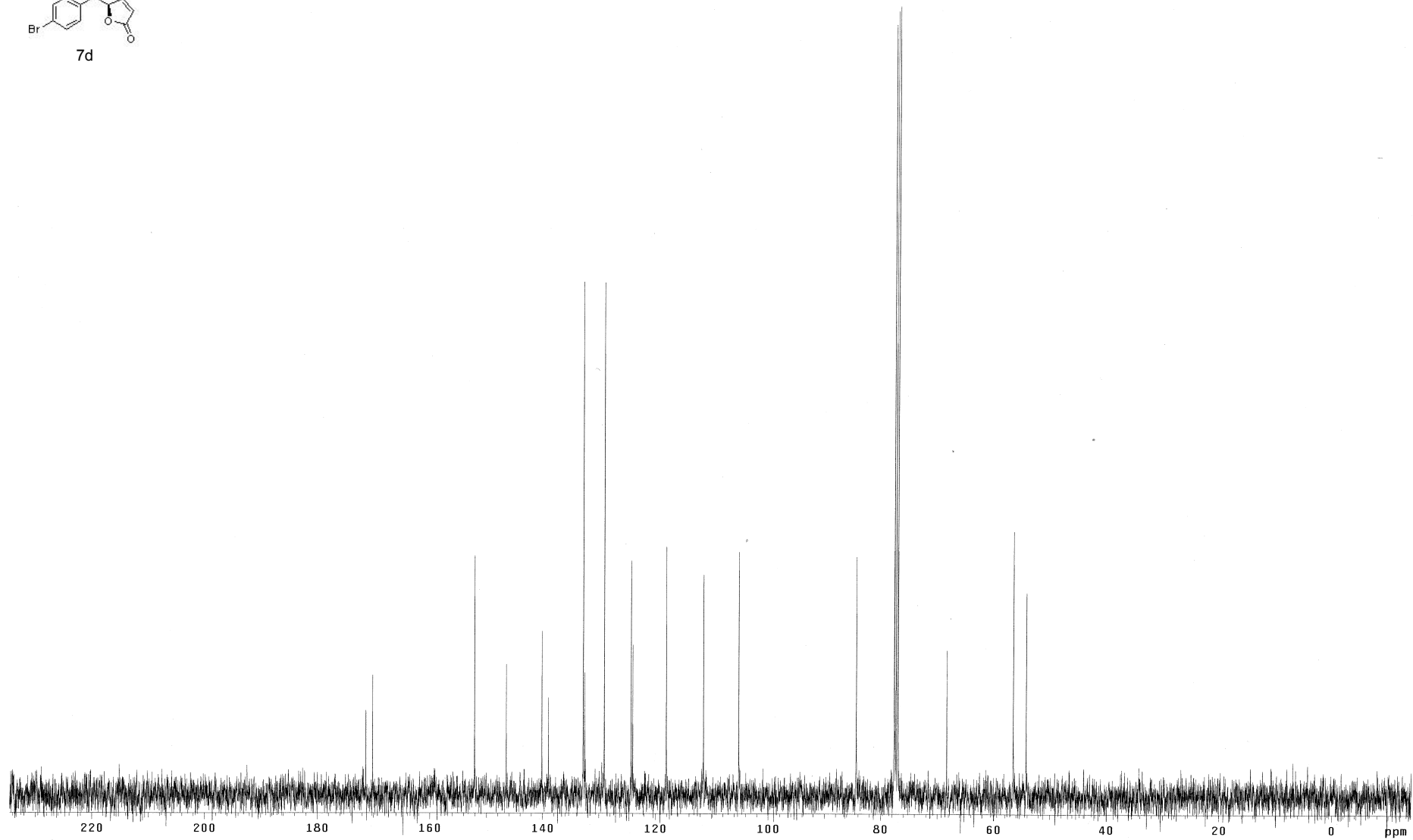
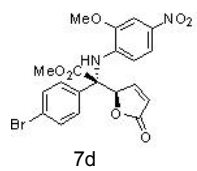


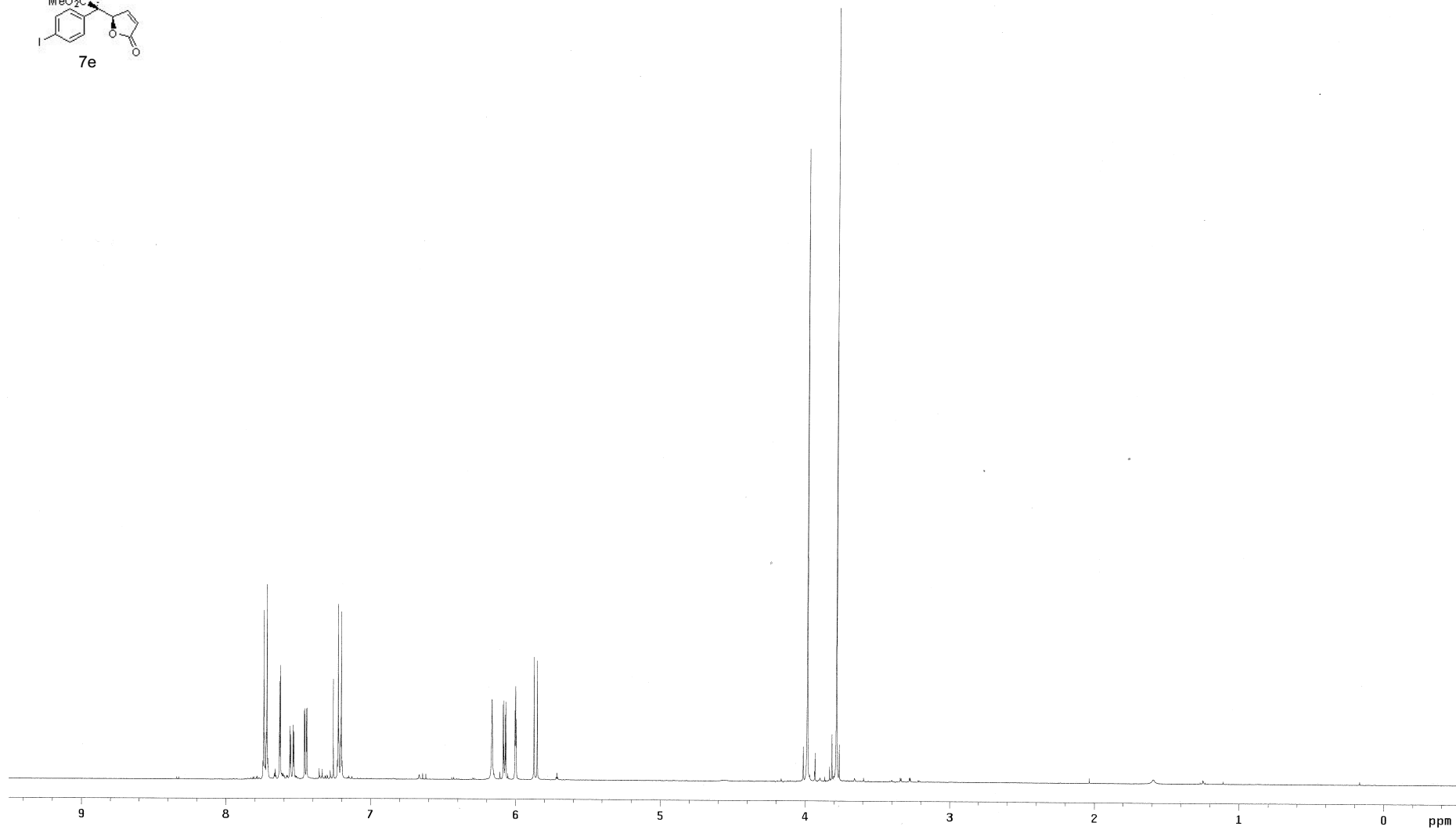
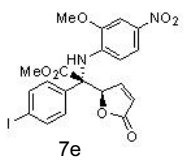


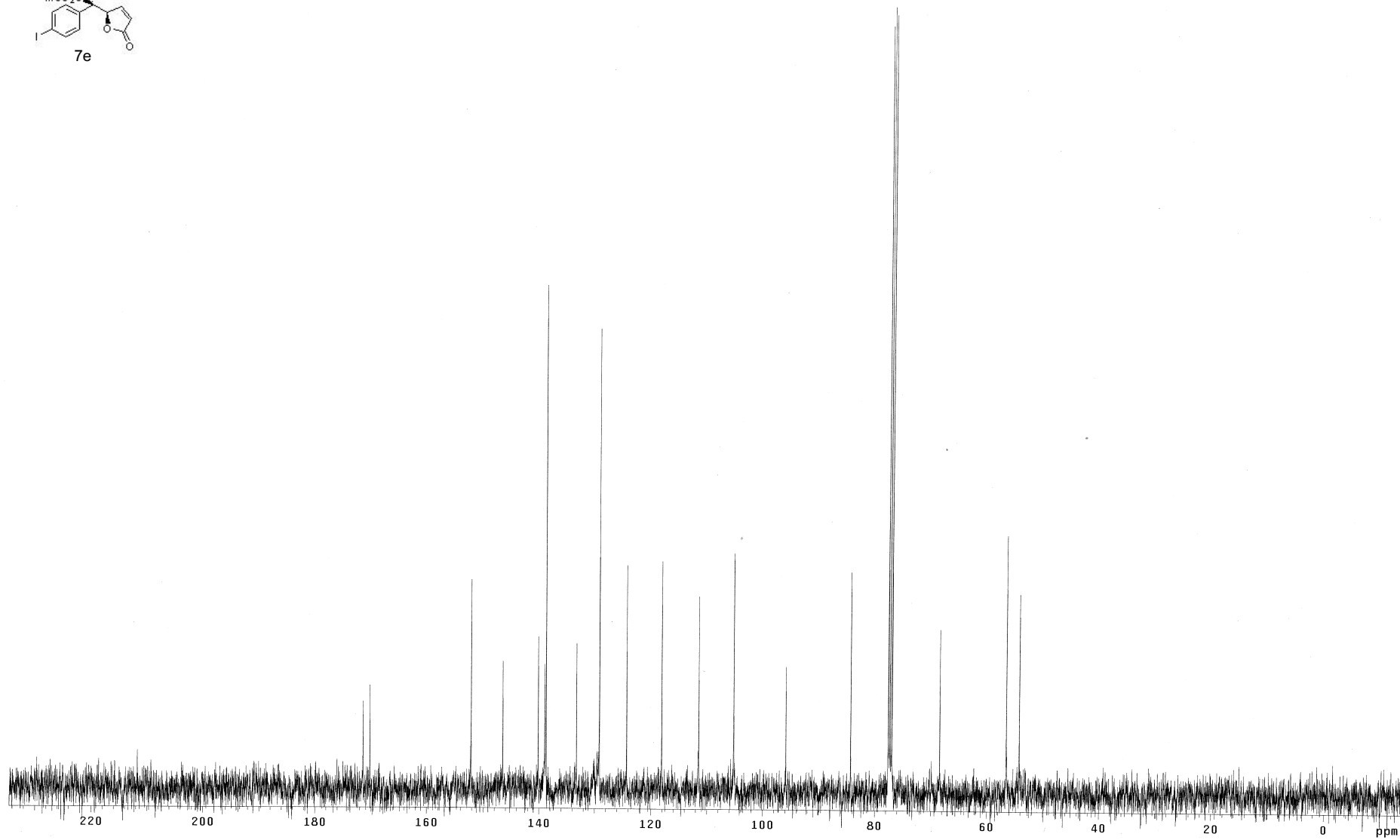
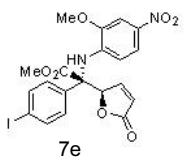


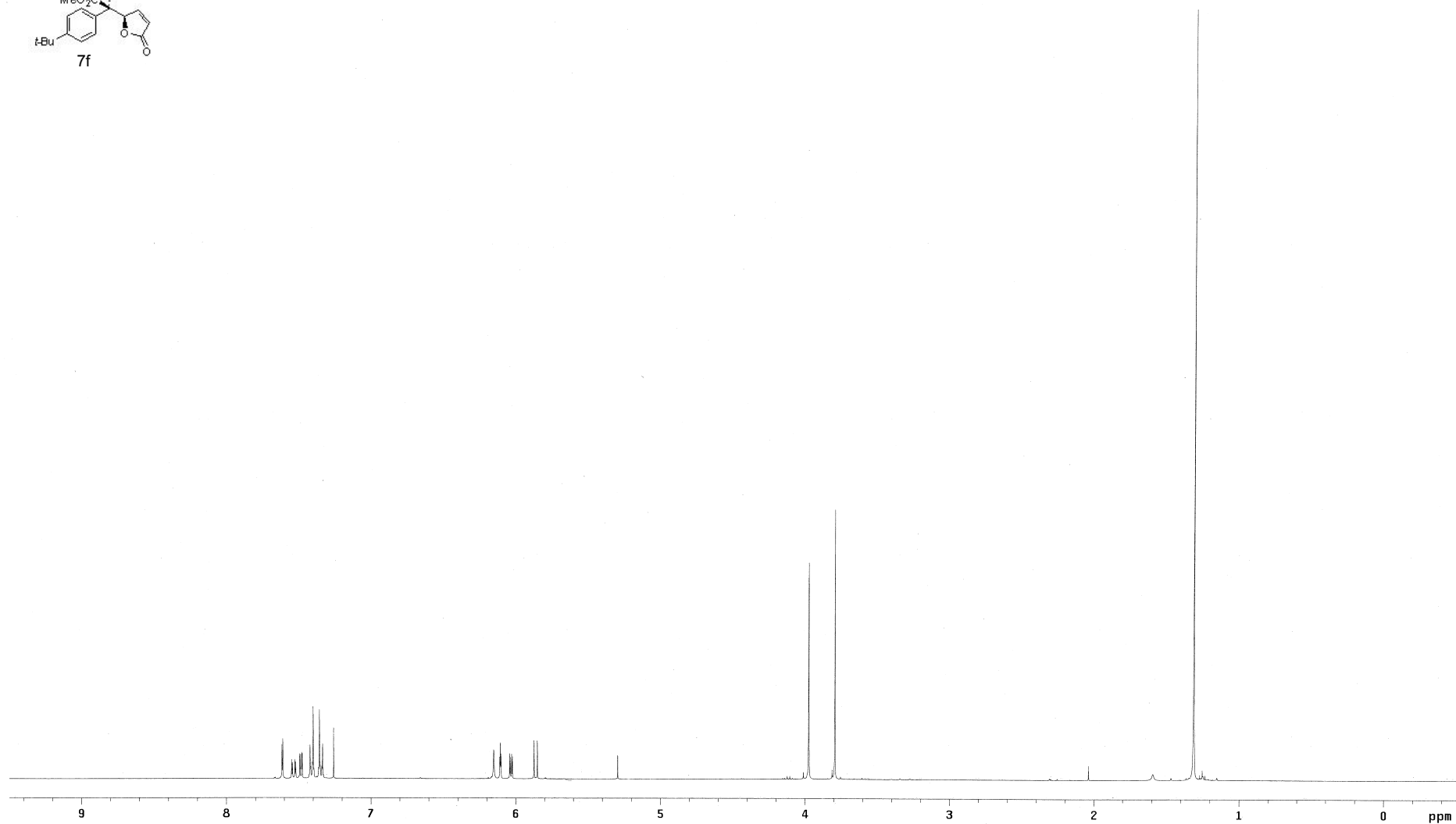
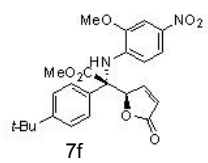


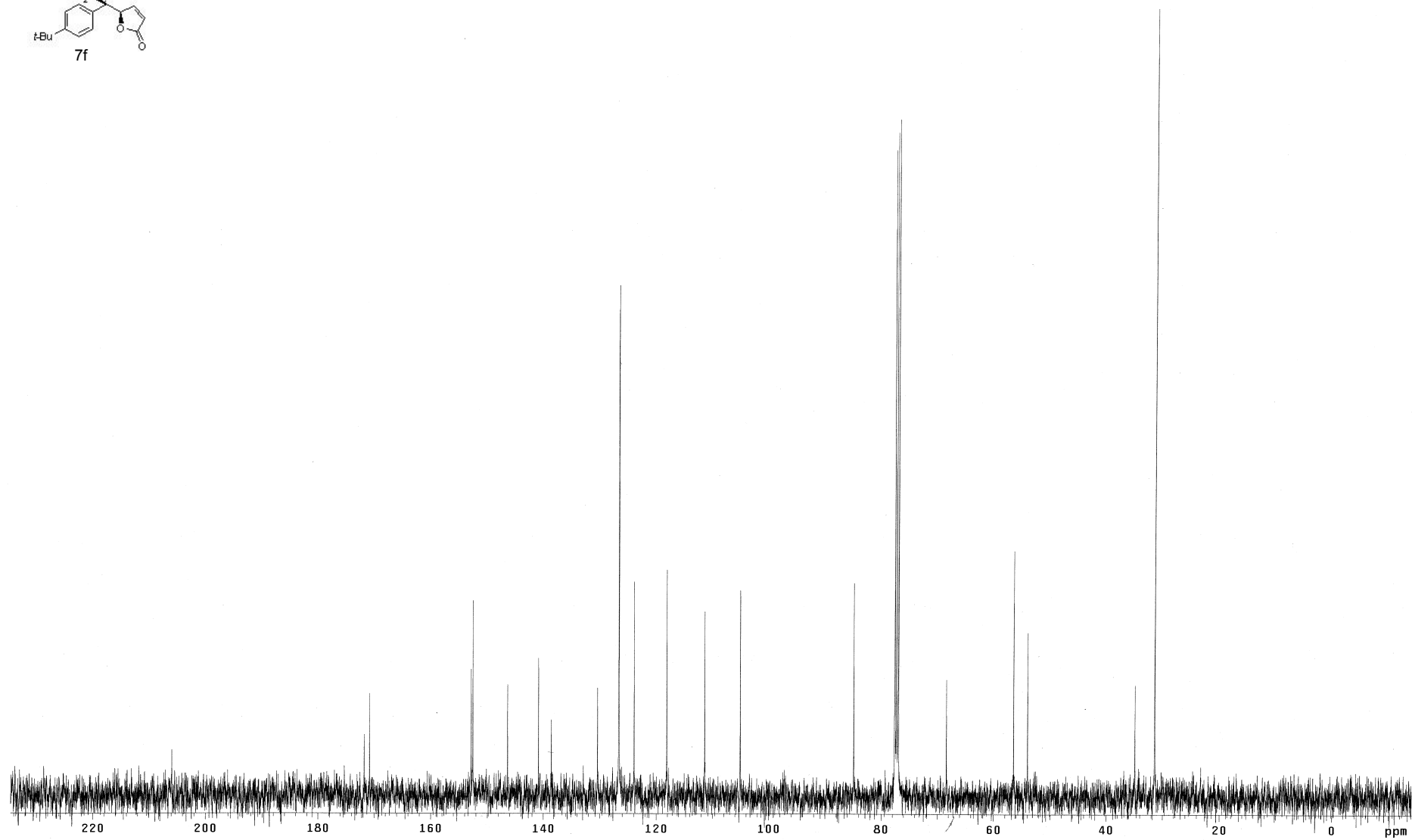
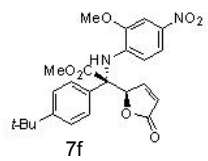


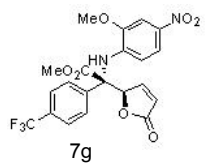




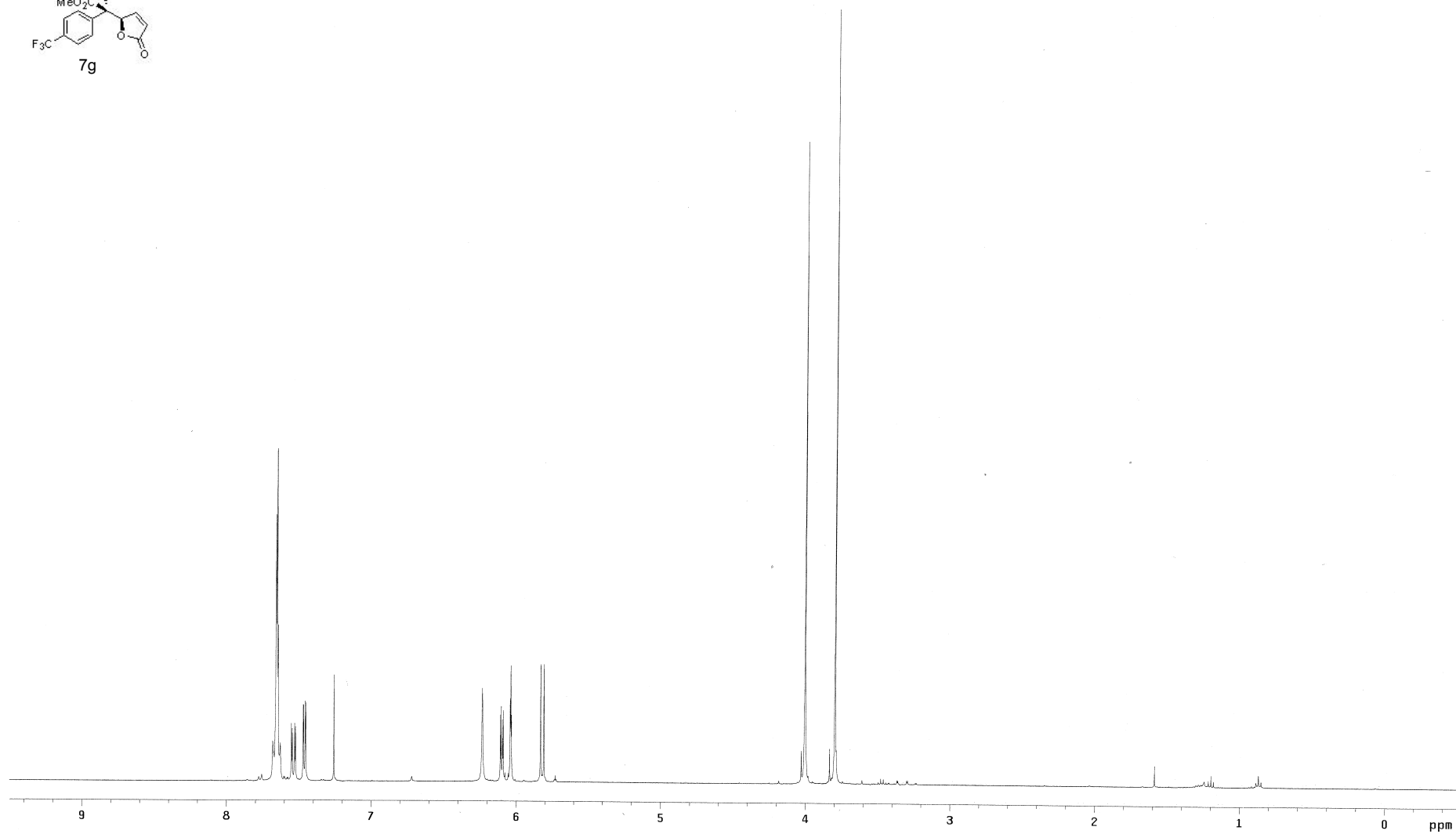


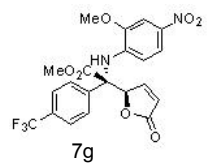




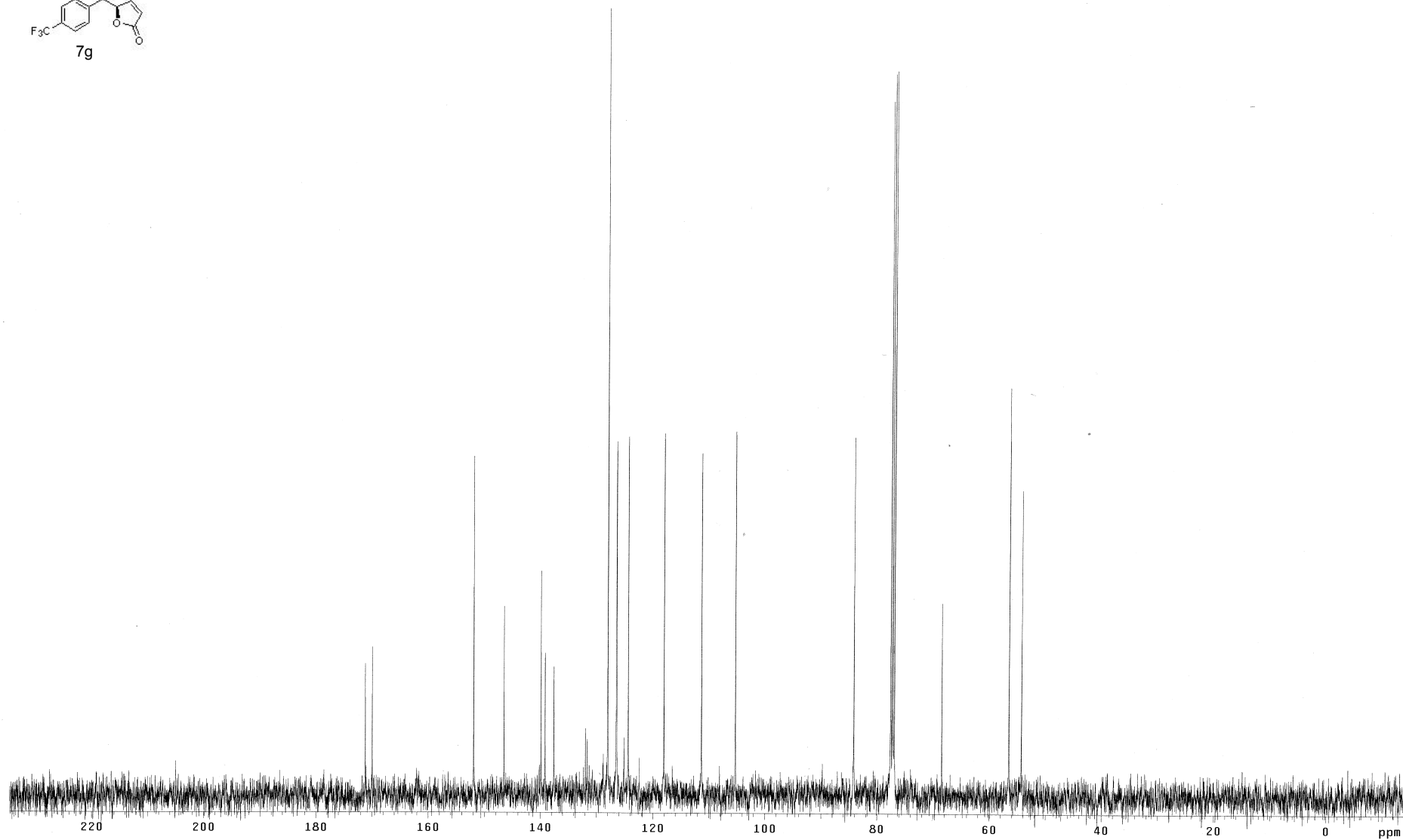


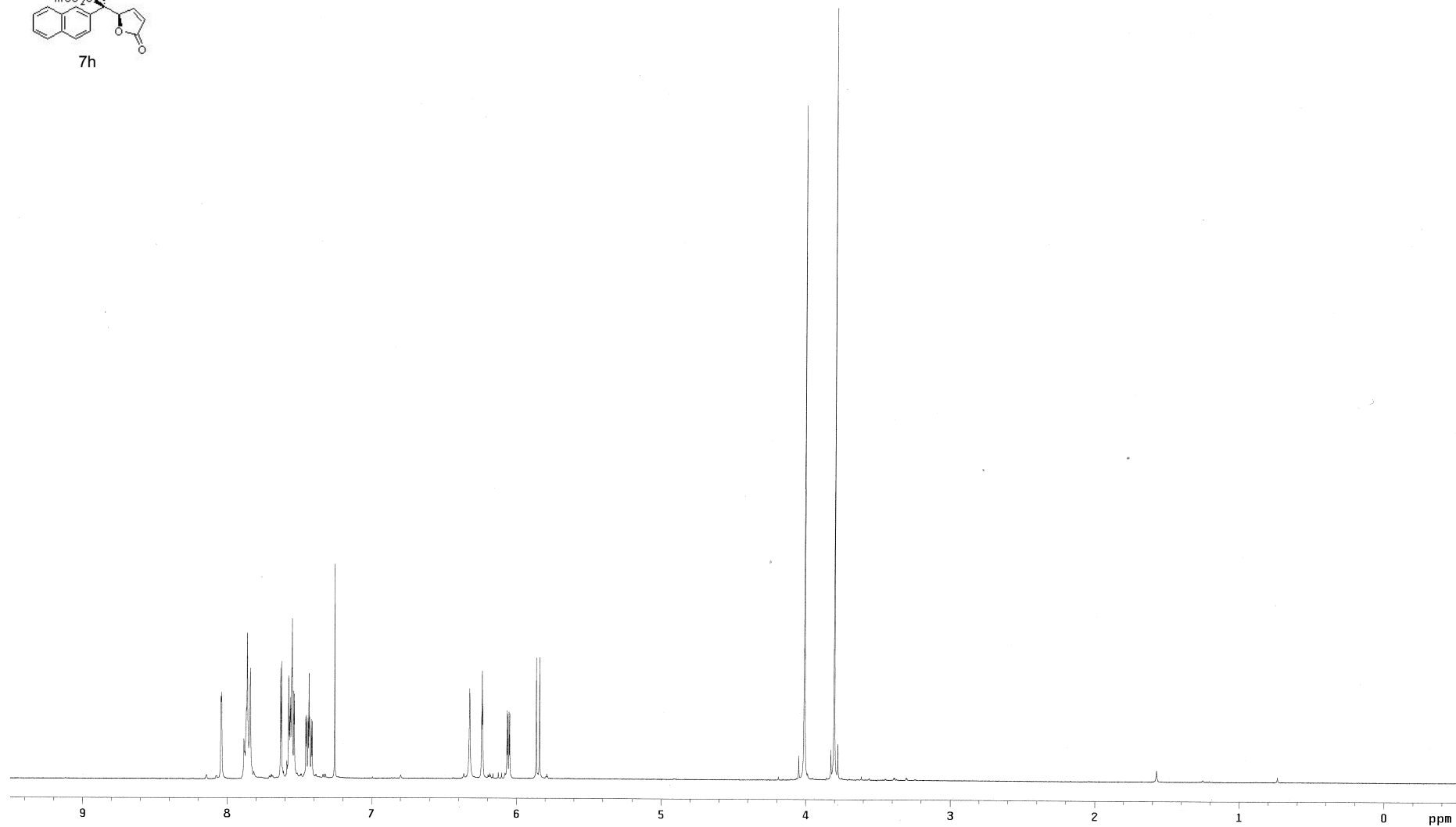
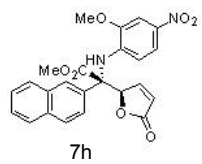
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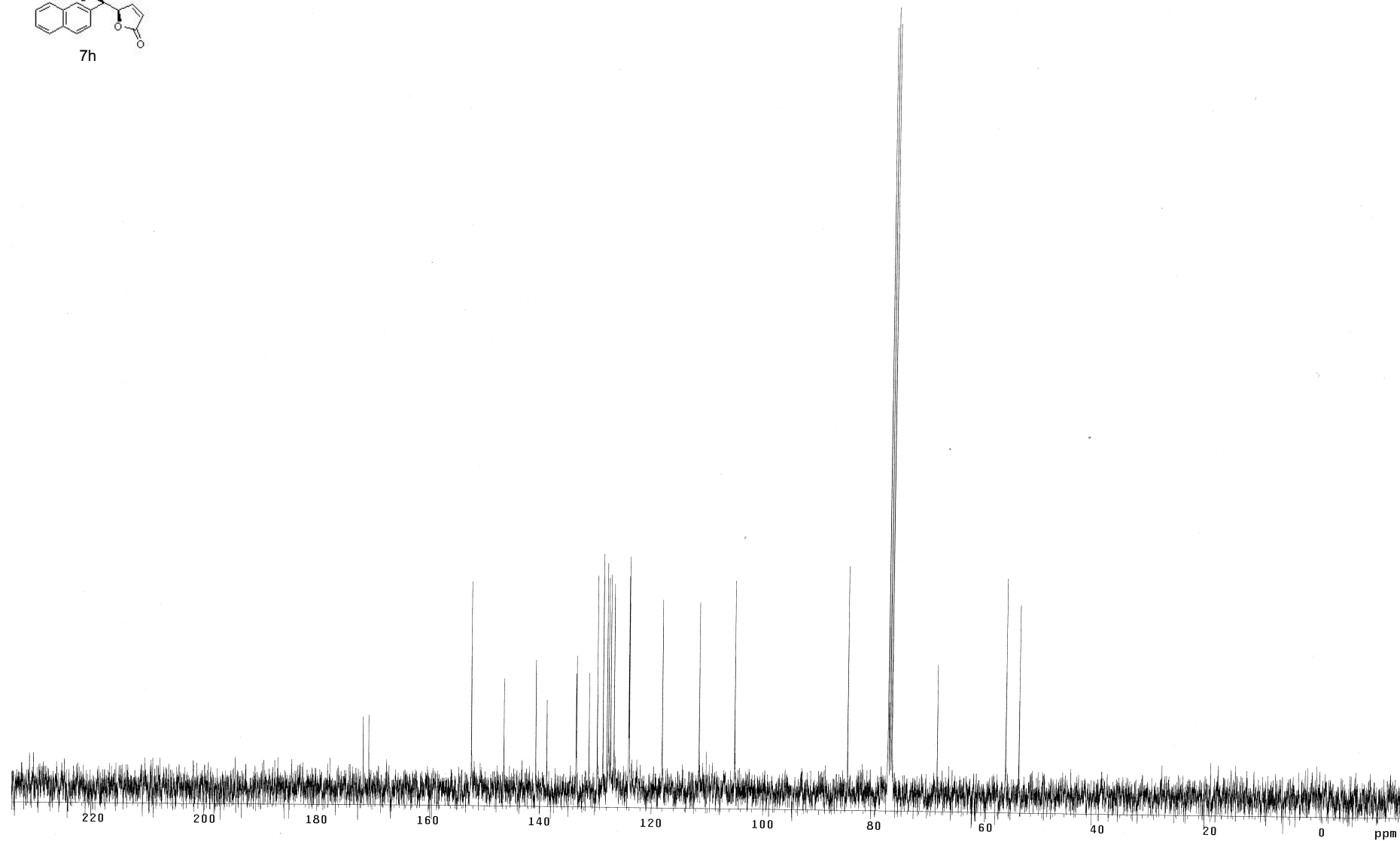
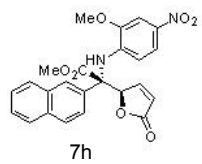


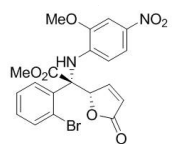


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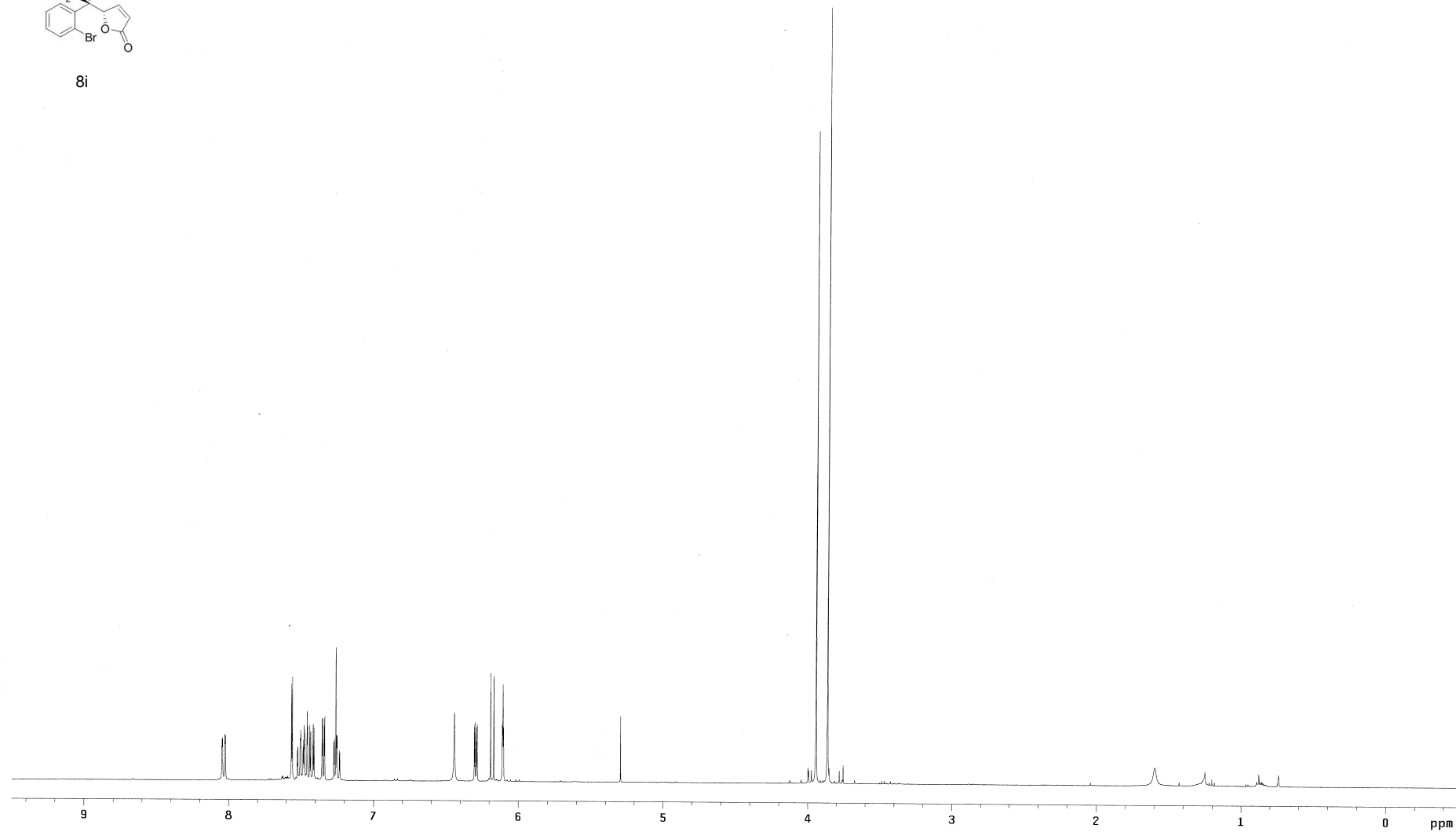


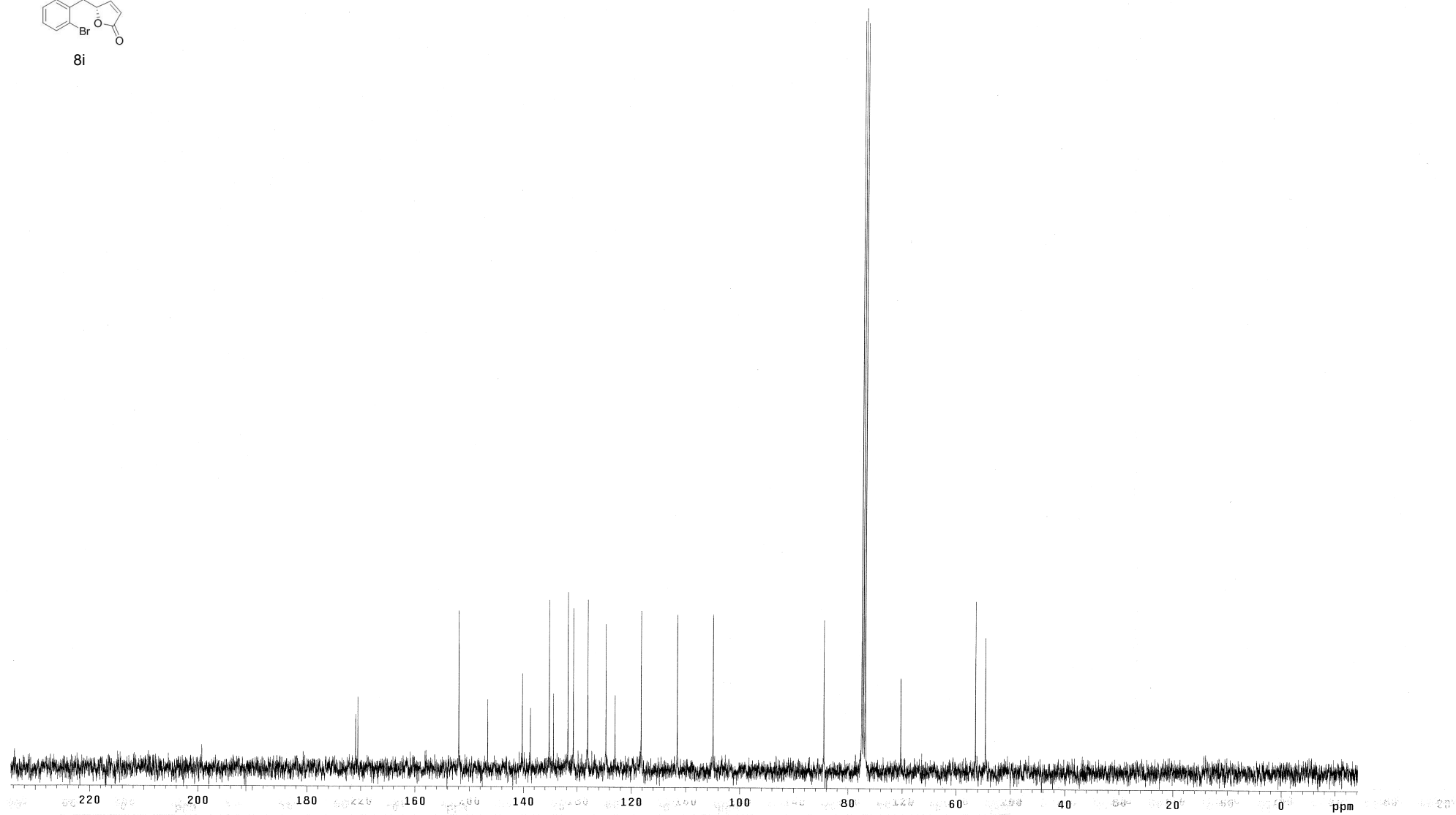


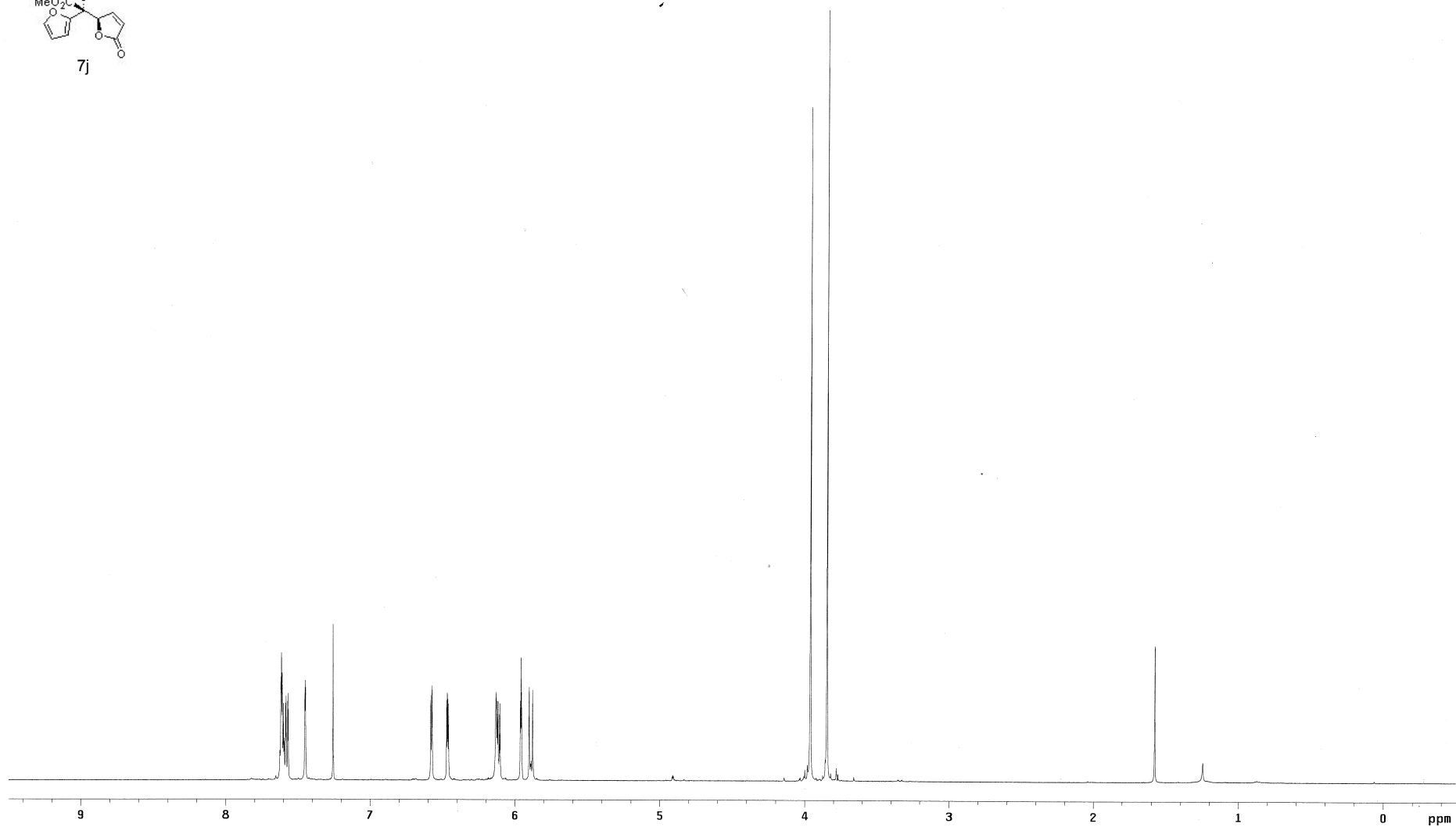
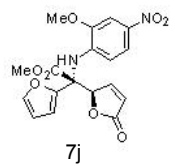


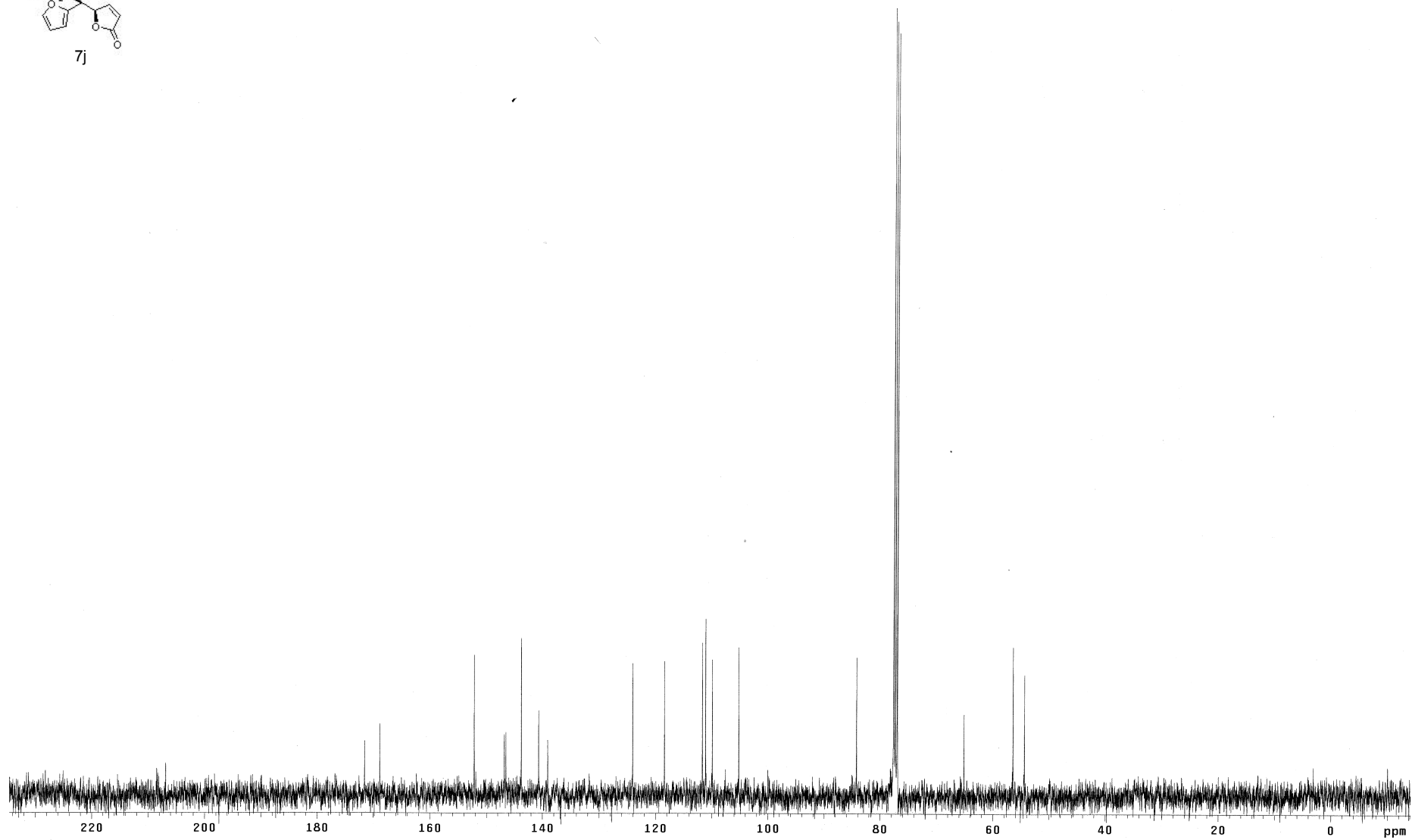
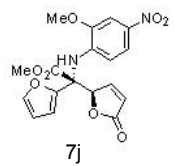


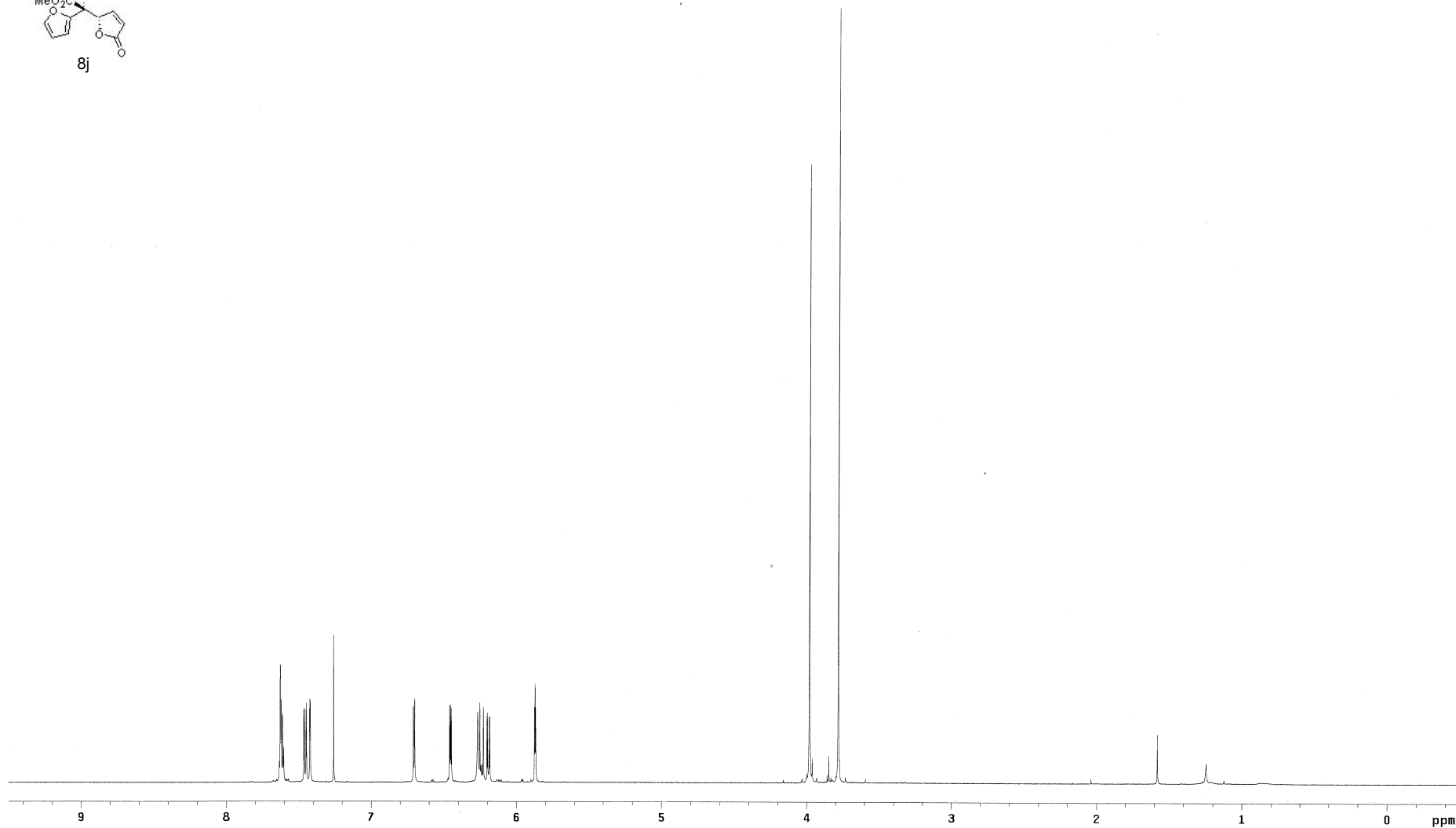
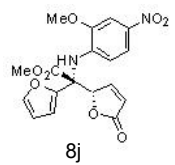
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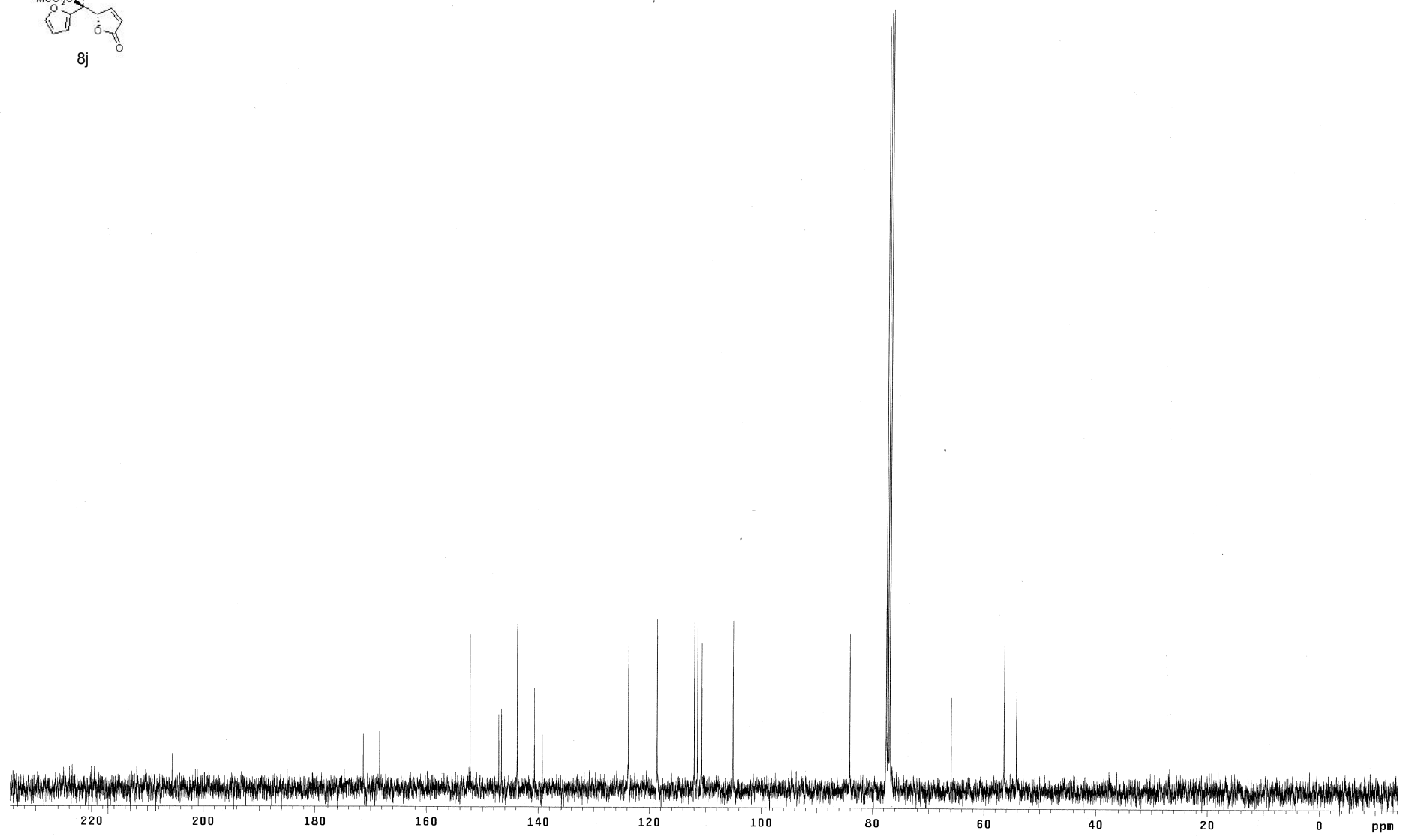
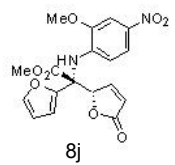


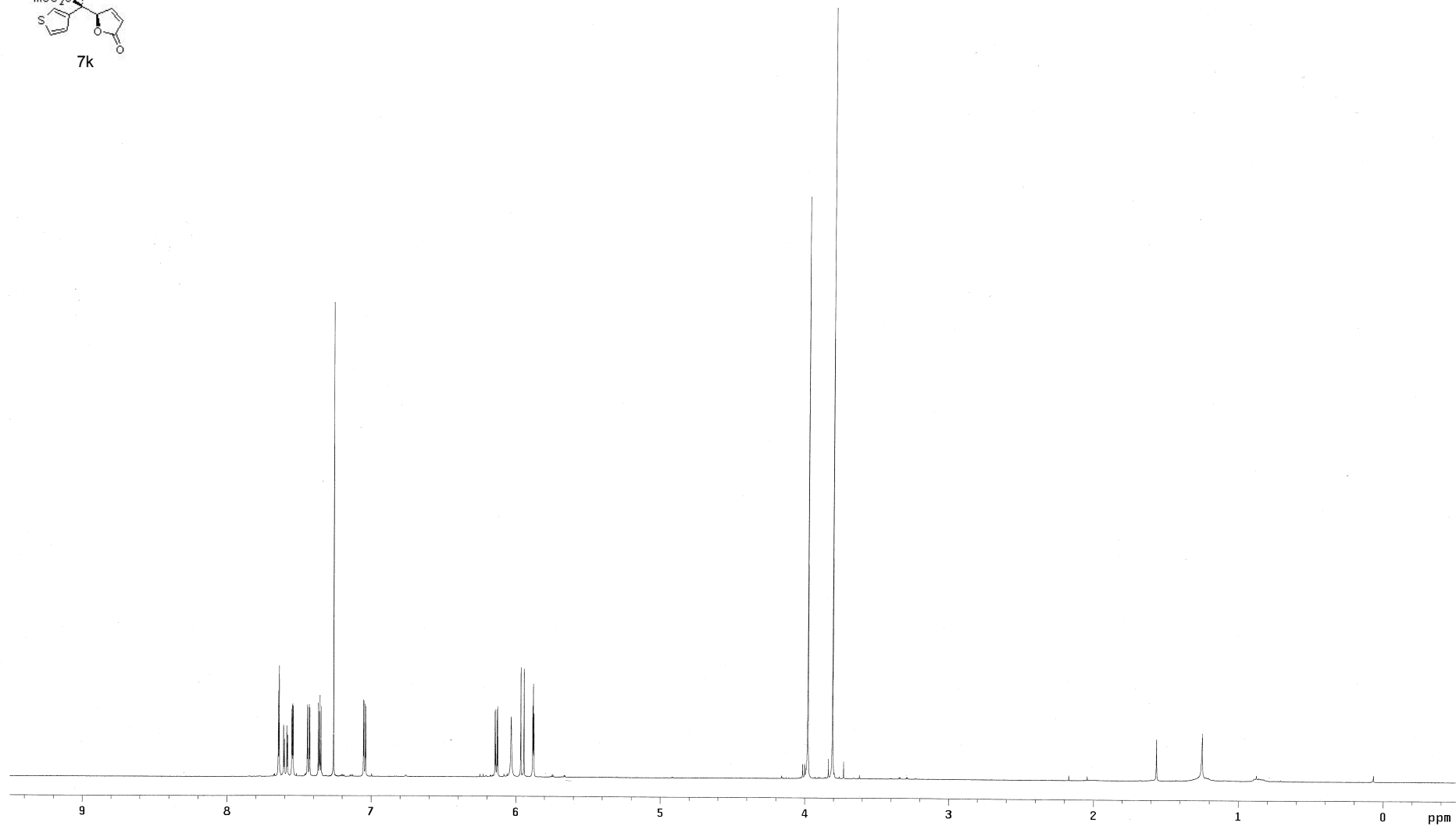
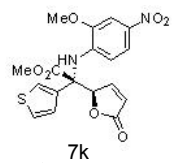


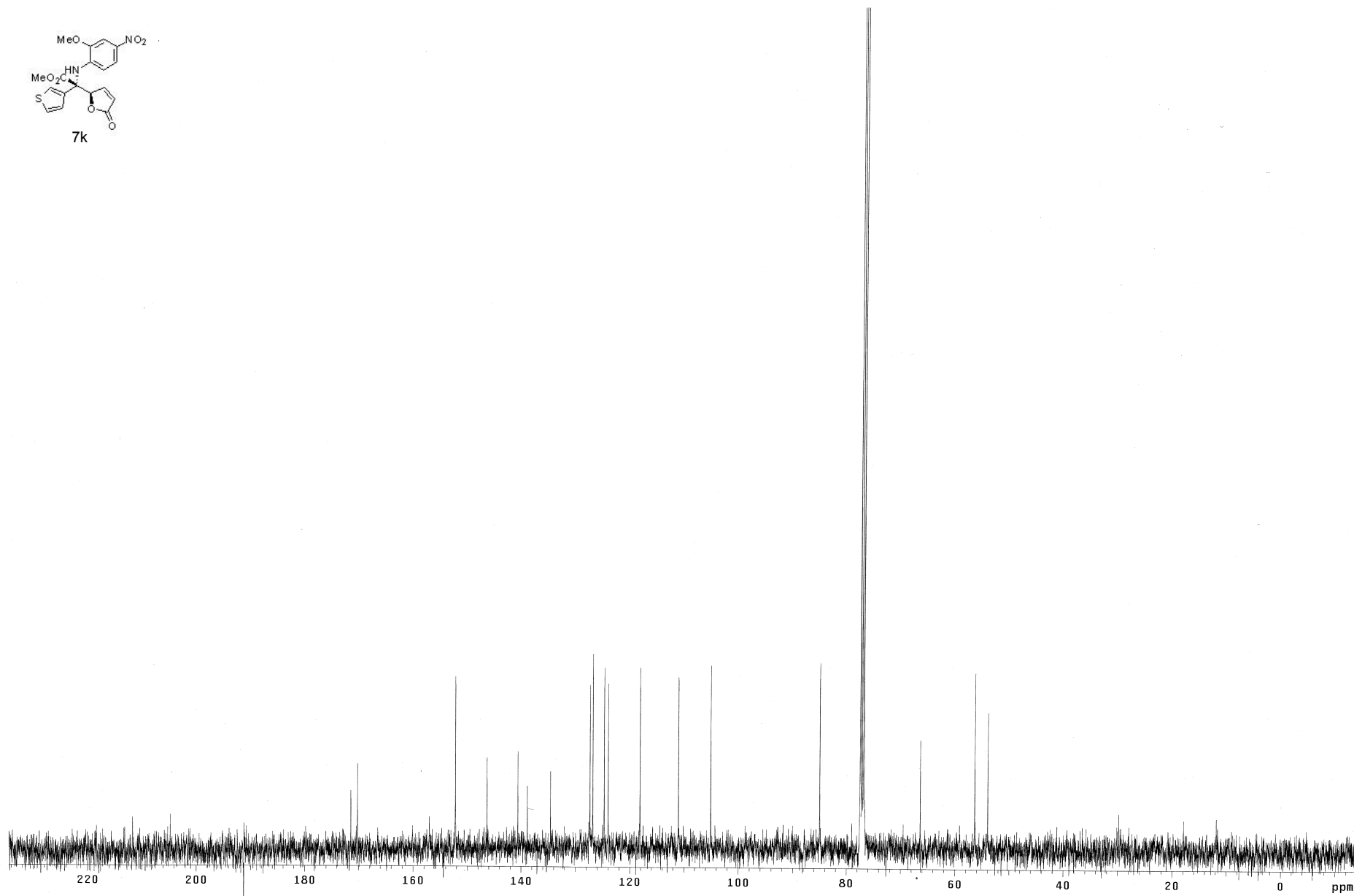
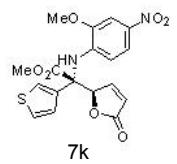


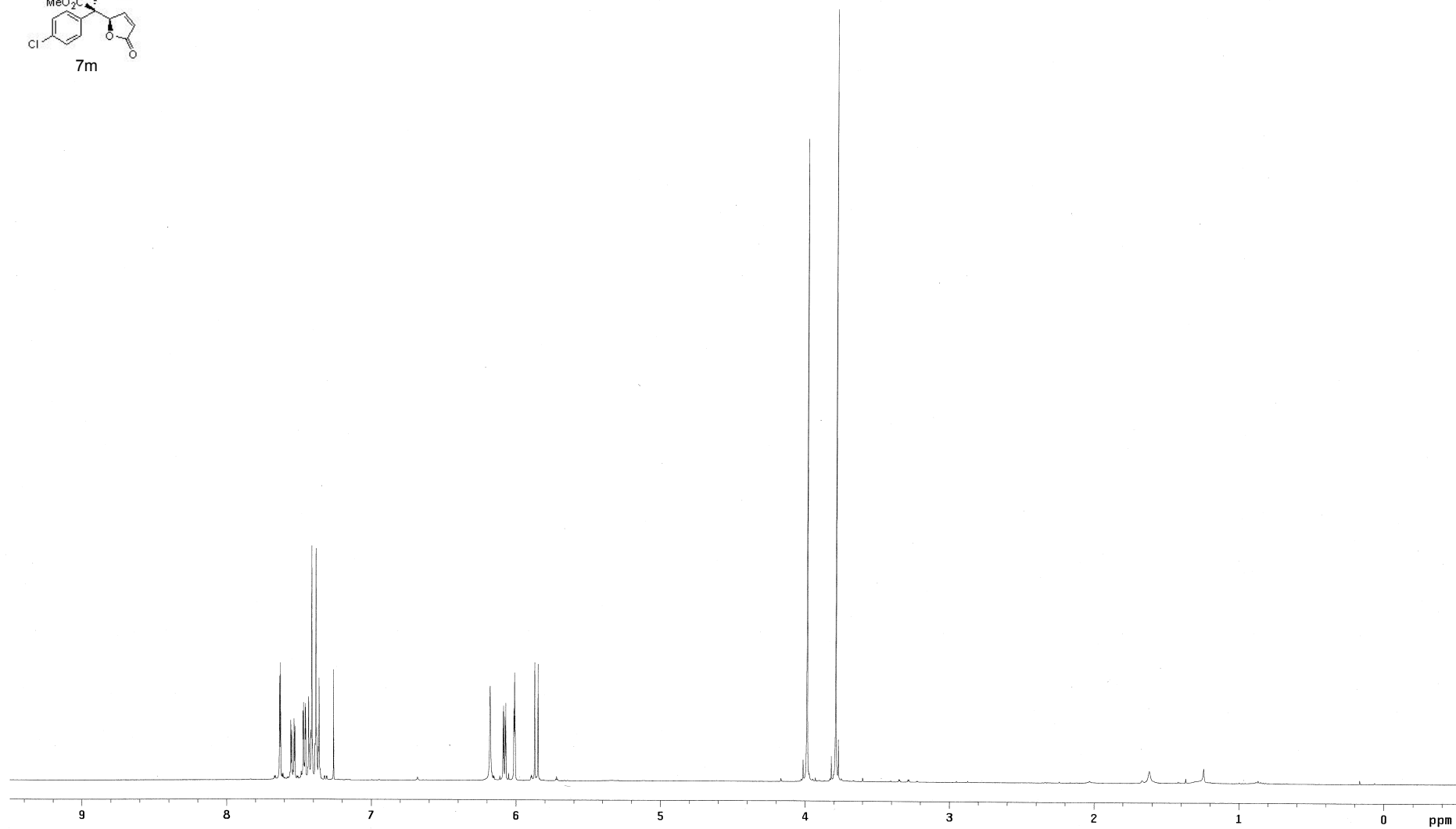
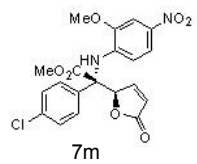


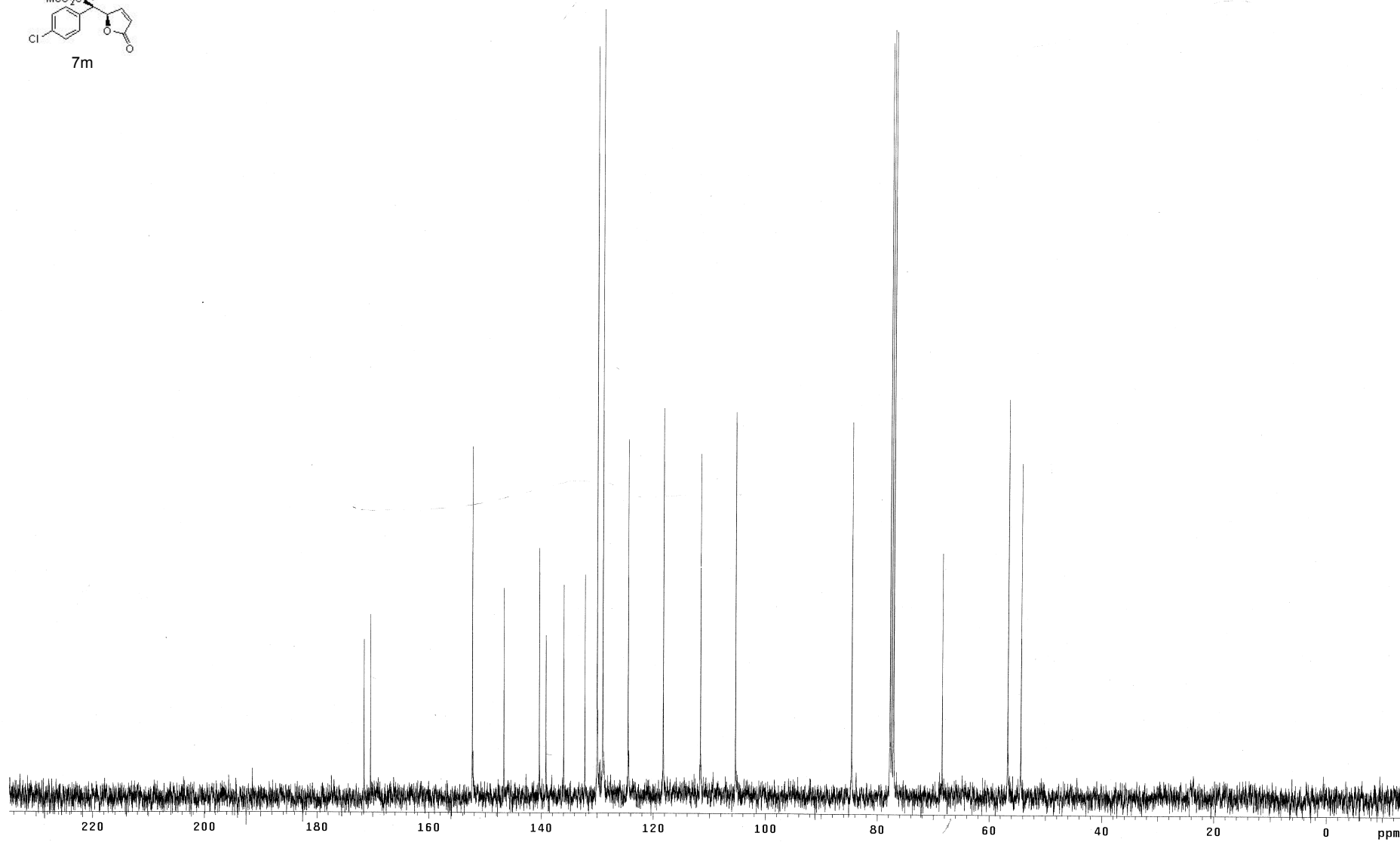
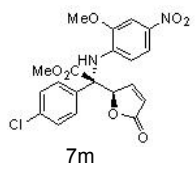


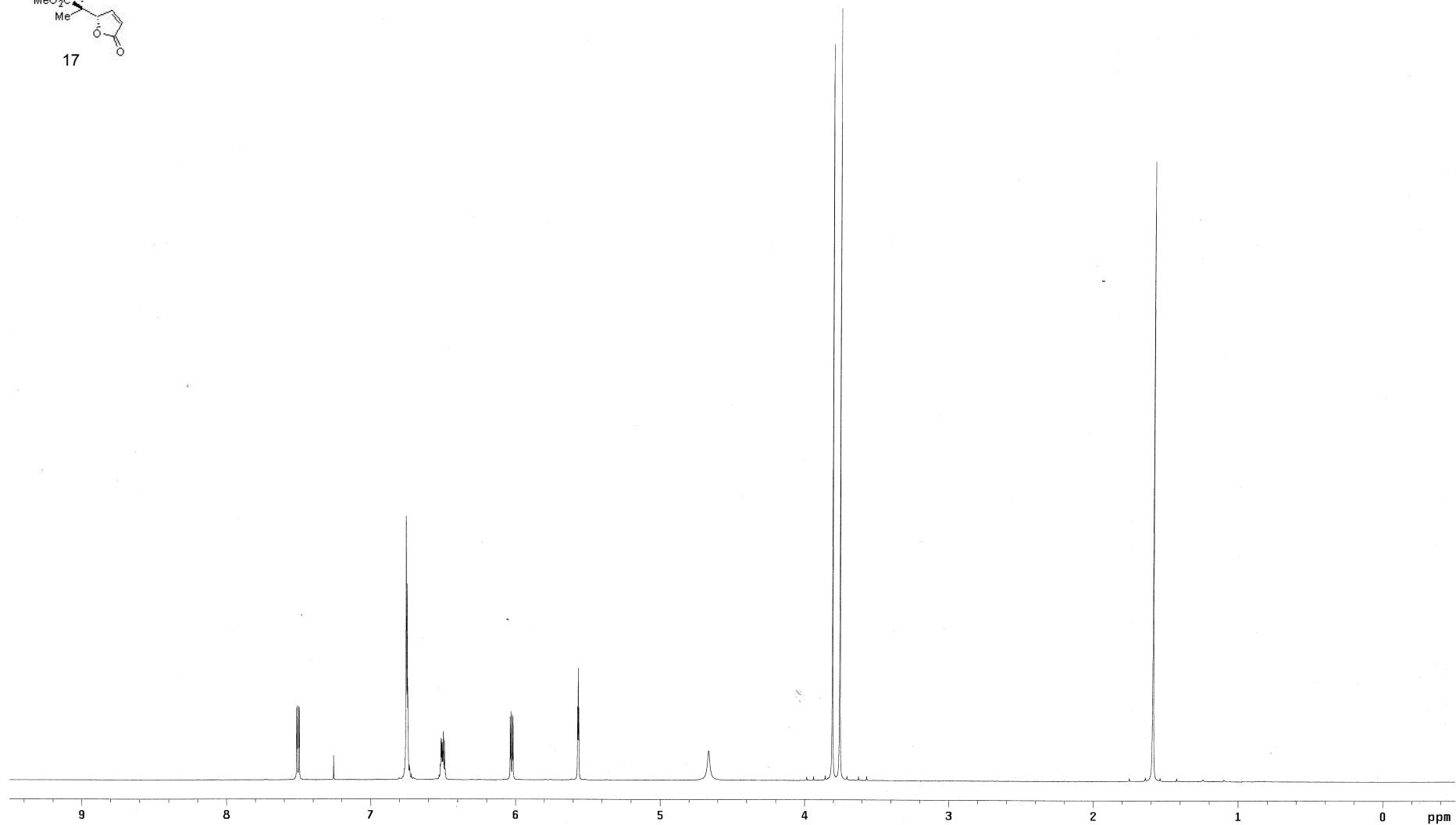
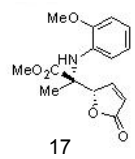


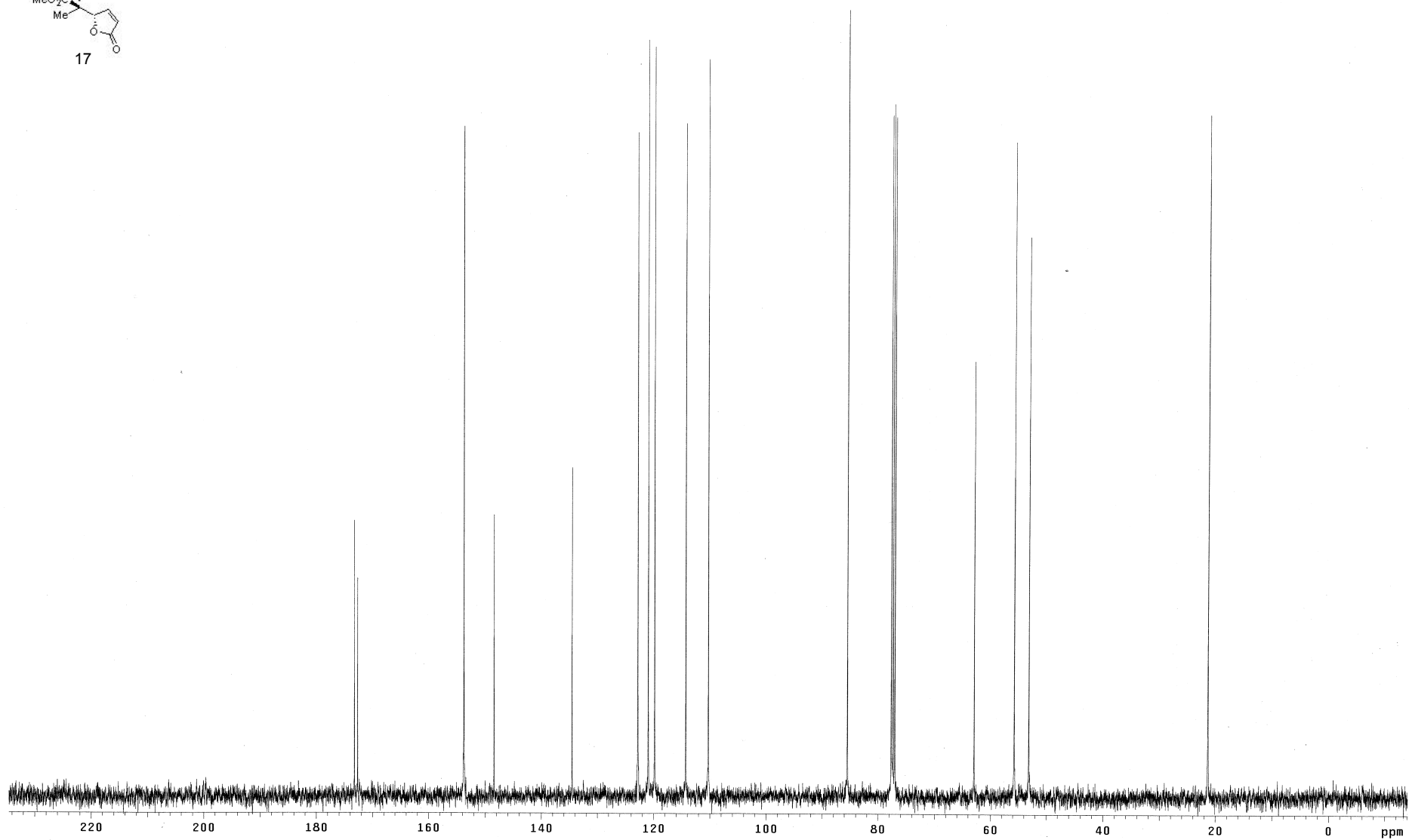
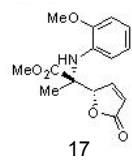


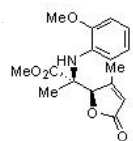




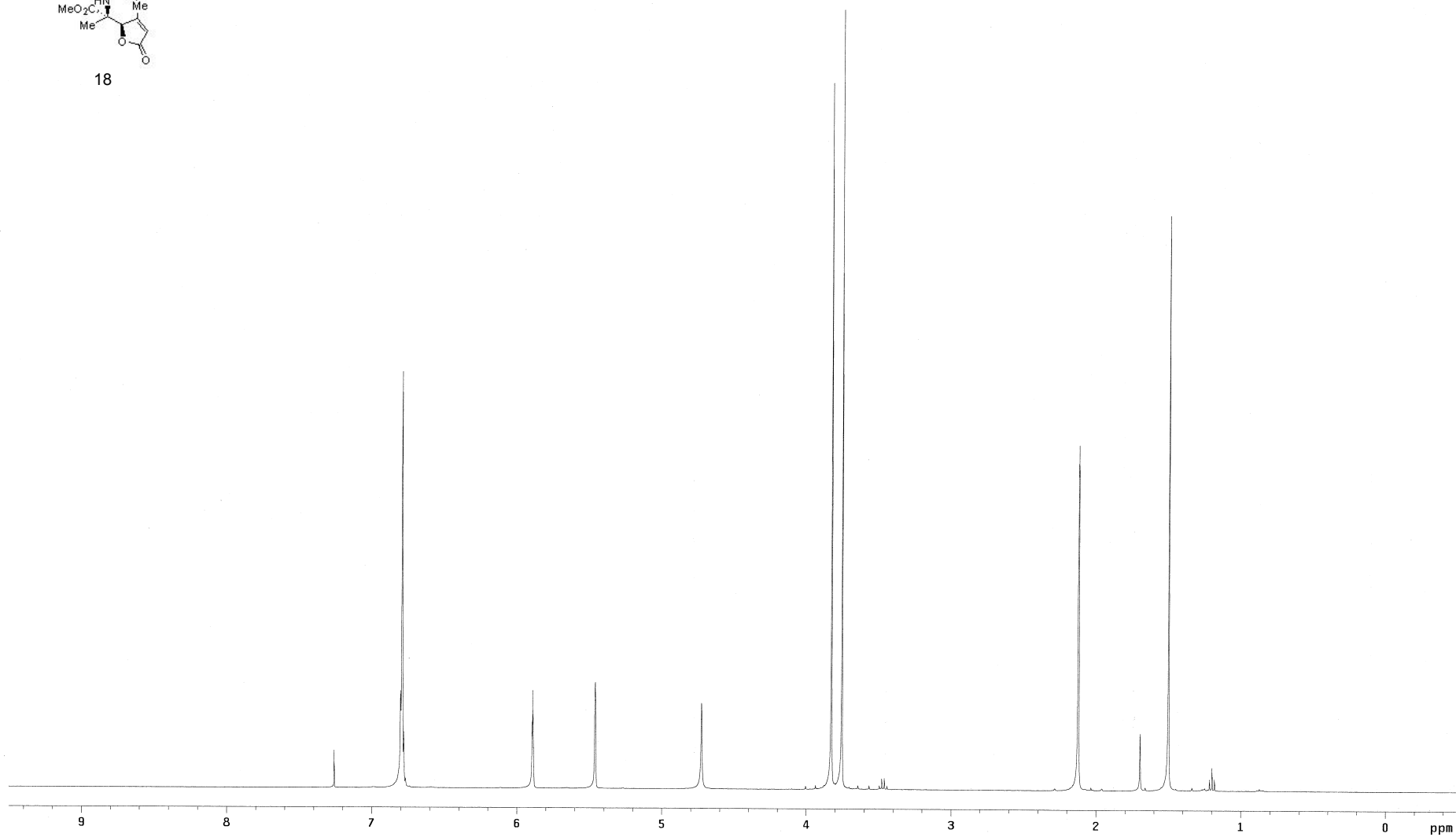


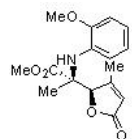




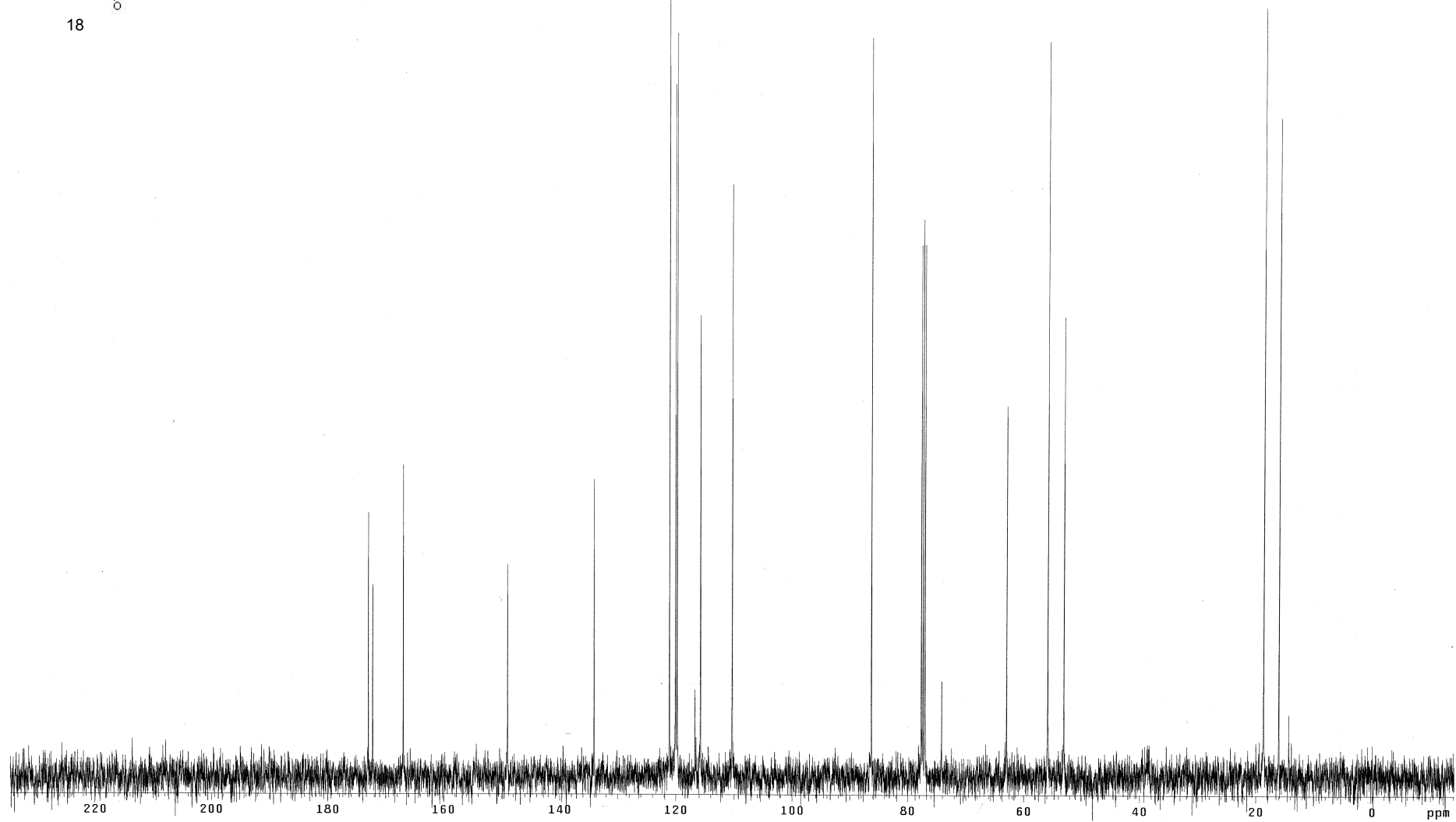


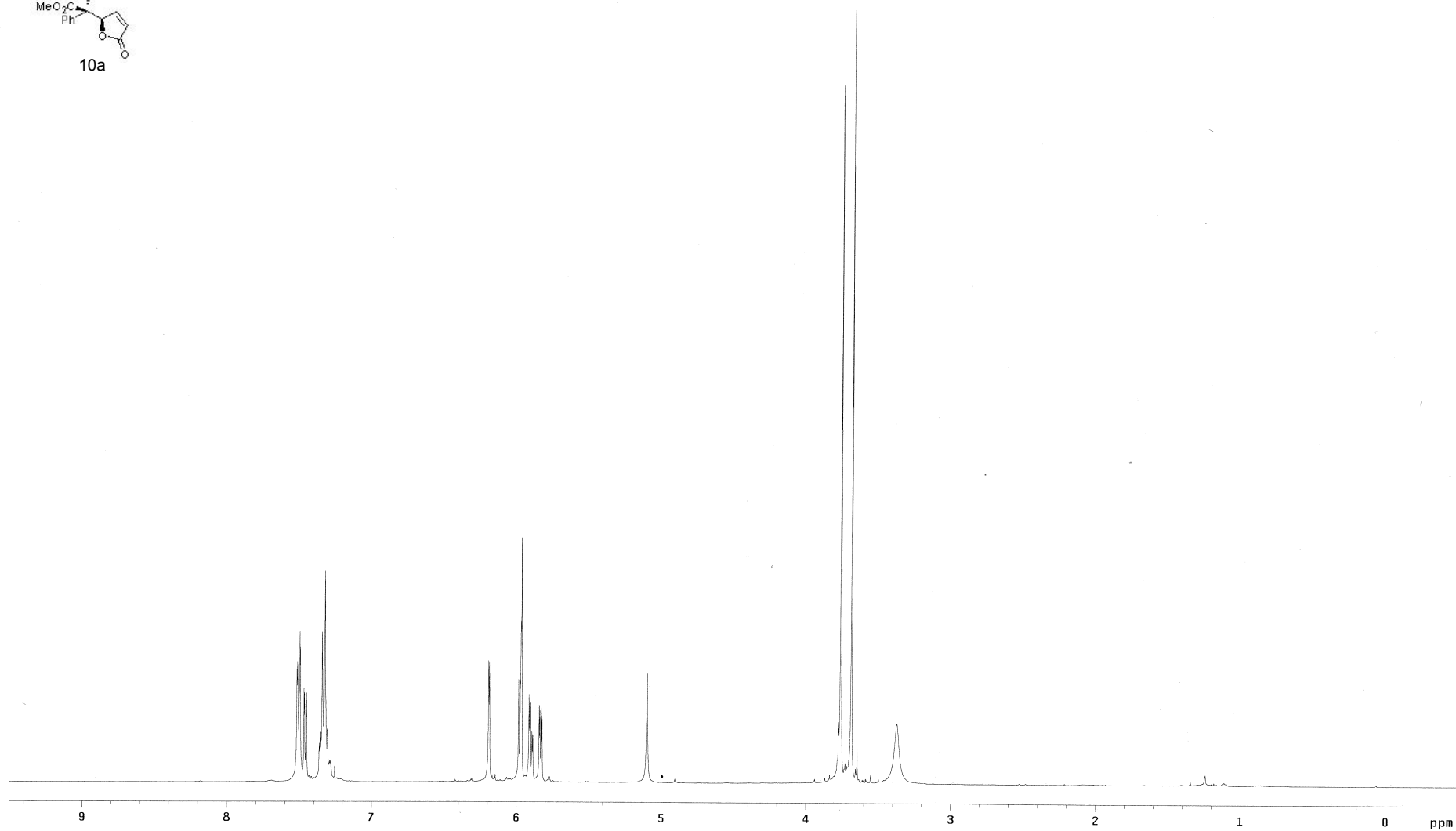
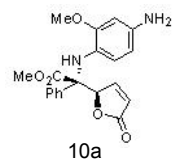
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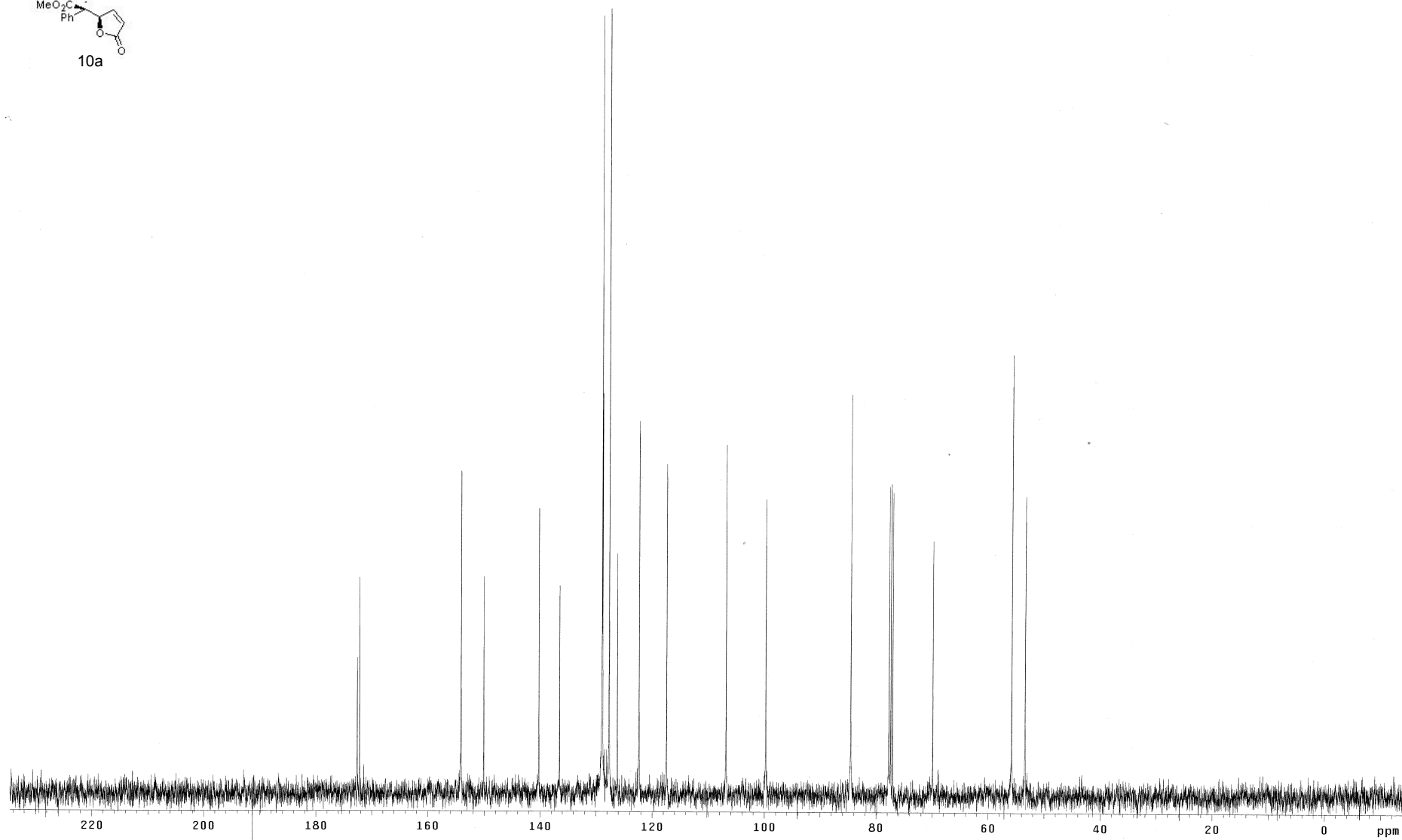
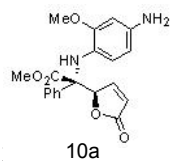


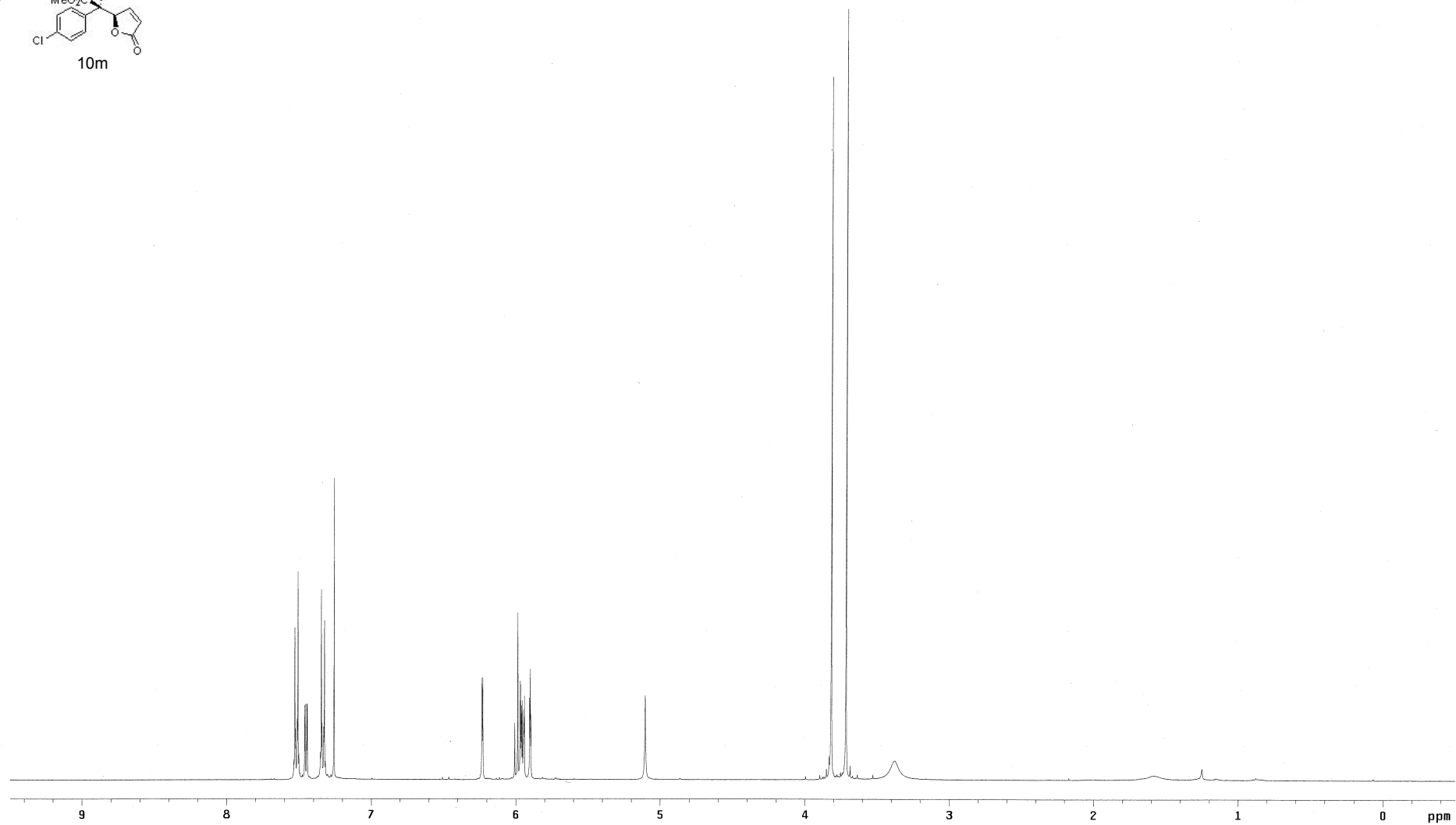
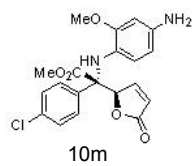


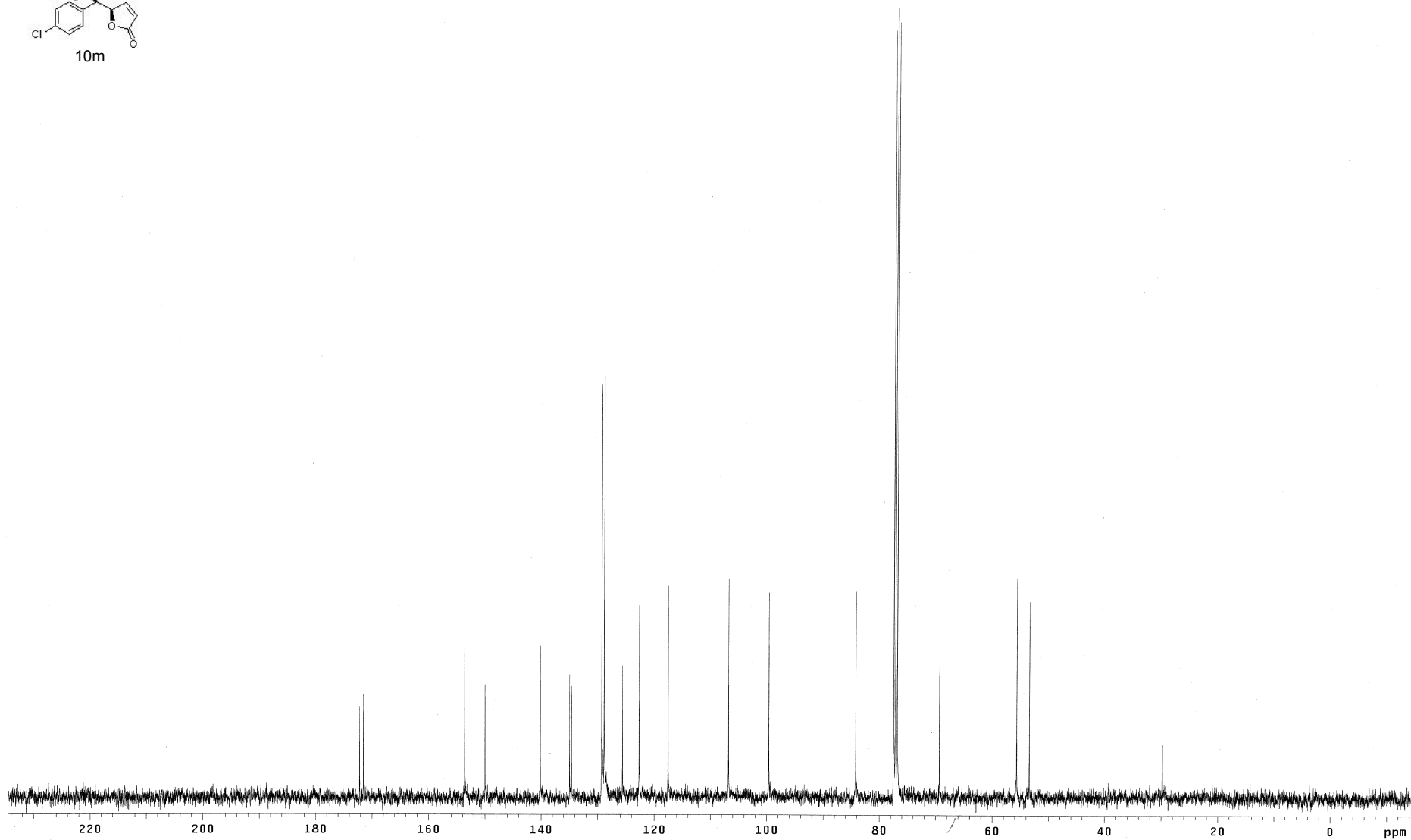
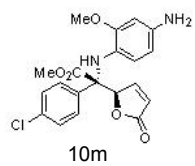
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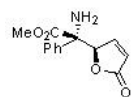




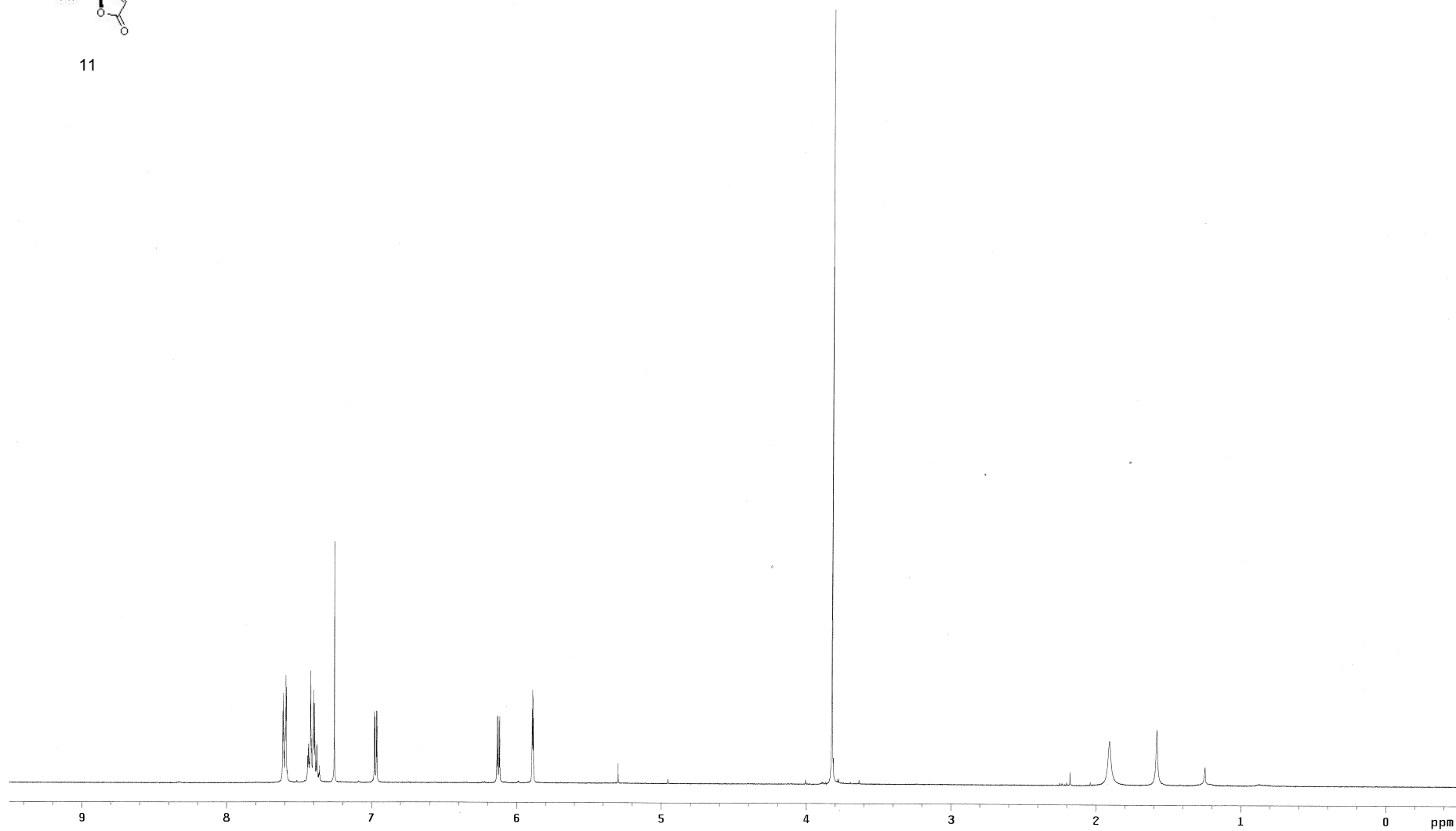


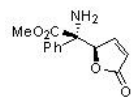




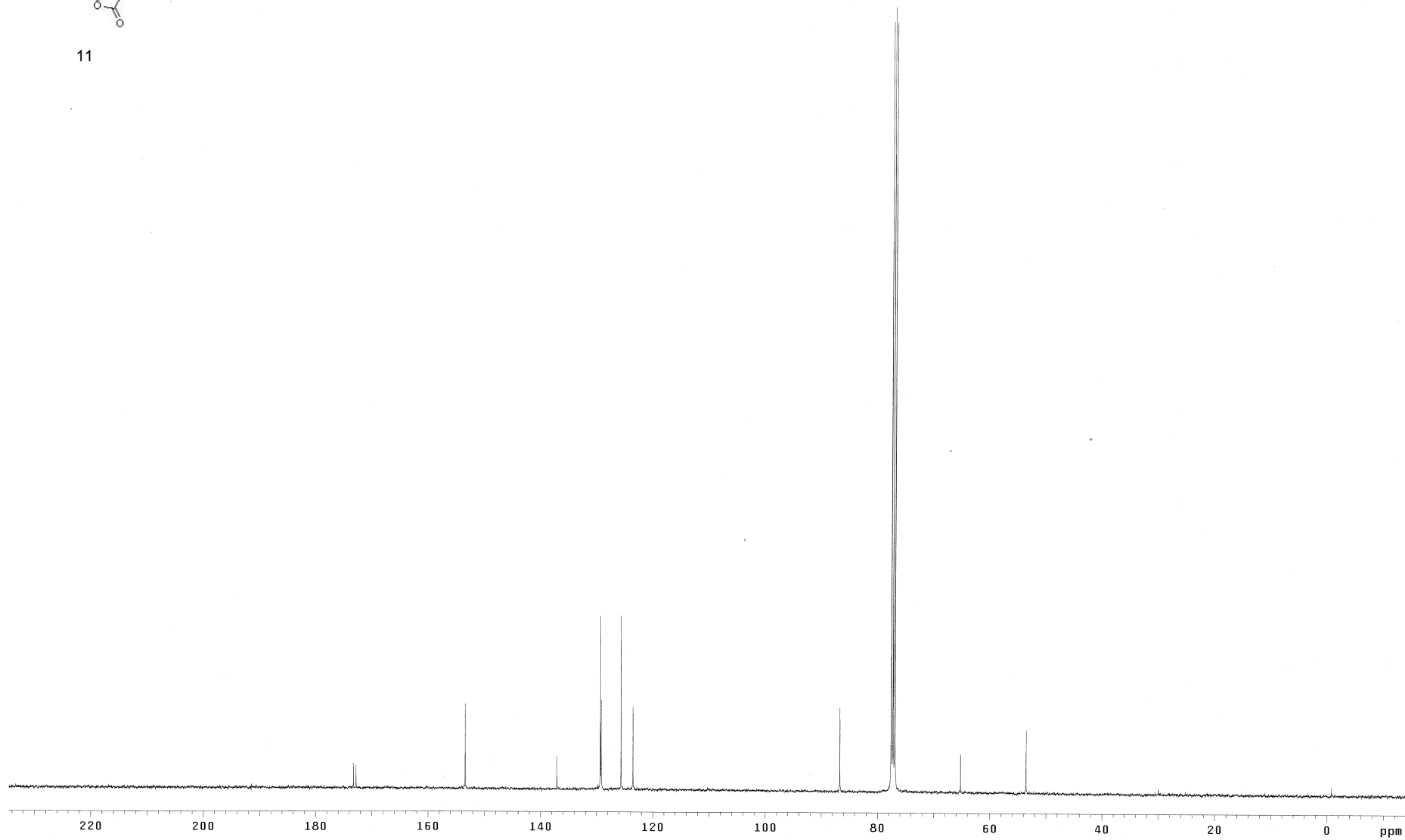


11

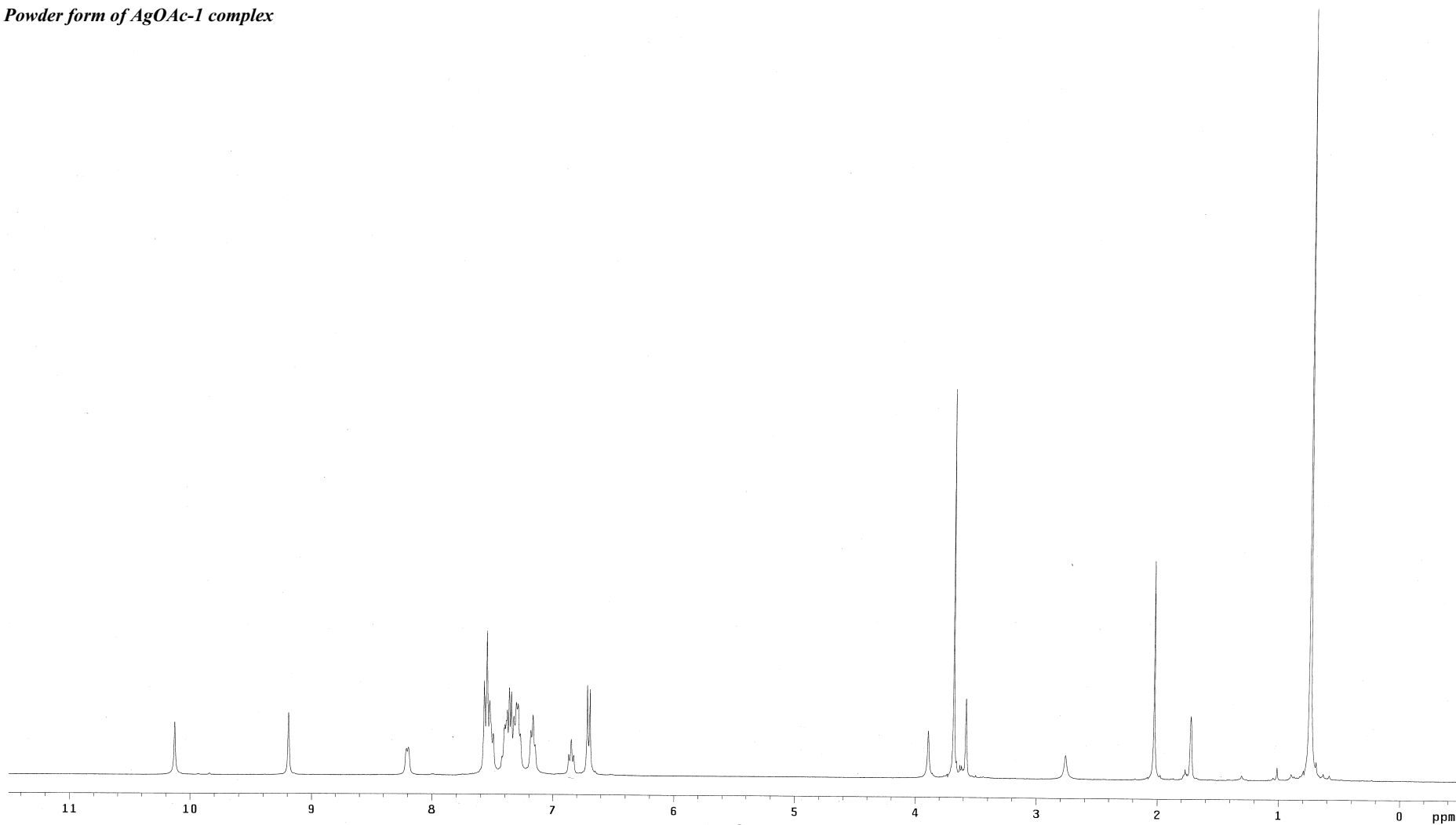




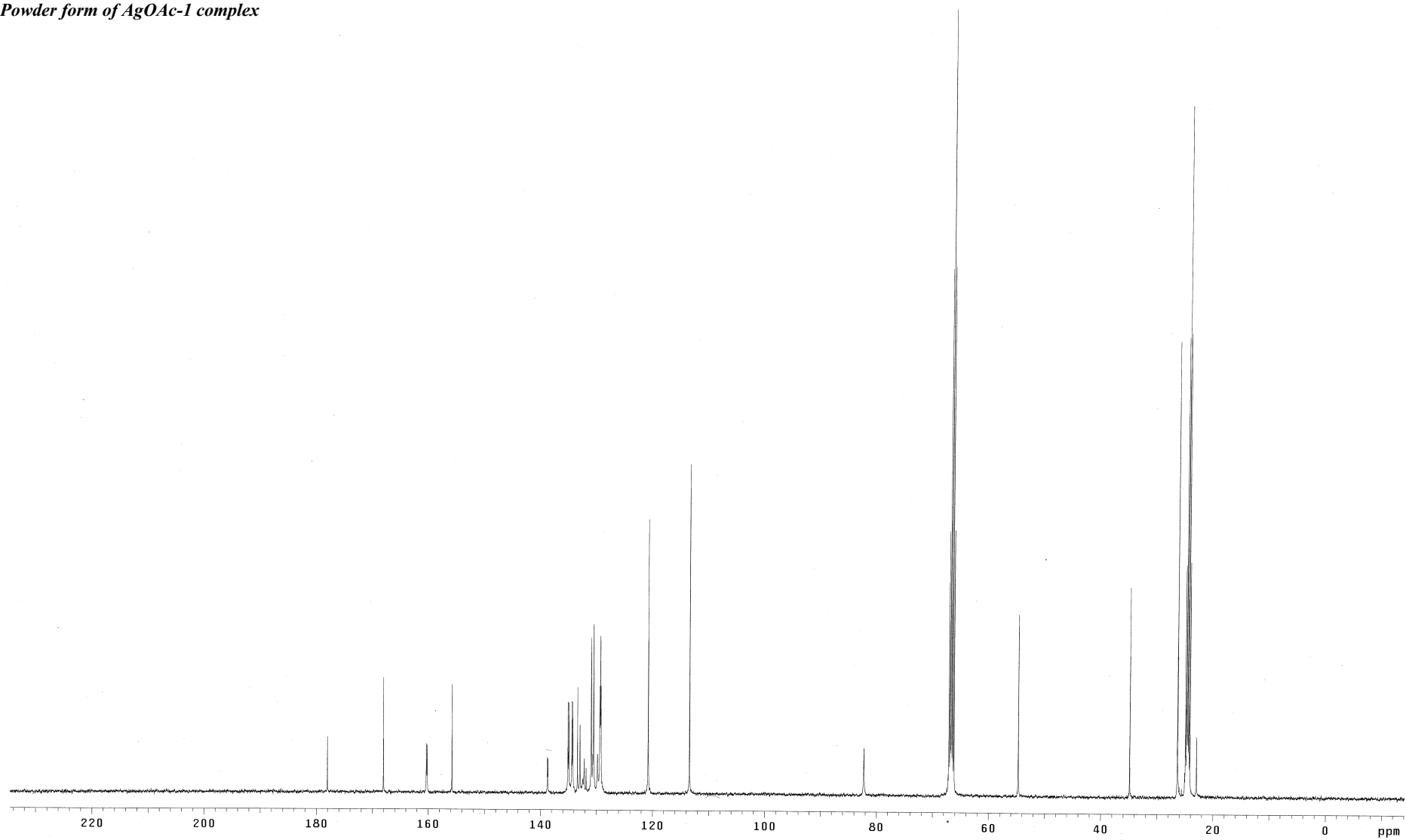
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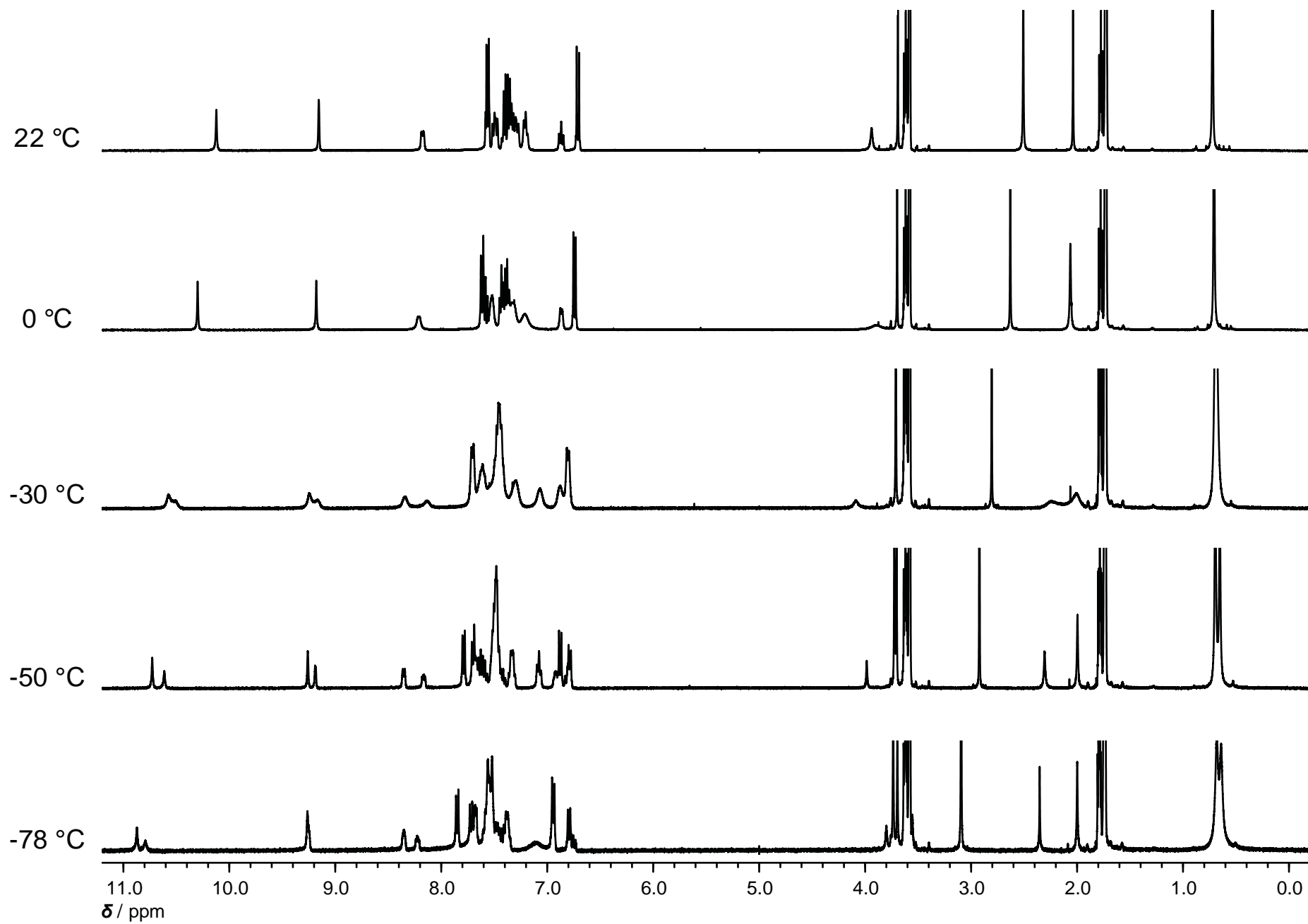


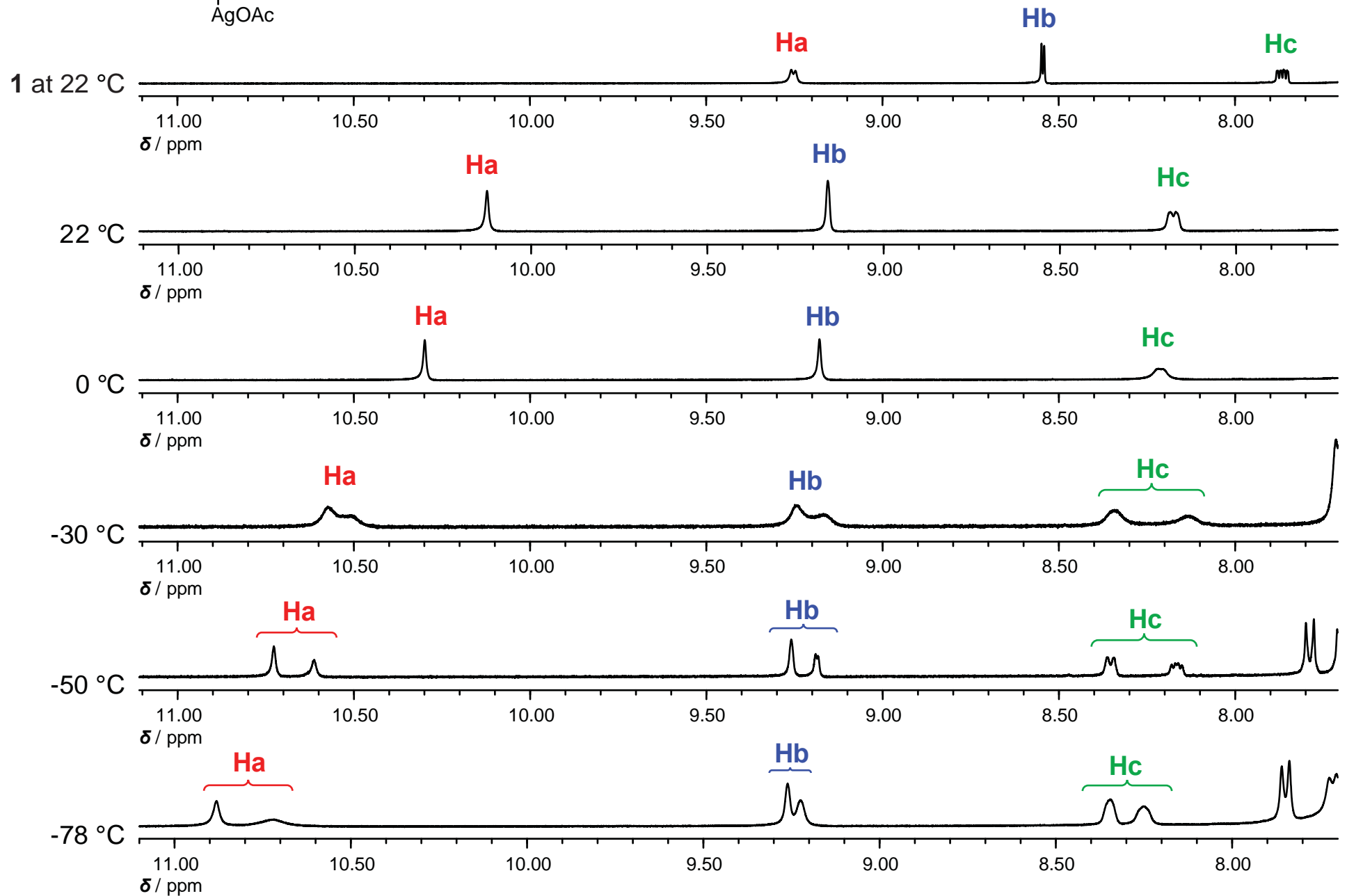
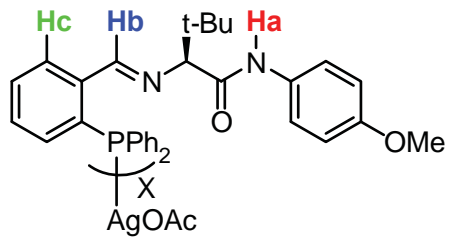
Powder form of AgOAc-1 complex

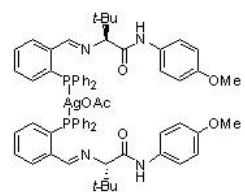
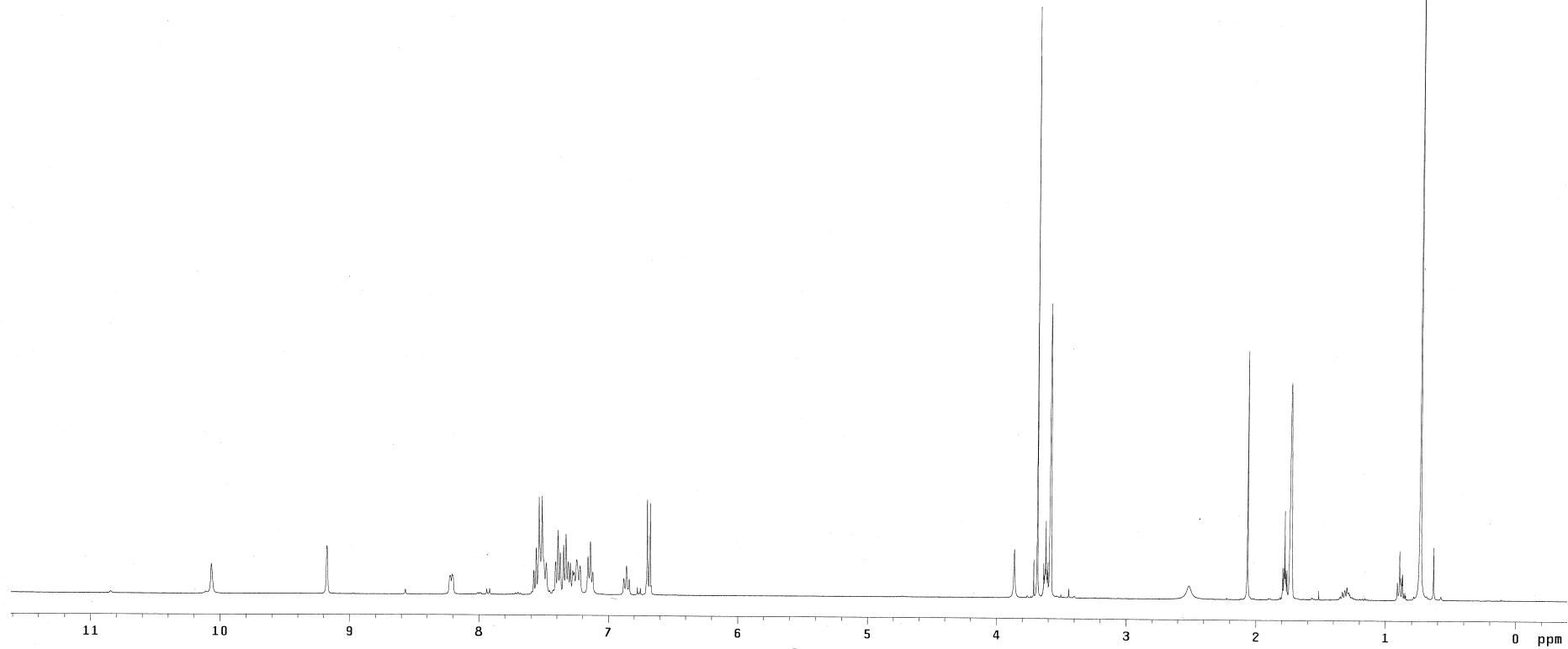


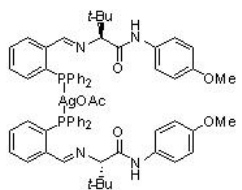
Powder form of AgOAc-1 complex



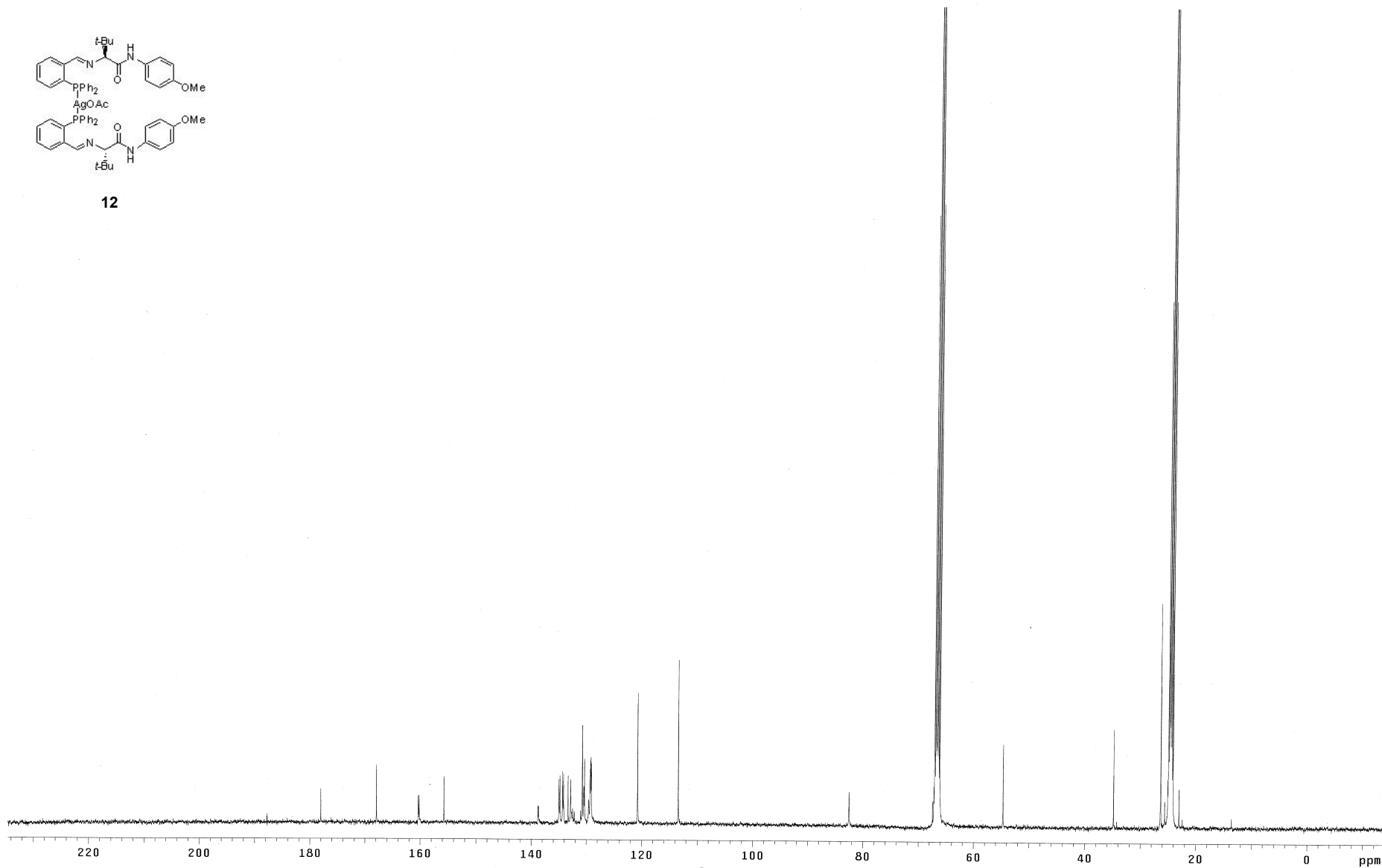
400 MHz ^1H NMR spectra of powder form of AgOAc-1 complex in d_8 -THF at various temperatures

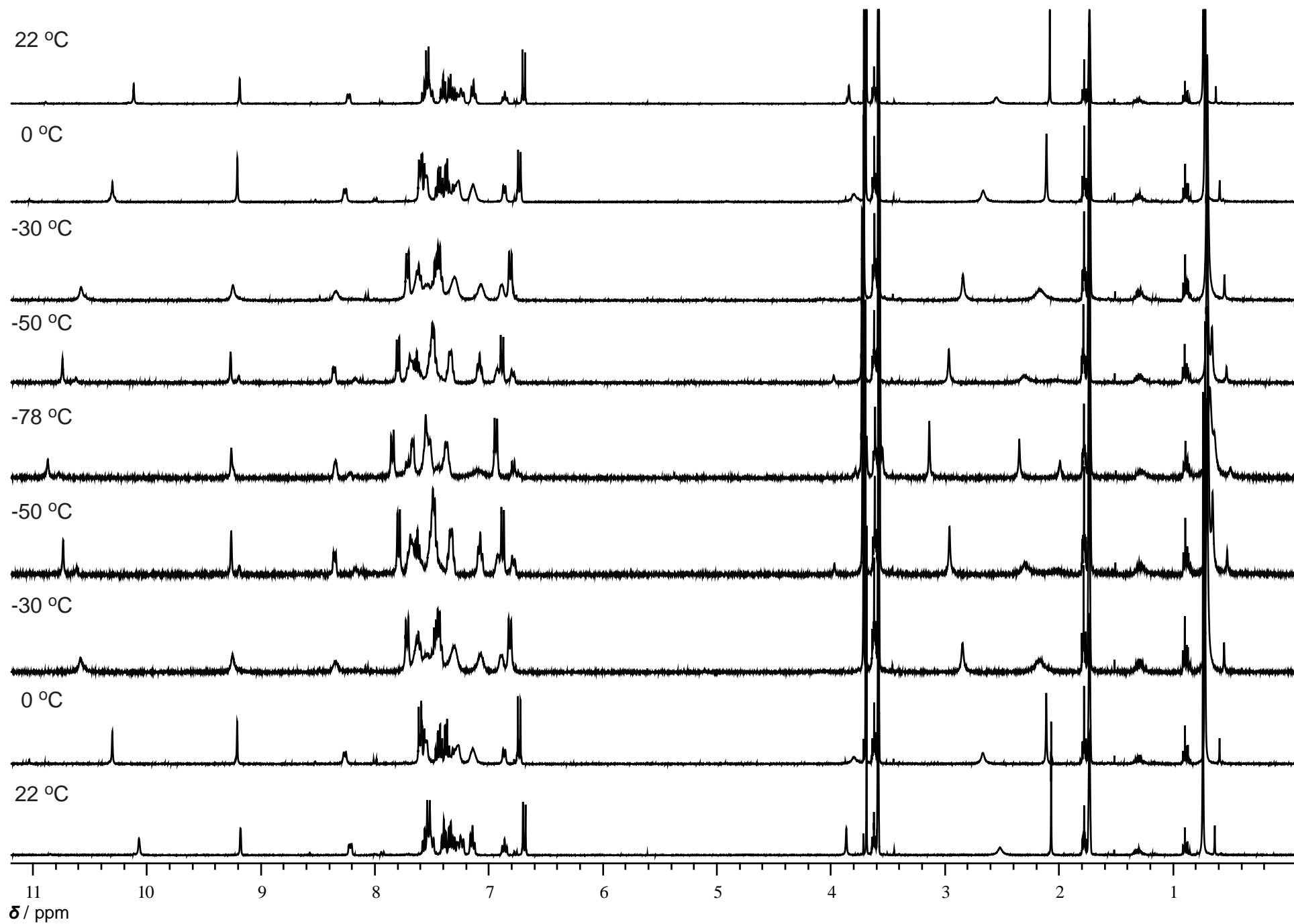
400 MHz ^1H NMR spectra of powder form of AgOAc-1 complex in d_8 -THF at various temperatures

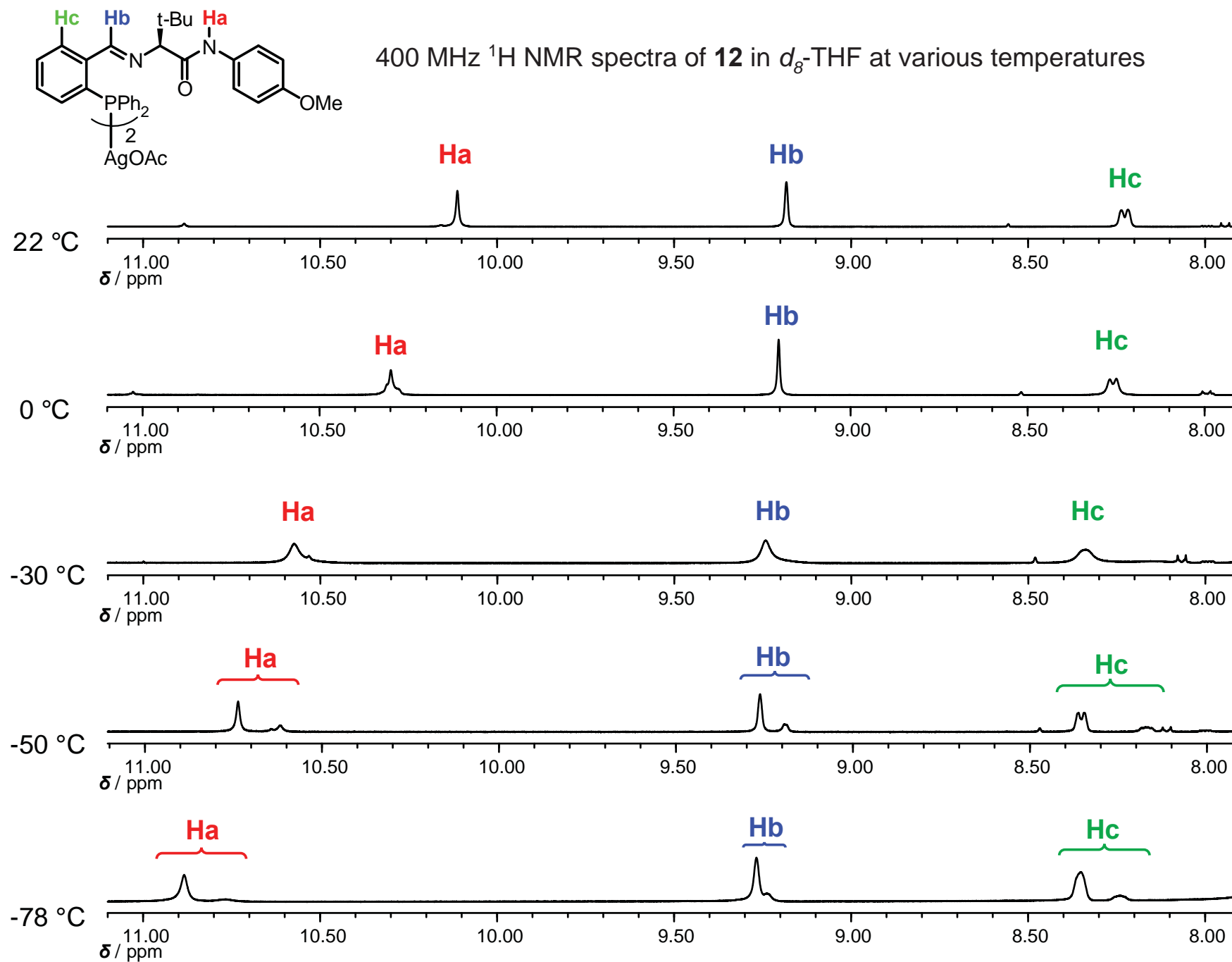
**12**



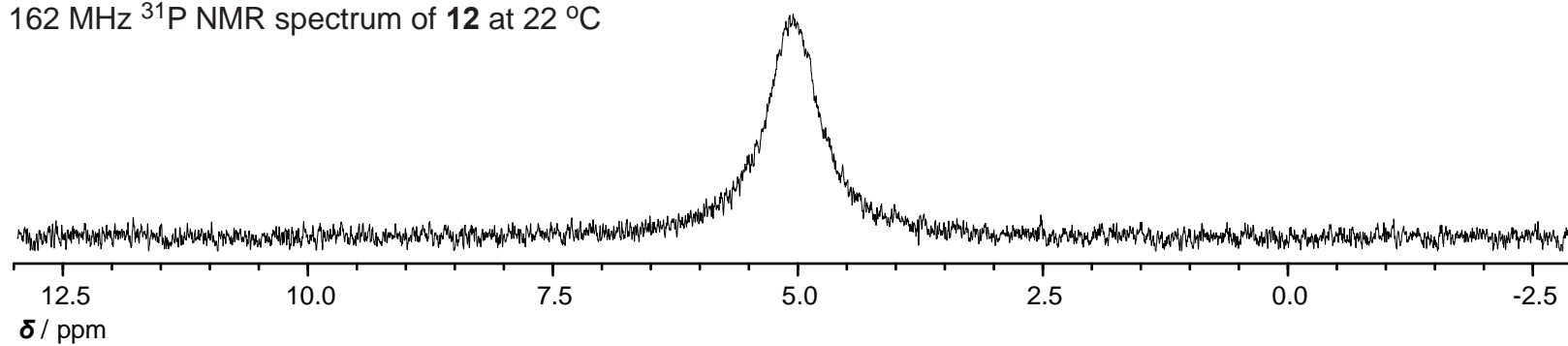
12



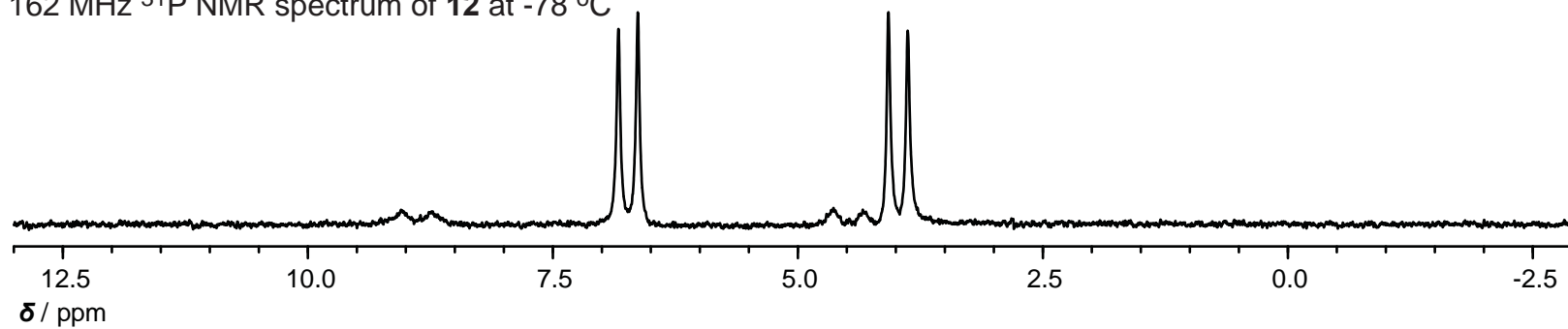
400 MHz ^1H NMR spectra of **12** in d_8 -THF at various temperatures



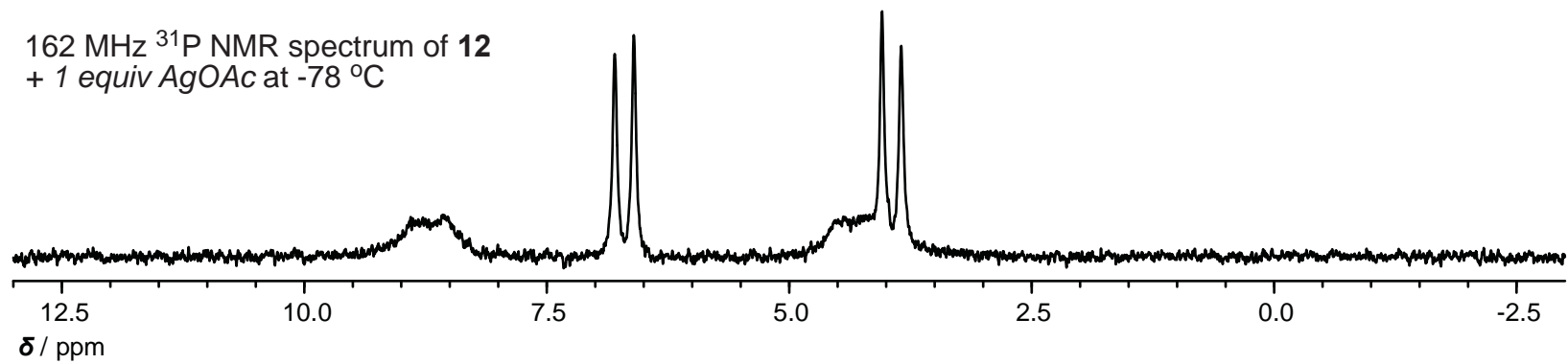
162 MHz ^{31}P NMR spectrum of **12** at 22 °C

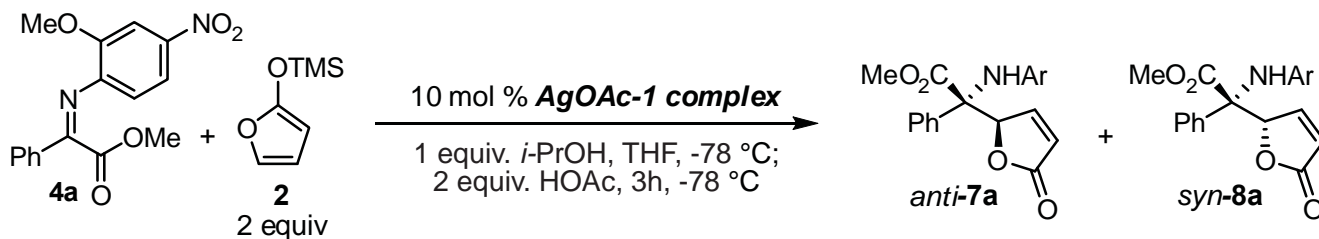


162 MHz ^{31}P NMR spectrum of **12** at -78 °C

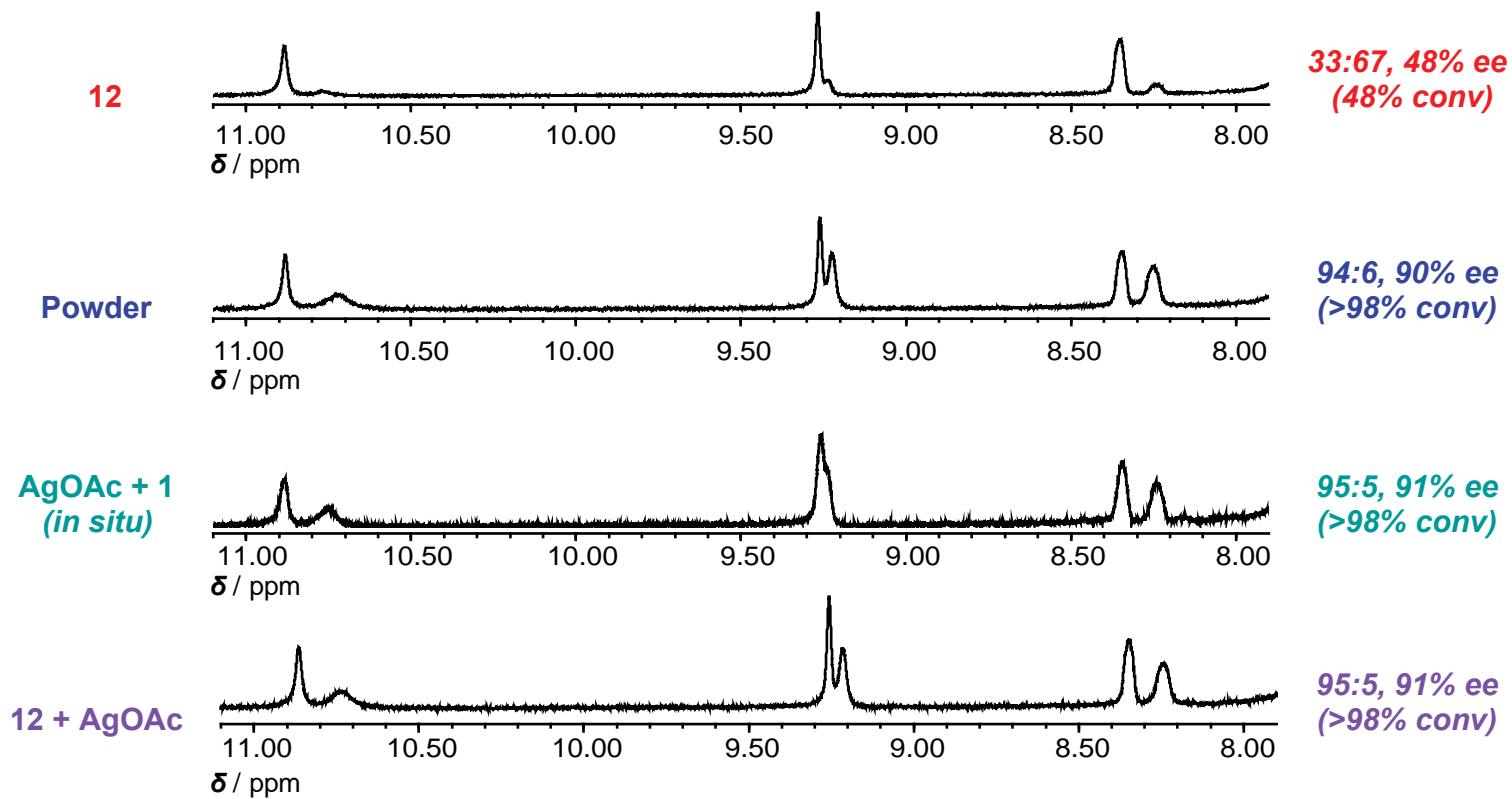


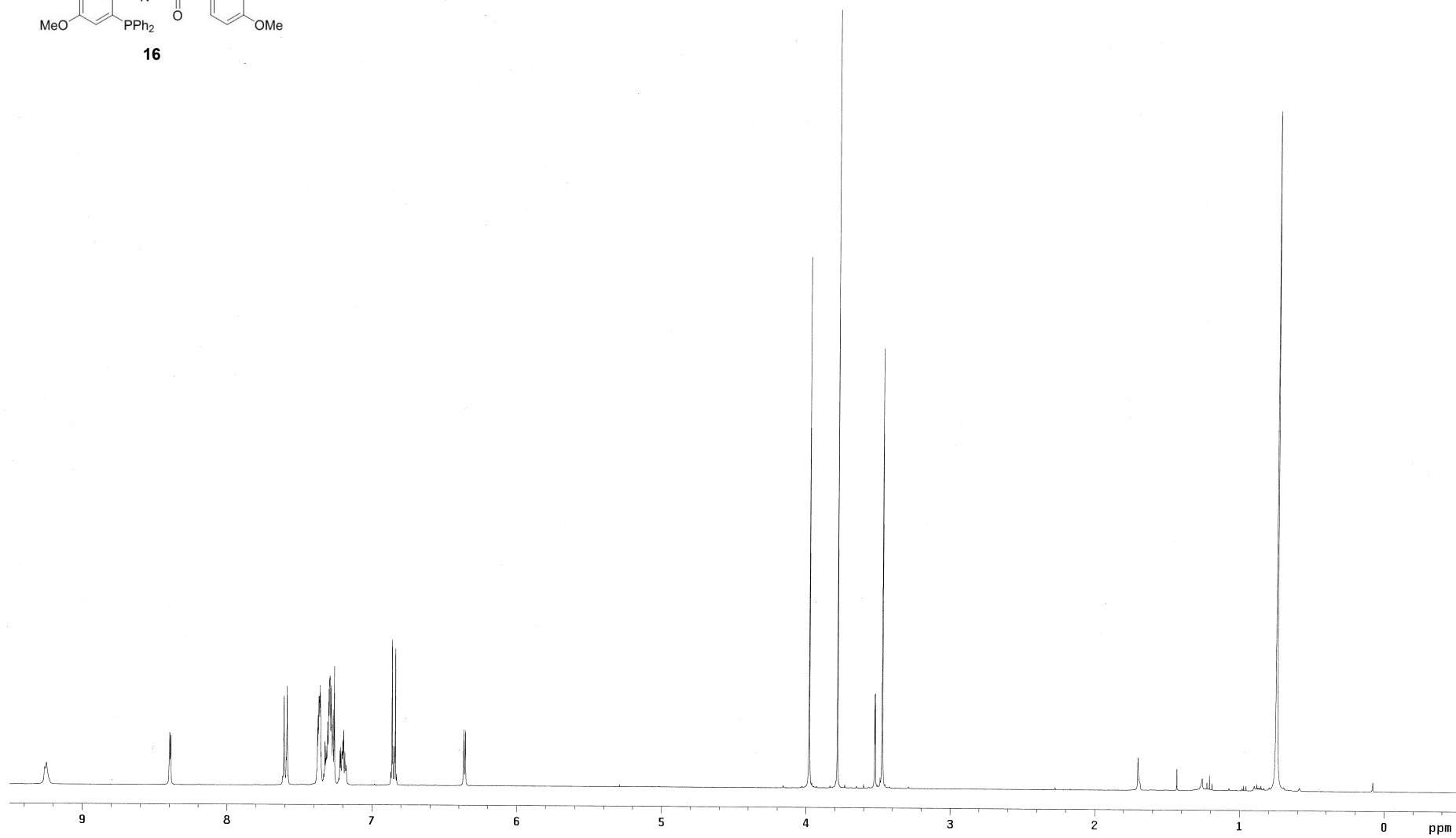
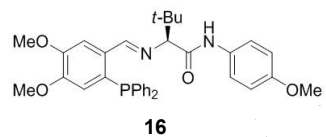
162 MHz ^{31}P NMR spectrum of **12**
+ 1 equiv AgOAc at -78 °C

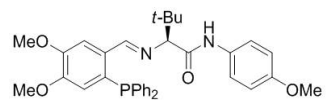


400 MHz ^1H NMR spectra of AgOAc-1 complexes in d_8 -THF at $-78\text{ }^\circ\text{C}$ 

**dr (anti-7a:syn-8a),
 %ee of anti-7a**







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