

**Oxidation-Reduction Condensation of Diazaphosphites for Carbon-Heteroatom
Bond Formation Based on Mitsunobu Mechanism**

Hai Huang,^{†,‡} Jun Yong Kang^{*,†}

junyong.kang@unlv.edu

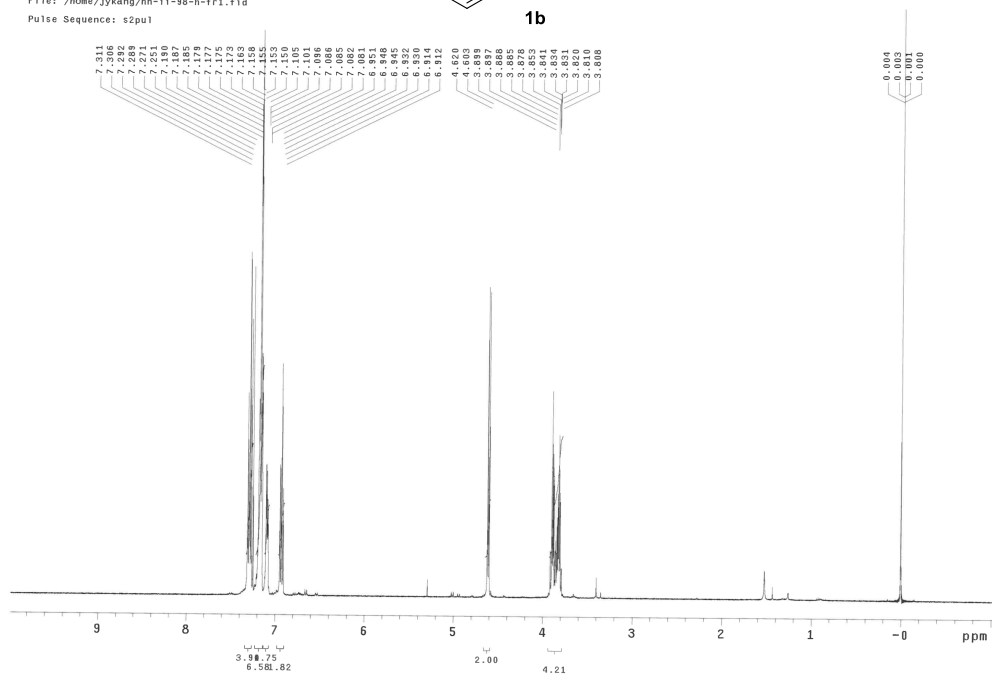
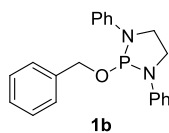
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Tech University, No. 30 Puzhu Road (S), Nanjing 211816, People's Republic of China

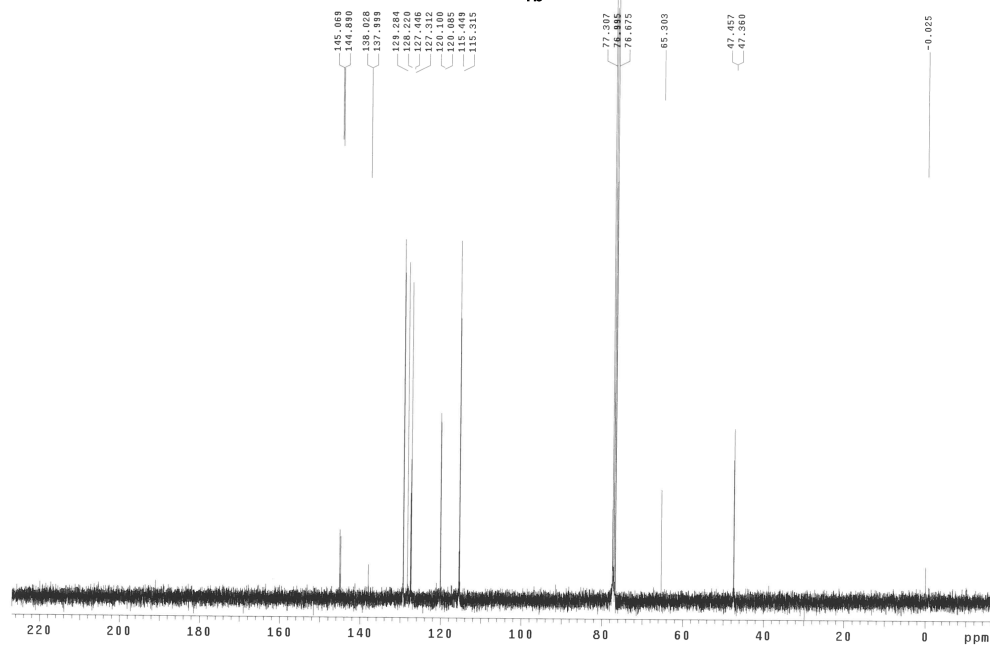
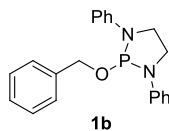
Supporting Information

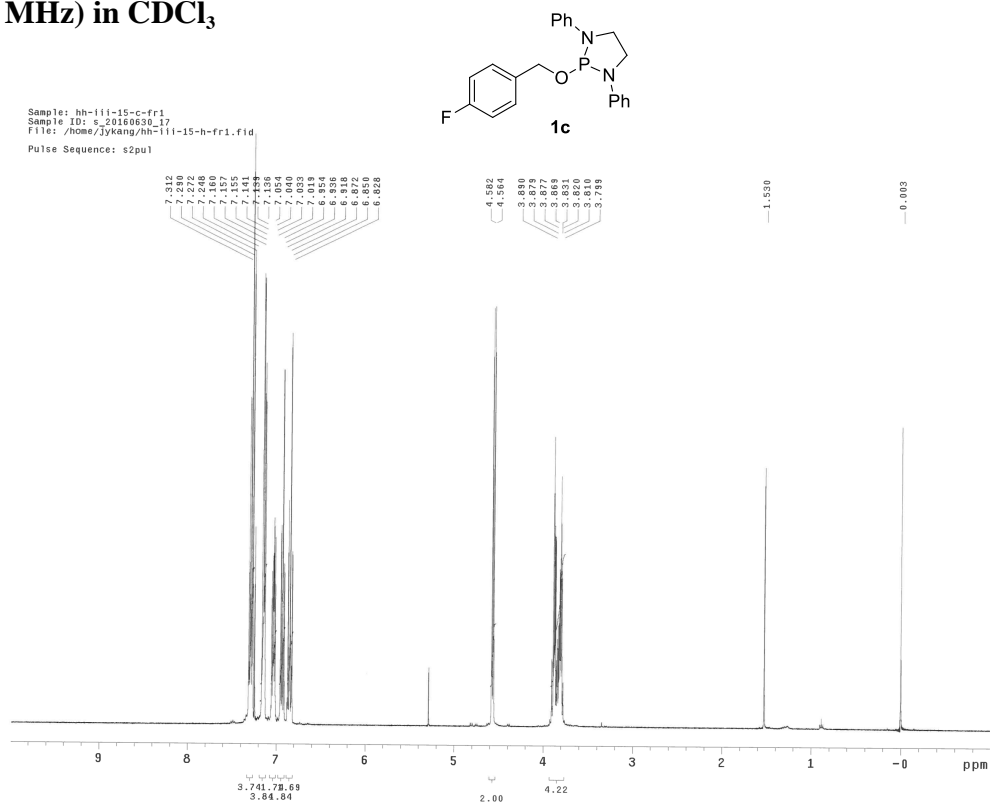
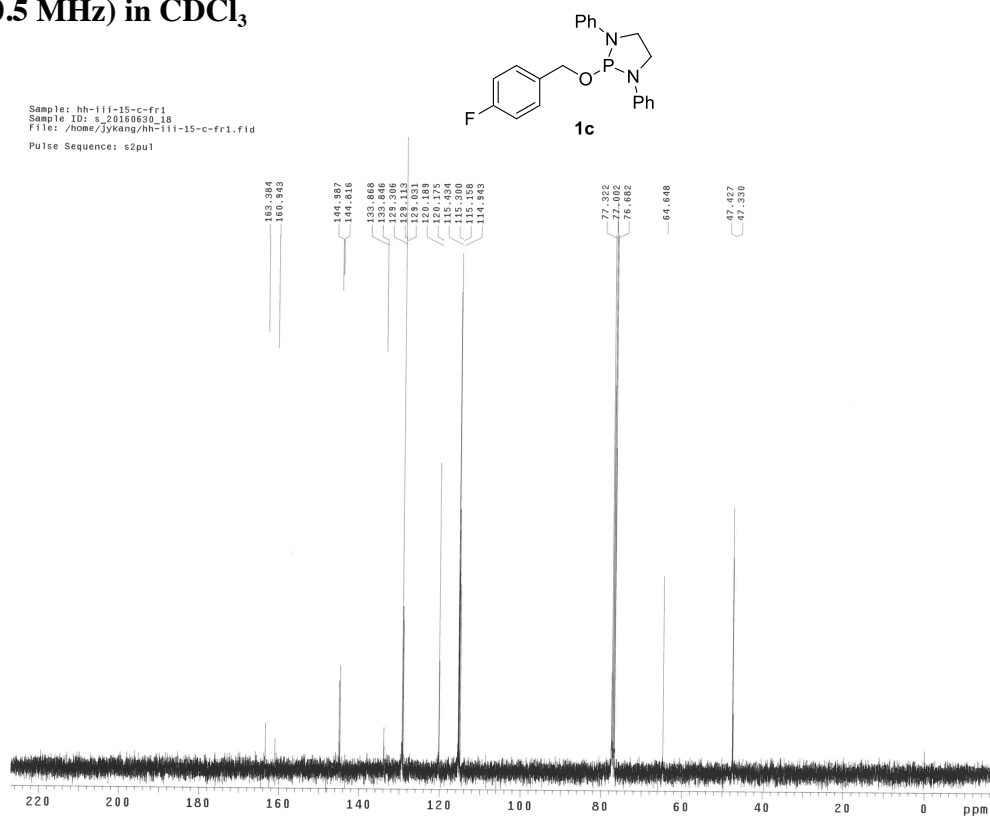
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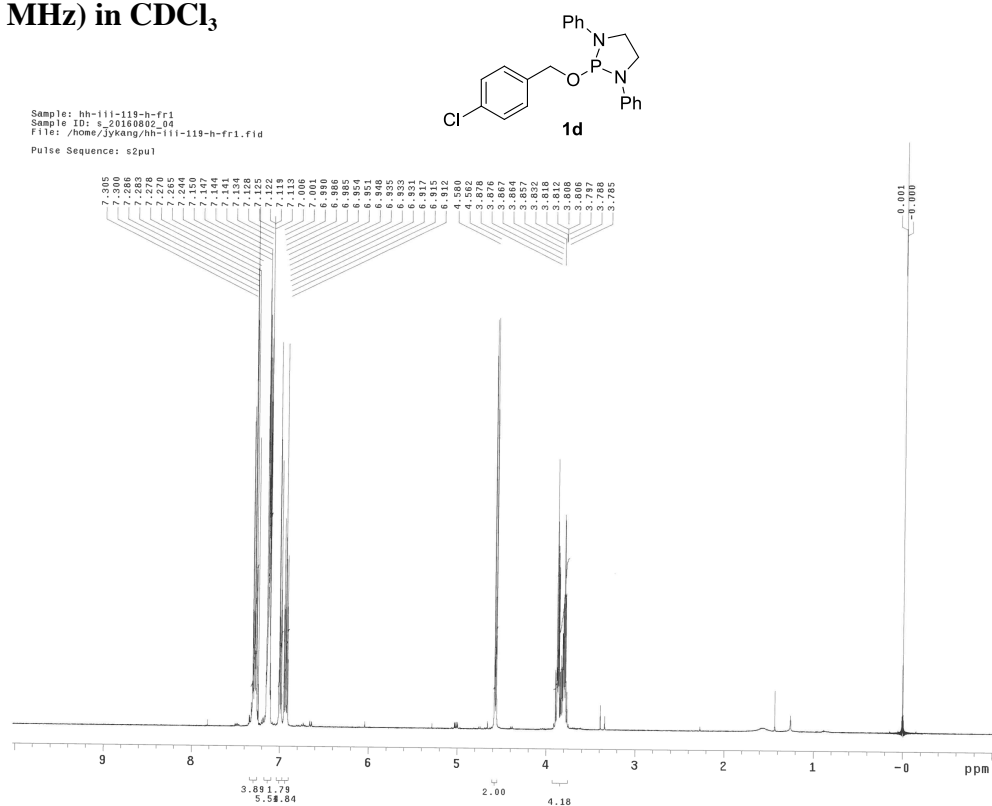
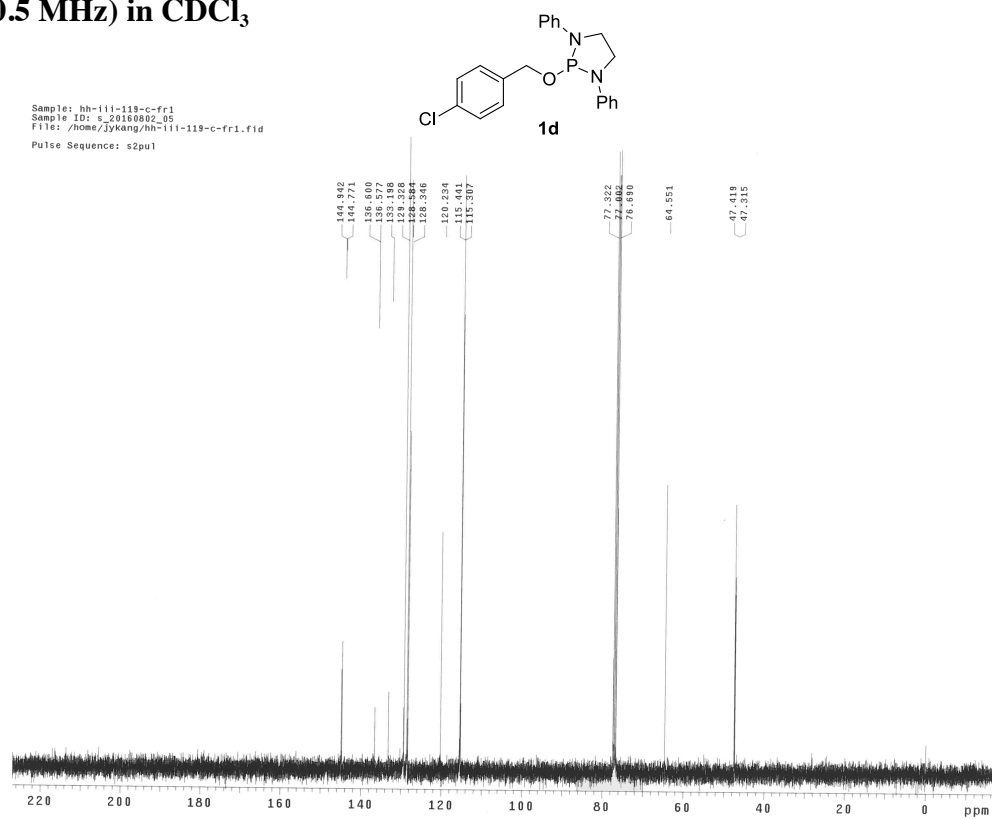
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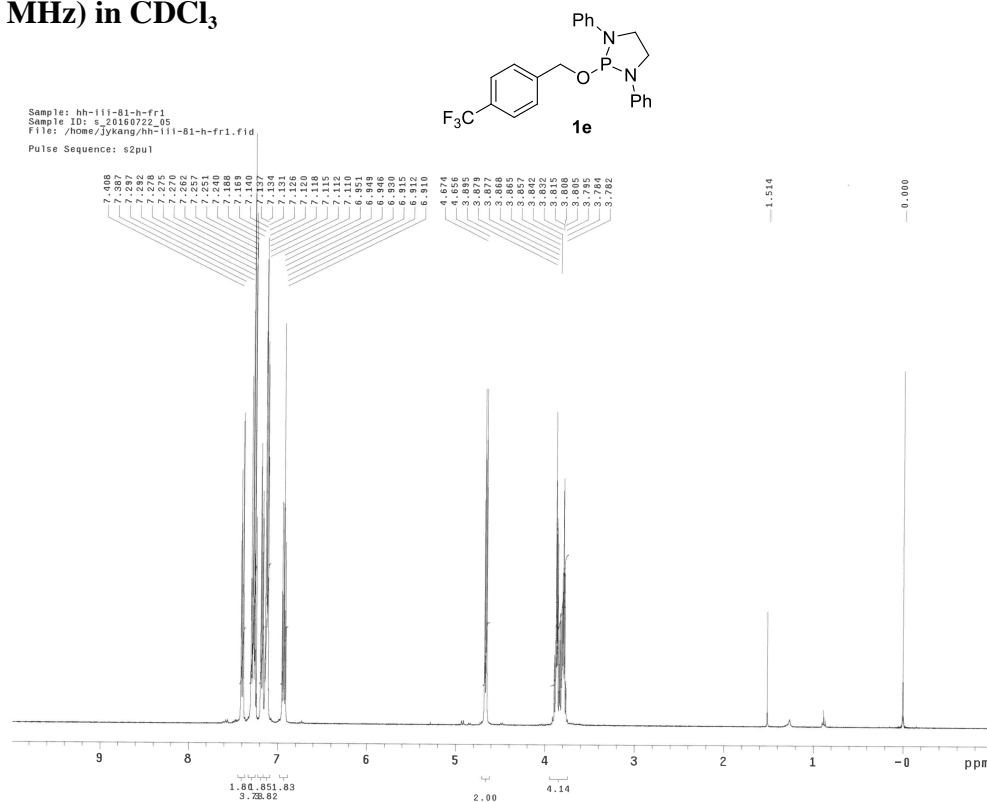
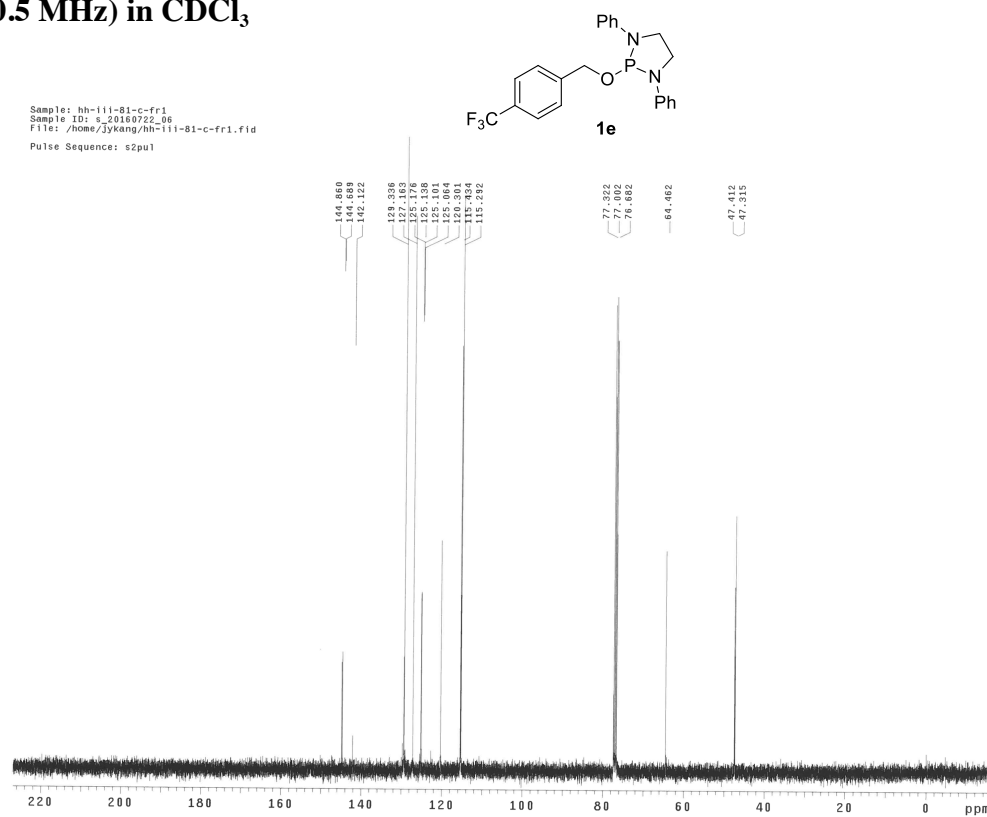


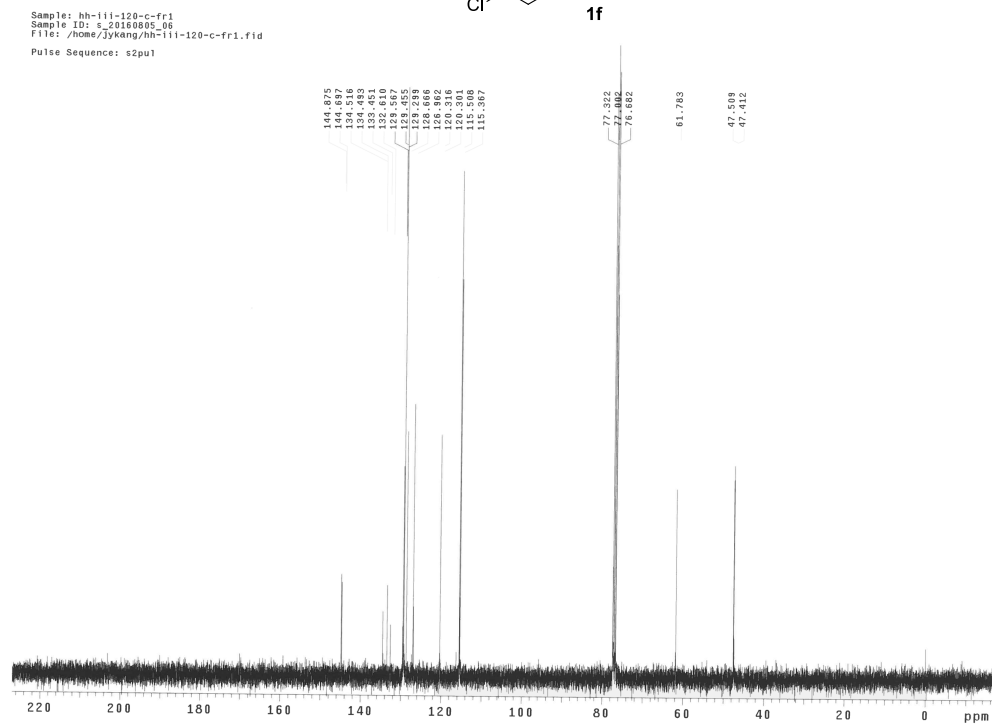
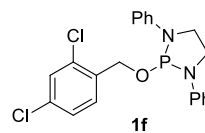
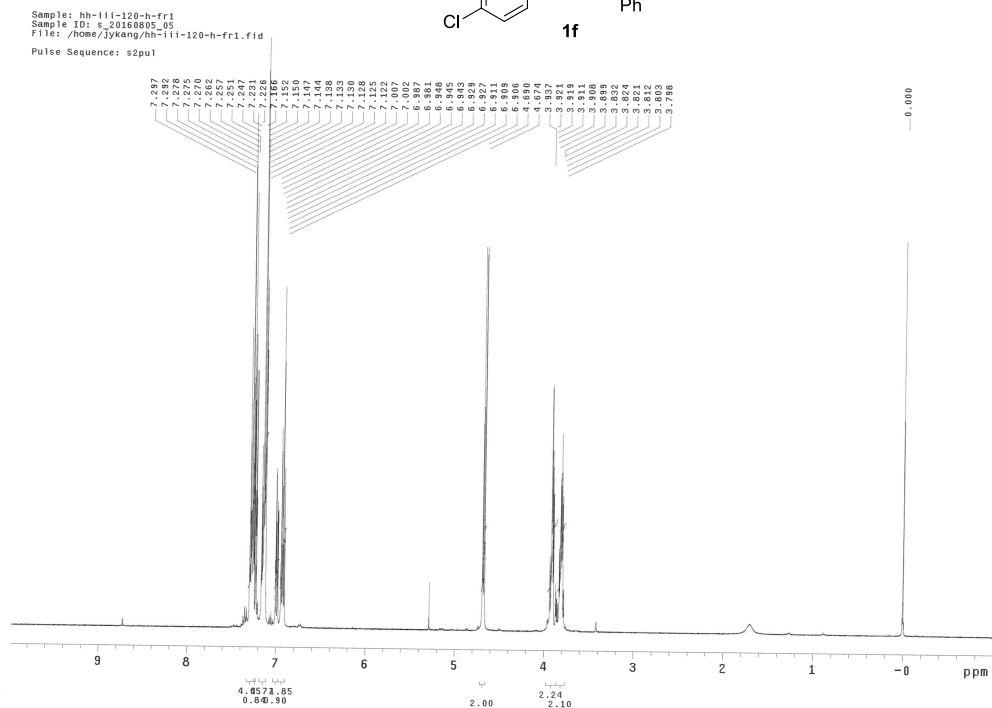
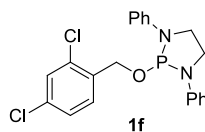
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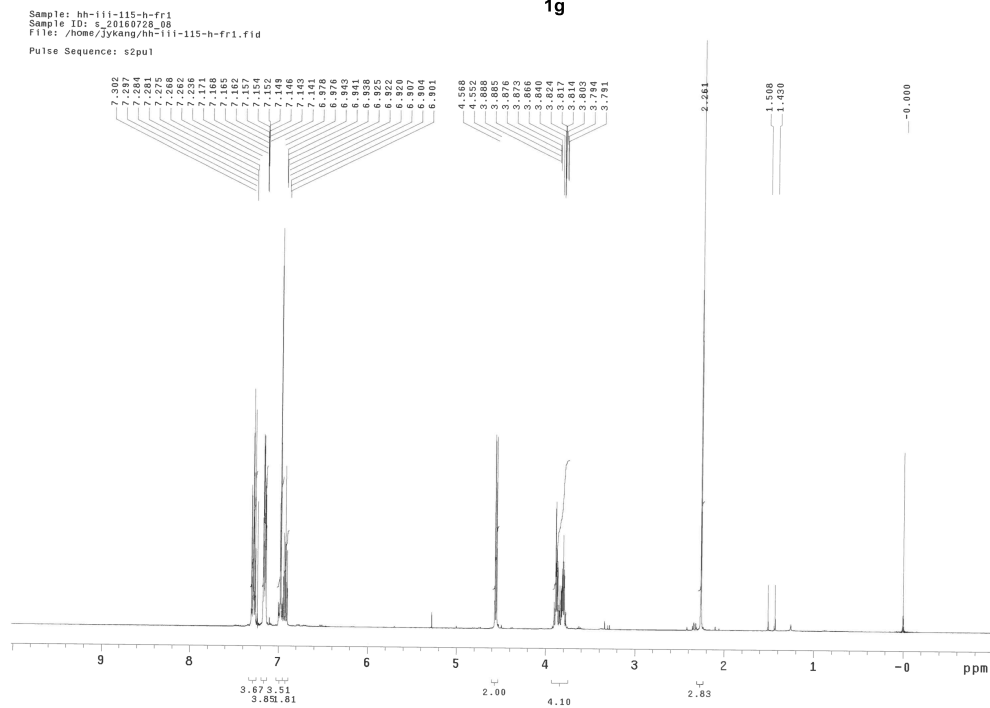
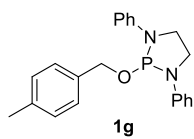
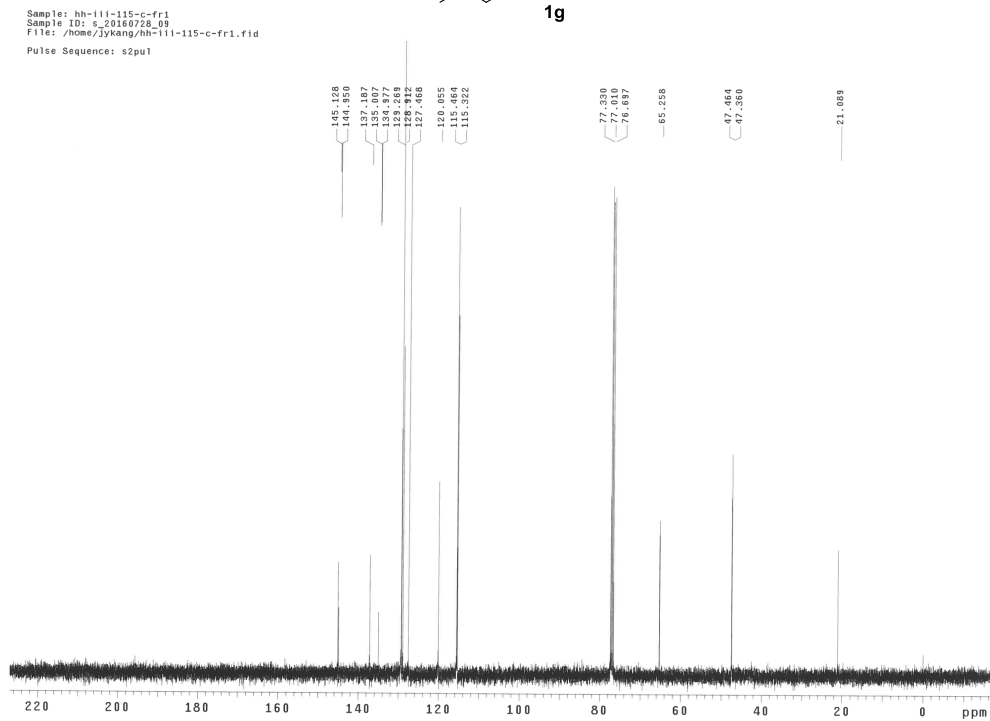
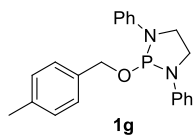


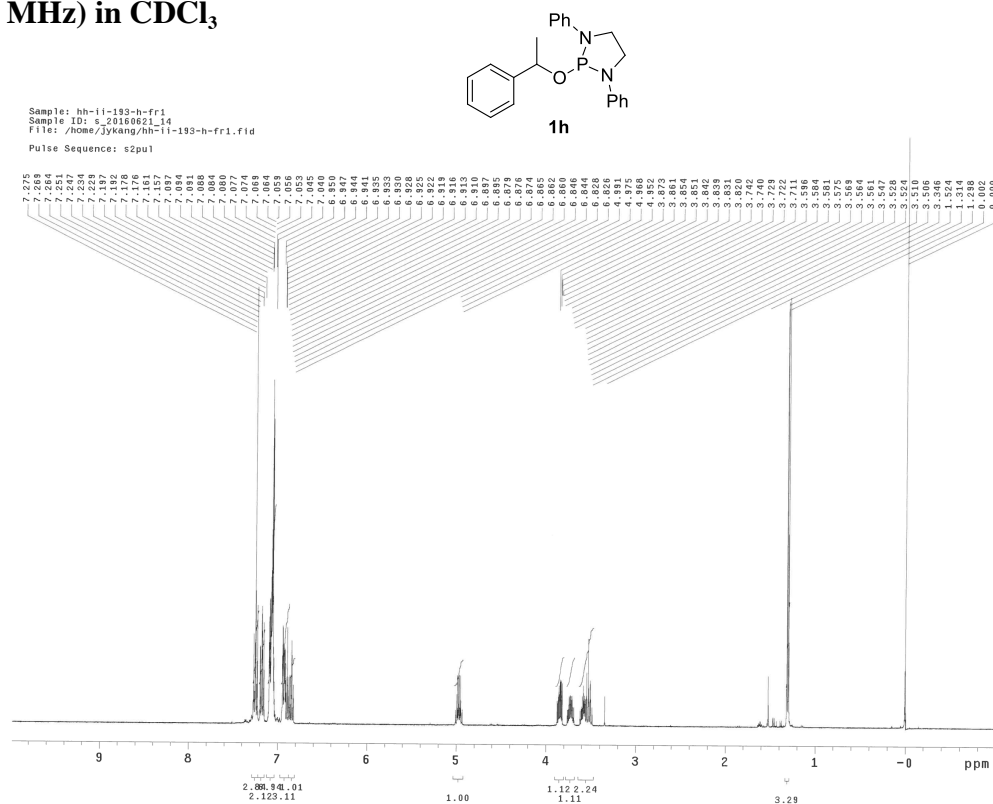
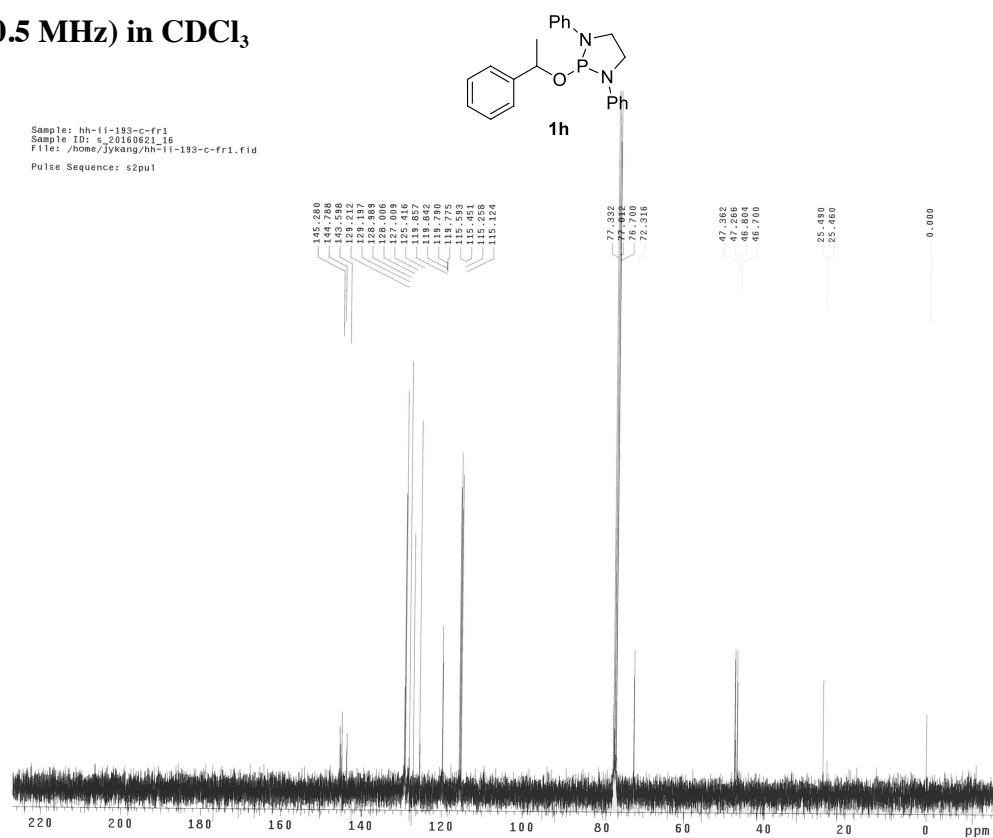
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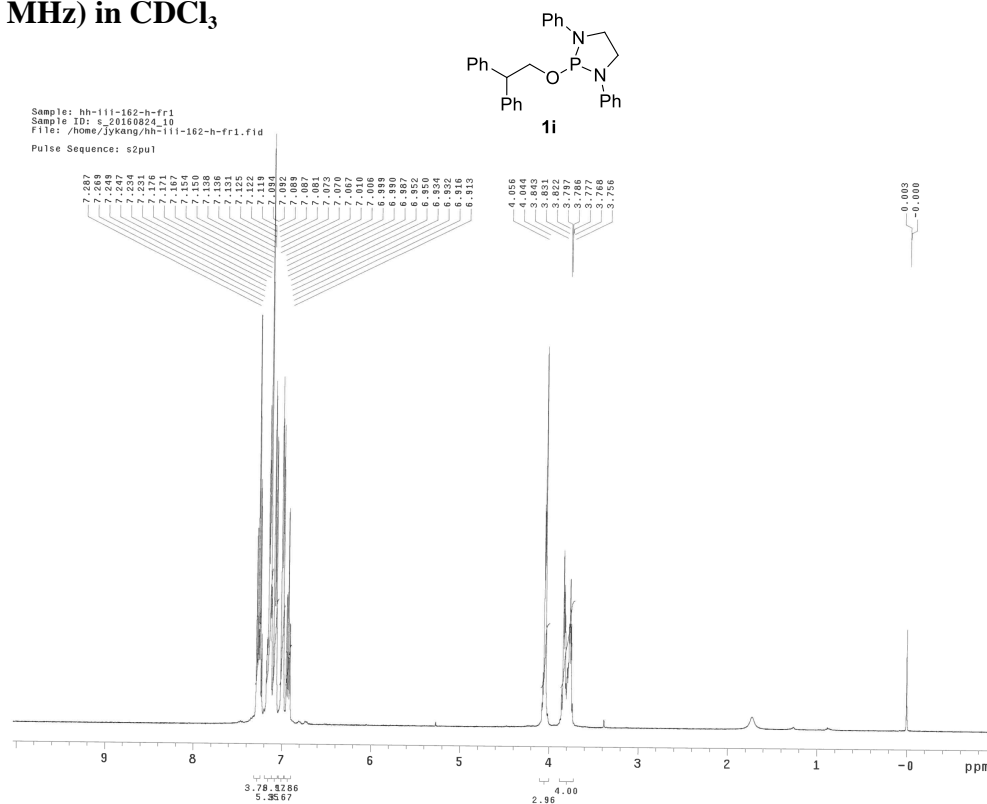
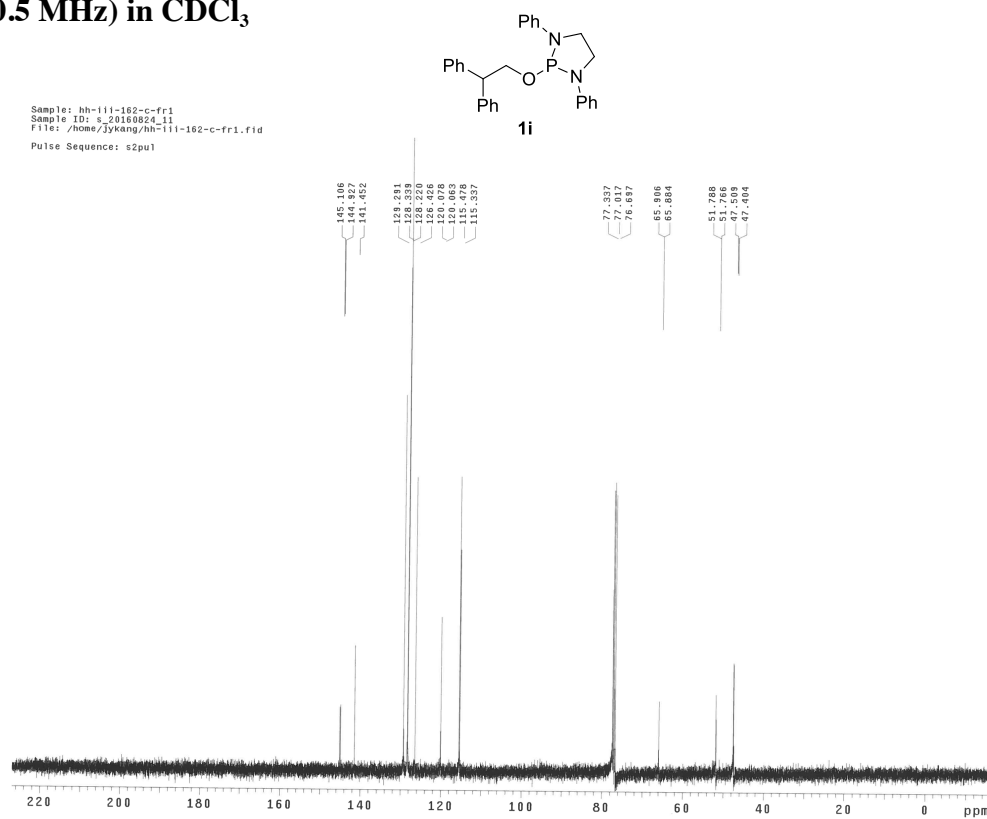
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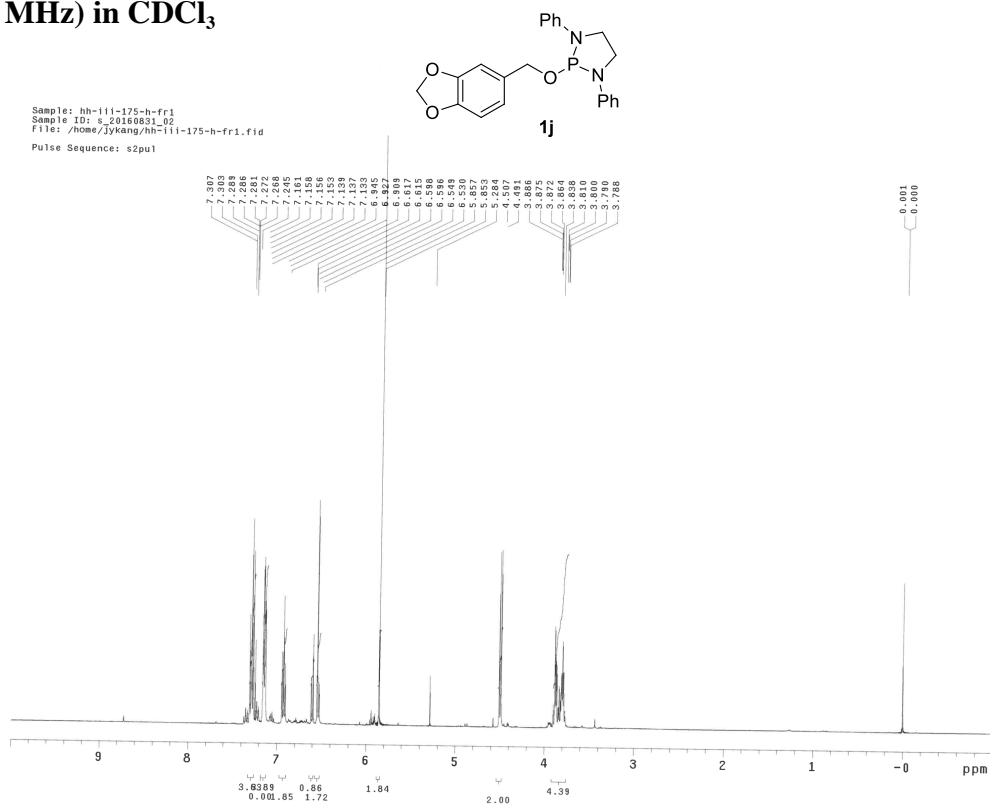
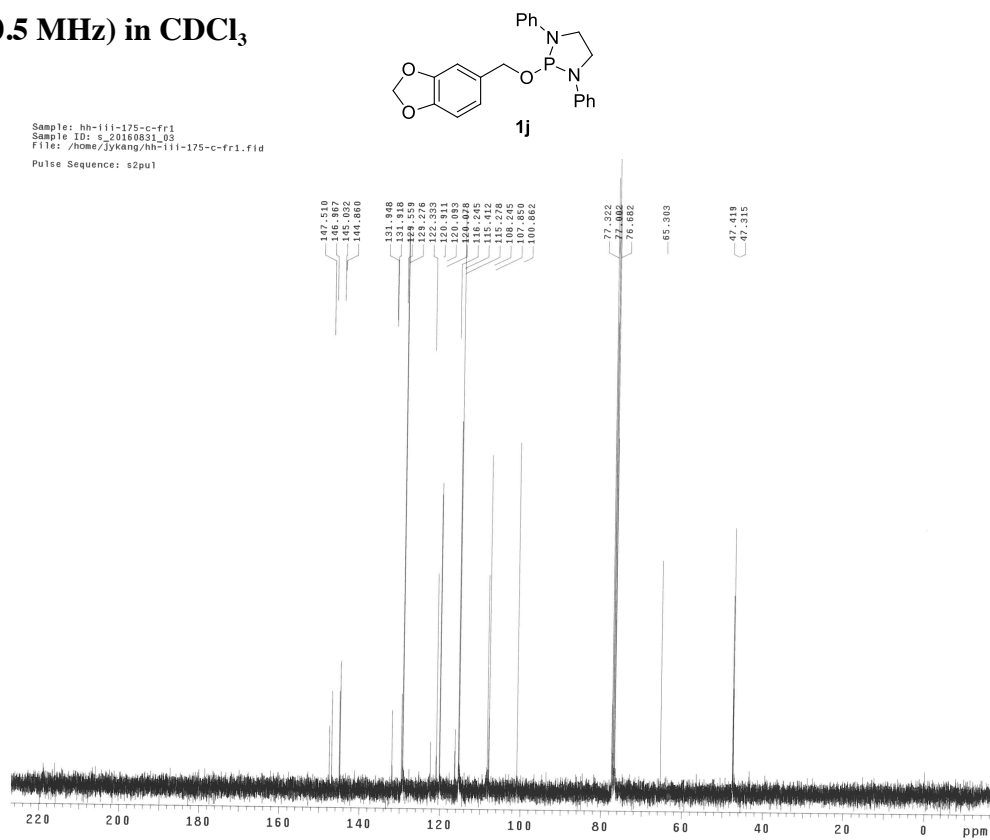
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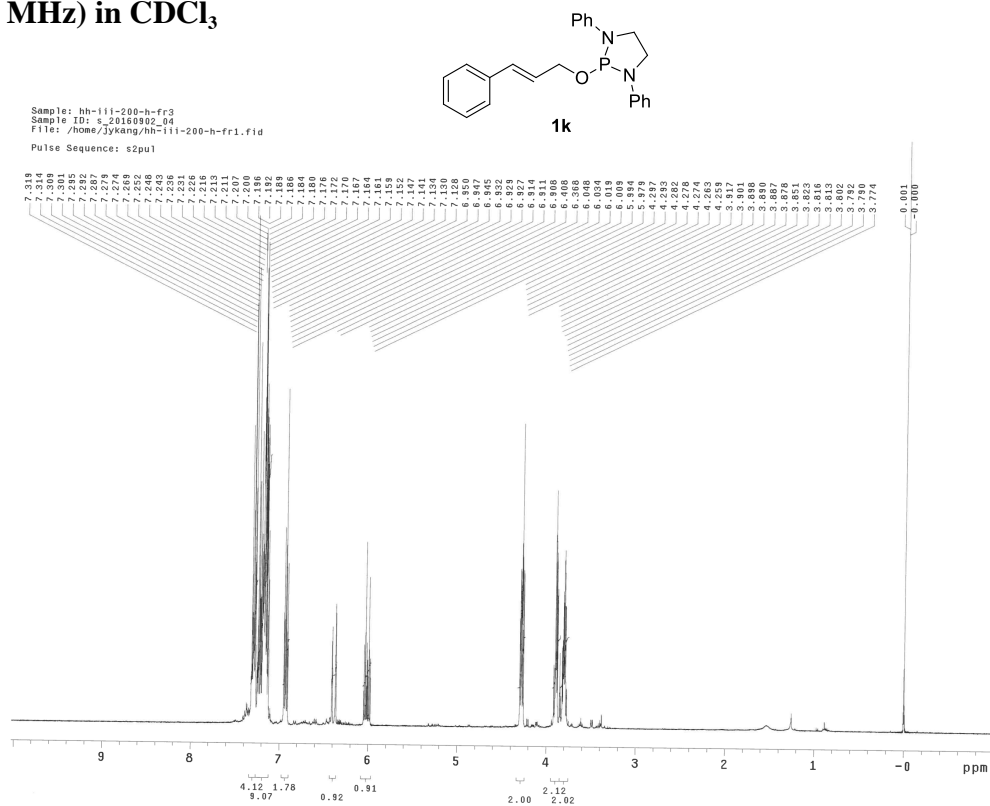
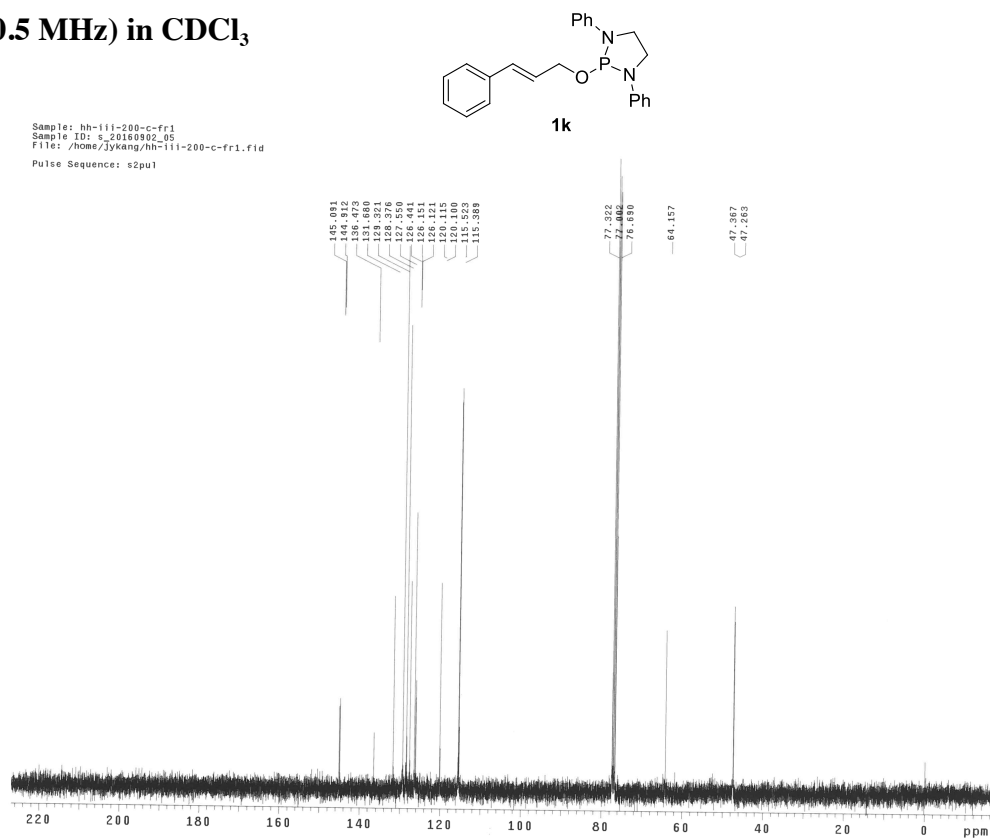


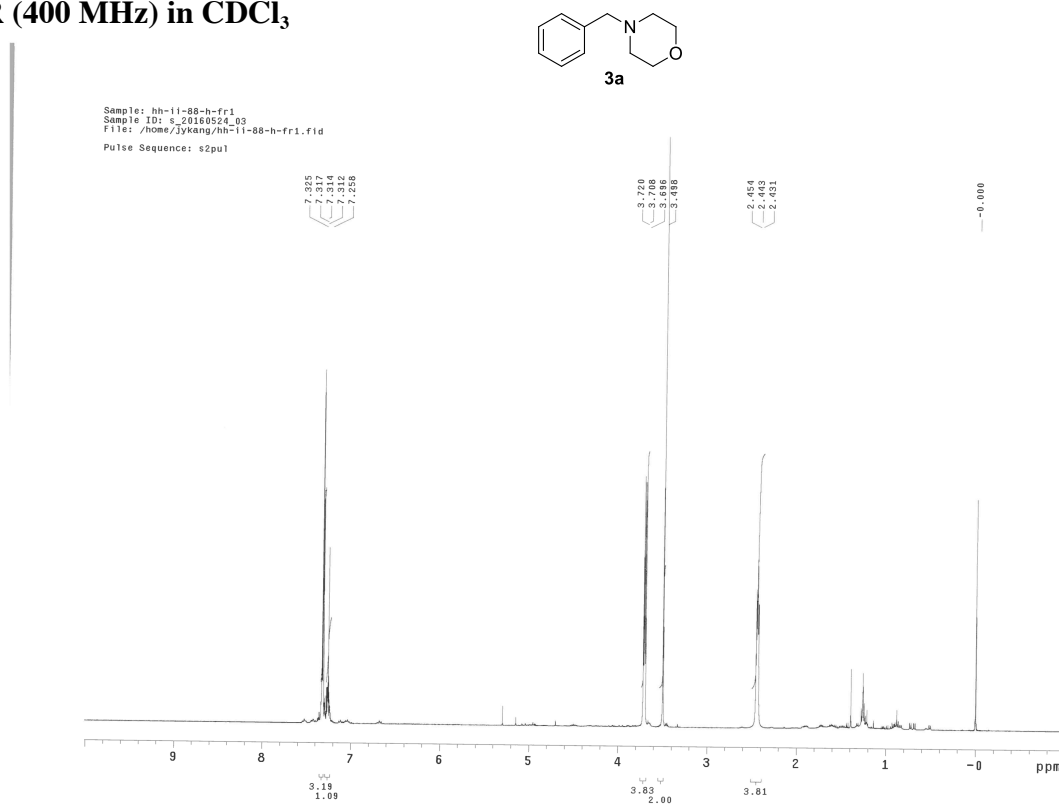
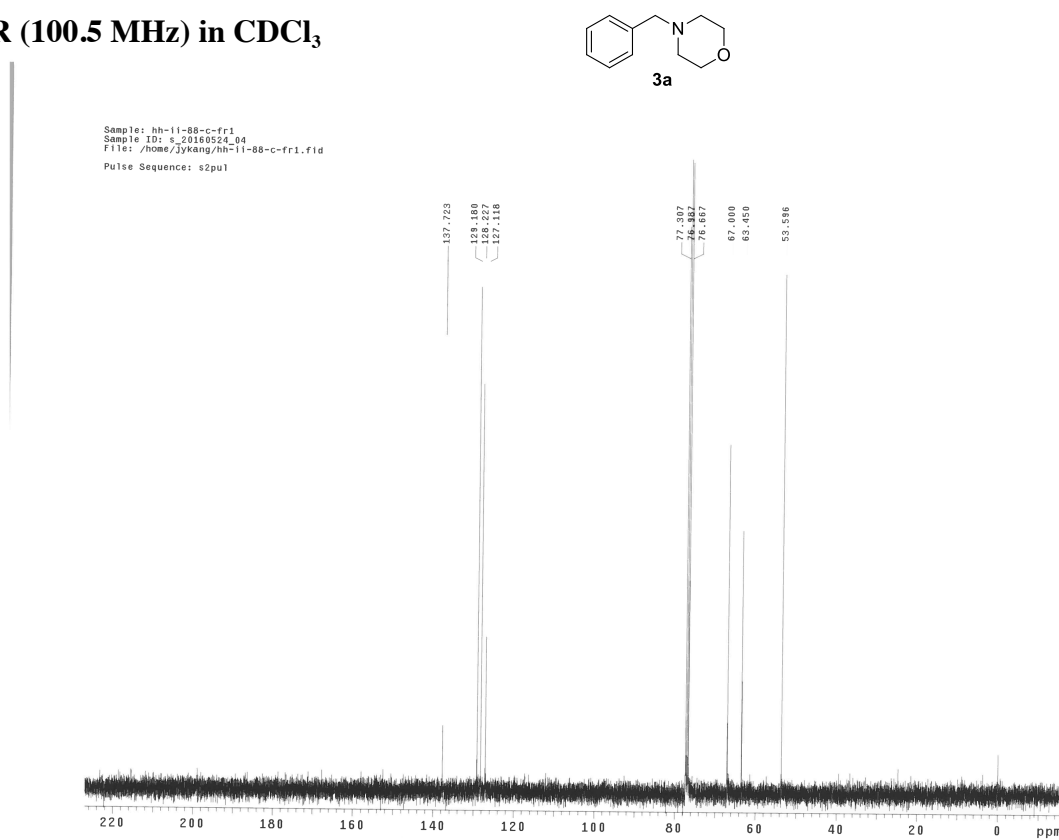
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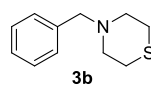
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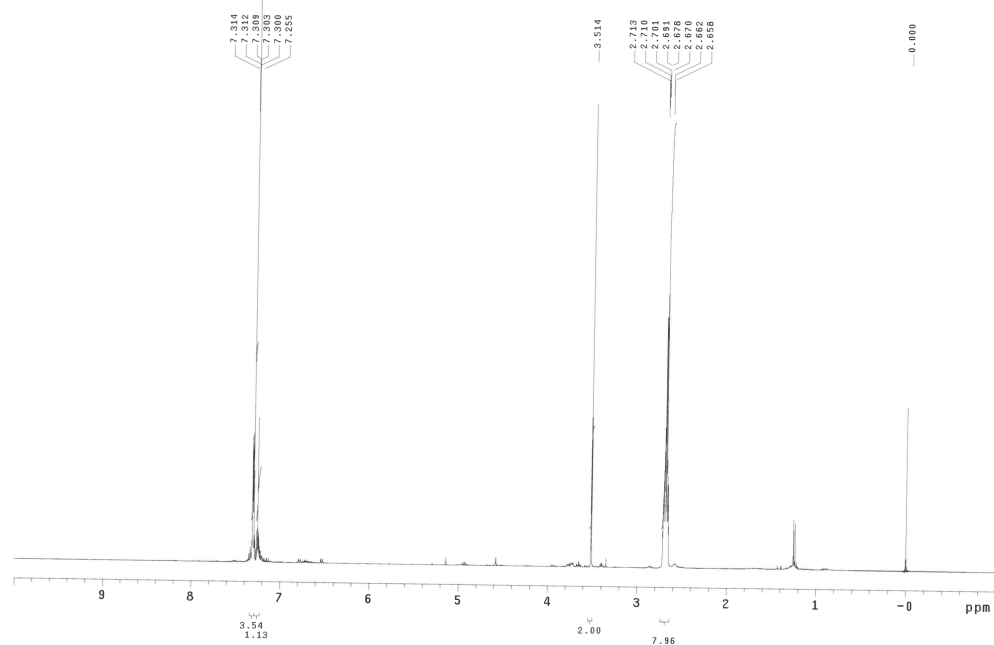
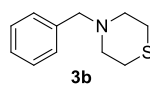
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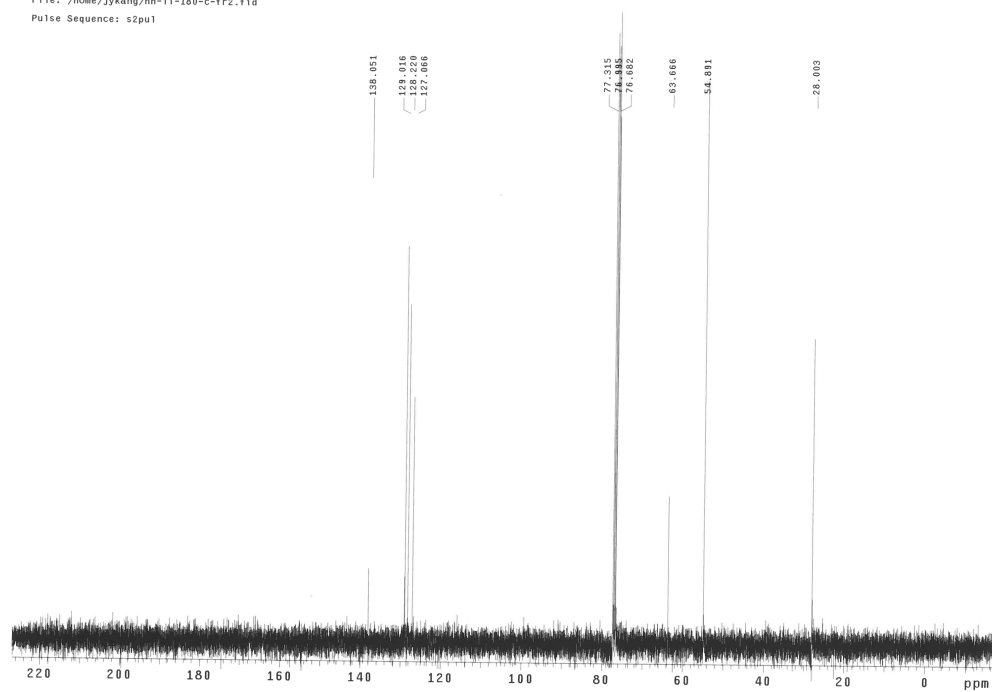
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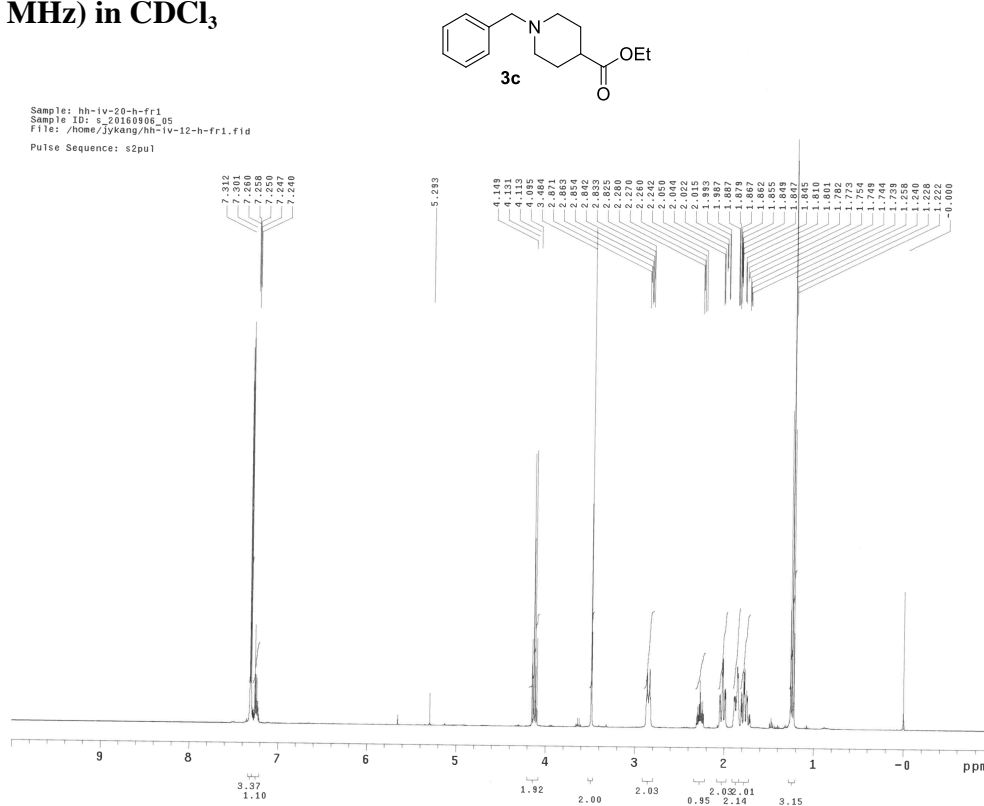
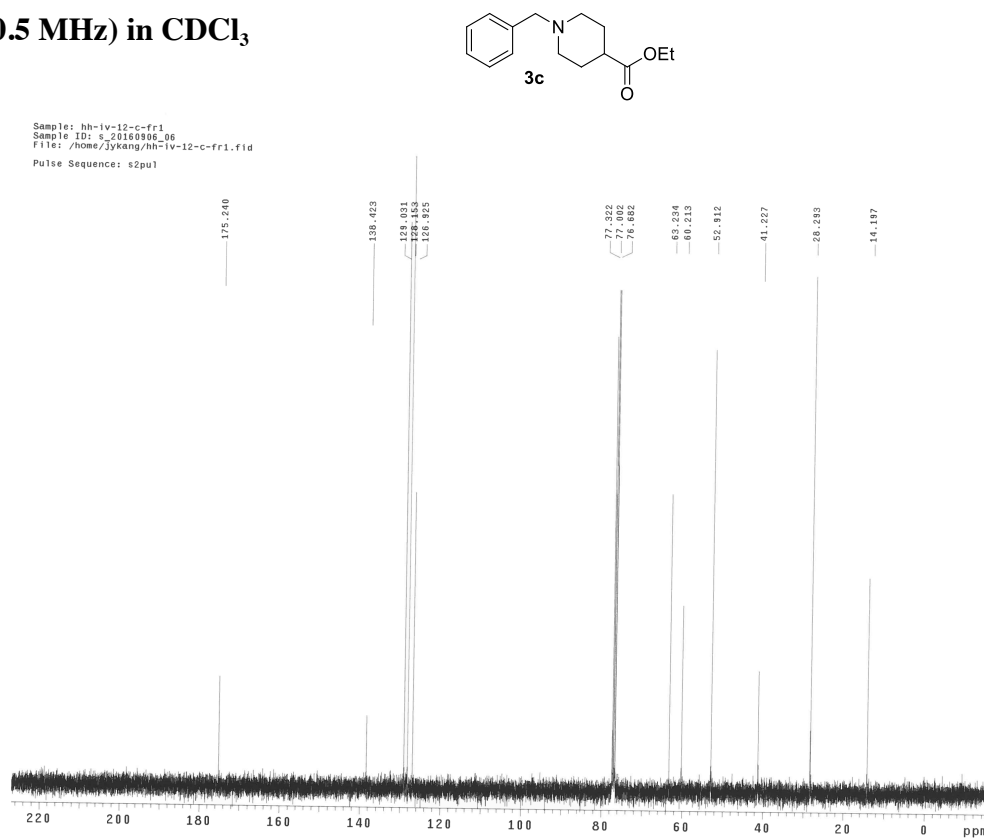
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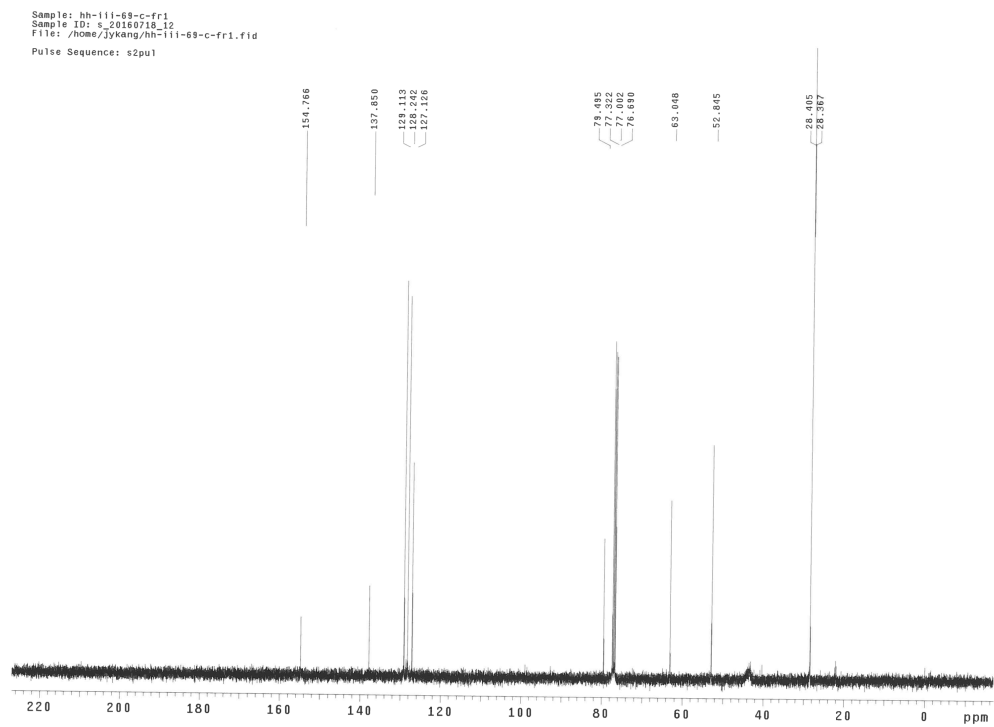
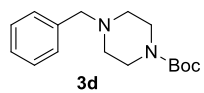
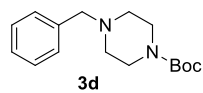
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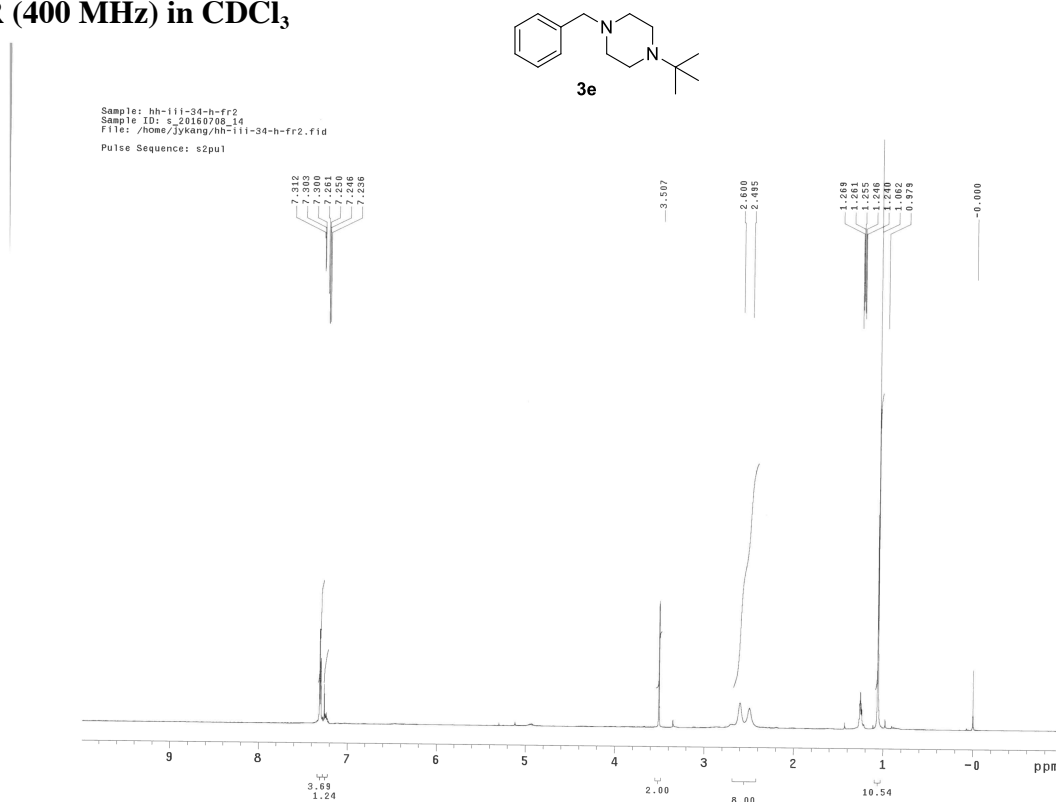
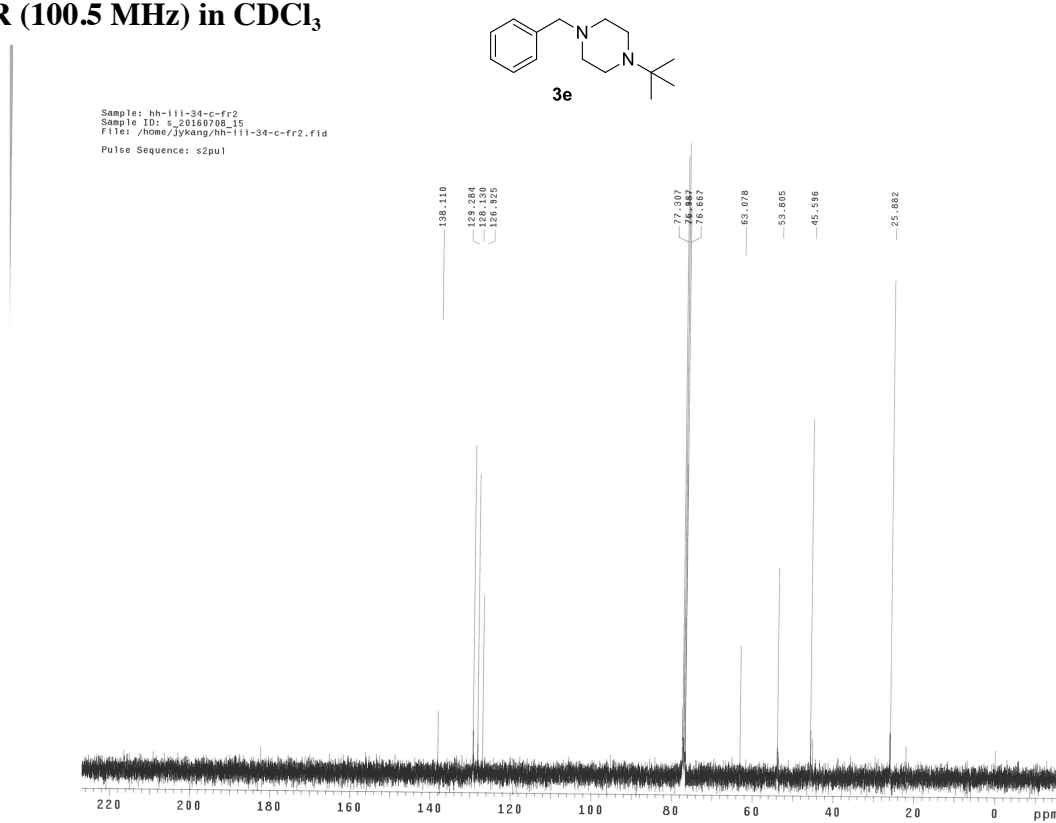
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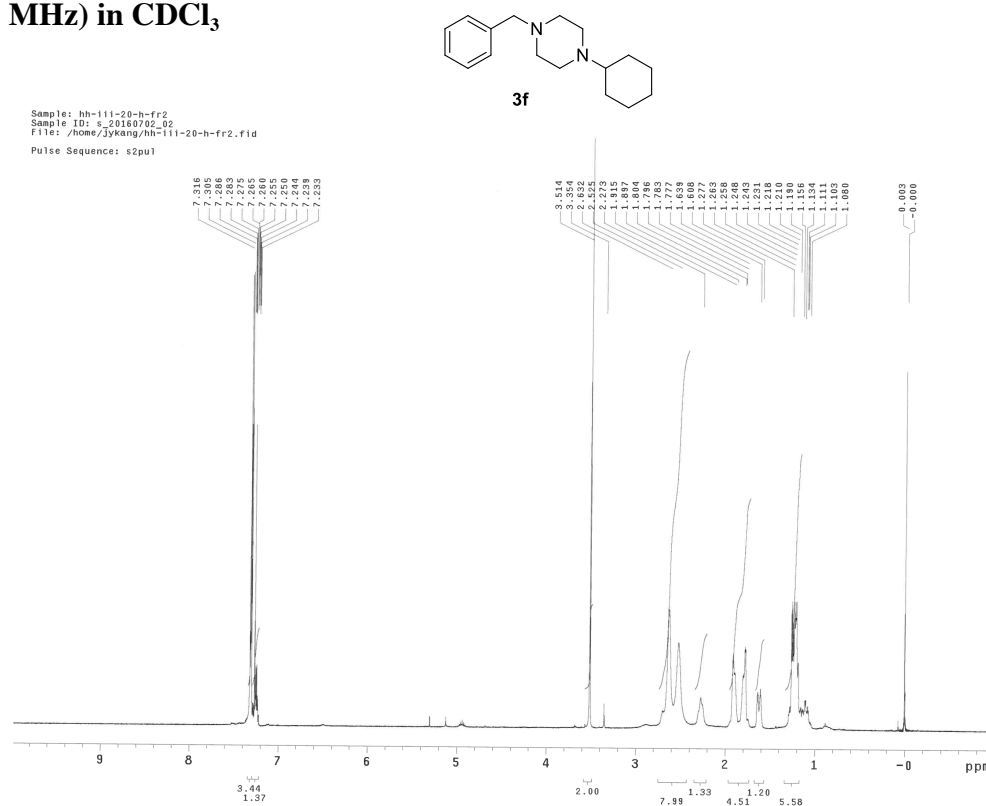
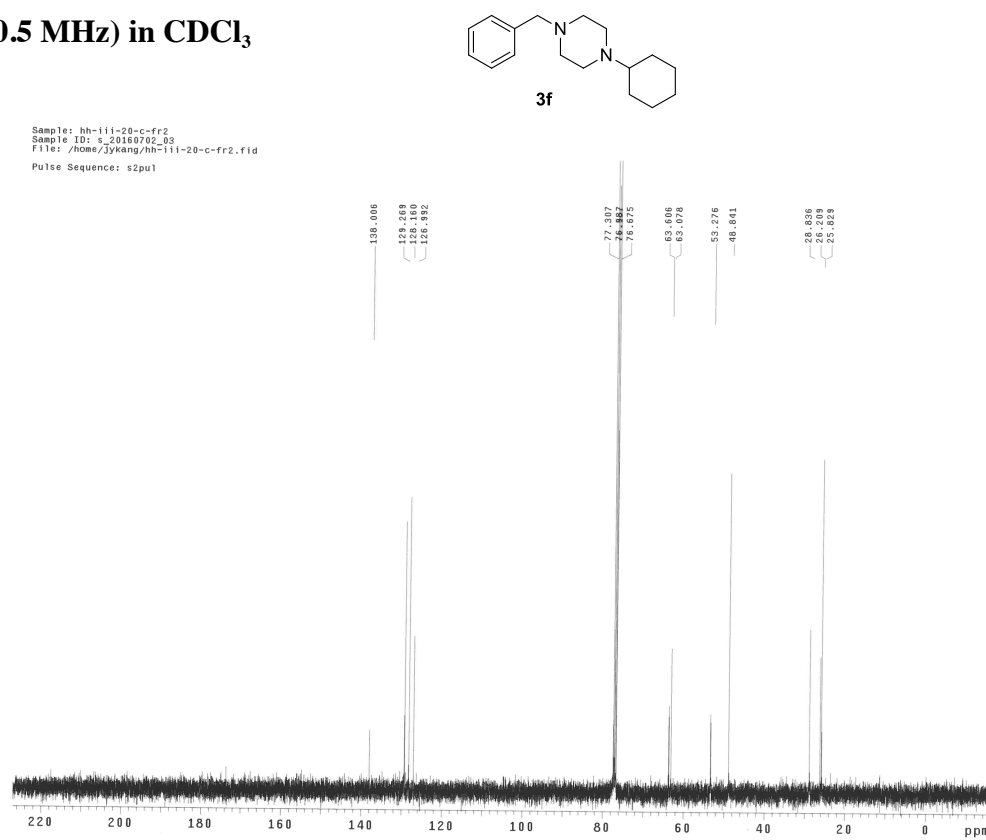
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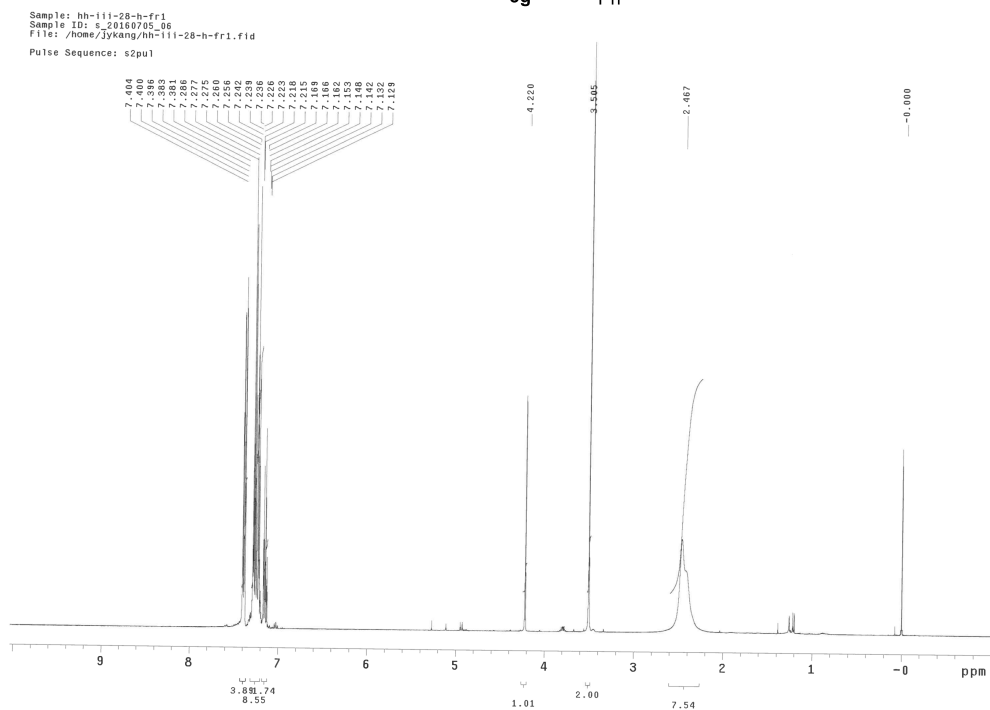
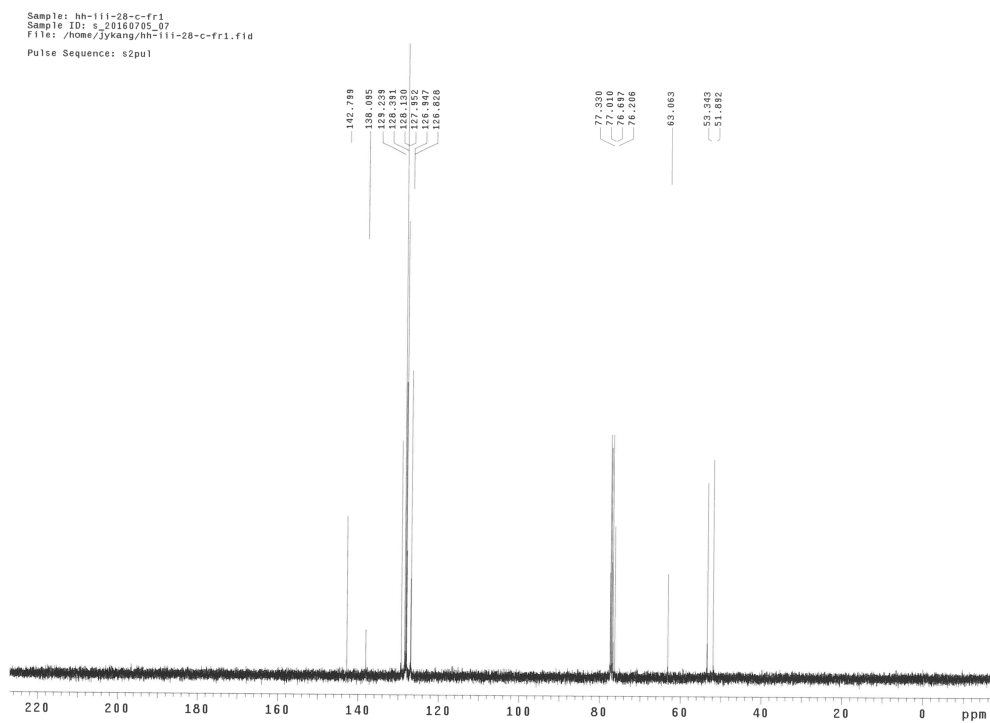
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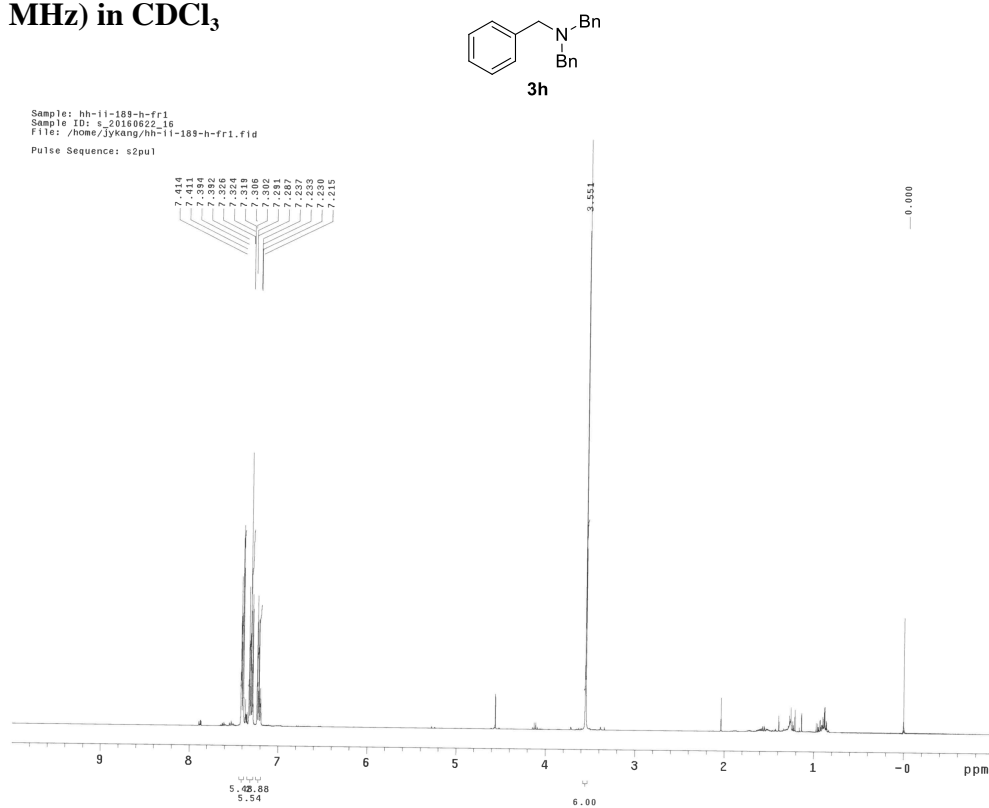
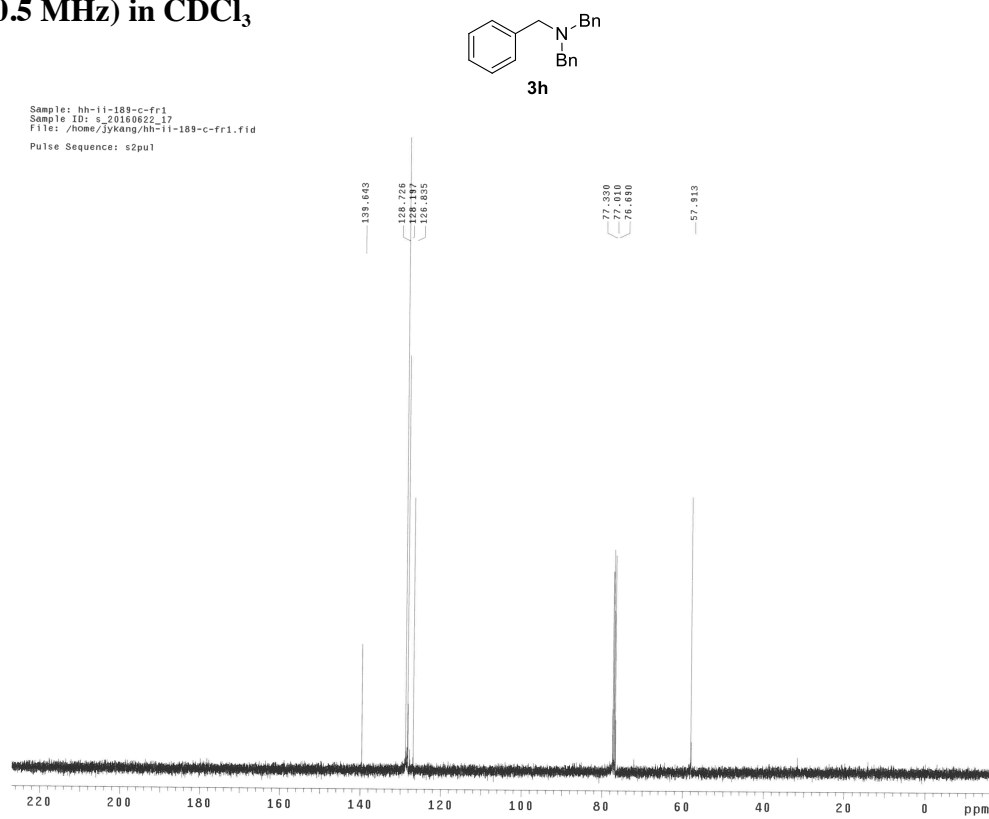


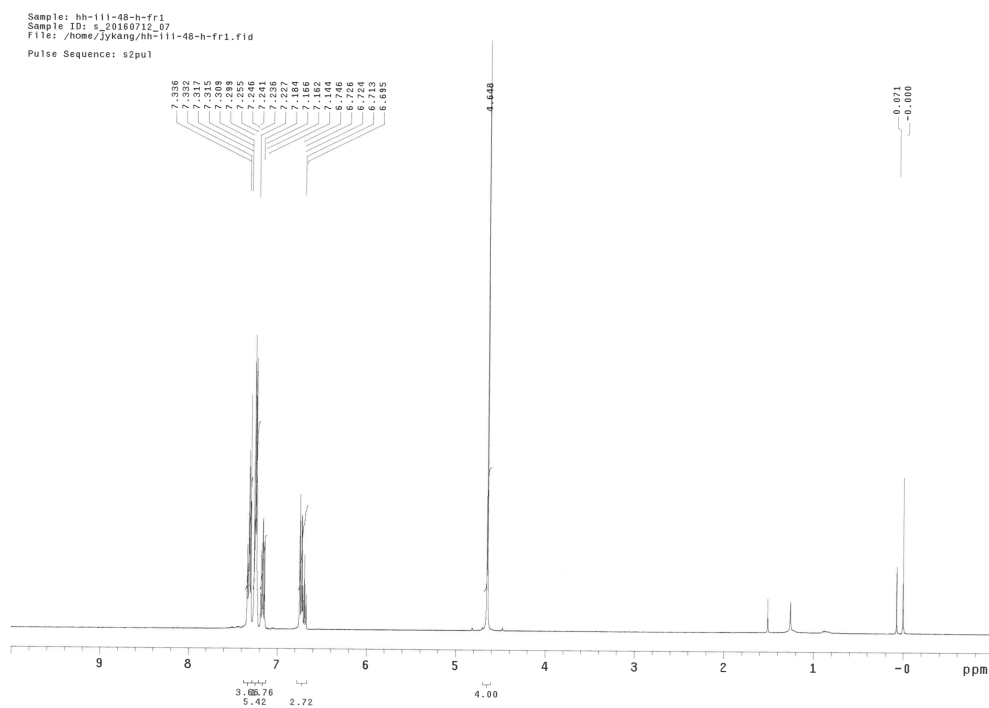
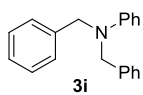
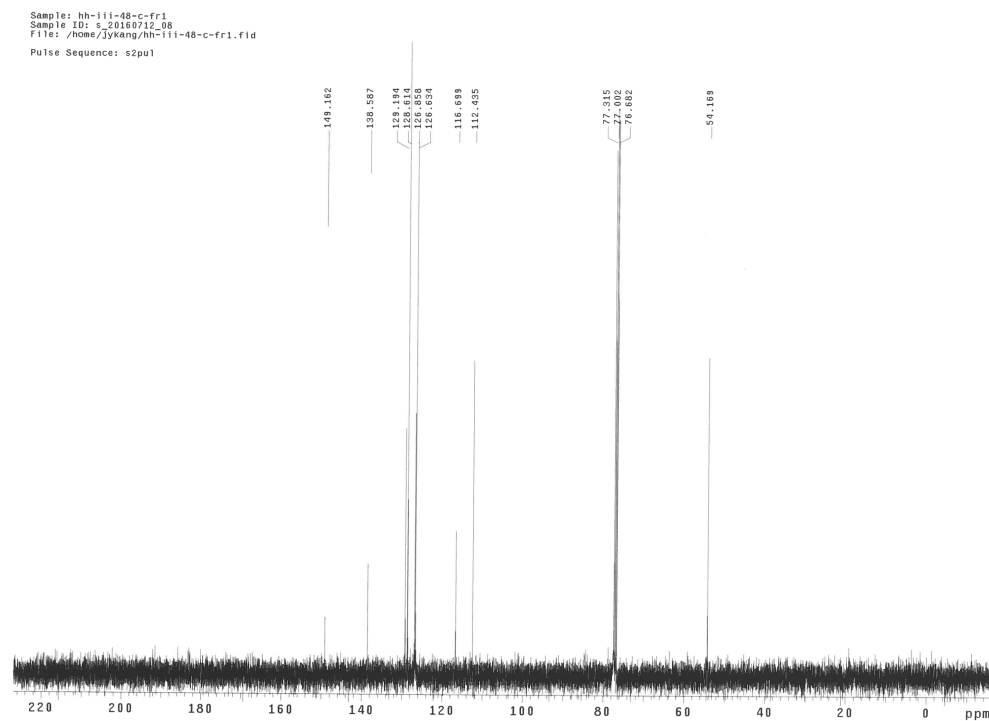
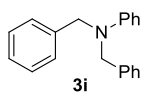
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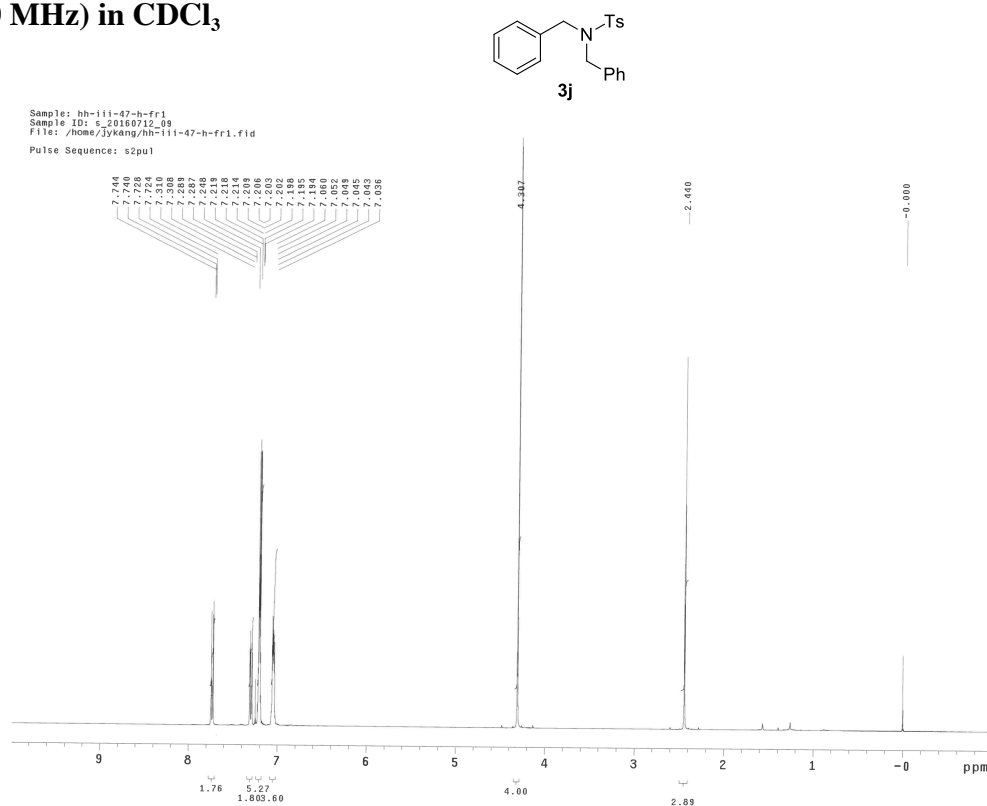
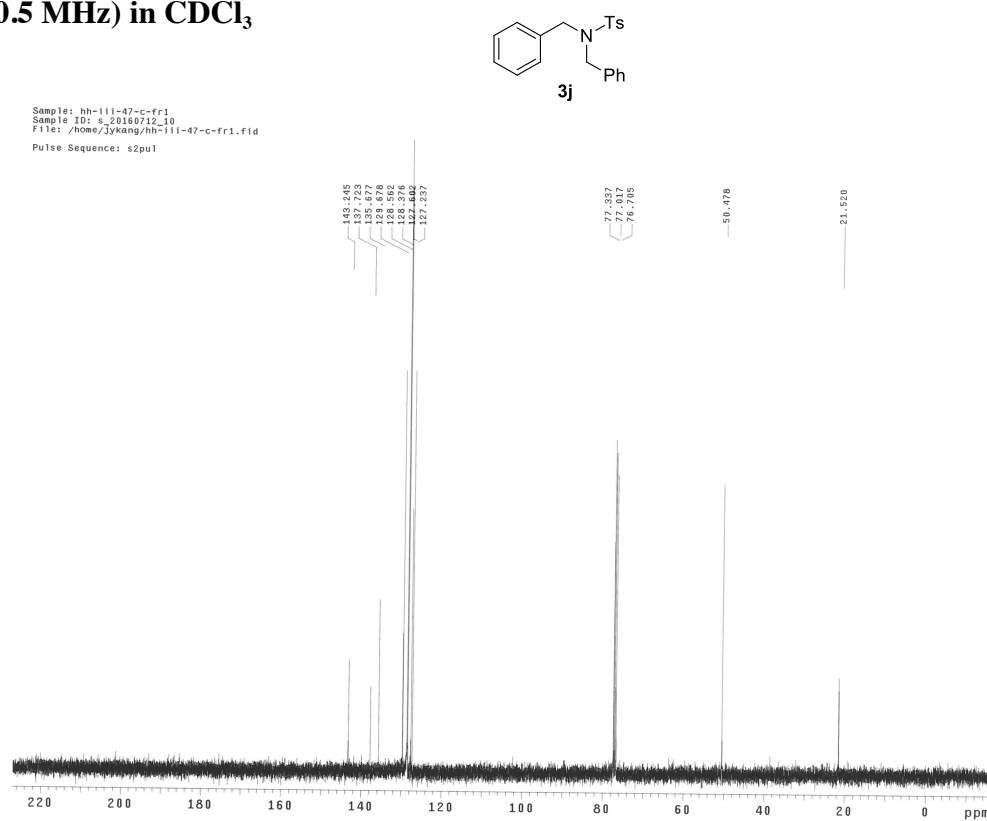
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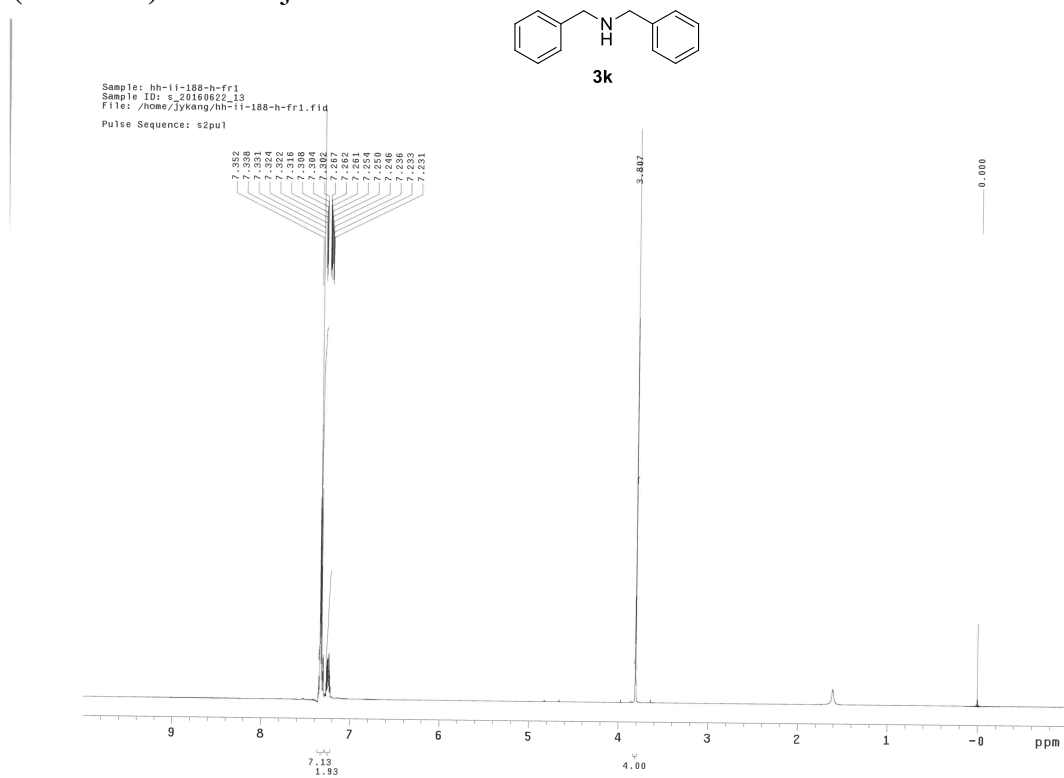
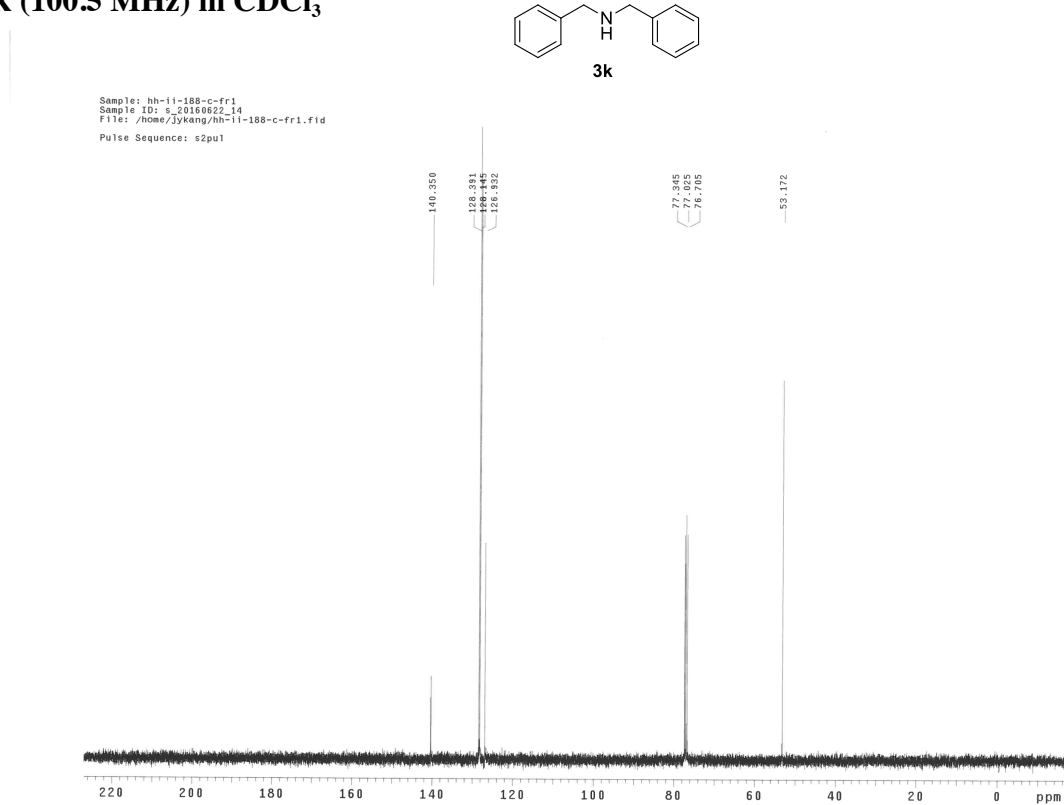
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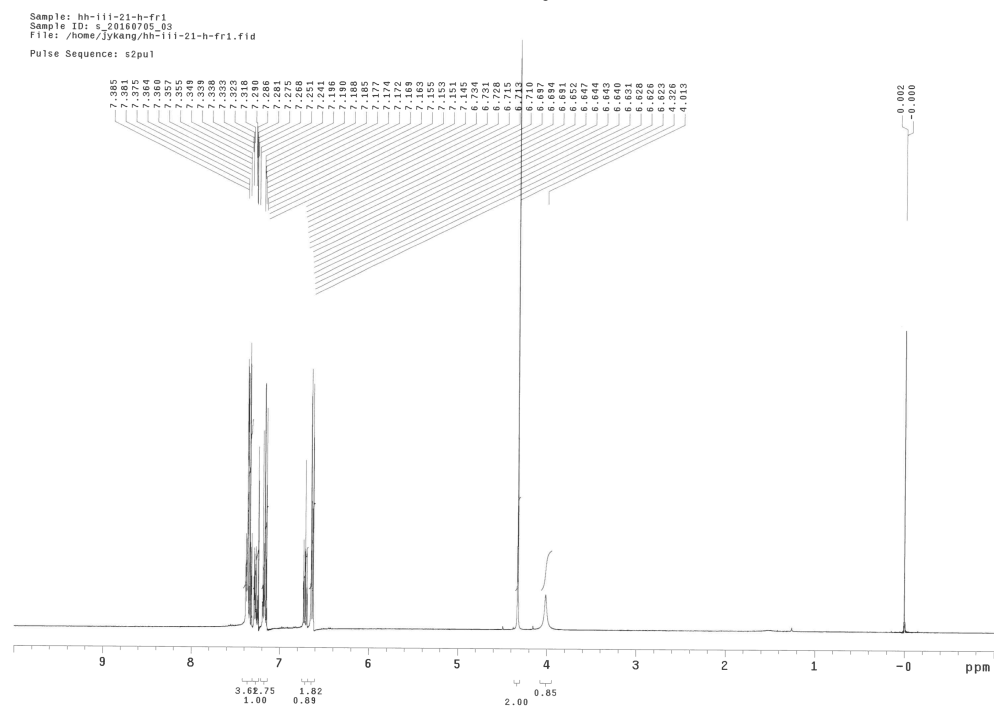
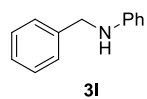
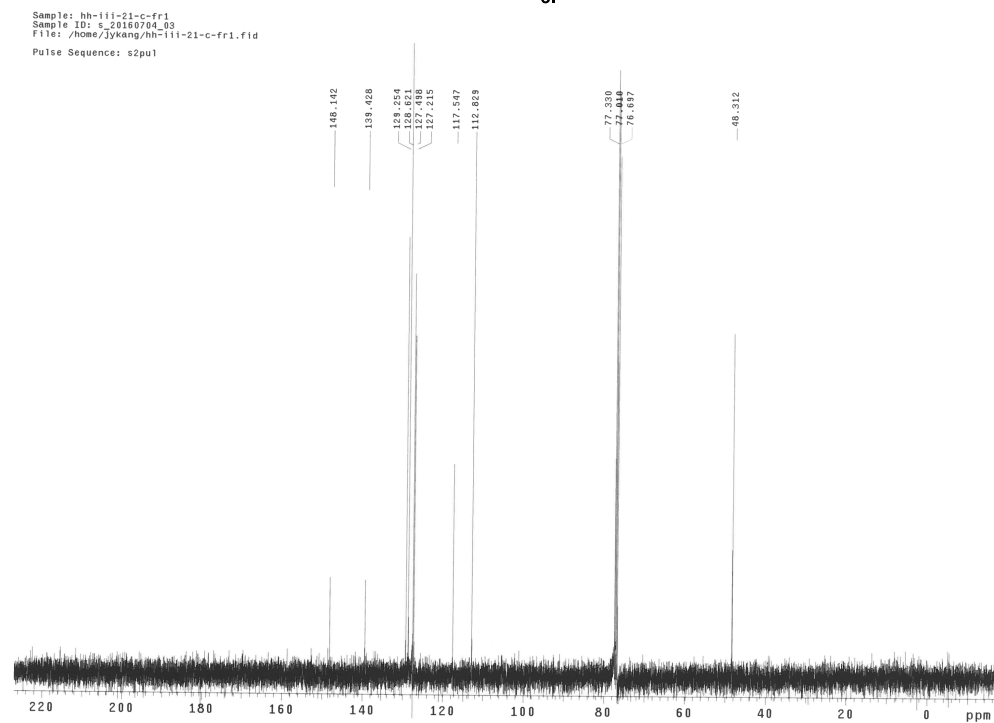
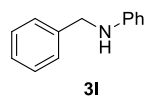
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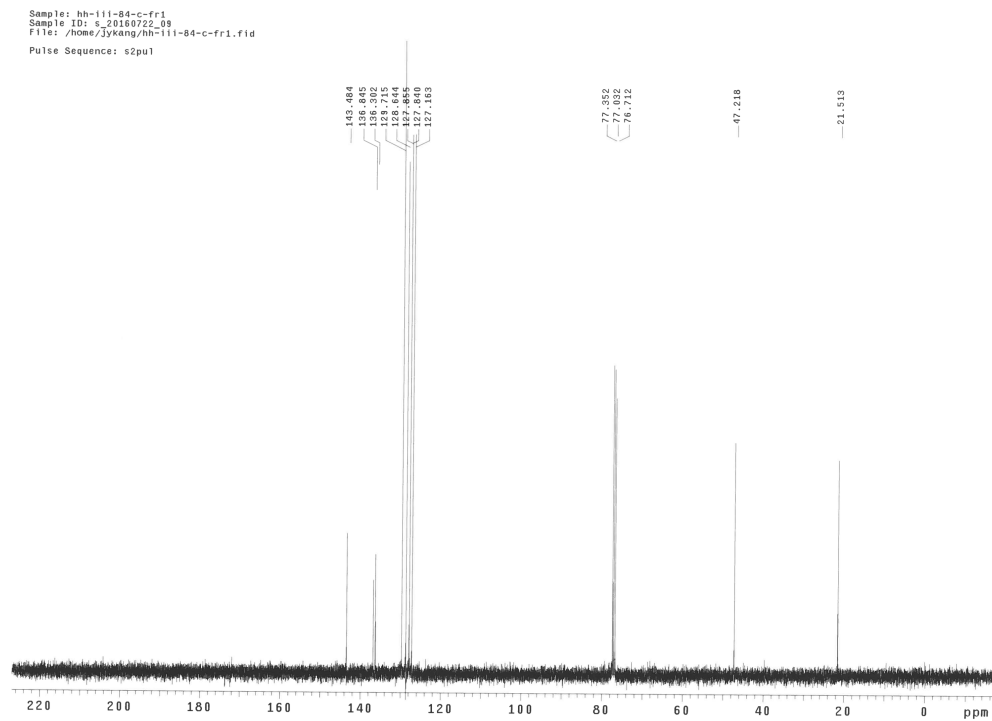
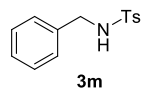
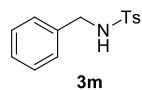
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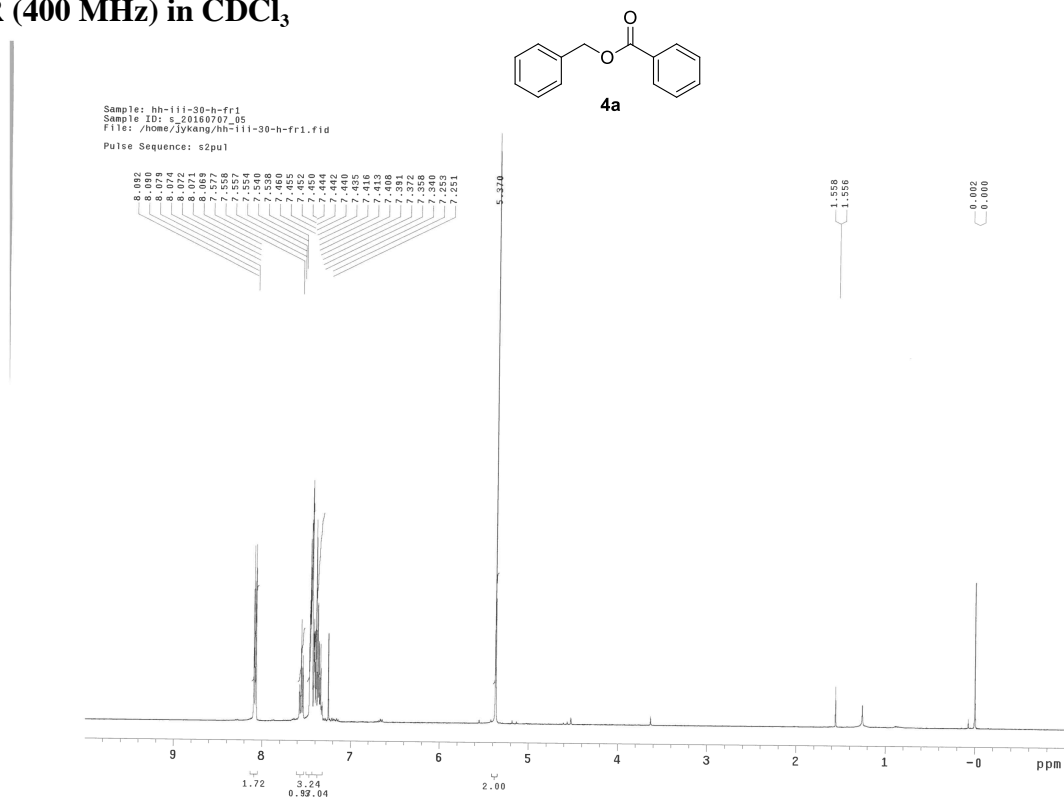
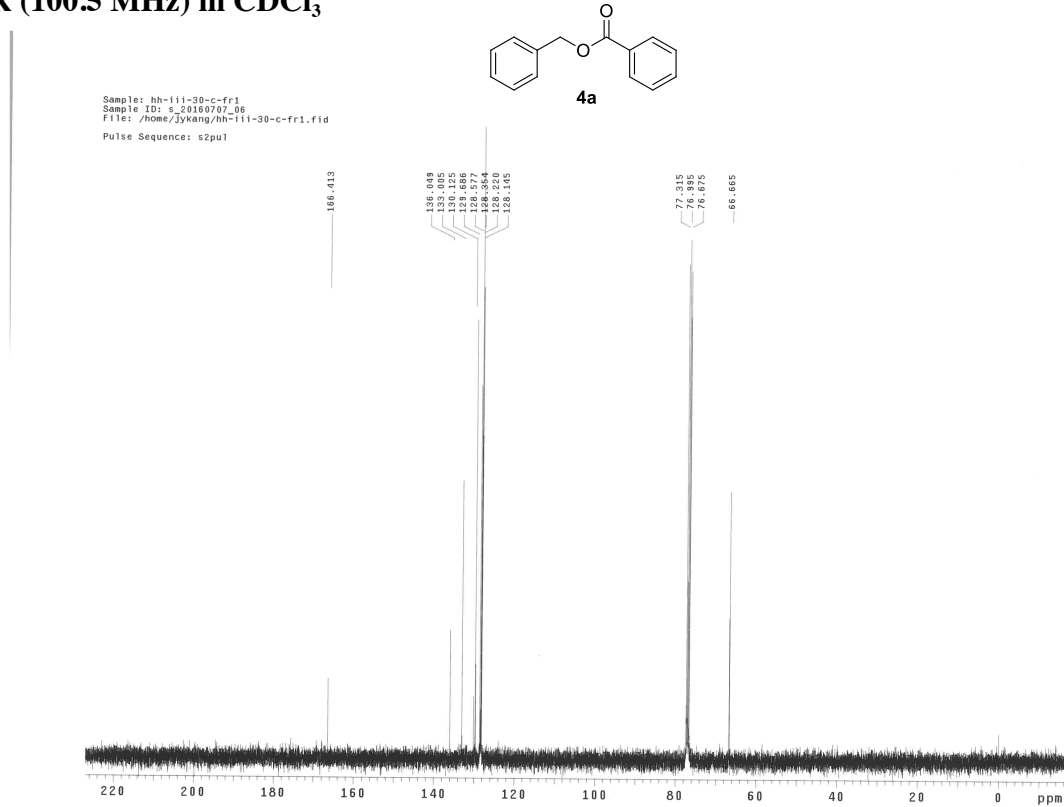
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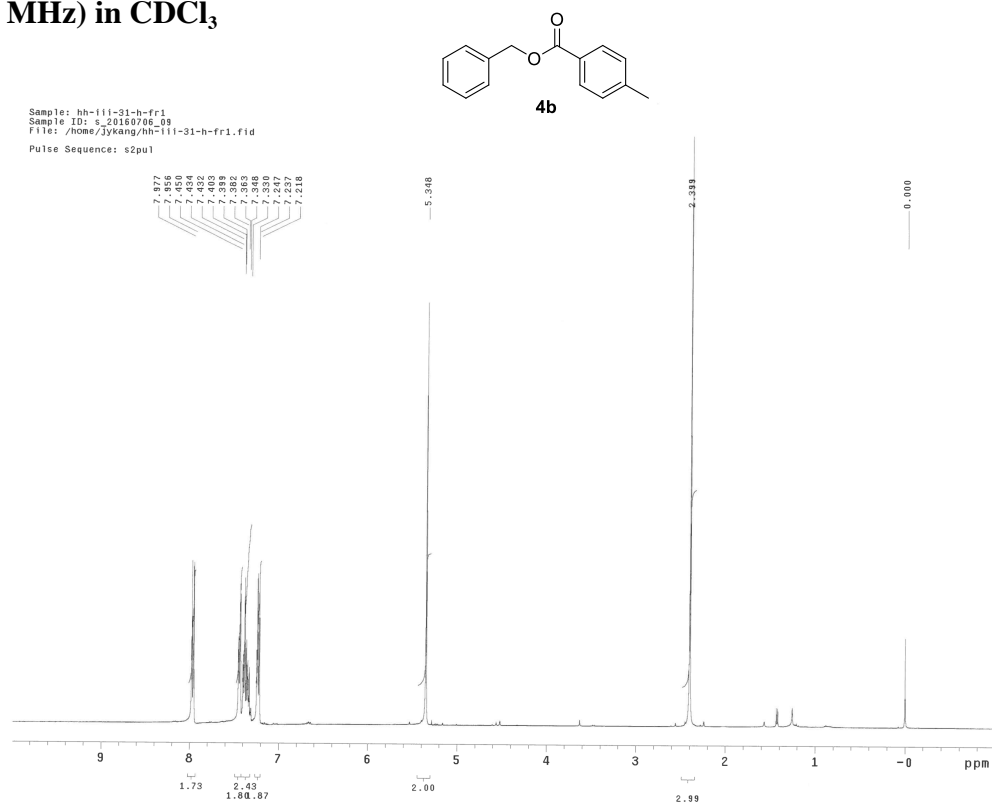
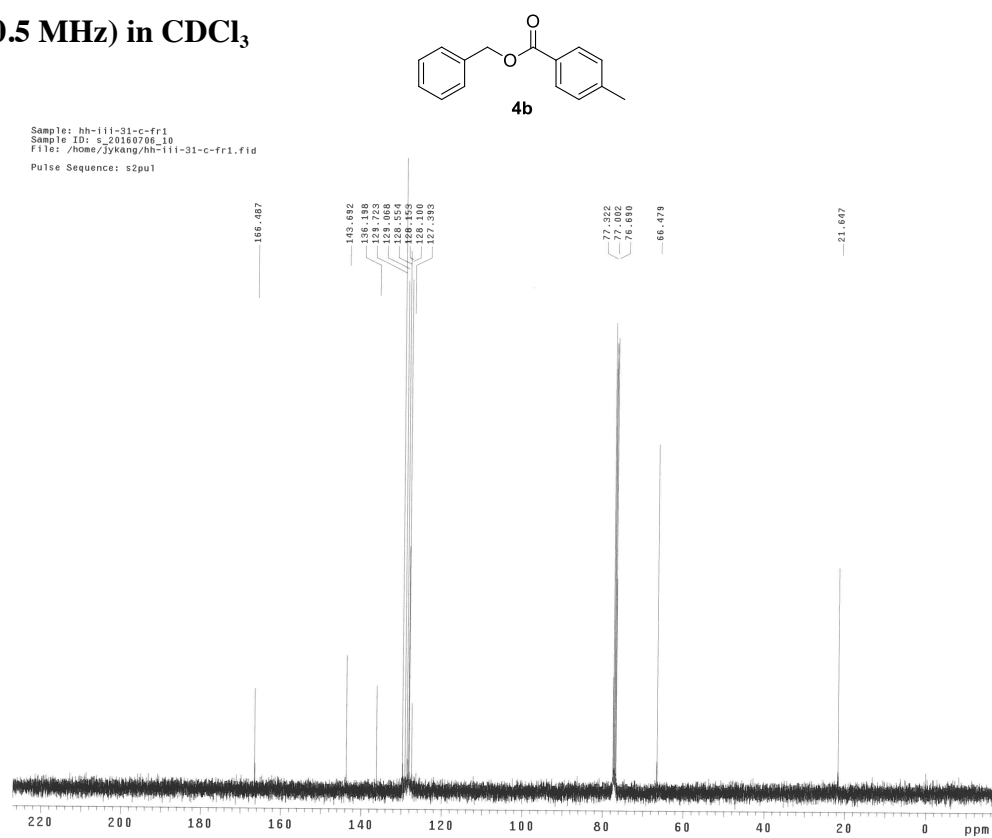
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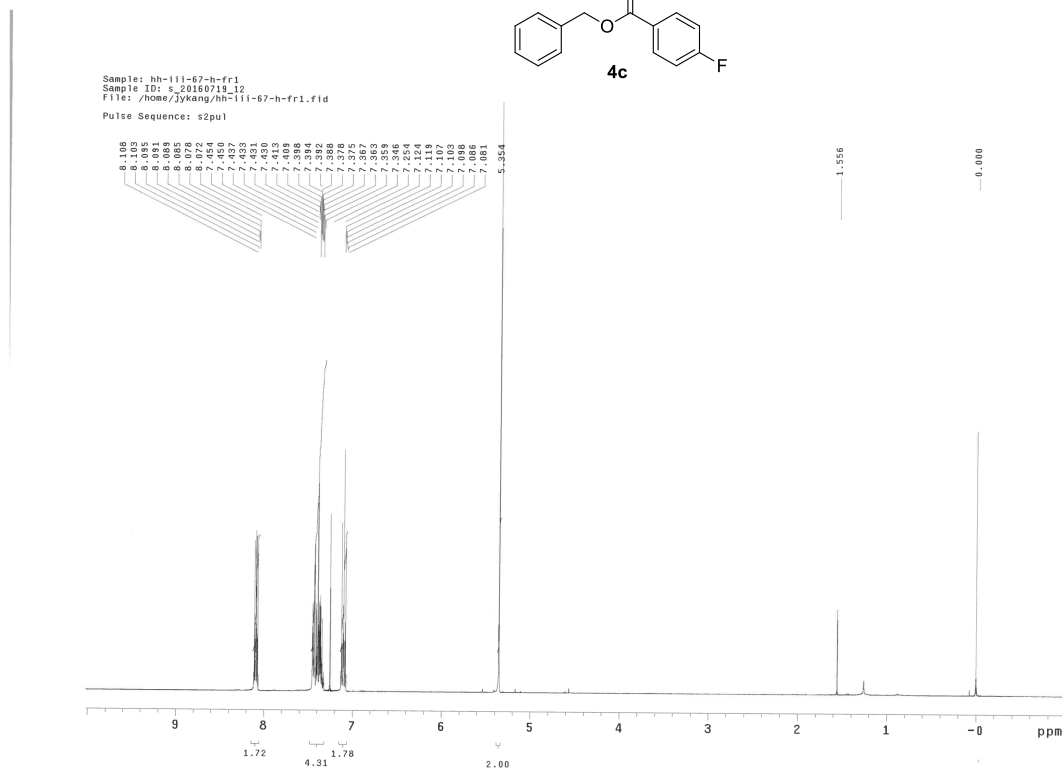
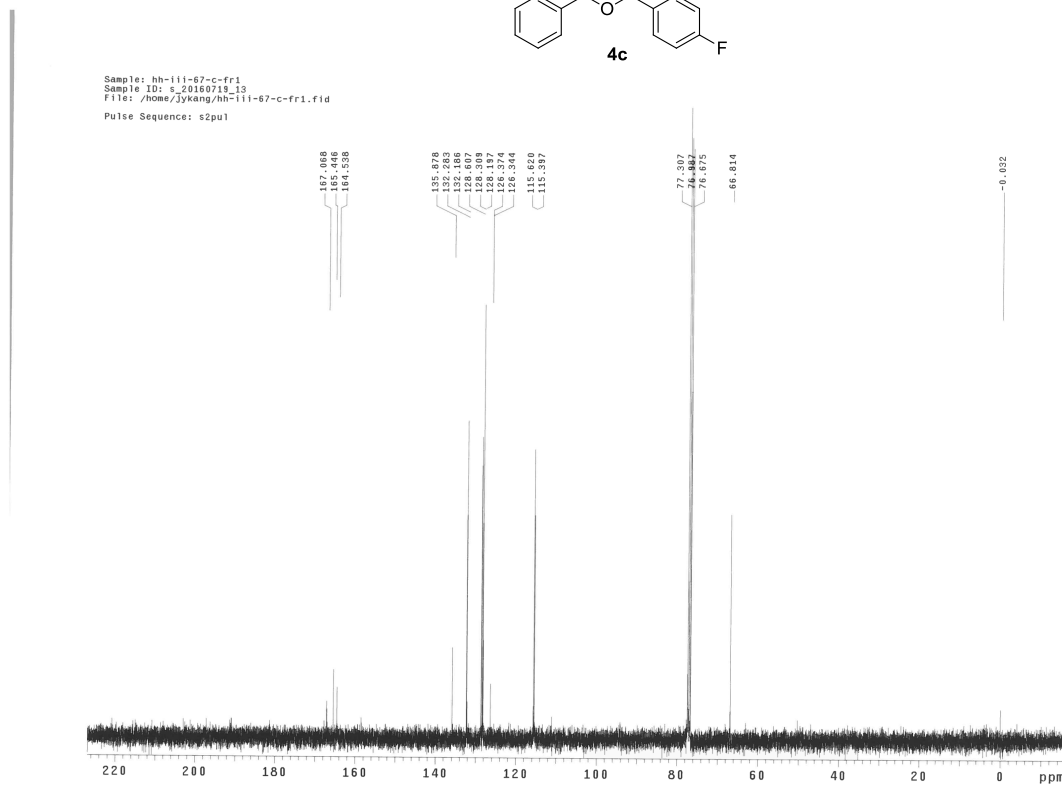
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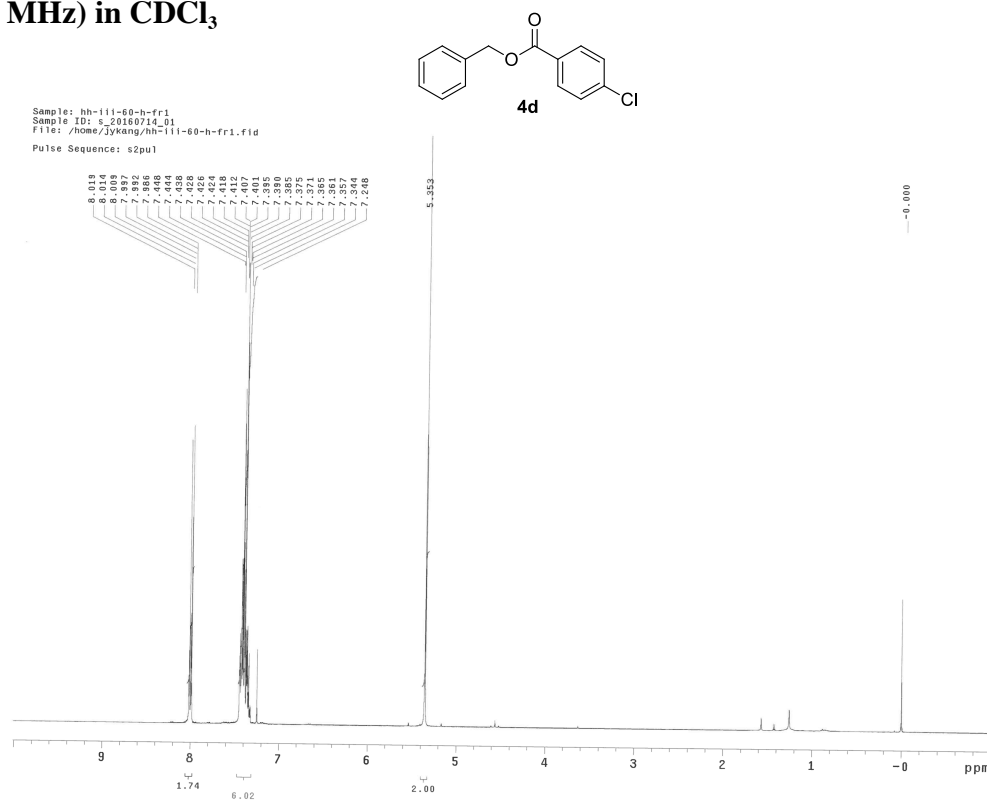
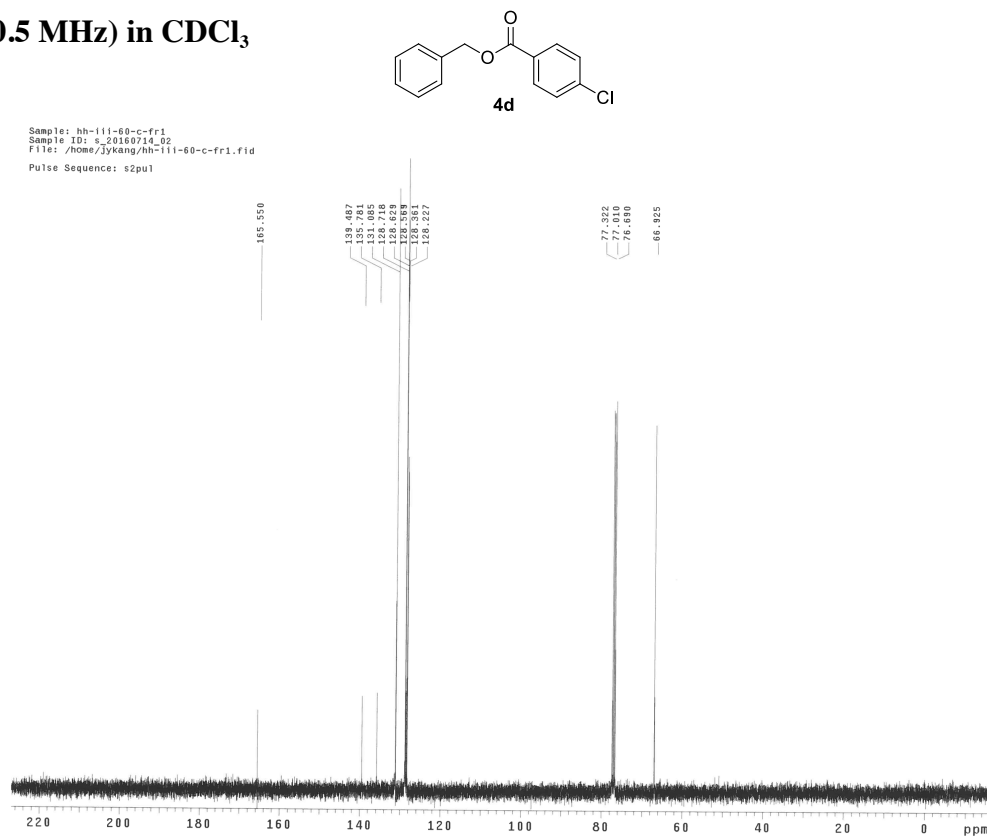
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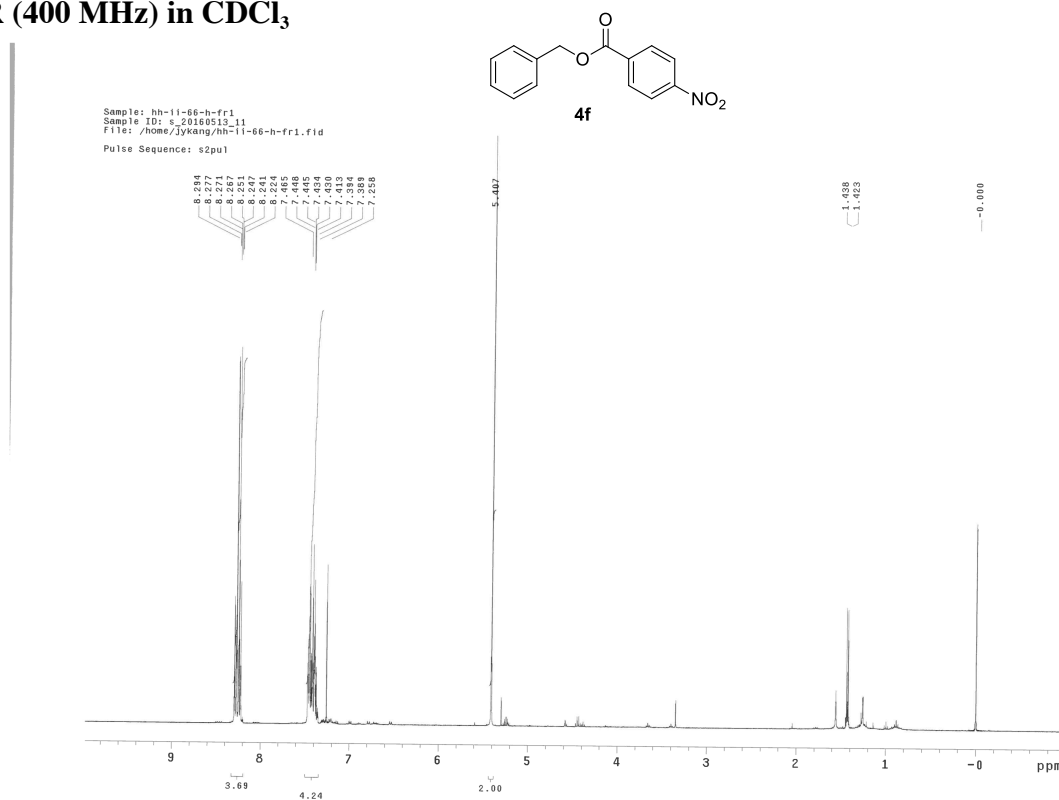
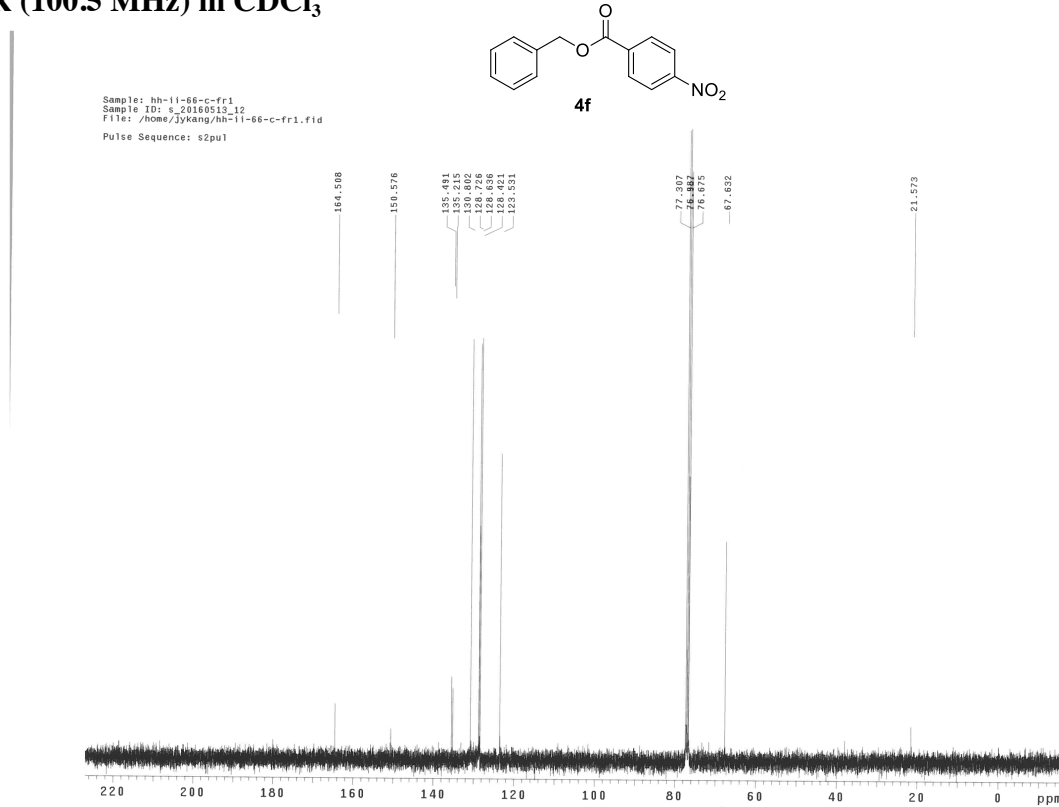


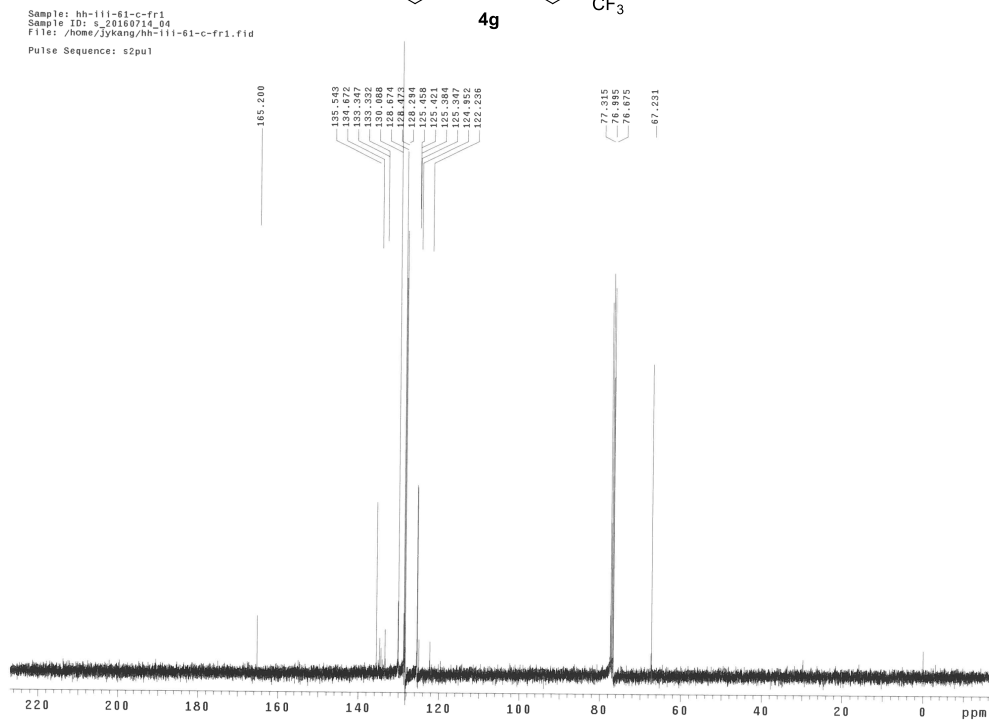
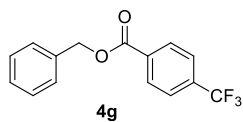
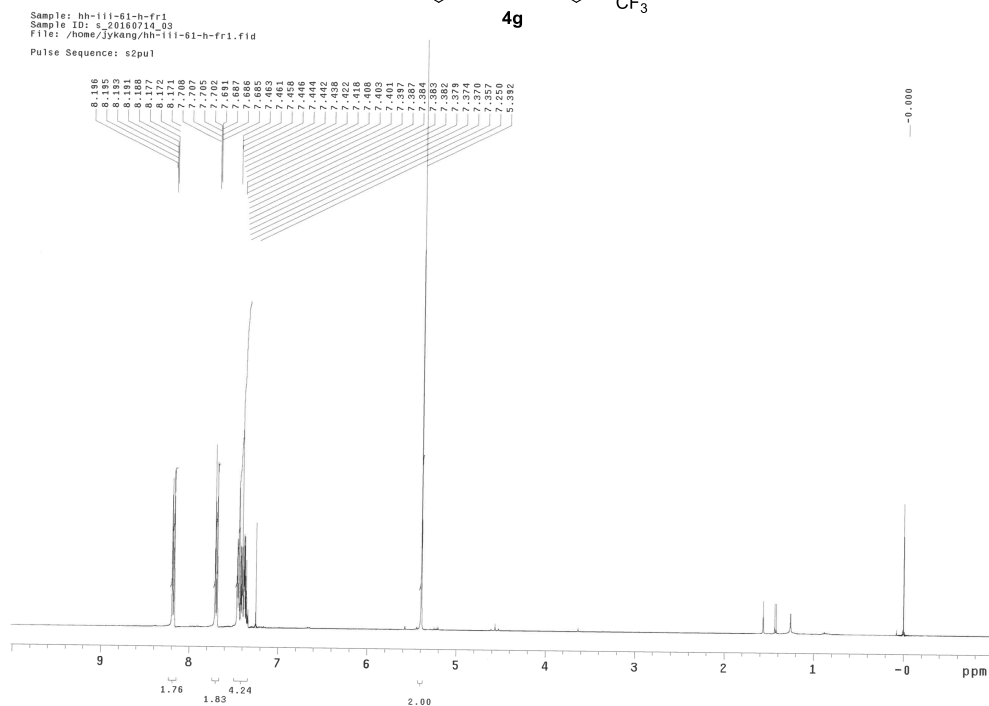
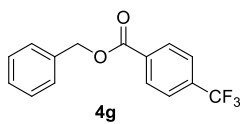
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

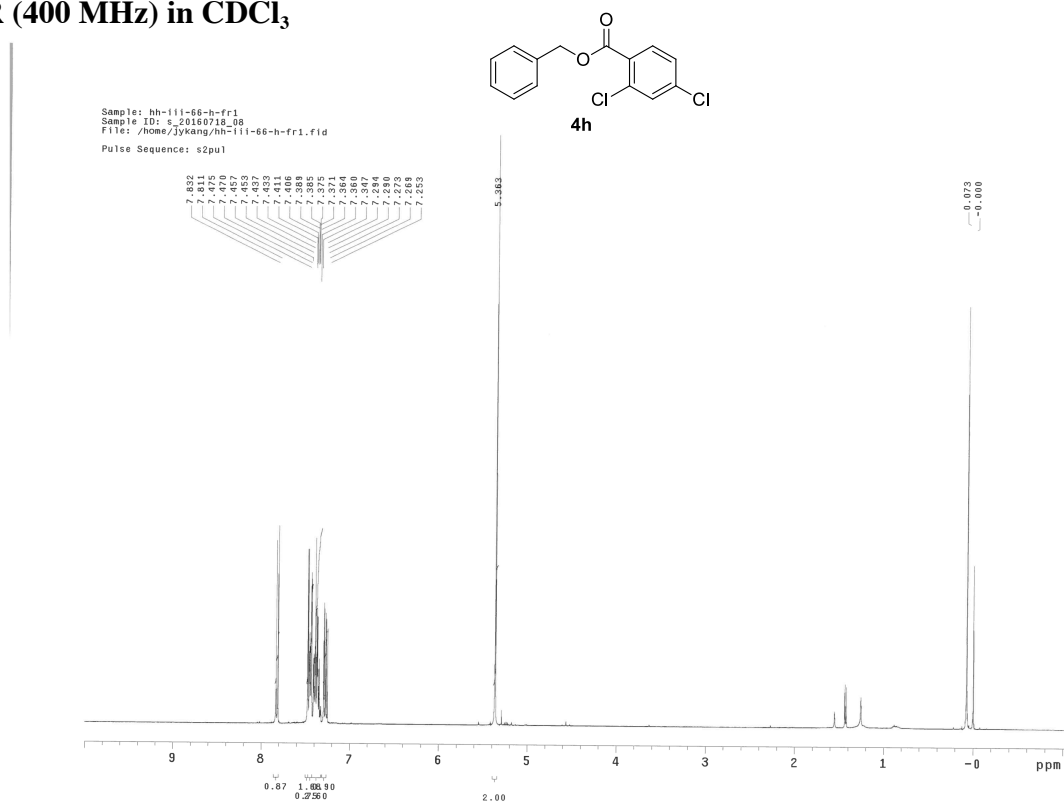
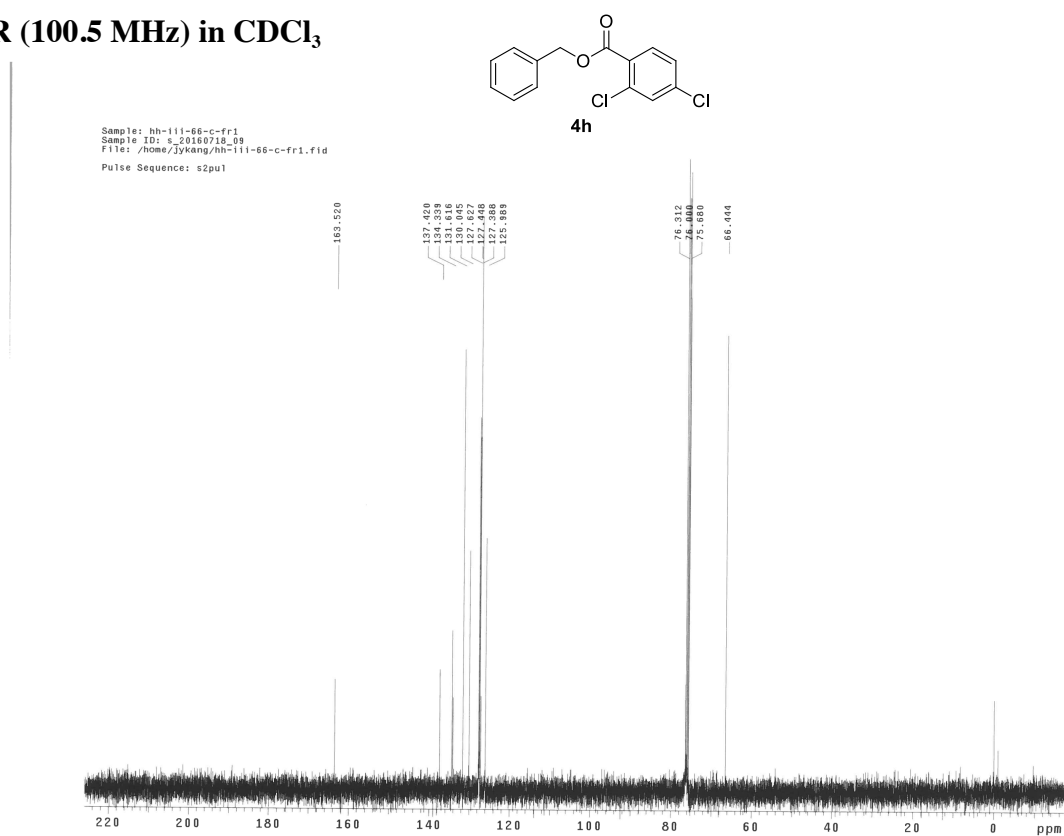
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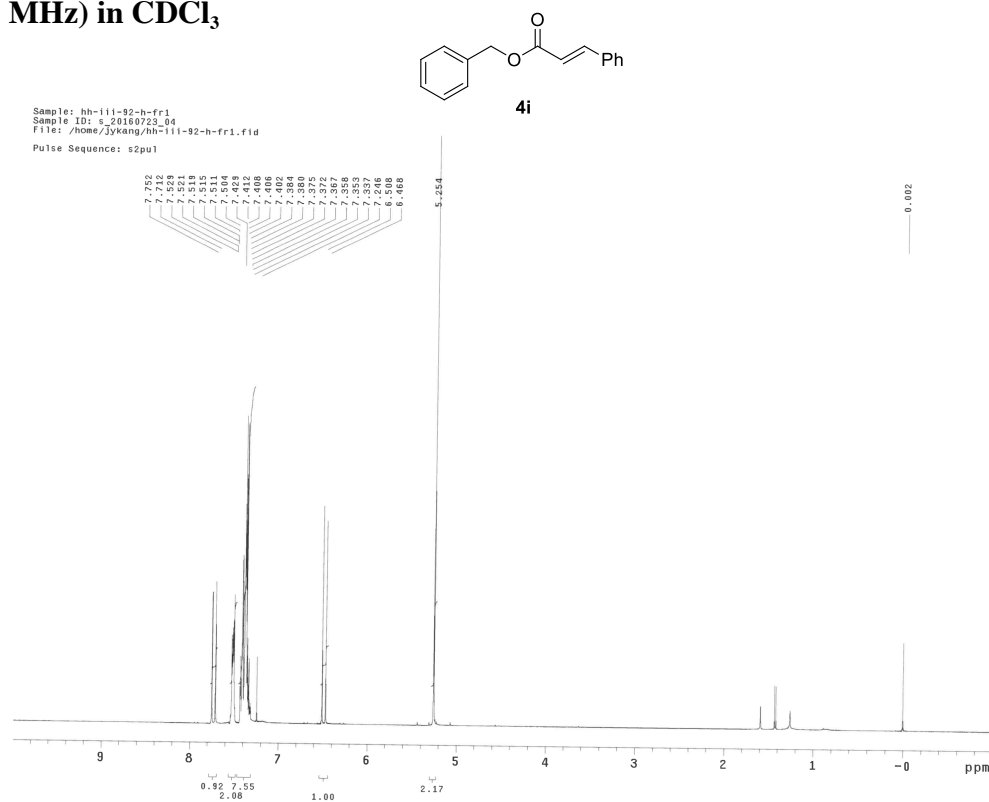
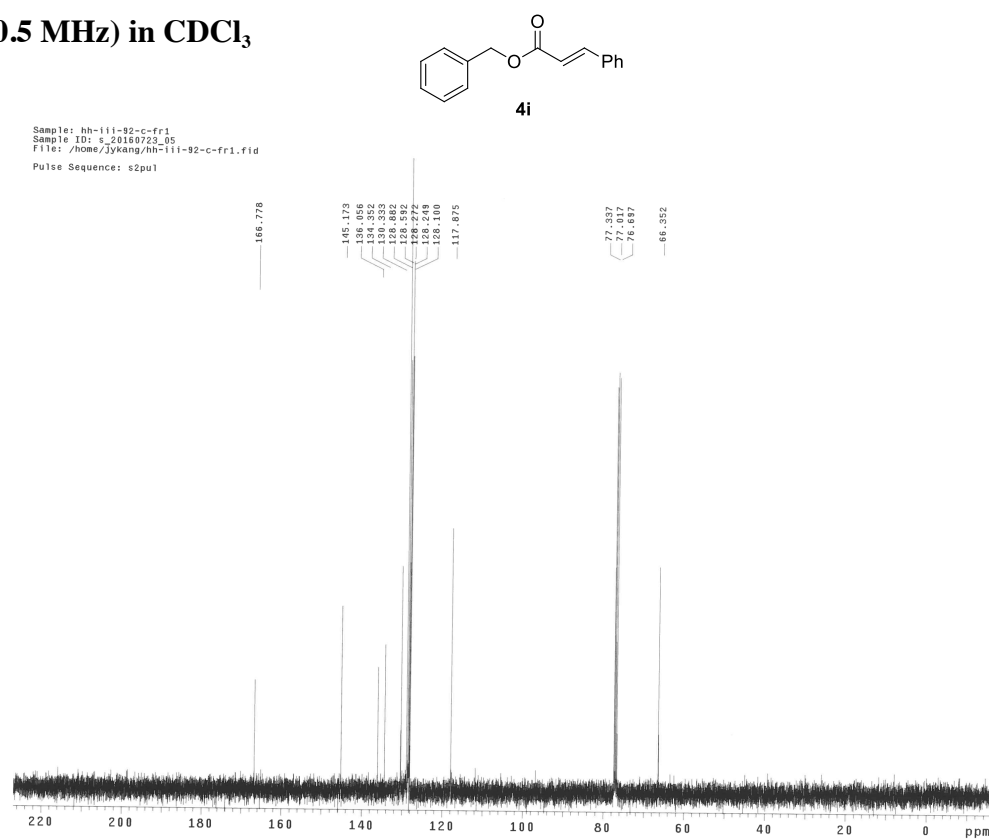
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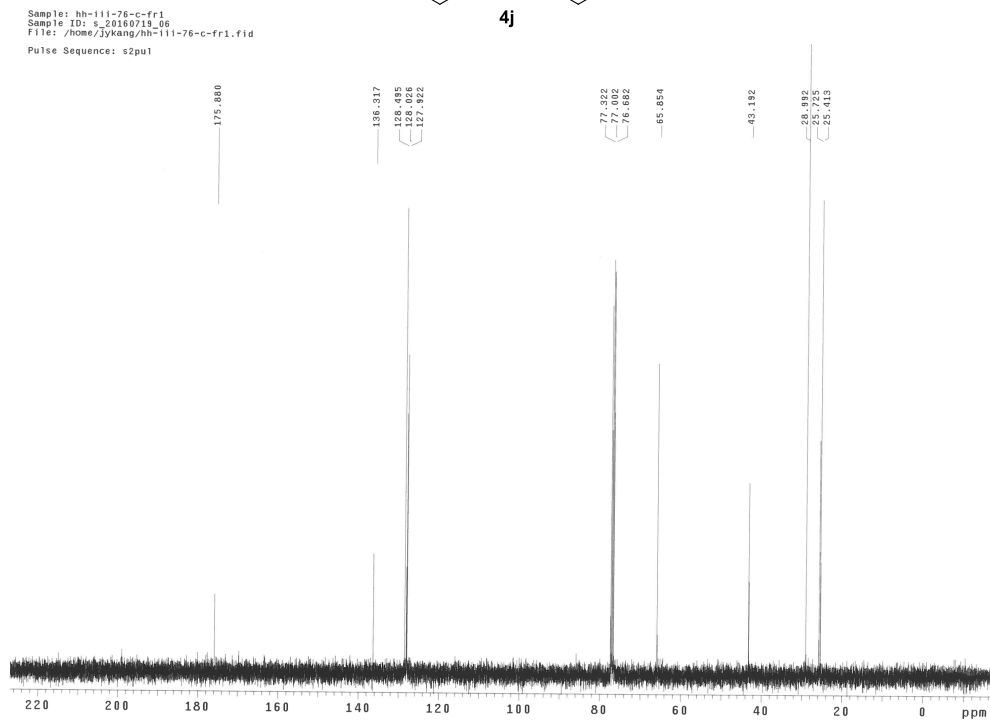
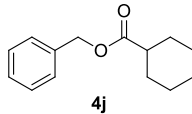
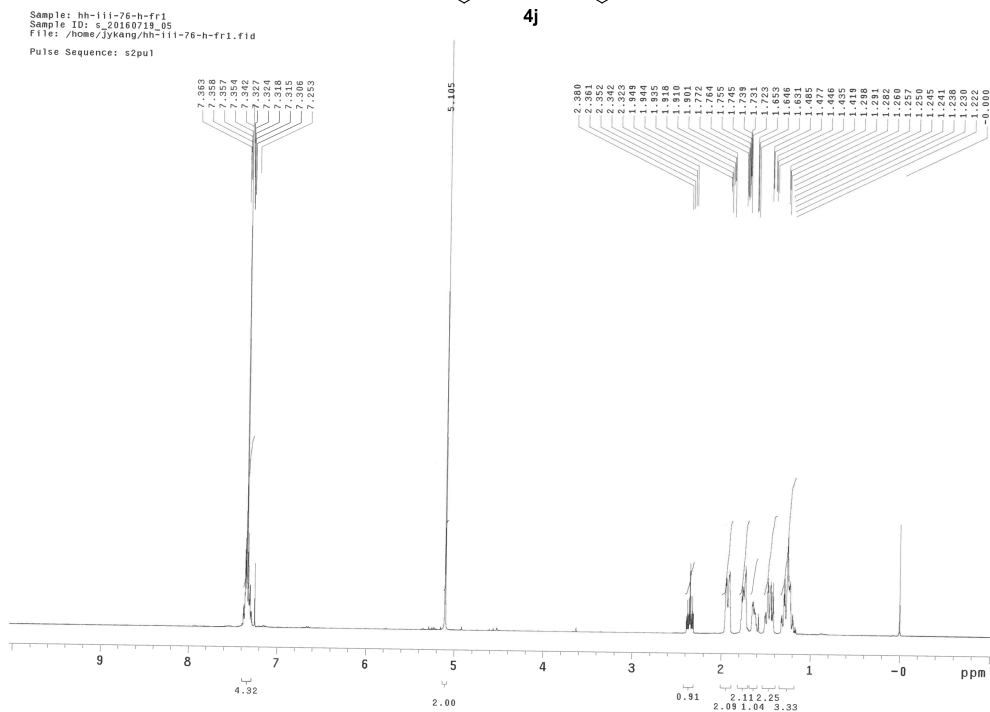
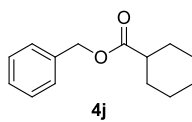
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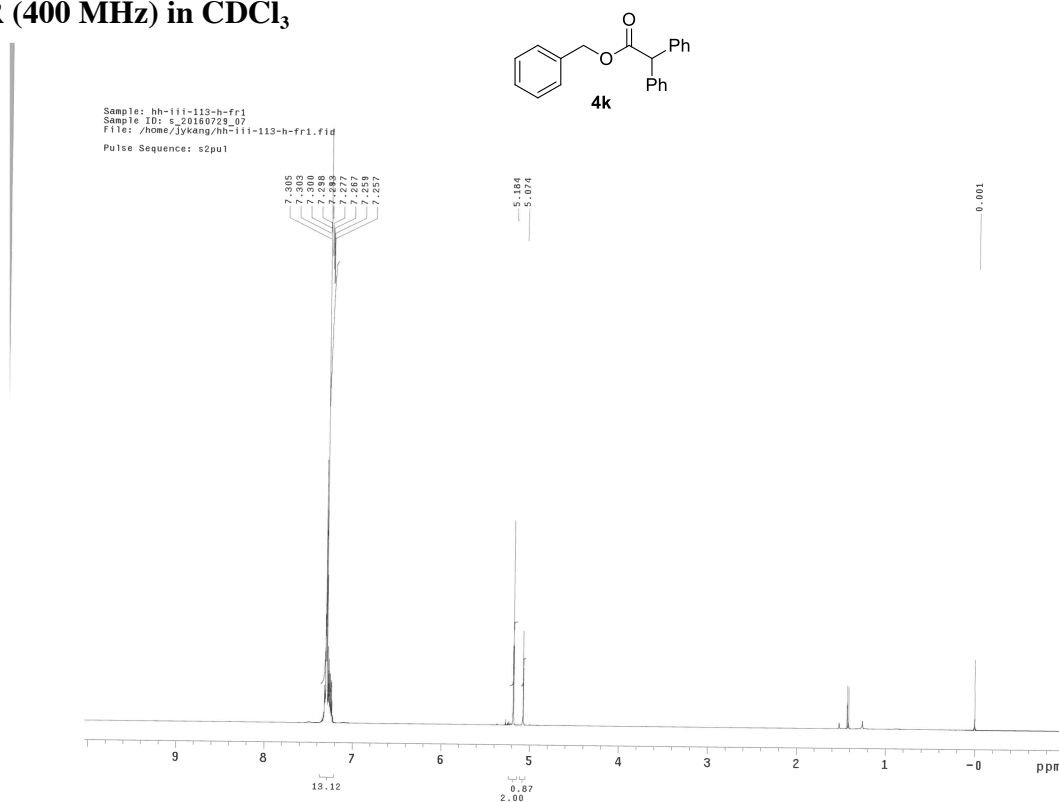
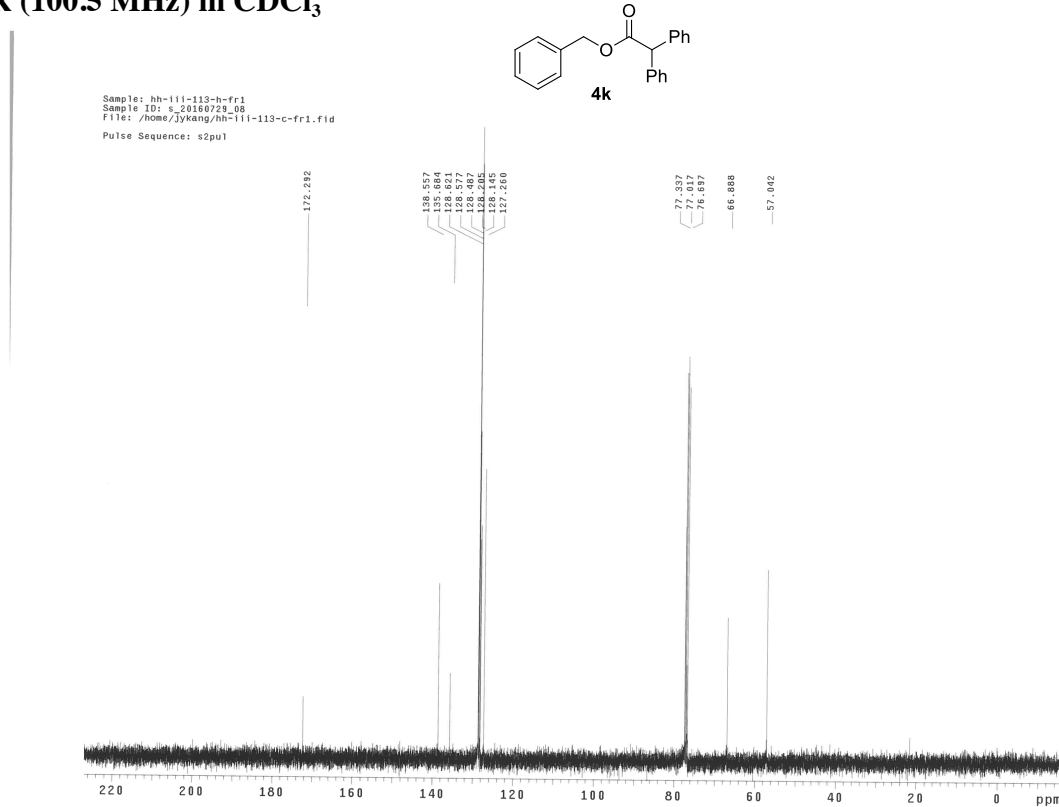
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

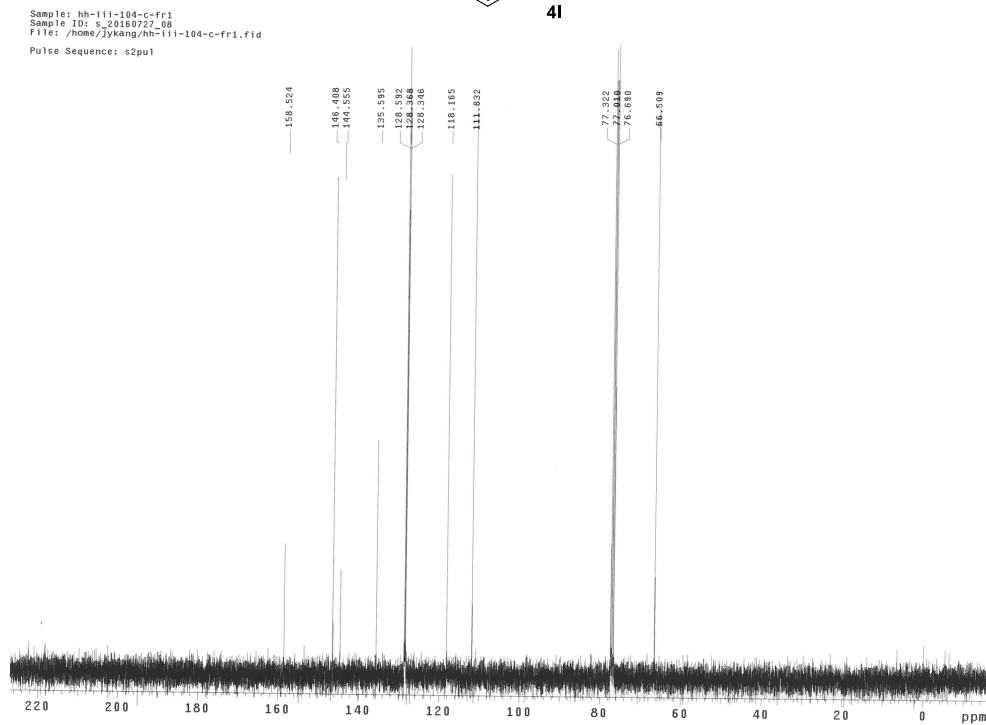
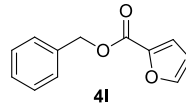
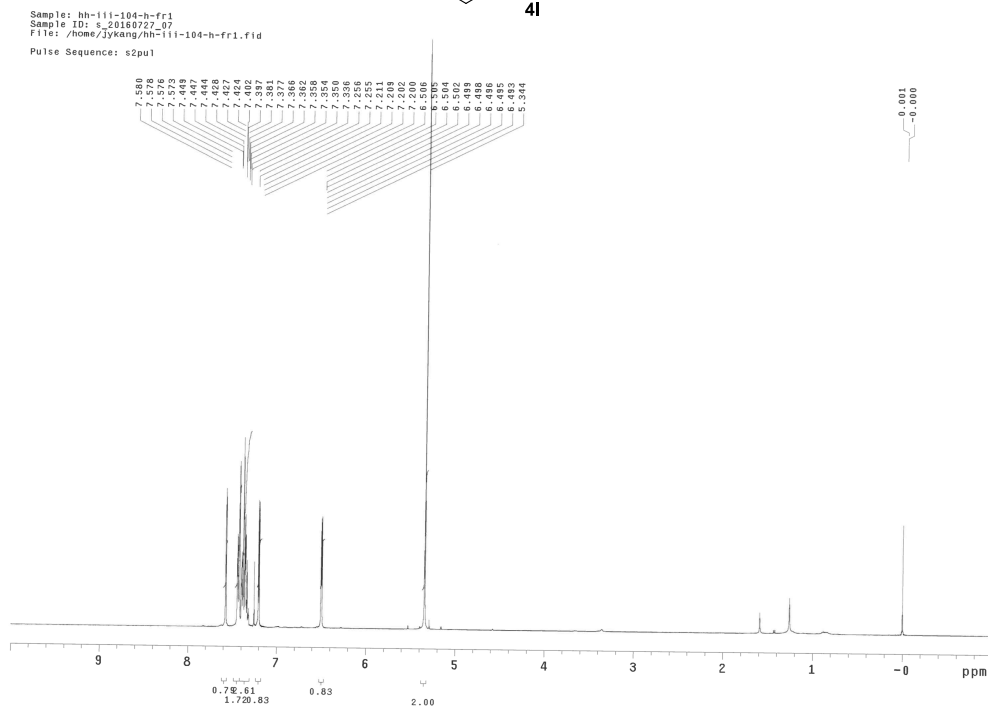
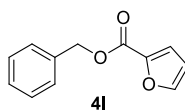


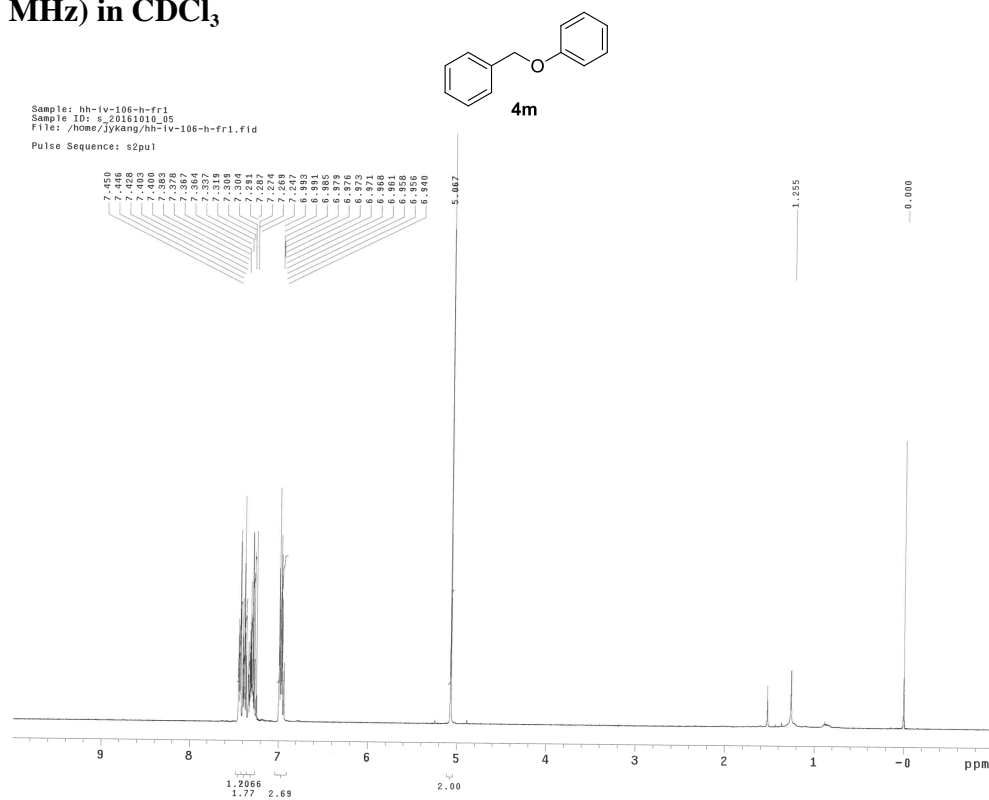
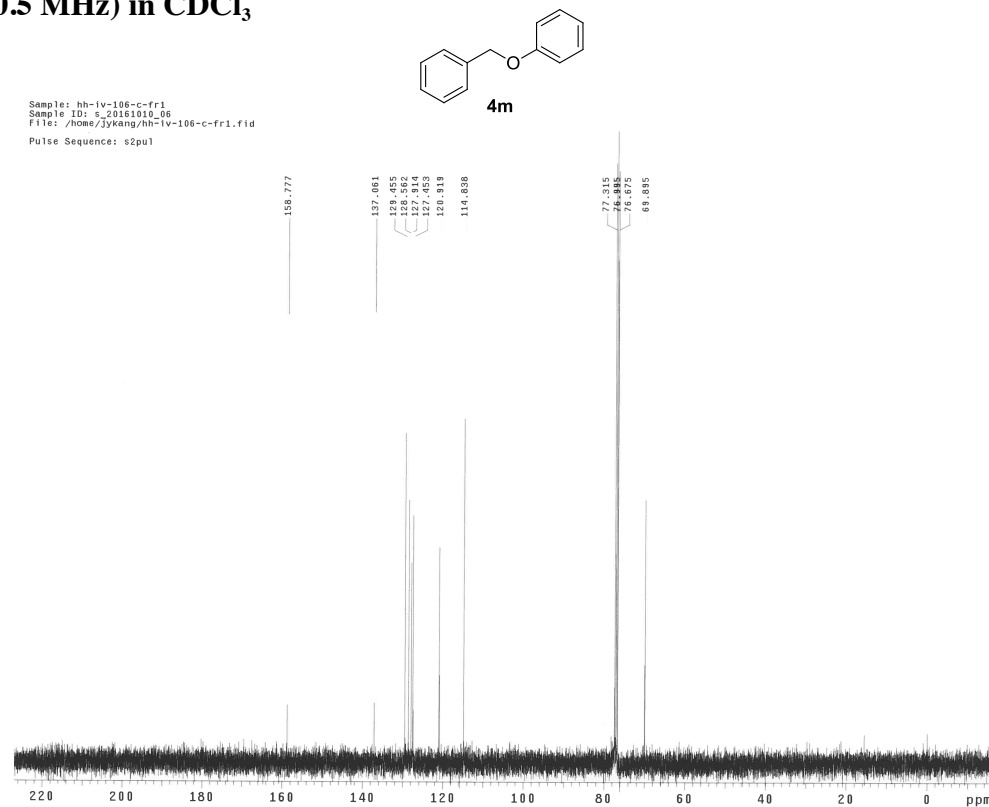
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

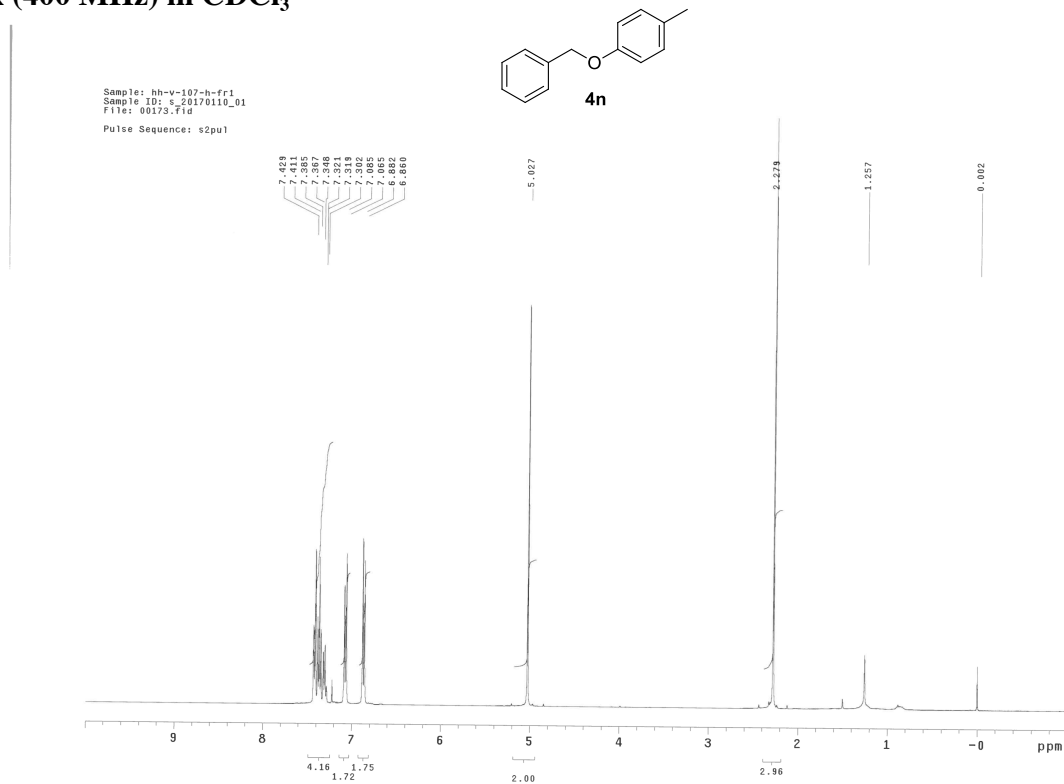
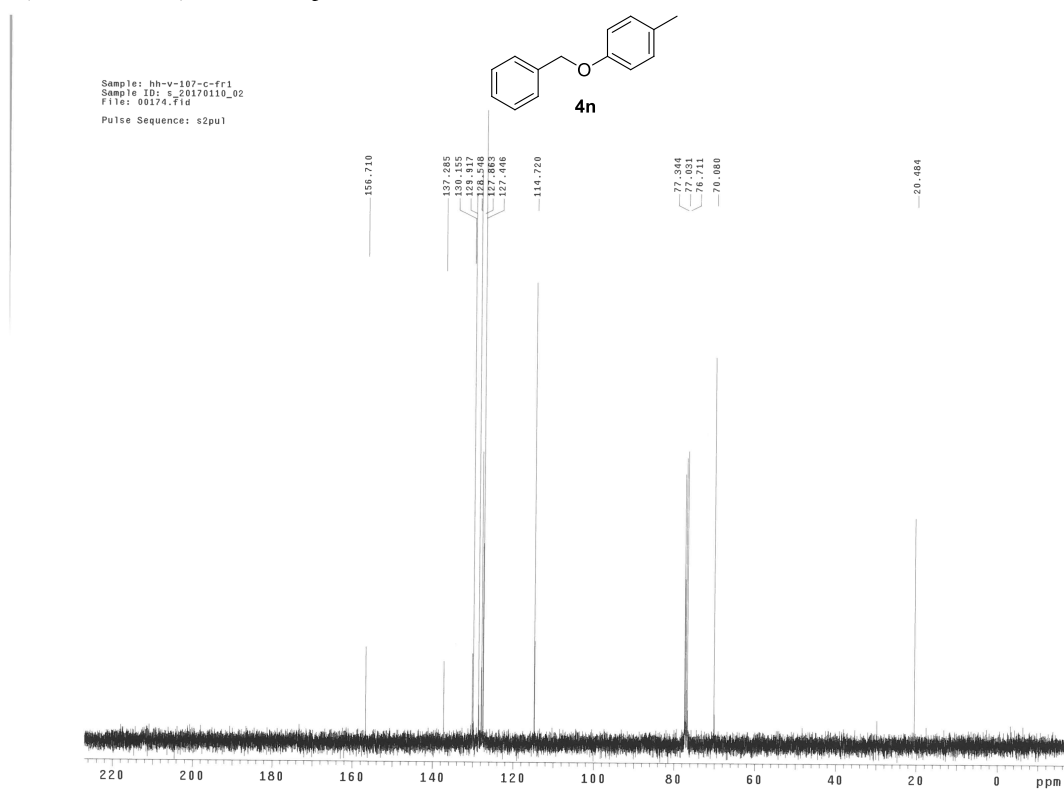
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

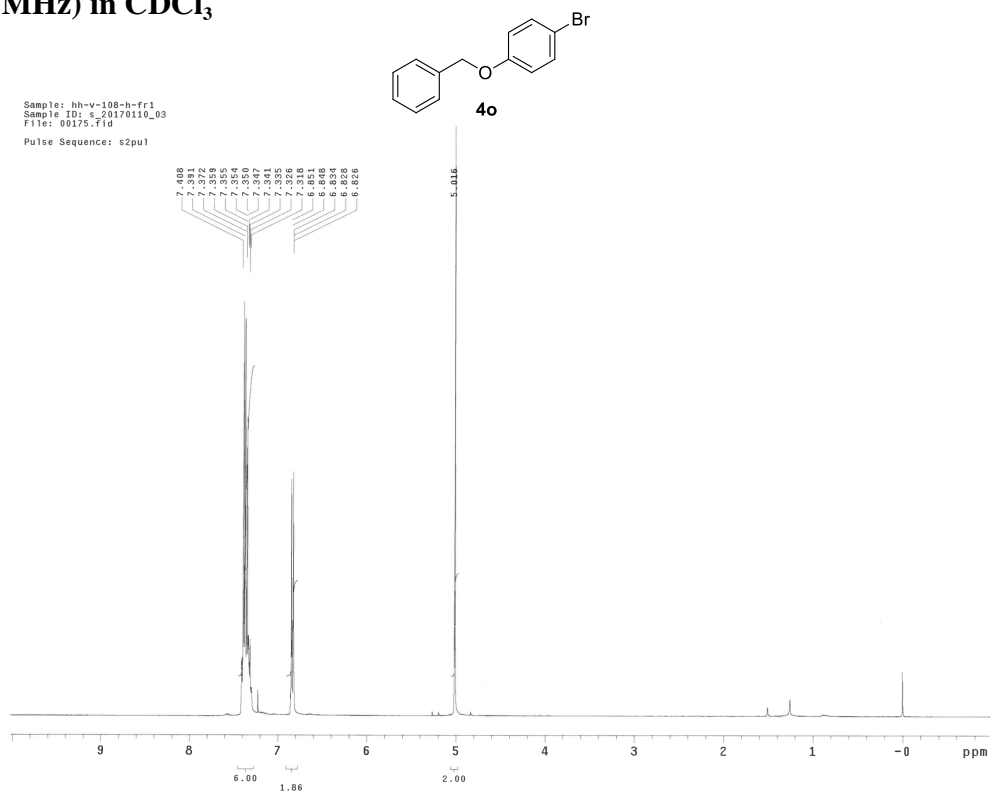
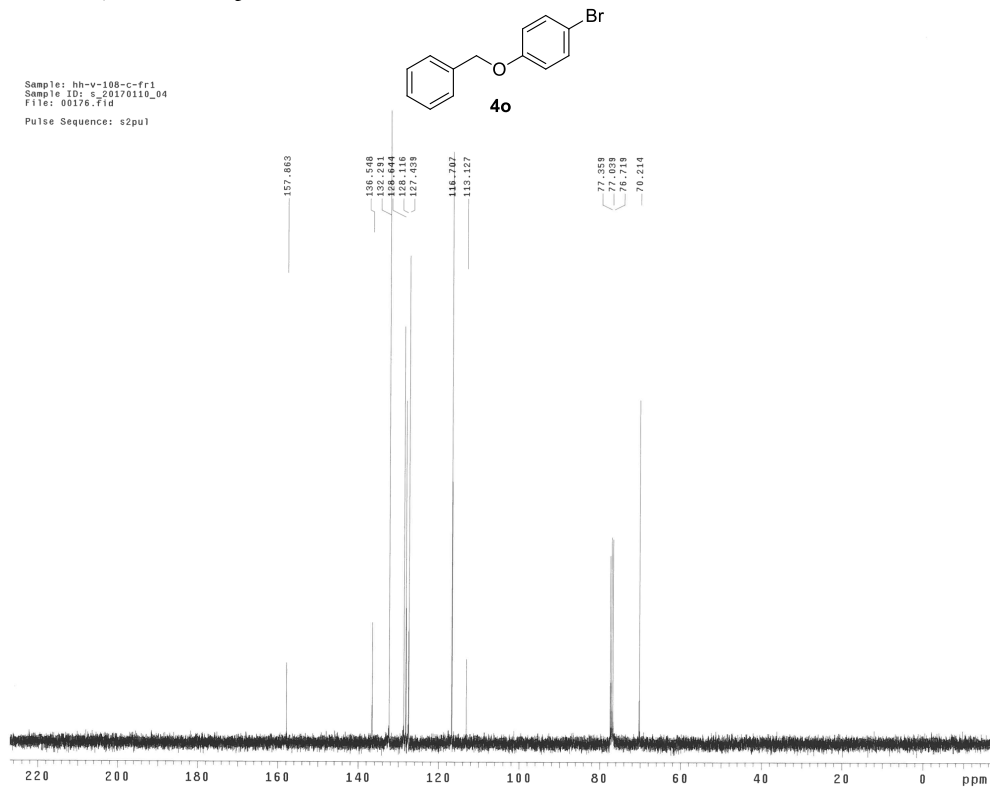


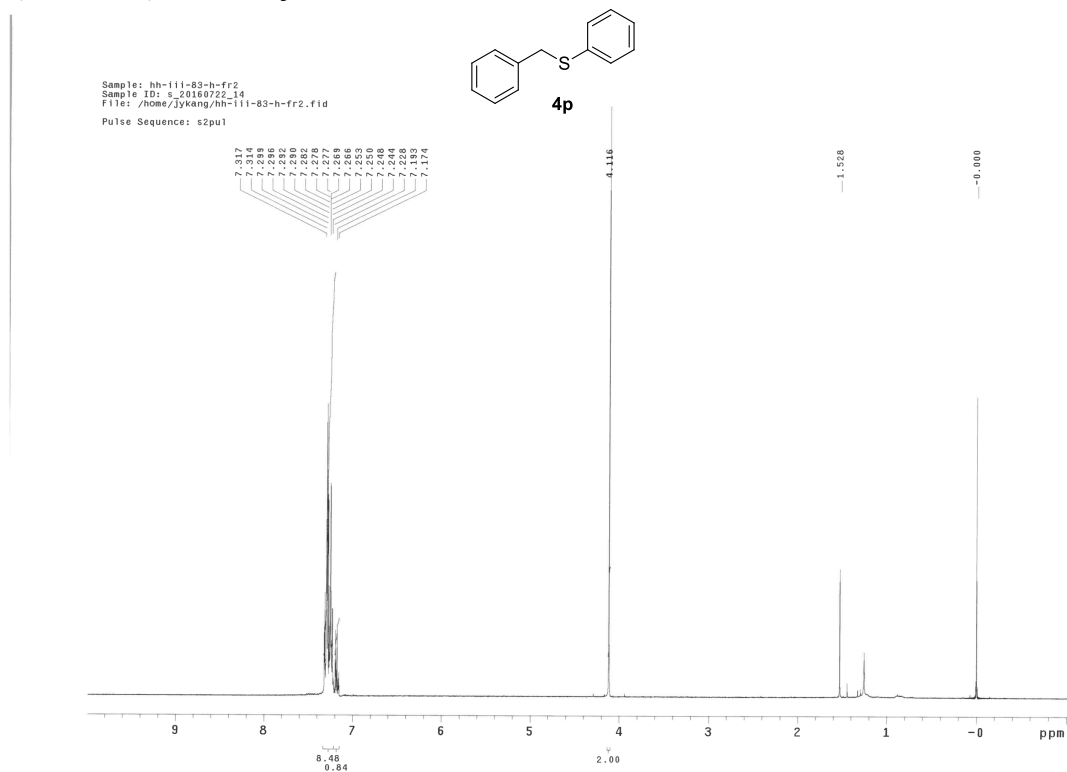
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

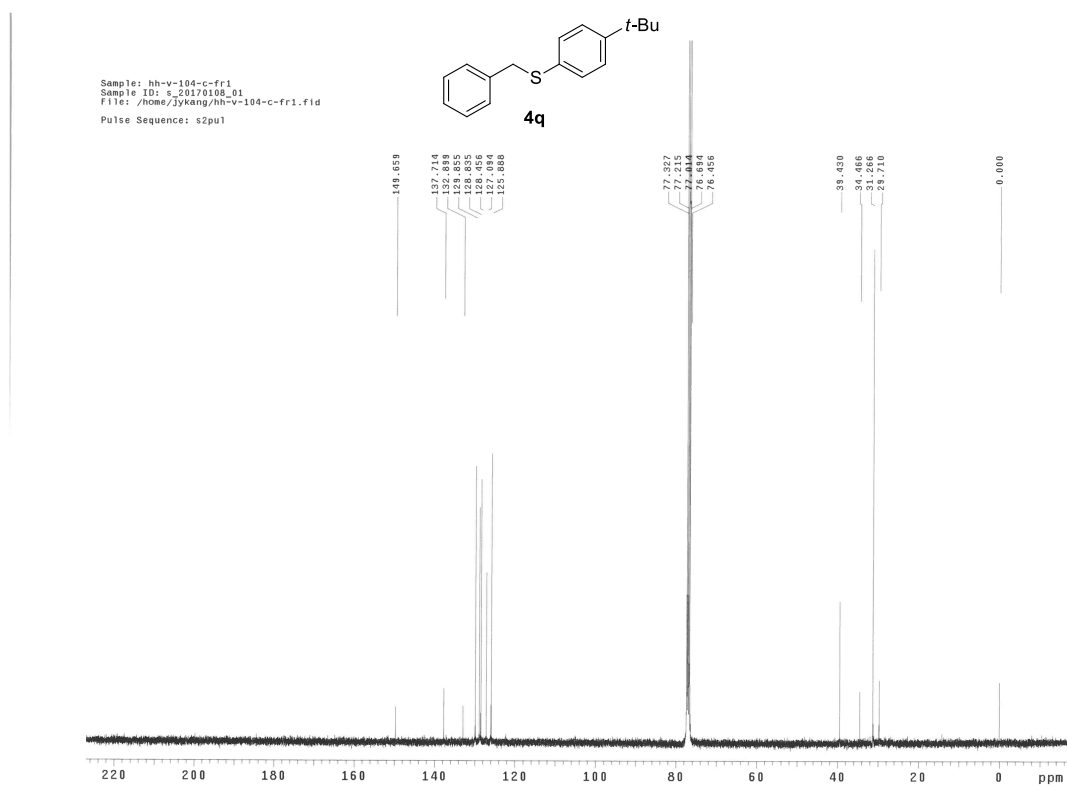


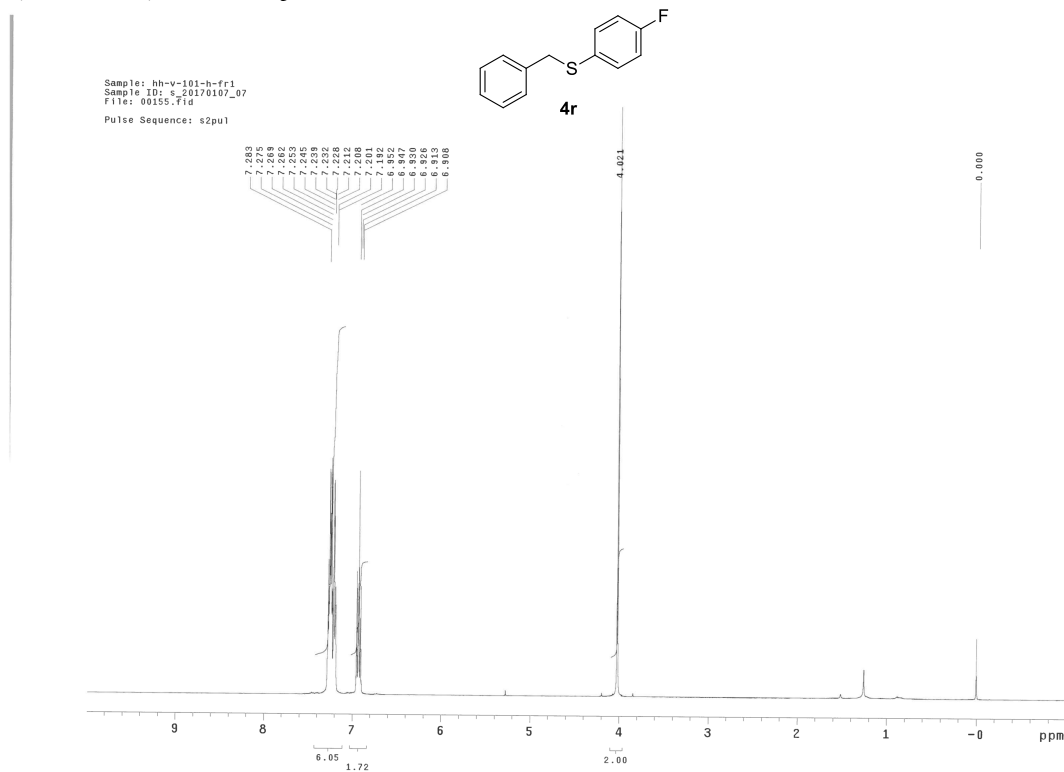
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

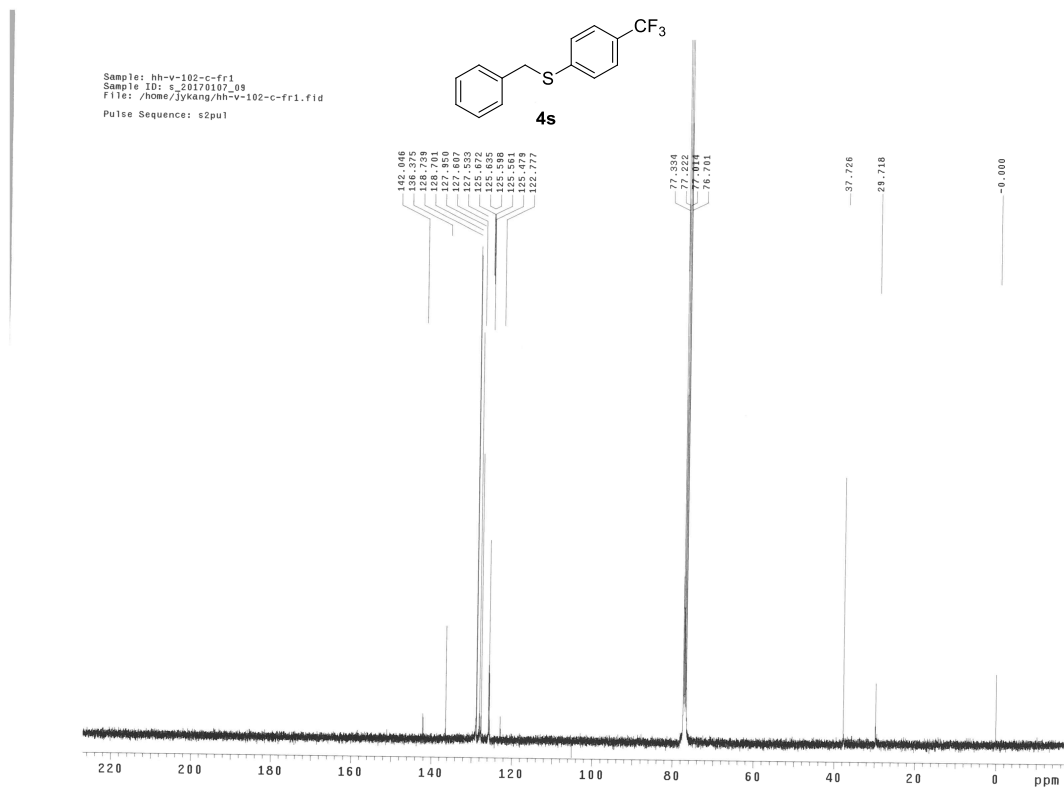
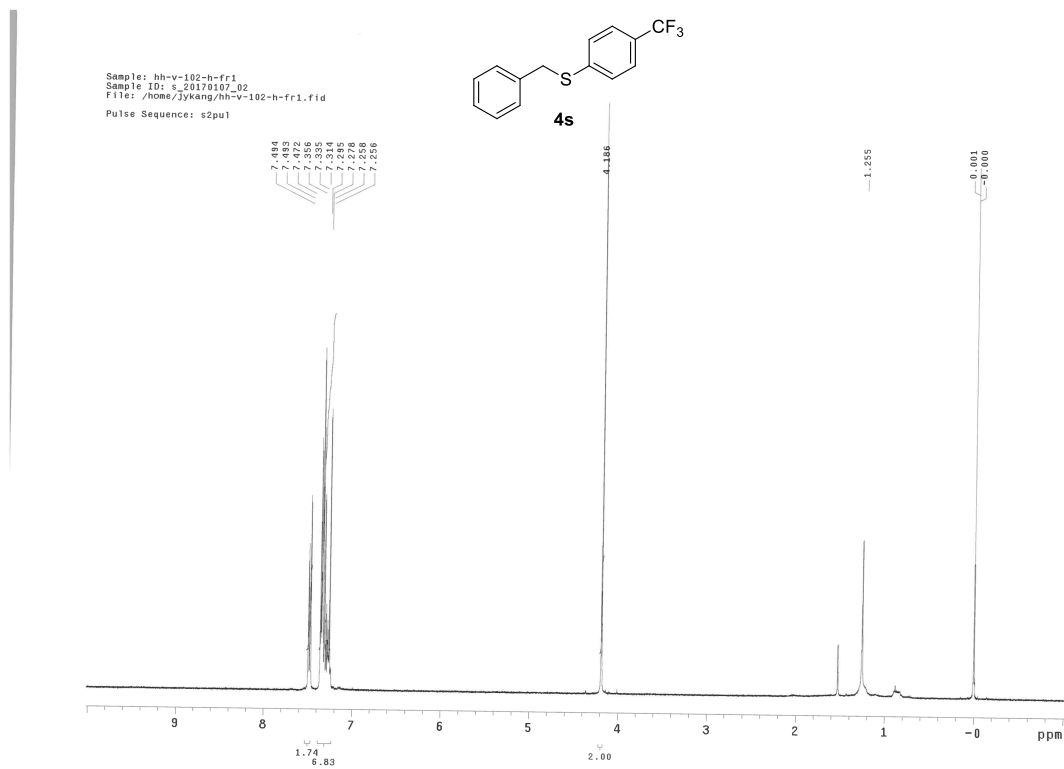
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

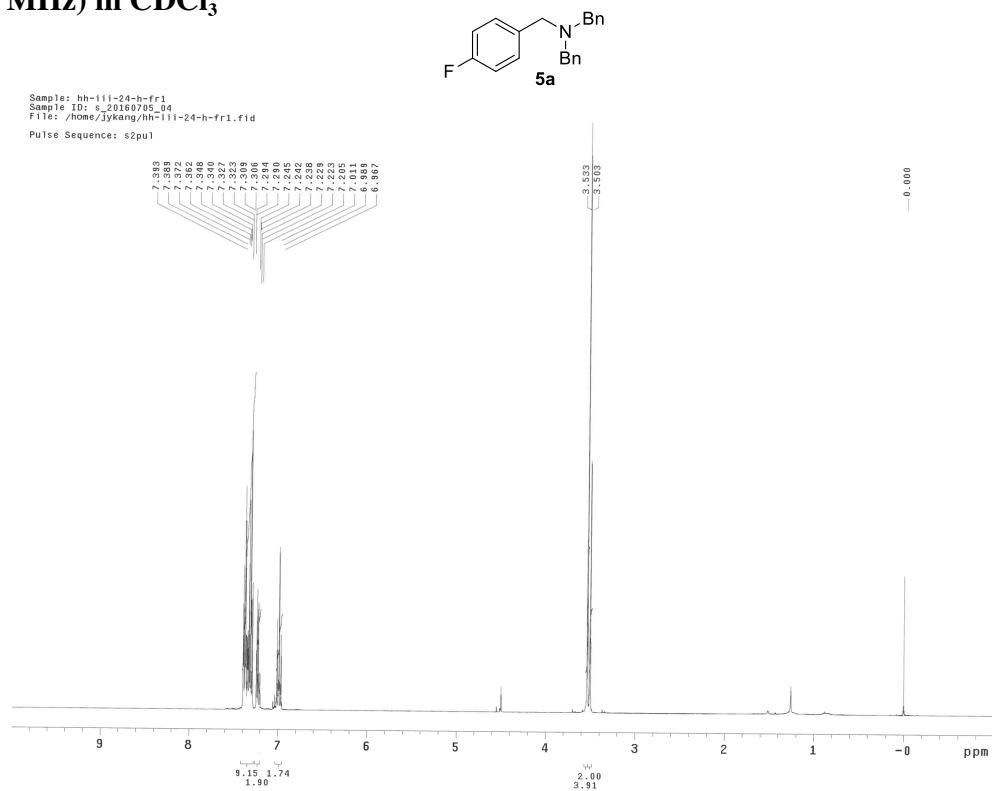
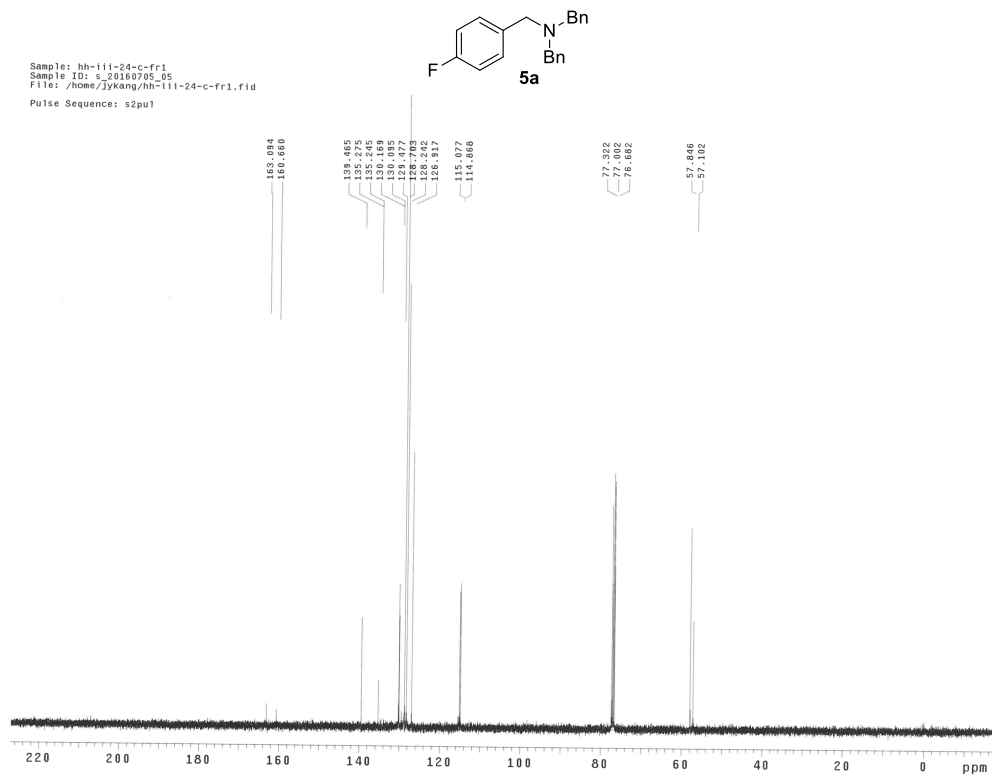
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

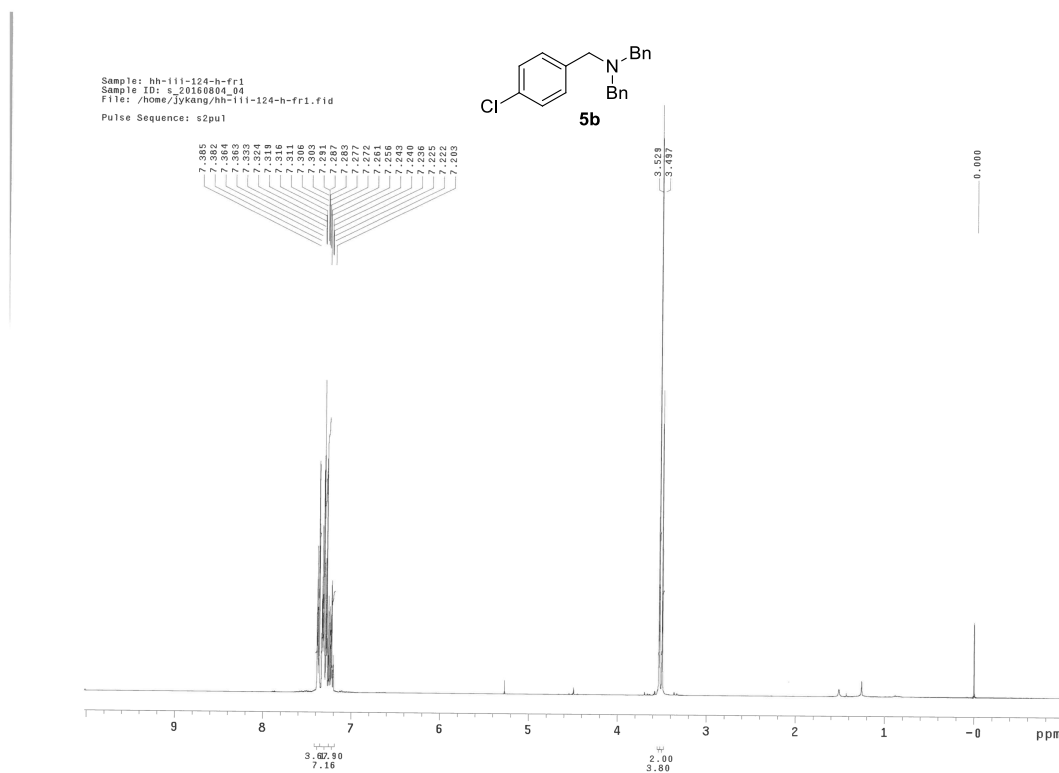
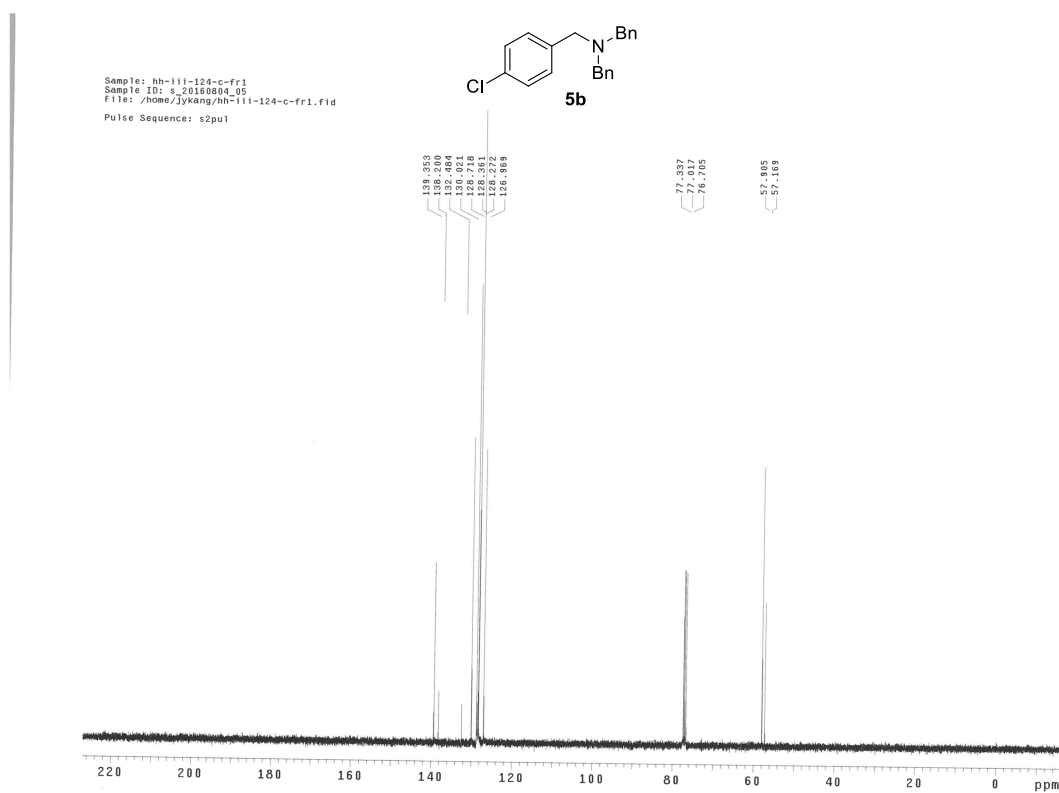
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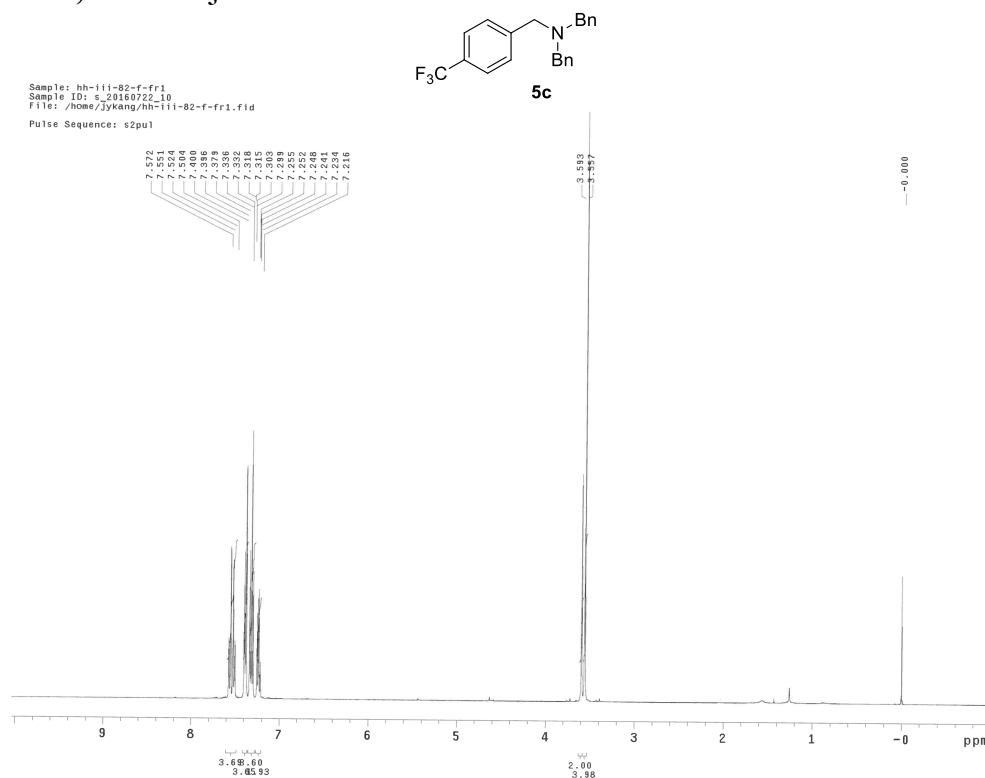
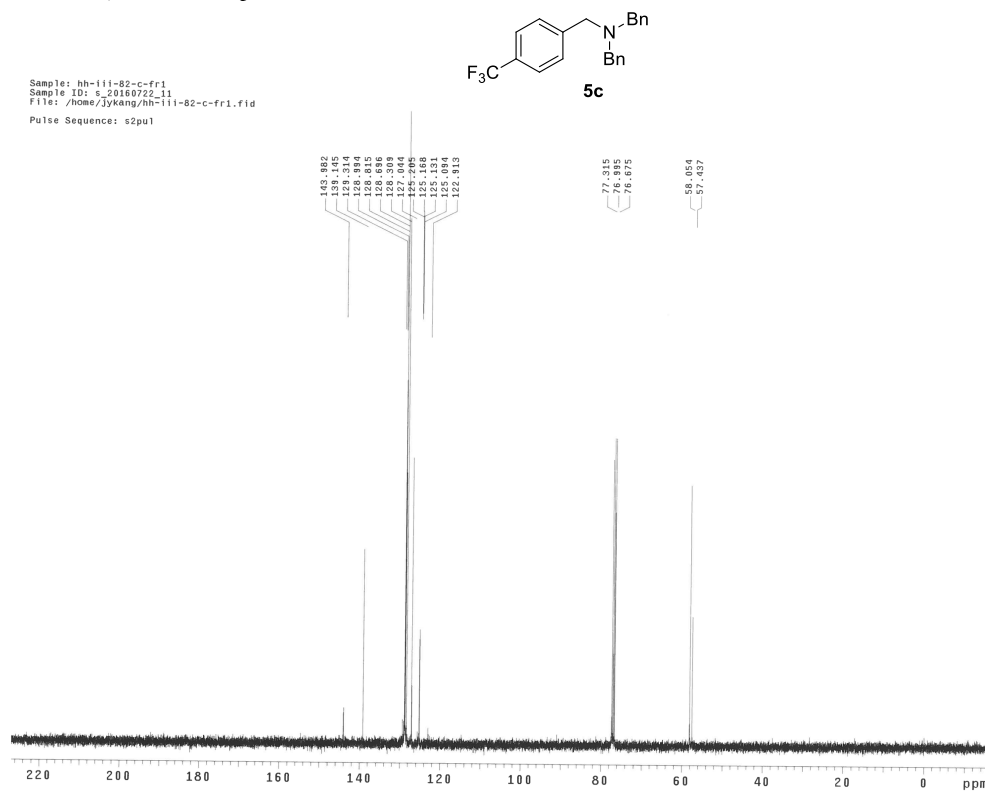
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

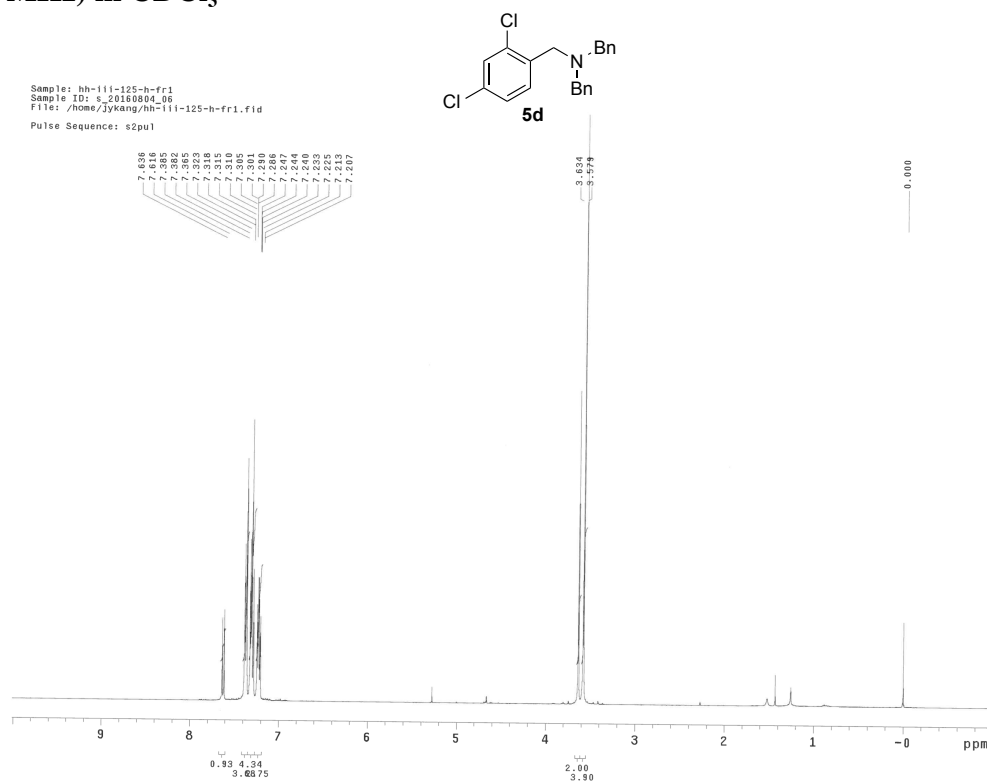
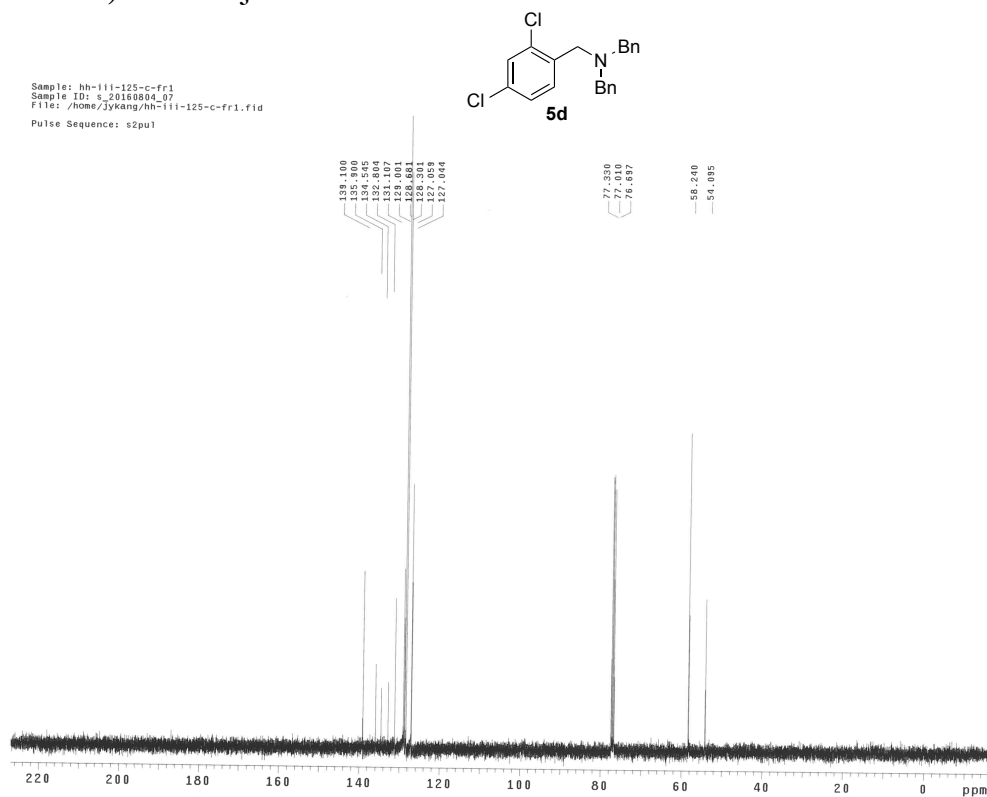
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

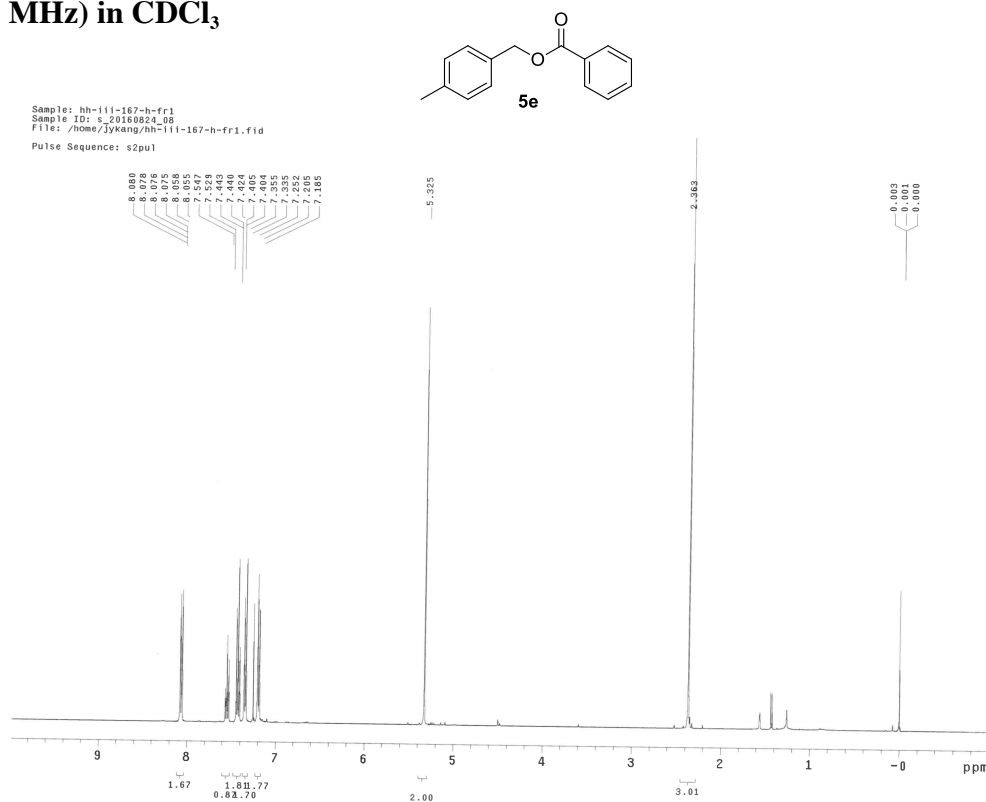
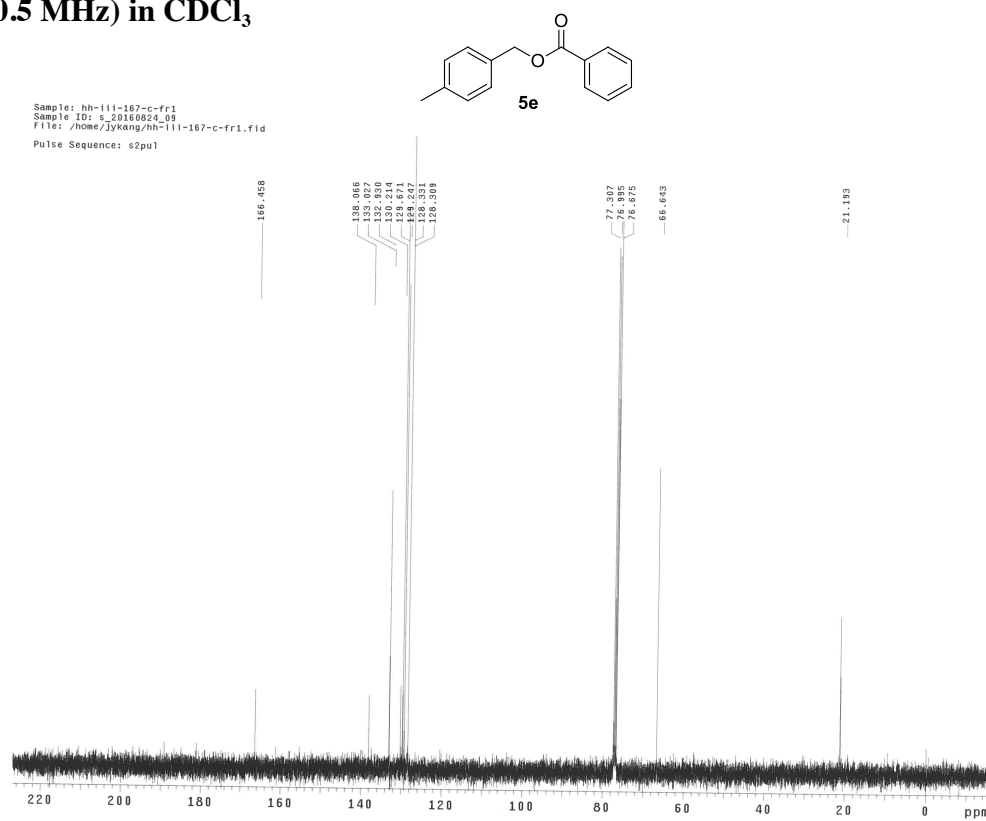


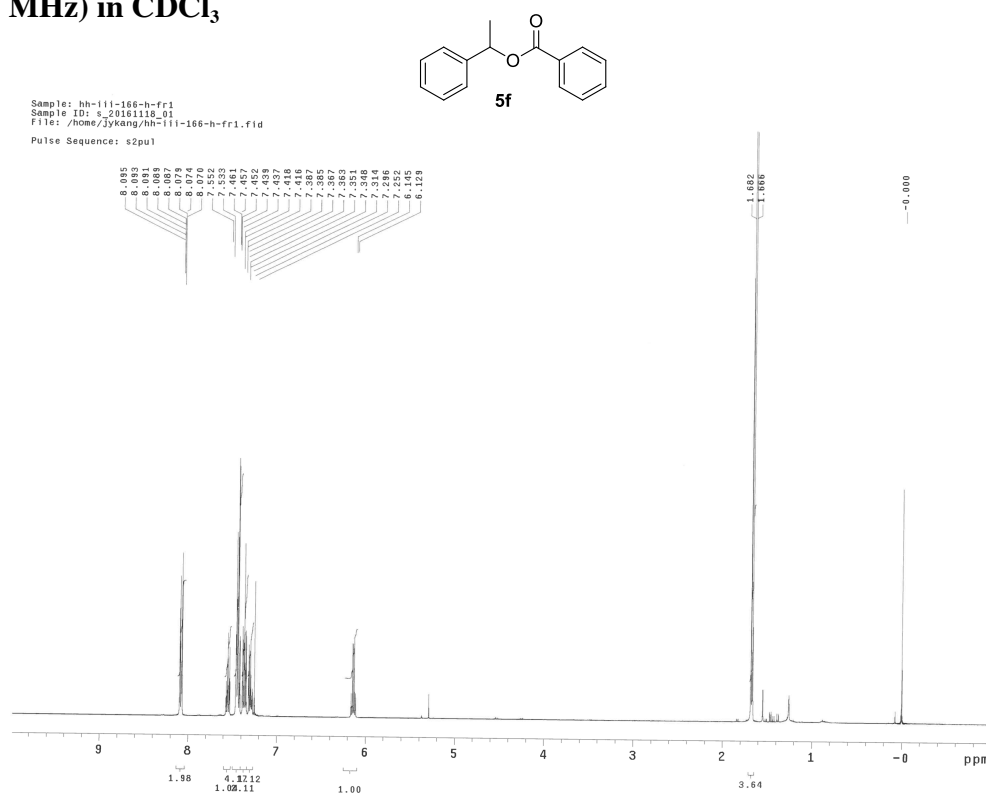
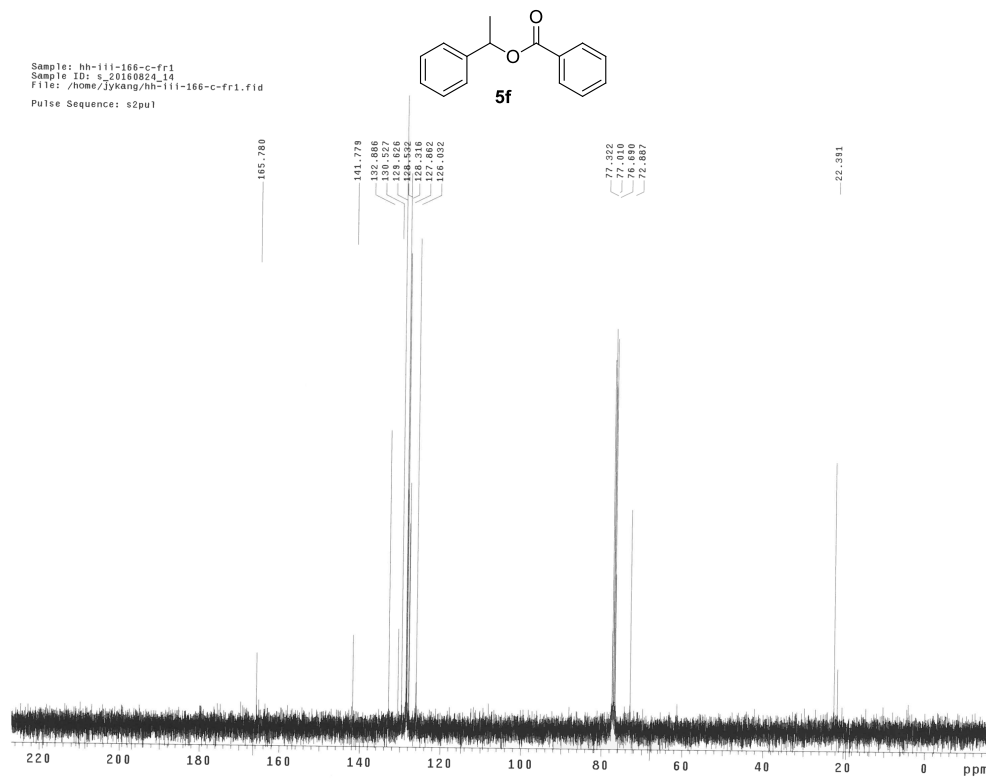
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

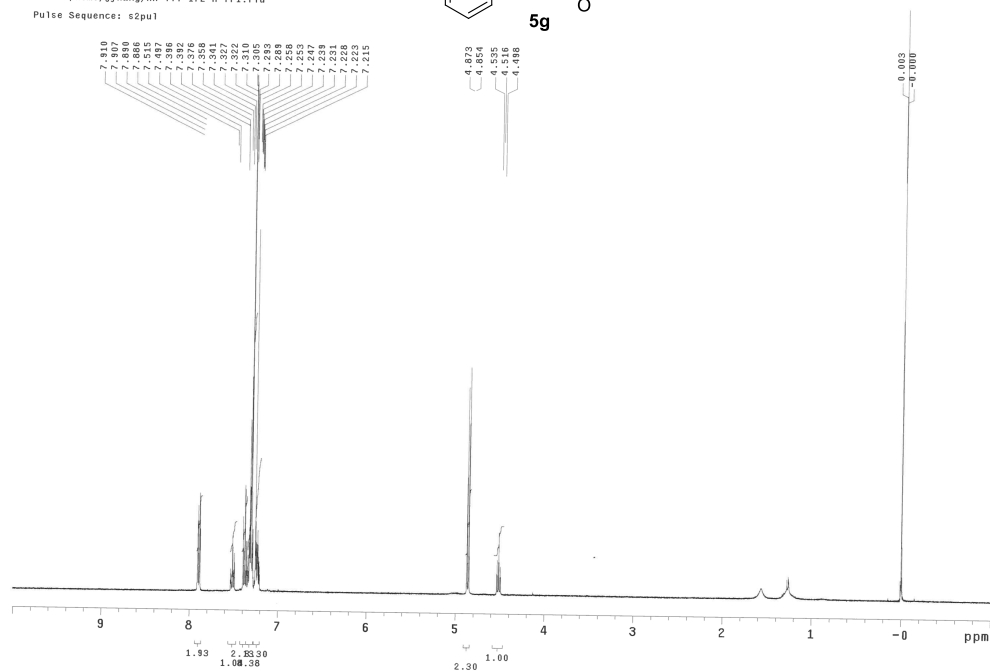
^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 

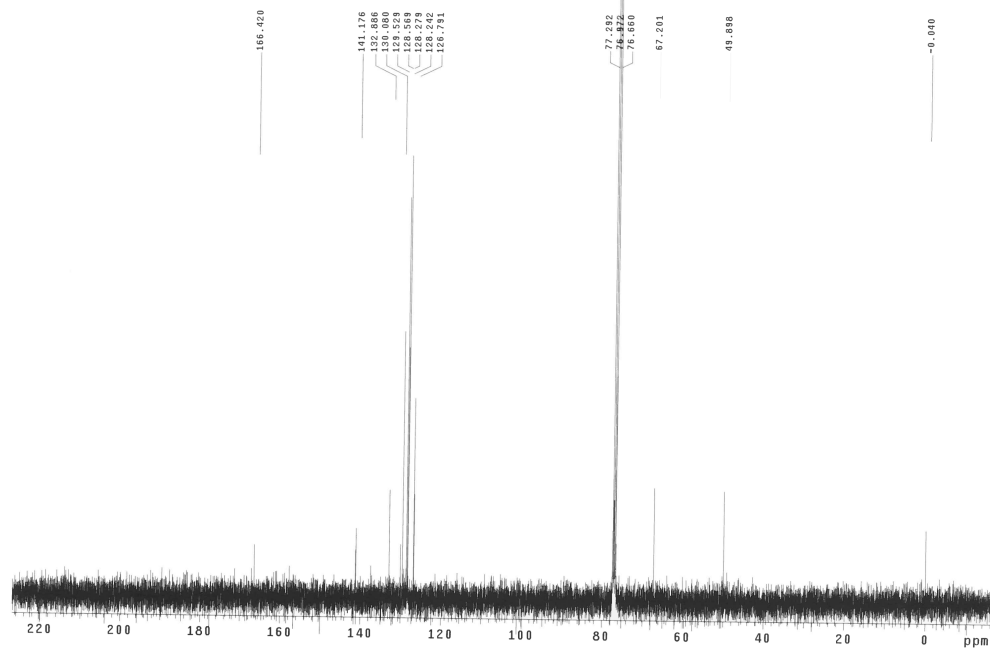
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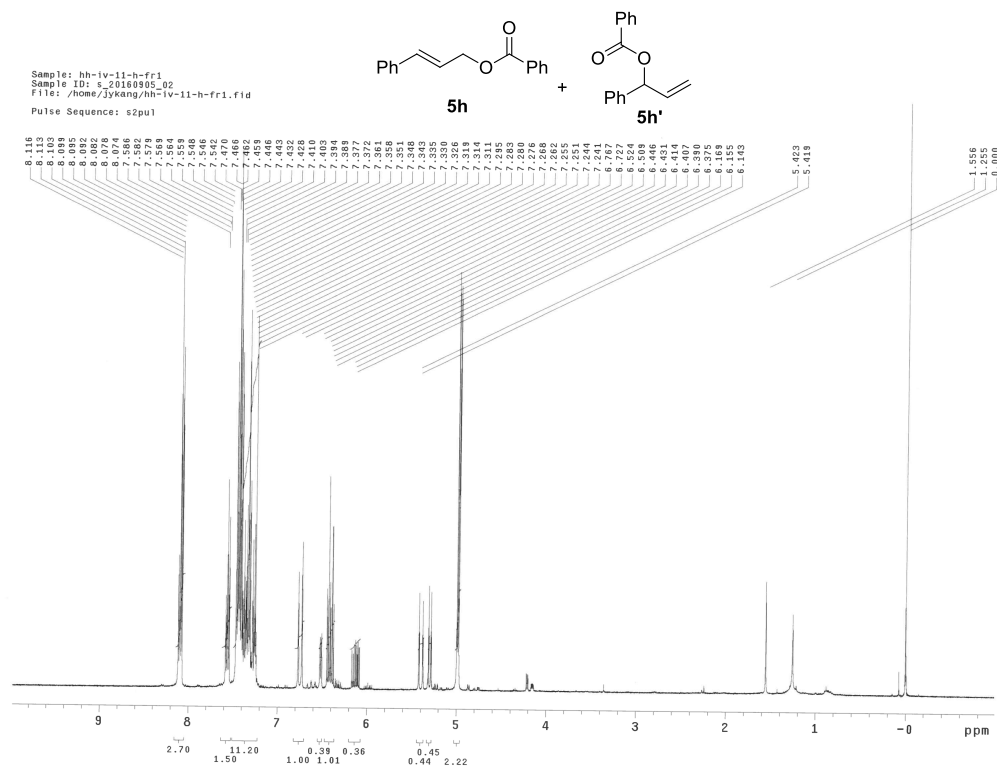
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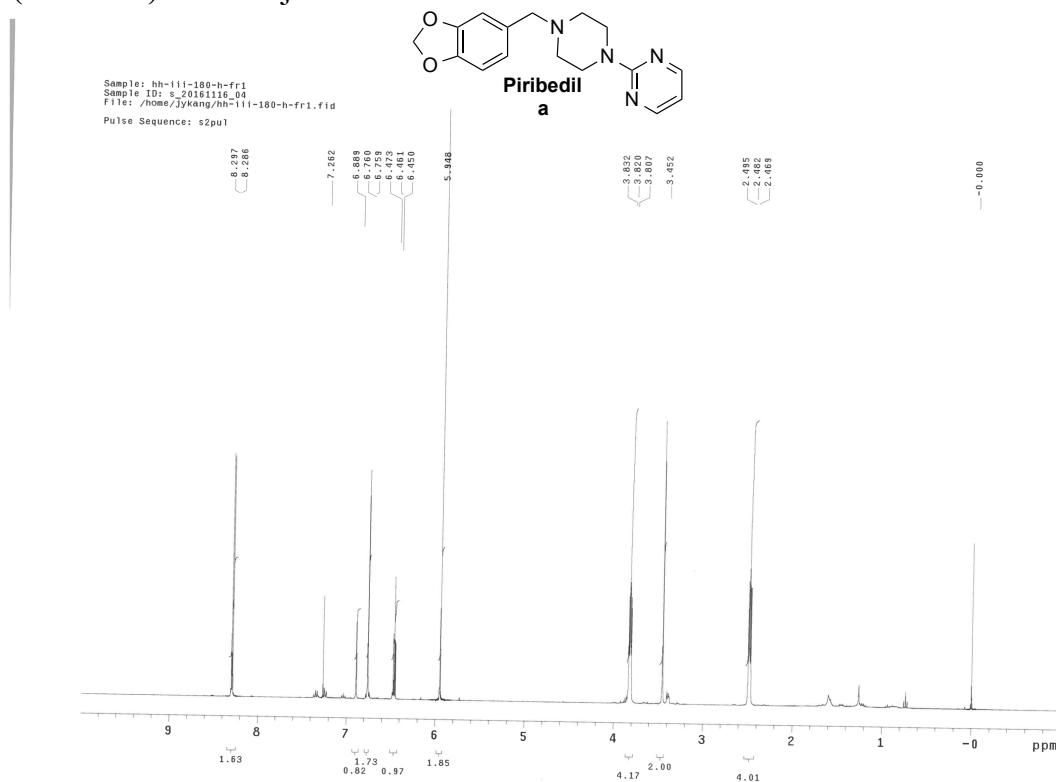
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Pulse Sequence: s2pul
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Pulse Sequence: s2pul
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^1H NMR (400 MHz) in CDCl_3 

^1H NMR (400 MHz) in CDCl_3  **^{13}C NMR (100.5 MHz) in CDCl_3** 