

Boronic acid / Brønsted acid co-catalyst systems for the synthesis of 2H-chromenes from phenols and α,β -unsaturated carbonyls

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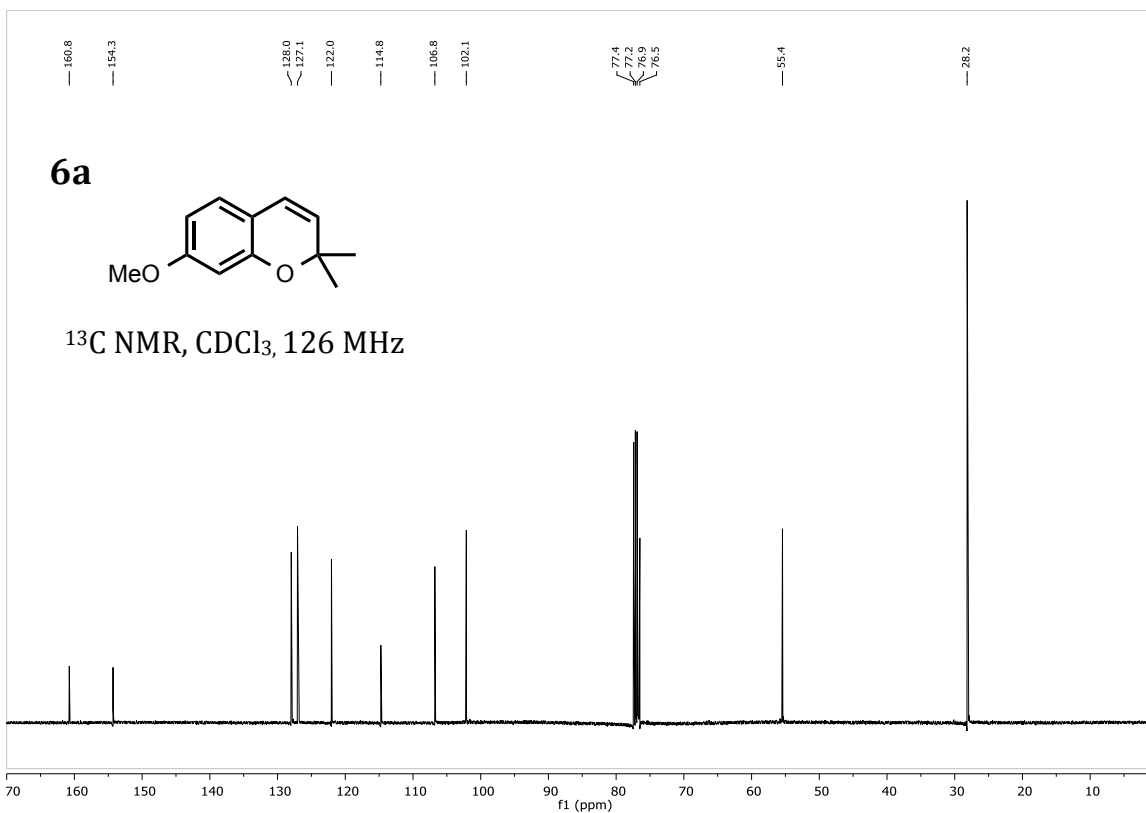
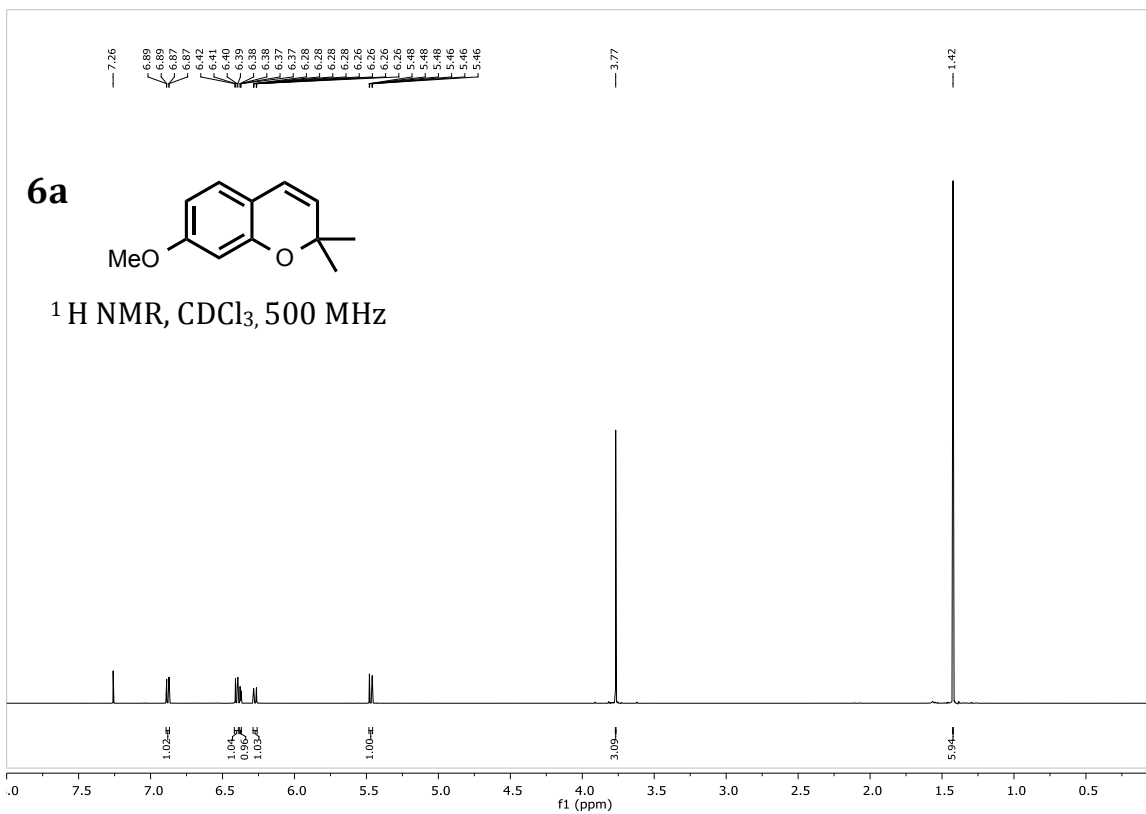
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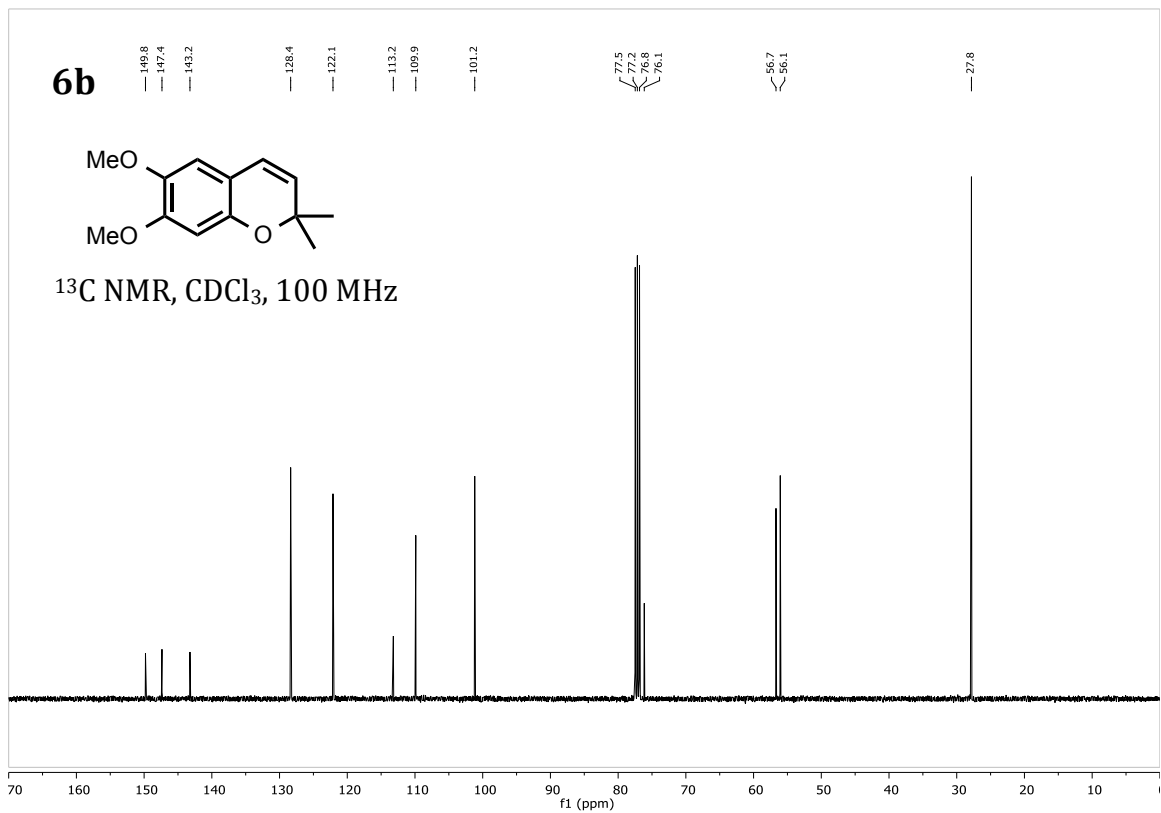
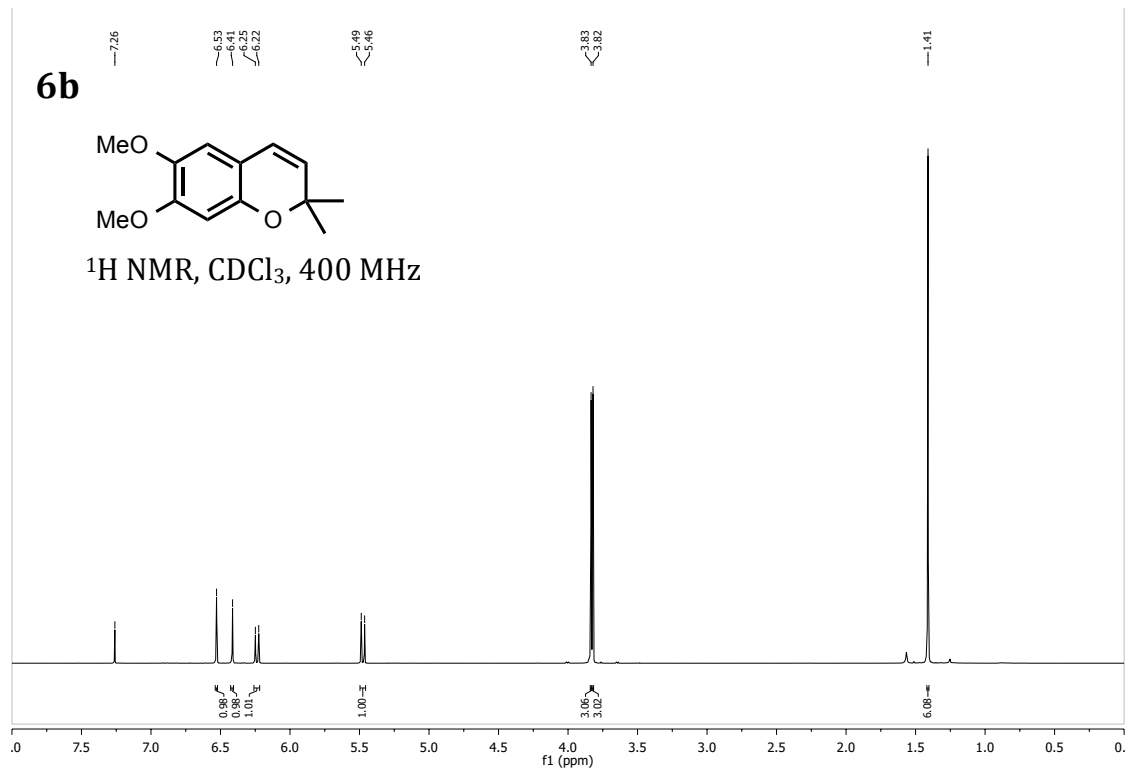
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Electronic Supplementary Information

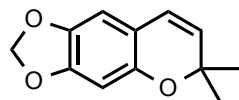
Contents

Copies of ^1H and ^{13}C NMR spectra for synthesized compounds

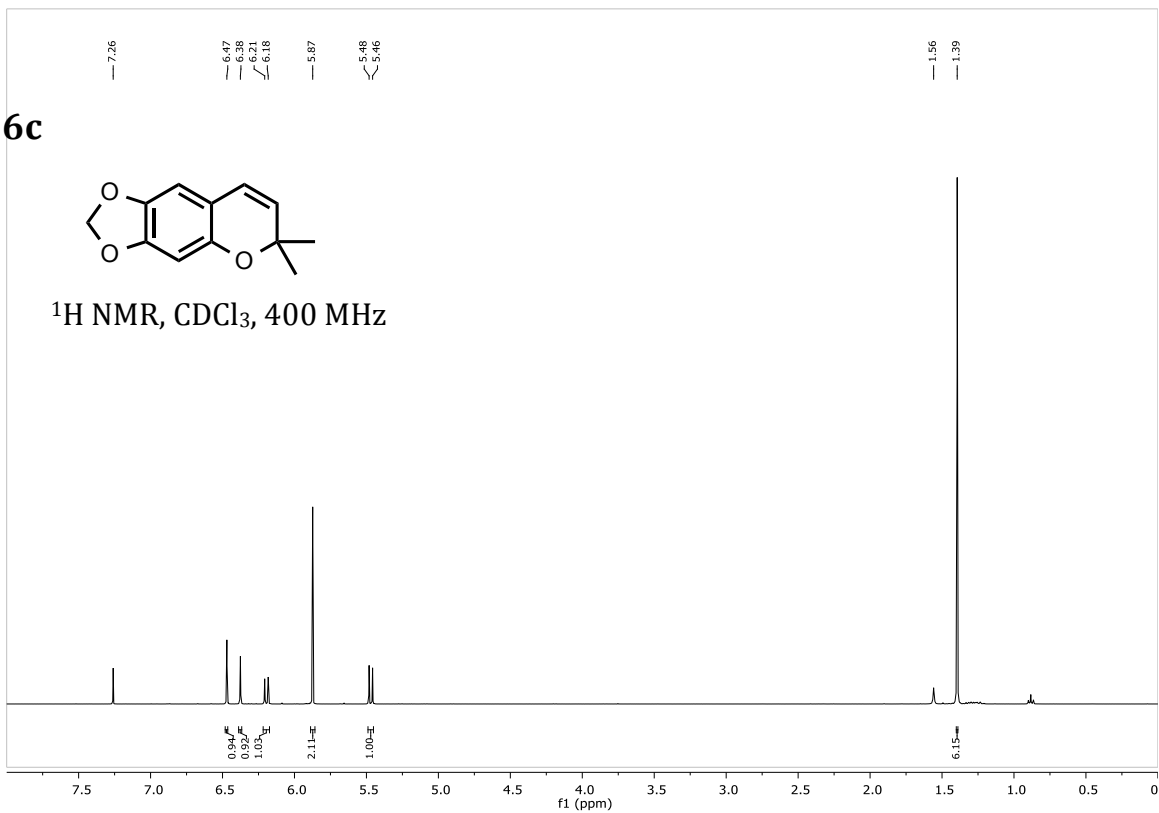




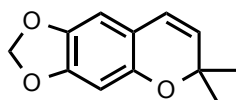
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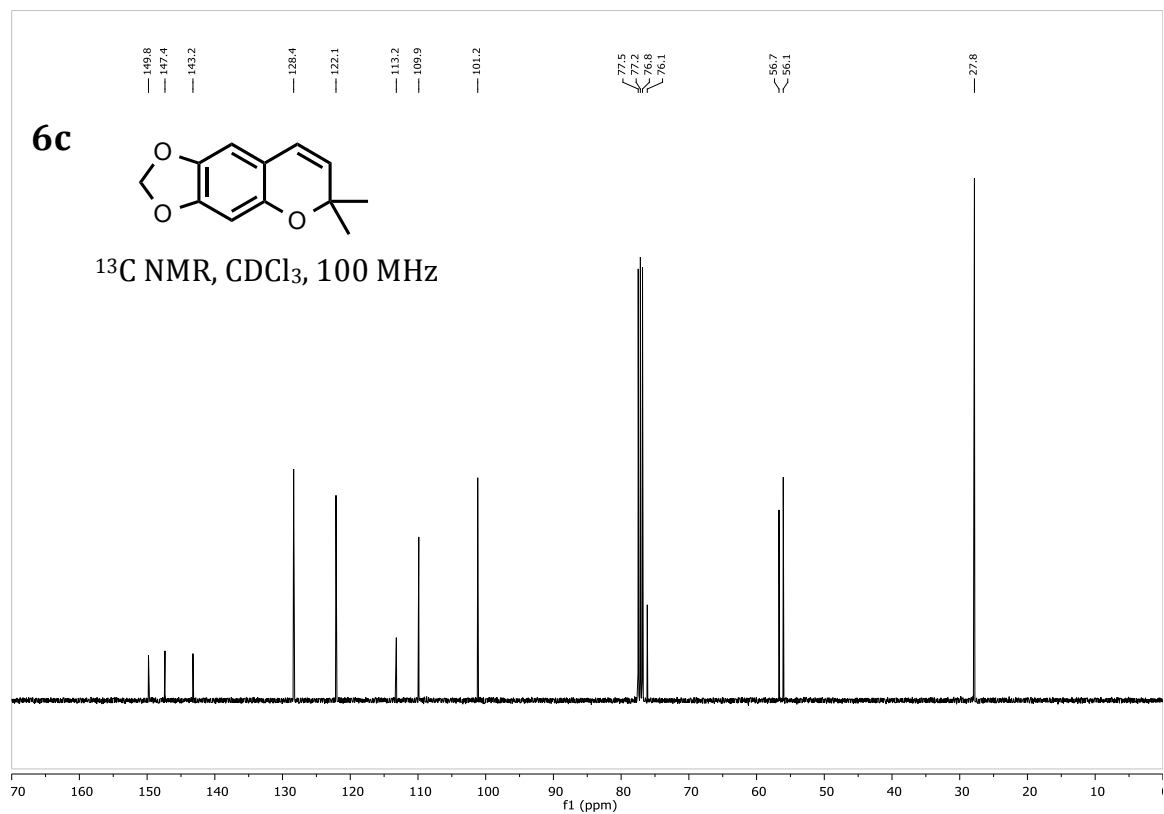
$^1\text{H NMR}$, CDCl_3 , 400 MHz

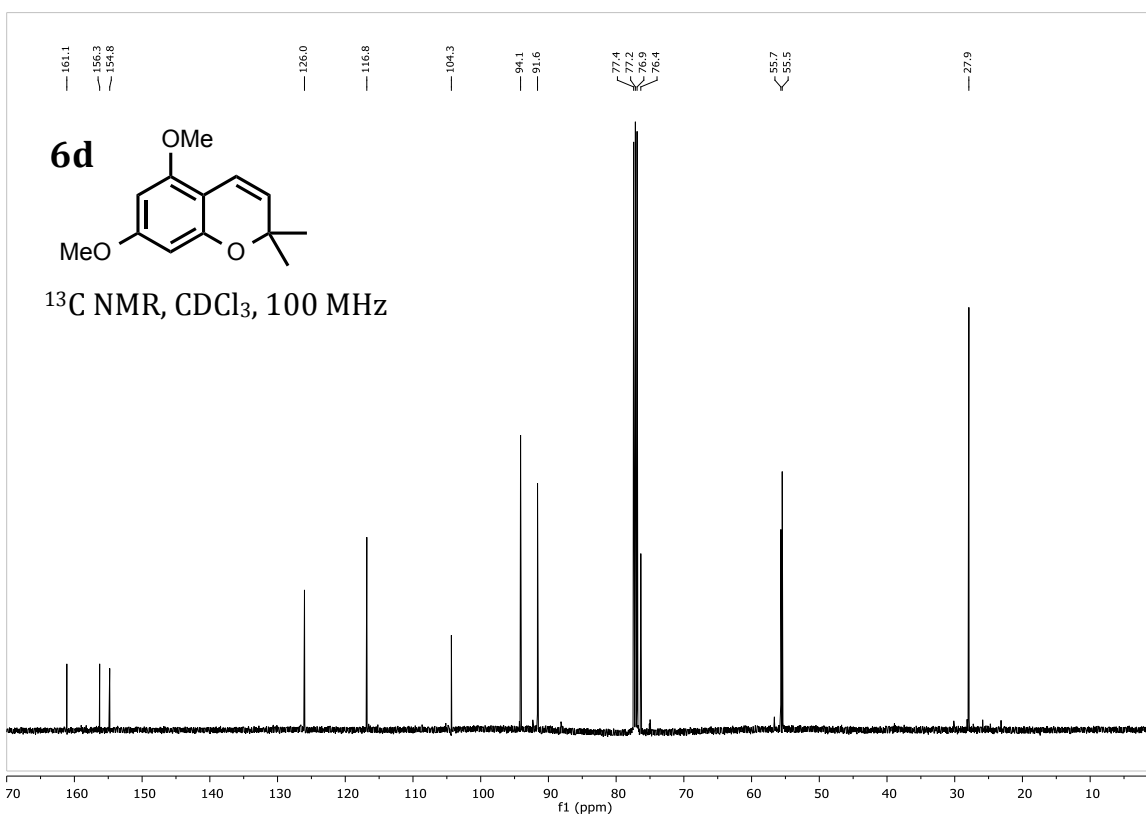
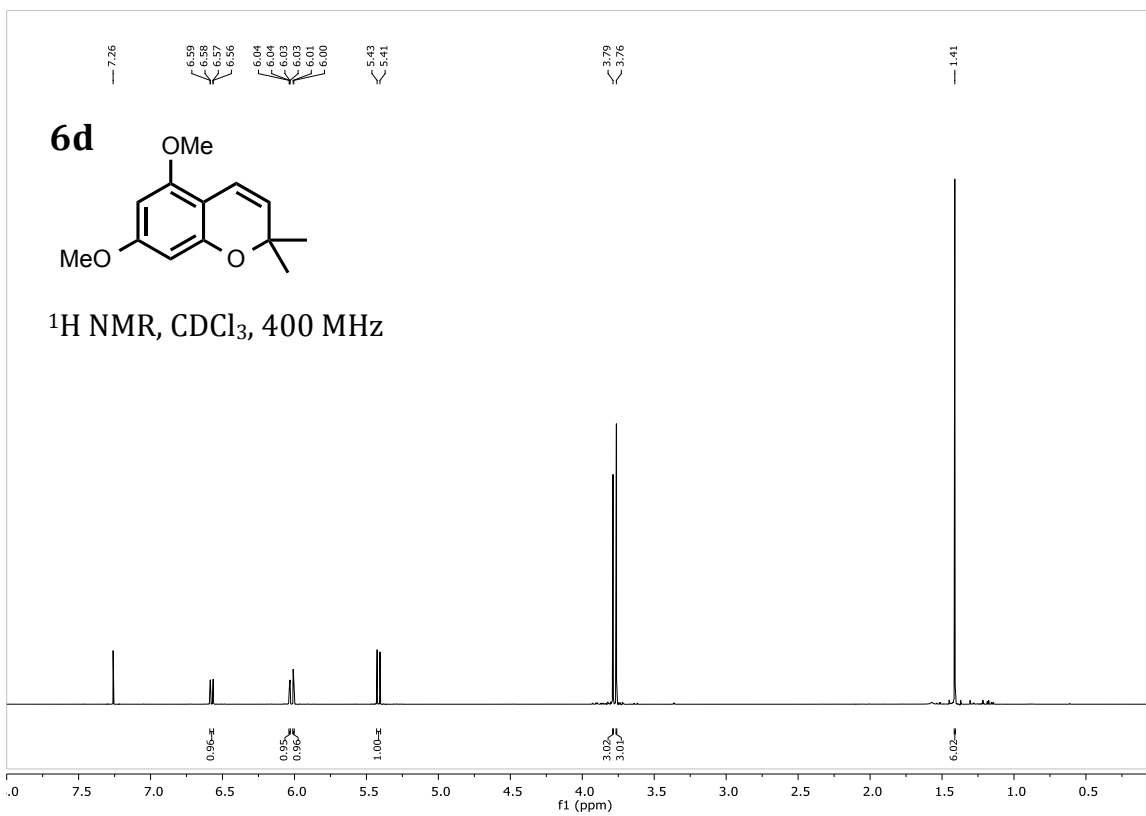


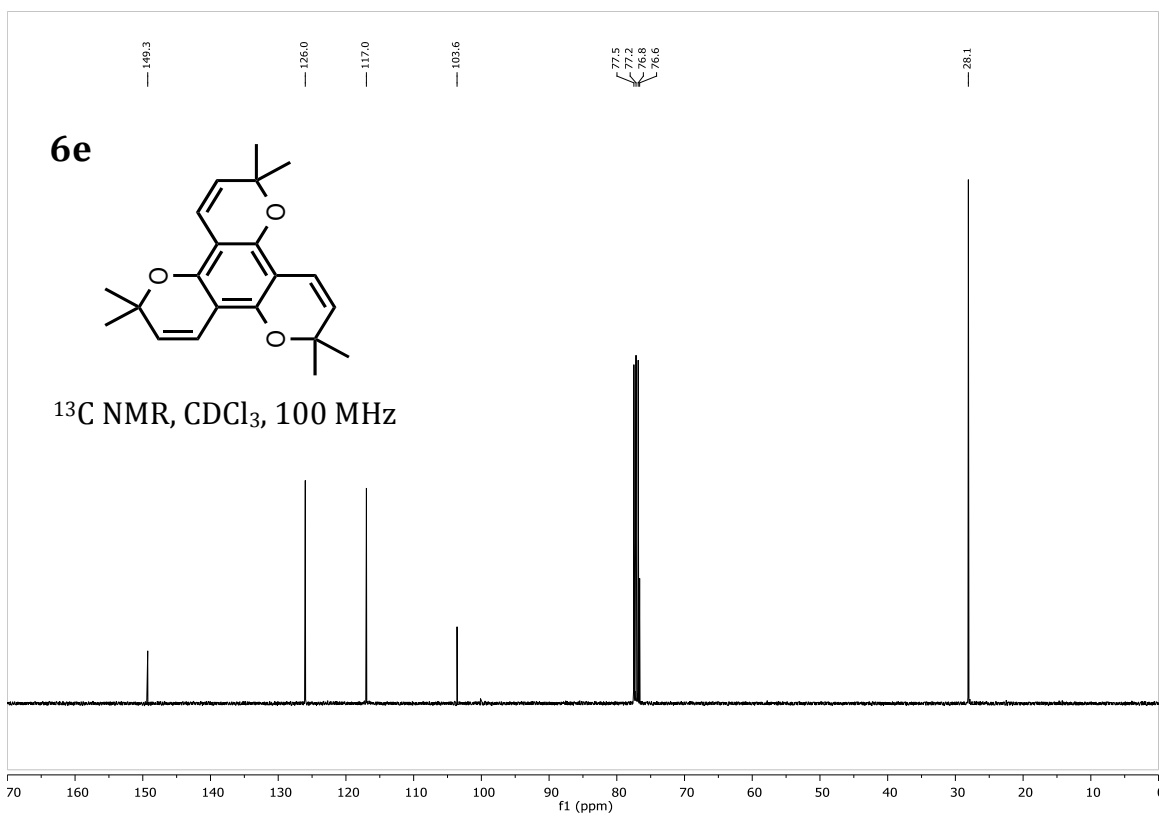
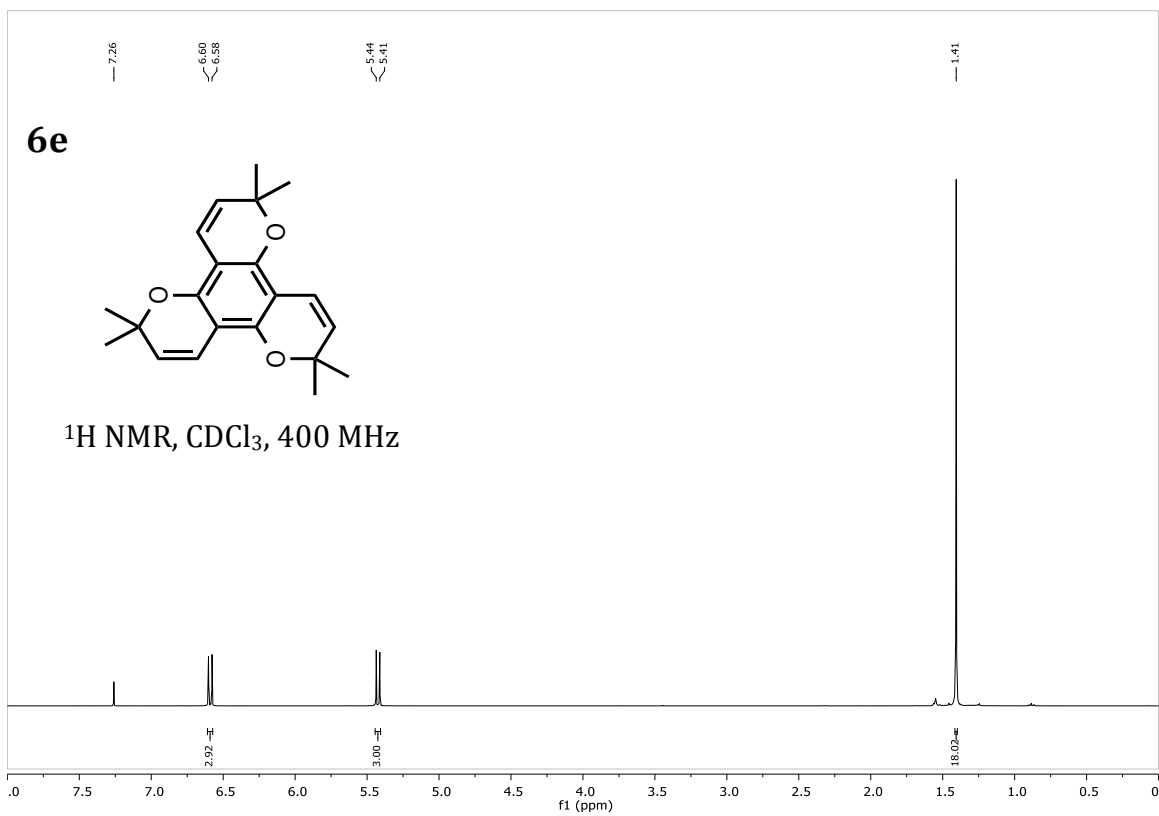
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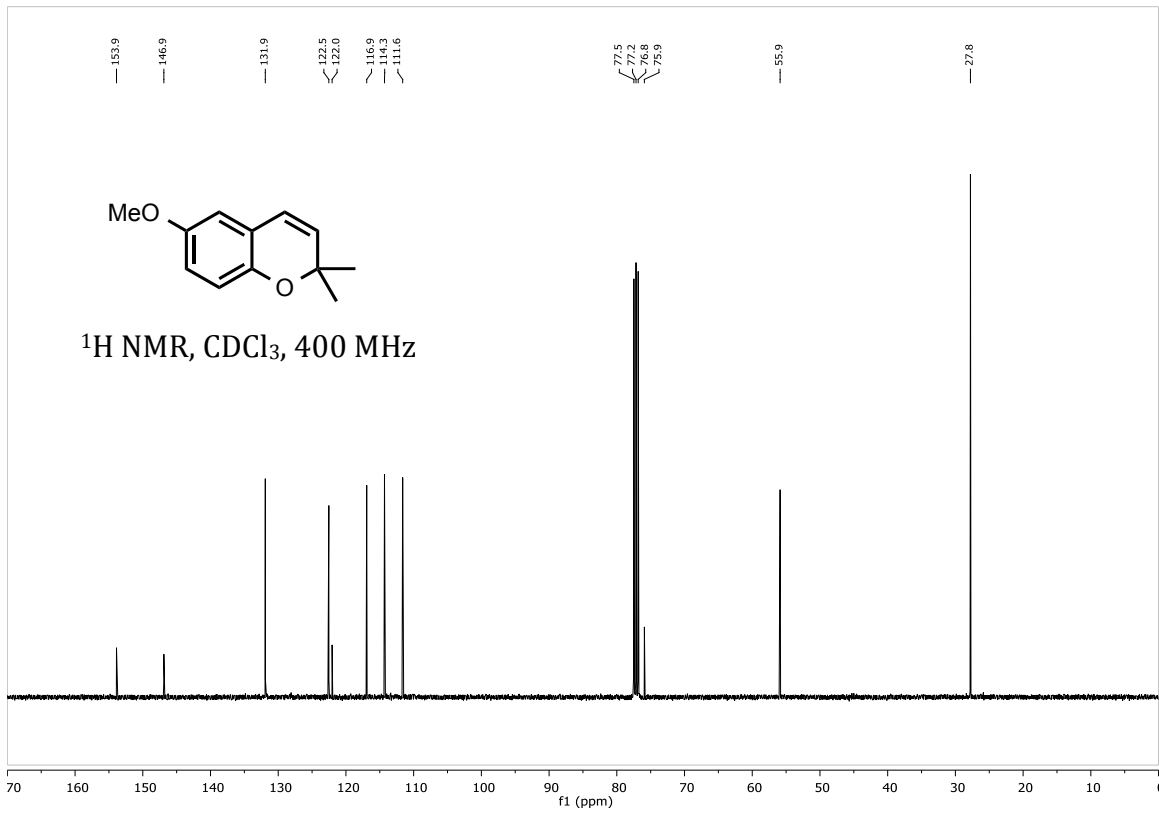
$^{13}\text{C NMR}$, CDCl_3 , 100 MHz



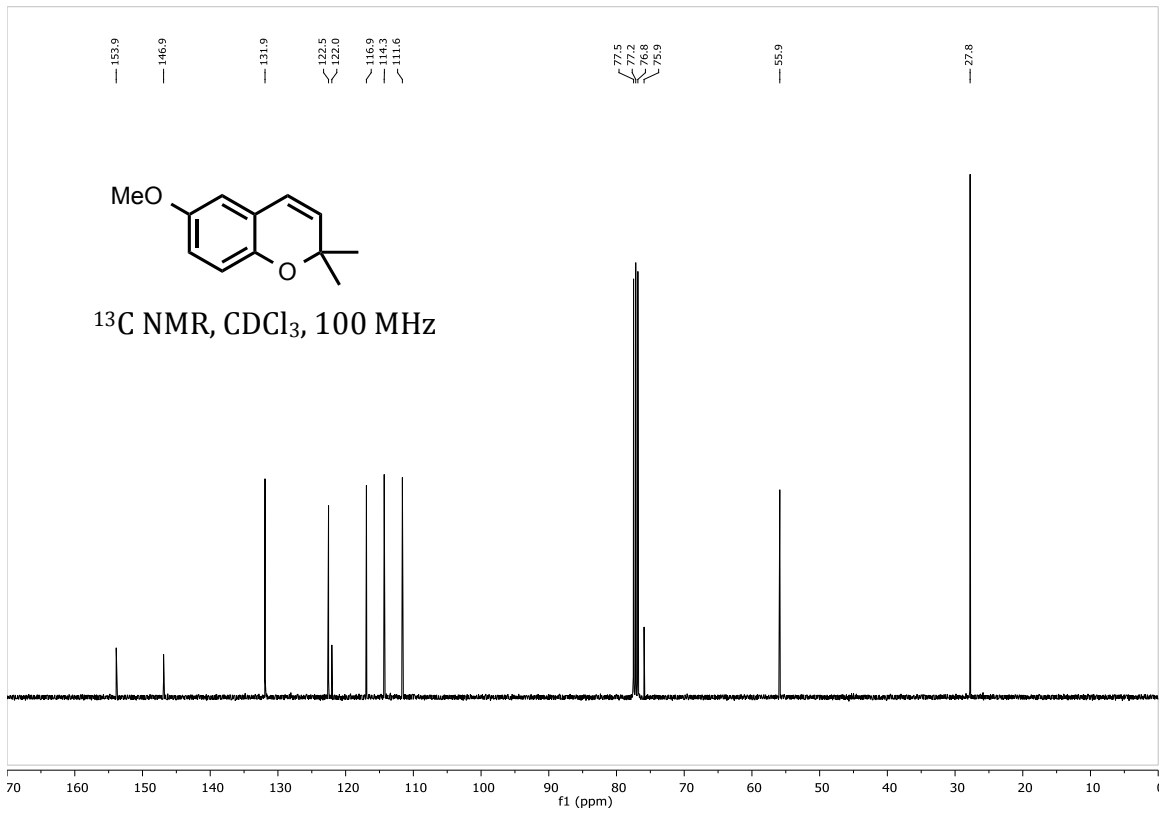


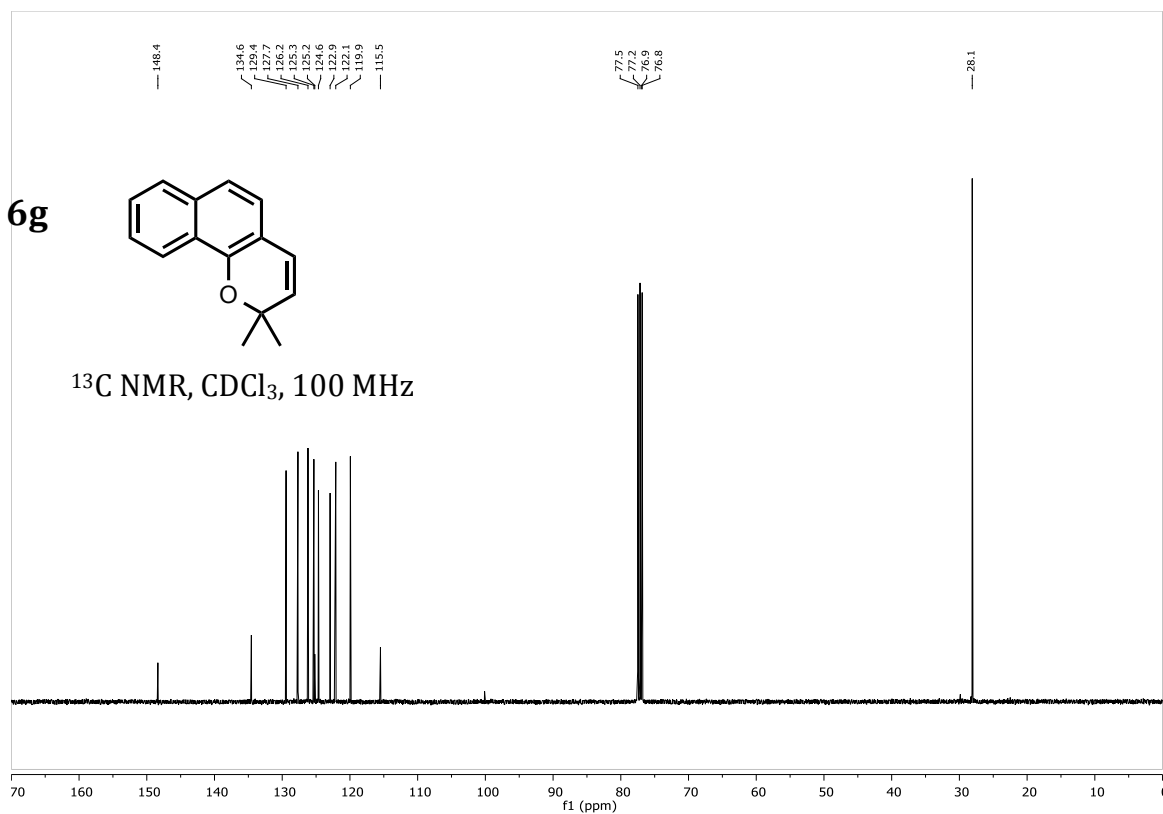
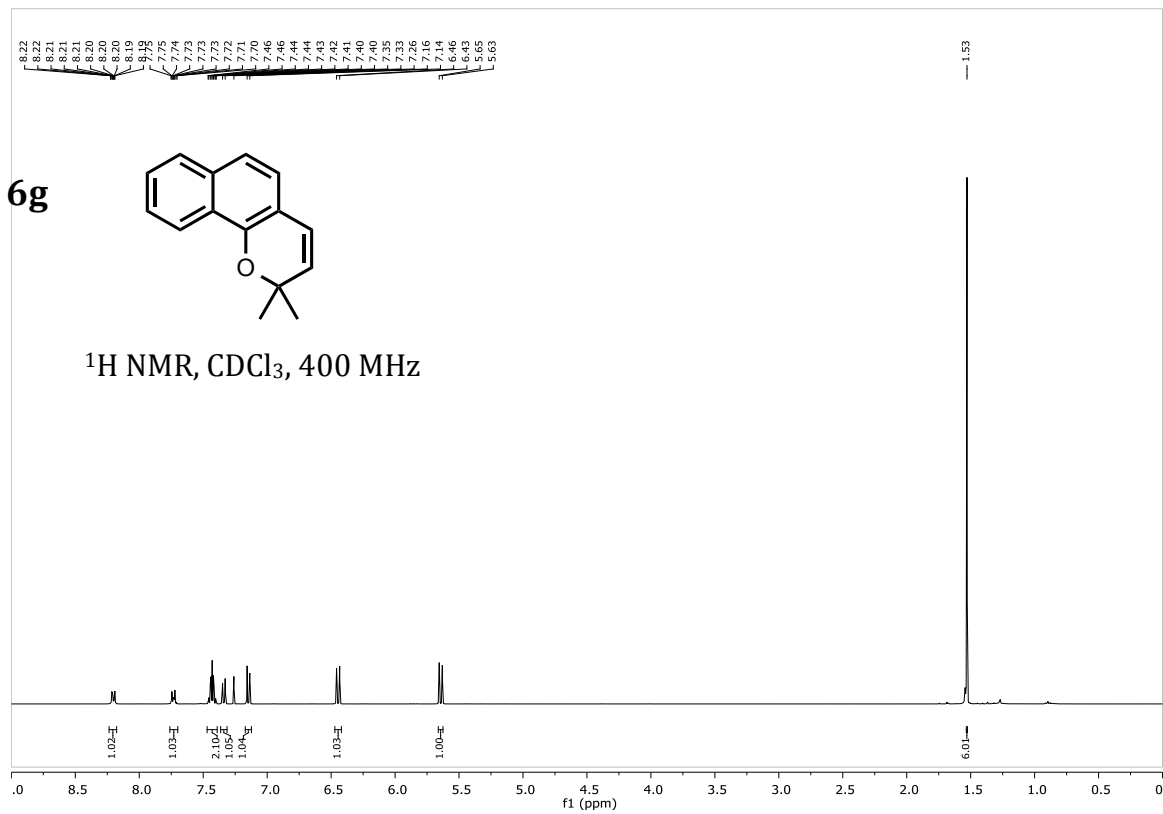


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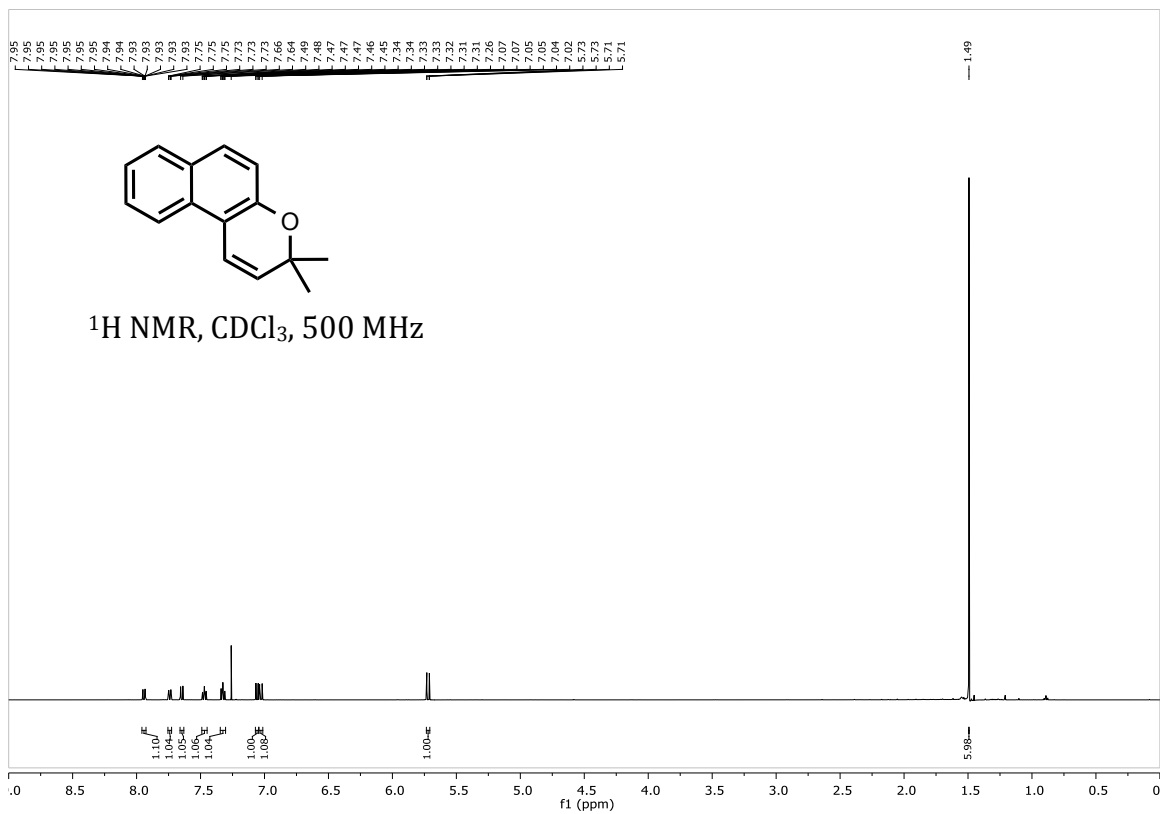


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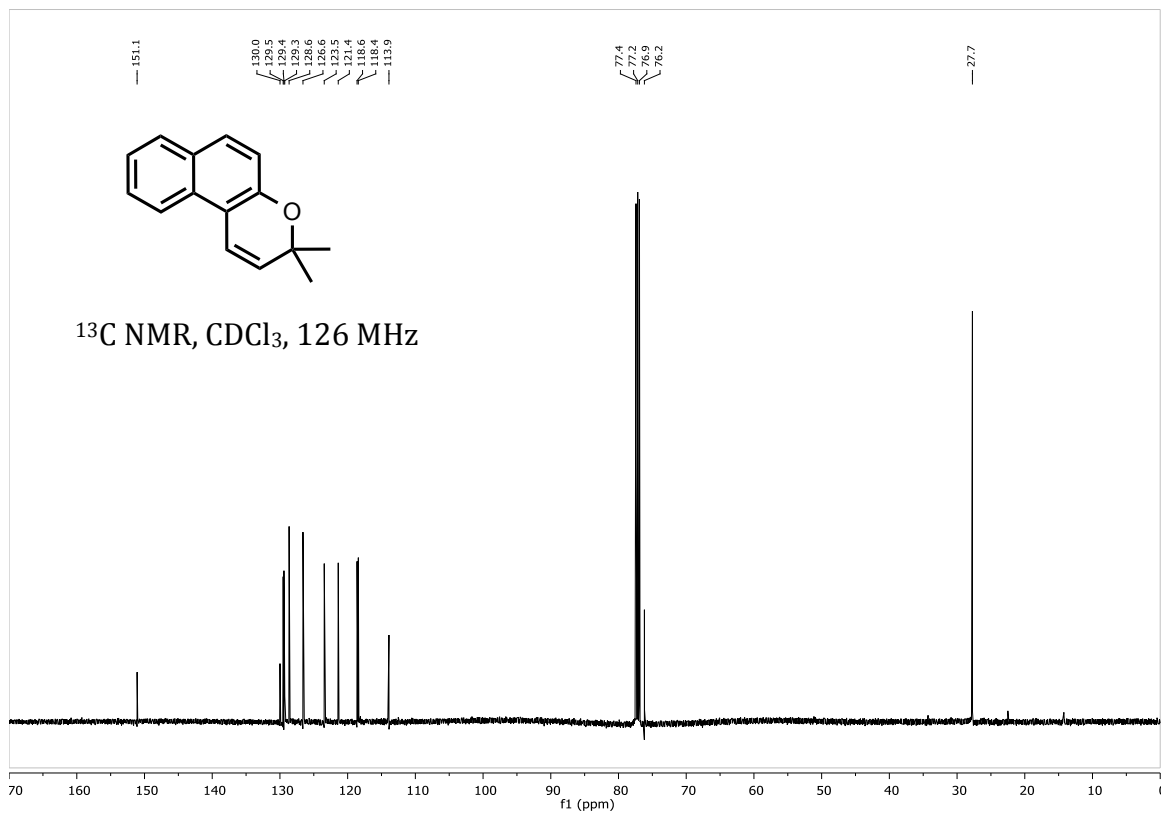




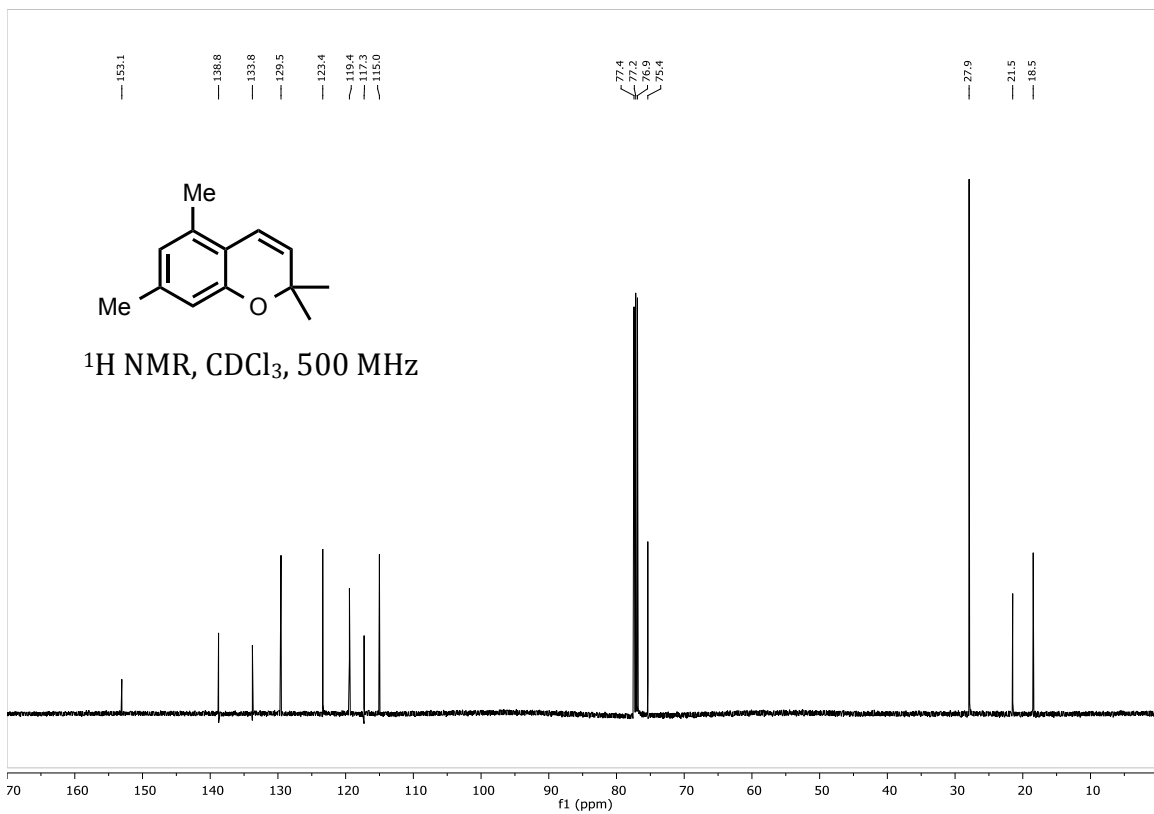
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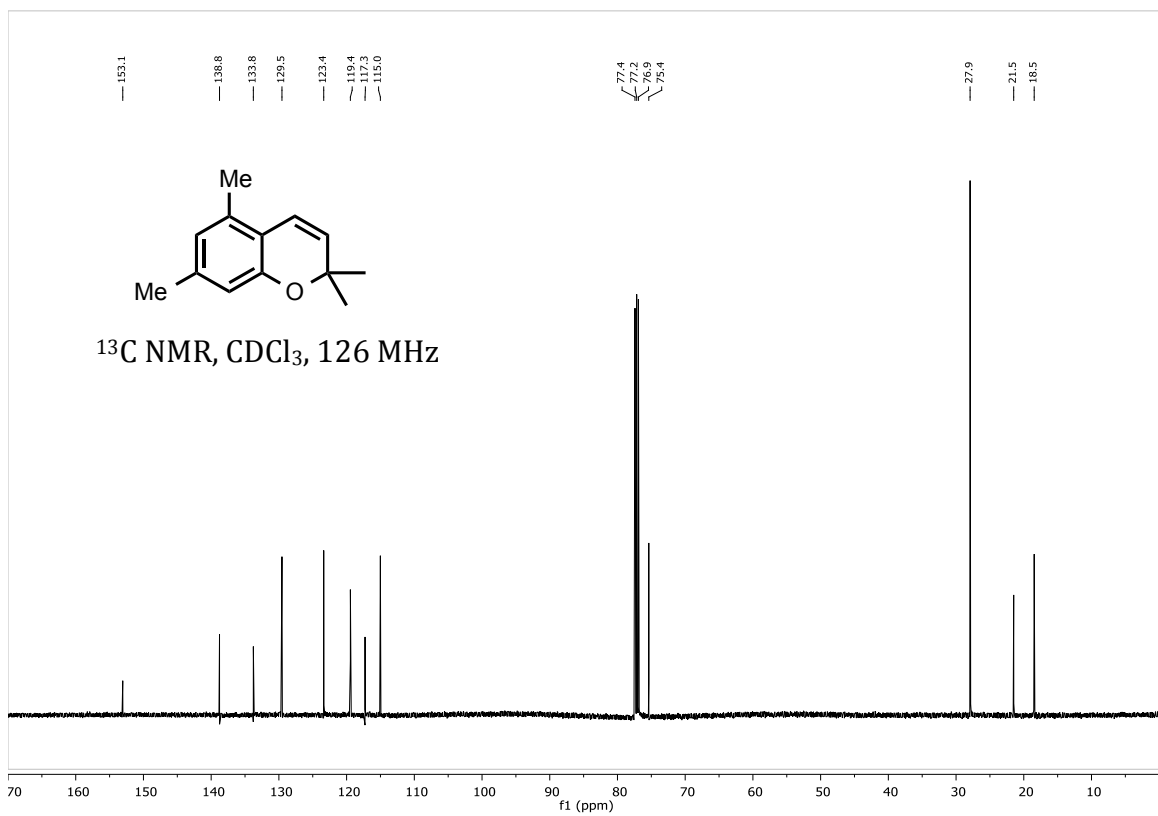
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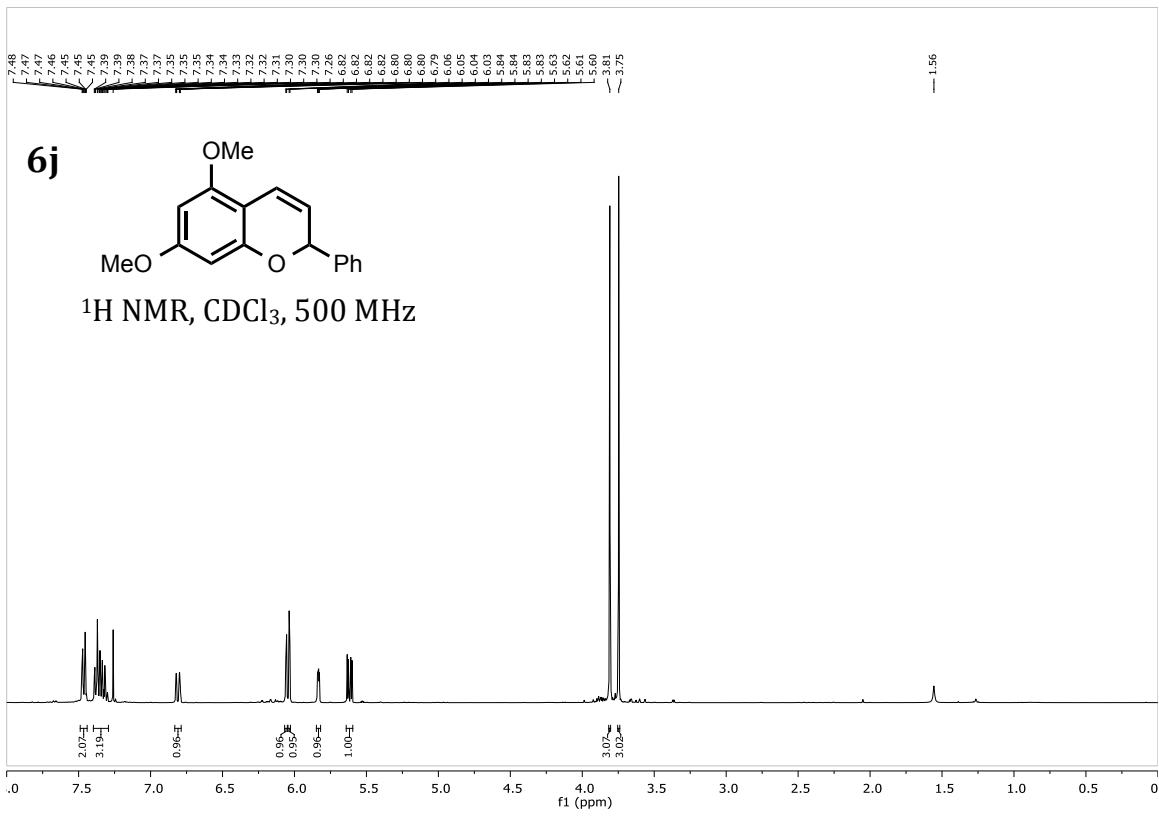


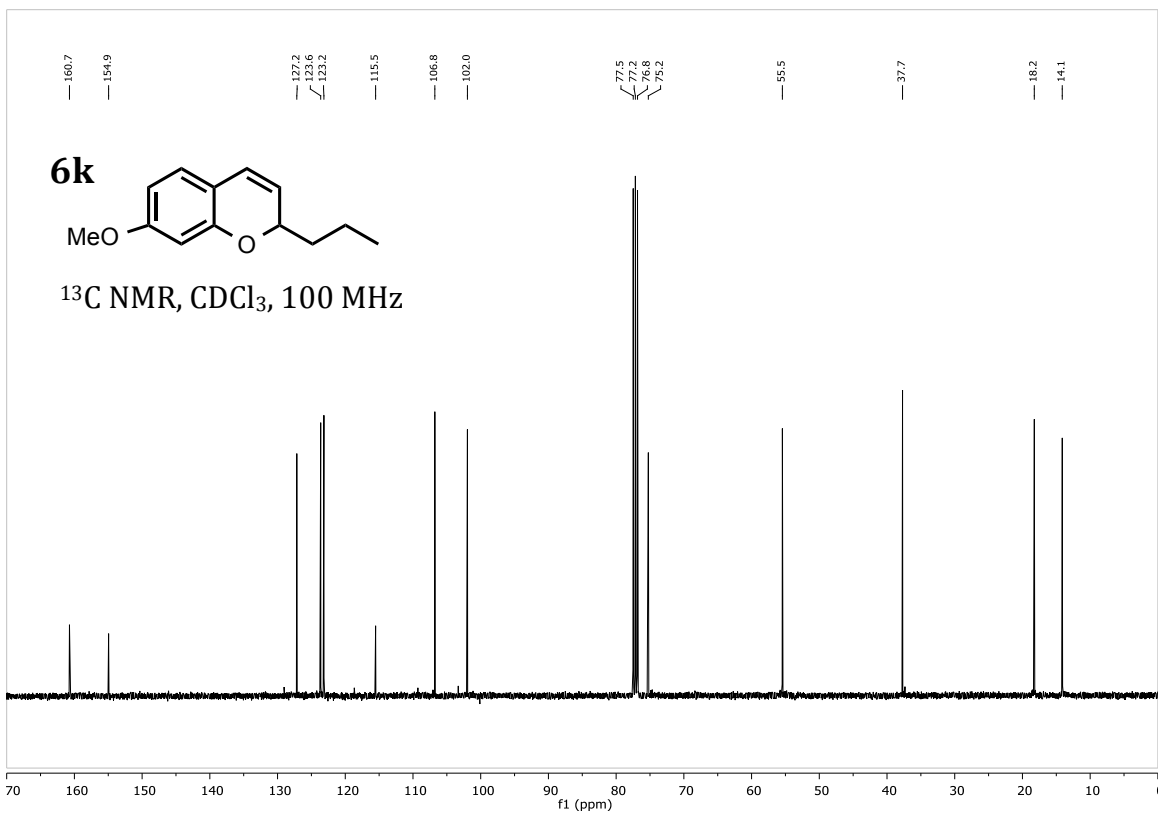
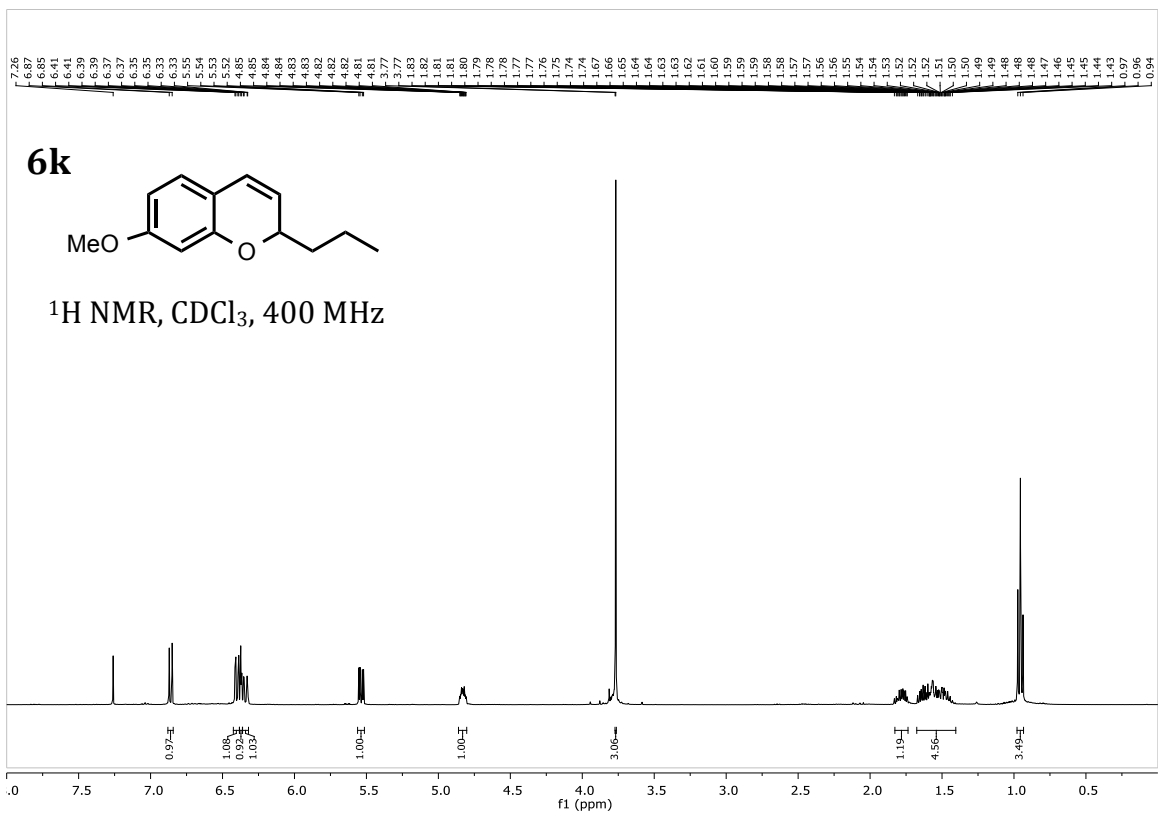
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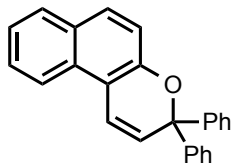
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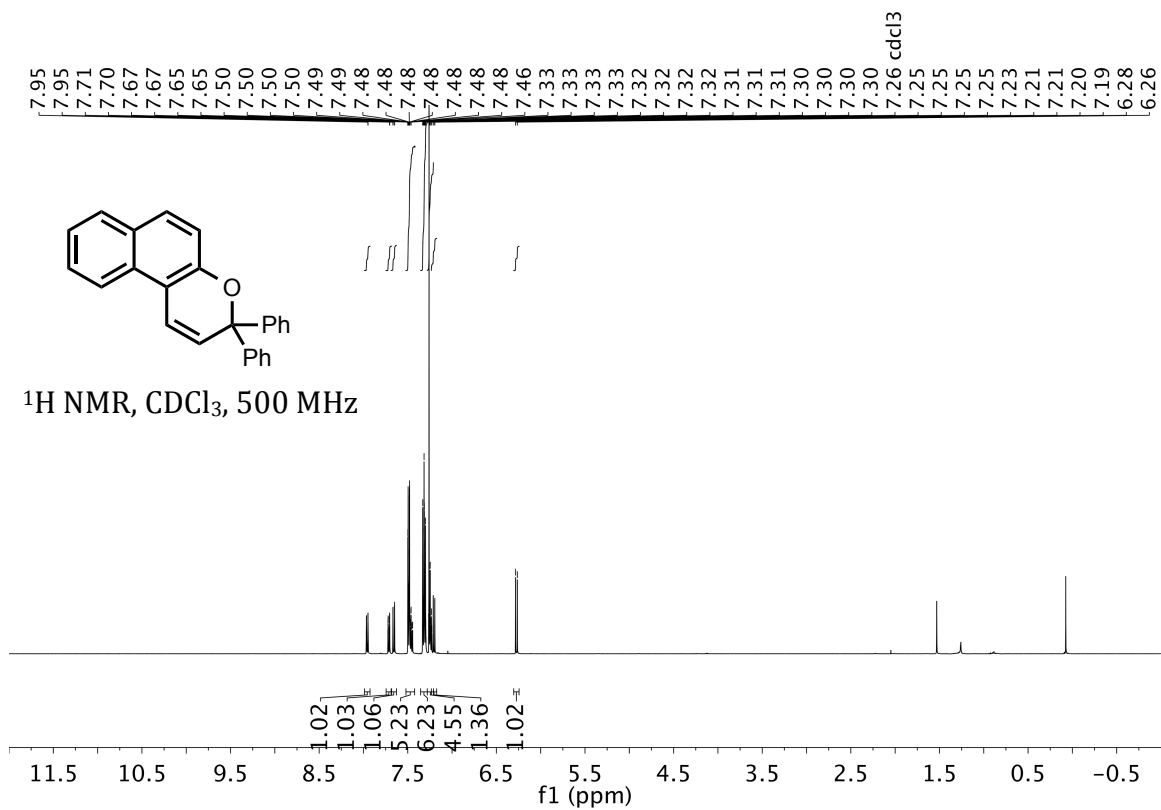




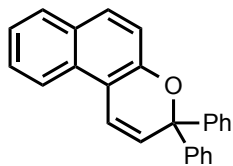
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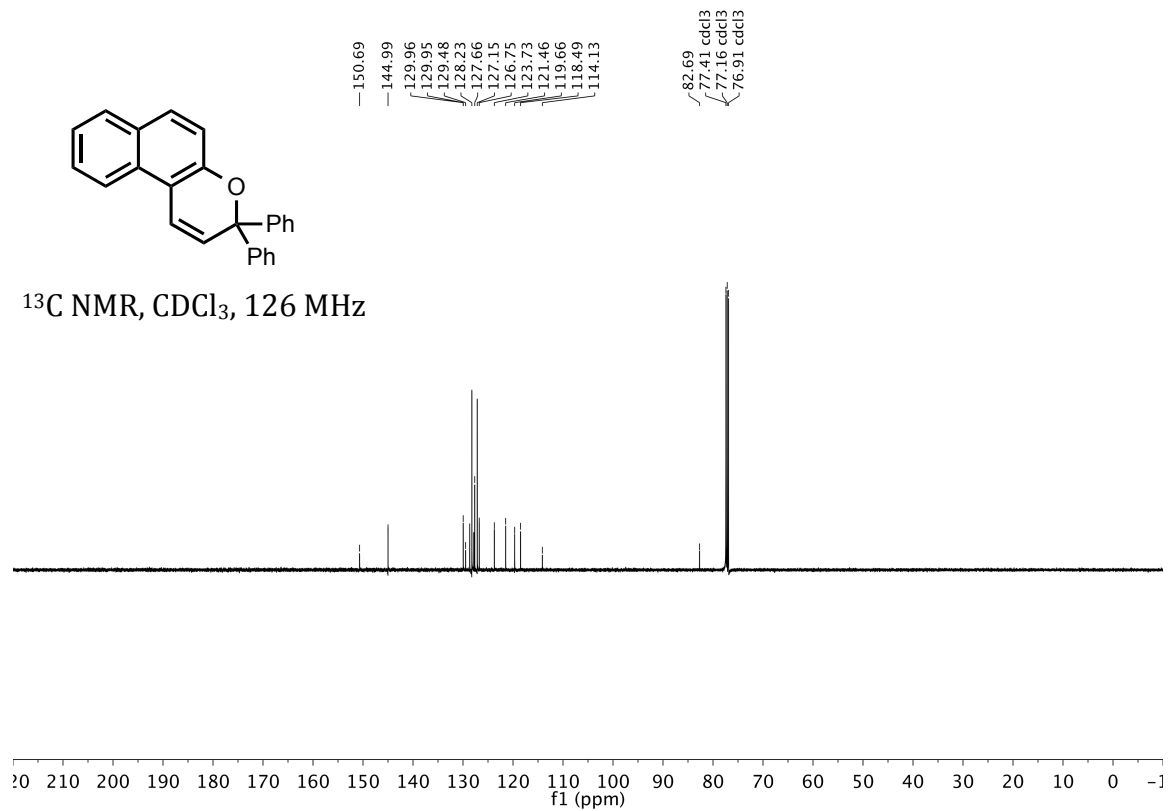
$^1\text{H NMR}$, CDCl_3 , 500 MHz



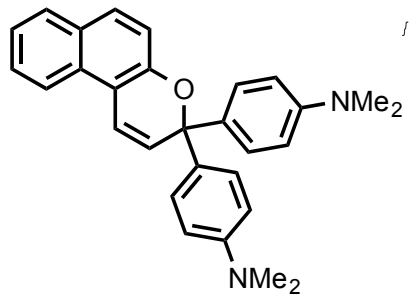
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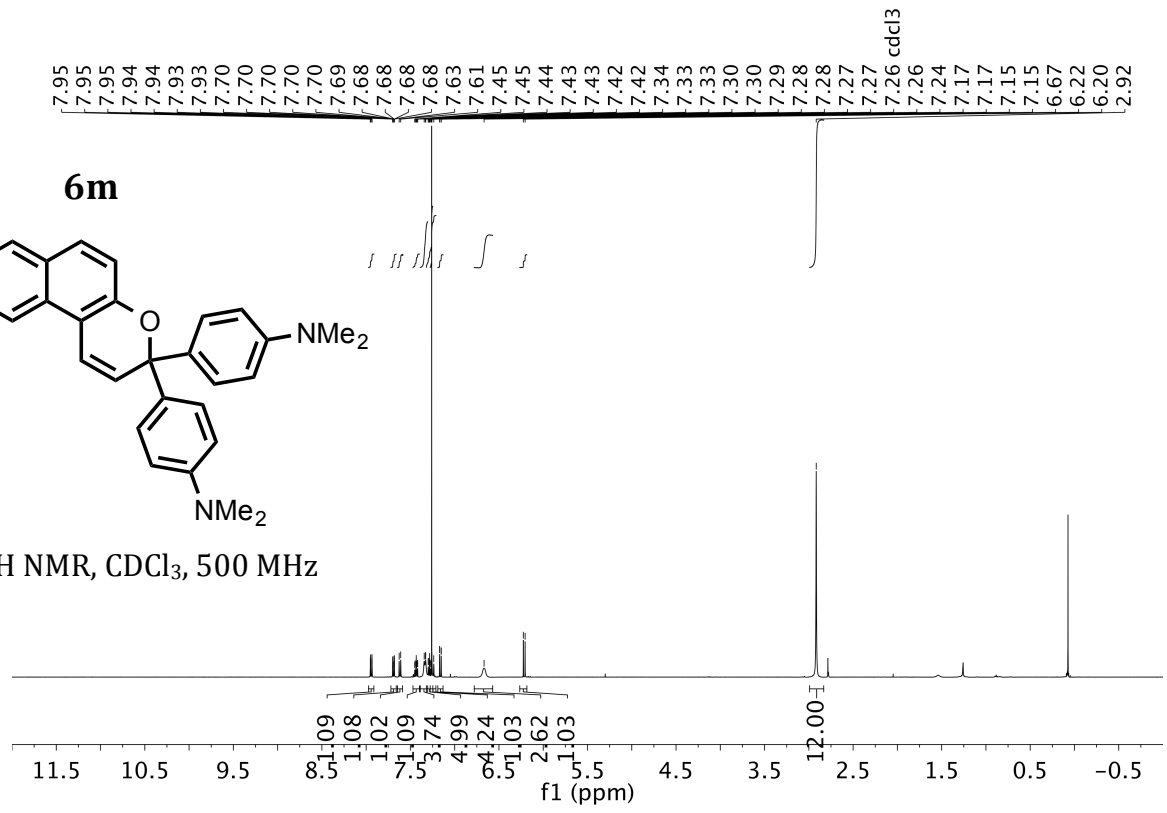
$^{13}\text{C NMR}$, CDCl_3 , 126 MHz



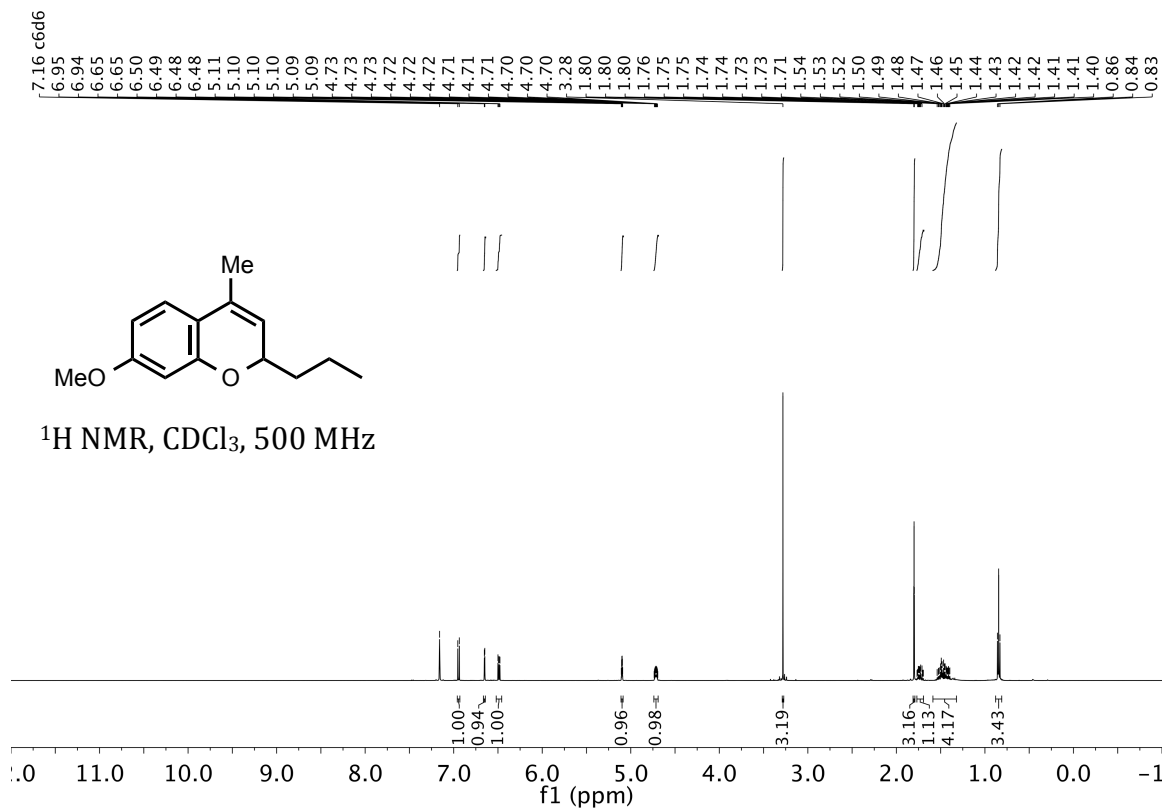
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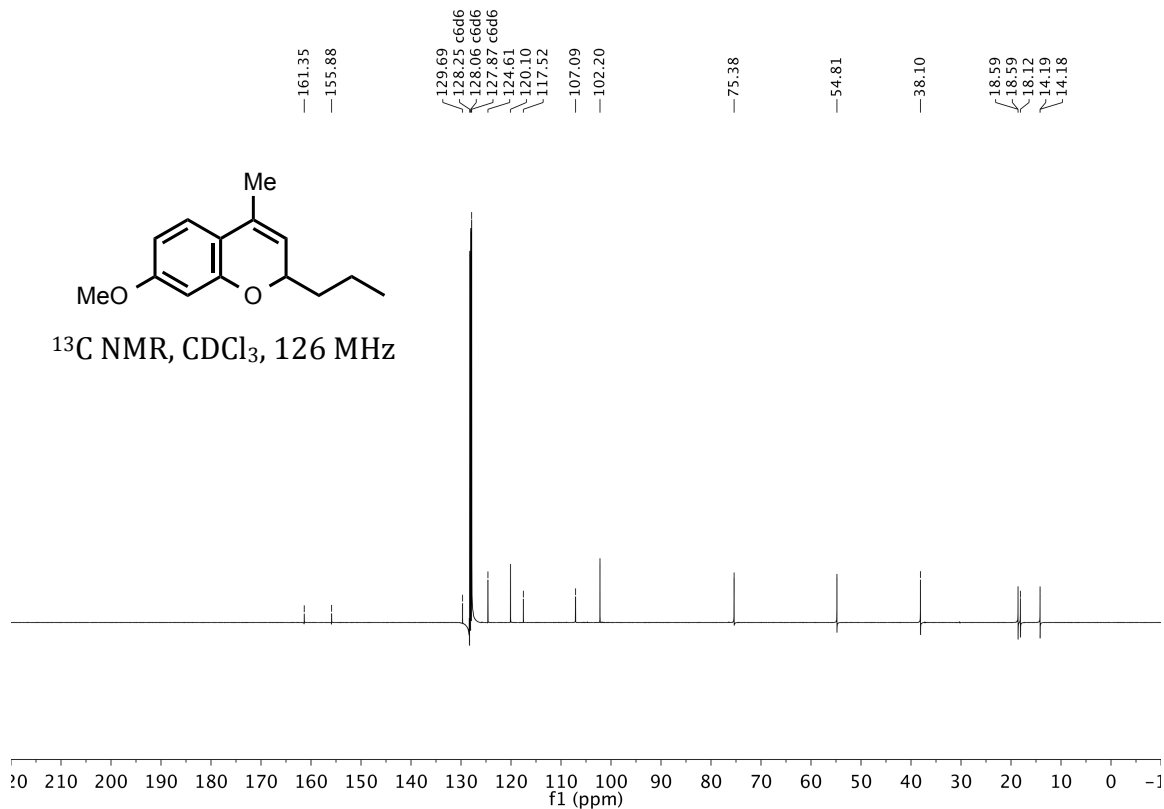
¹H NMR, CDCl₃, 500 MHz



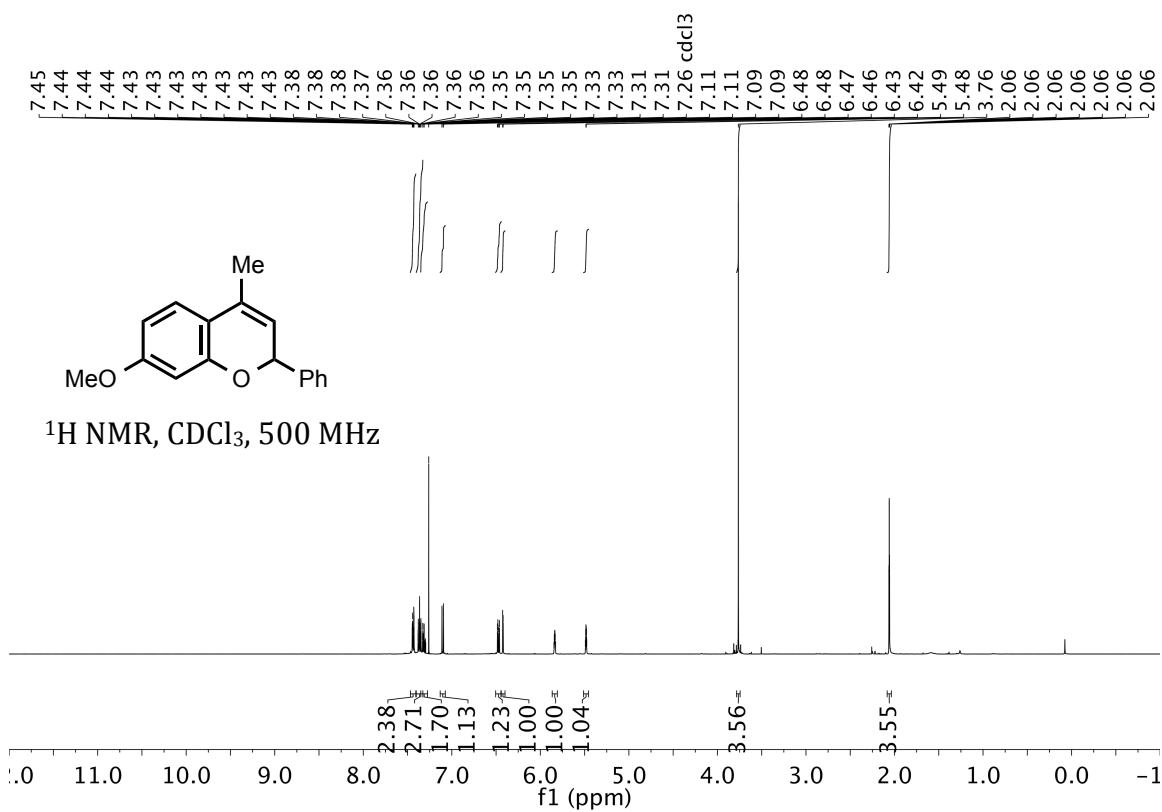
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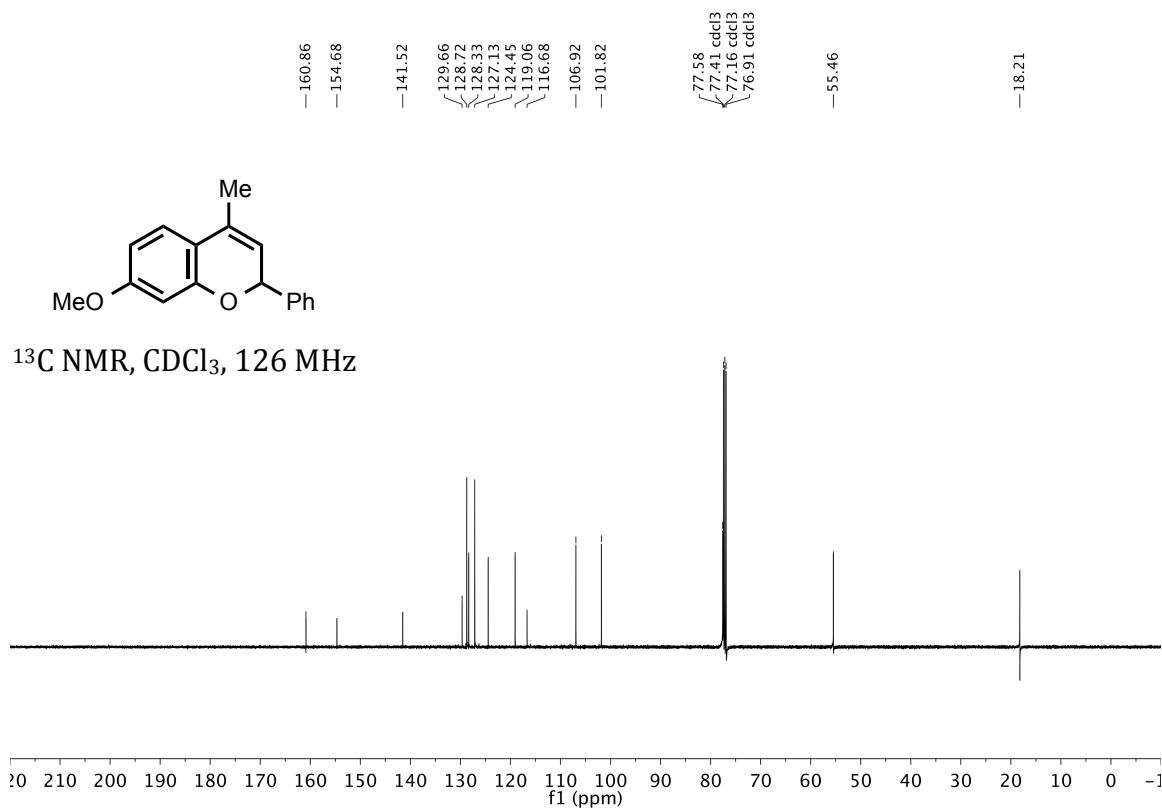
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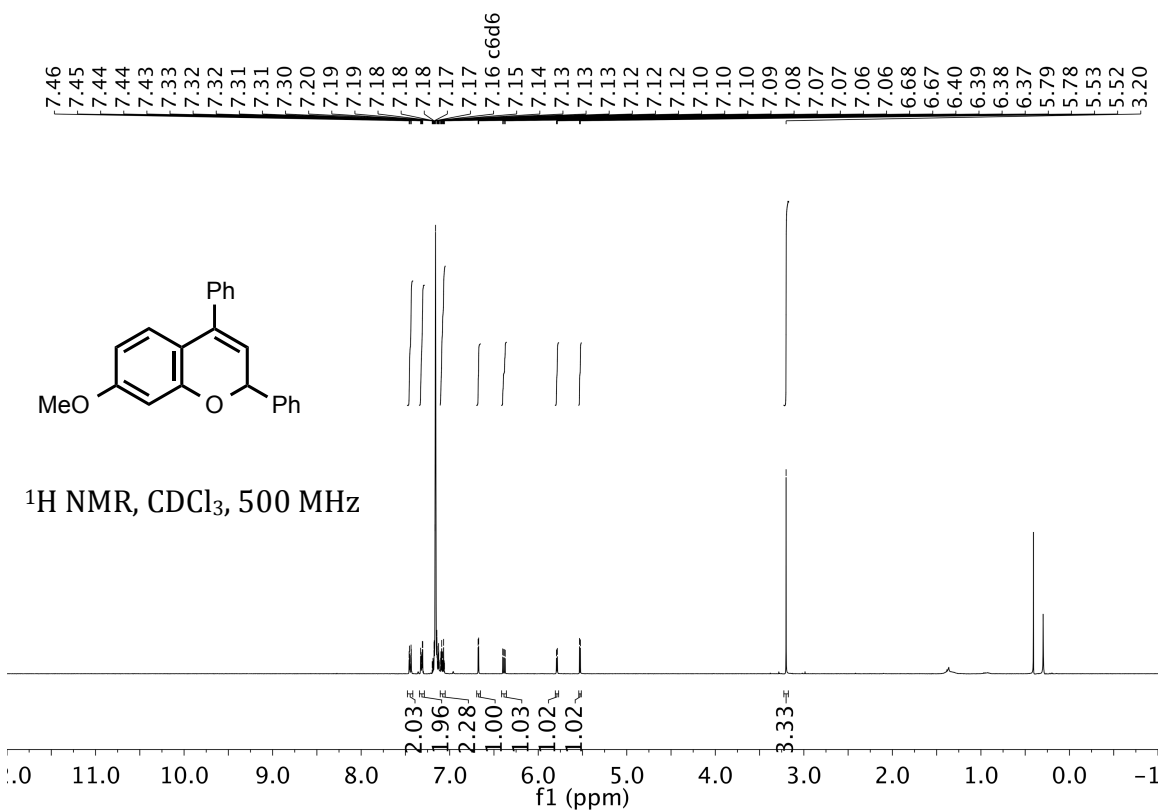
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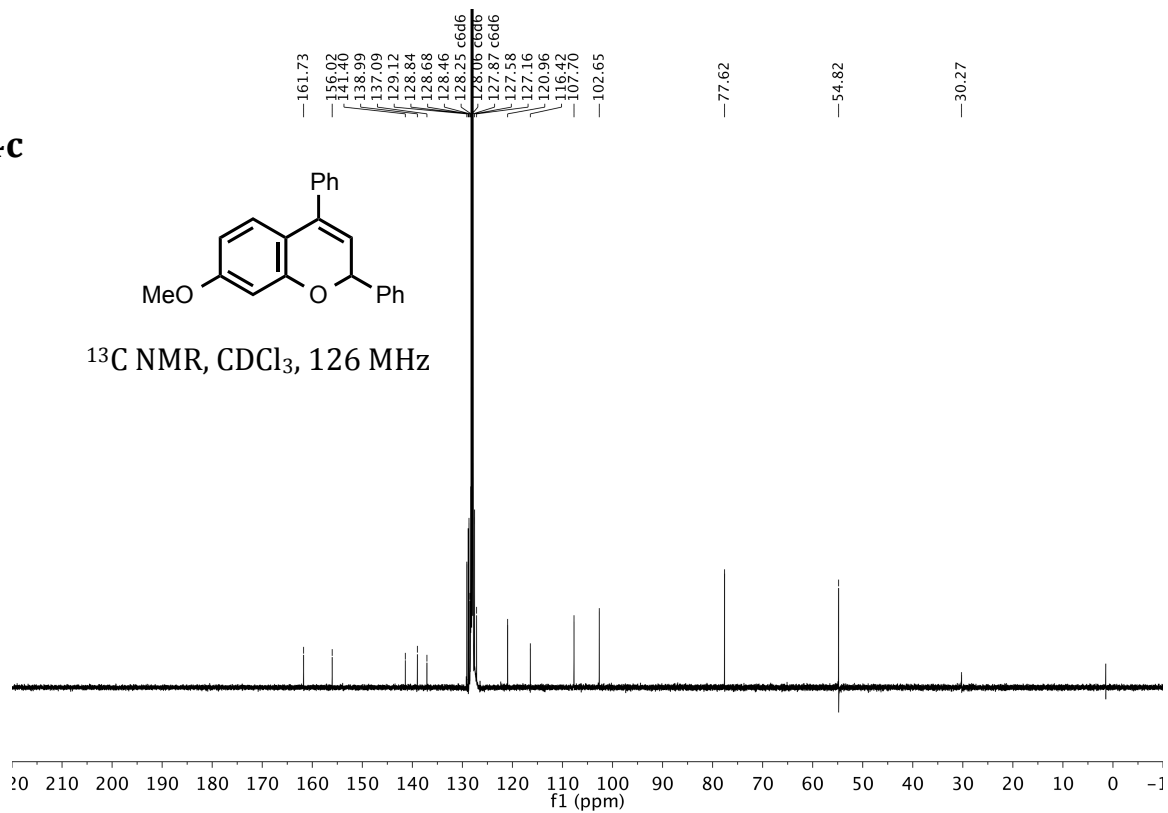
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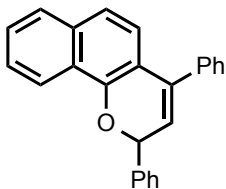
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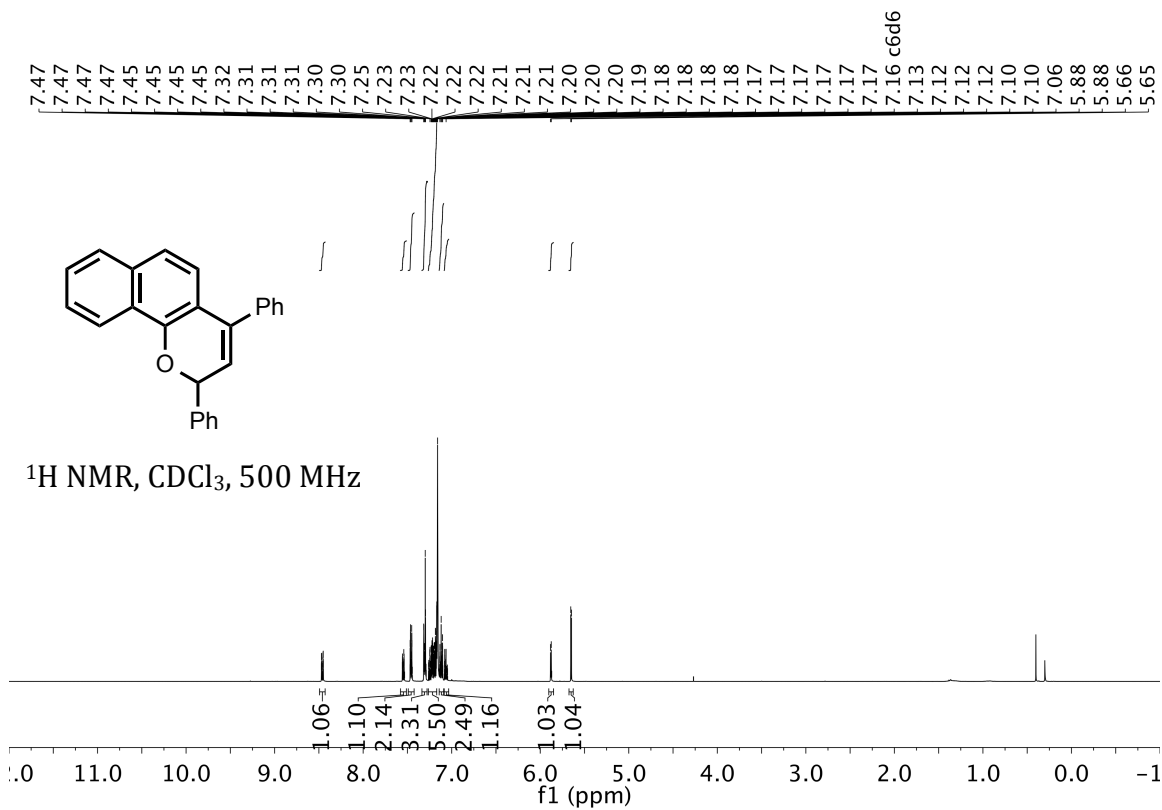
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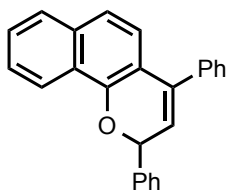
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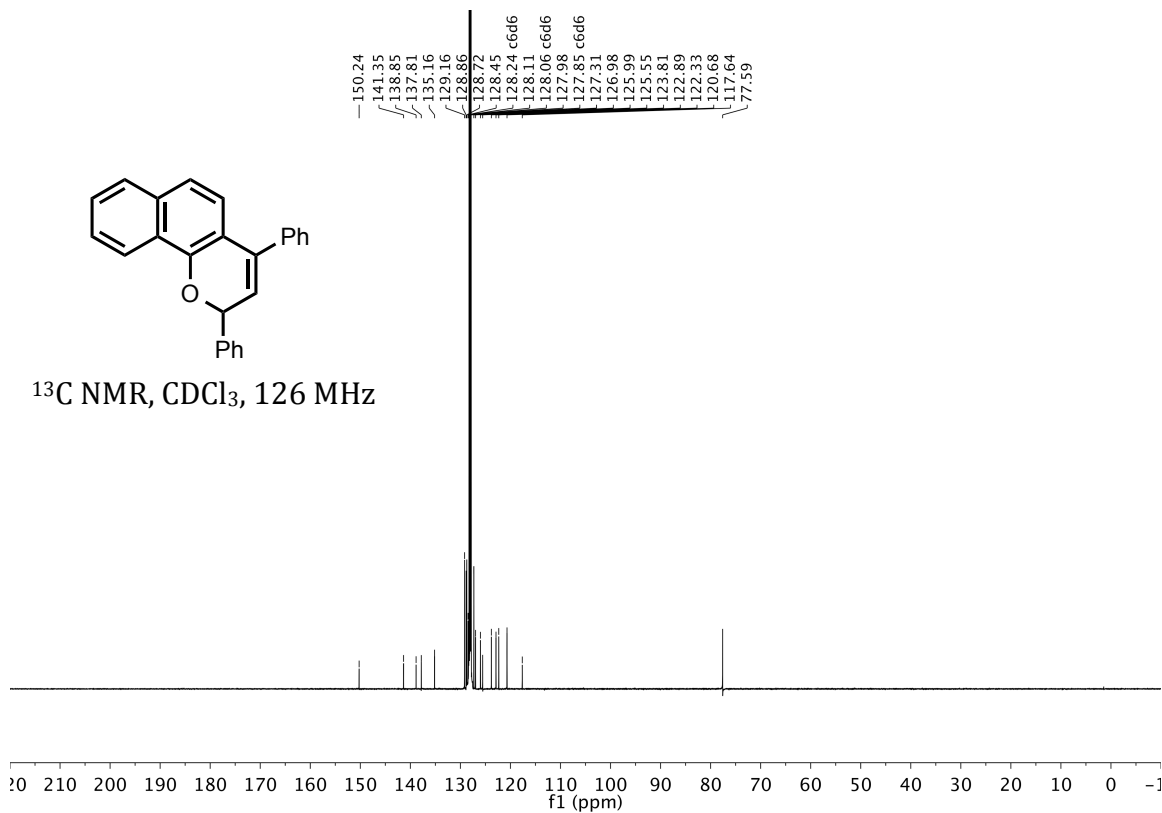
¹H NMR, CDCl₃, 500 MHz



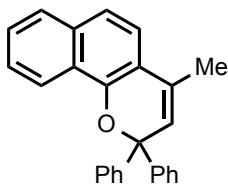
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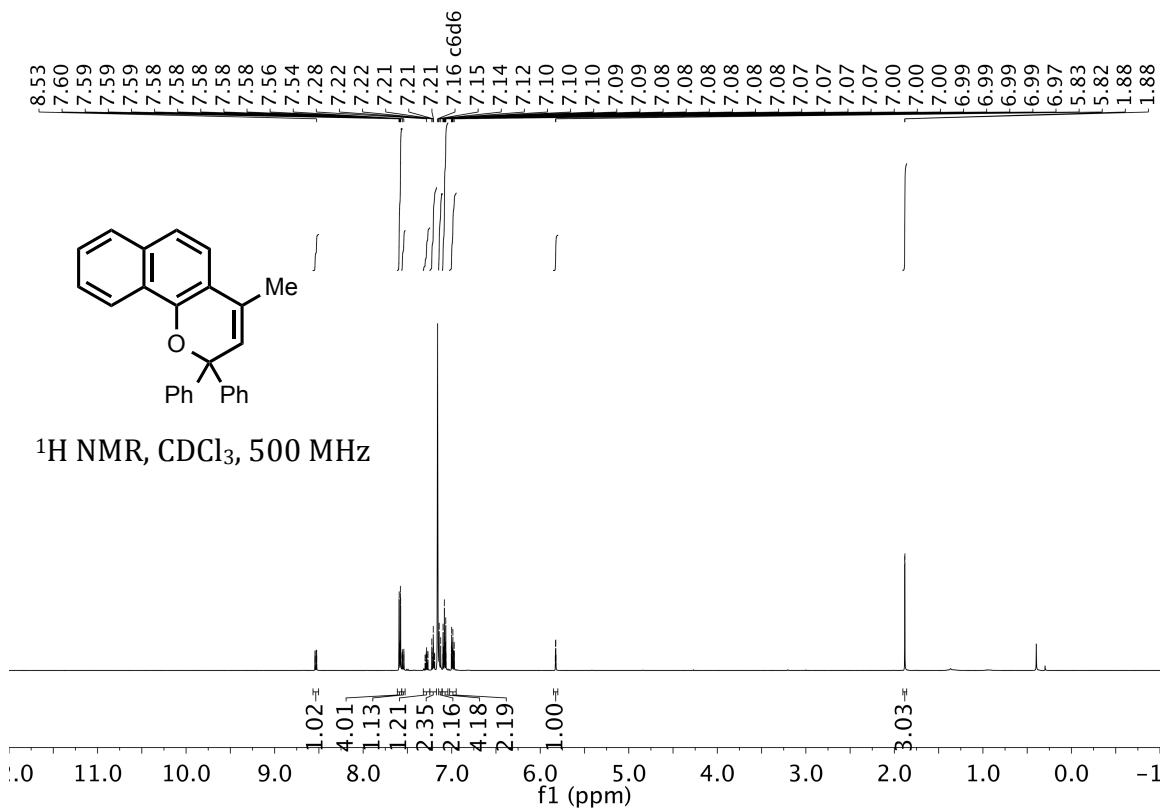
¹³C NMR, CDCl₃, 126 MHz



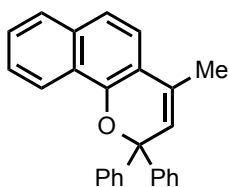
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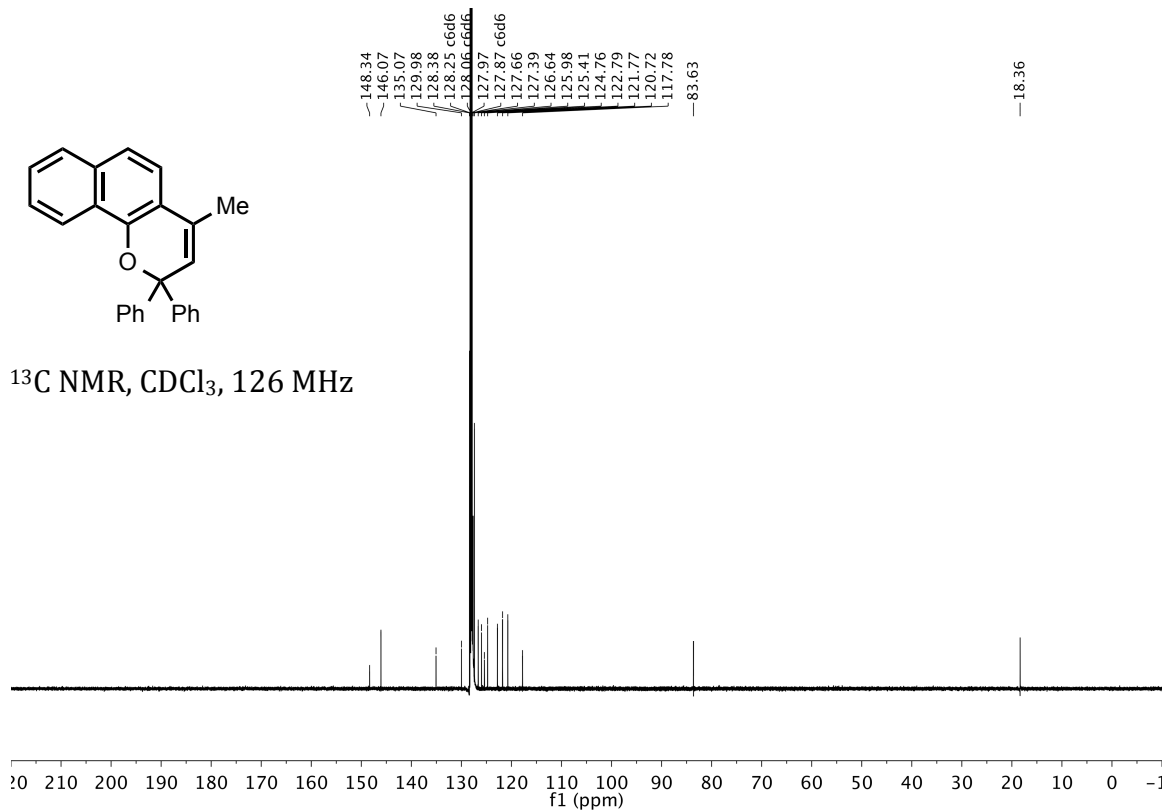
$^1\text{H NMR}$, CDCl_3 , 500 MHz



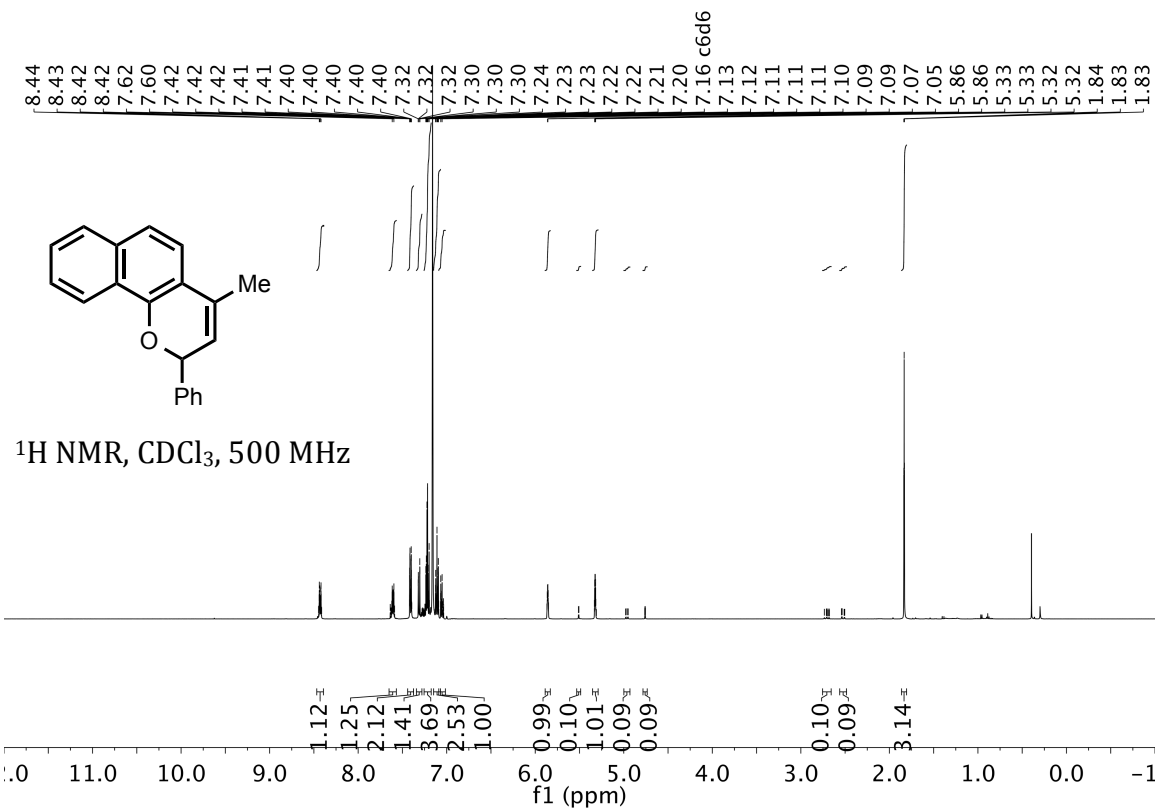
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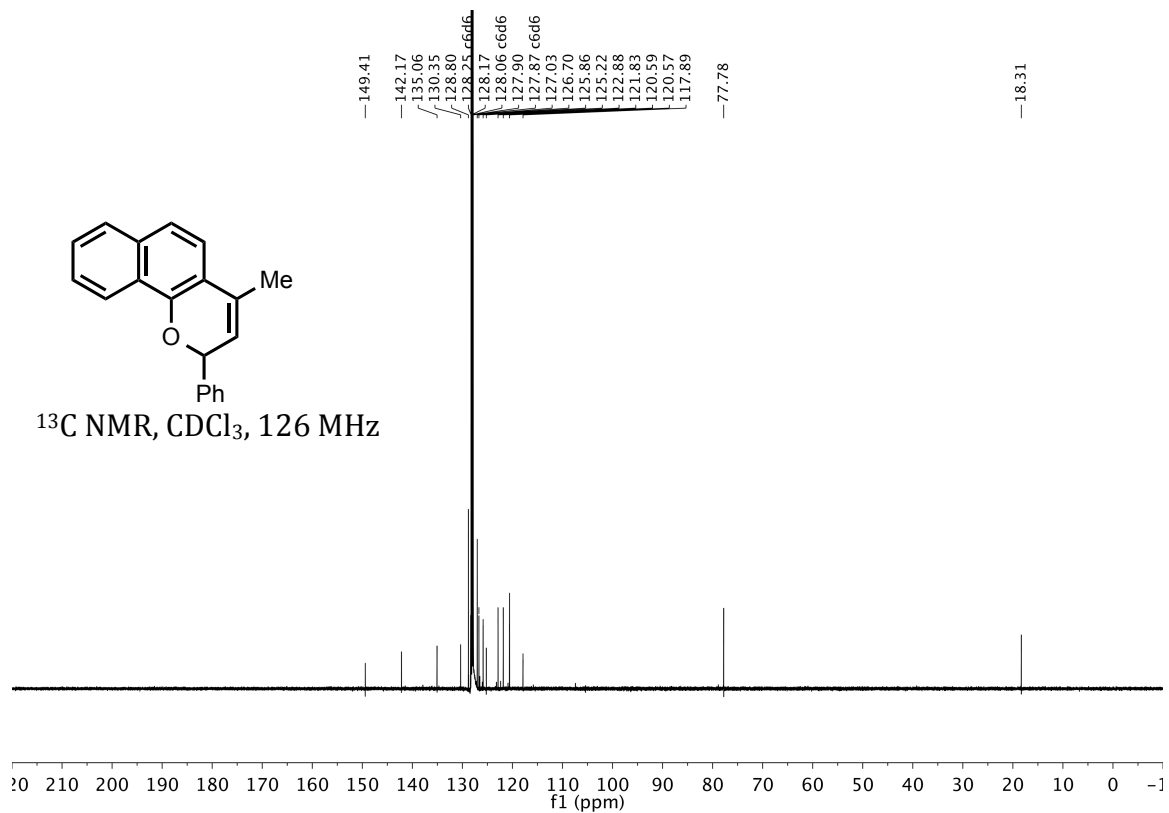
$^{13}\text{C NMR}$, CDCl_3 , 126 MHz



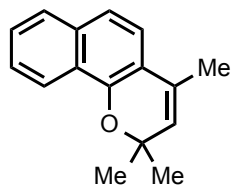
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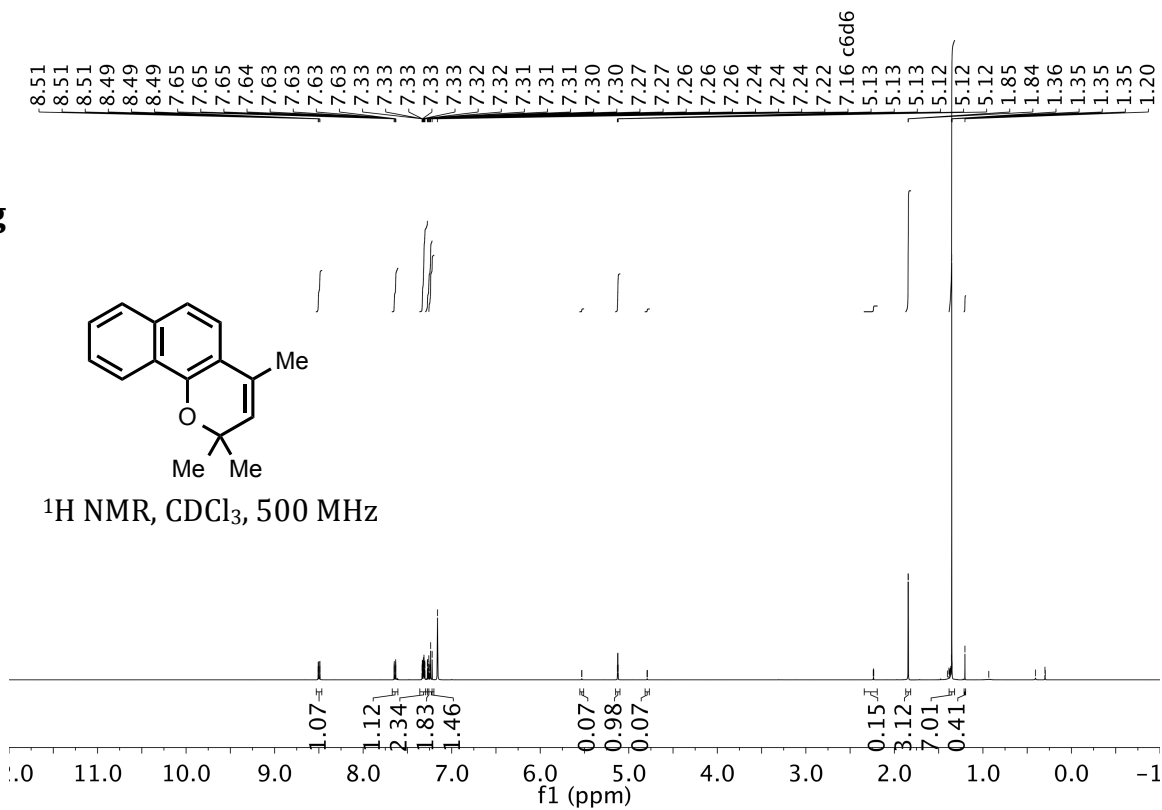
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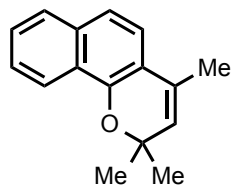
4g



$^1\text{H NMR}$, CDCl_3 , 500 MHz



4g



$^{13}\text{C NMR}$, CDCl_3 , 126 MHz

