

ZASTOSOWANIE SPEKTROSKOPII NMR W MEDYCYNIE

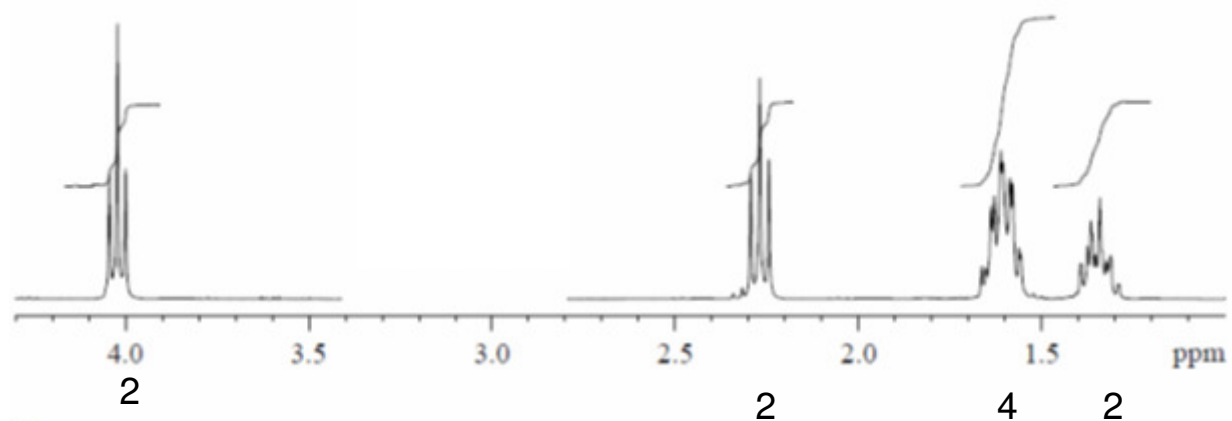
Zadania część druga - 2D NMR

Literatura:

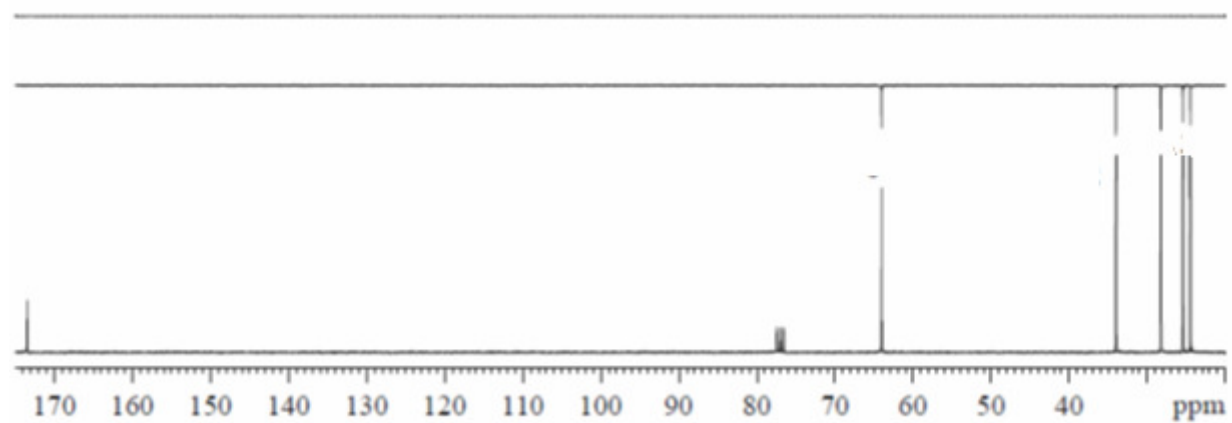
**A. R. SILVERSTEIN, F. WEBSTER, D. KIEMLE
SPEKTROSKOPOWE METODY IDENTYFIKACJI
ZWIĄZKÓW ORGANICZNYCH
WYDAWNICTWO NAUKOWE PWN, 2013.**



^1H NMR 300 MHz



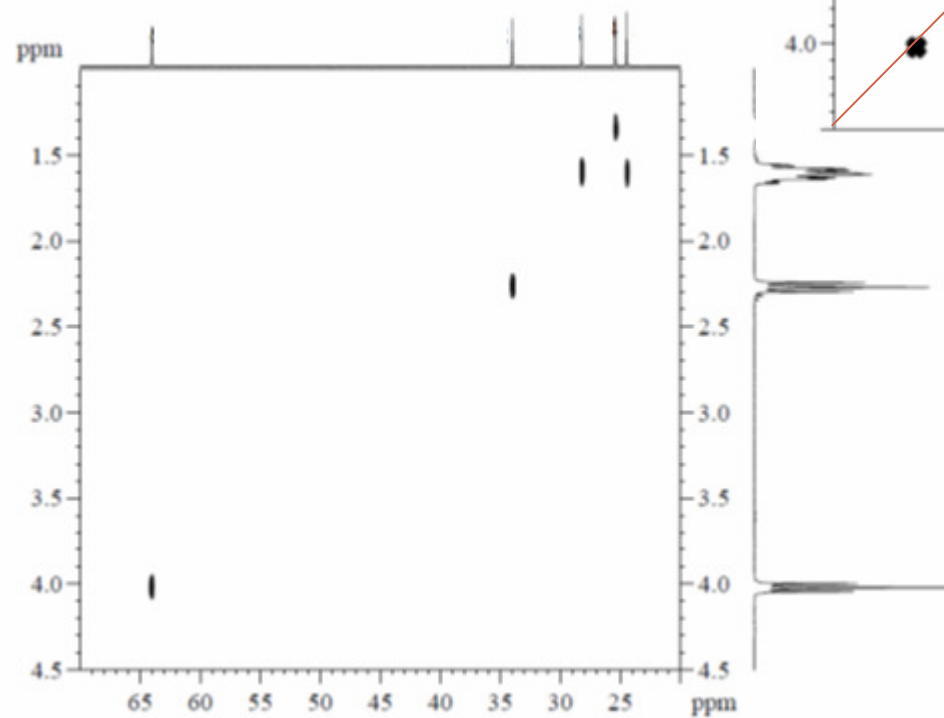
$^{13}\text{C}/\text{DEPT}$ NMR 75.5 MHz



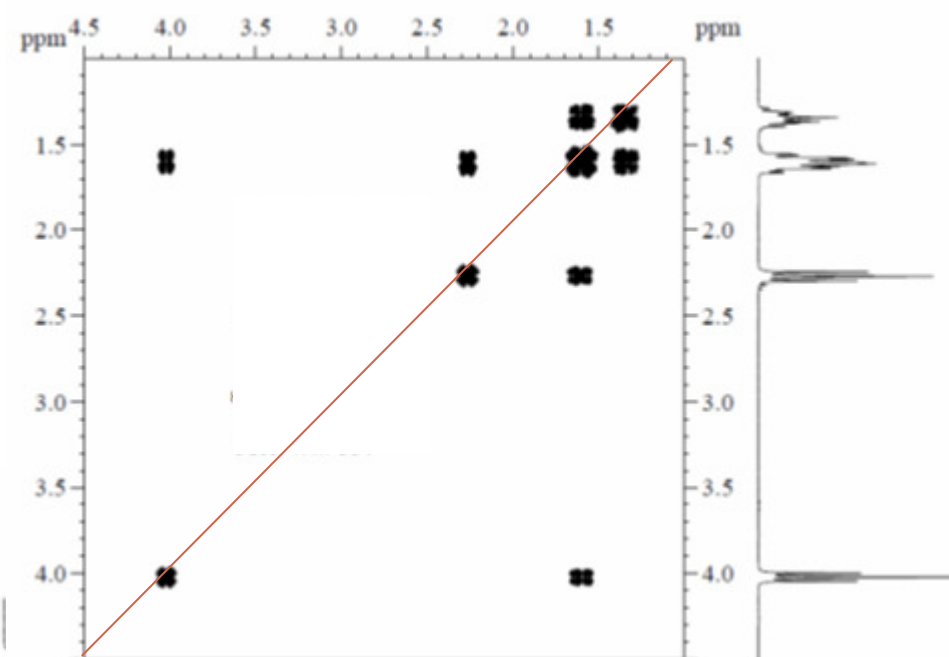
27



HETCOR 75.5 MHz

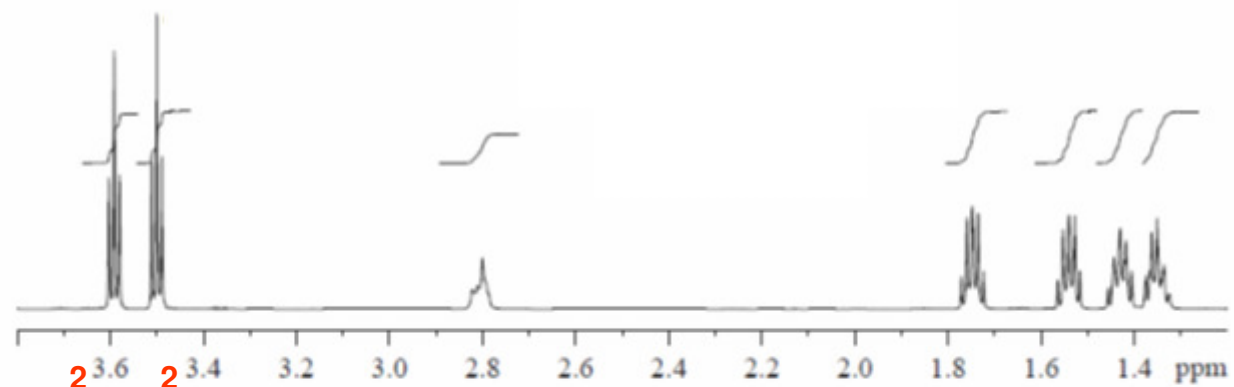


COSY 300 MHz

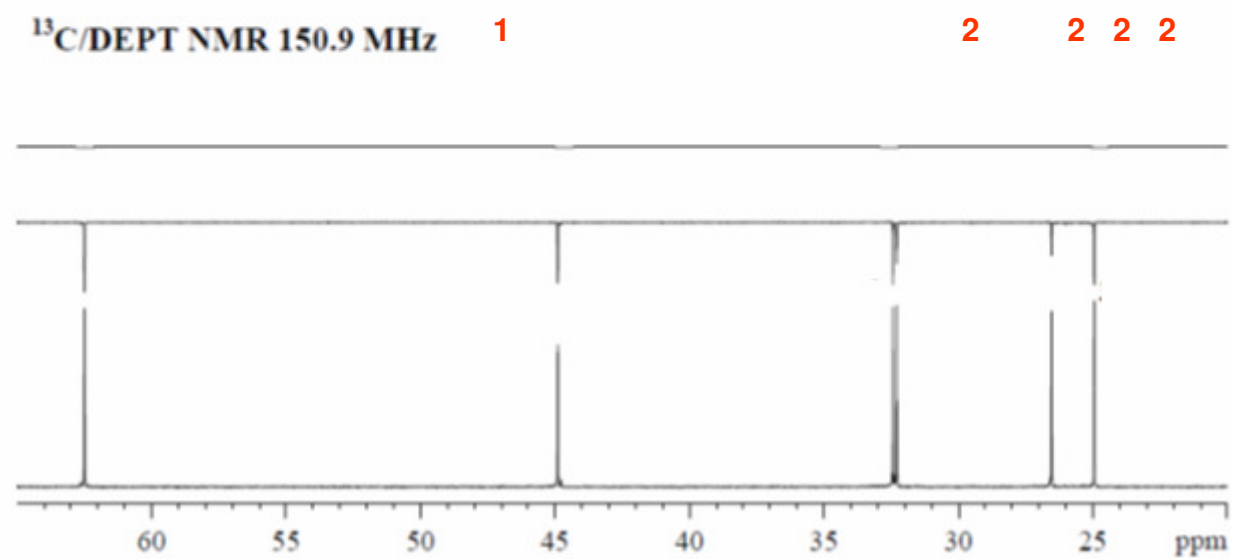




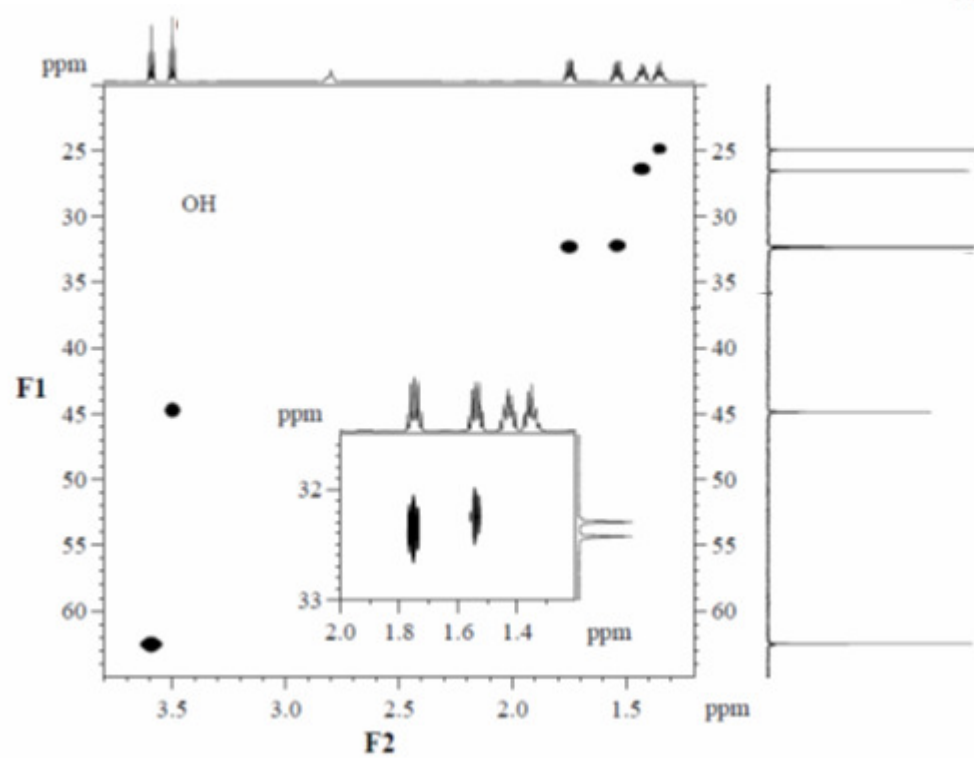
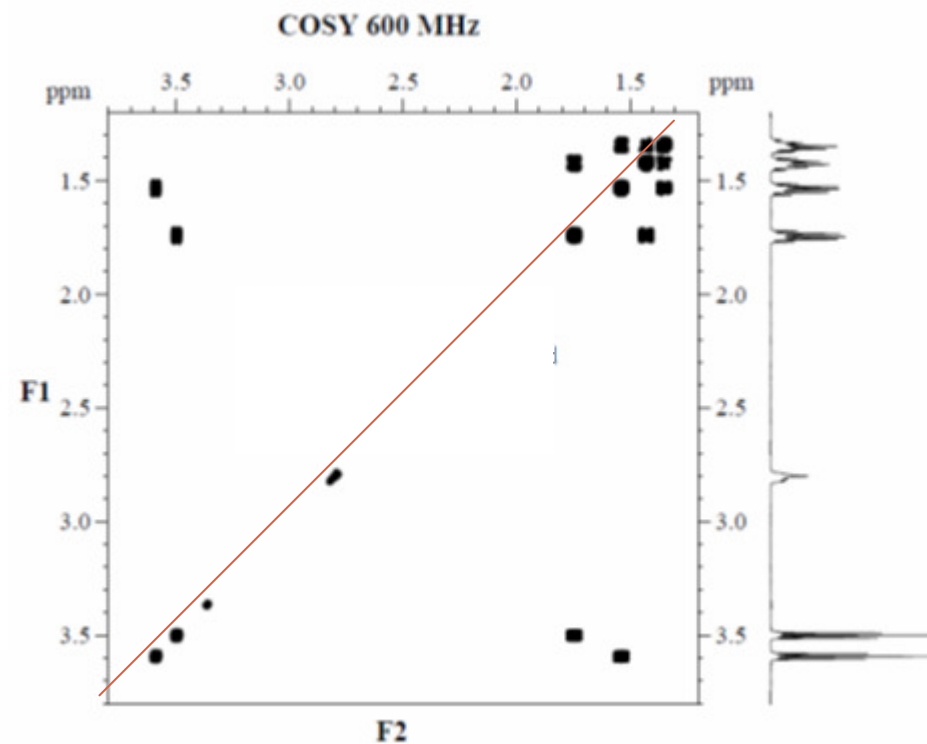
^1H NMR 600 MHz

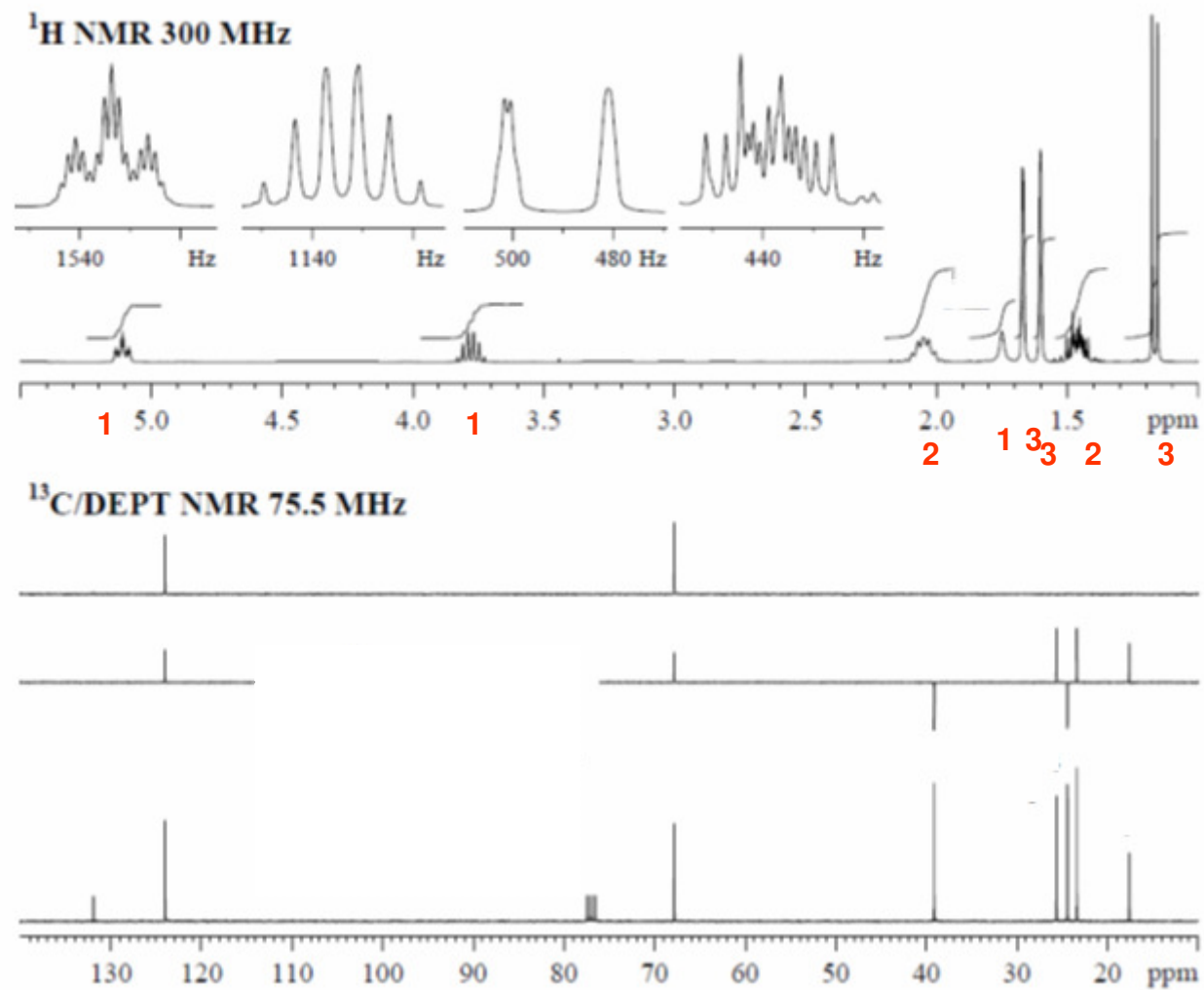


$^{13}\text{C}/\text{DEPT}$ NMR 150.9 MHz

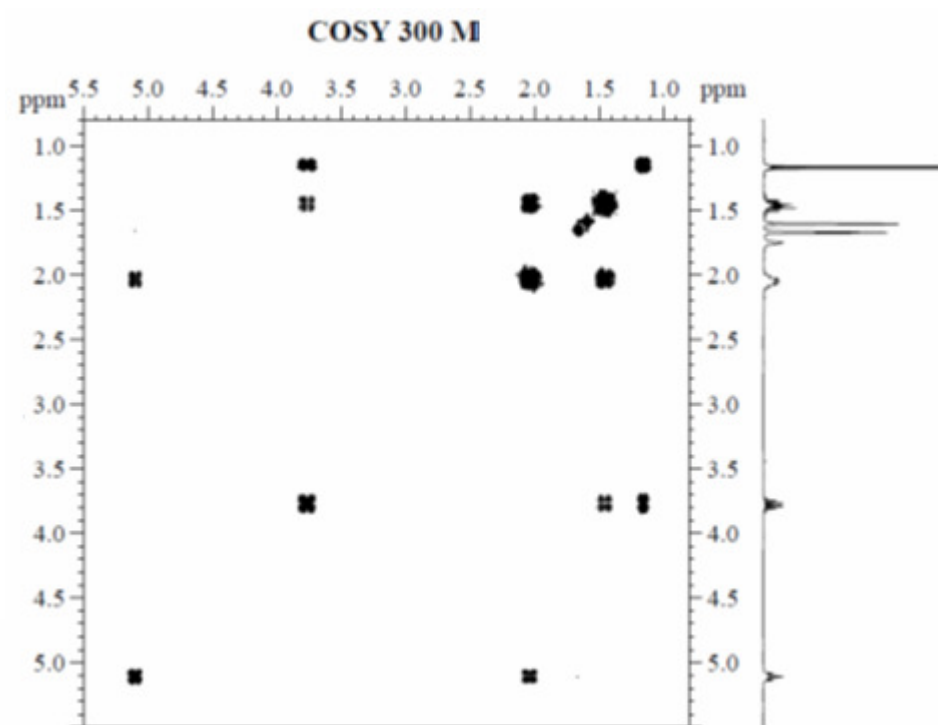
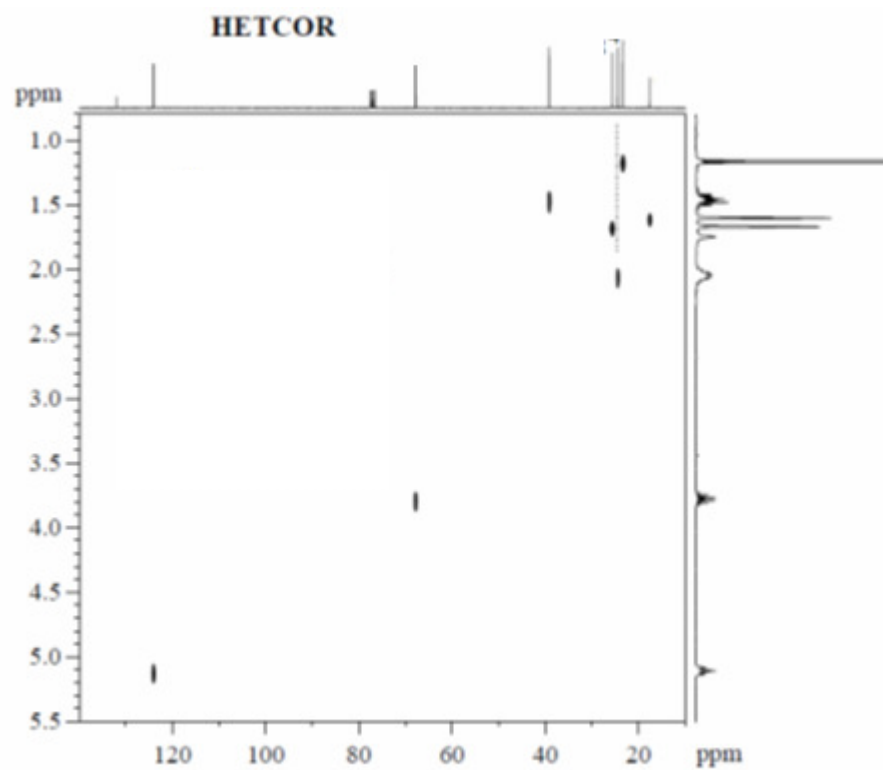


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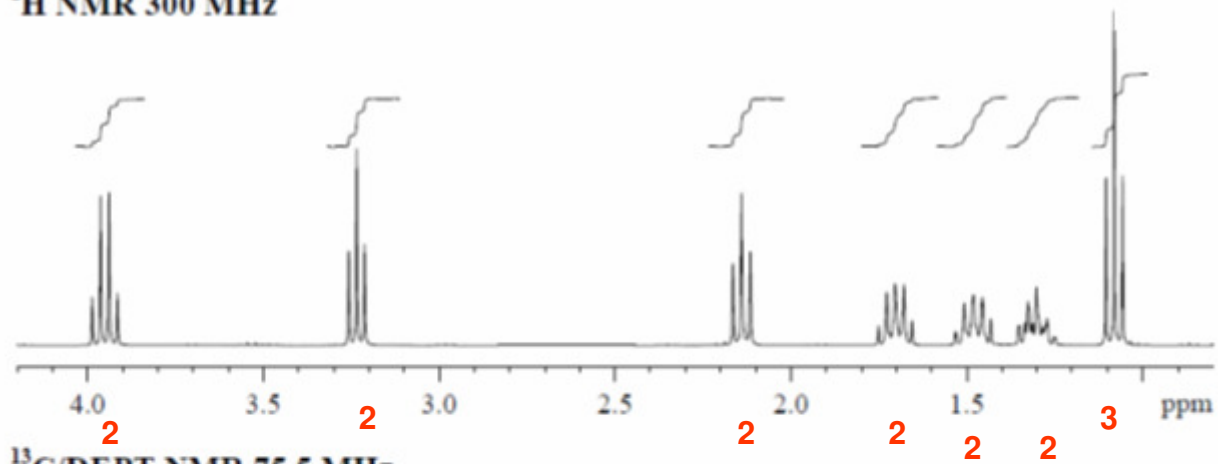
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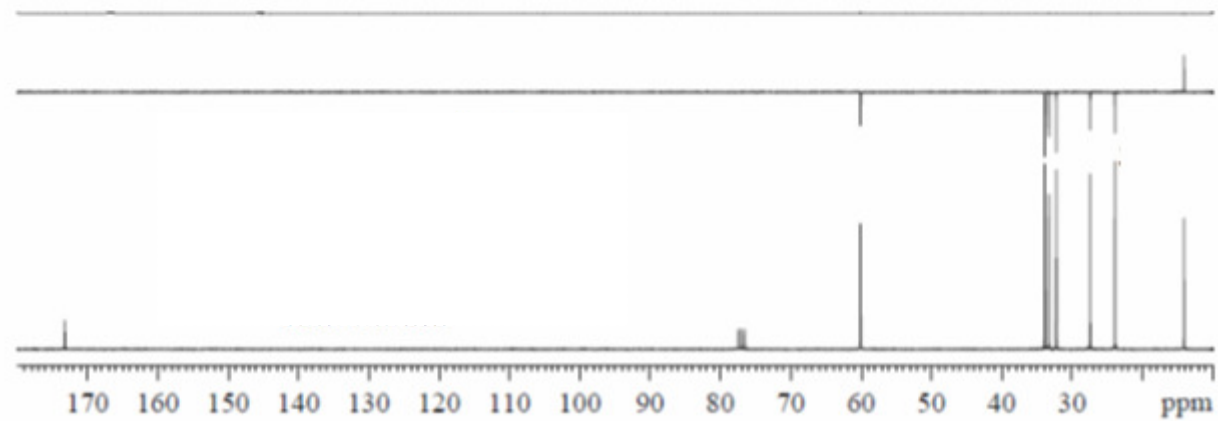
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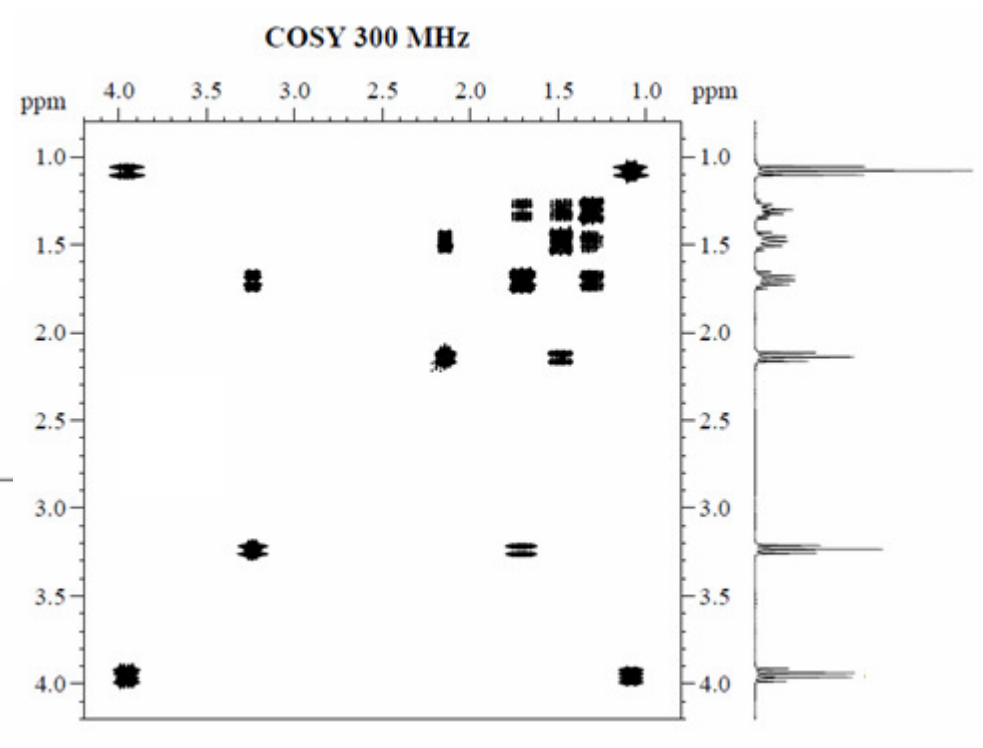
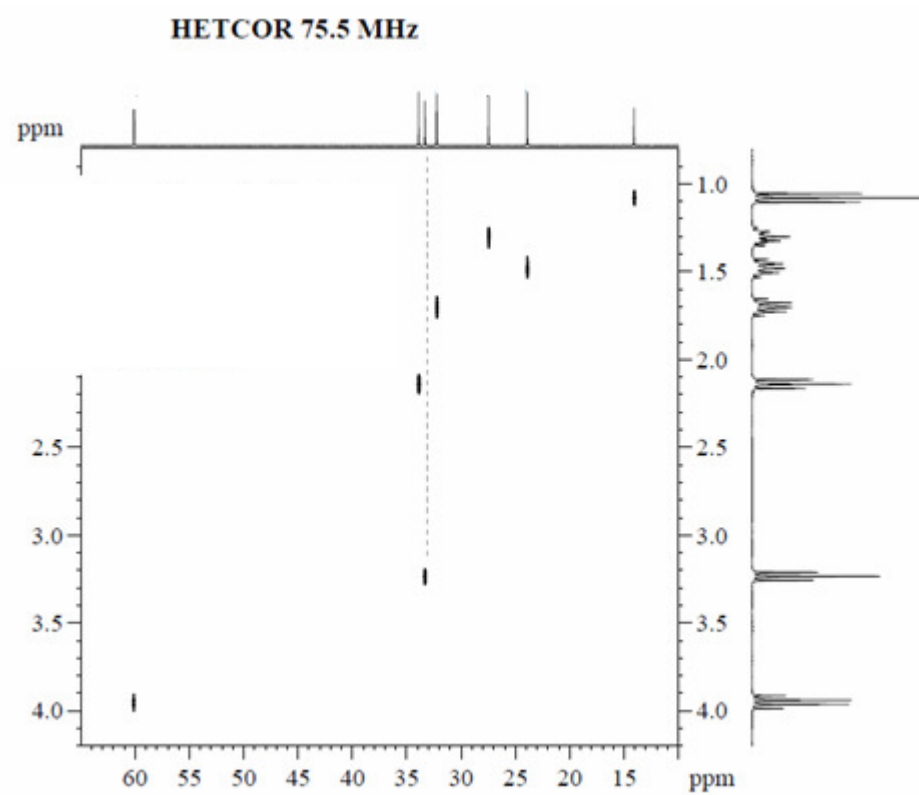
^1H NMR 300 MHz

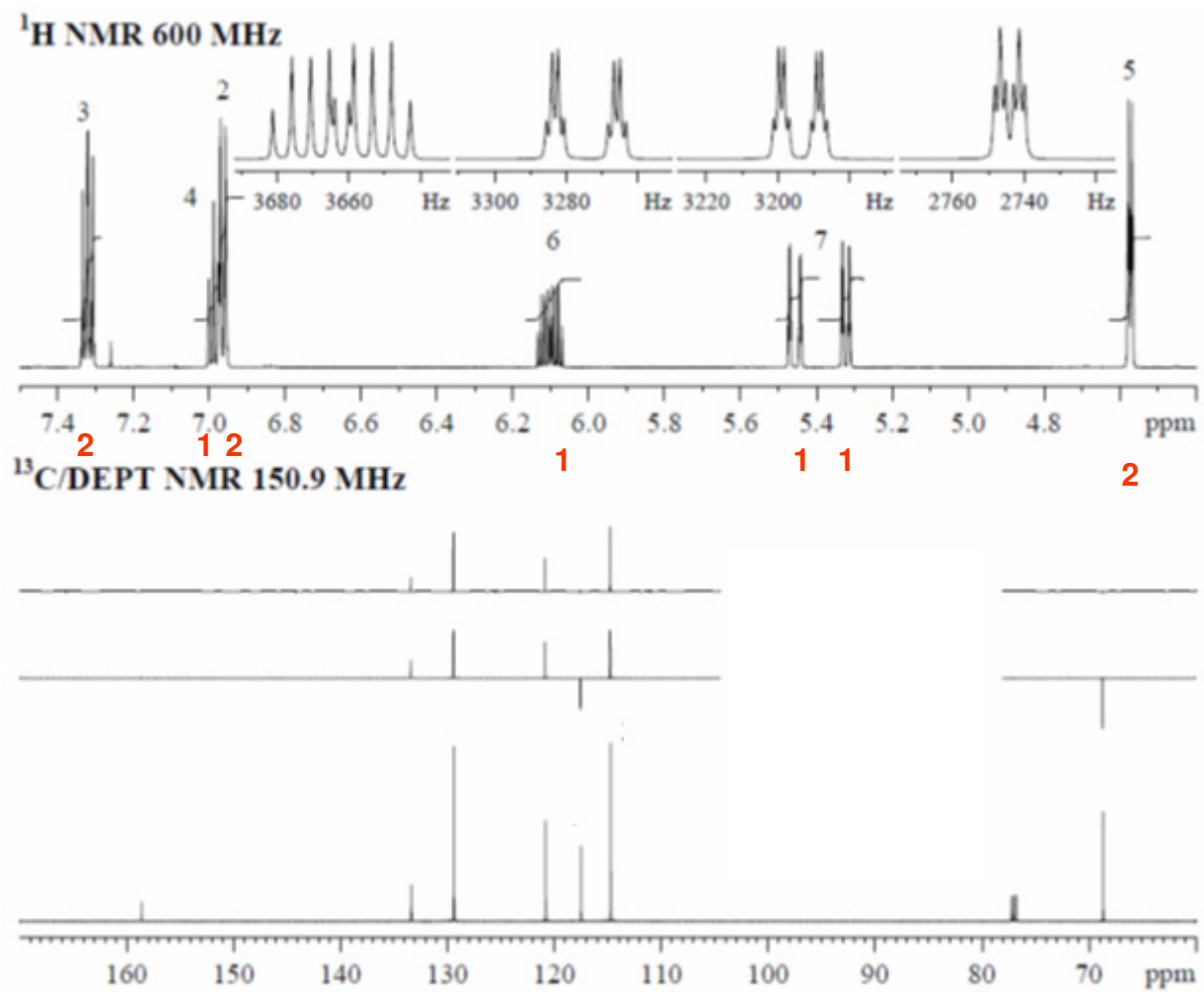


$^{13}\text{C}/\text{DEPT}$ NMR 75.5 MHz

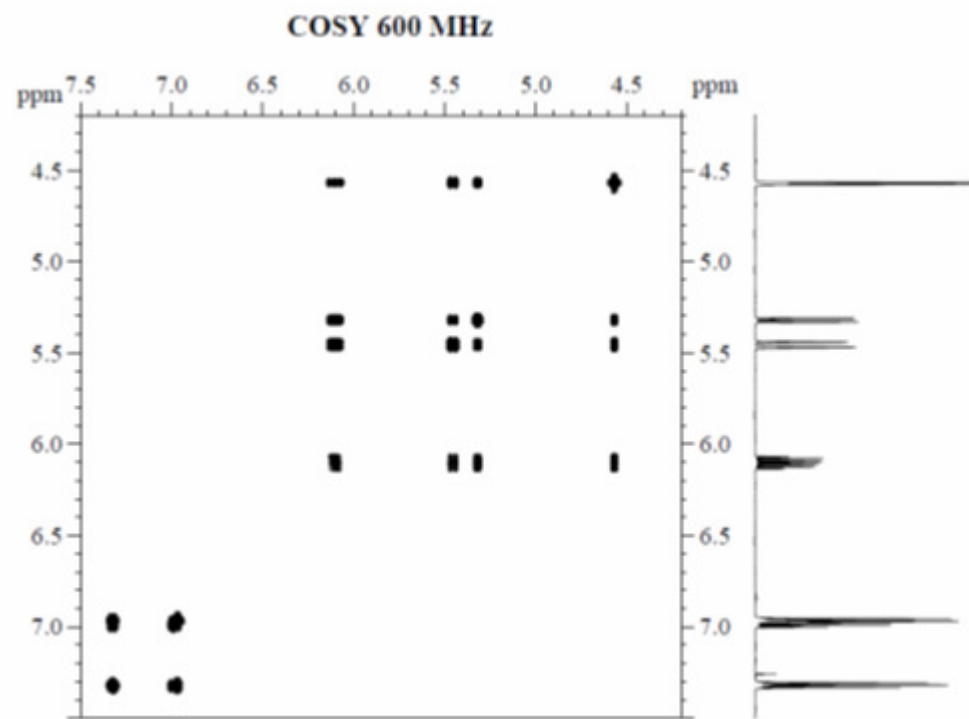
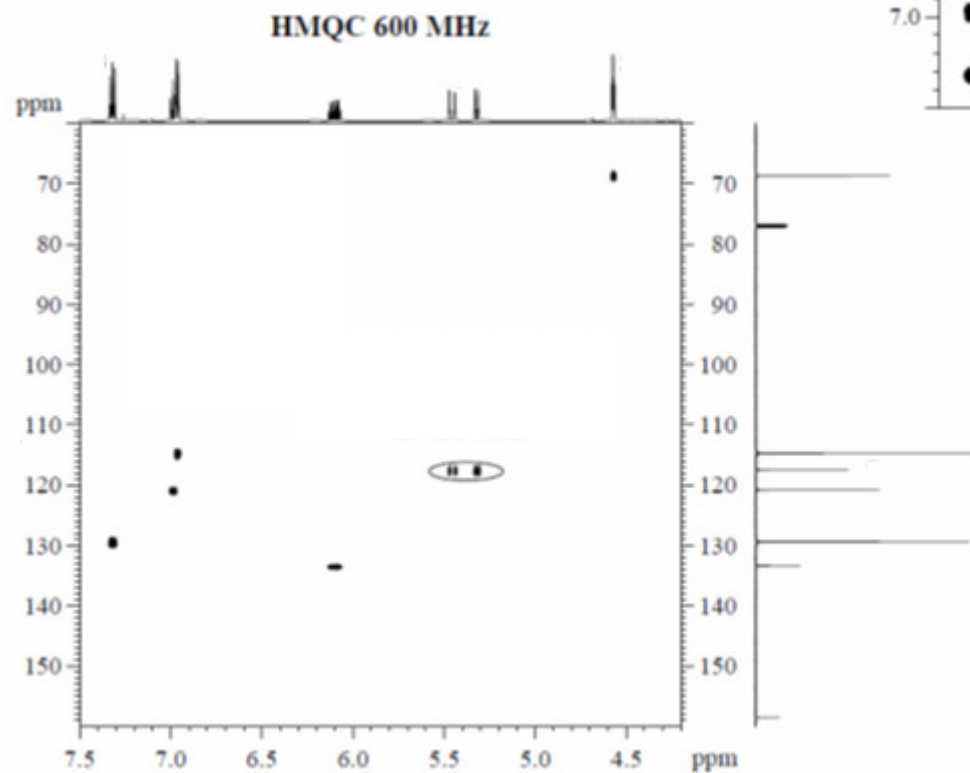


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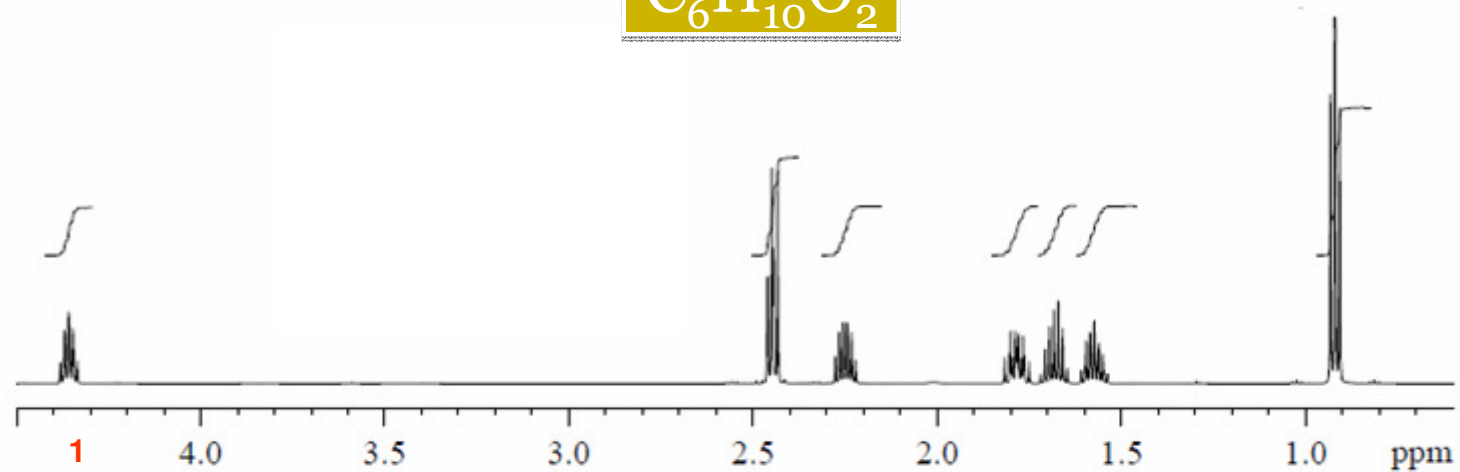
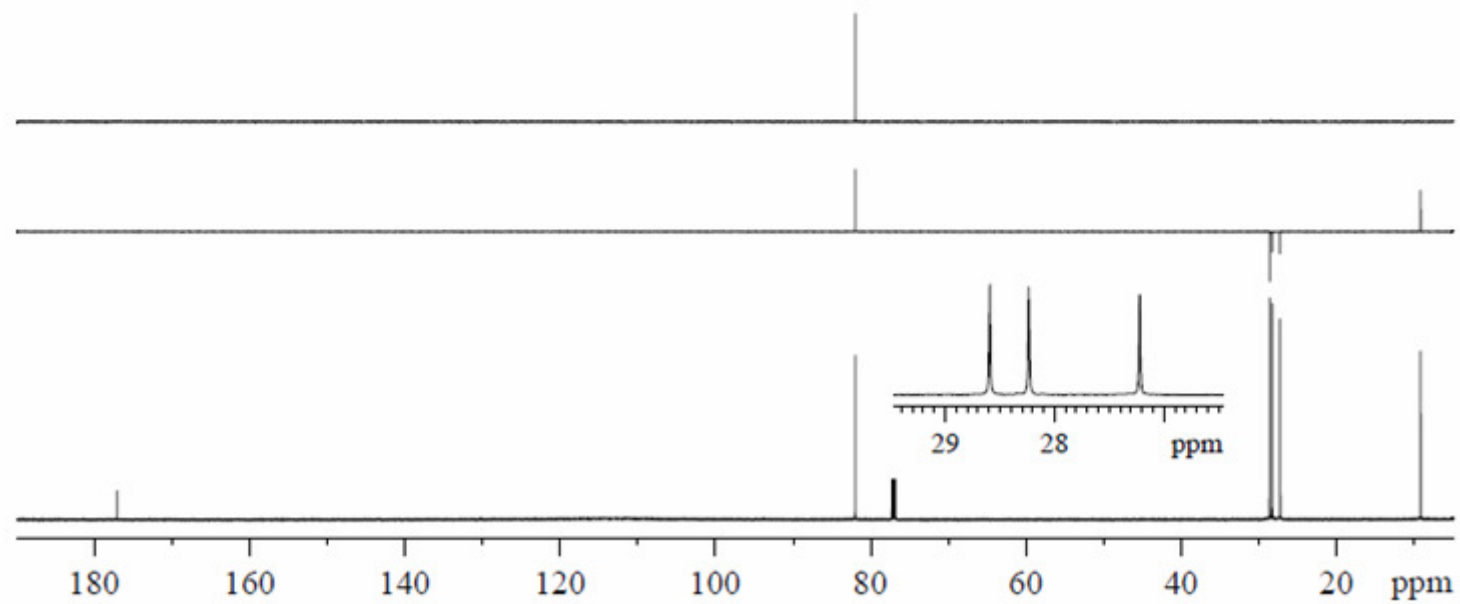




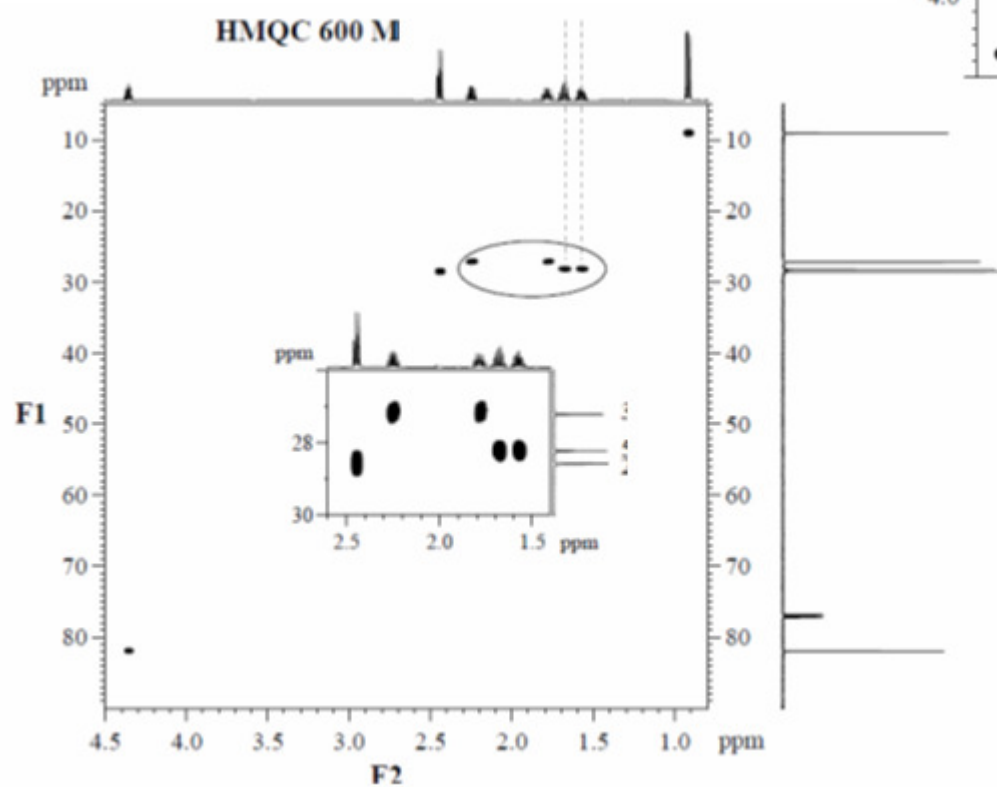
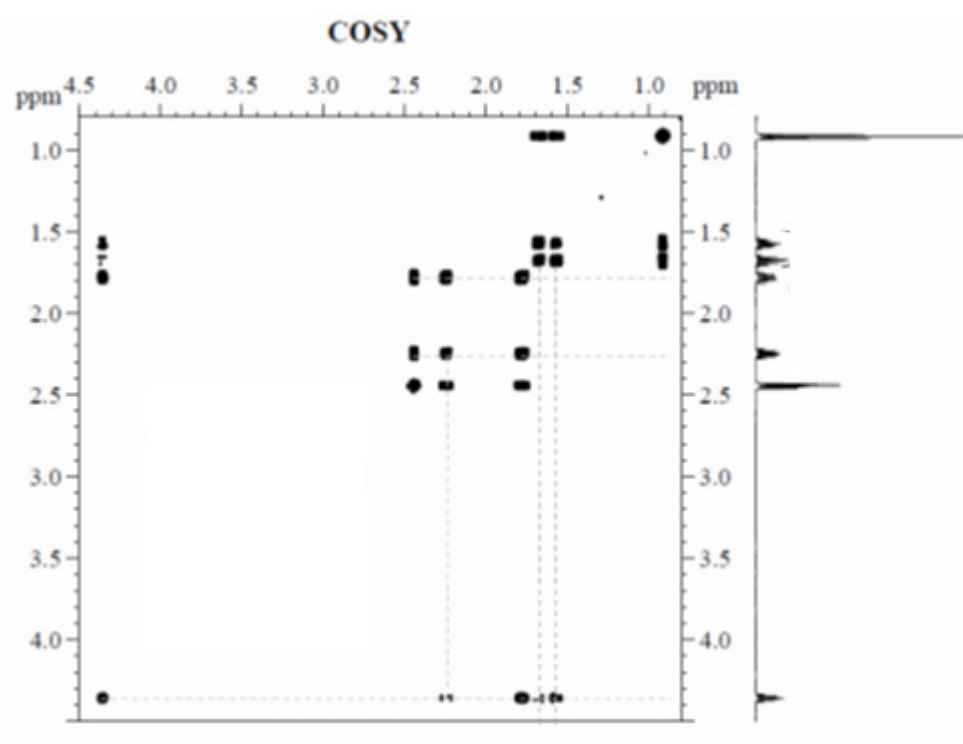
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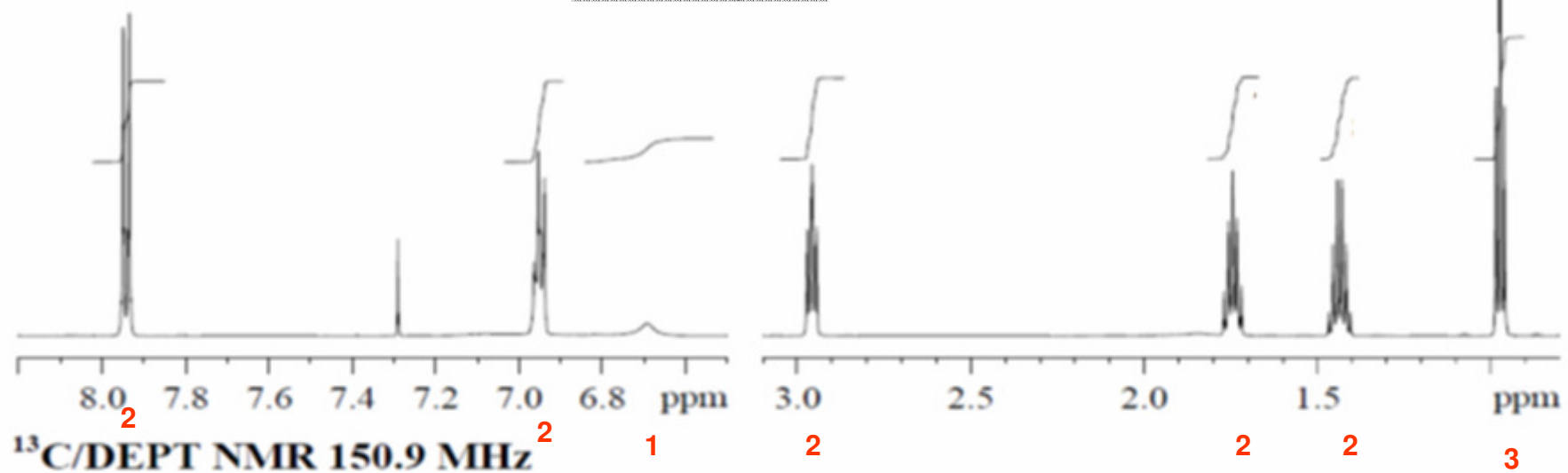
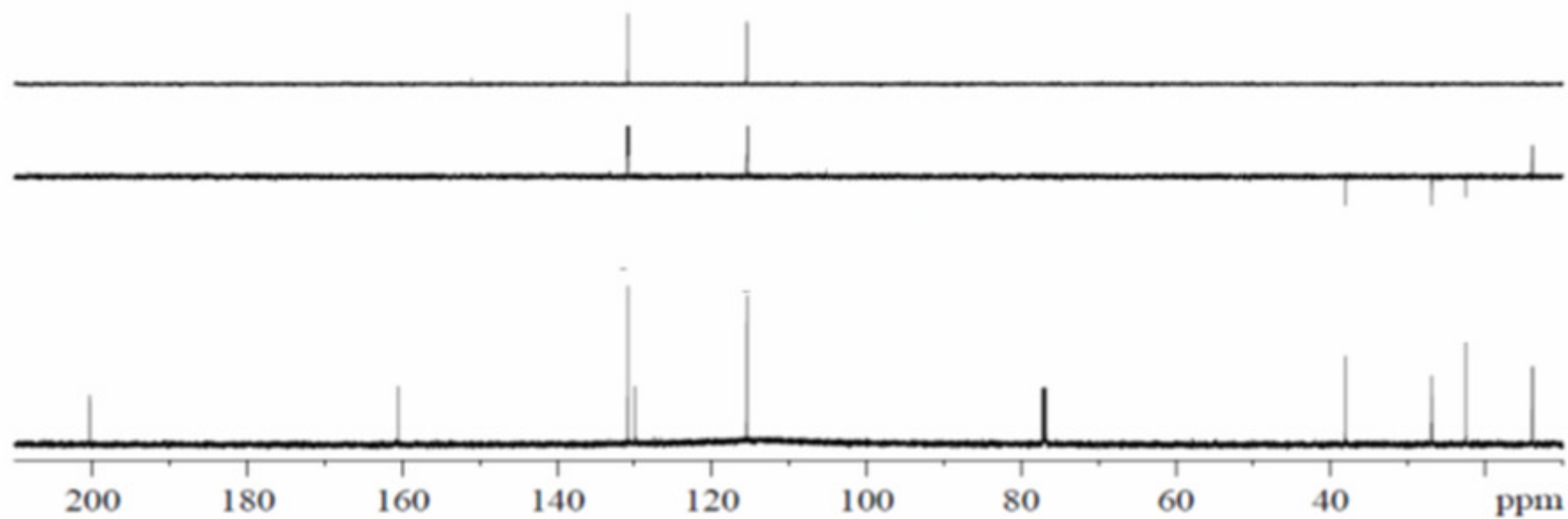
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 ^1H NMR 600 MHz $^{13}\text{C}/\text{DEPT}$ NMR 150.9 MHz

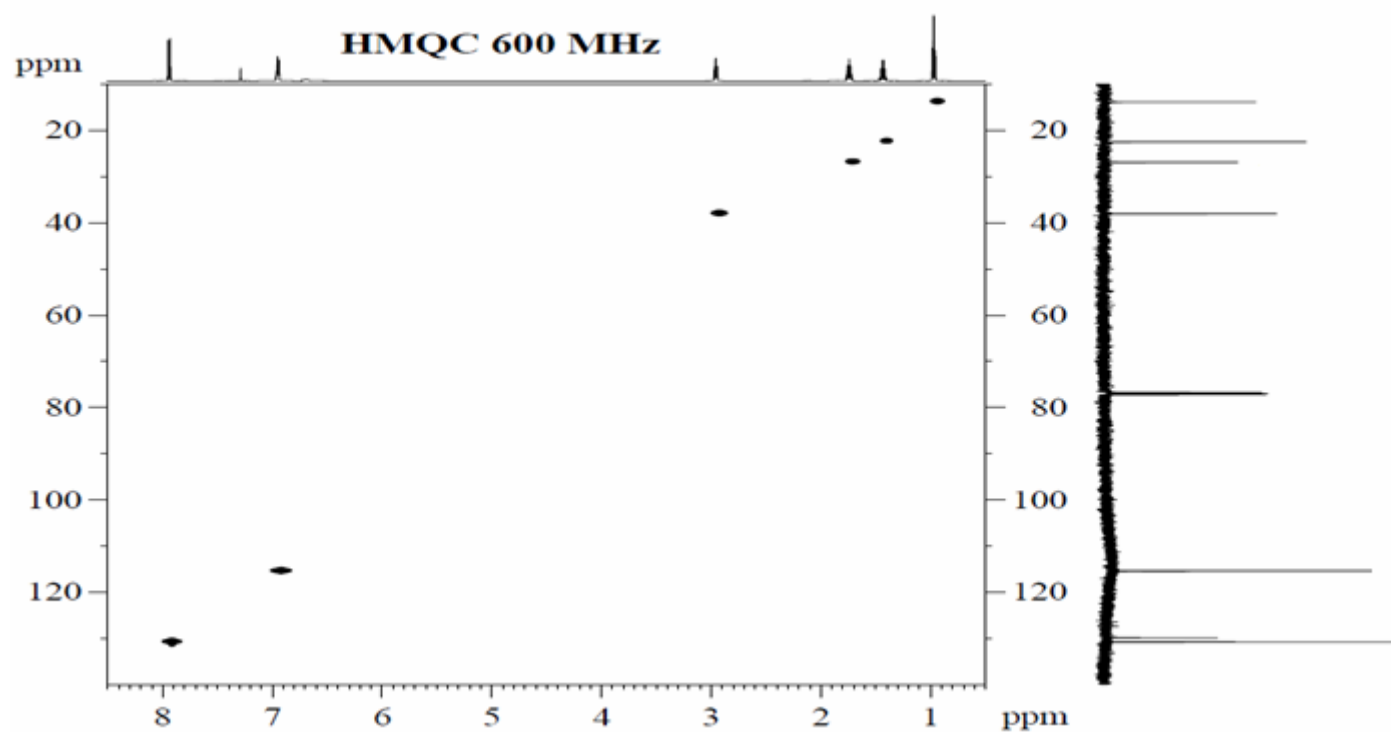
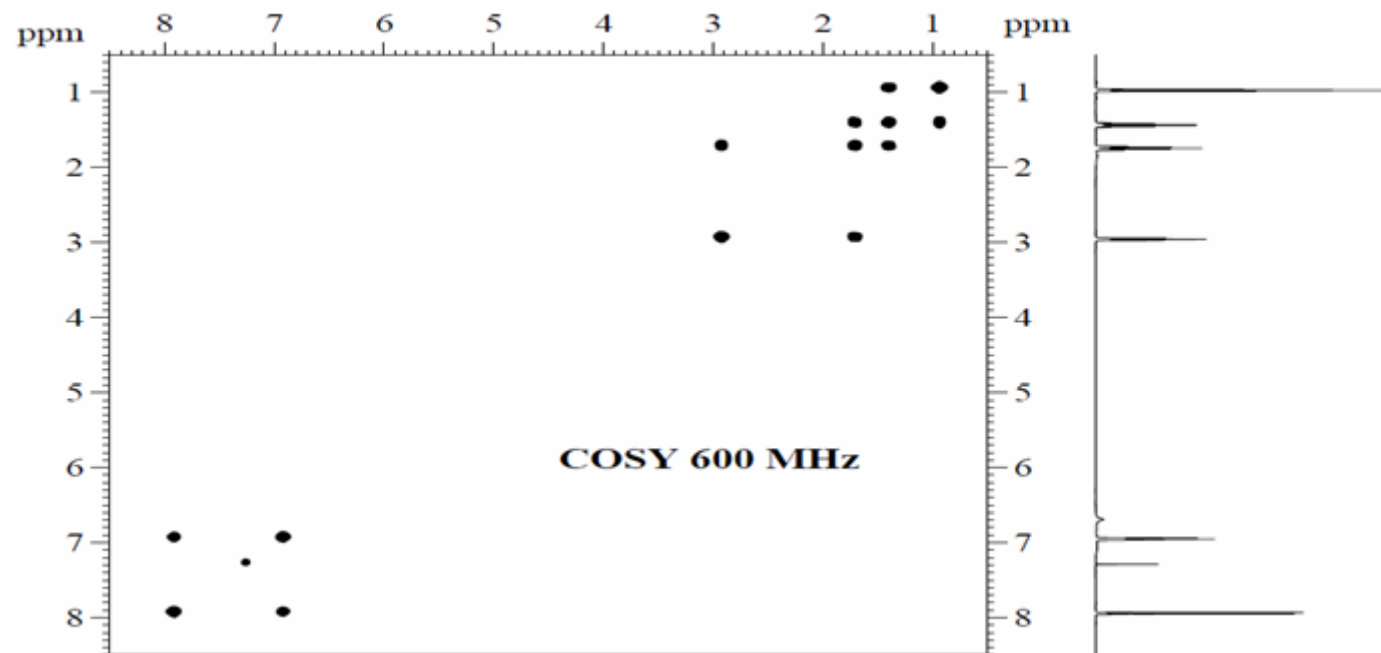
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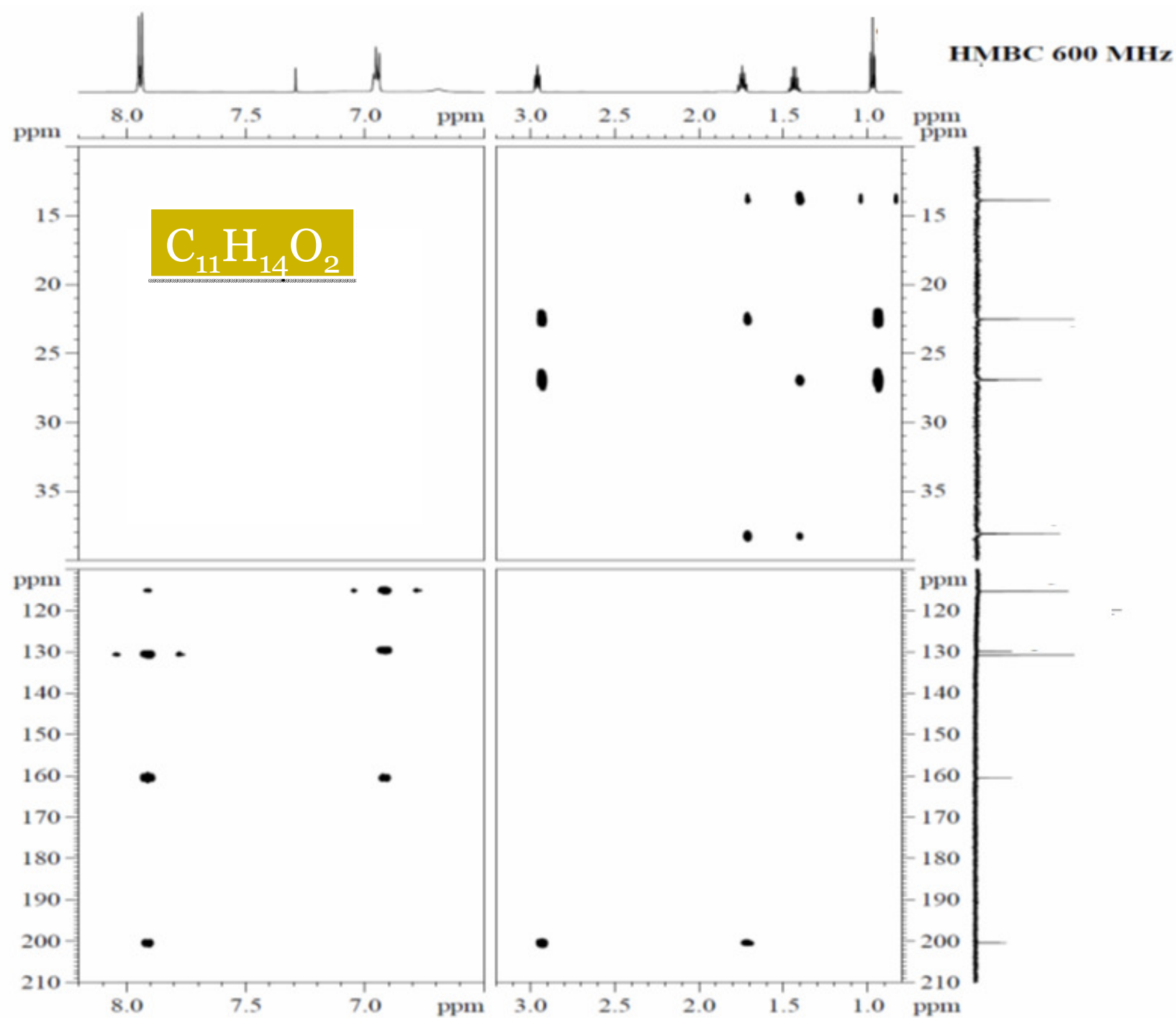
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 ^1H NMR 600 MHz $^{13}\text{C}/\text{DEPT}$ NMR 150.9 MHz

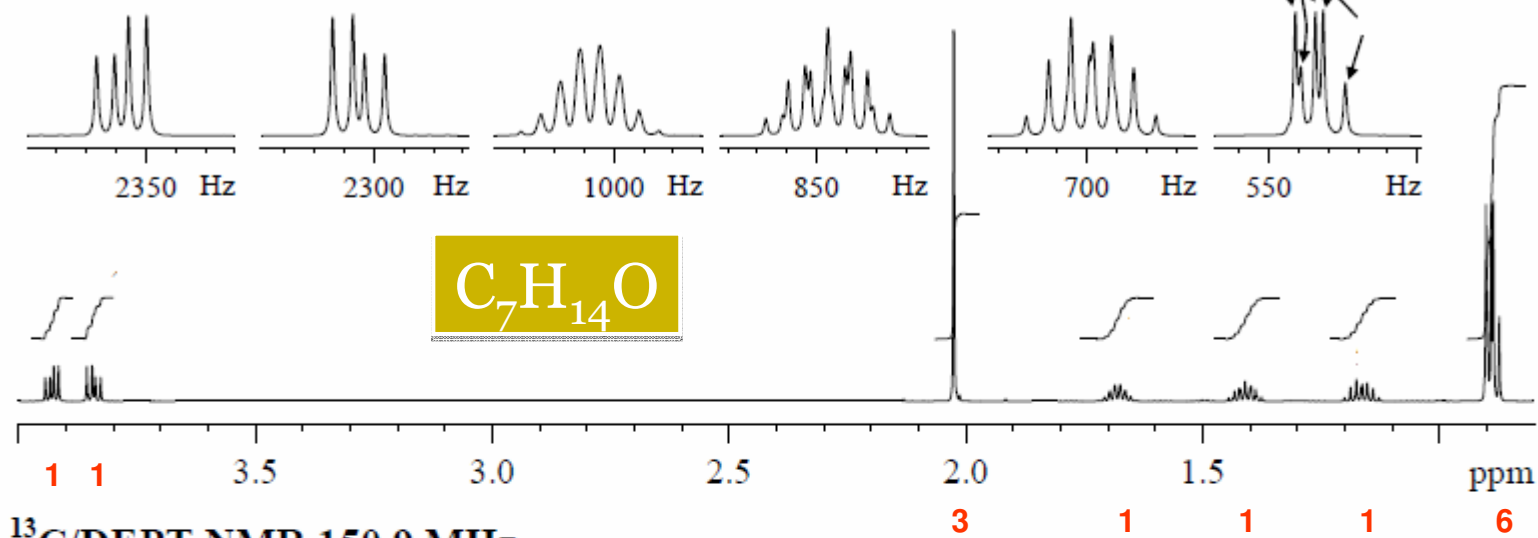
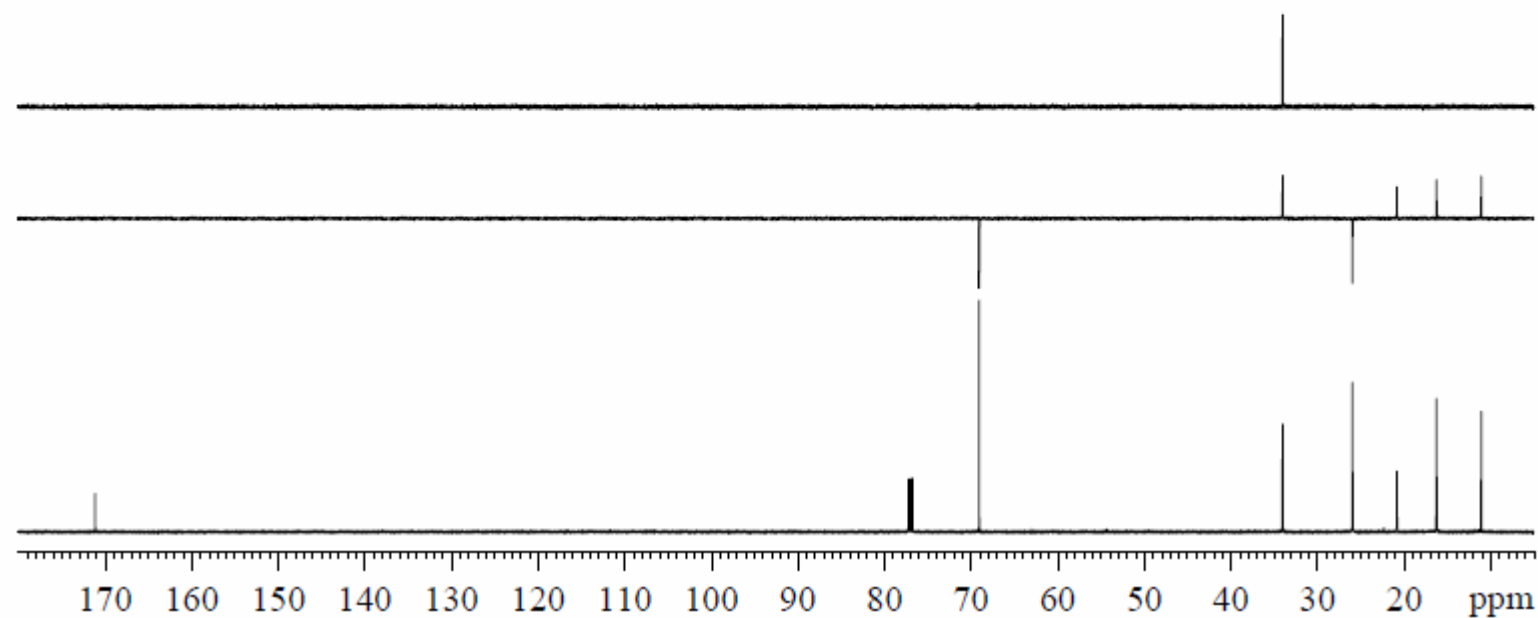
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44

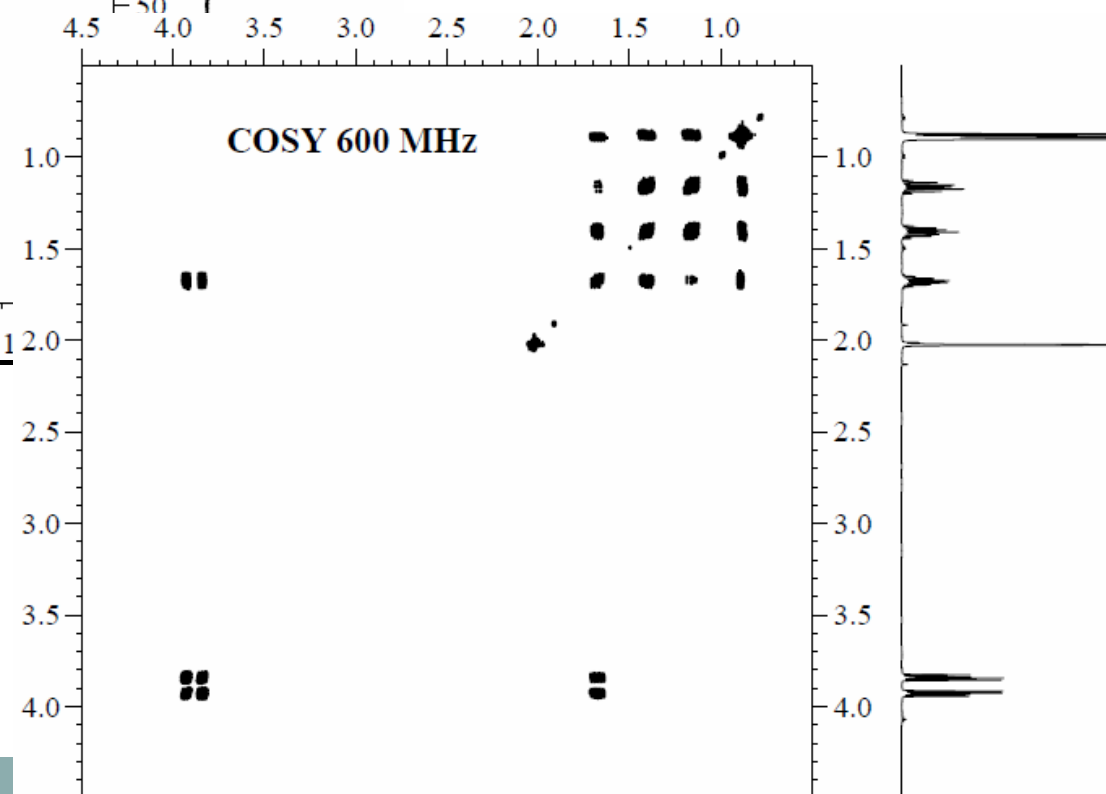
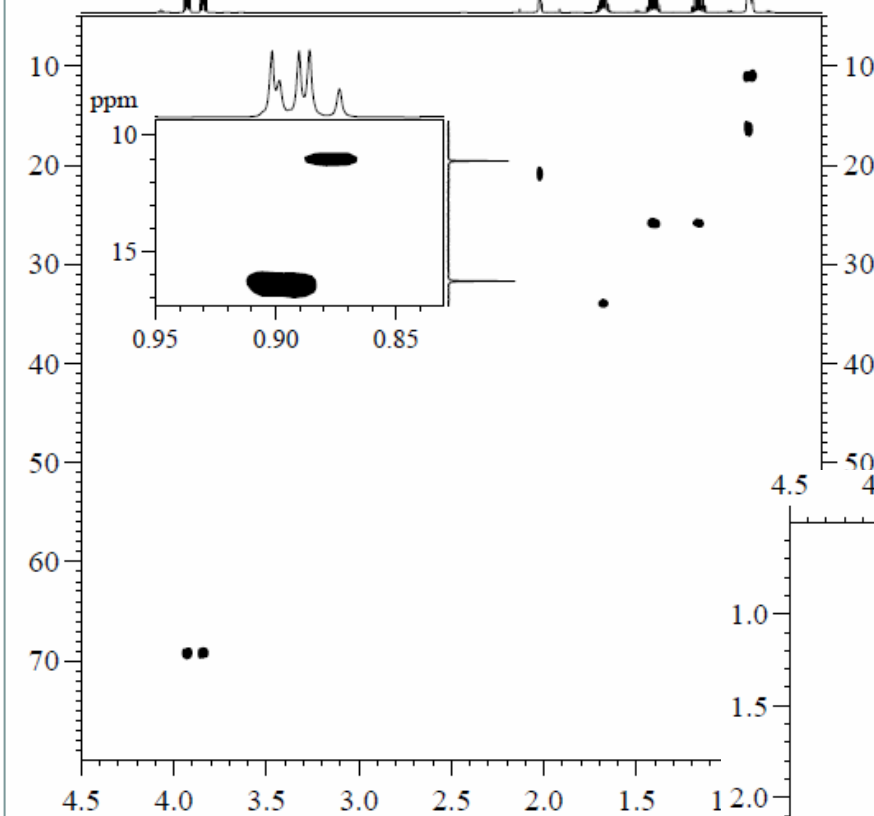


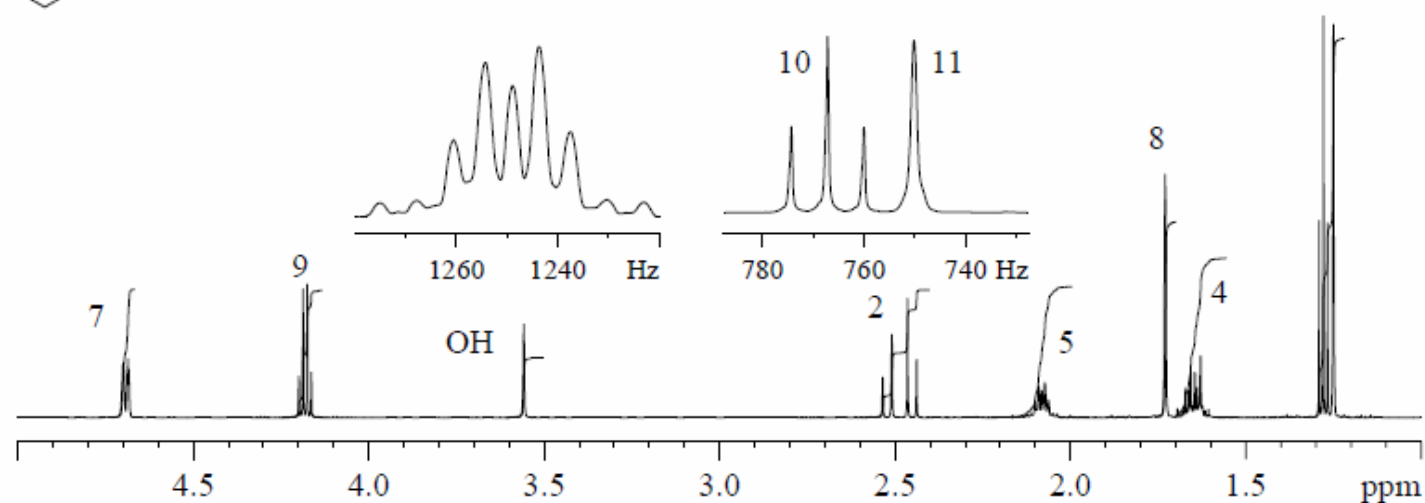
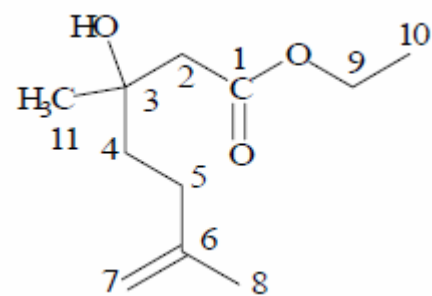
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 ^1H NMR 600 MHz $^{13}\text{C}/\text{DEPT}$ NMR 150.9 MHz

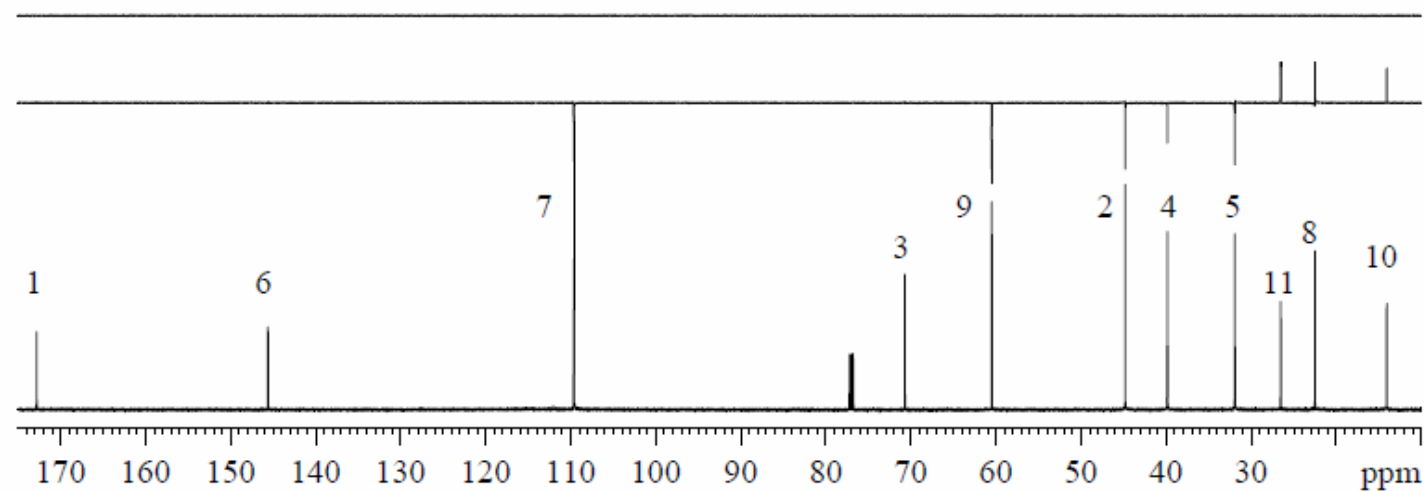
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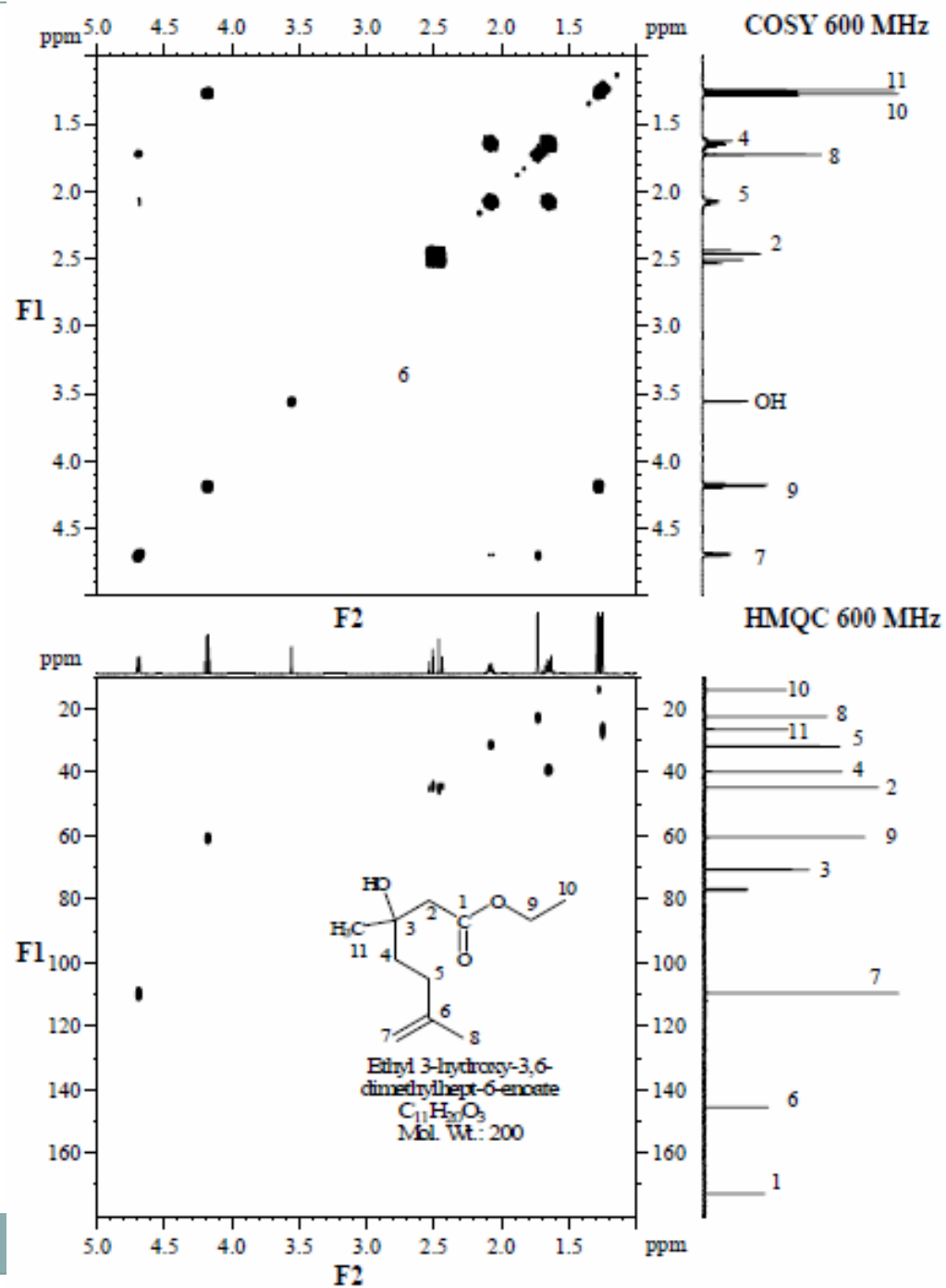
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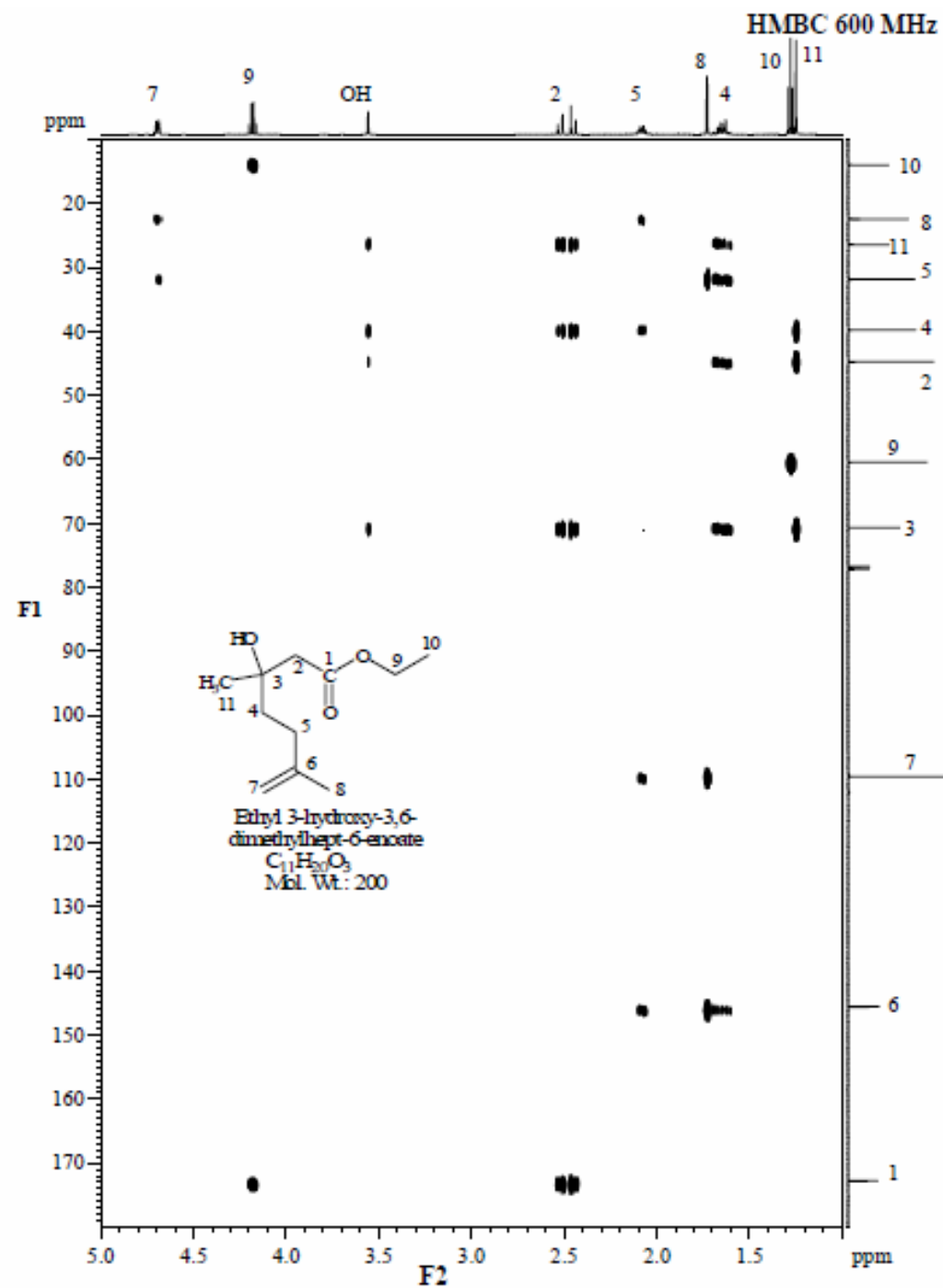




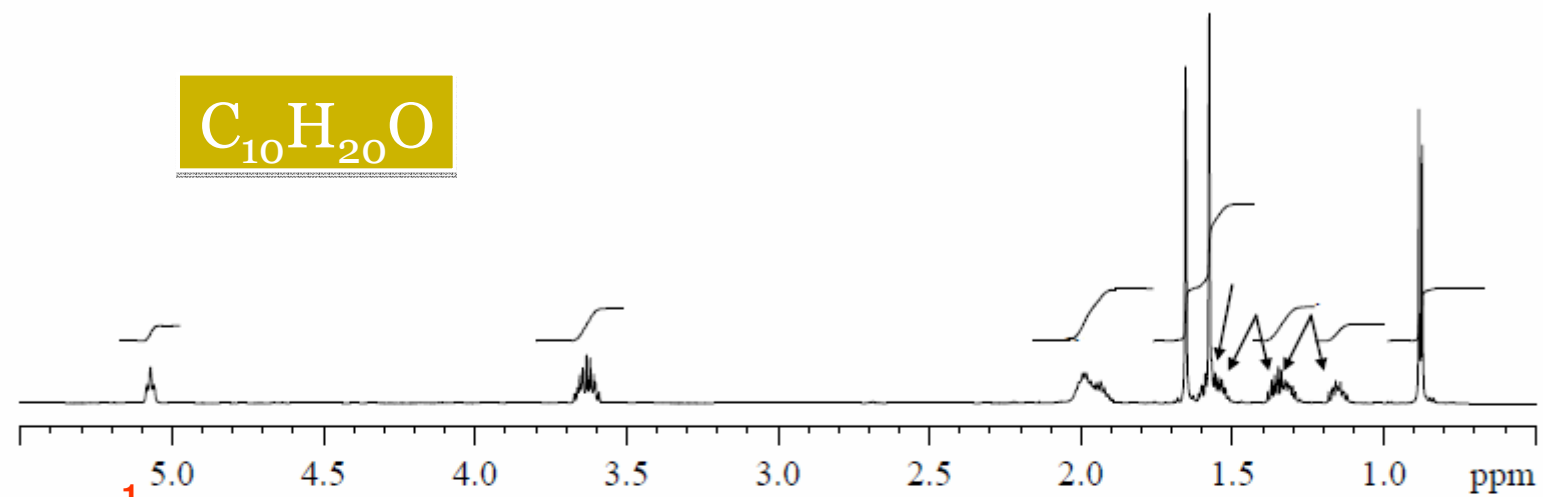
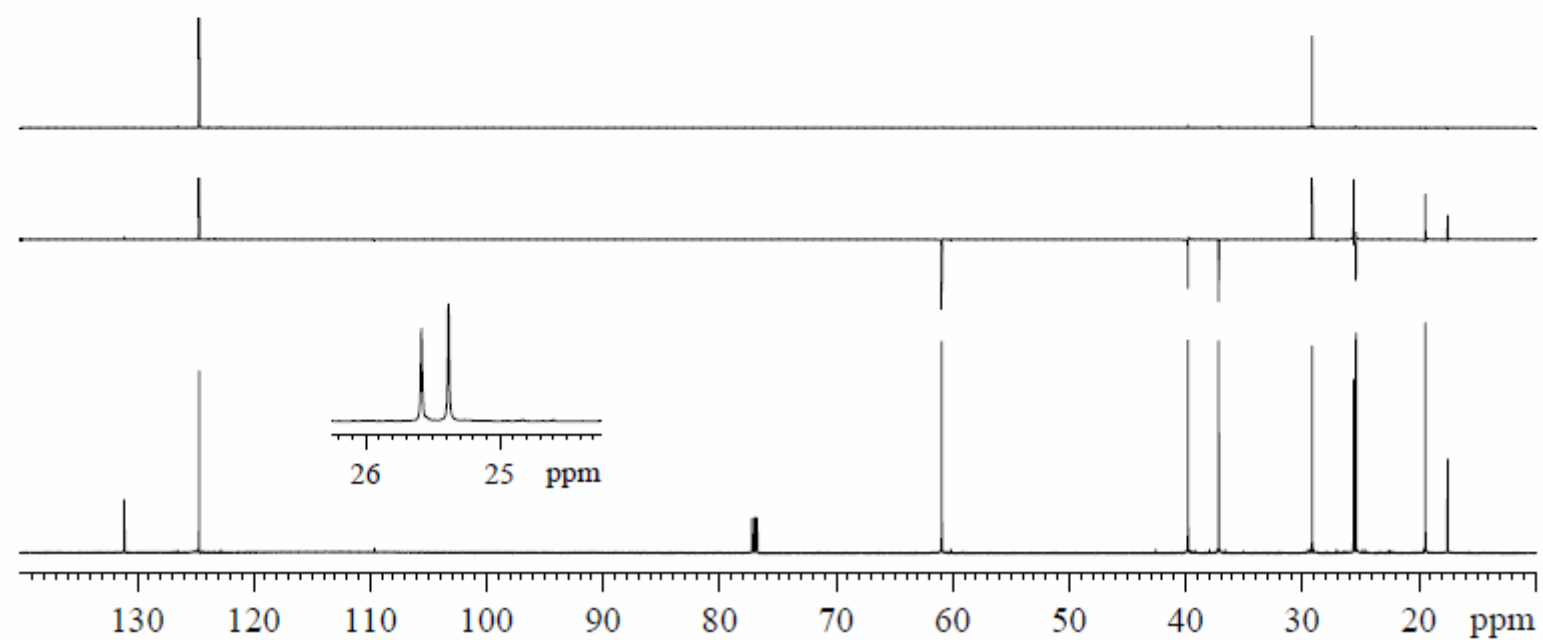
¹³C/DEPT NMR 150.9 MHz

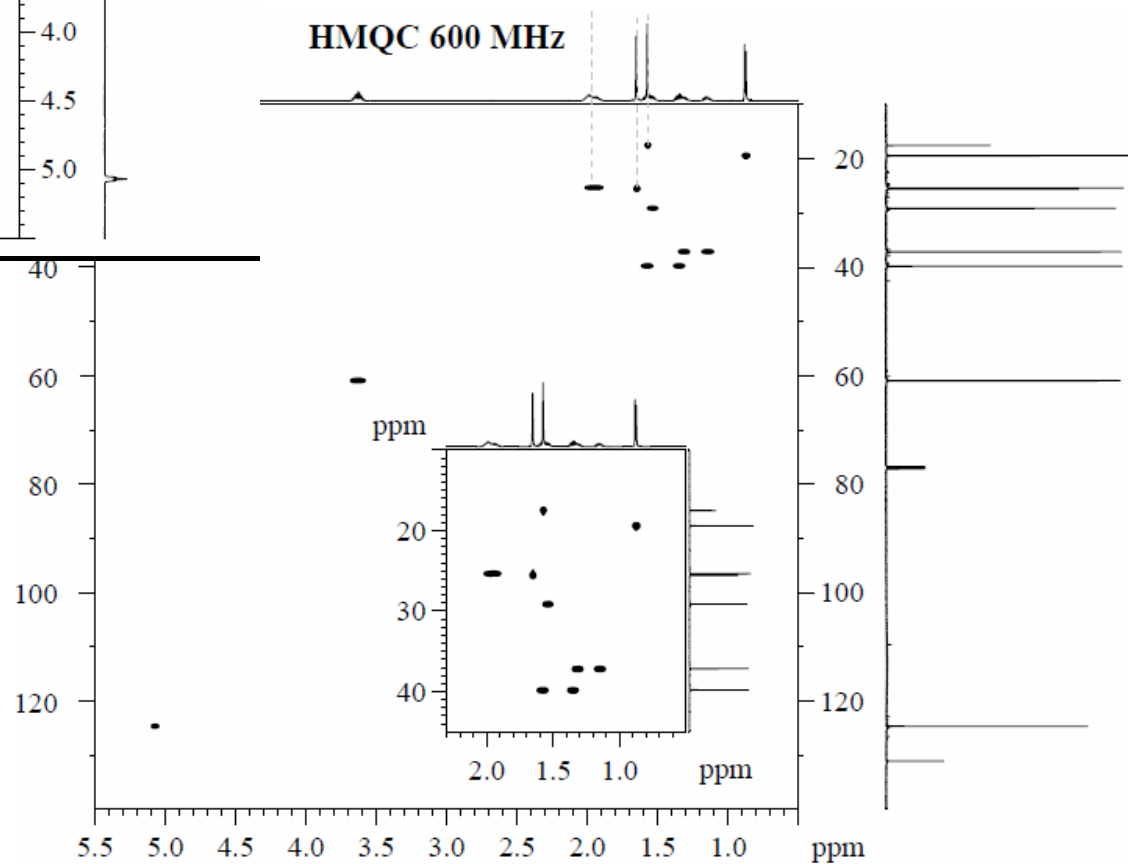
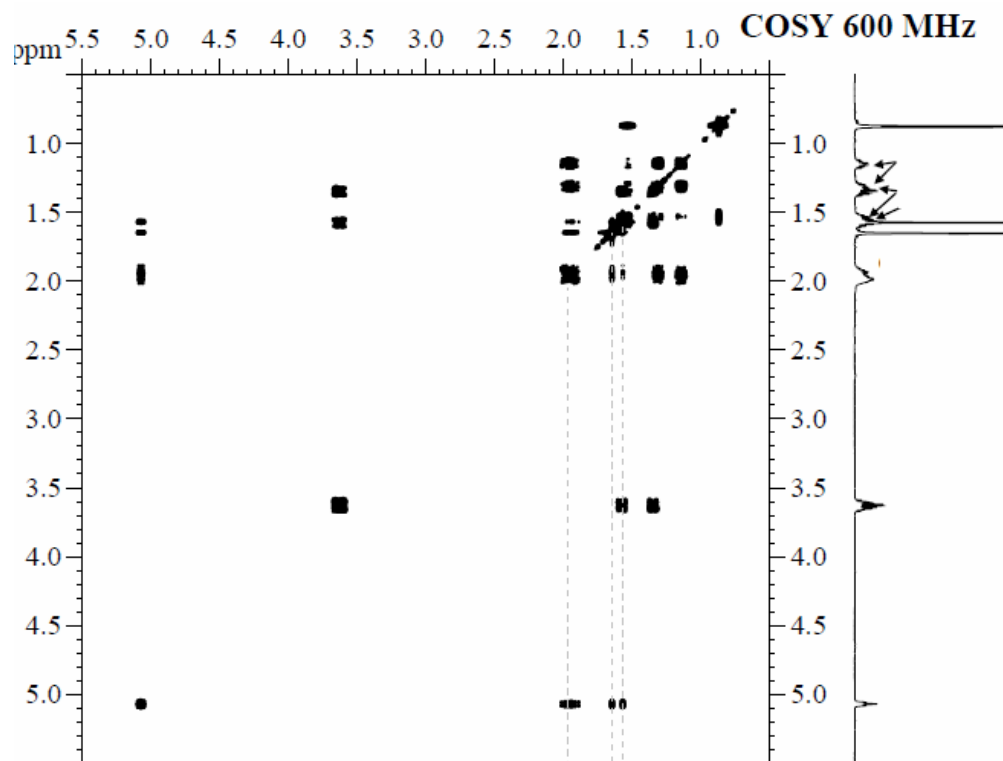
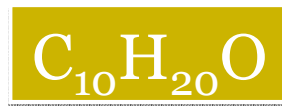




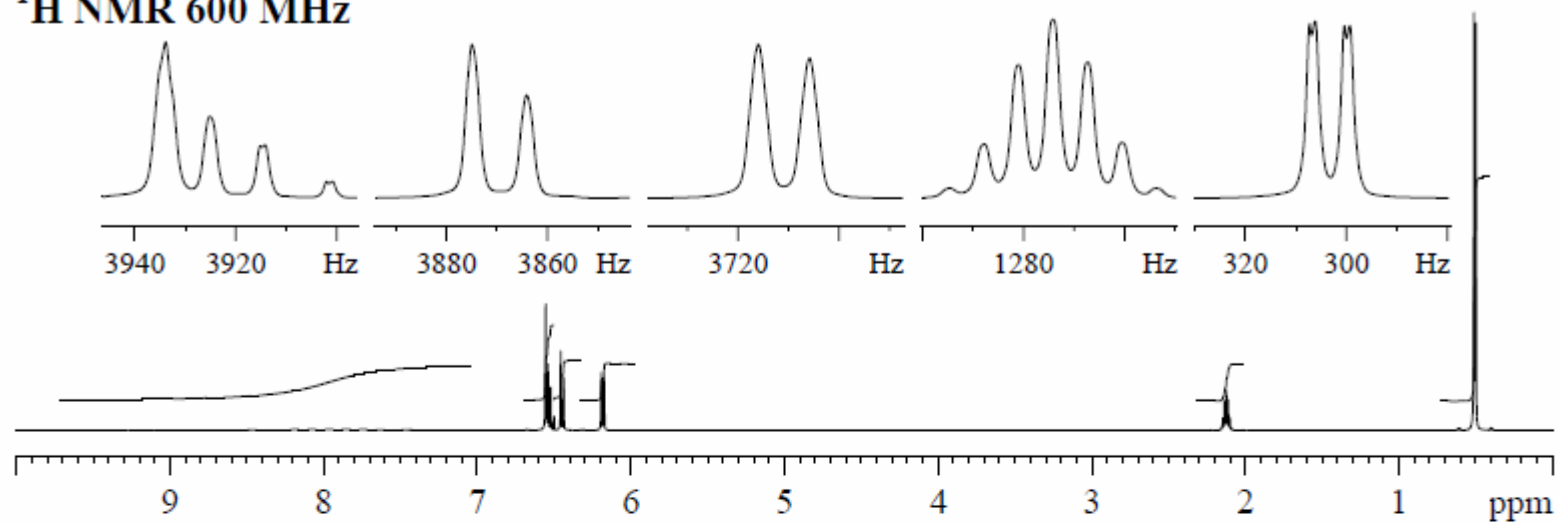
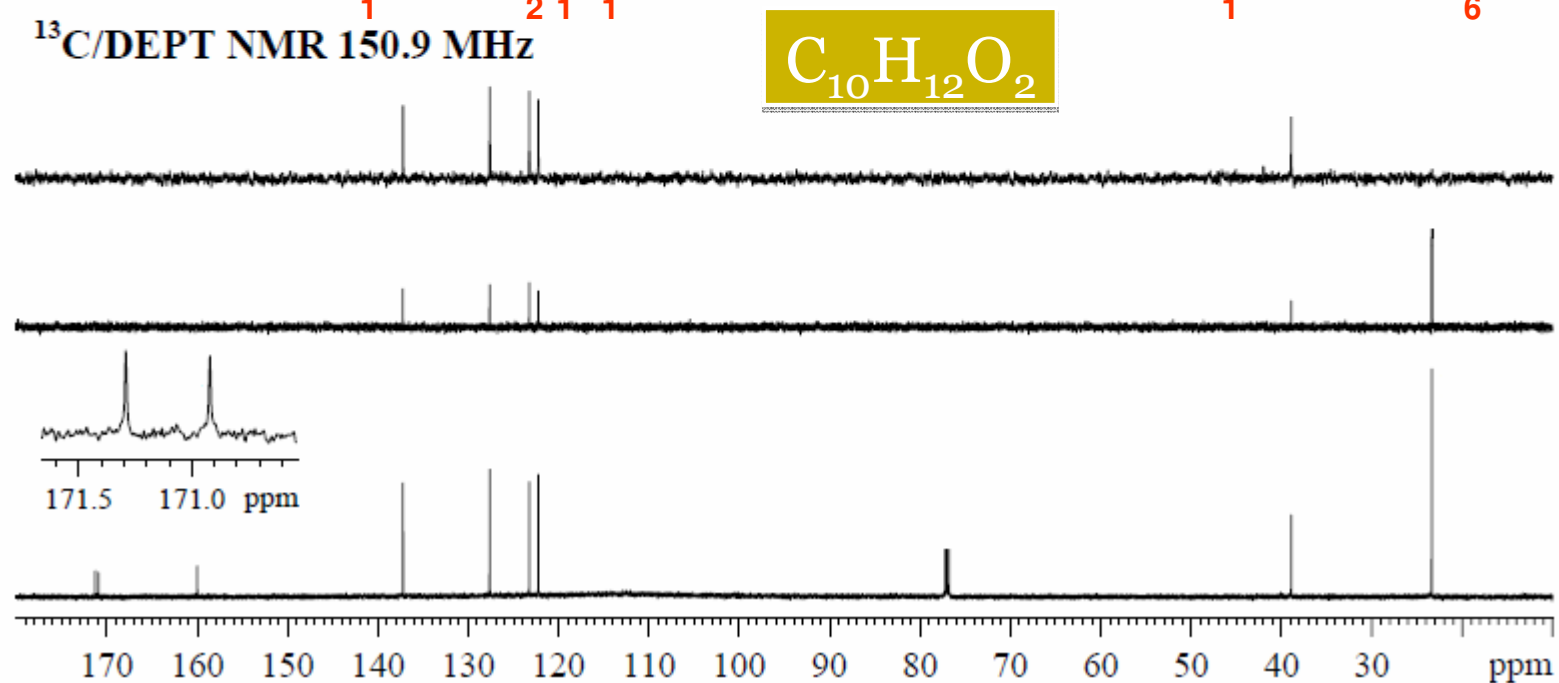


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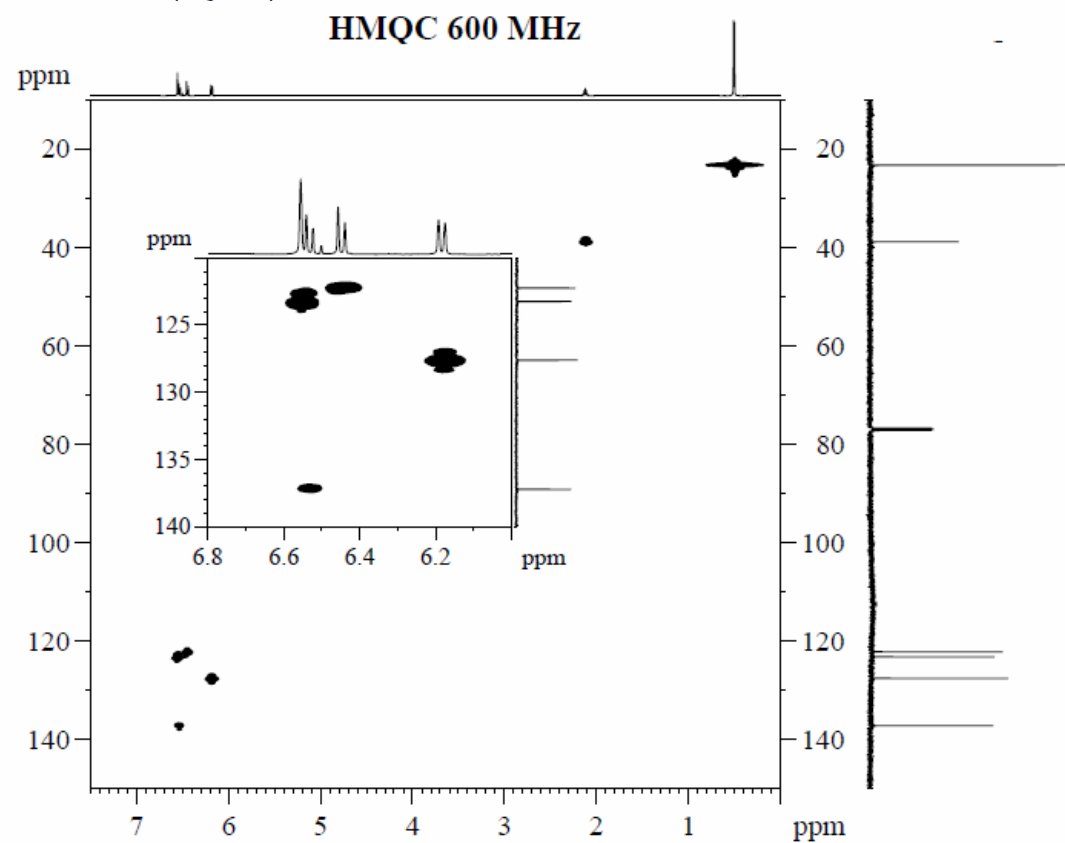
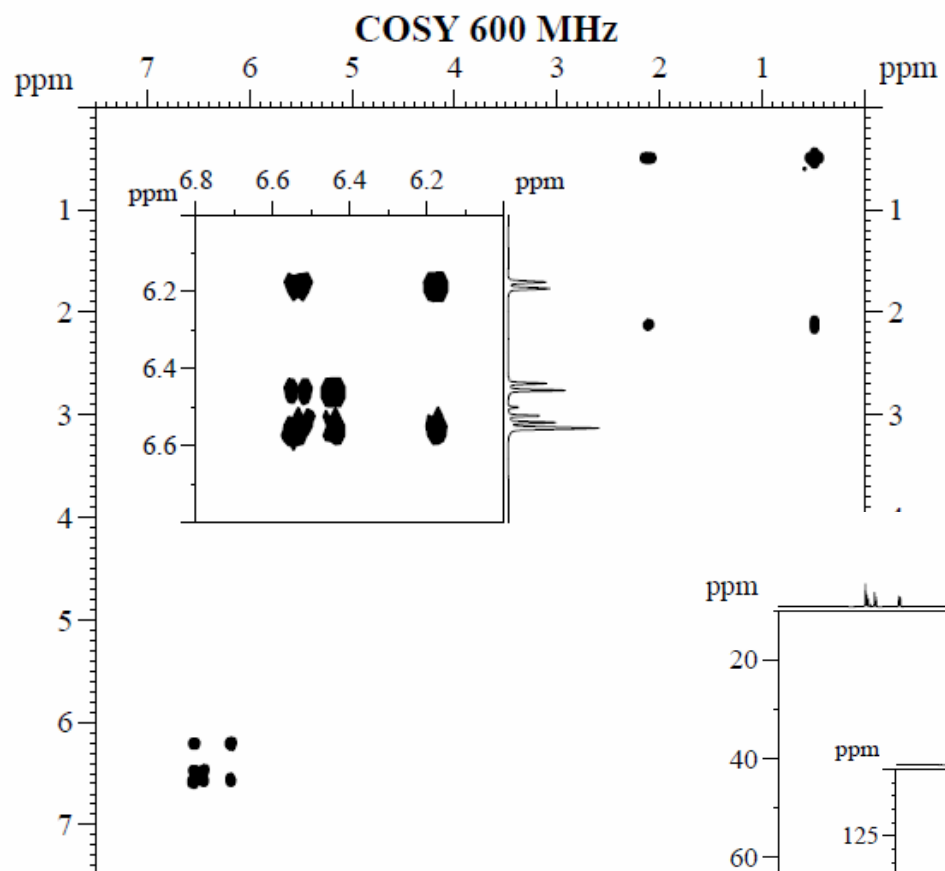
 ^1H NMR 600 MHz $^{13}\text{C}/\text{DEPT}$ NMR 150.9 MHz



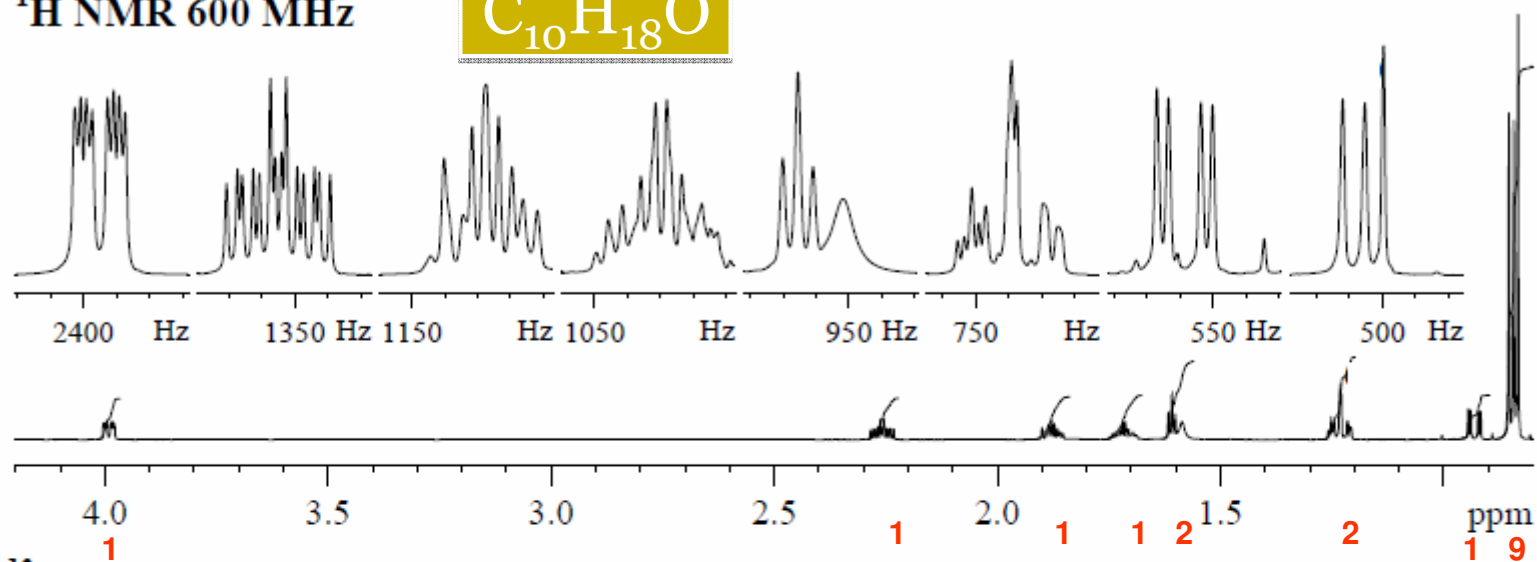
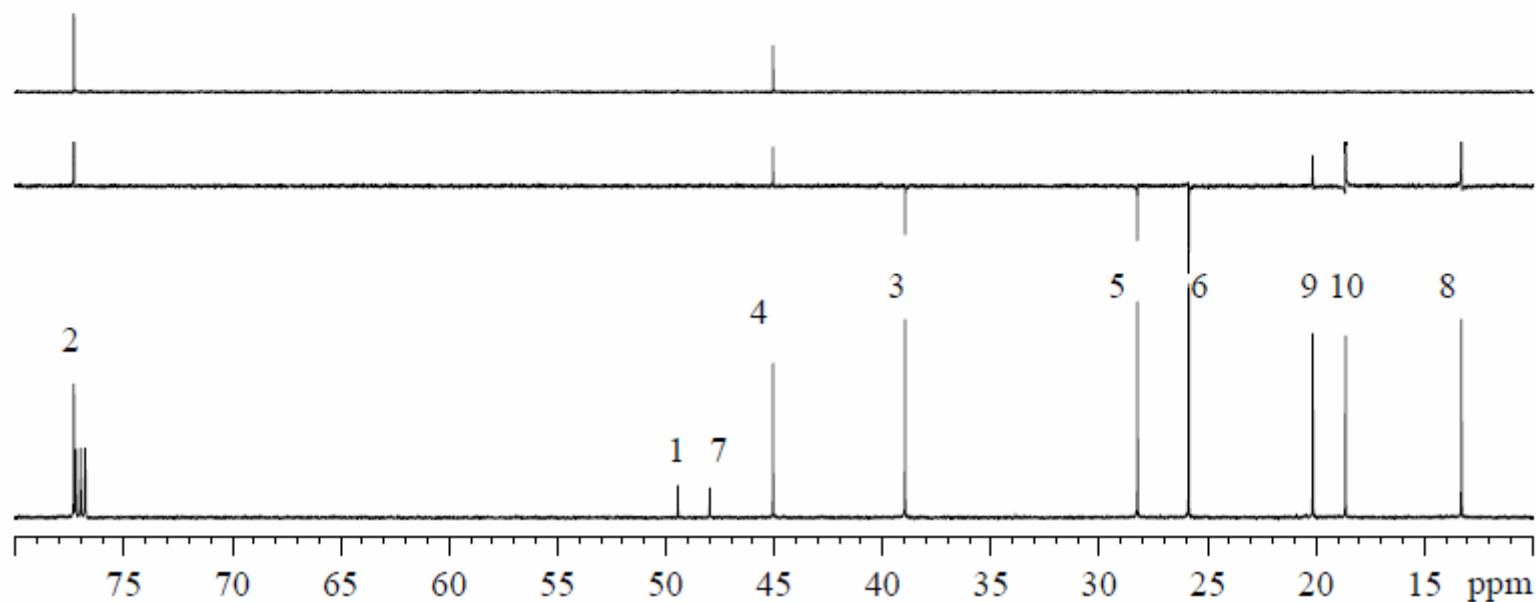
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 ^1H NMR 600 MHz $^{13}\text{C}/\text{DEPT}$ NMR 150.9 MHz

38



32

 ^1H NMR 600 MHz $^{13}\text{C}/\text{DEPT}$ NMR 150.9 MHz



32

