

## Truce-Smiles rearrangement of substituted phenyl ethers

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### Supporting Information

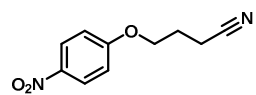
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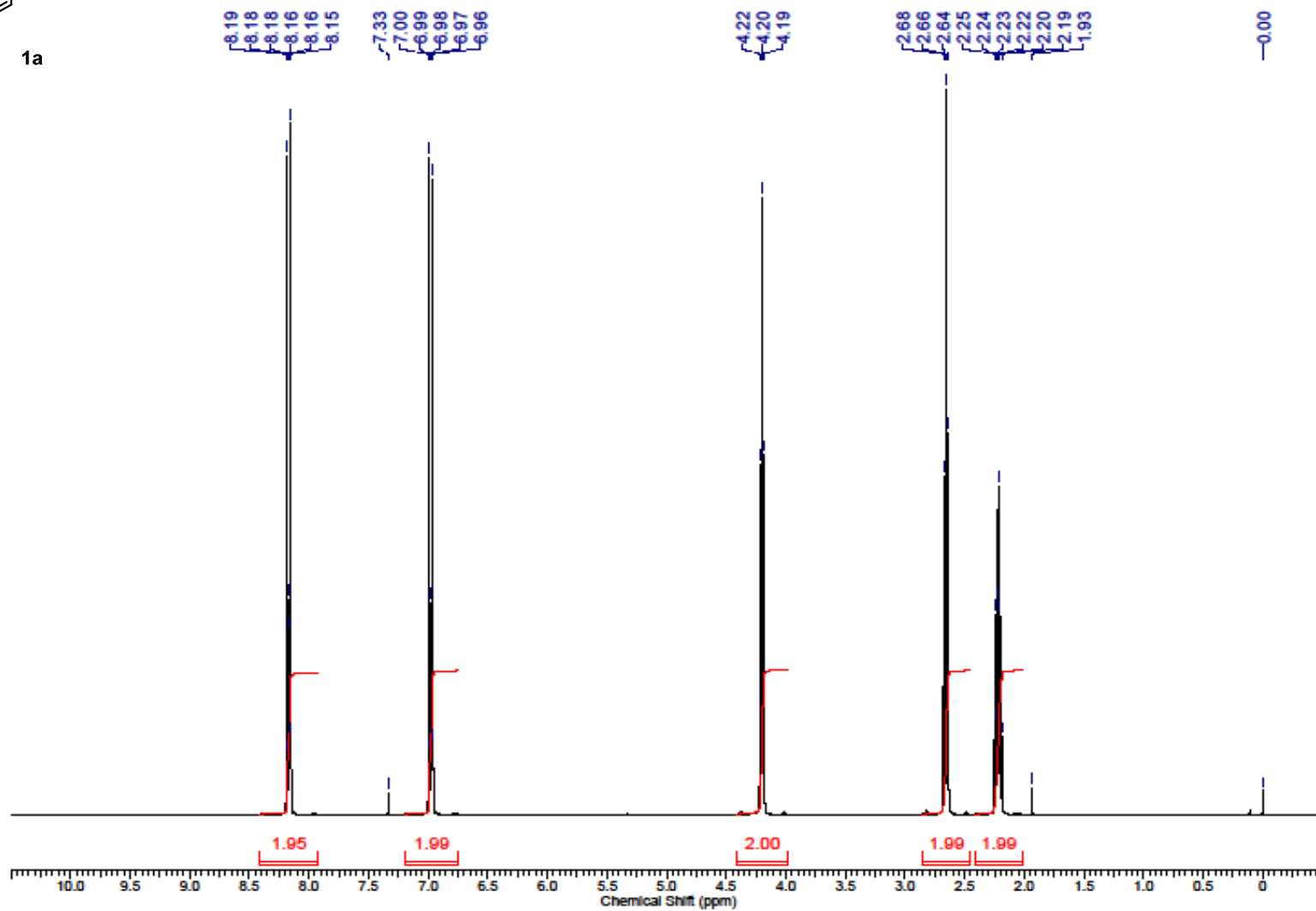
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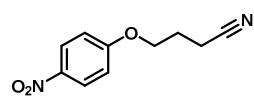
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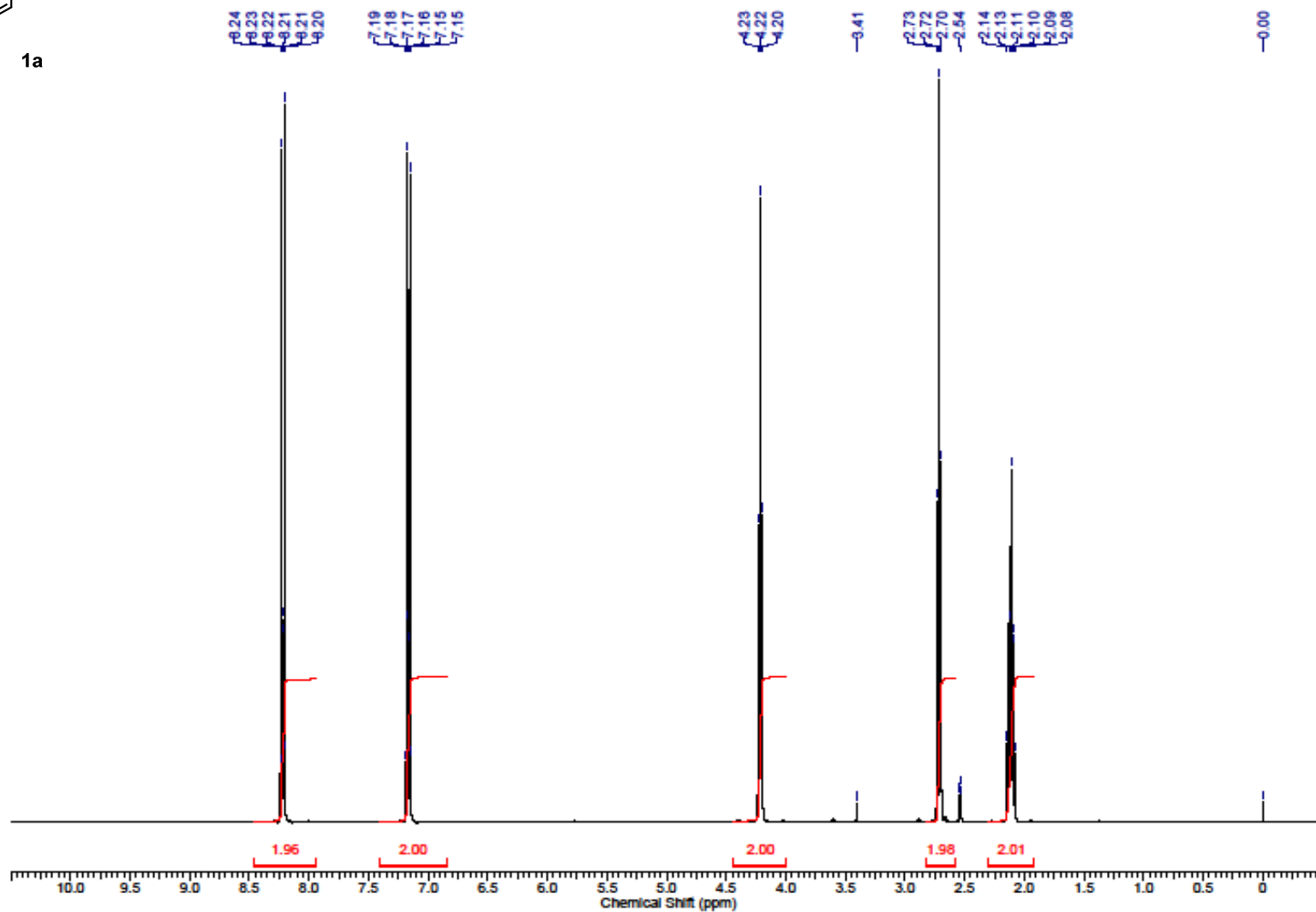
**1a**



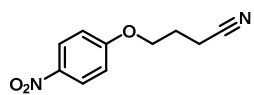
$^1\text{H}$  NMR spectrum of **1a** in  $(\text{CD}_3)_2\text{SO}$  with 0.05% v/v TMS (400 MHz)



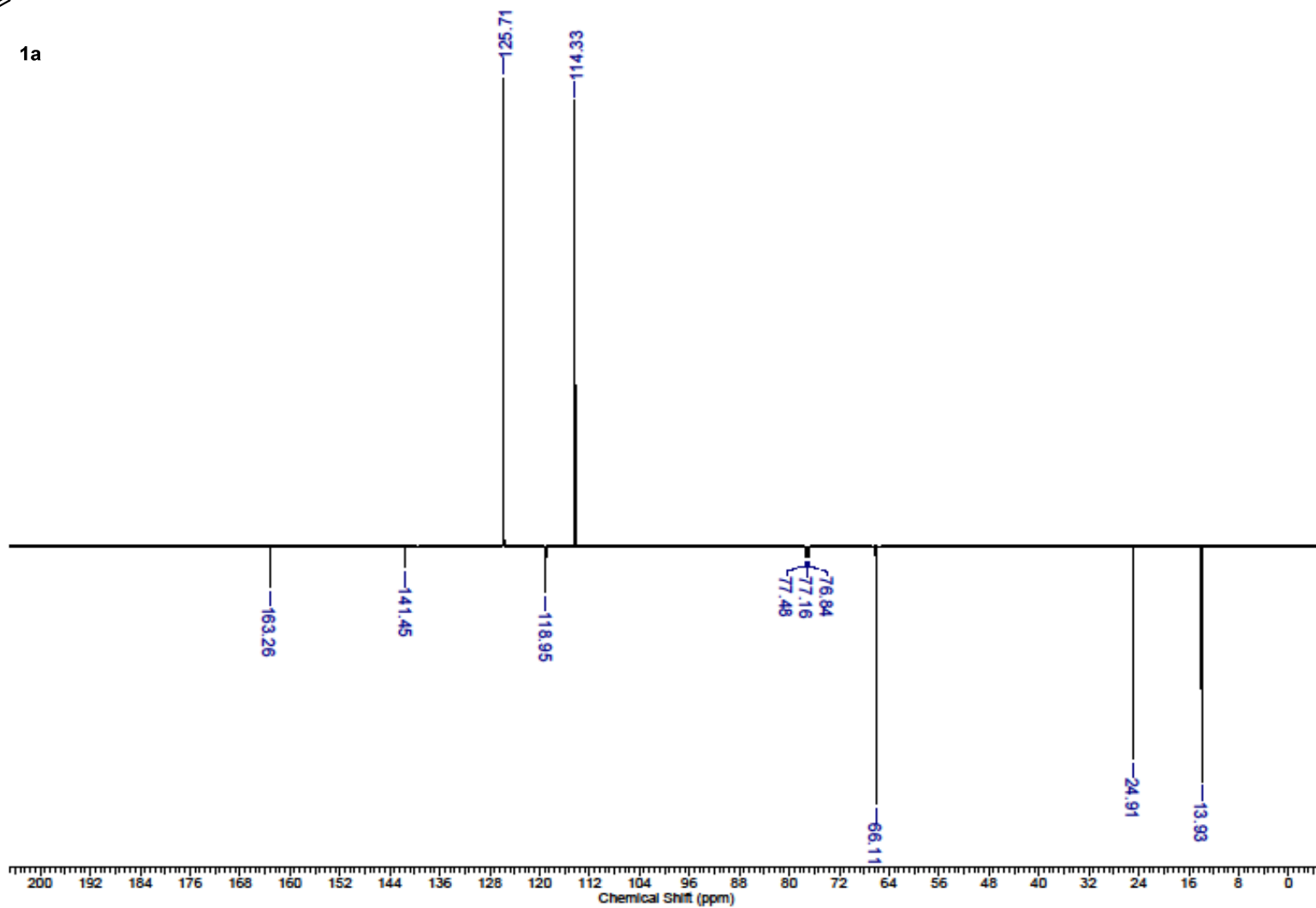
**1a**



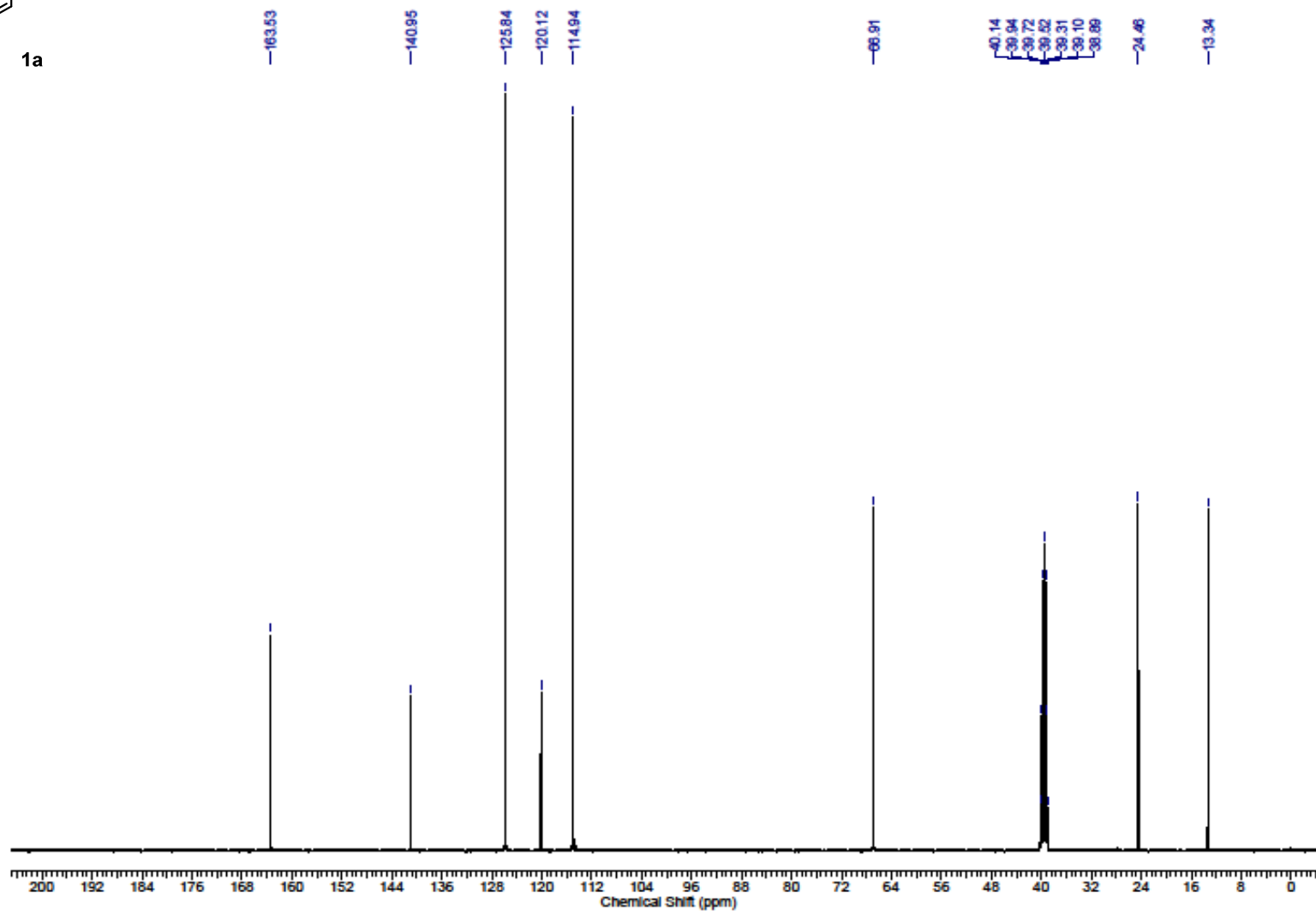
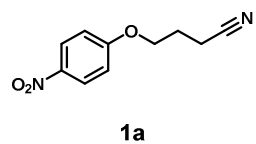
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1a** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



**1a**

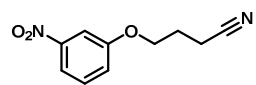


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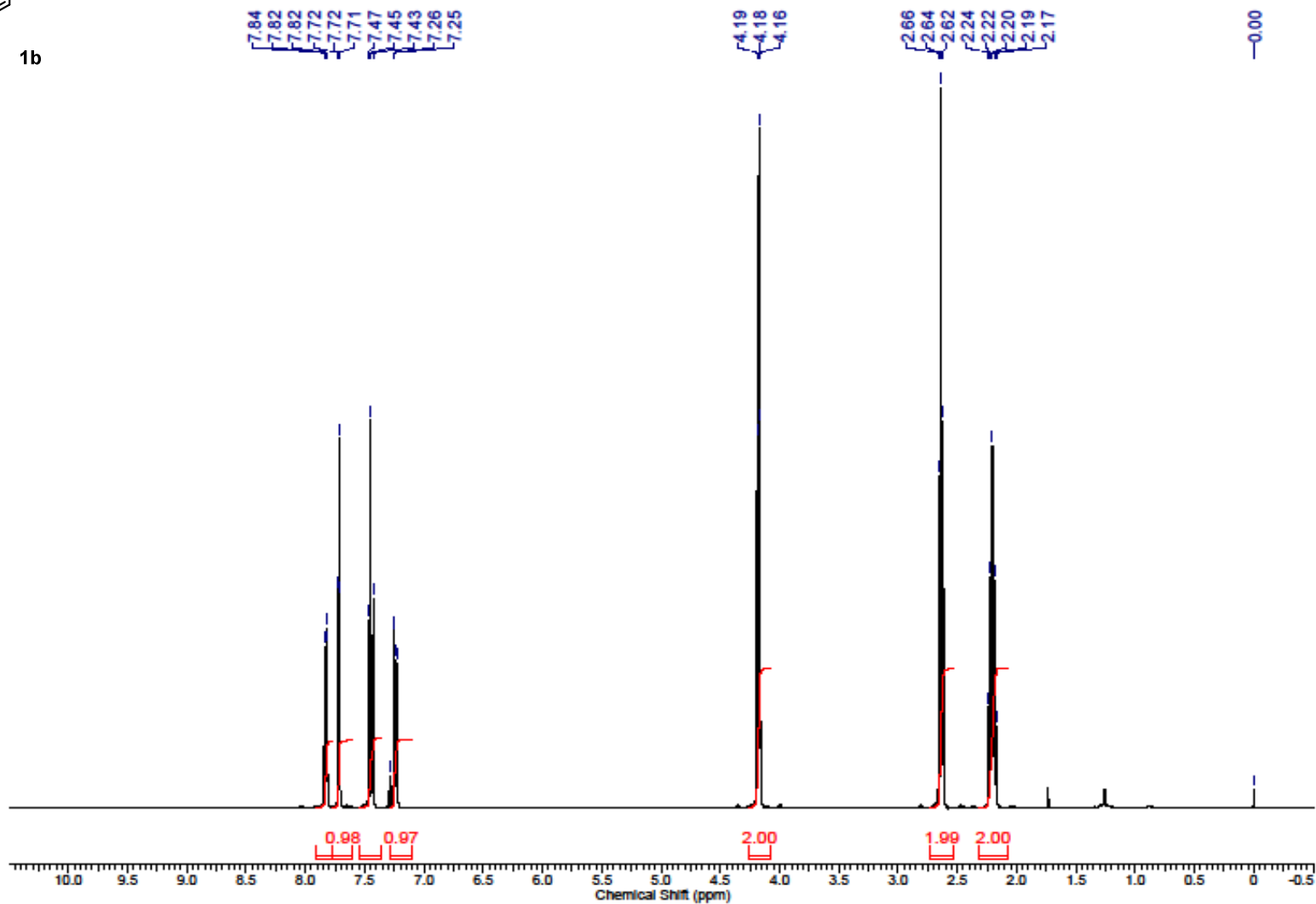




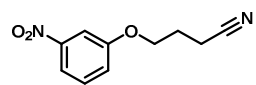
$^1\text{H}$  NMR spectrum of **1b** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



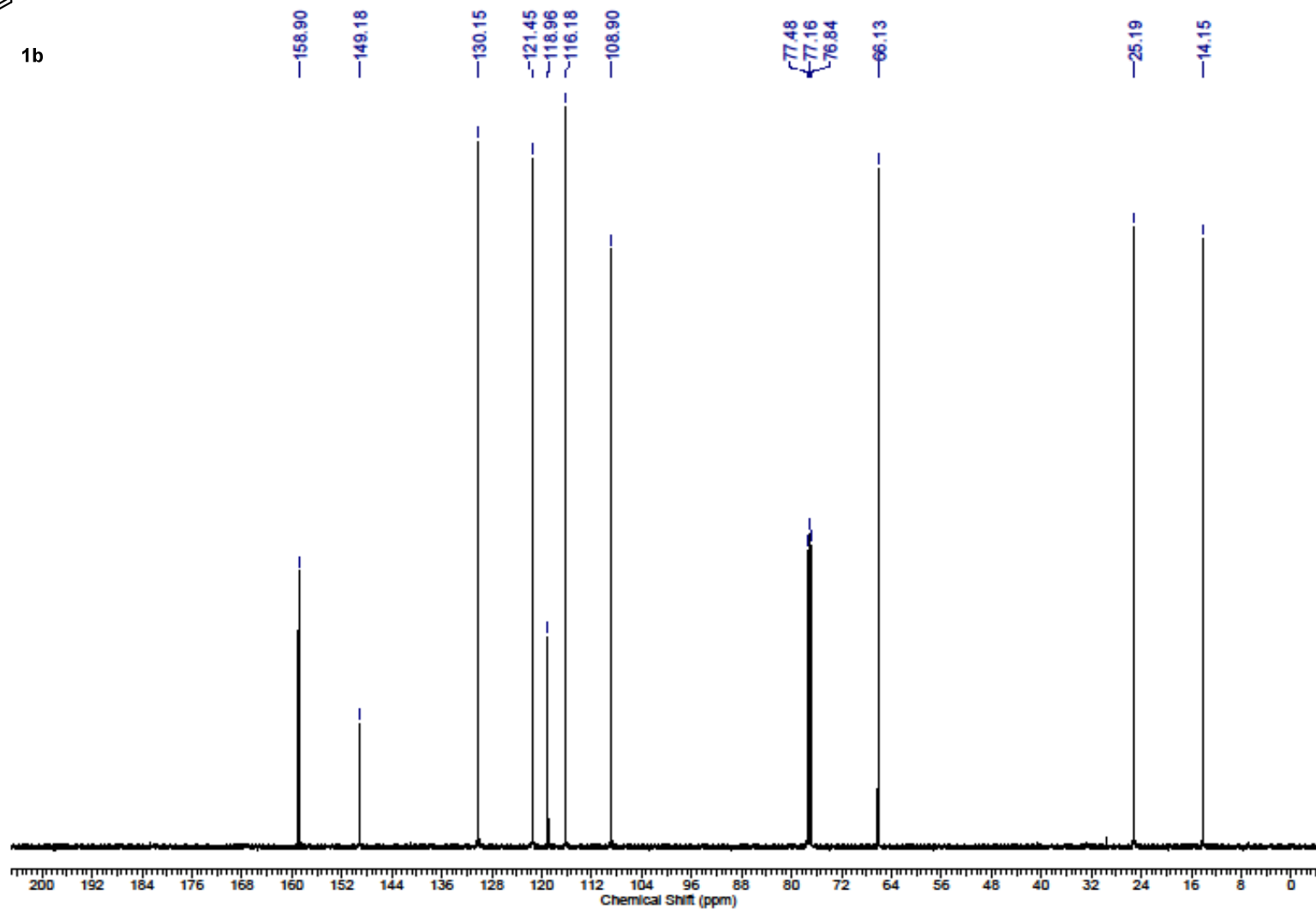
**1b**



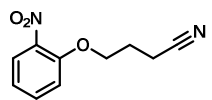
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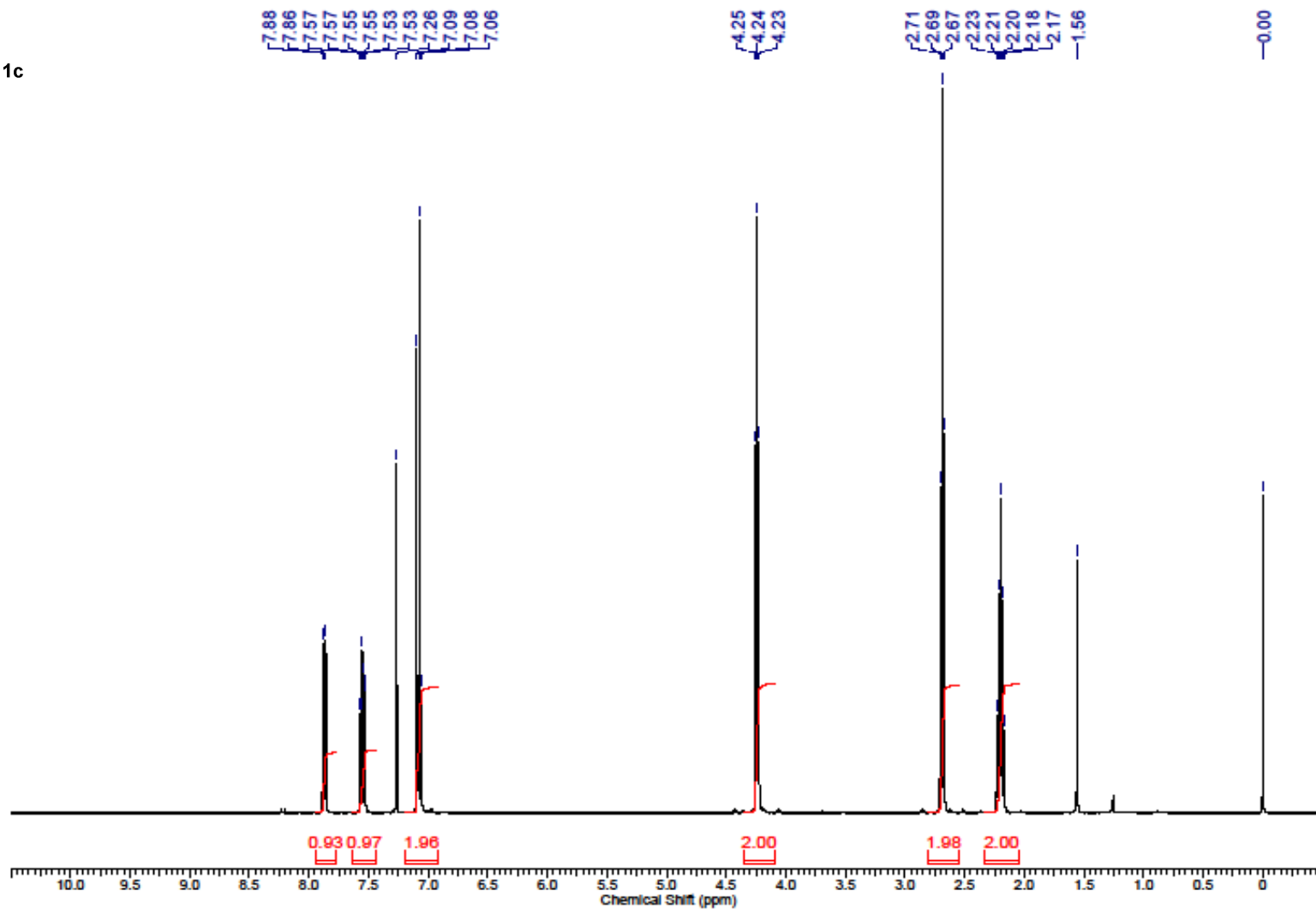
**1b**



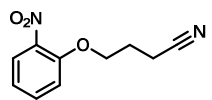
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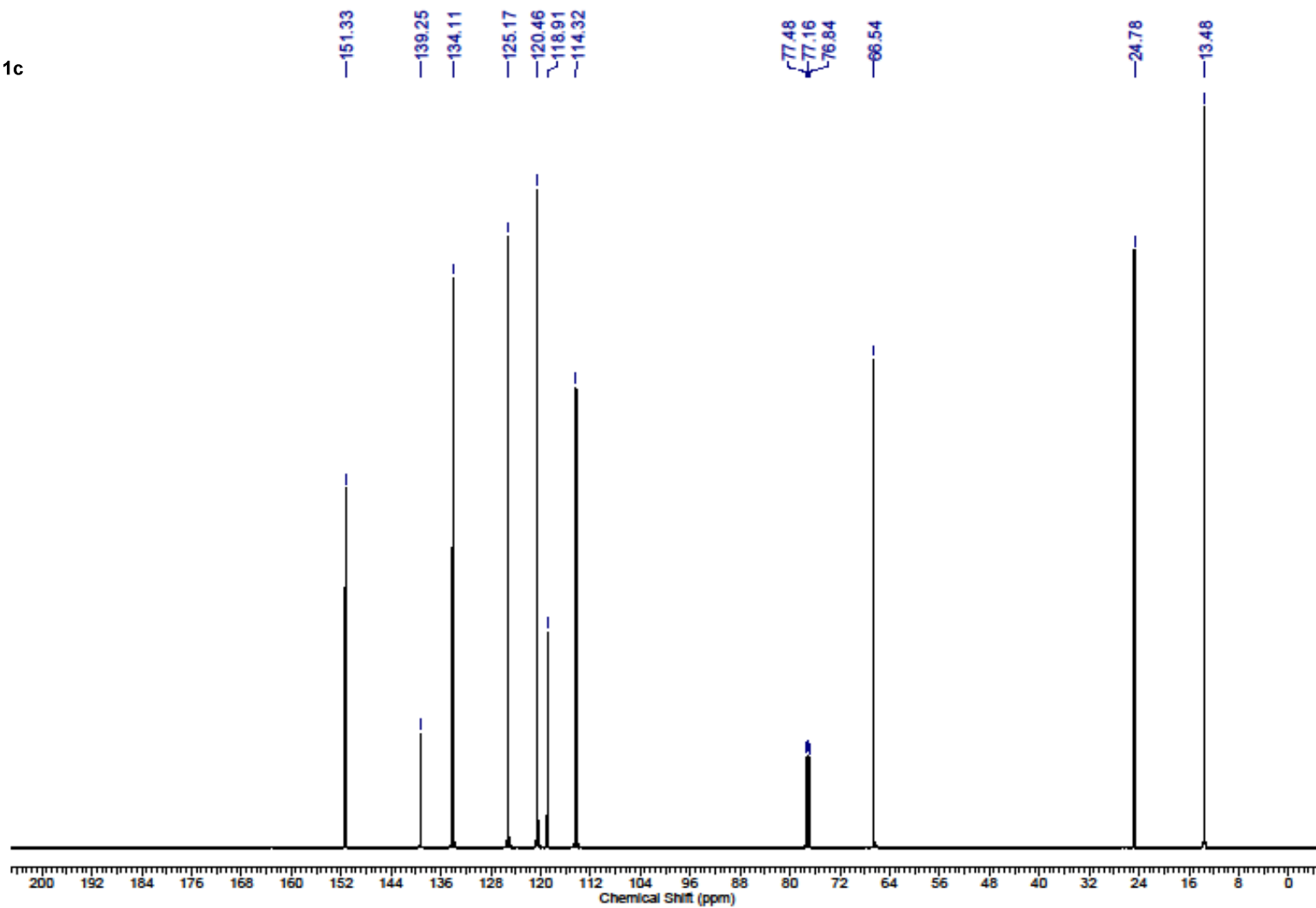
**1c**



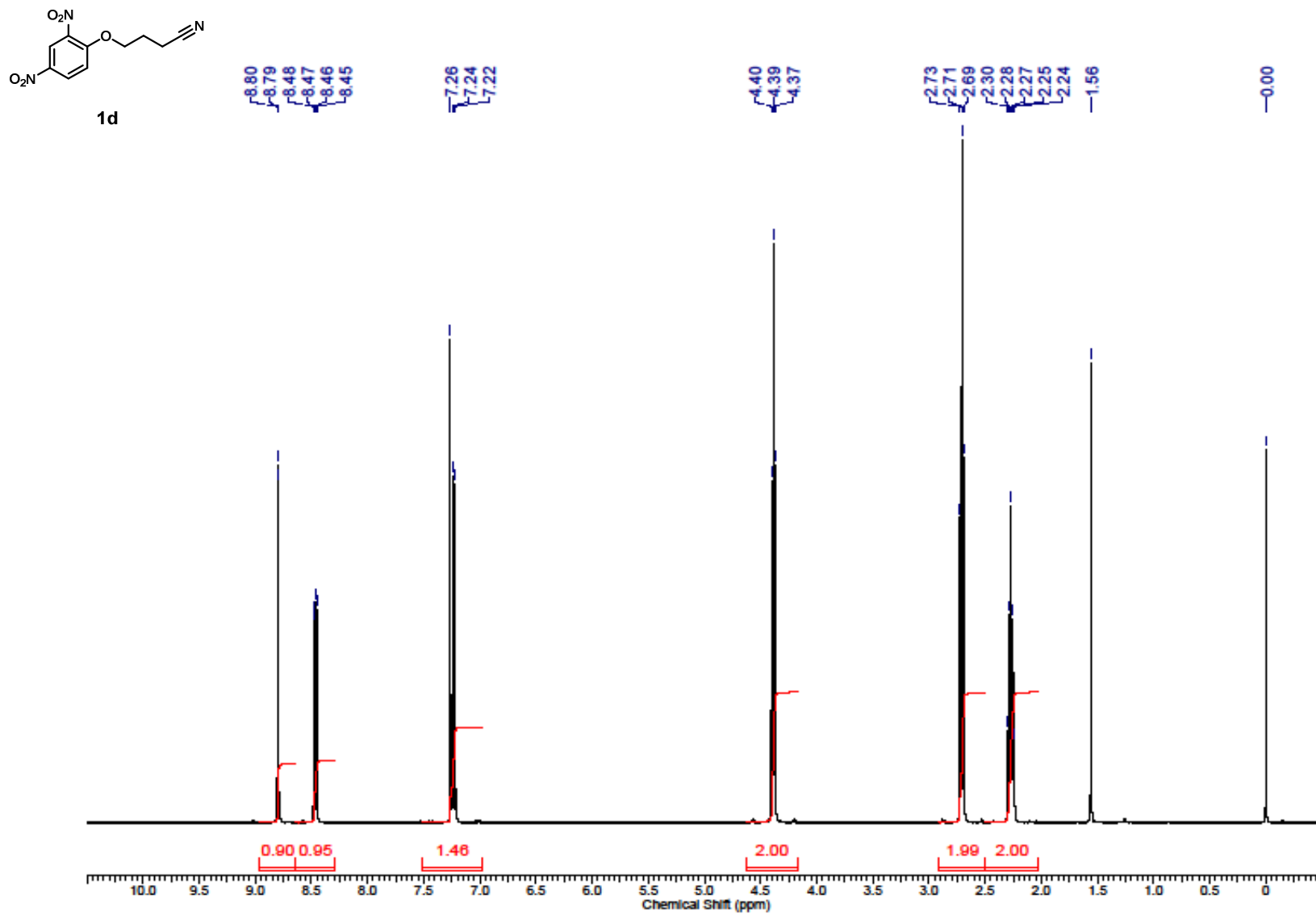
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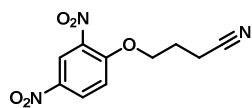
**1c**



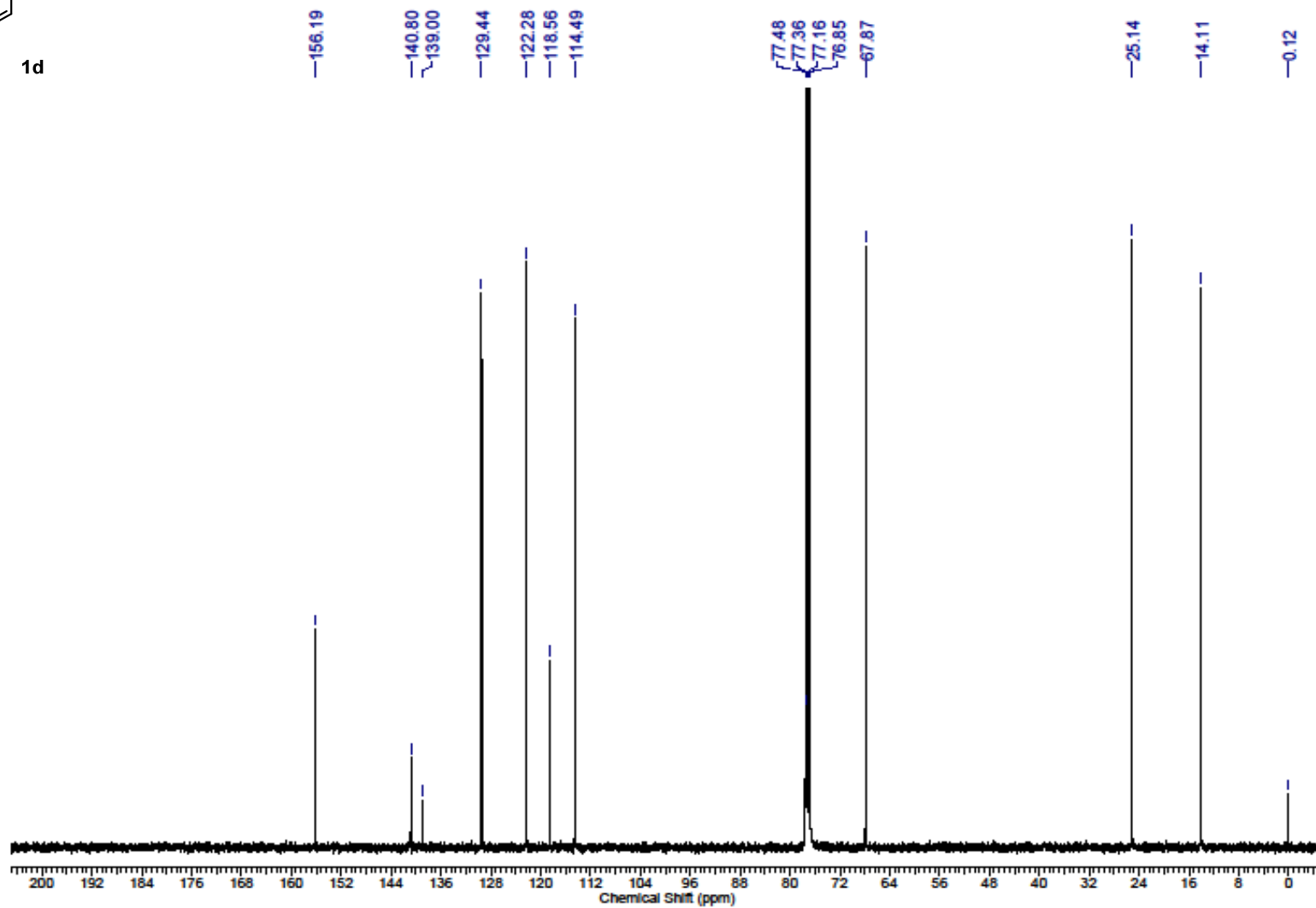
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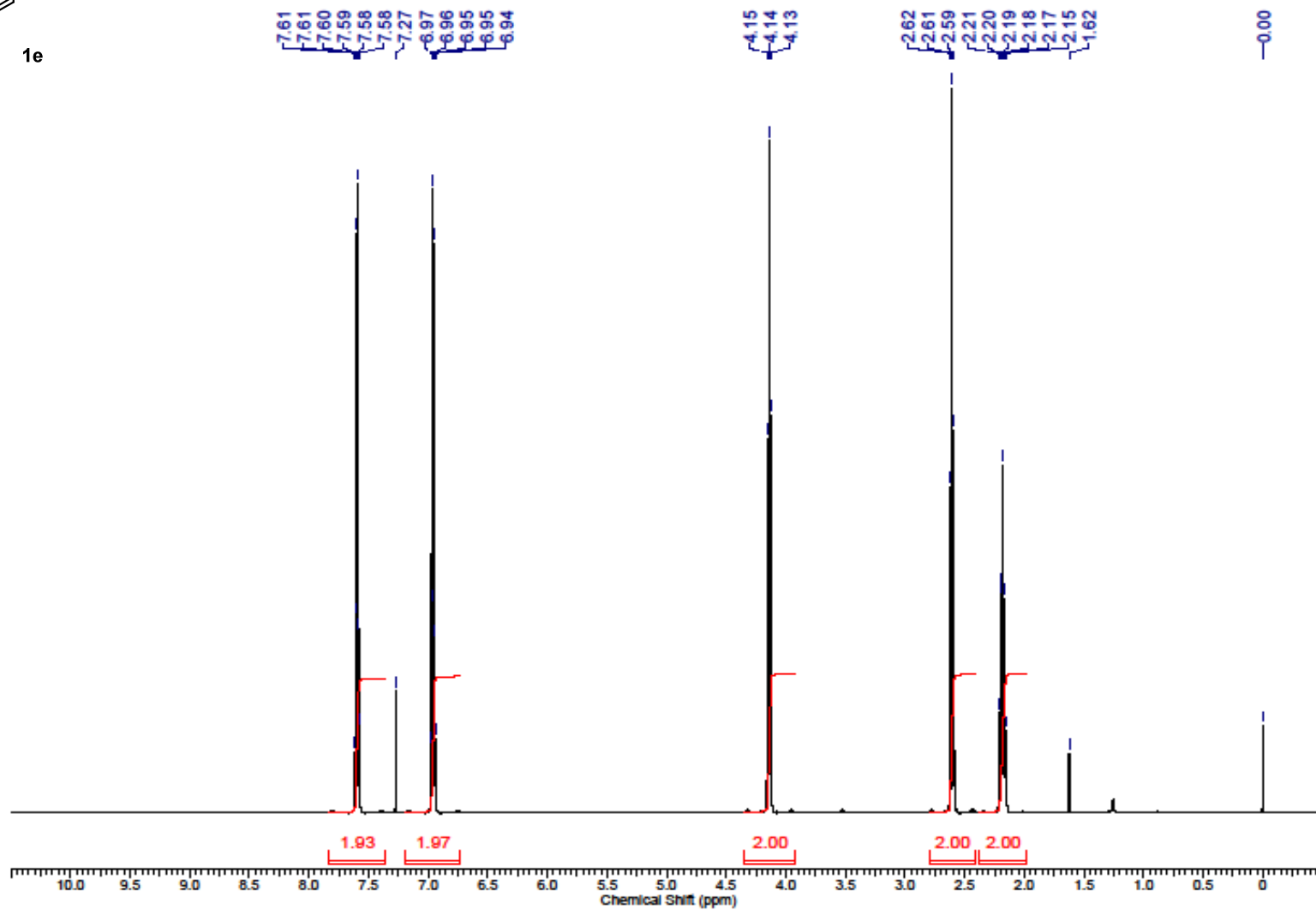
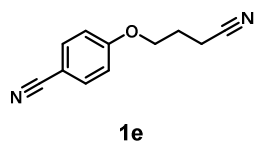
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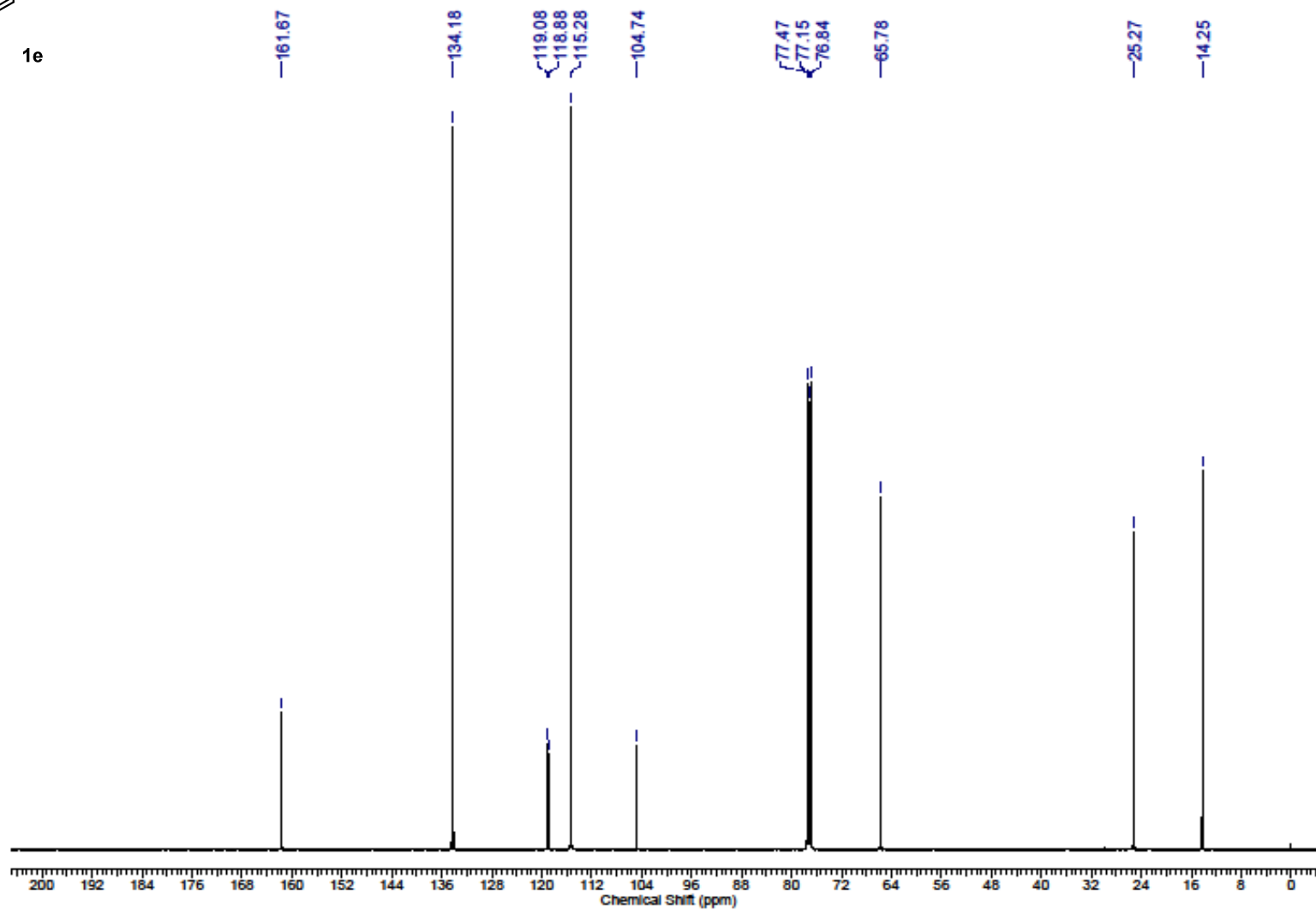
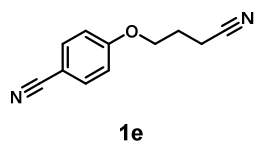
**1d**



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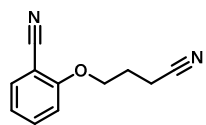


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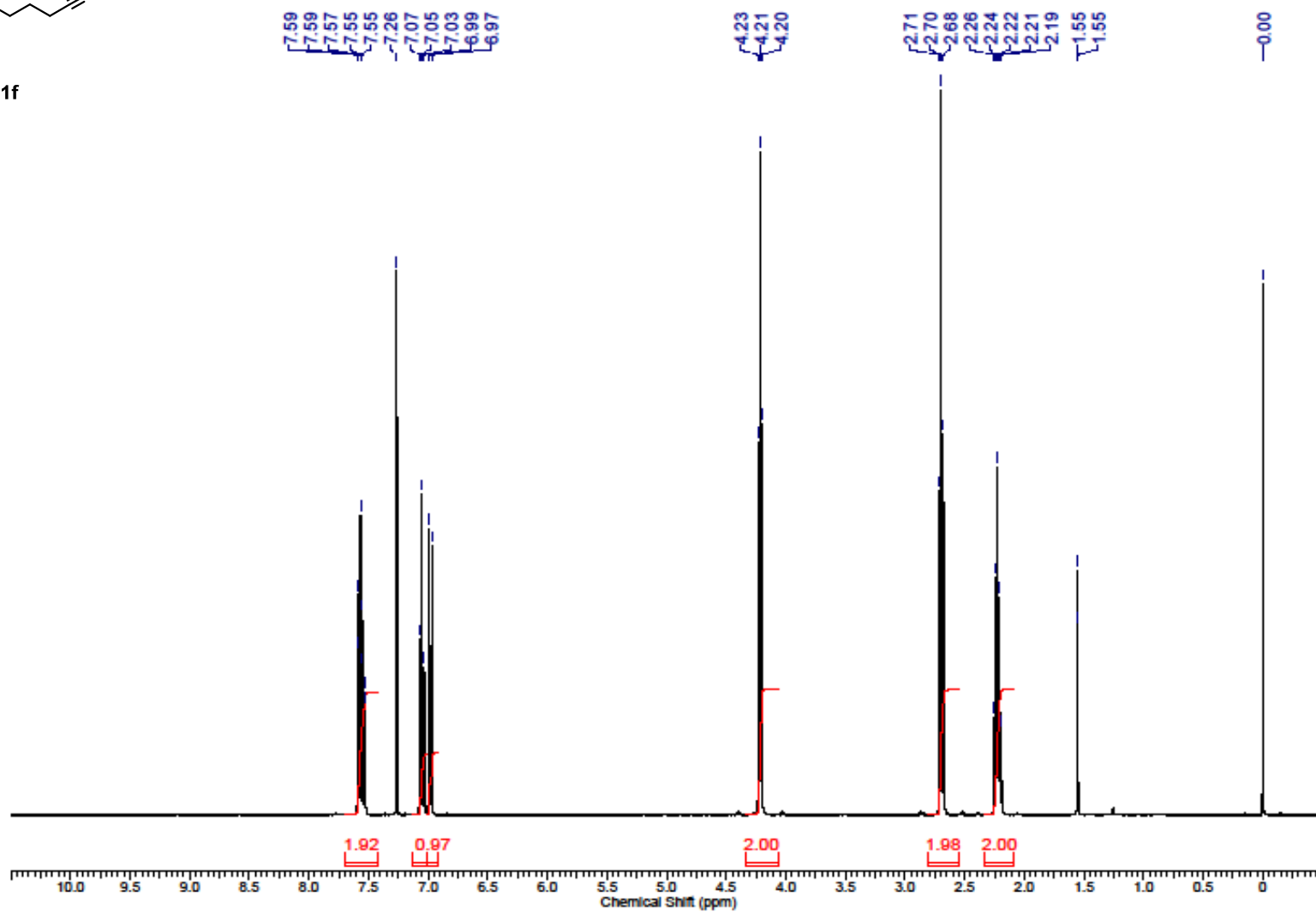




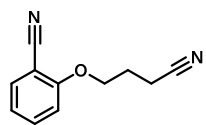
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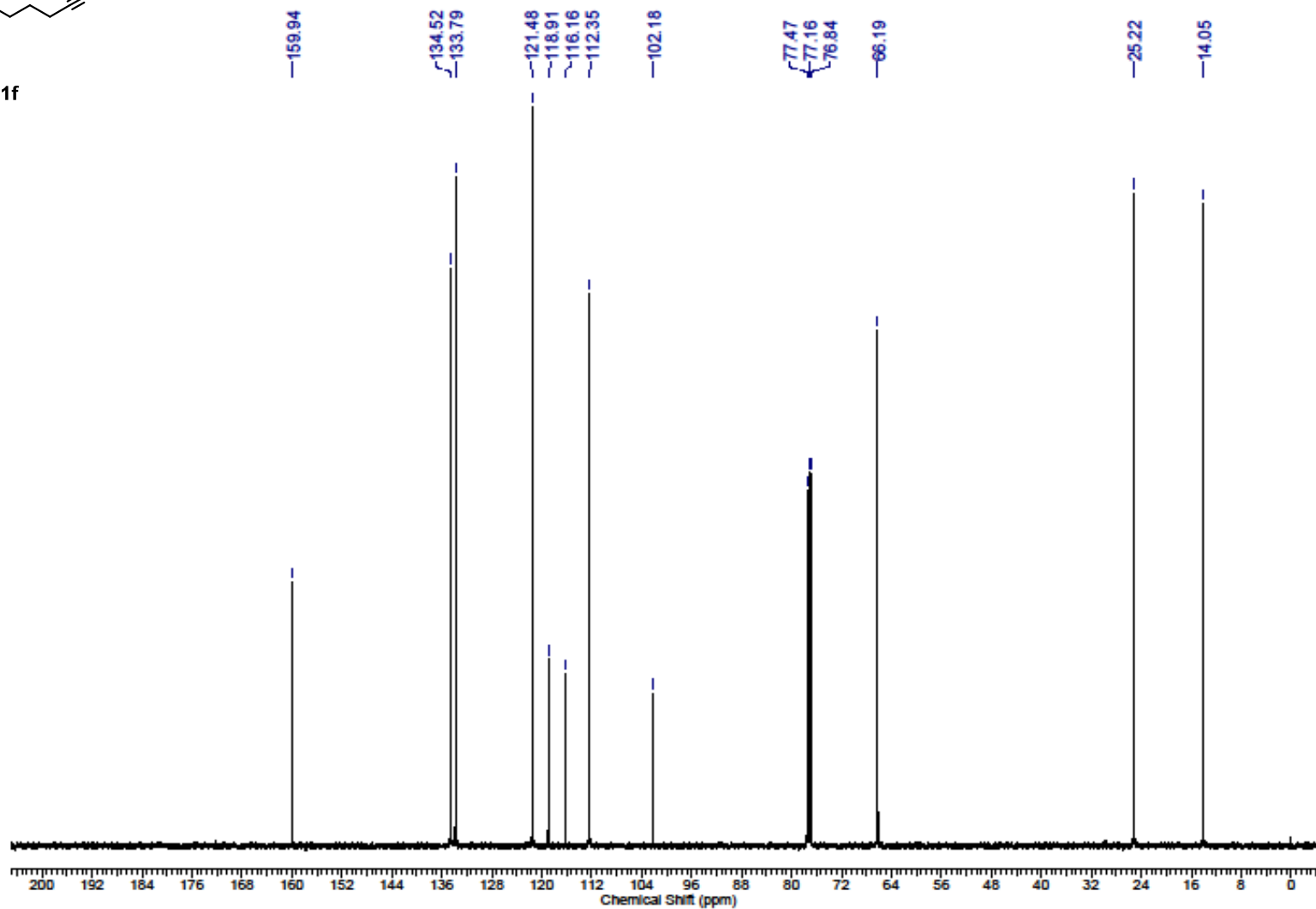
**1f**



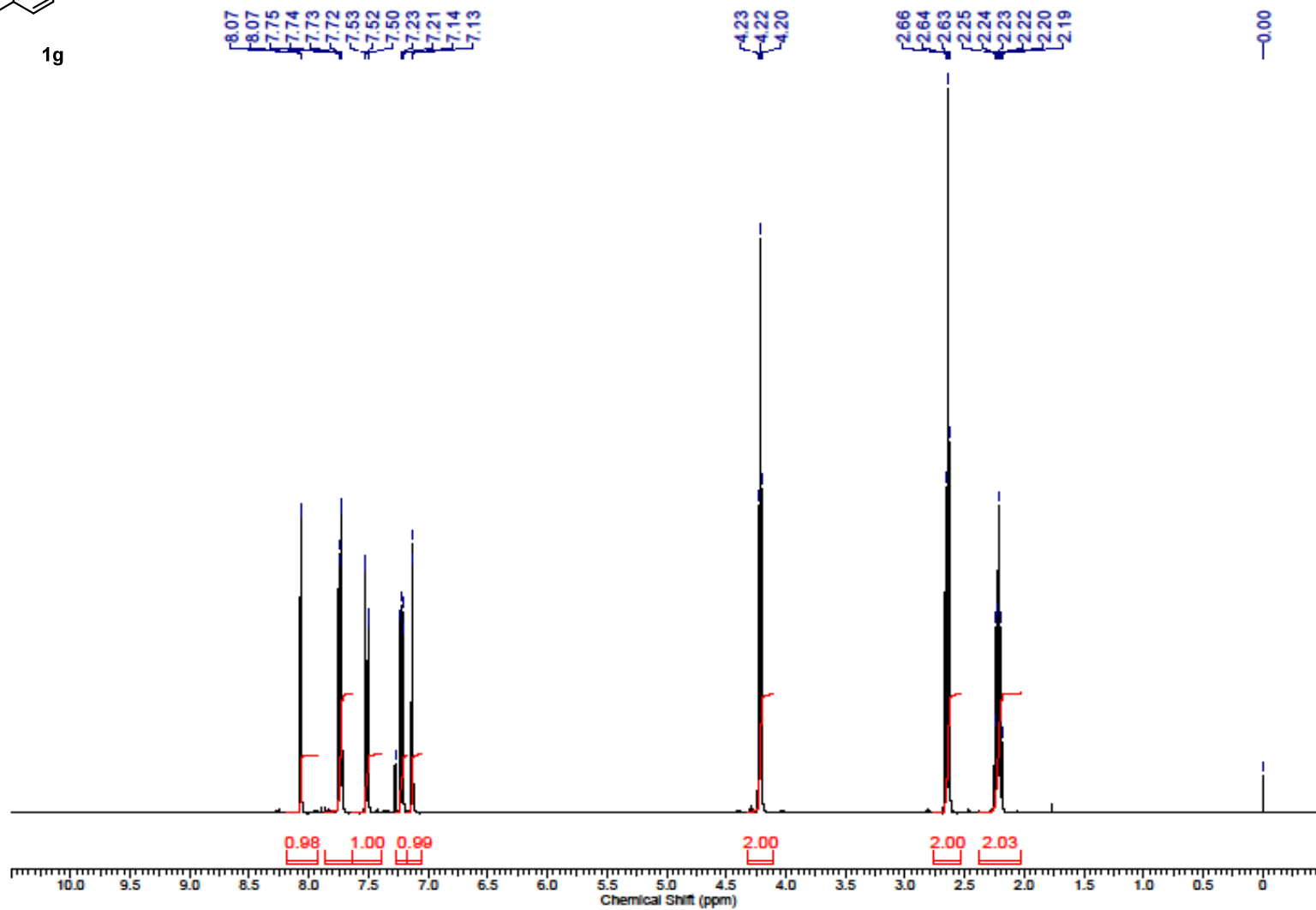
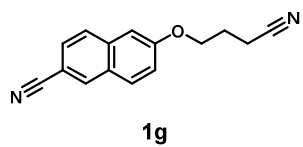
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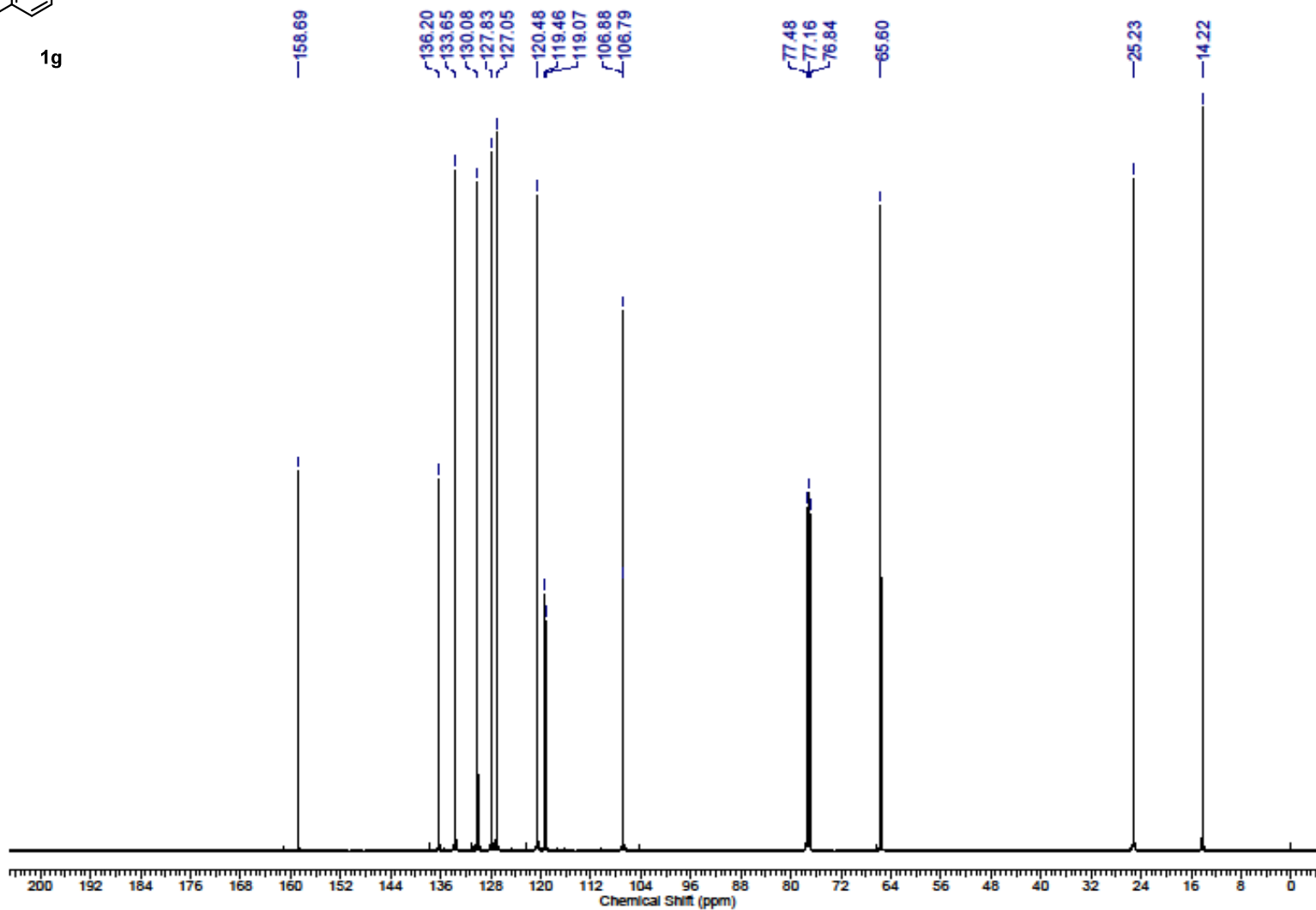
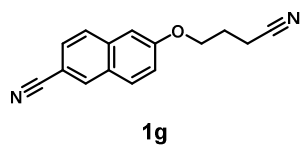
**1f**



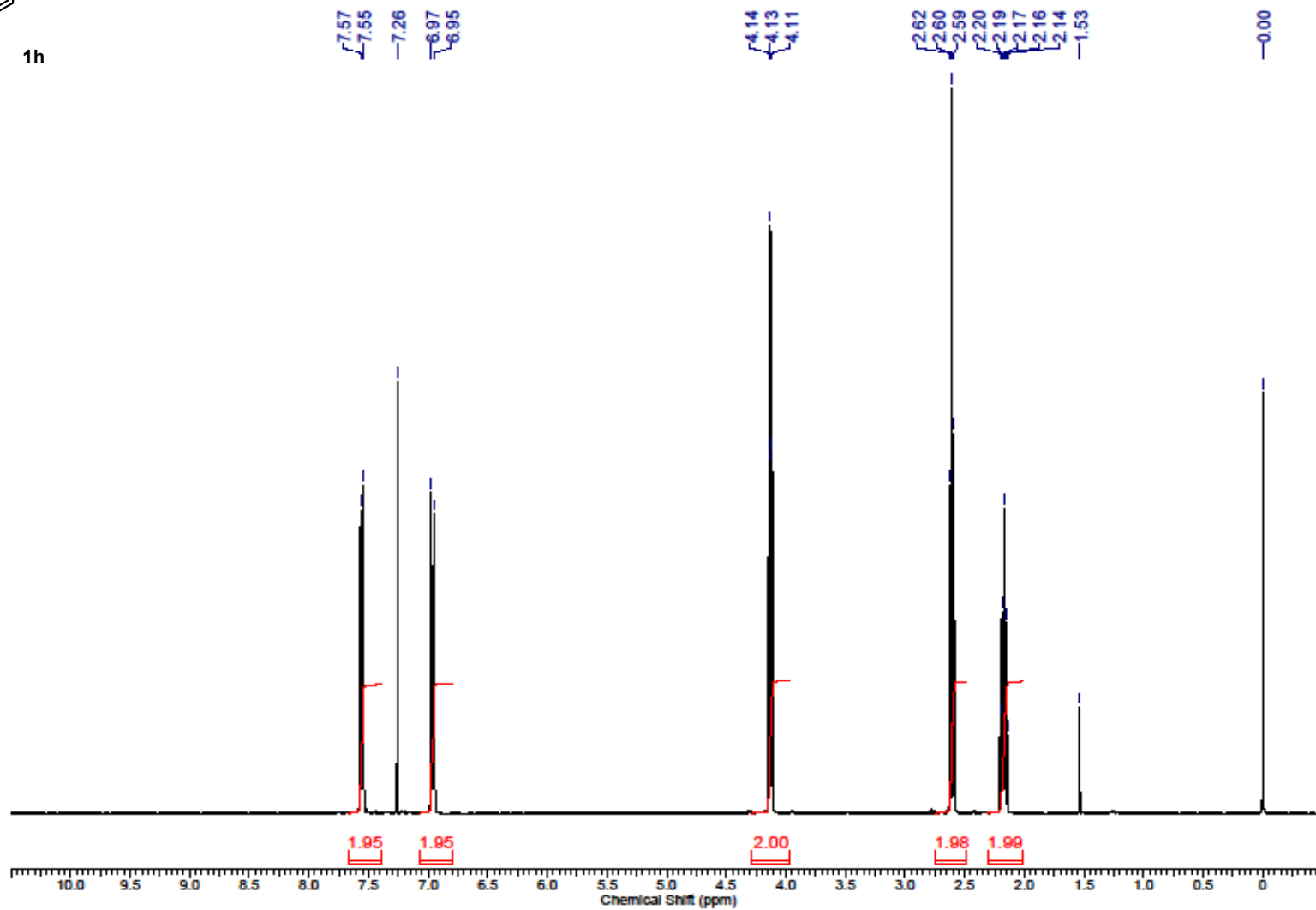
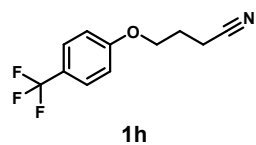
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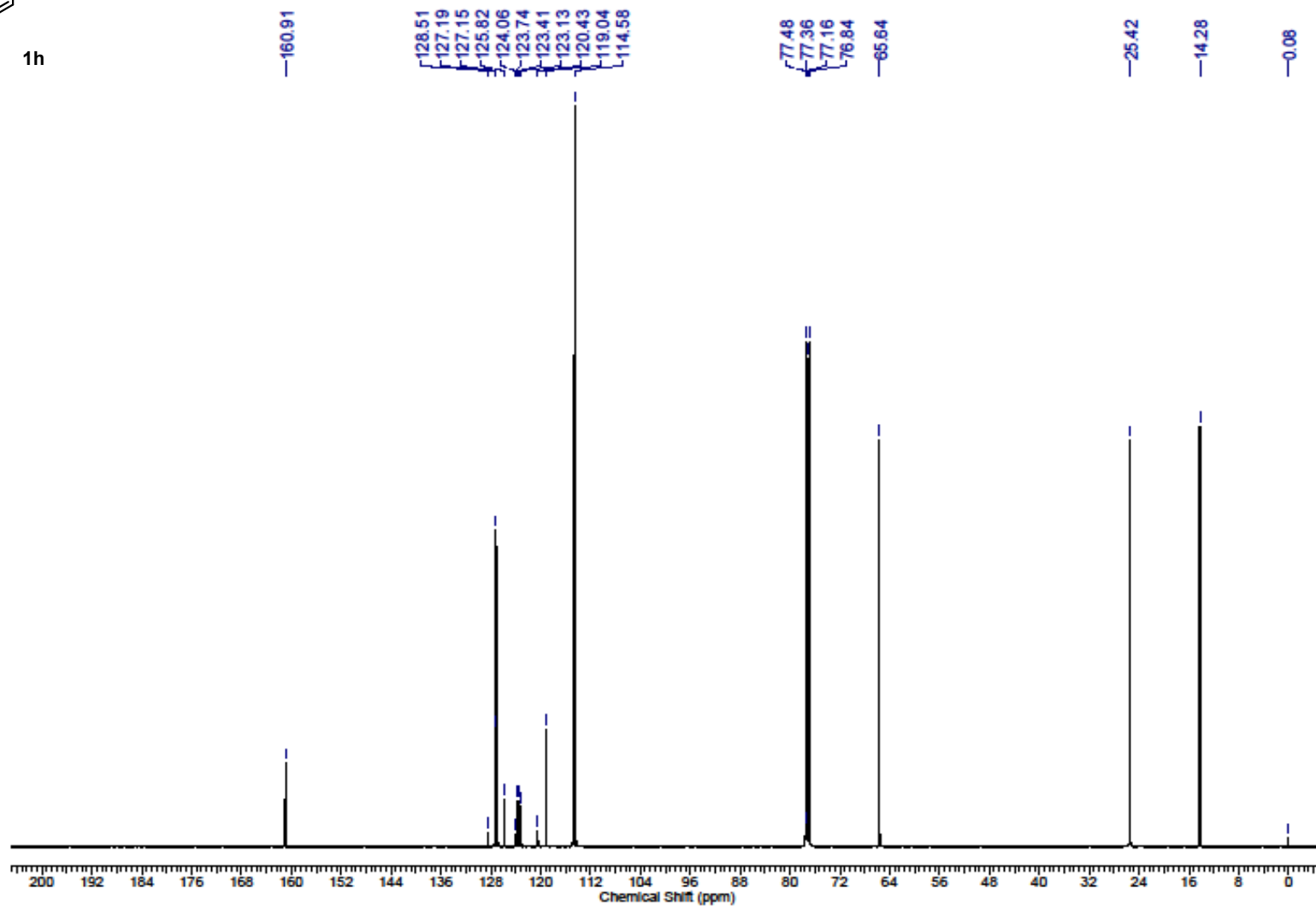
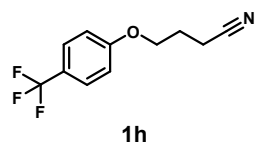
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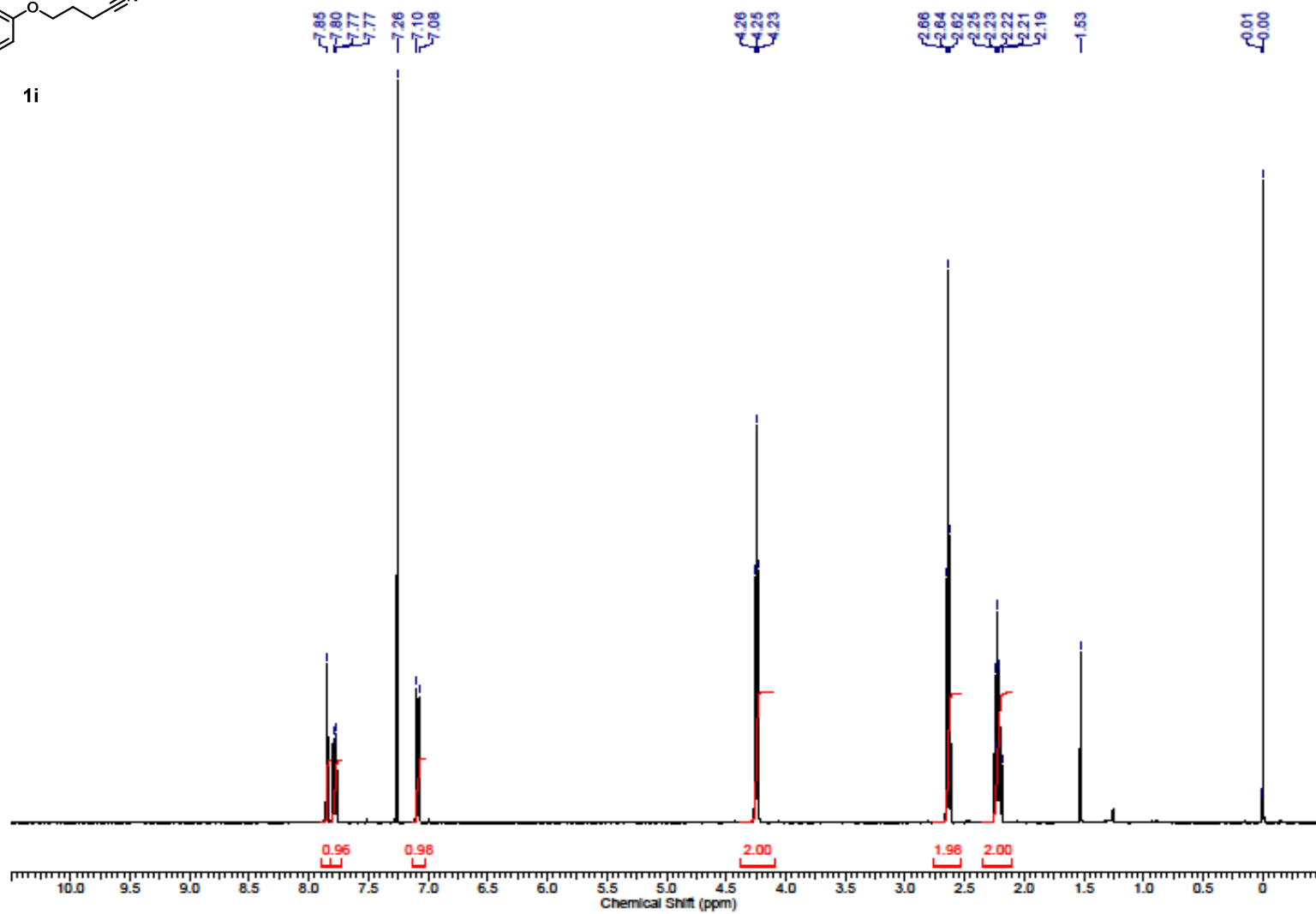
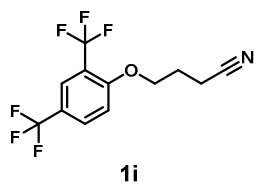
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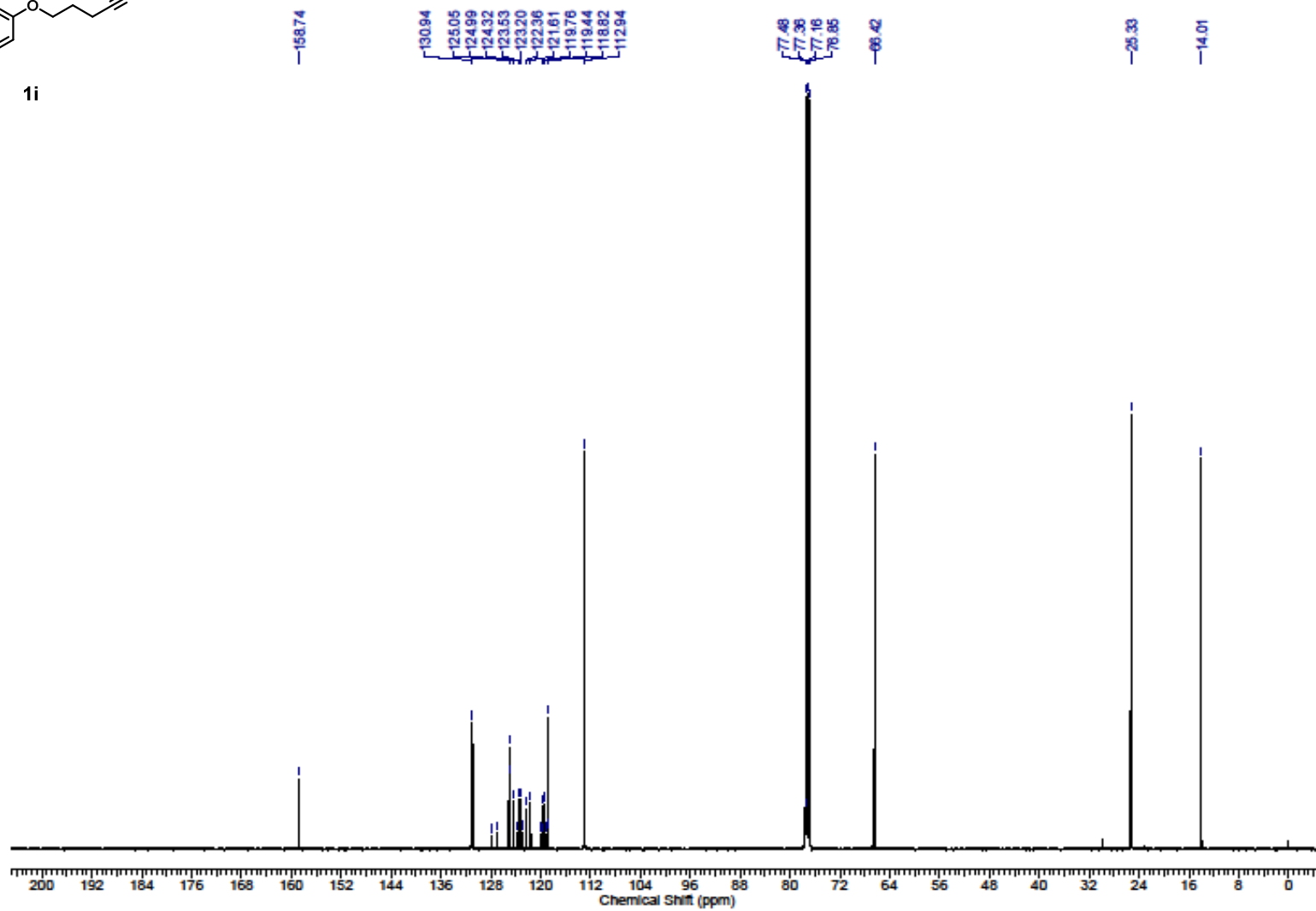
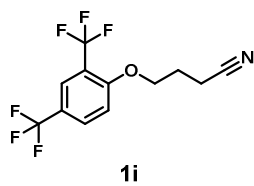
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1h** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



$^1\text{H}$  NMR spectrum of **1i** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)

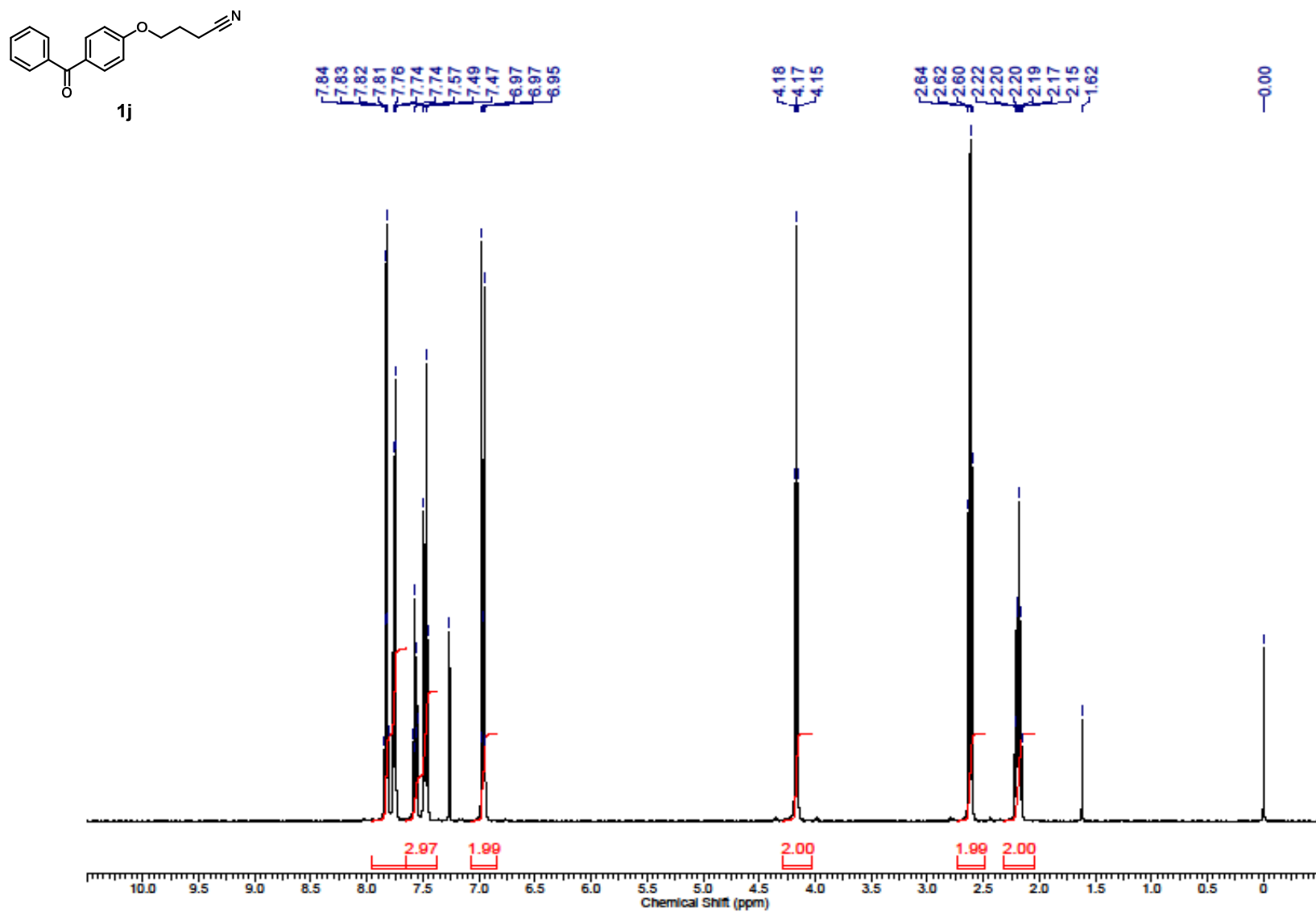


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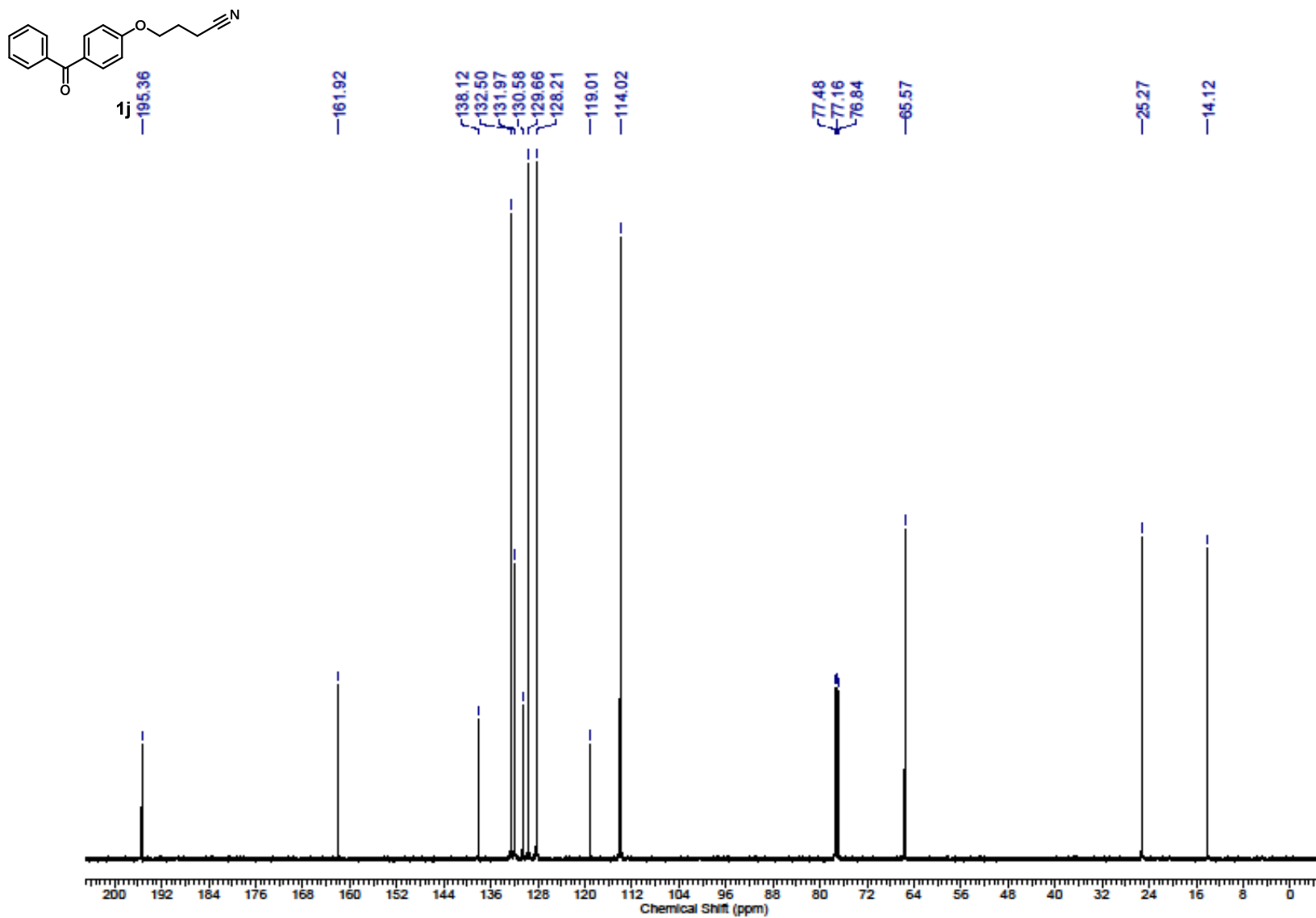




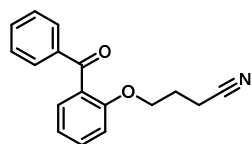
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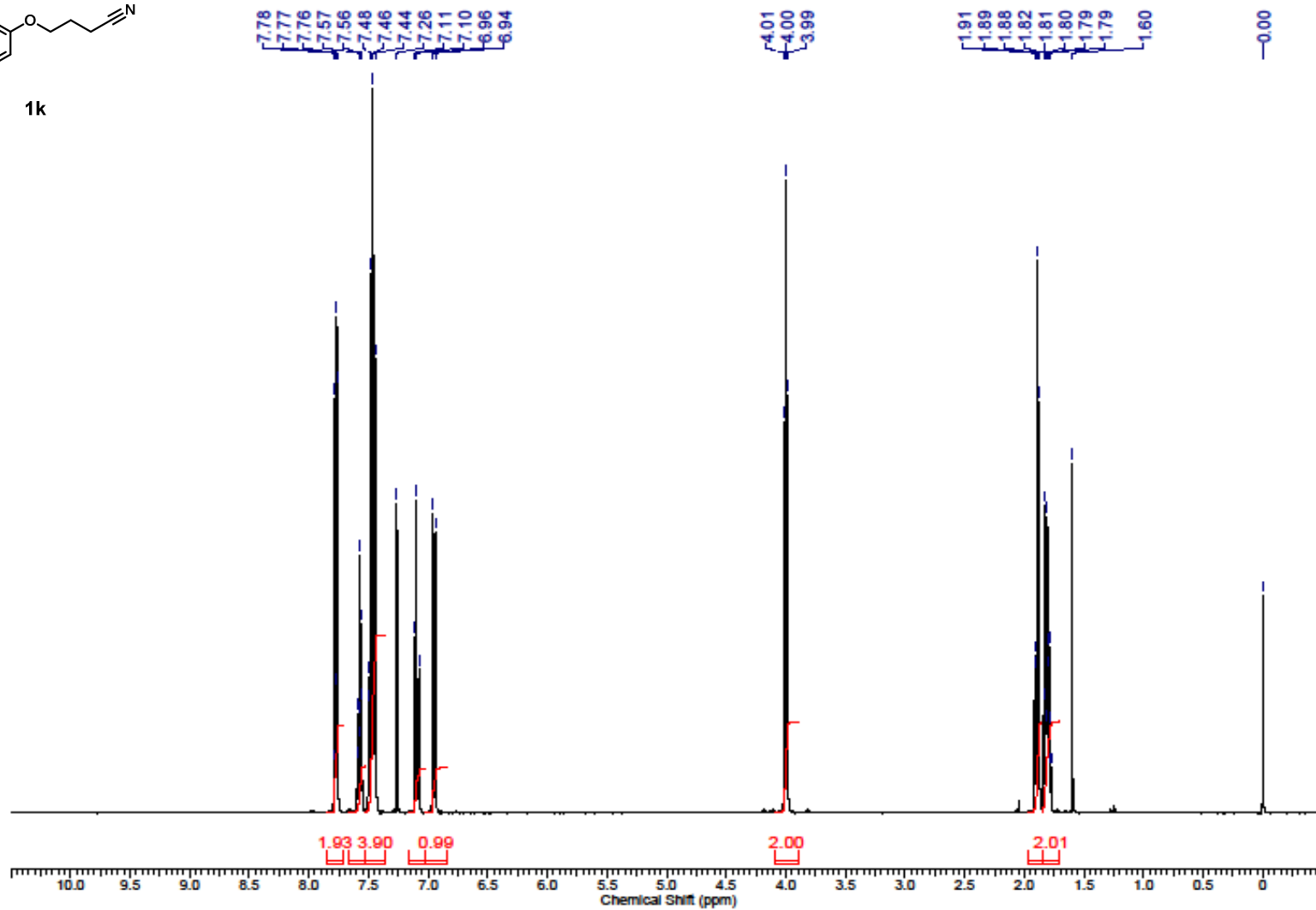
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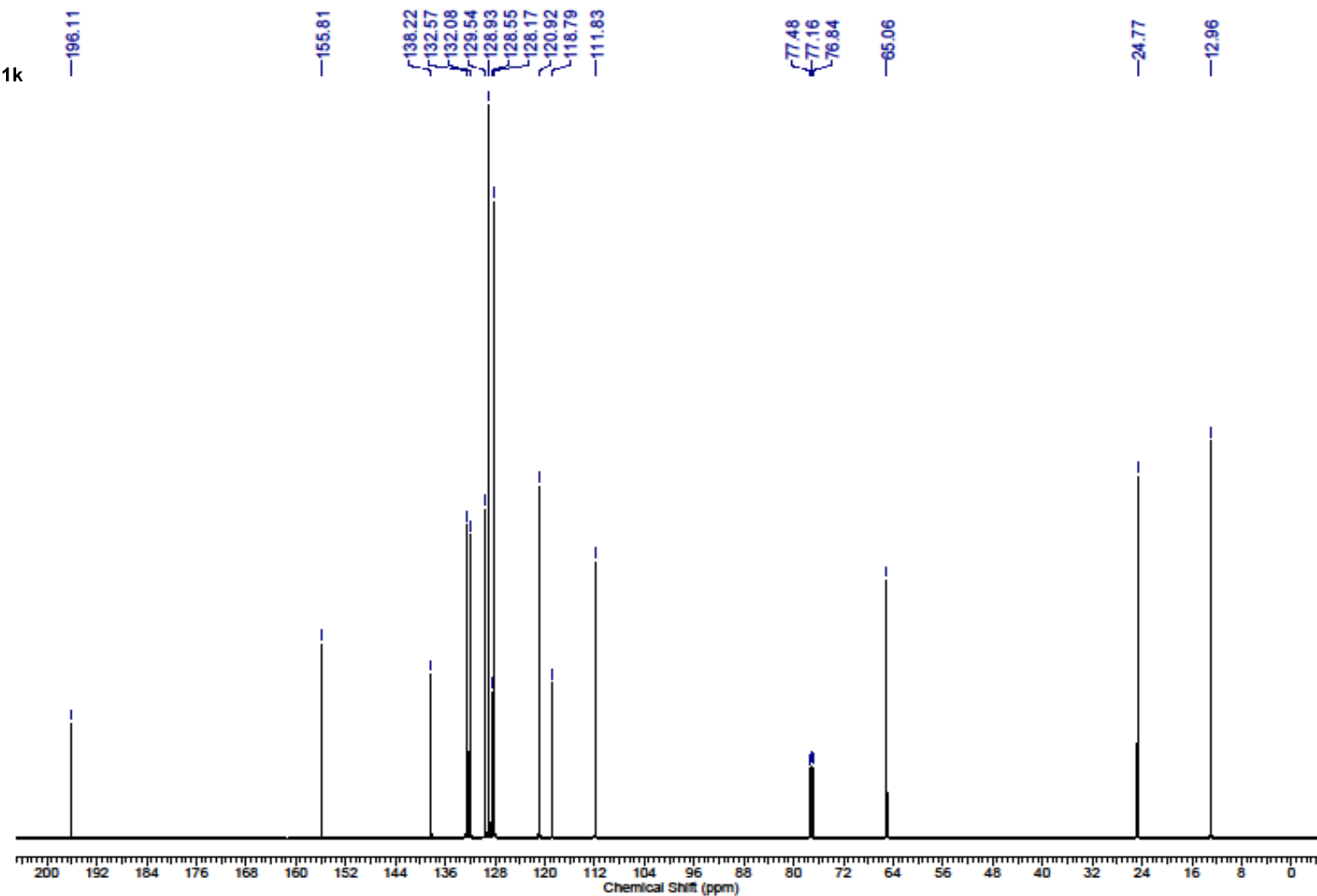
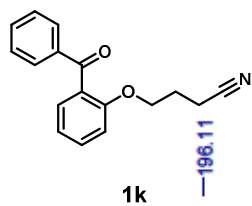
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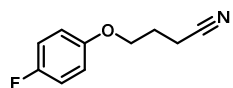
**1k**



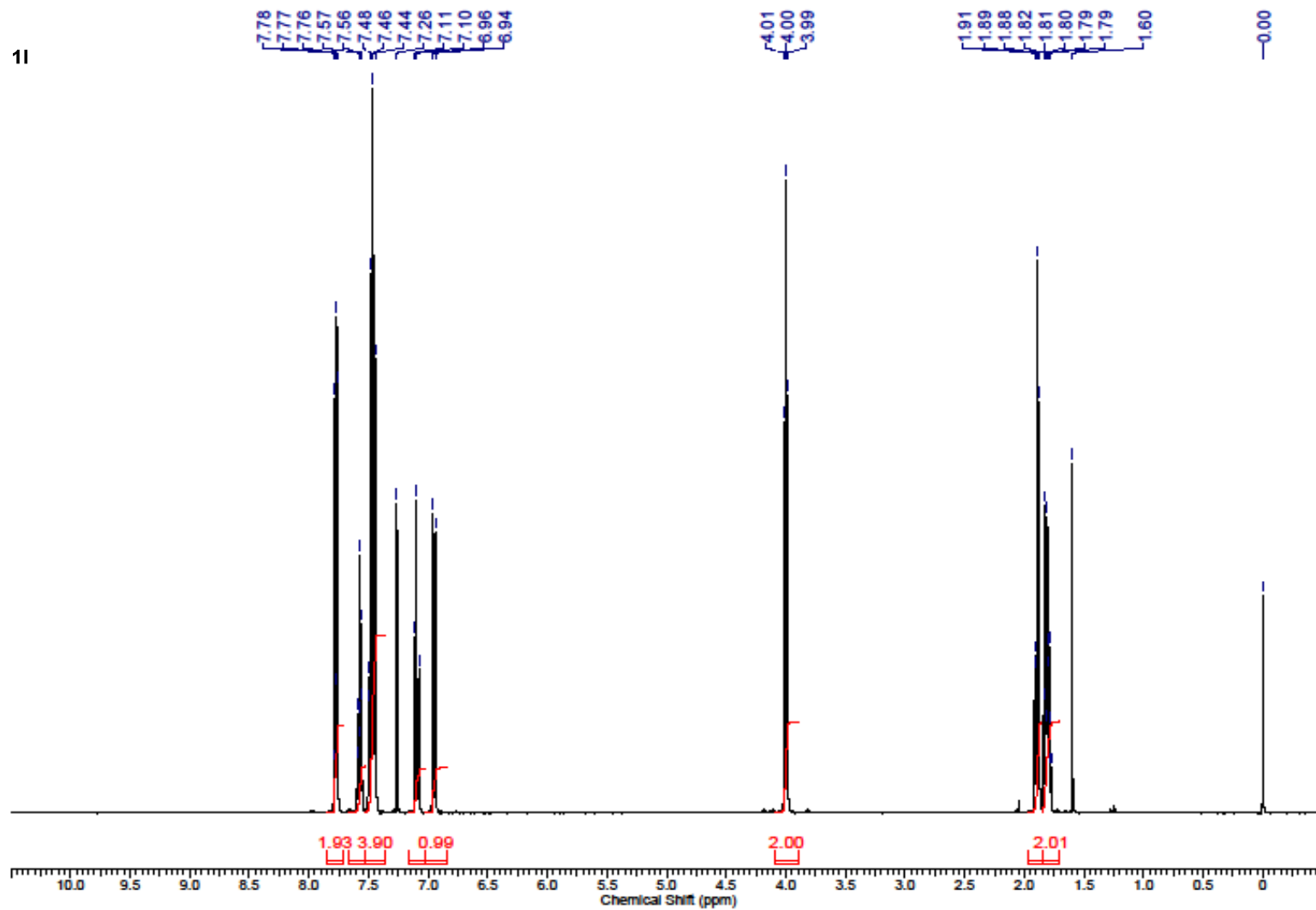
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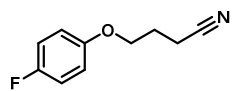
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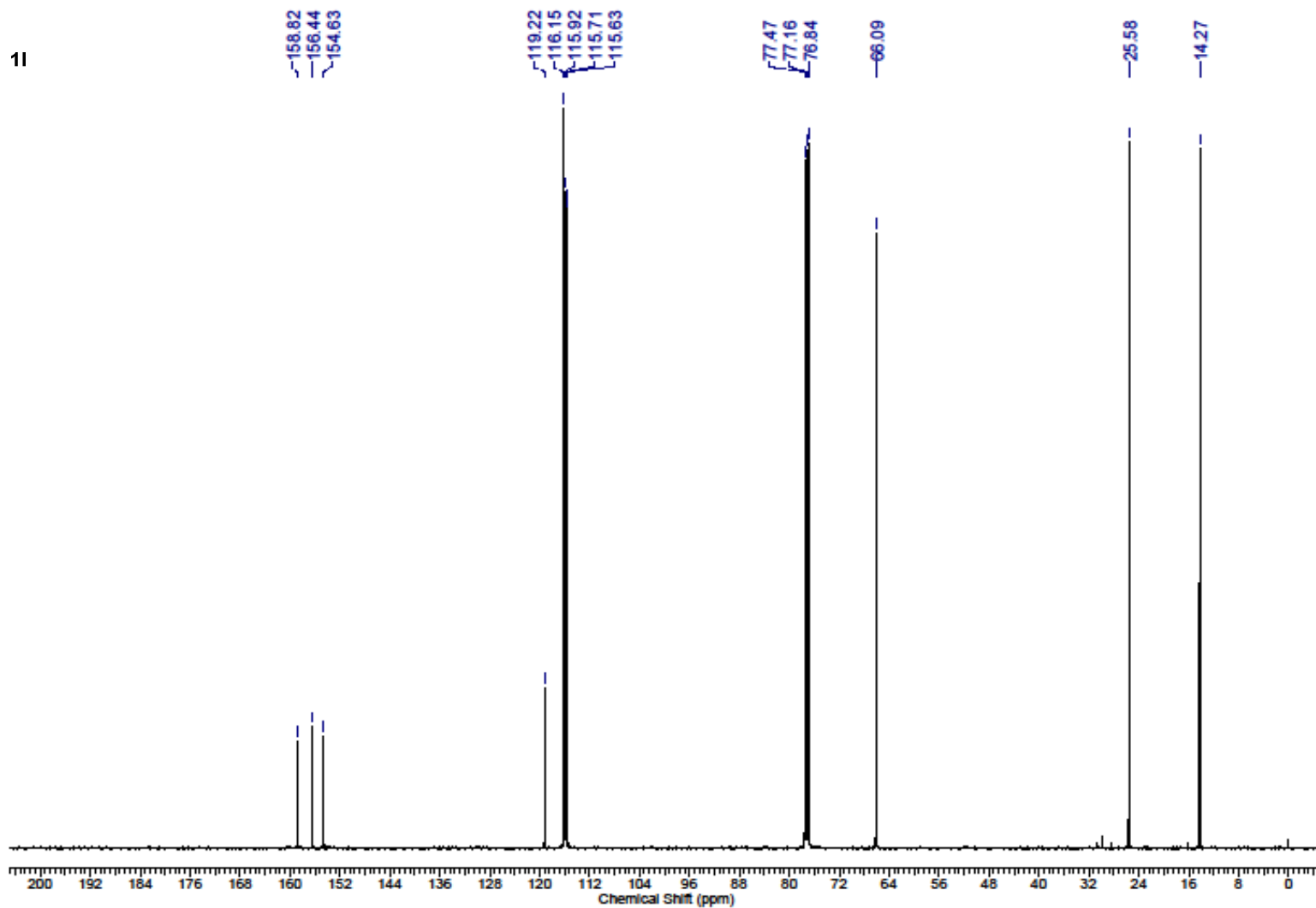
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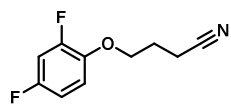
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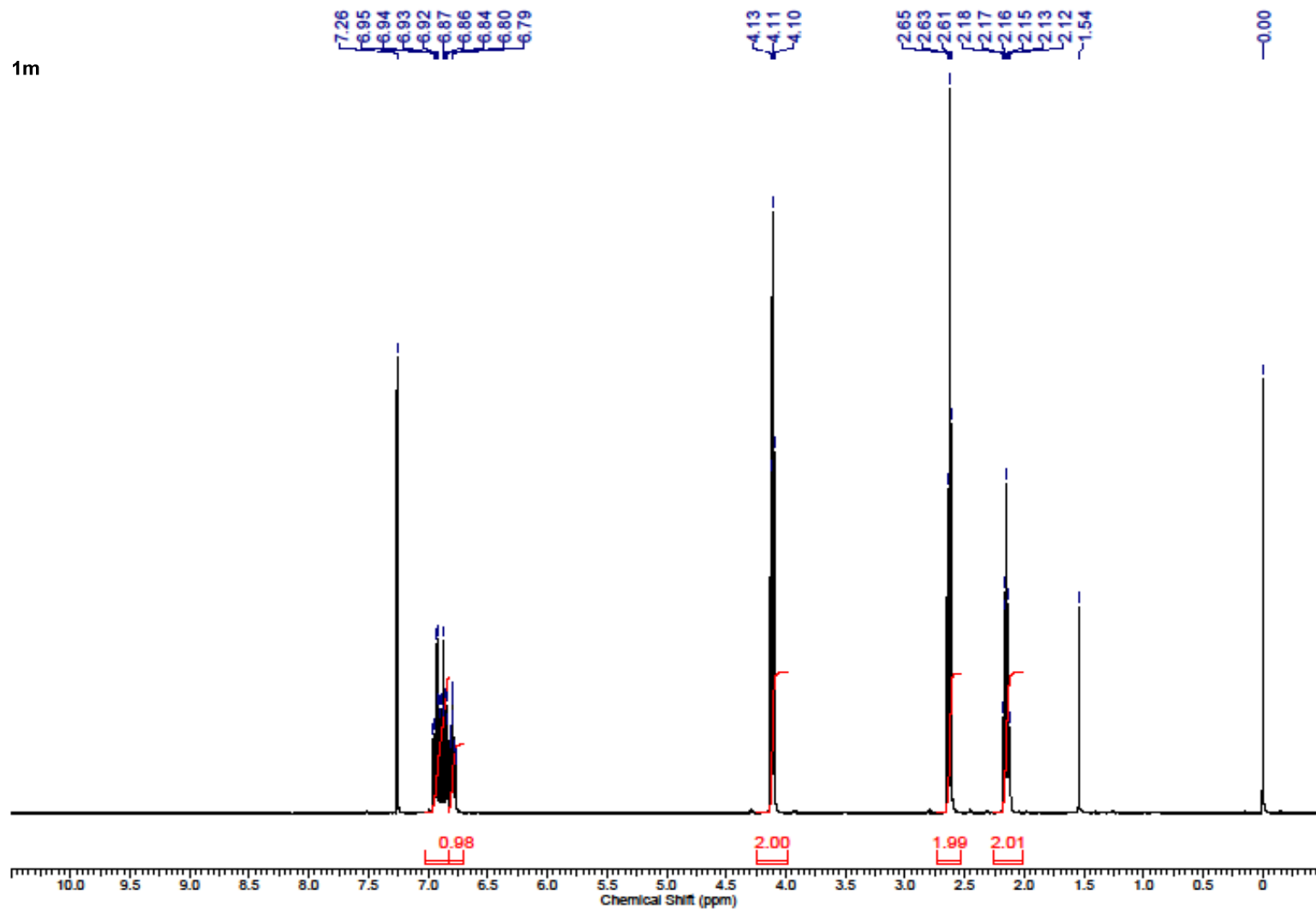
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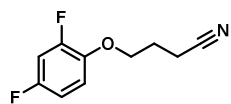
$^1\text{H}$  NMR spectrum of **1m** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



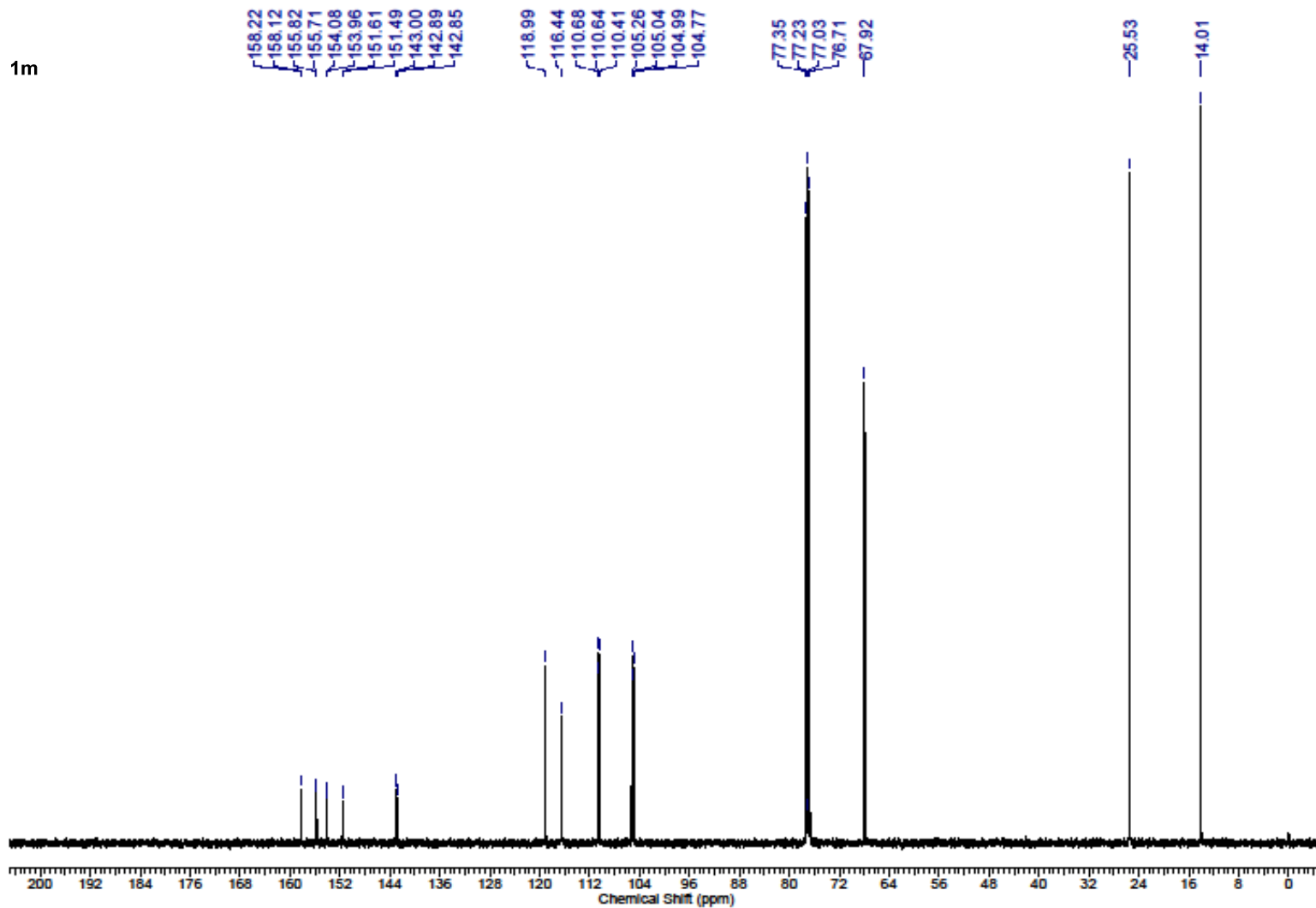
**1m**



$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1m** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)

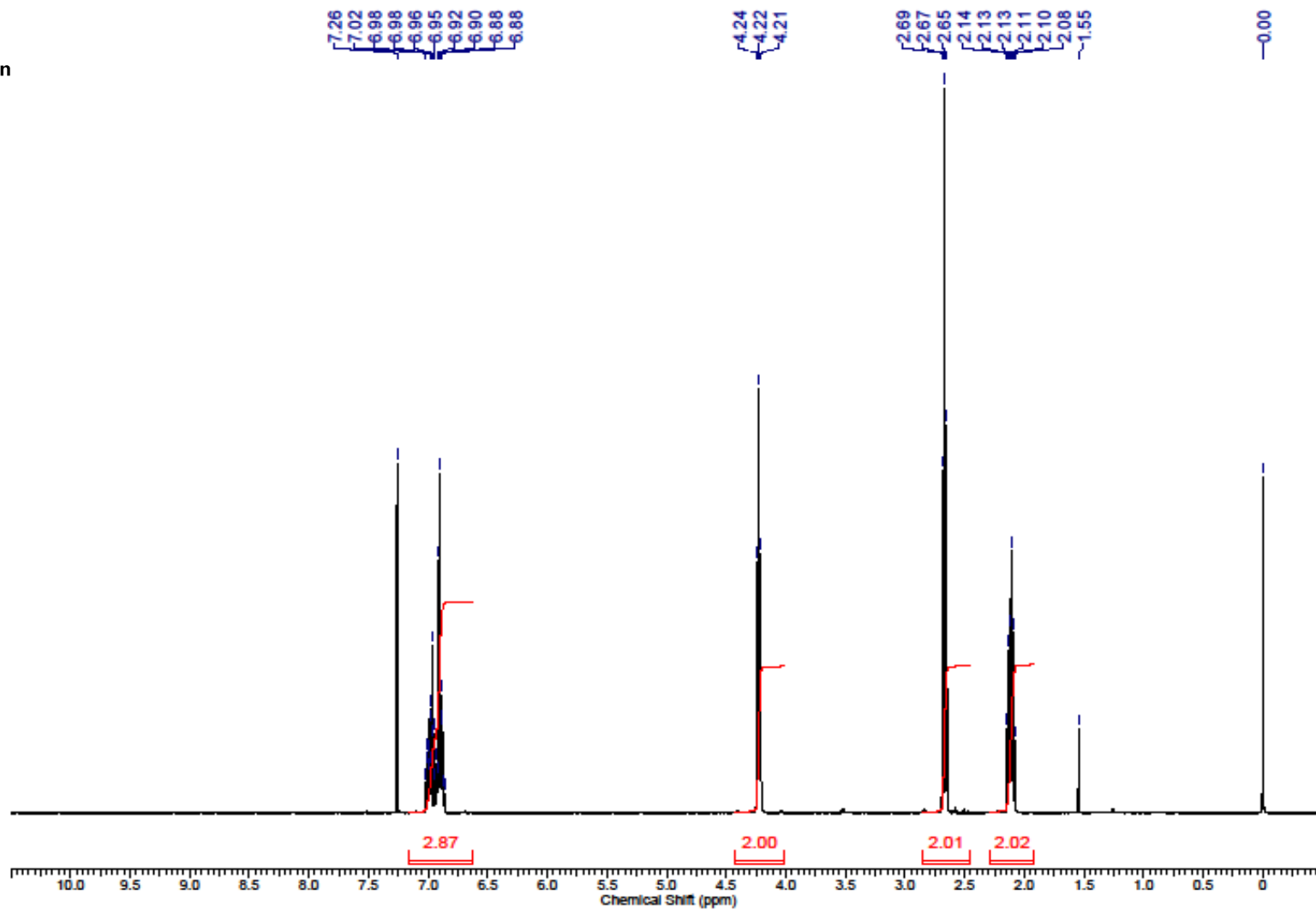
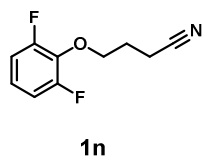


**1m**

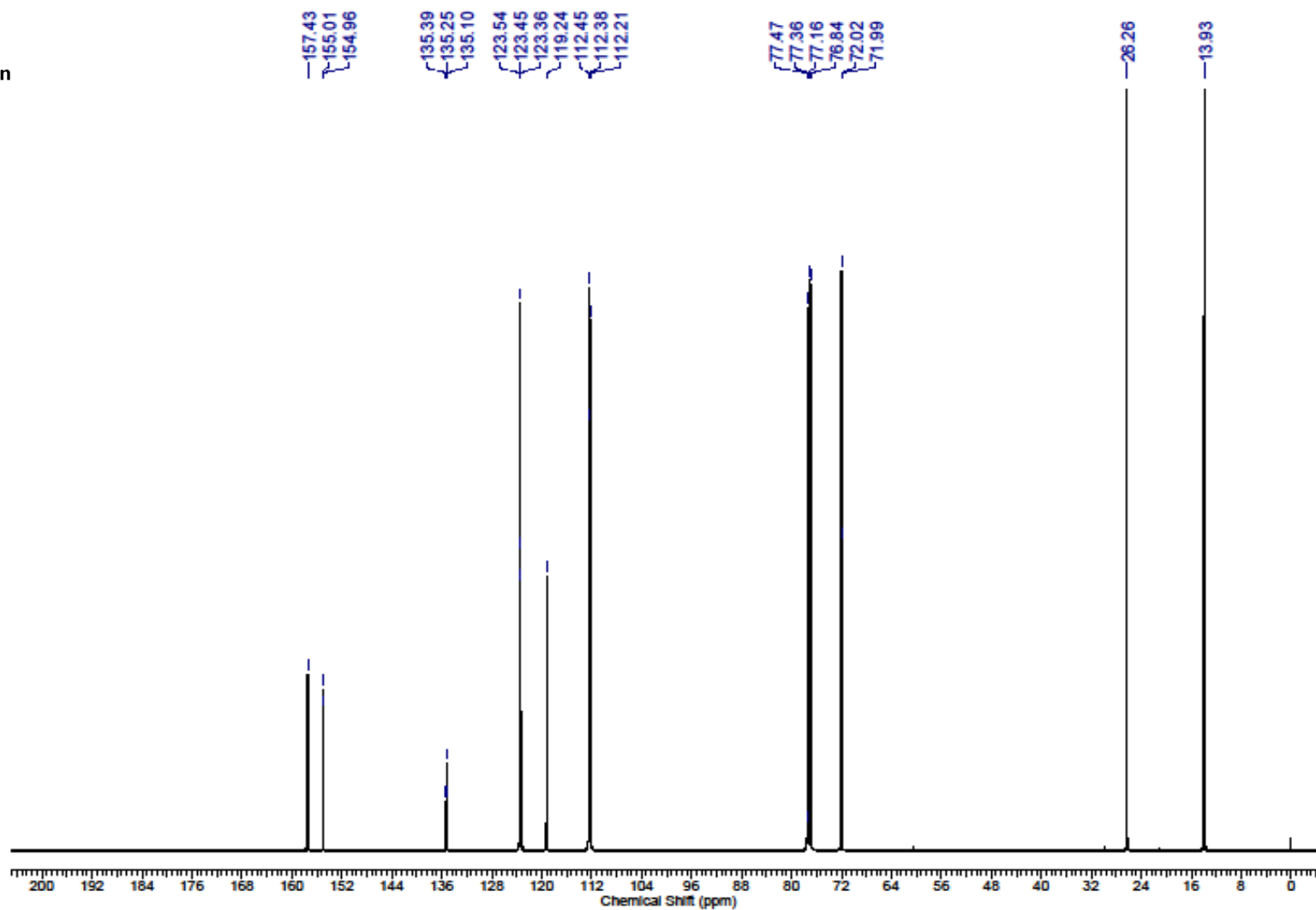
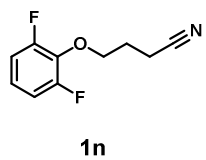




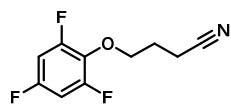
$^1\text{H}$  NMR spectrum of **1n** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



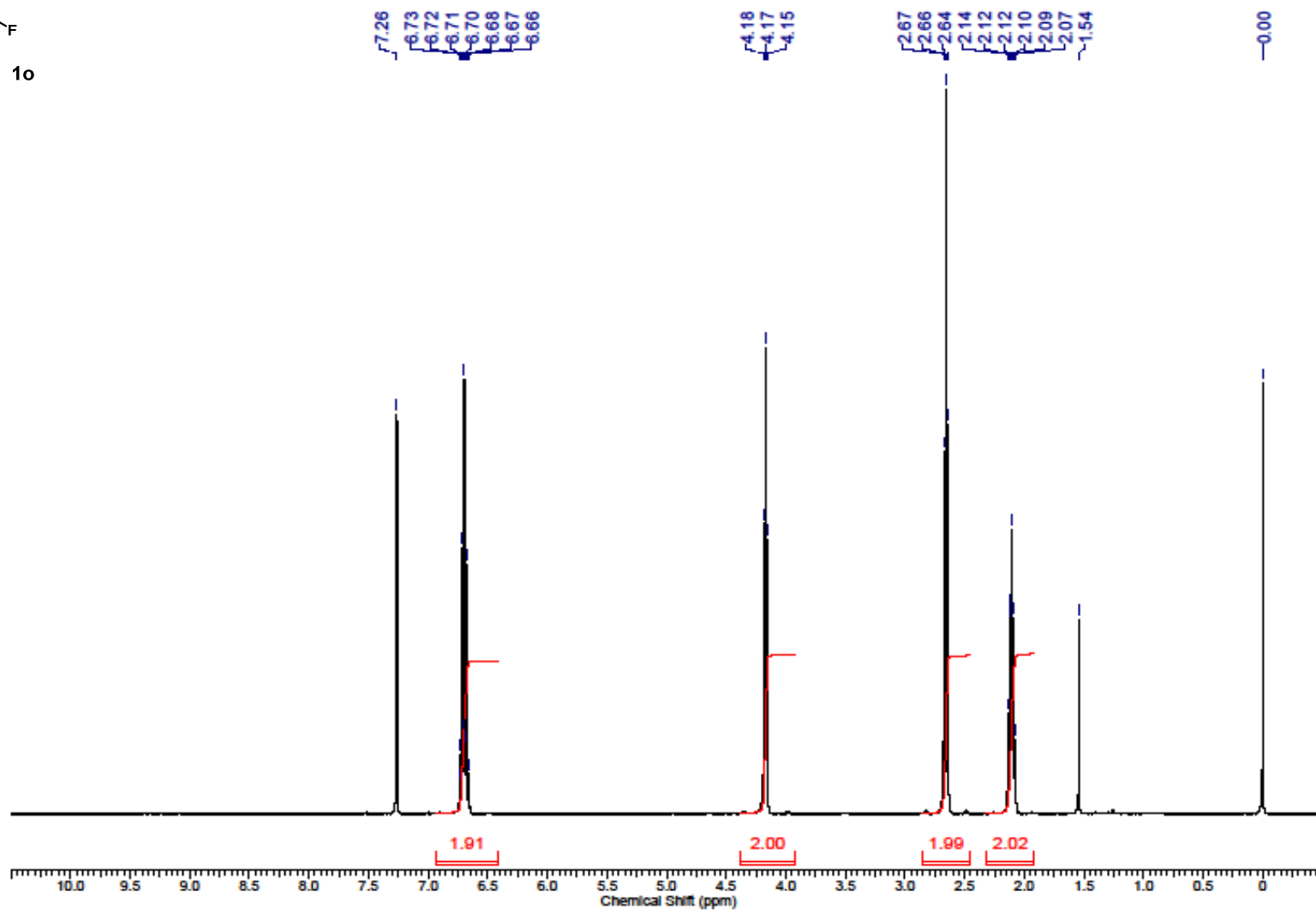
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1n** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



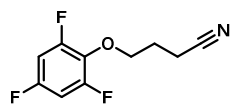
$^1\text{H}$  NMR spectrum of **1o** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



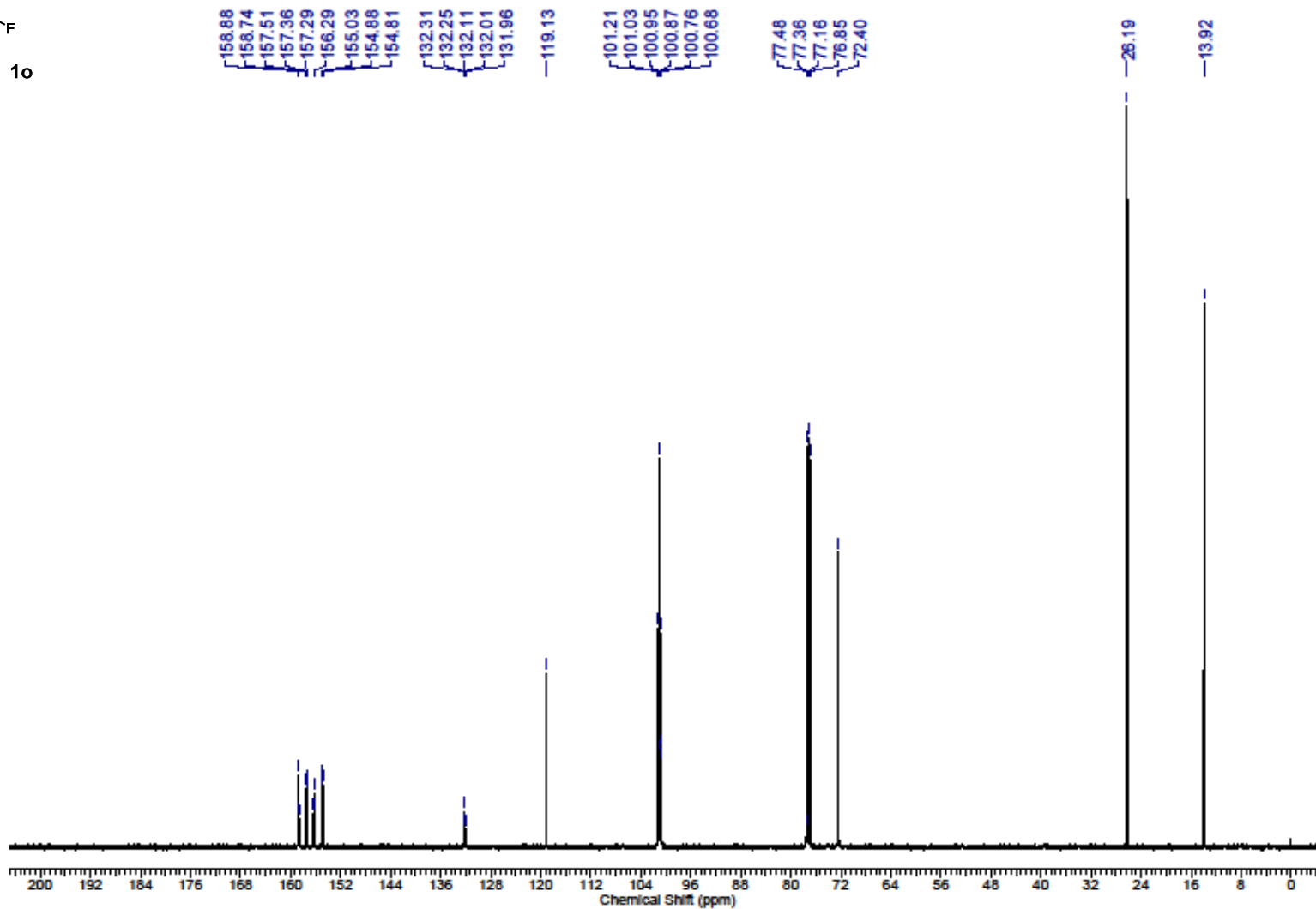
**1o**



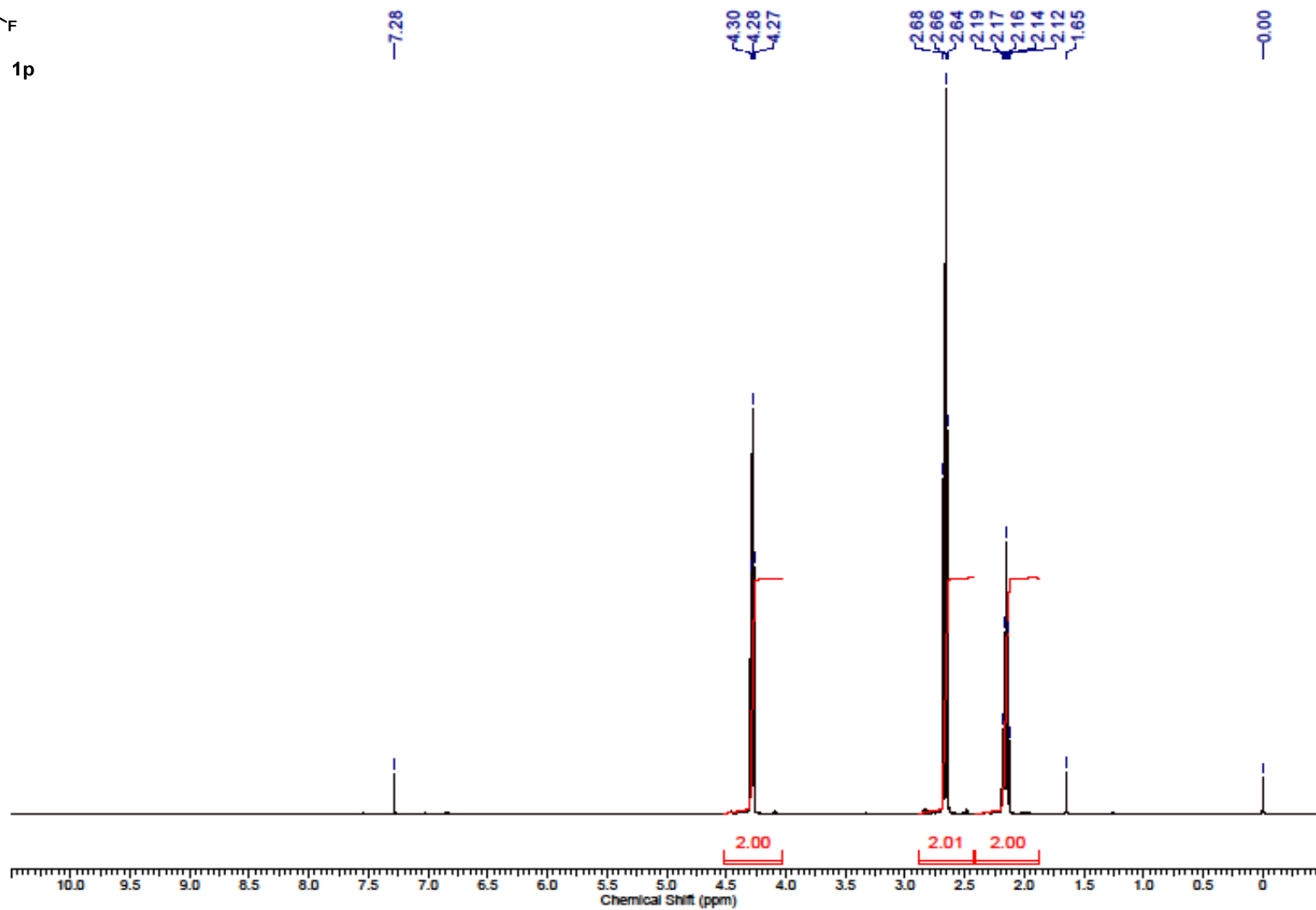
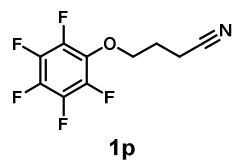
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1o** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



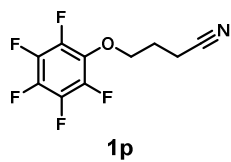
**1o**



$^1\text{H}$  NMR spectrum of **1p** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1p** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



143.19  
143.15  
143.03  
140.72  
140.68  
140.56  
139.29  
136.87  
136.51  
133.27  
118.77

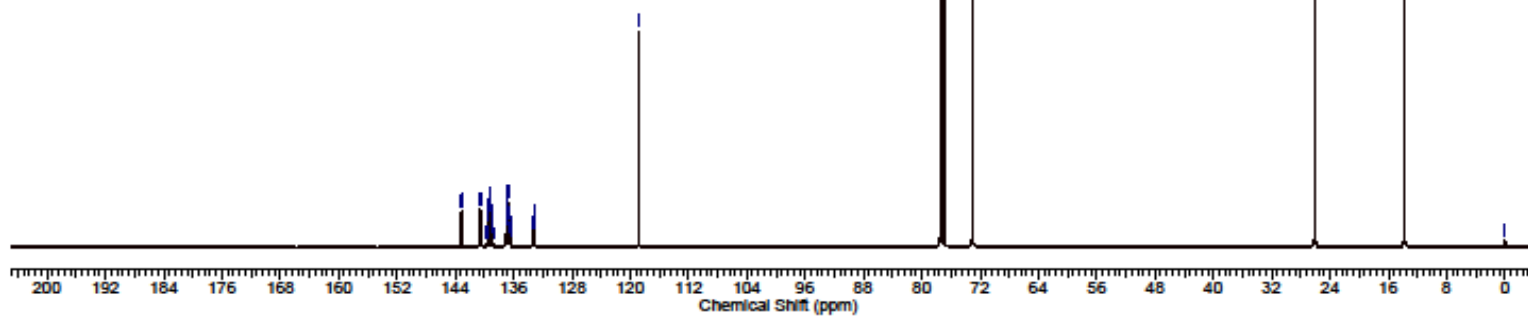
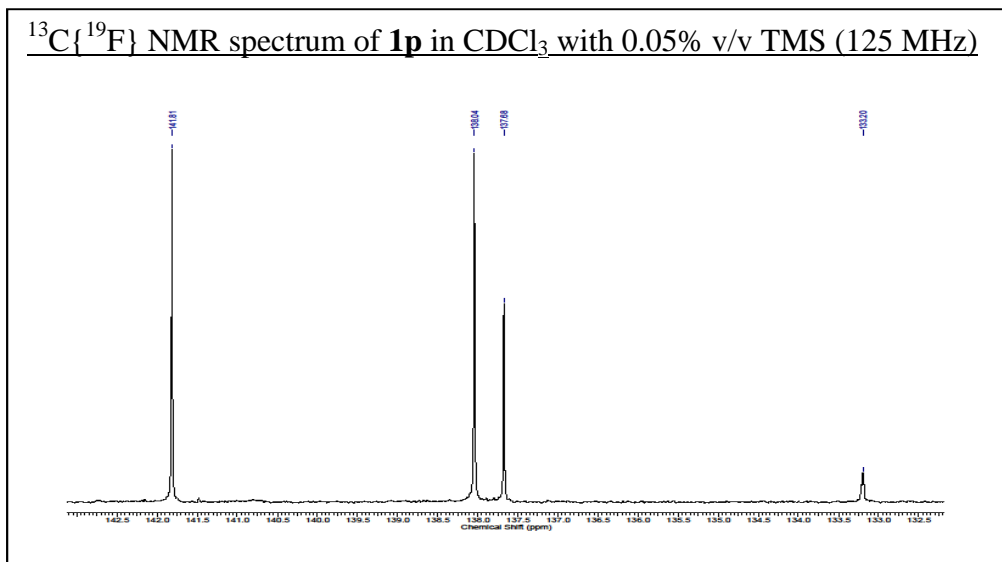
77.48  
77.16  
76.84  
73.06

26.11

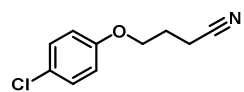
13.85

-0.05

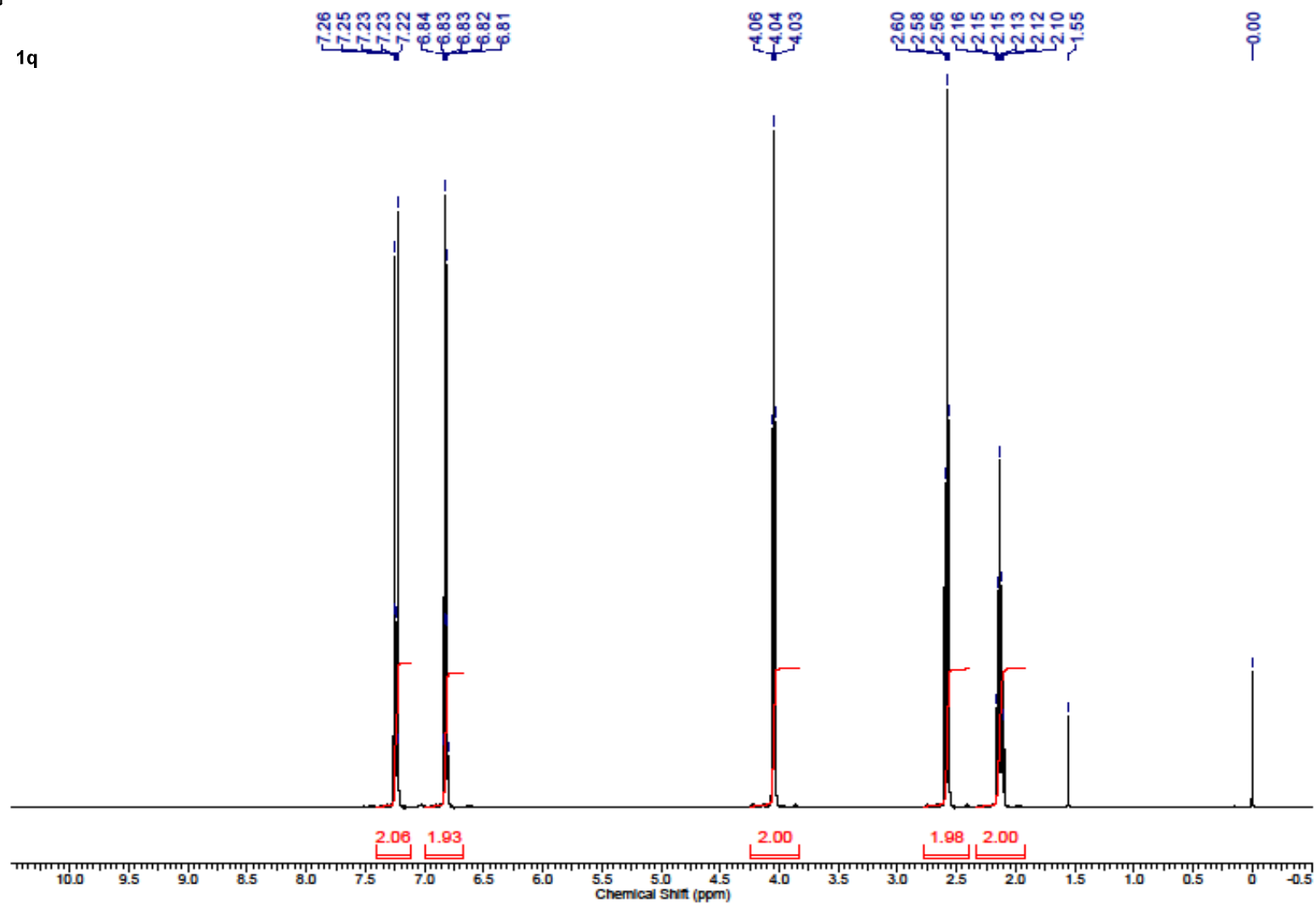
$^{13}\text{C}\{^{19}\text{F}\}$  NMR spectrum of **1p** in  $\text{CDCl}_3$  with 0.05% v/v TMS (125 MHz)



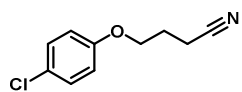
$^1\text{H}$  NMR spectrum of **1q** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



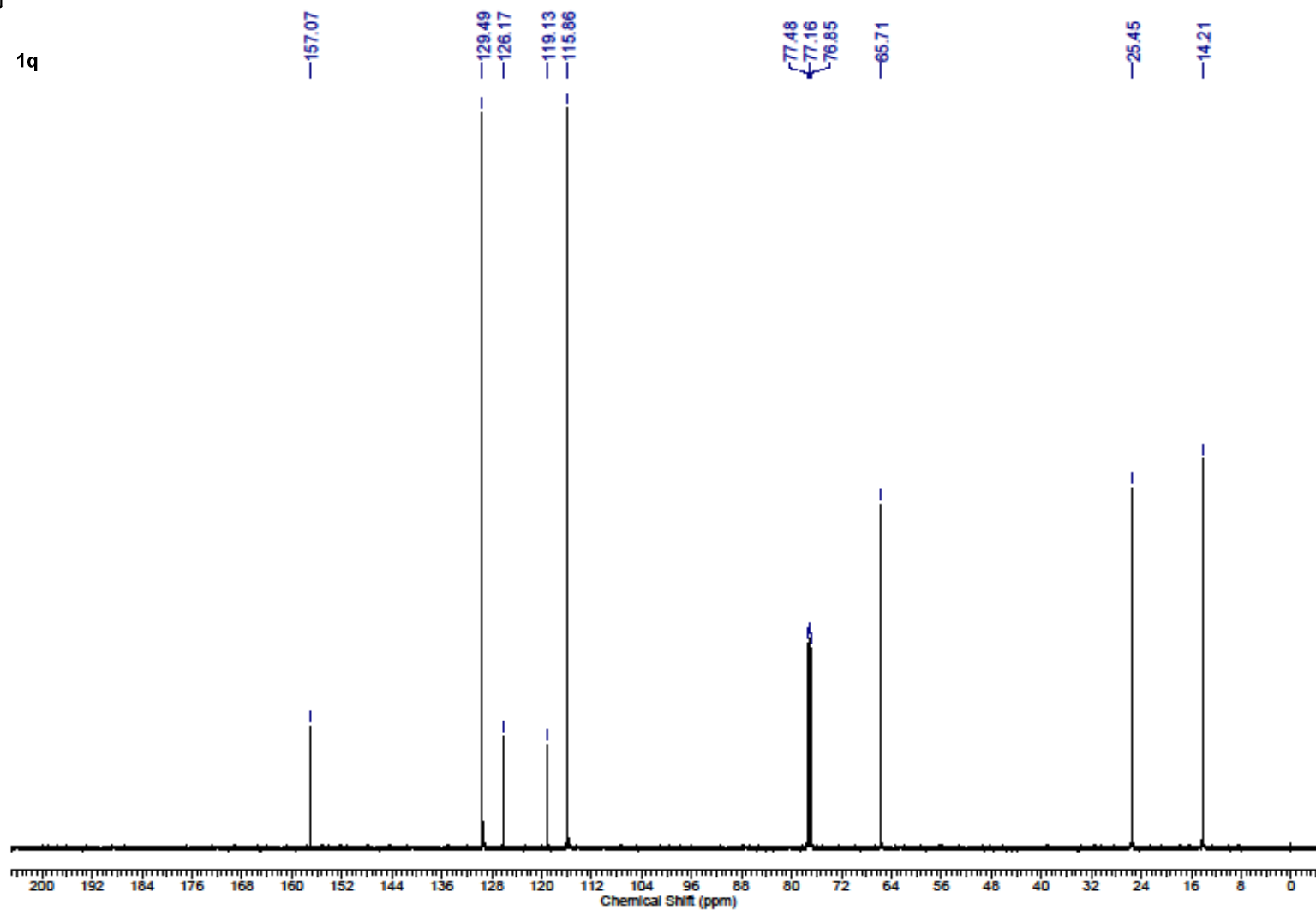
**1q**



$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1q** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)

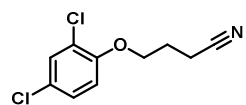


**1q**

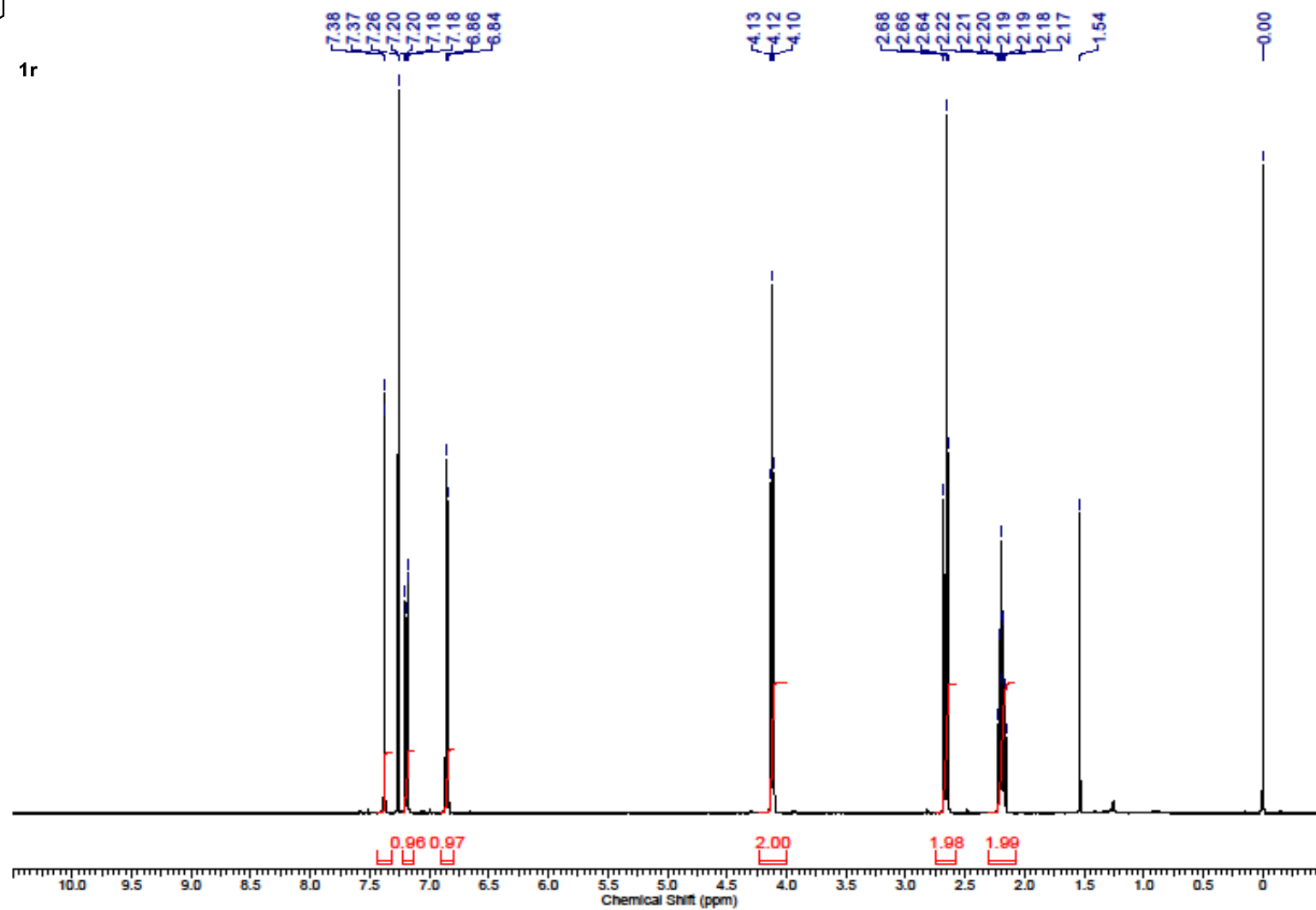




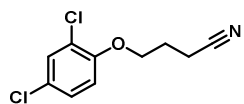
$^1\text{H}$  NMR spectrum of **1r** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



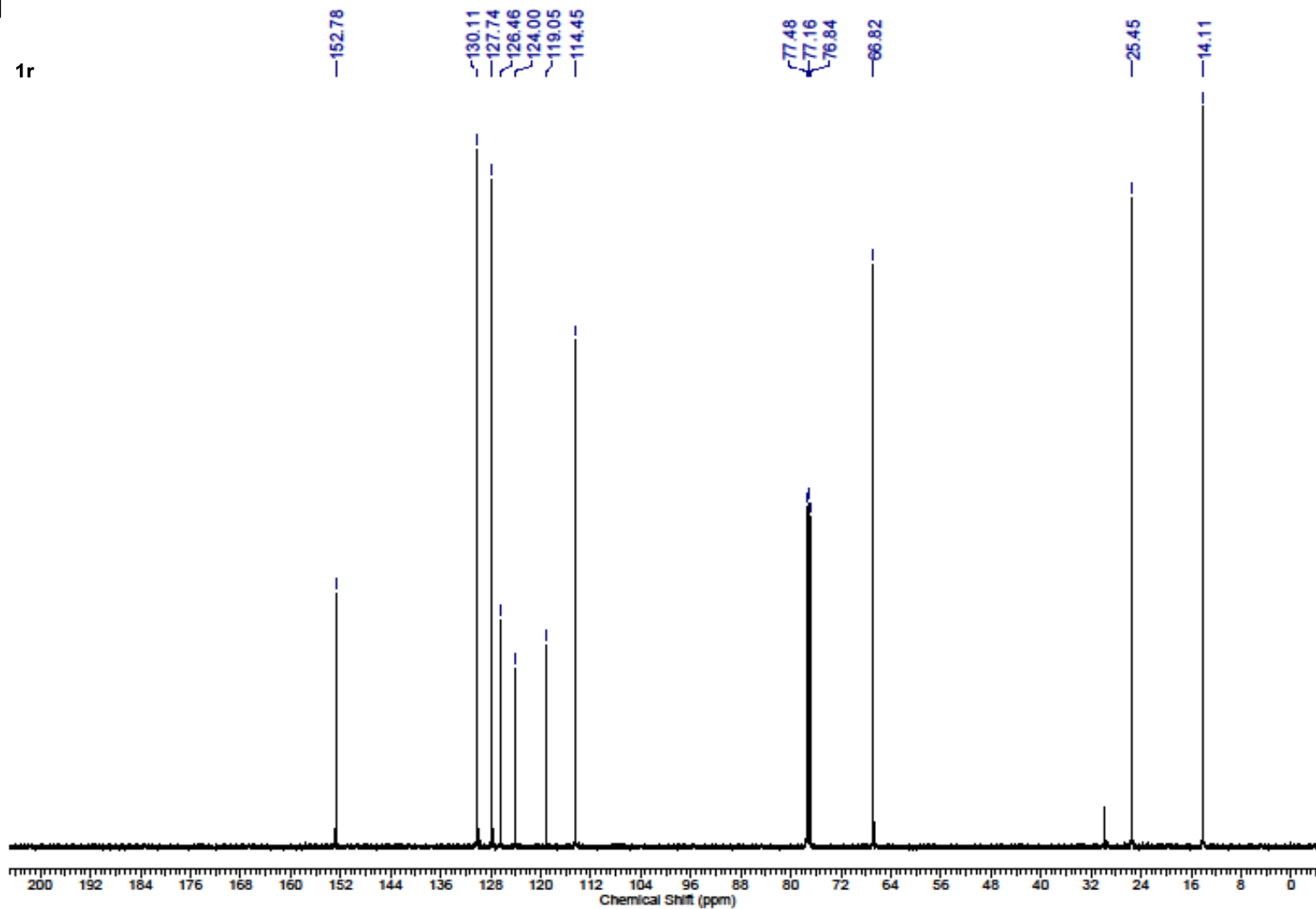
**1r**



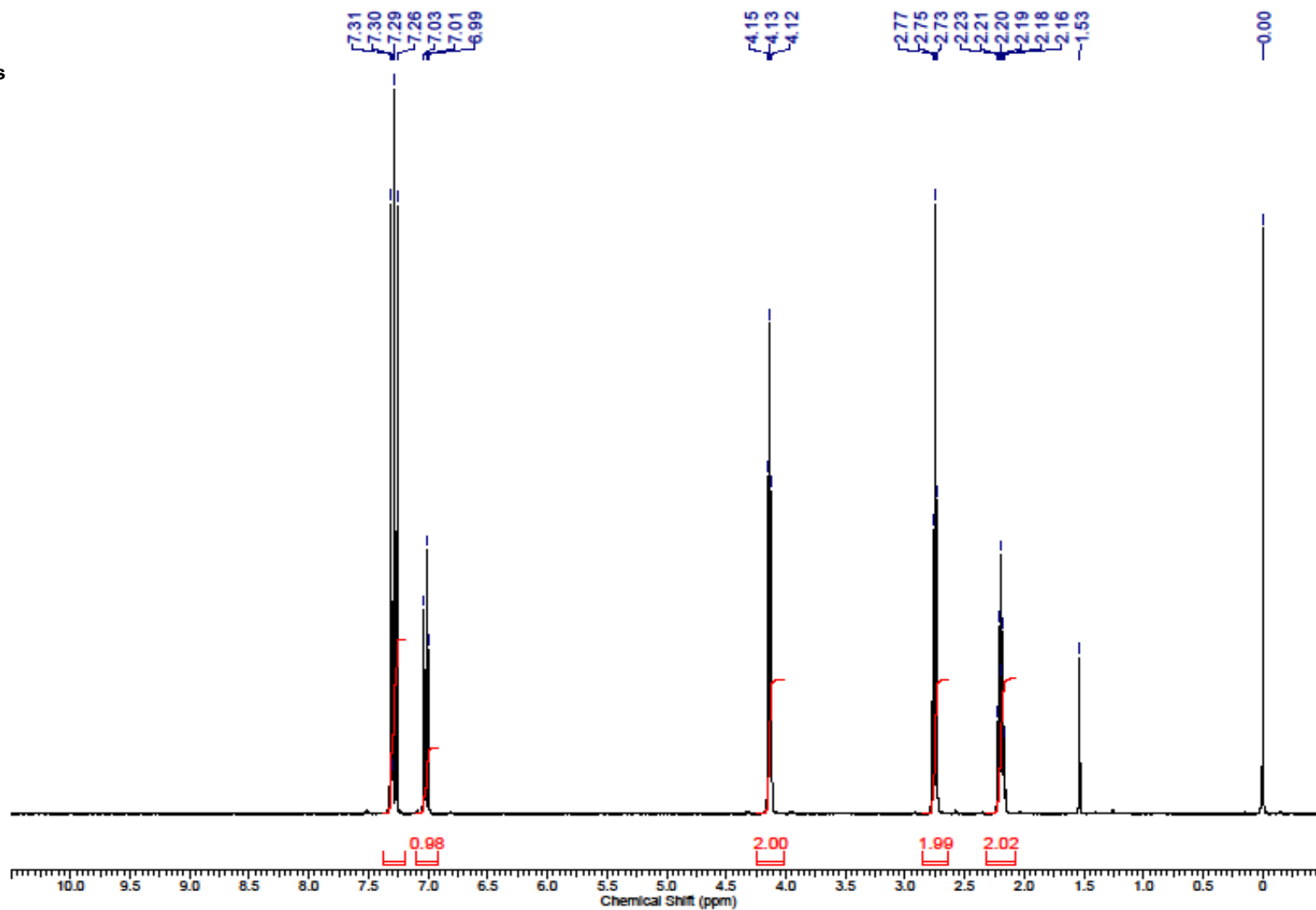
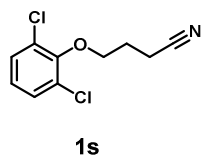
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1r** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



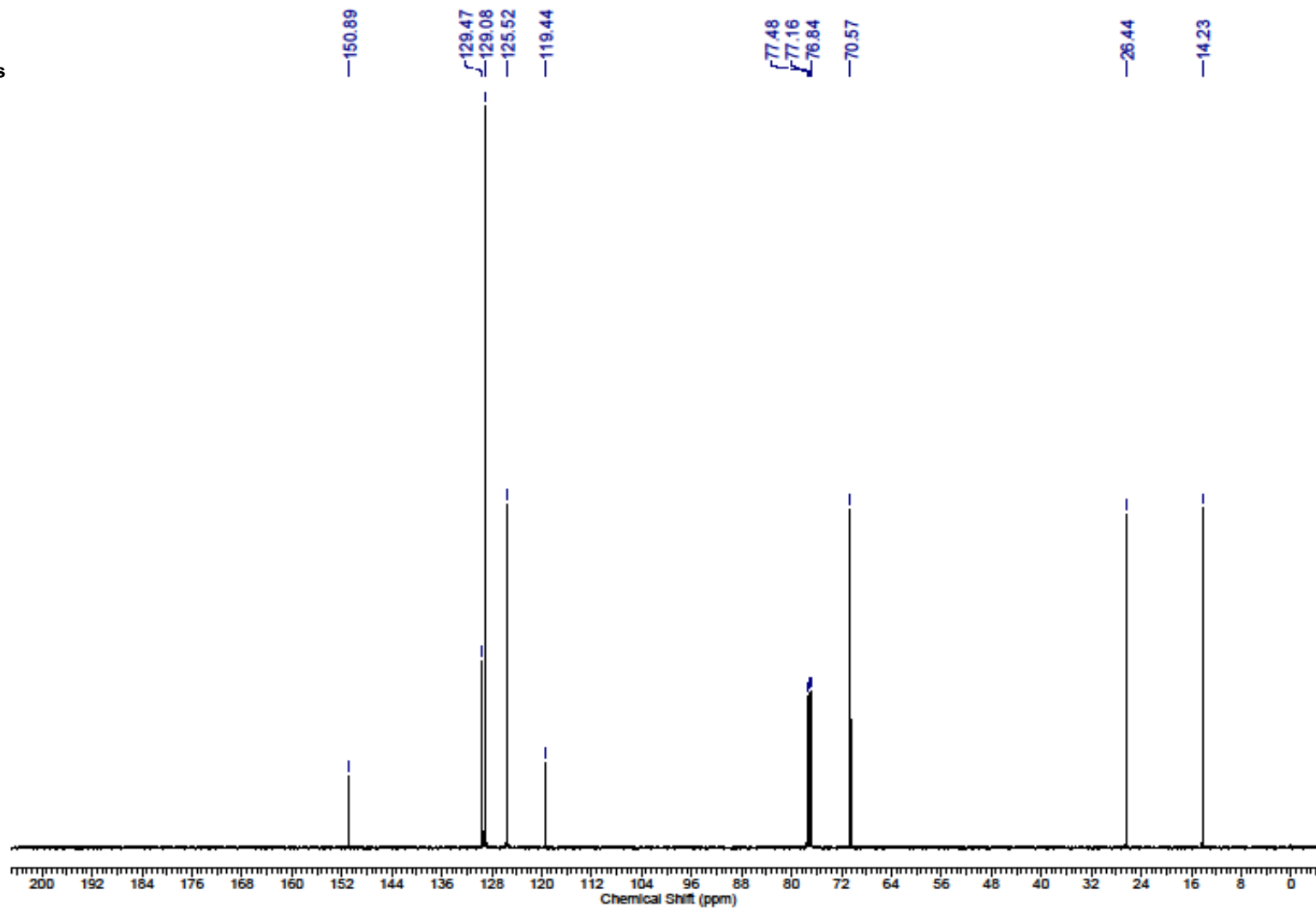
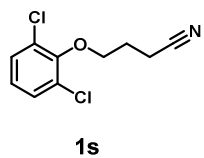
**1r**



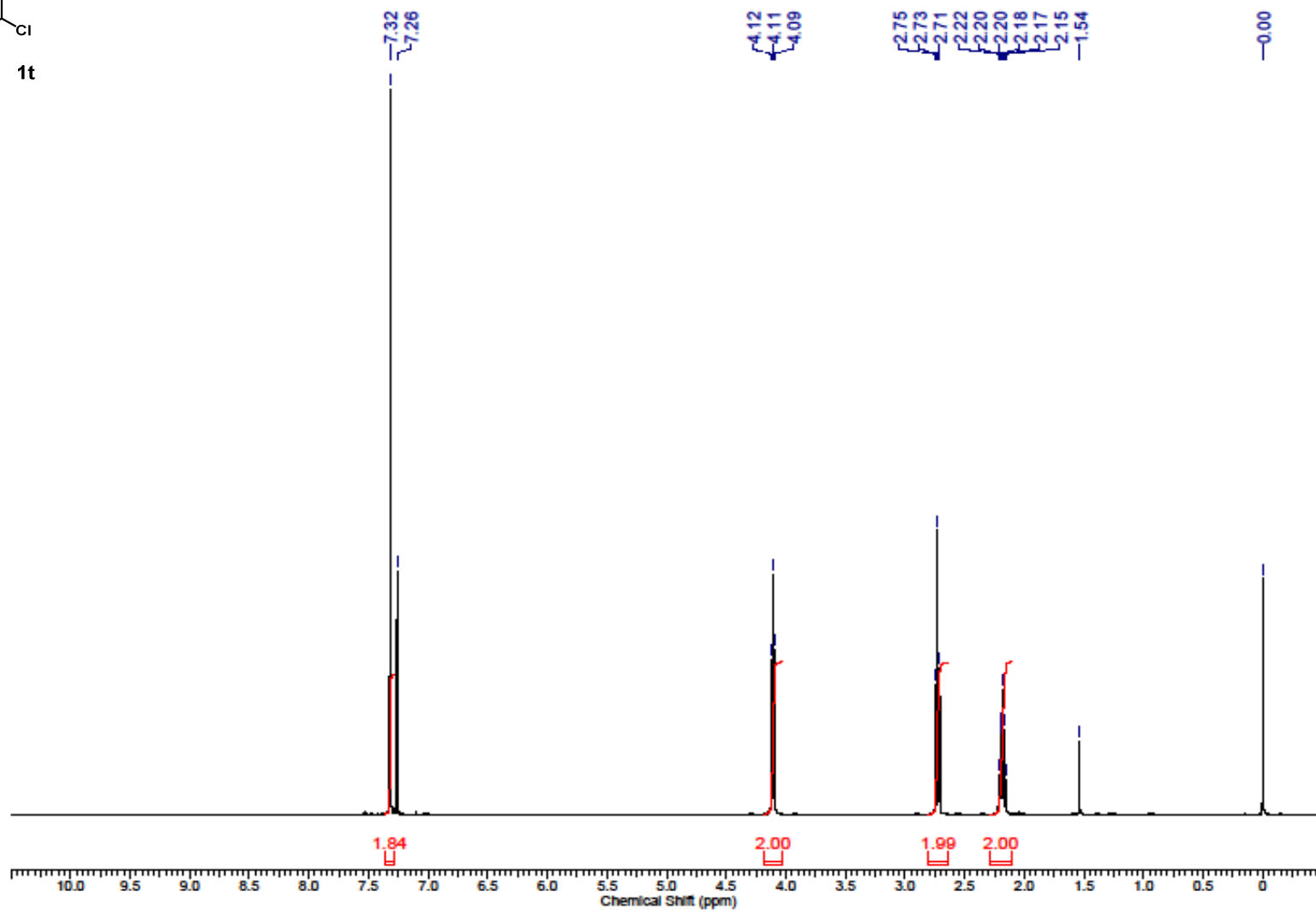
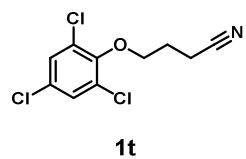
$^1\text{H}$  NMR spectrum of **1s** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



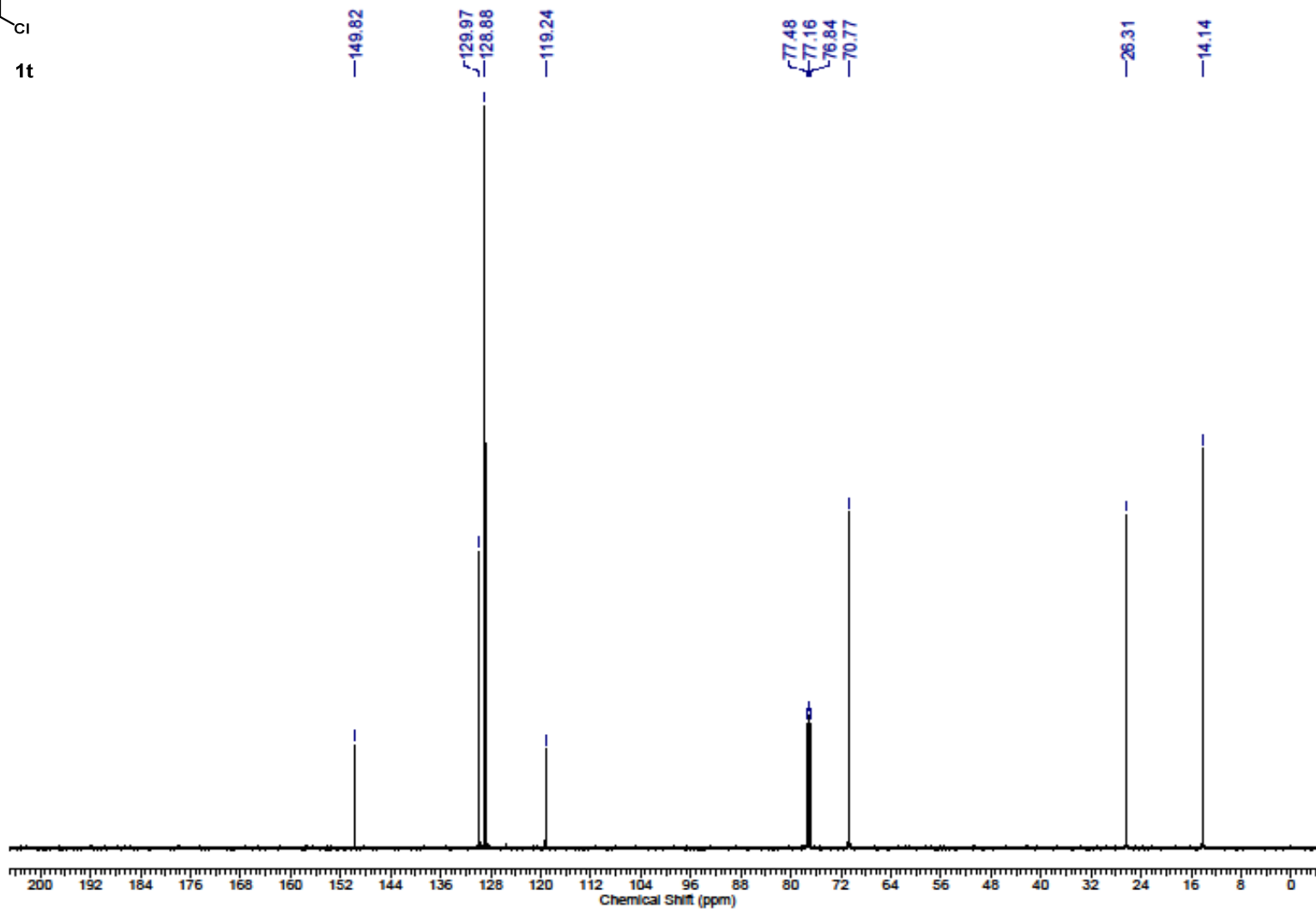
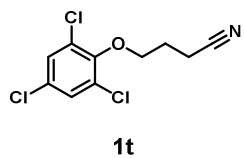
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1s** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



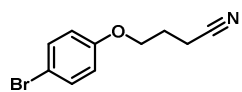
$^1\text{H}$  NMR spectrum of **1t** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



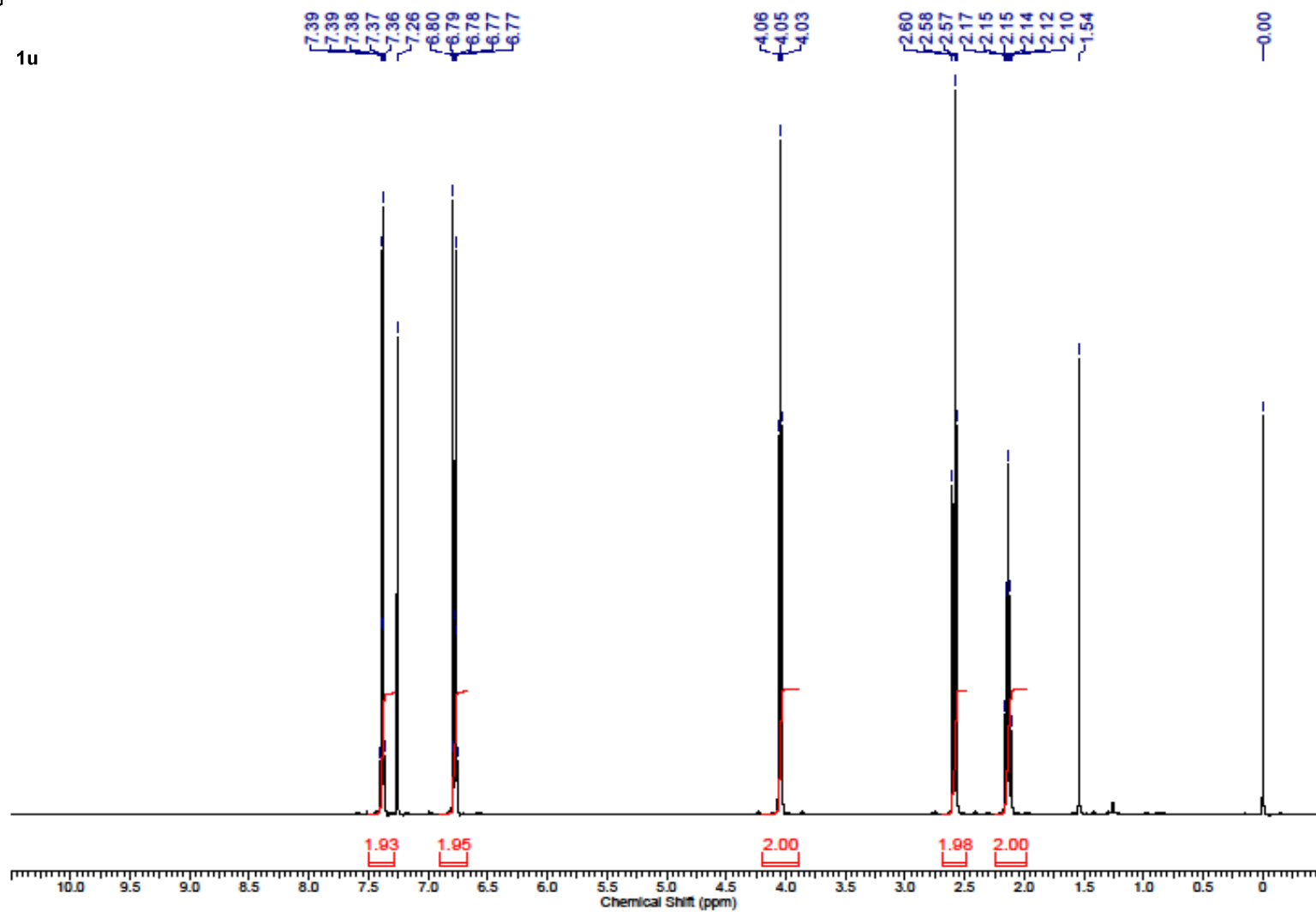
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1t** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



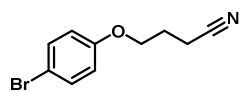
$^1\text{H}$  NMR spectrum of **1u** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



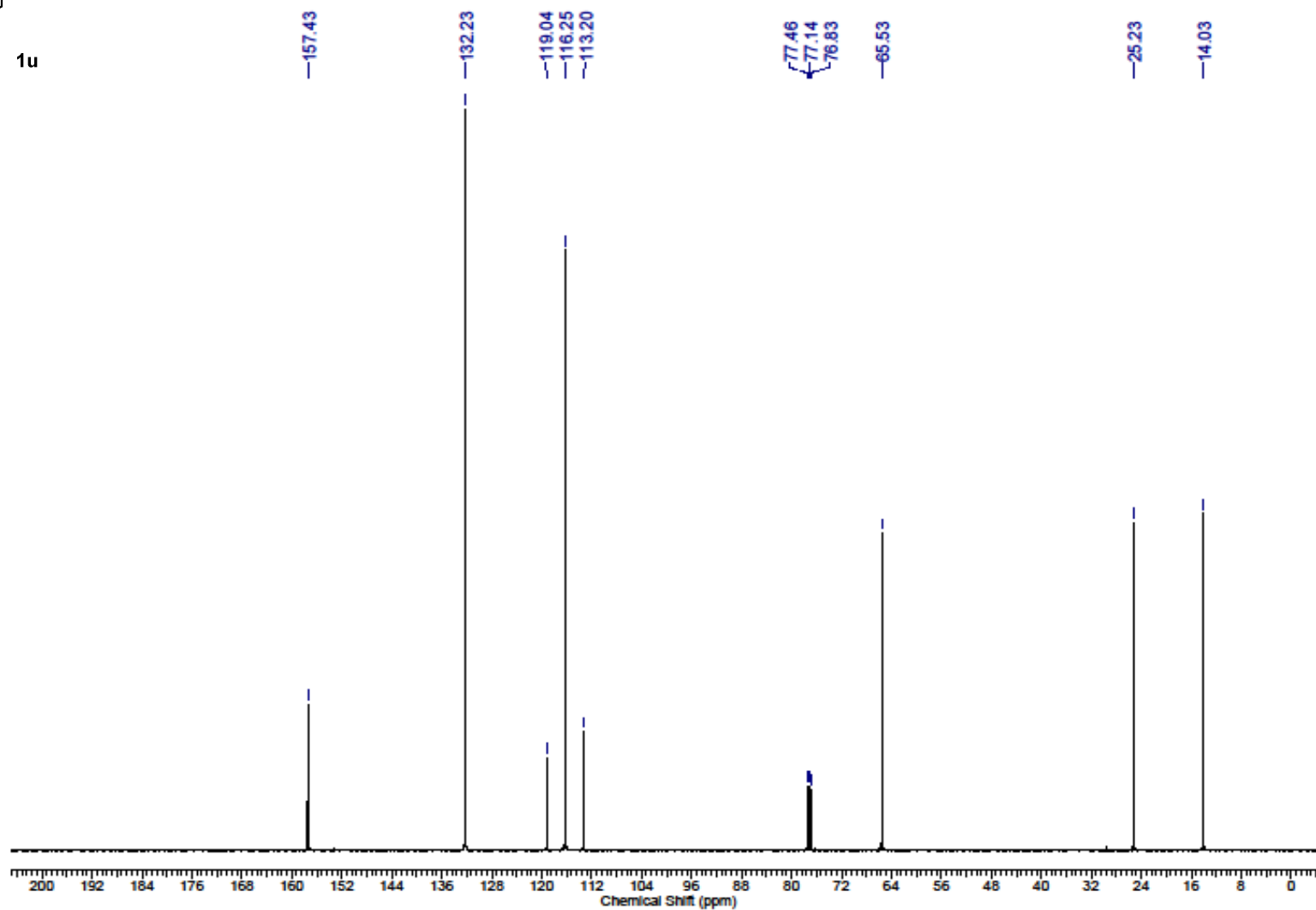
**1u**



$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1u** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)

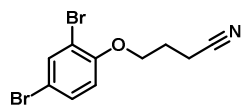


**1u**

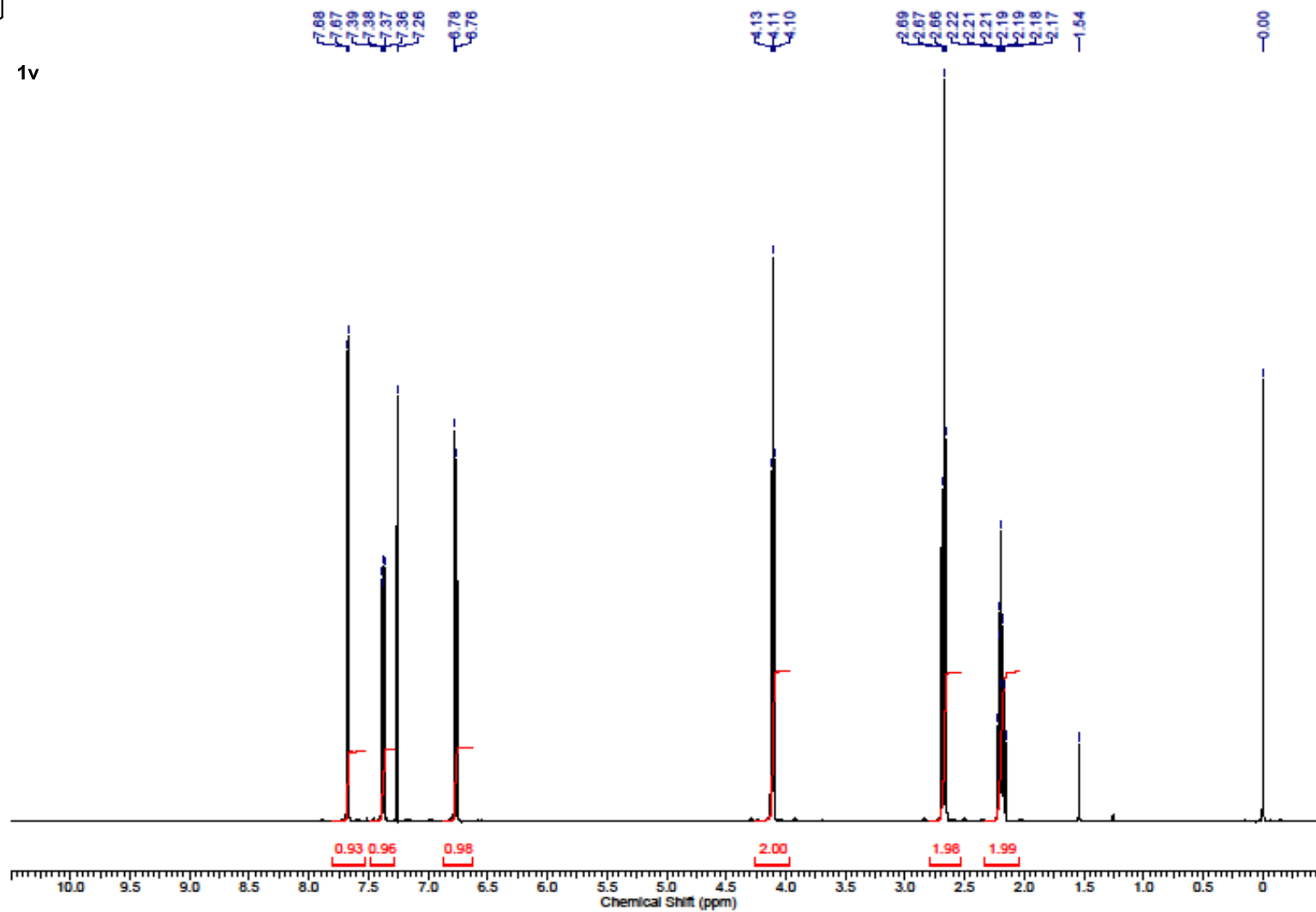




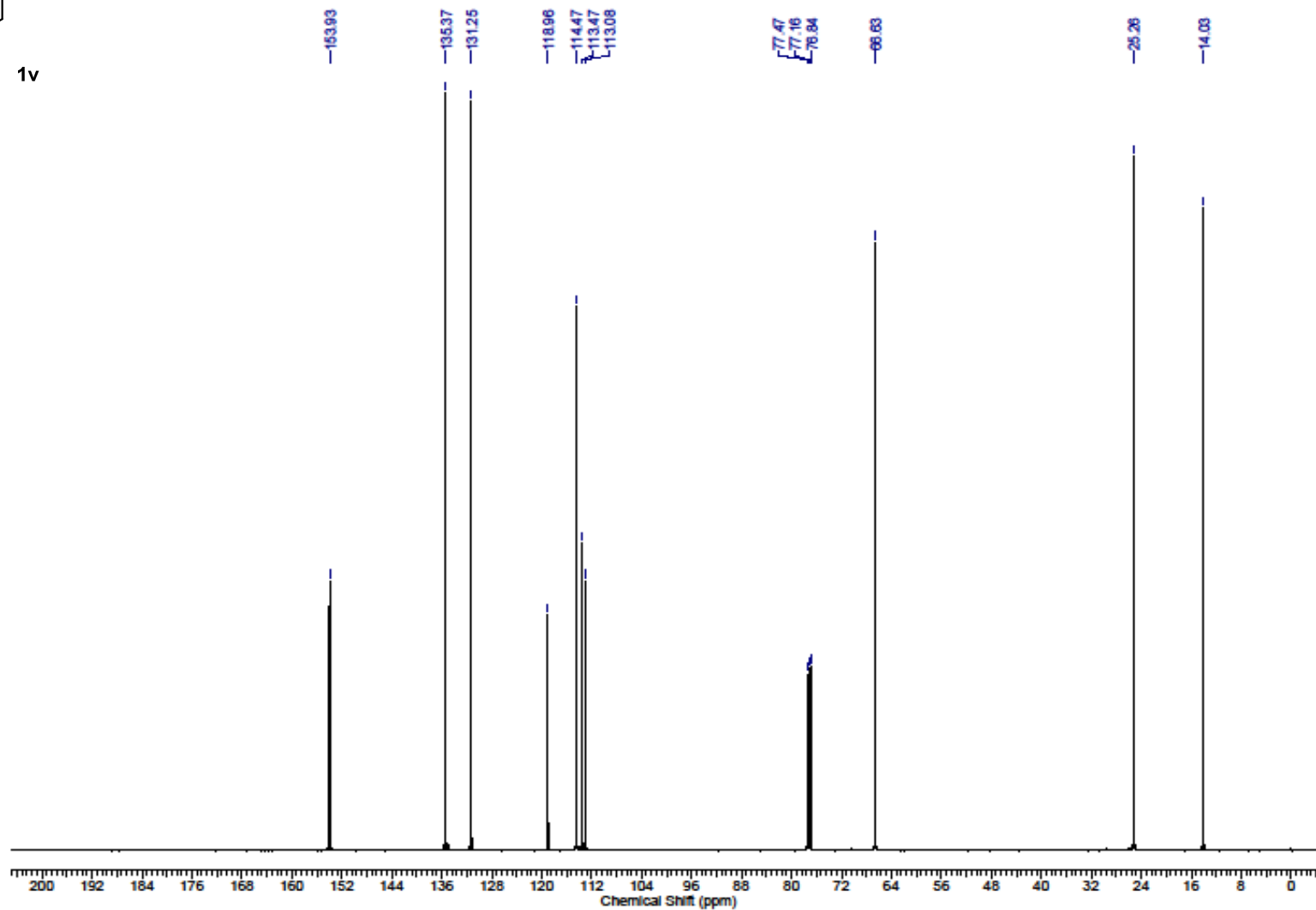
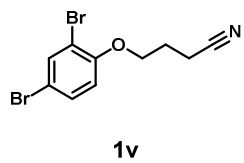
$^1\text{H}$  NMR spectrum of **1v** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



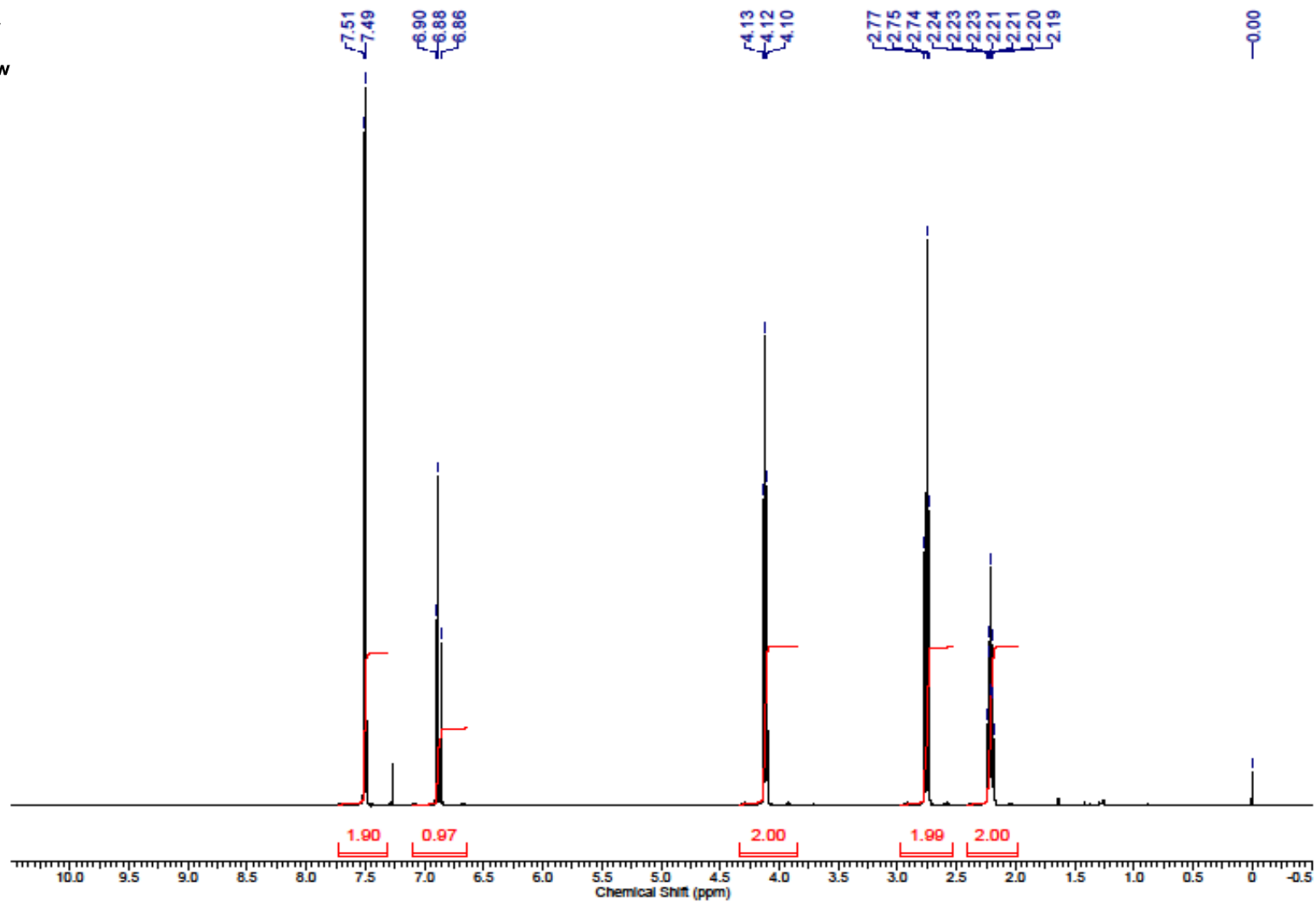
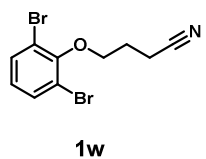
**1v**



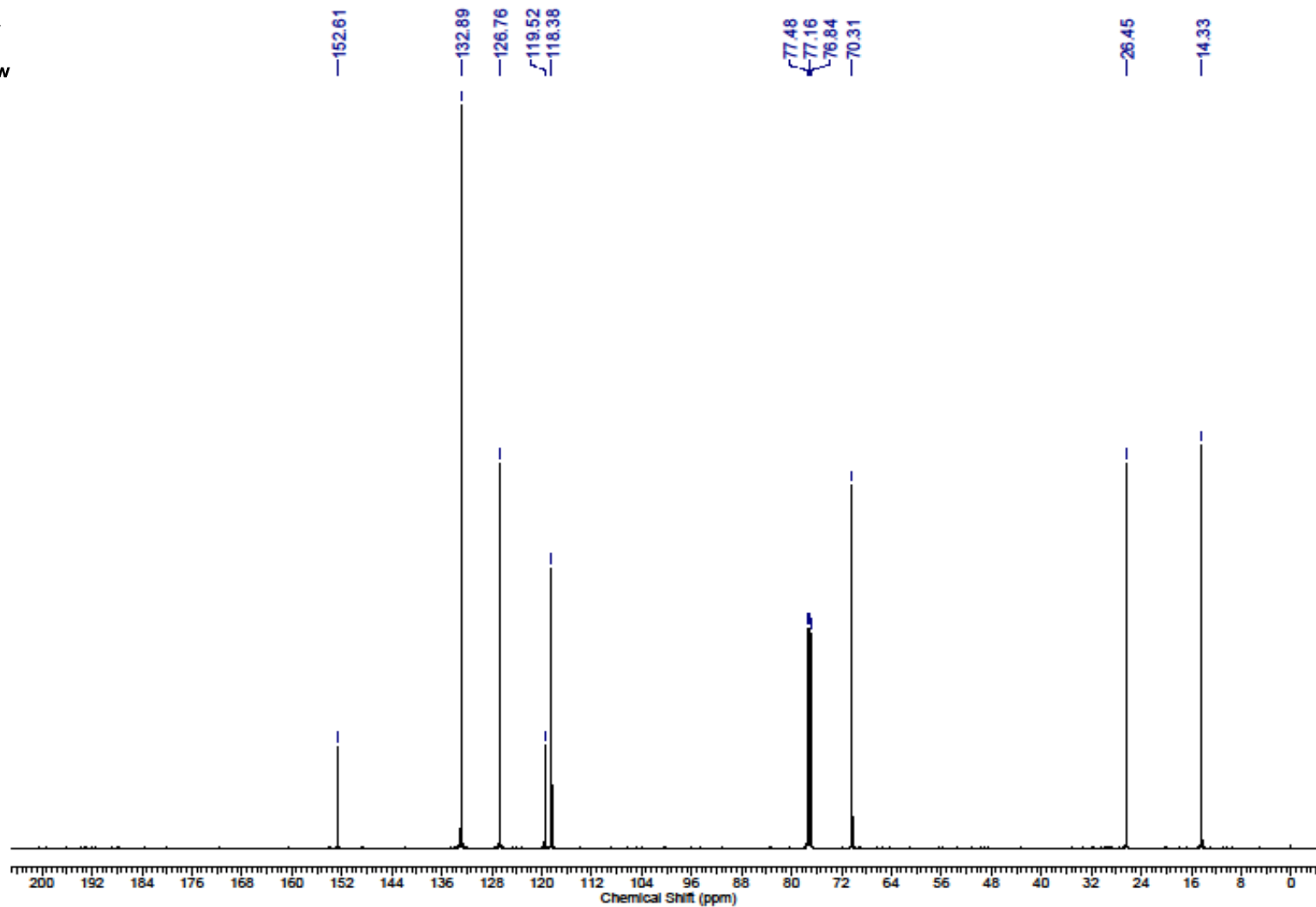
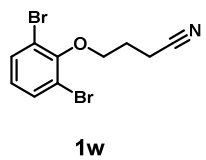
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1v** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



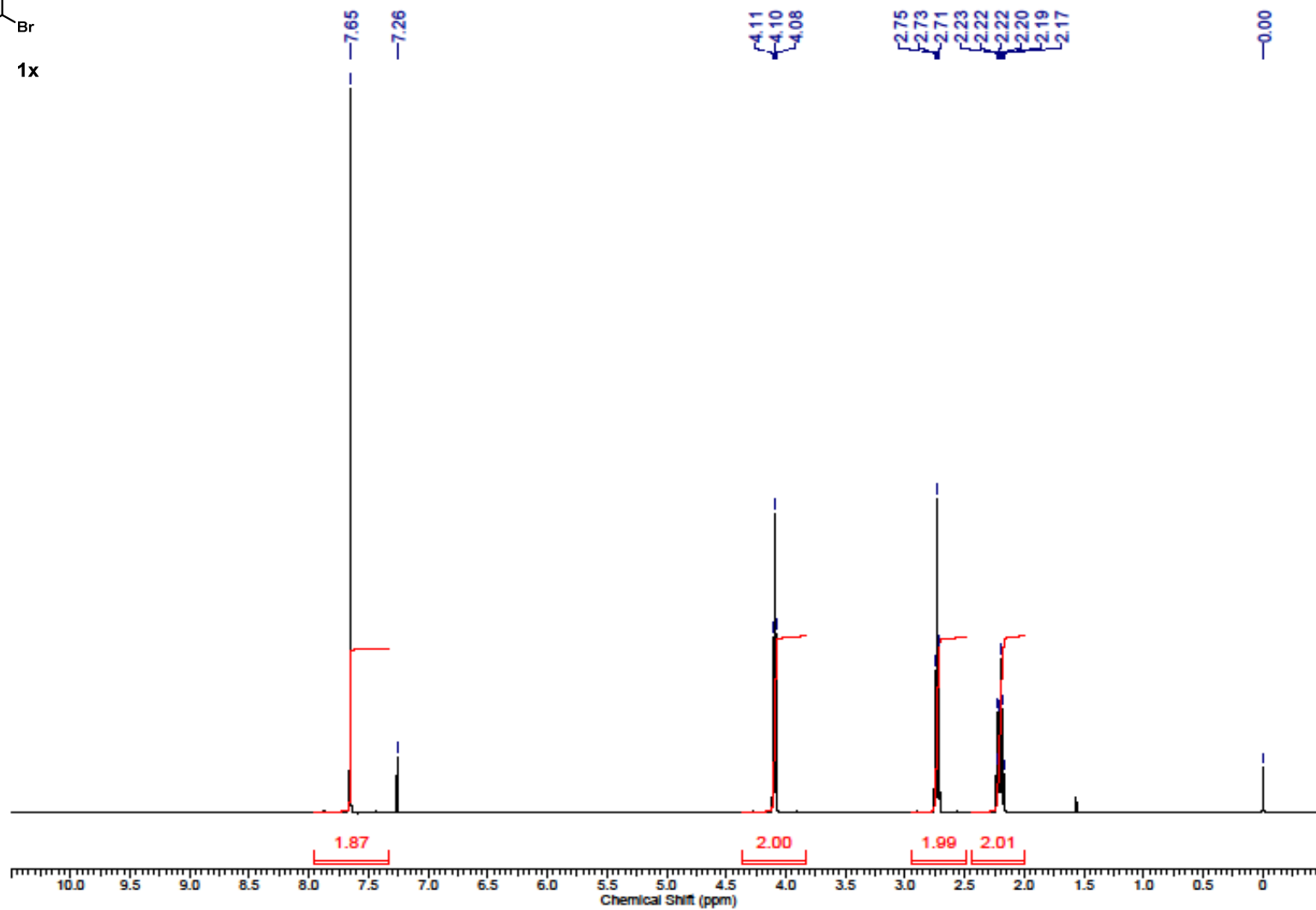
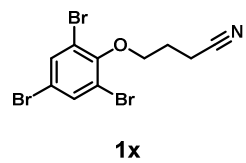
$^1\text{H}$  NMR spectrum of **1w** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



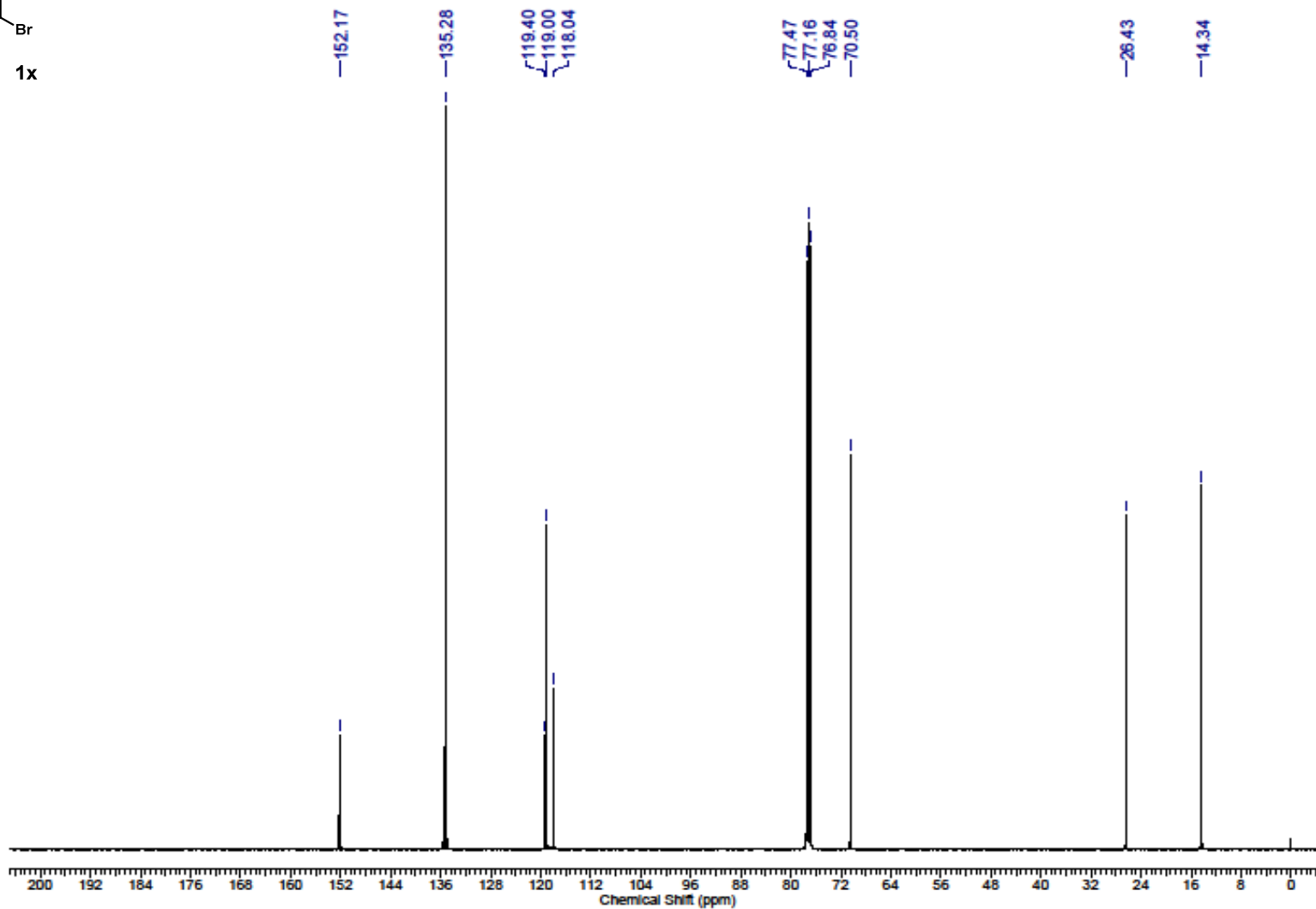
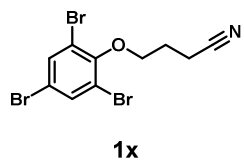
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1w** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



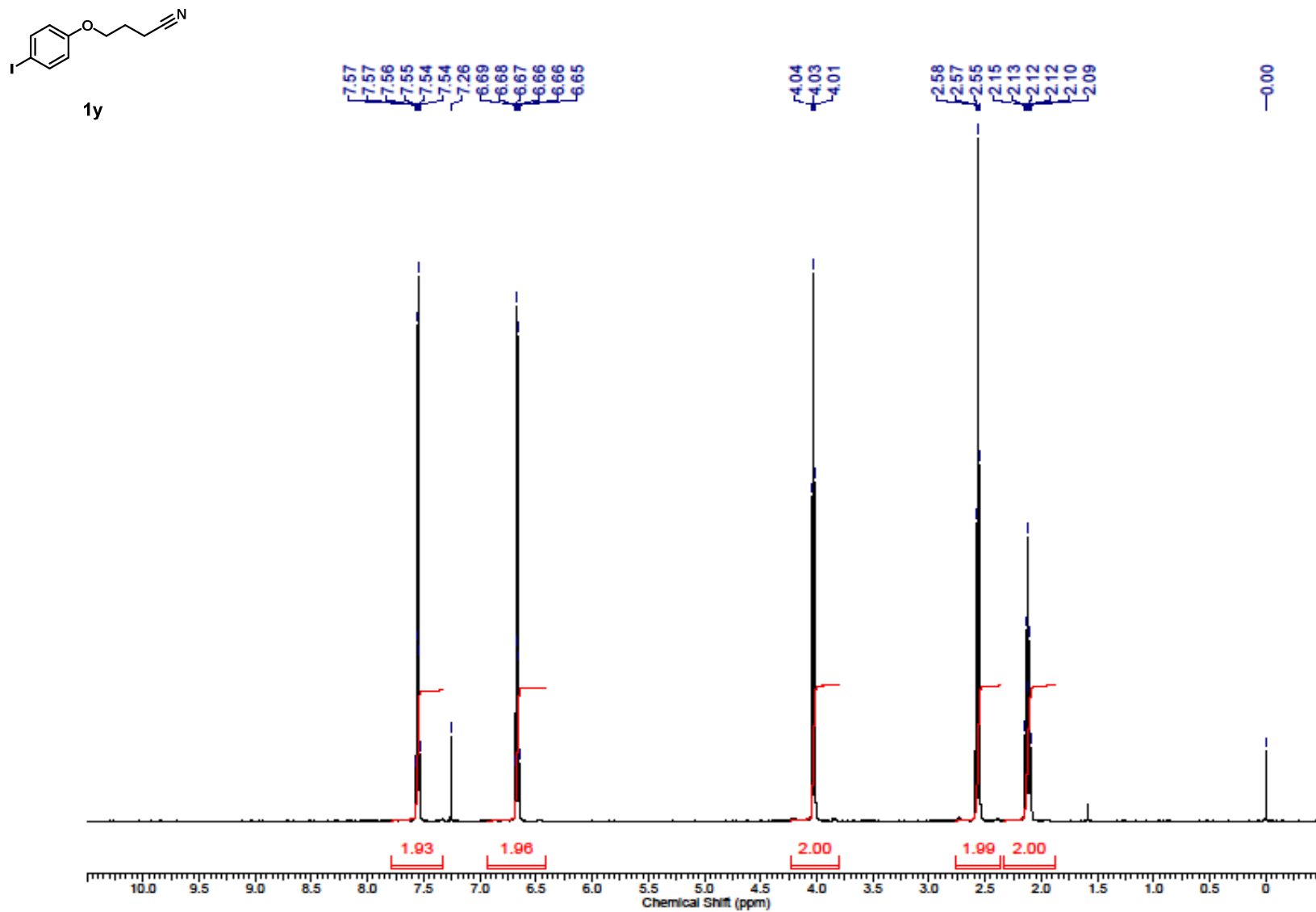
$^1\text{H}$  NMR spectrum of **1x** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



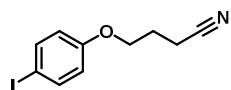
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1x** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



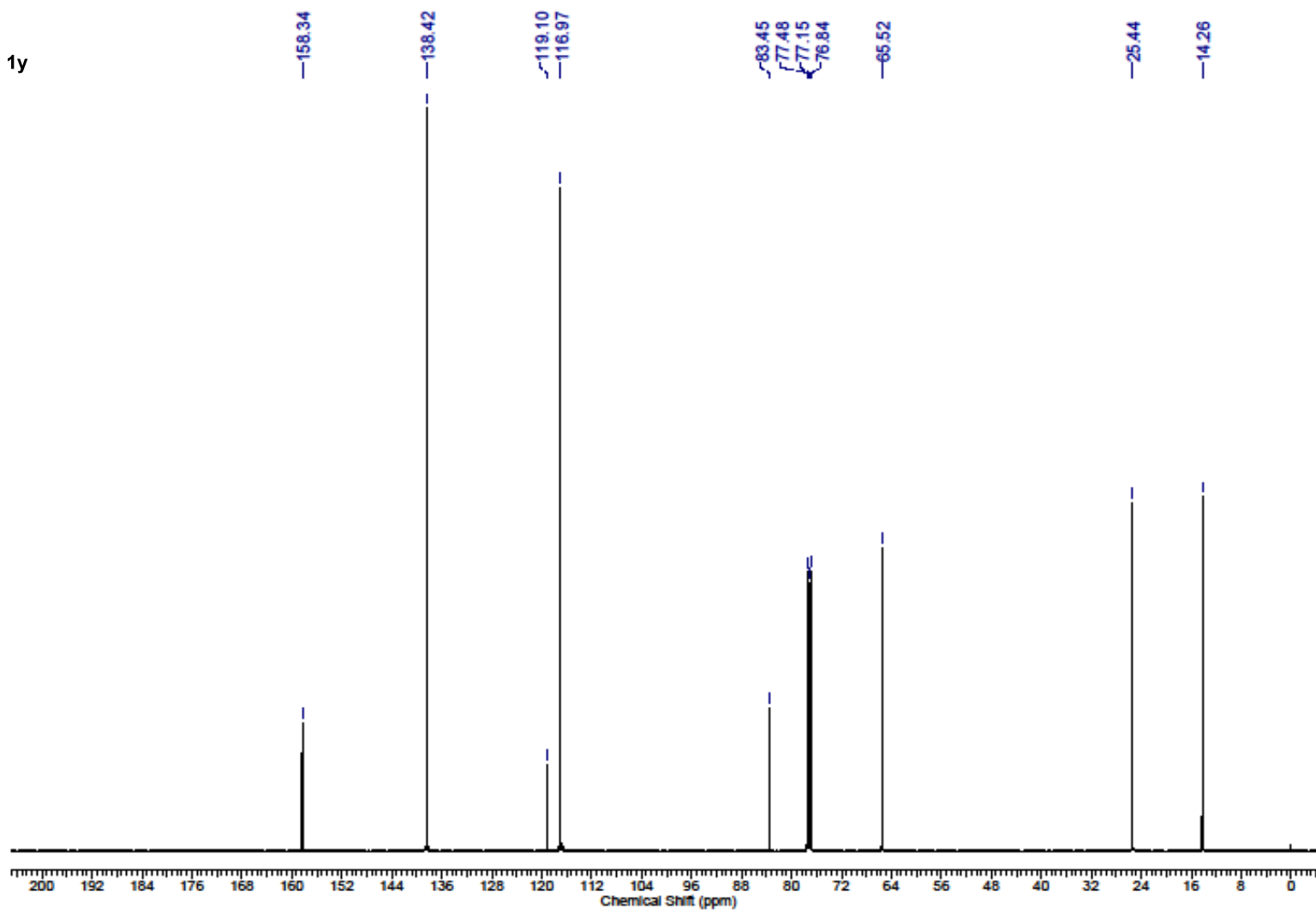
$^1\text{H}$  NMR spectrum of **1y** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1y** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)

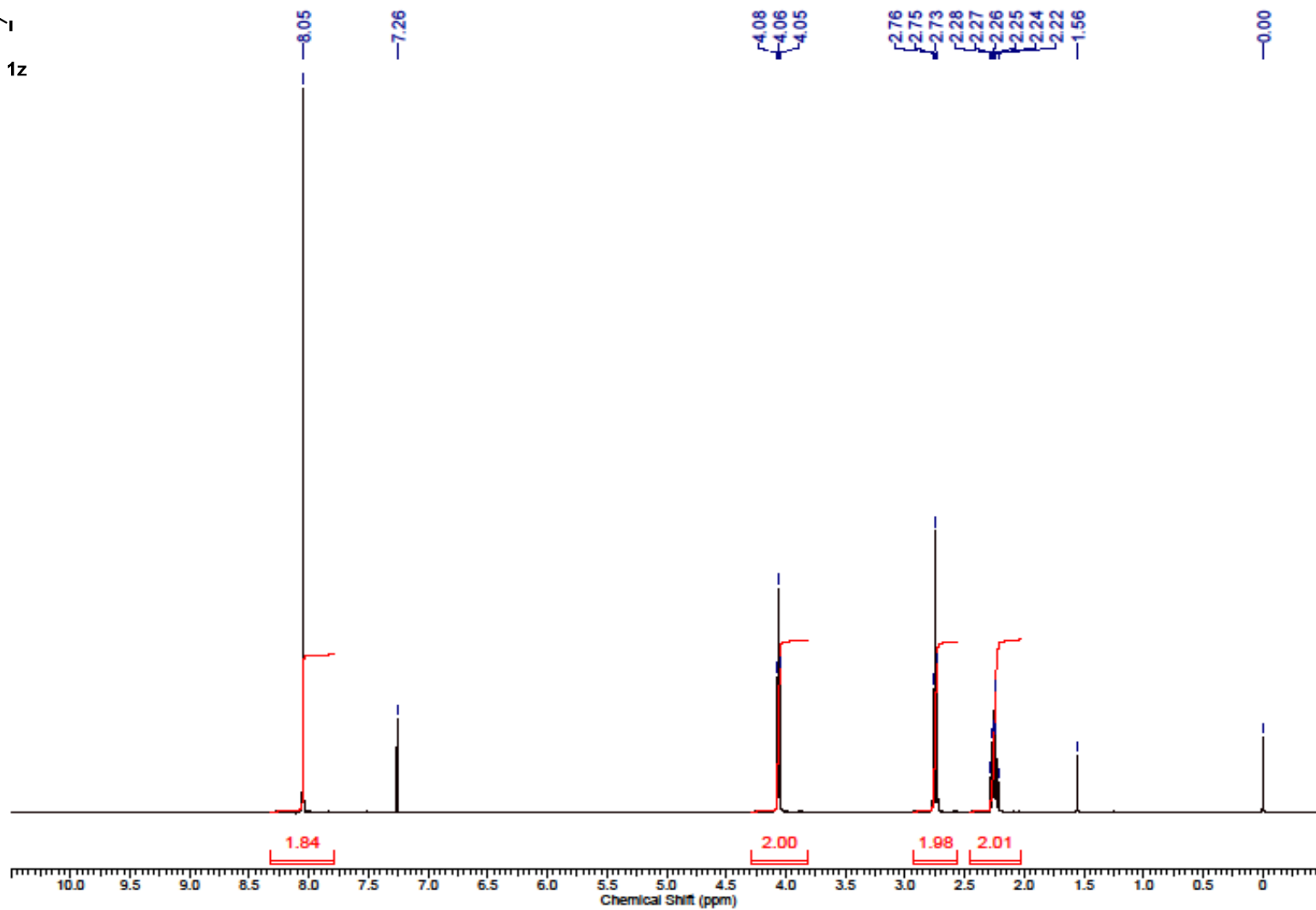
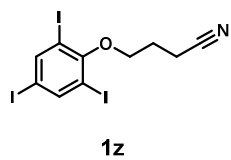


**1y**

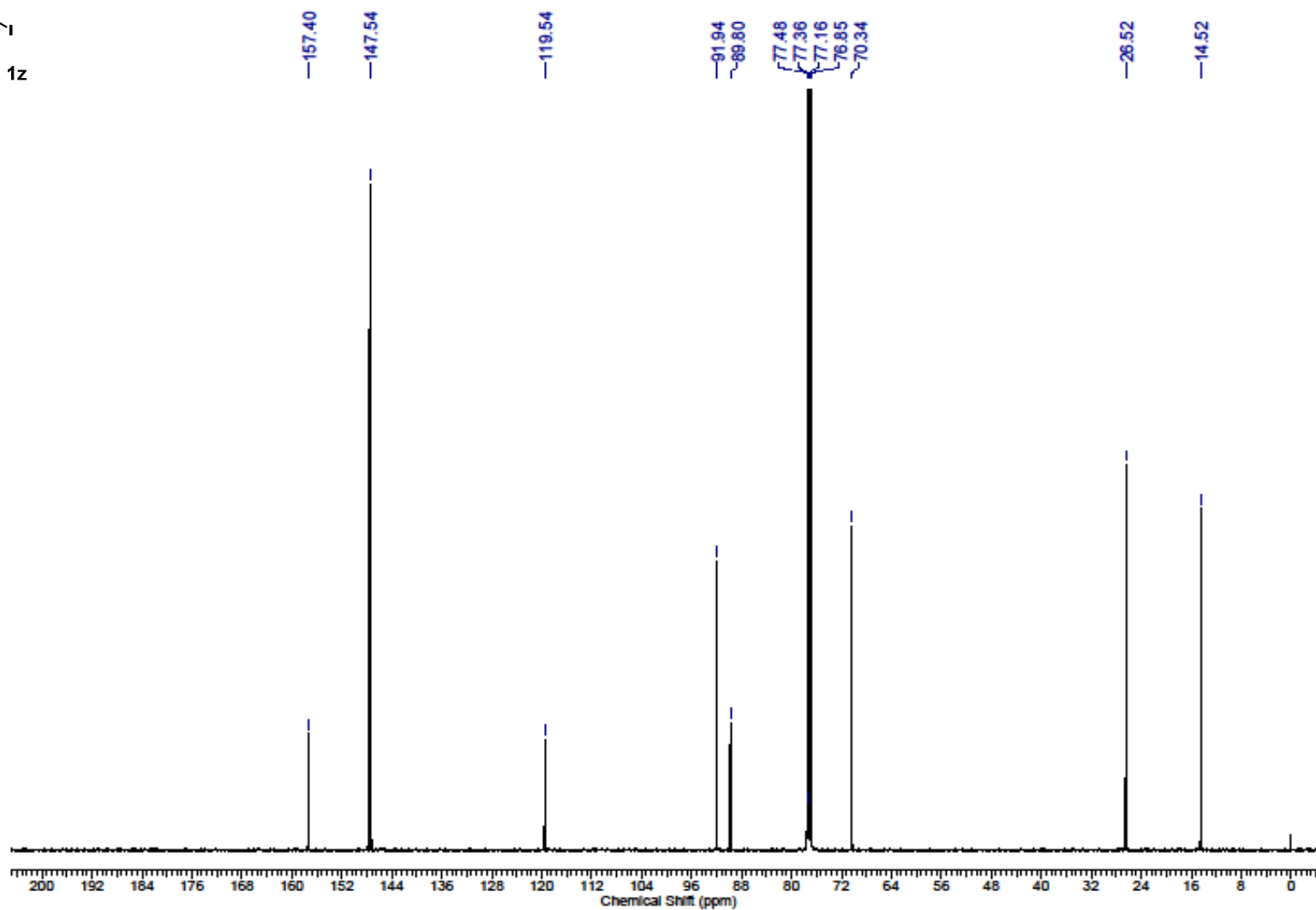
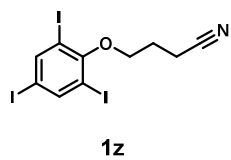




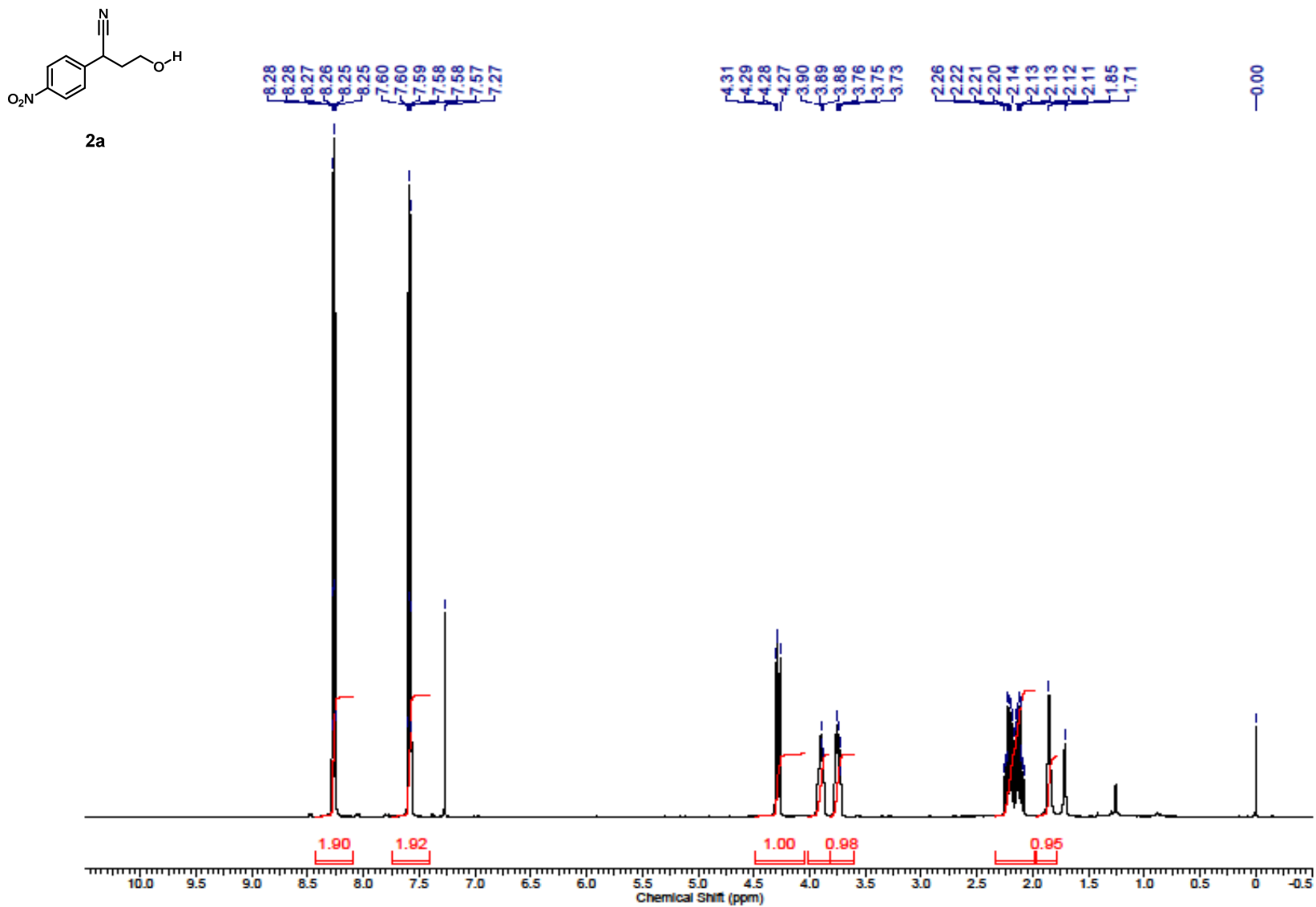
$^1\text{H}$  NMR spectrum of **1z** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



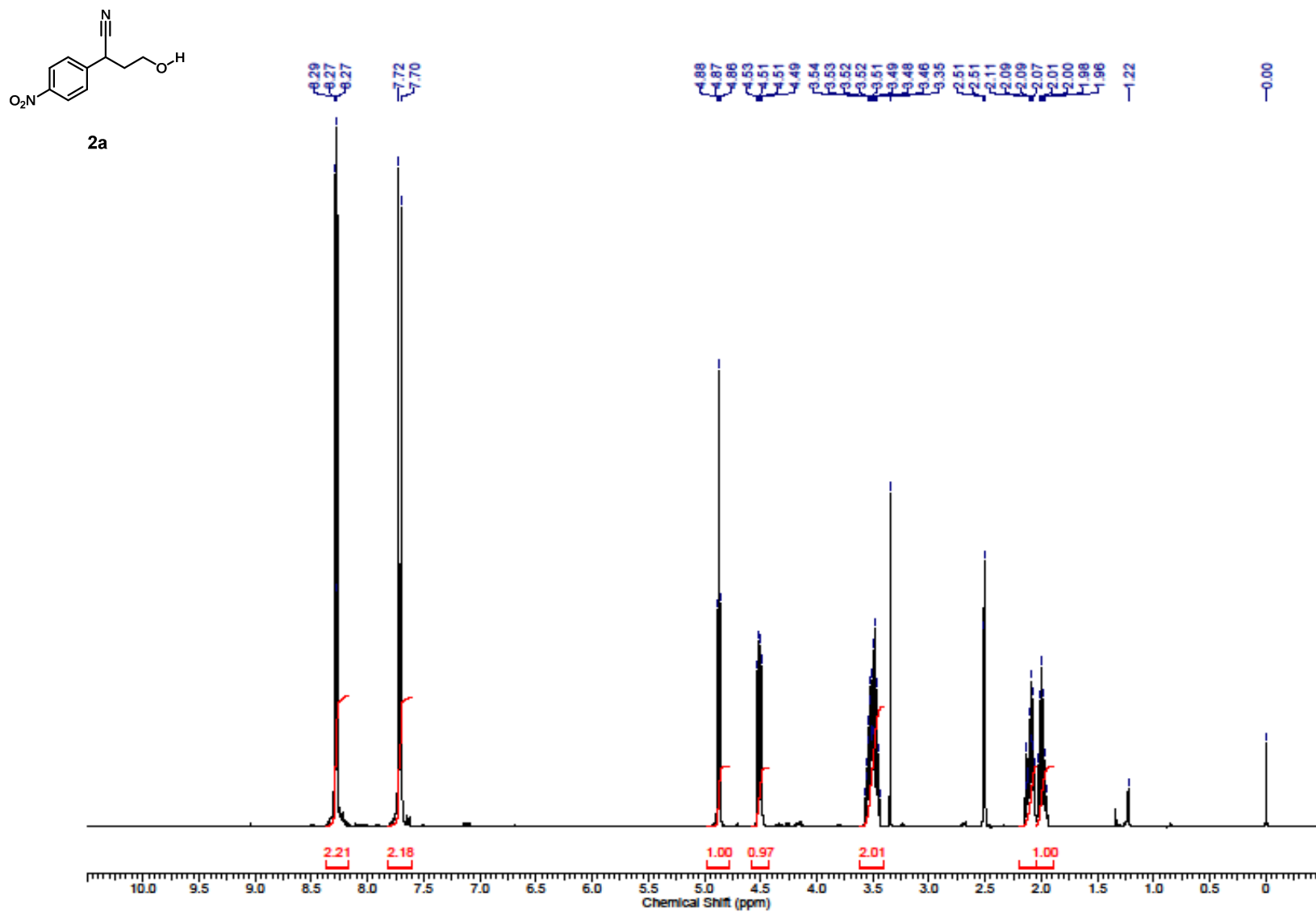
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **1z** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



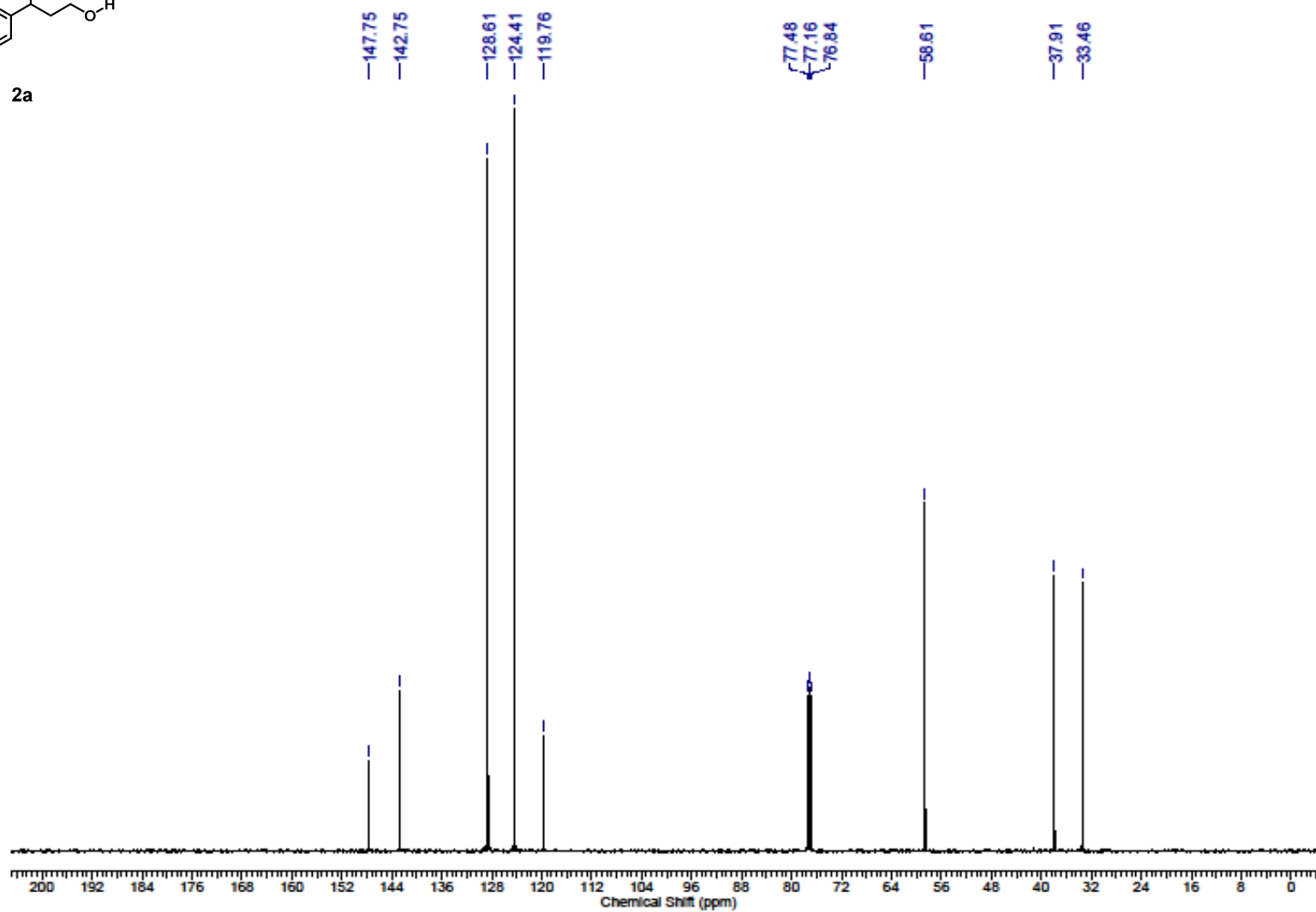
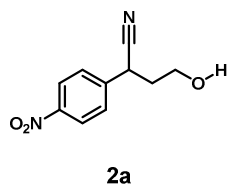
$^1\text{H}$  NMR spectrum of **2a** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



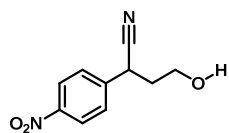
$^1\text{H}$  NMR spectrum of **2a** in  $(\text{CD}_3)_2\text{SO}$  with 0.05% v/v TMS (400 MHz)



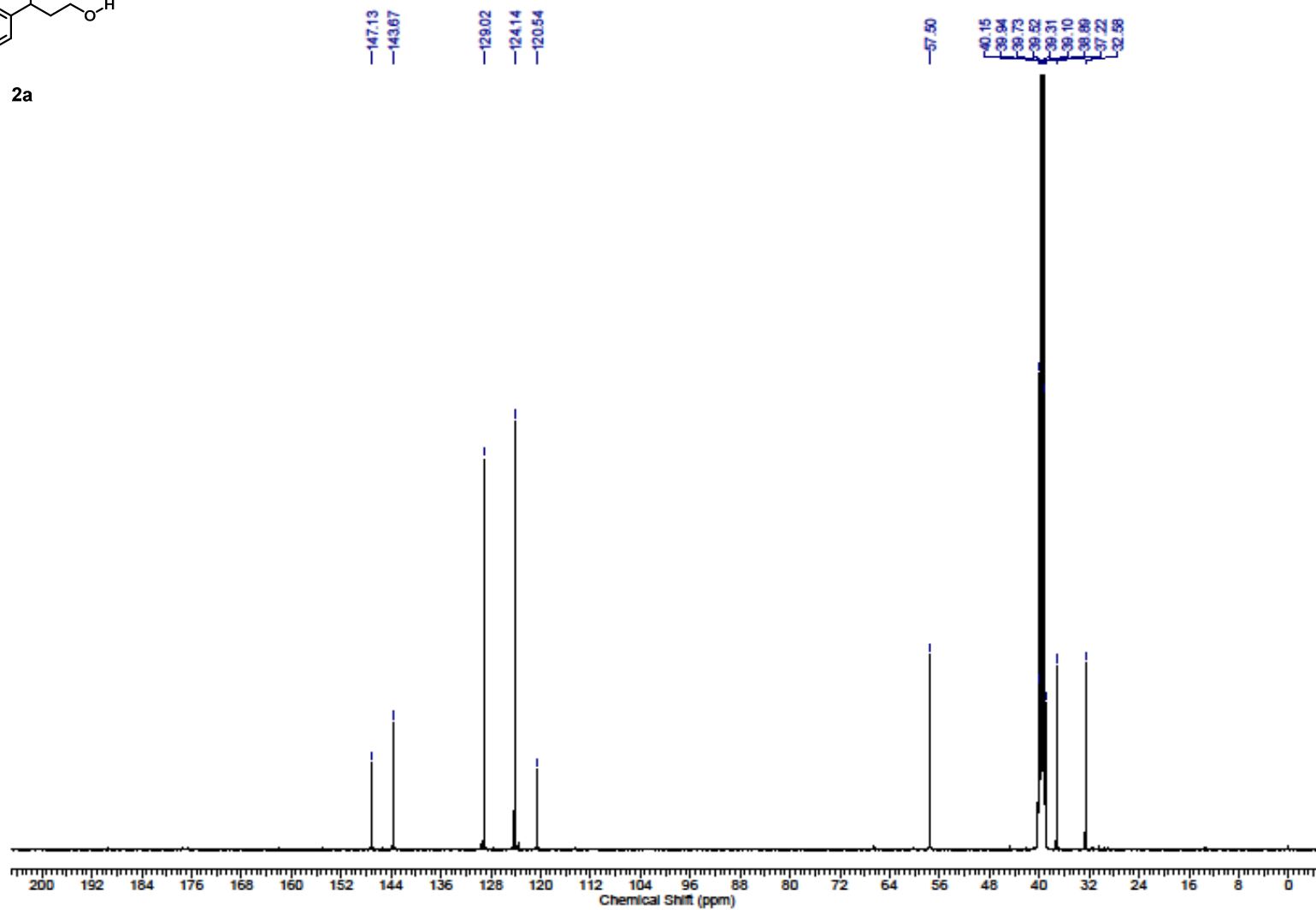
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2a** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



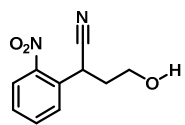
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2a** in  $(\text{CD}_3)_2\text{SO}$  with 0.05% v/v TMS (100 MHz)



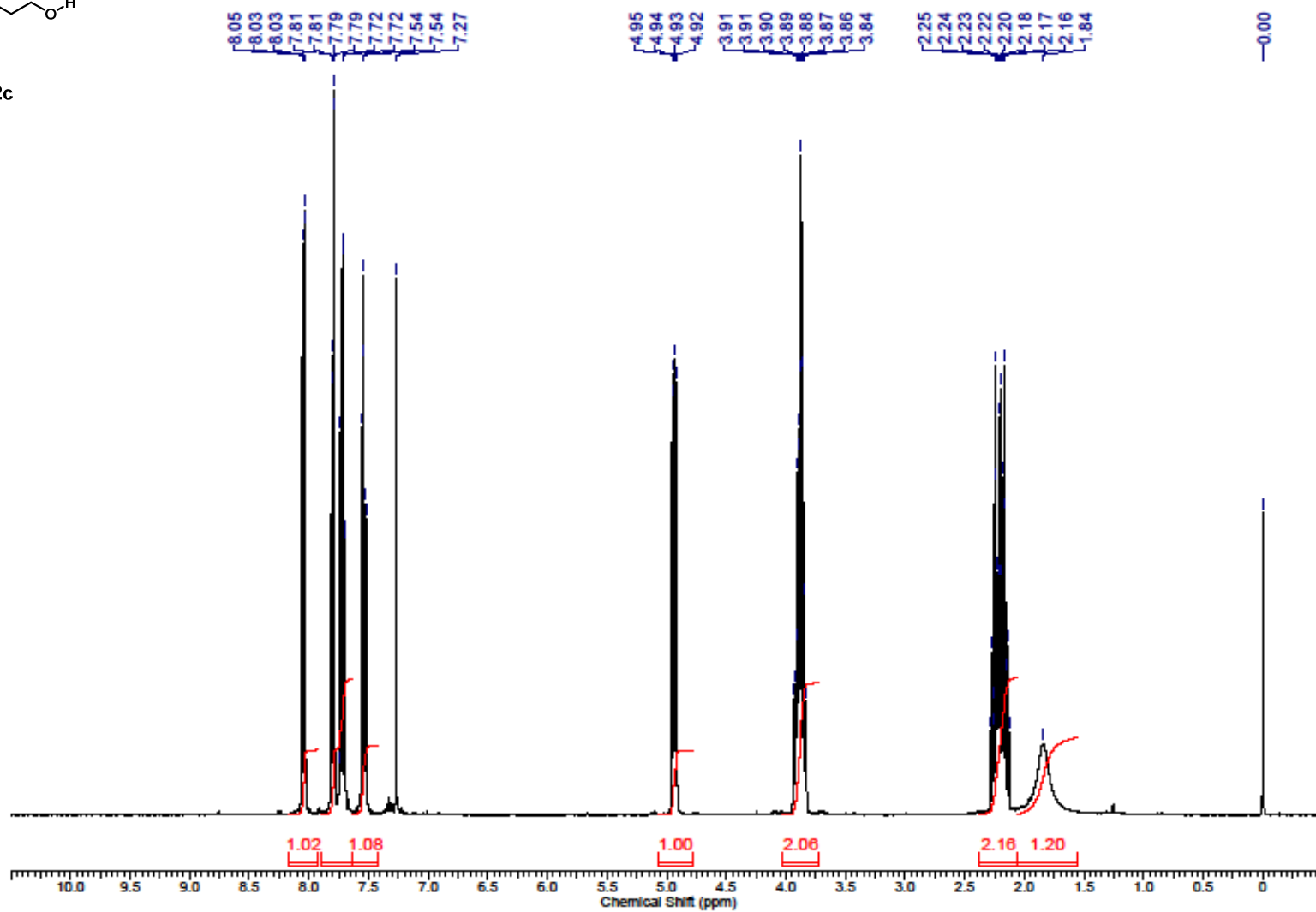
**2a**



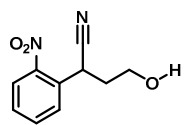
$^1\text{H}$  NMR spectrum of **2c** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



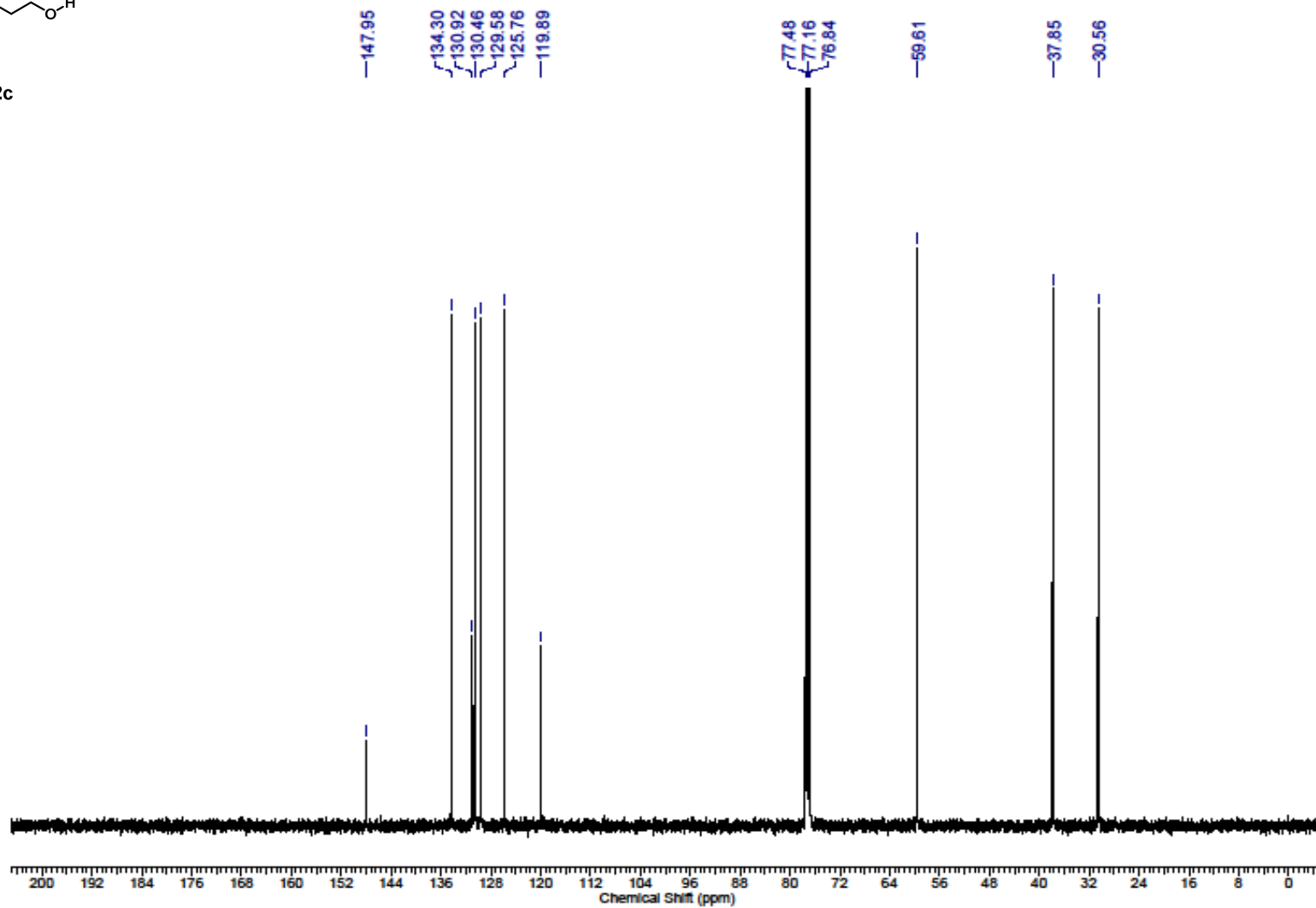
**2c**



$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2c** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)

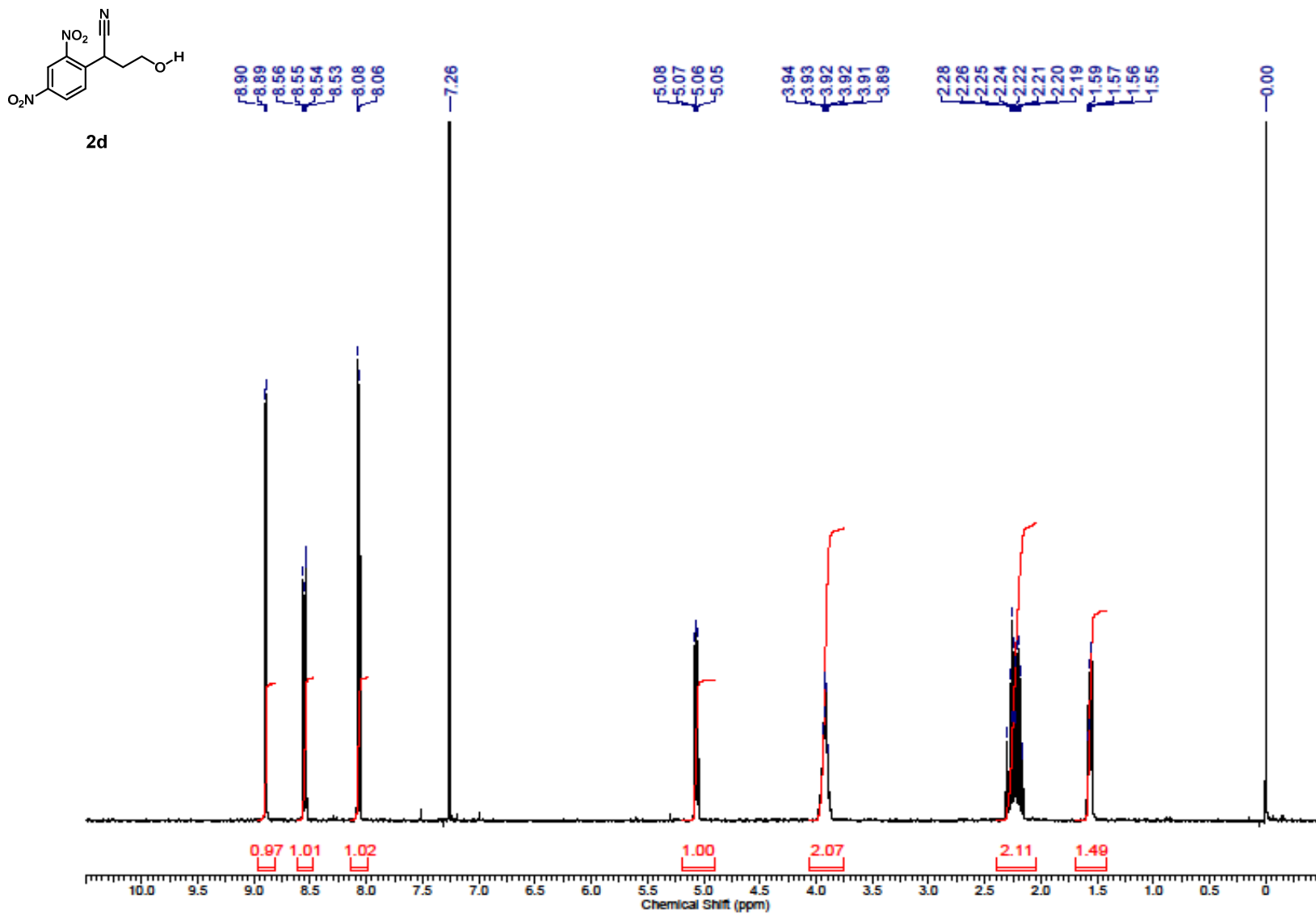


**2c**

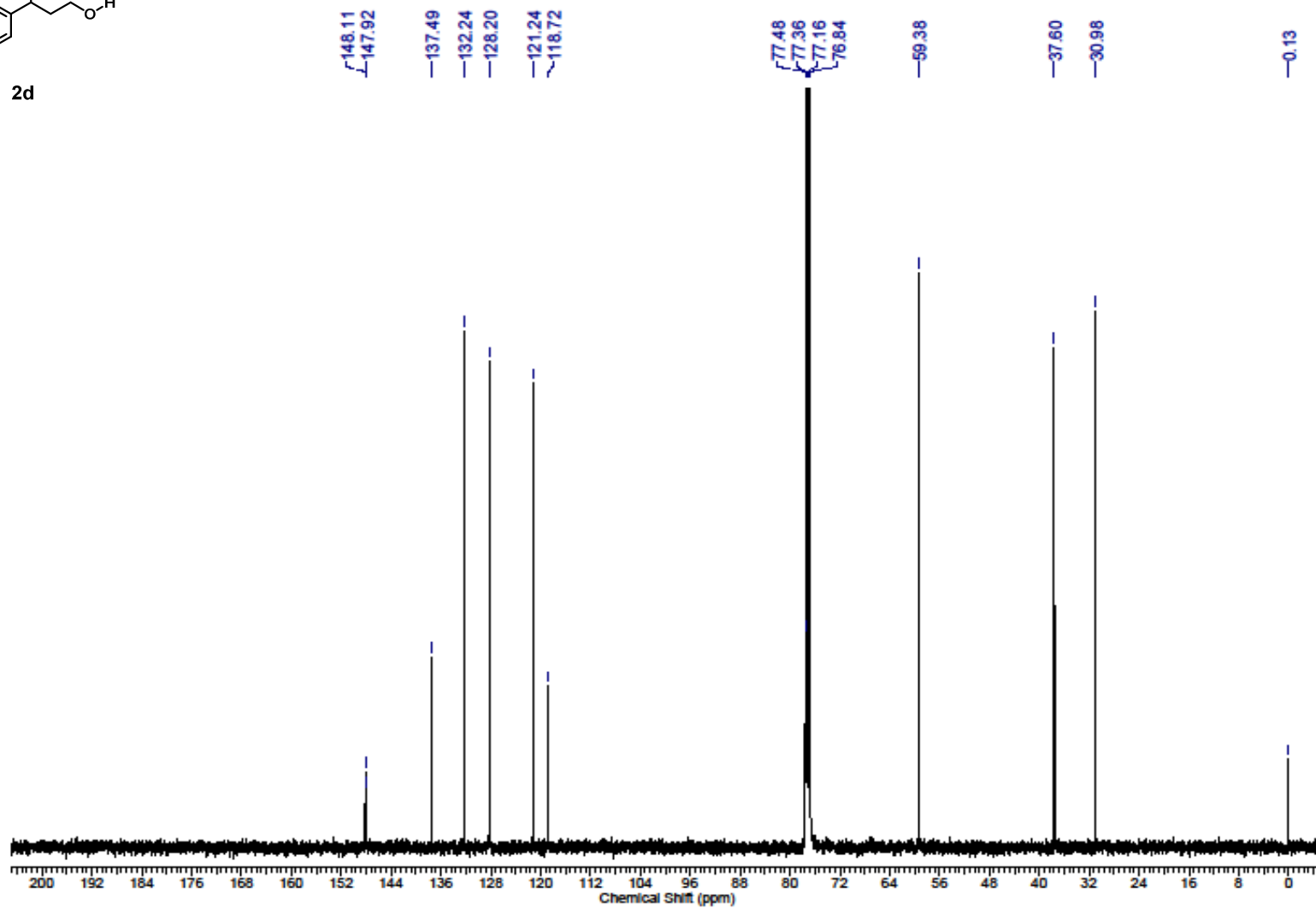
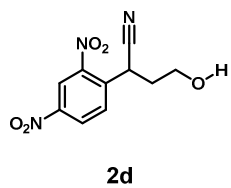




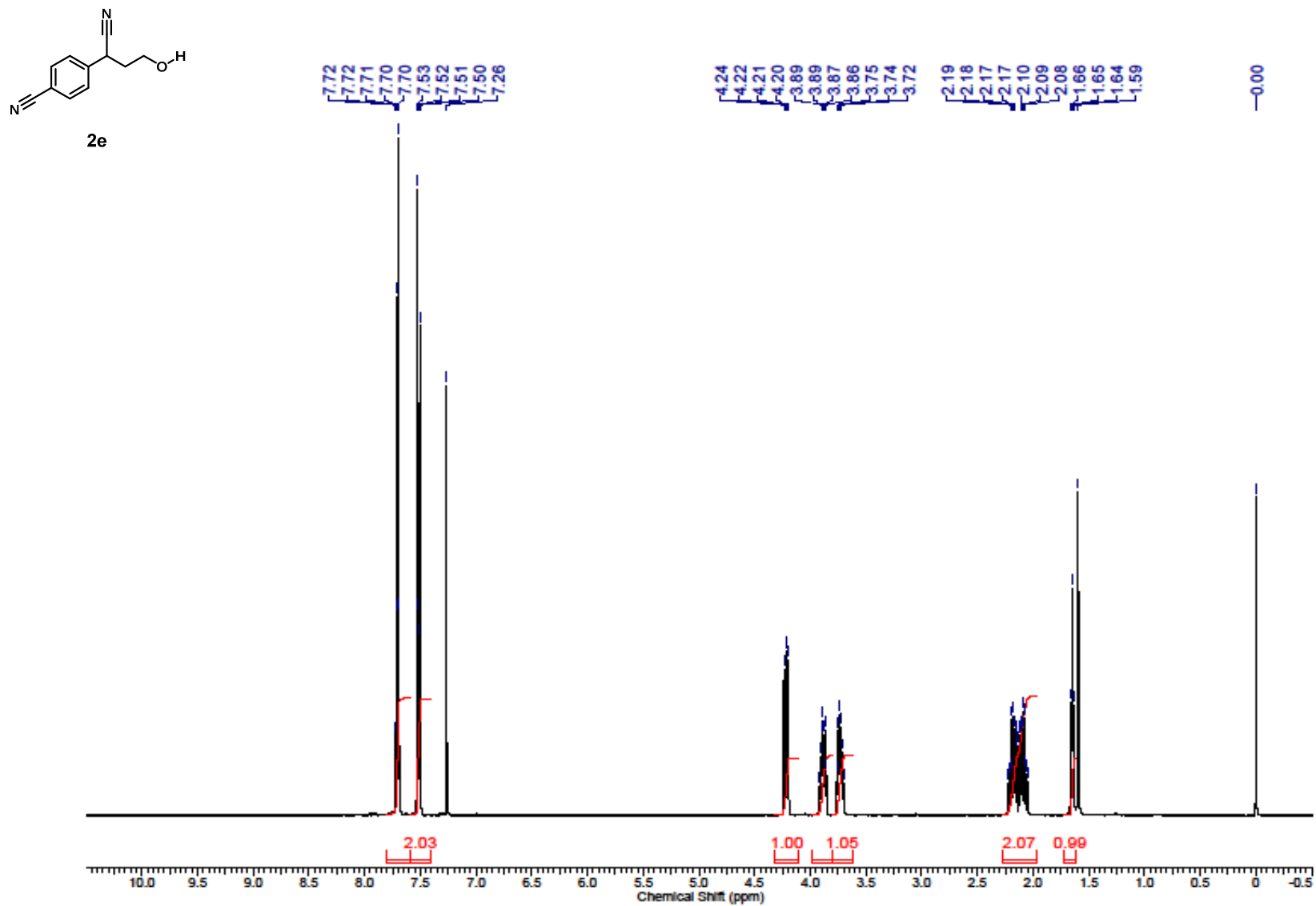
<sup>1</sup>H NMR spectrum of **2d** in CDCl<sub>3</sub> with 0.05% v/v TMS (400 MHz)



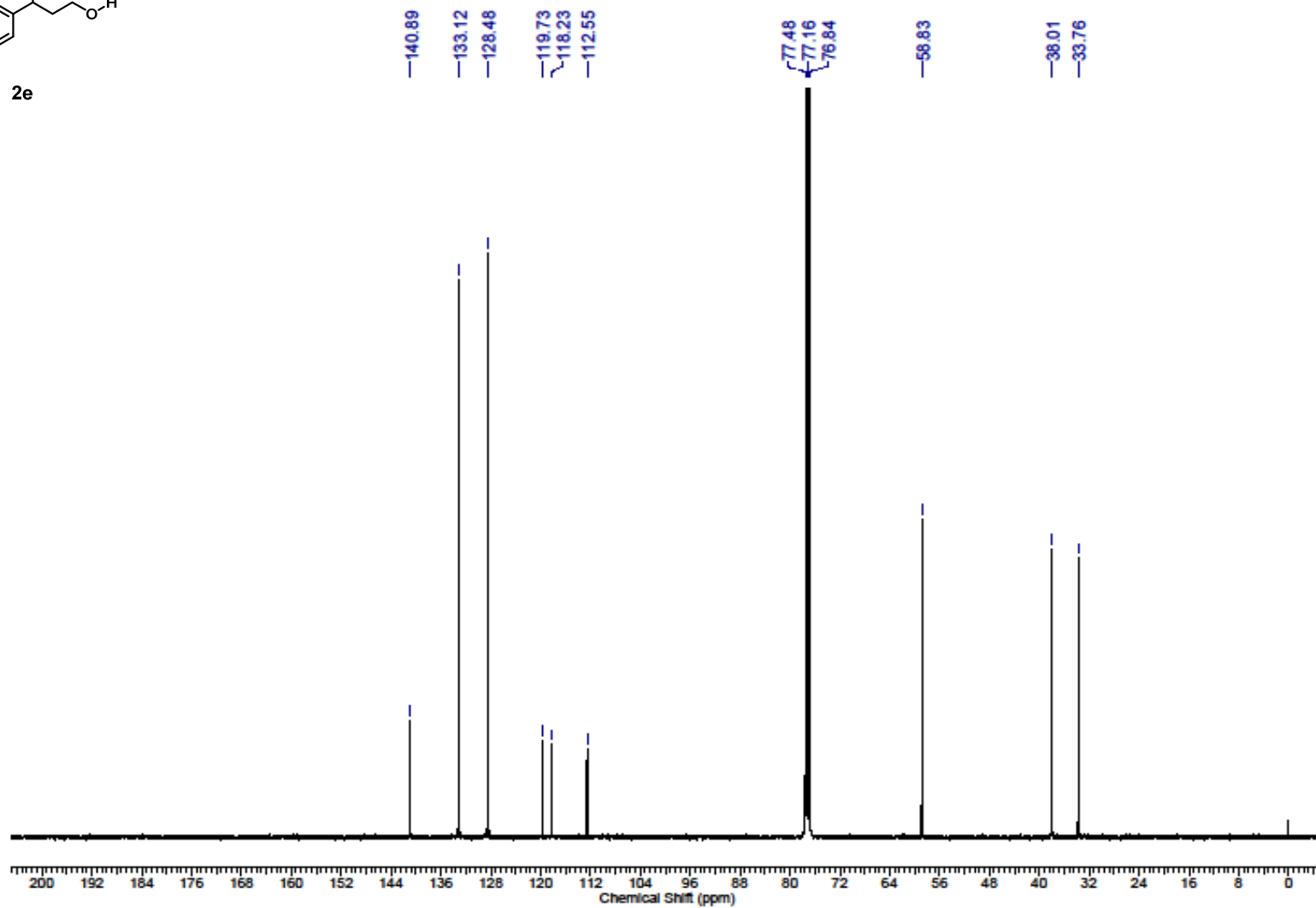
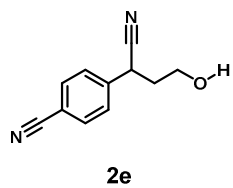
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2d** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



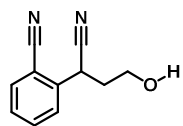
$^1\text{H}$  NMR spectrum of **2e** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



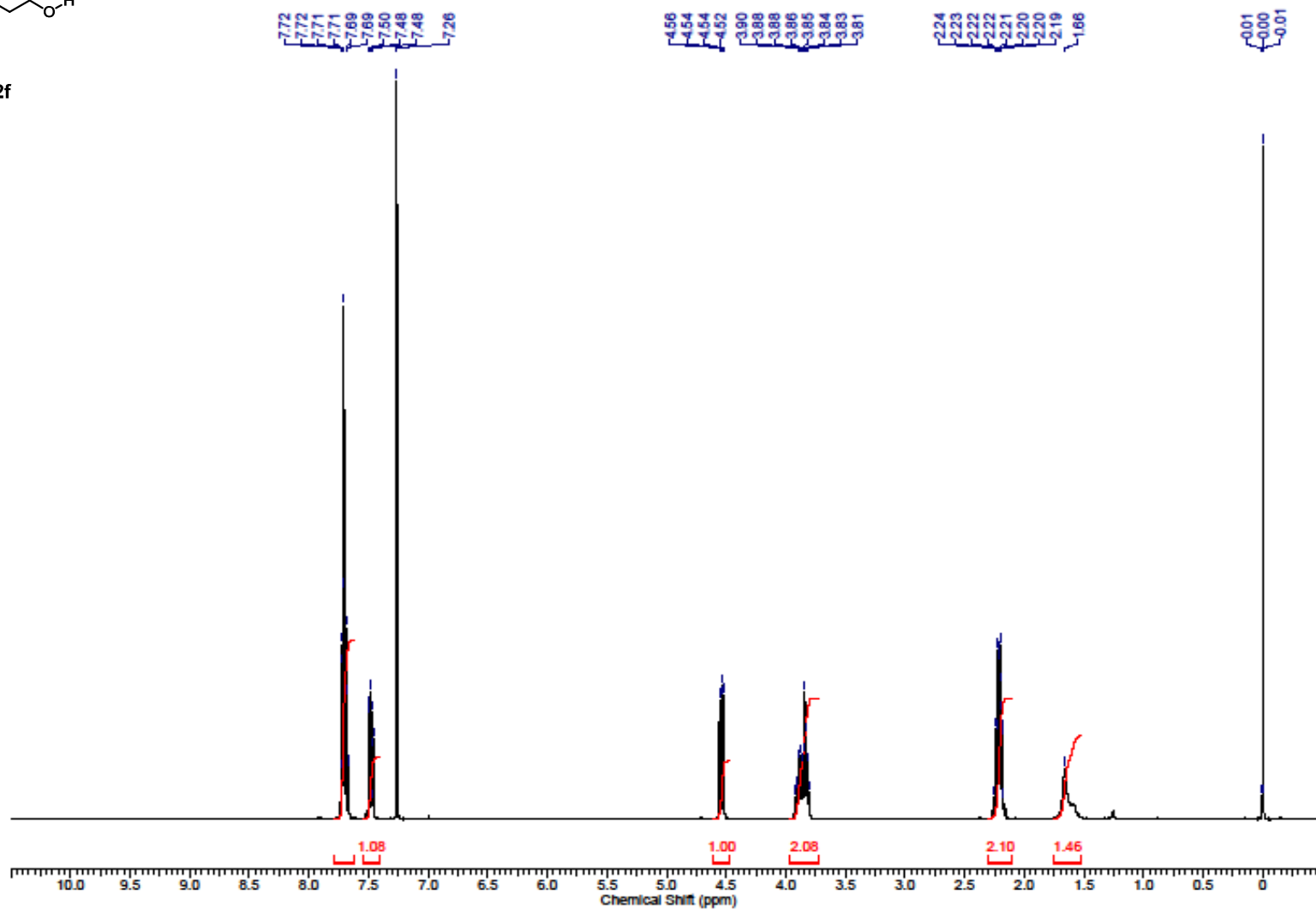
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2e** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



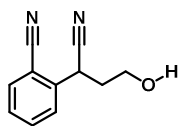
$^1\text{H}$  NMR spectrum of **2f** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



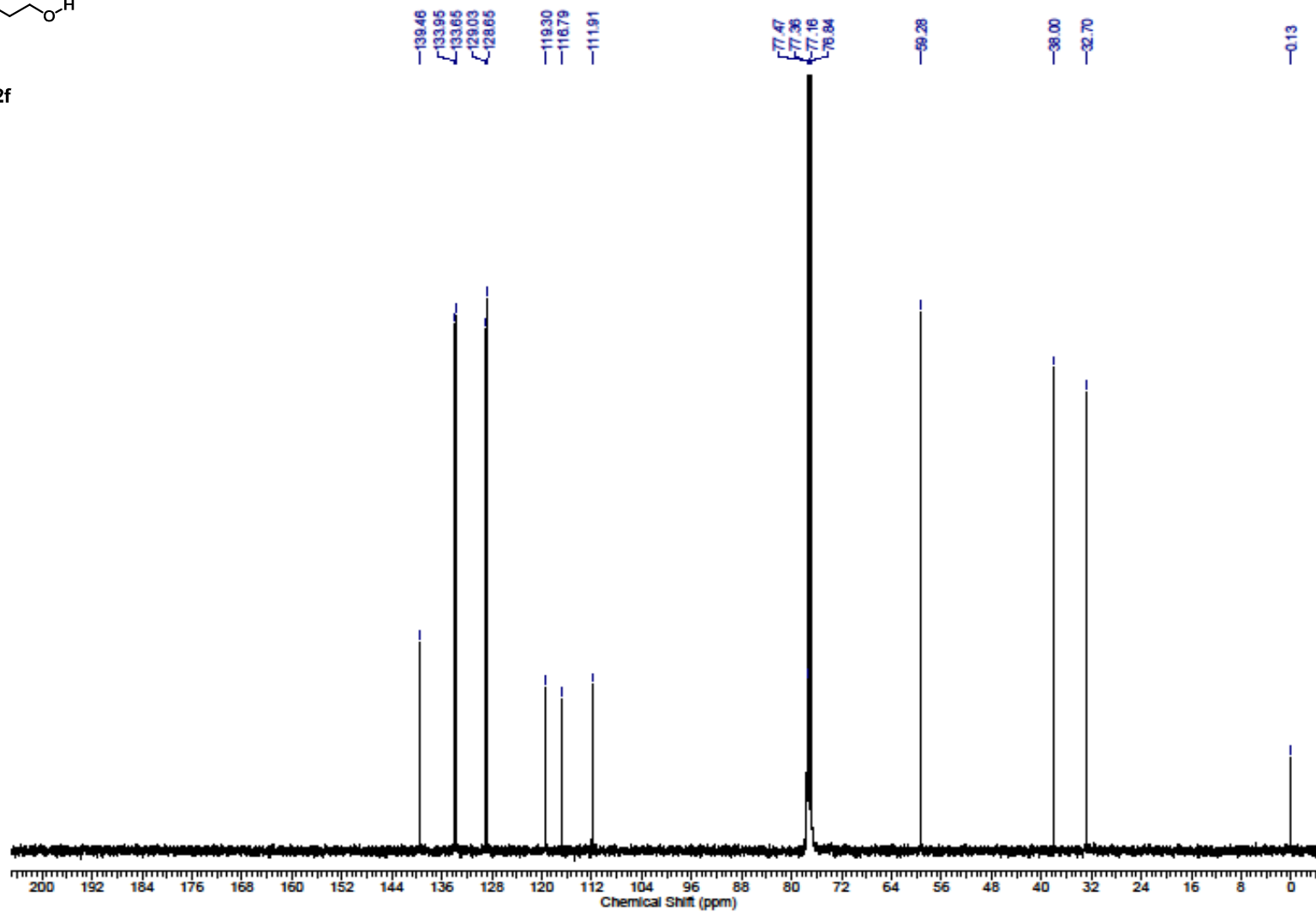
**2f**



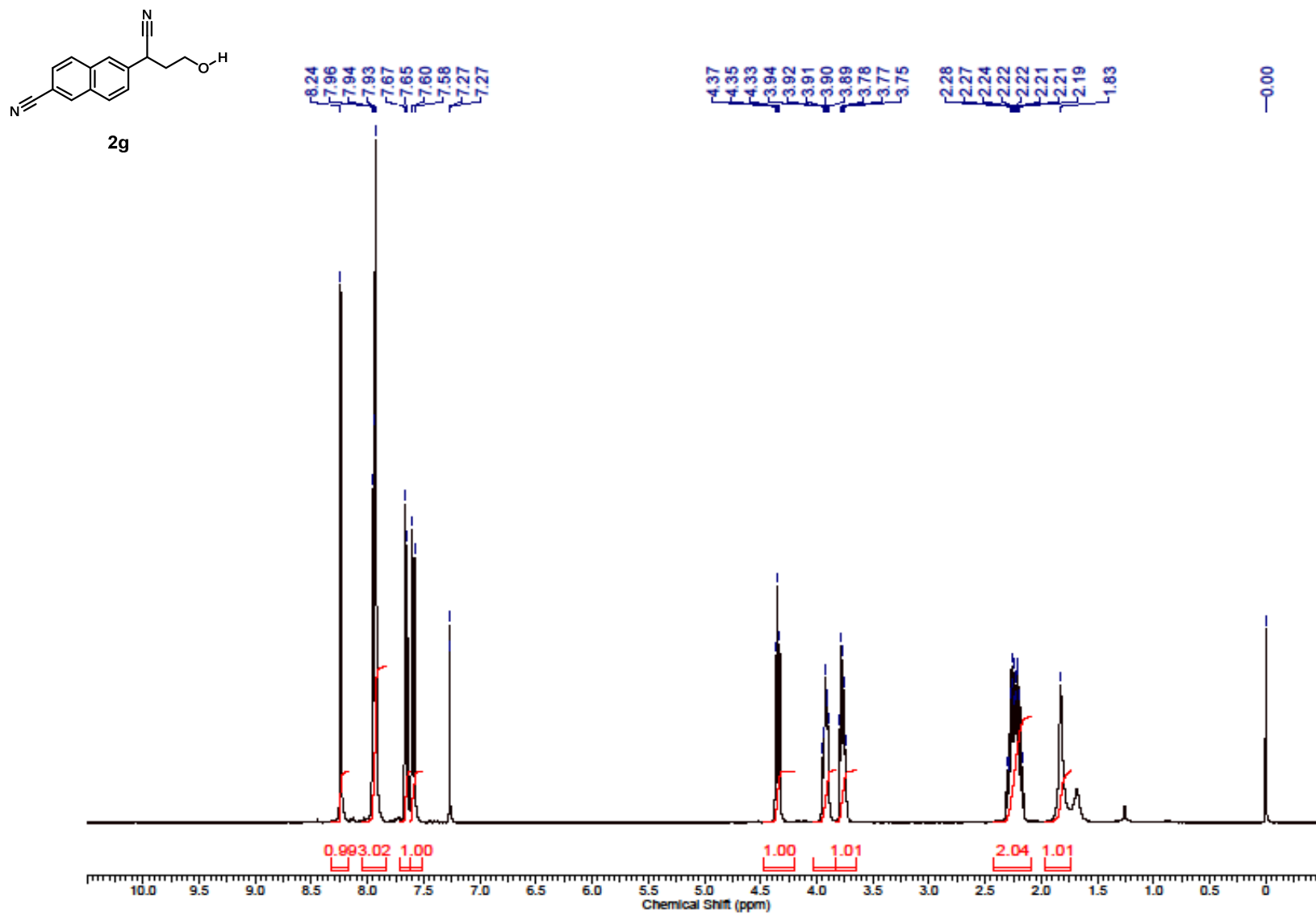
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2f** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



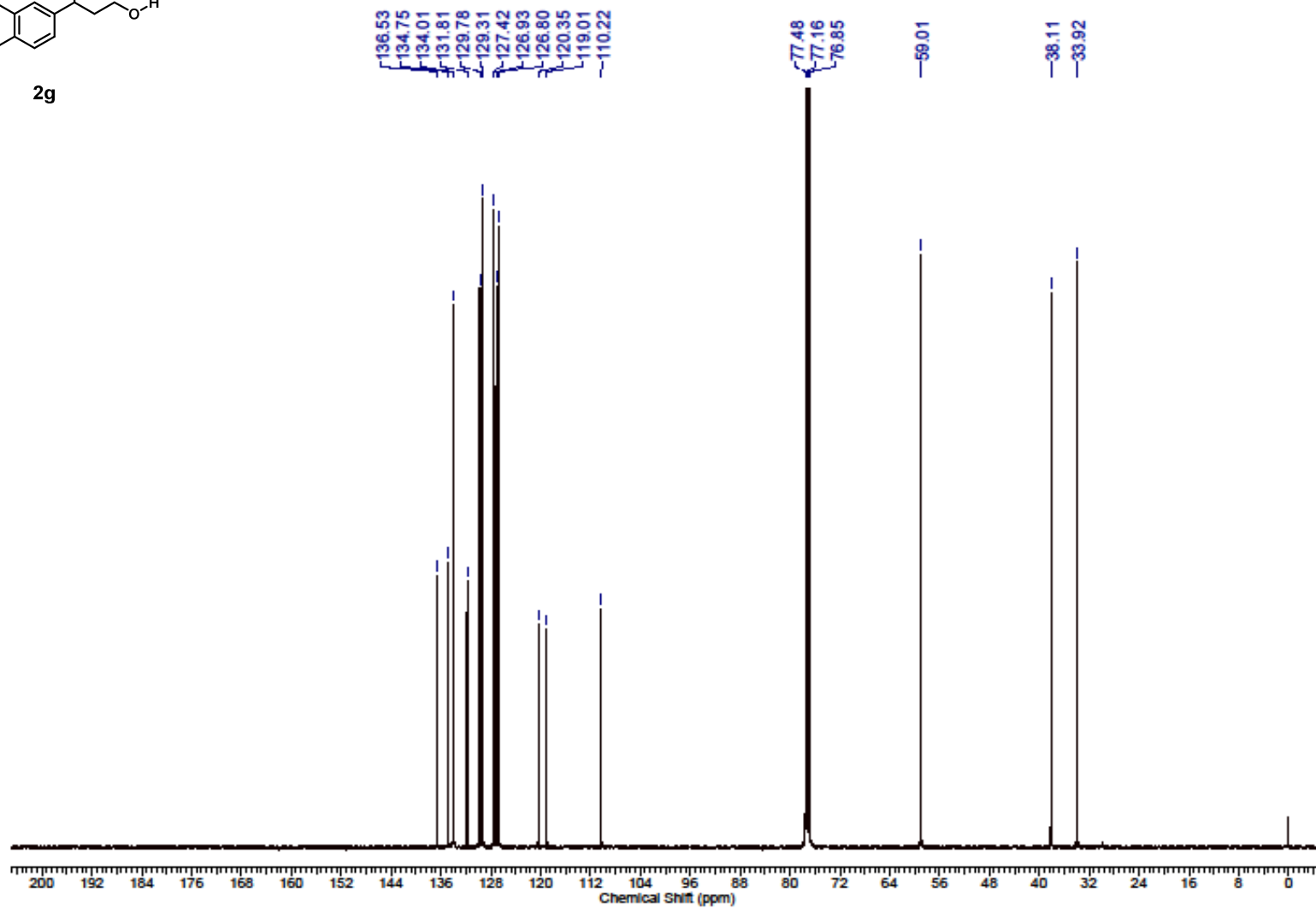
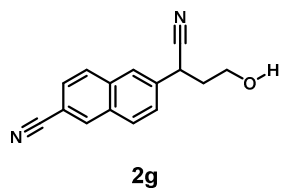
**2f**



$^1\text{H}$  NMR spectrum of **2g** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)

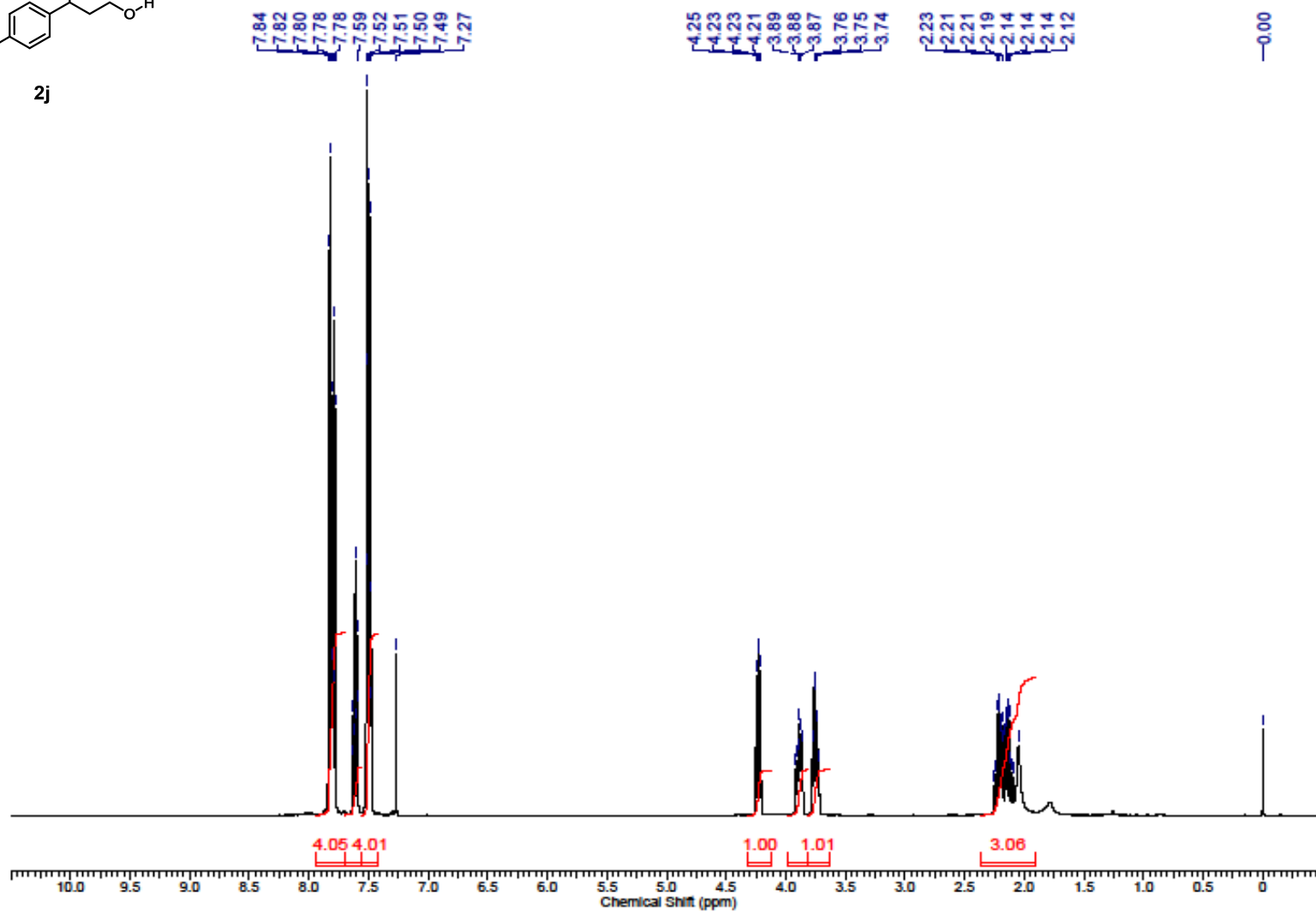
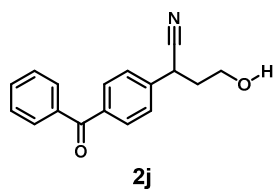


$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2g** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)

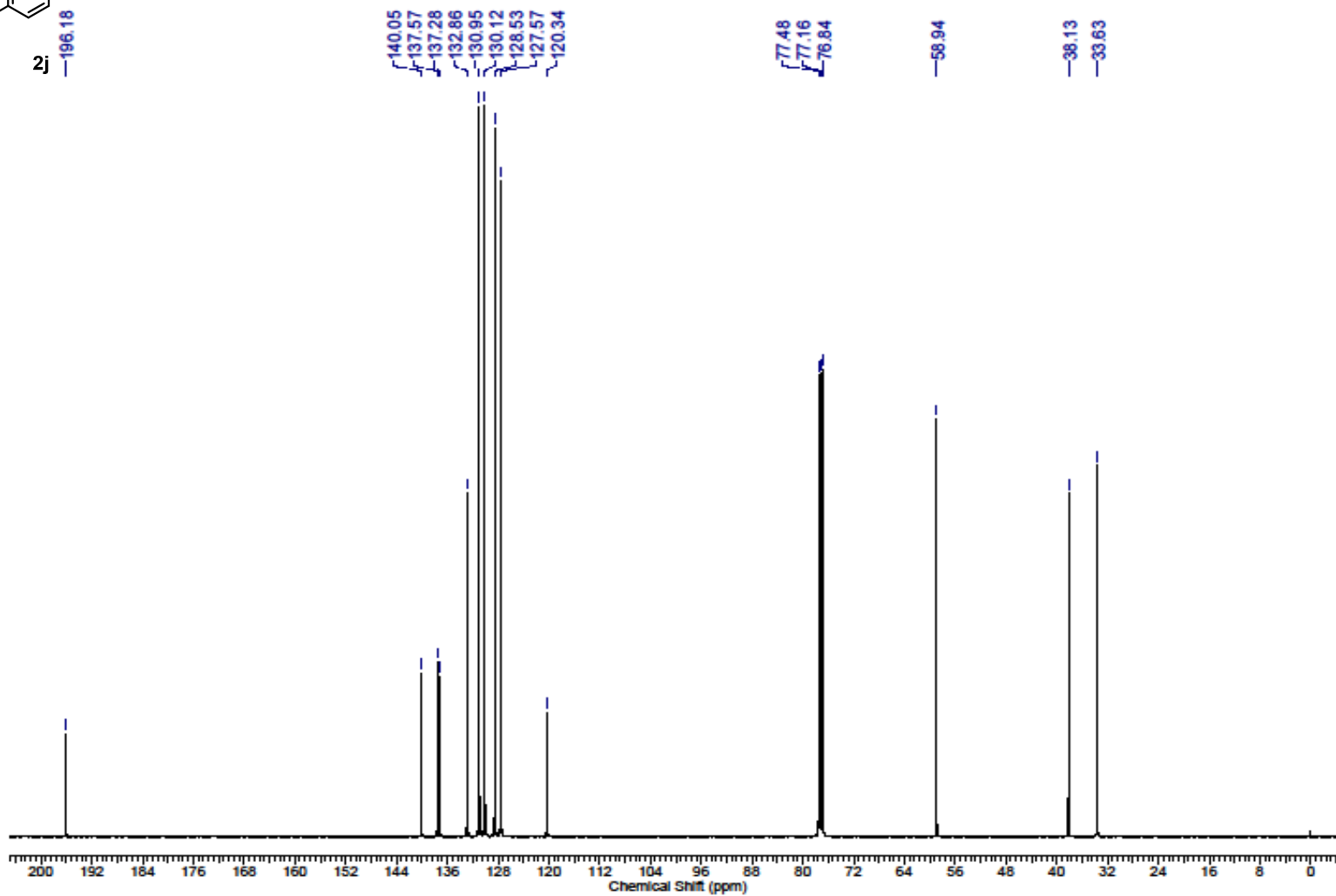
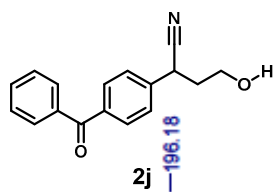




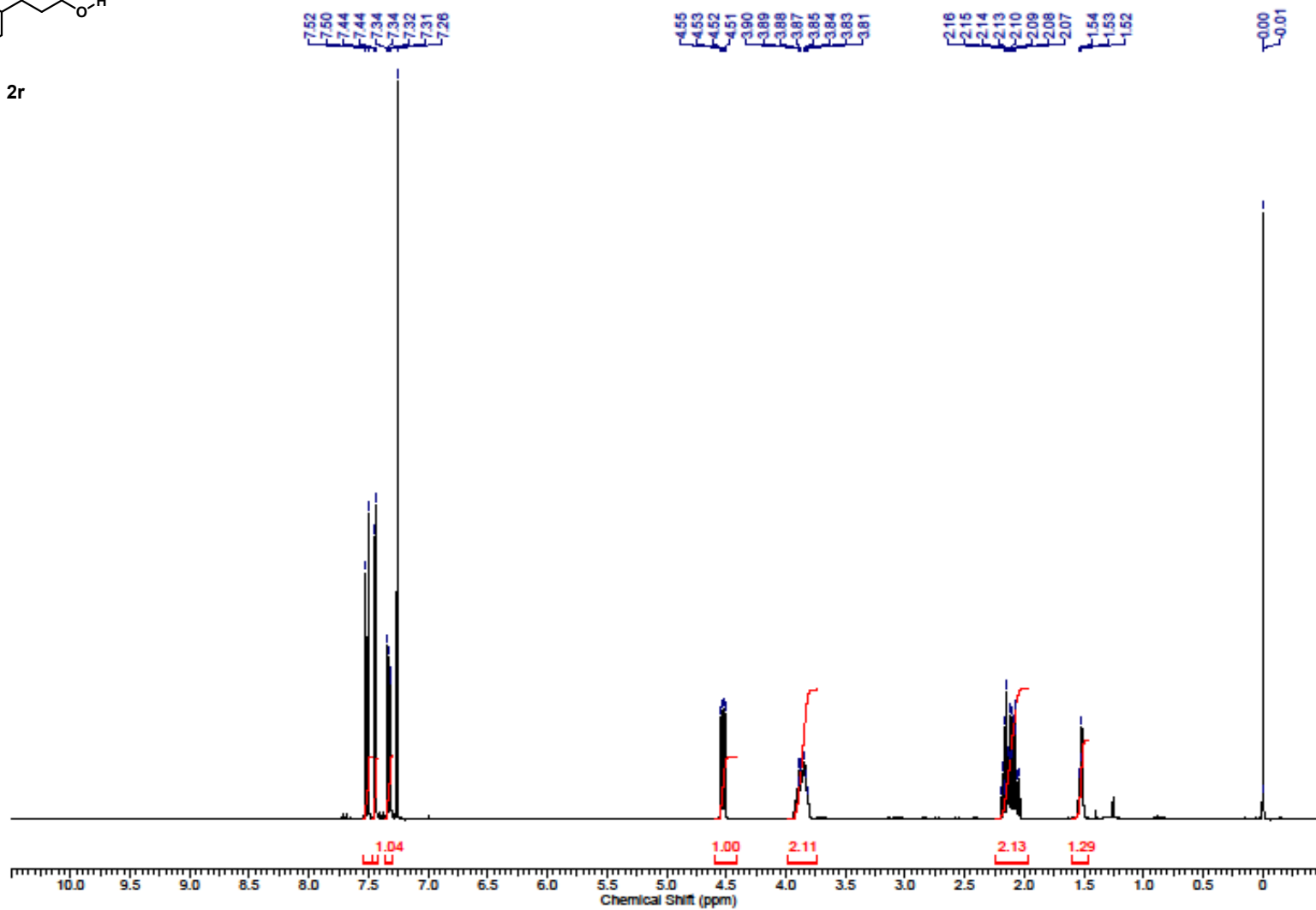
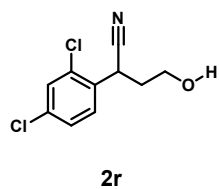
$^1\text{H}$  NMR spectrum of **2j** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



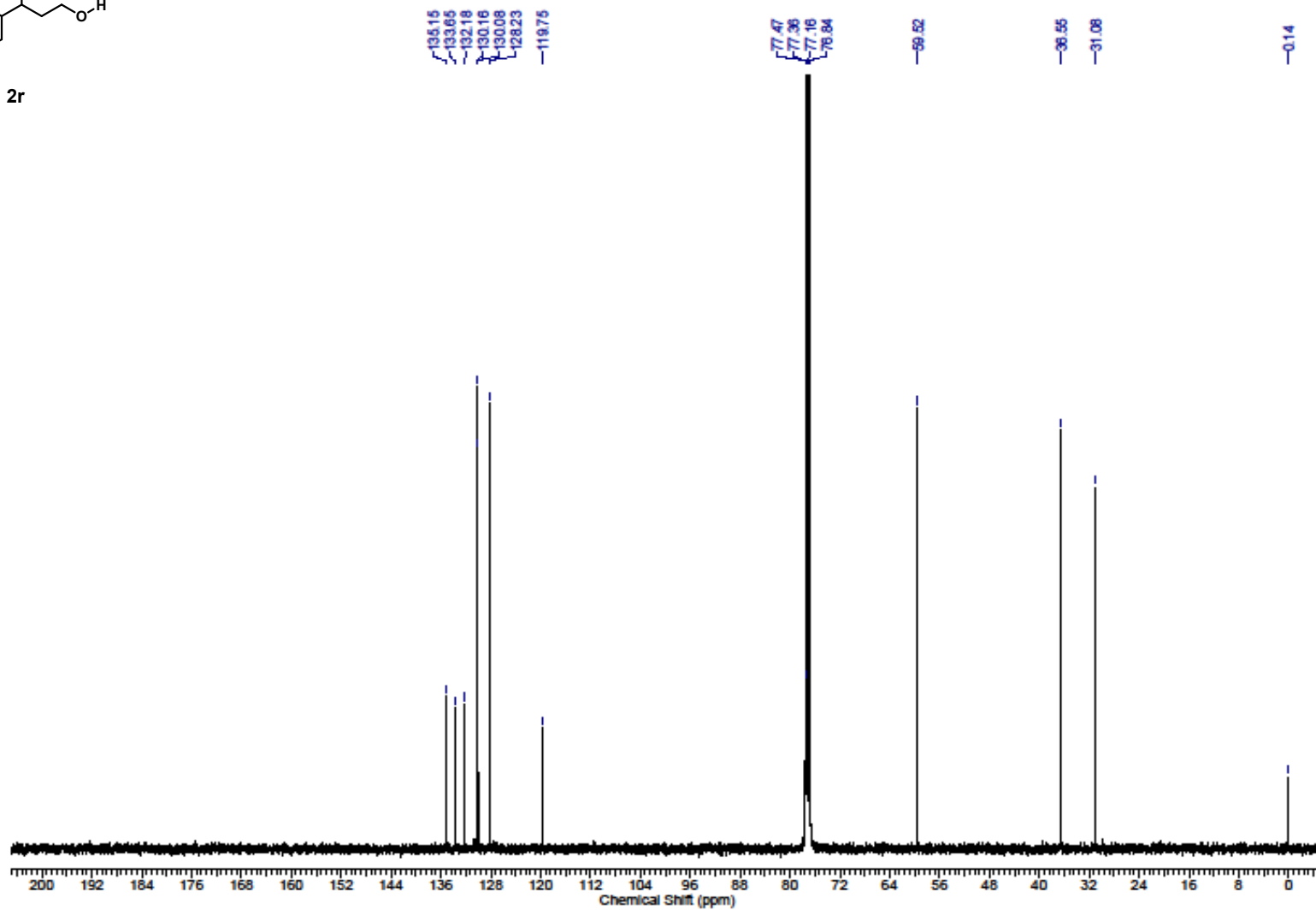
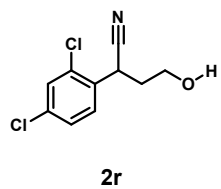
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2j** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



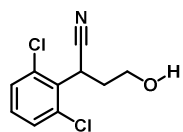
$^1\text{H}$  NMR spectrum of **2r** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



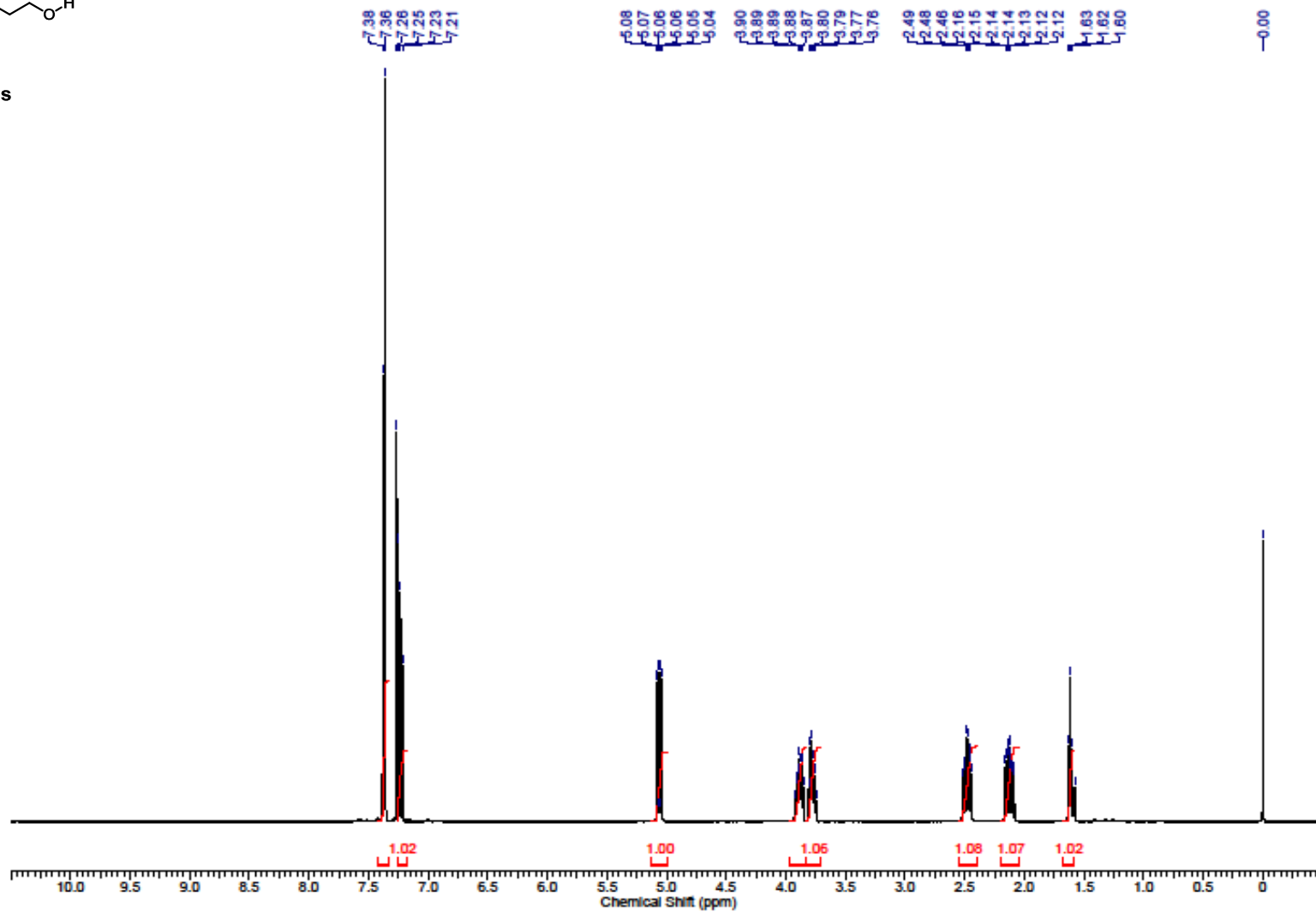
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2r** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



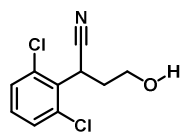
$^1\text{H}$  NMR spectrum of **2s** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



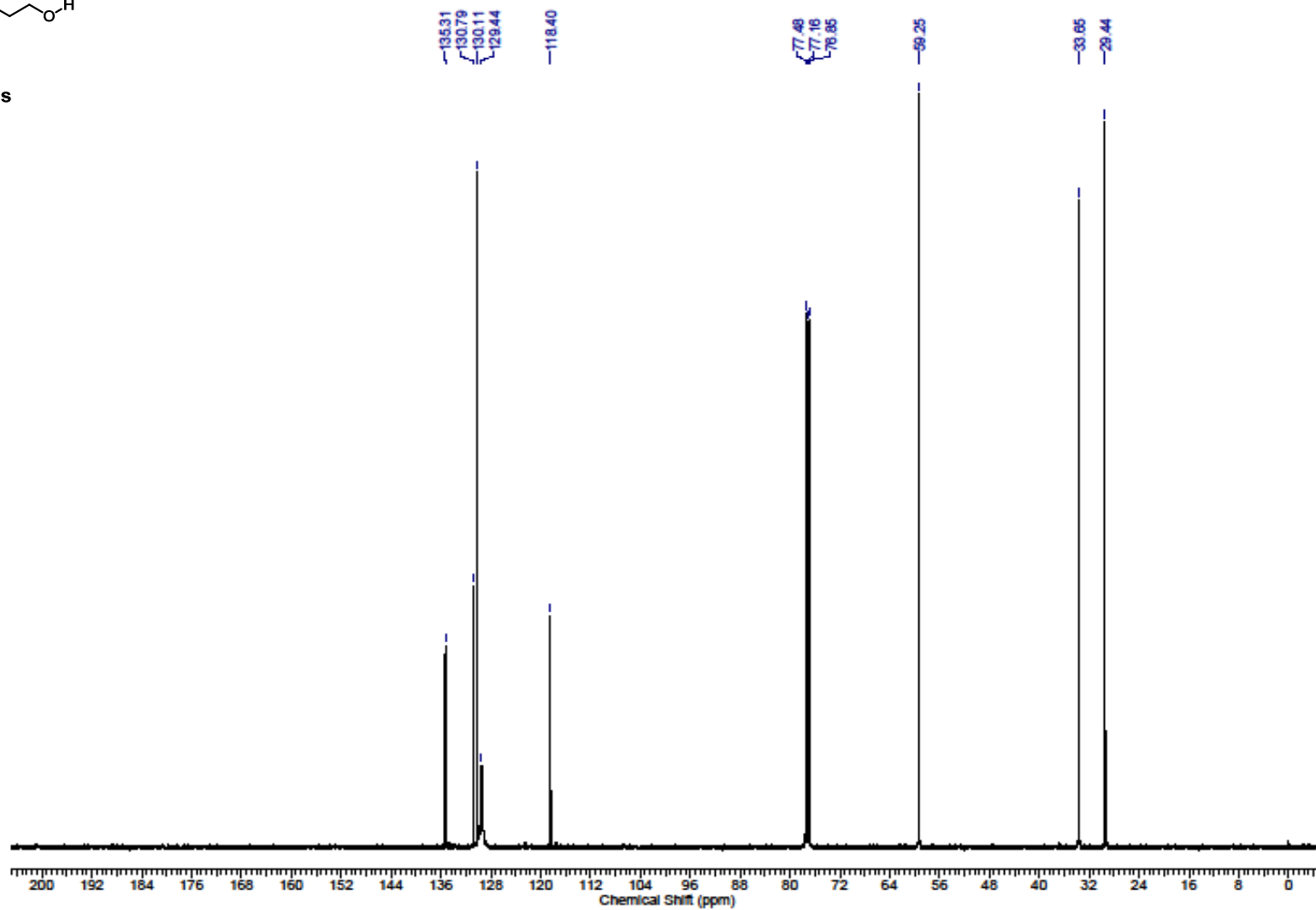
**2s**



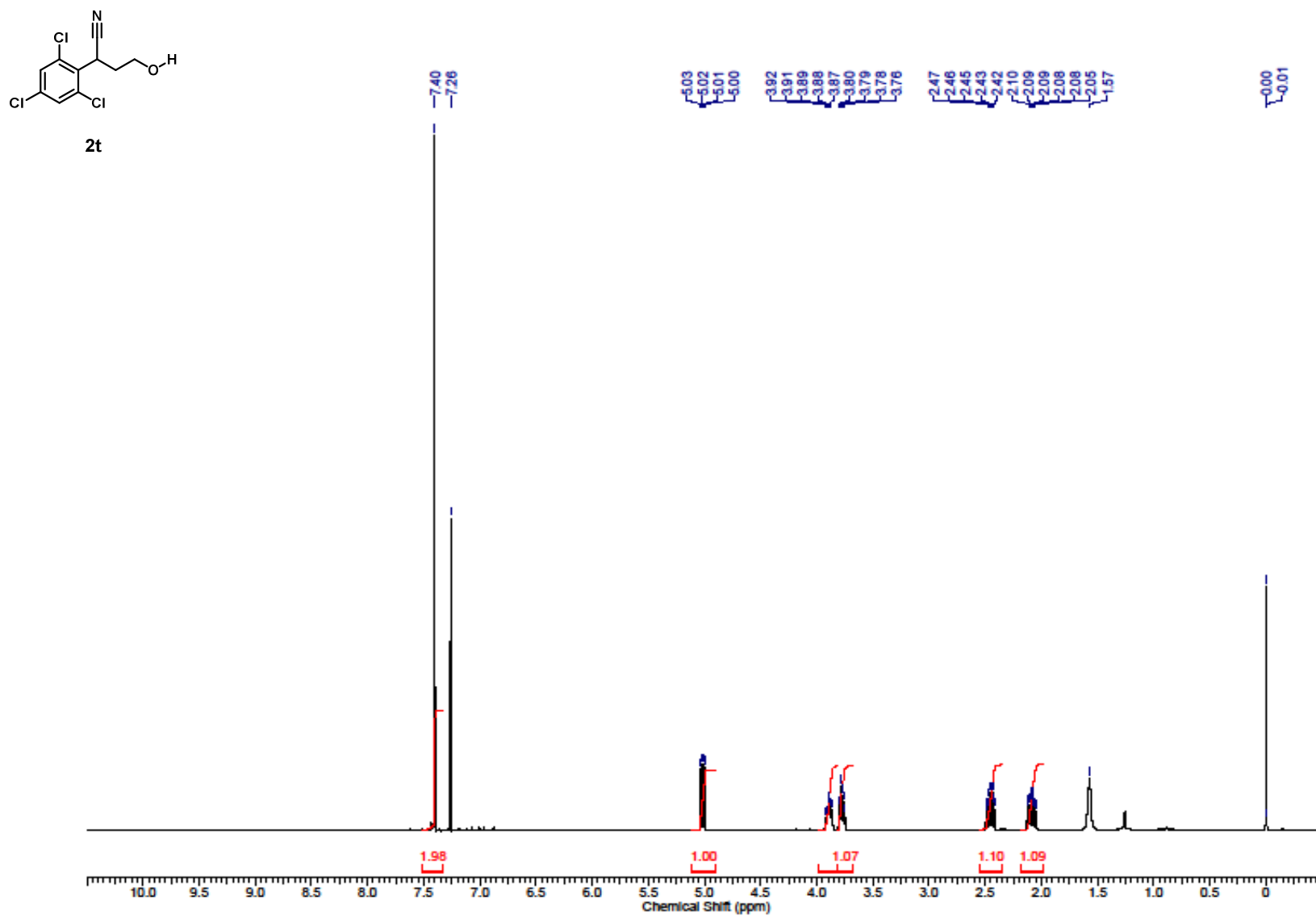
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2s** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



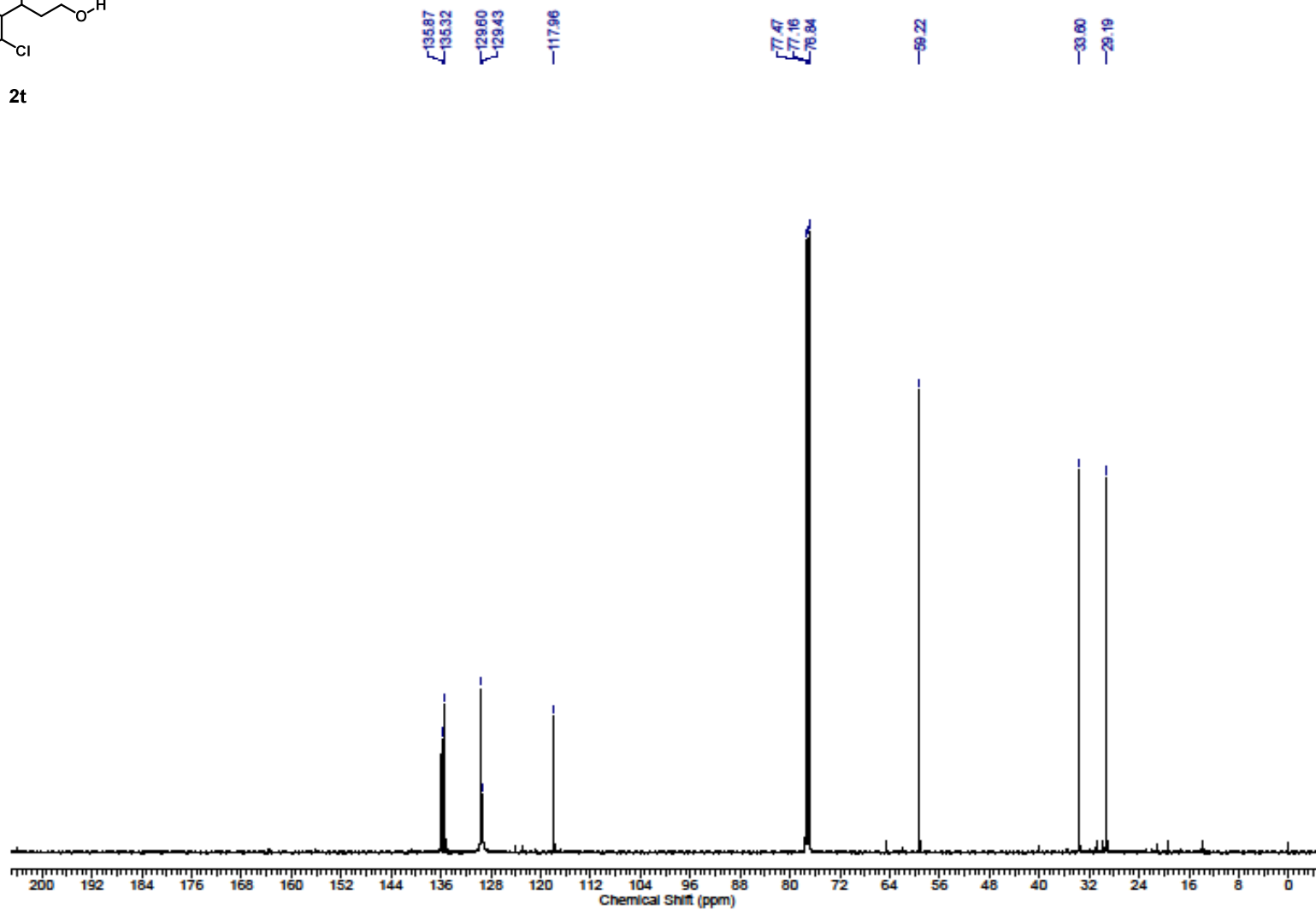
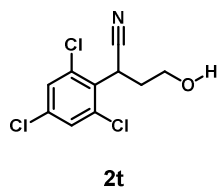
**2s**



$^1\text{H}$  NMR spectrum of **2t** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)

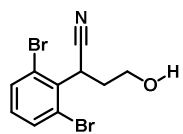


$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2t** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)

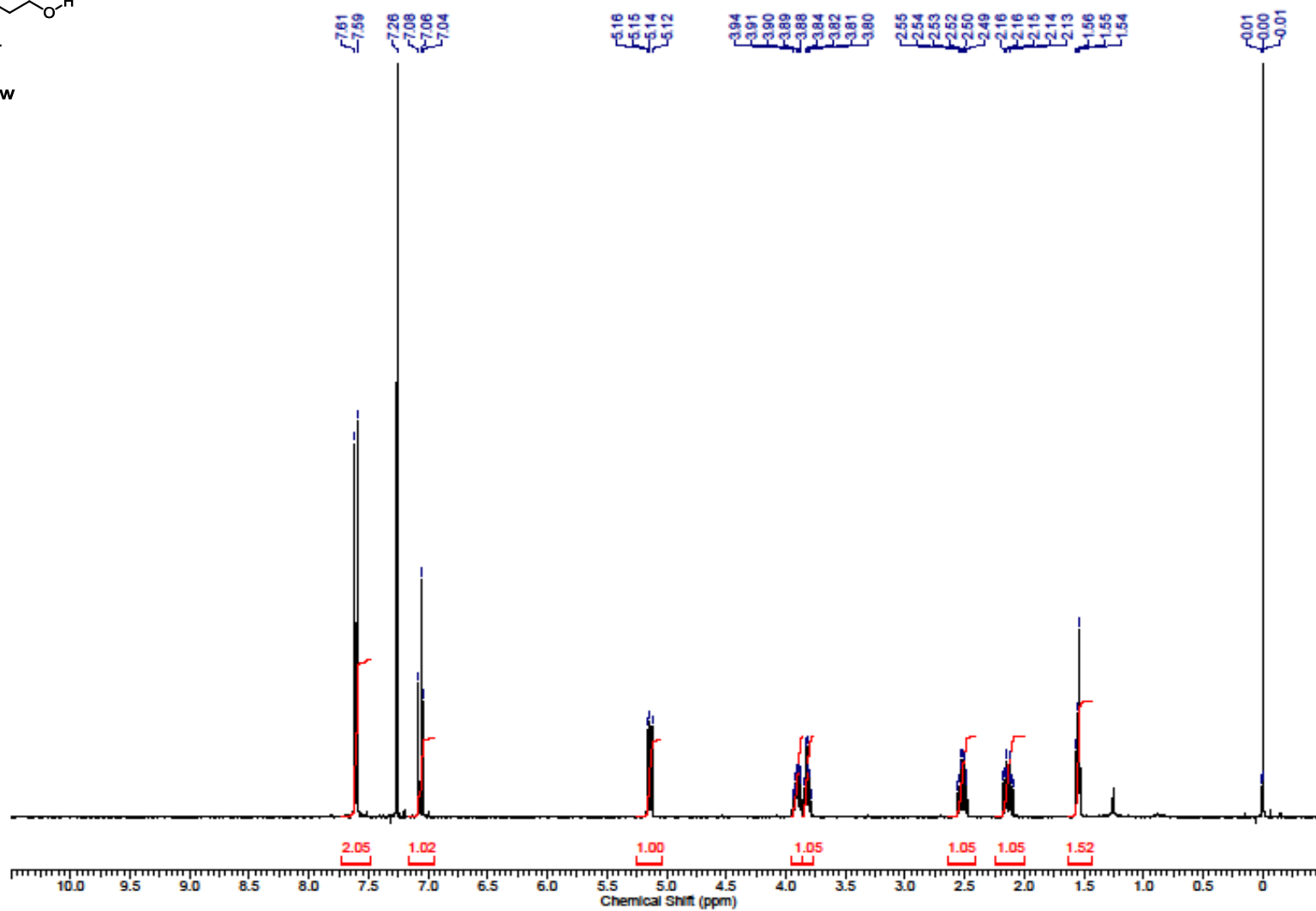




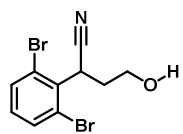
$^1\text{H}$  NMR spectrum of **2w** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



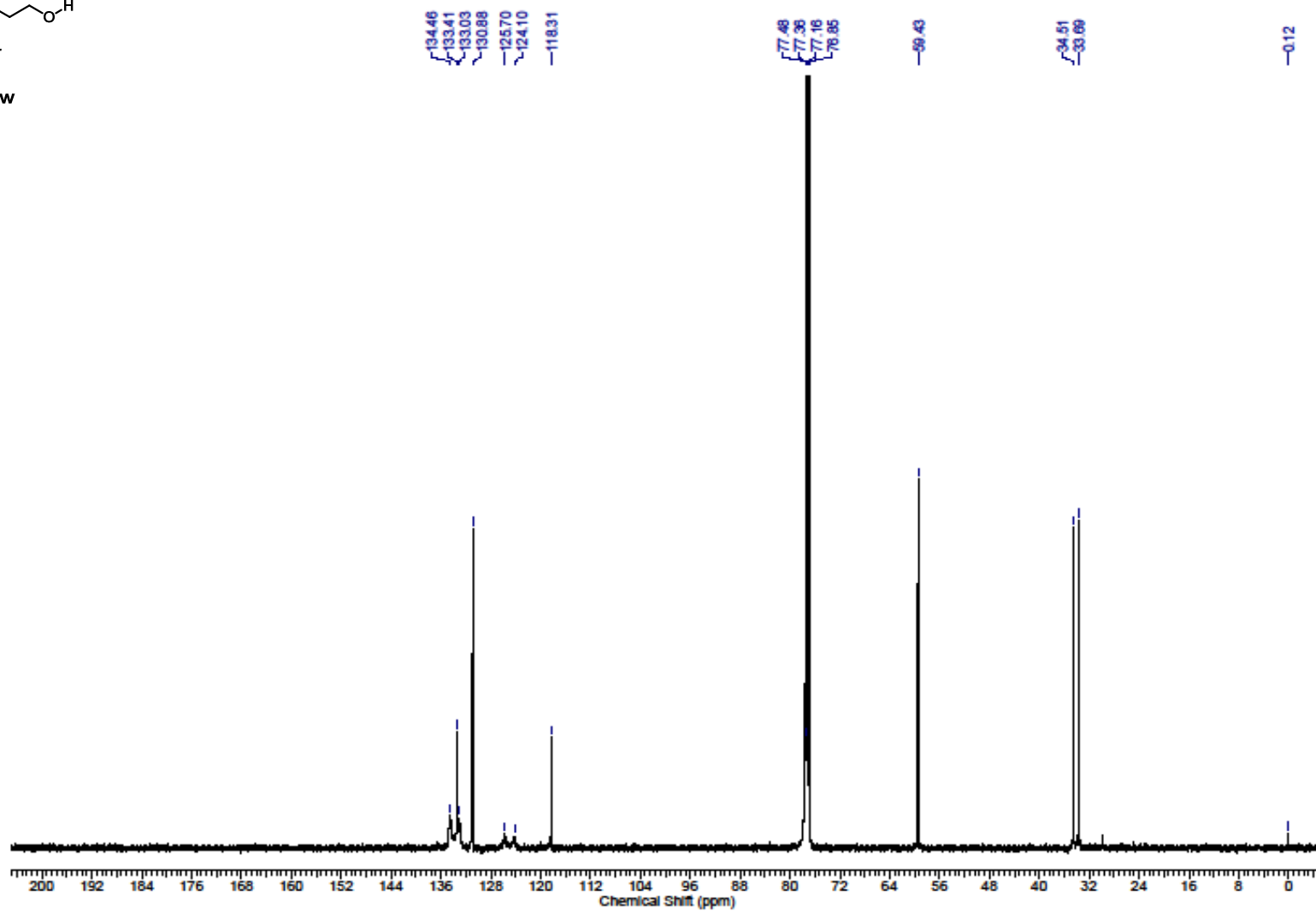
**2w**



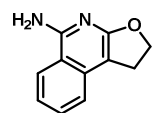
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **2w** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



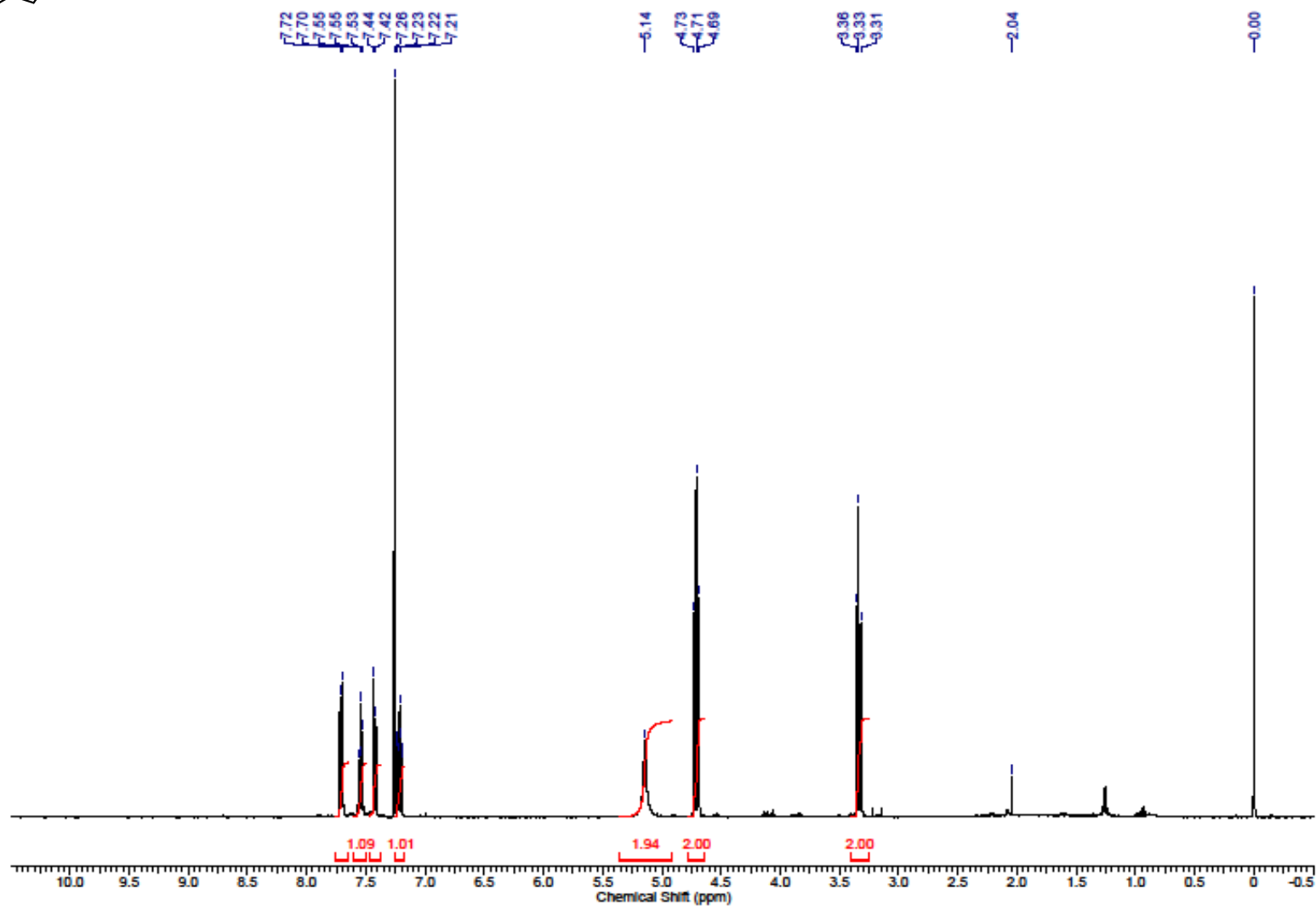
**2w**



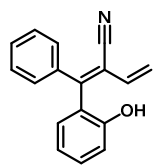
<sup>1</sup>H NMR spectrum of **3** in CDCl<sub>3</sub> with 0.05% v/v TMS (400 MHz)



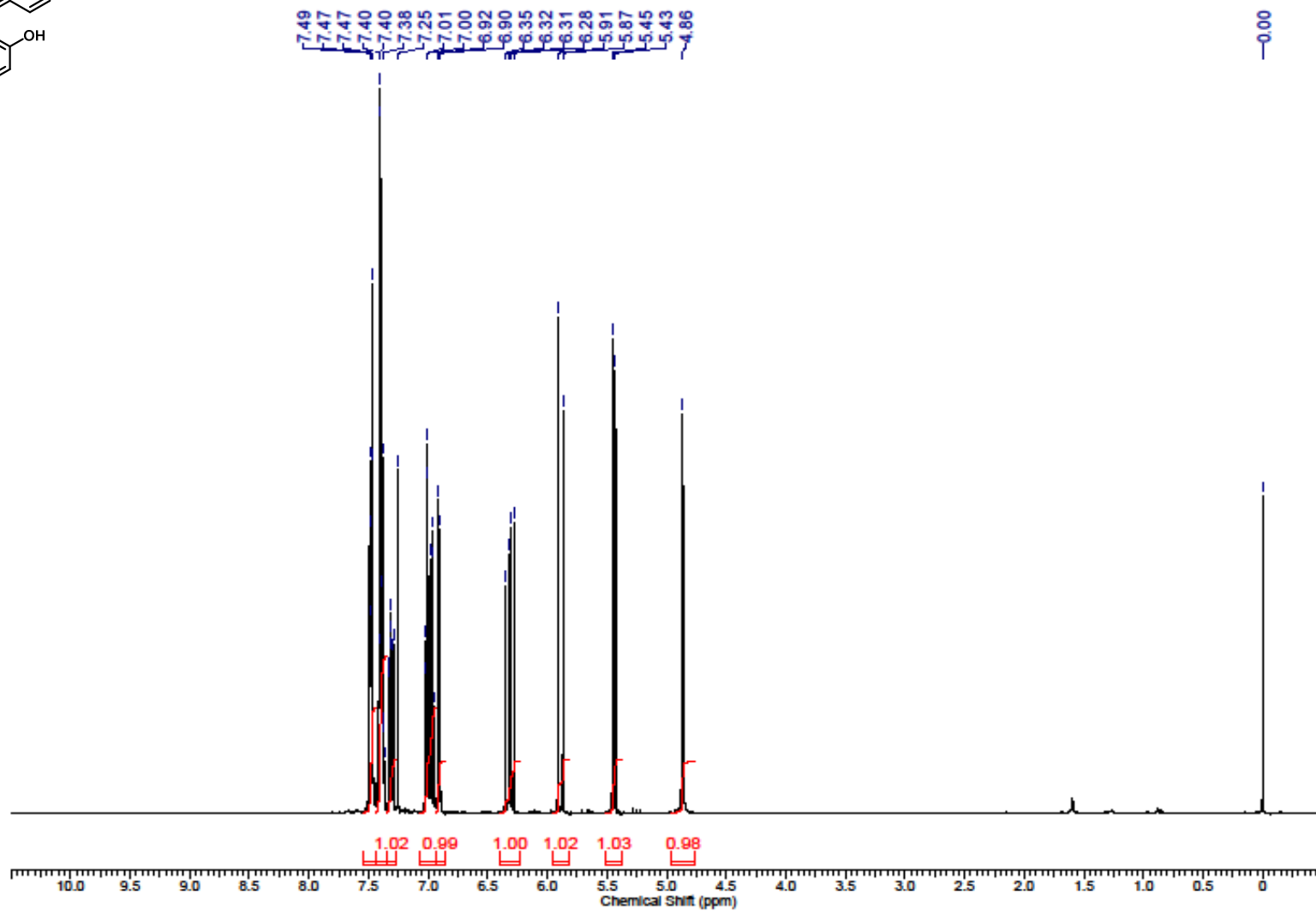
**3**



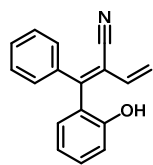
$^1\text{H}$  NMR spectrum of **4** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



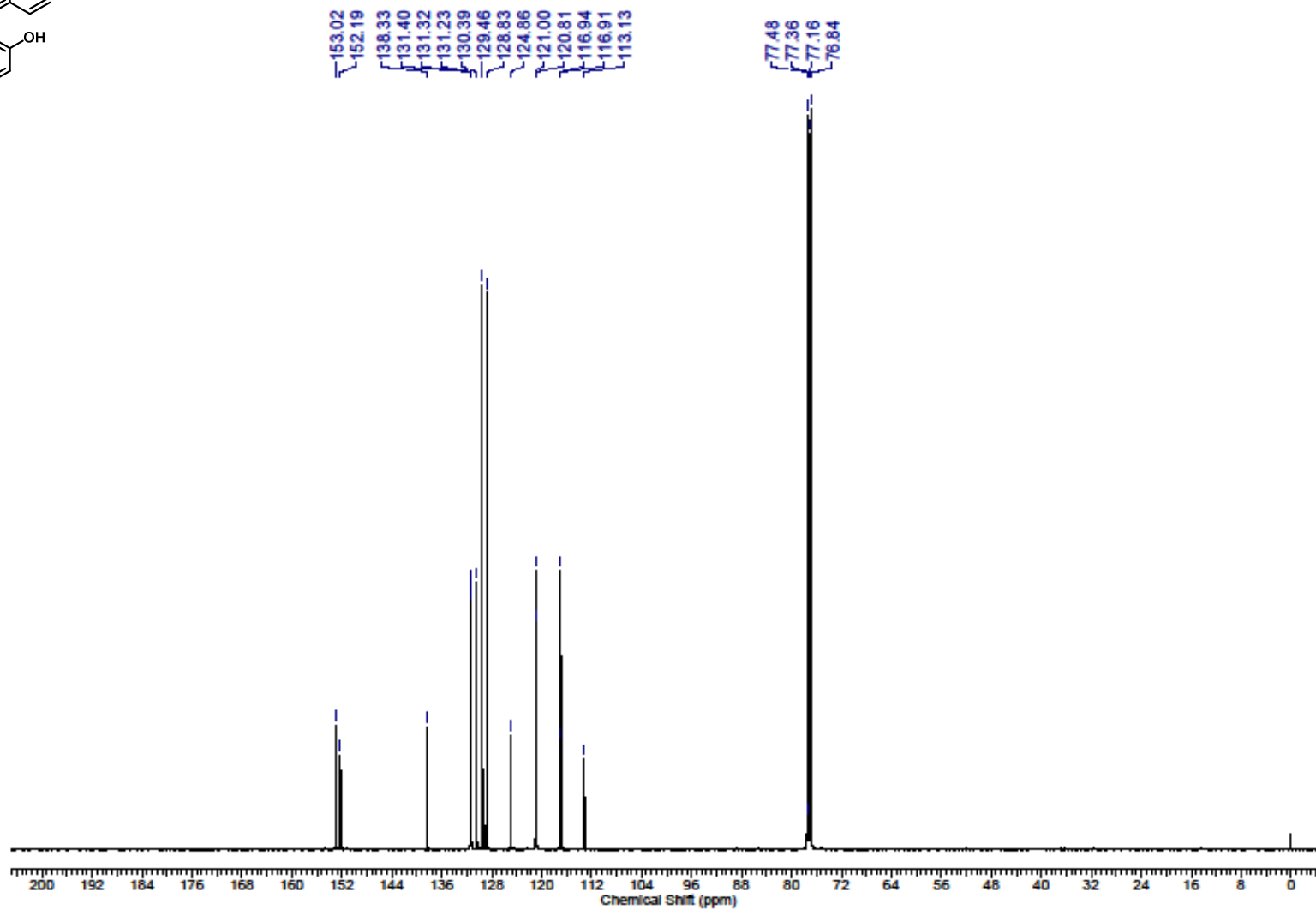
**4**



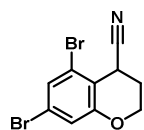
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **4** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)



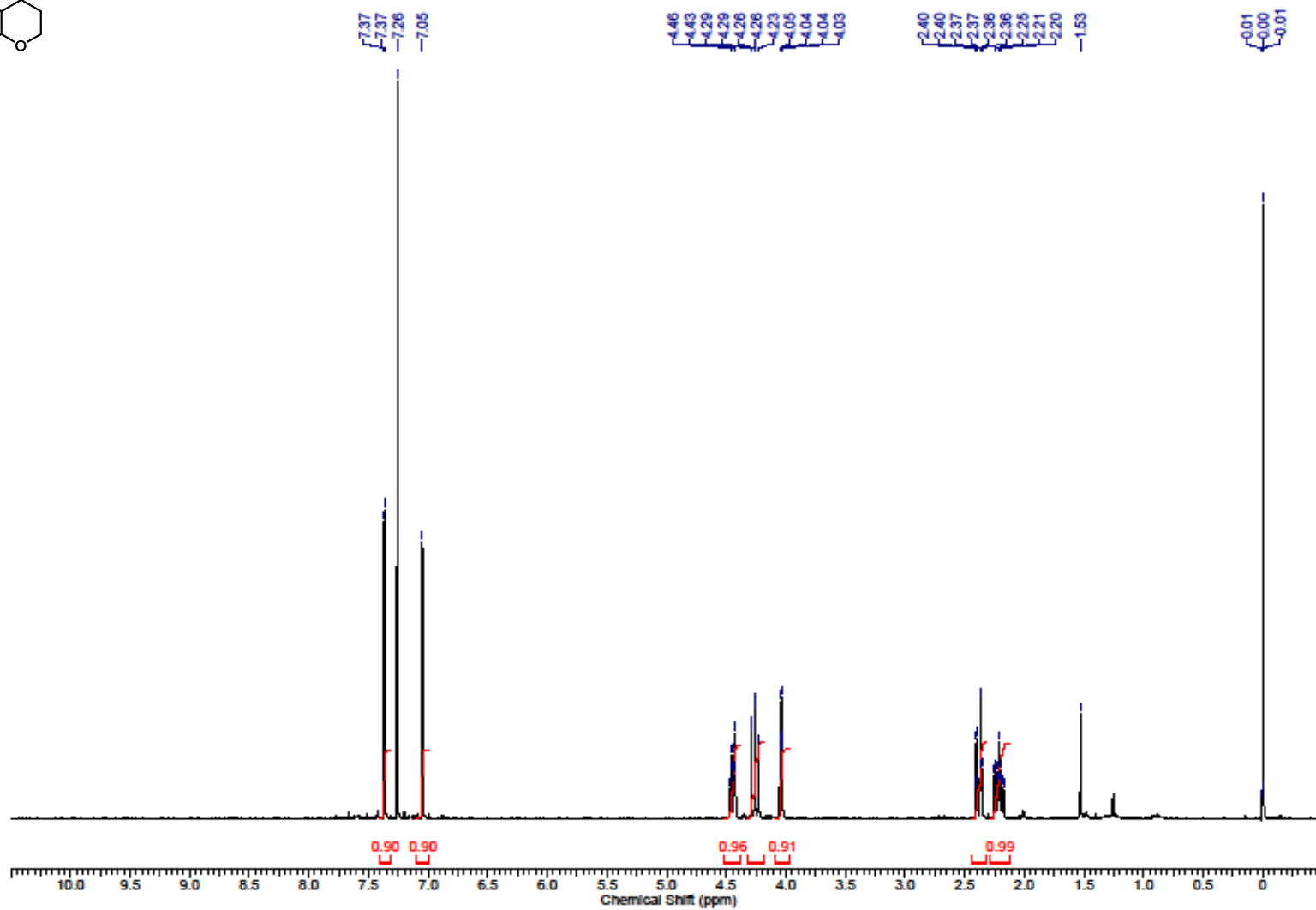
**4**



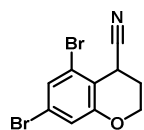
$^1\text{H}$  NMR spectrum of **5** in  $\text{CDCl}_3$  with 0.05% v/v TMS (400 MHz)



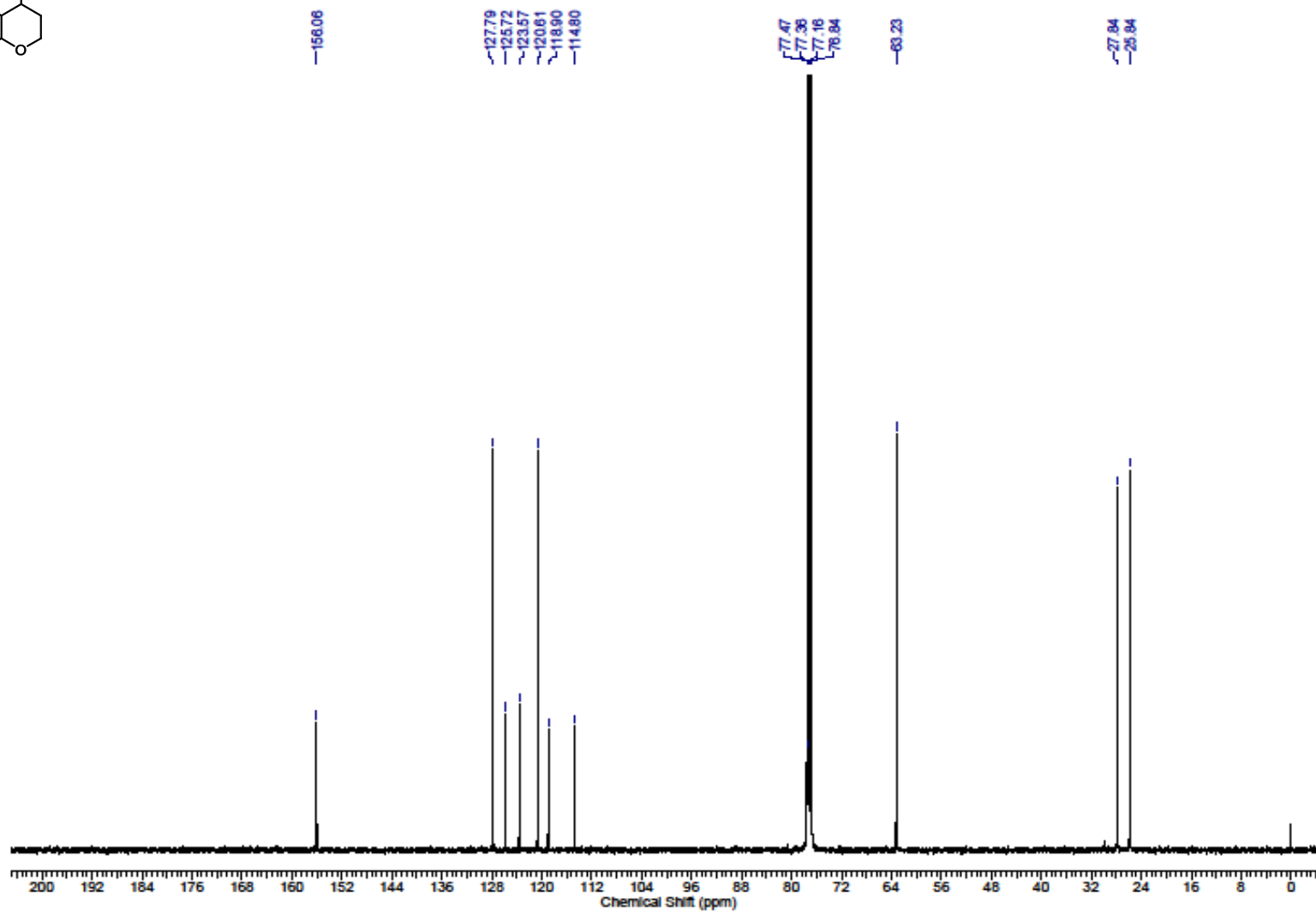
**5**



$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of **5** in  $\text{CDCl}_3$  with 0.05% v/v TMS (100 MHz)

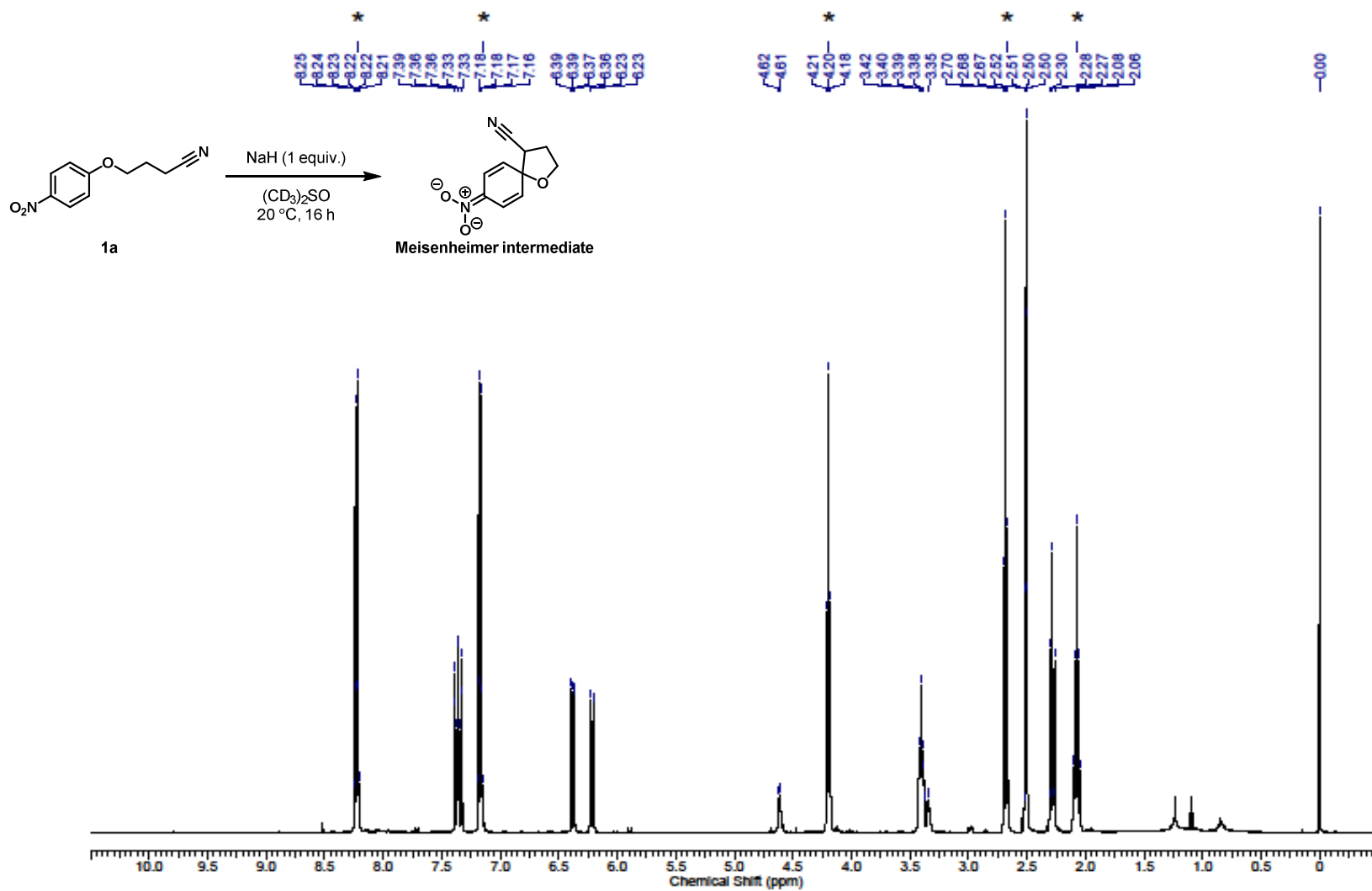


**5**



$^1\text{H}$  NMR spectrum in  $(\text{CD}_3)_2\text{SO}$  with 0.05% v/v TMS (400 MHz)

In situ observation of Meisenheimer intermediate (NOTE: **1a** annotated with \*)





$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum in  $(\text{CD}_3)_2\text{SO}$  with 0.05% v/v TMS (100 MHz)

In situ observation of Meisenheimer intermediate (NOTE: **1a** annotated with \*)

