

Truce-Smiles rearrangement of substituted phenyl ethers

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Supporting Information

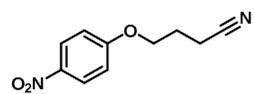
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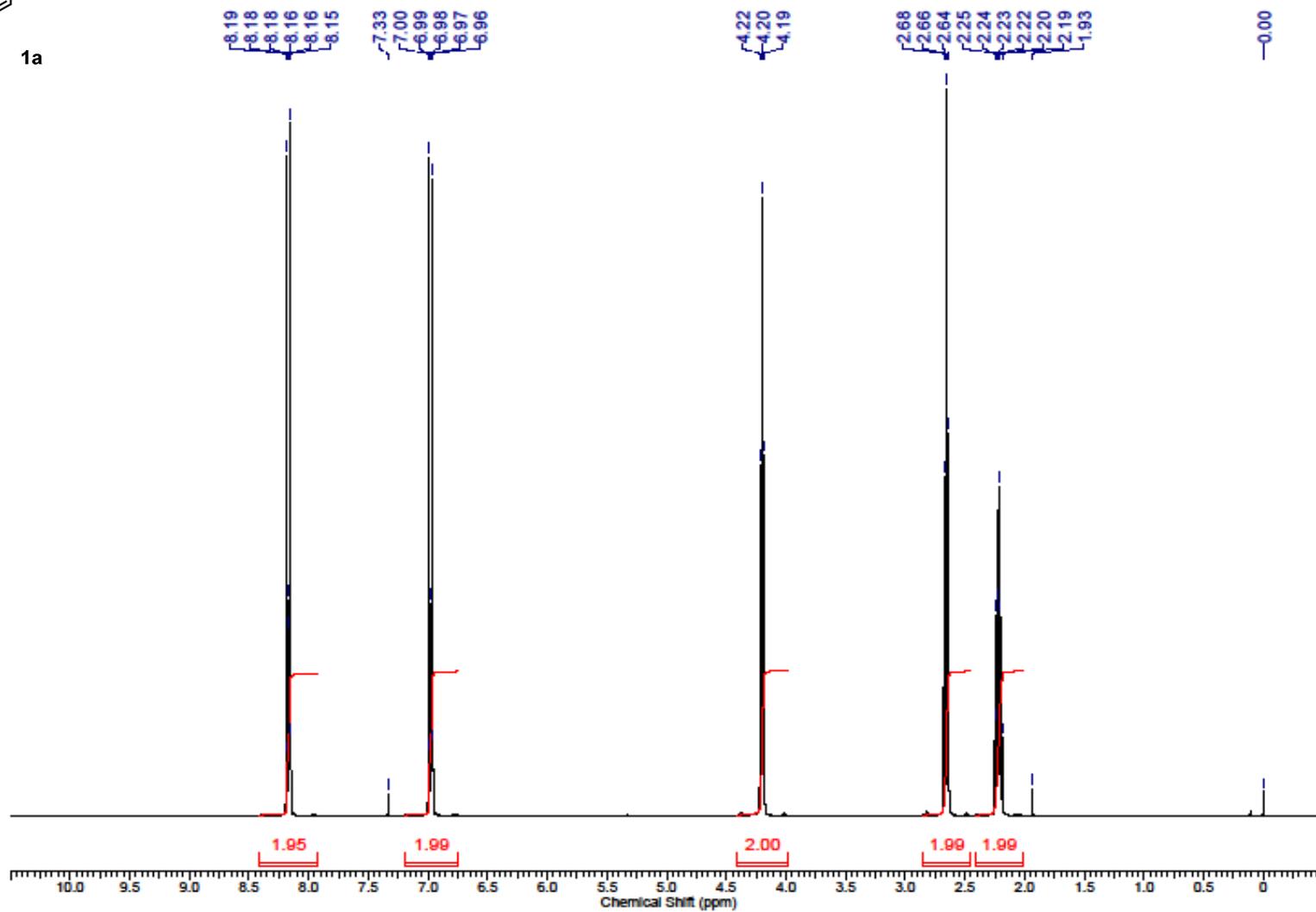
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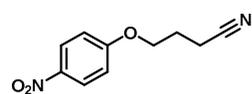
^1H NMR spectrum of **1a** in CDCl_3 with 0.05% v/v TMS (400 MHz)



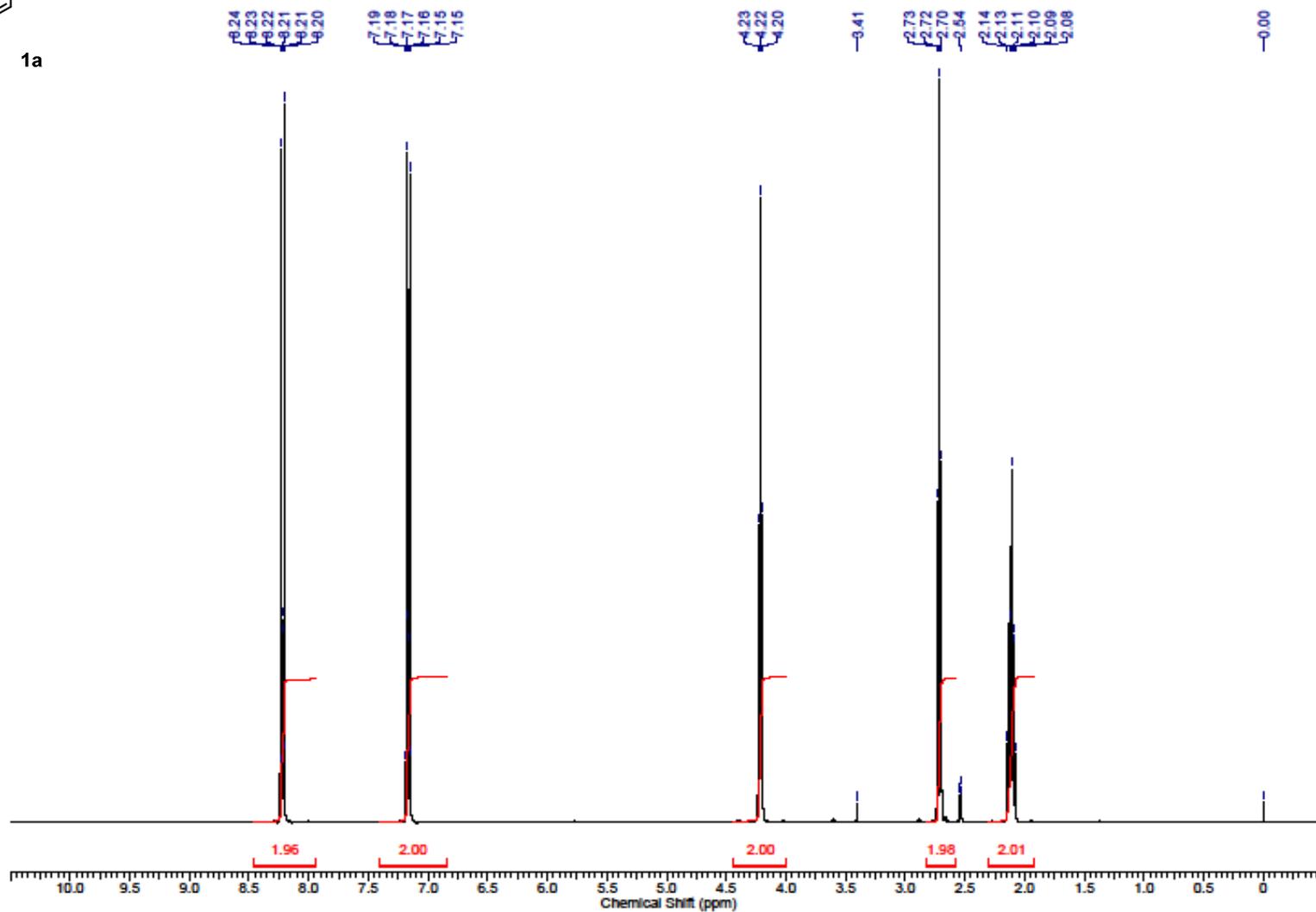
1a



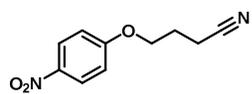
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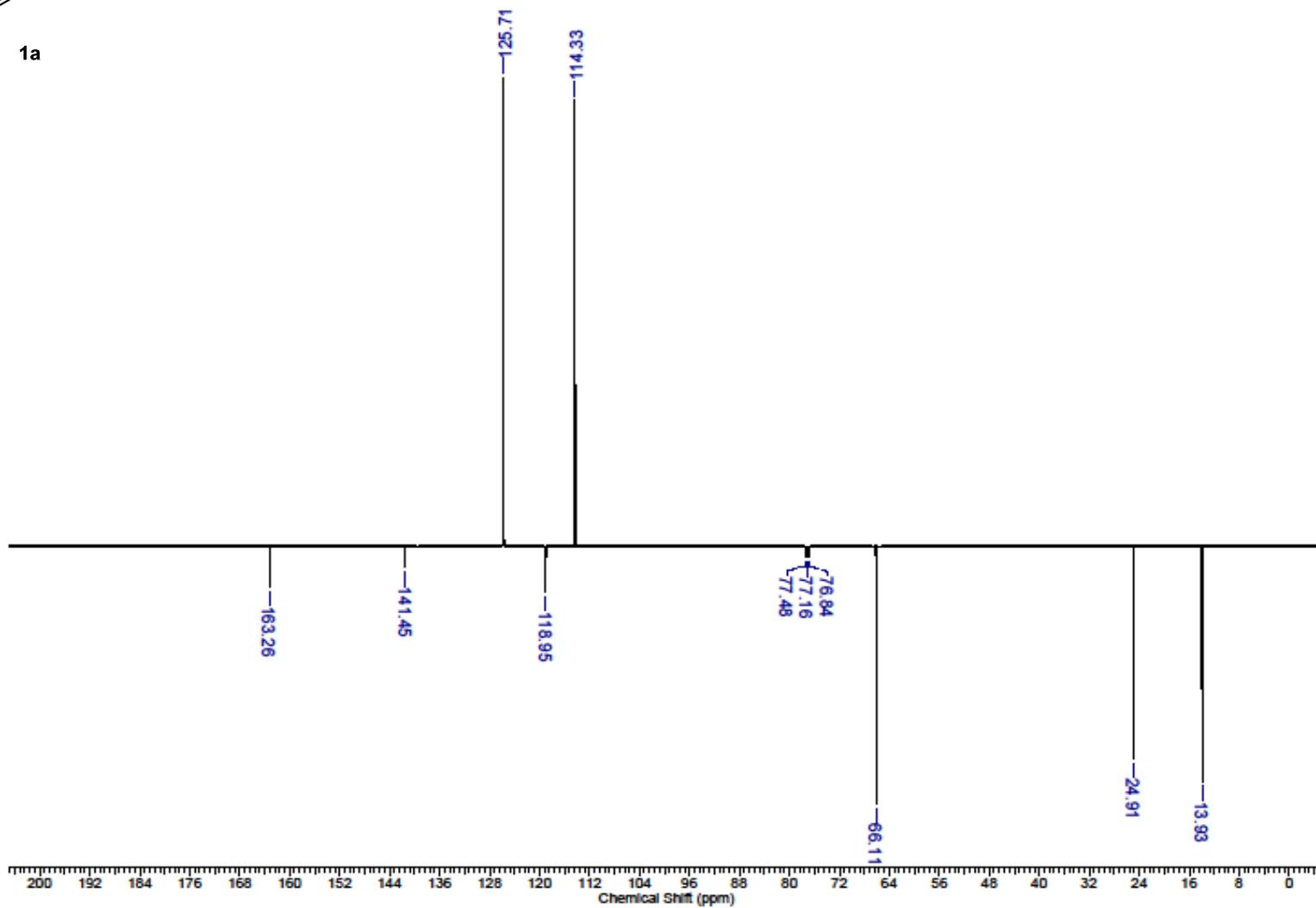
1a



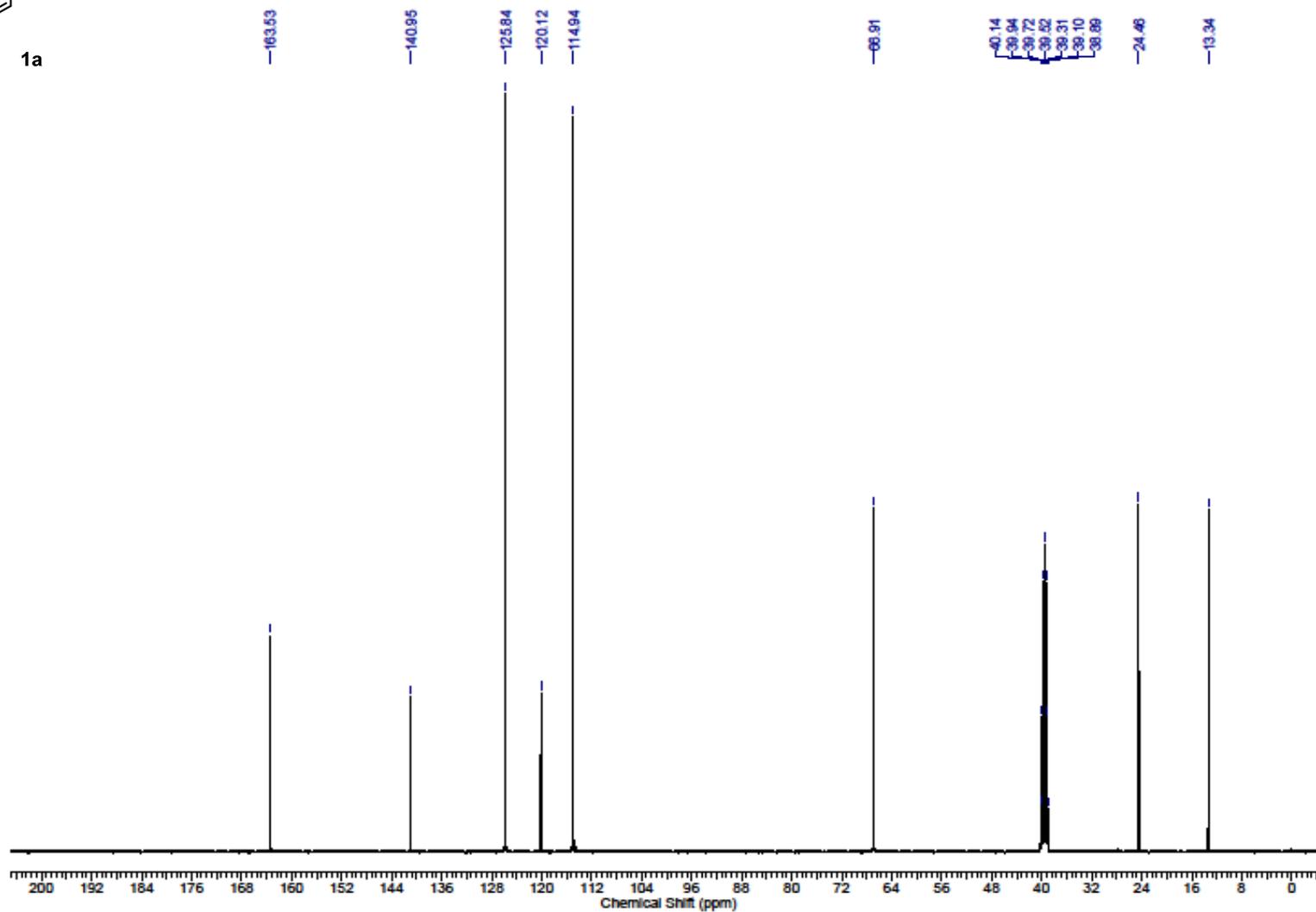
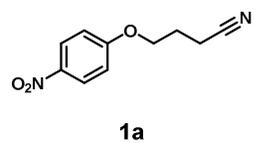
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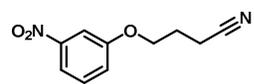
1a



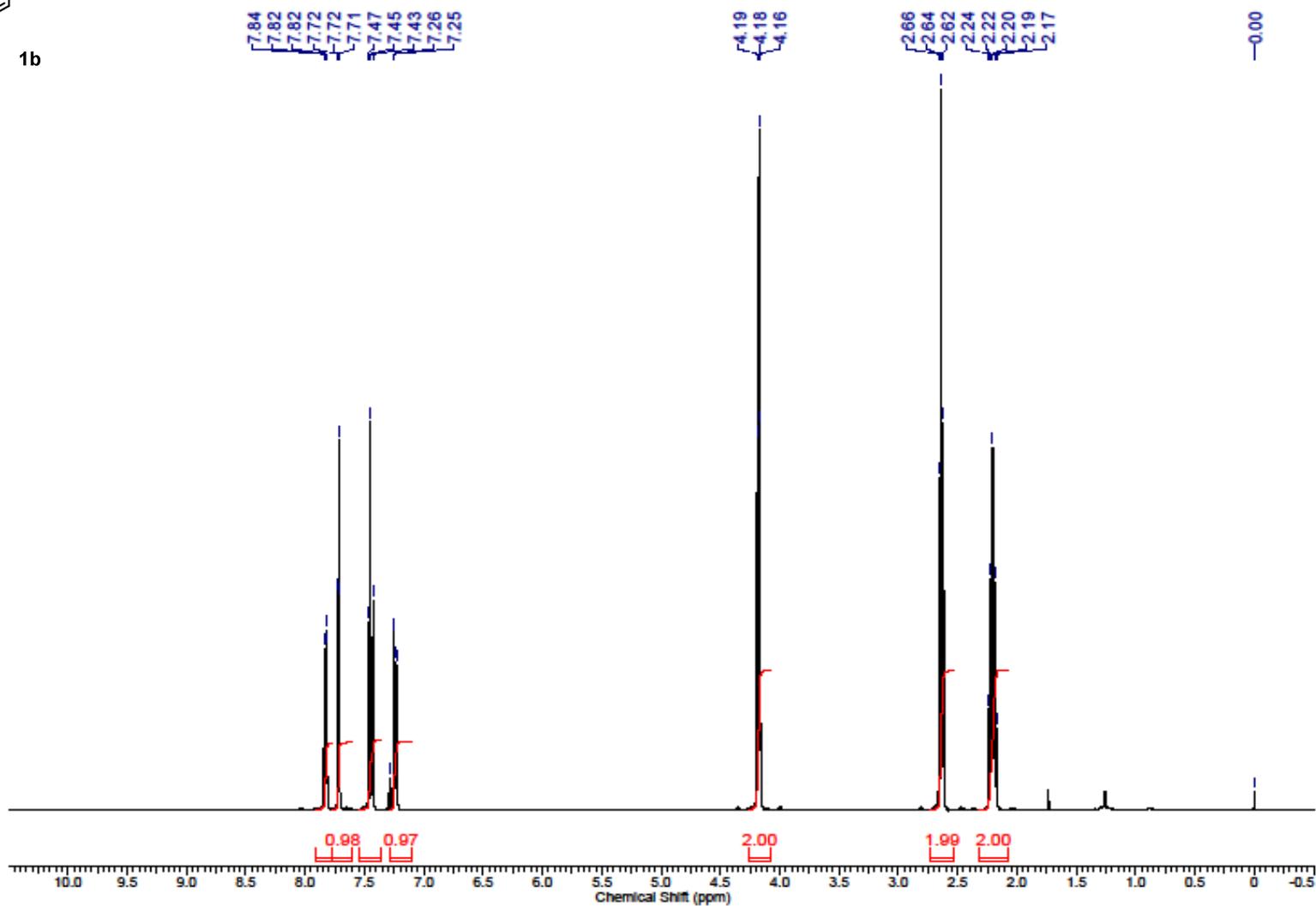
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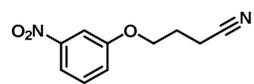
^1H NMR spectrum of **1b** in CDCl_3 with 0.05% v/v TMS (400 MHz)



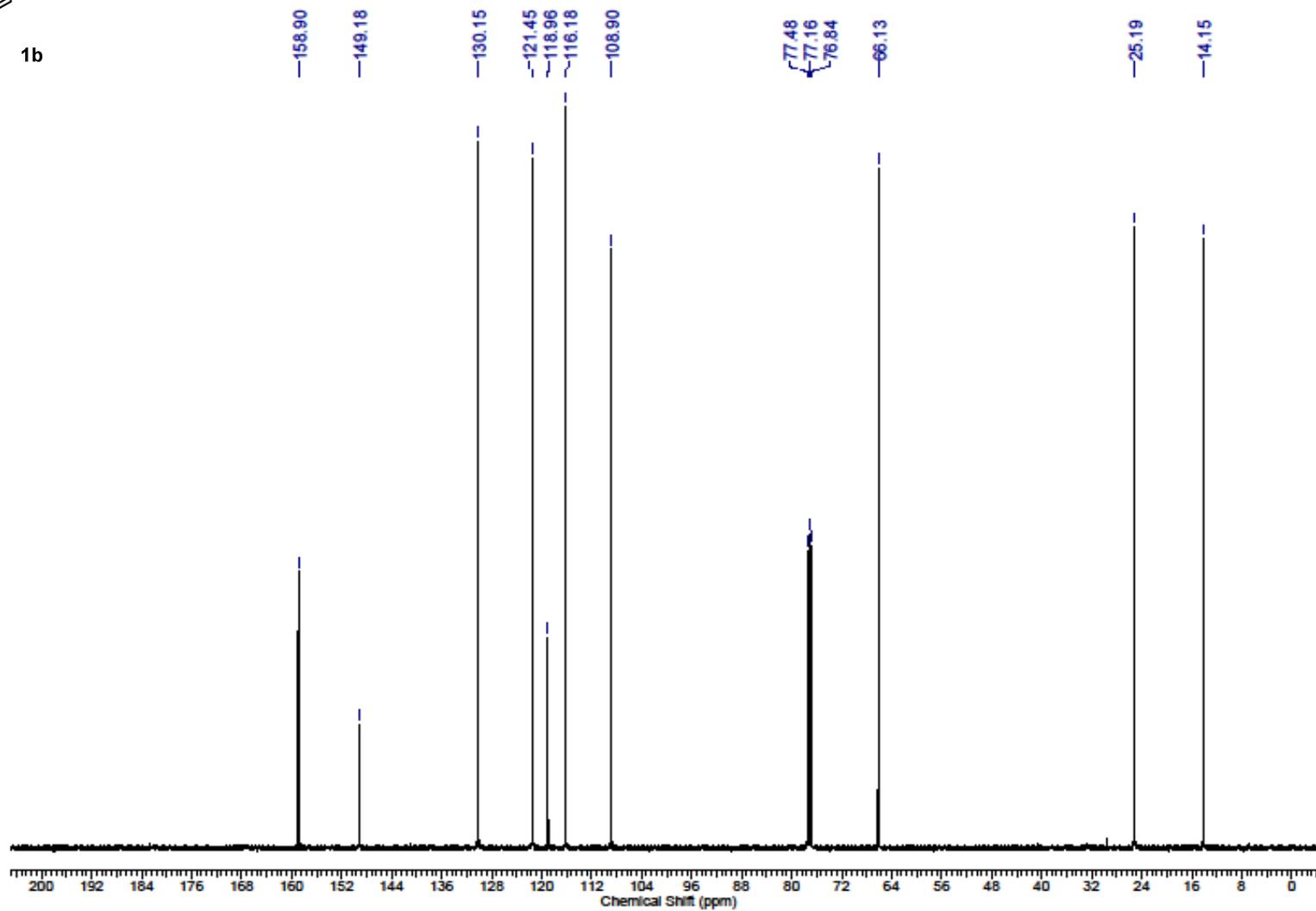
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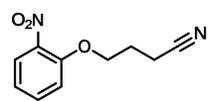
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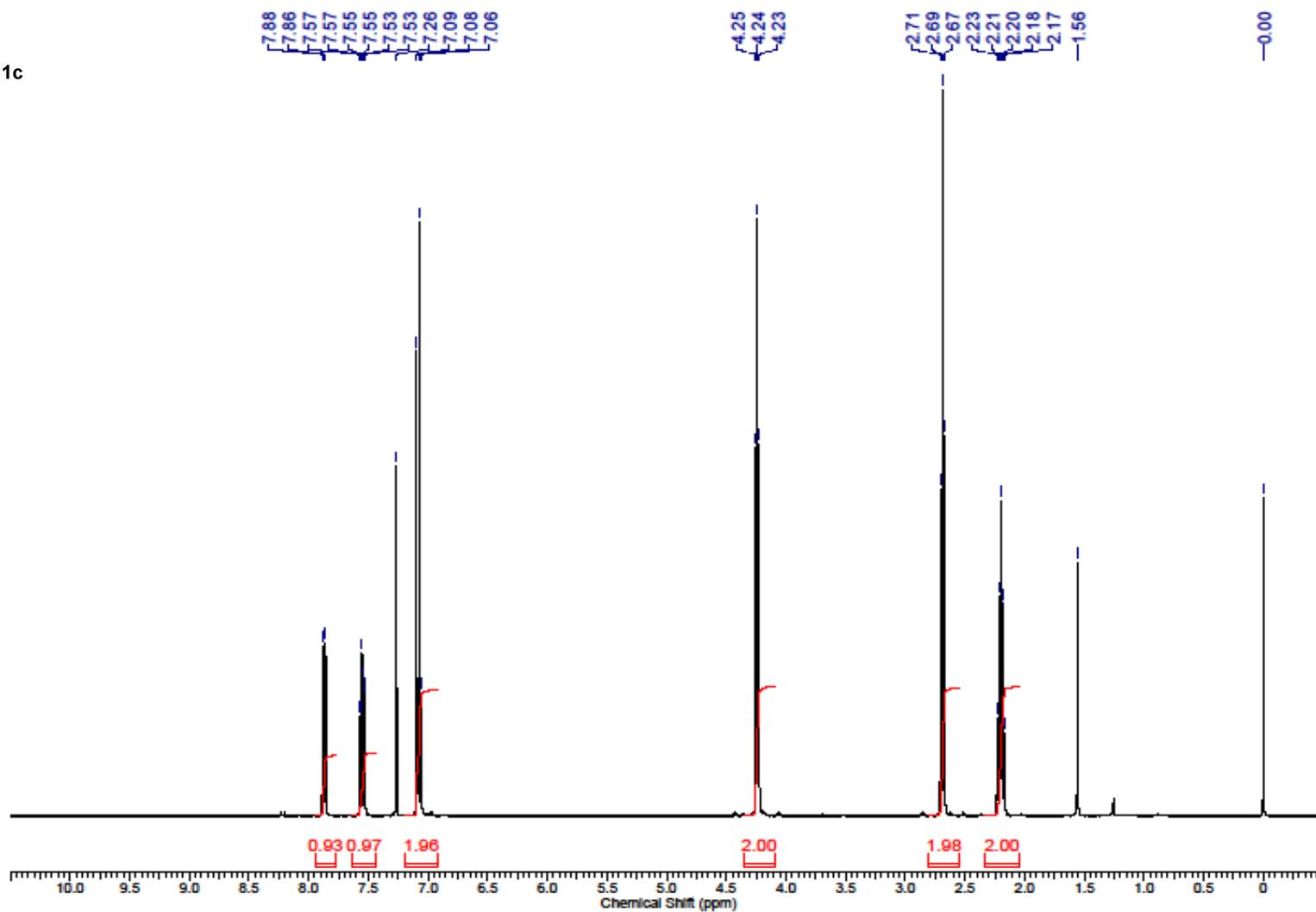
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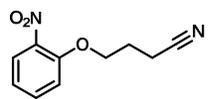
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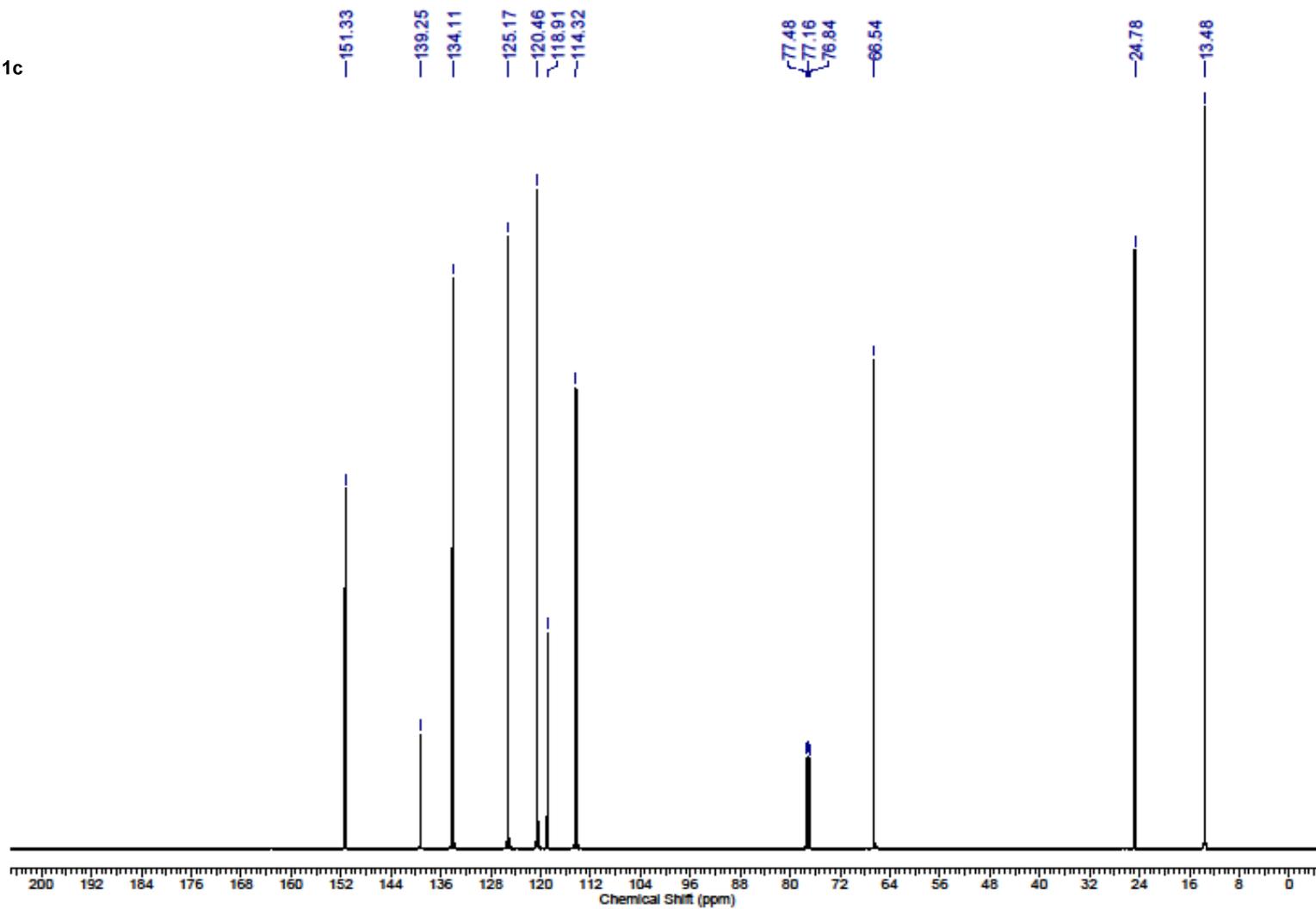
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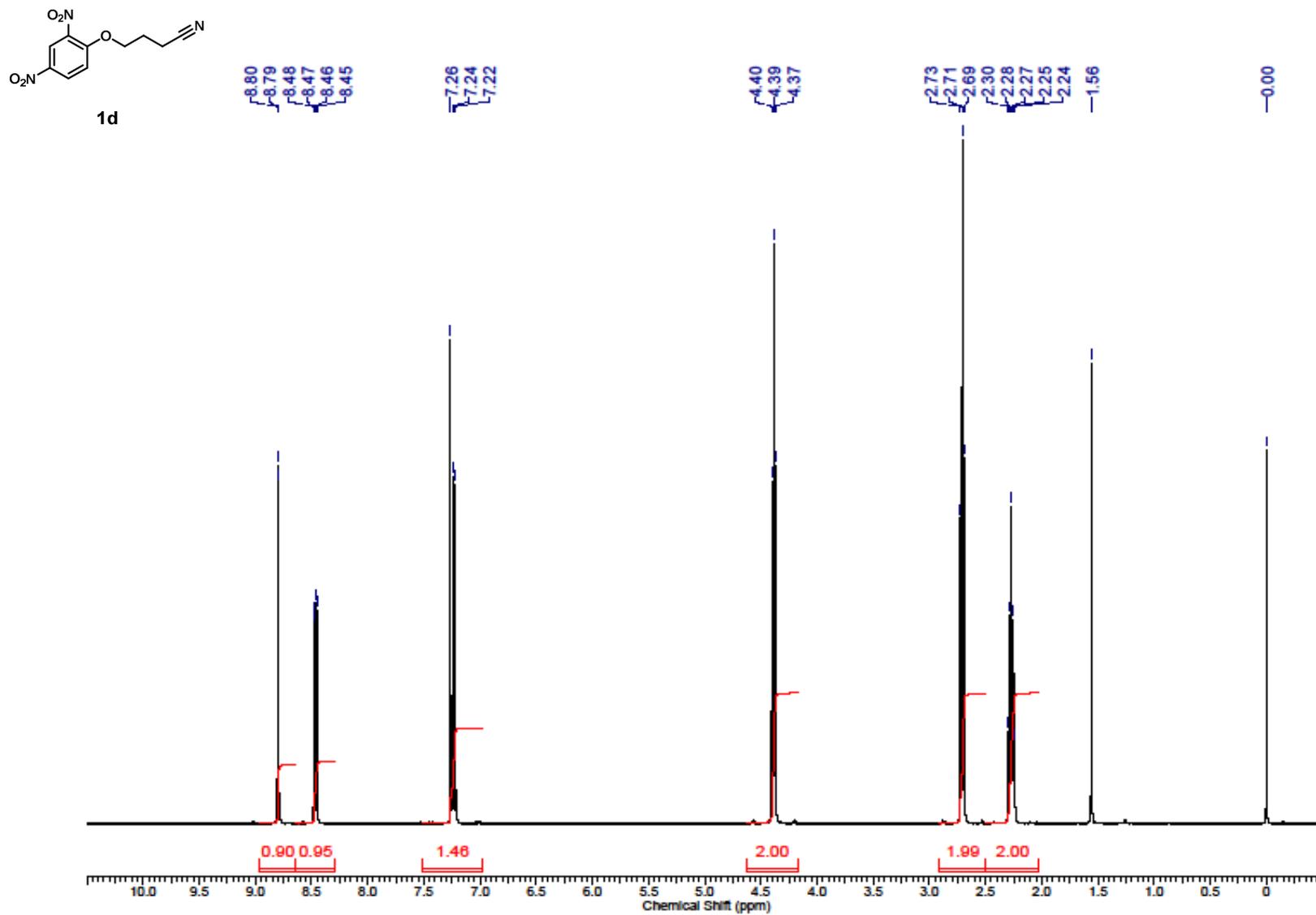
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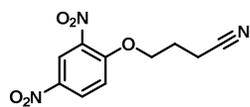
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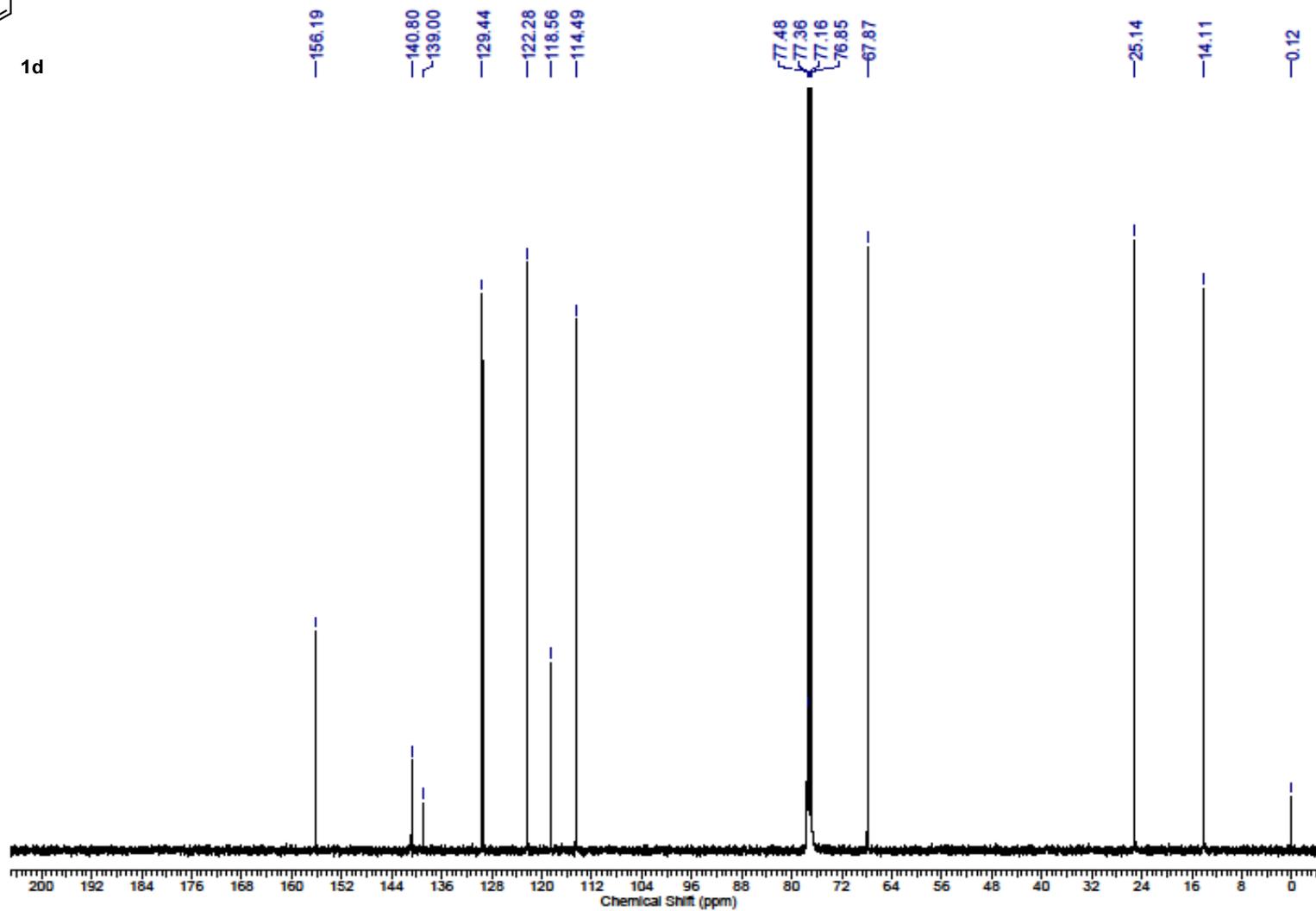
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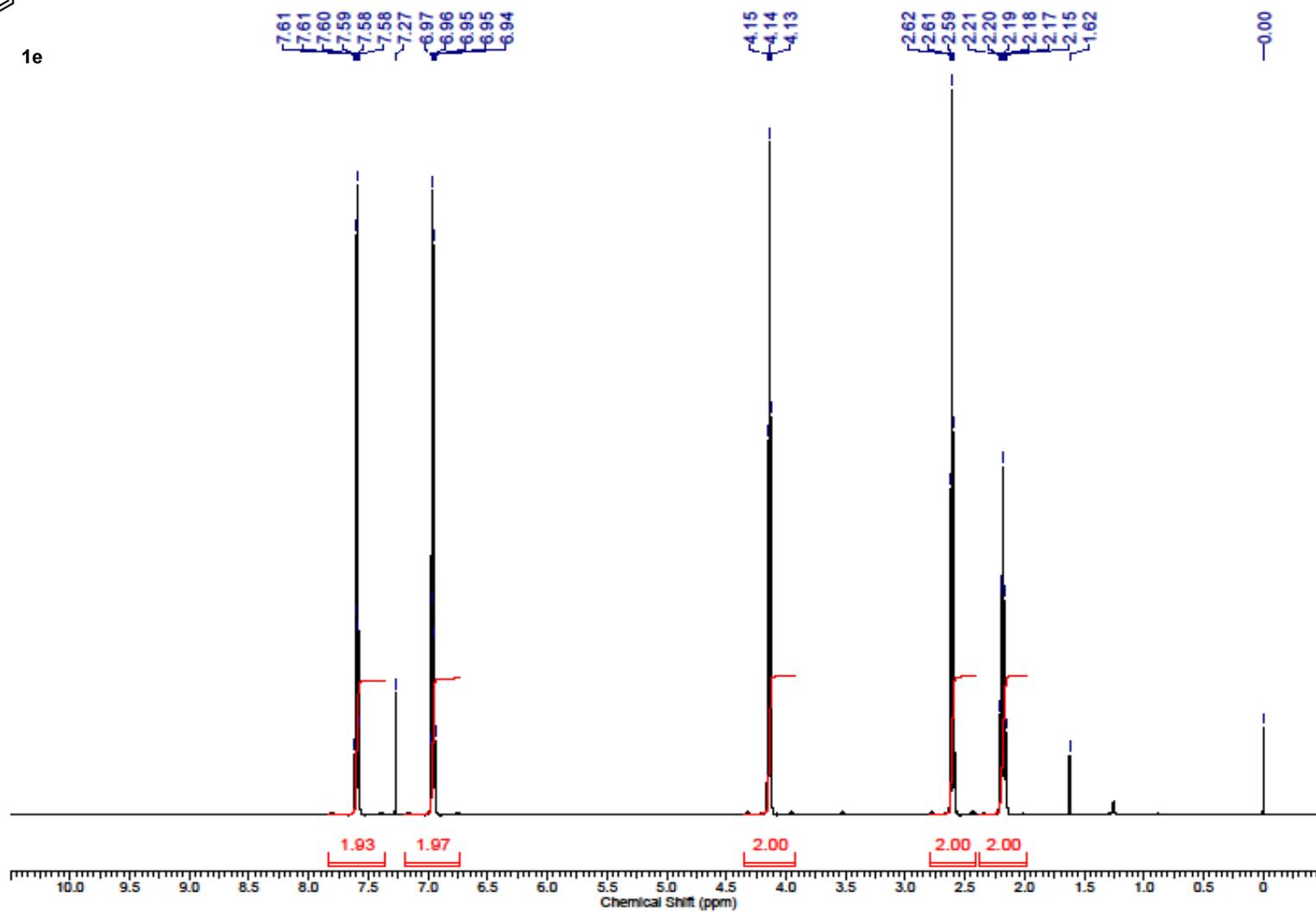
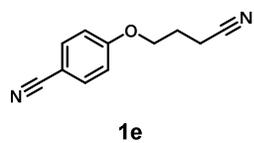
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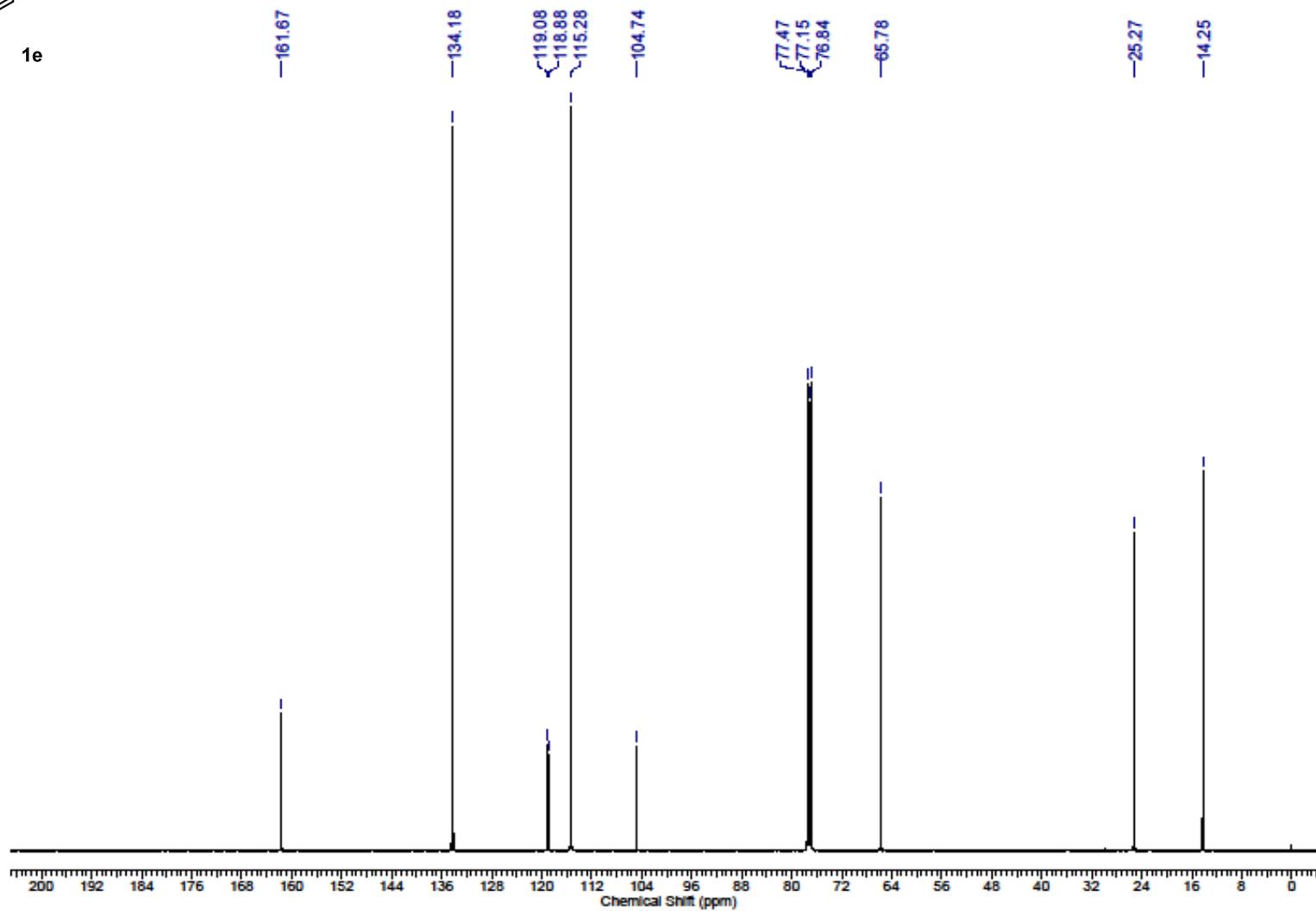
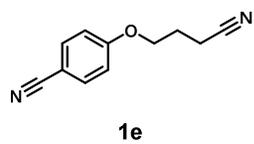
1d



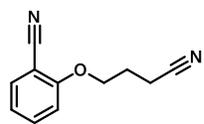
^1H NMR spectrum of **1e** in CDCl_3 with 0.05% v/v TMS (400 MHz)



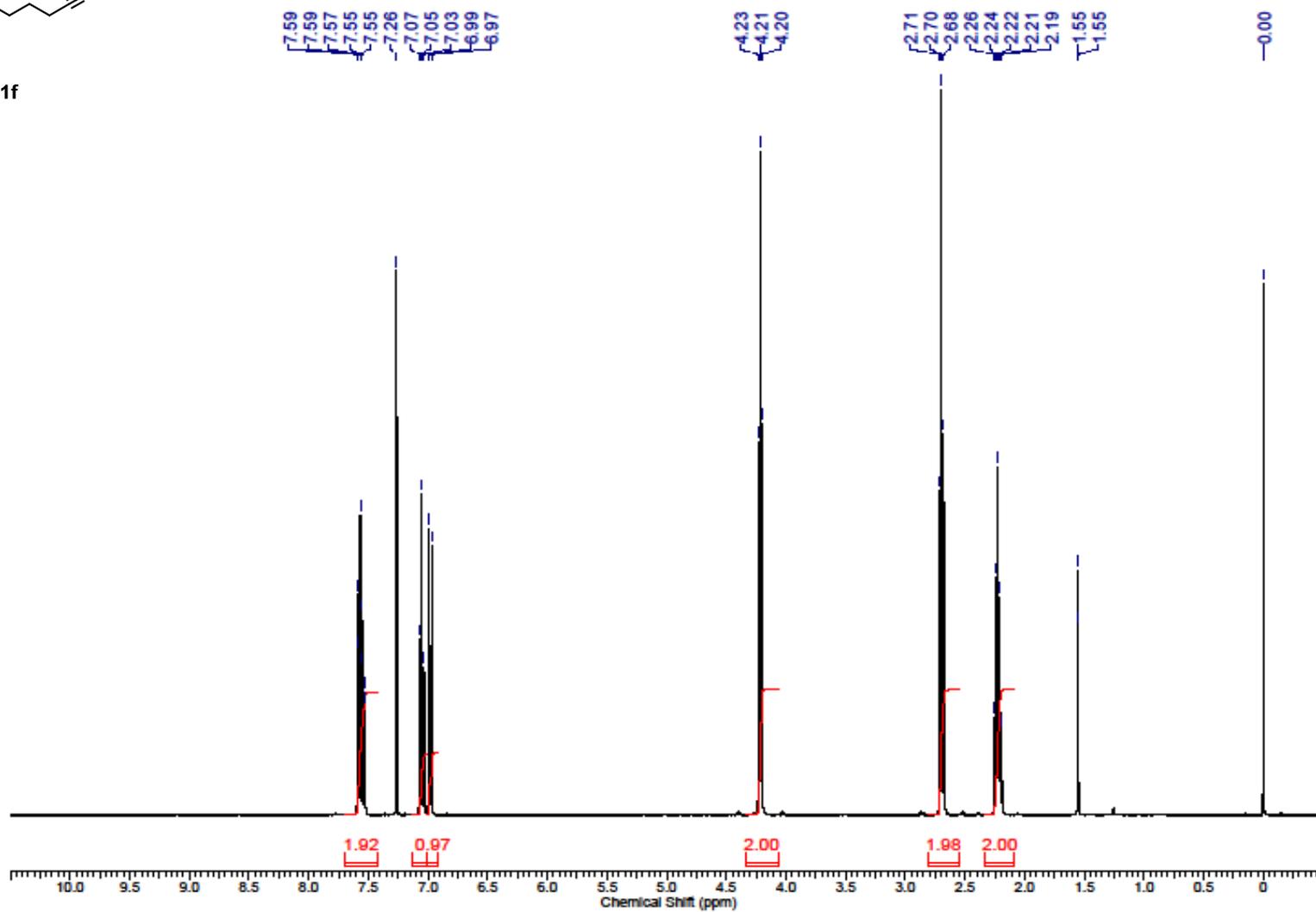
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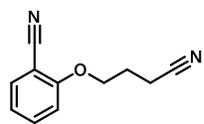
^1H NMR spectrum of **1f** in CDCl_3 with 0.05% v/v TMS (400 MHz)



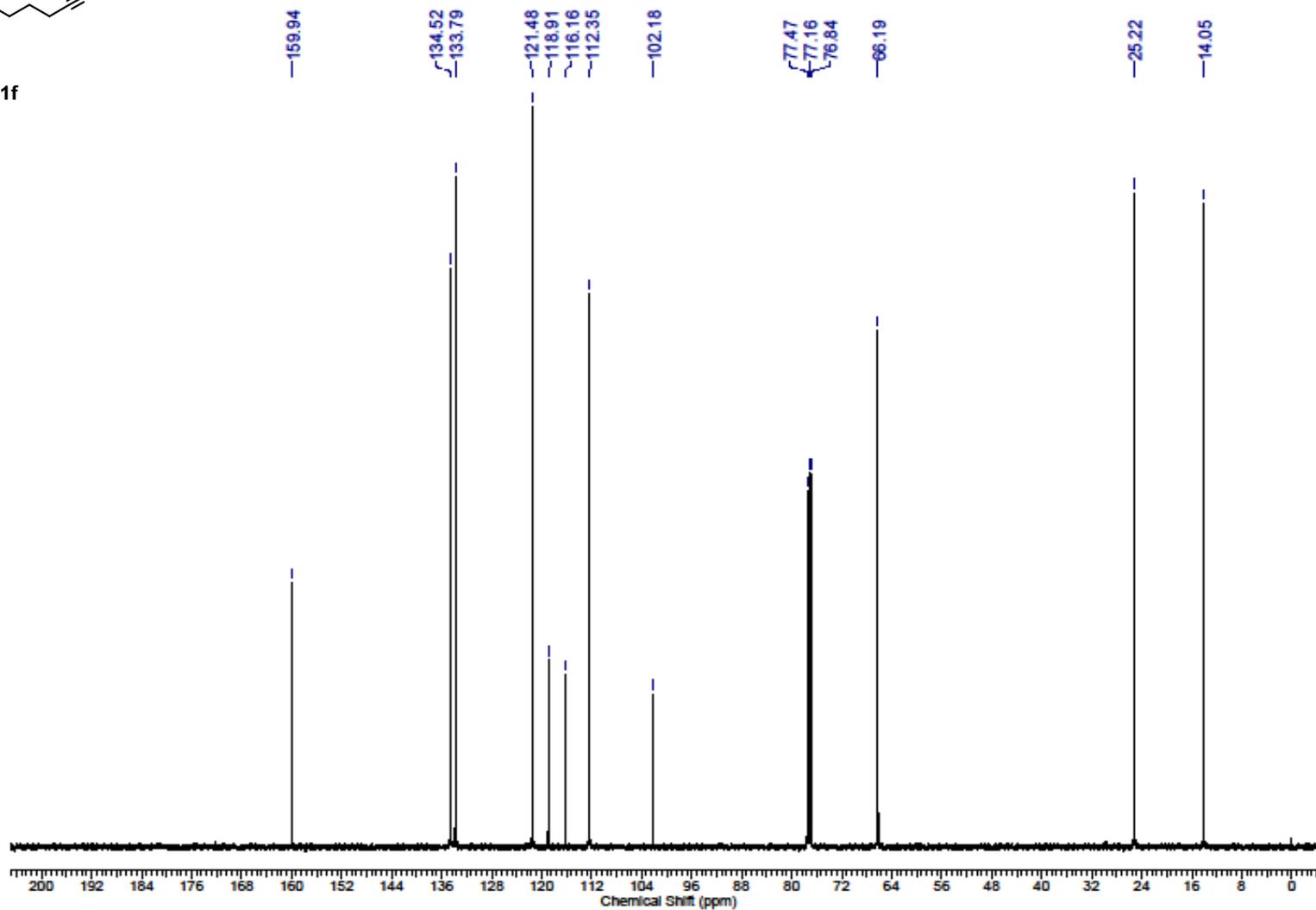
1f



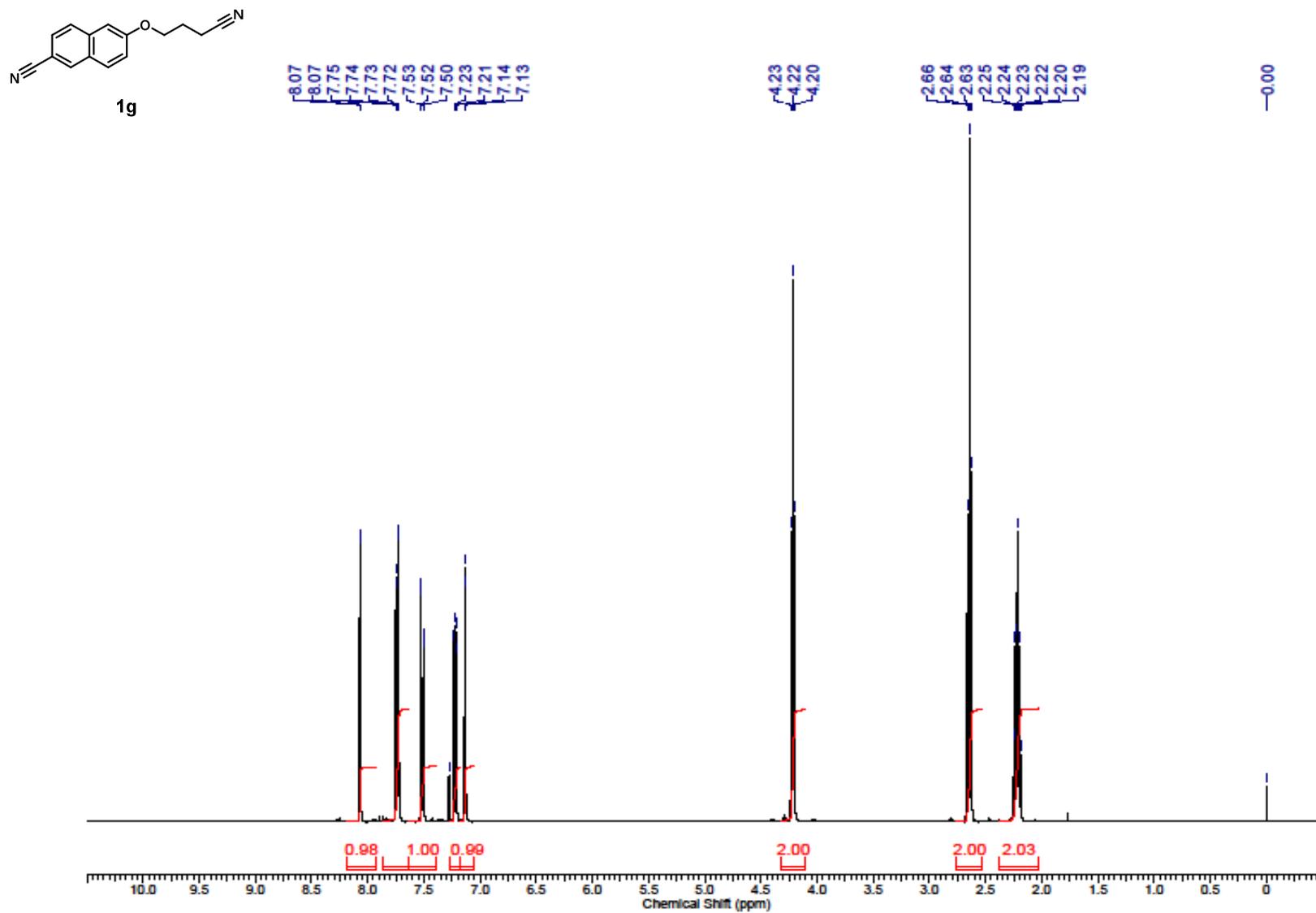
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1f** in CDCl_3 with 0.05% v/v TMS (100 MHz)



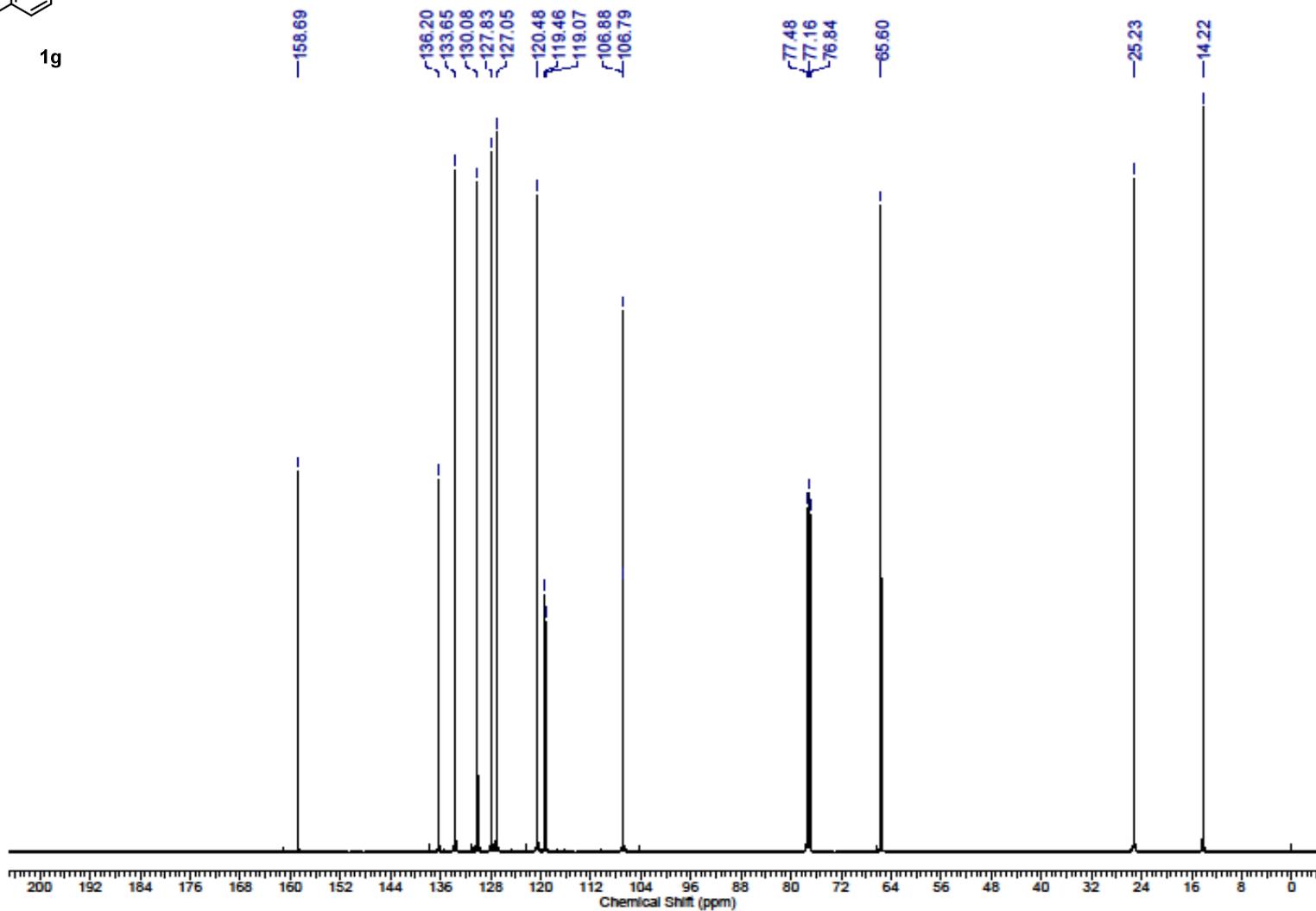
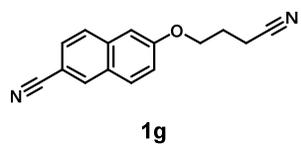
1f



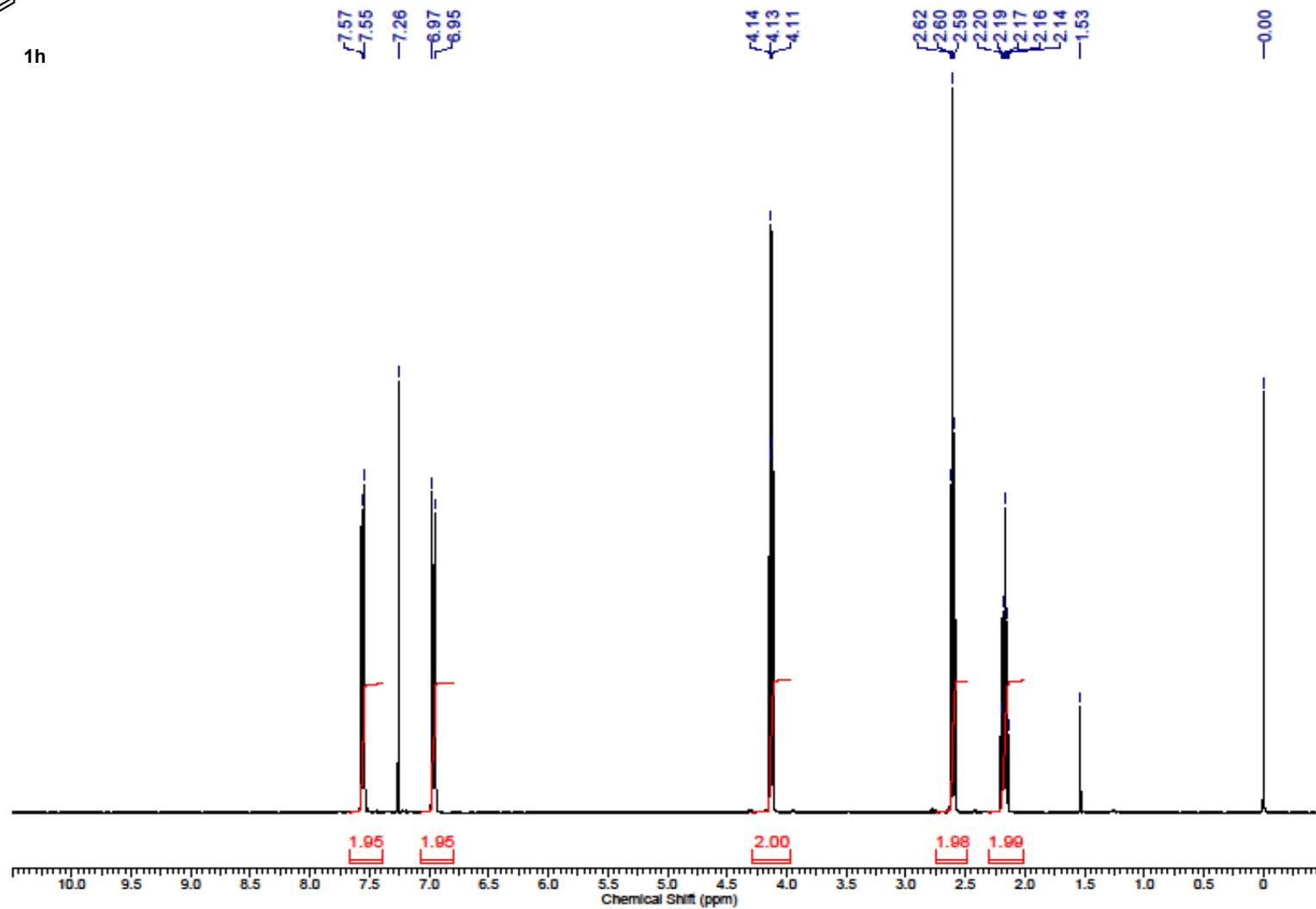
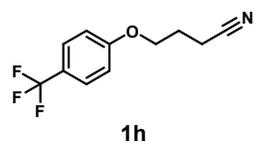
^1H NMR spectrum of **1g** in CDCl_3 with 0.05% v/v TMS (400 MHz)



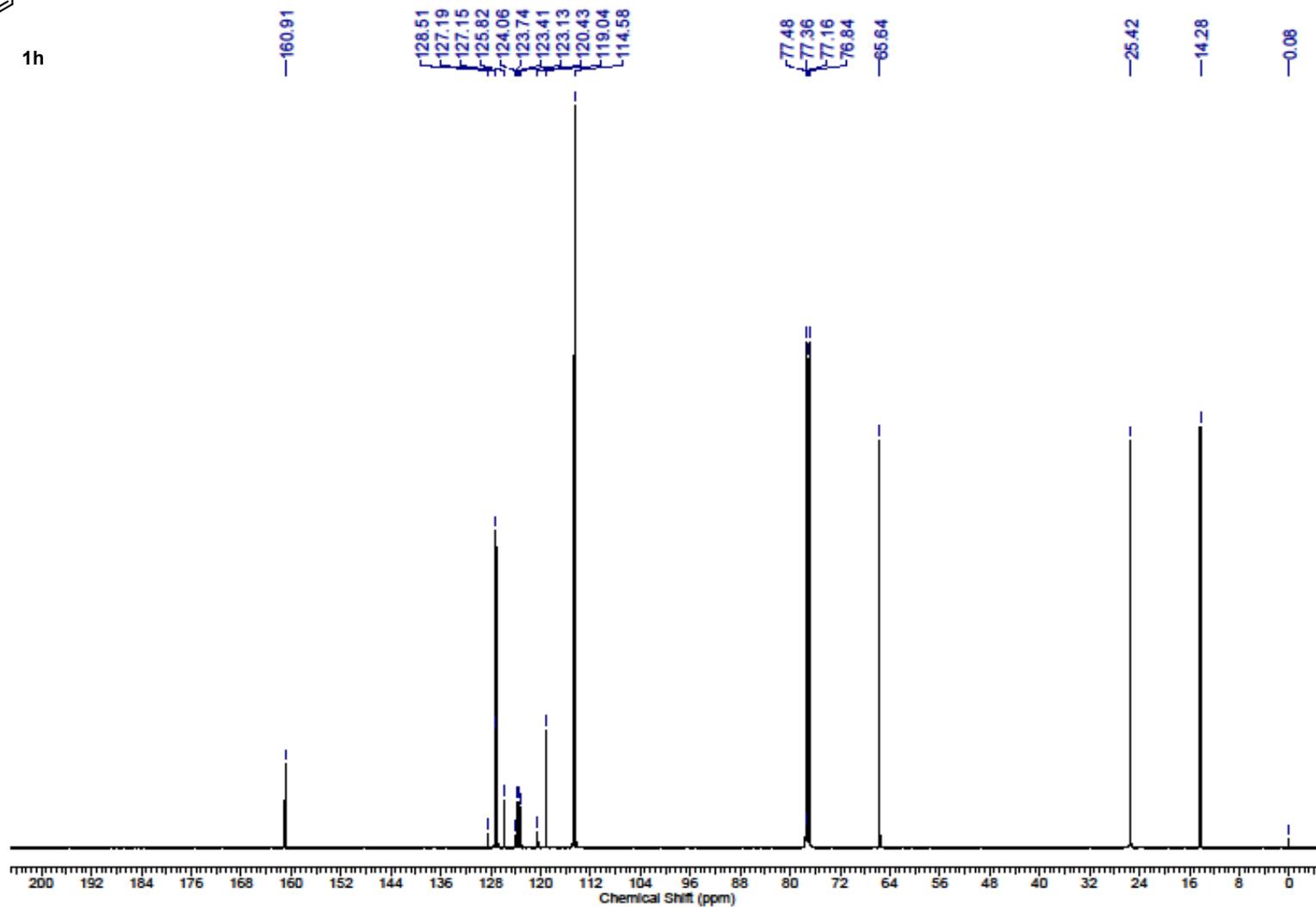
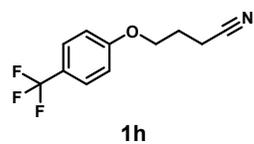
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1g** in CDCl_3 with 0.05% v/v TMS (100 MHz)



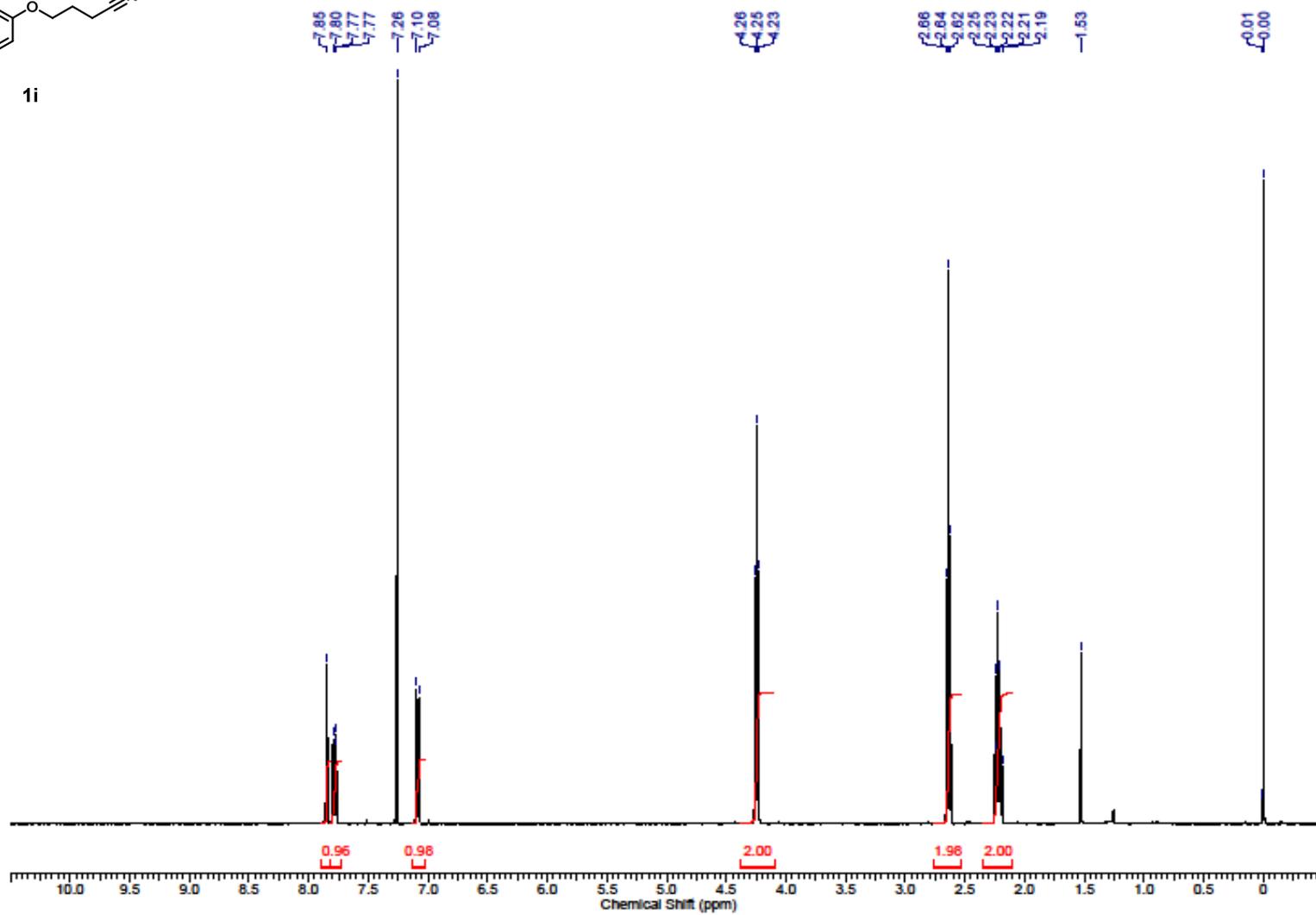
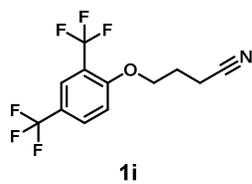
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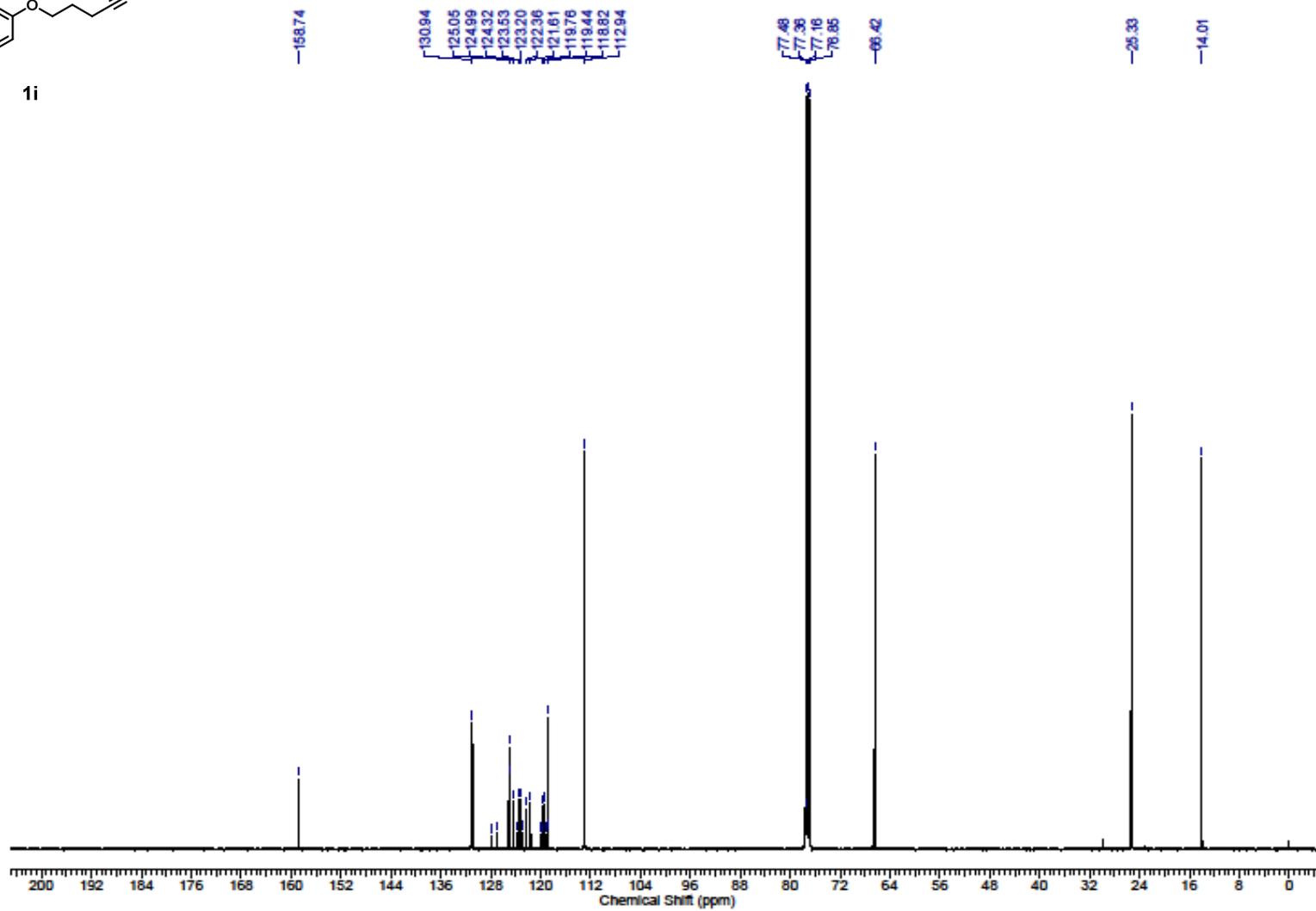
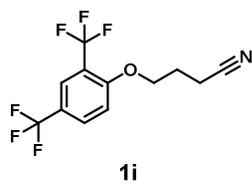
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1h** in CDCl_3 with 0.05% v/v TMS (100 MHz)



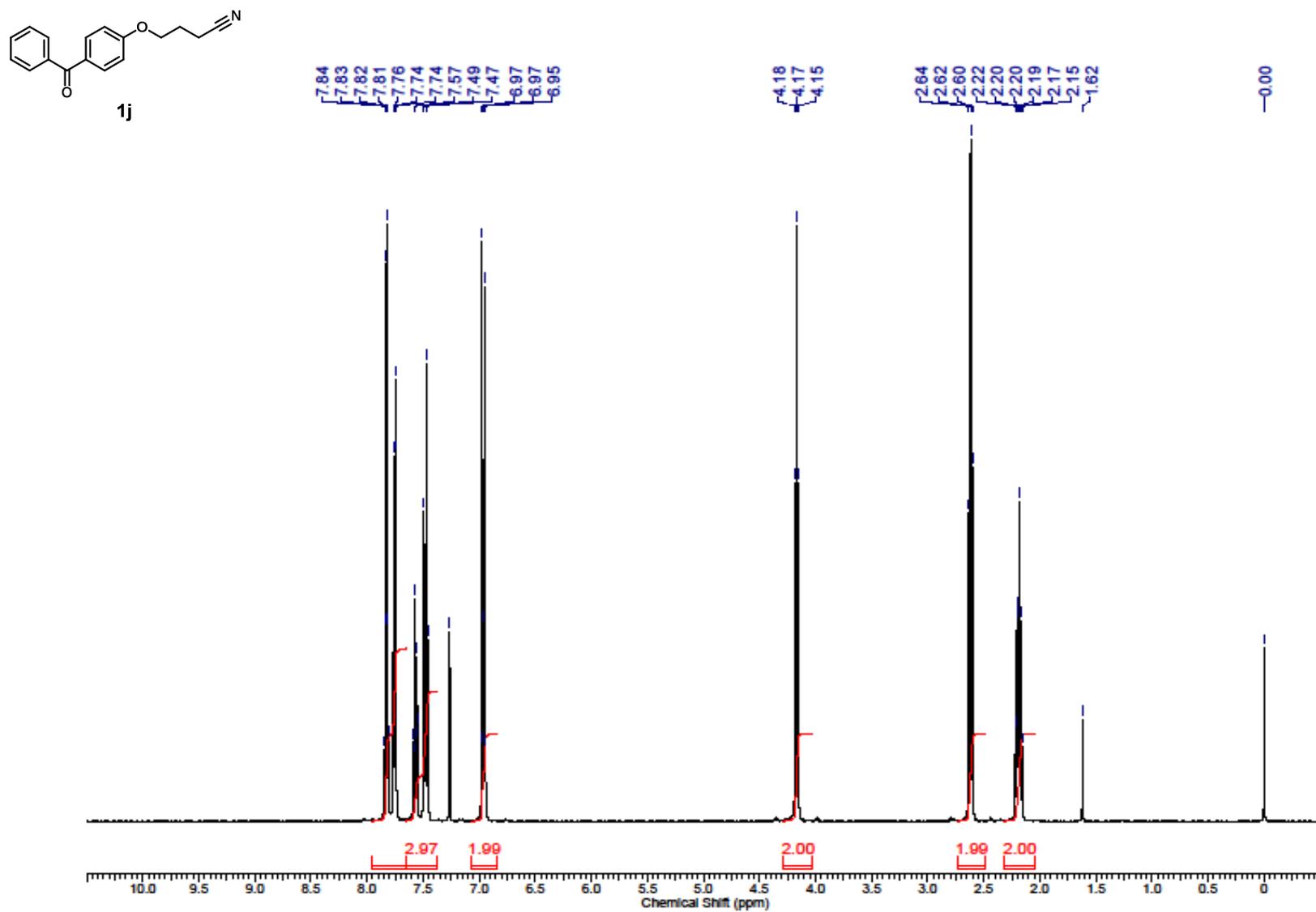
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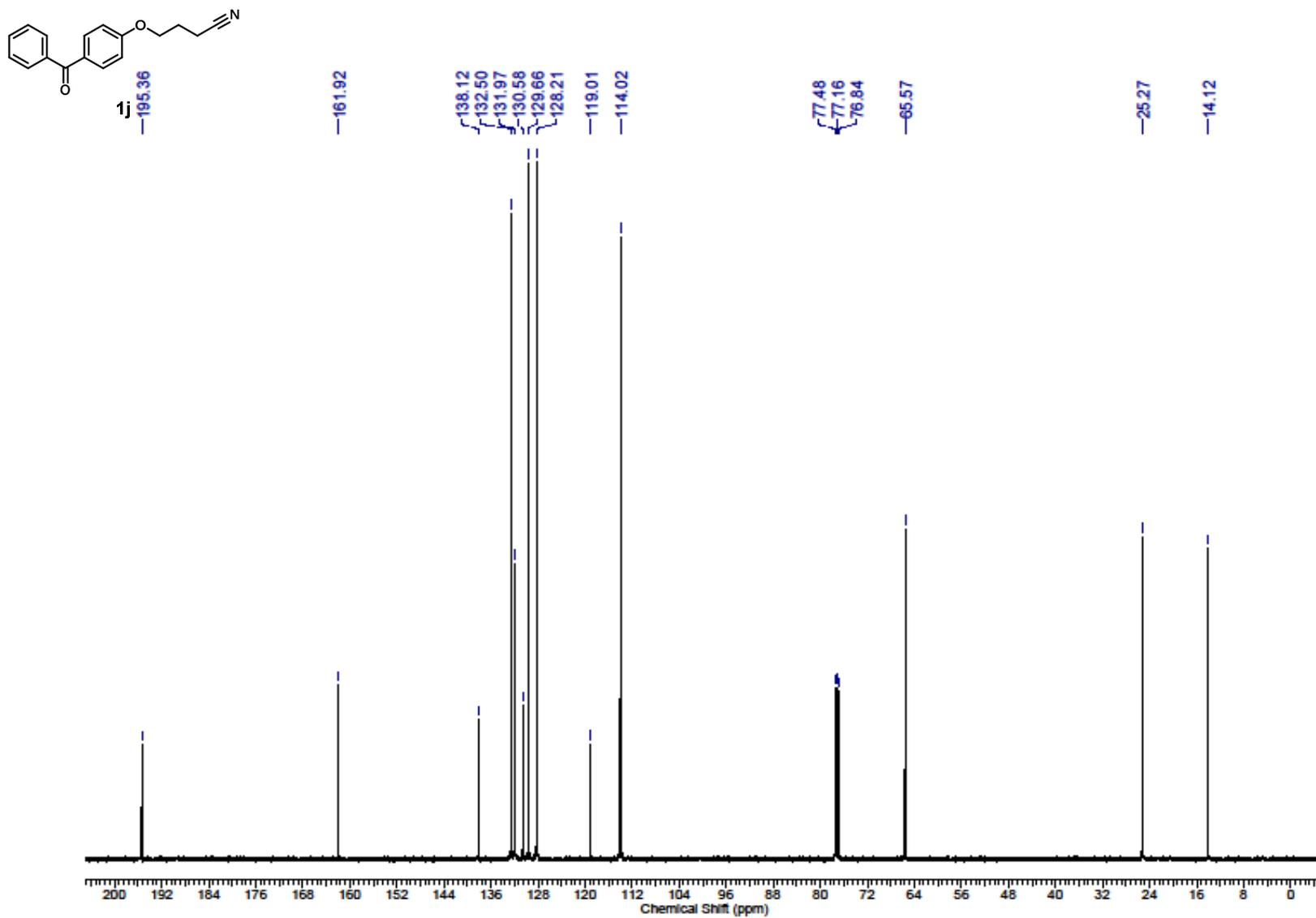
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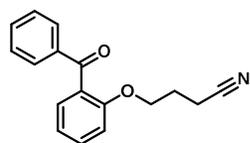
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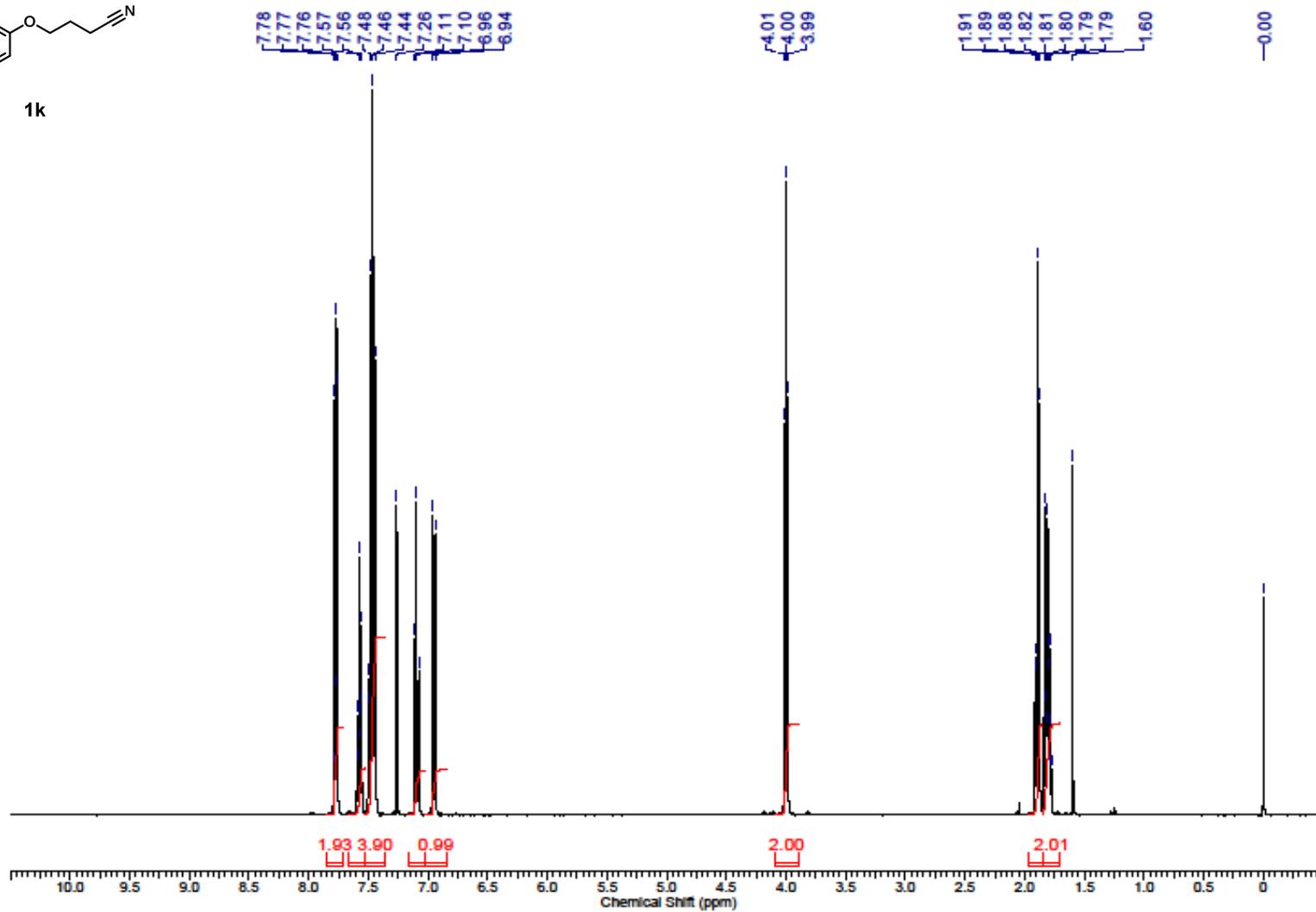
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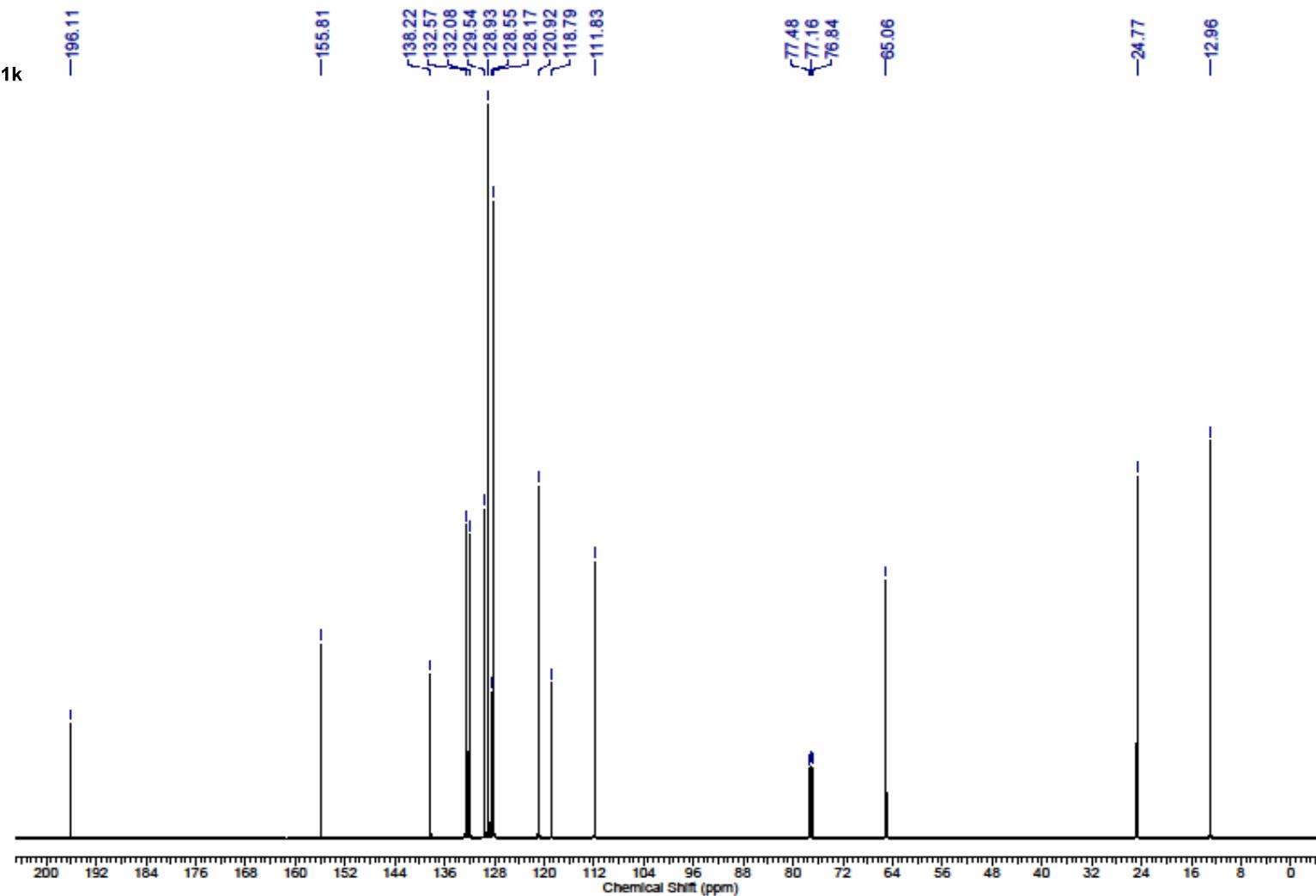
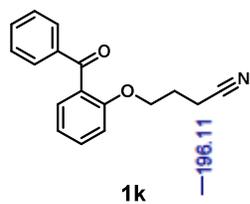
^1H NMR spectrum of **1k** in CDCl_3 with 0.05% v/v TMS (400 MHz)



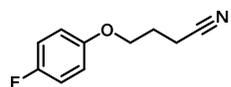
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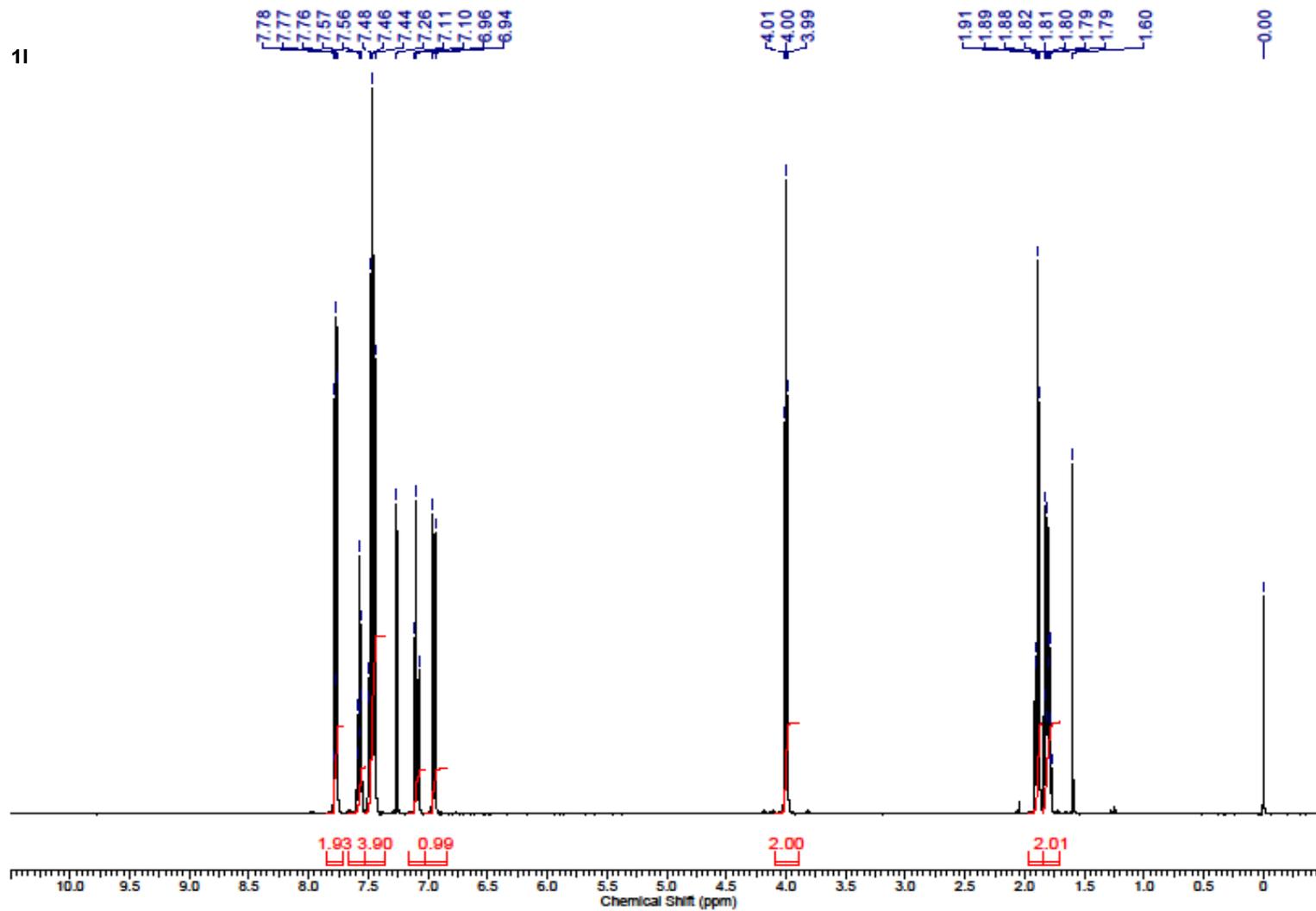
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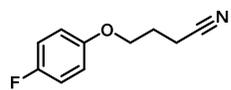
^1H NMR spectrum of **11** in CDCl_3 with 0.05% v/v TMS (400 MHz)



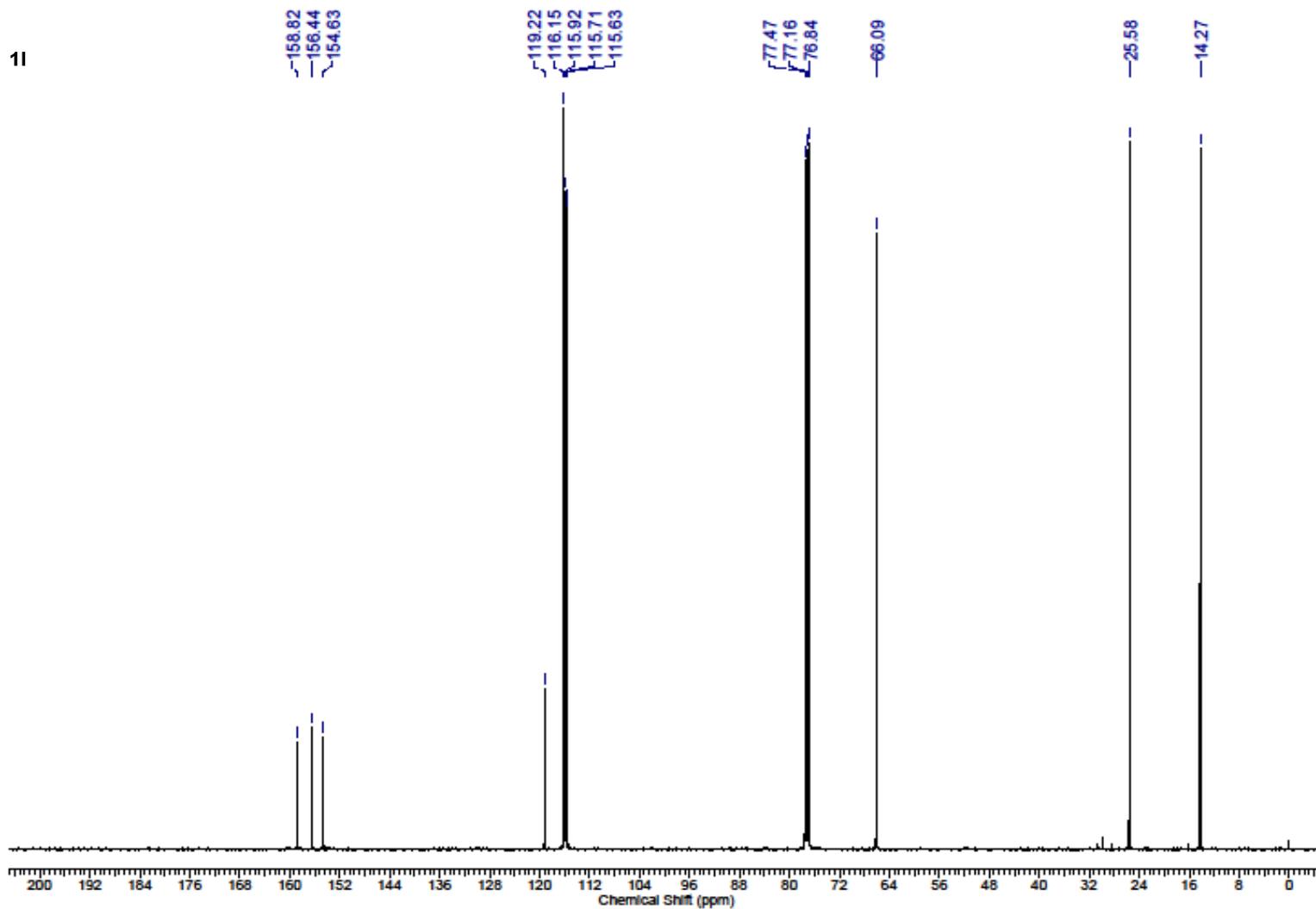
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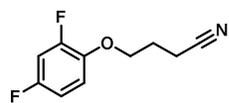
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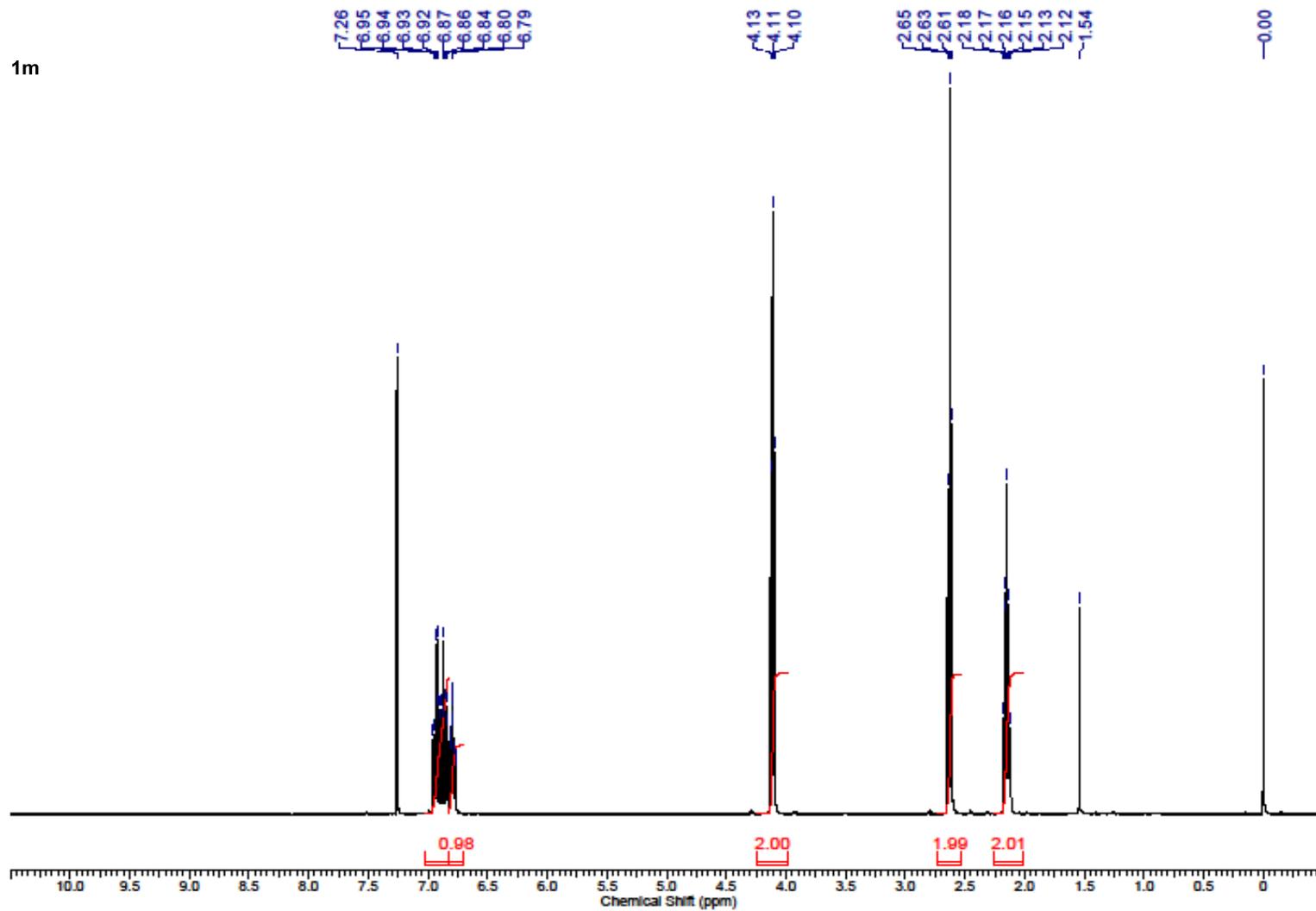
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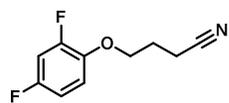
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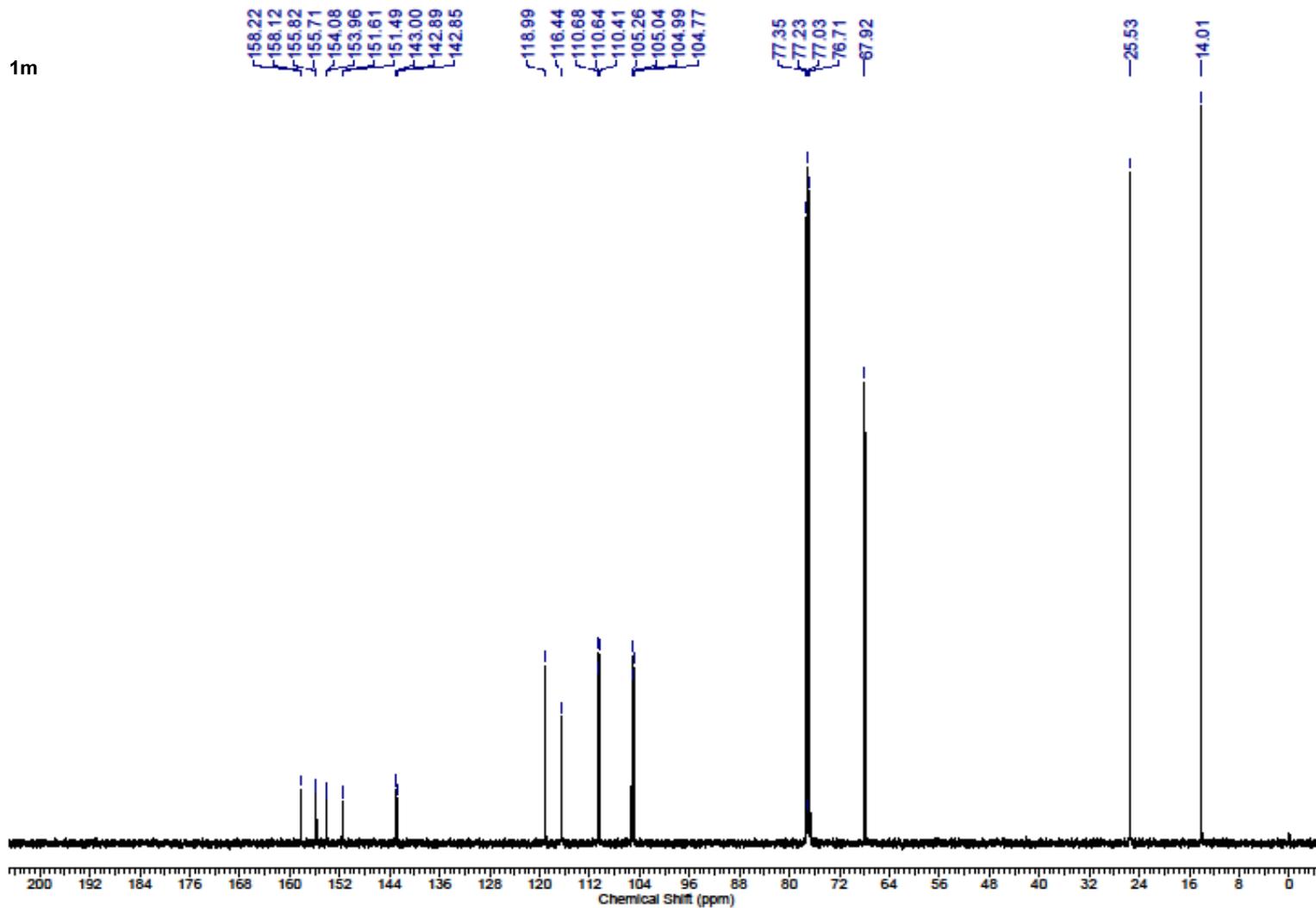
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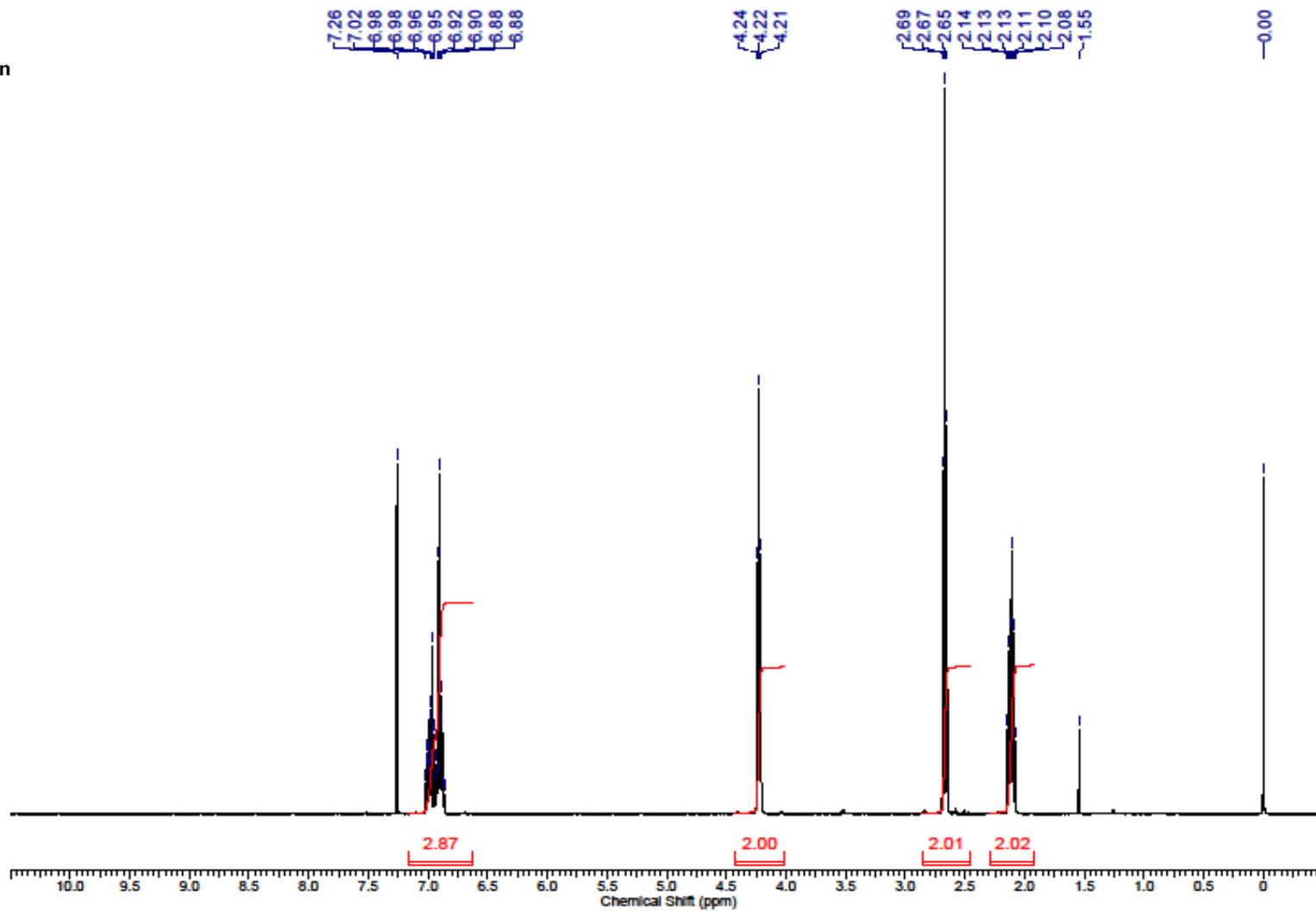
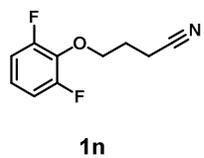
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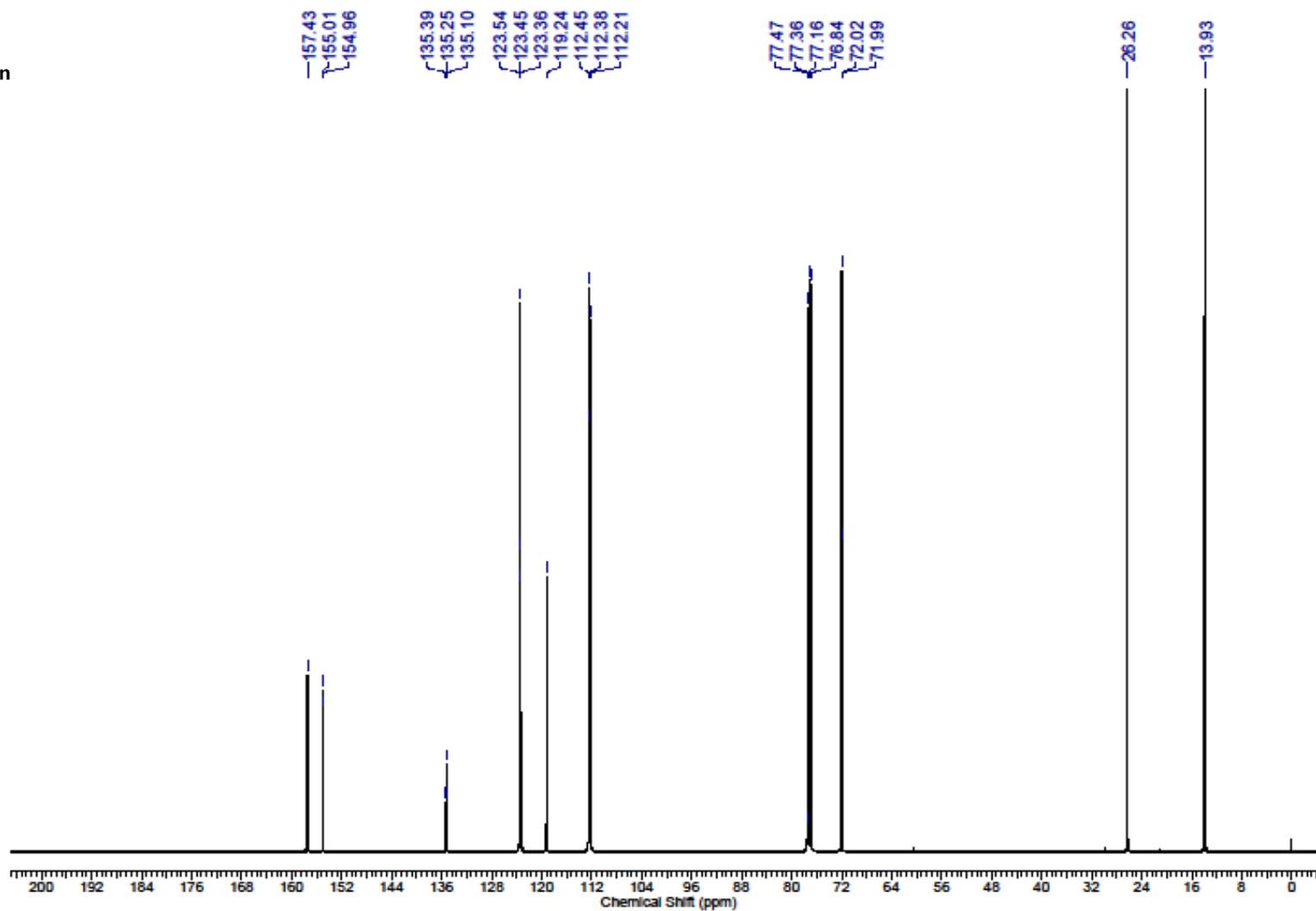
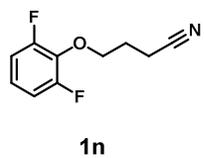
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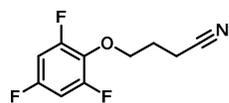
^1H NMR spectrum of **1n** in CDCl_3 with 0.05% v/v TMS (400 MHz)



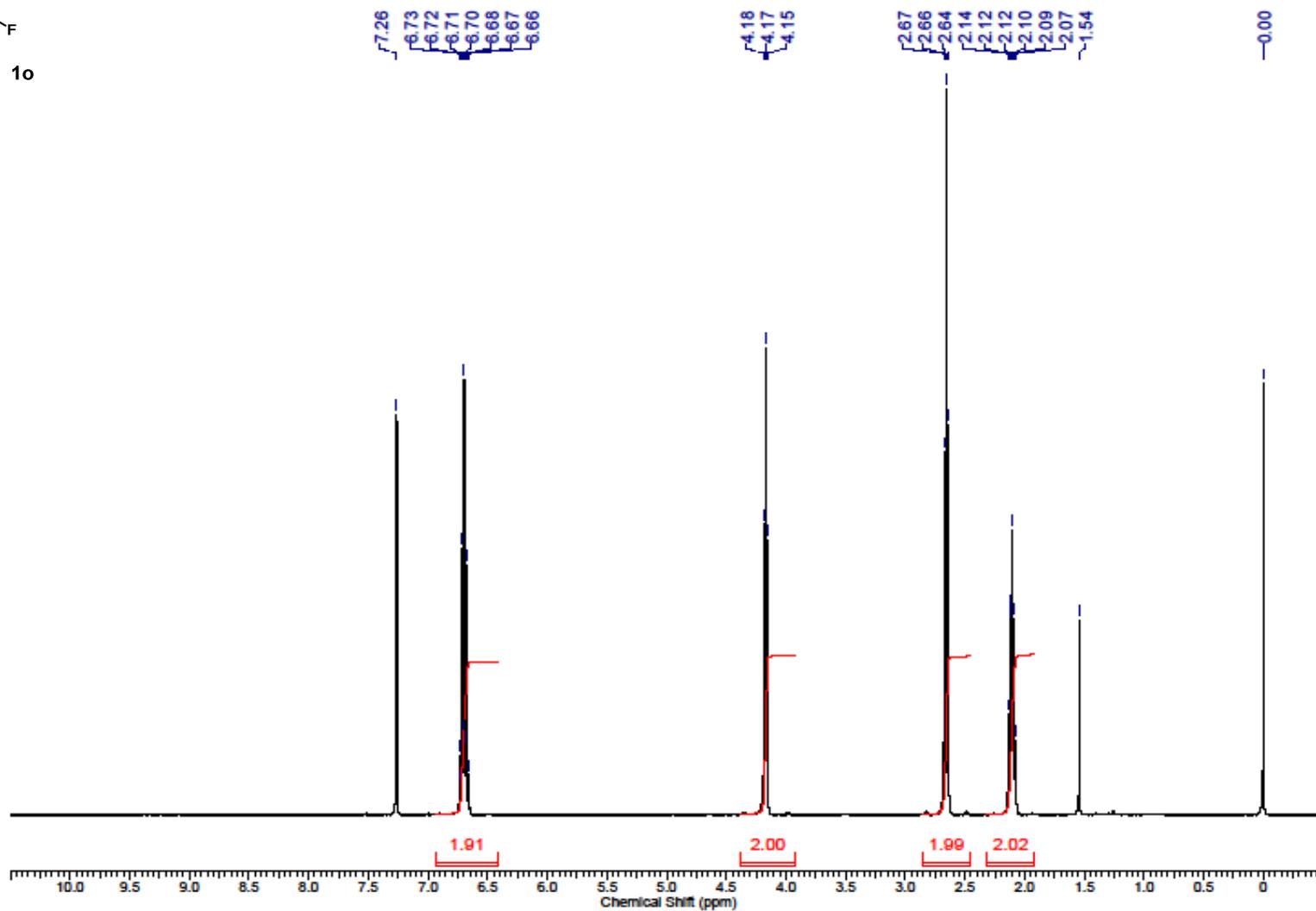
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1n** in CDCl_3 with 0.05% v/v TMS (100 MHz)



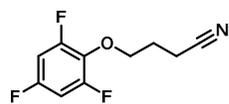
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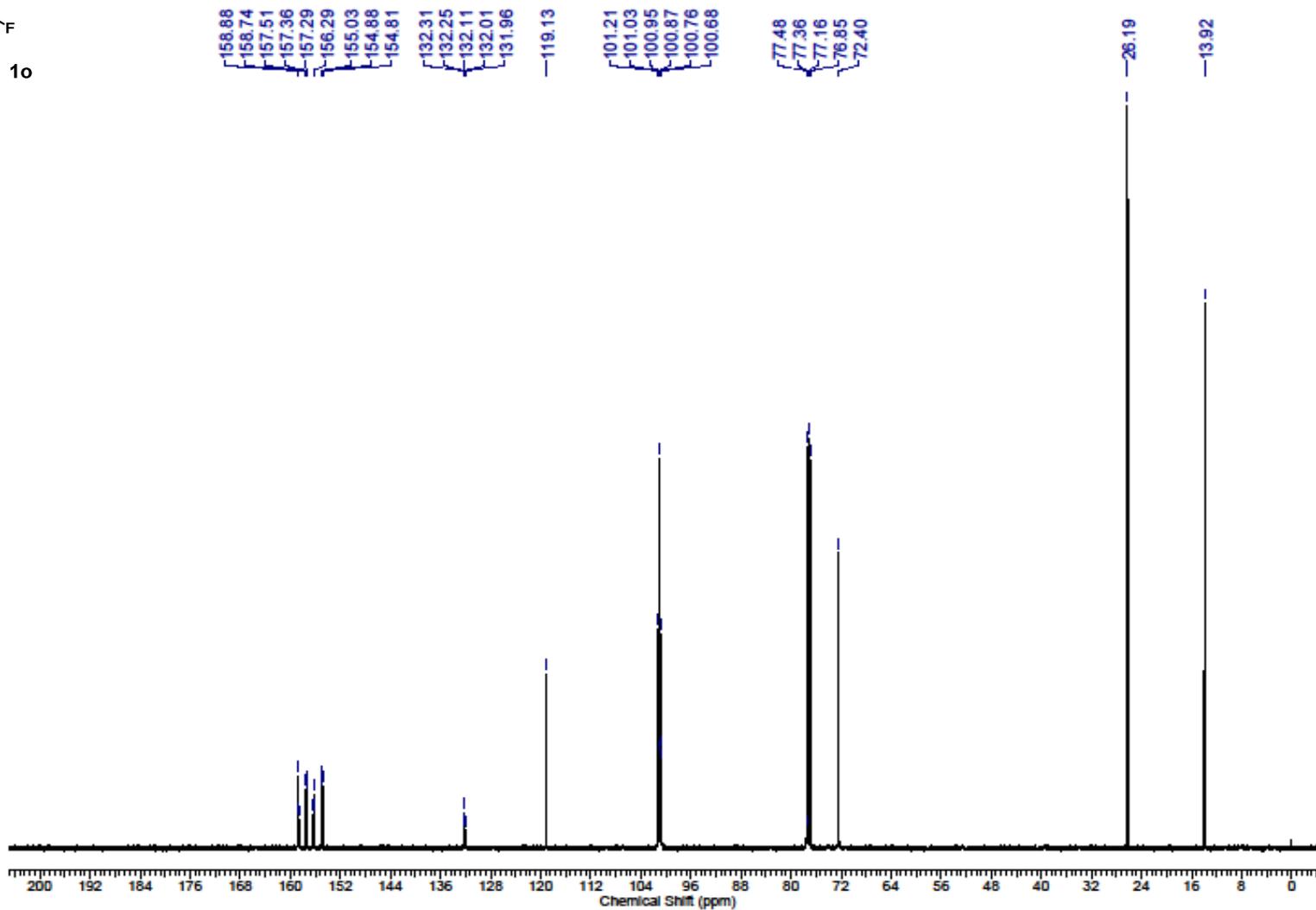
1o



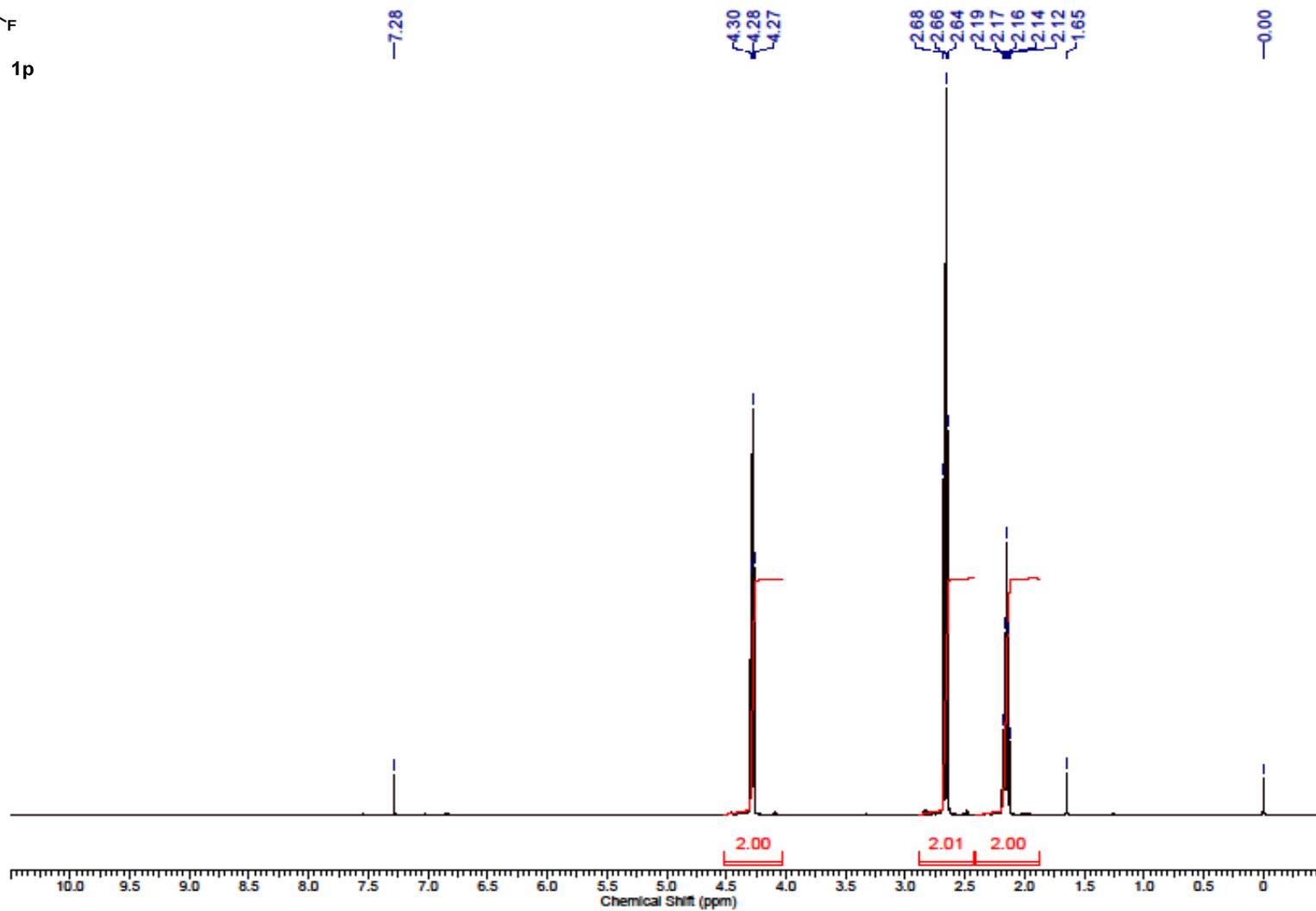
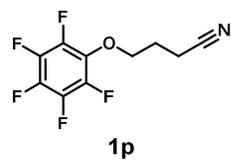
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1o** in CDCl_3 with 0.05% v/v TMS (100 MHz)



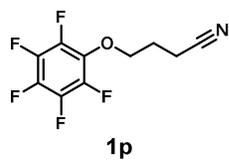
1o



^1H NMR spectrum of **1p** in CDCl_3 with 0.05% v/v TMS (400 MHz)



$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1p** in 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

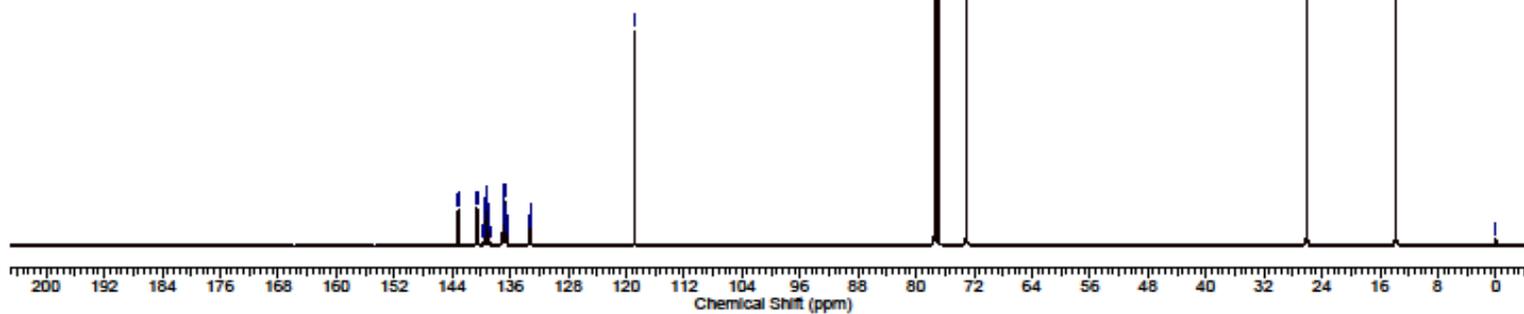
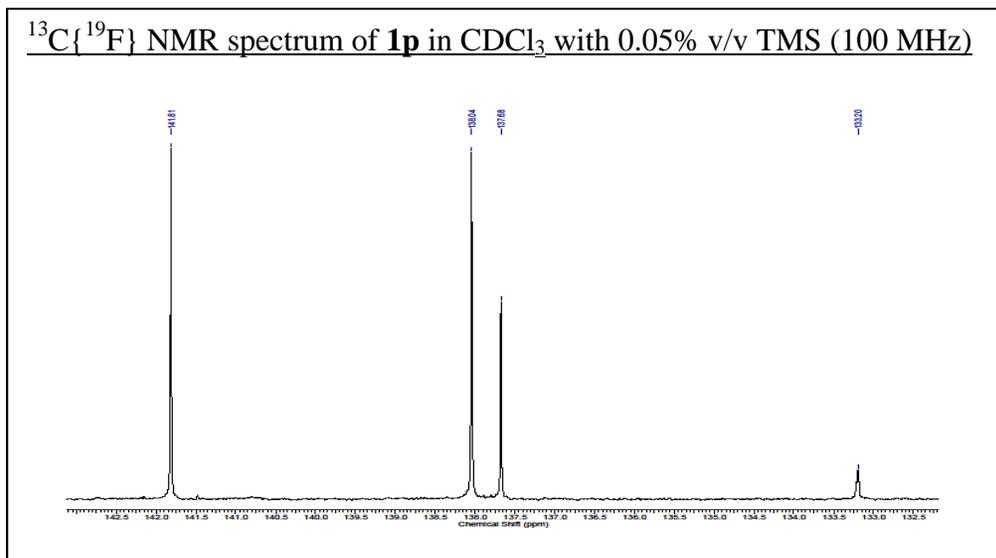
77.48
77.16
76.84
73.06

26.11

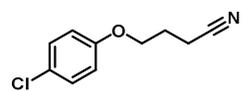
13.85

-0.05

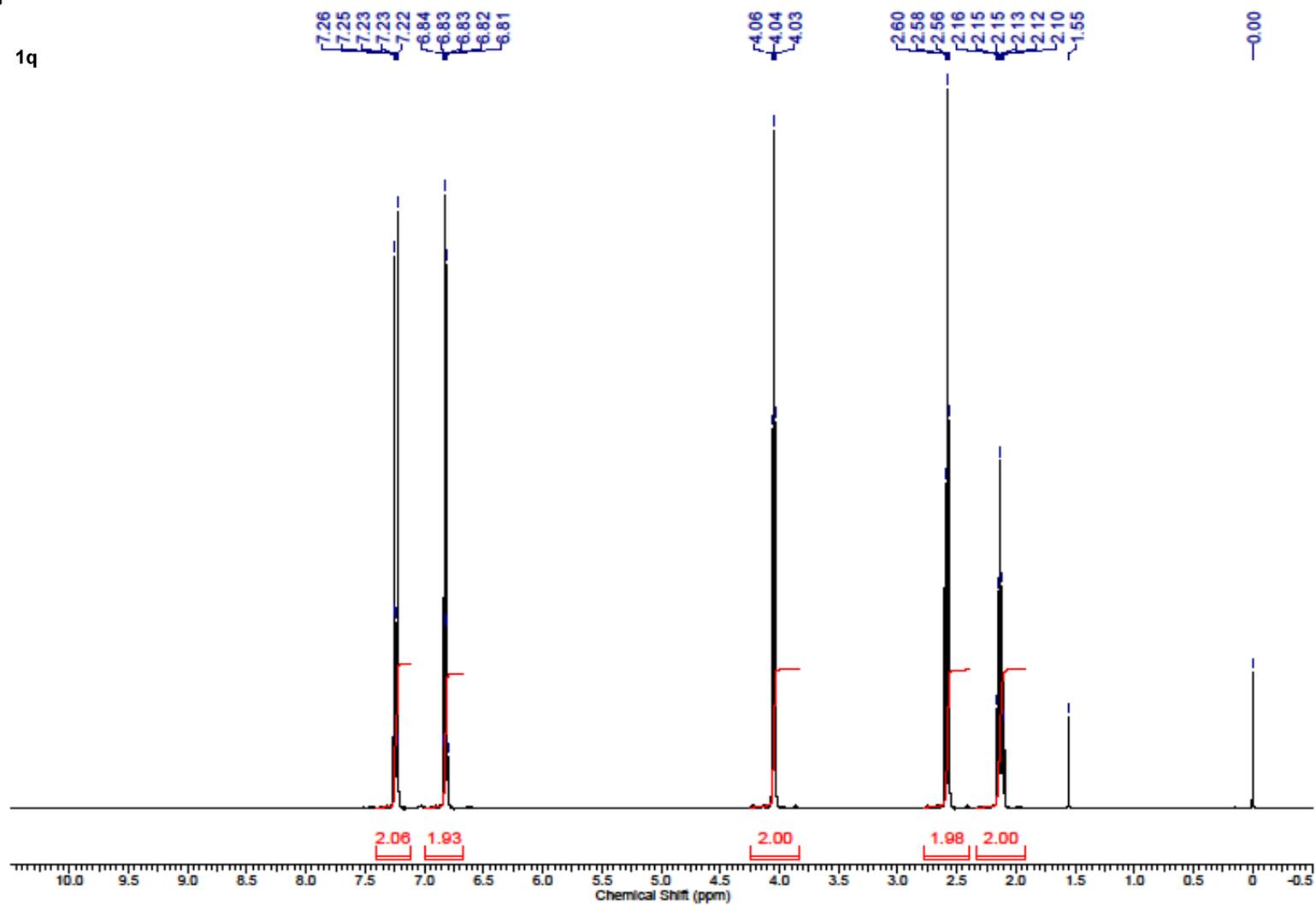
$^{13}\text{C}\{^{19}\text{F}\}$ NMR spectrum of **1p** in CDCl_3 with 0.05% v/v TMS (100 MHz)



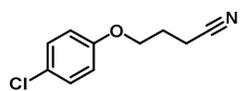
^1H NMR spectrum of **1q** in CDCl_3 with 0.05% v/v TMS (400 MHz)



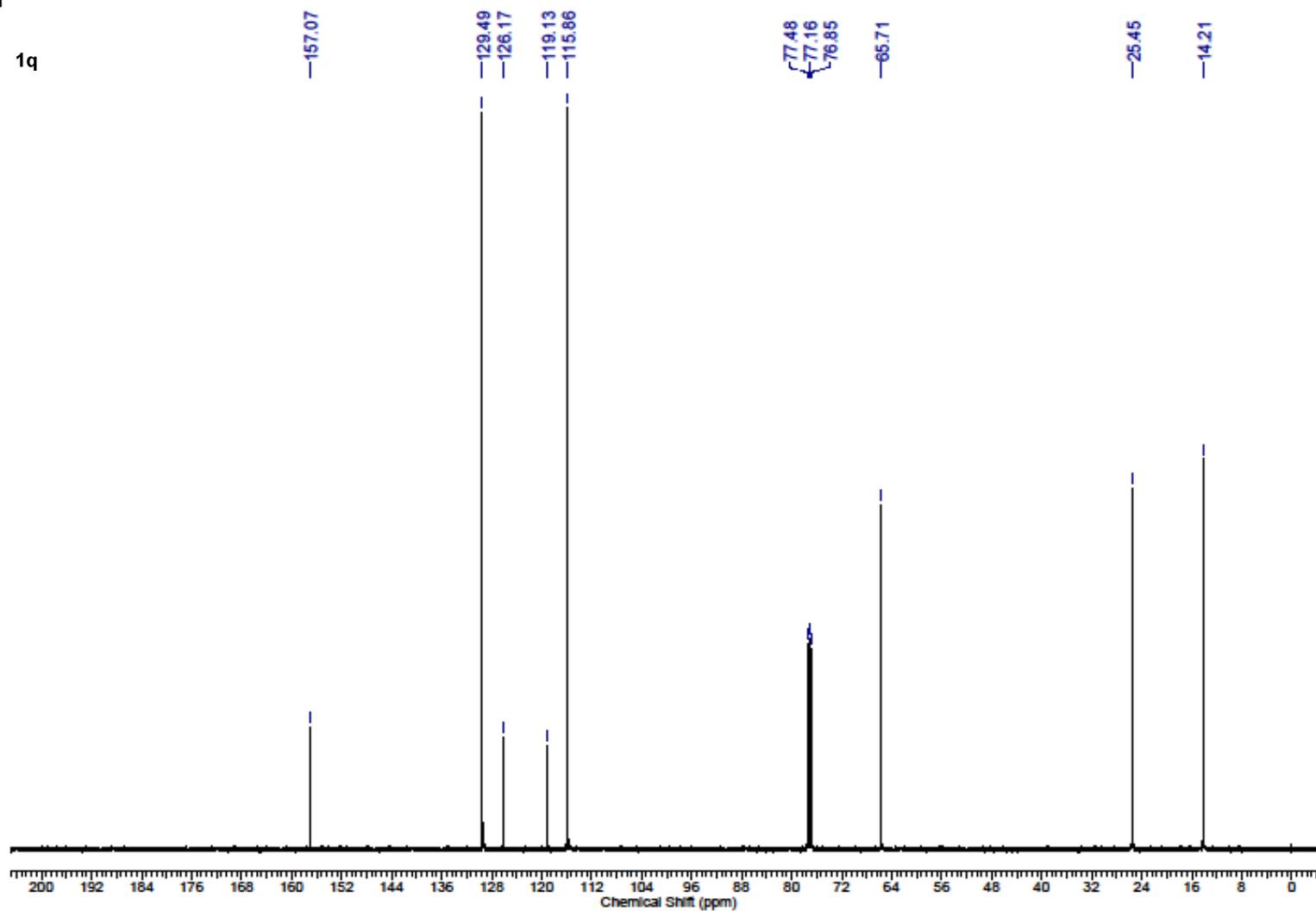
1q



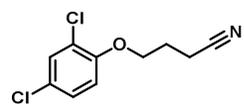
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1q** in CDCl_3 with 0.05% v/v TMS (100 MHz)



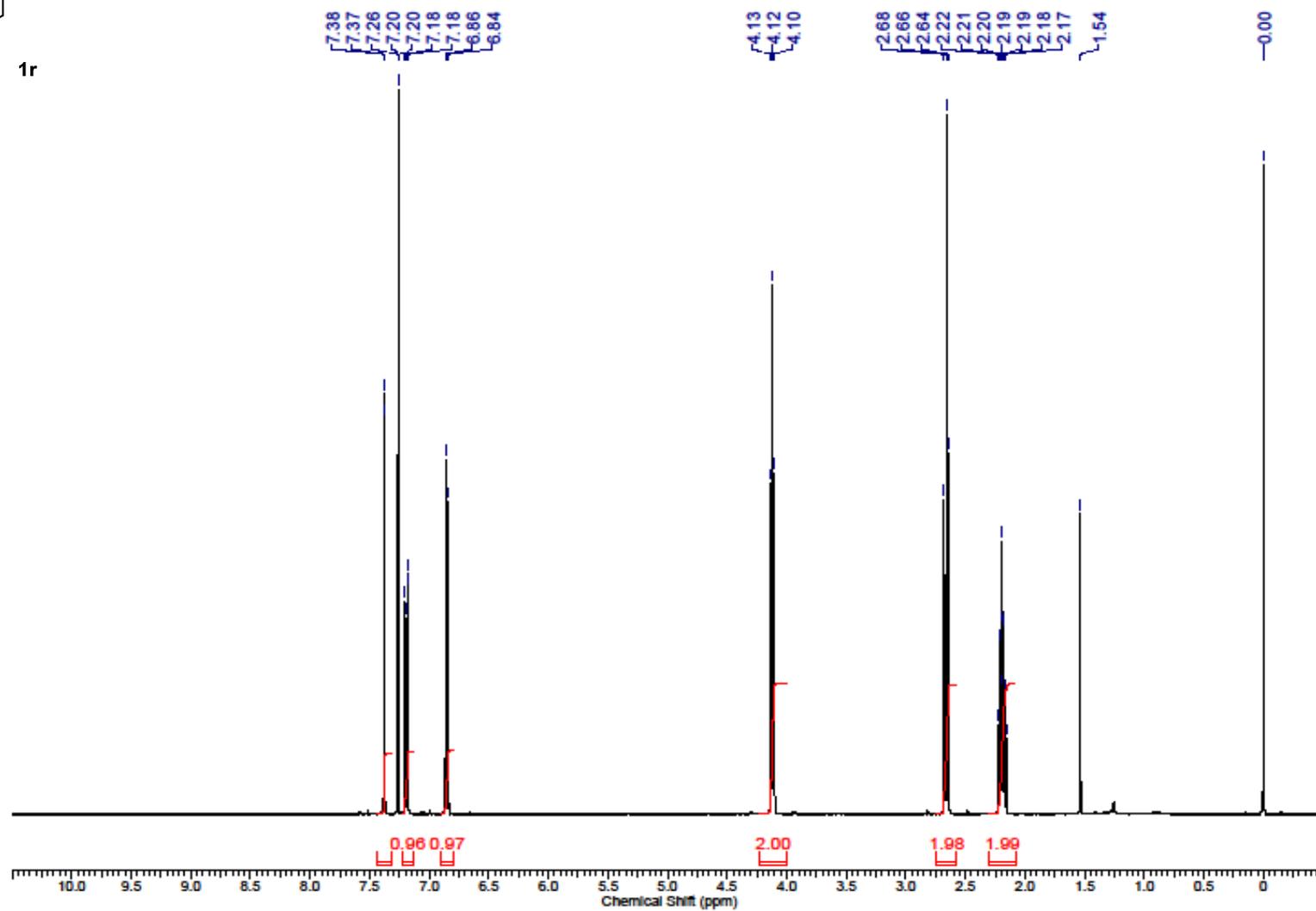
1q



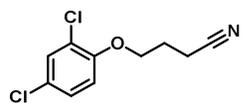
^1H NMR spectrum of **1r** in CDCl_3 with 0.05% v/v TMS (400 MHz)



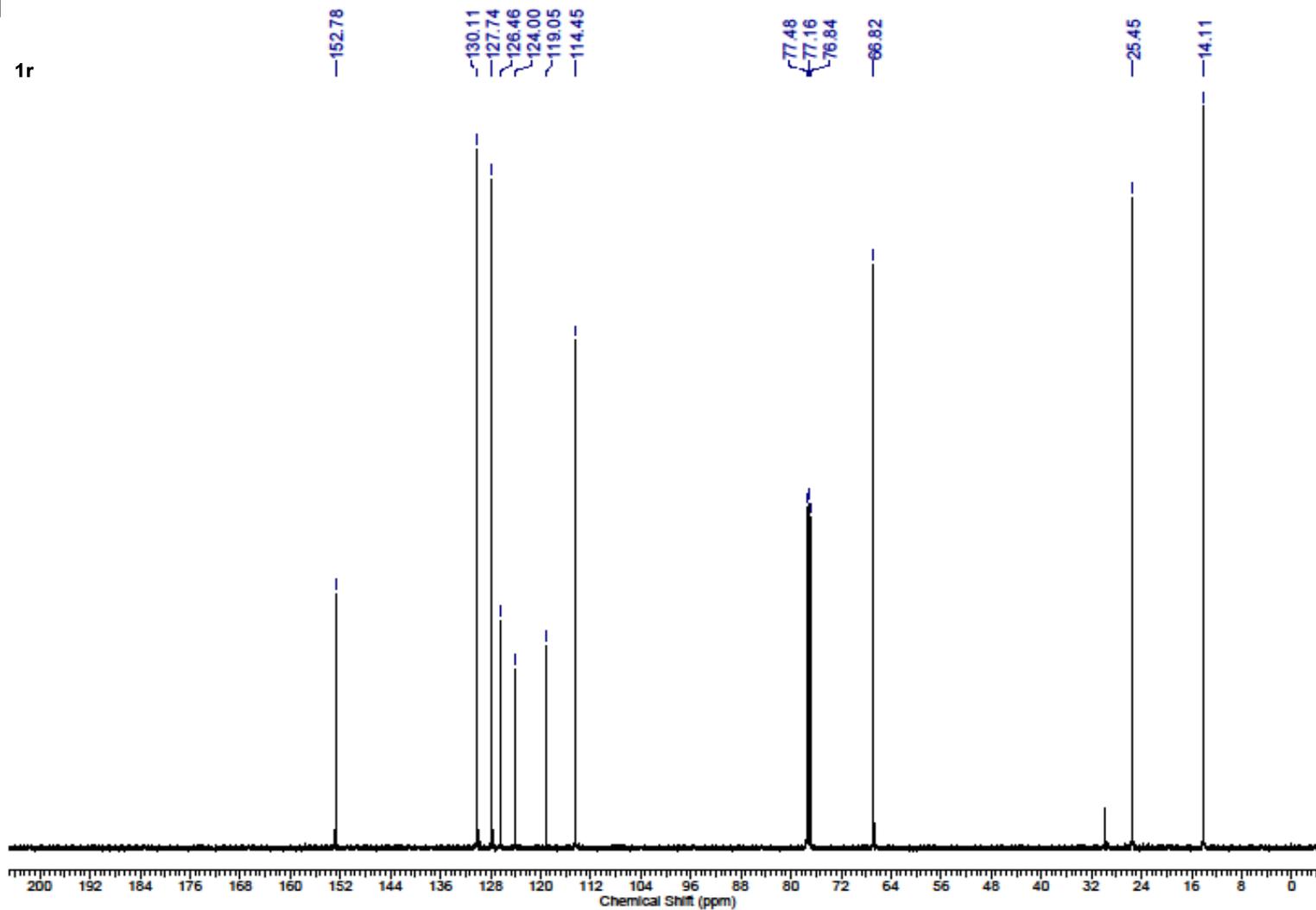
1r



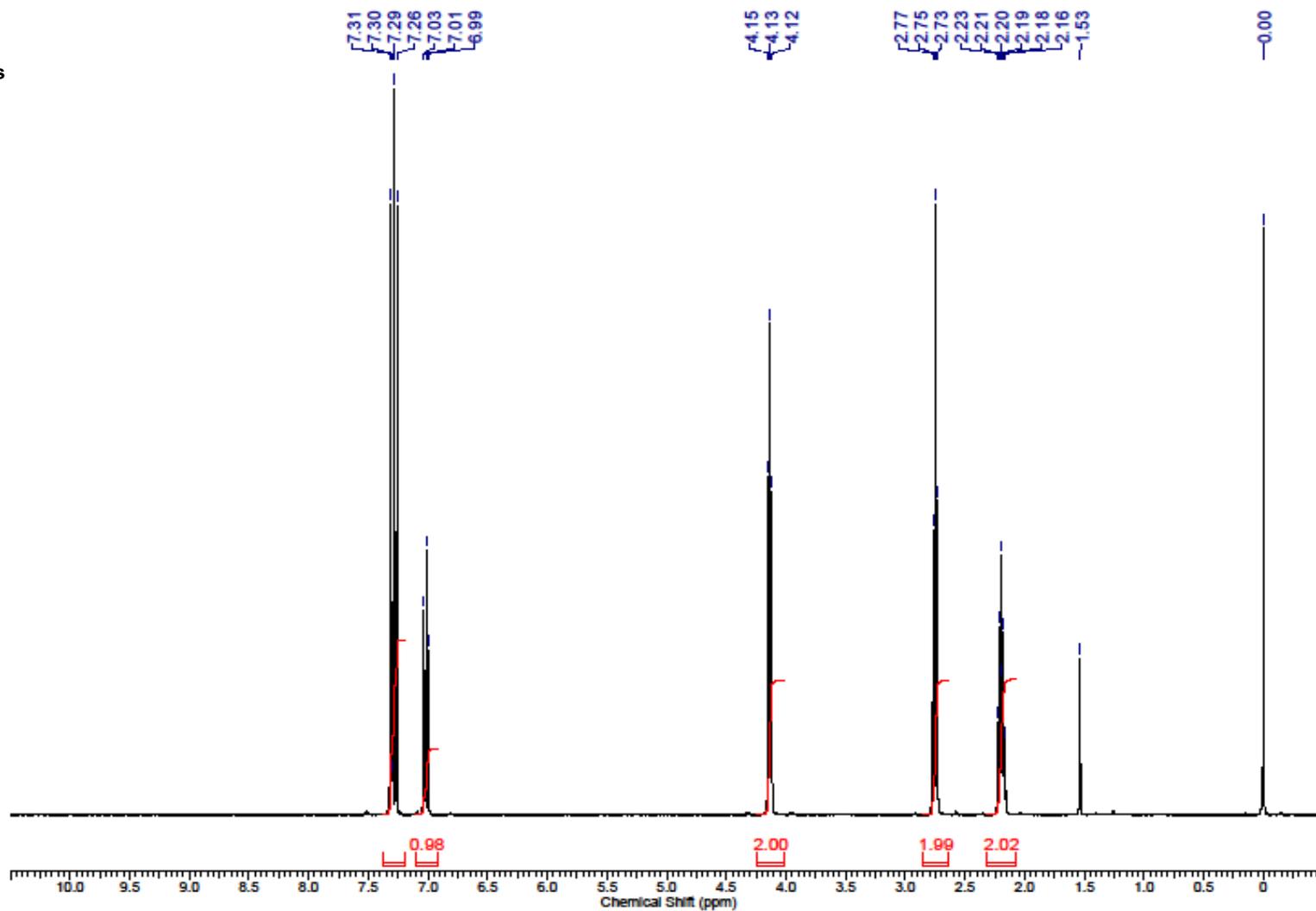
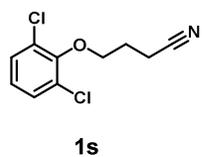
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1r** in CDCl_3 with 0.05% v/v TMS (100 MHz)



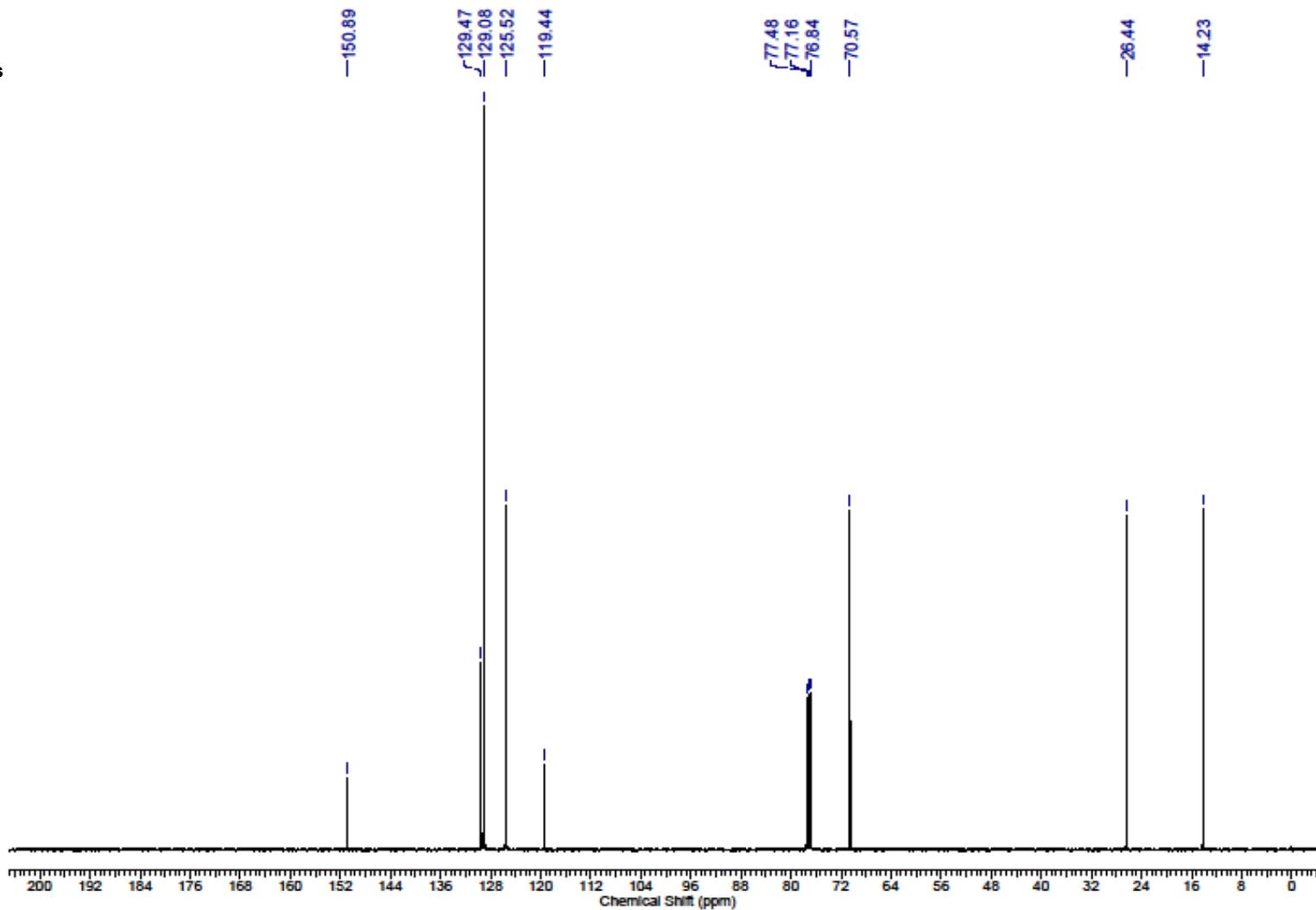
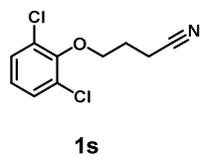
1r



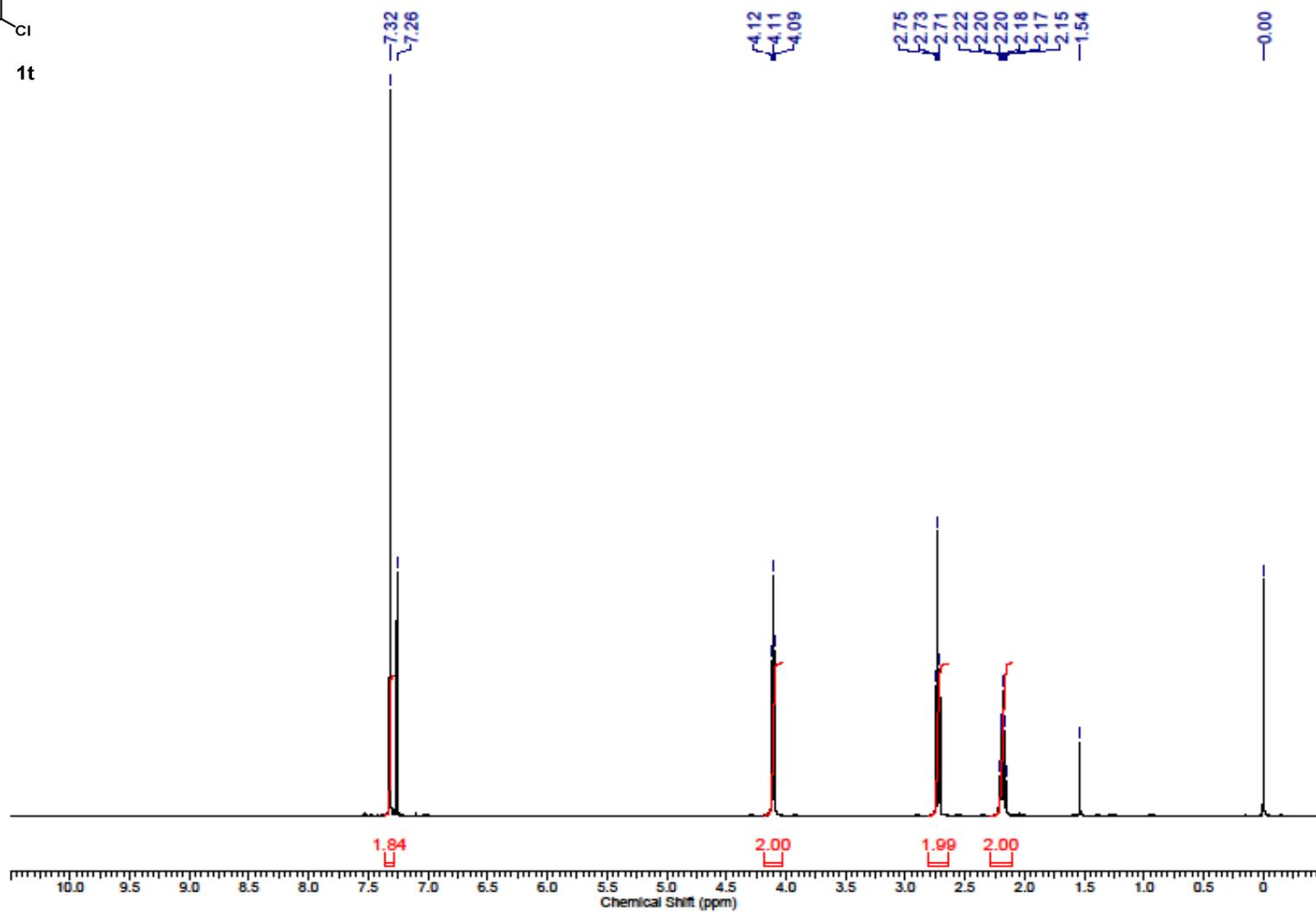
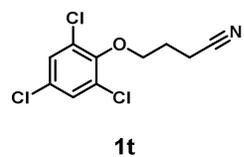
^1H NMR spectrum of **1s** in CDCl_3 with 0.05% v/v TMS (400 MHz)



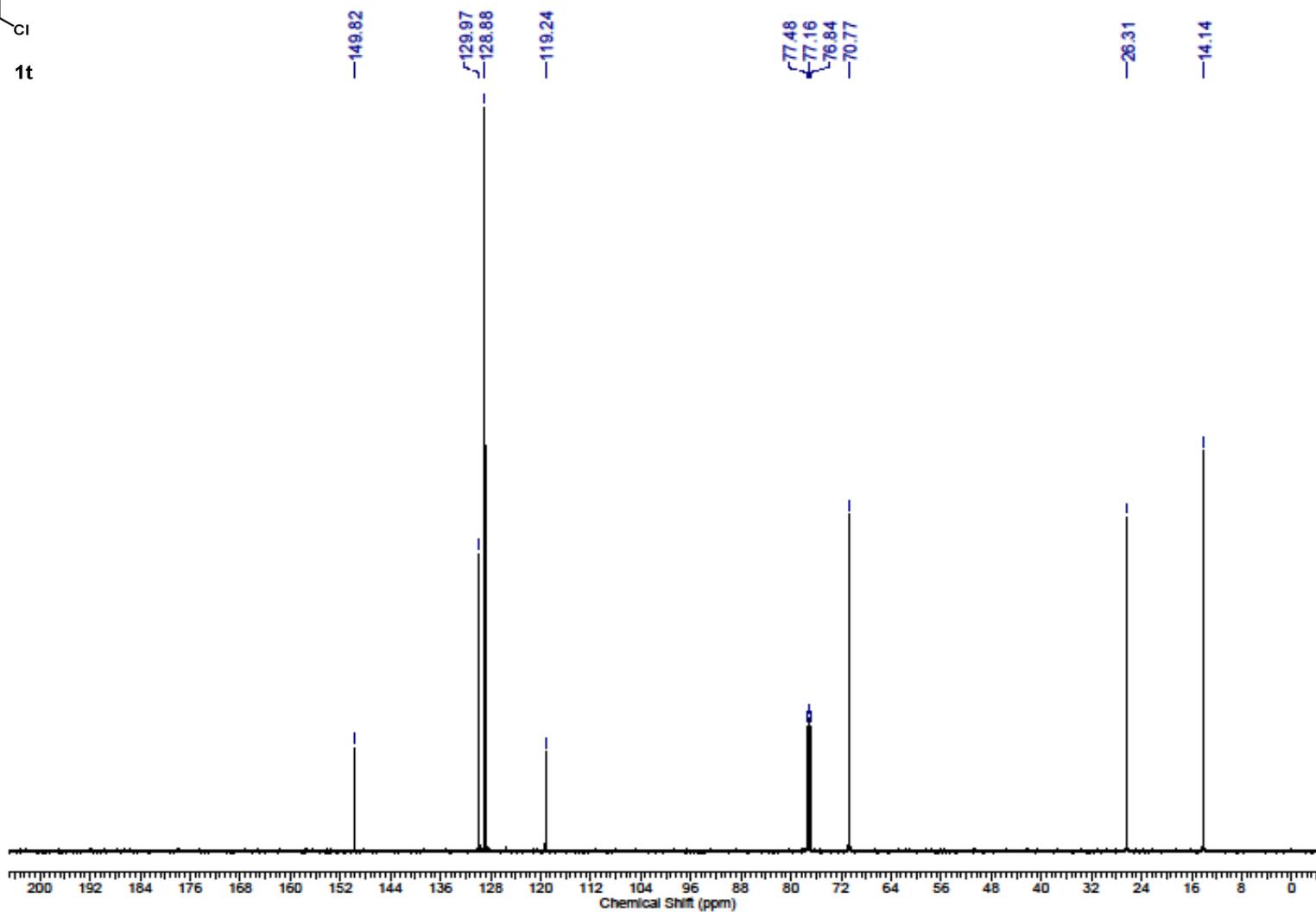
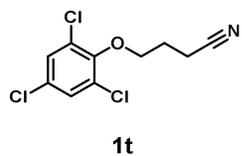
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1s** in CDCl_3 with 0.05% v/v TMS (100 MHz)



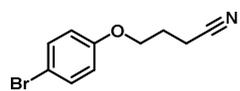
^1H NMR spectrum of **1t** in CDCl_3 with 0.05% v/v TMS (400 MHz)



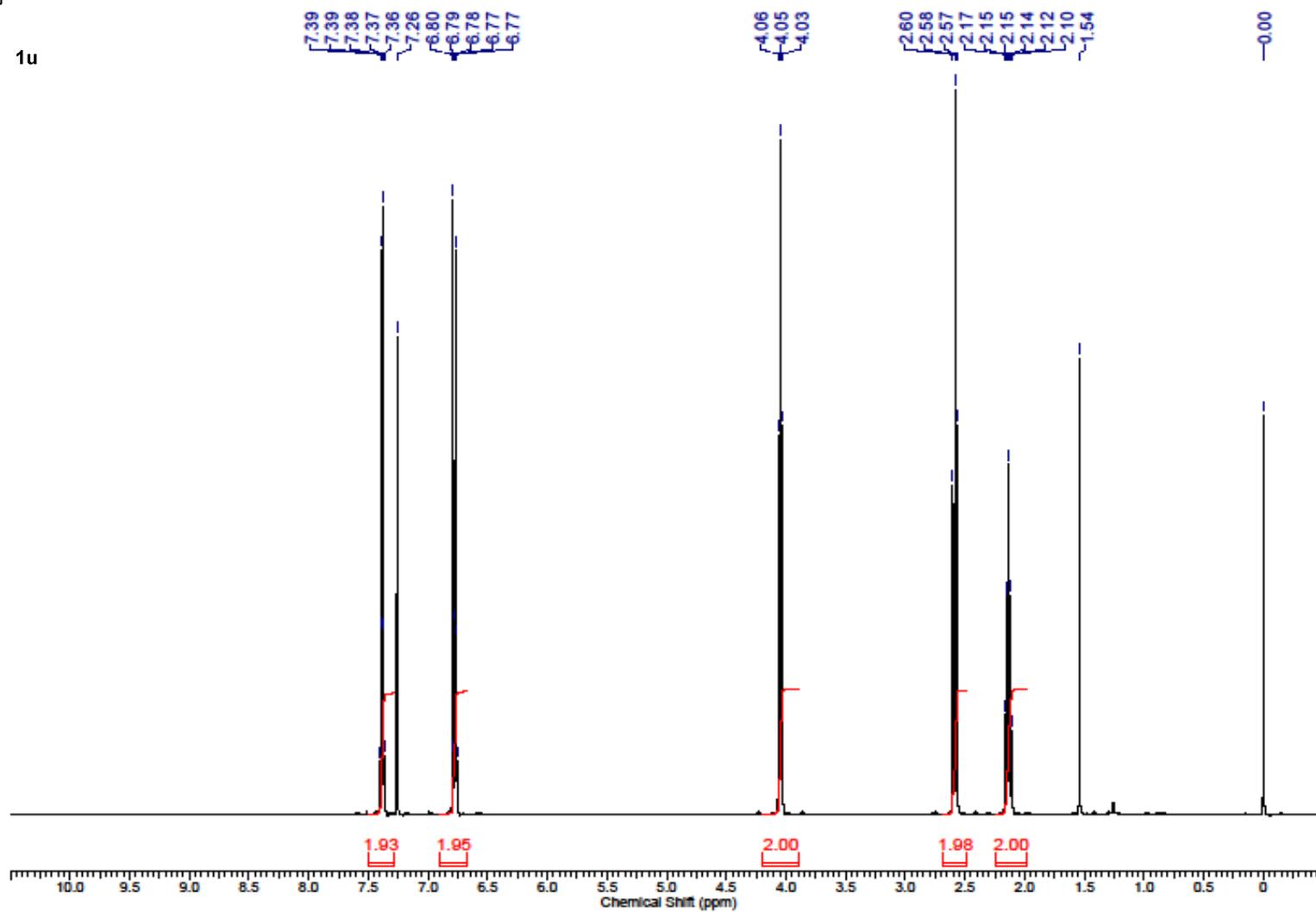
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1t** in CDCl_3 with 0.05% v/v TMS (100 MHz)



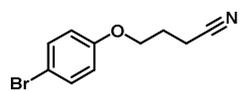
^1H NMR spectrum of **1u** in CDCl_3 with 0.05% v/v TMS (400 MHz)



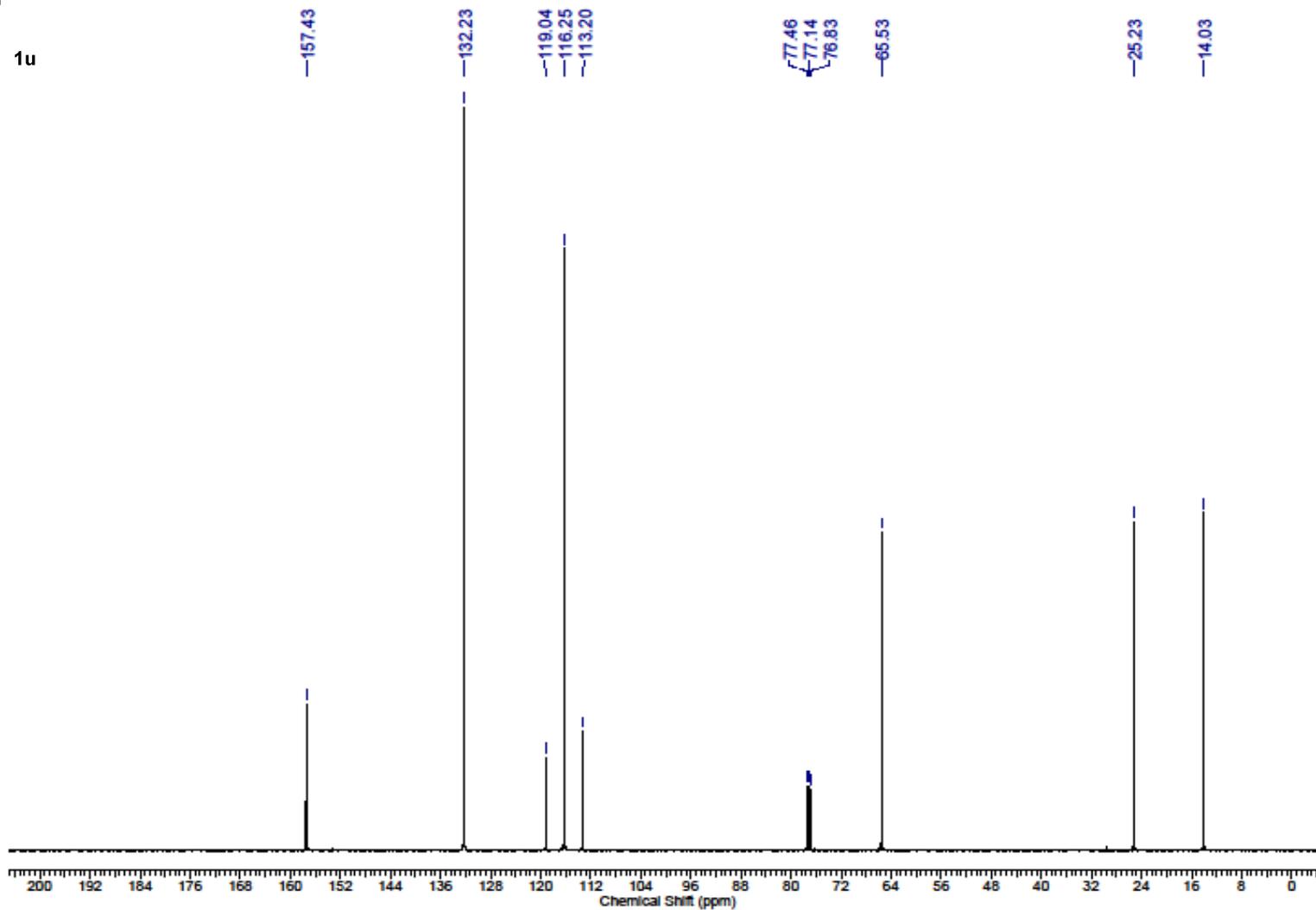
1u



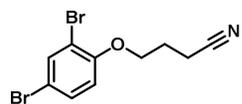
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1u** in CDCl_3 with 0.05% v/v TMS (100 MHz)



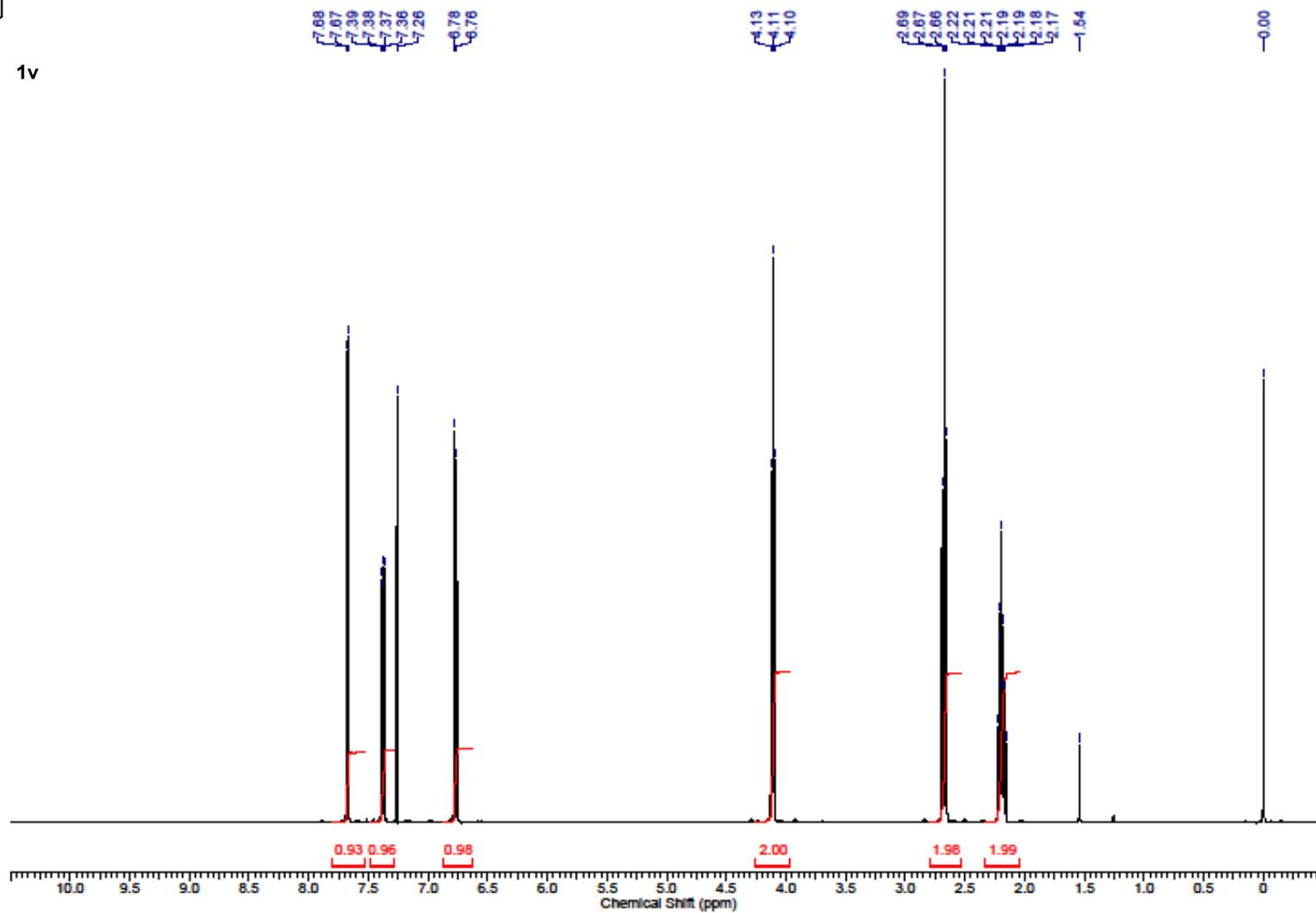
1u



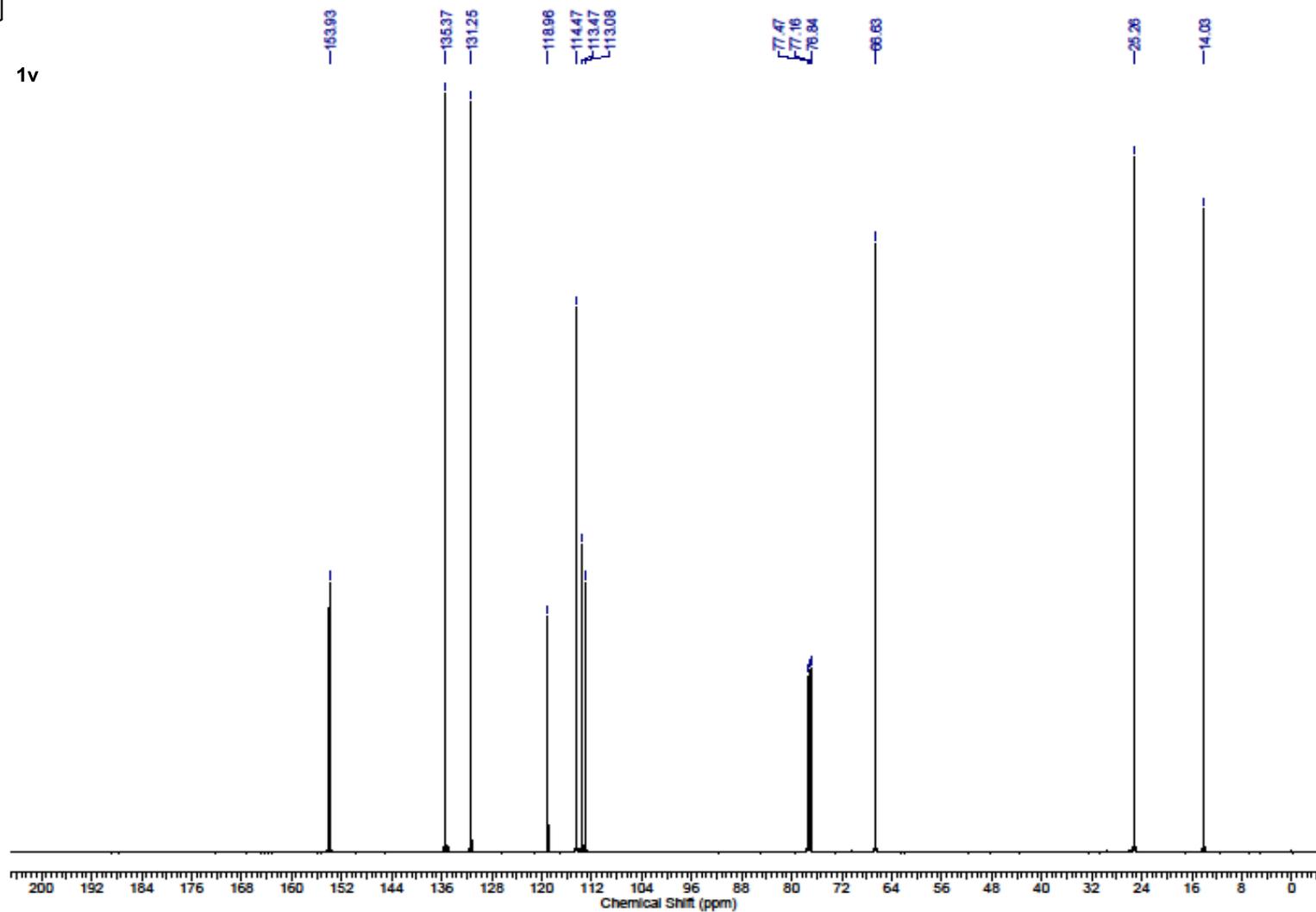
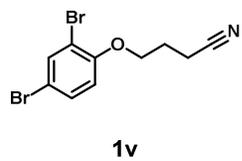
^1H NMR spectrum of **1v** in CDCl_3 with 0.05% v/v TMS (400 MHz)



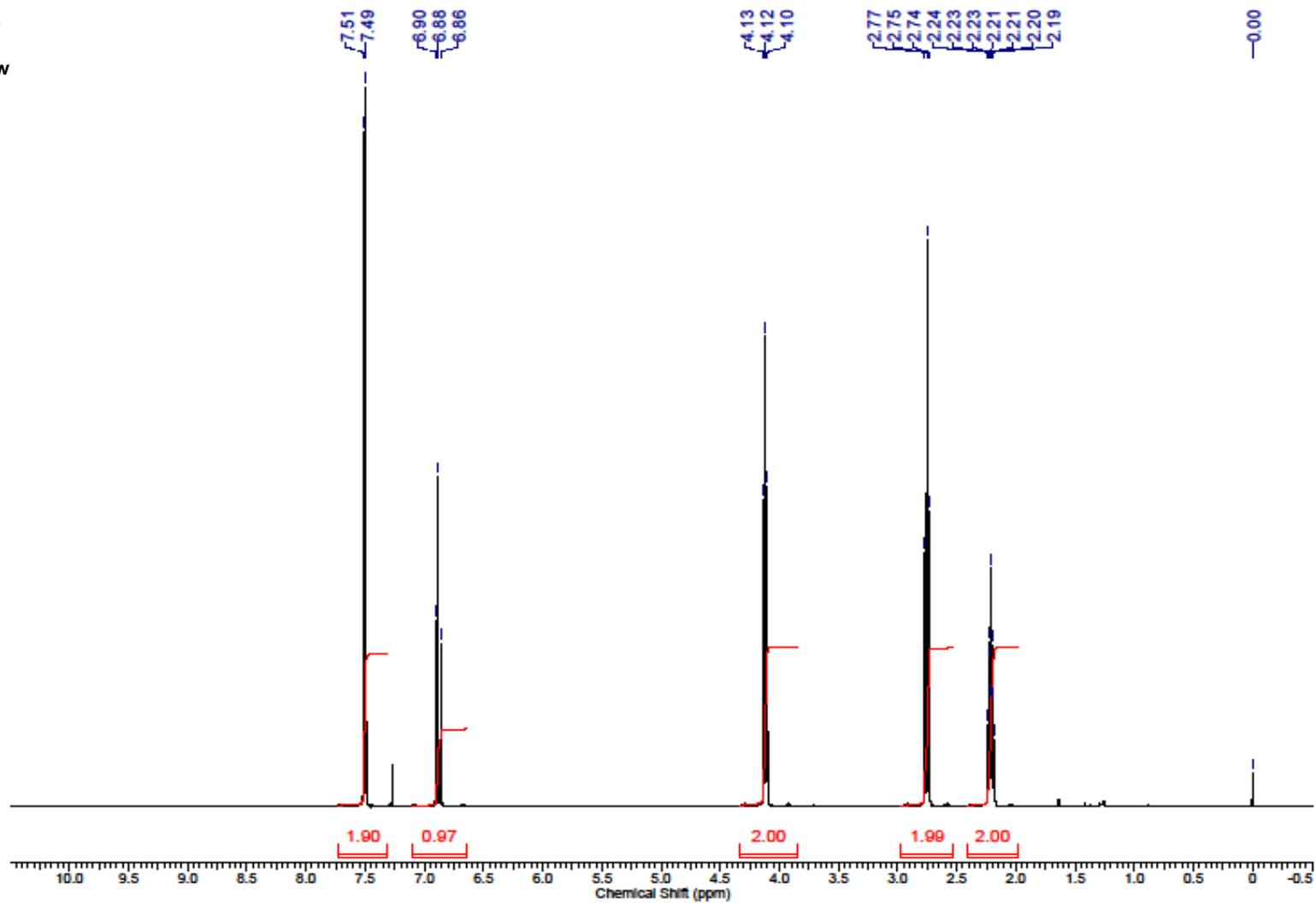
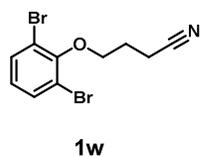
1v



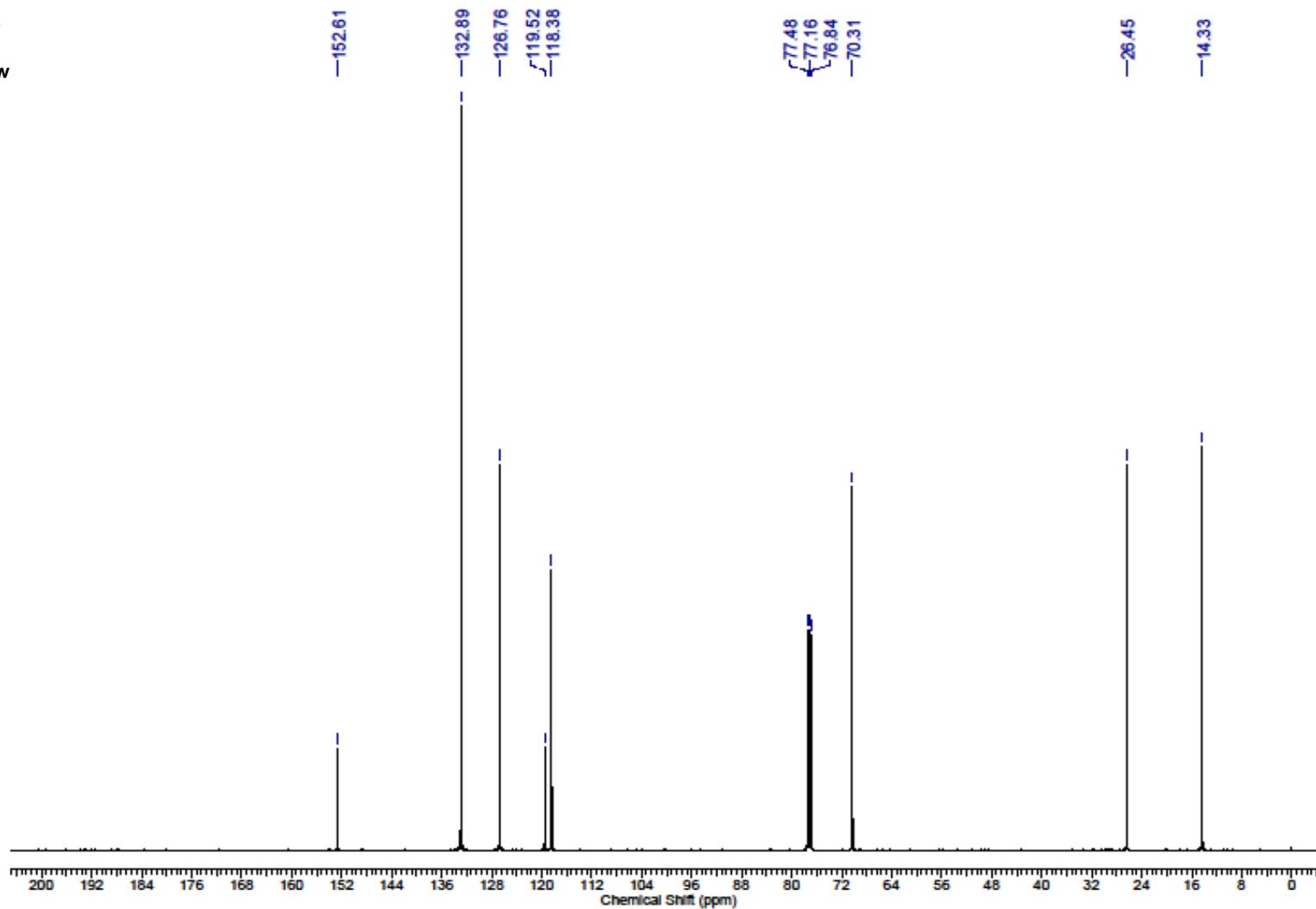
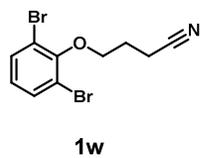
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1v** in CDCl_3 with 0.05% v/v TMS (100 MHz)



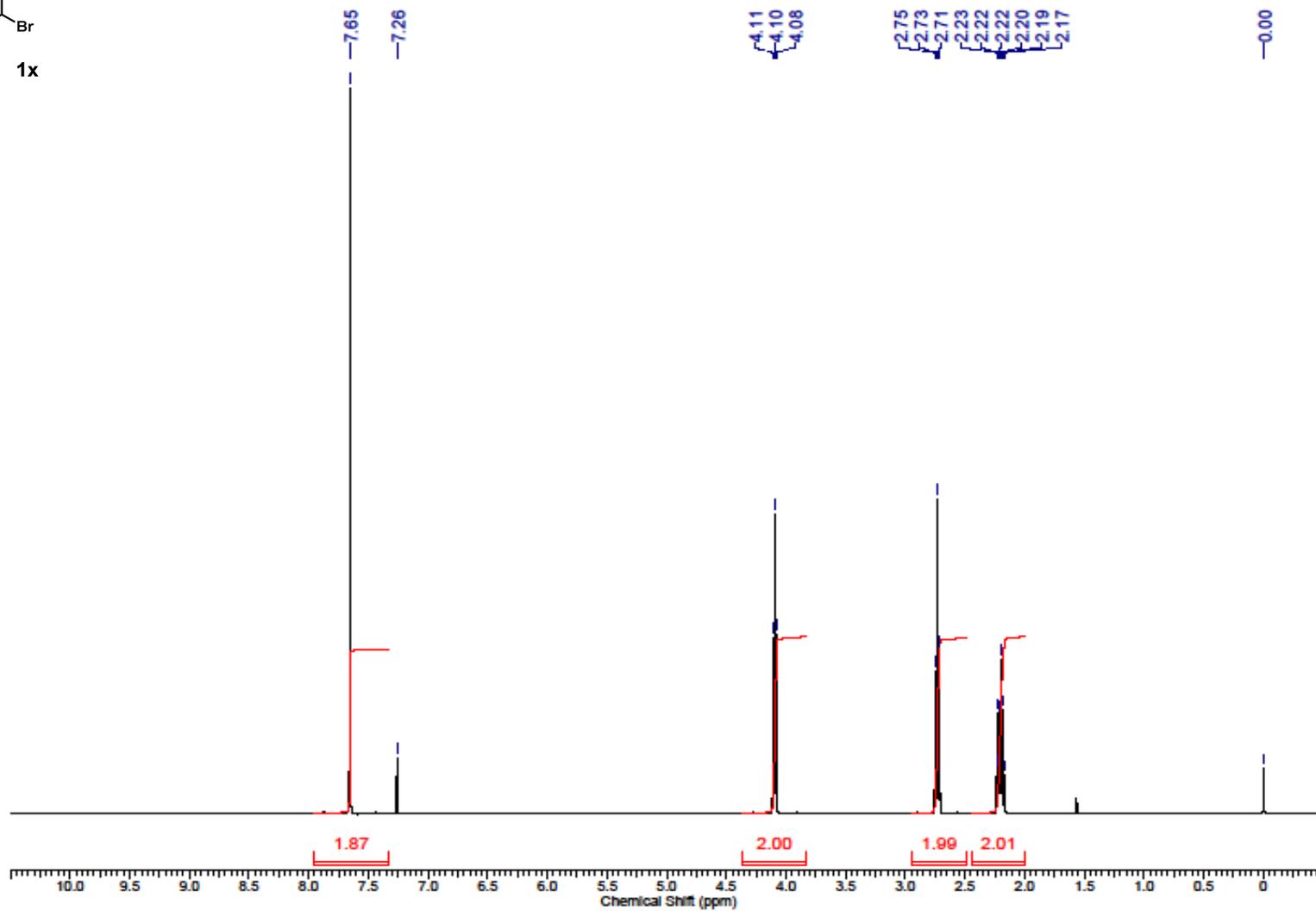
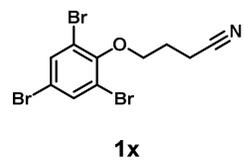
^1H NMR spectrum of **1w** in CDCl_3 with 0.05% v/v TMS (400 MHz)



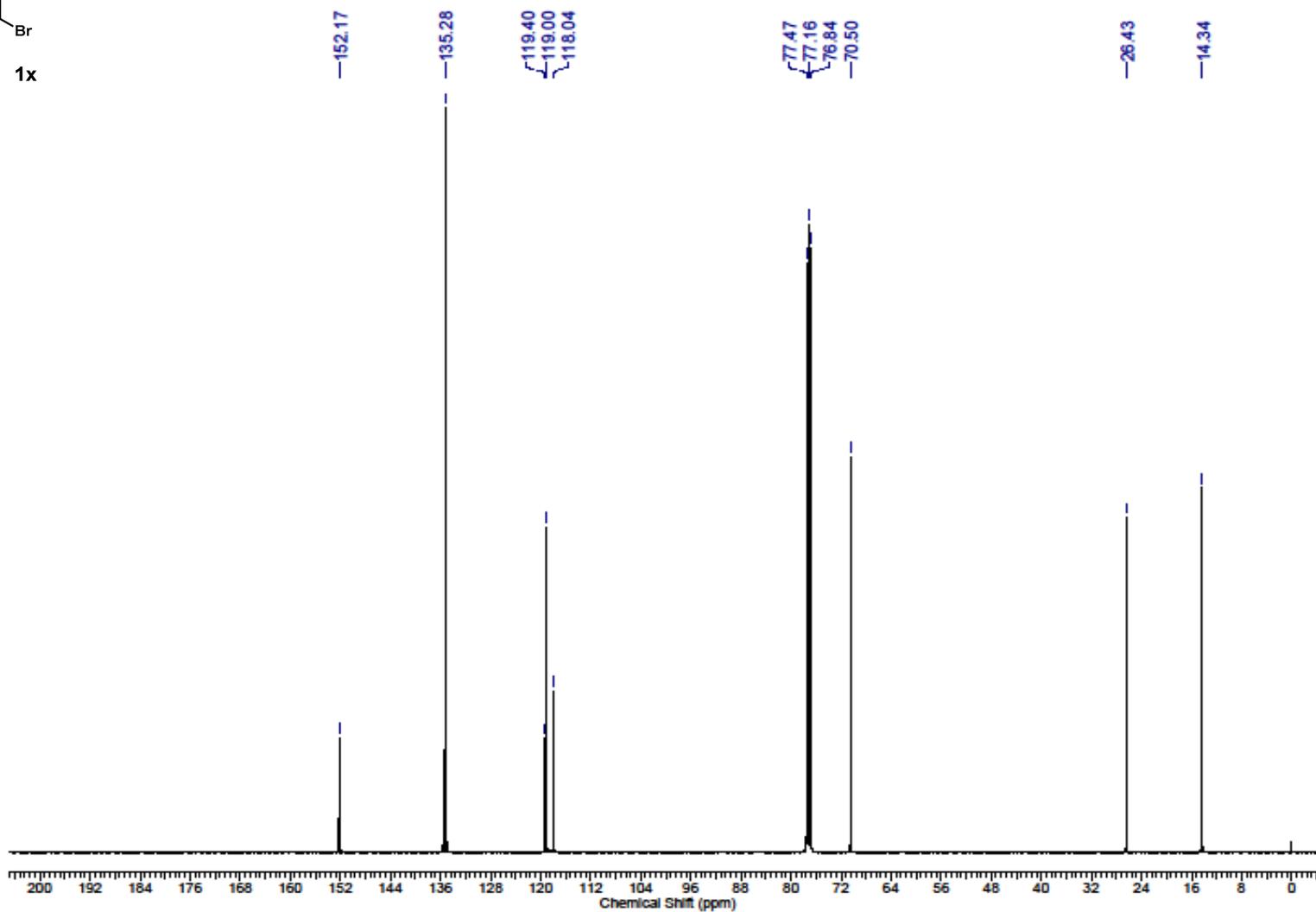
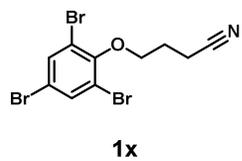
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1w** in CDCl_3 with 0.05% v/v TMS (100 MHz)



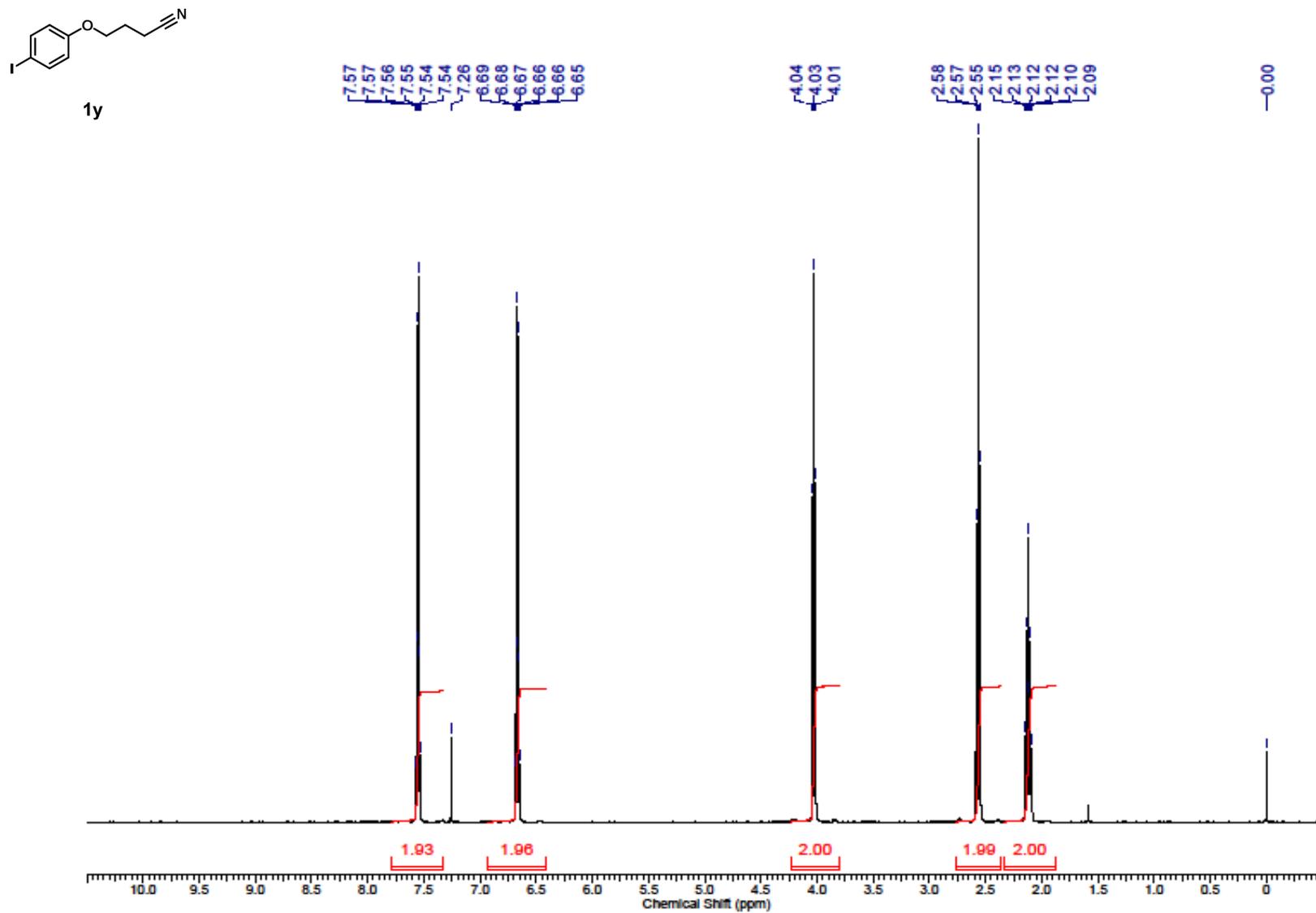
^1H NMR spectrum of **1x** in CDCl_3 with 0.05% v/v TMS (400 MHz)



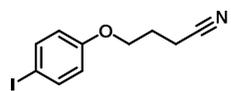
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1x** in CDCl_3 with 0.05% v/v TMS (100 MHz)



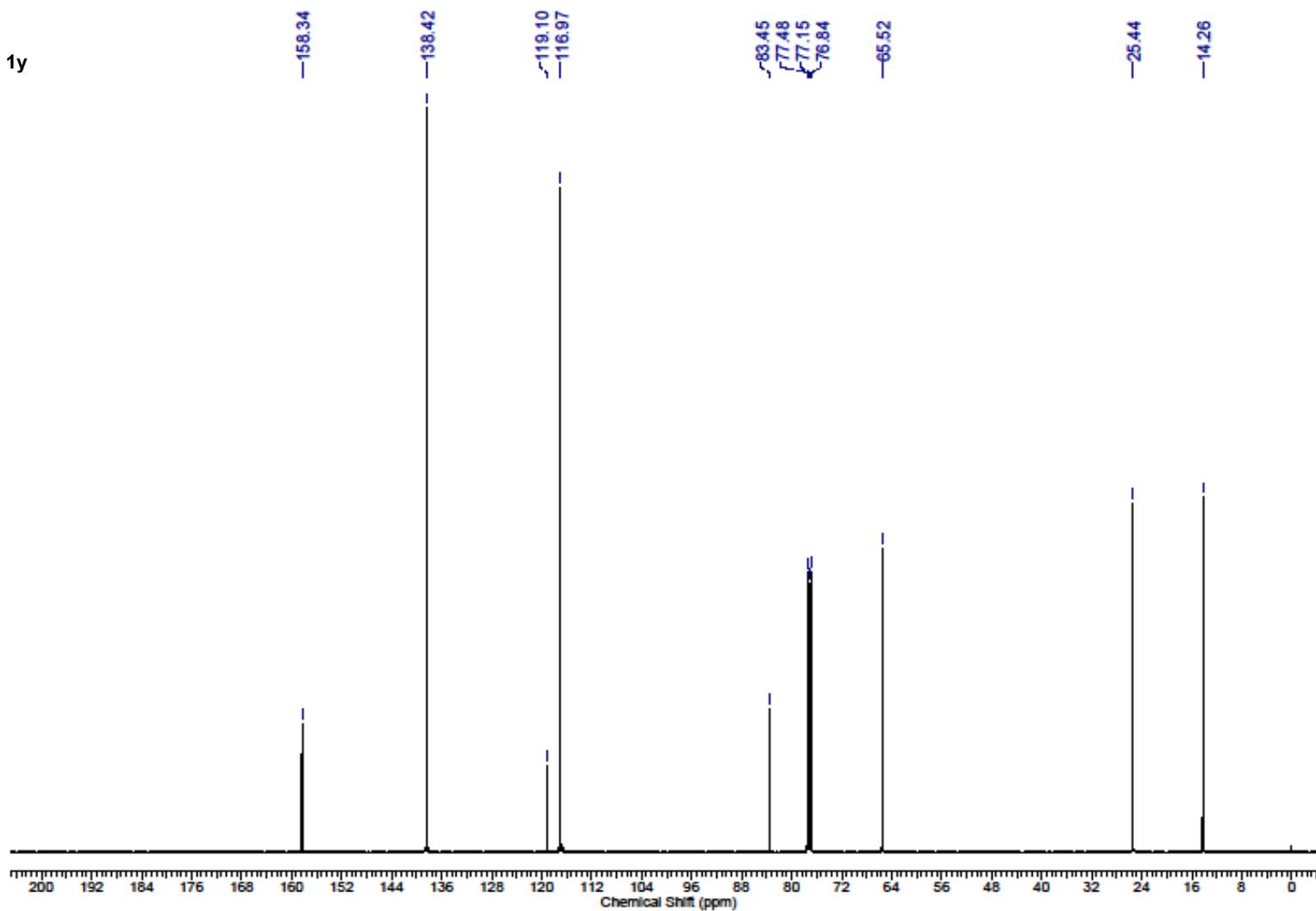
^1H NMR spectrum of **1y** in CDCl_3 with 0.05% v/v TMS (400 MHz)



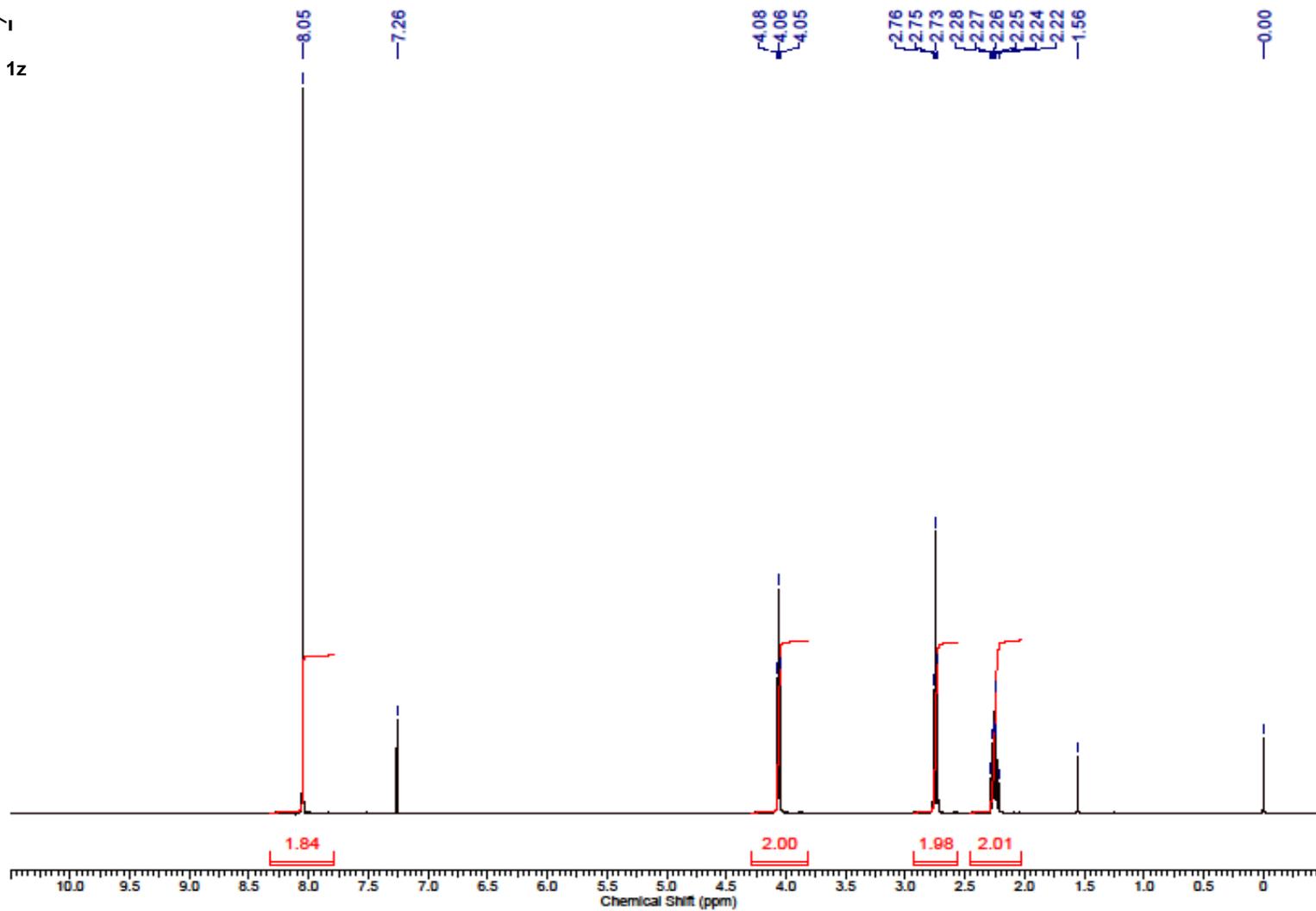
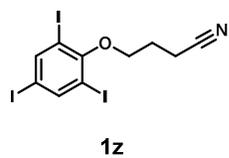
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1y** in CDCl_3 with 0.05% v/v TMS (100 MHz)



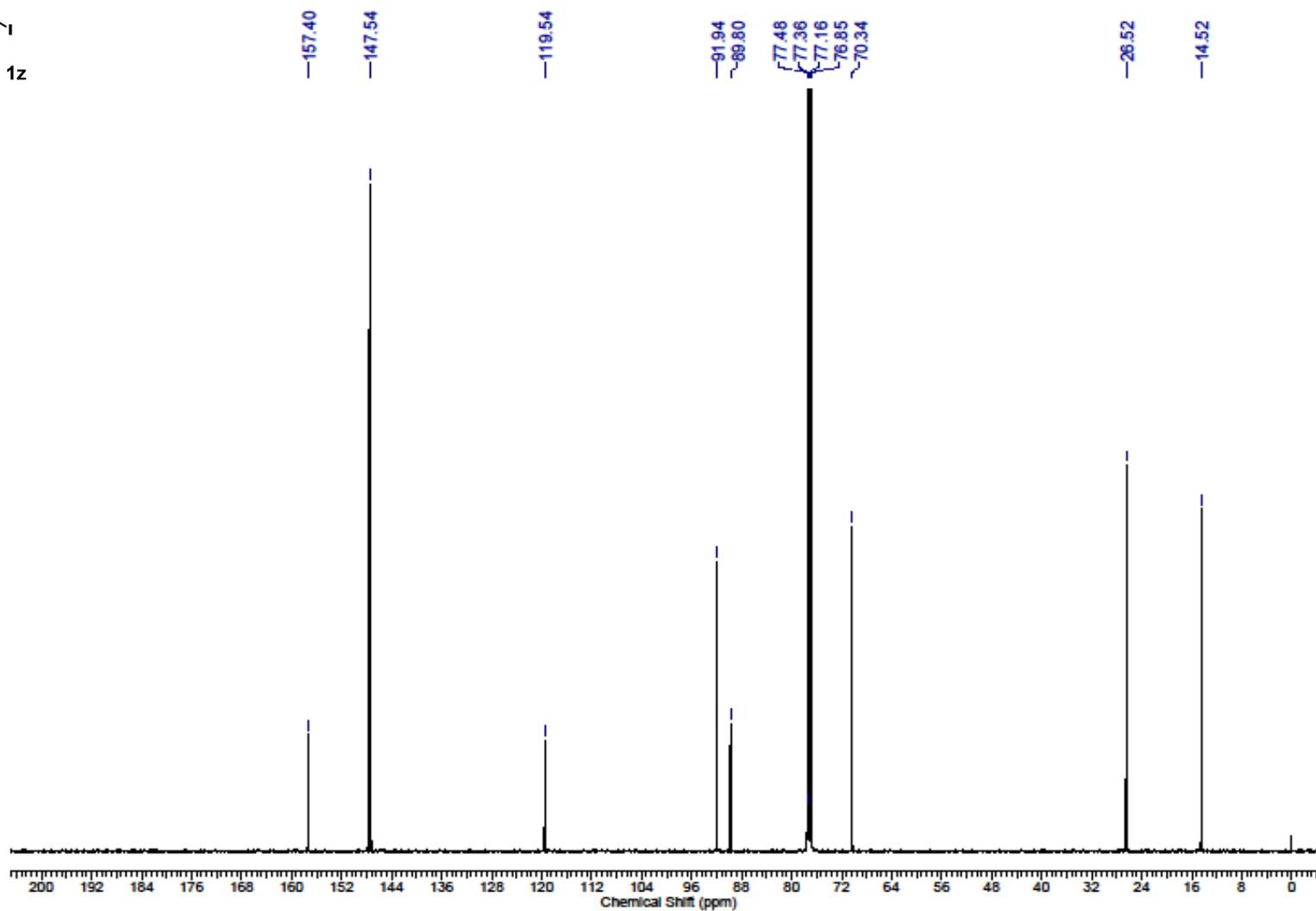
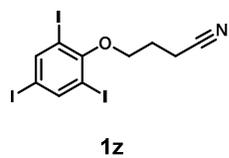
1y



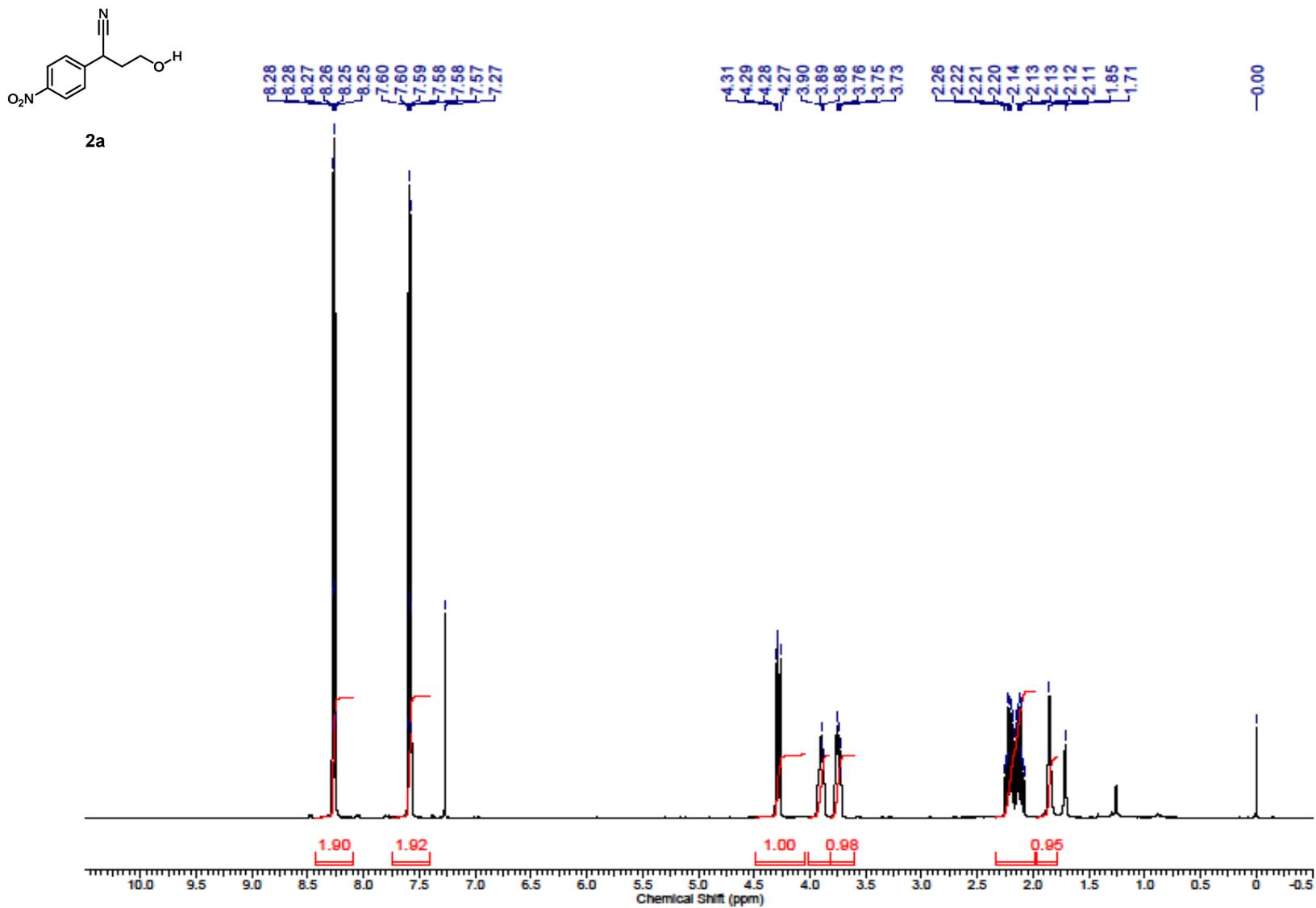
^1H NMR spectrum of **1z** in CDCl_3 with 0.05% v/v TMS (400 MHz)



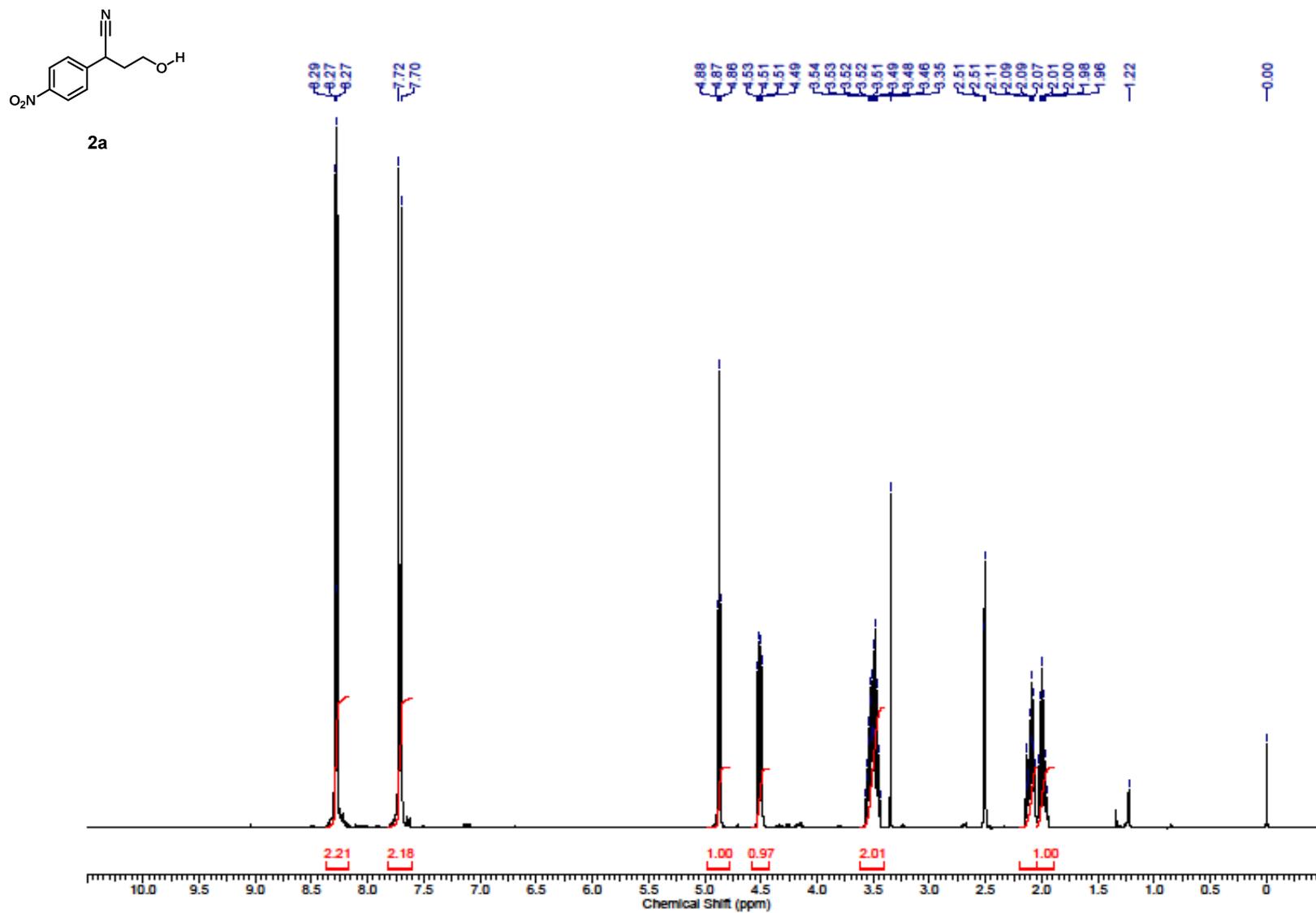
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **1z** in CDCl_3 with 0.05% v/v TMS (100 MHz)



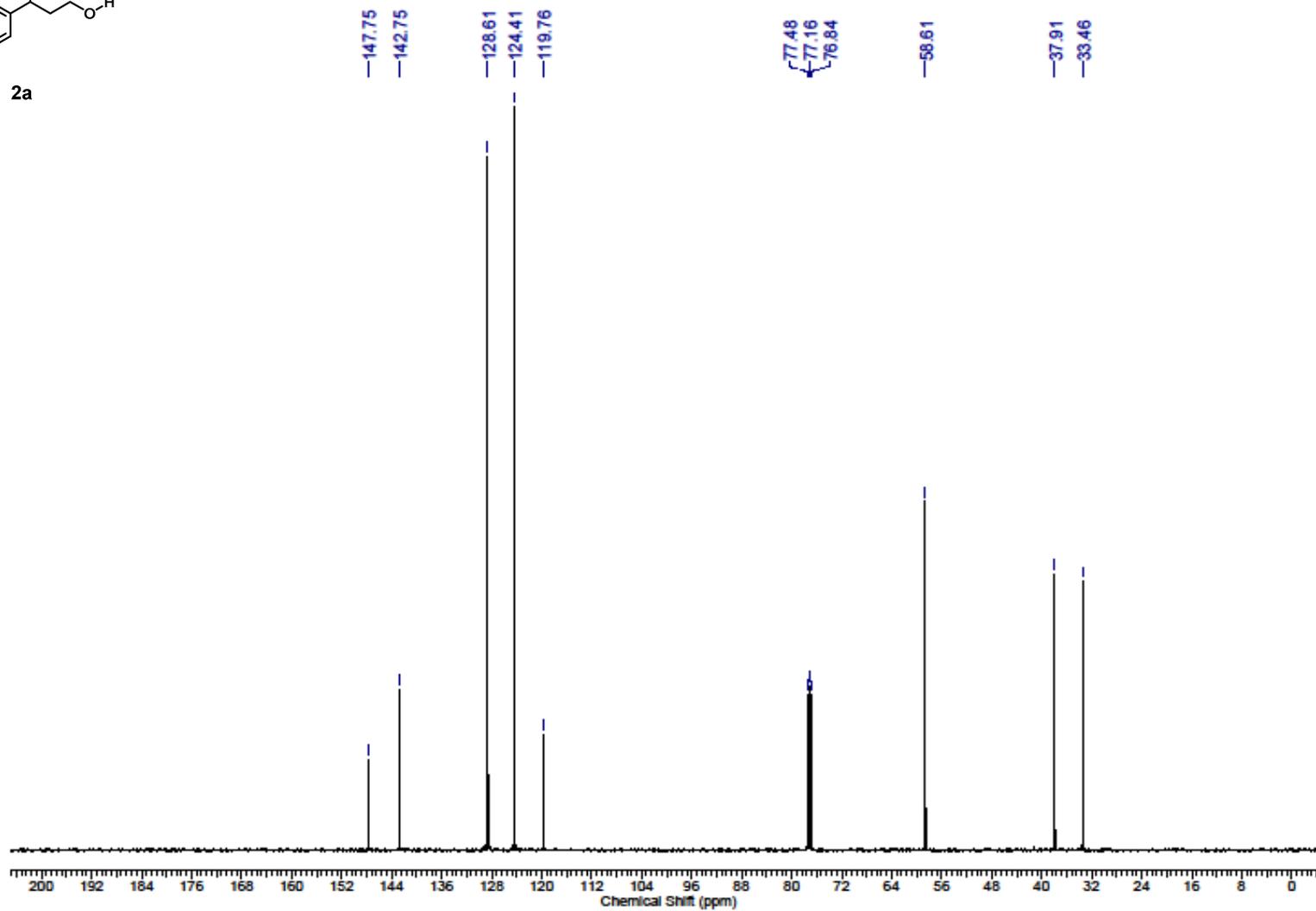
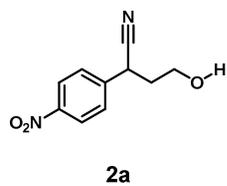
^1H NMR spectrum of **2a** in CDCl_3 with 0.05% v/v TMS (400 MHz)



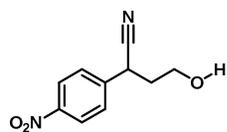
^1H NMR spectrum of **2a** in $(\text{CD}_3)_2\text{SO}$ with 0.05% v/v TMS (400 MHz)



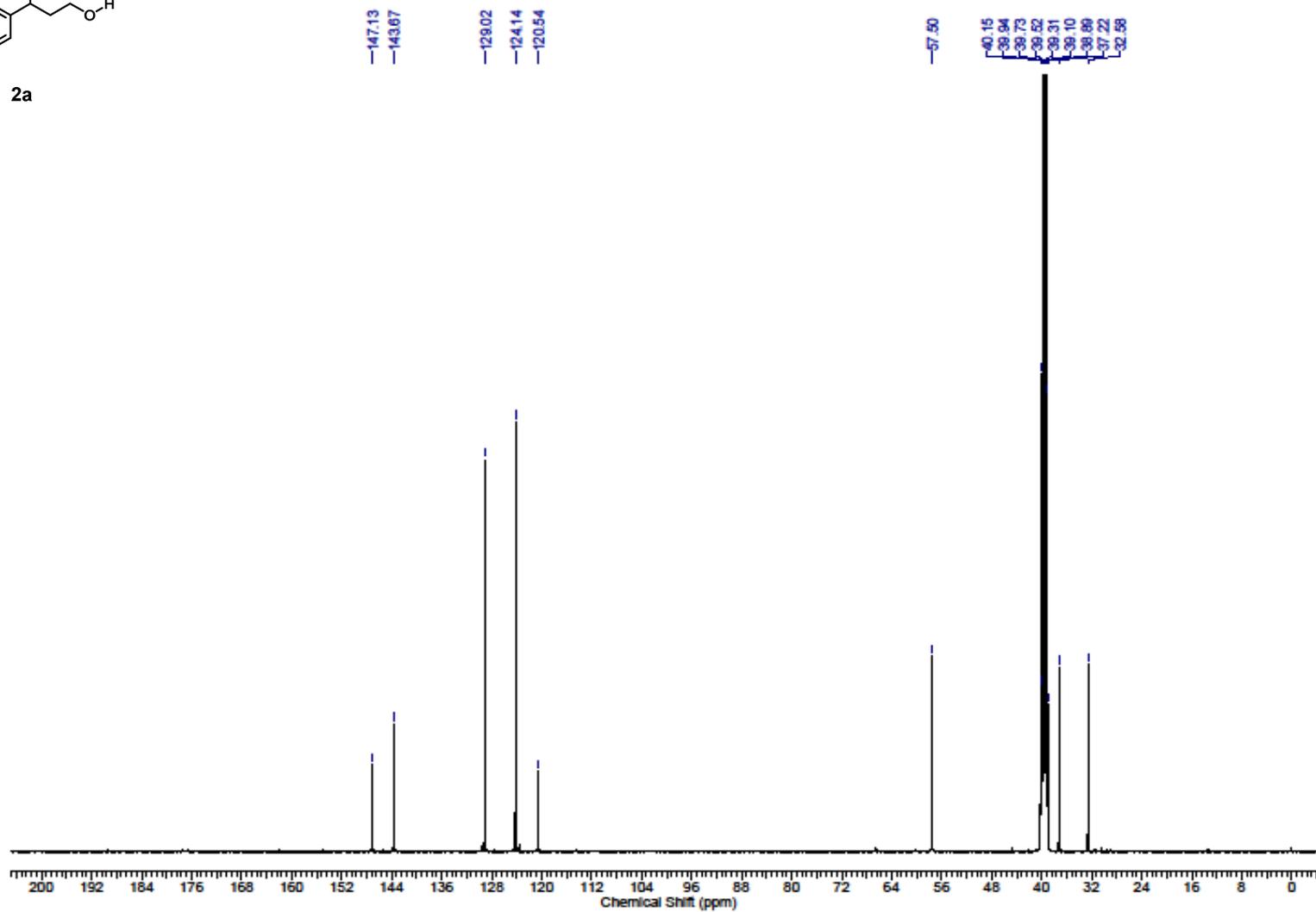
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2a** in CDCl_3 with 0.05% v/v TMS (100 MHz)



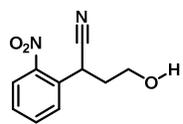
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2a** in $(\text{CD}_3)_2\text{SO}$ with 0.05% v/v TMS (100 MHz)



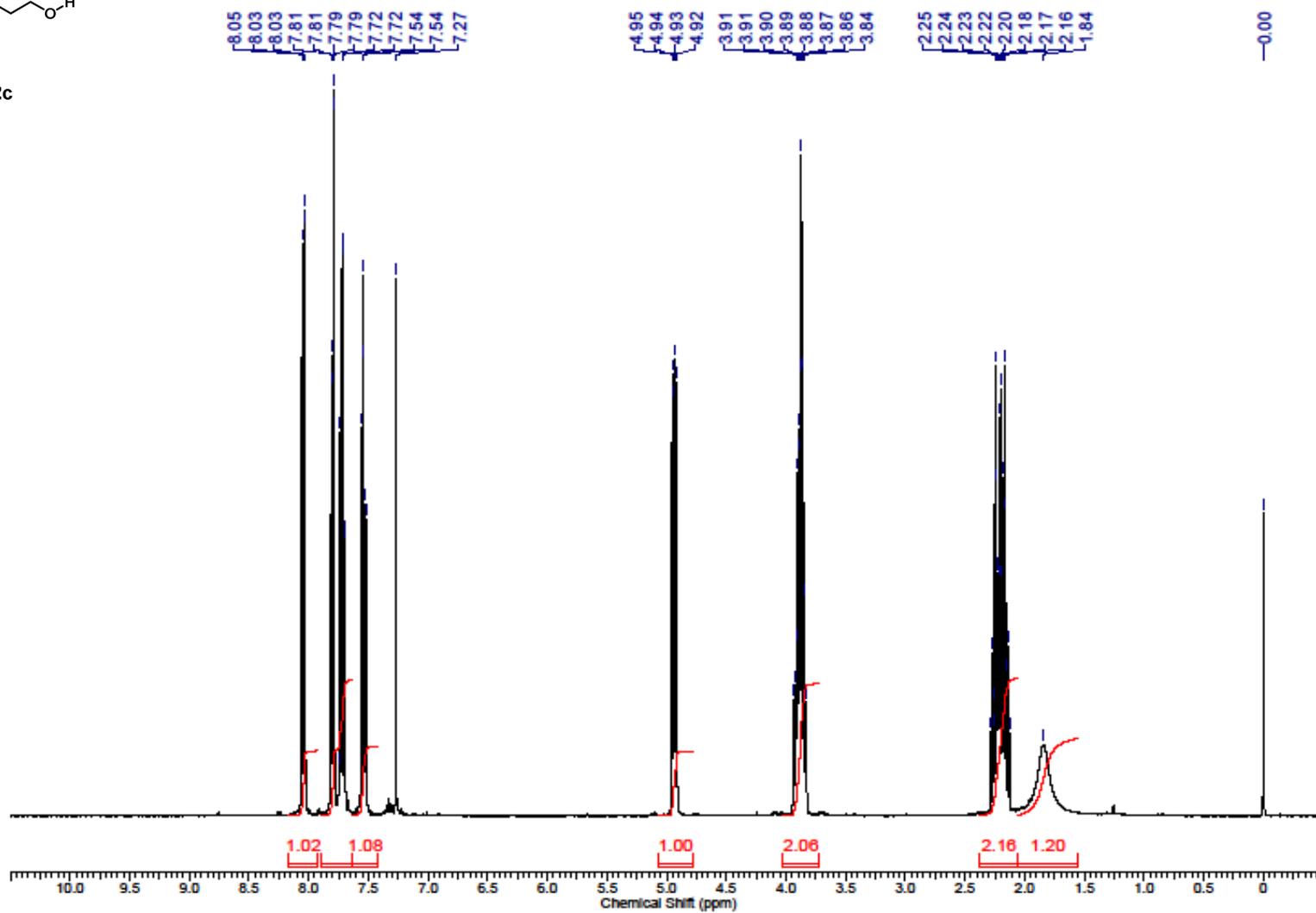
2a



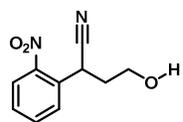
^1H NMR spectrum of **2c** in CDCl_3 with 0.05% v/v TMS (400 MHz)



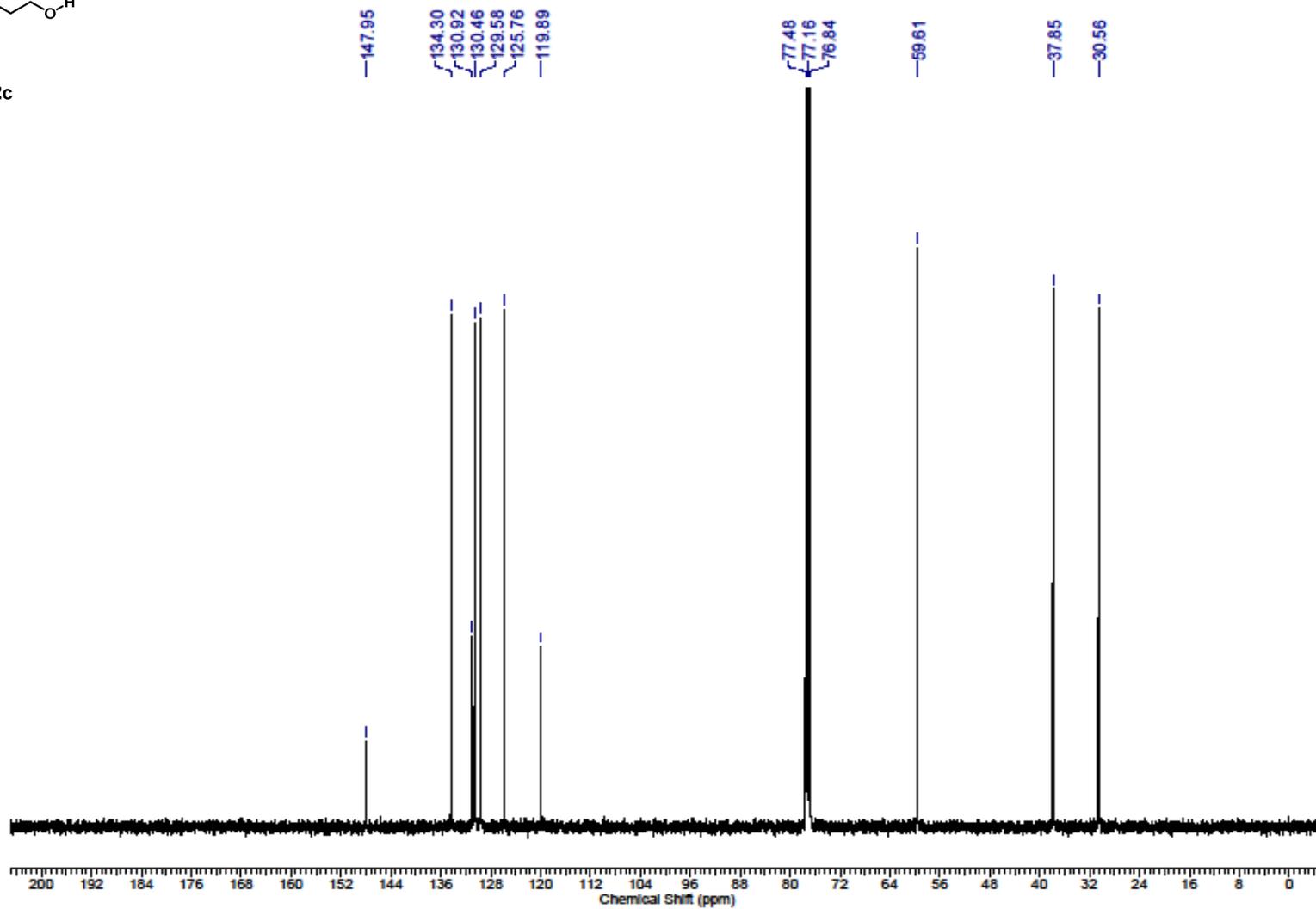
2c



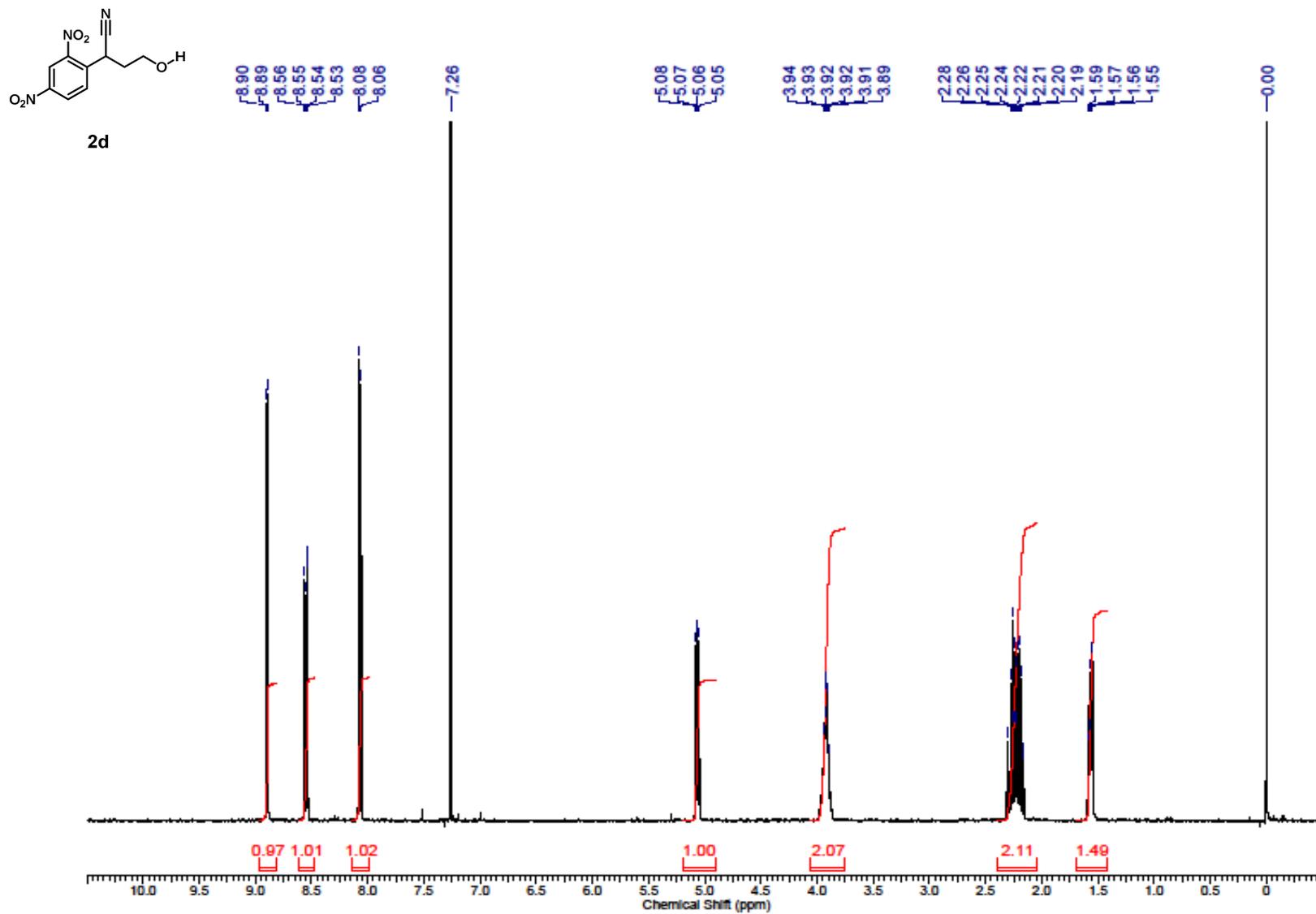
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2c** in CDCl_3 with 0.05% v/v TMS (100 MHz)



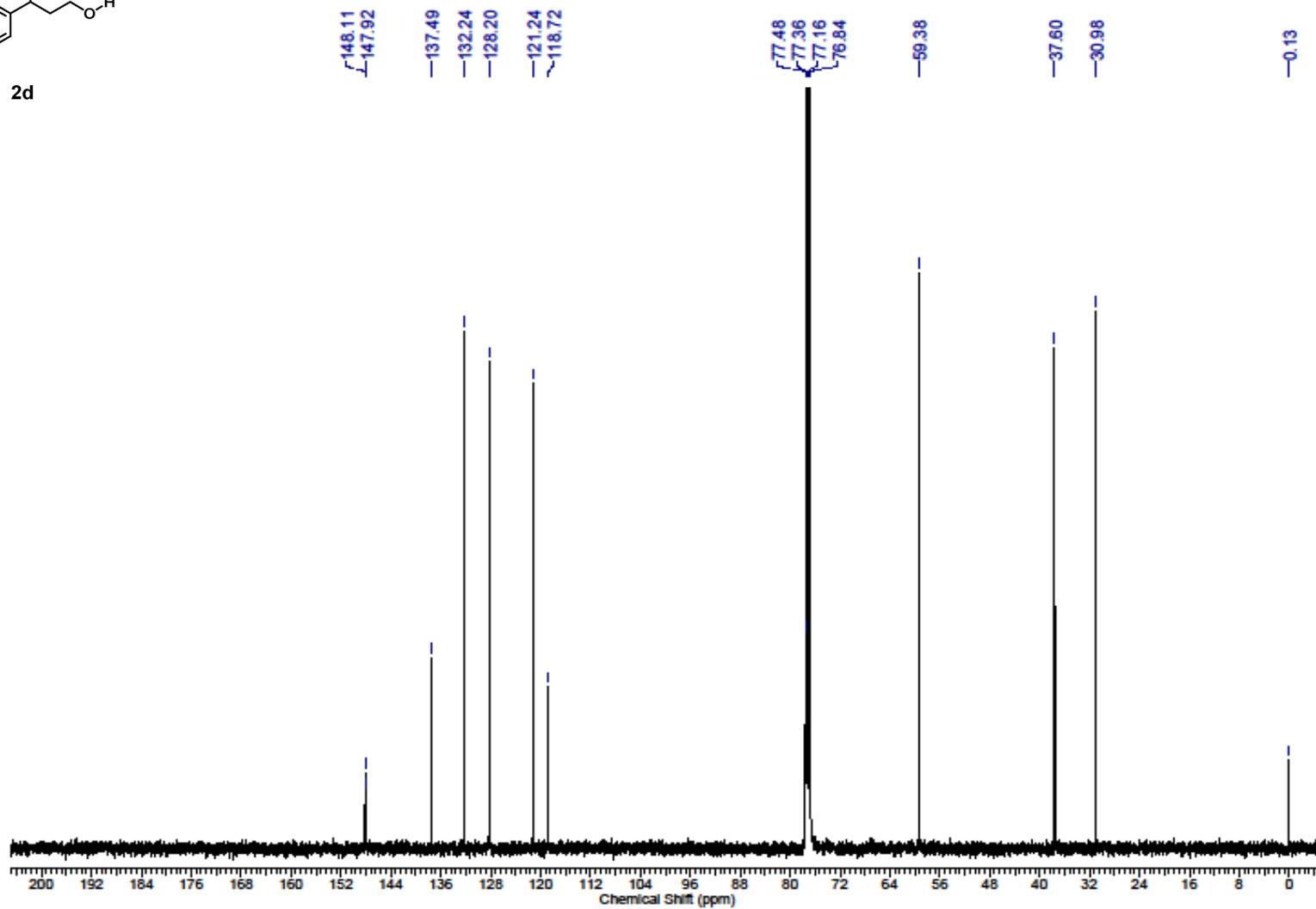
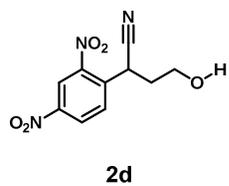
2c



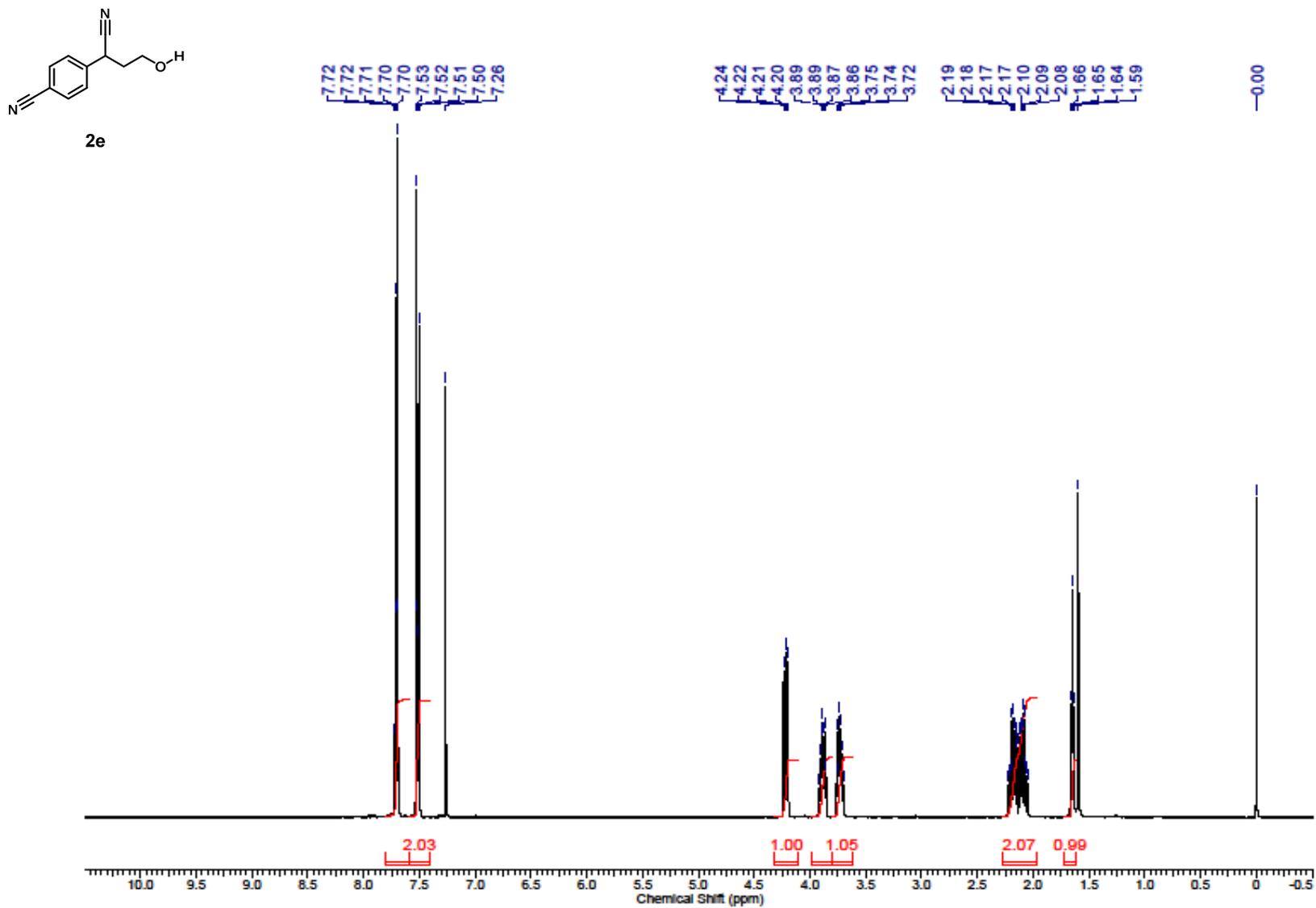
^1H NMR spectrum of **2d** in CDCl_3 with 0.05% v/v TMS (400 MHz)



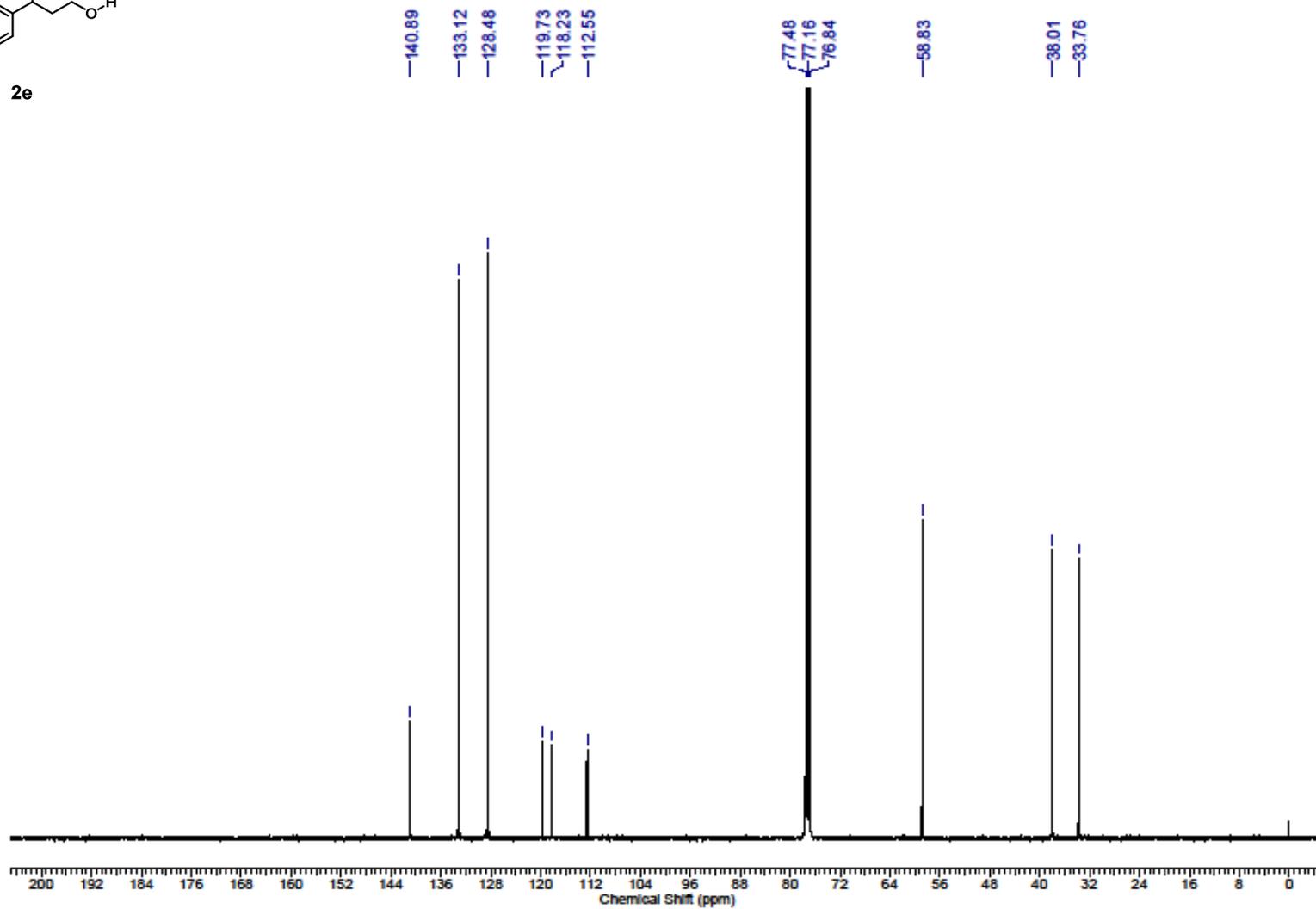
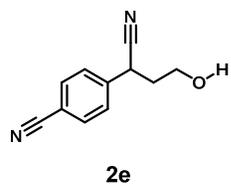
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2d** in CDCl_3 with 0.05% v/v TMS (100 MHz)



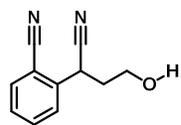
^1H NMR spectrum of **2e** in CDCl_3 with 0.05% v/v TMS (400 MHz)



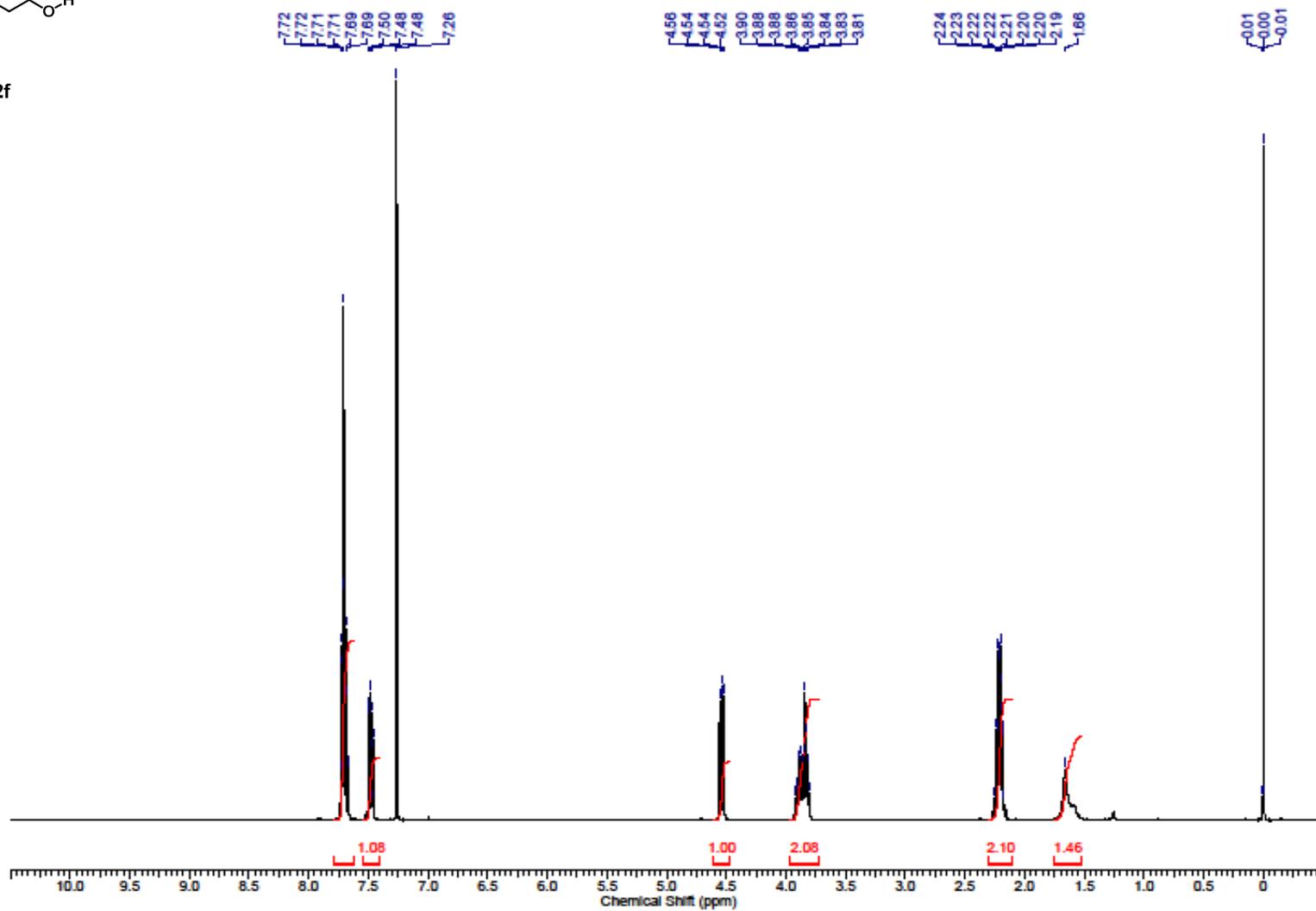
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2e** in CDCl_3 with 0.05% v/v TMS (100 MHz)



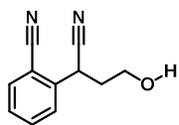
^1H NMR spectrum of **2f** in CDCl_3 with 0.05% v/v TMS (400 MHz)



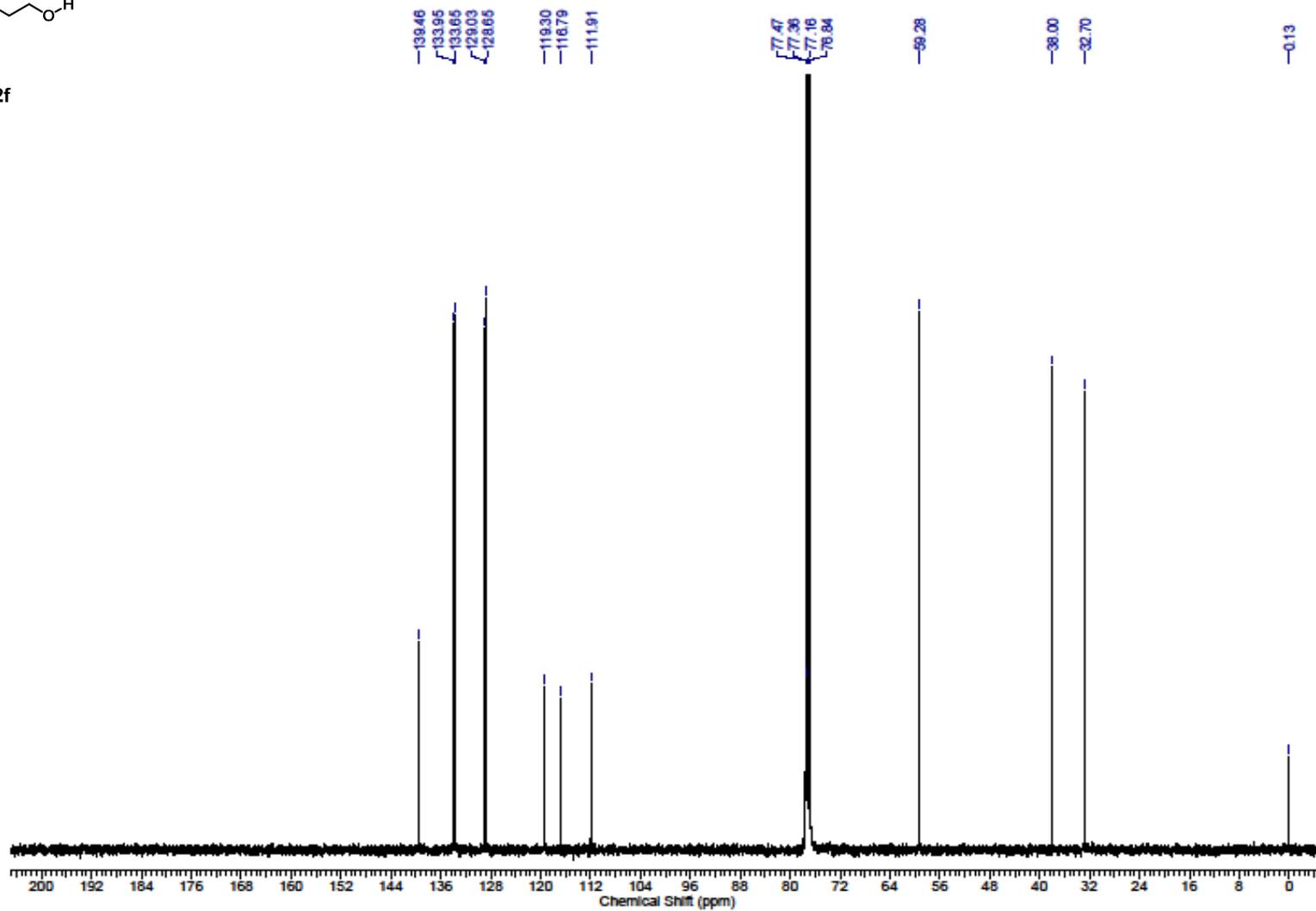
2f



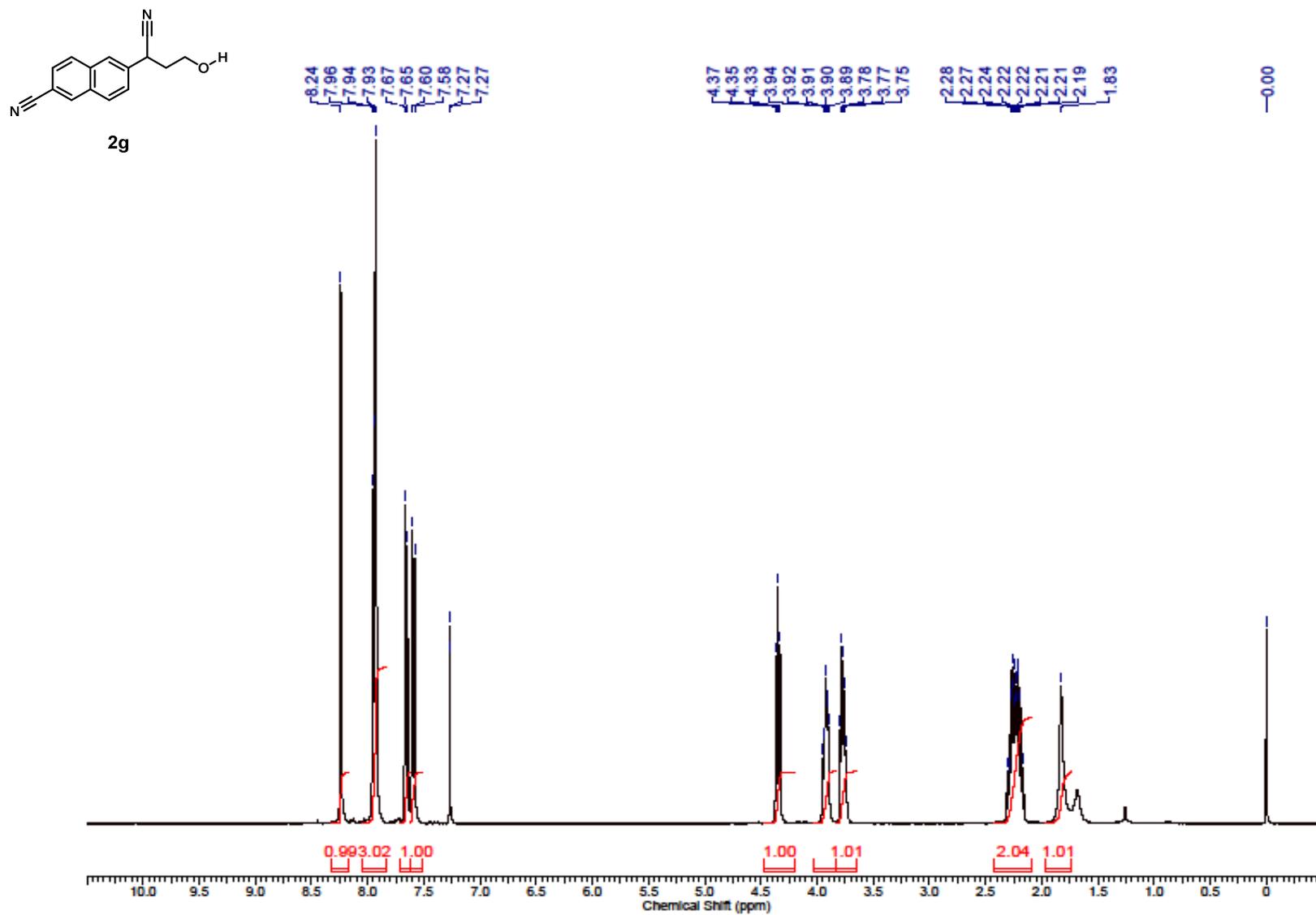
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2f** in CDCl_3 with 0.05% v/v TMS (100 MHz)



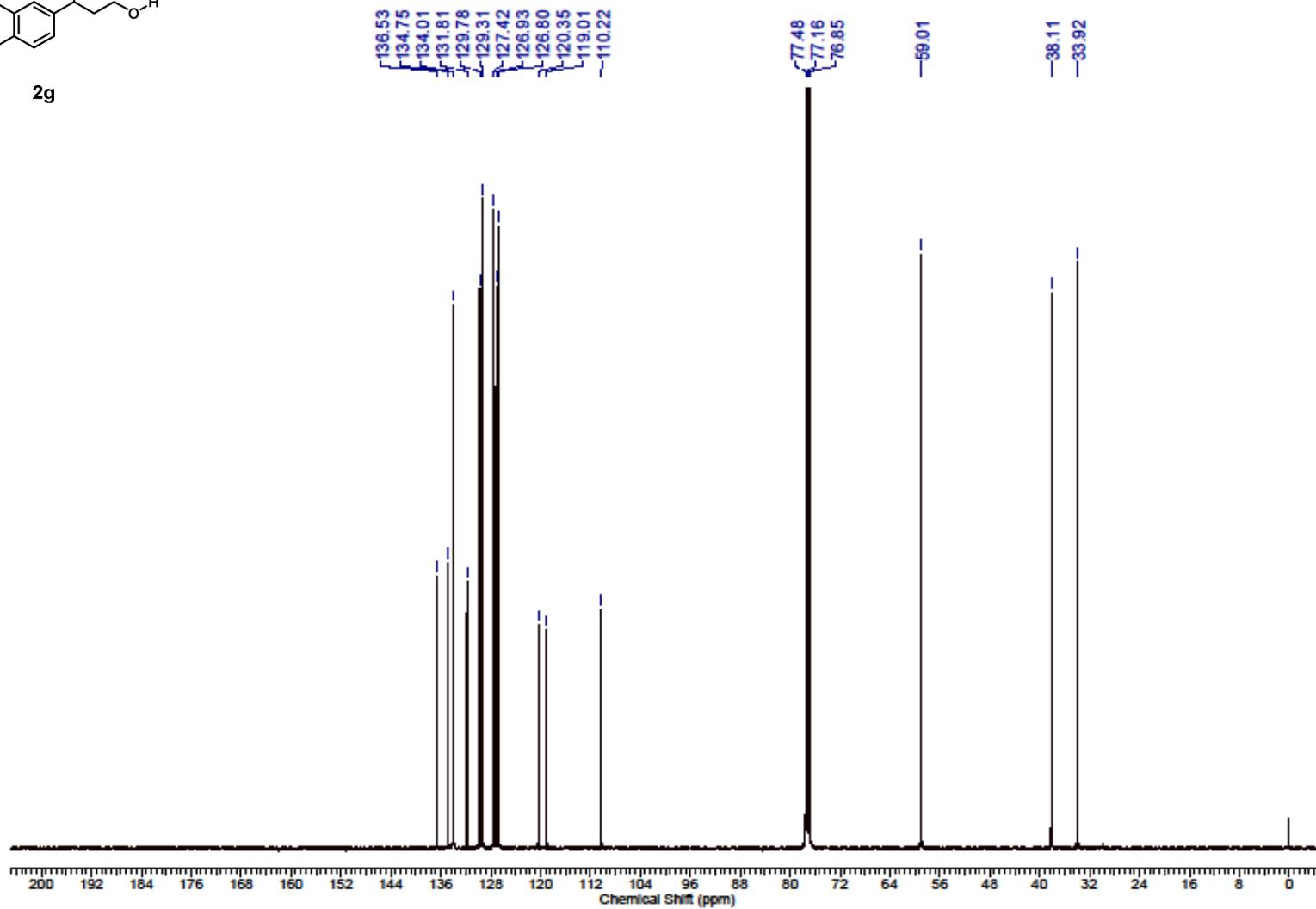
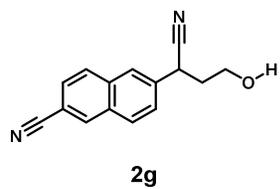
2f



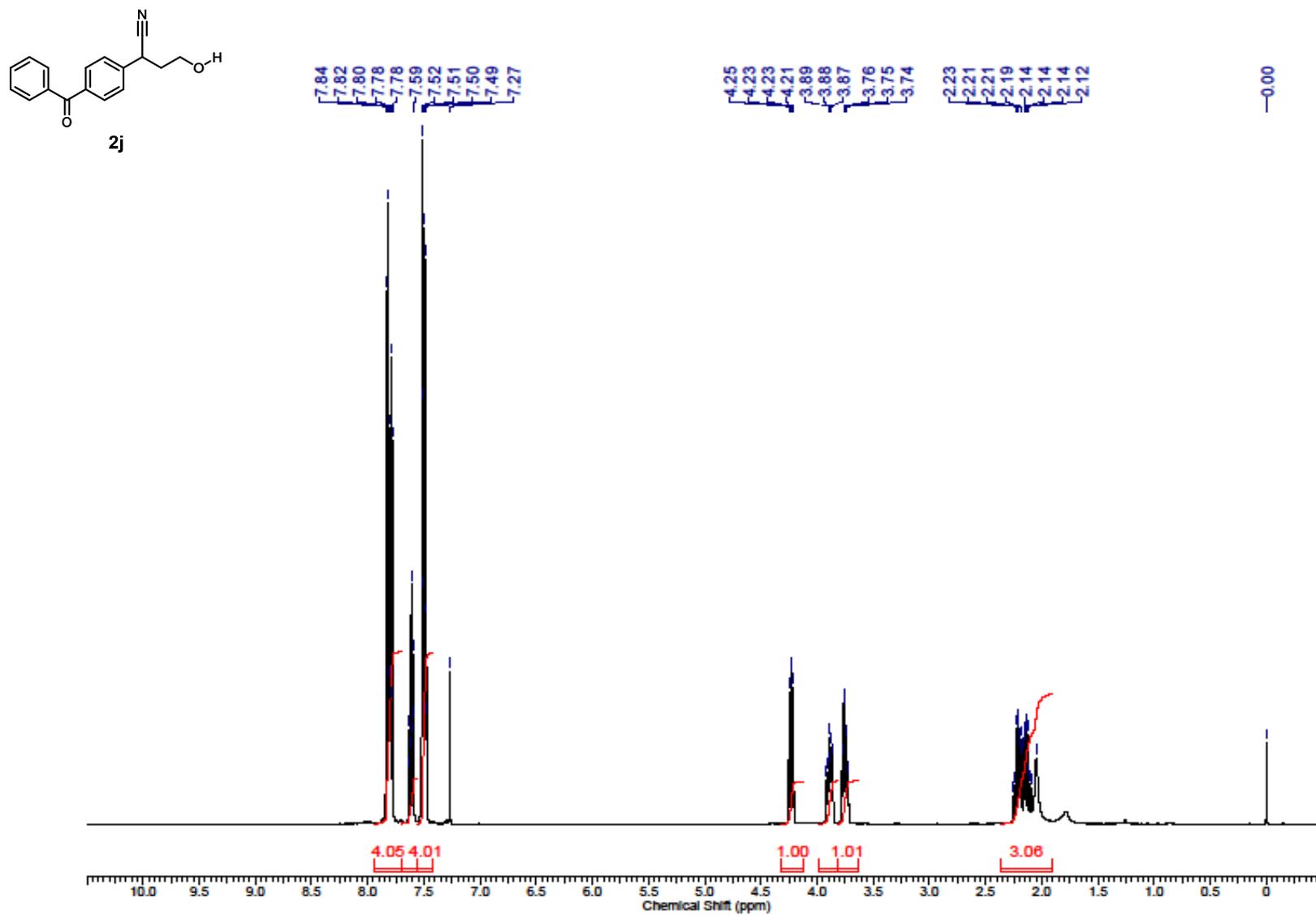
^1H NMR spectrum of **2g** in CDCl_3 with 0.05% v/v TMS (400 MHz)



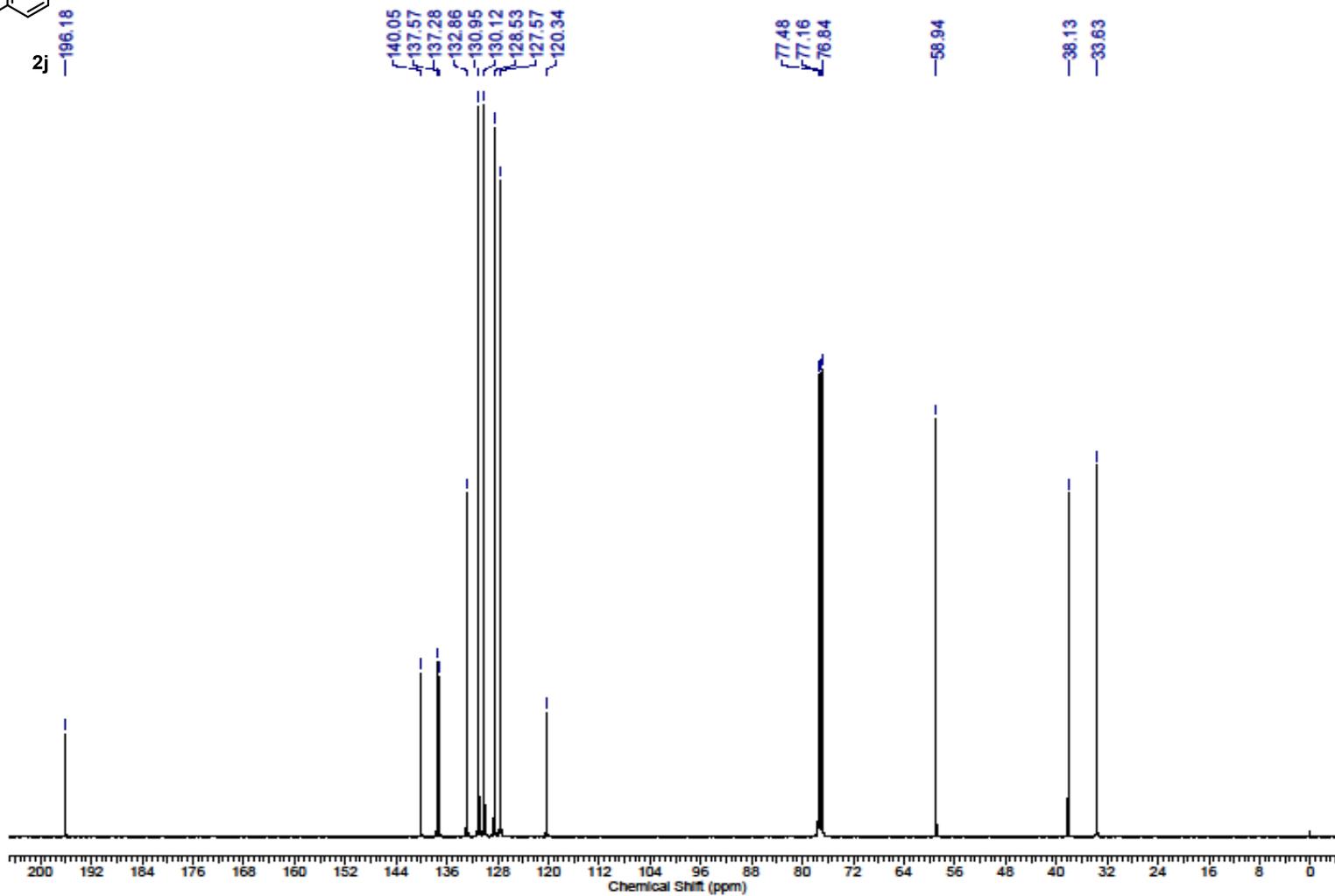
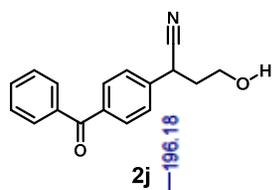
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2g** in CDCl_3 with 0.05% v/v TMS (100 MHz)



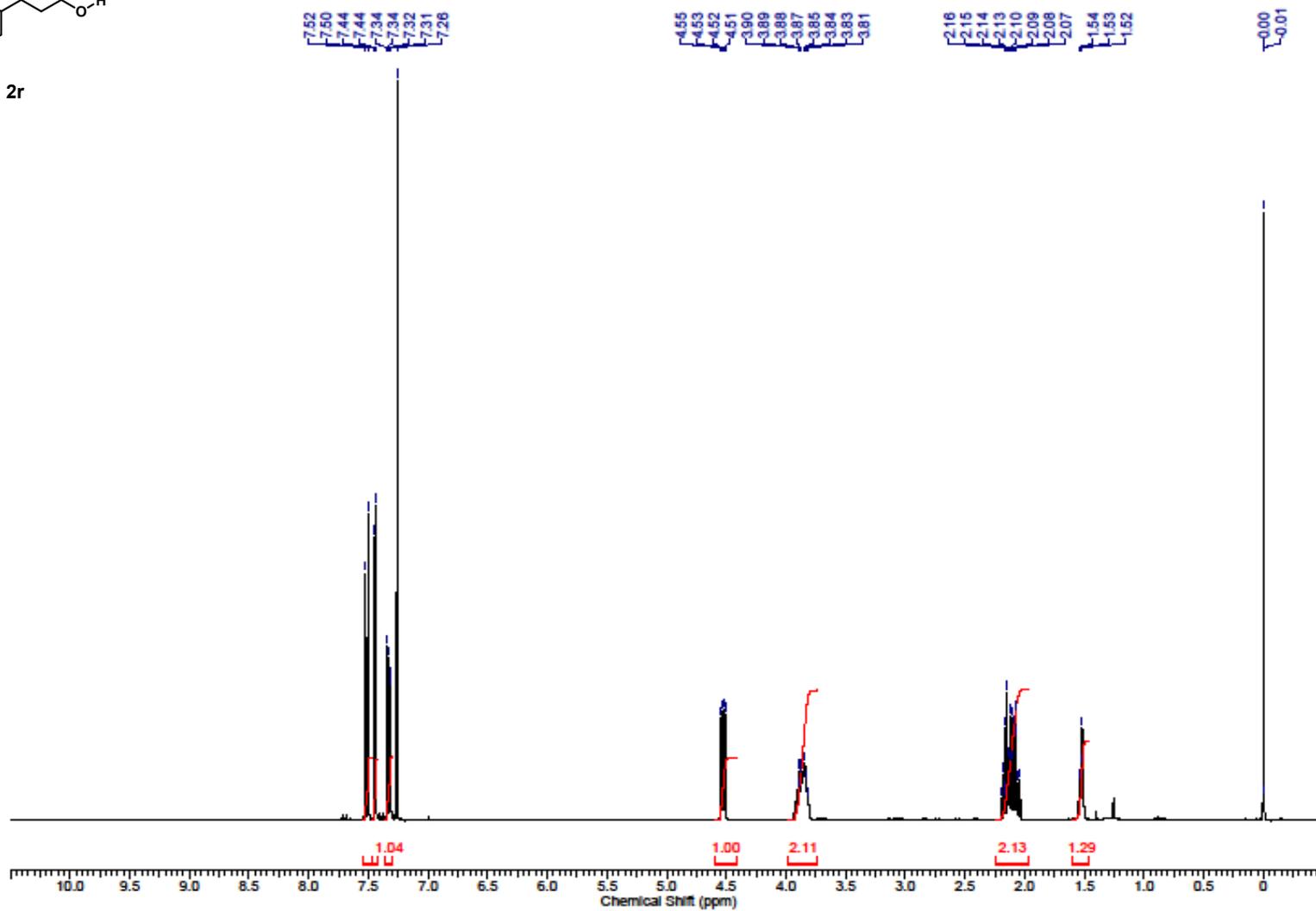
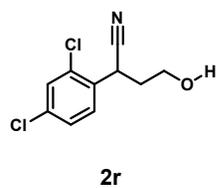
^1H NMR spectrum of **2j** in CDCl_3 with 0.05% v/v TMS (400 MHz)



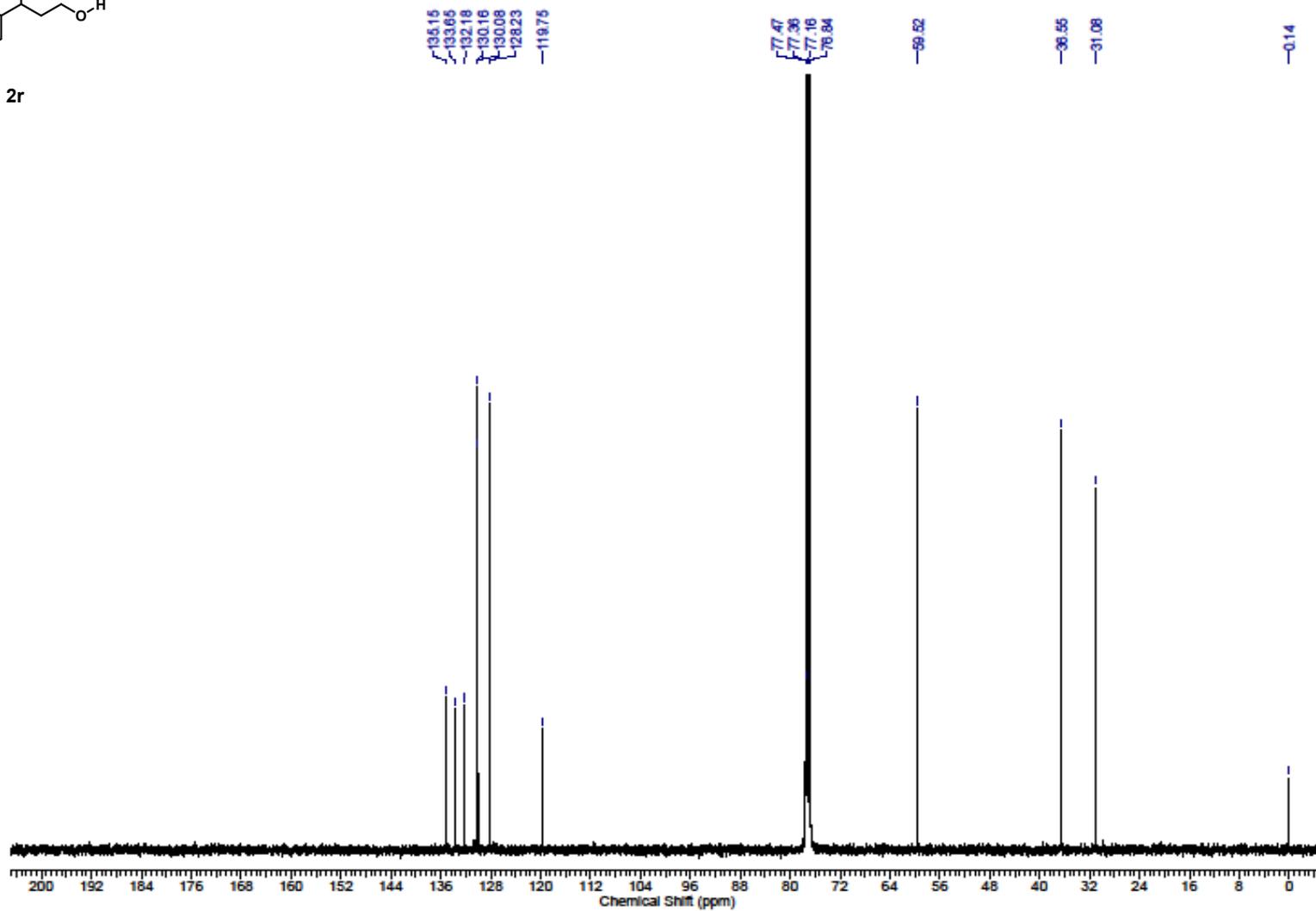
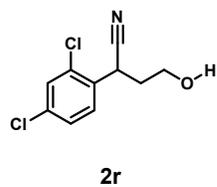
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2j** in CDCl_3 with 0.05% v/v TMS (100 MHz)



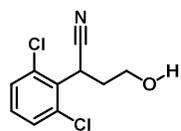
^1H NMR spectrum of **2r** in CDCl_3 with 0.05% v/v TMS (400 MHz)



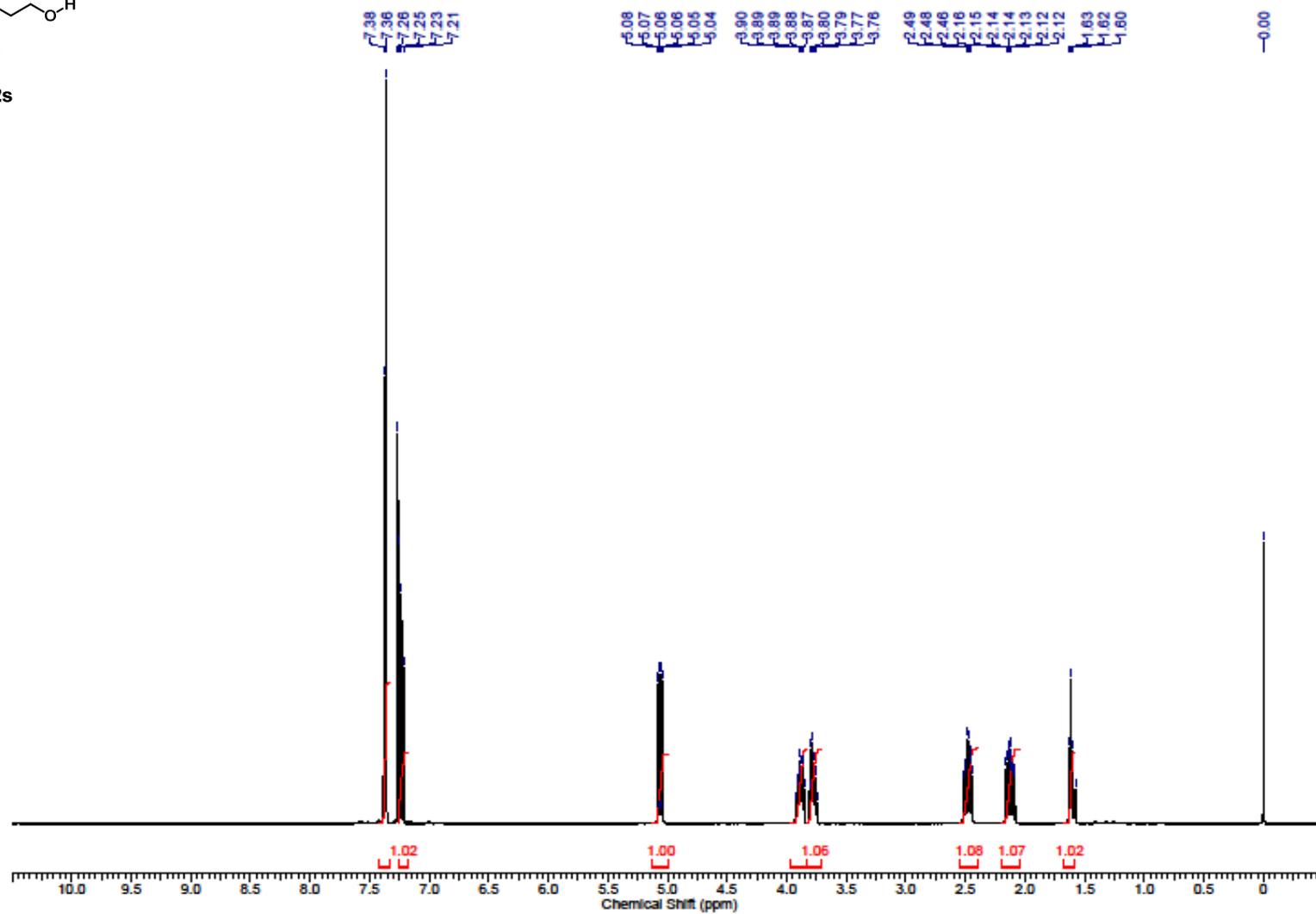
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2r** in CDCl_3 with 0.05% v/v TMS (100 MHz)



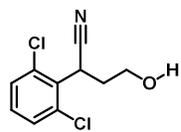
^1H NMR spectrum of **2s** in CDCl_3 with 0.05% v/v TMS (400 MHz)



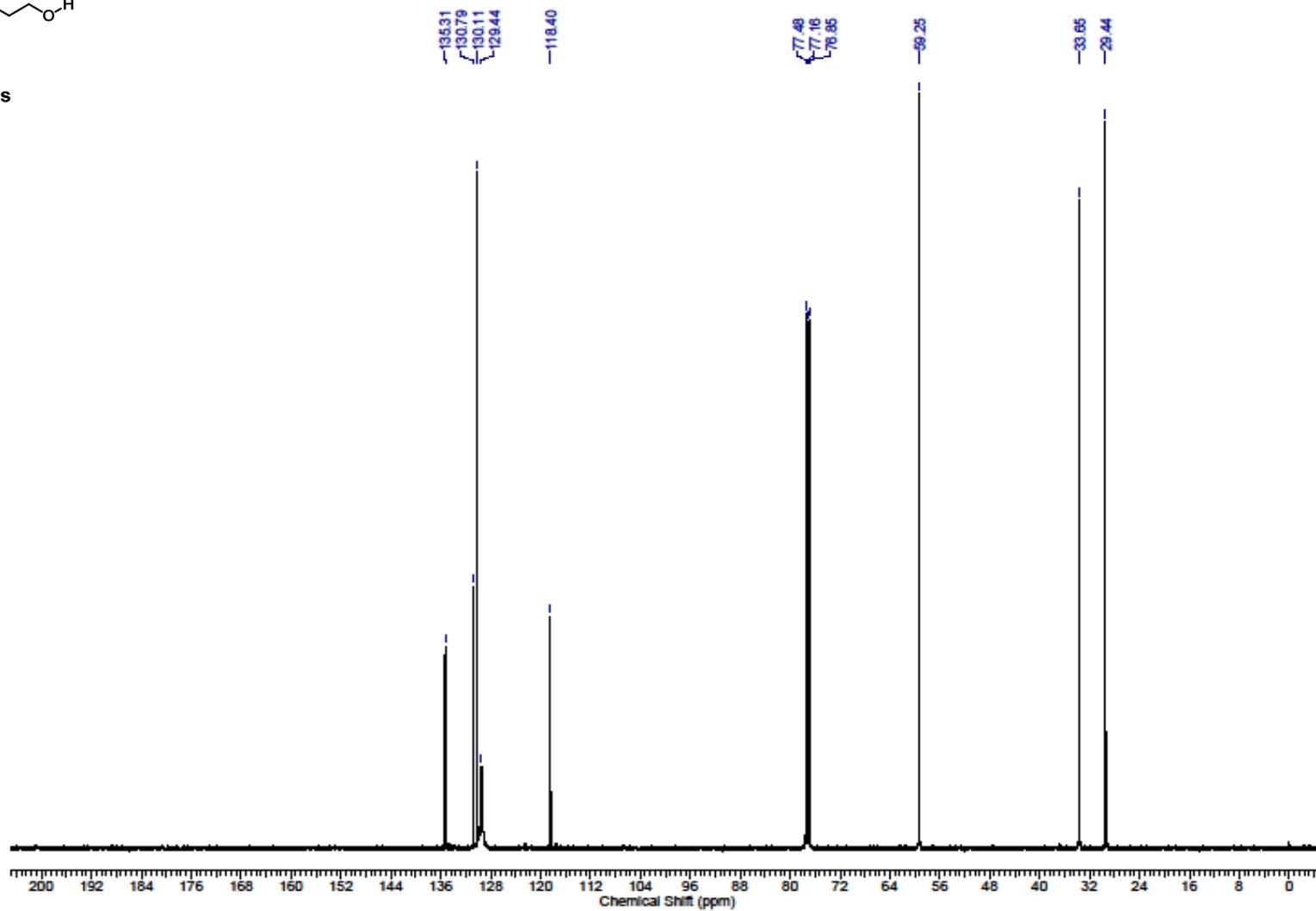
2s



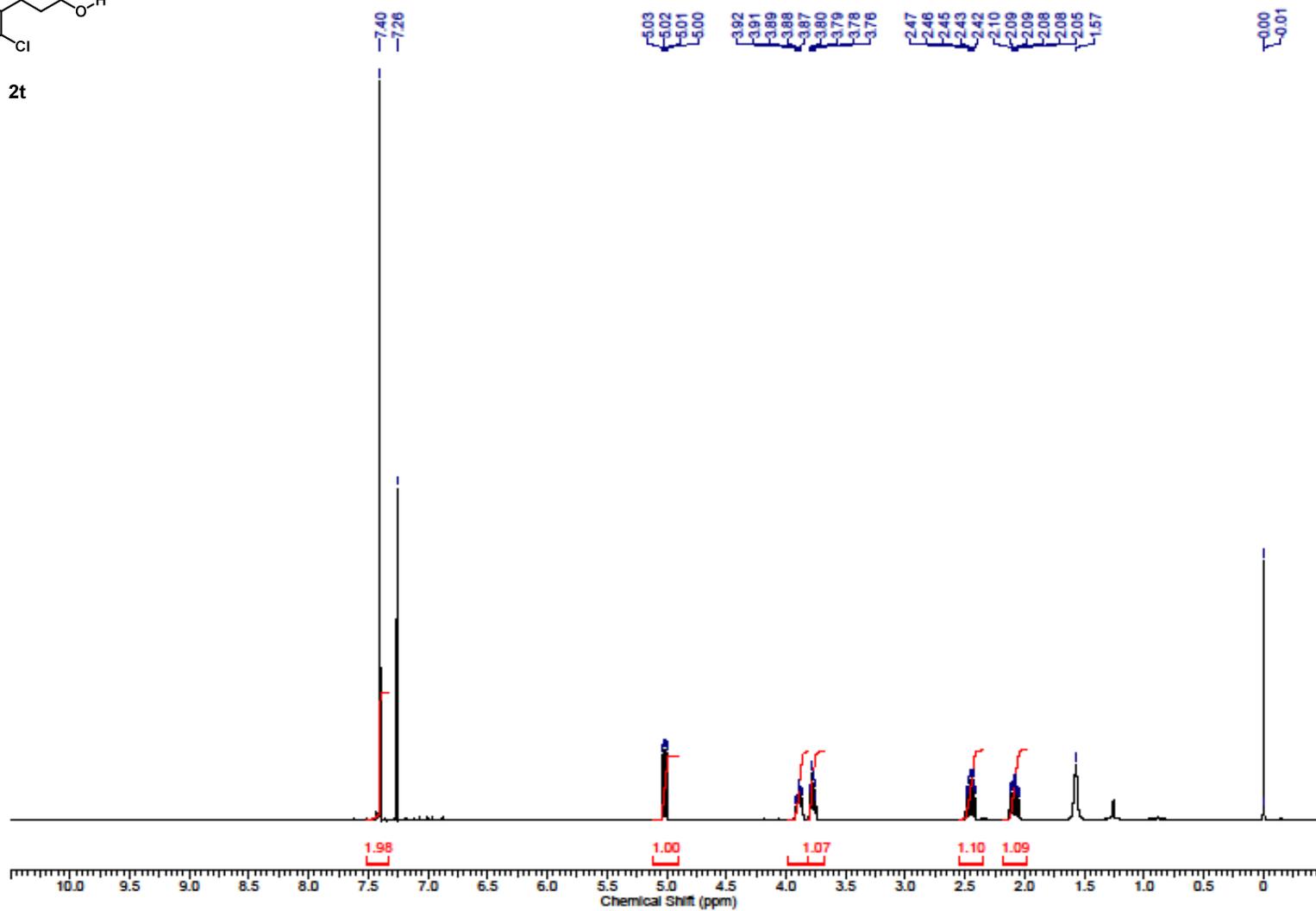
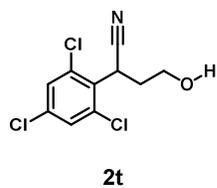
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2s** in CDCl_3 with 0.05% v/v TMS (100 MHz)



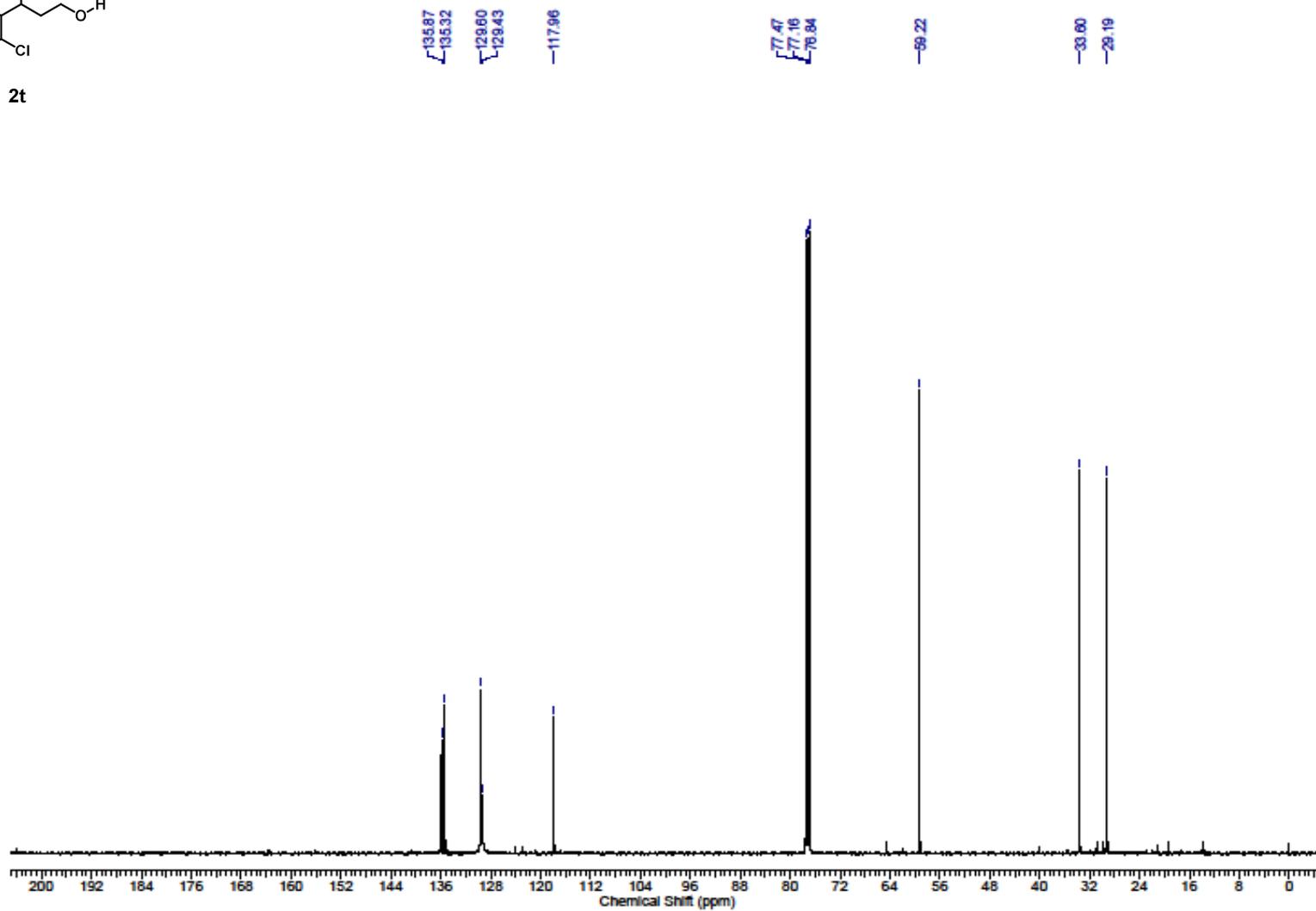
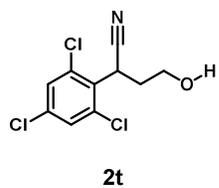
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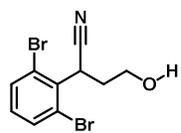
^1H NMR spectrum of **2t** in CDCl_3 with 0.05% v/v TMS (400 MHz)



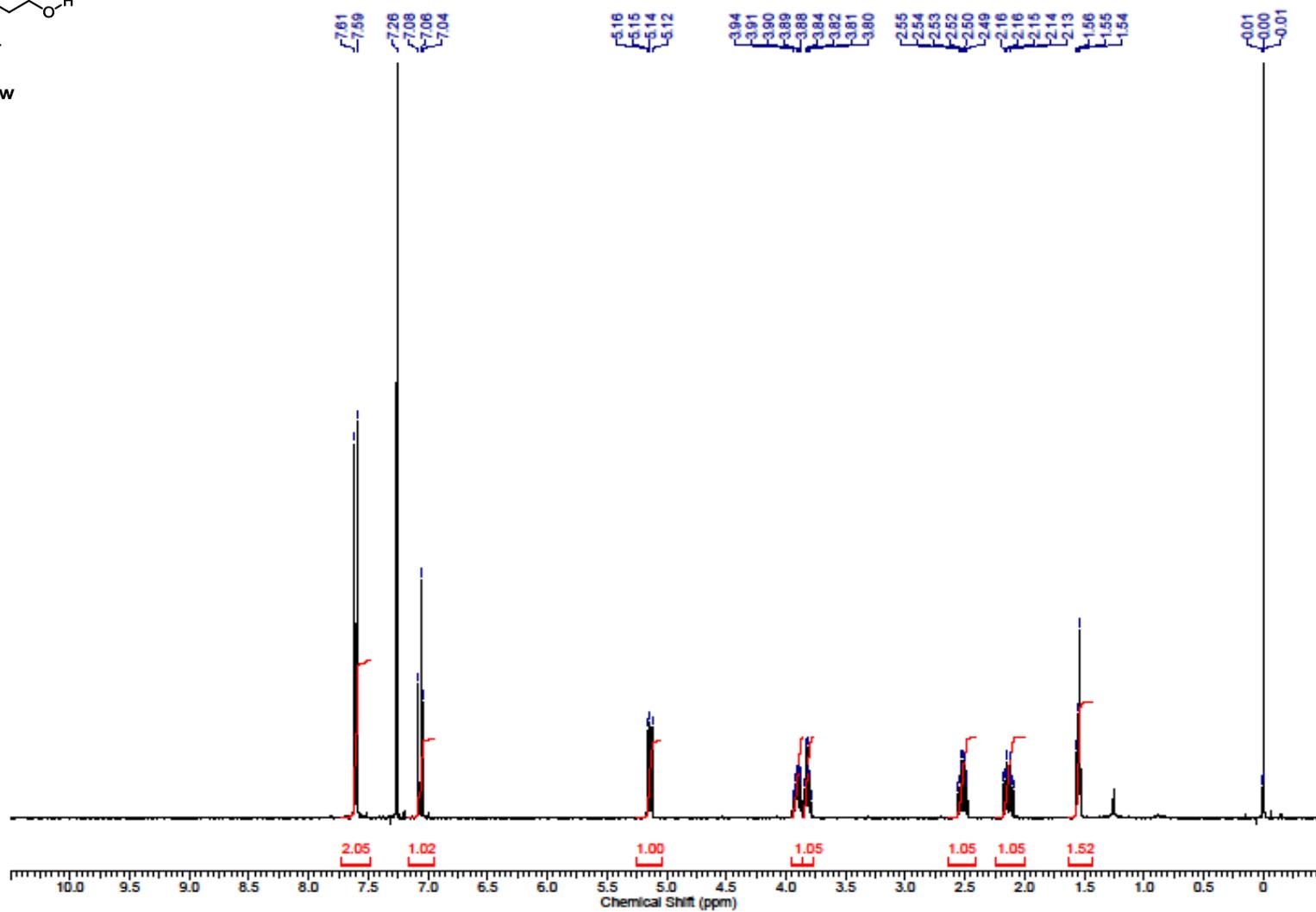
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2t** in CDCl_3 with 0.05% v/v TMS (100 MHz)



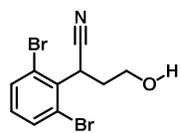
^1H NMR spectrum of **2w** in CDCl_3 with 0.05% v/v TMS (400 MHz)



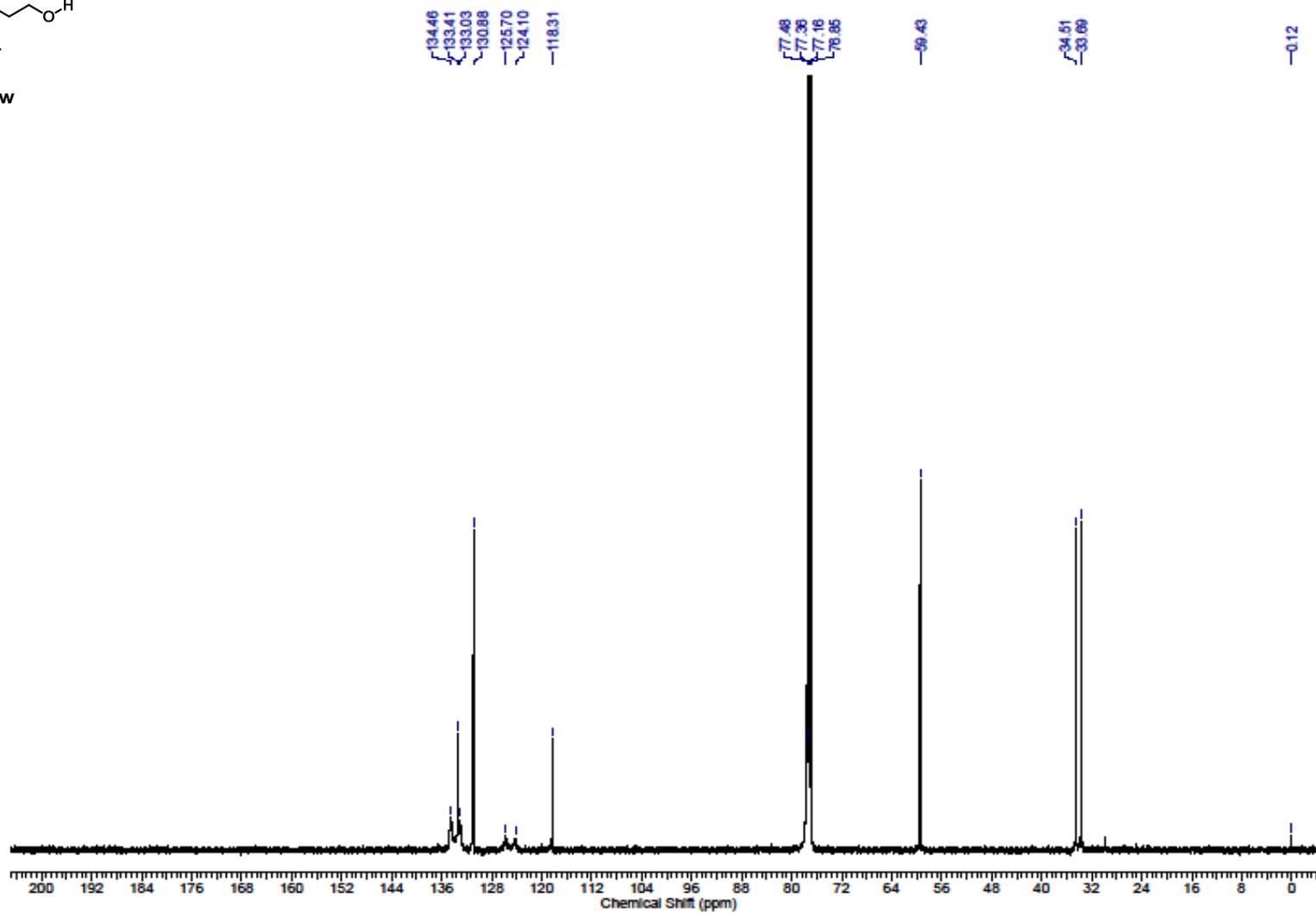
2w



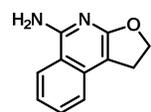
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2w** in CDCl_3 with 0.05% v/v TMS (100 MHz)



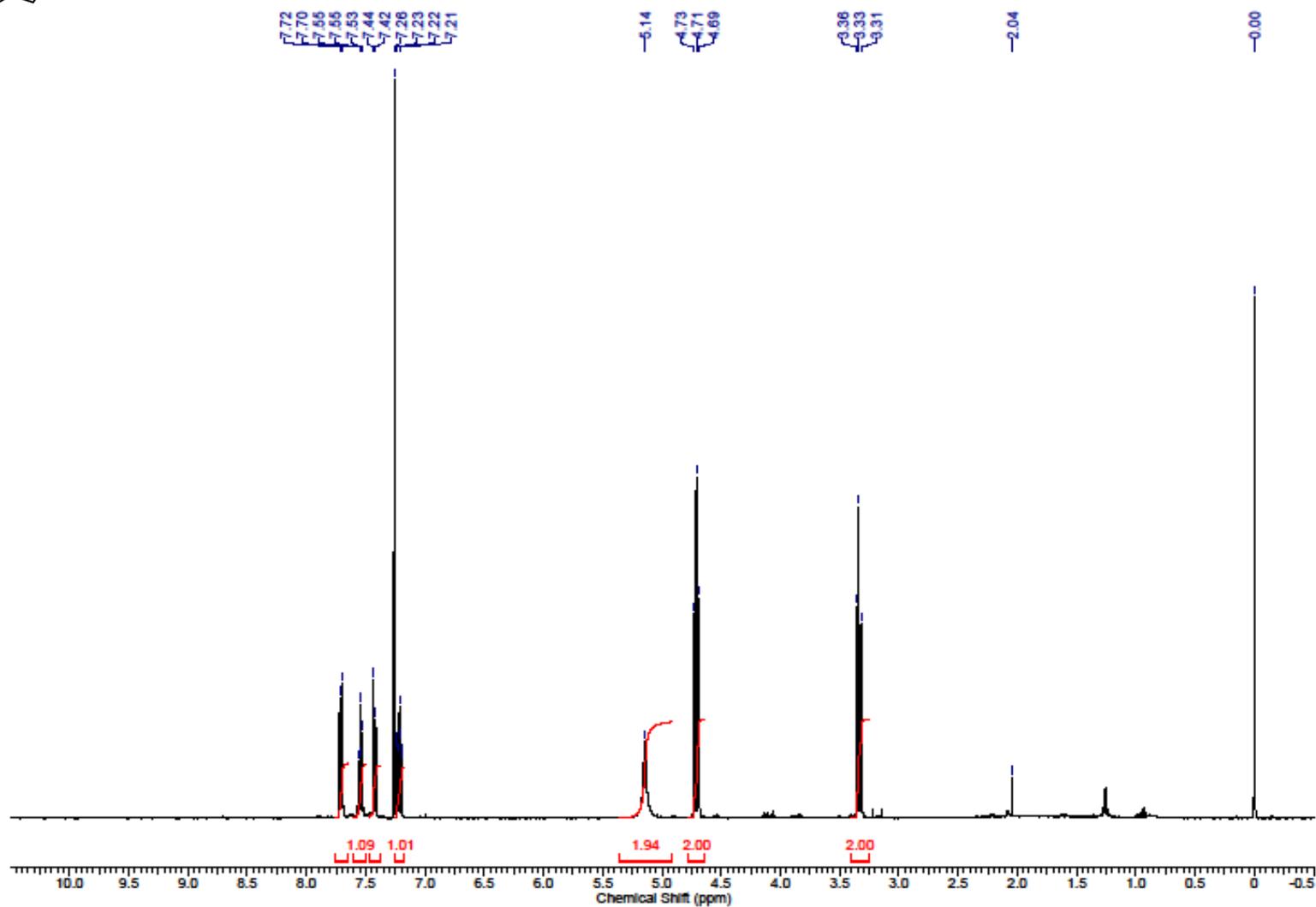
2w



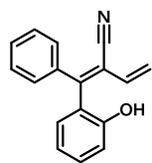
¹H NMR spectrum of **3** in CDCl₃ with 0.05% v/v TMS (400 MHz)



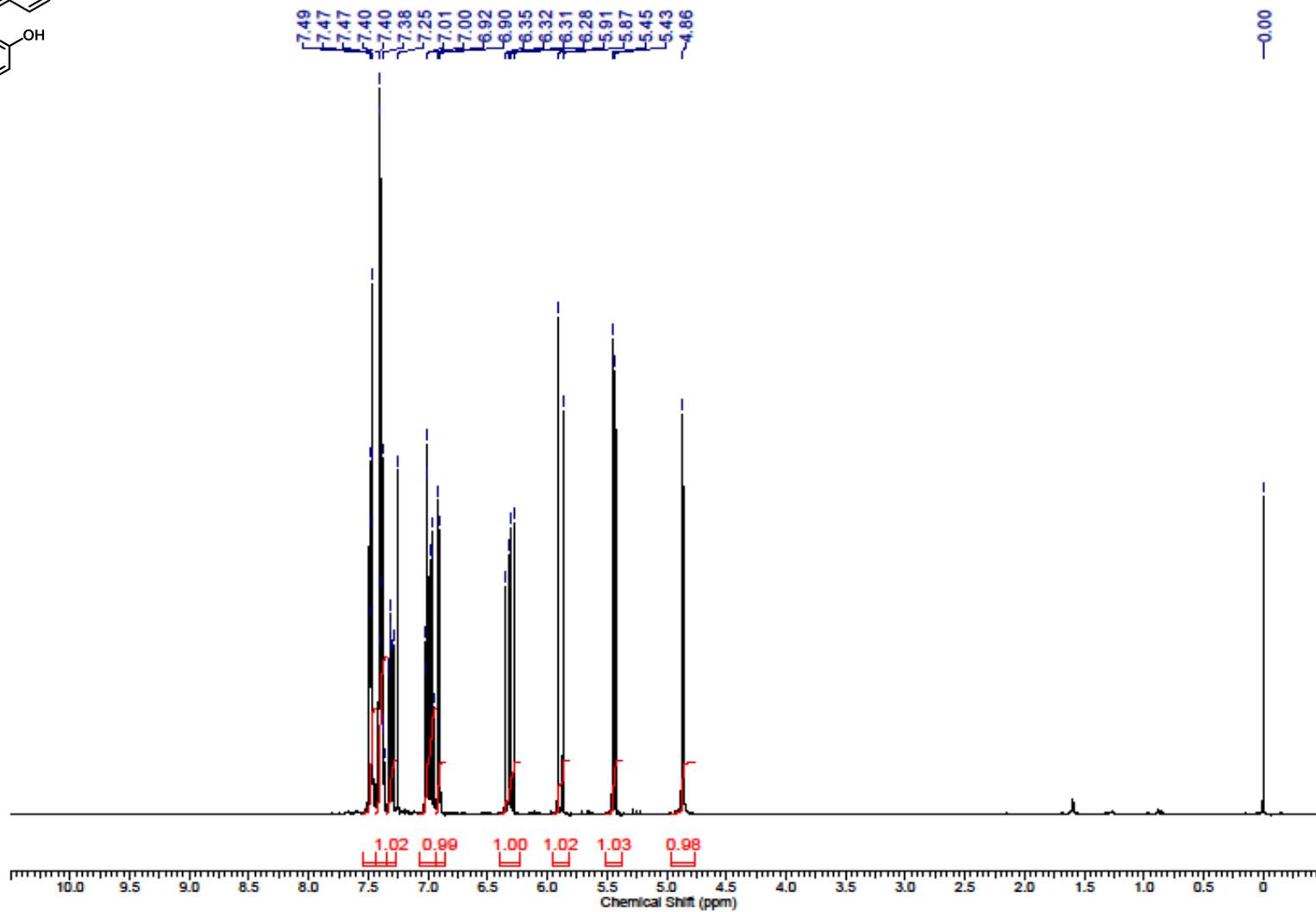
3



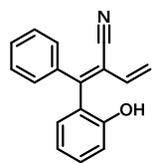
^1H NMR spectrum of **4** in CDCl_3 with 0.05% v/v TMS (400 MHz)



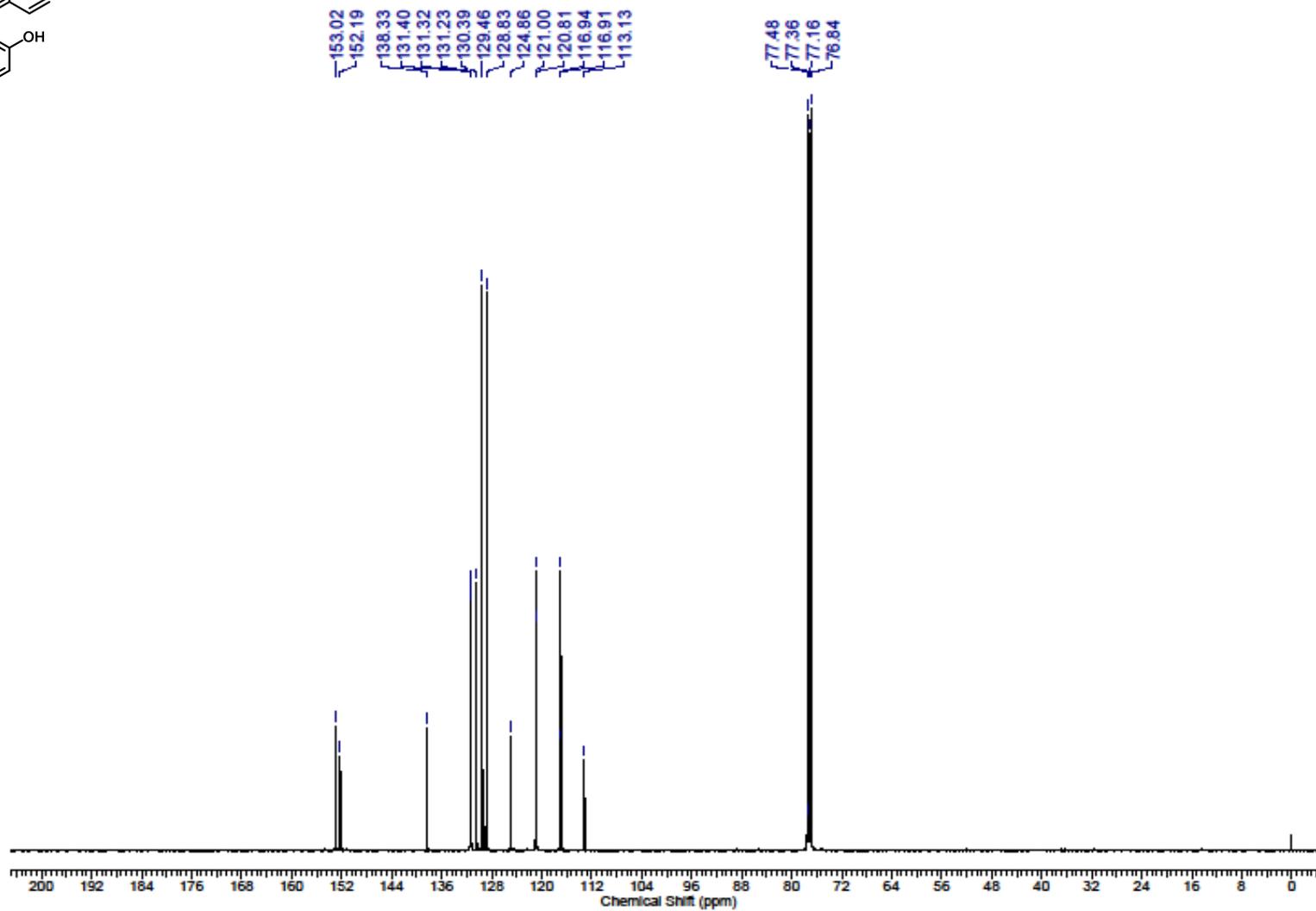
4



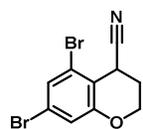
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **4** in CDCl_3 with 0.05% v/v TMS (100 MHz)



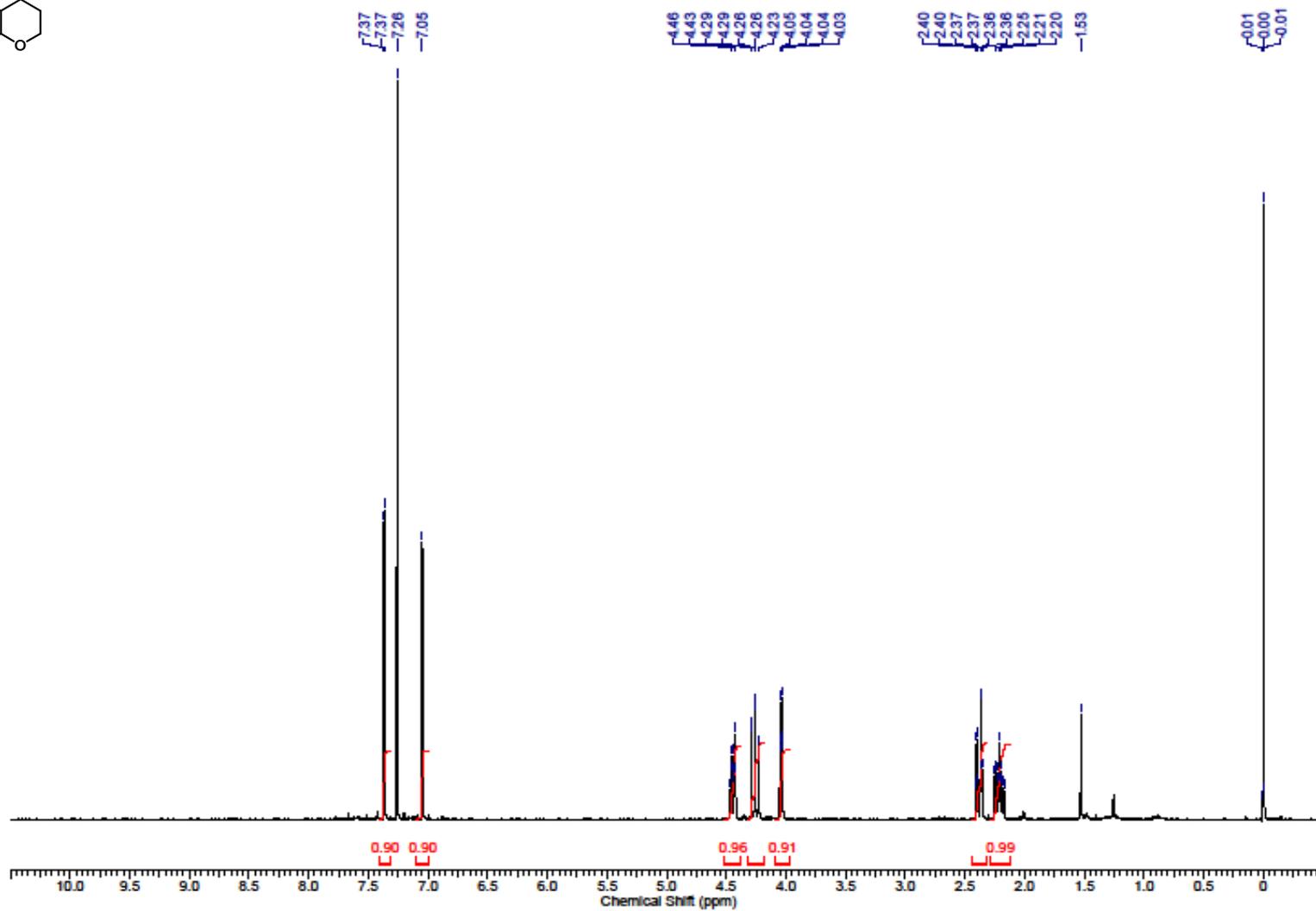
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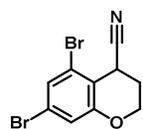
^1H NMR spectrum of **5** in CDCl_3 with 0.05% v/v TMS (400 MHz)



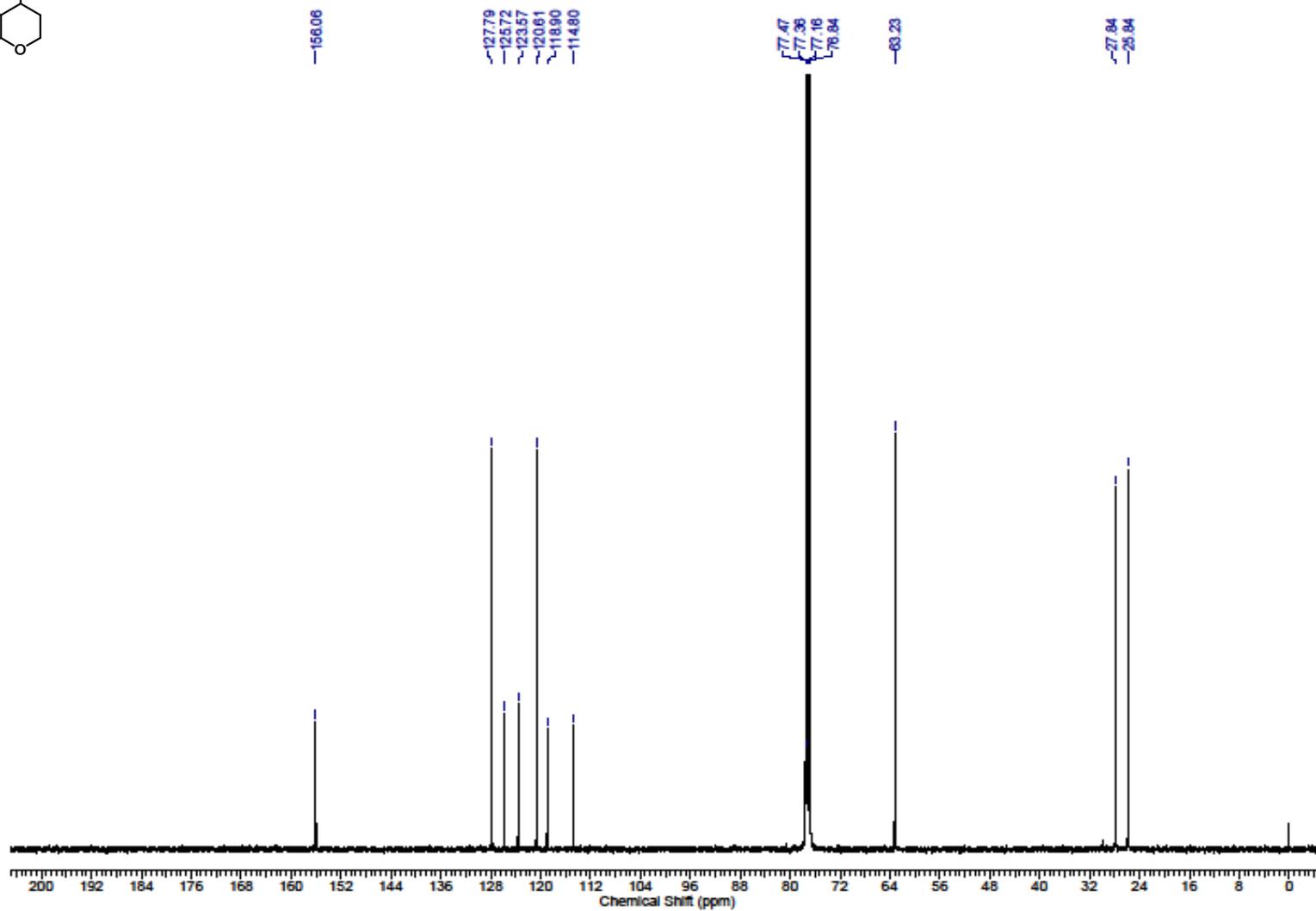
5



$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **5** in CDCl_3 with 0.05% v/v TMS (100 MHz)

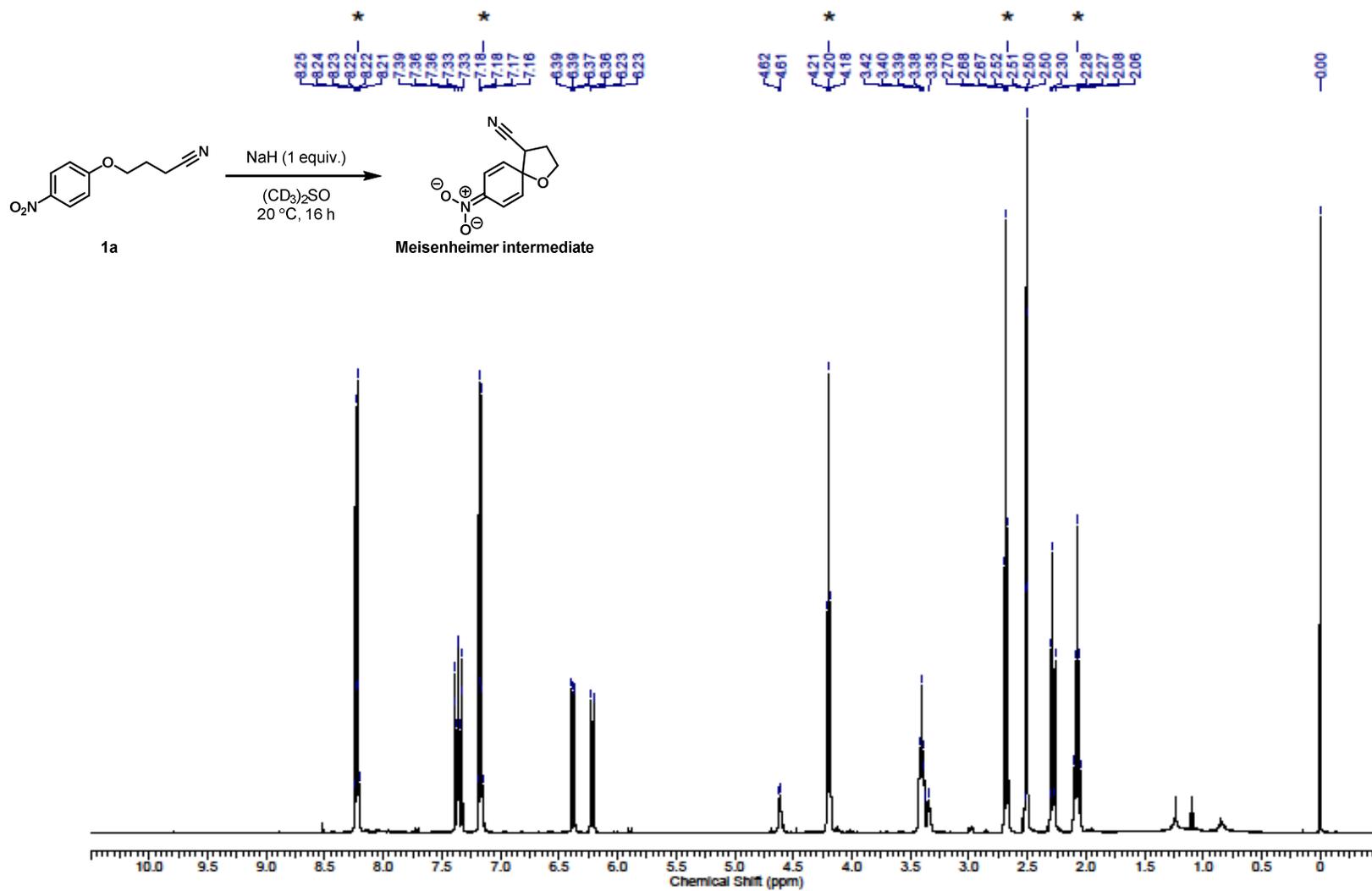


5



^1H 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 *)

