

## Supplementary Material

**Analogs of biologically active compounds IX <sup>1</sup>. Synthesis of several new uracil and pteridine 6-azaanalogs based on cyclization of arylhydrazones derived from mesoxalic acid**David Novosád, <sup>a</sup> and Jakub Stýskala <sup>b\*</sup>

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S32

<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **10k** (DMSO-*d*<sub>6</sub>)

S33

<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **10l** (DMSO-*d*<sub>6</sub>)

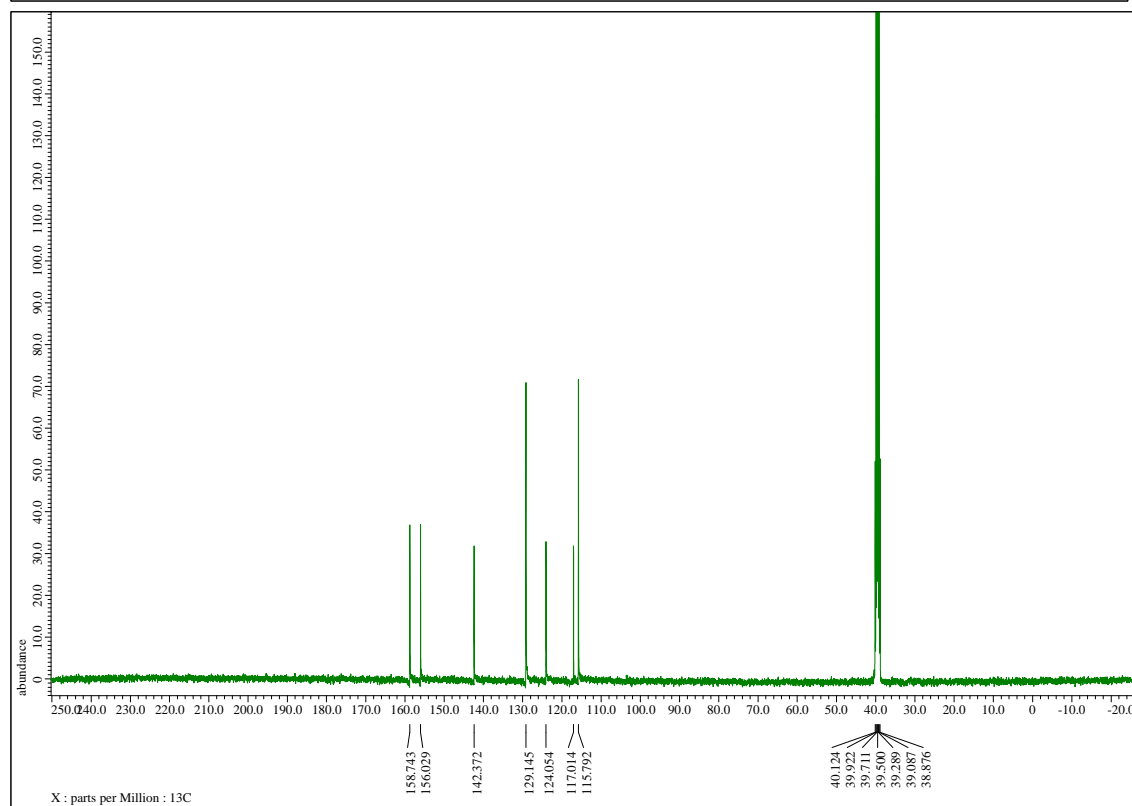
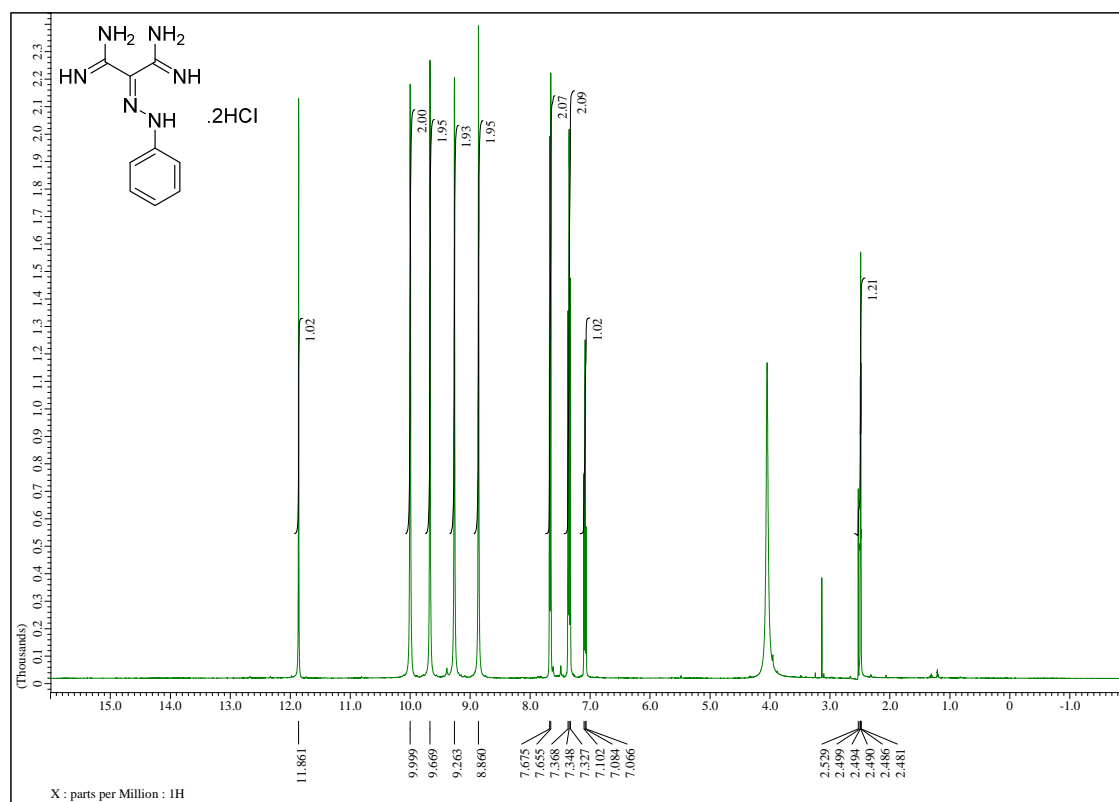
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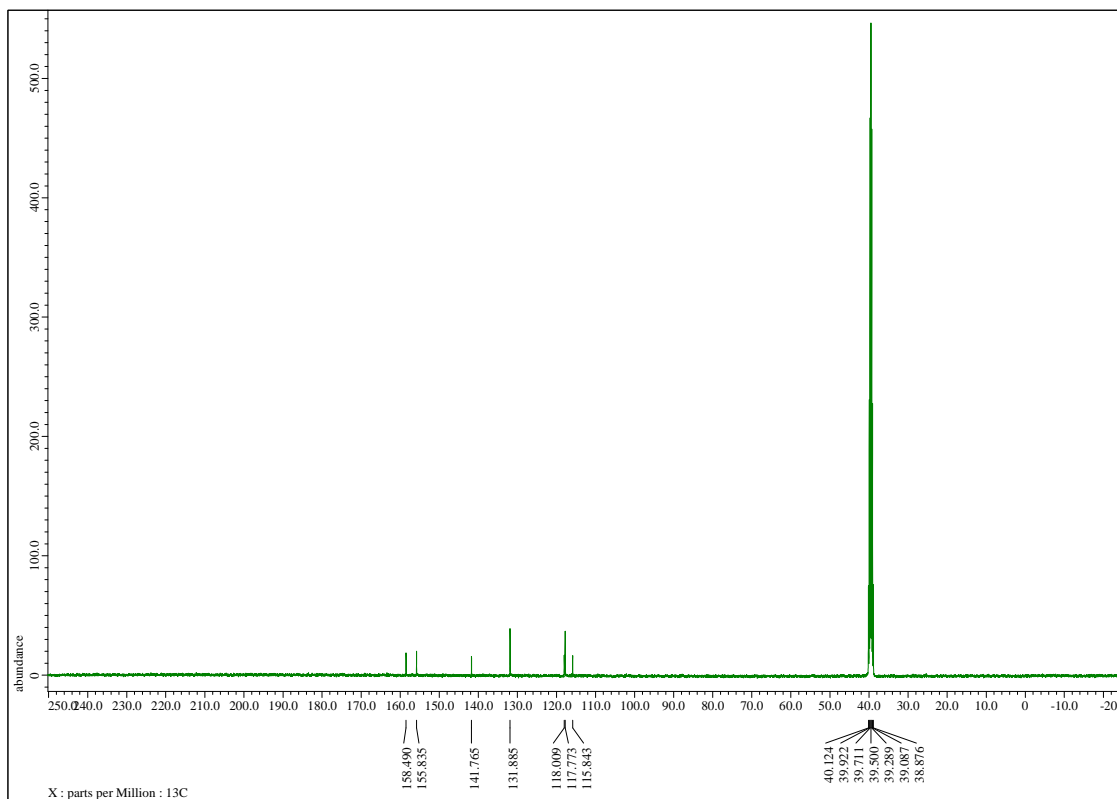
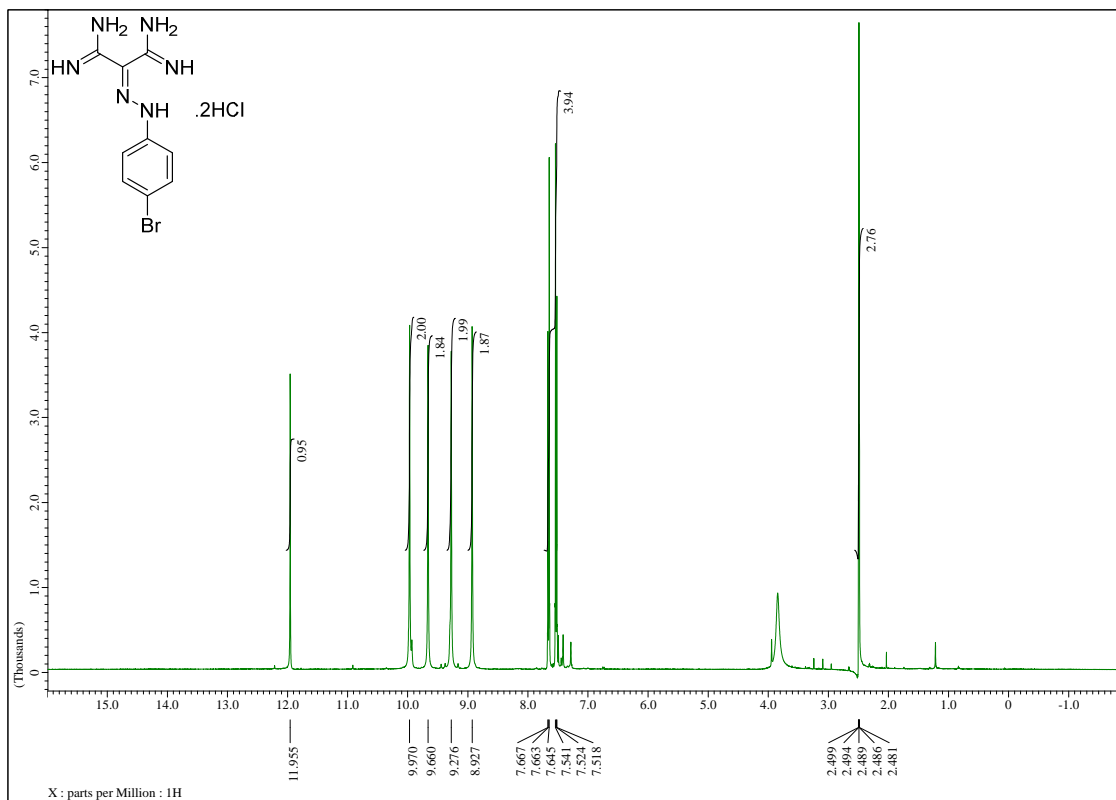
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S35

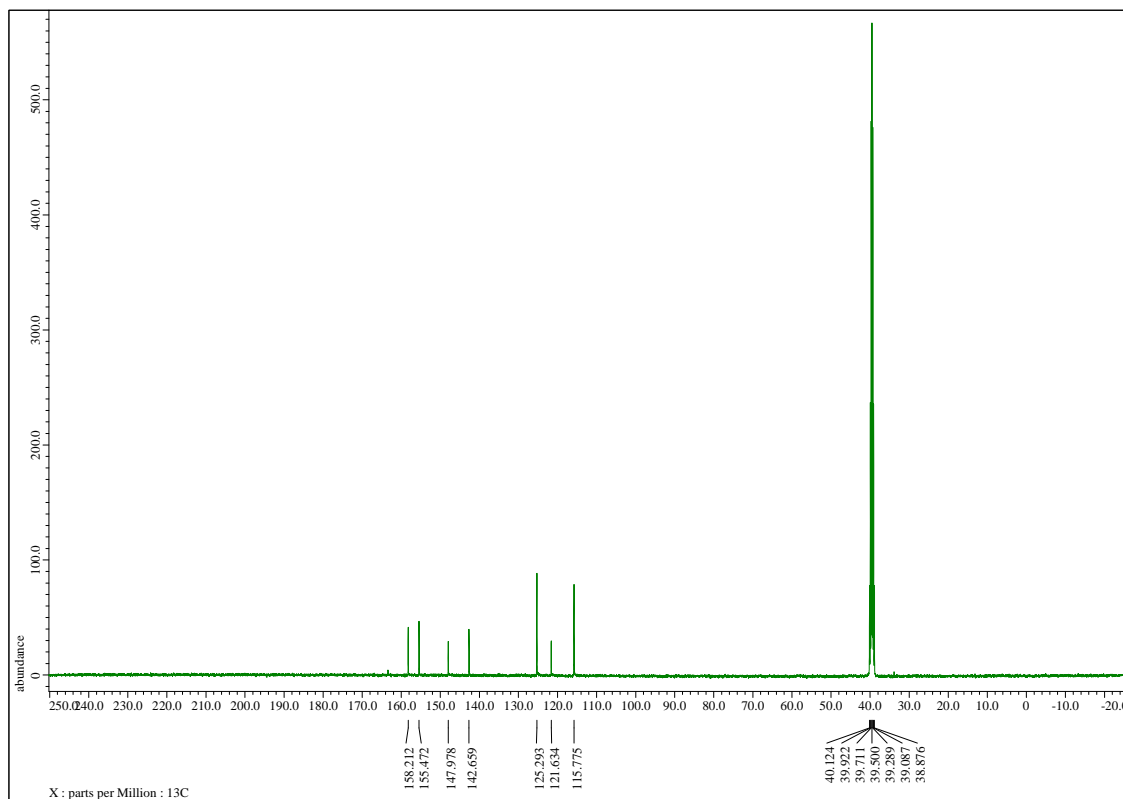
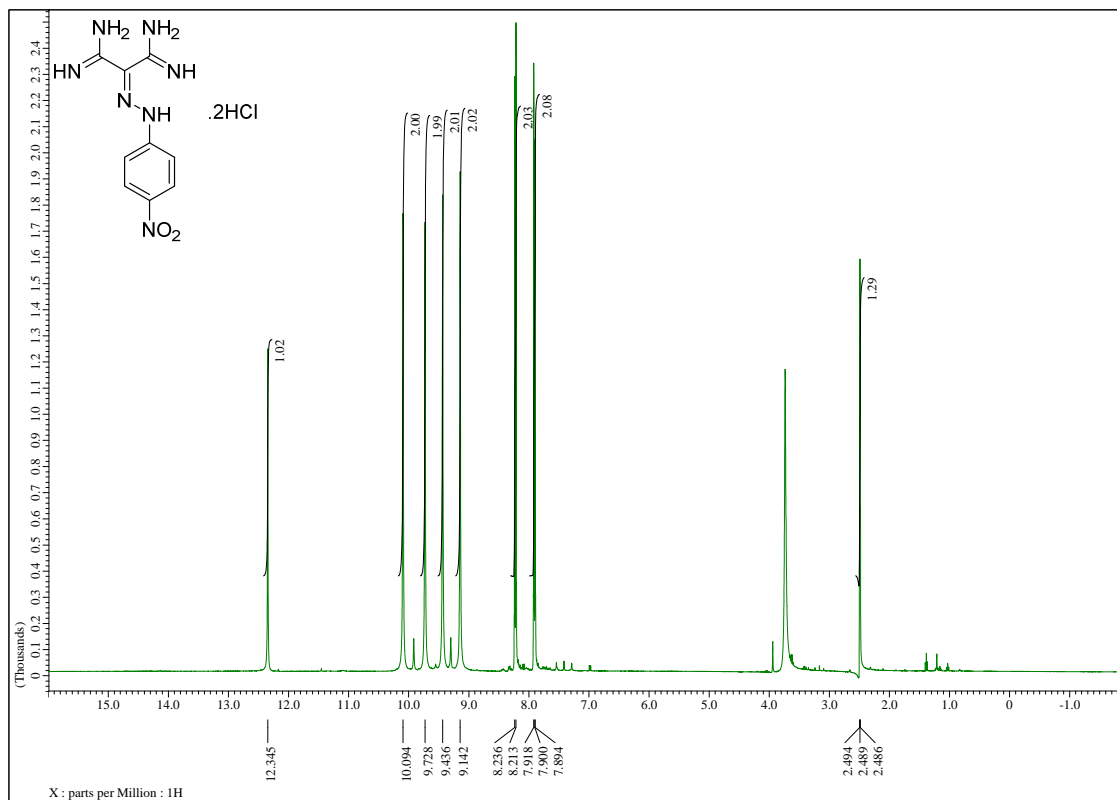
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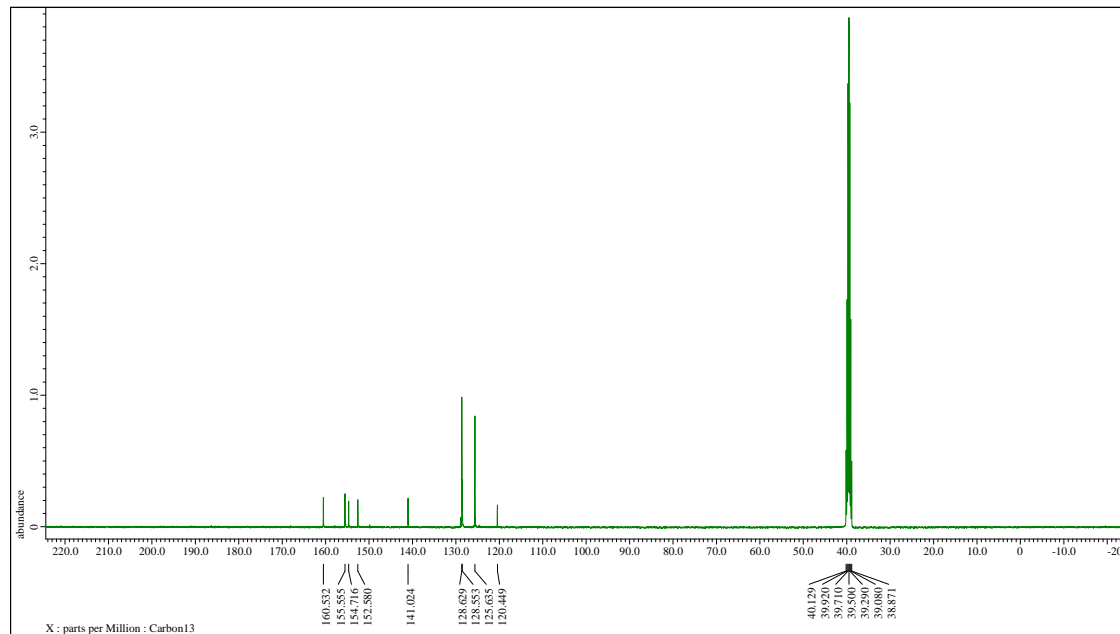
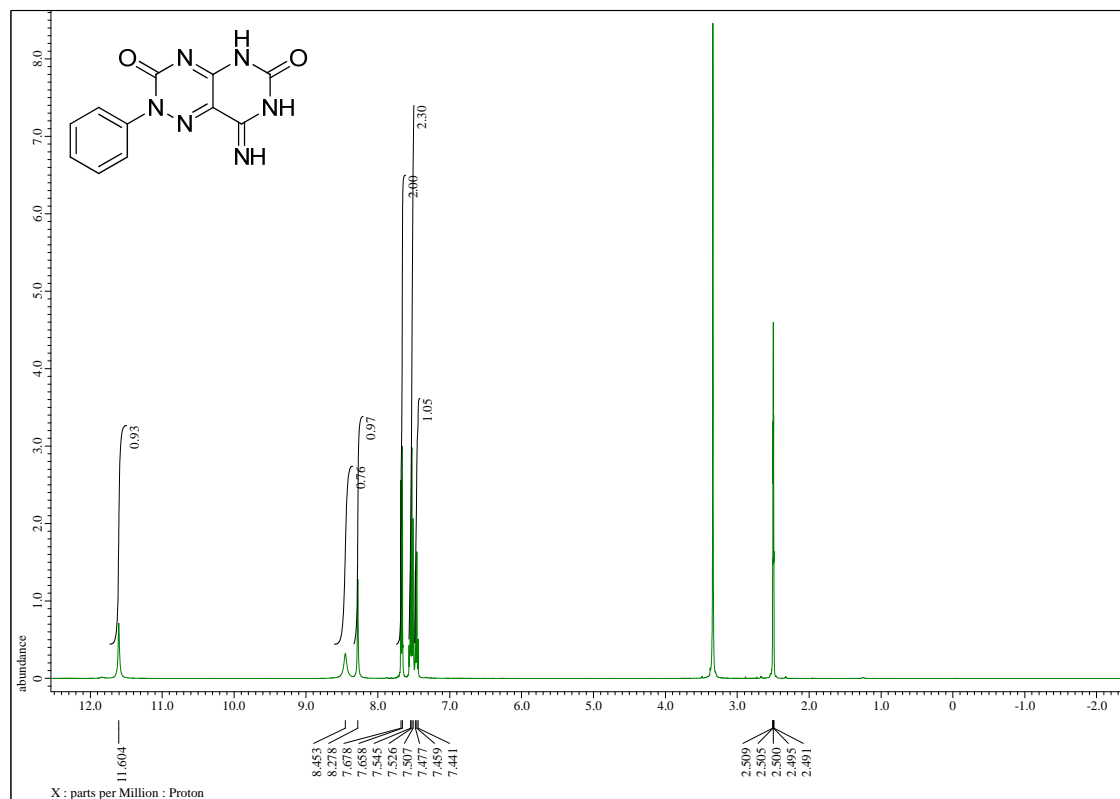
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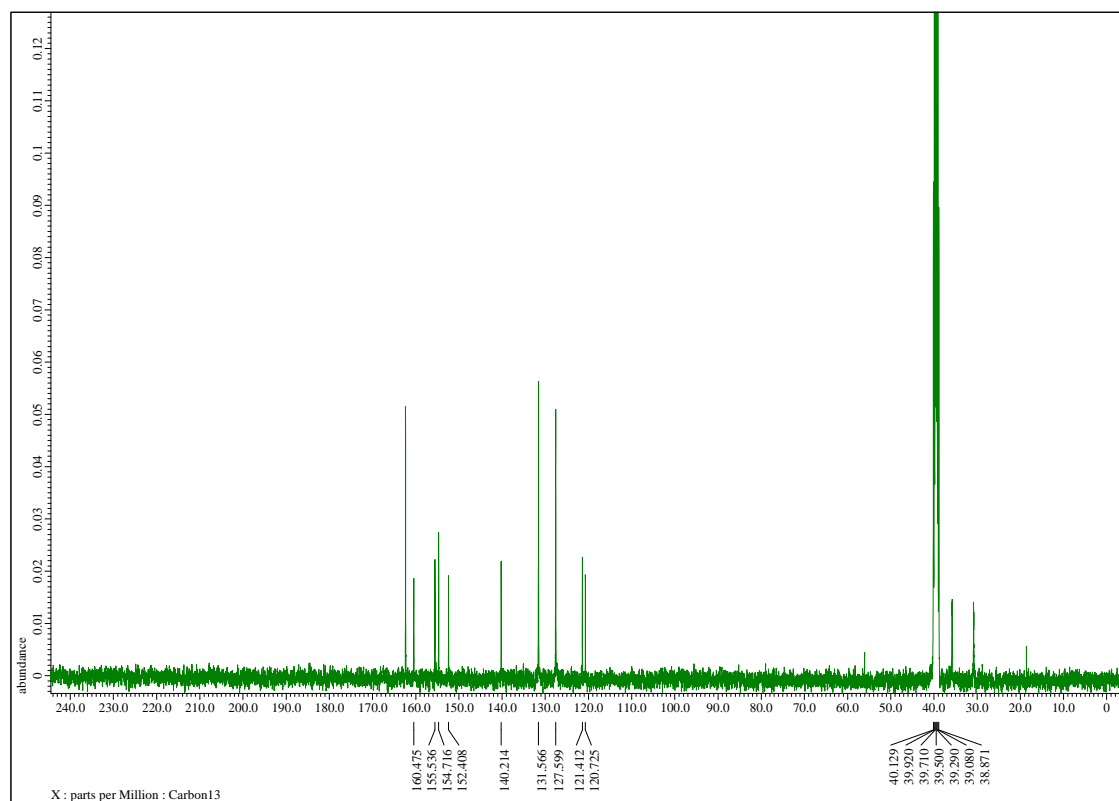
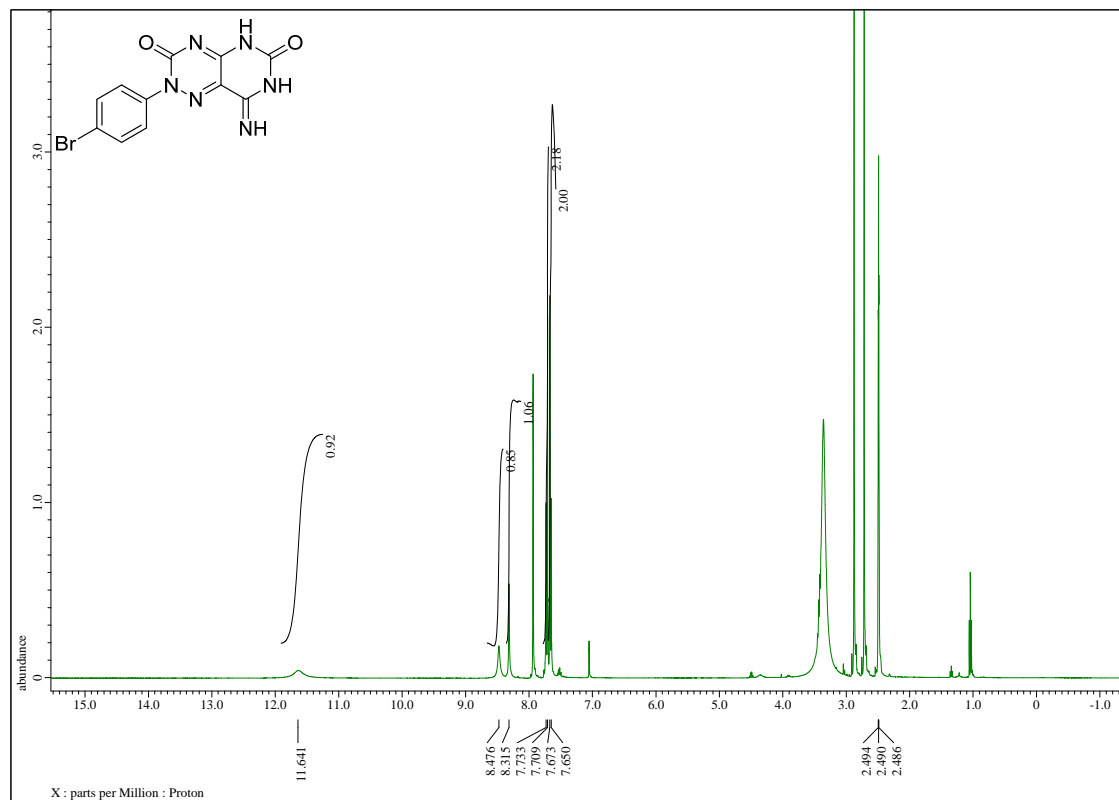
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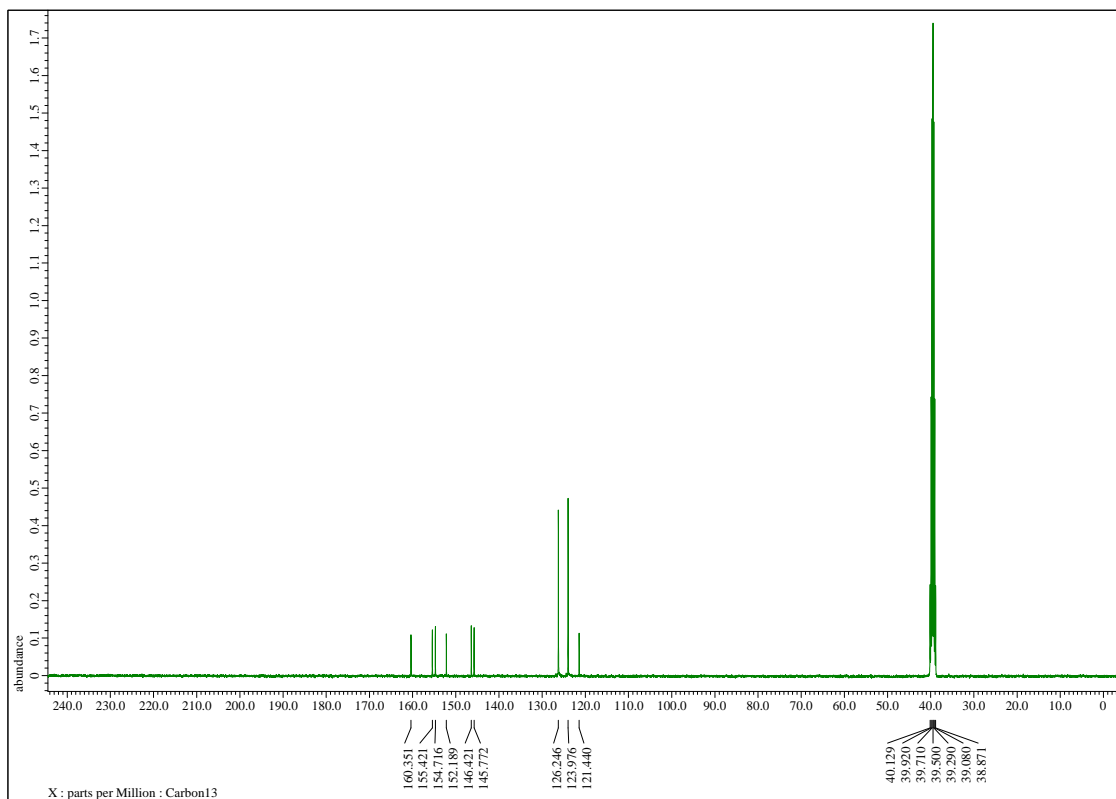
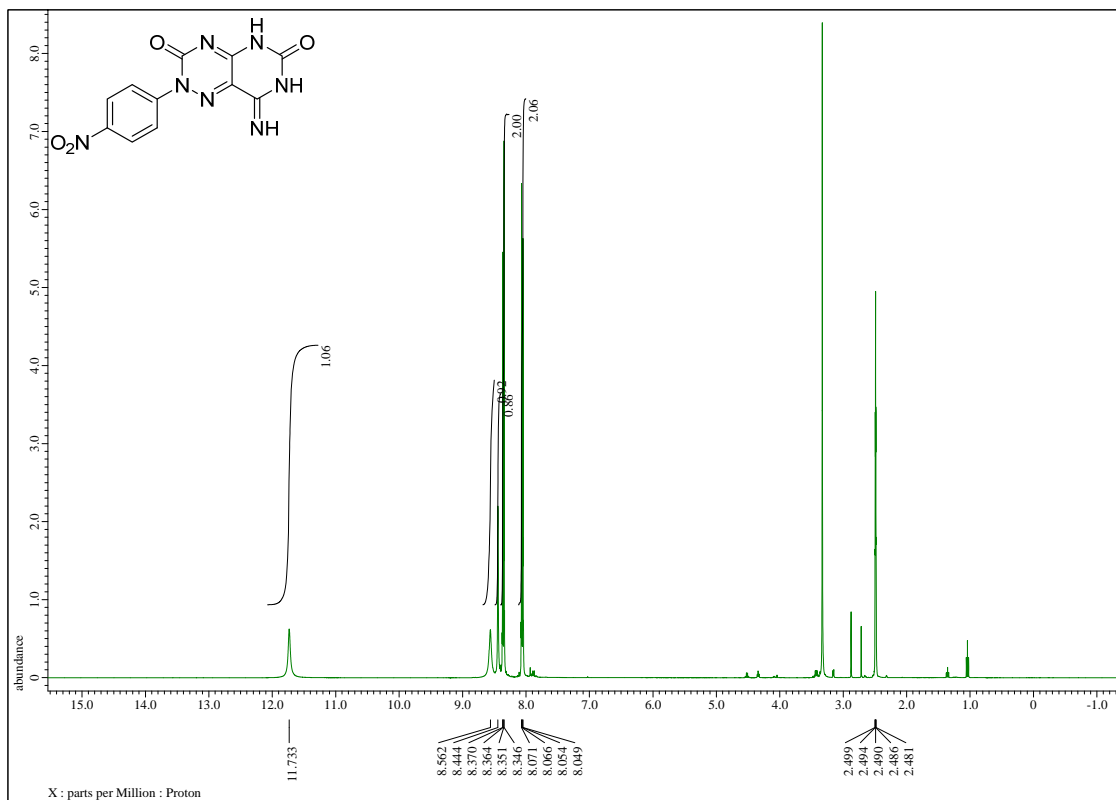
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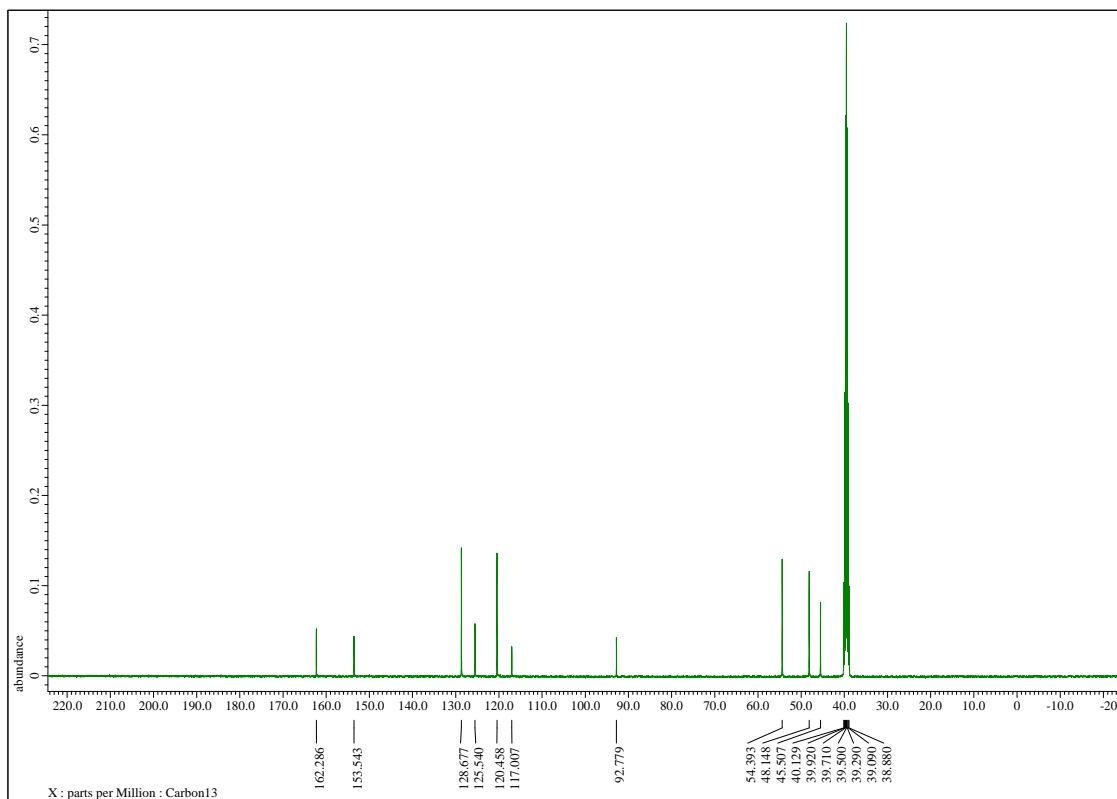
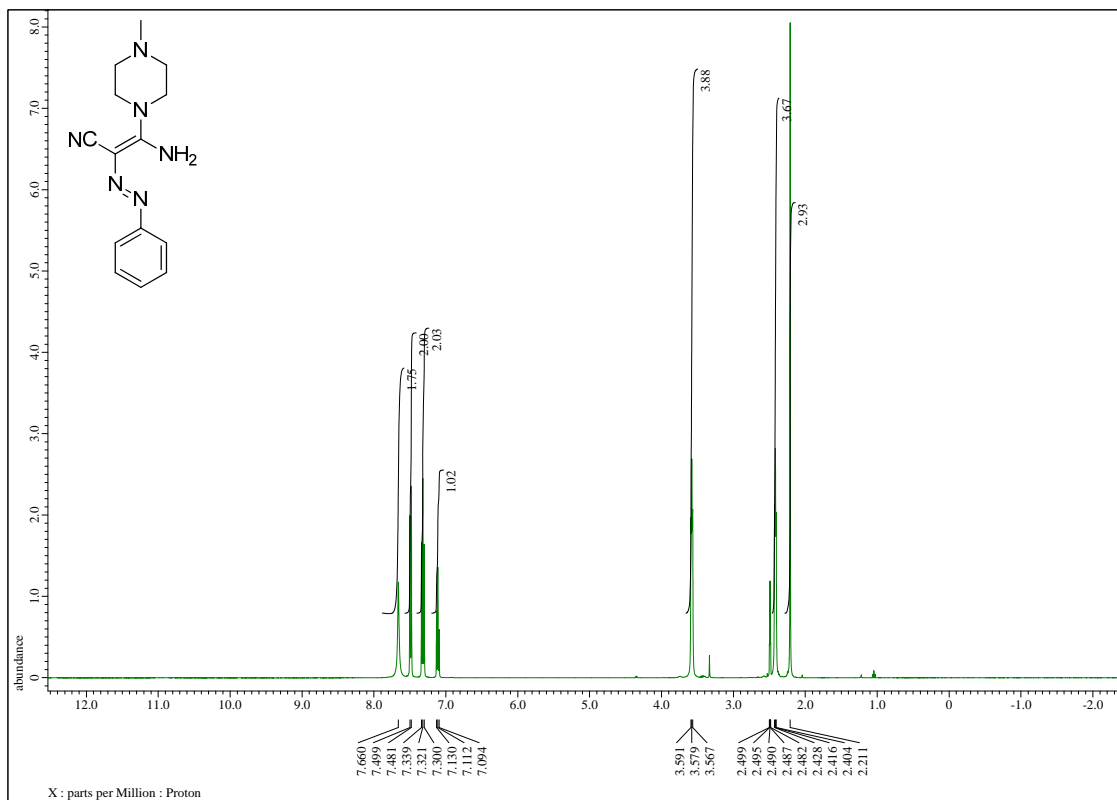
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **4a** ( $\text{DMSO}-d_6$ ) $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **4b** ( $\text{DMSO}-d_6$ )



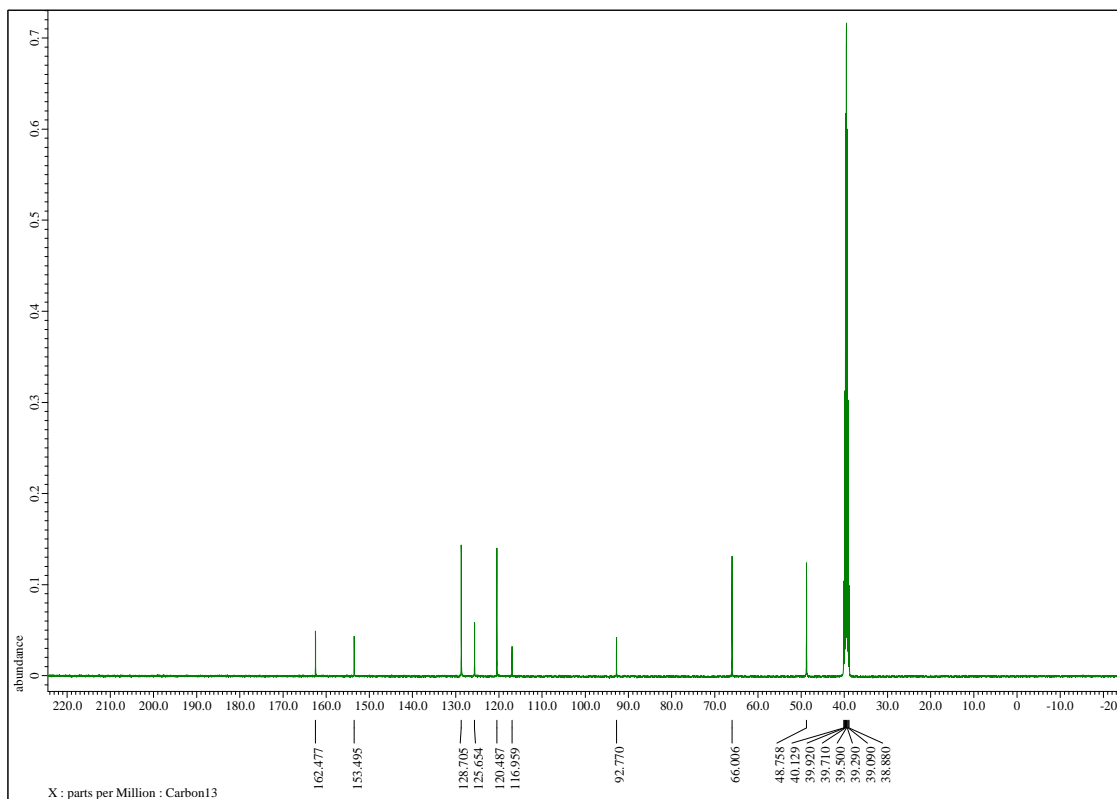
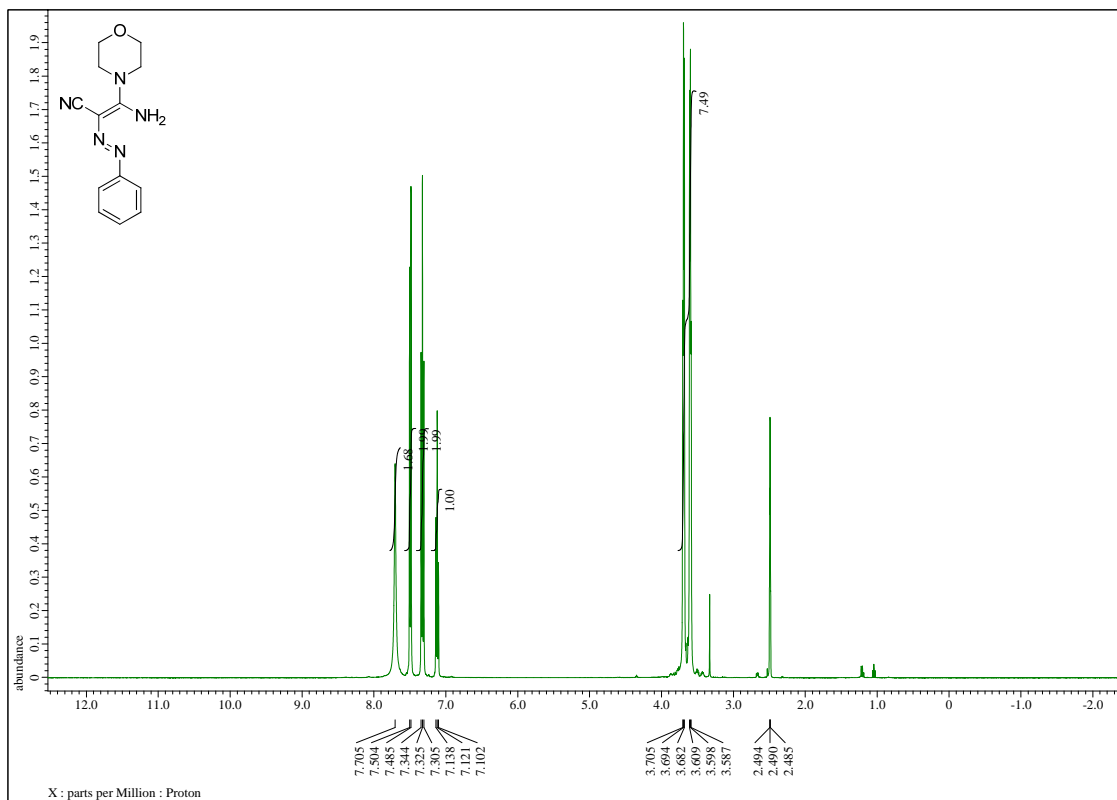
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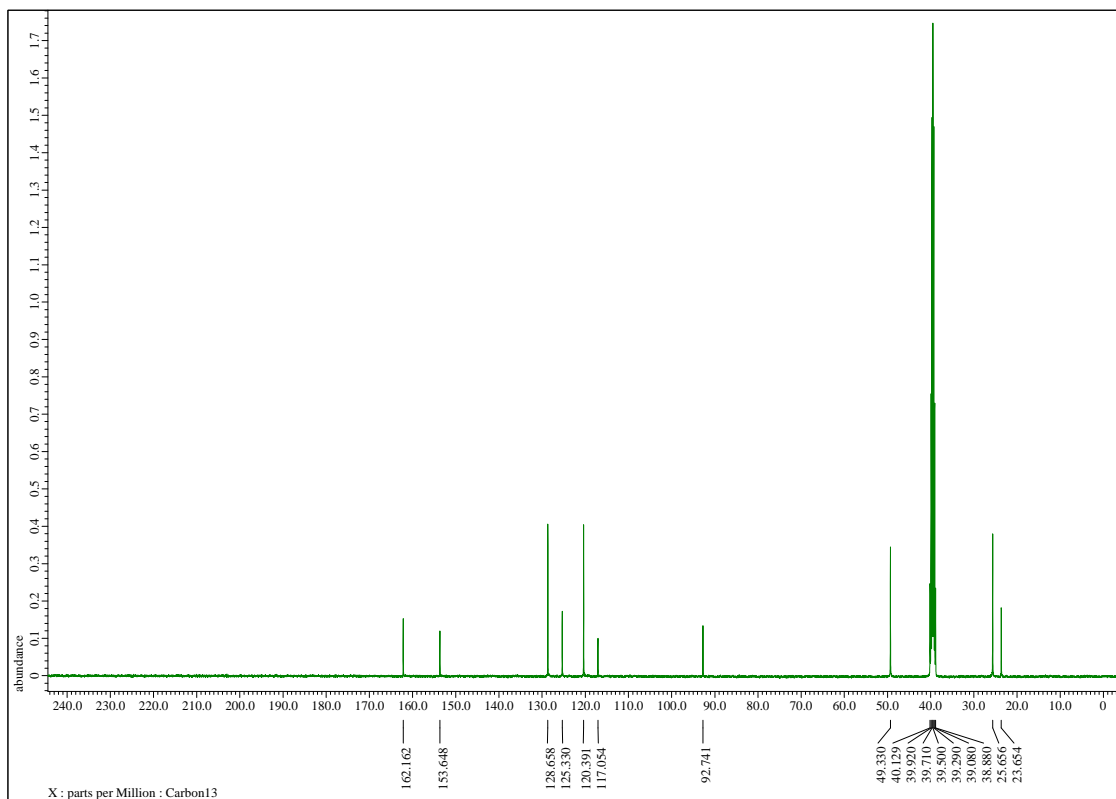
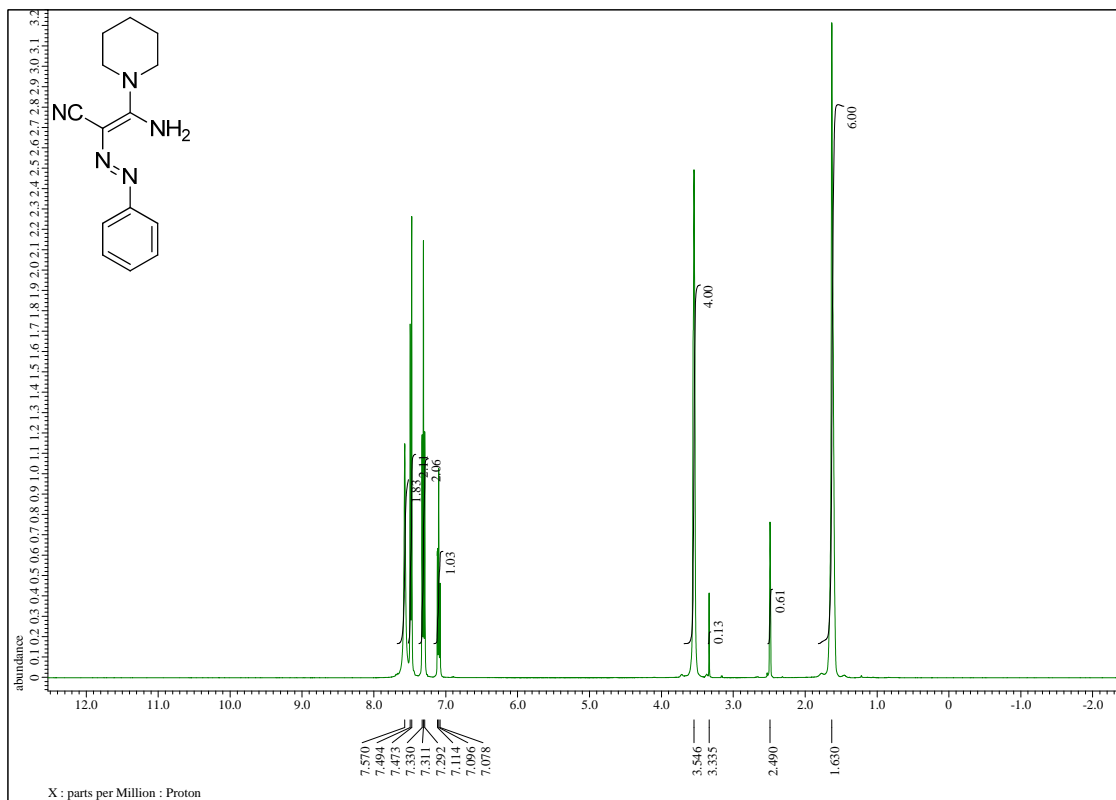




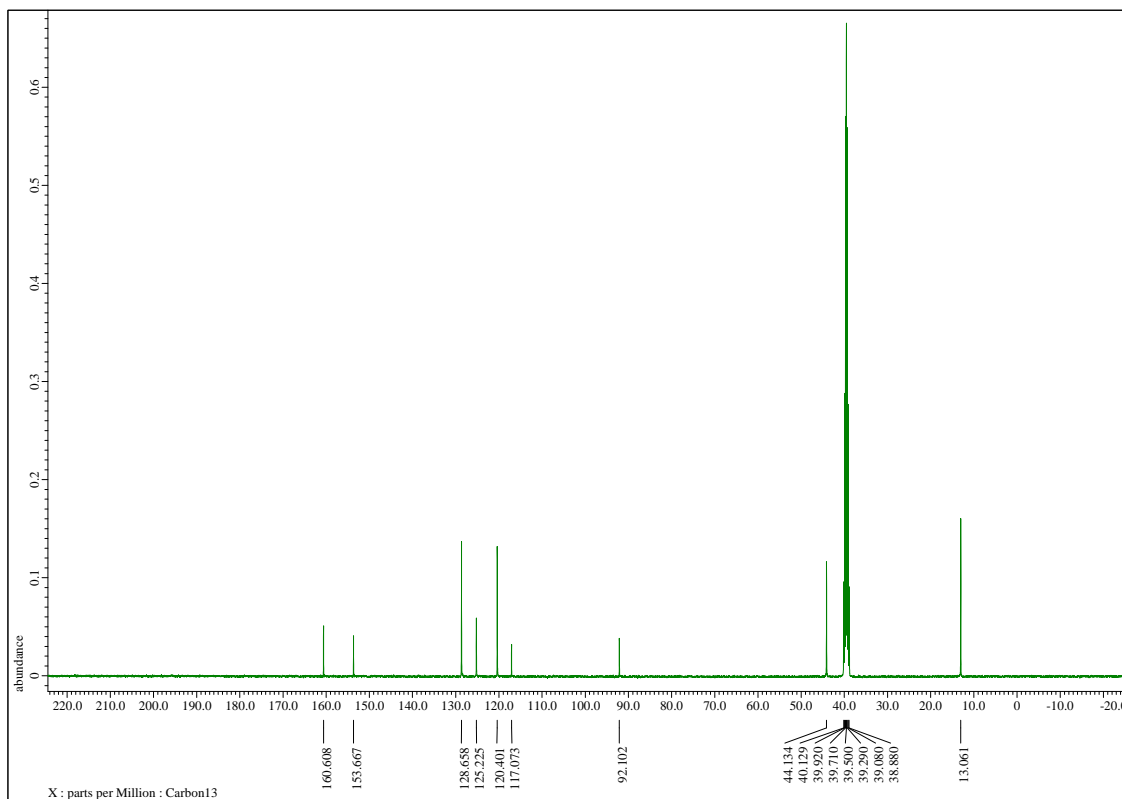
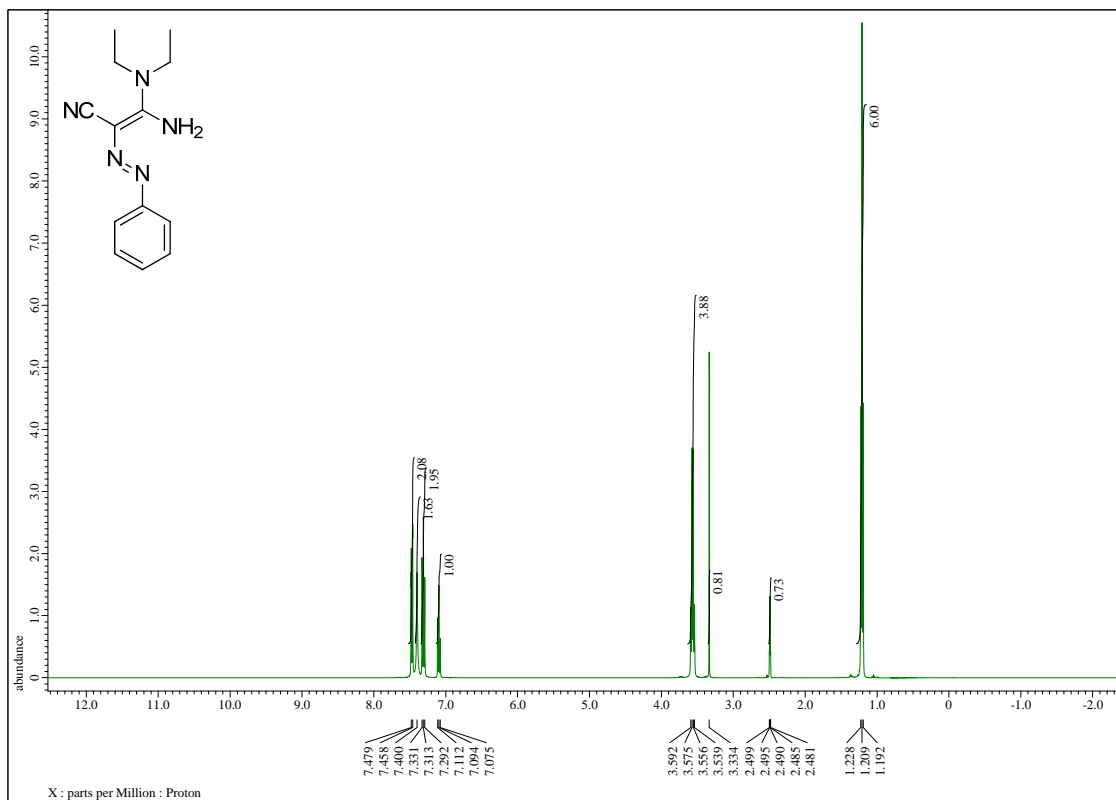
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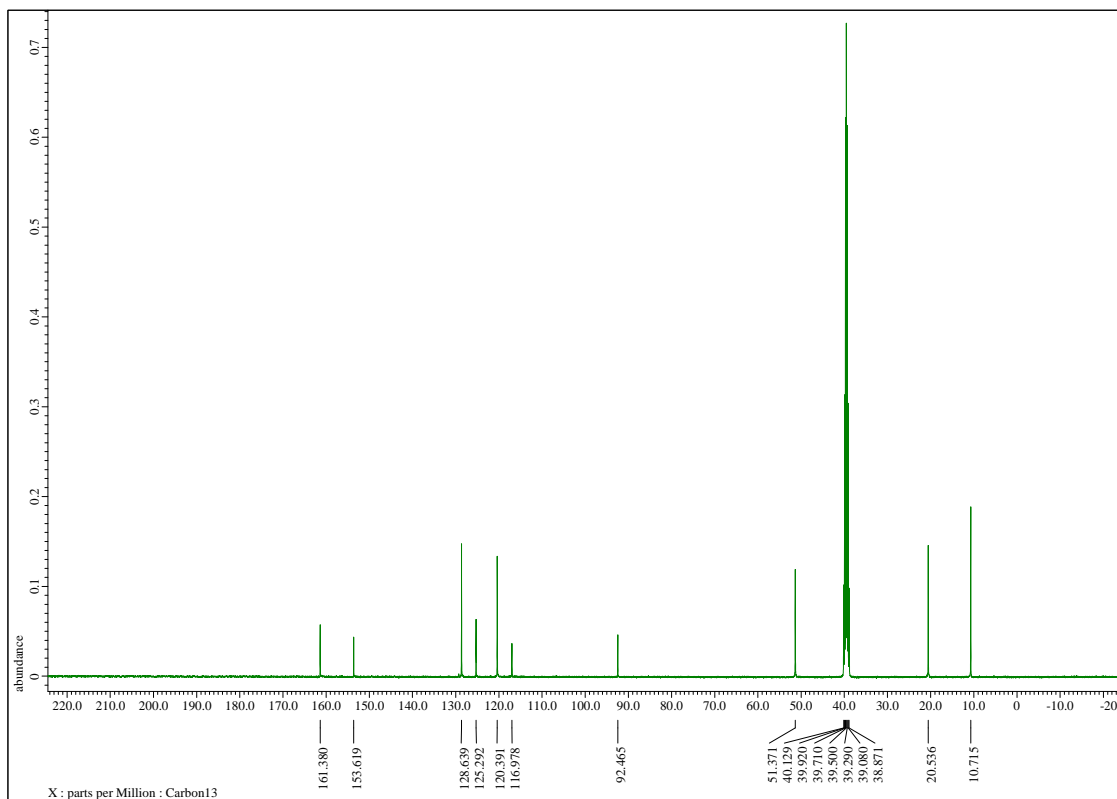
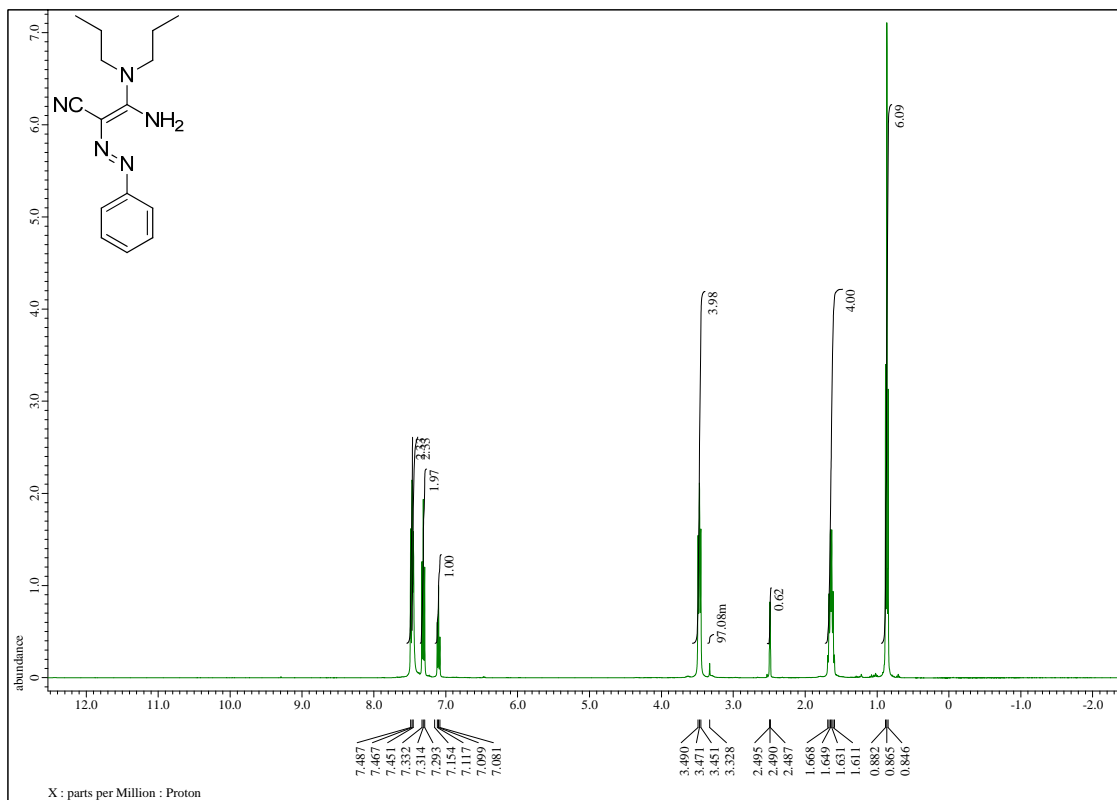
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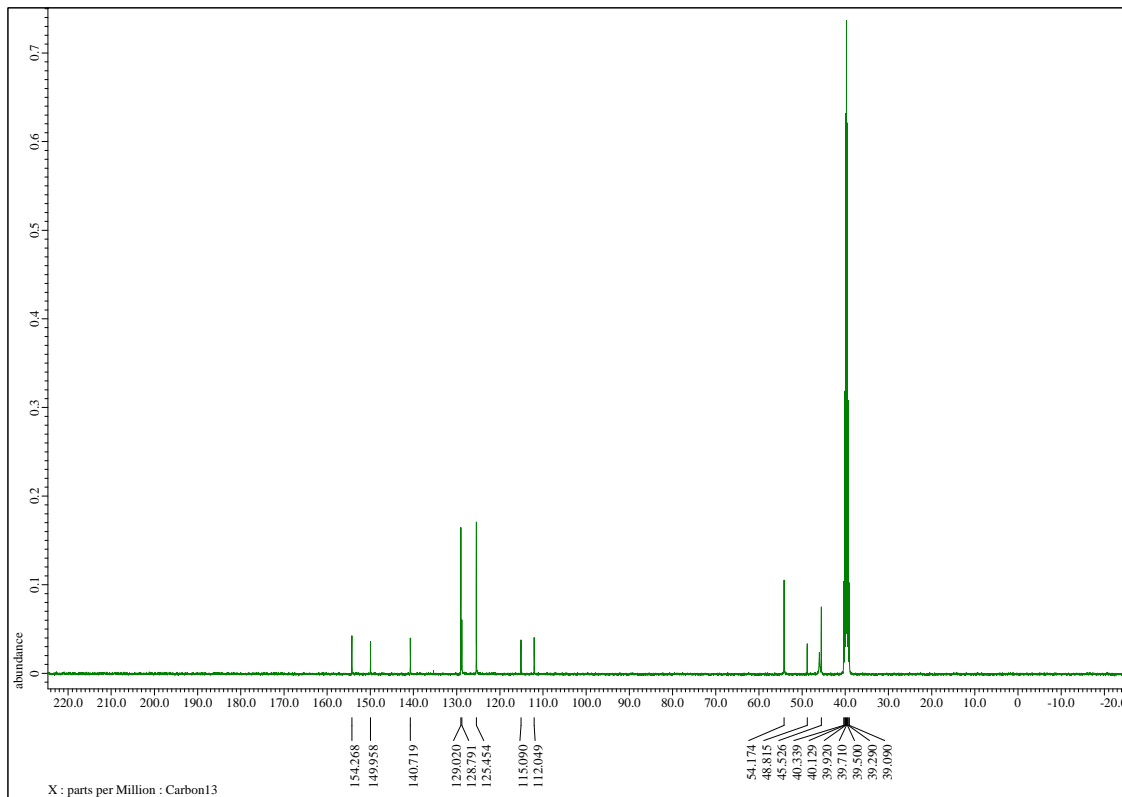
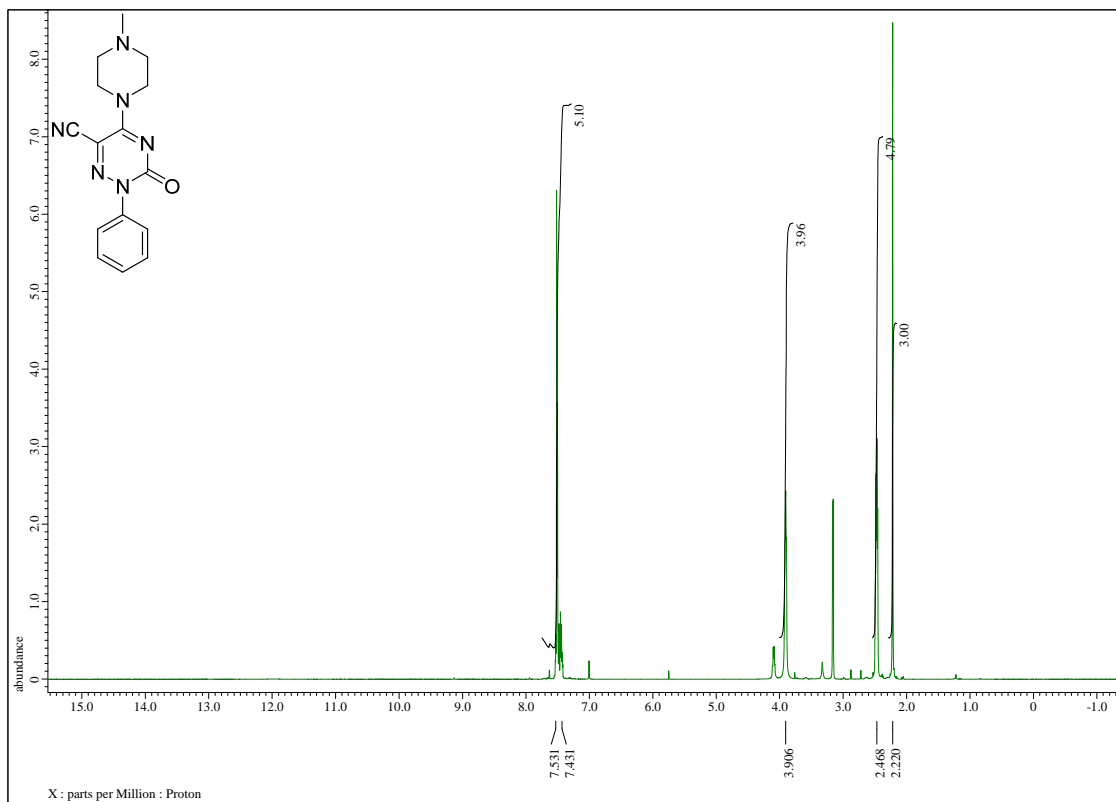
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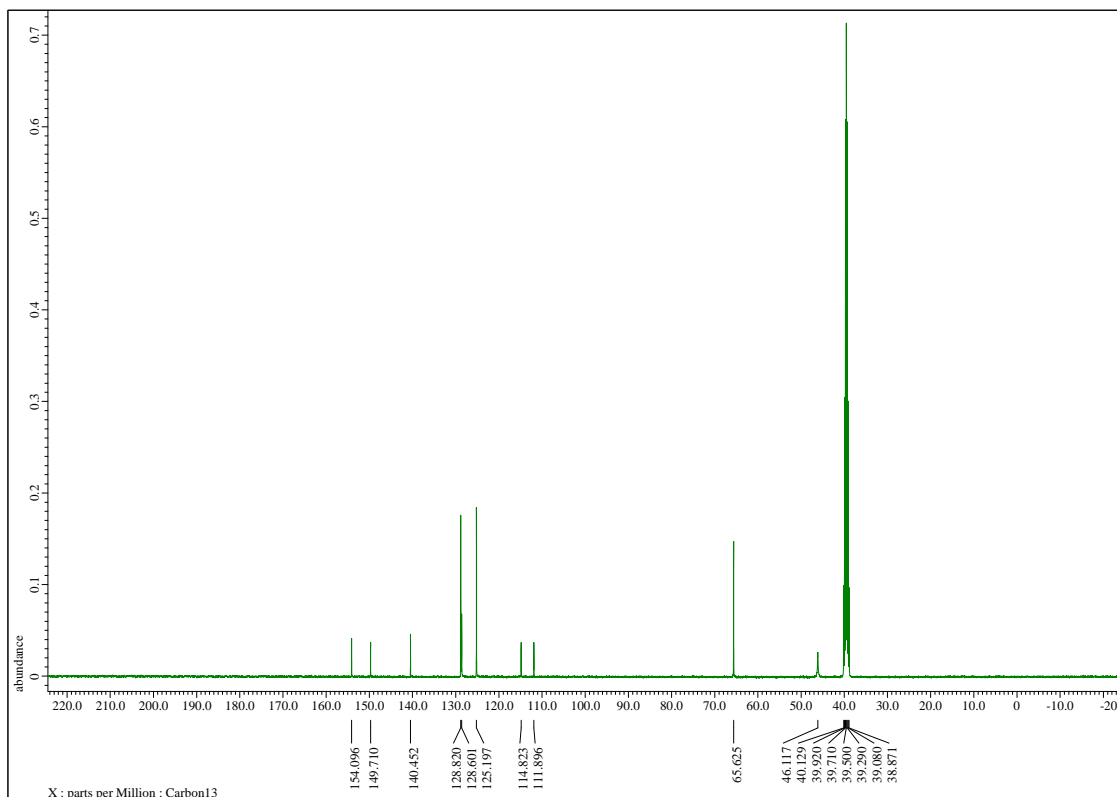
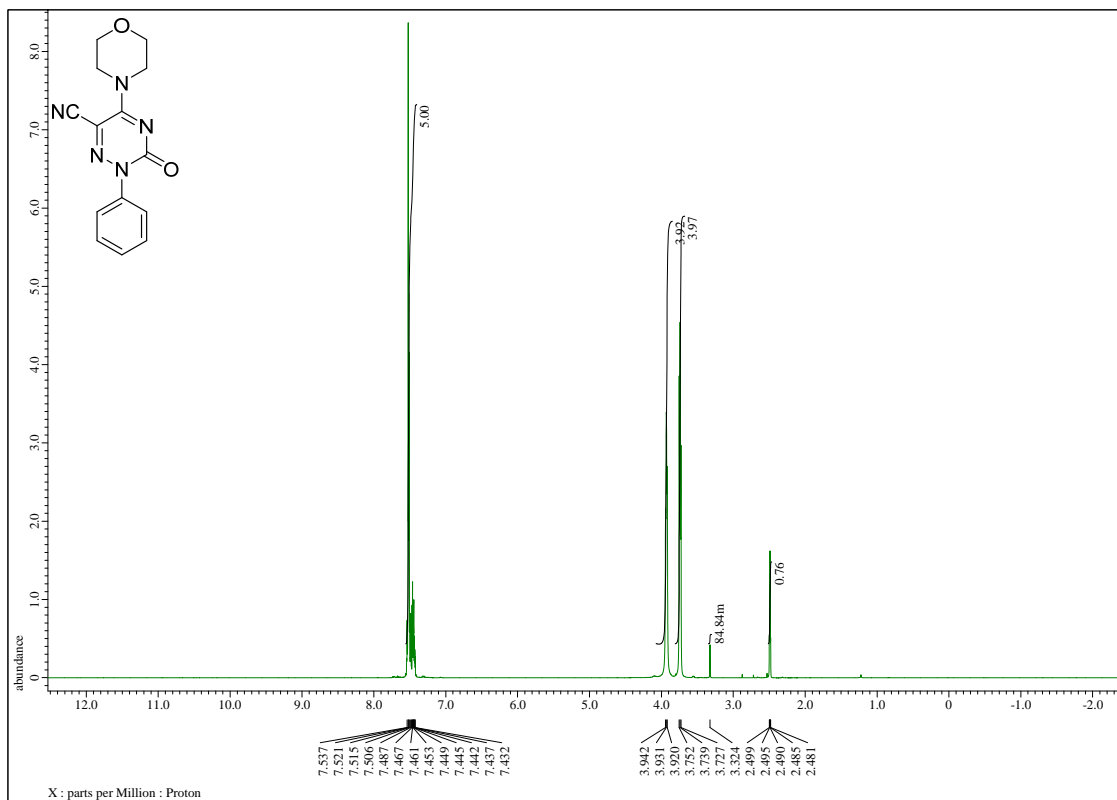
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **6h** (DMSO- $d_6$ )



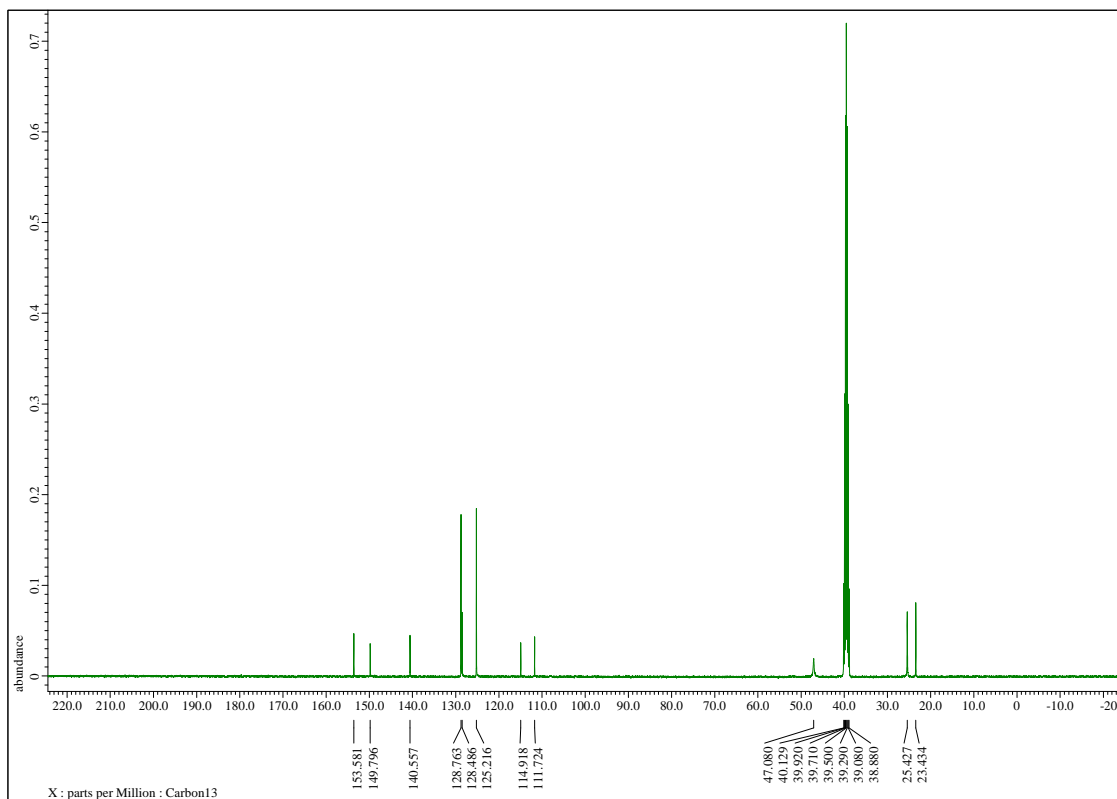
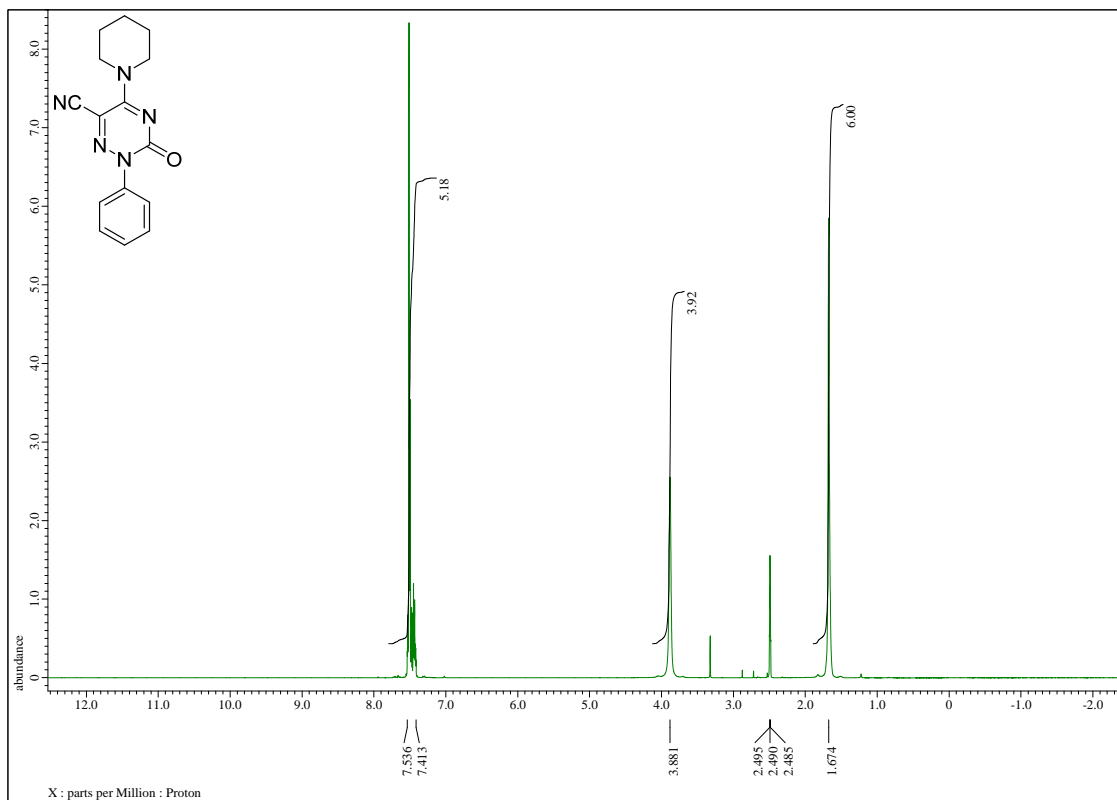
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound 7d (DMSO- $d_6$ )



$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **7e** (DMSO- $d_6$ )

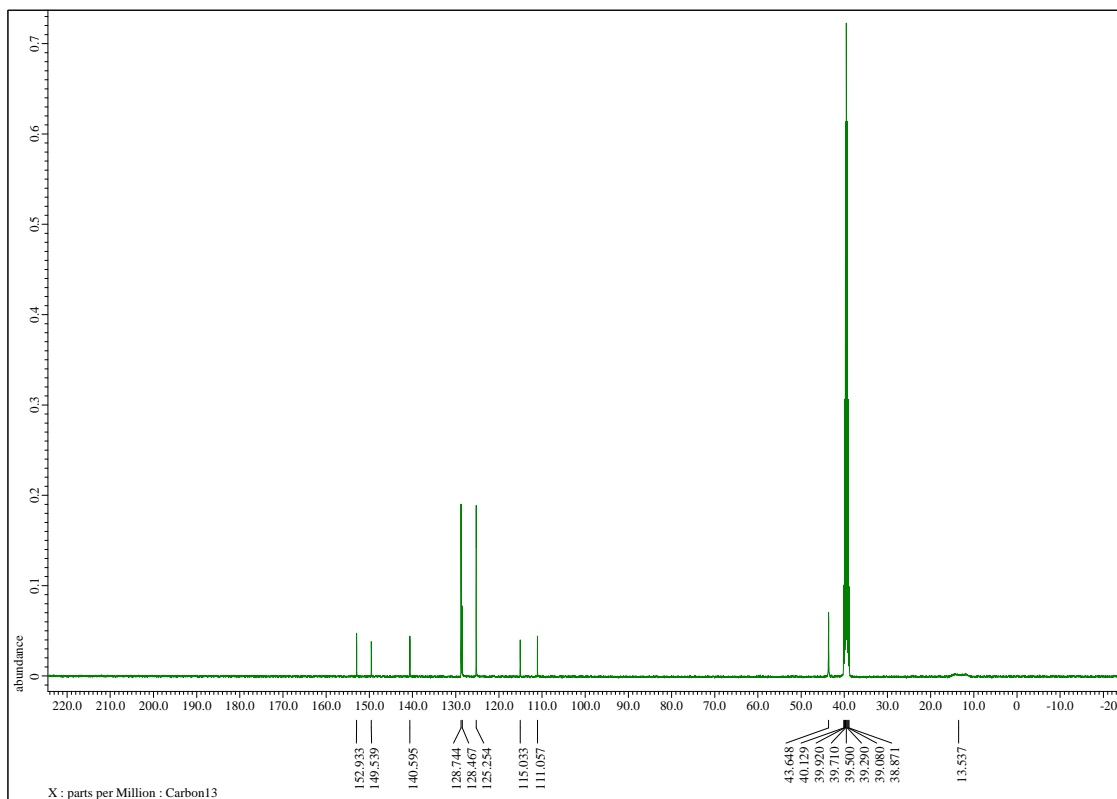
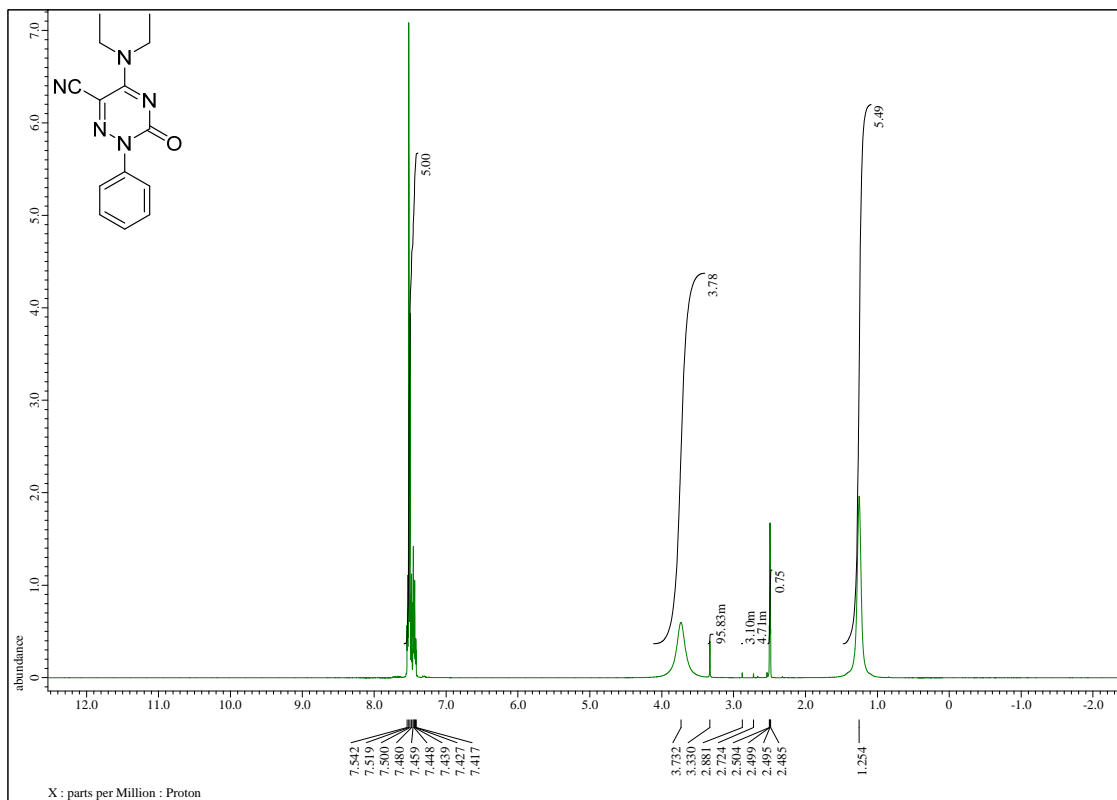


$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **7f** (DMSO- $d_6$ )

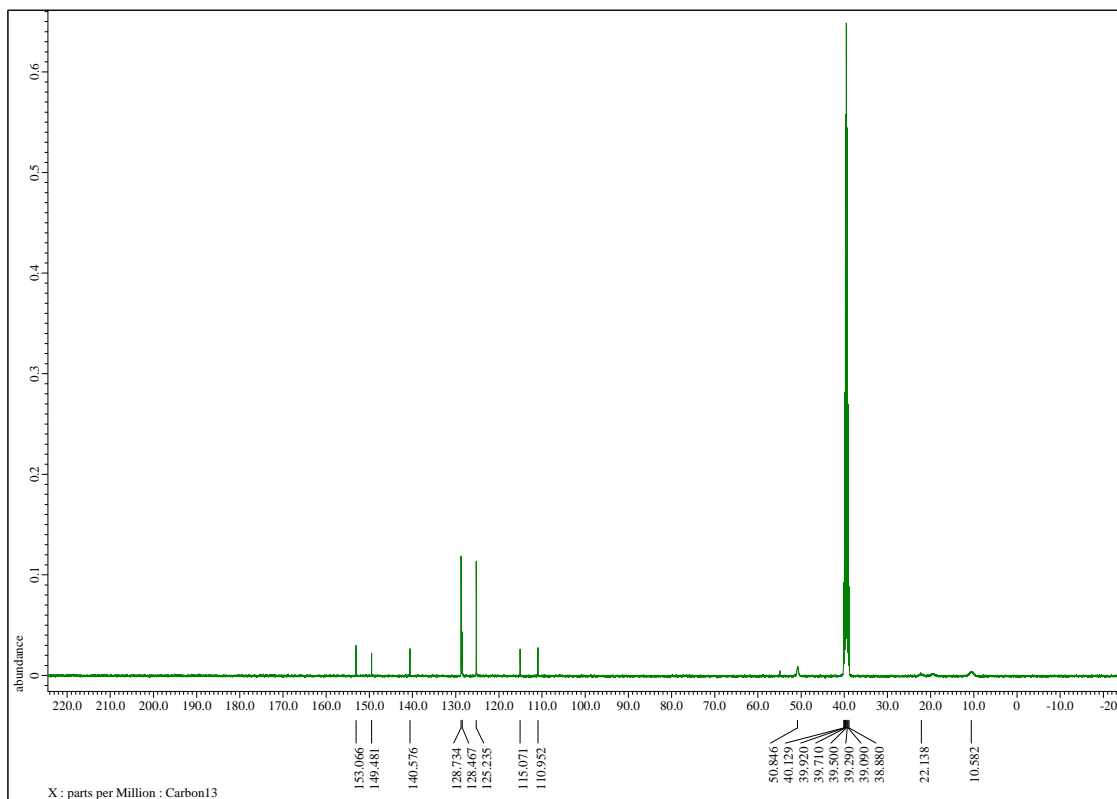
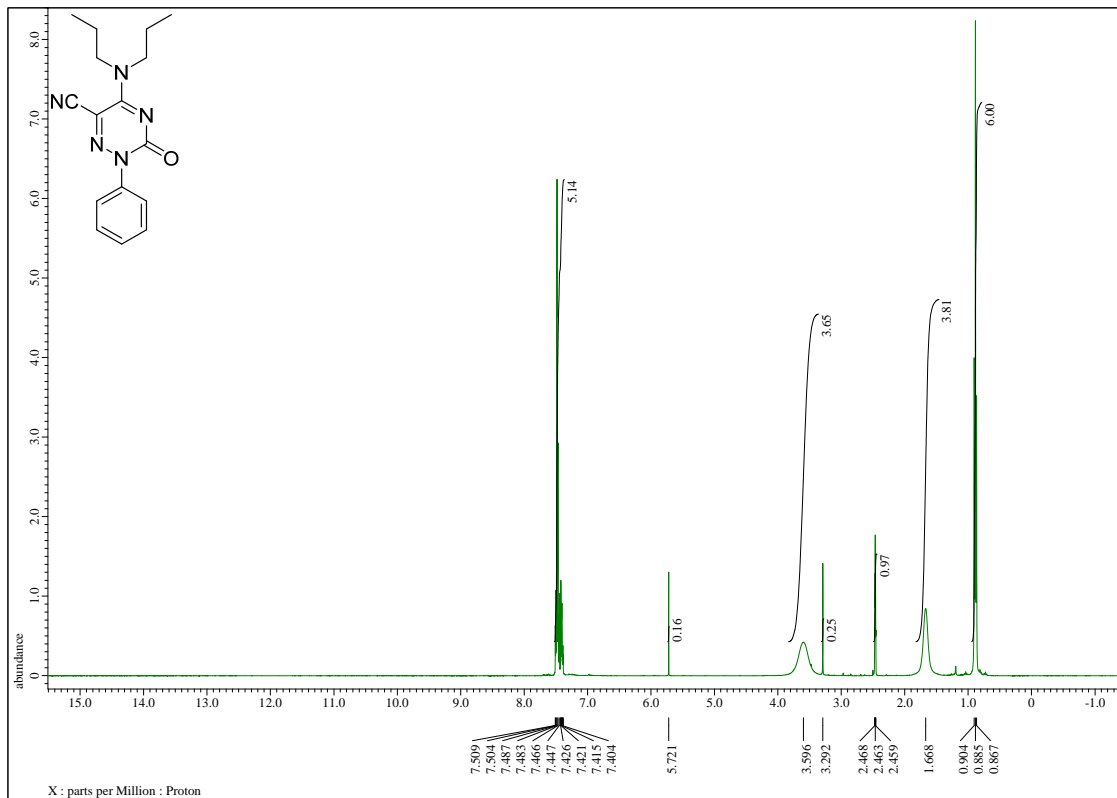


$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **7g** (DMSO- $d_6$ )

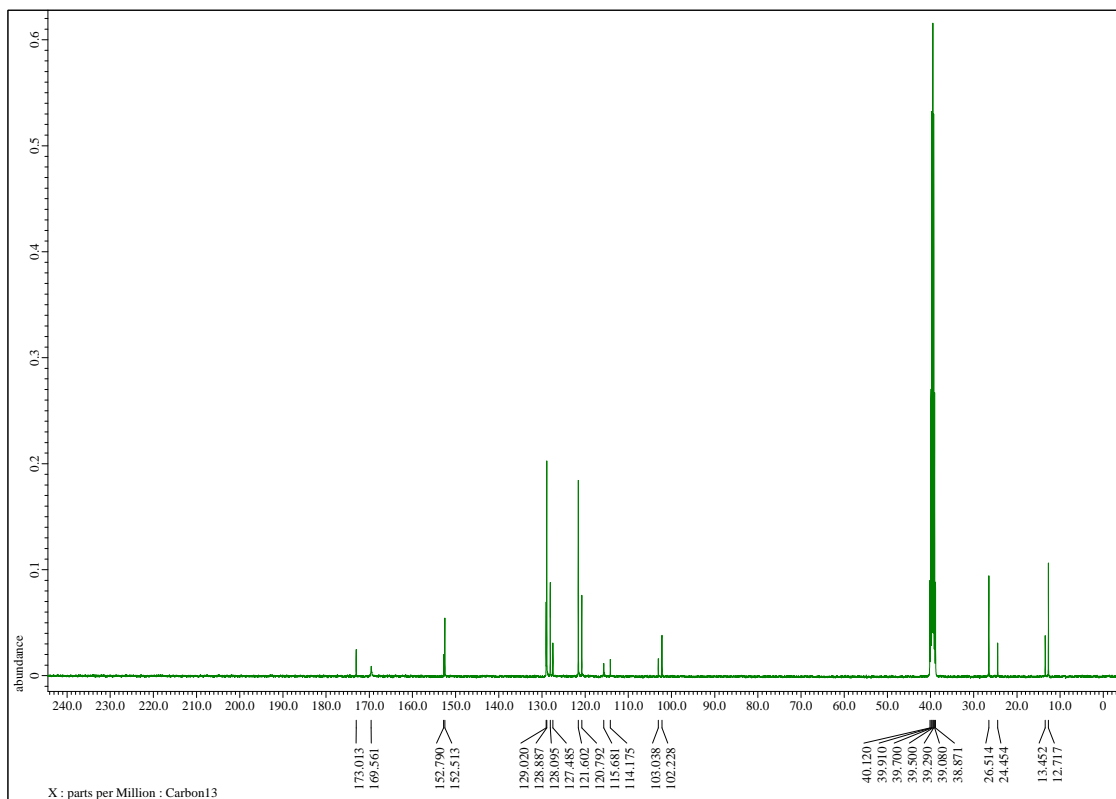
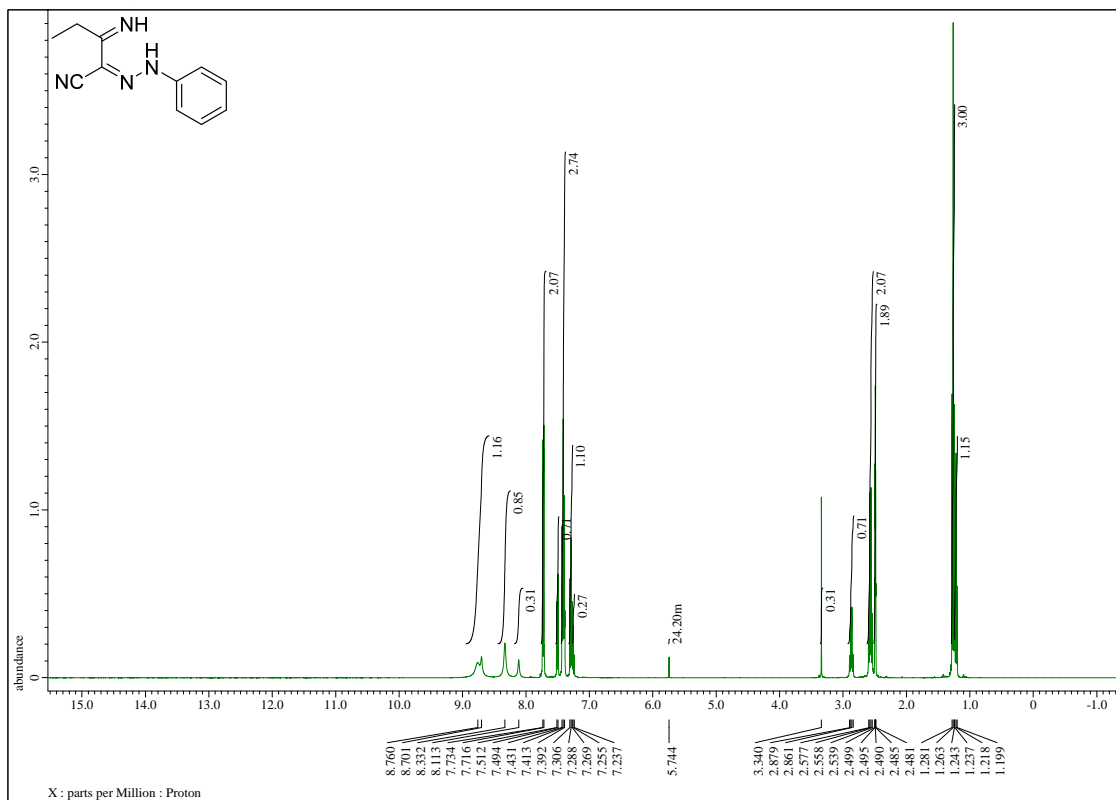




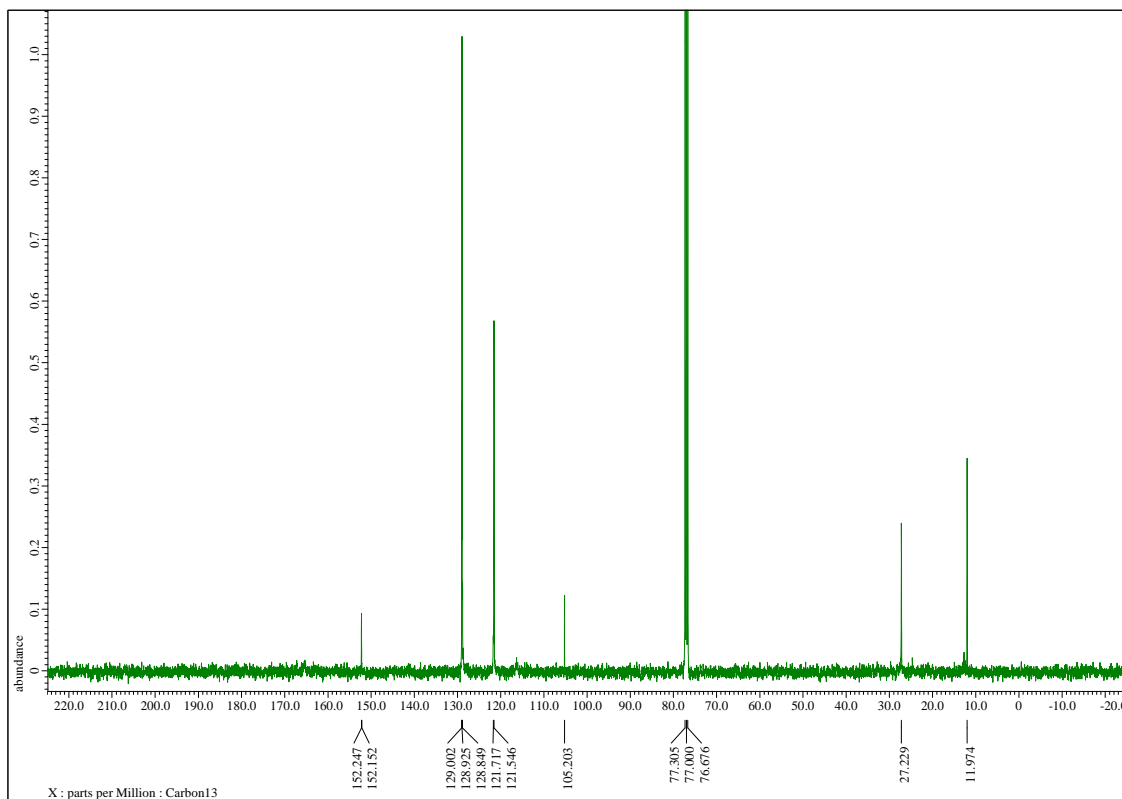
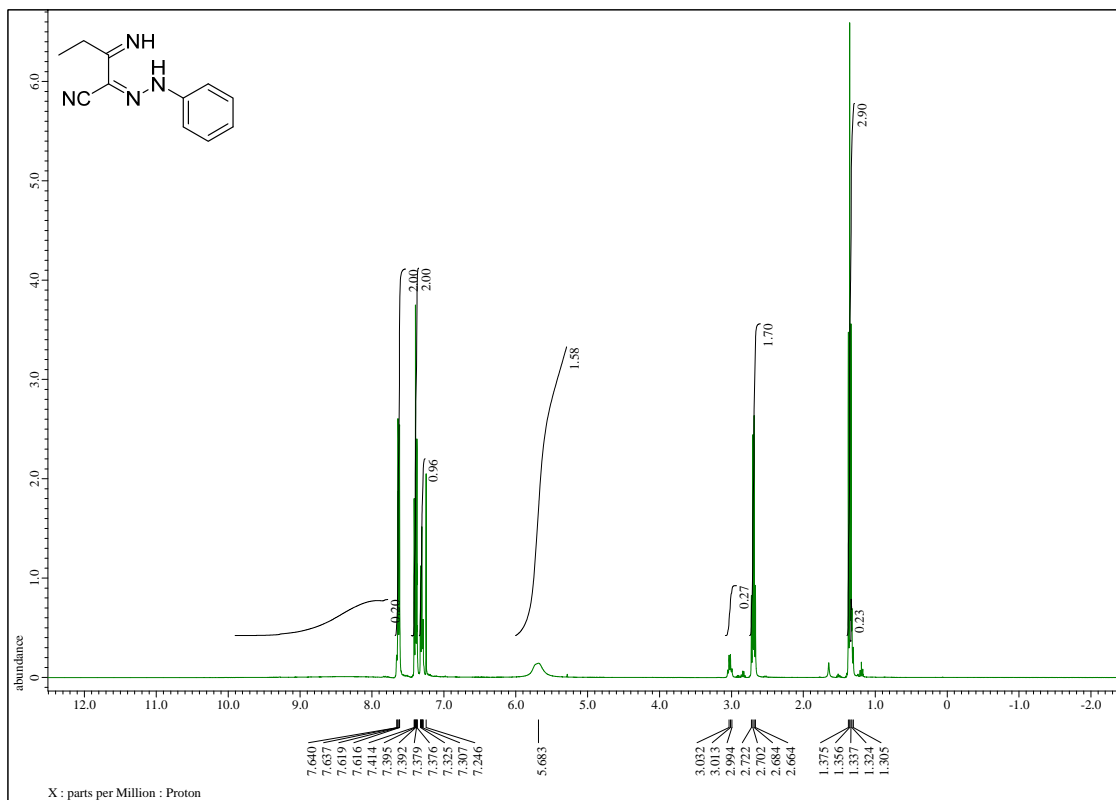
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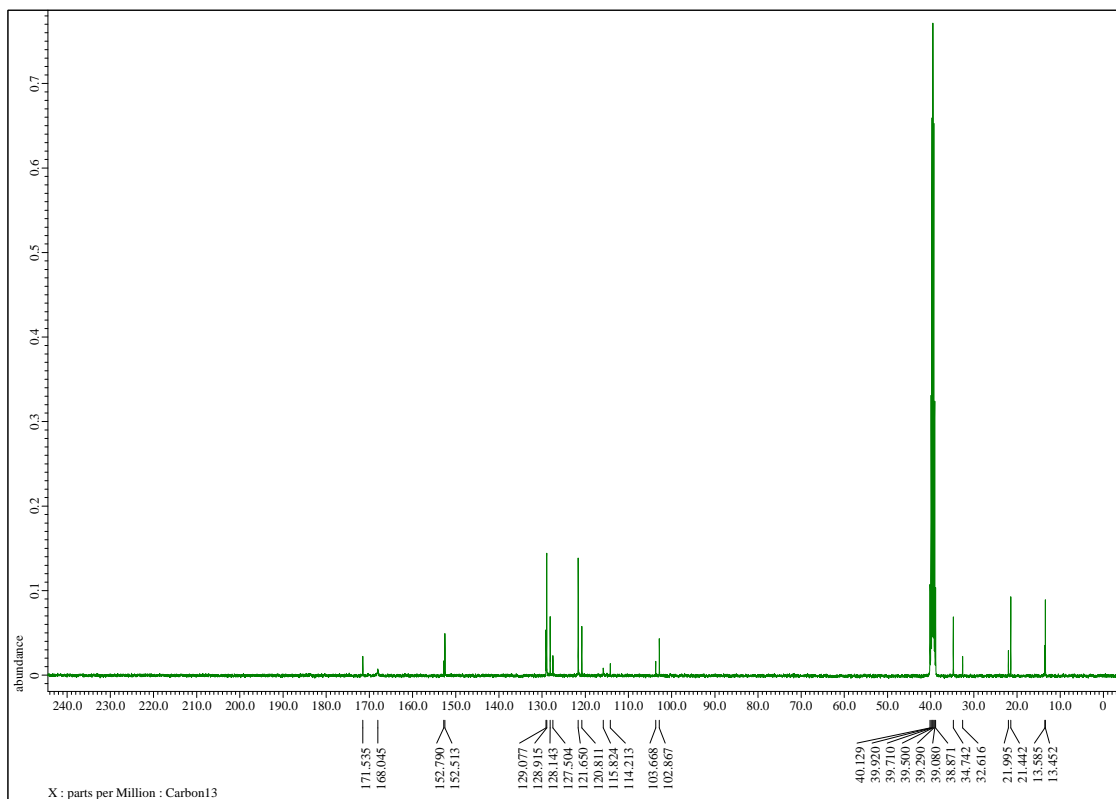
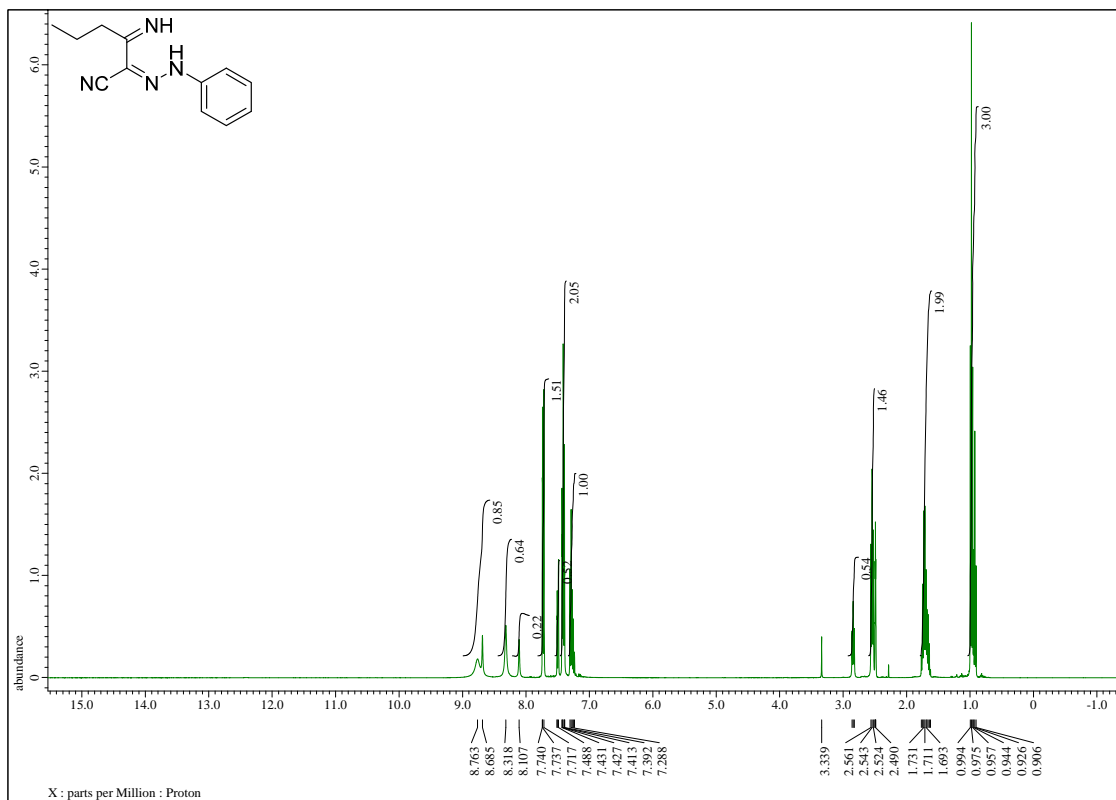
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **8i** (DMSO- $d_6$ )



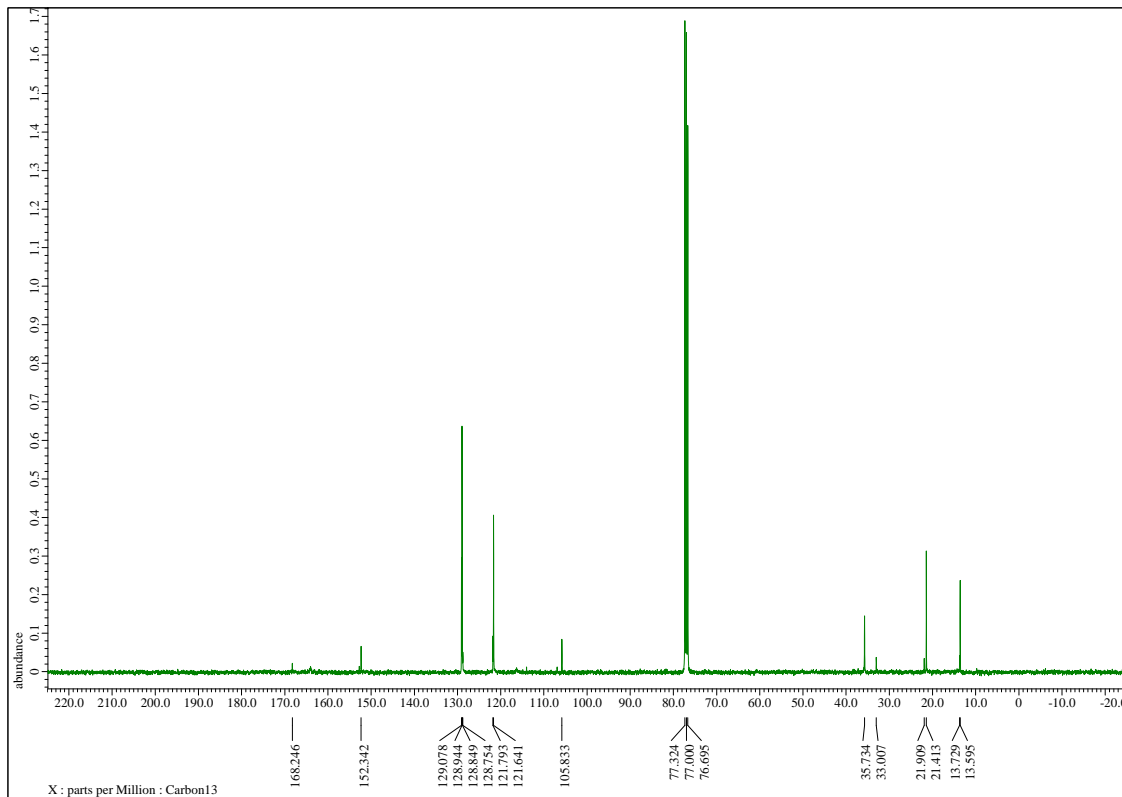
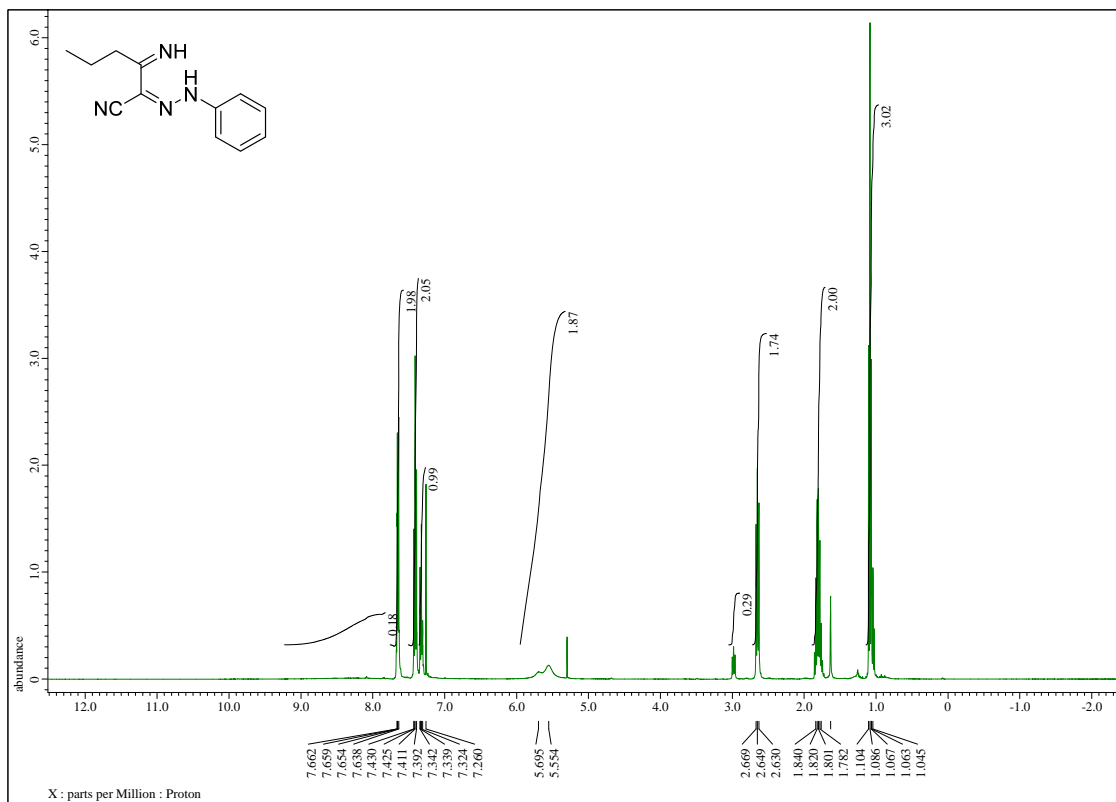
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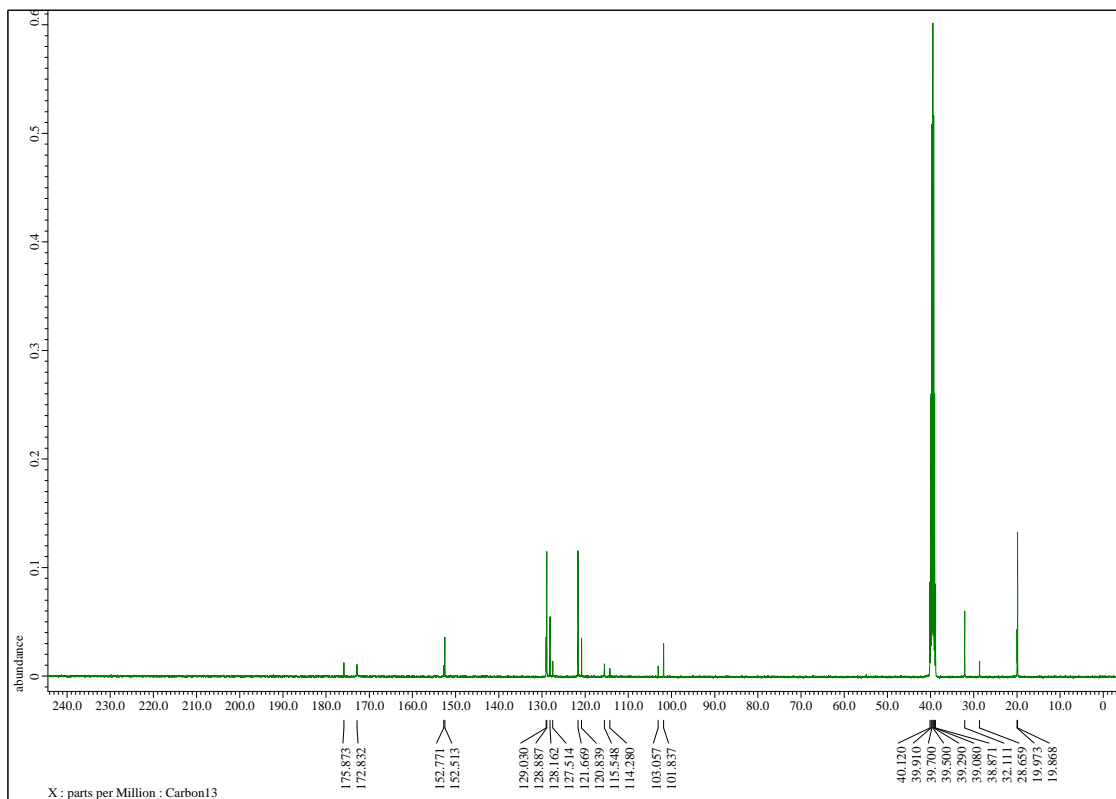
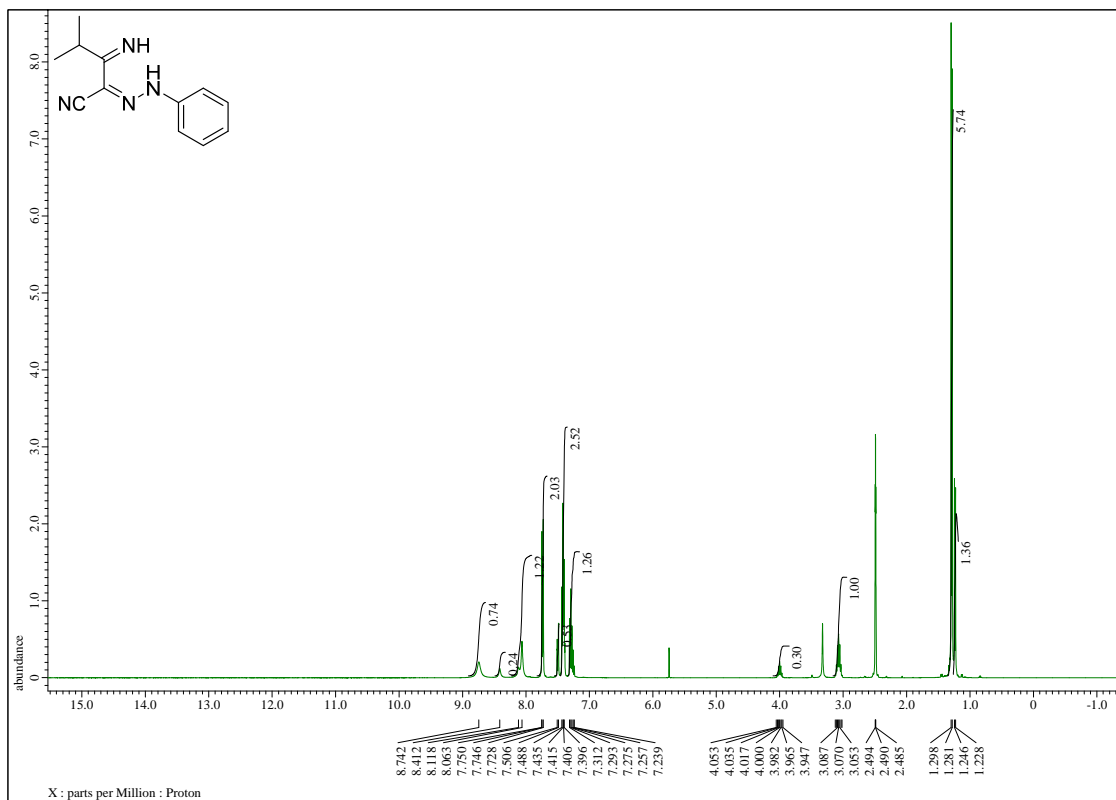
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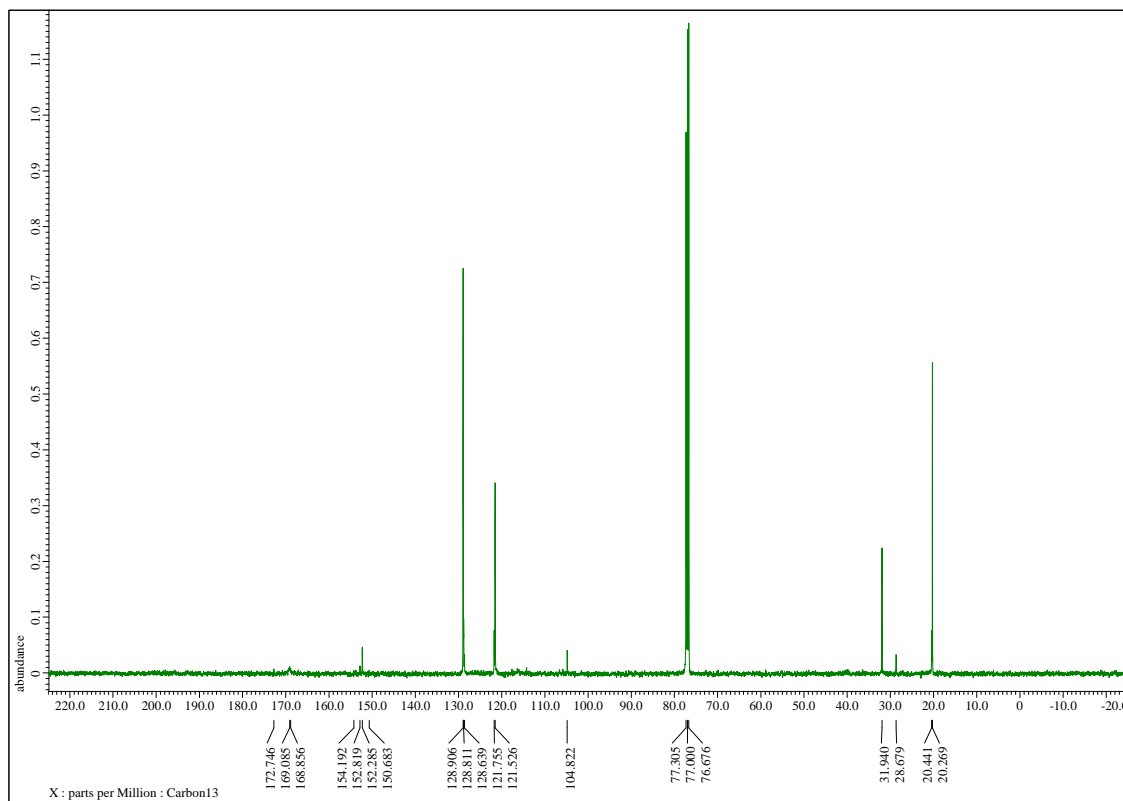
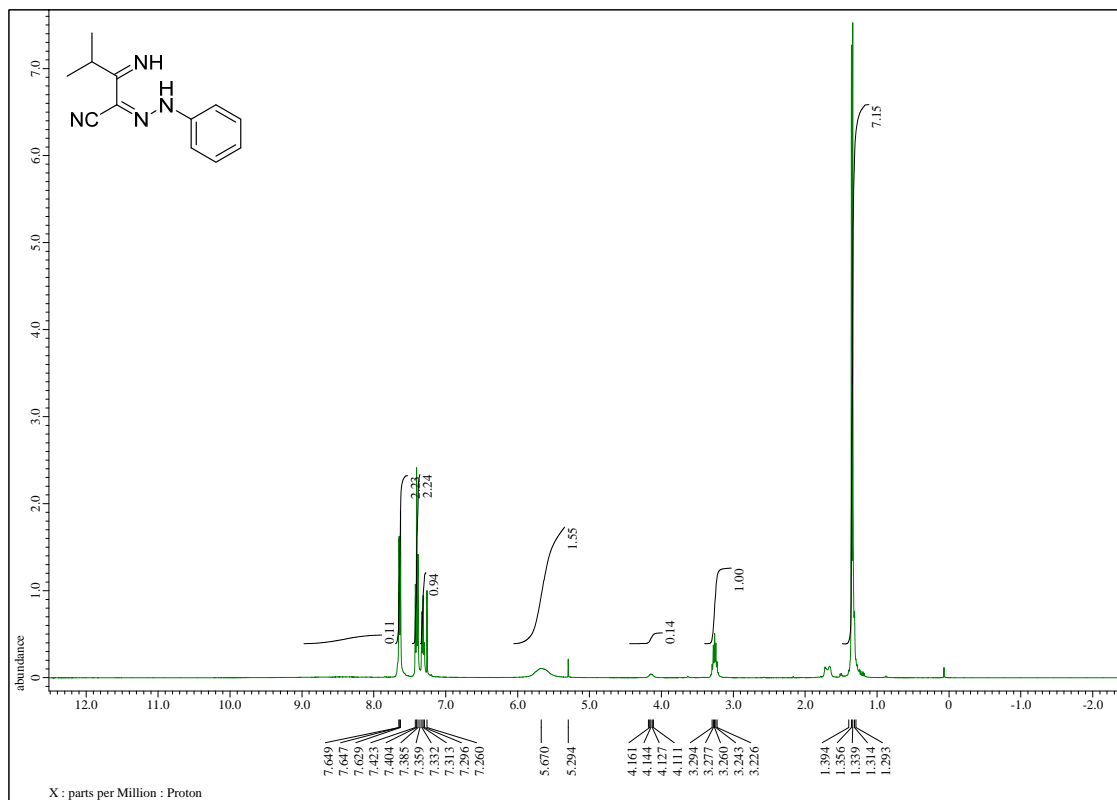
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **8j** (CDCl<sub>3</sub>)



$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **8k** (DMSO- $d_6$ )

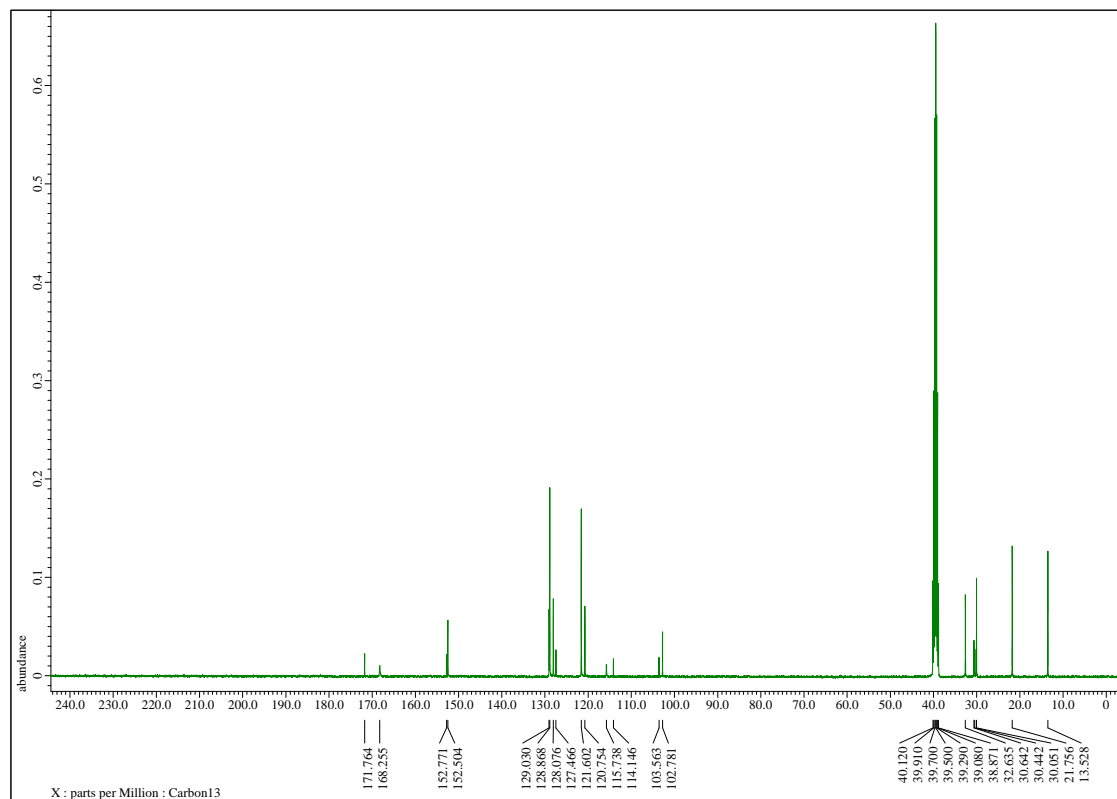
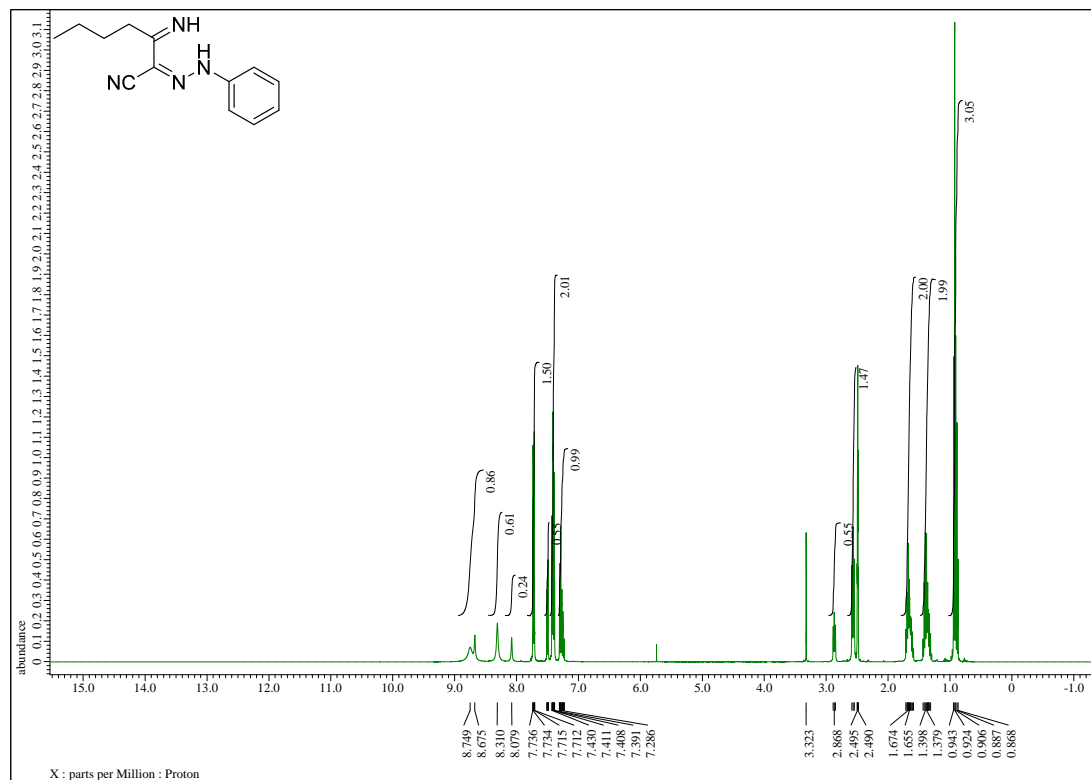


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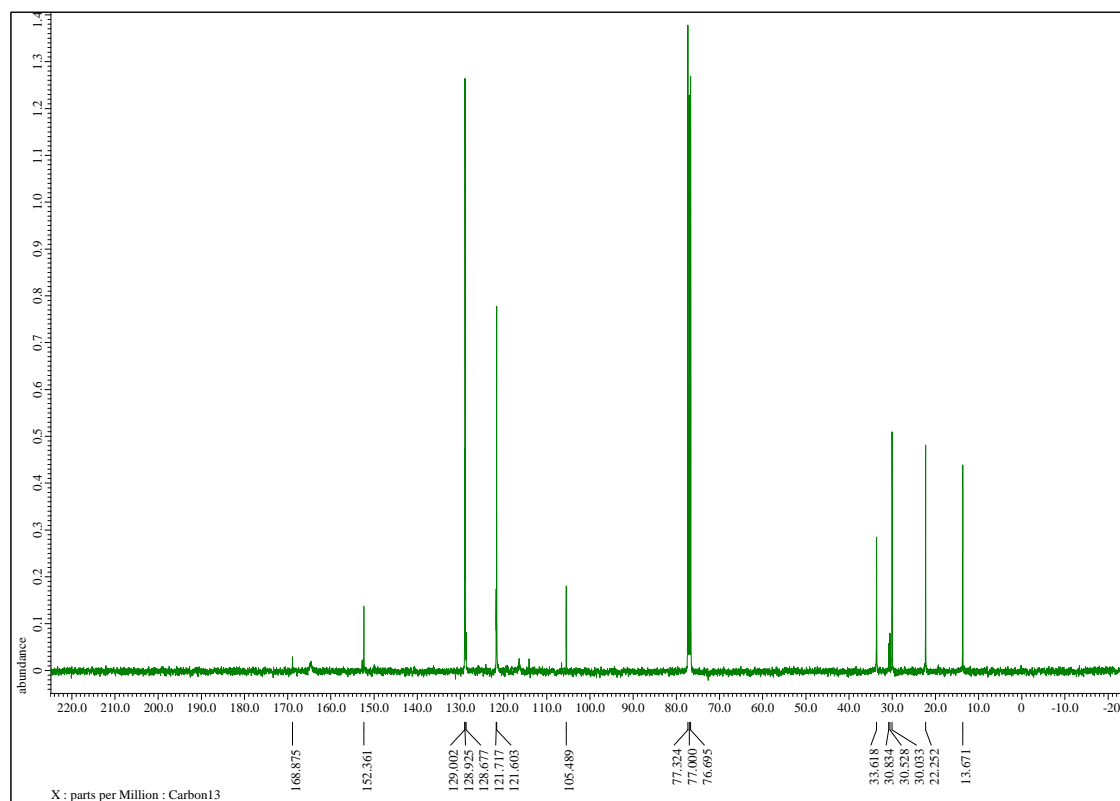
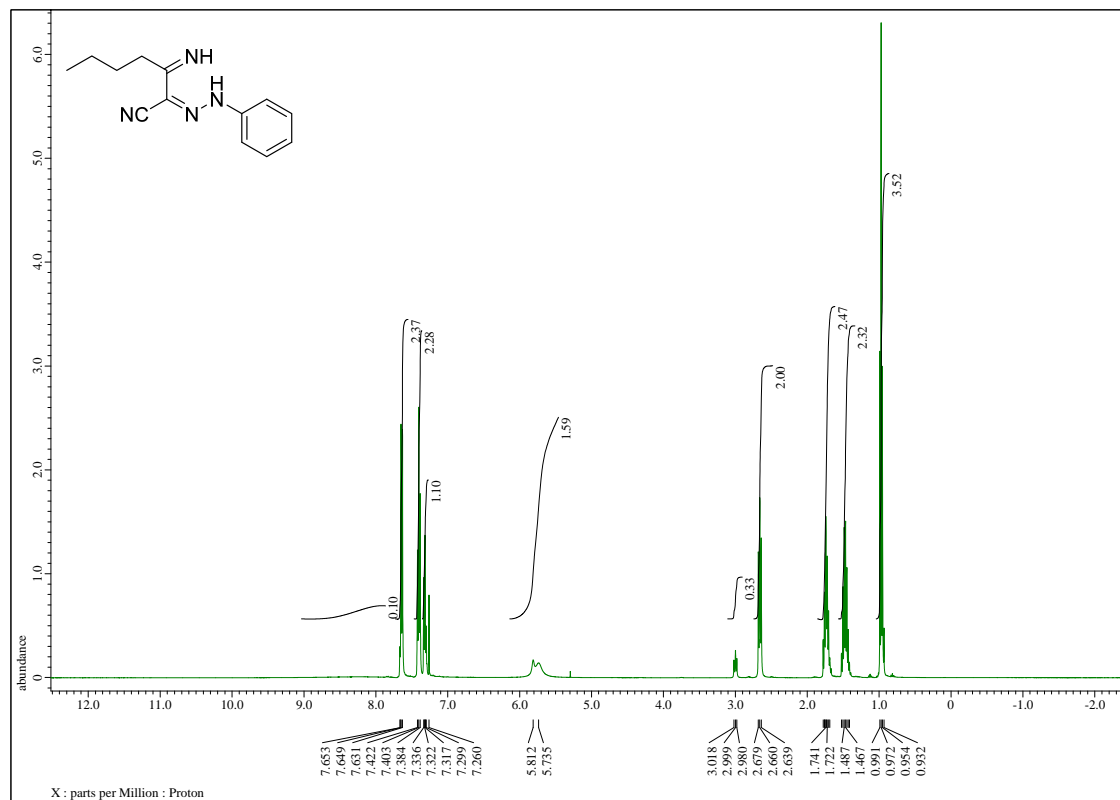


$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **8I** (DMSO- $d_6$ )

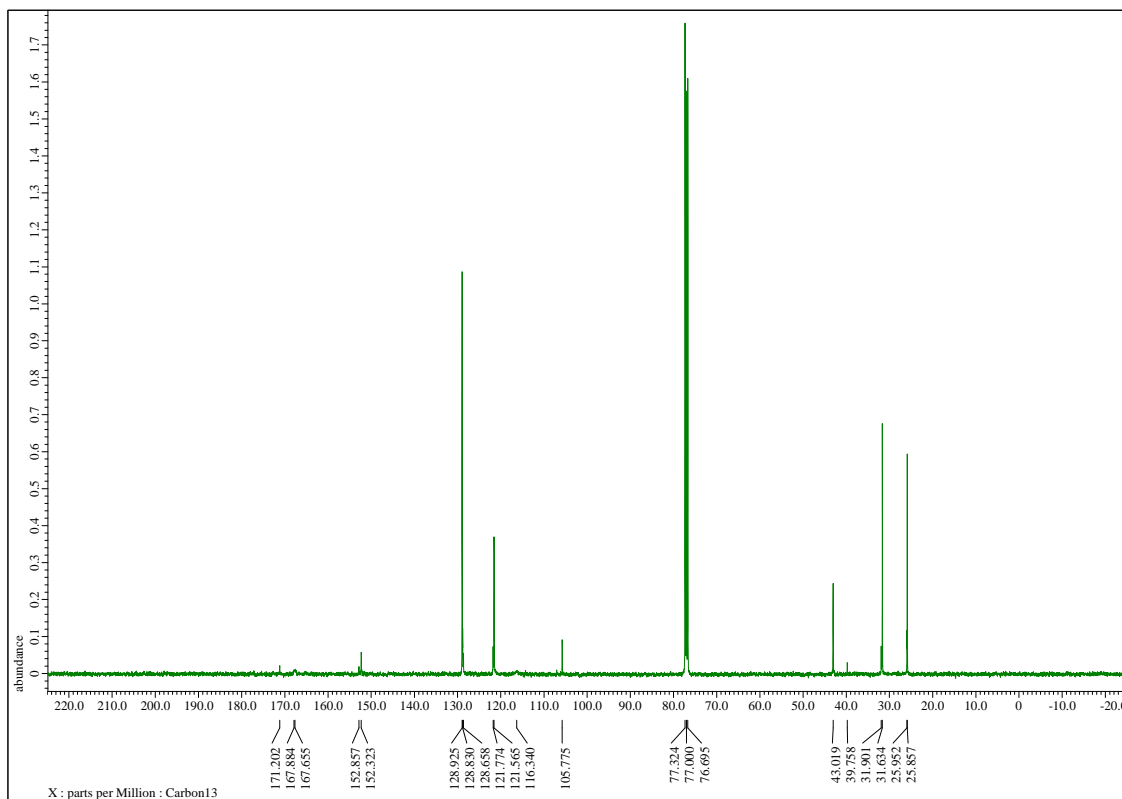
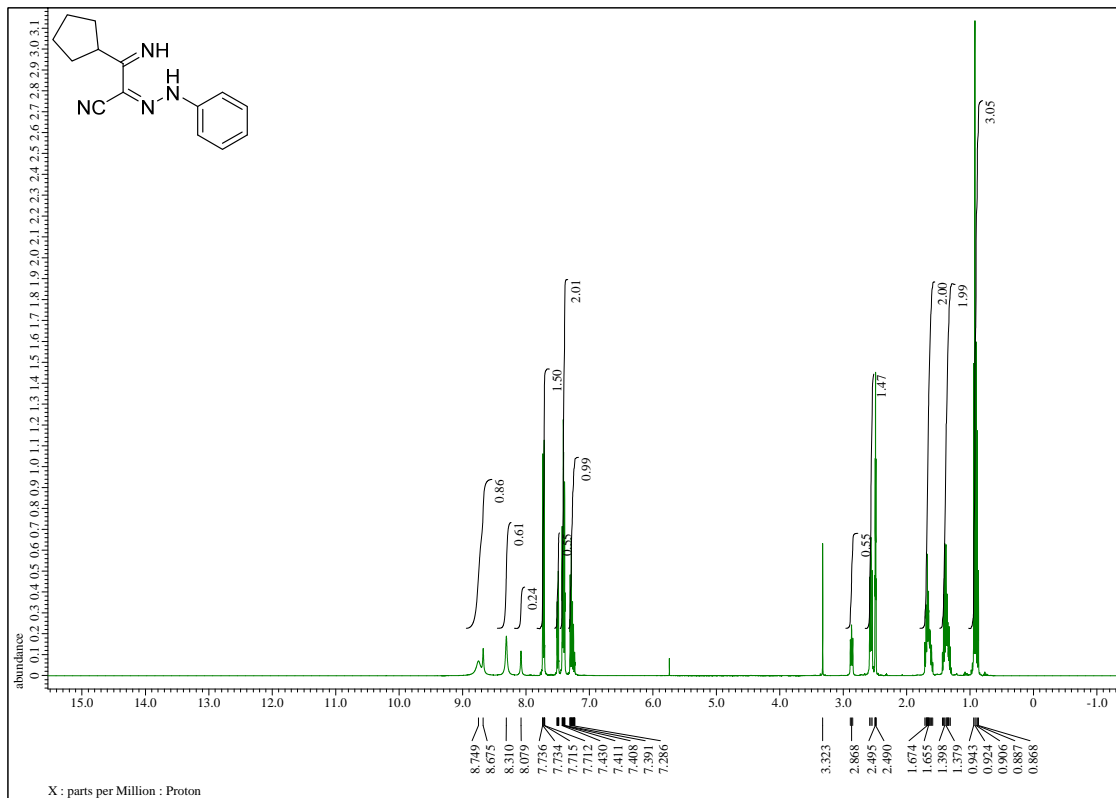




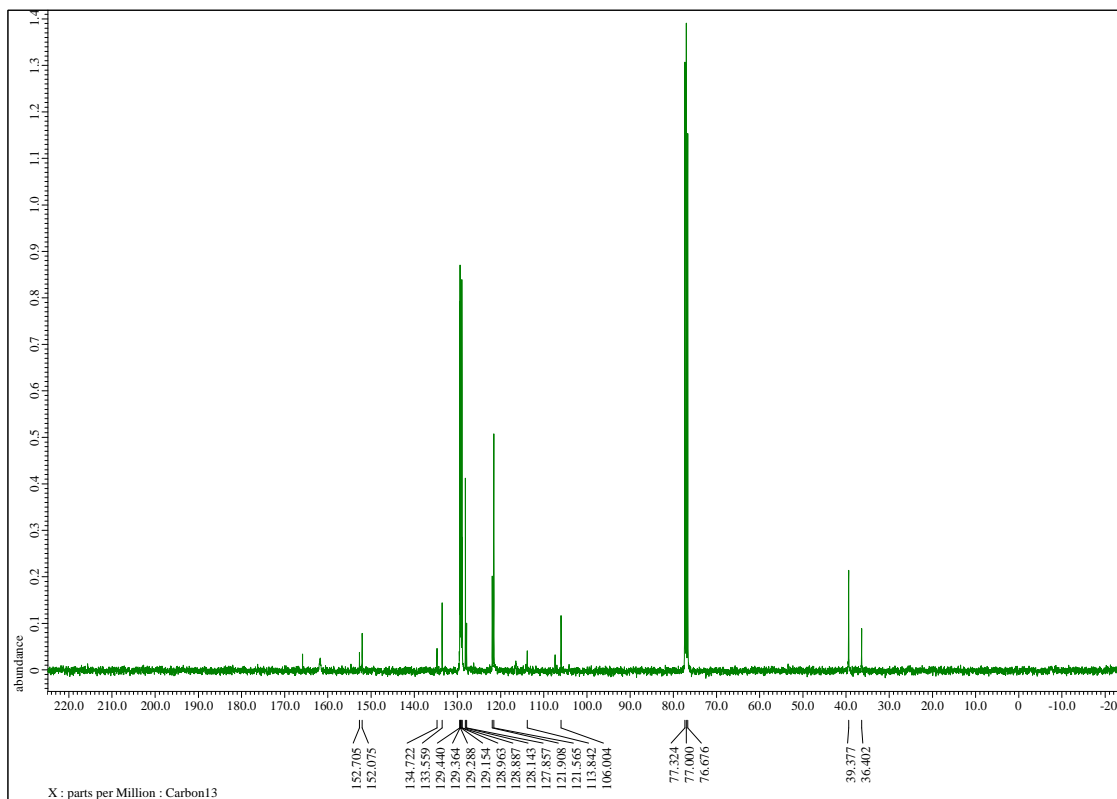
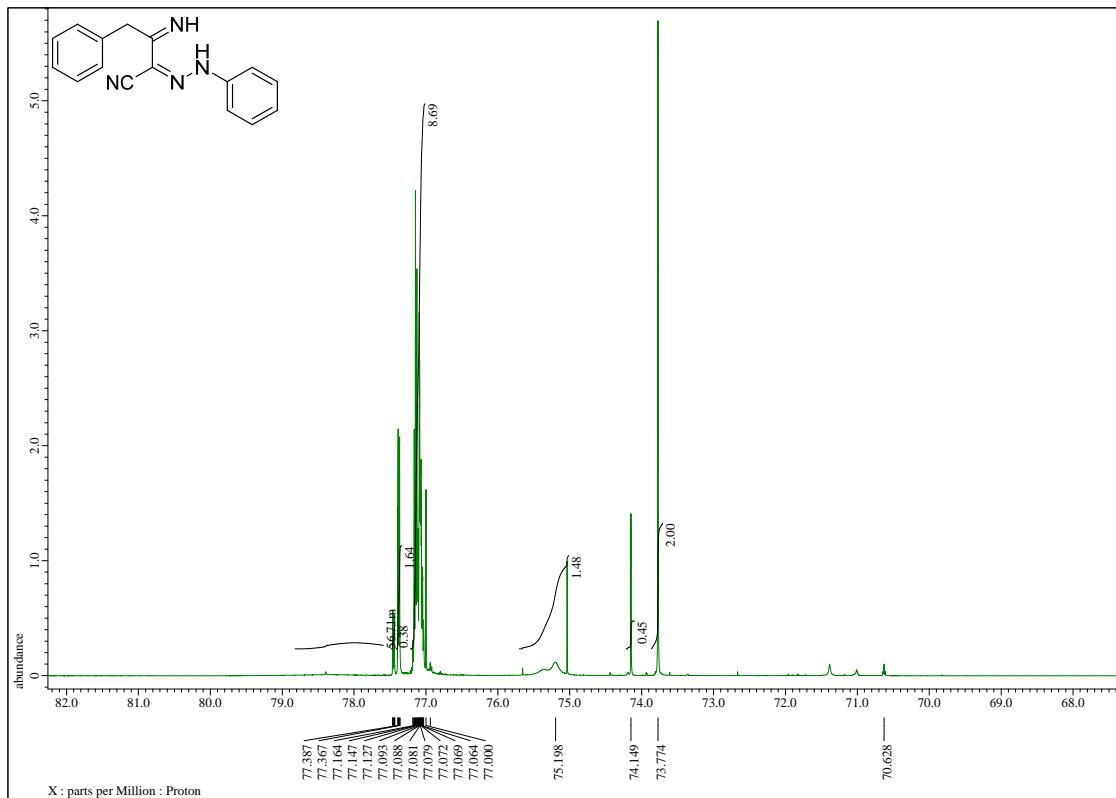
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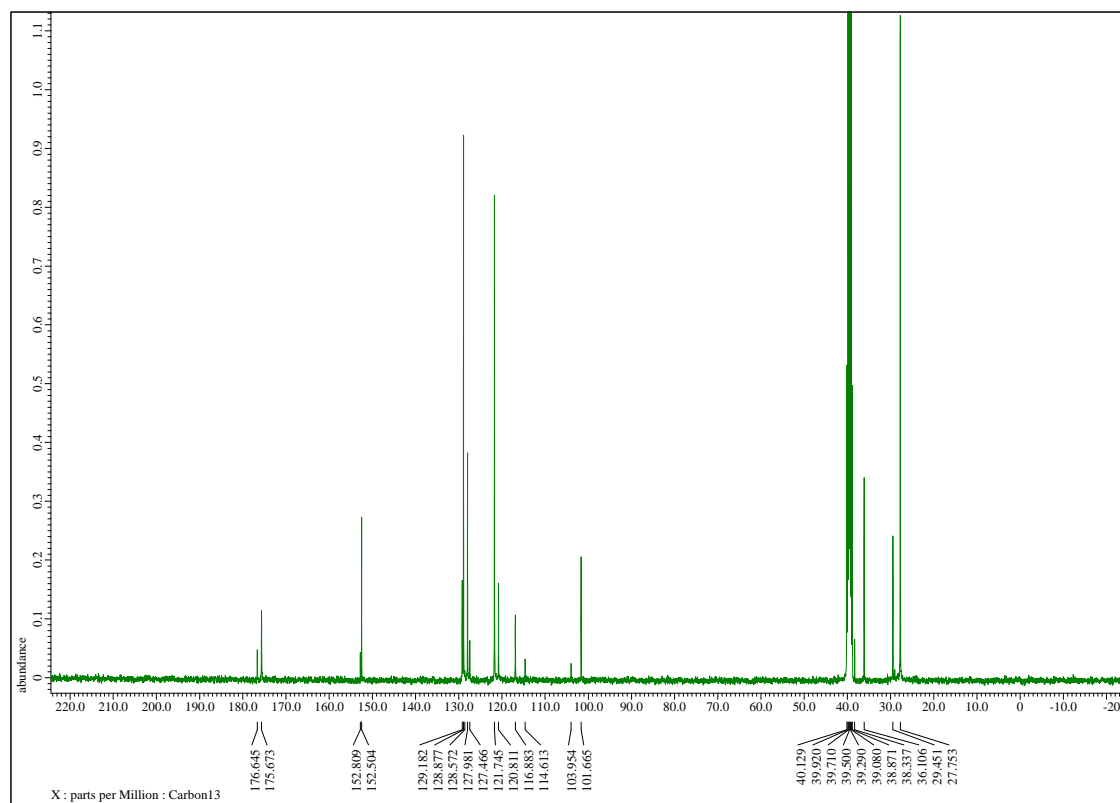
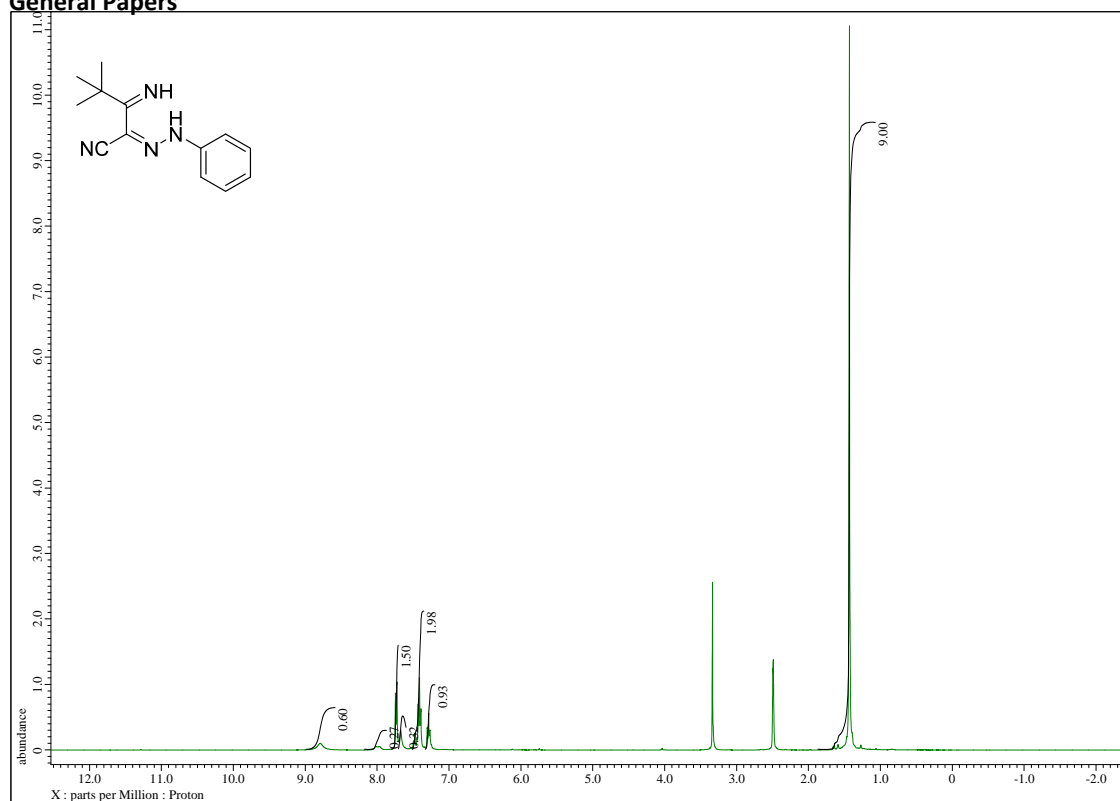
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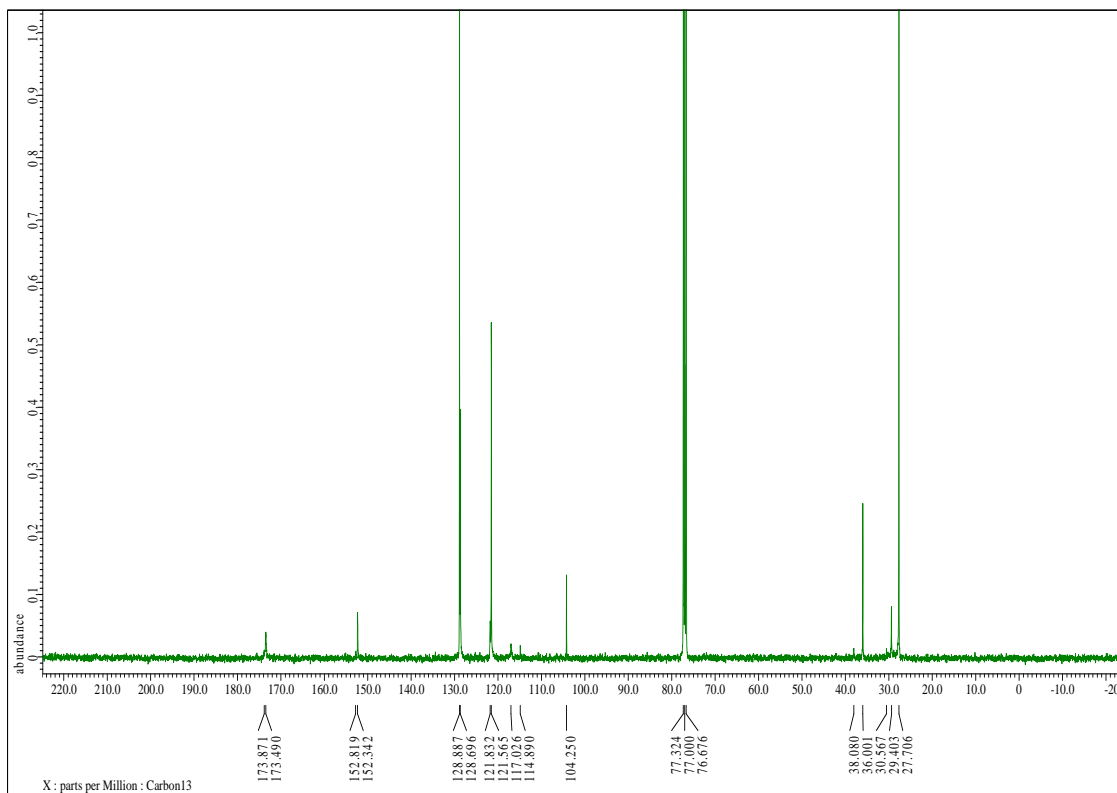
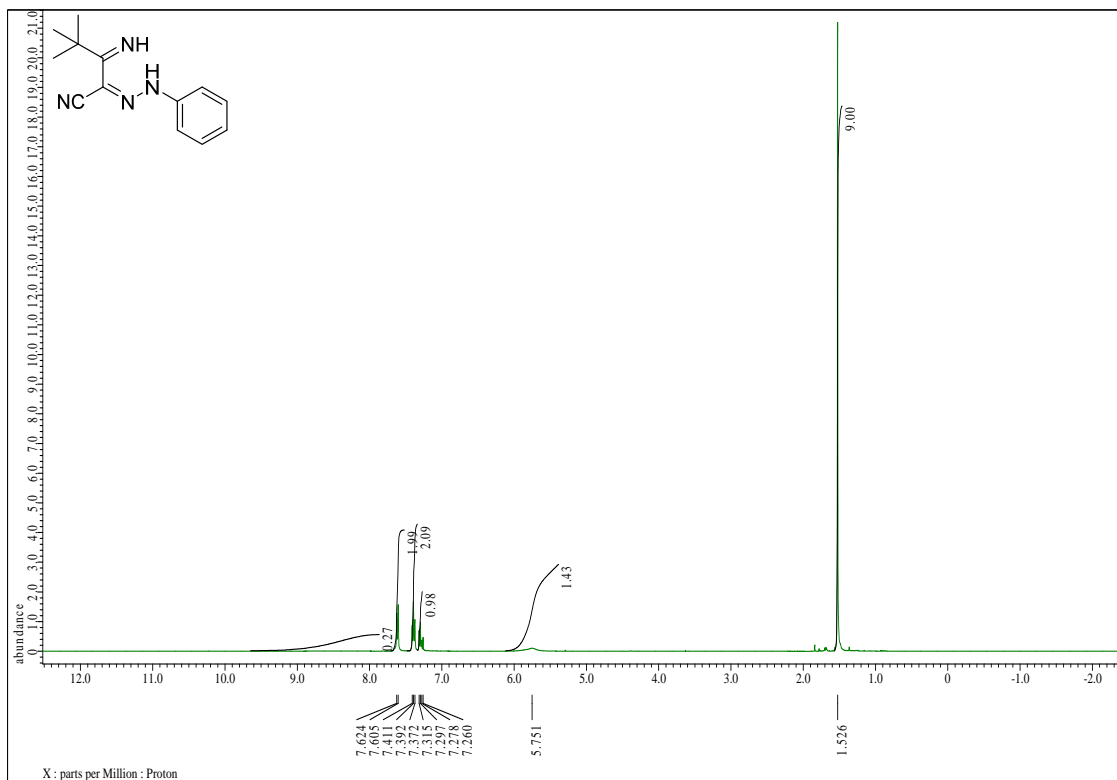
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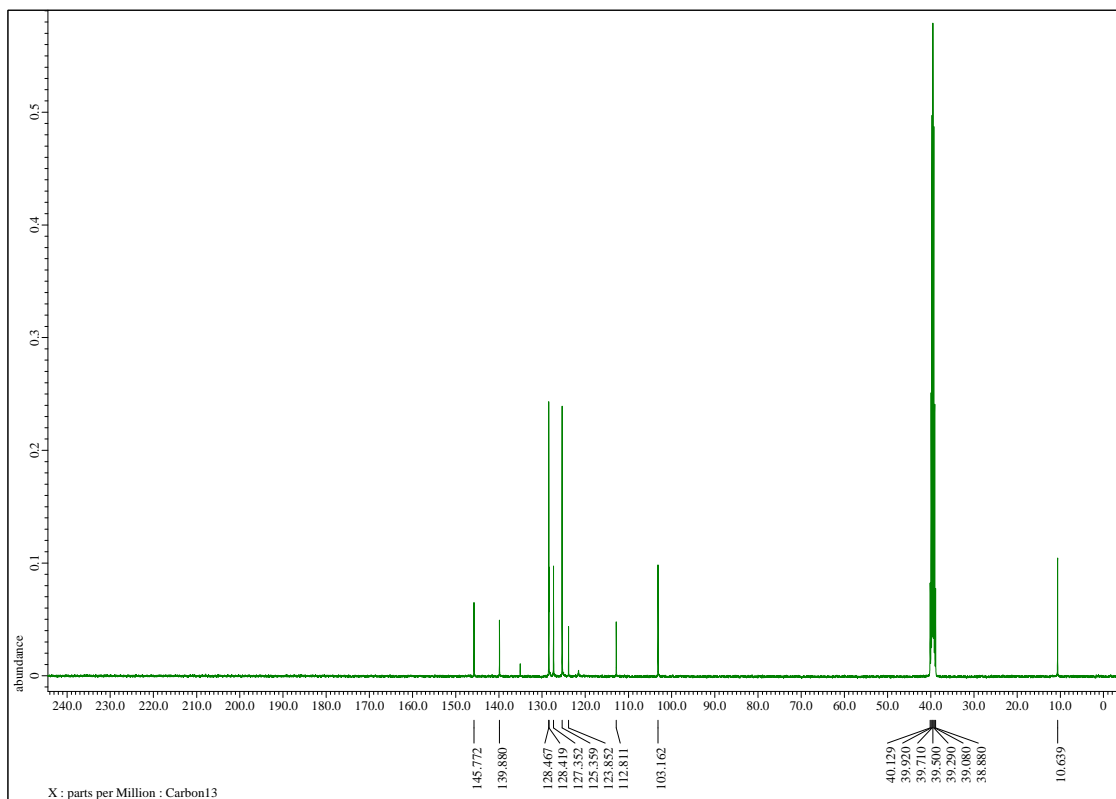
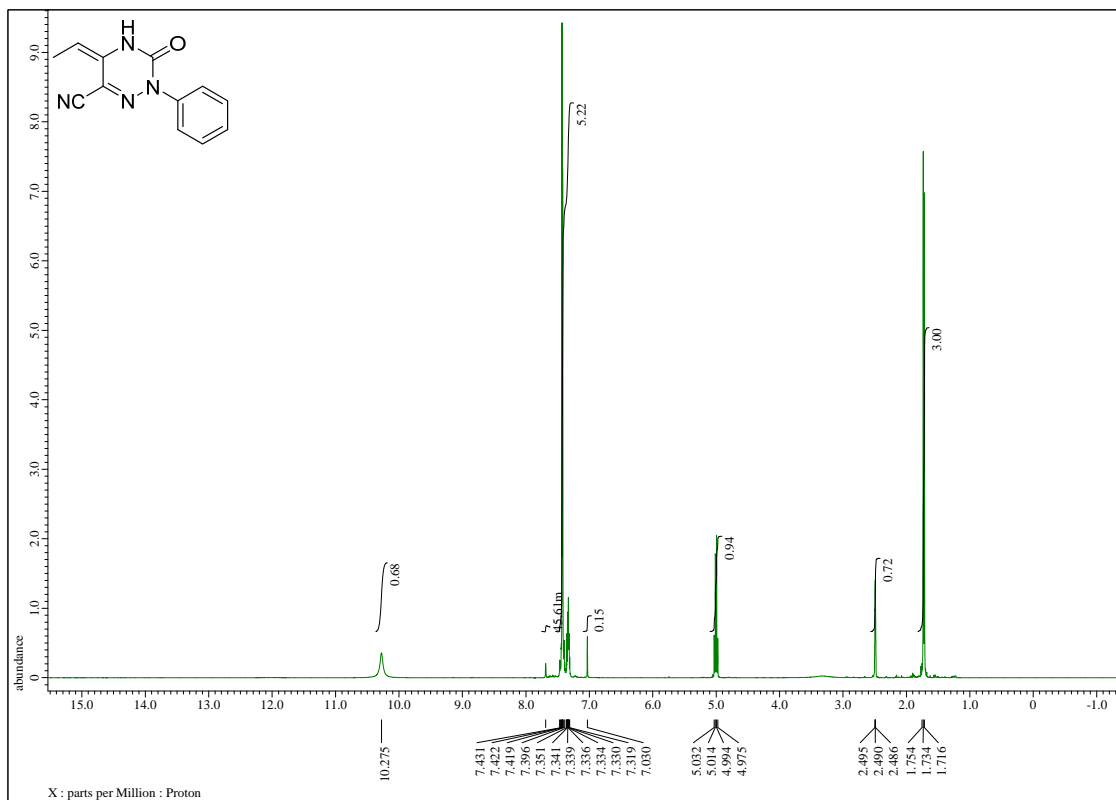
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **8p** (DMSO- $d_6$ )



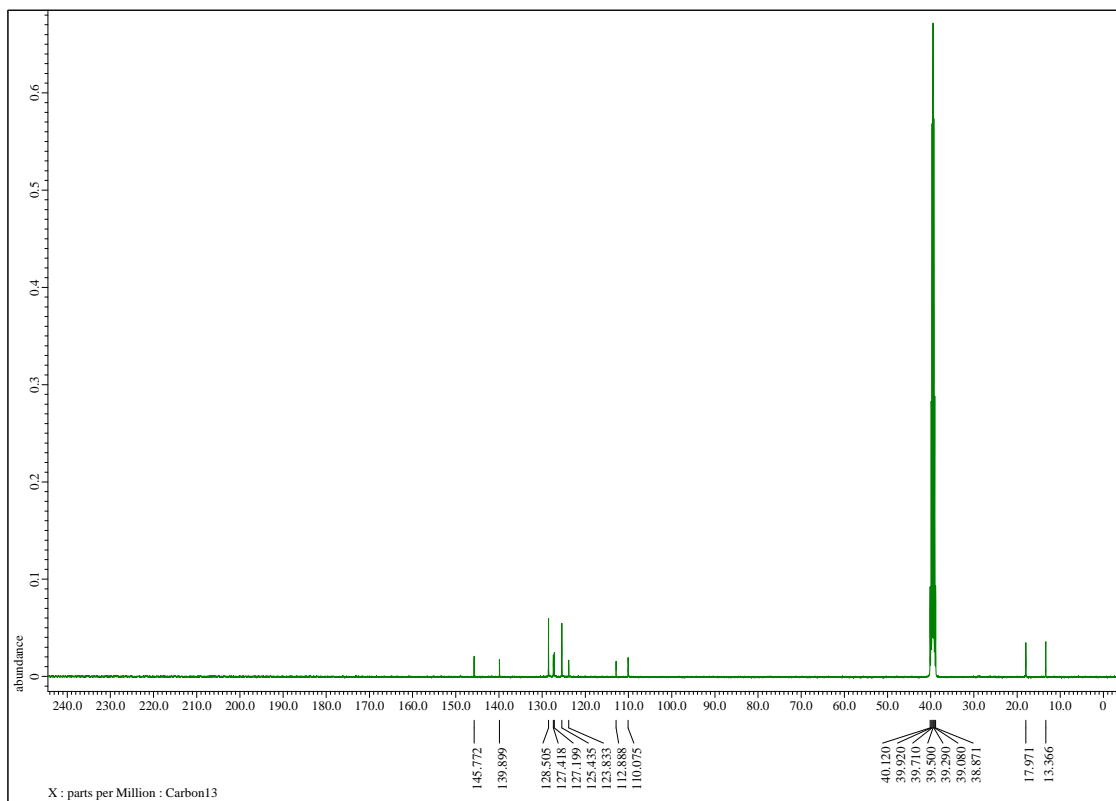
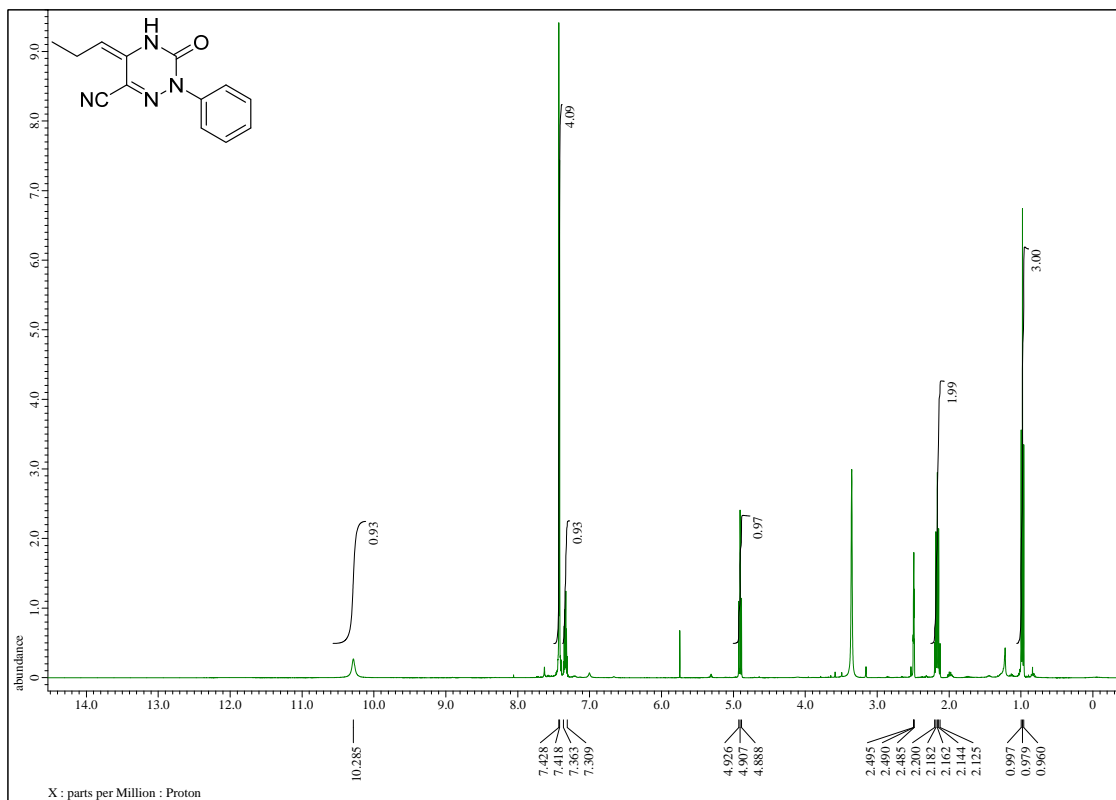
<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **8p** (CDCl<sub>3</sub>)



$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound 10i (DMSO- $d_6$ )

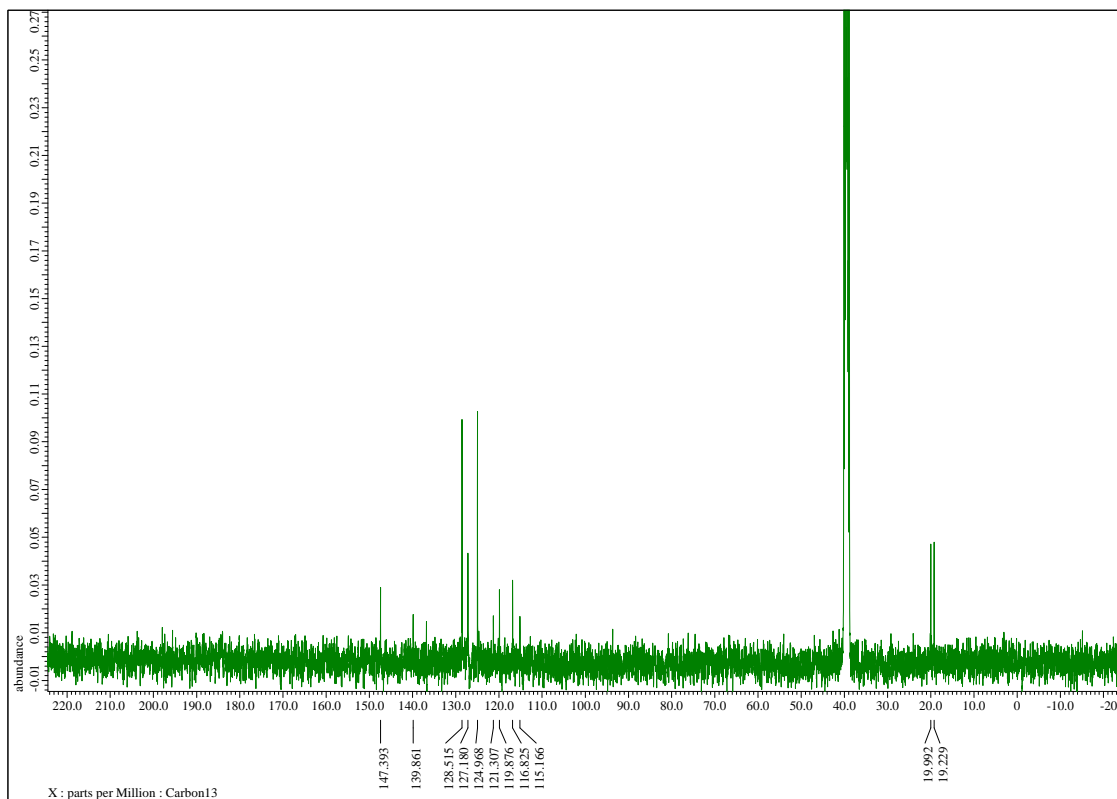
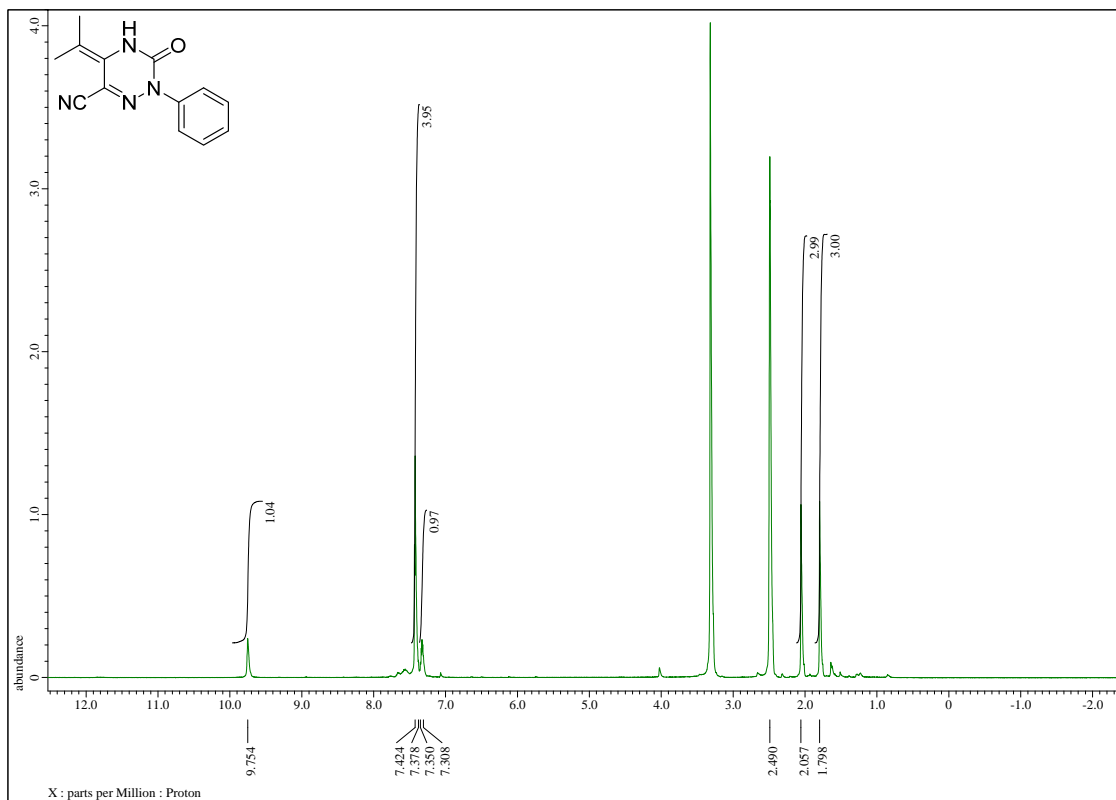


$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound 10j (DMSO- $d_6$ )

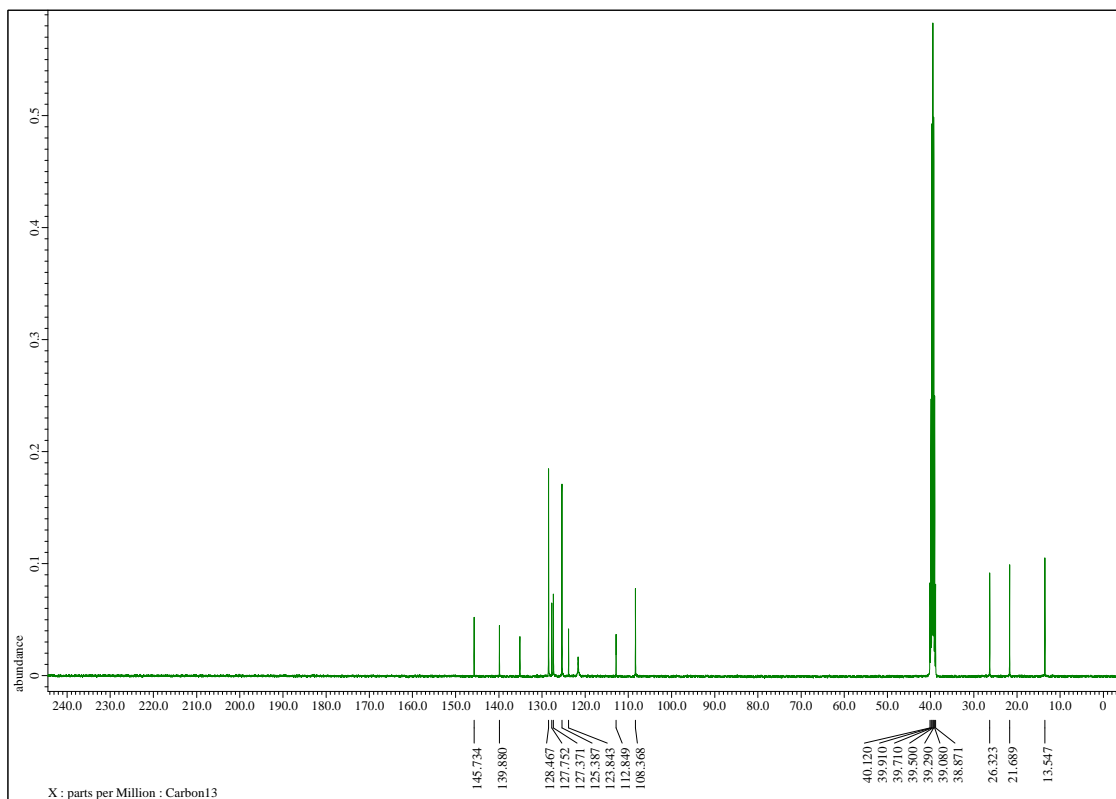
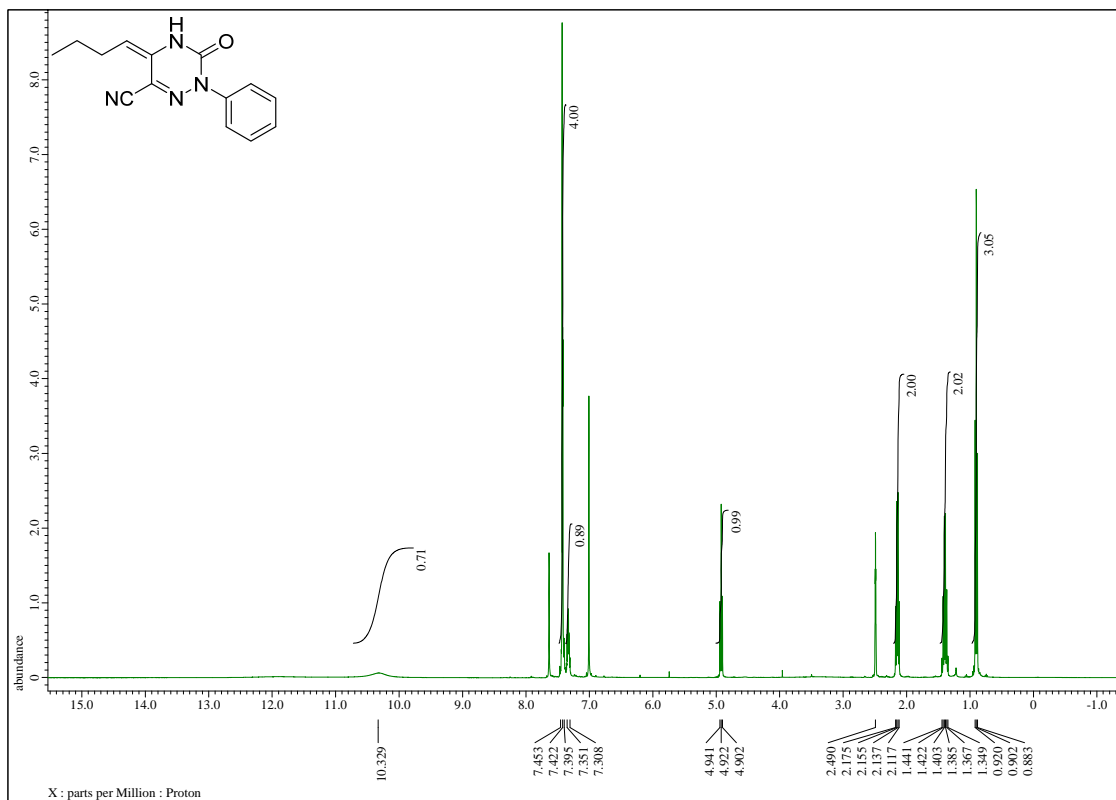


$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound 10k (DMSO- $d_6$ )

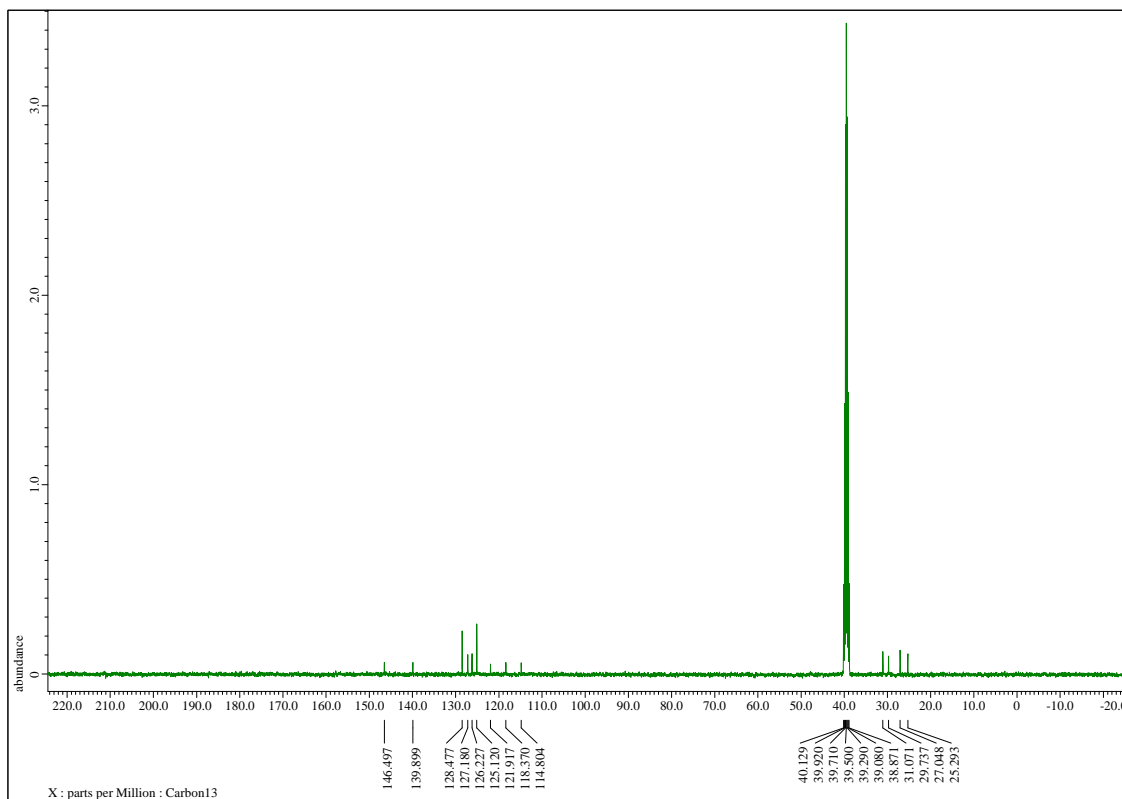
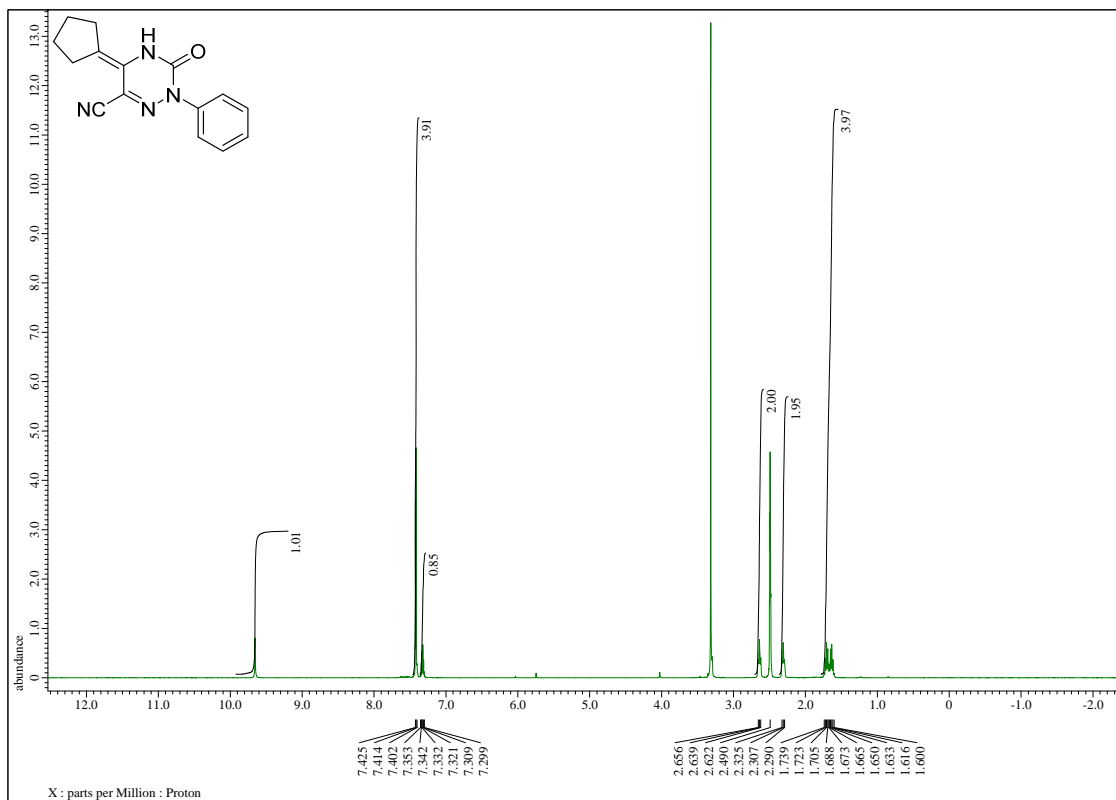




$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound 10I (DMSO- $d_6$ )



$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **10m** ( $\text{DMSO}-d_6$ )



$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound 10n (DMSO- $d_6$ )

