

# Supplementary Information

## Design and synthesis of new 5-aryl-4-arylethynyl-1*H*-1,2,3-triazoles with valuable photophysical and biological properties

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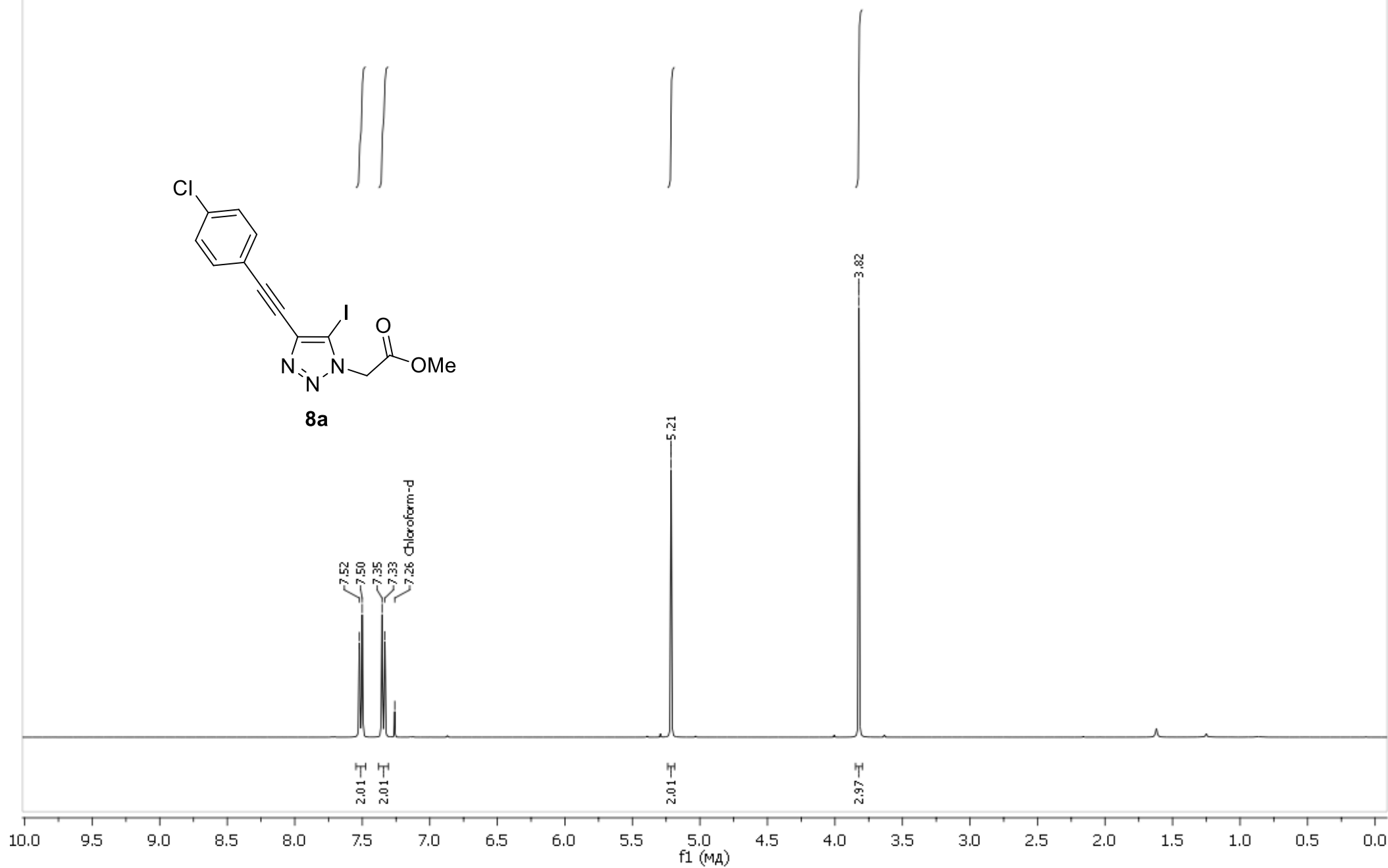
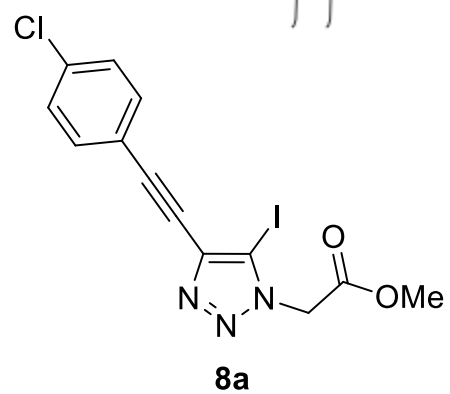
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MME  
MME, 14, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 07 Jul 2020 T=298 K

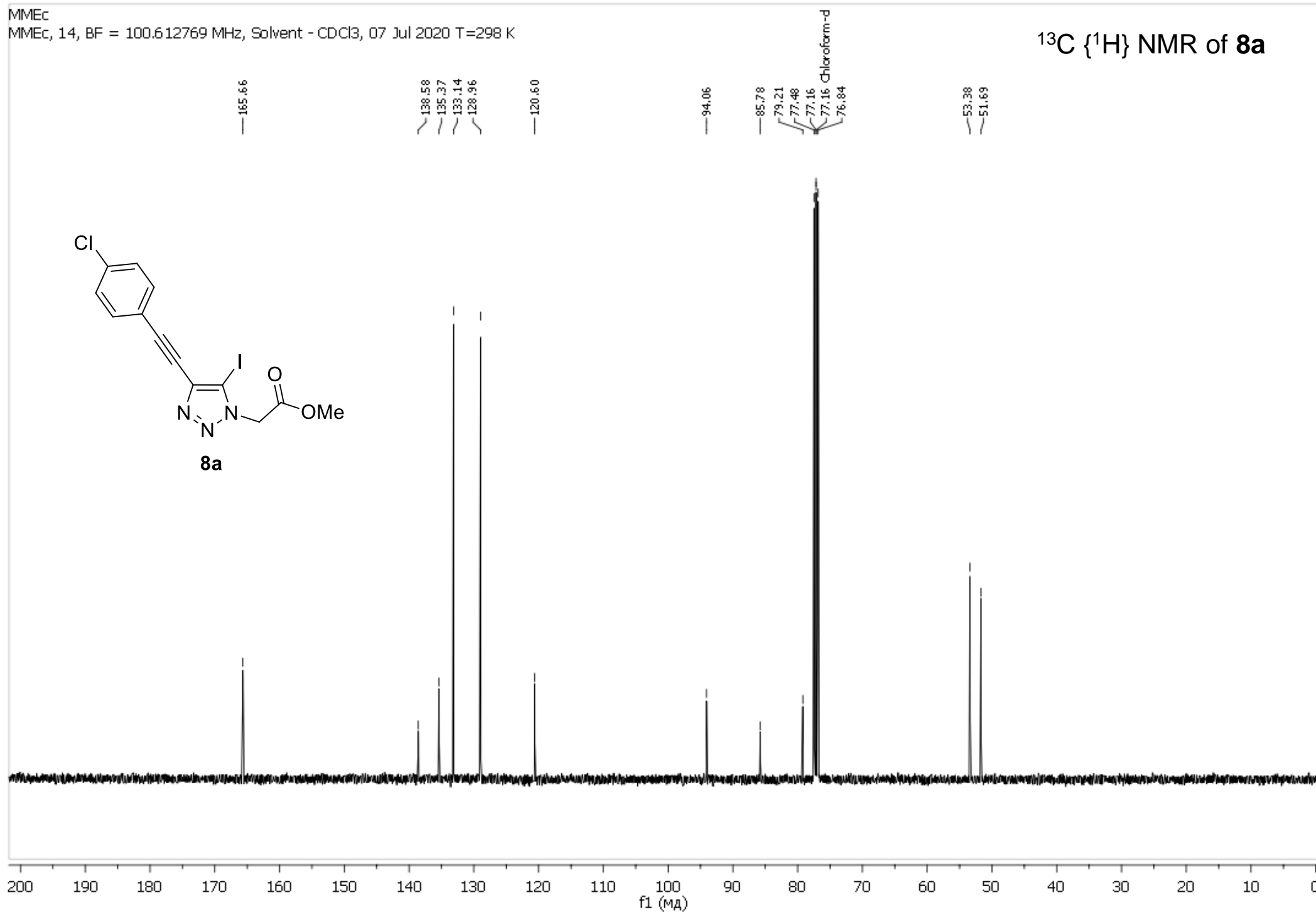
<sup>1</sup>H NMR of **8a**



MMEc

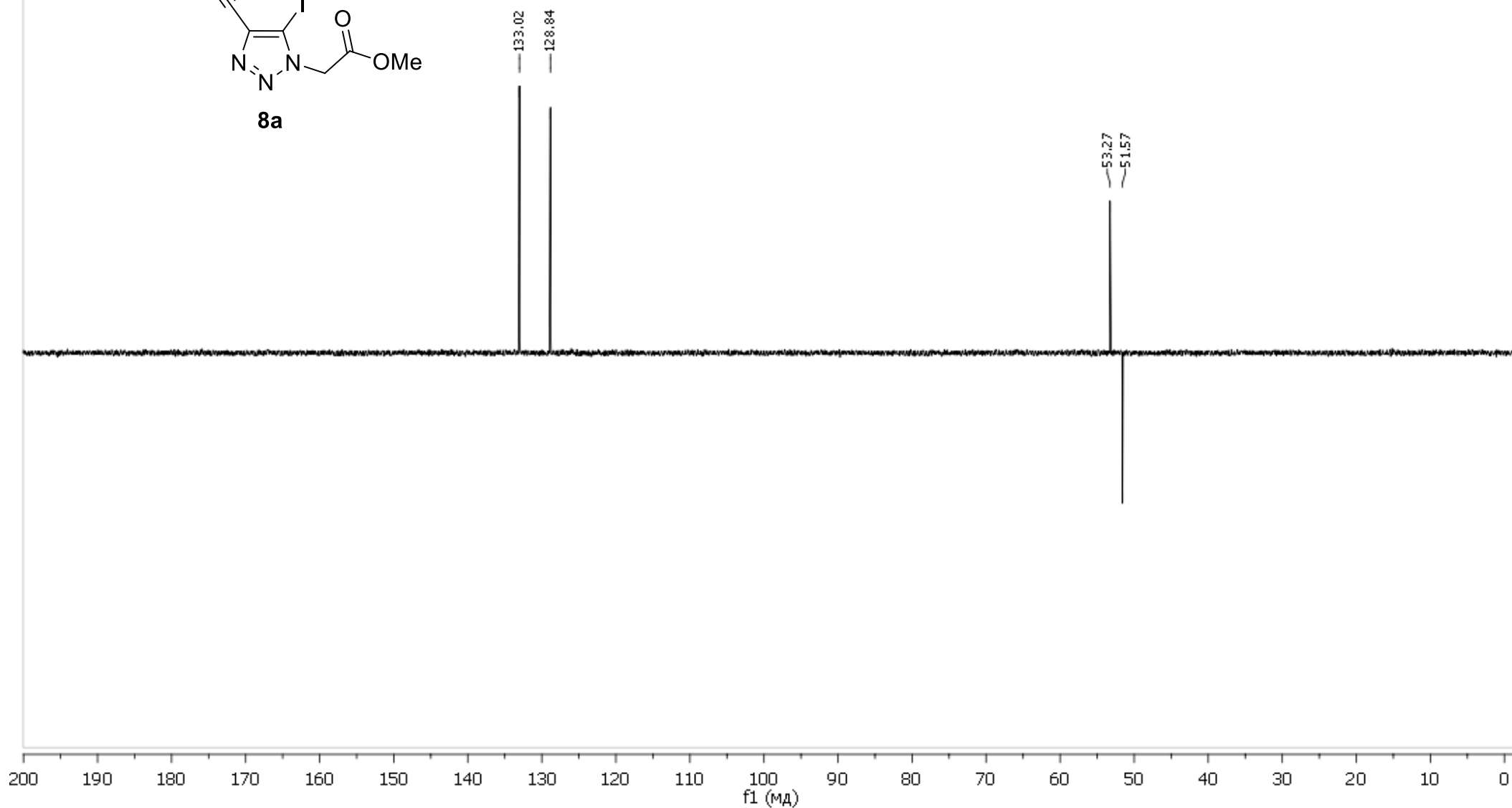
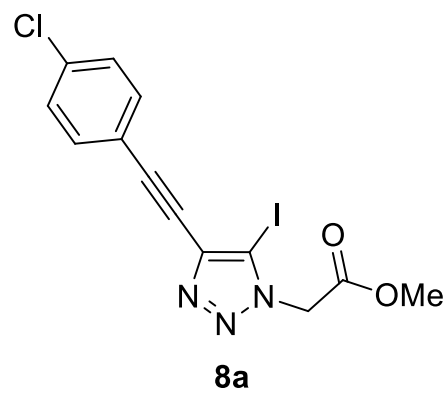
MMEc, 14, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 07 Jul 2020 T=298 K

<sup>13</sup>C {<sup>1</sup>H} NMR of **8a**



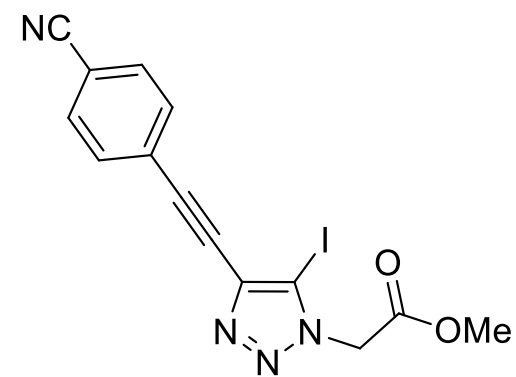
MMEd  
MMEd, 14, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 07 Jul 2020 T=298 K

<sup>13</sup>C dept NMR of **8a**

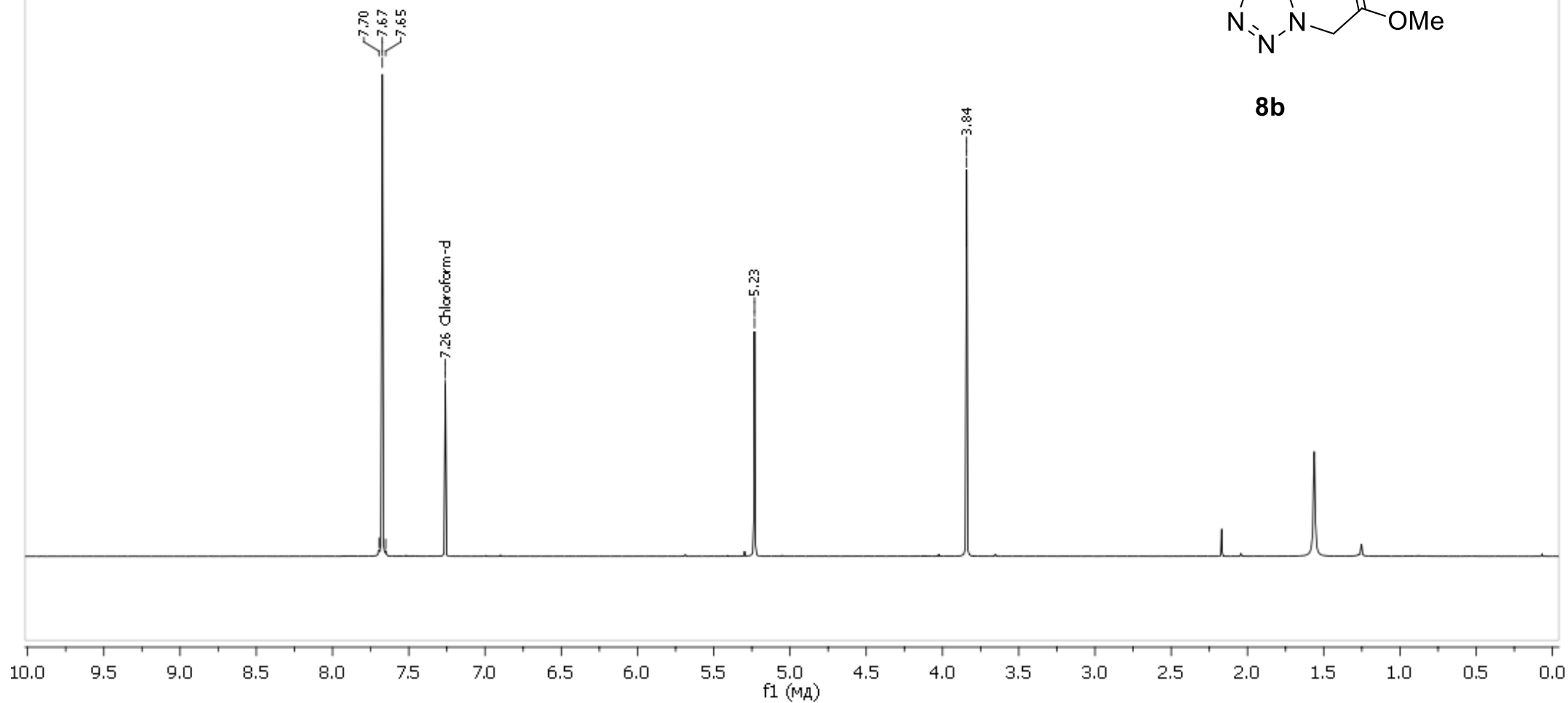


MME  
MME, 42, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 02 Oct 2020 T=298 K

# <sup>1</sup>H NMR of **8b**

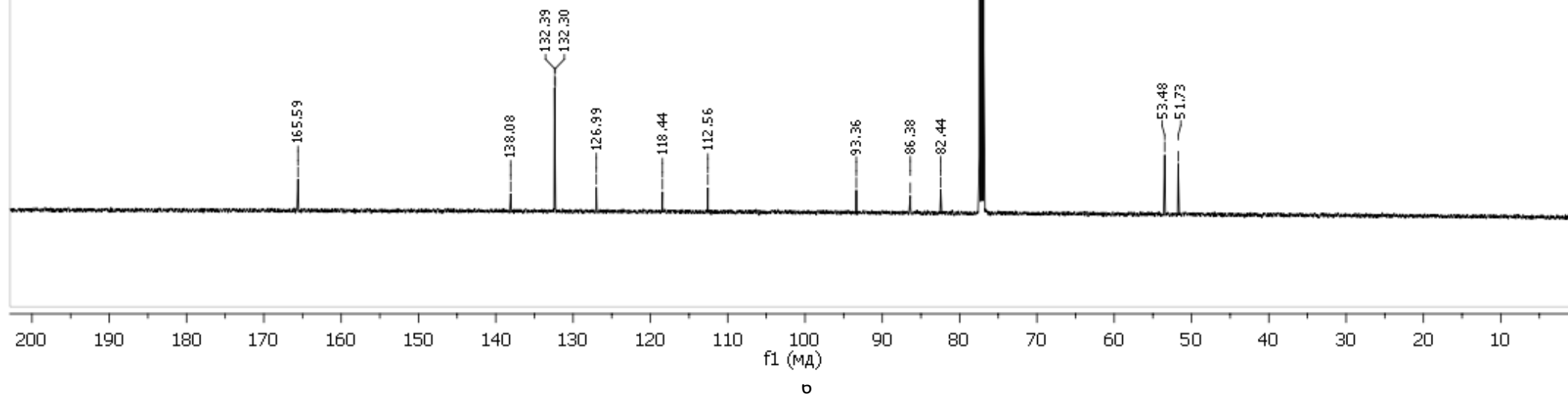
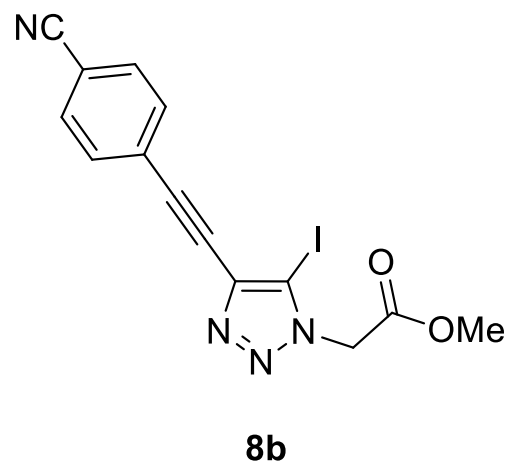


**8b**



MMEc  
MMEc, 42, BF = 125.732643506 MHz, Solvent - CDCl<sub>3</sub>, 05 Oct 2020 T=298 K

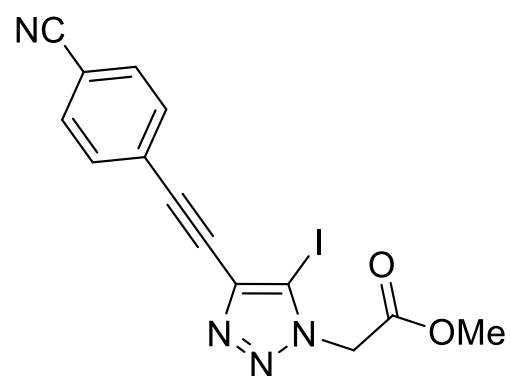
<sup>13</sup>C {<sup>1</sup>H} NMR of **8b**



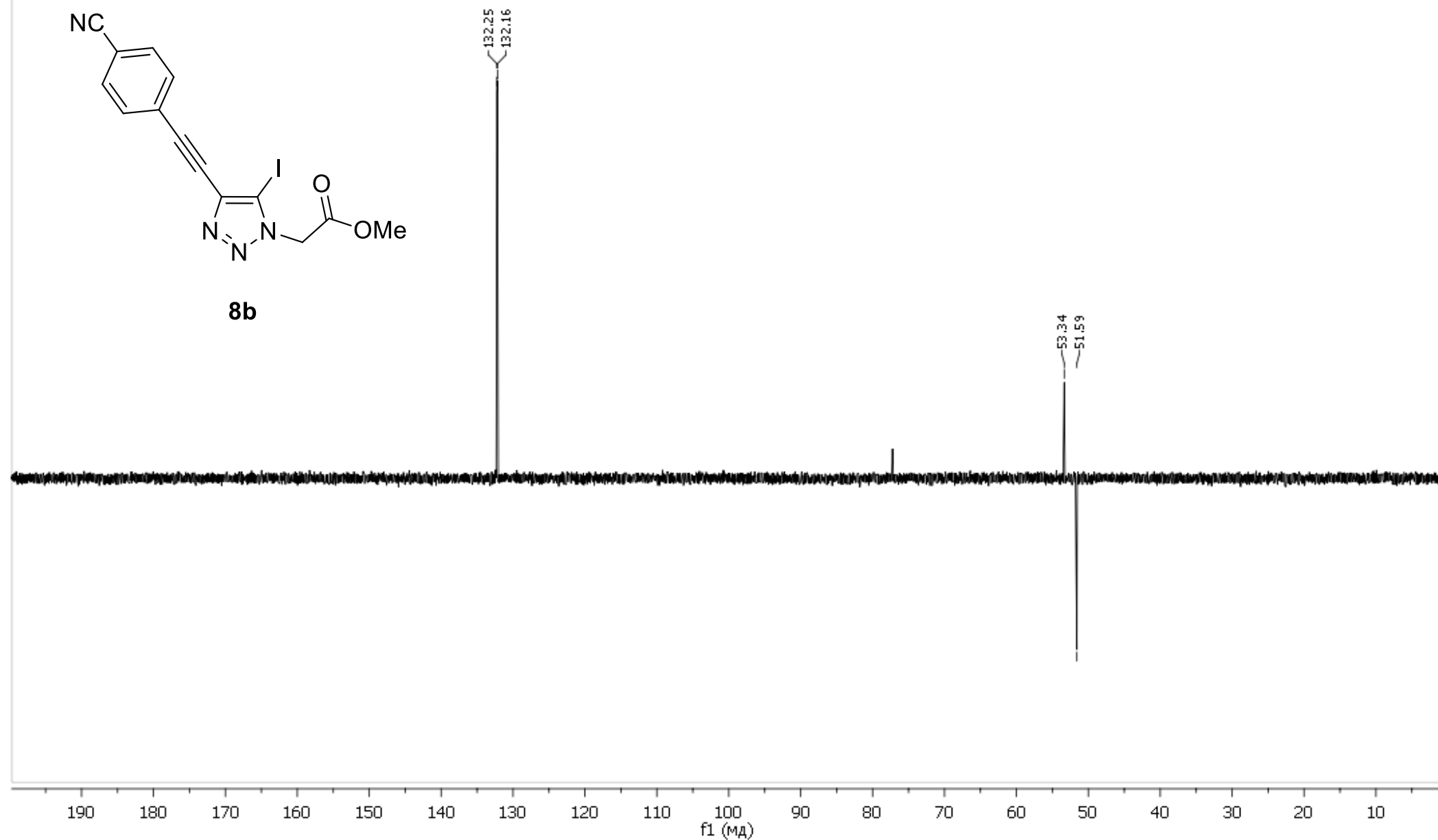
MMEd

MMEd, 42, BF = 125.732643506 MHz, Solvent - CDCl<sub>3</sub>, 05 Oct 2020 T=297 K

<sup>13</sup>C dept NMR of **8b**

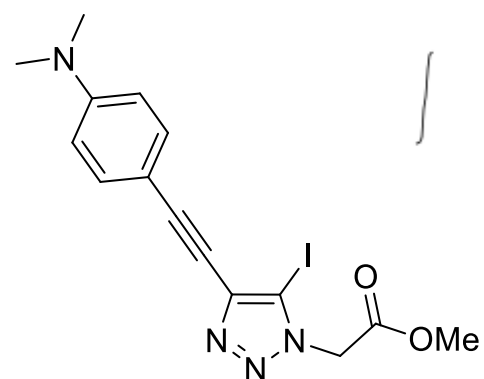


**8b**

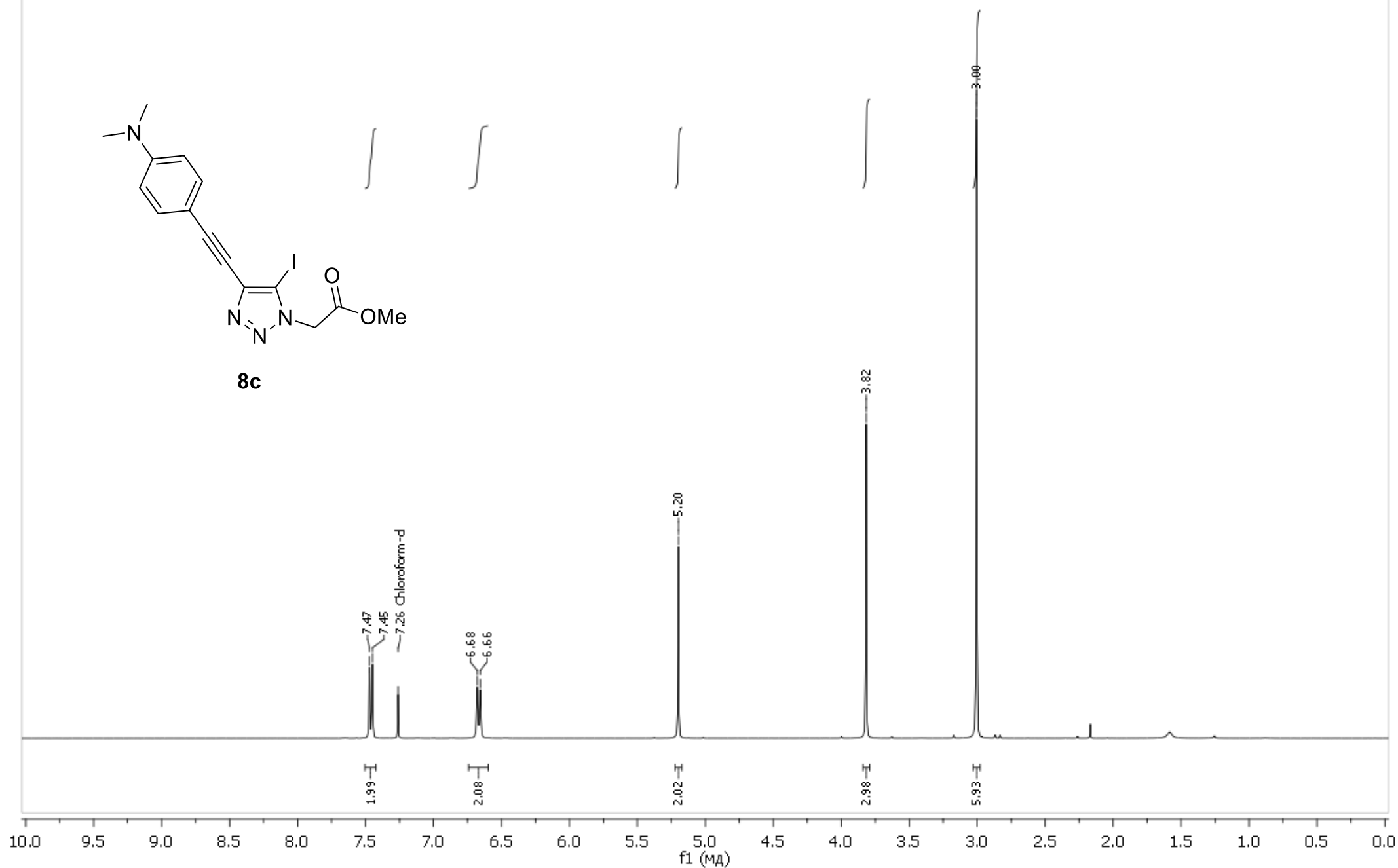


MME  
MME, 32, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 28 Aug 2020 T=298 K

<sup>1</sup>H NMR of **8c**



**8c**

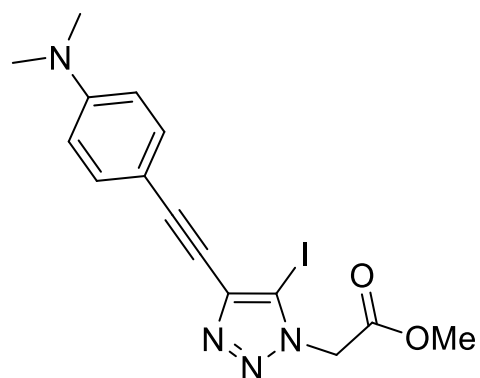




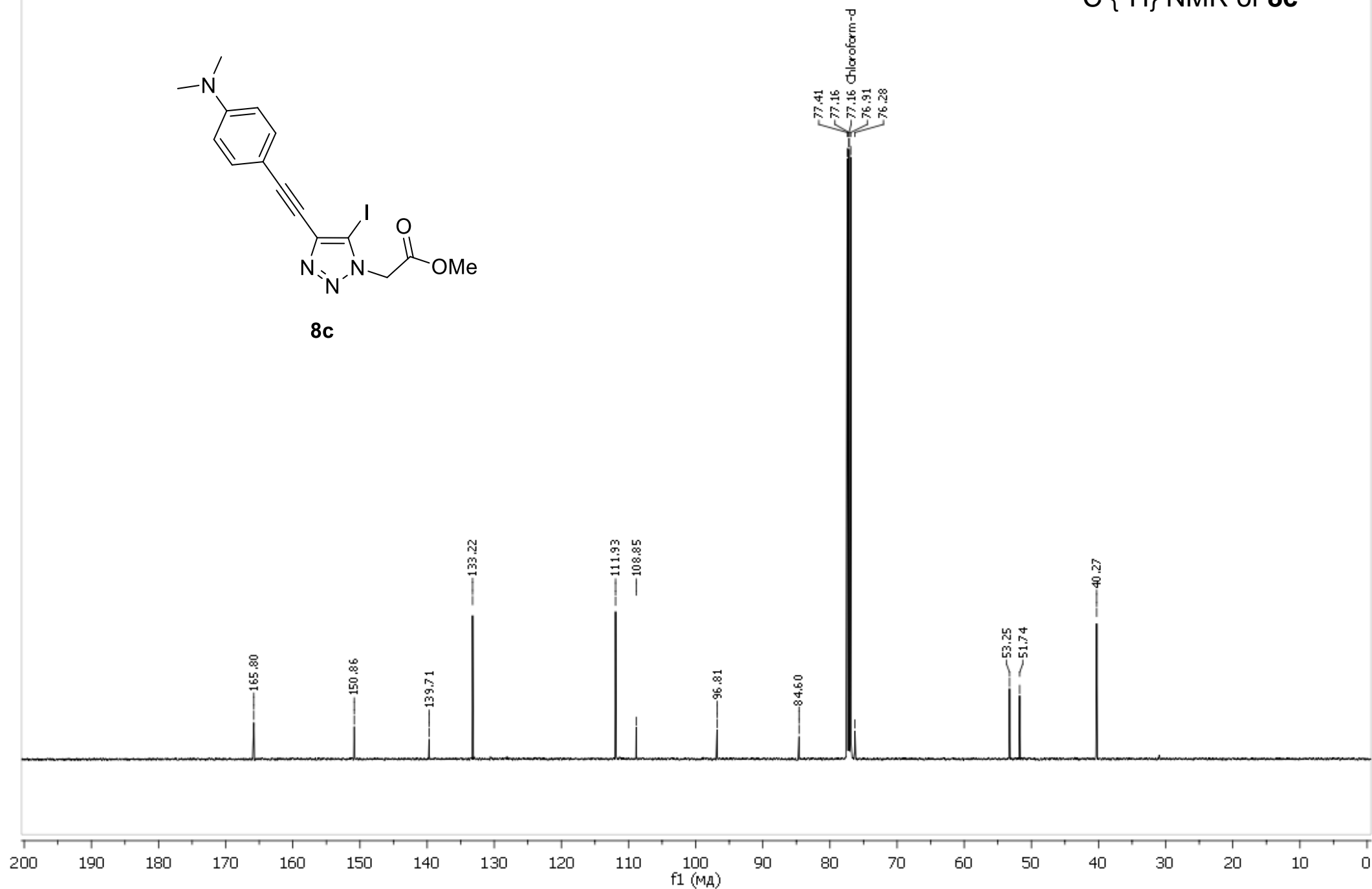
MMEc

MMEc, 34, BF = 125.732643 MHz, Solvent - CDCl<sub>3</sub>, 04 Sep 2020 T=313 K

<sup>13</sup>C {<sup>1</sup>H} NMR of **8c**

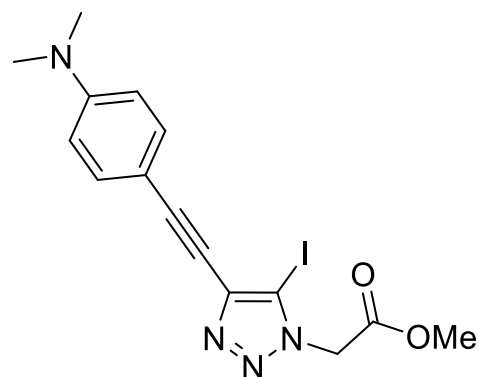


**8c**

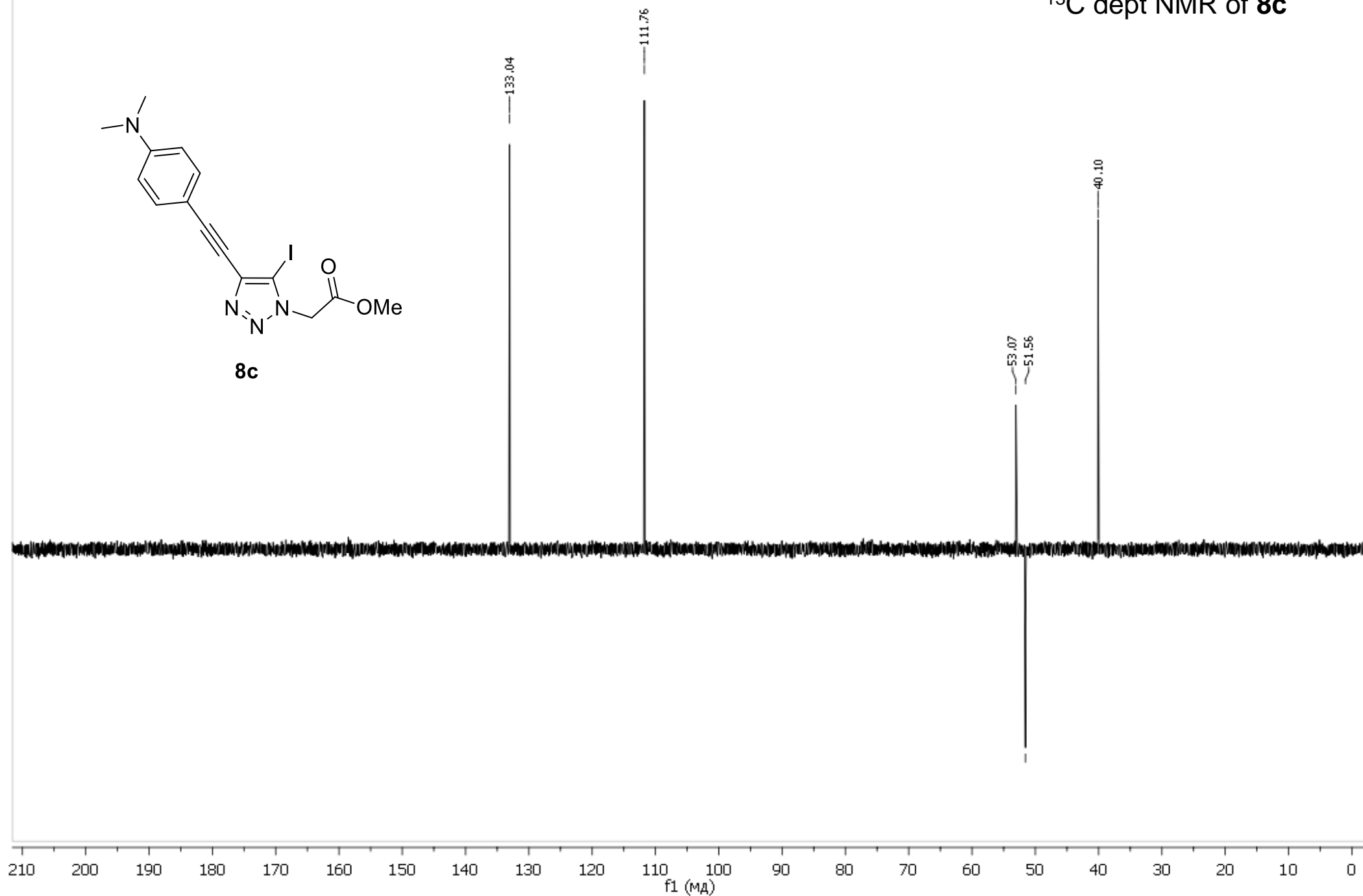


MMEd  
MMEd, 34, BF = 125.732643 MHz, Solvent - CDCl<sub>3</sub>, 04 Sep 2020 T=313 K

<sup>13</sup>C dept NMR of **8c**

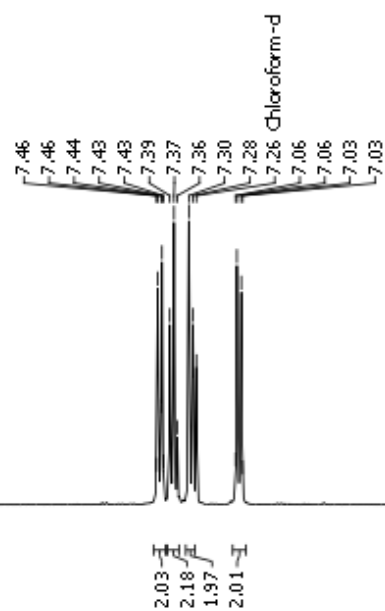
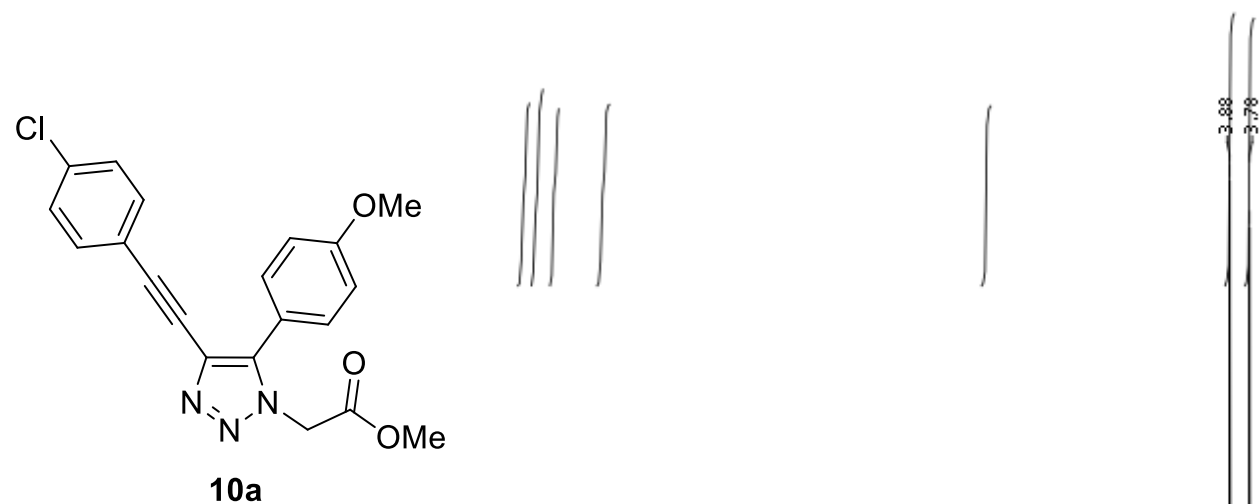


**8c**



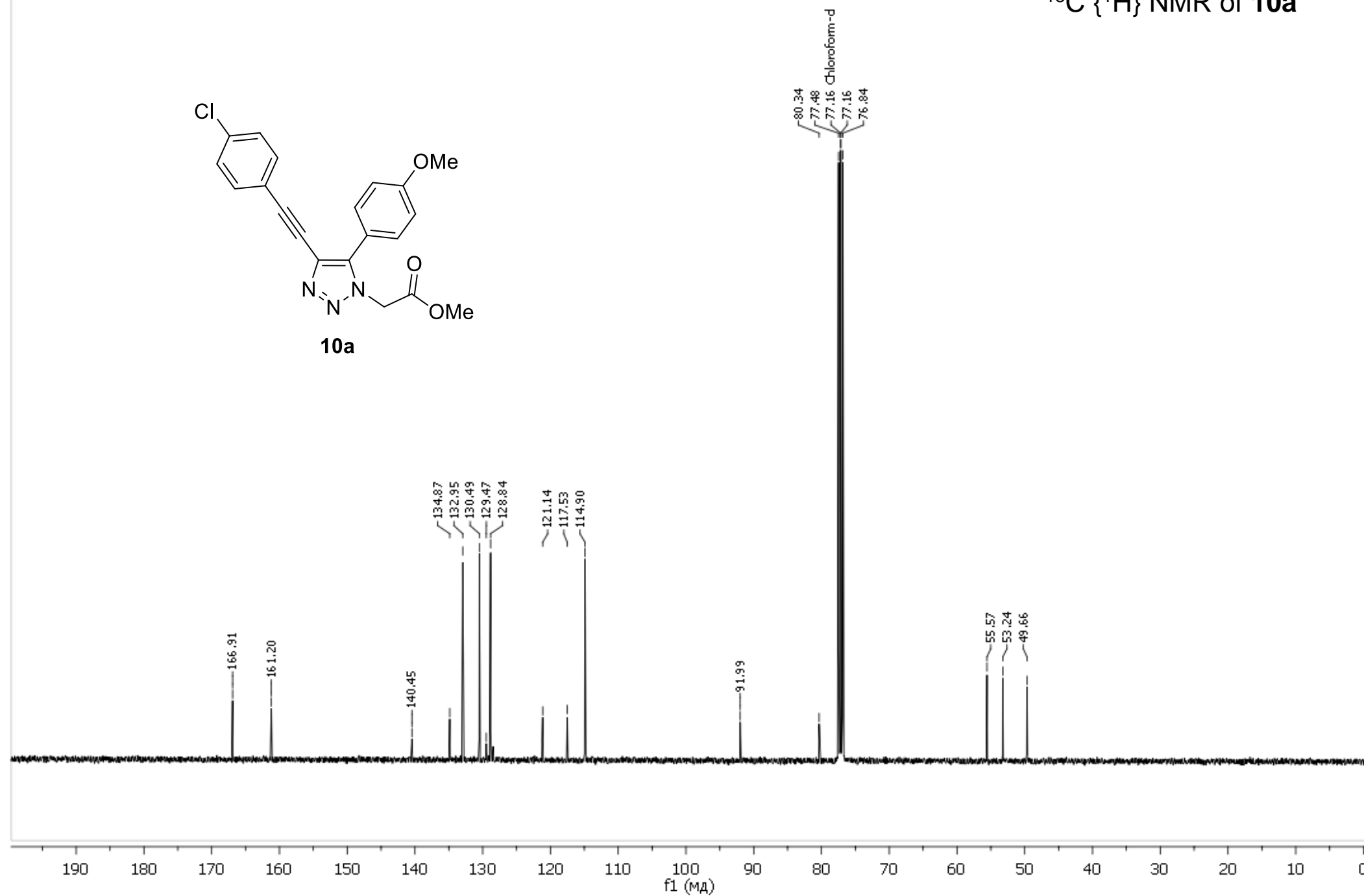
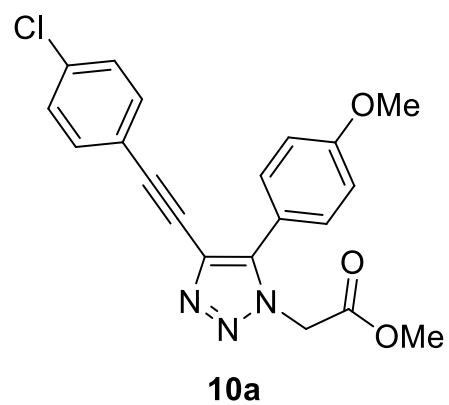
MME  
MME, 24, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 22 Jul 2020 T=298 K

# <sup>1</sup>H NMR of 10a

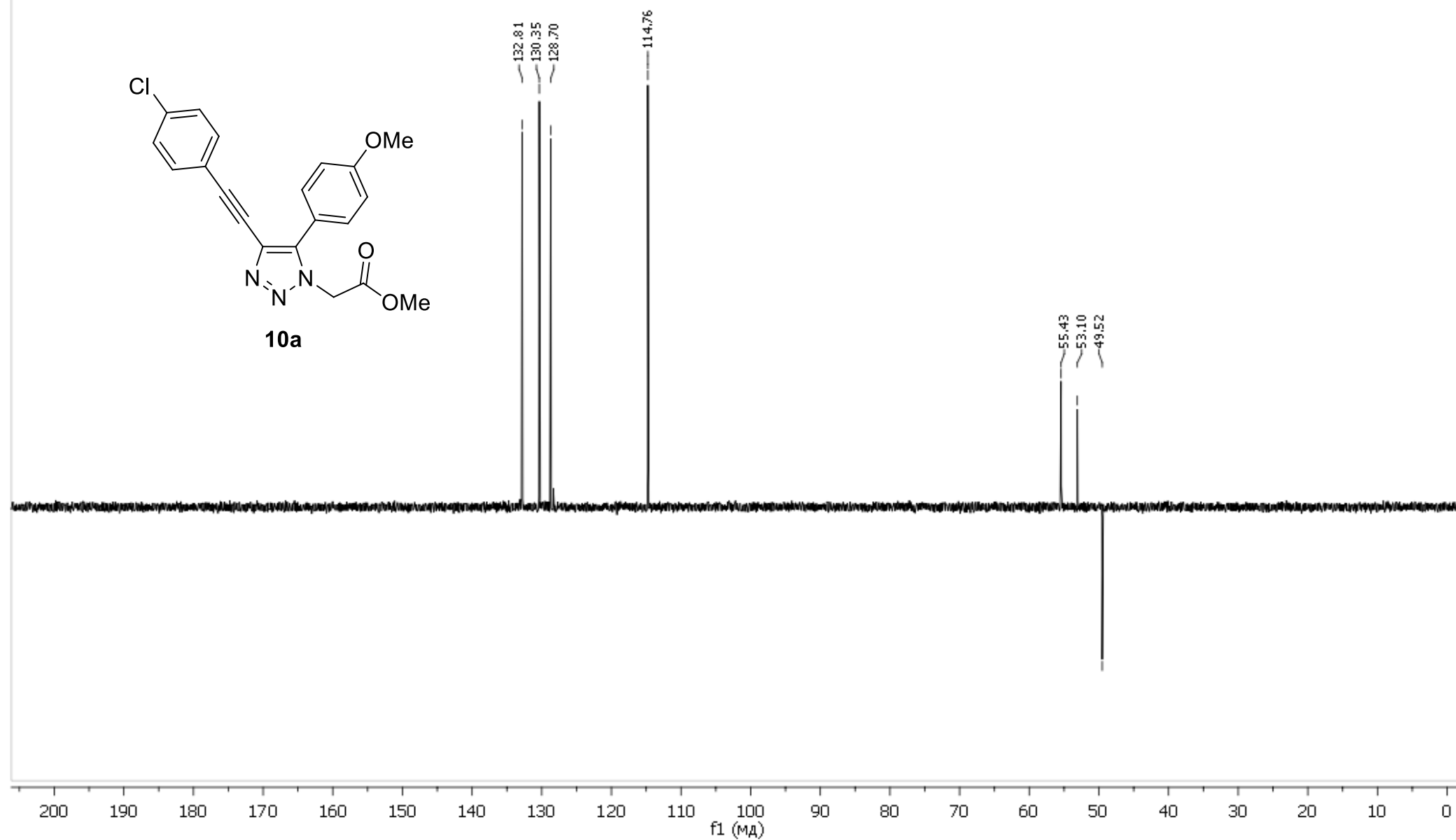


10.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0

f1 (M)

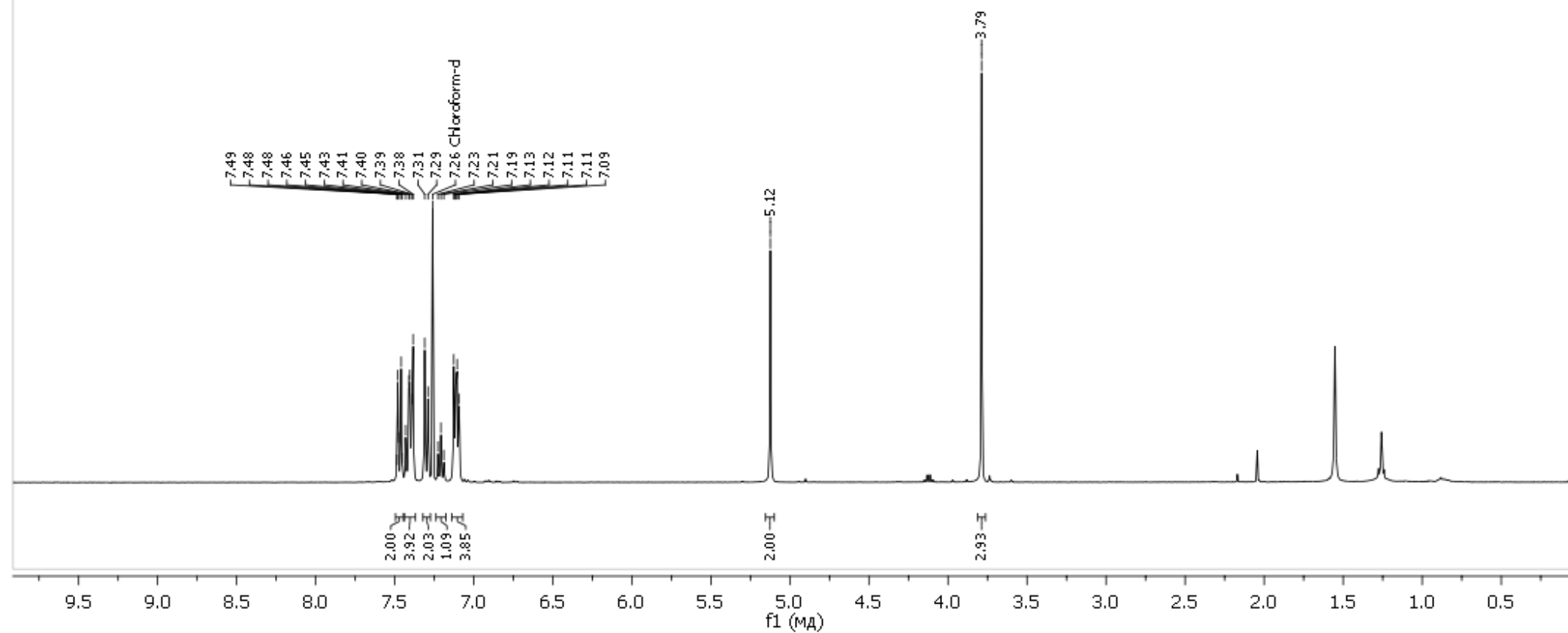
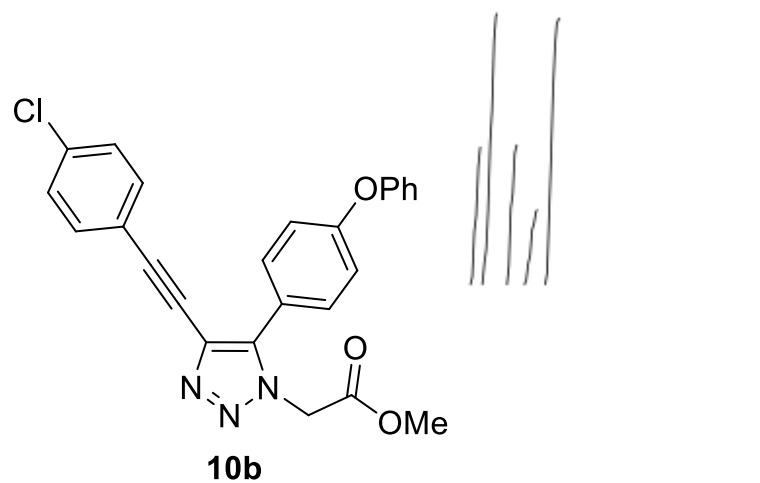


<sup>13</sup>C dept NMR of **10a**



MME  
MME, 10, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 26 Jun 2020 T=298 K

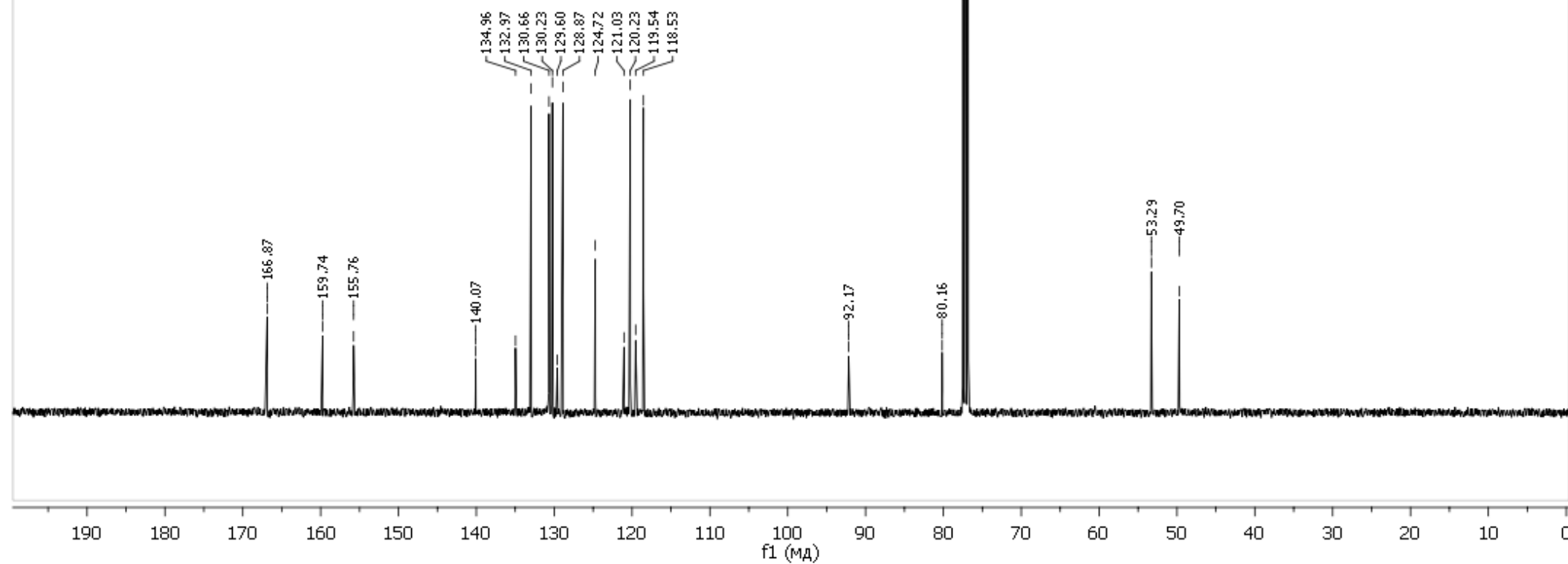
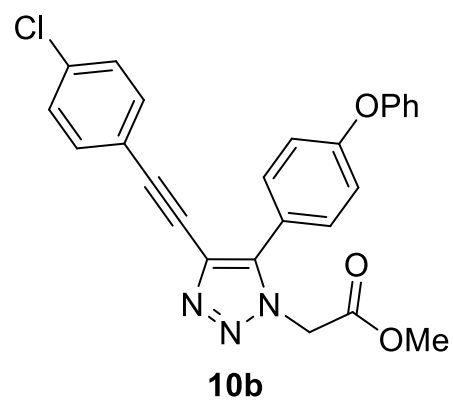
# <sup>1</sup>H NMR of 10b



MMEc

MMEc, 21, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 22 Jul 2020 T=298 K

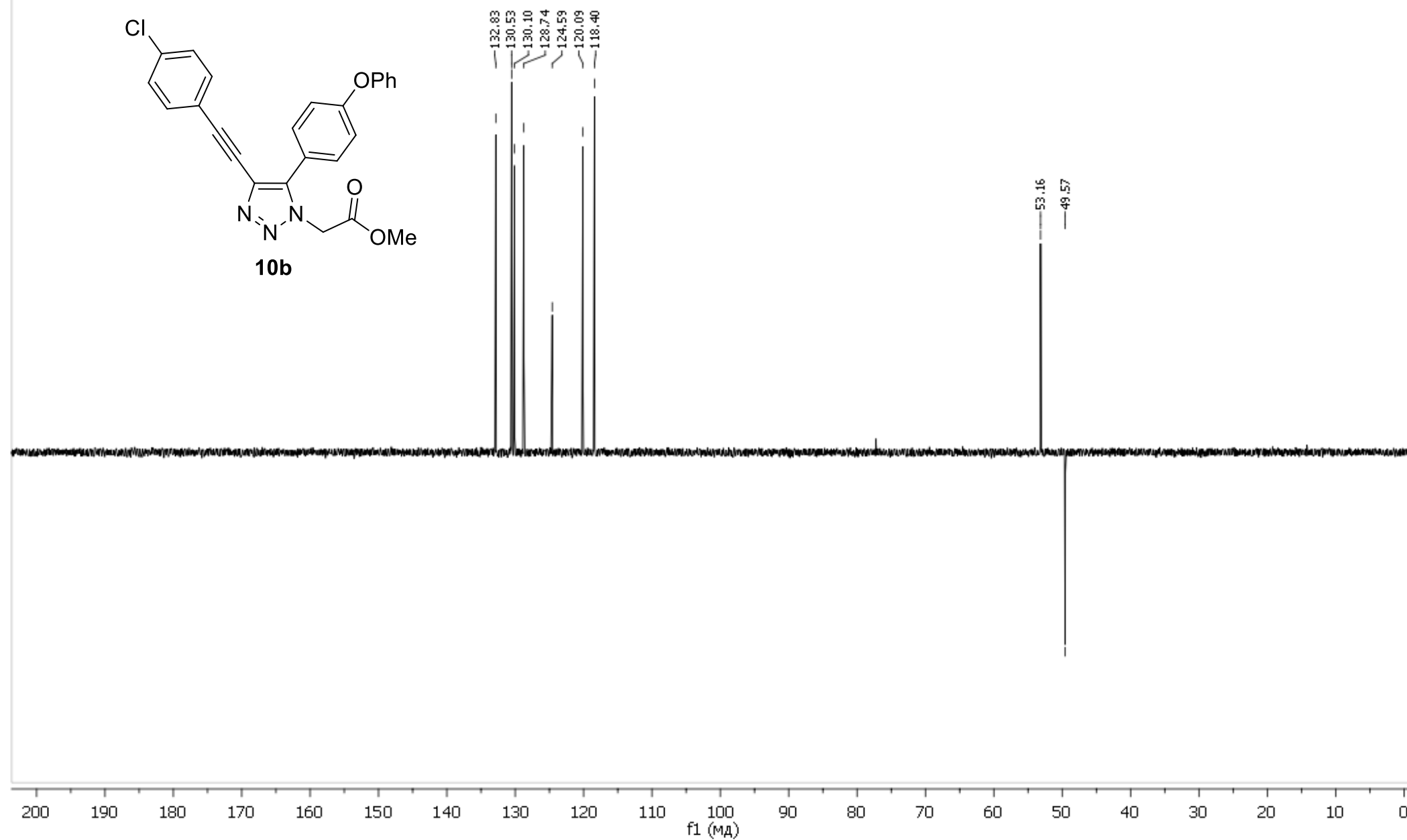
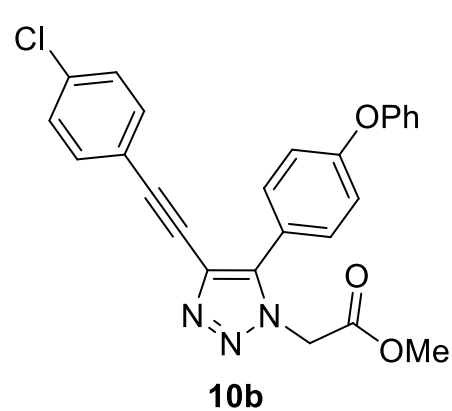
<sup>13</sup>C {<sup>1</sup>H} NMR of **10b**



MMEd

MMEd, 21, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 22 Jul 2020 T=298 K

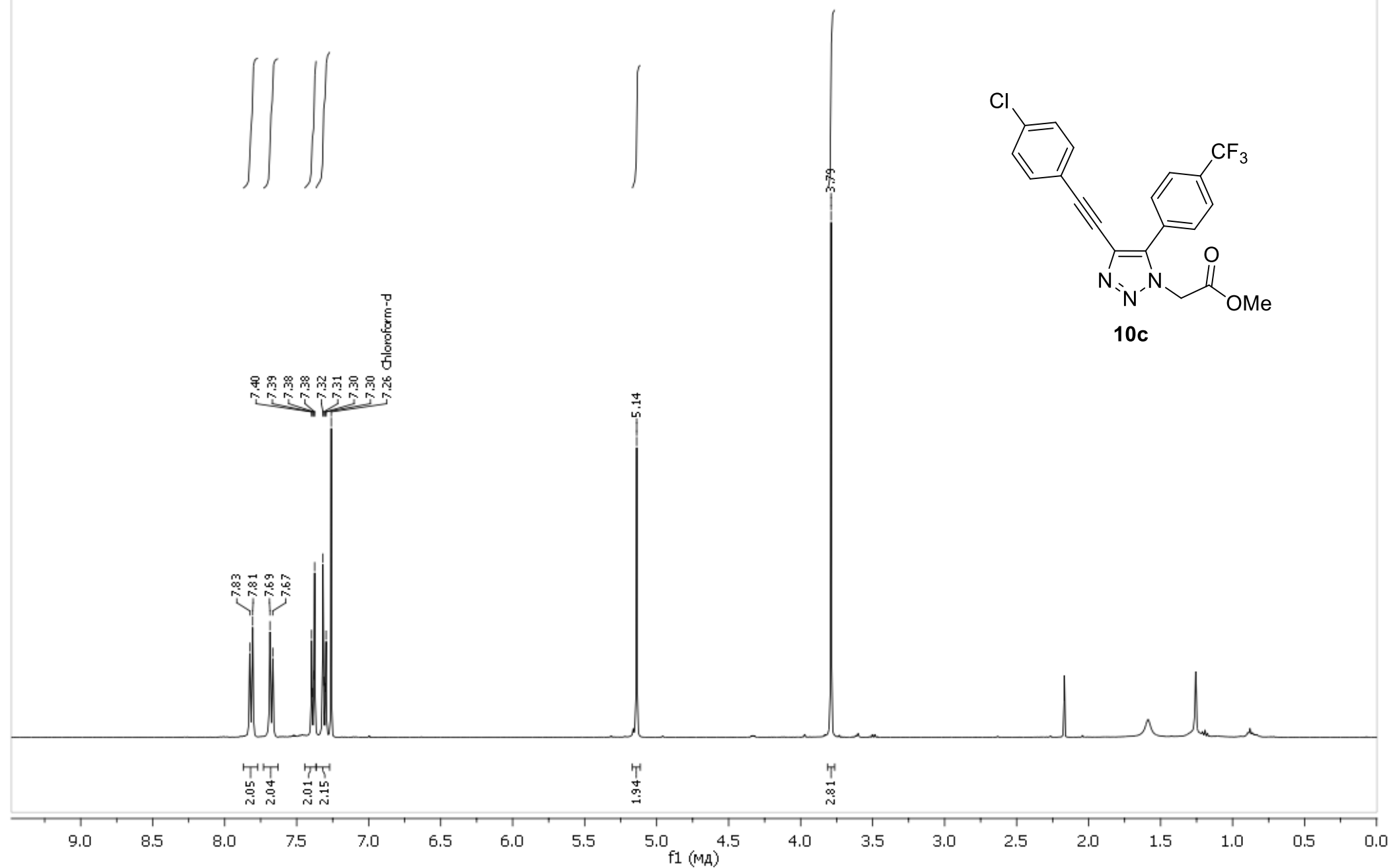
<sup>13</sup>C dept NMR of **10b**





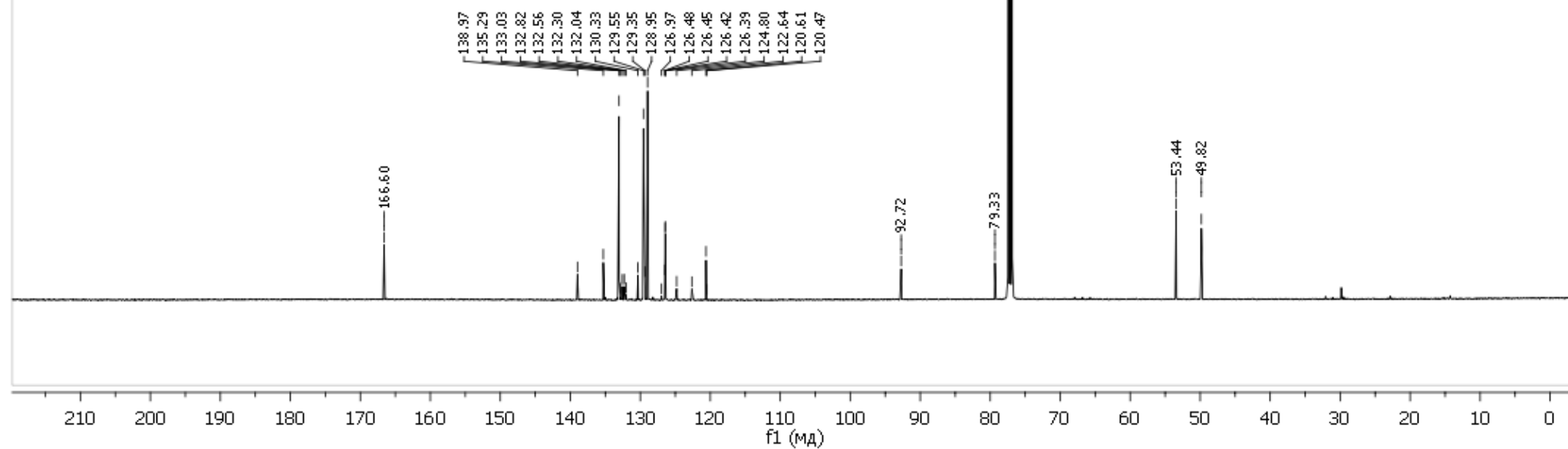
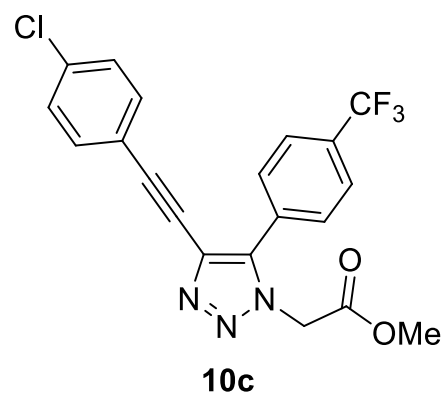
MME  
MME, 18, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 15 Jul 2020 T=298 K

# <sup>1</sup>H NMR of **10c**



MMEc  
MMEc, 102, BF = 125.732643506 MHz, Solvent - CDCl<sub>3</sub>, 15 Apr 2021 T=298 K

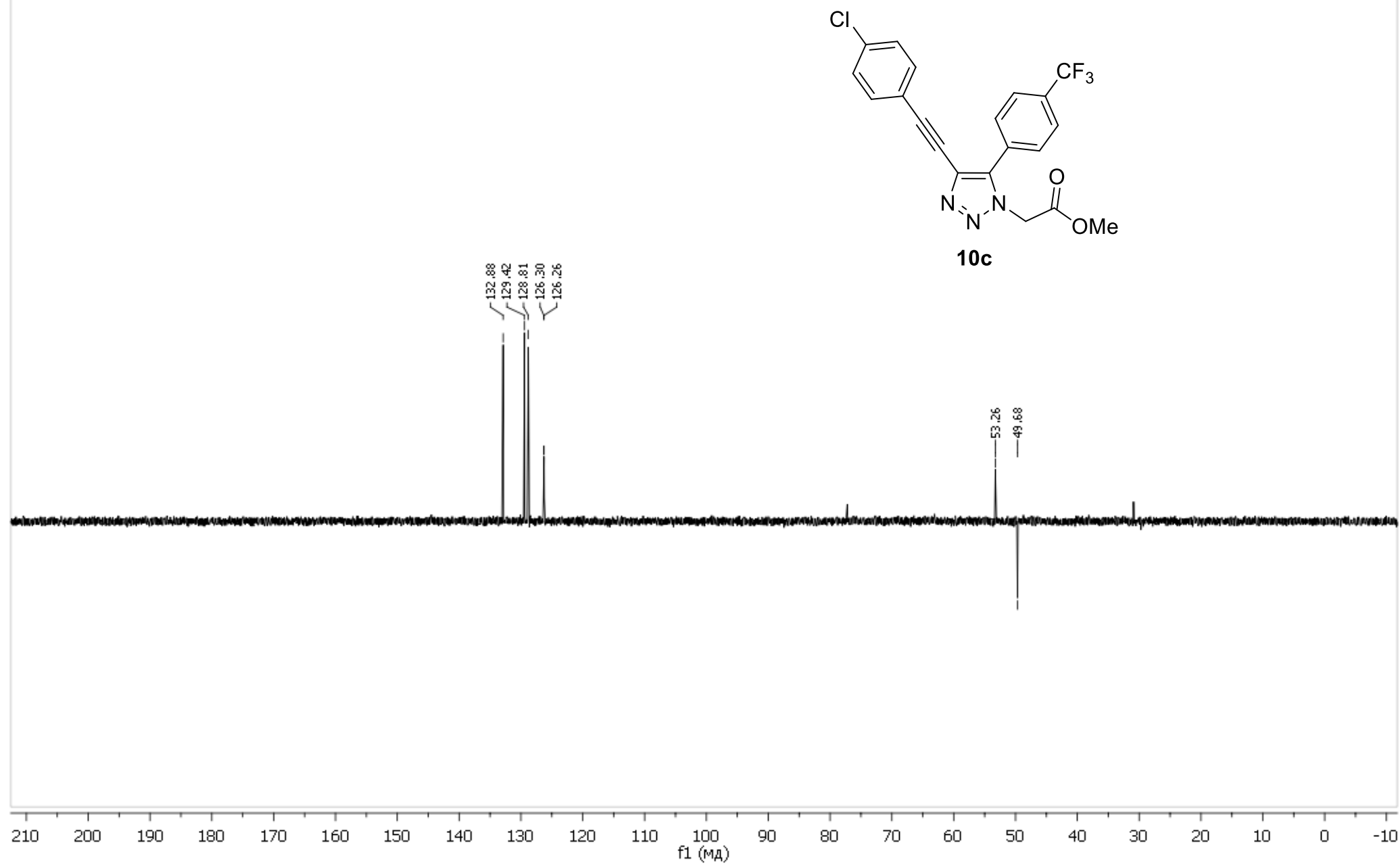
<sup>13</sup>C {<sup>1</sup>H} NMR of **10c**



MMEd

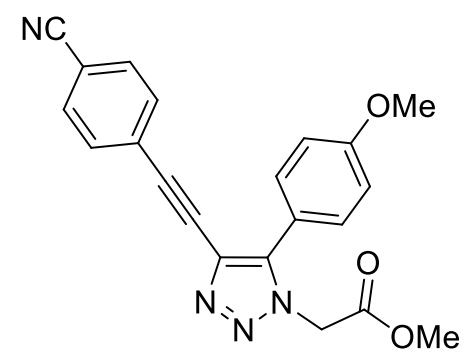
MMEd, 18, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 16 Jul 2020 T=298 K

<sup>13</sup>C dept NMR of **10c**

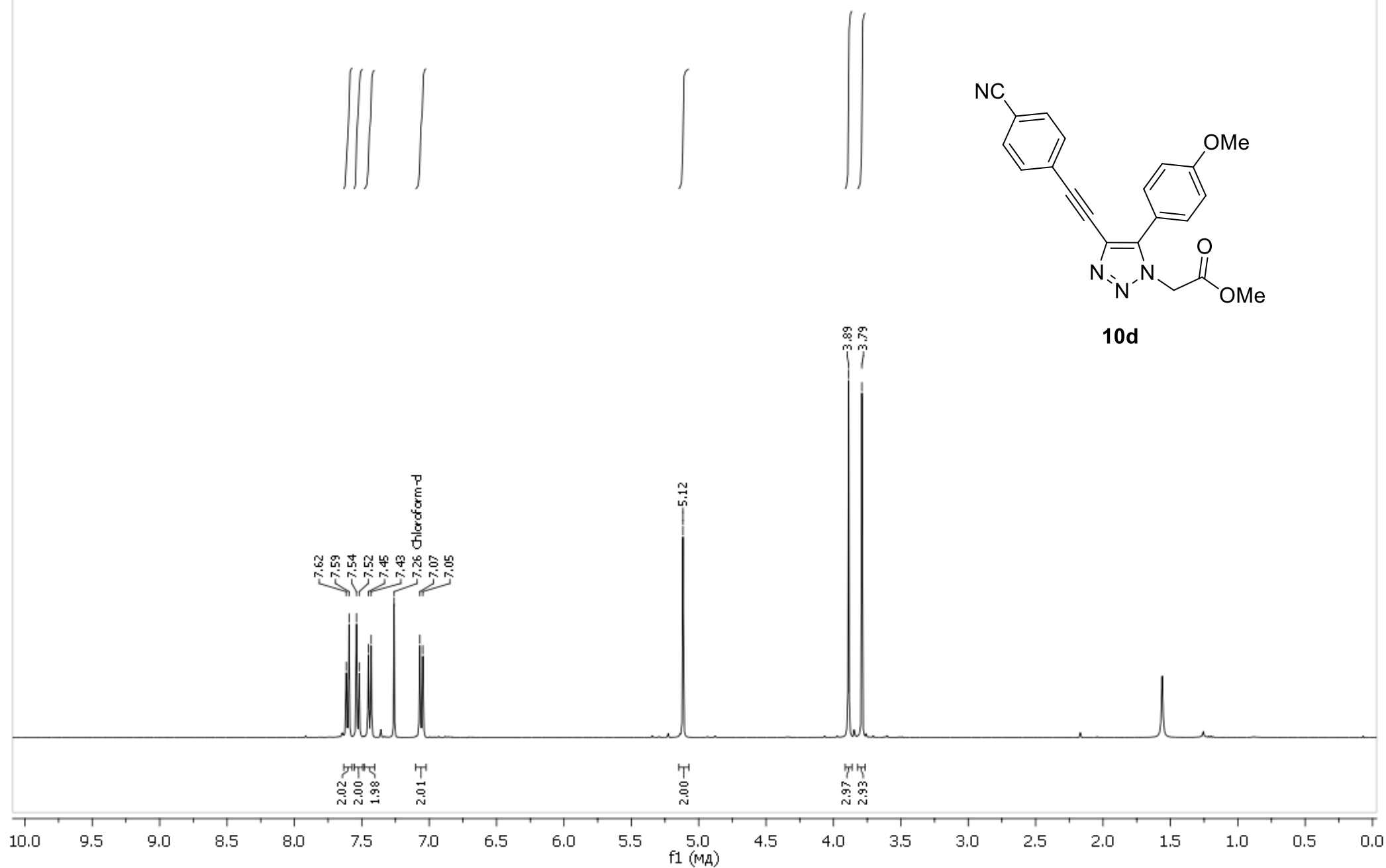


MME  
MME, 35, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 07 Sep 2020 T=298 K

# <sup>1</sup>H NMR of 10d

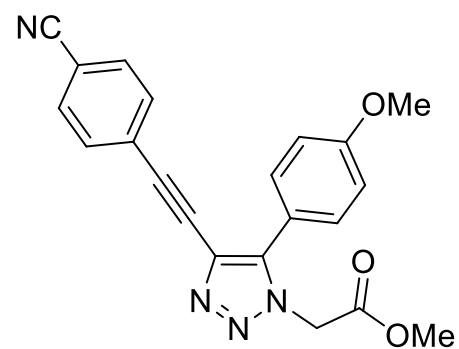


**10d**

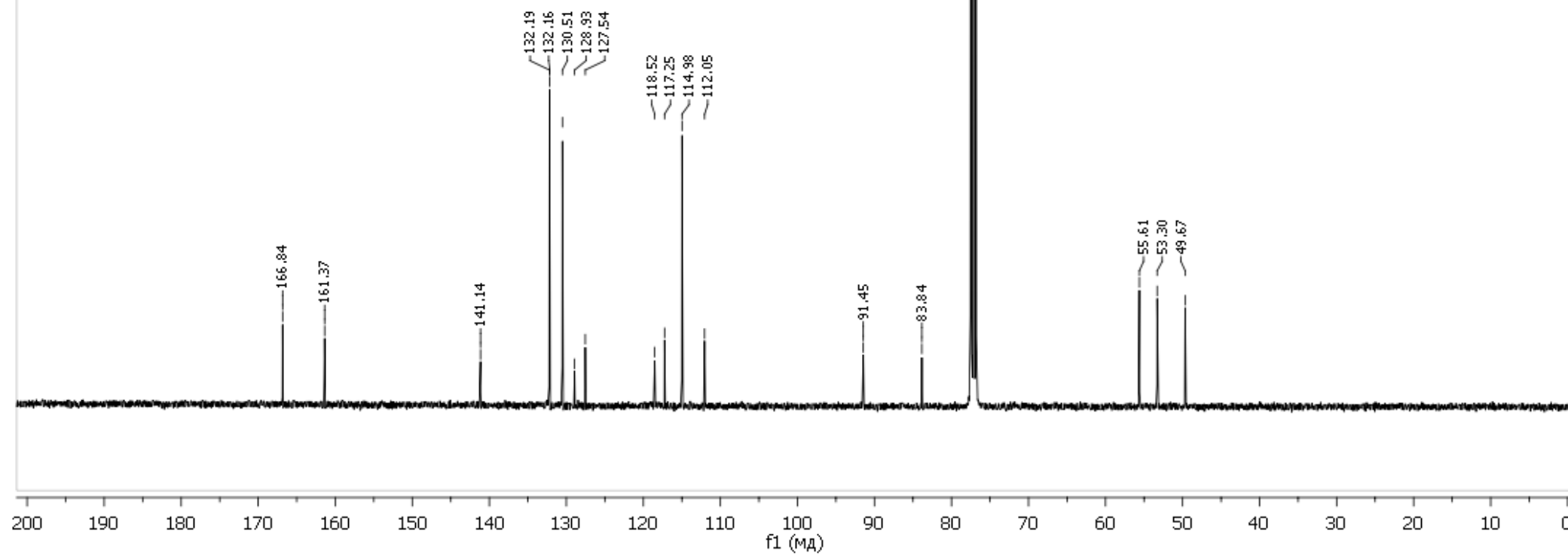


MMEc  
MMEc, 35, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 09 Sep 2020 T=298 K

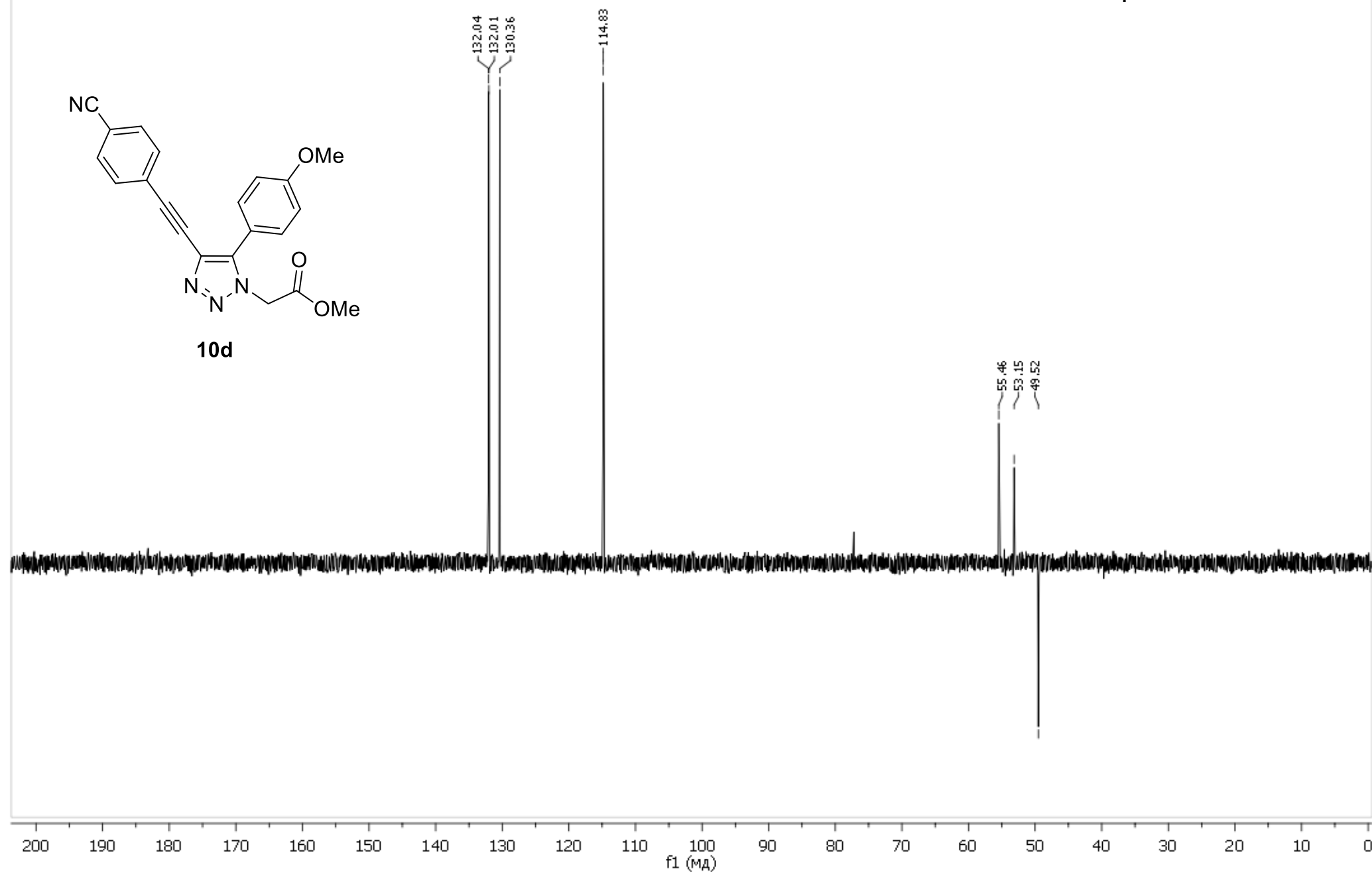
<sup>13</sup>C {<sup>1</sup>H} NMR of **10d**



**10d**

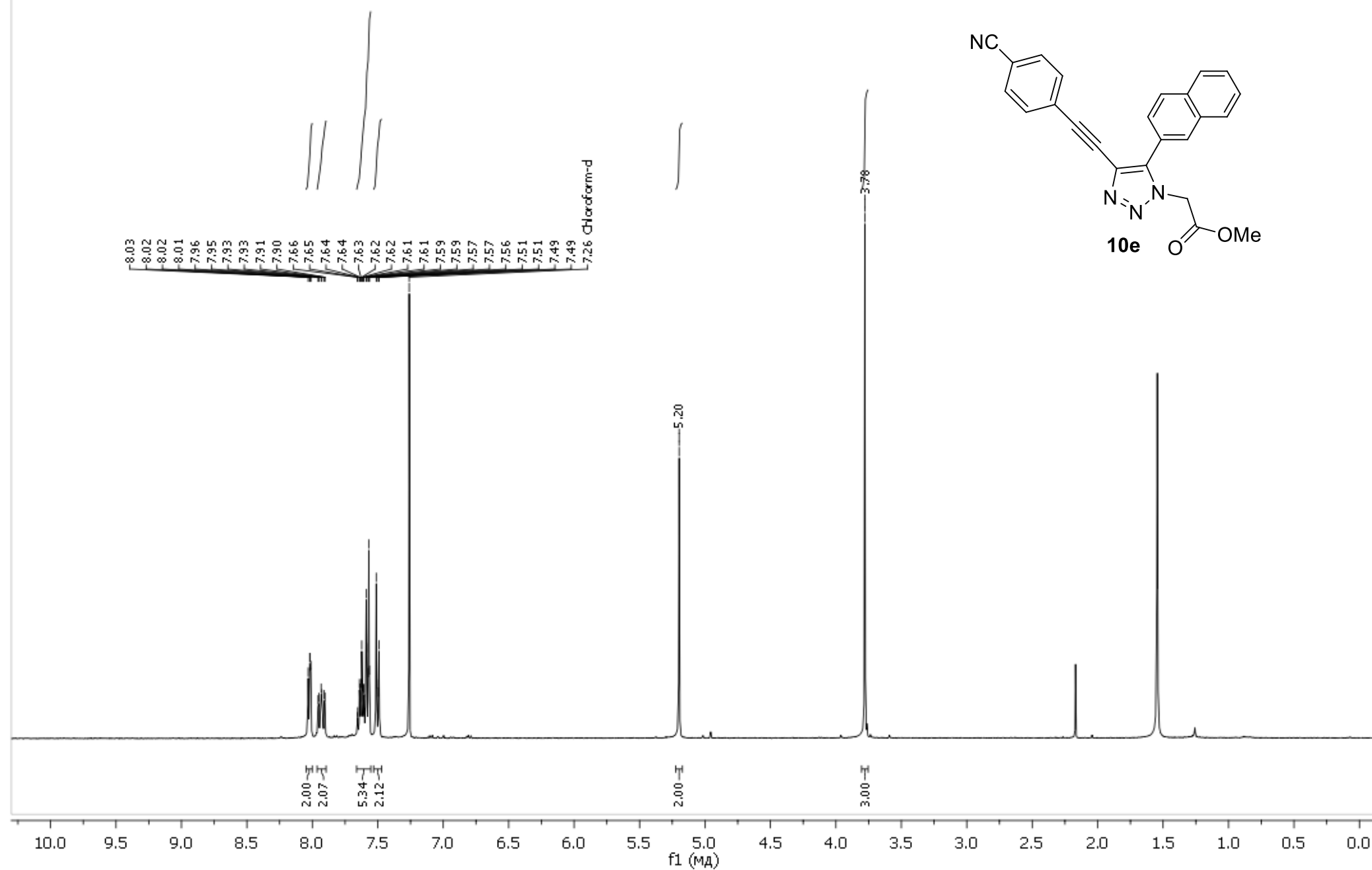


<sup>13</sup>C dept NMR of **10d**



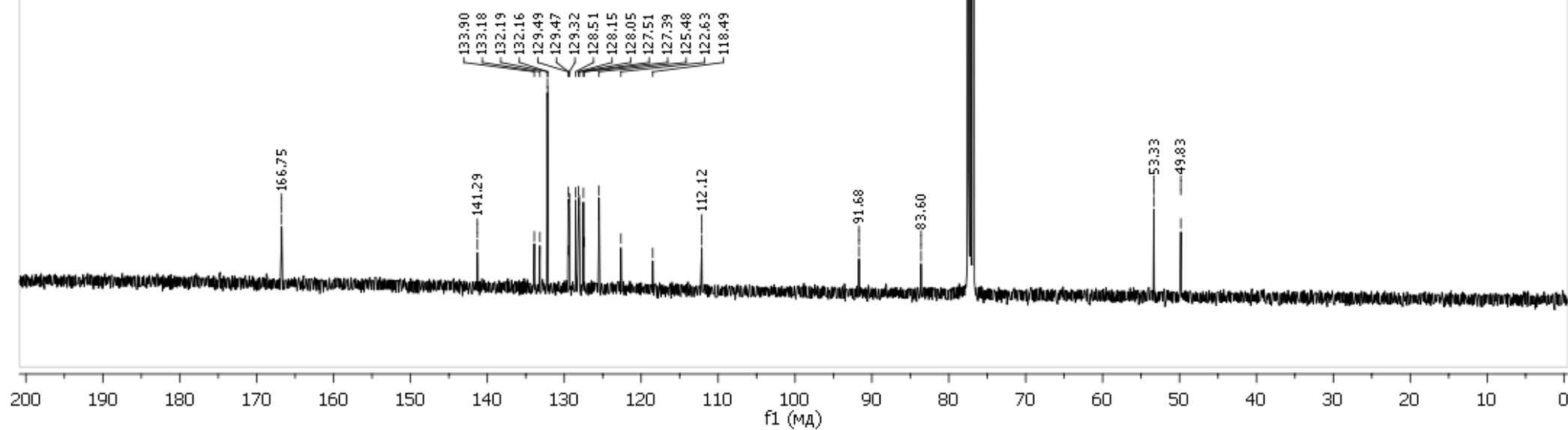
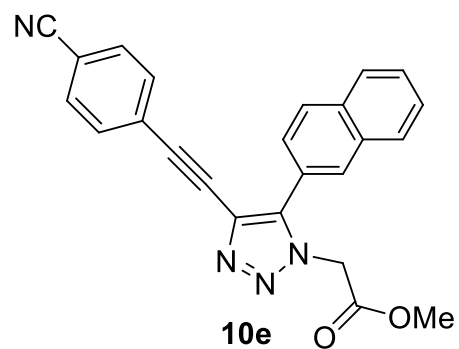
MME  
MME, 49, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 19 Oct 2020 T=298 K

# <sup>1</sup>H NMR of **10e**



MMEc  
MMEc, 49, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 21 Oct 2020 T=298 K

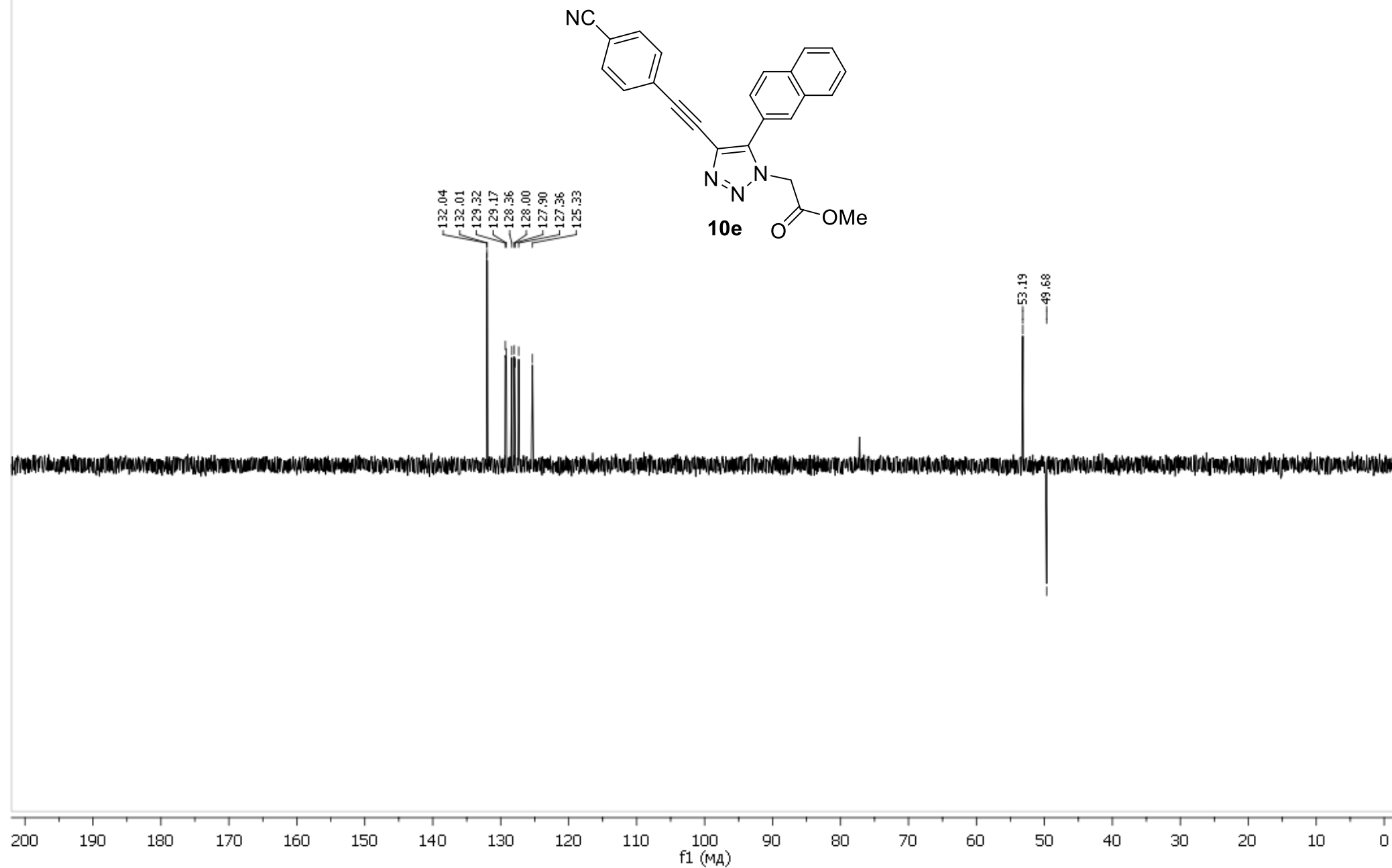
<sup>13</sup>C {<sup>1</sup>H} NMR of **10e**



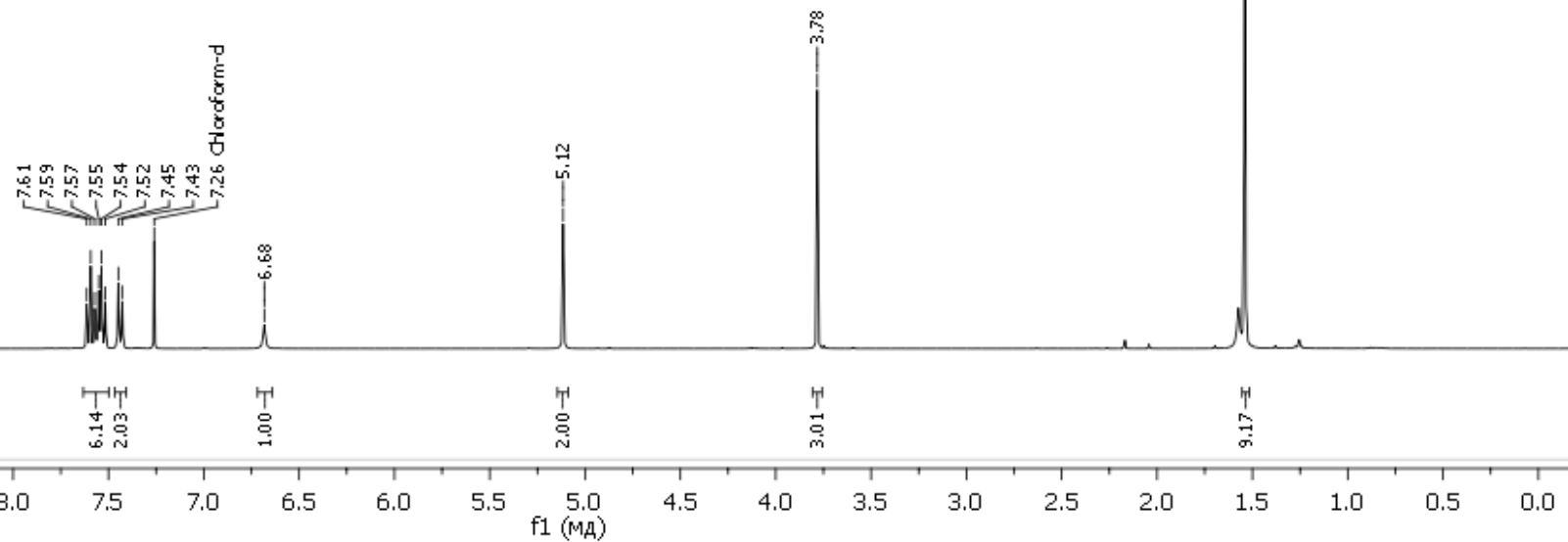
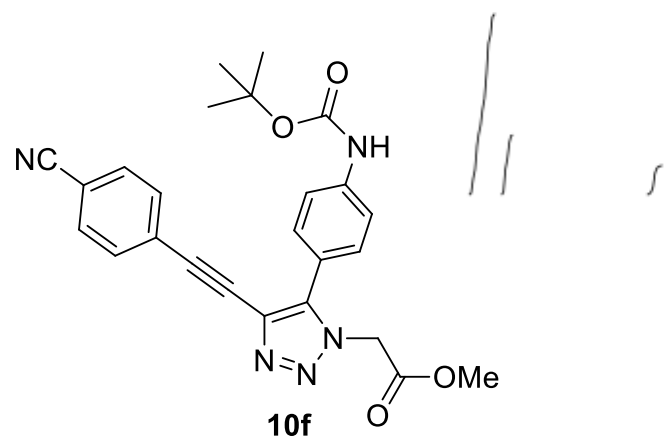


MMEd  
MMEd, 49, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 21 Oct 2020 T=298 K

<sup>13</sup>C dept NMR of **10e**

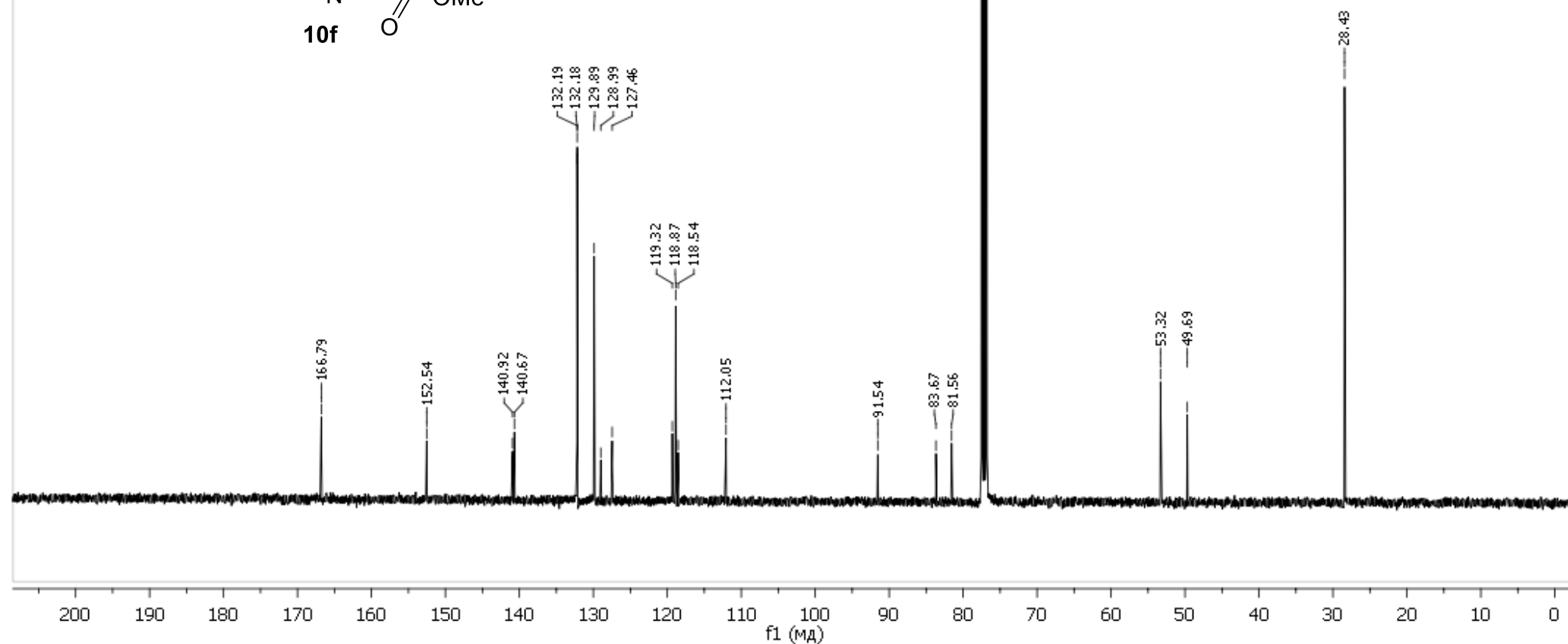
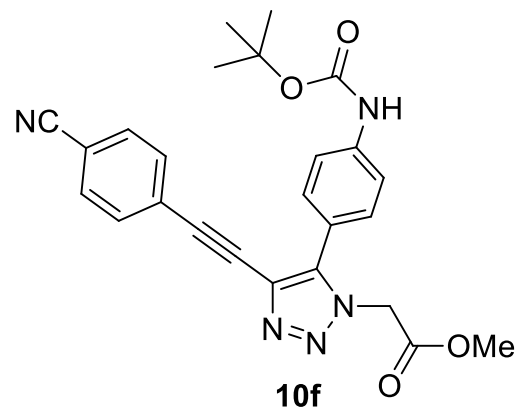


<sup>1</sup>H NMR of **10f**



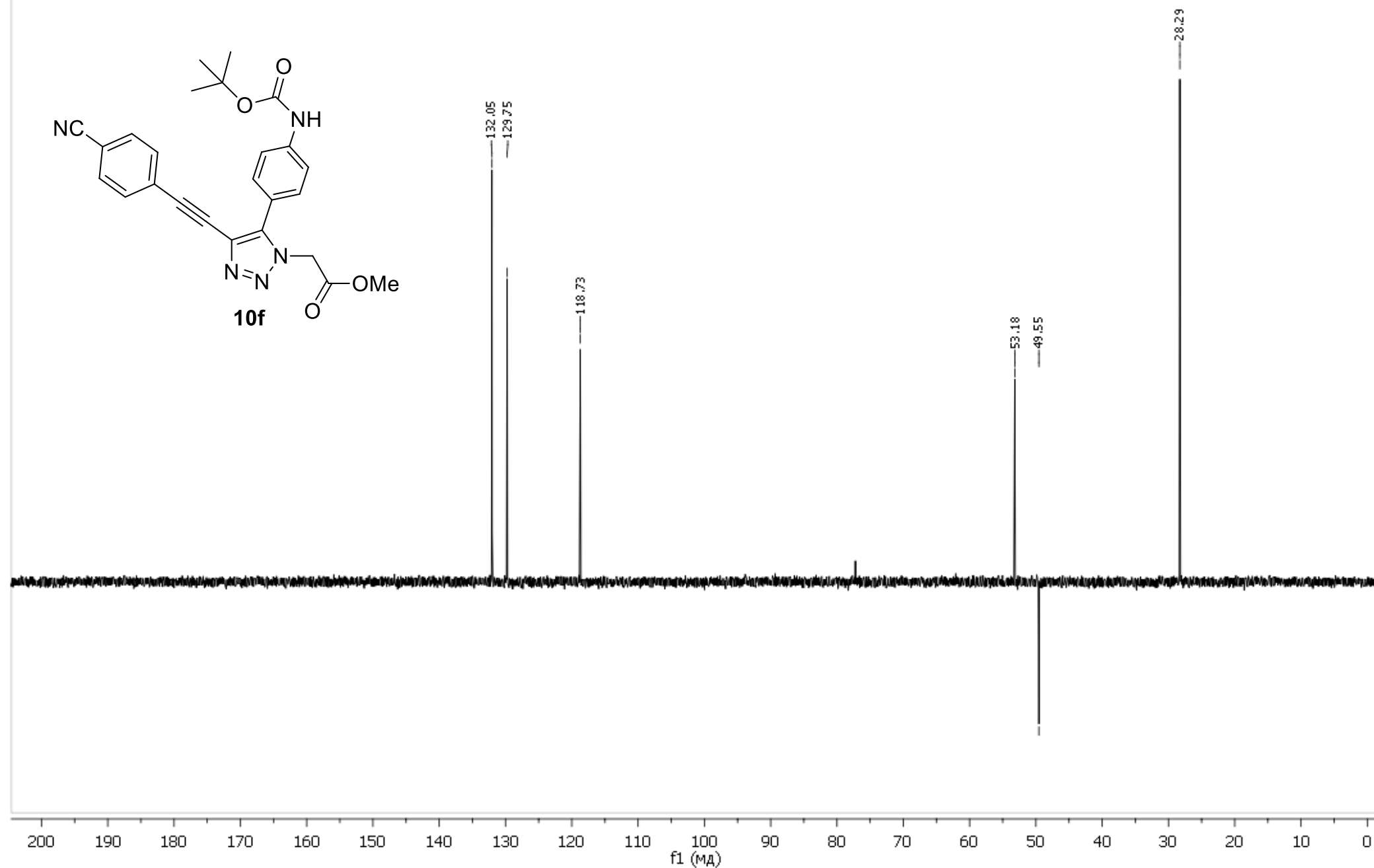
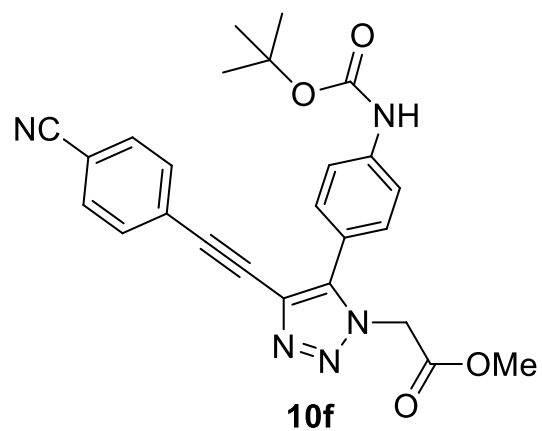
MMEc  
MMEc, 7, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 14 Oct 2020 T=298 K

<sup>13</sup>C {<sup>1</sup>H} NMR of **10f**



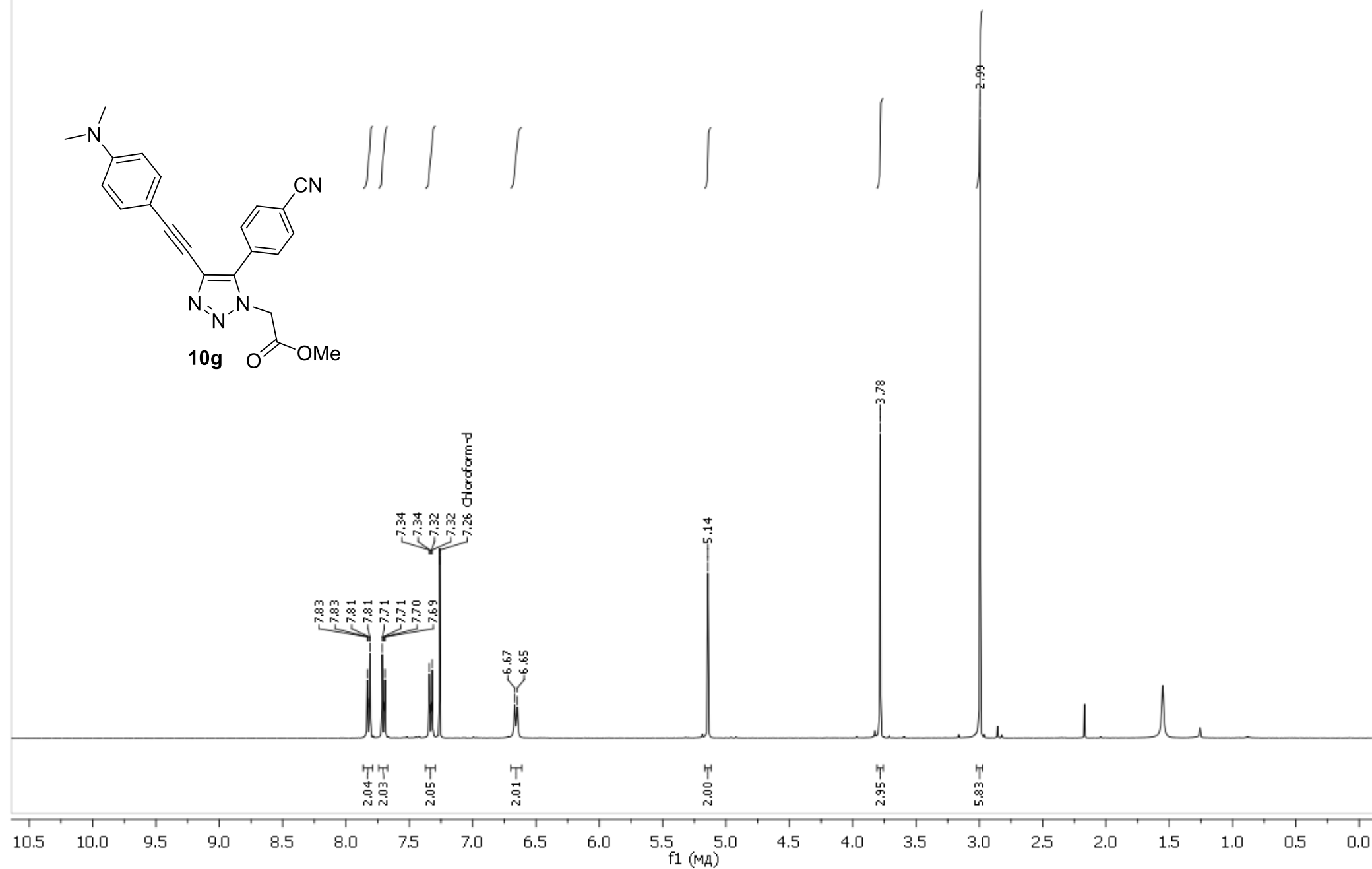
MMEd  
MMEd, 7, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 14 Oct 2020 T=298 K

<sup>13</sup>C dept NMR of **10f**



MME  
MME, 52, BF = 400.13 MHz, Solvent - CDCl<sub>3</sub>, 12 Nov 2020 T=298 K

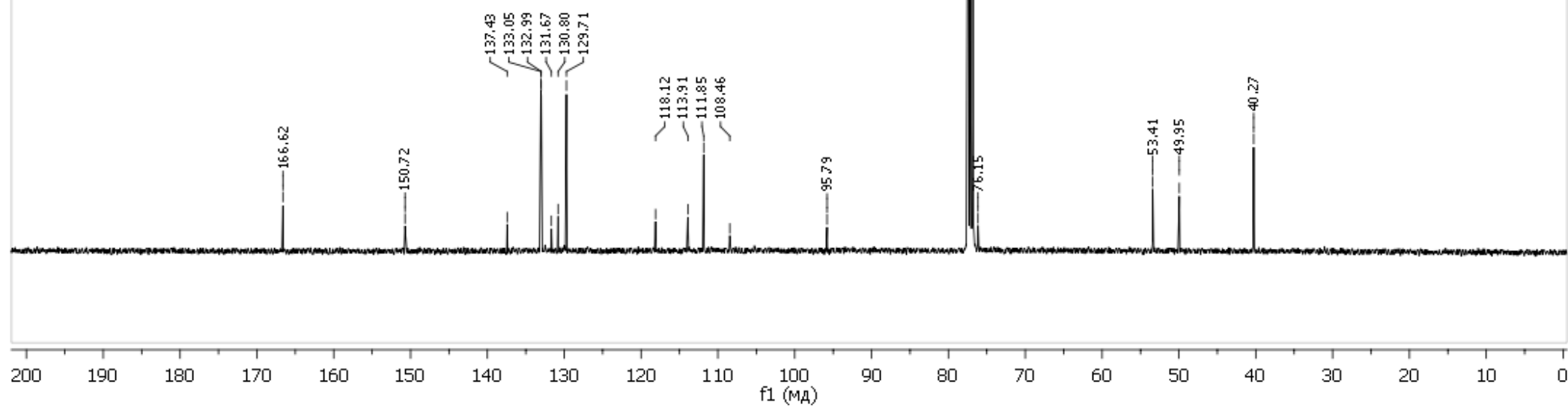
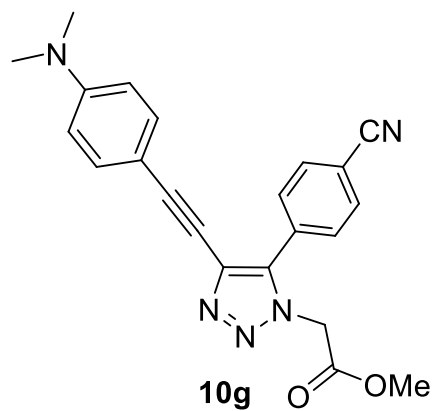
<sup>1</sup>H NMR of **10g**



MMEc

MMEc, 52, BF = 100.612769 MHz, Solvent - CDCl<sub>3</sub>, 13 Nov 2020 T=298 K

<sup>13</sup>C {<sup>1</sup>H} NMR of **10g**



<sup>13</sup>C dept NMR of **10g**

