

Supporting Information

Regioselective synthesis of new family of 2-substituted 1,2,3-triazoles and study of their fluorescent properties

Vasiliy M. Muzalevskiy, Zoia A. Sizova and Valentine G. Nenajdenko*

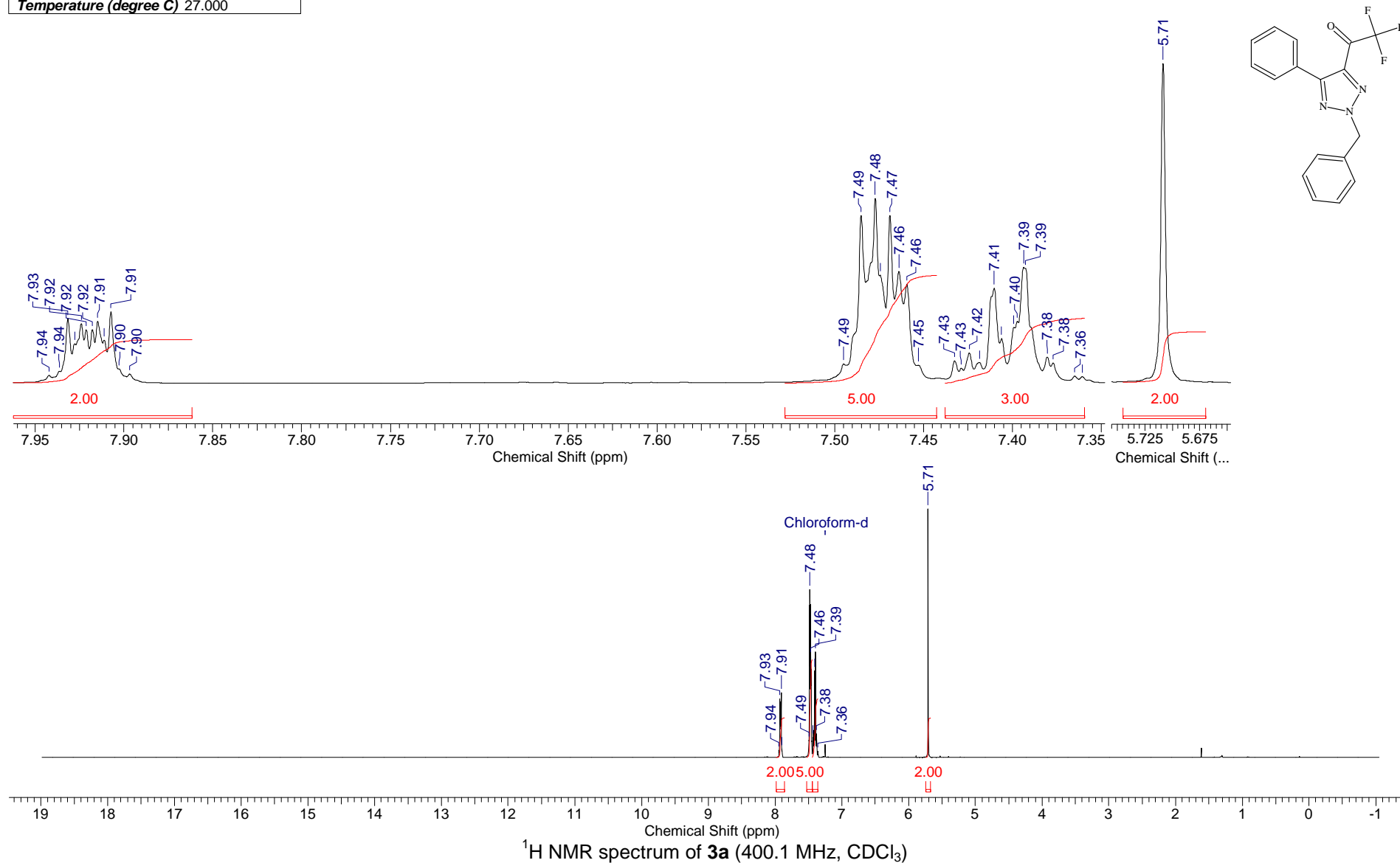
Department of Chemistry, Lomonosov Moscow State University, 119899 Moscow, Russia

* Correspondence: nenajdenko@org.chem.msu.ru (V.G.N.)

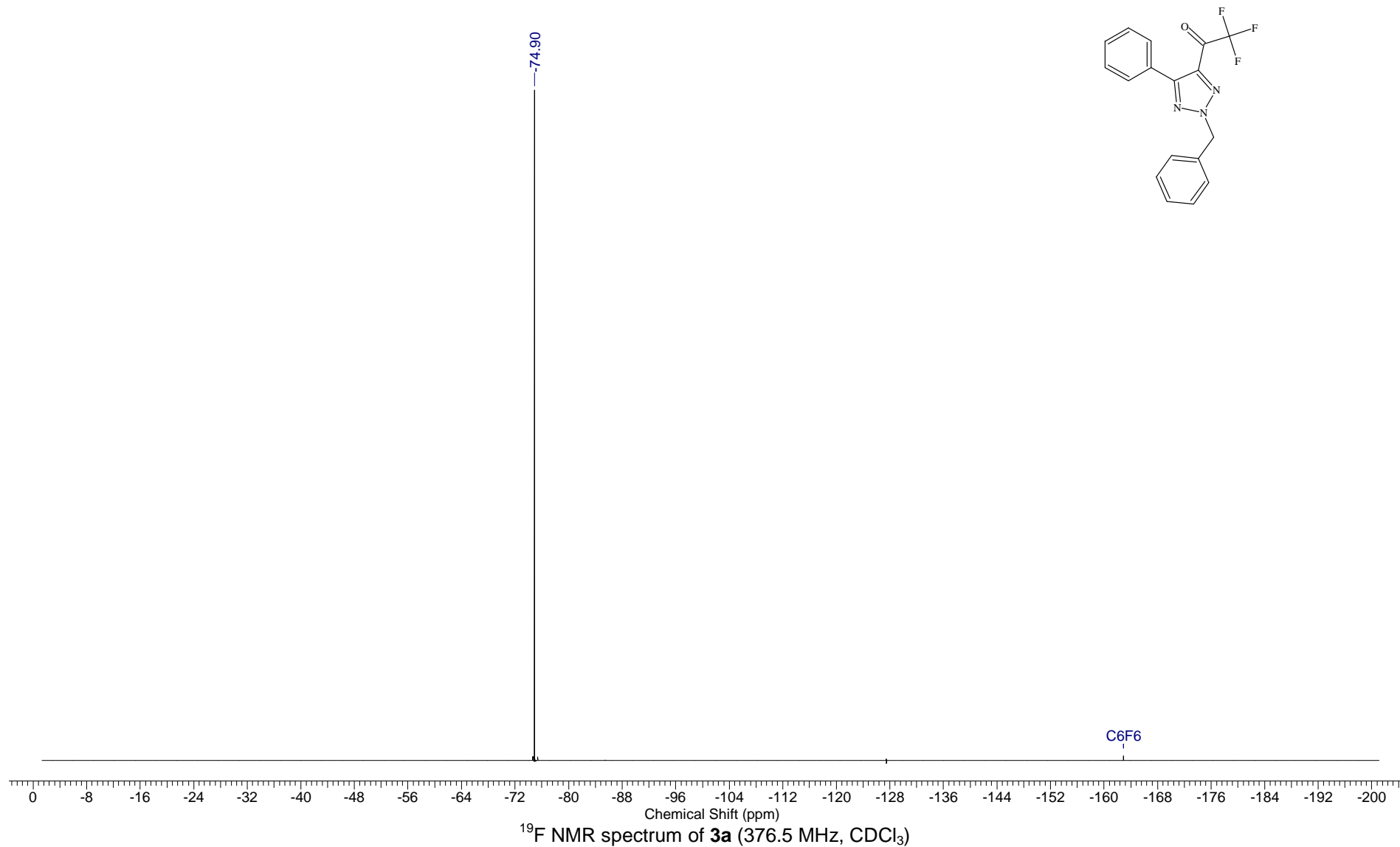
Copies of all NMR spectra

S2-S152

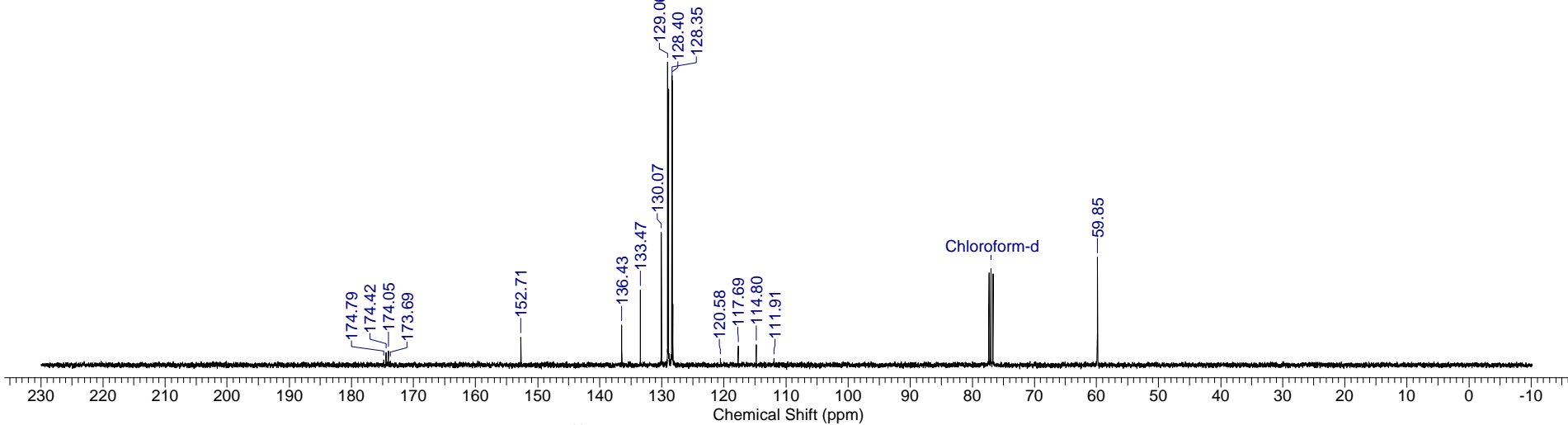
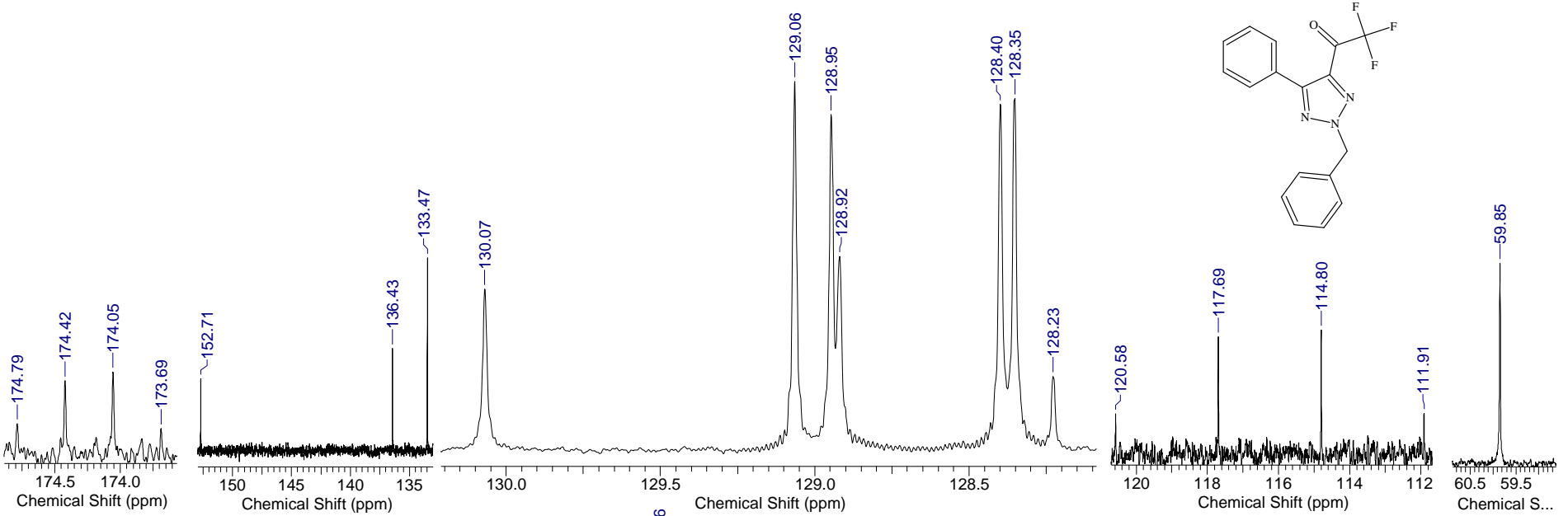
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Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						F



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Temperature (degree C)	27.000						

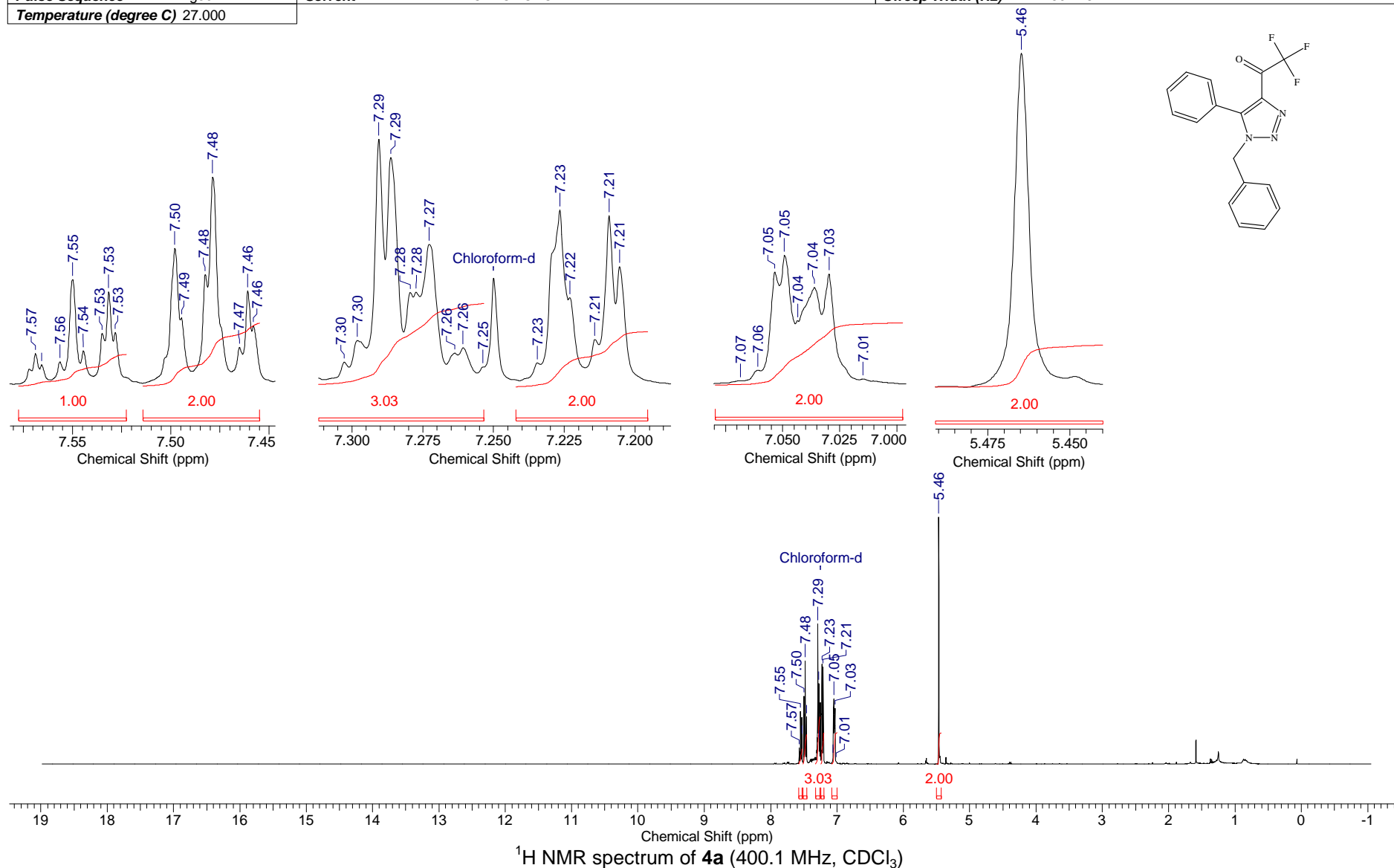


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Nucleus	13C	Number of Transients	73	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

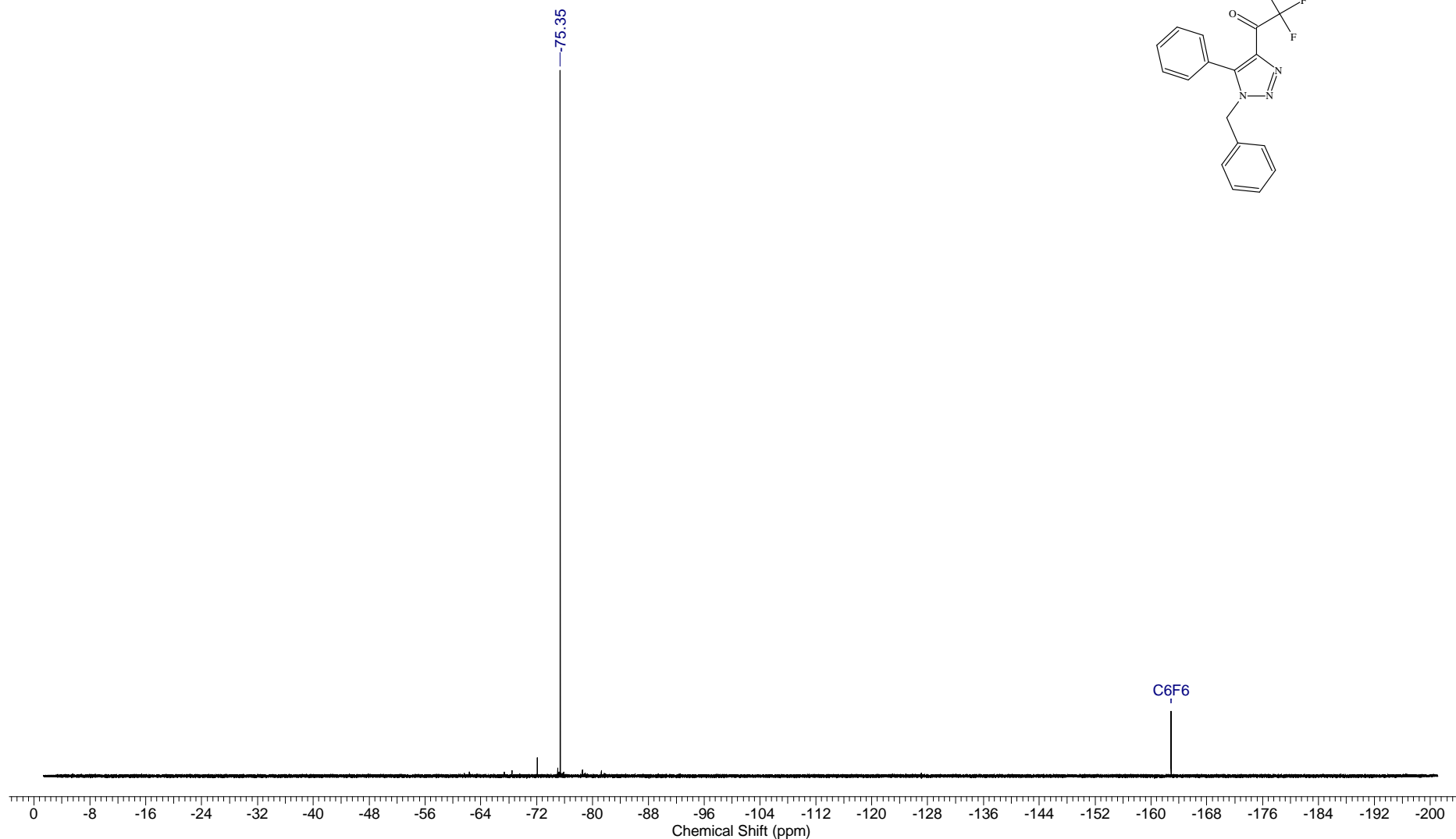
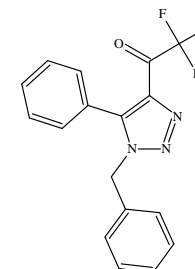


¹³C NMR spectrum of 3a (100.6 MHz, CDCl₃)

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Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000				

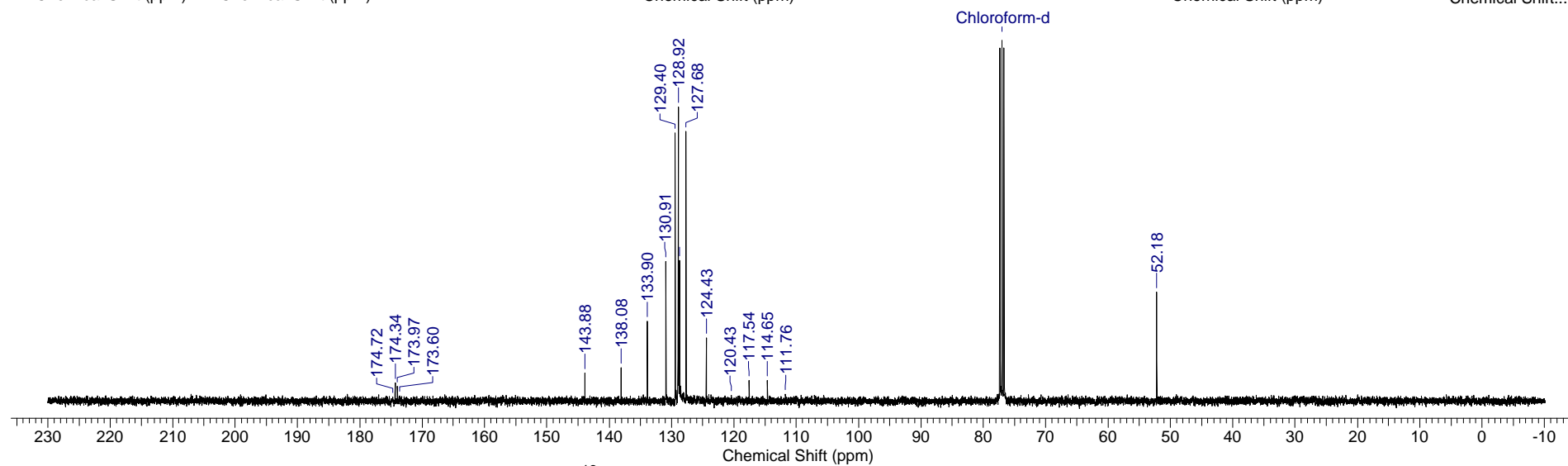
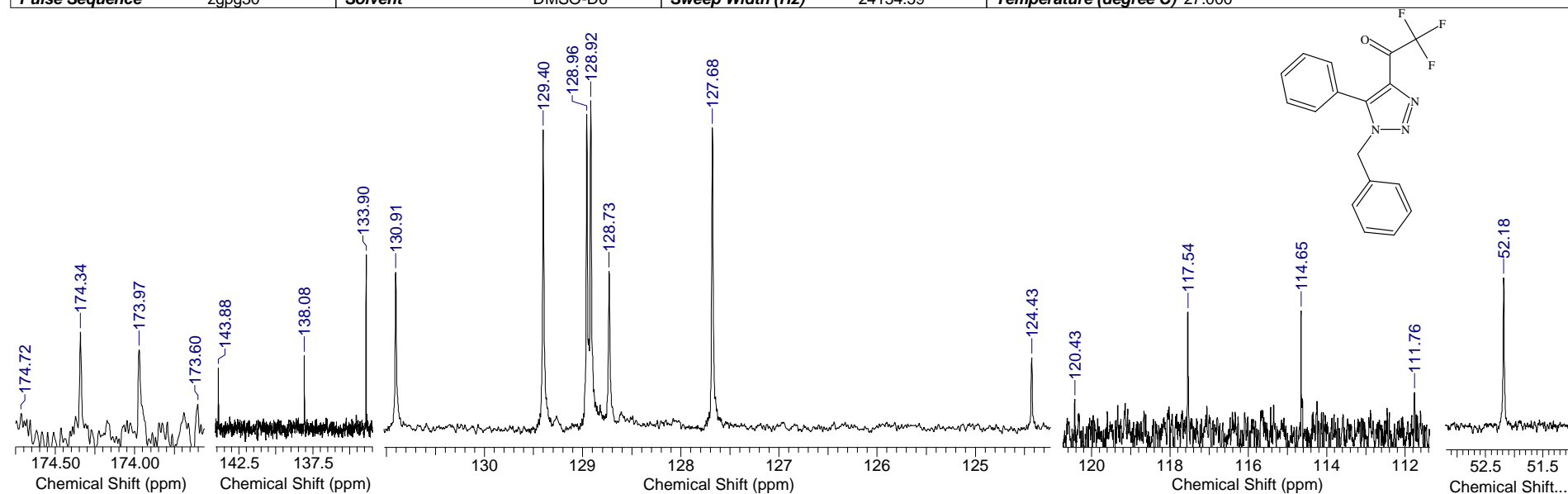


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Pulse Sequence	zgfgqn	Points Count	262144	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000	Solvent	CHLOROFORM-D		

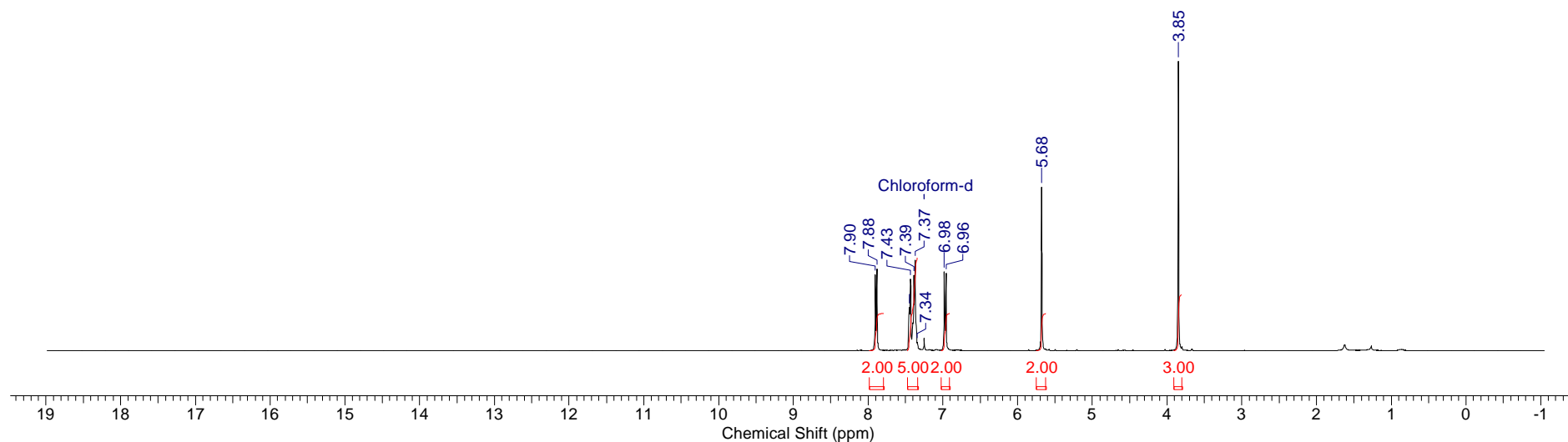
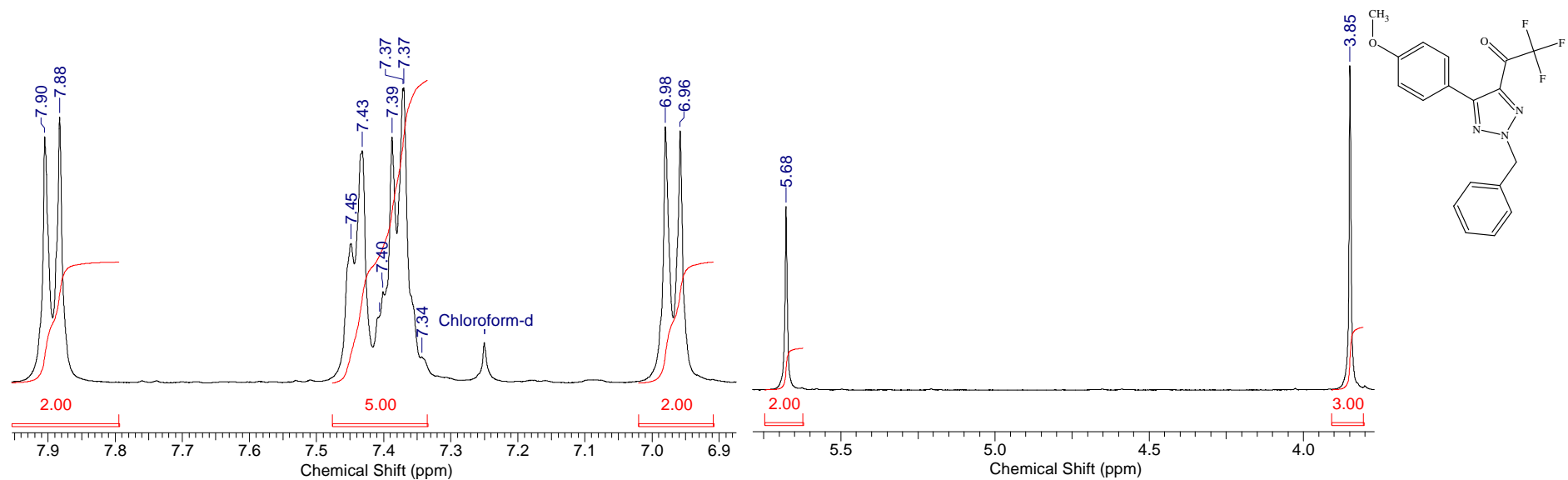


¹⁹F NMR spectrum of **4a** (376.5 MHz, CDCl₃)

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Nucleus	13C	Number of Transients	347	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

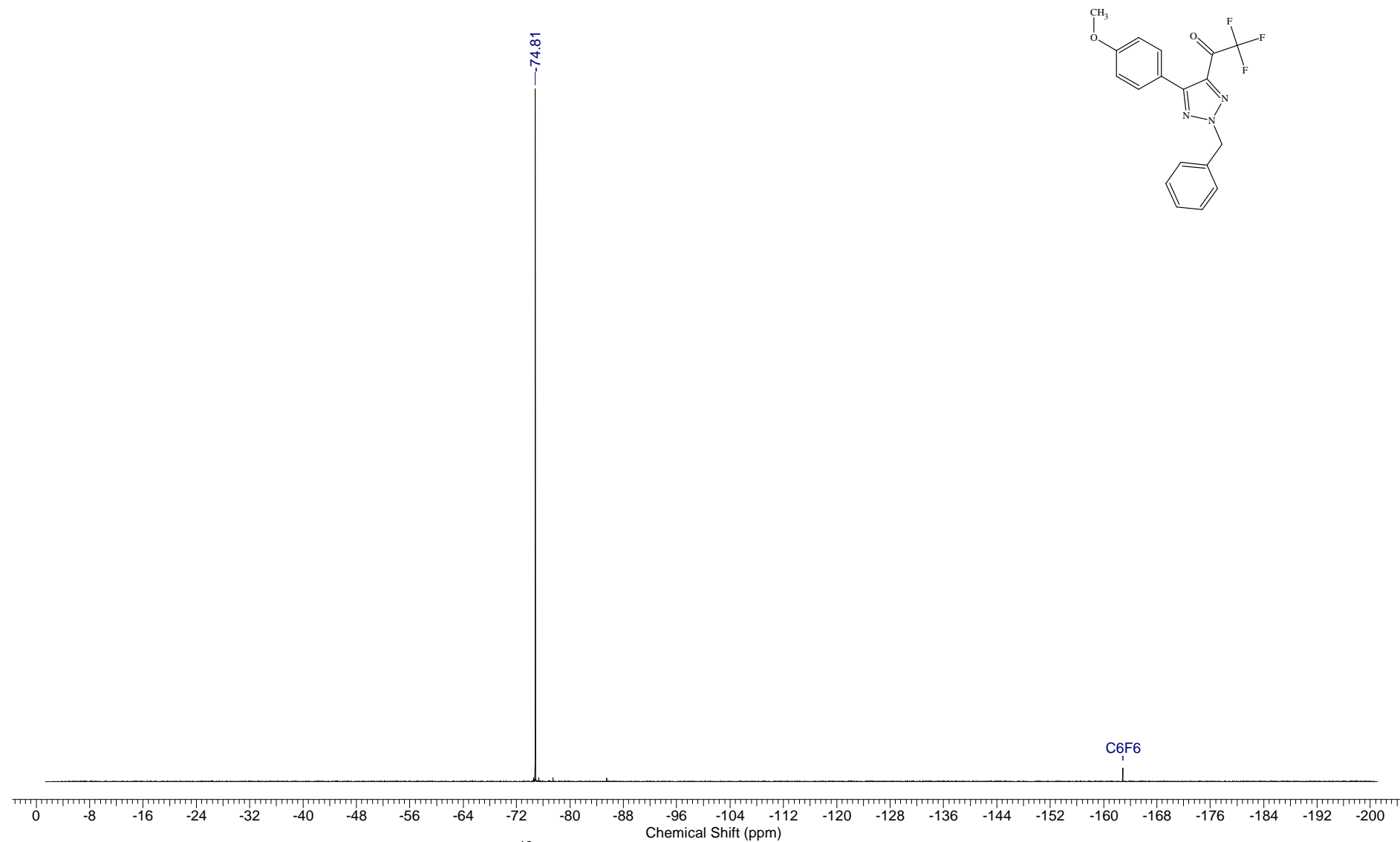
¹³C NMR spectrum of **4a** (100.6 MHz, CDCl₃)

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File Name	C:\DOCS\OUTPUT_301\2022\05.mai\BM-2513-1.H_001001r	Frequency (MHz)	400.13	Nucleus	¹ H
Number of Transients	4	Original Points Count	32768	Points Count	131072
Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82	Pulse Sequence	zg30
				Temperature (degree C)	27.000

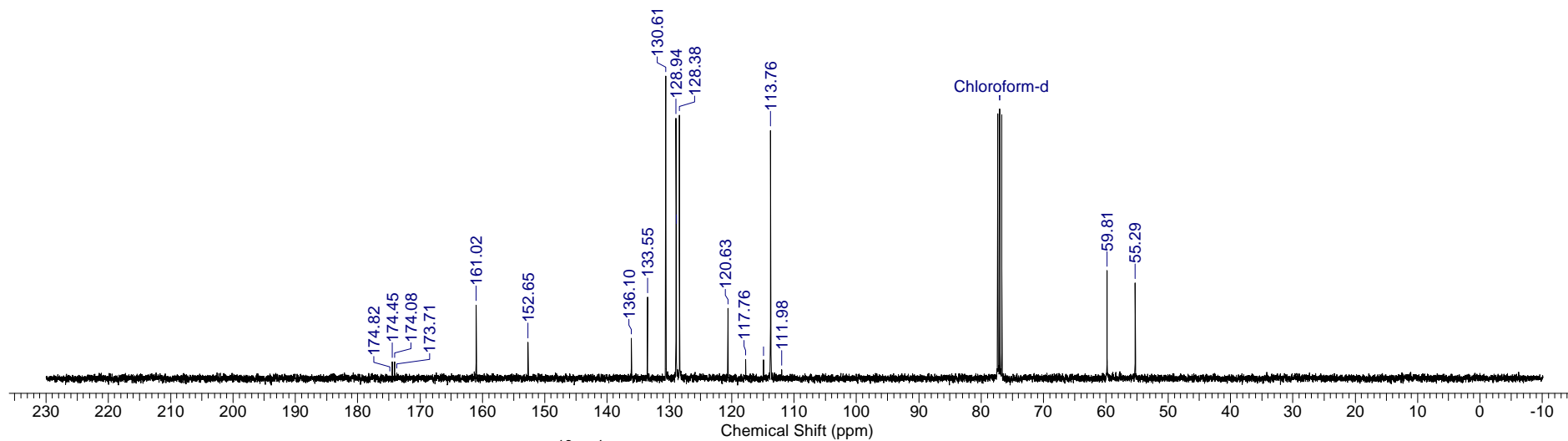
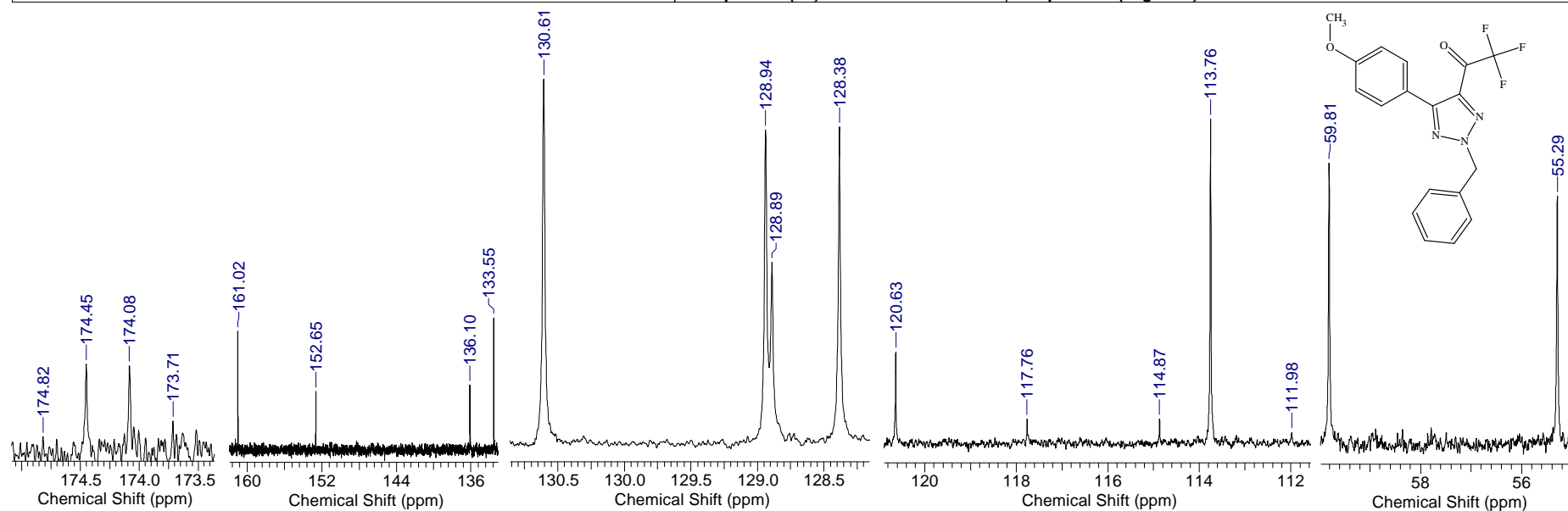


¹H NMR spectrum of **3b** (400.1 MHz, CDCl₃)

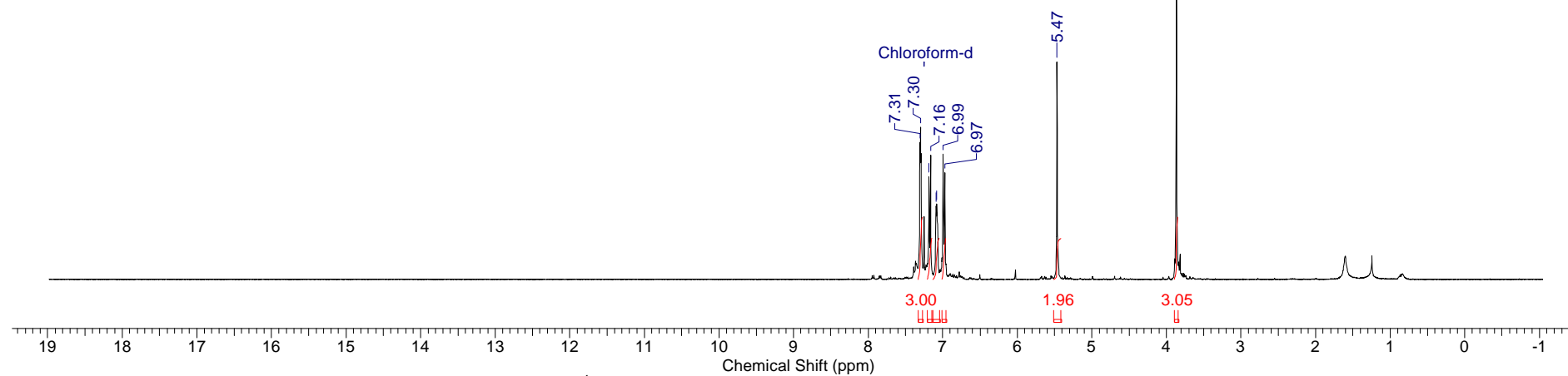
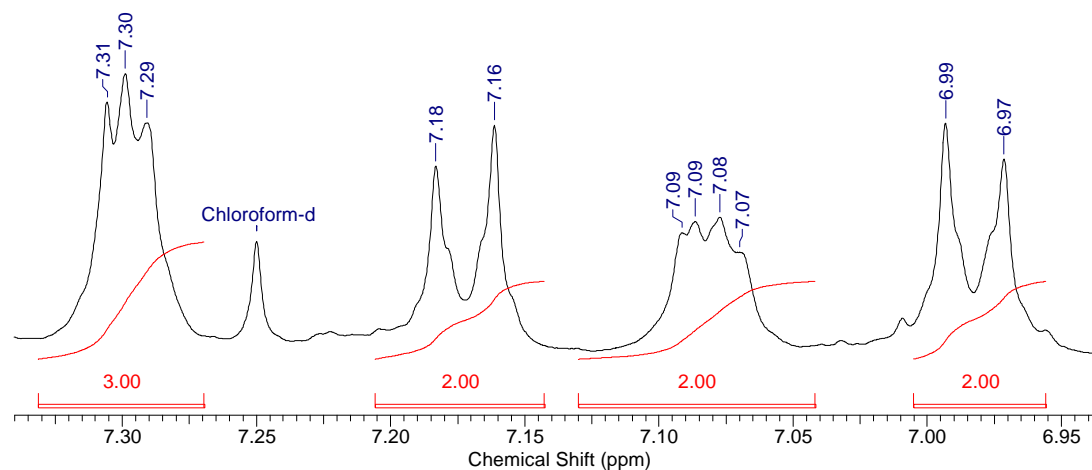
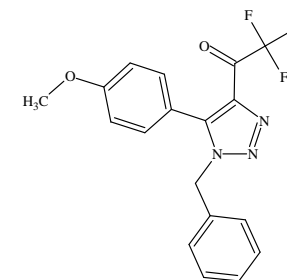
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Number of Transients	16	Original Points Count	131072	Points Count	262144	Pulse Sequence	zgfgqn
Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97	Temperature (degree C)	27.000		



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Number of Transients	225	Original Points Count	16384	Points Count	131072	
Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59	Pulse Sequence	zgpg30	
				Temperature (degree C)	27.000	

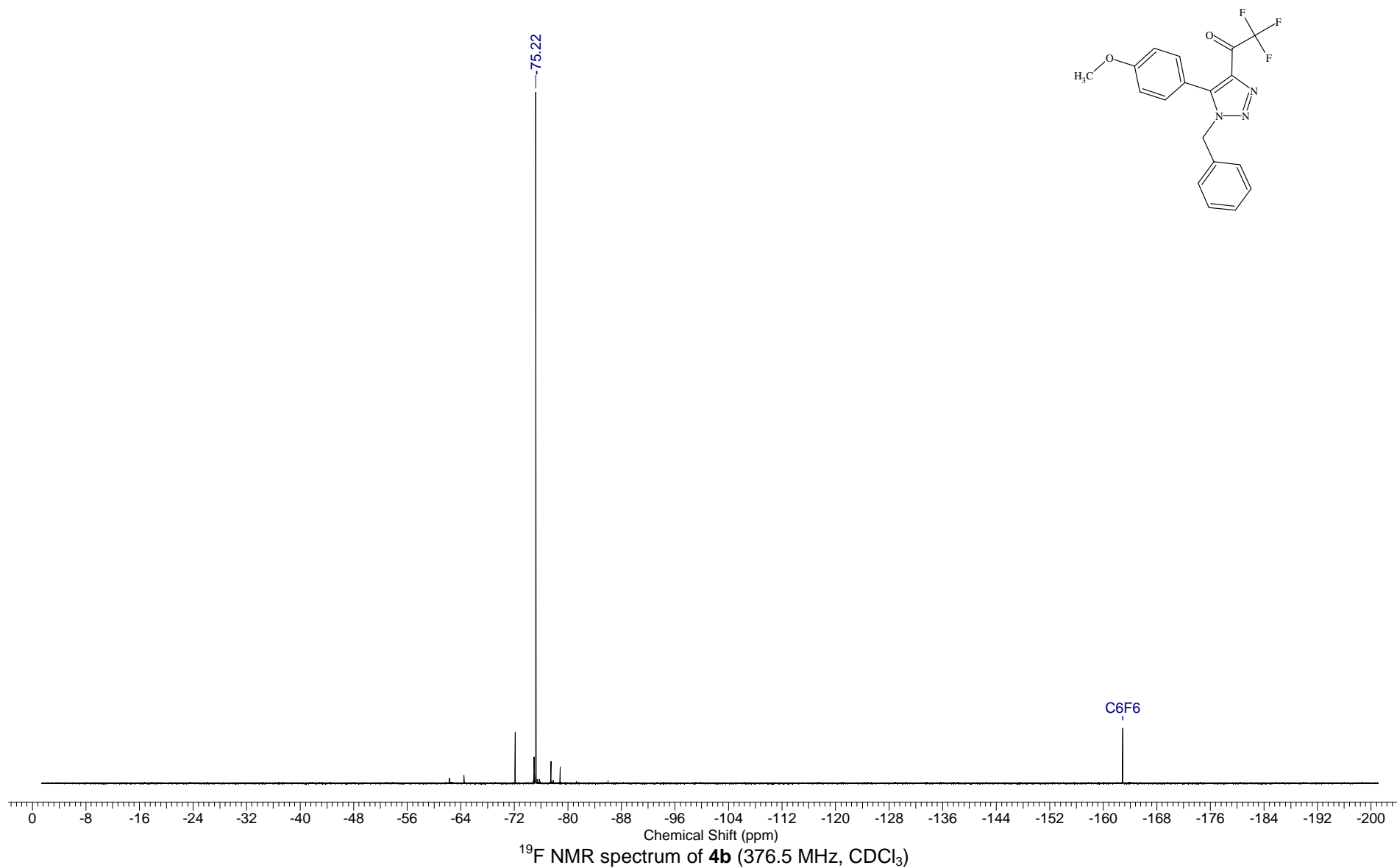
 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **3b** (100.6 MHz, CDCl_3)

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Number of Transients	4	Original Points Count	32768	Points Count	131072	Pulse Sequence	zg30
Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000		

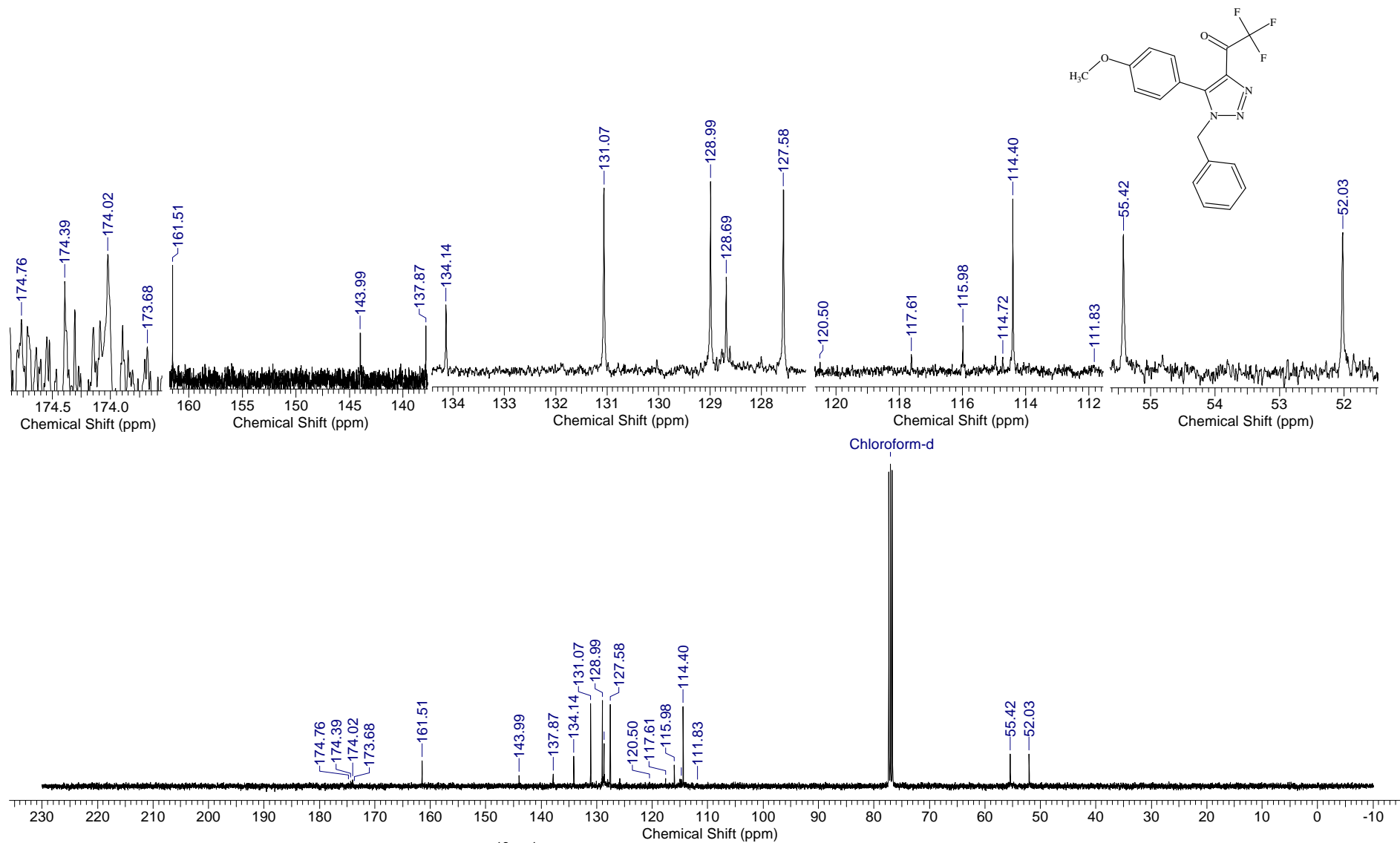


¹H NMR spectrum of **4b** (400.1 MHz, CDCl₃)

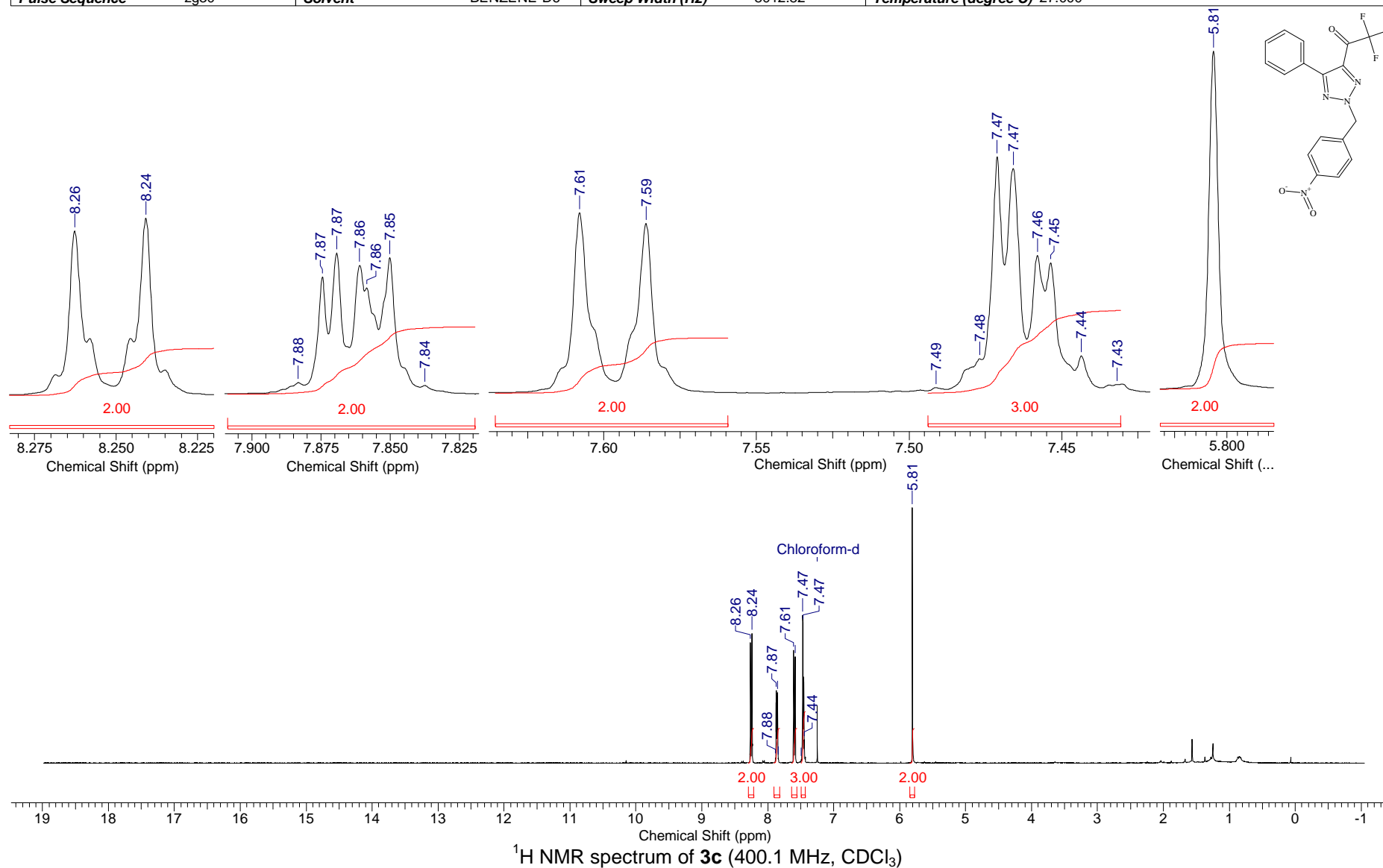
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File Name	C:\DOCS\OUTPUT_301\2022\05.май\BM-2513-3.F_005001r	Frequency (MHz)	376.50	Nucleus	¹⁹ F
Number of Transients	16	Original Points Count	131072	Points Count	262144
Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97	Pulse Sequence	zgfgqn
				Temperature (degree C)	27.000



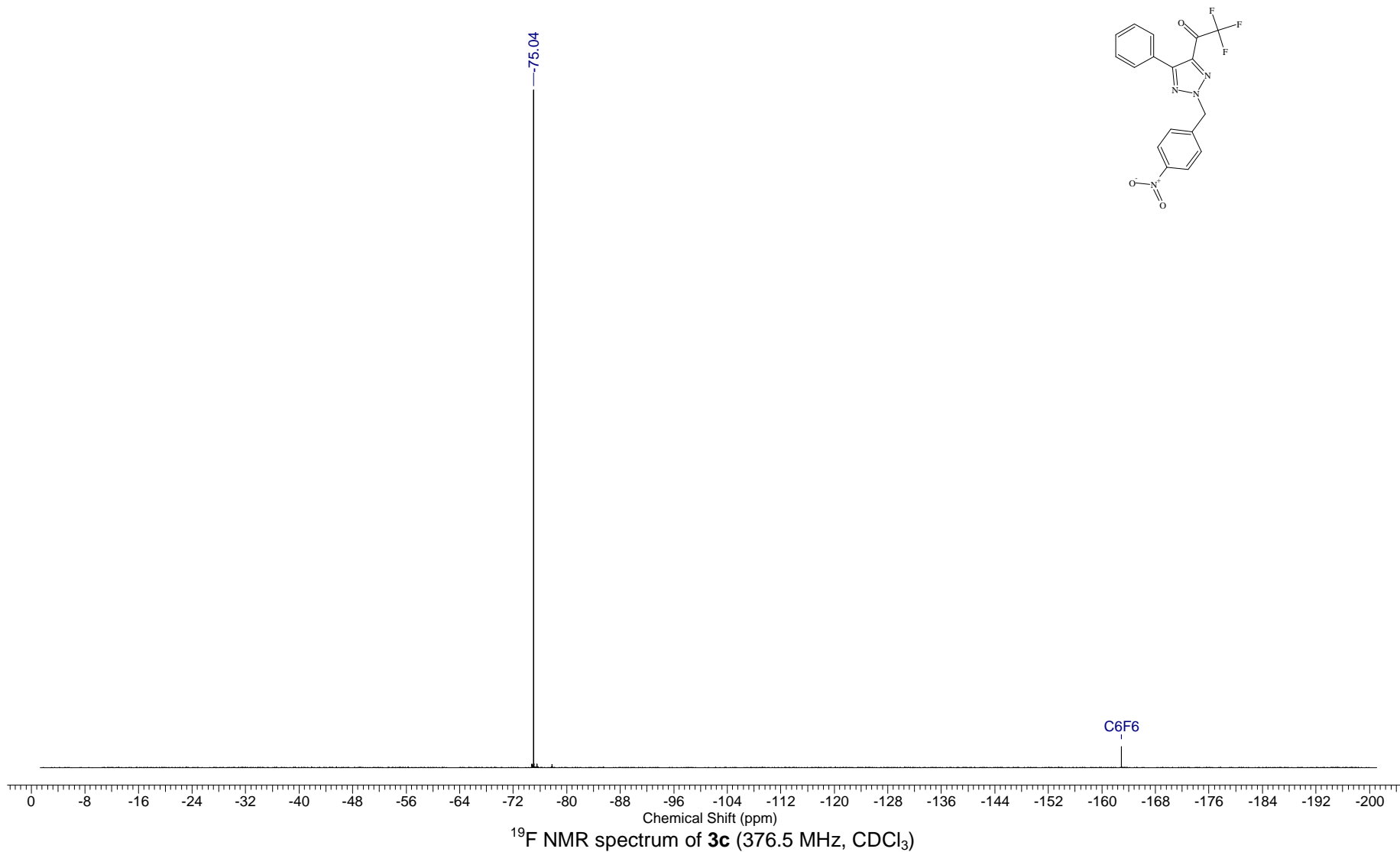
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Number of Transients	668	Original Points Count	16384	Points Count	131072	
Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59	Pulse Sequence	zgpg30	
				Temperature (degree C)	27.000	

¹³C{¹H} NMR spectrum of **4b** (100.6 MHz, CDCl₃)

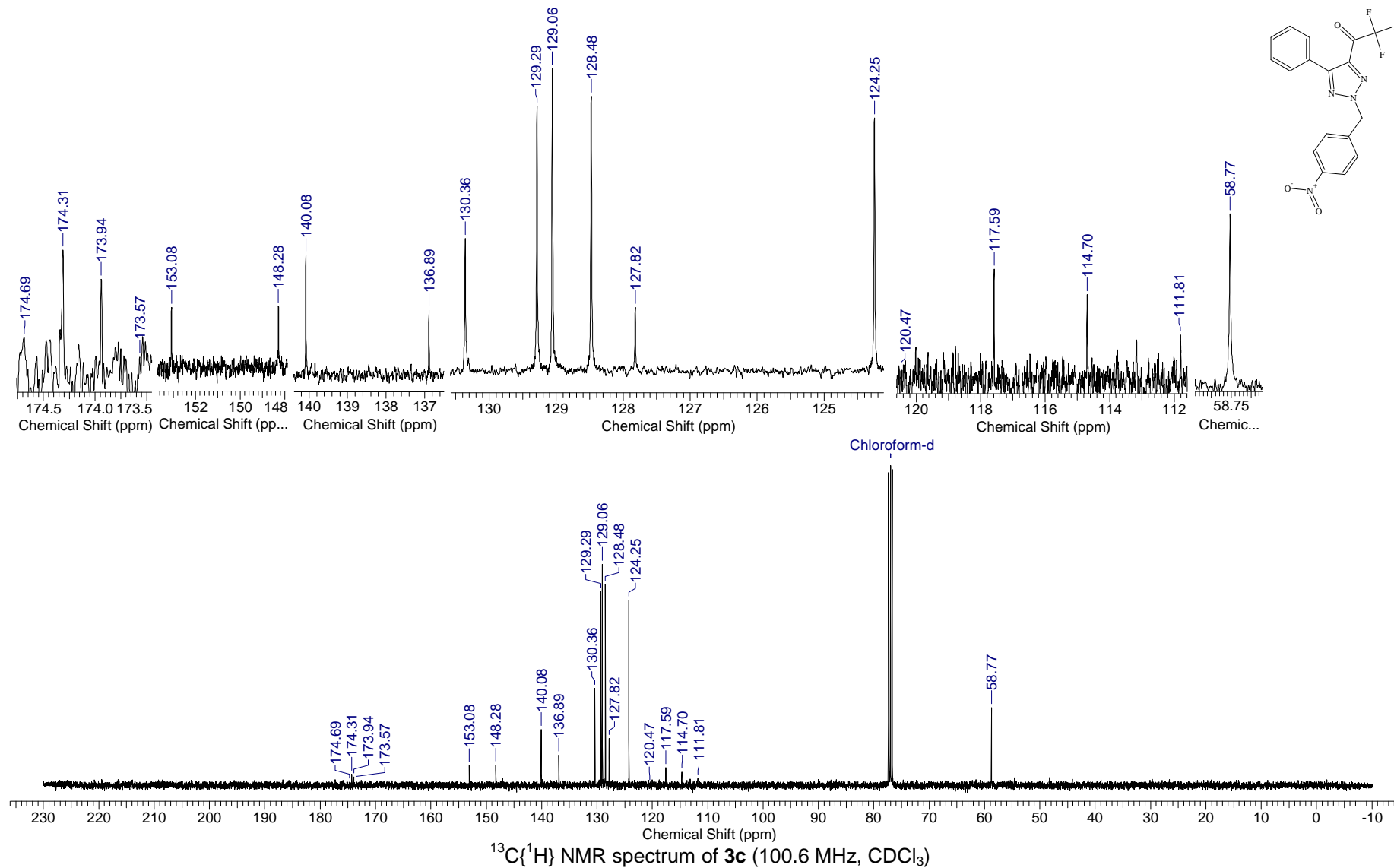
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Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	BENZENE-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000



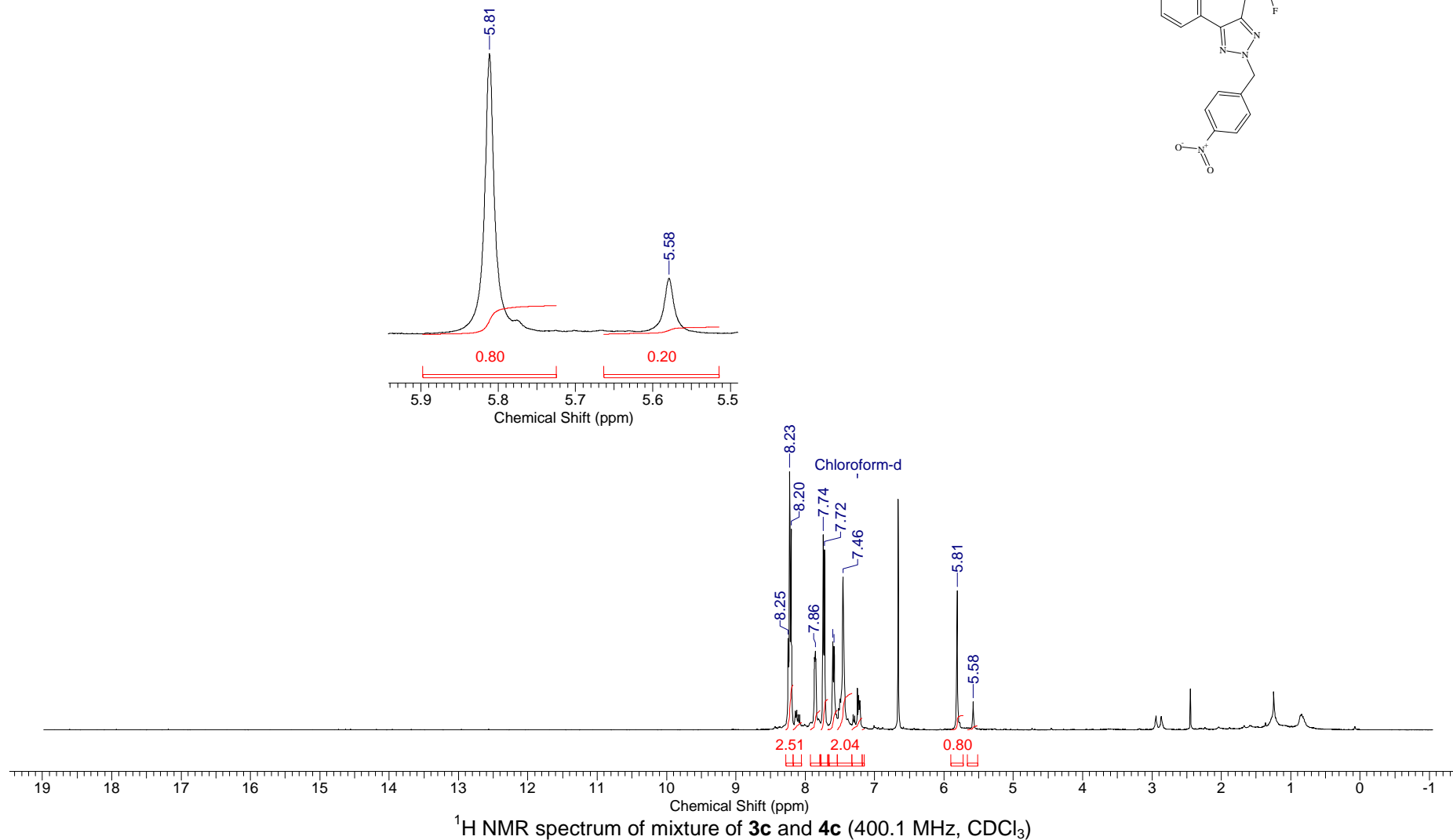
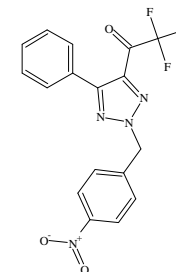
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Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



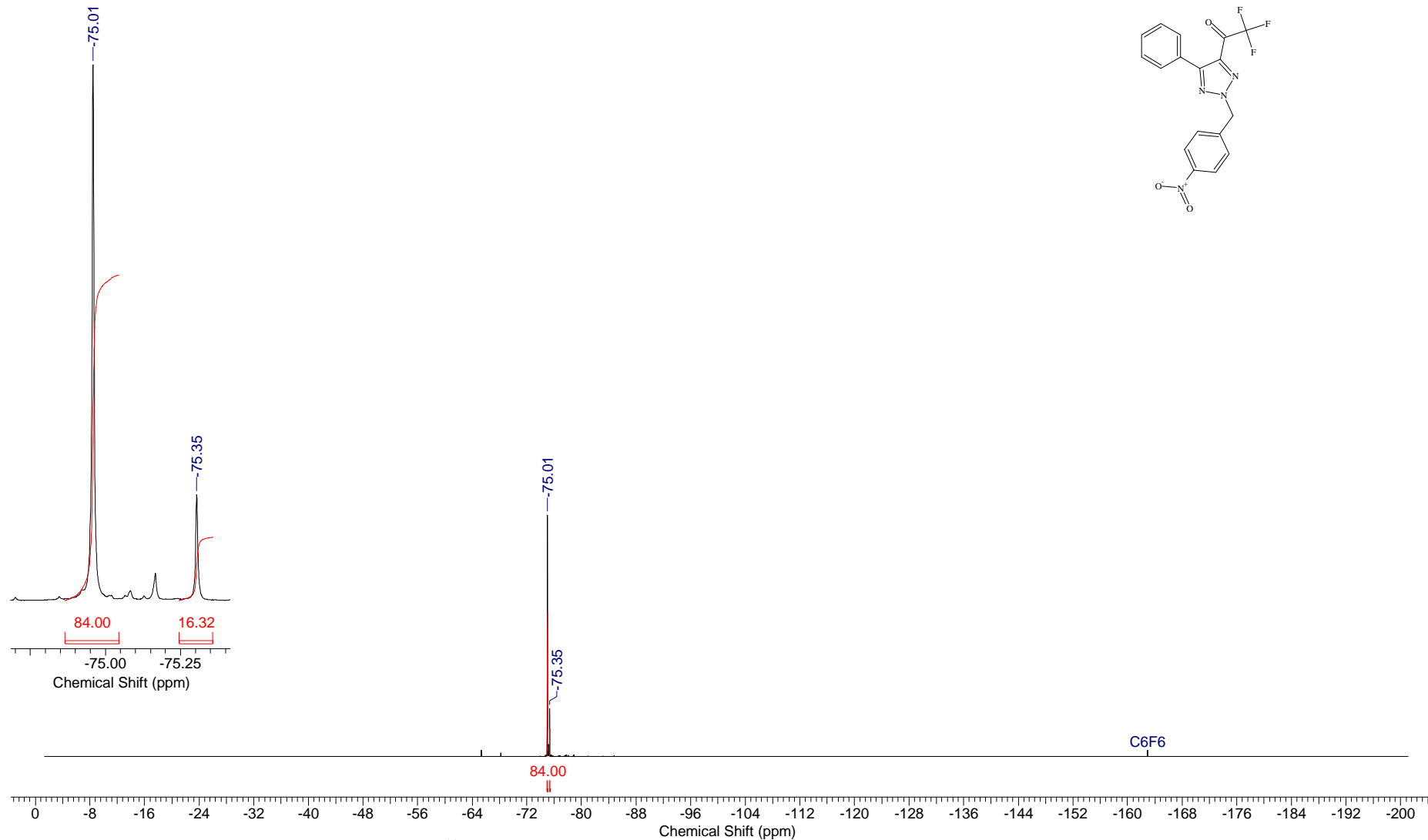
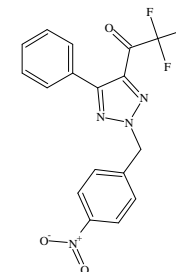
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Nucleus	13C	Number of Transients	353	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000



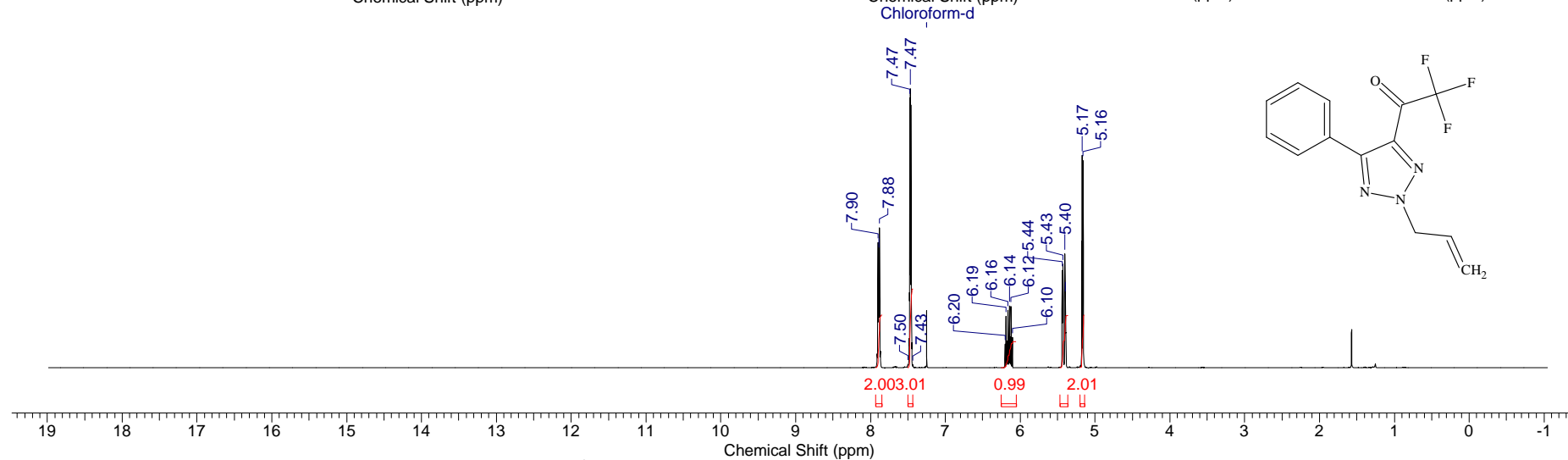
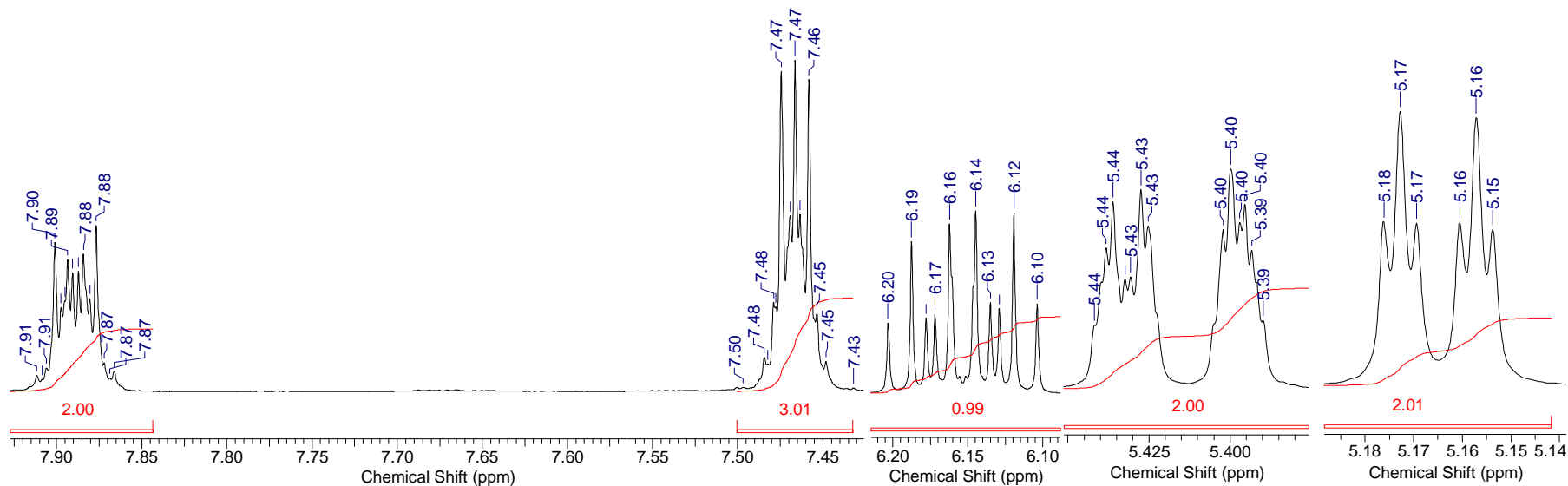
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Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82



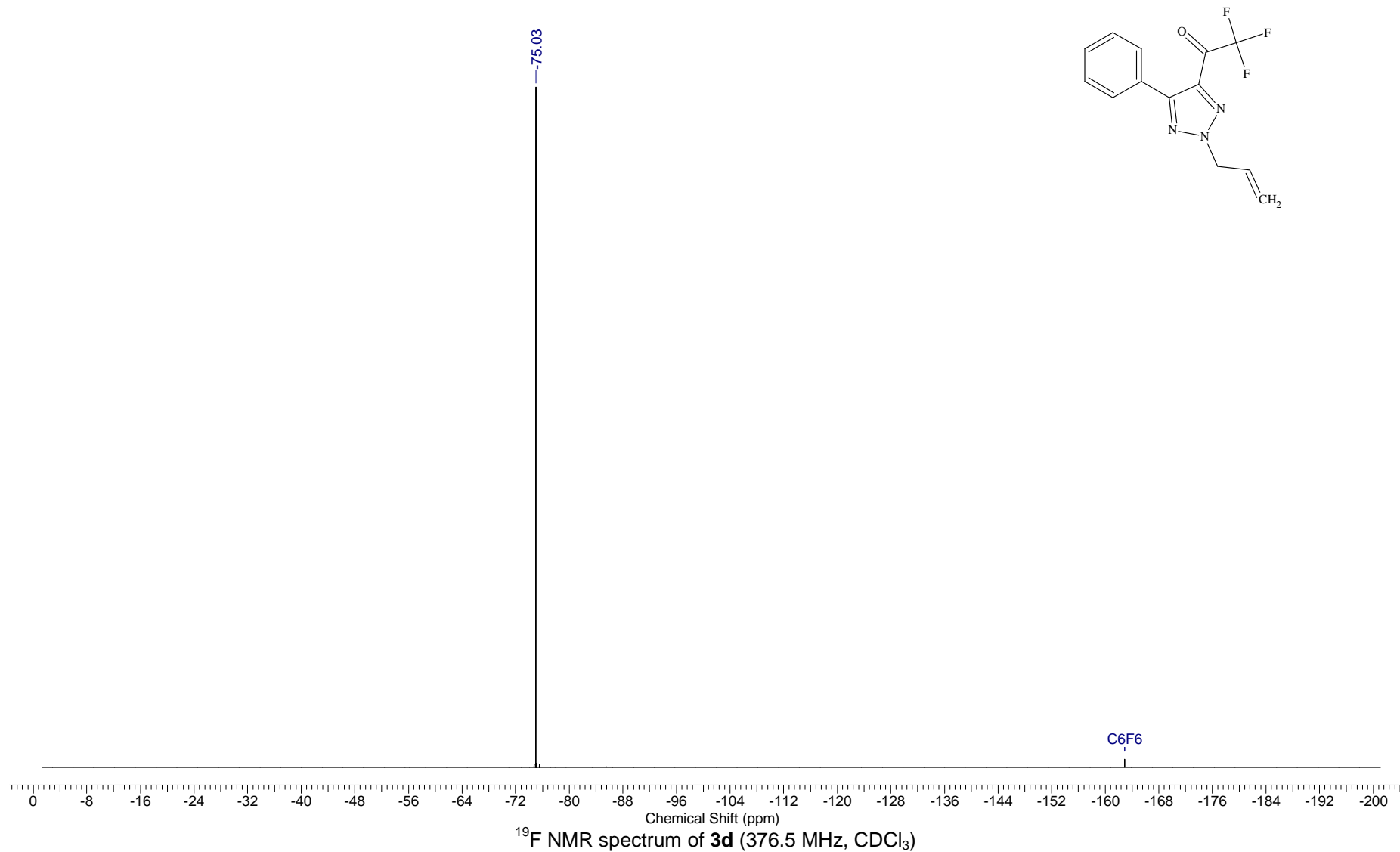
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Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000				



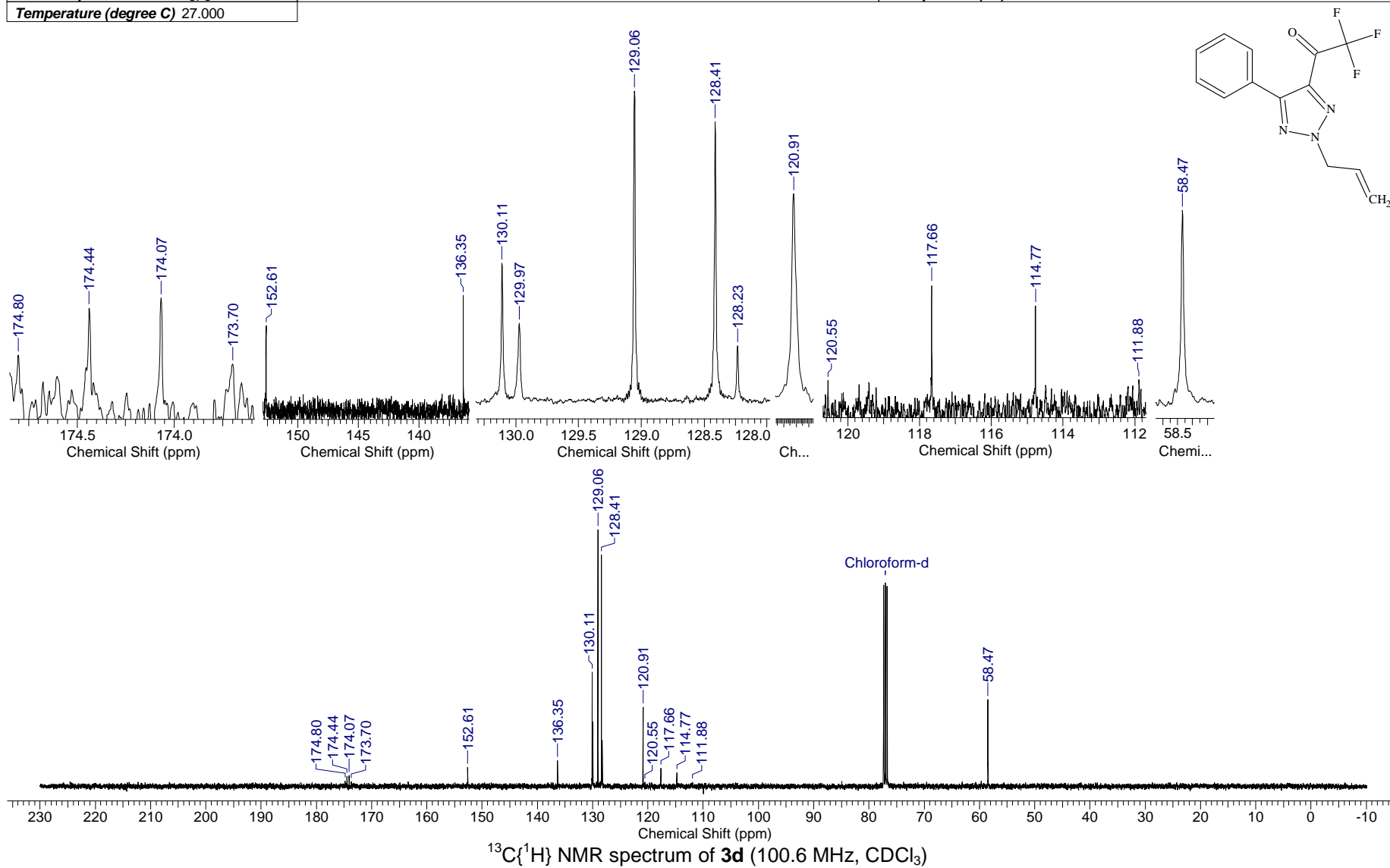
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Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000				

¹H NMR spectrum of **3d** (400.1 MHz, CDCl₃)

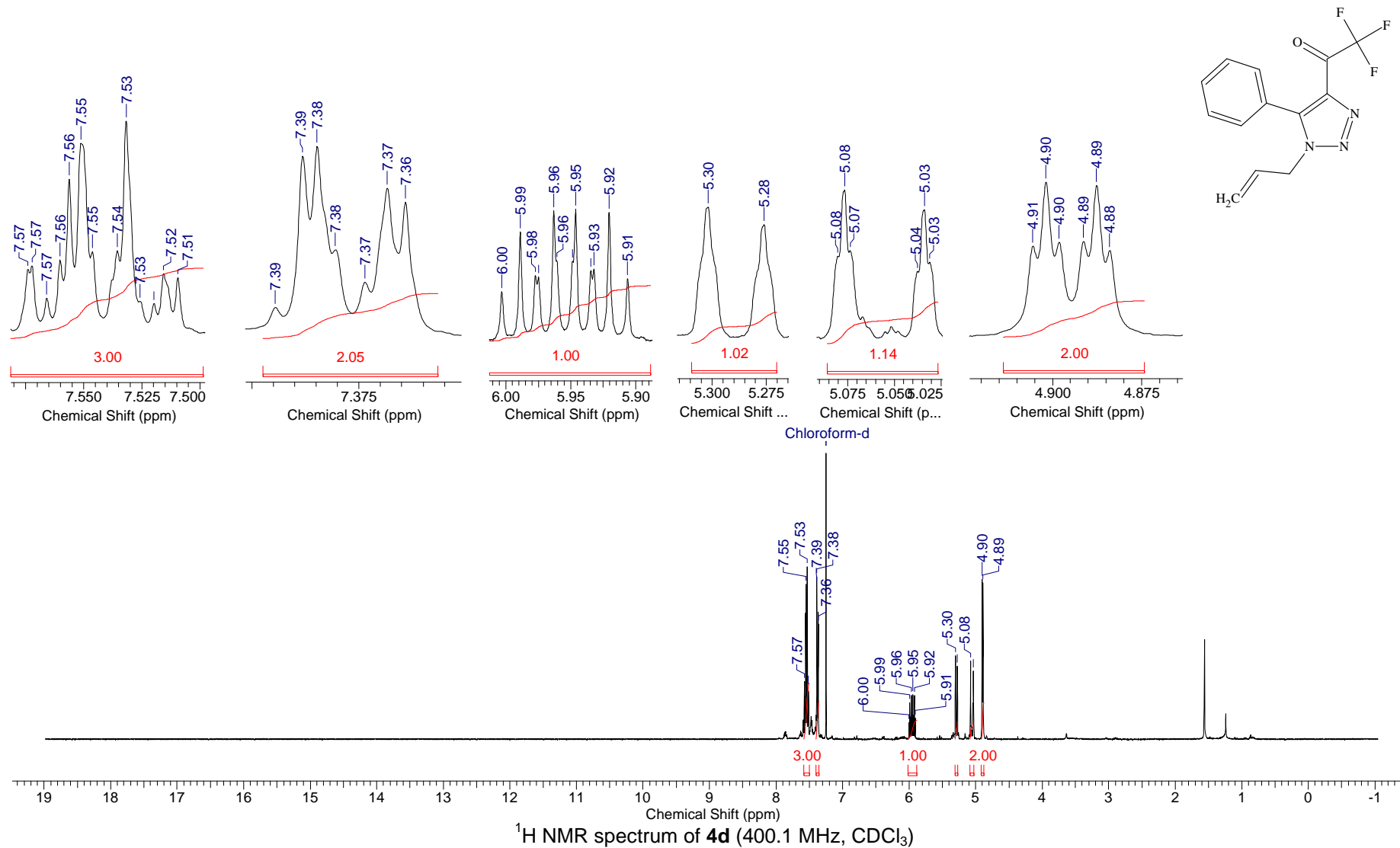
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Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
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Temperature (degree C)	27.000	Solvent	CHLOROFORM-D		



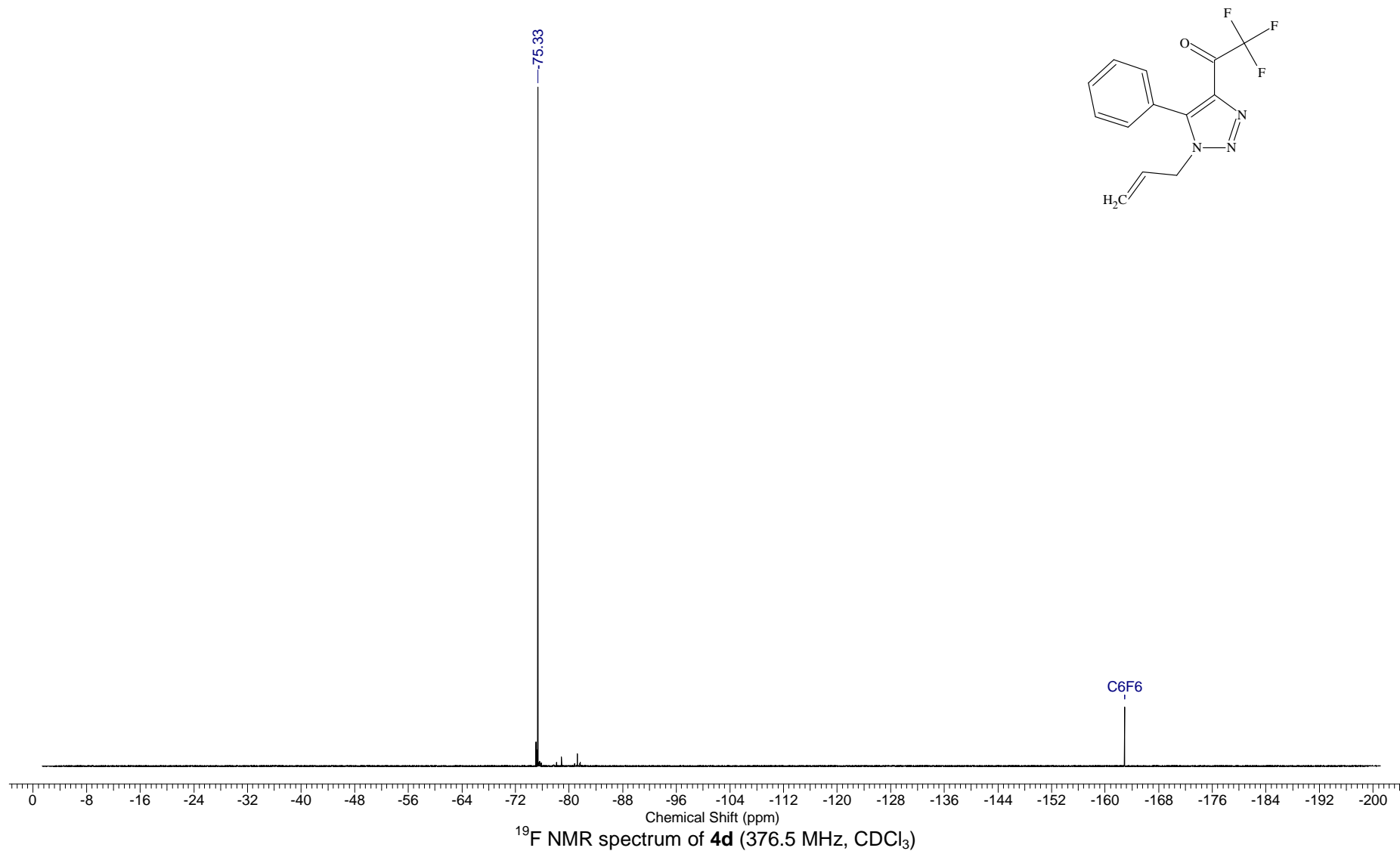
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Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	24154.59
Temperature (degree C)	27.000						F



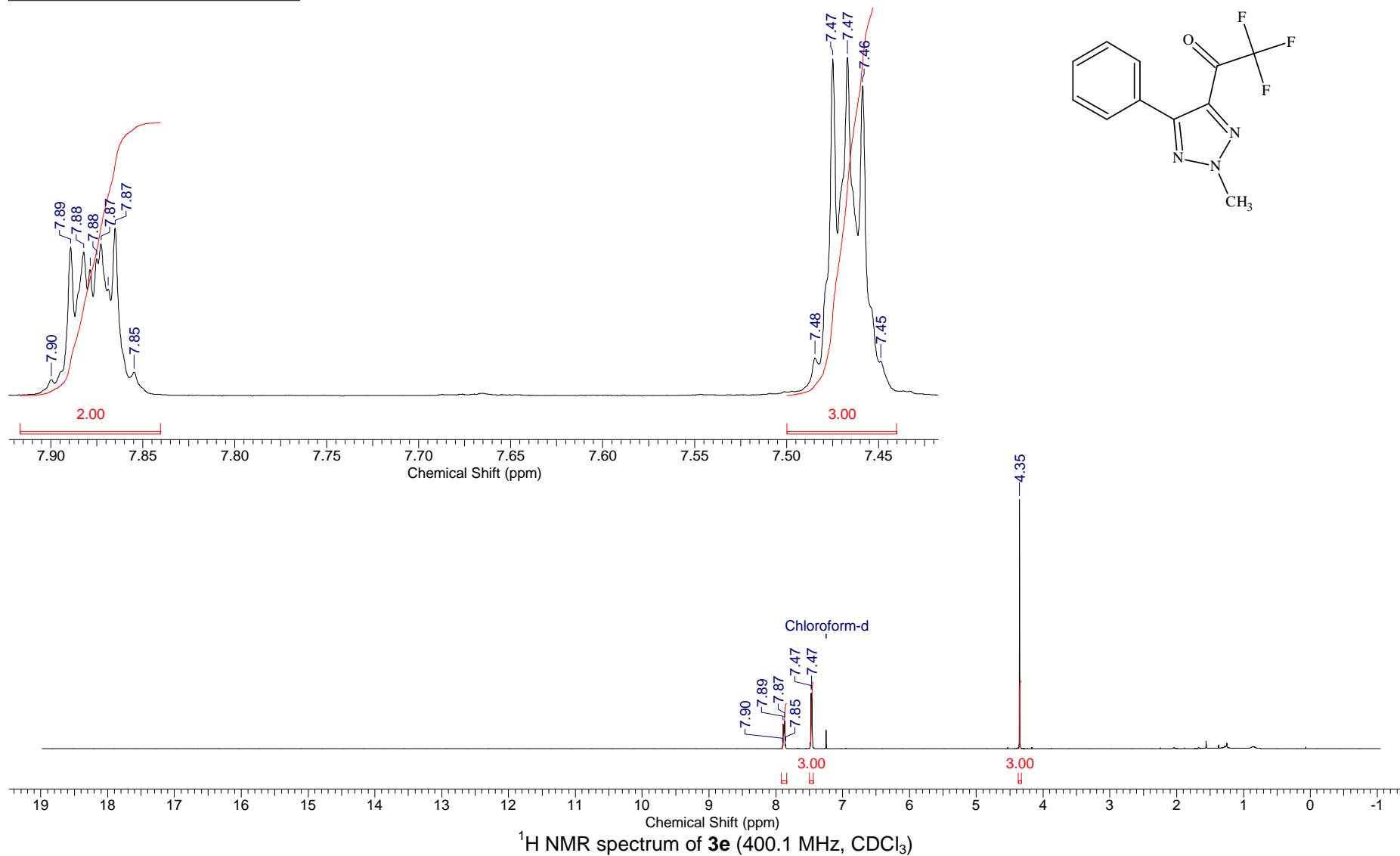
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Pulse Sequence	zg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000						



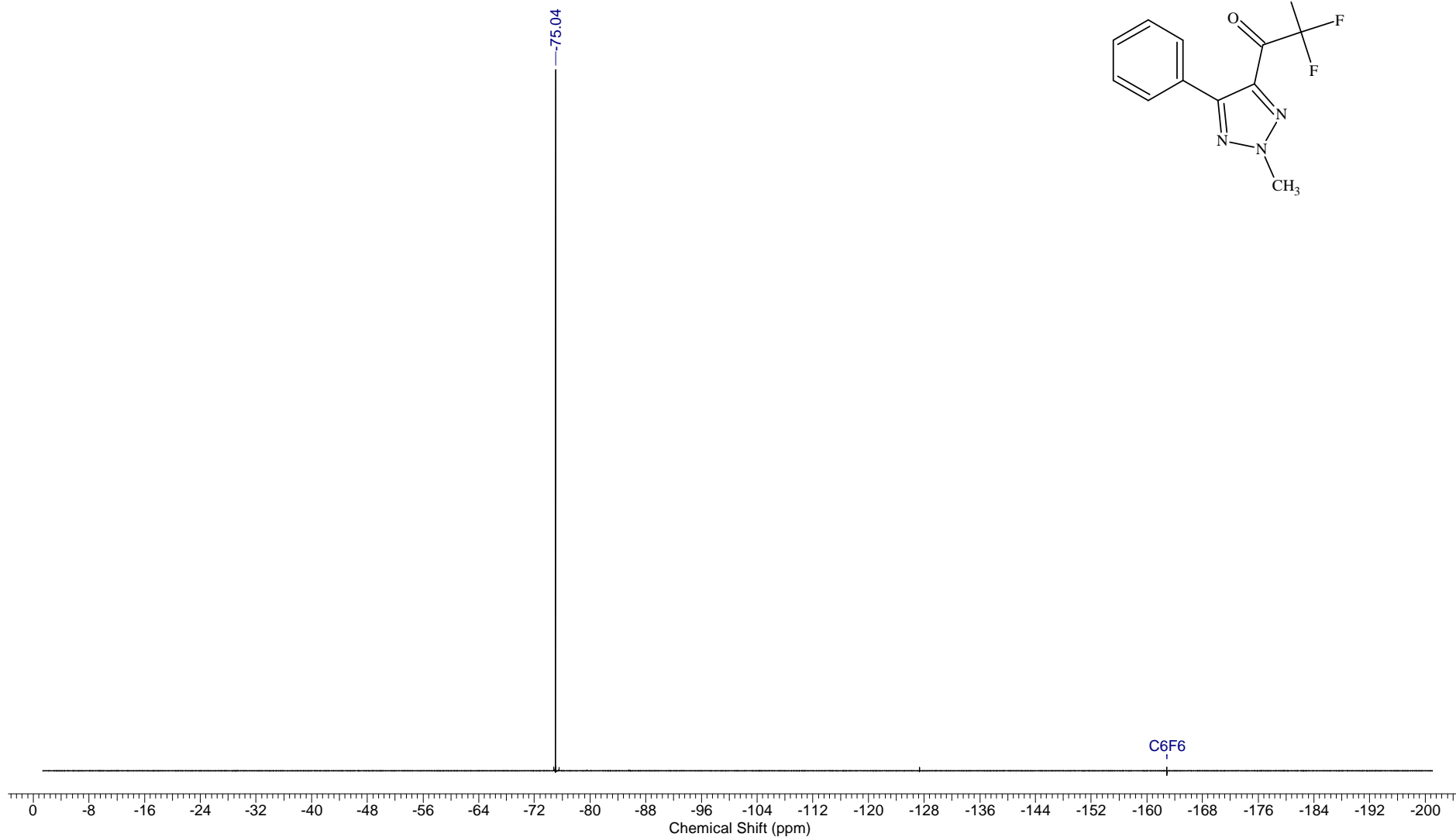
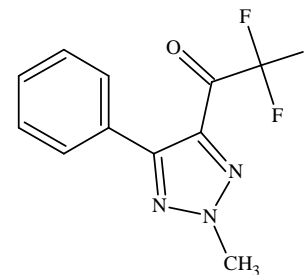
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Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgqn	Points Count	262144	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000	Solvent	CHLOROFORM-D		



Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	18 Mar 2022 15:09:20
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Nucleus	1H	Number of Transients	4	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000				

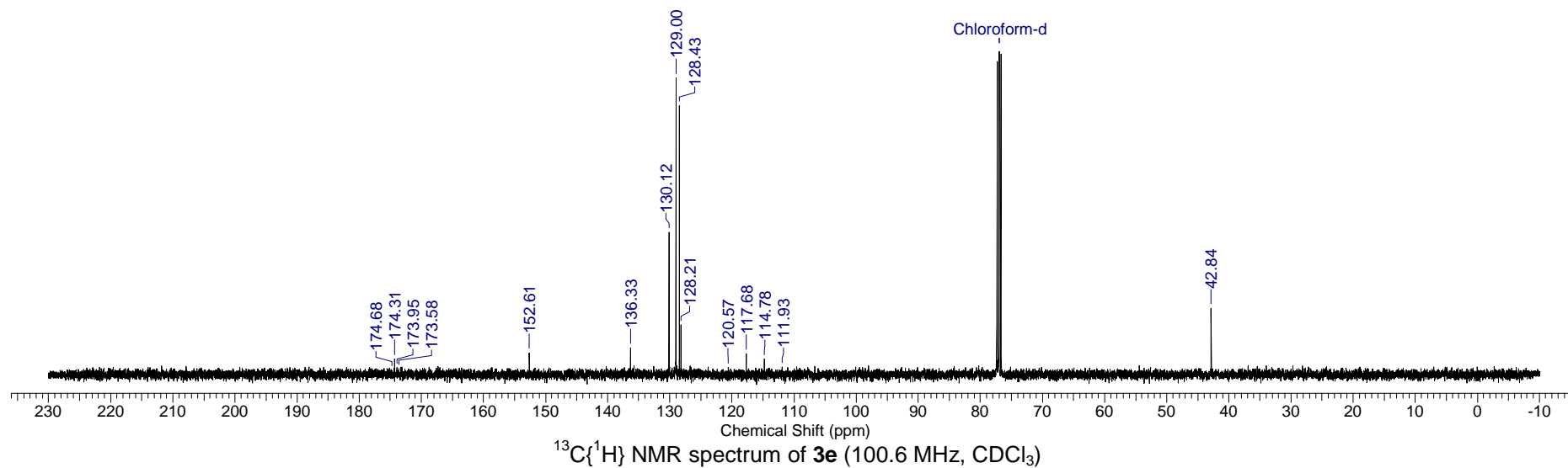
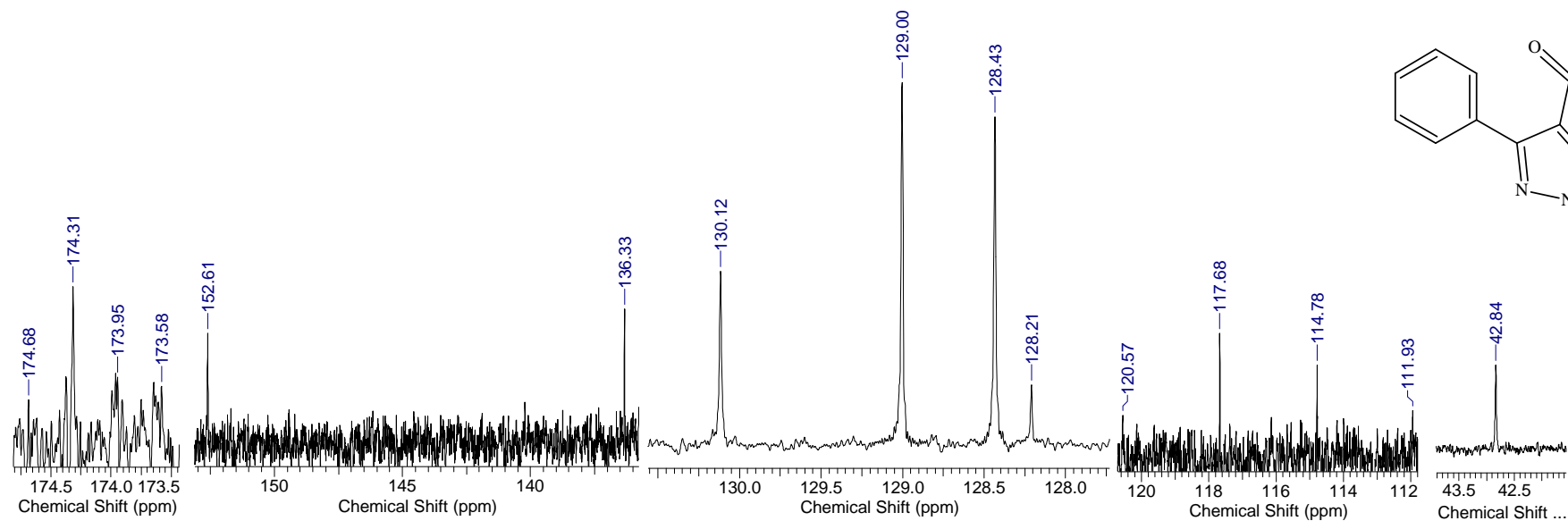


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Pulse Sequence	zgfgn	Solvent	CHLOROFORM-D	Points Count	262144
Temperature (degree C)	27.000			Sweep Width (Hz)	75187.97

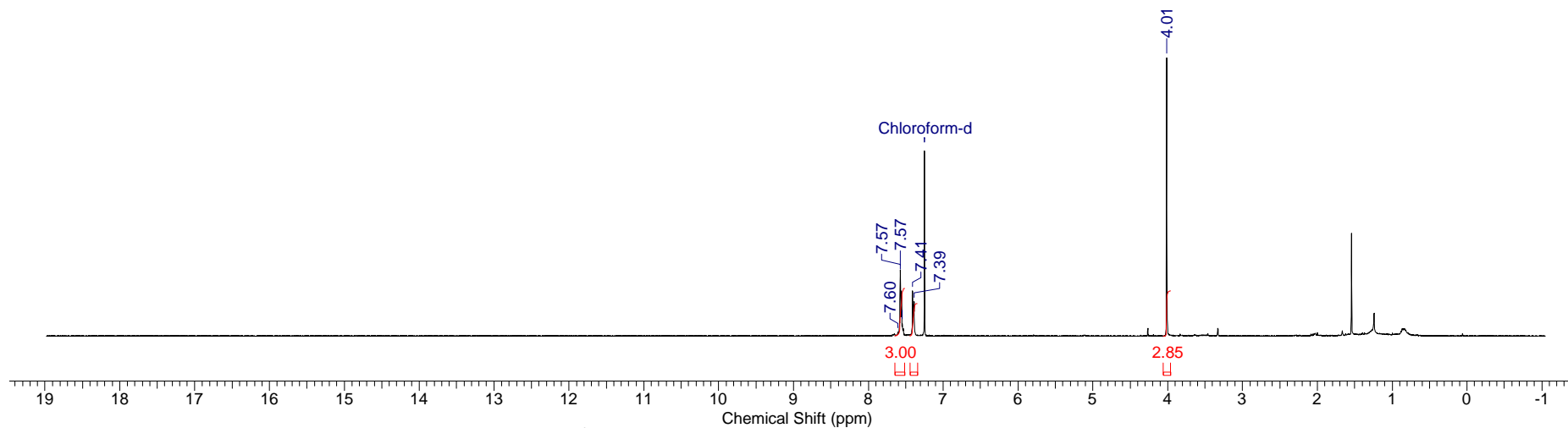
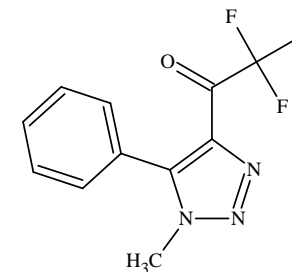
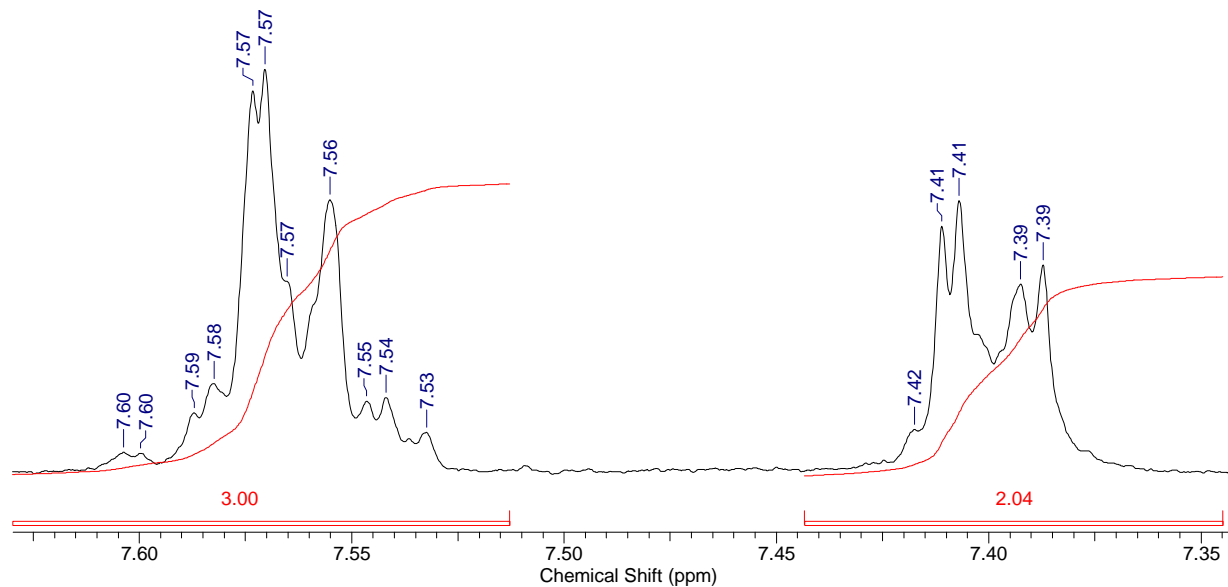


¹⁹F NMR spectrum of **3e** (376.5 MHz, CDCl₃)

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Nucleus	13C	Number of Transients	161	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

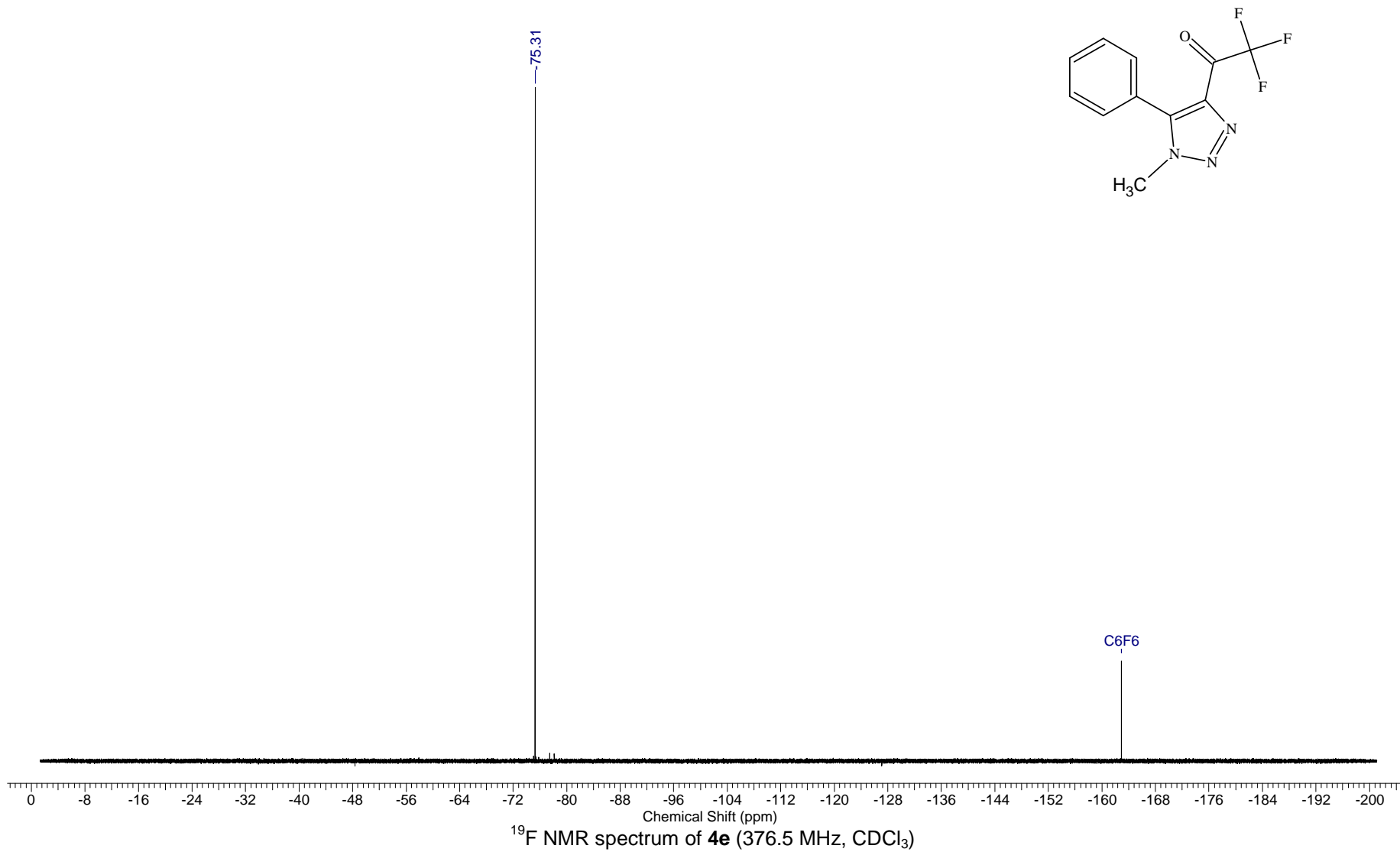


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Nucleus	¹ H	Number of Transients	8	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000				

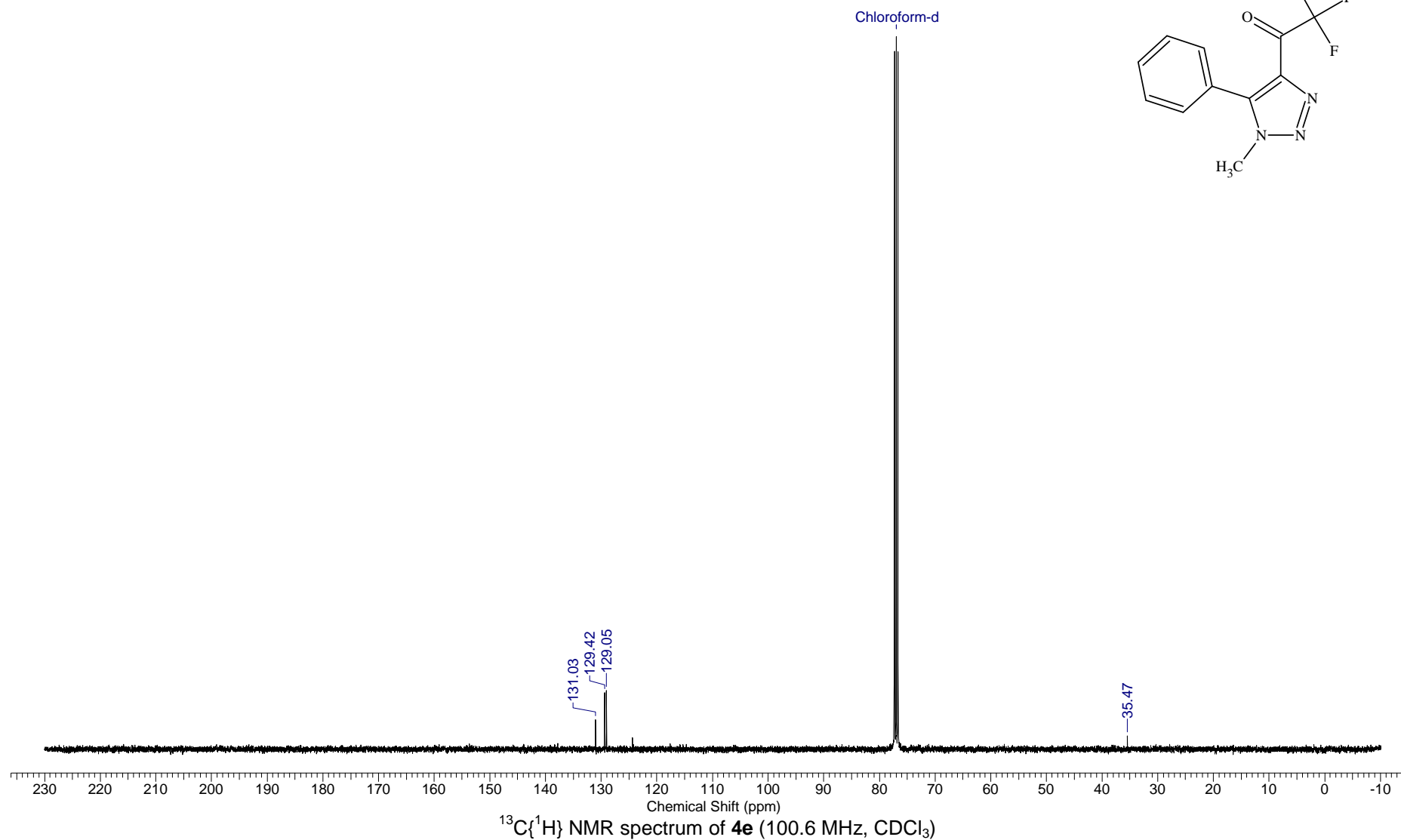
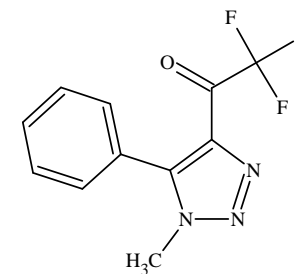


¹H NMR spectrum of **4e** (400.1 MHz, CDCl₃)

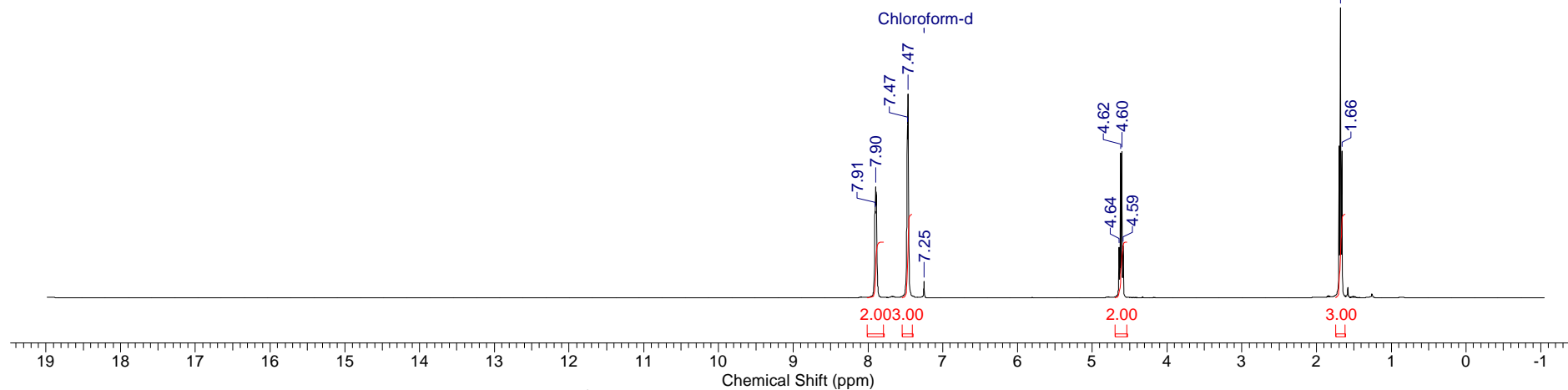
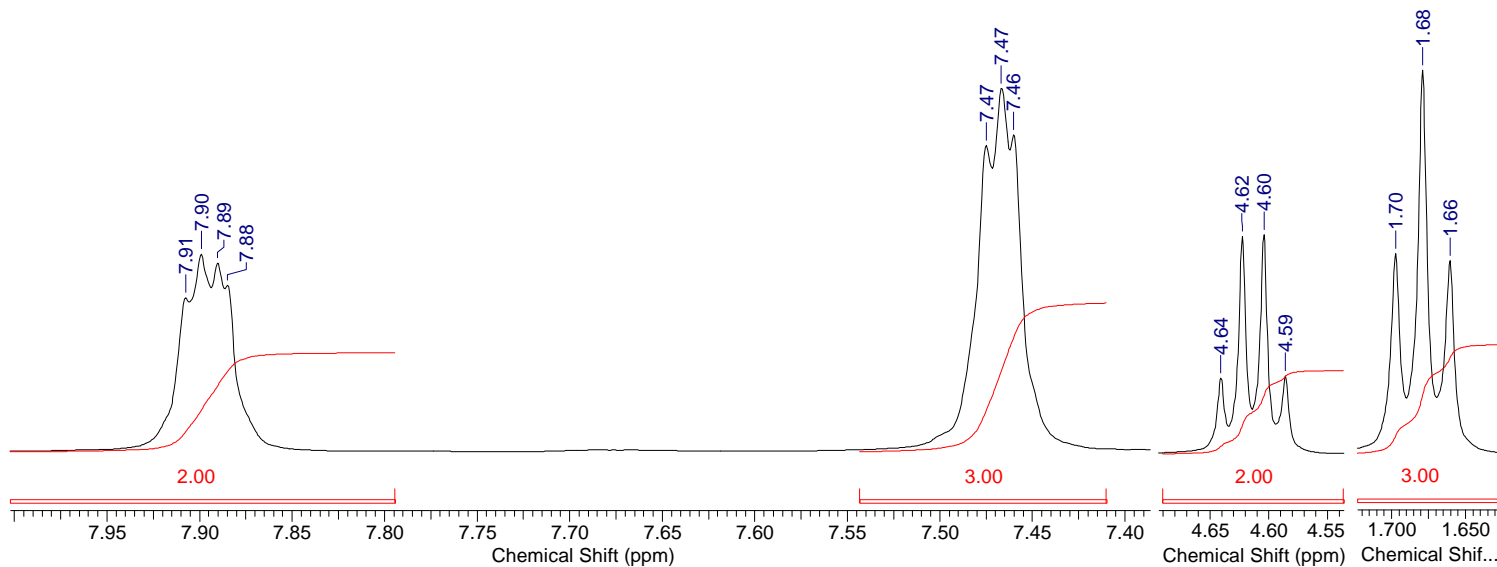
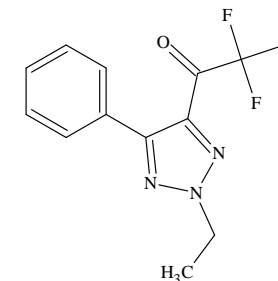
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.			Date	22 Mar 2022 15:09:02
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SA-BM-2460-14.F_005001r					Frequency (MHz)	376.50
Nucleus	19F	Number of Transients	4	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D			Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000						



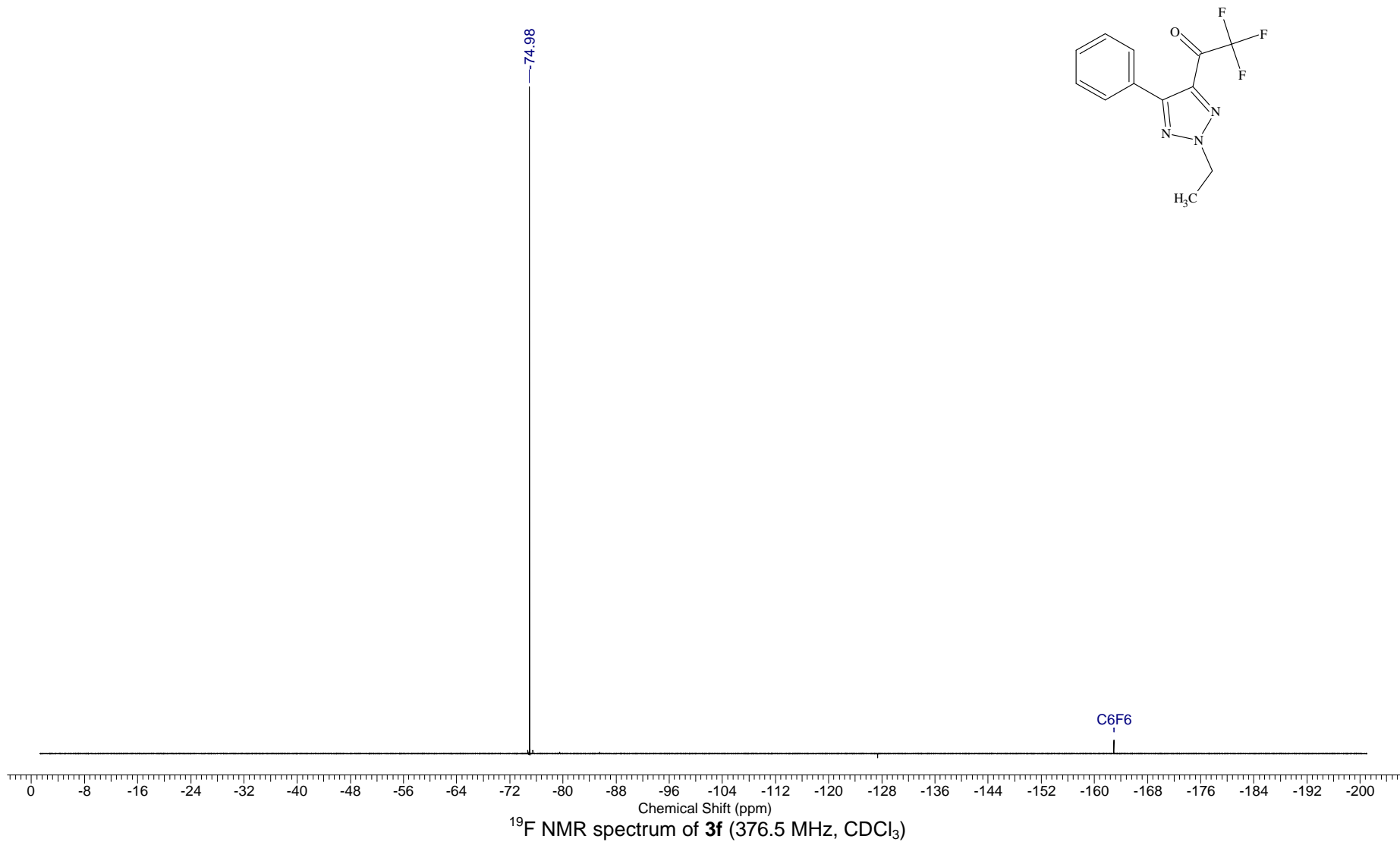
Acquisition Time (sec)	0.6783	Comment Imported from UXNMR.			Date	25 Mar 2022 15:18:18	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SA-BM-2460-14.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	2169	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						F



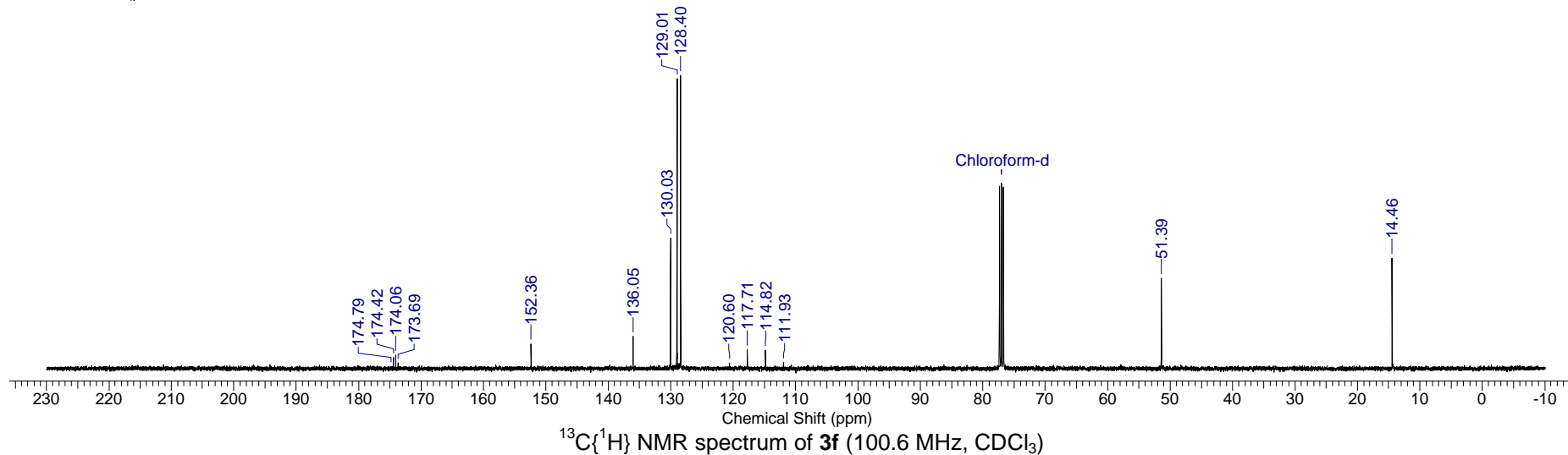
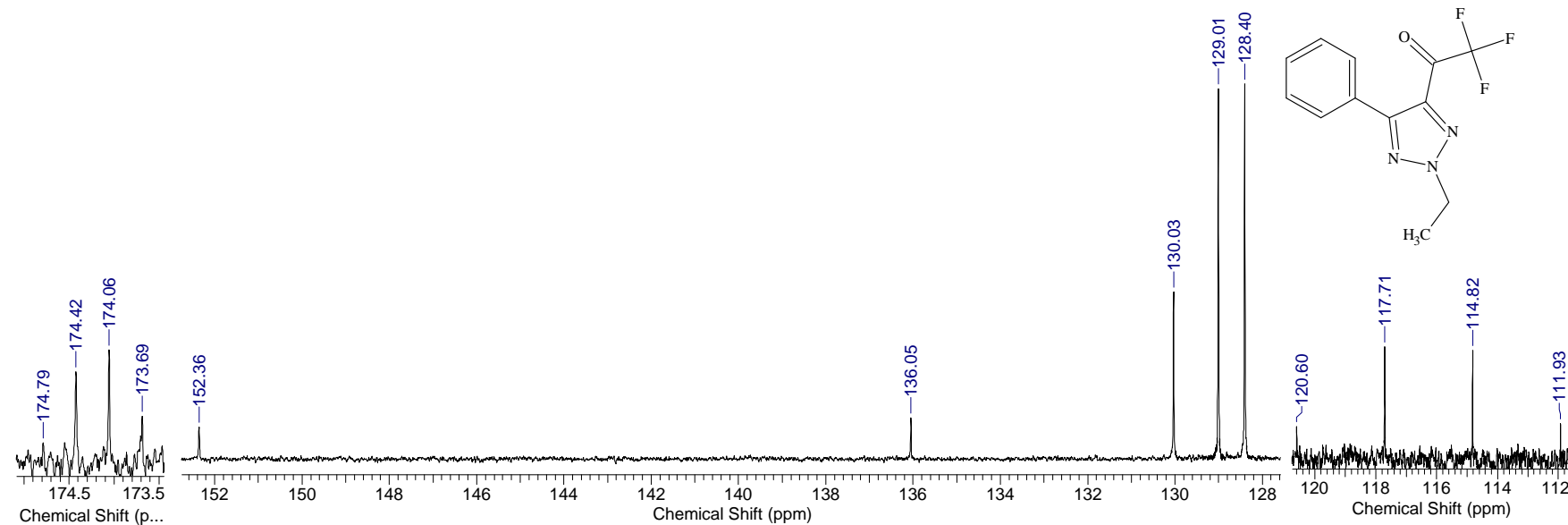
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	05 Apr 2022 11:46:08	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2478-1.H\BM-2478-1.H_001000fid				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	32768
Pulse Sequence	zg30	Solvent	BENZENE-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000

¹H NMR spectrum of **3f** (400.1 MHz, CDCl₃)

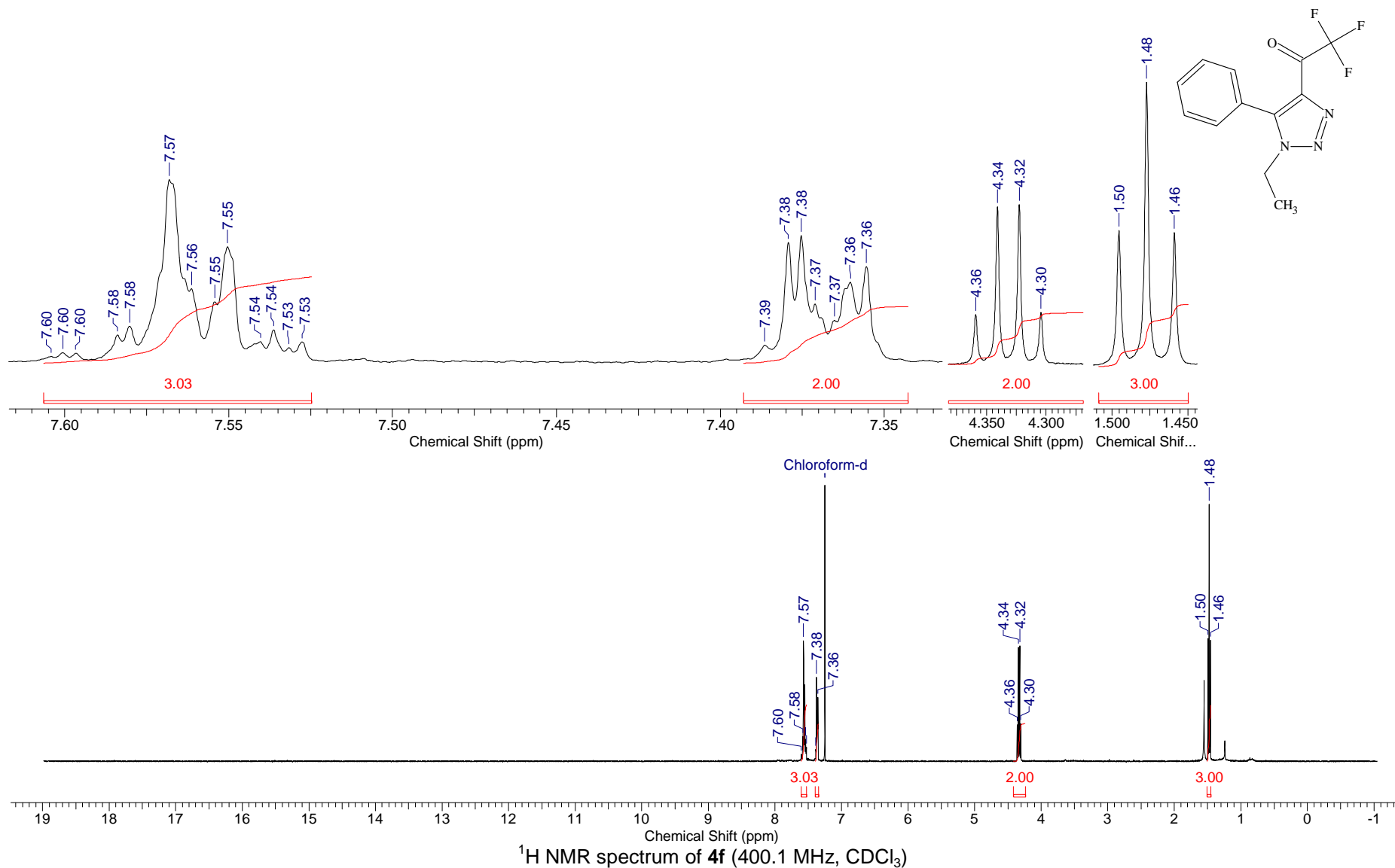
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.			Date	05 Apr 2022 15:25:08
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2478-1.F.F_005001r					Frequency (MHz)	376.50
Nucleus	19F	Number of Transients	4	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D			Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000						



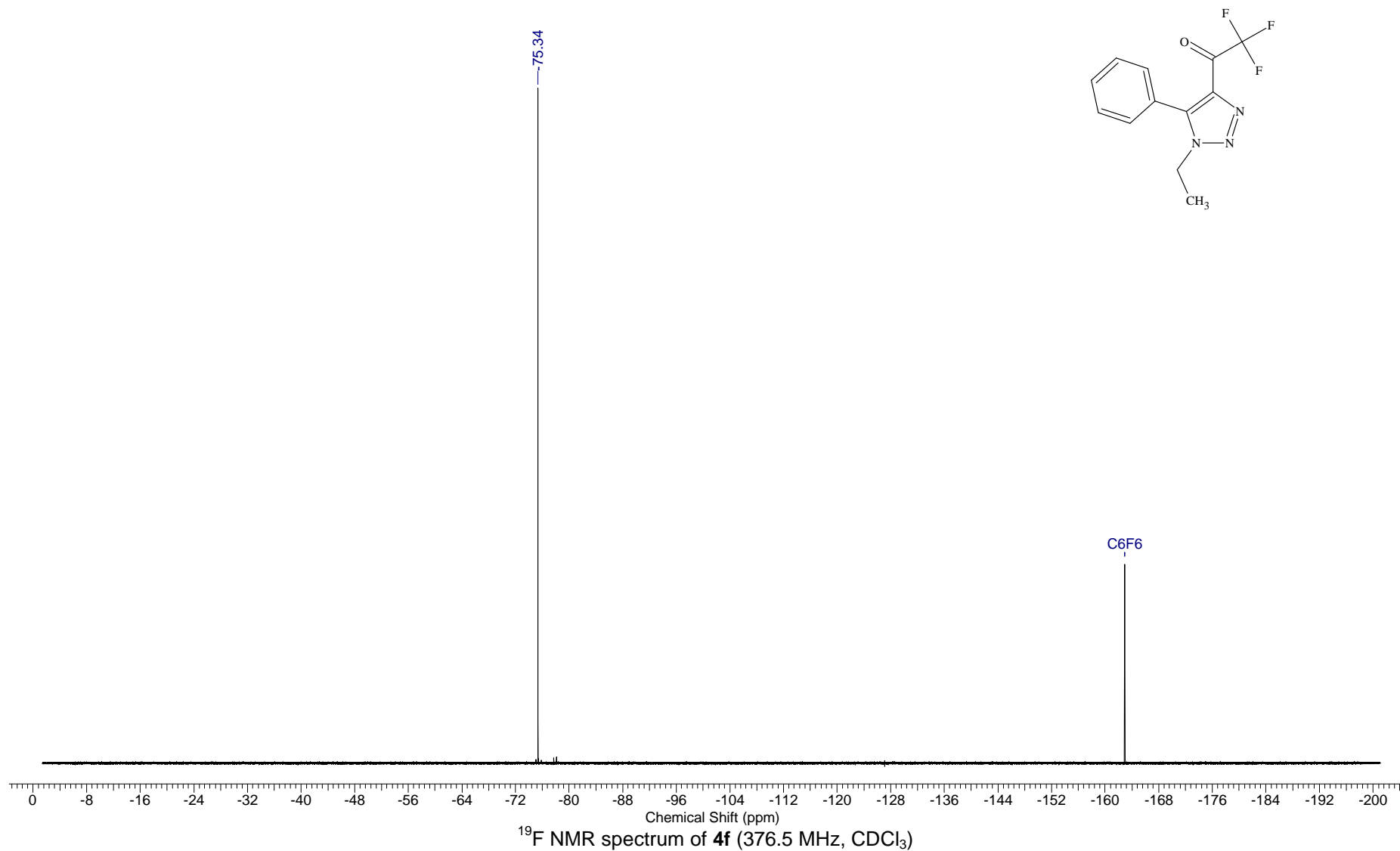
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.	Date	05 Apr 2022 14:57:30
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2478-1.C_002001r	Frequency (MHz)	100.61	Points Count	131072
Nucleus	¹³ C	Number of Transients	281	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59
Temperature (degree C)	27.000				



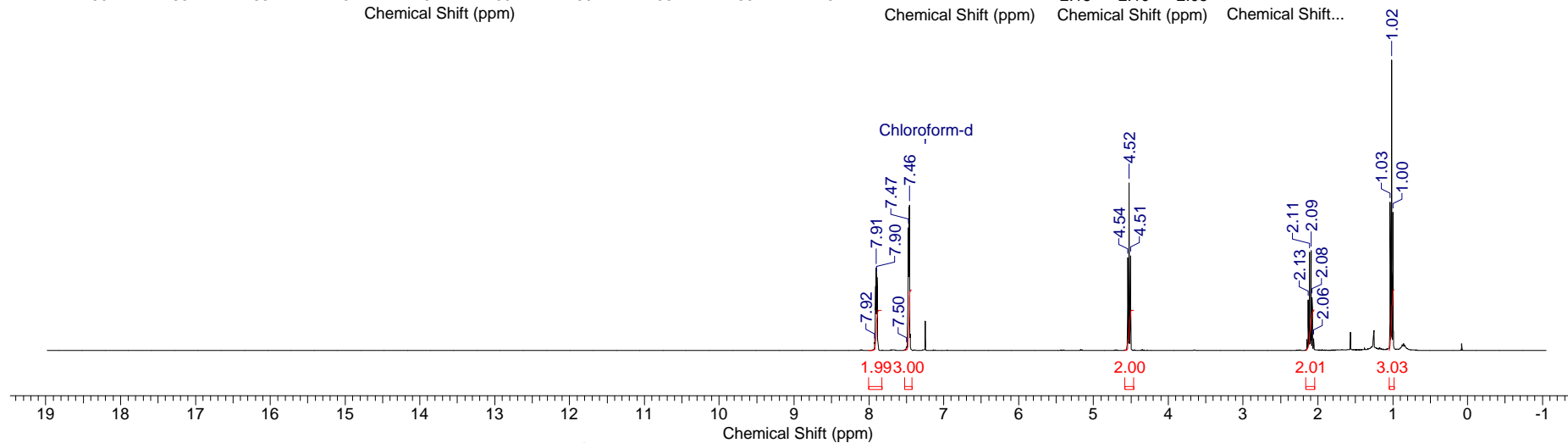
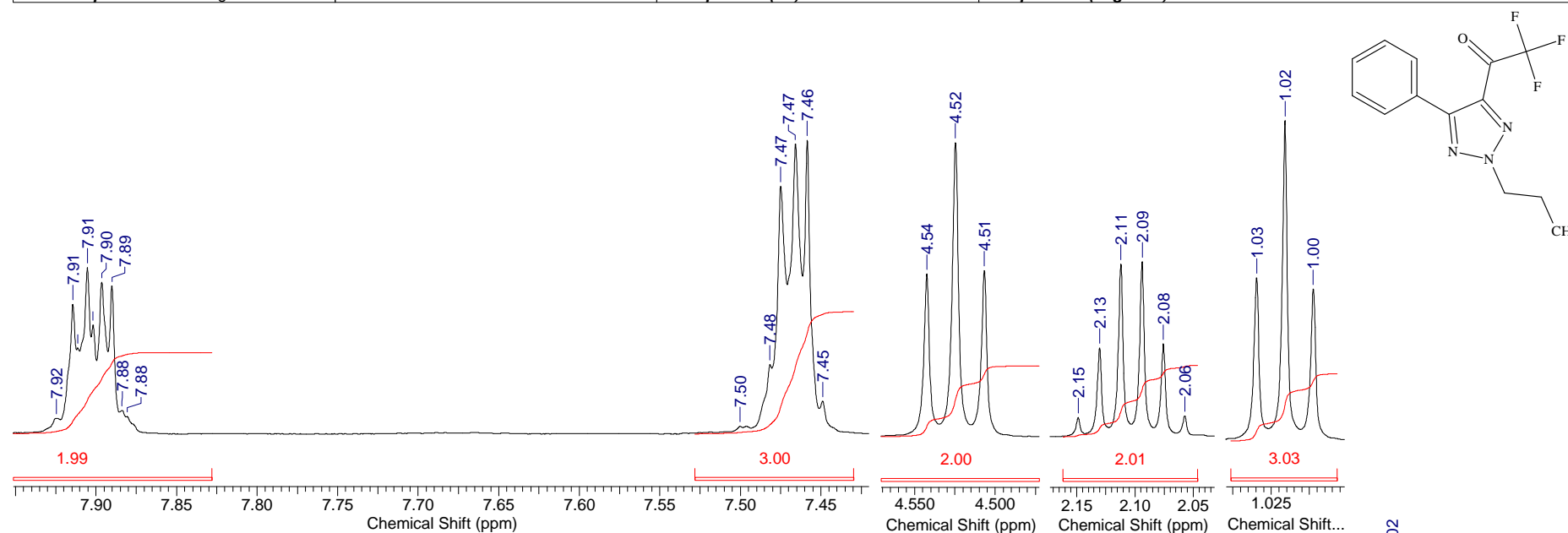
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	05 Apr 2022 15:03:36		
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2478-2.H_001001r				Frequency (MHz)	400.13		
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072	
Pulse Sequence	zg30	Solvent	BENZENE-D6		Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000



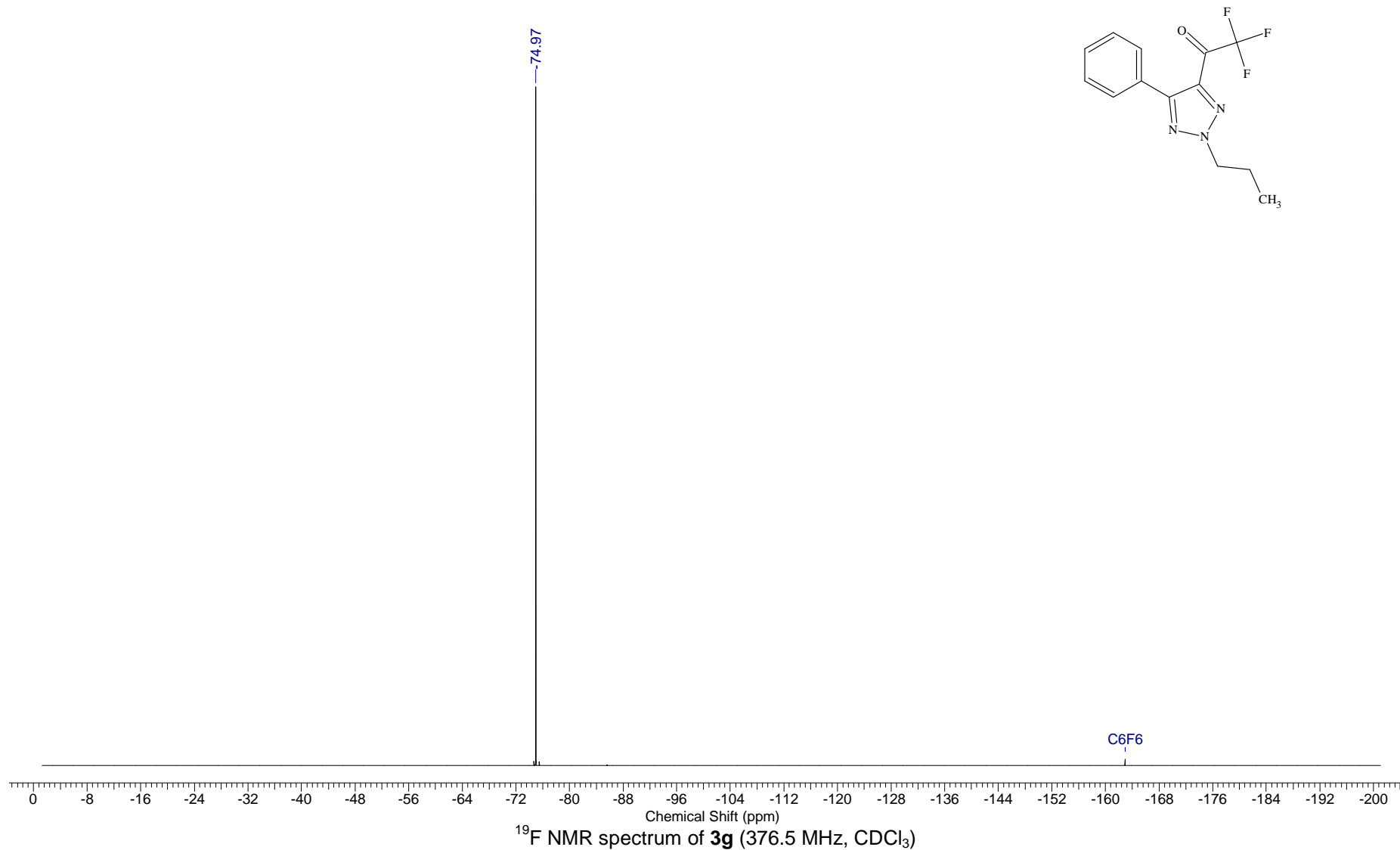
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	05 Apr 2022 15:28:58
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2478-2.F_005001r	Frequency (MHz)	376.50		
Nucleus	¹⁹ F	Number of Transients	4	Original Points Count	131072
Pulse Sequence	zgfgqn	Points Count	262144	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000	Solvent	CHLOROFORM-D		



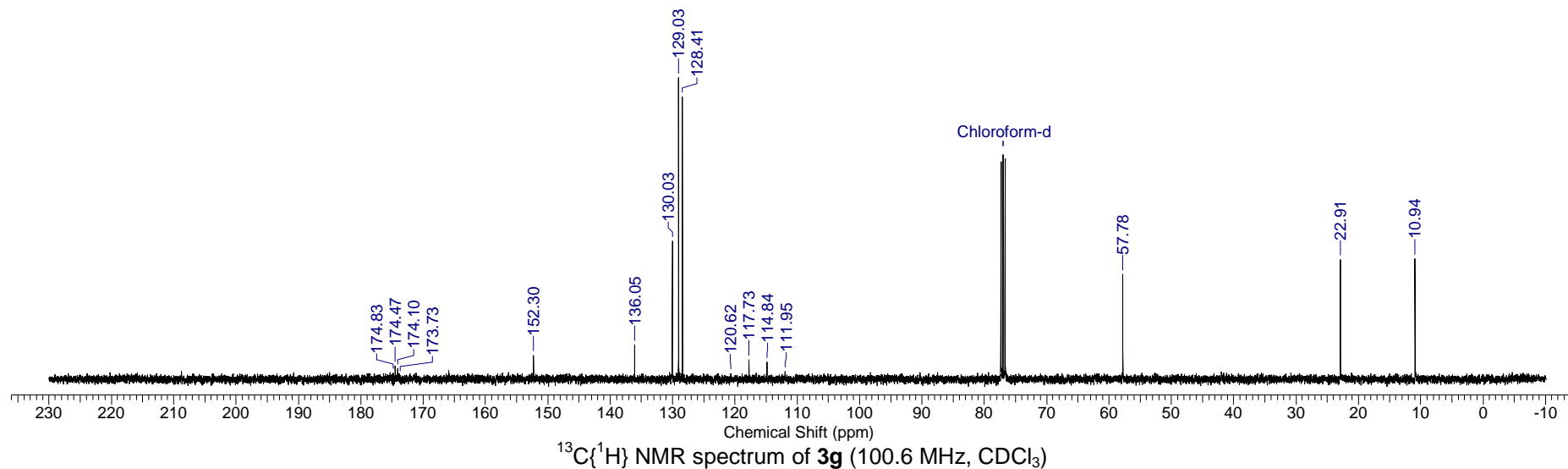
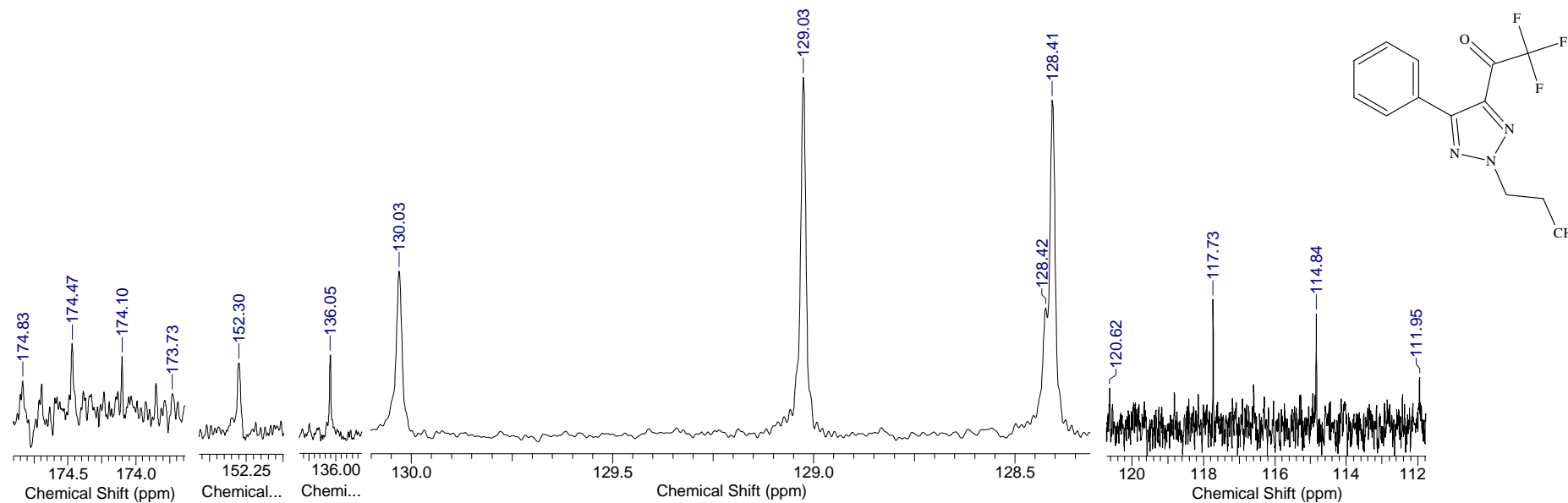
Acquisition Time (sec)	4.0894	Comment	Imported from UxNMR.		Date	23 Mar 2022 17:38:50		
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\1SZA-BM-2458-4.H_001001r				Frequency (MHz)	400.13		
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072	
Pulse Sequence	zg30	Solvent	BENZENE-D6		Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000

¹H NMR spectrum of **3g** (400.1 MHz, CDCl₃)

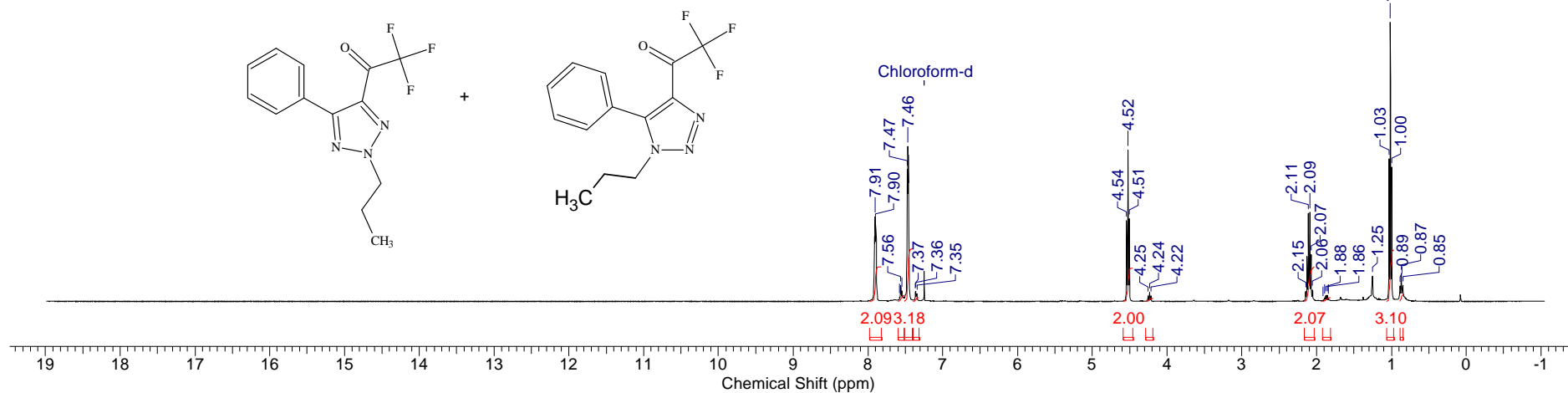
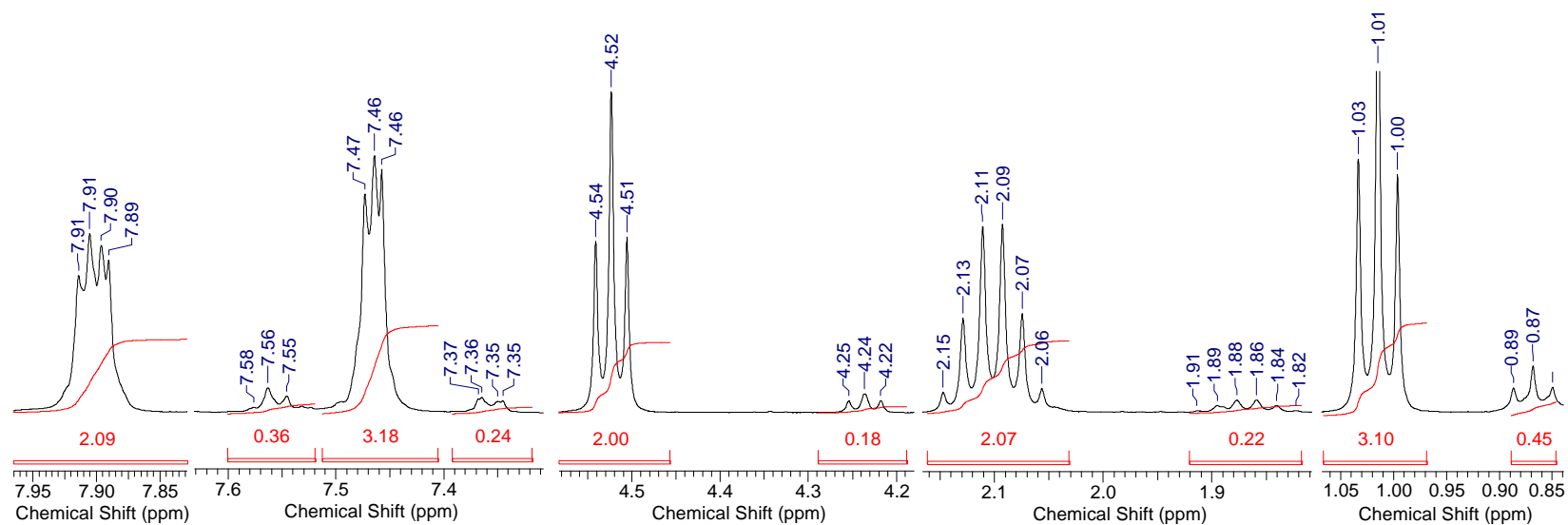
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	23 Mar 2022 17:43:32
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SZA-BM-2458-4.F_005001r	Frequency (MHz)	376.50		
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgqn	Points Count	262144		
Temperature (degree C)	27.000	Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97



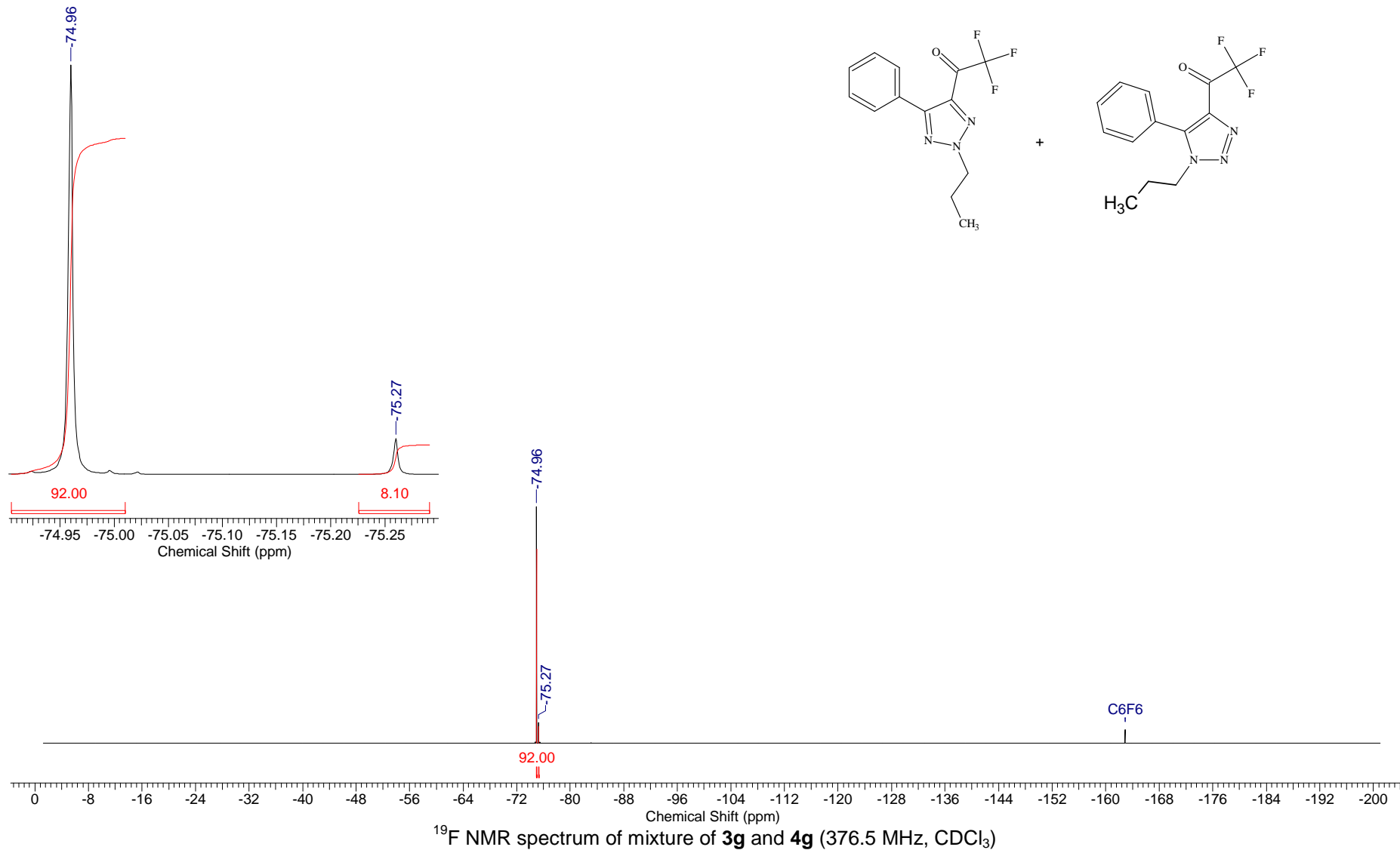
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	24 Mar 2022 12:35:36	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SA-BM-2458-4.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	121	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000



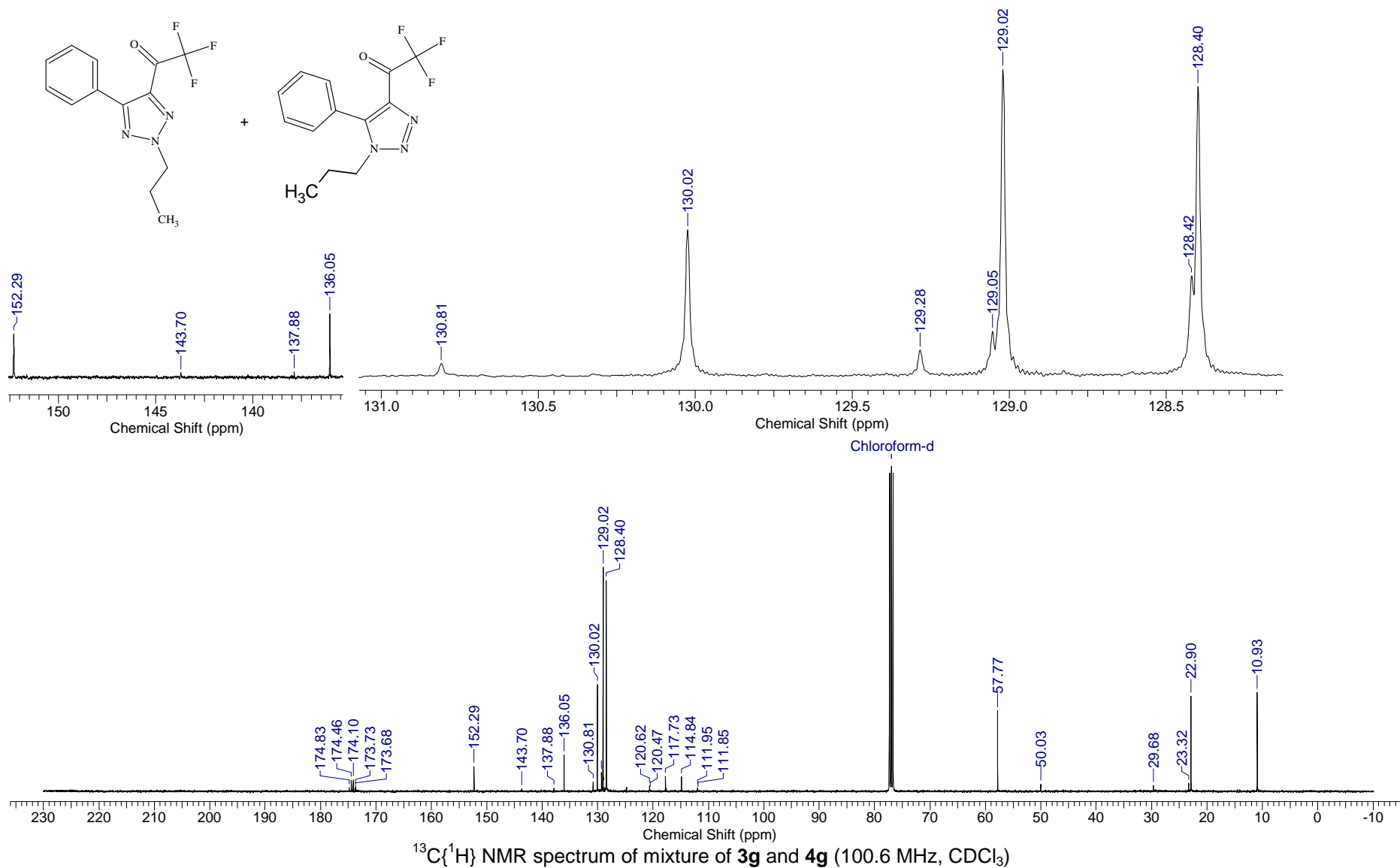
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	21 Mar 2022 15:26:36	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SAZ-BM-2458.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

¹H NMR spectrum of mixture of **3g** and **4g** (400.1 MHz, CDCl₃)

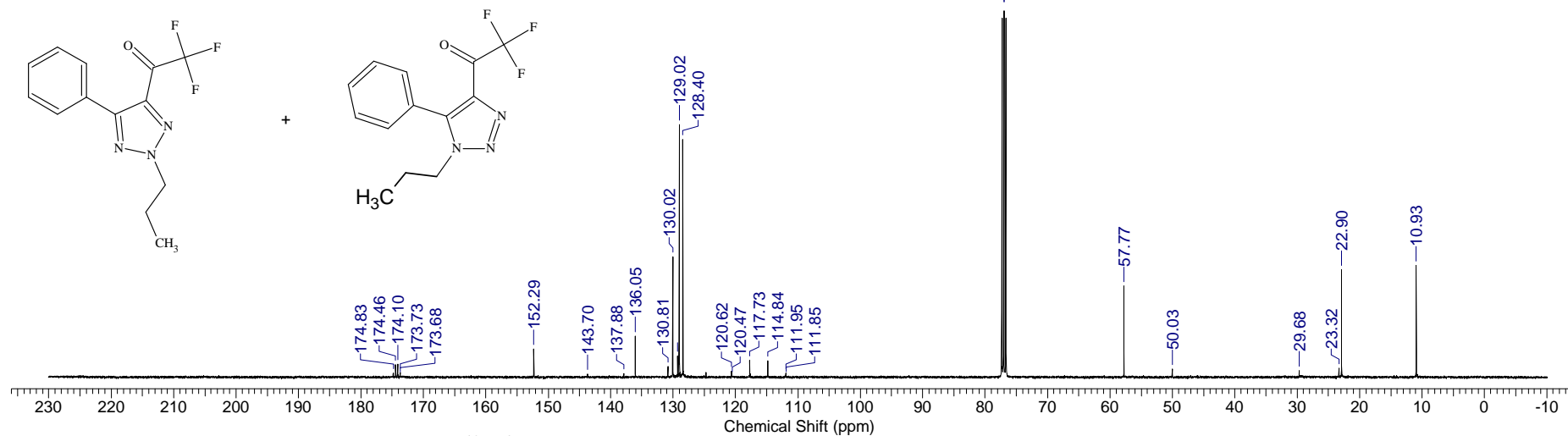
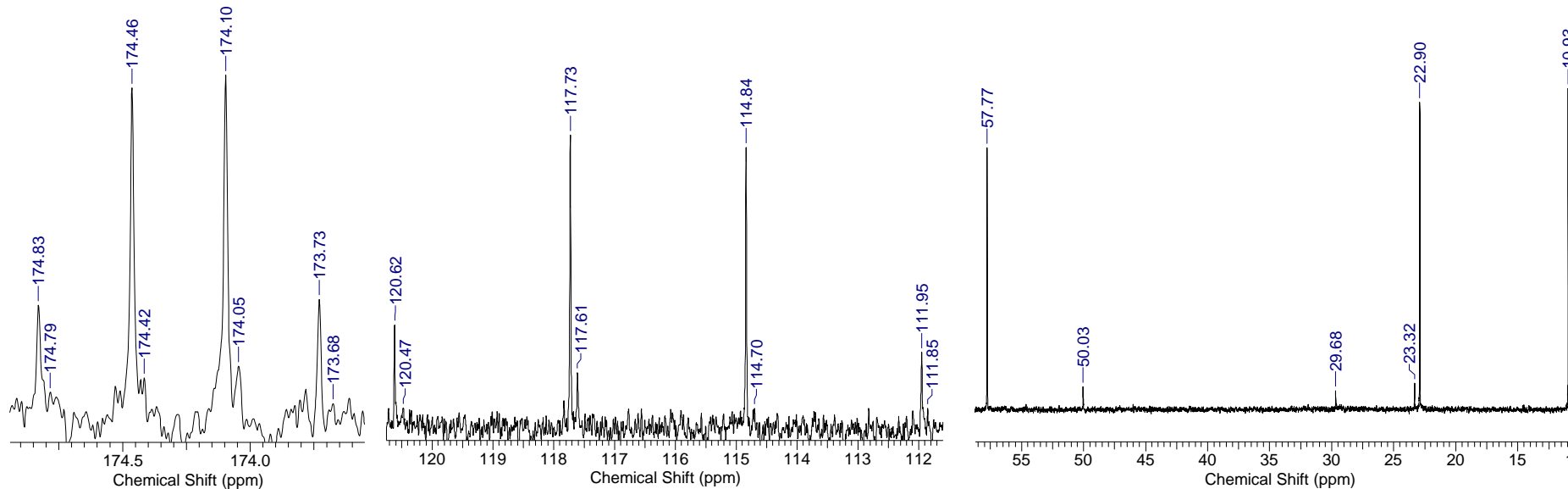
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.			Date	21 Mar 2022 15:38:44
File Name	C:\DOCS\OUTPUT_301\2022\03.map\1\SA-BM-2458.F_005001r					Frequency (MHz)	376.50
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfglqn	Solvent	CHLOROFORM-D			Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000						



Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.			Date	22 Mar 2022 14:03:50
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SA-BM-2458.C_002001r					Frequency (MHz)	100.61
Nucleus	13C	Number of Transients	2145	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

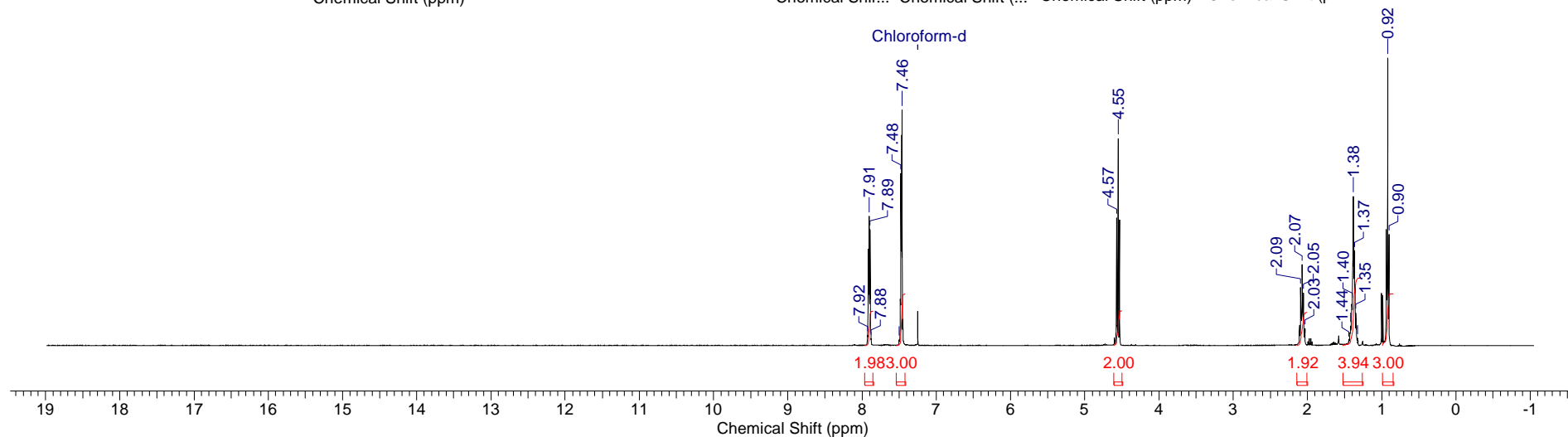
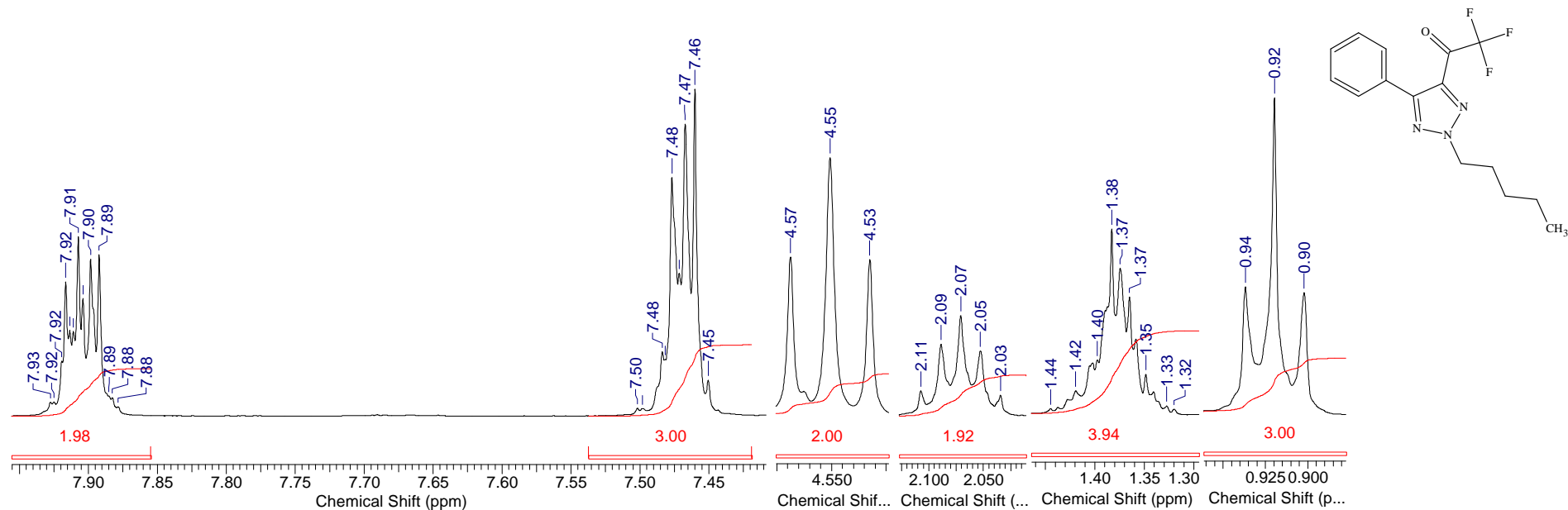


Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	22 Mar 2022 14:03:50	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\1SZA-BM-2458.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	2145	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

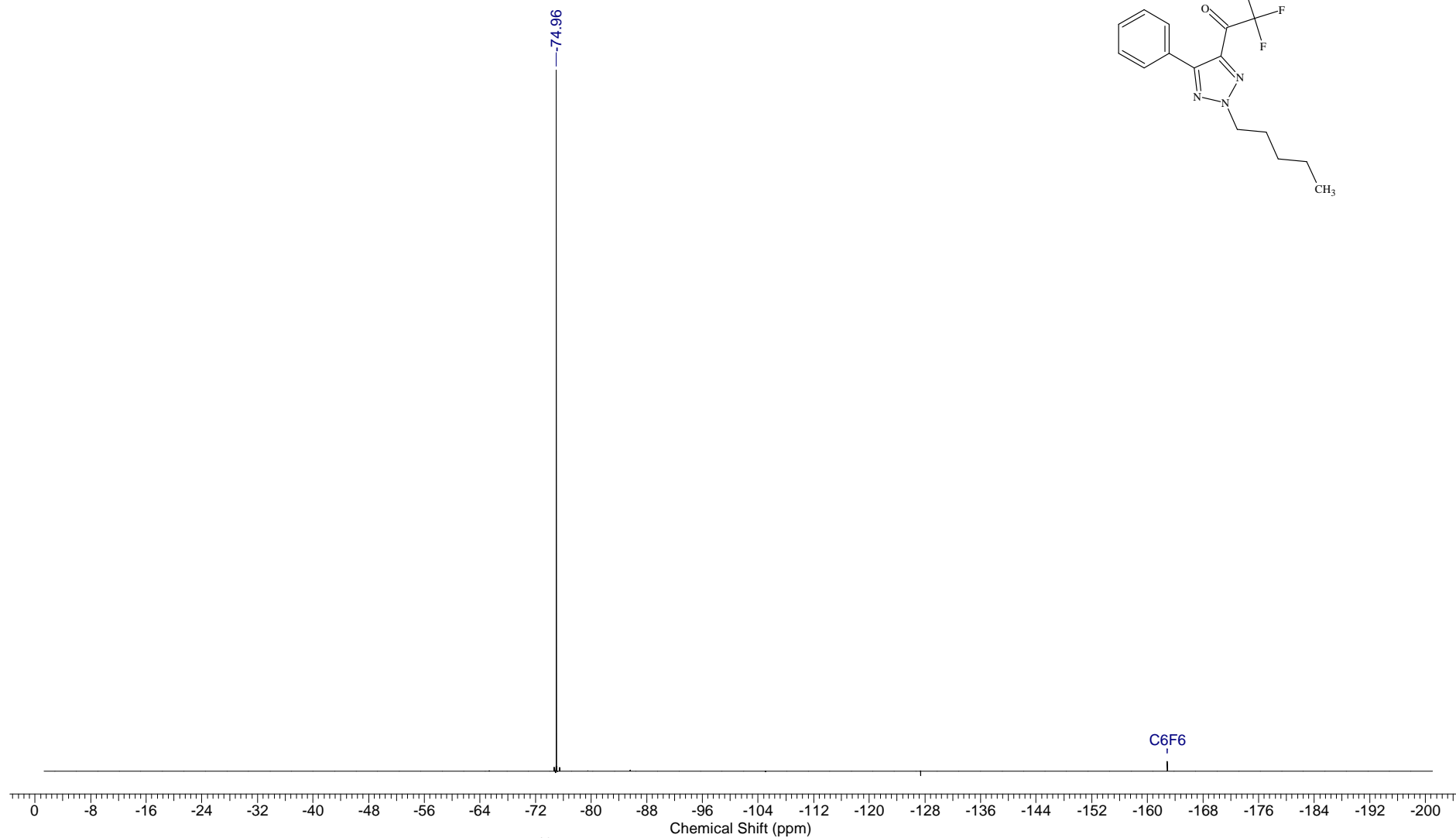
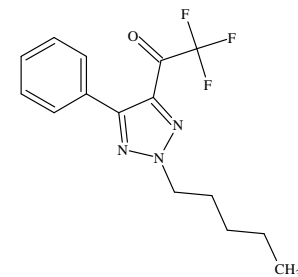


¹³C{¹H} NMR spectrum of mixture of **3g** and **4g** (100.6 MHz, CDCl₃)

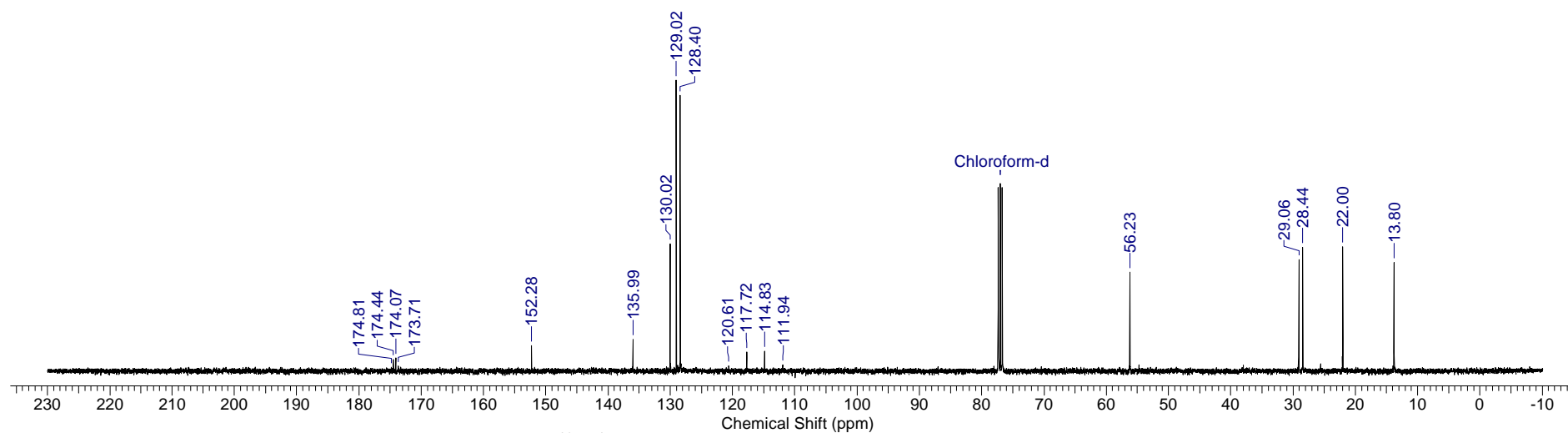
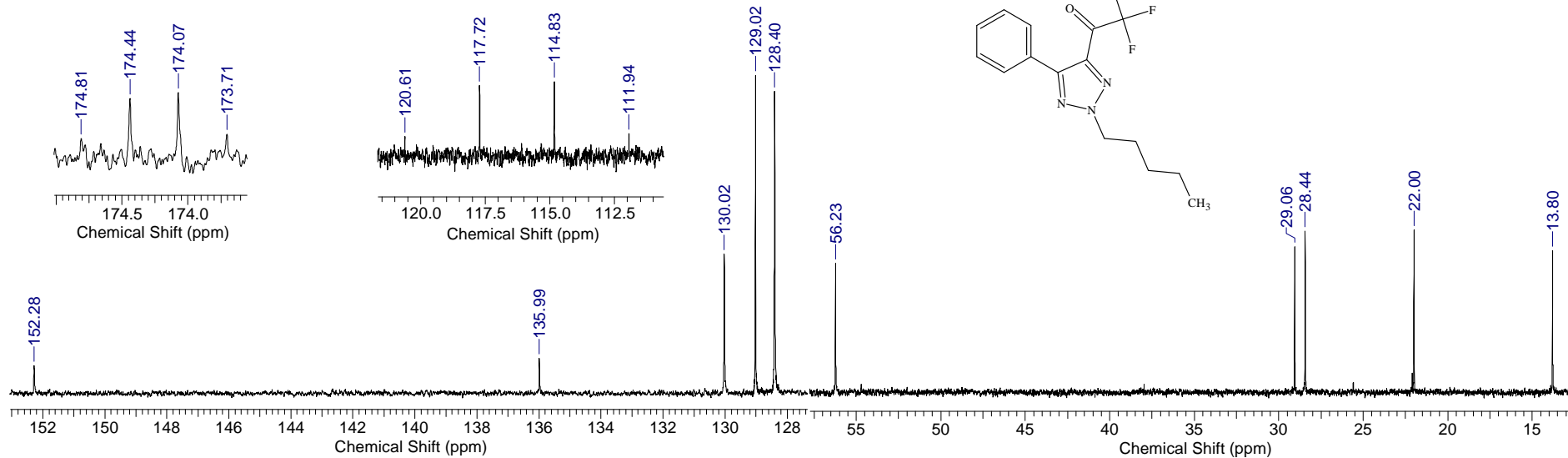
Acquisition Time (sec)	4.0894	Comment	Imported from UXMNR.		Date	05 Apr 2022 15:05:28	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2479-1.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	BENZENE-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000

¹H NMR spectrum of **3h** (400.1 MHz, CDCl₃)

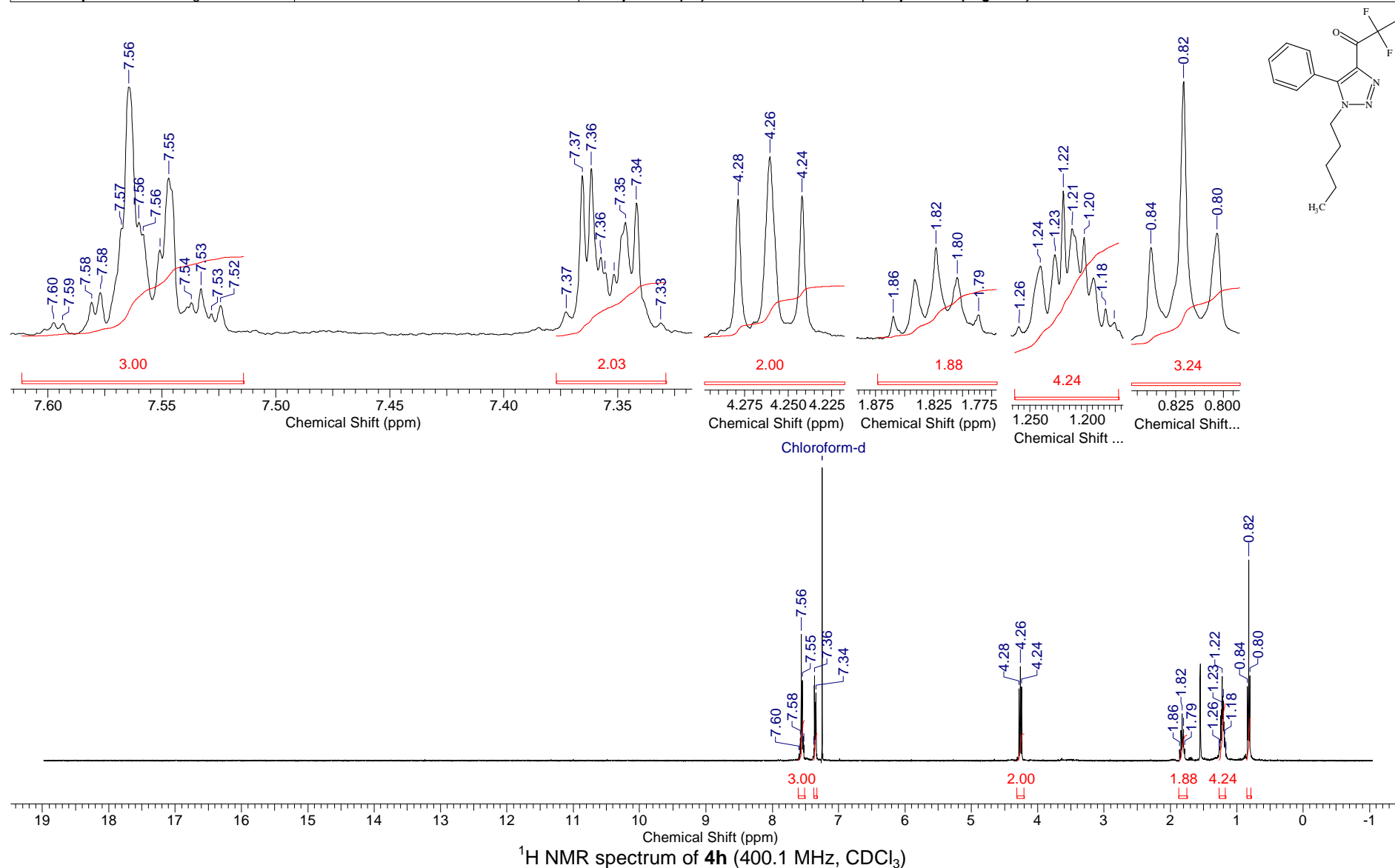
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File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2479-1.F_005001r	Frequency (MHz)	376.50	Points Count	262144
Nucleus	¹⁹ F	Number of Transients	4	Original Points Count	131072
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000				



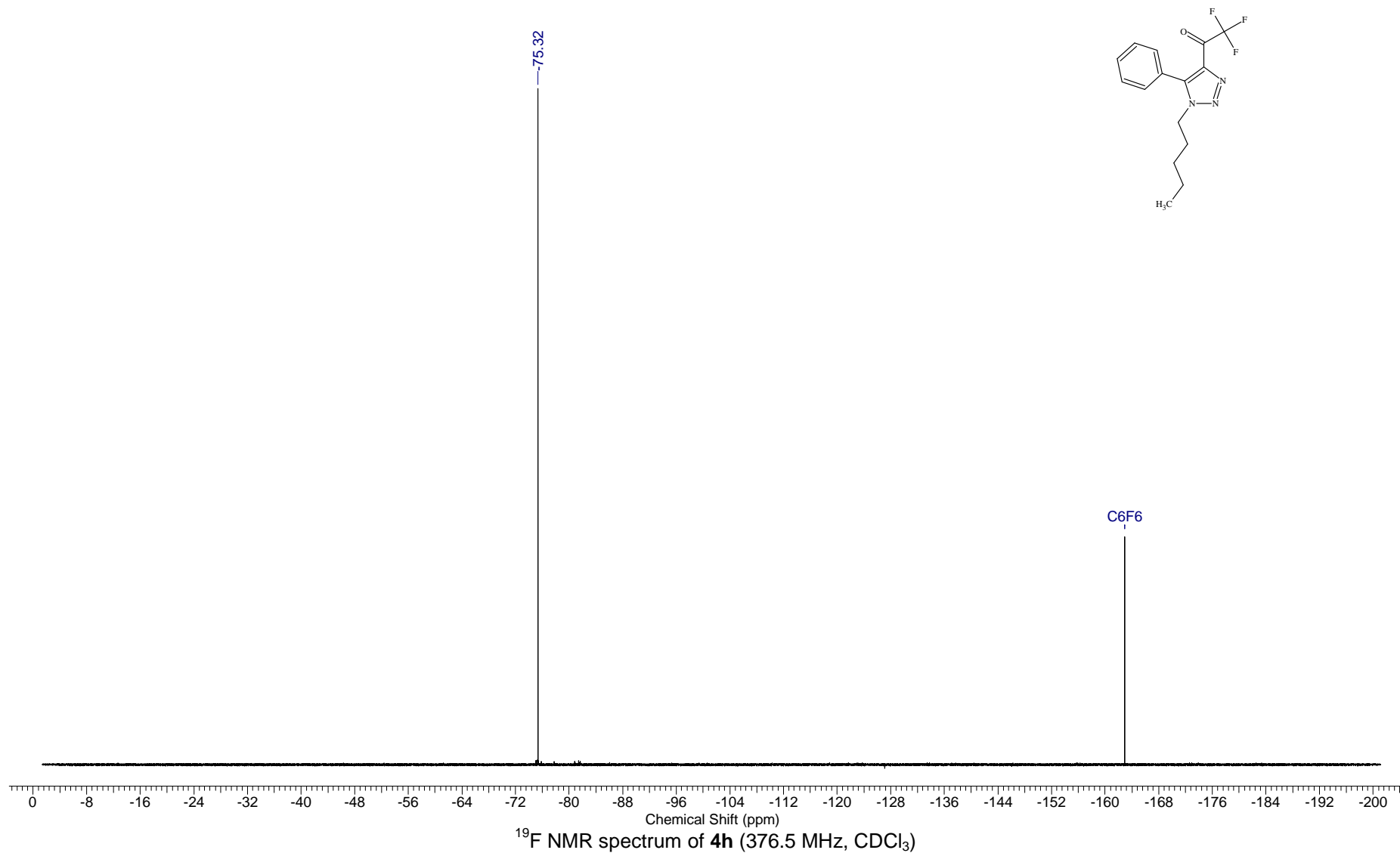
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.	Date	05 Apr 2022 15:13:32
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2479-1.C_002001r	Frequency (MHz)	100.61	Points Count	131072
Nucleus	¹³ C	Number of Transients	193	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59
Temperature (degree C)	27.000				

¹³C{¹H} NMR spectrum of **3h** (100.6 MHz, CDCl₃)

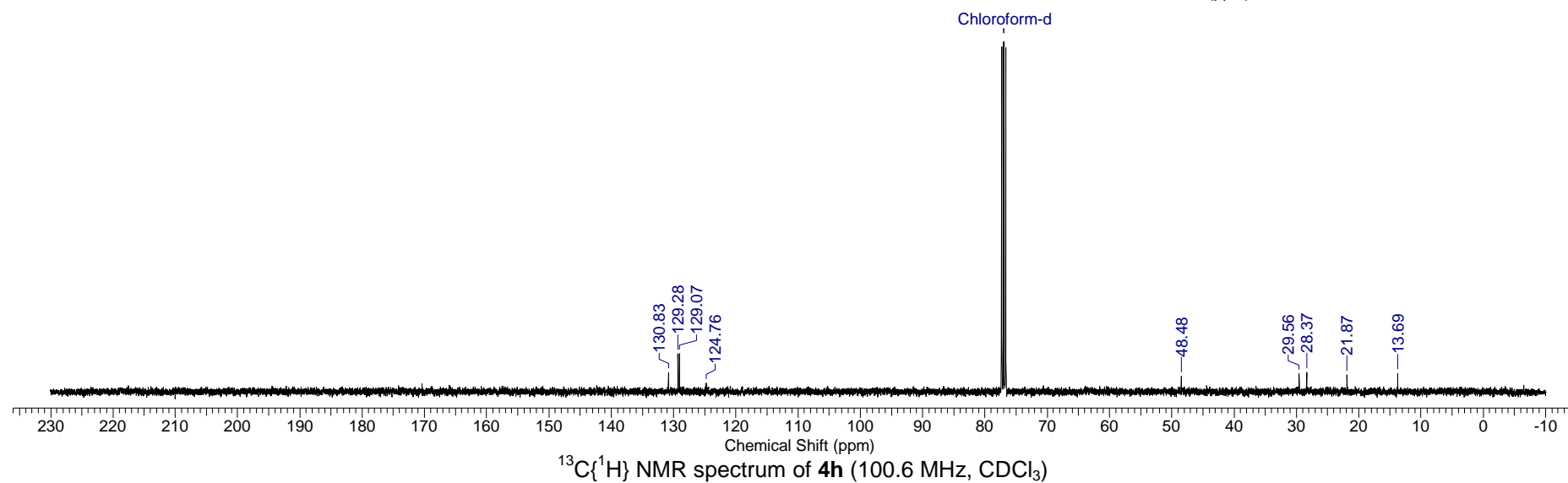
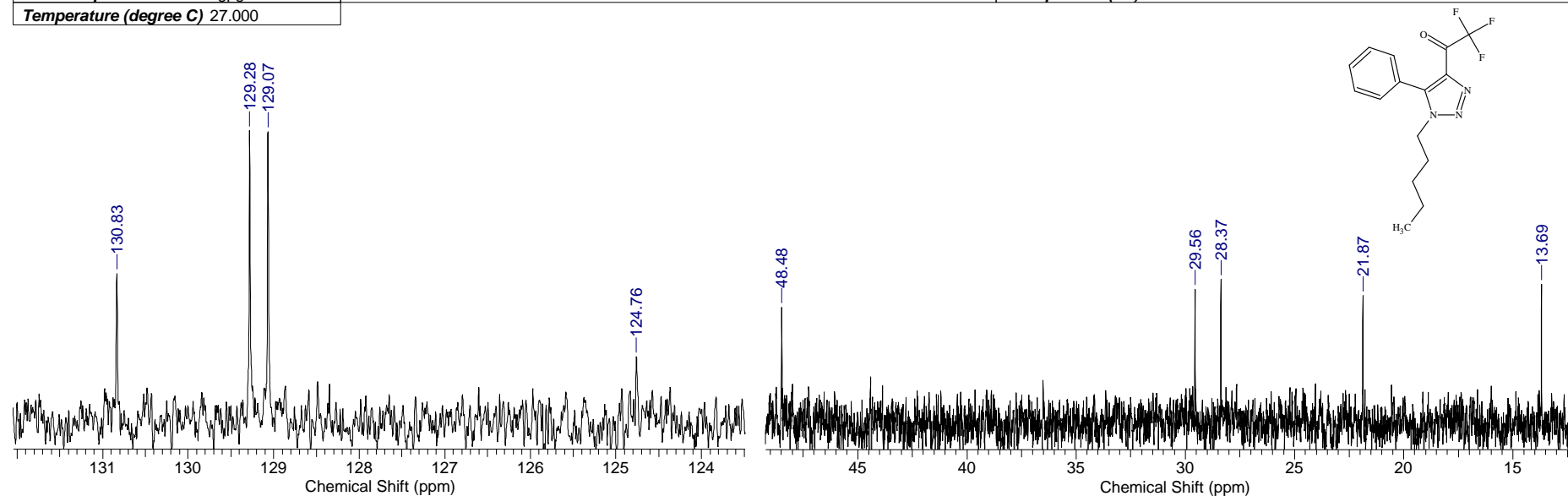
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	05 Apr 2022 15:01:32	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2479-2.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	BENZENE-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000



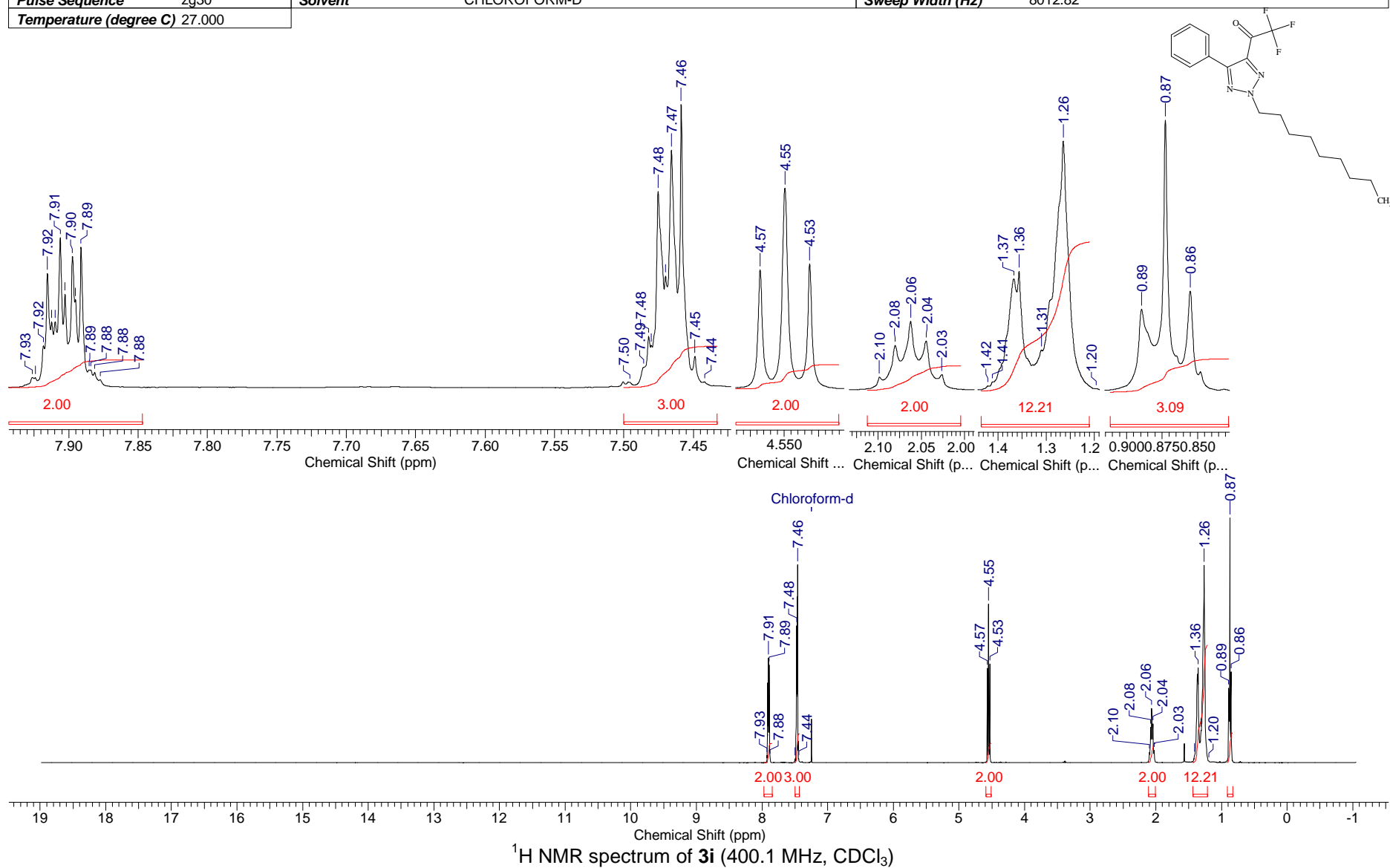
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File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2479-2.F_005001r	Frequency (MHz)	376.50		
Nucleus	¹⁹ F	Number of Transients	4	Original Points Count	131072
Pulse Sequence	zgfgqn	Points Count	262144		
Temperature (degree C)	27.000	Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97



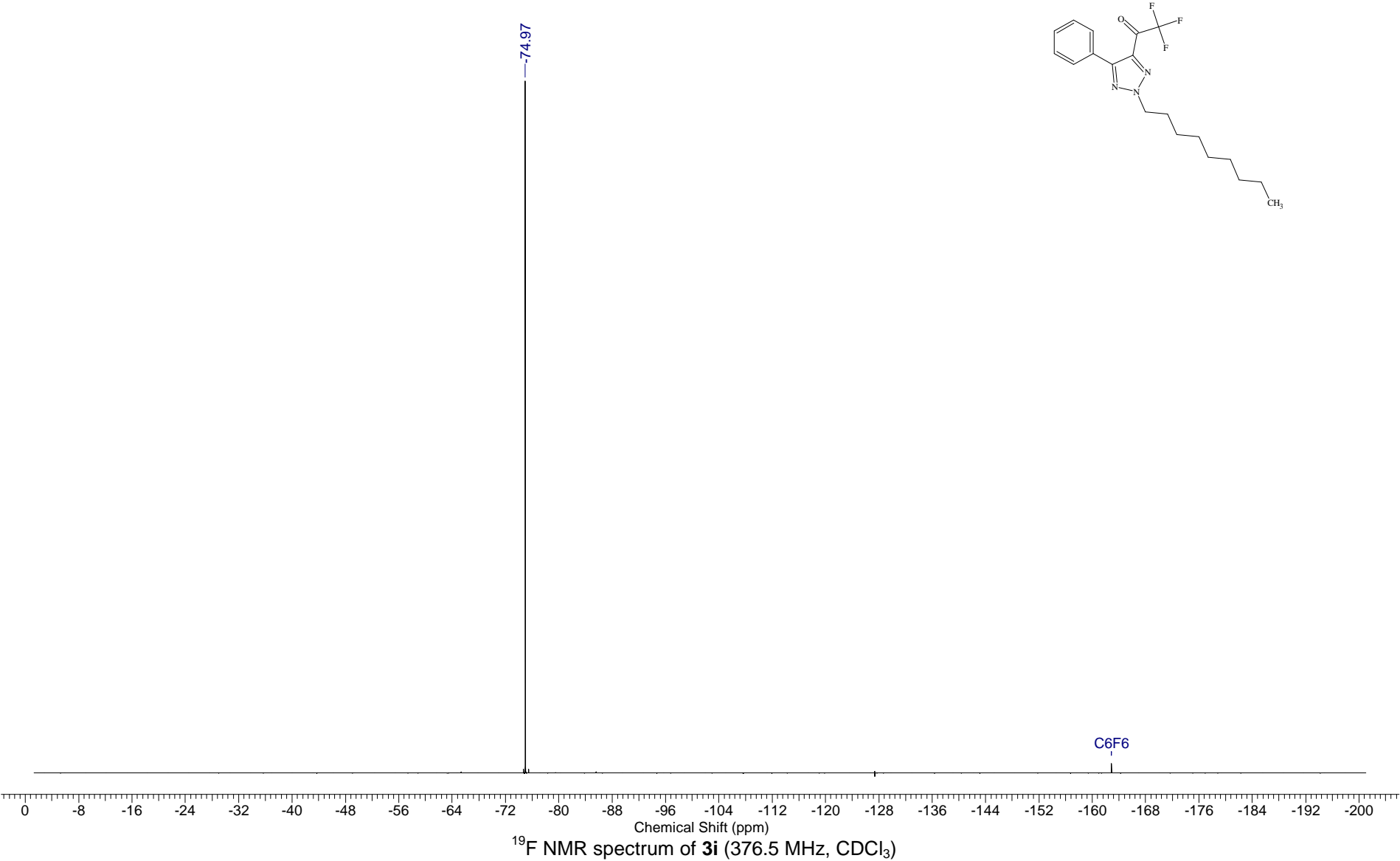
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.	Date	12 Apr 2022 16:03:14
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2479-2.C_002001r	Frequency (MHz)	100.61	Points Count	131072
Nucleus	¹³ C	Number of Transients	307	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59
Temperature (degree C)	27.000				



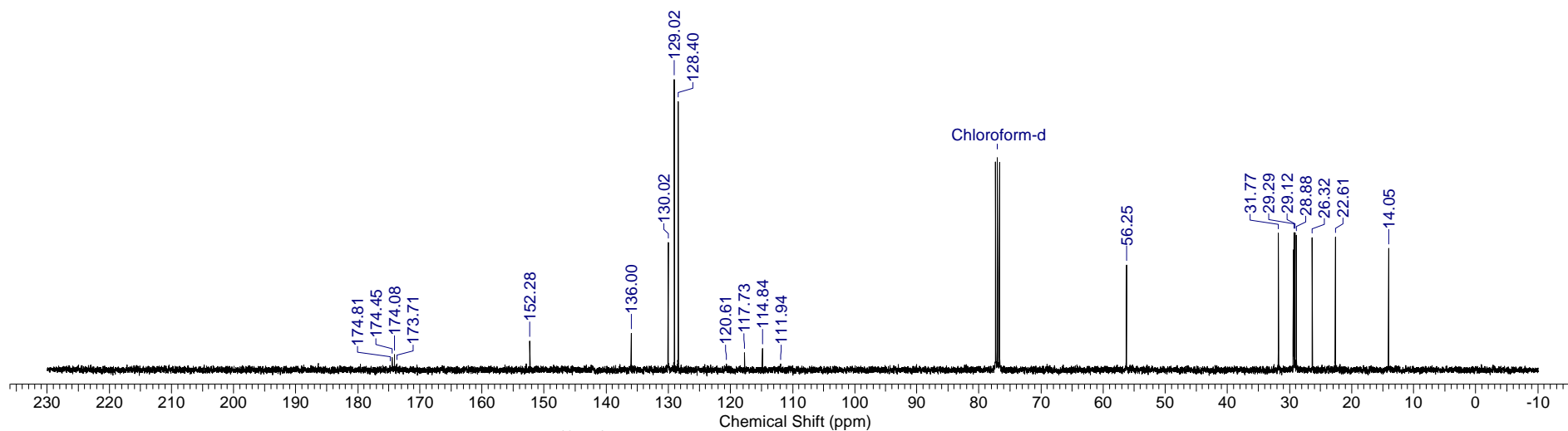
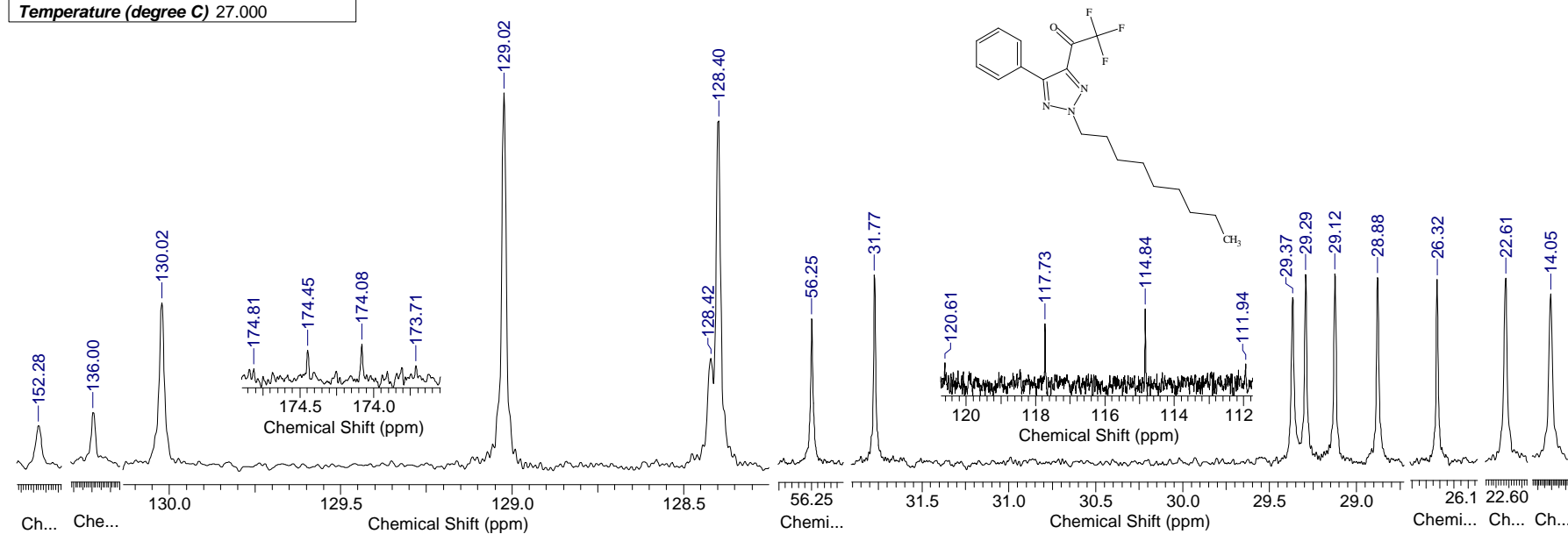
Acquisition Time (sec)	4.0894	Comment	Imported from UXMNR.			Date	25 Mar 2022 15:48:10		
File Name	C:\DOCS\OUTPUT_301\2022\03.map\BM-2464-2.H_001001r					Frequency (MHz)	400.13		
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072		
Pulse Sequence	zg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	8012.82		
Temperature (degree C)	27.000								



Acquisition Time (sec)	1.7433	Comment	Imported from UXMNR.		Date	25 Mar 2022 15:58:36	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapt\BM-2464-2.F_005001r	Frequency (MHz)	376.50	Nucleus	19F		
Number of Transients	4	Original Points Count	131072	Points Count	262144	Pulse Sequence	zgfgn
Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97	Temperature (degree C)	27.000		

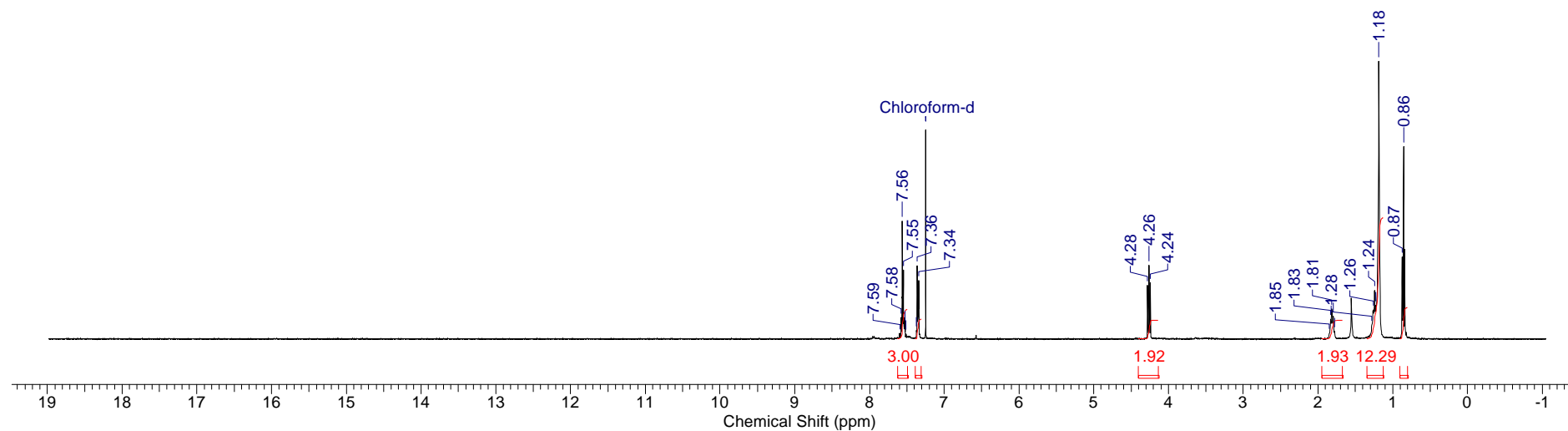
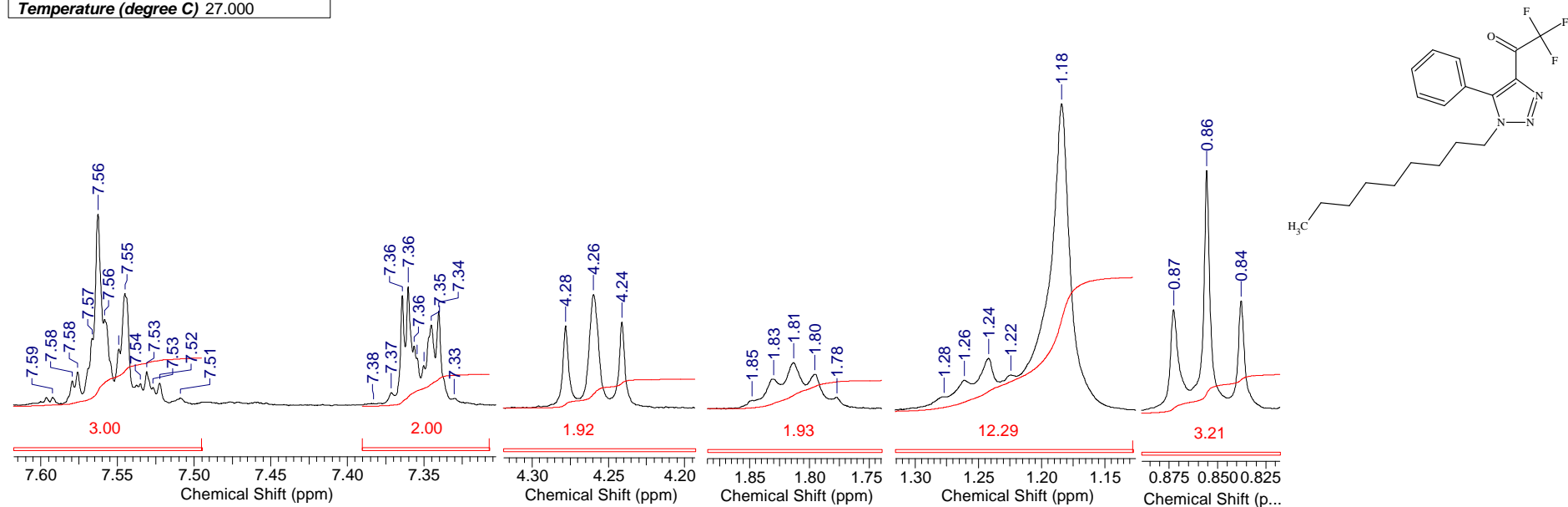


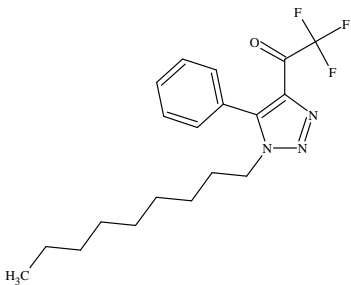
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.			Date	26 Mar 2022 13:44:02
File Name	C:\DOCS\BM\MP_COCE\DI\2022\bm220326\BM-2464-2_002001r					Frequency (MHz)	100.61
Nucleus	13C	Number of Transients	160	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	24154.59
Temperature (degree C)	27.000					F	

¹³C{¹H} NMR spectrum of **3i** (100.6 MHz, CDCl₃)

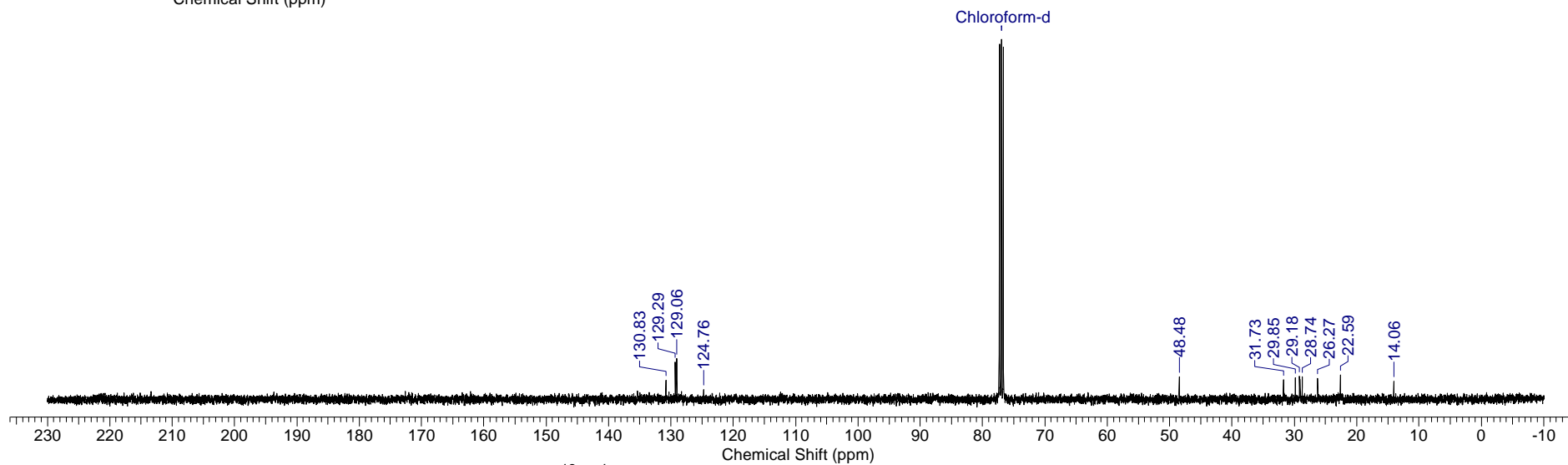
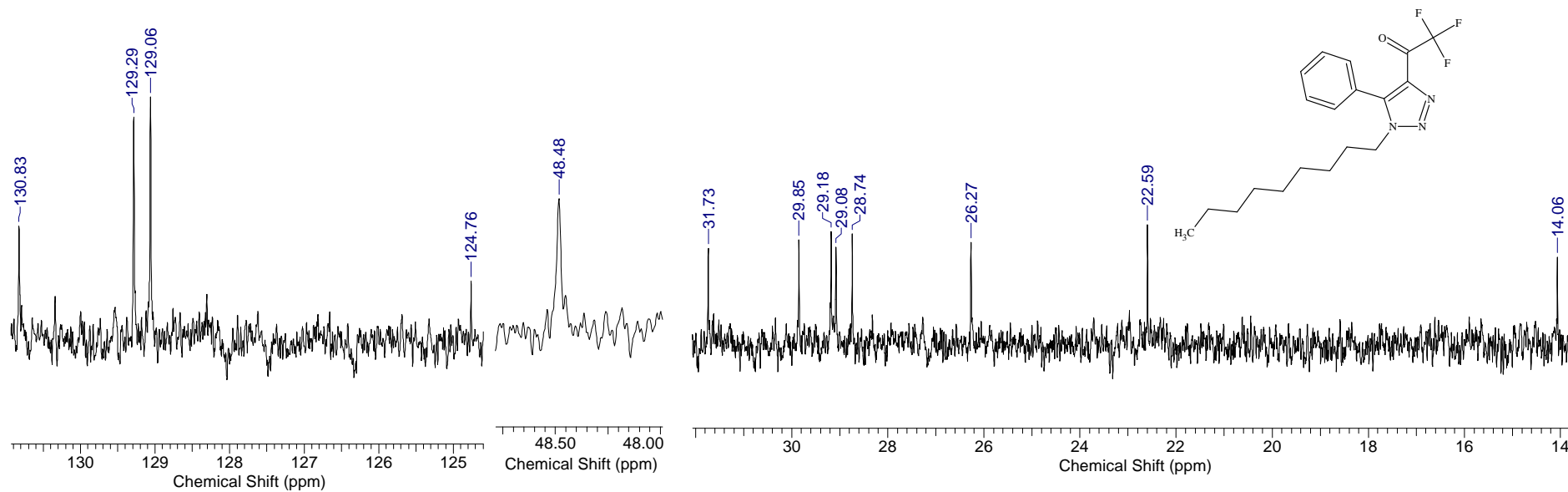
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	25 Mar 2022 15:50:02	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\BM-2464-3.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

F

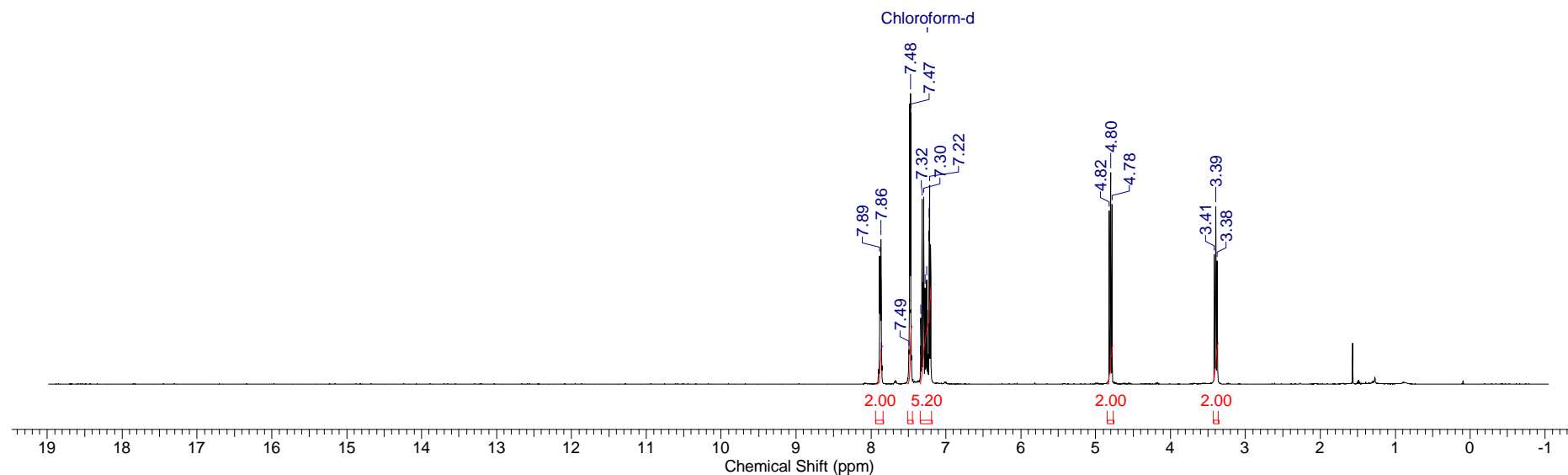
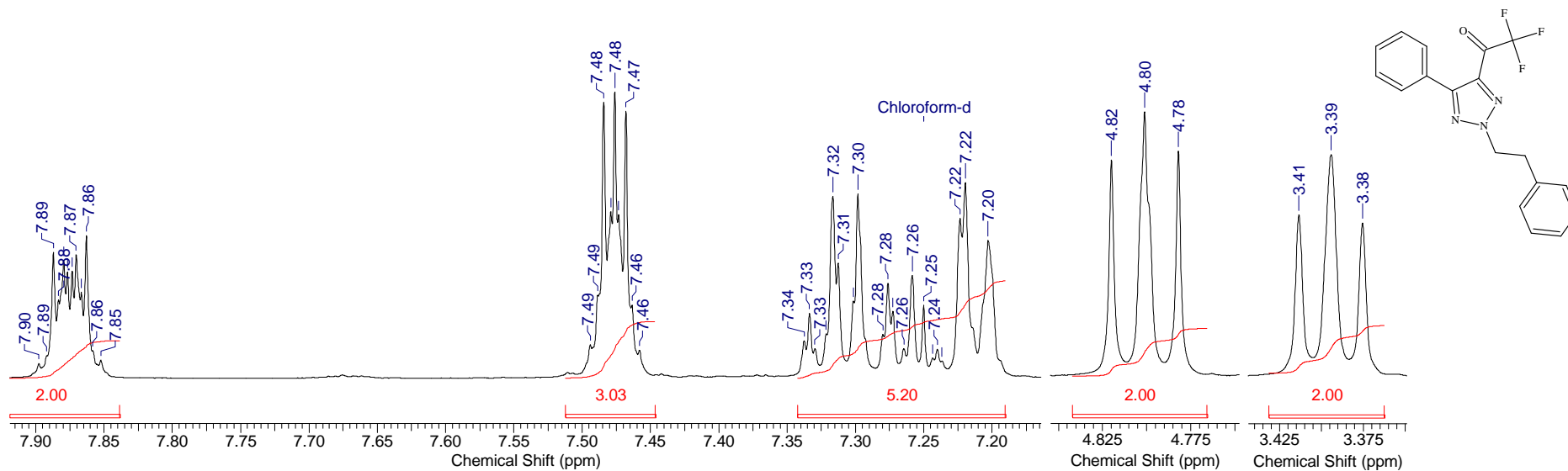
¹H NMR spectrum of **4i** (400.1 MHz, CDCl₃)



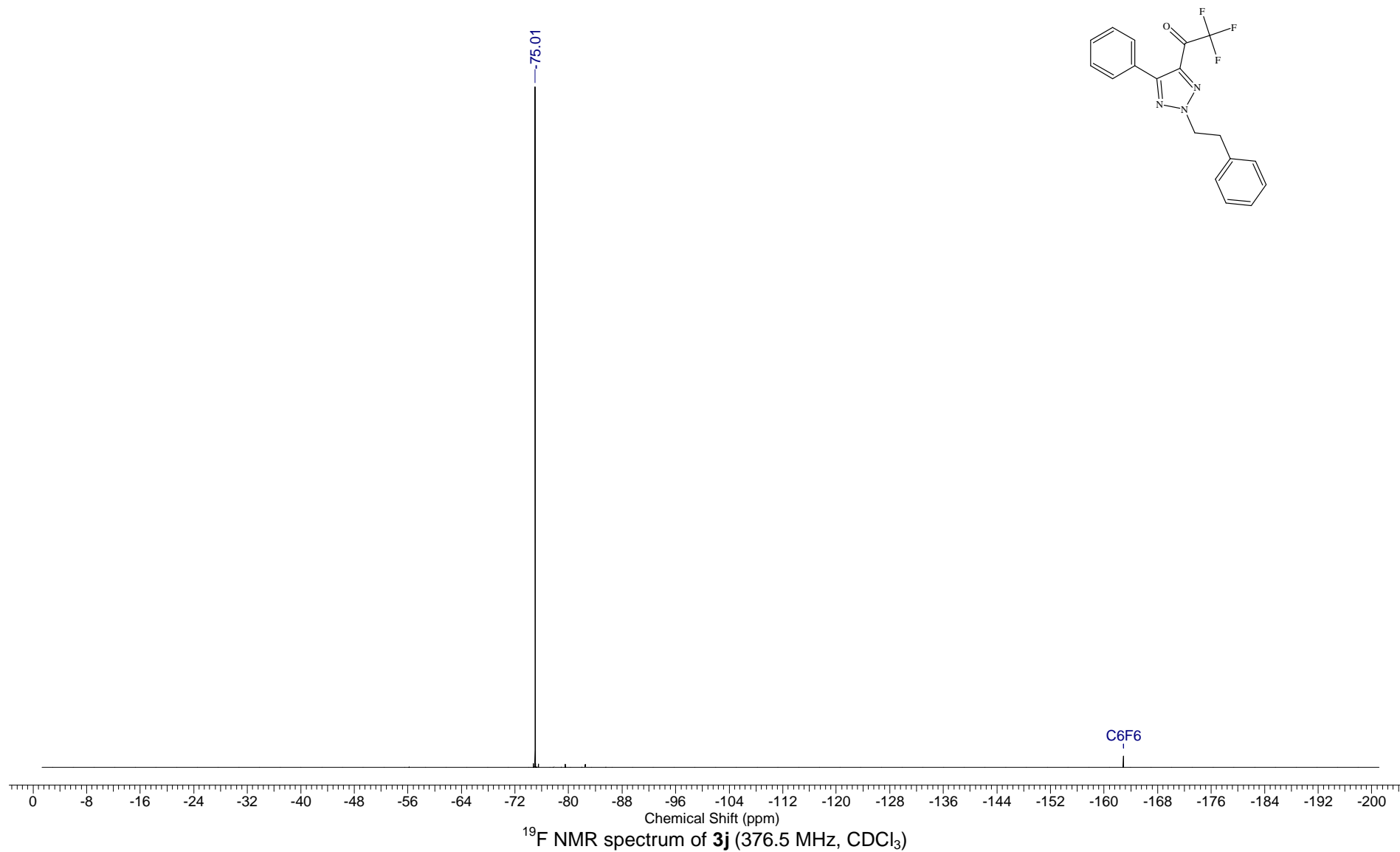
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File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\BM-2464-3.C_002001r	Frequency (MHz)	100.61	Nucleus	¹³ C
Number of Transients	175	Original Points Count	16384	Points Count	131072
Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59	Pulse Sequence	zgpg30
				Temperature (degree C)	27.000

¹³C{¹H} NMR spectrum of **4i** (100.6 MHz, CDCl₃)

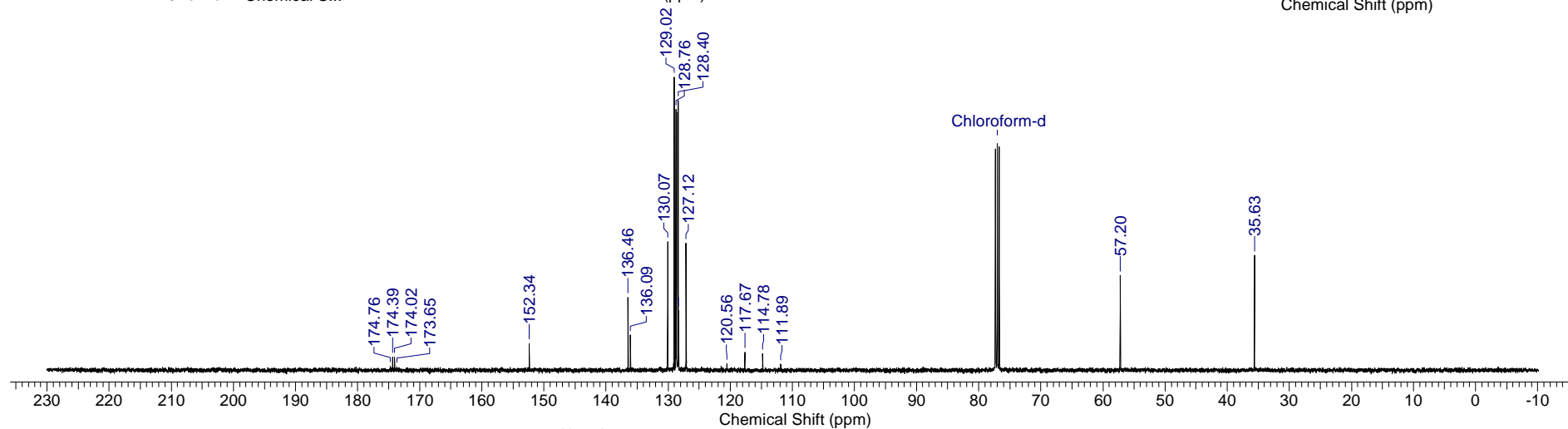
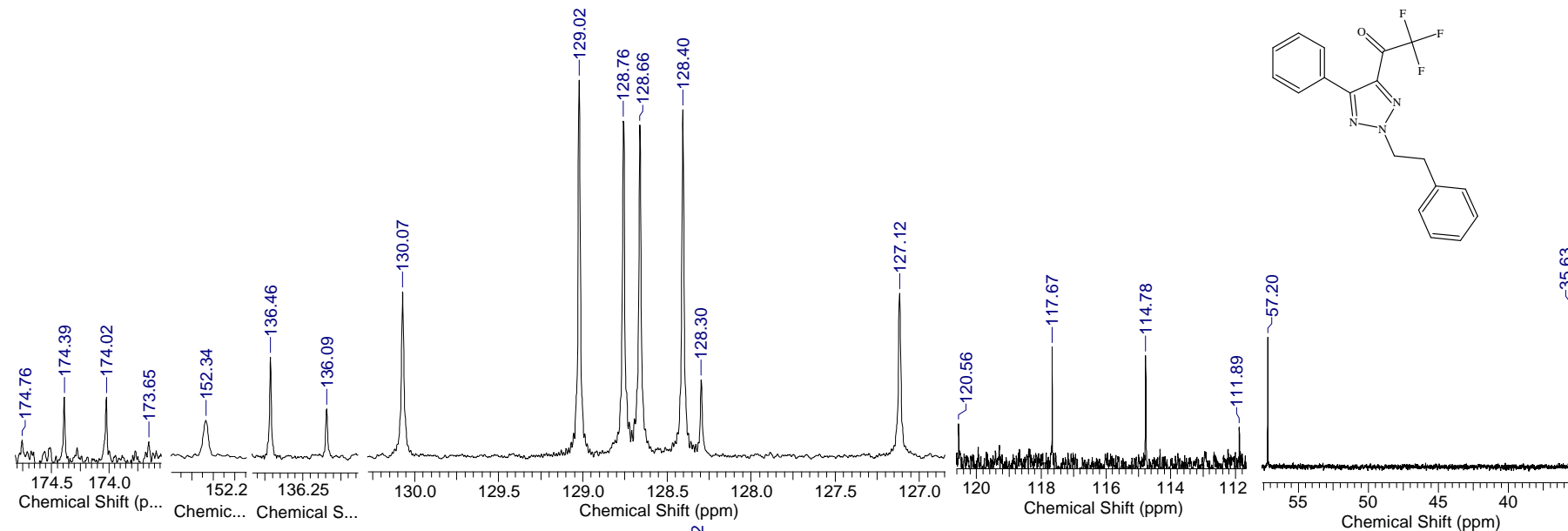
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File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2481R.H_001001r					Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	BENZENE-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000

¹H NMR spectrum of **3j** (400.1 MHz, CDCl₃)

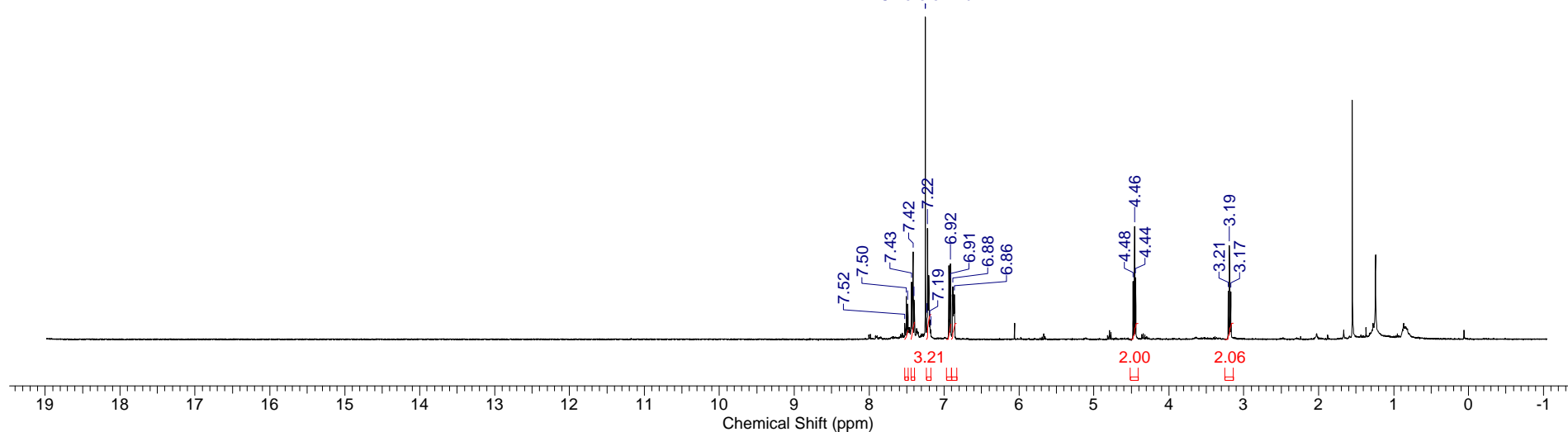
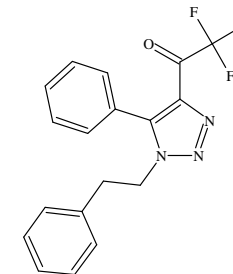
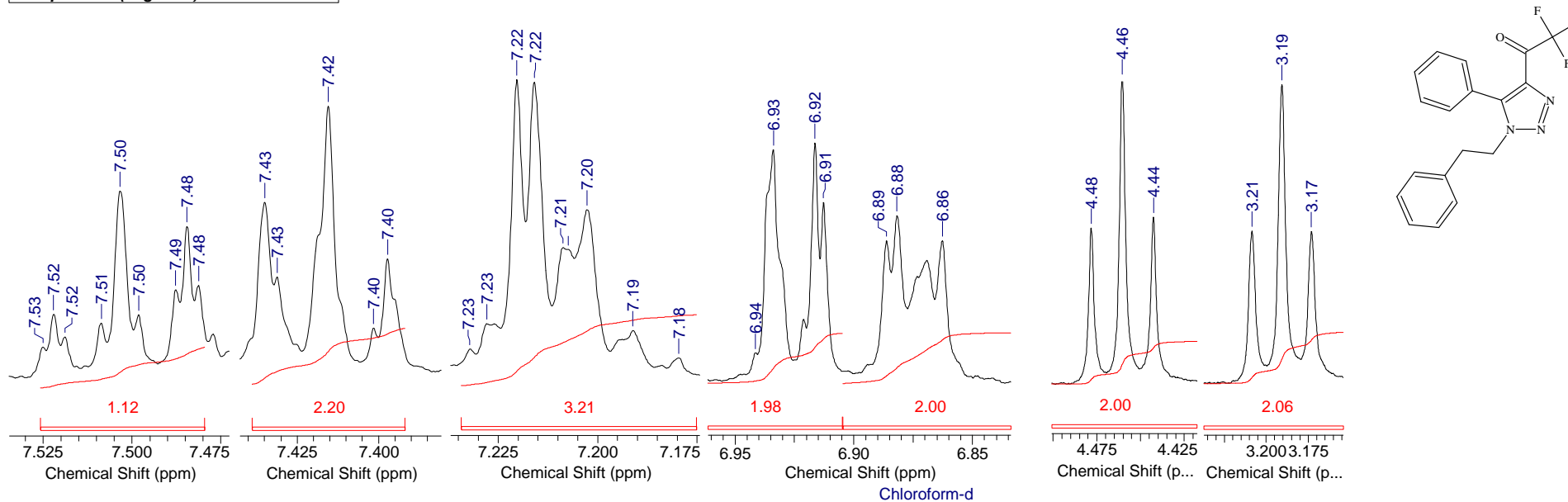
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File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2481R.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



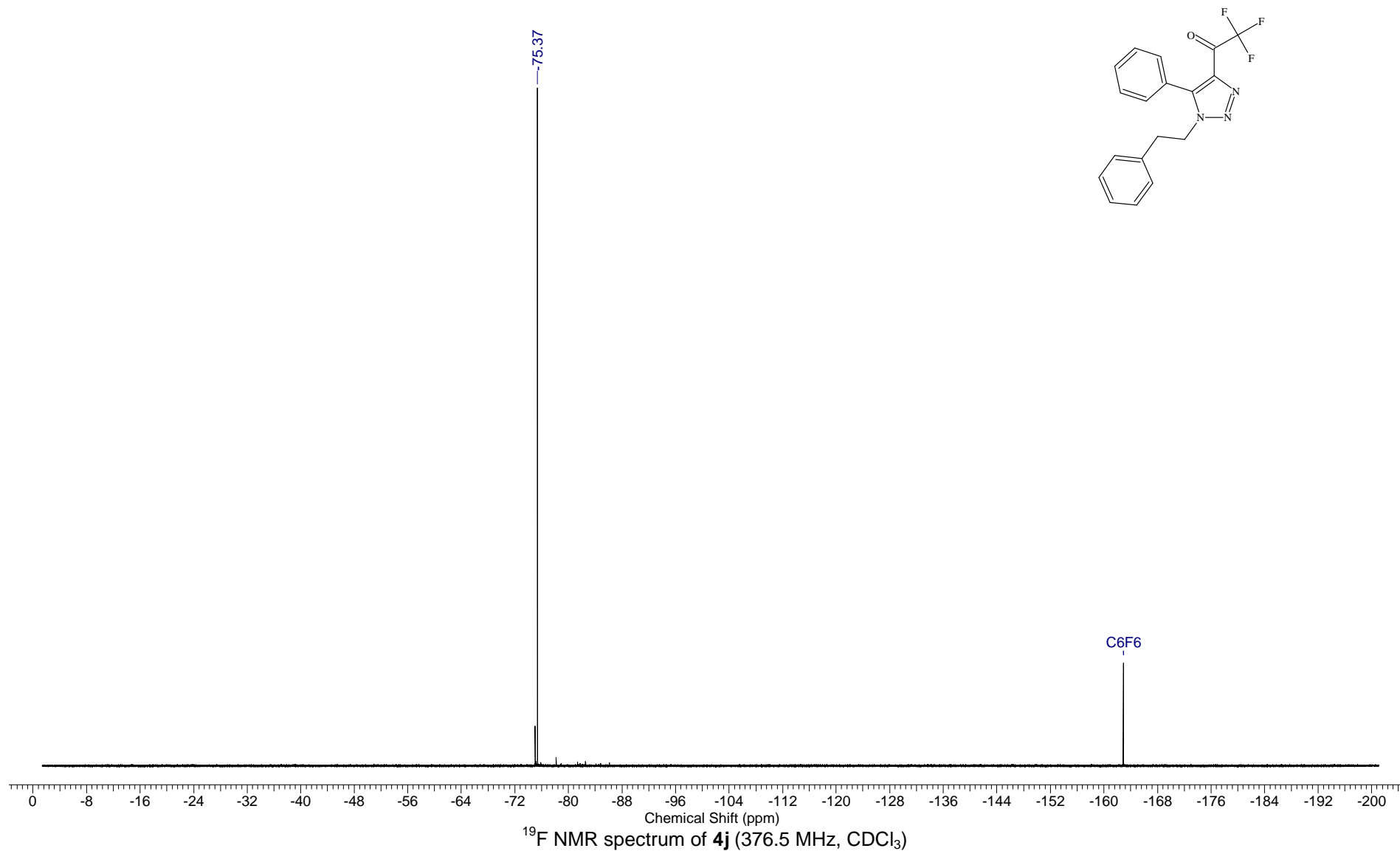
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	06 Apr 2022 17:33:28	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2481R.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	521	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

¹³C{¹H} NMR spectrum of **3j** (100.6 MHz, CDCl₃)

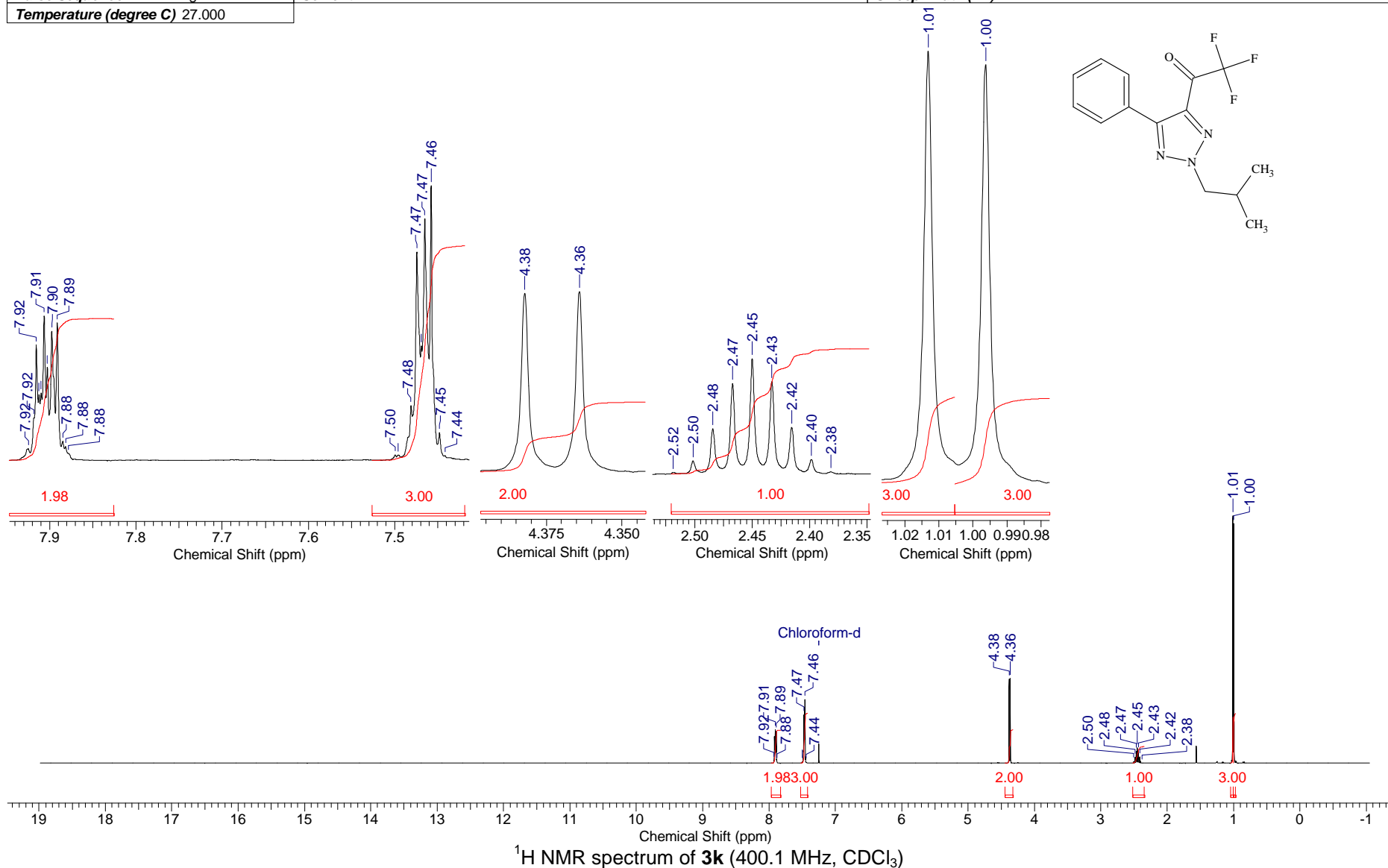
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	07 Apr 2022 11:31:38
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2481-11.H.H_001001r	Frequency (MHz)	400.13	Points Count	131072
Nucleus	¹ H	Number of Transients	8	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000				

¹H NMR spectrum of **4j** (400.1 MHz, CDCl₃)

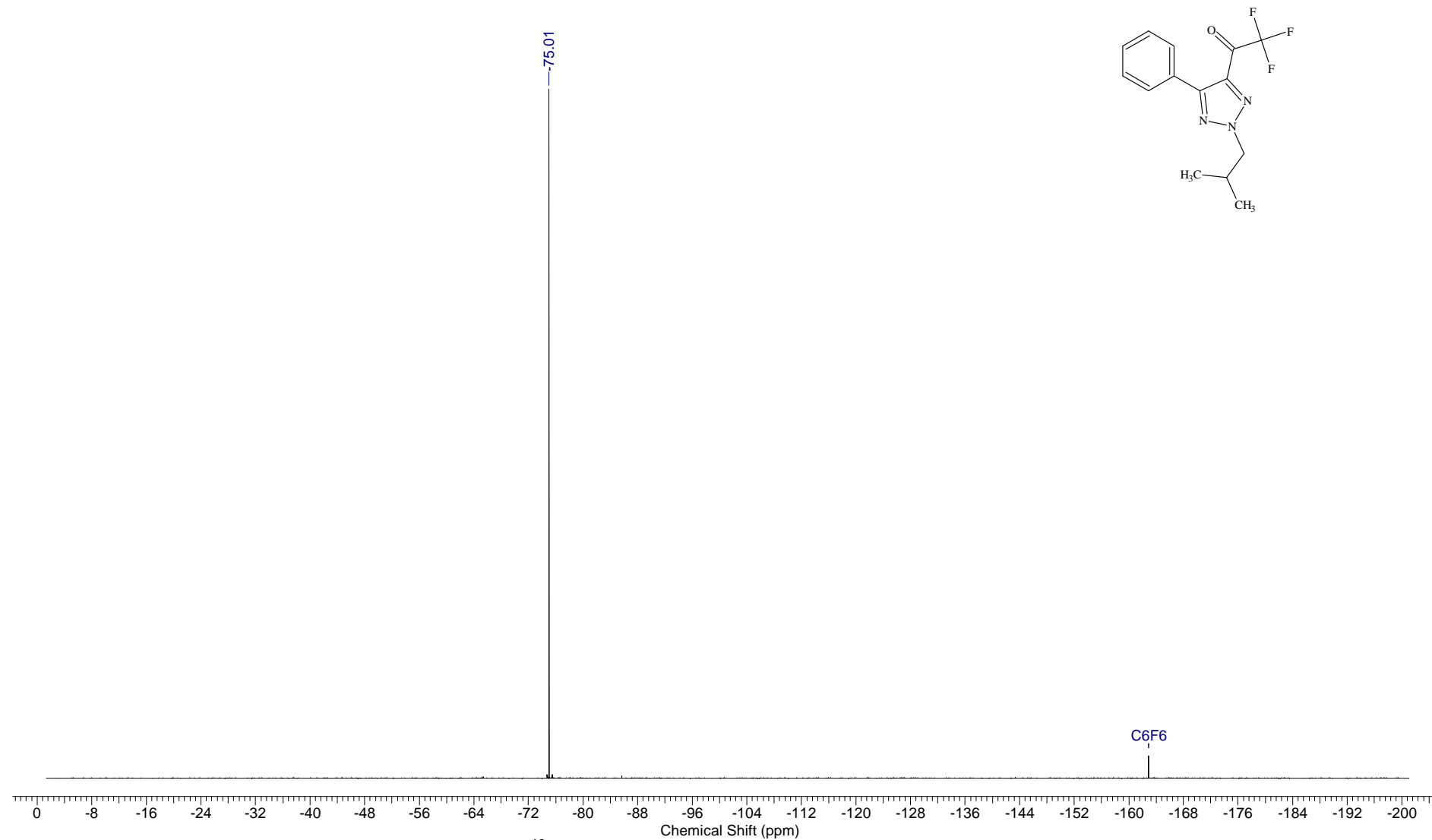
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	07 Apr 2022 12:32:14	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2481-11.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



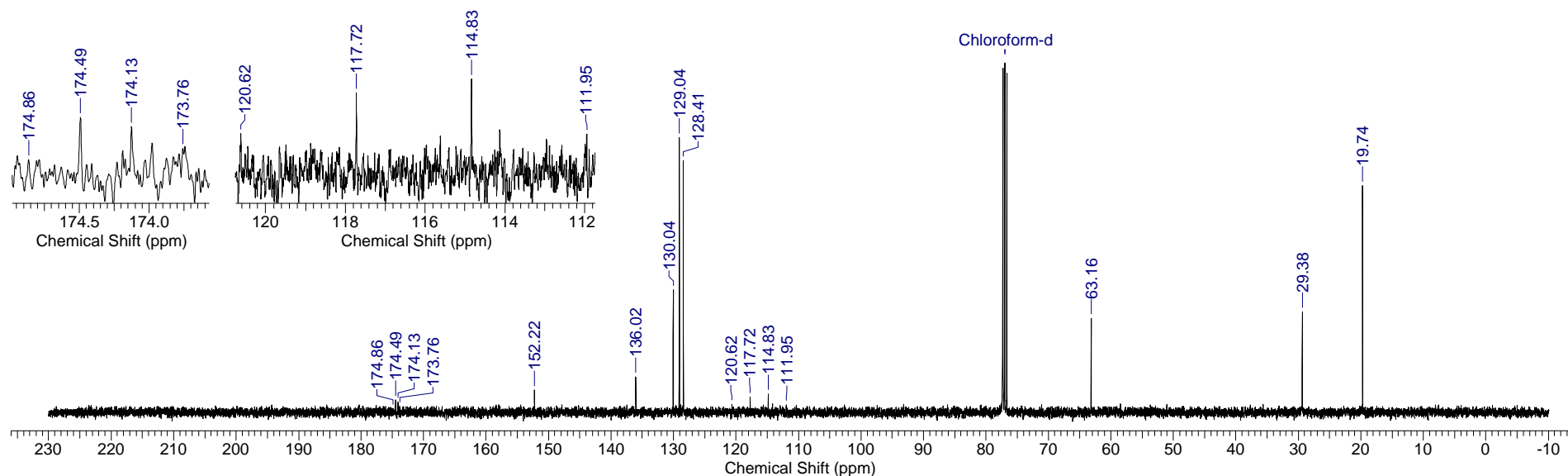
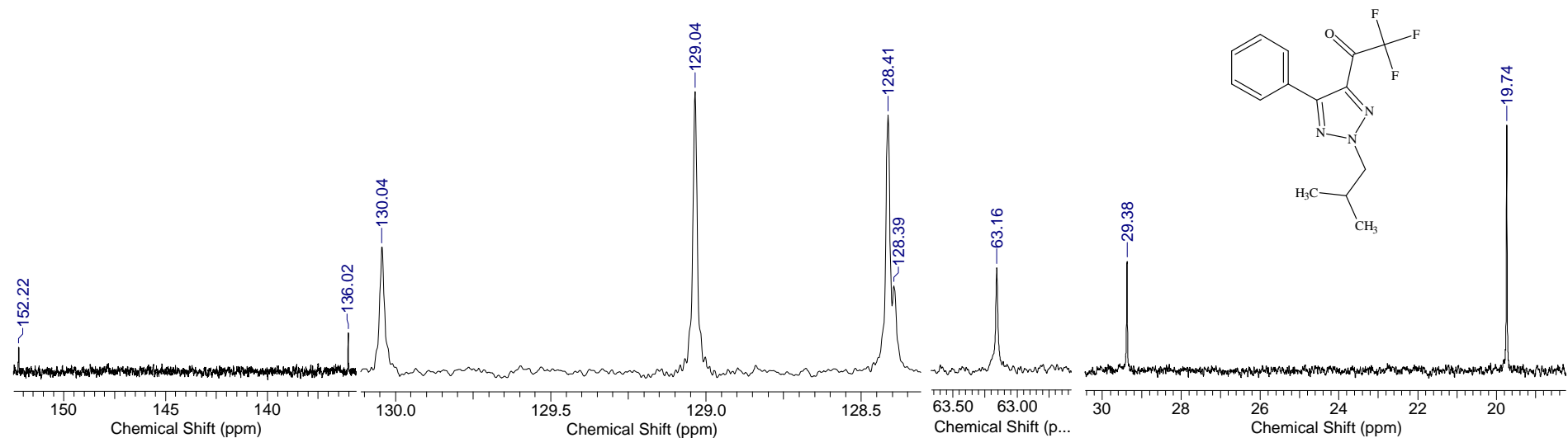
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.			Date	08 Apr 2022 15:21:08
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2480-1.H_001001r					Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000						



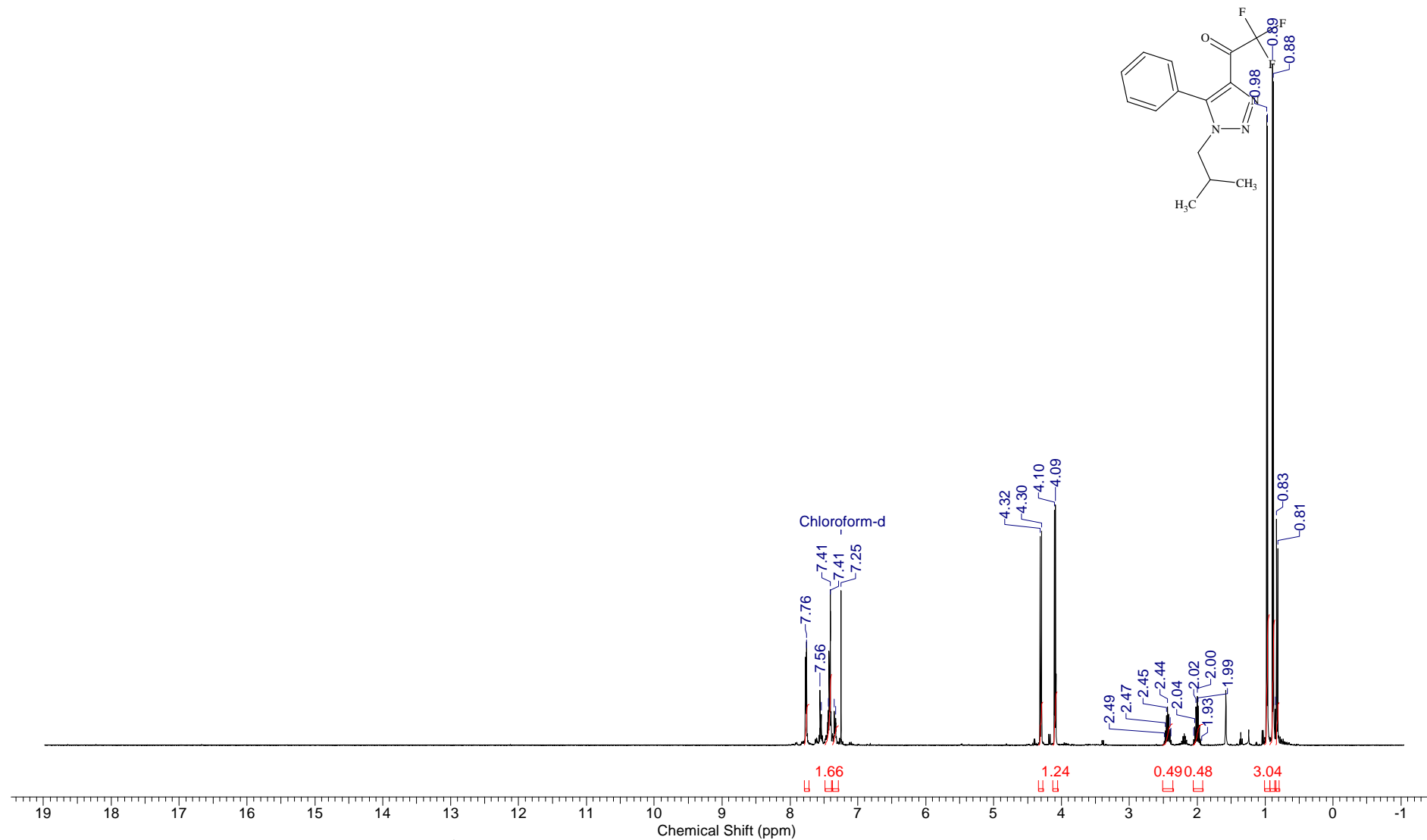
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File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2480-1.F_005001r	Frequency (MHz)	376.50		
Nucleus	¹⁹ F	Number of Transients	8	Original Points Count	131072
Pulse Sequence	zgfgn	Points Count	262144	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000	Solvent	CHLOROFORM-D		



Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	09 Apr 2022 13:45:48	
File Name	C:\DOCS\BM\ЯMP_COCE\ДИ\2022\bm220409\BM-2480-1_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	192	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

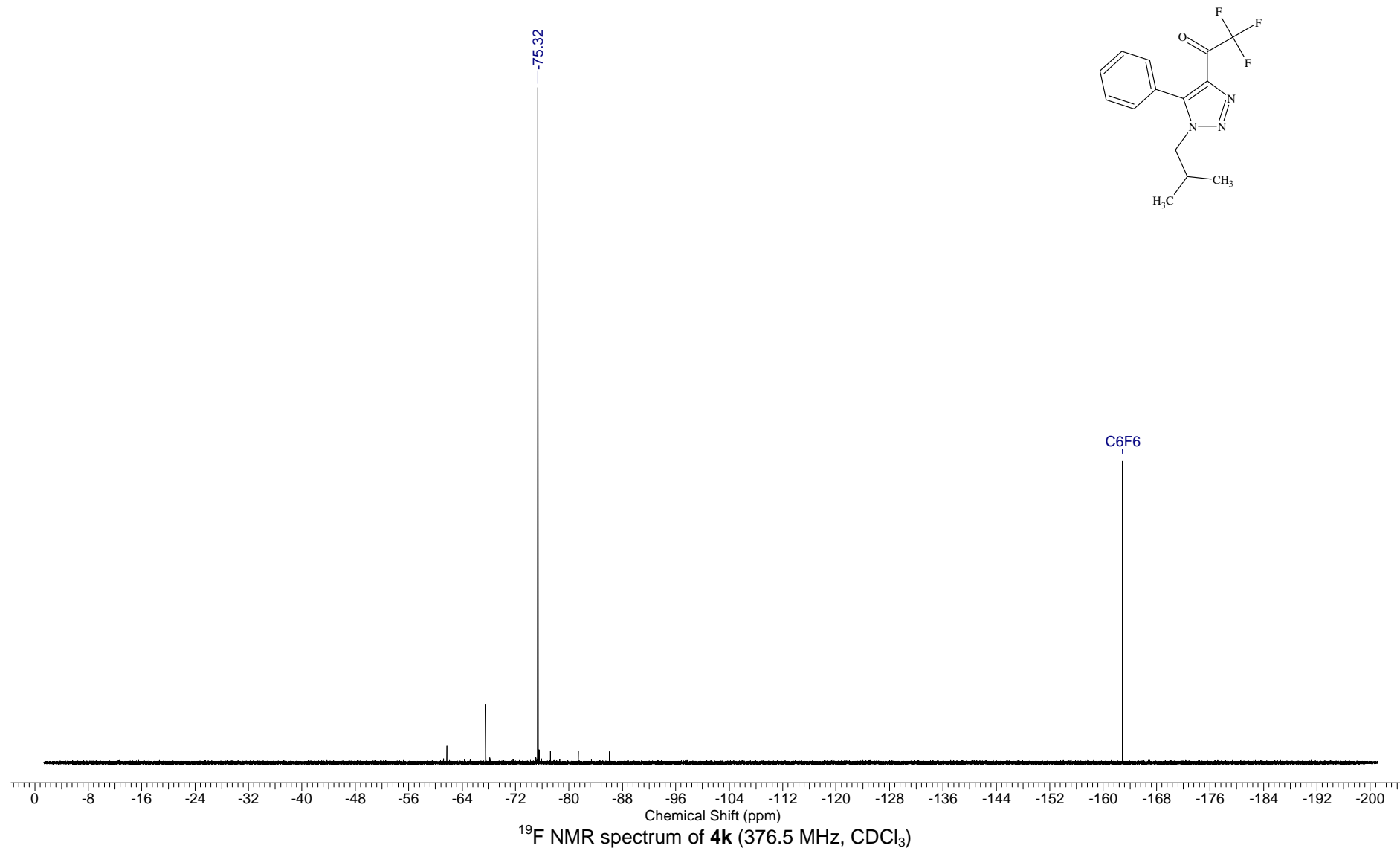
¹³C{¹H} NMR spectrum of **3k** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	08 Apr 2022 15:22:48	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2480-3.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

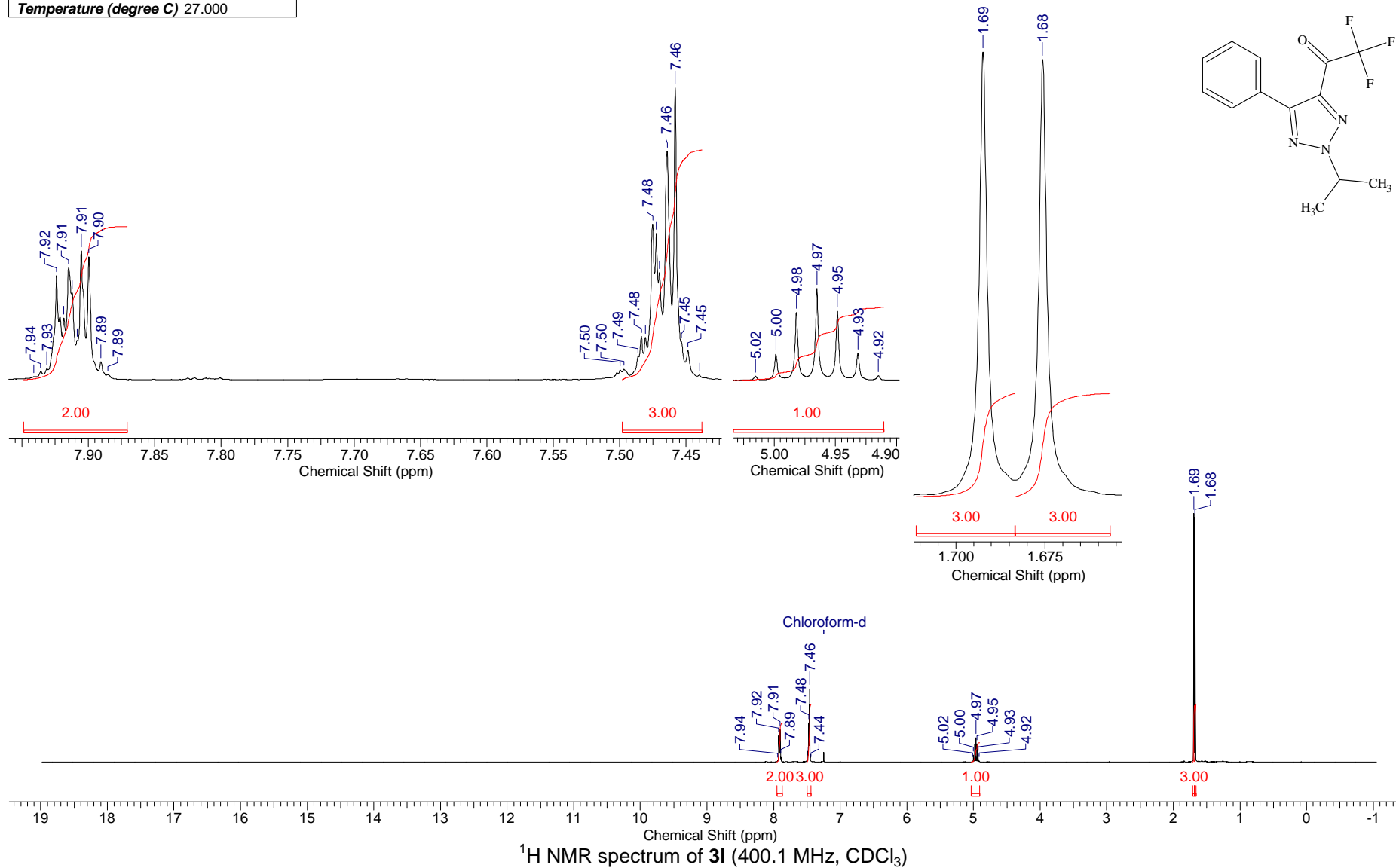


¹H NMR spectrum of mixture of **3k** and **4k** (400.1 MHz, CDCl₃)

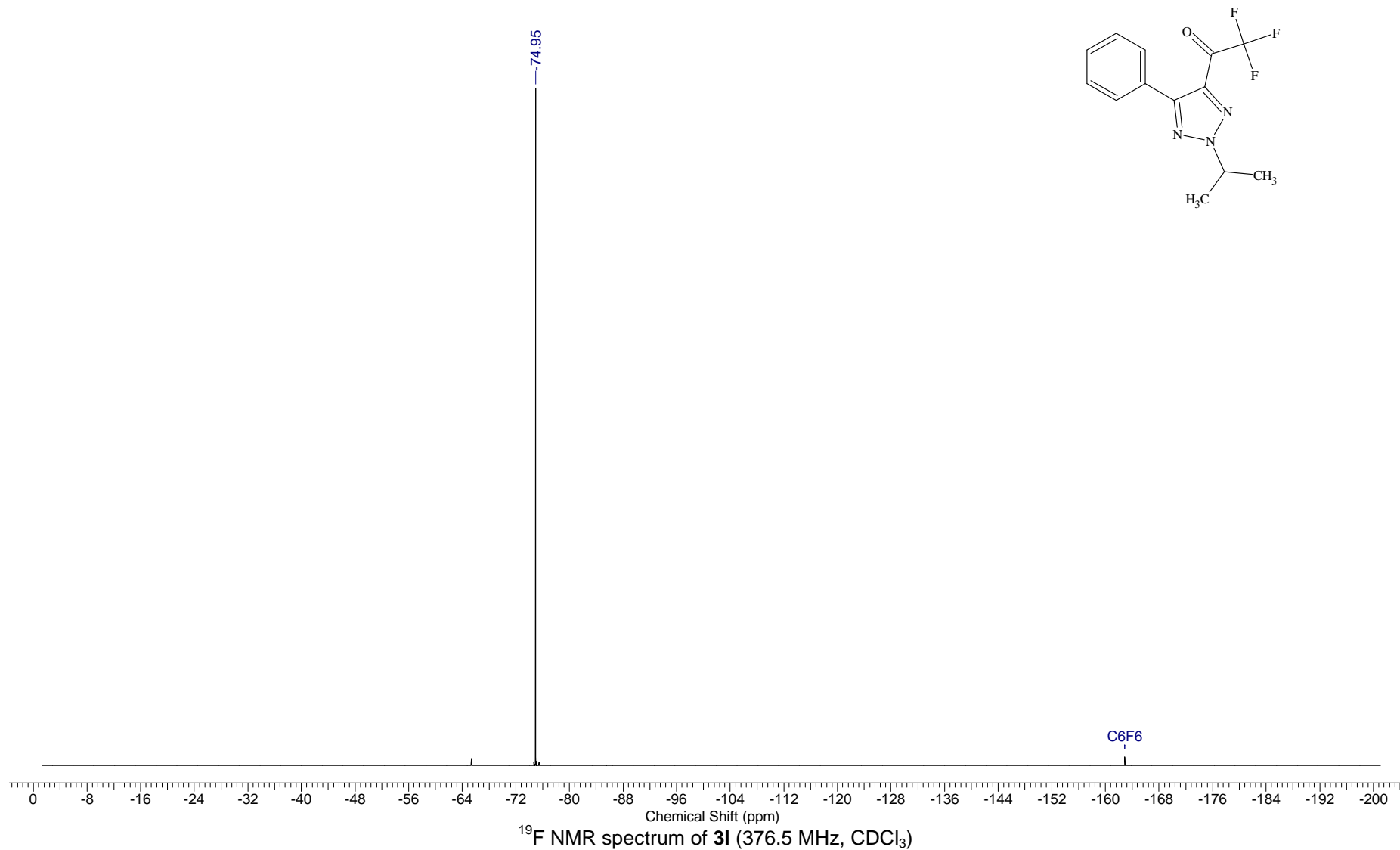
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	08 Apr 2022 15:40:58
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2480-3.F_005001r			Frequency (MHz)	376.50
Nucleus	¹⁹ F	Number of Transients	12	Original Points Count	131072
Pulse Sequence	zgfgn	Solvent	CHLOROFORM-D	Points Count	262144
Temperature (degree C)	27.000			Sweep Width (Hz)	75187.97



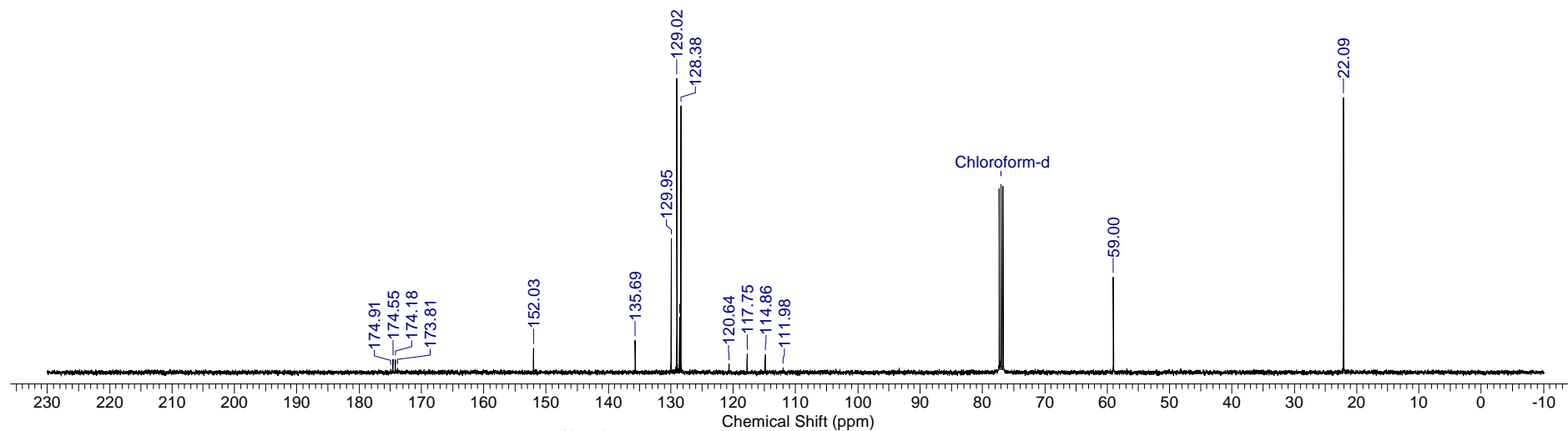
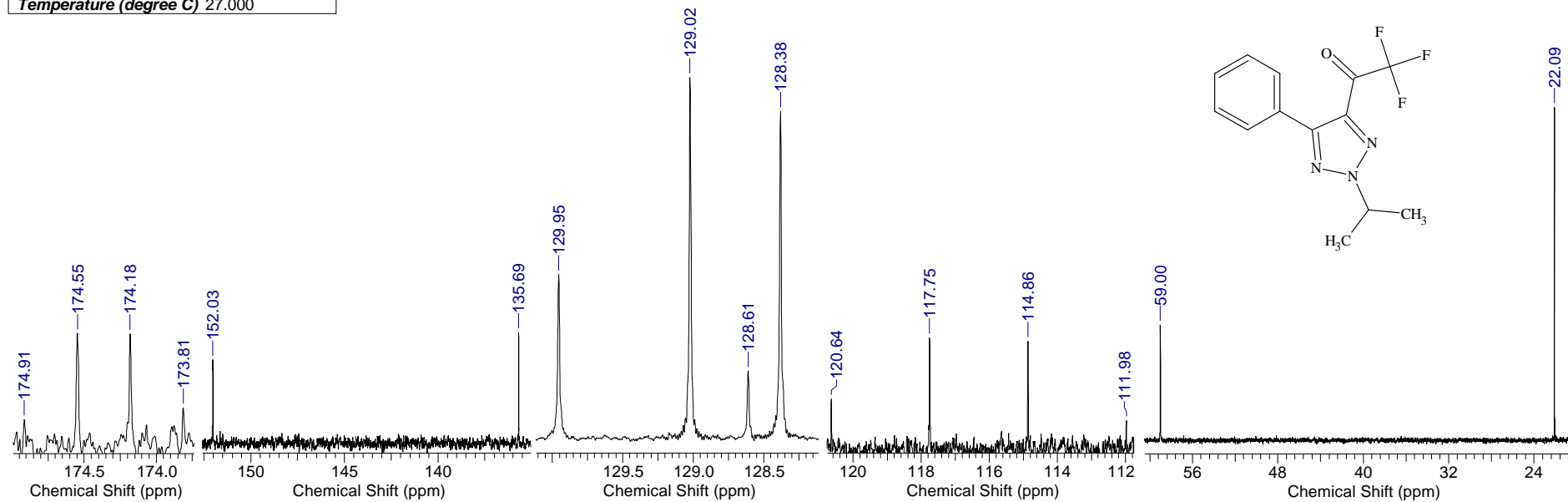
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.			Date	07 Apr 2022 11:38:38			
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2476-1.H_001001r						Frequency (MHz)	400.13		
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072			
Pulse Sequence	zg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	8012.82			
Temperature (degree C)	27.000									



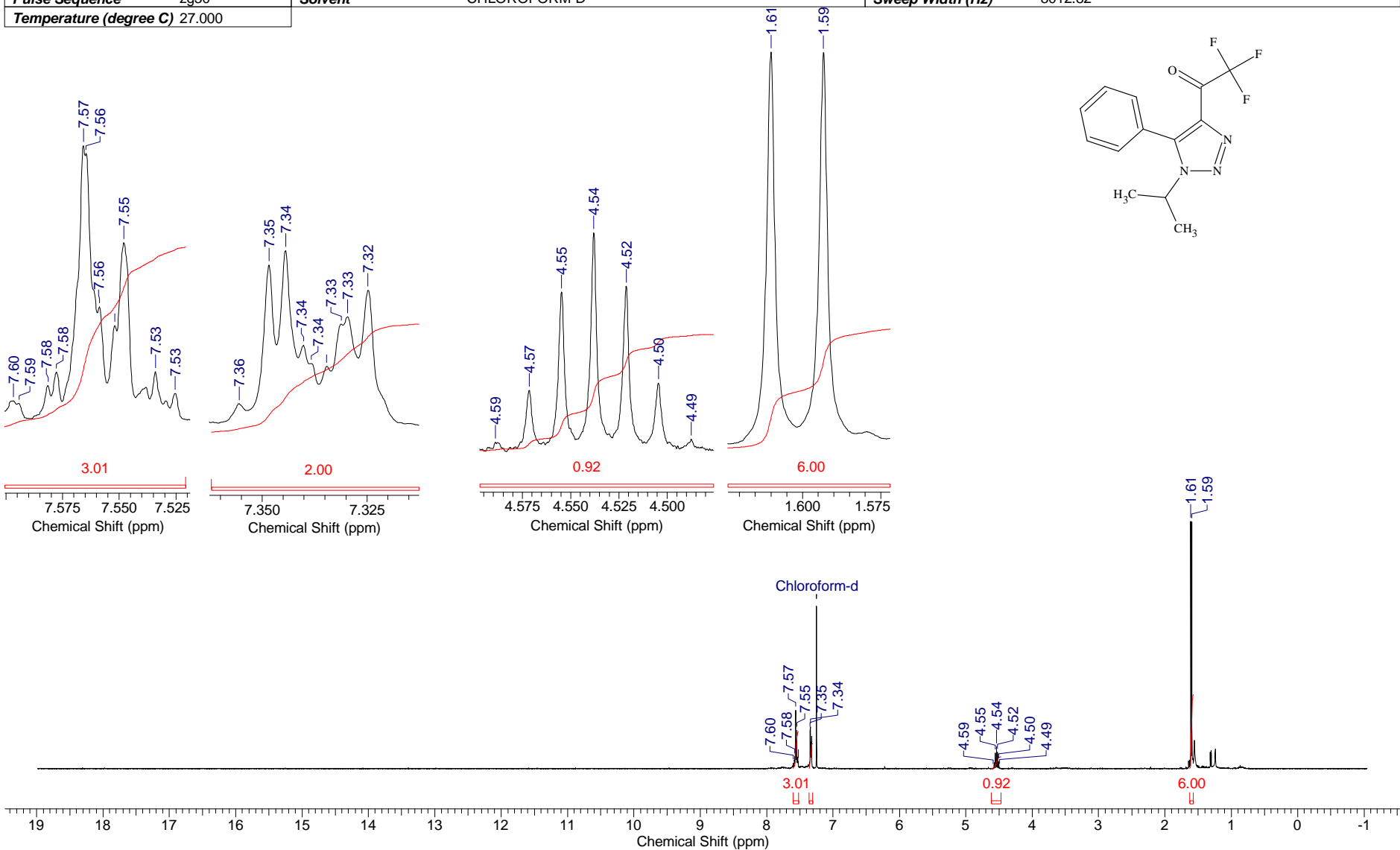
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.			Date	07 Apr 2022 12:13:14
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2476-1.F_005001r					Frequency (MHz)	376.50
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D			Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000						



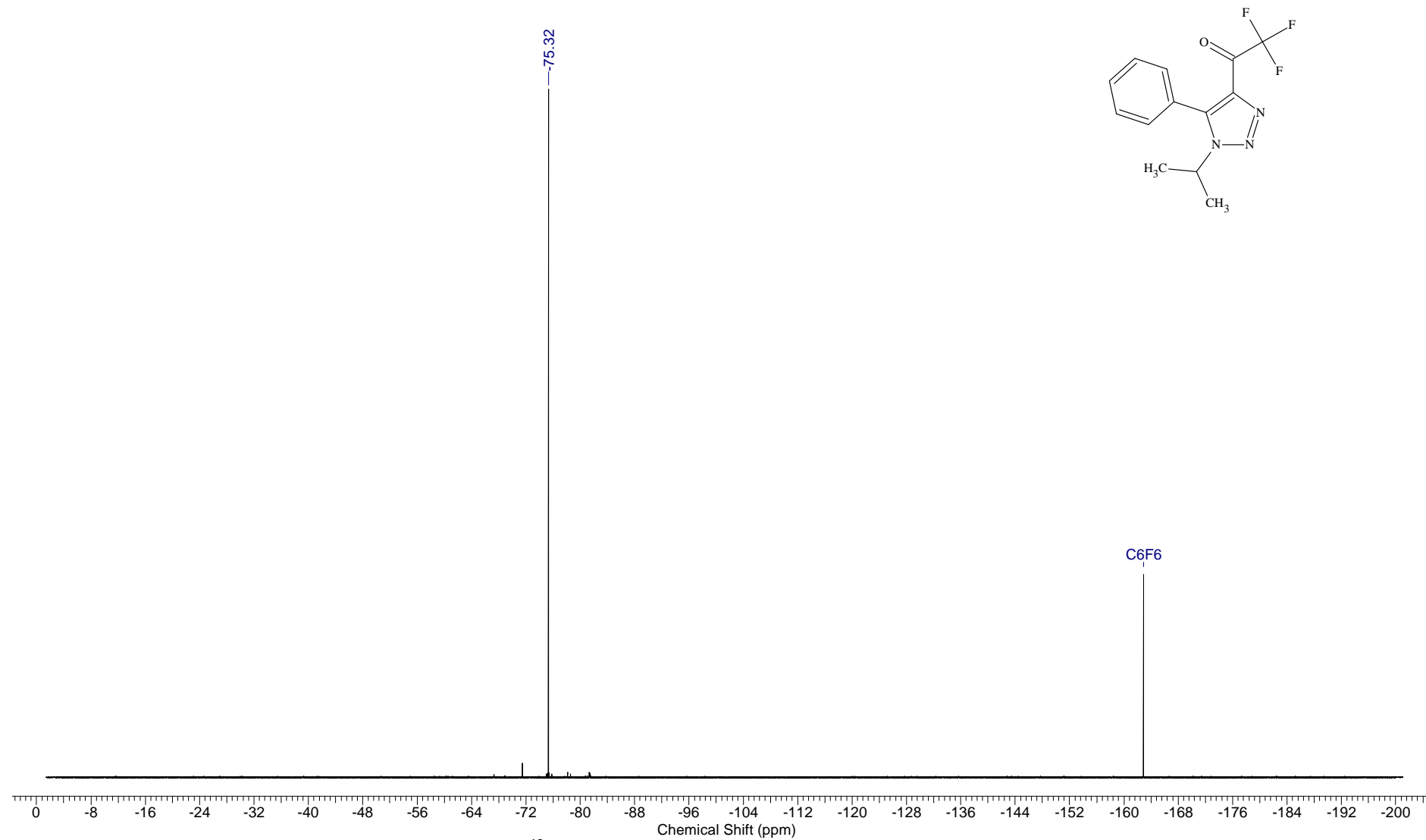
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	07 Apr 2022 11:54:10	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2476-1.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	361	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **3I** (100.6 MHz, CDCl_3)

Acquisition Time (sec)	4.0894	Comment	Imported from UXMNR.			Date	06 Apr 2022 17:08:52
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2476-2.H_001001r					Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000						

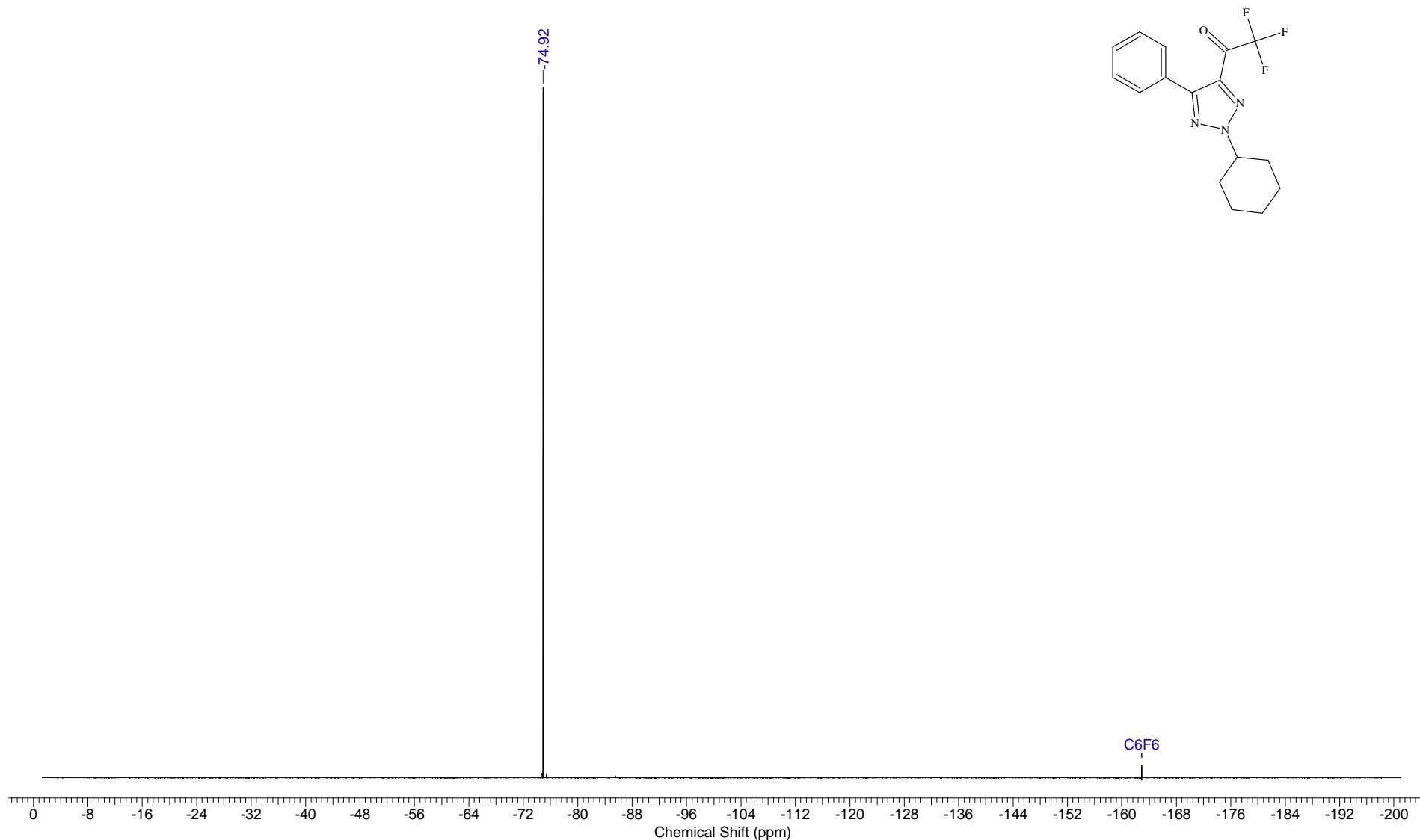
¹H NMR spectrum of **4l** (400.1 MHz, CDCl₃)

Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	06 Apr 2022 17:40:20	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2476-2.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						

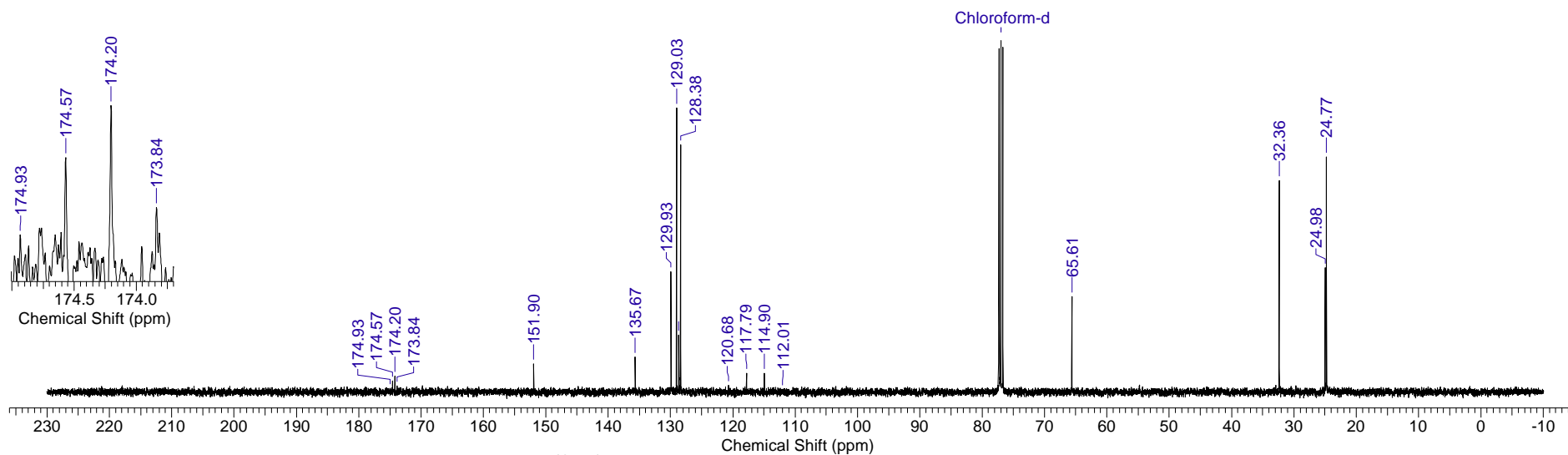
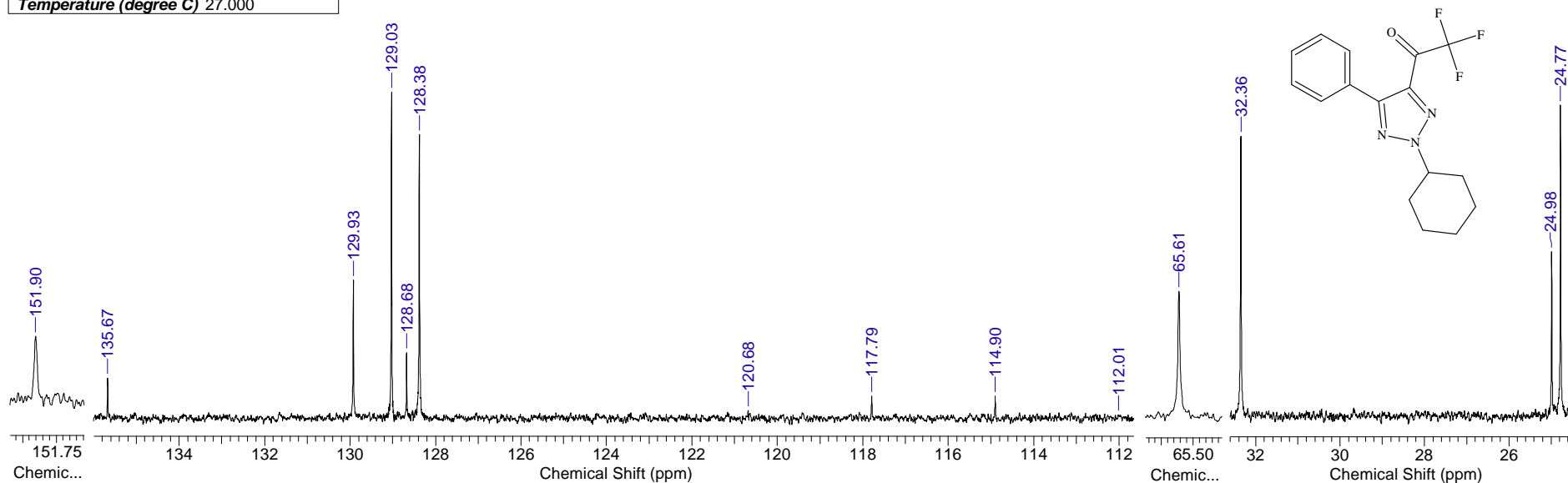




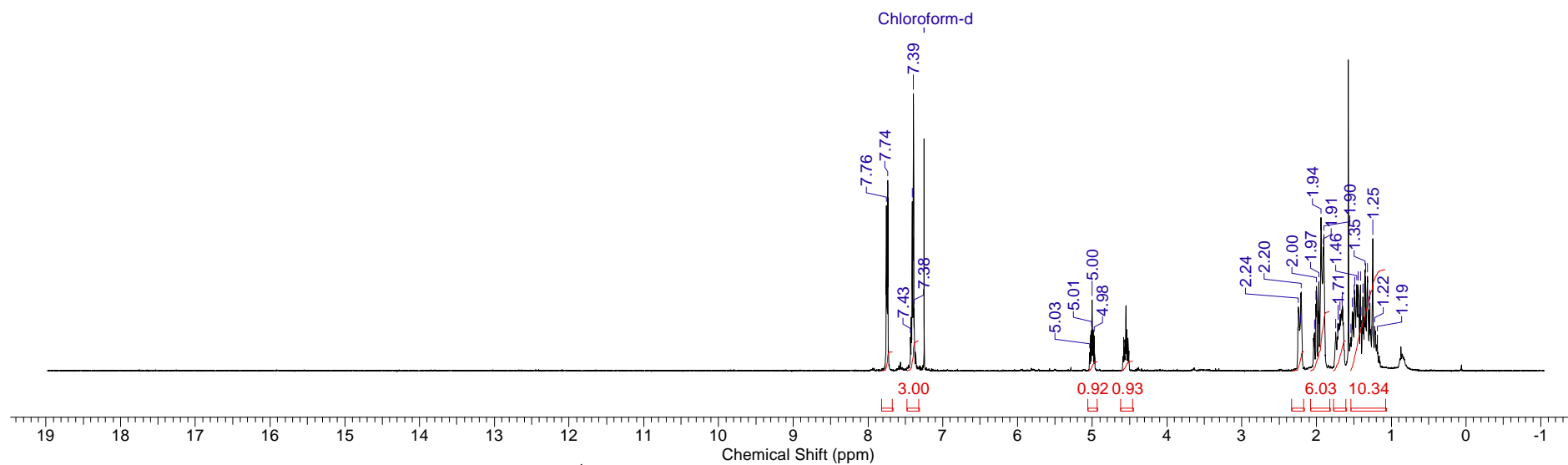
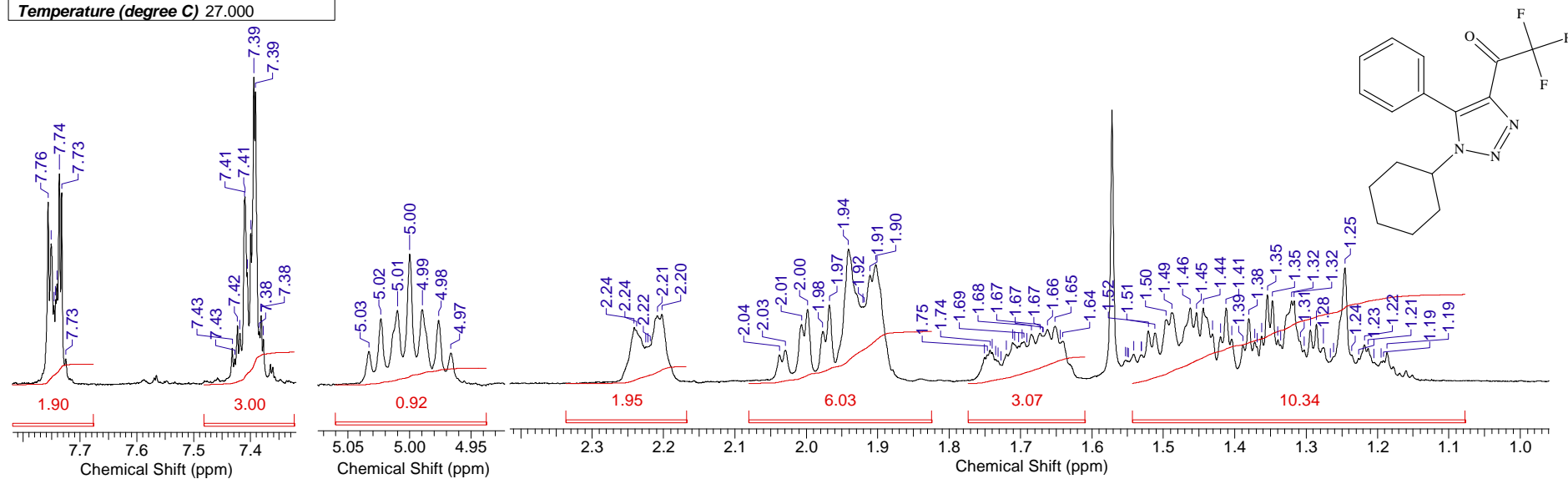
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	28 Jun 2022 14:47:14	
File Name	C:\DOCS\OUTPUT_301\2022\06.июнь\SZA-BM-2538-4.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	29 Jun 2022 17:47:08	
File Name	C:\DOCS\OUTPUT_301\2022\06.июнь\SZA-BM-2538-4.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	401	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

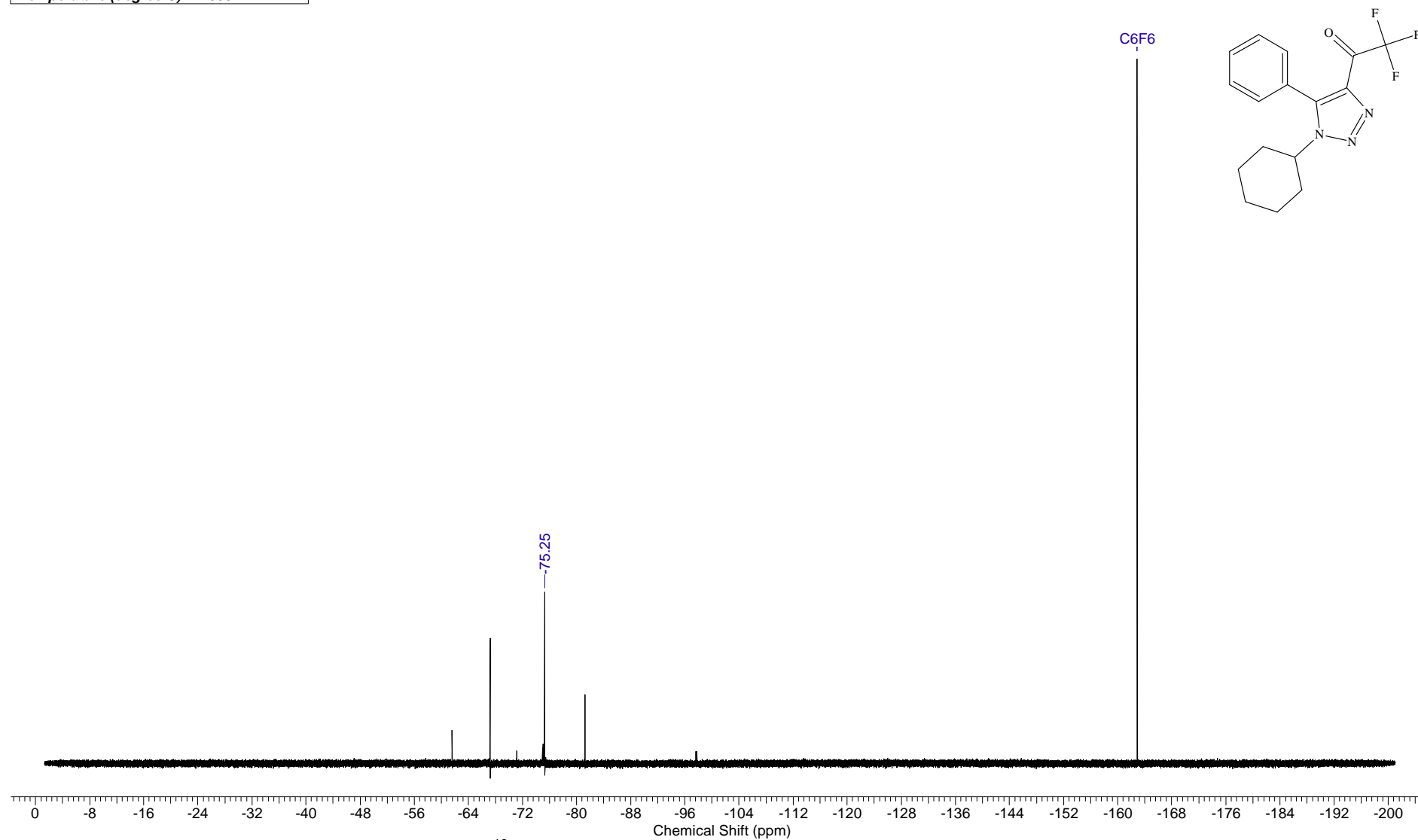
¹³C{¹H} NMR spectrum of **3m** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXMNR.	Date	28 Jun 2022 14:24:24
File Name	C:\DOCS\OUTPUT_301\2022\06.июнь\SZA-BM-2538-15.H_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	4	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

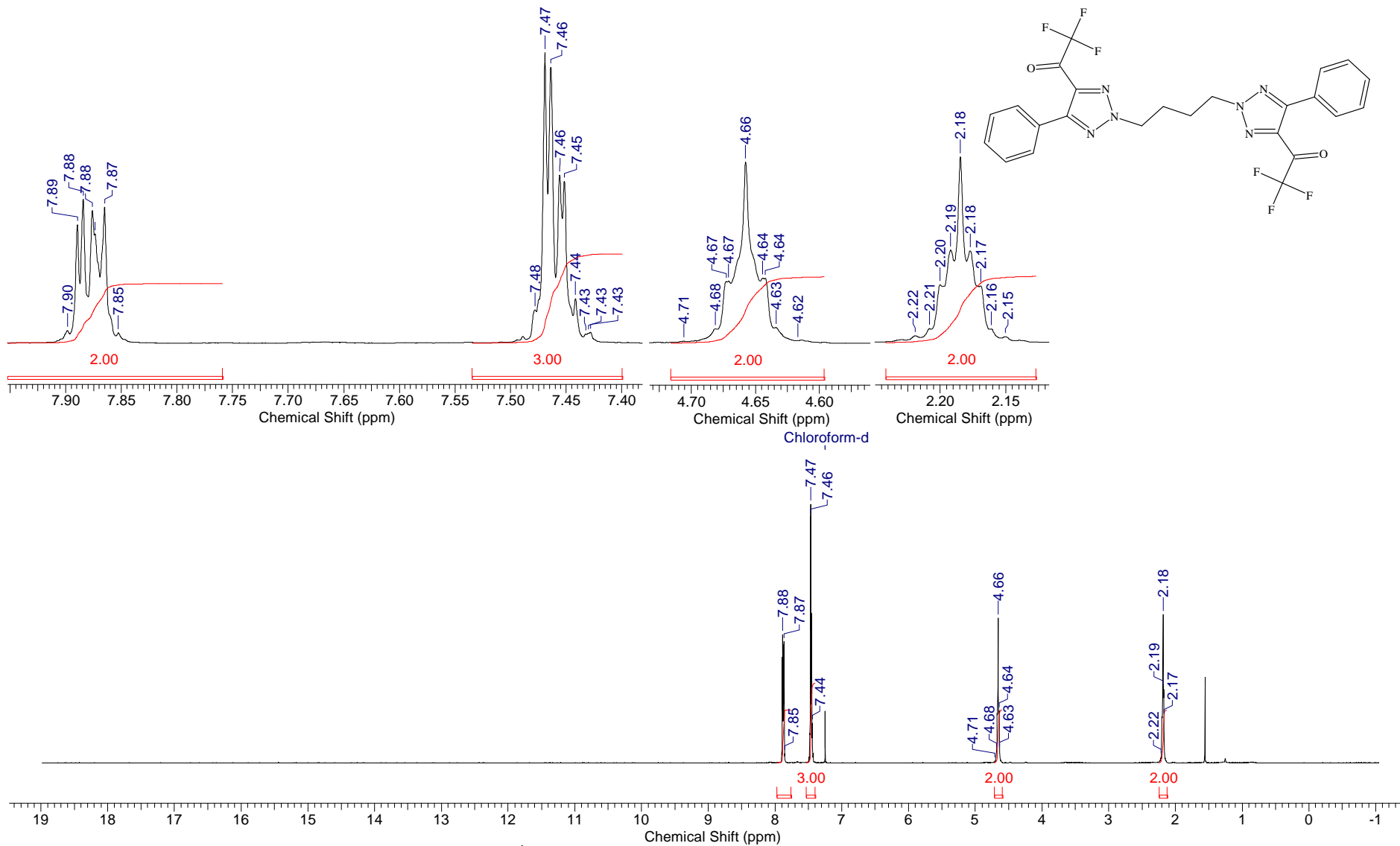


¹H NMR spectrum of **4m** (400.1 MHz, CDCl₃)

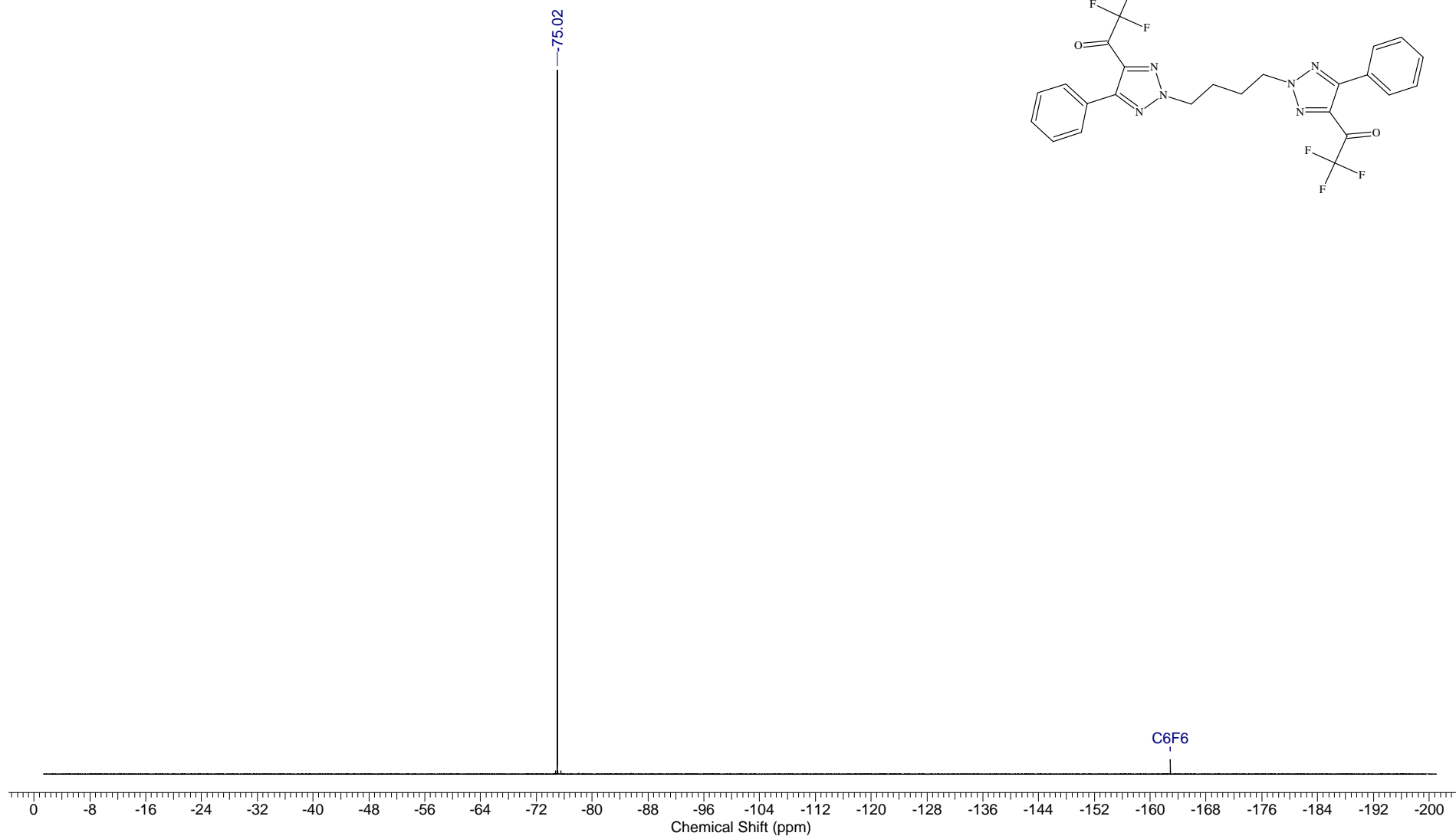
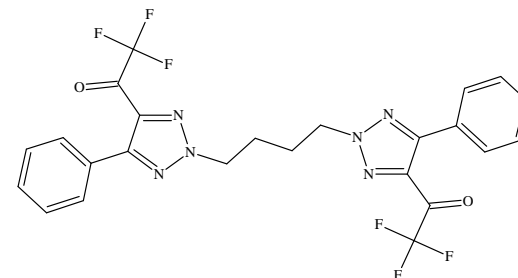
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	28 Jun 2022 14:44:30	
File Name	C:\DOCS\OUTPUT_301\2022\06.июнь\SZA-BM-2538-15.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	32	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



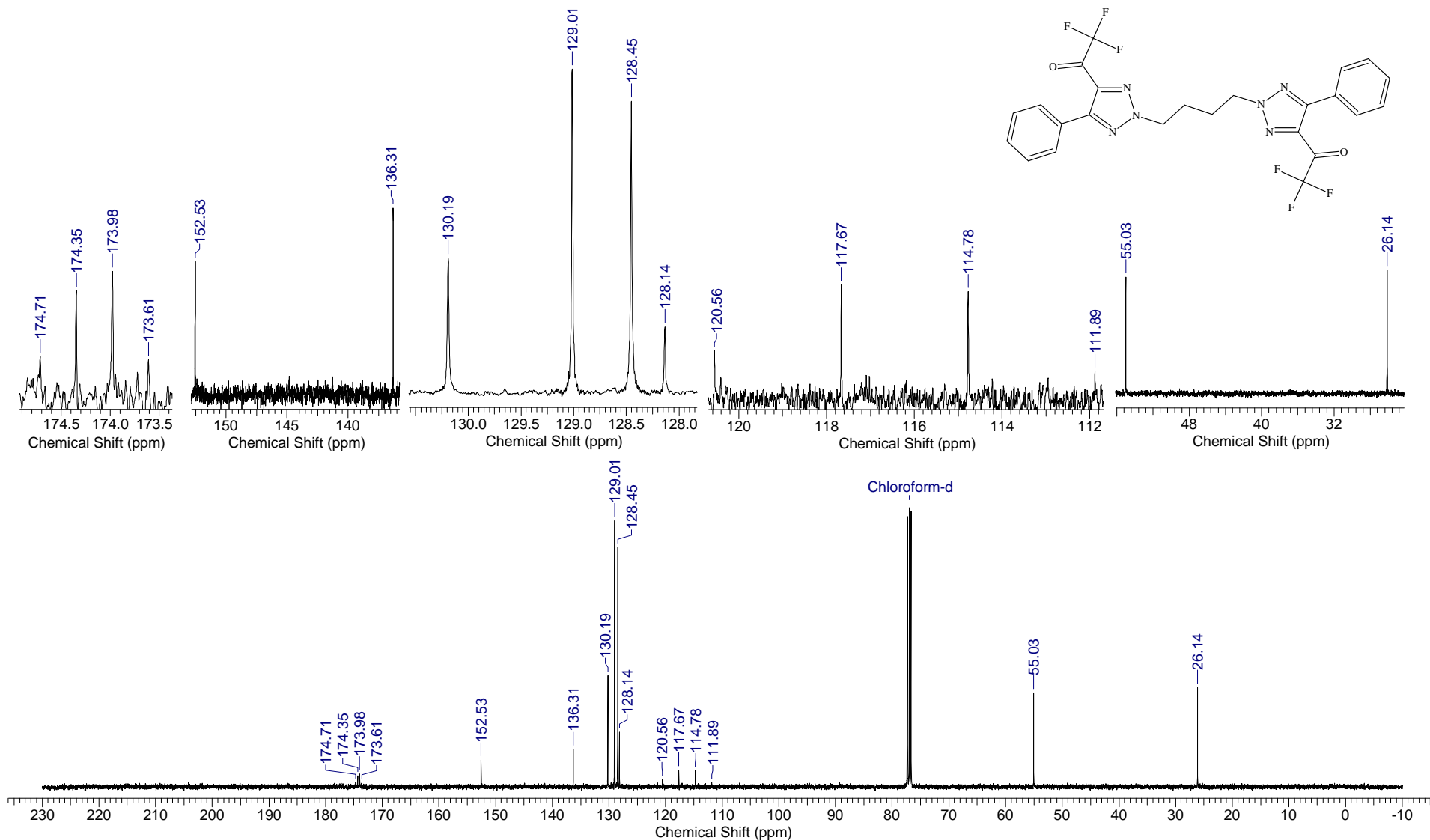
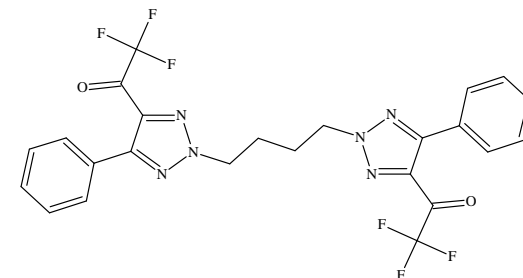
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	26 Apr 2022 14:01:10	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2504-R-18.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	7	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	BENZENE-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000



Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	26 Apr 2022 13:58:04
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2504-R-18.F_005001r	Frequency (MHz)	376.50	Points Count	262144
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000				

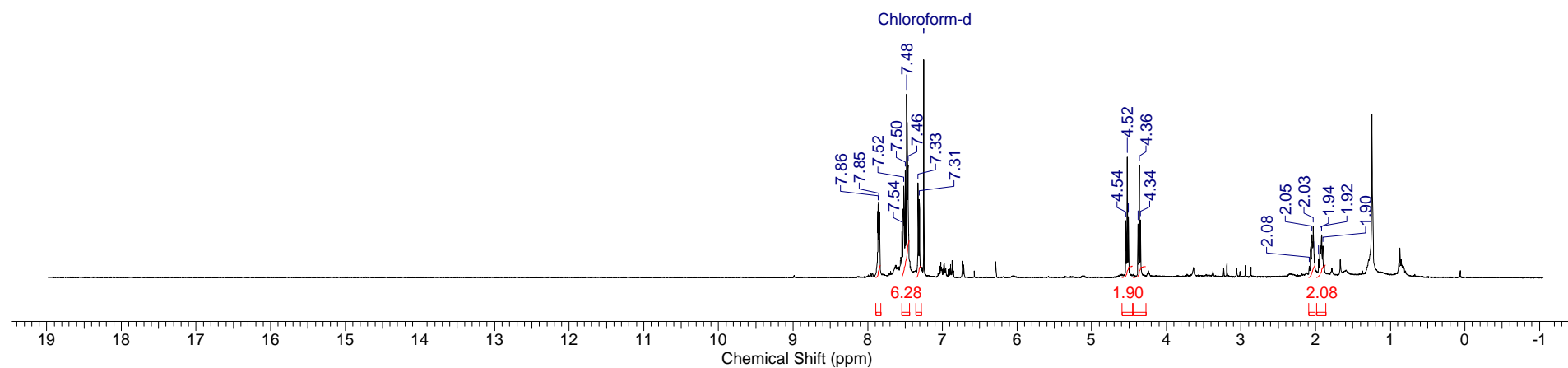
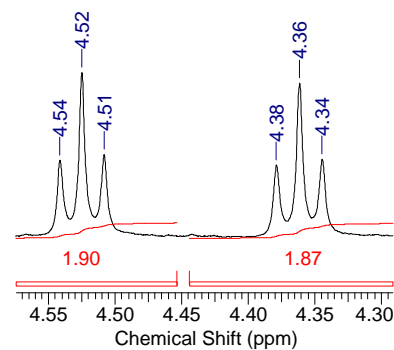
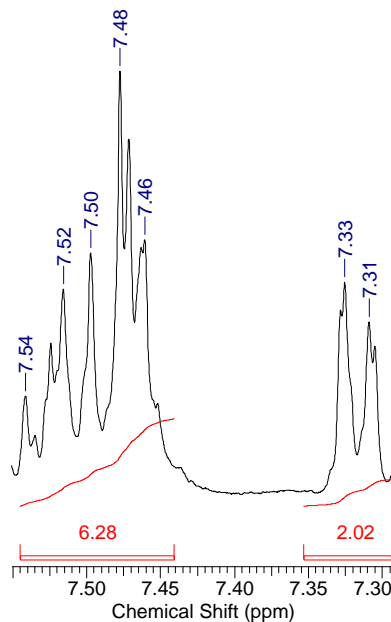
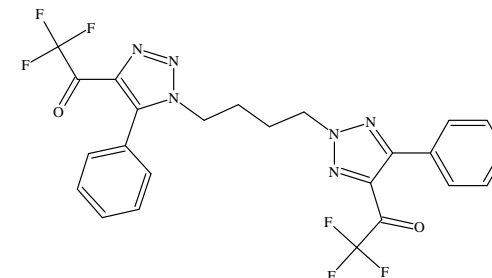


Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	26 Apr 2022 14:26:04	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2504-R-18.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	546	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						



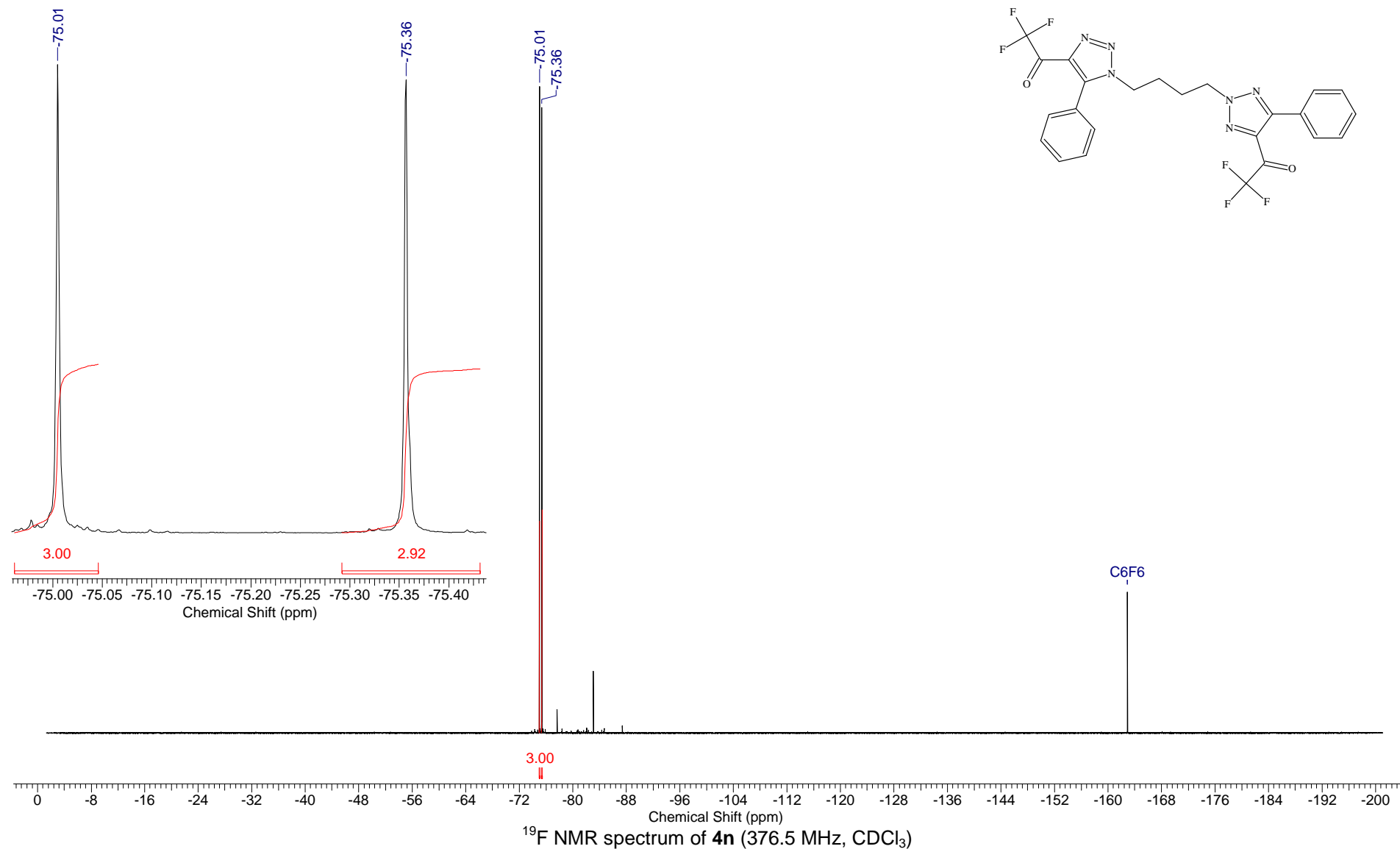
¹³C{¹H} NMR spectrum of **3n** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	28 Apr 2022 11:23:52	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2504-25.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	8	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

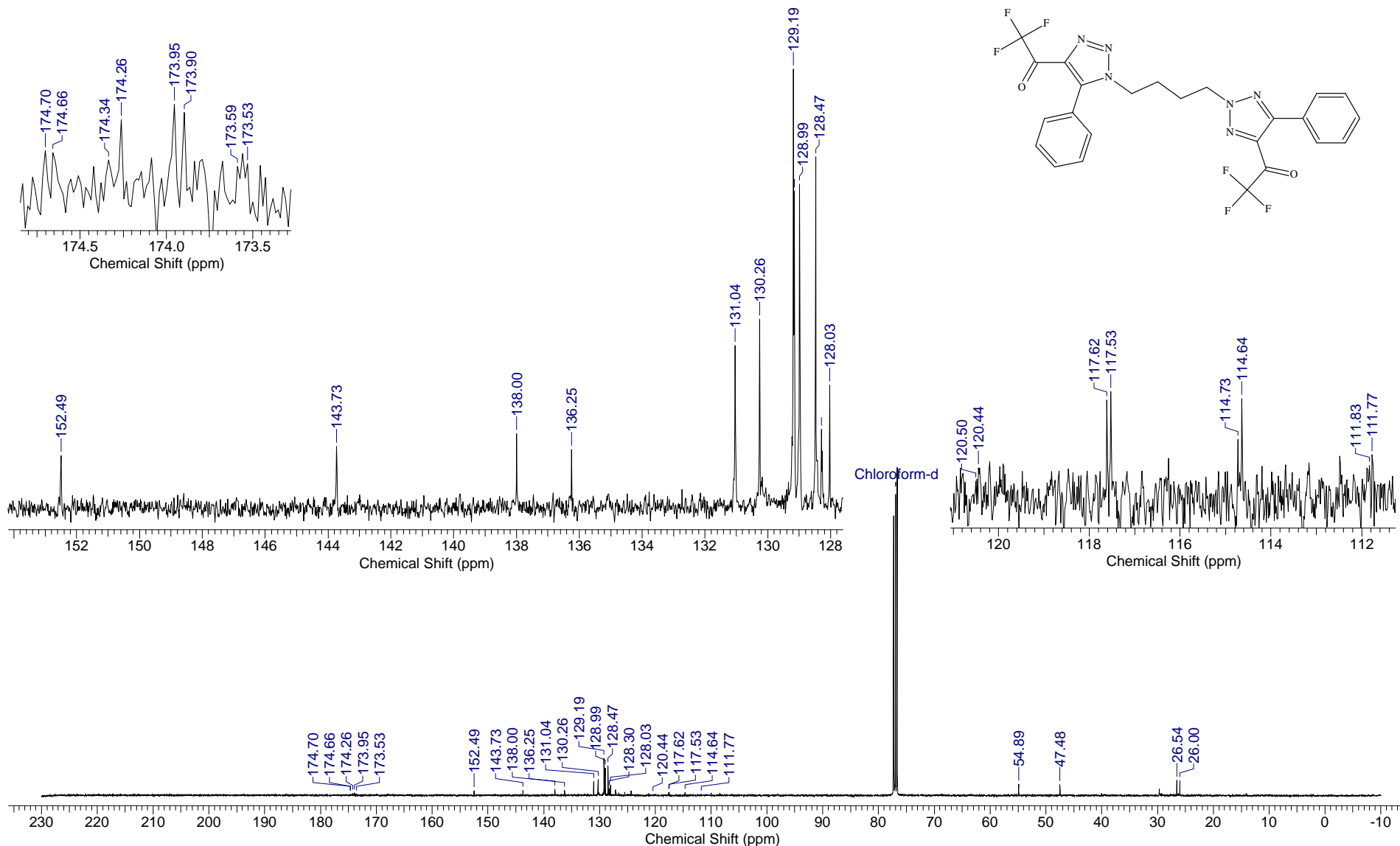


¹H NMR spectrum of **4n** (400.1 MHz, CDCl₃)

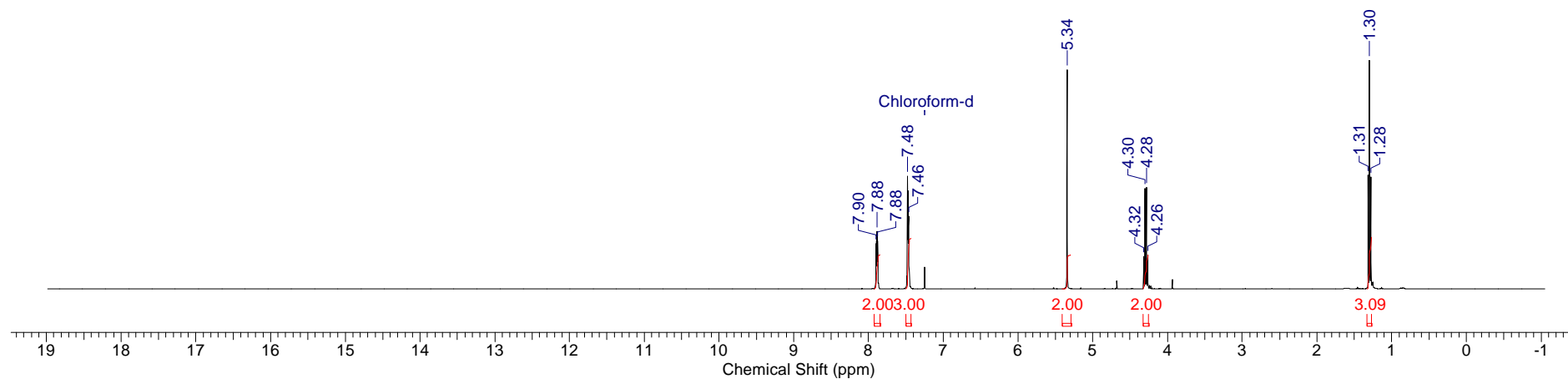
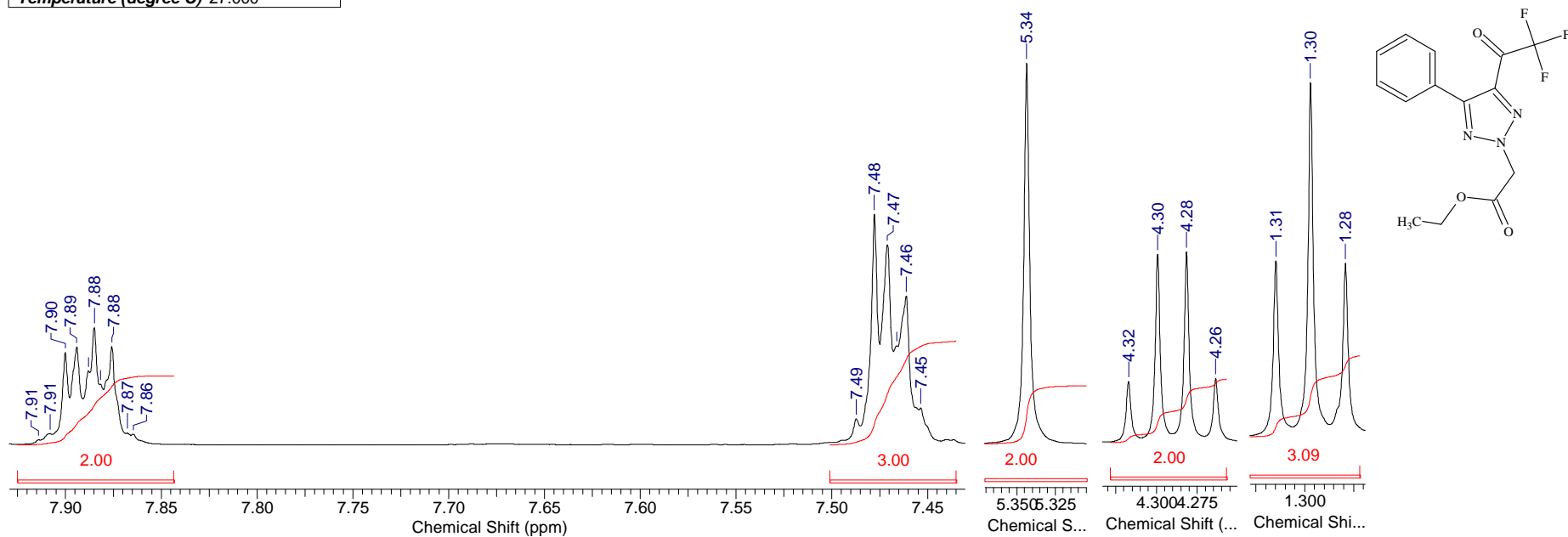
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	28 Apr 2022 12:03:50	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2504-25.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



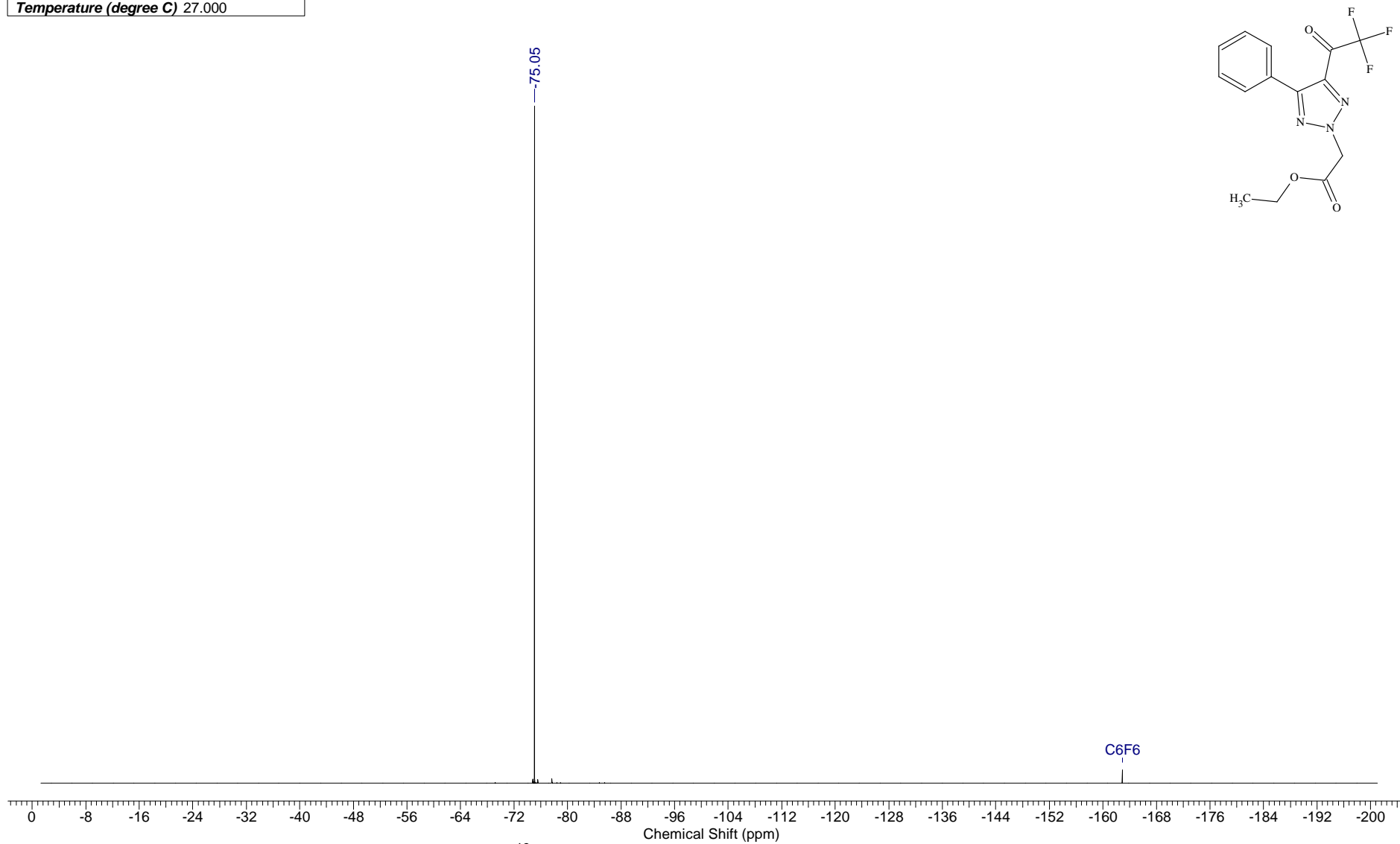
Acquisition Time (sec)	0.6783	Comment Imported from UXMNR.			Date	29 Apr 2022 12:48:00	
File Name	C:\DOCS\OUTPUT_301\2022\05.май\SA-BM-2504-25.C\SA-BM-2504-25.C_002000fid				Frequency (MHz)	100.62	
Nucleus	13C	Number of Transients	3207	Original Points Count	16384	Points Count	16384
Pulse Sequence	zpgq30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

¹³C{¹H} NMR spectrum of **4n** (100.6 MHz, CDCl₃)

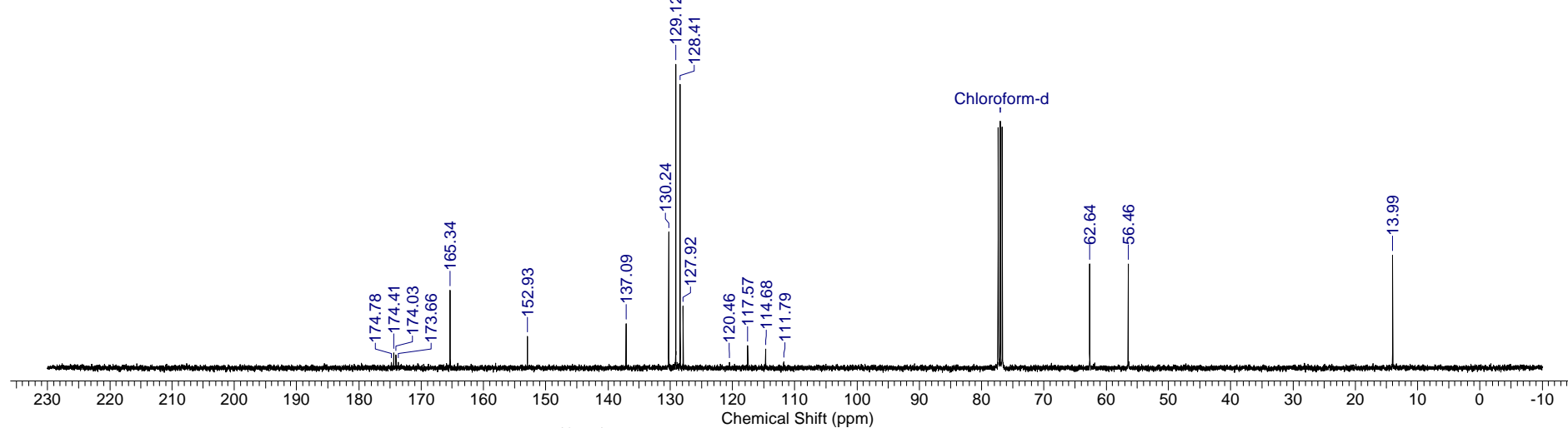
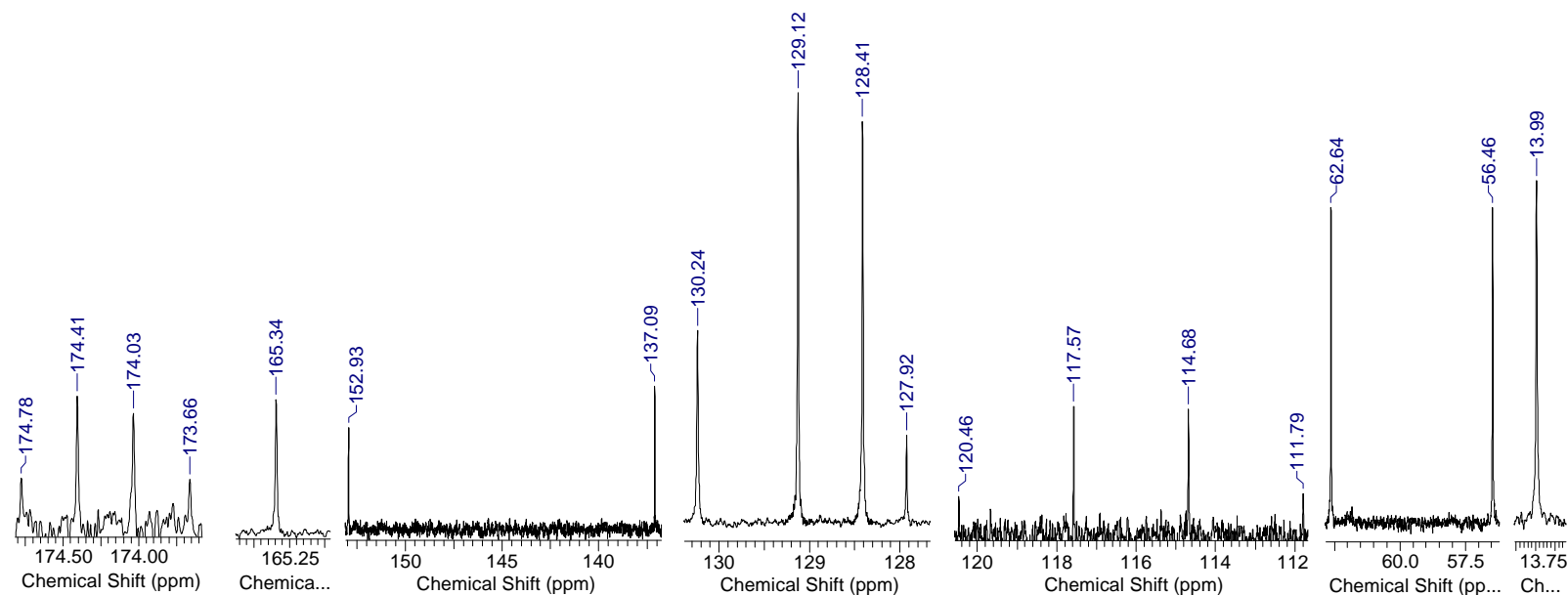
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	19 Mar 2022 23:08:00
File Name	C:\DOCS\BM\MP_COCEДИ\2022\bm220319\BM-2459-R_001001r	Frequency (MHz)	400.13	Points Count	131072
Nucleus	¹ H	Number of Transients	8	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000				

¹H NMR spectrum of **3o** (400.1 MHz, CDCl₃)

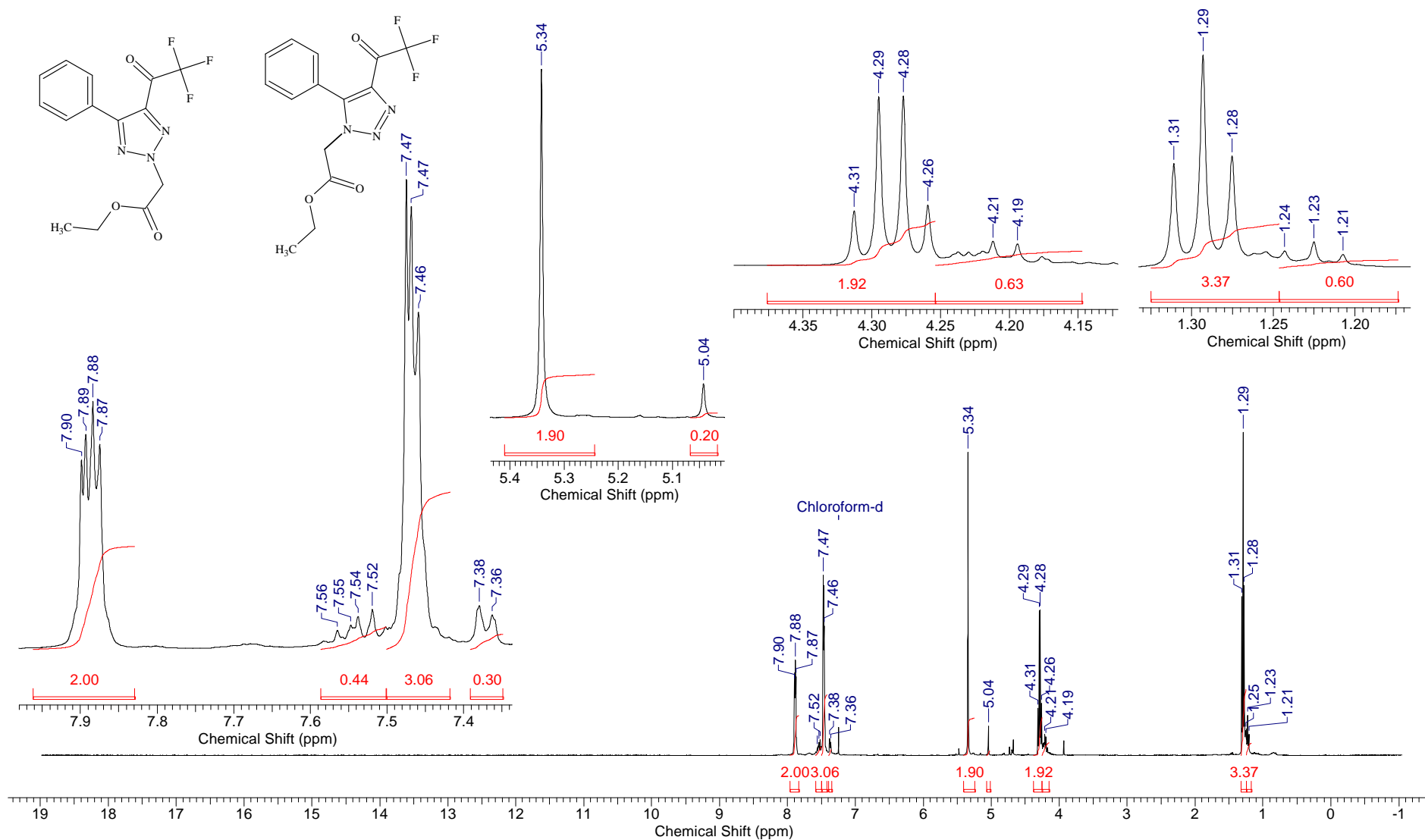
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	19 Mar 2022 23:11:04
File Name	C:\BM_DATA\DOCS\JMP_соседи\2022\bm220319\BM-2459-R_005001r			Frequency (MHz)	376.50
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D	Points Count	262144
Temperature (degree C)	27.000			Sweep Width (Hz)	75187.97



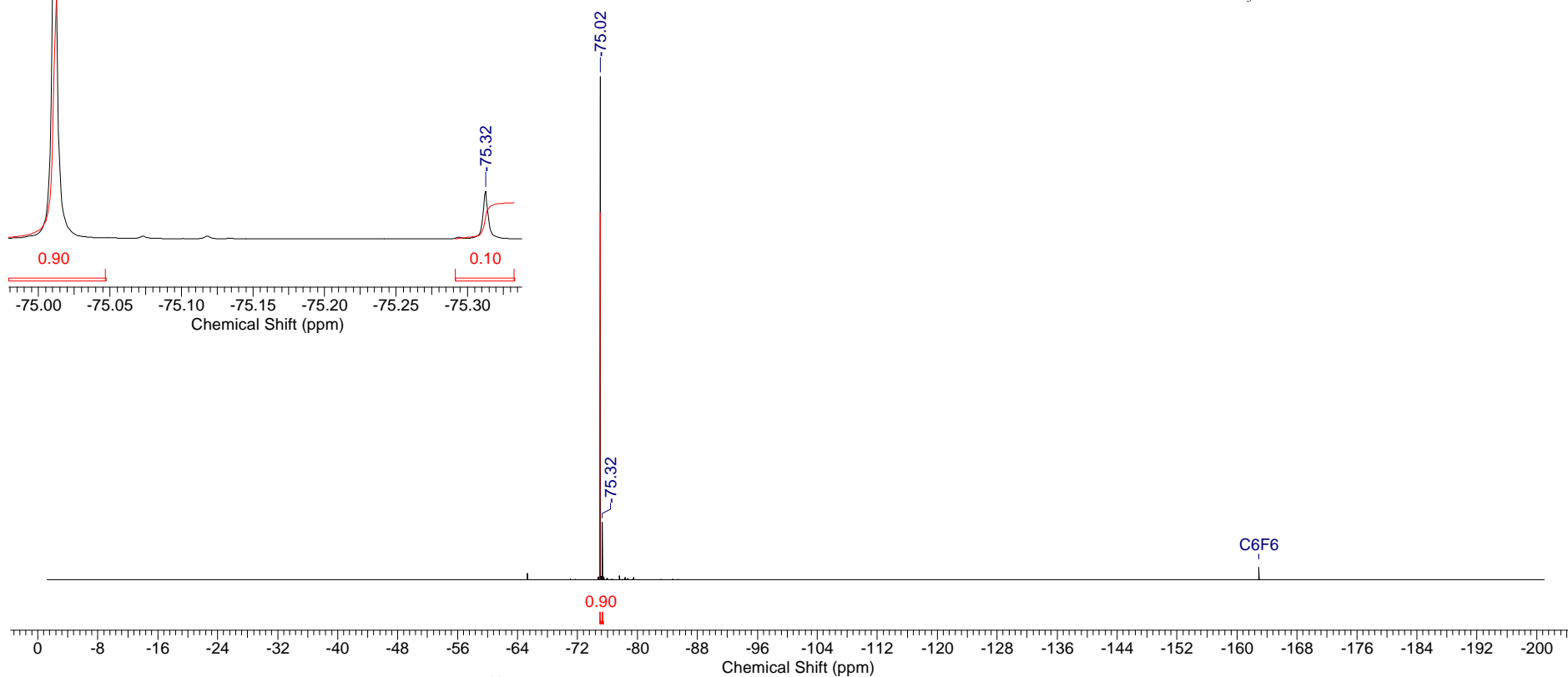
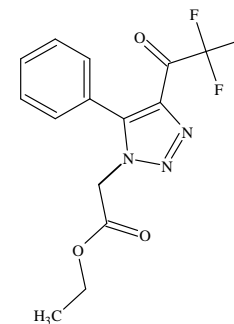
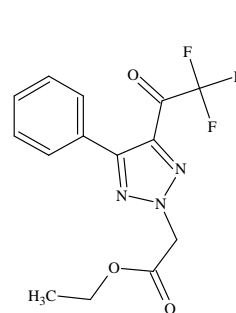
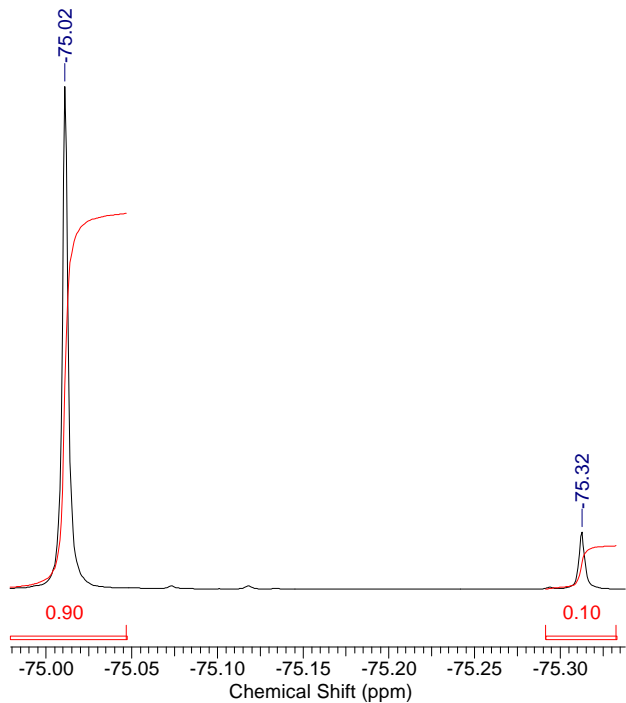
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.			Date	21 Mar 2022 15:51:54
File Name	C:\DOCS\OUTPUT_301\2022\03.mpr\BM-2459-R.C_002001r					Frequency (MHz)	100.61
Nucleus	13C	Number of Transients	257	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

¹³C{¹H} NMR spectrum of **3o** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	17 Mar 2022 22:53:52
File Name	C:\DOCS\BM\MP_COSEДИ\2022\BM-2459-R\BM-2459-R_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	8	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

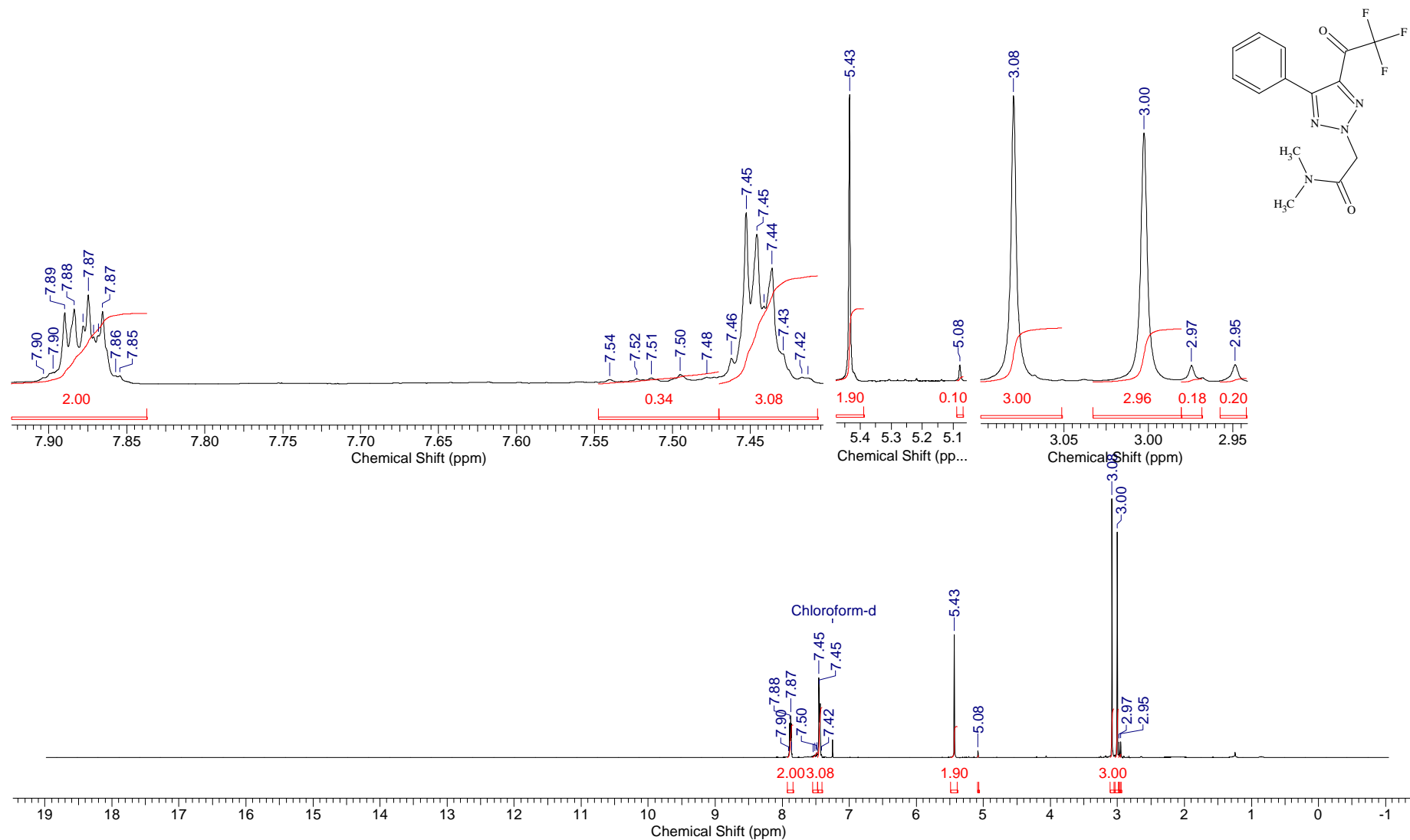
¹H NMR spectrum of mixture of **3o** and **4o** (400.1 MHz, CDCl₃)

Acquisition Time (sec)	1.7433	Comment Imported from UXNMR.			Date	23 Mar 2022 17:55:00	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SA-BM-2454.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						F



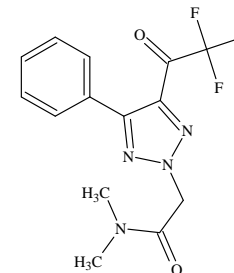
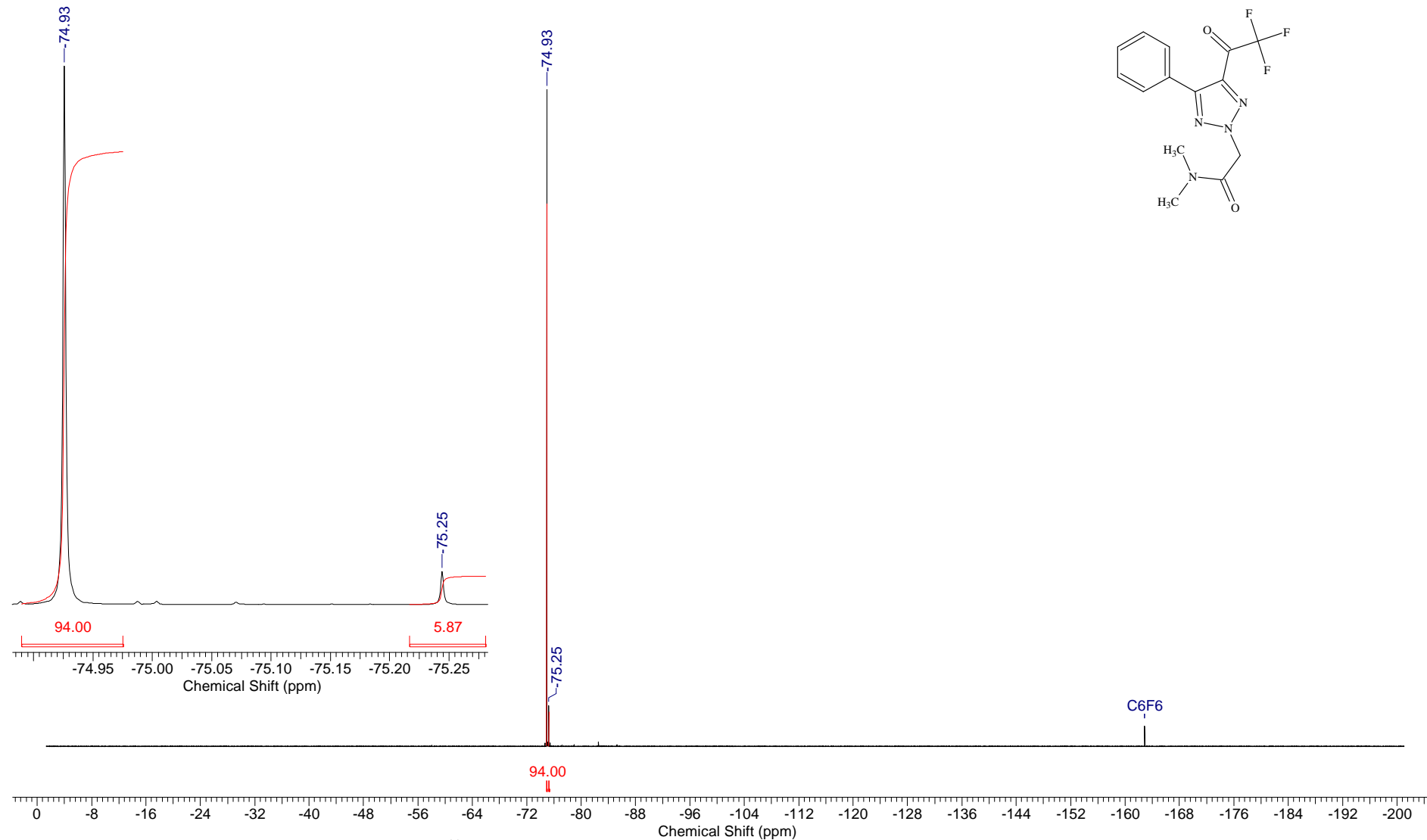
¹⁹F NMR spectrum of mixture of **3o** and **4o** (376.5 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UxNMR.		Date	18 May 2022 17:12:22		
File Name	C:\DOCS\OUTPUT_301\2022\05.may\BM-2494-2p.H_001001r				Frequency (MHz)	400.13		
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072	
Pulse Sequence	zg30	Solvent	BENZENE-D6		Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000

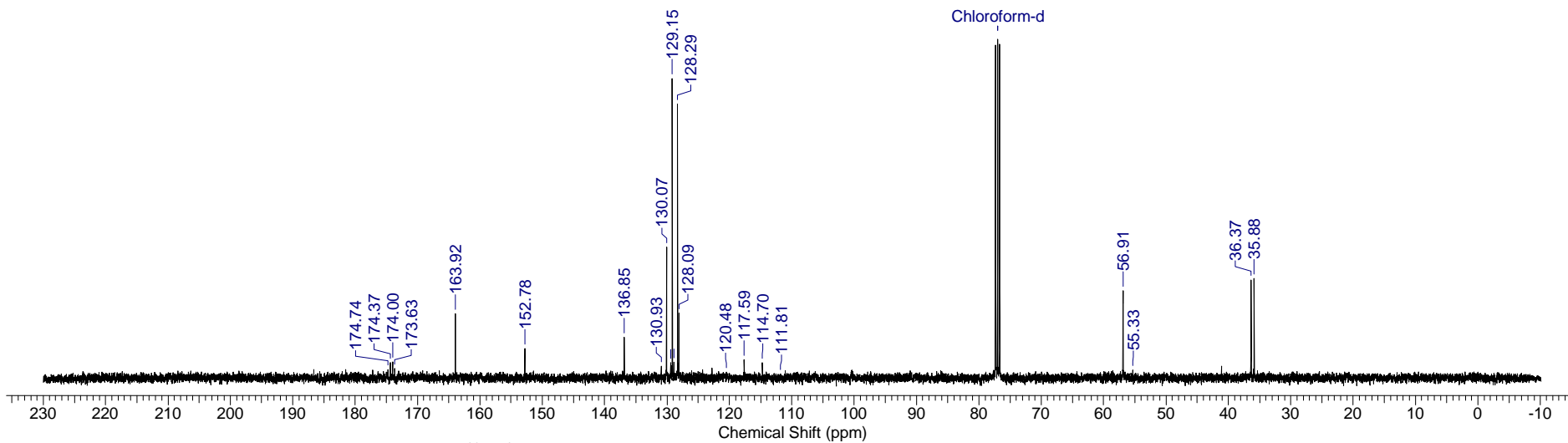
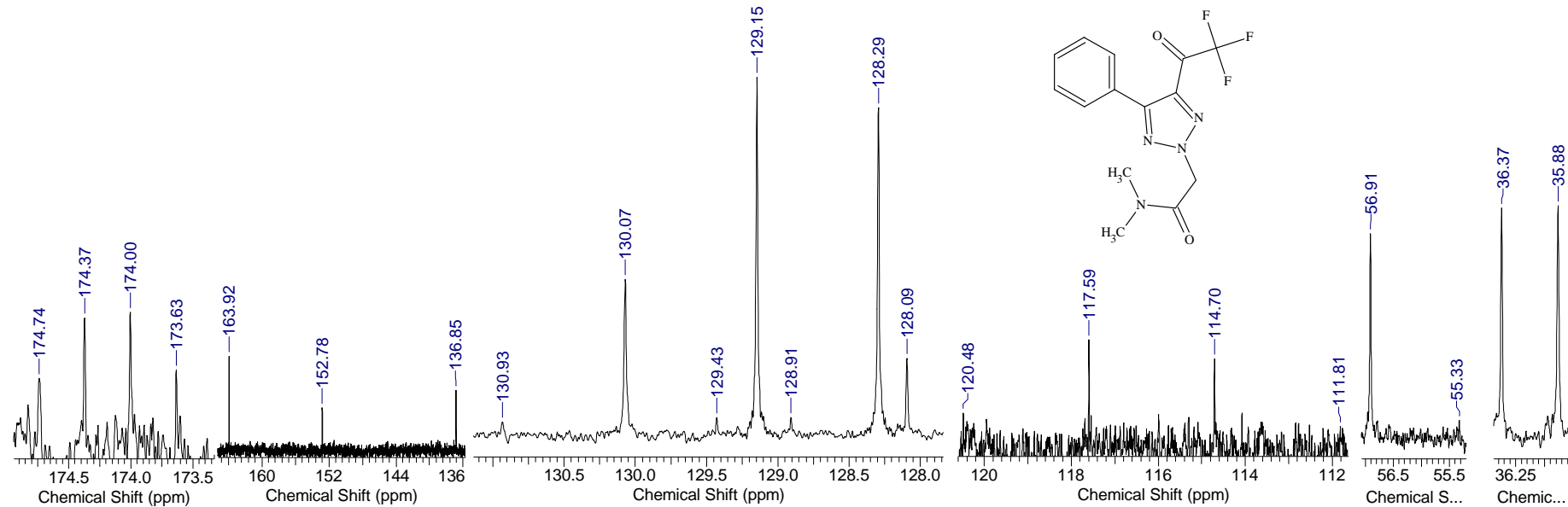


¹H NMR spectrum of mixture of **3p** and **4p** (400.1 MHz, CDCl₃)

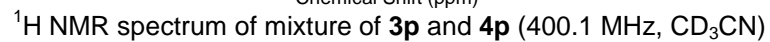
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	18 Apr 2022 15:31:52
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2494-2c.F_005001r			Frequency (MHz)	376.50
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D	Points Count	262144
Temperature (degree C)	27.000			Sweep Width (Hz)	75187.97



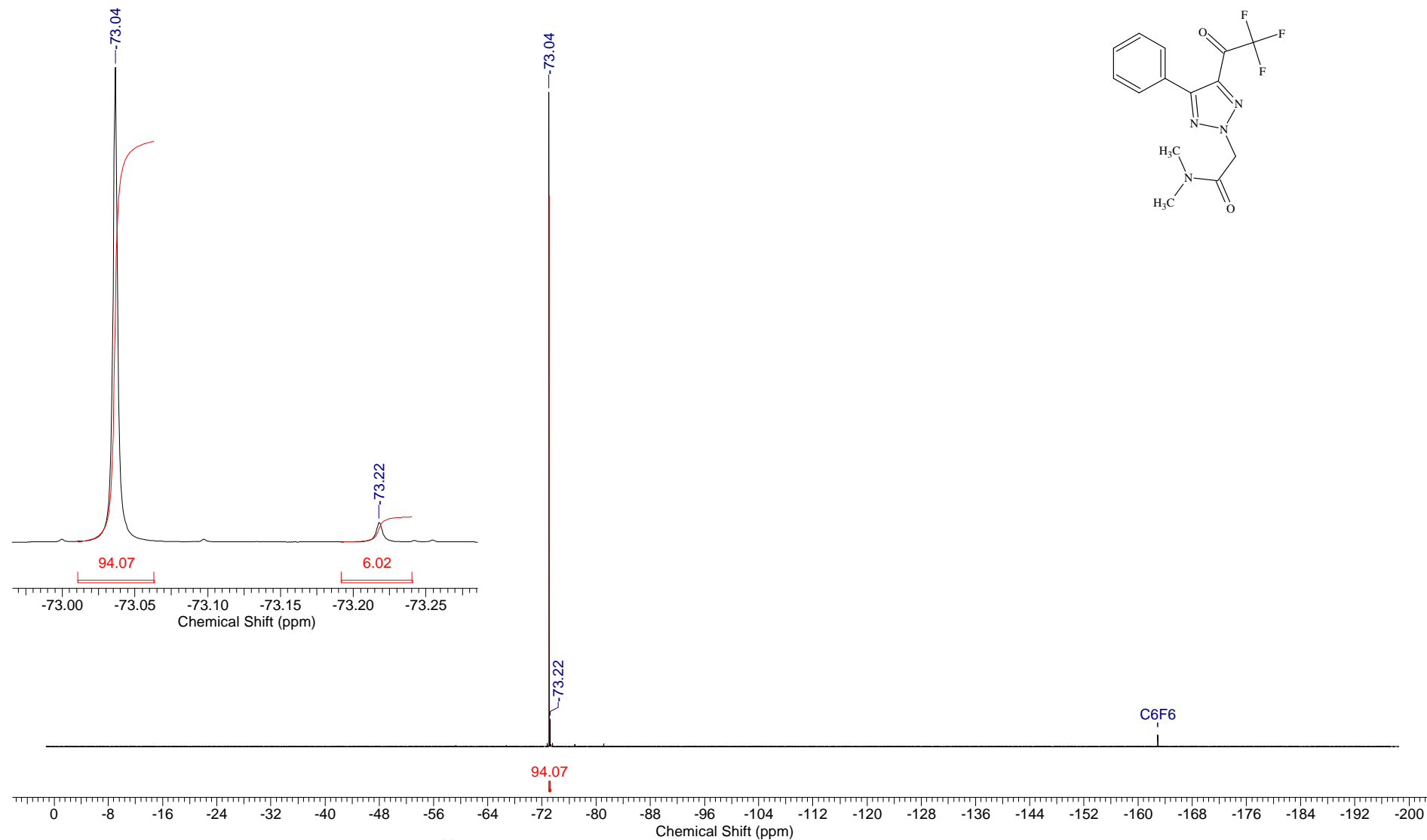
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	16 Apr 2022 14:05:18	
File Name	C:\DOCS\BM\MP_COSED\I\2022\16-04-2022_14-19-08\BM-2494-2c\BM-2494-2c_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	176	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000



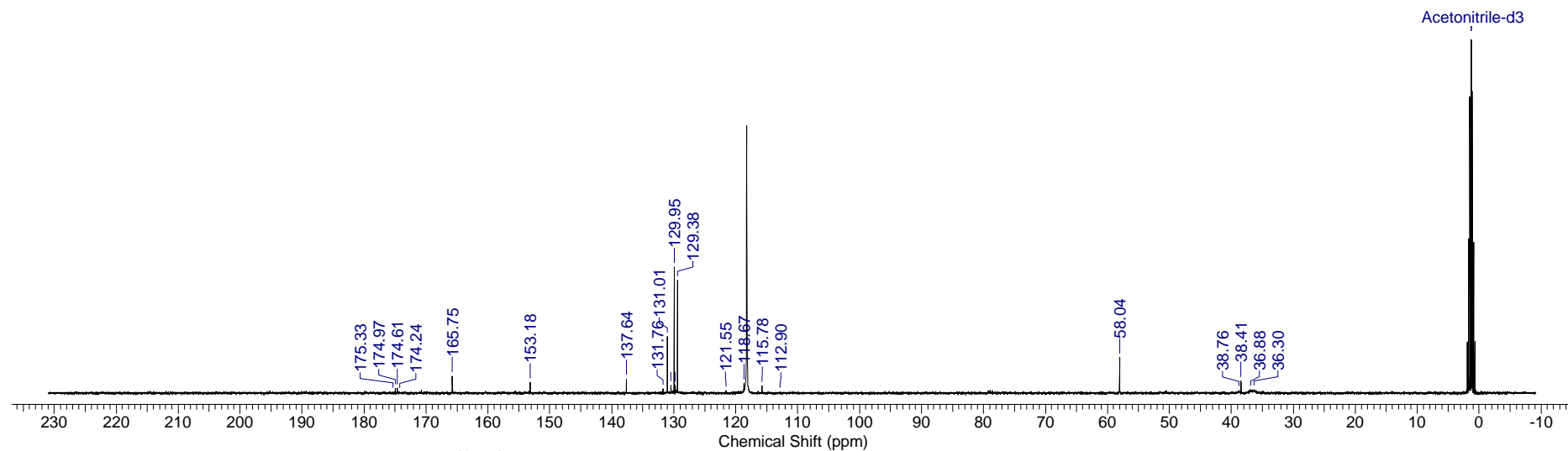
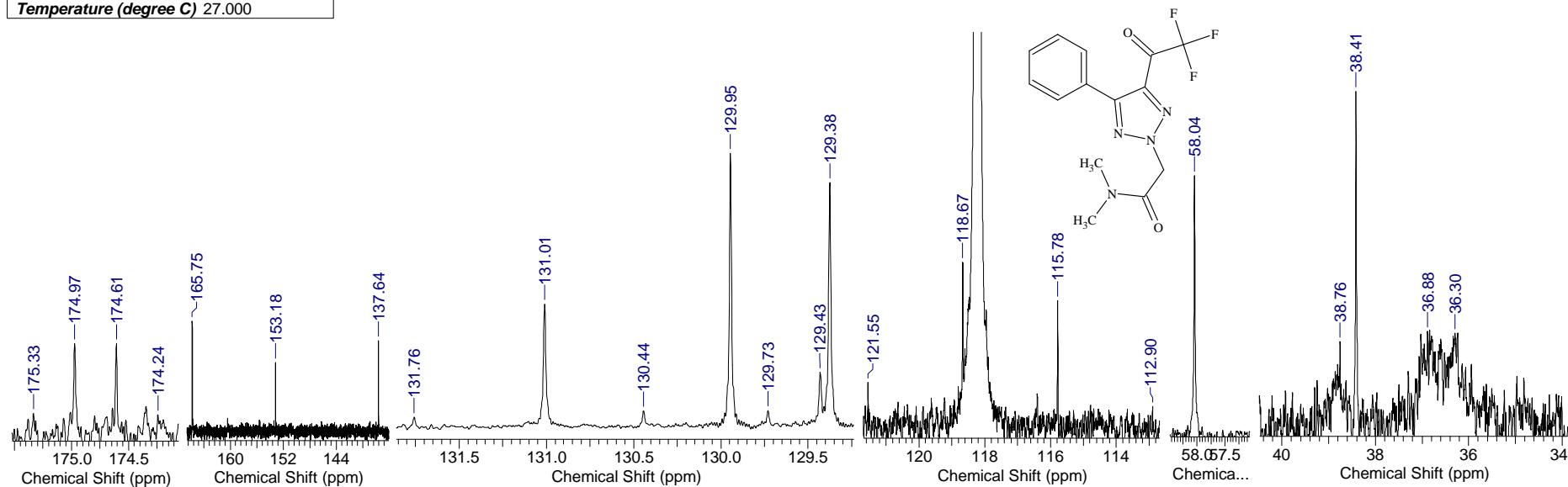
¹³C{¹H} NMR spectrum of mixture of **3p** and **4p** (100.6 MHz, CDCl₃)



Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	14 Apr 2022 12:37:52
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2494-2.F_005001r			Frequency (MHz)	376.50
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgq	Solvent	CHLOROFORM-D	Points Count	262144
Temperature (degree C)	27.000			Sweep Width (Hz)	75187.97

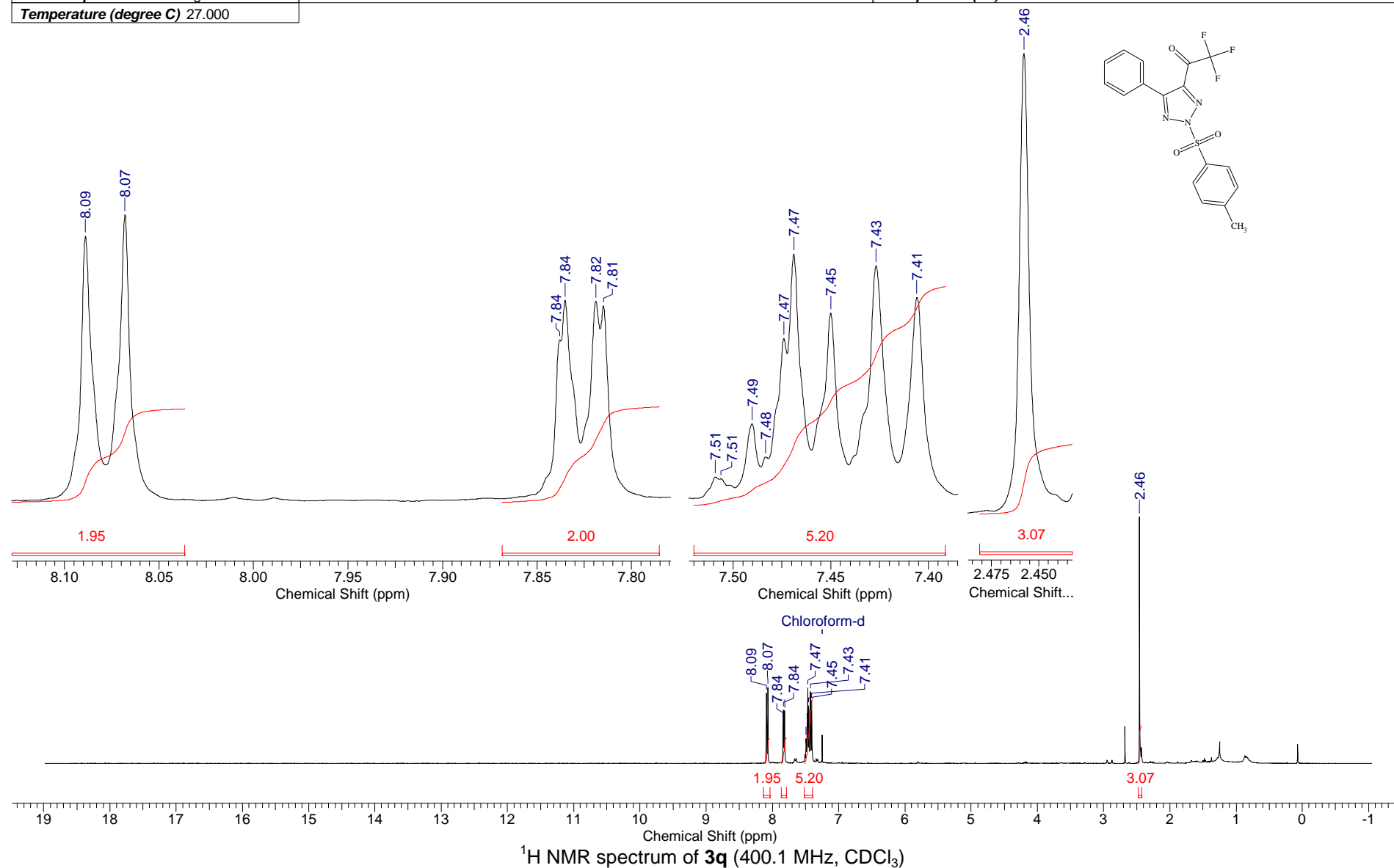


Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.	Date	14 Apr 2022 13:05:18
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2494-2.C_002001r	Frequency (MHz)	100.61	Points Count	131072
Nucleus	¹³ C	Number of Transients	601	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59
Temperature (degree C)	27.000				

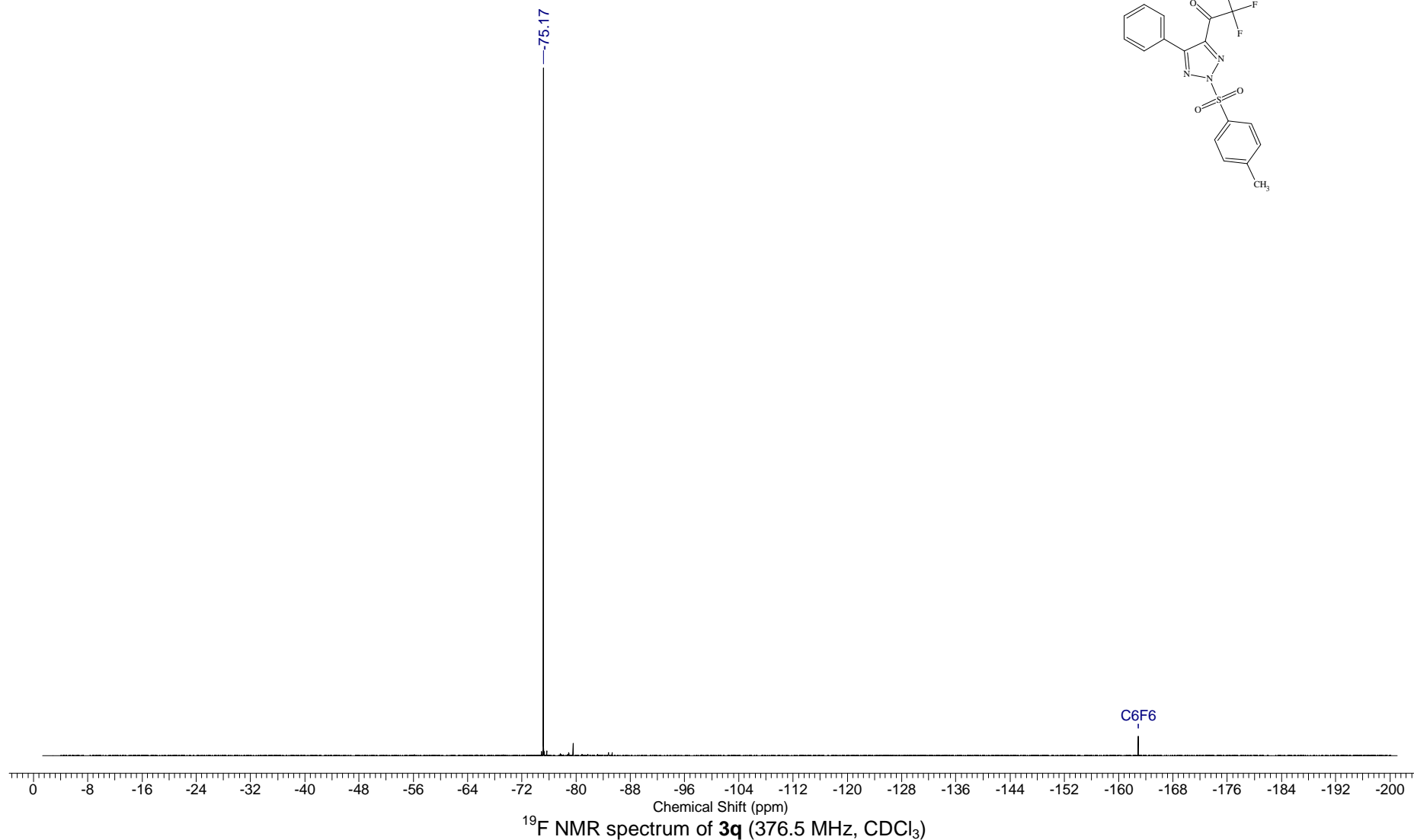
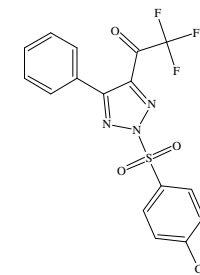


¹³C{¹H} NMR spectrum of mixture of **3p** and **4p** (100.6 MHz, CD₃CN)

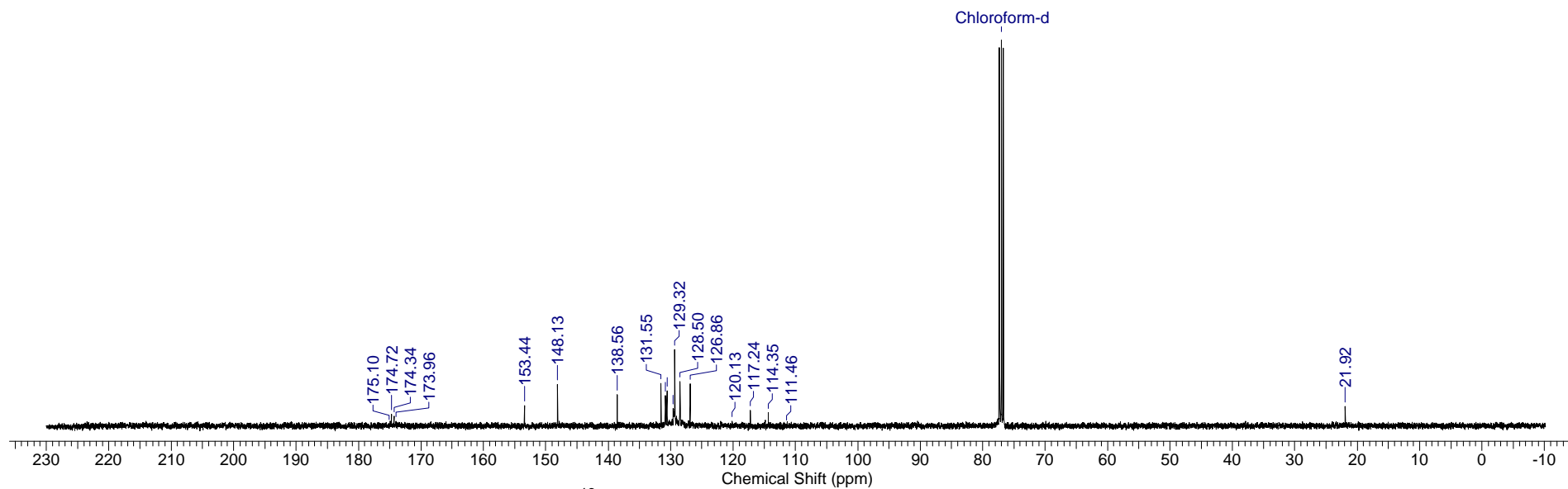
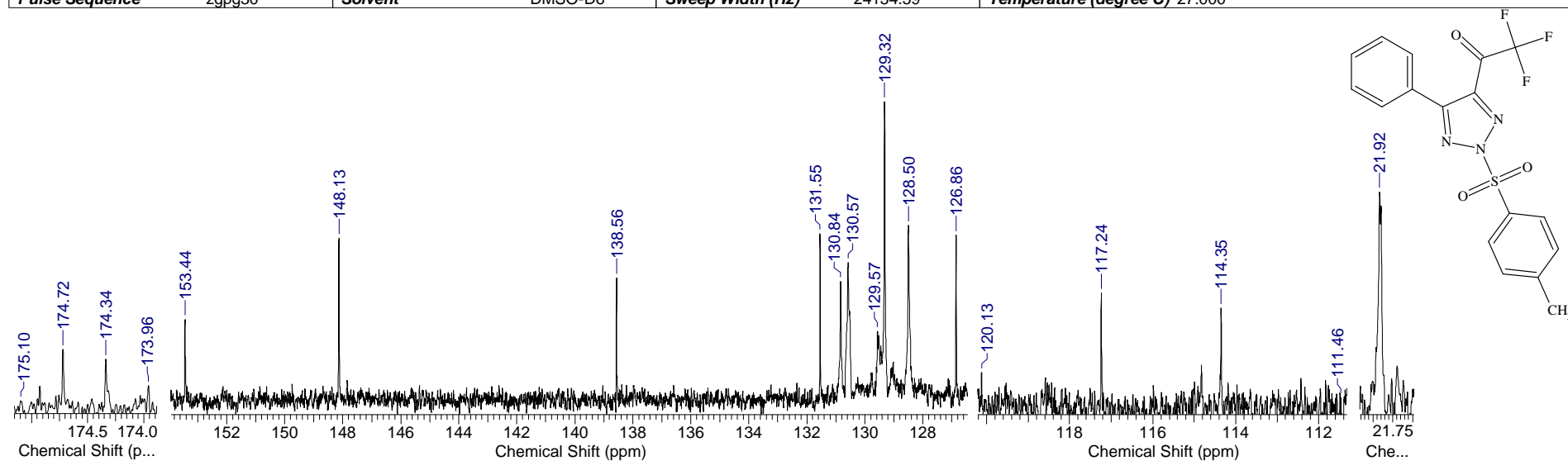
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	30 Mar 2022 17:23:40	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SZA-BM-2470.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						



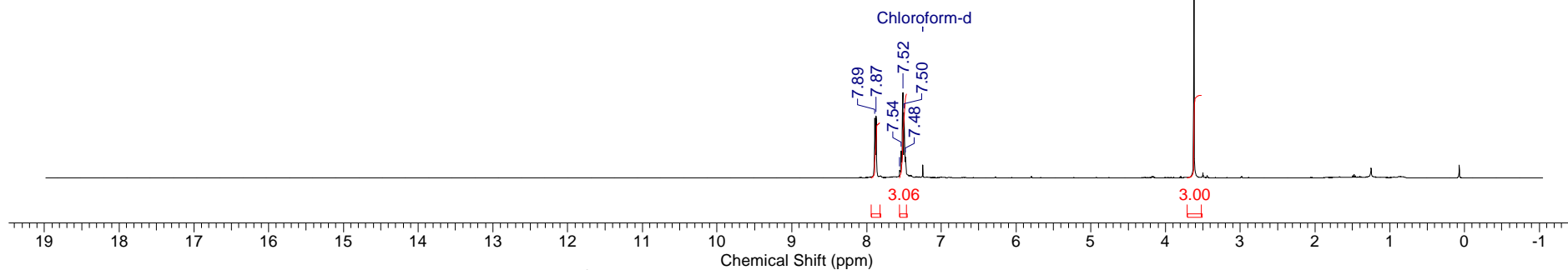
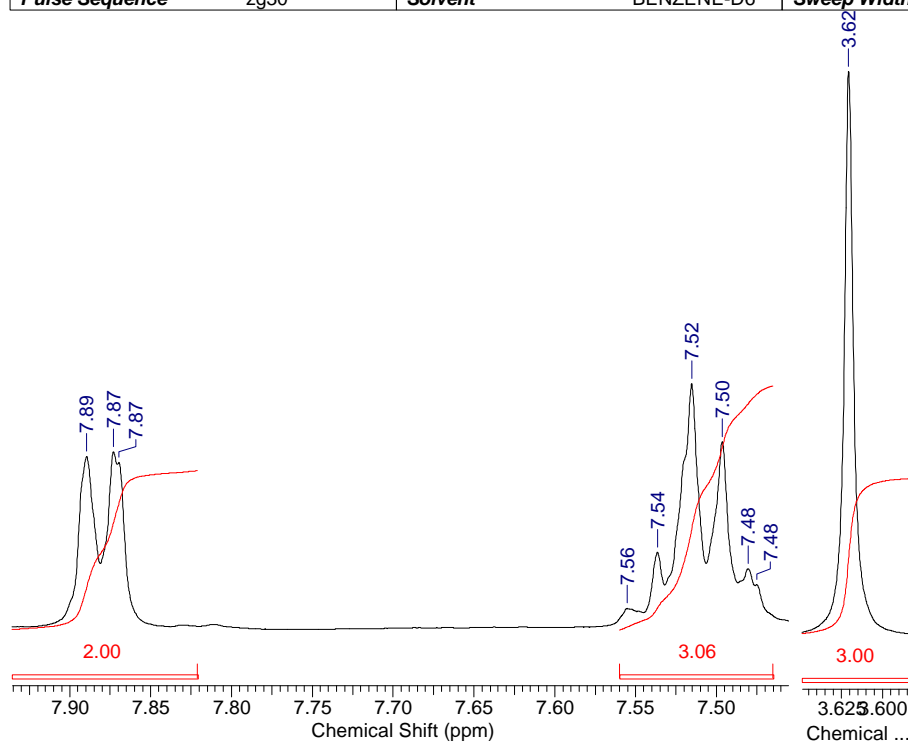
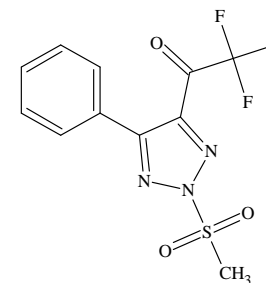
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	30 Mar 2022 17:49:38
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SA-BM-2470.F_005001r	Frequency (MHz)	376.50	Points Count	262144
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000				



Acquisition Time (sec)	0.6783	Comment	Imported from UXMNR.		Date	31 Mar 2022 12:54:26	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\SA-BM-2470.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	305	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

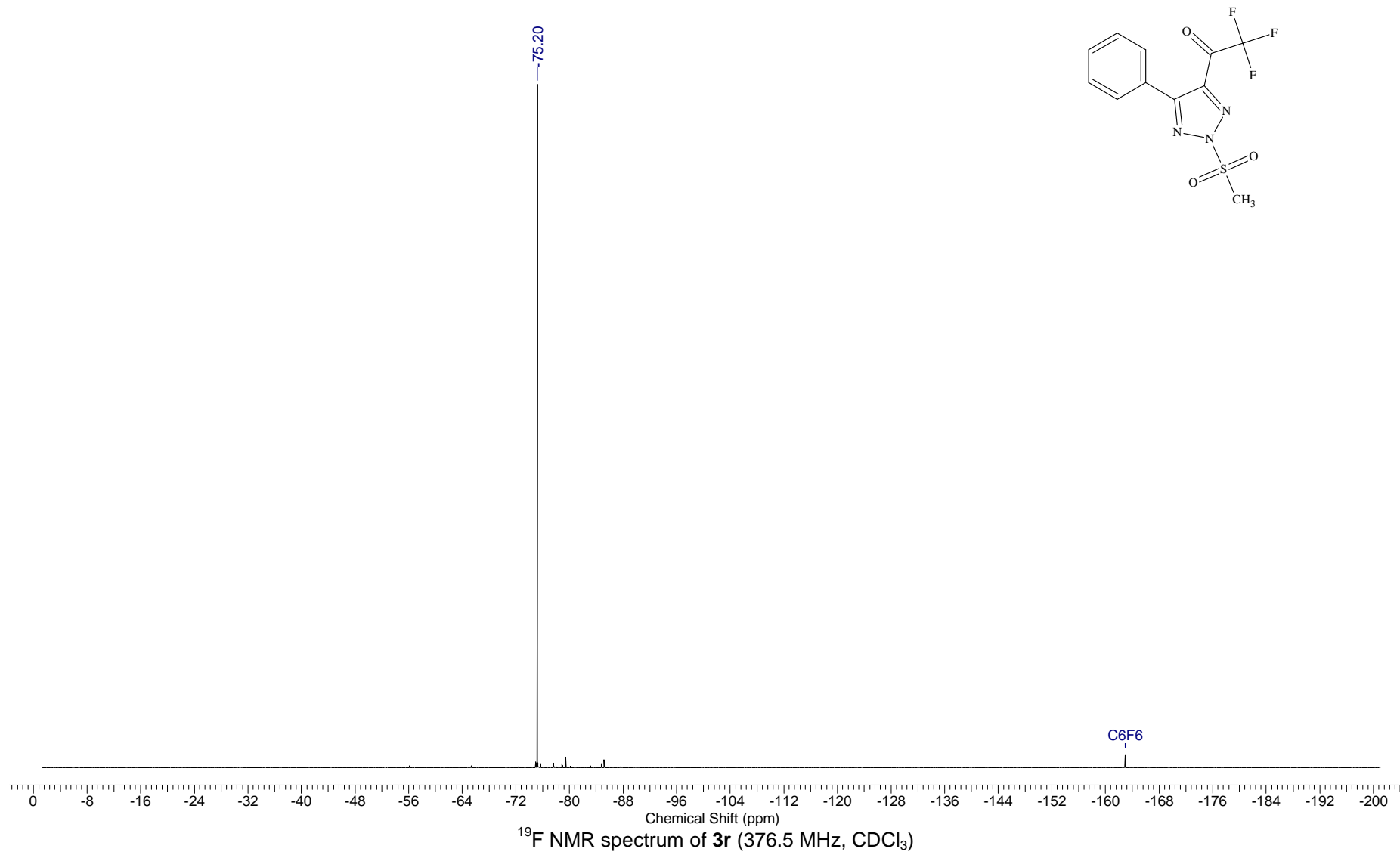
¹³C NMR spectrum of **3q** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	14 Apr 2022 11:55:20	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2498.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	BENZENE-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000

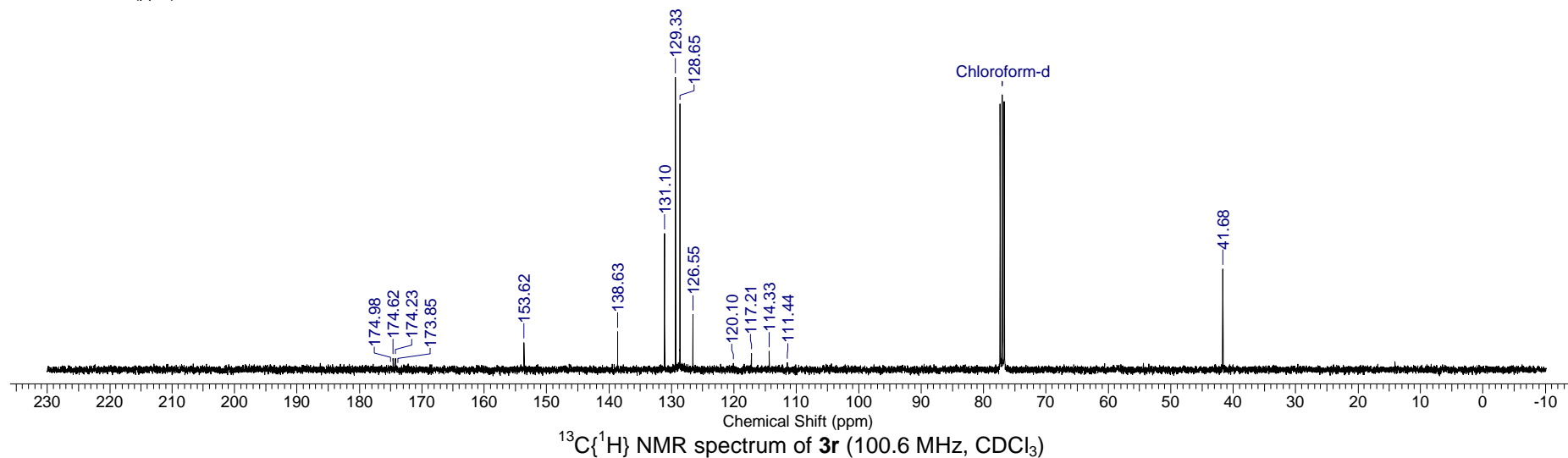
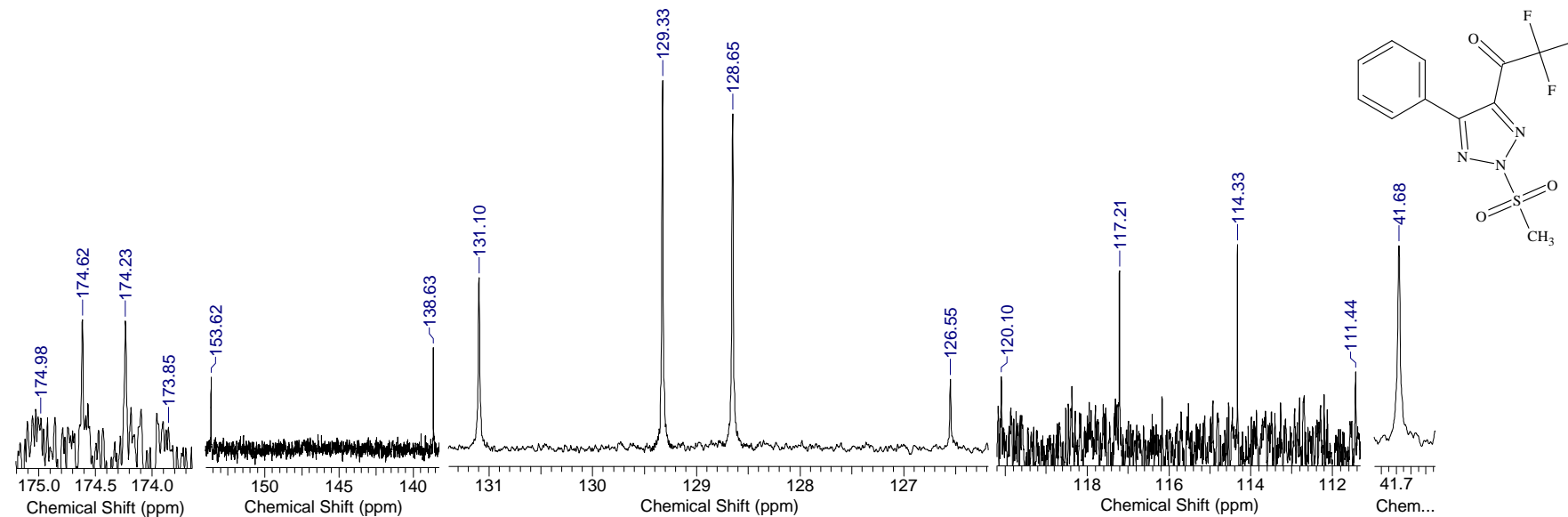


¹H NMR spectrum of **3r** (400.1 MHz, CDCl₃)

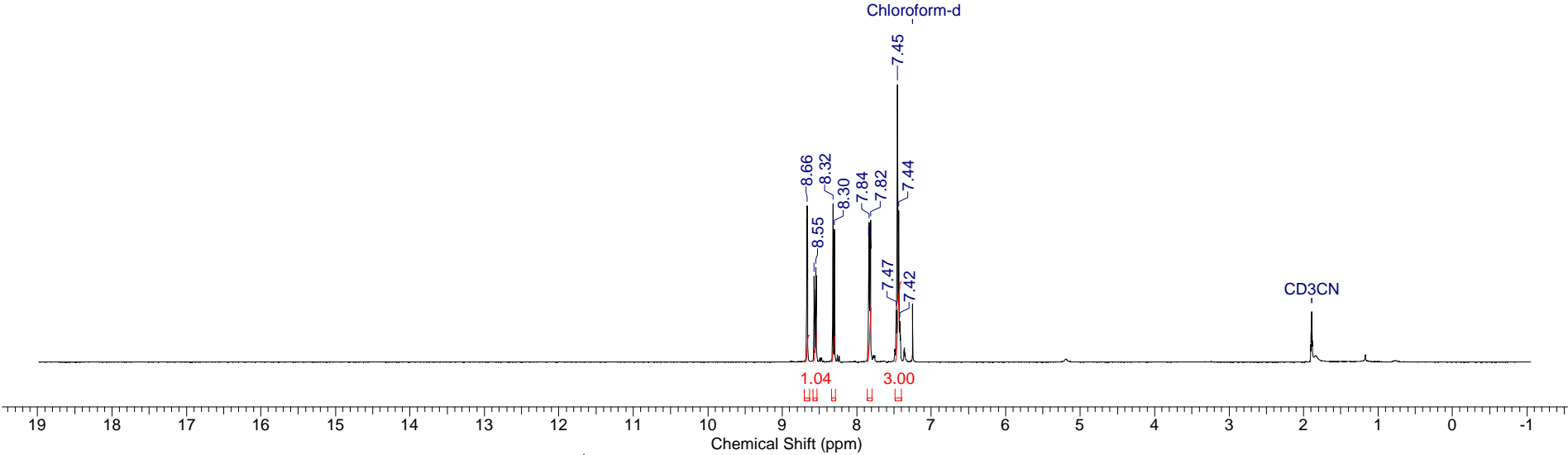
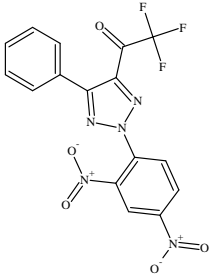
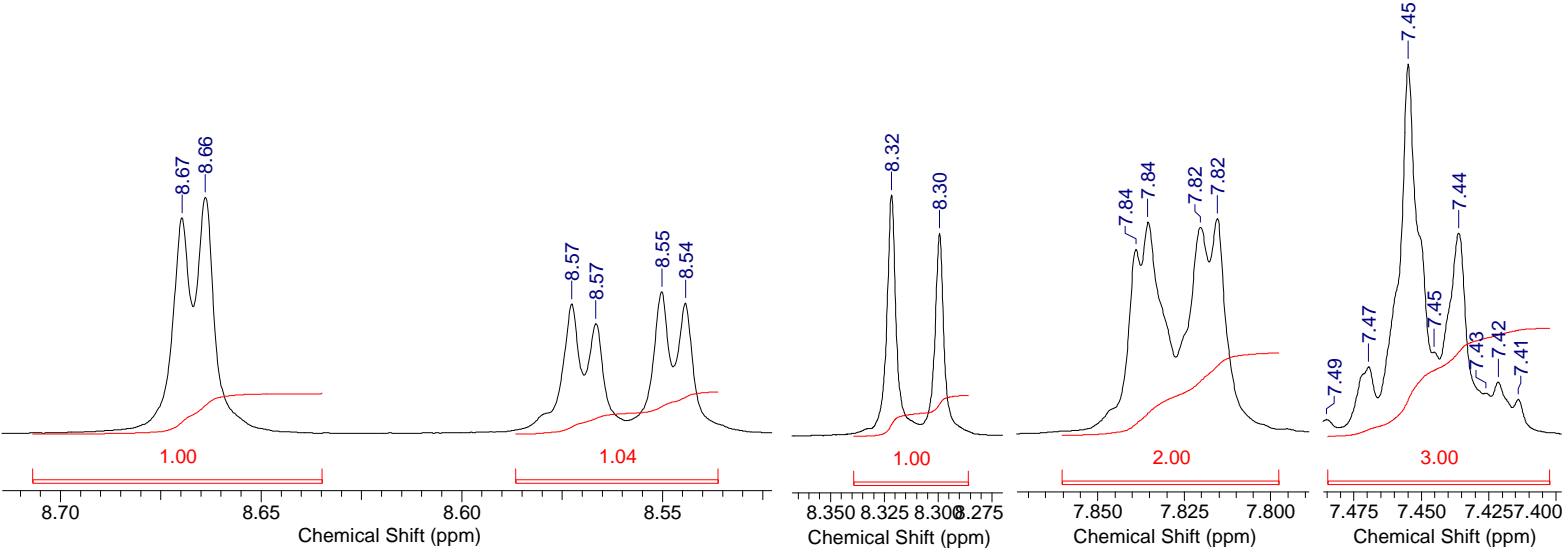
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	14 Apr 2022 13:21:22
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2498.F_005001r	Frequency (MHz)	376.50		
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgqn	Points Count	262144	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000	Solvent	CHLOROFORM-D		



Acquisition Time (sec)	0.6783	Comment Imported from UXNMR.		Date	15 Apr 2022 16:00:22
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2498.C_002001r			Frequency (MHz)	100.61
Nucleus	¹³ C	Number of Transients	201	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	24154.59

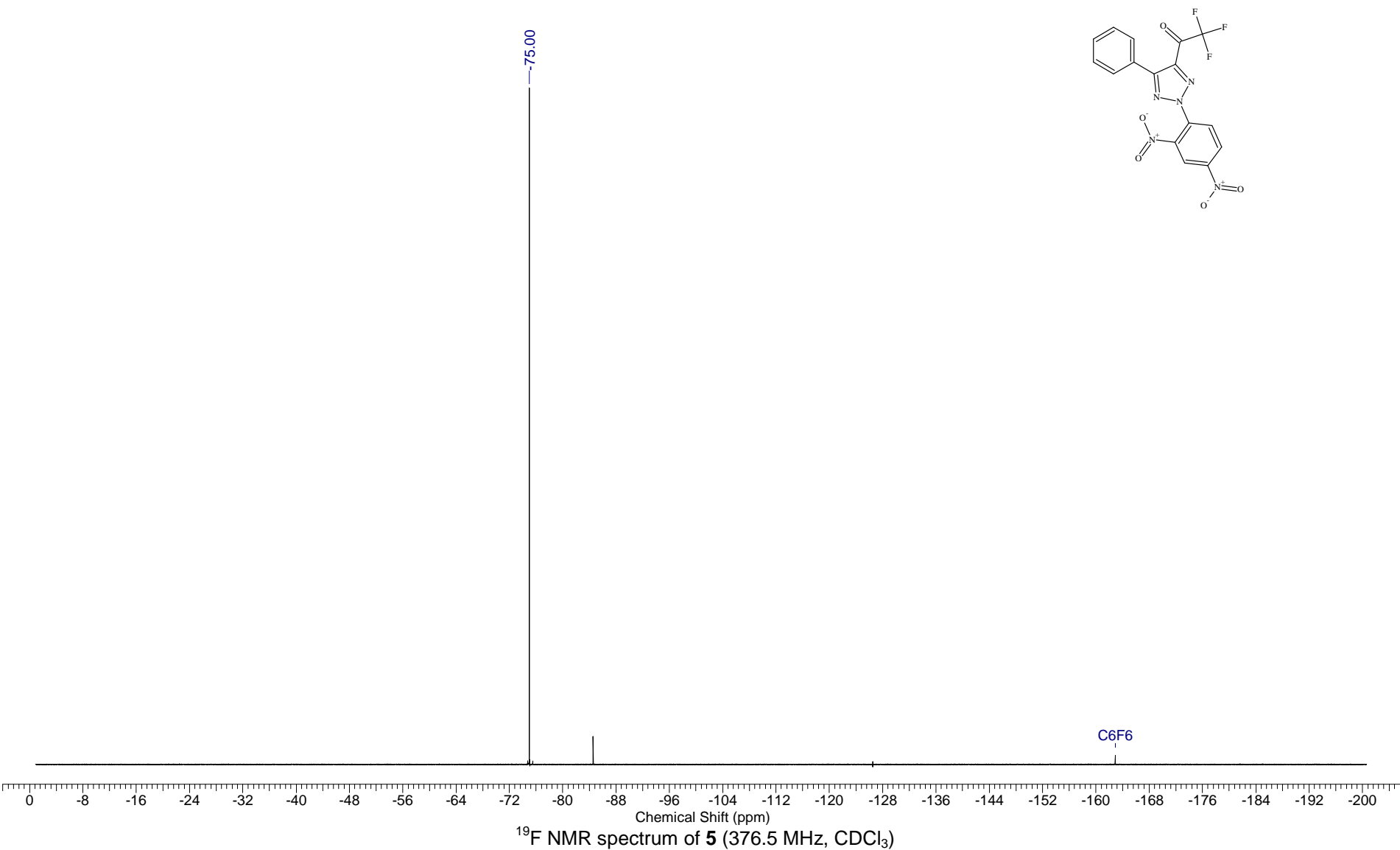


Acquisition Time (sec)	4.0894	Comment	Imported from UXMNR.		Date	22 Mar 2022 15:43:50	
File Name	C:\DOCS\OUTPUT_301\2022\03.map\BM-2461-1p.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

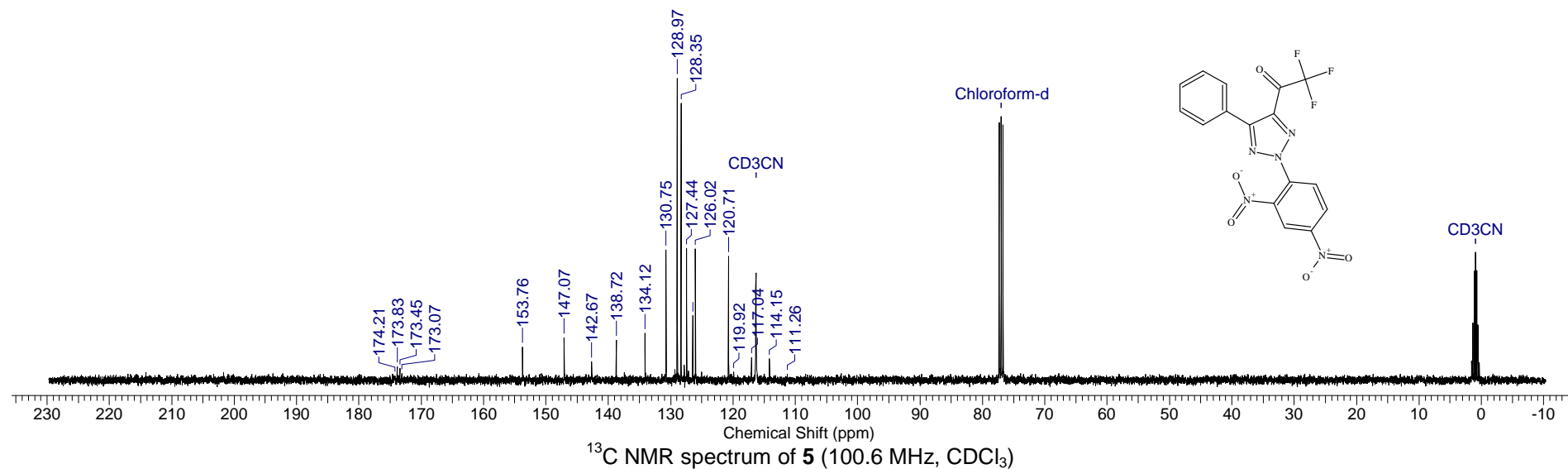
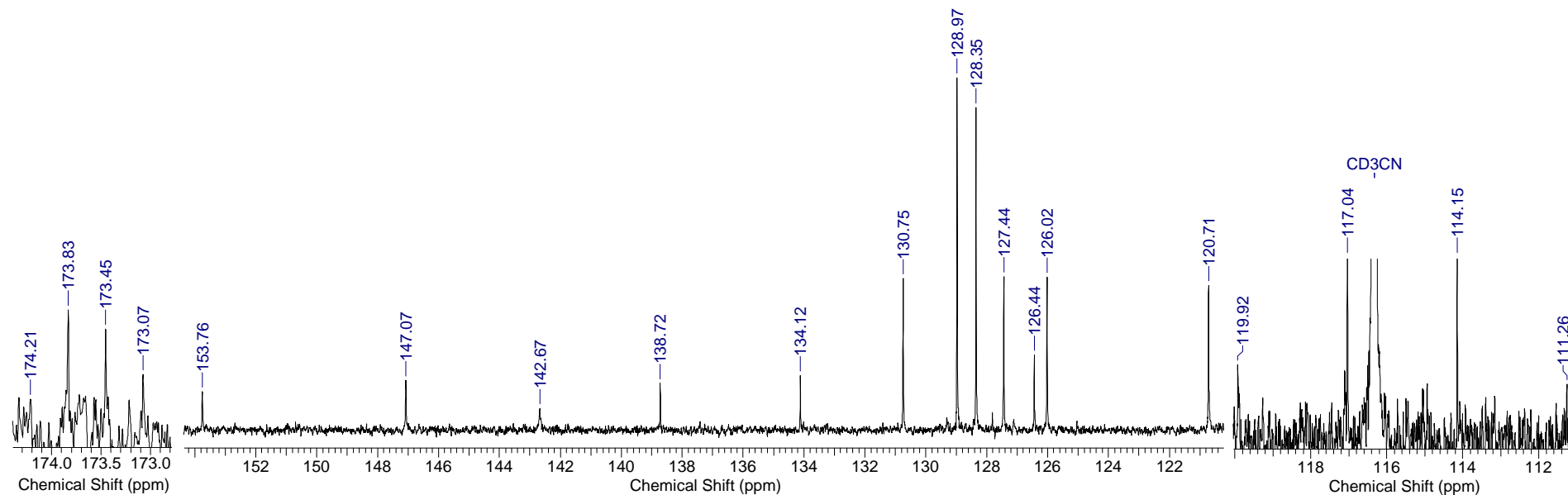


¹H NMR spectrum of **5** (400.1 MHz, CDCl₃)

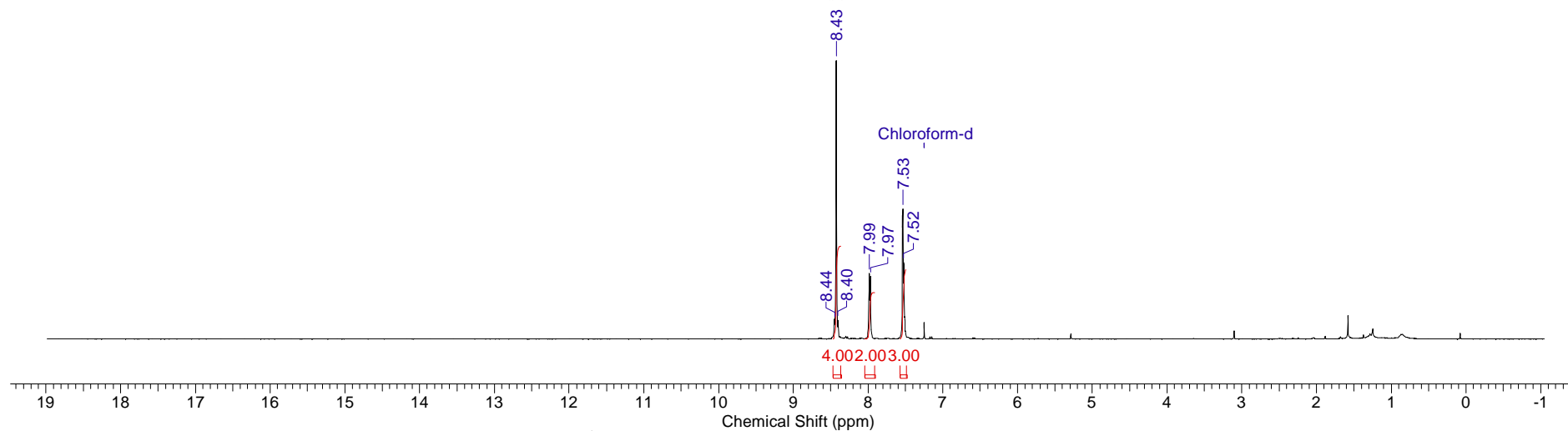
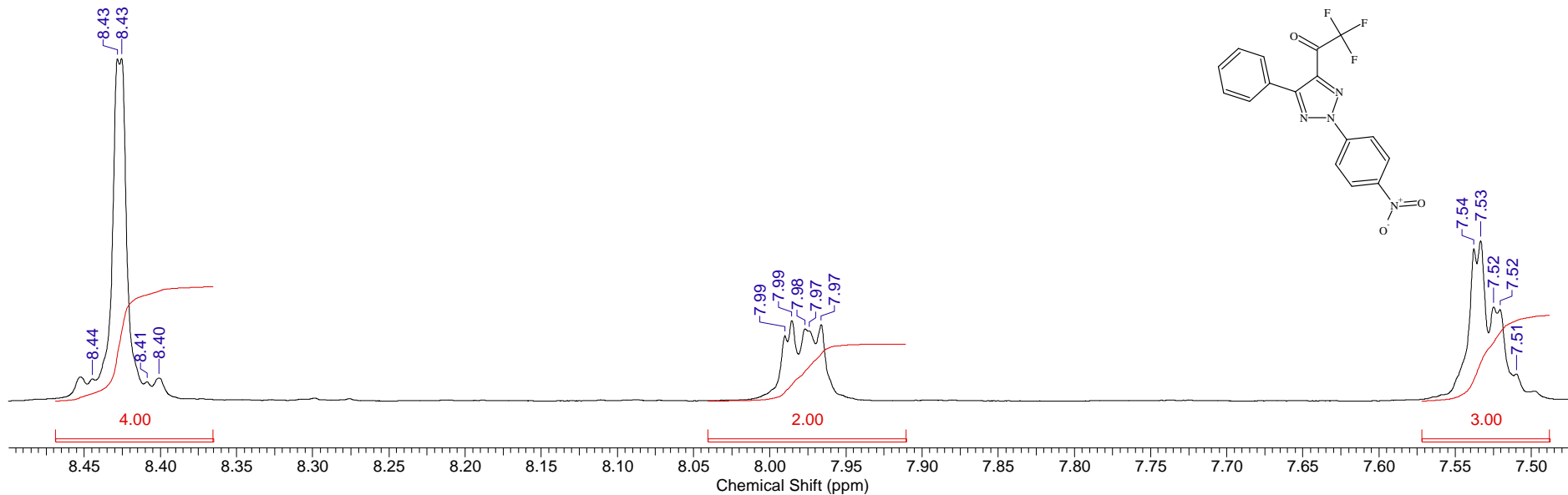
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	22 Mar 2022 15:28:42	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\BM-2461-1p.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	4	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



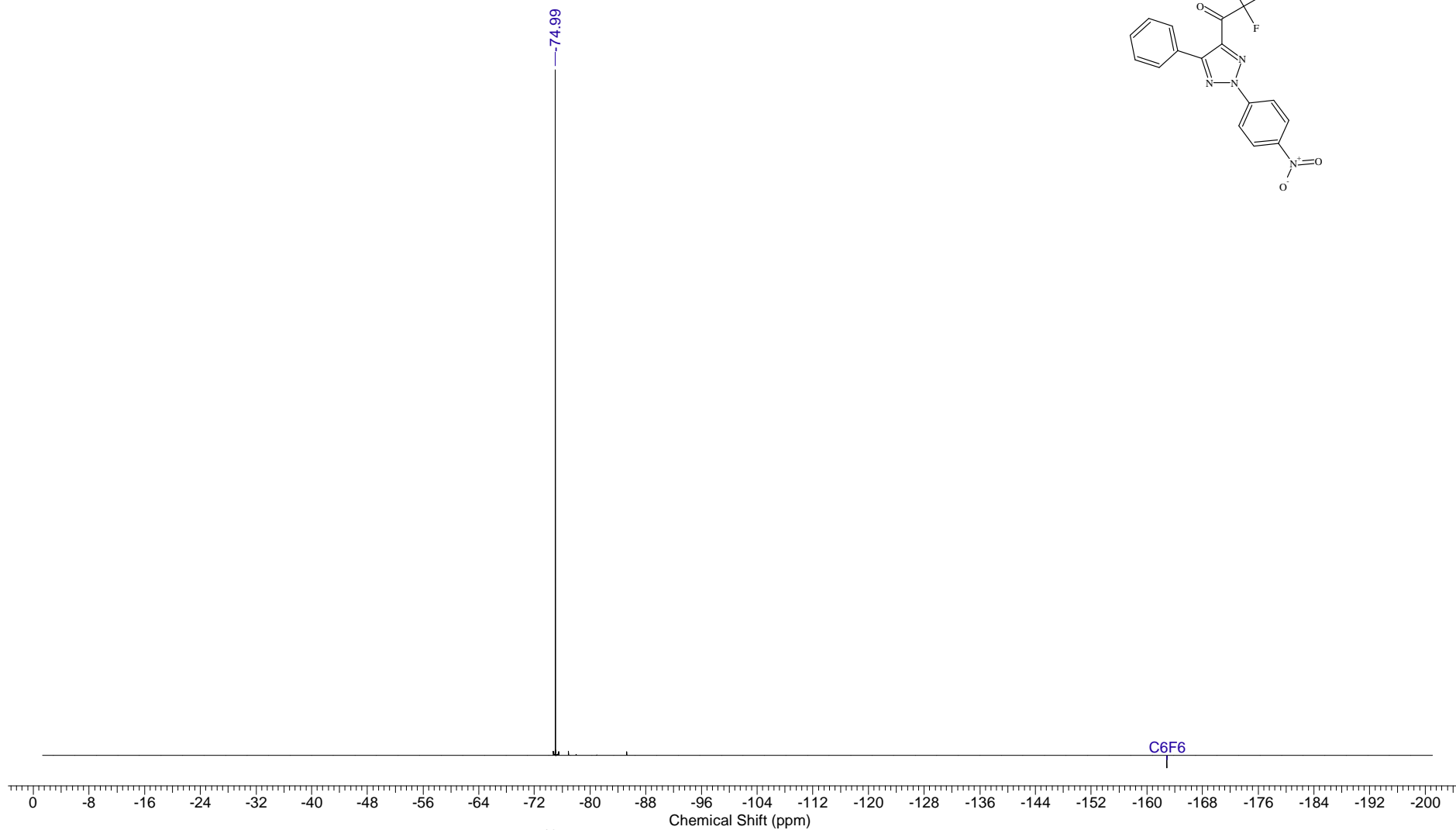
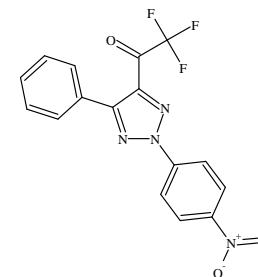
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	22 Mar 2022 15:54:02	
File Name	C:\DOCS\OUTPUT_301\2022\03.mapr\BM-2461-1p.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	266	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000



Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	01 Nov 2022 14:16:34
File Name	C:\DOCS\OUTPUT_301\2022\11.ноябрь\SA-BM-2671-9.H_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	4	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

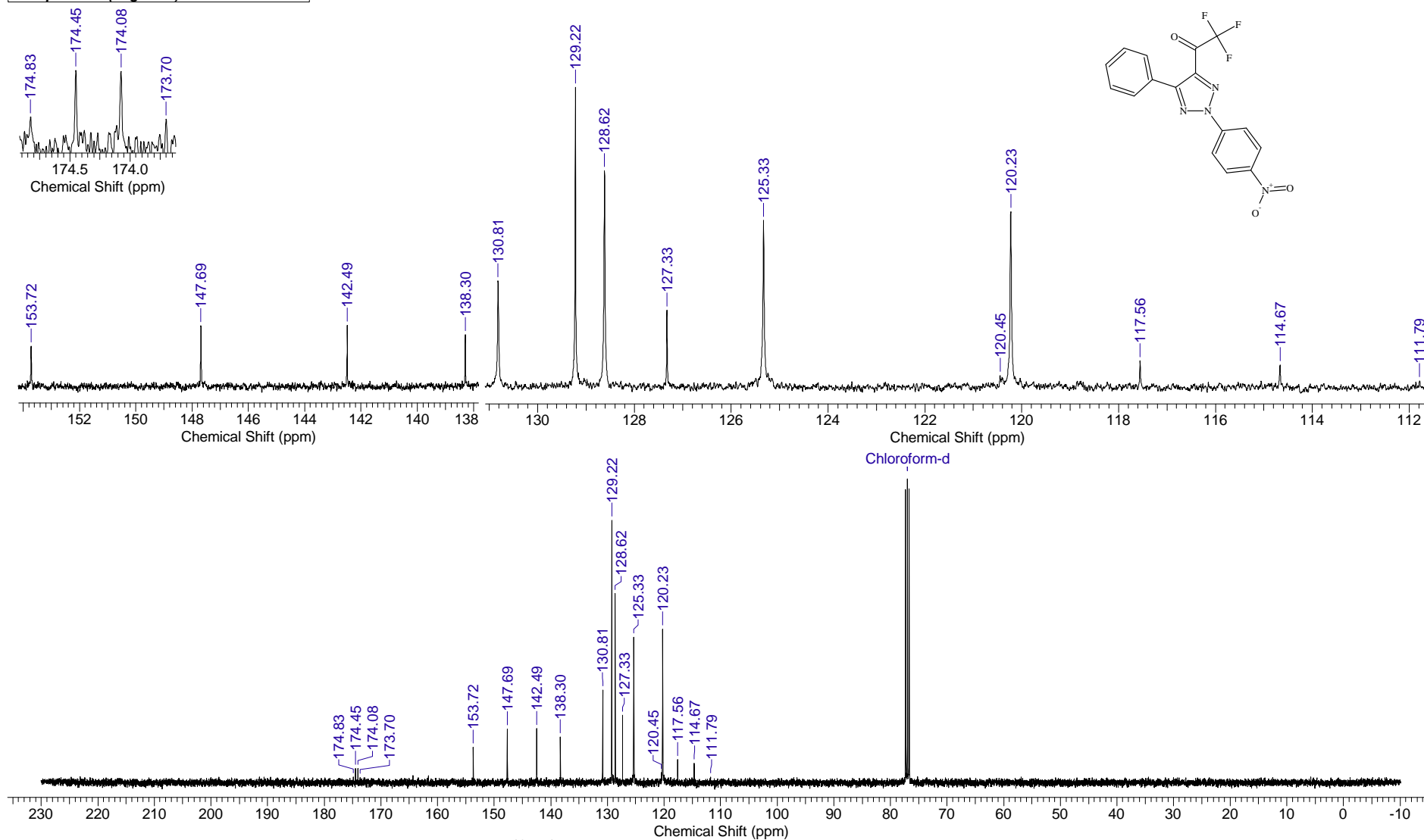
¹H NMR spectrum of **6** (400.1 MHz, CDCl₃)

Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	01 Nov 2022 15:46:26	
File Name	C:\DOCS\OUTPUT_301\2022\11.ноябрь\SA-BM-2671-9.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgn	Solvent	ACETONITRILE-D3		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						

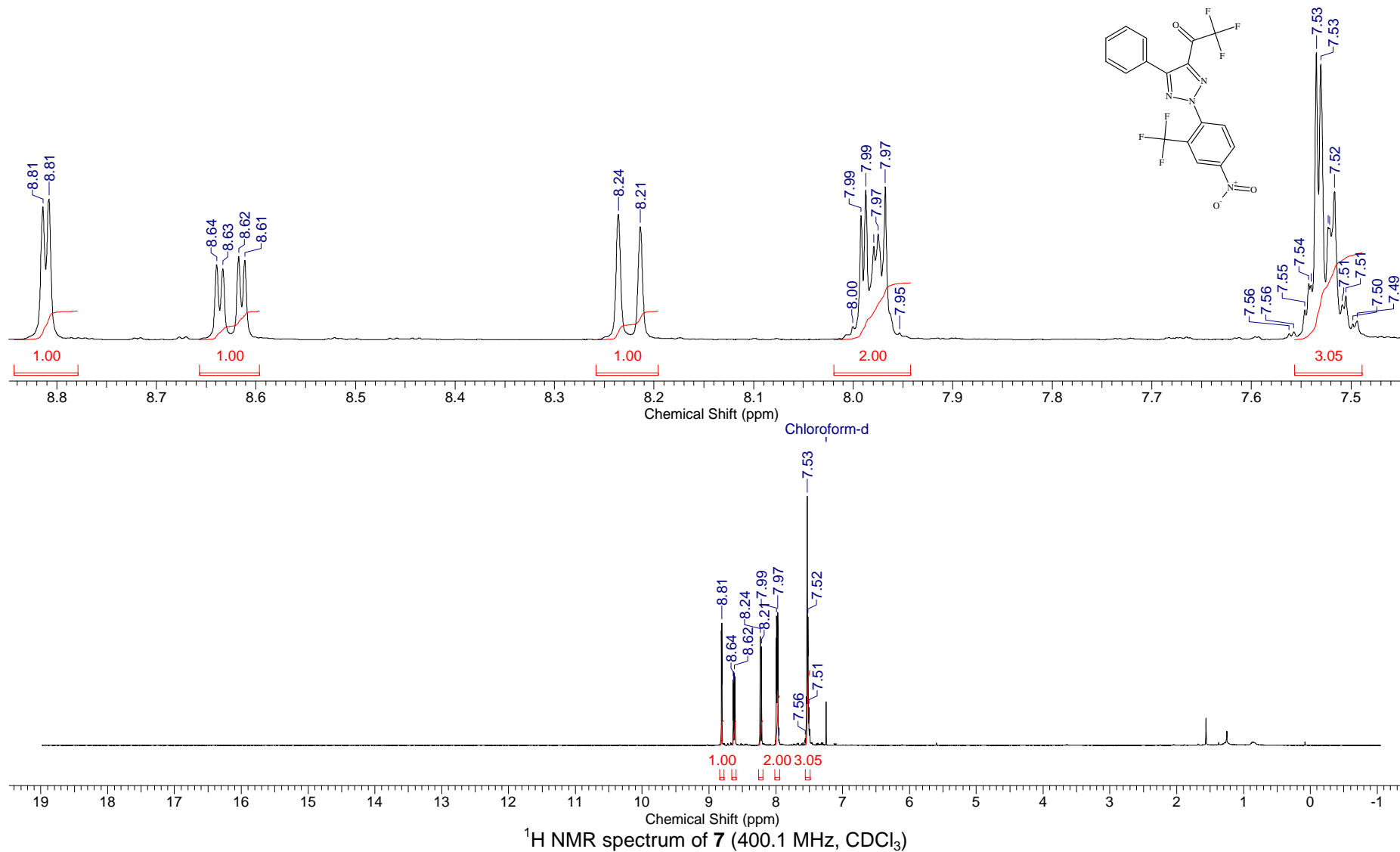


¹⁹F NMR spectrum of **6** (376.5 MHz, CDCl₃)

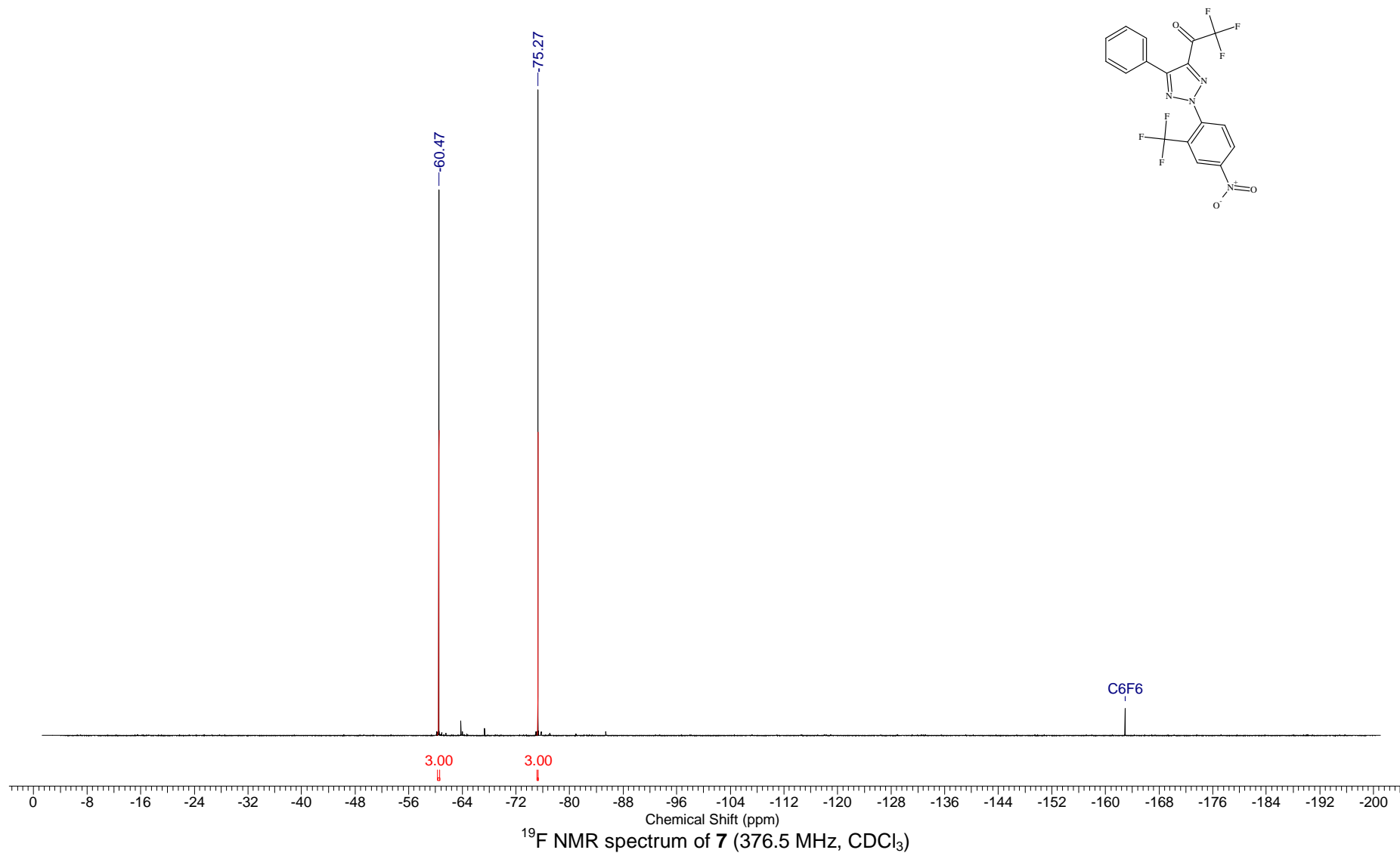
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	01 Nov 2022 14:31:16	
File Name	C:\DOCS\OUTPUT_301\2022\11.ноябрь\SA-BM-2671-9.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	305	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

¹³C{¹H} NMR spectrum of **6** (100.6 MHz, CDCl₃)

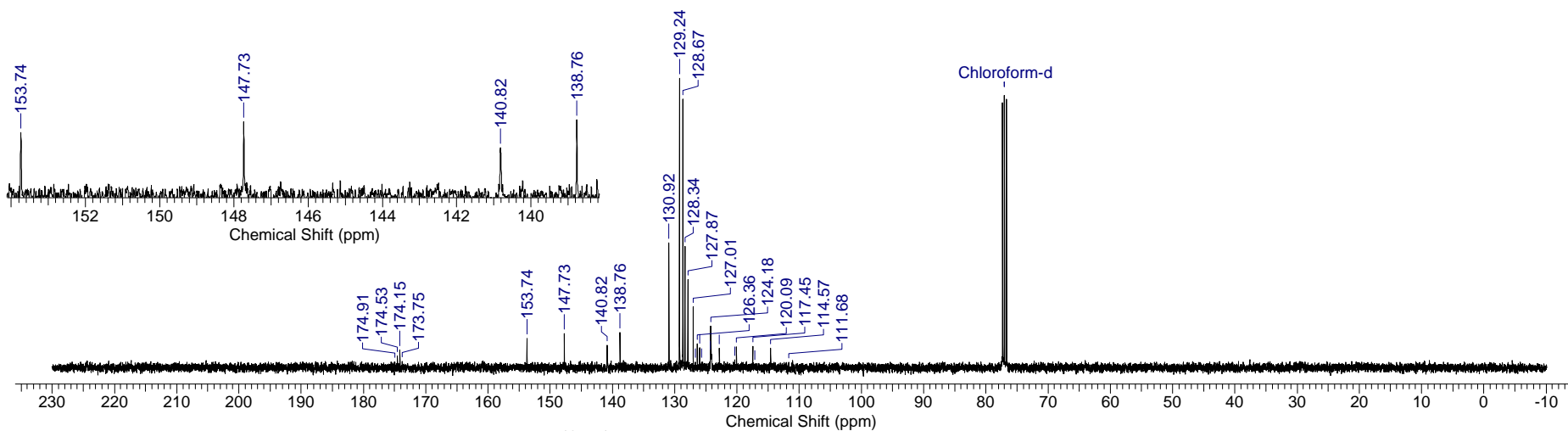
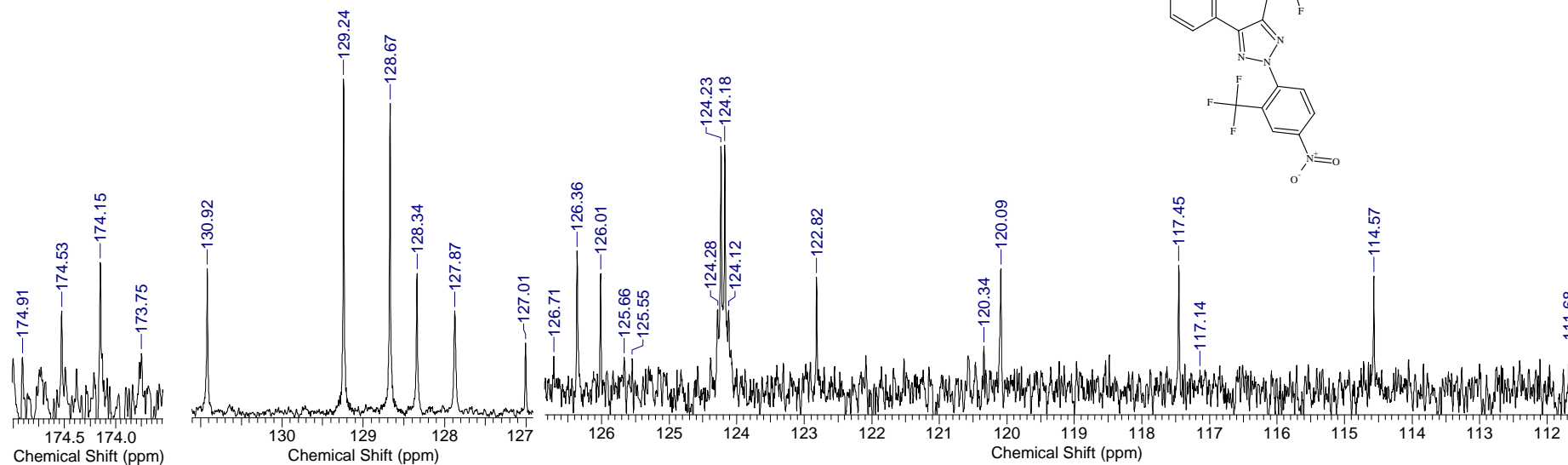
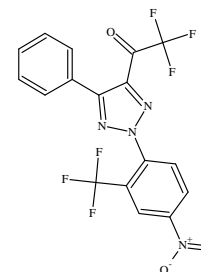
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	08 Apr 2022 15:46:58
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2488-7.H_001001r			Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	4	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82



Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	08 Apr 2022 15:45:36
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2488-7.F_005001r	Frequency (MHz)	376.50	Points Count	262144
Nucleus	¹⁹ F	Number of Transients	10	Original Points Count	131072
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000				

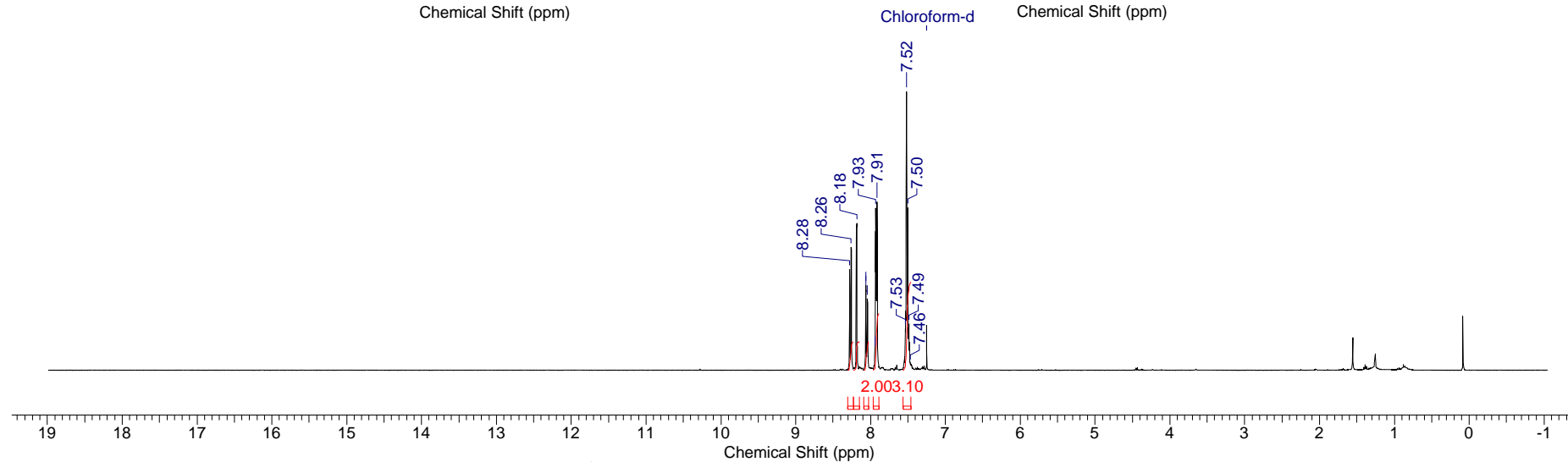
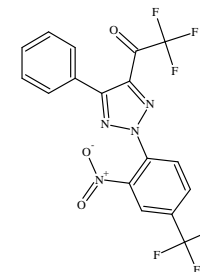
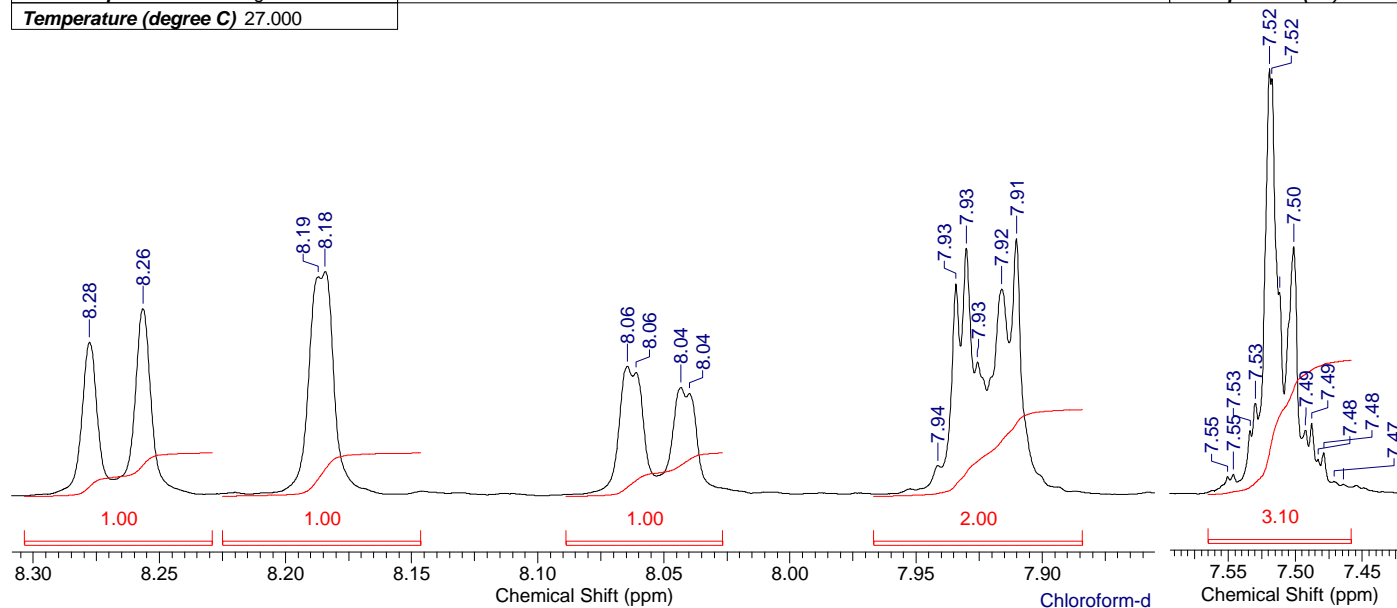


Acquisition Time (sec)	0.6783	Comment	Imported from UXMNR.		Date	08 Apr 2022 15:54:04	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2488-7.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	123	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						F



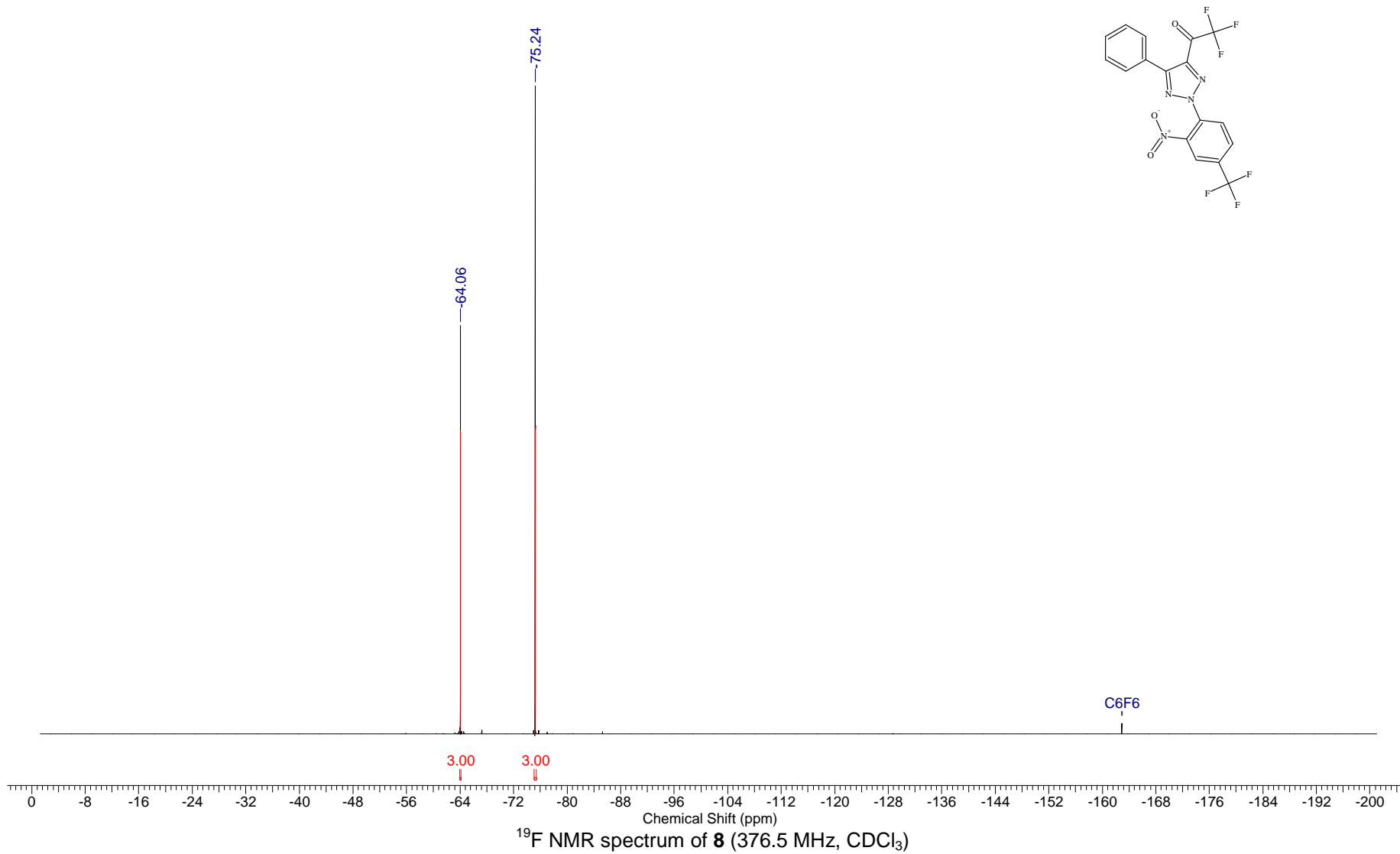
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **7** (100.6 MHz, CDCl_3)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	13 Apr 2022 17:07:34	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2492-5.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

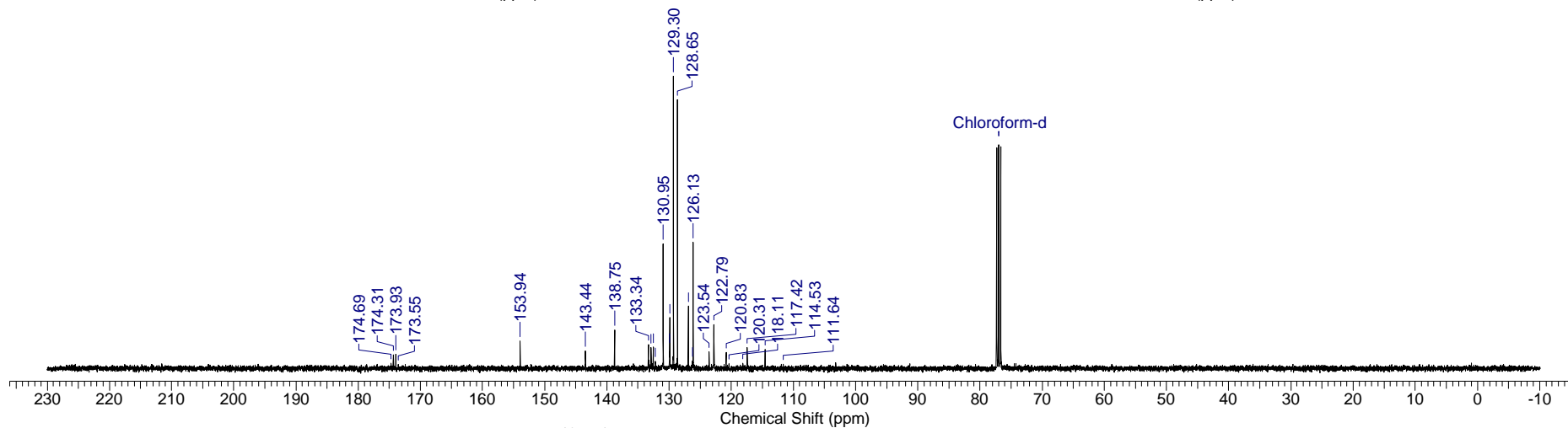
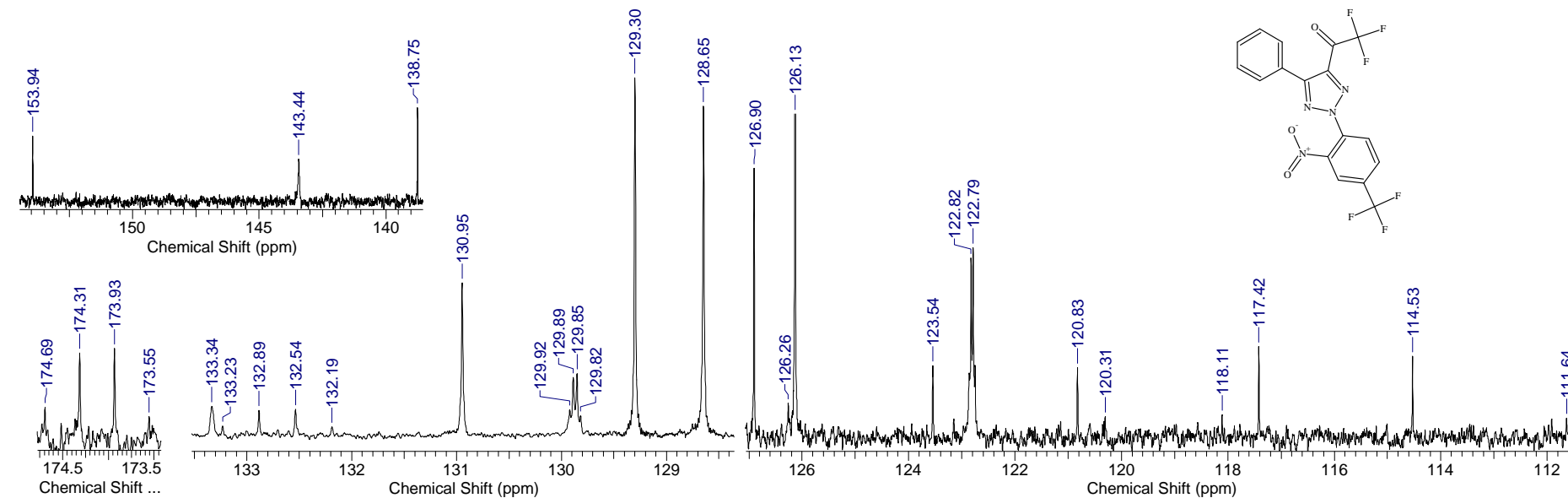


¹H NMR spectrum of **8** (400.1 MHz, CDCl₃)

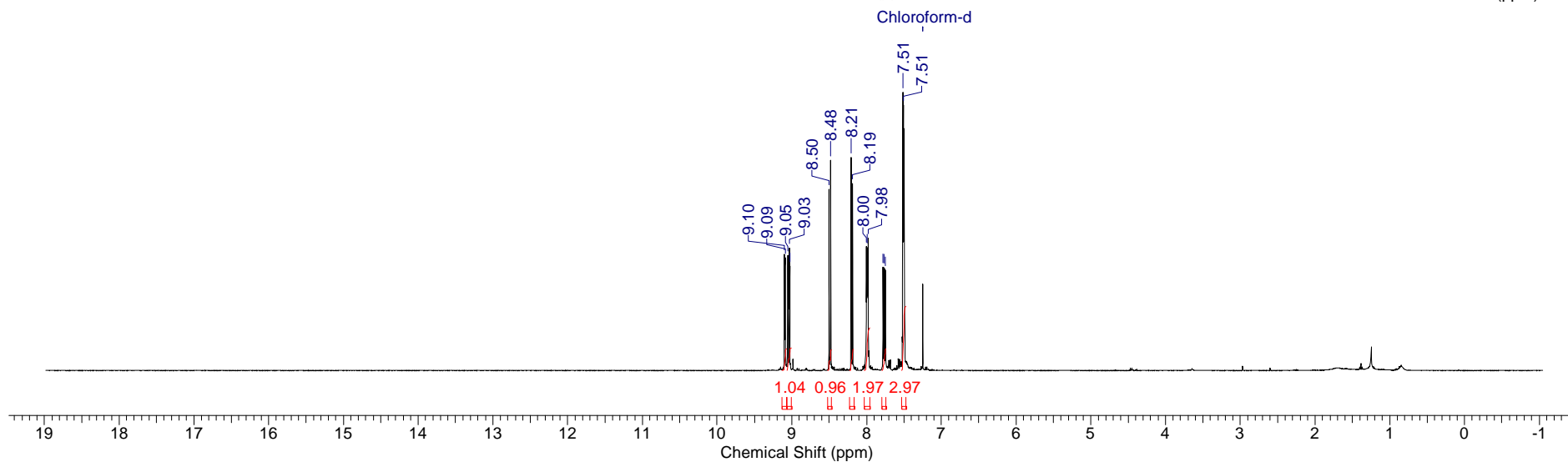
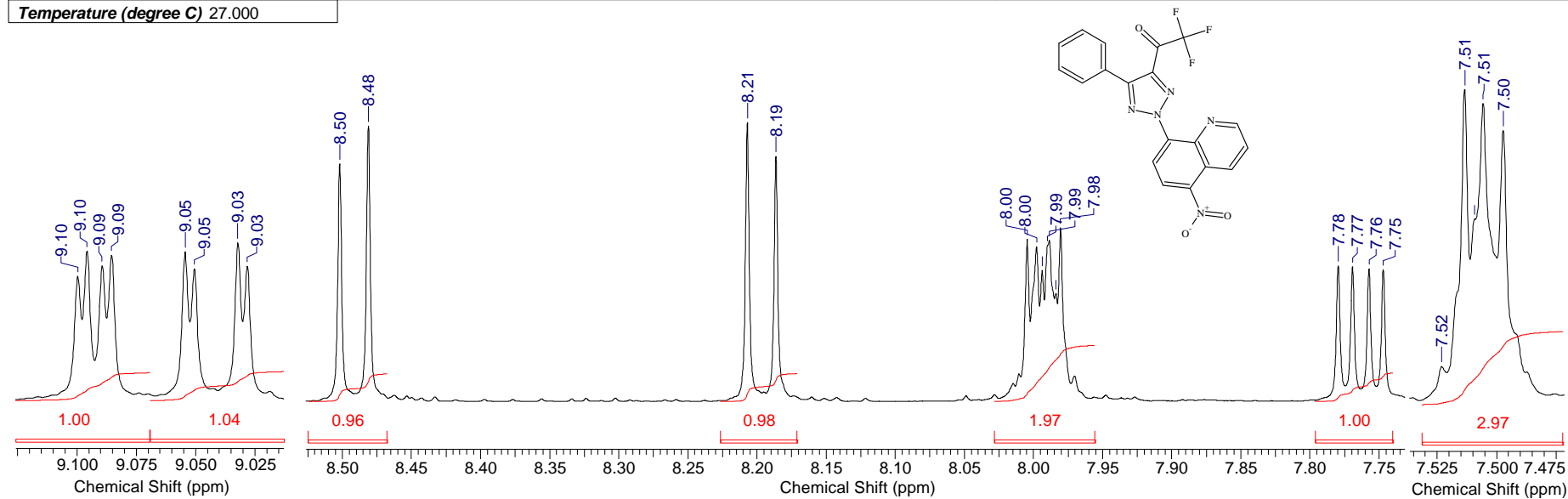
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.			Date	13 Apr 2022 17:11:06
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SZA-BM-2492-5.F_005001r					Frequency (MHz)	376.50
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D			Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000						



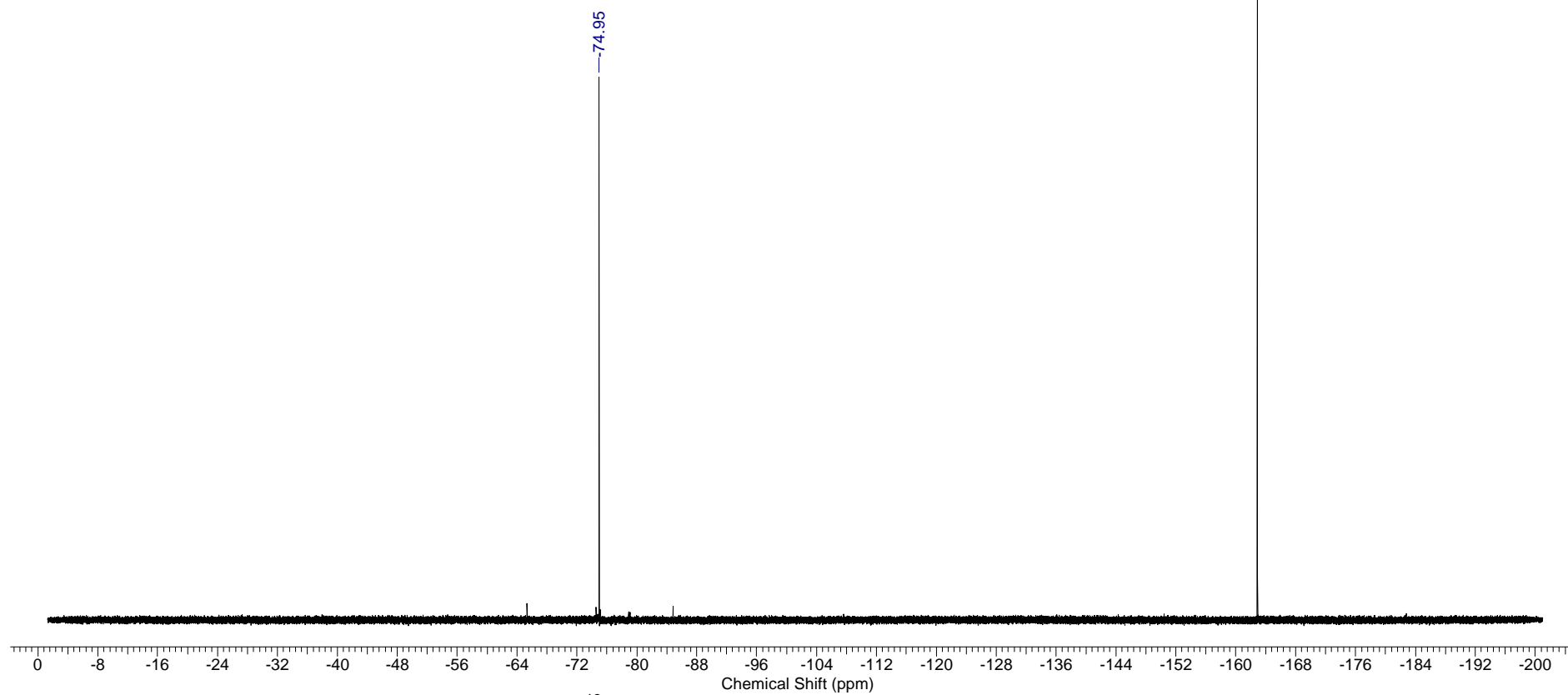
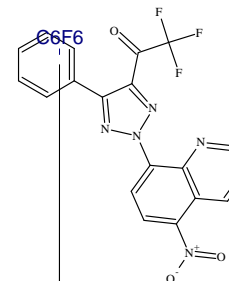
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	14 Apr 2022 12:08:54	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\SA-BM-2492-5.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	298	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

¹³C{¹H} NMR spectrum of **8** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	18 Apr 2022 15:15:14	
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2501-2.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

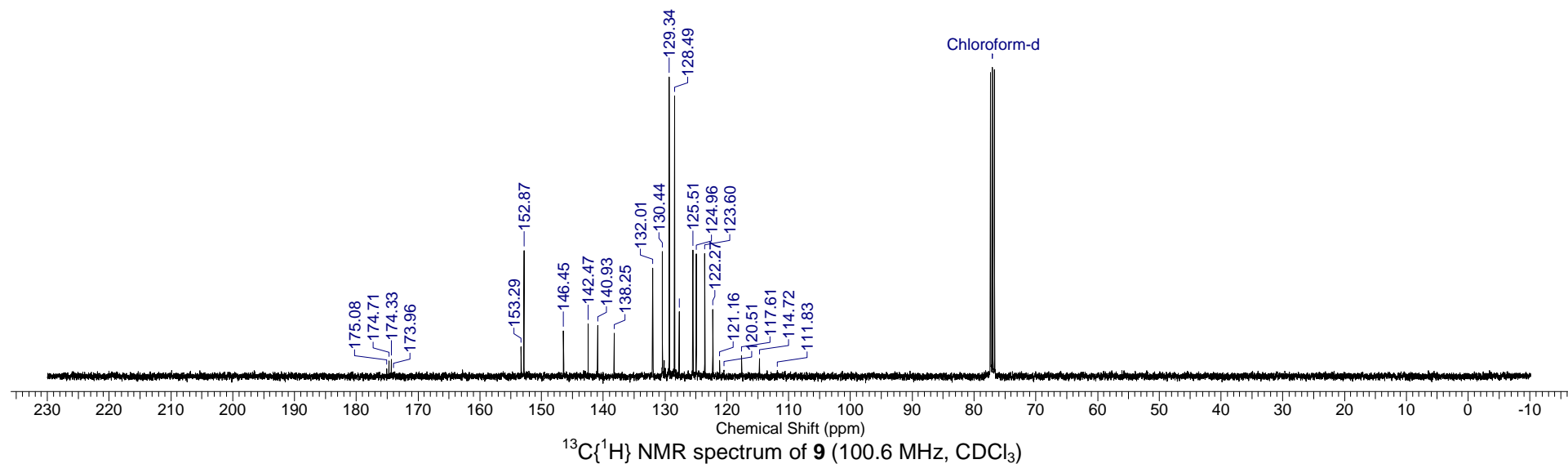
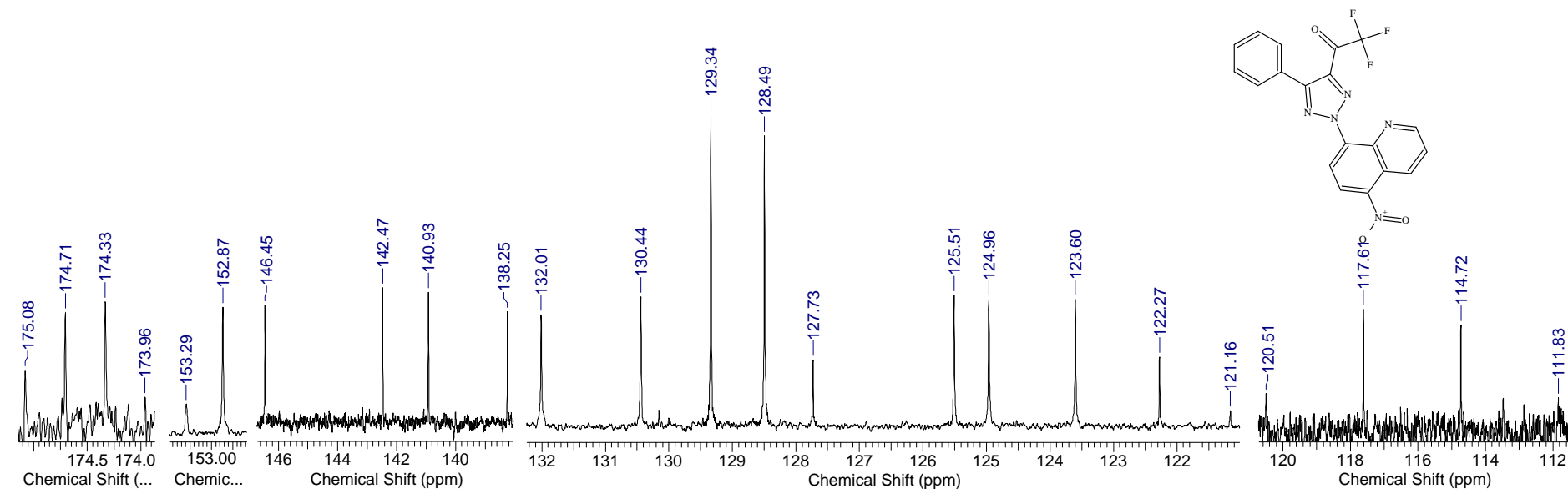
¹H NMR spectrum of **9** (400.1 MHz, CDCl₃)

Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	16 Apr 2022 13:50:10	
File Name	C:\DOCS\BM\ЯМР СОСЕДИ\2022\16-04-2022_14-19-08\BM-2501-R\BM-2501-R_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97	Temperature (degree C)	27.000

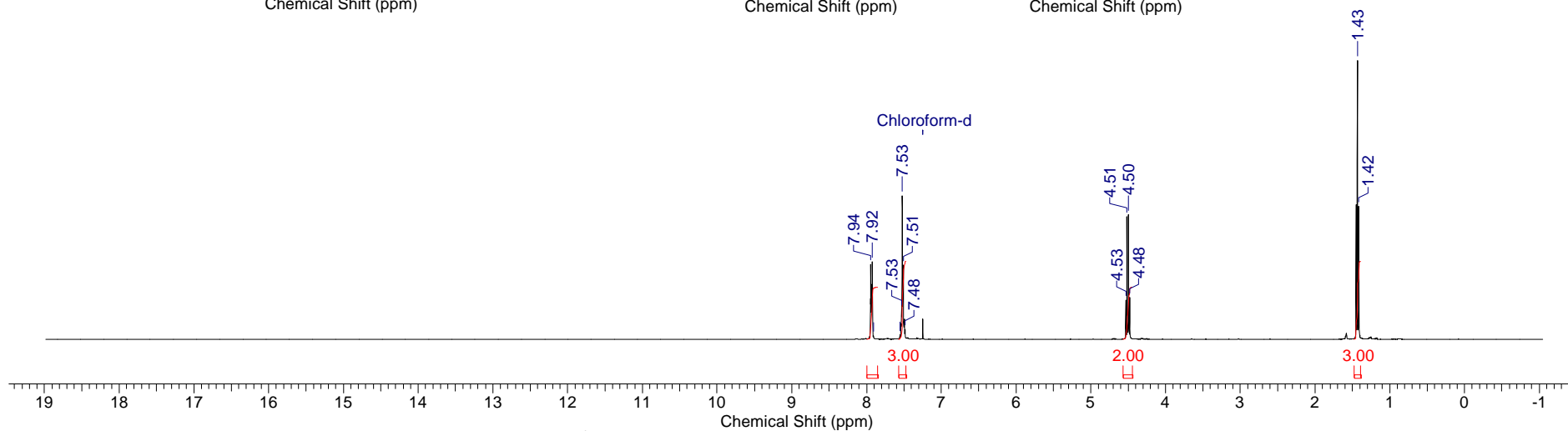
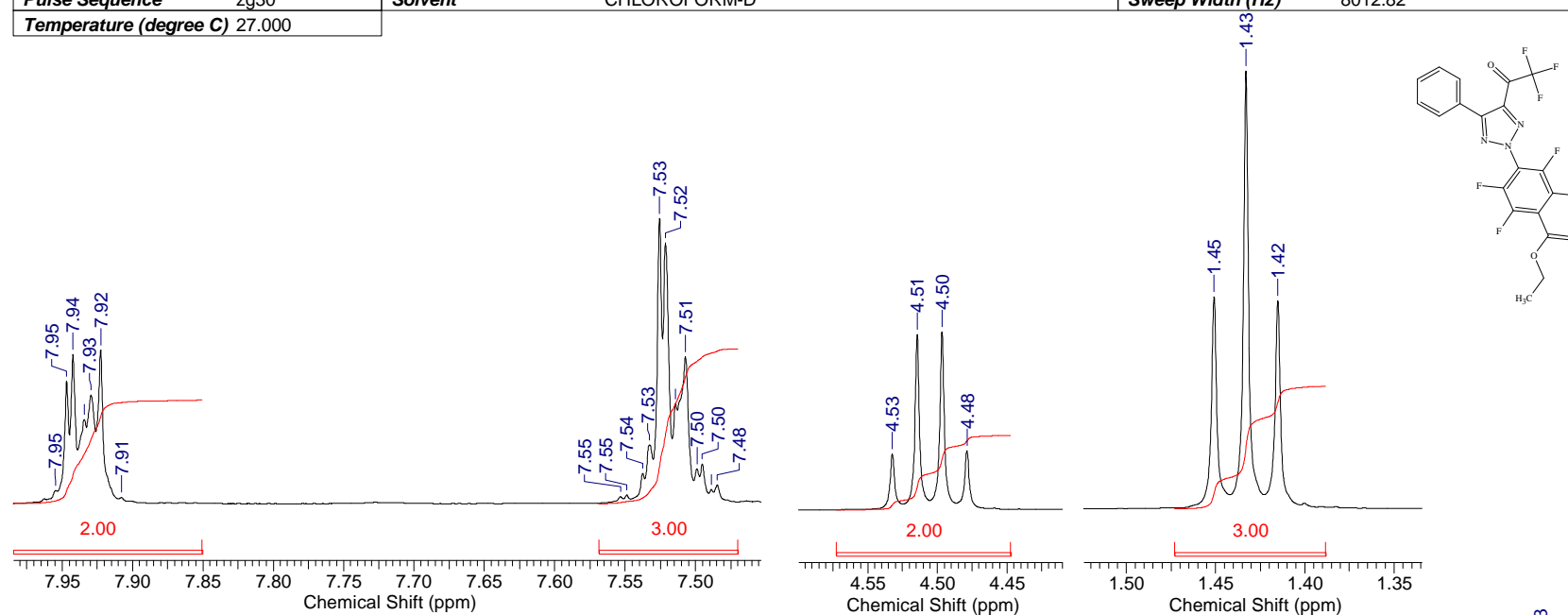


¹⁹F NMR spectrum of **9** (376.5 MHz, CDCl₃)

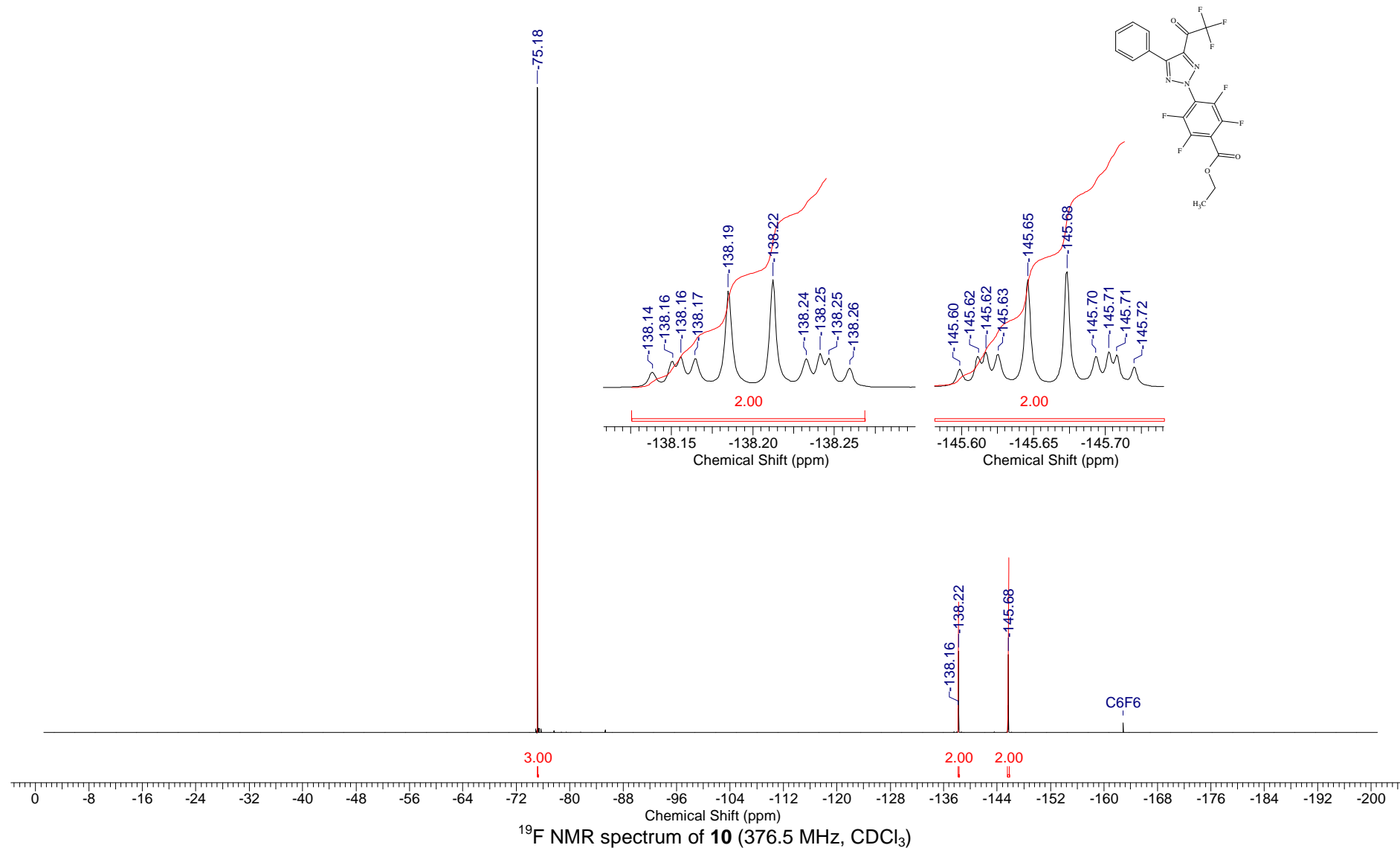
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	19 Apr 2022 15:40:42	
File Name	H:\VAMP\19.04.2022\BM-2501-2.C_002001r	Frequency (MHz)	100.61	Nucleus	¹³ C	Number of Transients	314
Original Points Count	16384	Points Count	131072	Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D
Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000				



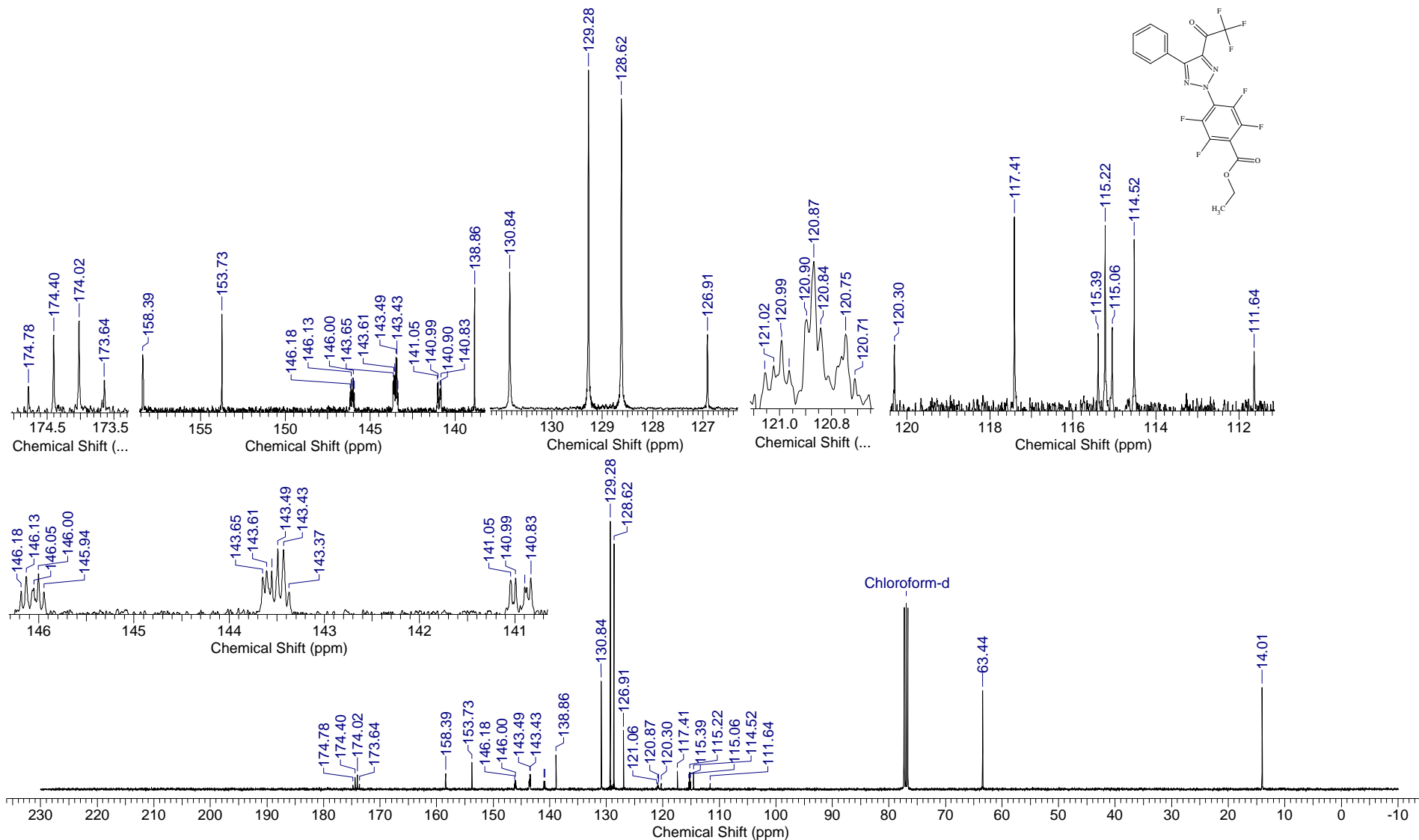
Acquisition Time (sec)	4.0894	Comment	Imported from UXMNR.	Date	09 Apr 2022 13:48:12
File Name	C:\DOCS\BM\MP_COCEДИ\2022\bm220409\BM-2489-2_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	8	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

¹H NMR spectrum of **10** (400.1 MHz, CDCl₃)

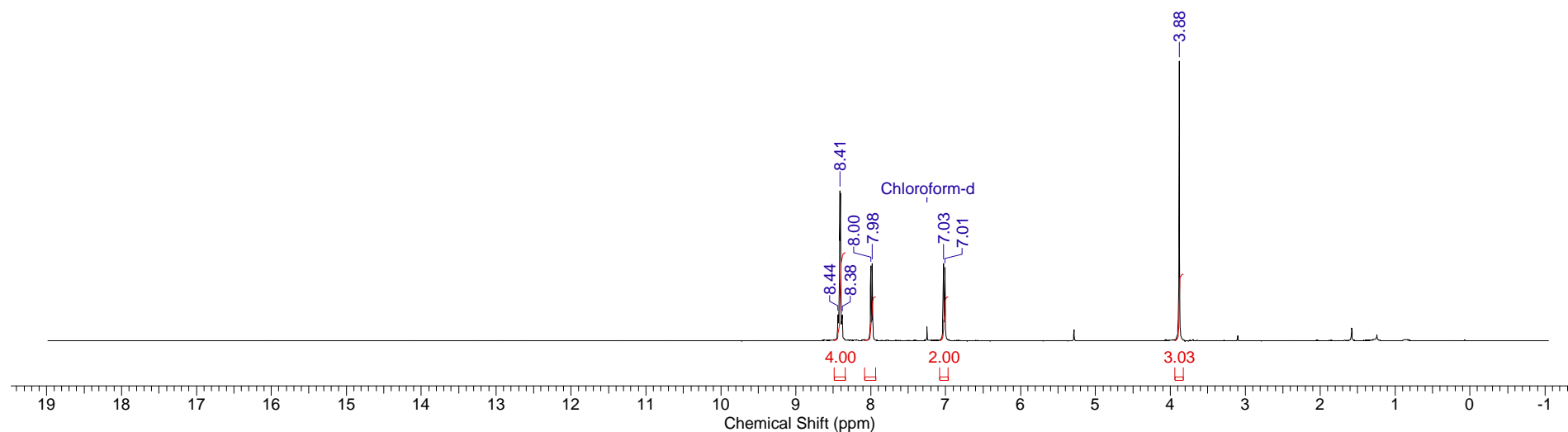
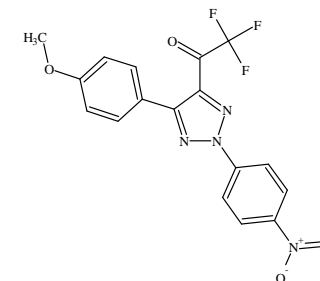
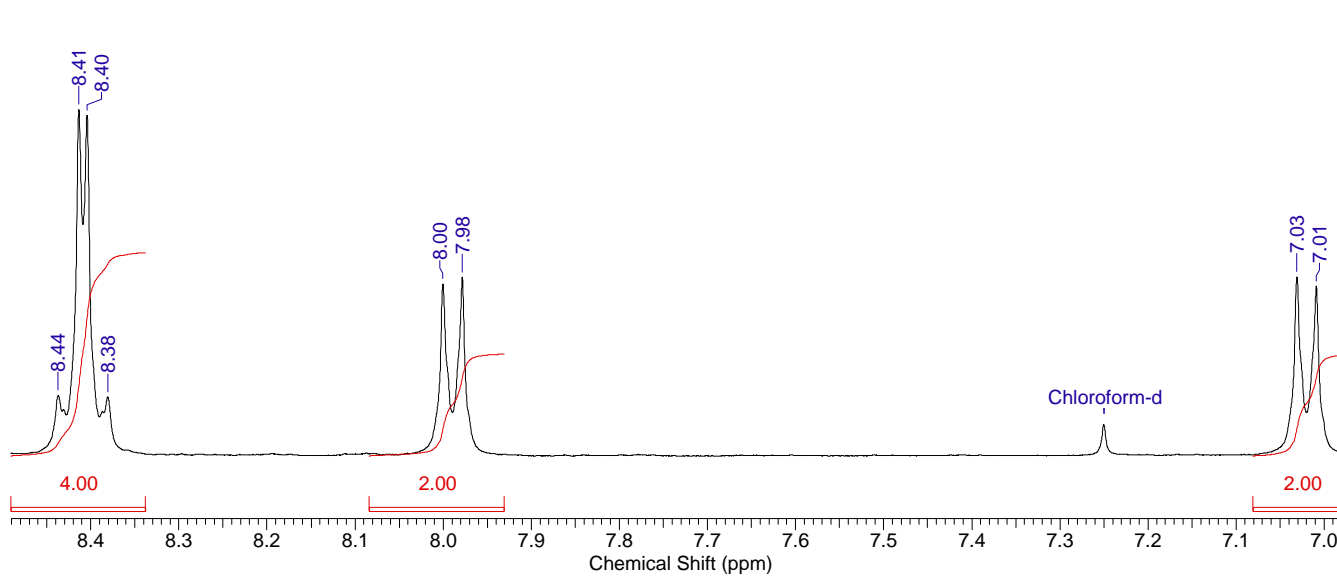
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	09 Apr 2022 13:59:12
File Name	C:\DOCS\BM\MP_COCEДИ\2022\bm220409\BM-2489-2_005001r			Frequency (MHz)	376.50
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgn	Solvent	CHLOROFORM-D	Points Count	262144
Temperature (degree C)	27.000			Sweep Width (Hz)	75187.97



Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.			Date	12 Apr 2022 14:16:50
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2489-2.C_002001r					Frequency (MHz)	100.61
Nucleus	13C	Number of Transients	922	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	24154.59
Temperature (degree C)	27.000						

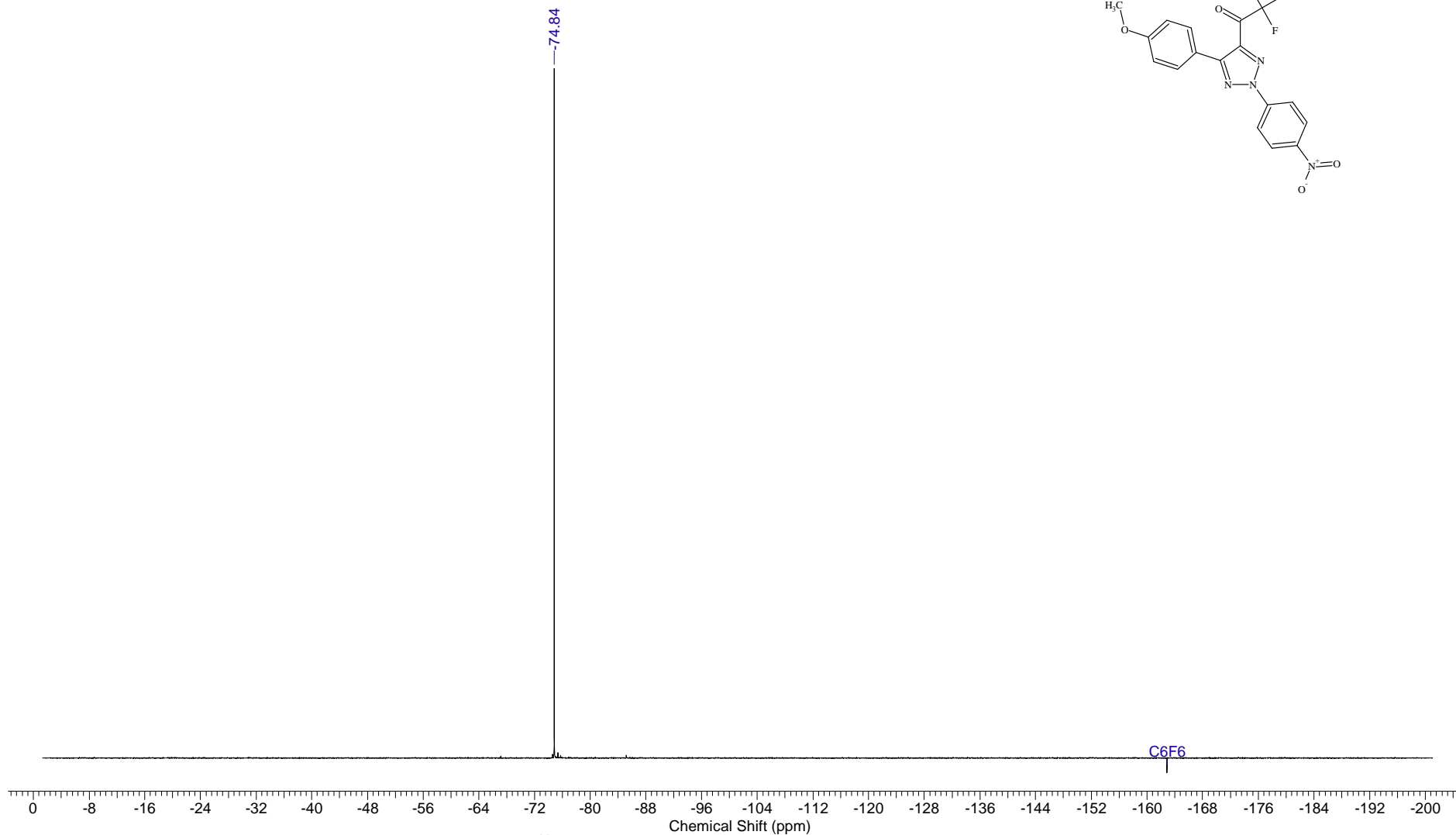
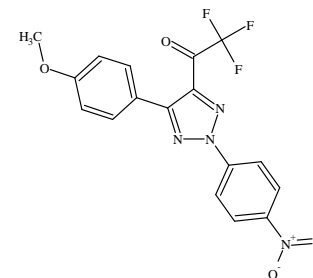
¹³C{¹H} NMR spectrum of **10** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	31 Oct 2022 15:59:38	
File Name	C:\DOCS\OUTPUT_301\2022\10.октябрь\SA-BM-2672.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

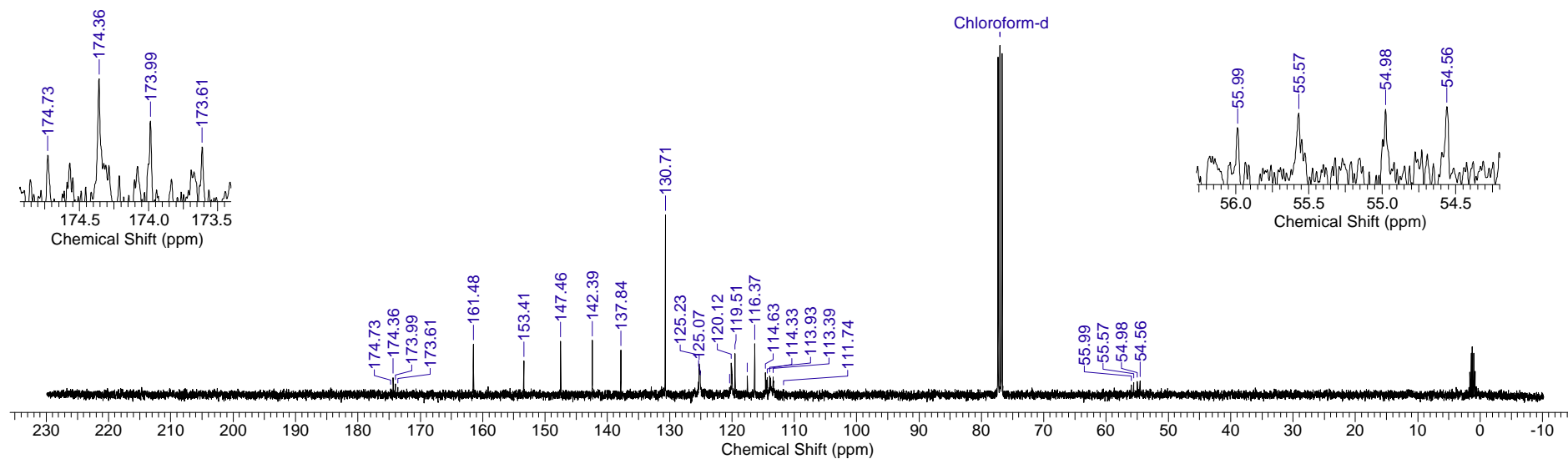
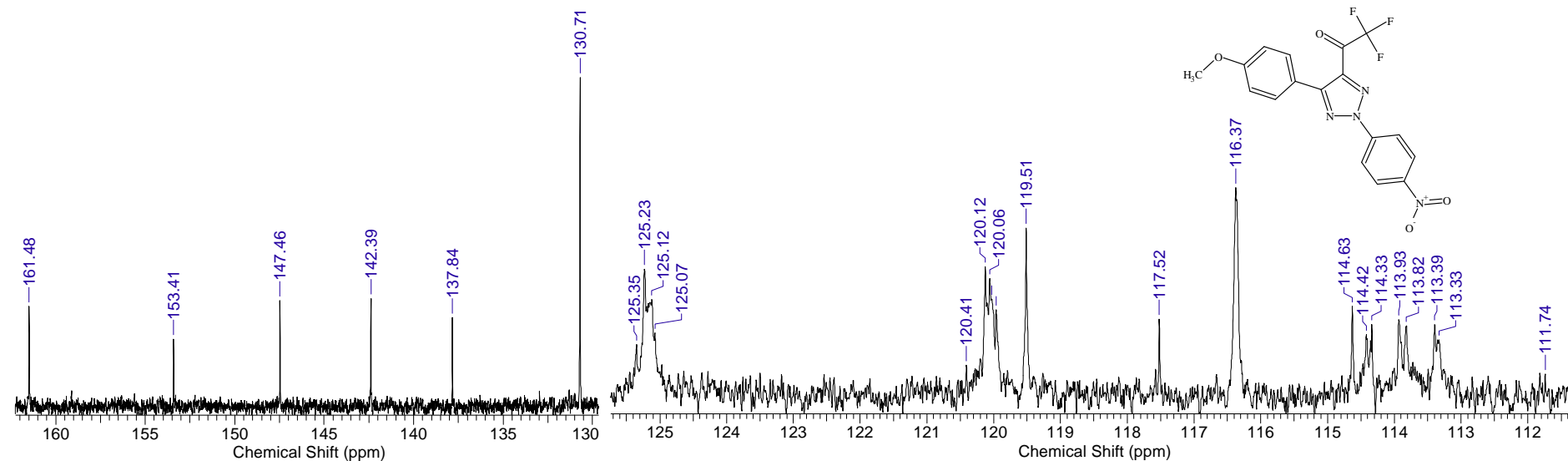


¹H NMR spectrum of **11** (400.1 MHz, CDCl₃)

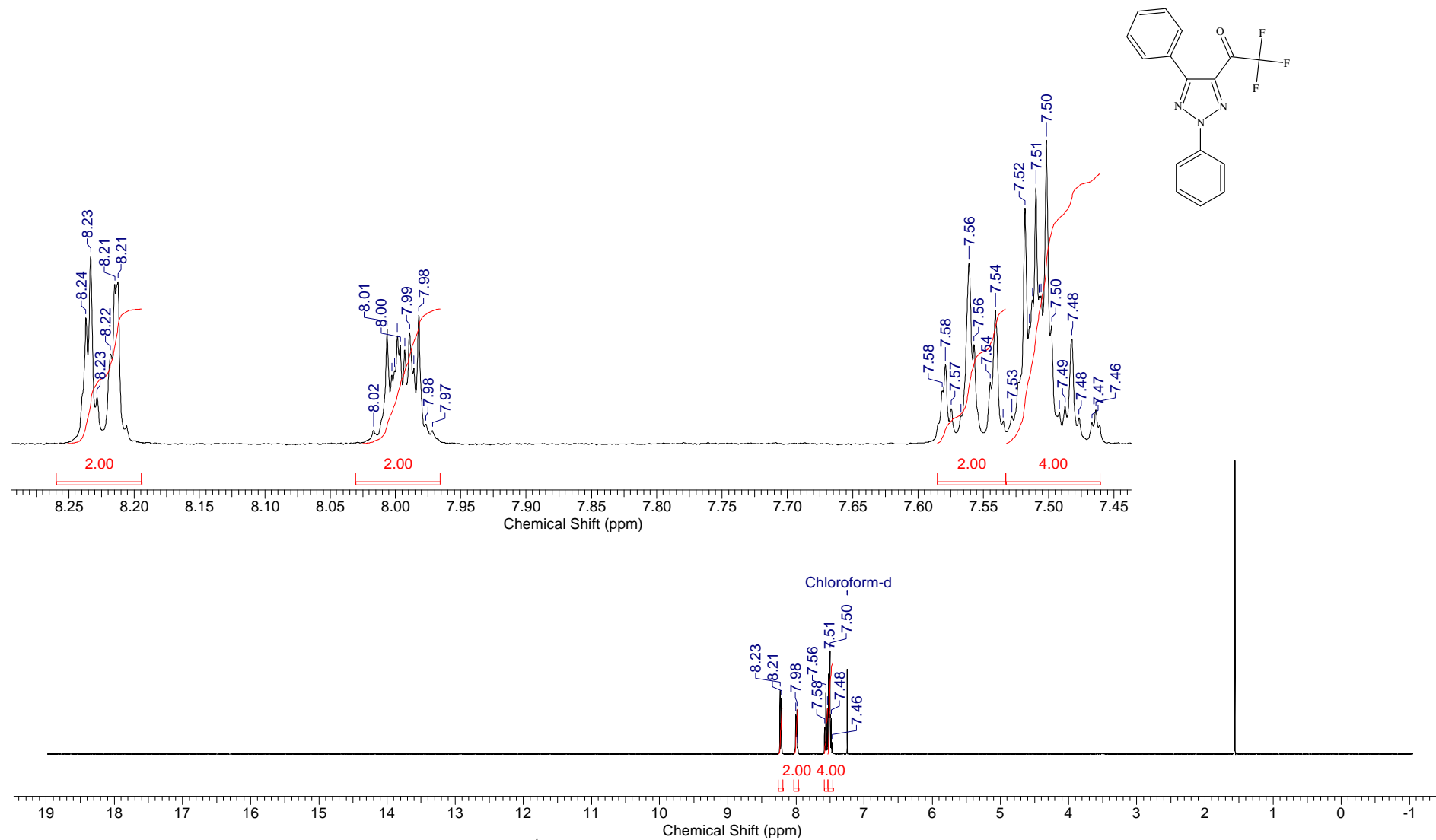
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.	Date	31 Oct 2022 15:49:56
File Name	C:\DOCS\OUTPUT_301\2022\10.октябрь\SA-BM-2672.F_005001r			Frequency (MHz)	376.50
Nucleus	¹⁹ F	Number of Transients	16	Original Points Count	131072
Pulse Sequence	zgfgn	Solvent	CHLOROFORM-D	Points Count	262144
Temperature (degree C)	27.000			Sweep Width (Hz)	75187.97



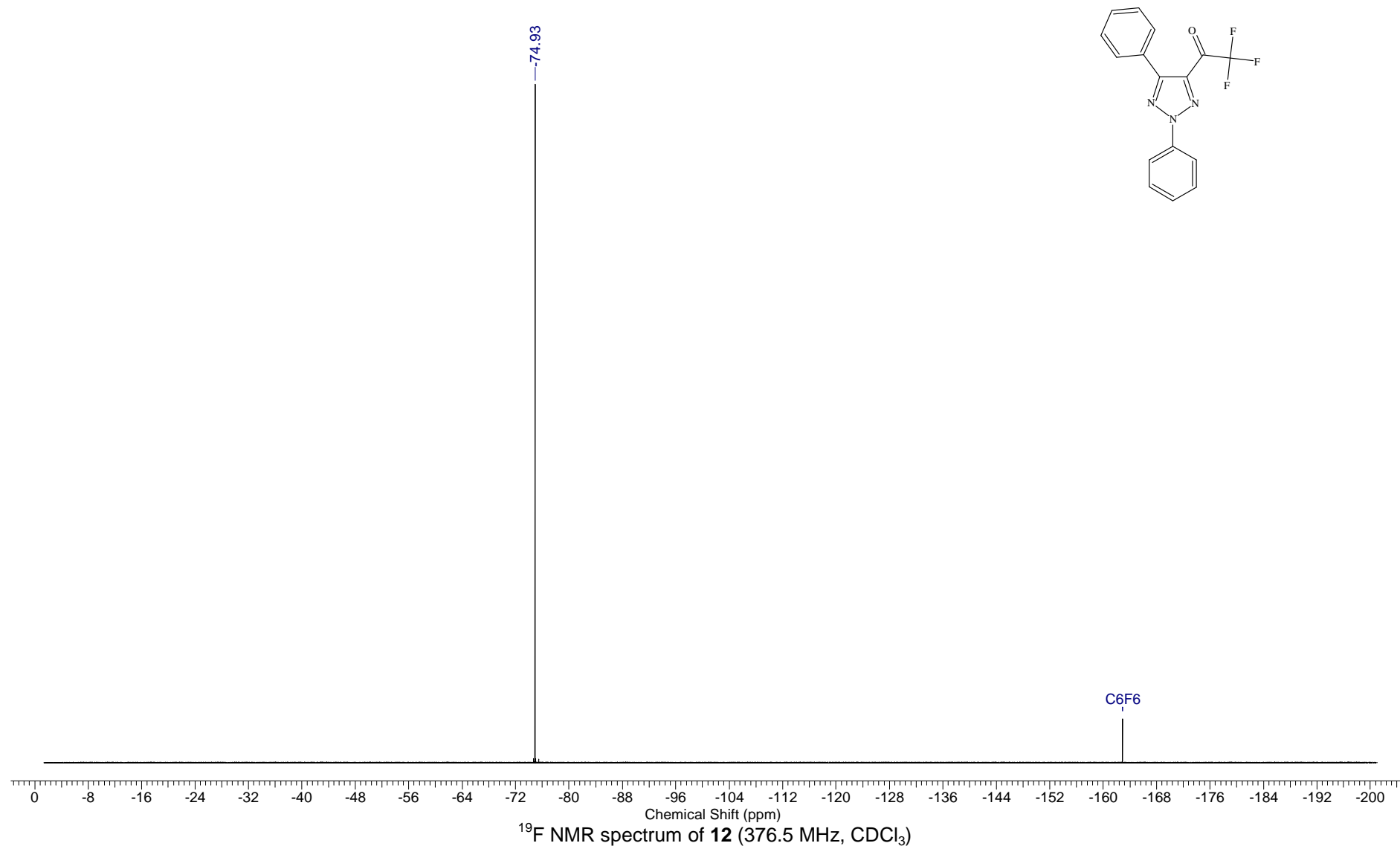
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	01 Nov 2022 14:13:08	
File Name	C:\DOCS\OUTPUT_301\2022\11.ноябрь\SA-BM-2672.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	356	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

¹³C{¹H} NMR spectrum of **11** (100.6 MHz, CDCl₃)

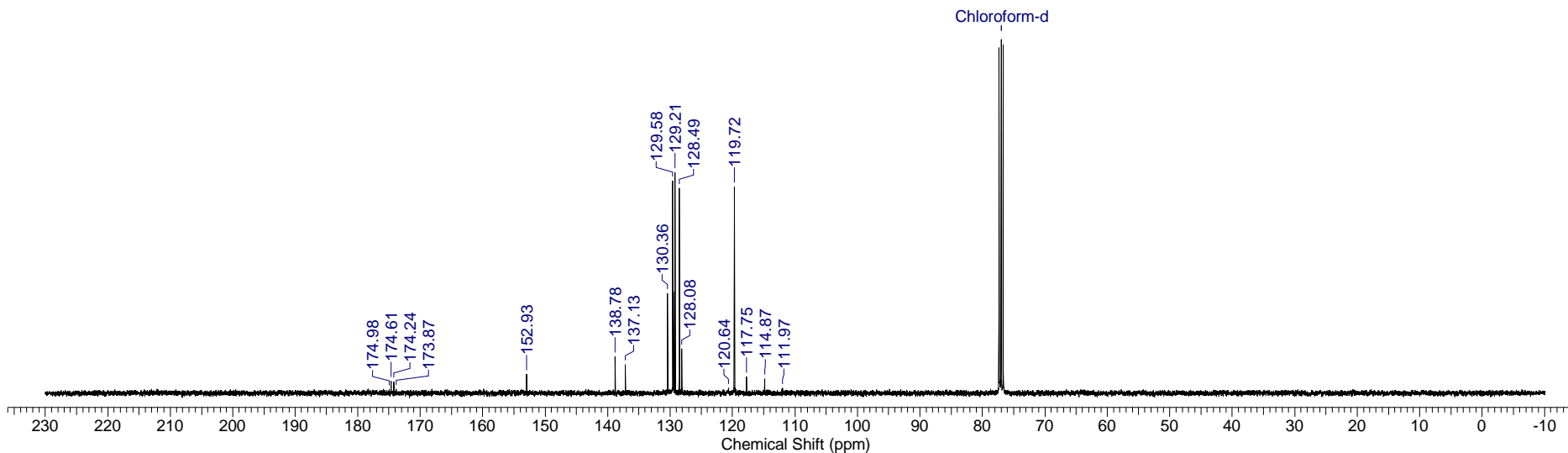
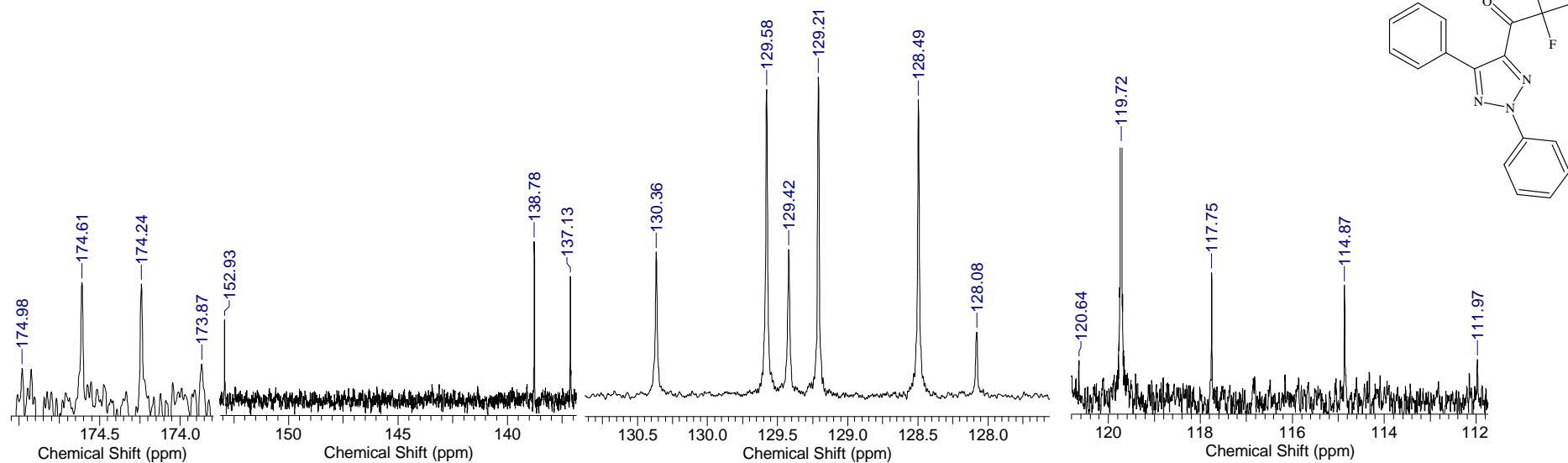
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	13 Dec 2022 15:36:00
File Name	C:\DOCS\OUTPUT_301\2022\12_декабрь\BM-2697-2.H_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	4	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

¹H NMR spectrum of **12** (400.1 MHz, CDCl₃)

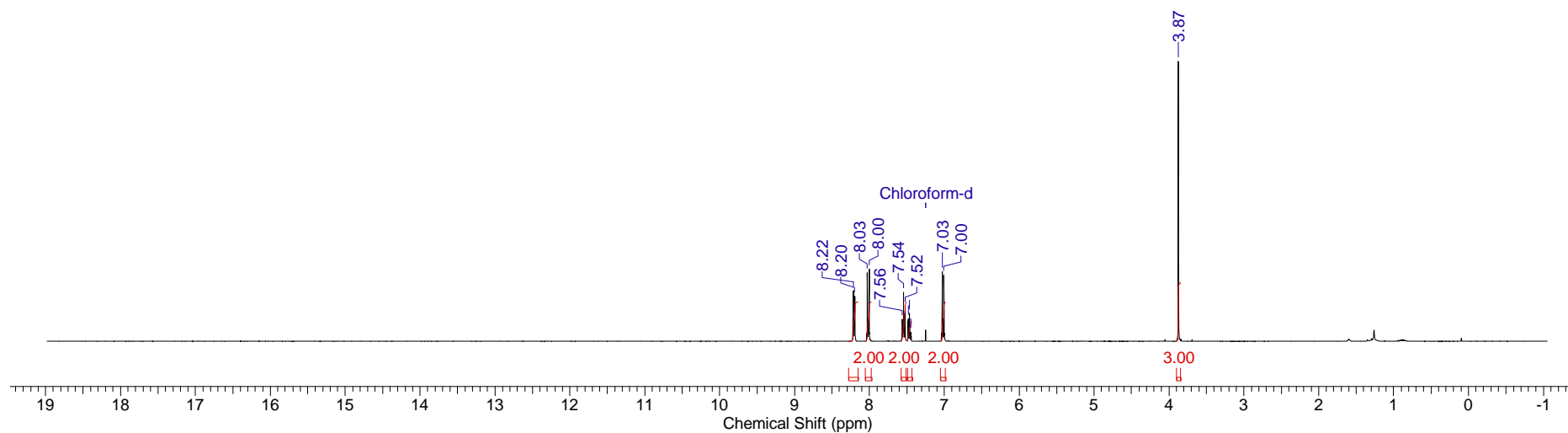
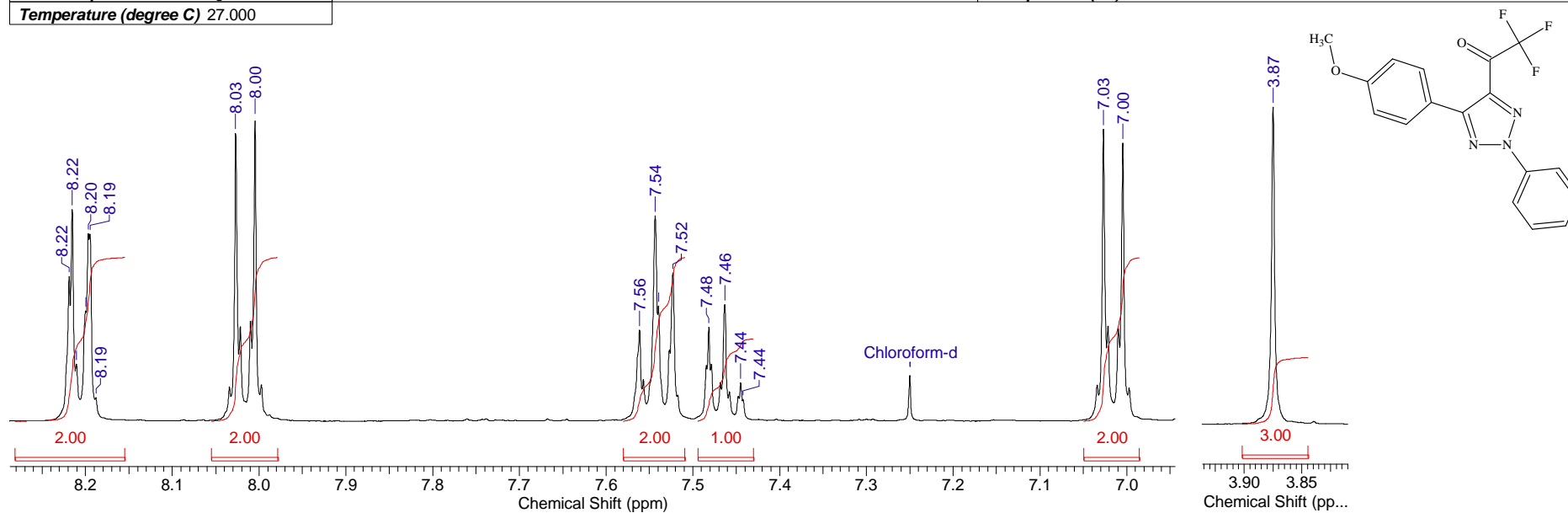
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	13 Dec 2022 15:37:54	
File Name	C:\DOCS\OUTPUT_301\2022\12_декабрь\BM-2697-2.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	14	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



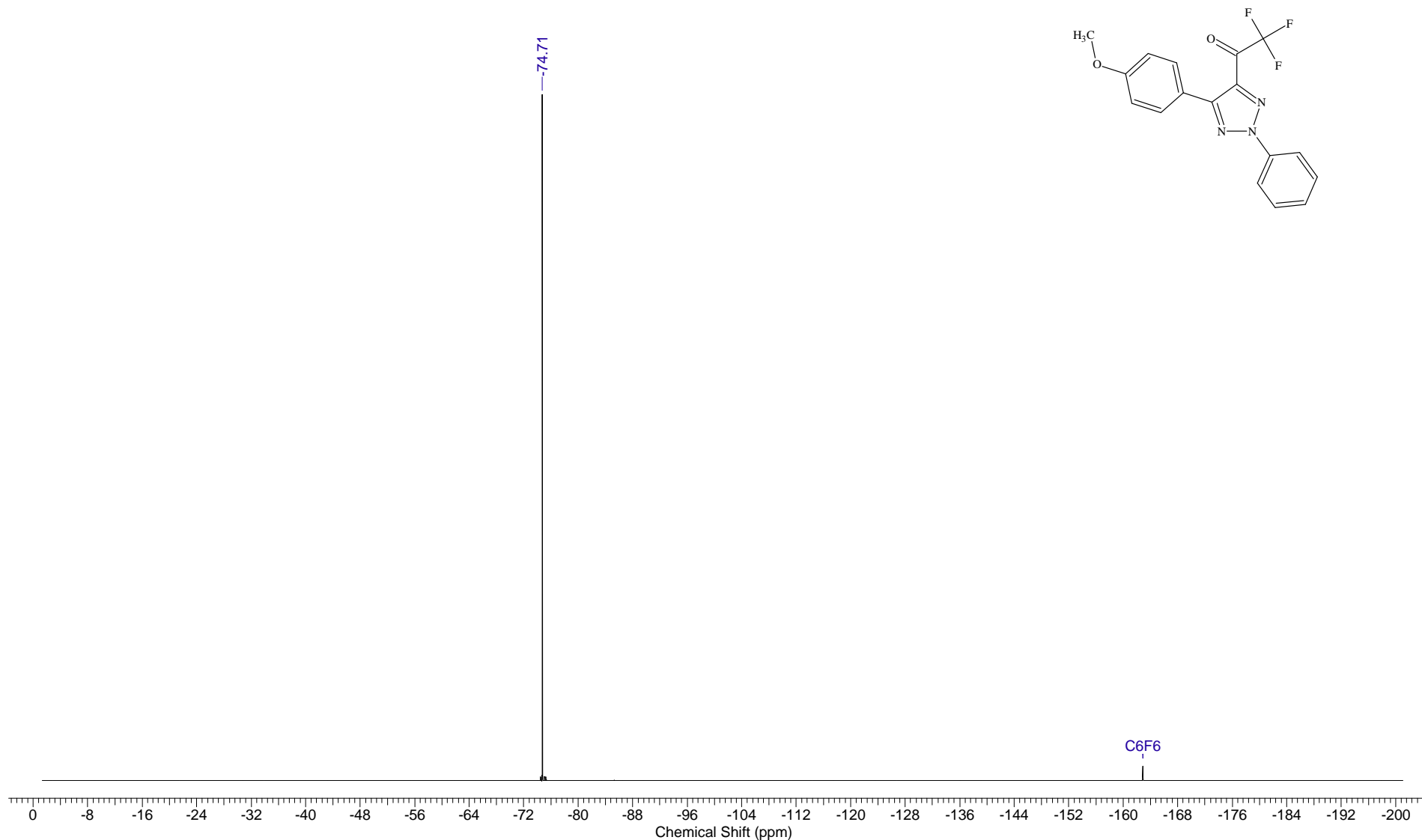
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.	Date	21 Apr 2022 13:09:40
File Name	C:\DOCS\OUTPUT_301\2022\04.апрель\BM-2505-2.C_002001r	Frequency (MHz)	100.61	Points Count	131072
Nucleus	¹³ C	Number of Transients	763	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59
Temperature (degree C)	27.000				

¹³C NMR spectrum of **12** (100.6 MHz, CDCl₃)

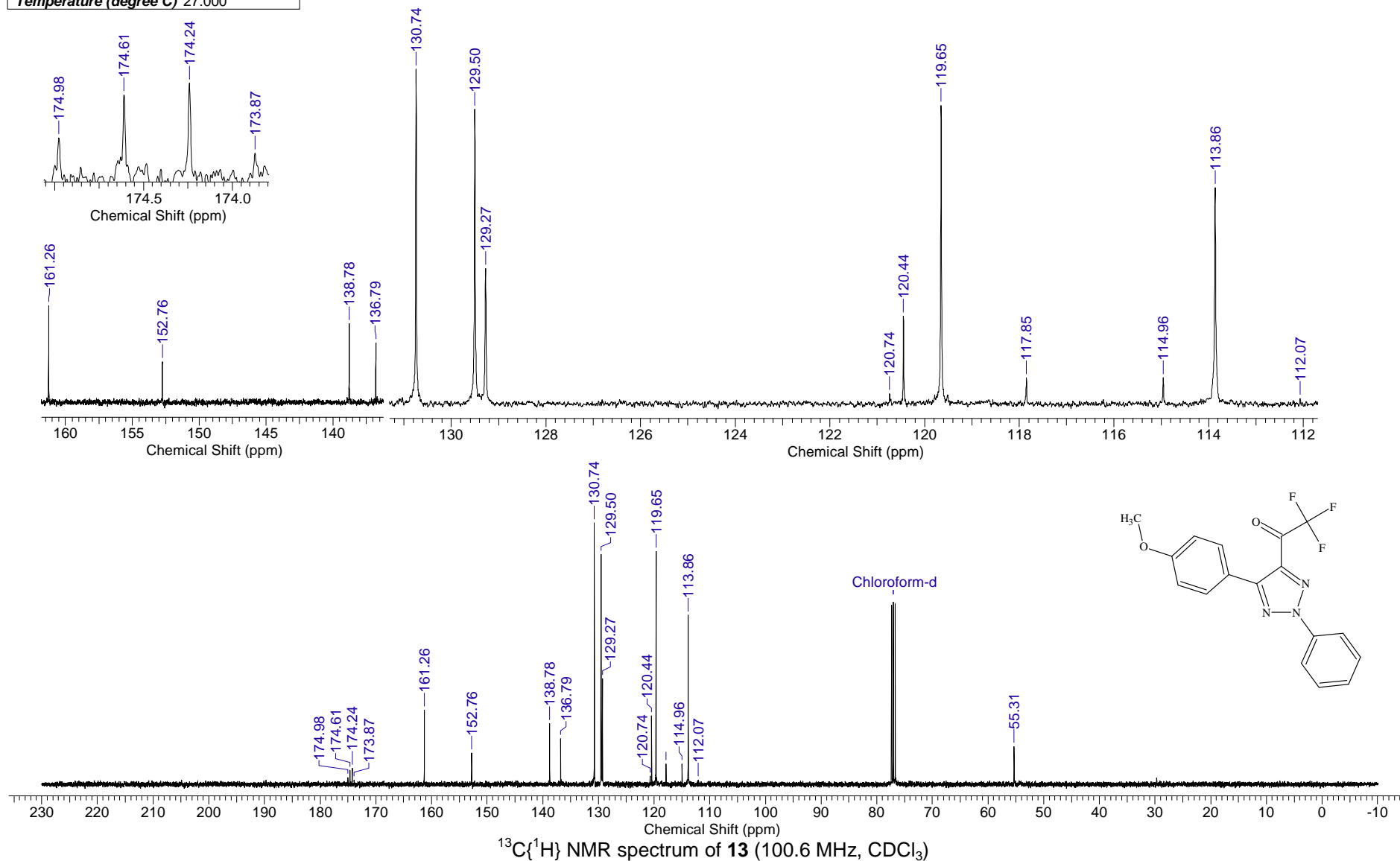
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	15 Oct 2022 22:41:10
File Name	C:\DOCS\BM\ЯМР_COCE\ДИ\2022\221015\BM-2650_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	8	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

¹H NMR spectrum of **13** (400.1 MHz, CDCl₃)

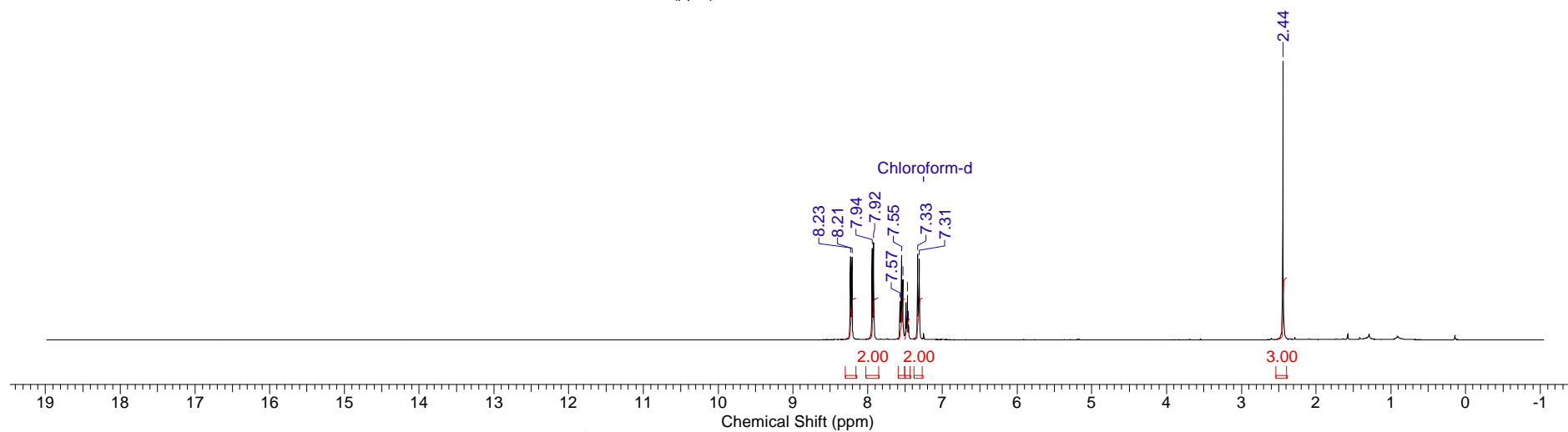
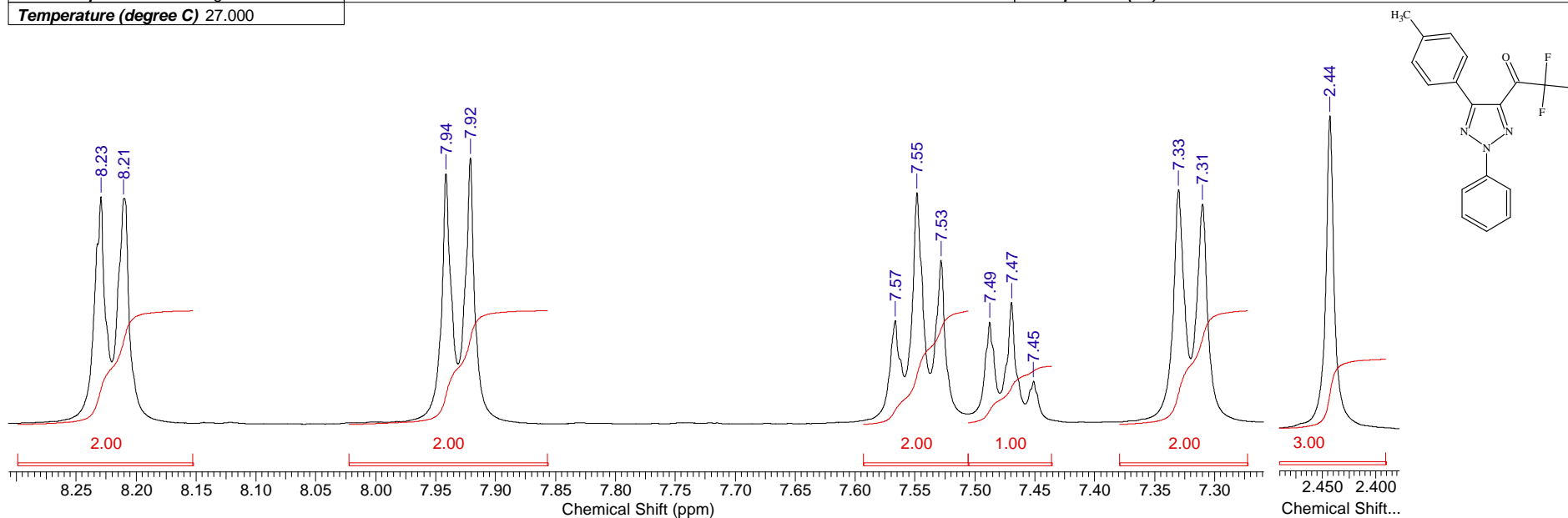
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.			Date	15 Oct 2022 22:44:04
File Name	C:\DOCS\BM\ЯMP_COCE\ДИ\2022\221015\BM-2650_005001r					Frequency (MHz)	376.50
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D			Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000						



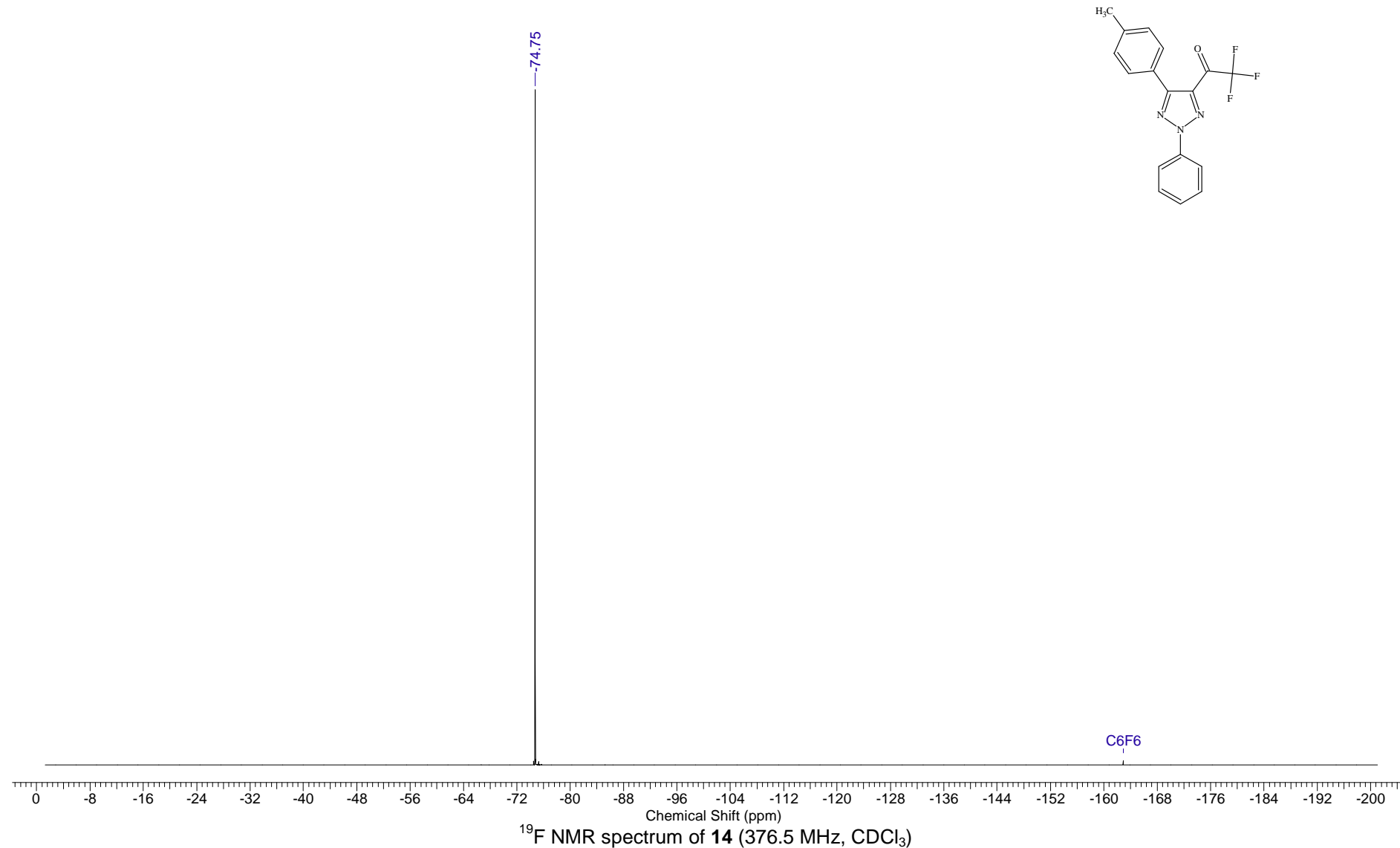
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.	Date	18 Oct 2022 14:48:06
File Name	C:\DOCS\OUTPUT_301\2022\10.октябрь\BM-2650.C_002001r			Frequency (MHz)	100.61
Nucleus	¹³ C	Number of Transients	273	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	24154.59



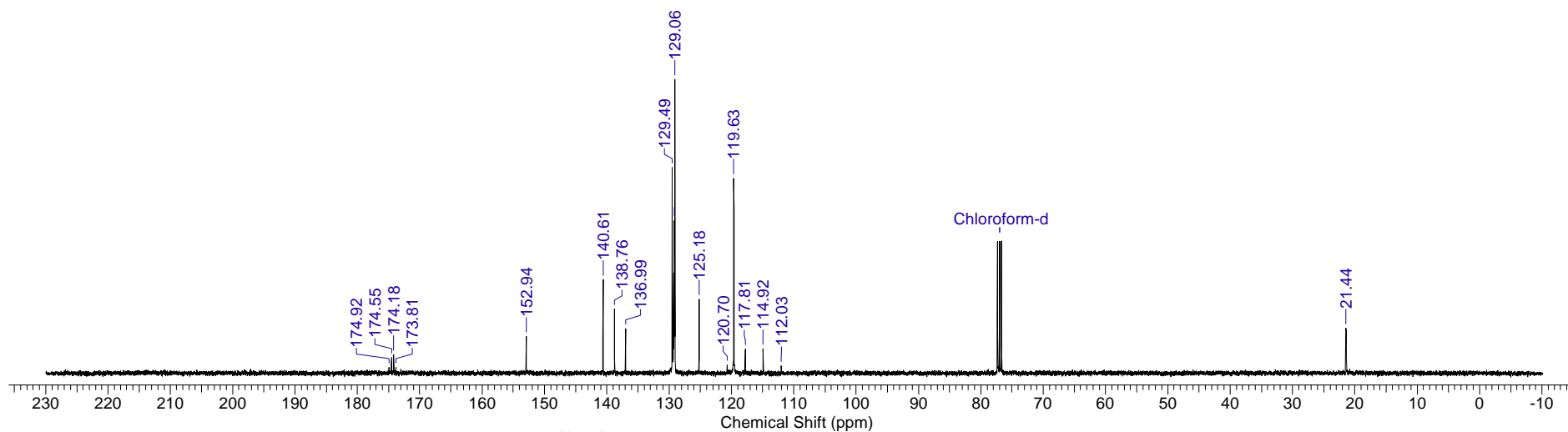
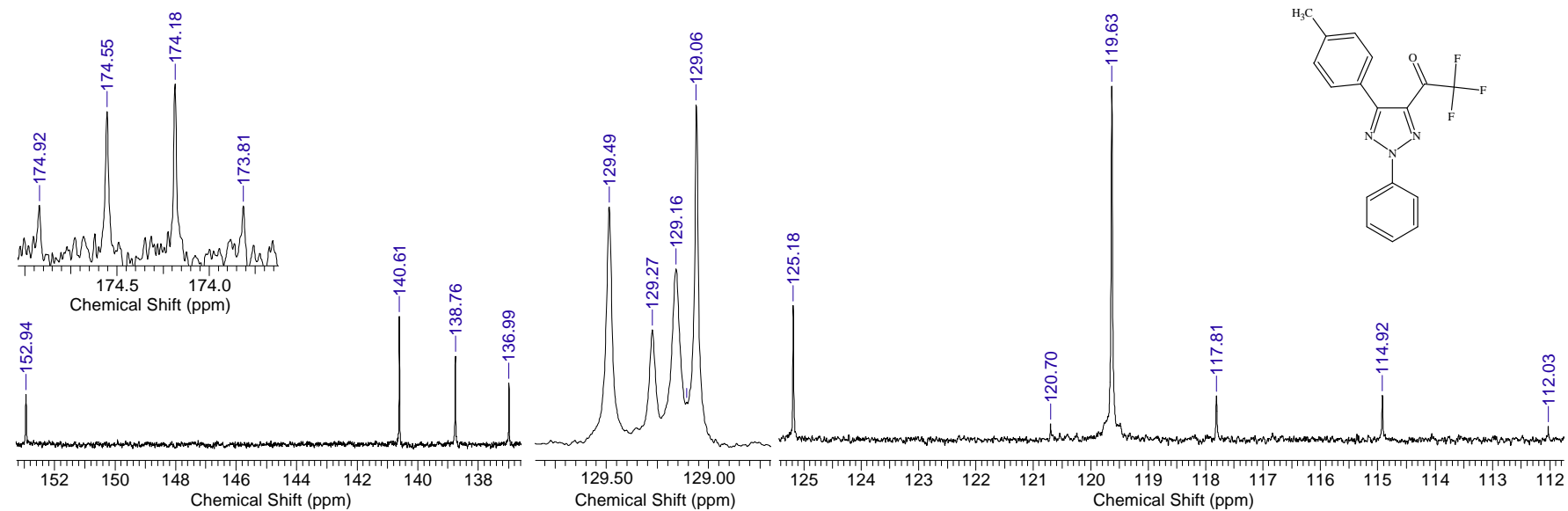
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.			Date	14 Nov 2022 15:31:06
File Name	C:\BM_DATA\DOCS\5ZA-BM-2676-5\5ZA-BM-2676-5\5ZA-BM-2676-5.H_001001r					Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000						H ₃ C

¹H NMR spectrum of **14** (400.1 MHz, CDCl₃)

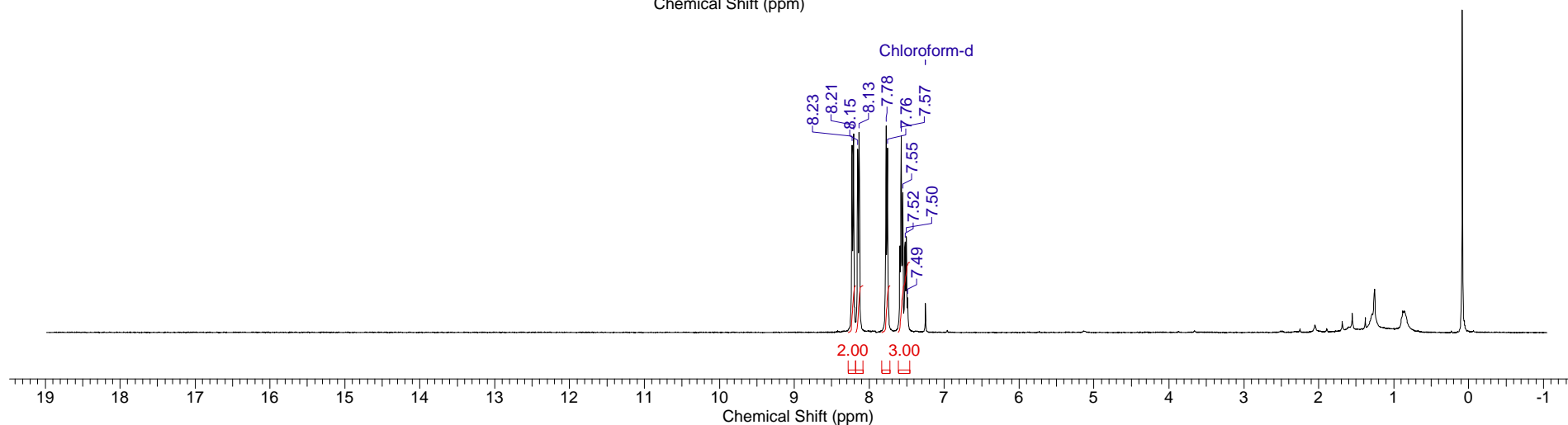
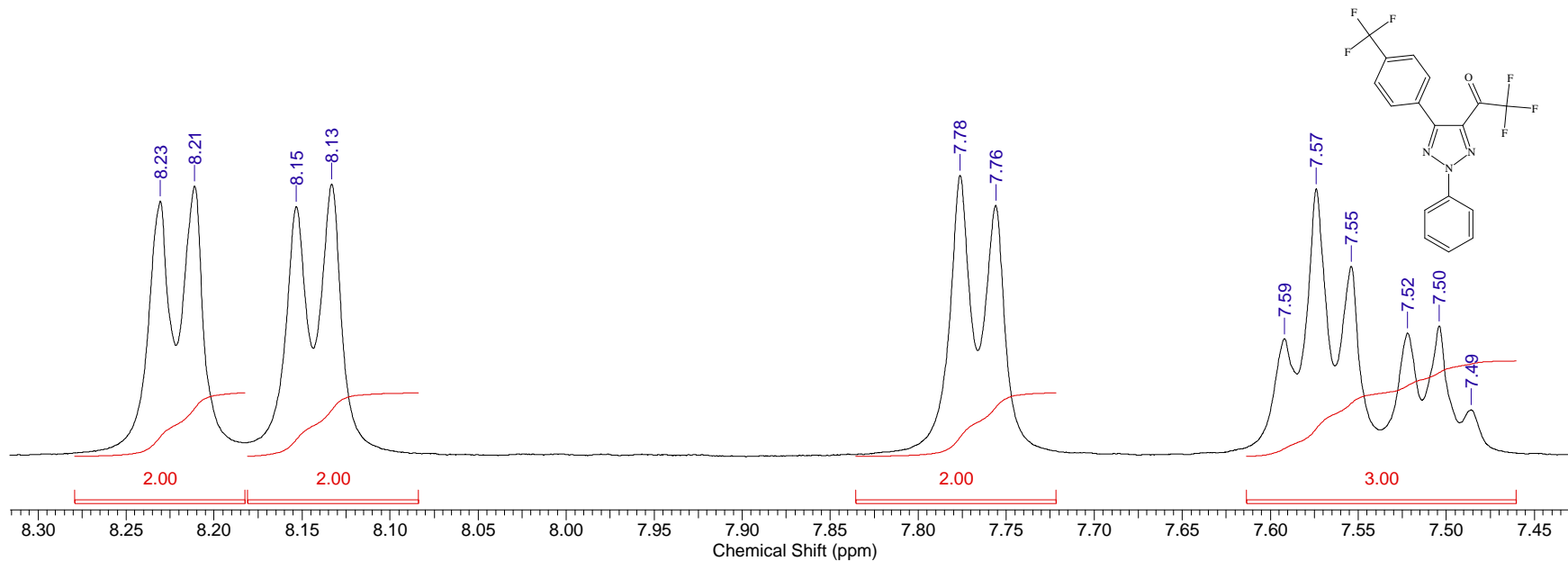
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	14 Nov 2022 15:44:06	
File Name	C:\BM_DATA\DOCS\LSZA-BM-2676-5\LSZA-BM-2676-5\LSZA-BM-2676-5.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						



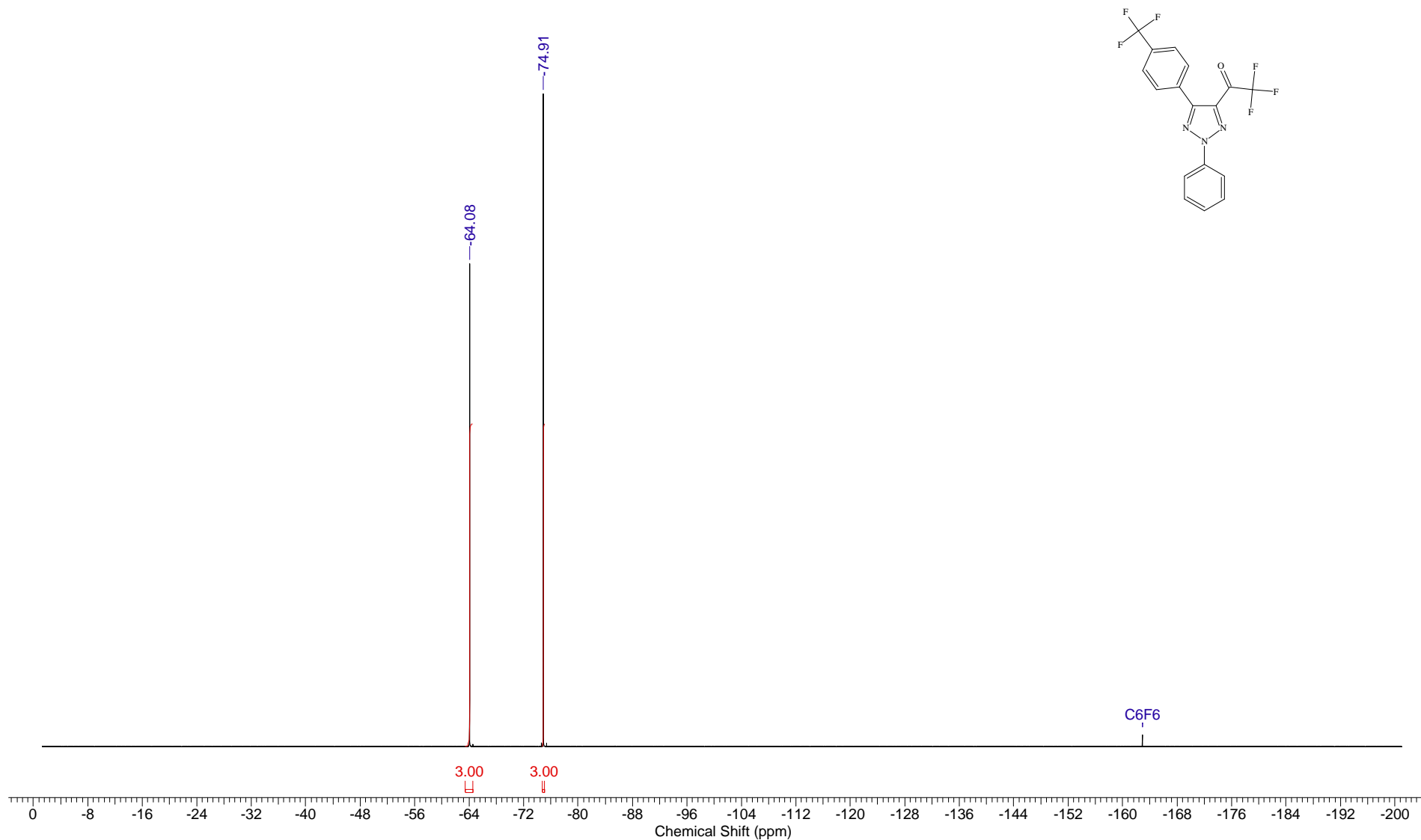
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	14 Nov 2022 15:40:02	
File Name	C:\BM_DATA\DOCS\5ZA-BM-2676-5\5ZA-BM-2676-5\5ZA-BM-2676-5.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	180	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DEUTERIUM OXIDE		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **14** (100.6 MHz, CDCl_3)

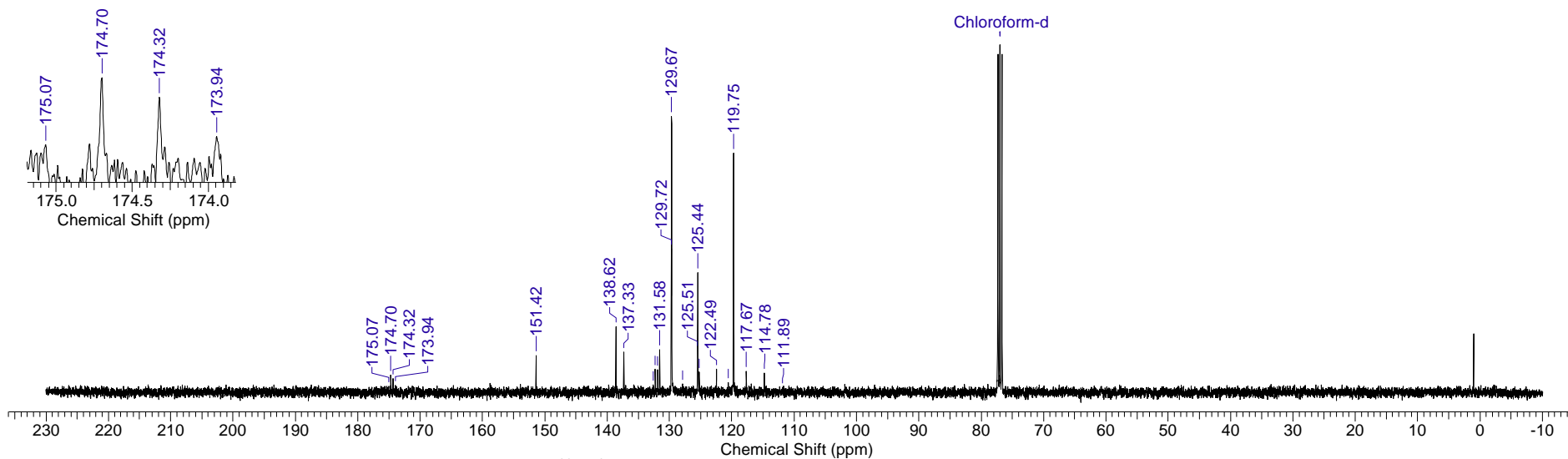
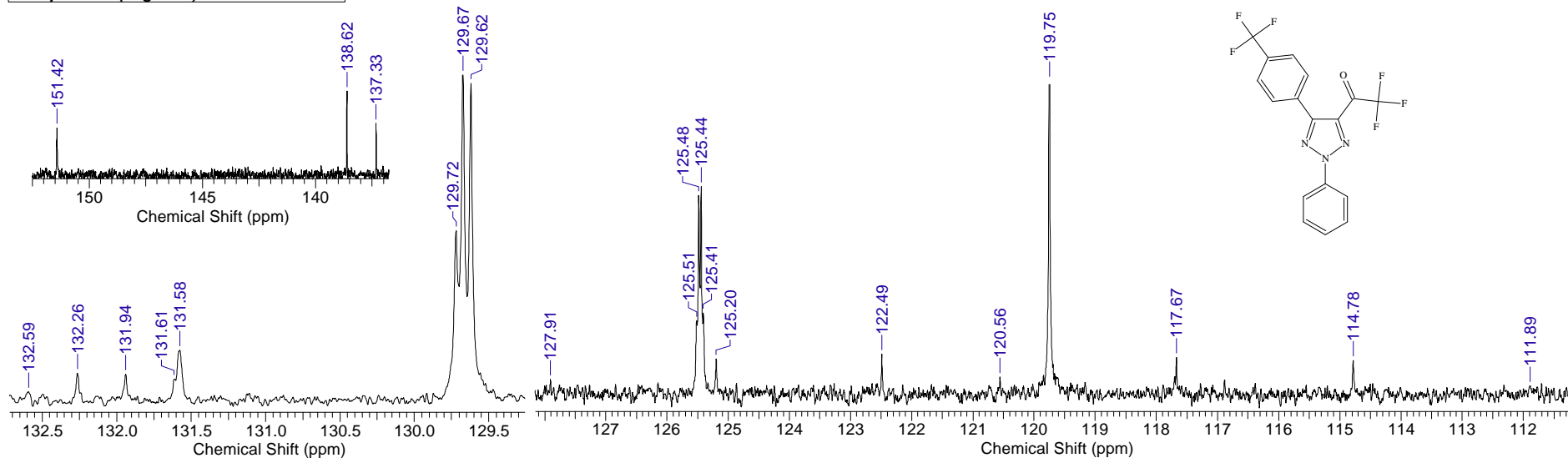
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	15 Nov 2022 14:46:50	
File Name	G:\DISK_ULTRA\SPEC_H,C_2022\11.ноябрь\SZA-BM-2677-9.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

¹H NMR spectrum of **15** (400.1 MHz, CDCl₃)

Acquisition Time (sec)	1.7433	Comment			Imported from UXNMR.		Date	15 Nov 2022 15:01:52	
File Name	G:\DISK_ULTRA\SPEC_H,C_2022\11.ноябрь\SZA-BM-2677-9.F_005001r						Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients		16	Original Points Count		131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent		CHLOROFORM-D			Sweep Width (Hz)		75187.97
Temperature (degree C)	27.000								

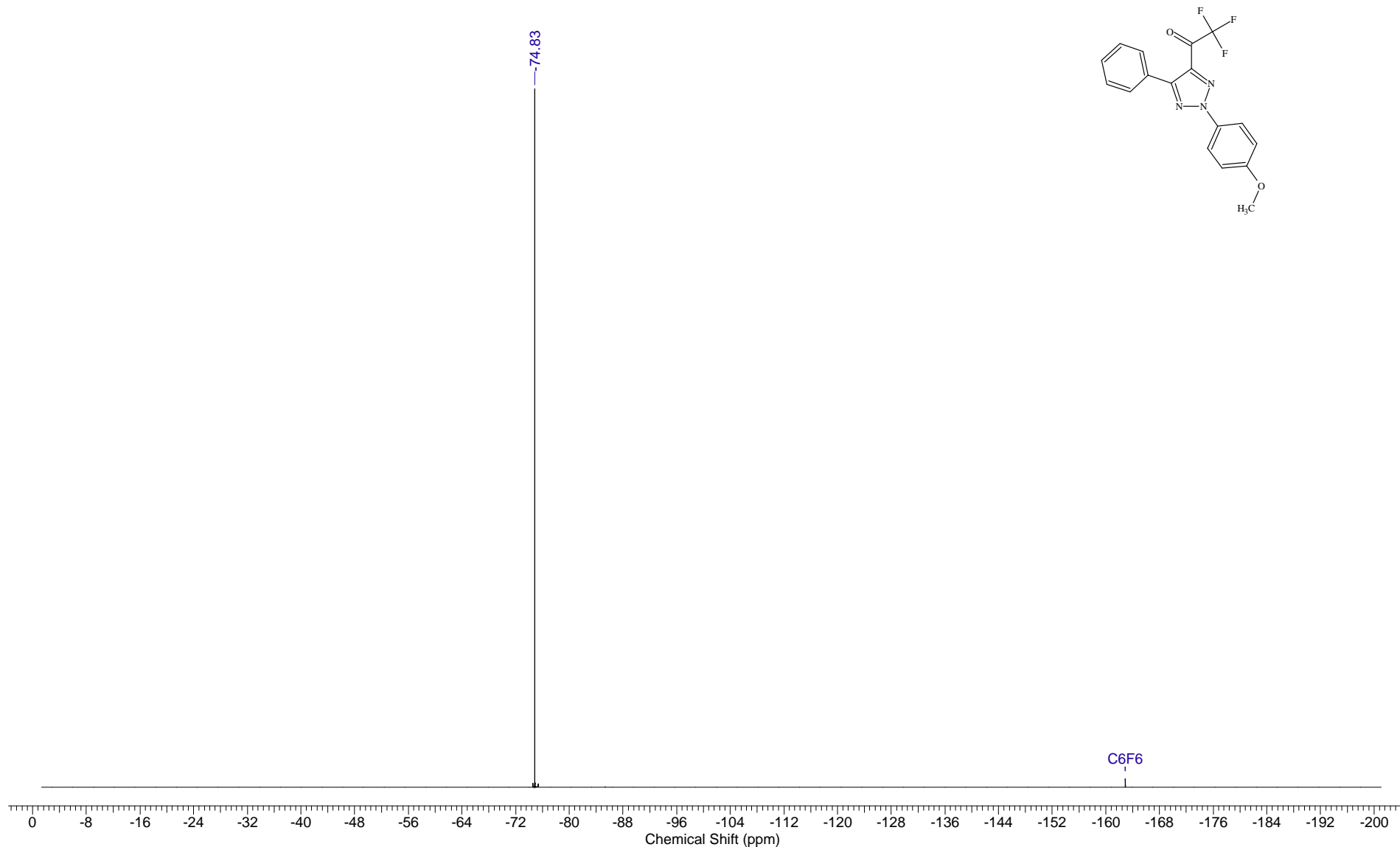
¹⁹F NMR spectrum of **15** (376.5 MHz, CDCl₃)

Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	15 Nov 2022 14:57:30	
File Name	G:\DISK_ULTRA\SPEC_H.C_2022\11.ноябрь\SA-BM-2677-9.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	257	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DEUTERIUM OXIDE		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

¹³C{¹H} NMR spectrum of **15** (100.6 MHz, CDCl₃)

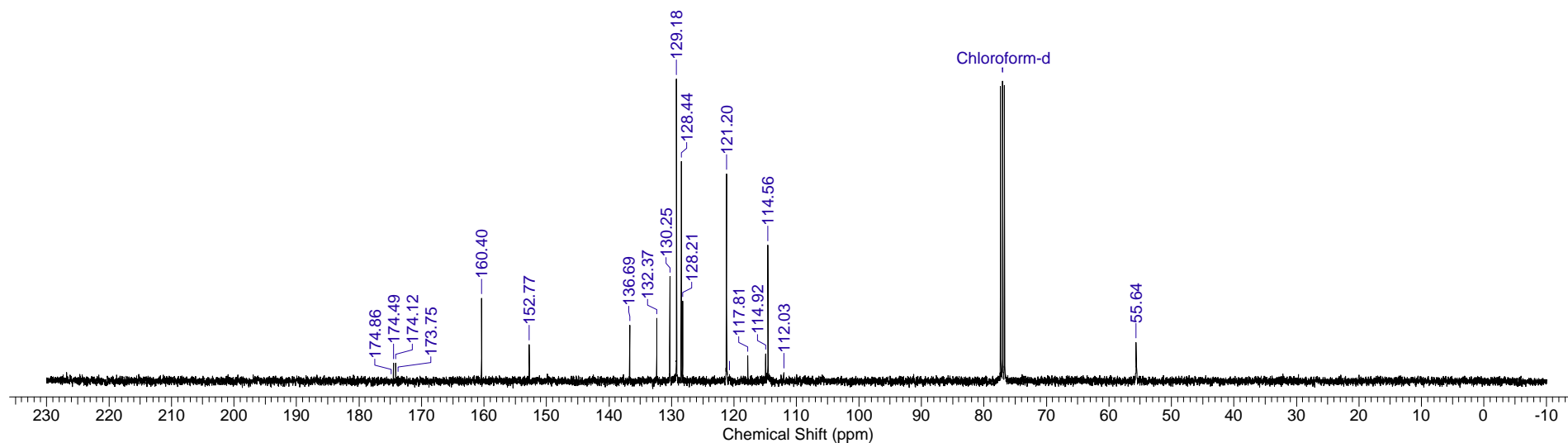
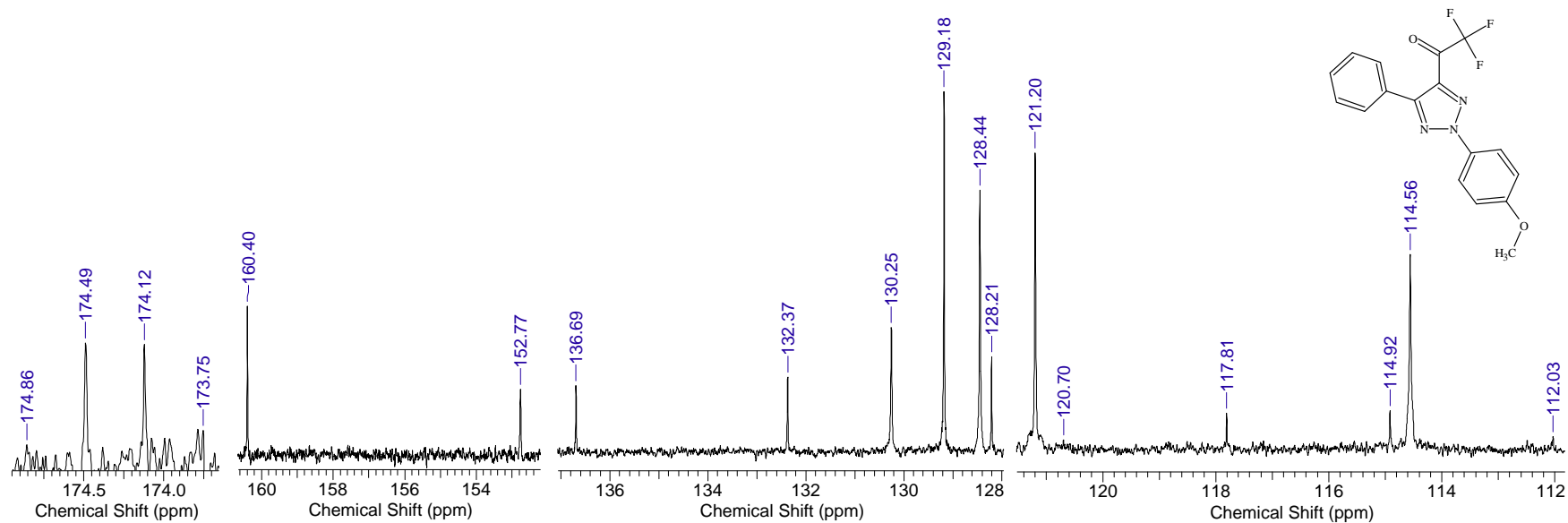


Acquisition Time (sec)	1.7433	Comment	Imported from UXMNR.		Date	20 Oct 2022 12:15:18	
File Name	C:\DOCS\OUTPUT_301\2022\10.октябрь\BM-2655.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	BENZENE-D6	Sweep Width (Hz)	75187.97	Temperature (degree C)	27.000

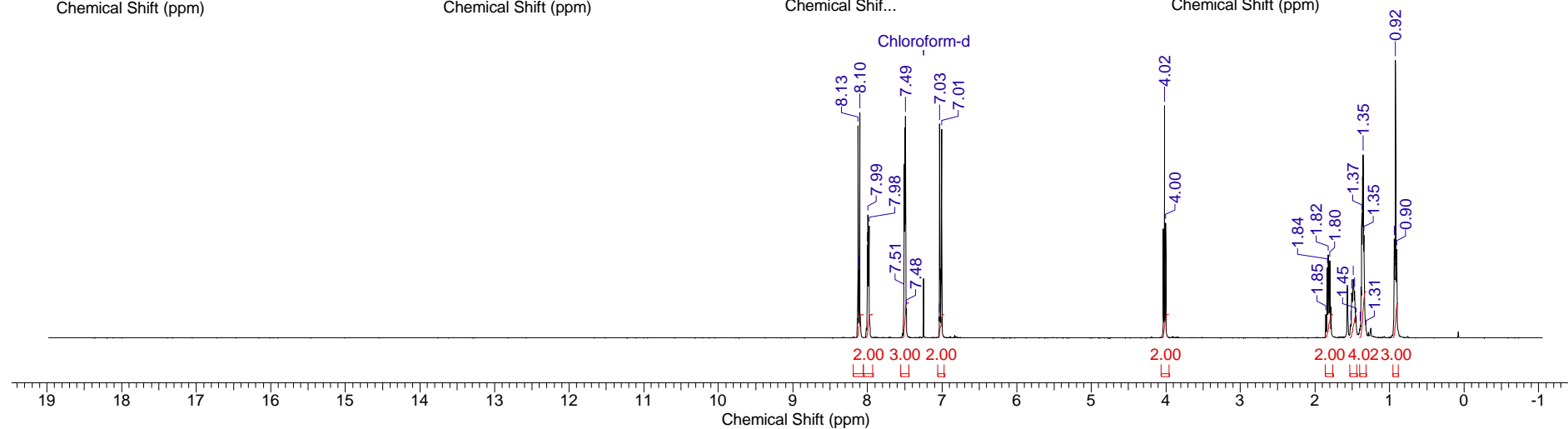
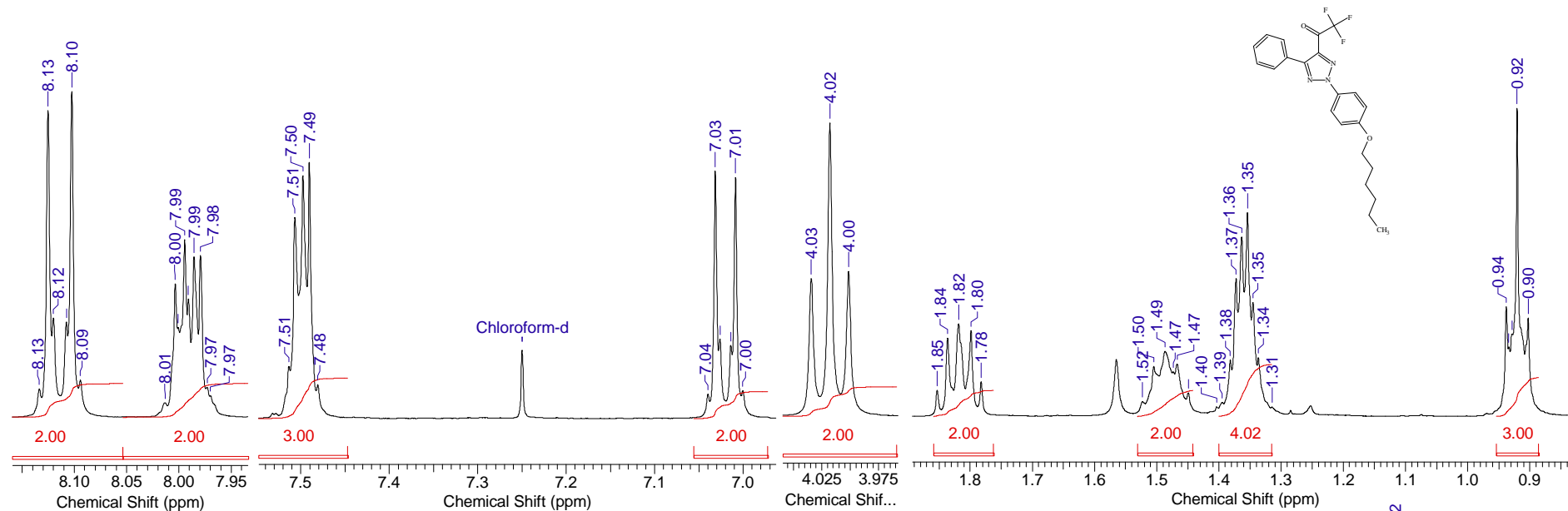
¹⁹F NMR spectrum of **16** (376.5 MHz, CDCl₃)

S131

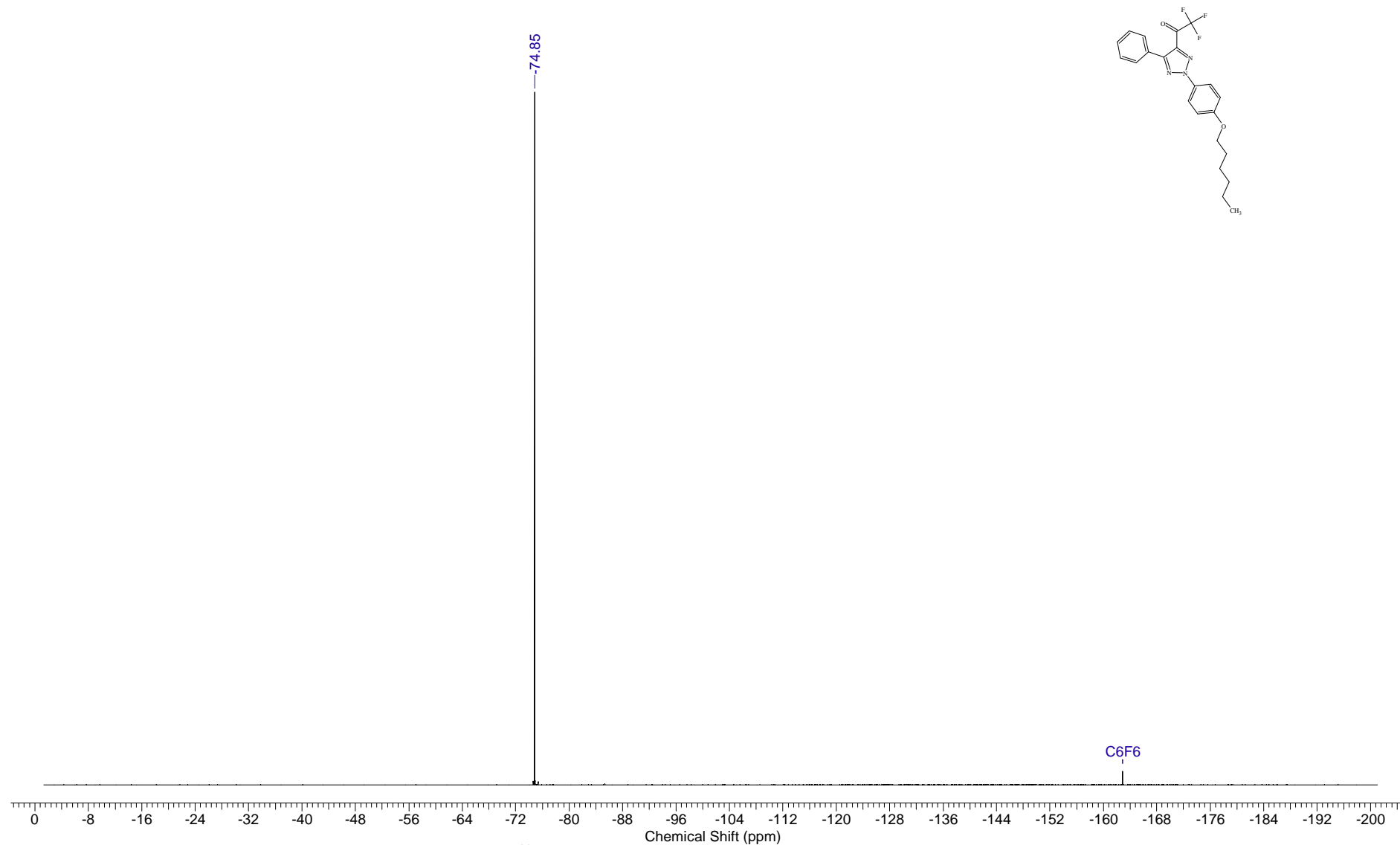
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	20 Oct 2022 12:09:26	
File Name	C:\DOCS\OUTPUT_301\2022\10.октябрь\BM-2655.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	190	Original Points Count	16384	Points Count	131072
Pulse Sequence	zpgq30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

¹³C{¹H} NMR spectrum of **16** (100.6 MHz, CDCl₃)

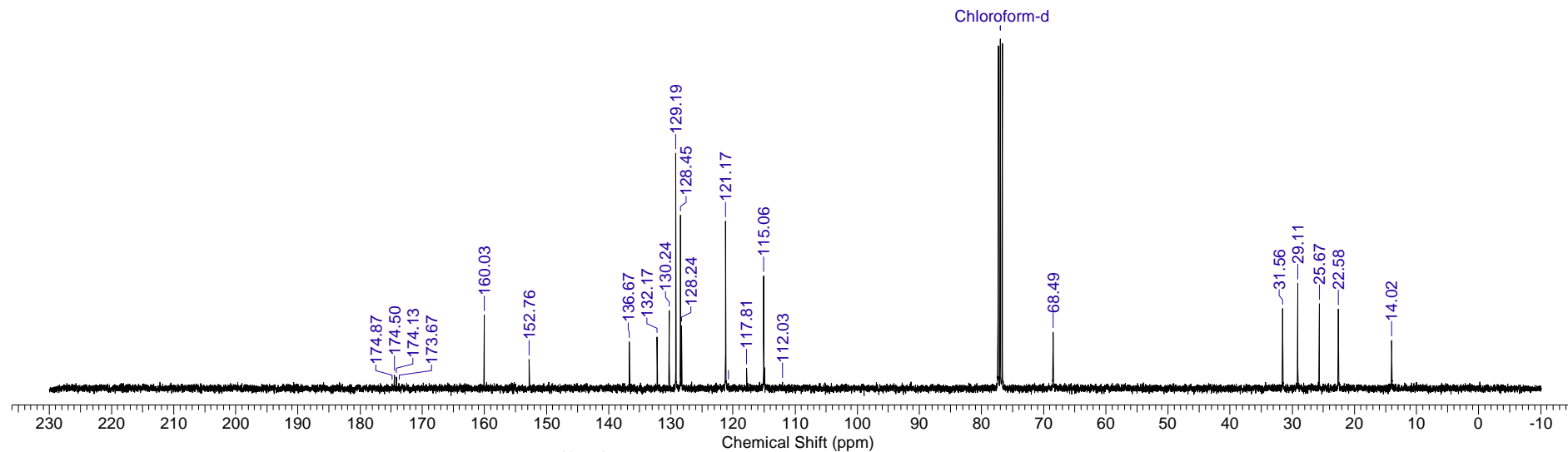
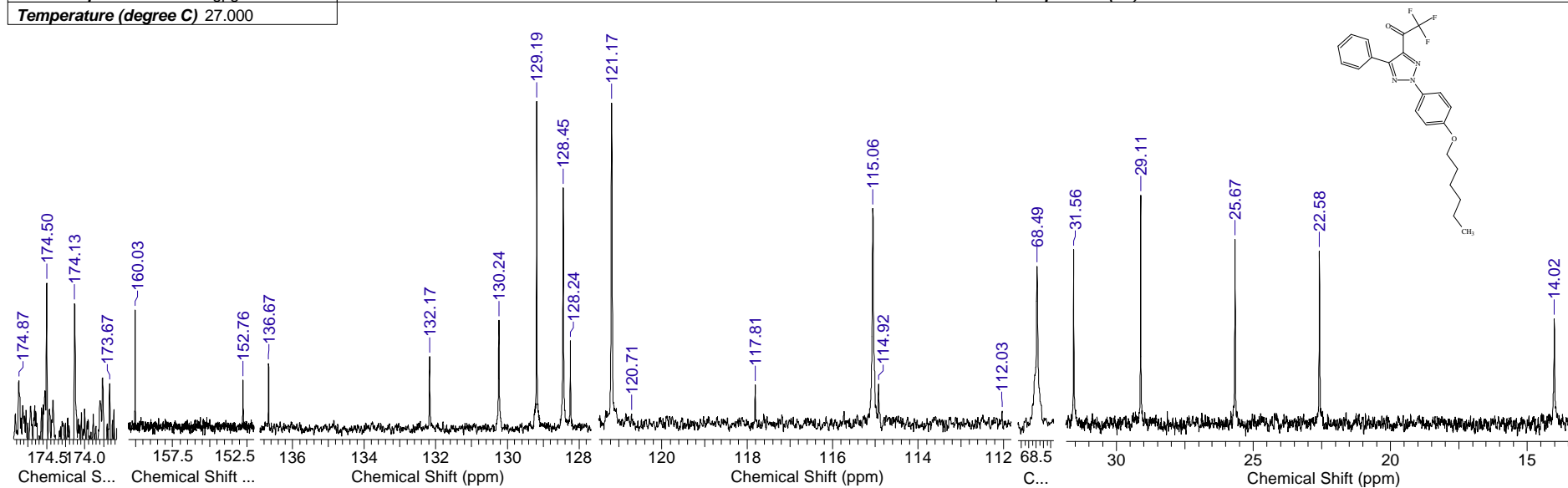
Acquisition Time (sec)	4.0894	Comment Imported from UXNMR.			Date	20 Oct 2022 23:52:48	
File Name	C:\DOCS\BM\MP_COSEДИ\2022\bm221020\BM-2656-2p_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	8	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

¹H NMR spectrum of 17 (400.1 MHz, CDCl₃)

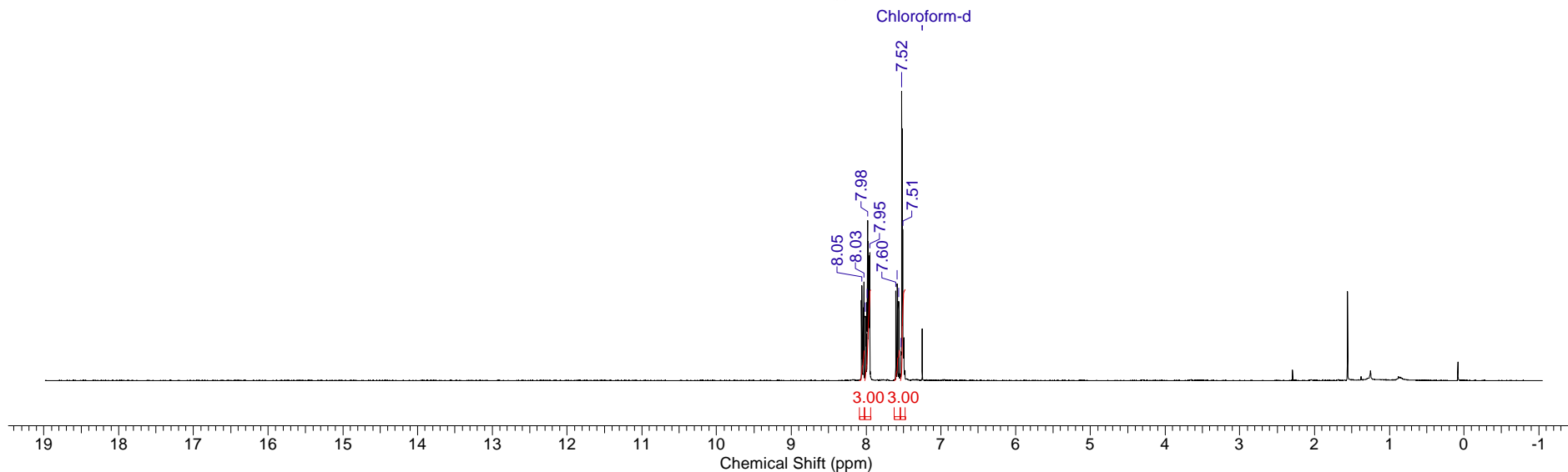
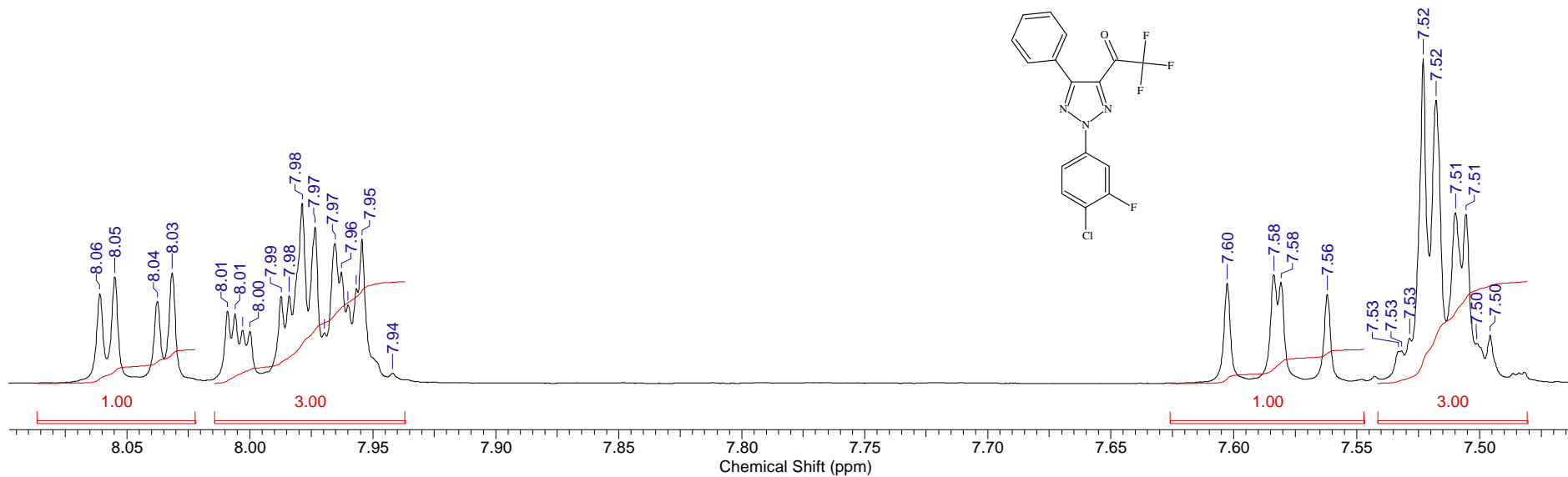
Acquisition Time (sec)	1.7433	Comment	Imported from UXMNR.		Date	21 Oct 2022 15:57:16	
File Name	C:\DOCS\OUTPUT_301\2022\10.октябрь\BM-2656-2p.F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	16	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	BENZENE-D6	Sweep Width (Hz)	75187.97	Temperature (degree C)	27.000



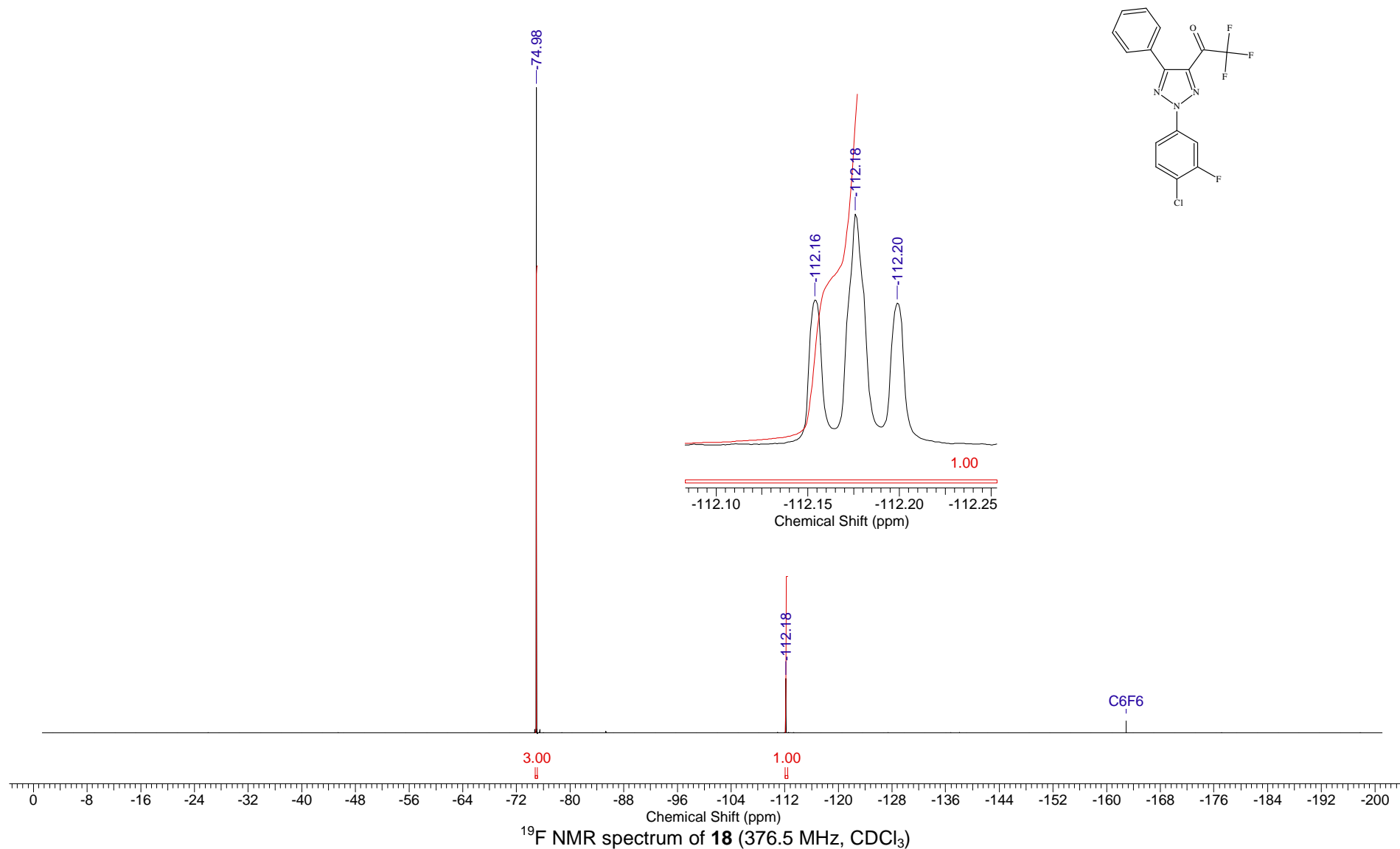
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.	Date	21 Oct 2022 16:30:44
File Name	C:\DOCS\OUTPUT_301\2022\10.октябрь\BM-2656-2p.C_002001r			Frequency (MHz)	100.61
Nucleus	¹³ C	Number of Transients	386	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	24154.59

¹³C{¹H} NMR spectrum of **17** (100.6 MHz, CDCl₃)

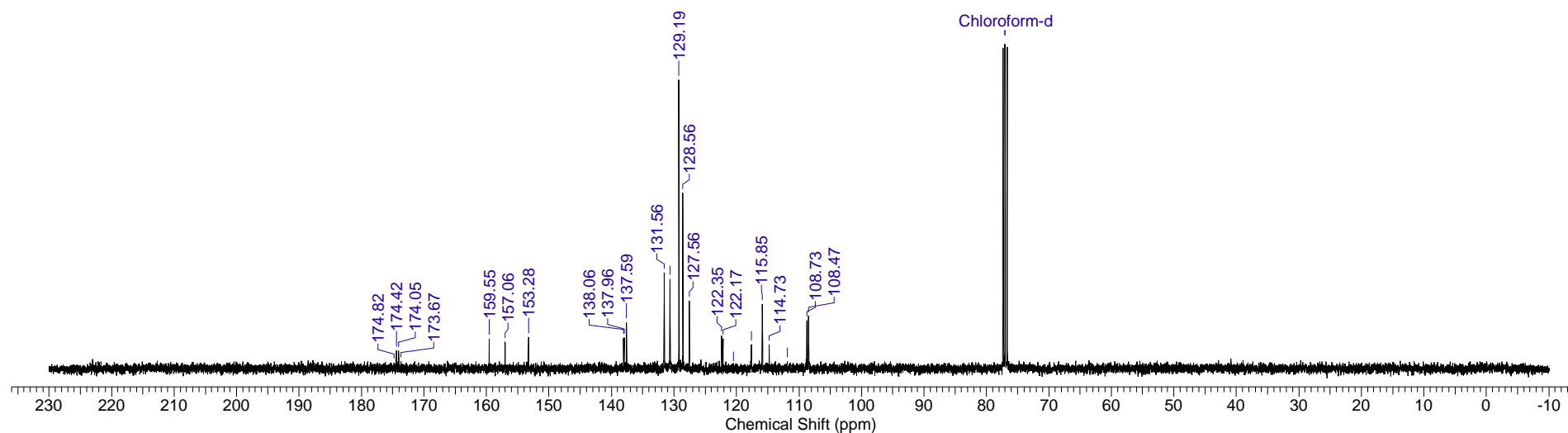
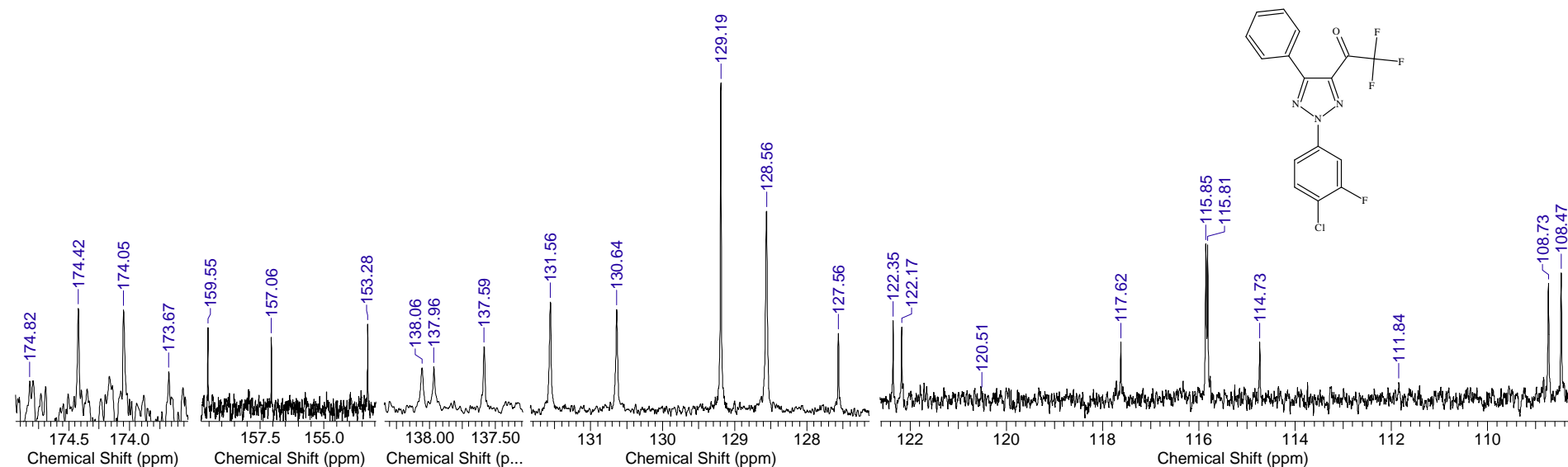
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	11 Nov 2022 15:50:04	
File Name	C:\BM_DATA\DOCS\SZA-BM-11.11.2022\SZA-BM-2674(2).H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	DMSO-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000

¹H NMR spectrum of **18** (400.1 MHz, CDCl₃)

Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.		Date	11 Nov 2022 15:48:12	
File Name	C:\BM_DATA\DOCS\SZA-BM-11.11.2022\SZA-BM-2674(2).F_005001r				Frequency (MHz)	376.50	
Nucleus	19F	Number of Transients	9	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D		Sweep Width (Hz)	75187.97	
Temperature (degree C)	27.000						

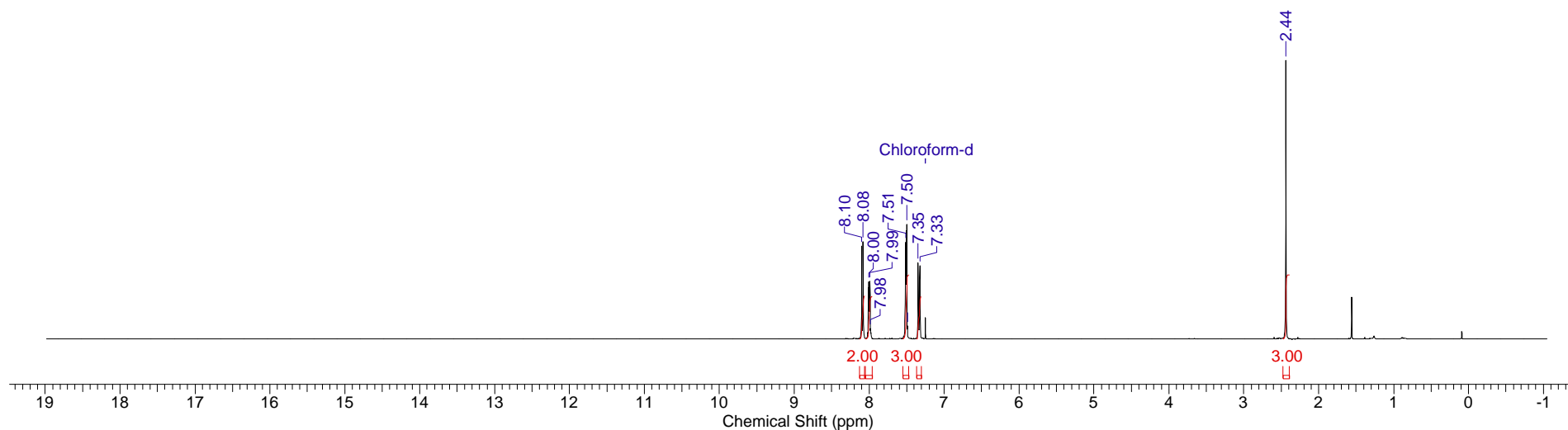
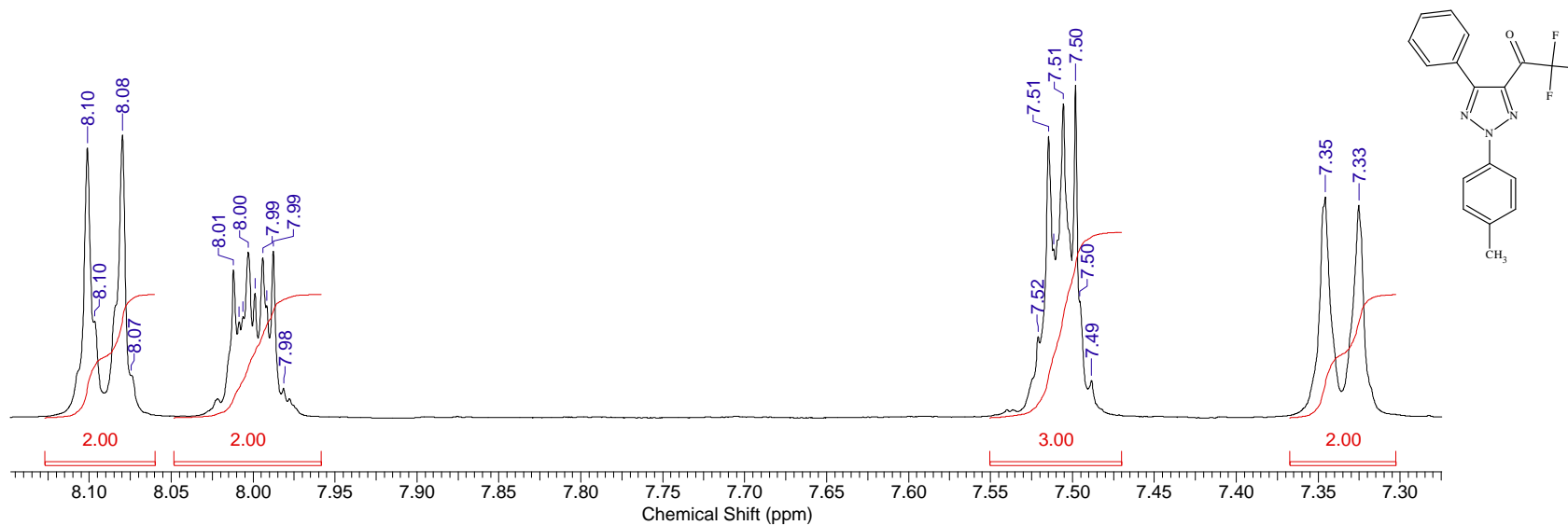


Acquisition Time (sec)	0.6783	Comment Imported from UXNMR.			Date	11 Nov 2022 15:59:10	
File Name	C:\BM_DATA\DOCS\SZA-BM-11.11.2022\SZA-BM-2674.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	193	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

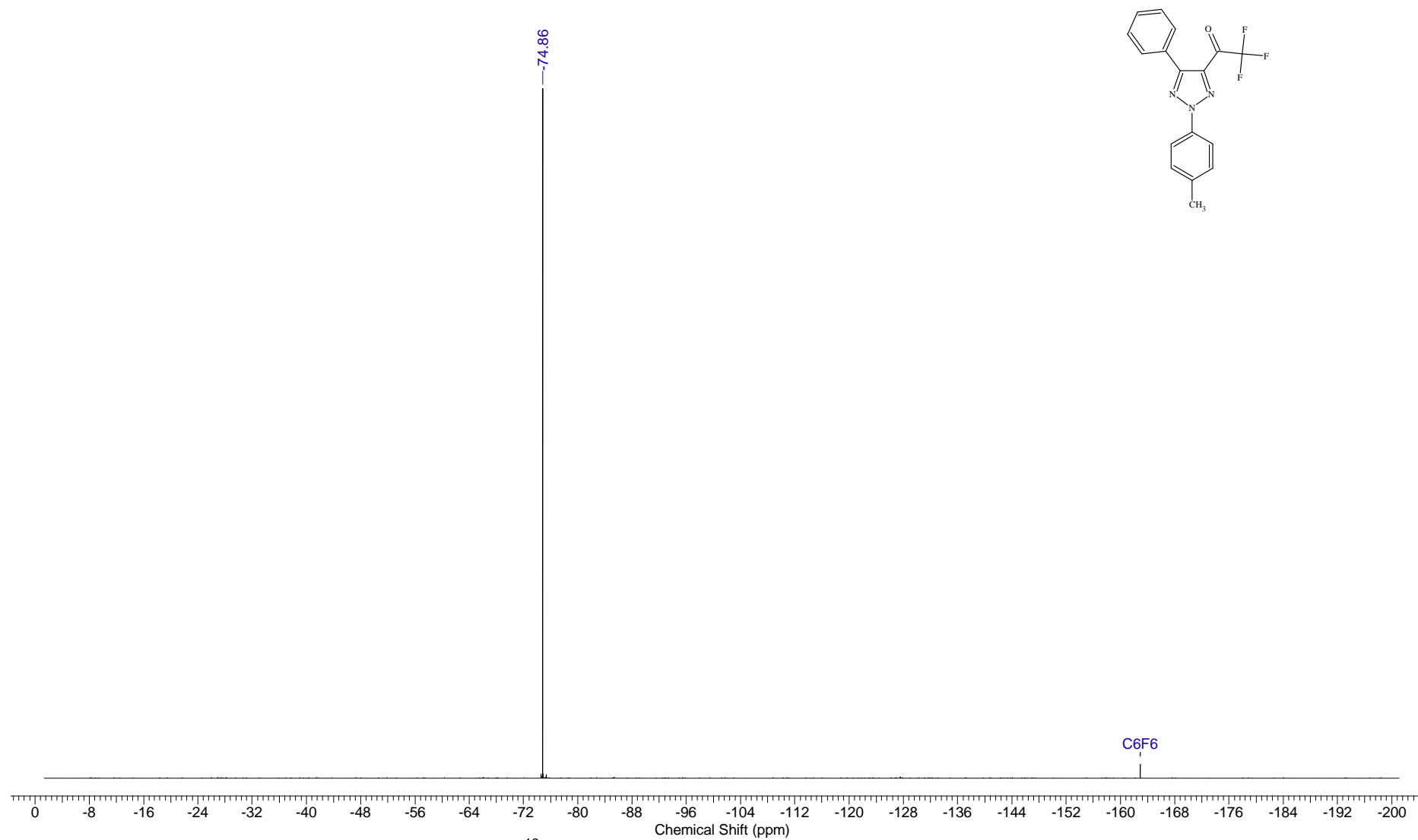
¹³C{¹H} NMR spectrum of **18** (100.6 MHz, CDCl₃)

S138

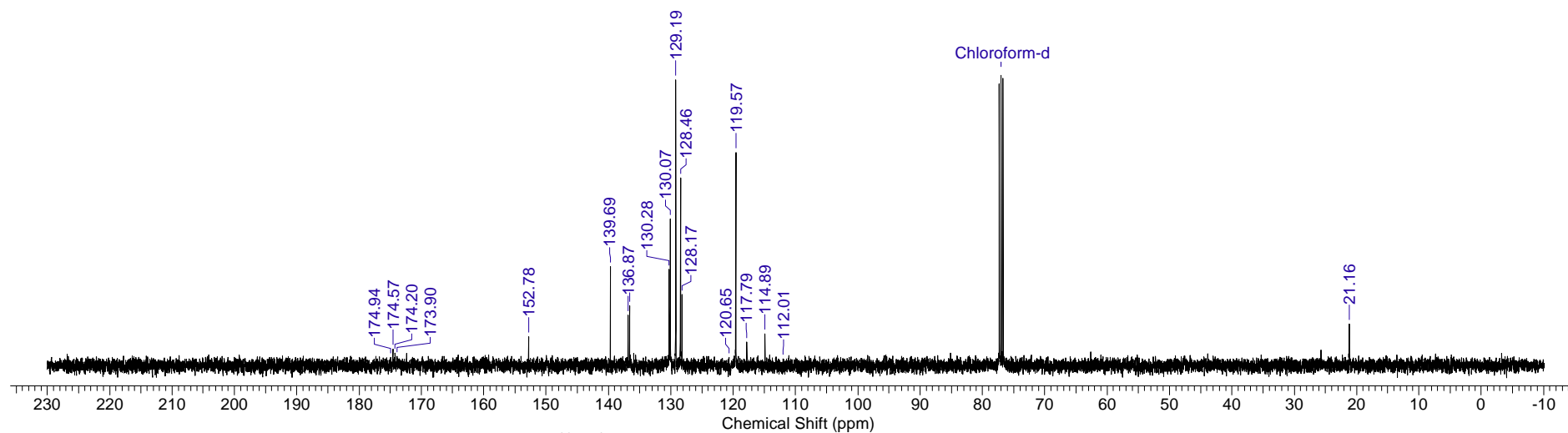
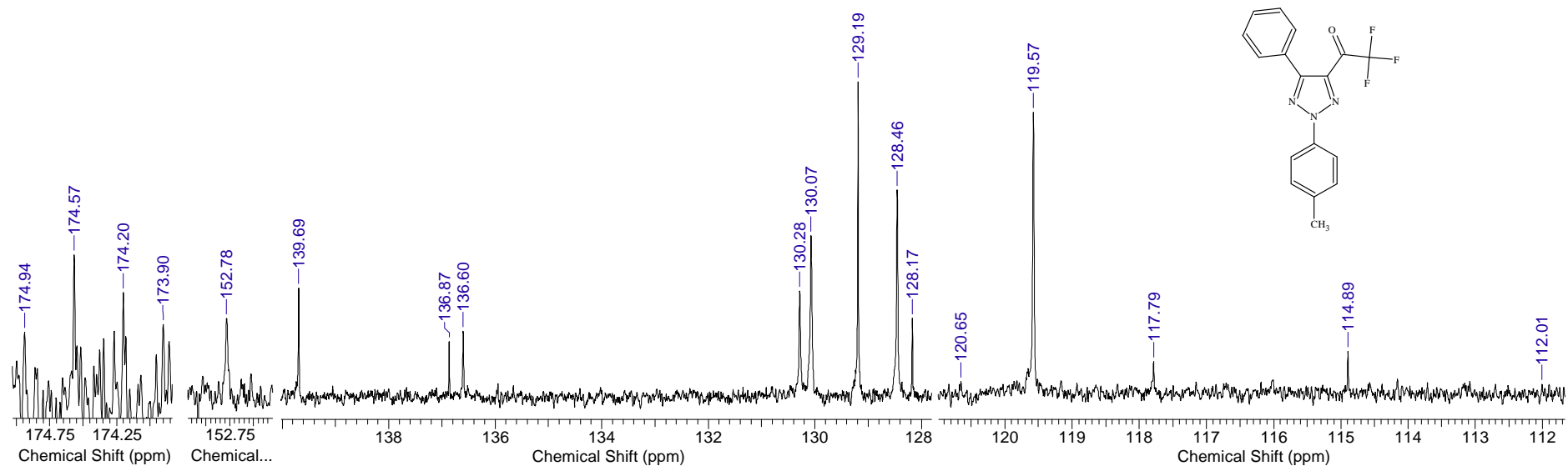
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	11 Nov 2022 15:36:22
File Name	C:\BM_DATA\DOCS\SZA-BM-11.11.2022\SZA-BM-2675-8.H_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	4	Original Points Count	32768
Pulse Sequence	zg30	Solvent	DEUTERIUM OXIDE	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

¹H NMR spectrum of **19** (400.1 MHz, CDCl₃)

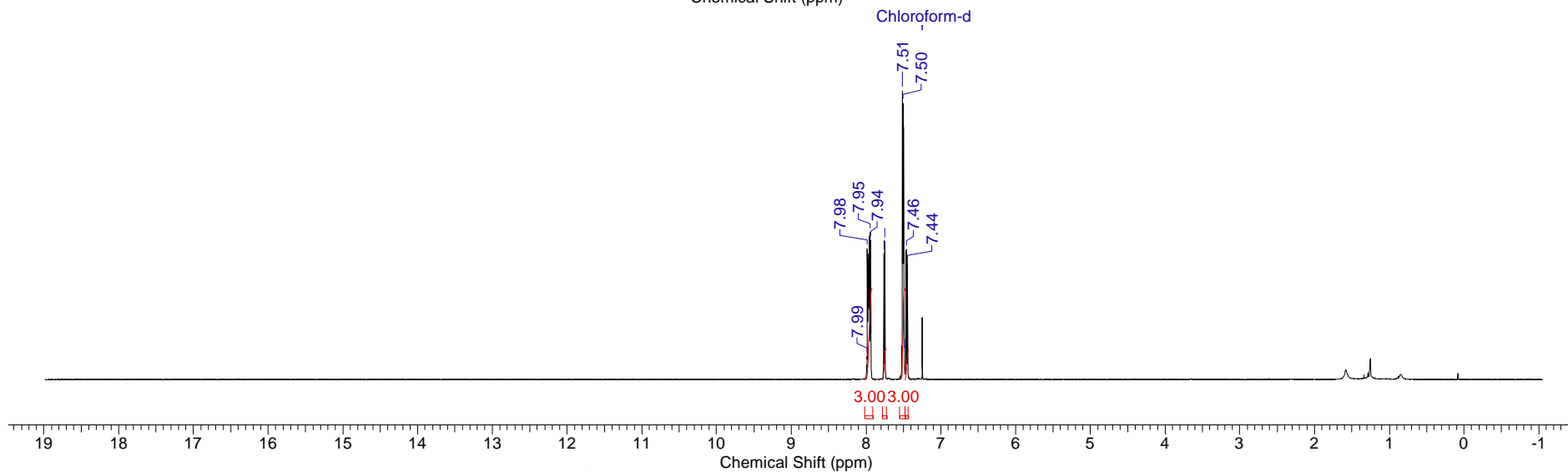
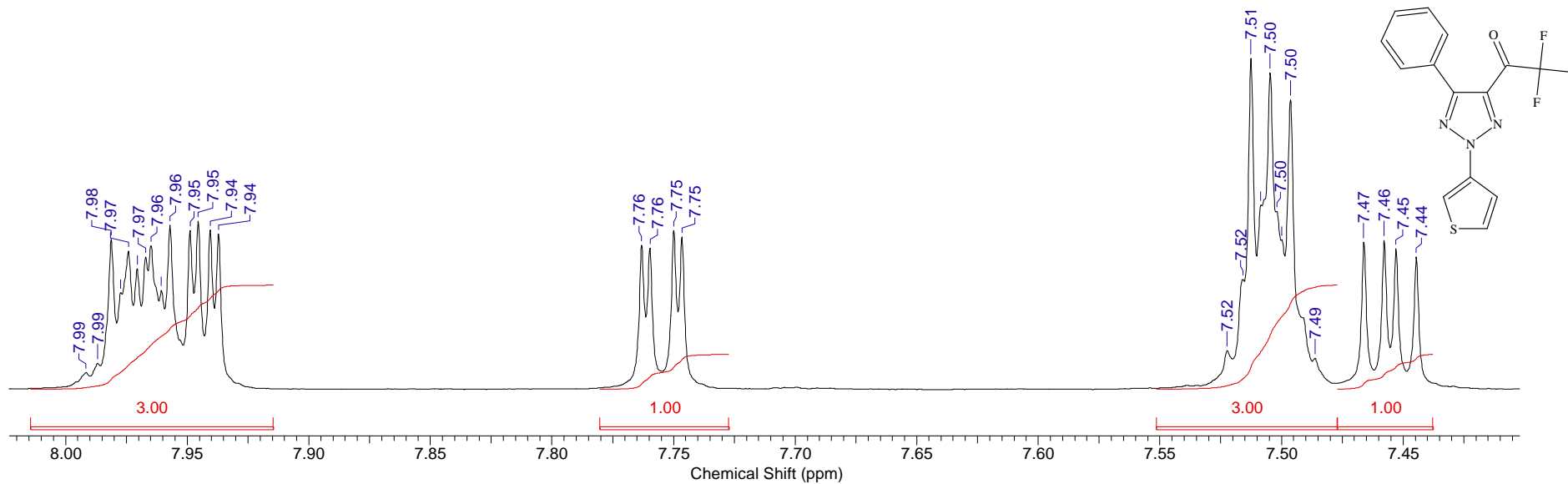
Acquisition Time (sec)	1.7433	Comment	Imported from UXNMR.			Date	11 Nov 2022 15:39:46
File Name	C:\BM_DATA\DOCS\SA-BM-11.11.2022\SA-BM-2675-8.F_005001r					Frequency (MHz)	376.50
Nucleus	19F	Number of Transients	13	Original Points Count	131072	Points Count	262144
Pulse Sequence	zgfgqn	Solvent	CHLOROFORM-D			Sweep Width (Hz)	75187.97
Temperature (degree C)	27.000						



Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	11 Nov 2022 16:04:30	
File Name	C:\BM_DATA\DOCS\SA-BM-11.11.2022\SA-BM-2675-8.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	71	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

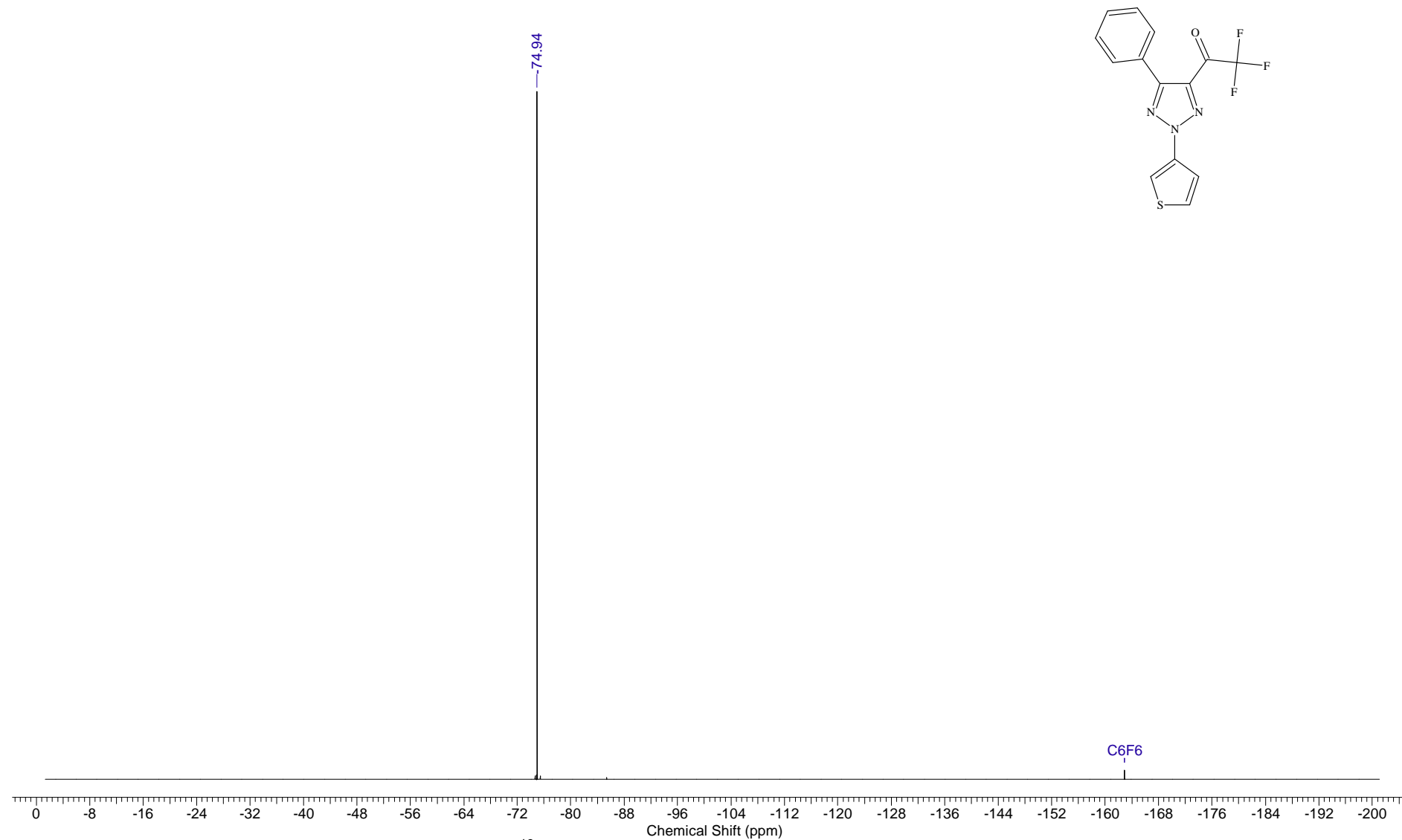
¹³C{¹H} NMR spectrum of **19** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.			Date	10 Nov 2022 14:03:54
File Name	C:\BM_DATA\DOCS\10.11.22\10.11.22\BM-2673.H_001001r					Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	DMSO-D6	Sweep Width (Hz)	8012.82	Temperature (degree C)	27.000

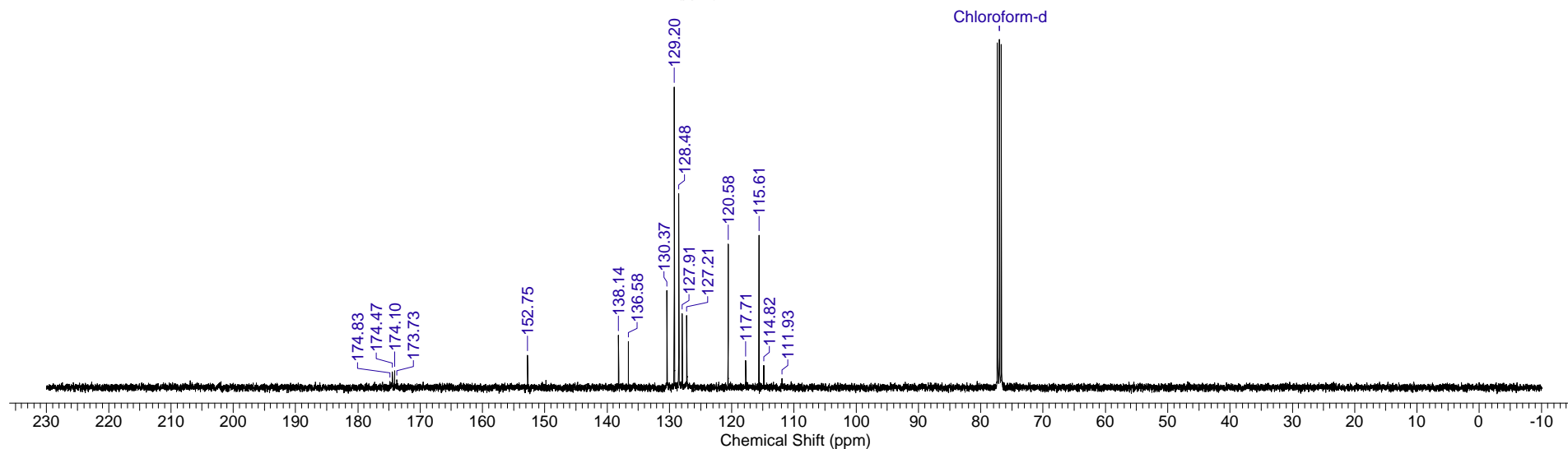
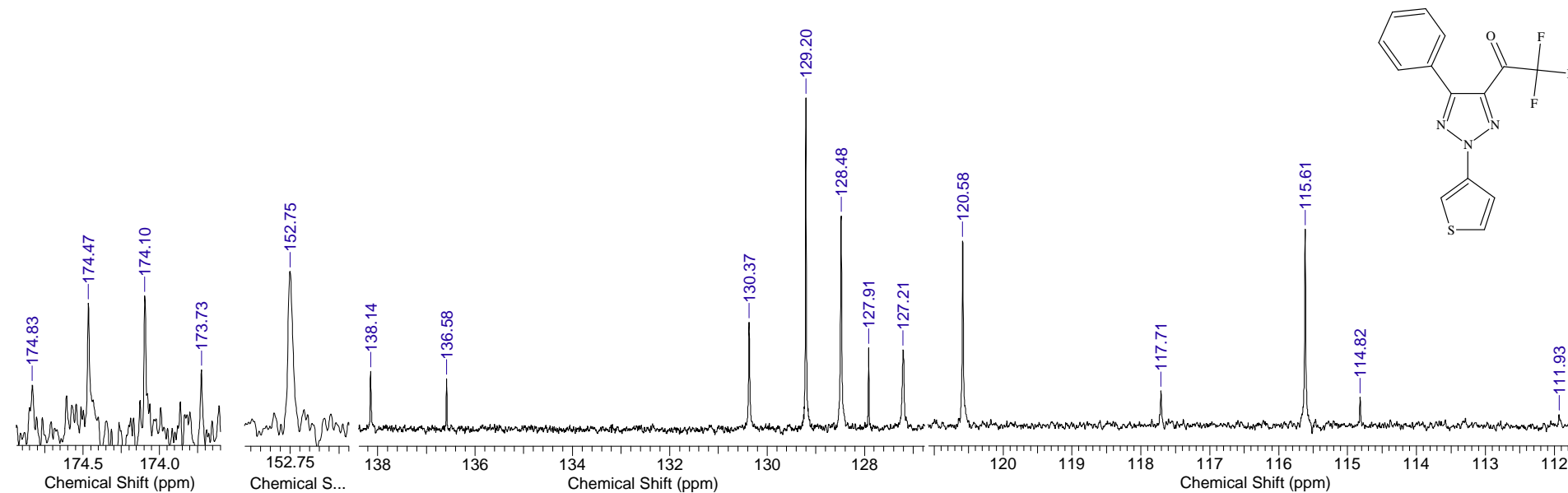


¹H NMR spectrum of **20** (400.1 MHz, CDCl₃)

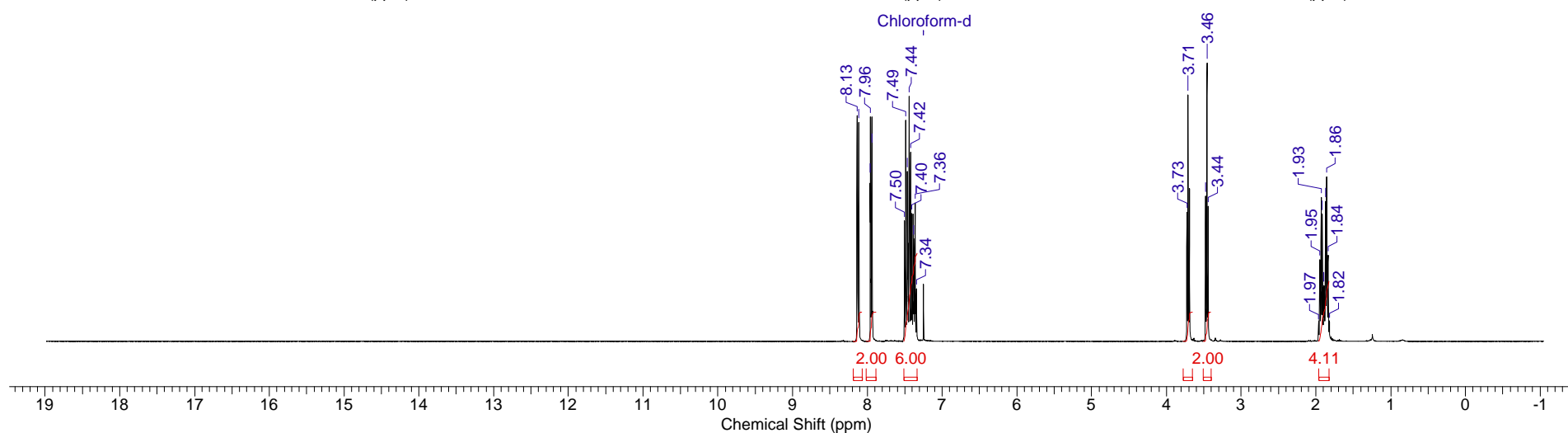
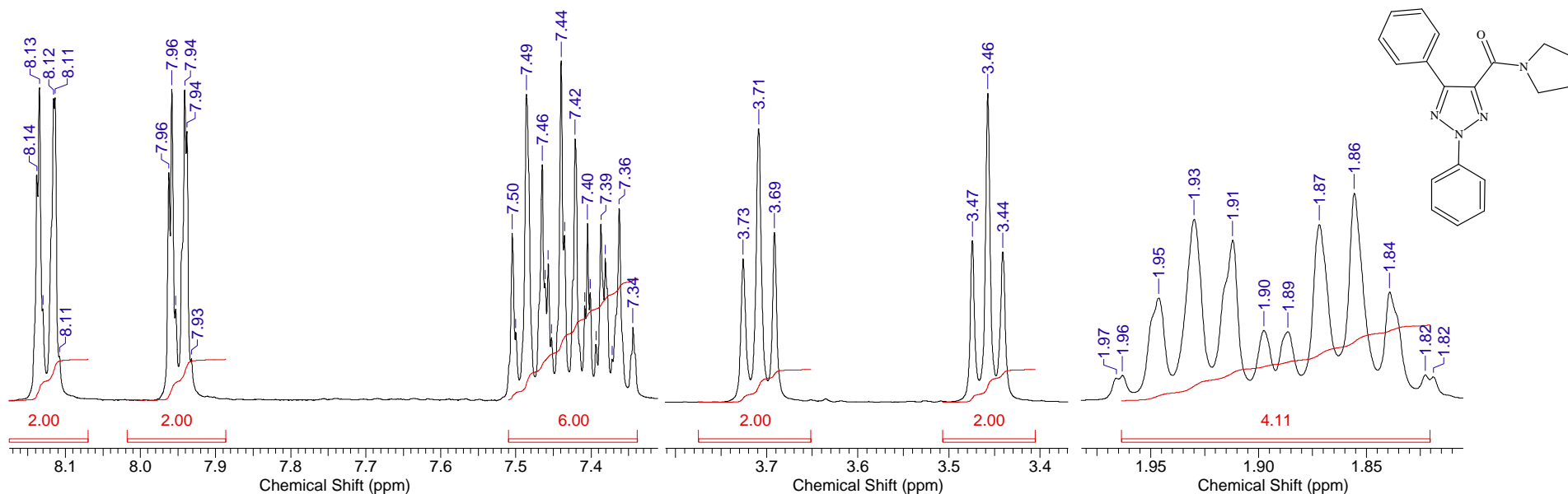
Acquisition Time (sec)	1.7433	Comment	Imported from UXMNR.		Date	10 Nov 2022 14:01:52
File Name	C:\BM_DATA\DOCS\10.11.22\10.11.22\BM-2673.F_005001r	Frequency (MHz)	376.50	Nucleus	19F	
Number of Transients	16	Original Points Count	131072	Points Count	262144	Pulse Sequence zgfgn
Solvent	CHLOROFORM-D	Sweep Width (Hz)	75187.97	Temperature (degree C)	27.000	



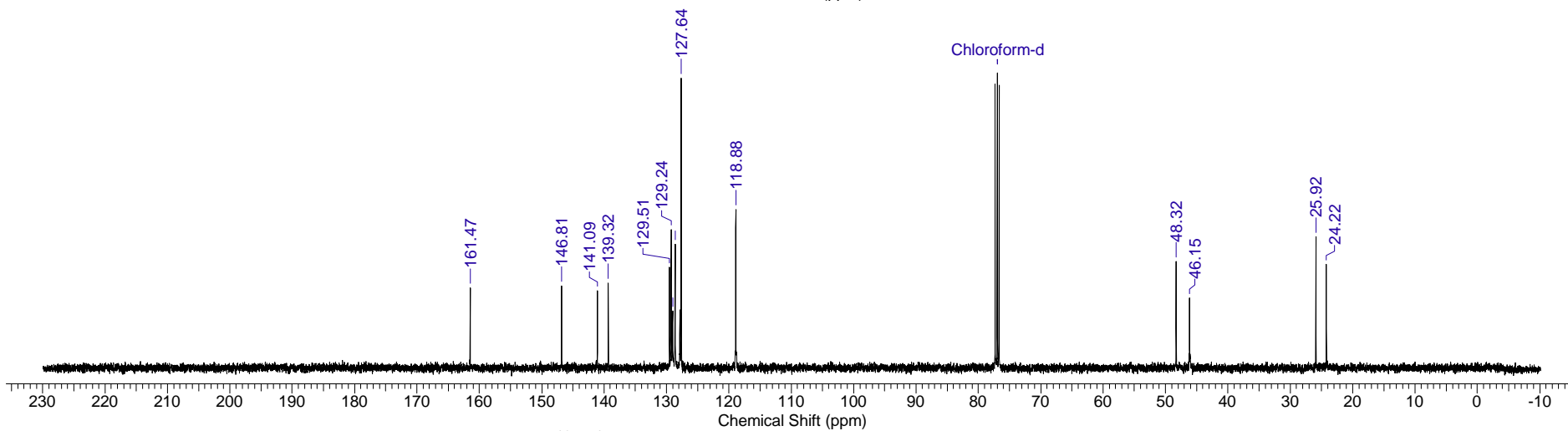
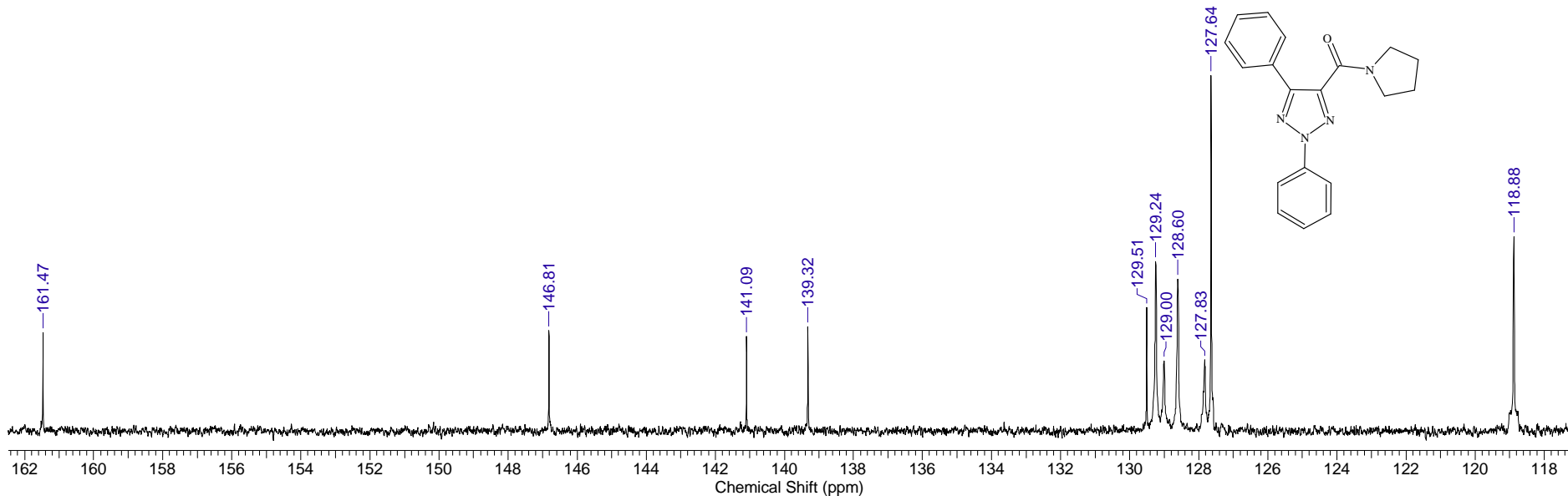
Acquisition Time (sec)	0.6783	Comment	Imported from UXMNR.	Date	10 Nov 2022 14:21:18
File Name	C:\BM_DATA\DOCS\10.11.22\10.11.22\BM-2673.C_002001r	Frequency (MHz)	100.61	Nucleus	¹³ C
Number of Transients	386	Original Points Count	16384	Points Count	131072
Solvent	CHLOROFORM-D	Sweep Width (Hz)	24154.59	Pulse Sequence	zgpg30
				Temperature (degree C)	27.000

¹³C{¹H} NMR spectrum of **20** (100.6 MHz, CDCl₃)

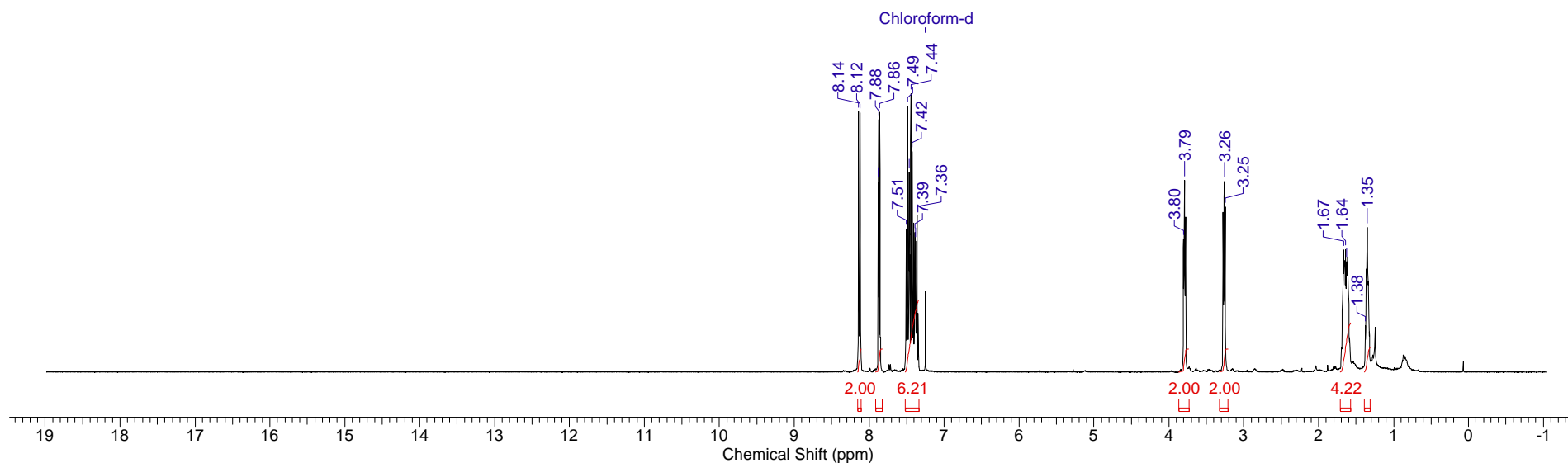
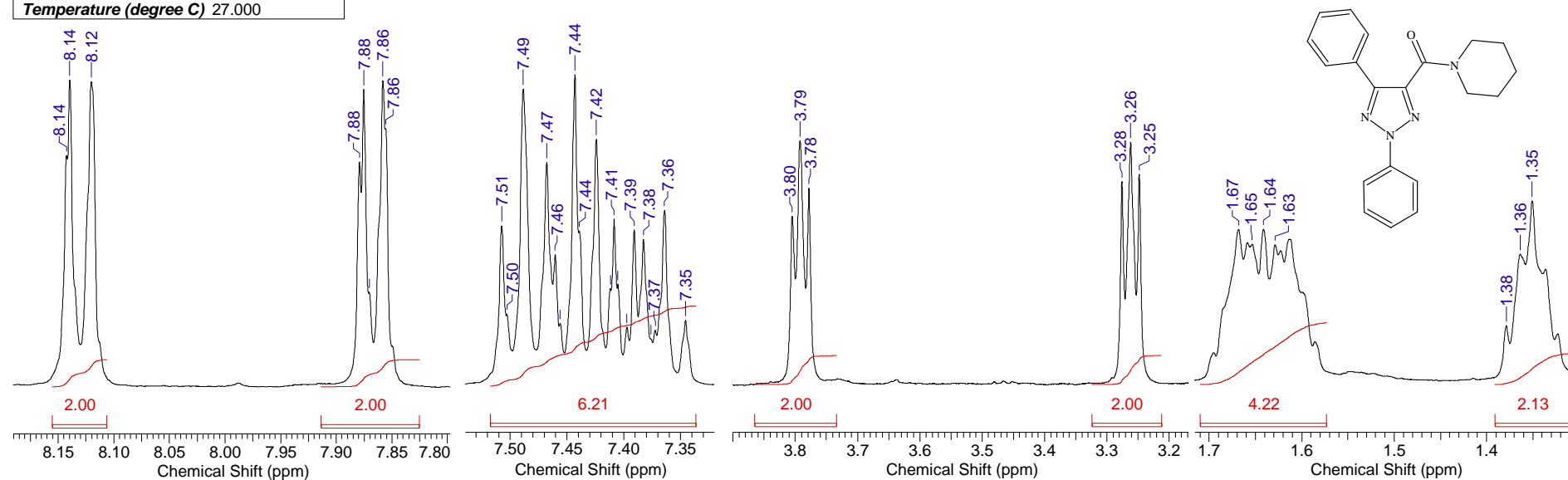
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.			Date	17 Dec 2022 13:36:08
File Name	C:\DOCS\OUTPUT_301\2022\12_декабрь\BM-2702.H_001001r					Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D			Sweep Width (Hz)	8012.82
Temperature (degree C)	27.000						

¹H NMR spectrum of **21** (400.1 MHz, CDCl₃)

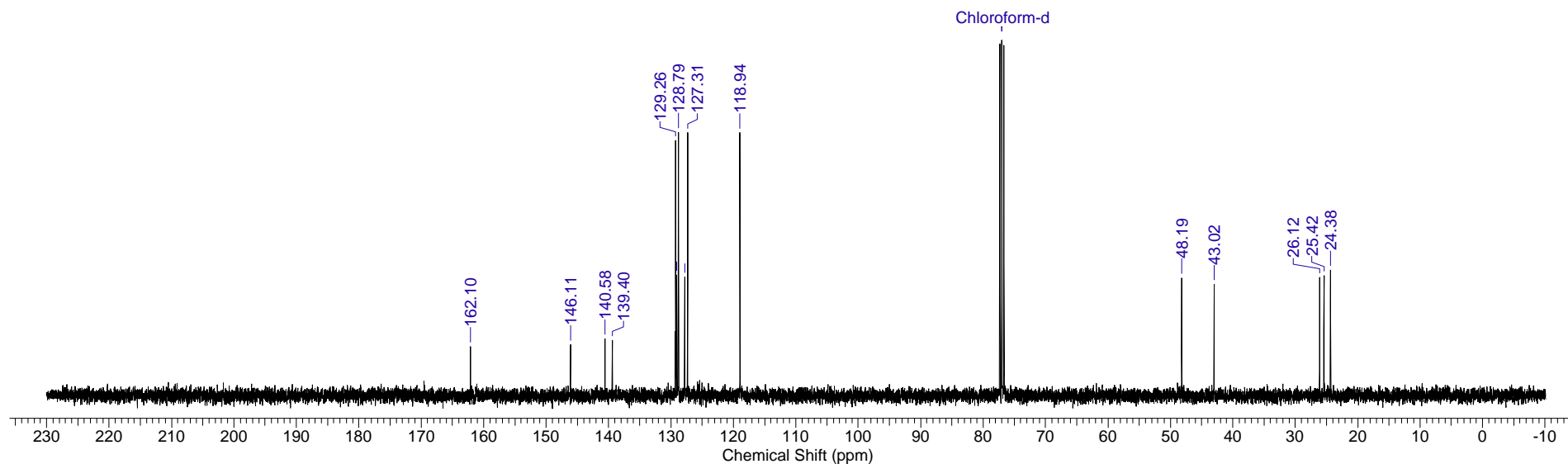
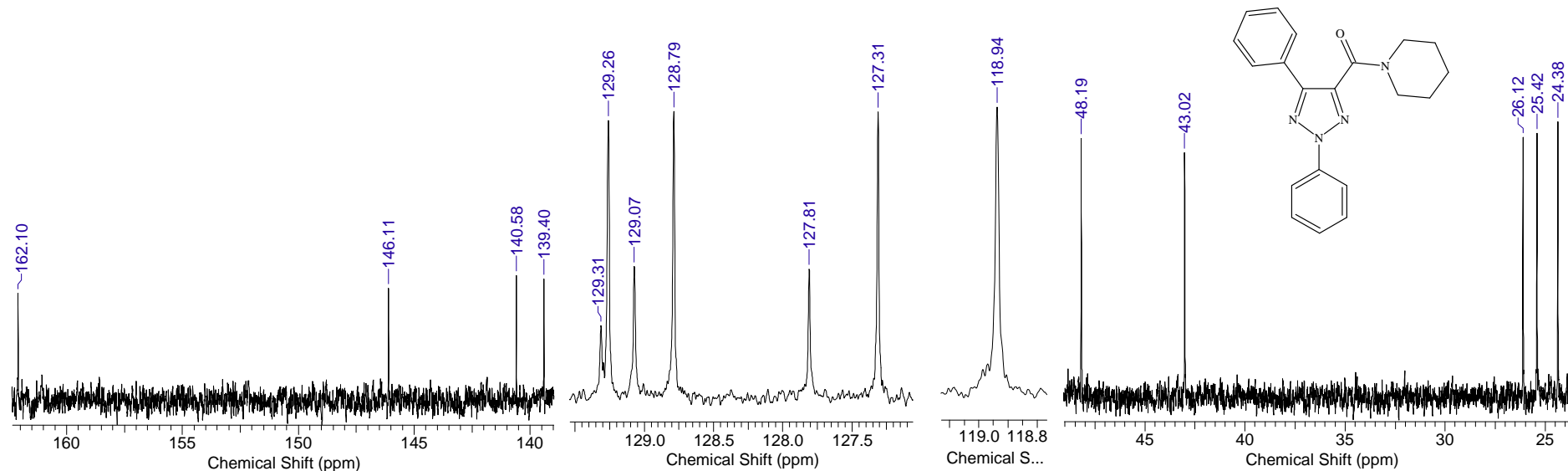
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.	Date	17 Dec 2022 13:44:02
File Name	C:\DOCS\OUTPUT_301\2022\12.декабрь\BM-2702.C_002001r			Frequency (MHz)	100.61
Nucleus	¹³ C	Number of Transients	175	Original Points Count	16384
Pulse Sequence	zgpg30	Solvent	DEUTERIUM OXIDE	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	24154.59

¹³C{¹H} NMR spectrum of **21** (100.6 MHz, CDCl₃)

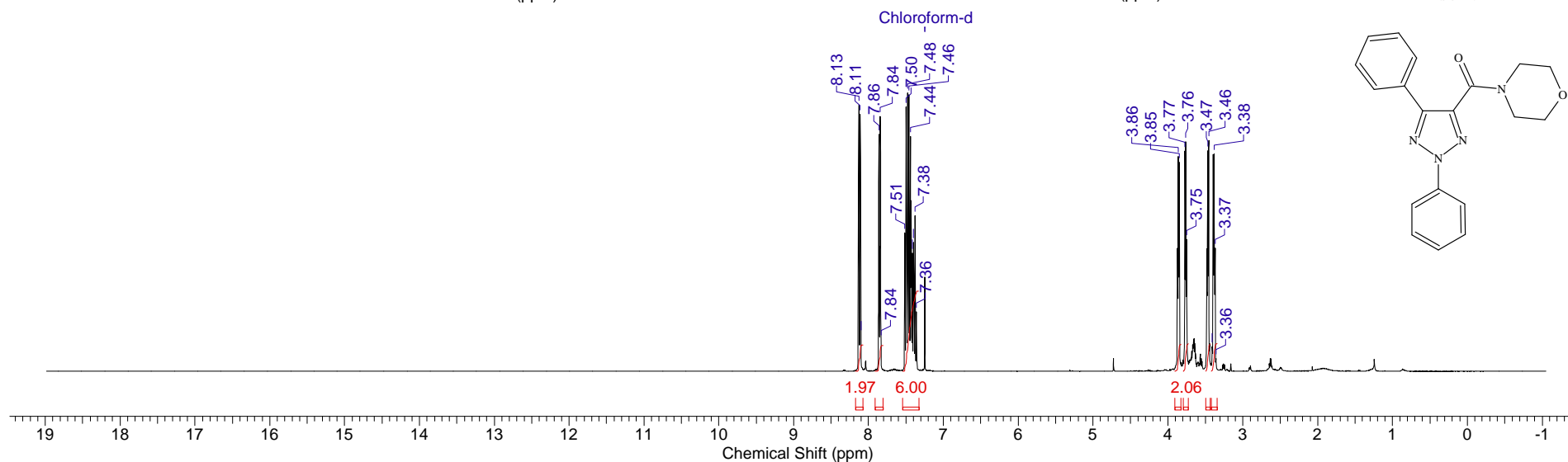
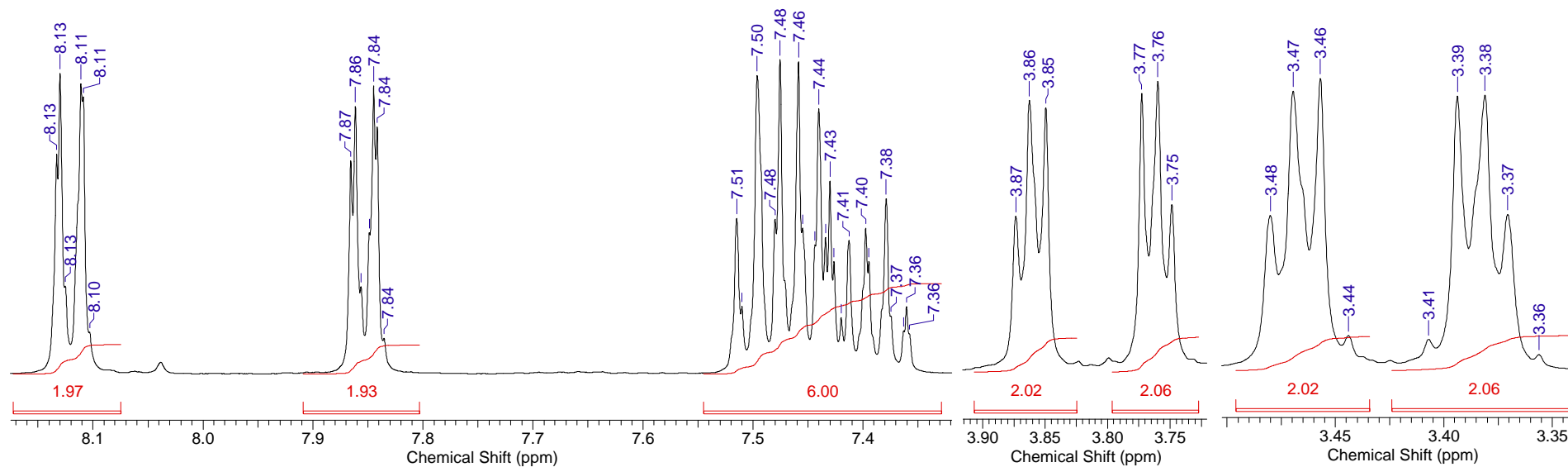
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	20 Dec 2022 14:25:18
File Name	C:\DOCS\OUTPUT_301\2022\12.декабрь\SA-BM-2706-16.H_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	4	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

¹H NMR spectrum of **22** (400.1 MHz, CDCl₃)

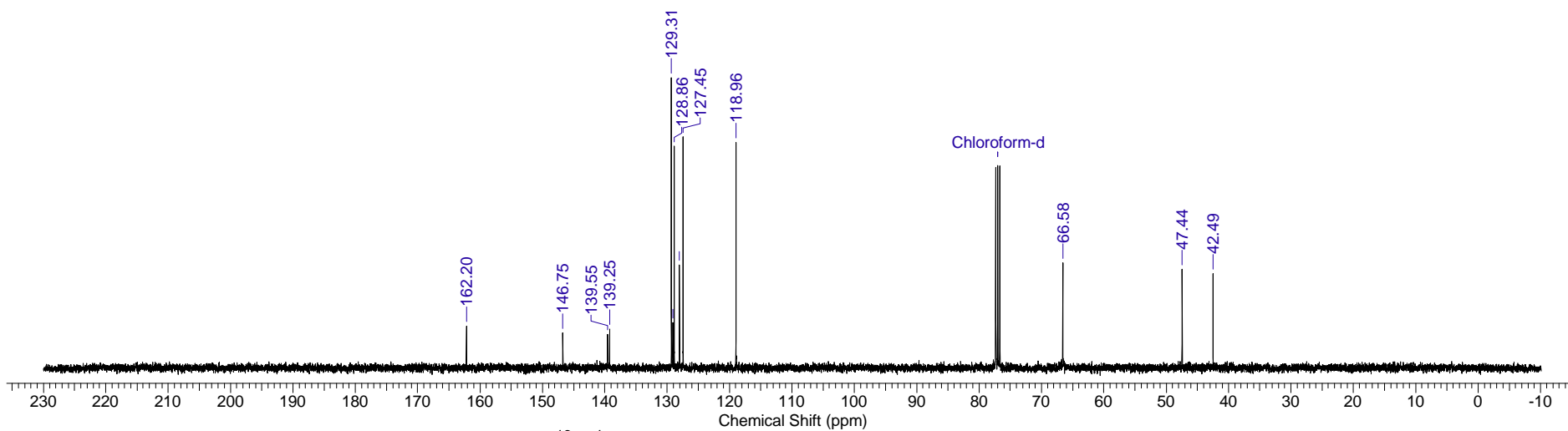
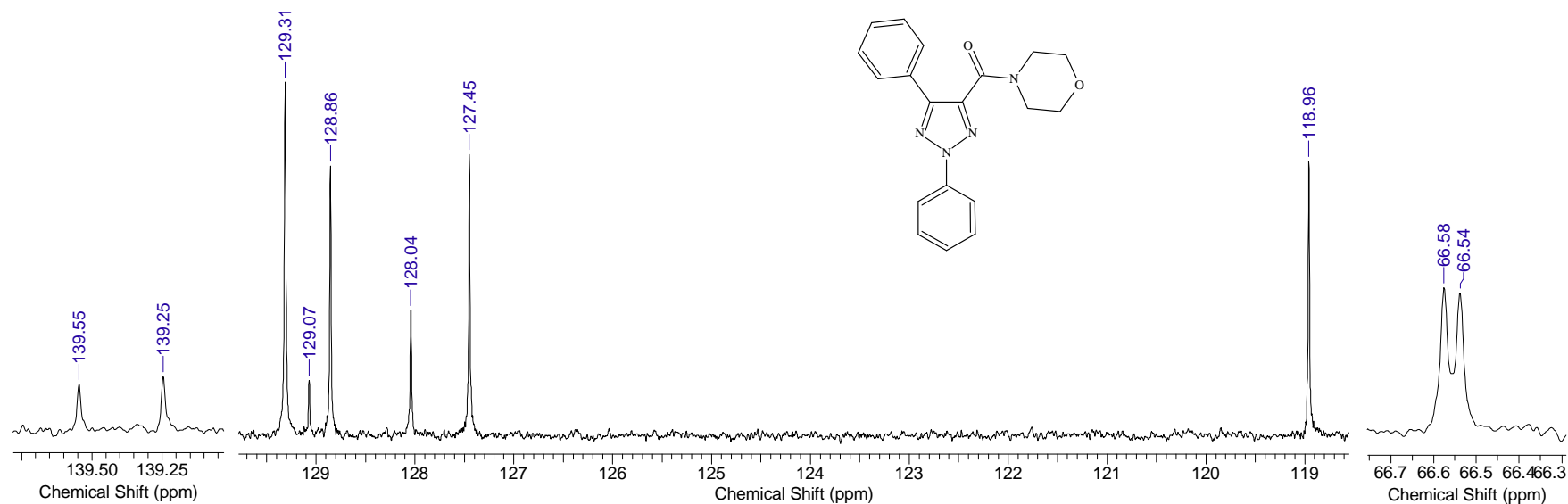
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	20 Dec 2022 14:28:32	
File Name	C:\DOCS\OUTPUT_301\2022\12_декабрь\SA-BM-2706-16.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	65	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

¹³C{¹H} NMR spectrum of **22** (100.6 MHz, CDCl₃)

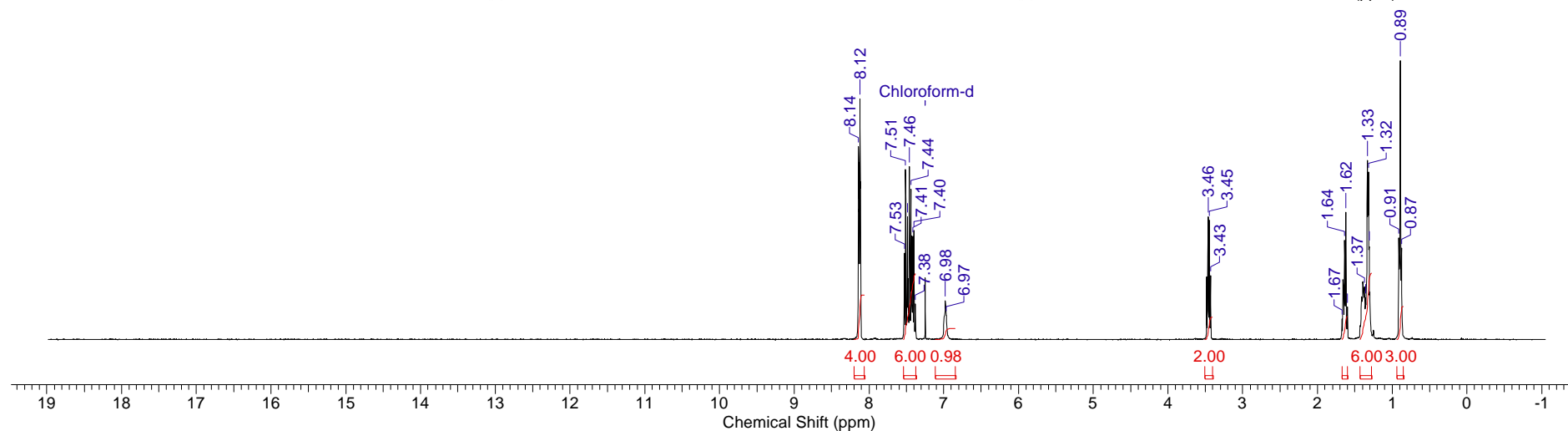
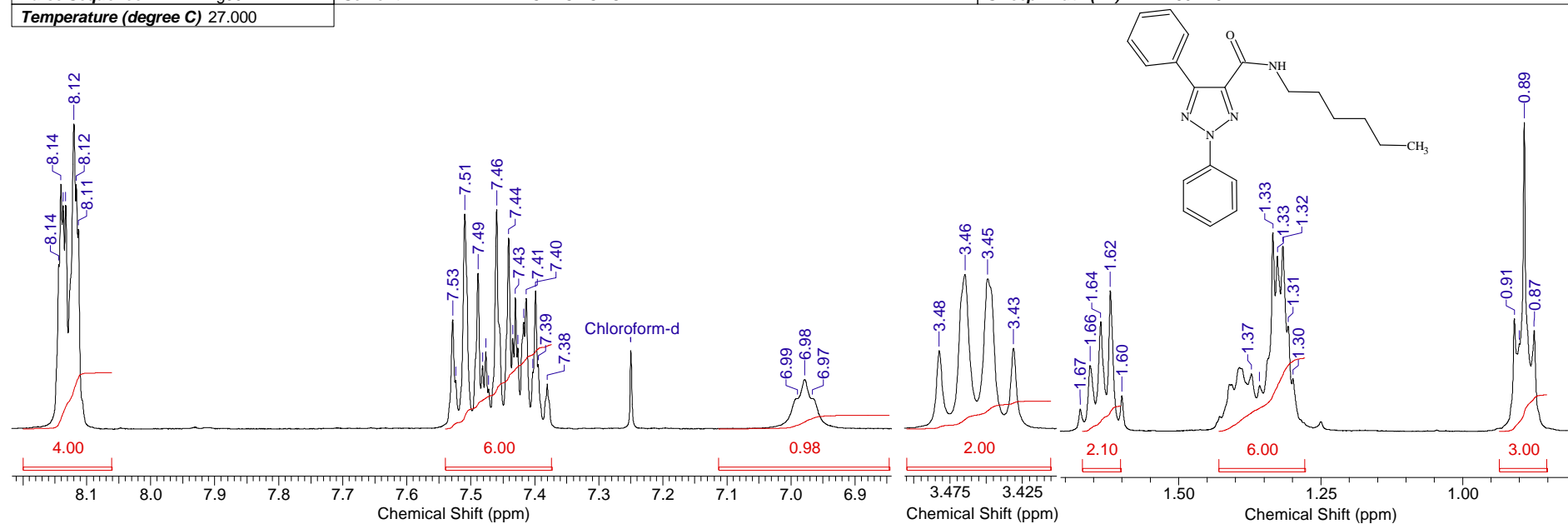
Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.	Date	20 Dec 2022 22:35:22
File Name	C:\BM_DATA\DOCS\ЯMP_соседи\2022\BM-2707-2\BM-2707-2_001001r			Frequency (MHz)	400.13
Nucleus	¹ H	Number of Transients	8	Original Points Count	32768
Pulse Sequence	zg30	Solvent	CHLOROFORM-D	Points Count	131072
Temperature (degree C)	27.000			Sweep Width (Hz)	8012.82

¹H NMR spectrum of **23** (400.1 MHz, CDCl₃)

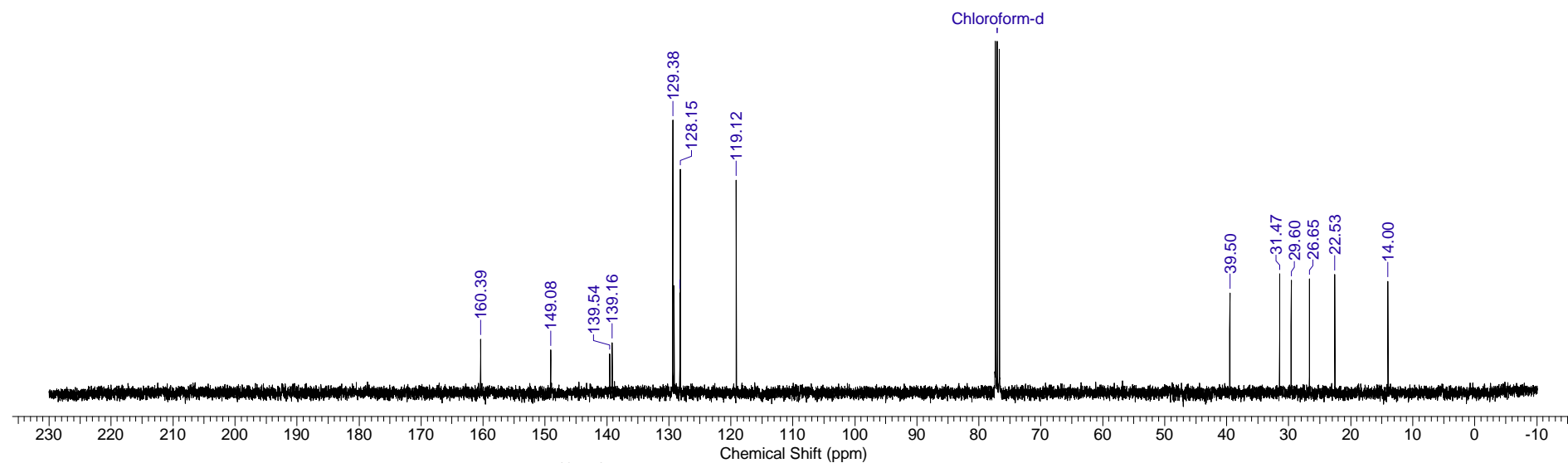
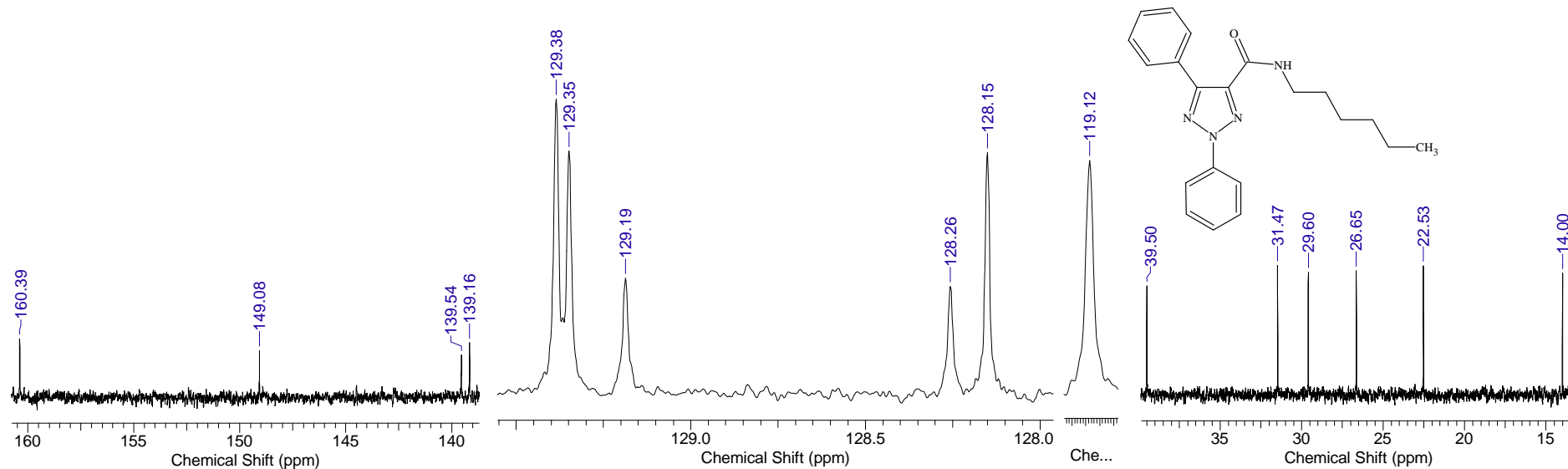
Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	20 Dec 2022 21:57:02	
File Name	C:\BM_DATA\DOCS\JMP_соседи\2022\BM-2707-2\BM-2707-2_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	96	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	24154.59	
Temperature (degree C)	27.000						

¹³C{¹H} NMR spectrum of **23** (100.6 MHz, CDCl₃)

Acquisition Time (sec)	4.0894	Comment	Imported from UXNMR.		Date	20 Dec 2022 14:19:10	
File Name	C:\DOCS\OUTPUT_301\2022\12_декабрь\BM-2708.H_001001r				Frequency (MHz)	400.13	
Nucleus	1H	Number of Transients	4	Original Points Count	32768	Points Count	131072
Pulse Sequence	zg30	Solvent	CHLOROFORM-D		Sweep Width (Hz)	8012.82	
Temperature (degree C)	27.000						

¹H NMR spectrum of **24** (400.1 MHz, CDCl₃)

Acquisition Time (sec)	0.6783	Comment	Imported from UXNMR.		Date	20 Dec 2022 14:23:18	
File Name	C:\DOCS\OUTPUT_301\2022\12_декабрь\BM-2708.C_002001r				Frequency (MHz)	100.61	
Nucleus	13C	Number of Transients	69	Original Points Count	16384	Points Count	131072
Pulse Sequence	zgpg30	Solvent	DMSO-D6	Sweep Width (Hz)	24154.59	Temperature (degree C)	27.000

¹³C{¹H} NMR spectrum of **24** (100.6 MHz, CDCl₃)