Supplementary Material

Photophysical and antibacterial properties of symmetrical curcuminoid–BF_2 complexes

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1. HRMS spectra

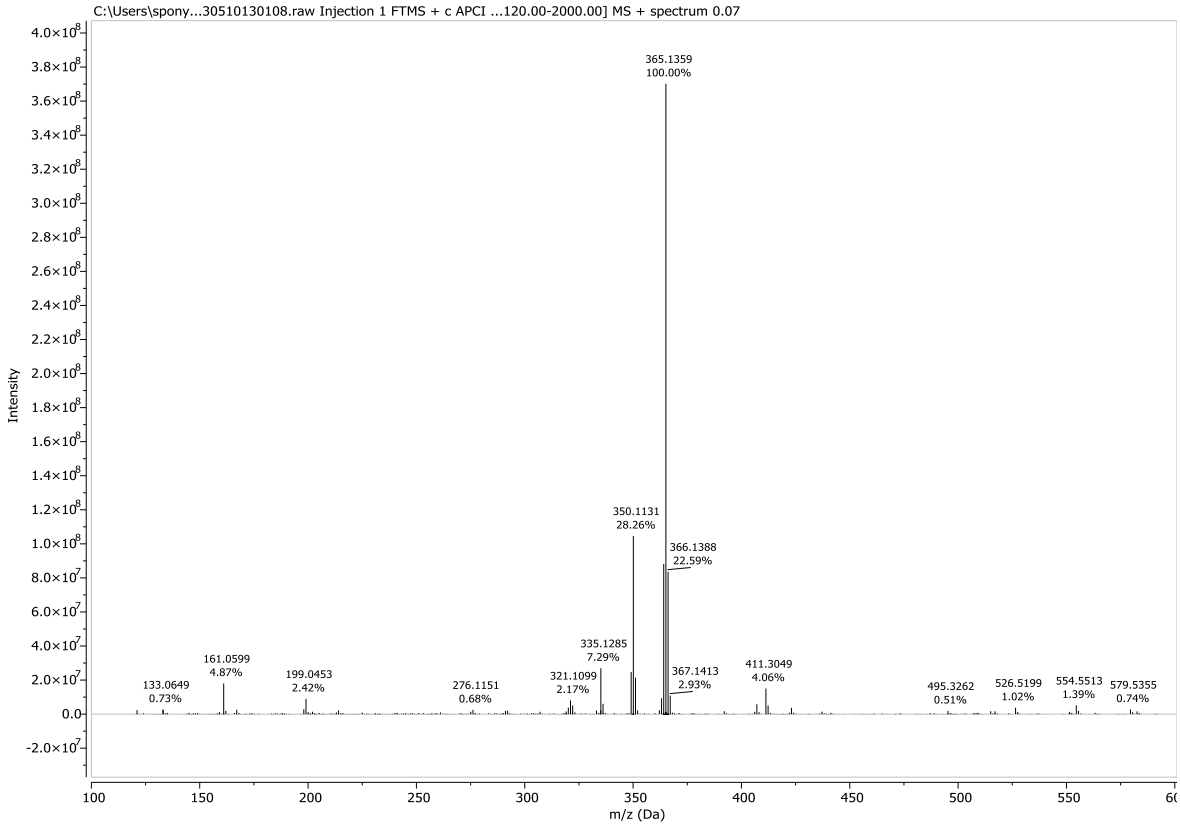


Figure 1.1: APCI (+) HRMS spectrum of **2**

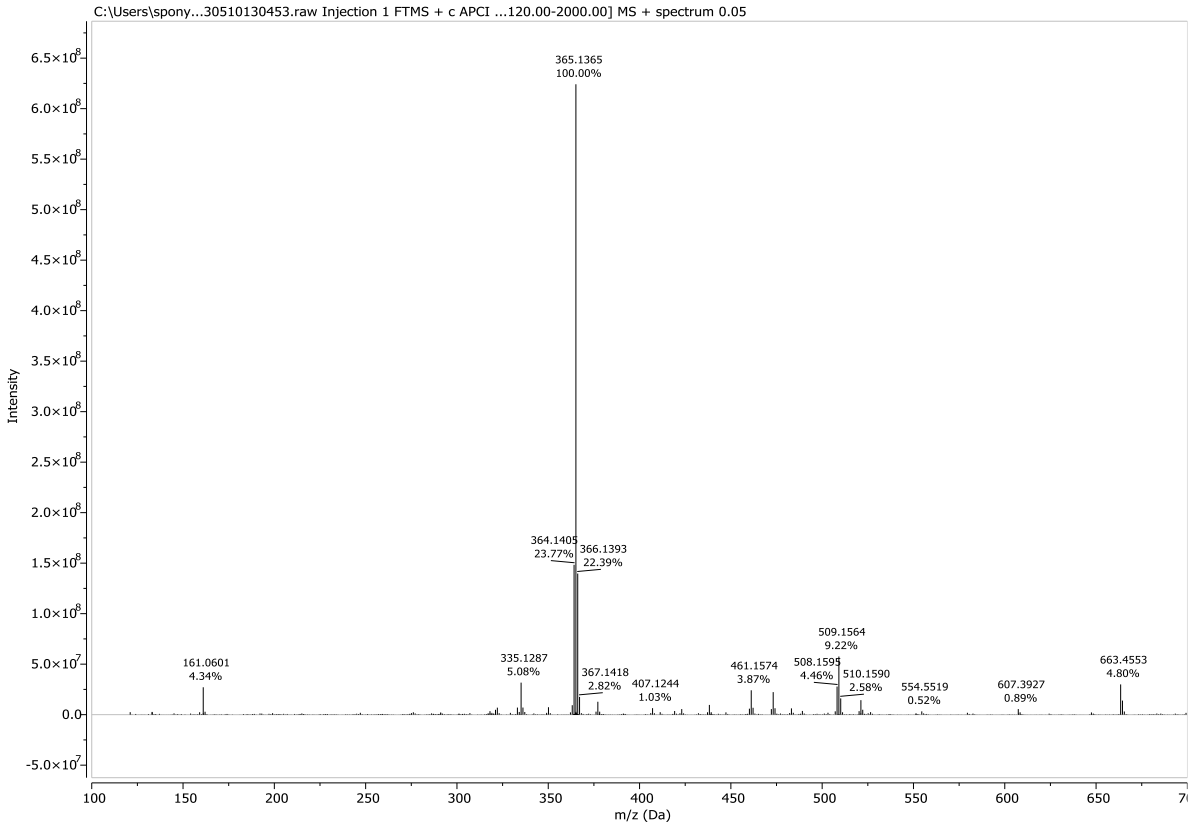


Figure 1.2: APCI (+) HRMS spectrum of **3**

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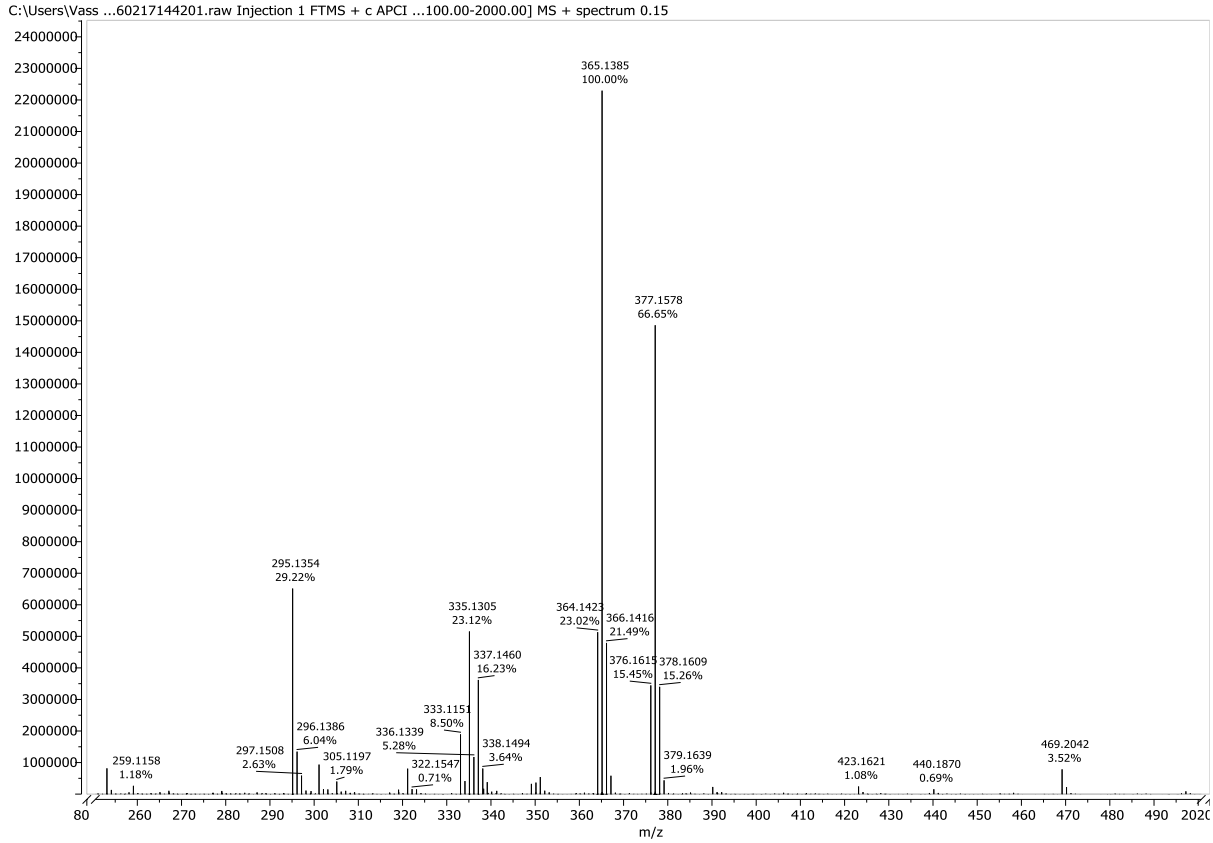


Figure 1.3: APCI (+) HRMS spectrum of 4

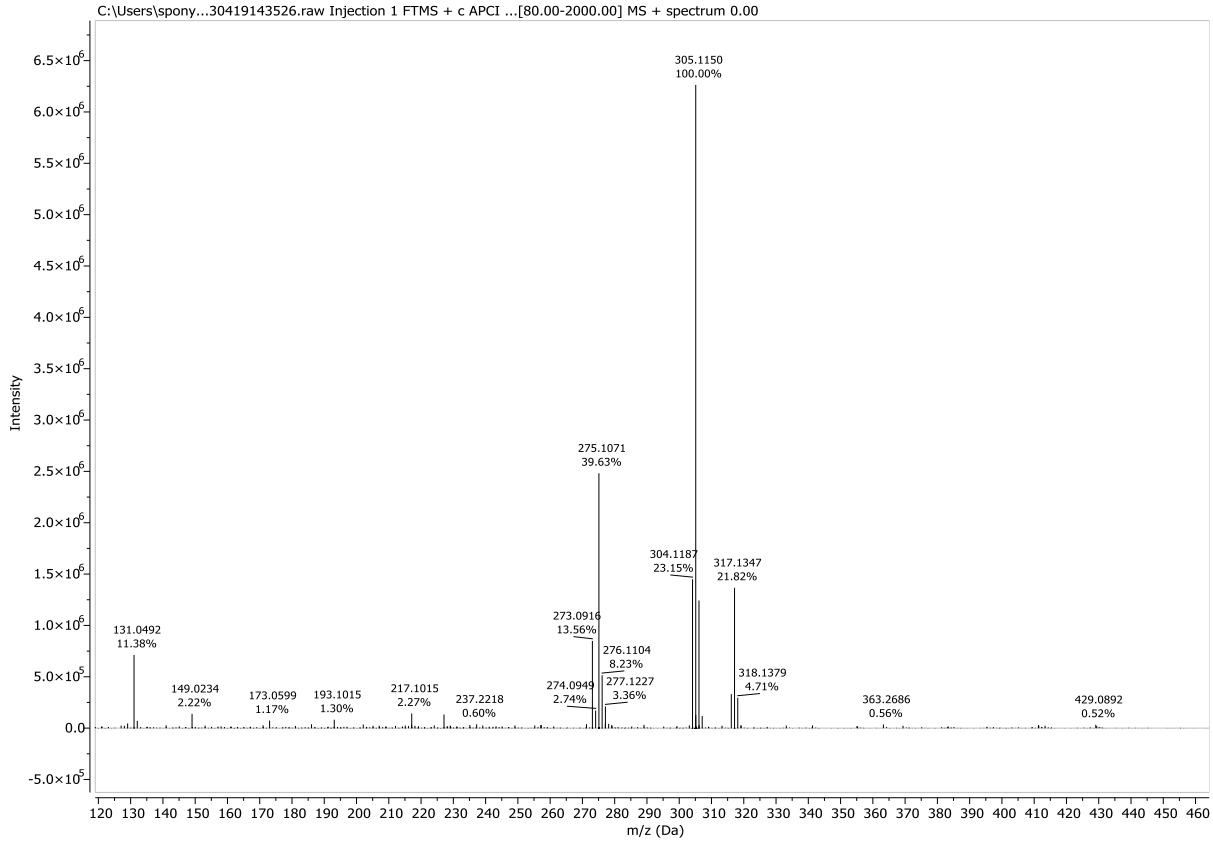


Figure 1.4: APCI (+) HRMS spectrum of **5**

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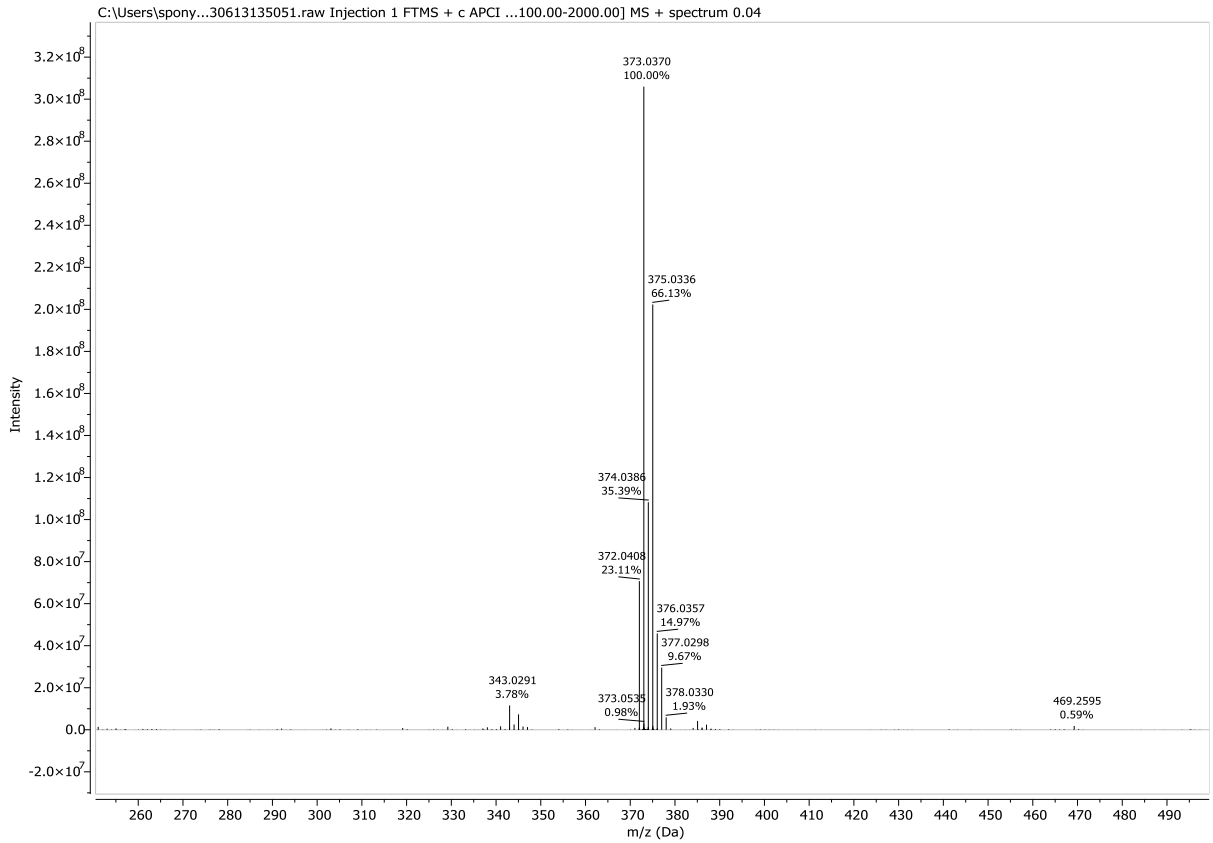


Figure 1.5: APCI (+) HRMS spectrum of **6**

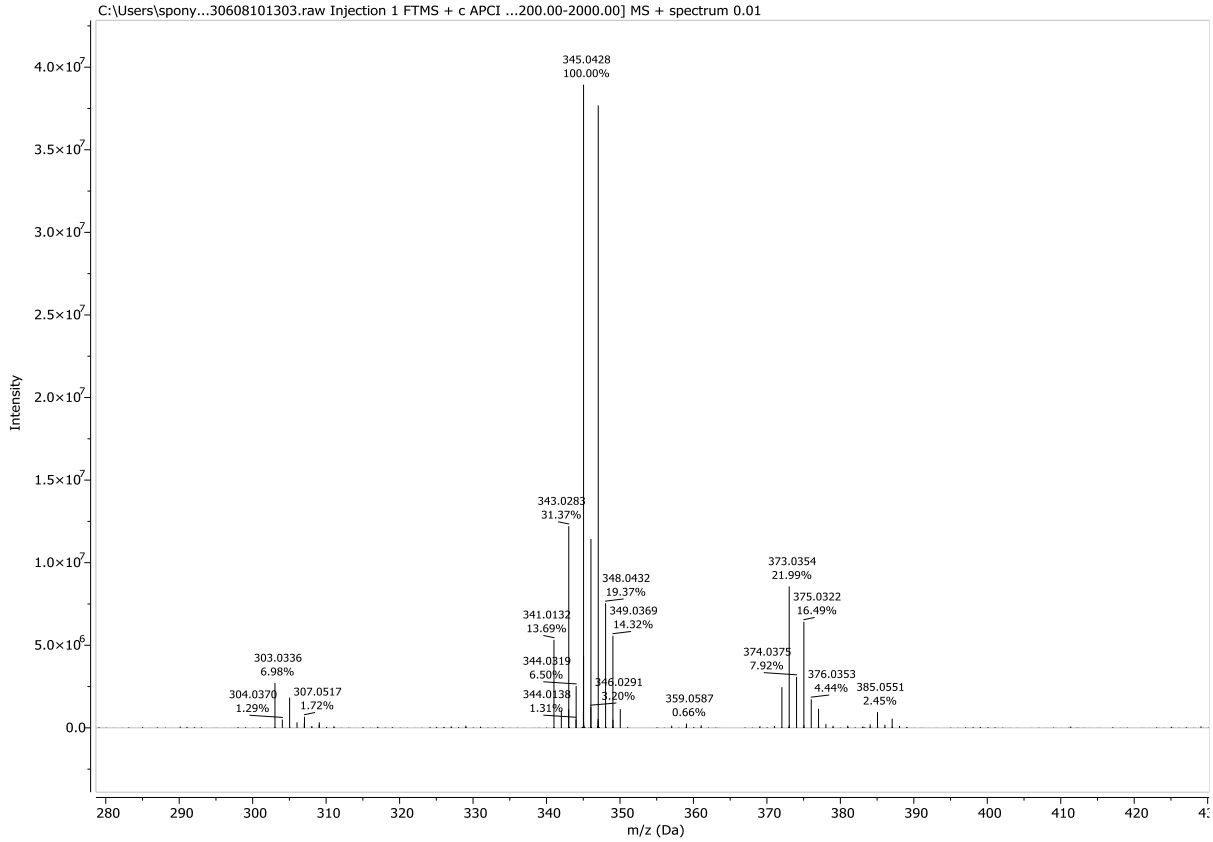


Figure 1.6: APCI (+) HRMS spectrum of **7**

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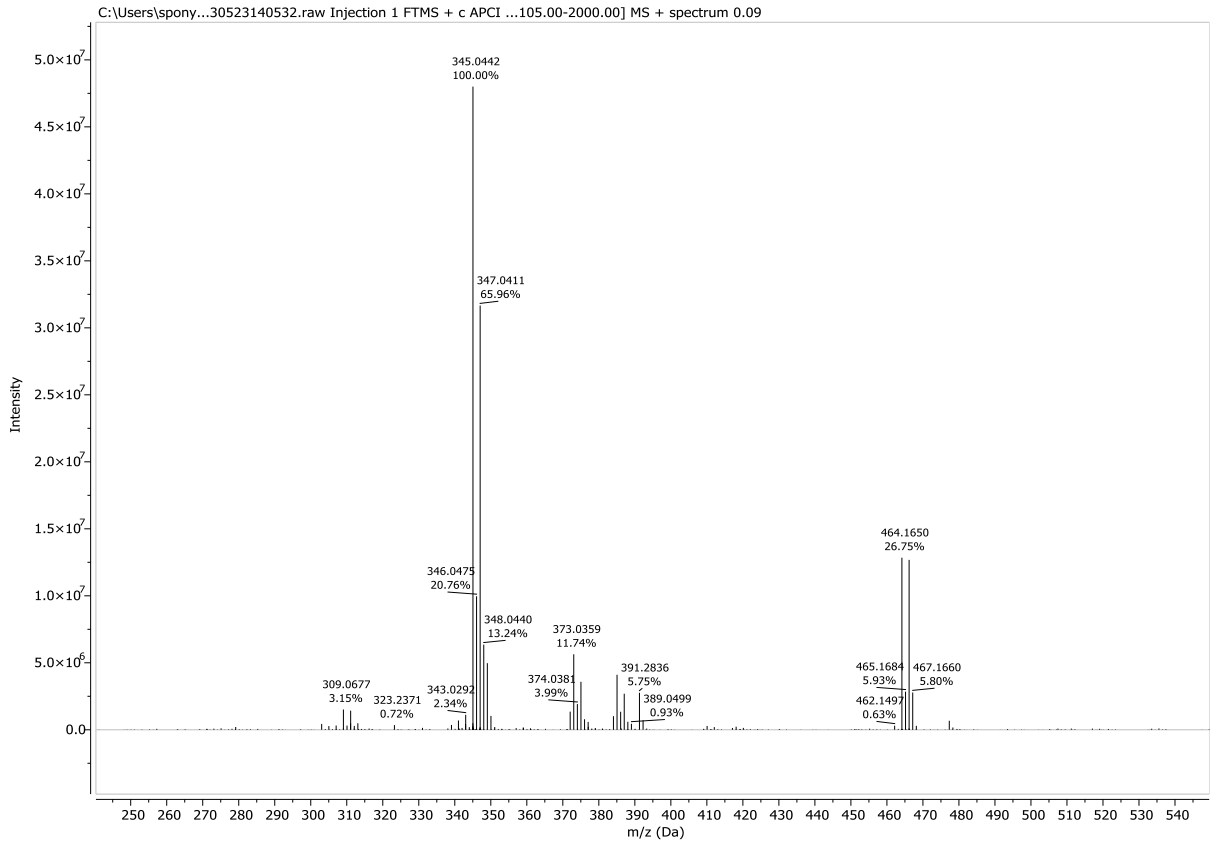


Figure 1.7: APCI (+) HRMS spectrum of **8**

2. ^{1}H, ^{11}B, ^{13}C and ^{19}F NMR spectra

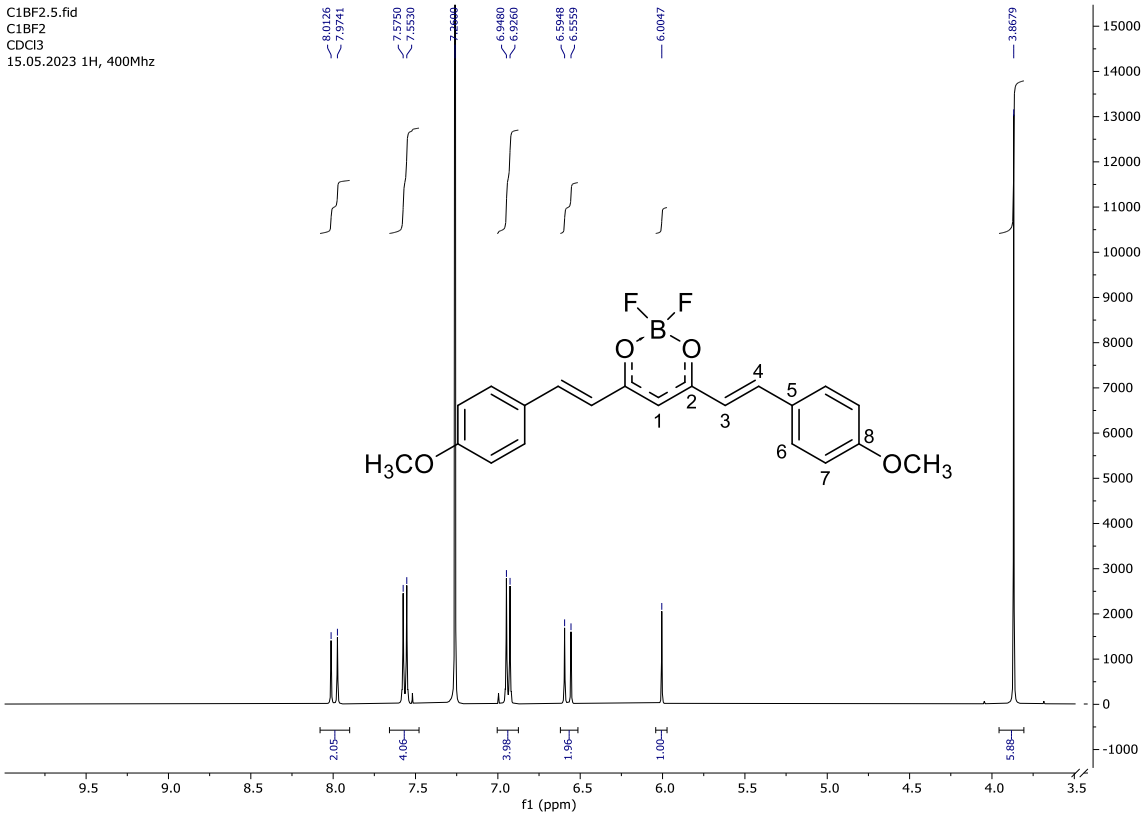


Figure 2.1: ^{1}H NMR spectrum of **2** in $CDCl_3$ at 400 MHz

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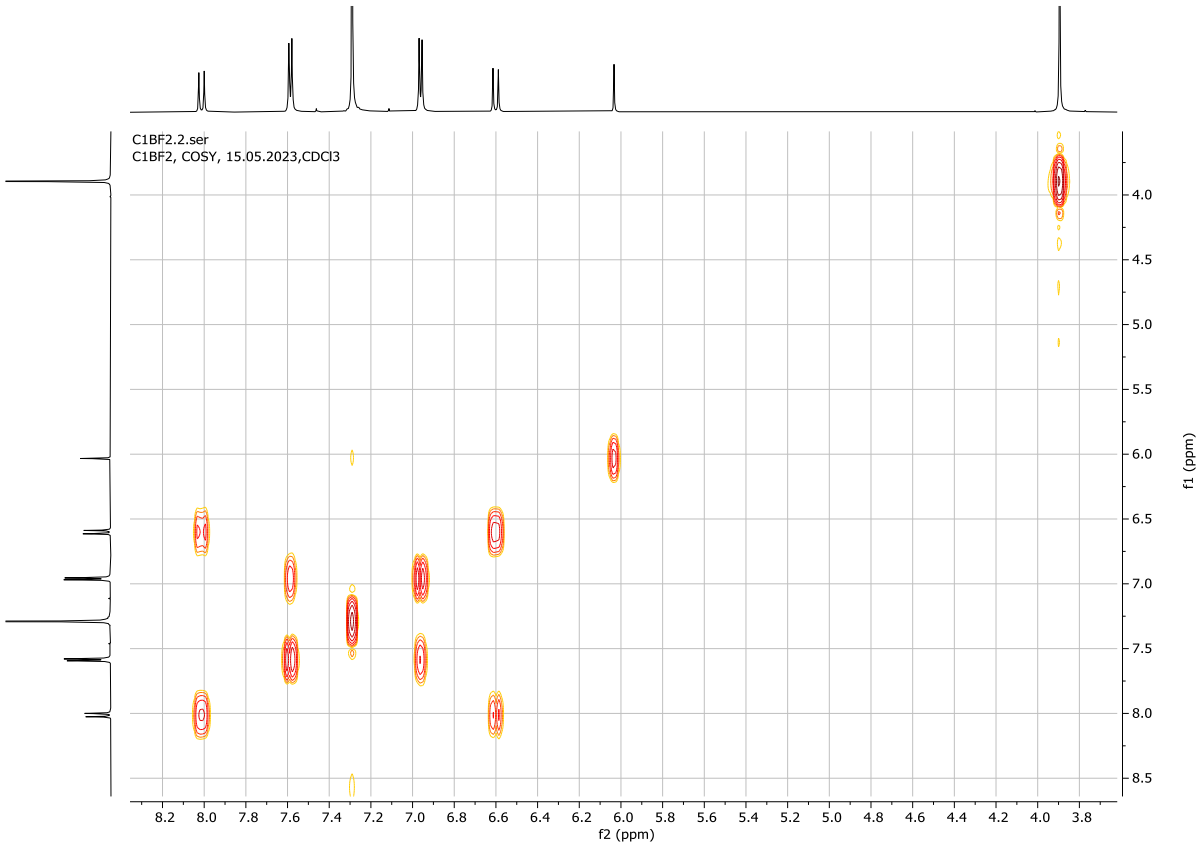


Figure 2.2: ^{1}H-^{1}H COSY NMR spectrum of **2** in $CDCl_3$ at 400 MHz

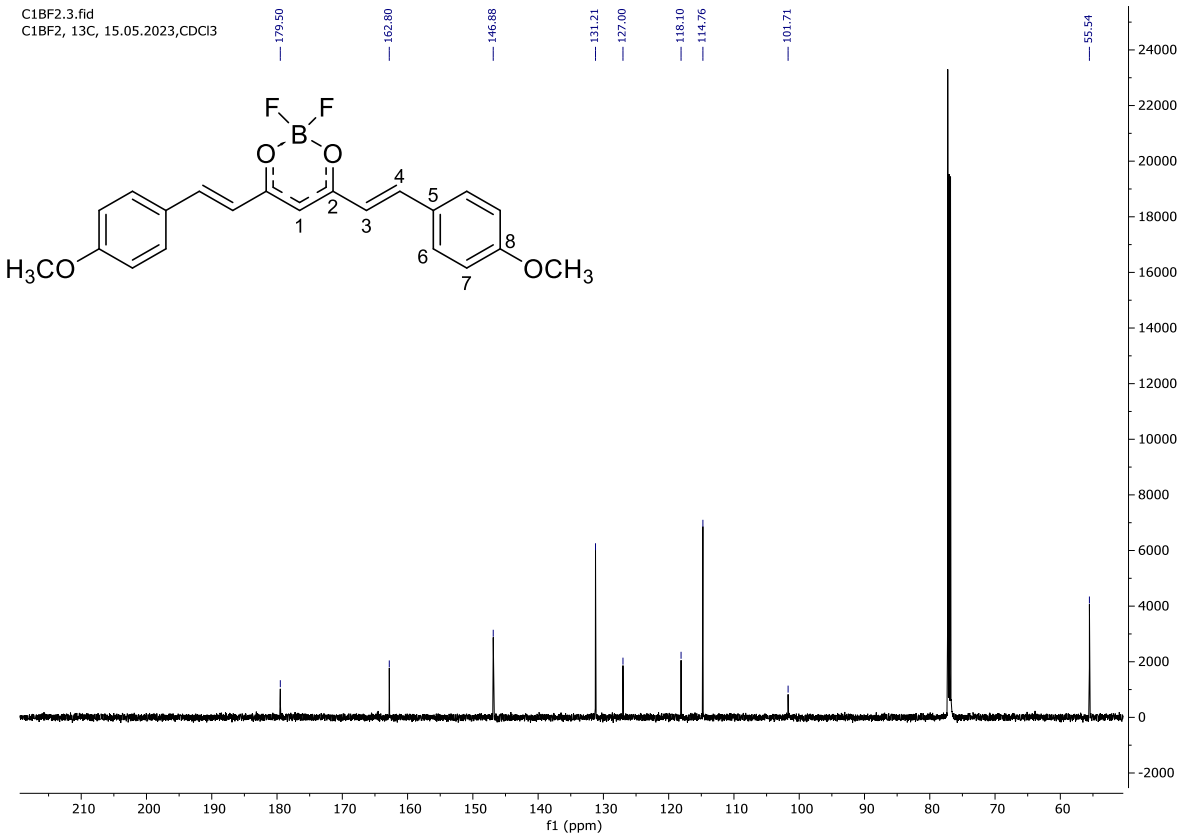


Figure 2.3: ^{13}C NMR spectrum of **2** in $CDCl_3$ at 101 MHz

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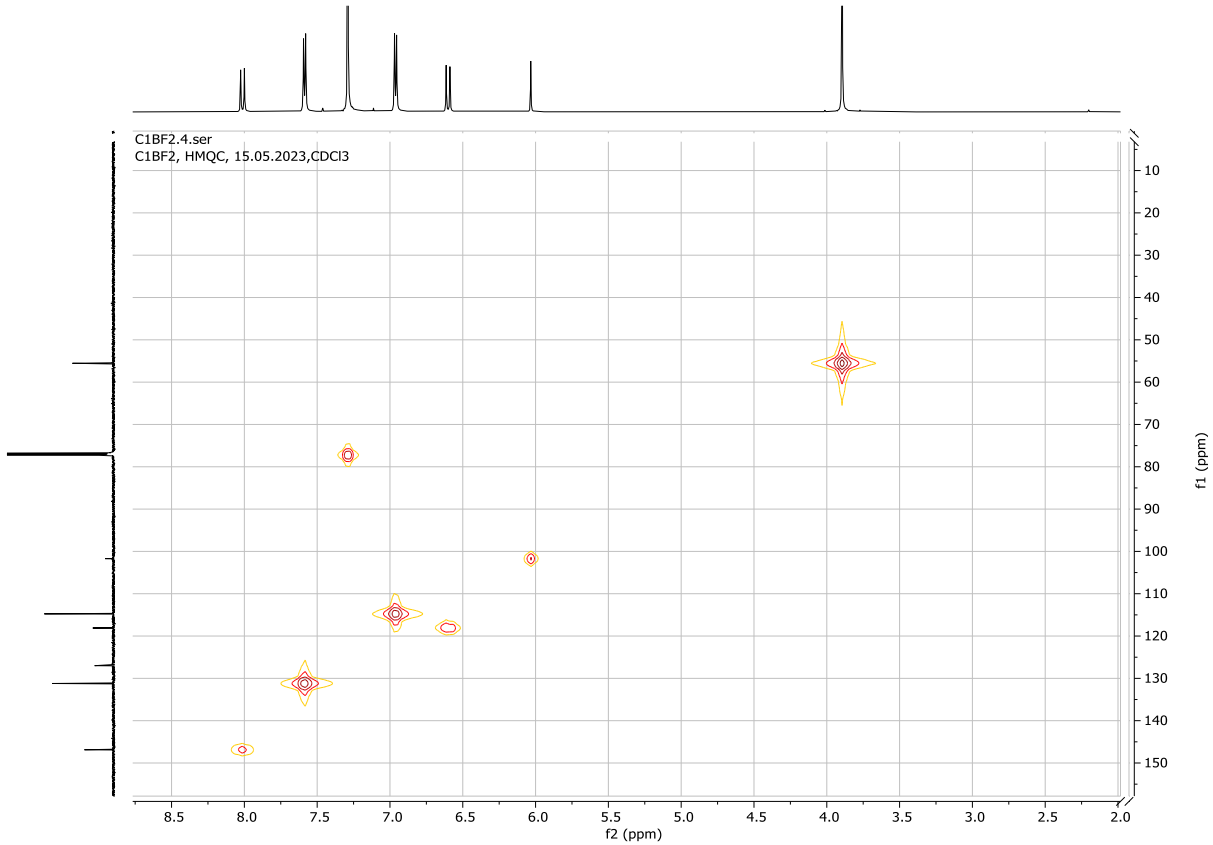


Figure 2.4: ^{1}H-^{13}C HMQC NMR spectrum of **2** in $CDCl_3$

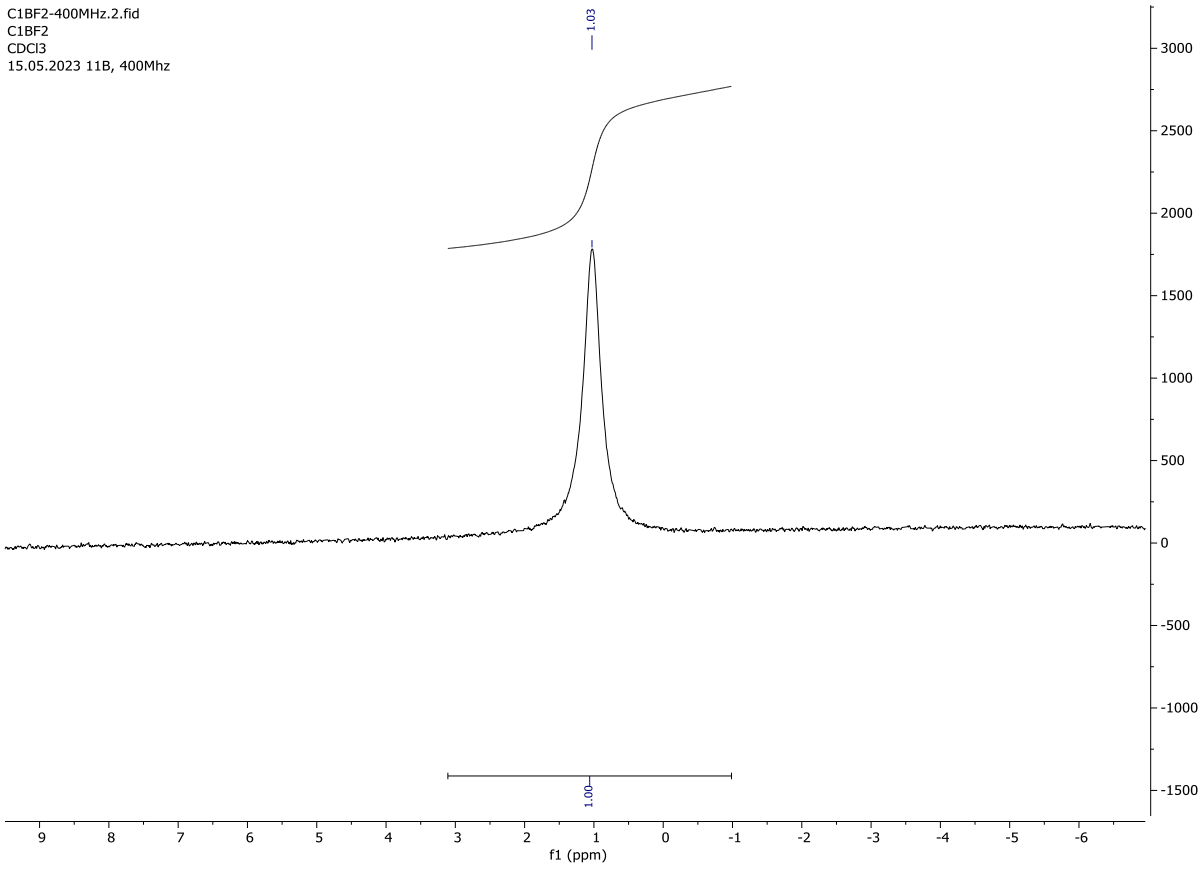


Figure 2.5: ^{11}B NMR spectrum of **2** in $CDCl_3$ at 127 MHz

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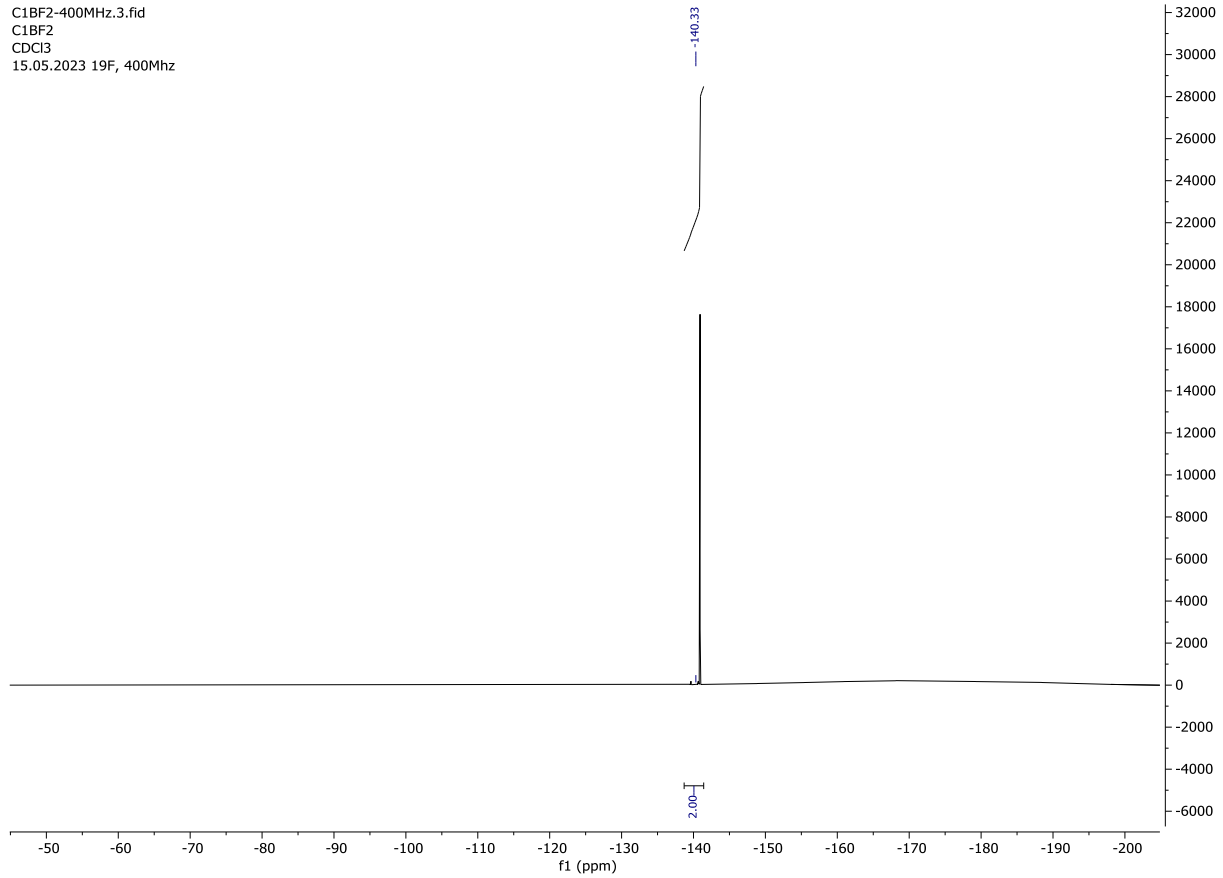
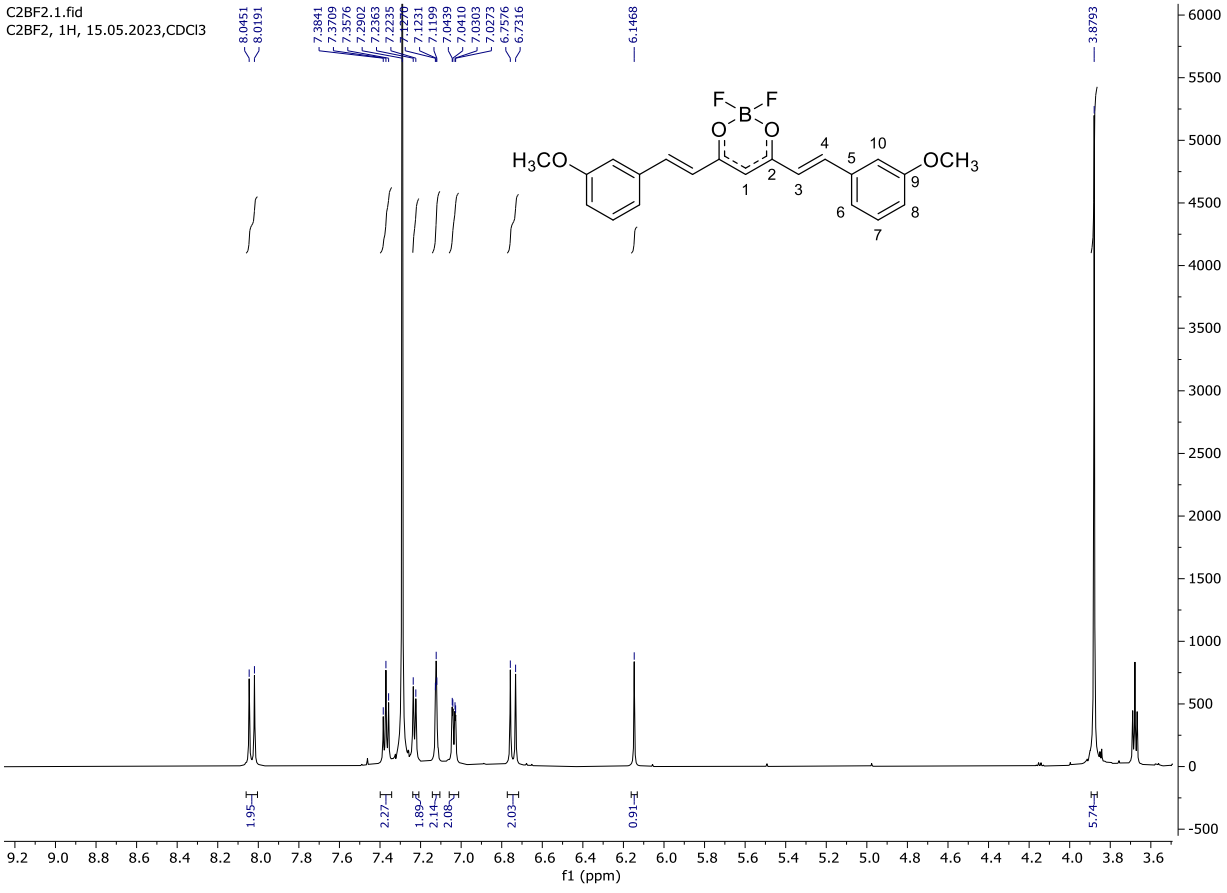


Figure 2.6: ^{19}F NMR spectrum of **2** in $CDCl_3$ at 376 MHz



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Figure 2.7: ^{1}H NMR spectrum of **3** in $CDCl_3$ at 400 MHz

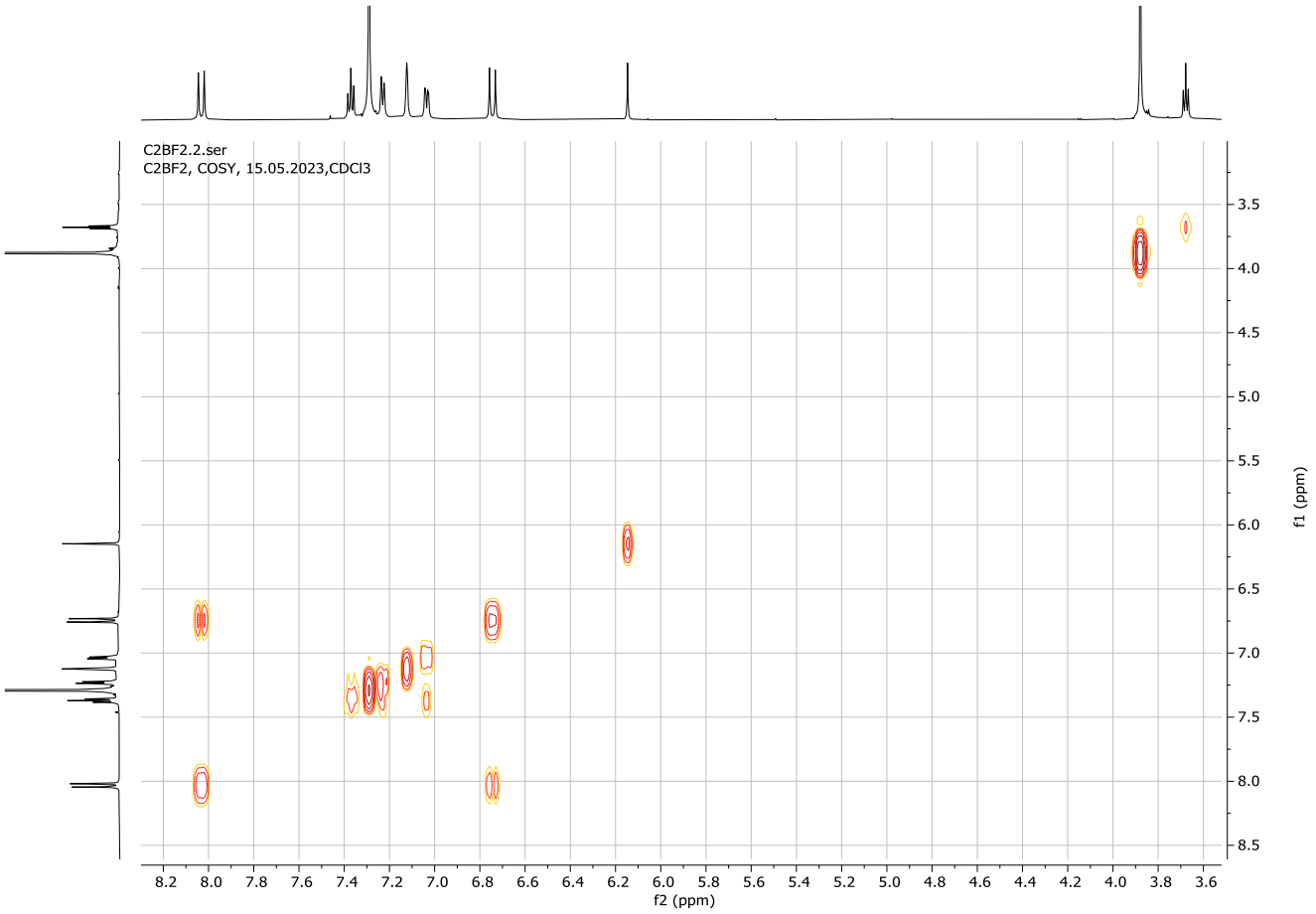


Figure 2.8: ^{1}H-^{1}H COSY NMR spectrum of **3** in $CDCl_3$ at 400 MHz

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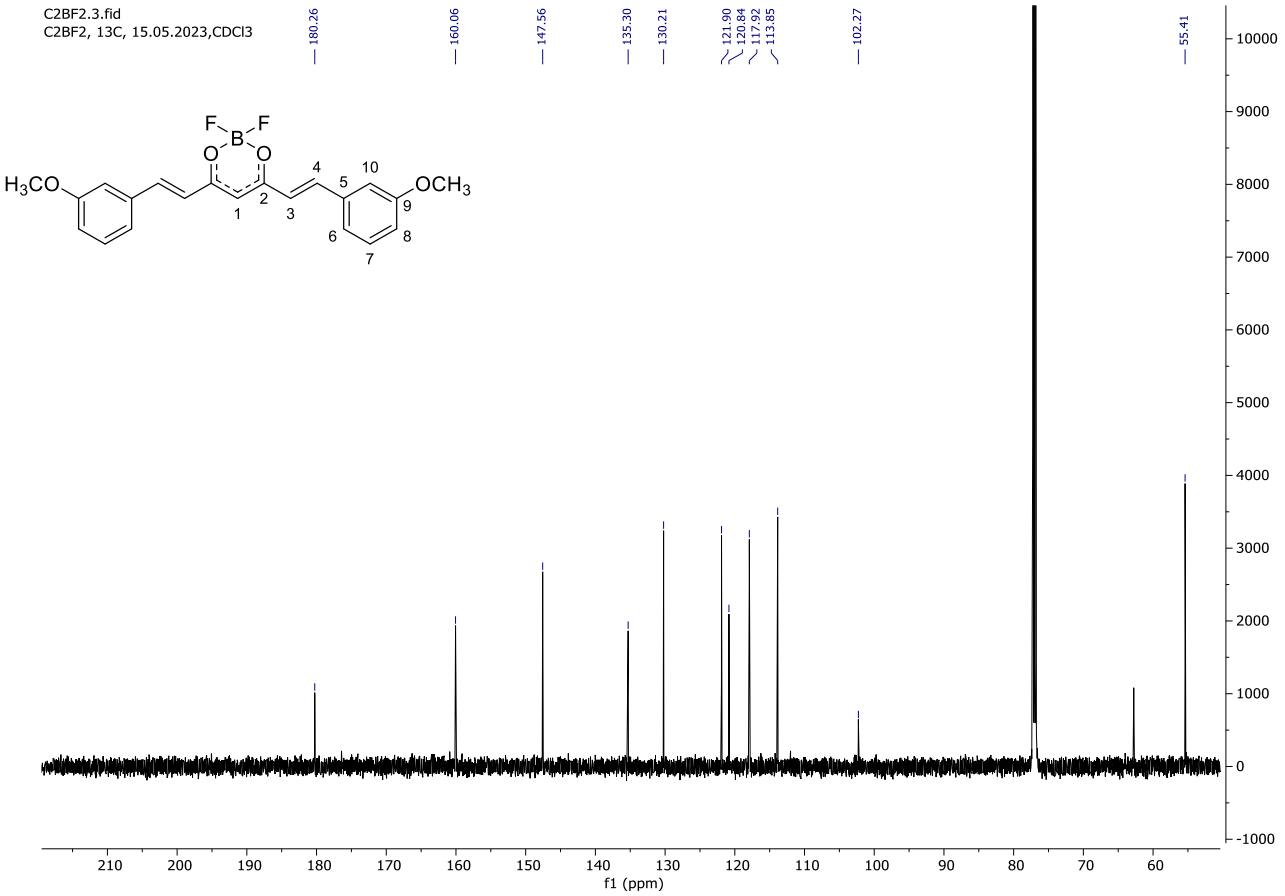
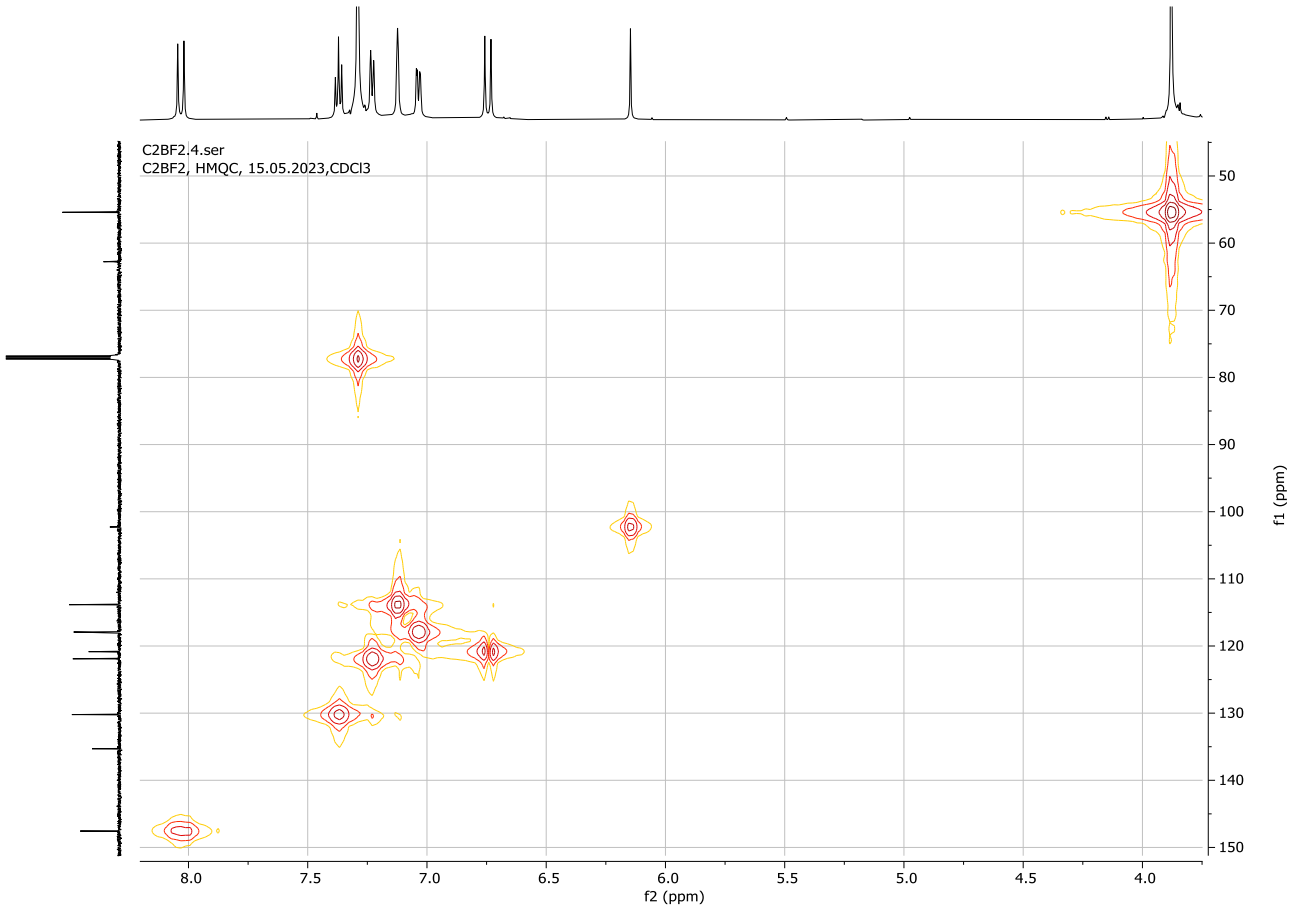


Figure 2.9: ^{13}C NMR spectrum of **3** in $CDCl_3$ at 101 MHz



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Figure 2.10: ^{1}H-^{13}C HMQC NMR spectrum of **3** in $CDCl_3$

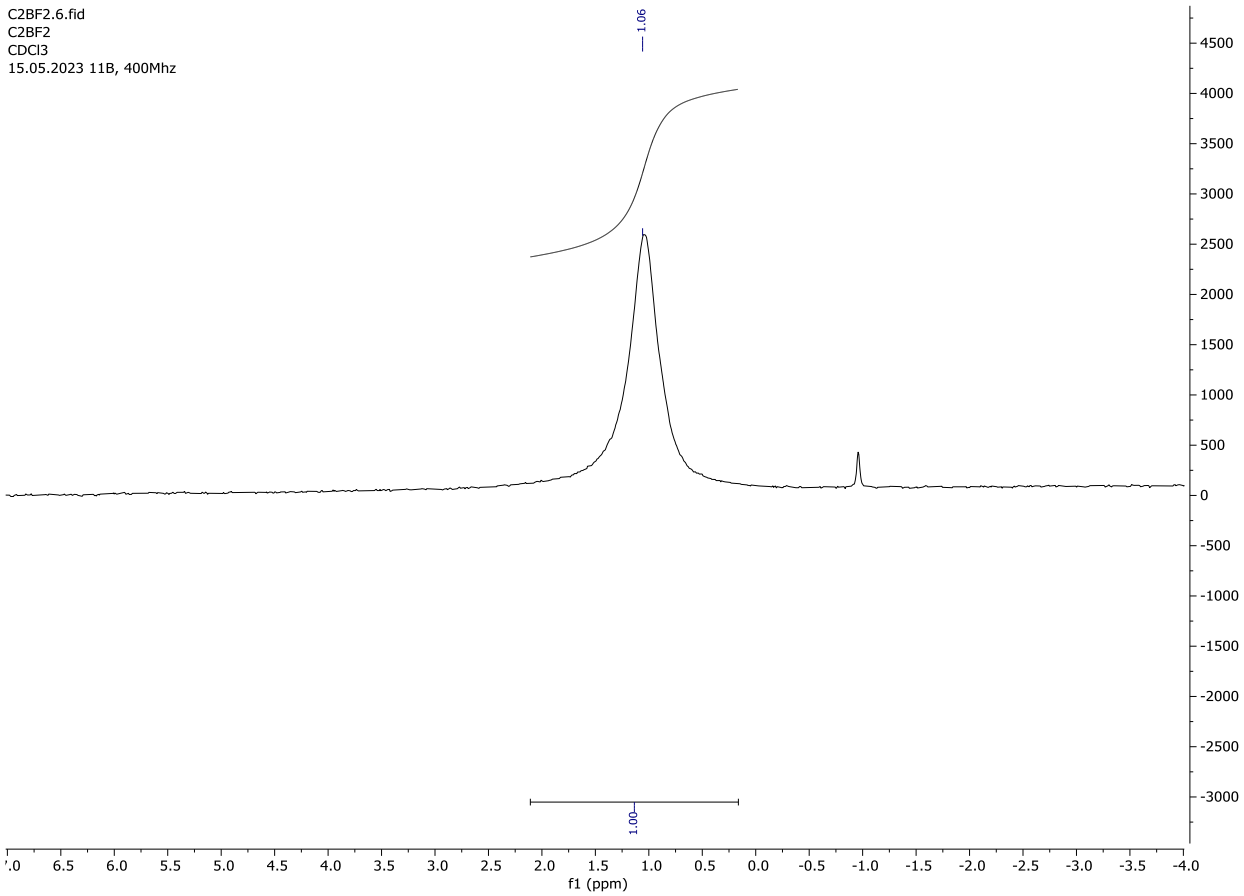


Figure 2.11: ^{11}B NMR spectrum of **3** in $CDCl_3$ at 127 MHz

 ©AUTHOR(S)

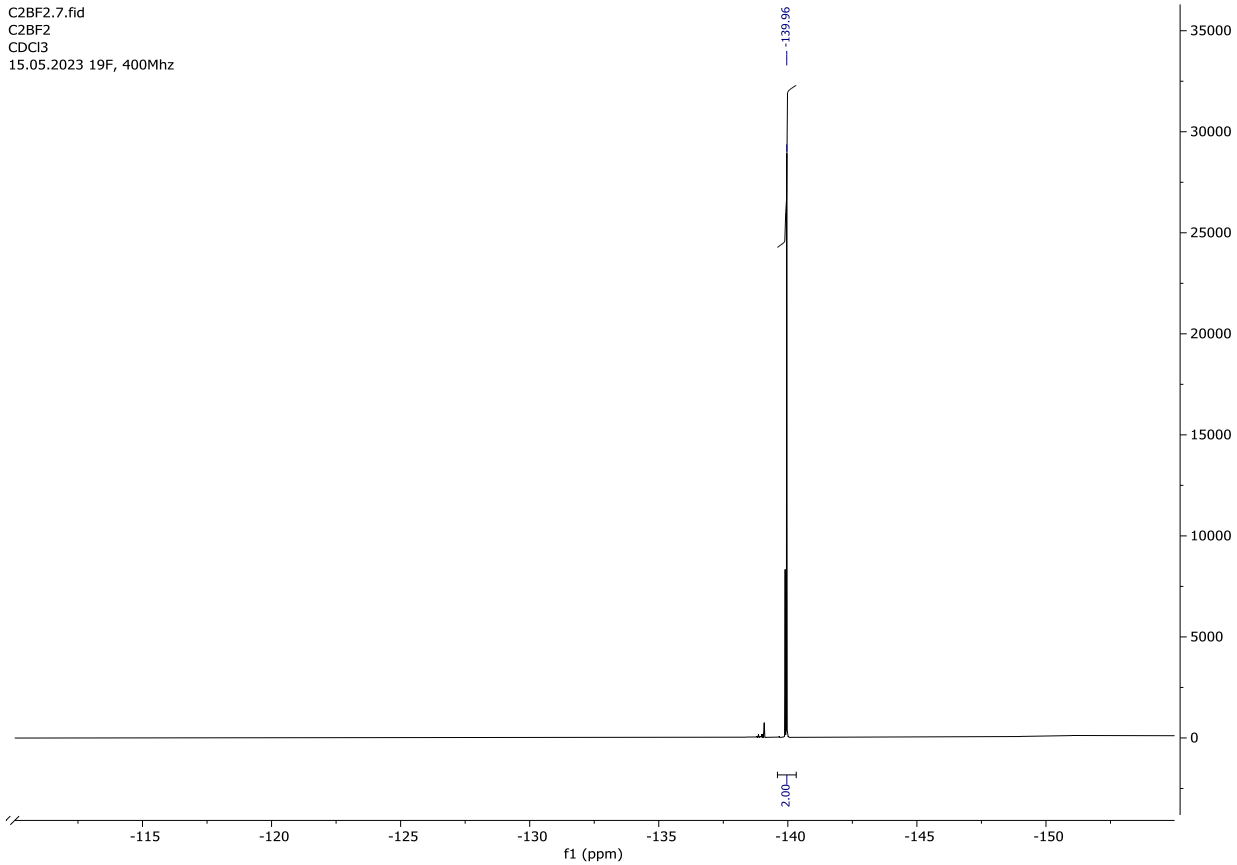
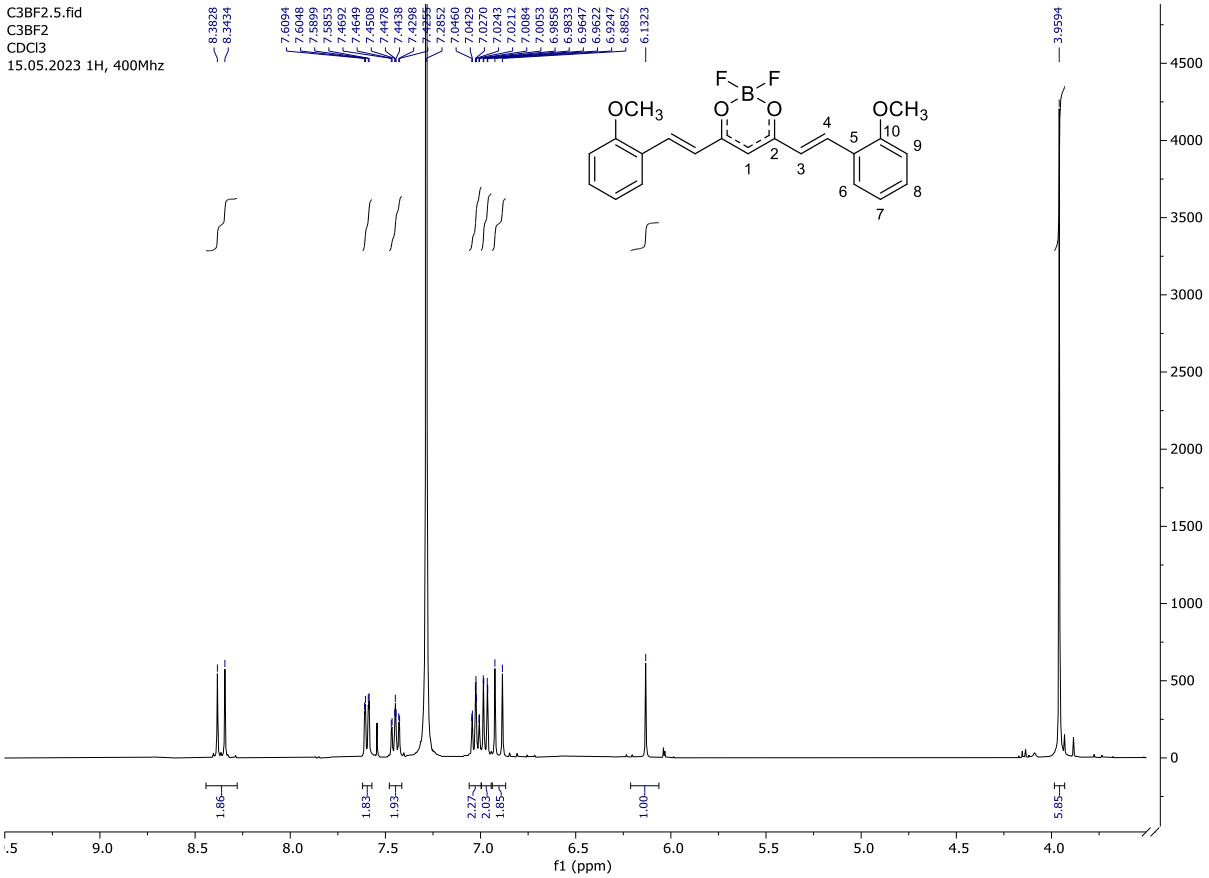


Figure 2.12: ^{19}F NMR spectrum of **3** in $CDCl_3$ at 376 MHz



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Figure 2.13: ^{1}H NMR spectrum of **4** in $CDCl_3$ at 400 MHz

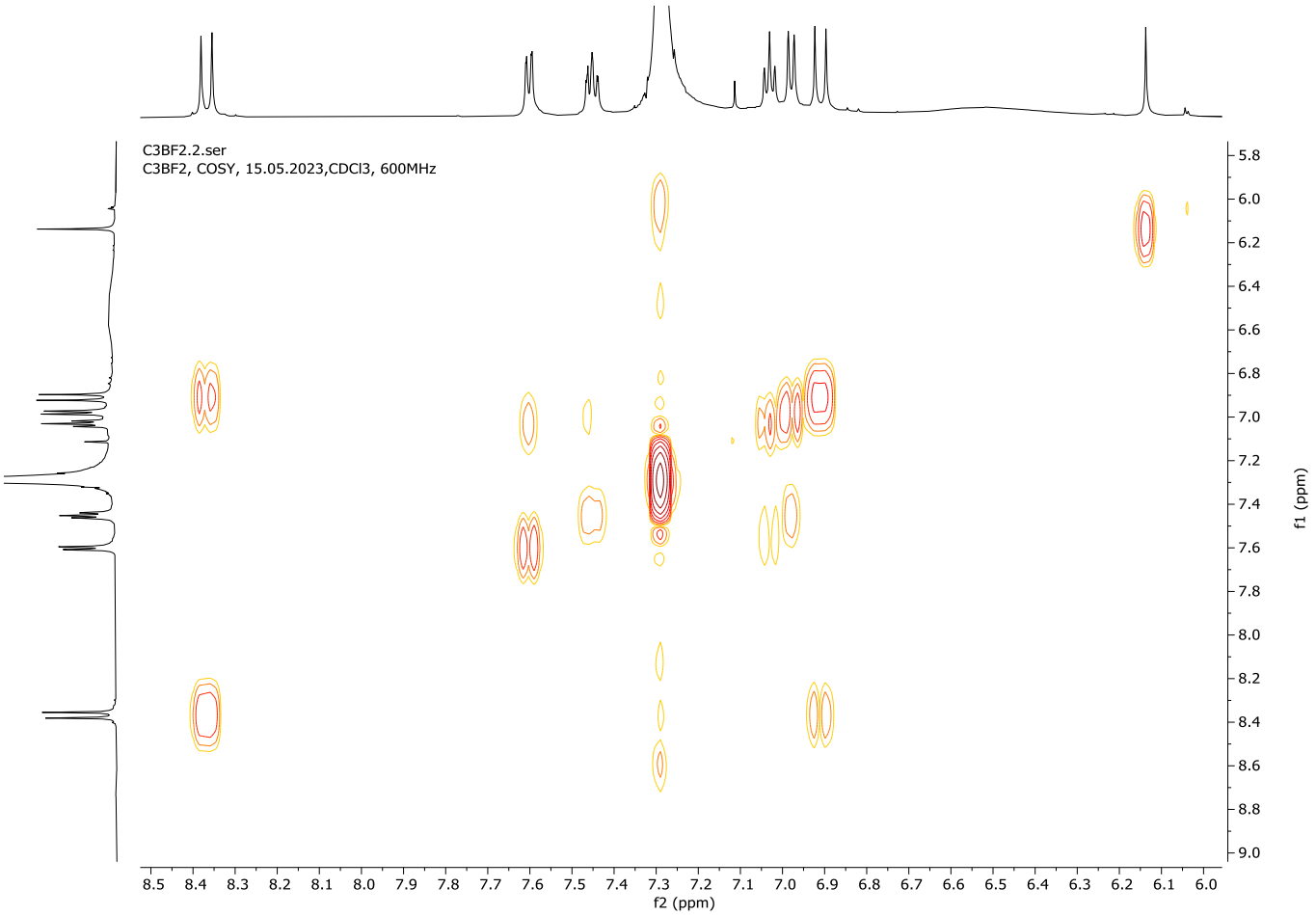


Figure 2.14: ^{1}H-^{1}H COSY NMR spectrum of **4** in $CDCl_3$ at 400 MHz

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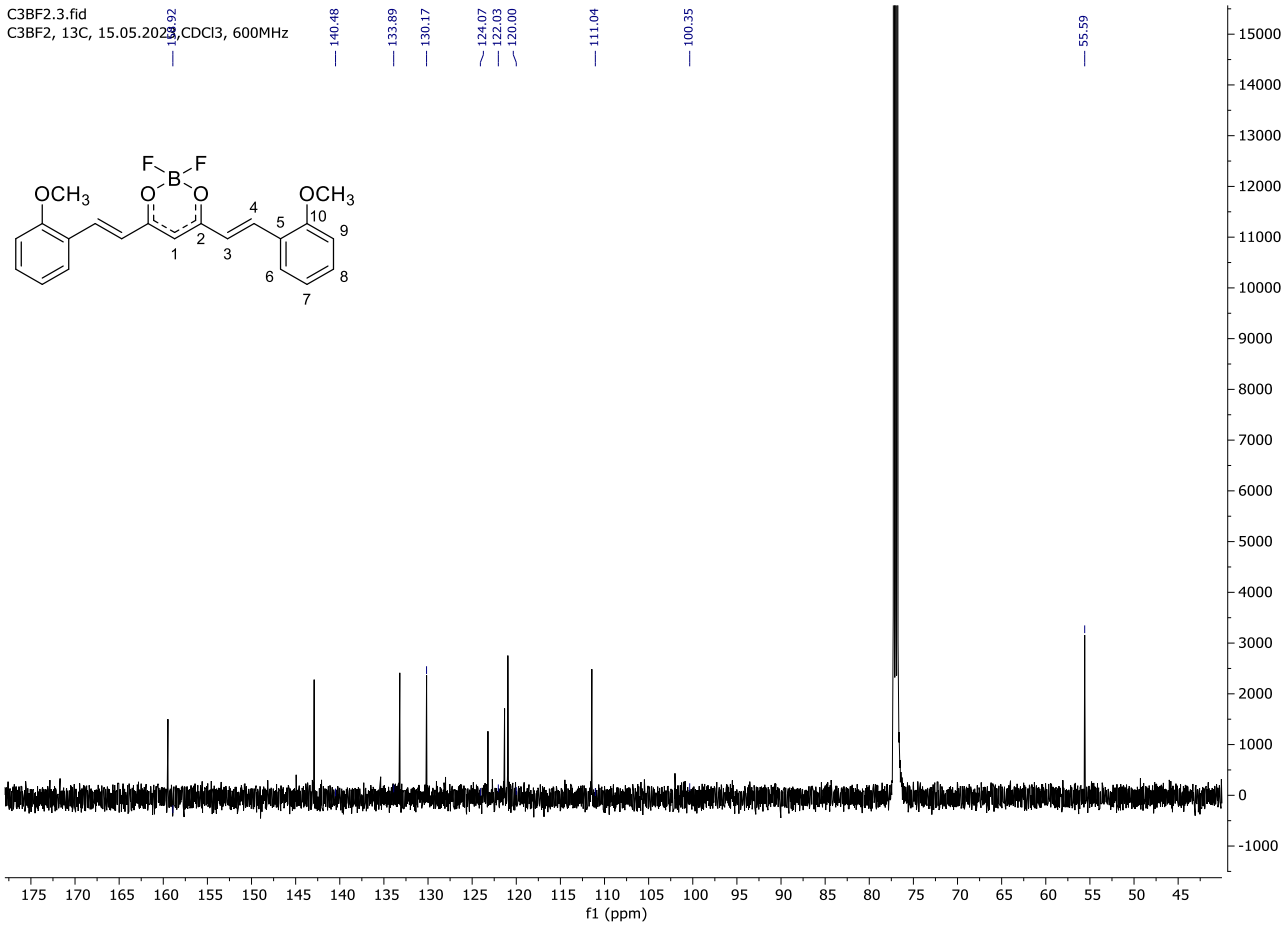
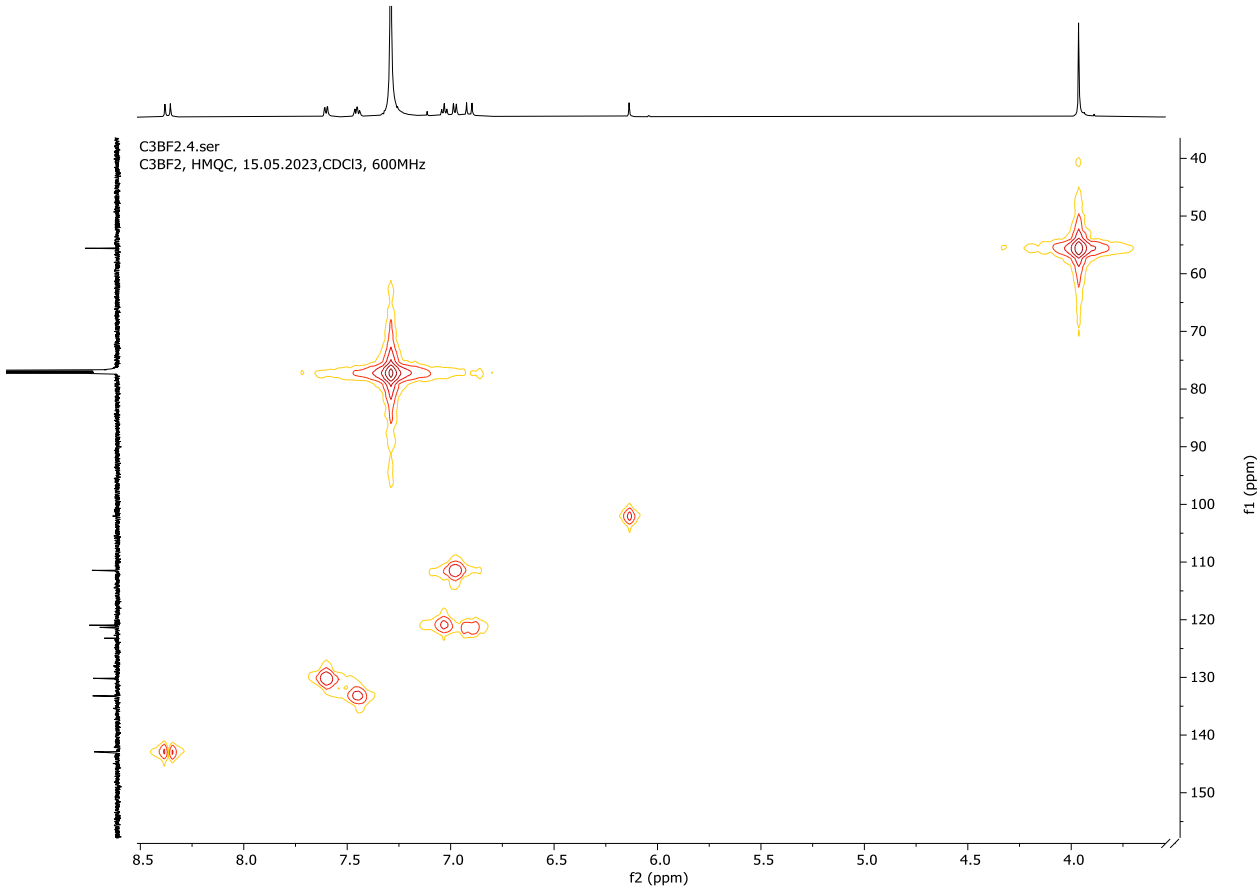


Figure 2.15: ^{13}C NMR spectrum of **4** in $CDCl_3$ at 101 MHz



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Figure 2.16: ^{1}H-^{13}C HMQC NMR spectrum of **4** in $CDCl_3$

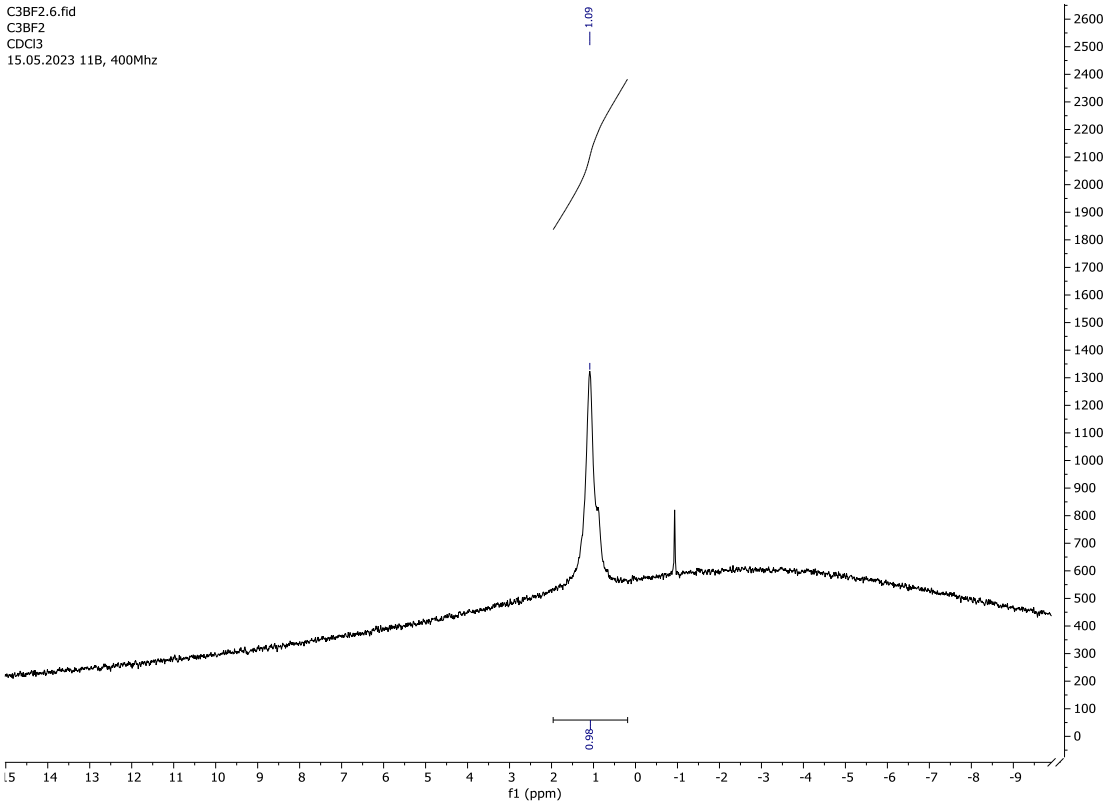


Figure 2.17: ^{11}B NMR spectrum of **4** in $CDCl_3$ at 127 MHz

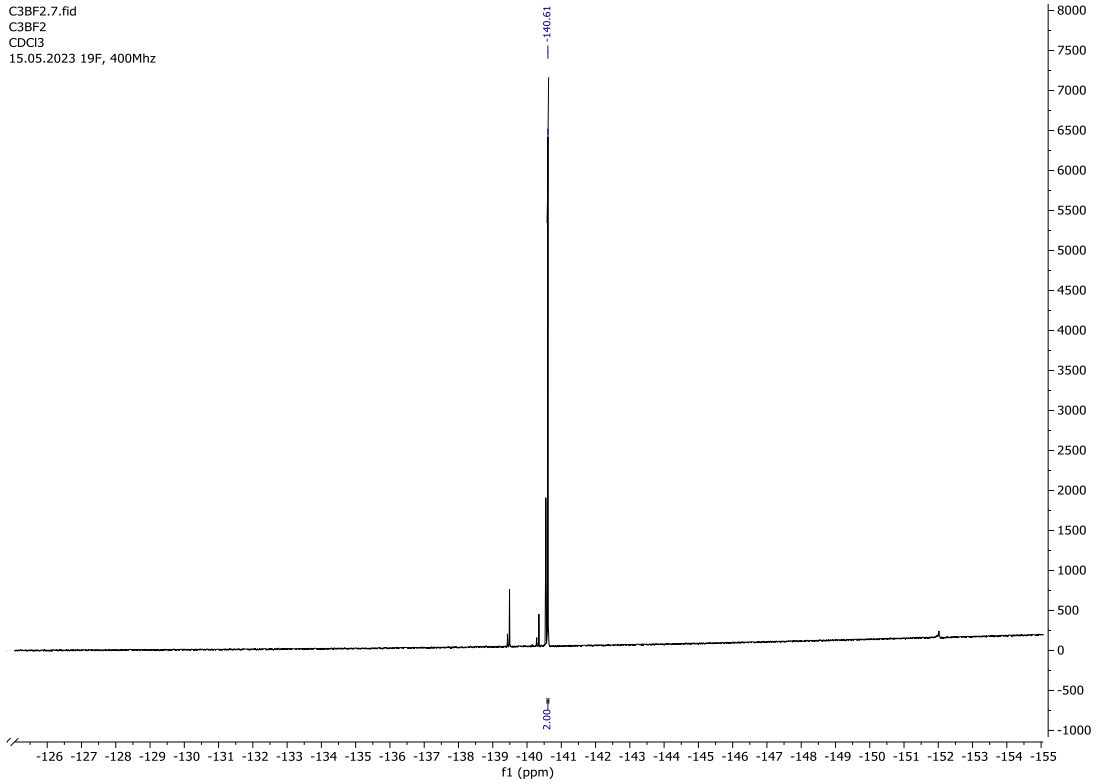


Figure 2.18: ^{19}F NMR spectrum of **4** in $CDCl_3$ at 376 MHz

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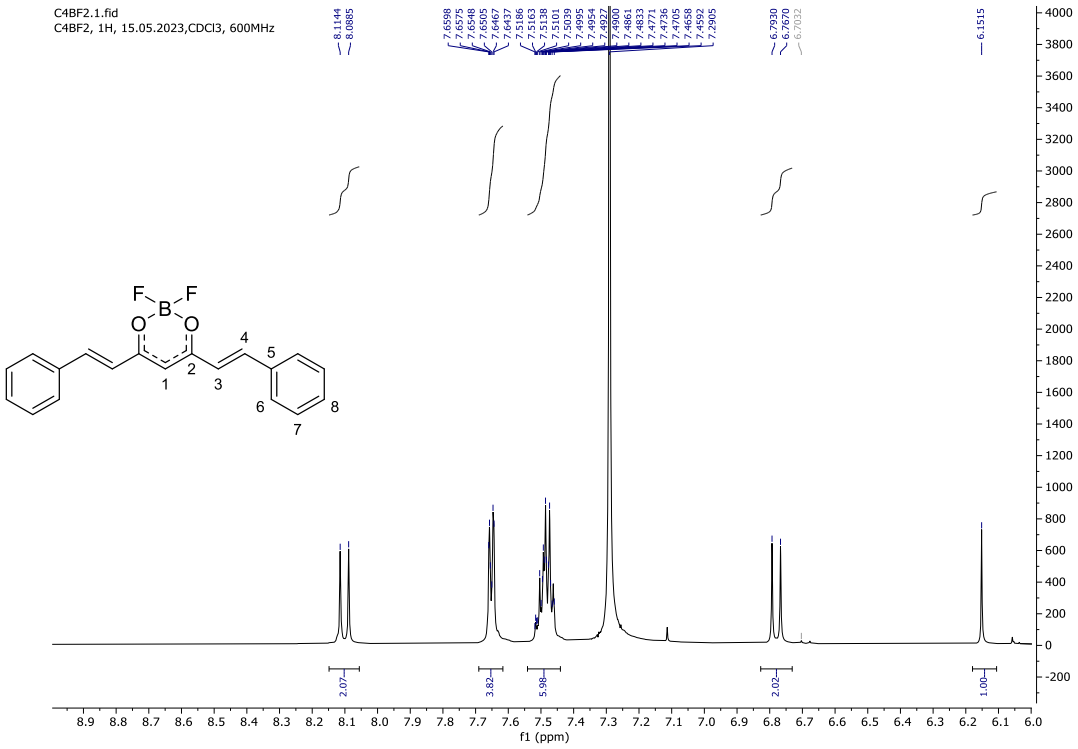


Figure 2.19: ^{1}H NMR spectrum of **5** in $CDCl_3$ at 600 MHz

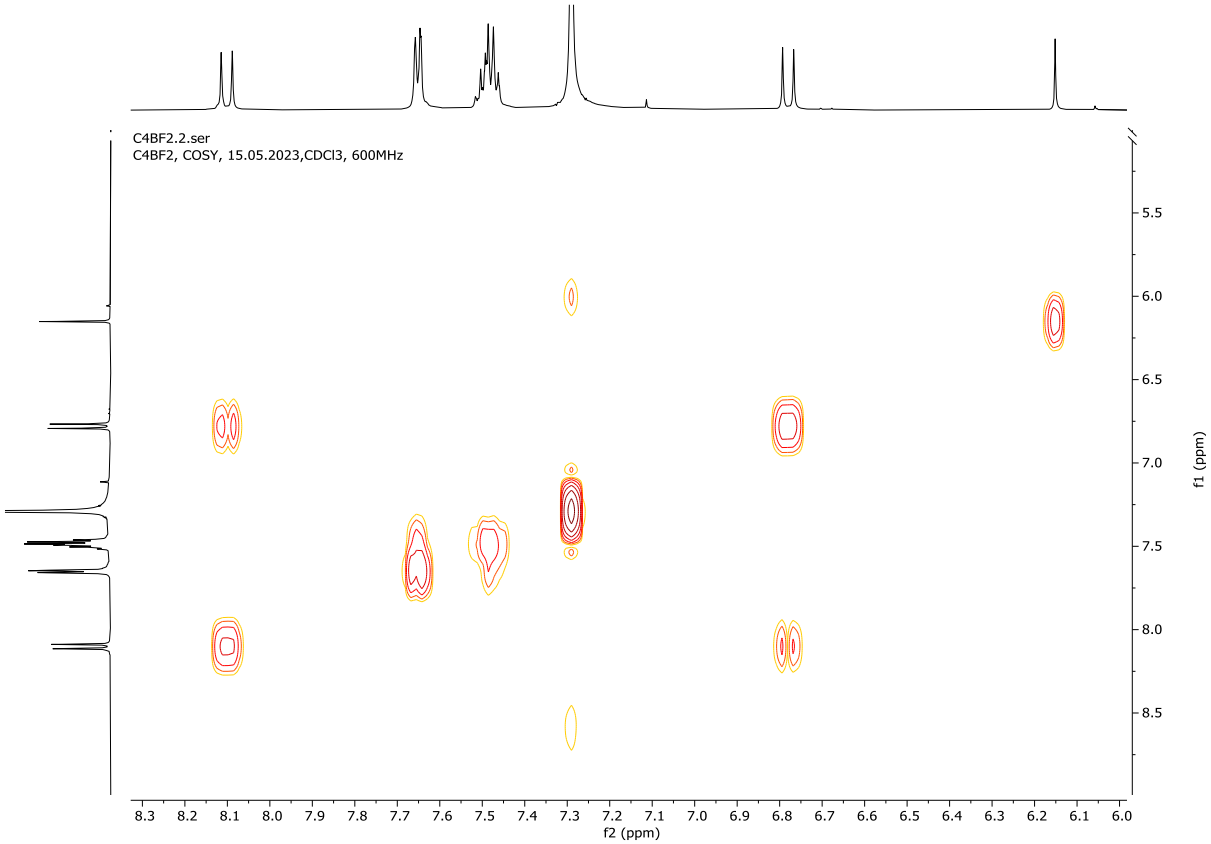


Figure 2.20: ^{1}H-^{1}H COSY NMR spectrum of **5** in $CDCl_3$ at 600 MHz

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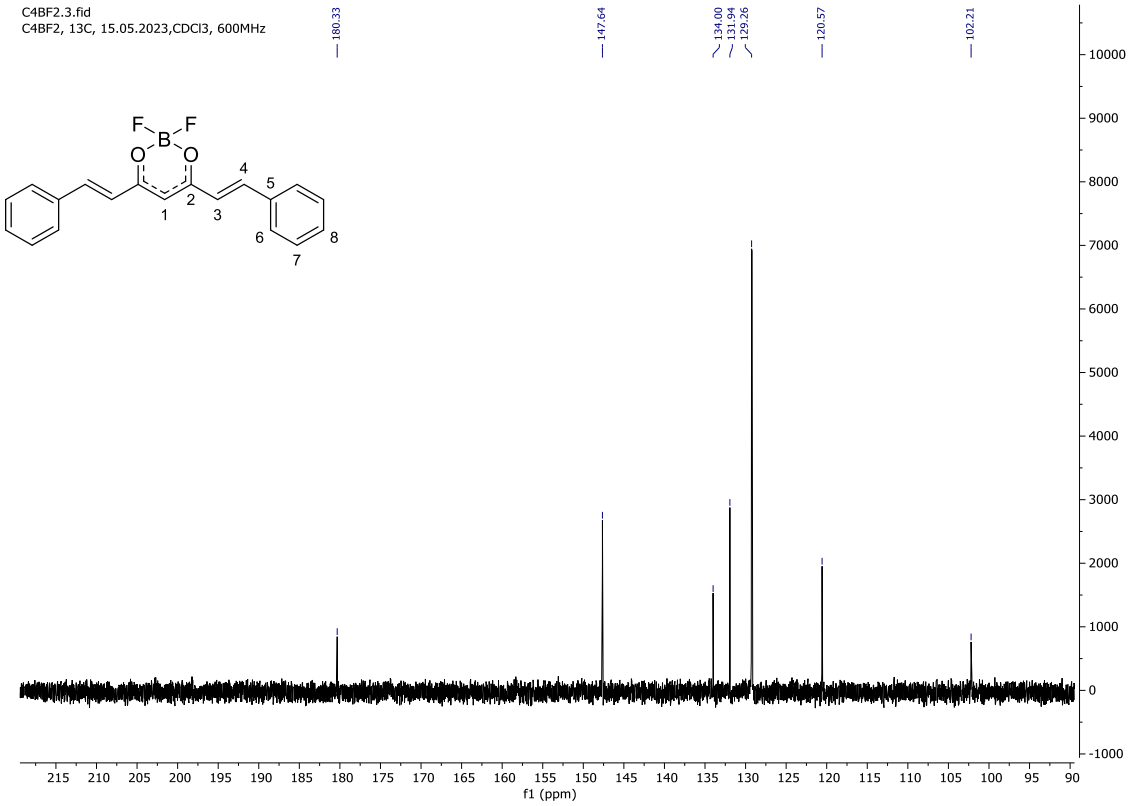


Figure 2.21: ^{13}C NMR spectrum of **5** in $CDCl_3$ at 125 MHz

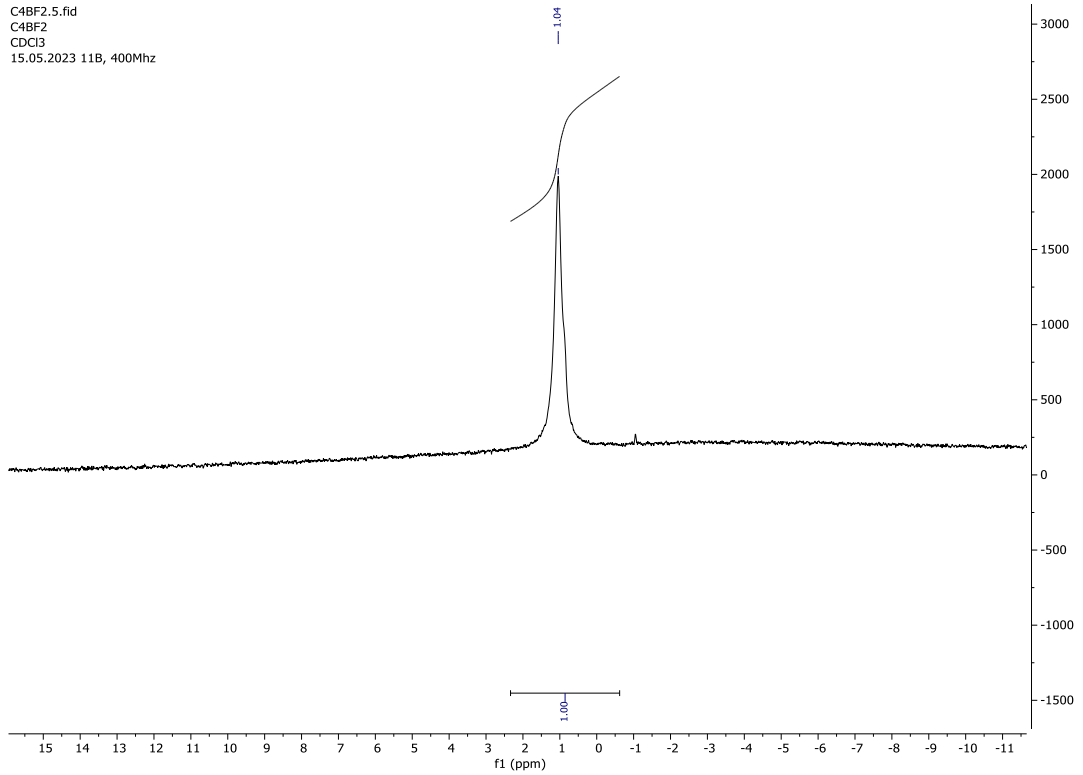


Figure 2.22: ^{11}B NMR spectrum of **5** in $CDCl_3$ at 127 MHz

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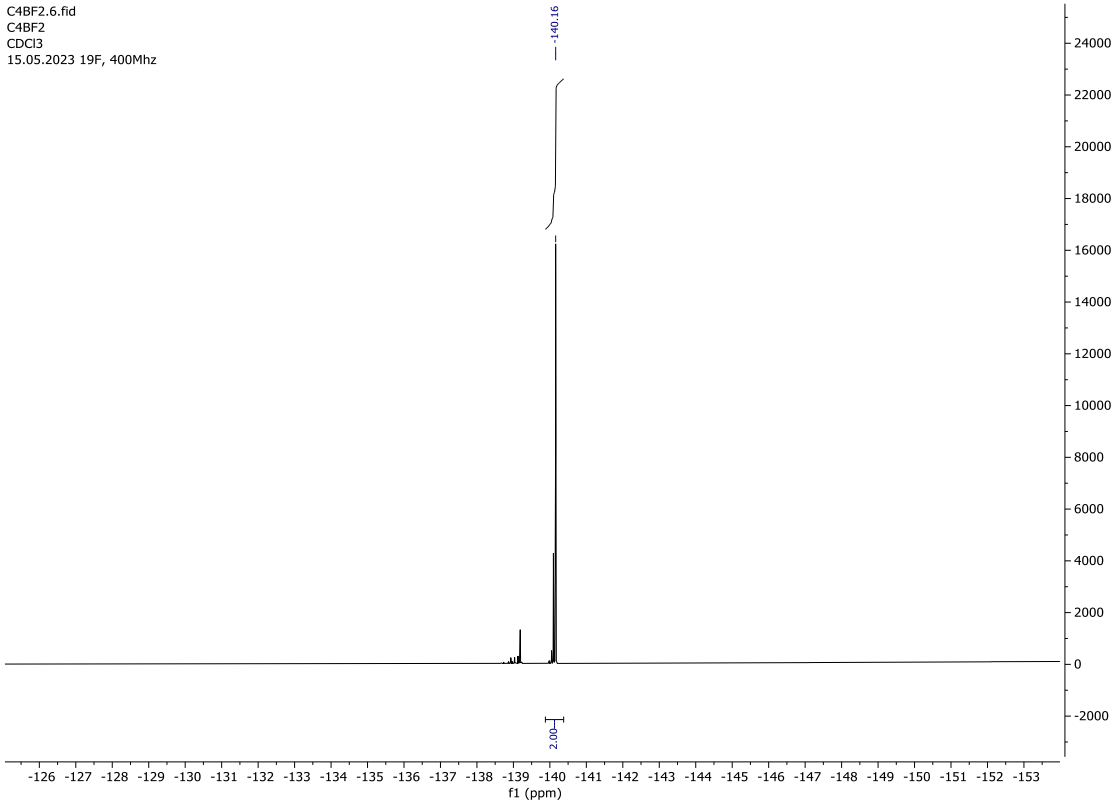


Figure 2.23: ^{19}F NMR spectrum of **5** in $CDCl_3$ at 376 MHz

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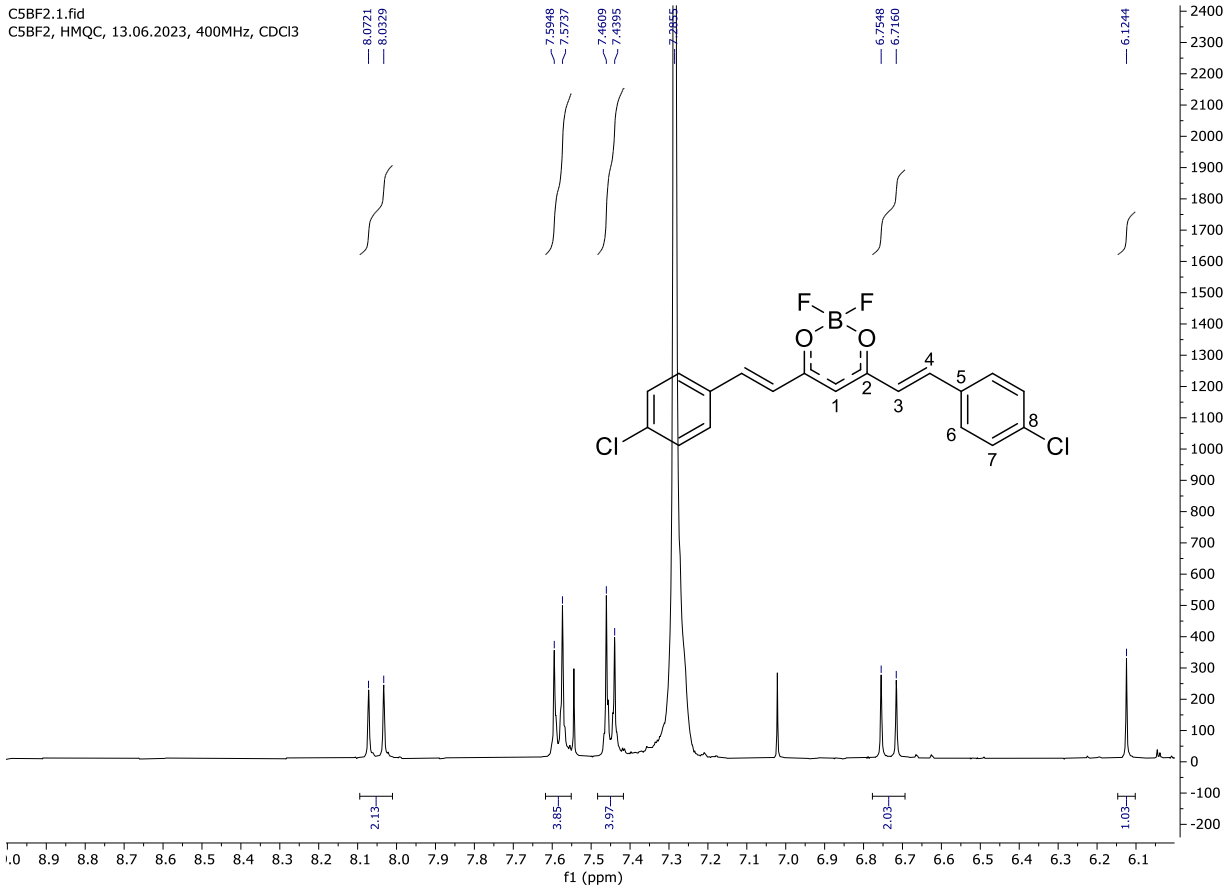


Figure 2.24: ^{1}H NMR spectrum of **6** in $CDCl_3$ at 400 MHz

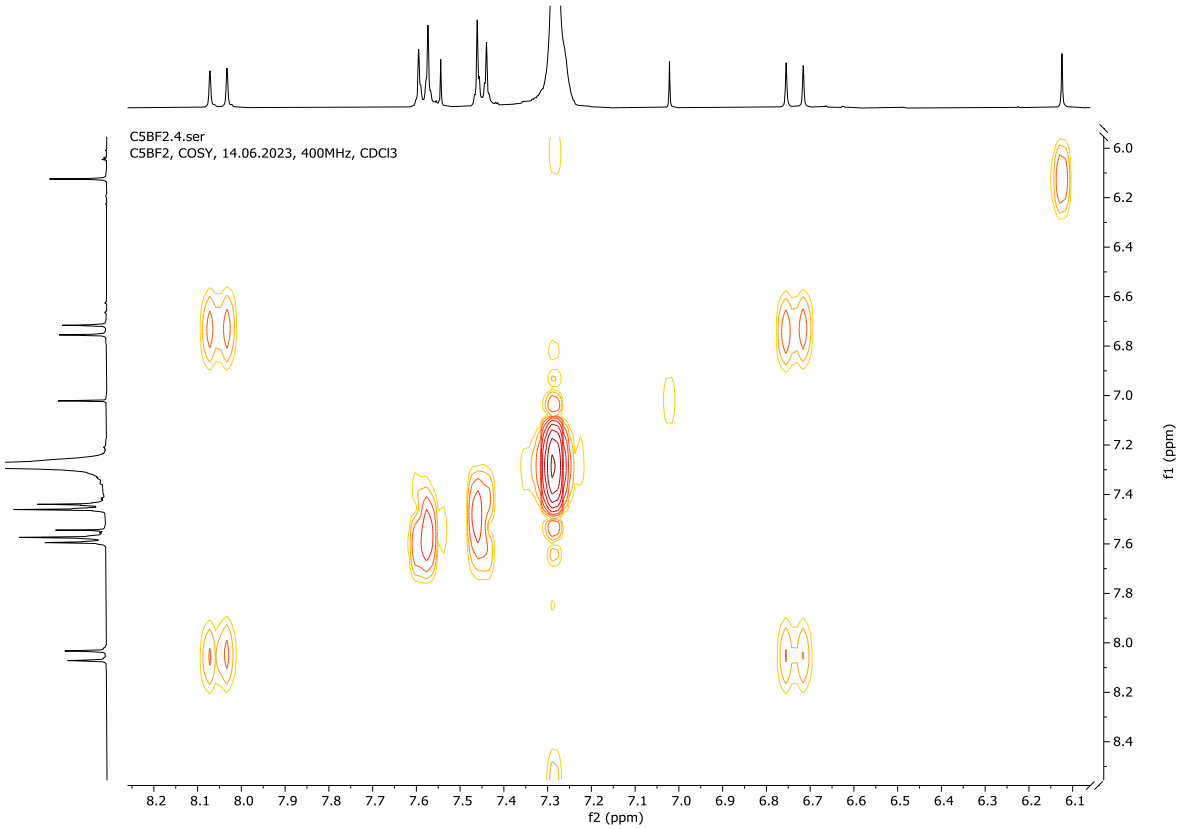


Figure 2.25: ^{1}H-^{1}H COSY NMR spectrum of **6** in $CDCl_3$ at 400 MHz

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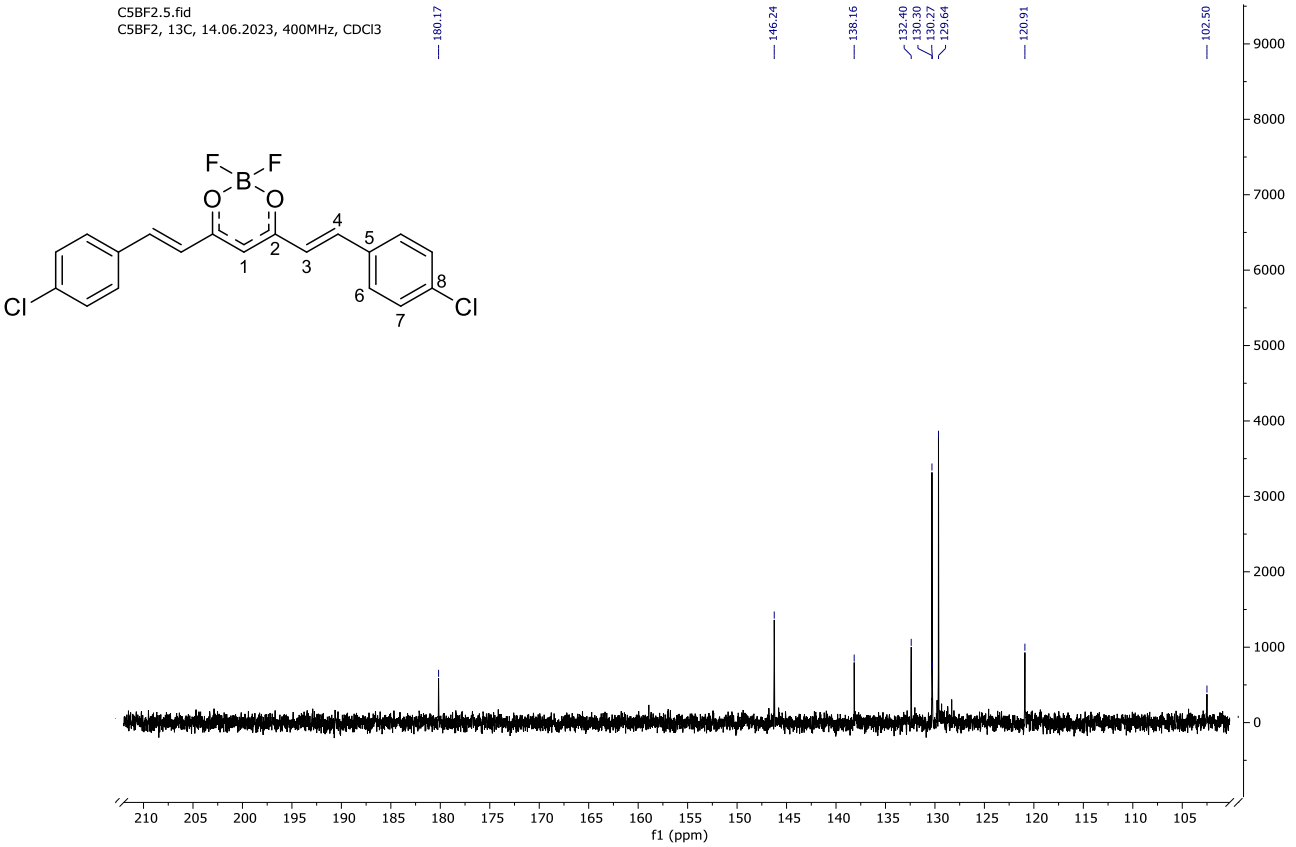


Figure 2.26: ^{13}C NMR spectrum of **6** in $CDCl_3$ at 101 MHz

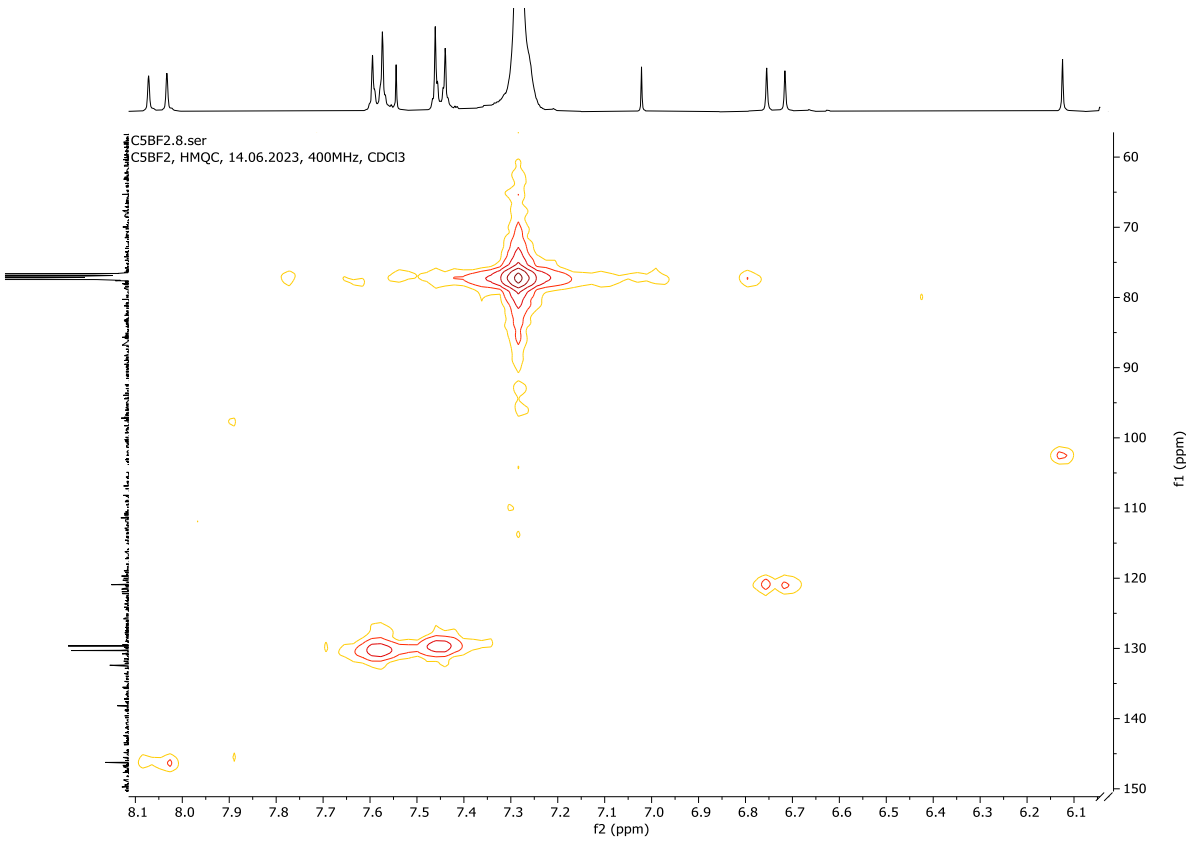


Figure 2.27: ^{1}H-^{13}C HMQC NMR spectrum of **6** in $CDCl_3$

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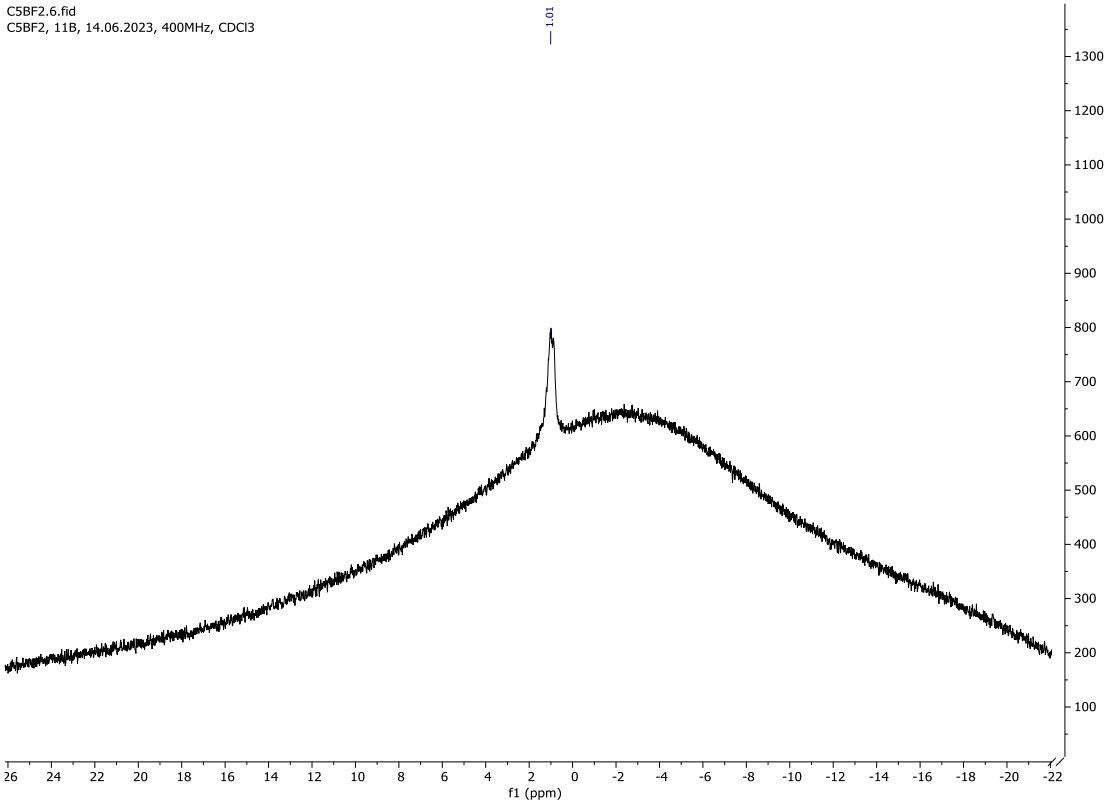


Figure 2.28: ^{11}B NMR spectrum of **6** in $CDCl_3$ at 127 MHz

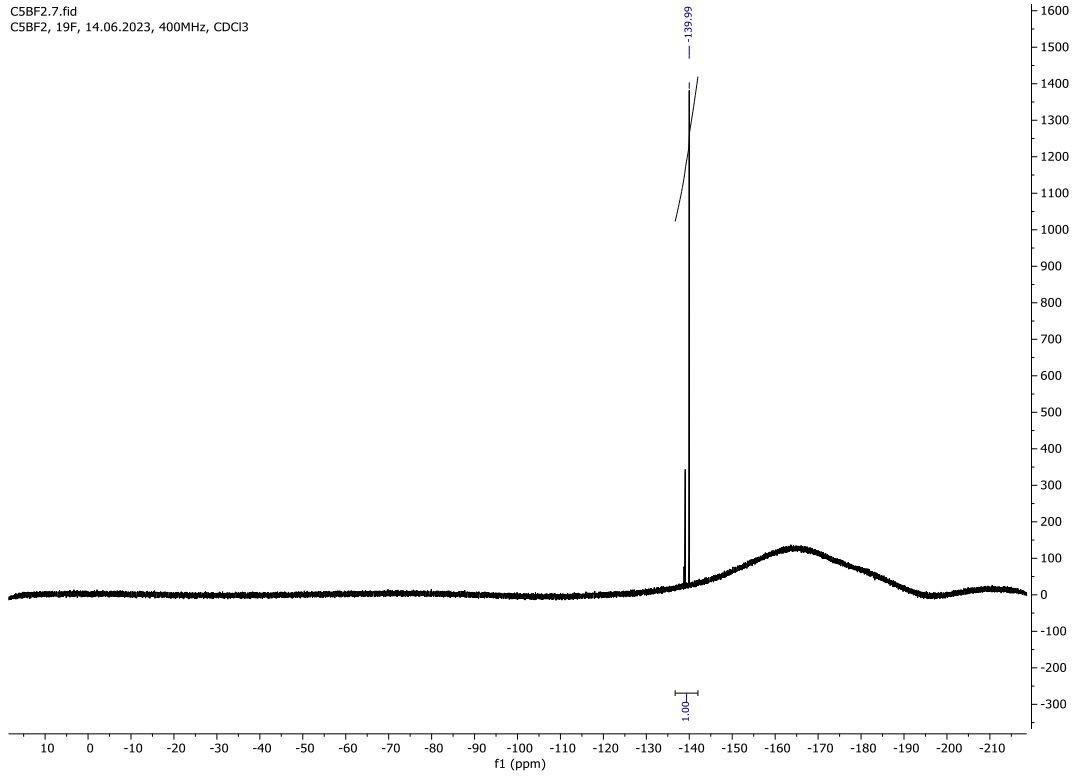


Figure 2.29: ^{19}F NMR spectrum of **6** in $CDCl_3$ at 376 MHz

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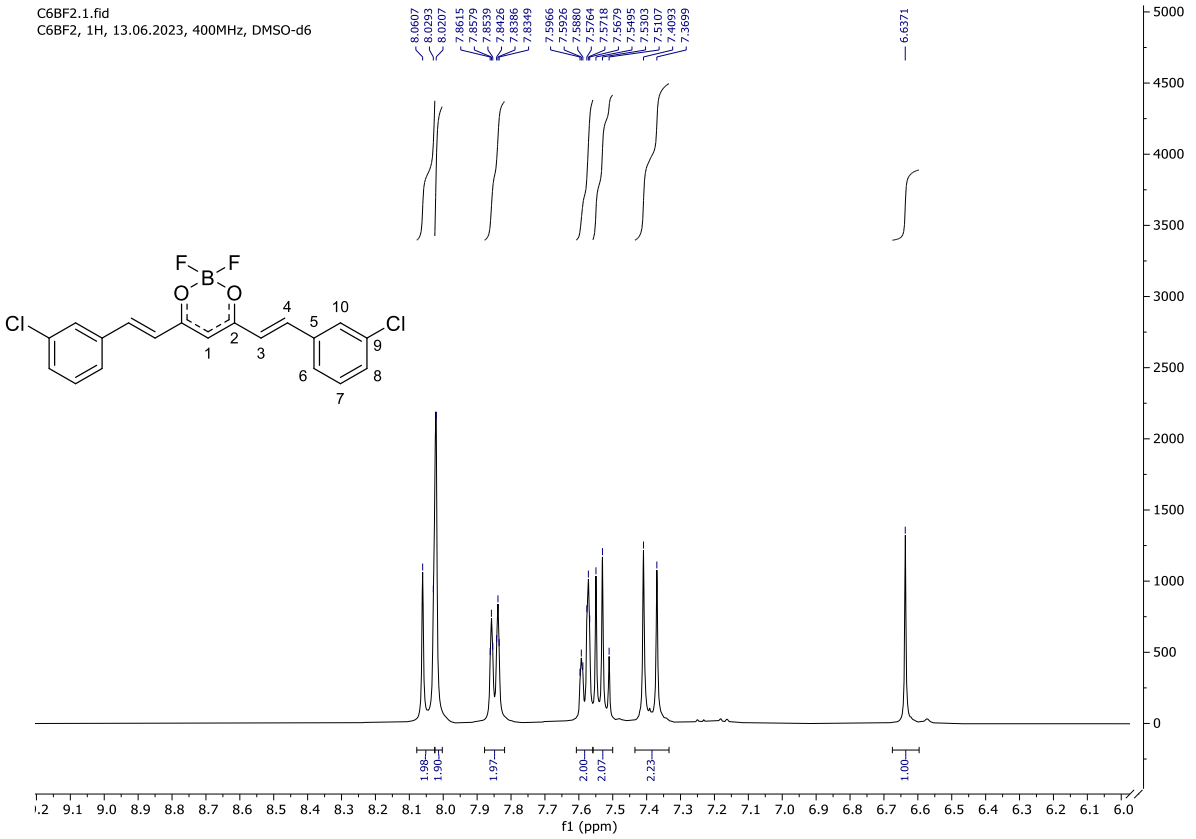


Figure 2.30: ^{1}H NMR spectrum of **7** in DMSO-*d6* at 400 MHz

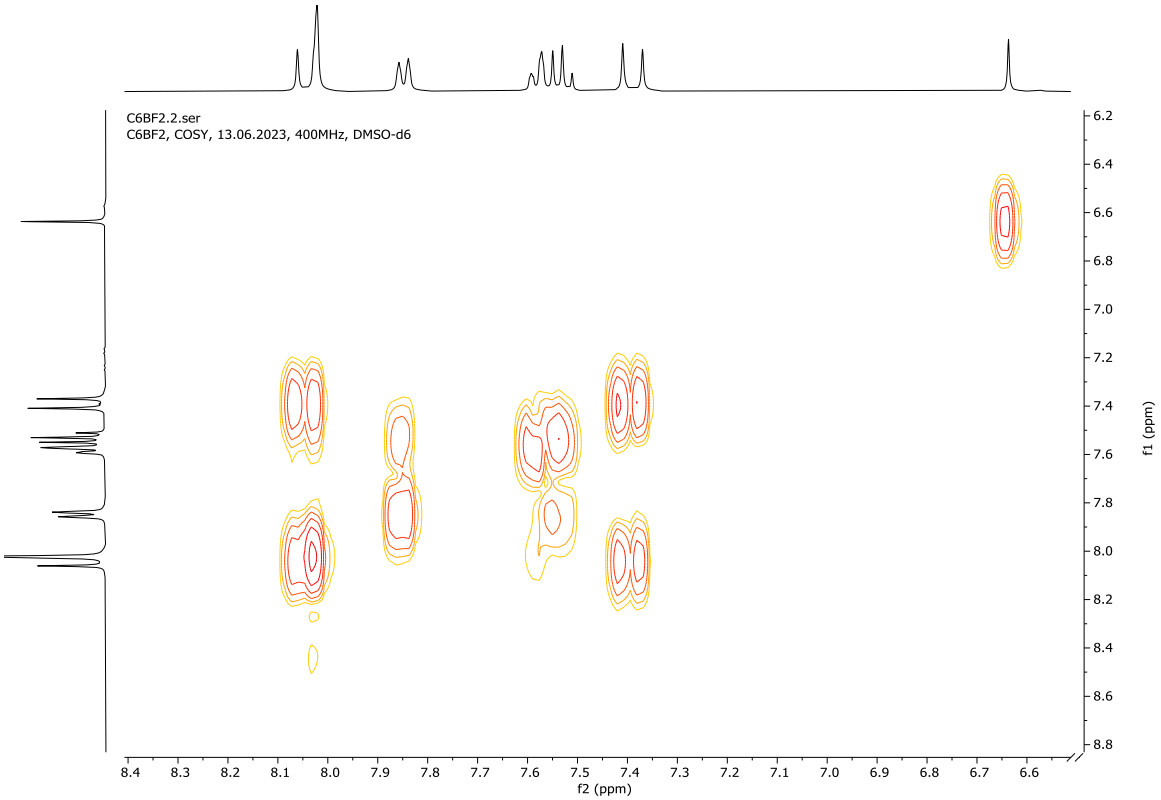


Figure 2.31: ^{1}H-^{1}H COSY NMR spectrum of **7** in DMSO-*d6* at 400 MHz

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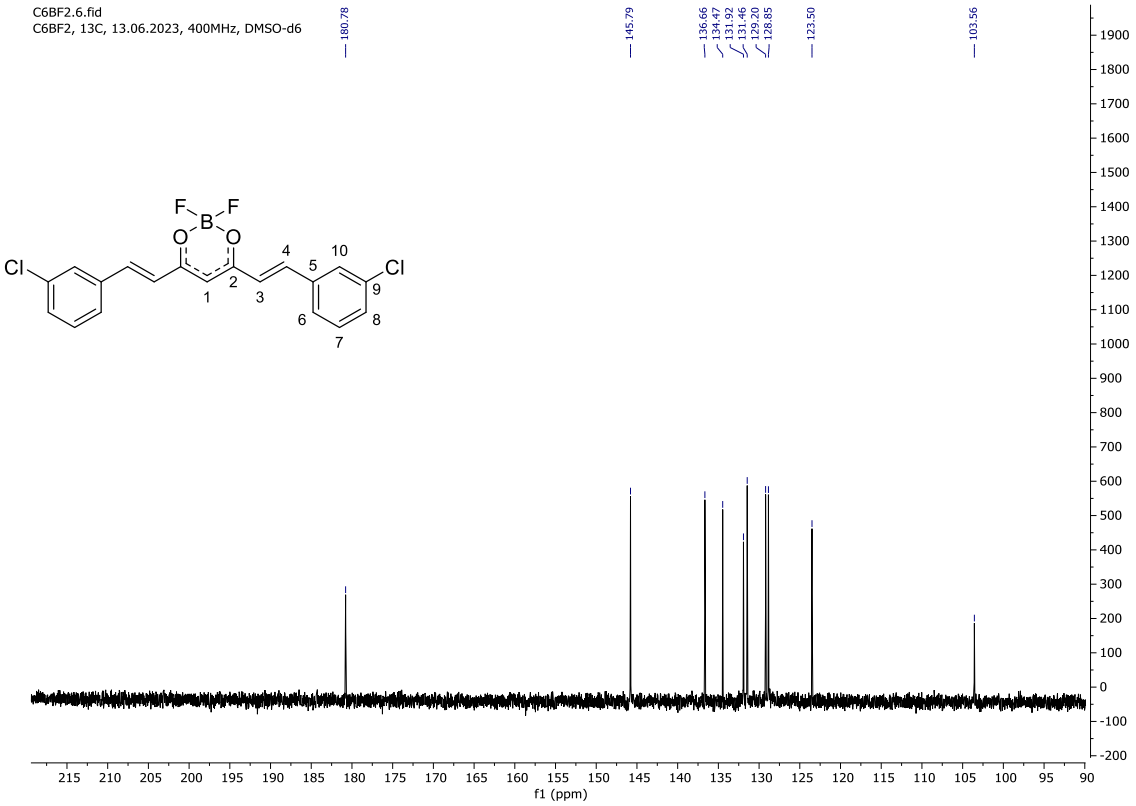


Figure 2.32: ^{13}C NMR spectrum of **7** in DMSO-*d6* at 101 MHz

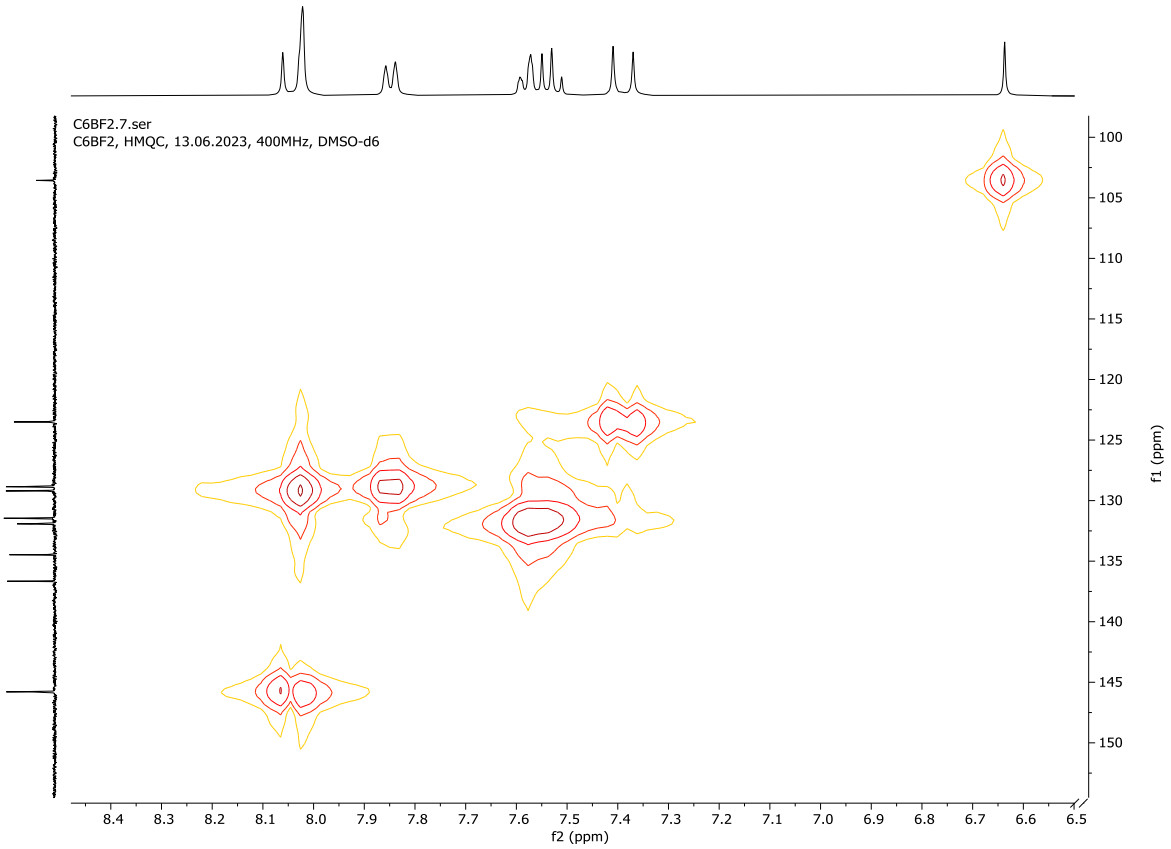


Figure 2.33: ^{1}H-^{13}C HMQC NMR spectrum of **7** in DMSO-*d6*

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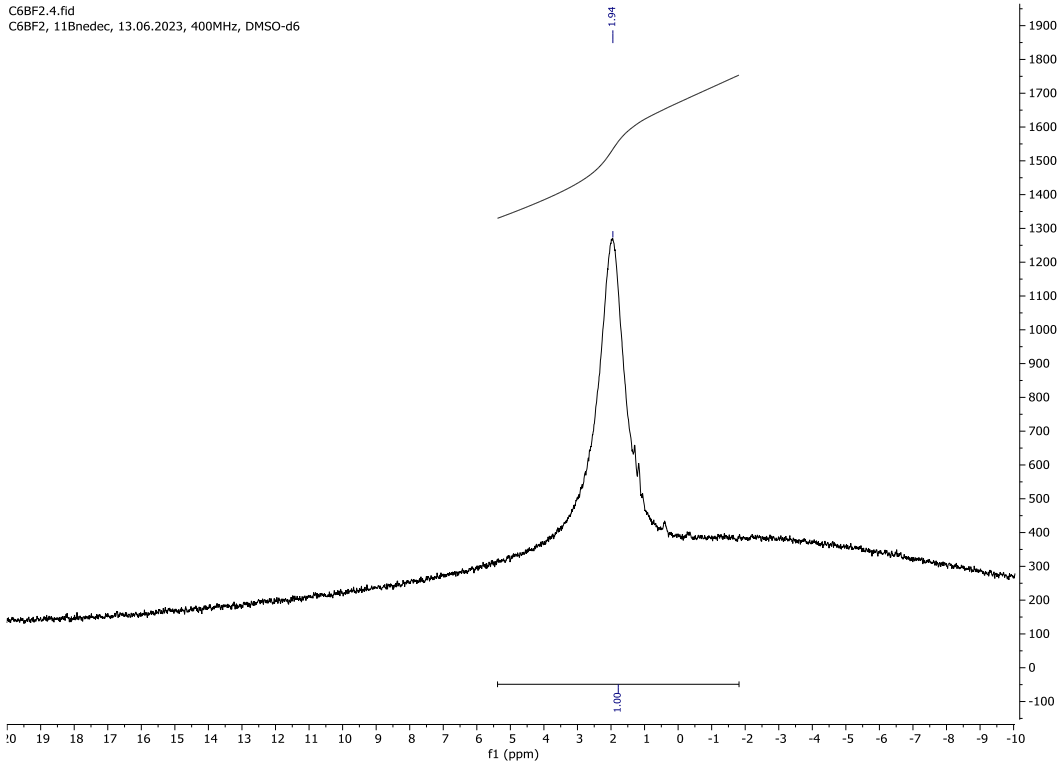


Figure 2.34: ^{11}B NMR spectrum of **7** in DMSO-*d6* at 127 MHz

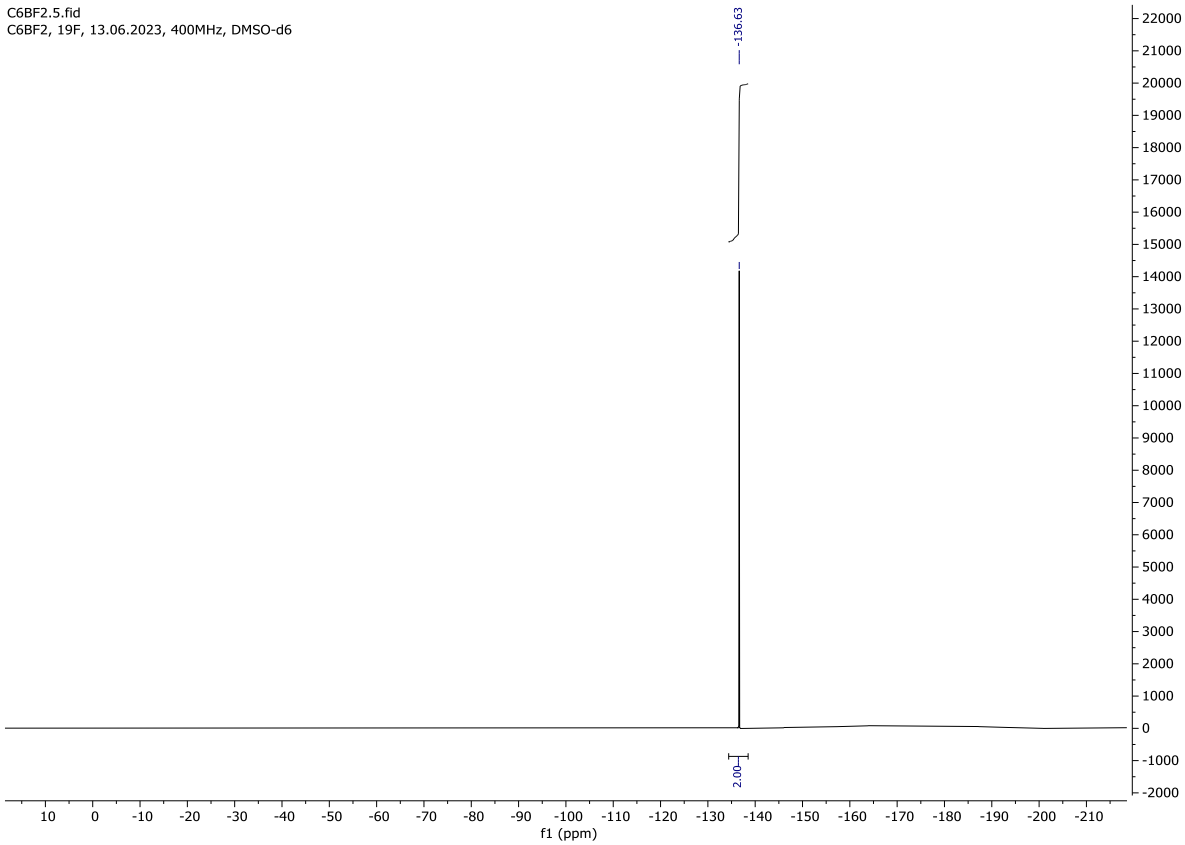


Figure 2.35: ^{19}F NMR spectrum of **7** in DMSO-*d6* at 376 MHz

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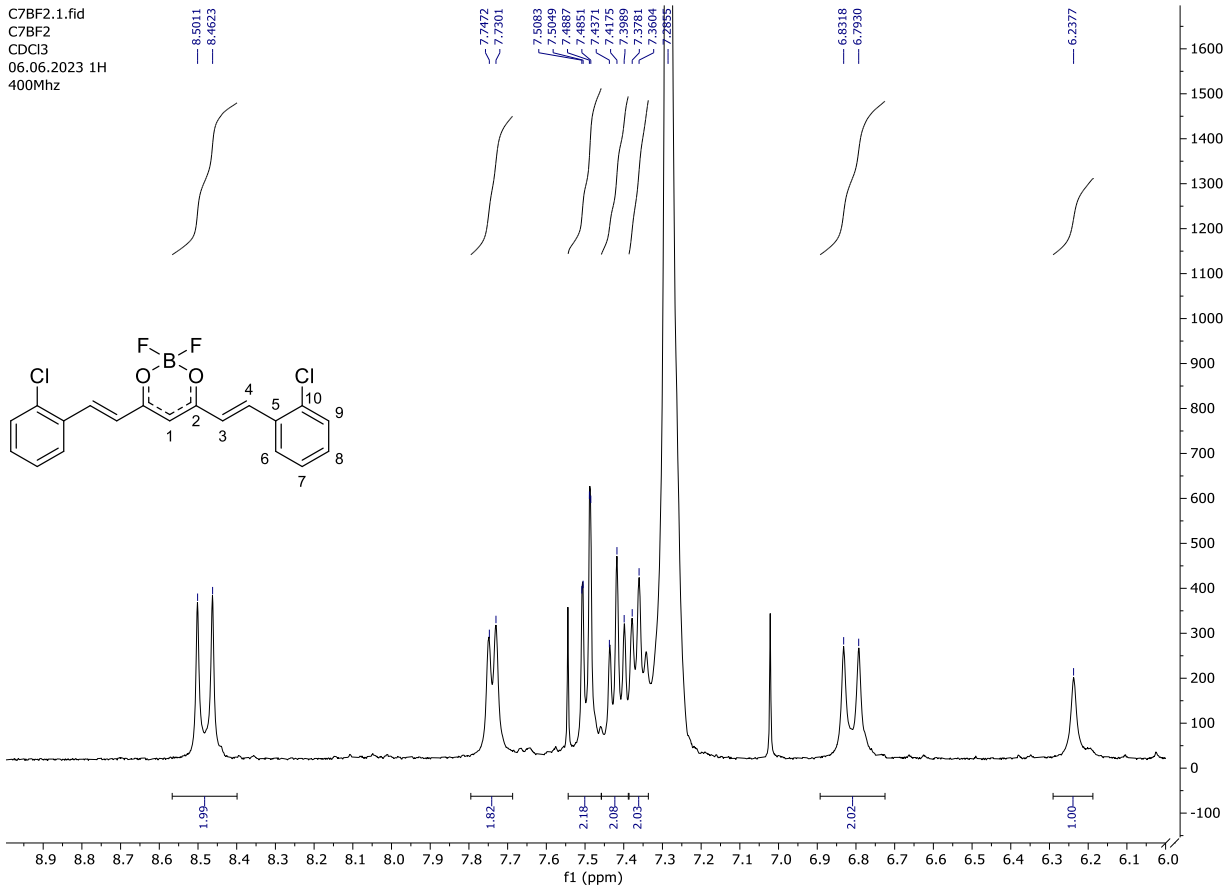


Figure 2.36: ^{1}H NMR spectrum of **8** in $CDCl_3$ at 400 MHz

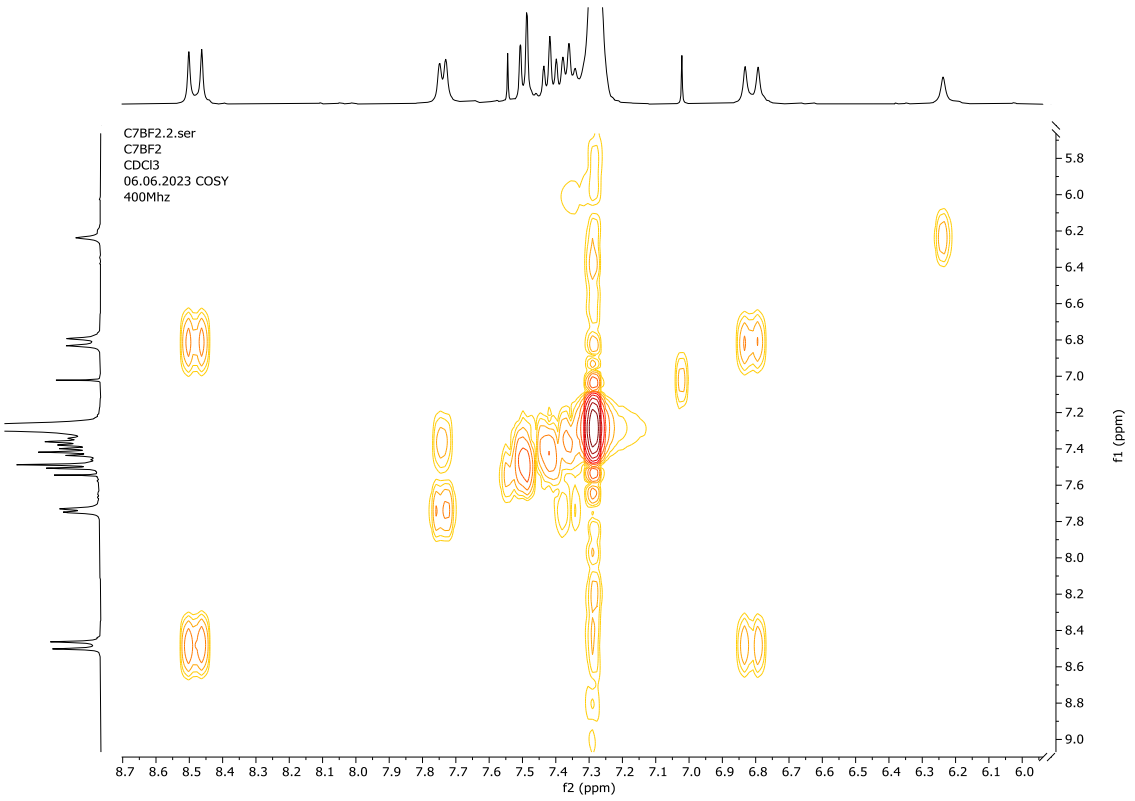


Figure 2.37: ^{1}H-^{1}H COSY NMR spectrum of **8** in $CDCl_3$ at 400 MHz

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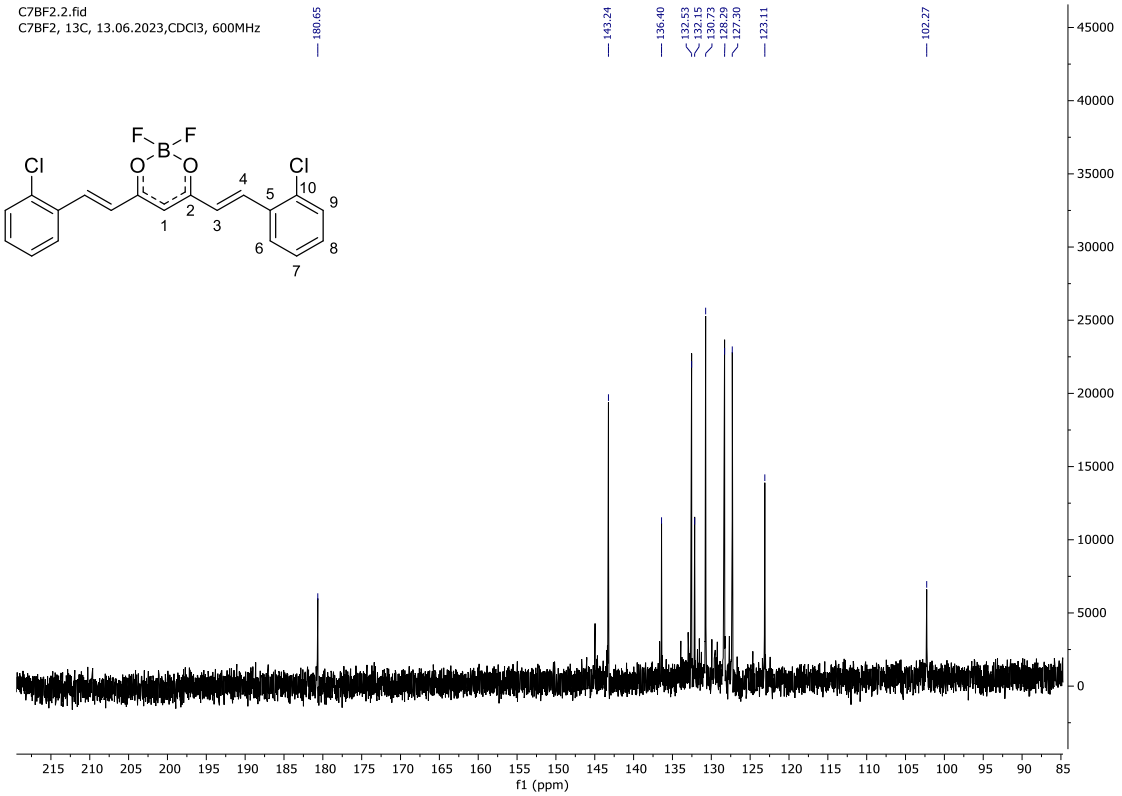


Figure 2.38: ^{13}C NMR spectrum of **8** in $CDCl_3$ at 101 MHz

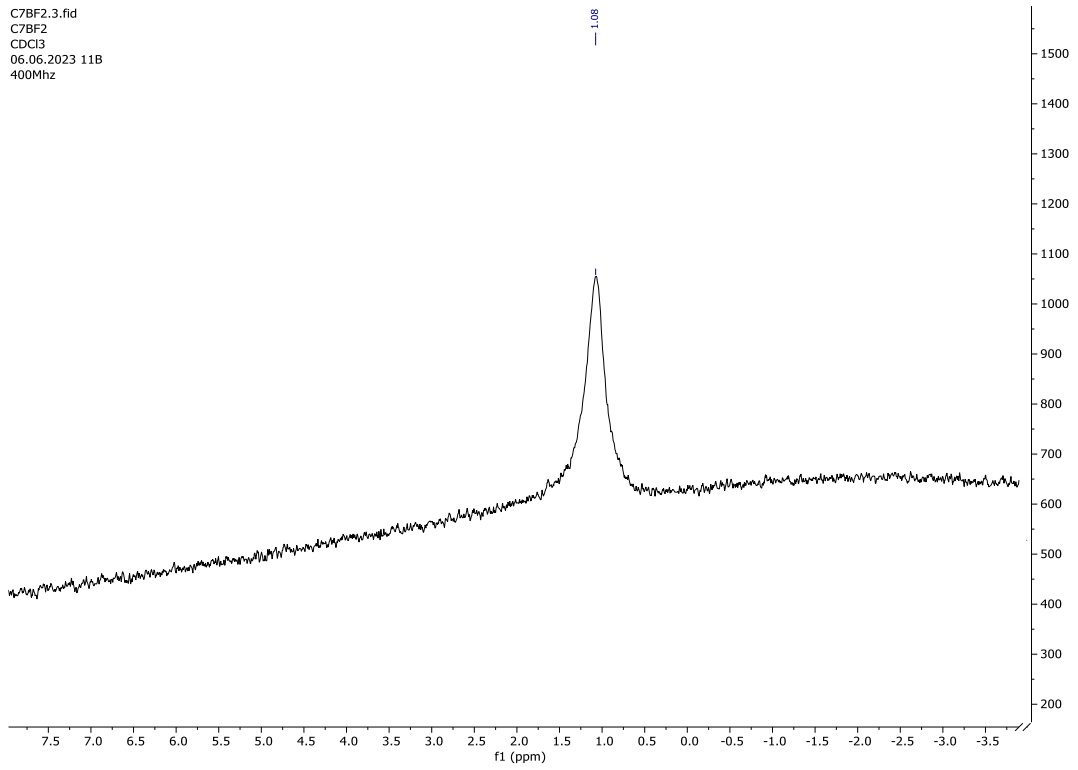


Figure 2.39: ^{11}B NMR spectrum of **8** in $CDCl_3$ at 127 MHz

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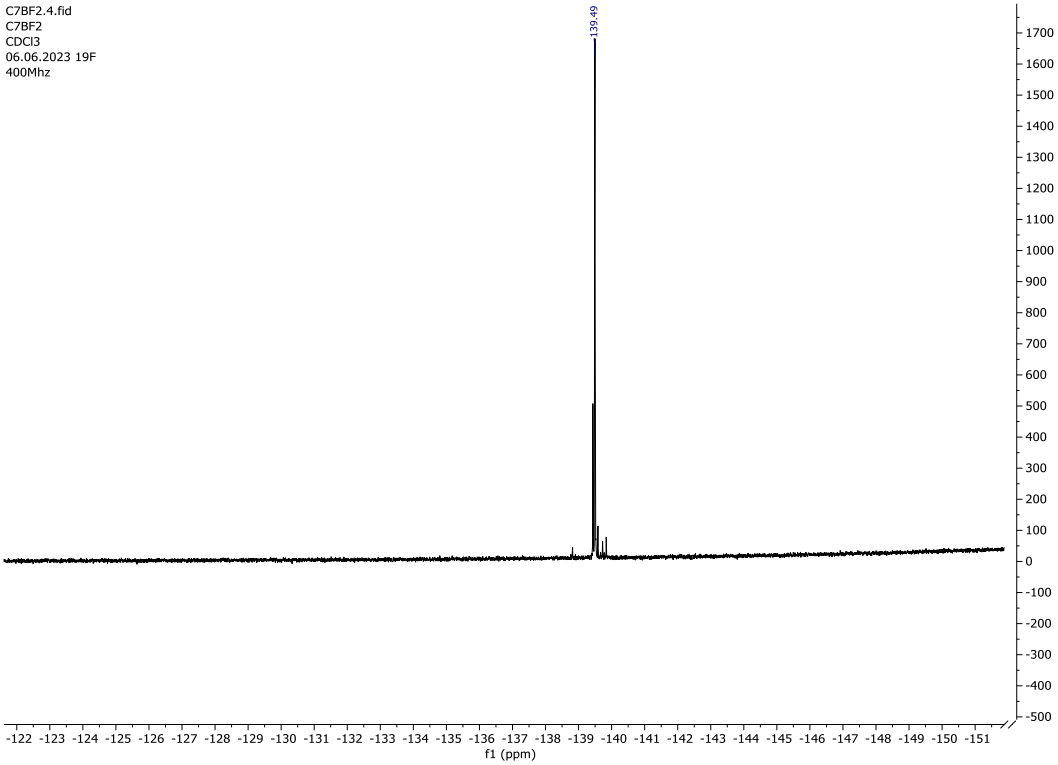


Figure 2.40: ^{19}F NMR spectrum of **8** in $CDCl_3$ at 376 MHz

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3. UV-Vis and fluorescence measurements

Table S1: Gained absorption and emission maxima

Compound	Solvent	λ_{abs} nm	λ_{em} nm	Stokes shift cm^{-1}
2	Toluene	463, **488**	527	1516
	DCM	469, **489**	541	1966
	DMSO	393, **498**	553	1997
	MeOH	462, **482**	550	2565
3	Toluene	433, **457**	**475**, 499	1842
	DCM	432, **455**	503	2097
	DMSO	441, **463**	508	1913
	MeOH	429, **450**	493	1938
4	Toluene	**453**, 474	520	1866
	DCM	458, **474**	528	2158
	DMSO	486	550	2394
	MeOH	455, **469**	534	2595
5	Toluene	**425**, 449	**465**, 492	1947
	DCM	**425**, 449	**512**, 536	2740
	DMSO	433, **458**	485	1216
	MeOH	**421**, 443	476	1565
6	Toluene	**430**, 456	**471**, 500	698
	DCM	**431**, 456	487, 511	1396
	DMSO	437, **462**	491	1278
	MeOH	**425**, 449	485	1653
7	Toluene	**421**, 447	**465**, 489	866
	DCM	**421**, 446	467	1008
	DMSO	429, **453**	473	933
	MeOH	**416**, 440	467	1314
8	Toluene	**429**, 450	**481**, 497	1432
	DCM	**427**, 448	478, 501	1401
	DMSO	**434**, 455	492	1653
	MeOH	**433**, 463	479	721

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Table S2: The obtained molar absorptivity for each compound

Compound	Solvent	$C_{UV\text{-}Vis}$ µM	A	ε L·mol^{-1}·cm^{-1}	C_{fluo} µM
2	Toluene	13	0.6702	51496	0.07
	DCM	13	0.8227	63214	0.07
	DMSO	13	0.6893	52964	0.07
	MeOH	13	0.7152	54954	0.07
3	Toluene	23	0.7464	31862	0.47
	DCM	23	0.8096	34560	0.47
	DMSO	23	0.8096	34560	0.47
	MeOH	23	0.7240	30906	0.47
4	Toluene	25	0.8513	33544	0.25
	DCM	25	0.9621	37910	0.25
	DMSO	25	0.9992	39372	0.25
	MeOH	25	0.7970	31405	0.25
5	Toluene	12	0.5480	46499	0.59
	DCM	12	0.7346	62332	0.59
	DMSO	12	0.7152	60686	0.59
	MeOH	12	0.5552	47110	0.59
6	Toluene	12	0.5675	48698	0.58
	DCM	12	0.8298	71207	0.58
	DMSO	12	0.7081	60763	0.58
	MeOH	12	0.5682	48758	0.58
7	Toluene	16	0.6642	41834	1.07
	DCM	16	0.8158	51382	1.07
	DMSO	16	0.7273	45808	1.07
	MeOH	16	0.7996	50362	1.07
8	Toluene	15	0.2558	16896	5.56
	DCM	15	0.3232	21348	5.56
	DMSO	15	0.3114	20569	5.56
	MeOH	15	0.2003	13230	5.56

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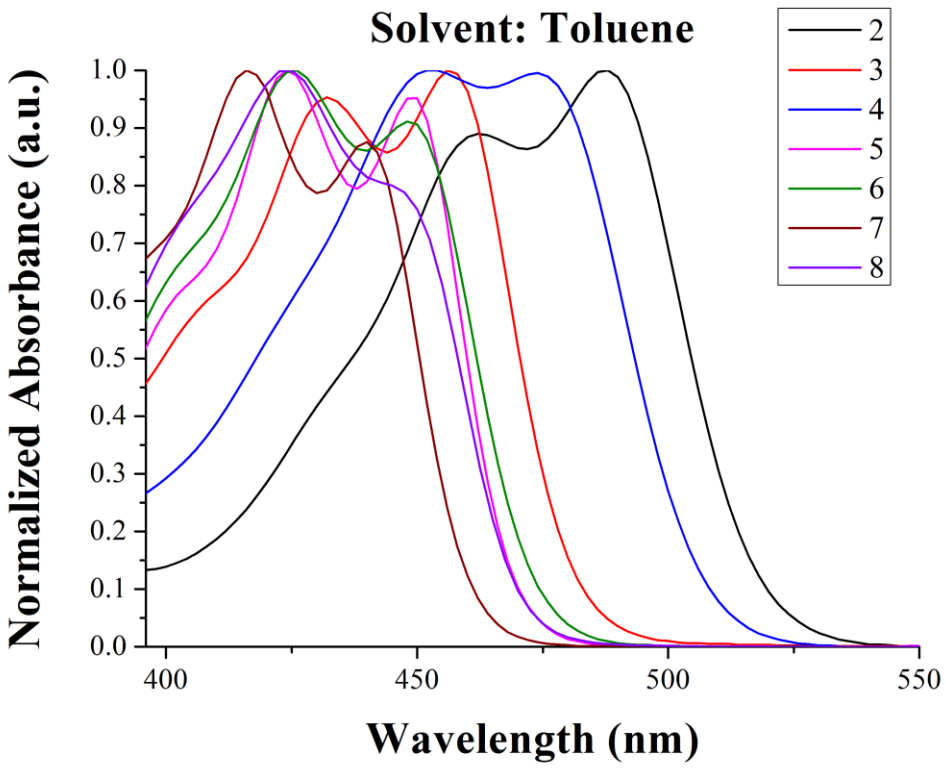


Figure 3.1: Obtained Normalized UV-Vis spectra in Toluene (20 °C, 10^{-5} M)

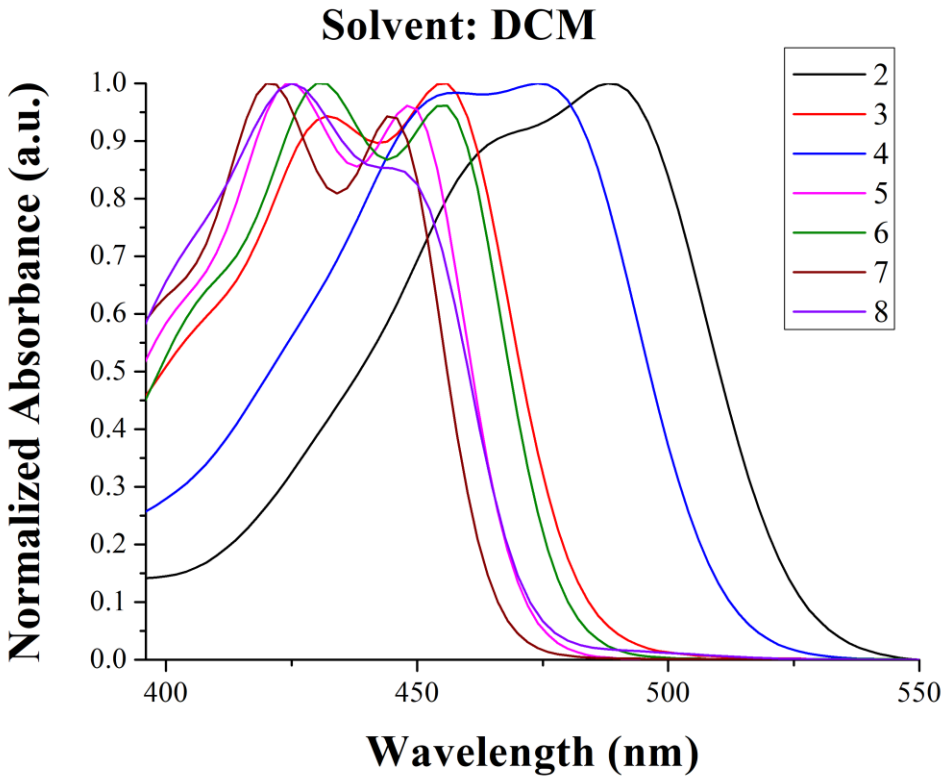


Figure 3.2: Obtained Normalized UV-Vis spectra in DCM (20 °C, 10^{-5} M)

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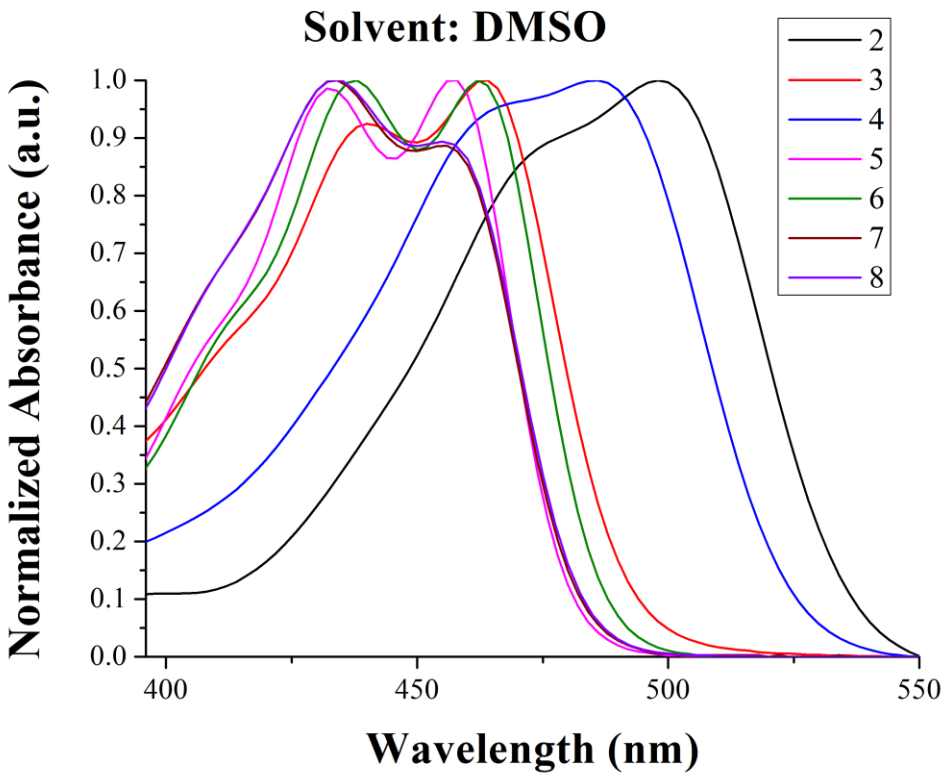


Figure 3.3: Obtained Normalized UV-Vis spectra in DMSO (20 °C, 10^{-5} M)

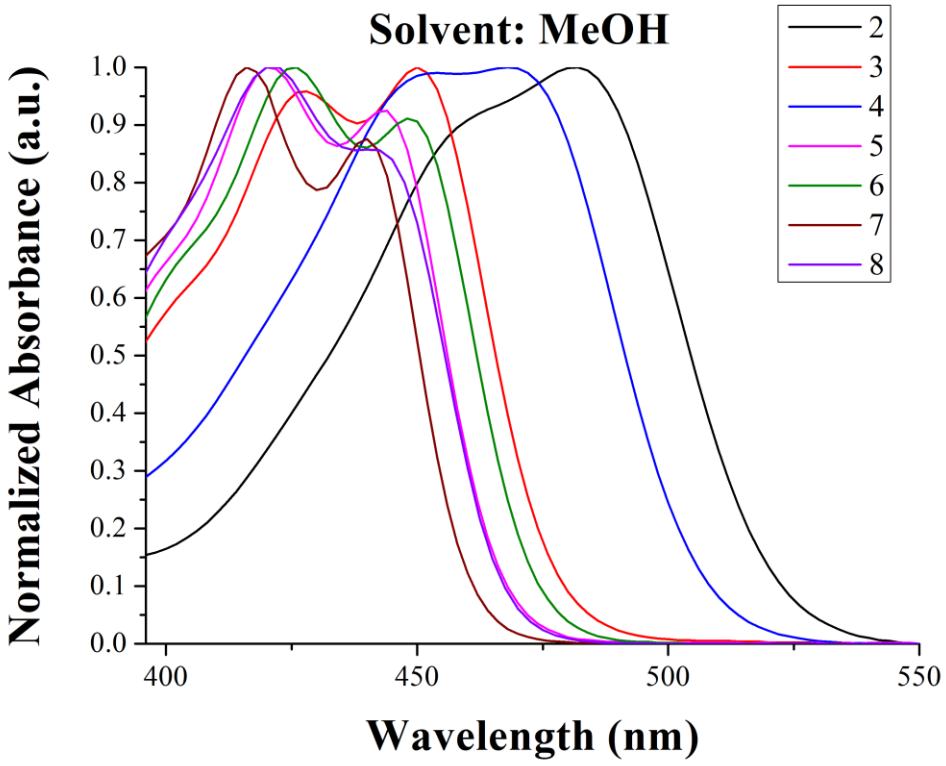


Figure 3.4: Obtained Normalized UV-Vis spectra in MeOH (20 °C, 10^{-5} M)

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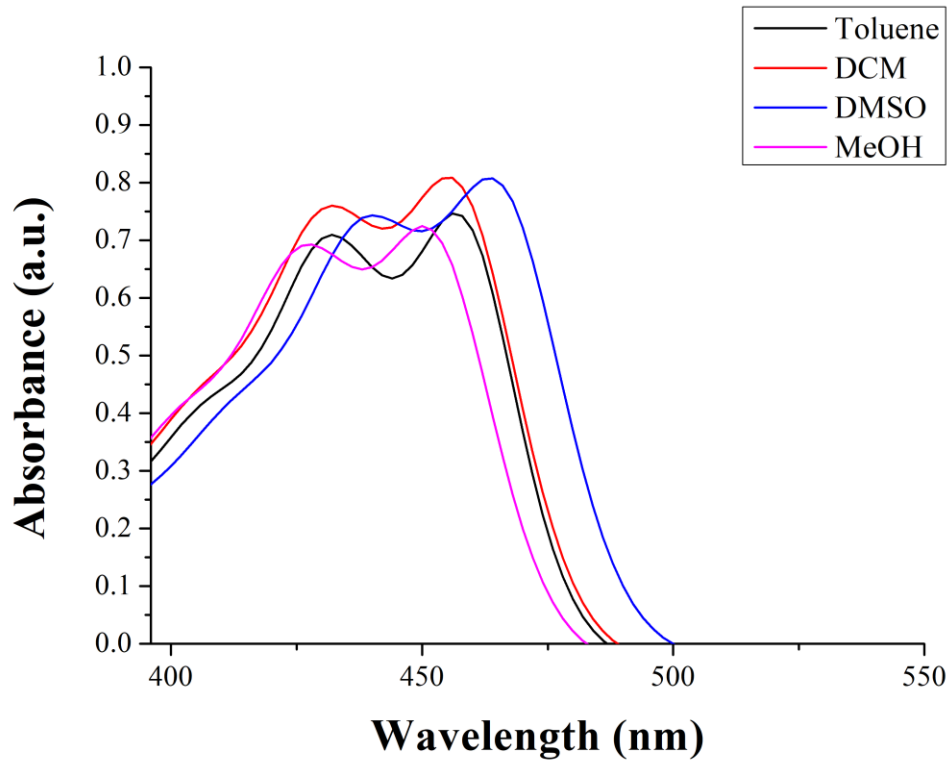


Figure 3.5: Obtained UV-Vis spectra of compound **3** in several solvents (20 °C, 13 µM)

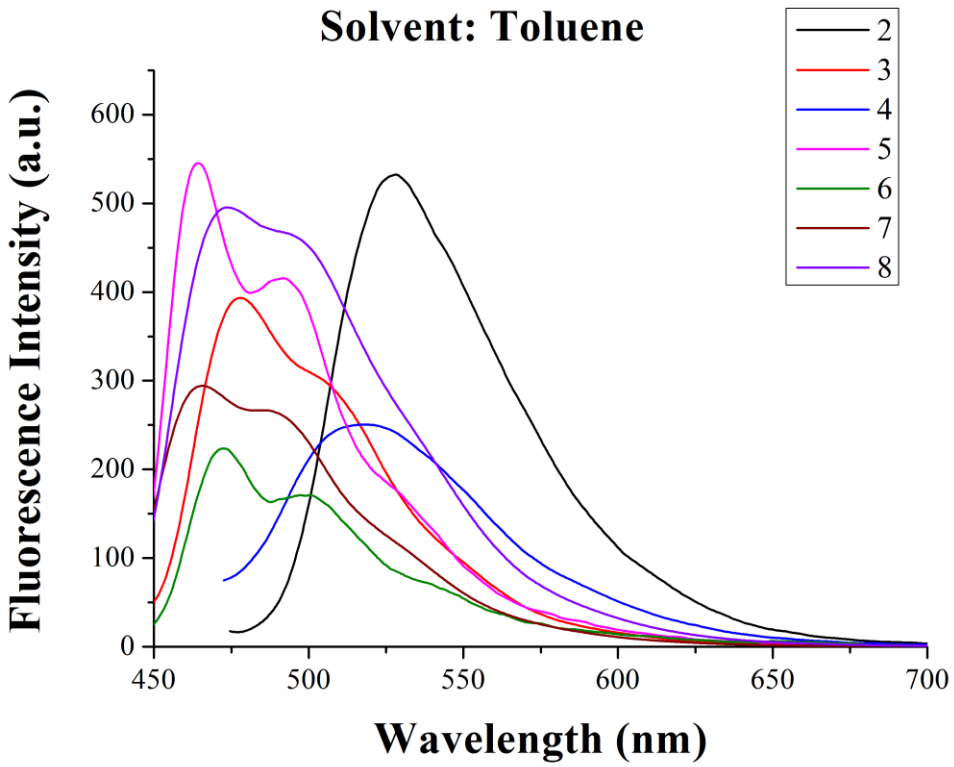


Figure 3.6: Obtained Fluorescence spectra in Toluene (20 °C, **2** at 0.07 µM, **3** at 0.47 µM, **4** at 0.25 µM, **5** at 0.59 µM, **6** 0.58 at µM, **7** at 1.07 µM, **8** at 5.50 µM)

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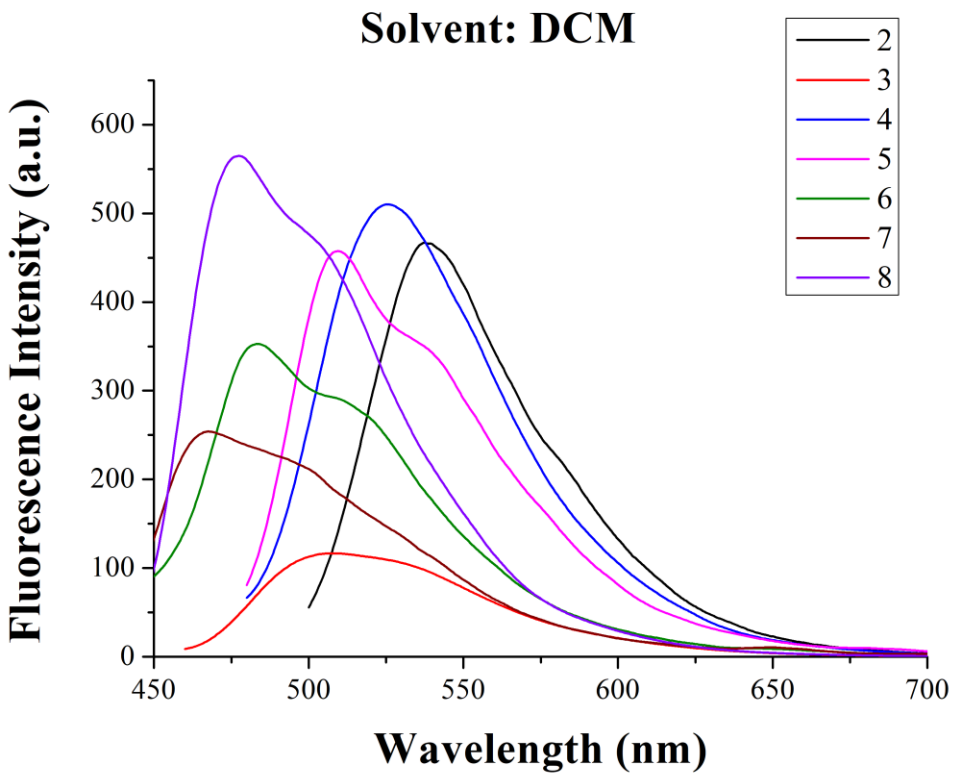


Figure 3.7: Obtained Fluorescence spectra in DCM (20 °C, **2** at 0.07 µM, **3** at 0.47 µM, **4** at 0.25 µM, **5** at 0.59 µM, **6** 0.58 at µM, **7** at 1.07 µM, **8** at 5.50 µM)

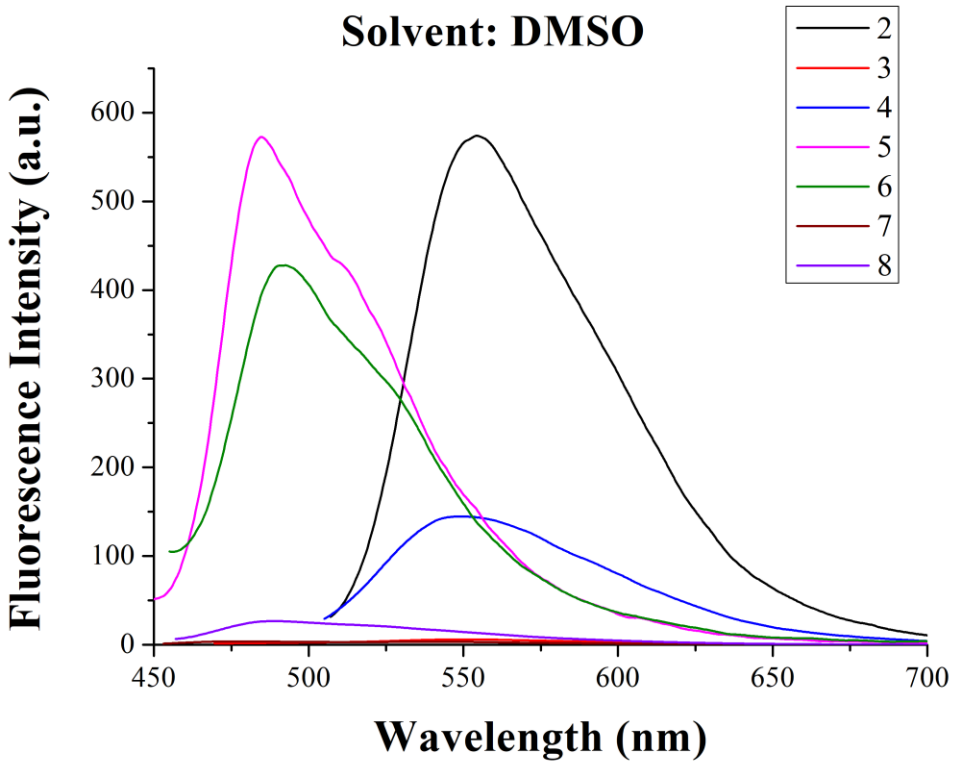


Figure 3.8: Obtained Fluorescence spectra in DMSO (20 °C, **2** at 0.07 µM, **3** at 0.47 µM, **4** at 0.25 µM, **5** at 0.59 µM, **6** 0.58 at µM, **7** at 1.07 µM, **8** at 5.50 µM)

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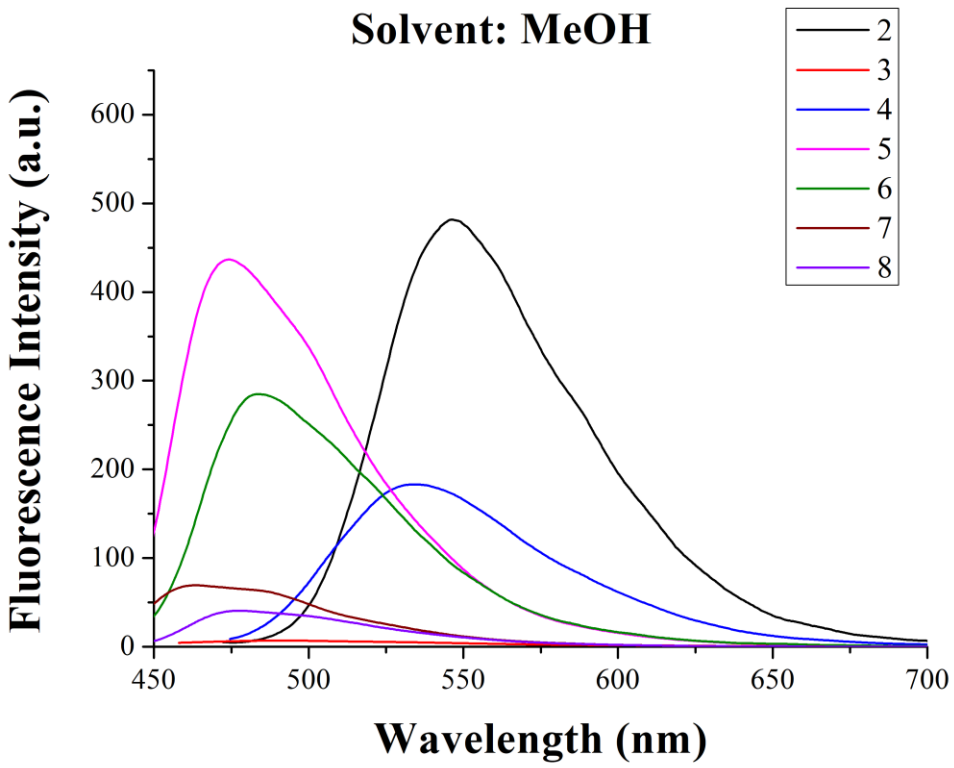


Figure 3.9: Obtained Fluorescence spectra in MeOH (20 °C, **2** at 0.07 µM, **3** at 0.47 µM, **4** at 0.25 µM, **5** at 0.59 µM, **6** 0.58 at µM, **7** at 1.07 µM, **8** at 5.50 µM)

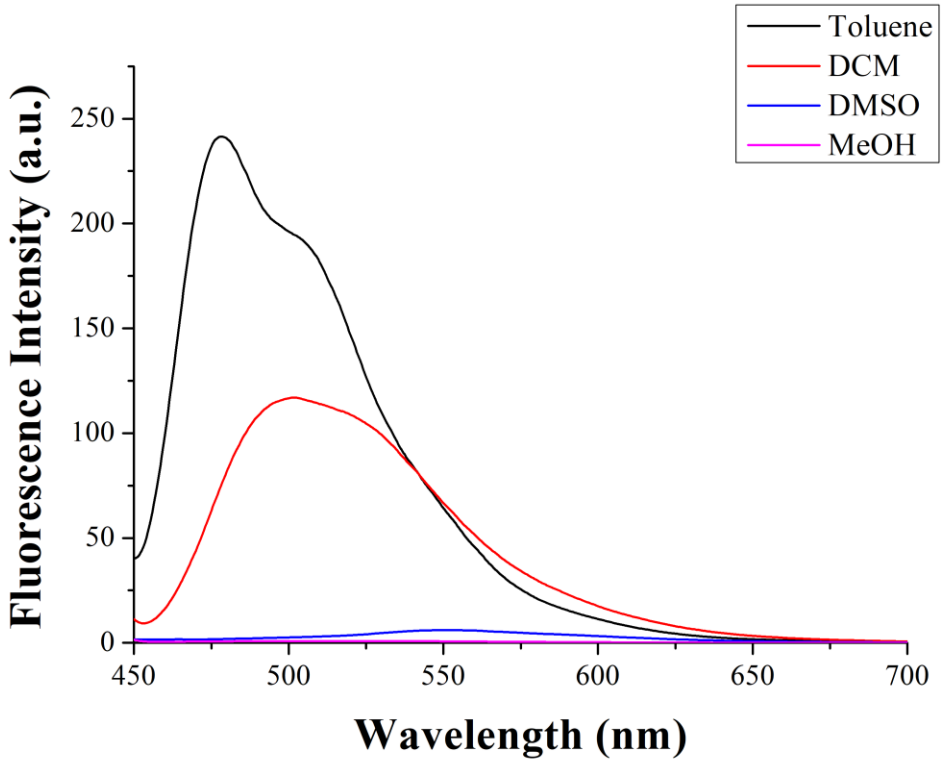


Figure 3.10: Obtained fluorescence spectra of compound **3** (20 °C, 0.47 µM)

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4. DFT results

Table S3: The DFT-calculated dipole moment values

Compound	Solvent	Polarity (Debye)	
		Ground state	Excited state
2	–	6.08 D	6.73 D
	Toluene	7.25 D	8.14 D
	DCM	8.30 D	9.46 D
	DMSO	8.73 D	10.01 D
	MeOH	8.68 D	9.95 D
3	–	4.83 D	5.42 D
	Toluene	5.87 D	6.40 D
	DCM	5.85 D	7.55 D
	DMSO	7.25 D	8.04 D
	MeOH	7.21 D	7.99 D
4	–	10.96 D	11.51 D
	Toluene	12.89 D	13.67 D
	DCM	14.58 D	15.63 D
	DMSO	15.26 D	16.44 D
	MeOH	15.19 D	16.35 D
5	–	7.63 D	8.03 D
	Toluene	9.03 D	9.62 D
	DCM	10.30 D	11.09 D
	DMSO	10.82 D	11.71 D
	MeOH	10.77 D	11.64 D
6	–	6.38 D	6.75 D
	Toluene	7.55 D	8.12 D
	DCM	8.64 D	9.42 D
	DMSO	9.11 D	9.97 D
	MeOH	9.06 D	9.91 D
7	–	4.03 D	4.44 D
	Toluene	4.82 D	5.44 D
	DCM	5.91 D	6.42 D
	DMSO	5.95 D	6.86 D
	MeOH	5.91 D	6.81 D
8	–	4.89 D	5.34 D
	Toluene	5.81 D	6.46 D
	DCM	6.67 D	7.55 D
	DMSO	7.04 D	8.03 D
	MeOH	7.00 D	7.97 D

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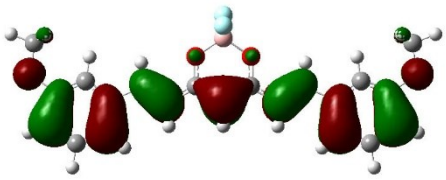
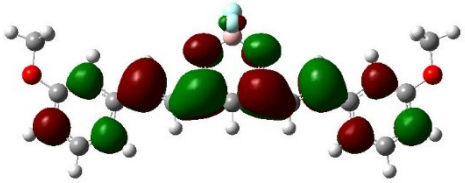
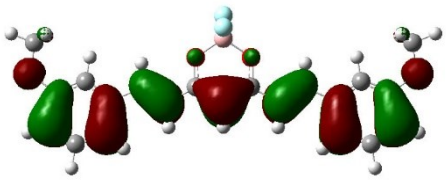
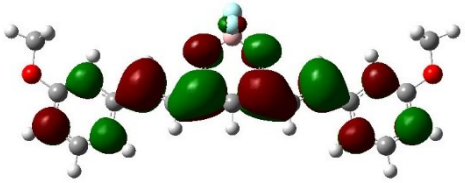
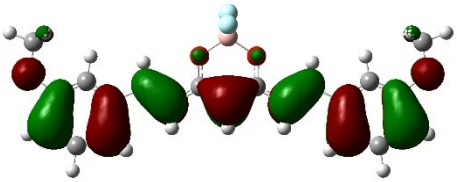
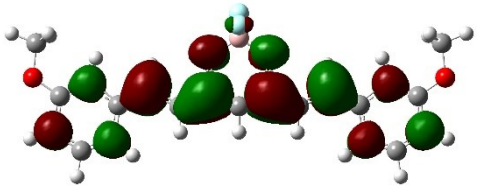
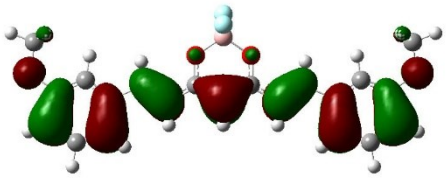
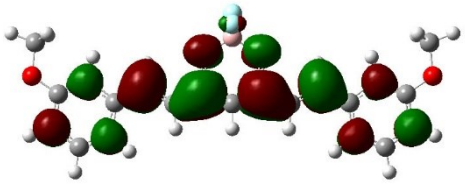
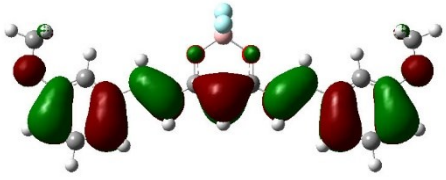
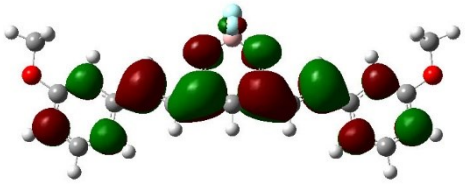
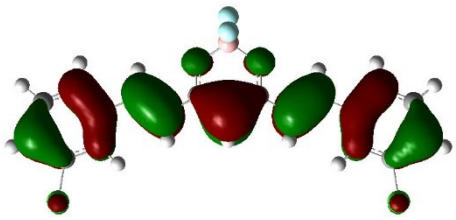
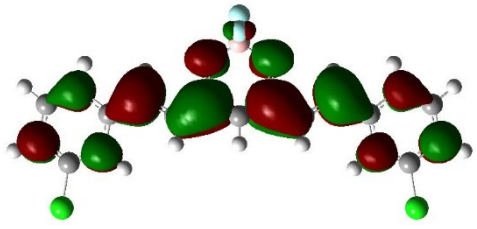
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Table S4: *In silico* obtained absorbance and emission values

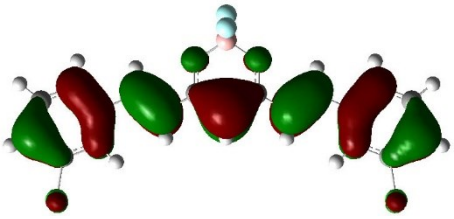
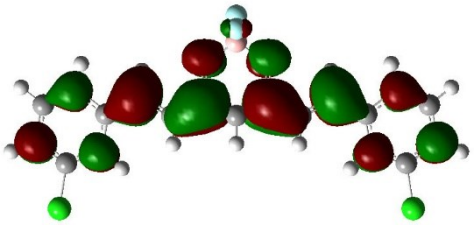
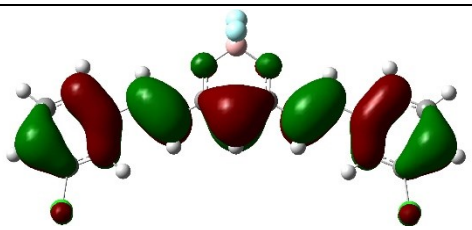
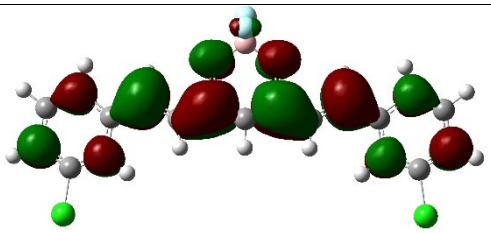
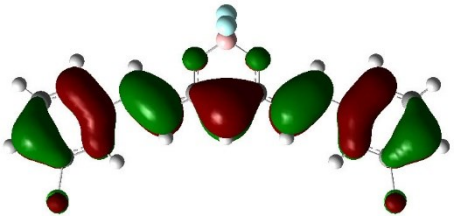
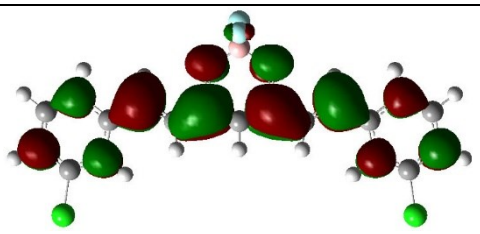
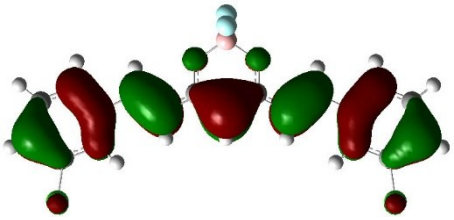
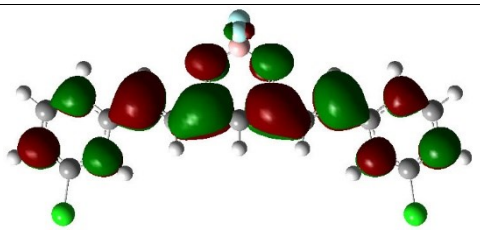
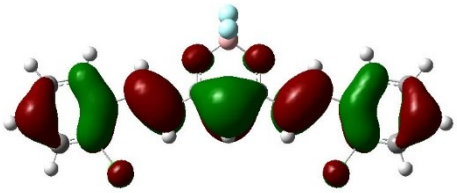
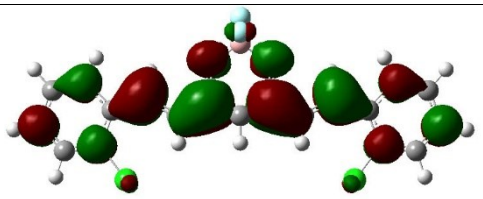
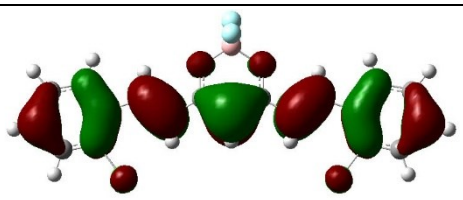
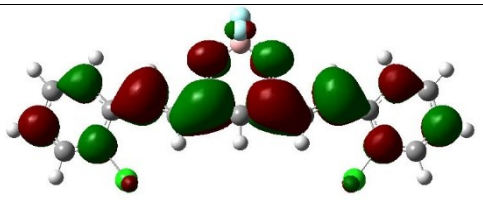
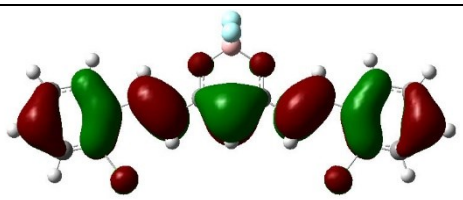
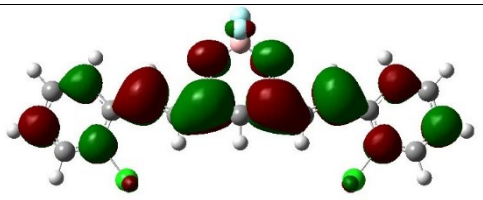
Compound	Solvent	λ_{abs} (nm)	f	λ_{em} (nm)	f
2	Gas phase	443	1.9009	464	1.9779
	Toluene	485	2.1114	515	2.2134
	DCM	497	2.1405	564	2.3590
	DMSO	503	2.1551	585	2.4069
	MeOH	498	2.1334	583	2.4018
3	Gas phase	443	1.0910	506	0.4550
	Toluene	476	1.3325	510	1.4059
	DCM	485	1.2772	549	1.6250
	DMSO	489	1.2701	566	1.6998
	MeOH	486	1.2243	564	1.6919
4	Gas phase	430	1.4480	456	1.5480
	Toluene	468	1.6374	502	1.7630
	DCM	482	1.5821	547	1.9035
	DMSO	488	1.5648	566	1.9501
	MeOH	483	1.5312	564	1.9452
5	Gas phase	414	1.6480	443	1.6916
	Toluene	447	1.8558	485	1.9316
	DCM	454	1.8767	525	2.0762
	DMSO	457	1.8876	542	2.1219
	MeOH	453	1.8660	540	2.1171
6	Gas phase	427	1.8098	456	1.8759
	Toluene	459	2.0118	499	2.1070
	DCM	465	2.0310	538	2.2417
	DMSO	468	2.0414	555	2.2828
	MeOH	464	2.0209	553	2.2786
7	Gas phase	414	1.6209	455	1.6740
	Toluene	444	1.8232	484	1.9061
	DCM	449	1.8414	521	2.0457
	DMSO	452	1.8515	537	2.0896
	MeOH	448	1.8304	535	2.0850
8	Gas phase	412	1.5579	445	1.6191
	Toluene	442	1.7765	484	1.8701
	DCM	448	1.7875	520	2.0266
	DMSO	451	1.7942	535	2.0775
	MeOH	447	1.7692	553	2.0721

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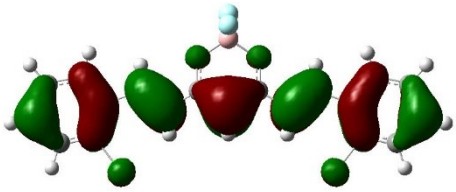
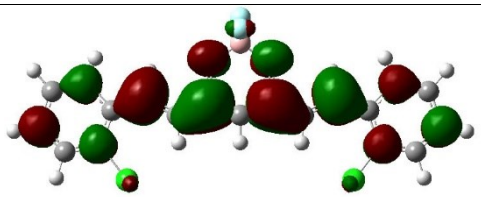
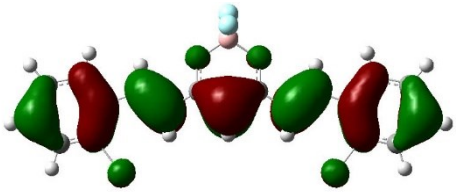
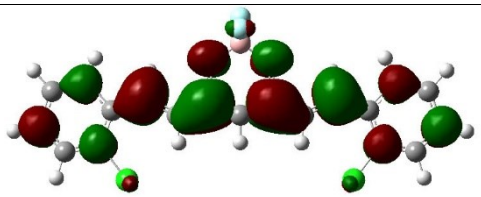
Table S5. Frontier molecular orbitals FMO predicted for curcuminoid BF_2-complexes **3**, **7** and **8**

No	Solvent	HOMO	LUMO
3	**Gas phase** ΔE = 3.0817 eV	 **-6.3022 eV**	 **-3.2205 eV**
	Toluene ΔE = 2.9856 eV	 **-6.2706 eV**	 **-3.2850 eV**
	DCM ΔE = 3.0817 eV	 **-6.2597 eV**	 **-3.3465 eV**
	DMSO ΔE = 2.8878 eV	 **-6.2571 eV**	 **-3.3693 eV**
	MeOH ΔE = 2.8906 eV	 **-6.2575 eV**	 **-3.3669 eV**
7	**Gas phase** ΔE = 3.2564 eV	 **-6.7533 eV**	 **-3.4969 eV**

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	Toluene ΔE = 3.1873 eV	 **-6.6573 eV**	 **-3.4700 eV**
	DCM ΔE = 3.1249 eV	 **-6.6001 eV**	 **-3.4752 eV**
	DMSO ΔE = 3.1007 eV	 **-6.5808 eV**	 **-3.4801 eV**
	MeOH ΔE = 3.1035 eV	 **-6.5827 eV**	 **-3.4792 eV**
8	**Gas phase** ΔE = 3.2808 eV	 **-6.6322 eV**	 **-3.3514 eV**
	Toluene ΔE = 3.2120 eV	 **-6.5960 eV**	 **-3.3840 eV**
	DCM ΔE = 3.1468 eV	 **-6.5803 eV**	 **-3.4335 eV**

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	DMSO ΔE = 3.1220 eV	 **-6.5765 eV**	 **-3.4545 eV**
	MeOH ΔE = 3.1247 eV	 **-6.5770 eV**	 **-3.4523 eV**

4.1. Cartesian Coordinates

Compound 3 in gas phase

1	6	0	1.210346	-0.102168	0.095770
2	6	0	-0.000000	-0.798014	0.220280
3	6	0	-1.210344	-0.102170	0.095731
4	8	0	1.227880	1.193149	-0.052687
5	8	0	-1.227875	1.193148	-0.052724
6	5	0	-0.000003	2.037970	0.178761
7	9	0	-0.000022	2.453727	1.499489
8	9	0	0.000011	3.070336	-0.724992
9	1	0	-0.000001	-1.873099	0.342936
10	6	0	-2.482972	-0.801519	0.090583
11	6	0	-3.663500	-0.145221	-0.008334
12	1	0	-2.432339	-1.882377	0.175858
13	6	0	-5.004777	-0.721741	-0.026703
14	1	0	-3.610595	0.939134	-0.080077
15	6	0	-6.097719	0.169386	-0.101334
16	6	0	-5.251753	-2.105350	0.027174
17	6	0	-7.408894	-0.314325	-0.118845
18	1	0	-5.897249	1.233615	-0.143052

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19	6	0	-6.563687	-2.578332	0.008357
20	1	0	-4.429139	-2.809950	0.080897
21	6	0	-7.641267	-1.697586	-0.063601
22	8	0	-8.521281	0.471493	-0.188117
23	1	0	-6.752033	-3.647020	0.049440
24	1	0	-8.665436	-2.055386	-0.079005
25	6	0	-8.358807	1.885697	-0.246003
26	1	0	-9.367412	2.296809	-0.294822
27	1	0	-7.853267	2.265870	0.650056
28	1	0	-7.799077	2.186446	-1.140048
29	6	0	2.482975	-0.801514	0.090662
30	6	0	3.663501	-0.145222	-0.008322
31	1	0	2.432346	-1.882365	0.176031
32	6	0	5.004779	-0.721739	-0.026655
33	1	0	3.610591	0.939127	-0.080157
34	6	0	6.097717	0.169385	-0.101371
35	6	0	5.251760	-2.105343	0.027336
36	6	0	7.408894	-0.314323	-0.118855
37	1	0	5.897244	1.233610	-0.143177
38	6	0	6.563696	-2.578323	0.008546
39	1	0	4.429148	-2.809941	0.081126
40	6	0	7.641272	-1.697579	-0.063497
41	8	0	8.521278	0.471493	-0.188204
42	1	0	6.752045	-3.647006	0.049717
43	1	0	8.665442	-2.055377	-0.078880
44	6	0	8.358798	1.885691	-0.246207
45	1	0	9.367402	2.296802	-0.295071
46	1	0	7.799059	2.186363	-1.140272
47	1	0	7.853267	2.265938	0.649825

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Compound 7 in gas phase

1	6	0	-1.209462	-0.822140	0.041114
2	6	0	0.000000	-0.125625	0.169443
3	6	0	1.209461	-0.822138	0.041096
4	8	0	-1.228376	-2.114955	-0.112888
5	8	0	1.228375	-2.114954	-0.112903
6	5	0	0.000003	-2.964861	0.112794
7	9	0	0.000009	-3.385367	1.429944
8	9	0	-0.000003	-3.987124	-0.799304
9	1	0	-0.000000	0.948843	0.296945
10	6	0	2.483465	-0.121505	0.038145
11	6	0	3.662827	-0.776917	-0.064929
12	1	0	2.430684	0.958910	0.128785
13	6	0	5.004097	-0.198099	-0.080685
14	1	0	3.615029	-1.860786	-0.144023
15	6	0	6.108961	-1.066012	-0.174548
16	6	0	5.239774	1.190102	-0.005687
17	6	0	7.410149	-0.565572	-0.191700
18	1	0	5.939108	-2.136969	-0.233299
19	6	0	6.542777	1.671097	-0.024270
20	1	0	4.417503	1.892371	0.065059
21	6	0	7.640436	0.808970	-0.116534
22	1	0	8.252663	-1.246243	-0.263943
23	17	0	6.819438	3.404341	0.069292
24	1	0	8.647775	1.209905	-0.129375
25	6	0	-2.483467	-0.121509	0.038180
26	6	0	-3.662822	-0.776910	-0.065037
27	1	0	-2.430694	0.958894	0.128966

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28	6	0	-5.004093	-0.198095	-0.080782
29	1	0	-3.615017	-1.860769	-0.144268
30	6	0	-6.108950	-1.065999	-0.174803
31	6	0	-5.239777	1.190097	-0.005623
32	6	0	-7.410138	-0.565561	-0.191954
33	1	0	-5.939091	-2.136948	-0.233681
34	6	0	-6.542781	1.671090	-0.024206
35	1	0	-4.417512	1.892359	0.065248
36	6	0	-7.640433	0.808971	-0.116628
37	1	0	-8.252648	-1.246225	-0.264320
38	17	0	-6.819451	3.404321	0.069557
39	1	0	-8.647773	1.209905	-0.129466

Compound 8 in gas phase

1	6	0	1.209721	0.504672	0.049725
2	6	0	-0.000002	-0.190734	0.178175
3	6	0	-1.209722	0.504663	0.049724
4	8	0	1.228027	1.797890	-0.105744
5	8	0	-1.228029	1.797890	-0.105755
6	5	0	-0.000020	2.647911	0.113130
7	9	0	-0.000010	3.081376	1.426771
8	9	0	-0.000006	3.664811	-0.806724
9	1	0	0.000001	-1.265047	0.305741
10	6	0	-2.481796	-0.204638	0.048795
11	6	0	-3.652725	0.469076	-0.053395
12	1	0	-2.425935	-1.279519	0.139025
13	6	0	-5.042193	0.017327	-0.075669
14	1	0	-3.553445	1.549705	-0.129500
15	6	0	-5.543450	-1.305548	-0.024376
16	6	0	-6.012467	1.046513	-0.160903

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17	6	0	-6.912474	-1.571571	-0.054469
18	17	0	-4.491220	-2.711847	0.076176
19	6	0	-7.378006	0.793060	-0.190742
20	1	0	-5.659183	2.072610	-0.202979
21	6	0	-7.832539	-0.526394	-0.136792
22	1	0	-7.249585	-2.601355	-0.013240
23	1	0	-8.081115	1.617121	-0.255698
24	1	0	-8.895000	-0.748128	-0.159040
25	6	0	2.481793	-0.204639	0.048791
26	6	0	3.652722	0.469071	-0.053417
27	1	0	2.425925	-1.279517	0.139047
28	6	0	5.042194	0.017326	-0.075664
29	1	0	3.553440	1.549698	-0.129542
30	6	0	5.543455	-1.305551	-0.024436
31	6	0	6.012463	1.046523	-0.160785
32	6	0	6.912484	-1.571561	-0.054452
33	17	0	4.491231	-2.711870	0.075880
34	6	0	7.378007	0.793082	-0.190551
35	1	0	5.659174	2.072620	-0.202819
36	6	0	7.832545	-0.526371	-0.136645
37	1	0	7.249601	-2.601345	-0.013268
38	1	0	8.081115	1.617150	-0.255427
39	1	0	8.895010	-0.748094	-0.158830

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