Inhibitors of the detoxifying enzyme of the phytoalexin brassinin based on quinoline and isoquinoline scaffolds

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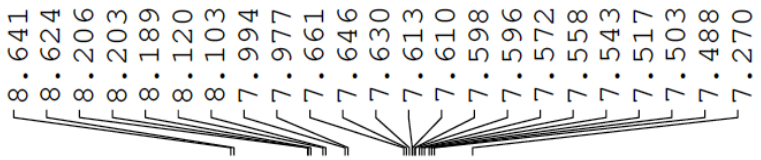
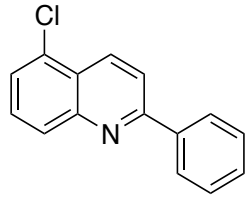
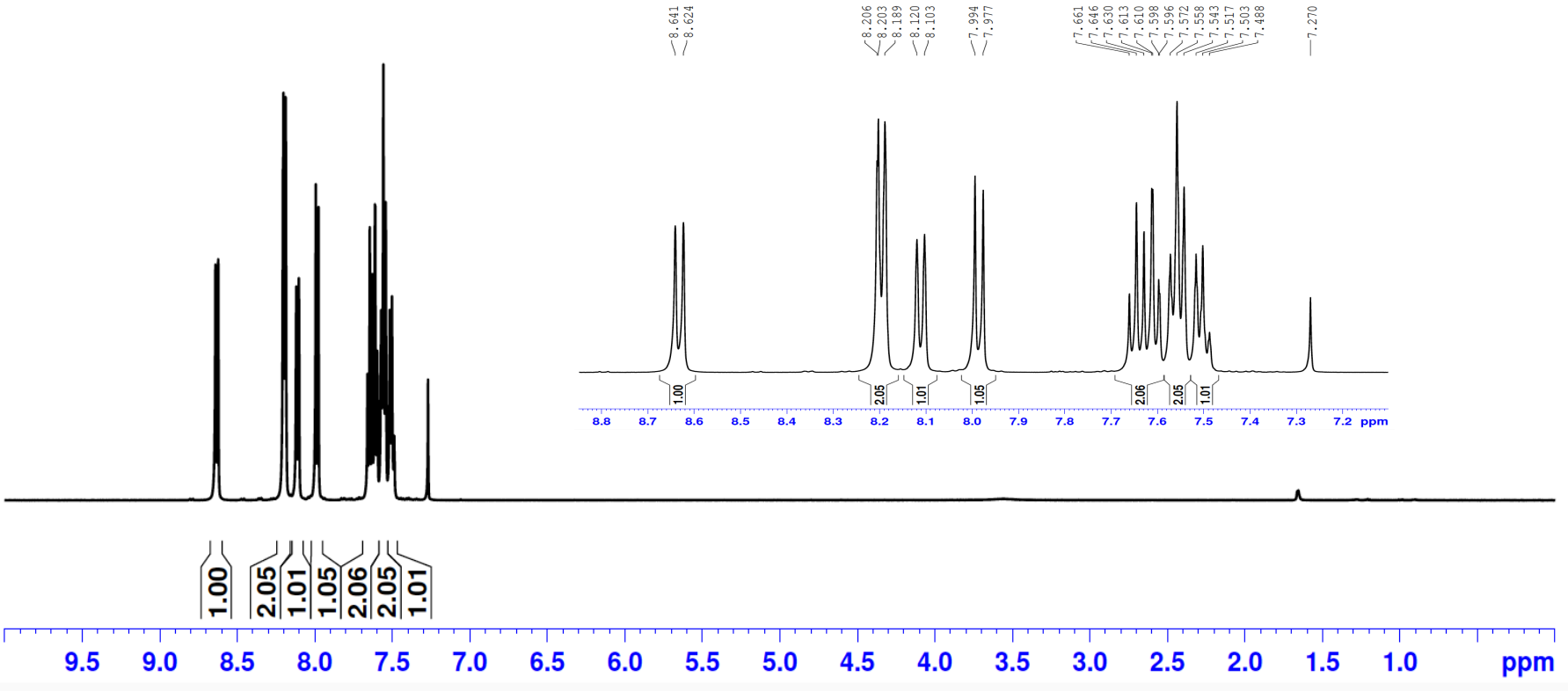
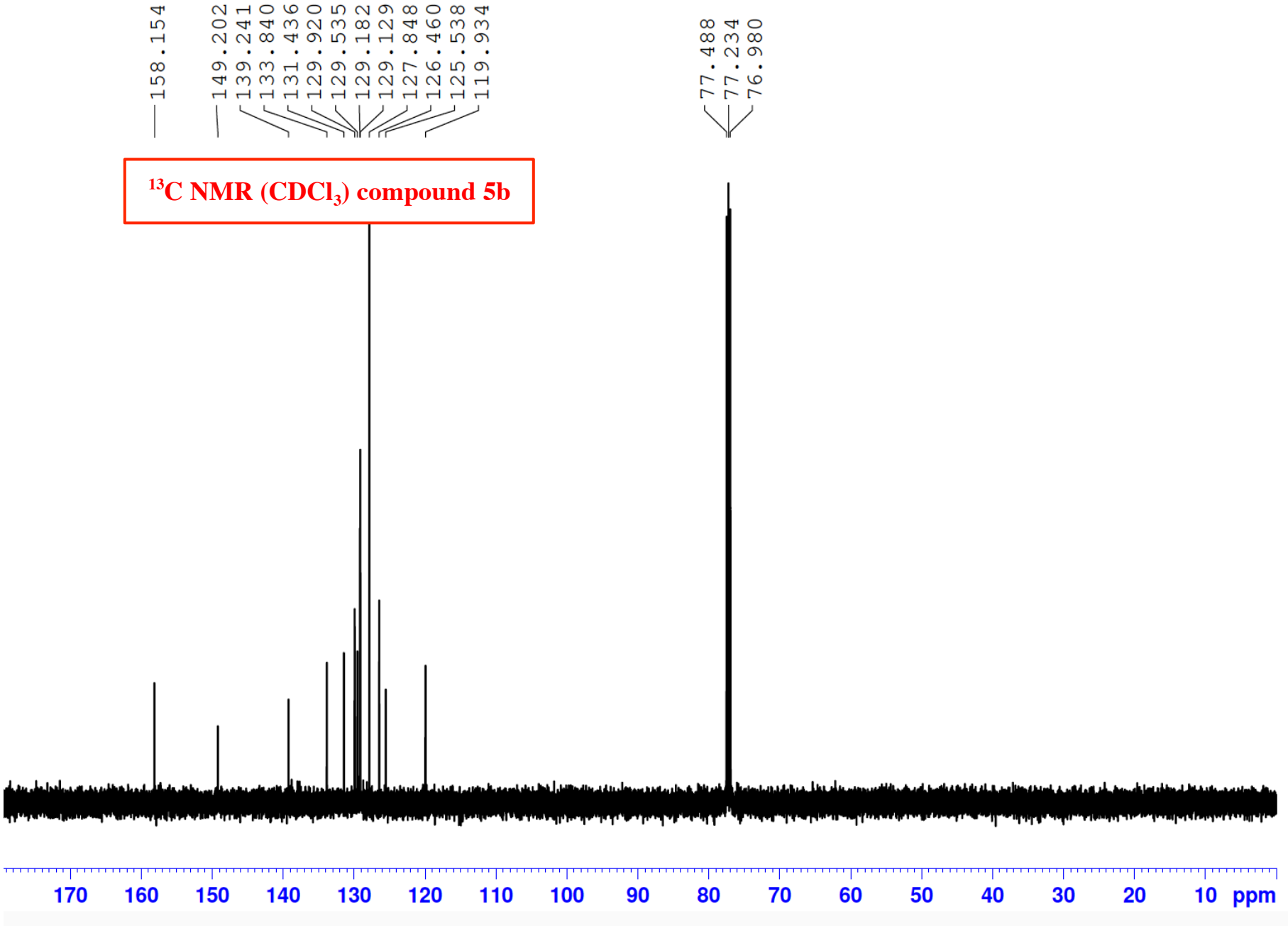
^{1}H and ^{13}C NMR of new compounds 5b, 6b, 6e, 7c, 7d, 7e, 7g, 9b, 9c and 10b.



^{1}H NMR ($CDCl_3$) compound 5b

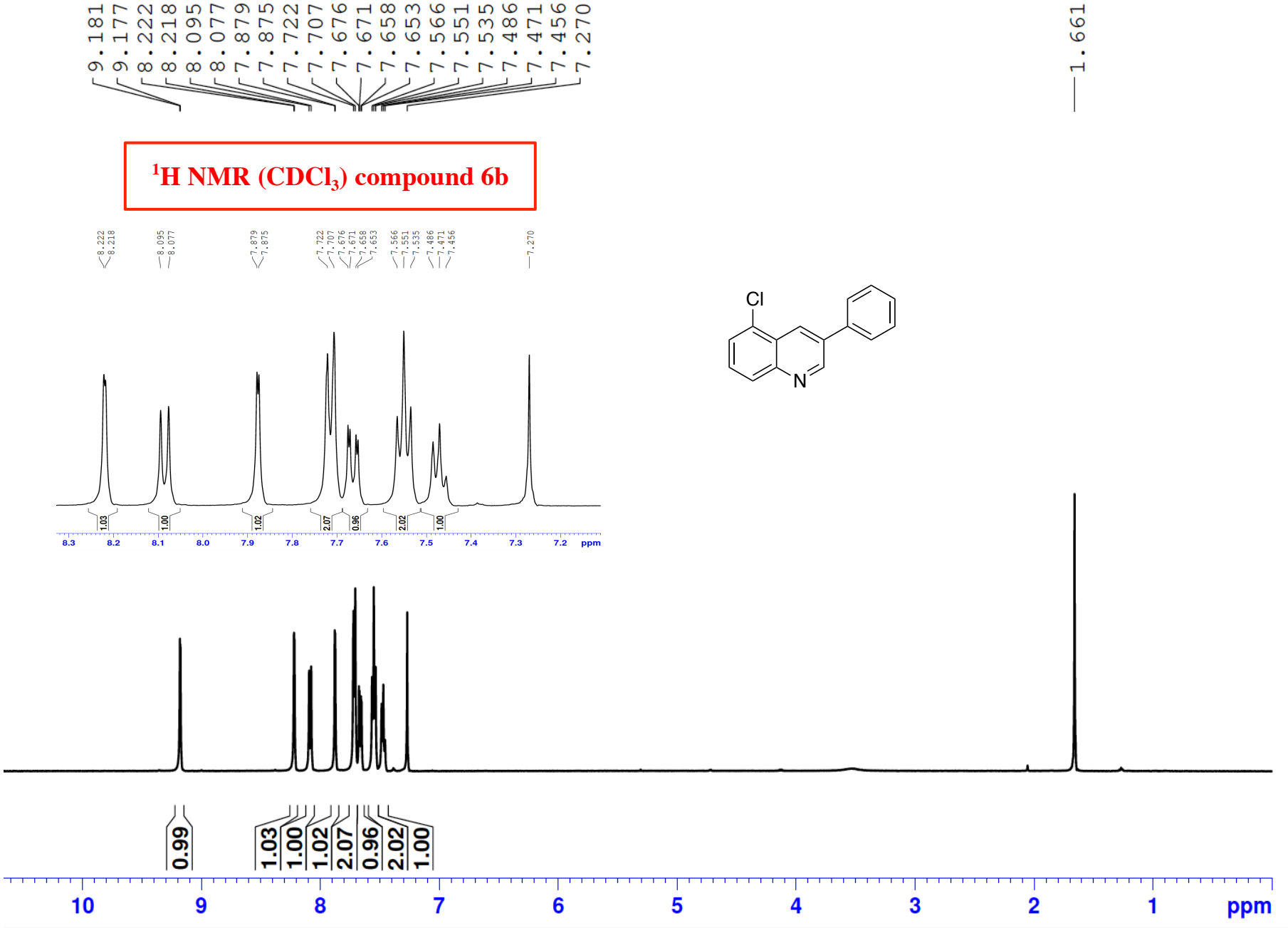


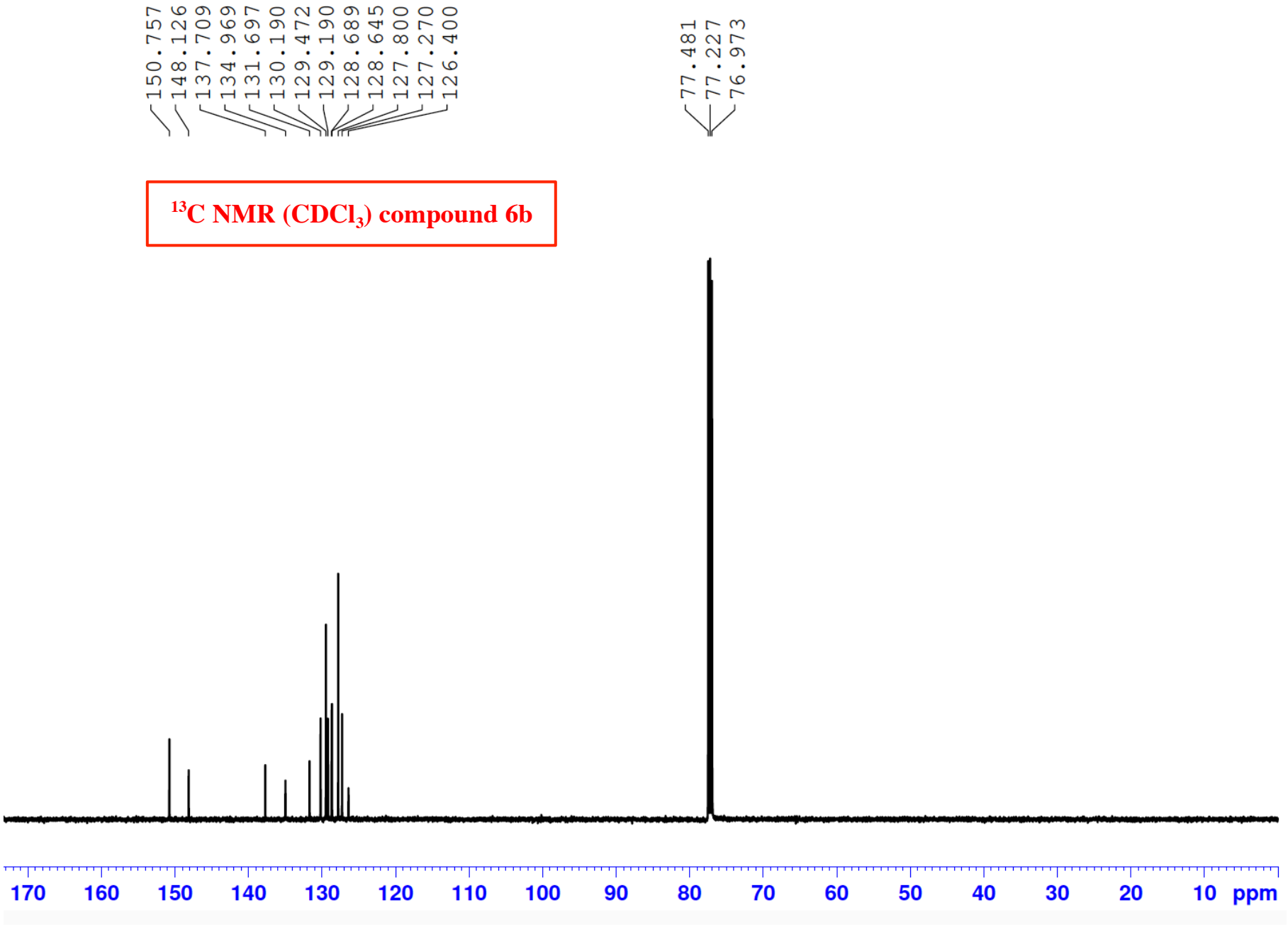




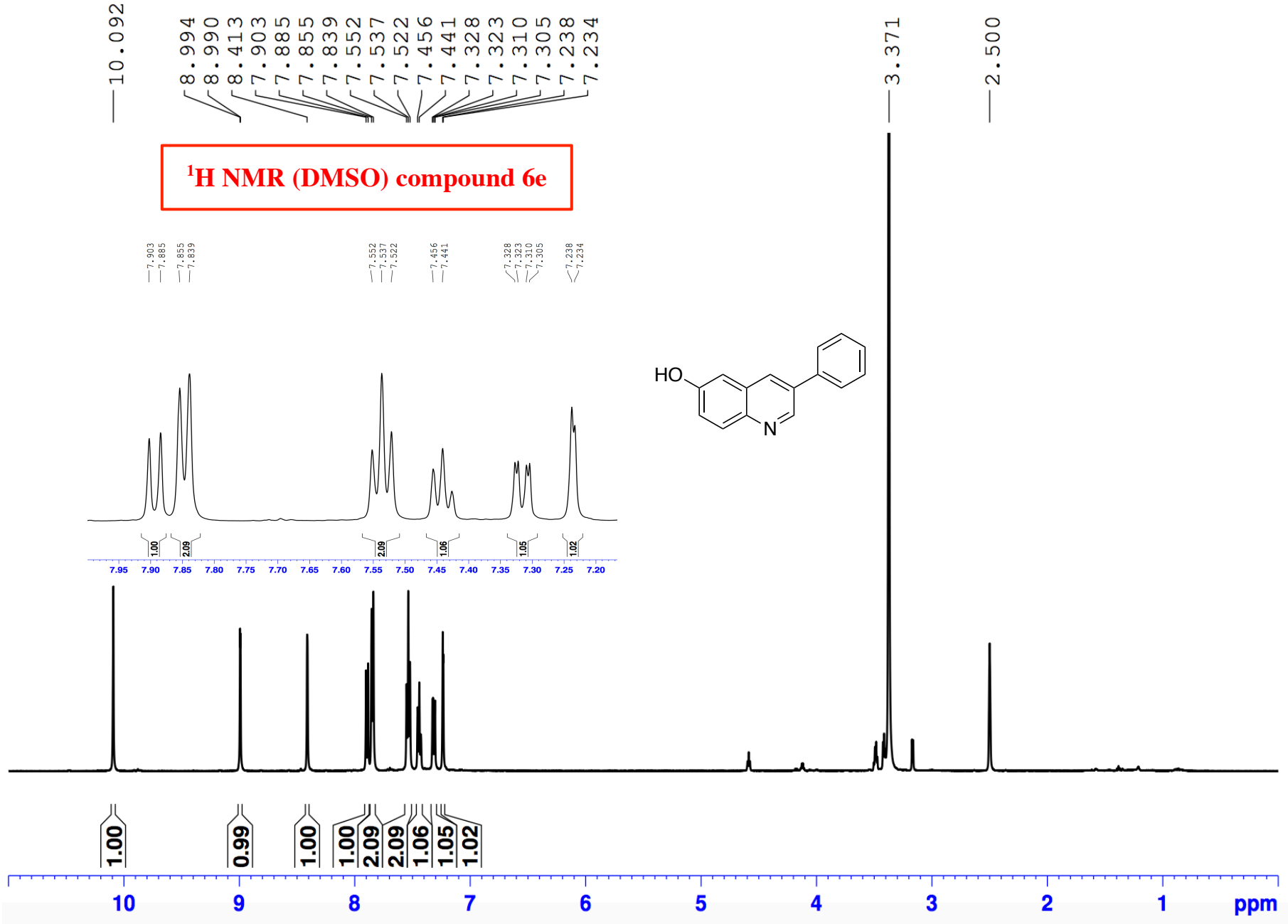
^{13}C NMR ($CDCl_3$) compound 5b

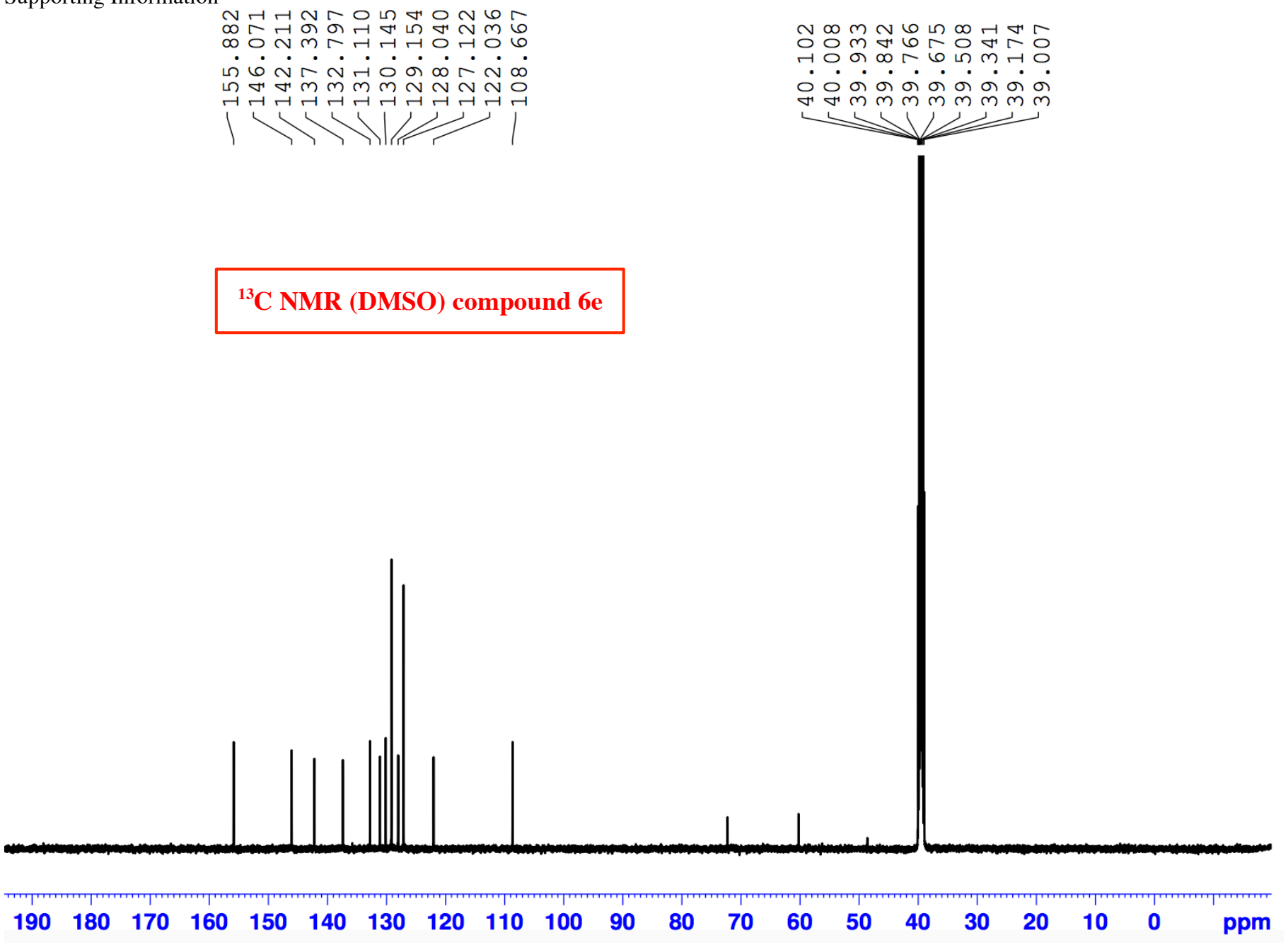
^{1}H NMR ($CDCl_3$) compound 6b



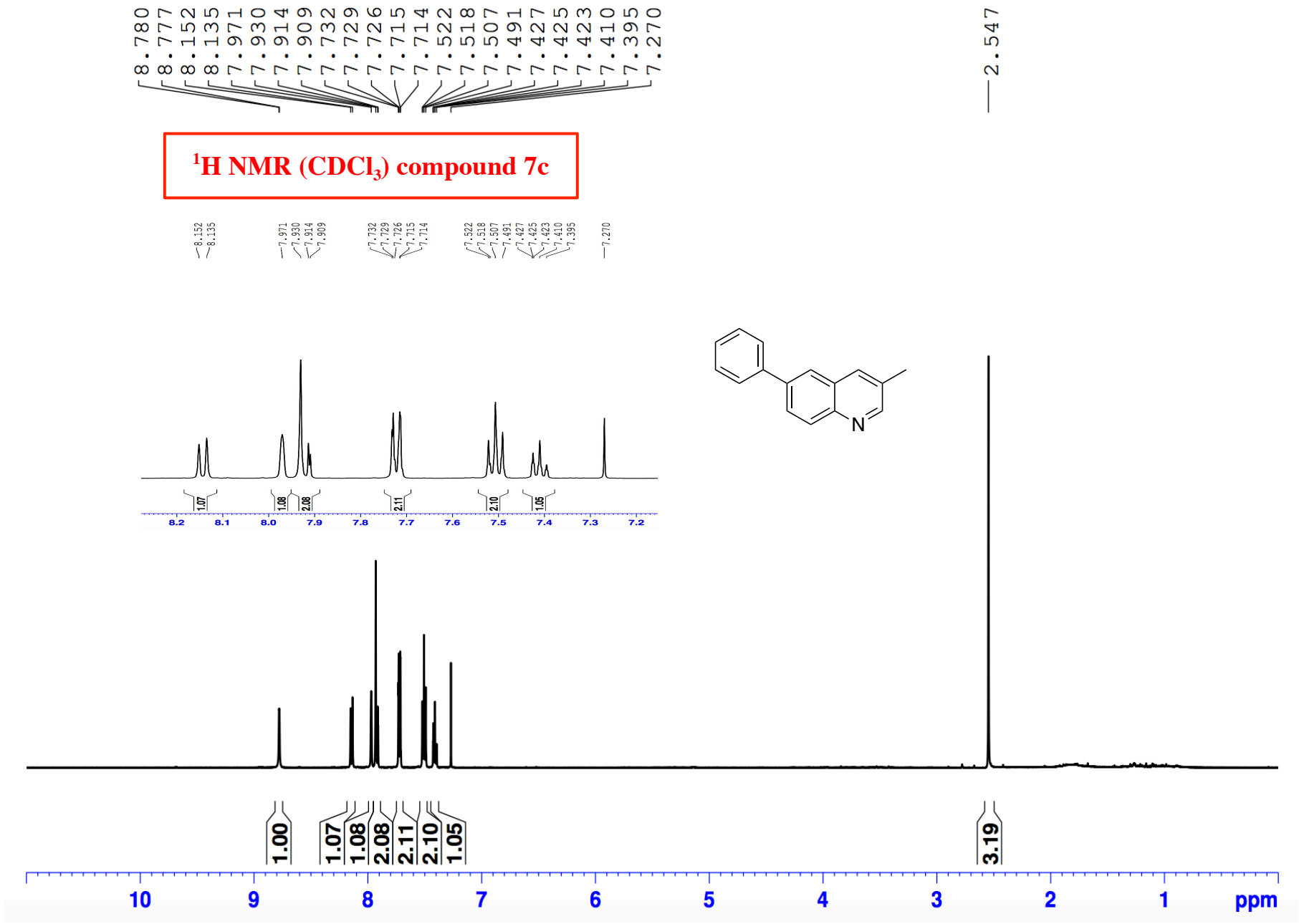


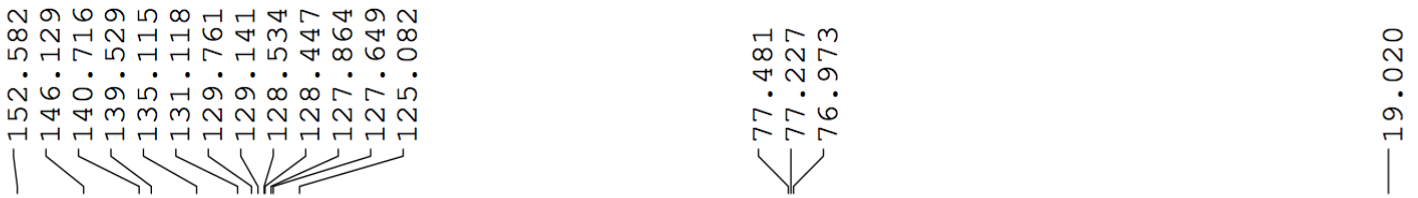
^{13}C NMR ($CDCl_3$) compound 6b


10.092
8.994
8.990
8.413
7.903
7.885
7.855
7.839
7.552
7.537
7.522
7.456
7.441
7.328
7.323
7.310
7.305
7.238
7.234
3.371
2.500
1H NMR (DMSO) compound 6e
HO
N
1.00
0.99
1.00
1.00
2.09
2.09
1.06
1.05
1.02
10
9
8
7
6
5
4
3
2
1
ppm

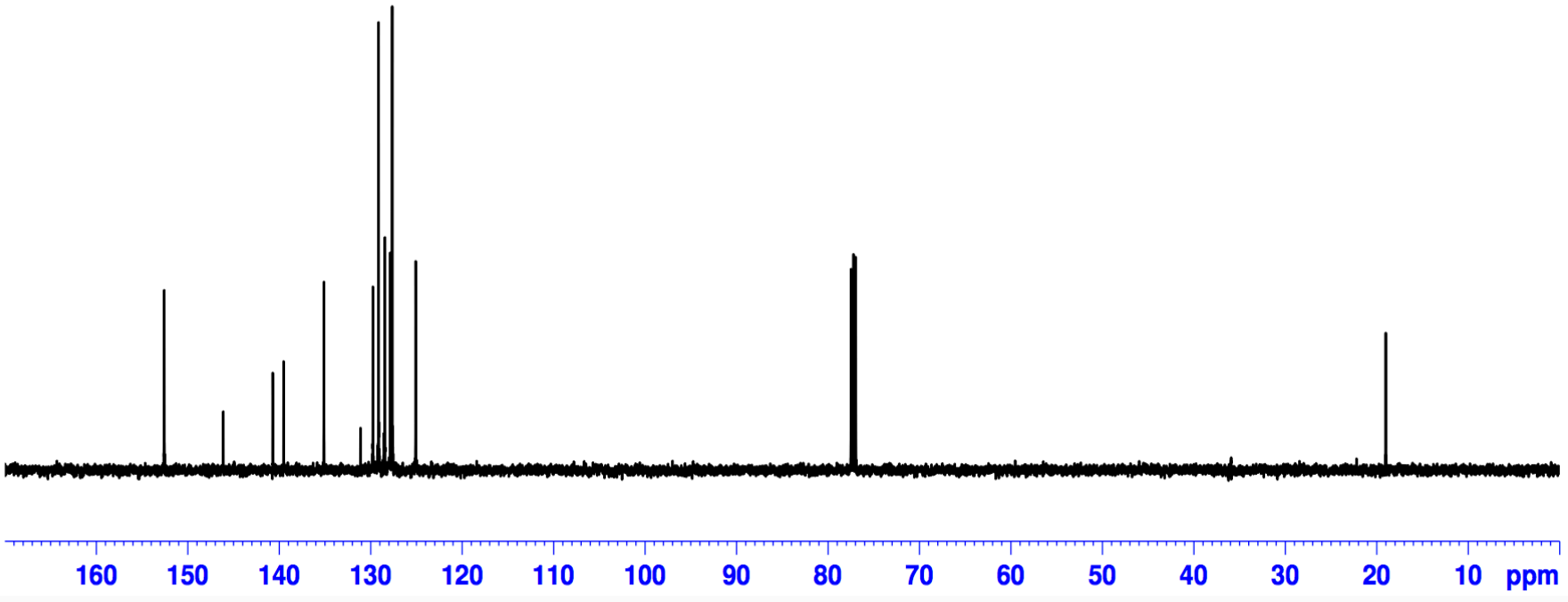


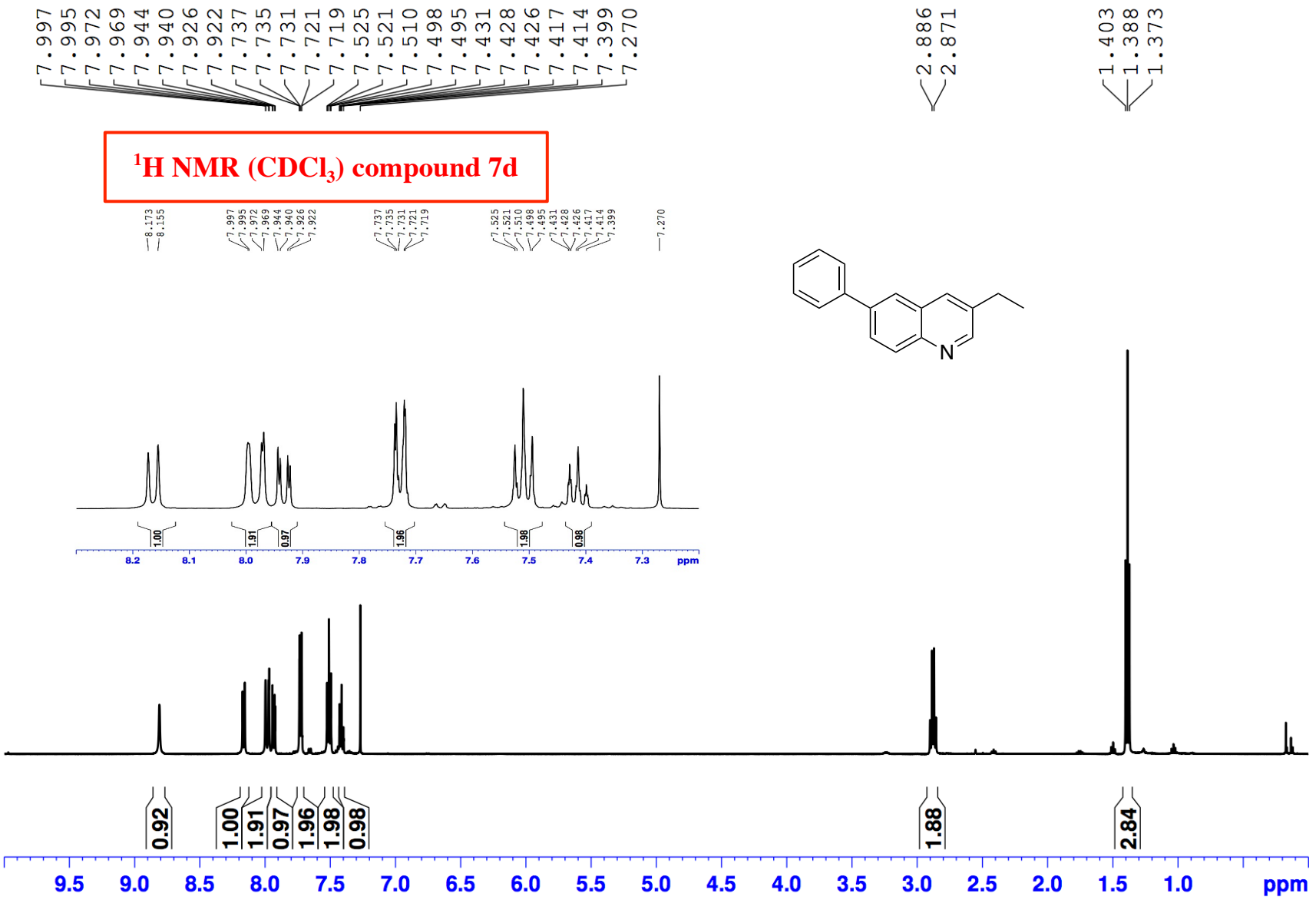
^{13}C NMR (DMSO) compound 6e

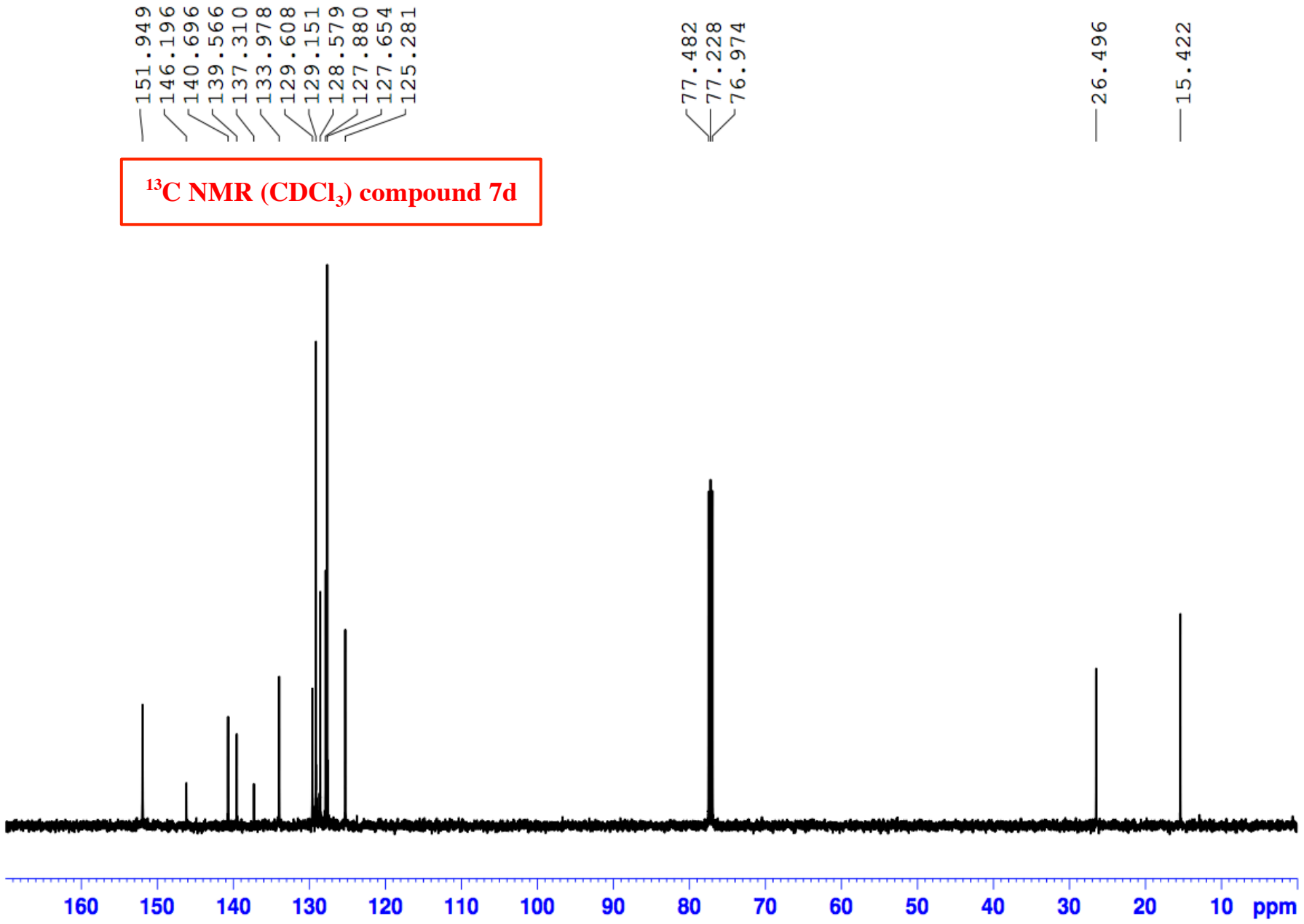

8.780
8.777
8.152
8.135
7.971
7.930
7.914
7.909
7.732
7.729
7.726
7.715
7.714
7.522
7.518
7.507
7.491
7.427
7.425
7.423
7.410
7.395
7.270
2.547
1H NMR (CDCl3) compound 7c
N
1.00
1.07
1.08
2.08
2.11
2.10
1.05
3.19
10
9
8
7
6
5
4
3
2
1
ppm



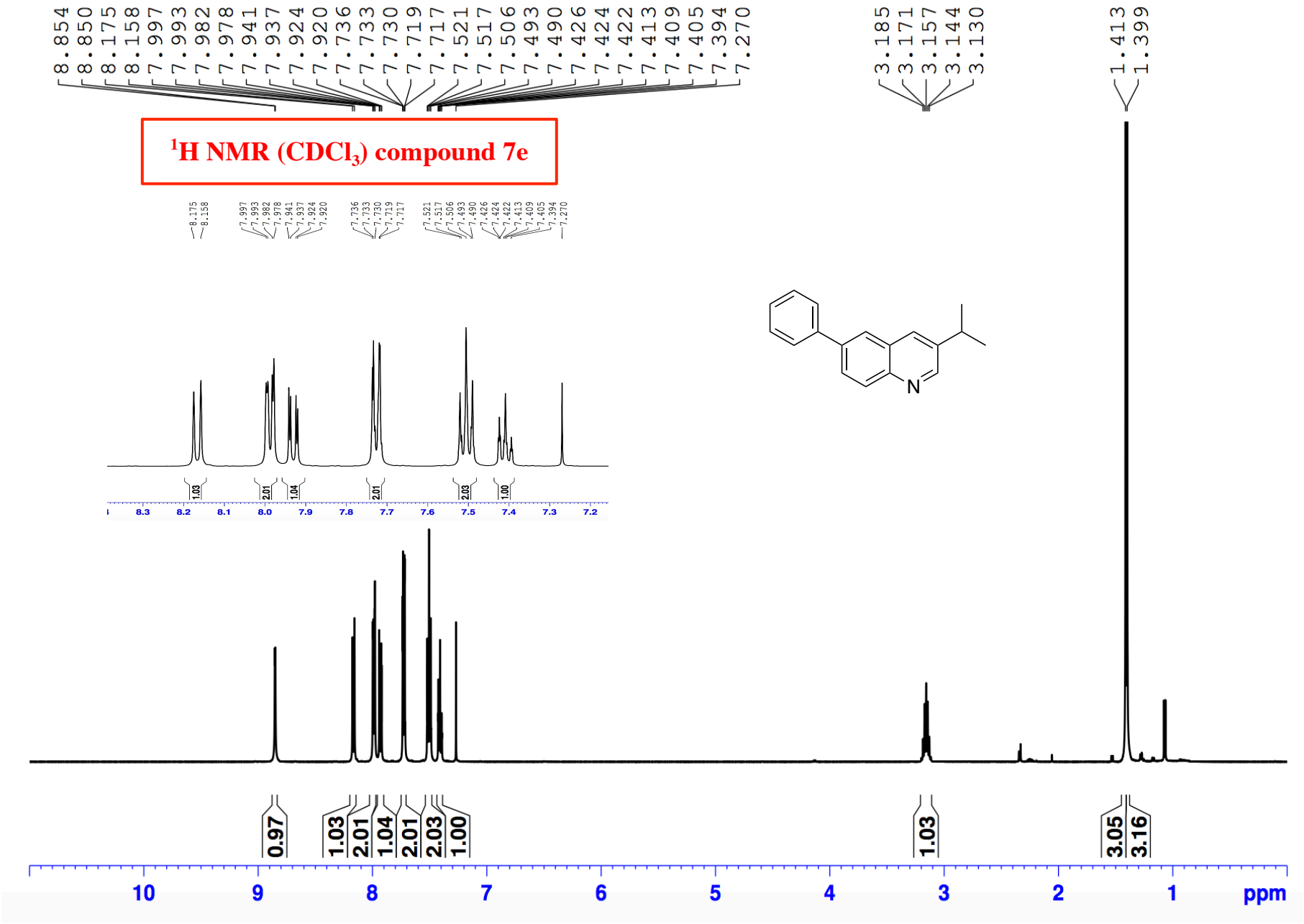
^{13}C NMR ($CDCl_3$) compound 7c

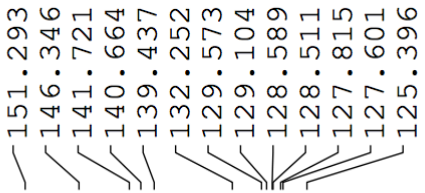


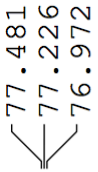

7.997
7.995
7.972
7.969
7.944
7.940
7.926
7.922
7.737
7.735
7.731
7.721
7.719
7.525
7.521
7.510
7.498
7.495
7.431
7.428
7.426
7.417
7.414
7.399
7.270
2.886
2.871
1.403
1.388
1.373
1H NMR (CDCl3) compound 7d
N
0.92
1.00
1.91
0.97
1.96
1.98
0.98
1.88
2.84
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
ppm

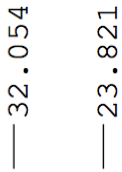


^{13}C NMR ($CDCl_3$) compound 7d

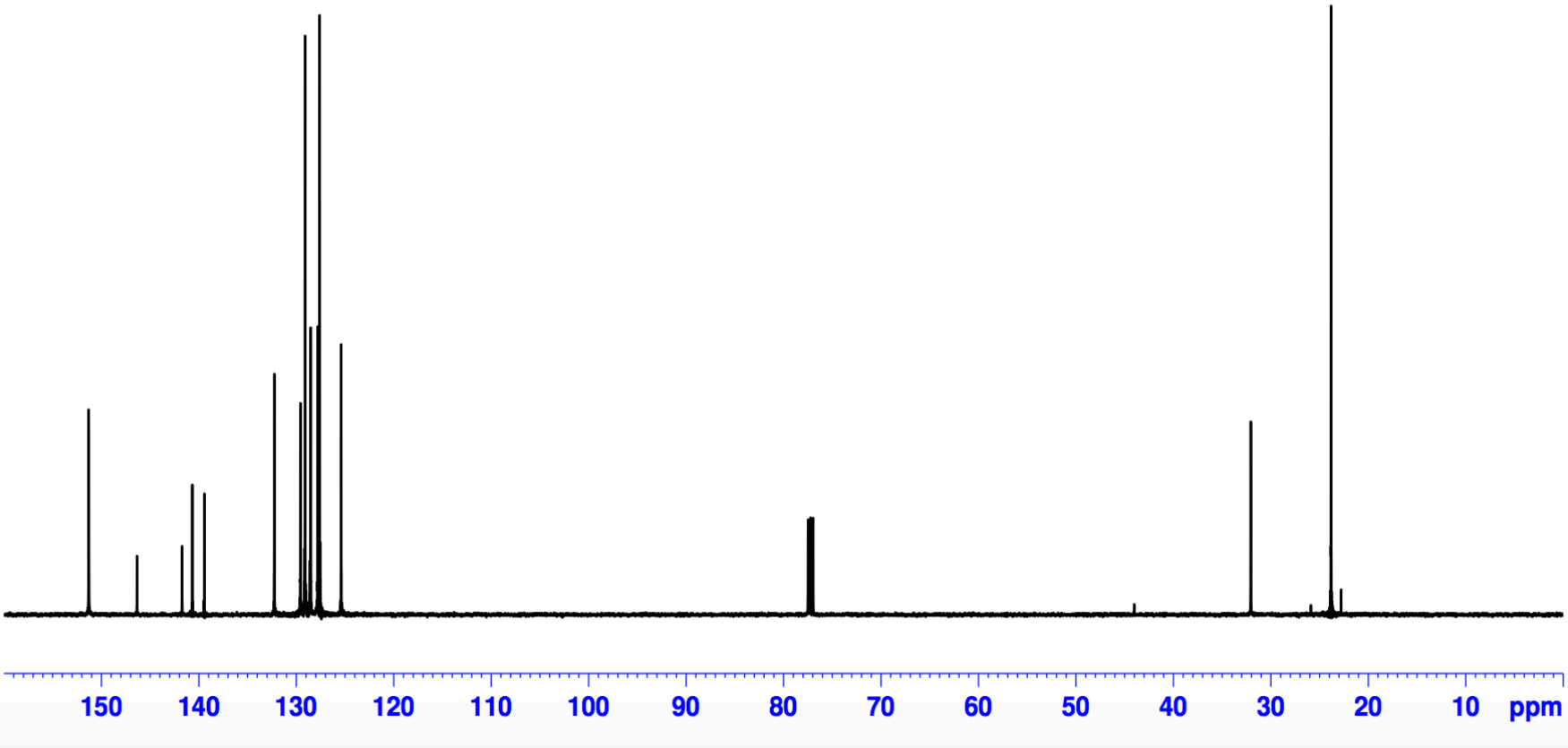

8.854
8.850
8.175
8.158
7.997
7.993
7.982
7.978
7.941
7.937
7.924
7.920
7.736
7.733
7.730
7.719
7.717
7.521
7.517
7.506
7.493
7.490
7.426
7.424
7.422
7.413
7.409
7.405
7.394
7.270
3.185
3.171
3.157
3.144
3.130
1.413
1.399
1H NMR (CDCl3) compound 7e
N
0.97
1.03
2.01
1.04
2.01
2.03
1.00
1.03
3.05
3.16
10
9
8
7
6
5
4
3
2
1
ppm

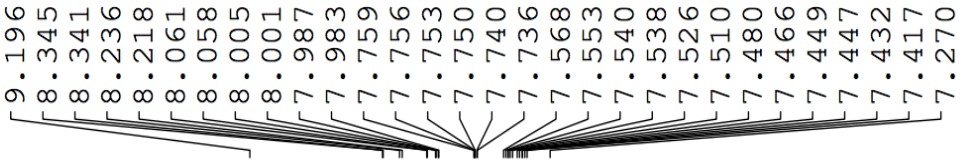




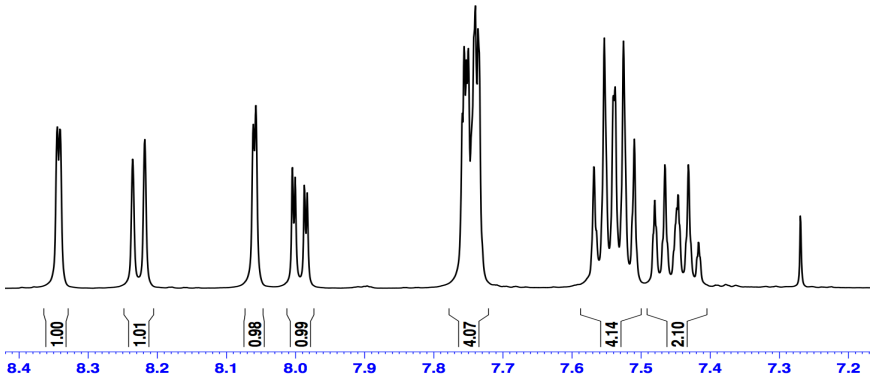


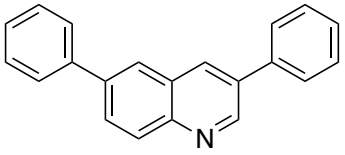
^{13}C NMR ($CDCl_3$) compound 7e

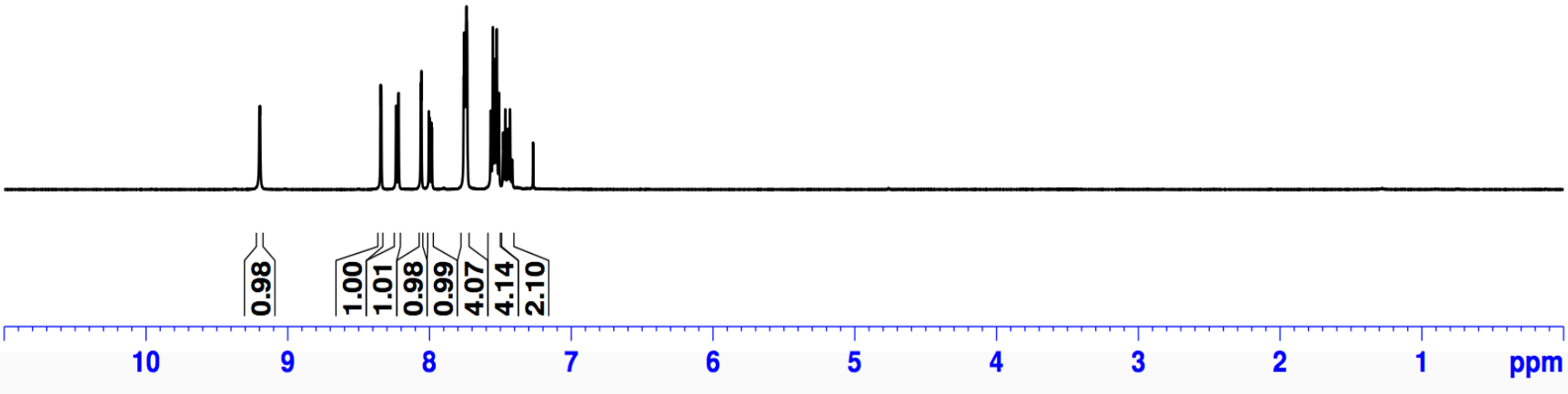




^{1}H NMR ($CDCl_3$) compound 7g



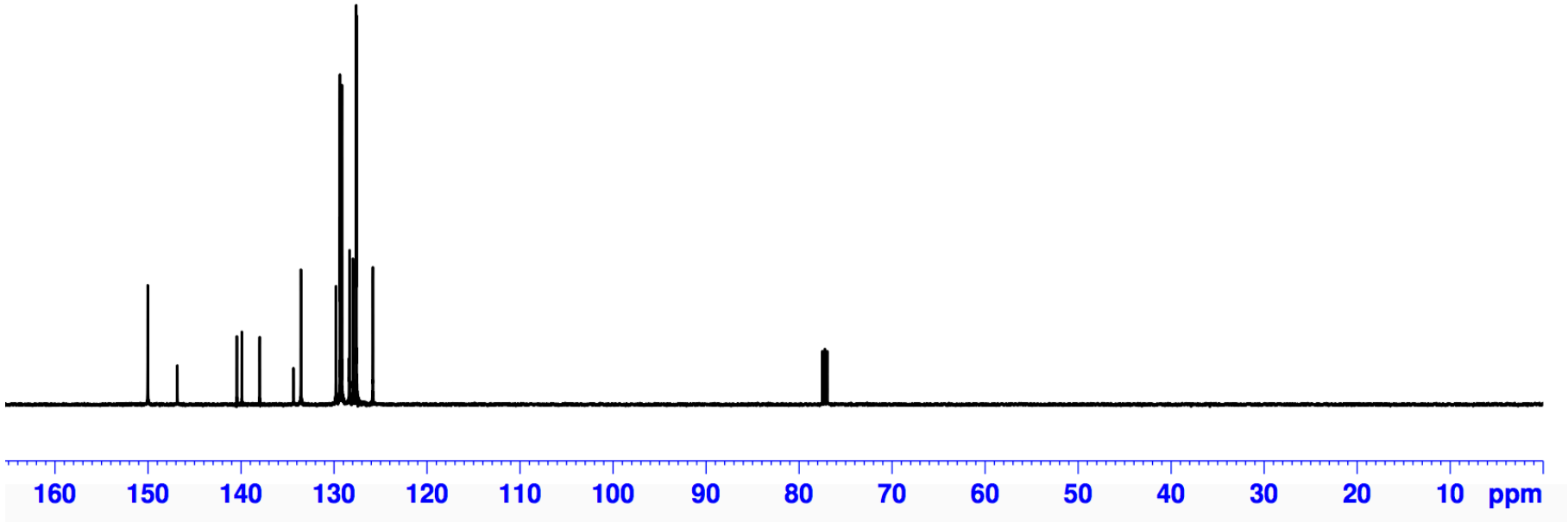


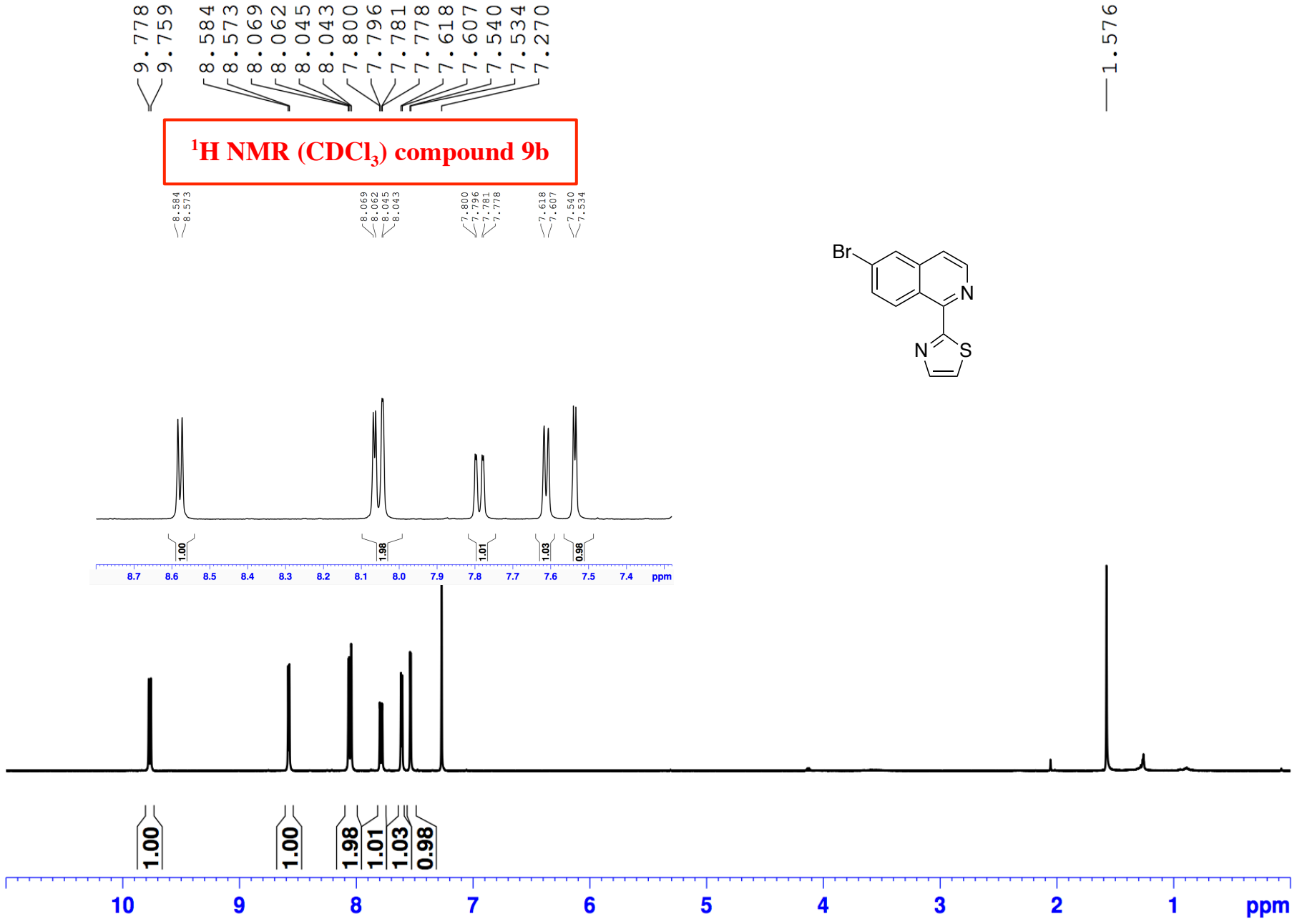


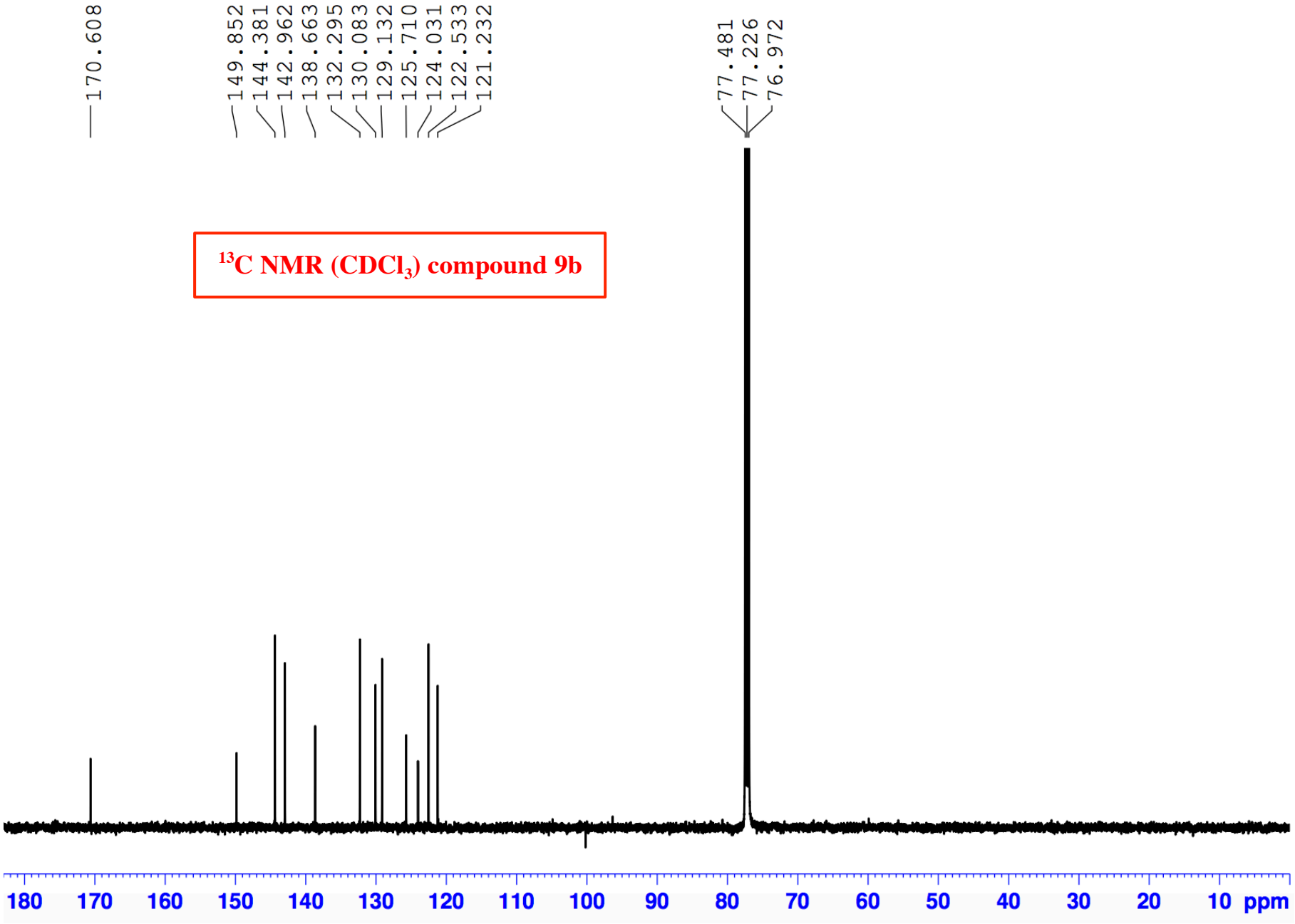
150.026
146.850
140.445
139.914
137.995
134.362
133.562
129.793
129.370
129.343
129.158
128.383
128.335
127.972
127.619
127.591
125.829

77.484
77.230
76.976

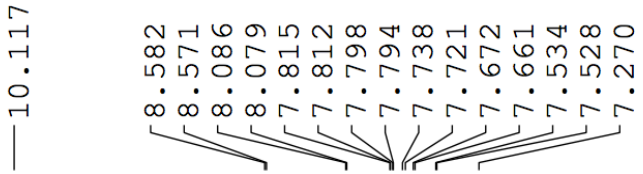
^{13}C NMR ($CDCl_3$) compound 7g



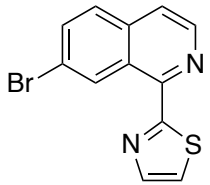

9.778
9.759
8.584
8.573
8.069
8.062
8.045
8.043
7.800
7.796
7.781
7.778
7.618
7.607
7.540
7.534
7.270
1.576
1H NMR (CDCl3) compound 9b
Br
N
N
S
1.00
1.98
1.01
1.03
0.98
ppm

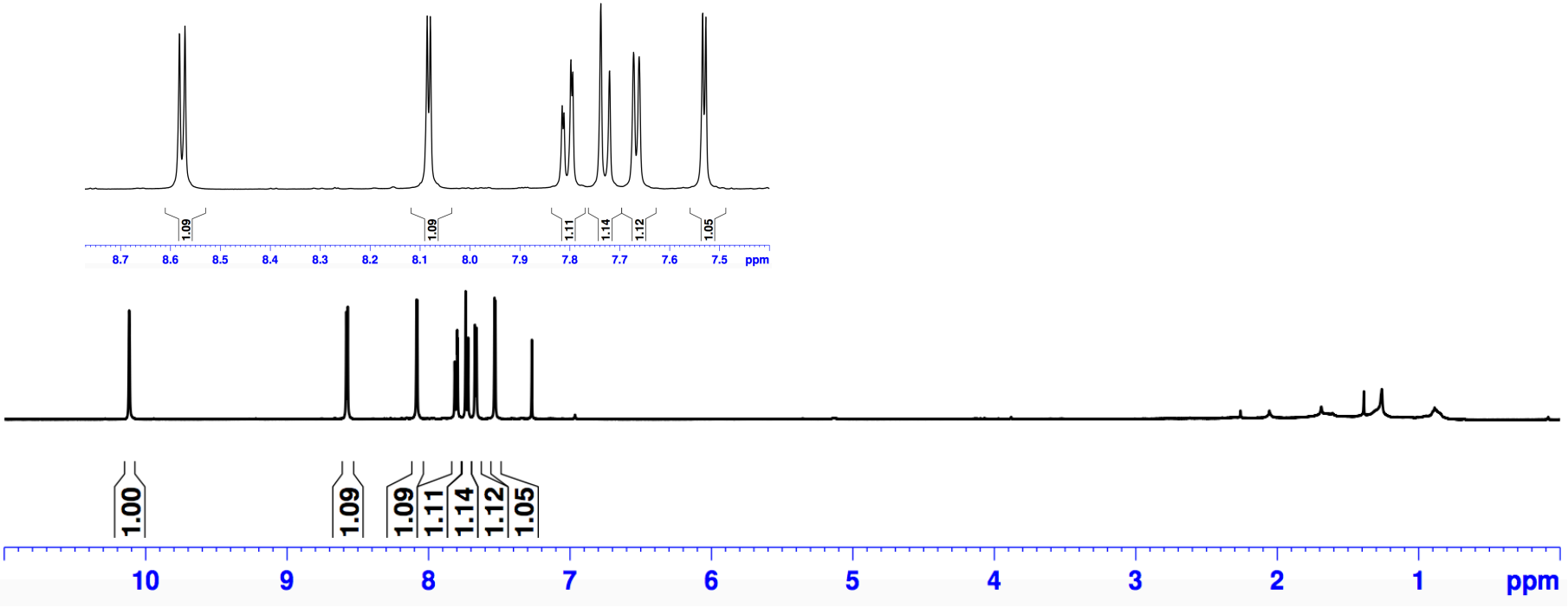


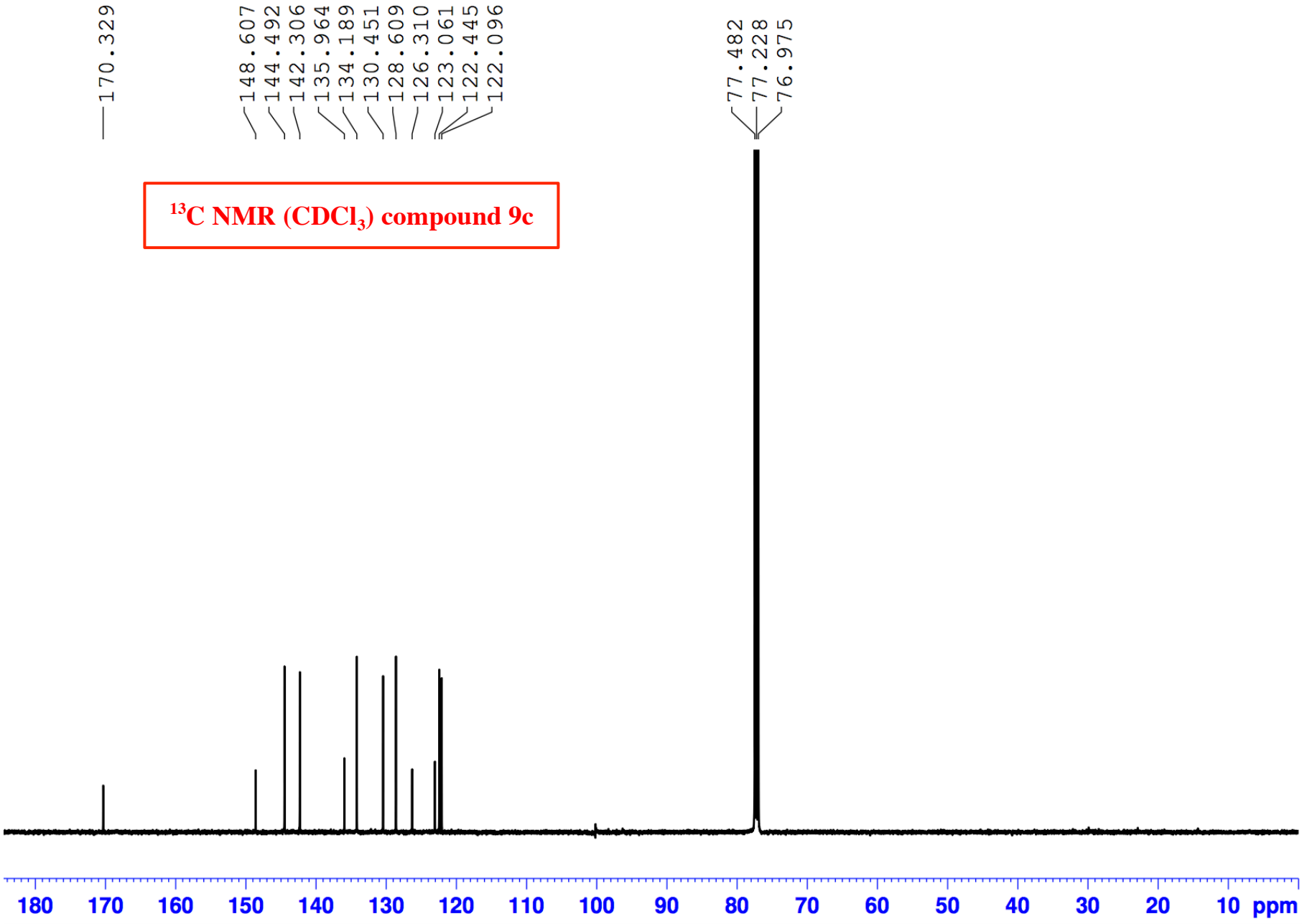
^{13}C NMR ($CDCl_3$) compound 9b



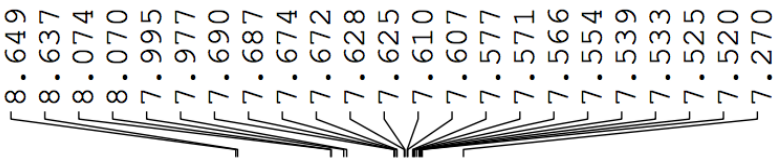
^{1}H NMR ($CDCl_3$) compound 9c



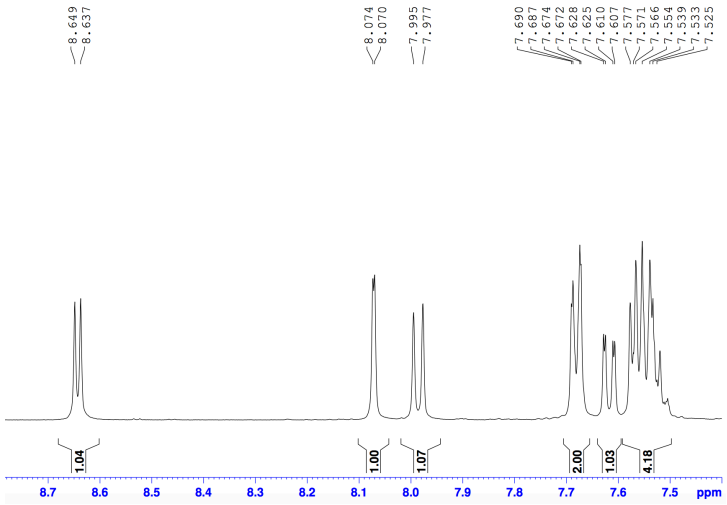


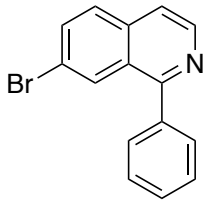


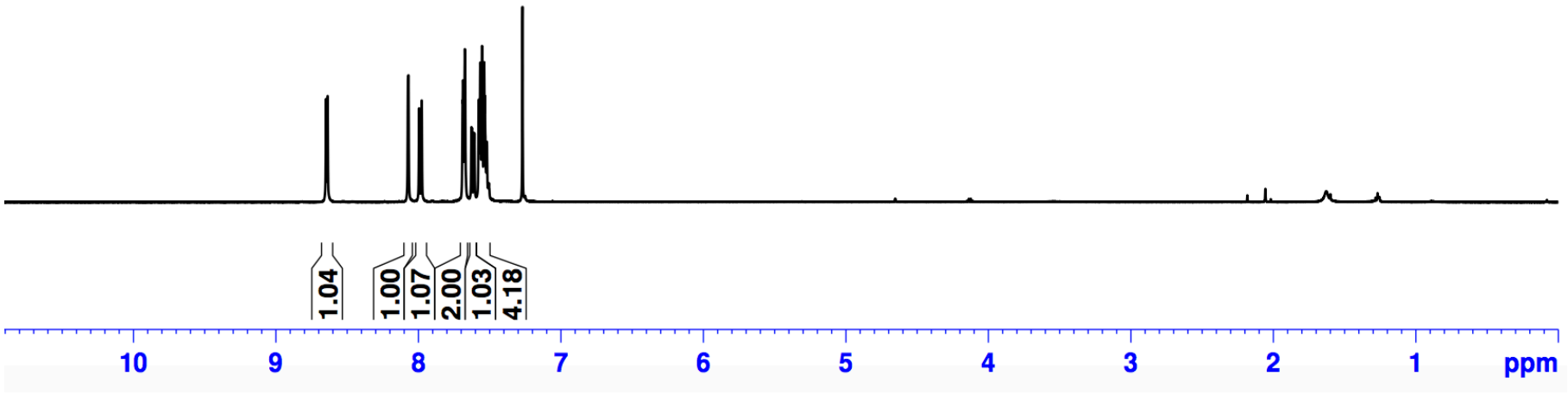
^{13}C NMR ($CDCl_3$) compound 9c

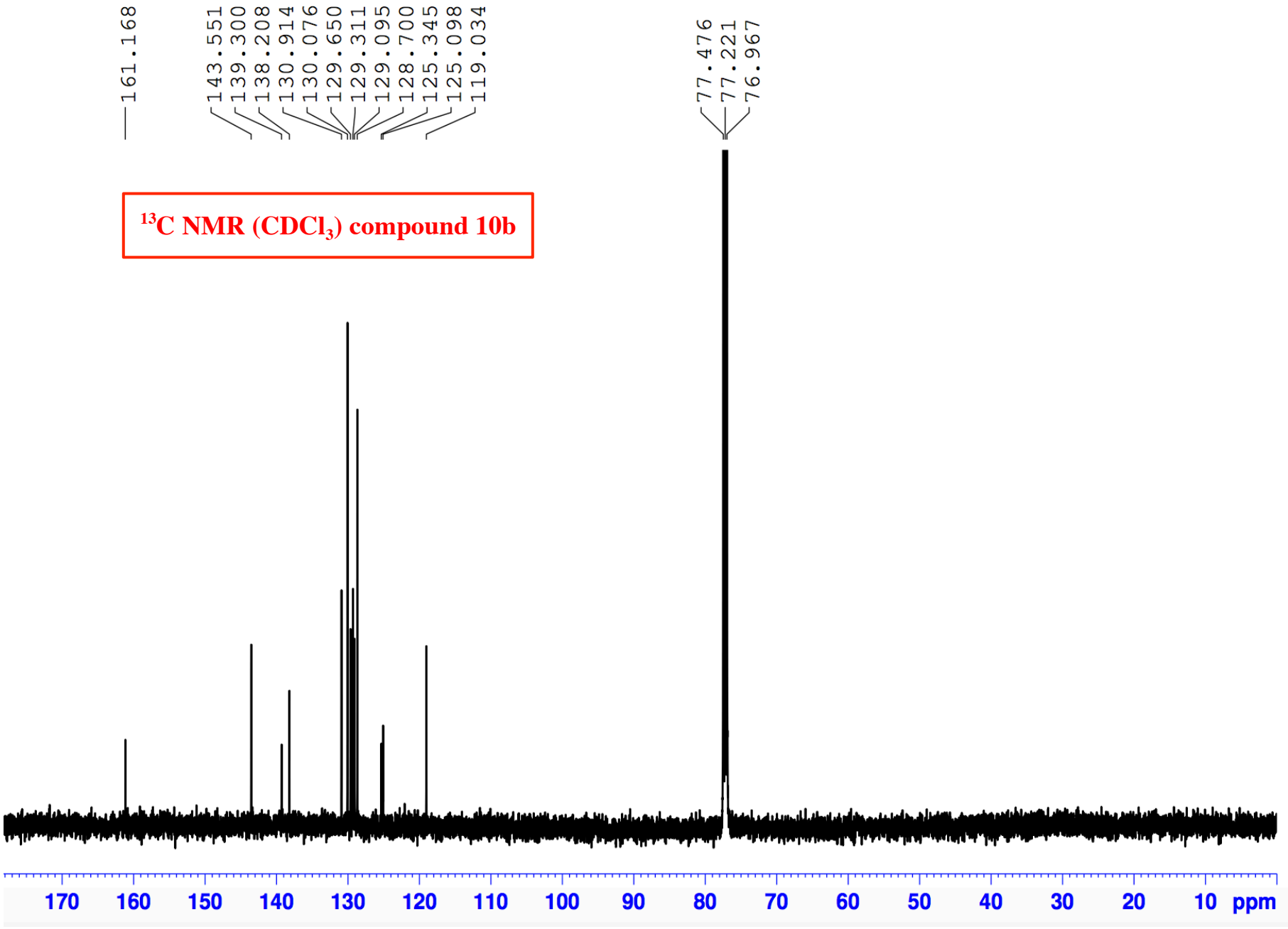


^{1}H NMR ($CDCl_3$) compound 10b









^{13}C NMR ($CDCl_3$) compound 10b