

## Supporting Information

# Design, Synthesis, and Structure-activity Relationship, Molecular Modeling and NMR Studies of a Series of Phenylalkyl Ketones as Highly Potent and Selective Phosphodiesterase-4 Inhibitors

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<sup>¶</sup> S. Zheng and G. Kaur made equal contributions to this manuscript.

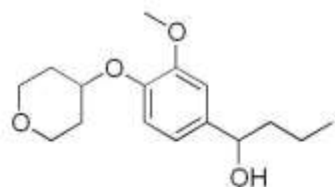
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**Content: Purity Table (S2), 1H-NMR and 13C-NMR (S3)**

**Table S1.** Purity for final compounds

Entries	Compound	Purity (from <sup>1</sup> H-NMR)	Possible Contaminant(s)
1	<b>4b</b>	≥98%	None
2	<b>4c</b>	≥98%	None
3	<b>4d</b>	≥98%	None
4	<b>4e</b>	≥98%	None
5	<b>4l</b>	≥98%	None
6	<b>6b</b>	≥98%	Ethyl acetate
7	<b>5a</b>	≥98%	None
8	<b>5b</b>	≥98%	Ethyl acetate
9	<b>5c</b>	≥98%	Ether
10	<b>5d</b>	≥98%	None
11	<b>5e</b>	≥98%	None
12	<b>5f</b>	≥98%	Ethyl acetate
13	<b>5j</b>	≥98%	Grease or hexane
14	<b>5k</b>	≥98%	Grease or hexane
15	<b>5l</b>	≥98%	CH <sub>2</sub> Cl <sub>2</sub>
16	<b>5m</b>	≥98%	Ethyl acetate
17	<b>5n</b>	≥98%	Grease or hexane
18	<b>5o</b>	≥98%	Grease
19	<b>5p</b>	≥98%	CH <sub>2</sub> Cl <sub>2</sub>
20	<b>5q</b>	≥98%	Hexane
21	<b>5r</b>	≥98%	CH <sub>2</sub> Cl <sub>2</sub>
22	<b>5i</b>	≥98%	TFA
23	<b>5zi</b>	≥98%	Grease or hexane
24	<b>5zh</b>	≥98%	grease
25	<b>5v</b>	≥98%	grease
26	<b>5zb</b>	≥98%	None
27	<b>5zd</b>	≥98%	Ethyl acetate
28	<b>5za</b>	≥98%	Ethyl acetate
29	<b>5zl</b>	≥98%	Ethyl acetate, grease
30	<b>5zm</b>	≥98%	None
31	<b>5zj</b>	≥98%	Ether, H <sub>2</sub> O, grease
32	<b>5zf</b>	≥98%	Ethyl acetate, ether
33	<b>5zg</b>	≥98%	Ethyl acetate
34	<b>5zc</b>	≥98%	grease
35	<b>5ze</b>	≥98%	grease
36	<b>5s</b>	≥98%	grease
37	<b>5t</b>	≥98%	Grease, H <sub>2</sub> O
38	<b>5u</b>	≥98%	grease
39	<b>11a</b>	≥98%	Ethyl acetate, grease, H <sub>2</sub> O
40	<b>11b</b>	≥98%	Ethyl acetate, grease
41	<b>8</b>	≥98%	None



Entry 1 in Table 1  
Compound **4b**



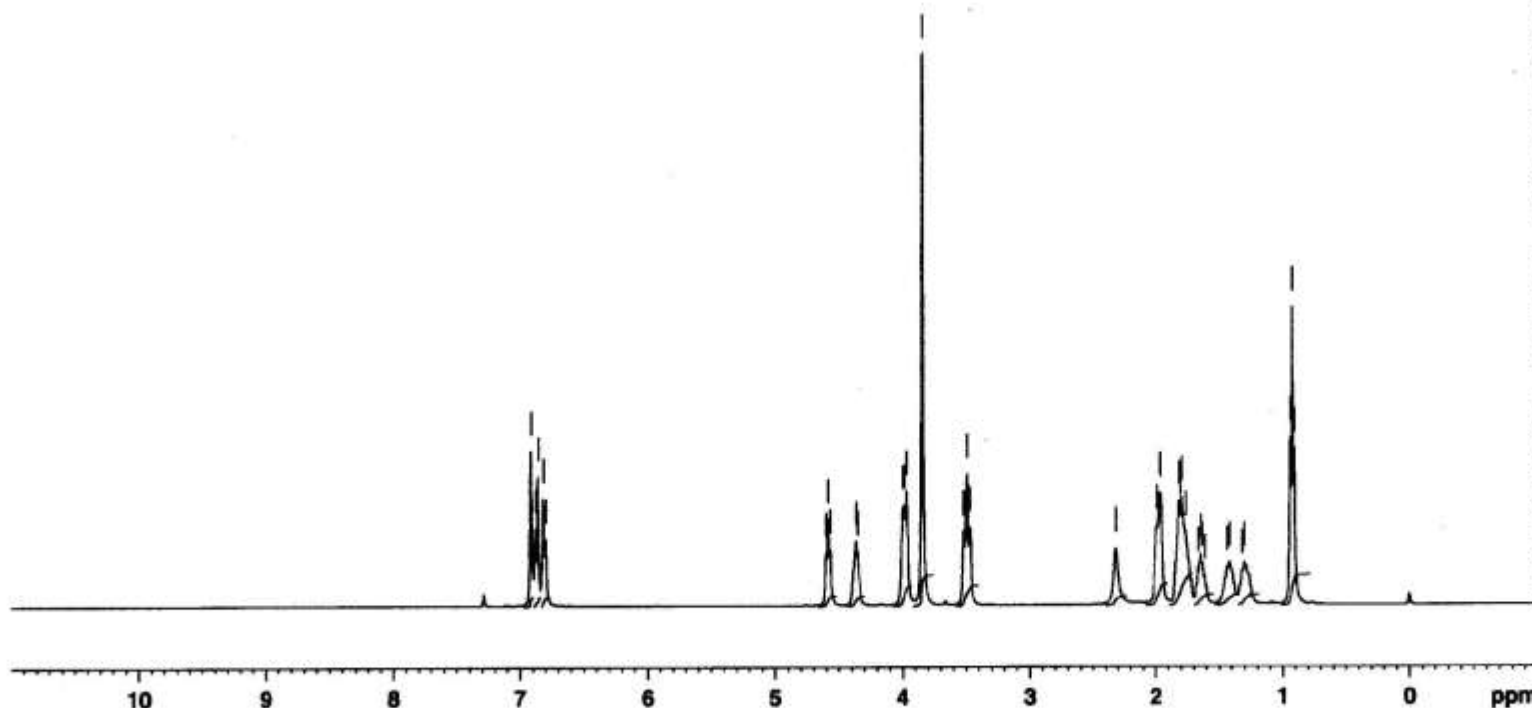
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PROCNO 1

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PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 28.5  
DW 60.400 usec  
DE 6.00 usec  
TE 299.1 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

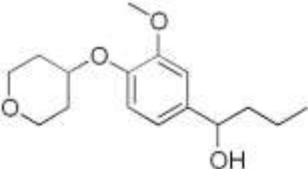
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PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
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WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40

6.913  
6.878  
6.868  
6.814  
6.785  
4.603  
4.587  
4.571  
4.568  
4.368  
3.998  
3.983  
3.970  
3.846  
3.523  
3.518  
3.485  
3.472  
2.317  
1.990  
1.964  
1.815  
1.803  
1.793  
1.762  
1.667  
1.643  
1.634  
1.610  
1.437  
1.418  
1.321  
1.306  
0.943  
0.925  
0.907



1.00  
1.04  
1.03  
1.02  
1.02  
2.07  
3.13  
2.06  
0.96  
2.16  
3.15  
1.09  
1.13  
1.11  
3.14



Entry 1 in Table 1  
Compound **4b**

150.89  
145.49  
139.31  
118.02  
117.38  
109.92  
77.32  
77.00  
76.68  
73.99  
73.81  
65.25  
55.82  
41.13  
32.00  
19.01  
13.86



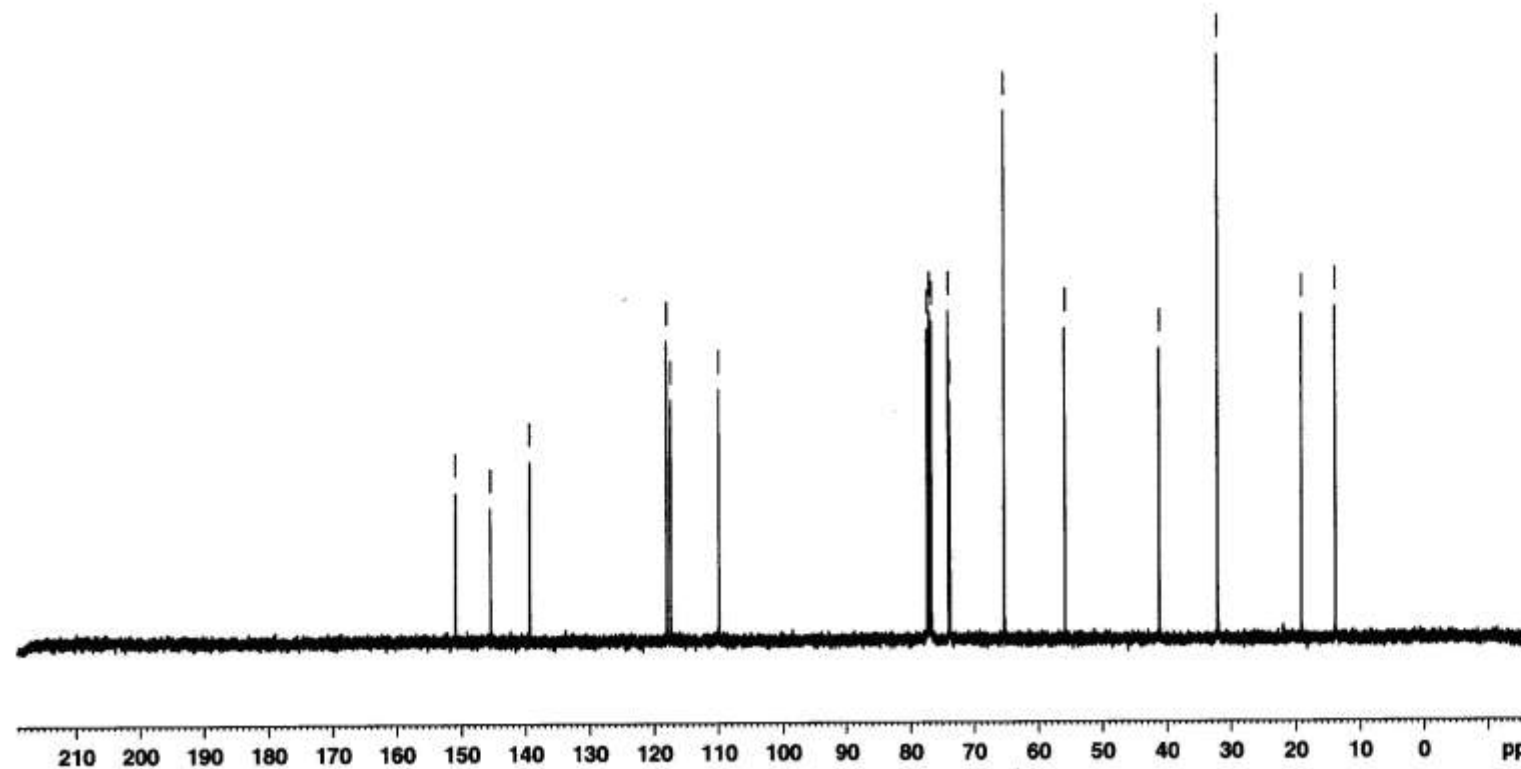
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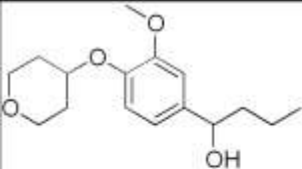
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PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 93  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 1290.2  
DW 20.850 usec  
DE 6.00 usec  
TE 299.7 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
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SF 100.6127803 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00





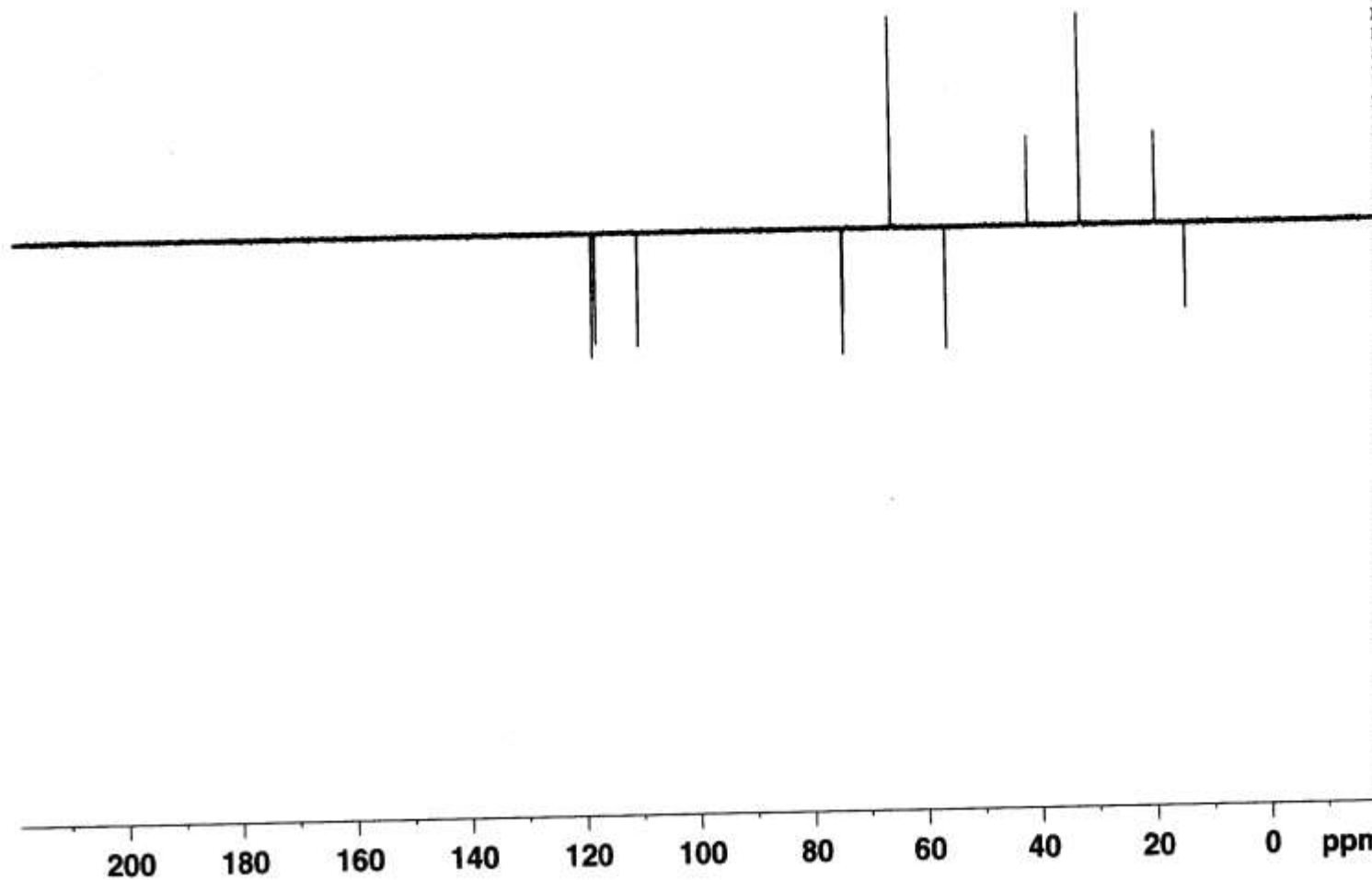
Entry 1 in Table 1  
Compound **4b**

118.13  
117.49  
110.02

74.10  
73.91  
65.37  
55.93

41.24  
32.11

19.12  
13.98



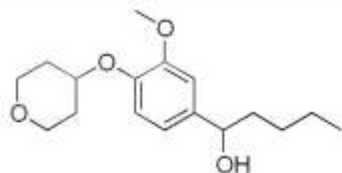
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PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 45  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 23170.5  
DW 20.850 usec  
DE 6.00 usec  
TE 299.5 K  
CNST2 145.000000  
d1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



Entry 2 in Table 1  
Compound 4c

7.209  
6.923  
6.892  
6.872  
6.827  
6.807

4.606  
4.593  
4.578  
4.392  
4.382  
4.373  
4.019  
4.003  
3.991  
3.861  
3.842  
3.536  
3.514  
3.491  
1.993  
1.833  
1.822  
1.811  
1.802  
1.799  
1.790  
1.745  
1.723  
1.708  
1.694  
1.684  
1.674  
1.363  
1.347  
1.330  
1.313  
1.296  
1.288  
1.264  
0.908  
0.891  
0.874  
0.001

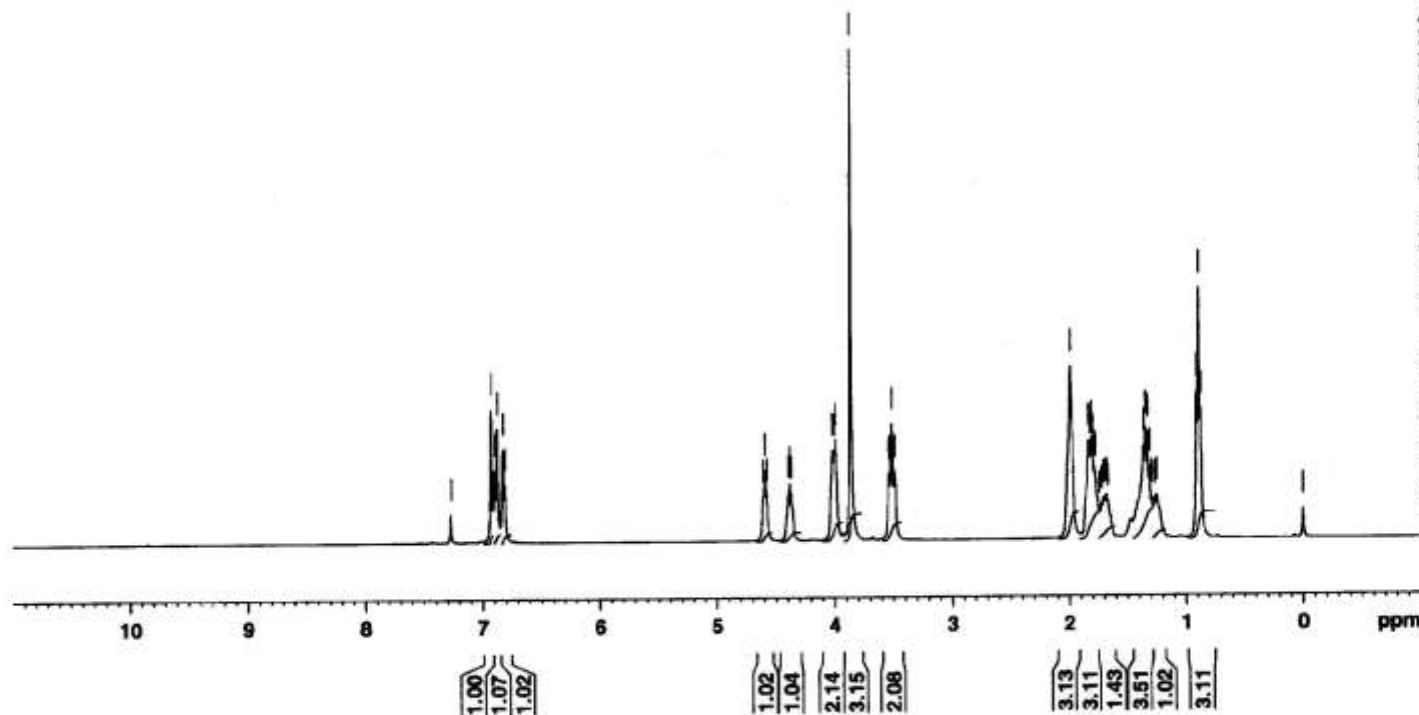


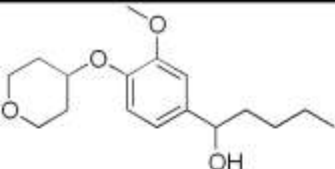
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EXPNO 1  
PROCNO 1

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PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 80.6  
DW 60.400 usec  
DE 6.00 usec  
TE 299.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

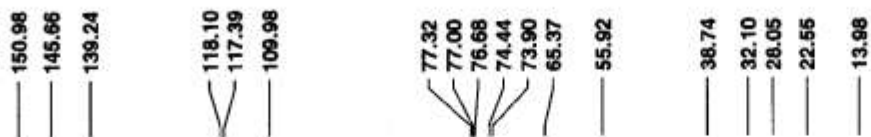
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P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300066 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40





Entry 2 in Table 1  
Compound **4c**



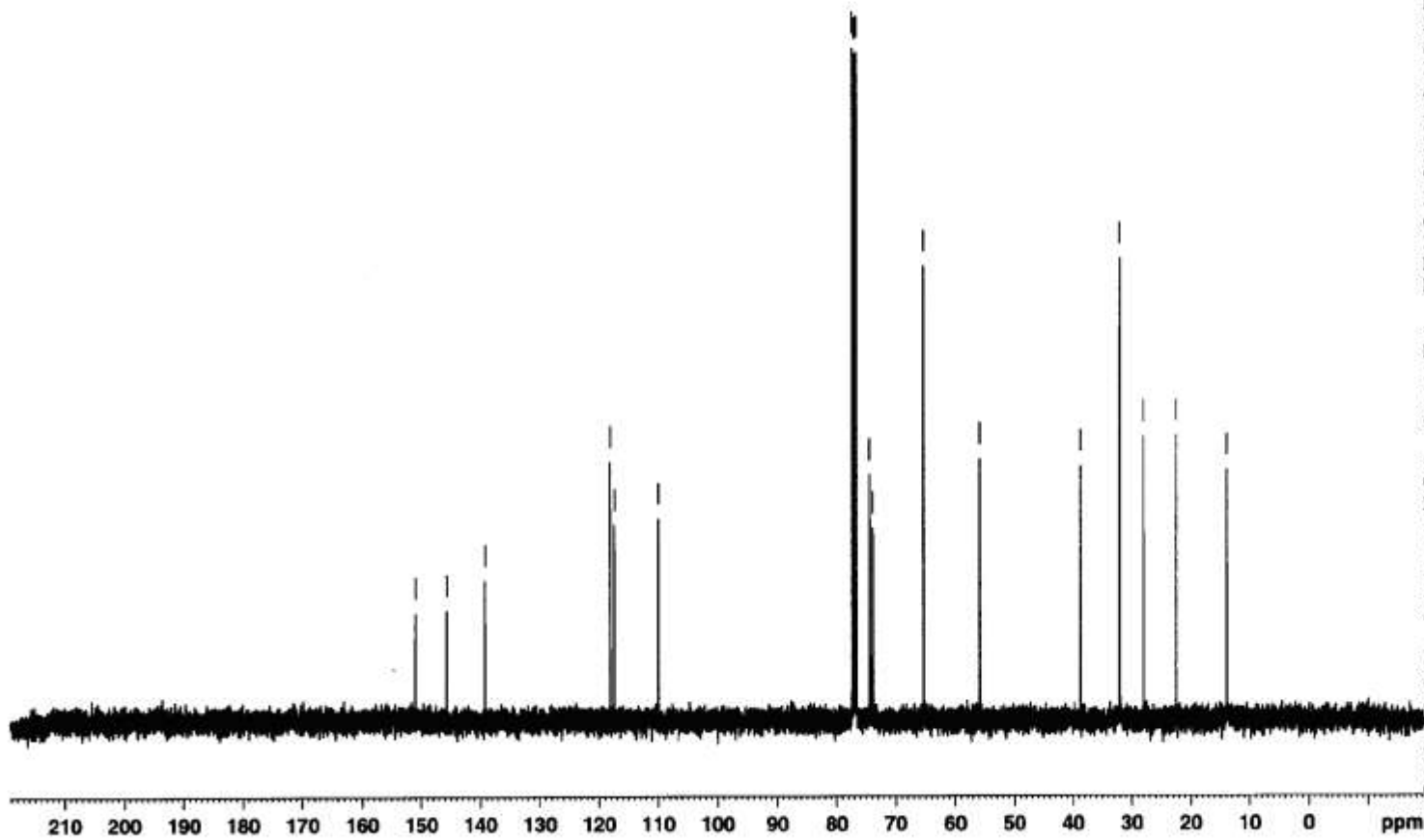
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 EXPNO 2  
 PROCNO 1

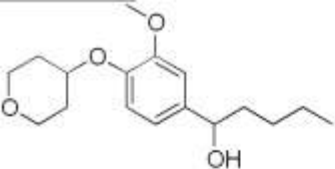
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 Time 11.20  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT D2O  
 NS 115  
 DS 4  
 SWH 23980.814 Hz  
 FIDRES 0.365918 Hz  
 AQ 1.3664756 sec  
 RG 1149.4  
 DW 20.850 usec  
 DE 6.00 usec  
 TE 299.8 K  
 D1 2.0000000 sec  
 d11 0.0300000 sec  
 DELTA 1.89999998 sec  
 MCREST 0.0000000 sec  
 MCWRK 0.0150000 sec

==== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.00 usec  
 PL1 -3.00 dB  
 SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 PCPD2 70.00 usec  
 PL2 -1.00 dB  
 PL12 14.00 dB  
 PL13 14.00 dB  
 SFO2 400.1316005 MHz

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 SF 100.6127737 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.00



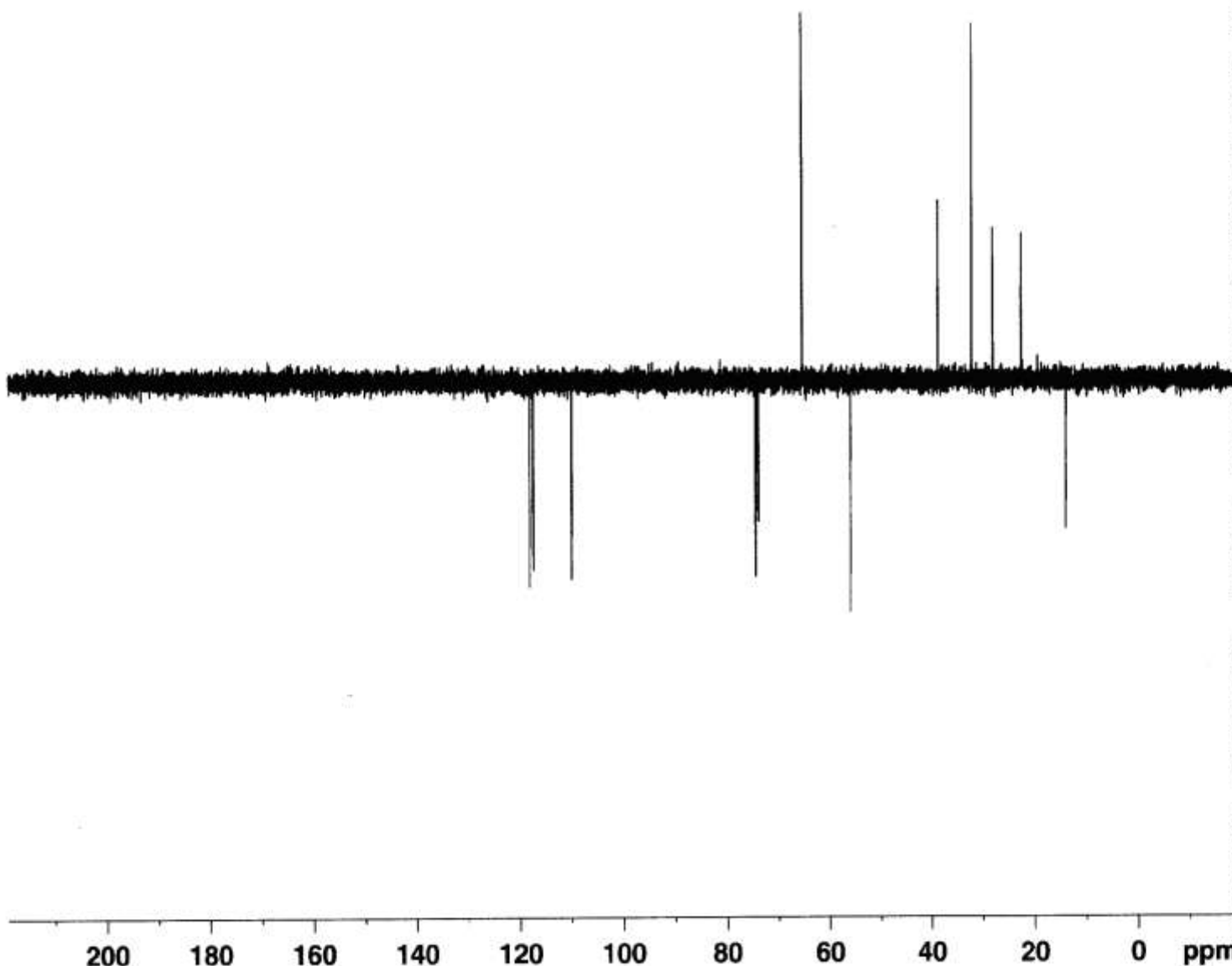


Entry 2 in Table 1  
Compound 4c

118.15  
117.43  
110.02

74.49  
73.94  
65.42  
55.97

38.79  
32.15  
28.10  
22.60  
14.03



Current Data Parameters  
NAME n63-16  
EXPNO 3  
PROCNO 1

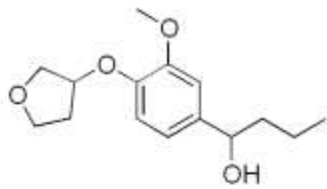
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Time 11.25  
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PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 28  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 6.00 usec  
TE 299.6 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40





Entry 3 in Table 1  
Compound **4d**

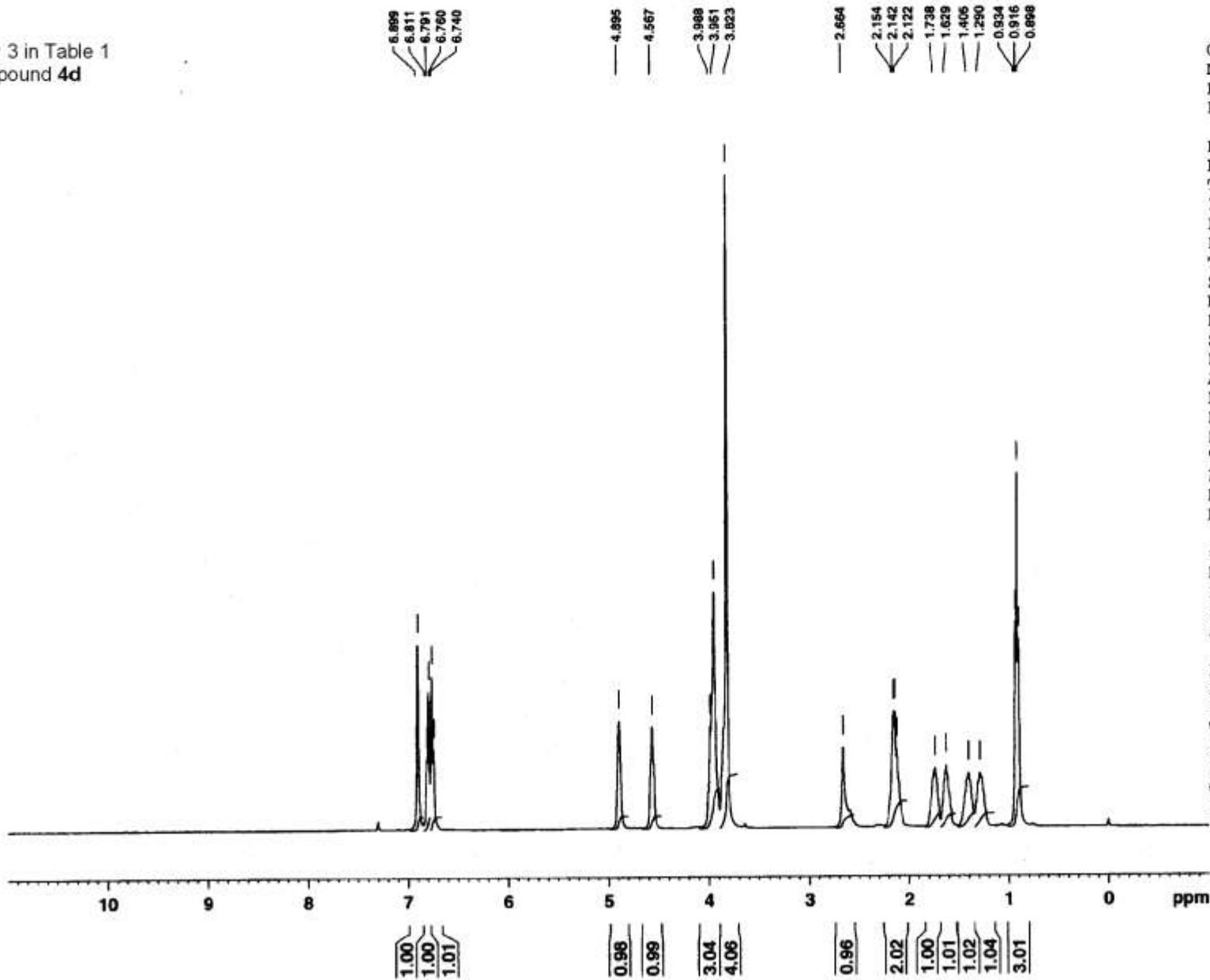


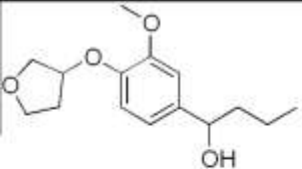
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 PROCNO 1

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 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 8278.146 Hz  
 PIDRES 0.126314 Hz  
 AQ 3.9584243 sec  
 RG 28.5  
 DW 60.400 usec  
 DE 6.00 usec  
 TE 298.7 K  
 D1 1.00000000 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

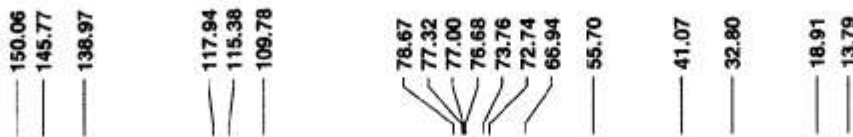
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 NUC1 1H  
 P1 12.80 usec  
 PL1 0.00 dB  
 SFO1 400.1324710 MHz

F2 - Processing parameters  
 SI 32768  
 SF 400.1299944 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.40





Entry 3 in Table 1  
Compound **4d**



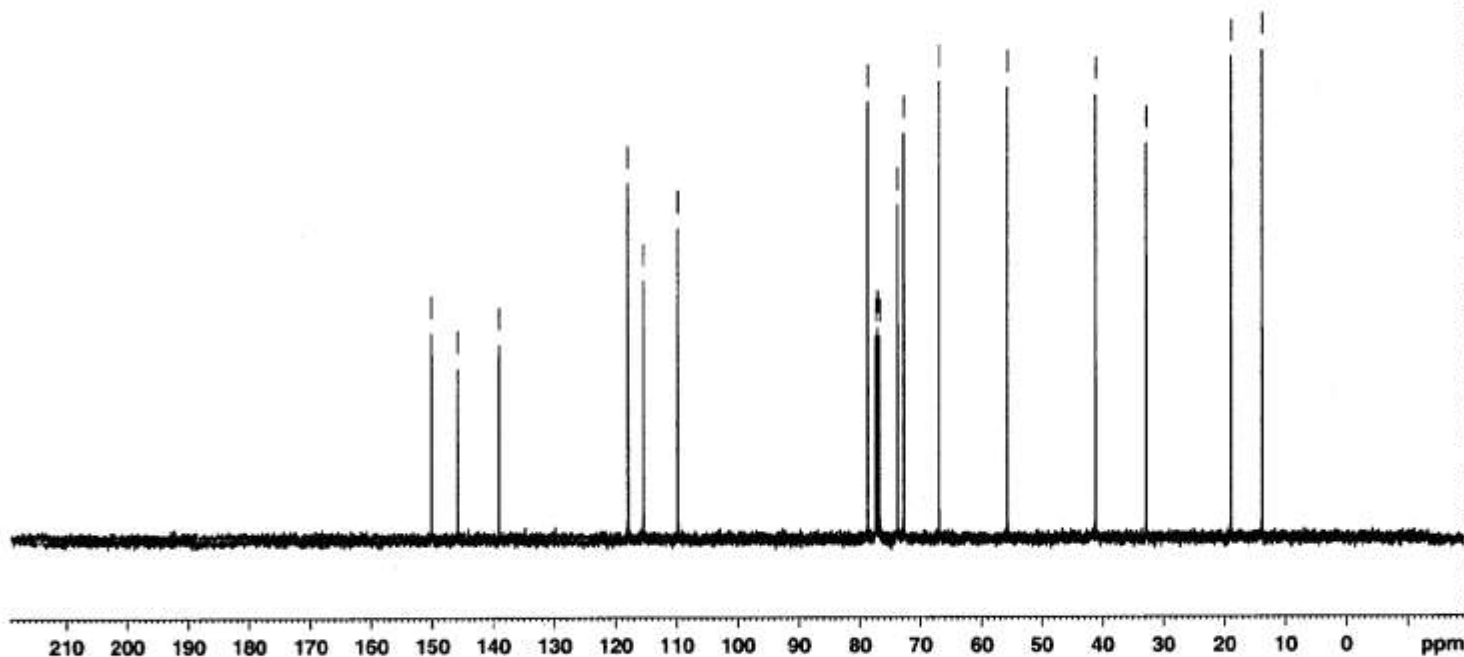
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 EXPNO 2  
 PROCNO 1

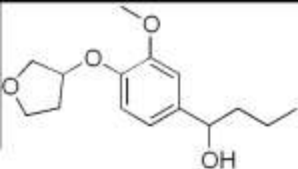
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 Time 11.46  
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 PULPROG zgpg30  
 TD 65536  
 SOLVENT D2O  
 NS 70  
 DS 4  
 SWH 23980.814 Hz  
 FIDRES 0.365918 Hz  
 AQ 1.3664756 sec  
 RG 406.4  
 DW 20.850 usec  
 DE 6.00 usec  
 TE 299.3 K  
 D1 2.00000000 sec  
 d11 0.03000000 sec  
 DELTA 1.89999998 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.00 usec  
 PL1 -3.00 dB  
 SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 PCPD2 70.00 usec  
 PL2 -1.00 dB  
 PL12 14.00 dB  
 PL13 14.00 dB  
 SFO2 400.1316005 MHz

F2 - Processing parameters  
 SI 32768  
 SF 100.6127876 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.00





Entry 3 in Table 1  
Compound 4d

118.12  
115.57  
115.55  
109.96

78.85  
73.94  
72.92  
67.13

55.88

41.26

32.98

19.10  
13.97



Current Data Parameters  
NAME n65  
EXPNO 3  
PROCNO 1

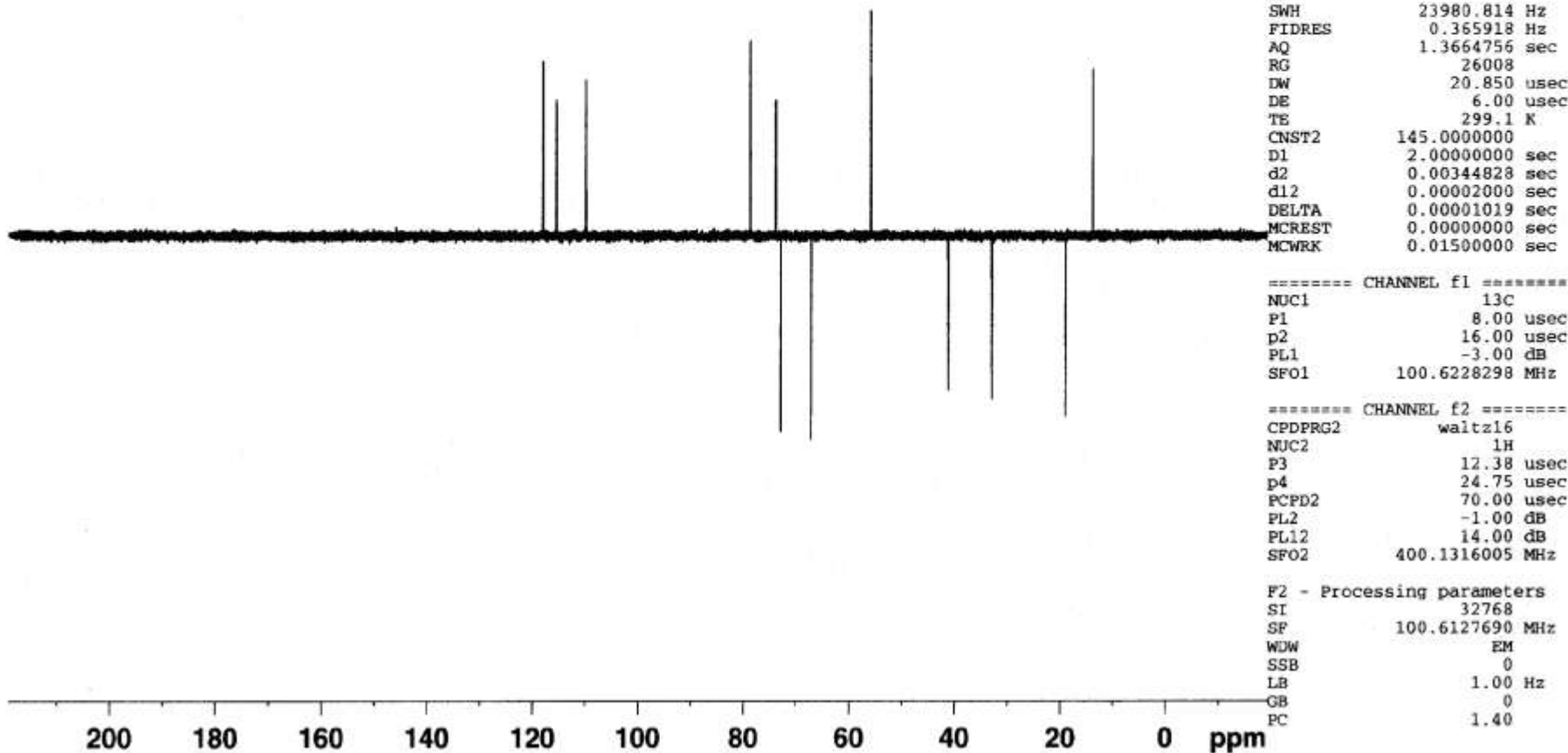
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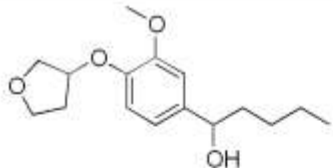
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PULPROG dept135  
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SOLVENT CDC13  
NS 10  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 6.00 usec  
TE 299.1 K  
CNST2 145.0000000  
d1 2.0000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



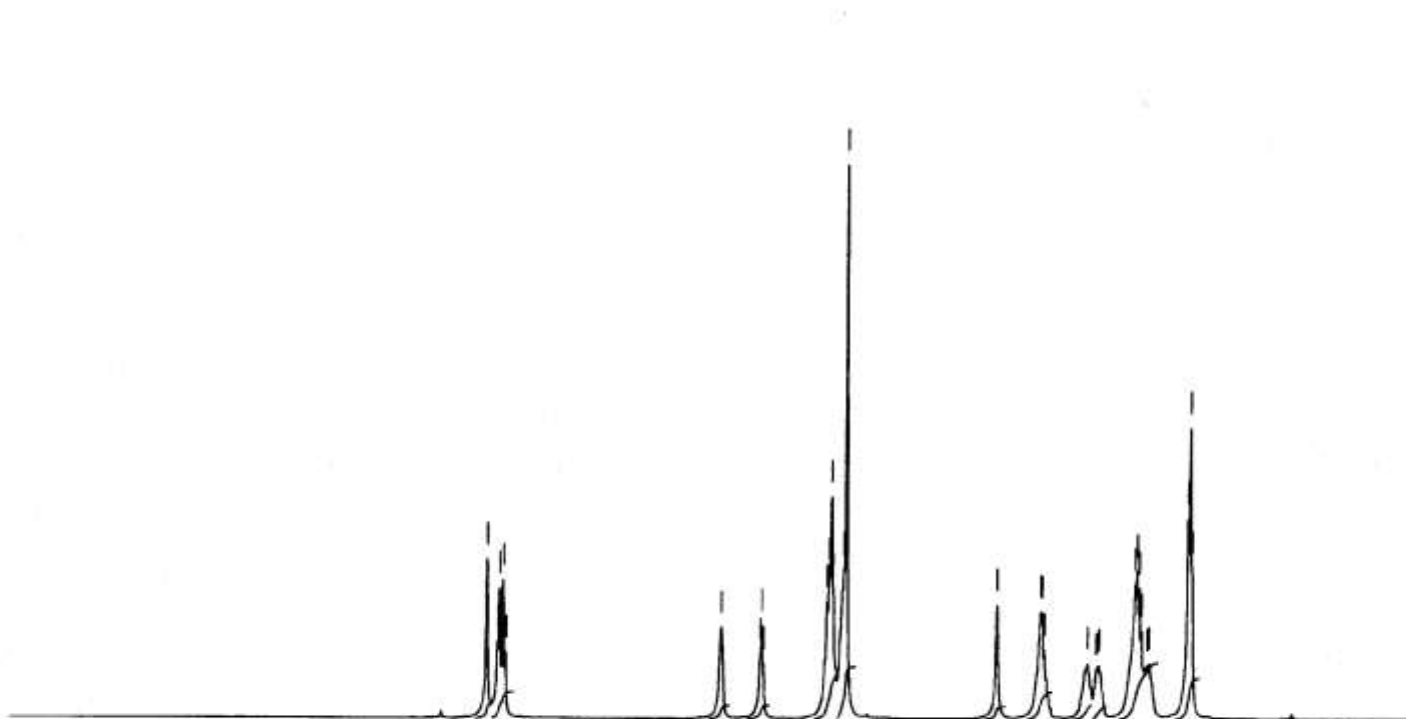


Entry 4 in Table 1  
Compound 4e

6.903  
6.816  
6.796  
6.766  
6.746

4.903  
4.574  
4.560  
4.545  
3.995  
3.977  
3.959  
3.952  
3.930

2.535  
2.164  
2.148  
2.129  
1.757  
1.694  
1.663  
1.349  
1.334  
1.317  
1.300  
1.290  
1.232  
0.899  
0.882  
0.869



1.00  
1.87

0.91  
0.92

3.11  
3.72

0.90  
1.93  
1.04  
0.89  
4.03  
2.92

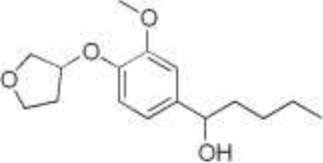


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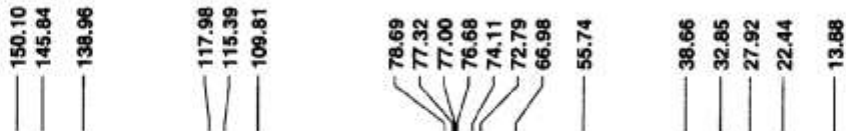
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PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 28.5  
DW 60.400 usec  
DE 6.00 usec  
TE 298.7 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1299965 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



Entry 4 in Table 1  
Compound 4e



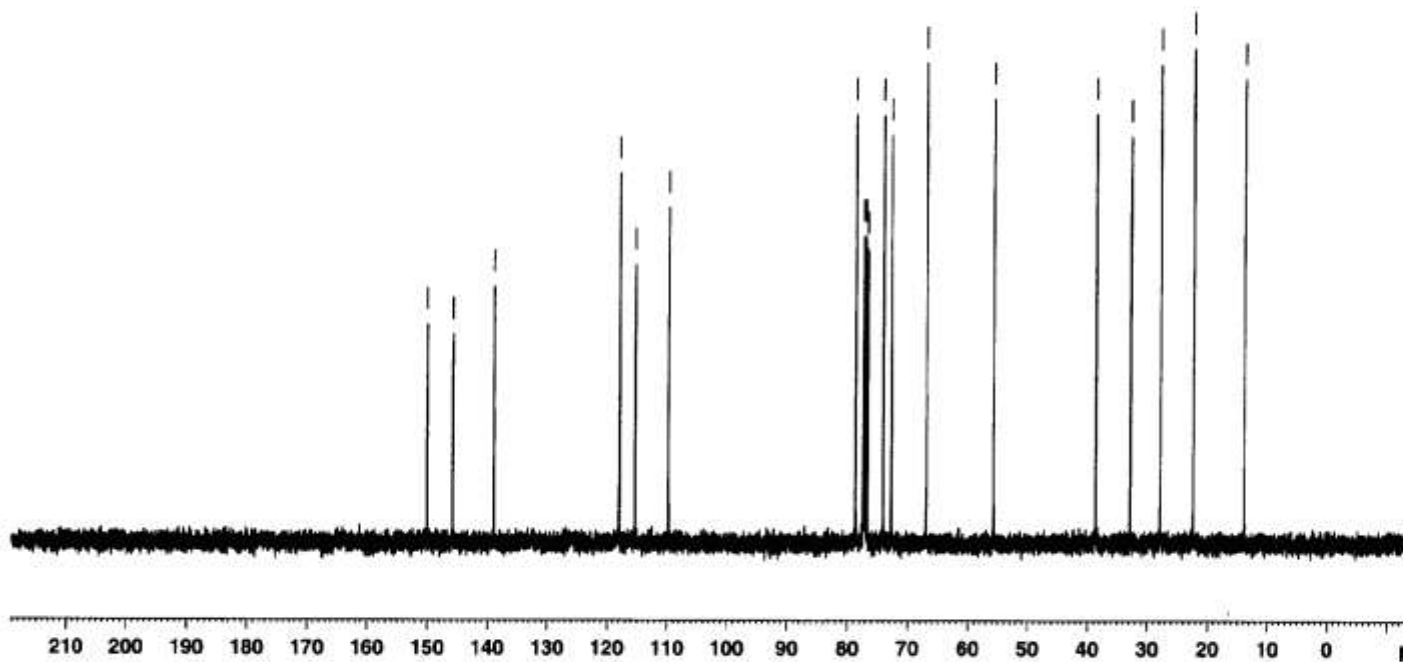
Current Data Parameters  
NAME n64  
EXPNO 2  
PROCNO 1

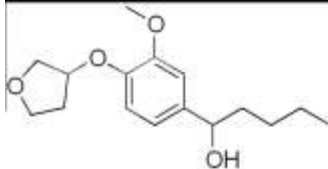
F2 - Acquisition Parameters  
Date\_ 20050118  
Time 11.36  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 70  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 574.7  
DW 20.850 usec  
DE 6.00 usec  
TE 299.3 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.8999998 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

==== CHANNEL f1 =====  
NUC1 13C  
PI 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127847 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00





Entry 4 in Table 1  
Compound **4e**

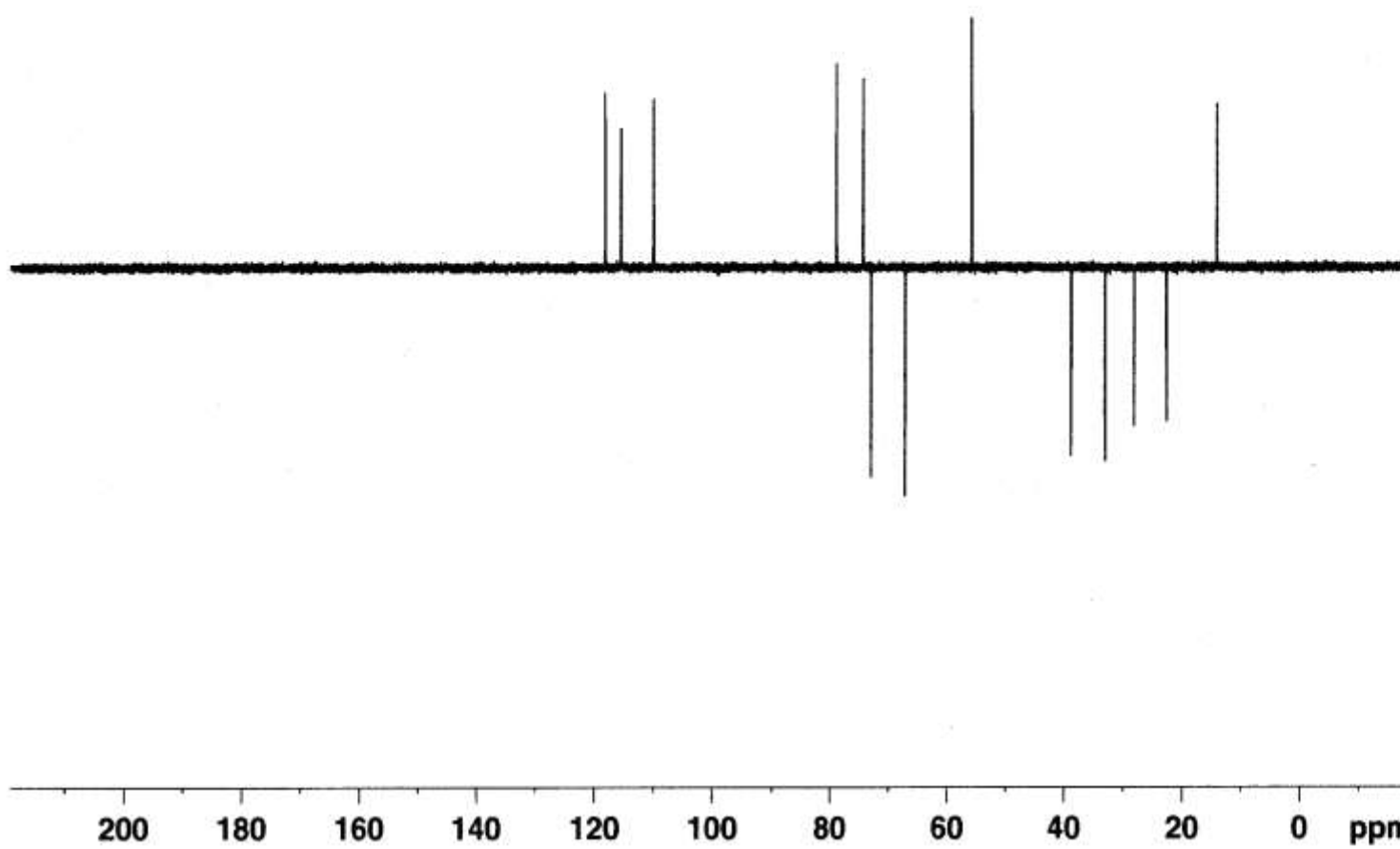
118.14  
115.54  
109.96

78.84  
74.26  
72.94  
67.14

55.90

38.81  
33.00  
28.07  
22.60

14.03



Current Data Parameters  
 NAME n64  
 EXPNO 3  
 PROCNO 1

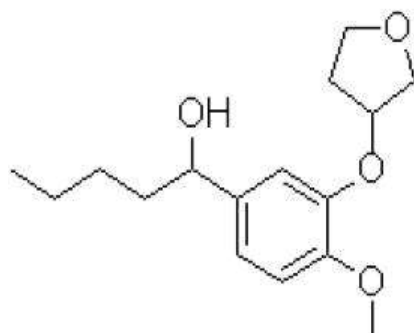
F2 - Acquisition Parameters  
 Date\_ 20050118  
 Time 11.40  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG dept135  
 TD 65536  
 SOLVENT CDC13  
 NS 22  
 DS 4  
 SWH 23980.814 Hz  
 FIDRES 0.365918 Hz  
 AQ 1.3664756 sec  
 RG 26008  
 DW 20.850 usec  
 DE 6.00 usec  
 TE 299.1 K  
 CNST2 145.000000  
 D1 2.00000000 sec  
 d2 0.00344828 sec  
 d12 0.00002000 sec  
 DELTA 0.00001019 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.00 usec  
 p2 16.00 usec  
 PL1 -3.00 dB  
 SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 P3 12.38 usec  
 p4 24.75 usec  
 PCPD2 70.00 usec  
 PL2 -1.00 dB  
 PL12 14.00 dB  
 SFO2 400.1316005 MHz

F2 - Processing parameters  
 SI 32768  
 SF 100.6127690 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

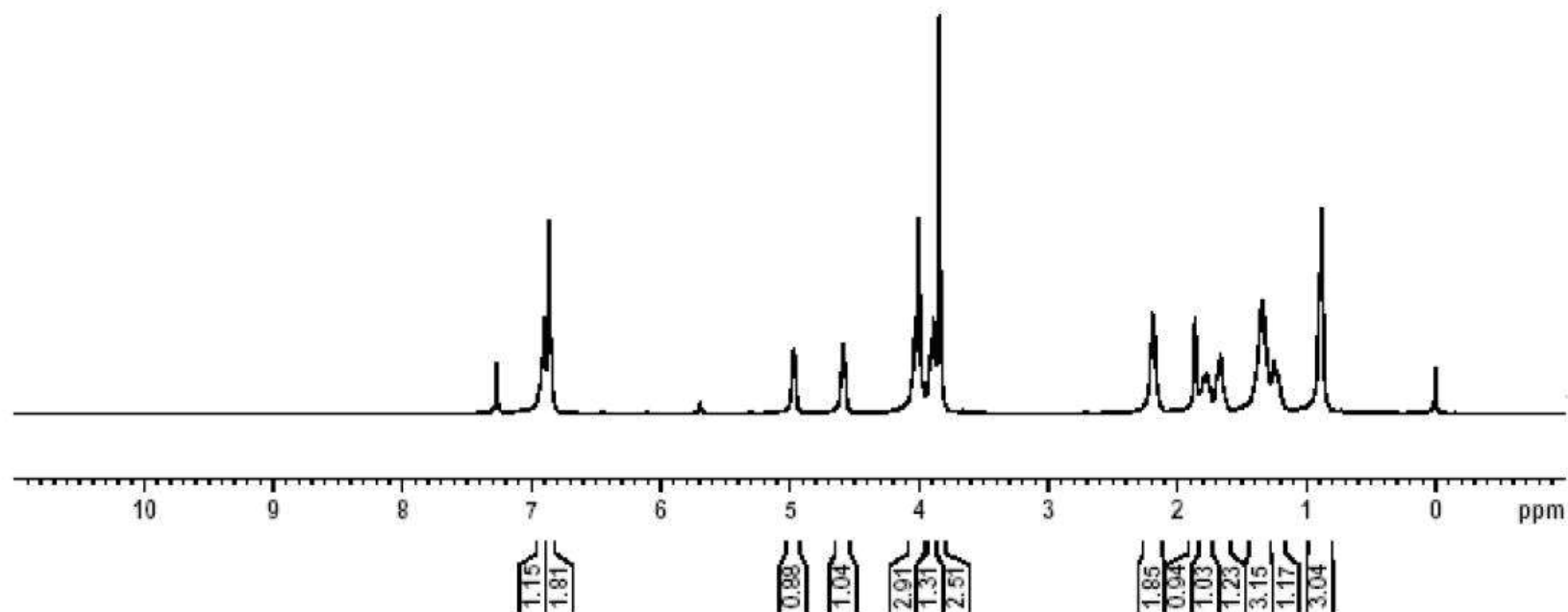
Entry 5 in Table 1  
Compound 4]



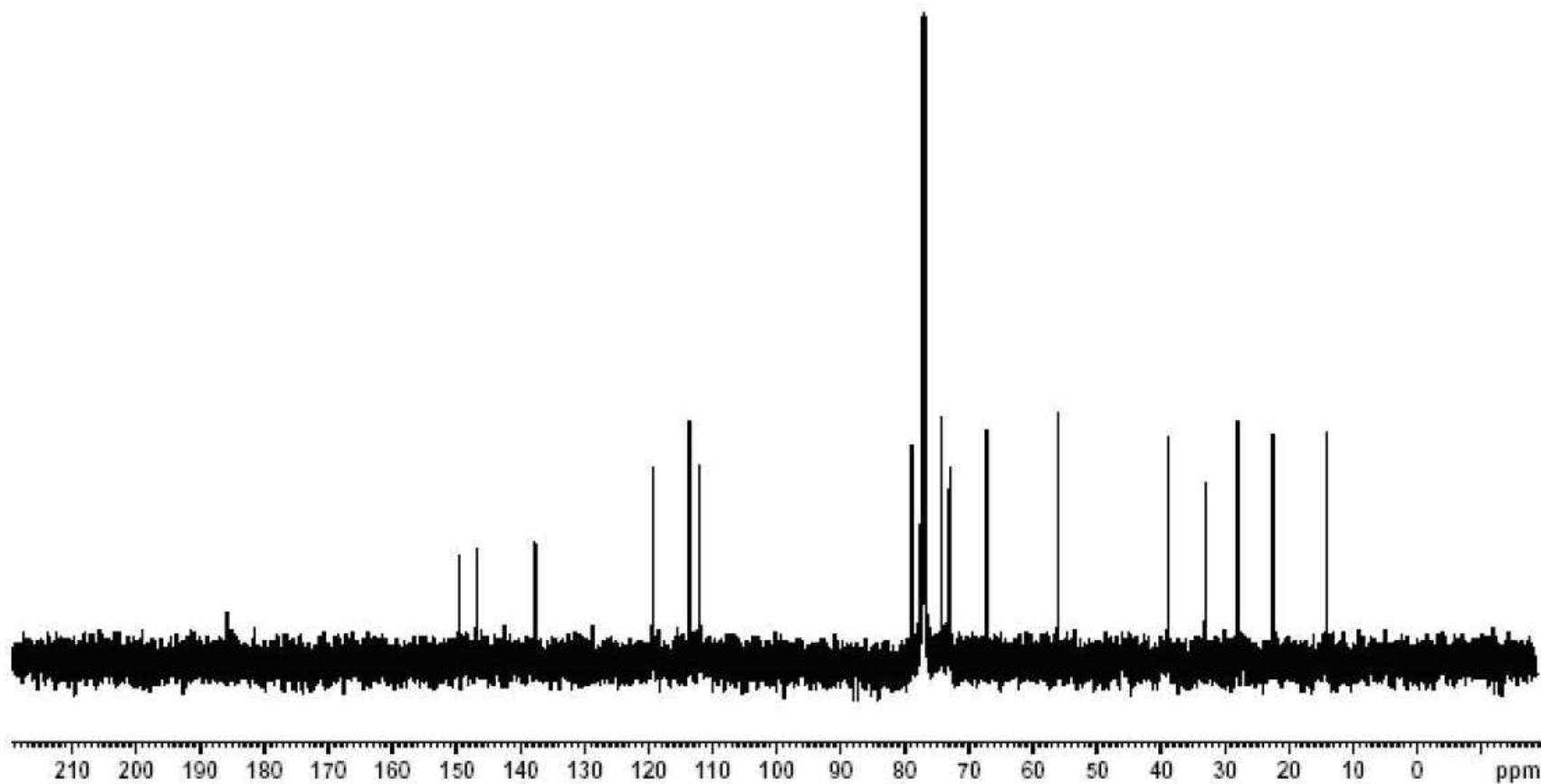
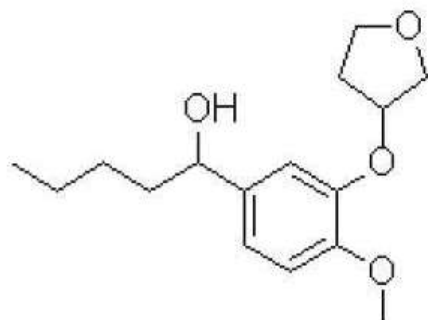
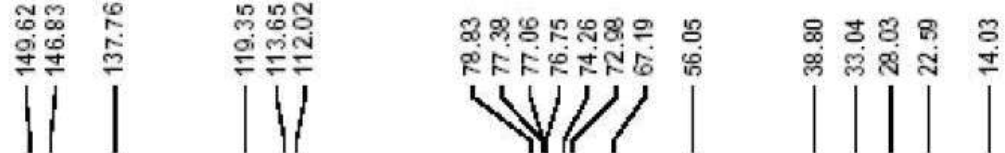
7.264  
7.262  
6.917  
6.896  
6.852  
6.841

4.969  
4.585  
4.054  
4.035  
4.002  
3.922  
3.904  
3.889  
3.842

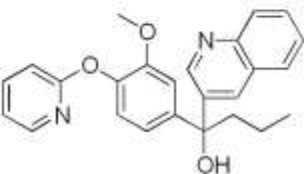
2.189  
2.175  
1.861  
1.771  
1.692  
1.665  
1.351  
1.339  
1.322  
1.305  
1.288  
1.255  
1.229  
0.901  
0.885  
0.869  
0.001  
-0.001



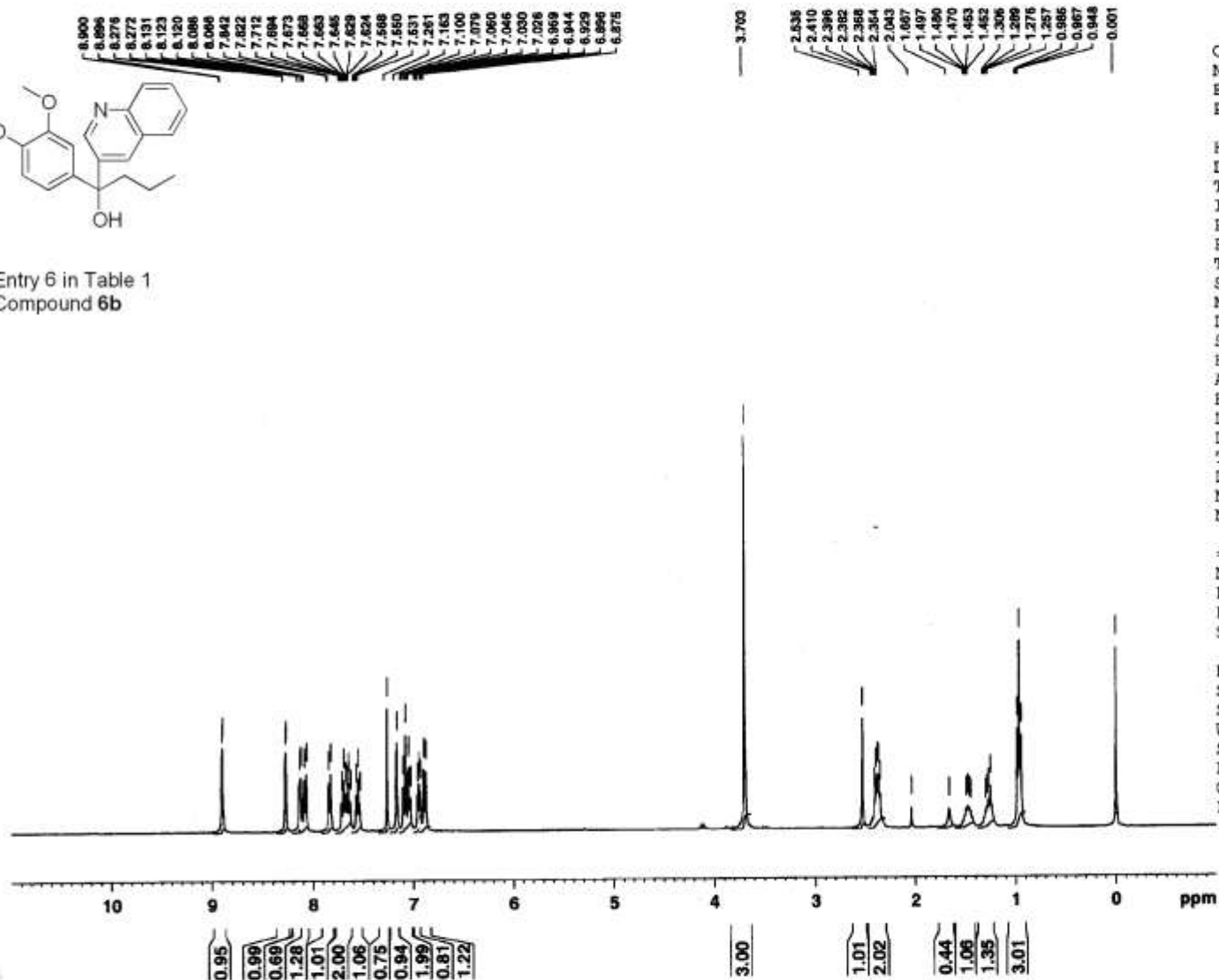
Entry 5 in Table 1  
Compound 4j







Entry 6 in Table 1  
Compound 6b

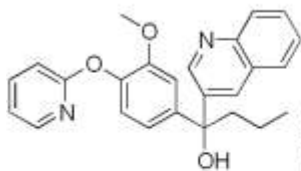


Current Data Parameters  
NAME n38  
EXPNO 1  
PROCNO 1

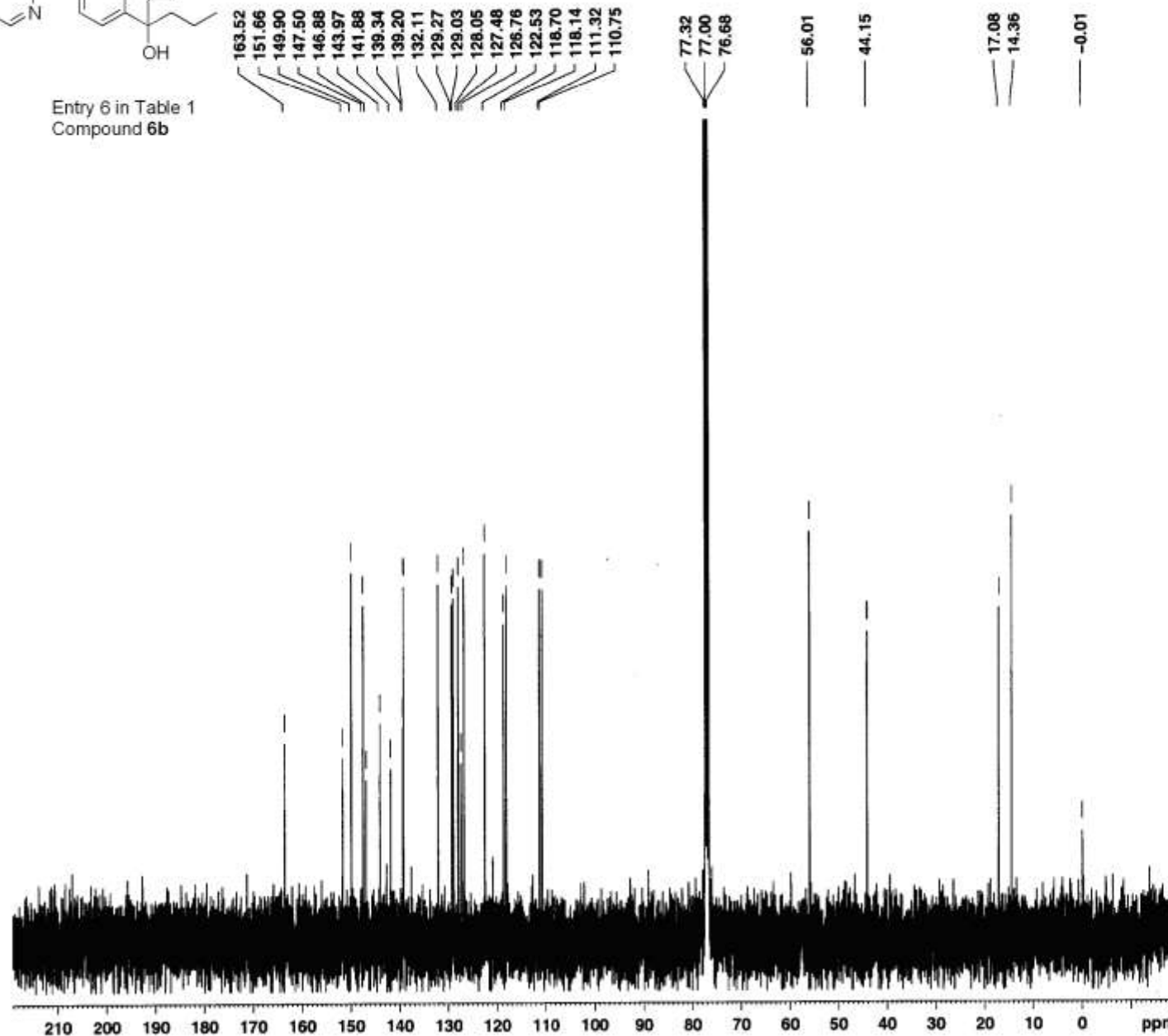
F2 - Acquisition Parameters  
Date\_ 20041123  
Time 17.01  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 287.4  
DW 60.400 usec  
DE 6.00 usec  
TE 298.2 K  
D1 1.0000000 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300099 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



Entry 6 in Table 1  
Compound 6b



163.52  
151.66  
149.90  
147.50  
146.88  
143.97  
141.88  
139.34  
139.20  
132.11  
129.27  
129.03  
128.05  
127.48  
126.76  
122.53  
118.70  
118.14  
111.32  
110.75

77.32  
77.00  
76.68

56.01

44.15

17.08  
14.36

-0.01



```

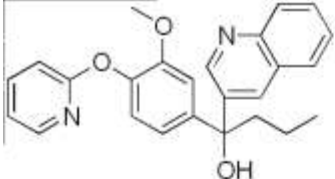
Current Data Parameters
NAME          n38
EXPNO        2
PROCNO       1

F2 - Acquisition Parameters
Date_        20041123
Time         17.14
INSTRUM      spect
PROBHD       5 mm PABBO BB-
PULPROG      zgpg30
TD           65536
SOLVENT      D2O
NS           512
DS           4
SWH          23980.814 Hz
FIDRES       0.365918 Hz
AQ           1.3664756 sec
RG           1024
DW           20.850 usec
DE           6.00 usec
TE           298.4 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
MCREST       0.00000000 sec
MCWRK        0.01500000 sec

===== CHANNEL f1 =====
NUC1          13C
P1            8.00 usec
PL1           -3.00 dB
SFO1         100.6228298 MHz

===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          1H
PCPD2        70.00 usec
PL2           -1.00 dB
PL12         14.00 dB
PL13         14.00 dB
SFO2         400.1316005 MHz

F2 - Processing parameters
SI           32768
SF           100.6127715 MHz
WDW          EM
SSB          0
LB           1.00 Hz
GB           0
PC           1.40
  
```



Entry 6 in Table 1  
Compound **6b**

149.92  
147.53  
139.23  
132.14  
129.29  
129.05  
128.08  
126.78  
122.56  
118.72  
118.17  
111.34  
110.78

56.04

44.18

17.10  
14.38



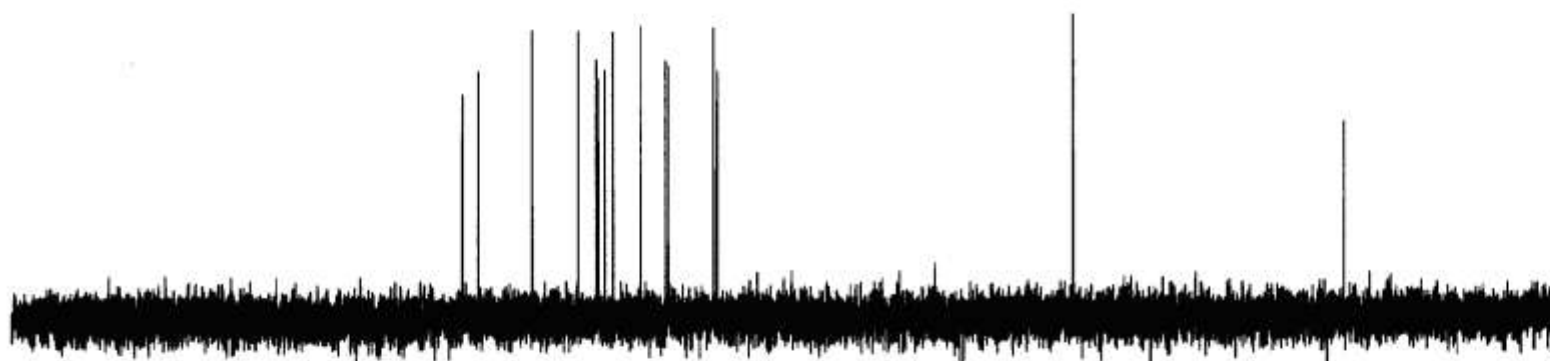
Current Data Parameters  
NAME n38  
EXPNO 3  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041123  
Time 17.43  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 256  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 6.00 usec  
TE 298.3 K  
CNST2 145.000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

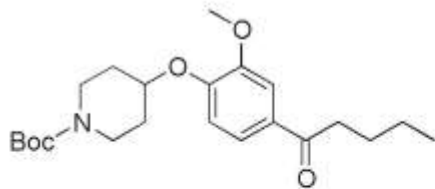
==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



200 180 160 140 120 100 80 60 40 20 0 ppm



Entry 7 in Table 2  
Compound 5a

7.551  
7.546  
7.535  
7.530  
7.290  
6.934  
6.912

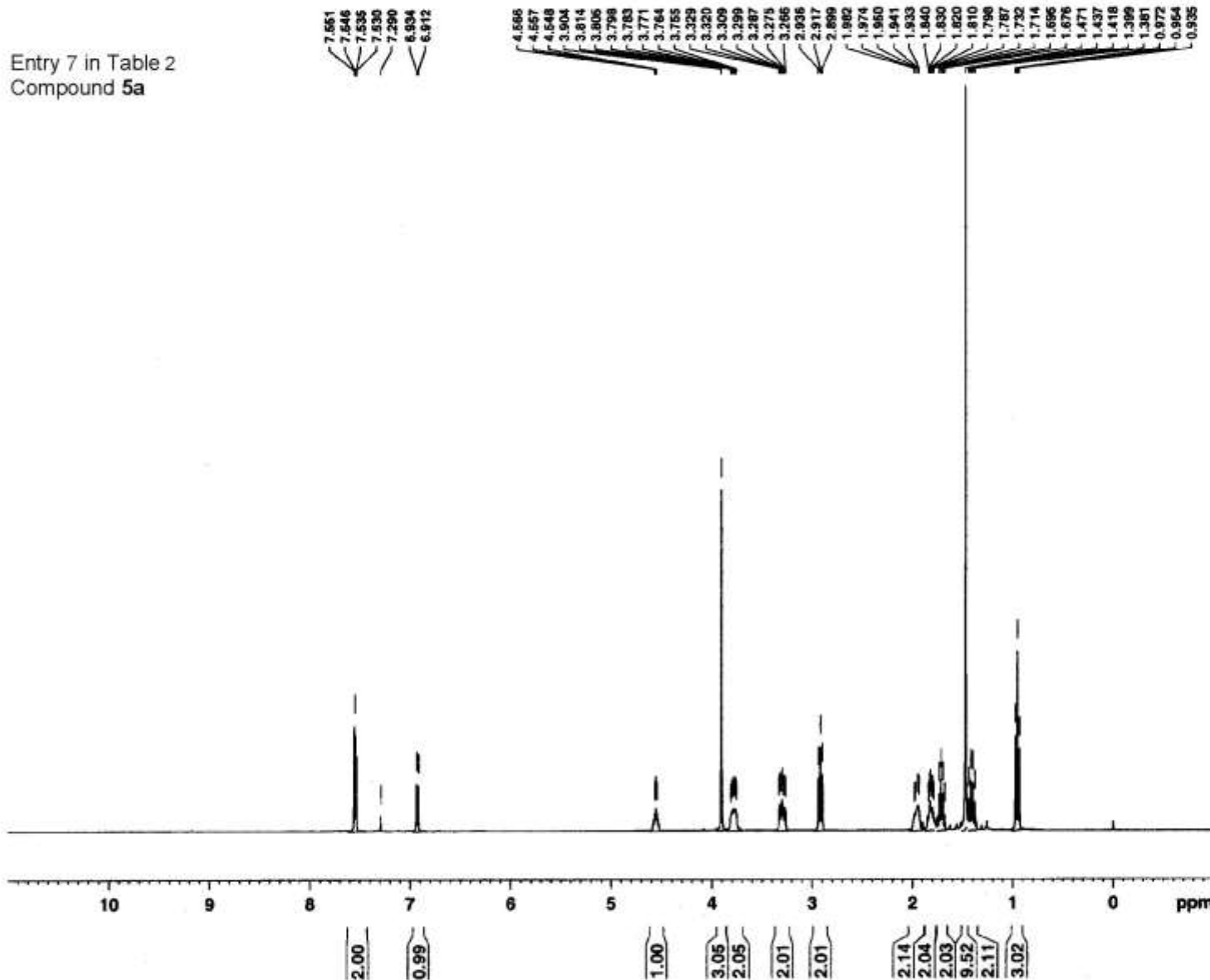
4.586  
4.567  
4.548  
3.904  
3.814  
3.805  
3.798  
3.783  
3.771  
3.764  
3.755  
3.329  
3.320  
3.309  
3.299  
3.287  
3.275  
3.266  
2.936  
2.917  
2.899  
1.982  
1.974  
1.960  
1.941  
1.933  
1.840  
1.830  
1.820  
1.810  
1.796  
1.787  
1.732  
1.714  
1.696  
1.676  
1.471  
1.437  
1.418  
1.399  
1.381  
0.972  
0.964  
0.935

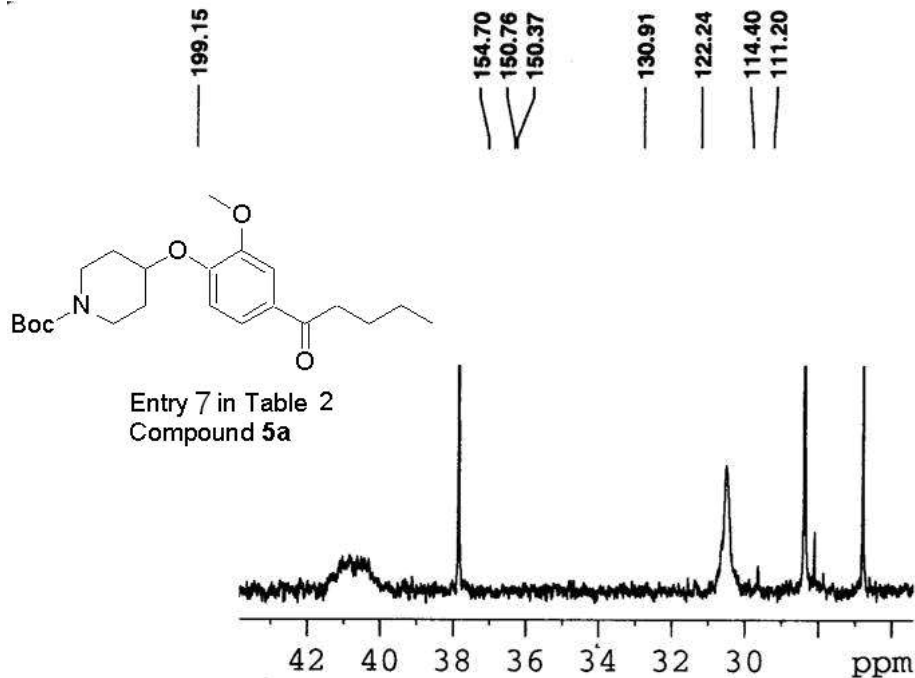
Current Data Parameters  
NAME n81  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050211  
Time 3.58  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 57  
DW 60.400 usec  
DE 7.00 usec  
TE 298.0 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1299972 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00





Current Data Parameters  
NAME n81  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters

Date\_ 20050211  
Time 4.08  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT cdcl3  
NS 388  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 5160.6  
DW 20.850 usec  
DE 7.00 usec  
TE 298.4 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.89999998 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127744 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 ppm



Current Data Parameters  
NAME n81  
EXPNO 3  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050211  
Time 4.40  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 140  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 7.00 usec  
TE 298.4 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

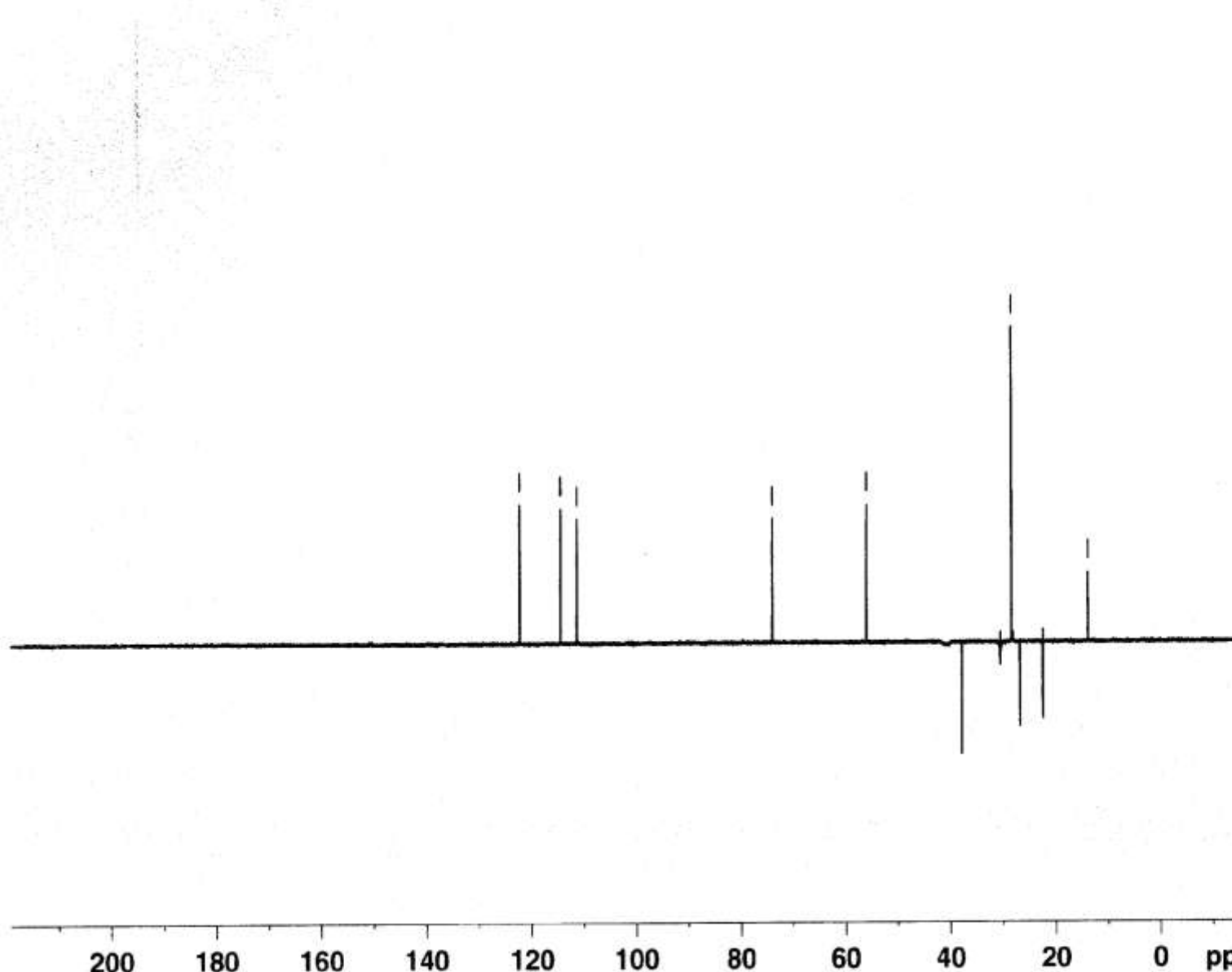
==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

122.30  
114.45  
111.25  
73.90  
56.03  
37.89  
30.55  
28.42  
26.83  
22.52  
13.95

Entry 7 in Table 2  
Compound 5a



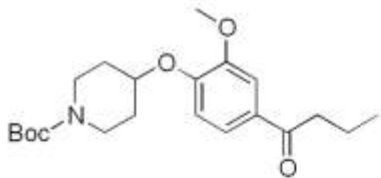


Current Data Parameters  
NAME n82  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050213  
Time 22.45  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 28.5  
DW 60.400 usec  
DE 7.00 usec  
TE 300.0 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

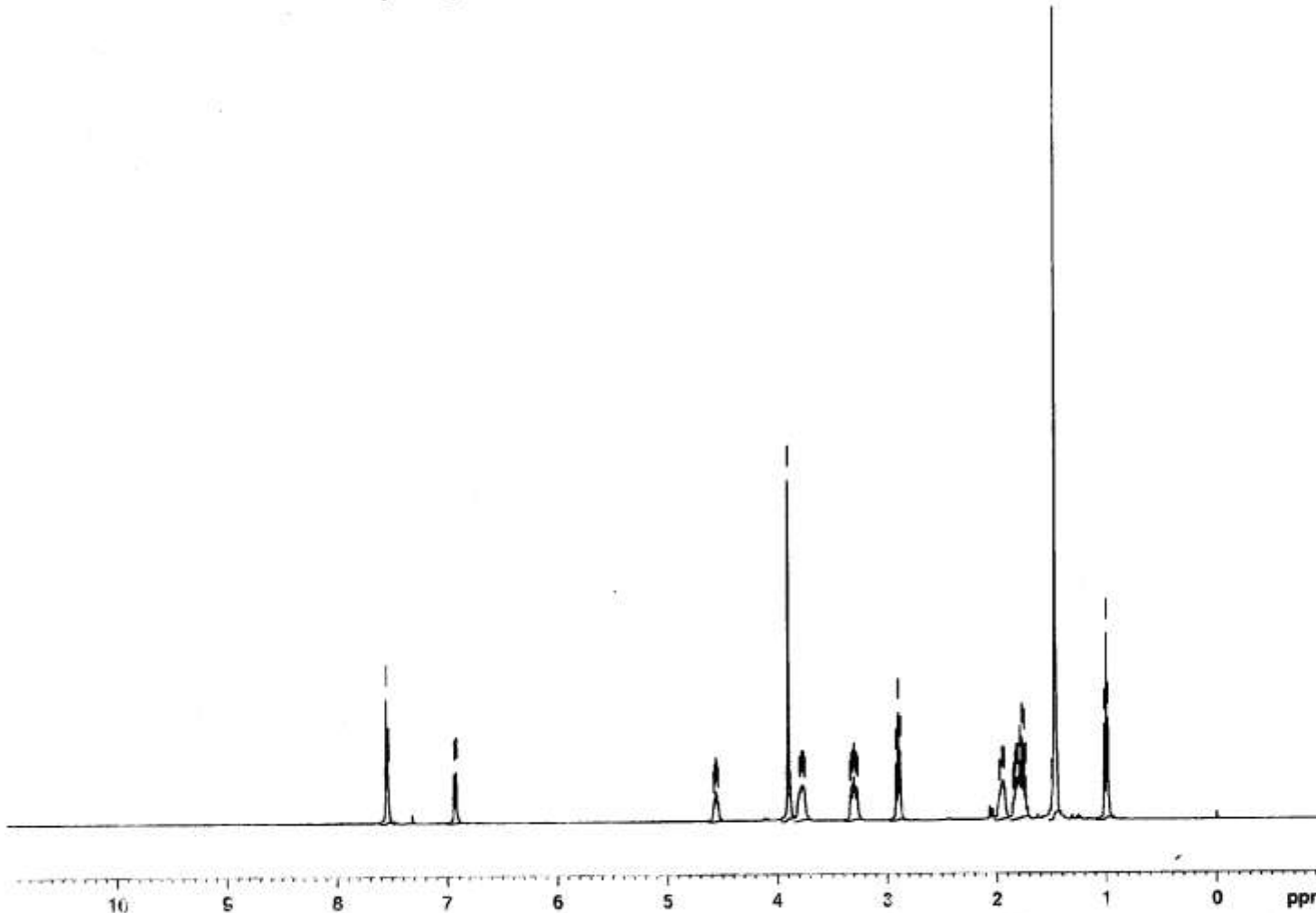
F2 - Processing parameters  
SI 32768  
SF 400.1299881 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



Entry 8 in Table 2  
Compound 5b

7.563  
7.636  
7.632  
6.940  
6.918

4.580  
4.571  
4.562  
4.553  
4.544  
3.904  
3.796  
3.781  
3.770  
3.763  
3.754  
3.336  
3.327  
3.316  
3.304  
3.283  
3.282  
3.273  
2.919  
2.900  
2.882  
1.973  
1.949  
1.941  
1.932  
1.849  
1.838  
1.829  
1.819  
1.810  
1.791  
1.772  
1.764  
1.736  
1.489  
1.473  
1.021  
1.003  
0.994



1.99

1.01

1.00

3.07

2.10

2.03

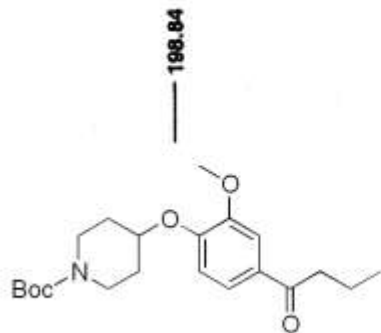
2.01

2.10

4.13

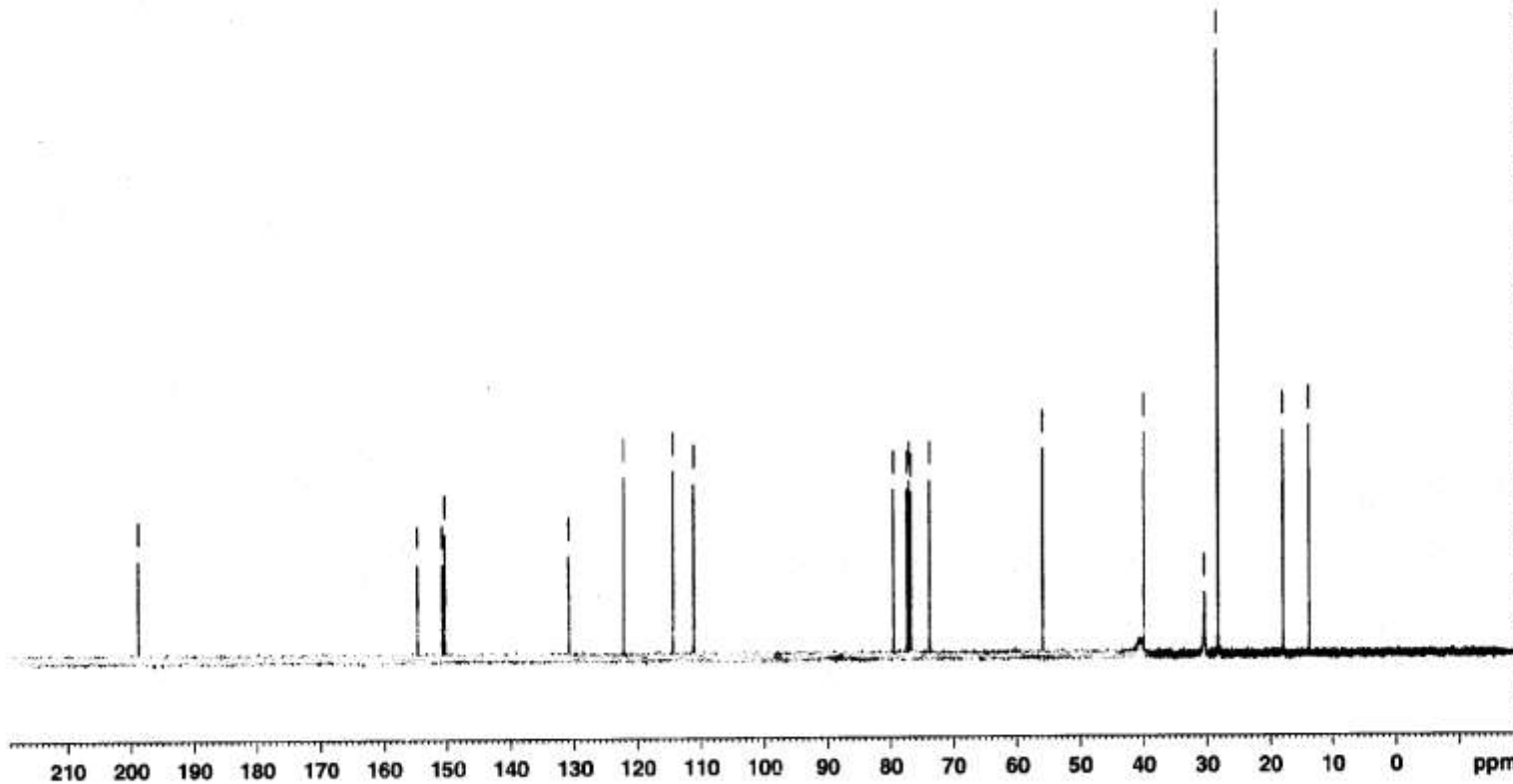
9.53

3.00



Entry 8 in Table 2  
Compound 5b

198.84  
154.80  
150.70  
150.30  
130.86  
122.15  
114.38  
111.12  
79.45  
77.32  
77.00  
76.68  
73.76  
55.88  
39.92  
30.42  
28.28  
17.93  
13.78



Current Data Parameters  
NAME n82  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050213  
Time 22.51  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 84  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 6502  
DW 20.850 usec  
DE 7.00 usec  
TE 300.0 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.89999998 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127810 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00





Current Data Parameters  
NAME n82  
EXPNO 3  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050213  
Time 22.55  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 35  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 7.00 usec  
TE 300.0 K  
CNST2 145.000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

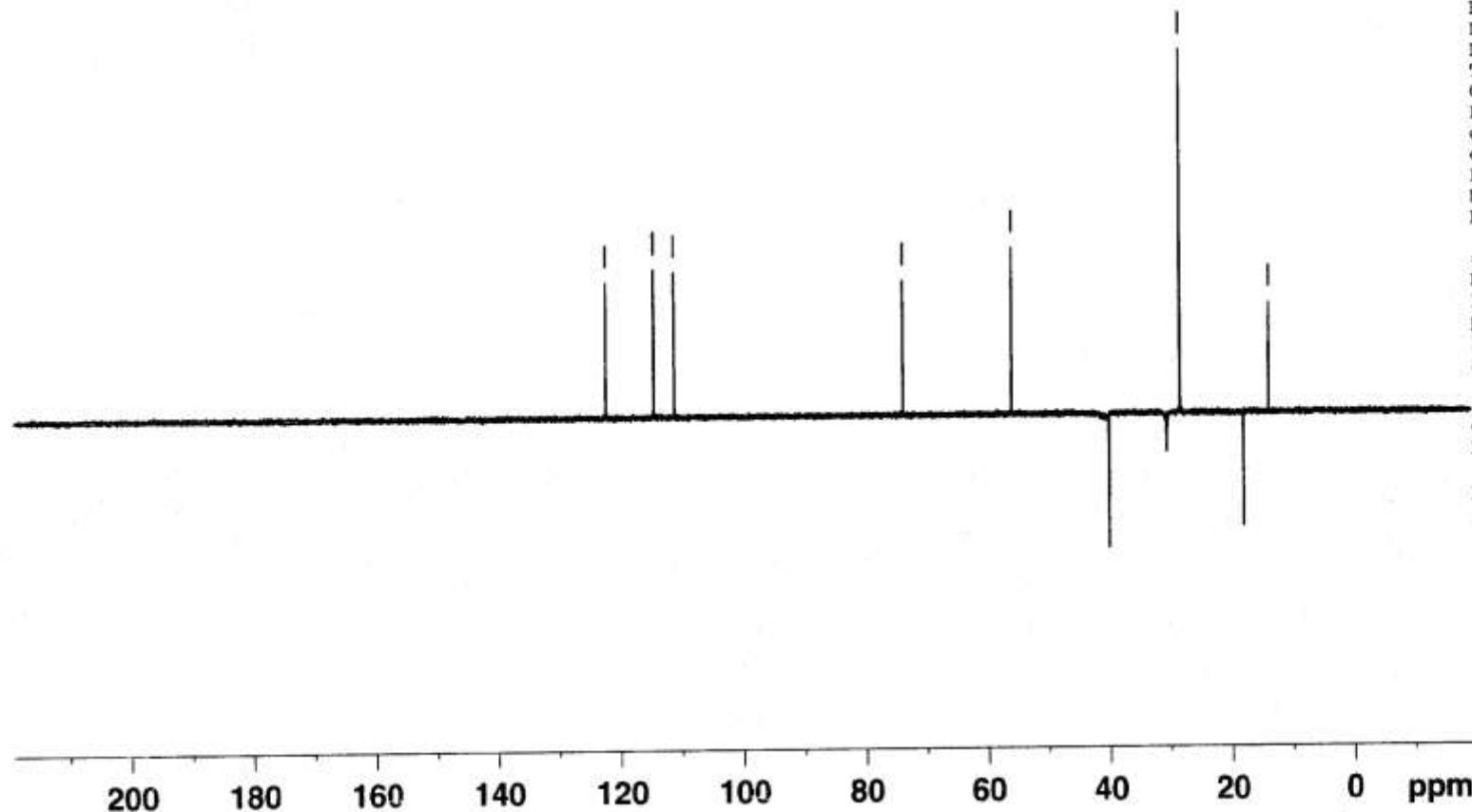
==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

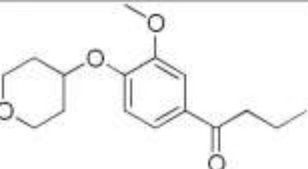
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
CF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

122.27  
114.49  
111.23  
73.88  
56.00  
40.04  
30.54  
28.40  
18.05  
13.90

Entry 8 in Table 2  
Compound 5b





Entry 9 in Table 2  
Compound 5c

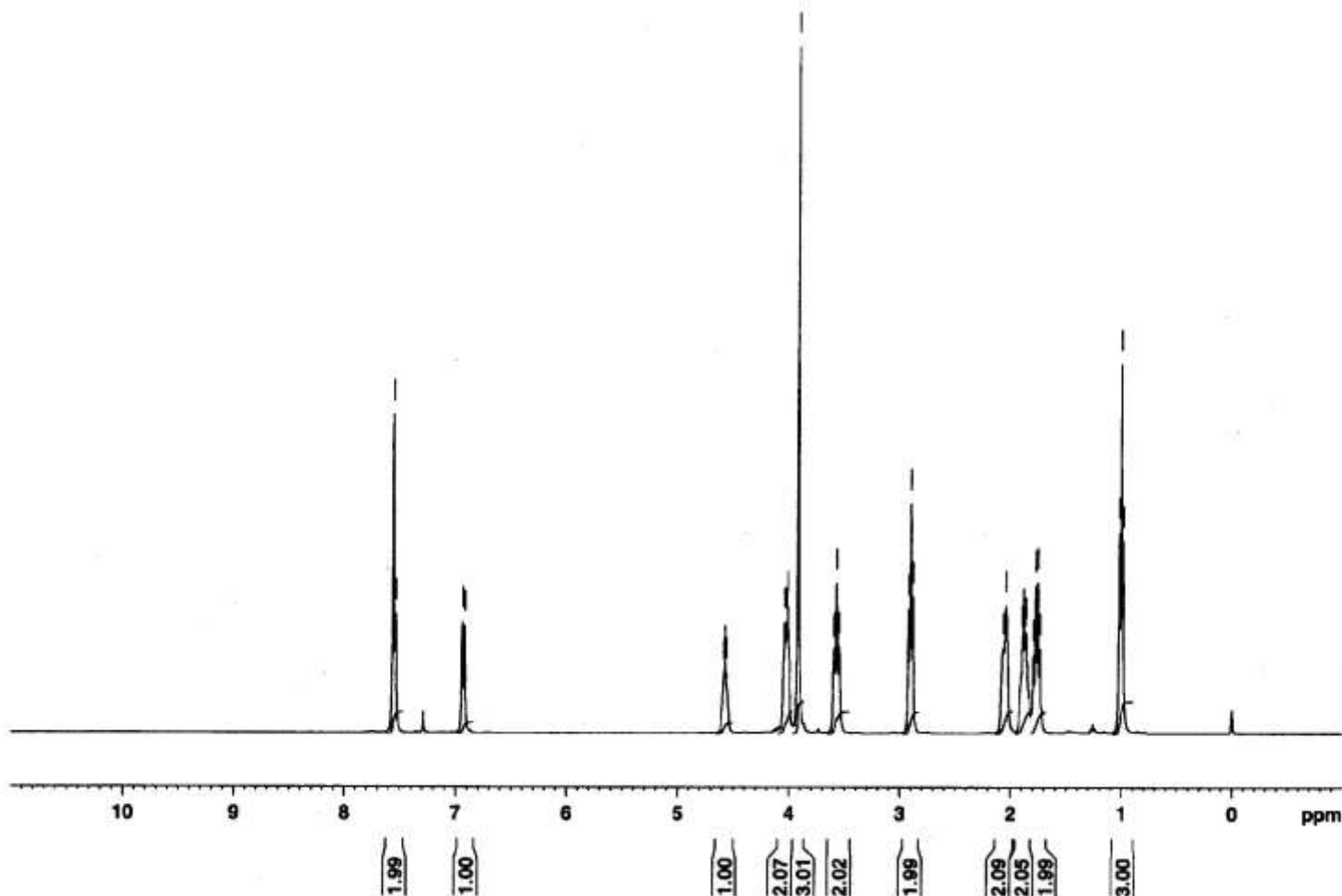
7.664  
7.534  
6.936  
6.916  
4.594  
4.574  
4.566  
4.036  
4.023  
4.009  
3.916  
3.896  
3.692  
3.670  
3.648  
2.920  
2.902  
2.884  
2.084  
2.041  
1.892  
1.883  
1.871  
1.861  
1.792  
1.774  
1.756  
1.737  
1.022  
1.004  
0.986

Current Data Parameters  
NAME n67  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050118  
Time 11.13  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 50.8  
DW 60.400 usec  
DE 6.00 usec  
TE 298.7 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1299992 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40





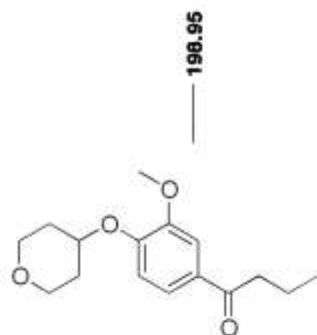
Current Data Parameters  
NAME n67  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050118  
Time 11.18  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 77  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 1024  
DW 20.850 usec  
DE 6.00 usec  
TE 299.2 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

=====  
CHANNEL f1  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

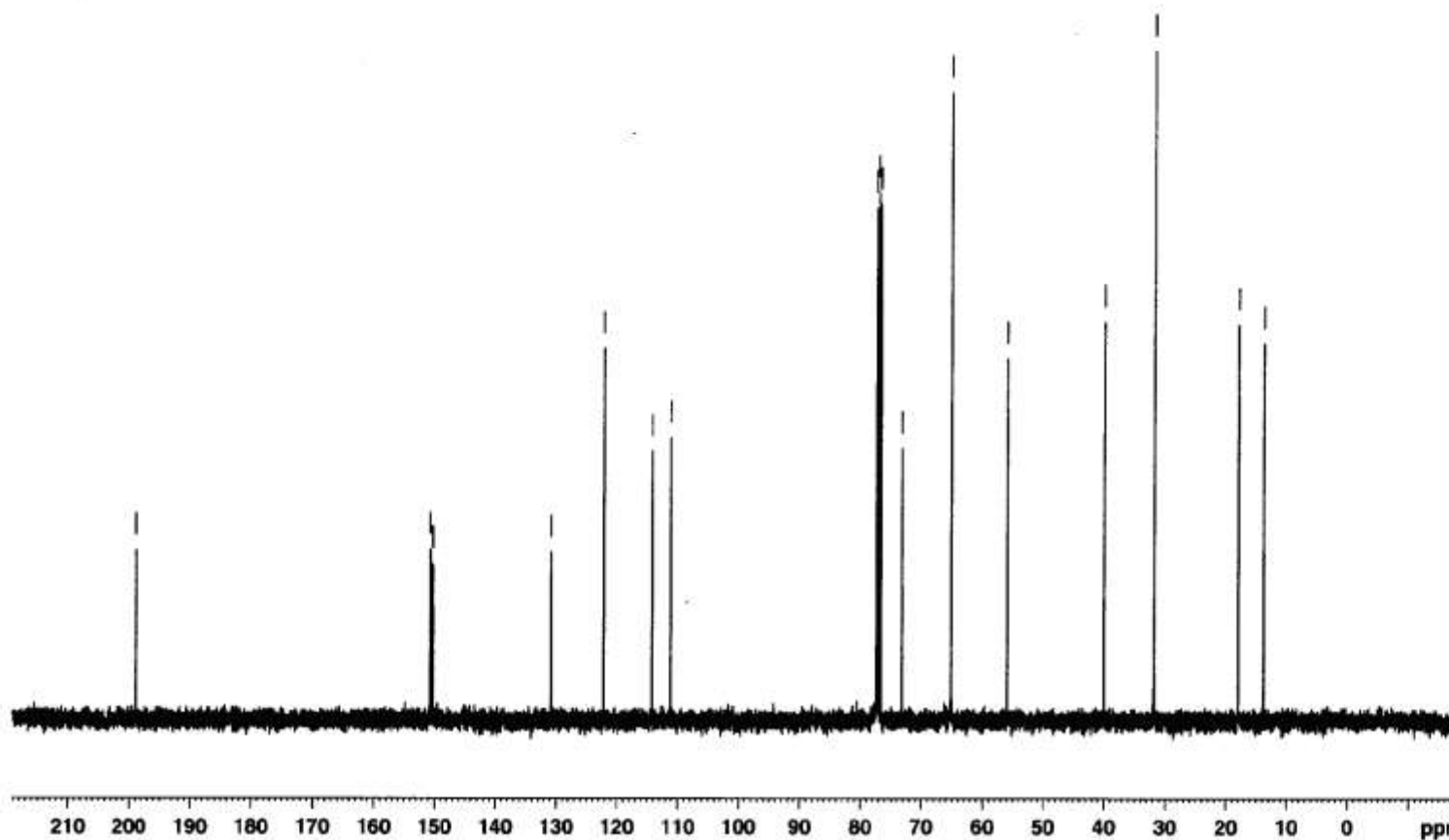
=====  
CHANNEL f2  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

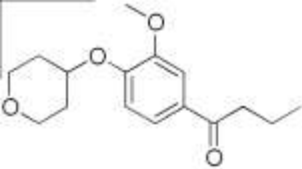
F2 - Processing parameters  
SI 32768  
SF 100.6127766 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00



Entry 9 in Table 2  
Compound 5c

198.95  
150.74  
150.30  
130.87  
122.21  
114.23  
111.15  
77.33  
77.01  
76.69  
73.21  
65.15  
55.97  
40.00  
31.76  
18.01  
13.86





Entry 9 in Table 2  
Compound 5c



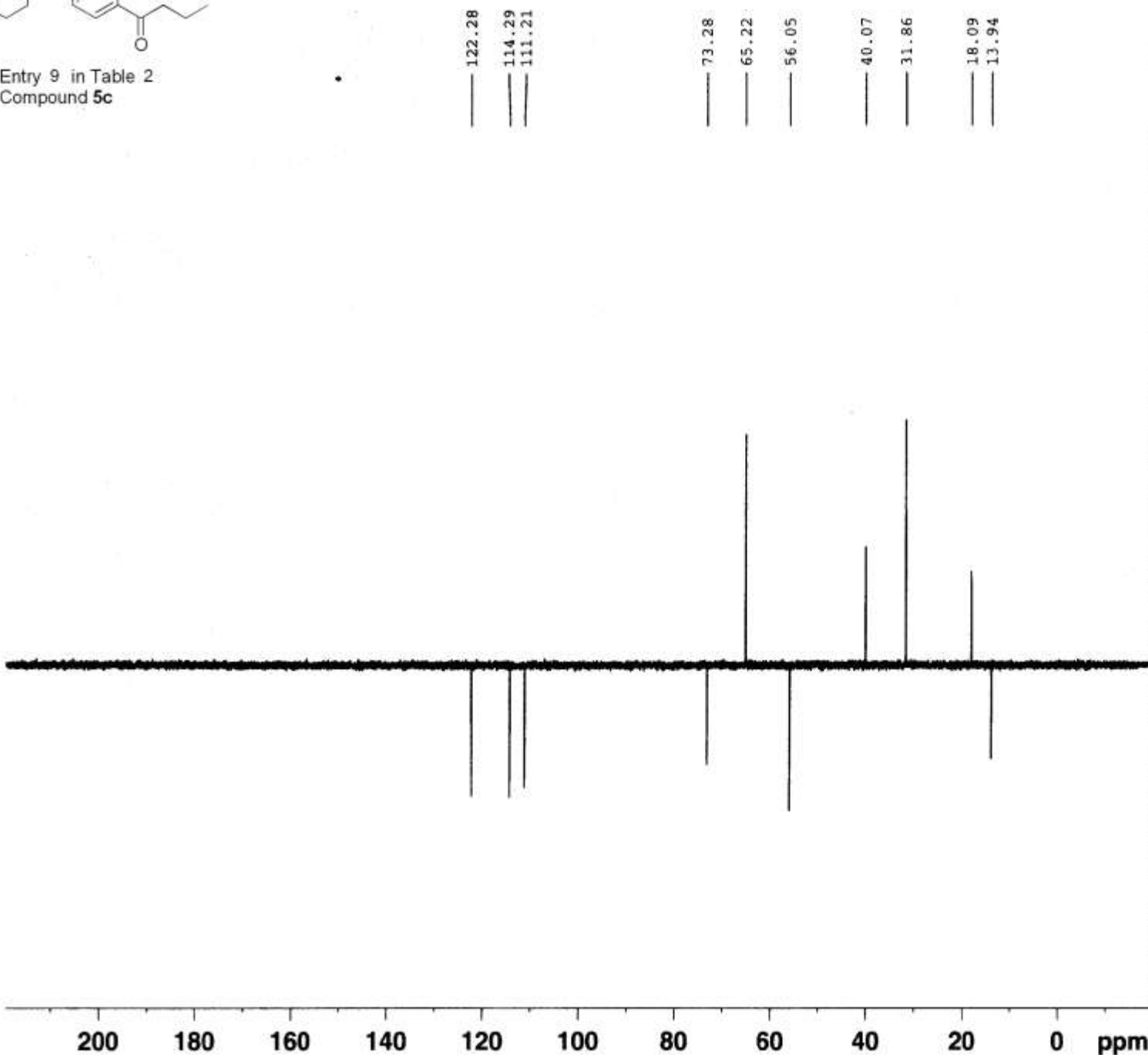
Current Data Parameters  
 NAME n67  
 EXPNO 3  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20050118  
 Time 11.21  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG dept135  
 TD 65536  
 SOLVENT CDC13  
 NS 24  
 DS 4  
 SWH 23980.814 Hz  
 FIDRES 0.365918 Hz  
 AQ 1.3664756 sec  
 RG 26008  
 DW 20.850 usec  
 DE 6.00 usec  
 TE 299.1 K  
 CNST2 145.0000000  
 D1 2.00000000 sec  
 d2 0.00344828 sec  
 d12 0.00002000 sec  
 DELTA 0.00001019 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.00 usec  
 p2 16.00 usec  
 PL1 -3.00 dB  
 SFO1 100.6228298 MHz

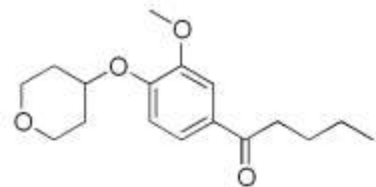
==== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 P3 12.38 usec  
 p4 24.75 usec  
 PCPD2 70.00 usec  
 PL2 -1.00 dB  
 PL12 14.00 dB  
 SFO2 400.1316005 MHz

F2 - Processing parameters  
 SI 32768  
 SF 100.6127690 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

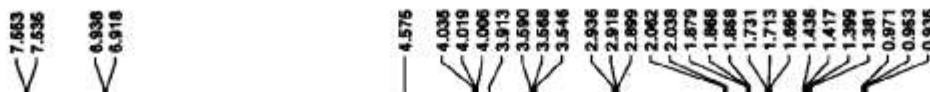


122.28  
 114.29  
 111.21  
 73.28  
 65.22  
 56.05  
 40.07  
 31.86  
 18.09  
 13.94

200 180 160 140 120 100 80 60 40 20 0 ppm



Entry 10 in Table 2  
Compound 5d

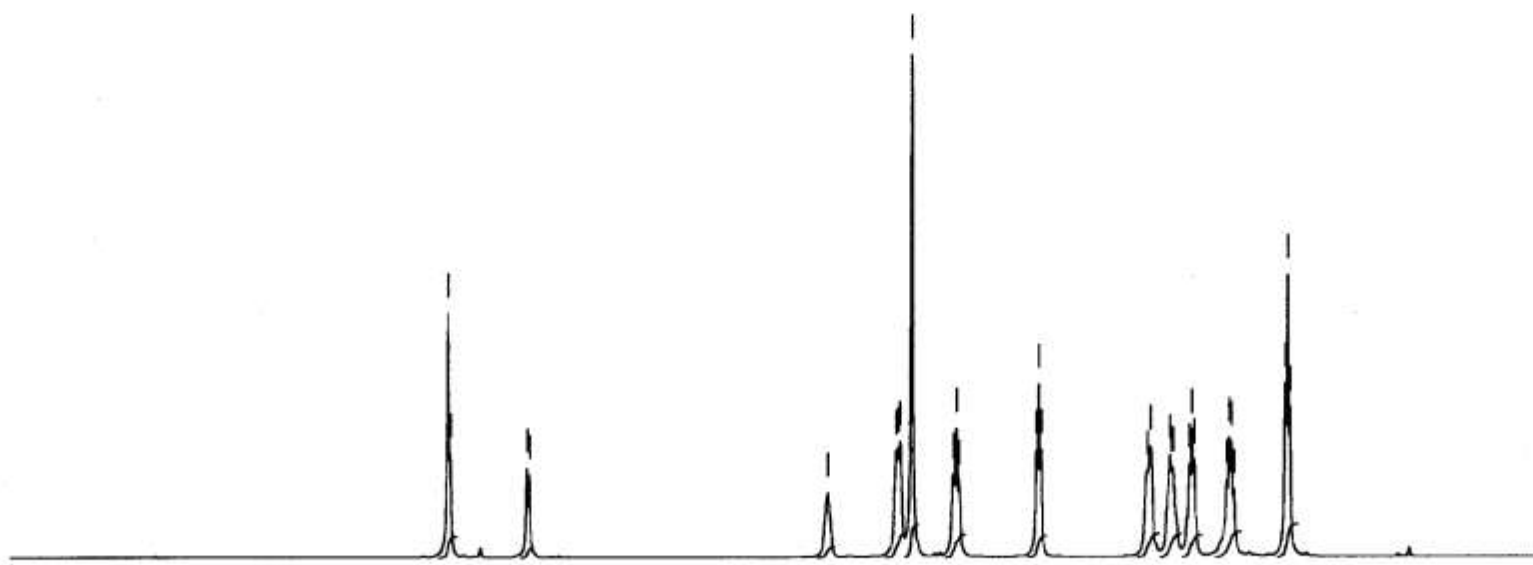


Current Data Parameters  
NAME n66pure  
EXPNO 1  
PROCNO 1

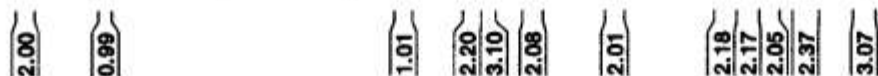
F2 - Acquisition Parameters  
Date\_ 20050117  
Time 13.20  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 H  
FIDRES 0.126314 H  
AQ 3.9584243 s  
RG 28.5  
DW 60.400 u  
DE 6.00 u  
TE 298.9 K  
D1 1.00000000 s  
MCREST 0.00000000 s  
MCWRK 0.01500000 s

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 u  
PL1 0.00 d  
SFO1 400.1324710 M

F2 - Processing parameter  
SI 32768  
SF 400.1299939 M  
WDW EM  
SSB 0  
LB 0.30 H  
GB 0  
PC 1.40



10 9 8 7 6 5 4 3 2 1 0 ppm





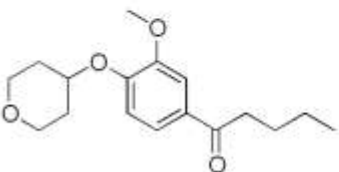
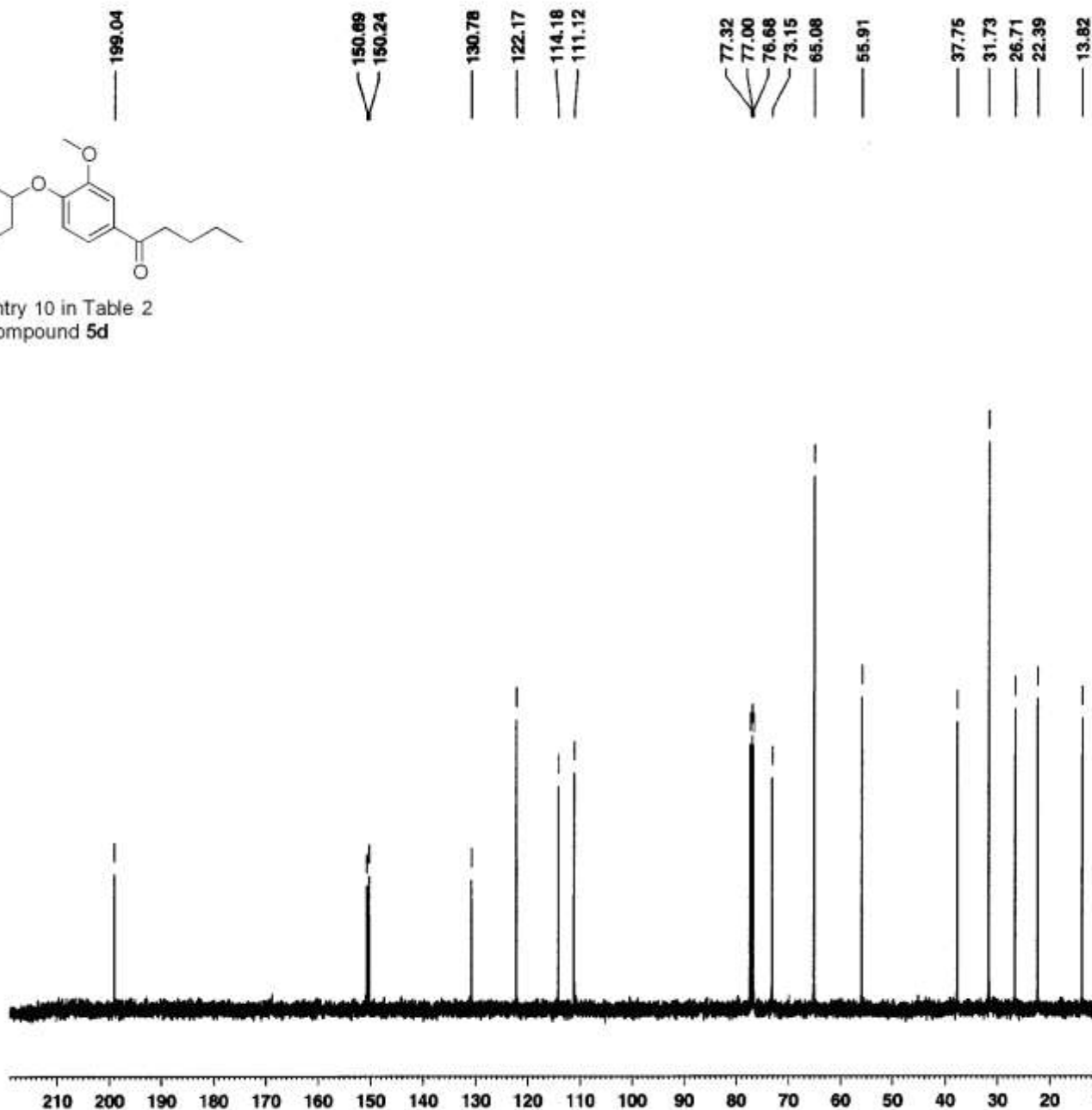
Current Data Parameters  
NAME n66pure  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050117  
Time 13.25  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 69  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 1149.4  
DW 20.850 usec  
DE 6.00 usec  
TE 299.4 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.89999998 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

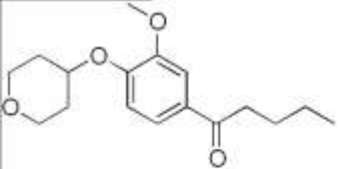
==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SPO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SPO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127810 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00



Entry 10 in Table 2  
Compound 5d



Entry 10 in Table 2  
Compound 5d

122.29  
114.29  
111.23  
73.26  
65.20  
56.03  
37.87  
31.85  
26.82  
22.51  
13.94



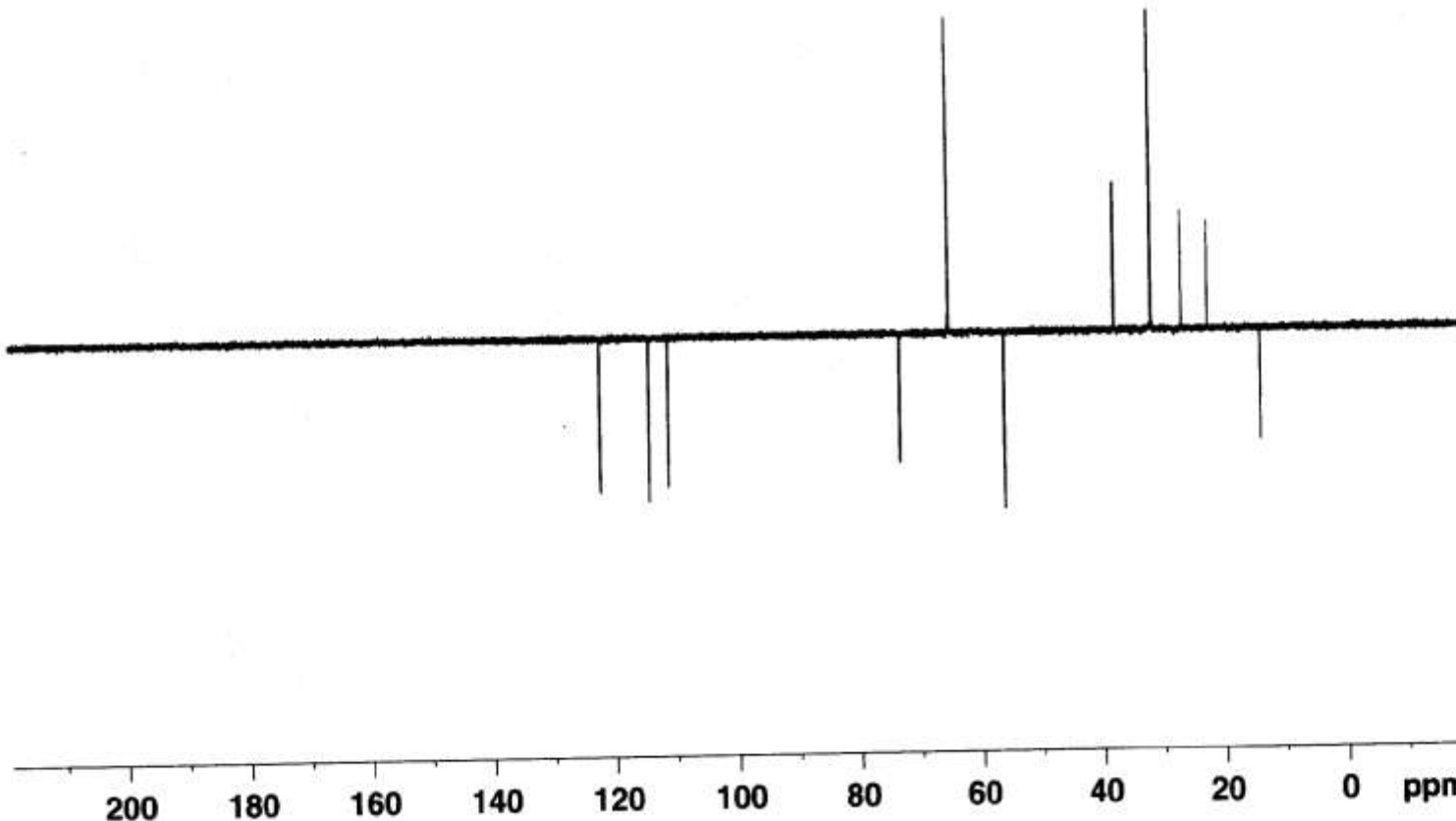
Current Data Parameters  
NAME n66pure  
EXPNO 3  
PROCNO 1

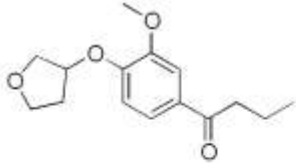
F2 - Acquisition Parameters  
Date\_ 20050117  
Time 13.29  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 33  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 6.00 usec  
TE 299.2 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
P2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
P4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

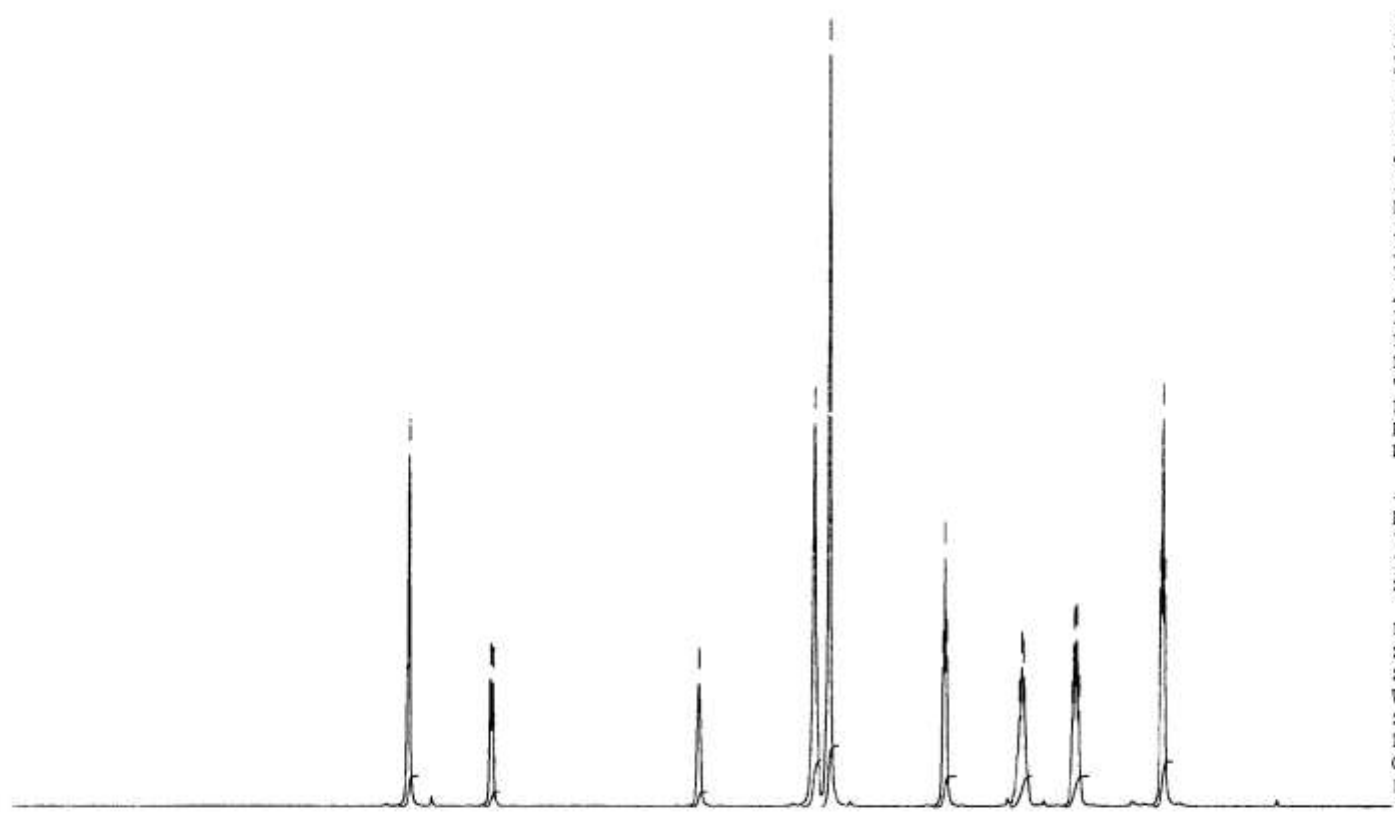




Entry 11 in Table 2  
Compound 5e



7.567  
7.540  
6.840  
6.820  
6.023  
4.026  
3.896  
2.916  
2.896  
2.881  
2.242  
2.223  
2.211  
1.785  
1.768  
1.749  
1.732  
1.018  
1.000  
0.982



1.99  
1.00  
1.00  
3.09  
4.05  
2.00  
2.02  
2.00  
3.00

Current Data Parameters  
NAME n69  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050120  
Time 11.05  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 22.6  
DW 60.400 usec  
DE 6.00 usec  
TE 298.9 K  
D1 1.0000000 sec  
MCREST 0.0000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SF01 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1299755 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40





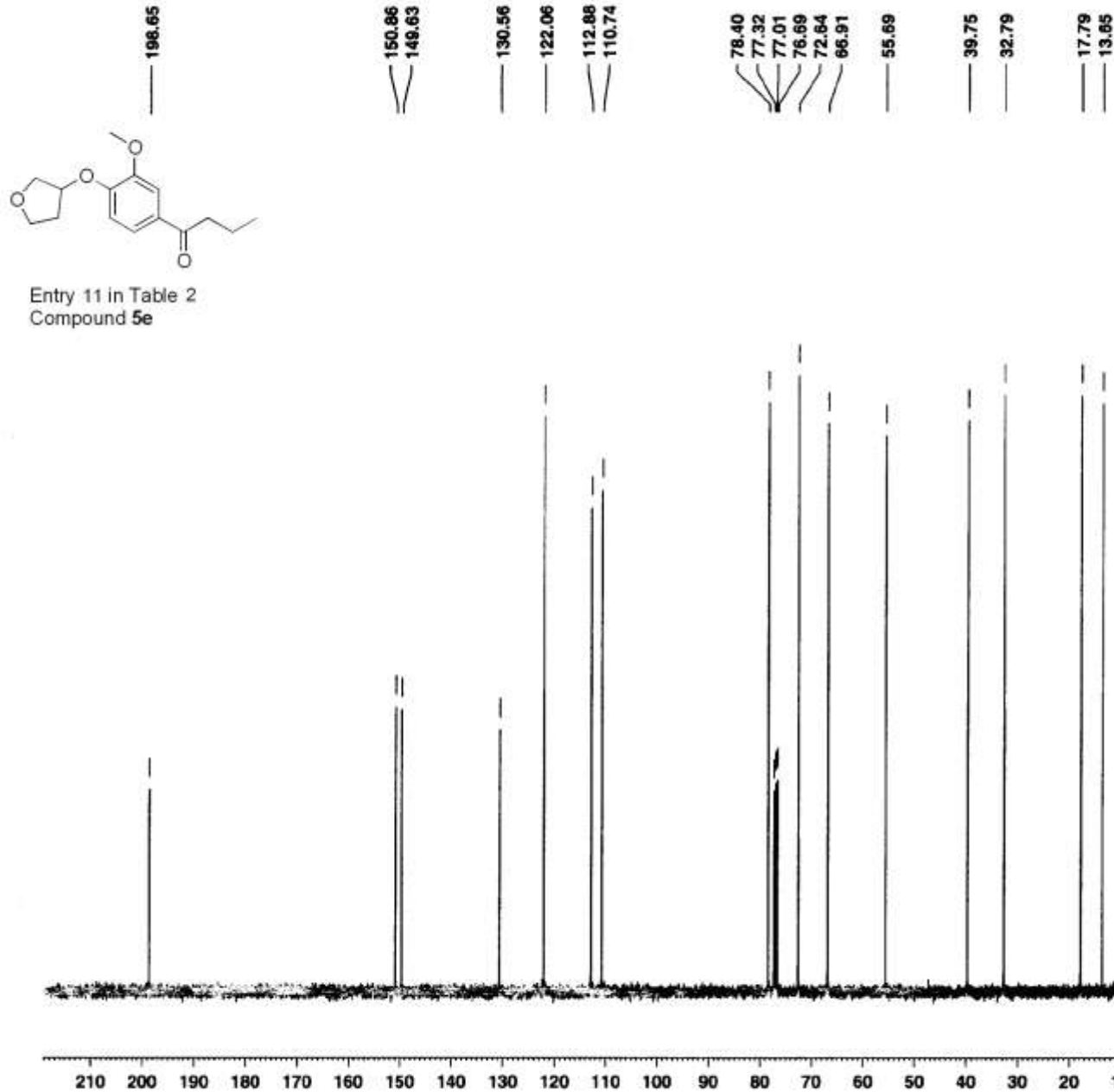
Current Data Parameters  
NAME n69  
EXPNO 2  
PROCNO 1

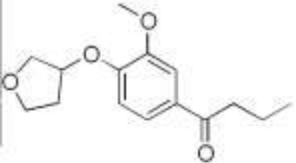
F2 - Acquisition Parameters  
Date\_ 20050120  
Time 11.10  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 82  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 406.4  
DW 20.850 usec  
DE 6.00 usec  
TE 299.4 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

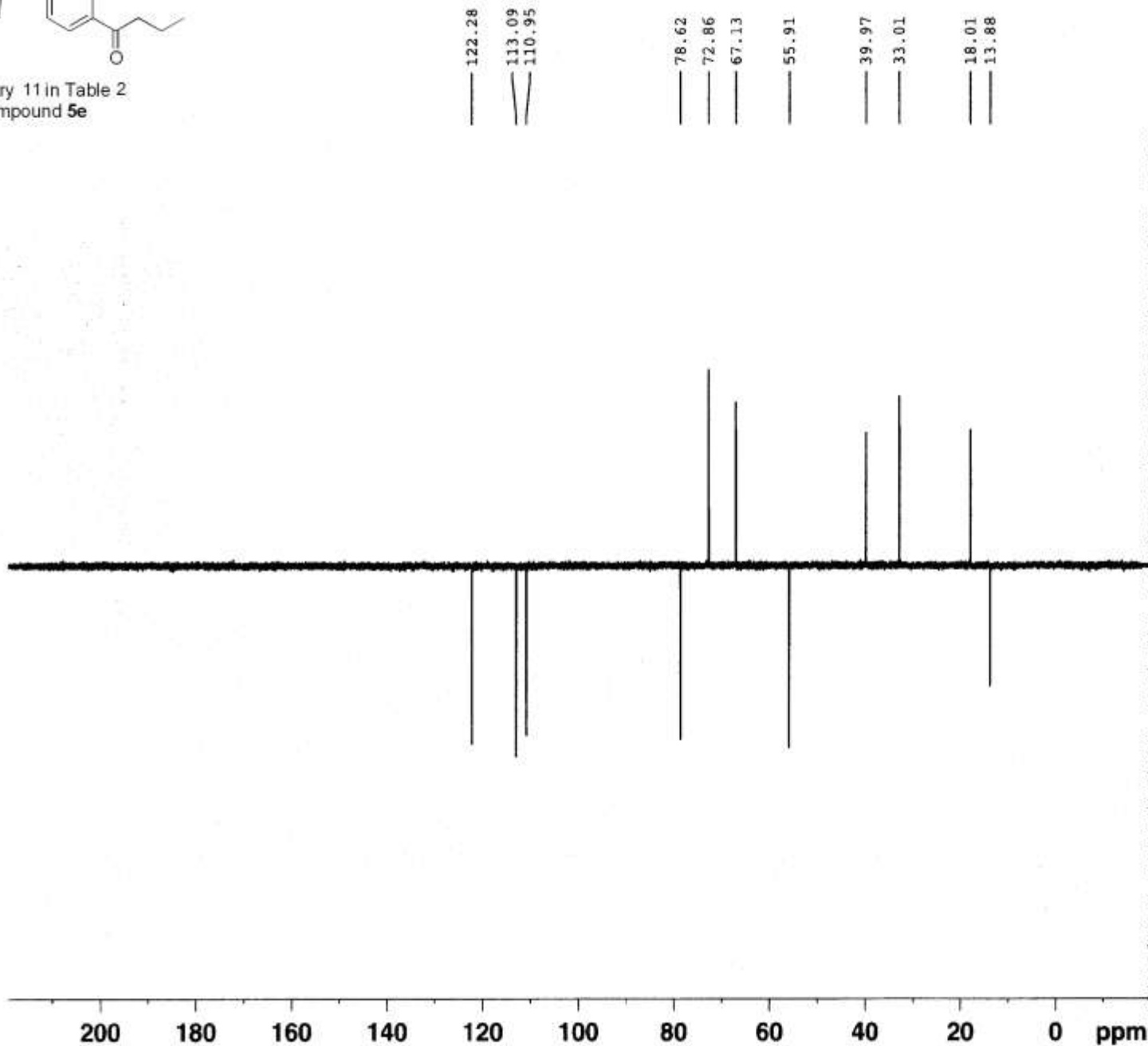
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127912 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00





Entry 11 in Table 2  
Compound 5e



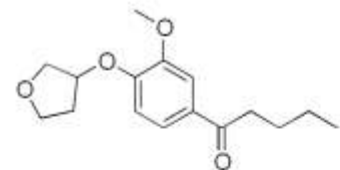
Current Data Parameters  
 NAME n69  
 EXPNO 3  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20050120  
 Time 11.13  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG dept135  
 TD 65536  
 SOLVENT CDCl3  
 NS 9  
 DS 4  
 SWH 23980.814 Hz  
 FIDRES 0.365918 Hz  
 AQ 1.3664756 sec  
 RG 16384  
 DW 20.850 usec  
 DE 6.00 usec  
 TE 299.2 K  
 CNST2 145.0000000  
 D1 2.00000000 sec  
 d2 0.00344828 sec  
 d12 0.00002000 sec  
 DELTA 0.00001019 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.00 usec  
 p2 16.00 usec  
 PL1 -3.00 dB  
 SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 P3 12.38 usec  
 p4 24.75 usec  
 PCPD2 70.00 usec  
 PL2 -1.00 dB  
 PL12 14.00 dB  
 SFO2 400.1316005 MHz

F2 - Processing parameters  
 SI 32768  
 SF 100.6127690 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40



Entry 12 in Table 2  
Compound 5f



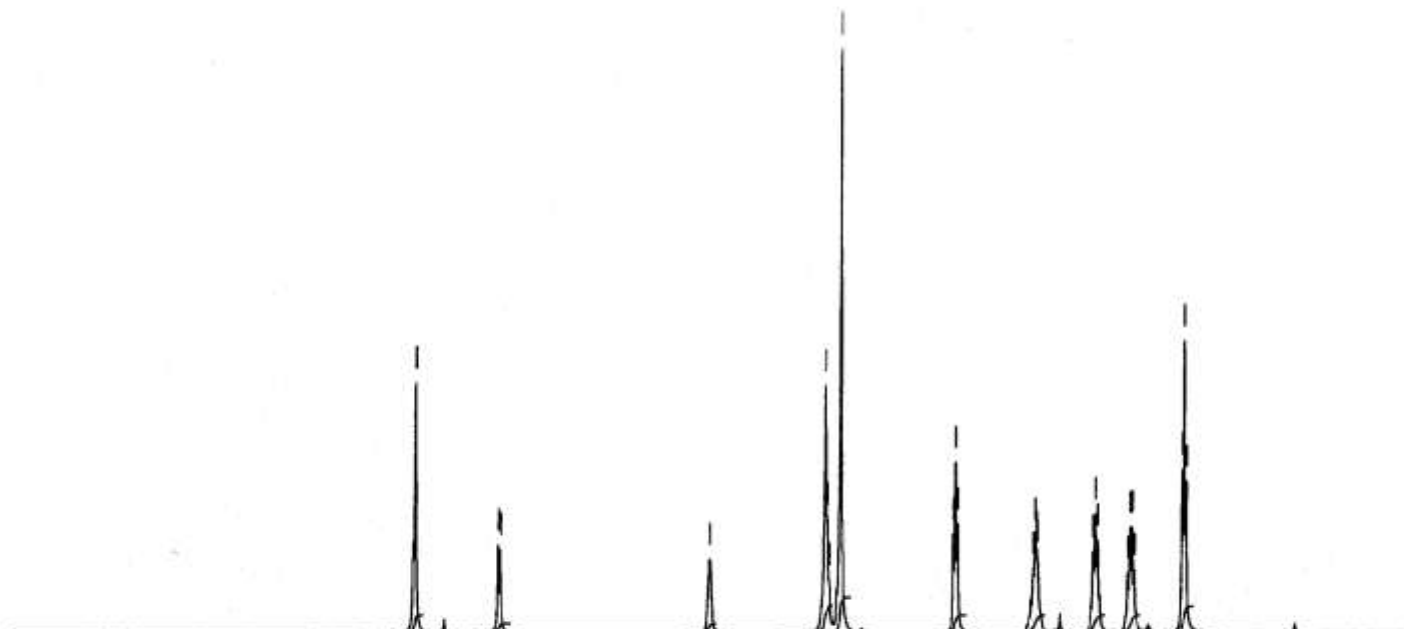
7.559  
7.541  
5.836  
5.814  
5.024  
4.034  
4.018  
4.000  
3.903  
2.937  
2.918  
2.900  
2.246  
2.230  
2.220  
2.212  
1.732  
1.714  
1.696  
1.437  
1.418  
1.399  
1.381  
0.972  
0.964  
0.938

Current Data Parameters  
NAME n68  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050121  
Time 11.17  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 28.5  
DW 60.400 usec  
DE 6.00 usec  
TE 299.1 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1299957 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



1.98  
0.99  
0.98  
3.07  
4.03  
1.99  
2.00  
2.00  
2.00  
3.00



Current Data Parameters  
NAME n68  
EXPNO 2  
PROCNO 1

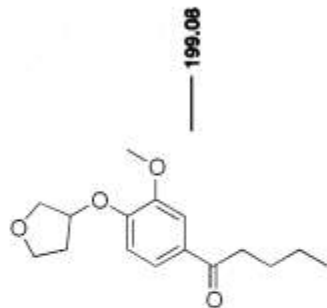
F2 - Acquisition Parameters

Date\_ 20050121  
Time 11.22  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 90  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 1024  
DW 20.850 usec  
DE 6.00 usec  
TE 299.6 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.89999998 sec  
MCREST 0.0000000 sec  
MCWRK 0.01500000 sec

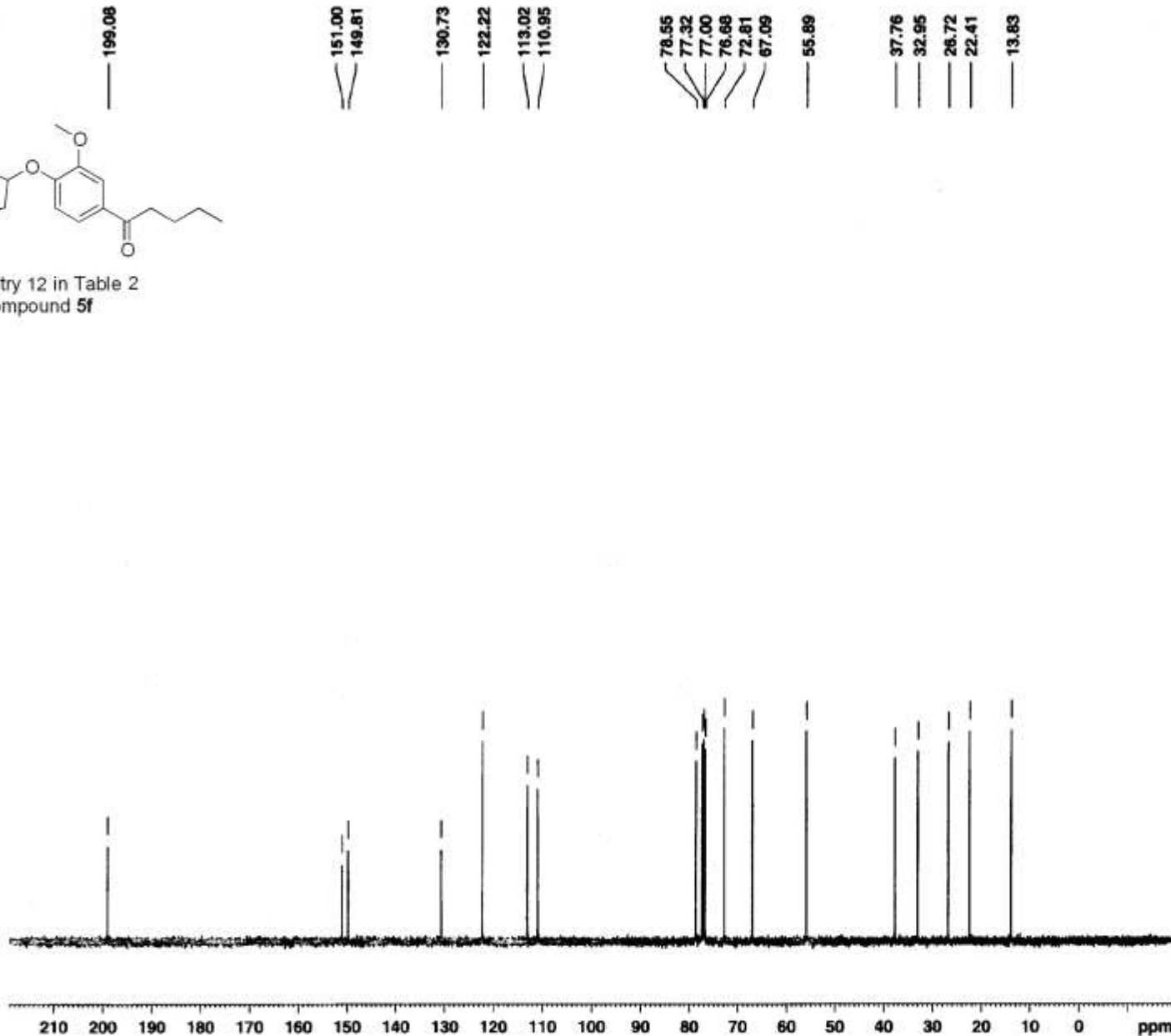
===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

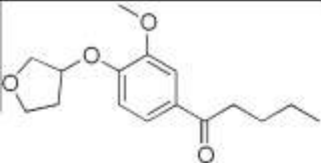
===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127795 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00



Entry 12 in Table 2  
Compound 5f





Entry 12 in Table 2  
Compound **5f**



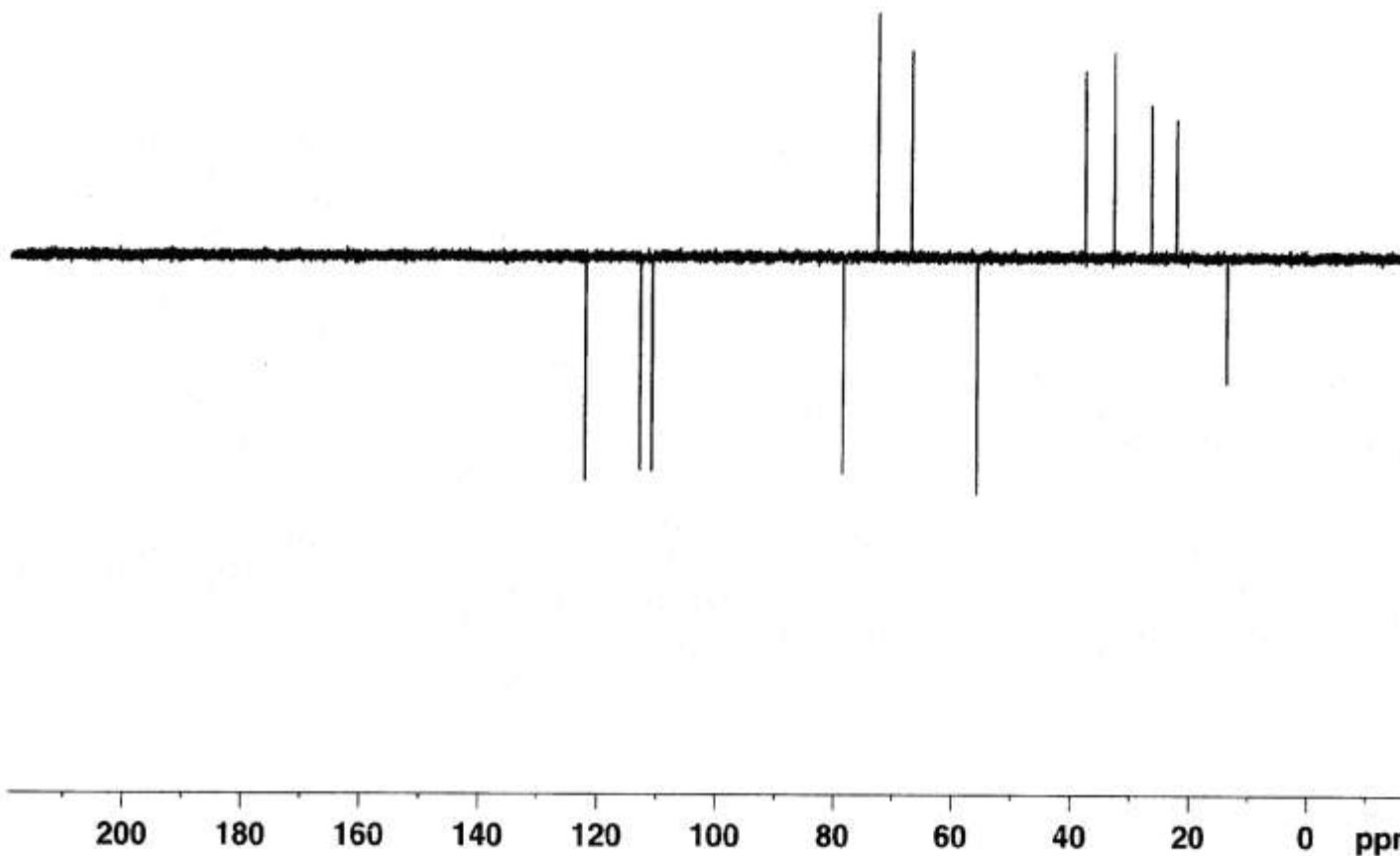
Current Data Parameters  
NAME n68  
EXPNO 3  
PROCNO 1

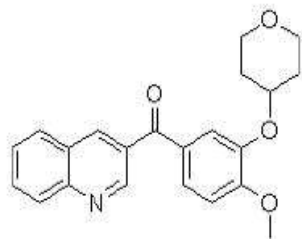
F2 - Acquisition Parameters  
Date\_ 20050121  
Time 11.25  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 21  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 6.00 usec  
TE 299.4 K  
CNST2 145.000000  
D1 2.0000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

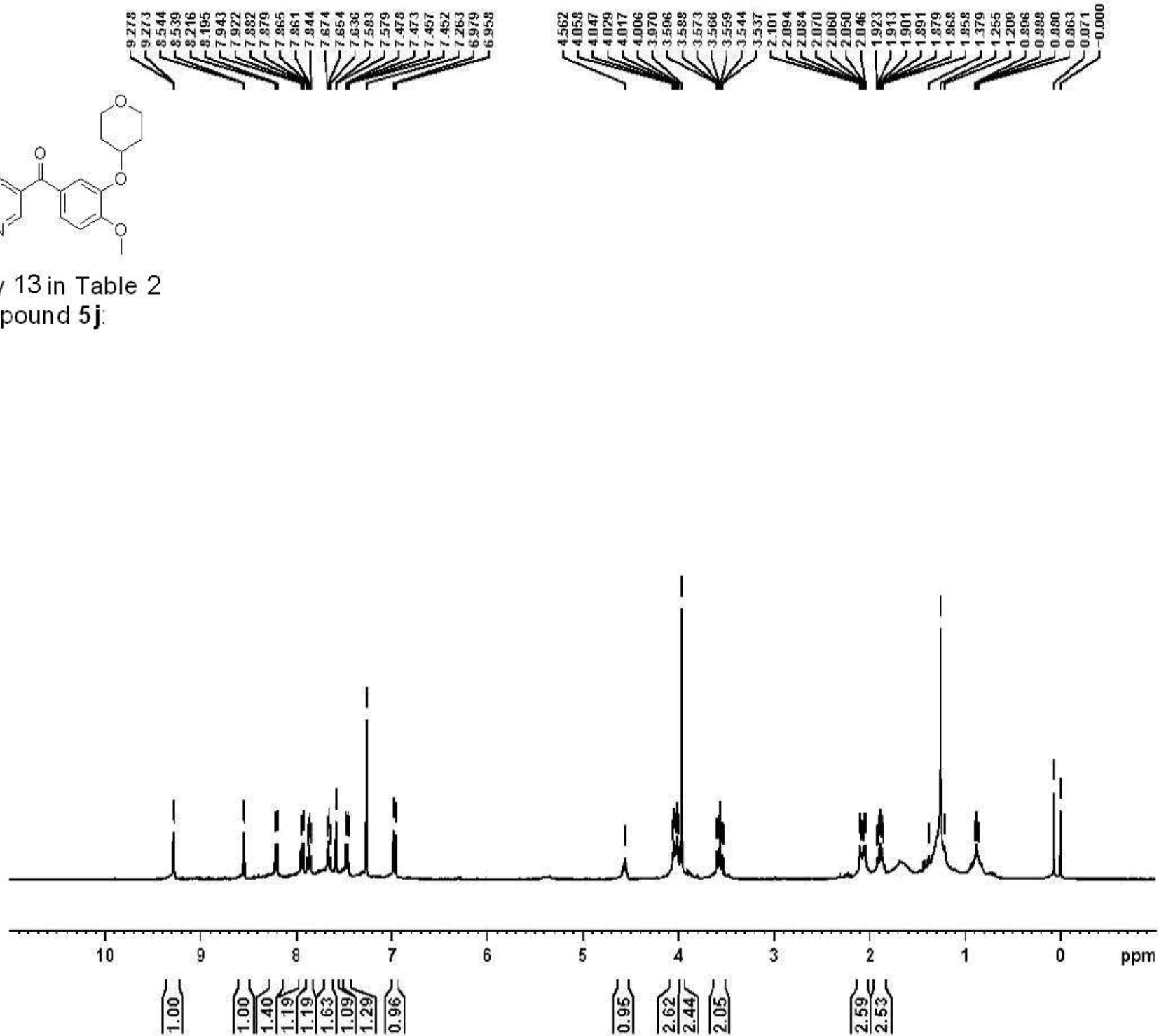
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

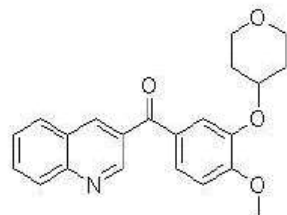
F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
FC 1.40



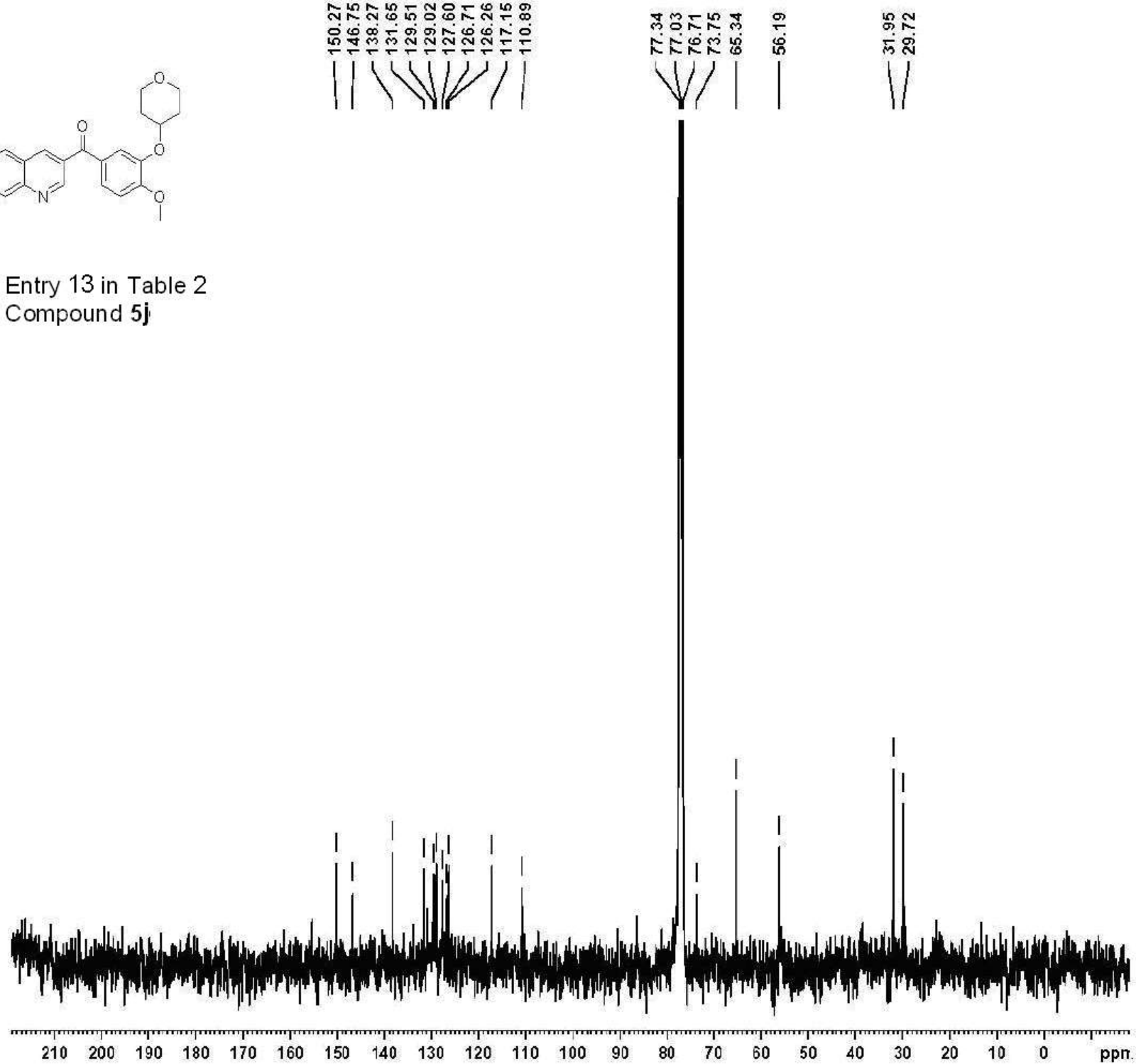


Entry 13 in Table 2  
Compound 5j.

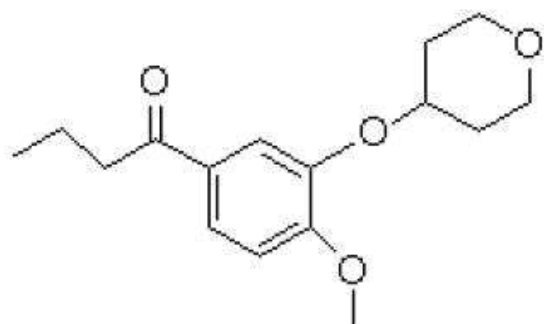




Entry 13 in Table 2  
Compound 5j



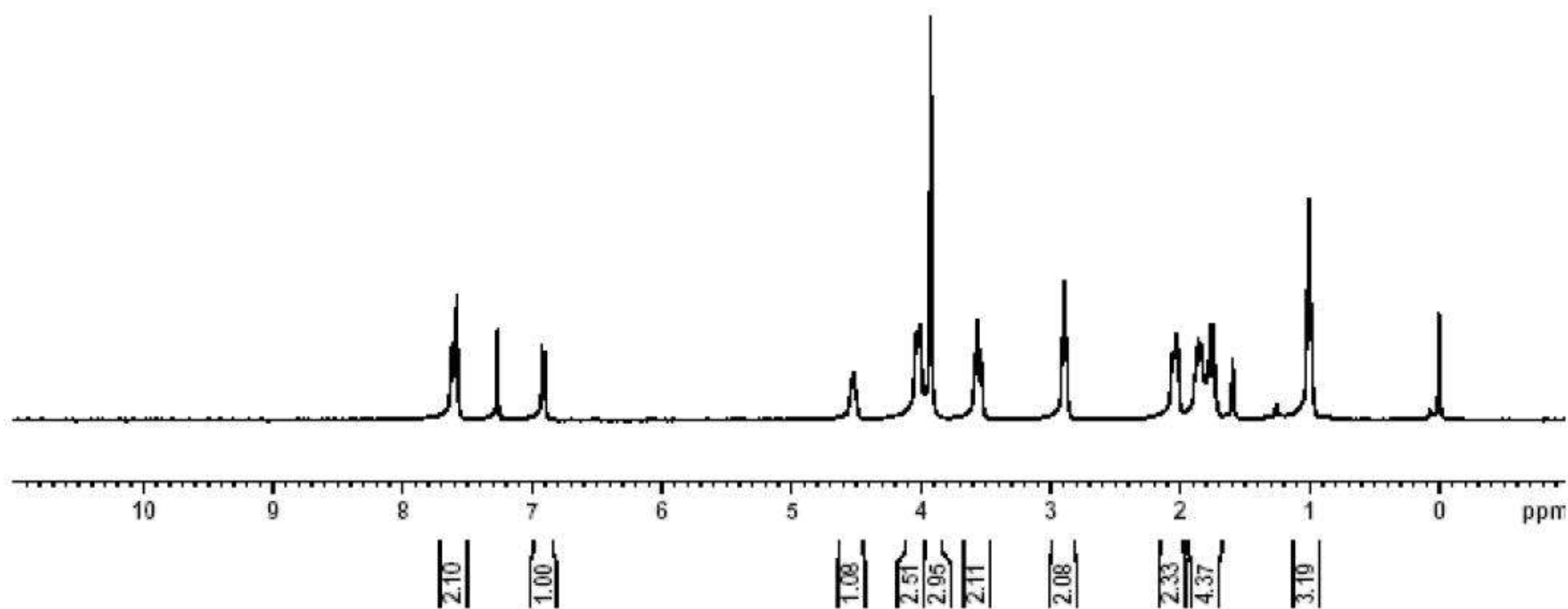
Entry 14 in Table 2  
compound 5k



7.622  
7.601  
7.578  
7.263  
6.918  
6.898

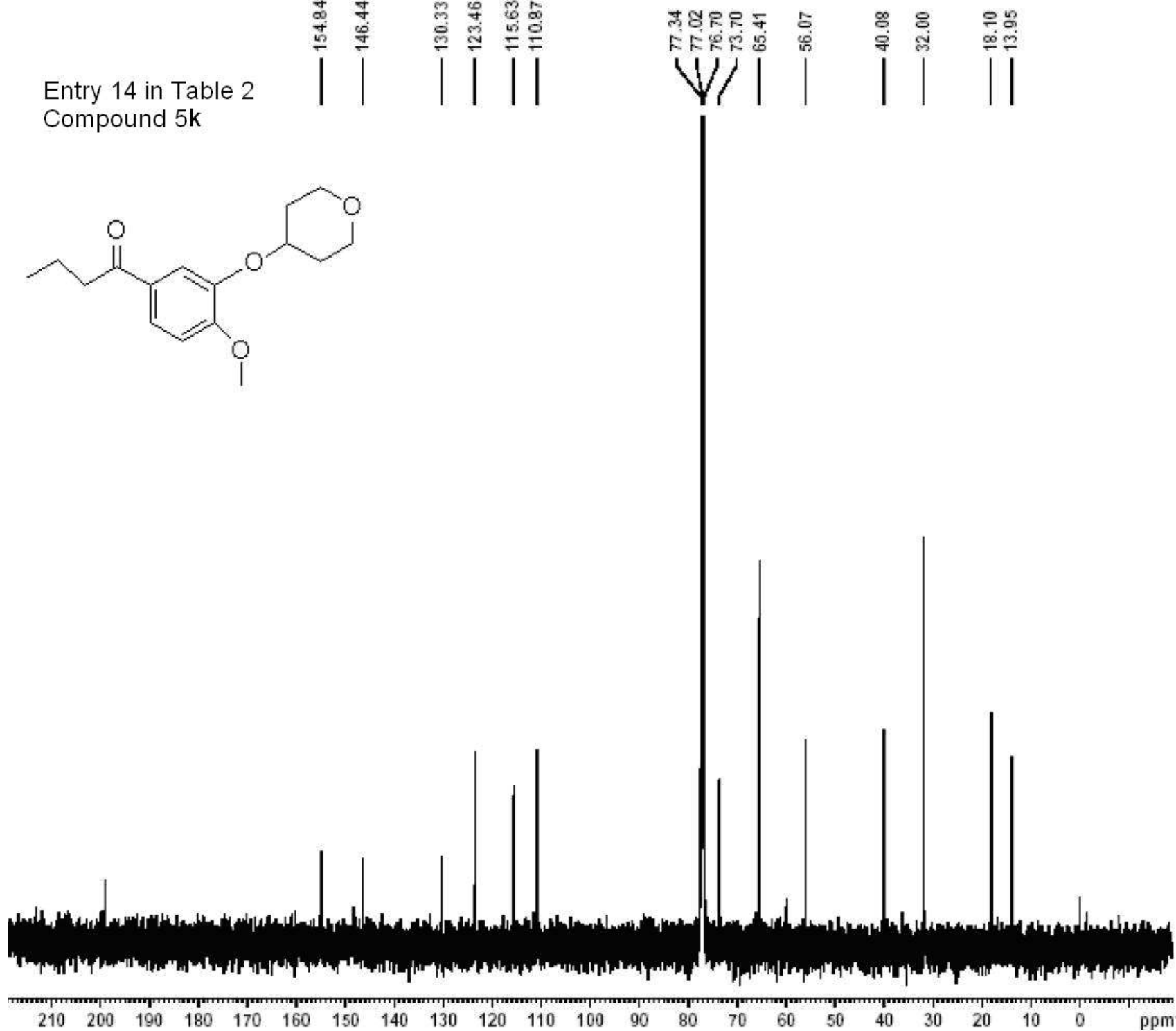
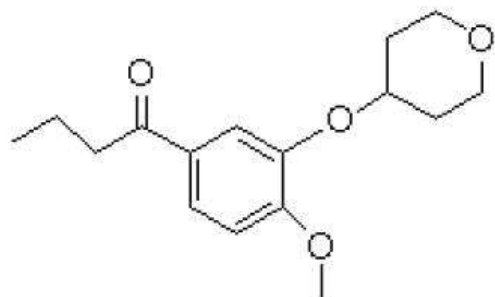
4.036  
4.021  
4.007  
3.924  
3.583  
3.558  
3.532  
2.908  
2.890  
2.873  
2.054  
2.027  
1.857  
1.844  
1.834  
1.785  
1.768  
1.749  
1.733  
1.594  
1.020  
1.002  
0.984

-0.001

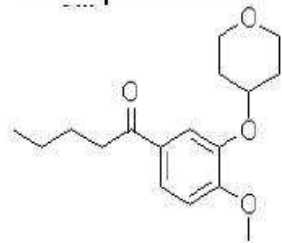




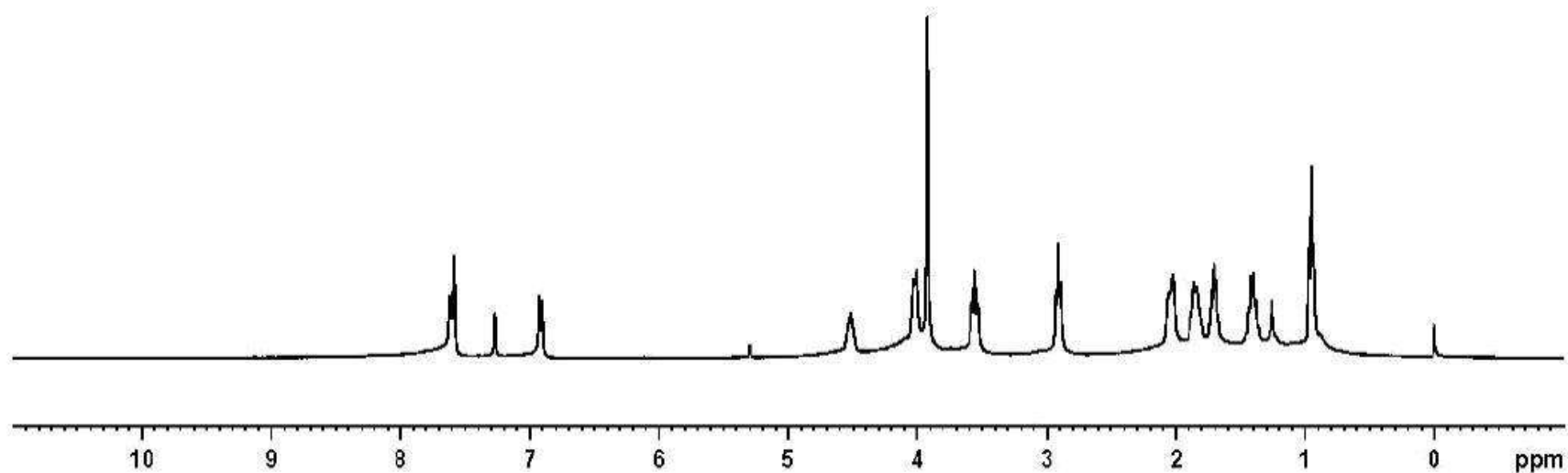
Entry 14 in Table 2  
Compound 5k



Entry 15 in Table 2  
Compound 5I



7.621  
7.600  
7.577  
7.268  
6.919  
6.899  
4.520  
4.034  
4.006  
3.923  
3.579  
3.555  
3.532  
2.925  
2.907  
2.880  
2.050  
2.025  
1.856  
1.845  
1.834  
1.744  
1.726  
1.708  
1.690  
1.672  
1.435  
1.416  
1.398  
1.380  
1.257  
0.971  
0.953  
0.935  
0.000



1.00  
0.79

0.91

1.24

2.42

3.21

2.11

2.02

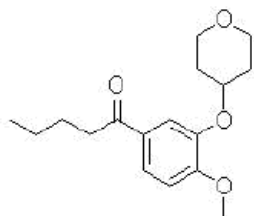
2.60

2.68

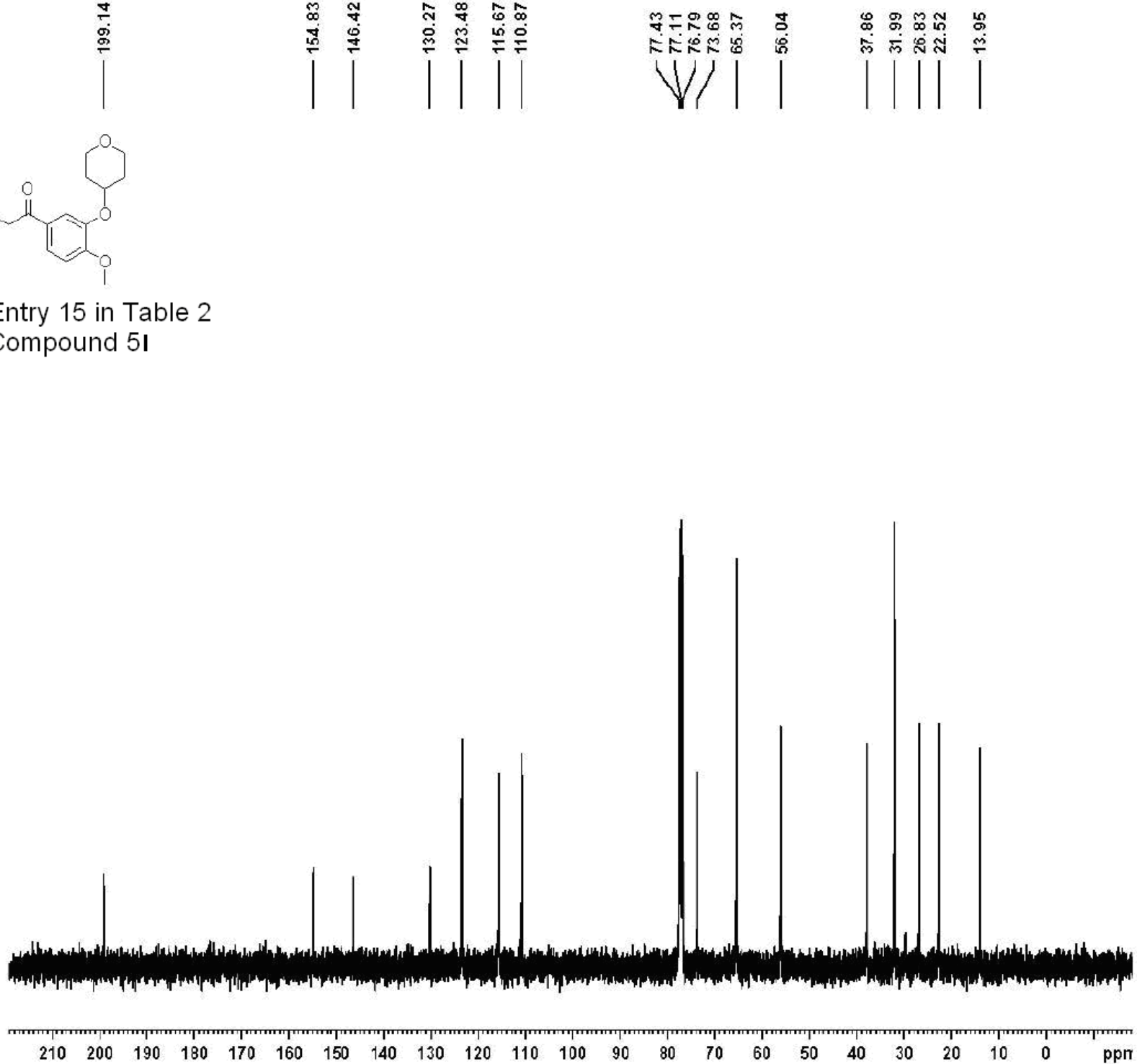
2.63

2.62

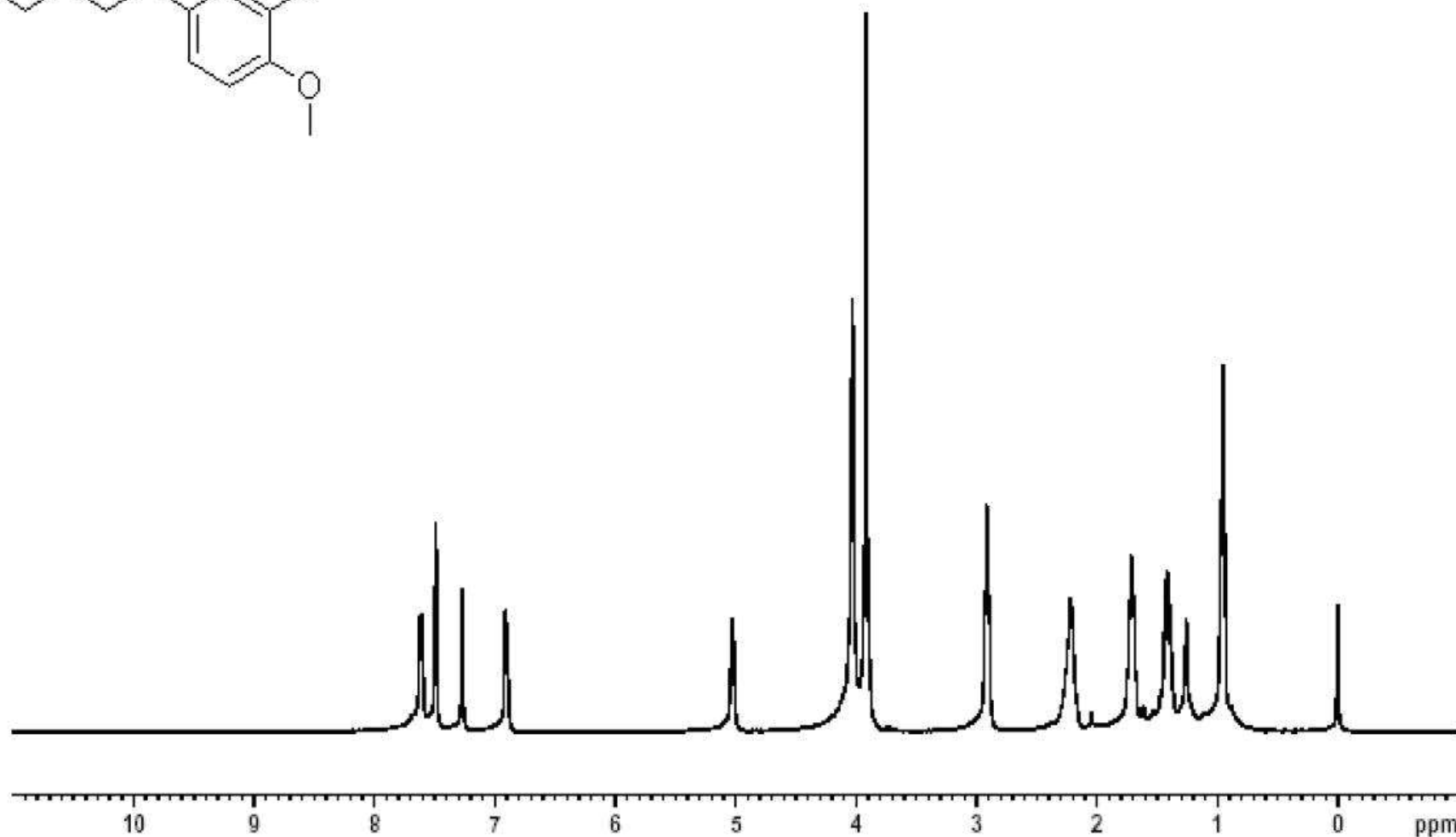
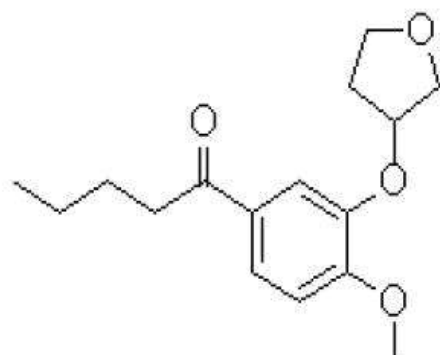
3.14

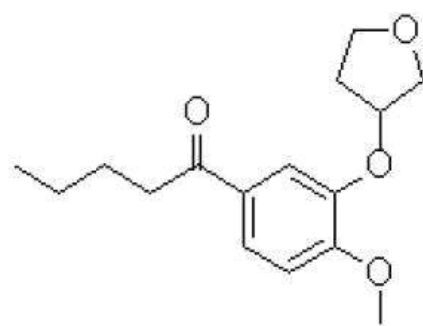


Entry 15 in Table 2  
Compound 5I

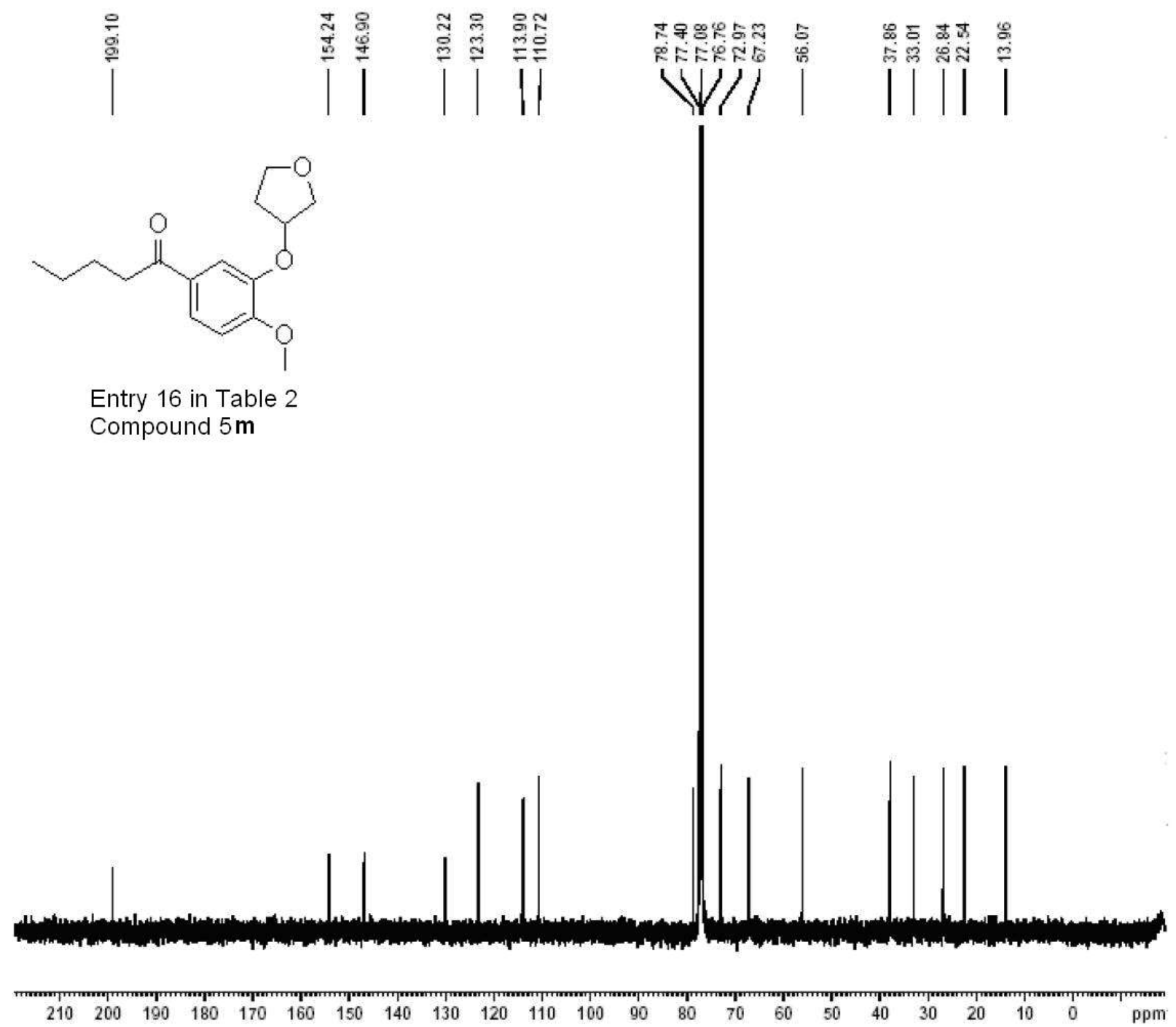


Entry 16 in Table 2  
Compound 5m

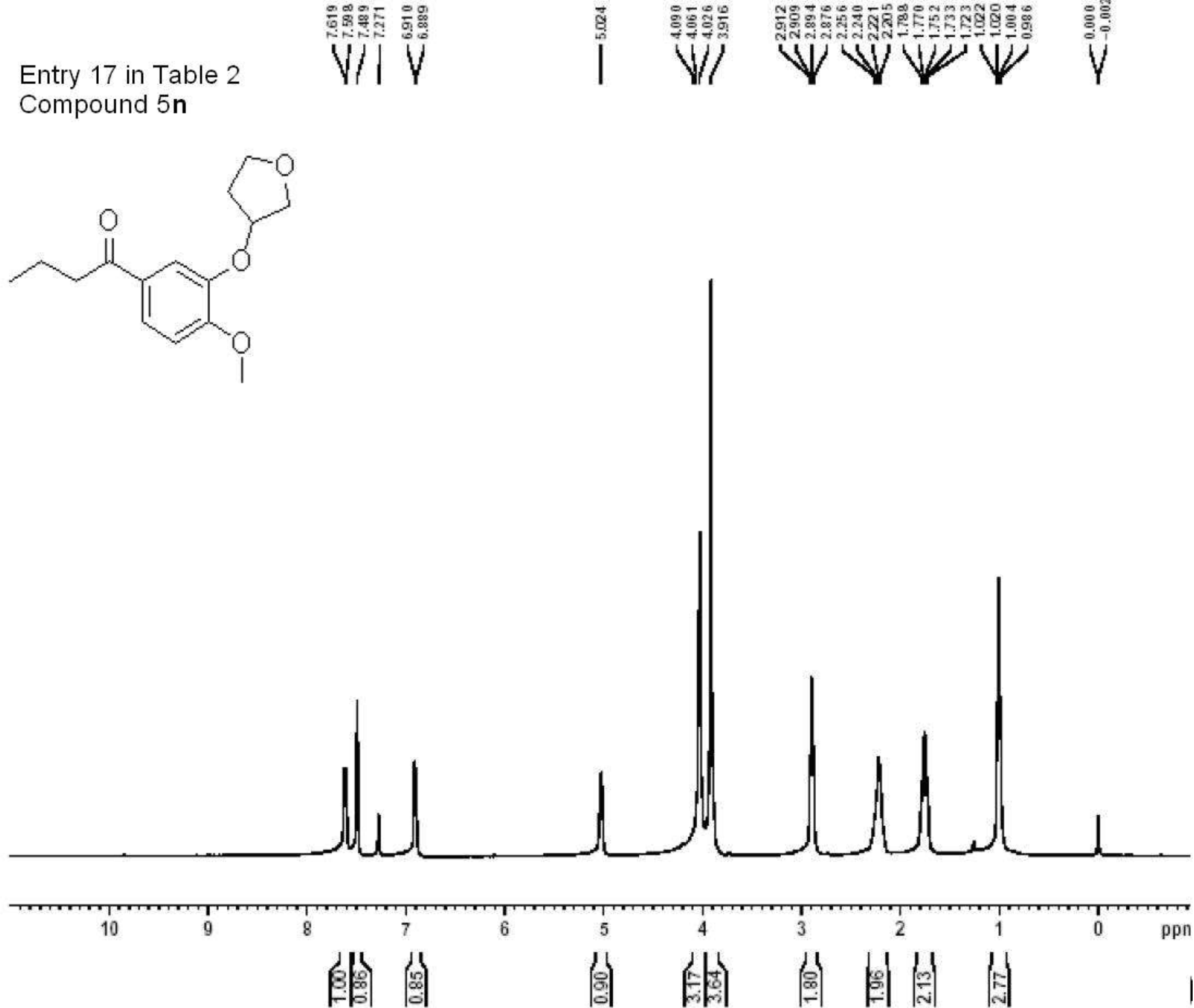
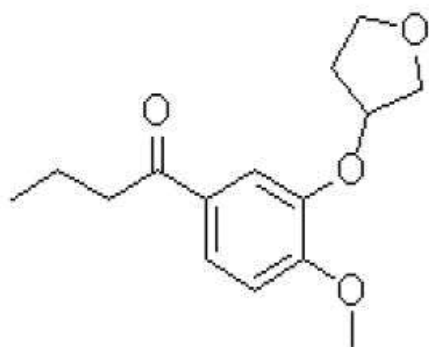


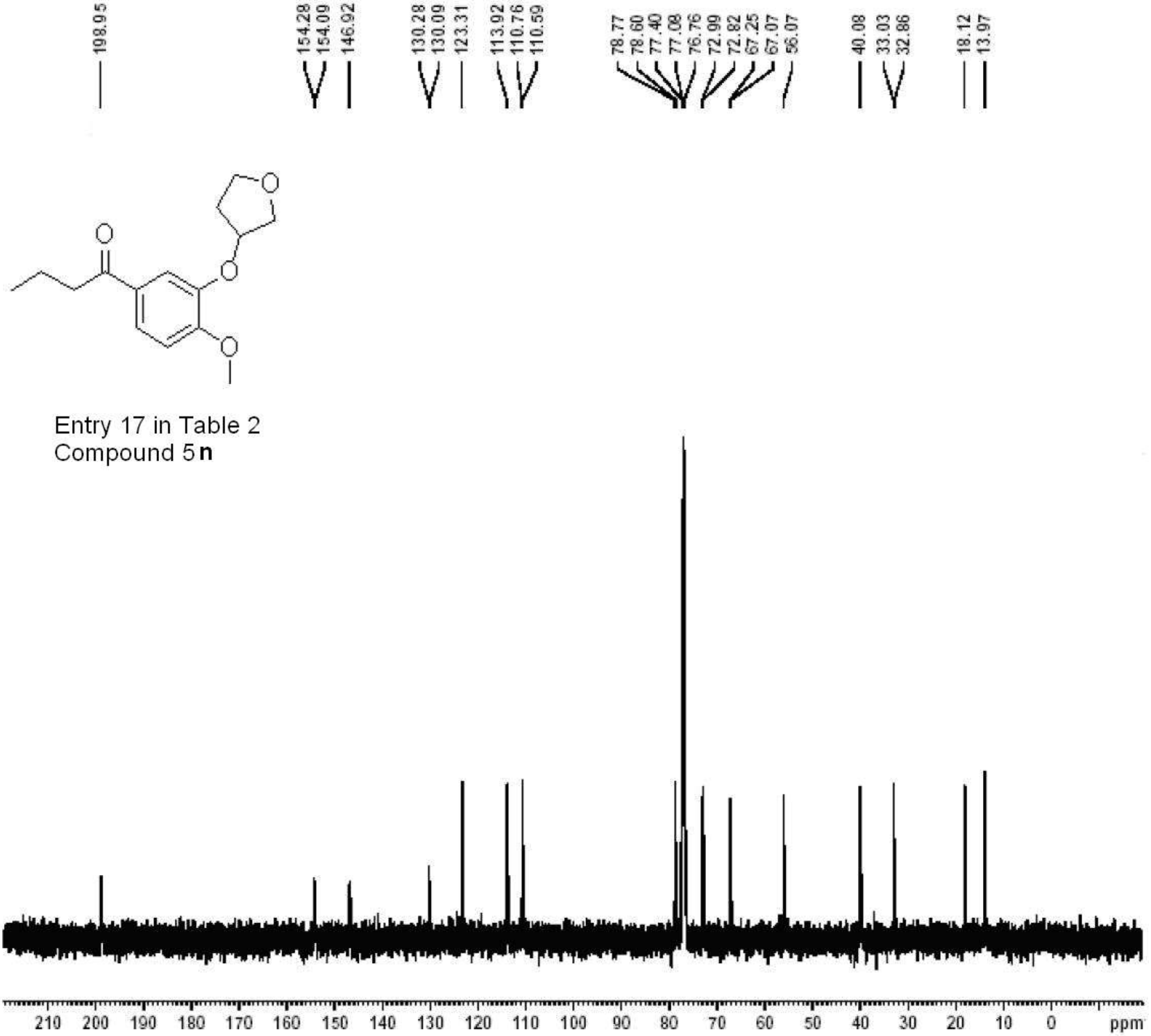


Entry 16 in Table 2  
Compound 5m

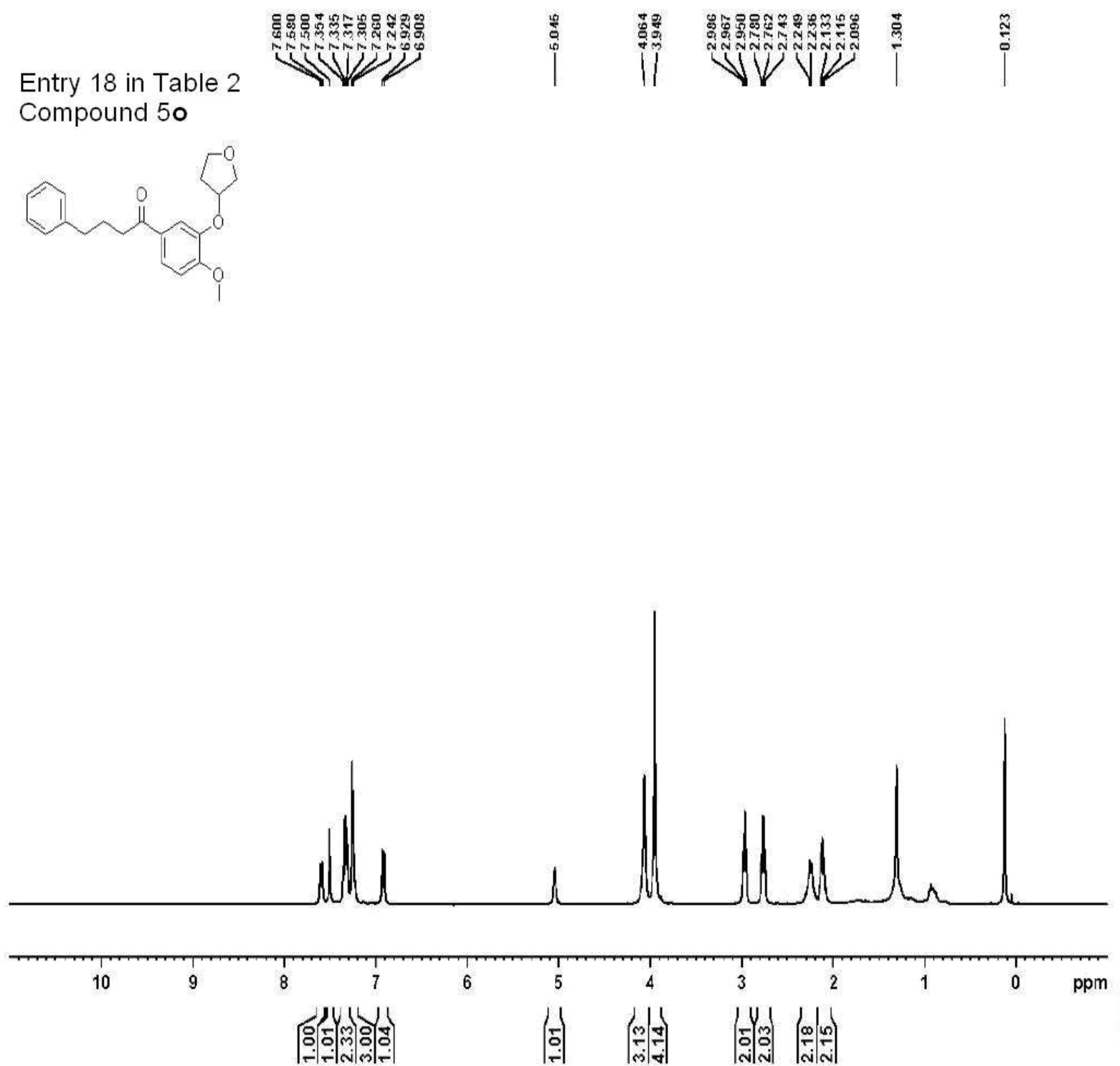
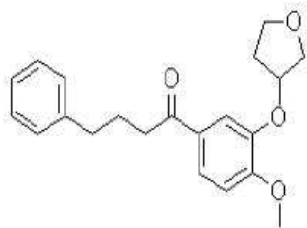


Entry 17 in Table 2  
Compound 5n

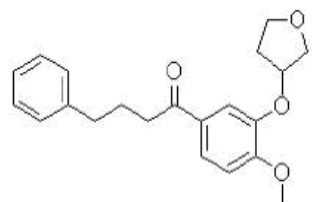




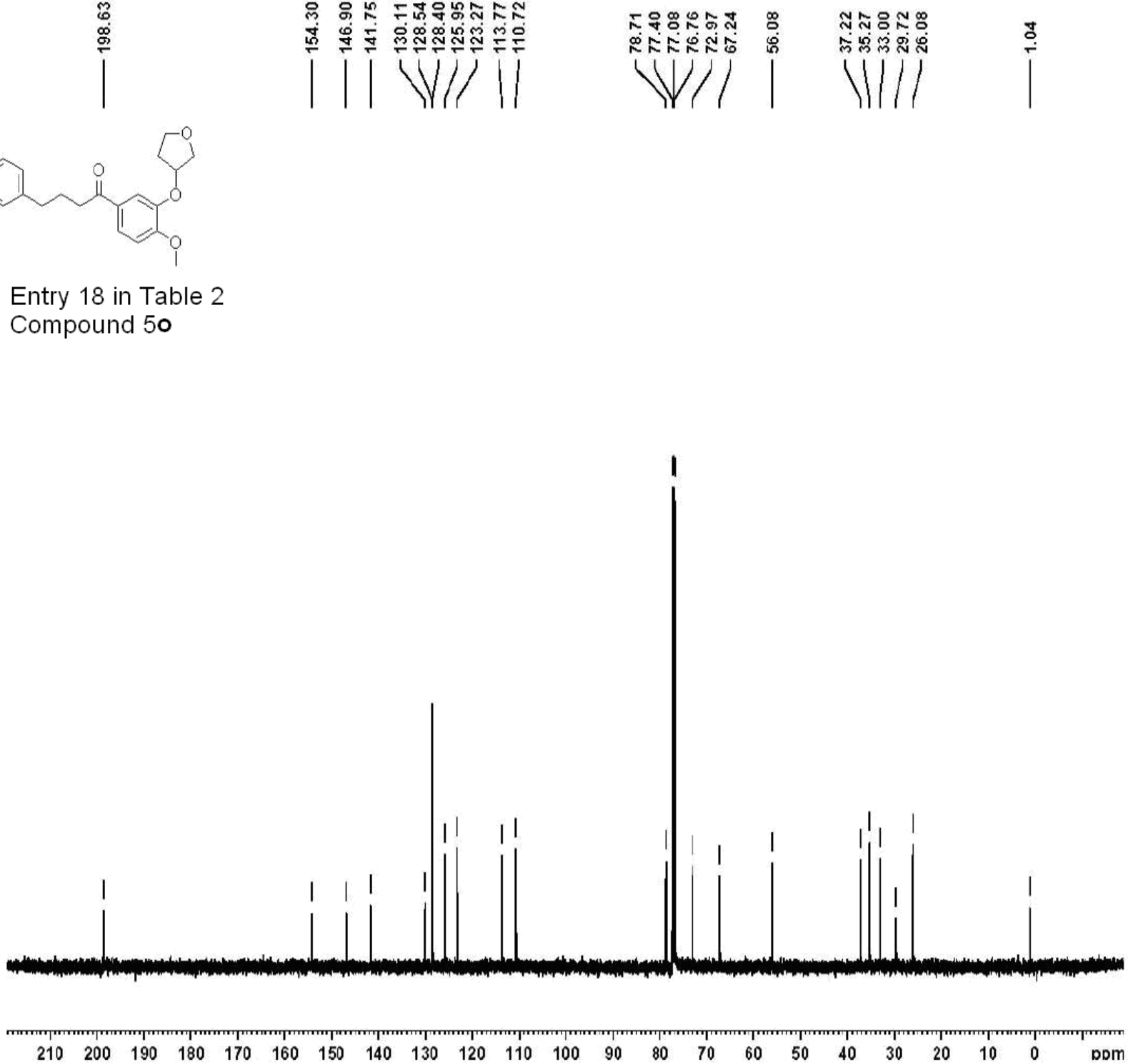
Entry 18 in Table 2  
Compound 5



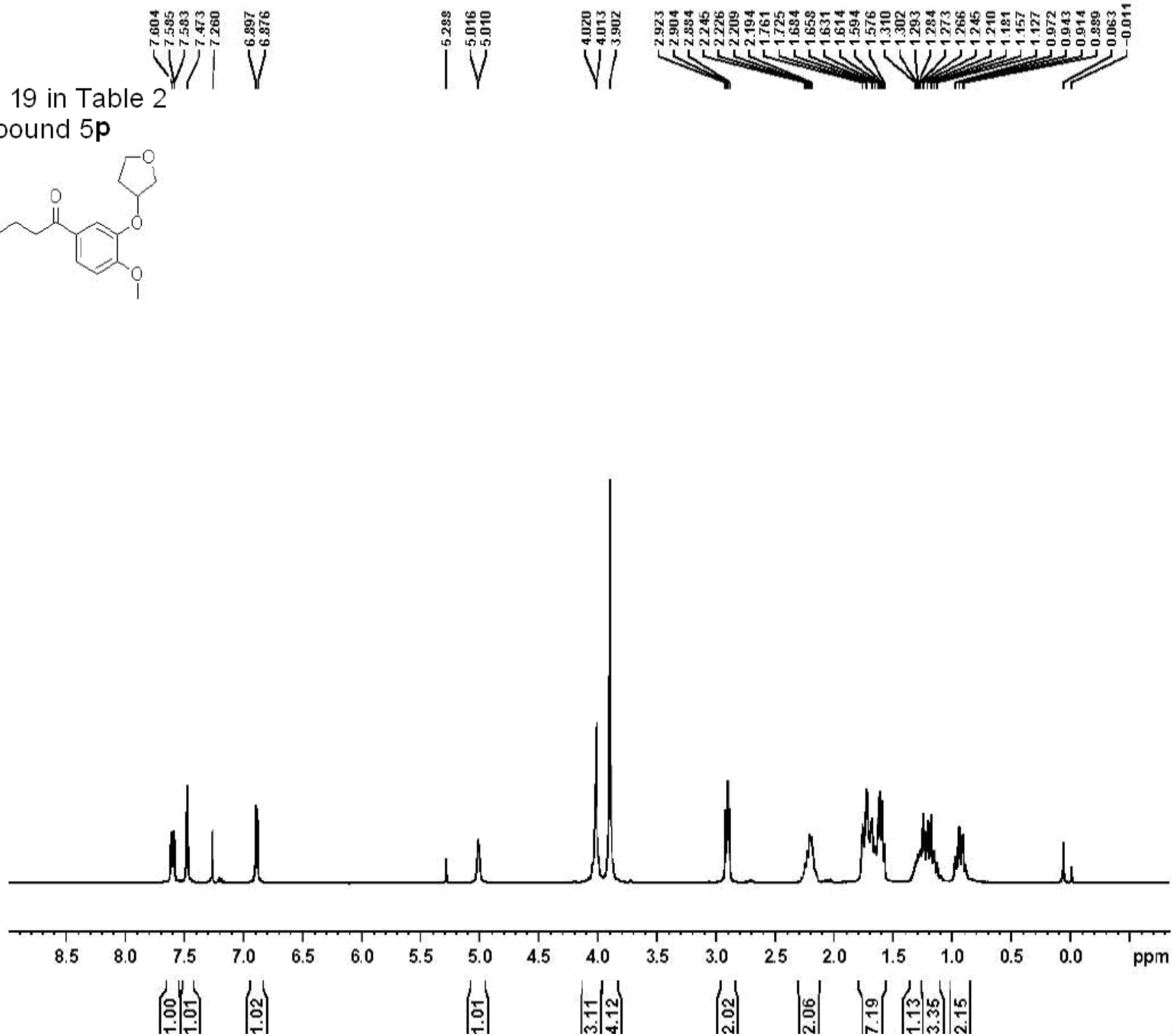
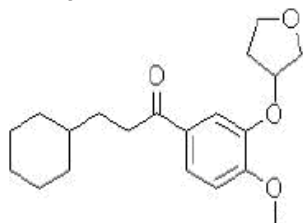


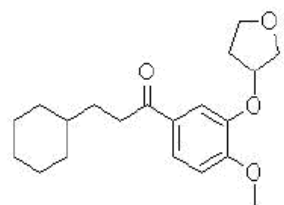


Entry 18 in Table 2  
Compound 5o

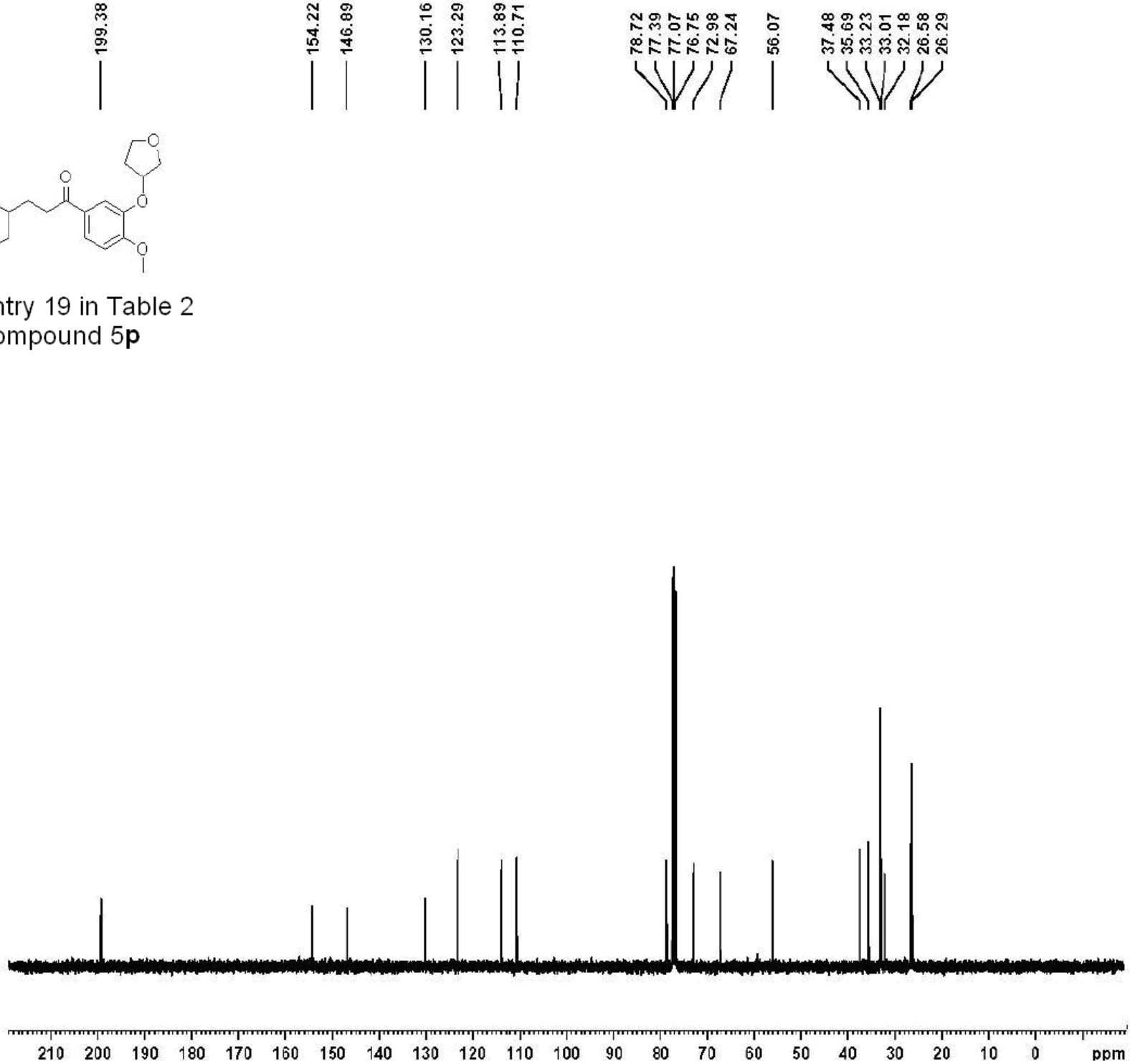


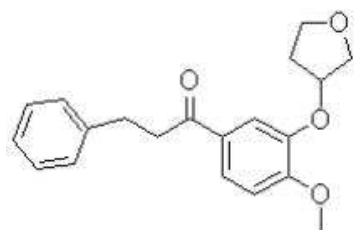
Entry 19 in Table 2  
Compound 5p



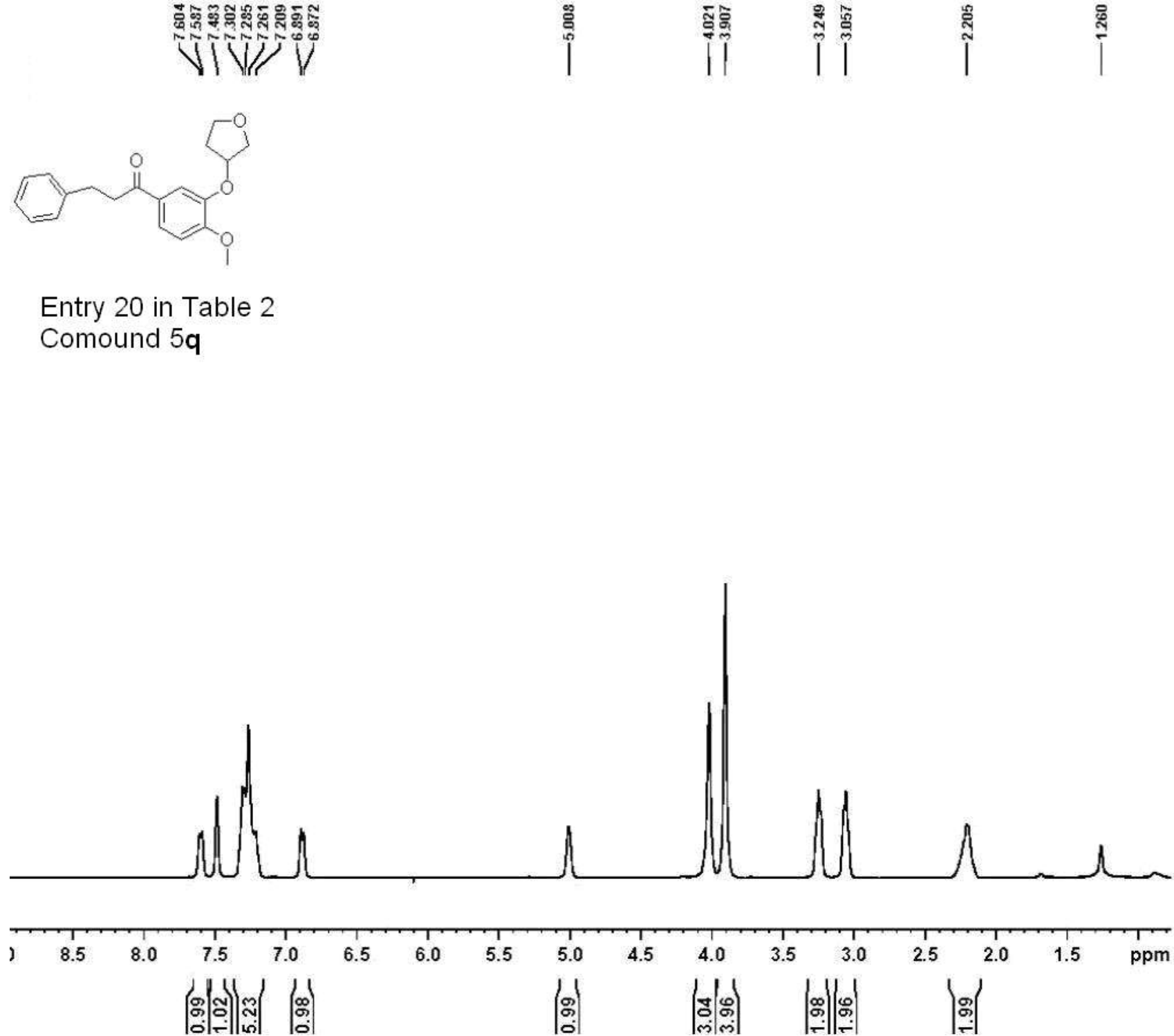


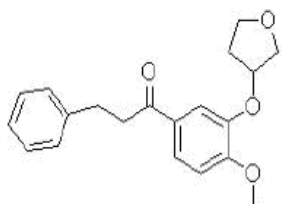
Entry 19 in Table 2  
Compound 5p



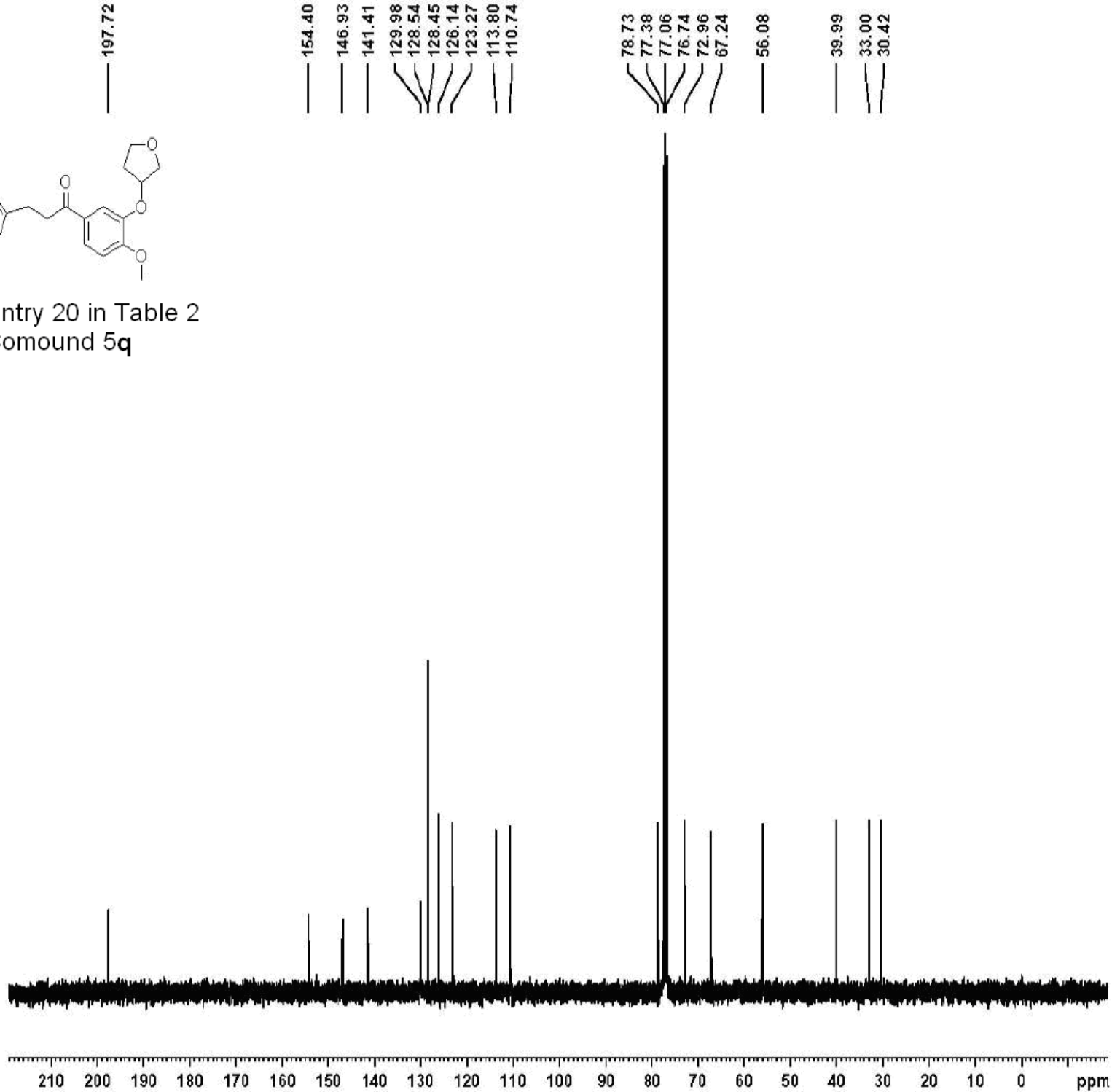


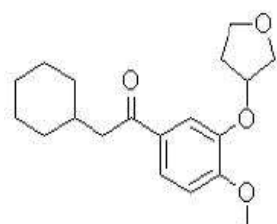
Entry 20 in Table 2  
Compound 5q



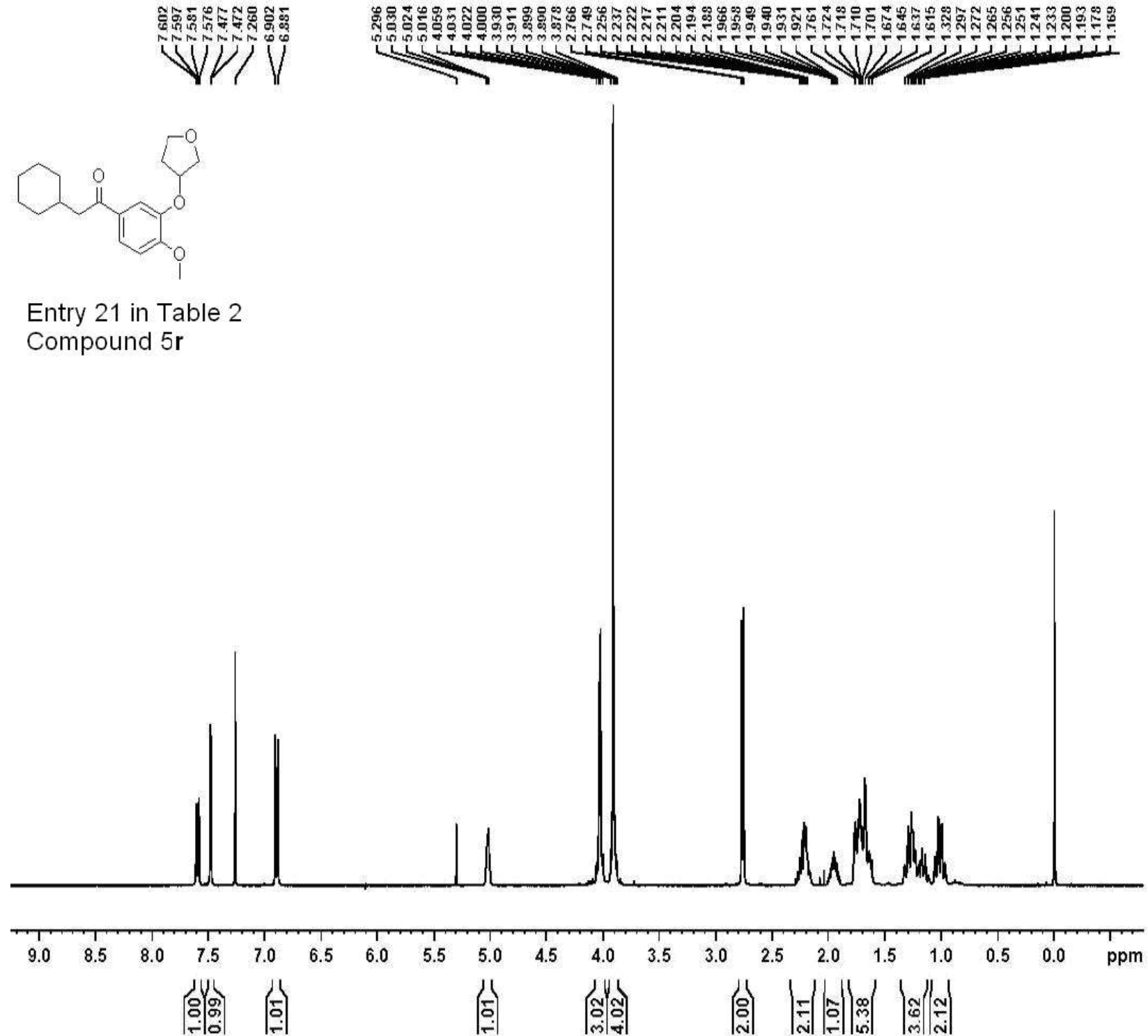


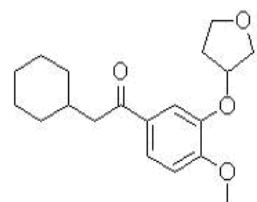
Entry 20 in Table 2  
Compound 5q



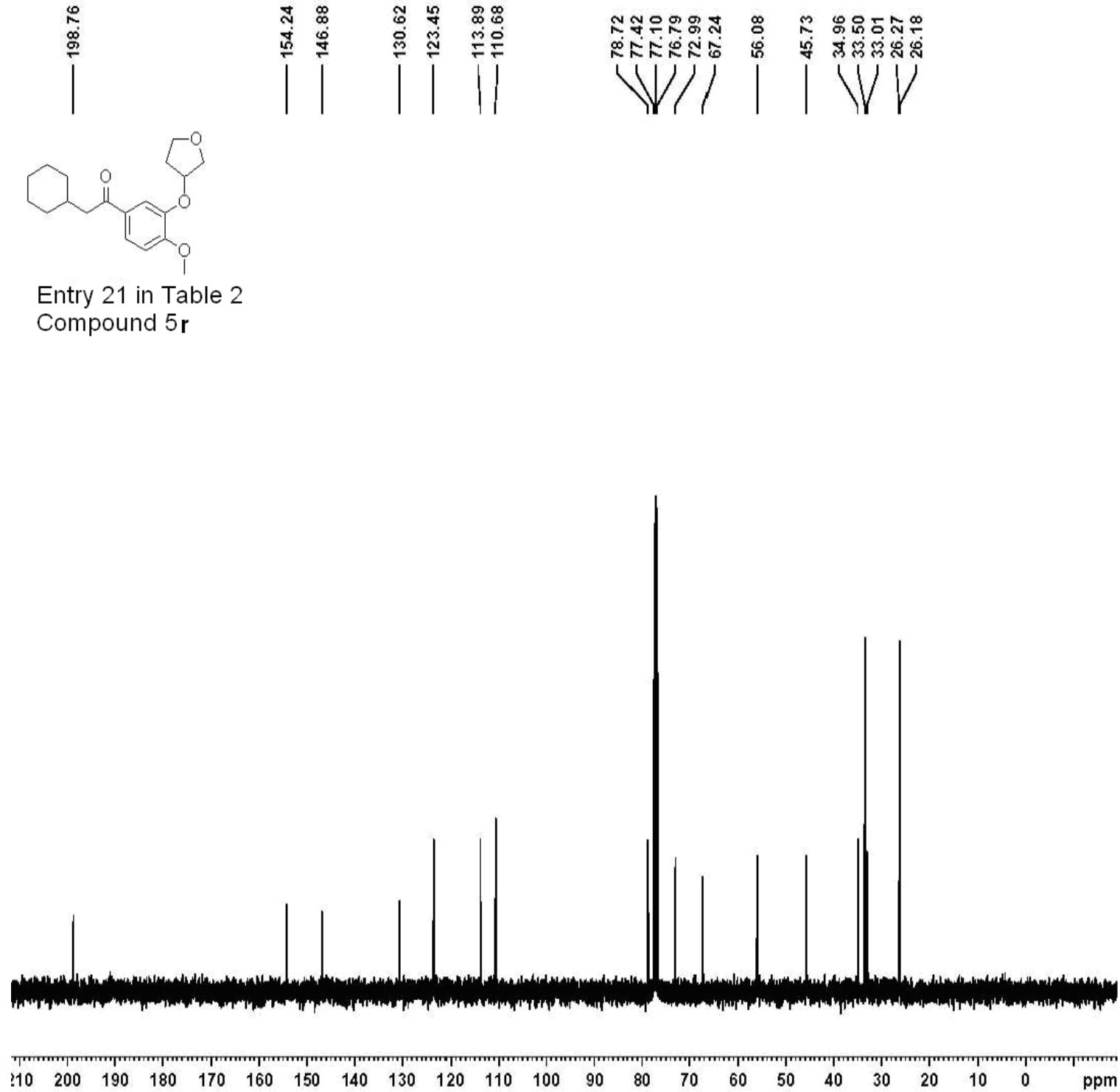


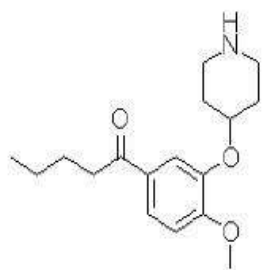
Entry 21 in Table 2  
Compound 5r



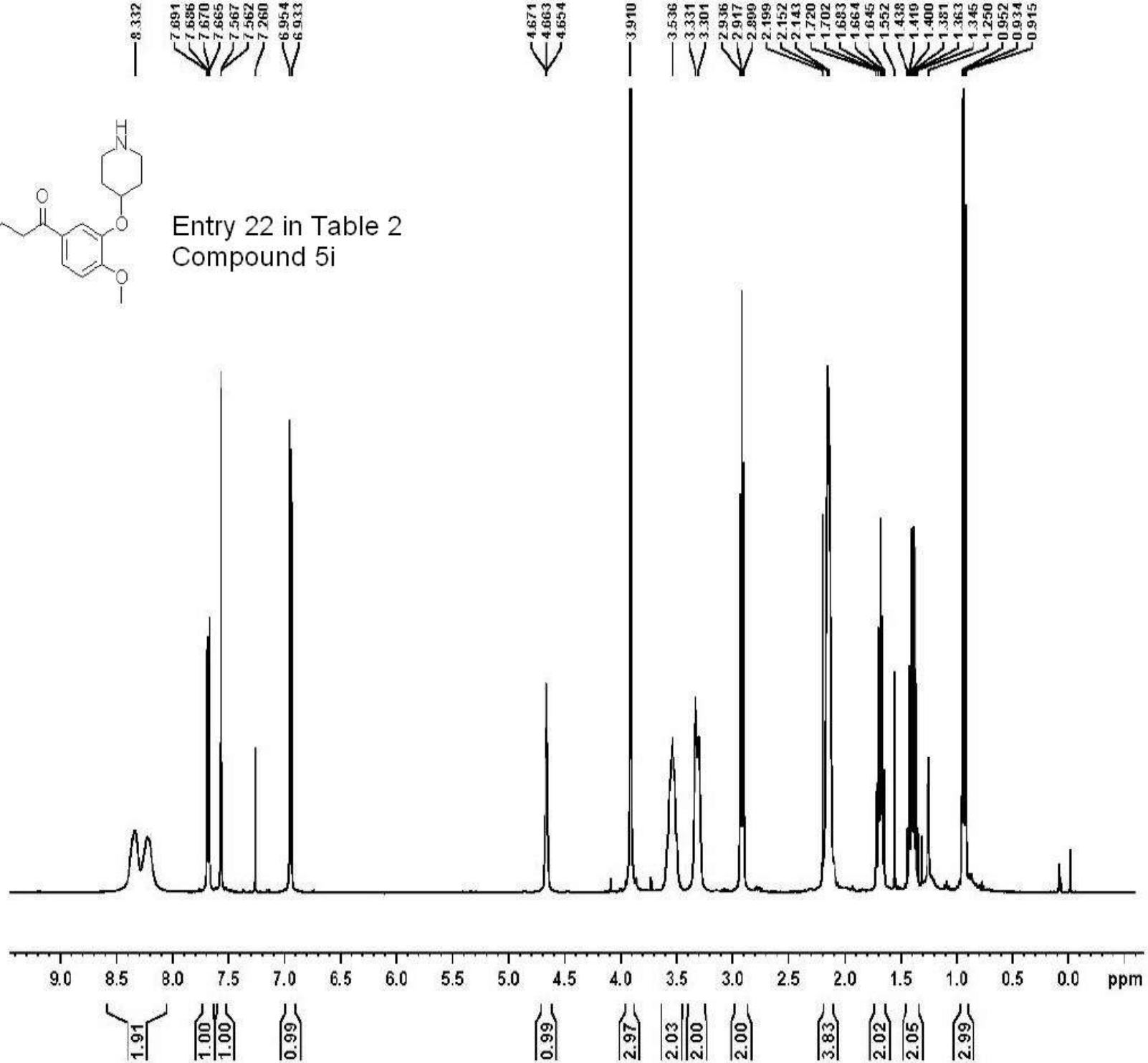


Entry 21 in Table 2  
Compound 5r

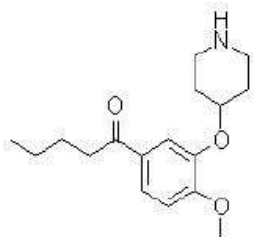




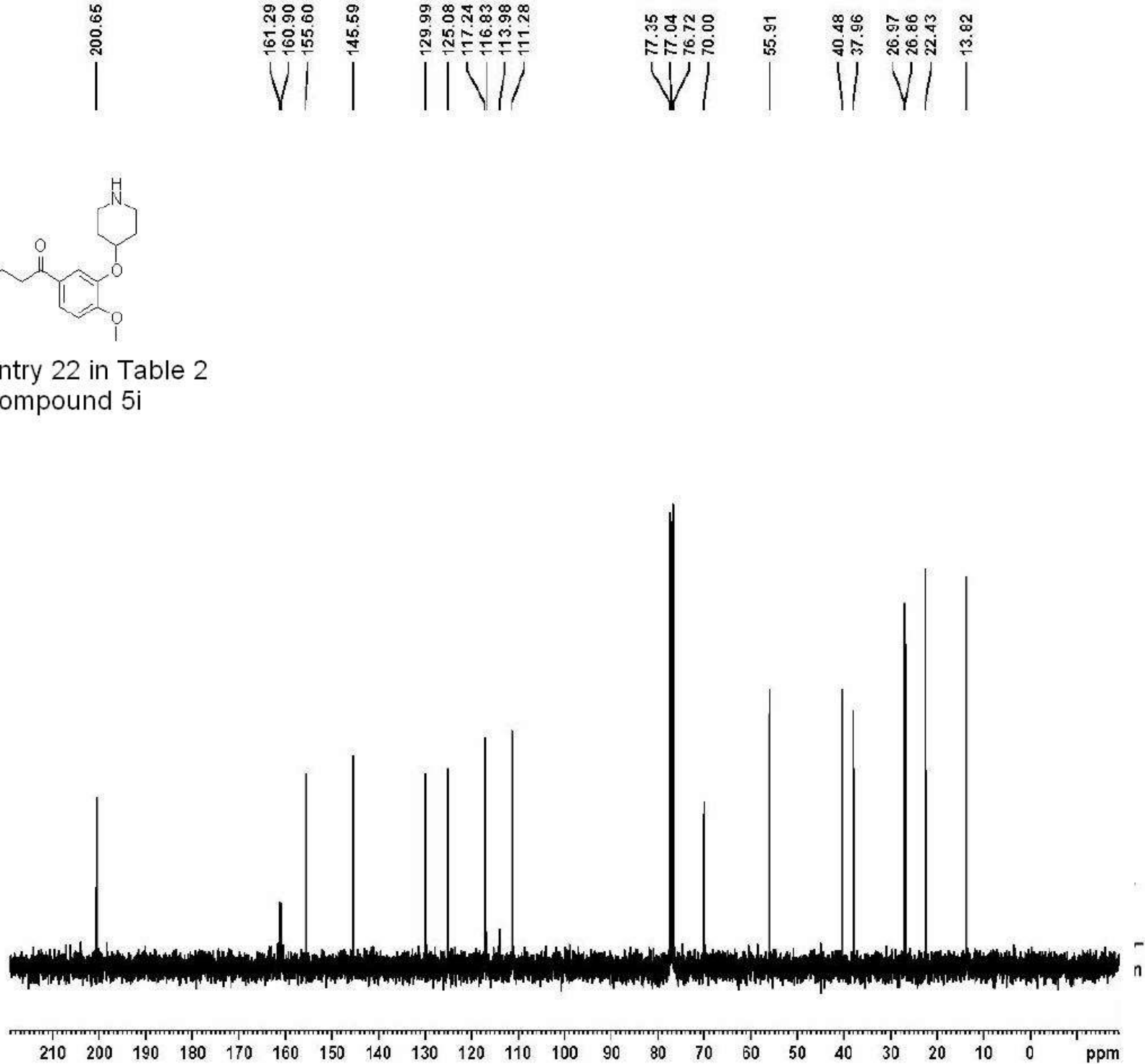
Entry 22 in Table 2  
Compound 5i

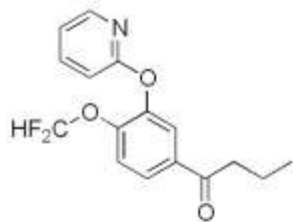






Entry 22 in Table 2  
Compound 5i





Entry 23 in Table 2  
Compound 5zi

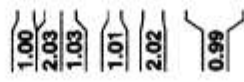
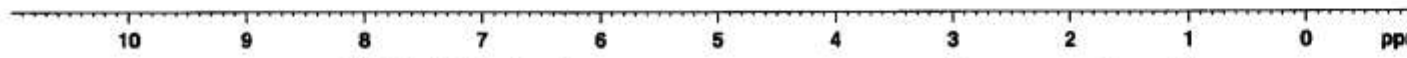
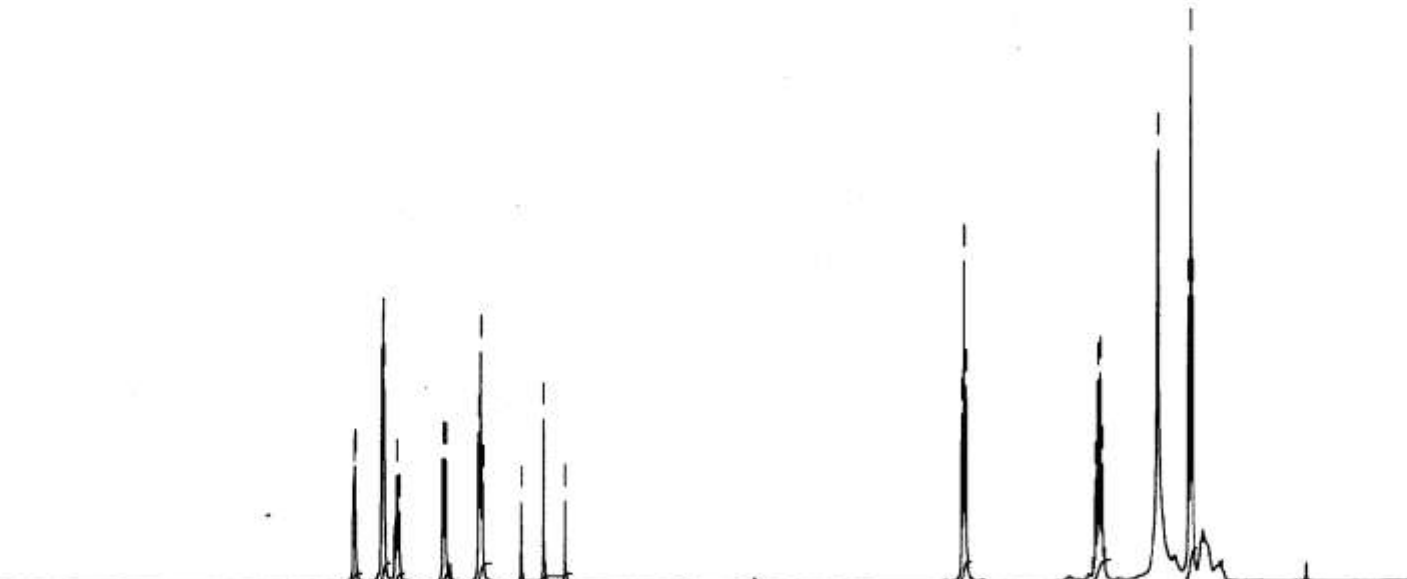


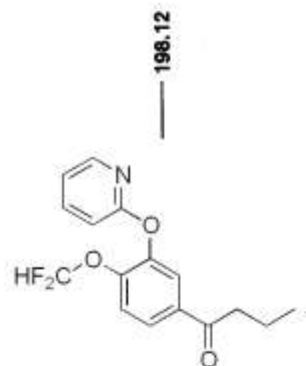
Current Data Parameters  
 NAME n35  
 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20041119  
 Time 10.26  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDC13  
 NS 16  
 DS 2  
 SWH 8278.146 Hz  
 FIDRES 0.126314 Hz  
 AQ 3.9584243 sec  
 RG 28.5  
 DW 60.400 usec  
 DE 6.00 usec  
 TE 298.1 K  
 D1 1.00000000 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

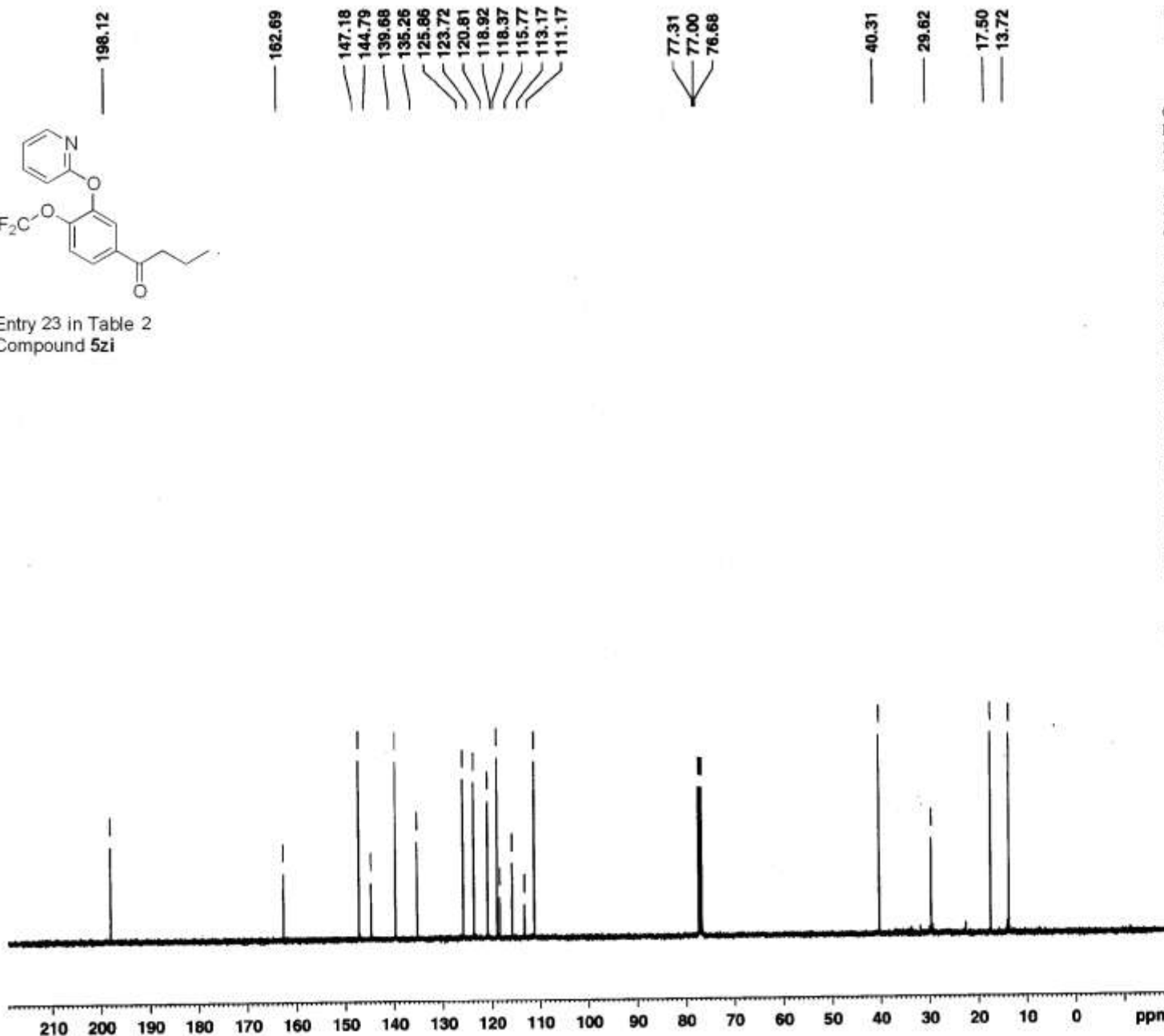
==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.80 usec  
 PL1 0.00 dB  
 SFO1 400.1324710 MHz

F2 - Processing parameters  
 SI 32768  
 SF 400.1300066 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.40





Entry 23 in Table 2  
Compound 5zi



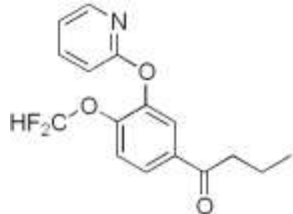
Current Data Parameters  
NAME n35  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041119  
Time 10.34  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT ~~CDCl3~~ CD<sub>3</sub>Cl<sub>2</sub>  
NS 117  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 1149.4  
DW 20.850 usec  
DE 6.00 usec  
TE 298.5 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.89999998 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

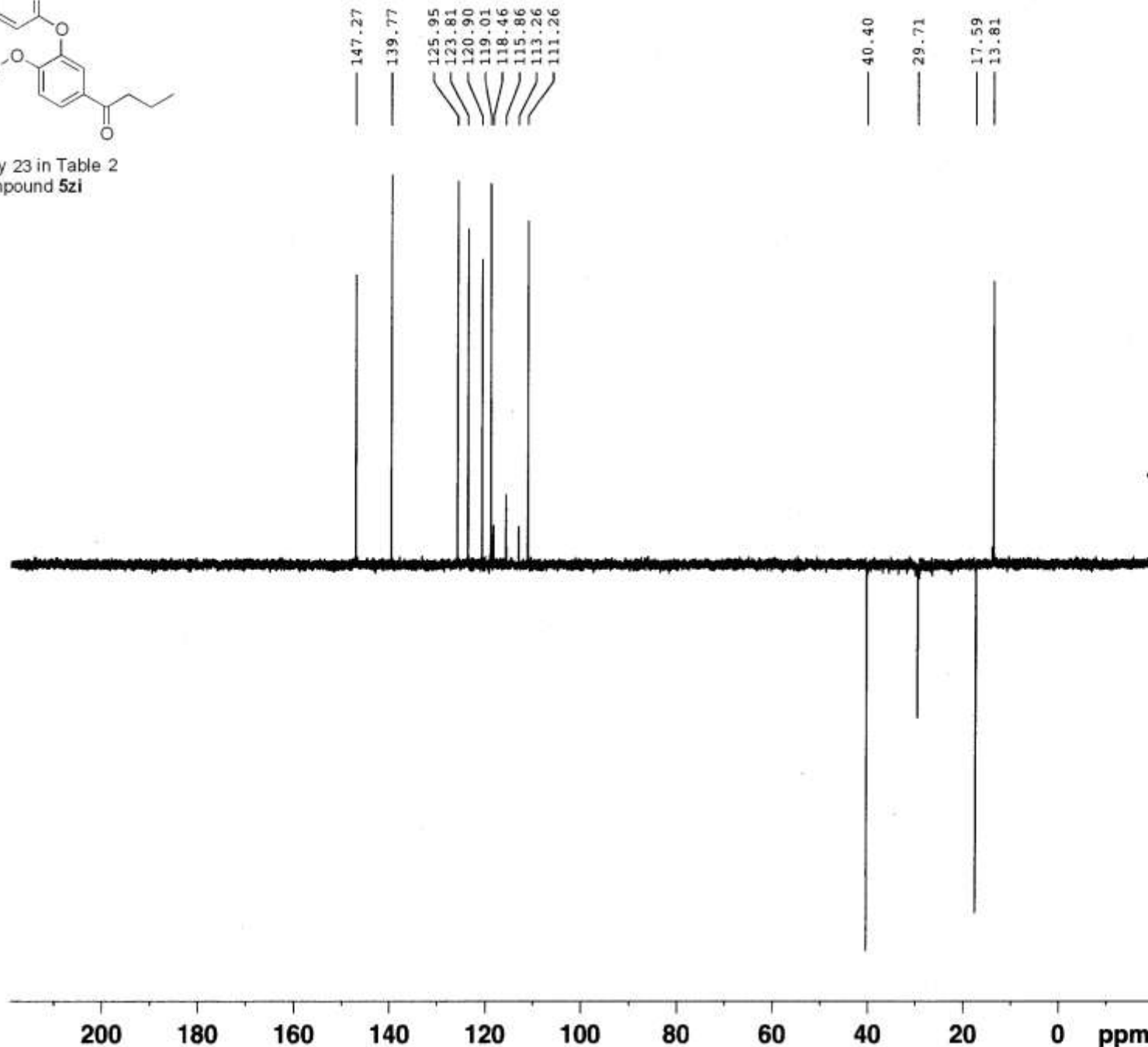
==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127781 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00



Entry 23 in Table 2  
Compound 5zi



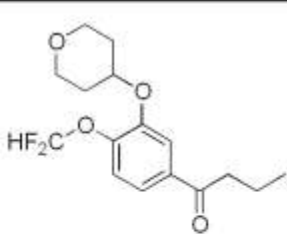
Current Data Parameters  
NAME n35  
EXPNO 3  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041119  
Time 10.39  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
dept135  
PULPROG  
TD 65536  
SOLVENT CDC13  
NS 55  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 6.00 usec  
TE 298.3 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



Entry 24 in Table 2  
Compound 5zh

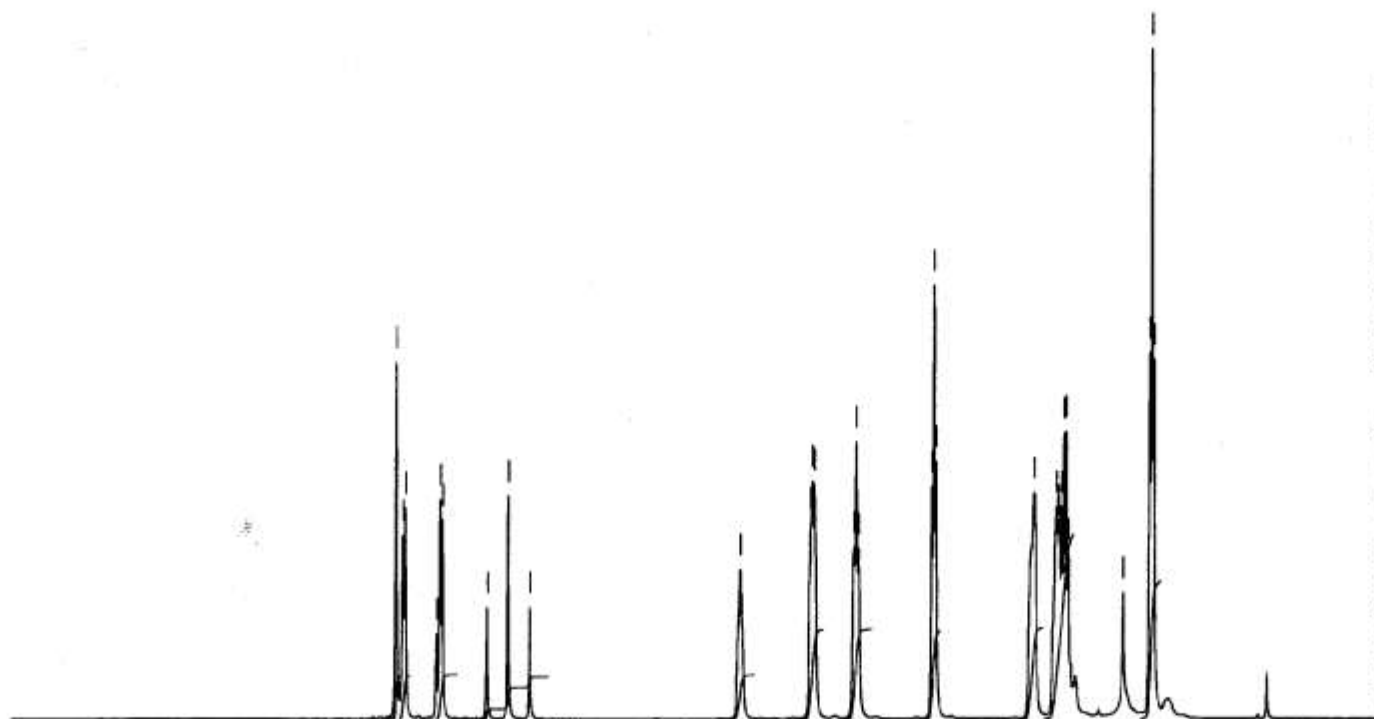
7.622  
7.664  
7.643  
7.271  
7.242  
7.221  
6.829  
6.643  
6.487

4.618

3.998  
3.962  
3.969  
3.622  
3.601  
3.690

2.933  
2.915  
2.897

2.038  
1.843  
1.832  
1.822  
1.812  
1.792  
1.774  
1.758  
1.738  
1.269  
1.026  
1.007  
0.989



1.00  
1.00  
1.02  
0.96

1.00  
2.03  
2.04  
2.01

2.07  
4.20

3.13



Current Data Parameters

NAME n55  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters

Date\_ 20041222  
Time 11.29  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 101.6  
DW 60.400 usec  
DE 6.00 usec  
TE 299.3 K  
D1 1.0000000 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*

NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SF01 400.1324710 MHz

F2 - Processing parameters

SI 32768  
SF 400.1300056 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



Current Data Parameters  
NAME n55  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041222  
Time 11.33  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 291  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 456.1  
DW 20.850 usec  
DE 6.00 usec  
TE 299.7 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

198.93

148.83  
145.04

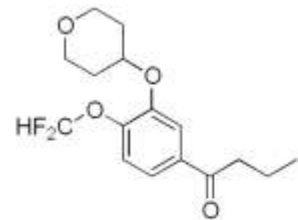
135.38

122.14  
122.07  
118.46  
115.87  
115.29  
113.28

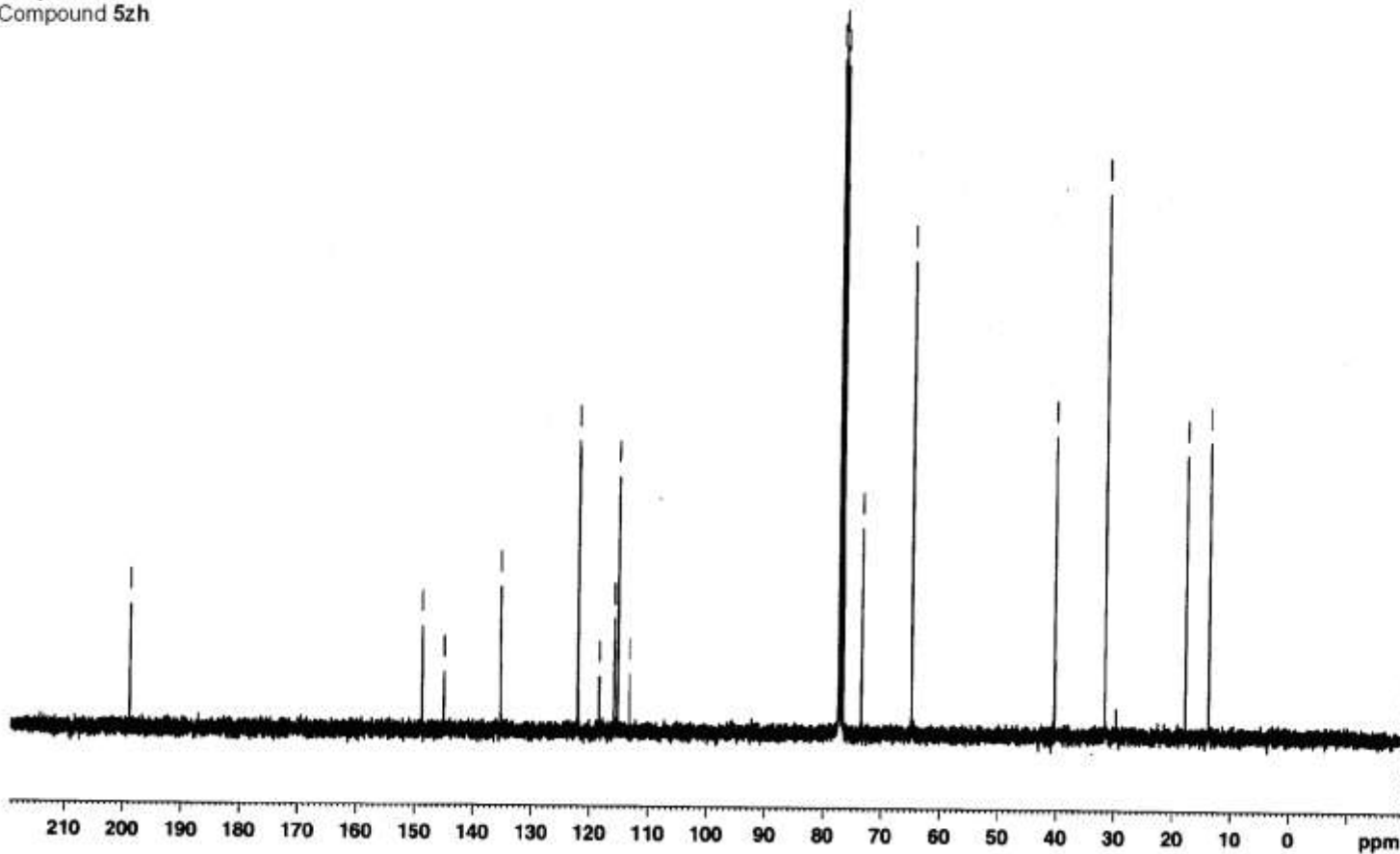
77.35  
77.03  
76.71  
73.50  
64.89

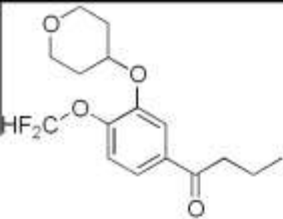
40.39  
31.62

17.80  
13.84



Entry 24 in Table 2  
Compound 5zh





Entry 24 in Table 2  
Compound 5zh

122.14  
122.07  
118.46  
115.87  
115.28

73.49

64.90

40.39

31.62

17.80

13.84



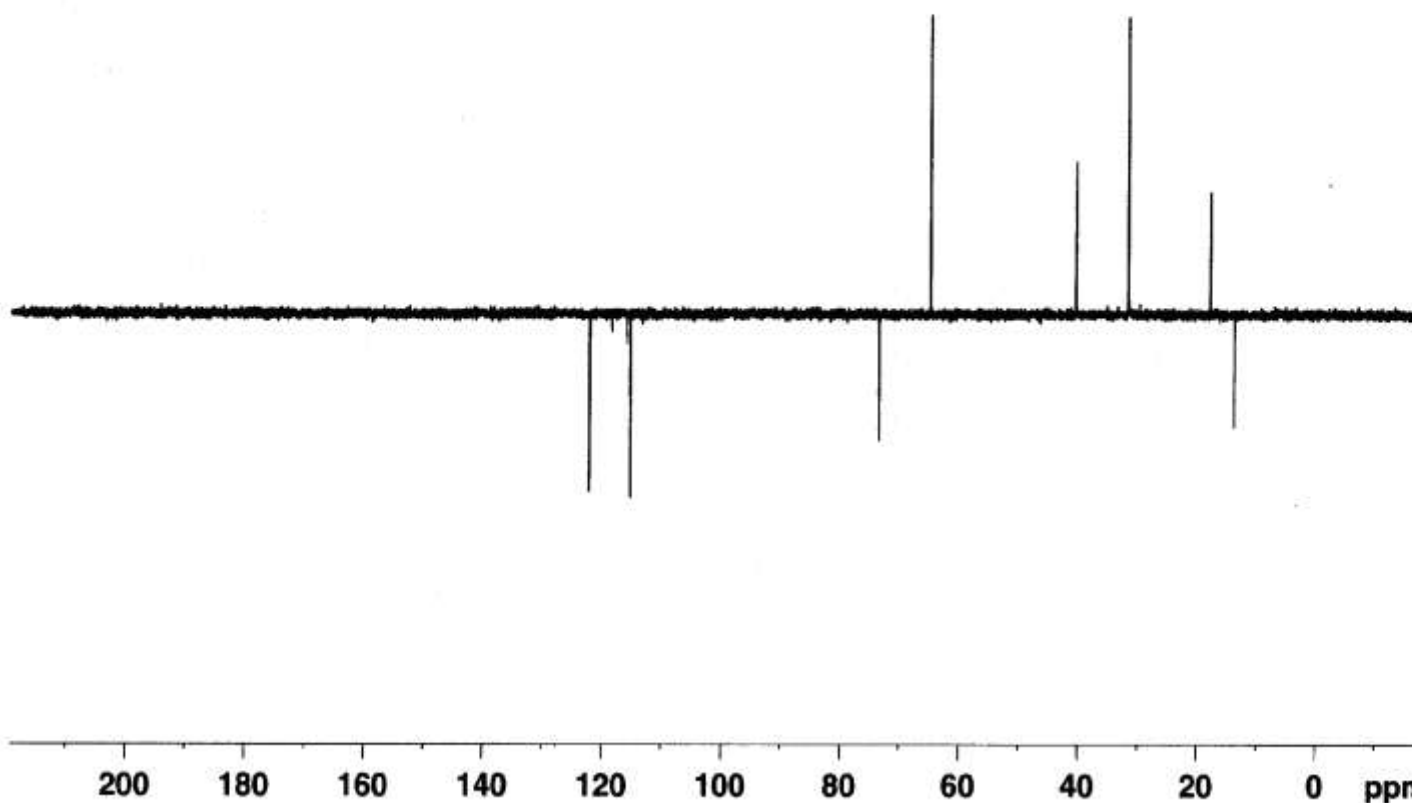
Current Data Parameters  
NAME n55  
EXPNO 3  
PROCNO 1

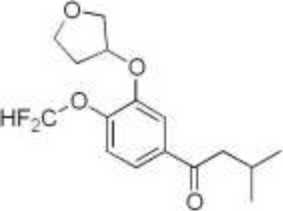
F2 - Acquisition Parameters  
Date\_ 20041222  
Time 11.50  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 118  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 23170.5  
DW 20.850 usec  
DE 6.00 usec  
TE 299.7 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

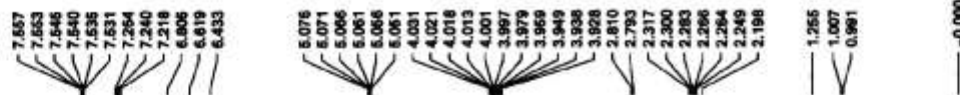
===== CHANNEL f2 =====  
CFDPG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40





Entry 25 in Table 2  
Compound 5v

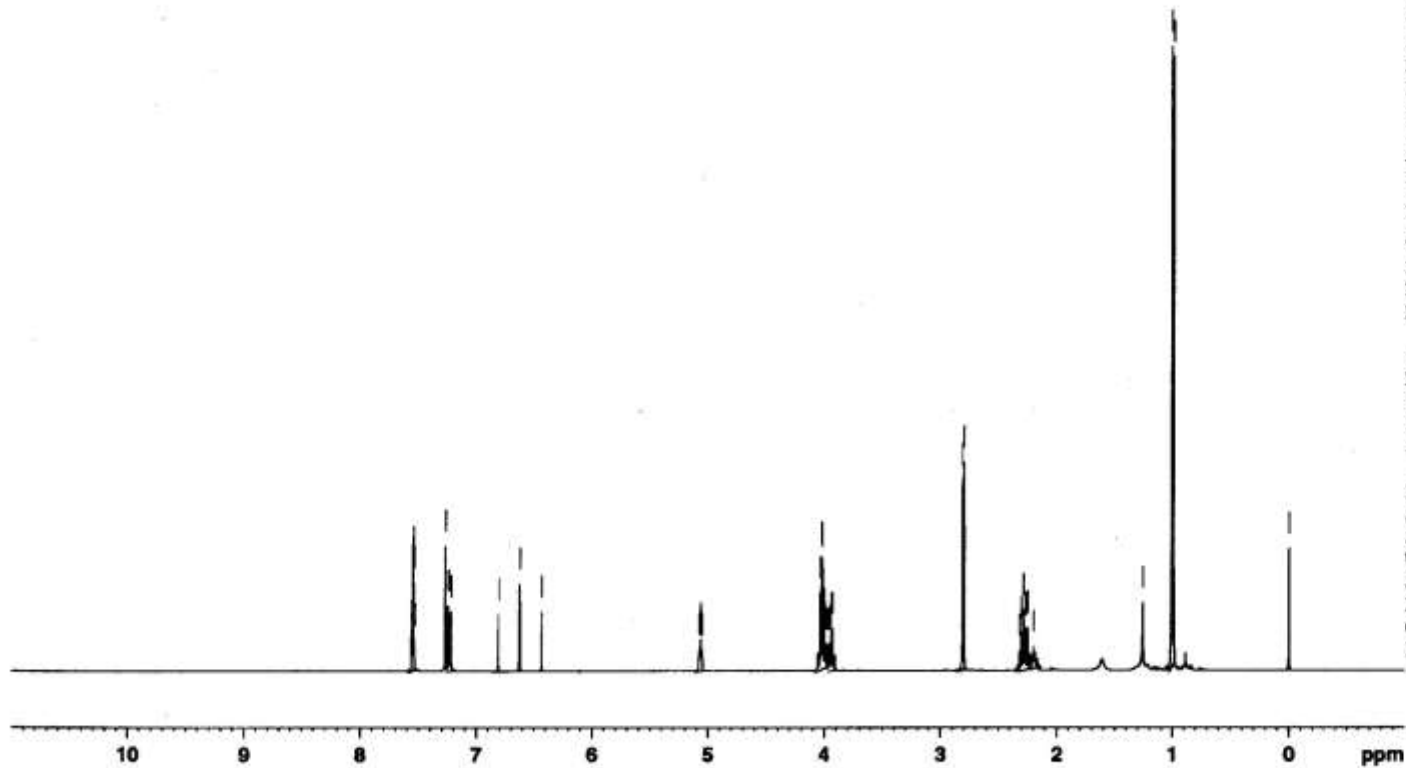


Current Data Parameters  
NAME z1-n-91  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20051010  
Time 16.47  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 181  
DW 60.400 usec  
DE 7.00 usec  
TE 297.9 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300078 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00







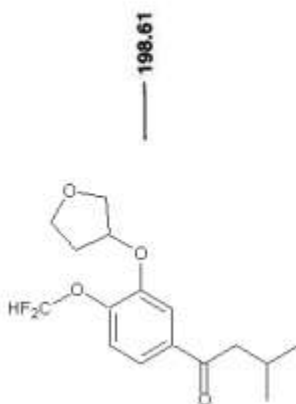
Current Data Parameters  
NAME n91  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050225  
Time 1.14  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT cdc13  
NS 405  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 5160.6  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.89999998 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

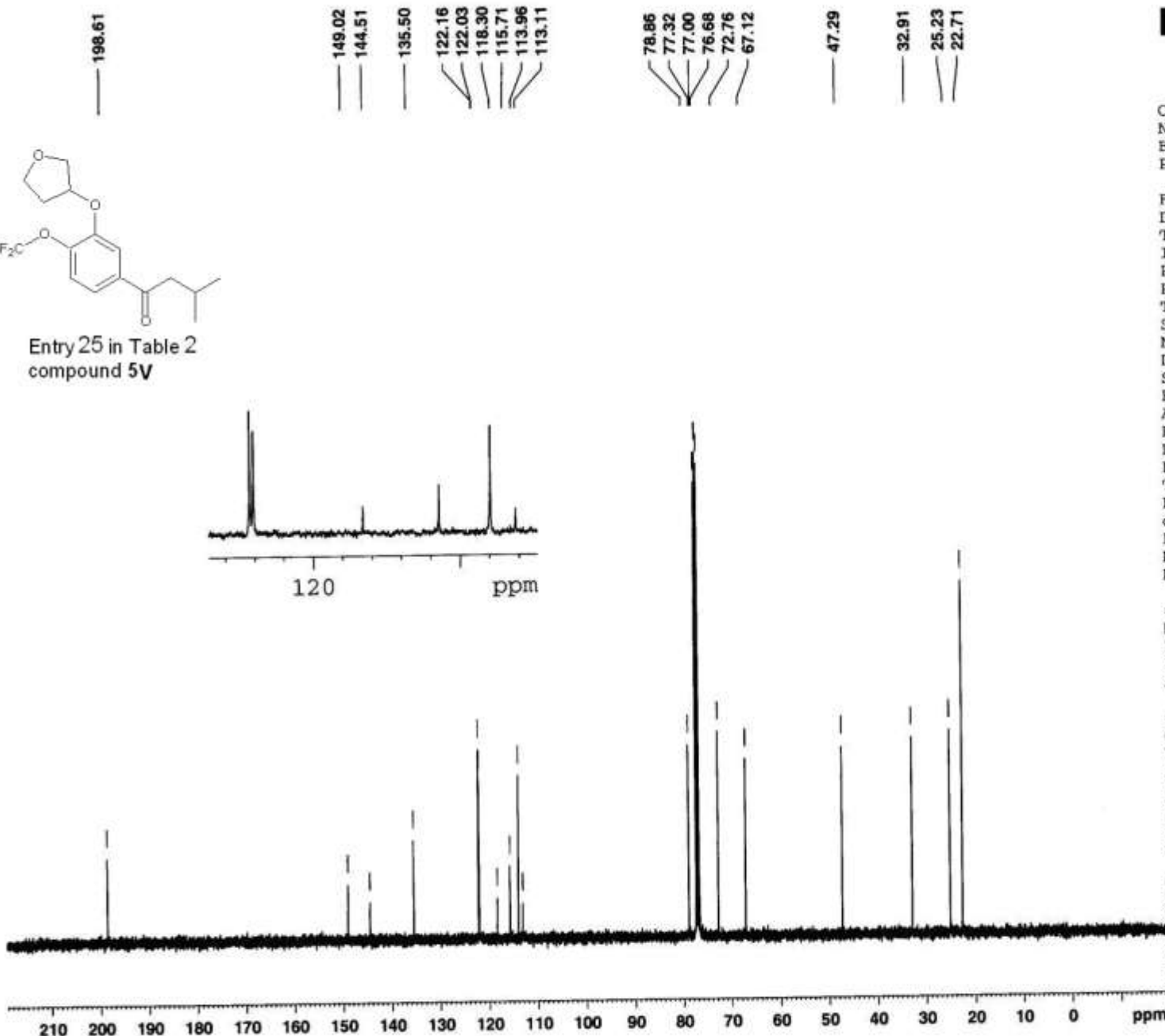
==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

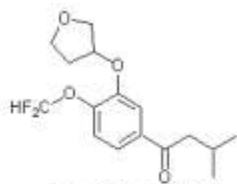
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127722 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00



Entry 25 in Table 2  
compound 5V





Entry 25 in Table 2  
compound 5V



122 120 118 116 114 ppm

122.19  
122.07  
115.74  
113.99

78.89  
72.79  
67.15

47.32

32.95  
25.26  
22.75



Current Data Parameters  
NAME n91  
EXPNO 3  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050225  
Time 1.40  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 164  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

200 180 160 140 120 100 80 60 40 20 0 ppm





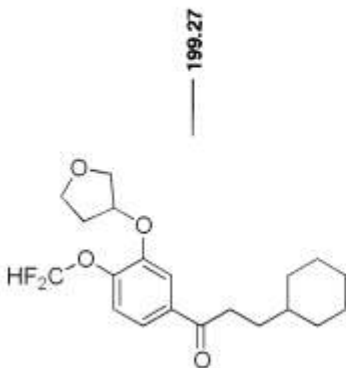
Current Data Parameters  
NAME n100  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050309  
Time 11.17  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT cdc13  
NS 455  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 6502  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

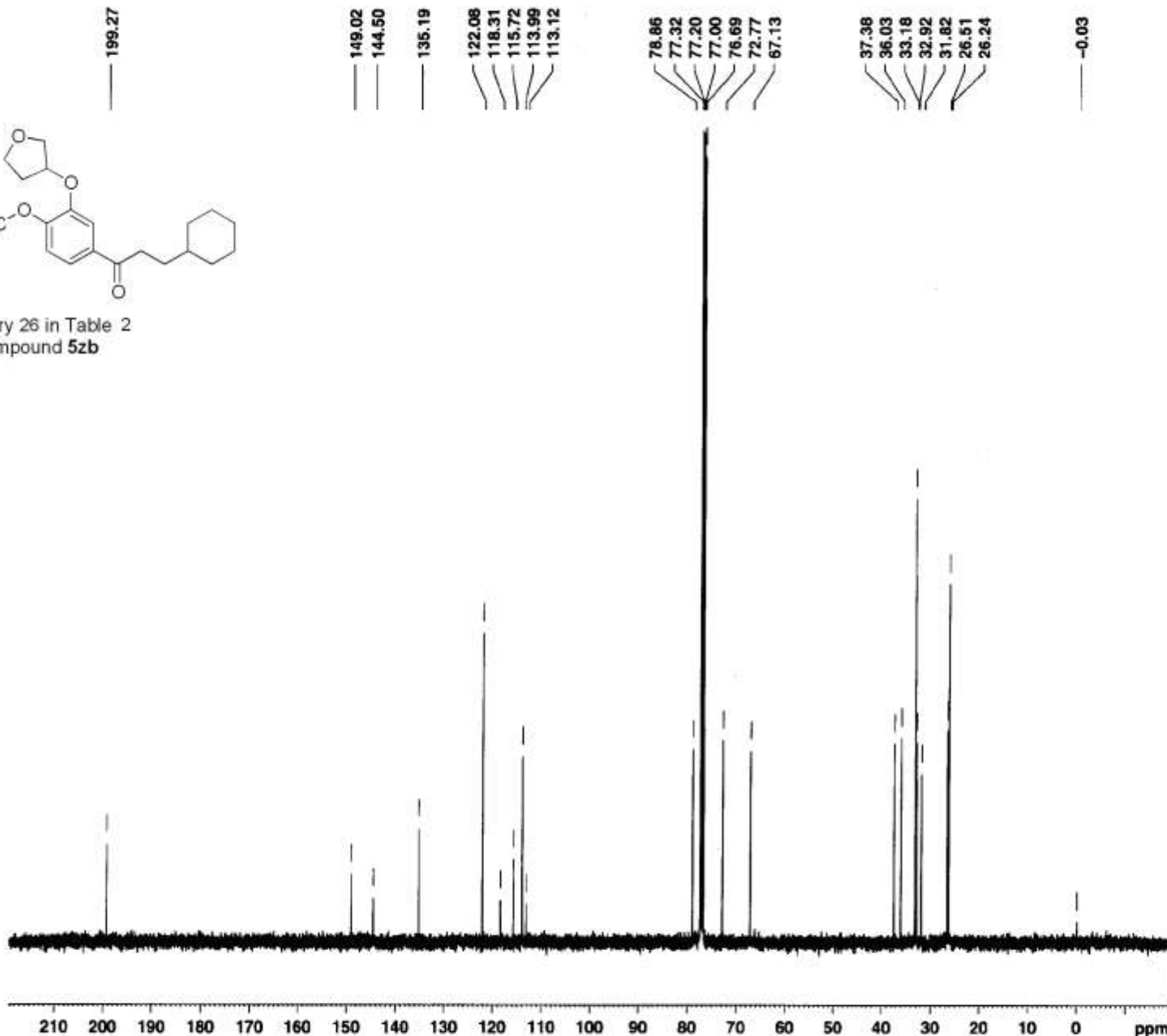
=====  
CHANNEL f1  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

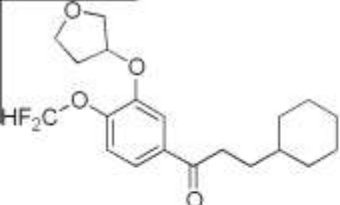
=====  
CHANNEL f2  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127715 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



Entry 26 in Table 2  
Compound 5zb





Entry 26 in Table 2  
Compound **5zb**

122.11  
115.74  
114.01

78.89  
72.79  
67.16

37.41  
36.05  
33.20  
32.95  
31.85  
26.54  
26.27



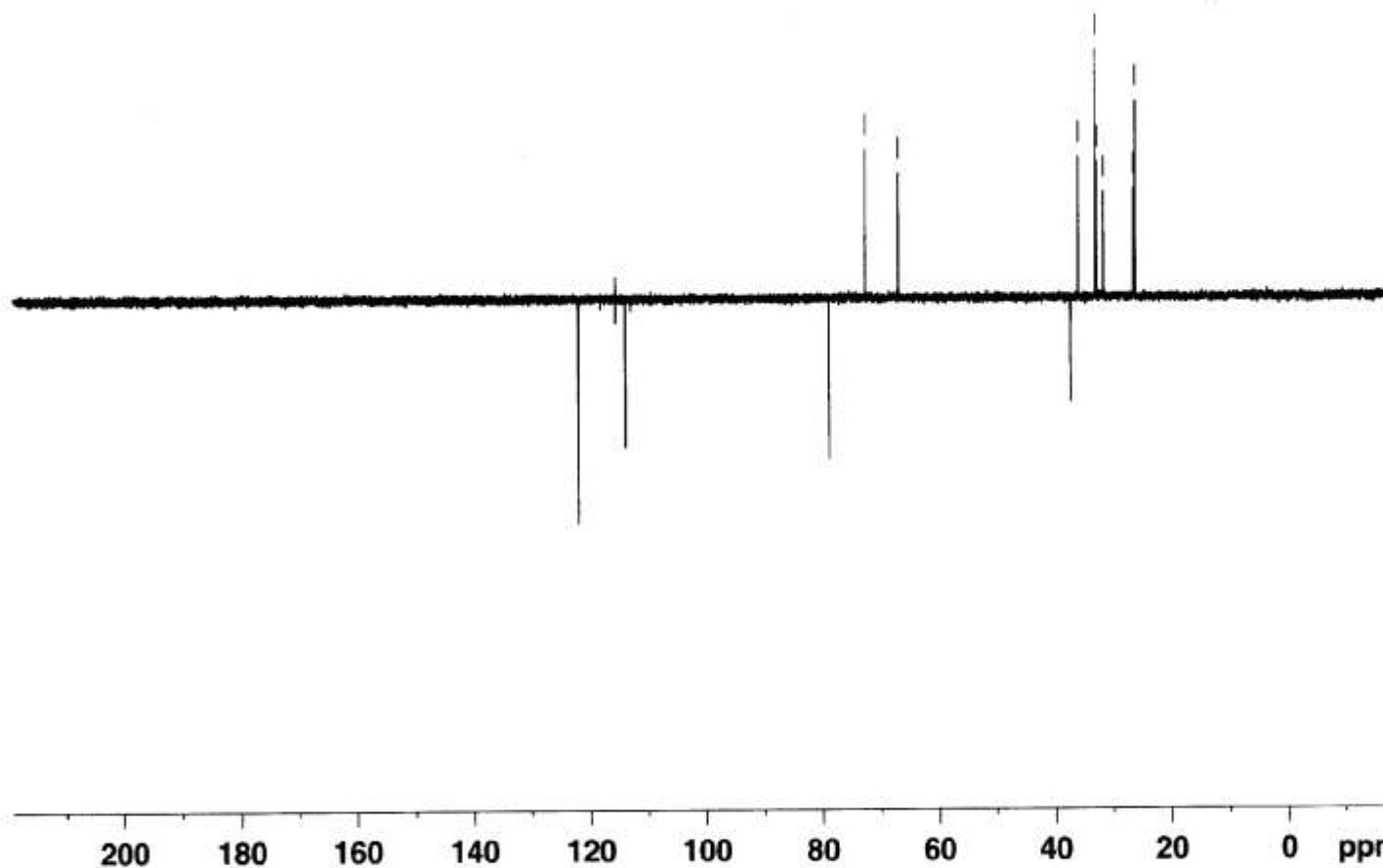
Current Data Parameters  
NAME n100  
EXPNO 3  
PROCNO 1

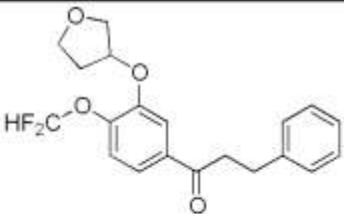
F2 - Acquisition Parameters  
Date\_ 20050309  
Time 11.42  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 256  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 29193  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
CNST2 145.000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

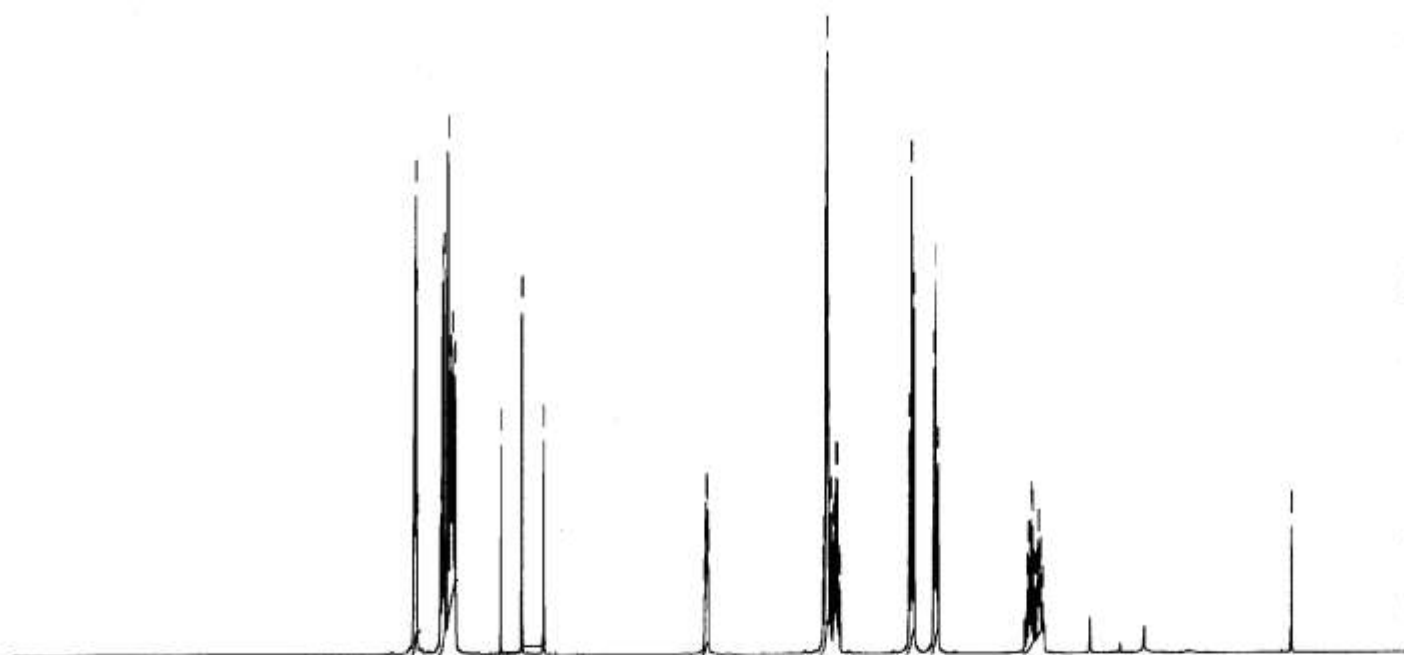
F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40





Entry 27 in Table 2  
Compound 5zd

7.646  
7.641  
7.533  
7.528  
7.524  
7.519  
7.317  
7.314  
7.299  
7.286  
7.281  
7.249  
7.231  
7.228  
7.215  
7.207  
7.201  
7.193  
6.796  
6.609  
8.423  
5.046  
5.042  
5.037  
5.032  
5.027  
5.022  
5.017  
5.011  
4.022  
4.006  
4.001  
4.001  
3.996  
3.989  
3.984  
3.980  
3.968  
3.963  
3.941  
3.930  
3.920  
3.909  
3.899  
3.888  
3.265  
3.254  
3.248  
3.073  
3.054  
3.035  
2.972  
2.259  
2.244  
2.238  
2.224  
2.218  
2.203  
2.188  
2.184  
2.177  
2.173  
2.167  
2.161  
2.156  
2.139  
0.000



Current Data Parameters  
NAME n101  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050310  
Time 13.44  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT D2O  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 64  
DW 60.400 usec  
DE 7.00 usec  
TE 298.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300129 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



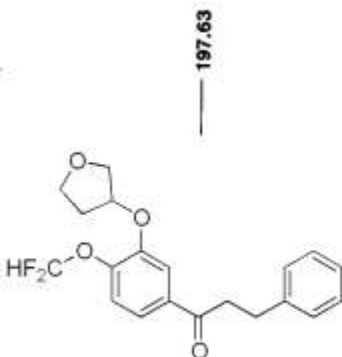
Current Data Parameters  
NAME n101  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050310  
Time 13.46  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT cdcl3  
NS 142  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 6502  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.8999999 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

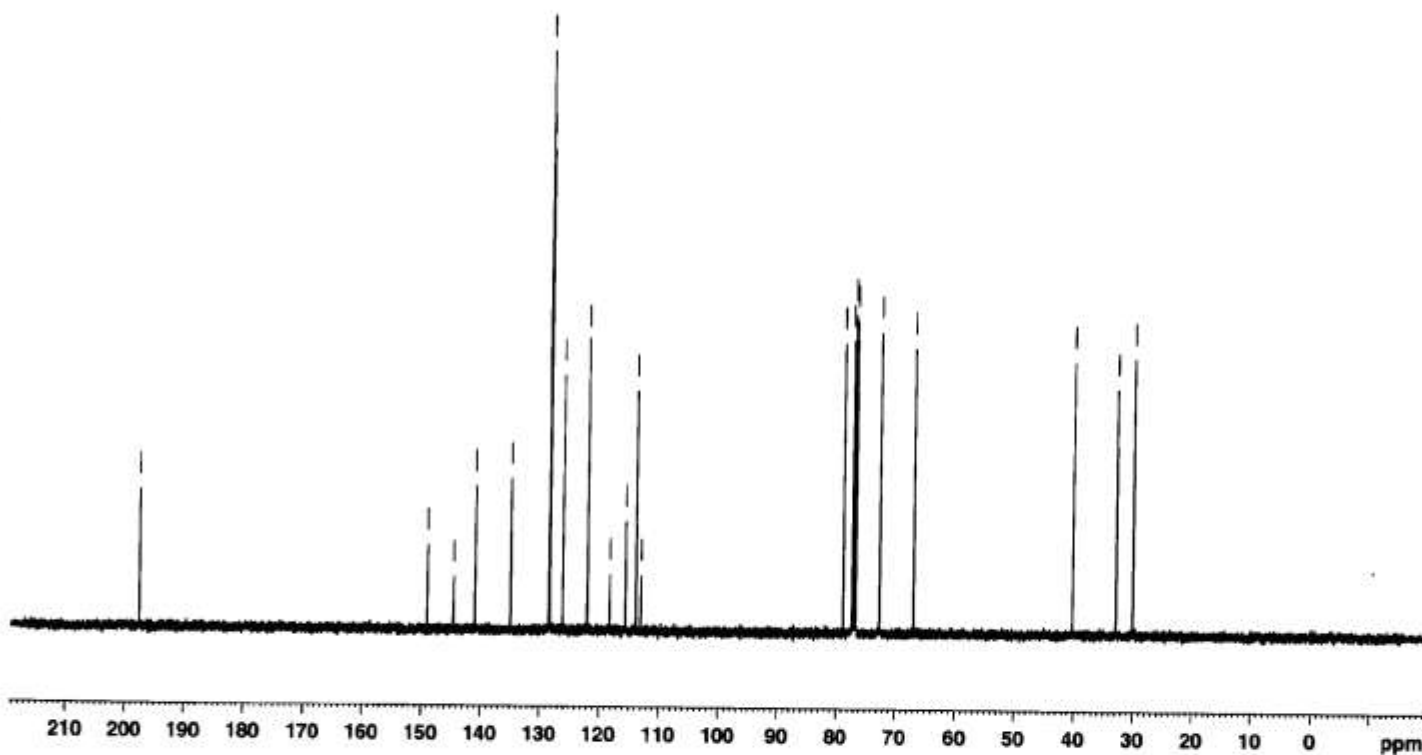
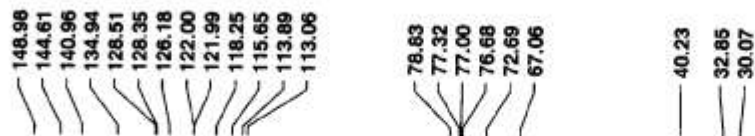
==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

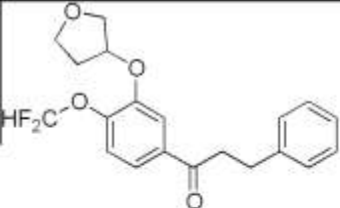
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127773 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00

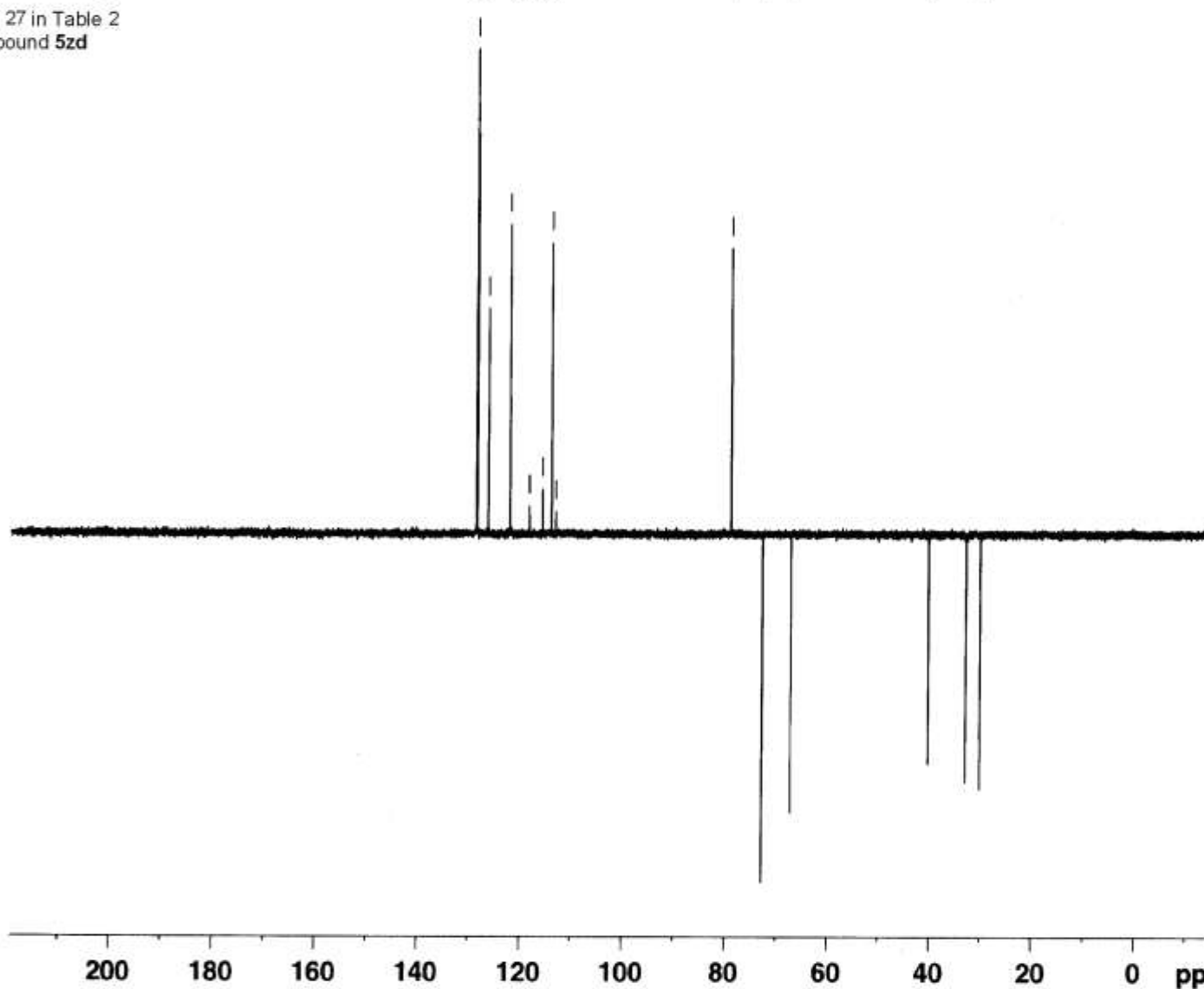


Entry 27 in Table 2  
Compound 5zd





Entry 27 in Table 2  
Compound 5zd



Current Data Parameters  
 NAME n101  
 EXPNO 3  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20050310  
 Time 13.58  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG dept135  
 TD 65536  
 SOLVENT CDCl3  
 NS 90  
 DS 4  
 SWH 23980.814 Hz  
 FIDRES 0.365918 Hz  
 AQ 1.3664756 sec  
 RG 29193  
 DW 20.850 usec  
 DE 7.00 usec  
 TE 298.2 K  
 CNST2 145.0000000  
 D1 2.00000000 sec  
 d2 0.00344828 sec  
 d12 0.00002000 sec  
 DELTA 0.00001019 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.00 usec  
 p2 16.00 usec  
 PL1 -3.00 dB  
 SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 P3 12.38 usec  
 p4 24.75 usec  
 PCPD2 70.00 usec  
 PL2 -1.00 dB  
 PL12 14.00 dB  
 SFO2 400.1316005 MHz

F2 - Processing parameters  
 SI 32768  
 SF 100.6127690 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40





Current Data Parameters  
NAME n89  
EXPNO 1  
PROCNO 1

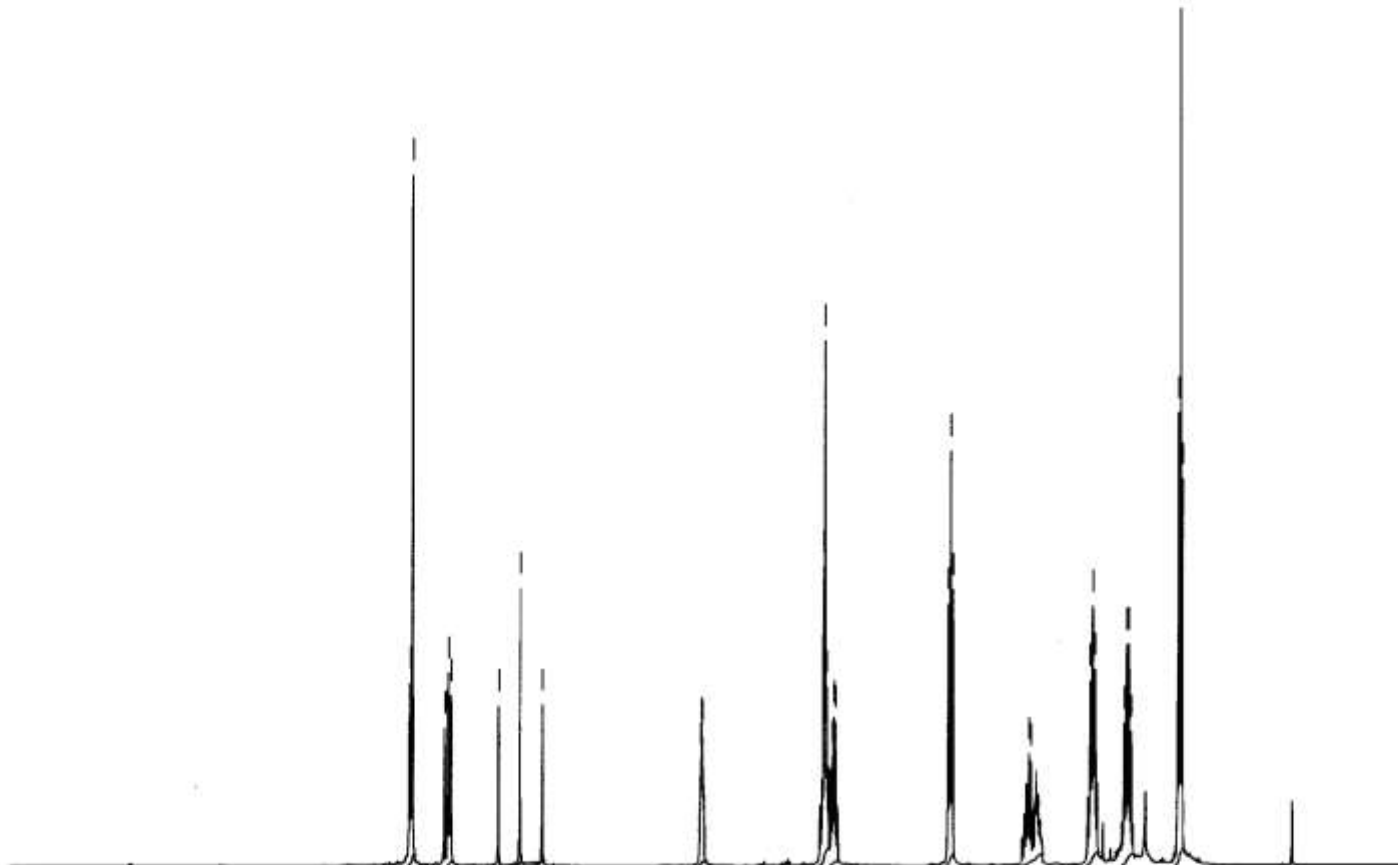
F2 - Acquisition Parameters  
Date\_ 20050221  
Time 22.55  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
POLPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 90.5  
DW 60.400 usec  
DE 7.00 usec  
TE 300.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300051 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40

Entry 28 in Table 2  
Compound 52a

7.570  
7.565  
7.546  
7.271  
7.238  
7.219  
6.807  
6.621  
6.435  
5.087  
5.062  
5.068  
4.026  
4.015  
4.008  
3.997  
3.994  
3.944  
3.834  
3.823  
2.963  
2.934  
2.916  
2.289  
2.246  
1.794  
1.715  
1.696  
1.439  
1.420  
1.401  
1.383  
0.976  
0.968  
0.940



1.90  
0.93  
0.98  
0.96  
2.94  
1.01  
1.90  
2.00  
2.29  
2.06  
2.94



Current Data Parameters  
NAME n89  
EXPNO 2  
PROCNO 1

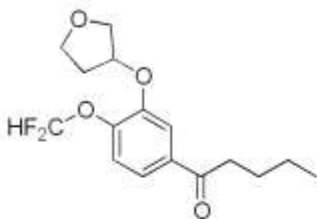
F2 - Acquisition Parameters  
Date\_ 20050221  
Time 23.03  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 257  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 5160.6  
DW 20.850 usec  
DE 7.00 usec  
TE 300.0 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.8999999 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

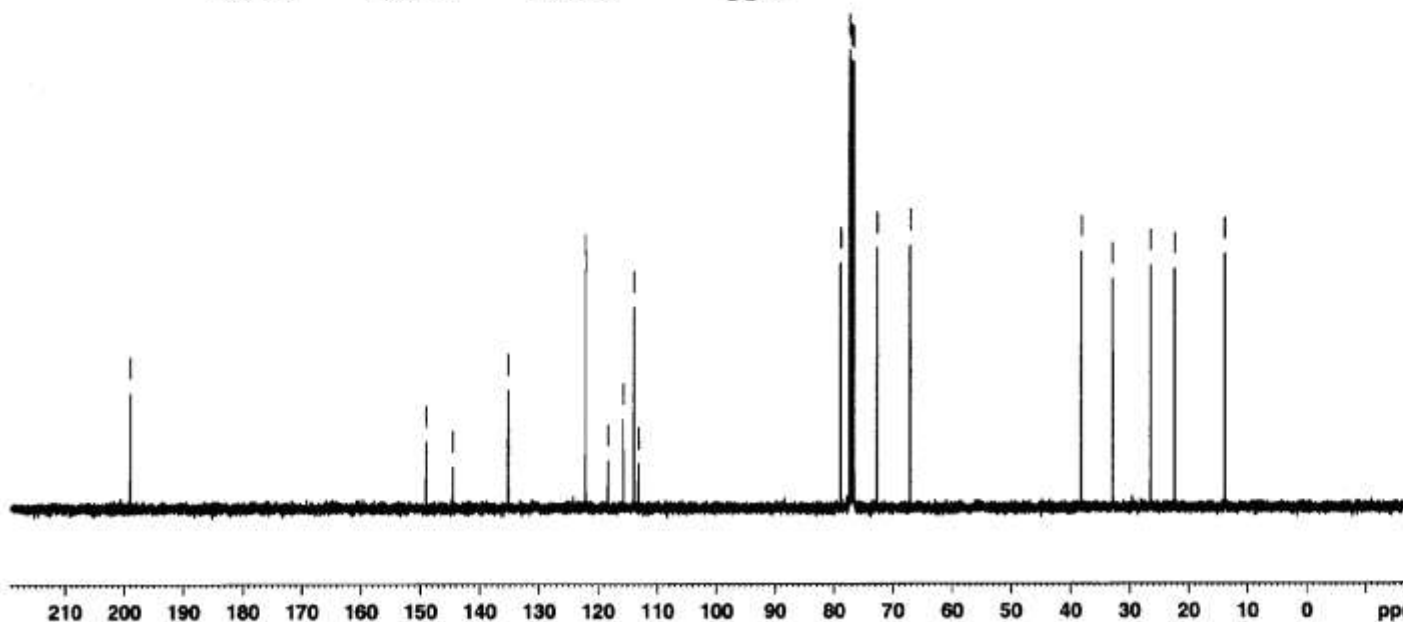
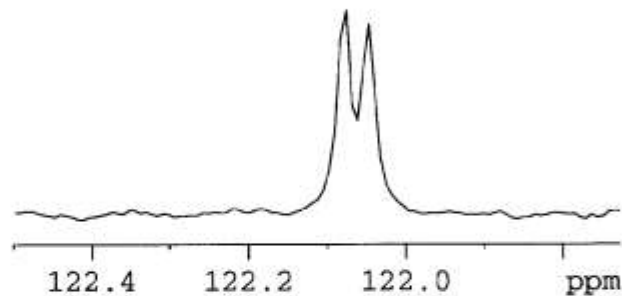
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

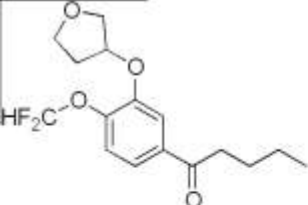
F2 - Processing parameters  
SI 32768  
SF 100.6127722 MHz  
WDW EM  
SSB 0  
LB 1.00 HZ  
GB 0  
PC 1.00

198.97  
149.01  
144.51  
135.21  
122.08  
122.05  
118.31  
115.71  
113.97  
113.12  
78.87  
77.32  
77.00  
76.69  
72.74  
67.11  
38.16  
32.90  
26.47  
22.41  
13.88



Entry 28 in Table 2  
Compound 5za





Entry 28 in Table 2  
Compound 5za

122.11  
122.08  
118.34  
115.74  
113.99  
113.15

78.89  
72.78  
67.14

38.19  
32.93  
26.51  
22.44  
13.91



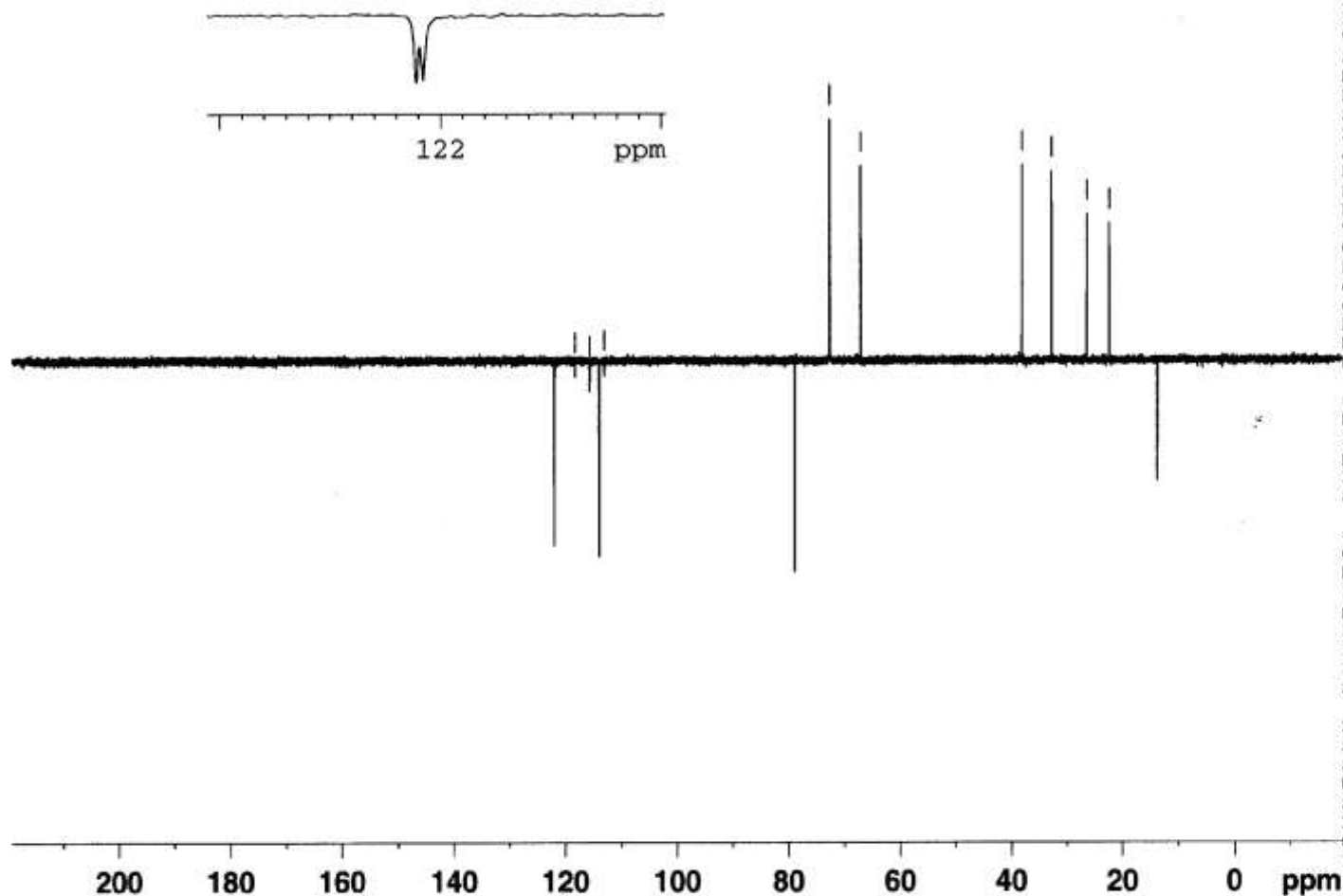
Current Data Parameters  
NAME n89  
EXPNO 3  
PROCNO 1

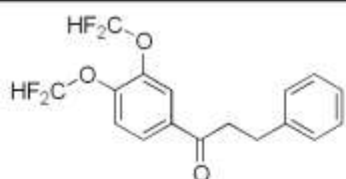
F2 - Acquisition Parameters  
Date\_ 20050221  
Time 23.24  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 126  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 36008  
DW 20.850 usec  
DE 7.00 usec  
TE 299.5 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRR 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
P2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
P4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



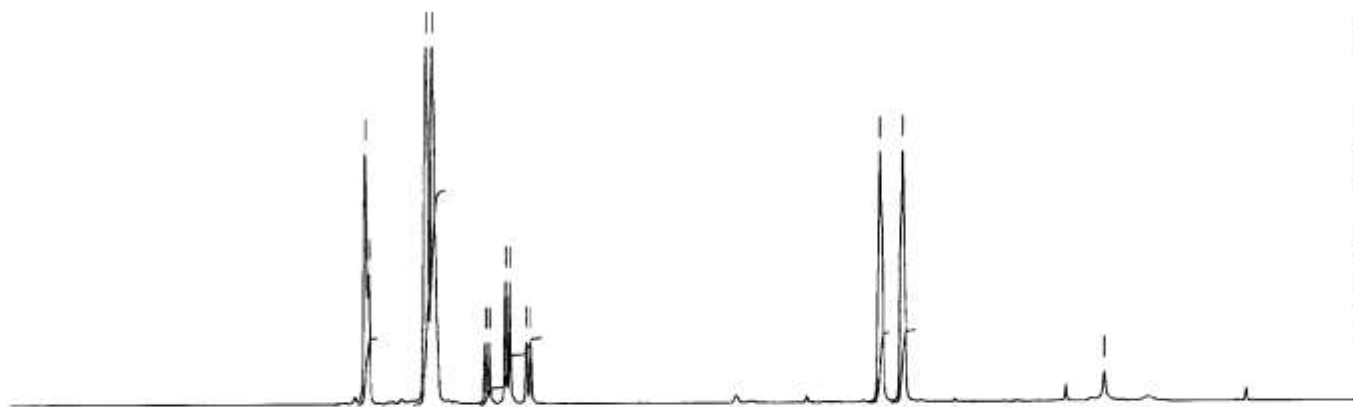


Entry 29 in Table 2  
Compound 5z1

7.832  
7.800  
7.295  
7.244  
6.768  
6.731  
6.687  
6.549  
6.405  
6.366

3.255  
3.065

1.264



2.01  
6.49  
2.00

2.12  
2.20

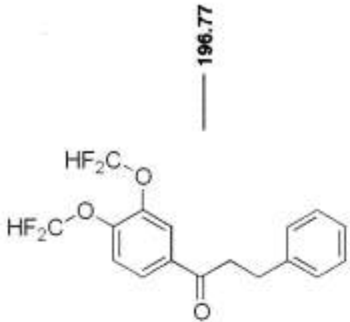


Current Data Parameters  
NAME n98  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050307  
Time 11.27  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 71.8  
DW 60.400 usec  
DE 7.00 usec  
TE 298.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SF01 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300169 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40

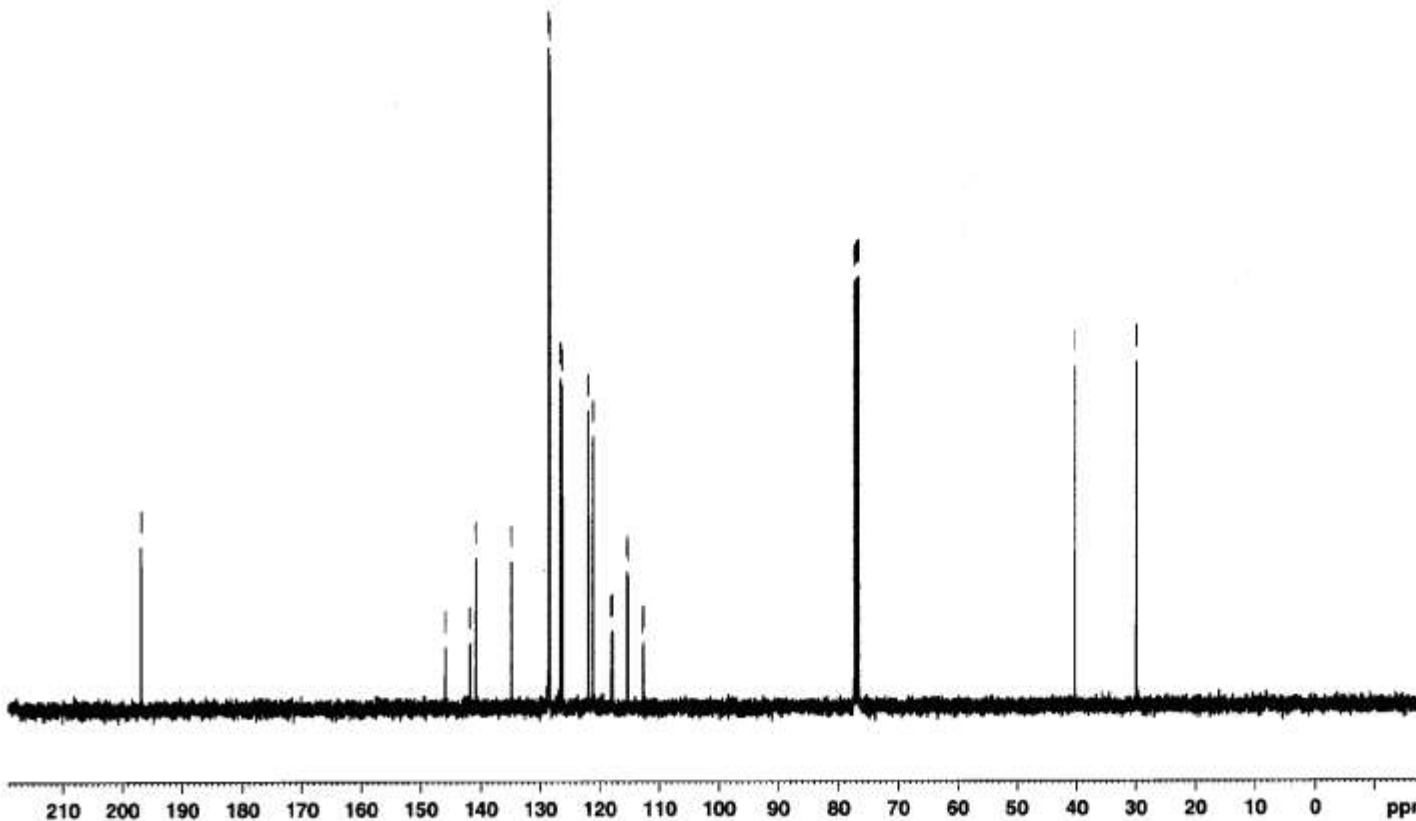


Entry 29 in Table 2  
Compound 5z1

145.99  
141.90  
140.81  
134.89  
128.56  
128.38  
126.50  
126.26  
121.92  
121.15  
118.13  
117.95  
115.51  
115.32  
112.89  
112.70

77.32  
77.00  
76.69

40.34  
29.93



Current Data Parameters  
NAME n98  
EXPNO 2  
PROCNO 1

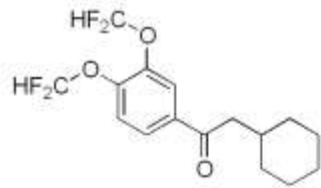
F2 - Acquisition Parameters

Date\_ 20050307  
Time 11.32  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT ~~CDCl3~~ *CDCl3*  
NS 102  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 6502  
DW 20.850 usec  
DE 7.00 usec  
TE 298.3 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127751 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00



Entry 30 in Table 2  
Compound 5zm

7.841  
7.817  
7.339  
7.320  
6.804  
6.777  
6.622  
6.596  
6.440  
6.412

2.797  
2.784  
1.967  
1.761  
1.726  
1.684  
1.306  
1.278  
1.204  
1.176  
1.147  
1.068  
1.028  
0.999

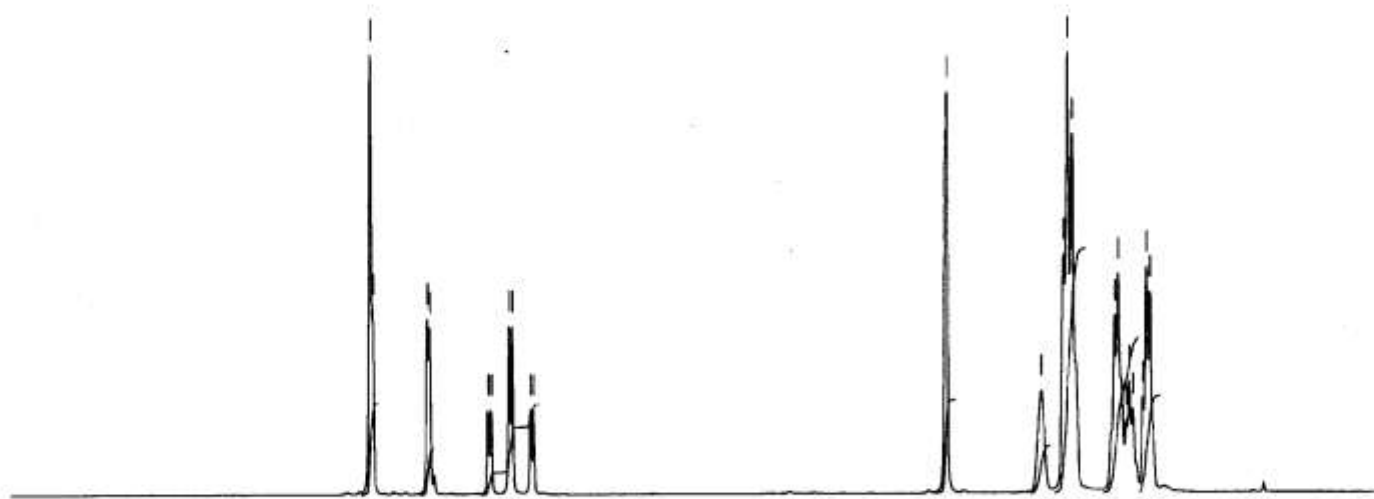


Current Data Parameters  
NAME n99  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050307  
Time 11.04  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 28.5  
DW 60.400 usec  
DE 7.00 usec  
TE 298.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300018 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



2.04  
1.02  
2.00  
2.08  
1.06  
5.45  
3.45  
2.17



Current Data Parameters  
NAME n99  
EXPNO 2  
PROCNO 1

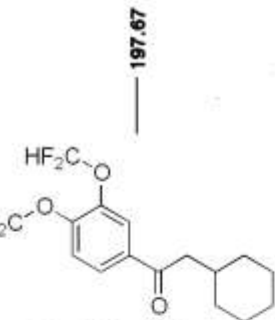
F2 - Acquisition Parameters  
Date\_ 20050307  
Time 11.07  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT ~~CDCl3~~ *CDCl3*  
NS 104  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 6502  
DW 20.850 usec  
DE 7.00 usec  
TE 298.3 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

=====  
CHANNEL f1  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

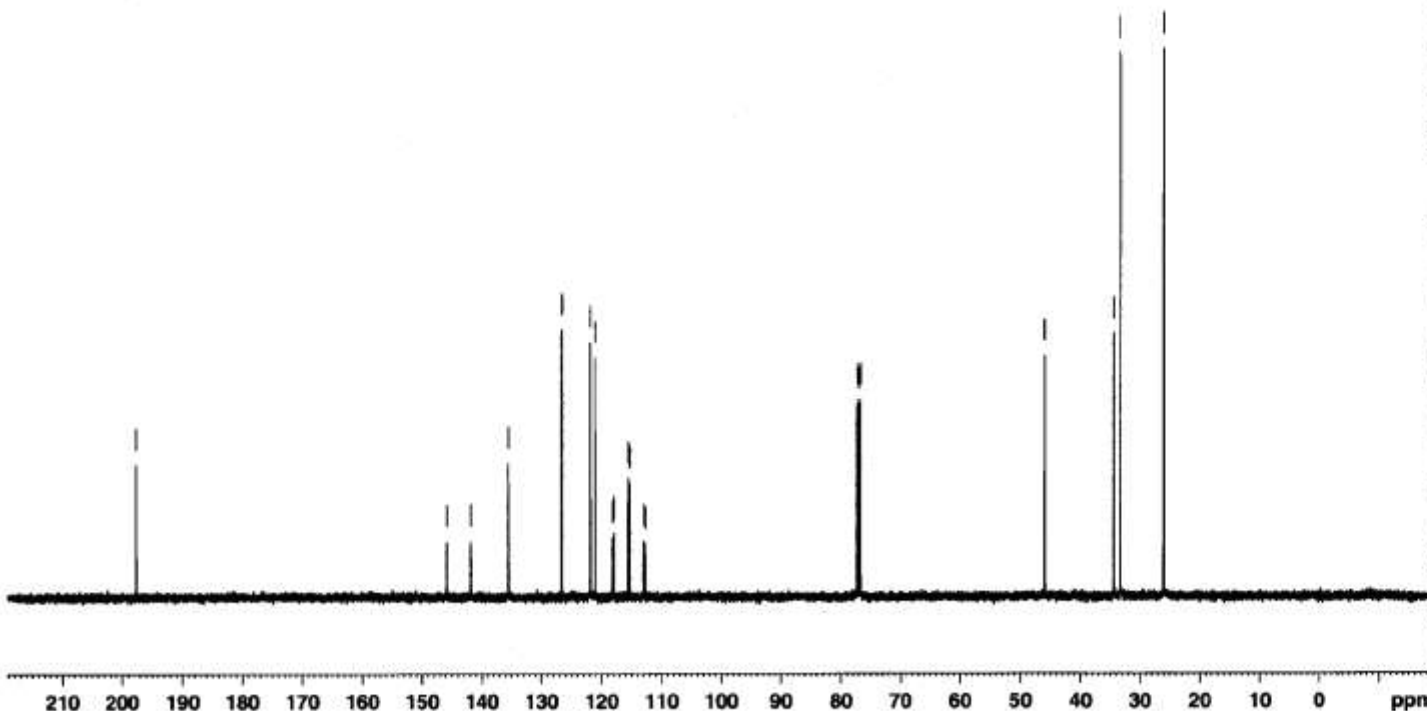
=====  
CHANNEL f2  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

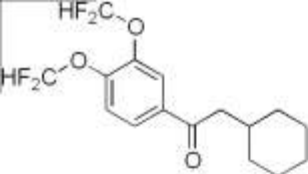
F2 - Processing parameters  
SI 32768  
SF 100.6127729 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00

145.83  
141.90  
135.49  
126.61  
121.93  
121.06  
118.18  
117.99  
115.56  
115.36  
112.95  
112.74  
77.31  
77.00  
76.68  
45.99  
34.43  
33.31  
26.12  
26.04



Entry 30 in Table 2  
Compound 5zm





126.65  
 121.97  
 121.12  
 118.22  
 118.03  
 115.60  
 115.40  
 112.99  
 112.78

46.03  
 34.47  
 33.35  
 26.16  
 26.08



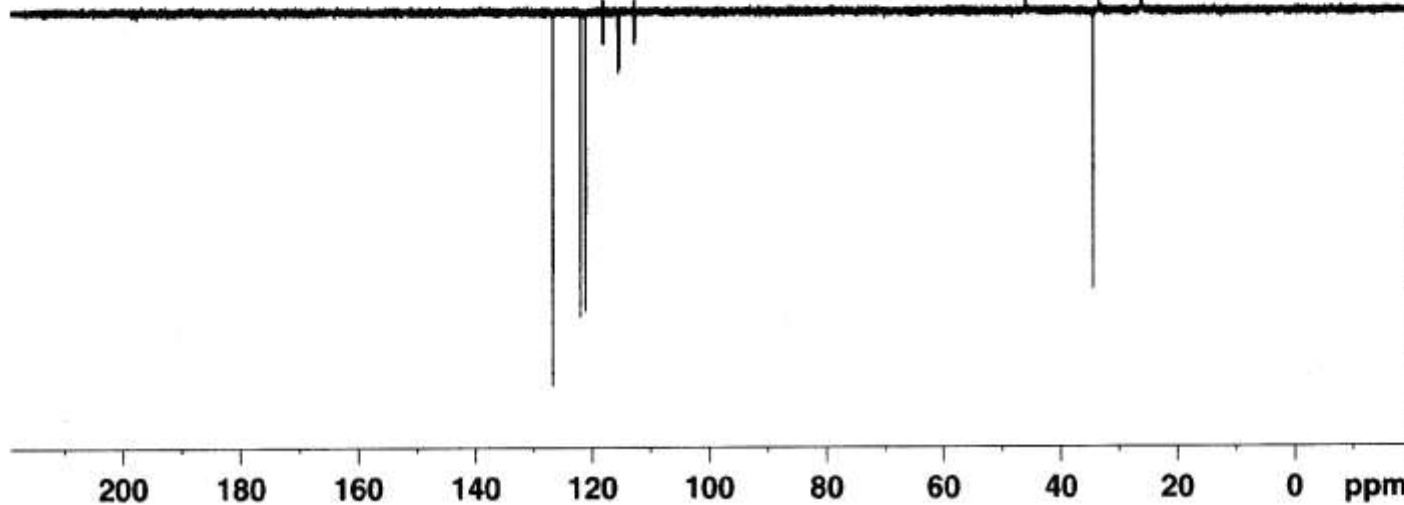
Current Data Parameters  
 NAME n99  
 EXPNO 3  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20050307  
 Time 11.16  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG dept135  
 TD 65536  
 SOLVENT CDC13  
 NS 86  
 DS 4  
 SWH 23980.814 Hz  
 FIDRES 0.365918 Hz  
 AQ 1.3664756 sec  
 RG 26008  
 DW 20.850 usec  
 DE 7.00 usec  
 TE 298.2 K  
 CNST2 145.0000000  
 D1 2.0000000 sec  
 d2 0.00344828 sec  
 d12 0.00002000 sec  
 DELTA 0.00001019 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

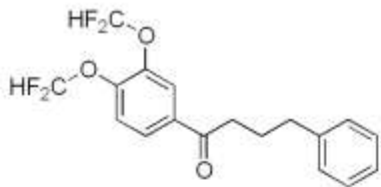
===== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.00 usec  
 p2 16.00 usec  
 PL1 -3.00 dB  
 SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 P3 12.38 usec  
 p4 24.75 usec  
 PCPD2 70.00 usec  
 PL2 -1.00 dB  
 PL12 14.00 dB  
 SFO2 400.1316005 MHz

F2 - Processing parameters  
 SI 32768  
 SF 100.6127690 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40







Entry 31 in Table 2  
Compound 5zj



-0.000

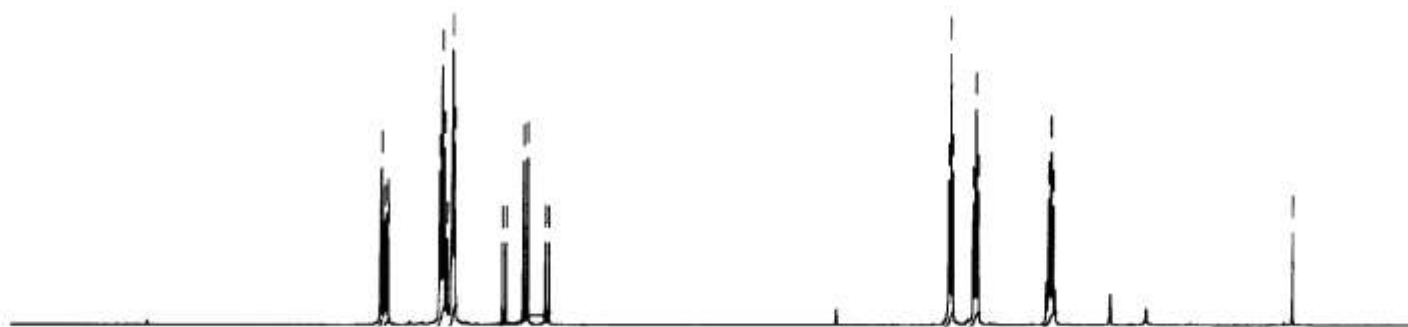


Current Data Parameters  
NAME n115-2  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050404  
Time 9.17  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 161.3  
DW 60.400 usec  
DE 7.00 usec  
TE 298.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

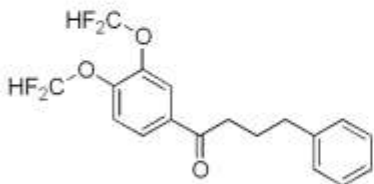
F2 - Processing parameters  
SI 32768  
SF 400.1300124 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



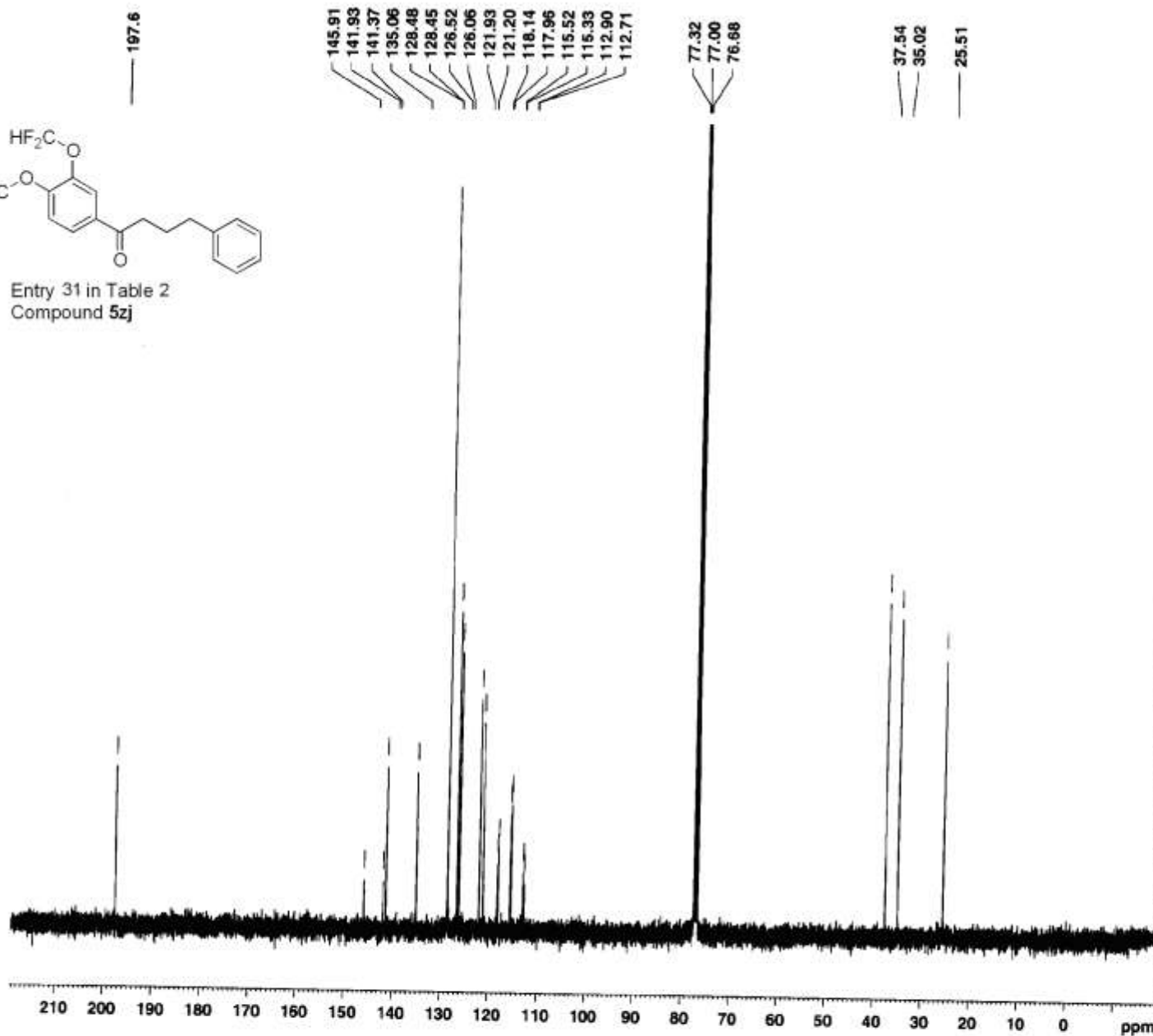
10 9 8 7 6 5 4 3 2 1 0 ppm

0.98  
0.98  
3.12  
3.14  
2.05

2.12  
2.10  
2.11



Entry 31 in Table 2  
Compound 5zj



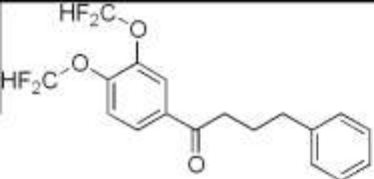
Current Data Parameters  
NAME n115-2  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050404  
Time 9.23  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 204  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 7298.2  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.89999999 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127722 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00



Entry 31 in Table 2  
Compound 5zj

128.51  
128.48  
126.55  
126.09  
121.96  
121.23  
115.55  
115.37

37.57  
35.05  
25.54



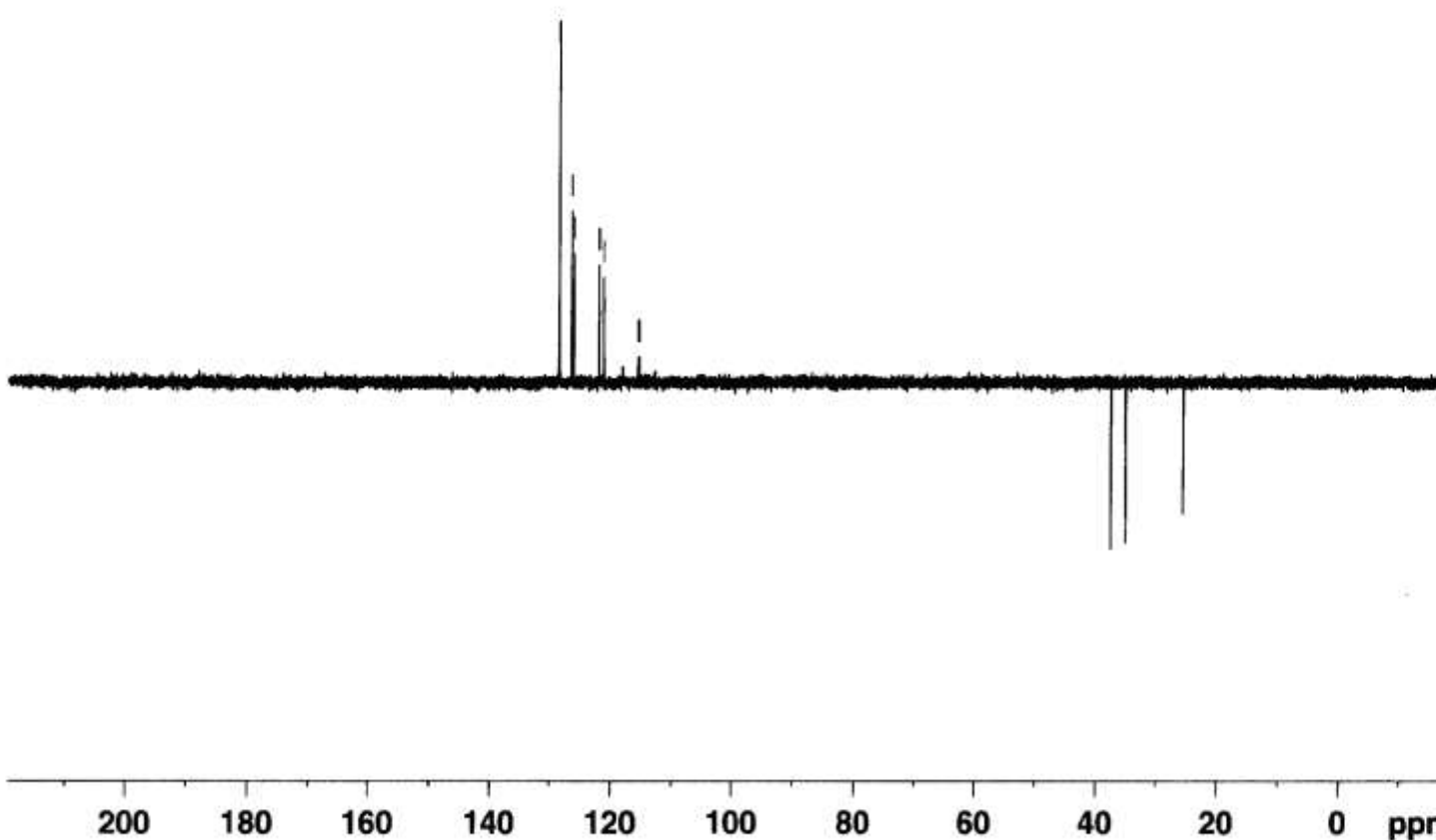
Current Data Parameters  
NAME n115-2  
EXPNO 3  
PROCNO 1

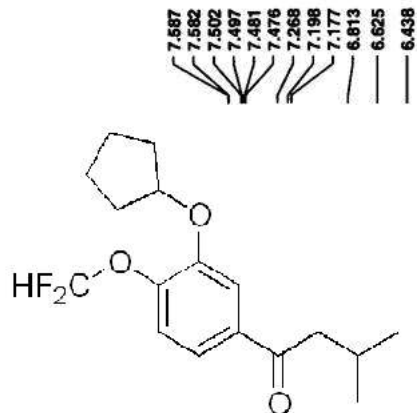
F2 - Acquisition Parameters  
Date\_ 20050404  
Time 9.40  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 83  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 29193  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
CNST2 145.0000000  
d1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

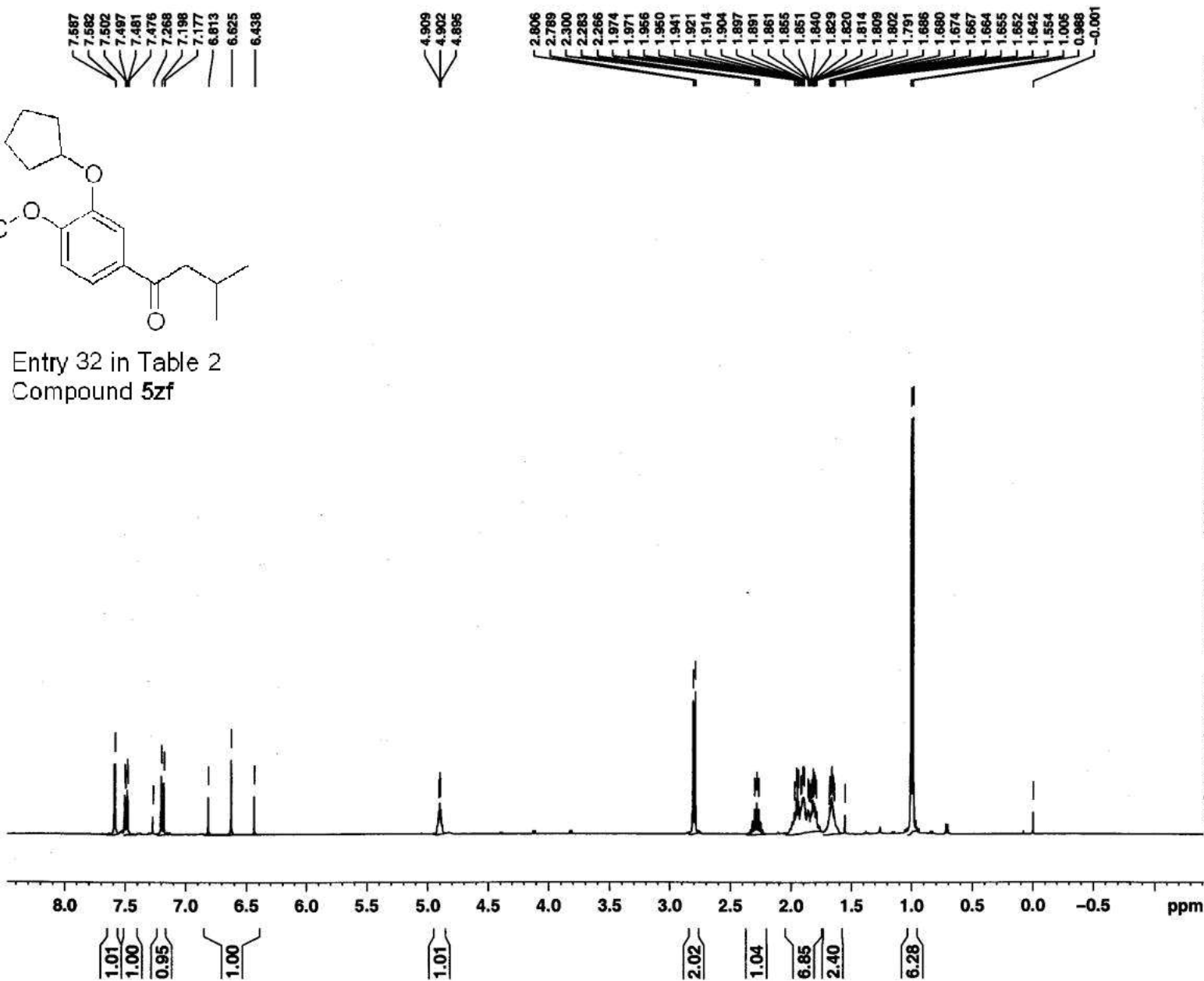
===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40





Entry 32 in Table 2  
Compound 5zf



Current Data Parameters  
NAME n120  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050414  
Time 9.05  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT D2O  
NS 16  
DS 2  
SWH 8278.146  
FIDRES 0.126314  
AQ 3.9584243  
RG 64  
DW 60.400  
DE 7.00  
TE 297.7  
D1 1.00000000  
MCREST 0.00000000  
MCWRK 0.01500000

==== CHANNEL f1 ====  
NUC1 1H  
P1 12.80  
PL1 0.00  
SFO1 400.1324710

F2 - Processing parameters  
SI 32768  
SF 400.1300061  
WDW EM  
SSB 0  
LB 0.30  
GB 0  
PC 1.00



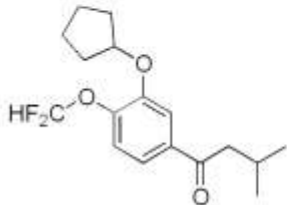
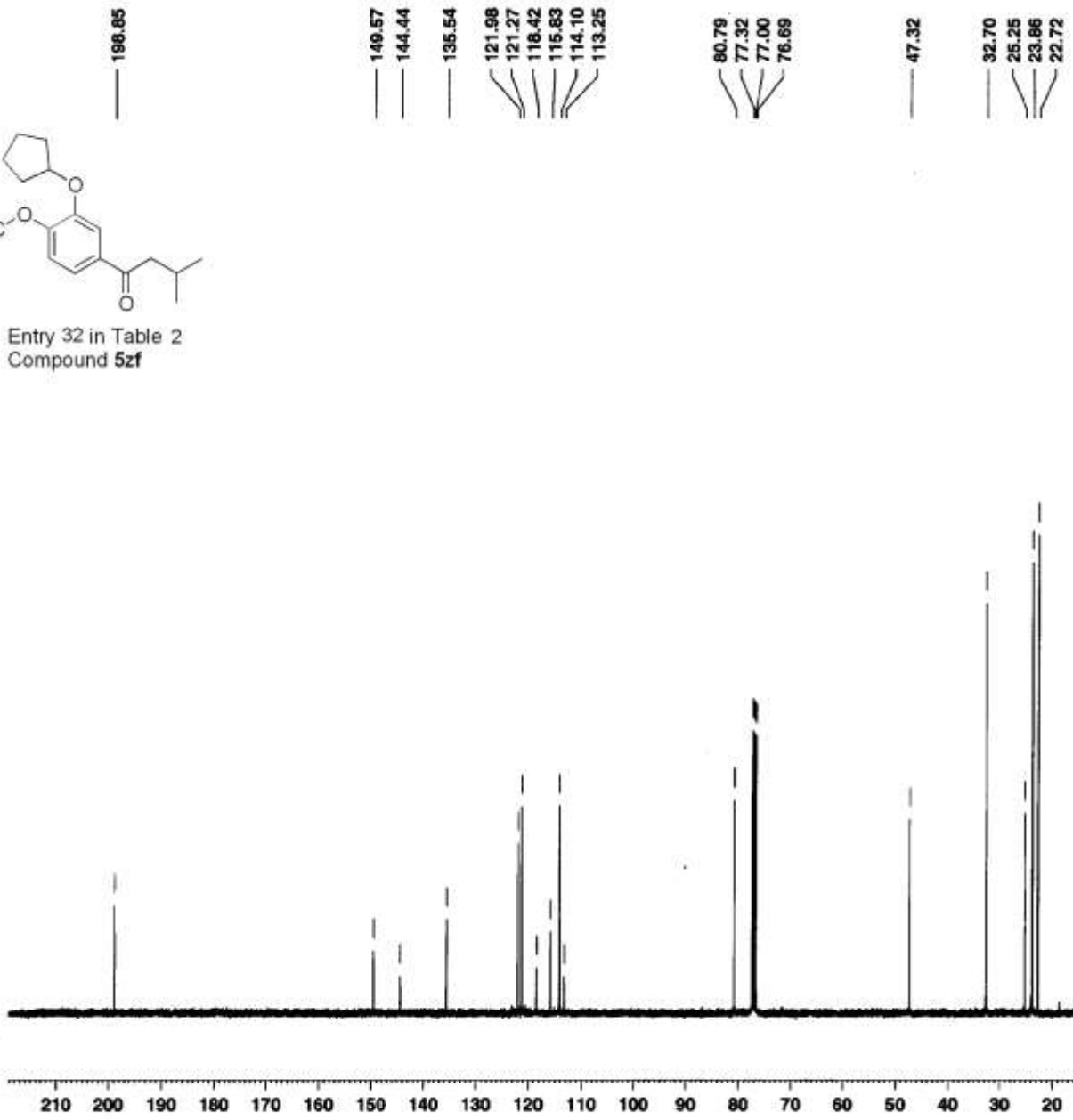
Current Data Parameters  
NAME n120  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050414  
Time 9.11  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 245  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 7298.2  
DW 20.850 usec  
DE 7.00 usec  
TE 298.0 K  
D1 2.0000000 sec  
d11 0.0300000 sec  
DELTA 1.89999998 sec  
MCREST 0.0000000 sec  
MCWRK 0.0150000 sec

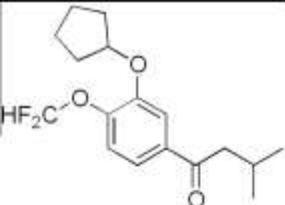
===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127722 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



Entry 32 in Table 2  
Compound 5zf



Entry 32 in Table 2  
Compound **5zf**

122.02  
121.30  
115.87  
114.13

80.82

47.35

32.73  
25.28  
23.89  
22.75



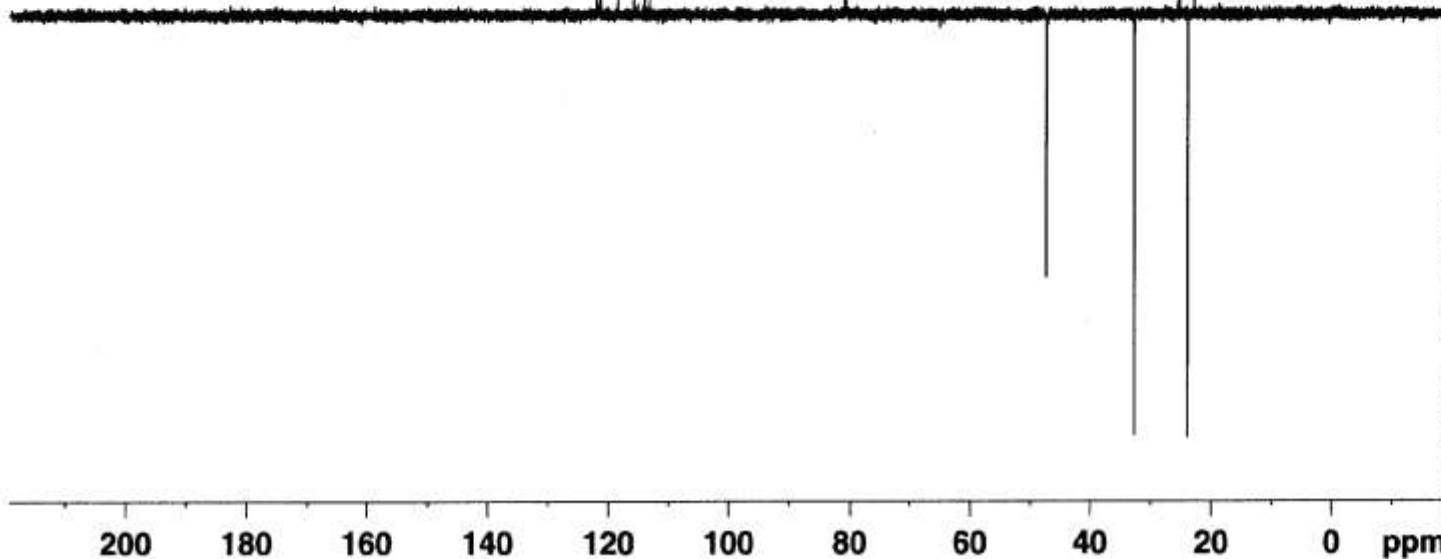
Current Data Parameters  
NAME n120  
EXPNO 3  
PROCNO 1

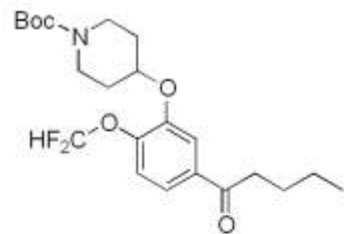
F2 - Acquisition Parameters  
Date\_ 20050414  
Time 9.25  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 79  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 29193  
DW 20.850 usec  
DE 7.00 usec  
TE 297.9 K  
CNST2 145.0000000  
D1 2.0000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40





Entry 33 in Table 2  
Compound 5zg

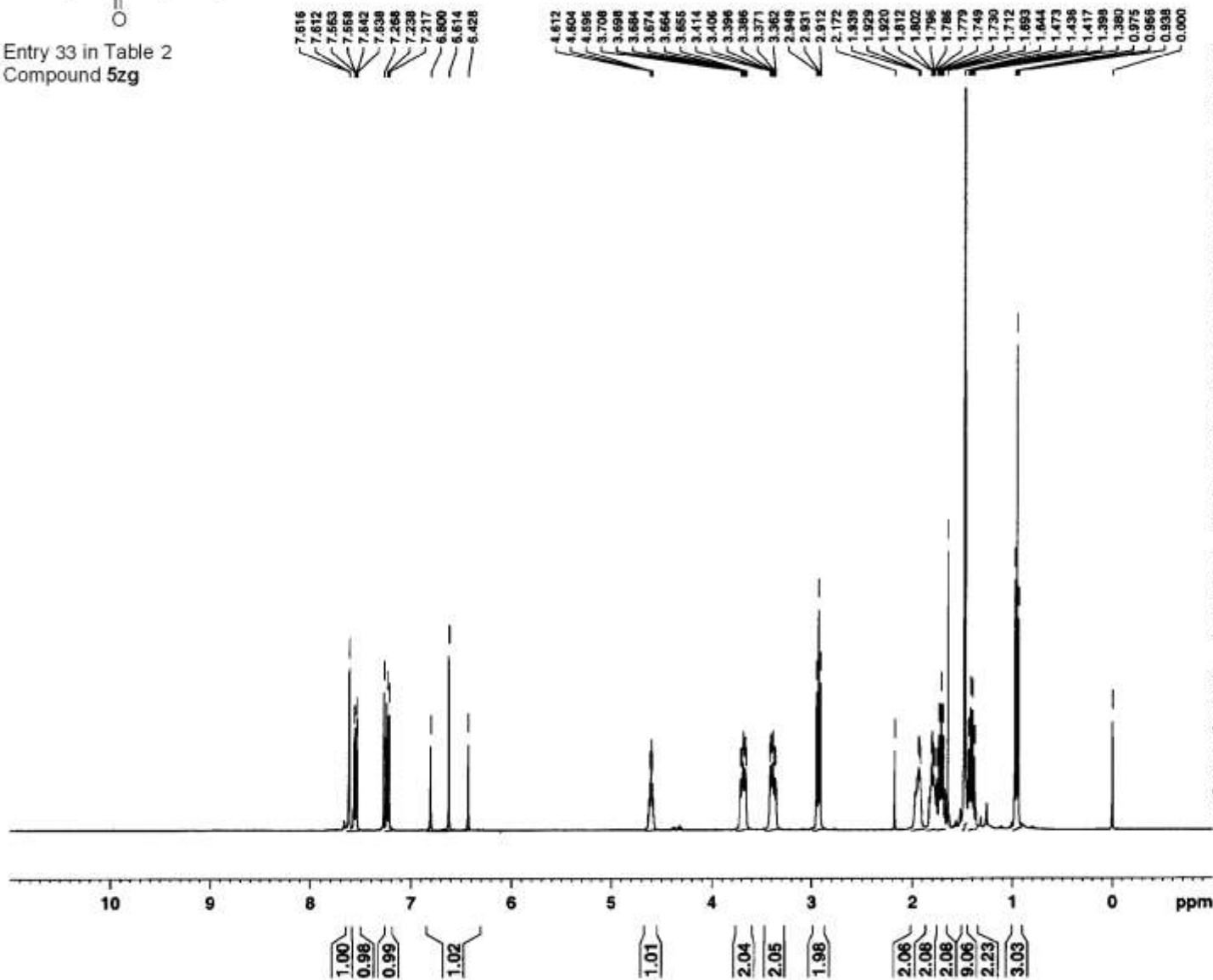


Current Data Parameters  
 NAME n114-8  
 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20050331  
 Time 10.49  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl<sub>3</sub>  
 NS 16  
 DS 2  
 SWH 8278.146 Hz  
 FIDRES 0.126314 Hz  
 AQ 3.9584243 sec  
 RG 143.7  
 DW 60.400 usec  
 DE 7.00 usec  
 TE 297.7 K  
 D1 1.00000000 sec  
 MCREST 0.00000000 sec  
 MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.80 usec  
 PL1 0.00 dB  
 SFO1 400.1324710 MHz

F2 - Processing parameters  
 SI 32768  
 SF 400.1300063 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.40





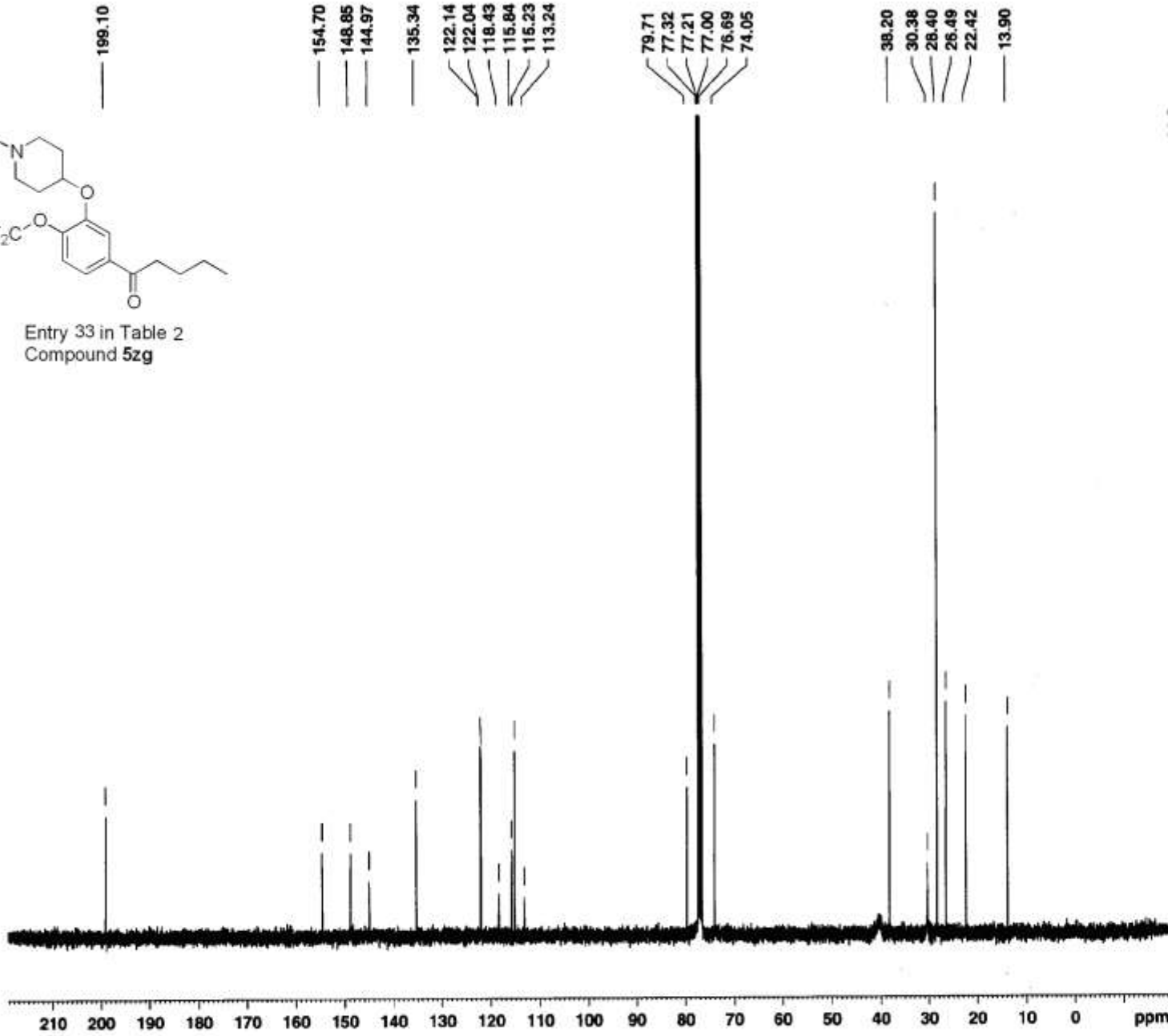
Current Data Parameters  
NAME n114-8  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050331  
Time 10.53  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 512  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 6502  
DW 20.850 usec  
DE 7.00 usec  
TE 297.8 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

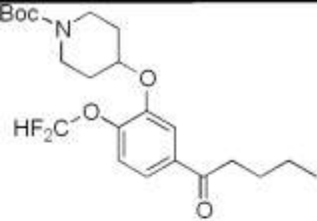
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127715 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00



Entry 33 in Table 2  
Compound 5zg





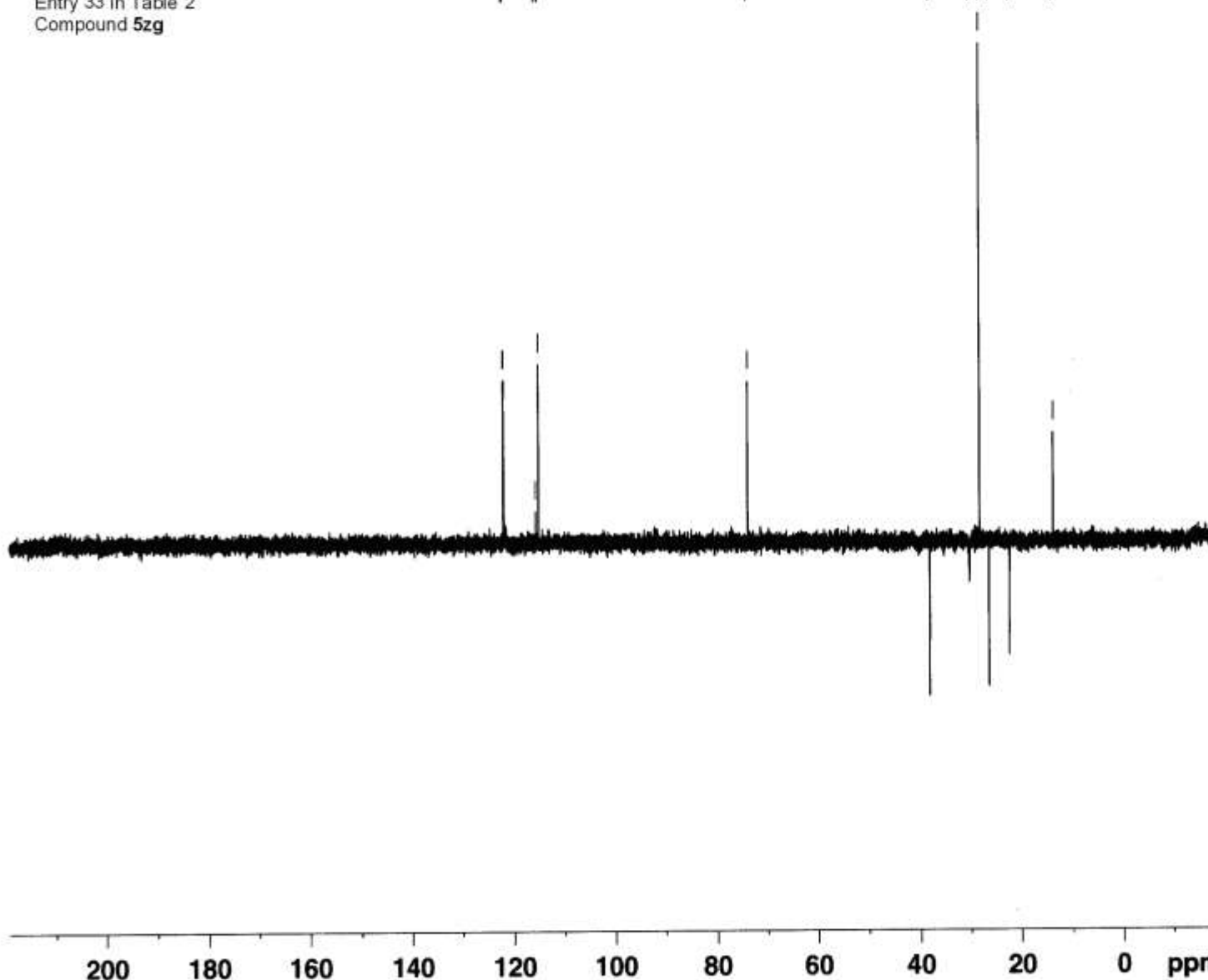
Entry 33 in Table 2  
Compound 5zg

122.17  
122.07  
115.86  
115.25

74.07

38.23  
30.39  
28.43  
26.52  
22.45

13.93



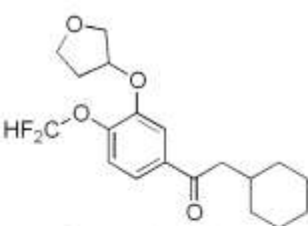
Current Data Parameters  
NAME n114-8  
EXPNO 3  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050331  
Time 11.27  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 105  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 29193  
DW 20.850 usec  
DE 7.00 usec  
TE 297.9 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



Entry 34 in Table 2  
Compound 5zc

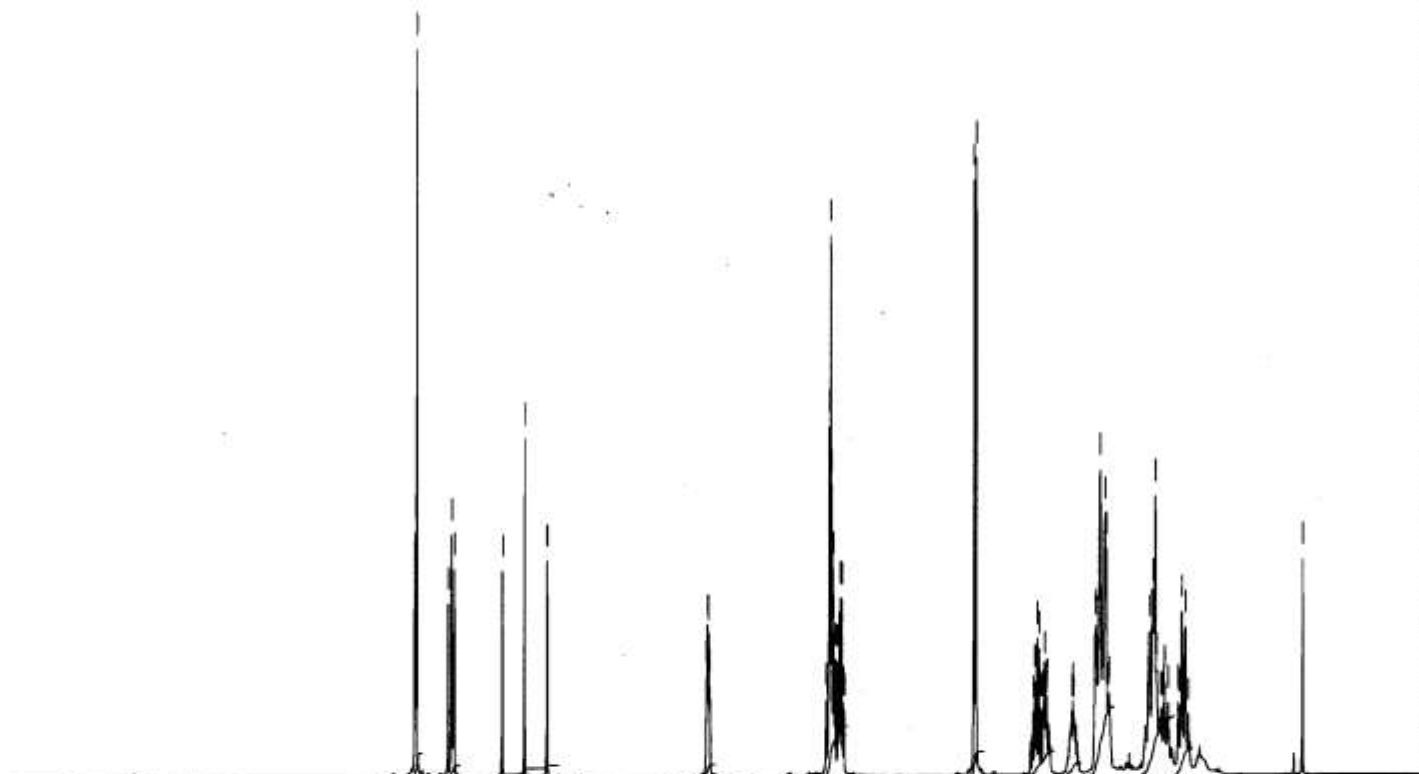


Current Data Parameters  
NAME n106  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050321  
Time 9.47  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 114  
DW 60.400 usec  
DE 7.00 usec  
TE 298.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300058 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00



10 9 8 7 6 5 4 3 2 1 0 ppm

2.08  
0.20  
0.99  
1.00  
1.02  
4.19  
2.07  
2.11  
1.10  
5.72  
4.95  
2.31



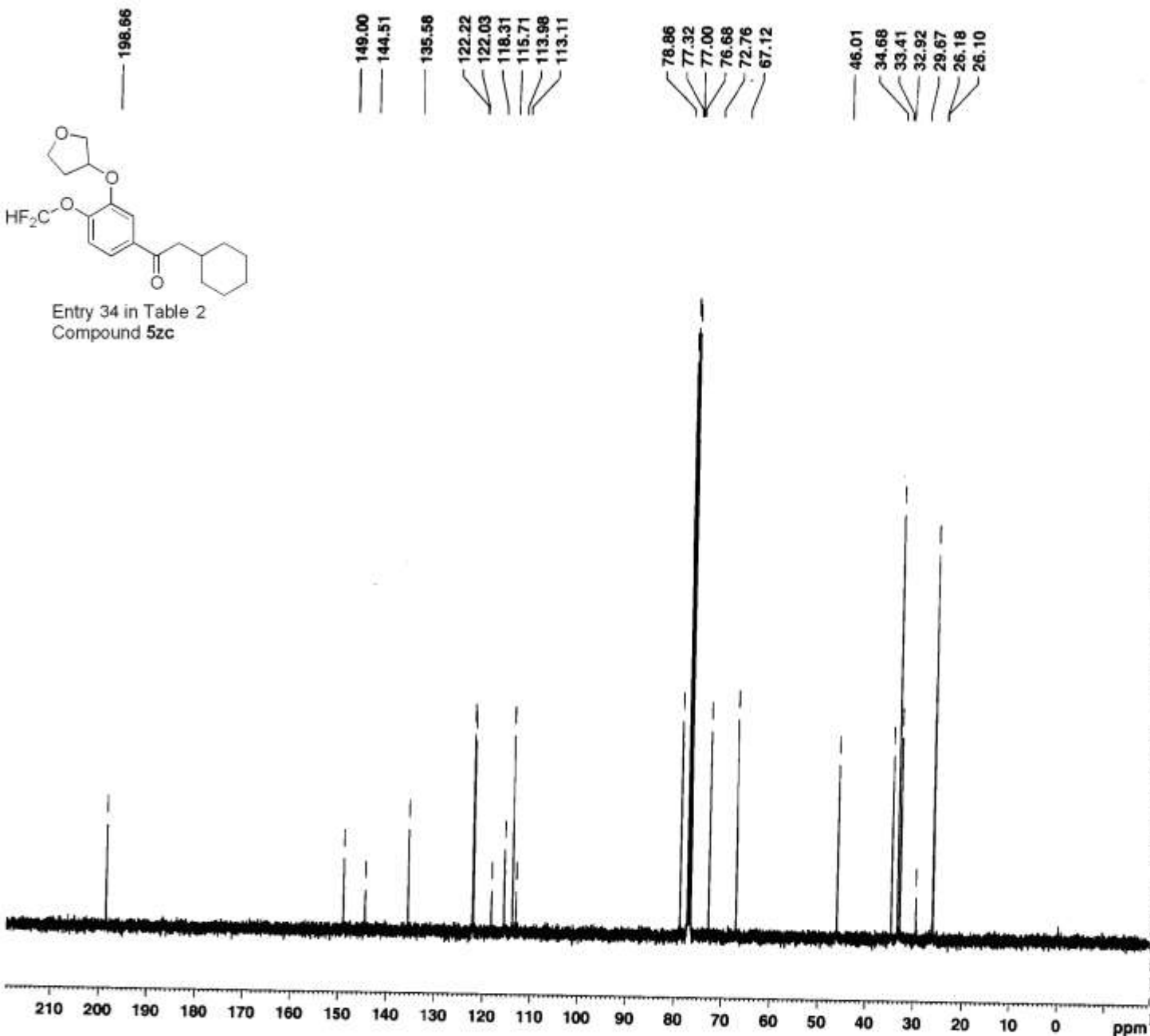
Current Data Parameters  
NAME n106  
EXPNO 2  
PROCNO 1

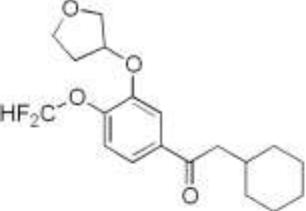
F2 - Acquisition Parameters  
Date\_ 20050317  
Time 10.53  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT cdcl3  
NS 399  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 6502  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127722 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00





Entry 34 in Table 2  
Compound 5zc

122.25  
122.05  
115.74  
114.01

78.89  
72.79  
67.15

46.04  
34.71  
33.44  
32.95  
26.21  
26.13



Current Data Parameters  
NAME n106  
EXPNO 3  
PROCNO 1

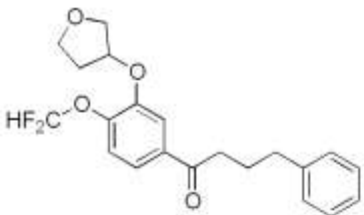
F2 - Acquisition Parameters  
Date\_ 20050321  
Time 10.02  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDC13  
NS 207  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 23170.5  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

----- CHANNEL f1 -----  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

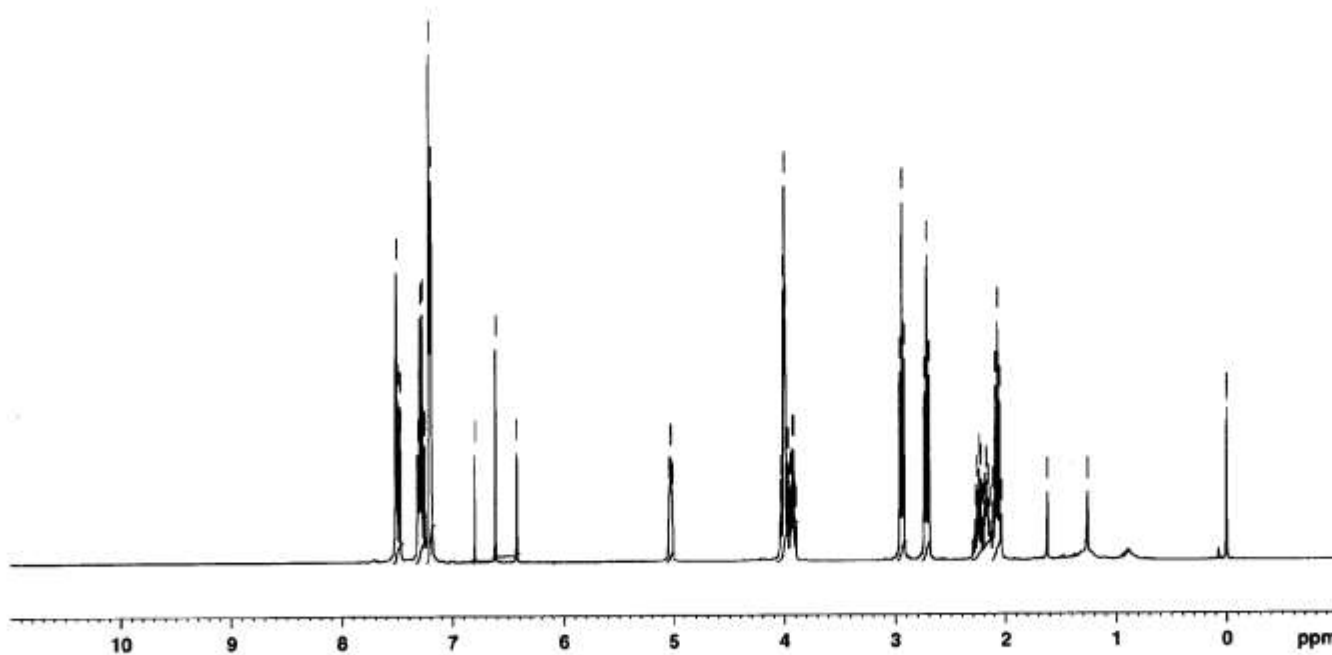
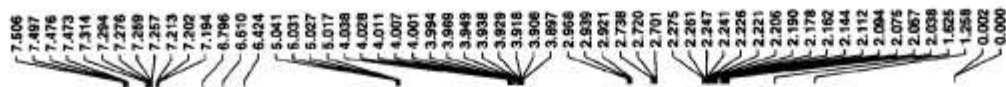
----- CHANNEL f2 -----  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00

200 180 160 140 120 100 80 60 40 20 0 ppm



Entry 35 in Table 2  
Compound 5ze



2.11  
2.06  
4.03  
1.00  
1.01  
4.24  
2.07  
2.06  
2.22  
2.09



Current Data Parameters  
NAME n107  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20050321  
Time 9.11  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 128  
DW 60.400 usec  
DE 7.00 usec  
TE 298.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300104 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



Current Data Parameters  
NAME n107  
EXPNO 2  
PROCNO 1

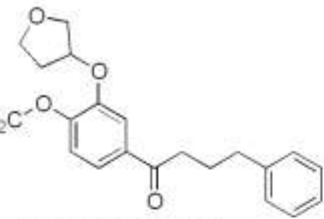
F2 - Acquisition Parameters  
Date\_ 20050321  
Time 9.13  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT cdcl3  
NS 203  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RC 8192  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

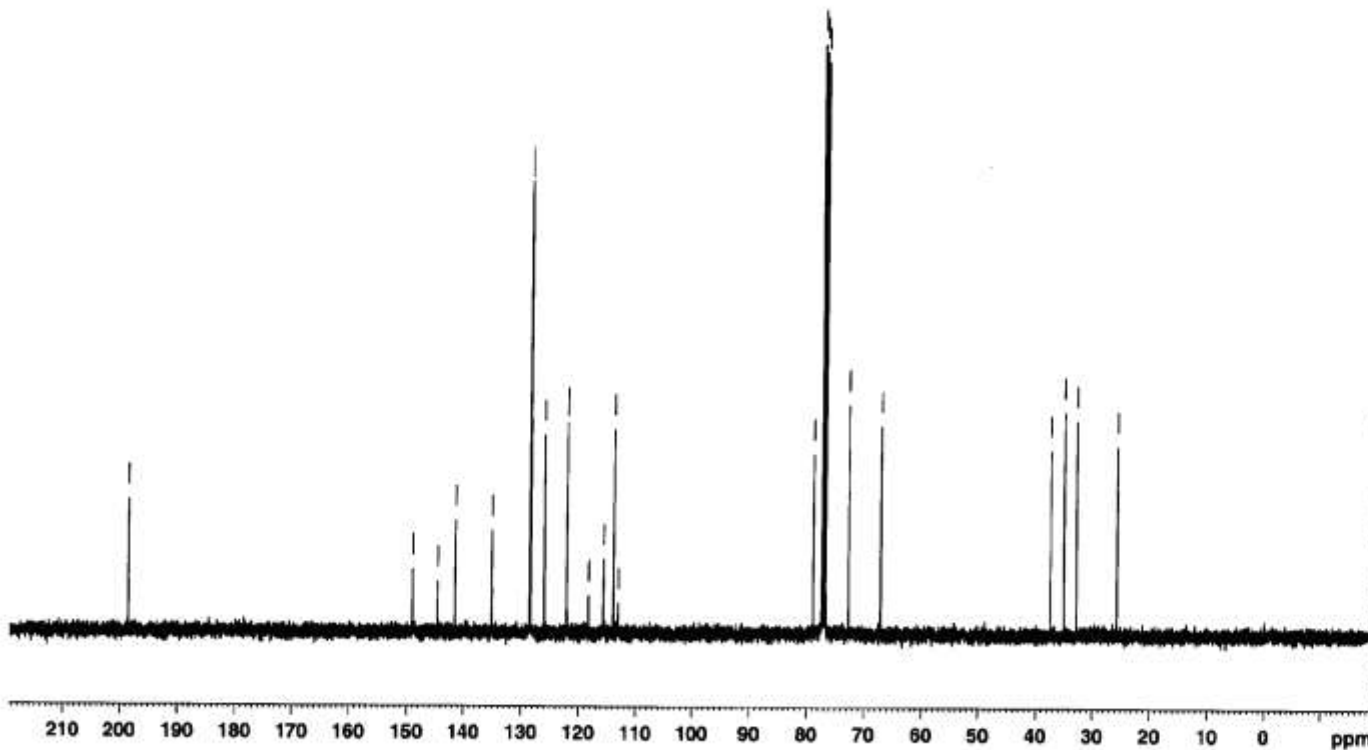
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PLL2 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

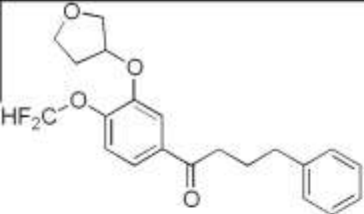
F2 - Processing parameters  
SI 32768  
SF 100.6127729 MHz  
WDW EM  
SSP 0  
LB 1.00 Hz  
GB 0  
PC 1.40

198.53  
149.00  
144.55  
141.47  
135.09  
128.48  
128.42  
126.01  
122.05  
122.04  
118.28  
115.69  
113.88  
113.09  
78.84  
77.32  
77.00  
76.69  
72.74  
67.12  
37.48  
35.10  
32.90  
25.73



Entry 35 in Table 2  
Compound 5ze





Entry 35 in Table 2  
Compound 5ze

128.52  
128.46  
126.05  
122.09  
122.08  
115.73  
113.91

78.88  
72.78  
67.16

37.52  
35.14  
32.94  
25.77



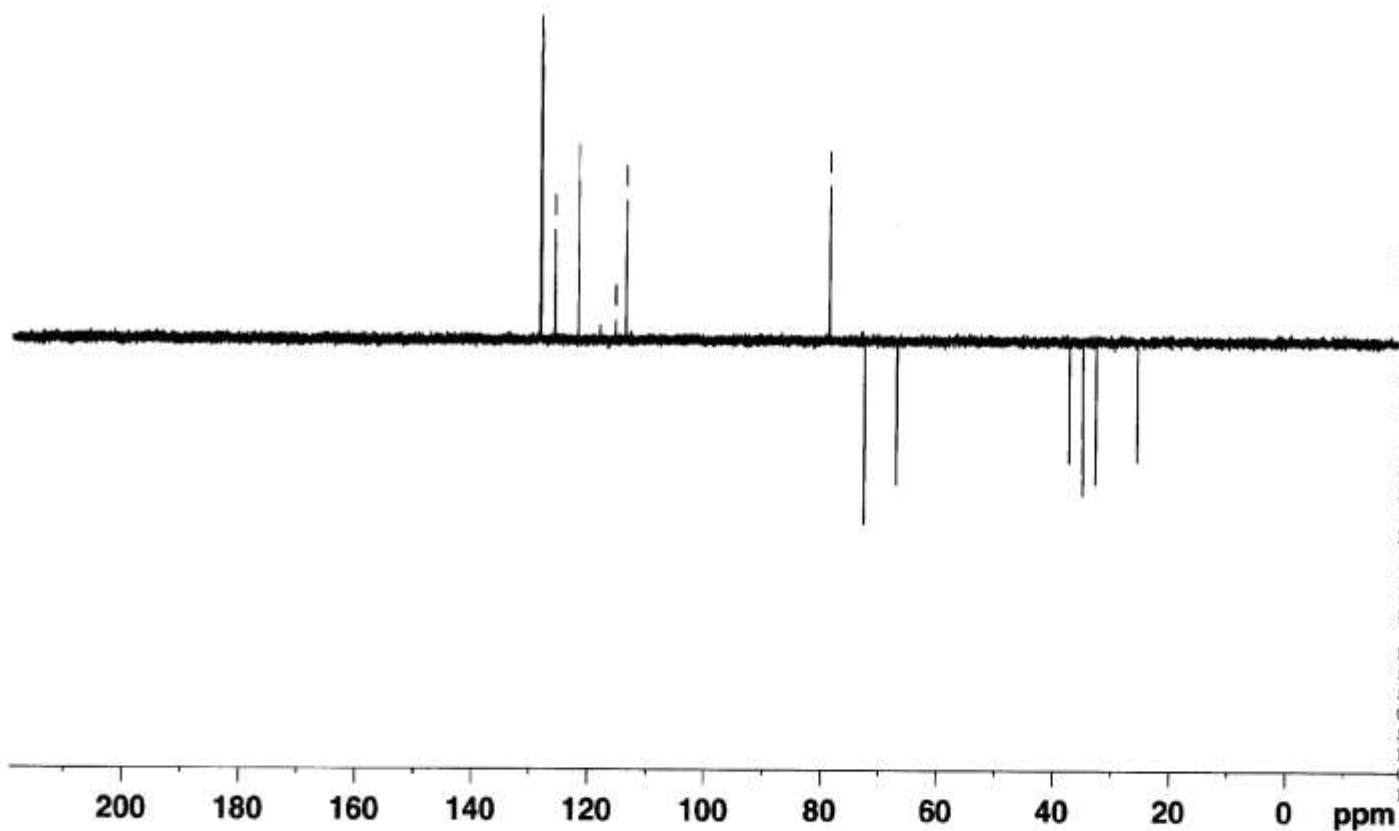
Current Data Parameters  
NAME n107  
EXPNO 3  
PROCNO 1

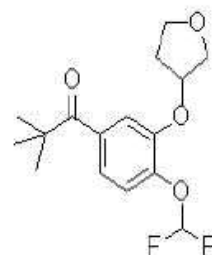
F2 - Acquisition Parameters  
Date\_ 20050321  
Time 9.30  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 117  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 29193  
DW 20.850 usec  
DE 7.00 usec  
TE 298.2 K  
CNST2 145.0000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

----- CHANNEL f1 -----  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

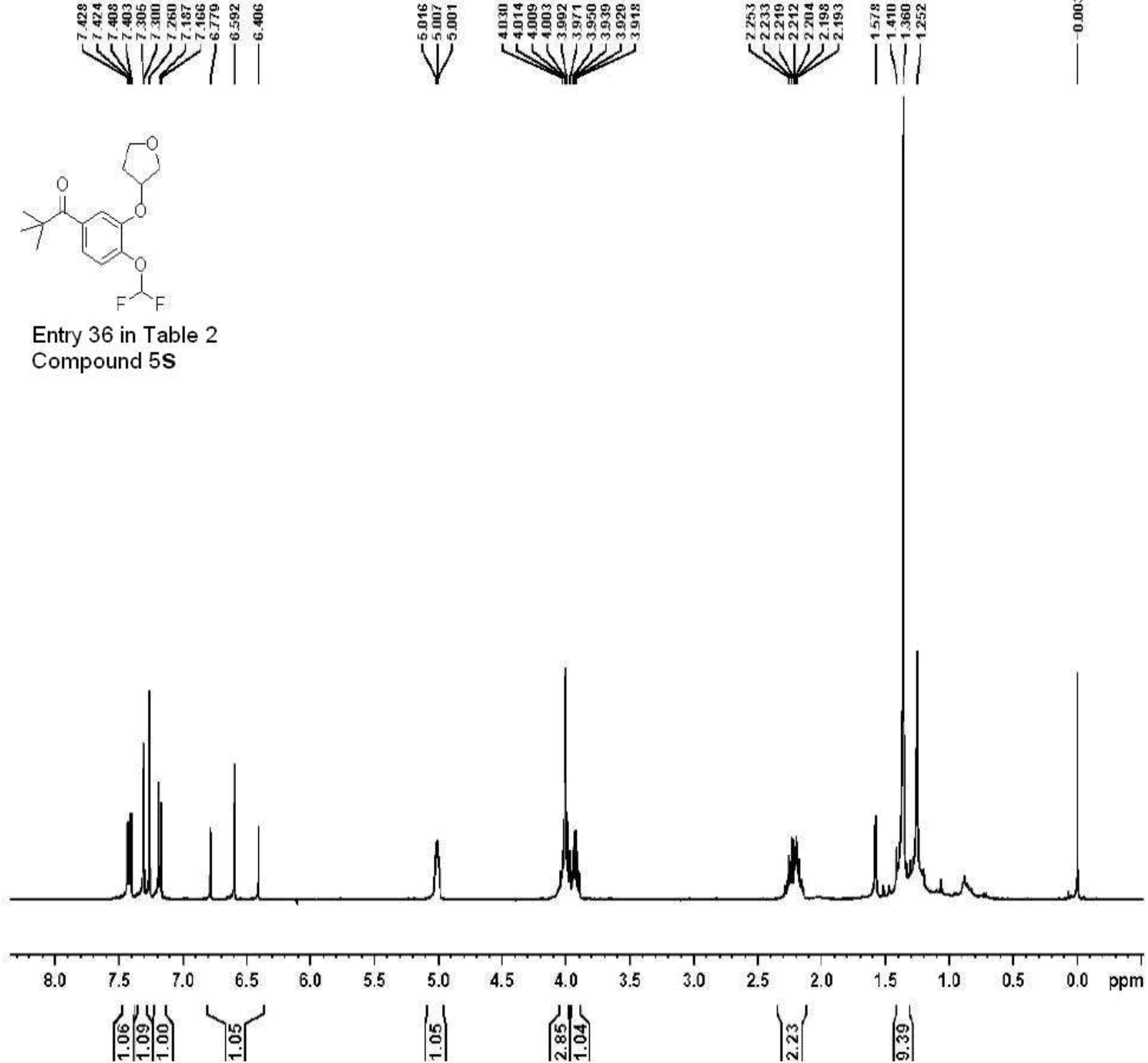
----- CHANNEL f2 -----  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

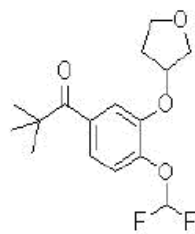




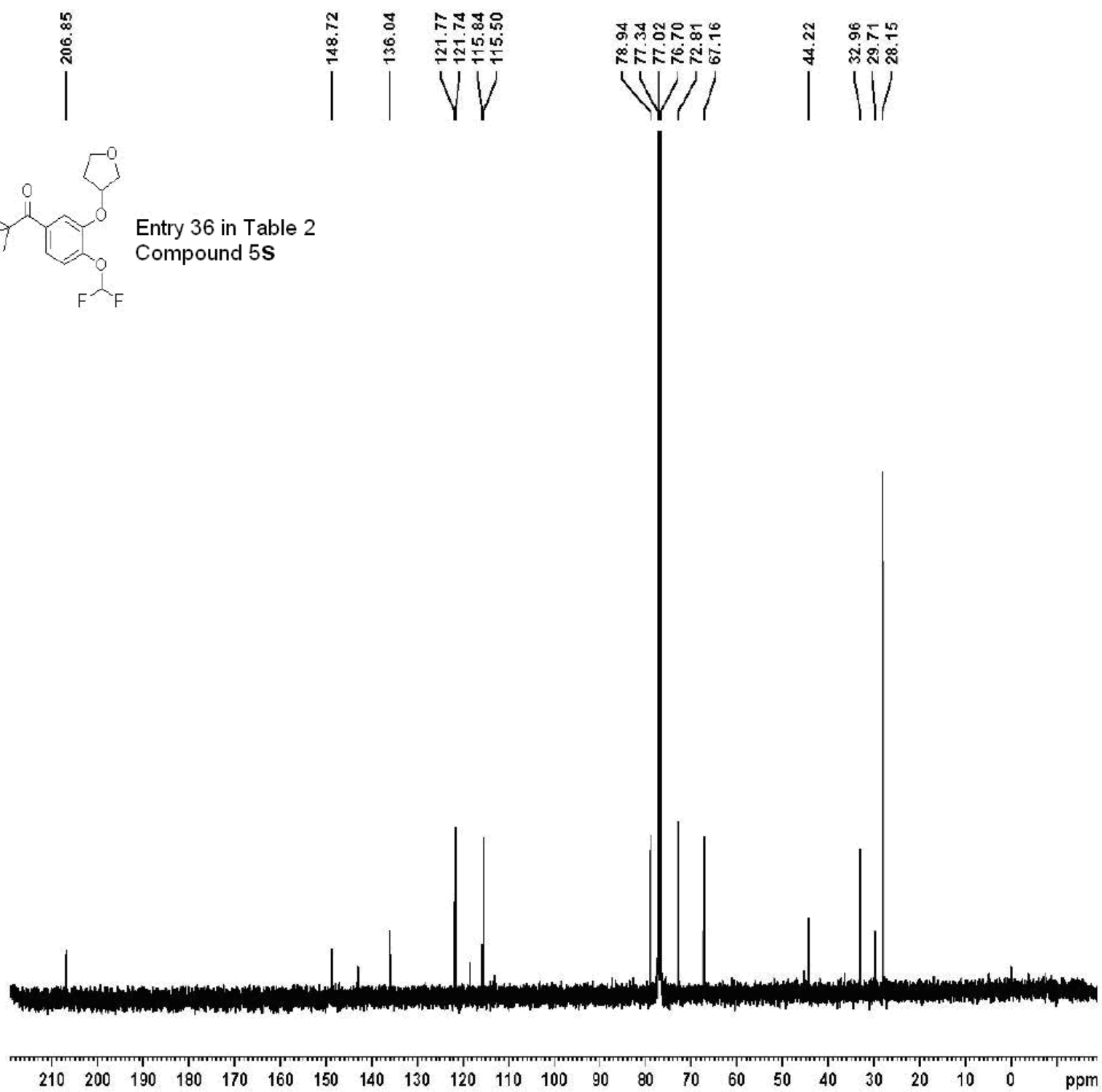
Entry 36 in Table 2  
Compound 5S

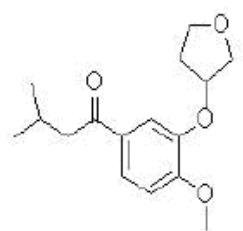




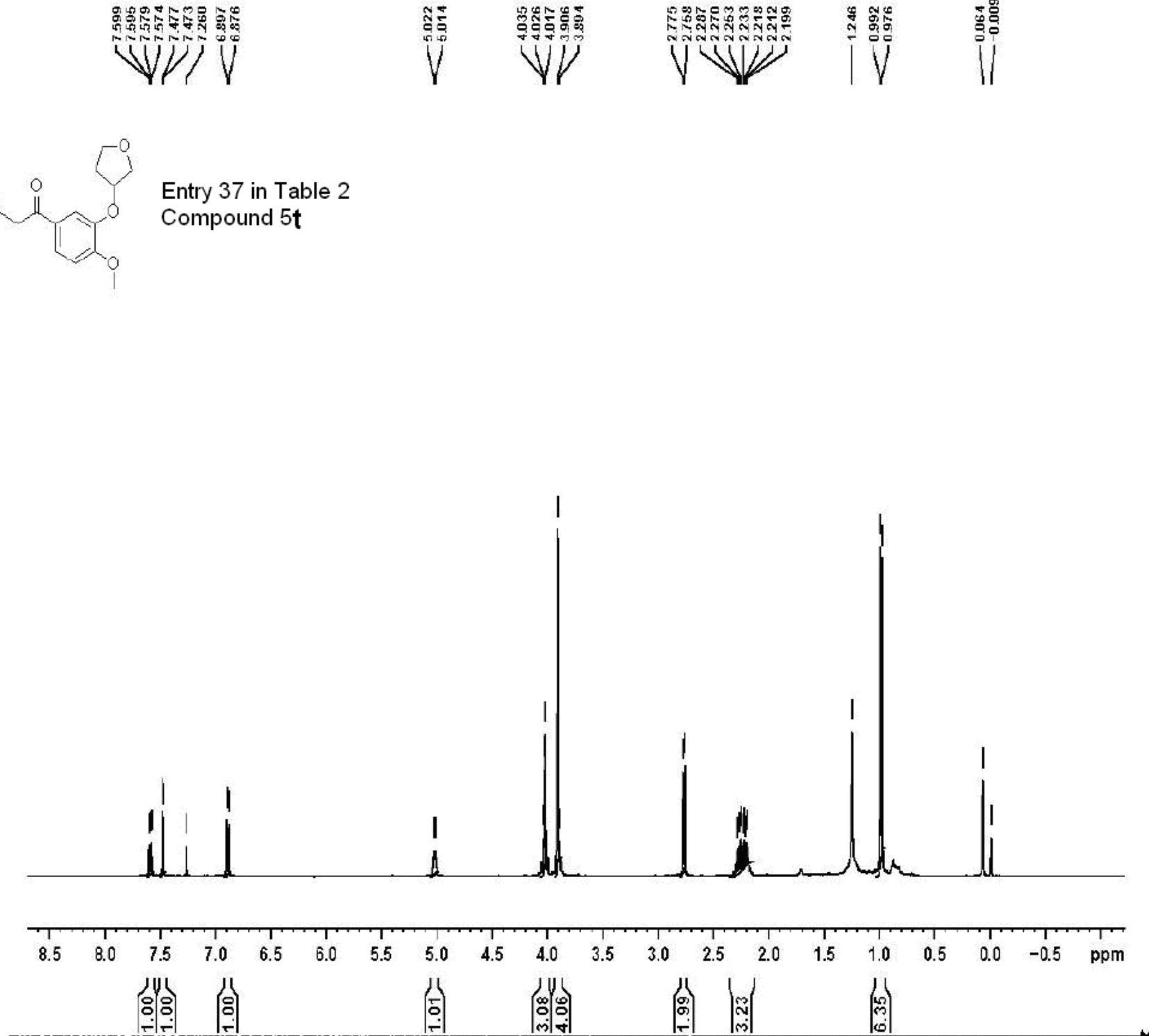


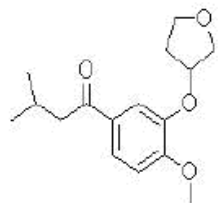
Entry 36 in Table 2  
Compound 5S



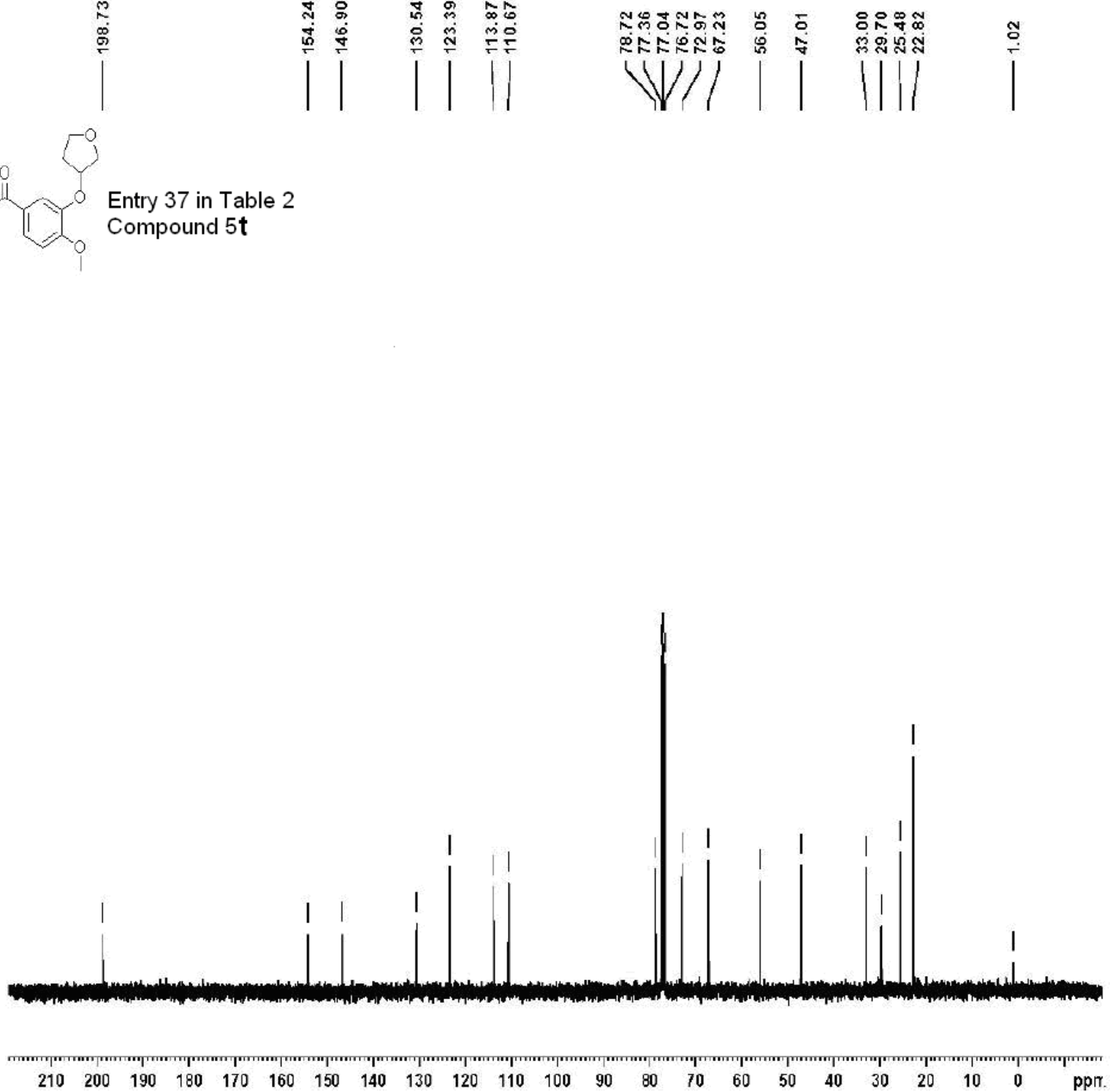


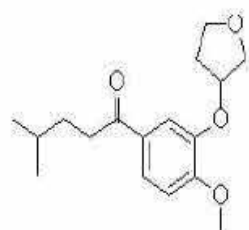
Entry 37 in Table 2  
Compound 5t



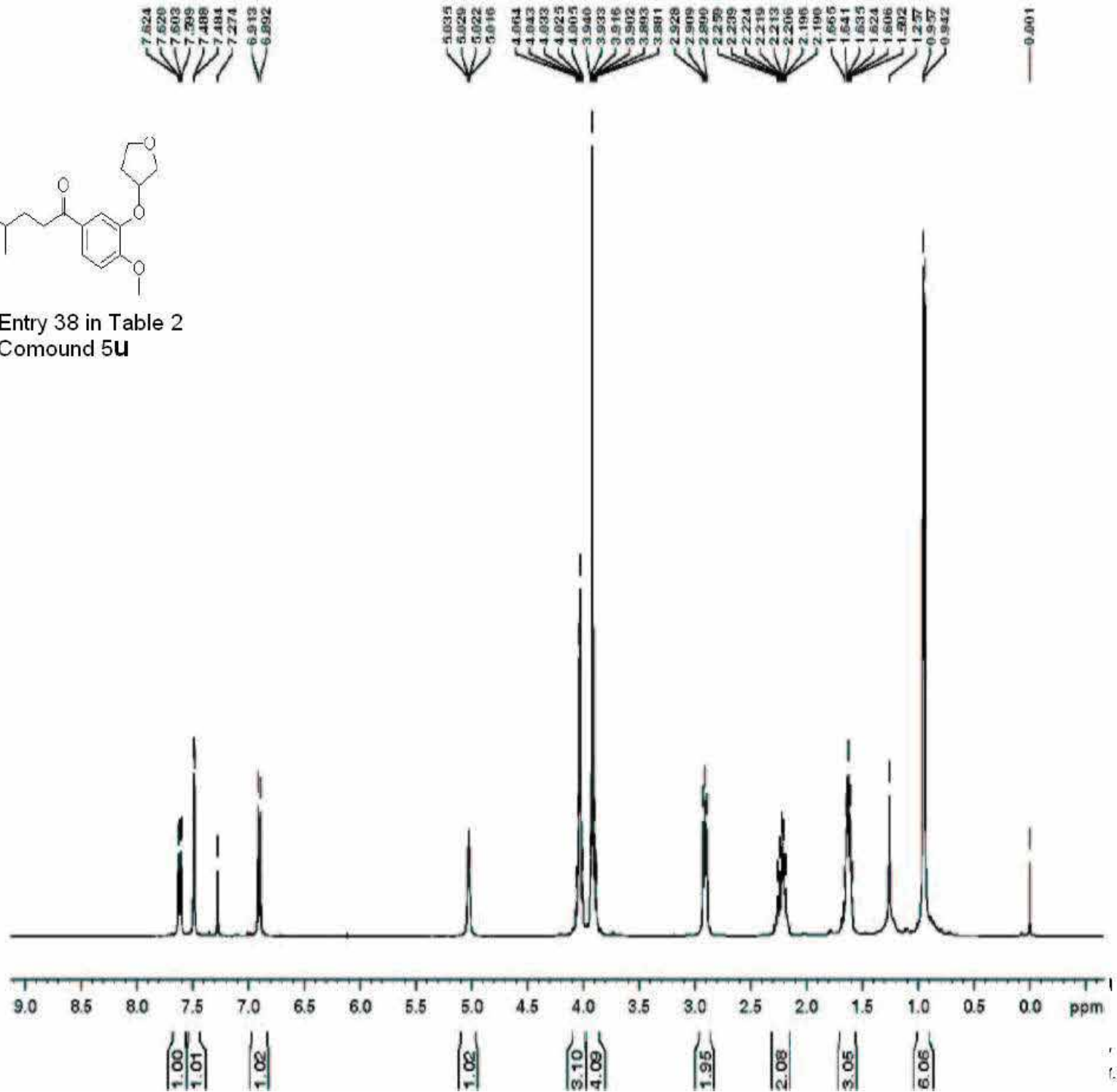


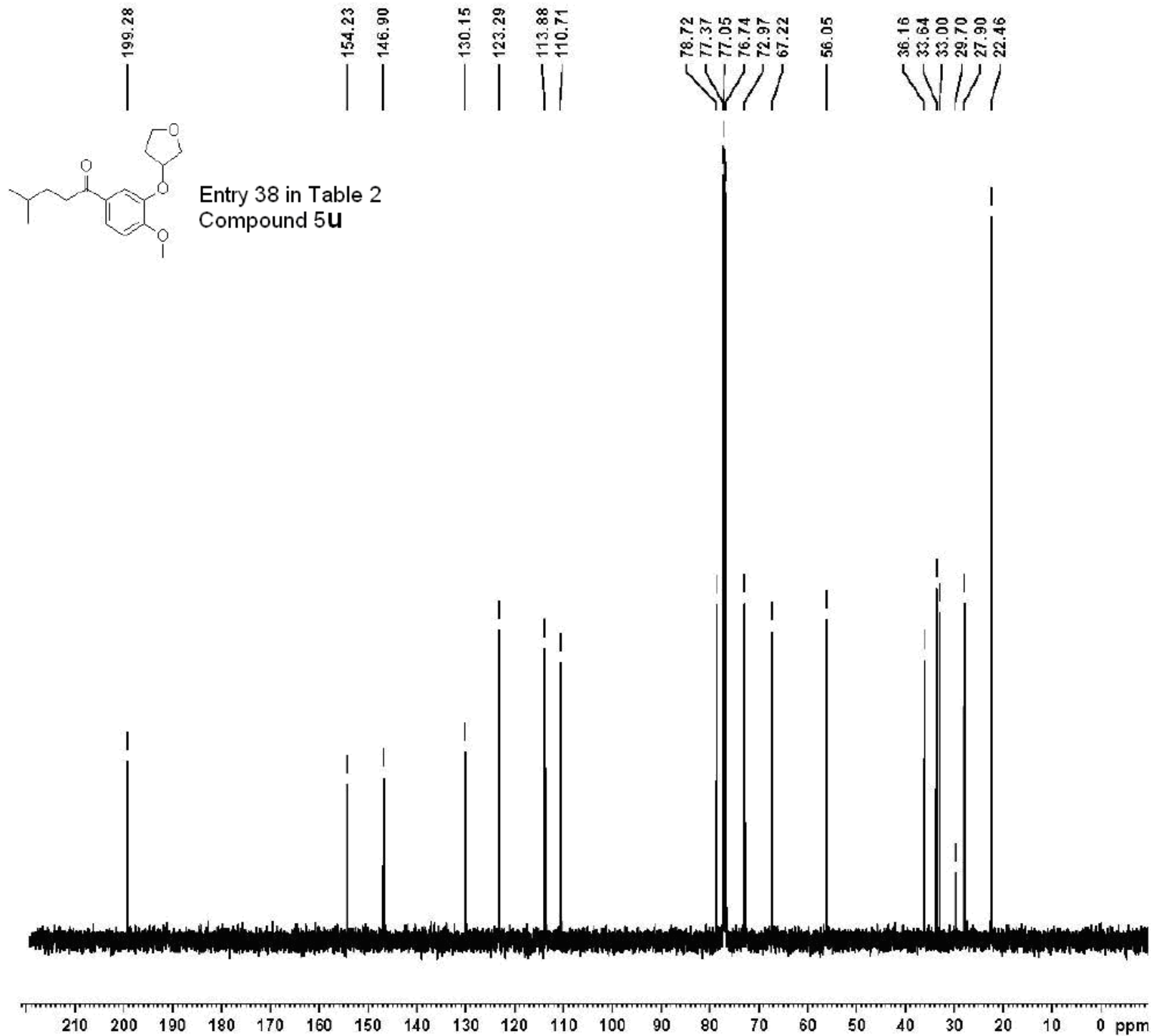
Entry 37 in Table 2  
Compound 5t





Entry 38 in Table 2  
Compound 5U





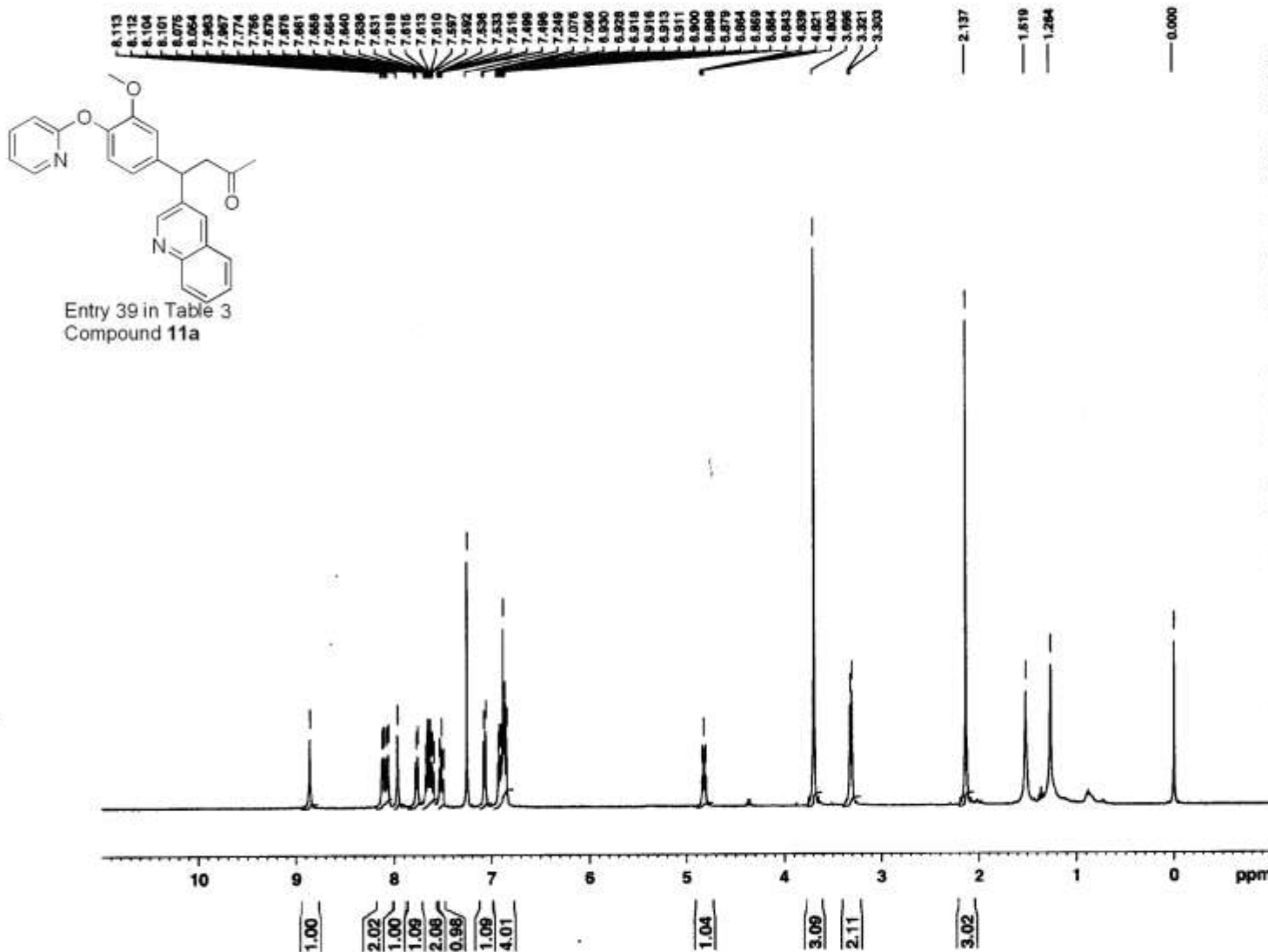


Current Data Parameters  
NAME 99ypure-repeat  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041013  
Time 10.00  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT ~~CDCl3~~ *CPH3*  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 362  
DW 60.400 usec  
DE 6.00 usec  
TE 323.0 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

=====  
CHANNEL f1  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300136 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00



Entry 39 in Table 3  
Compound 11a



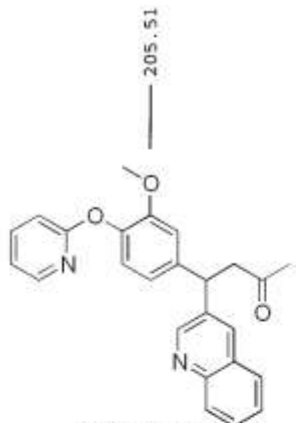
Current Data Parameters  
NAME 99ypure-repeat  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041013  
Time 10.08  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT CDCl3  
NS 1022  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 645.1  
DW 20.850 usec  
DE 6.00 usec  
TE 323.2 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

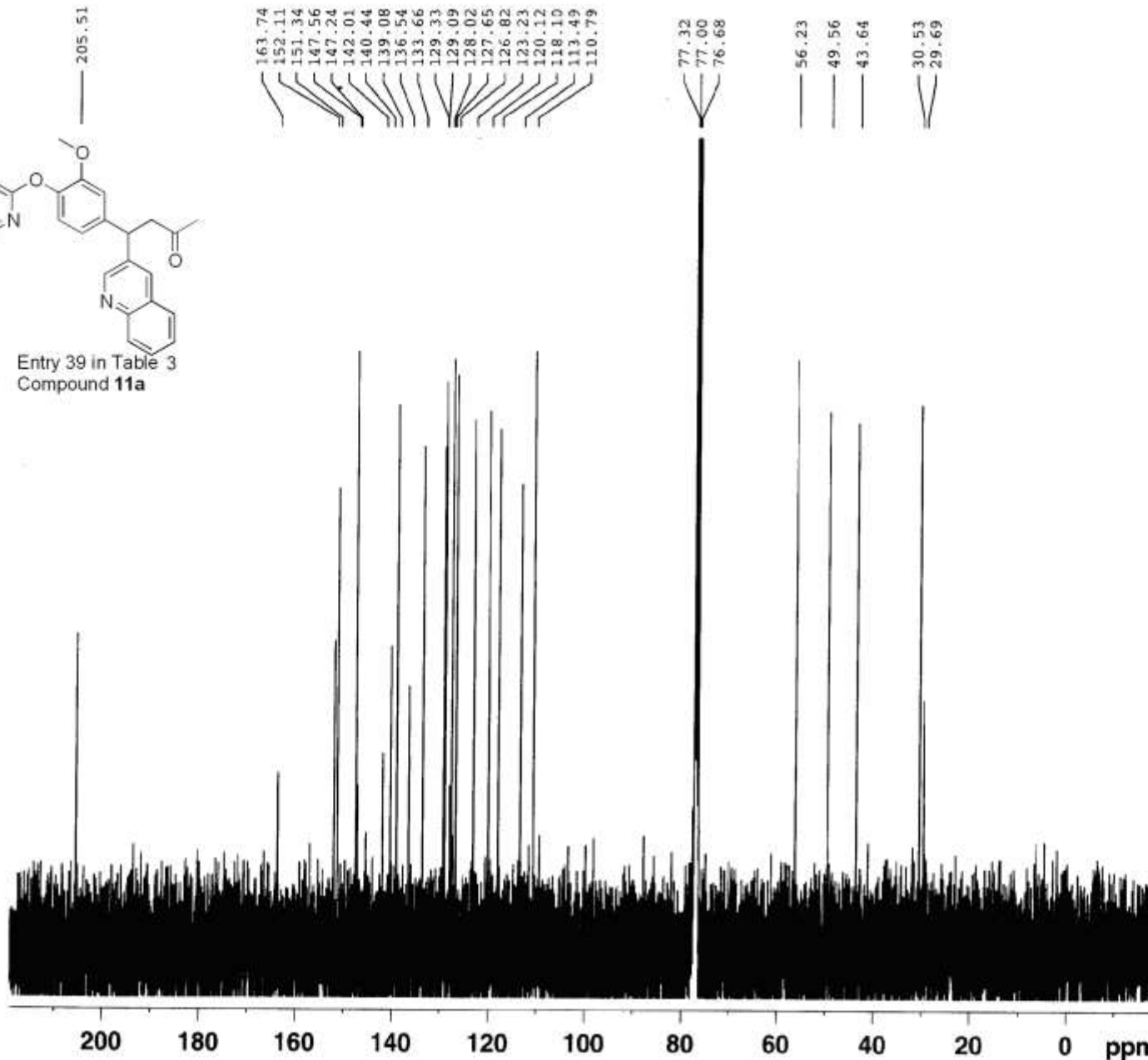
==== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

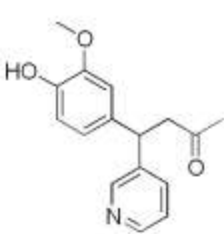
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127612 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



Entry 39 in Table 3  
Compound 11a





Entry 40 in Table 3  
Compound 11b

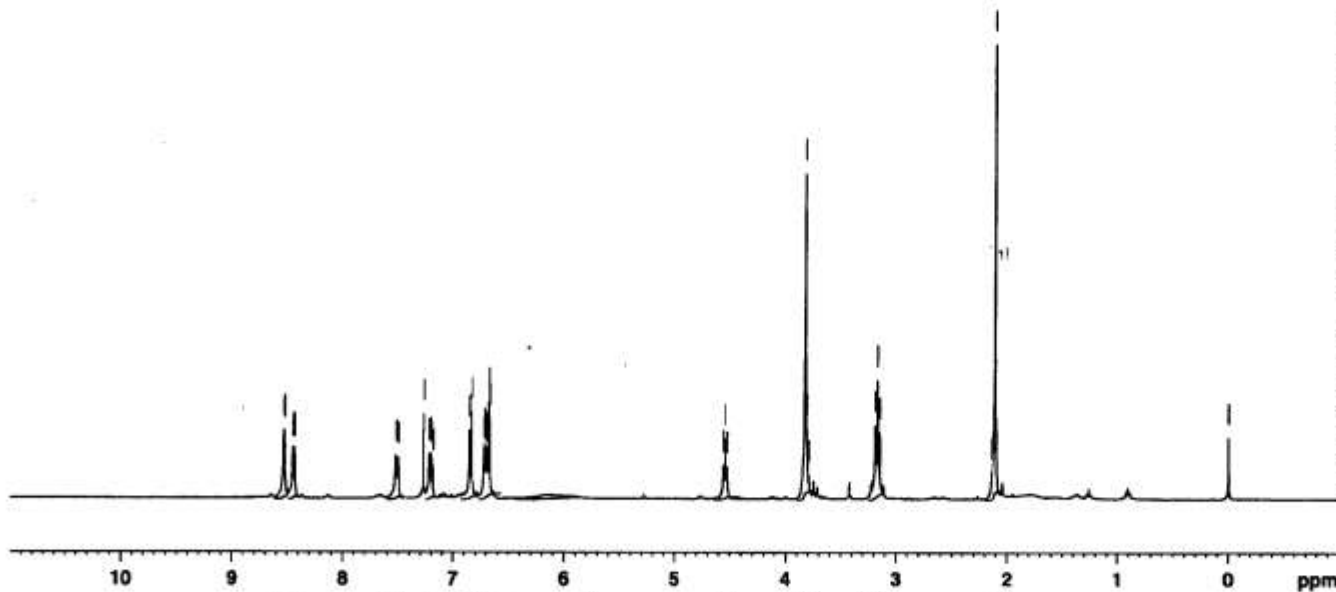


Current Data Parameters  
NAME n17-13  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041010  
Time 13.51  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT *CDCl3*  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 203.2  
DW 60.400 usec  
DE 6.00 usec  
TE 299.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SFO1 400.1324710 MHz

F2 - Processing parameters  
SI 32768  
SF 400.1300076 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40







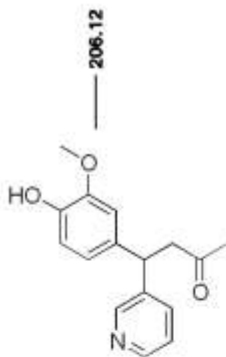
Current Data Parameters  
NAME n17-13  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041010  
Time 14.15  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT ~~acet~~ *CDCl3*  
NS 660  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 143.7  
DW 20.850 usec  
DE 6.00 usec  
TE 299.9 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

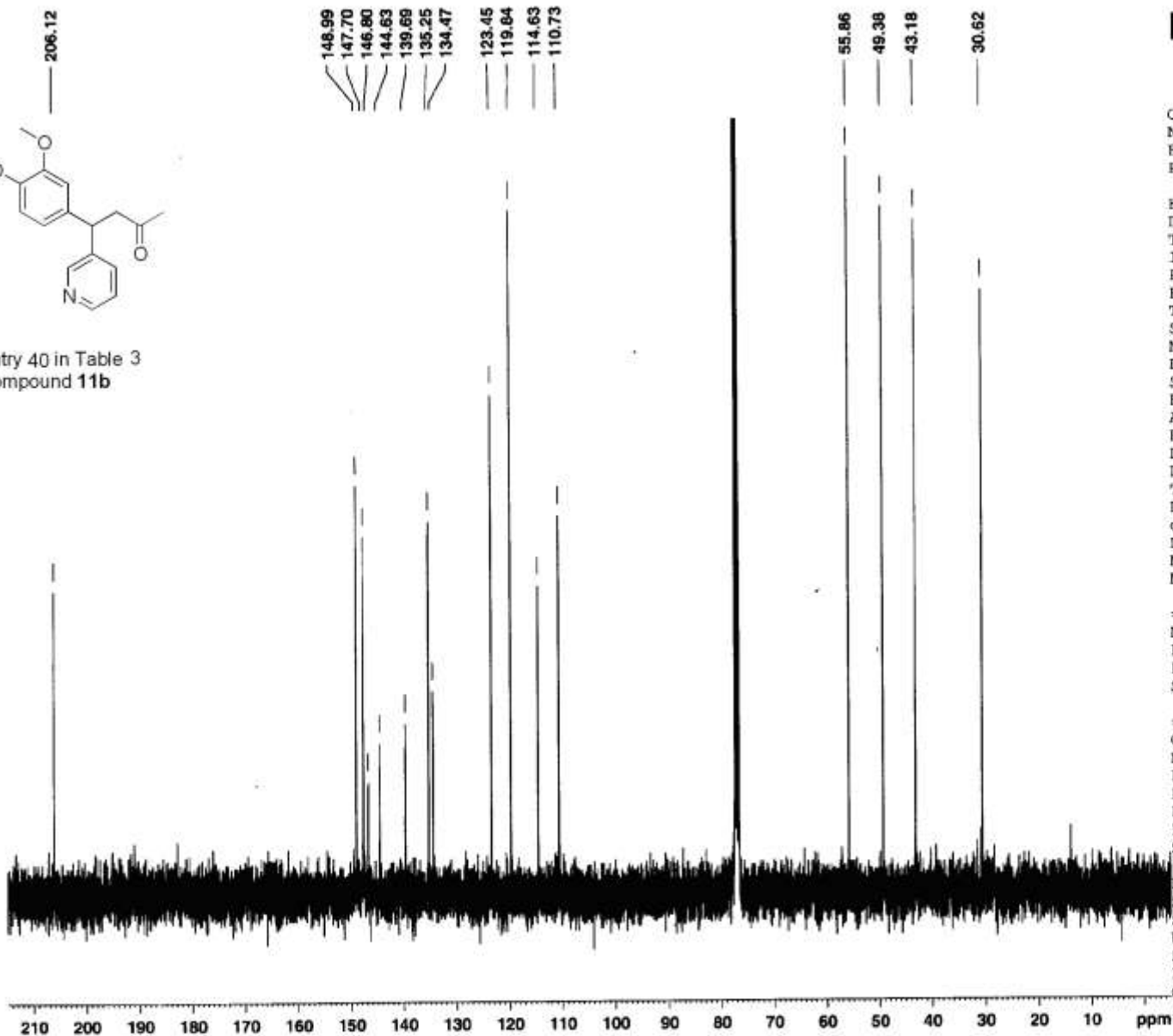
===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

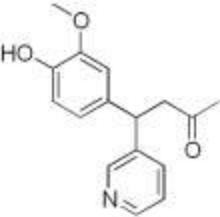
===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127722 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

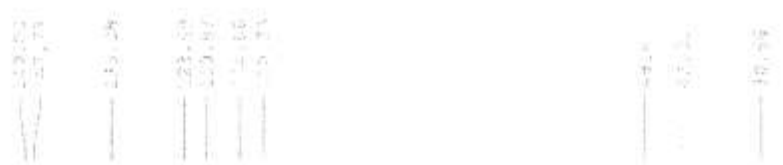


Entry 40 in Table 3  
Compound 11b





Entry 40 in Table 3  
Compound **11b**



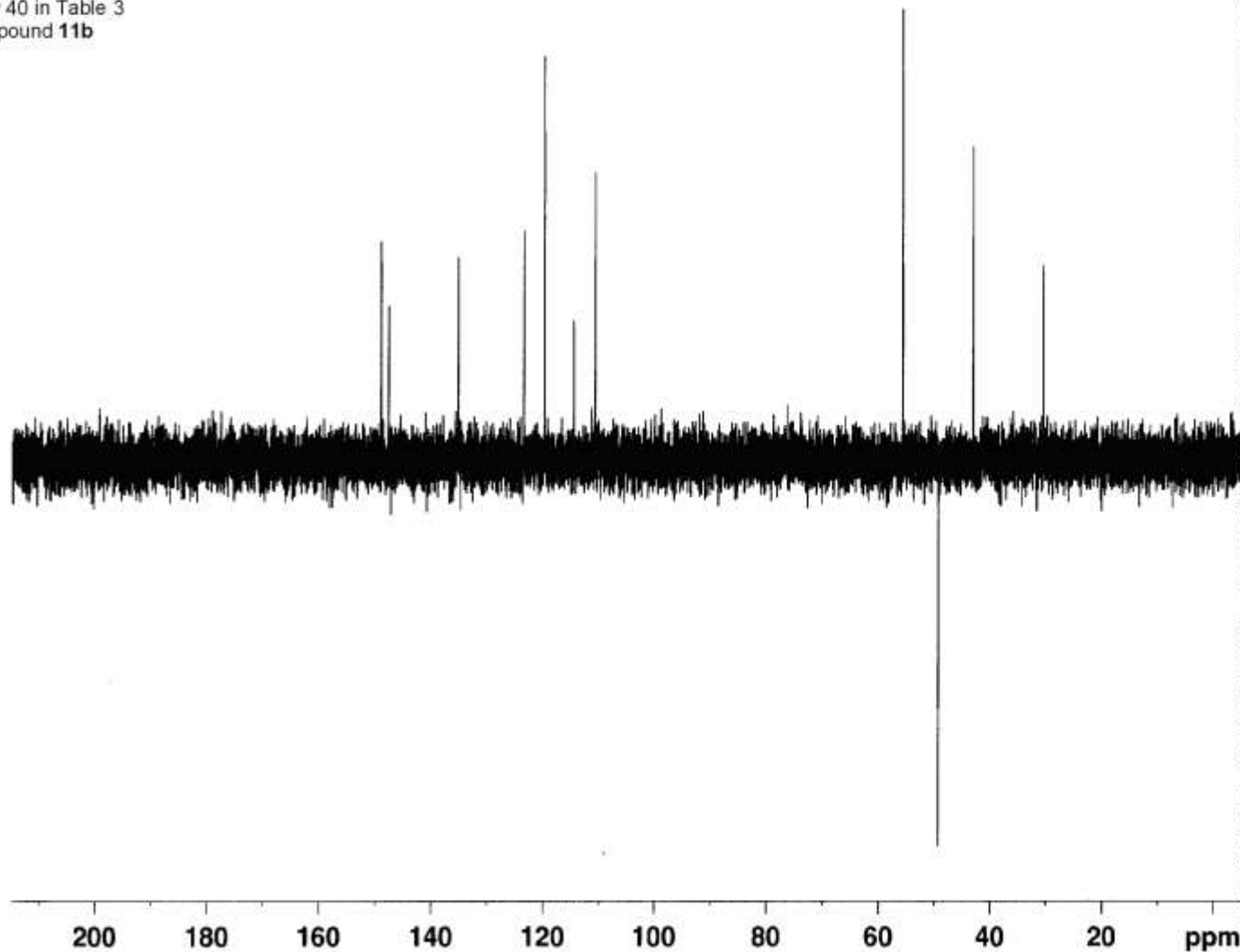
Current Data Parameters  
NAME n17-13  
EXPNO 3  
PROCNO 1

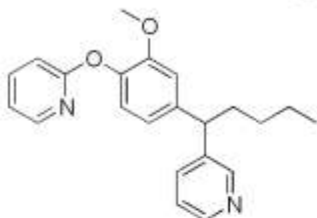
F2 - Acquisition Parameters  
Date\_ 20041010  
Time 14.39  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 66  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 29193  
DW 20.850 usec  
DE 6.00 usec  
TE 299.6 K  
CNST2 145.000000  
D1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40





Entry 41 in Table 3  
Compound 8

8.673  
8.443  
8.432  
8.121  
8.116  
8.108  
8.104  
7.822  
7.817  
7.803  
7.800  
7.578  
7.563  
7.559  
7.540  
7.210  
7.199  
7.181  
7.179  
7.073  
7.063  
6.913  
6.901  
6.896  
6.881  
6.874  
6.850  
6.846

3.929  
3.910  
3.890  
3.895

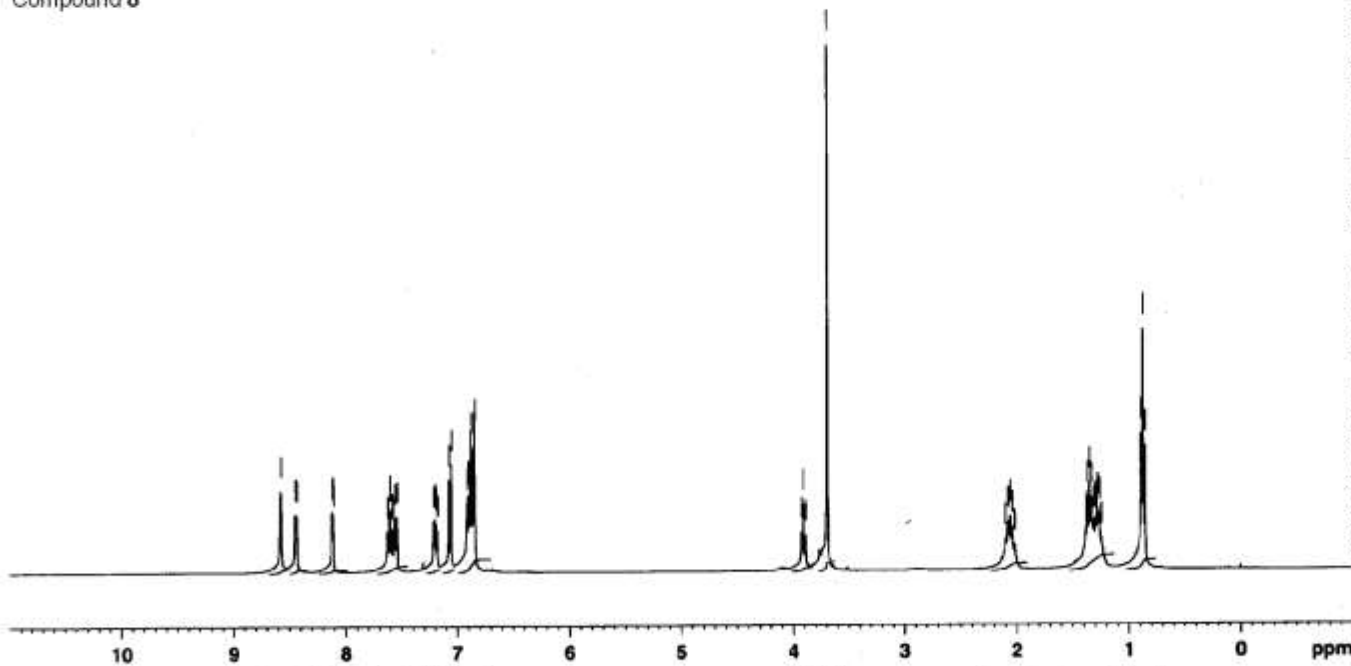
2.103  
2.090  
2.082  
2.044  
2.022  
1.381  
1.394  
1.347  
1.330  
1.313  
1.296  
1.290  
1.281  
1.274  
1.259  
1.242  
0.892  
0.875  
0.857

Current Data Parameters  
NAME n29-6-9  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041105  
Time 10.35  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 2  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 28.5  
DW 60.400 usec  
DE 6.00 usec  
TE 298.2 K  
D1 1.00000000 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.80 usec  
PL1 0.00 dB  
SF01 400.1324710 MHz

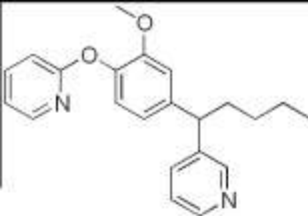
F2 - Processing parameters  
SI 32768  
SF 400.1299909 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40



0.98  
0.85  
0.88  
1.86  
1.01  
1.00  
3.71

1.06  
2.57

2.00  
4.31  
2.93



Entry 41 in Table 3  
Compound 8

163.38  
151.40  
149.34  
147.37  
147.20  
141.61  
140.82  
140.06  
138.89  
134.88  
123.21  
122.60  
119.75  
117.75  
112.39  
110.39

77.32  
77.00  
76.68

55.65  
48.49

34.97  
29.80  
22.32

13.70



Current Data Parameters

NAME n29-6-9  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters

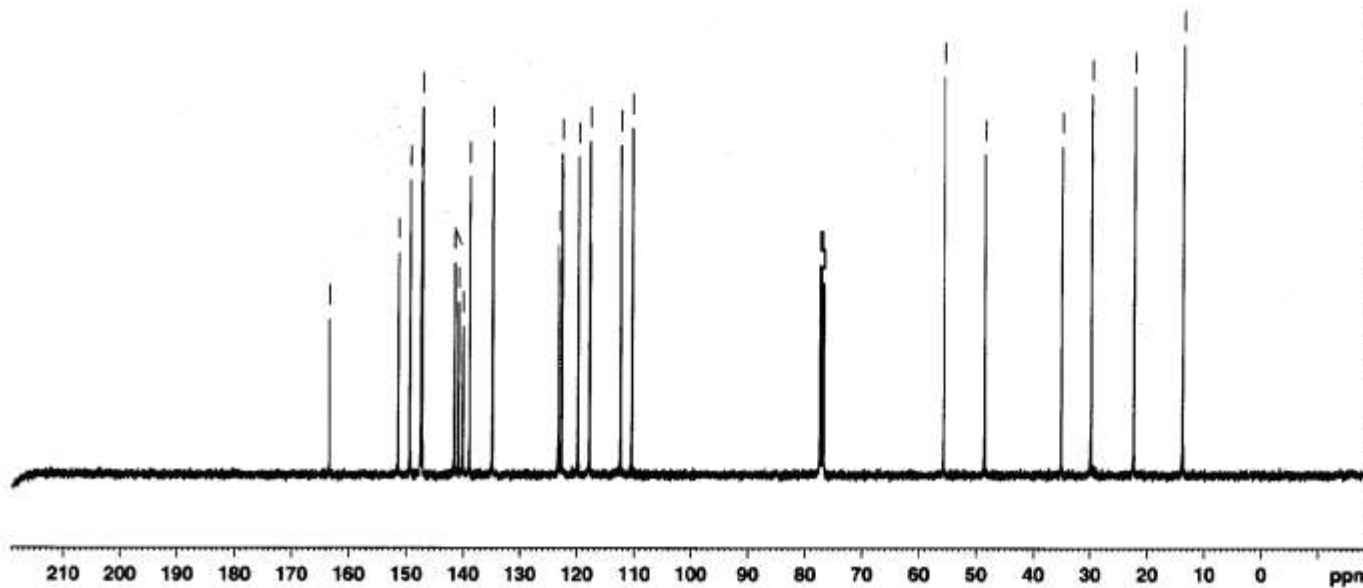
Date\_ 20041105  
Time 10.38  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 65536  
SOLVENT D2O  
NS 151  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 1448.2  
DW 20.850 usec  
DE 6.00 usec  
TE 298.2 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

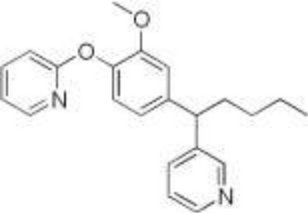
=====  
CHANNEL f1  
NUC1 13C  
P1 8.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

=====  
CHANNEL f2  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
PL13 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters

SI 32768  
SP 100.6127956 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.00

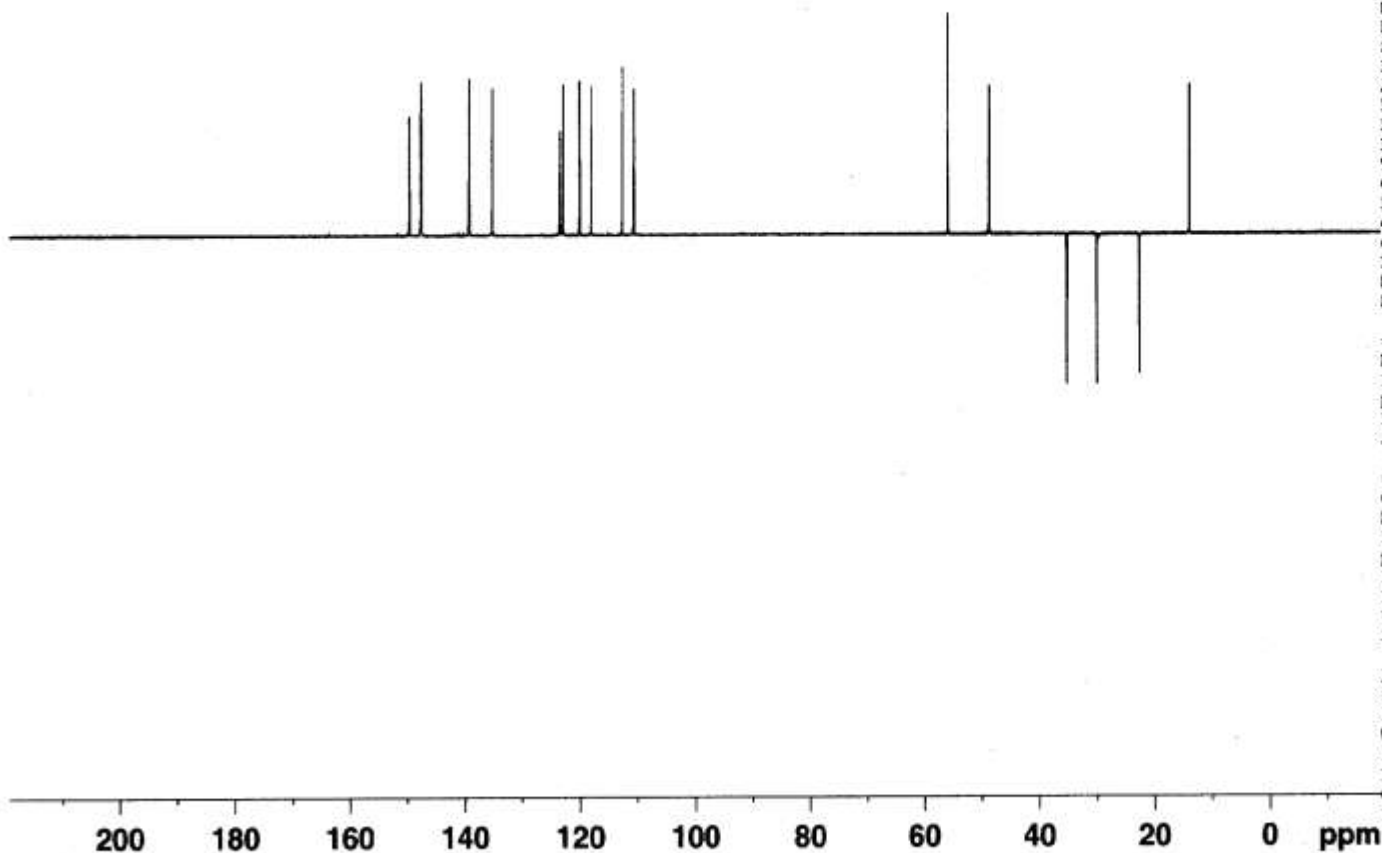




Entry 41 in Table 3  
Compound 8

149.60  
147.64  
147.46  
139.16  
135.14  
123.47  
122.87  
120.01  
118.02  
112.65  
110.65

55.92  
48.76  
35.24  
30.07  
22.59  
13.97



Current Data Parameters  
NAME n29-6-9  
EXPNO 3  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20041105  
Time 11.00  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG dept135  
TD 65536  
SOLVENT CDCl3  
NS 217  
DS 4  
SWH 23980.814 Hz  
FIDRES 0.365918 Hz  
AQ 1.3664756 sec  
RG 26008  
DW 20.850 usec  
DE 6.00 usec  
TE 298.2 K  
CNST2 145.0000000  
d1 2.00000000 sec  
d2 0.00344828 sec  
d12 0.00002000 sec  
DELTA 0.00001019 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 8.00 usec  
p2 16.00 usec  
PL1 -3.00 dB  
SFO1 100.6228298 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
P3 12.38 usec  
p4 24.75 usec  
PCPD2 70.00 usec  
PL2 -1.00 dB  
PL12 14.00 dB  
SFO2 400.1316005 MHz

F2 - Processing parameters  
SI 32768  
SF 100.6127690 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40