

## Electronic Supplementary Information

# The Reaction of $\beta$ -Lactam Carbenes with 3,6-Dipyridyltetrazines: Switch of Reaction Pathways by 2-Pyridyl and 4-Pyridyl Substituents of Tetrazines

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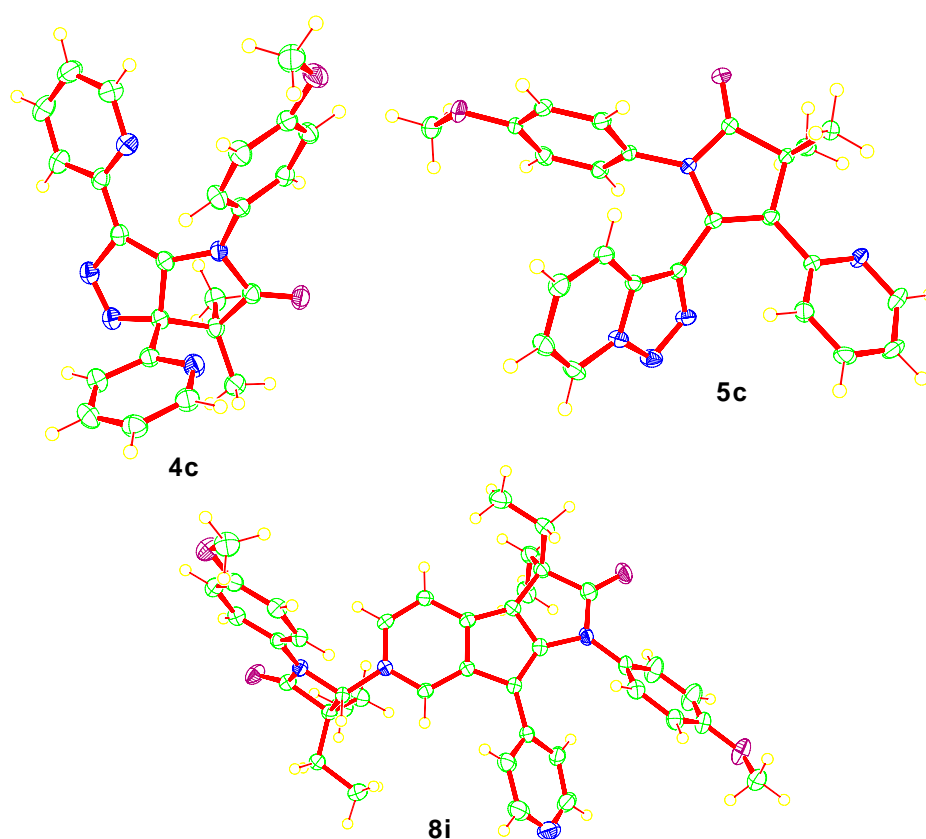
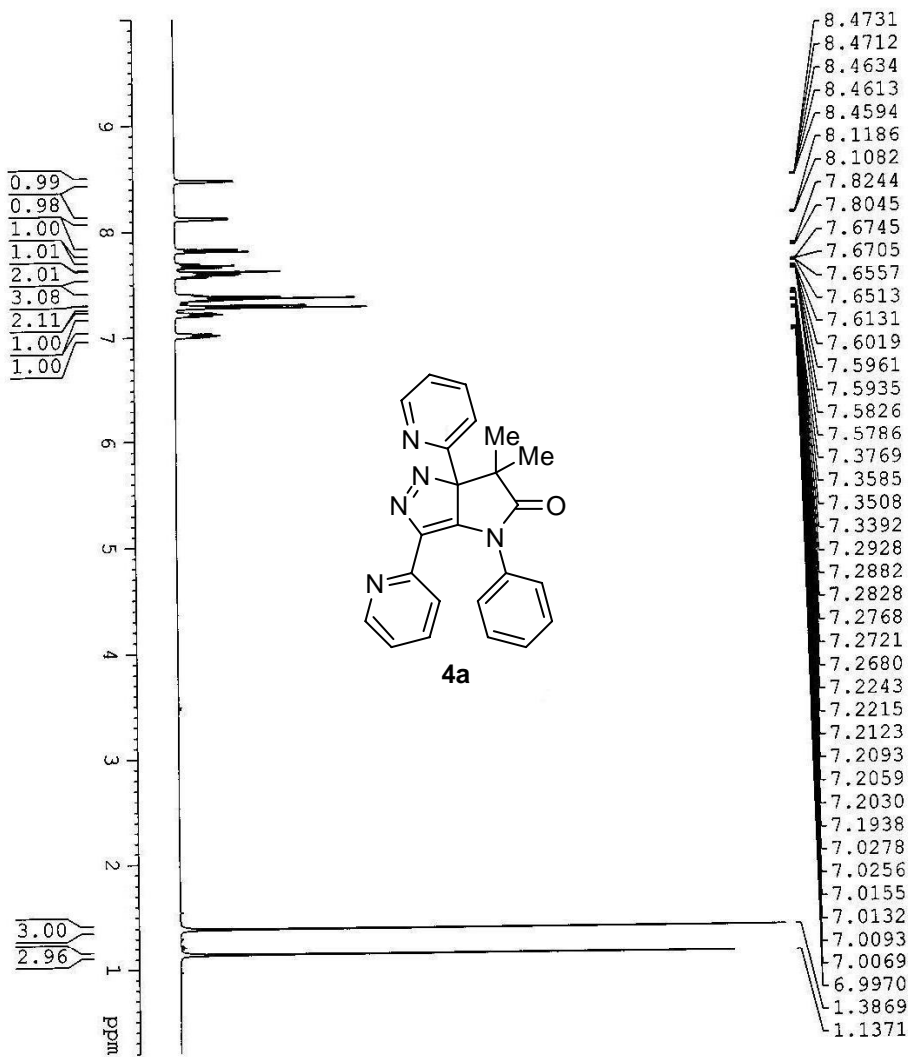


Figure S1. ORTEP drawing of X-ray structures of compounds **4c**, **5c** and **8i**.



NAME wxt-6-31  
 EXPNO 1  
 PROCNO 1  
 Date\_ 20100407  
 Time\_ 16.23  
 INSTRUM spect  
 PROBRD 5 mm F400 BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 8223.685 Hz  
 FIDRES 0.125483 Hz  
 AQ 3.9846387 sec  
 RG 203  
 DW 60.800 usec  
 DE 6.50 usec  
 TE 295.7 K  
 D1 1.00000000 sec  
 TDO 1

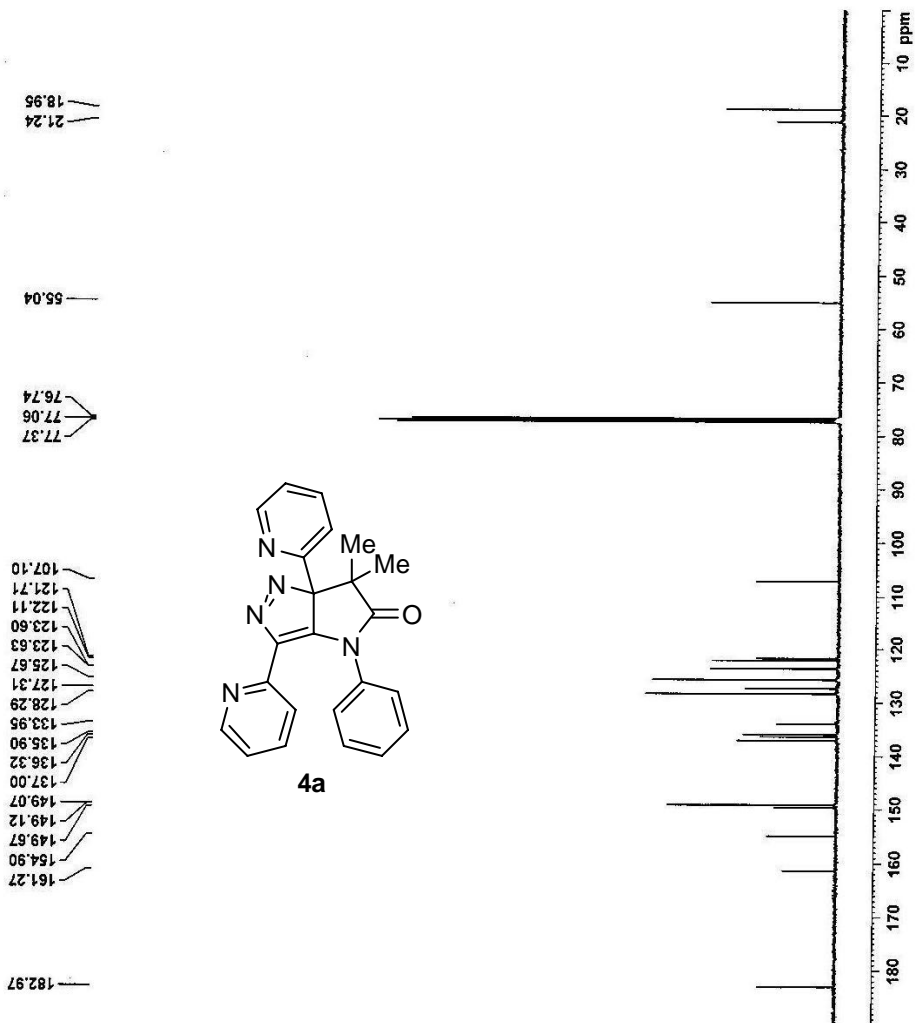
CHANNEL F1  
 NUC1 1H  
 P1 14.20 usec  
 PL1 -1.00 dB  
 PL1W 13.18669796 W  
 SFO1 400.1724712 MHz  
 SI 32768  
 SE 400.1700000 MHz  
 WDW EM  
 SSB 0  
 GB 0.30 Hz  
 LB 0  
 PC 1.00



NAME WXR-6-31-Cl3  
 EXPTNO 1  
 PROCNO 1  
 Date\_ 20100407  
 Time\_ 17.36  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zgpg30  
 SOLVENT CDCl3  
 NS 825  
 DS 4  
 SWH 24038.461 Hz  
 FIDRES 0.366798 Hz  
 AQ 1.3631988 sec  
 RG 203  
 DM 20.800 usec  
 DE 6.50 usec  
 TE 297.3 K  
 D1 2.00000000 sec  
 D11 0.03000000 sec  
 TDO 1

===== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.70 usec  
 PL1 -2.00 dB  
 PL1W 57.32743073 W  
 SF01 100.6328888 MHz

===== CHANNEL f2 =====  
 CPDPRG2 maltz16  
 NUC2 1H  
 PCPD2 80.00 usec  
 PL2 -1.00 dB  
 PL12 14.02 dB  
 PL13 14.46 dB  
 PL2W 13.18669796 W  
 PL12W 0.41508400 W  
 PL13W 0.37509048 W  
 SF02 400.1716007 MHz  
 SI 32768  
 SF 100.6228270 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 0.60



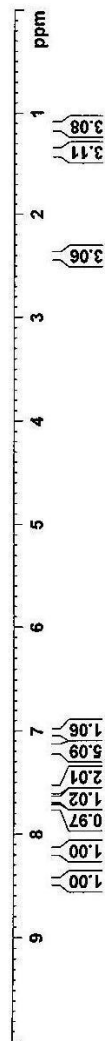
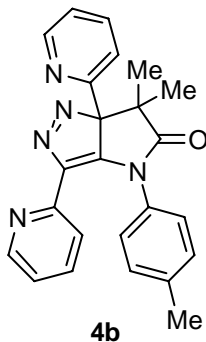


```

NAME          wxt-6-29
EXPNO         2
PROCNO        1
Date_         20100617
Time          15.13
INSTRUM       spect
PROBHD        5 mm FAPBO BB-
PULPROG       zg30
TD            65536
SOLVENT       CDCl3
NS            16
DS            2
SWH           8223.685 Hz
FIDRES        0.125483 Hz
AQ            3.9846387 sec
RG            203
DW            60.800 usec
DE            6.50 usec
TE            299.7 K
D1            1.00000000 sec
TDO           1
===== CHANNEL f1 =====
NUC1          1H
P1            14.20 usec
PL1          -1.00 dB
PL12         13.18663796 W
SF01         400.1724712 MHz
SI           32768
SF           400.1700000 MHz
WDW          EM
SSB          0
LB           0.30 Hz
GB           0
PC           1.00
    
```

1.1275  
1.3781  
2.4052

7.0051  
7.0175  
7.0220  
7.0346  
7.1434  
7.1516  
7.1652  
7.1839  
7.1870  
7.1960  
7.1988  
7.2024  
7.2053  
7.2146  
7.2172  
7.2676  
7.5426  
7.5469  
7.5623  
7.5665  
7.5812  
7.6008  
7.6412  
7.6456  
7.6603  
7.6646  
7.6796  
7.6841  
7.7268  
7.7468



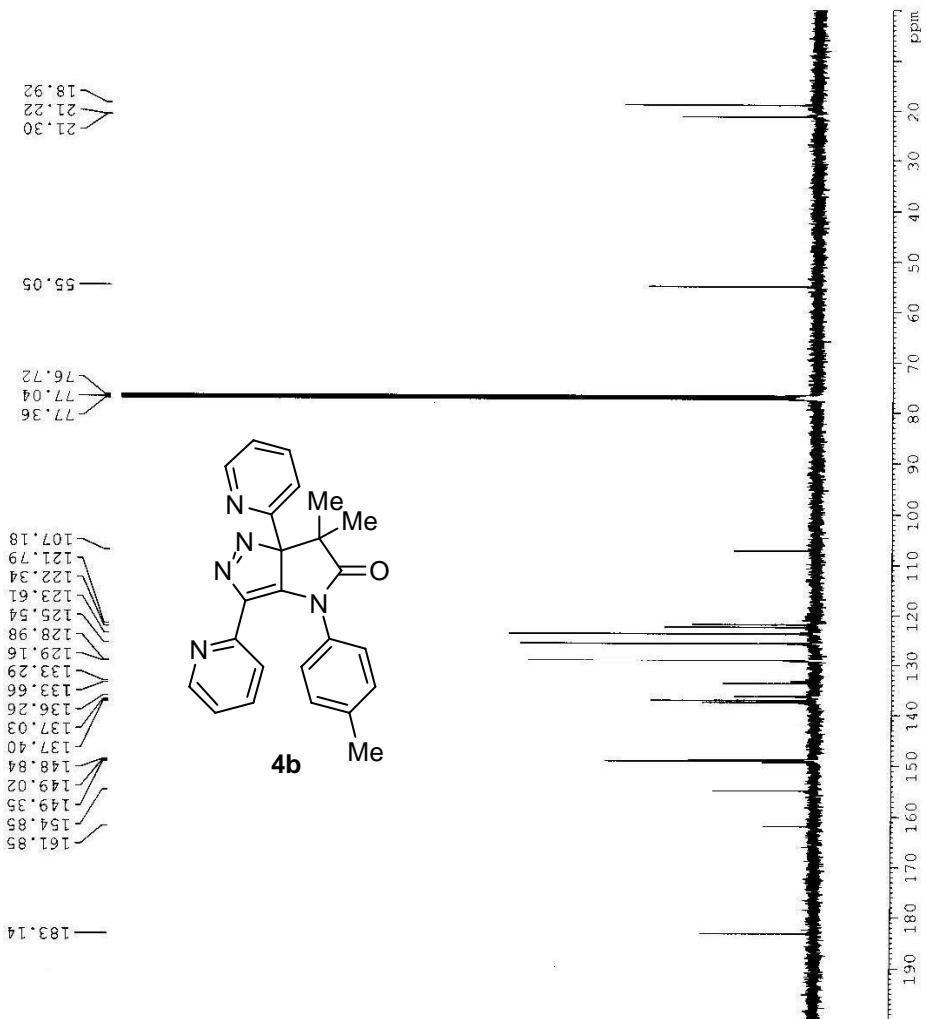


```

NAME wxr-6-29-C13
EXPNO 1
PROCNO 1
Date_ 20100419
Time 21.34
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 555
DS 4
SMH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 203
DW 20.800 usec
DE 6.50 usec
TE 295.0 K
D1 2.0000000 sec
D11 0.0300000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.70 usec
PL1 -2.00 dB
PL1W 57.32743073 W
SFO1 100.6328888 MHz

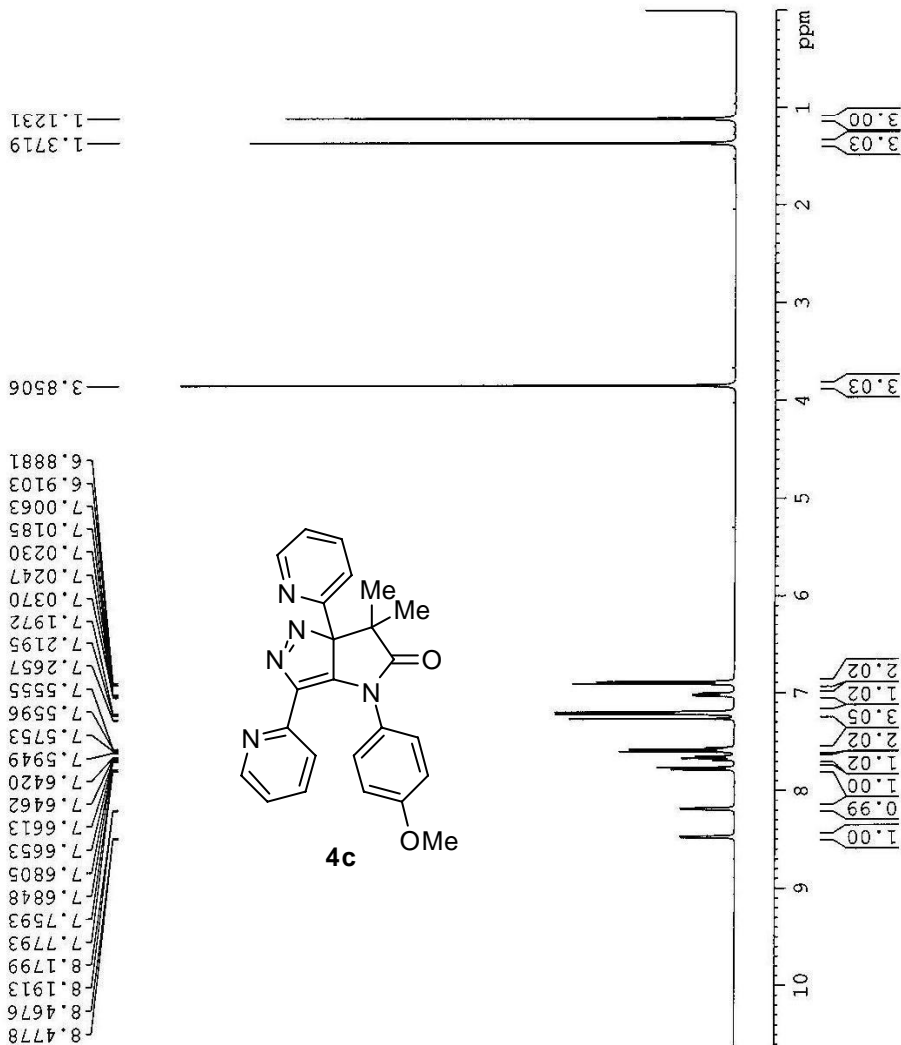
===== CHANNEL f2 =====
CPDPRG2 waitz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL12 14.02 dB
PL13 1.46 dB
PL14 1.46 dB
PL15 13.18659796 W
PL16 0.21508409 W
PL17 0.37502019 W
SFO2 400.1463996 MHz
SF 100.6228270 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
    
```





wxr-6-l0-a  
 NAME 1  
 EXNO 1  
 PROCNO 1  
 Date\_ 20100319  
 Time 9.18  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 8223.685 Hz  
 FIDRES 0.125483 Hz  
 AQ 3.9846387 sec  
 RG 203  
 DW 60.800 usec  
 DE 6.50 usec  
 TE 291.7 K  
 D1 1.00000000 sec  
 TD0 1

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 14.20 usec  
 PL1 -1.00 dB  
 PL1W 13.18669796 W  
 SFO1 400.1724712 MHz  
 SI 32768  
 SF 400.1700009 MHz  
 EM 0  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00





```

NAME wxf-6-10-a-cl3
EXPNO 1
PROCNO 1
Date_ 20100320
Time 17.24
INSTRUM spect
PROBHD 5 mm F4BBO BB
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 153
DS 0
SWH 24039.461 Hz
FIDRES 0.366788 Hz
AQ 1.3651703 sec
RG 203
DW 20.800 usec
DE 6.50 usec
TE 294.6 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

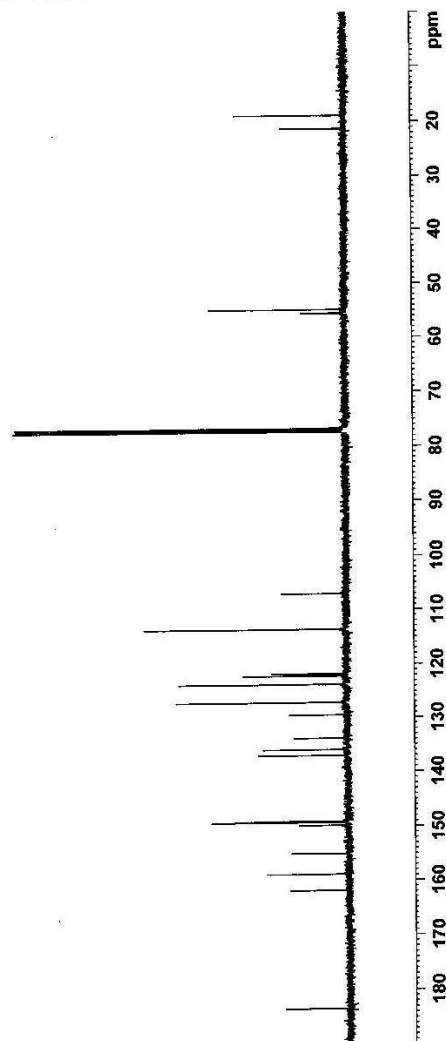
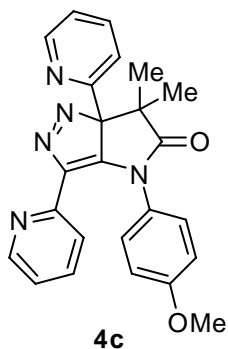
===== CHANNEL f1 =====
NUC1 13C
P1 8.70 usec
PL1 -2.00 dB
PL1W 57.32745003 W
SFO1 100.626888 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
P2 1.00 dB
PL2 1.00 dB
PL2W 13.18669796 W
PL3 1.46 dB
PL3W 13.18669796 W
PL12W 0.41508400 W
PL13W 0.37509048 W
SFO2 400.1716007 MHz
SI 32768
SF 100.6268224 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
    
```

18.9261  
21.3164

54.8849  
55.5811  
55.6382

183.4032  
161.8014  
158.8246  
154.9577  
149.7680  
149.2231  
149.0154  
137.0002  
135.9277  
133.7618  
129.4529  
127.1187  
123.6105  
122.0699  
121.6798  
113.5697  
106.9807





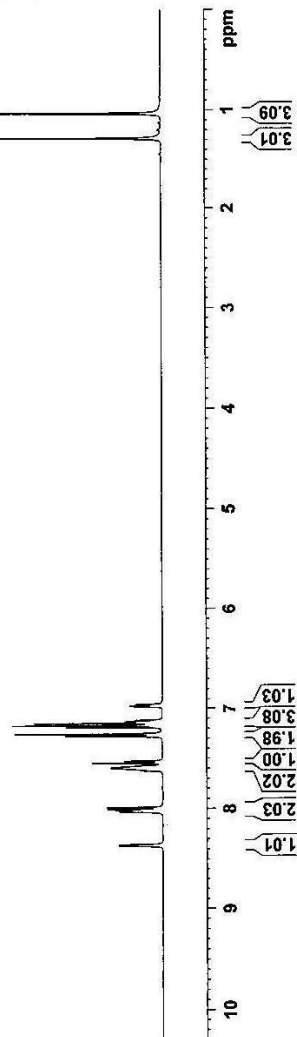
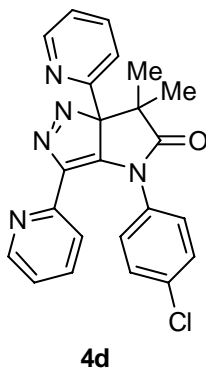
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NAME wxr-6-38
EXPNO 1
PROCNO 1
Date_ 20100617
Time_ 16.06
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 203
DM 60.800 usec
DE 6.50 usec
TE 298.7 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.20 usec
PL1 -1.00 dB
PL1W 13.18669796 W
SF01 400.1724712 MHz
SI 32768
SF 400.1700318 MHz
EM 0
SSB 0
WDW 0.30 Hz
LB 0
GB 0
PC 1.00
    
```

1.2909  
1.0386

8.3672  
8.3570  
8.0308  
8.0195  
8.0087  
7.9887  
7.6096  
7.6049  
7.6004  
7.5950  
7.5907  
7.5862  
7.5815  
7.5463  
7.5266  
7.2769  
7.2552  
7.1888  
7.1704  
7.1487  
7.1372  
7.1345  
7.1311  
7.1188  
7.1163  
6.9821  
6.9694  
6.9645  
6.9516



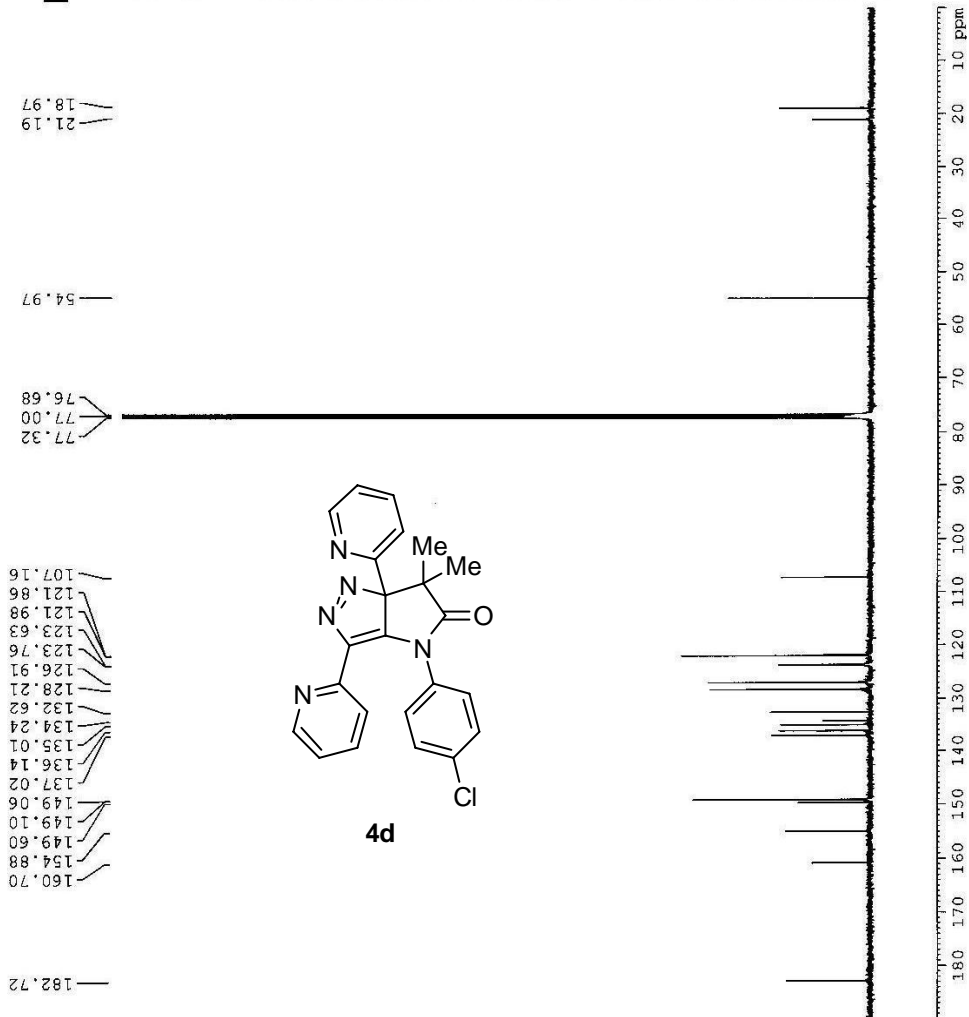




NAME wxr-6-38-Cl3  
 EXPNO 1  
 PROCNO 1  
 Date\_ 20100617  
 Time\_ 17.16  
 INSTRUM spect  
 PROBDH 5 mm PABBO BB-  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 4669  
 DS 4  
 SWH 24038.461 Hz  
 FIDRES 0.366798 Hz  
 AQ 1.3631988 sec  
 RG 203  
 DW 20.800 usec  
 DE 6.50 usec  
 TE 289.0 K  
 D1 2.00000000 sec  
 D11 0.03000000 sec  
 TDO 1

===== CHANNEL f1 =====  
 NUC1 <sup>13</sup>C  
 P1 8.70 usec  
 PL1 -2.00 dB  
 PL1W 57.32743073 W  
 SF01 100.6328888 MHz

===== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 <sup>1</sup>H  
 PCPD2 80.00 usec  
 PL2 -1.00 dB  
 PLI2 14.02 dB  
 PLI3 14.46 dB  
 PLI4 13.18669796 W  
 PLI5 0.41508400 W  
 PLI6 0.37509048 W  
 SF02 400.1716007 MHz  
 SI 32768  
 SF 100.6228270 MHz  
 EM EM  
 WDW 0  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

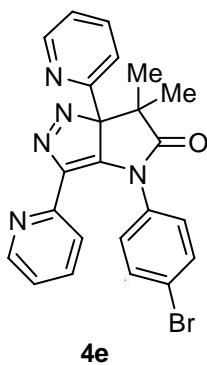




```

NAME          WKF-6-33
EXPNO         1
PROCNO        1
Date_         20100420
Time          16.22
INSTRUM       spect
PROBHD        5 mm PABBO BB-
PULPROG       zg30
TD            65536
SOLVENT       CDCl3
NS            16
DS            1
SWH           8223.482 Hz
FIDRES        0.1125843 Hz
AQ            3.9816387 sec
RG            60.800 usec
DM            6.50 usec
DE            234.7 Ksec
TE            1.00000000 sec
D1            1
TD0           1
===== CHANNEL f1 =====
NUC1          1H
P1            14.20 usec
PL1           -1.00 dB
PL12         13.18669796 W
SFO1          400.1724712 MHz
SI            32768
SF            400.1700000 MHz
WDW           EM
SSB           0
LB            0.30 Hz
GB            0
PC            1.00
    
```

1.1145  
 1.3652  
 7.0405  
 7.0429  
 7.0525  
 7.0550  
 7.0590  
 7.0616  
 7.0713  
 7.0737  
 7.1599  
 7.1671  
 7.1720  
 7.1839  
 7.1889  
 7.1940  
 7.2030  
 7.2060  
 7.2094  
 7.2125  
 7.2217  
 7.2244  
 7.2679  
 7.4755  
 7.4826  
 7.4874  
 7.4995  
 7.5044  
 7.5113  
 7.5018  
 7.6215  
 7.6578  
 7.6622  
 7.6769  
 7.6812  
 7.6961  
 7.7006  
 8.0549  
 8.0748  
 8.1113  
 8.1231  
 8.4228  
 8.4247  
 8.4267  
 8.4346  
 8.4365



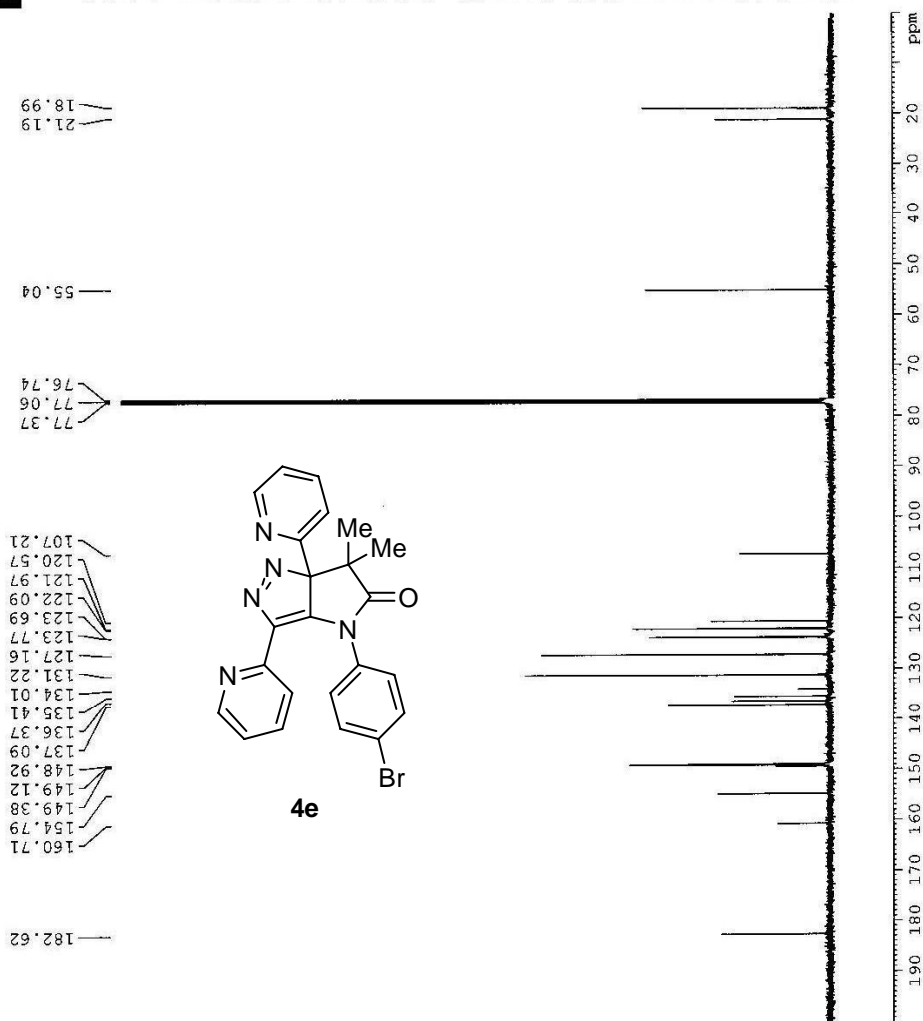


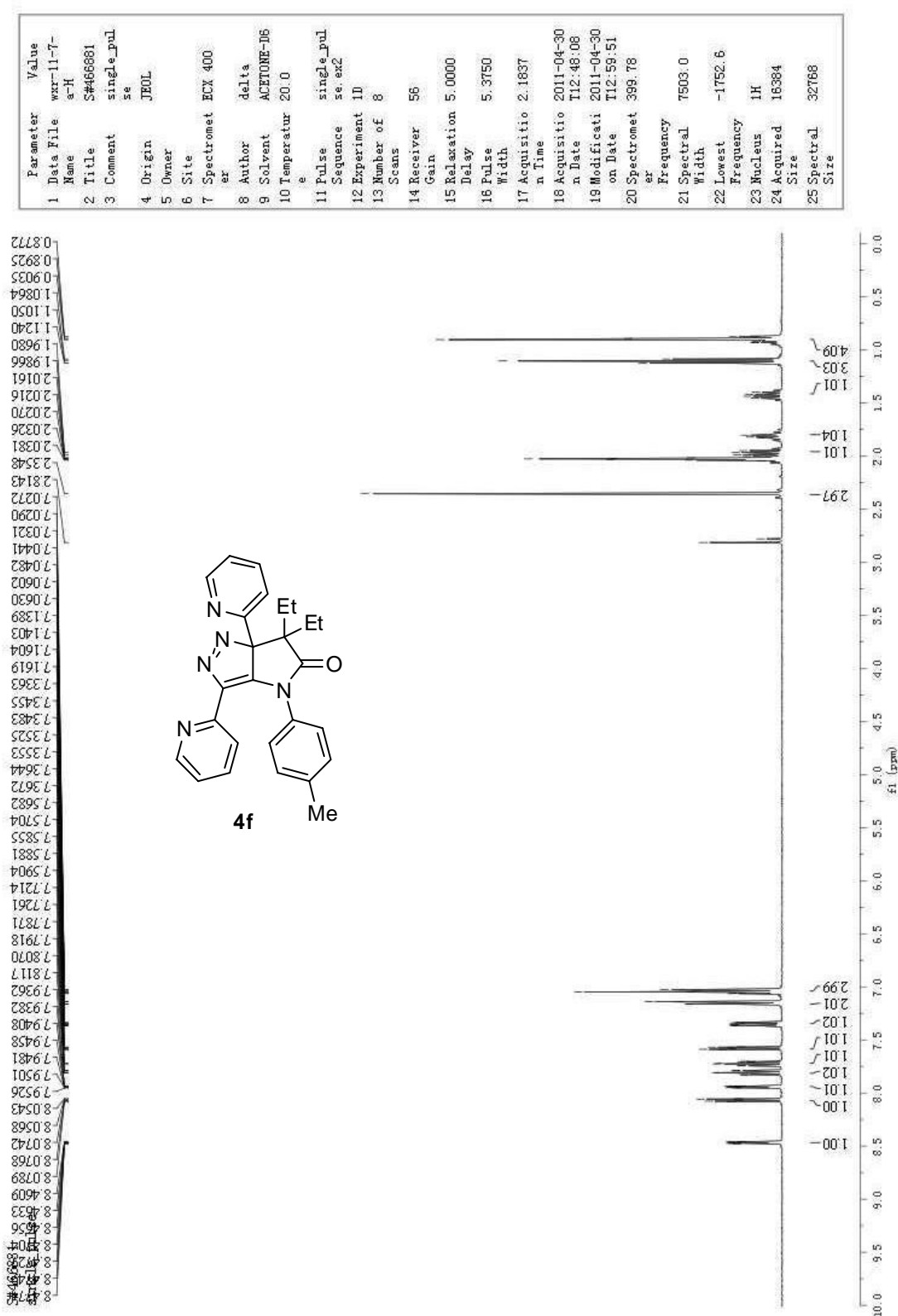
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NAME wxt-6-39-cl13
EXPNO 1
PROCNO 1
Date_ 20100428
Time 10.38
INSTRUM spect
PROBHD 5 mm PABBO BB
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 655
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 203
DE 20.800 usec
TE 293.4 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

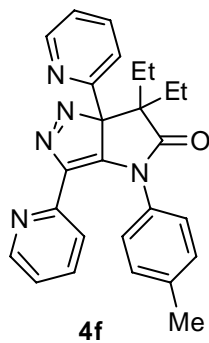
===== CHANNEL f1 =====
NUC1 13C
P1 8.70 usec
PL1 -2.00 dB
PL1W 57.32743073 W
SFO1 100.6328888 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL12 14.02 dB
PL13 14.46 dB
PL1W 13.18669796 W
PL2W 0.41508400 W
PL3W 0.37509048 W
SFO2 400.1716007 MHz
SI 32768
SF 100.6228270 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
    
```

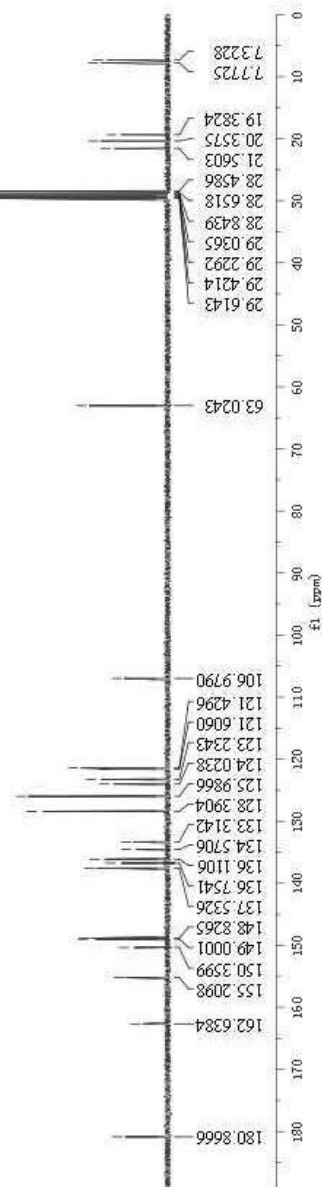


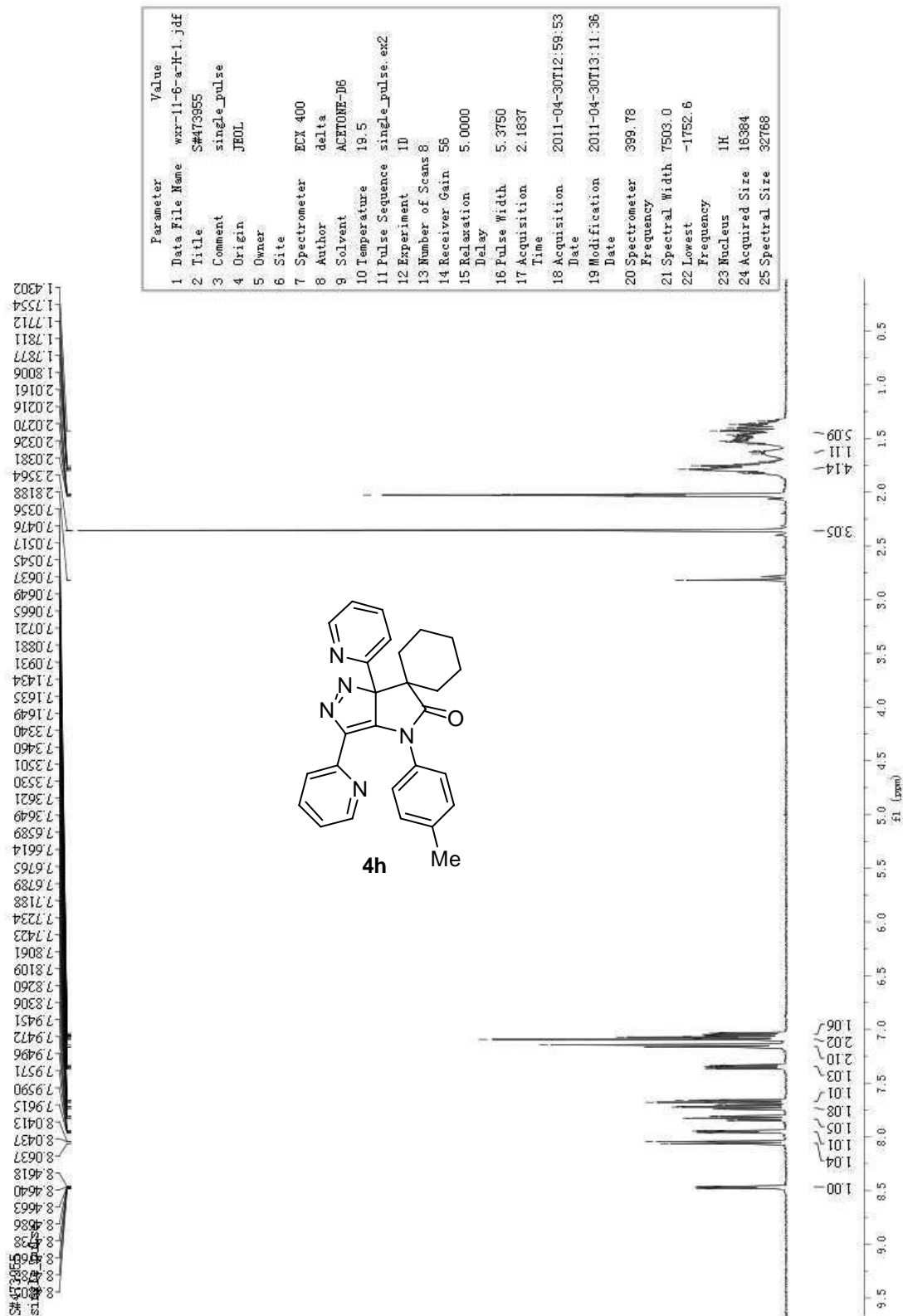


S#611506  
single pulse decoupled NOE



Parameter	Value
1 Data File Name	wxr-11-7-a-C13
2 Title	S#611506
3 Comment	single pulse decoupled gated NOE
4 Origin	JEOL
5 Owner	
6 Site	
7 Spectrometer	EX 400
8 Author	delta
9 Solvent	ACETONE-D6
10 Temperature	20.7
11 Pulse Sequence	single_pulse_dec
12 Experiment ID	
13 Number of Scans	1141
14 Receiver Gain	80
15 Relaxation Delay	2.0000
16 Pulse Width	2.9167
17 Acquisition Time	1.0433
18 Acquisition Date	2011-05-07T17:45:04
19 Modification Date	2011-05-07T17:57:41
20 Spectrometer Frequency	100.53
21 Spectral Width	31407.0
22 Lowest Frequency	-5651.0
23 Nucleus	<sup>13</sup> C
24 Acquired Size	32788
25 Spectral Size	65536





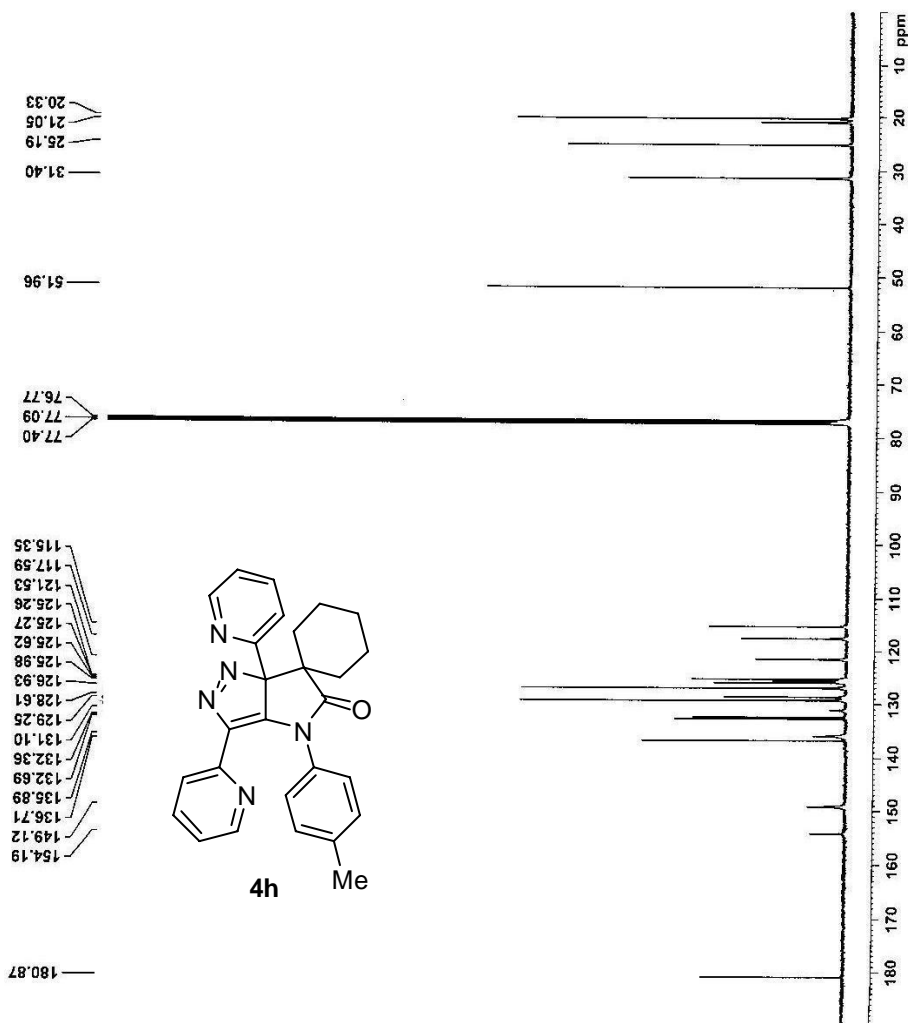


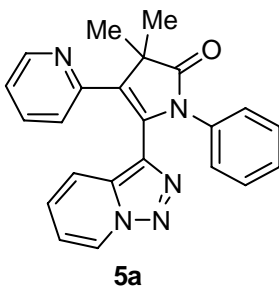
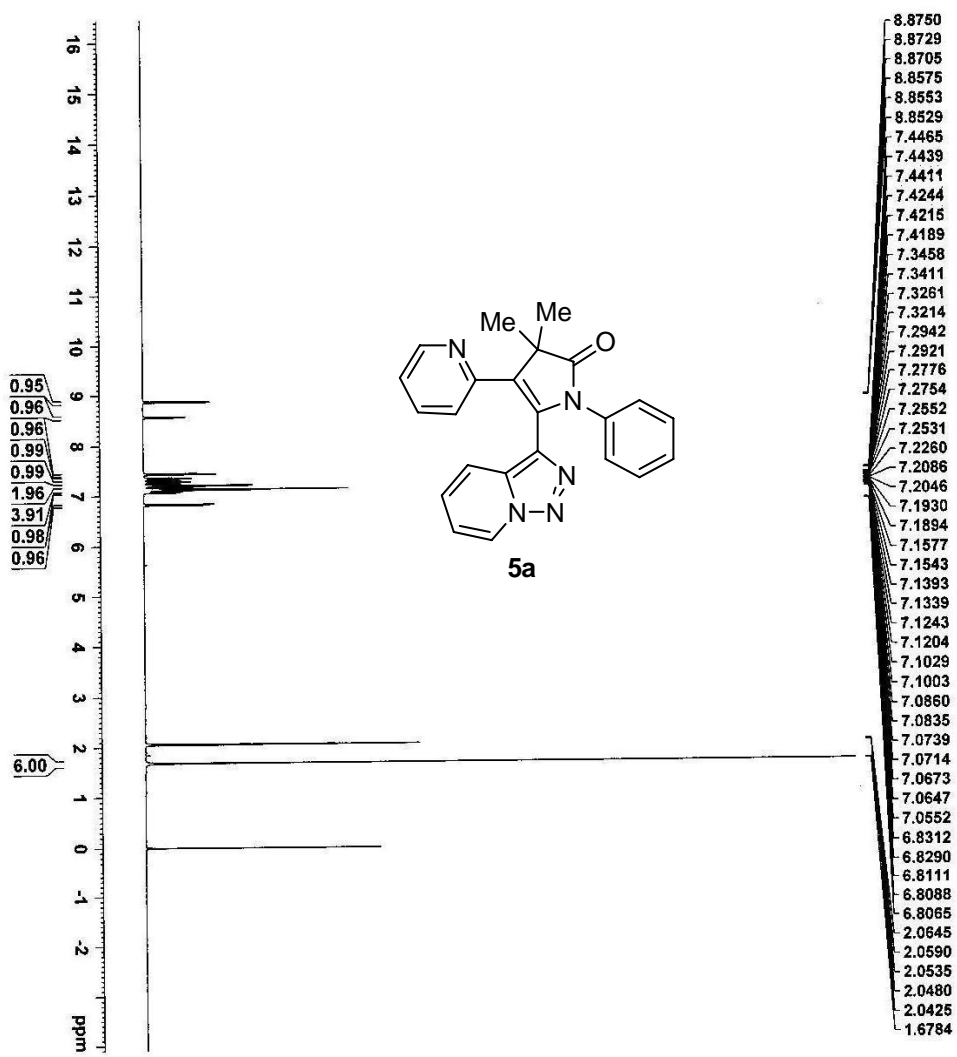
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NAME      wxr-7-c13
EXPNO    1
PROCNO   1
Date_    20100706
Time     17.22
INSTRUM spect
PROBHD   5 mm RABBO BB-
PULPROG zgpg30
TD       65536
SOLVENT  CDCl3
NS       4383
DS       4
SWH      24038.461 Hz
FIDRES   0.36798 Hz
AQ       1.3631988 sec
RG       203
DK       20.800 usec
DE       6.500 usec
TE       303.0 K
D1       2.0000000 sec
D11      0.0300000 sec
TD0      1

===== CHANNEL f1 =====
NUC1     13C
P1       8.70 usec
PL1     -2.00 dB
PL1W    57.32743673 W
SFO1    100.6288688 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2     -1.00 dB
PL2W    14.02 dB
PL3     14.46 dB
PL3W    13.18666796 W
PL4W    0.41508400 W
PL13W   0.37509048 W
SFO2    400.1716007 MHz
SI       32768
SF      100.6228242 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
    
```



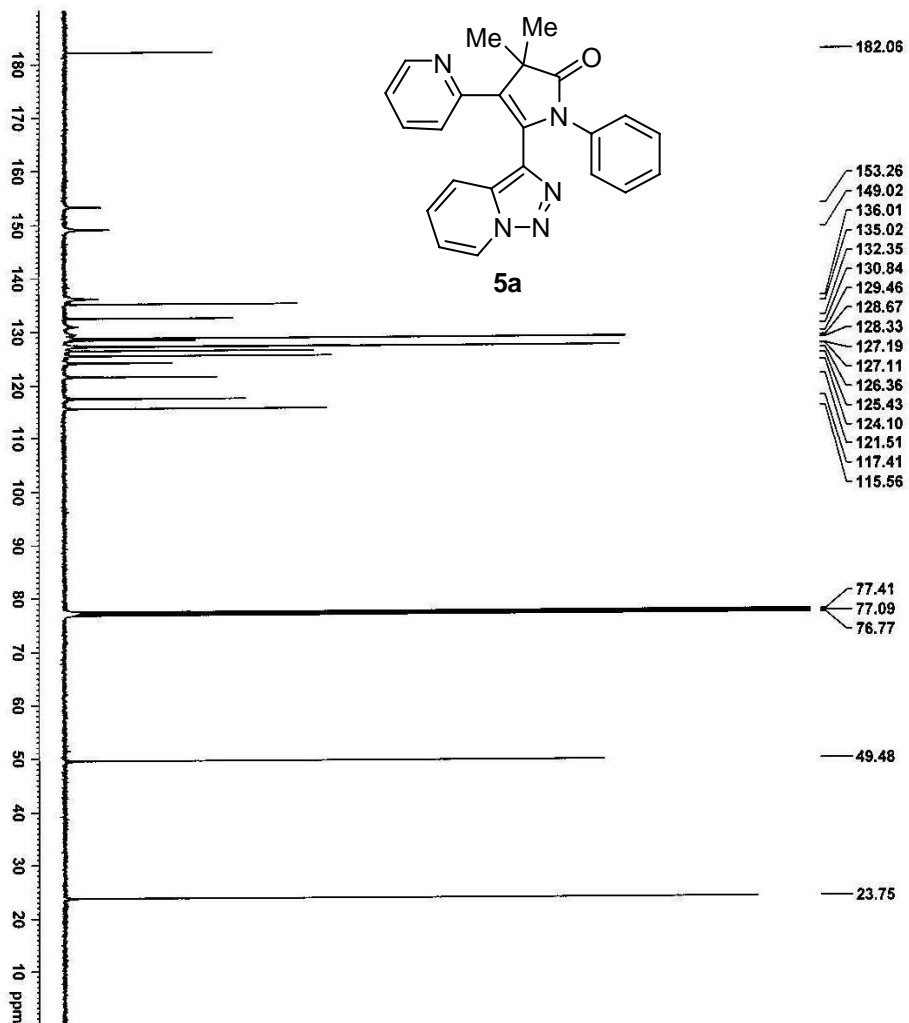


```

NAME          wxr-6-33
EXPNO         1
PROCNO        1
Date_         20101025
Time_         10.19
INSTRUM       spect
PROBHD        5 mm PABBO-BB-
PULPROG       zg30
TD            65536
SOLVENT       acetone
NS            16
DS            2
SMT           8223.685 Hz
AQ            0.1725483 Hz
RG            3.9848387 sec
FIDRES        203
AQ            60.800 usec
DE            6.550 usec
TE            293.2 K
D1            1.00000000 sec
ID0           1

===== CHANNEL f1 =====
NUC1          1H
P1            14.20 usec
PL1           -1.00 dB
PL12          13.18669796 W
SFO1          400.1124712 MHz
SI            32768
SF            400.1700017 MHz
WDW           EM
SSB           0
LB            0.30 Hz
GB            0
PC            1.00
    
```





**BRUKER**  
 wxt-6-33-C13

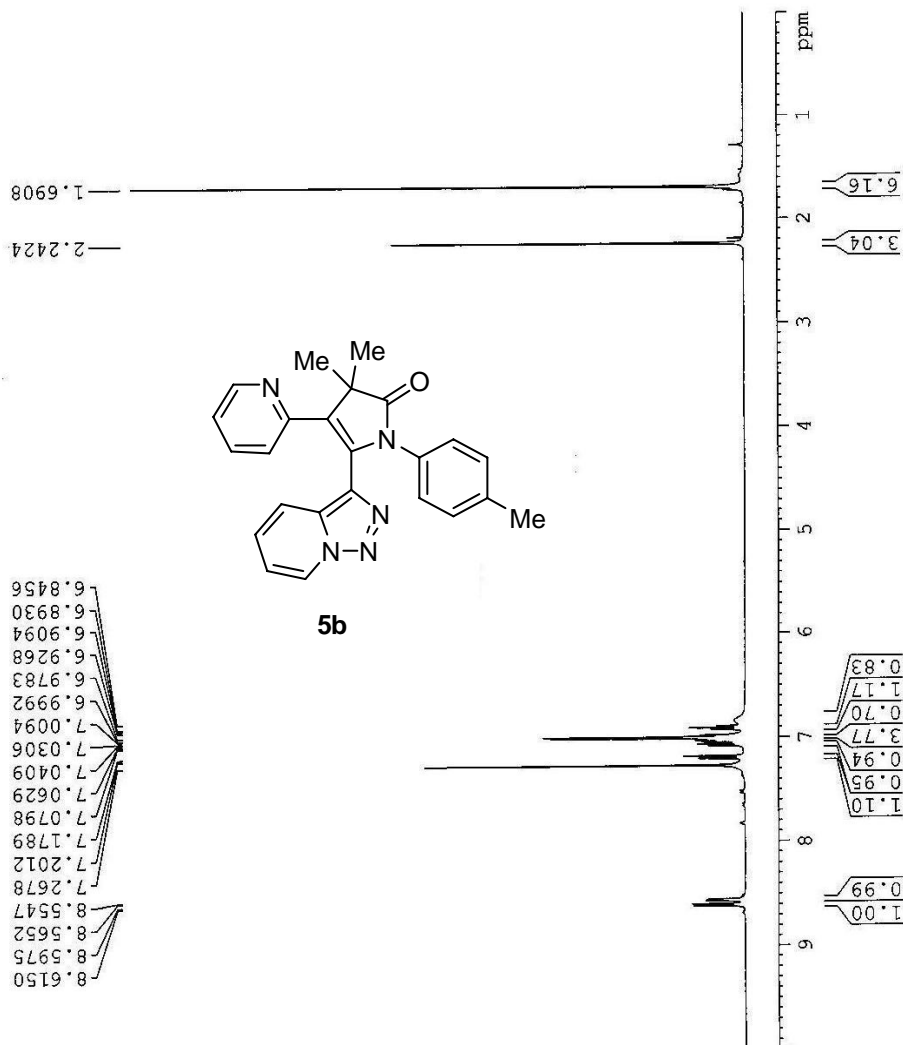
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 PROCNO 1  
 Date\_ 20100410  
 Time 22.44  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CMC13  
 NS 4000  
 DS 4  
 SWH 24038.461 Hz  
 FIDRES 0.366798 Hz  
 AQ 1.3631988 sec  
 RG 203  
 DW 20.800 usec  
 DE 6.50 usec  
 TE 294.2 K  
 D1 2.00000000 sec  
 D11 0.03000000 sec  
 TD0 1

==== CHANNEL F1 =====  
 NUC1 13C  
 P1 8.70 usec  
 PL1 -2.00 dB  
 PL1W 57.32743073 W  
 SFO1 100.6328888 MHz

==== CHANNEL F2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 RCPD2 80.00 usec  
 PL2 -1.00 dB  
 PL12 14.02 dB  
 PL13 14.46 dB  
 PL1W 13.18665736 W  
 PL2W 0.41508400 W  
 PL3W 0.37509048 W  
 SED2 400.1716007 MHz  
 SF 100.6328270 MHz  
 SI 2M  
 SCW 0  
 SSB 0  
 LA 1.00 Hz  
 LB 0  
 GB 0  
 PC 1.40



NAME wxr-6-30  
EXPNO 1  
PROCNO 1  
Date\_ 20100408  
Time\_ 14.57  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 8223.685 Hz  
FIDRES 0.125083 Hz  
AQ 3.984687 sec  
RG 203  
DW 60.800 usec  
DE 5.50 usec  
TE 295.8 K  
D1 1.00000000 sec  
TDO 1  
===== CHANNEL f1 =====  
NUC1 1H  
P1 14.20 usec  
PL1 -1.00 dB  
PL1W 13.18665796 W  
SFO1 400.1724712 MHz  
SI 32768  
SF 400.1700000 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00





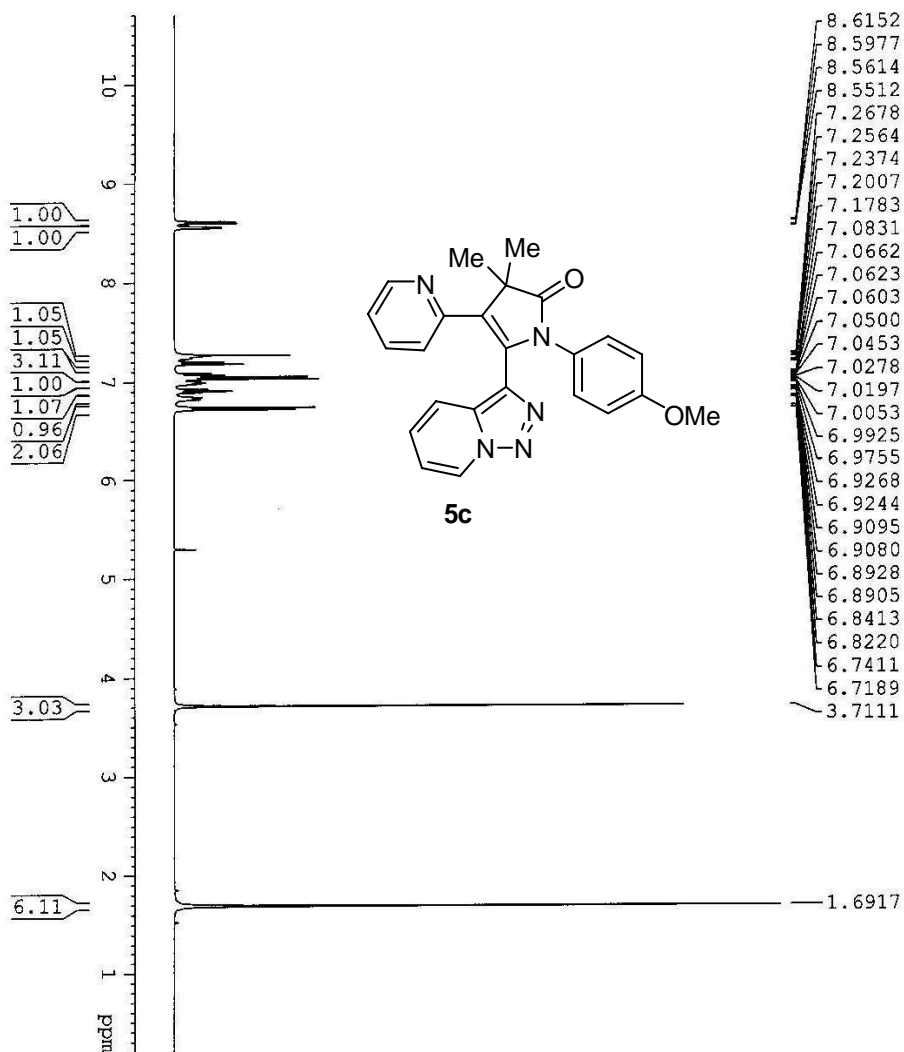
wxr-6-30-C13

NAME	1
EXPNO	1
PROCNO	1
Date_	20100409
Time	15.23
INSTRUM	spect
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	2655
DS	4
SWH	24038.461 Hz
FIDRES	0.366798 Hz
AQ	1.3631988 sec
RG	203
DW	20.800 usec
DE	6.50 usec
TE	295.5 K
D1	2.00000000 sec
D11	0.03000000 sec
TDO	1

===== CHANNEL f1 =====	
NUC1	13C
PL1	8.70 usec
PL2	-2.00 dB
PL1W	57.32743073 W
SFO1	100.6328888 MHz
===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	1H
PL2	80.00 usec
PL12	-1.00 dB
PL13	14.02 dB
PL14	14.46 dB
PL12W	13.186669796 W
PL13W	0.41508400 W
PL13W	0.37509048 W
SFO2	400.1716007 MHz
SI	32768
SF	100.6228270 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

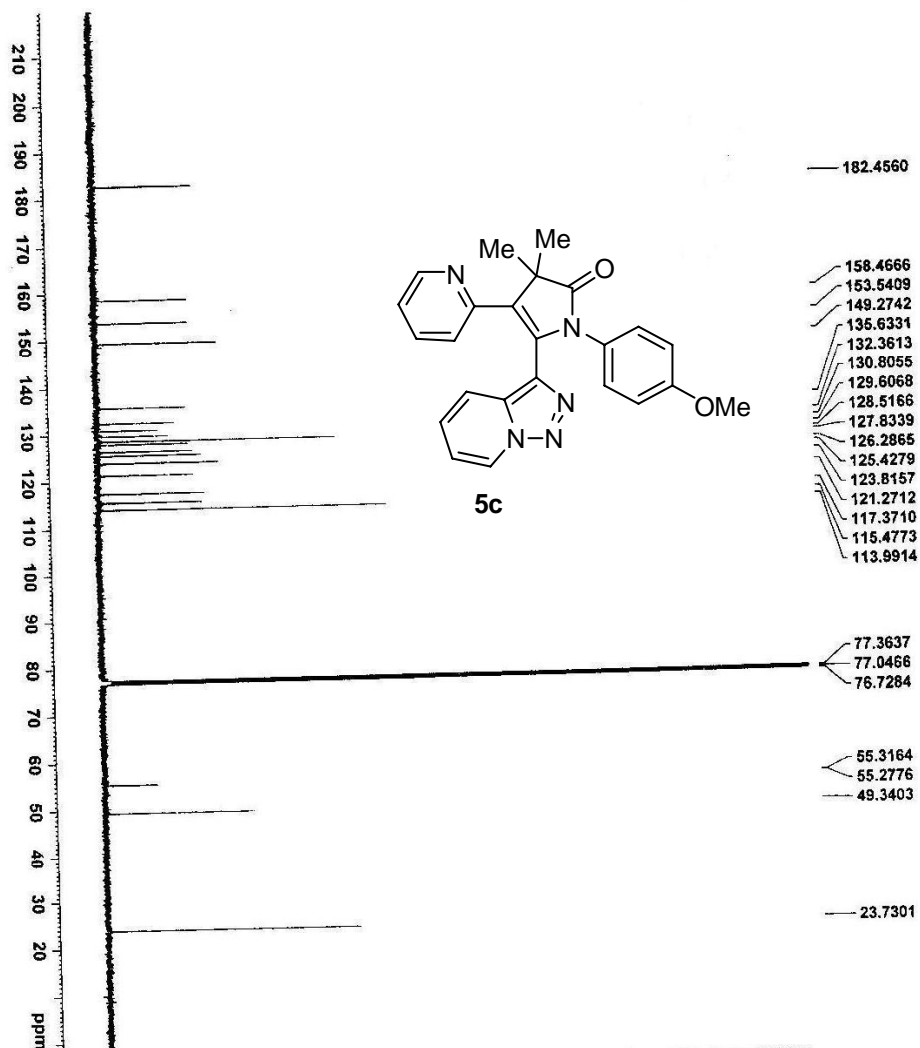




NAME: WXR-6-6-b  
 EXPNO: 1  
 PROCNO: 1  
 F2: 20100319  
 File: 15.37  
 INSTRUM: spect  
 PULPROG: zgpg30  
 TD: 65536  
 SOLVENT: CDCl3  
 NS: 16  
 DS: 2  
 SWH: 8223.683 Hz  
 FIDRES: 0.125483 Hz  
 AQ: 3.9846387 sec  
 RG: 203  
 DM: 60.800 usec  
 DE: 6.50 usec  
 TE: 294.6 K  
 D1: 1.00000000 sec  
 TDO: 1

CHANNEL F1  
 NUCL1: 1H  
 P1: 14.20 usec  
 PL1: -1.00 dB  
 PL1W: 13.18659796 W  
 SFO1: 400.1724712 MHz  
 SI: 32768  
 SF: 400.1699999 MHz  
 WDW: EM  
 SSB: 0  
 LB: 0.30 Hz  
 GB: 0  
 PC: 1.00



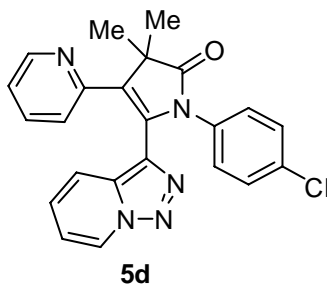
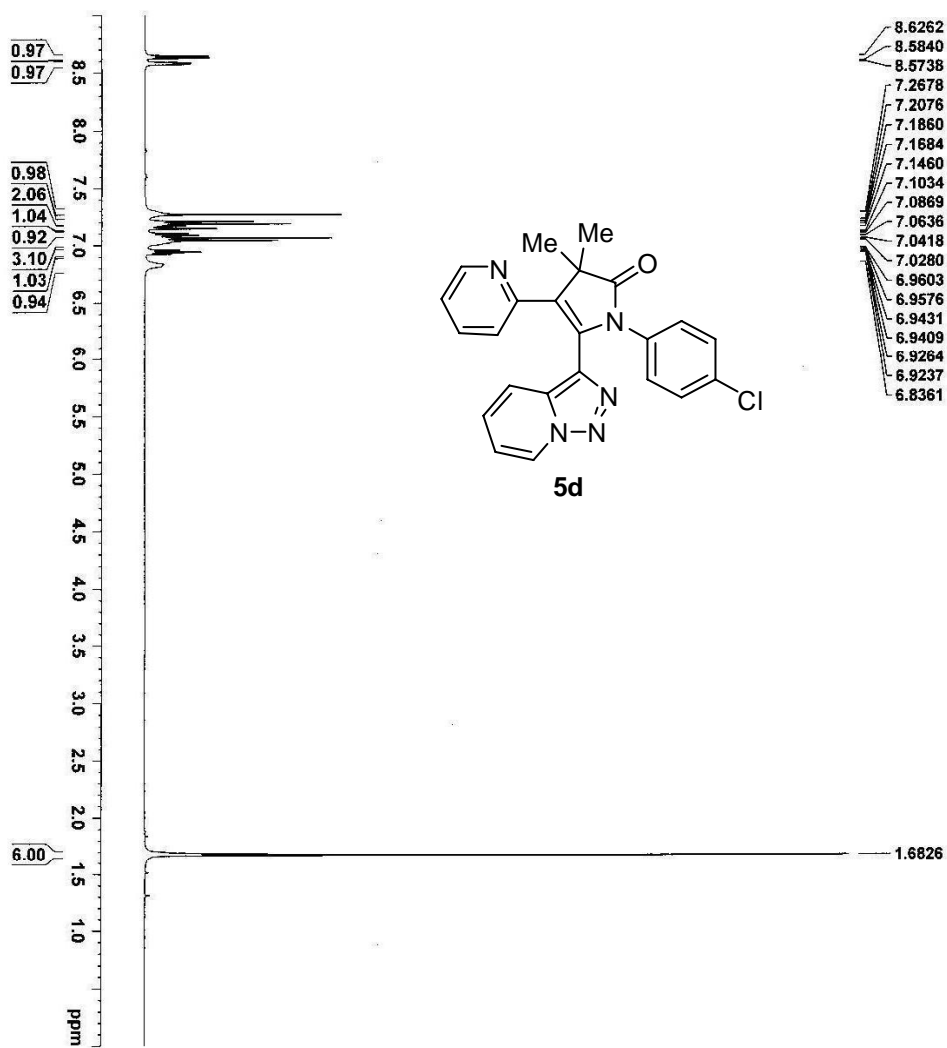


```

NAME: 5c
EXPNO: 1
PROCNO: 1
Date_ : 20110224
Time: 12.24
INSTRUM: spect
PROBHD: 5 mm F4ACS BBO
PULPROG: zgpg30
TD: 65536
SOLVENT:
NS: 2048
DS: 4
SWH: 24036.414 Hz
FIDRES: 1.0000000 Hz
RG: 1.0000000
AQ: 0.0001000 sec
RG2: 1.0000000
DE: 2.0000000
TE: 300.2
D1: 2.0000000 sec
D11: 0.0300000 sec
TD0:
===== CHANNEL f1 =====
NUC1: 13
P1: 12.00000000 sec
PL1: 0.00000000 dB
SFO1: 100.628366 MHz
===== CHANNEL f2 =====
NAME: CHANDEL
NUC2: 13
P2: 12.00000000 sec
PL2: 0.00000000 dB
SFO2: 100.628366 MHz
=====
PROCNO: 1
RG: 1.0000000
RG2: 1.0000000
DE: 2.0000000
TE: 300.2
D1: 2.0000000
D11: 0.0300000
=====
SOLVENT:
NS: 2048
DS: 4
SWH: 24036.414 Hz
FIDRES: 1.0000000 Hz
RG: 1.0000000
AQ: 0.0001000 sec
RG2: 1.0000000
DE: 2.0000000
TE: 300.2
D1: 2.0000000
D11: 0.0300000
TD0:
===== CHANNEL f1 =====
NUC1: 13
P1: 12.00000000 sec
PL1: 0.00000000 dB
SFO1: 100.628366 MHz
===== CHANNEL f2 =====
NAME: CHANDEL
NUC2: 13
P2: 12.00000000 sec
PL2: 0.00000000 dB
SFO2: 100.628366 MHz
=====

```





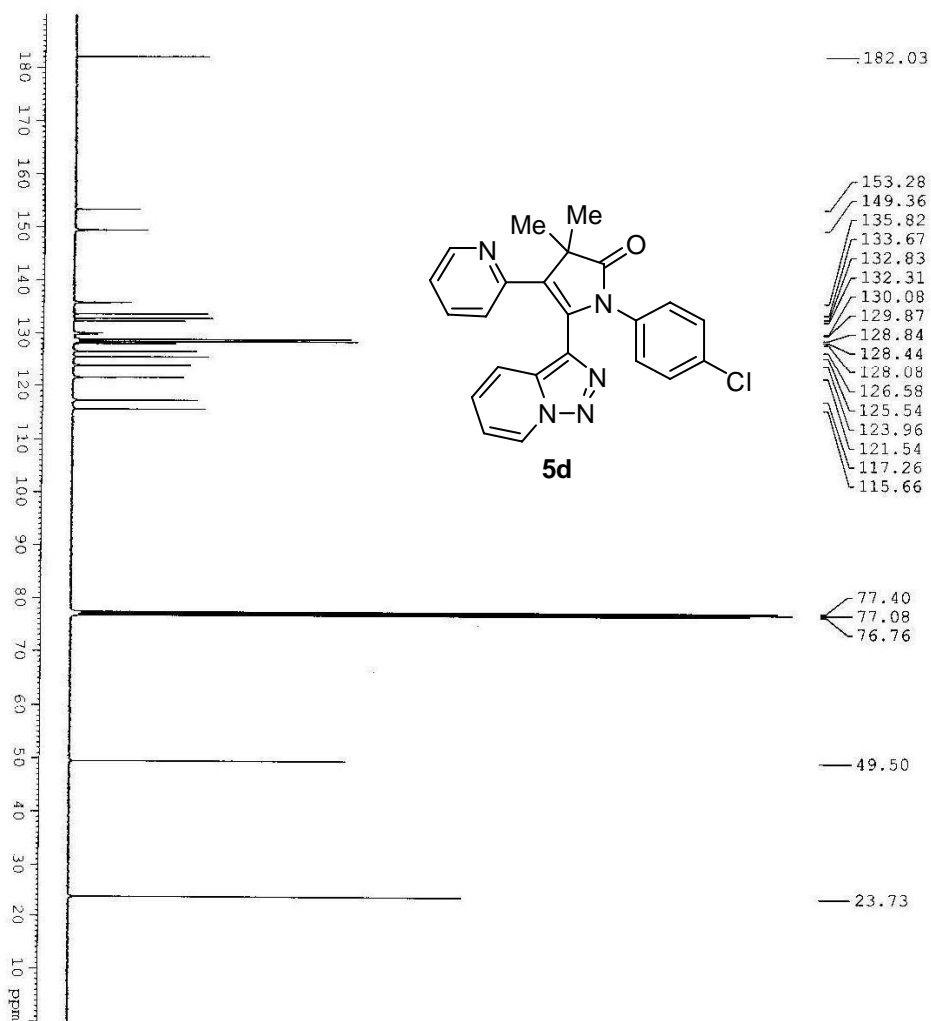
8.6262  
 8.5840  
 8.5738  
 7.2678  
 7.2076  
 7.1860  
 7.1684  
 7.1460  
 7.1034  
 7.0869  
 7.0636  
 7.0418  
 7.0280  
 6.9603  
 6.9576  
 6.9431  
 6.9409  
 6.9264  
 6.9237  
 6.8361



```

===== CHANNEL F1 =====
NAME          wxr-6-35
EXPNO         1
PROCNO        1
Date_         20100419
Time         10.32
INSTRUM       spect
PROBHD        5 mm PABBO BB-
PULPROG       zg30
TD            65536
SOLVENT       CDCl3
NS            16
DS            2
SWH           8223.685 Hz
FIDRES       0.125483 Hz
AQ           3.9846387 sec
RG           203
DE           60.800 usec
TE           292.3 K
D1           1.00000000 sec
TD0          1

===== CHANNEL F1 =====
NUC1          1H
PI           14.20 usec
PL1         -1.00 dB
PL1W       13.18669796 W
SFO1        400.1724712 MHz
SI          32768
SF          400.1700000 MHz
WDW          EM
SSB          0
LB           0.30 Hz
GB           0
PC           1.00
    
```

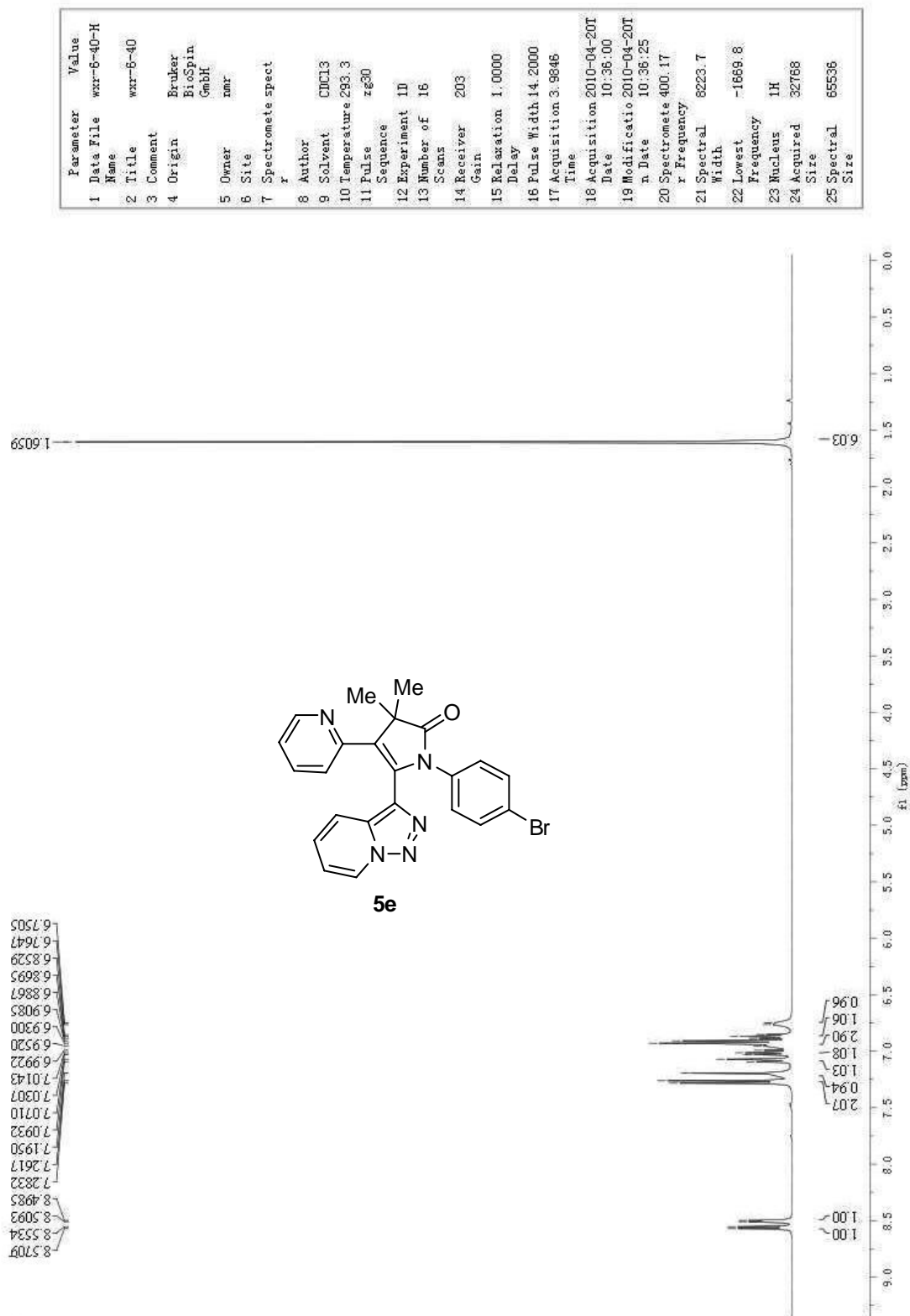


BRUKER

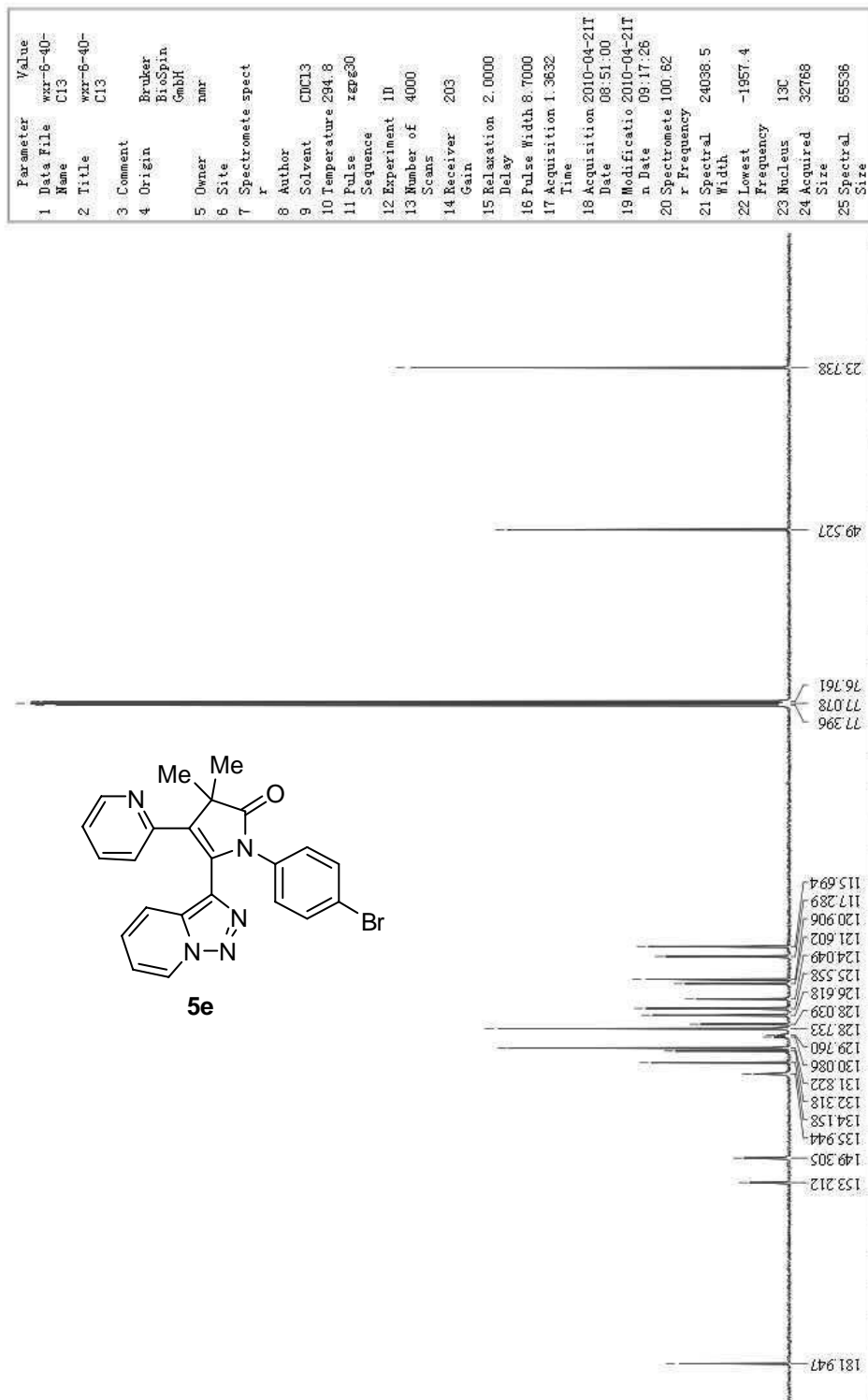
NAME wxt-b-35-cl3  
 EXPNO 1  
 PROCNO 1  
 Date\_ 20100419  
 Time 17.31  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CDC13  
 NS 4129  
 DS 4  
 SWH 24038.461 Hz  
 FIDRES 0.366798 Hz  
 AQ 1.3631988 sec  
 RG 203  
 DW 20.800 usec  
 DE 6.50 usec  
 TE 295.4 K  
 D1 2.00000000 sec  
 D11 0.03000000 sec  
 TD0 1

==== CHANNEL f1 =====  
 NUC1 13C  
 P1 8.70 usec  
 PL1 -2.00 dB  
 PL1W 57.32743073 MHz  
 SFO1 100.628270 MHz

==== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 PCPD2 80.00 usec  
 PL2 1.00 dB  
 PL12 14.02 dB  
 PL13 14.46 dB  
 PL1W 13.1868796 MHz  
 F112W 0.41508400 MHz  
 F113W 0.37509048 MHz  
 SFO2 400.1716007 MHz  
 S1 100.628270 MHz  
 S1W 32768 MHz  
 S2W 0 MHz  
 S3W 1.00 MHz  
 S4W 0 MHz  
 S5W 1.40 MHz  
 S6W 0 MHz  
 S7W 0 MHz  
 S8W 0 MHz  
 S9W 0 MHz  
 S10W 0 MHz







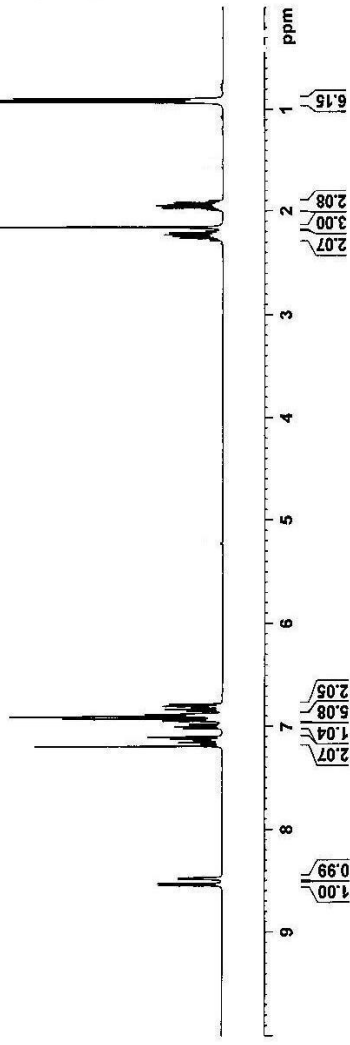
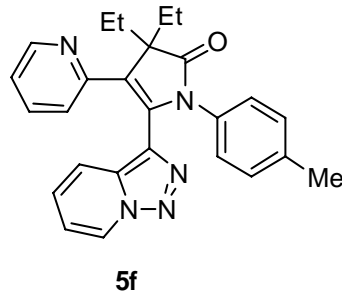


0.8949  
0.9134  
0.9317  
1.9218  
1.9399  
1.9546  
1.9728  
2.1595  
2.2127  
2.2312  
2.2456  
2.2641  
6.7829  
6.8028  
6.8127  
6.8157  
6.8299  
6.8326  
6.8469  
6.8498  
6.8756  
6.8801  
6.8851  
6.8923  
6.8951  
6.9012  
6.9250  
6.9458  
6.9771  
6.9791  
6.9959  
6.9994  
7.0014  
7.0159  
7.0180  
7.1007  
7.1033  
7.1205  
7.1230  
7.1334  
7.1379  
7.1529  
7.1573  
7.1908  
8.4694  
8.4715  
8.4736  
8.4794  
8.4814  
8.4836  
8.4855  
8.5267

```

NAME wxr-7-9
EXPNO 1
PROCNO 1
Date_ 20100617
Time_ 10.10
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 203
DE 60.800 usec
TE 298.3 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.20 usec
PL1 -1.00 dB
PL1W 13.18669796 W
SF01 400.1724712 MHz
SI 32768
SF 400.1700308 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00
    
```



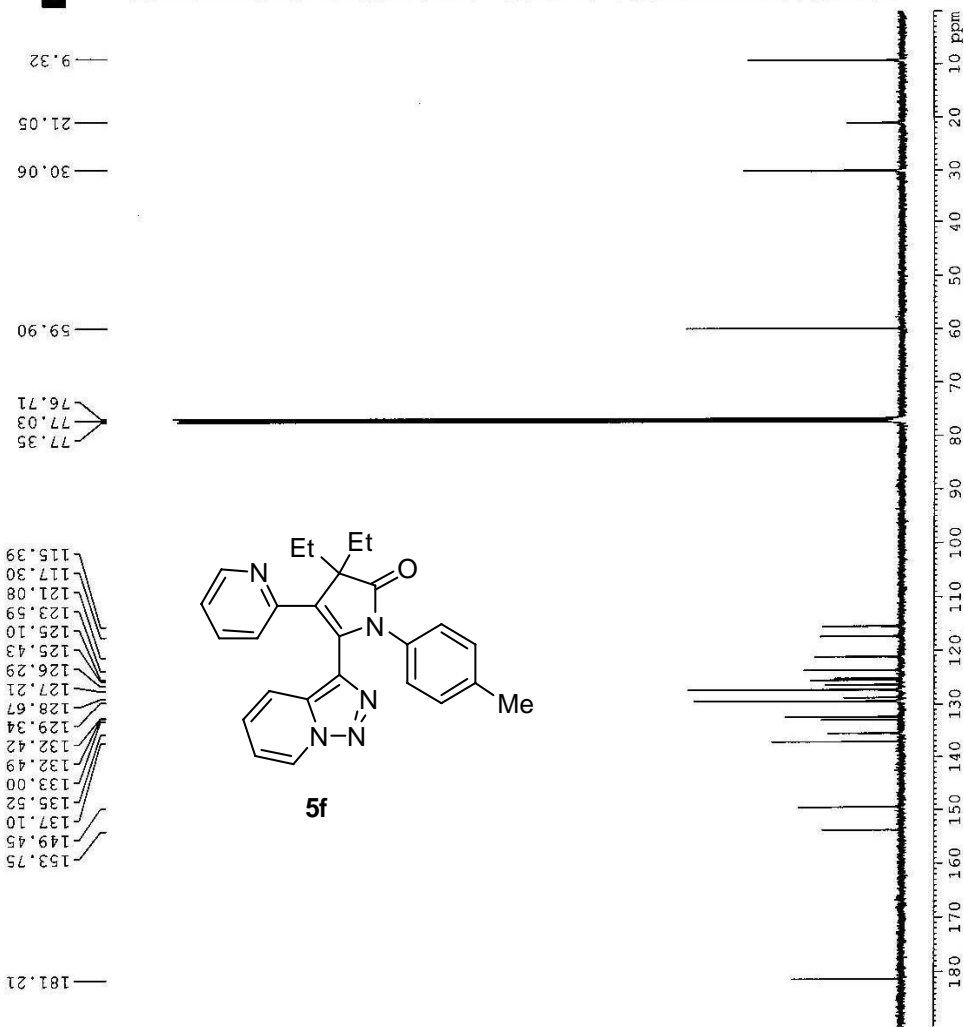


```

NAME          wxf-7-9-Cl3
EXPNO         1
PROCNO        1
Date_         20100618
Time_         8.10
INSTRUM       spect
PROBHD        5 mm PABBO BB-
PULPROG       zgpg30
TD            65536
SOLVENT       CDC13
NS            1204
DS            4
SWH           24038.461 Hz
FIDRES        0.366798 Hz
AQ            1.3631988 sec
RG            203
DM            20.800 usec
DE            6.50 usec
TE            302.3 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           1

===== CHANNEL f1 =====
NUC1          13C
P1            8.70 usec
PL1           -2.00 dB
PL1W          57.32743073 W
SFO1          100.6328888 MHz

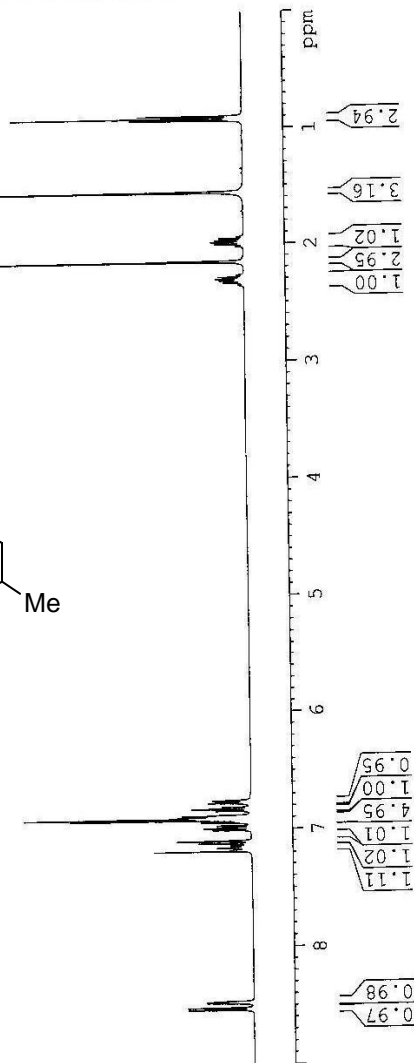
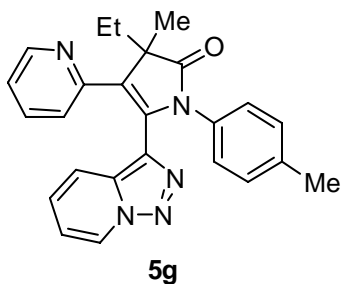
===== CHANNEL f2 =====
CPDPRG2       waltz16
NUC2          1H
PCPD2         80.00 usec
PL2           1.00 dB
PL2W          14.02 dB
PL3           13.18669756 W
PL3W          0.41508400 W
PL4           0.37509045 W
SFO2          400.1716007 MHz
SI            32.798
SF            100.6228270 MHz
WDW           EM
SSB           0
GB            1.00 Hz
PC            1.40
    
```





wxx-7-25  
 NAME: 1  
 EXPRO: 1  
 PROCNO: 1  
 Date: 20100527  
 Time: 16.35  
 INSTRUM: spect  
 PROBHD: 5 mm PABBO BB-  
 PULPROG: zg30  
 TD: 65536  
 SOLVENT: CDCl3  
 NS: 16  
 DS: 2  
 SWH: 8223.685 Hz  
 FIDRES: 0.125483 Hz  
 AQ: 3.9846387 sec  
 RG: 203  
 DW: 60.800 usec  
 DE: 6.50 usec  
 TE: 299.2 K  
 D1: 1.00000000 sec  
 TD0: 1  
 =====  
 CHANNEL f1 =====  
 NUC1: 1H  
 P1: 14.20 usec  
 PL1: -1.00 dB  
 PL1W: 13.18669796 W  
 SF01: 400.1724712 MHz  
 SI: 32768  
 SF: 400.1700308 MHz  
 DM: 0  
 WDW: 0  
 SSB: 0  
 LB: 0.30 Hz  
 GB: 0  
 PC: 1.00

0.9010  
 0.9194  
 0.9378  
 1.5614  
 1.9572  
 1.9752  
 1.9902  
 2.0083  
 2.1572  
 2.2891  
 2.3076  
 2.3221  
 2.3406  
 6.7578  
 6.7776  
 6.8099  
 6.8125  
 6.8272  
 6.8293  
 6.8440  
 6.8467  
 6.8865  
 6.8926  
 6.9023  
 6.9080  
 6.9233  
 6.9443  
 6.9700  
 6.9717  
 6.9887  
 6.9920  
 6.9940  
 7.0088  
 7.0105  
 7.1022  
 7.1246  
 7.1447  
 7.1637  
 7.1909  
 8.4683  
 8.4704  
 8.4803  
 8.4824  
 8.5214



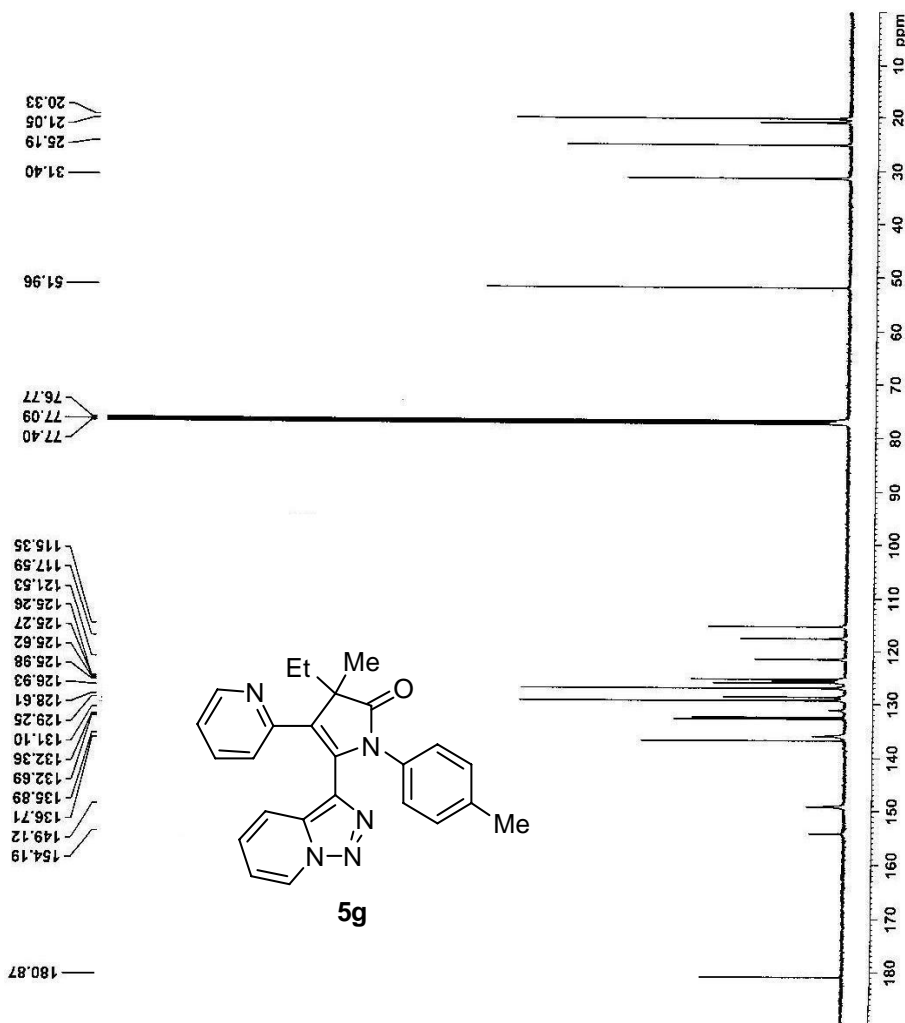


```

NAME          wxr-7-7-cl3
EXPNO         1
PROCNO        1
Date_         20100706
Time_         17.22
INSTRUM       spect
PROBHD        5 mm PABBO BB-
PULPROG       zgpg30
TD            65536
SOLVENT       CDCl3
NS            4383
DS            4
SWH           24038.461 Hz
FIDRES        0.366798 Hz
AQ            1.3631988 sec
RG            203
DK            20.800 usec
DE            6.50 usec
TE            303.0 K
D1            2.00000000 sec
d11           0.03000000 sec
TD0           1

===== CHANNEL f1 =====
NUC1          13C
P1            8.70 usec
PL1          -9.00 dB
PL1W         57.32745073 W
SFO1         100.6228868 MHz

===== CHANNEL f2 =====
CPDPRG2       waltz16
NUC2          1H
P2            60.00 usec
PL2          -1.00 dB
PL2W         14.02 dB
PL13         14.46 dB
PL14W        13.18666796 W
PL12W        0.41508400 W
PL13W        0.37509048 W
SFO2         400.1716007 MHz
SI            32768
SF           100.6228242 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.40
    
```

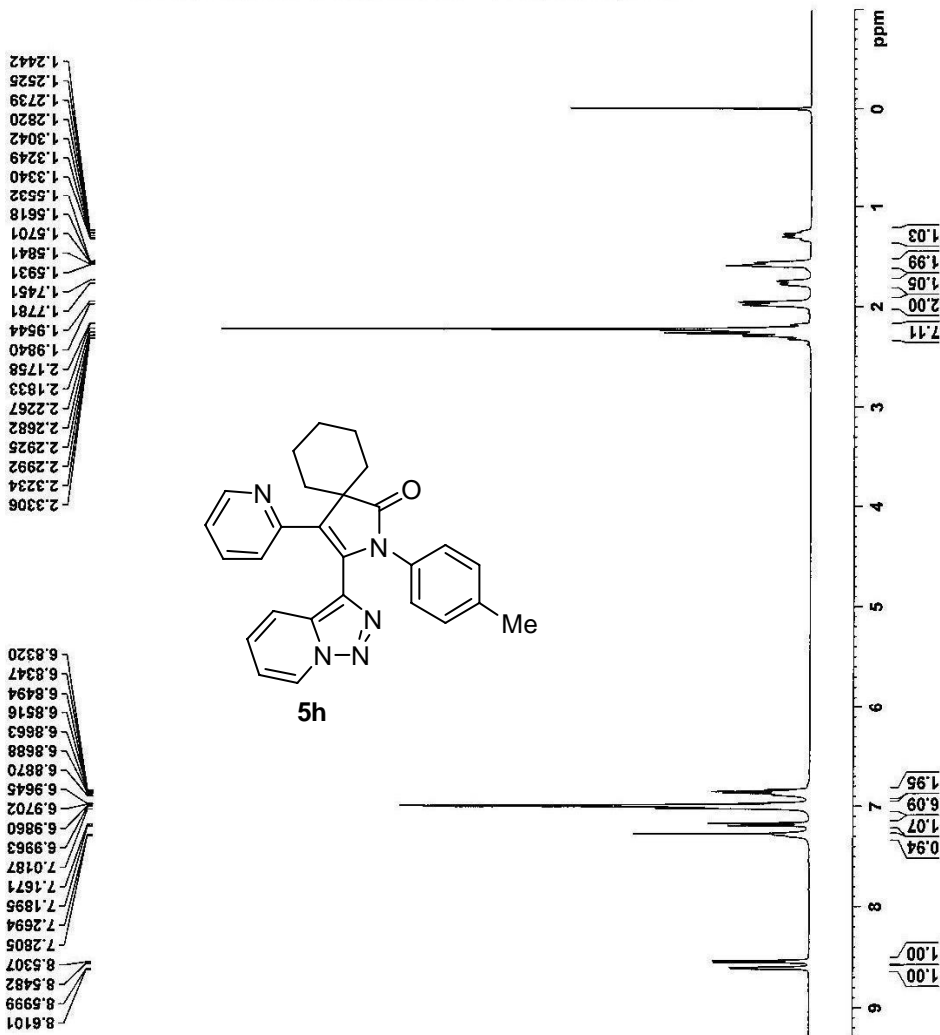




```

NAME      wzr-7
EXPNO     1
PROCNO    1
Date_     20100706
Time      9.37
INSTRUM   spect
PROBHD    5 mm PABBO BBO
PULPROG   zg30
TD        65536
SOLVENT   CDCl3
NS        16
DS        2
SWH       8223.685 Hz
FIDRES    0.123483 Hz
AQ        3.9846387 sec
RG        181
DW        60.800 usec
DE        6.50 usec
TE        298.4 K
D1        1.00000000 sec
TD0       1

===== CHANNEL f1 =====
NUC1      1H
P1        14.20 usec
PL1       -1.00 dB
PL1W      13.18669796 W
SFOL      400.1724712 MHz
SI        32768
SF        400.1699994 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
    
```



2.3306  
2.3234  
2.2992  
2.2926  
2.2682  
2.2267  
2.1833  
2.1758  
1.9840  
1.9544  
1.7781  
1.7451  
1.5931  
1.5841  
1.5701  
1.5618  
1.5532  
1.3340  
1.3249  
1.3042  
1.2820  
1.2739  
1.2525  
1.2442

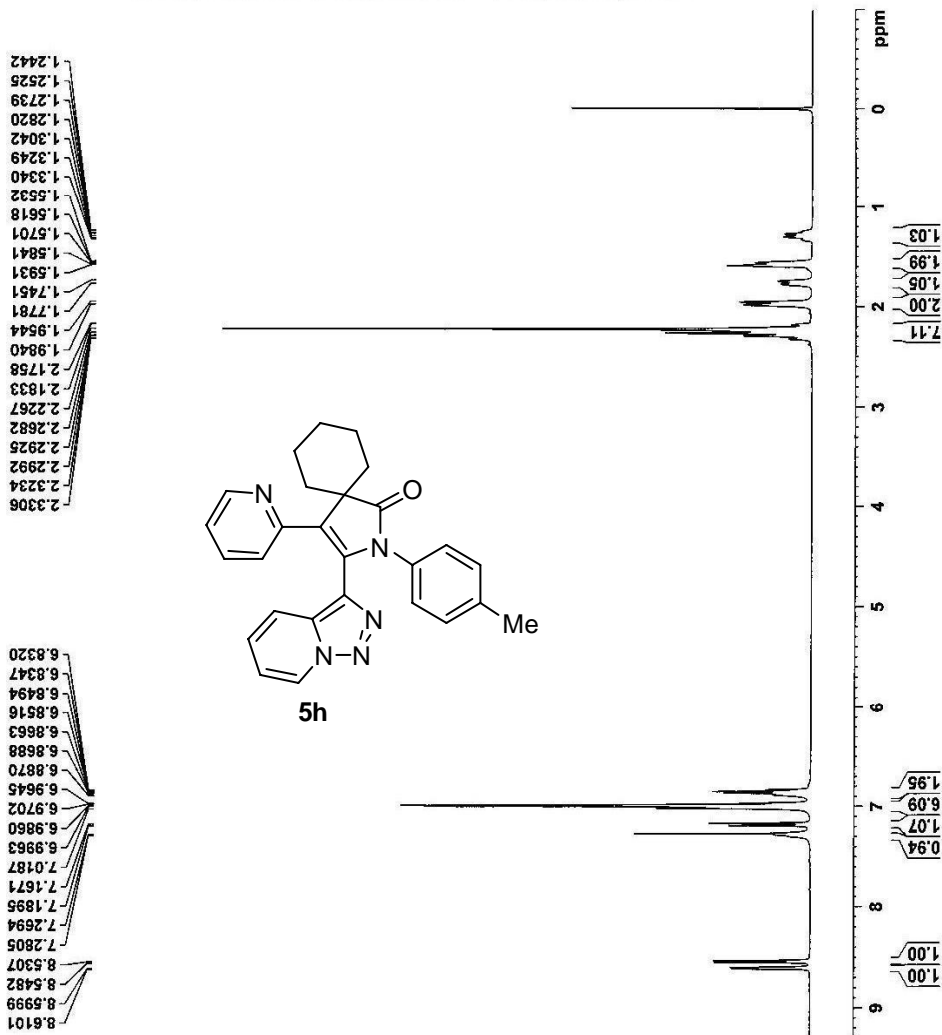
8.6101  
8.5999  
8.5482  
8.5307  
7.2805  
7.2694  
7.1895  
7.1671  
7.0187  
6.9963  
6.9660  
6.9702  
6.9645  
6.8870  
6.8688  
6.8663  
6.8516  
6.8494  
6.8347  
6.8320



```

NAME      wxr-7
EXPNO     1
PROCNO    1
Date_     20100706
Time      9.37
INSTRUM   spect
PROBHD    5 mm PABBO BBO
PULPROG   zg30
TD         65536
SOLVENT   CDCl3
NS         16
DS         2
SWH        8223.685 Hz
FIDRES     0.123483 Hz
AQ         3.9846387 sec
RG         181
DW         60.800 usec
DE         6.50 usec
TE         298.4 K
D1         1.00000000 sec
TD0        1

===== CHANNEL f1 =====
NUC1      1H
P1        14.20 usec
PL1       -1.00 dB
PL12      13.18669796 W
SFOL      400.1724712 MHz
SI         32768
SF         400.1699994 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.00
    
```



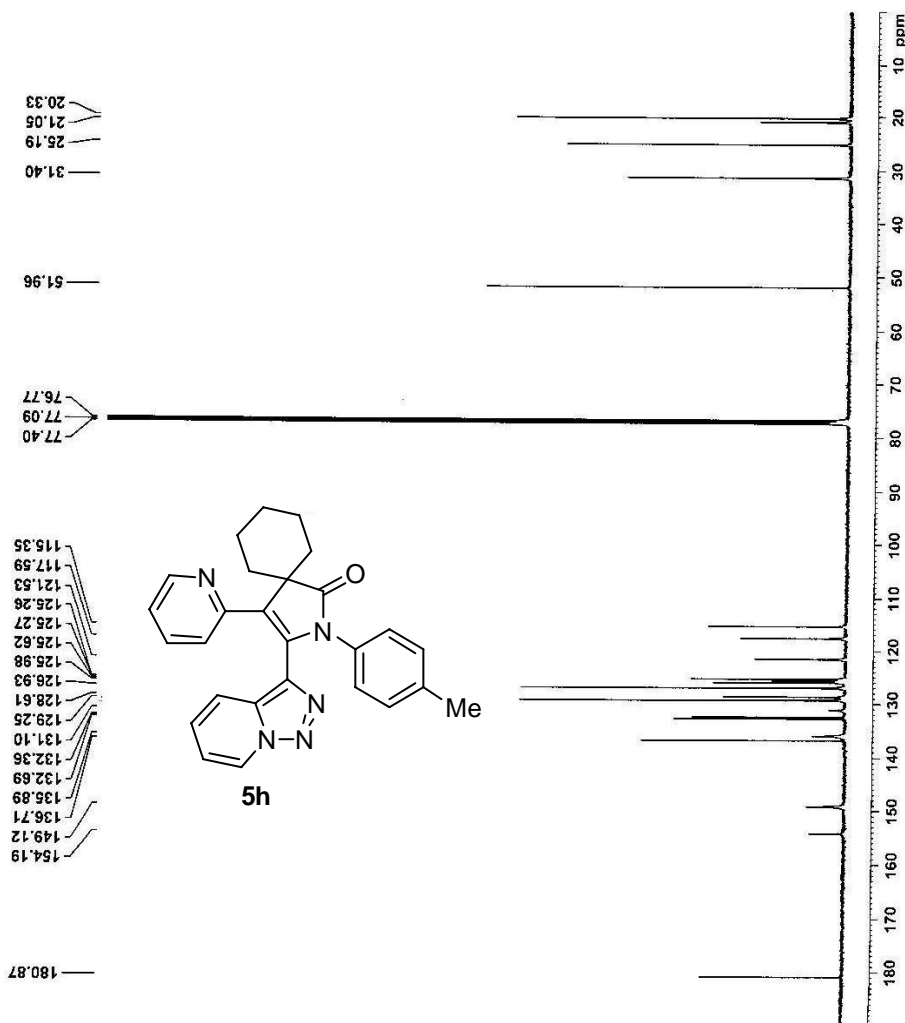


```

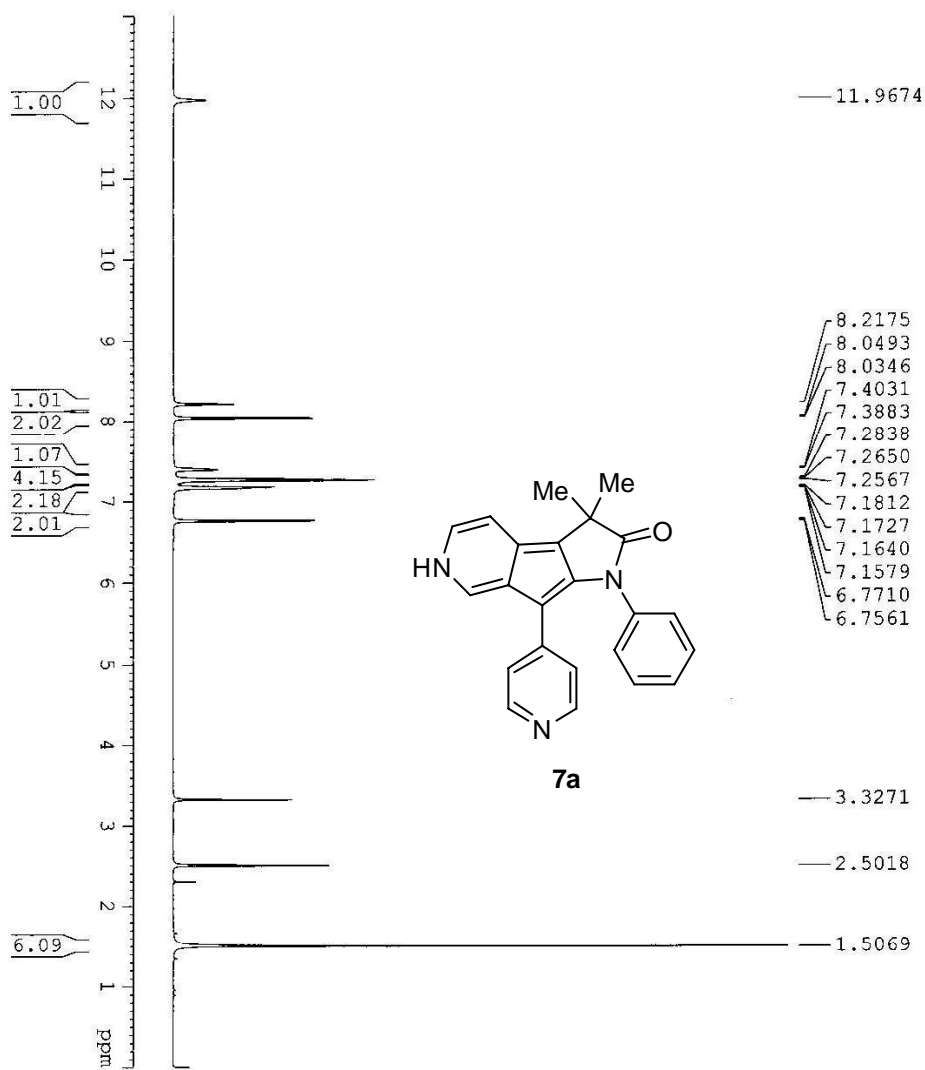
NAME      wxr-7-7-cl3
EXPNO    1
PROCNO   1
Date_    20100706
Time     17.22
INSTRUM spect
PROBHD   5 mm PABBO BB-
PULPROG zgpg30
TD       65536
SOLVENT  CDCl3
NS       4383
DS       4
SWH      24038.461 Hz
FIDRES   0.366798 Hz
AQ       1.3631988 sec
RG        203
DM       20.800 usec
DE       6.500 usec
TE       303.0 K
D1       2.00000000 sec
D11      0.03000000 sec
TD0      1

===== CHANNEL f1 =====
NUC1     13C
P1       8.70 usec
PL1      -9.00 dB
PL1W     57.32745073 W
SFO1     100.6228868 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
P2       60.00 usec
PL2      -1.00 dB
PL2W     14.02 dB
PL13     14.46 dB
PL14W    13.18666796 W
PL12W    0.41508400 W
PL13W    0.37509048 W
SFO2     400.1716007 MHz
SI       32768
SFO      100.6228242 MHz
=====
SFO      1.00 Hz
GB       0
PC       1.40
    
```







```

NAME          xj18-59a
EXPNO         1
PROCNO        1
Date_         20100511
Time          10.45
INSTRUM      spect
PROBHD       5 mm PABBO BB-
PULPROG      zg30
TD           65536
SOLVENT      DMSO
NS           16
DS           2
SWH          8223.695 Hz
FIDRES       0.125483 Hz
AQ           3.9846387 sec
RG           203
DE           60.800 usec
TE           298.7 K
D1           1.00000000 sec
TD0          1

----- CHANNEL f1 -----
NUC1          1H
P1           14.20 usec
PL1          -1.00 dB
PL1W         13.18669796 W
SFO1         400.1724712 MHz
SI           32768
SF           400.1639943 MHz
WDW          EM
SSB          0
GB           0
PC           0.30 Hz
  
```



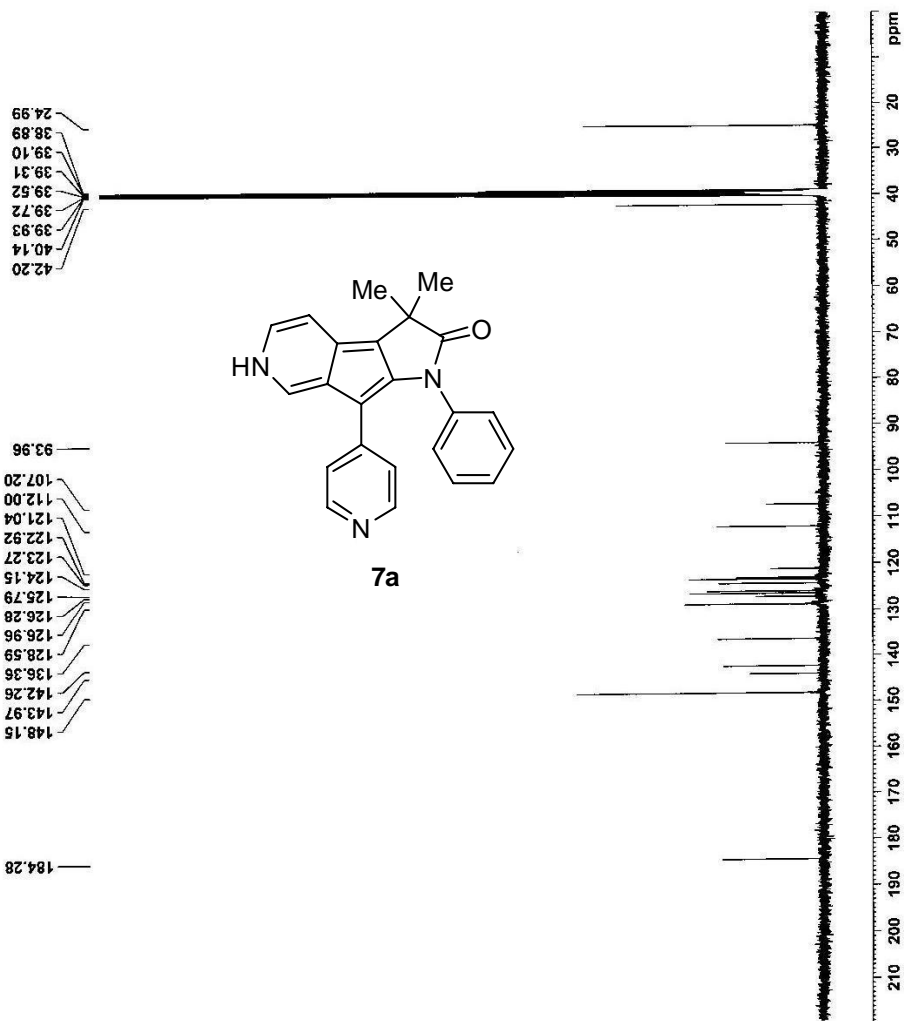


```

NAME xj9-59a-Cl3
EXPNO 1
PROCNO 1
Date_ 20100511
Time 22.15
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1142
DS 4
SWH 24038.461 Hz
FIDRES 0.366738 Hz
AQ 1.3631988 sec
RG 203
DW 20.600 usec
DE 6.50 usec
TE 301.1 K
D1 2.0000000 sec
D11 0.0300000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.70 usec
PL1 -2.00 dB
PL1W 57.32743073 W
SF01 100.6328888 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL12 14.02 dB
PL13 14.46 dB
PL12W 13.18663796 W
PL12W 0.41508400 W
PL13W 0.37509048 W
SF02 400.1716007 MHz
SI 32768
SF 100.6228773 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
    
```





```

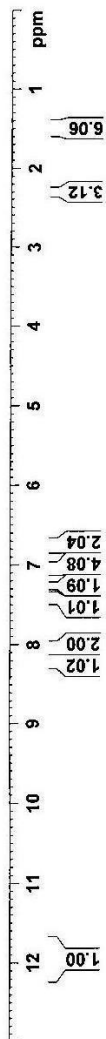
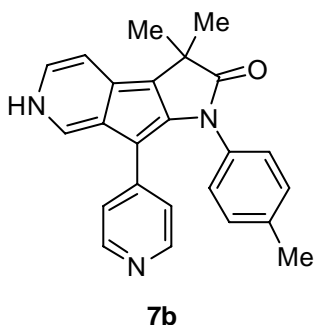
NAME      xj8-60a
EXPNO    1
PROCNO   1
Date_    20100510
Time     15.53
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD        65536
SOLVENT  DMSO
NS        16
DS        2
SWH       8223.685 Hz
FIDRES    0.125483 Hz
AQ        3.9846387 sec
RG        203
DW        60.800 usec
DE        6.50 usec
TE        299.0 K
D1        1.00000000 sec
TD0       1

===== CHANNEL f1 =====
NUC1      1H
P1        14.20 usec
PL1       -1.00 dB
PL12      13.18669796 W
SFO1      400.1724712 MHz
SI        32768
SF        400.1699940 MHz
WDW       EM
SSB       0
LB        0
GB        0
PC        1.00
    
```

1.4932  
 2.2908  
 2.5018

6.7603  
 6.7739  
 7.0282  
 7.0489  
 7.0646  
 7.0851  
 7.2507  
 7.2672  
 7.3752  
 7.3855  
 8.0441  
 8.0575  
 8.1993  
 8.2104

11.9433



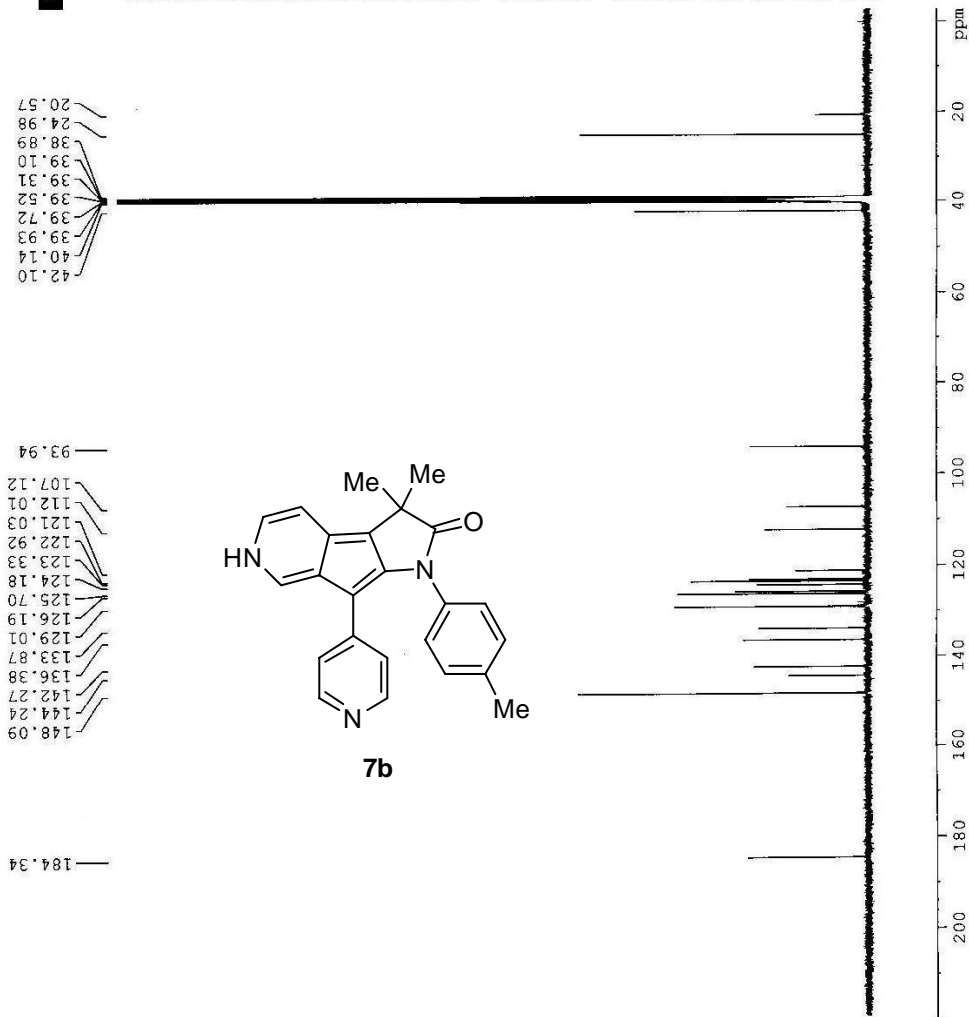


```

NAME xj8-60a-C13
EXPNO 1
PROCNO 1
Date_ 20100510
Time_ 21.01
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 4000
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 20.203
DE 20.800 usec
TE 300.8 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.70 usec
PL1 -2.00 dB
PL1W 57.32743073 W
SFO1 100.6328888 MHz

===== CHANNEL f2 =====
CFDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL2W 14.02 dB
PL13 14.46 dB
PL12W 13.18669786 W
PL12W 0.41508400 W
PL13W 0.37509048 W
SFO2 400.1716007 MHz
SI 32768
SF 100.6228773 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
    
```

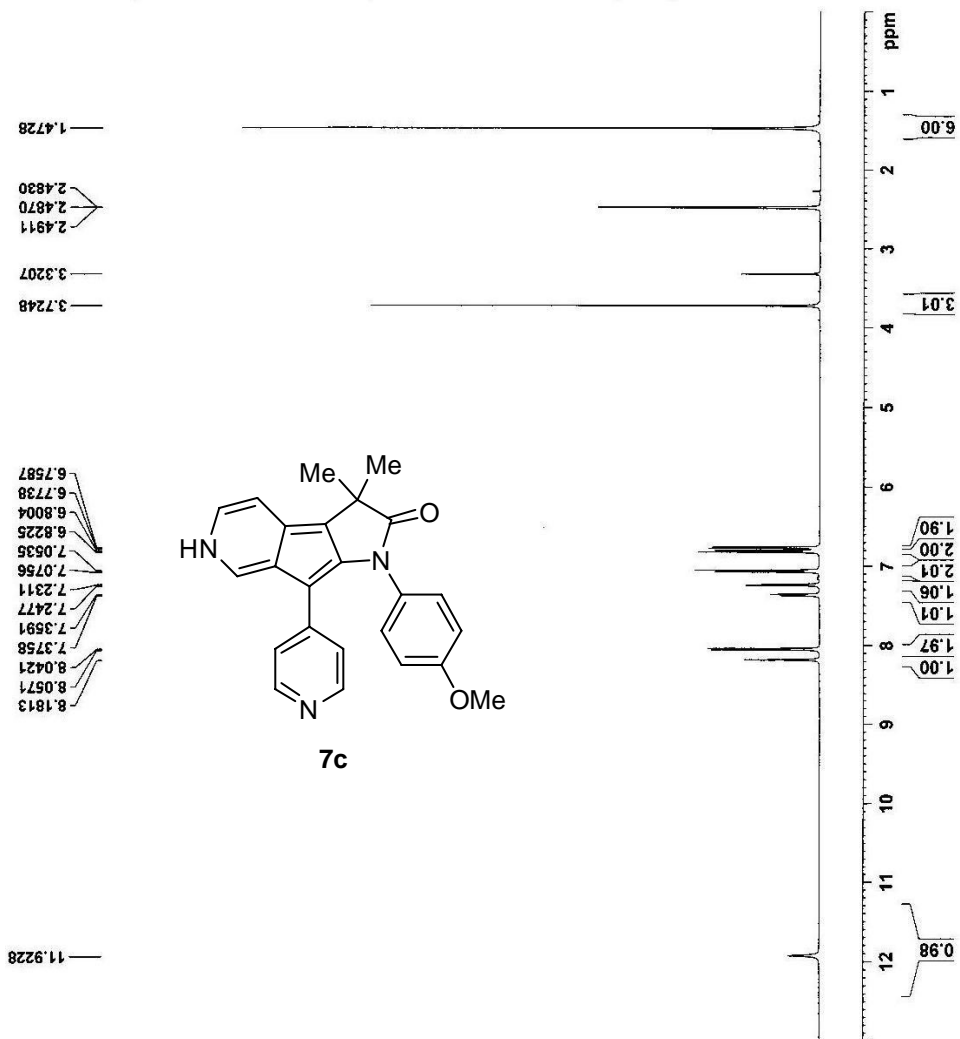




```

NAME      xj8-46
EXPNO     1
PROCNO    1
Date_     20100401
Time      17.01
INSTRUM   spect
PROBHD    5 mm PABBO BB-
PULPROG   zgpg30
TD         65536
SOLVENT   DMSO
NS         16
DS         2
SWH        8223.685 Hz
FIDRES     0.125483 Hz
AQ         3.9846387 sec
RG         203
DW         60.800 usec
DE         6.50 usec
TE         294.8 K
D1         1.00000000 sec
TDO        1

===== CHANNEL f1 =====
NUC1       1H
P1         14.20 usec
PL1        -1.00 dB
EL1W       13.18669796 W
SFO1       400.1724712 MHz
SI         32768
SF         400.1700000 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.00
    
```





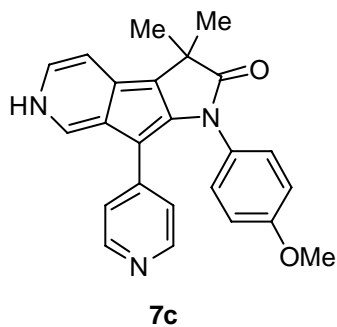
```

NAME xj8-46-C13
EXPNO 1
PROCNO 1
Date_ 20100402
Time 21.46
INSTRUM spect
PROBHD 5 mm PABBO1BB
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 3000
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 203
DW 20.800 usec
DE 6.50 usec
TE 295.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.70 usec
PL1 -2.00 dB
PL1W 57.32743073 W
SFO1 100.6328888 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL12 14.02 dB
PL13 14.46 dB
PL2W 13.18669796 W
PL12W 0.41508400 W
PL13W 0.37509048 W
SFO2 400.1716007 MHz
SI 32768
SF 100.6228773 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
    
```

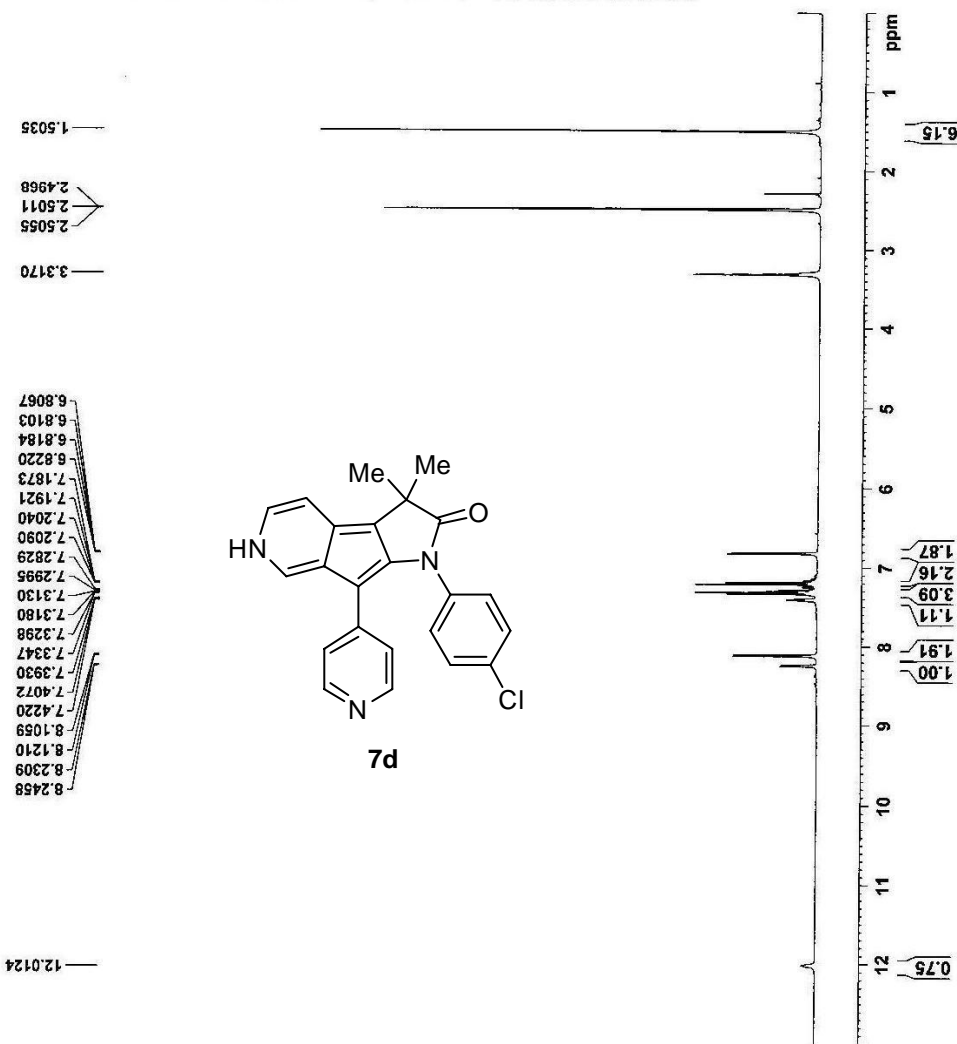
184.46  
 158.14  
 148.14  
 144.58  
 142.22  
 129.25  
 127.75  
 125.66  
 124.16  
 124.13  
 123.34  
 122.92  
 121.04  
 113.89  
 111.91  
 107.10  
 93.85  
 55.38  
 42.04  
 40.07  
 39.86  
 39.65  
 39.44  
 39.24  
 39.03  
 38.82  
 24.96





```

NAME      xj8-56a
EXPNO    2
PROCNO   1
Date_    20100513
Time     10.55
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD        65536
SOLVENT  DMSO
NS        16
DS        2
SWH       8223.685 Hz
FIDRES    0.125483 Hz
AQ        3.9846387 sec
RG        203
DW        60.800 usec
DE        6.50 usec
TE        299.0 K
D1        1.0000000 sec
TDO       1
=====
CHANNEL f1
=====
NUC1      1H
P1        14.20 usec
PL1       -1.00 dB
PL12      13.18669796 W
SFO1      400.1724712 MHz
SI        32768
SF        400.1699945 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
    
```



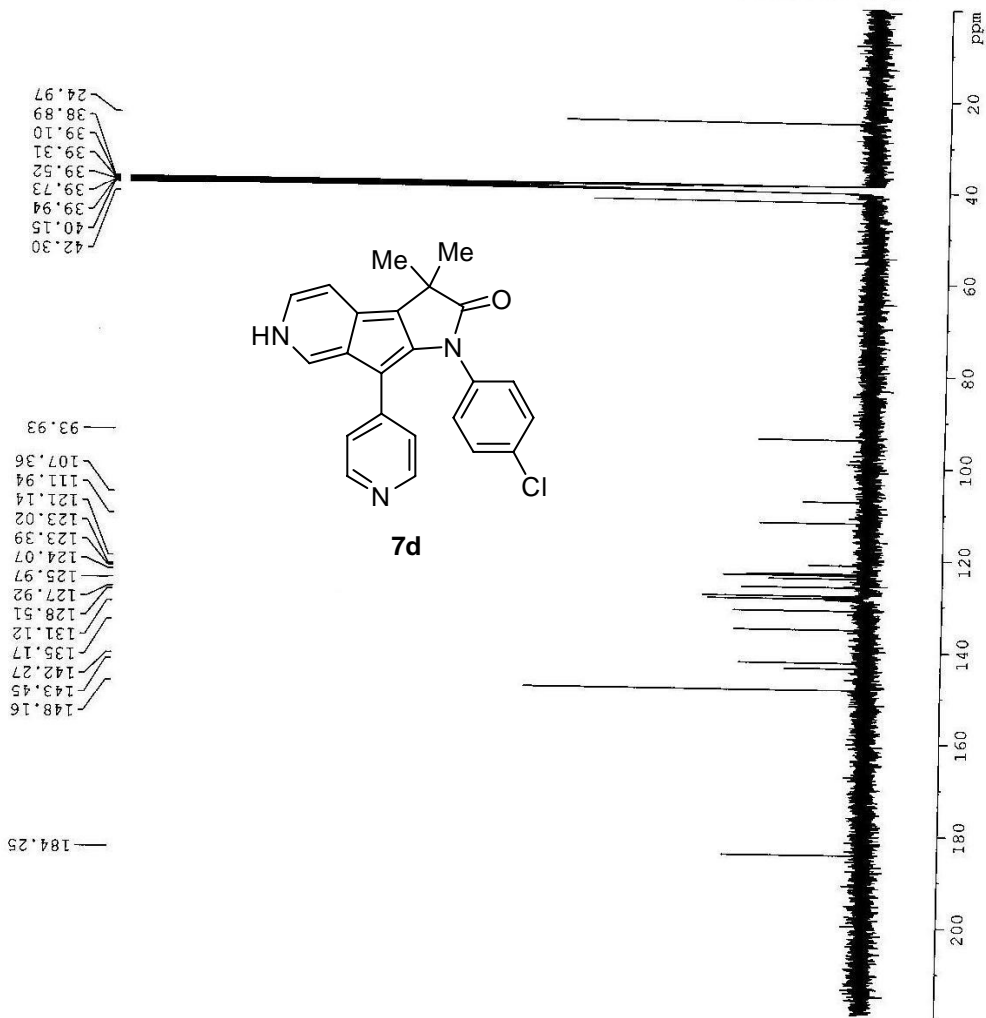


```

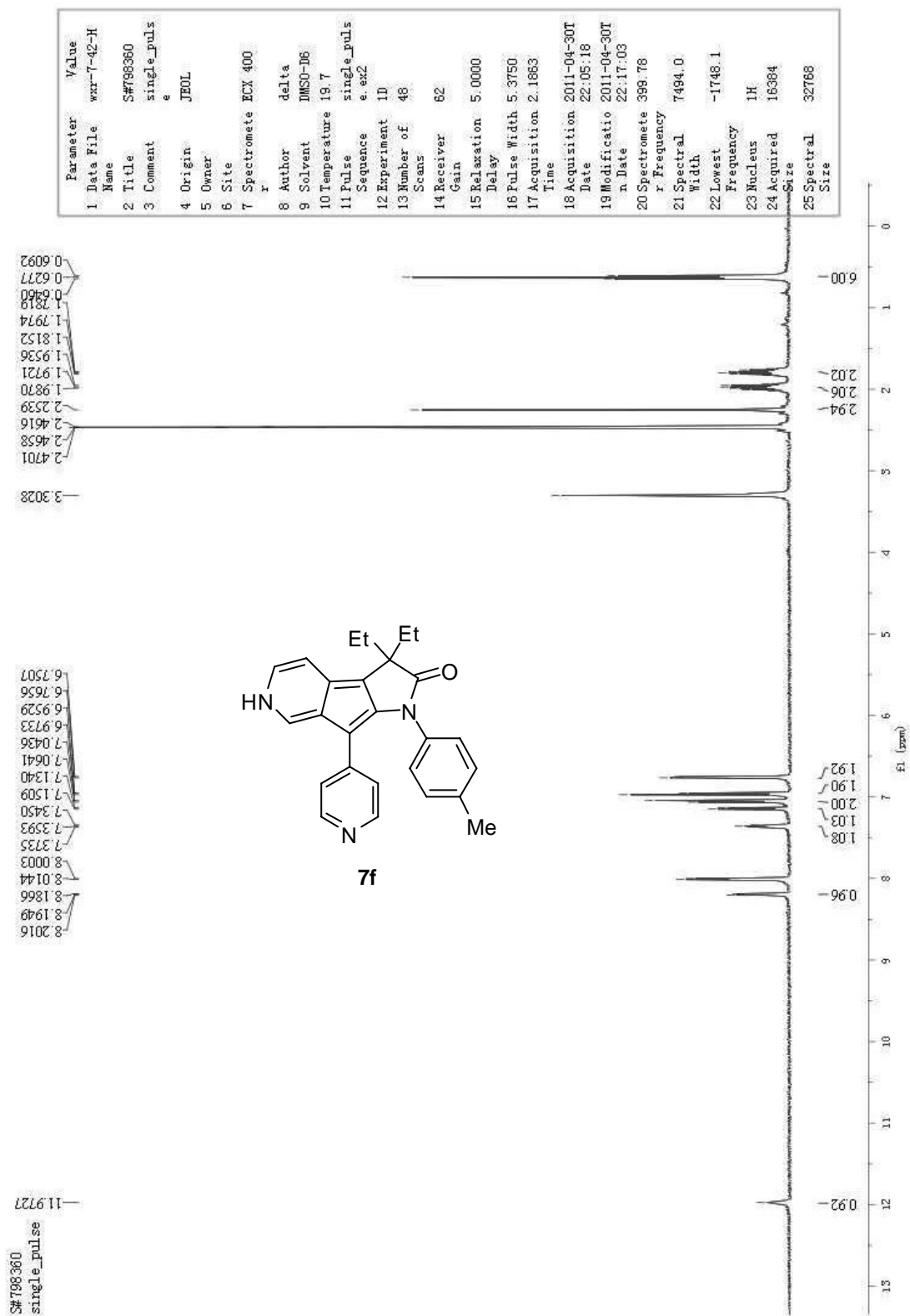
NAME xj8-58a-Cl3
EXPNO 1
PROCNO 1
Date_ 20100513
Time 14.18
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 3426
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 203
DW 20.800 usec
DE 6.50 usec
TE 302.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.70 usec
PL1 -2.00 dB
PL1W 57.32743073 W
SFO1 100.6328888 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL12 14.02 dB
PL13 1.46 dB
PL2W 13.18669796 W
PL12W 0.41508400 W
PL13W 0.37509048 W
SFO2 400.1716007 MHz
SI 32768
SF 100.6228773 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
    
```







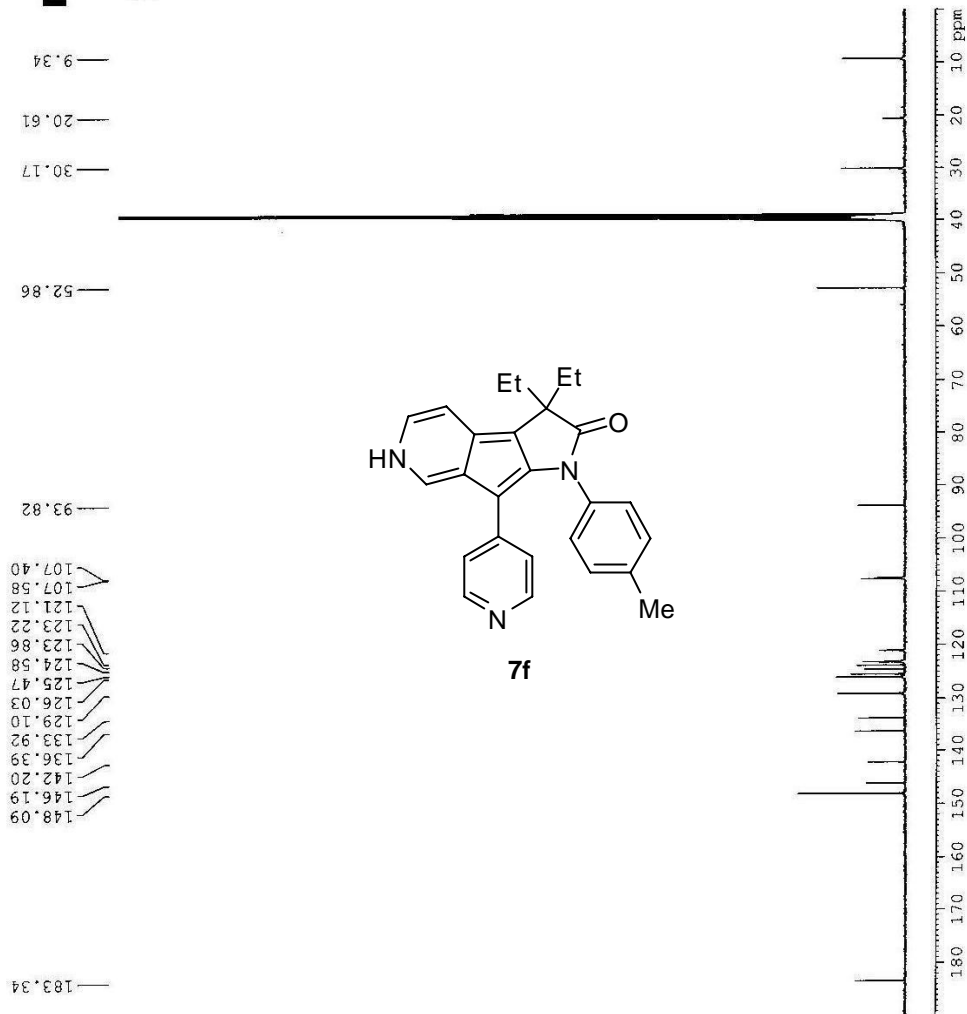


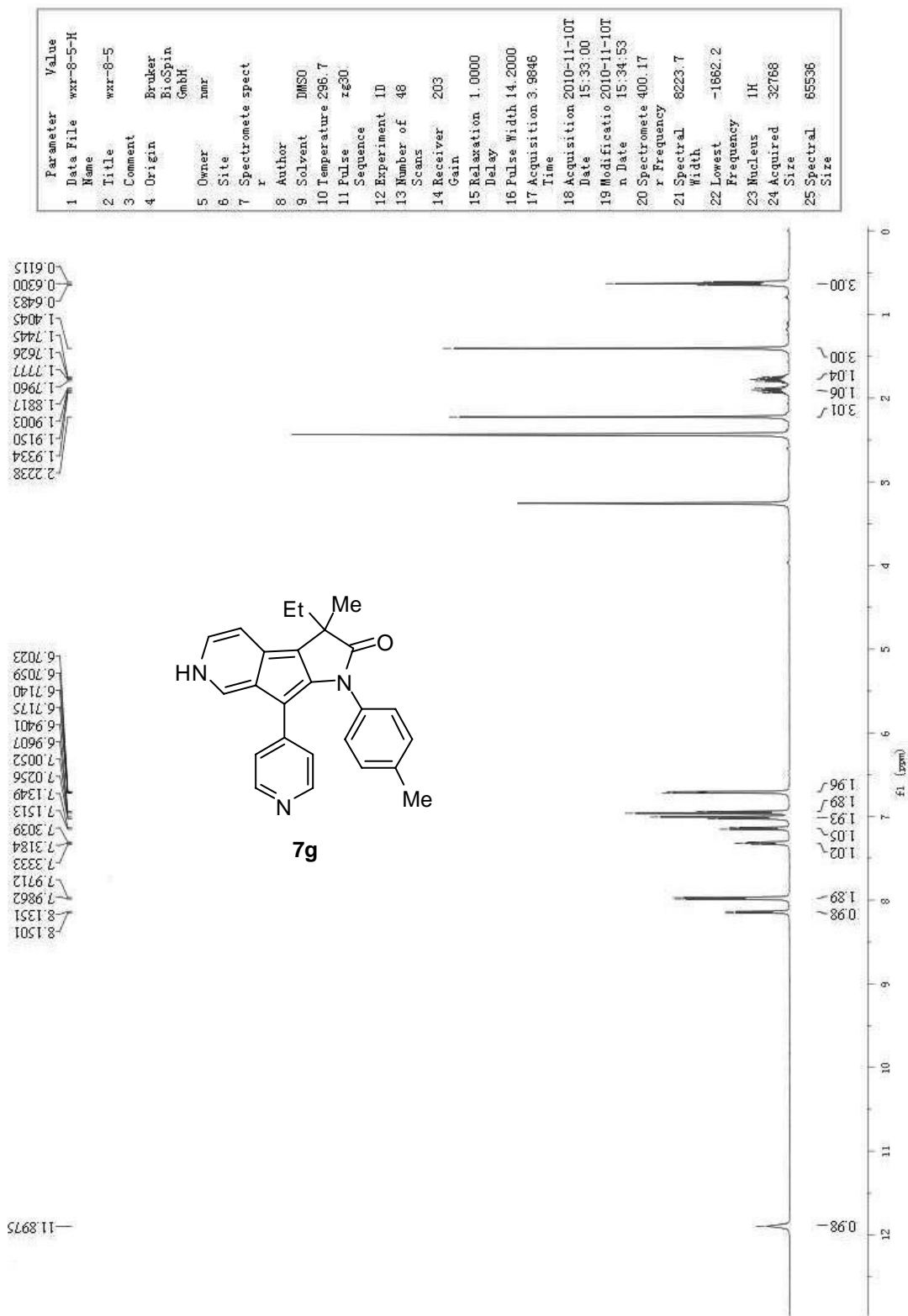
```

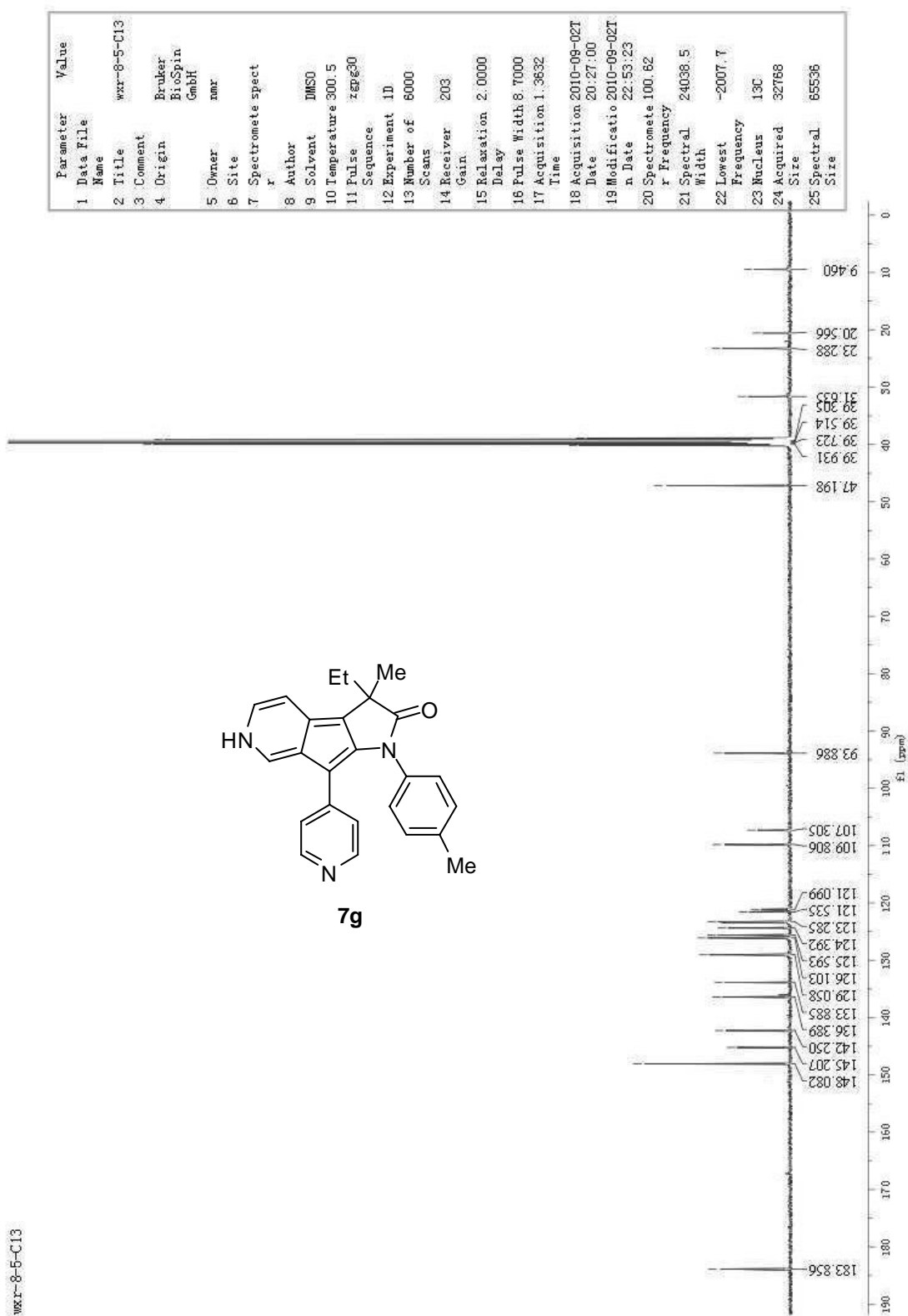
NAME          WXR-7-42-Cl3
EXPNO         1
PROCNO        1
Date_         20100727
Time          10.00
INSTRUM       spect
PROBHD        5 mm PABBO BB-
PULPROG       zgpg30
TD            65536
SOLVENT       DMSO
NS            4310
DS            4
SWH           24038.461 Hz
FIDRES        0.366798 Hz
AQ            1.3651988 sec
RG            203
DM            20.800 usec
DE            6.50 usec
TE            300.0 K
D1            2.0000000 sec
D11           0.0300000 sec
TD0           1

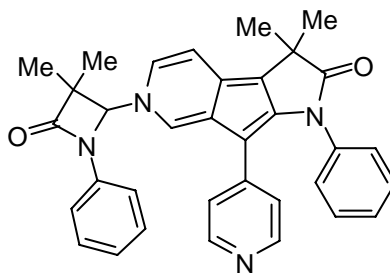
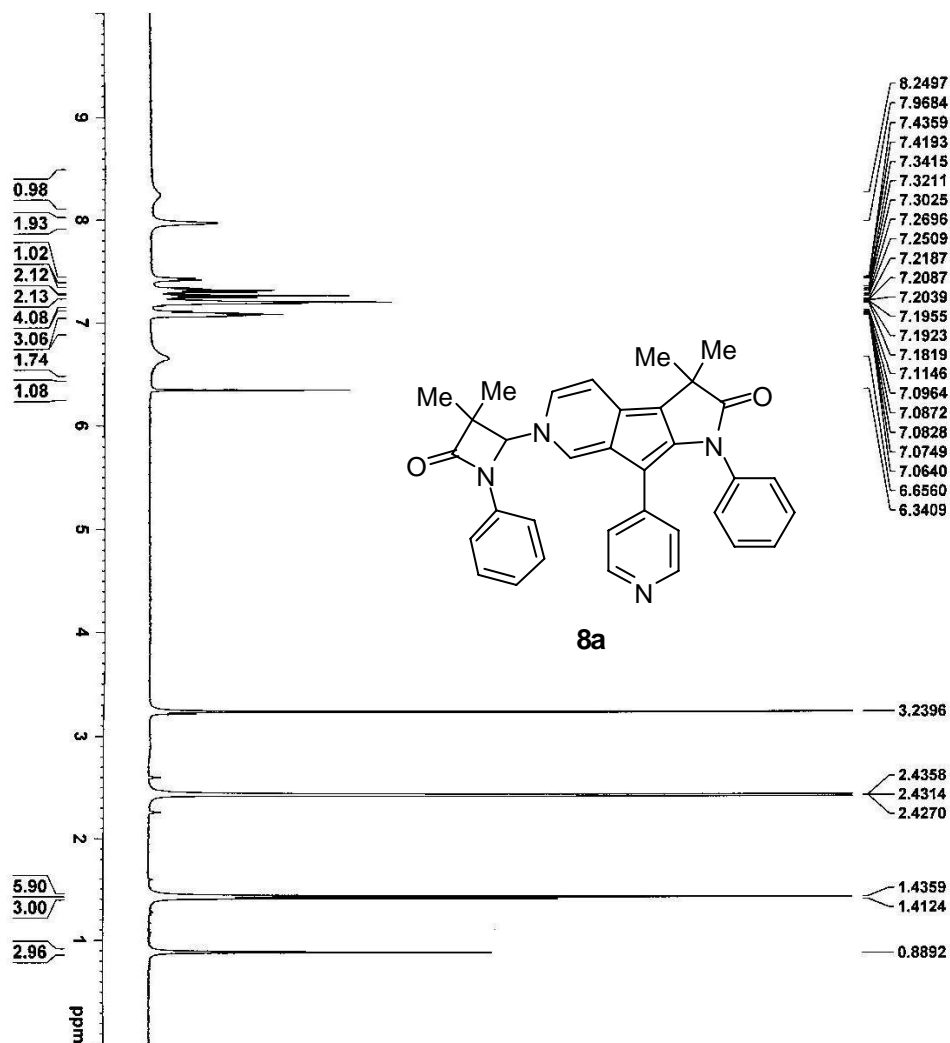
===== CHANNEL f1 =====
NUC1          13C
P1            13C
PL1           8.70 usec
PL12          -2.00 dB
PL1W          57.32743073 W
SFO1          100.6328886 MHz

===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          1H
PCPD2        80.00 usec
PL2          -1.00 dB
PL12         14.02 dB
PL13         14.46 dB
PL2W         13.18669796 W
PL12W        0.41508400 W
PL13W        0.37509048 W
SFO2         400.1716007 MHz
SI           32768
SF           100.6228773 MHz
WDW          EM
SSB          0
LB           1.00 Hz
GB           0
PC           1.40
    
```









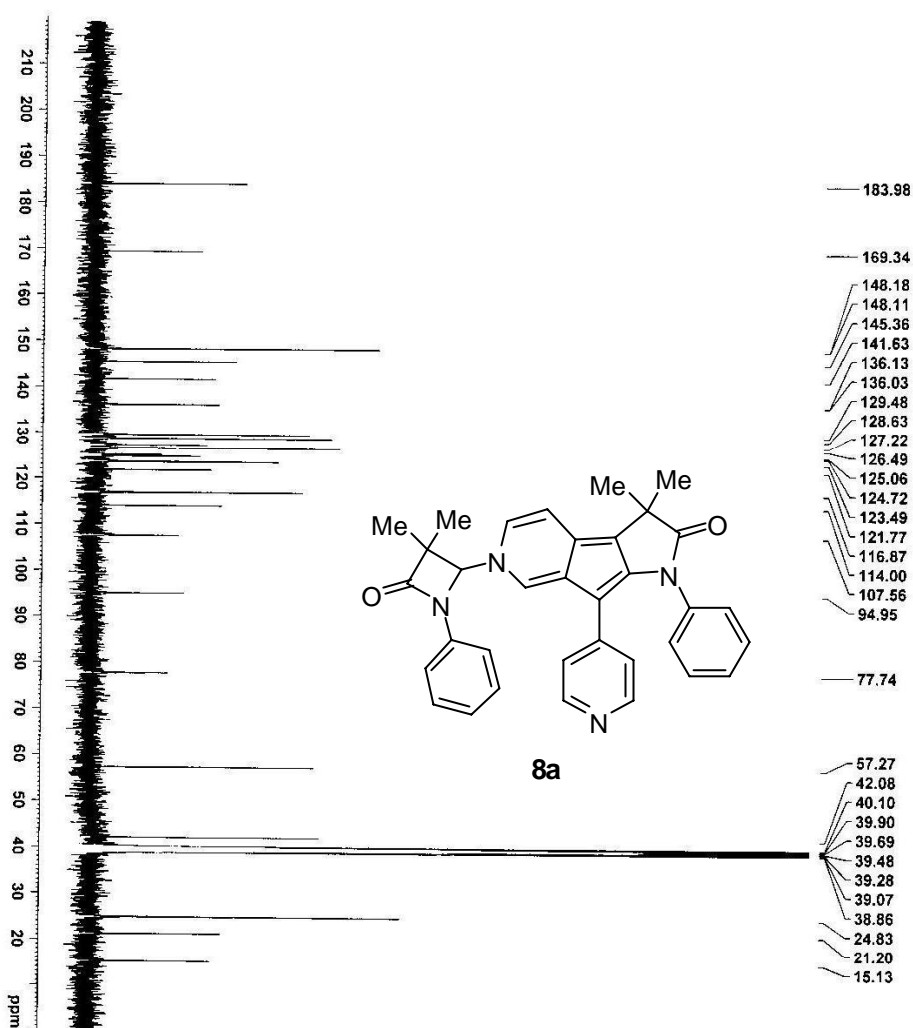
8a

```

NAME          xj8-55p
EXPNO         1
PROCNO        1
Date_         20100517
Time          17.06
INSTRUM       spect
PROBHD        5 mm PABBO BBO
PULPROG       zgpg30
TD            65536
SOLVENT       DMSO
NS            16
DS            2
SWH           8223.685 Hz
FIDRES        0.125483 Hz
AQ            3.9846587 sec
RG            203
KW            60.800 usec
DE            6.50 usec
TE            299.8 K
D1            1.00000000 sec
TD0           1

===== CHANNEL f1 =====
NUC1          1H
P1            14.20 usec
PL1           -1.00 dB
PL1M          13.18669196 W
SF01          400.1724712 MHz
SI            32768
SF            400.1700226 MHz
WDW           EM
SSB           0
LB            0.30 Hz
GB            0
PC            1.00
    
```





**BRUKER**

```

NAME      xj6-S5b-C13
EXPNO     1
PROCNO    1
Date_     20100521
Time      21.05
INSTRUM   spect
PROBHD    5 mm PABBO-PE-
PULPROG   zgpg30
TD         65536
SOLVENT   DMSO
NS         3980
DS         1
SWH        24038.461 Hz
FIDRES     0.367798 Hz
AQ         1.3631988 sec
RG         203
DE         20.890 usec
TE         302.1 K
D1         2.00000000 sec
D11        0.05000000 sec
TD0        1

===== CHANNEL f1 =====
NUC1       13C
P1         8.70 usec
PL1        -2.00 dB
SFO1       100.628888 MHz

===== CHANNEL f2 =====
CDEPRG2   waltz16
NUC2       1H
PCPD2     80.00 usec
PL2        -1.00 dB
PL12       14.02 dB
PL13       14.46 dB
PL14       13.18669796 W
PL15       0.41508400 W
PL16       0.37509648 W
SFO2       400.1716007 MHz
SI         32768
SF         100.6228773 MHz
WDW        EM
SSB        0
LB         1.06 Hz
GB         0
RC         1.40
    
```

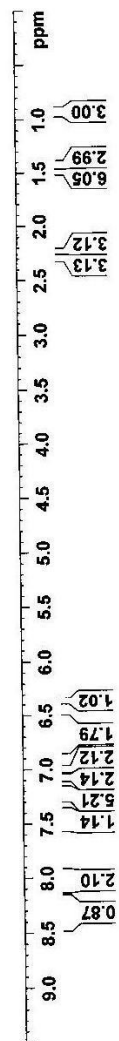
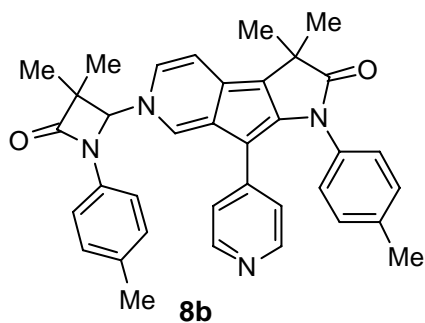


```

NAME          xj8-60b
EXPNO         1
PROCNO        1
Date_         20100520
Time          15.12
INSTRUM       spect
PROBHD        5 mm PABBO BB-
PULPROG       zg30
TD            65536
SOLVENT       DMSO
NS            16
DS            2
SWH           6223.685 Hz
FIDRES        0.125483 Hz
AQ            3.9846387 sec
RG            203
DM            60.800 usec
DE            6.50 usec
TE            297.3 K
D1            1.00000000 sec
TD0           1
===== CHANNEL f1 =====
NUC1          1H
P1            14.20 usec
PL1           -1.00 dB
PL12         13.18669796 W
SFO1          400.1724712 MHz
SI            32768
SF            400.1700000 MHz
WDW           EM
SSB           0
LB            0.30 Hz
GB            0
PC            1.00
    
```

0.9256  
 1.4765  
 1.4534  
 2.2814  
 2.2353

6.3646  
 6.7234  
 6.9938  
 7.0140  
 7.0565  
 7.0768  
 7.1635  
 7.1845  
 7.2015  
 7.2227  
 7.2411  
 7.2560  
 7.4324  
 7.4468  
 8.0308  
 8.2766



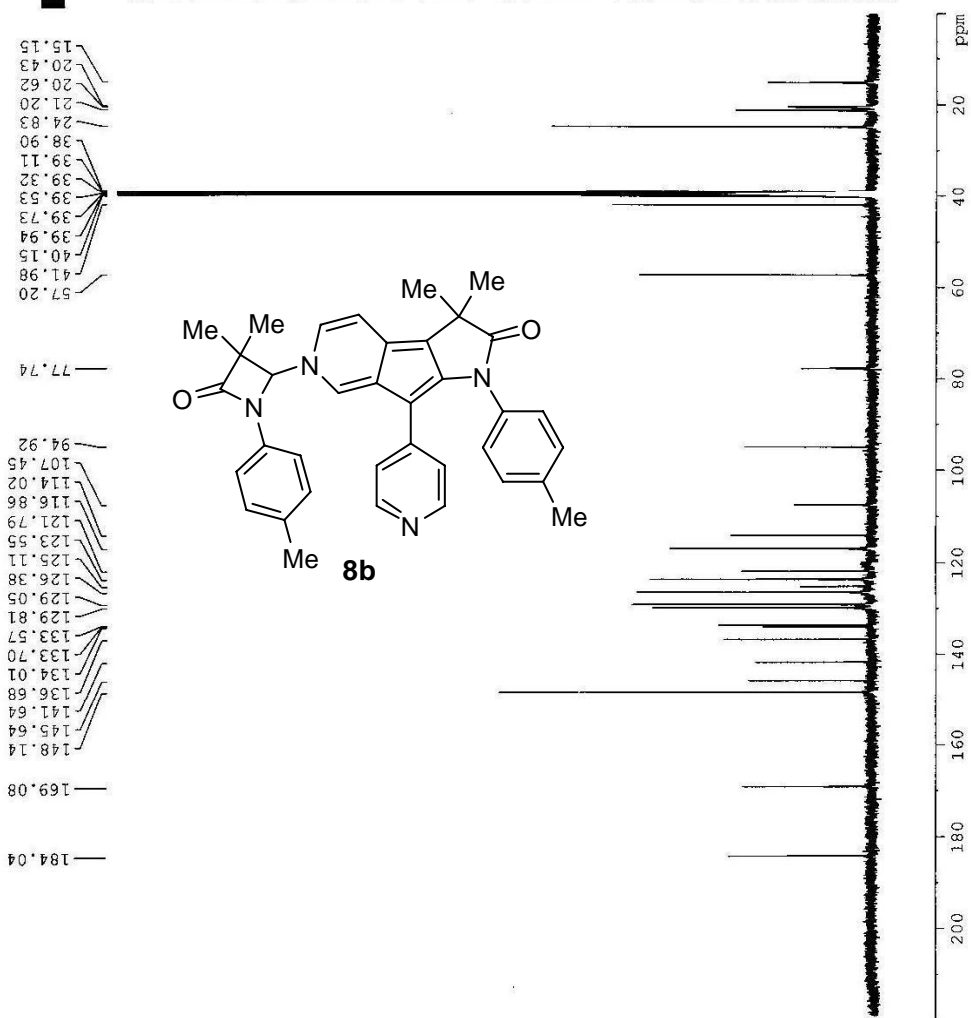


```

NAME: xj8-60b-C13
EXPNO: 1
PROCNO: 1
Date_: 20100519
Time: 16.35
INSTRUM: spect
PROBHD: 5 mm PABBO BB-
PULPROG: zgpg30
TD: 65536
SOLVENT: DMSO
NS: 1603
DS: 4
SMH: 24038.461 Hz
FLORES: 0.366798 Hz
AQ: 1.3631988 sec
RG: 203
DM: 20.800 usec
DE: 6.50 usec
TE: 301.6 K
D1: 2.0000000 sec
D1.1: 0.0300000 sec
TD0: 1

===== CHANNEL f1 =====
NUC1: 13C
P1: 8.70 usec
PL1: -2.00 dB
PL1W: 57.32743073 W
SFO1: 100.6288888 MHz

===== CHANNEL f2 =====
CPDPRG2: waltz16
NUC2: 1H
PCPD2: 80.00 usec
PL2: 11.00 dB
PL12: 14.02 dB
PL13: 14.46 dB
PL2W: 13.18669796 W
PL12W: 0.41508400 W
PL13W: 0.37509048 W
SFO2: 400.1716007 MHz
SI: 32768
SF: 100.6228773 MHz
WDW: EM
SSB: 0
LB: 1.00 Hz
GB: 0
PC: 1.40
    
```

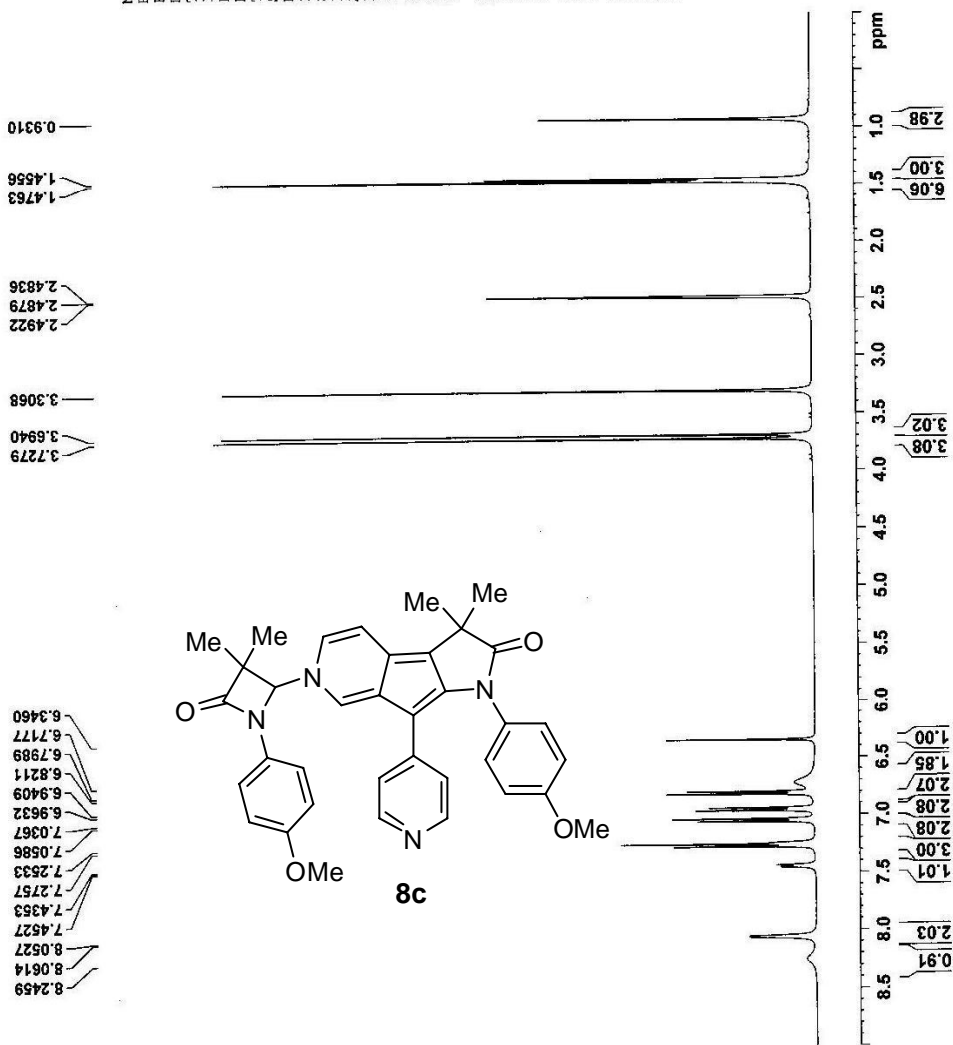






```

NAME      xj16-77b
EXPNO     1
PROCNO    1
Date_     20100519
Time      21.28
INSTRUM   spect
PROBHD    5 mm PABBO BB-
PULPROG   zg30
TD         65536
SOLVENT   DMSO
NS         16
DS         2
SWH        8223.685 Hz
FIDRES     0.125483 Hz
AQ         3.9846387 sec
RG         203
DM         60.800 usec
DE         6.50 usec
TE         300.0 K
D1         1.00000000 sec
TDO        1
===== CHANNEL f1 =====
NUC1       1H
P1         14.20 usec
PL1        -1.00 dB
PL1W       13.18669796 W
SFO1       400.1724712 MHz
SI         32768
SF         400.1700900 MHz
WDW         EM
SSB         0
GB         0
PC         1.00
    
```



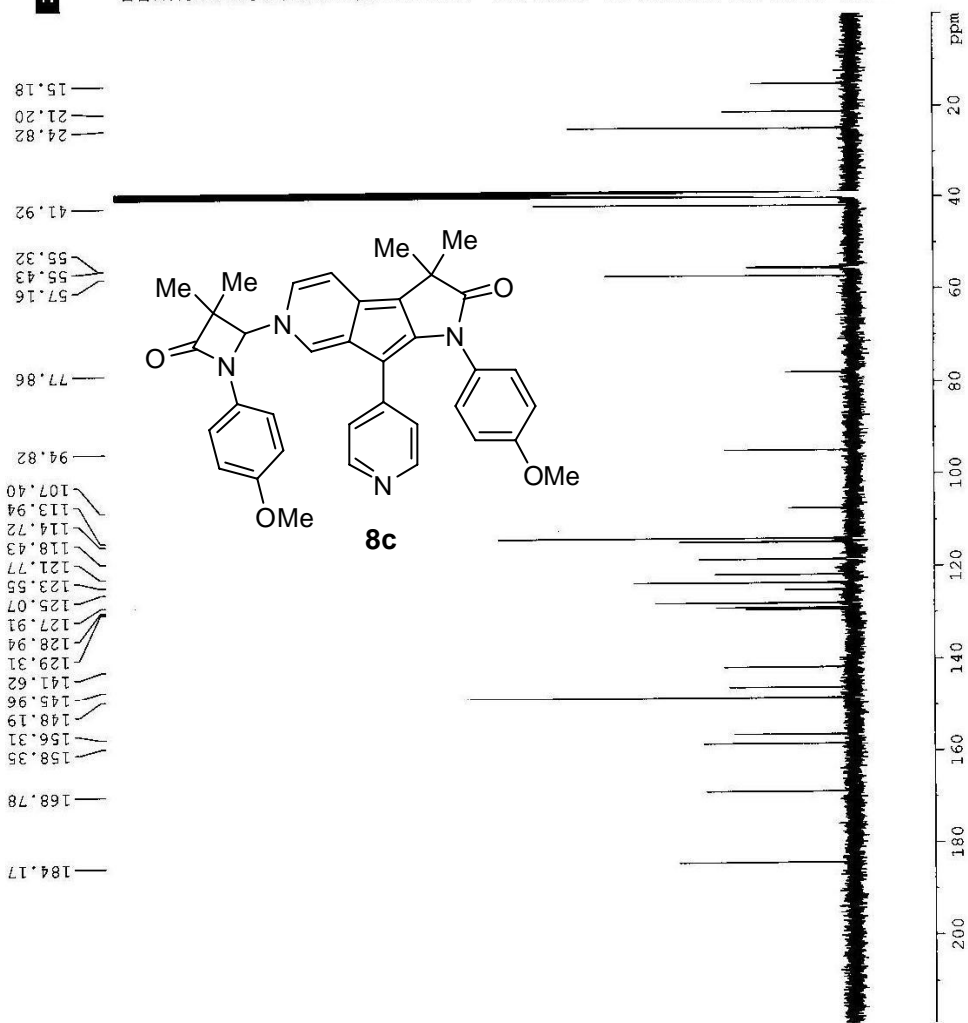


```

NAME xj8-77b-cl3
EXPNO 1
PROCNO 1
Date_ 20100519
Time_ 20.58
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 3538
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 203
DW 20.800 usec
DE 6.50 usec
TE 300.0 K
D1 2.0000000 sec
D11 0.0300000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 13C
PL 8.70 usec
PL1 -2.00 dB
PL1W 57.32743073 W
SF01 100.6328888 MHz

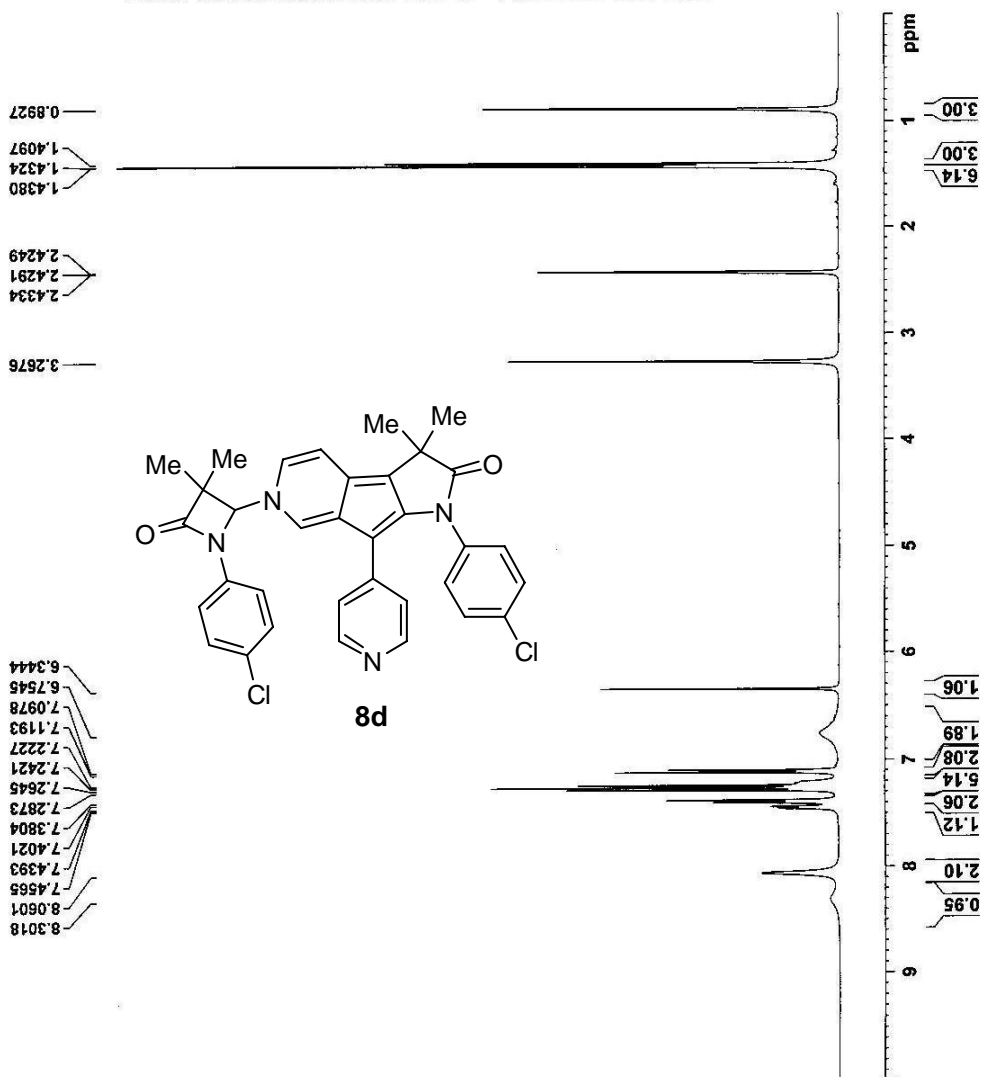
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL12 14.02 dB
PL13 14.46 dB
PL1W 13.18669796 W
PL2W 0.41508400 W
PL13W 0.37509048 W
SF02 400.1116007 MHz
SI 32768
WDW EM
SSB 0
GB 0
PC 1.40
    
```





```

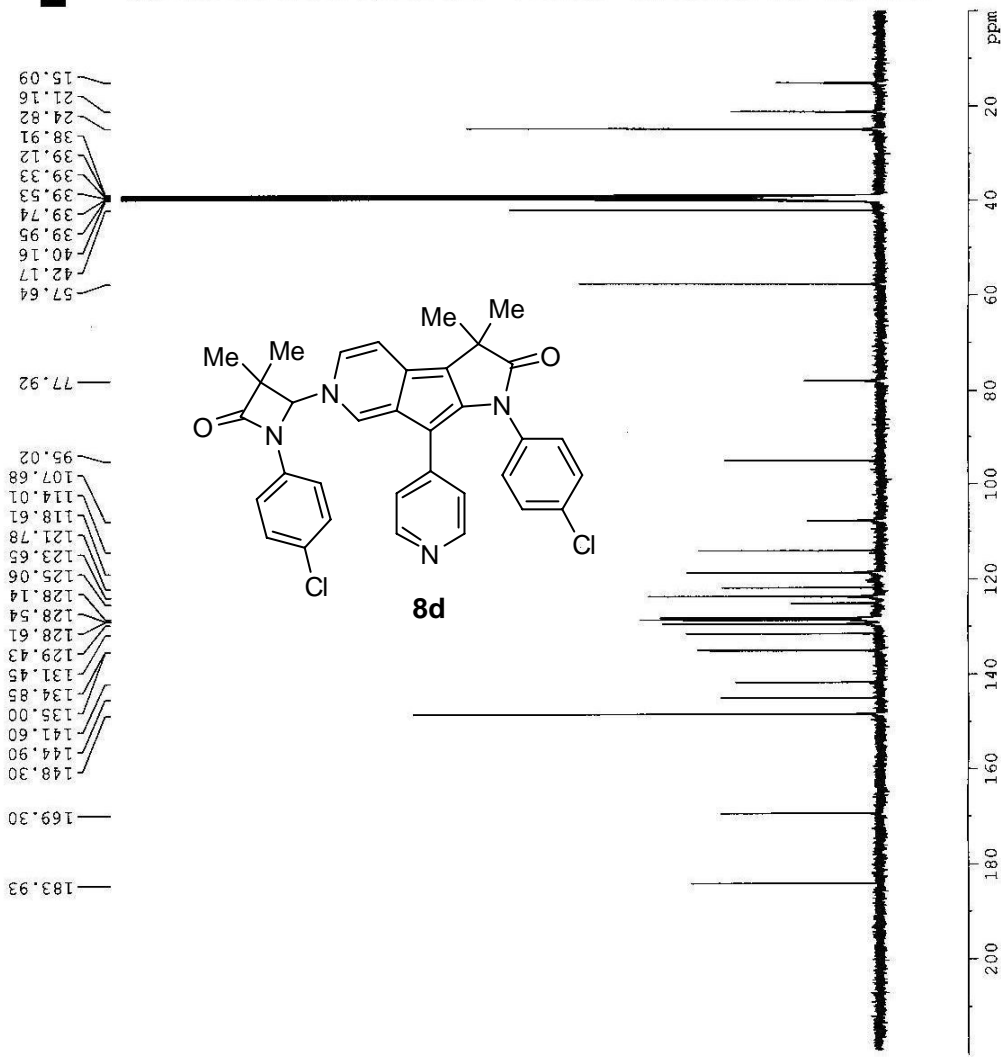
NAME      xj8-62b
EXPNO     1
PROCNO    1
Date_     20100521
Time      16.02
INSTRUM   spect
PROBHD    5 mm PABBO BB-
PULPROG   zg30
TD         65536
SOLVENT   DMSO
NS         16
DS         2
SWH        8223.685 Hz
FIDRES     0.125483 Hz
AQ         3.9846387 sec
RG         161
DW         60.800 usec
DE         6.50 usec
TE         298.0 K
D1         1.00000000 sec
TDO
===== CHANNEL f1 =====
NUC1       1H
P1         14.20 usec
PL1        -1.00 dB
PLLW       13.18669796 W
SFO1       400.1724712 MHz
SI         32768
SF         400.1700233 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.00
    
```





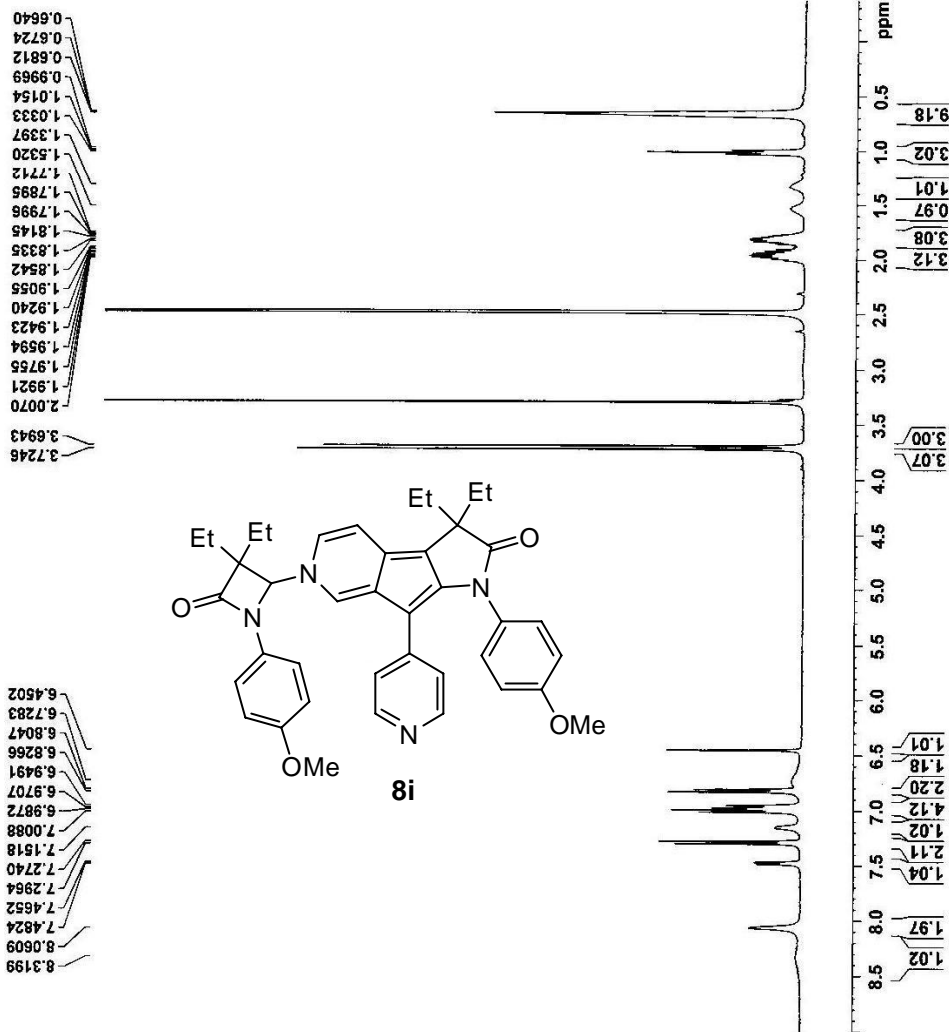
```

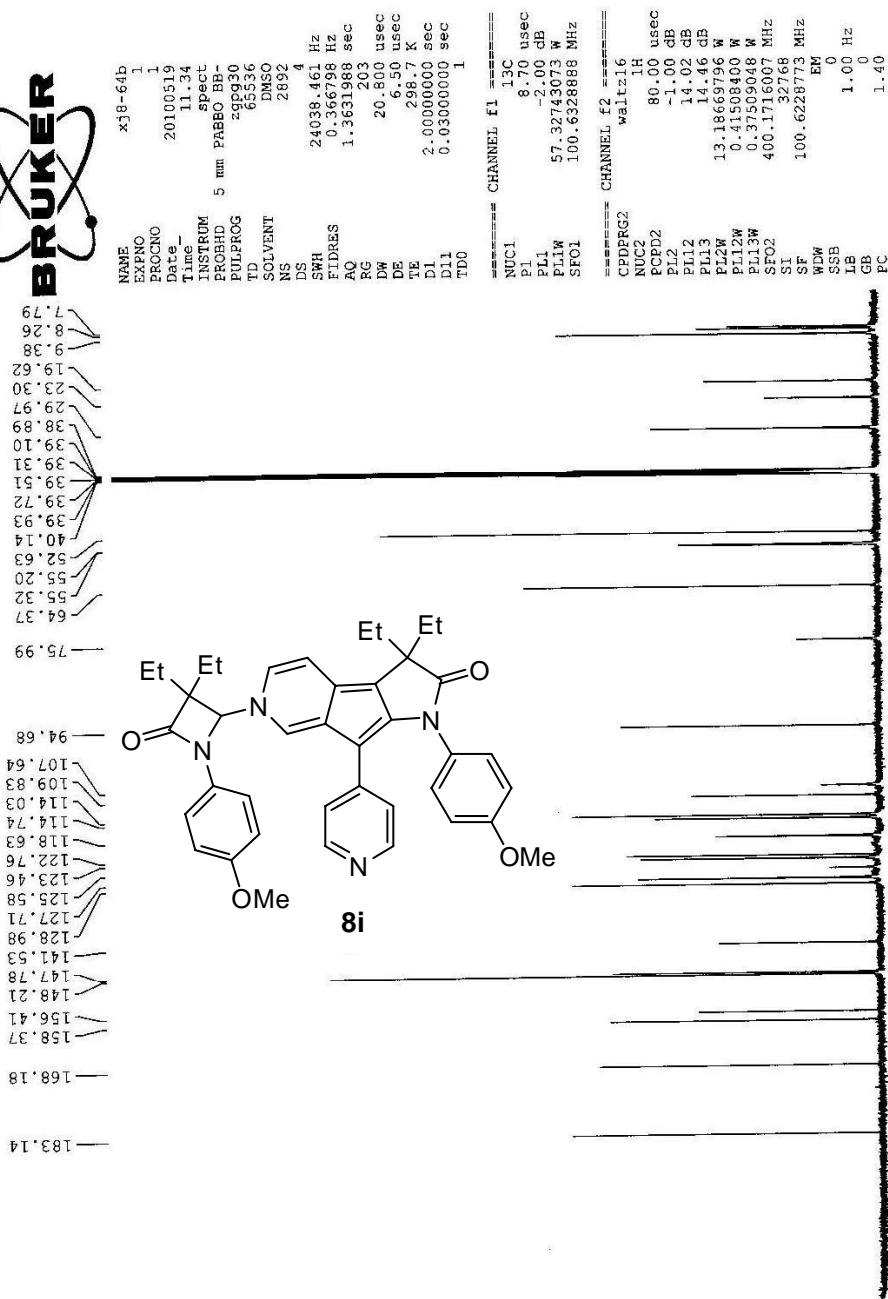
NAME                xj18-62b-C13
EXPNO                1
PROCNO               1
Date_                20100520
Time_                16.18
INSTRUM              spect
PROBHD               5 mm PABBO BB-
PULPROG              zgpg30
TD                   65536
SOLVENT              DMSO
NS                   2306
DS                   4
SWH                  24038.461 Hz
FIDRES               0.366798 Hz
AQ                   1.3631988 sec
RG                   203
DW                   20.800 usec
DE                   6.50 usec
TE                   299.3 K
D1                   2.0000000 sec
D11                  0.0300000 sec
TDO                  1
===== CHANNEL f1 =====
NUC1                  13C
P1                    8.70 usec
PL1                   -2.00 dB
PL1W                  57.32743073 W
SFO1                  100.6328888 MHz
===== CHANNEL f2 =====
CPDPRG2              waitz16
NUC2                  1H
P2                    80.00 usec
PL2                   -1.00 dB
PL12                  14.02 dB
PL13                  14.46 dB
PL1W                  13.18669796 W
PL12W                 0.41508400 W
PL13W                 0.37509048 W
SFO2                  400.1716007 MHz
SI                    32768
SF                    100.6228773 MHz
WDW                   EM
SSB                   0
LB                    1.00 Hz
GB                    0
PC                    1.40
    
```





NAME xj6-64b  
 EXPNO 1  
 PROCNO 1  
 Date\_ 20100514  
 Time 15.09  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT DMSO  
 NS 16  
 DS 2  
 SWH 8223.685 Hz  
 FIDRES 0.125483 Hz  
 AQ 3.9846387 sec  
 RG 203  
 DW 60.800 usec  
 DE 6.50 usec  
 TE 300.0 K  
 D1 1.00000000 sec  
 TDO 1  
 CHANNEL f1  
 NUC1 1H  
 P1 14.20 usec  
 PL1 -1.00 dB  
 PL1W 13.18669796 W  
 SF01 400.1724712 MHz  
 SI 32768  
 SF 400.1700000 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00







```

NAME      xj8-69b
EXPNO     1
PROCNO    1
Date_     20100519
Time      8.47
INSTRUM   spect
PROBHD    5 mm PABBO BB-
PULPROG   zg30
TD         65536
SOLVENT   DMSO
NS         16
DS         2
SWH        8223.685 Hz
FIDRES     0.125483 Hz
AQ         3.9846387 sec
RG         203
DM         60.800 usec
DE         5.50 usec
TE         298.0 K
D1         1.00000000 sec
TD0        1
===== CHANNEL f1 =====
NUC1      1H
P1         14.20 usec
PL1        -1.00 dB
PL12       13.186669796 dB
SFO1       400.1724732 MHz
SI         32768
SF         400.1700000 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.00
    
```

