

β -Substituted γ -Butyrolactams from Mucochloric acids: Synthesis of (\pm)Baclofen and Other γ -AminobutyricAcids and Useful Building Blocks

Kallolmay Biswas, Rajesh Gholap, Padakanti Srinivas, Sachin Kanyal, Koushik Das Sarma*

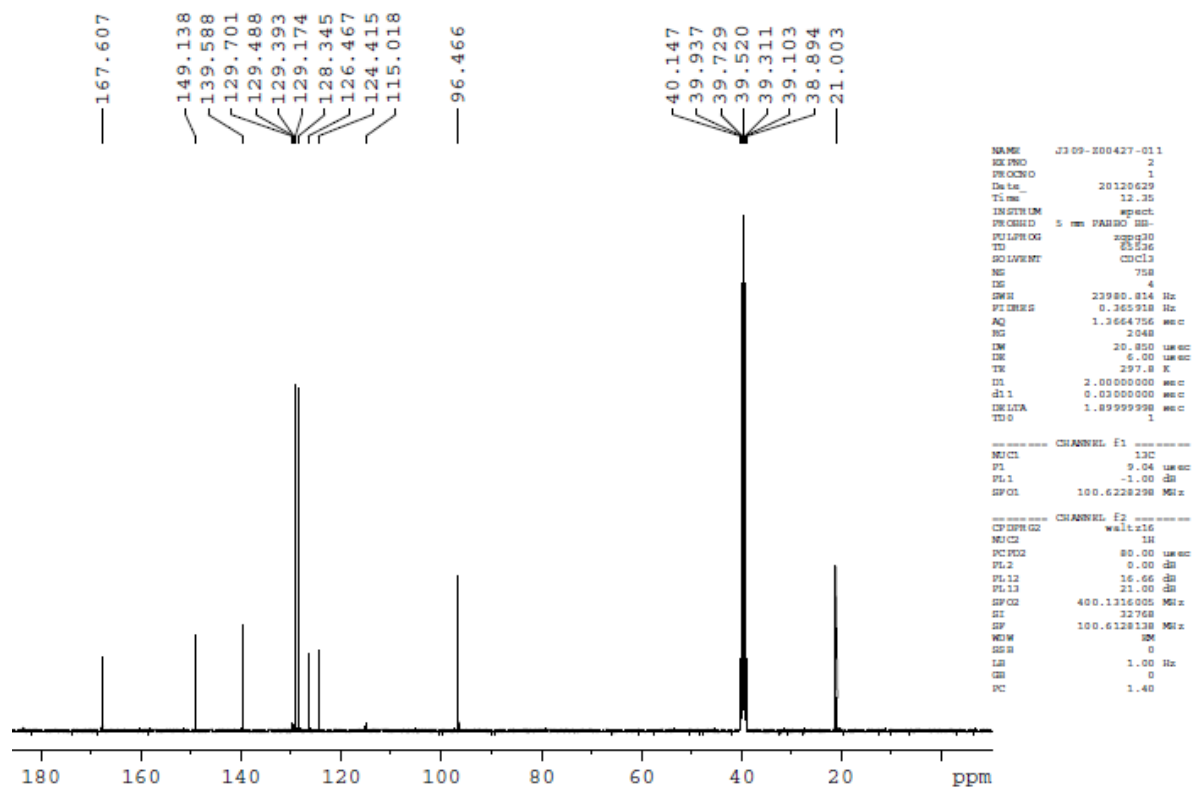
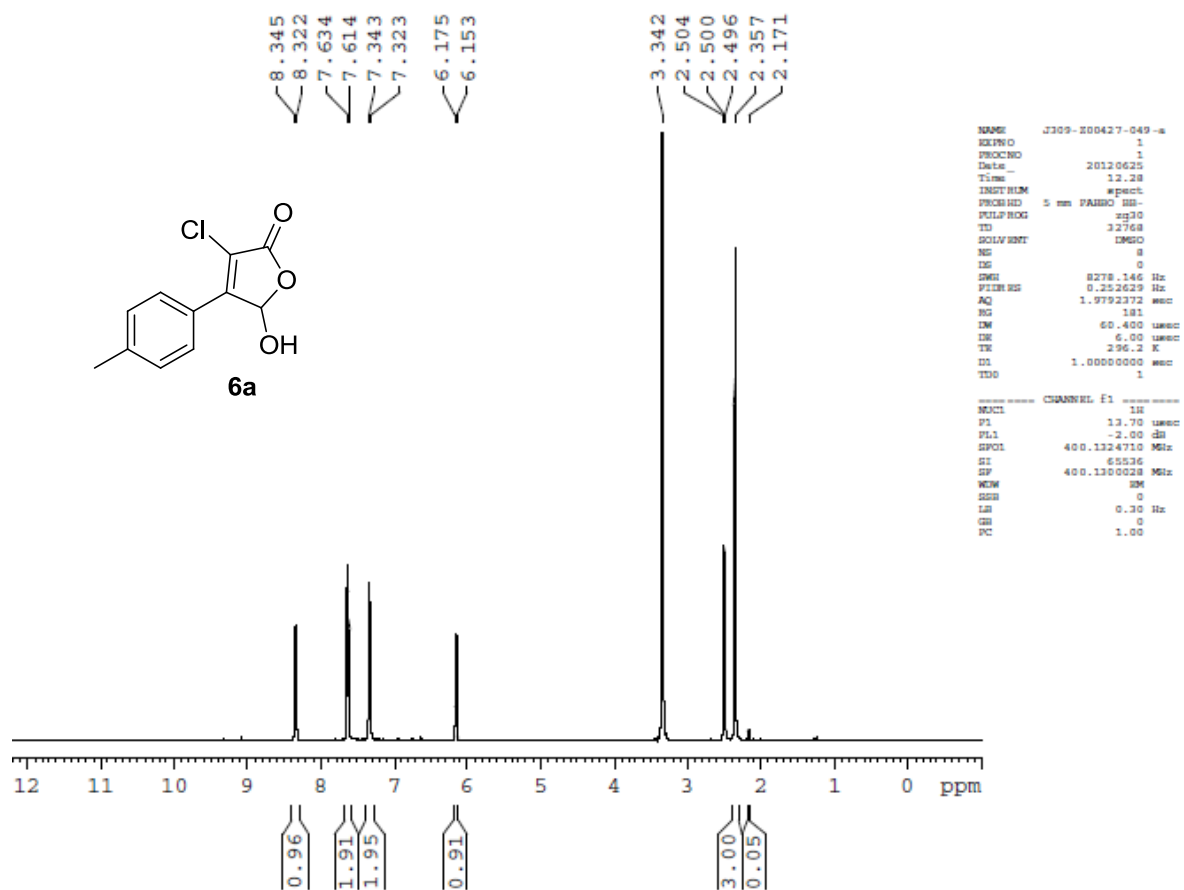
Jubilant Chemsys Ltd., B-34, Sector-58, Noida, UP, India-201301

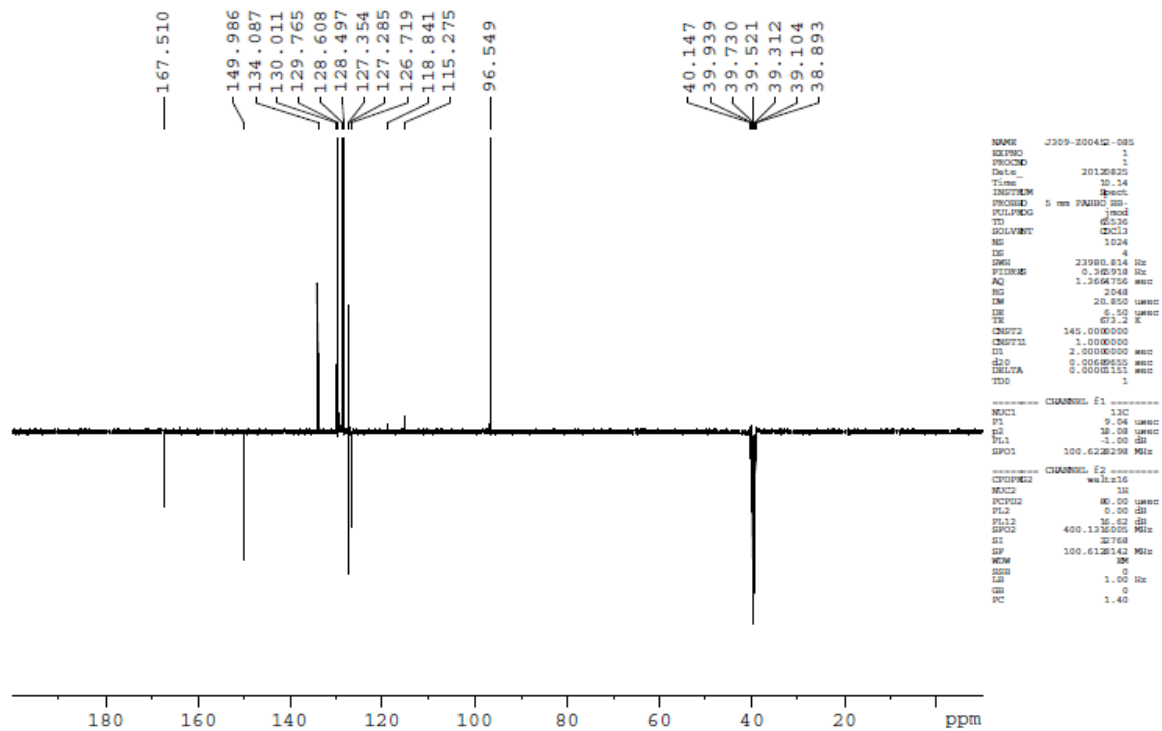
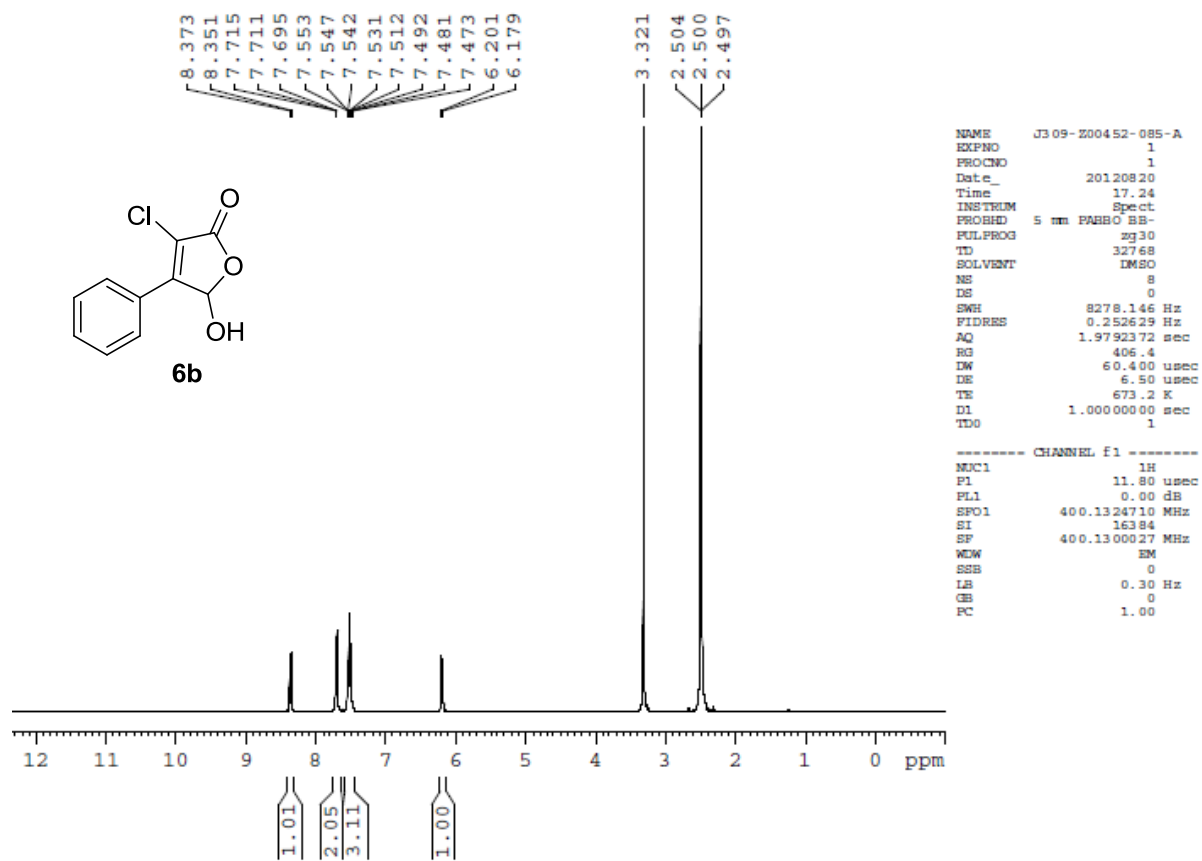
* Corresponding authors. Tel: +91 120-4093300; e-mail: kdsarma@gmail.com,

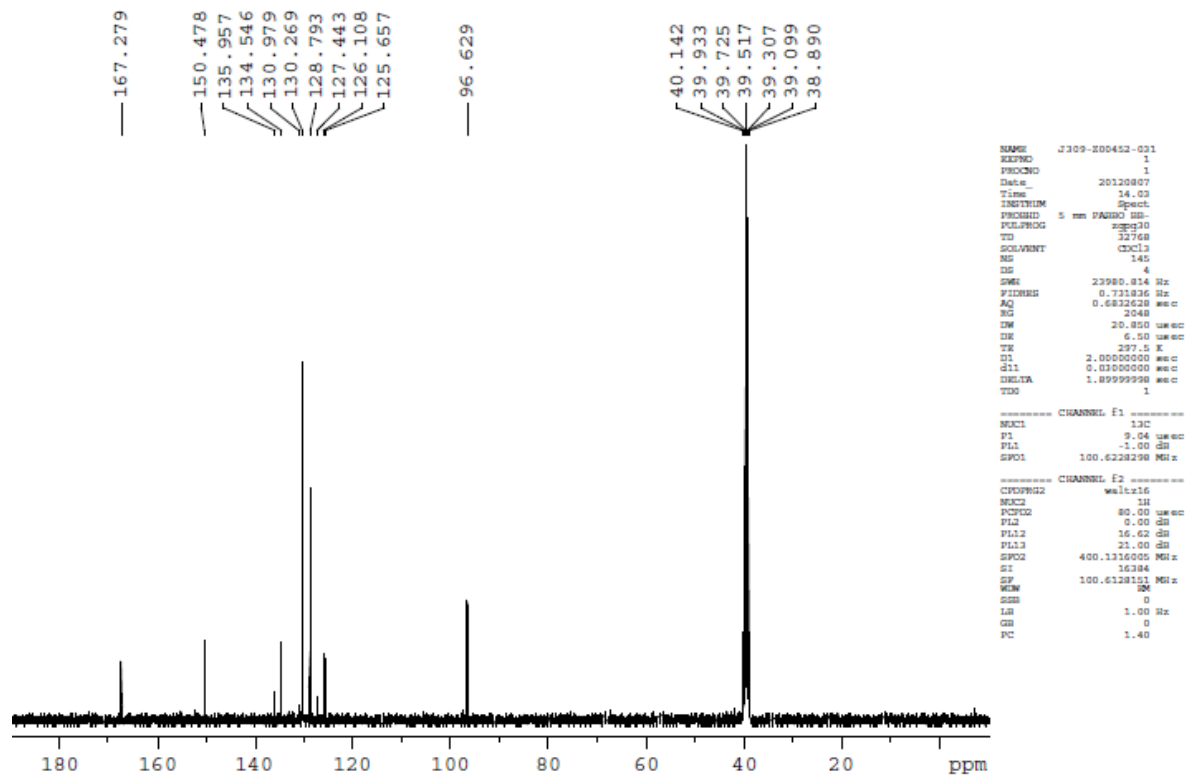
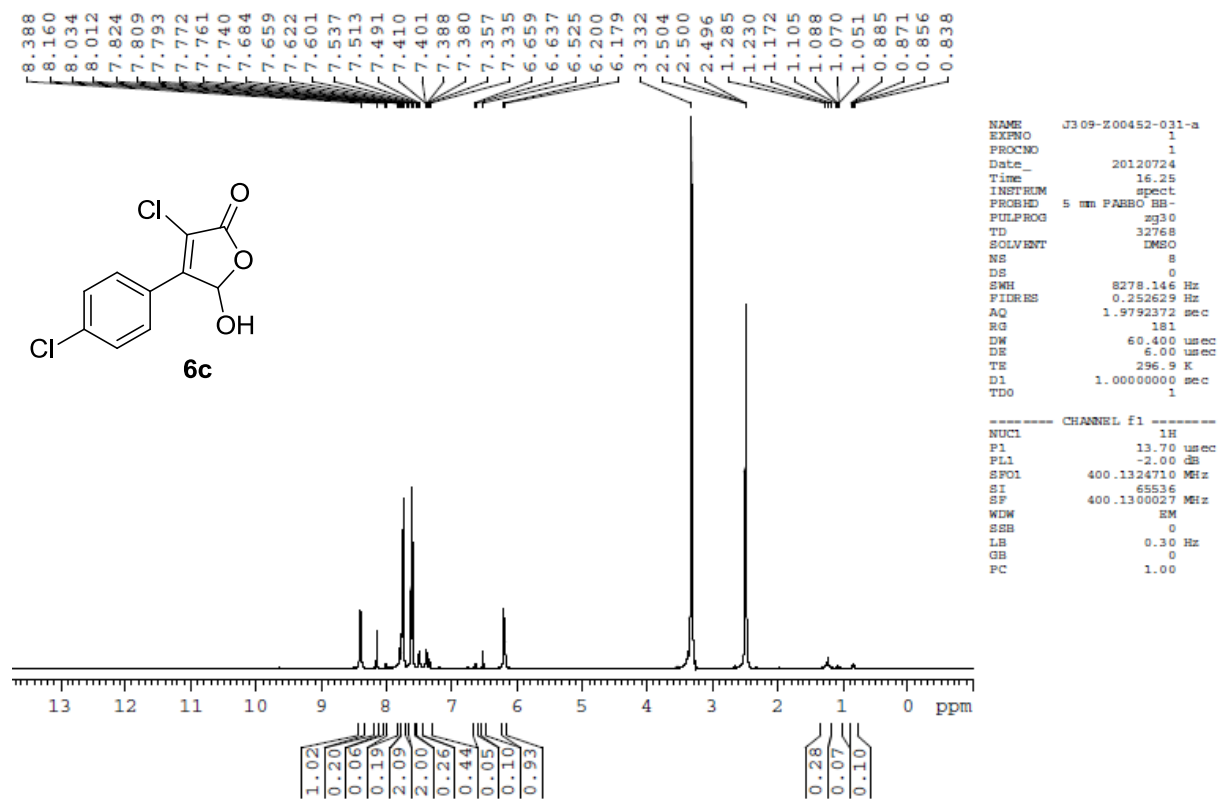
koushik_sarma@jchemsys.com

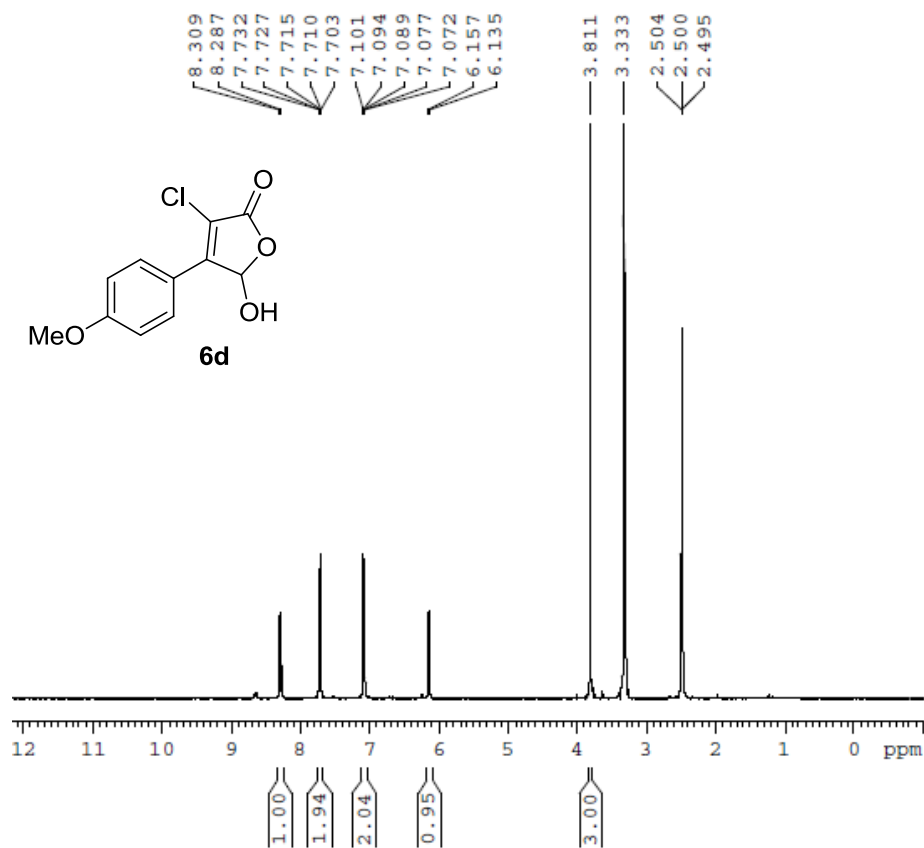
Supporting Information

^1H and ^{13}C NMR dataS2-S32







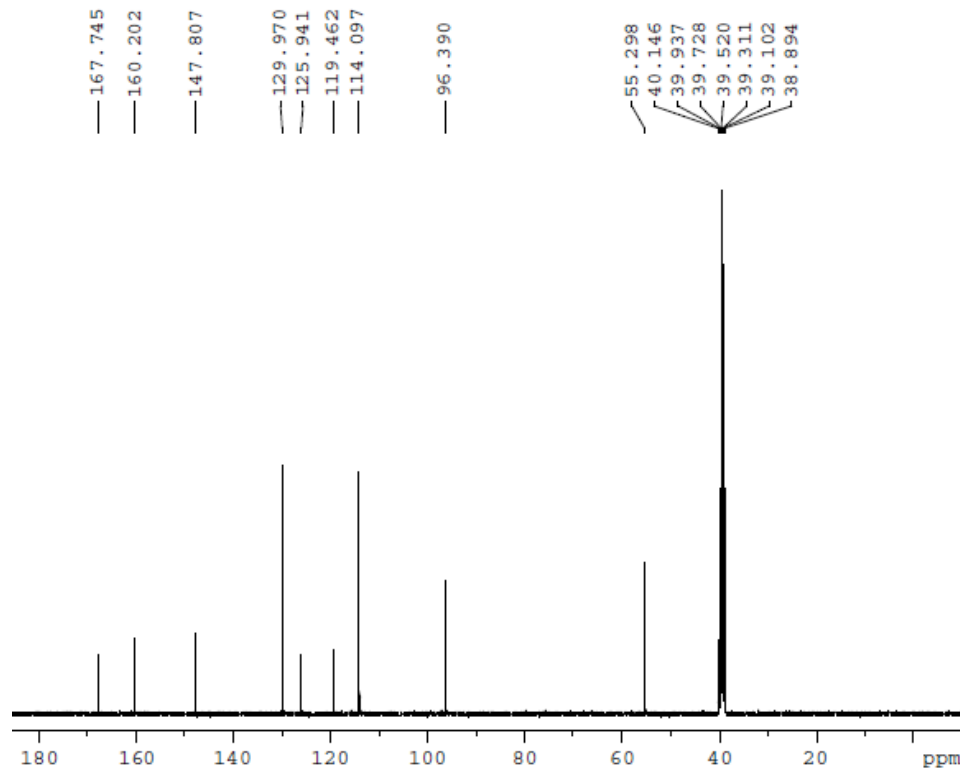


```

NAME      J309-Z00452-019
EXPNO    1
PROCNO   1
Date_    20120720
Time     13.18
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD        32768
SOLVENT  DMSO
NS        8
DS        0
SWH       8278.146 Hz
FIDRES   0.252629 Hz
DE        8.00 usec
AQ        1.9792372 sec
RG        181
DW        60.400 usec
DE        8.00 usec
TE        296.7 K
D1        1.0000000 sec
TDO       1
    
```

```

----- CHANNEL f1 -----
NUC1      1H
P1        13.70 usec
PL1       -2.00 dB
SFO1      400.1324710 MHz
SI         65536
SF         400.1300031 MHz
WDW        EM
SBB        0
LB         0.30 Hz
GB         0
PC         1.00
    
```



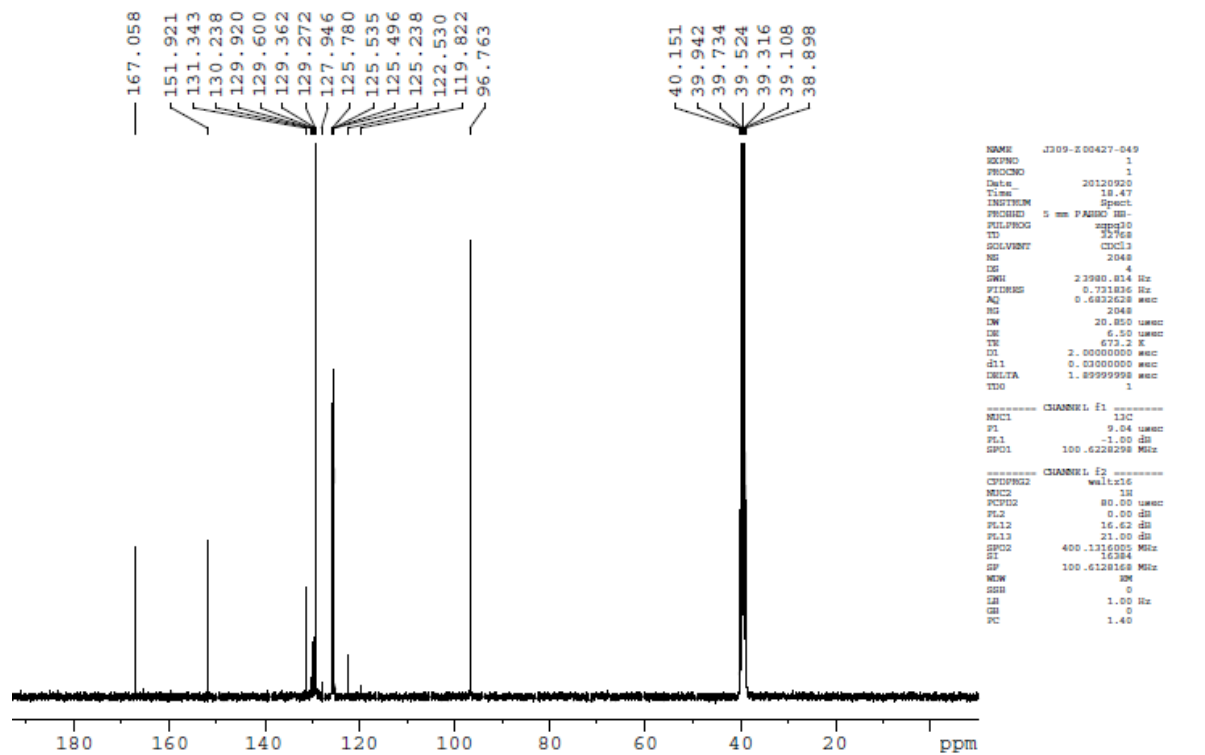
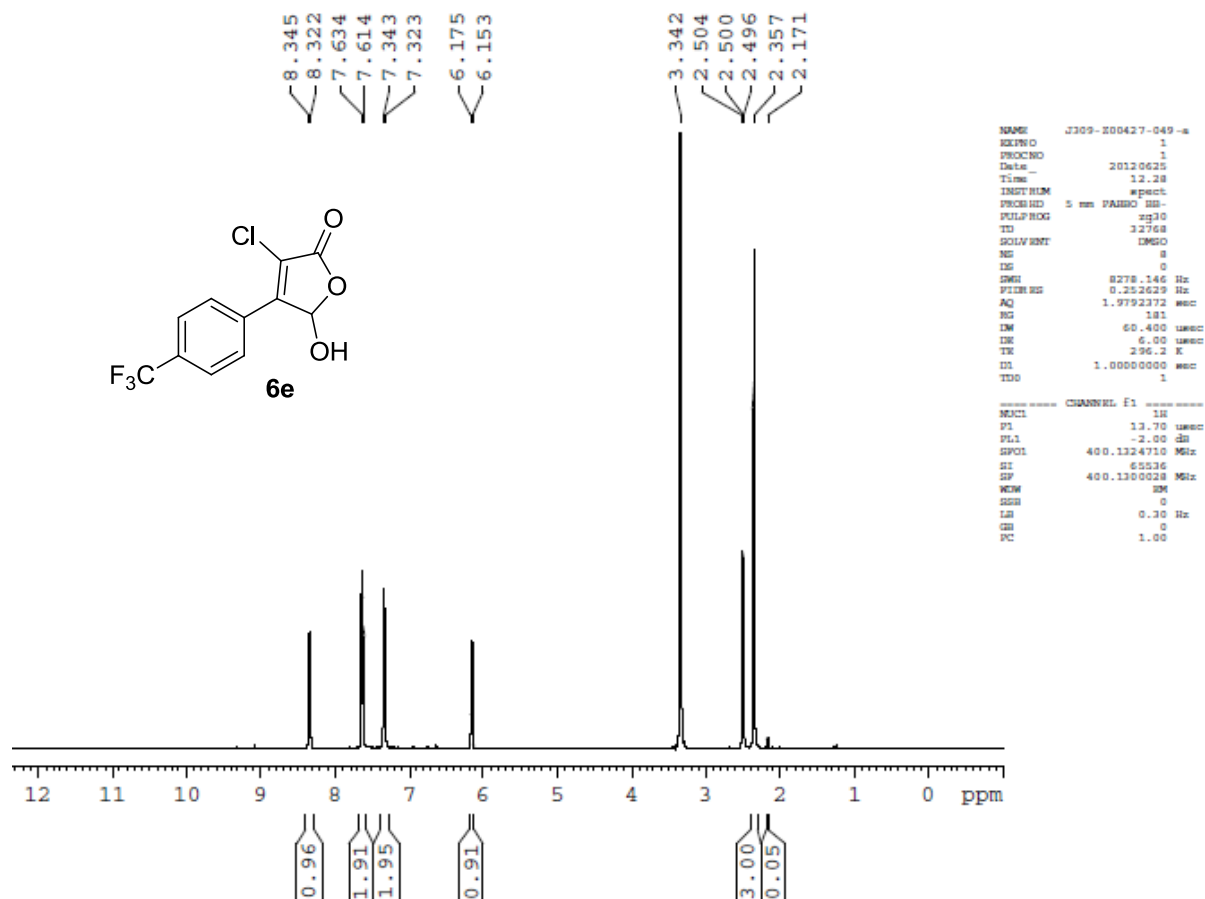
```

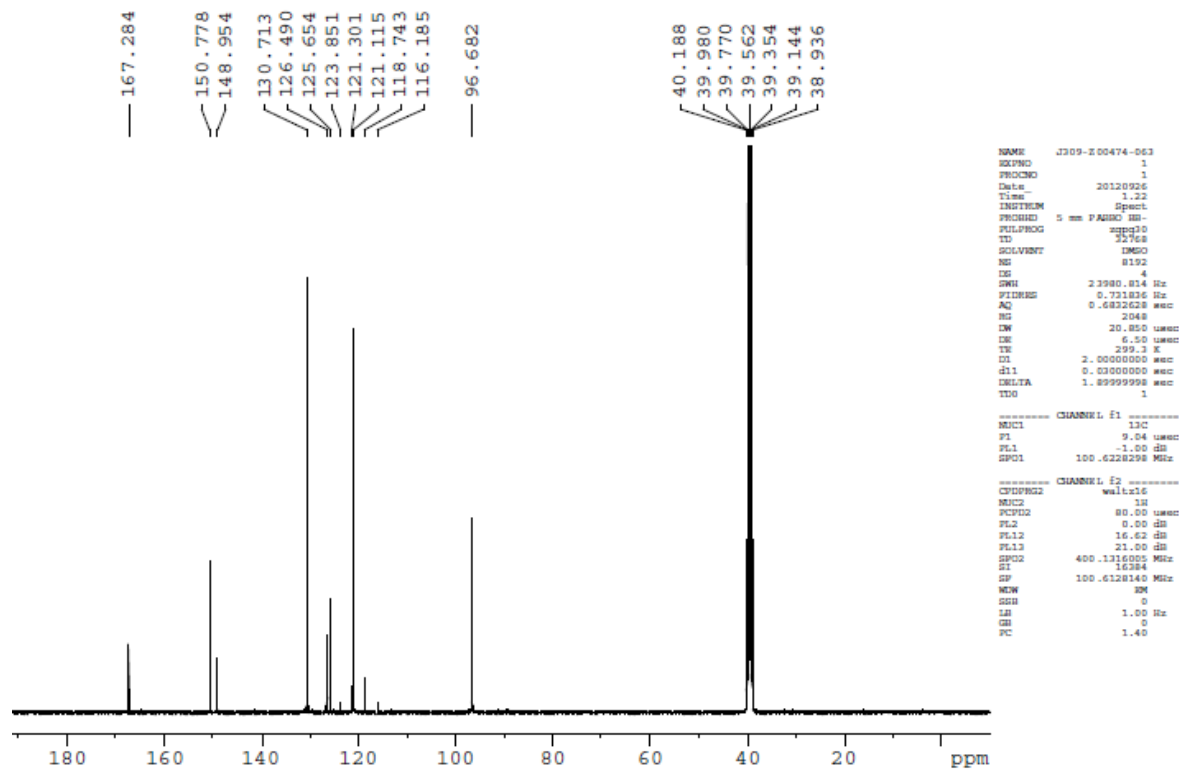
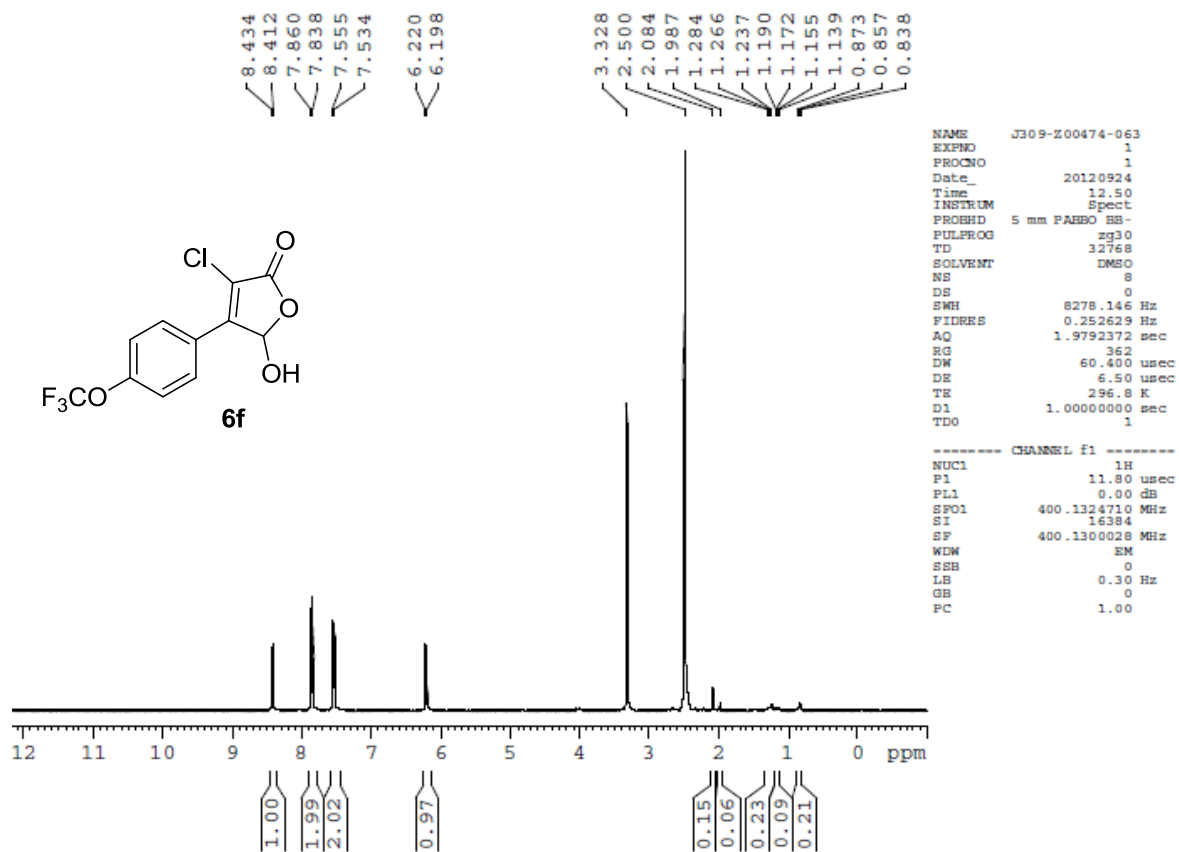
NAME      J309-Z00452-019-p
EXPNO    1
PROCNO   1
Date_    20120720
Time     17.52
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        871
DS        4
SWH       23980.814 Hz
FIDRES   0.265918 Hz
AQ        1.3664758 sec
RG        2048
DW        20.850 usec
DE        8.00 usec
TE        297.5 K
D1        2.0000000 sec
d11       0.0300000 sec
DELTA    1.8999999 sec
TDO       1
    
```

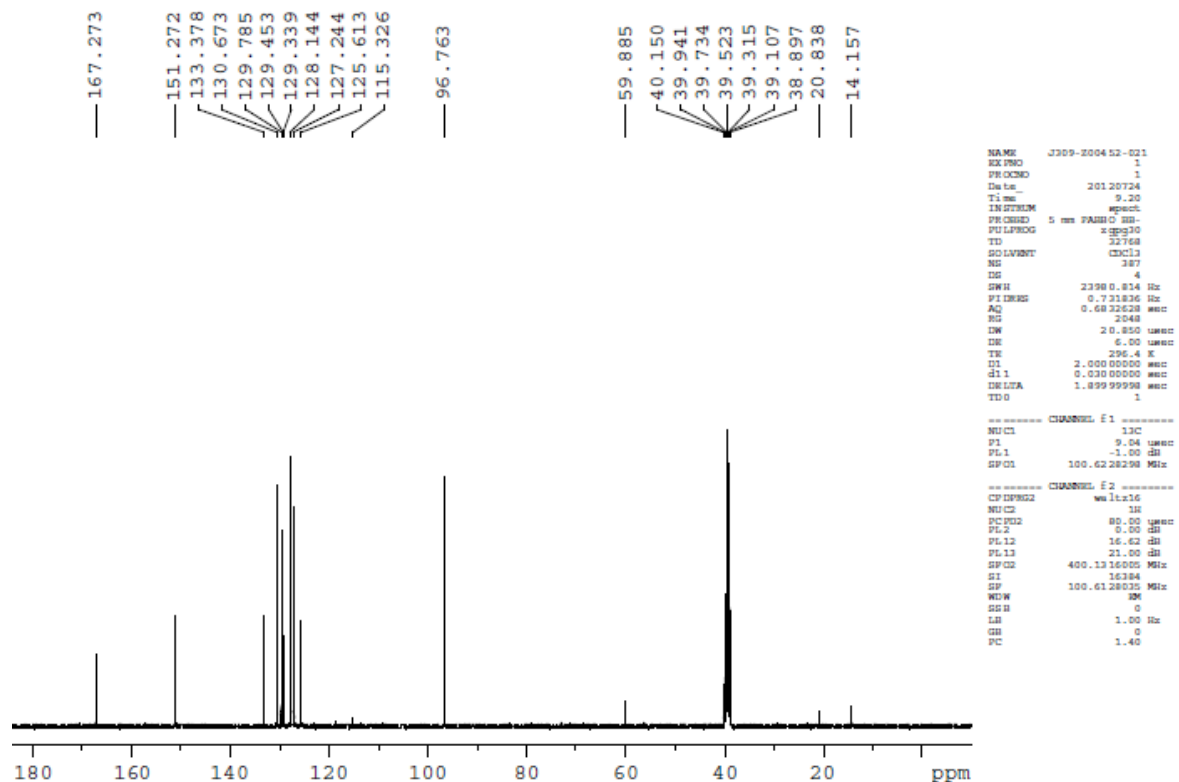
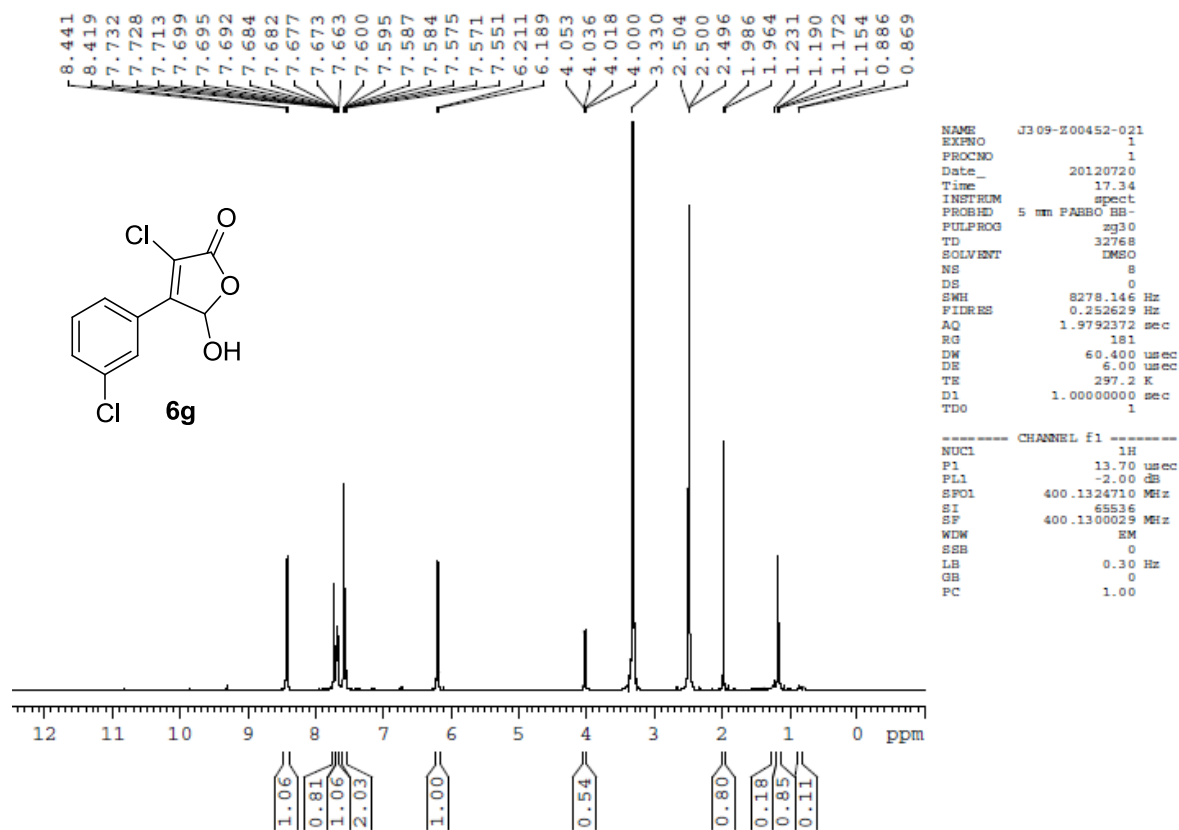
```

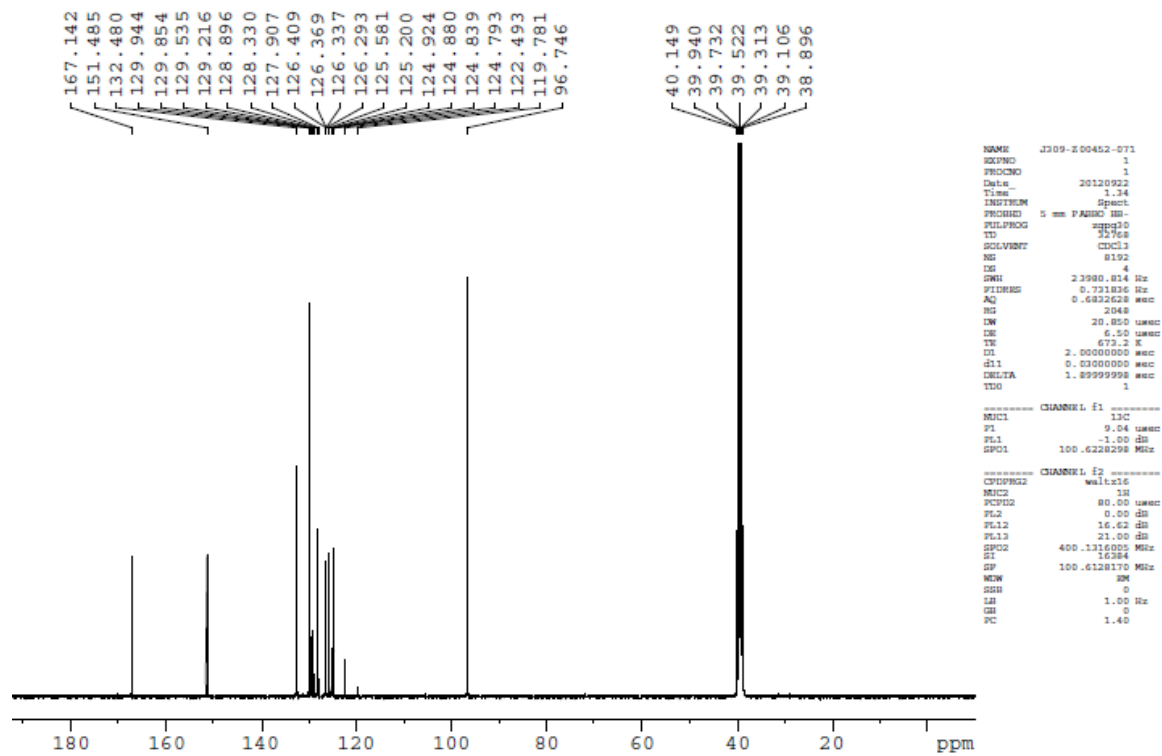
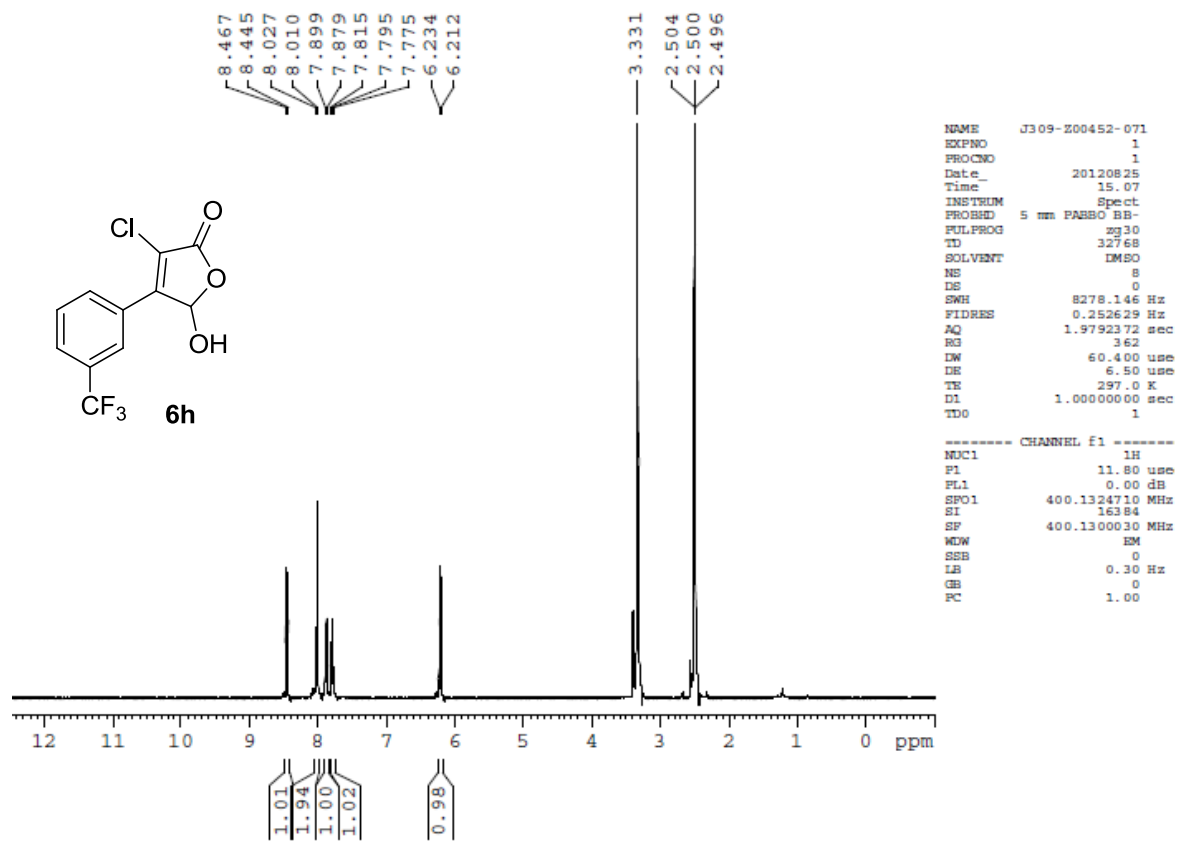
----- CHANNEL F1 -----
NUC1      13C
P1        9.04 usec
PL1       -1.00 dB
SFO1      100.6228298 MHz

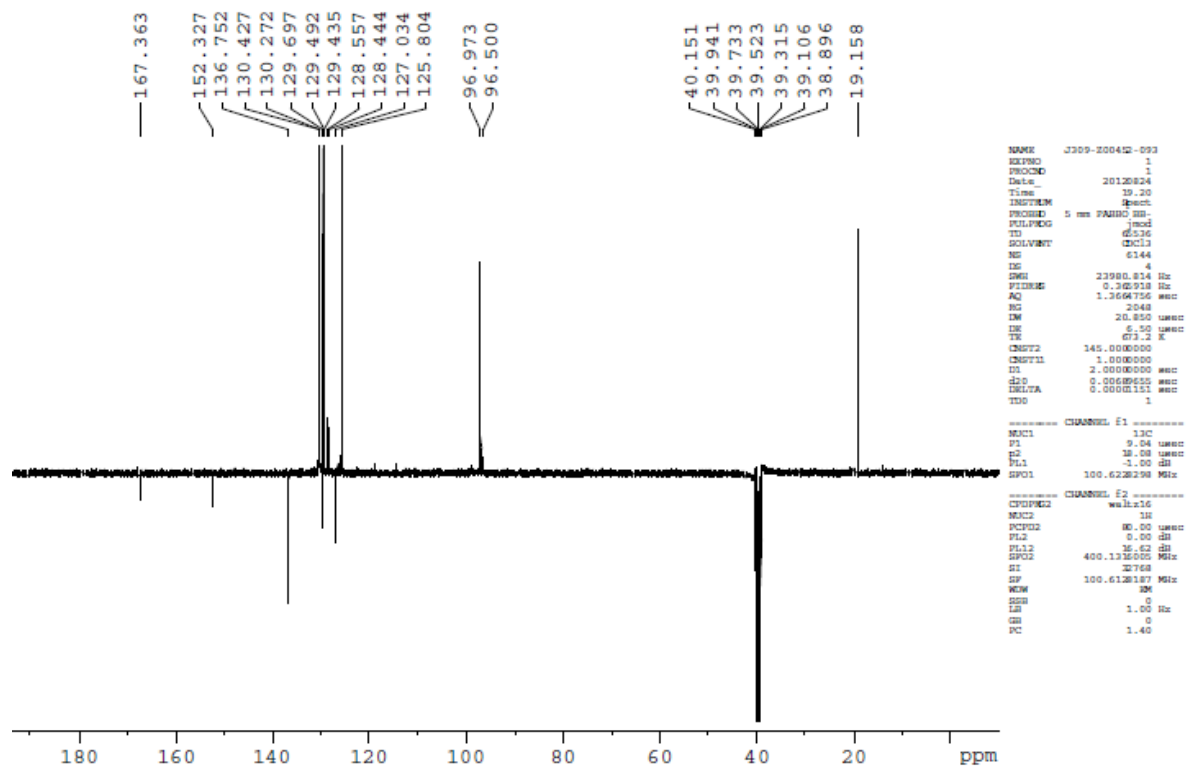
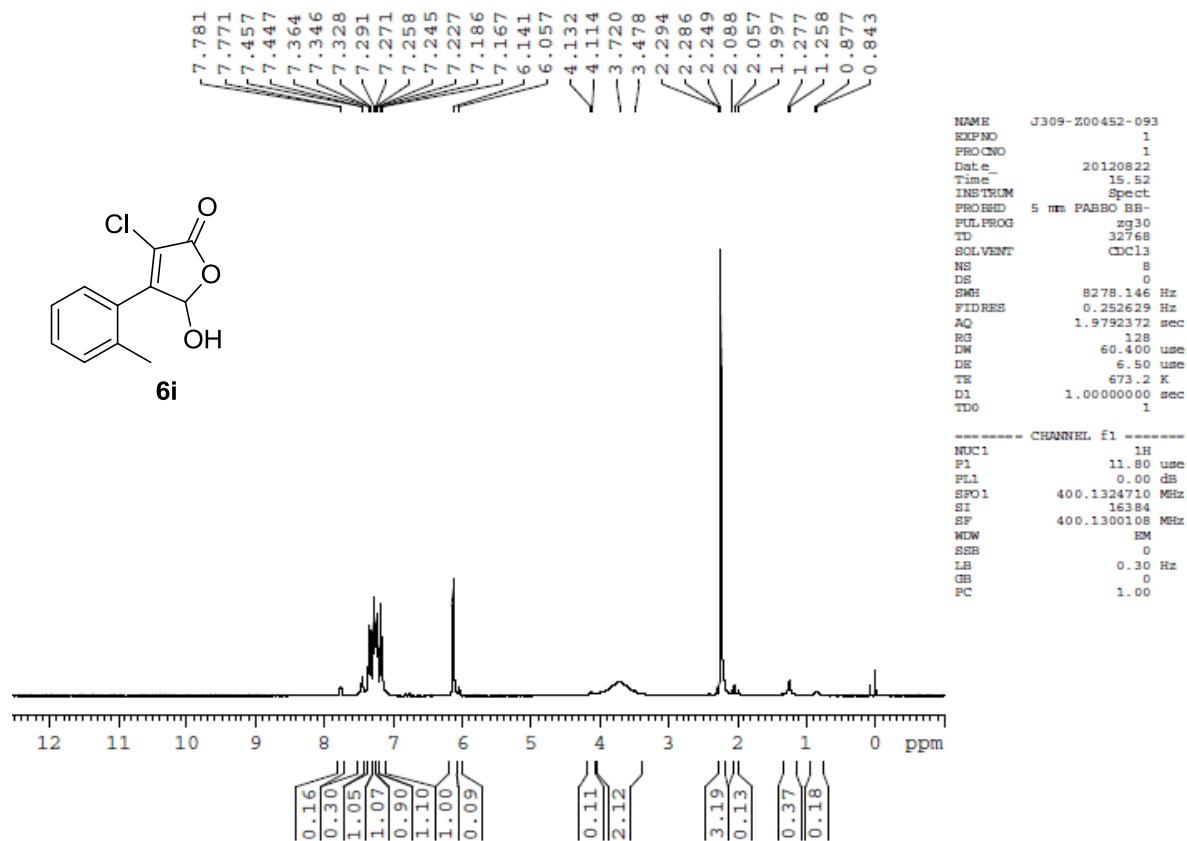
----- CHANNEL F2 -----
CPDPRG2  waltz16
NUC2      1H
PCPD2    80.00 usec
PL2       0.00 dB
PL12     16.62 dB
PL13     21.00 dB
SFO2     400.1316000 MHz
SI        32768
SF        100.6128146 MHz
WDW       RM
SBB       0
LB        1.00 Hz
GB        0
PC        1.40
    
```

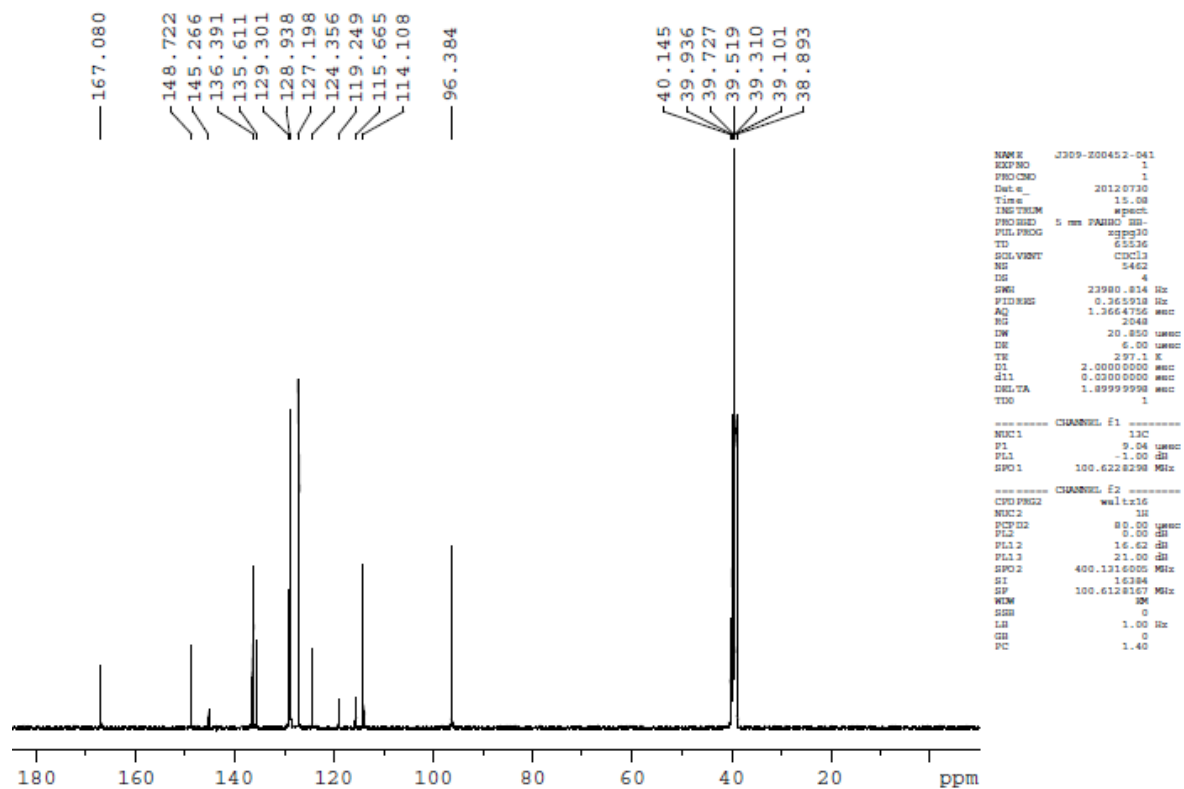
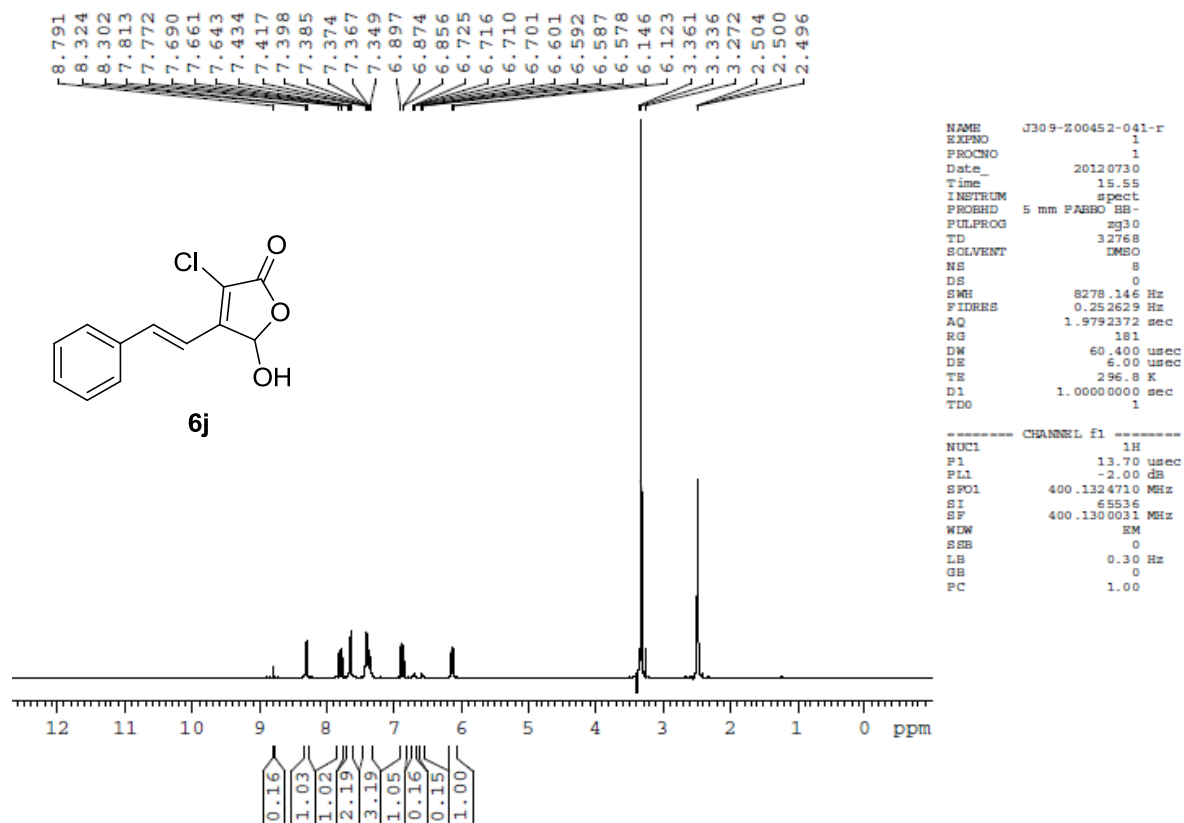


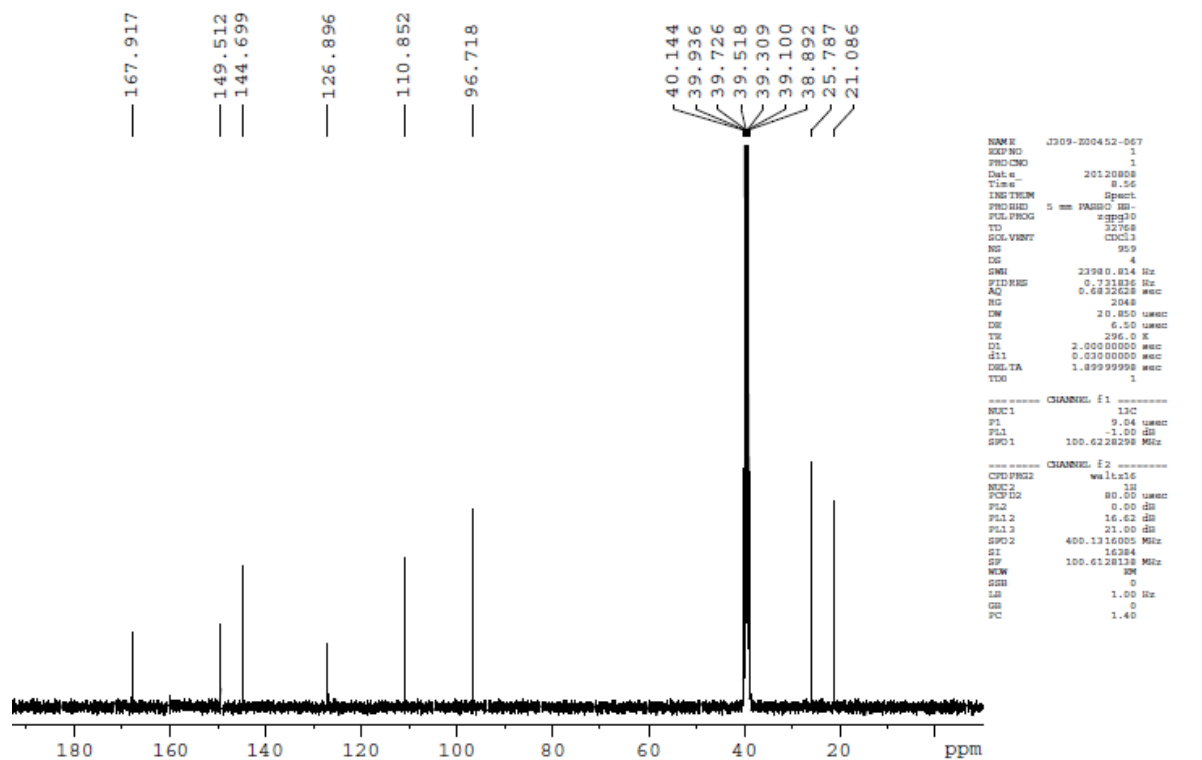
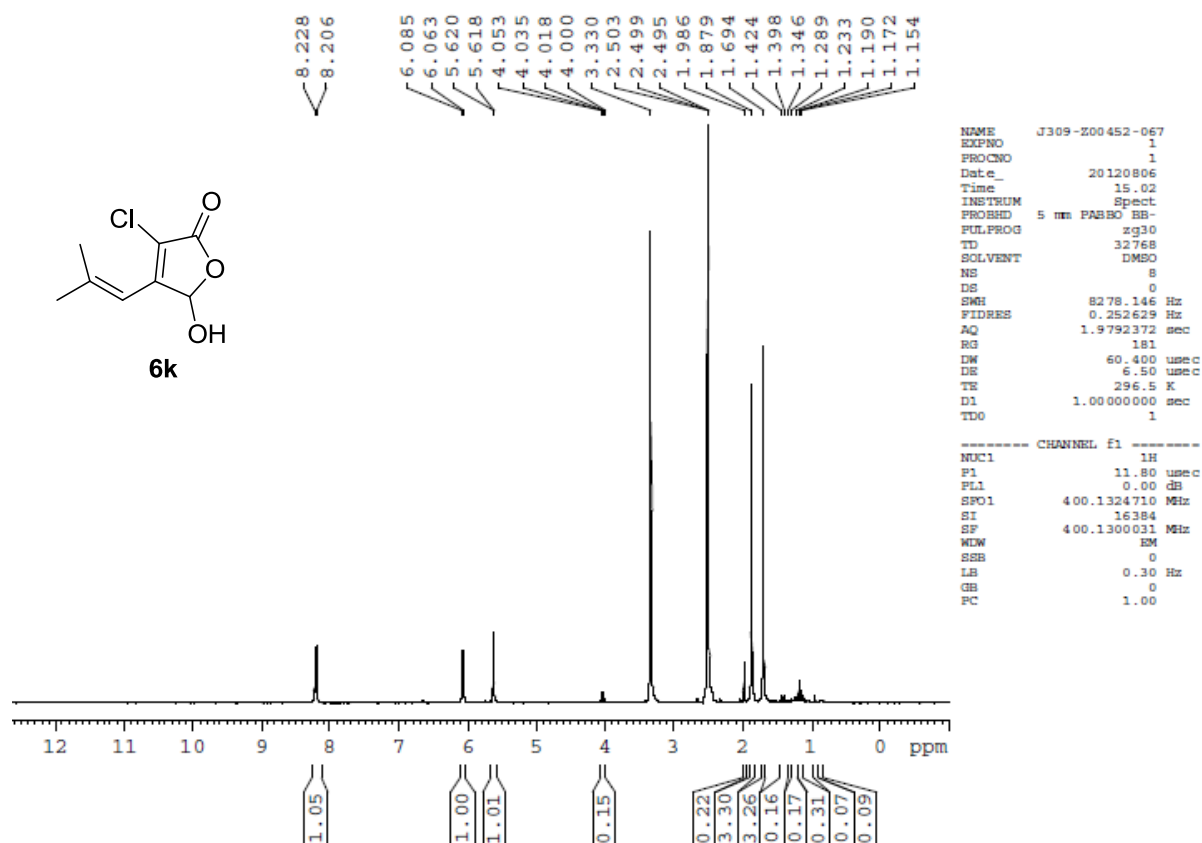


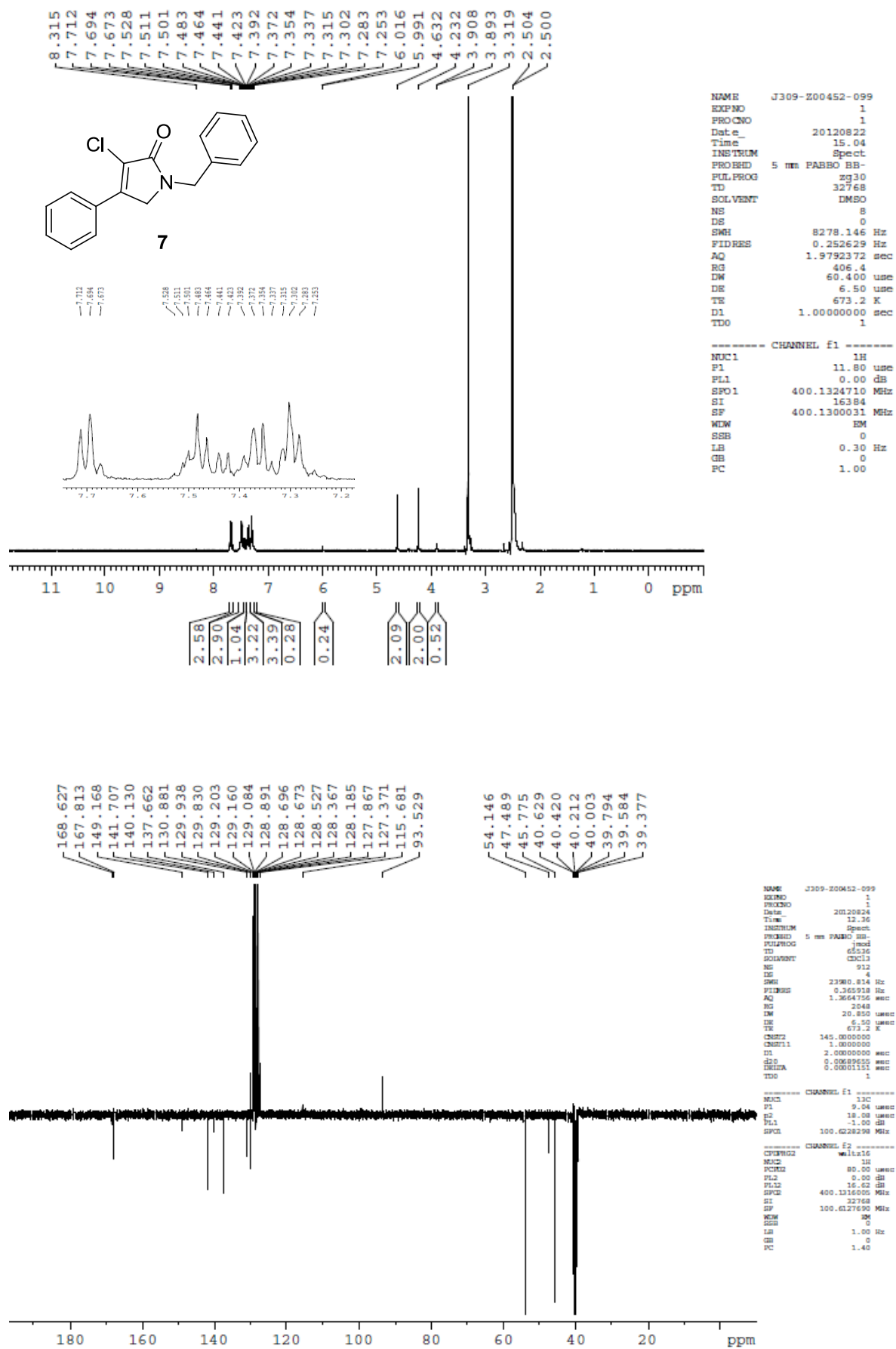


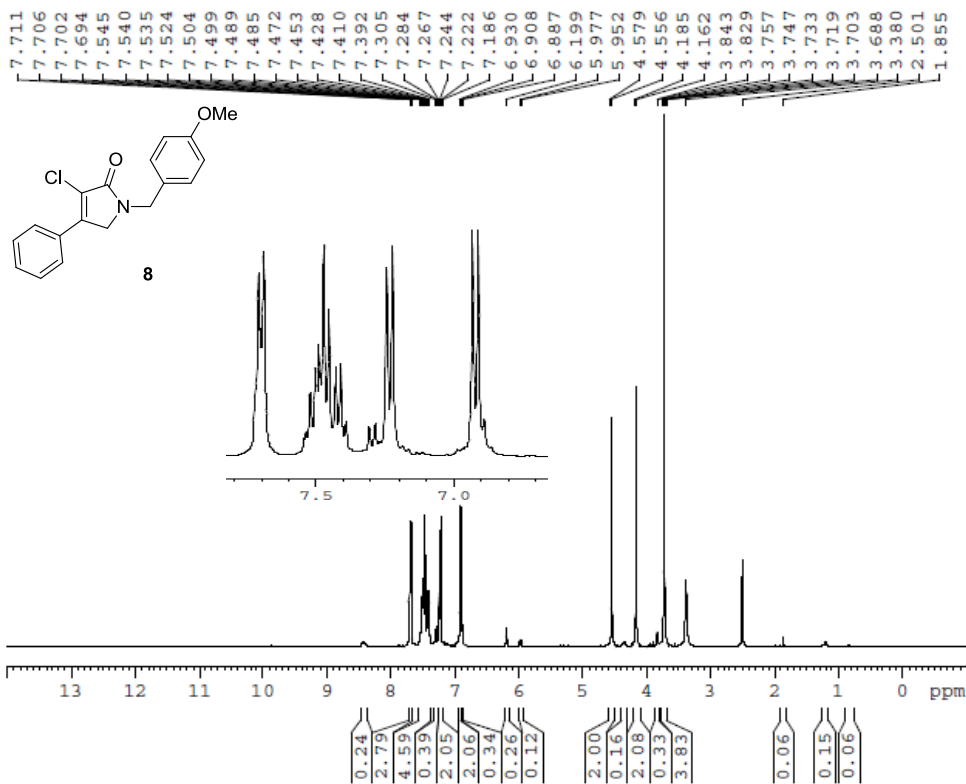








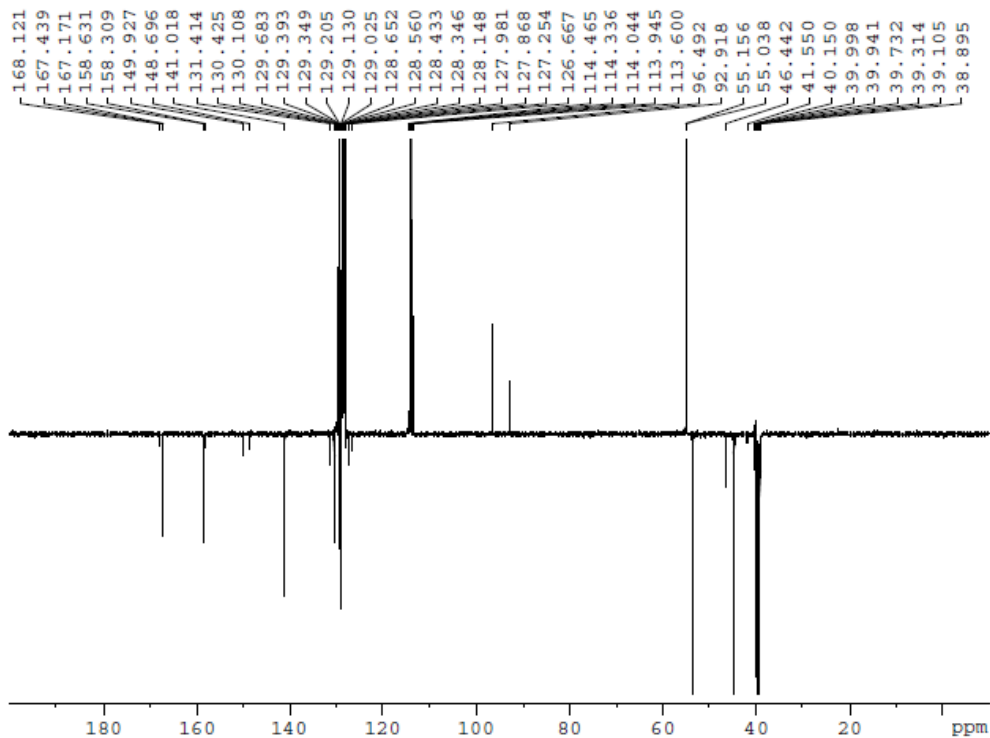




```

NAME      J309-Z00452-089
EXPNO    1
PROCNO   1
Date_    20120823
Time     19.02
INSTRUM  Spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD       32768
SOLVENT  DMSO
NS       8
DS       0
SWH      8278.146 Hz
FIDRES   0.252629 Hz
AQ       1.9792372 sec
RG       64
DW       60.400 usec
DE       6.50 usec
TE       273.2 K
D1       1.0000000 sec
TD0      1

----- CHANNEL F1 -----
NUC1     1H
P1       11.80 usec
PL1      0.00 dB
SFO1     400.1324710 MHz
SI       16384
SF       400.1300025 MHz
WDW      EM
SSB      0
LB       0.30 Hz
GB       0
PC       1.00
    
```

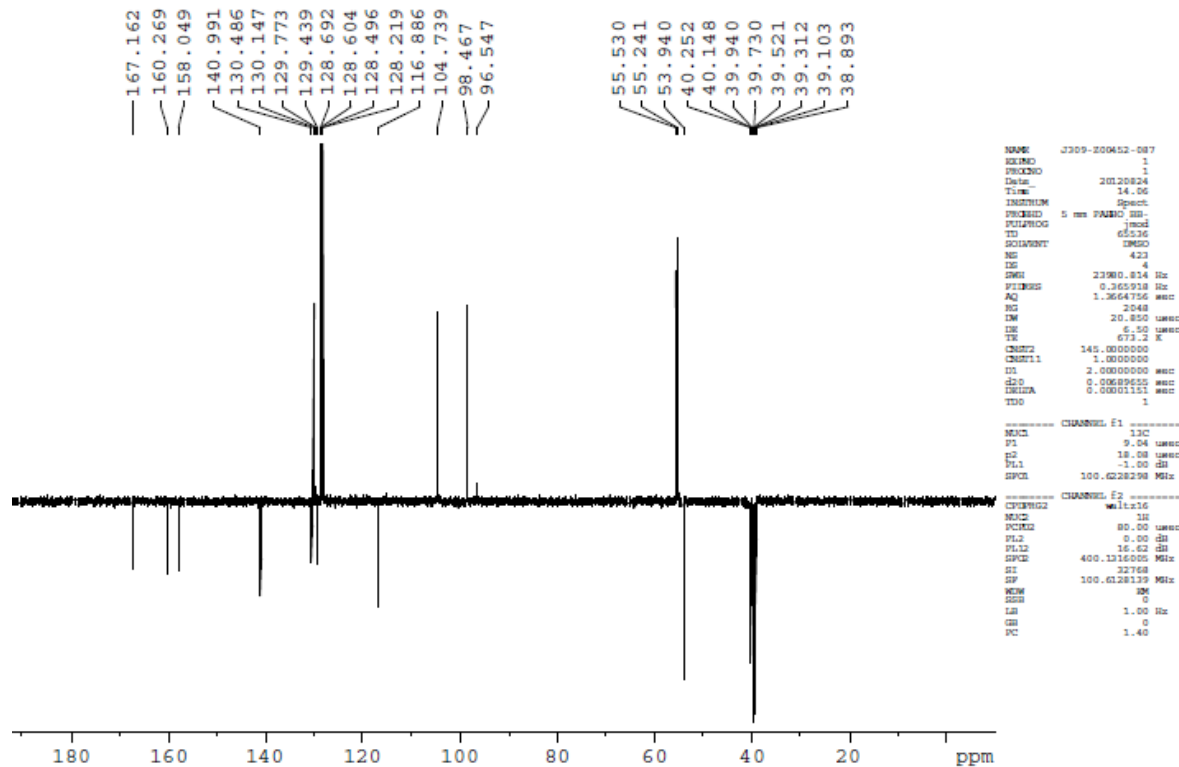
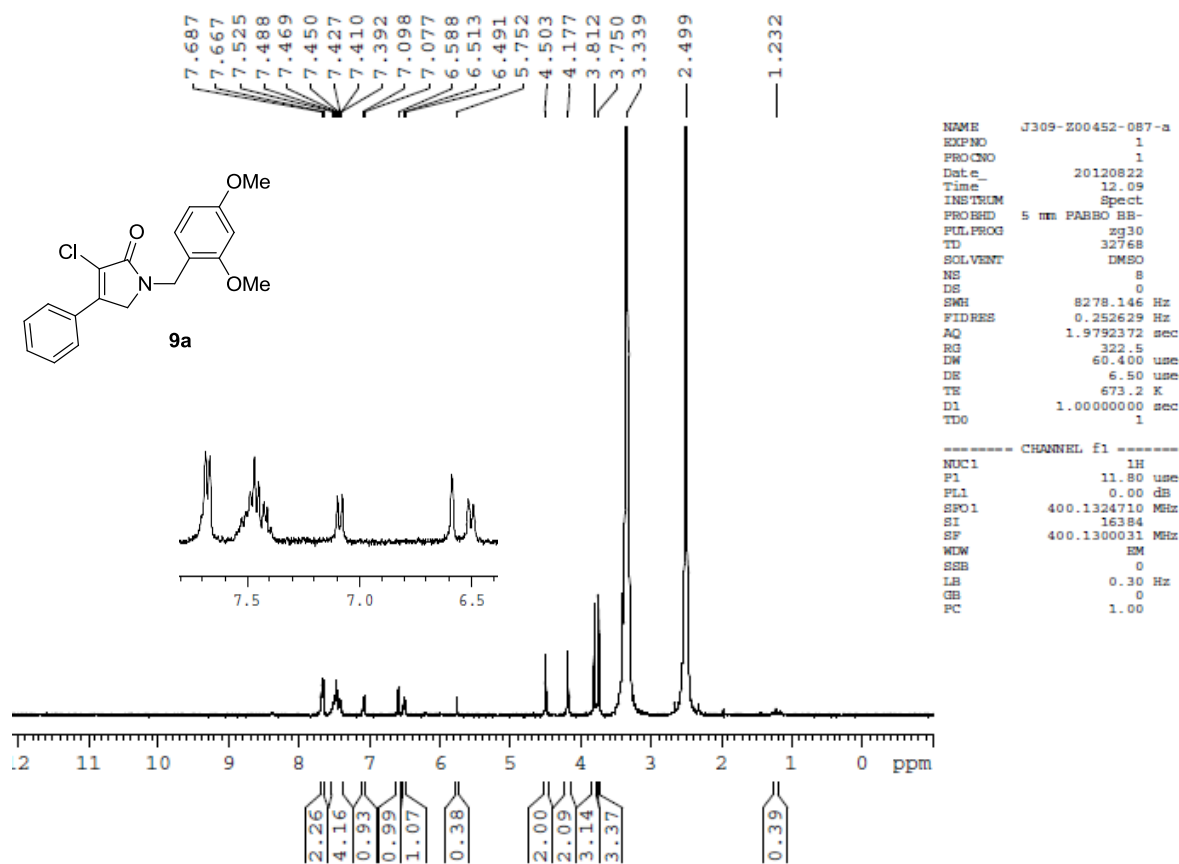


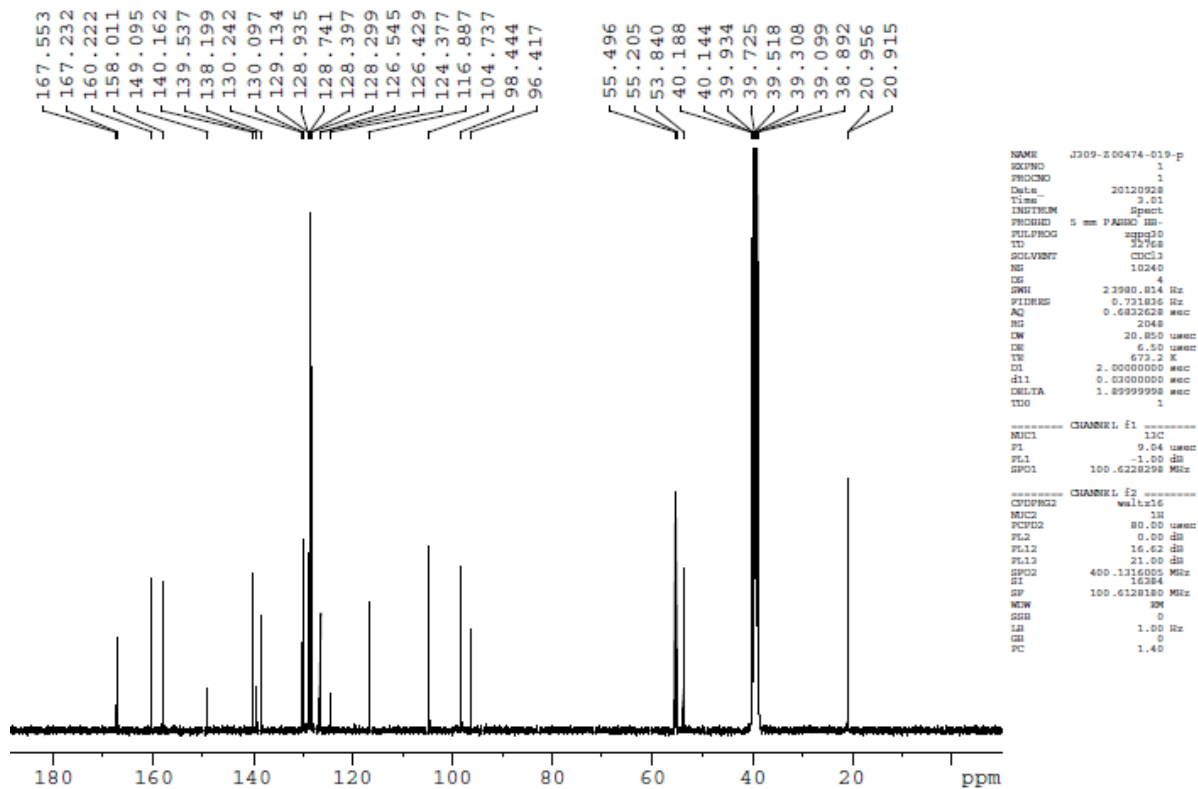
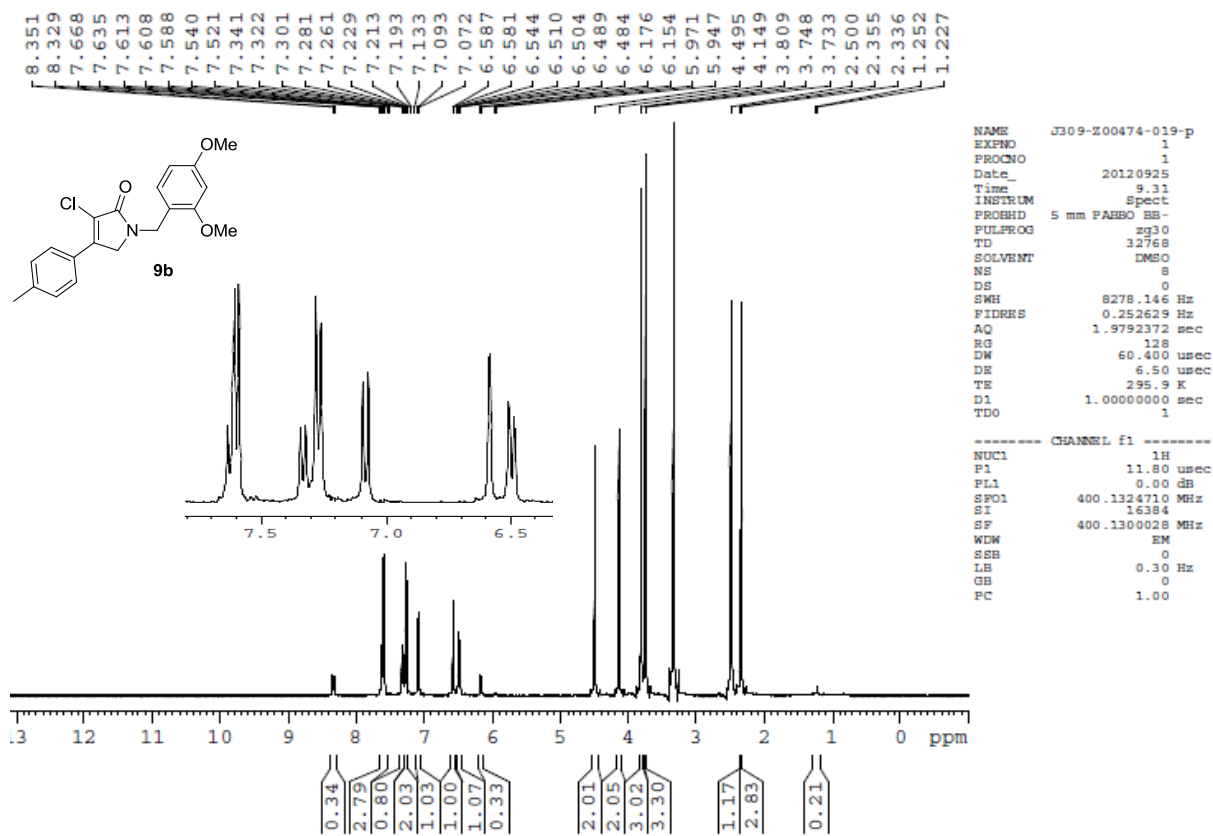
```

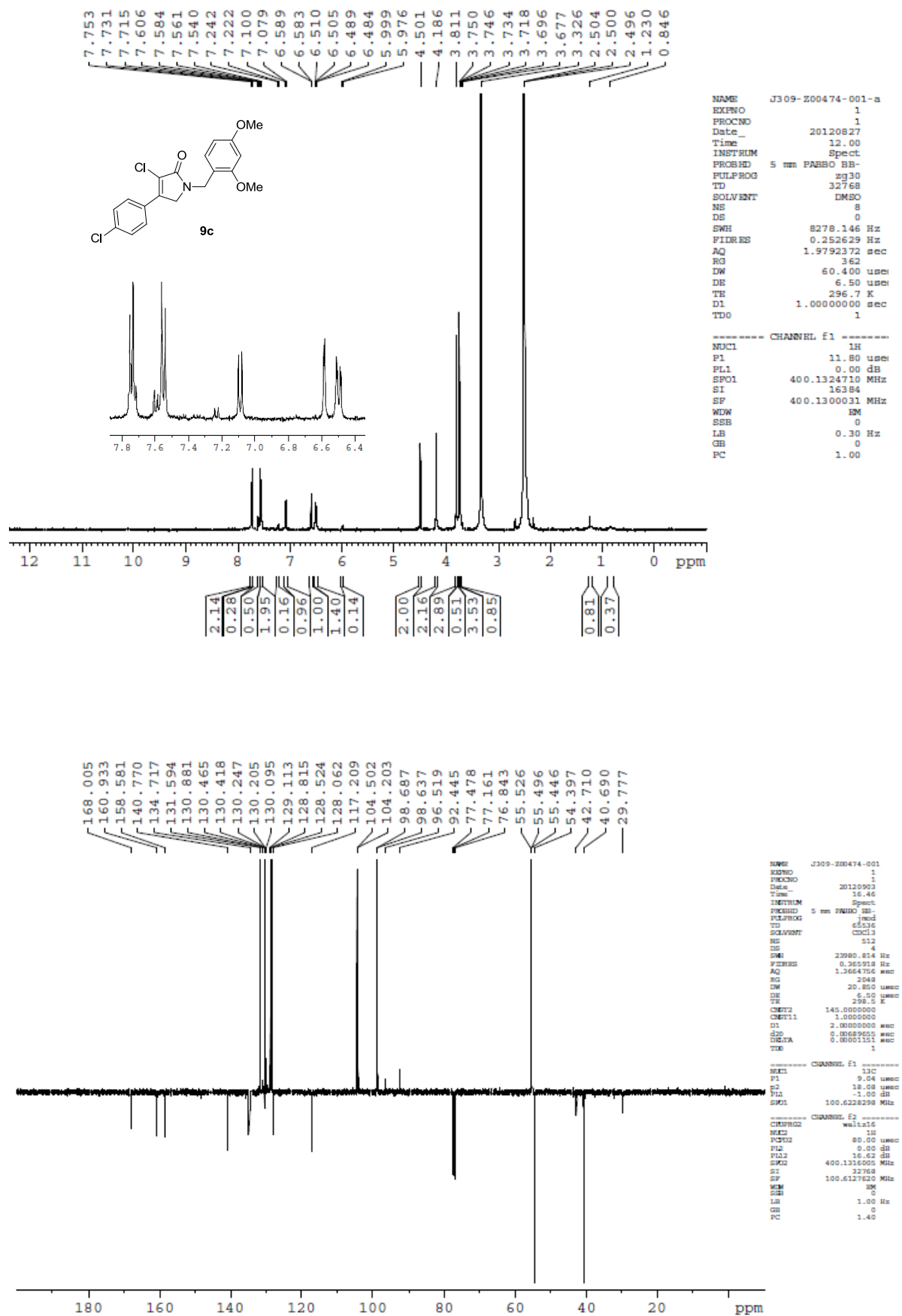
NAME      J309-Z00452-089
EXPNO    2
PROCNO   1
Date_    20120823
Time     19.17
INSTRUM  Spect
PROBHD   5 mm PABBO BB-
PULPROG  jmod
TD       32768
SOLVENT  DMSO
NS       4
DS       0
SWH      23980.814 Hz
FIDRES   0.728836 Hz
AQ       0.6830028 sec
RG       2048
DW       20.950 usec
DE       6.50 usec
TE       273.2 K
D1       145.0000000 sec
D11      1.0000000 sec
D12      2.0000000 sec
dS1      0.0066665 sec
DELTA    0.0000151 sec
TD0      1

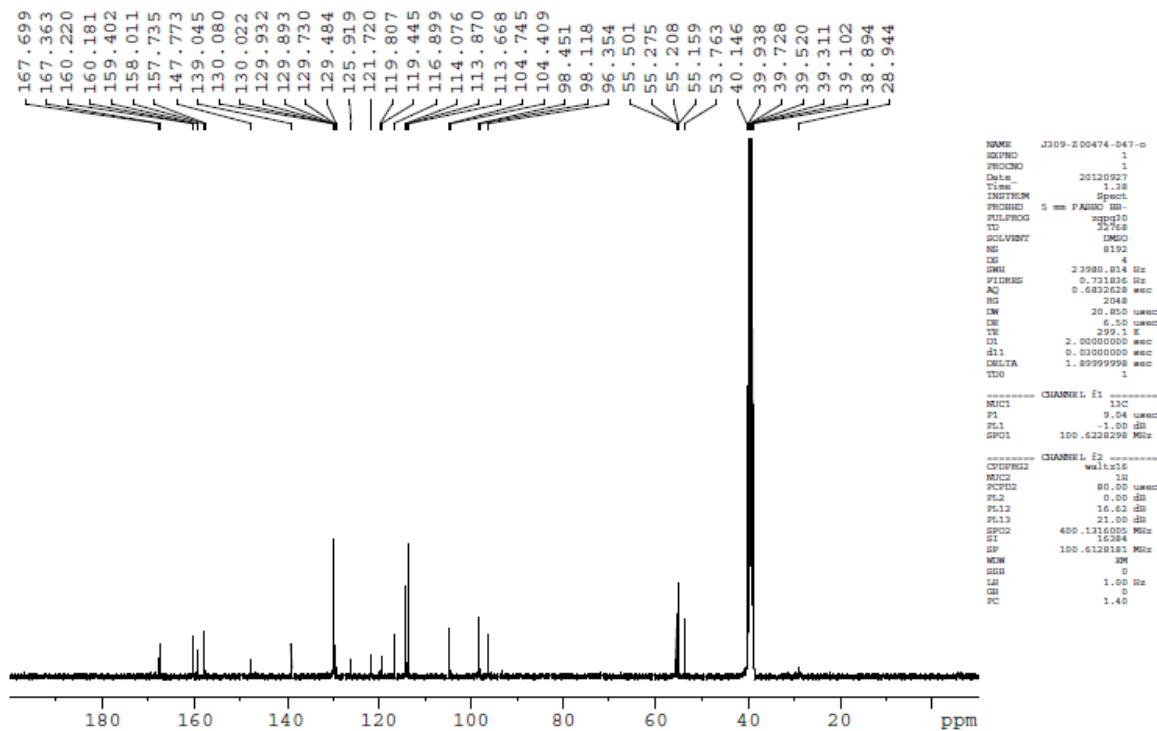
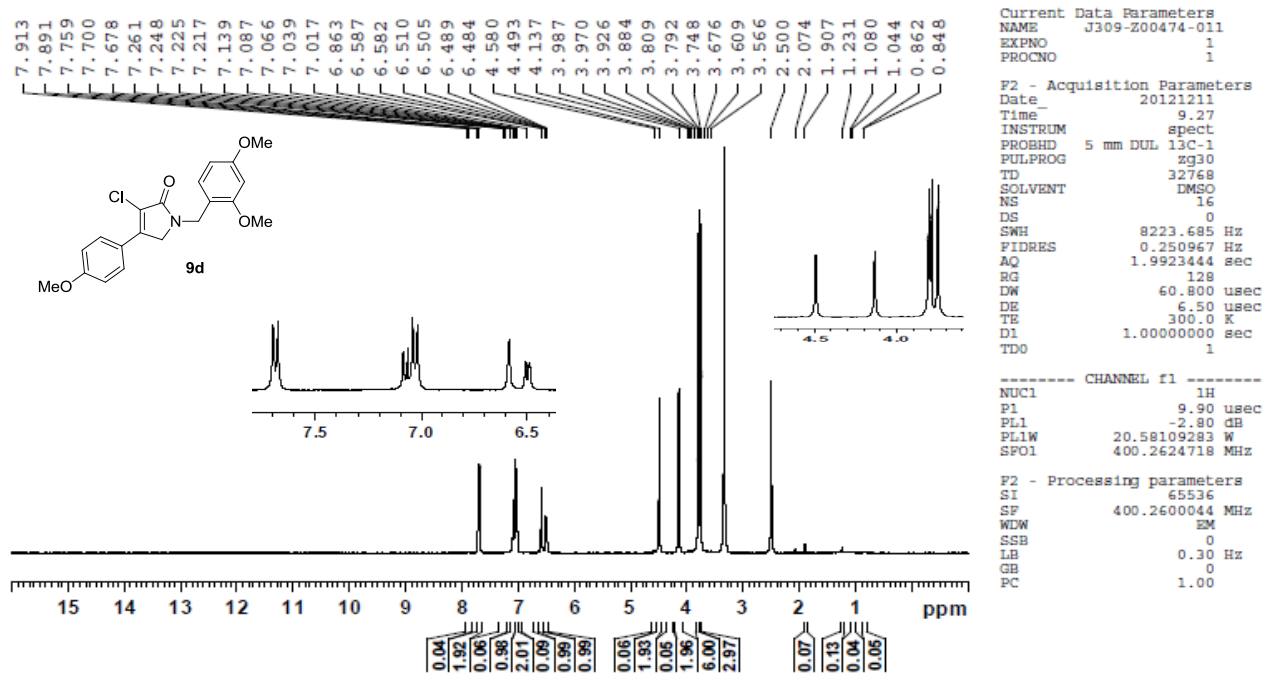
----- CHANNEL F1 -----
NUC1     13C
P1       9.04 usec
PL1      19.00 dB
SFO1     100.6220298 MHz

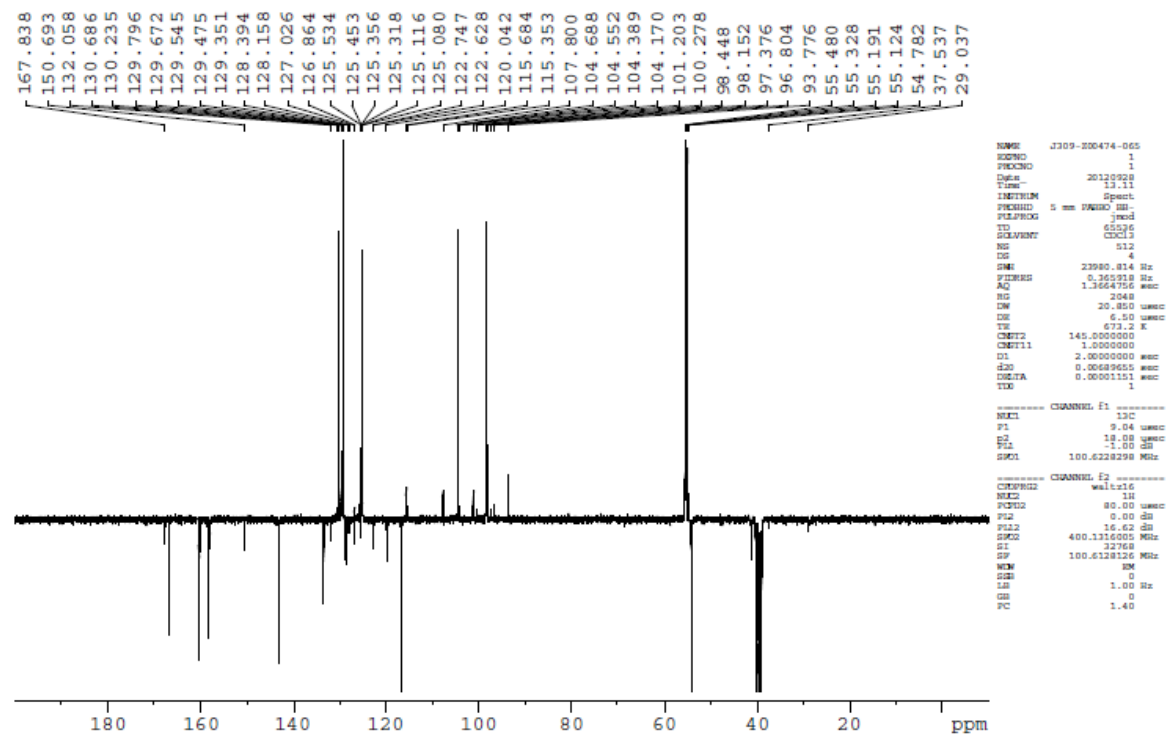
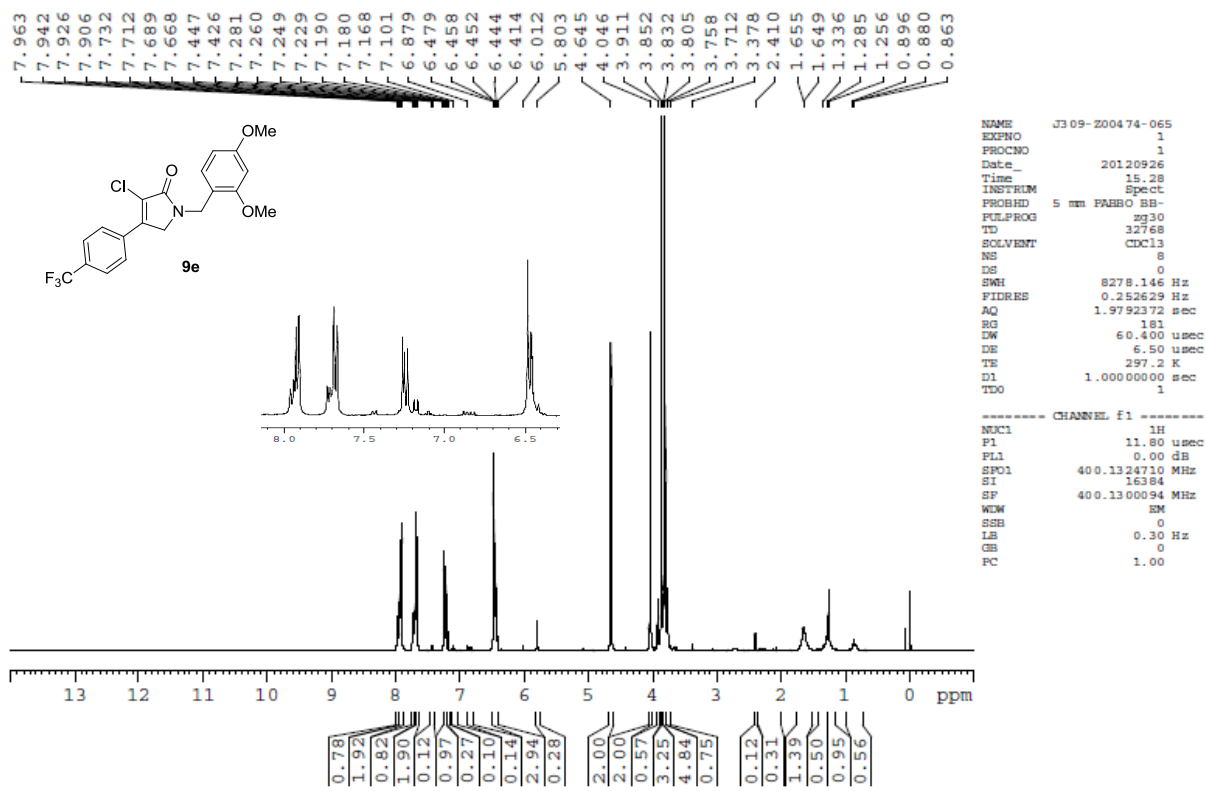
----- CHANNEL F2 -----
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2      0.00 dB
PL12     19.12 dB
SFO2     400.1320025 MHz
SI       16384
SF       100.6120198 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
    
```

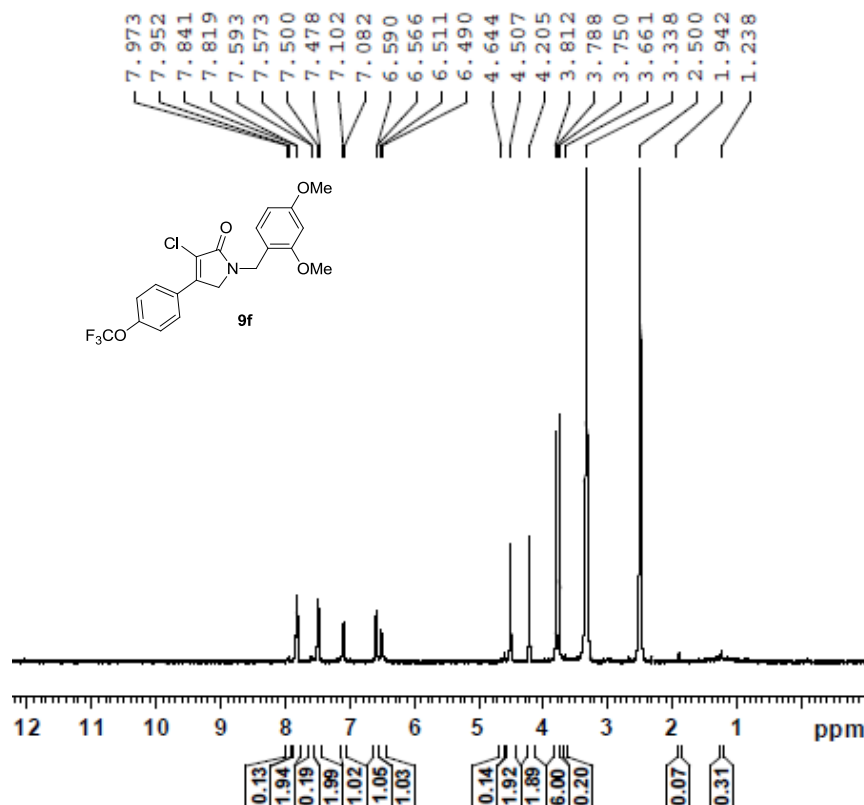










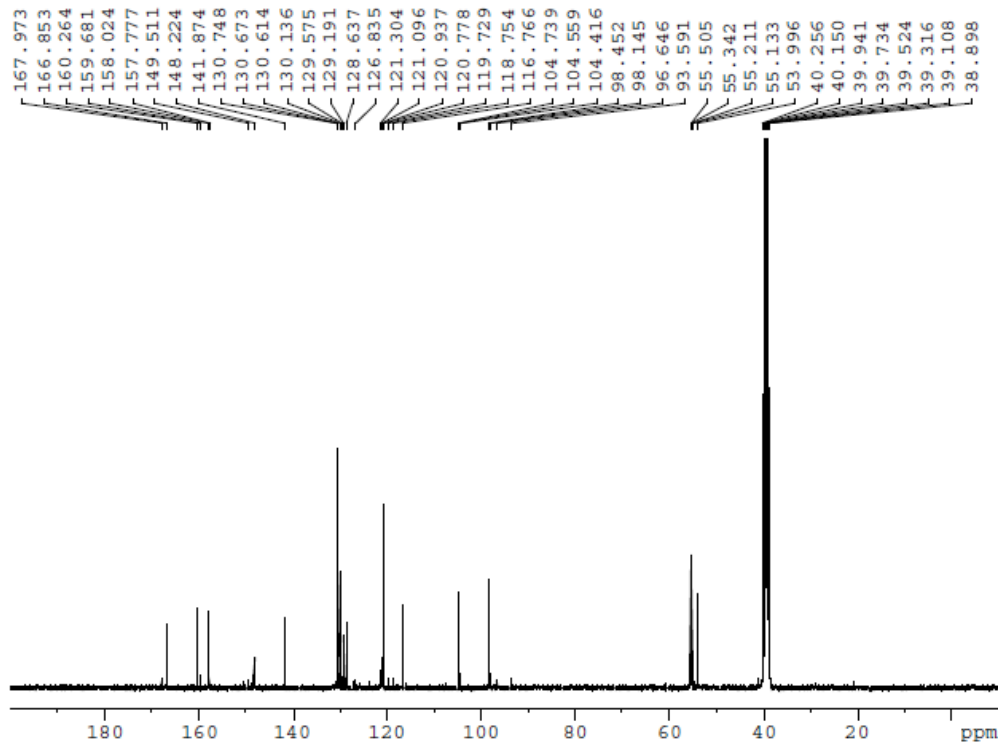


Current Data Parameters
 NAME J309-Z00474-067
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20121211
 Time 9.19
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 16
 DS 0
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 128
 DW 60.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec
 TDO 1

----- CHANNEL f1 -----
 NUC1 1H
 P1 9.90 usec
 PL1 -2.80 dB
 PL1W 20.58109283 W
 SFO1 400.2624718 MHz

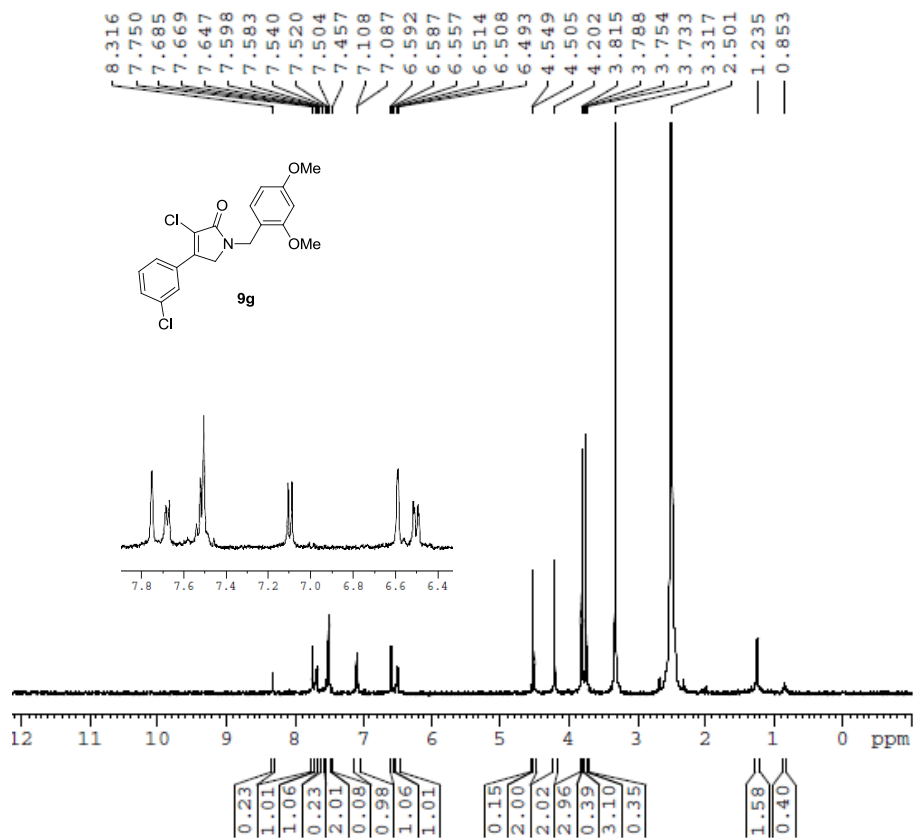
F2 - Processing parameters
 SI 65536
 SF 400.2600044 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



NAME J309-Z00474-067
 EXPNO 1
 PROCNO 1
 Date_ 20120929
 Time 4.26
 INSTRUM spect
 PROBHD 5 mm PABBO HD-
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 12288
 DS 4
 SWH 22980.814 Hz
 FIDRES 0.731836 Hz
 AQ 0.6832628 sec
 RG 2048
 DW 20.850 usec
 DE 6.50 usec
 TE 300.2 K
 D1 2.00000000 sec
 d11 0.03000000 sec
 DELTA 1.89999998 sec
 TDO 1

----- CHANNEL f1 -----
 NUC1 13C
 P1 9.04 usec
 PL1 -1.00 dB
 SFO1 100.6228298 MHz

----- CHANNEL f2 -----
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 0.00 dB
 PL12 16.62 dB
 PL13 21.03 dB
 SFO2 400.1316002 MHz
 SI 16384
 SF 100.6128183 MHz
 SP 8W
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

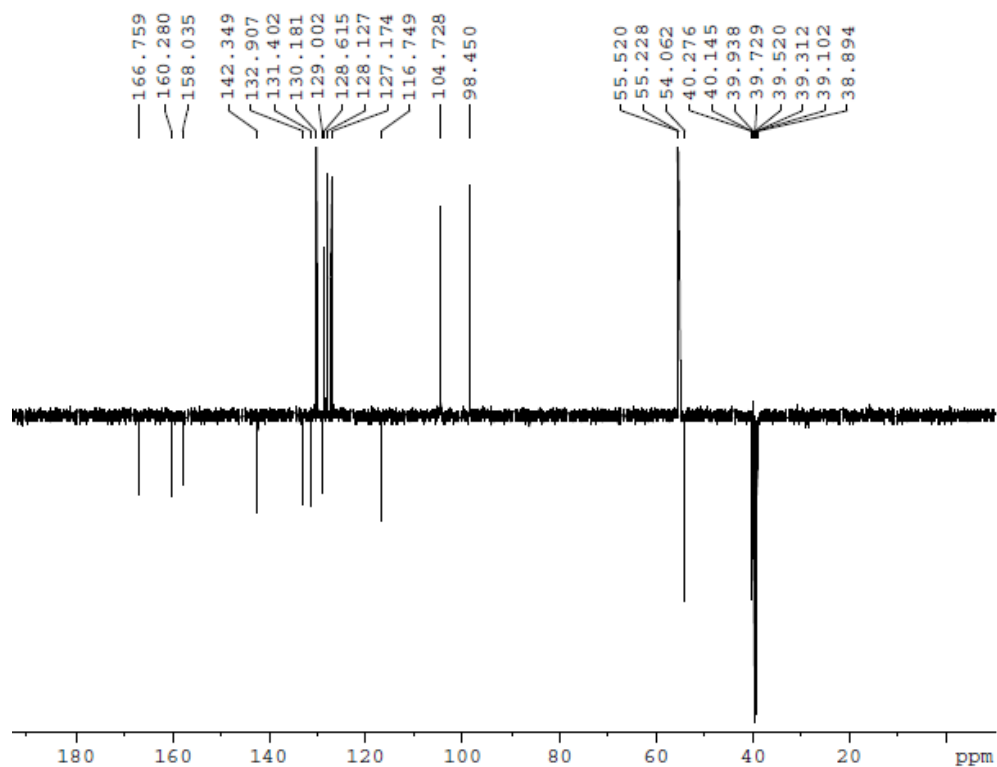


```

NAME      J309-Z00474-021
EXPNO    1
PROCNO    1
Date_     20120904
Time      17.58
INSTRUM   Spect
PROBHD    5 mm PABBO BB-
PULPROG   zg30
TD         32768
SOLVENT   DMSO
NS         8
DS         0
SWH        8278.146 Hz
FIDRES     0.252629 Hz
AQ         1.9792372 sec
RG         362
DE         60.400 usec
TE         298.0 K
D1         1.0000000 sec
TD0        1
    
```

```

----- CHANNEL f1 -----
NUC1      1H
P1        11.80 usec
PL1       0.00 dB
SFO1      400.1324710 MHz
SI         16384
SF         400.1300025 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.00
    
```

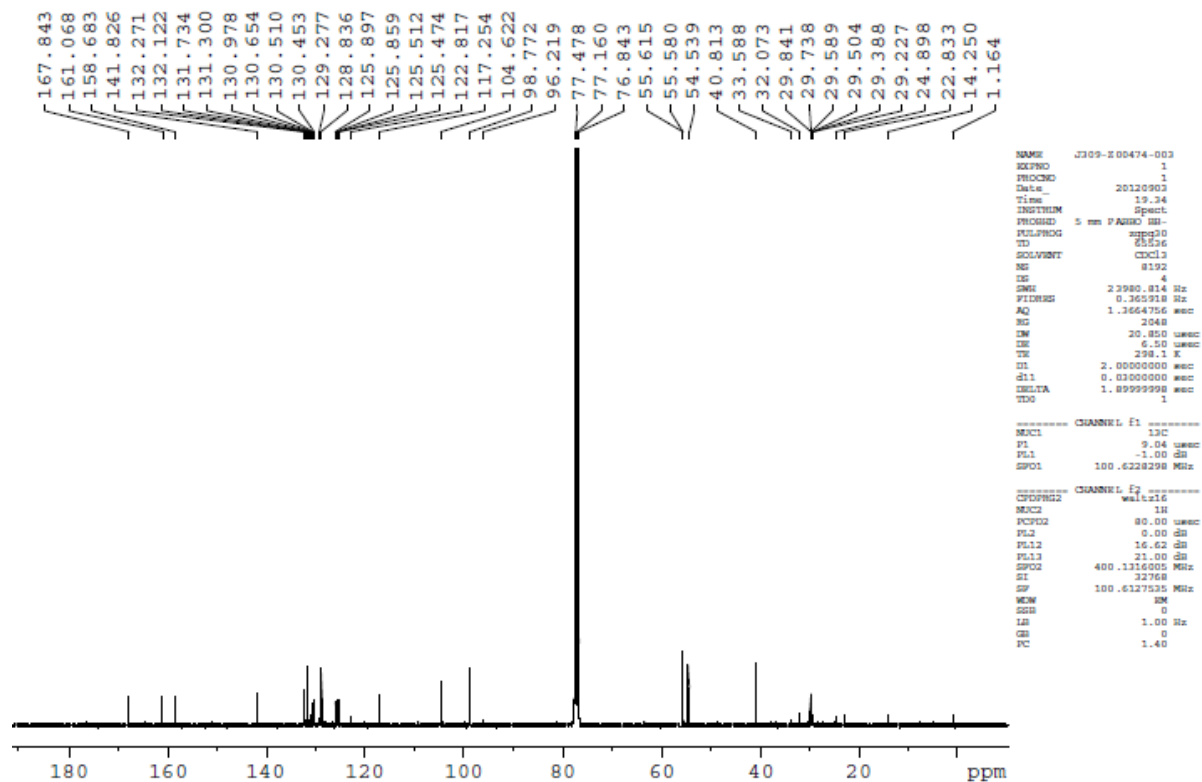
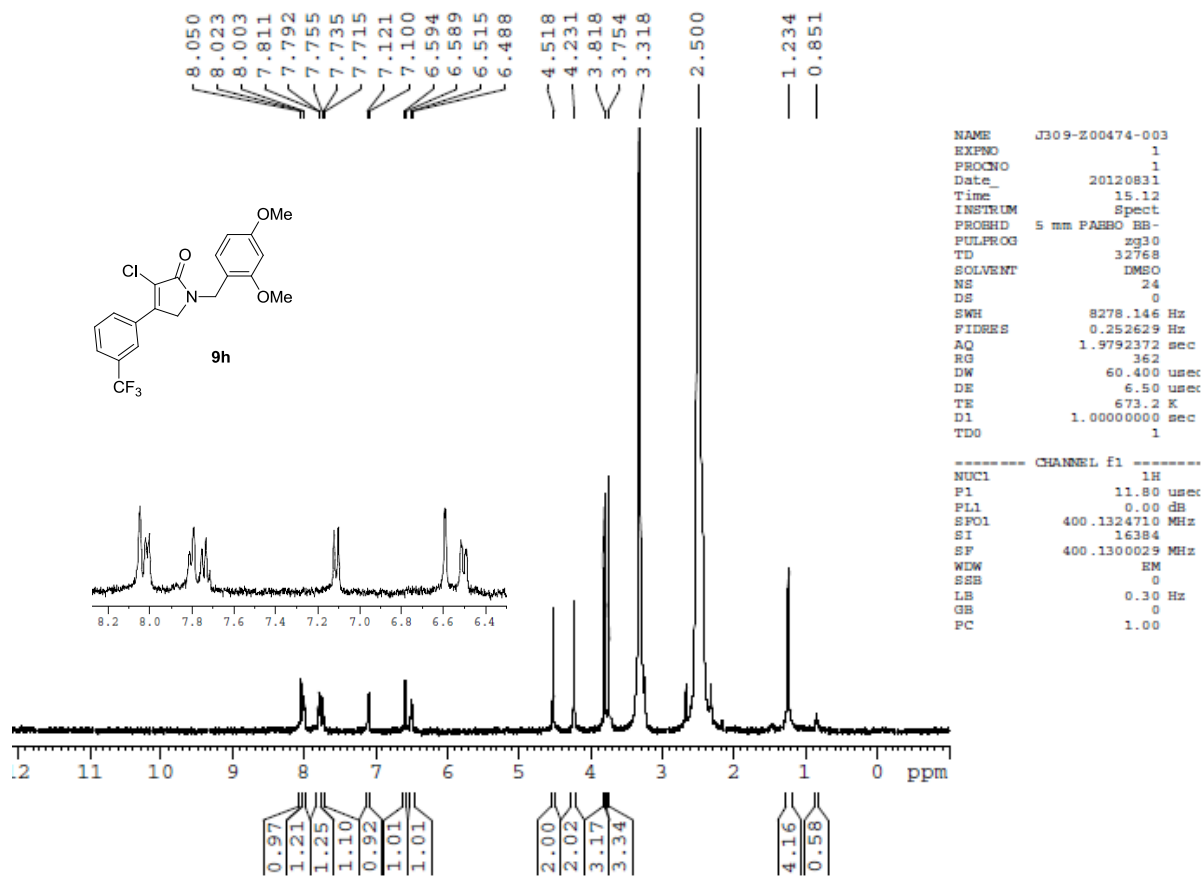


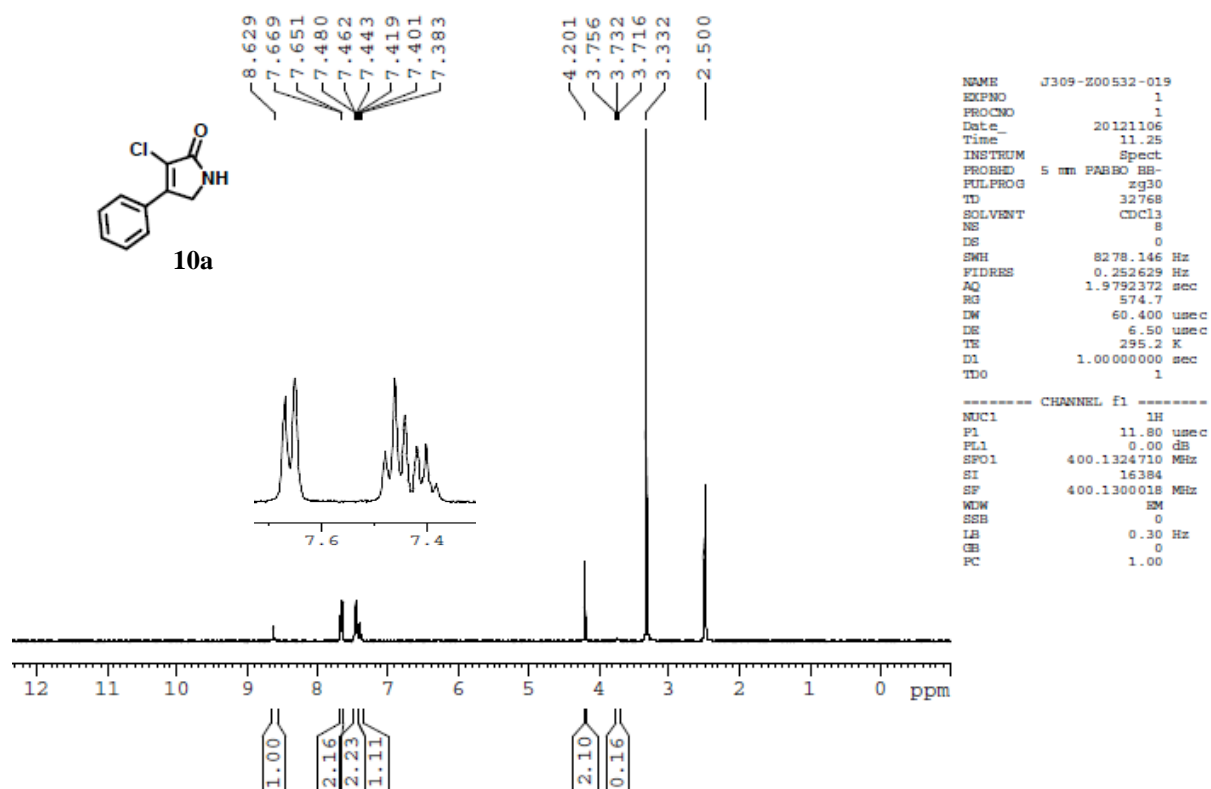
```

NAME      J309-Z00474-021
EXPNO    2
PROCNO    1
Date_     20120905
Time      14.09
INSTRUM   Spect
PROBHD    5 mm PABBO BB-
PULPROG   jmod
TD         65536
SOLVENT   DMSO
NS         322
DS         4
SWH        20980.814 Hz
FIDRES     0.265918 Hz
AQ         1.3664706 sec
RG         2048
DE         20.850 usec
TE         298.0 K
D1         2.0000000 sec
D11        0.0000000 sec
D12        0.0068965 sec
DELTA      0.0001151 sec
TD0        1
    
```

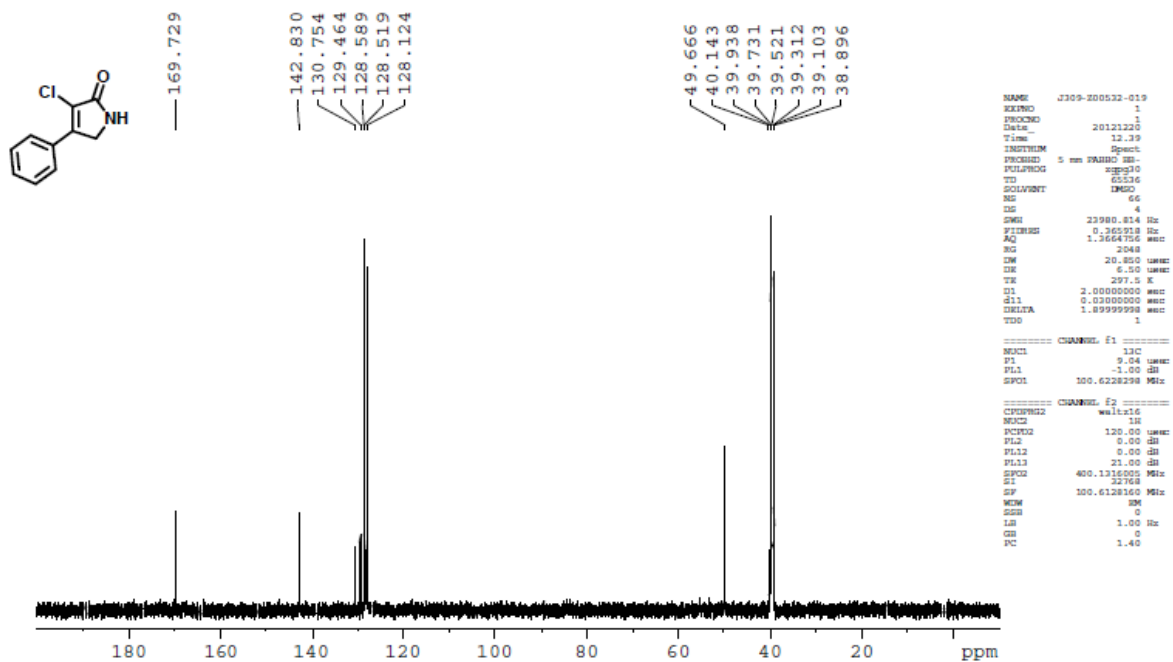
```

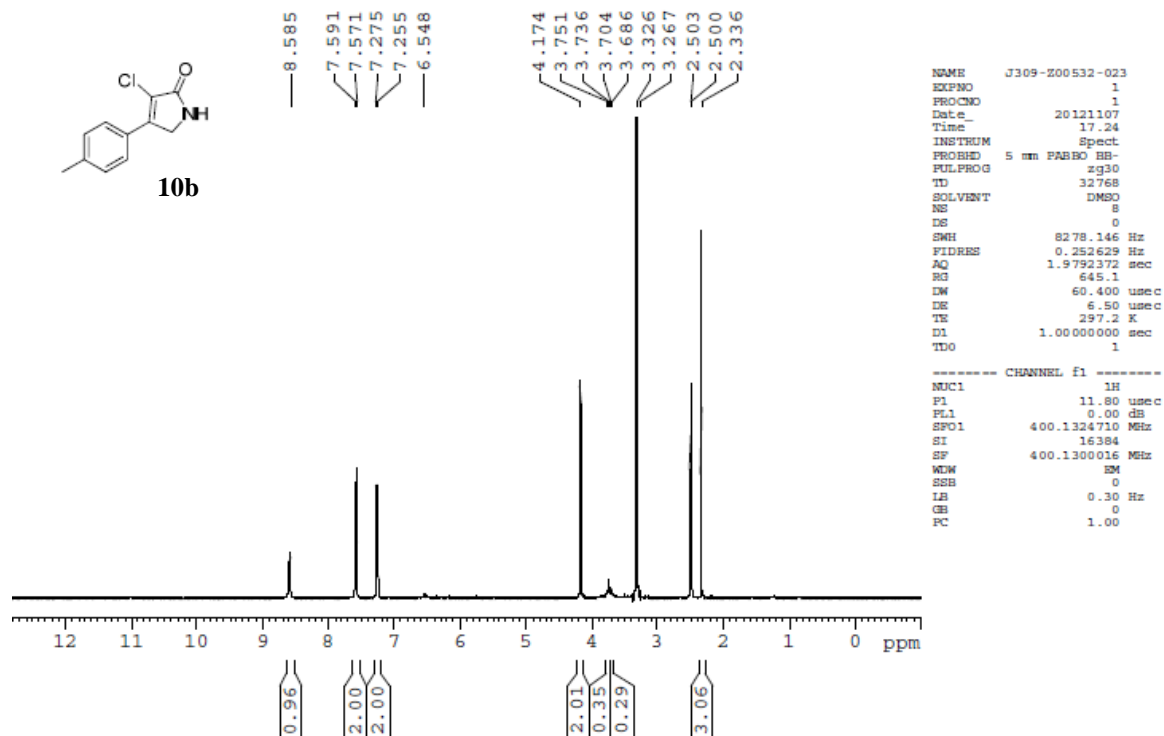
----- CHANNEL F1 -----
NUC1      13C
P1        9.04 usec
PL1       18.00 dB
SFO1      100.6228298 MHz
----- CHANNEL F2 -----
NAME      waltz16
NUC1      1H
P1        80.00 usec
PL1       0.00 dB
PL2       16.62 dB
SFO1      400.1316005 MHz
SI         32768
SF         100.6128157 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
    
```





J309-Z00532-019 DMSO





J309-Z00532-053

DMSO

