

Lawesson's Reagent-Initiated Domino Reactions of Dimethylaminopropenoyl Cyclopropanes: Synthesis of Thieno[3,2-c]pyridinones

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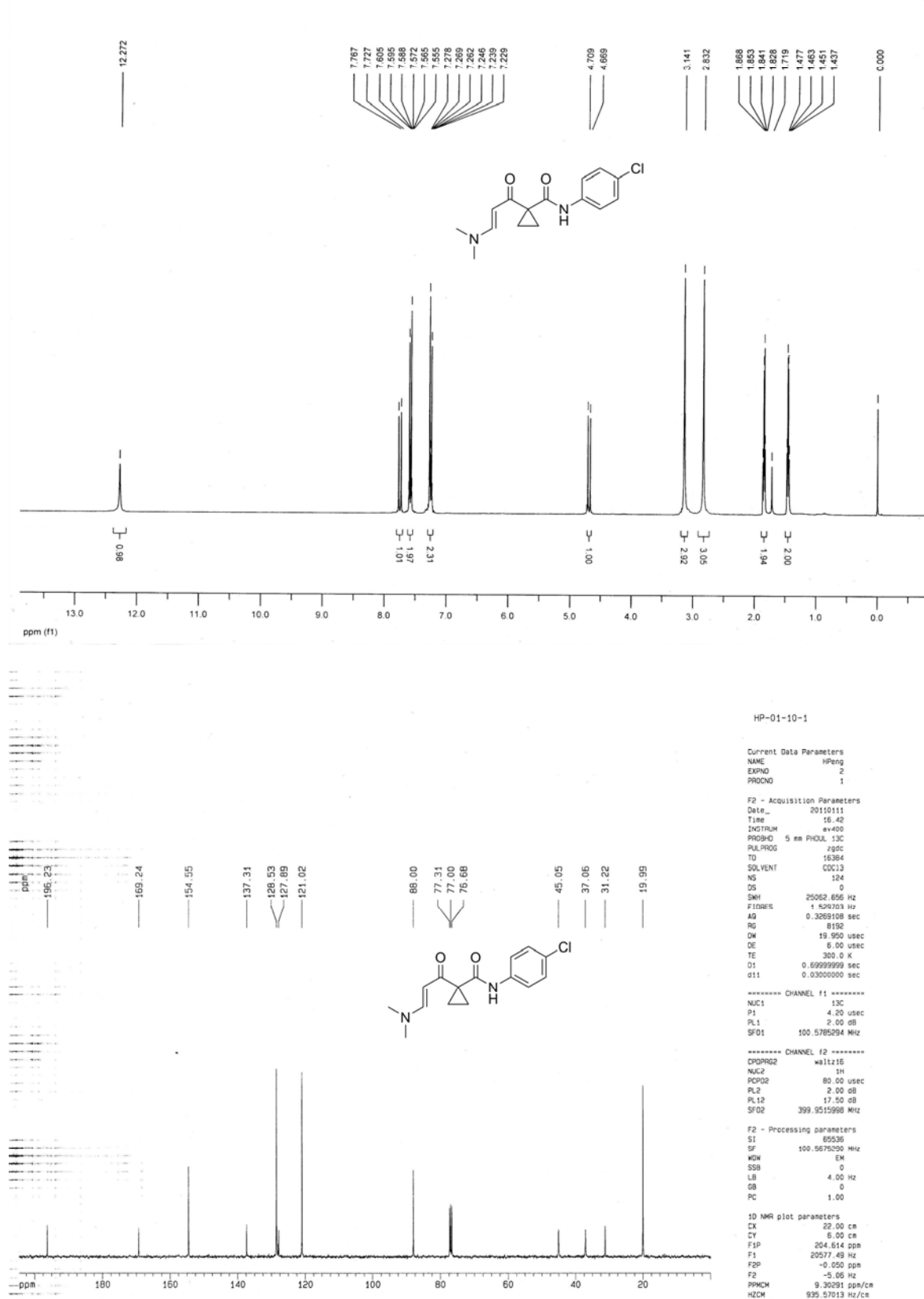
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Supplementary information

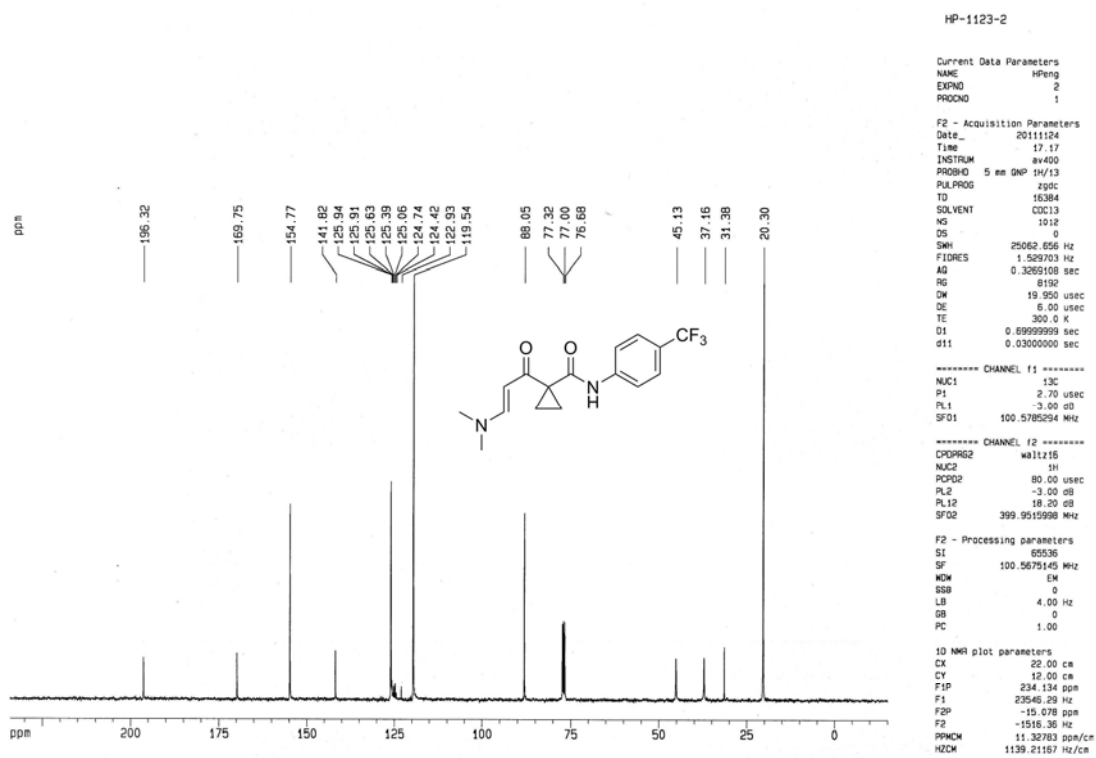
I. Copies of NMR spectra for substrates 1h-k	S2
II. Copies of NMR spectra for products 2	S7
III. Copies of NMR spectra for products 3	S20

I. Copies of NMR spectra for substrates 1h-k

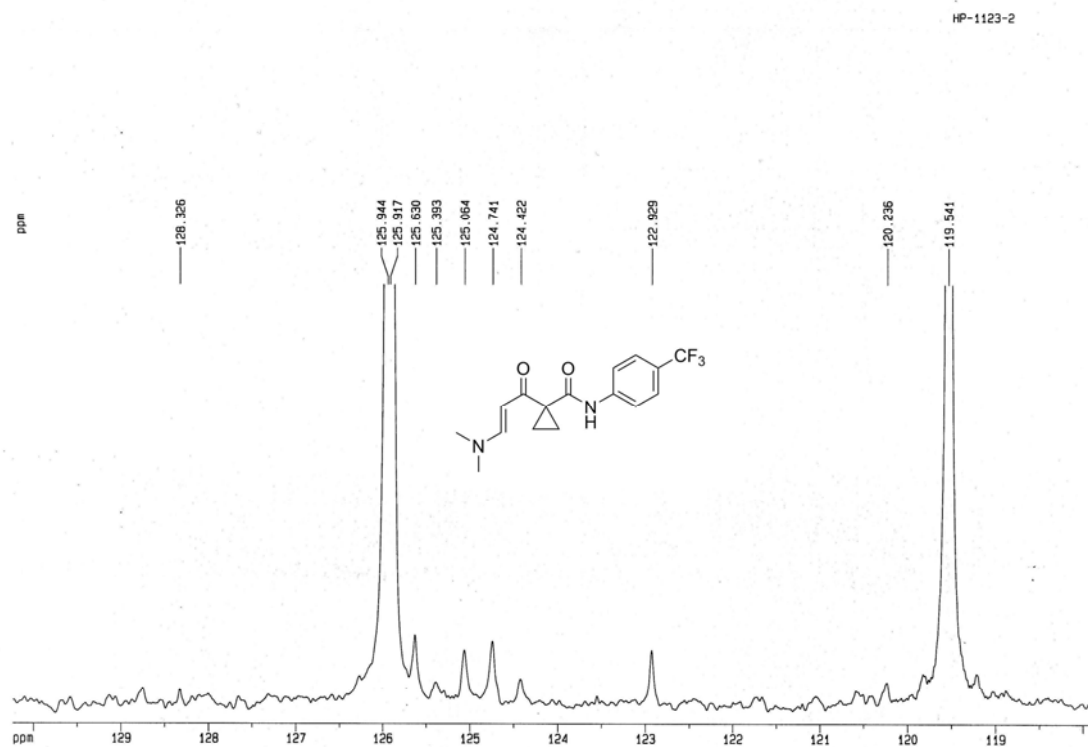
1h



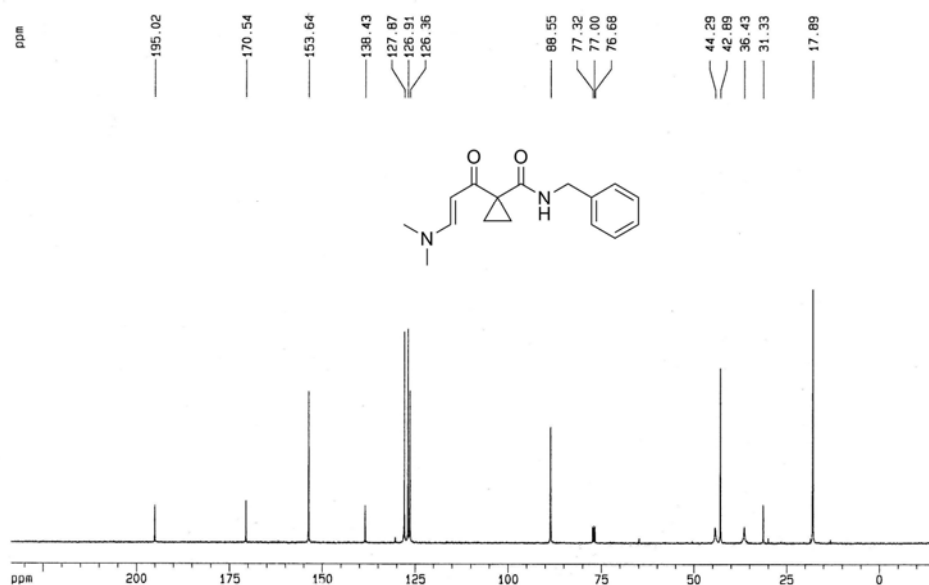
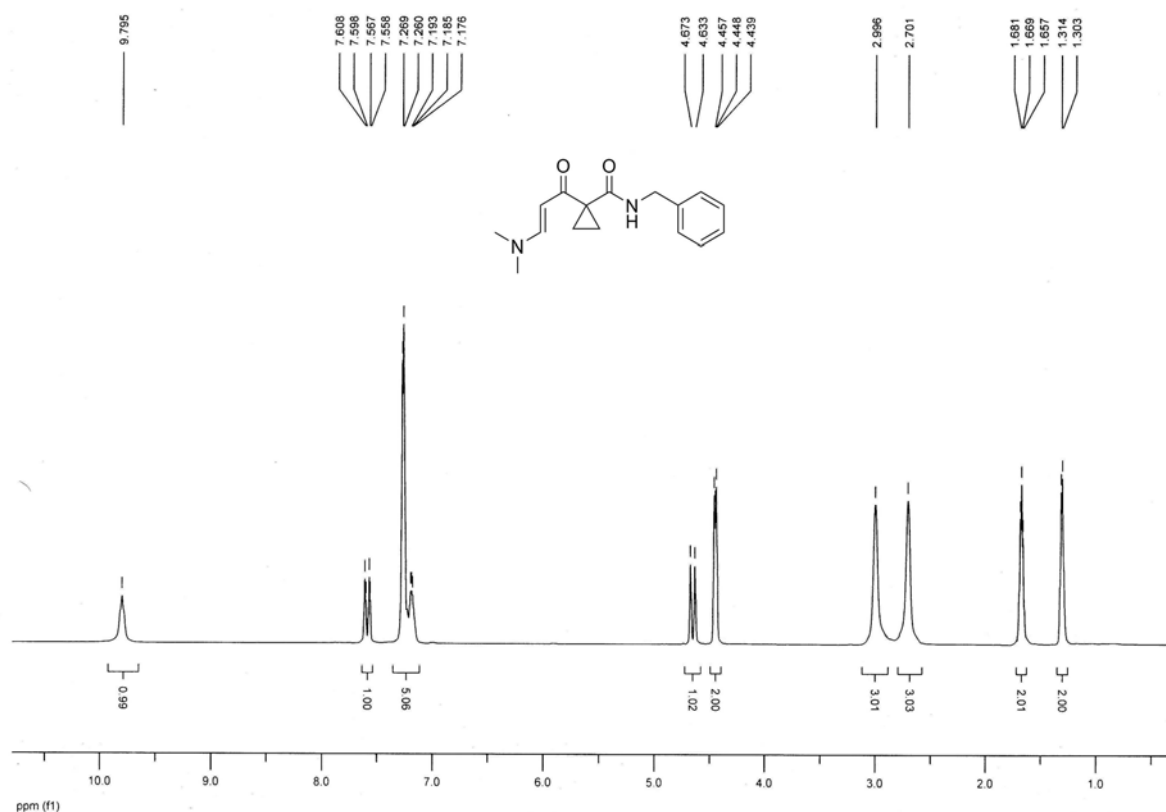
1i



1i



1j



HP-01-17-2

Current Date Parameters
NAME HPeng
EXPNO 7
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110117
Time 16.49
INSTRUM av400
PROBHD 5 mm QNP 1H/13
PULPROG zgpg30
TD 16384
SOLVENT CDCl3
NS 275
DS 0
SWH 25062.656 Hz
FIDRES 1.529703 Hz
AQ 0.3269108 sec
RG 6192
DW 19.950 usec
DE 6.00 usec
TE 303.0 K
D1 0.69999999 sec
d11 0.03000000 sec

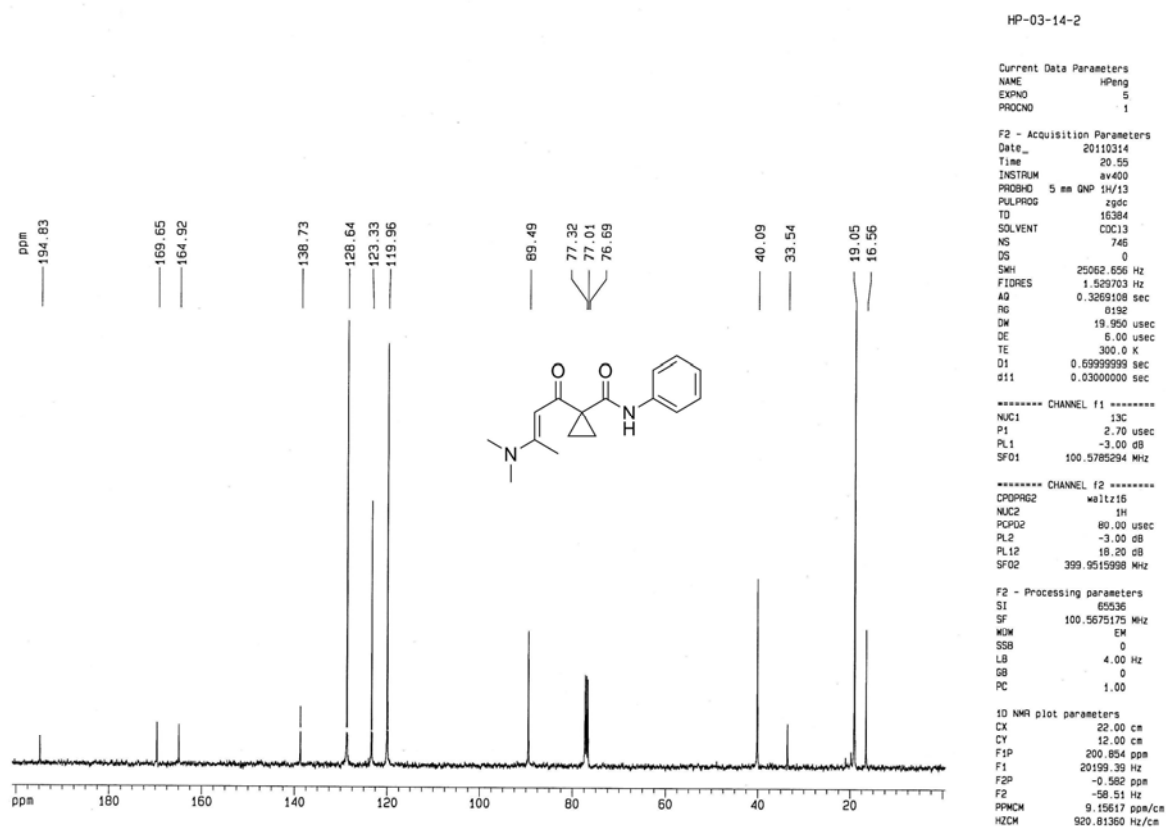
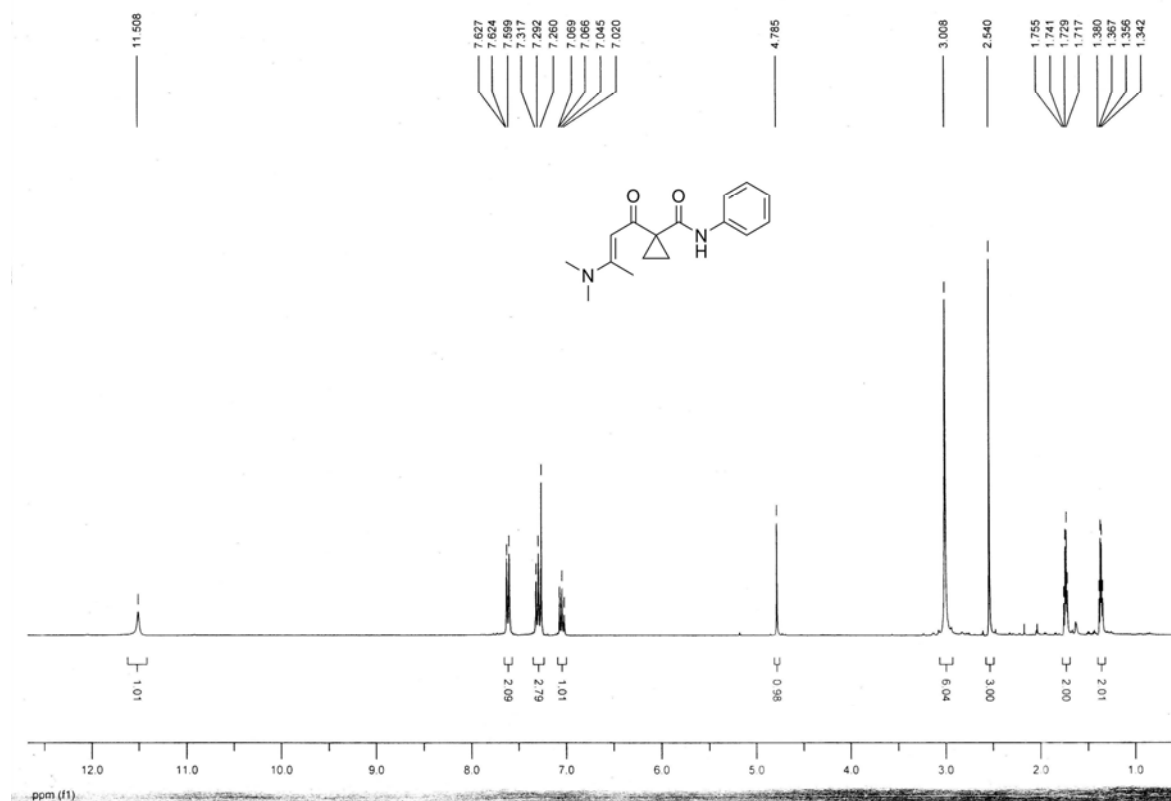
***** CHANNEL f1 *****
NUC1 13C
P1 2.70 usec
PL1 -3.00 dB
SFO1 100.5785294 MHz

***** CHANNEL f2 *****
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -3.00 dB
PL12 18.20 dB
SFO2 399.9515998 MHz

F2 - Processing parameters
SI 65536
SF 100.5675600 MHz
WDW EM
SSB 0
LB 4.00 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 22.00 cm
CY 6.00 cm
F1P 233.682 ppm
F1 23500.79 Hz
F2P -15.531 ppm
F2 -1561.87 Hz
PQMCN 11.32782 ppm/cm
HZCM 1139.2167 Hz/cm

1k



HP-03-14-2

Current Data Parameters
NAME HPeng
EXPNO 5
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110314
Time 20.55
INSTRUM av400
PROBHD 5 mm QNP 1H/13
PULPROG zgpg
TD 16384
SOLVENT CDCl₃
NS 746
DS 0
SWH 25062.656 Hz
FIDRES 1.529703 Hz
AQ 0.3269108 sec
RG 0192
DM 19.950 usec
DE 6.00 usec
TE 300.0 K
D1 0.69999999 sec
d11 0.03000000 sec

***** CHANNEL f1 *****
NUC1 13C
P1 2.70 usec
PL1 -3.00 dB
SF01 100.5785294 MHz

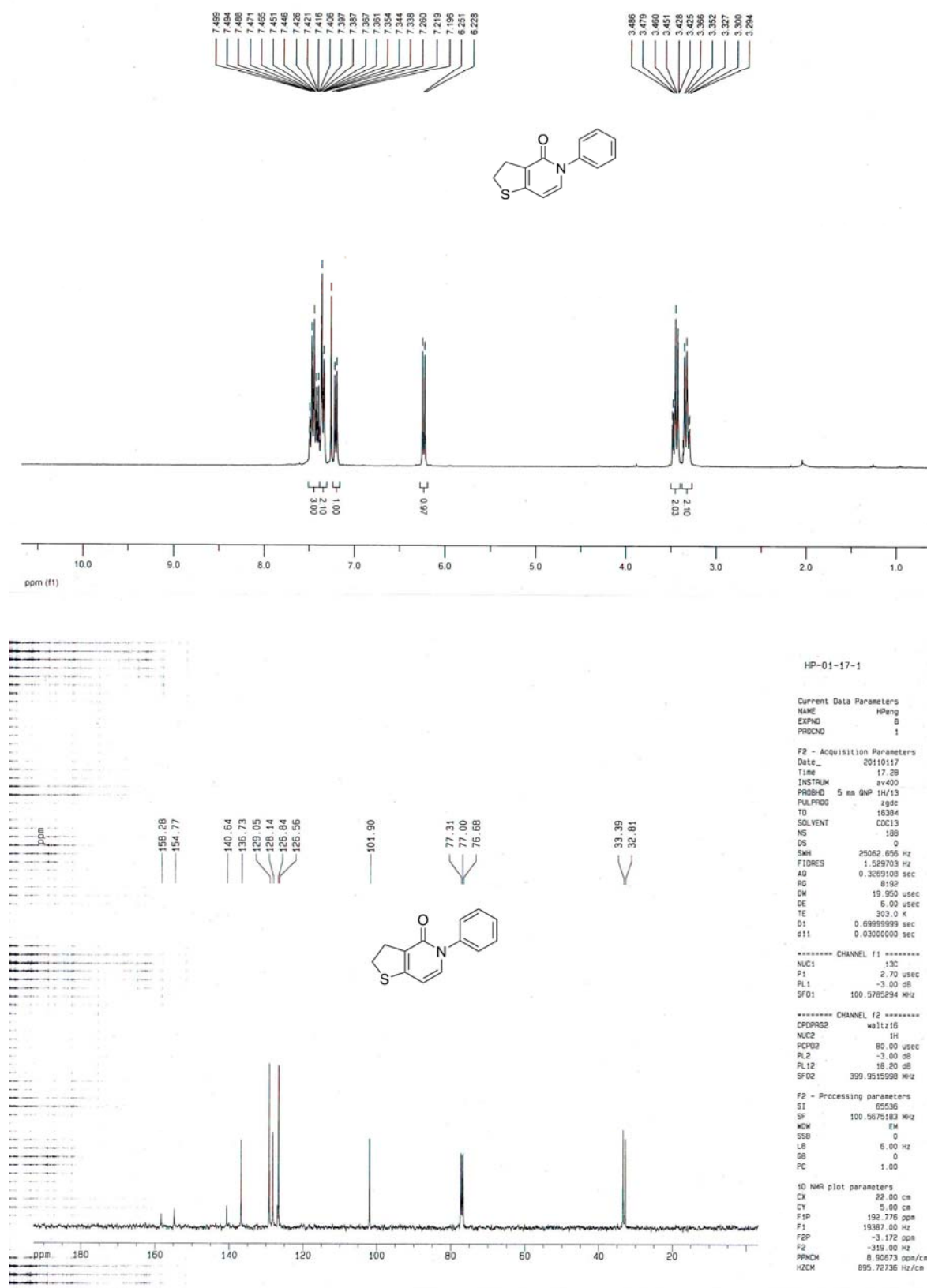
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CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -3.00 dB
PL12 18.20 dB
SF02 399.9515998 MHz

F2 - Processing parameters
SI 65536
SF 100.5675175 MHz
WDW EM
SSB 0
LB 4.00 Hz
GB 0
PC 1.00

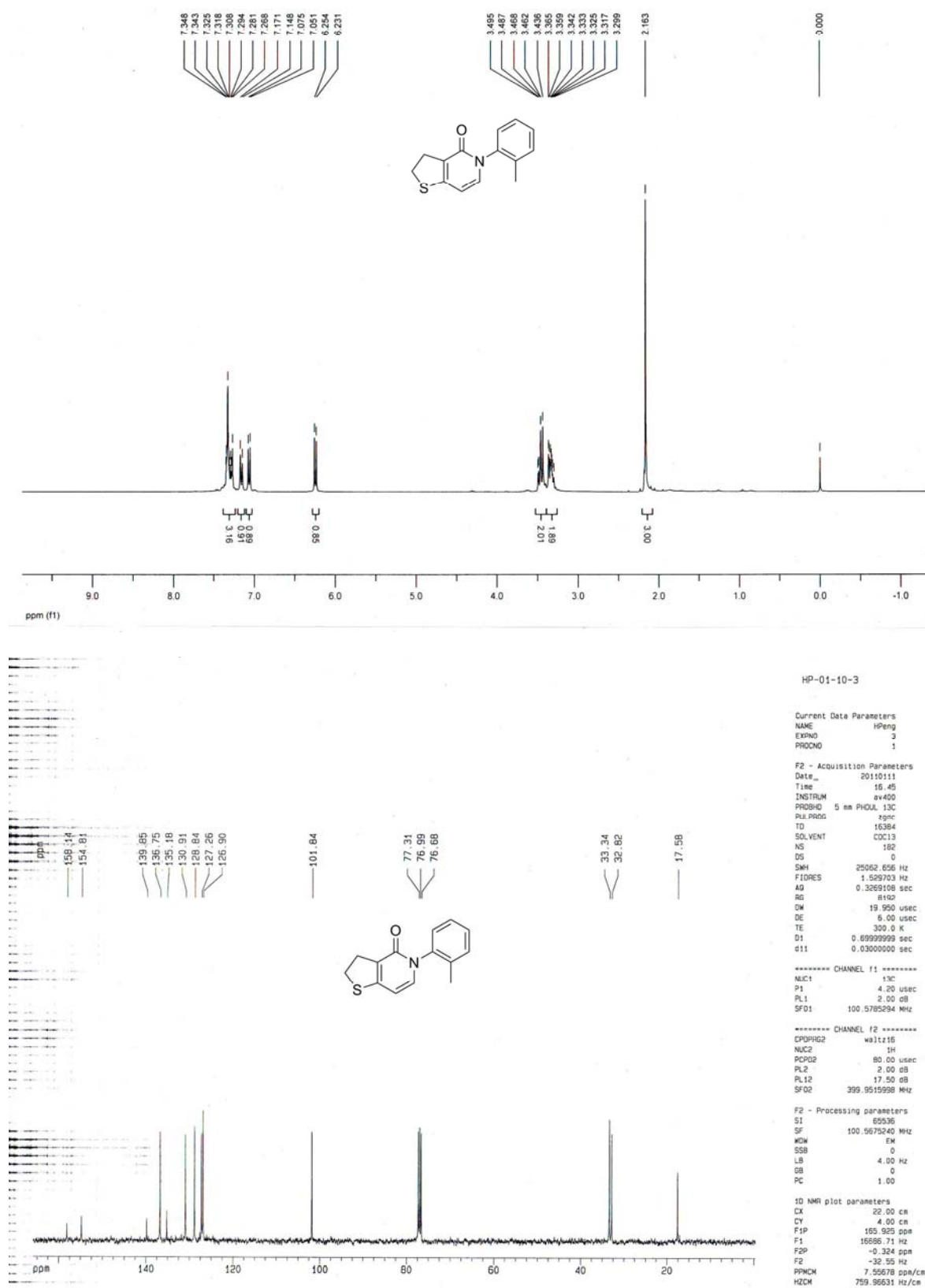
1D NMR plot parameters
CX 22.00 cm
CY 12.00 cm
F1P 200.854 ppm
F1 20199.39 Hz
F2P -0.582 ppm
F2 -58.51 Hz
PPMCM 9.15617 ppm/cm
HZCM 920.81360 Hz/cm

II. Copies of NMR spectra for products 2

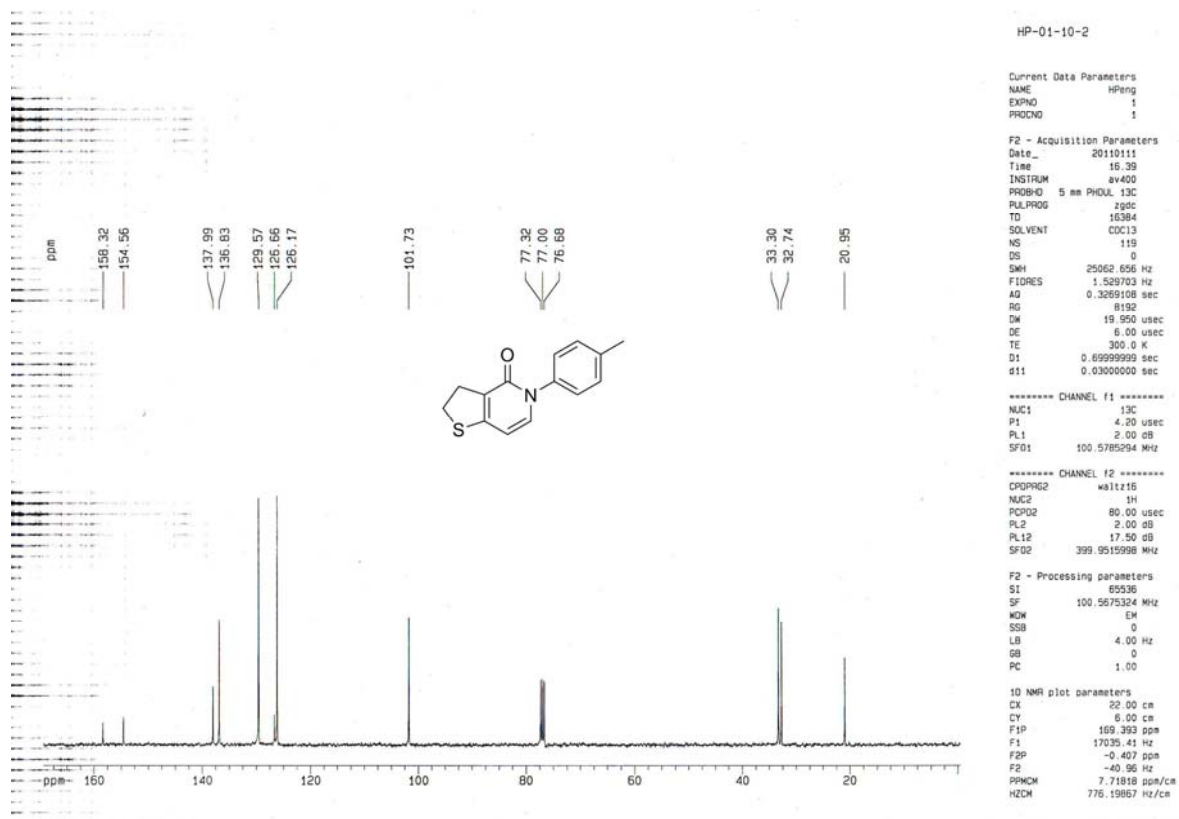
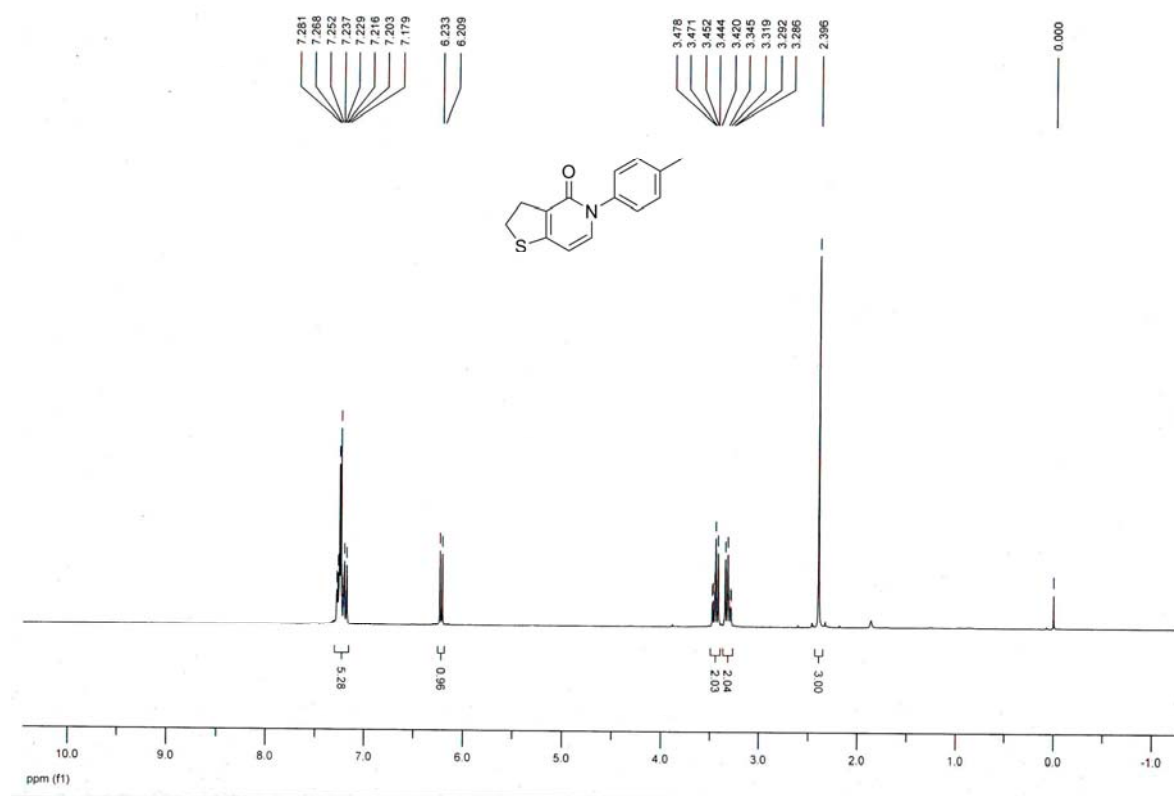
2a



2b



2c



HP-01-10-2

Current Data Parameters
NAME HPeng
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110111
Time 16.39
INSTRUM av400
PROBHD 5 mm PHDQ 13C
PULPROG zgpg30
TD 16384
SOLVENT CDCl3
NS 118
DS 0
SWH 25062.656 Hz
FIDRES 1.529703 Hz
AQ 0.3269108 sec
RG 8192
DM 19.950 usec
DE 6.00 usec
TE 300.0 K
D1 0.69999999 sec
d11 0.03000000 sec

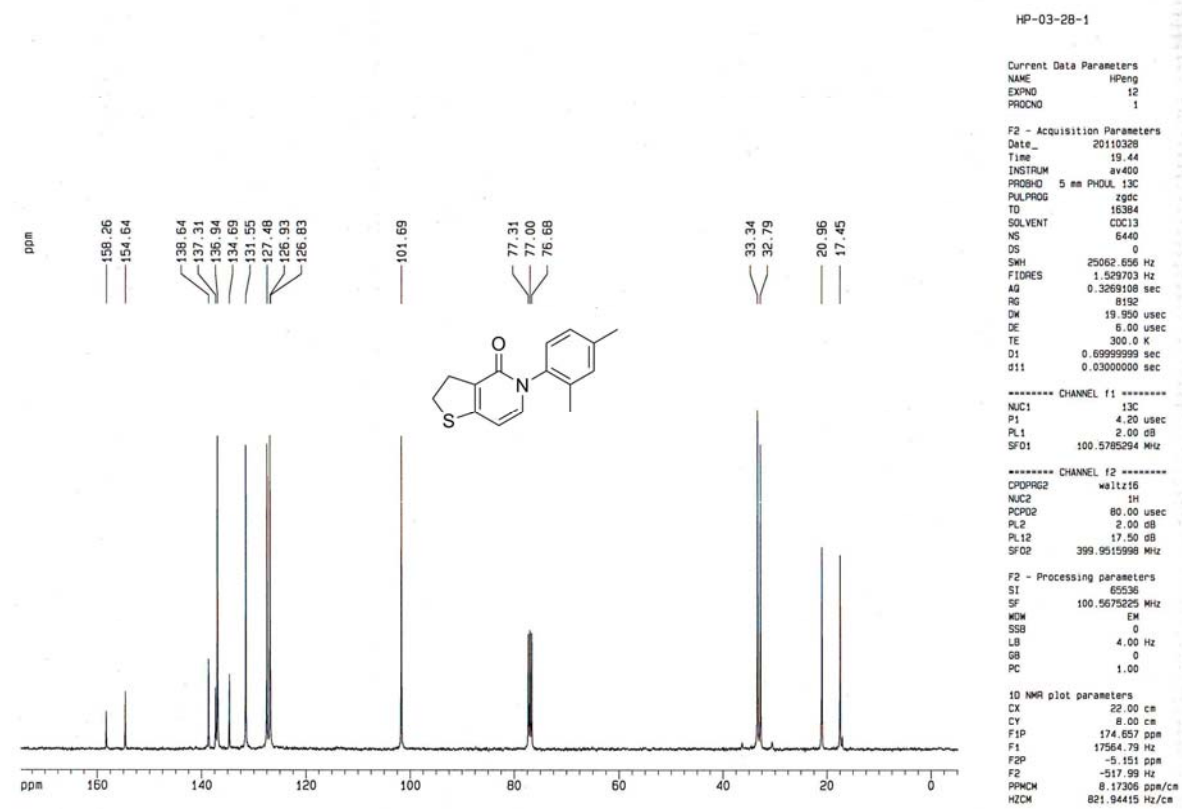
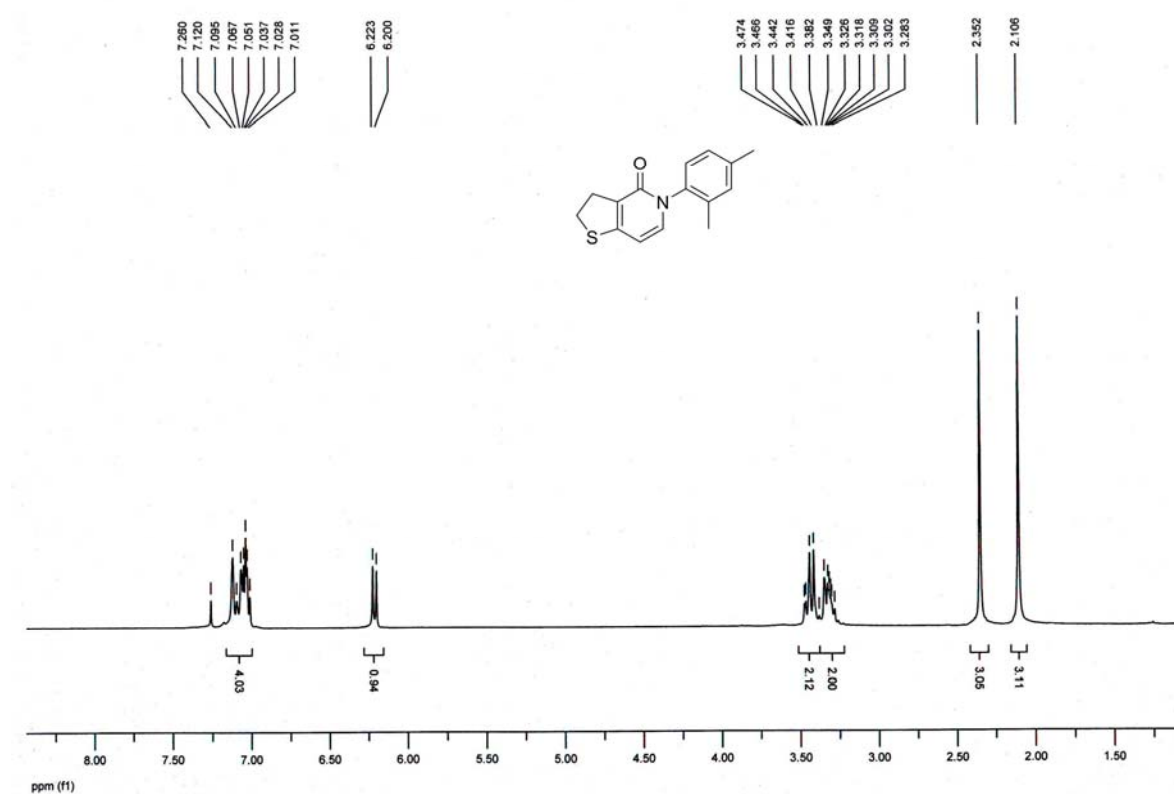
***** CHANNEL f1 *****
NUC1 13C
P1 4.20 usec
PL1 2.00 dB
SFO1 100.578594 MHz

***** CHANNEL f2 *****
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 2.00 dB
PL12 17.50 dB
SFO2 399.951598 MHz

F2 - Processing parameters
SI 65536
SF 100.5675324 MHz
WDW EM
SSB 0
LB 4.00 Hz
GB 0
PC 1.00

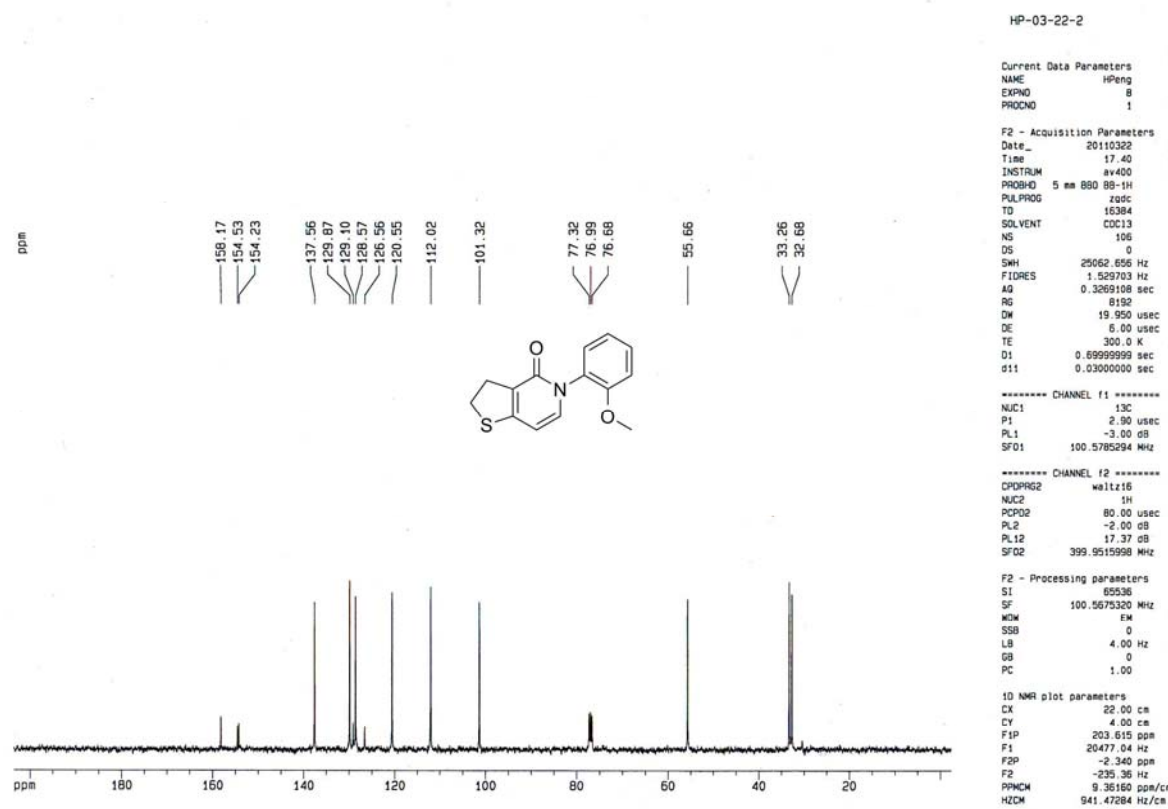
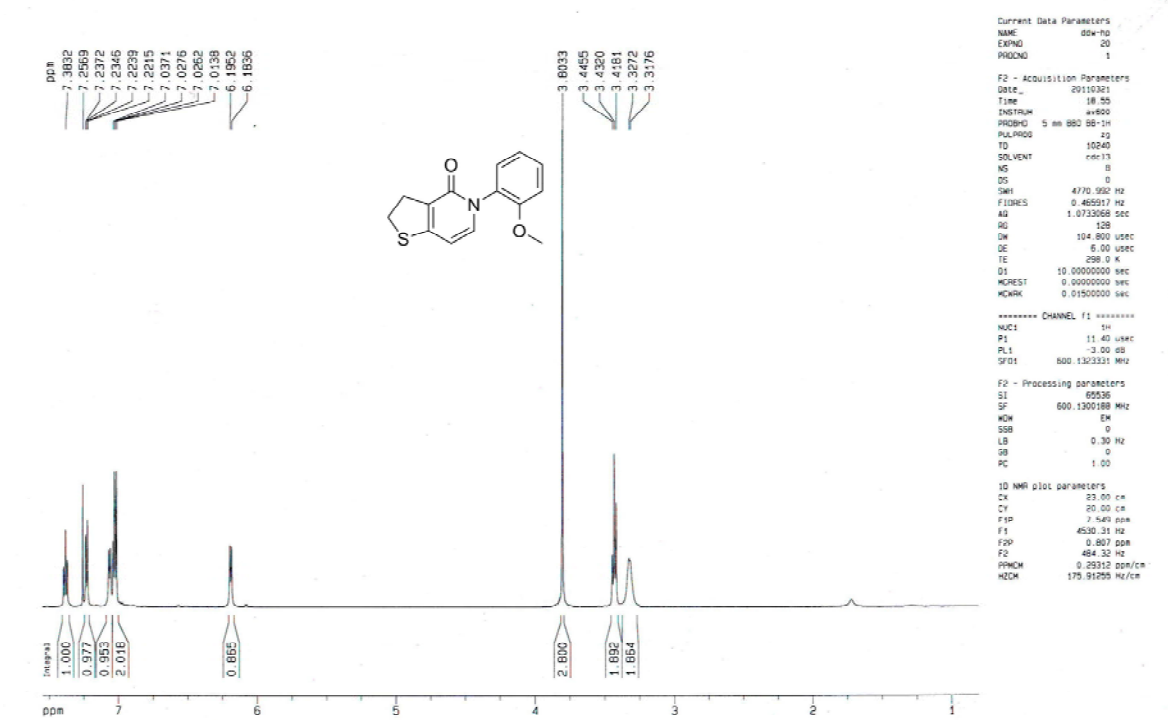
1D NMR plot parameters
CX 22.00 cm
CY 6.00 cm
F1P 169.393 ppm
F1 17035.41 Hz
F2P -0.407 ppm
F2 -0.96 Hz
PPMCM 7.71818 ppm/cm
HZCM 776.19867 Hz/cm

2d

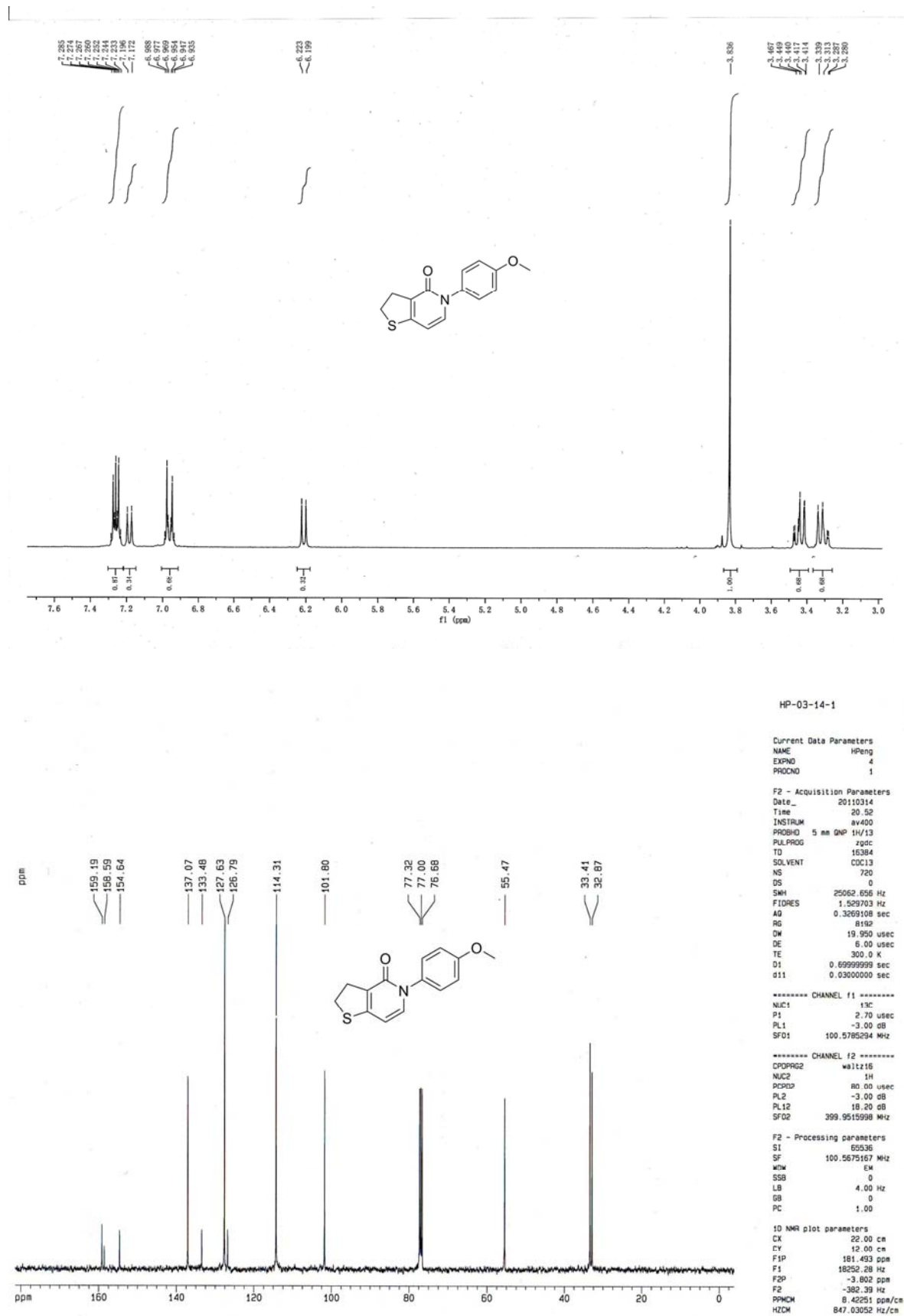


2e

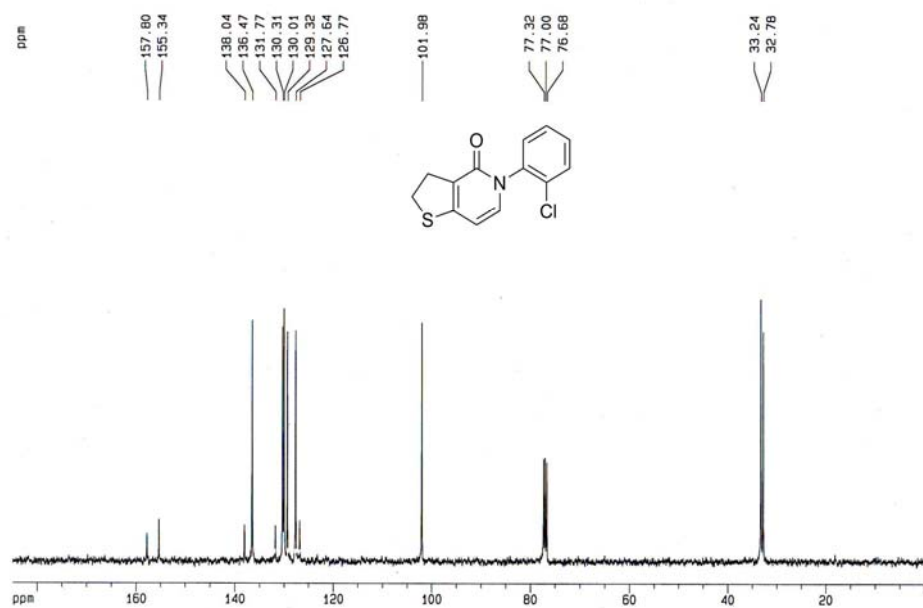
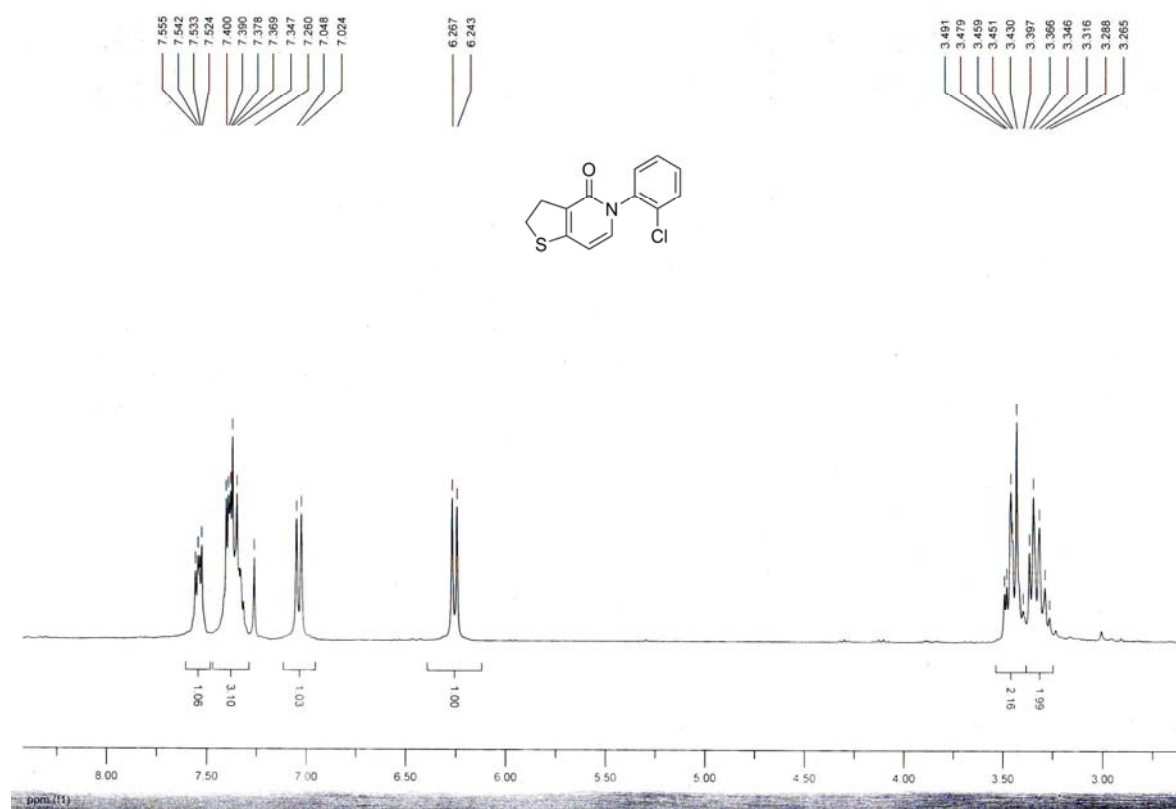
huangpeng 03-21-2



2f



2g



HP-03-07-1

Current Data Parameters
NAME HPeng
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110307
Time 20.19
INSTRUM av400
PROBHD 5 mm QNP 1H/13
PULPROG zgpg
TD 16384
SOLVENT CDCl3
NS 389
DS 0
SWH 25062.655 Hz
FIDRES 1.529703 Hz
AQ 0.3269108 sec
RG 8192
DW 19.950 usec
DE 6.00 usec
TE 300.0 K
D1 0.69999999 sec
d11 0.03000000 sec

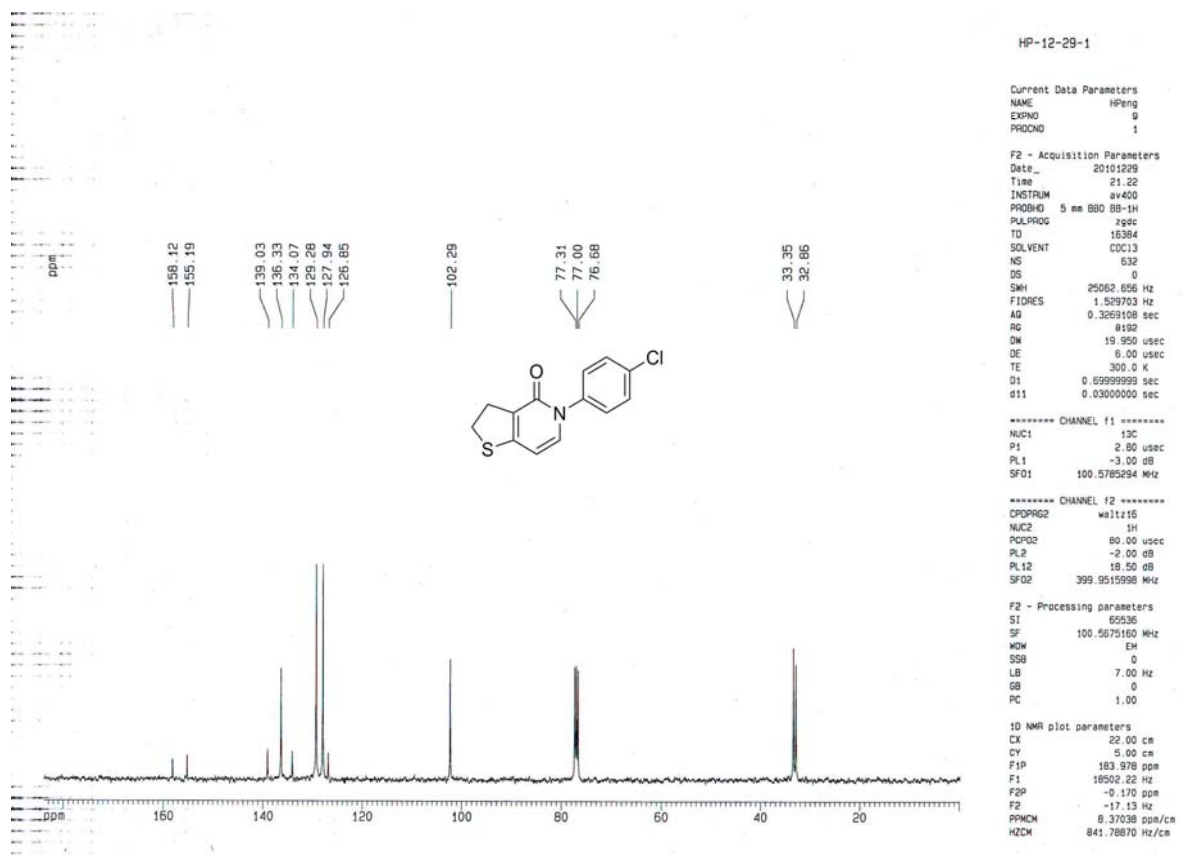
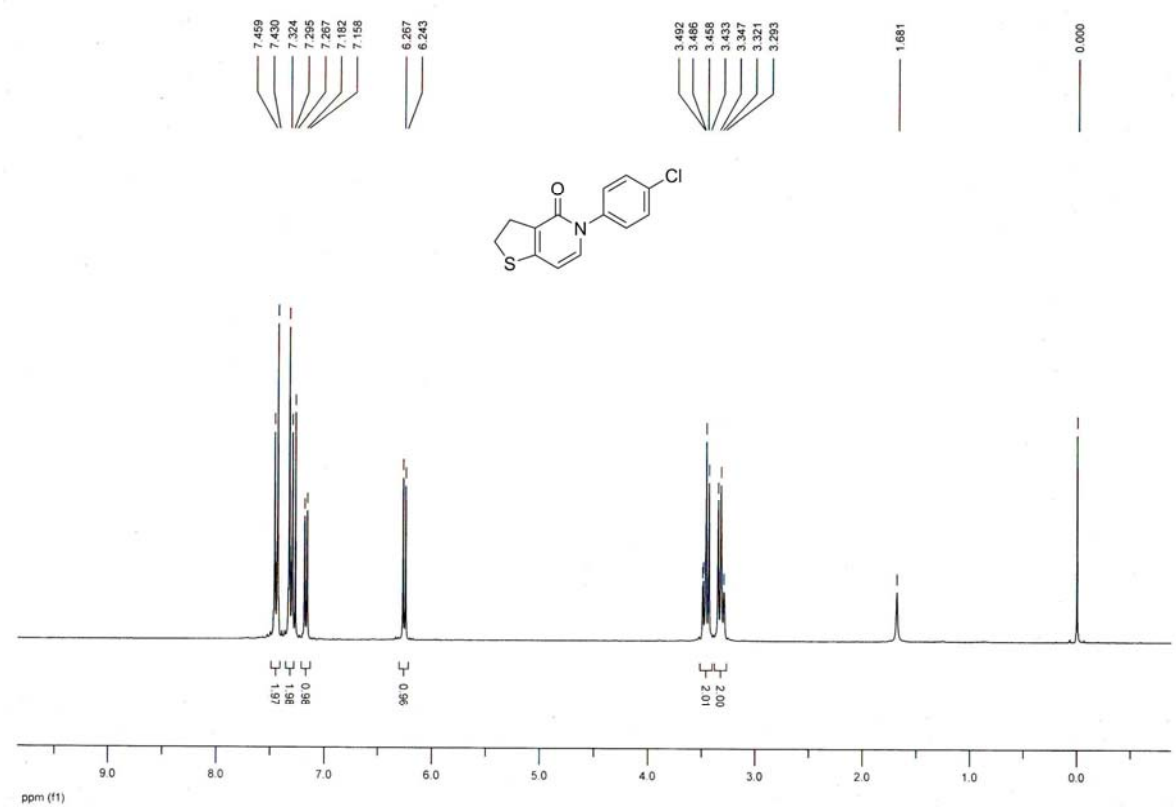
***** CHANNEL f1 *****
NUC1 13C
P1 2.70 usec
PL1 -3.00 dB
SFO1 100.5785294 MHz

***** CHANNEL f2 *****
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -2.00 dB
PL12 17.37 dB
SFO2 399.9515998 MHz

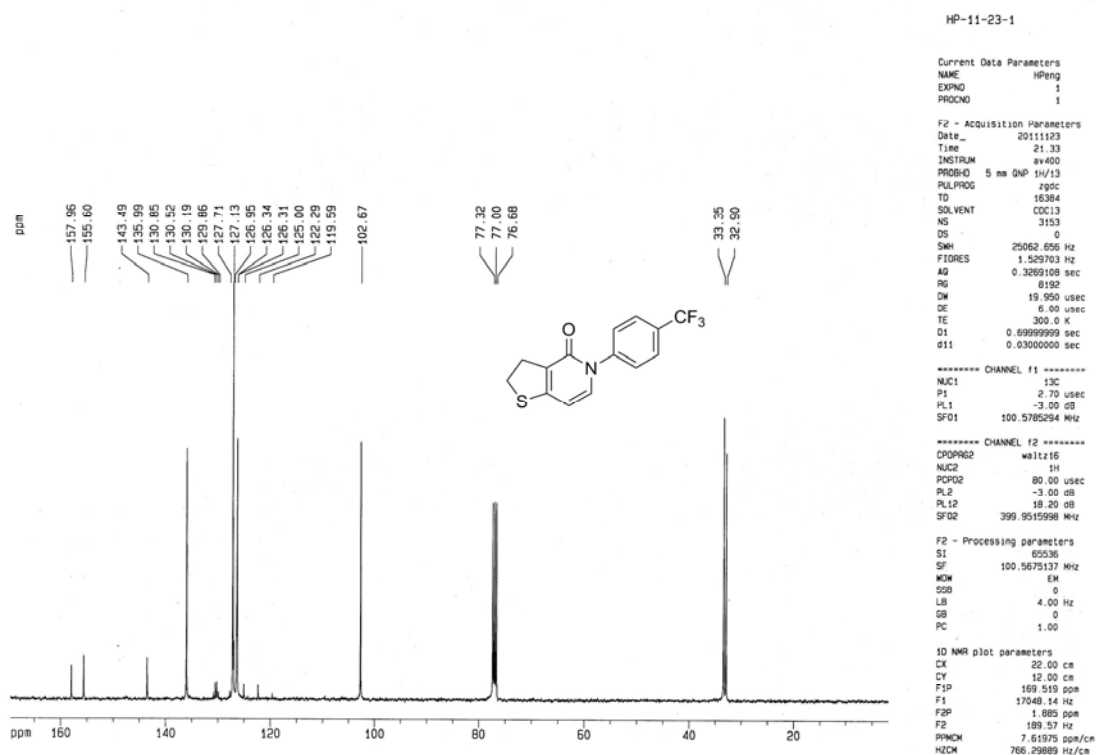
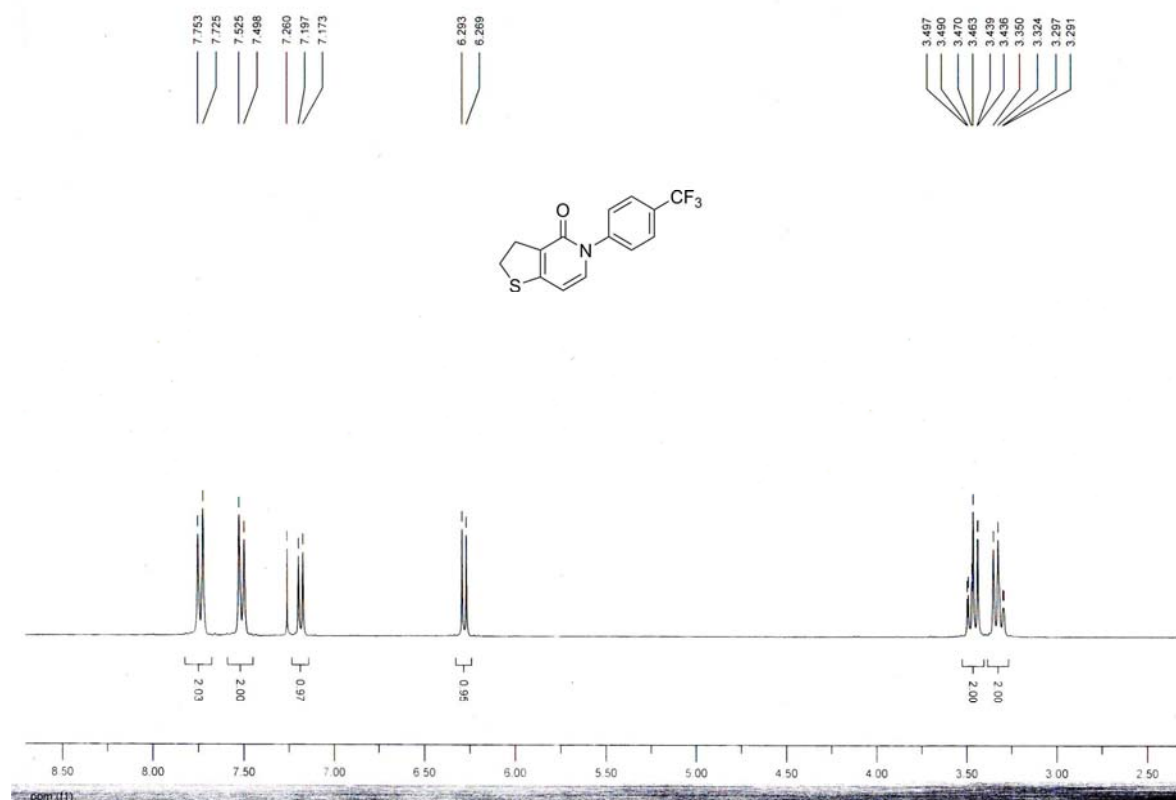
F2 - Processing parameters
SI 65536
SF 100.5675248 MHz
WDW EM
SSB 0
LB 4.00 Hz
GB 0
PC 2.00

1D NMR plot parameters
CX 22.00 cm
CY 6.00 cm
F1P 184.964 ppm
F1 18601.36 Hz
F2P -0.977 ppm
F2 -98.24 Hz
PPMCH 8.45185 ppm/cm
HZCM 849.98181 Hz/cm

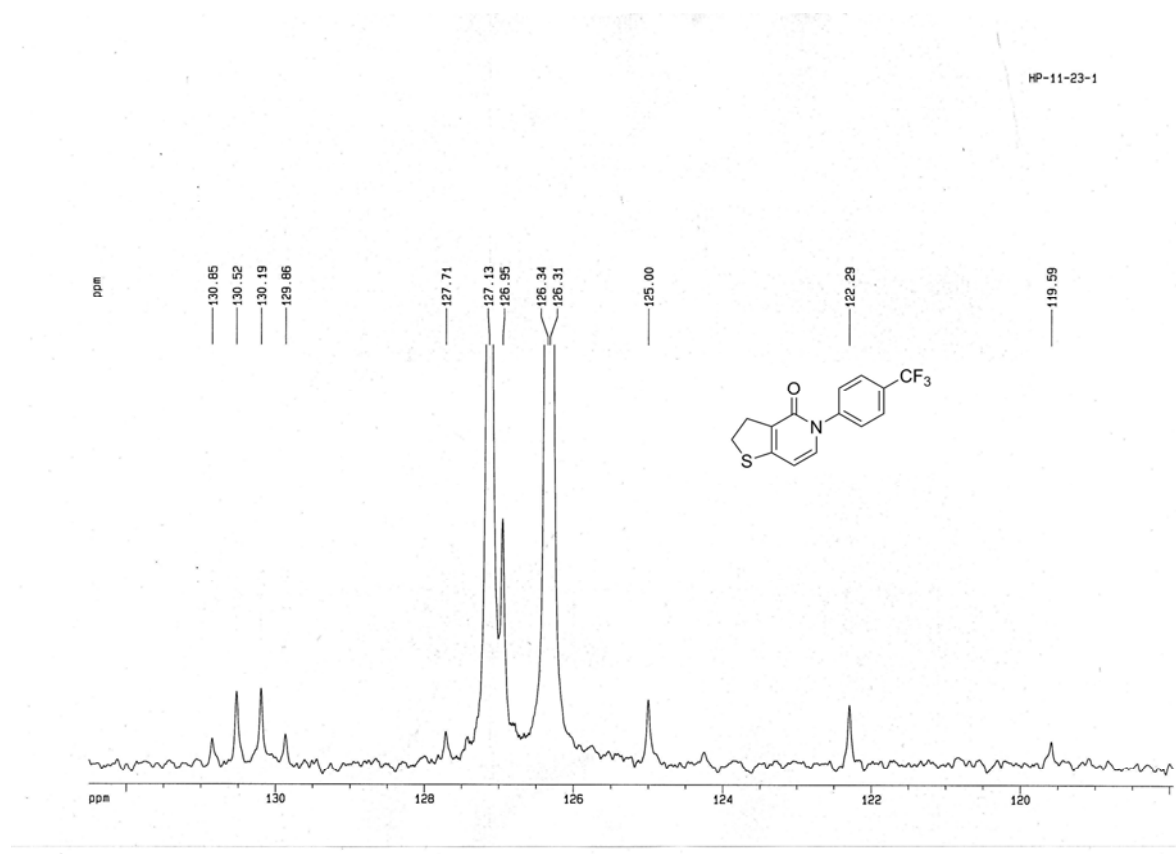
2h



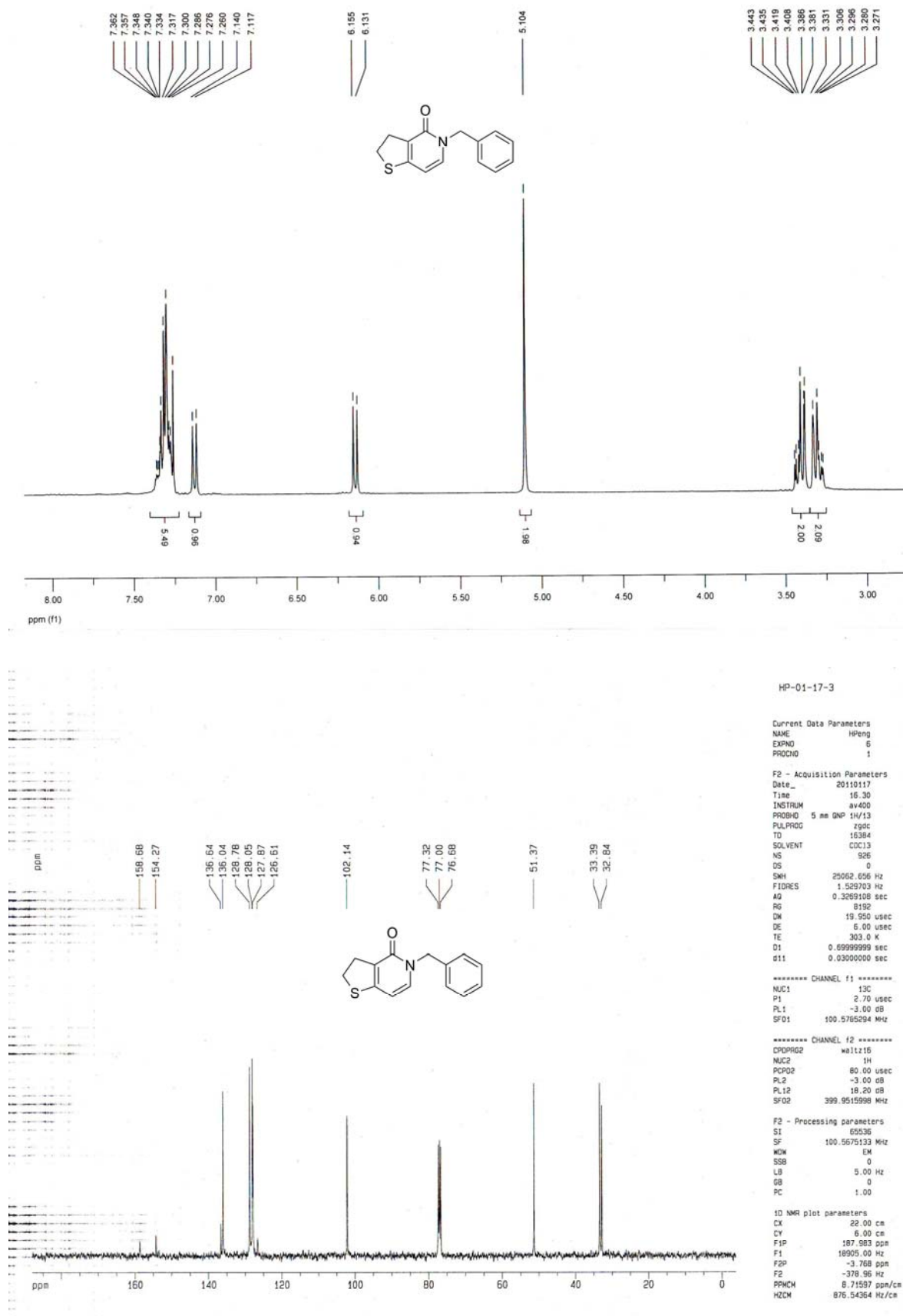
2i



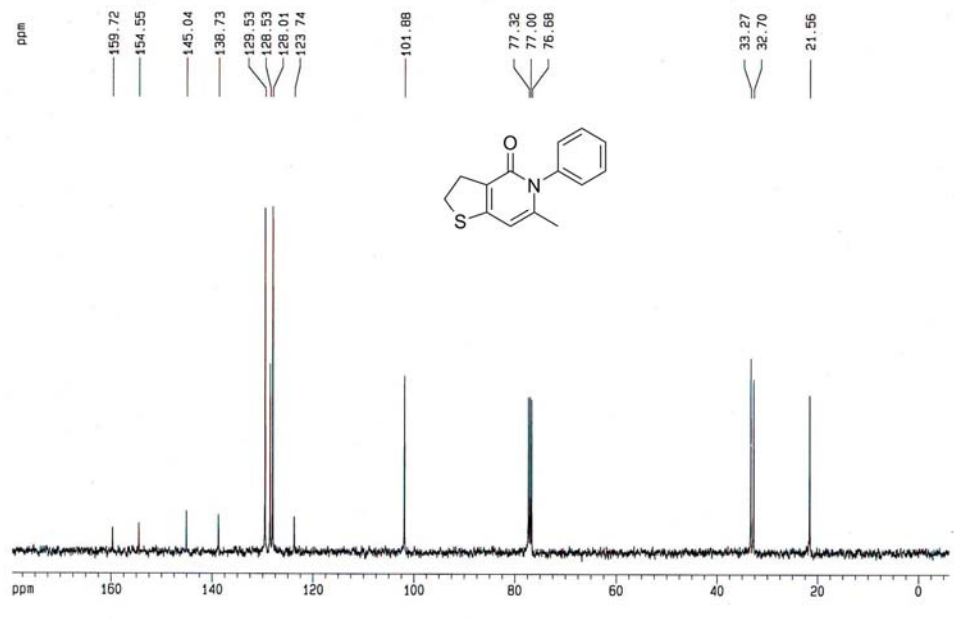
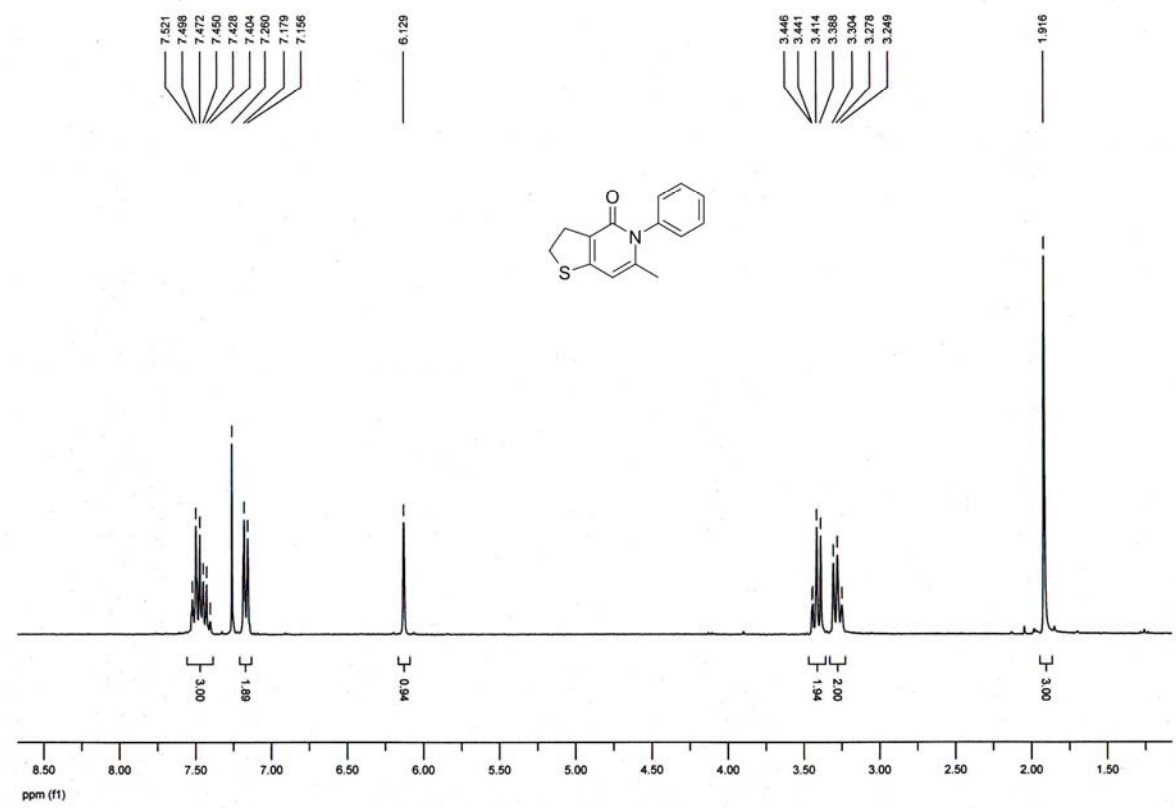
2i



2j



2k



HP-03-28-2

Current Data Parameters
NAME HPeng
EXPNO 13
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110328
Time 20.25
INSTRUM av400
PROBHD 5 mm PHDQ 13C
PULPROG zgpgc
TO 16384
SOLVENT CDCl3
NS 297
DS 0
SWH 25062.656 Hz
FIDRES 1.529703 Hz
AQ 0.3269108 sec
RG 8192
DW 19.950 usec
DE 8.00 usec
TE 300.0 K
D1 0.69999999 sec
d11 0.03000000 sec

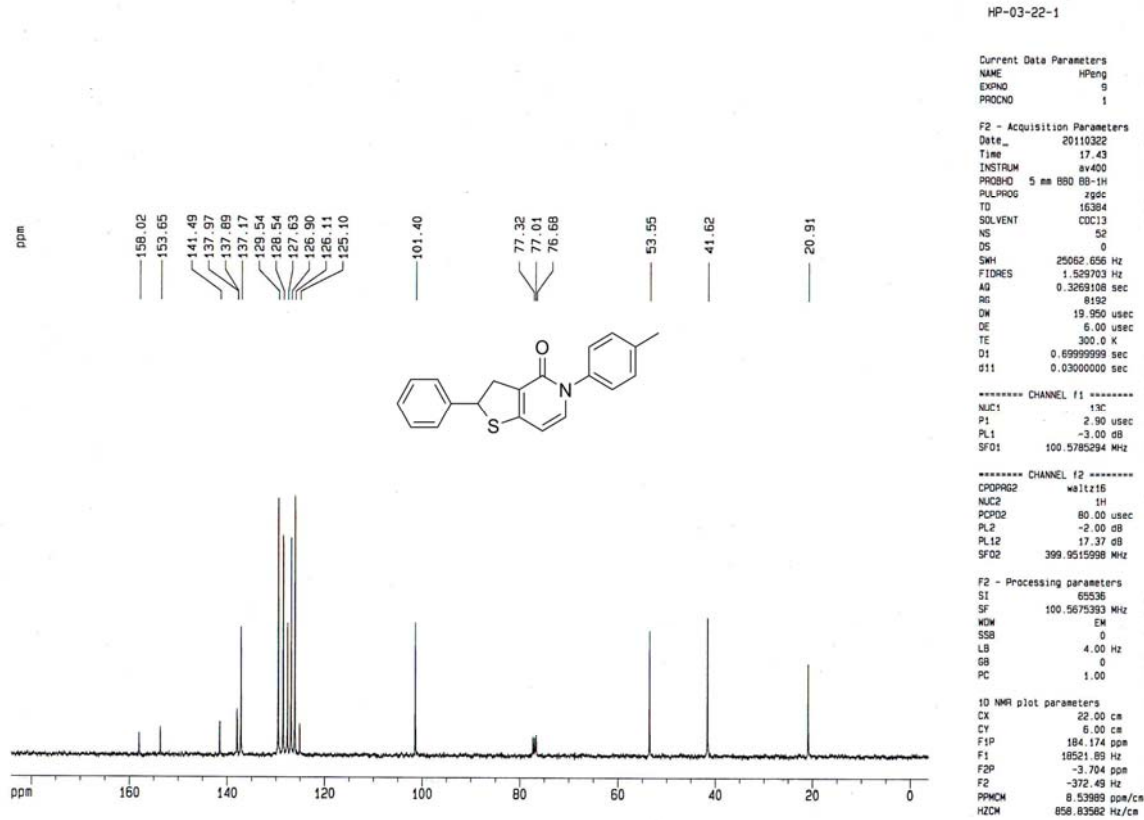
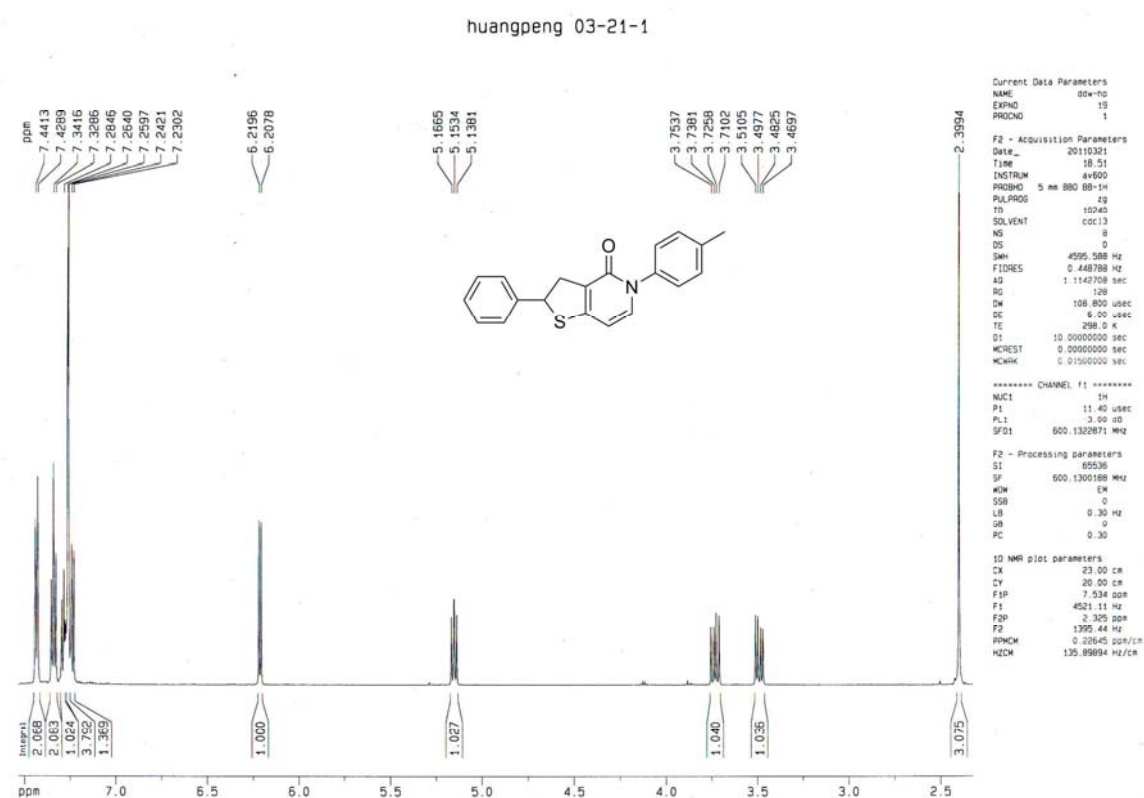
----- CHANNEL f1 -----
NUC1 13C
P1 4.20 usec
PL1 2.00 dB
SFO1 100.5785294 MHz

----- CHANNEL f2 -----
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 2.00 dB
PL12 17.50 dB
SFO2 399.9515998 MHz

F2 - Processing parameters
SI 65536
SF 100.5675183 MHz
WDW EM
SSB 0
LB 4.00 Hz
GB 0
PC 1.00

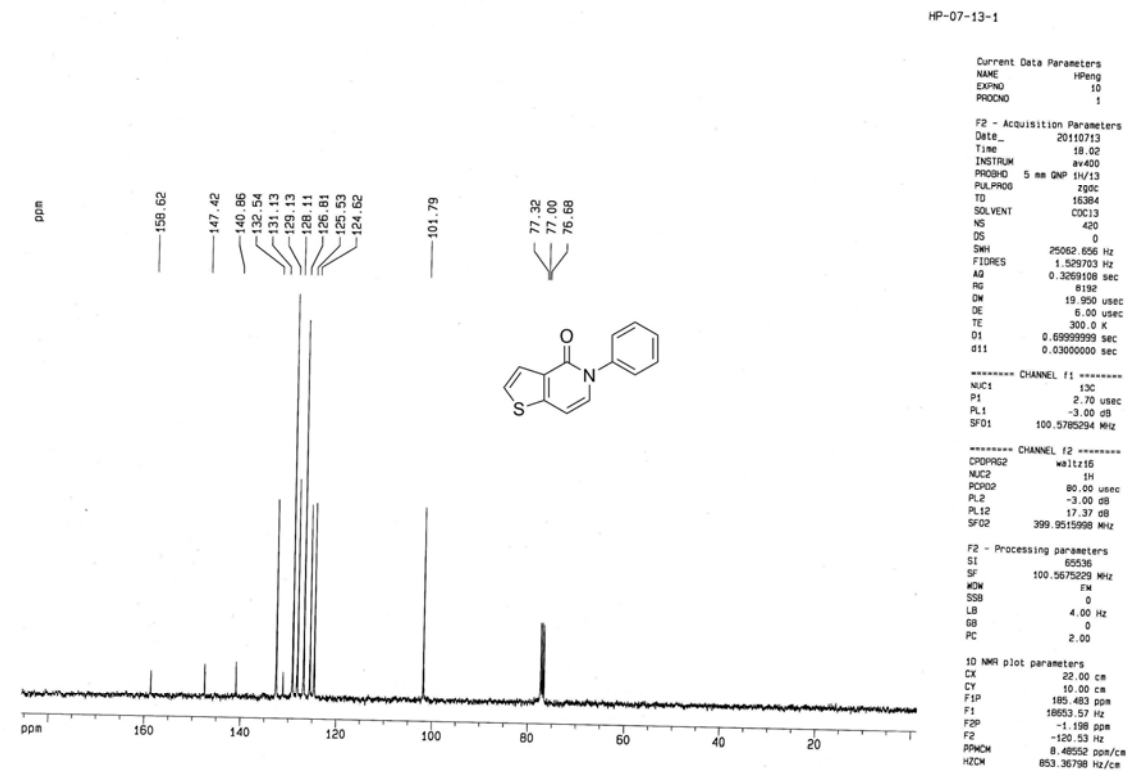
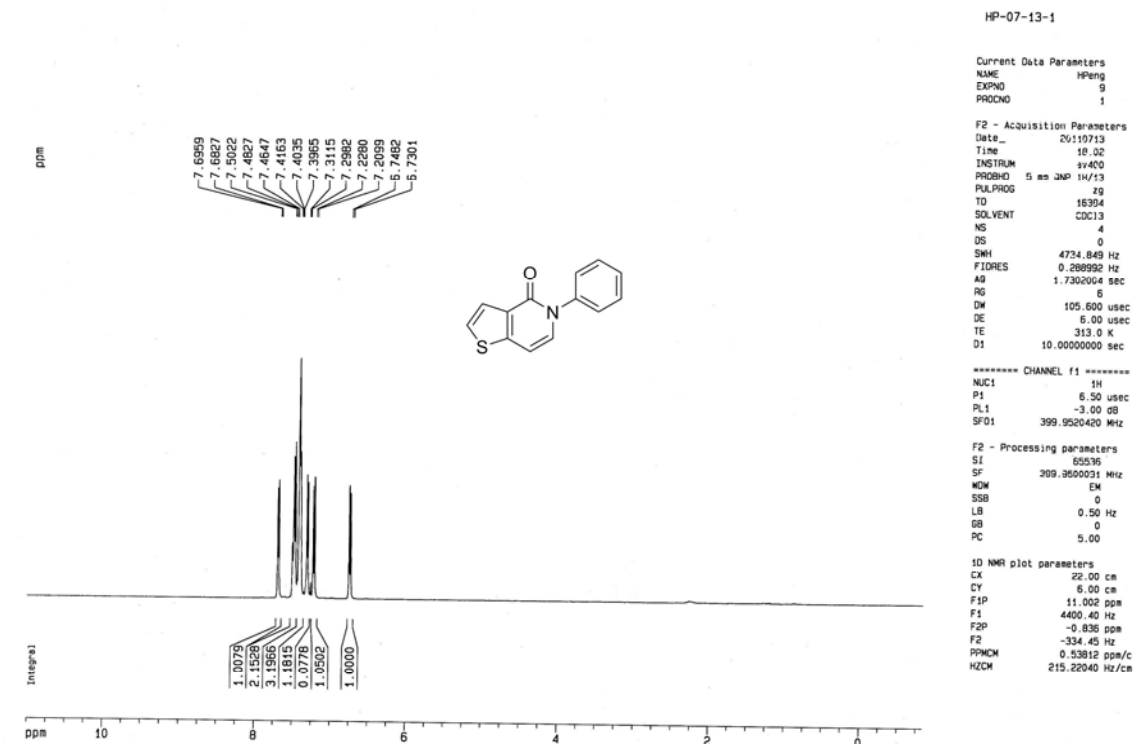
1D NMR plot parameters
CX 22.00 cm
CY 8.00 cm
FIP 179.541 ppm
F1 18025.96 Hz
F2P -6.077 ppm
F2 -611.17 Hz
PPMCM 8.43718 ppm/cm
HZCM 848.50616 Hz/cm

21

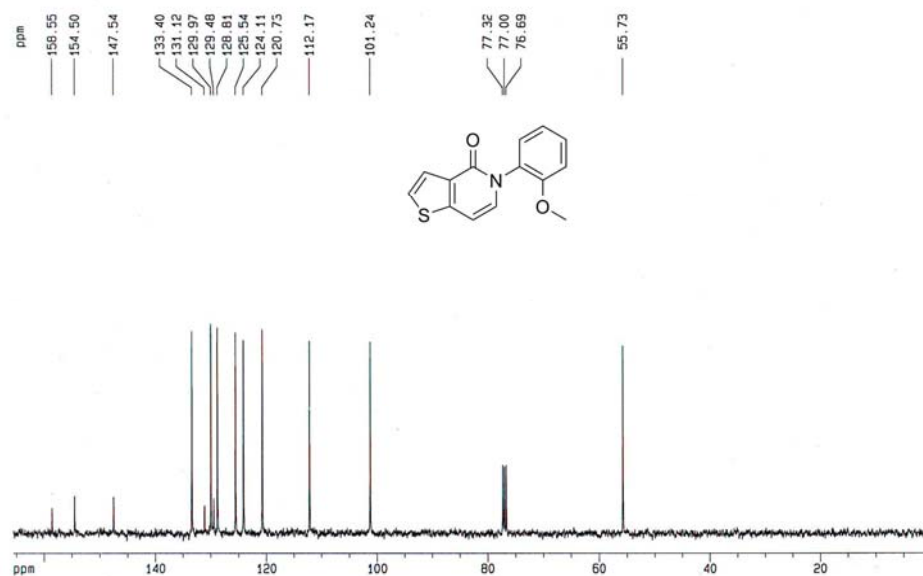
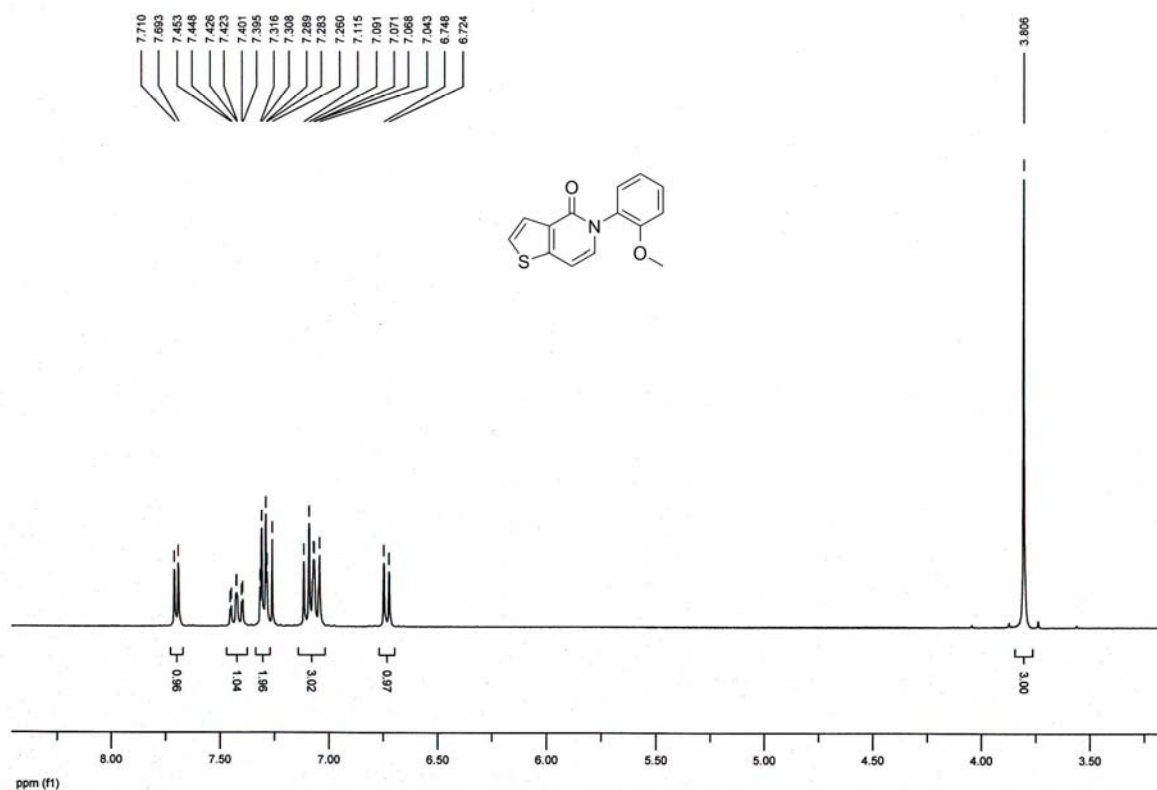


III. Copies of NMR spectra for products 3

3a



3e



HP-03-28-3

Current Data Parameters
NAME HPeng
EXPNO 14
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110328
Time 23.52
INSTRUM av400
PROBHD 5 mm QNP1H 13C
PULPROG zgpg30
TD 16384
SOLVENT CDCl3
NS 168
DS 0
SWH 25062.656 Hz
FIDRES 1.529703 Hz
AQ 0.3269108 sec
RG 8198
DW 19.950 usec
DE 6.00 usec
TE 300.0 K
D1 0.69999999 sec
d11 0.03000000 sec

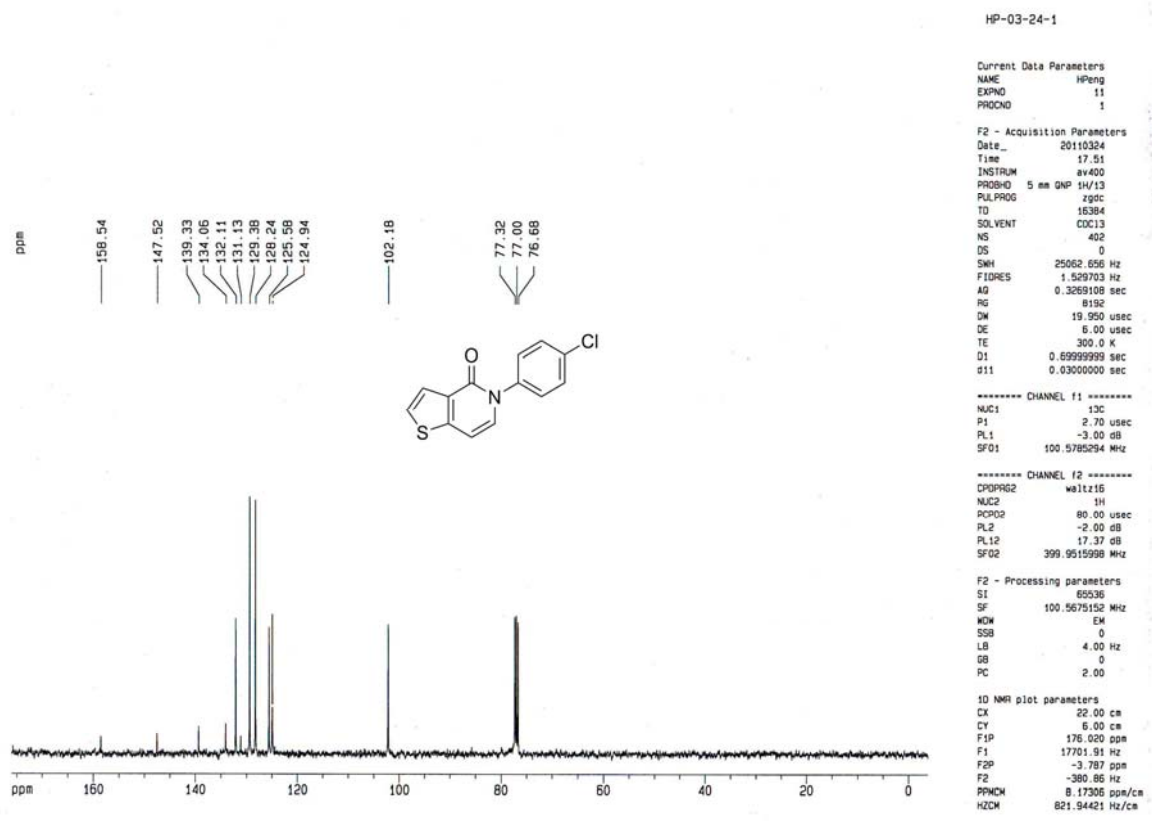
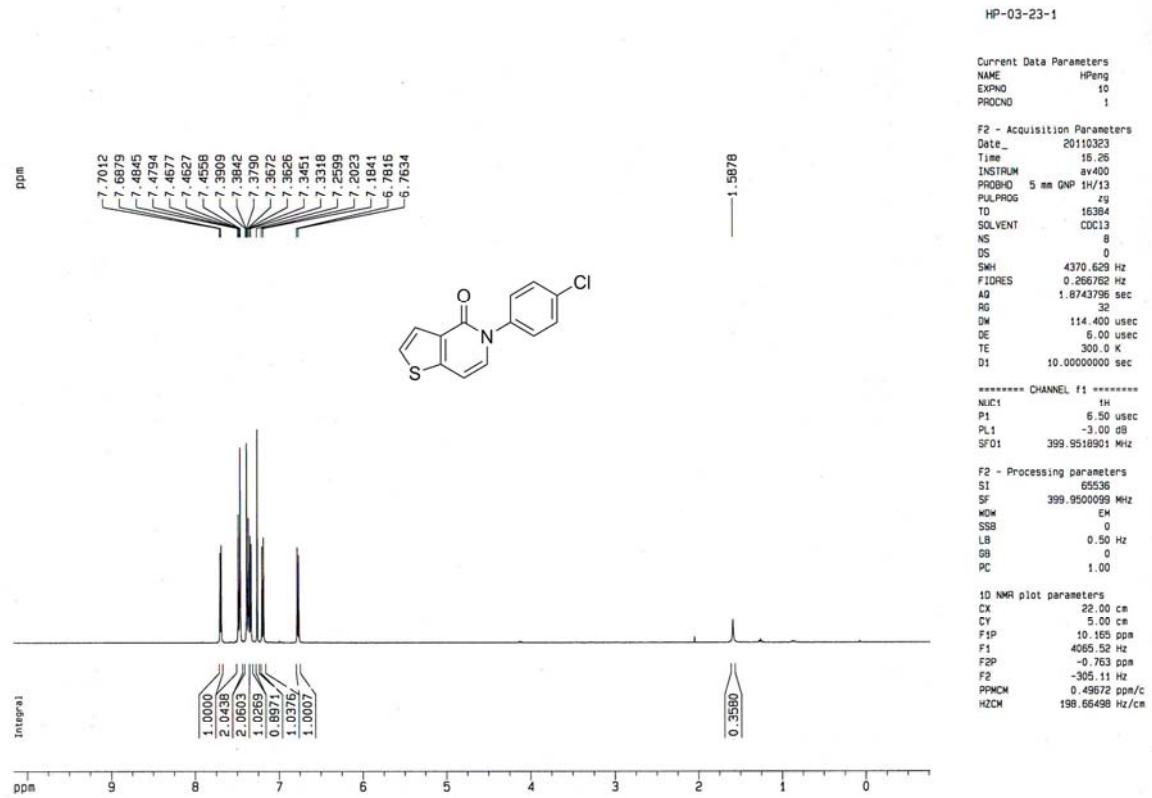
***** CHANNEL f1 *****
NUC1 13C
P1 4.20 usec
PL1 2.00 dB
SFO1 100.5785294 MHz

***** CHANNEL f2 *****
CPDPRG2 waltz16
NUC2 1H
PCPD 40.00 usec
PL2 2.00 dB
PL12 17.50 dB
SFO2 399.9615998 MHz

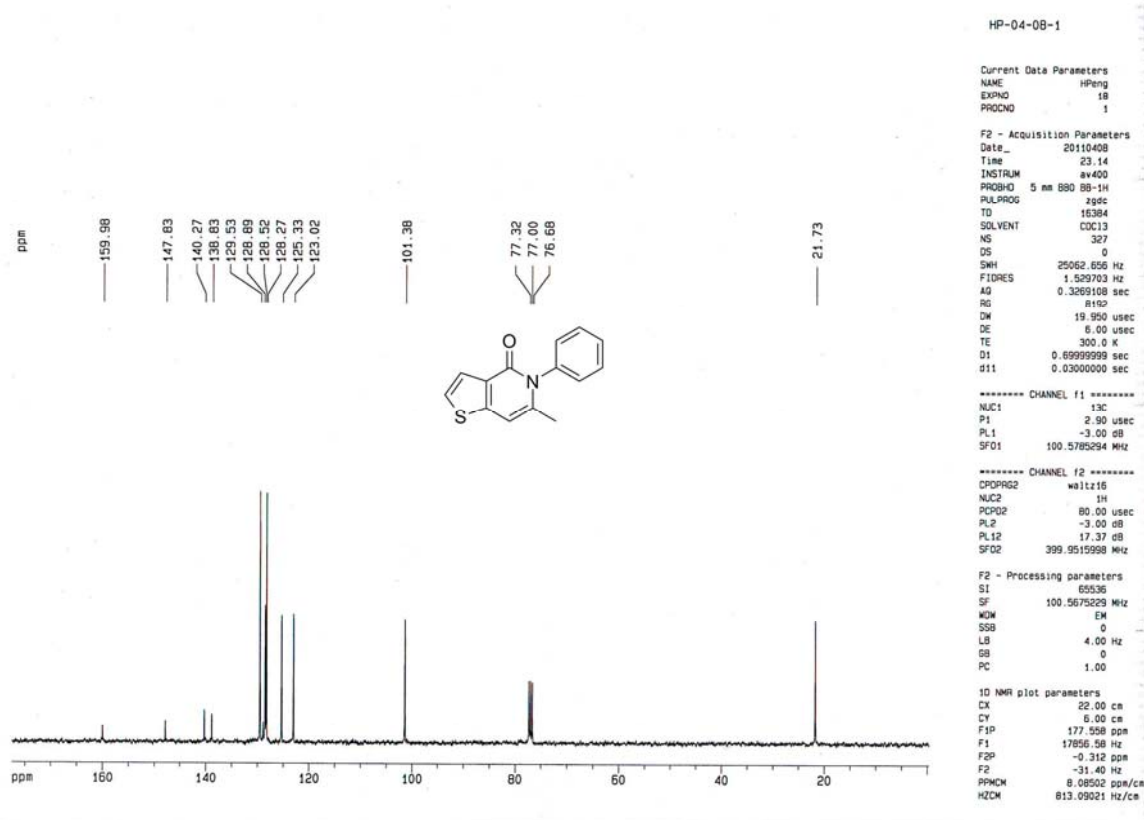
F2 - Processing parameters
SI 65536
SF 100.5675252 MHz
WDW EM
SSB 0
LB 4.00 Hz
GB 0
PC 1.00

10 NMR plot parameters
CX 22.00 cm
CY 5.00 cm
F1P 165.591 ppm
F1 16653.10 Hz
F2P 0.311 ppm
F2 31.23 Hz
PPHCH 7.51276 ppm/cm
HZCM 755.53943 Hz/cm

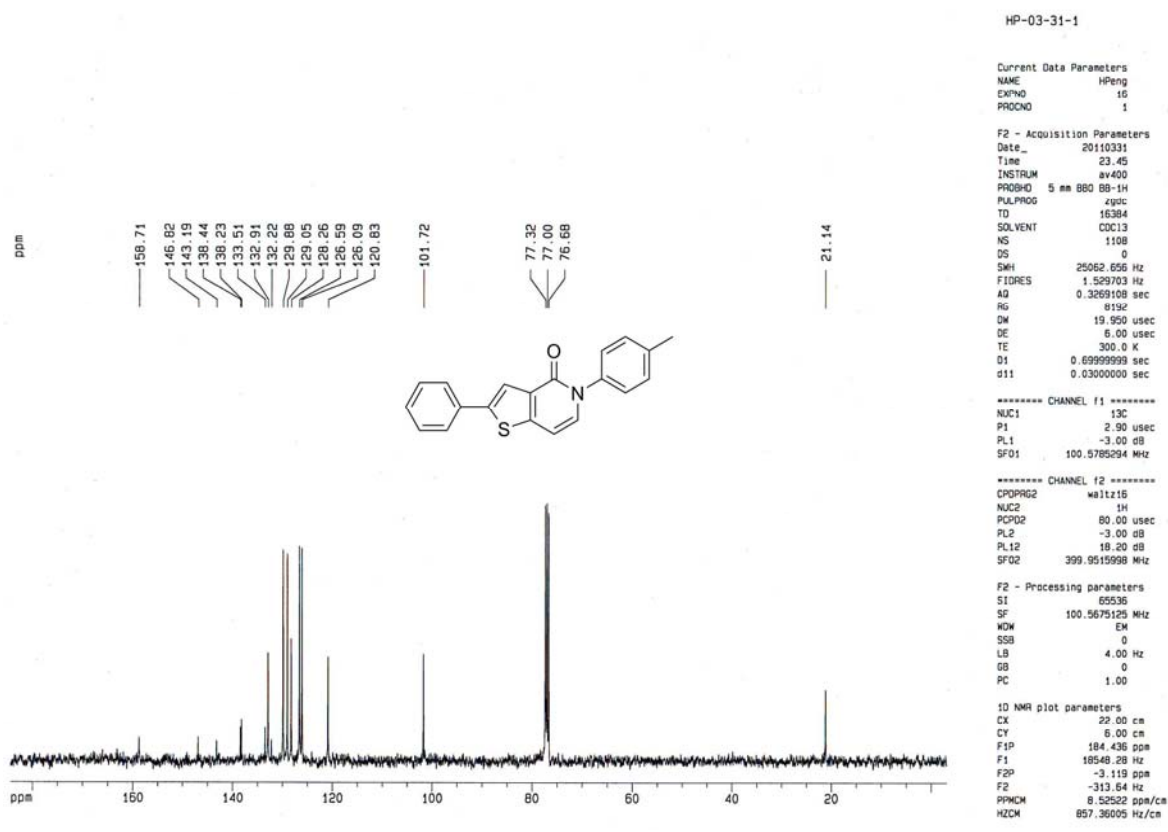
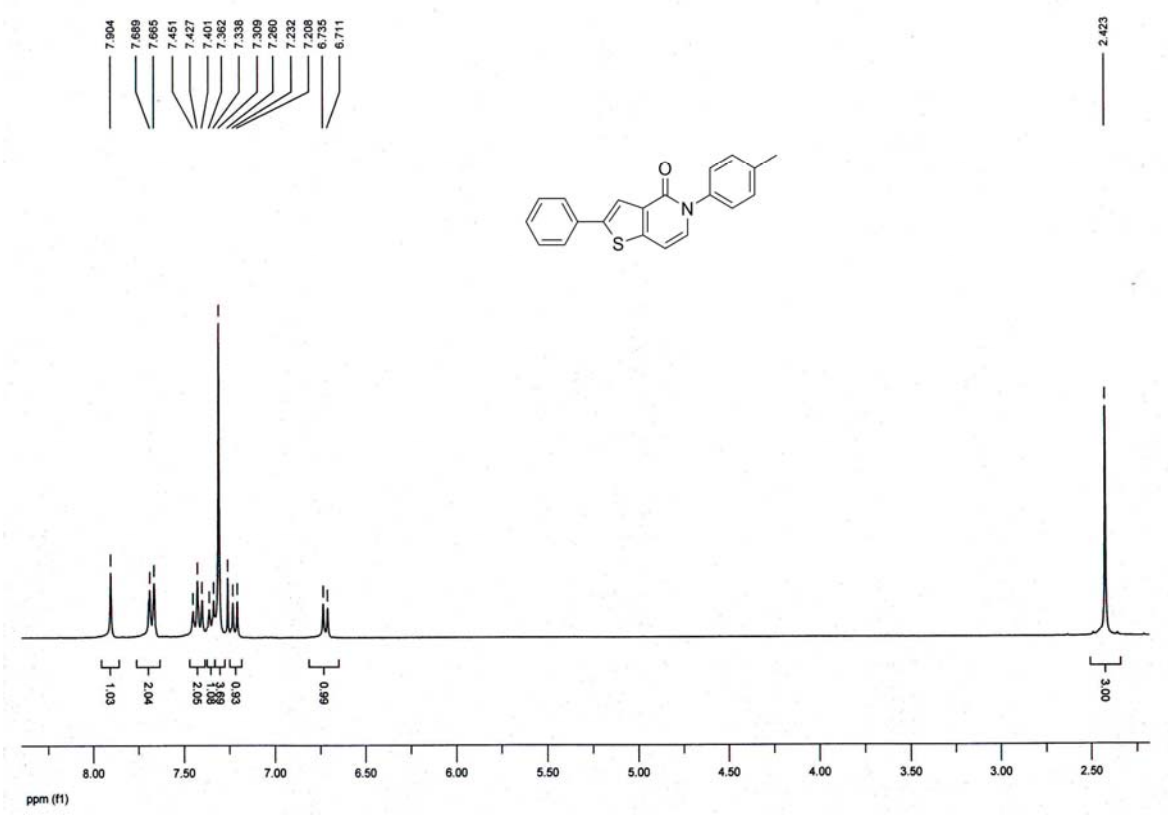
3h



3k



31



HP-03-31-1

Current Data Parameters
NAME HPeng
EXPNO 16
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110331
Time 23.45
INSTRUM av400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg
TD 16384
SOLVENT CDCl3
NS 1108
DS 0
SWH 25062.656 Hz
FIDRES 1.529703 Hz
AQ 0.3269108 sec
RG 6192
DM 19.950 usec
DE 6.00 usec
TE 300.0 K
D1 0.69999999 sec
d11 0.03000000 sec

***** CHANNEL f1 *****
NUC1 13C
P1 2.90 usec
PL1 -3.00 dB
SFO1 100.5785894 MHz

***** CHANNEL f2 *****
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -3.00 dB
PL12 18.20 dB
SFO2 399.9515998 MHz

F2 - Processing parameters
SI 65536
SF 100.5679125 MHz
WDW EM
SSB 0
LB 4.00 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 22.00 cm
CY 6.00 cm
F1P 184.436 ppm
F1 18548.28 Hz
F2P -3.119 ppm
F2 -313.64 Hz
PPHOM 8.52522 ppm/cm
HZCM 857.36005 Hz/cm