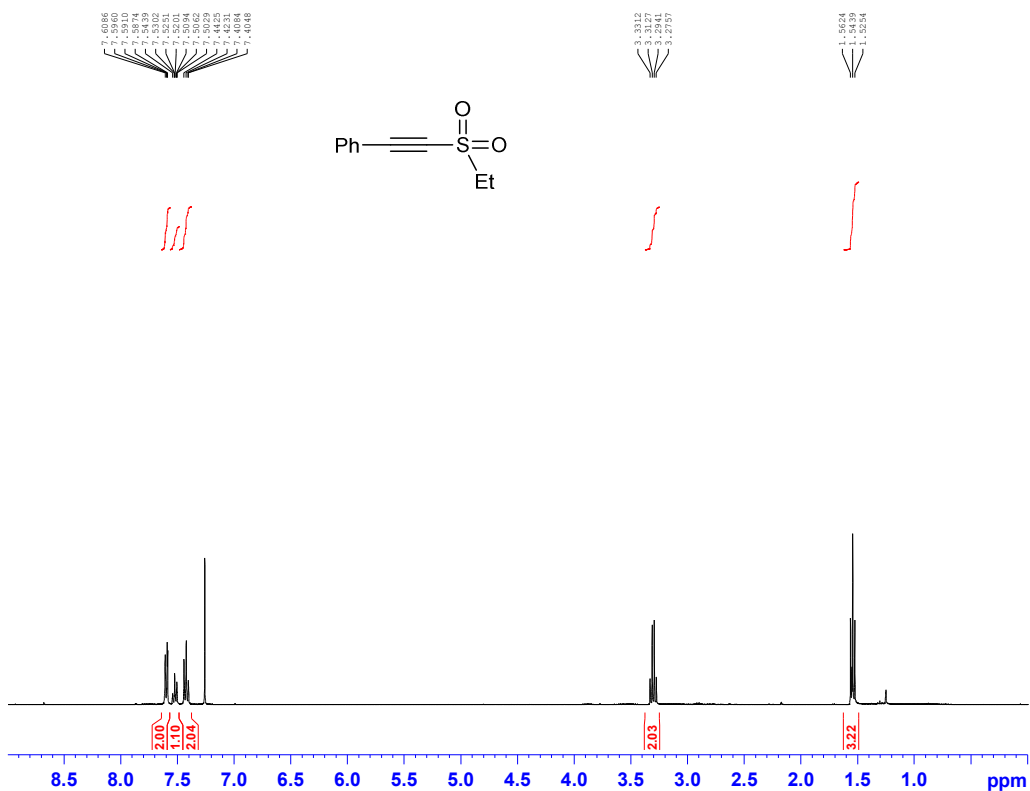


Preparation of alkyl alkynyl sulfones and cyclic vinyl sulfones from alkynyl(aryl)iodonium salts

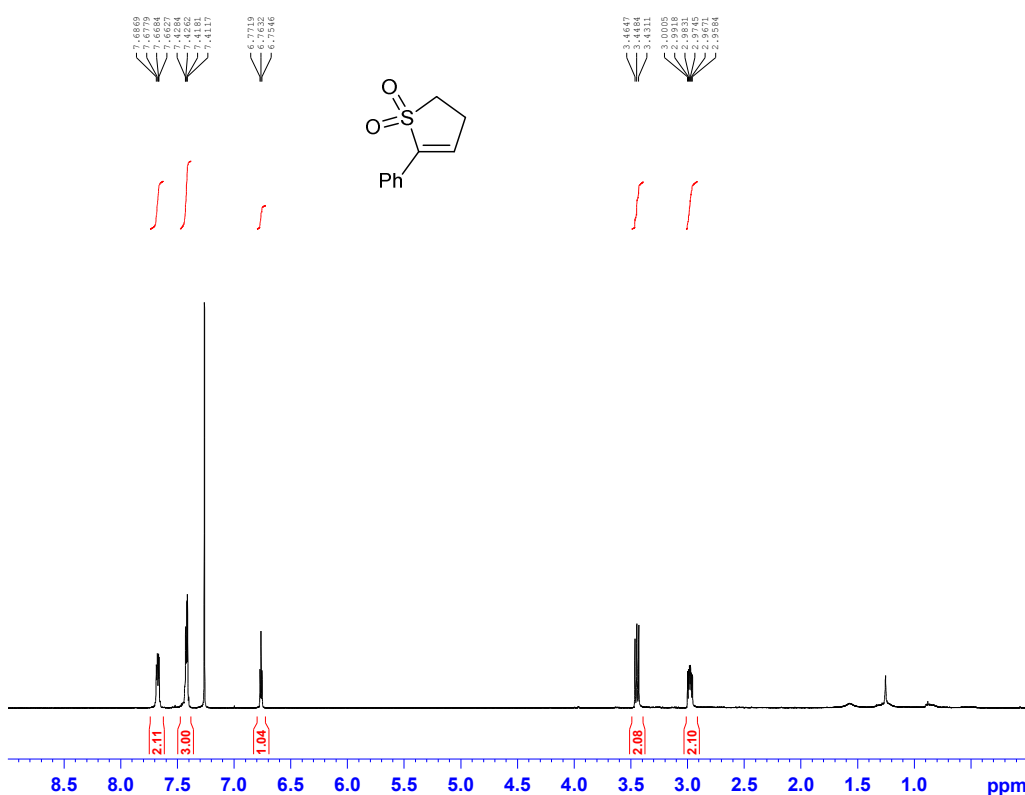
Arantxa Rodríguez and Wesley J. Moran*

Department of Chemistry, University of Huddersfield, Queensgate, Huddersfield HD1 3DH,
UK.

NMR spectra of ((ethysulfonyl)ethynyl)benzene 5a



NMR spectra of 5-phenyl-2,3-dihydrothiophene 1,1-dioxide 6a



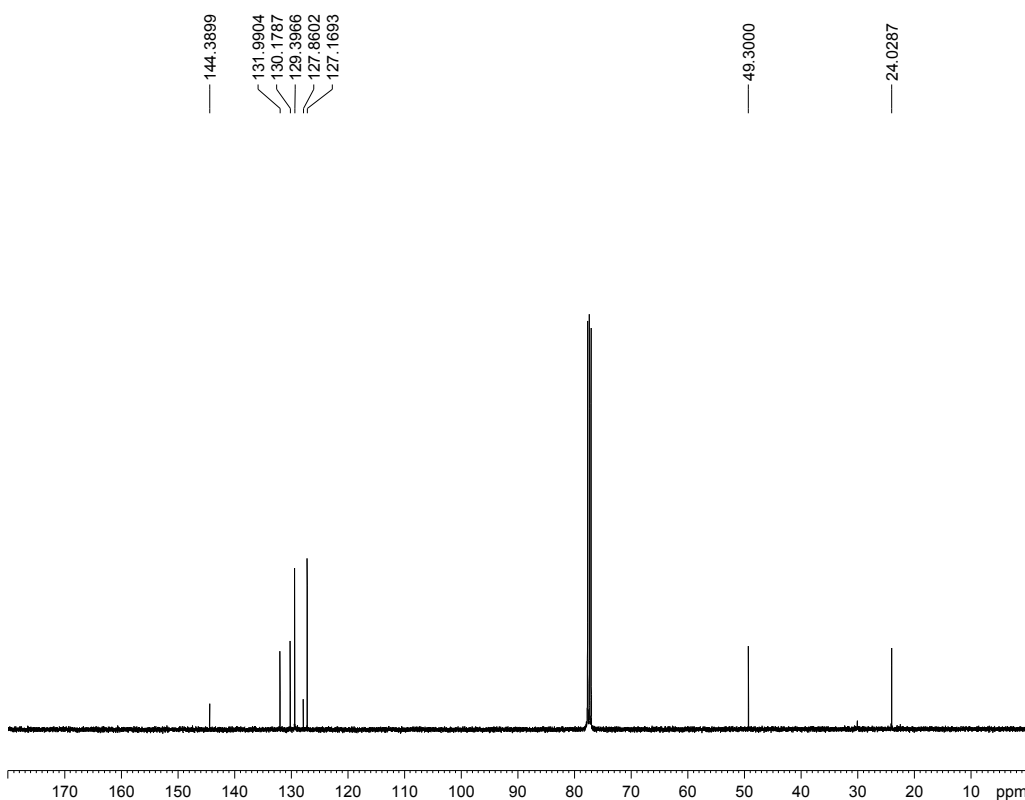
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PROCNO 1

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RG 147.88
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DE 10.69 usec
TE 293.6 K
D1 2.0000000 sec
TDO 1

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P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
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Current Data Parameters
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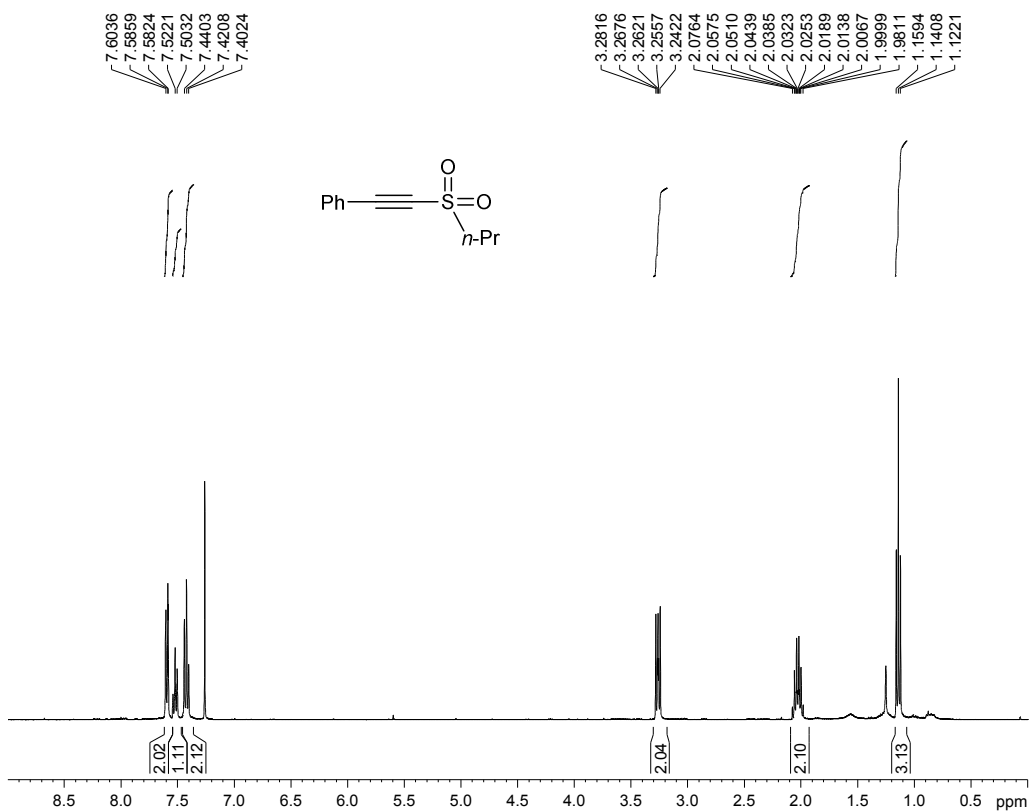
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TDO 1

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NMR spectra of ((propylsulfonyl)ethynyl)benzene 5b



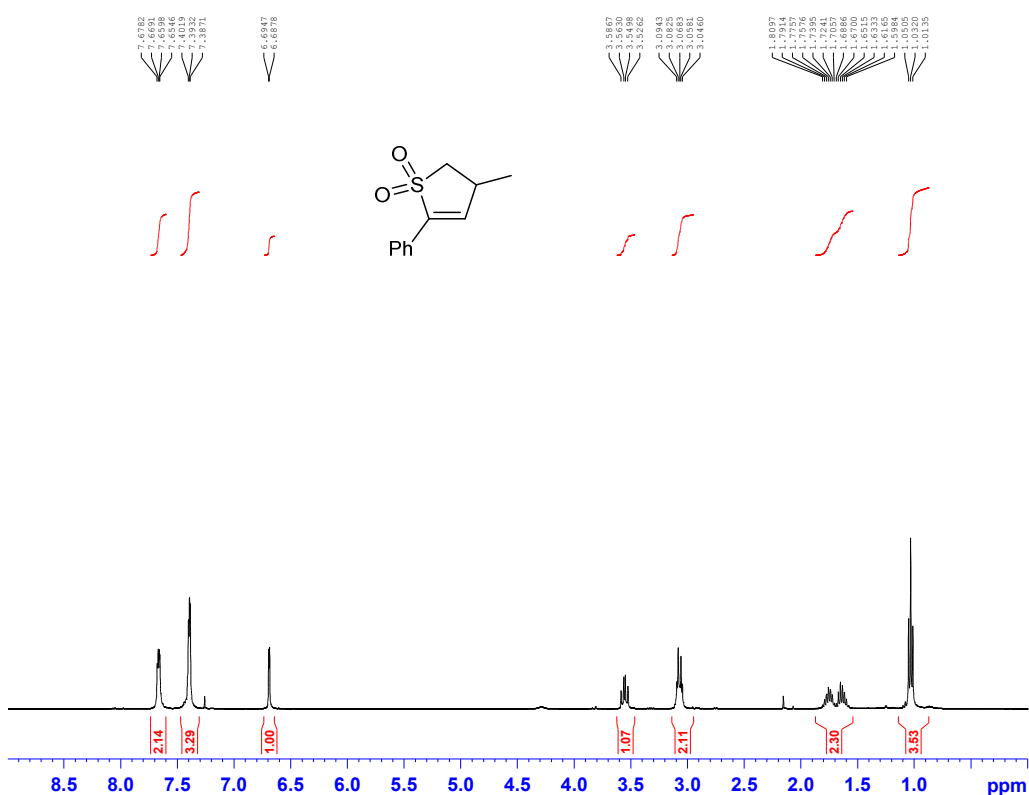
University of
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PULPROG zg30
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FIDRES 0.366798 Hz
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RG 181.72
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D329 1
D330 1
D331 1
D332 1
D333 1
D334 1
D335 1
D336 1
D337 1
D338 1
D339 1
D340 1
D341 1
D342 1
D343 1
D344 1
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D347 1
D348 1
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D353 1
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D355 1
D356 1
D357 1
D358 1
D359 1
D360 1
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D365 1
D366 1
D367 1
D368 1
D369 1
D370 1
D371 1
D372 1
D373 1
D374 1
D375 1
D376 1
D377 1
D378 1
D379 1
D380 1
D381 1
D382 1
D383 1
D384 1
D385 1
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D406 1
D407 1
D408 1
D409 1
D410 1
D411 1
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D413 1
D414 1
D415 1
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D422 1
D423 1
D424 1
D425 1
D426 1
D427 1
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D429 1
D430 1
D431 1
D432 1
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D434 1
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D436 1
D437 1
D438 1
D439 1
D440 1
D441 1
D442 1
D443 1
D444 1
D445 1
D446 1
D447 1
D448 1
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D451 1
D452 1

NMR spectra of 3-methyl-5-phenyl-2,3-dihydrothiophene 1,1-dioxide 6b



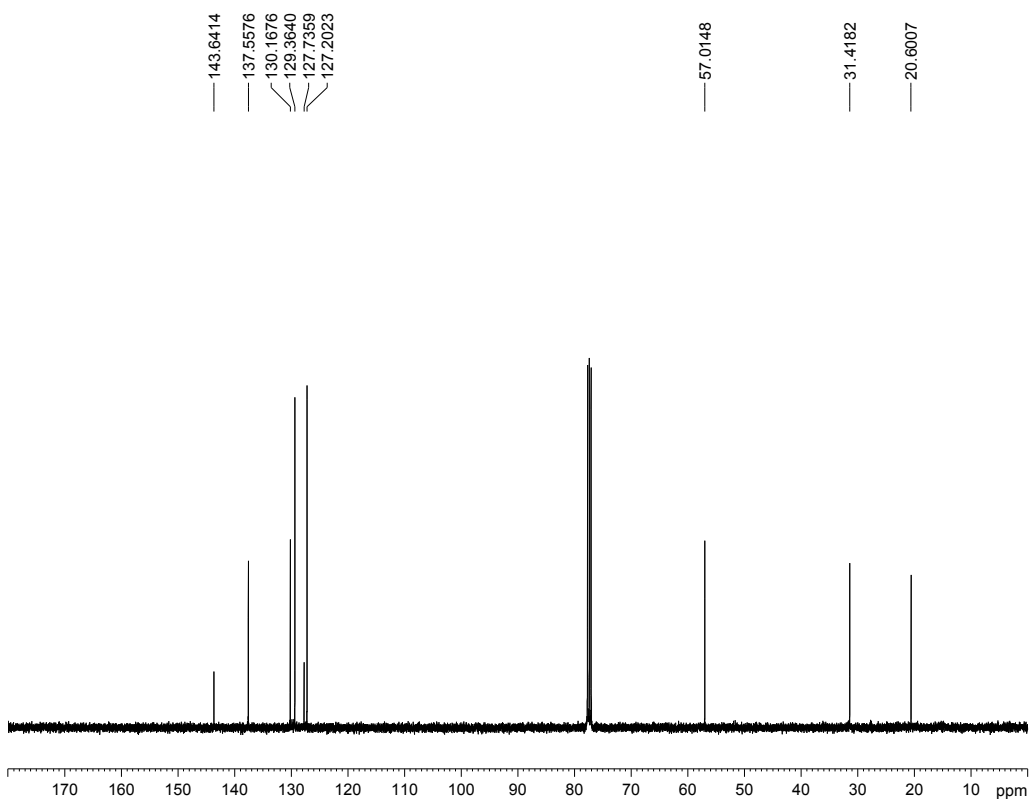
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Current Data Parameters
NAME ATX-128
EXPNO 50
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150202
Time 16.46
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 3.9845889 sec
RG 32.09
DW 60.800 usec
DE 10.69 usec
TE 293.7 K
D1 2.00000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 ¹H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-39
EXPNO 50
PROCNO 1

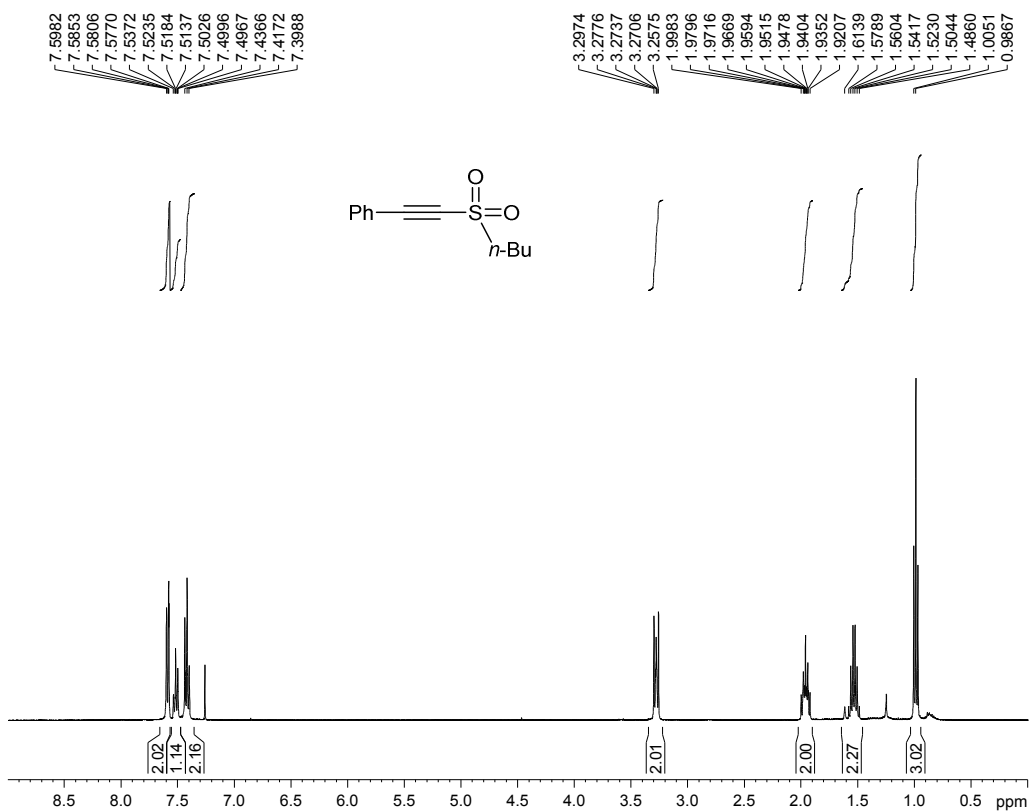
F2 - Acquisition Parameters
Date_ 20140520
Time 12.15
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366799 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.7 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 ¹³C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 ¹H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127346 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of ((butylsulfonyl)ethynyl)benzene 5c



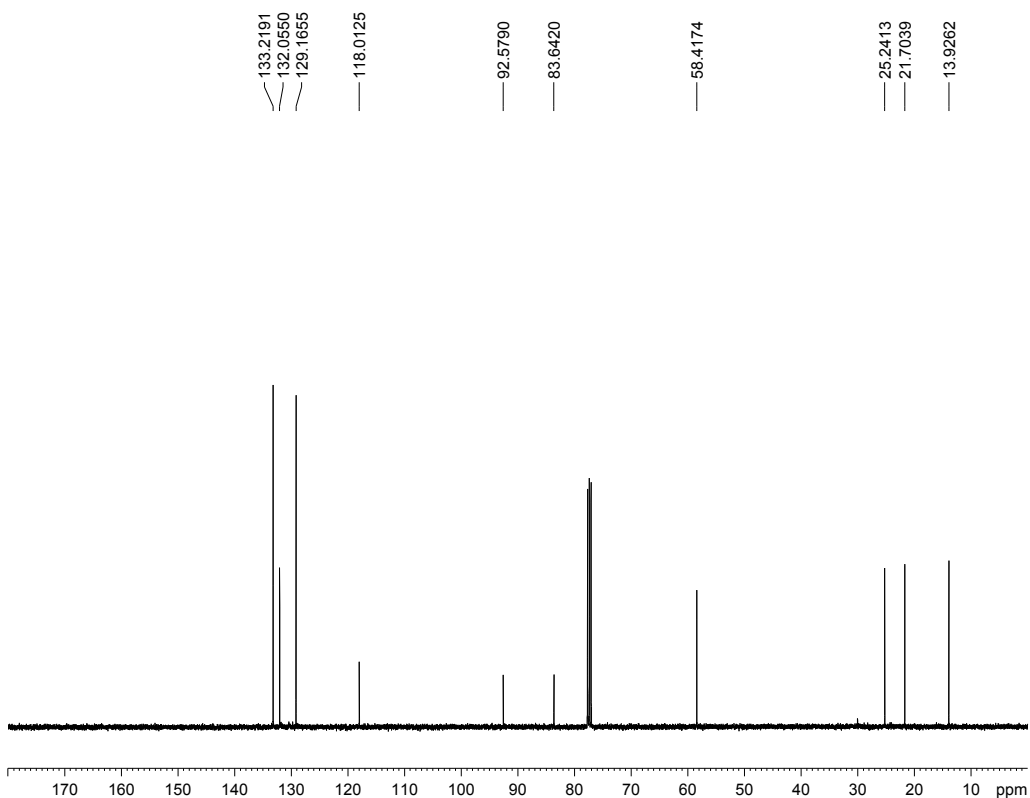
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Current Data Parameters
NAME ATK-128
EXPNO 30
PROCNO 1

F2 - Acquisition Parameters
Date_ 20141110
Time 9.36
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 3.9845889 sec
RG 16.39
DW 60.800 usec
DE 10.69 usec
TE 293.5 K
D1 2.00000000 sec
D11 1
TD0

----- CHANNEL f1 -----
SF01 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATK-128
EXPNO 31
PROCNO 1

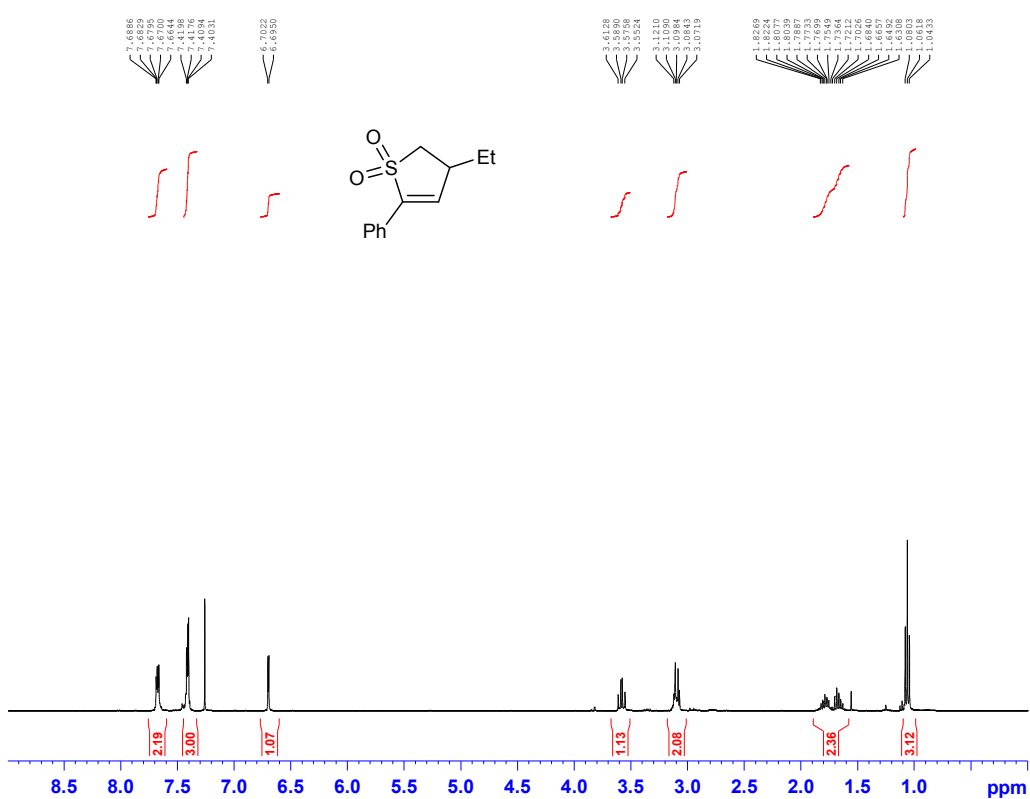
F2 - Acquisition Parameters
Date_ 20141110
Time 9.52
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 293.9 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SF01 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SF02 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127354 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 3-ethyl-5-phenyl-2,3-dihydrothiophene 1,1-dioxide 6c



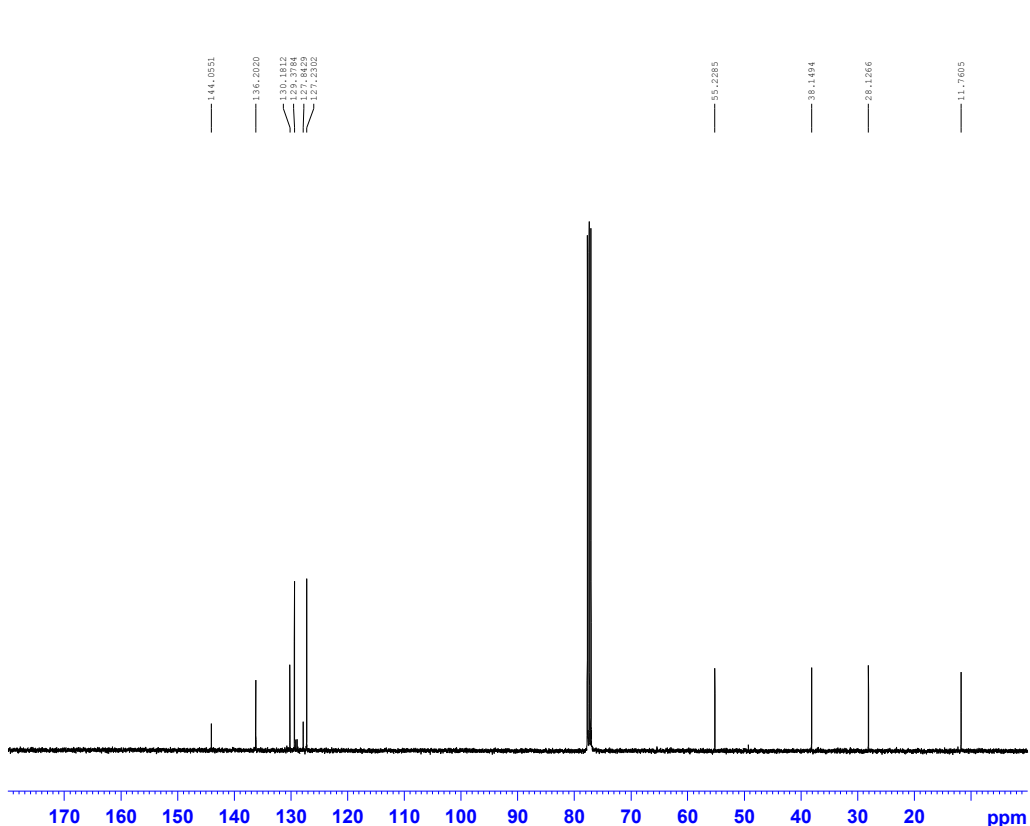
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Current Data Parameters
NAME ATX-128 prep
EXPNO 30
PROCNO 1

F2 - Acquisition Parameters
Date_ 20160226
Time_ 14.43
INSTRUM spect
PROBHD 5 mm FABBO BB/
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9845889 sec
RG 17.88
DW 60.800 usec
DE 10.69 usec
TE 293.6 K
D1 2.00000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300099 MHz
WDW EM
GB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-128 prep
EXPNO 11
PROCNO 1

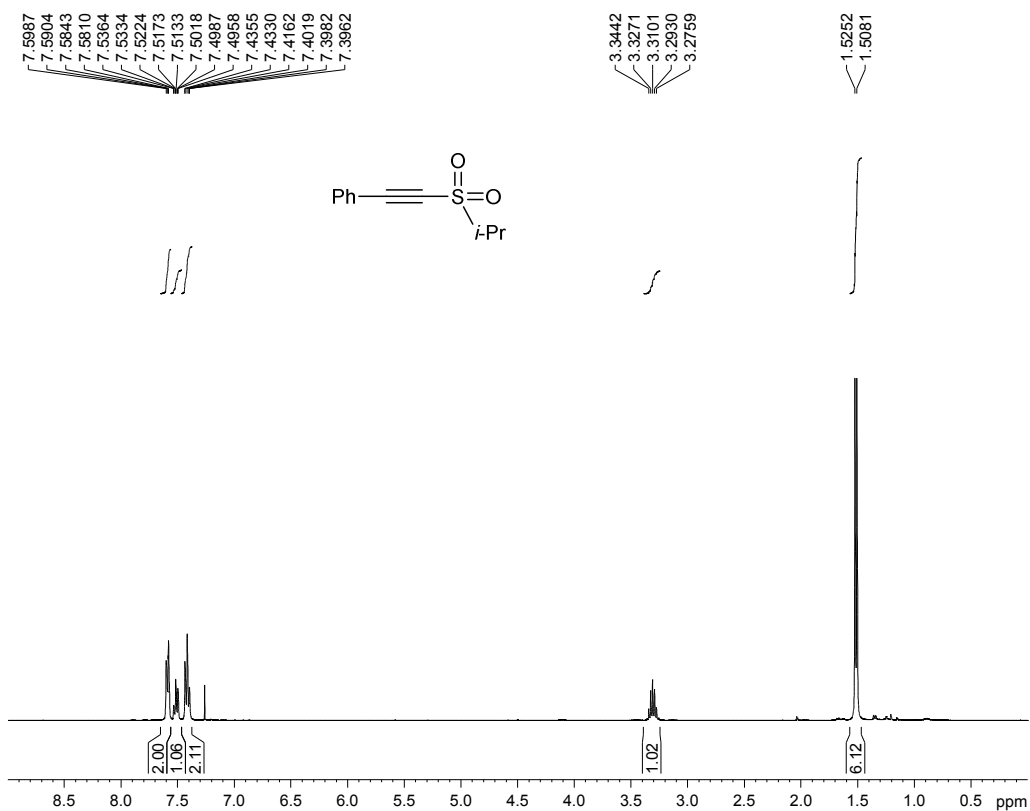
F2 - Acquisition Parameters
Date_ 20160220
Time_ 23.31
INSTRUM spect
PROBHD 5 mm FABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.4 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228303 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127322 MHz
WDW EM
GB 0
LB 1.00 Hz
GB 0
PC 1.40

NMR spectra of ((isopropylsulfonyl)ethynyl)benzene 5d



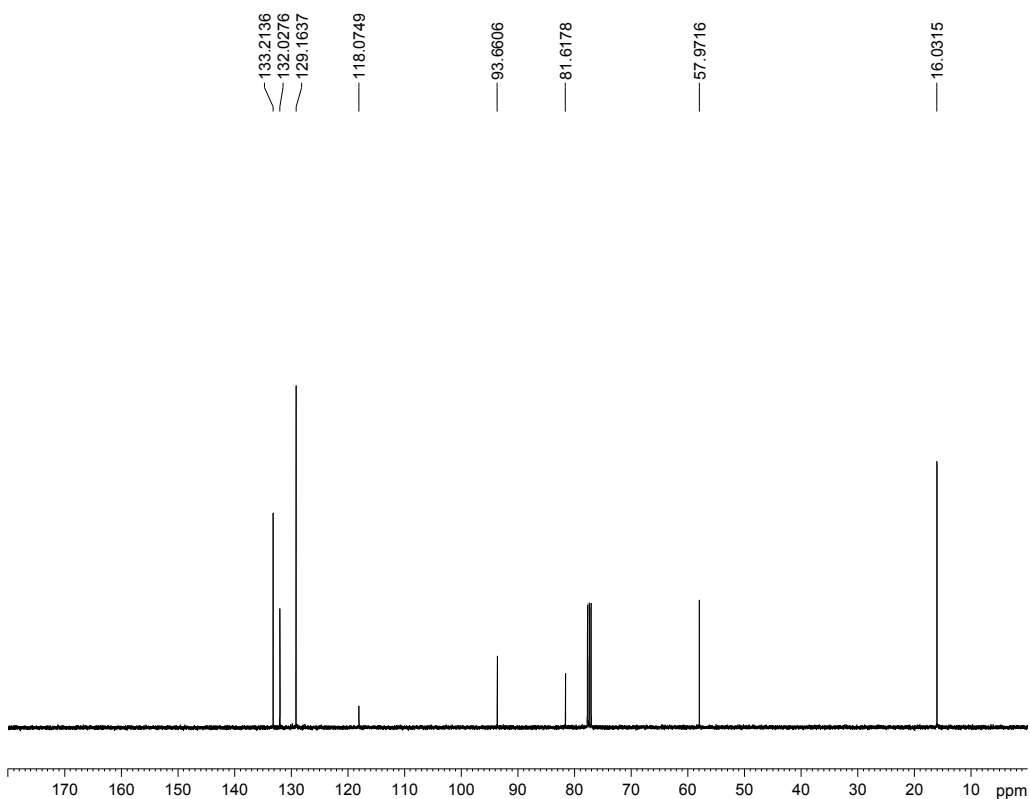
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Current Data Parameters
NAME ATX-140
EXPNO 20
PROCNO 1

F2 - Acquisition Parameters
Date_ 20141117
Time_ 11.22
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 3.9845889 sec
RG 46.39
DW 60.800 usec
DE 10.69 usec
TE 293.8 K
D1 2.00000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300087 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-140
EXPNO 21
PROCNO 1

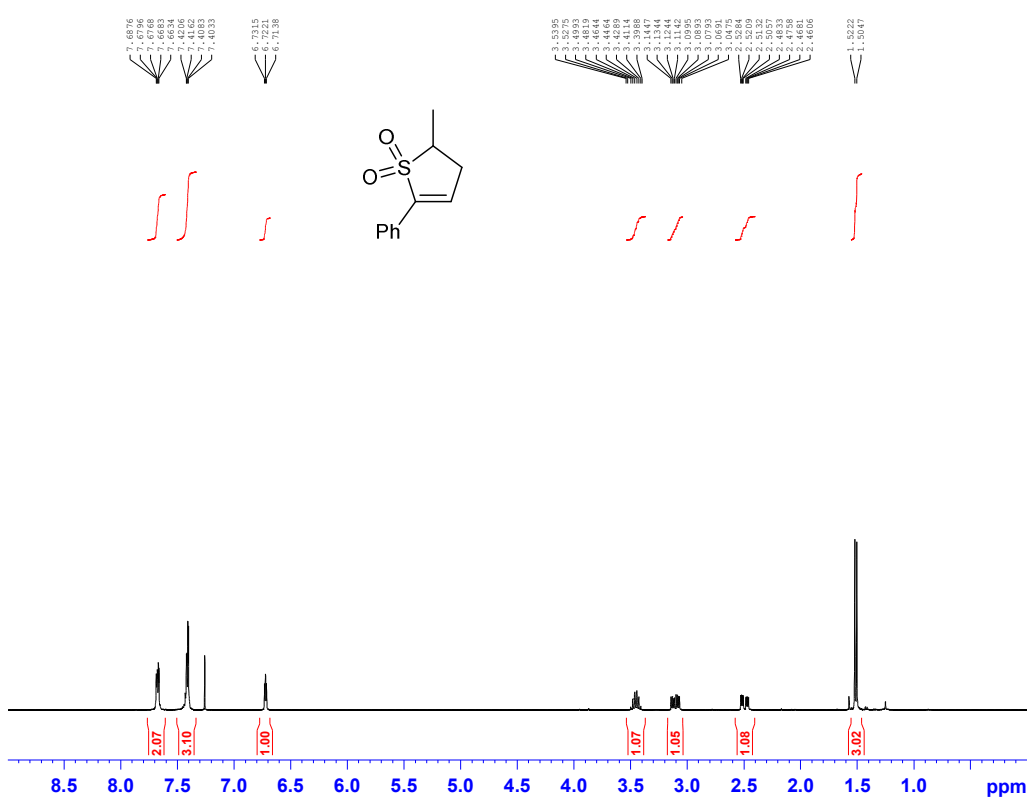
F2 - Acquisition Parameters
Date_ 20141117
Time_ 11.38
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127362 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 2-methyl-5-phenyl-2,3-dihydrothiophene 1,1-dioxide 6d



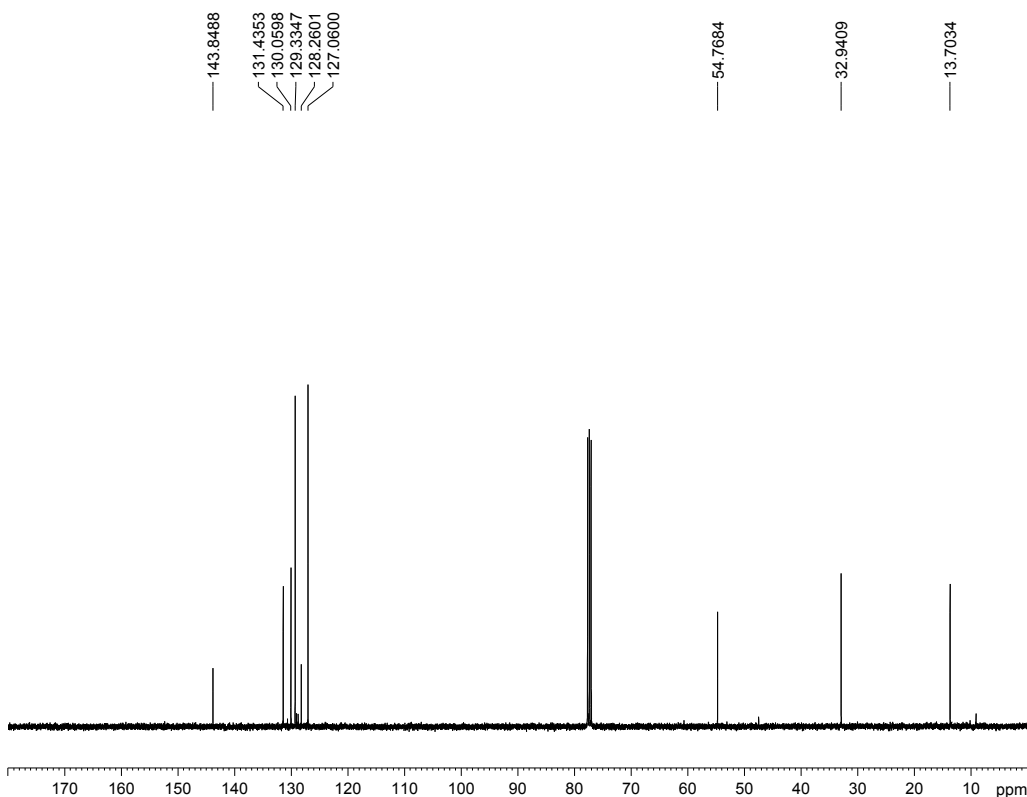
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Current Data Parameters
NAME ATK-140 t 19-36 prep
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20160226
Time_ 14.53
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125883 Hz
AQ 3.9843889 sec
RG 147.88
DW 60.800 usec
DE 10.69 usec
TE 293.6 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300098 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATK-140
EXPNO 51
PROCNO 1

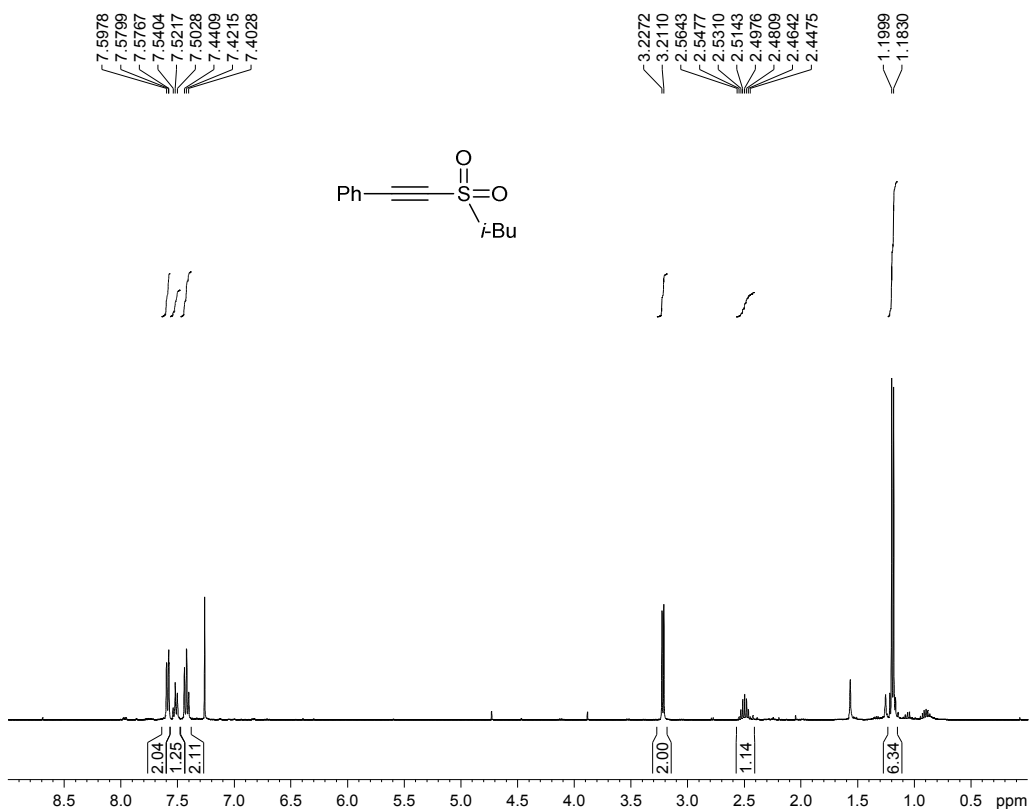
F2 - Acquisition Parameters
Date_ 20150202
Time_ 21.32
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.346798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

===== CHANNEL f2 =====
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLM12 0.17567000 W
PLM13 0.14239999 W

F2 - Processing parameters
SI 65536
SF 100.6127358 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of ((isobutylsulfonyl)ethynyl)benzene 5e



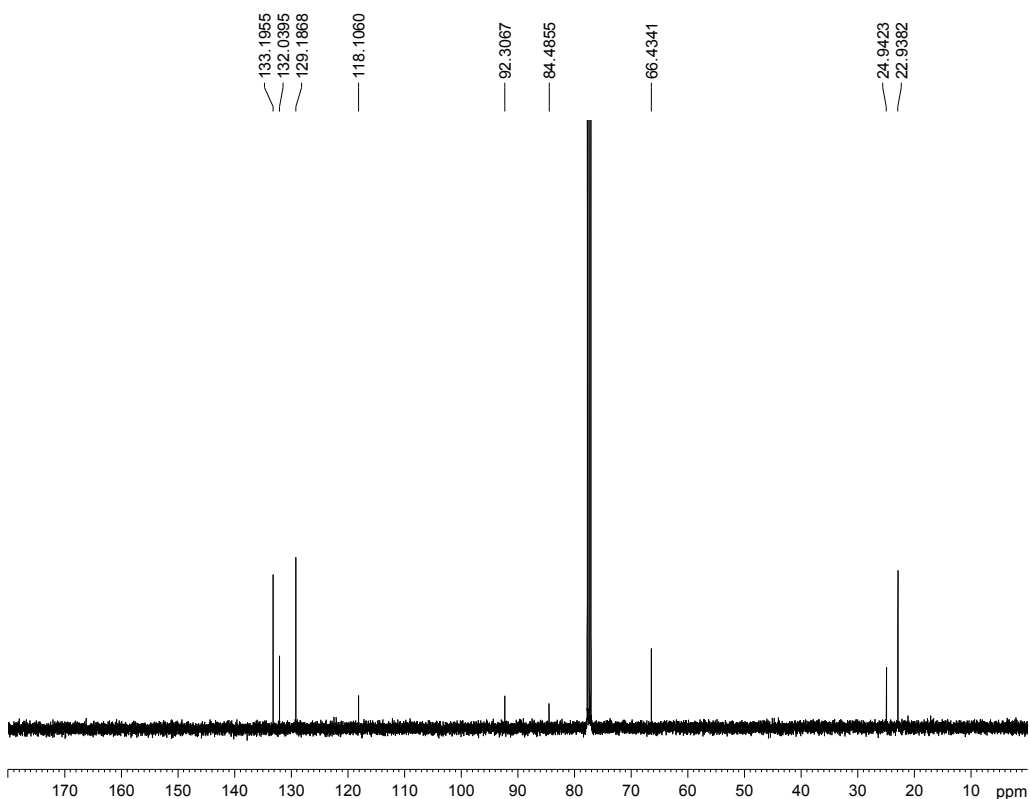
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Current Data Parameters
NAME ATX-53
EXPNO 20
PROCNO 1

F2 - Acquisition Parameters
Date_ 20140604
Time_ 12.47
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 3.9845889 sec
RG 147.88
DW 60.800 usec
DE 10.69 usec
TE 293.6 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 ¹H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300087 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-53
EXPNO 21
PROCNO 1

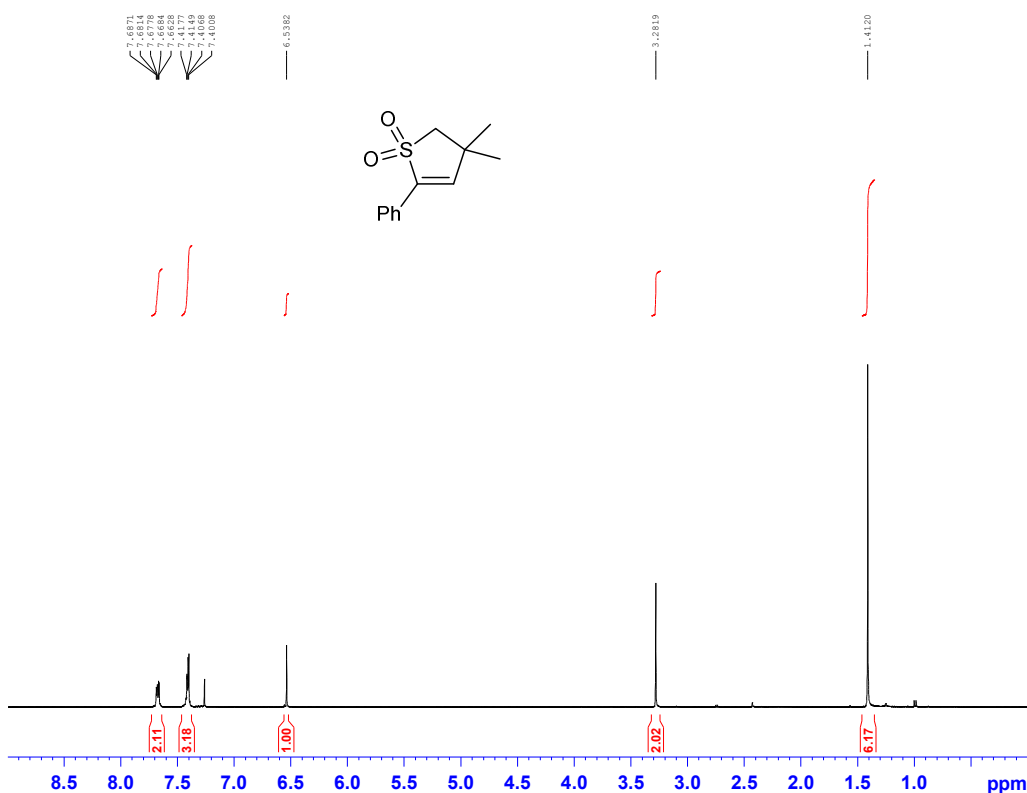
F2 - Acquisition Parameters
Date_ 20140605
Time_ 8.52
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 ¹³C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 ¹H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127321 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 3,3-dimethyl-5-phenyl-2,3-dihydrothiophene 1,1-dioxide 6e



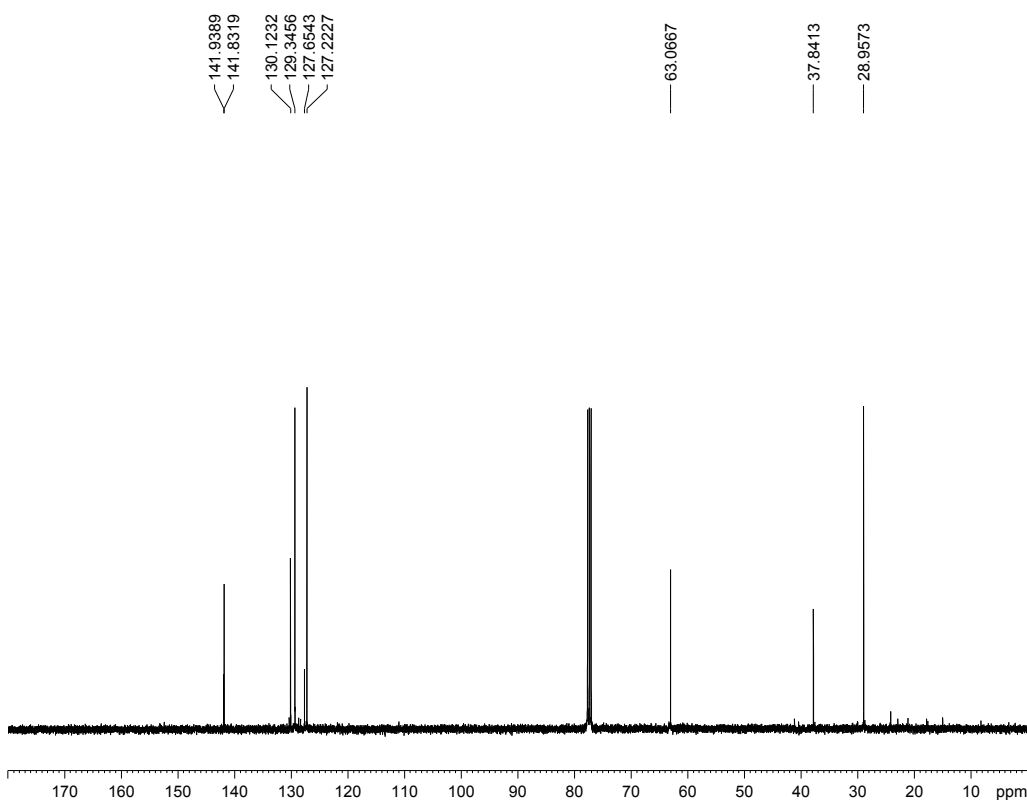
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Current Data Parameters
NAME ATX-53 t 14-21
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date 20160223
Time 11.54
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 65536
SOLVENT CDCl₃
NS 16
DS 2
SWH 8223.682 Hz
FIDRES 0.125483 Hz
AQ 3.9845889 sec
RG 104.33
DW 60.800 usec
DE 10.69 usec
TE 293.6 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 62768
SF 400.1300087 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-53
EXPNO 31
PROCNO 1

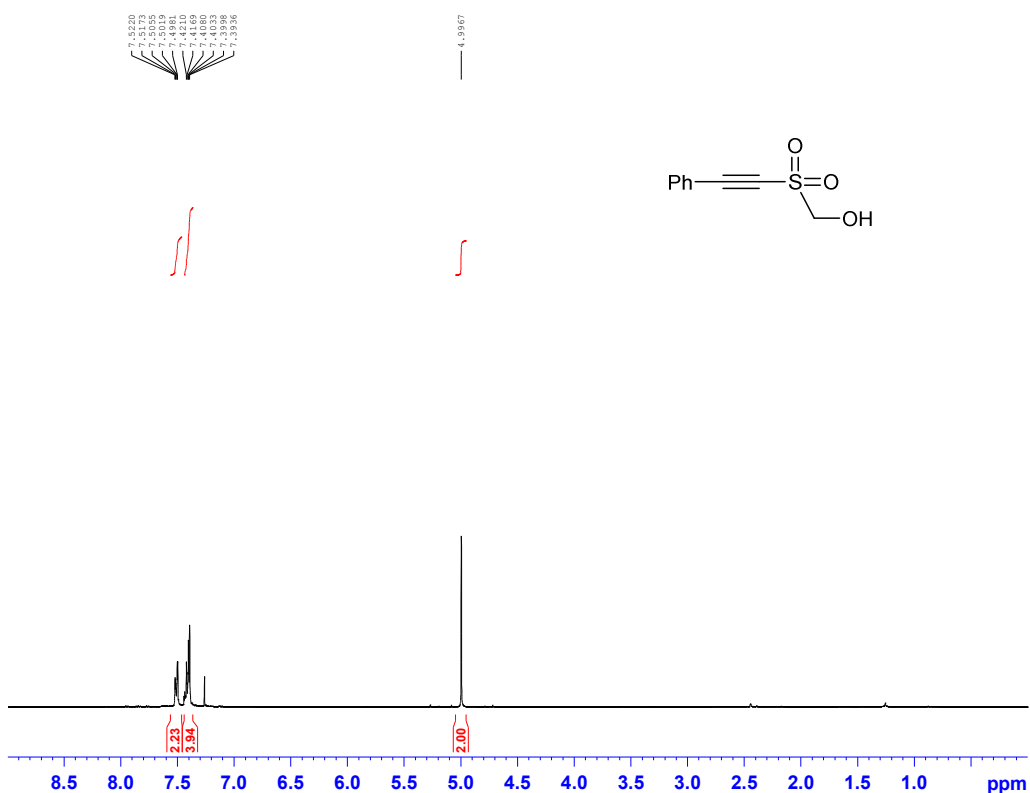
F2 - Acquisition Parameters
Date 20140605
Time 10.30
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 80.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127350 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of ((phenylethynyl)sulfonyl)methanol 5f



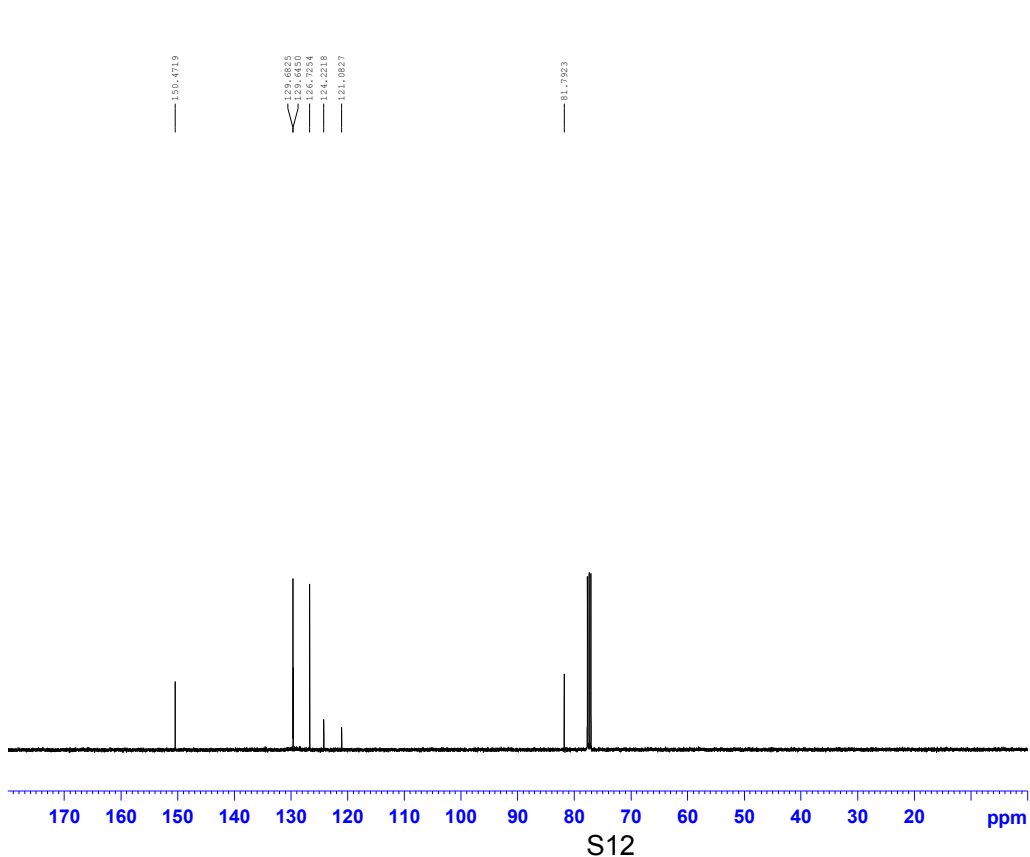
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Current Data Parameters
NAME ATX-41 t 13-18
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20160223
Time_ 11.59
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 65536
SOLVENT CDCl₃
NS 16
DS 2
SWH 8223.662 Hz
FIDRES 0.125483 Hz
AQ 3.9845889 sec
RG 104.33
DW 60.800 usec
DE 10.69 usec
TE 293.6 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300087 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-41
EXPNO 31
PROCNO 1

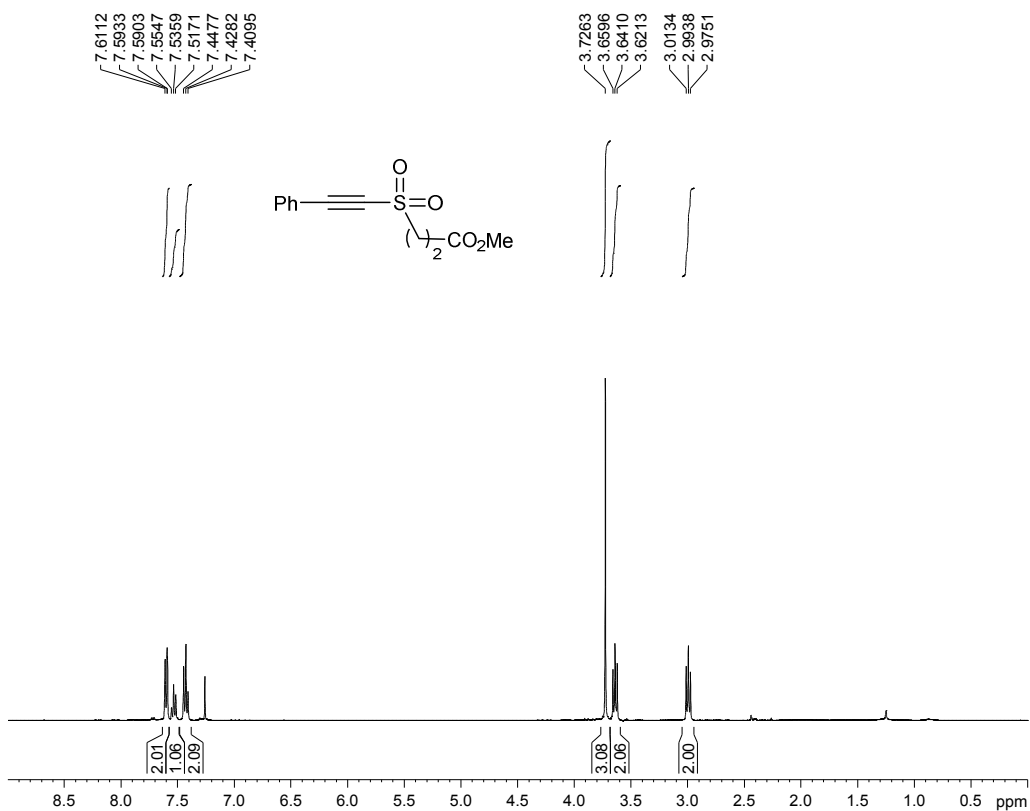
F2 - Acquisition Parameters
Date_ 20140521
Time_ 15.52
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 256
DS 4
SWH 24039.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127346 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of methyl 3-((phenylethynyl)sulfonyl)propanoate 5g



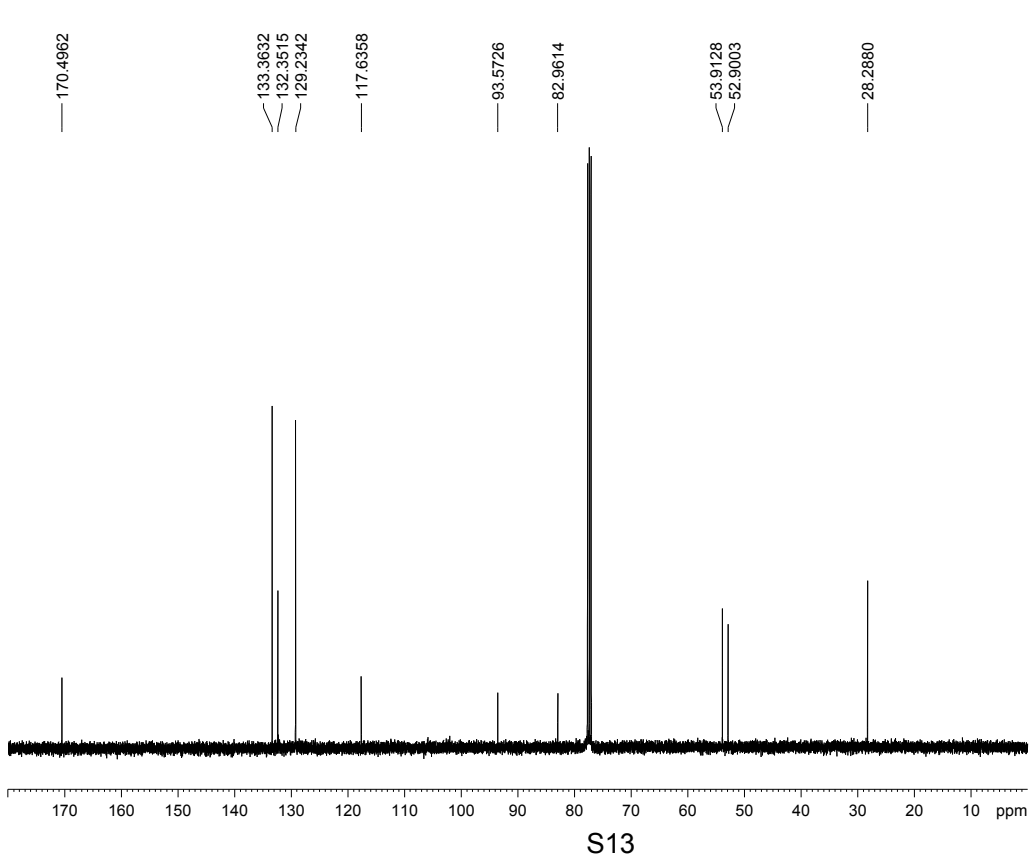
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Current Data Parameters
NAME ATX-15
EXPNO 40
PROCNO 1

F2 - Acquisition Parameters
Date_ 20140429
Time_ 9.55
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 3.9845889 sec
RG 147.88
DW 60.800 usec
DE 10.69 usec
TE 294.0 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SF01 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 82768
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-15
EXPNO 41
PROCNO 1

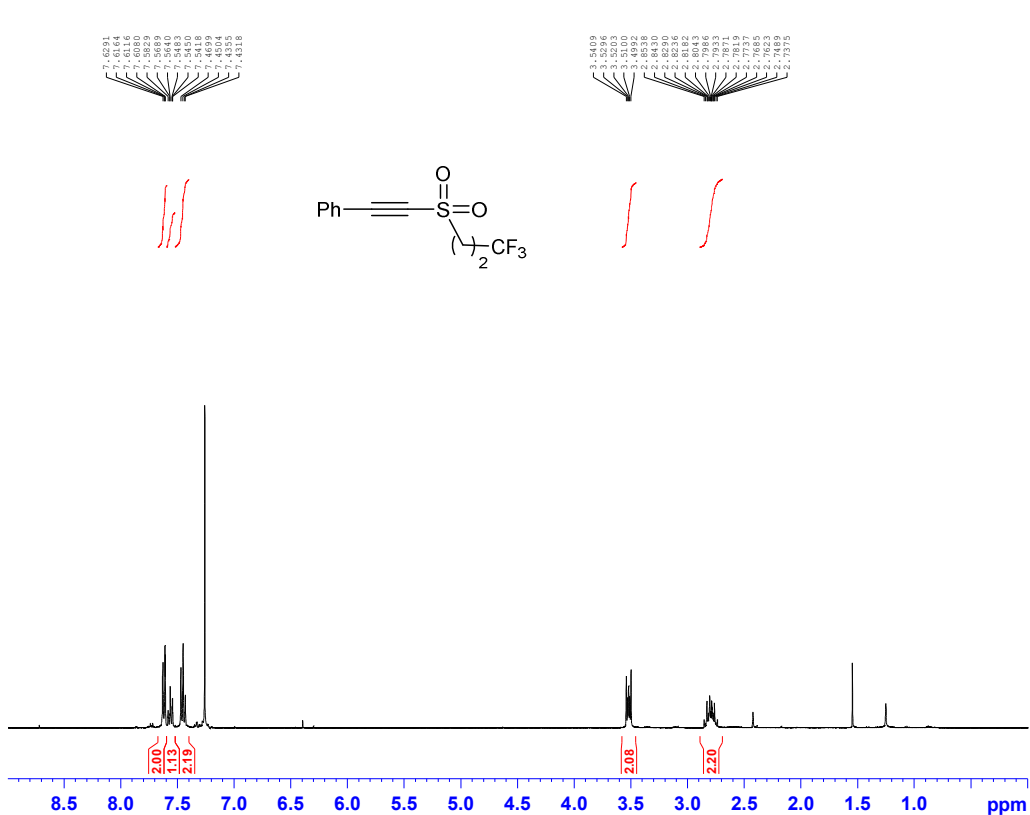
F2 - Acquisition Parameters
Date_ 20140429
Time_ 10.10
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.3 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SF01 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SF02 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127333 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of (((3,3,3-trifluoropropyl)sulfonyl)ethynyl)benzene 5h



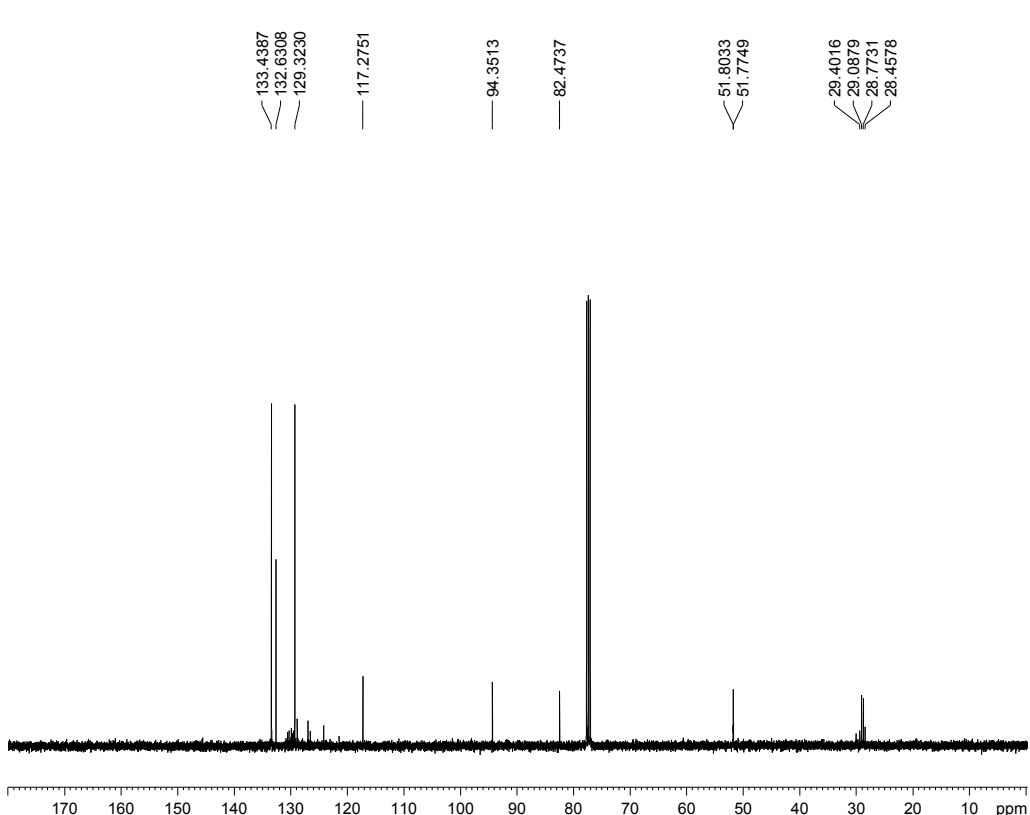
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Current Data Parameters
NAME ATX-63 prep
EXPNO 30
PROCNO 1

F2 - Acquisition Parameters
Date 20160226
Time 14.38
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9845889 sec
RG 147.88
DW 60.800 usec
DE 10.69 usec
TE 293.6 K
D1 2.0000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.0000000 W

F2 - Processing parameters
SI 32768
SF 400.1300099 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-63
EXPNO 71
PROCNO 1

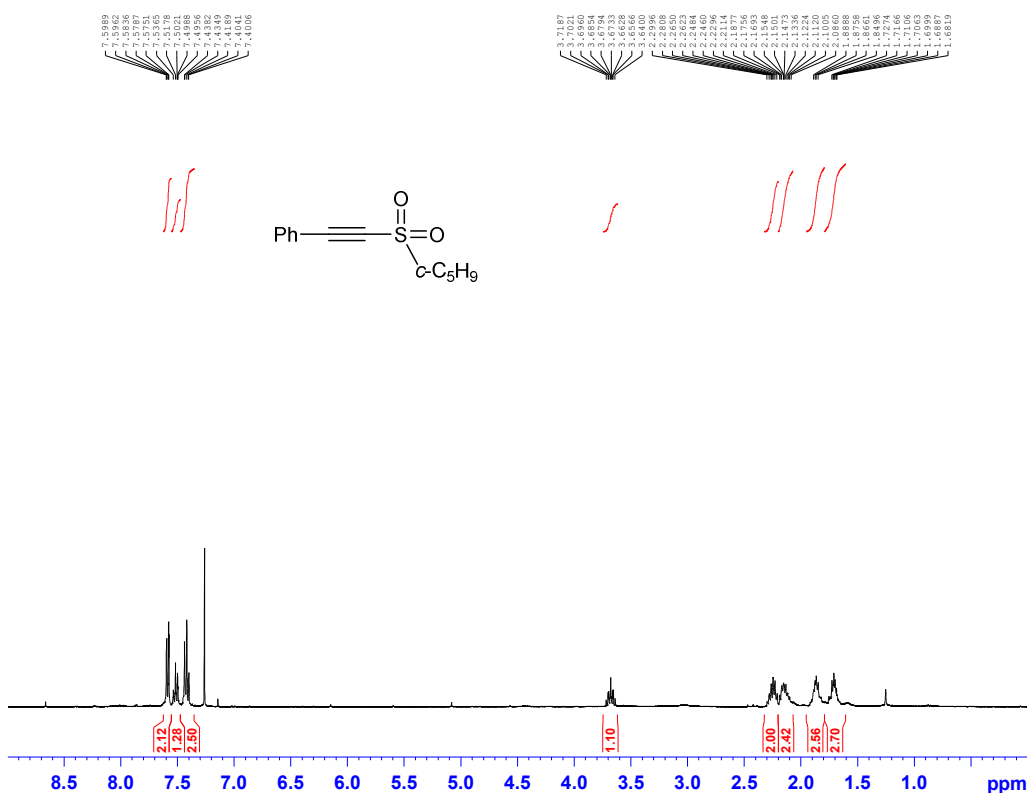
F2 - Acquisition Parameters
Date 20150218
Time 17.26
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 151.72
DW 20.800 usec
DE 8.18 usec
TE 294.1 K
D1 2.0000000 sec
D11 0.0300000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.0000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.0000000 W
PLW12 0.17587000 W
PLW13 0.14229999 W

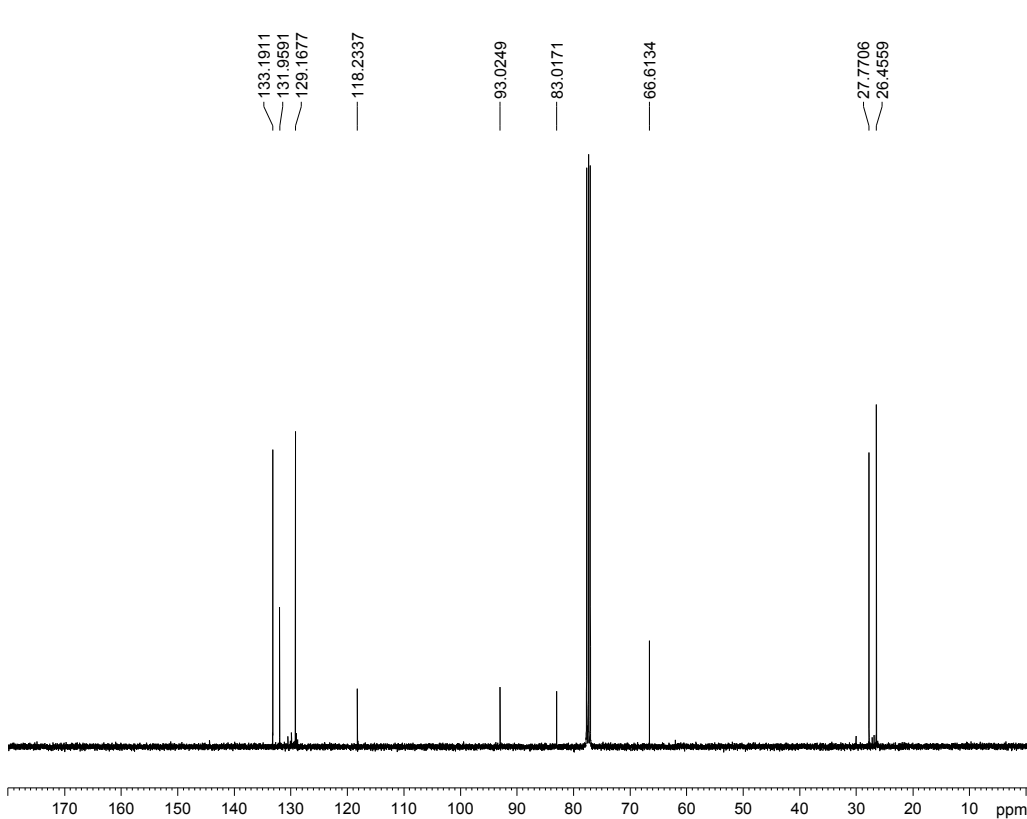
F2 - Processing parameters
SI 65536
SF 100.6127333 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of ((cyclopentylsulfonyl)ethynyl)benzene 5i



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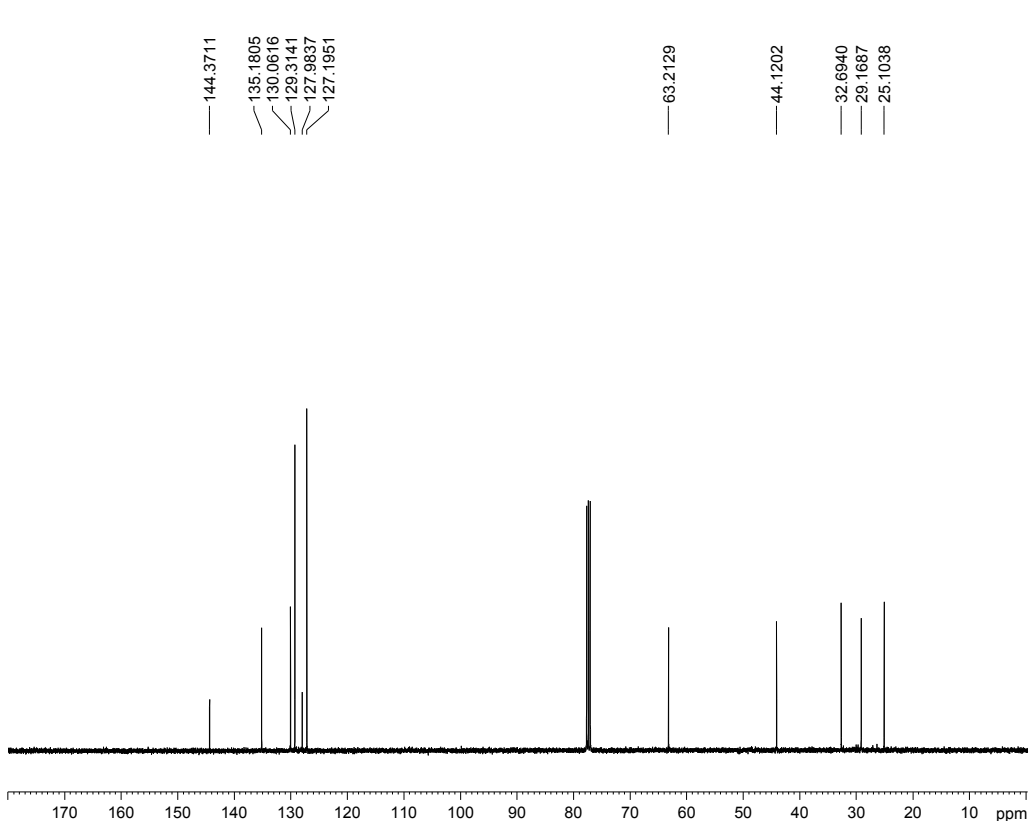
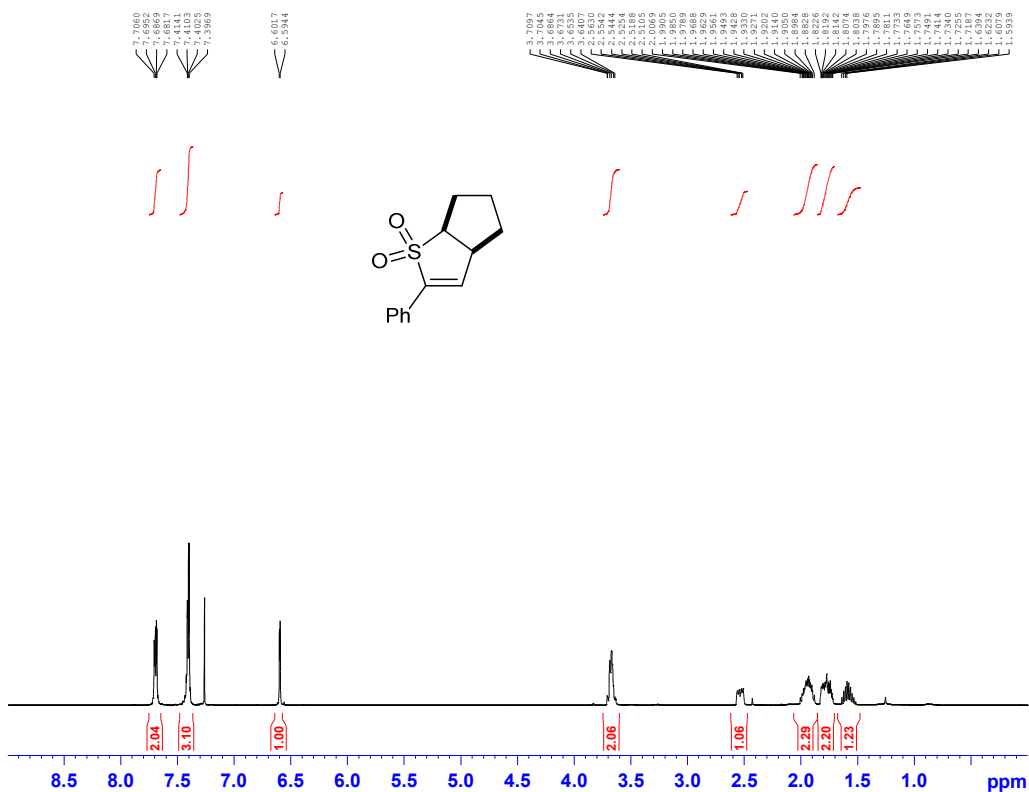
Current Data Parameters
NAME: ATK-54 t 8-9
EXPNO: 10
PROCNO: 1
F2 - Acquisition Parameters
Date_: 20160223
Time_: 12.04
INSTRUM: spect
PROBHD: 5 mm PABBO BB/
PULPROG: zg30
TD: 65536
SOLVENT: CDCl₃
NS: 16
DS: 4
SWH: 8223.685 Hz
FIDRES: 0.125483 Hz
AQ: 3.9845889 sec
RG: 147.88
DW: 60.800 usec
DE: 10.69 usec
TE: 293.6 K
D1: 2.00000000 sec
TDO: 1
----- CHANNEL f1 -----
SFO1: 400.1324710 MHz
NUC1: 1H
P1: 8.00 usec
PLW1: 24.00000000 W
F2 - Processing parameters
SI: 32768
SF: 400.1300087 MHz
WDW: EM
SSB: 0
LB: 0.30 Hz
GB: 0
PC: 1.50



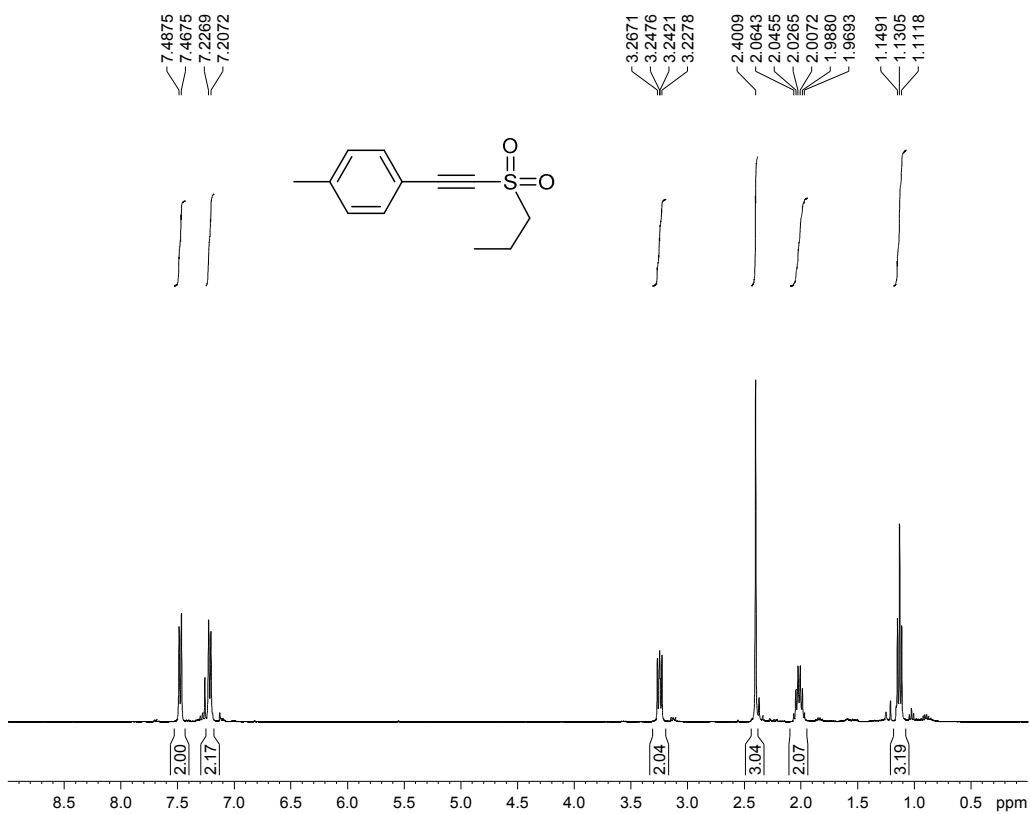
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Current Data Parameters
NAME: ATK-54
EXPNO: 60
PROCNO: 1
F2 - Acquisition Parameters
Date_: 20140610
Time_: 2.57
INSTRUM: spect
PROBHD: 5 mm PABBO BB/
PULPROG: zgpg30
TD: 65536
SOLVENT: CDCl₃
NS: 1024
DS: 4
SWH: 24038.461 Hz
FIDRES: 0.366798 Hz
AQ: 1.3631488 sec
RG: 181.72
DW: 20.800 usec
DE: 8.18 usec
TE: 294.5 K
D1: 2.00000000 sec
D11: 0.03000000 sec
TDO: 1
----- CHANNEL f1 -----
SFO1: 100.6228284 MHz
NUC1: 13C
P1: 9.00 usec
PLW1: 77.00000000 W
----- CHANNEL f2 -----
SFO2: 400.1316005 MHz
NUC2: 1H
CPDPRG2: waltz16
PCPD2: 90.00 usec
PLW2: 24.00000000 W
PLW12: 0.17567000 W
PLW13: 0.14229999 W
F2 - Processing parameters
SI: 65536
SF: 100.6127333 MHz
WDW: EM
SSB: 0
LB: 0.50 Hz
GB: 0
PC: 1.40

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NMR spectra of 1-methyl-4-((propylsulfonyl)ethynyl)benzene 8



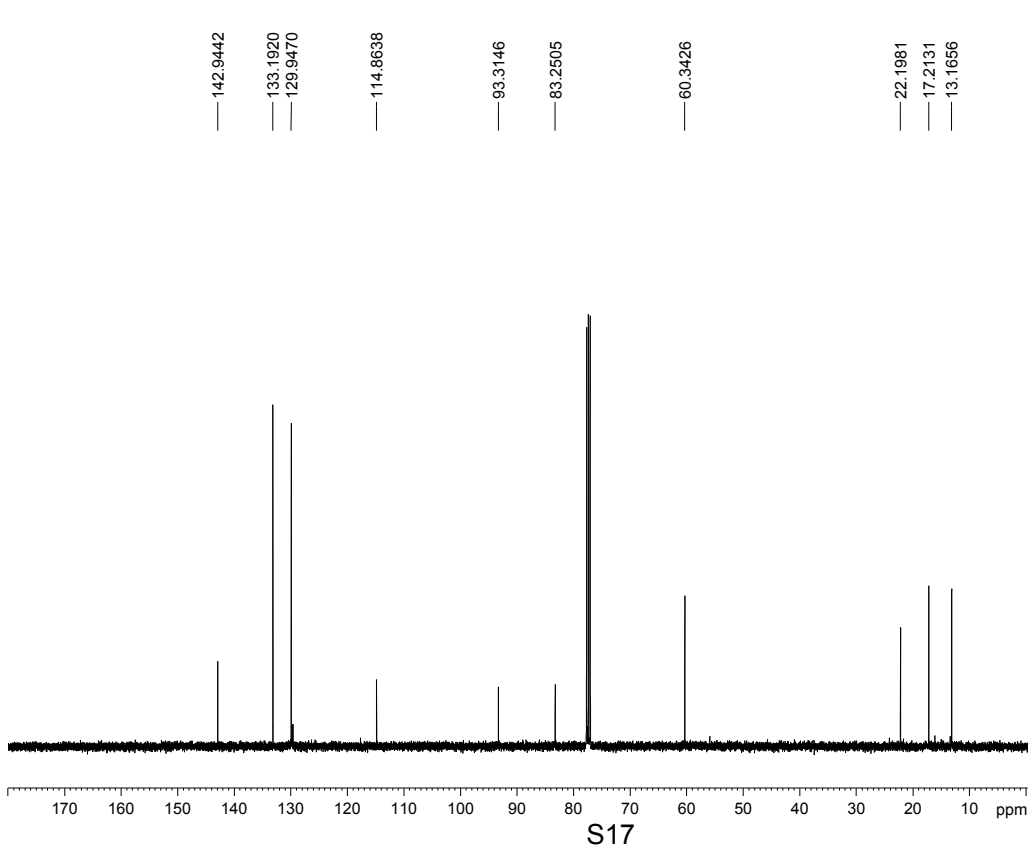
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Current Data Parameters
NAME ATX-193
EXPNO 20
PROCNO 1

F2 - Acquisition Parameters
Date 20150217
Time 11.46
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 3.9845889 sec
RG 81.67
SW 60.800 usec
DE 10.69 usec
TE 293.7 K
D1 2.00000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300095 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-193
EXPNO 21
PROCNO 1

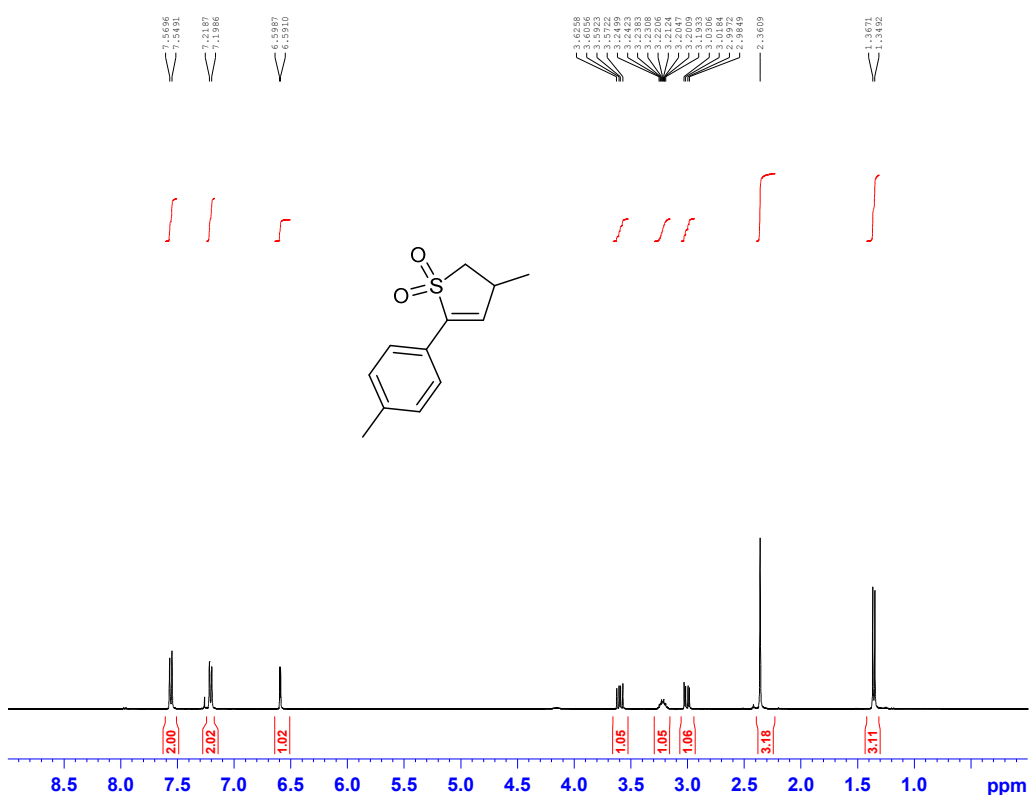
F2 - Acquisition Parameters
Date 20150217
Time 12.02
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLM2 24.00000000 W
PLM12 0.17567000 W
PLM13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127343 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of Synthesis of 3-methyl-5-(p-tolyl)-2,3-dihydrothiophene 1,1-dioxide 9



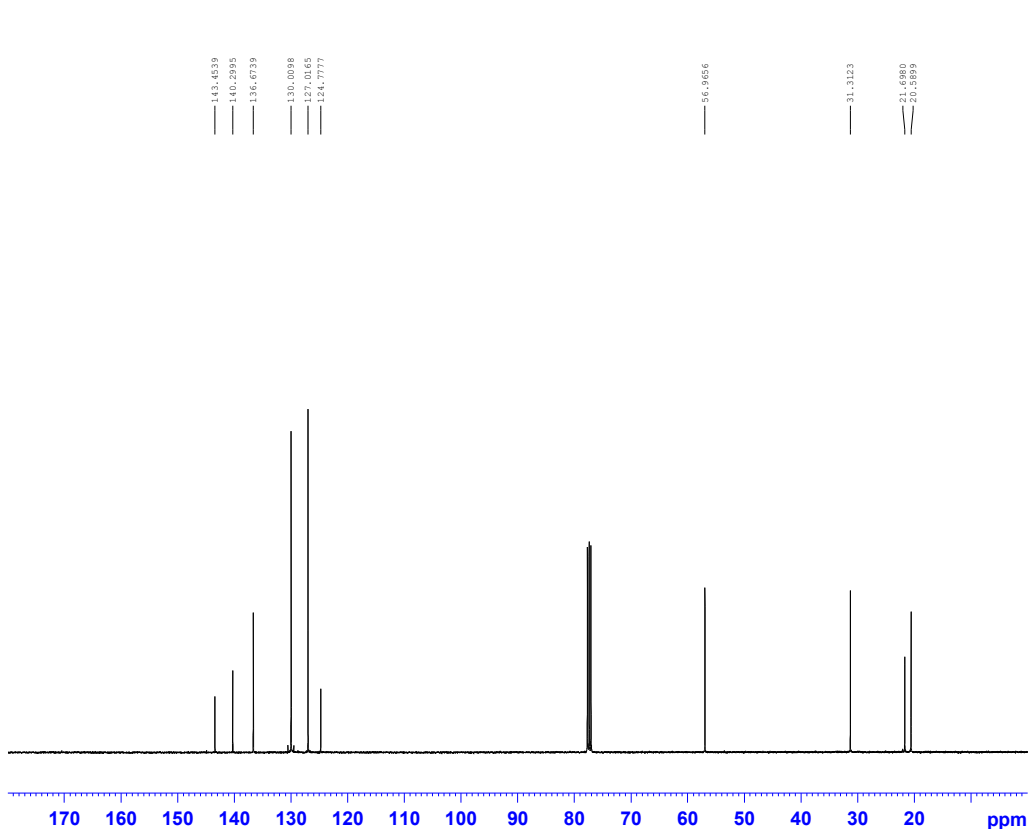
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Current Data Parameters
NAME ATX-193 t 16-32
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20160223
Time_ 12.14
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 3.9845889 sec
RG 40.16
DW 60.800 usec
DE 10.69 usec
TE 293.6 K
D1 2.00000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300087 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-193 t 16-32
EXPNO 20
PROCNO 1

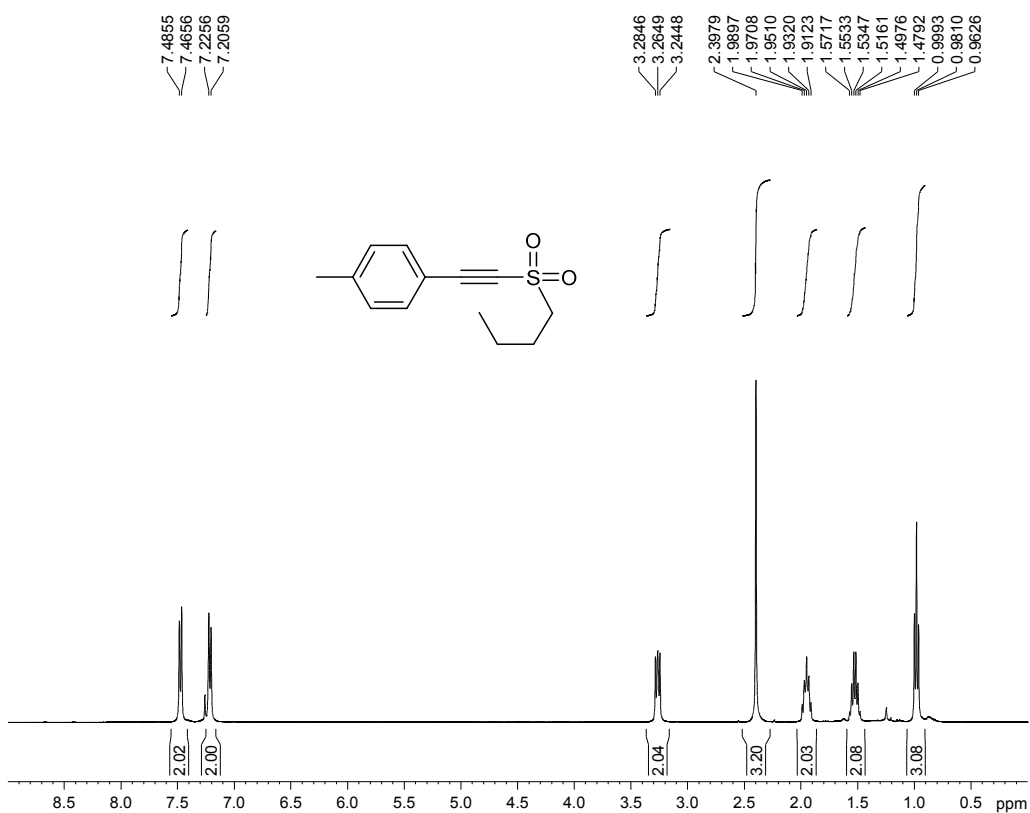
F2 - Acquisition Parameters
Date_ 20160224
Time_ 5.09
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228303 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17967000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127381 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

NMR spectra of 1-((butylsulfonyl)ethynyl)-4-methylbenzene 10



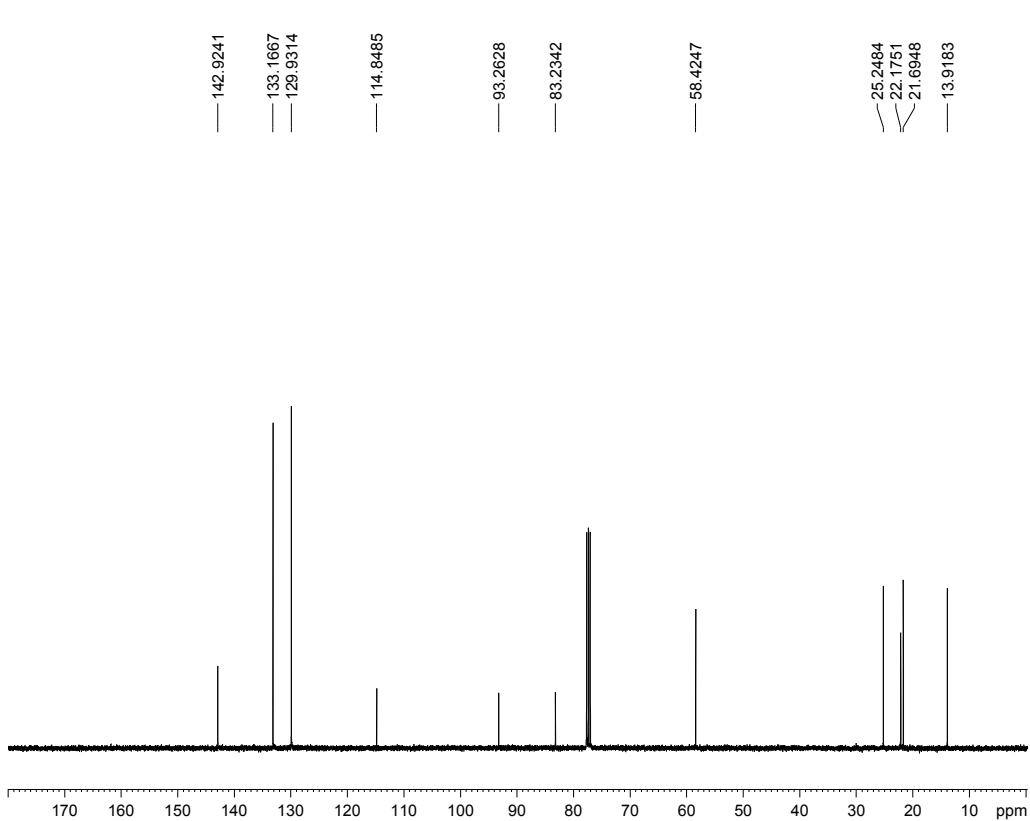
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Current Data Parameters
NAME ATK-194
EXPNO 70
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150218
Time_ 16.50
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 3.9845889 sec
RG 40.16
DW 60.800 usec
DE 10.169 usec
TE 293.6 K
D1 2.00000000 sec
D0 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300095 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATK-194
EXPNO 71
PROCNO 1

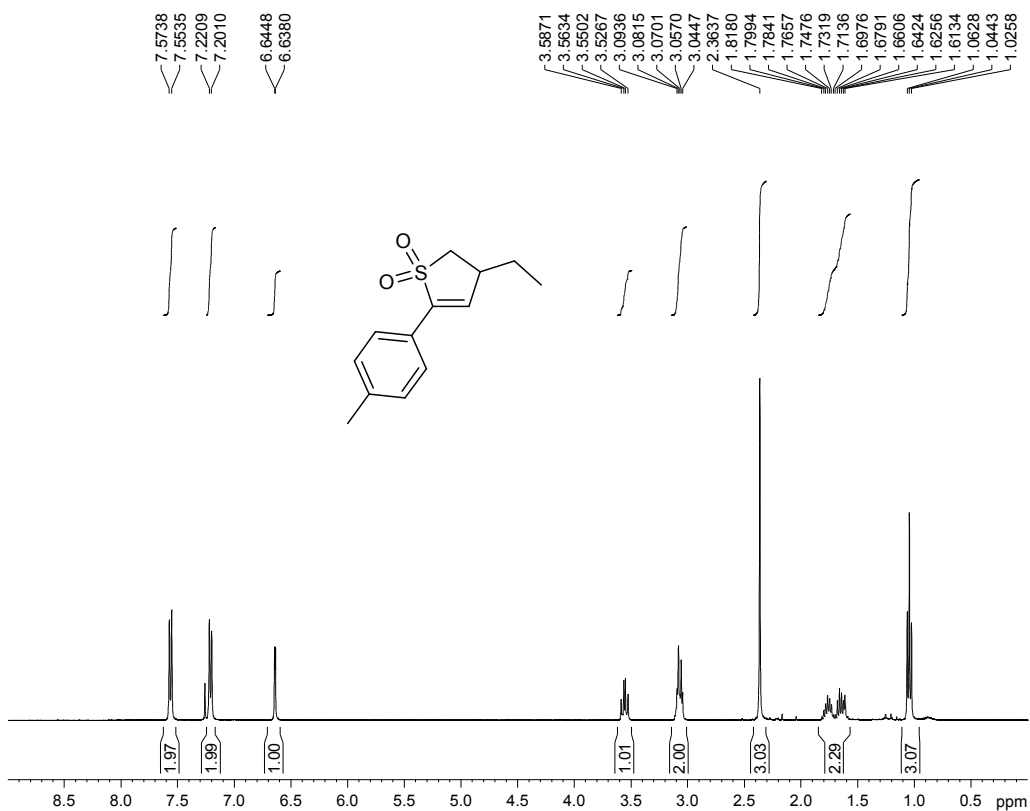
F2 - Acquisition Parameters
Date_ 20150218
Time_ 17.06
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.1 K
D1 2.00000000 sec
D11 0.03000000 sec
D0 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CFDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127364 MHz
WDW DM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 3-ethyl-5-(p-tolyl)-2,3-dihydrothiophene 1,1-dioxide 11



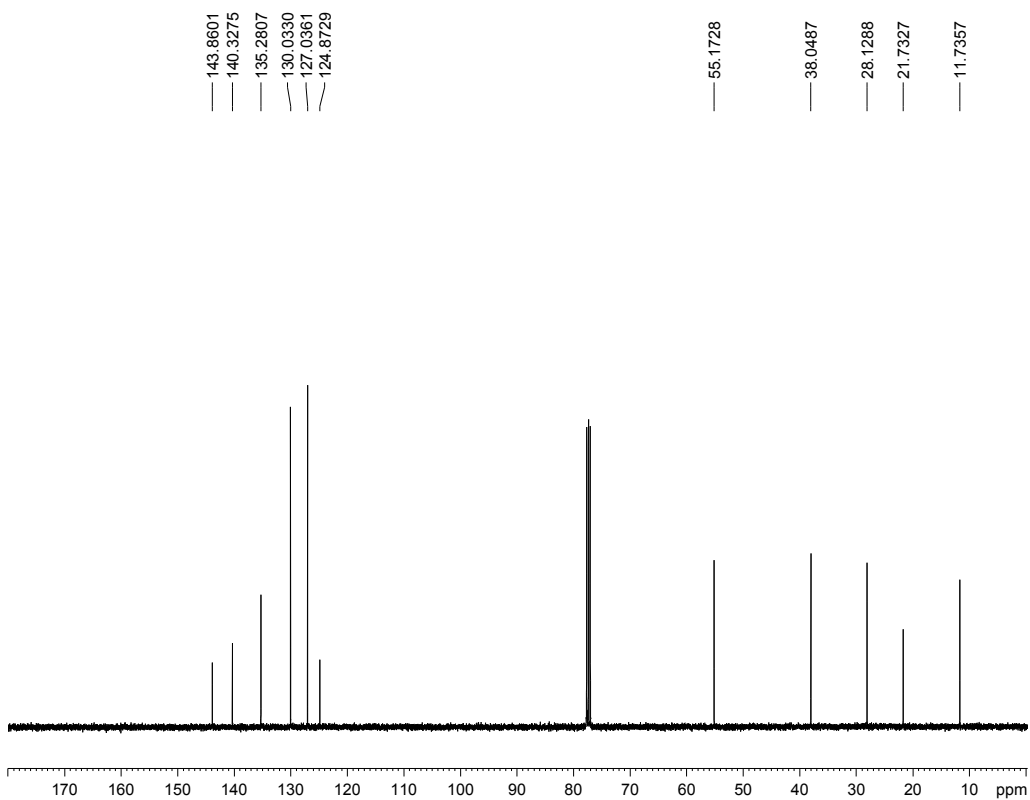
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Current Data Parameters
NAME ATK-194
EXPNO 30
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150216
Time_ 17.42
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 3.9845889 sec
RG 50.36
DW 60.800 usec
DE 10.169 usec
TE 293.7 K
D1 2.00000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300095 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATK-194
EXPNO 31
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150216
Time_ 17.57
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CFDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127358 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 1-(tert-butyl)-4-((propylsulfonyl)ethynyl)benzene 13



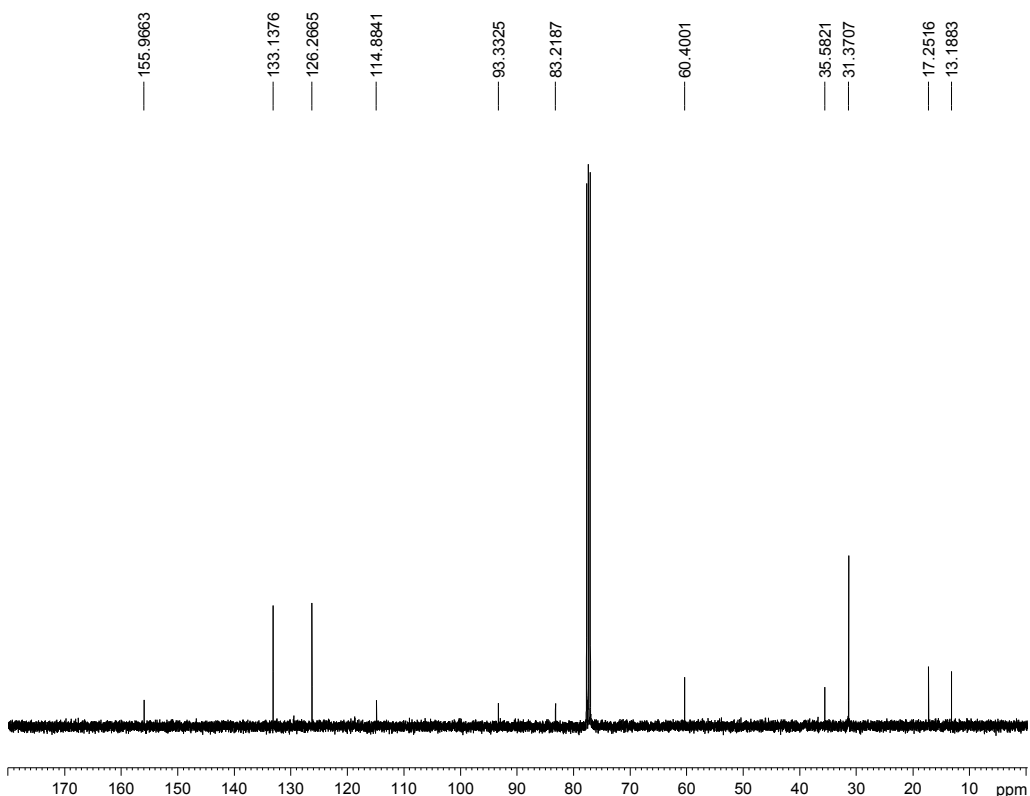
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Current Data Parameters
NAME: ATK-187
EXPNO: 20
PROCNO: 1

F2 - Acquisition Parameters
Date_: 20150209
Time: 11.40
INSTRUM: spect
PROBHD: 5 mm PABBO BB/
PULPROG: zg30
TD: 65536
SOLVENT: CDCl3
NS: 16
DS: 2
SWH: 8223.665 Hz
FIDRES: 0.125483 Hz
AQ: 3.9845889 sec
RG: 147.88
DW: 60.800 usec
DE: 10.69 usec
TE: 293.5 K
D1: 2.00000000 sec
TDO: 1

----- CHANNEL f1 -----
SFO1: 400.1324710 MHz
NUC1: 1H
P1: 8.00 usec
PLW1: 24.00000000 W

F2 - Processing parameters
SI: 32768
SF: 400.1300097 MHz
WDW: EM
SSB: 0
LB: 0.30 Hz
GB: 0
PC: 1.50



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Current Data Parameters
NAME: ATK-187
EXPNO: 50
PROCNO: 1

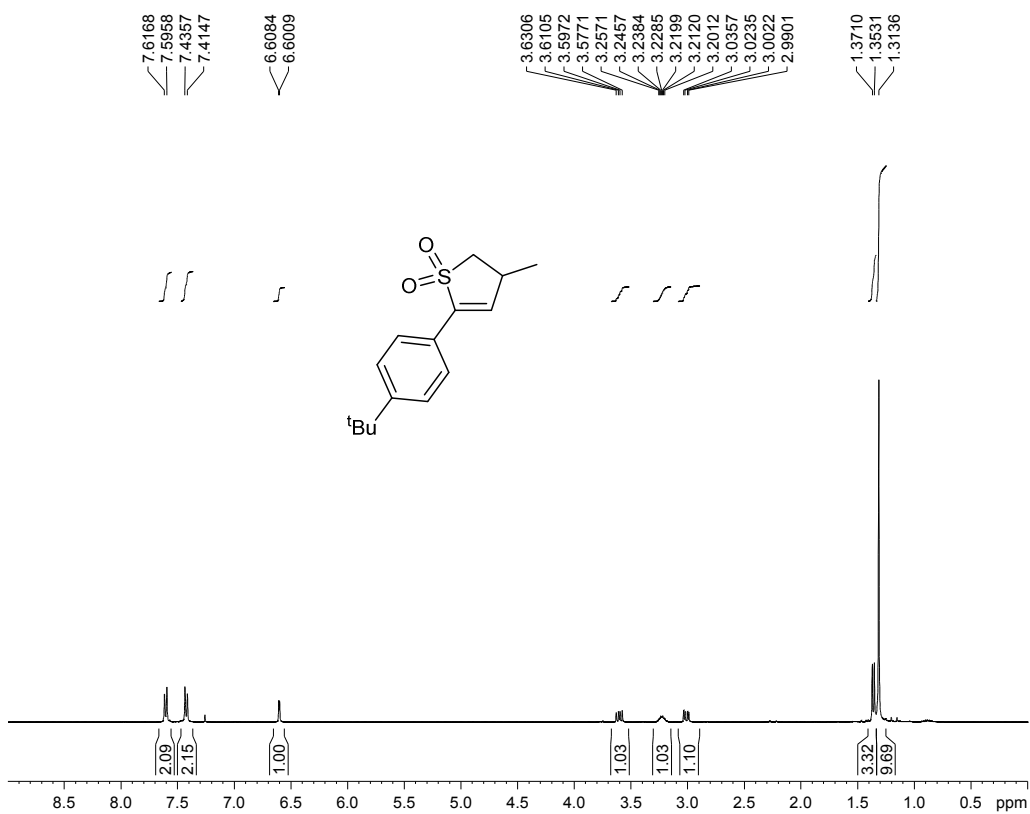
F2 - Acquisition Parameters
Date_: 20150209
Time: 13.22
INSTRUM: spect
PROBHD: 5 mm PABBO BB/
PULPROG: zgpg30
TD: 65536
SOLVENT: CDCl3
NS: 256
DS: 4
SWH: 24038.461 Hz
FIDRES: 0.366798 Hz
AQ: 1.3631488 sec
RG: 181.72
DW: 20.800 usec
DE: 8.18 usec
TE: 294.1 K
D1: 2.00000000 sec
D11: 0.03000000 sec
TDO: 1

----- CHANNEL f1 -----
SFO1: 100.6228284 MHz
NUC1: 13C
P1: 9.00 usec
PLW1: 77.00000000 W

----- CHANNEL f2 -----
SFO2: 400.1316005 MHz
NUC2: 1H
PCPD2: waltz16
PCPD2: 90.00 usec
PLW2: 24.00000000 W
PLW12: 0.17507000 W
PLW13: 0.14229999 W

F2 - Processing parameters
SI: 65536
SF: 100.6127321 MHz
WDW: EM
SSB: 0
LB: 0.50 Hz
GB: 0
PC: 1.40

NMR spectra of 5-(4-(tert-butyl)phenyl)-3-methyl-2,3-dihydrothiophene 1,1-dioxide 14



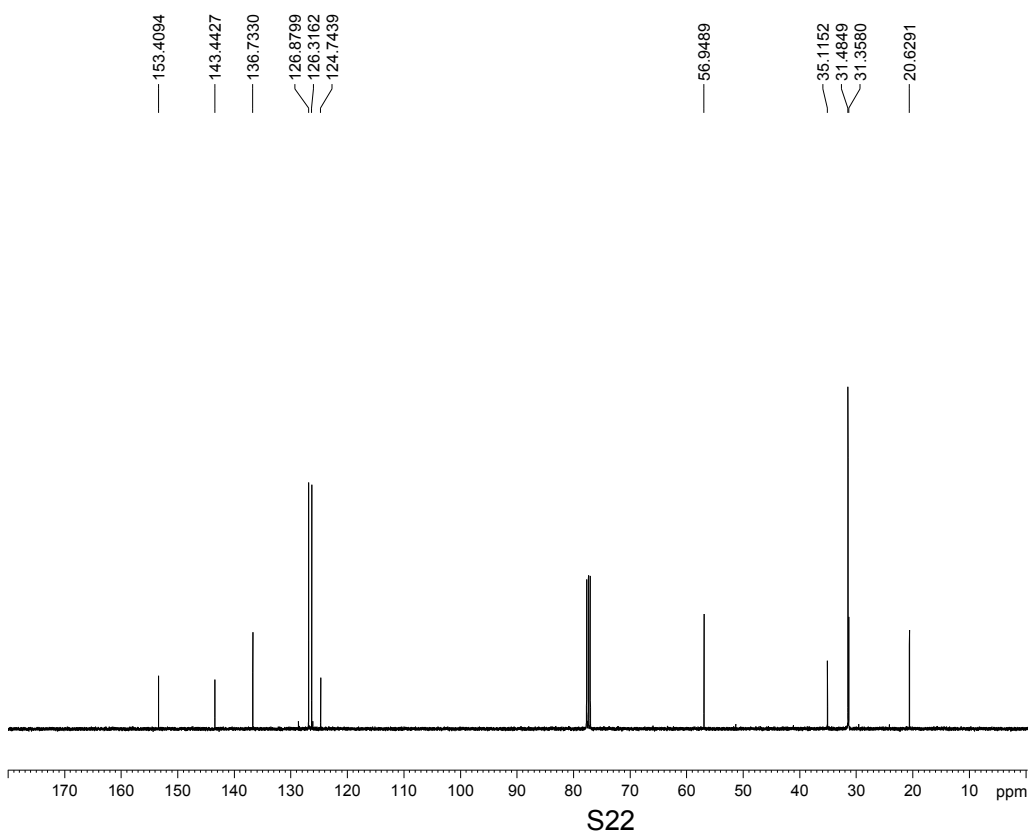
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Current Data Parameters
NAME ATX-187
EXPNO 40
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150209
Time 11.48
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 3.9845889 sec
RG 35.7
DW 60.800 usec
DE 10.69 usec
TE 293.5 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-187
EXPNO 41
PROCNO 1

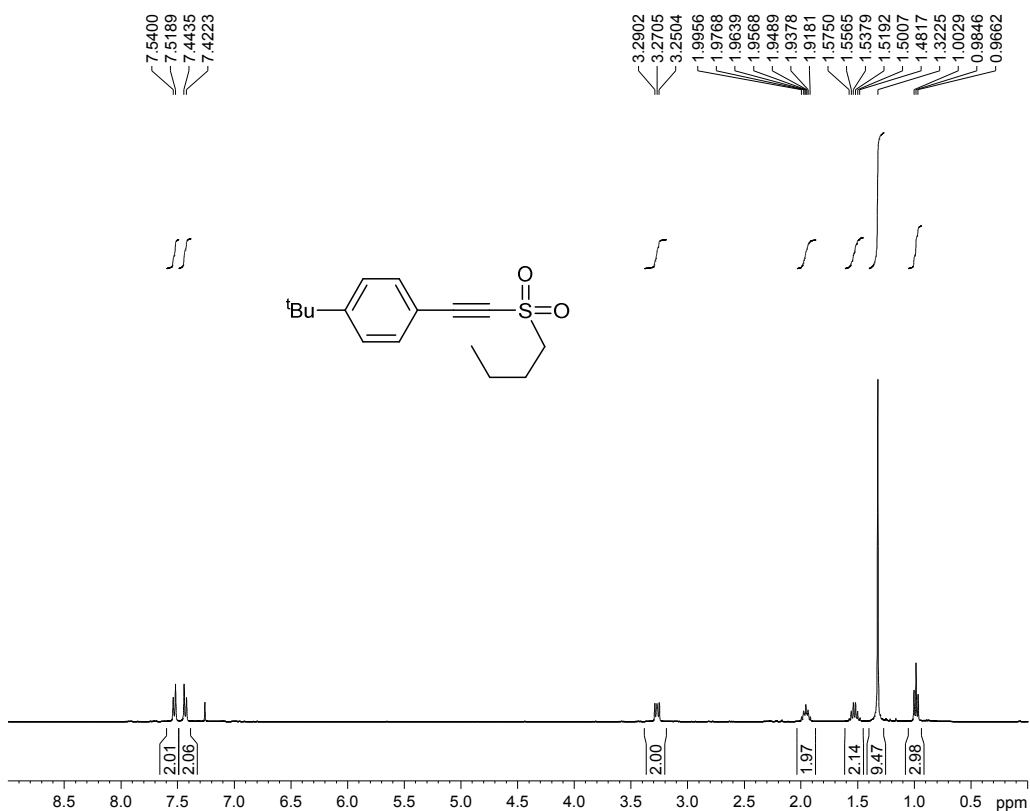
F2 - Acquisition Parameters
Date_ 20150209
Time 12.04
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127378 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 1-(tert-butyl)-4-((butylsulfonyl)ethynyl)benzene **15**



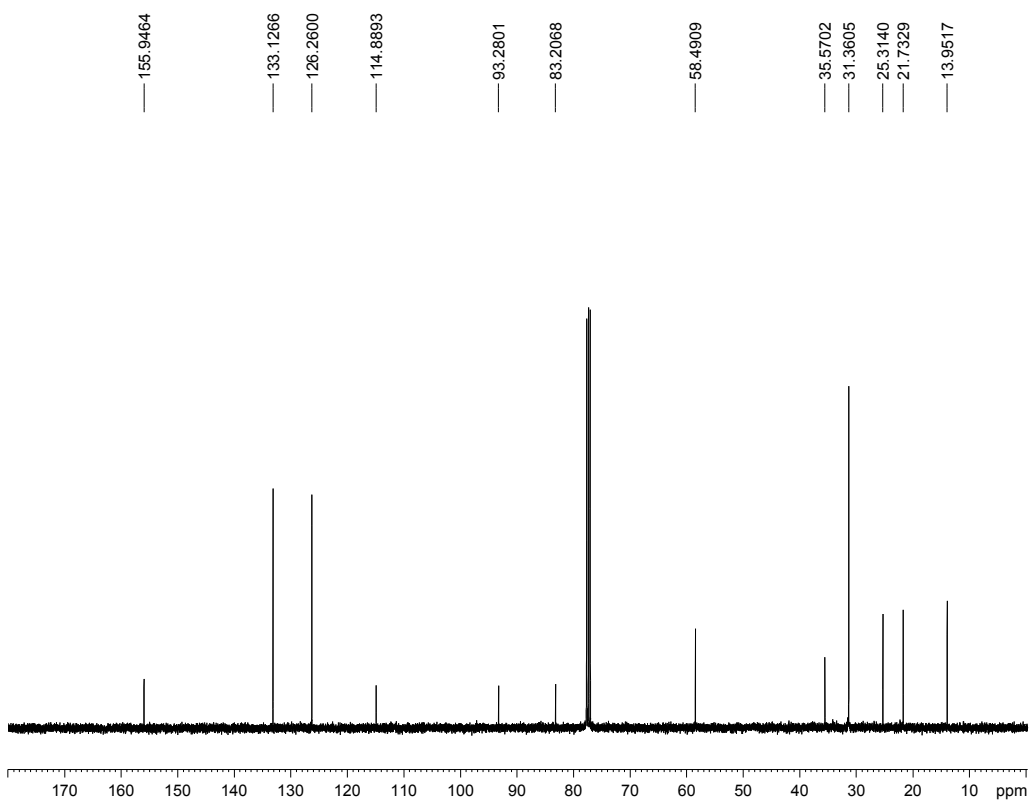
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Current Data Parameters
NAME ATX-188
EXPNO 40
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150210
Time 16.59
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 3.9845889 sec
RG 81.67
DW 60.800 usec
DE 10.69 usec
TE 293.7 K
D1 2.00000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-188
EXPNO 41
PROCNO 1

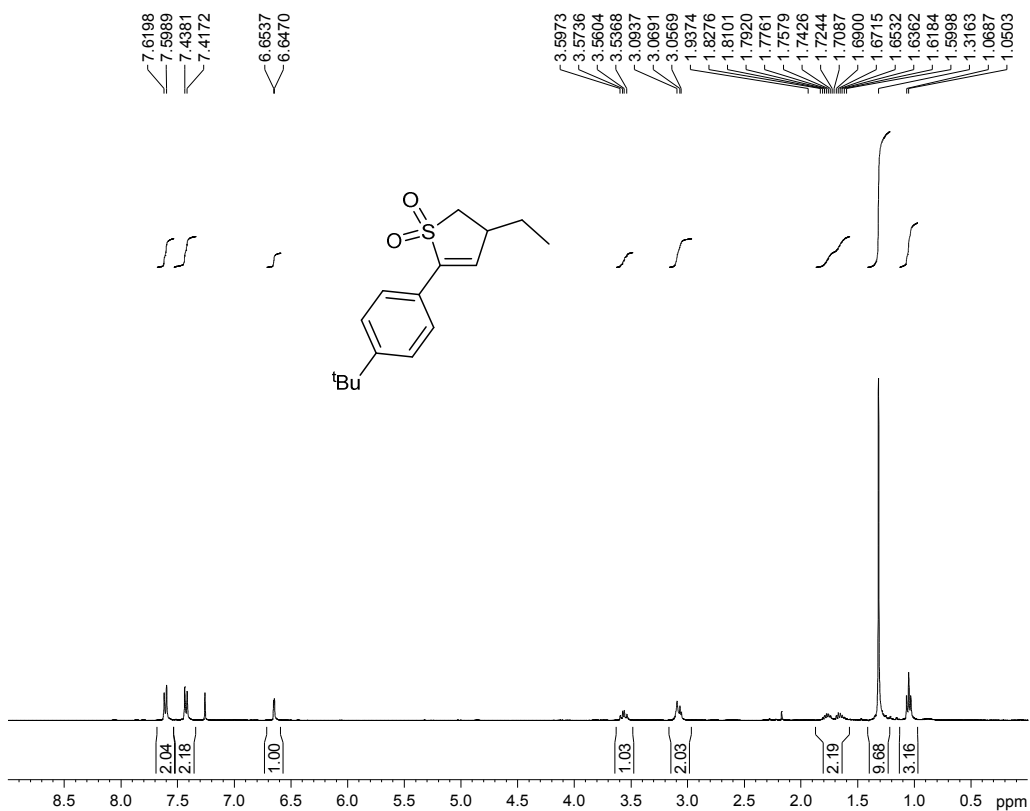
F2 - Acquisition Parameters
Date_ 20150210
Time 17.14
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127332 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 5-(4-(tert-butyl)phenyl)-3-ethyl-2,3-dihydrothiophene 1,1-dioxide 16



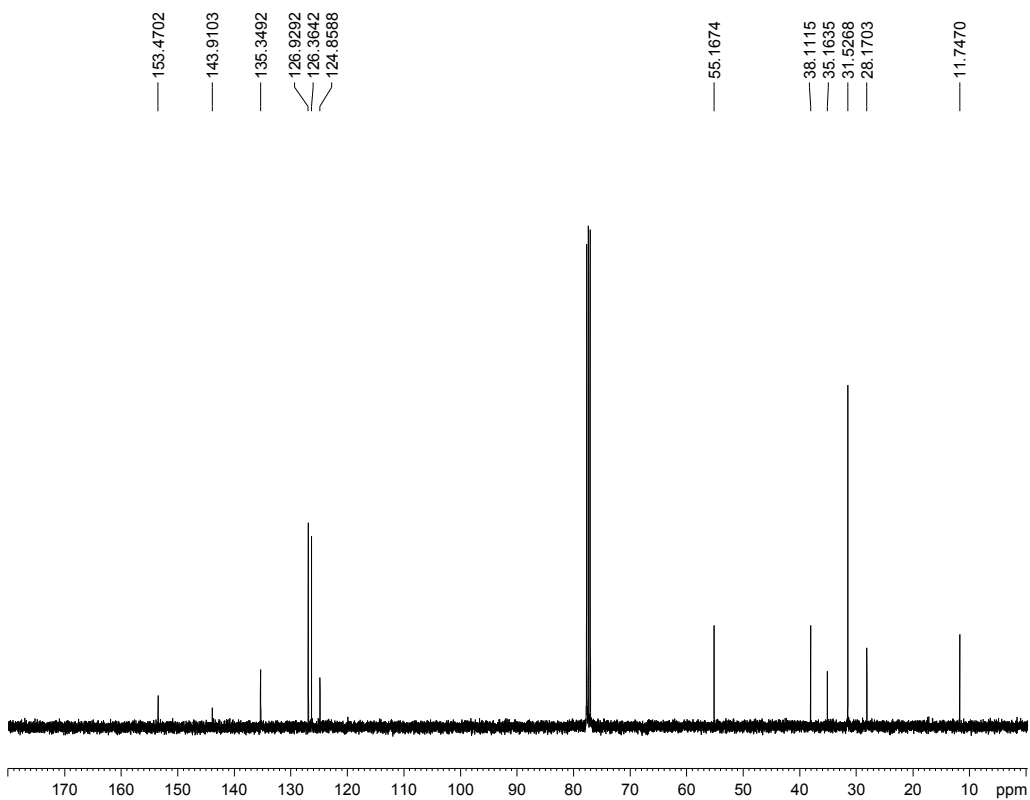
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Current Data Parameters
NAME ATK-188
EXPNO 50
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150210
Time_ 17.19
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 3.9845889 sec
RG 104.33
DW 60.800 usec
DE 10.69 usec
TE 293.7 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300098 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATK-188
EXPNO 51
PROCNO 1

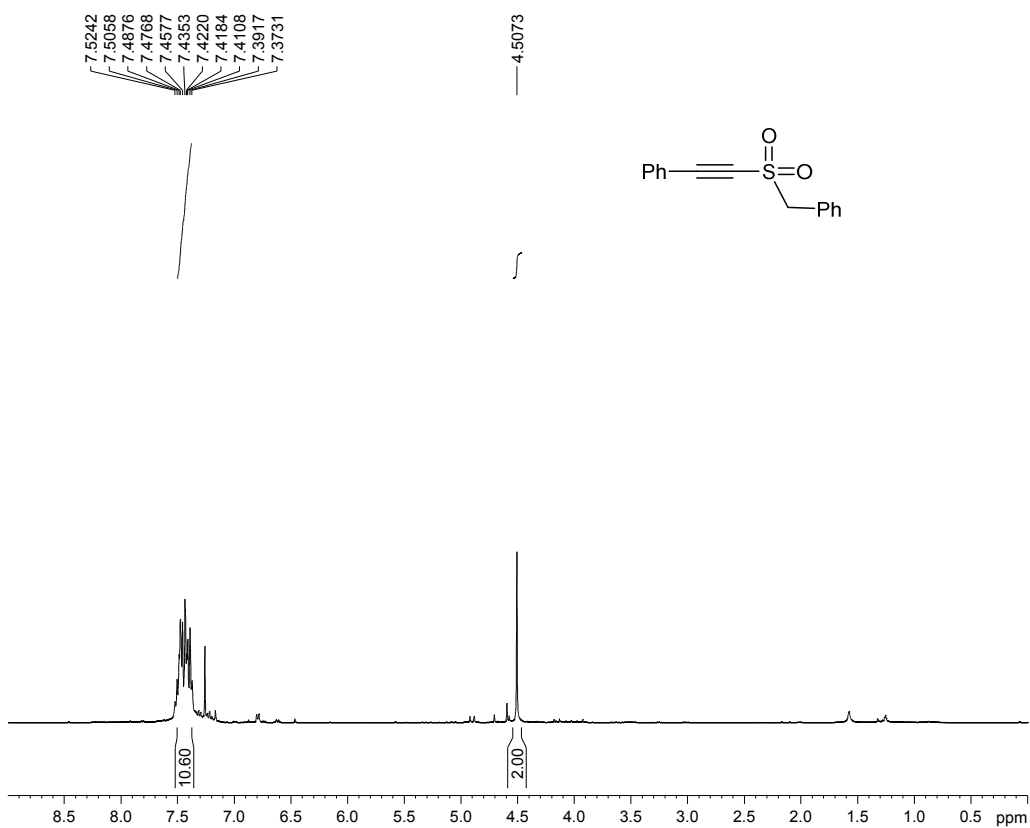
F2 - Acquisition Parameters
Date_ 20150210
Time_ 17.34
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CFDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127329 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of ((benzylsulfonyl)ethynyl)benzene 5j



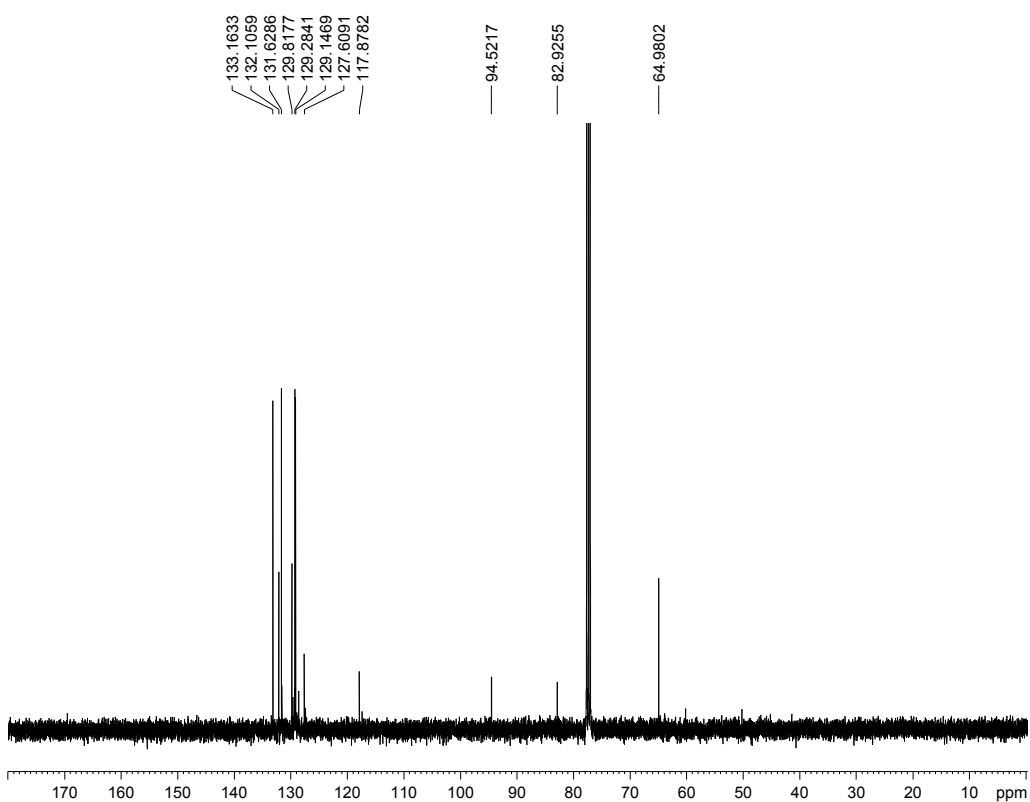
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Current Data Parameters
NAME ATX-191
EXPNO 60
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150213
Time 16.27
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9845889 sec
RG 147.88
DW 60.800 usec
DE 10.69 usec
TE 293.7 K
D1 2.00000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATX-191
EXPNO 61
PROCNO 1

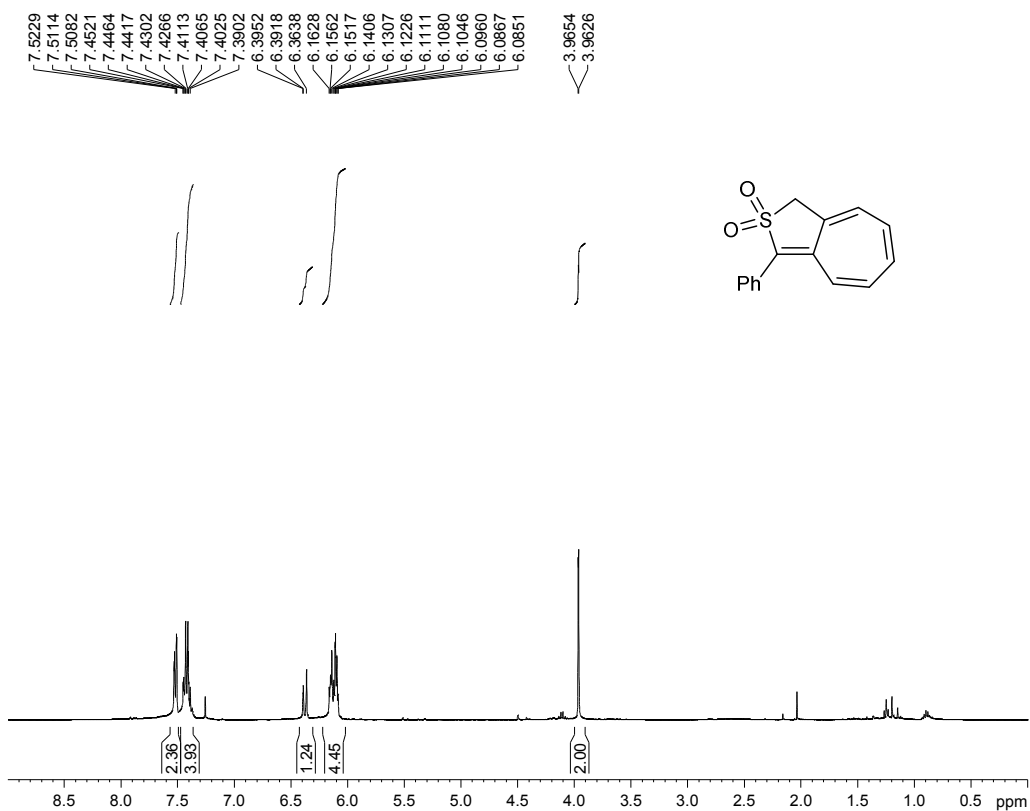
F2 - Acquisition Parameters
Date_ 20150213
Time 16.42
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 80.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127332 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 3-phenyl-1H-cyclohepta[c]thiophene 2,2-dioxide 17



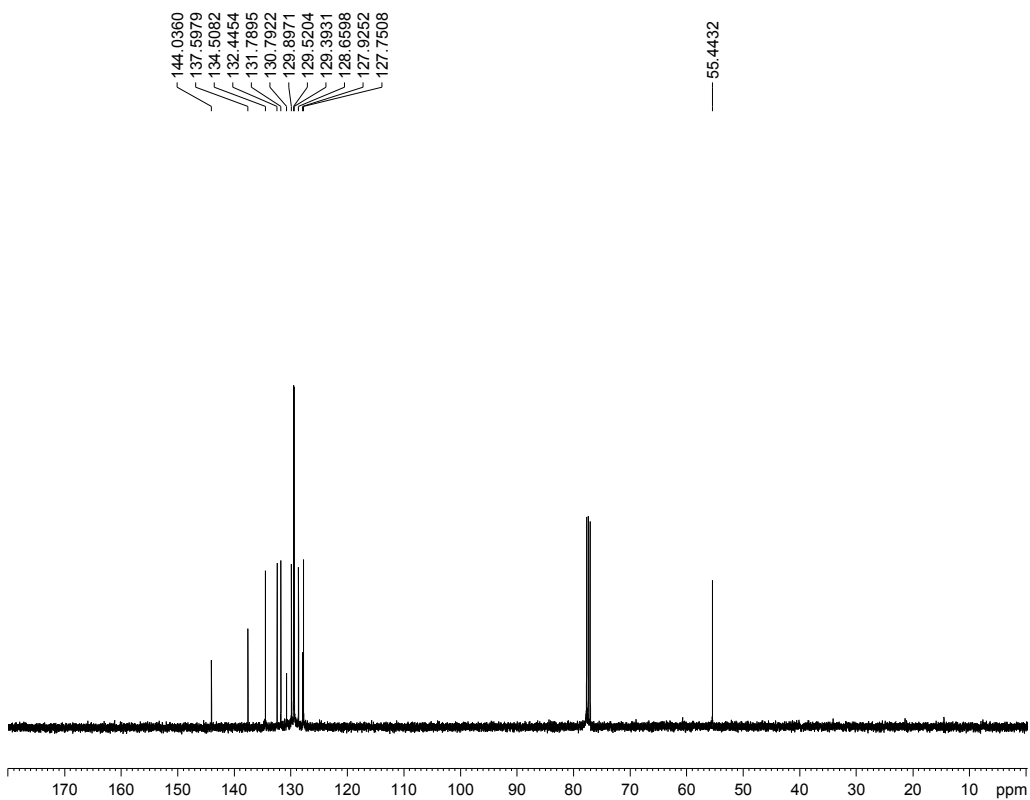
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Current Data Parameters
NAME ATK-146
EXPNO 20
PROCNO 1

F2 - Acquisition Parameters
Date_ 20141119
Time_ 15.45
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 3.9845889 sec
RG 46.39
DW 60.800 usec
DE 10.69 usec
TE 294.0 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300111 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATK-146
EXPNO 21
PROCNO 1

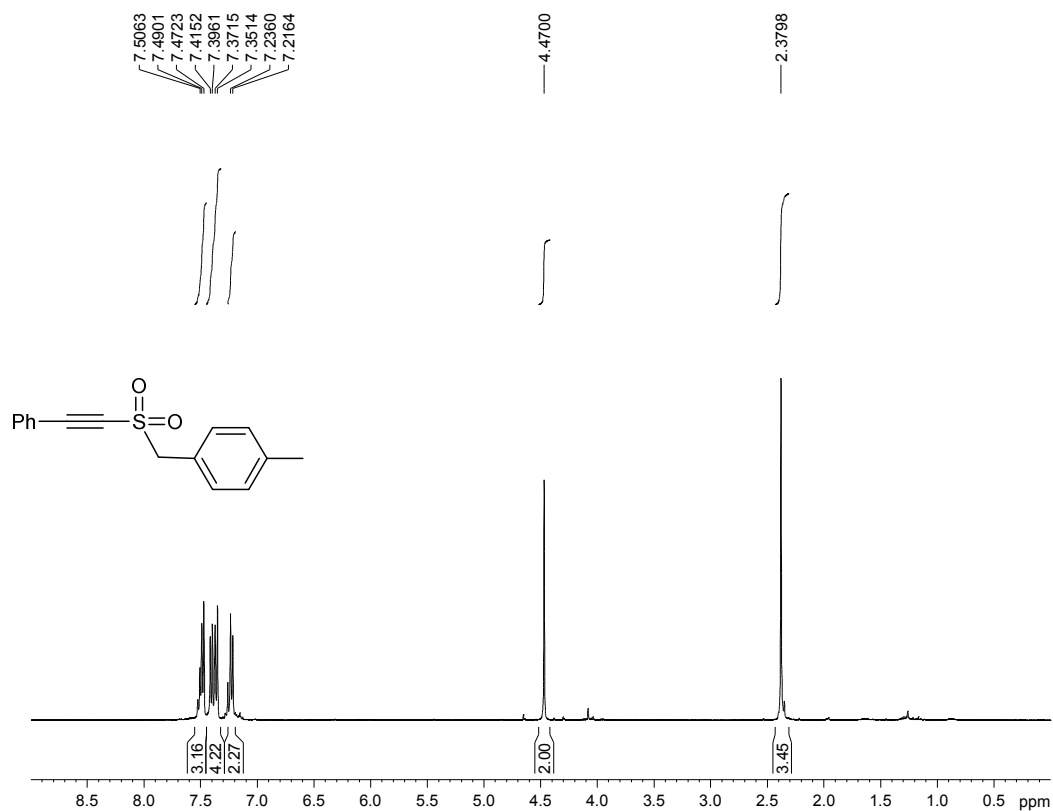
F2 - Acquisition Parameters
Date_ 20141119
Time_ 16.01
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.4 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CFDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.17567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127368 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 1-methyl-4-(((phenylethynyl)sulfonyl)methyl)benzene 5k

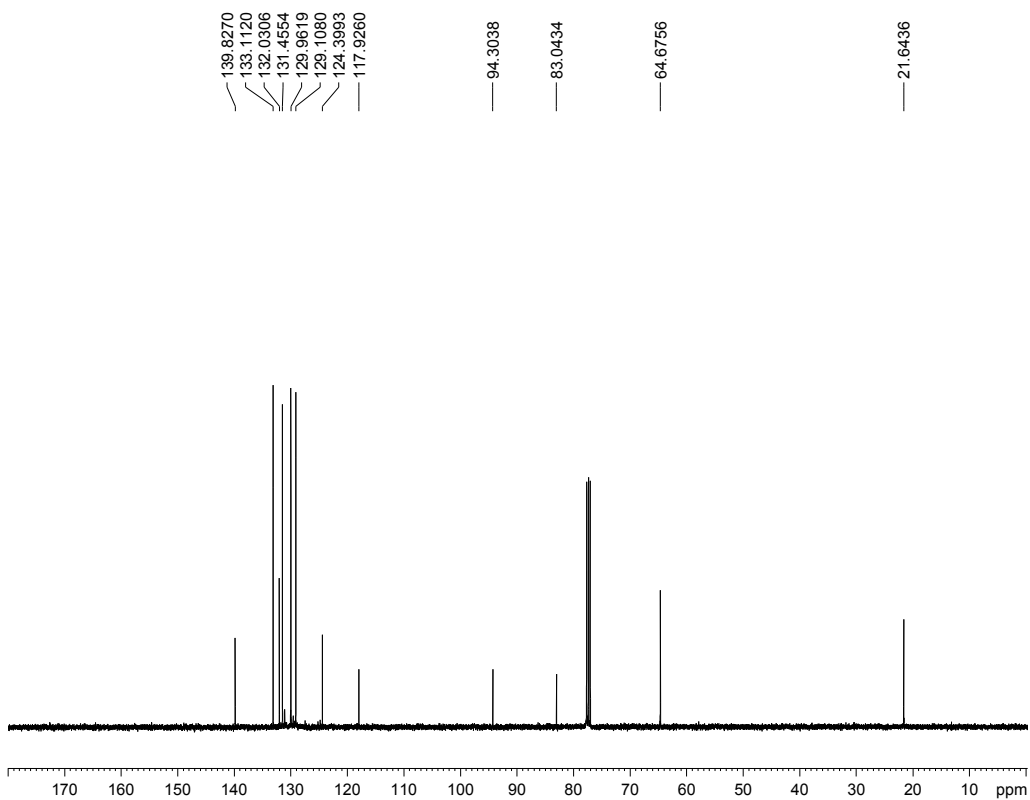


Current Data Parameters
NAME ATK-169
EXPNO 20
PROCNO 1

F2 - Acquisition Parameters
Date_ 20141205
Time_ 10.13
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 3.984589 sec
RG 46.39
DW 60.800 usec
DE 10.69 usec
TE 293.9 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300098 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



Current Data Parameters
NAME ATK-169
EXPNO 21
PROCNO 1

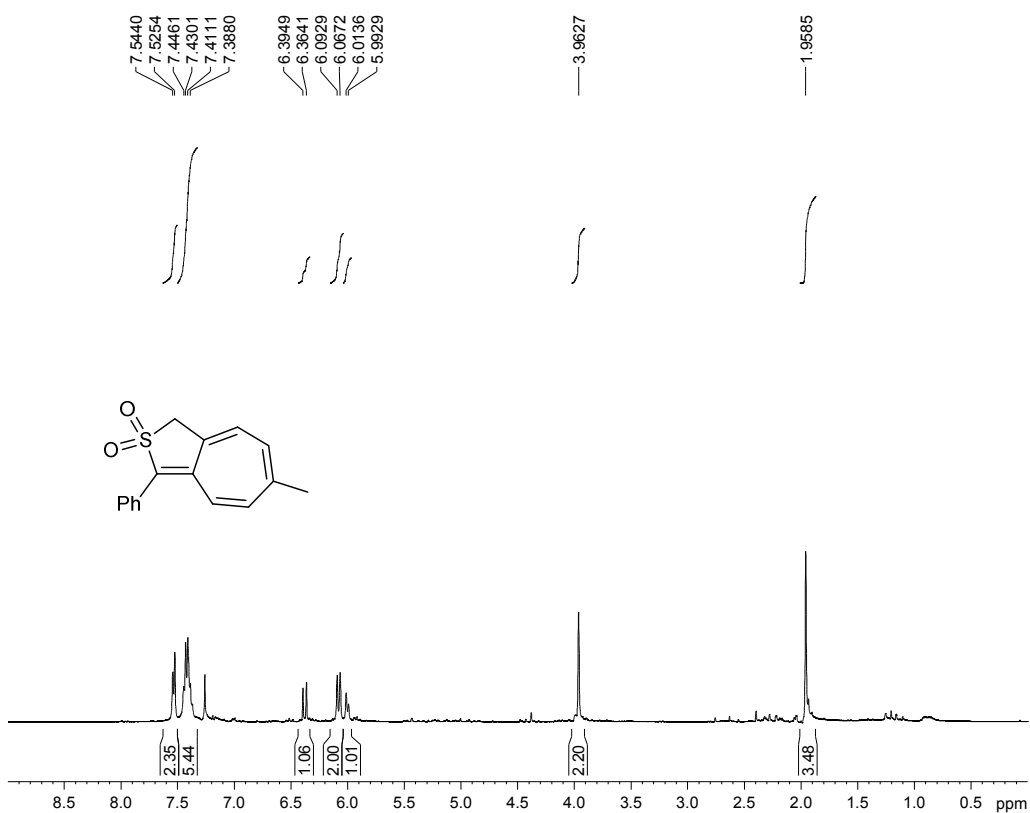
F2 - Acquisition Parameters
Date_ 20141205
Time_ 11.29
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SFO2 400.1316005 MHz
NUC2 1H
CFDPRG2 waltz16
PCPD2 90.00 usec
PLW2 24.00000000 W
PLW12 0.11567000 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127374 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40

NMR spectra of 6-methyl-3-phenyl-1H-cyclohepta[c]thiophene 2,2-dioxide 18



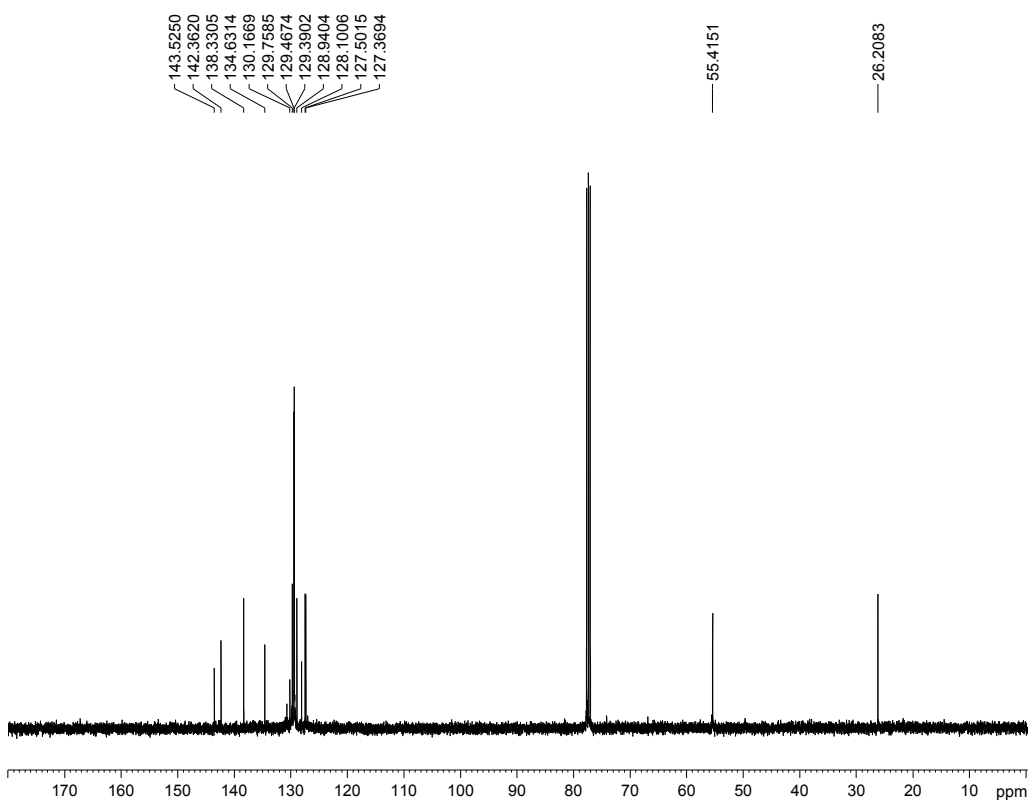
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Current Data Parameters
NAME ATK-197
EXPNO 80
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150220
Time_ 11.55
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 3.9845889 sec
RG 65.91
DW 60.800 usec
DE 10.69 usec
TE 293.8 K
D1 2.00000000 sec
TD0 1

----- CHANNEL f1 -----
SF01 400.1324710 MHz
NUC1 1H
P1 8.00 usec
PLW1 24.00000000 W

F2 - Processing parameters
SI 32768
SF 400.1300094 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50



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Current Data Parameters
NAME ATK-197
EXPNO 81
PROCNO 1

F2 - Acquisition Parameters
Date_ 20150220
Time_ 12.10
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 24038.461 Hz
FIDRES 0.366788 Hz
AQ 1.3631488 sec
RG 181.72
DW 20.800 usec
DE 8.18 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SF01 100.6228284 MHz
NUC1 13C
P1 9.00 usec
PLW1 77.00000000 W

----- CHANNEL f2 -----
SF02 400.1316005 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 80.00 usec
PLW2 24.00000000 W
PLW12 0.17567050 W
PLW13 0.14229999 W

F2 - Processing parameters
SI 65536
SF 100.6127369 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40