

Supporting information

ⁿBu₄NPF₆ Promoted Regioselective Cascade Synthesis of Functionally Embellished Naphthofurans under Acid, Metal & Solvent Free Conditions

Abhishek Pareek,[†] Ravikrishna Dada[†] Monika Rana,[†] Anuj K Sharma,[†] and Srinivasarao Yaragorla,^{*,†}

Department of Chemistry, Central University of Rajasthan, NH-8, Bandersindri, Ajmer-district, Rajasthan, 305817,
India

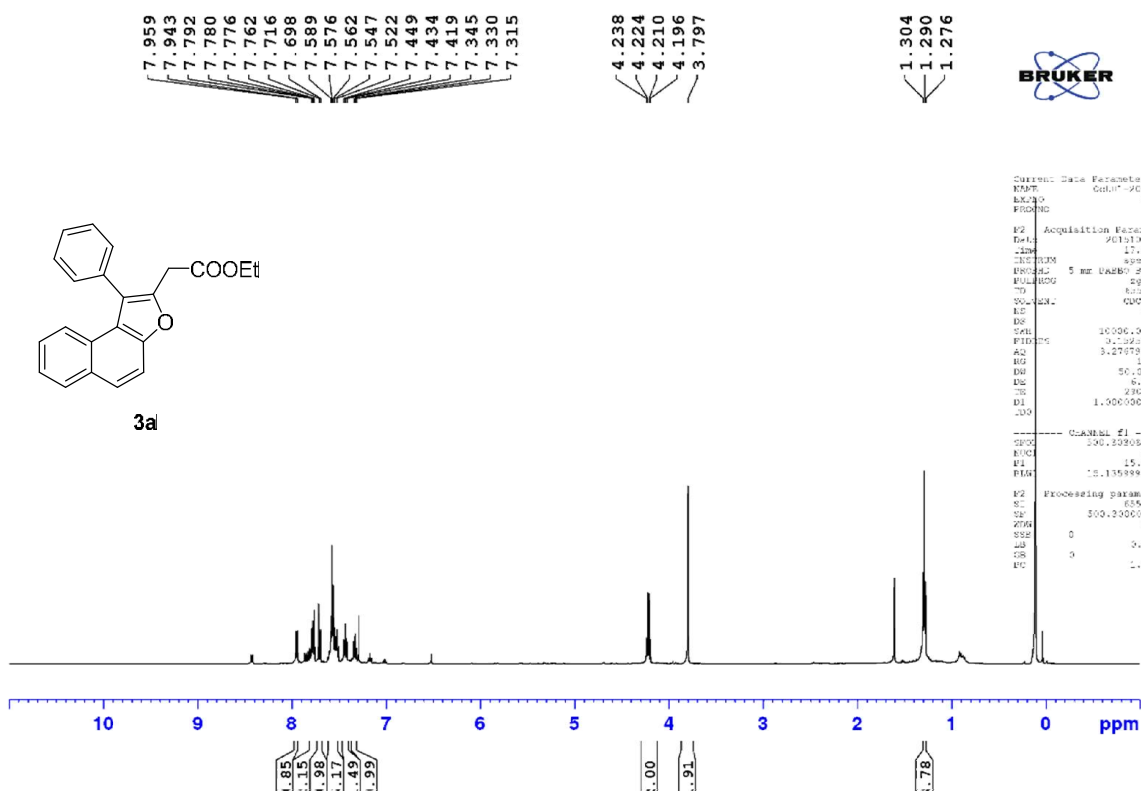
E-mail: srinivasarao@curaj.ac.in & ysriict@gmail.com

List of contents	page no.
1. Copies of ¹ H and ¹³ C-NMR	2-41

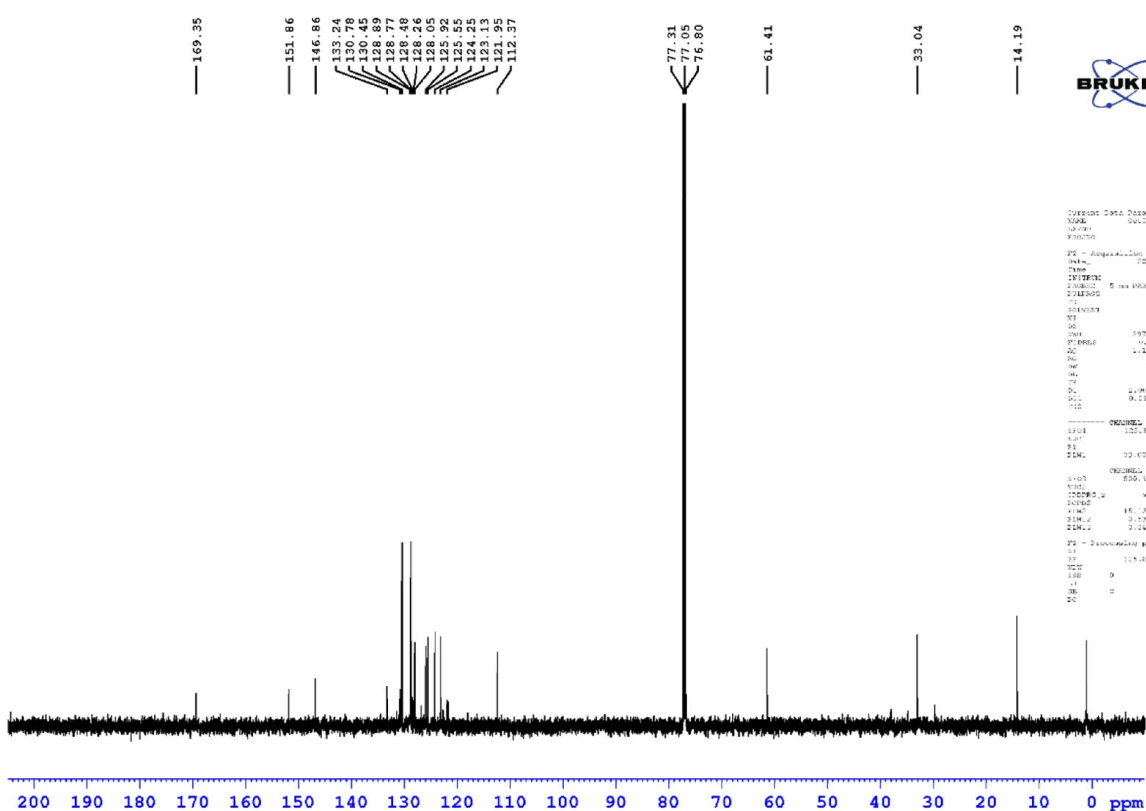
1. Copies of ¹H and C¹³-NMR

Regioselective cascade synthesis of Naphthofurans

SY-AP-111-B

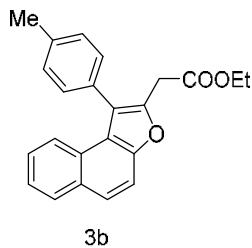
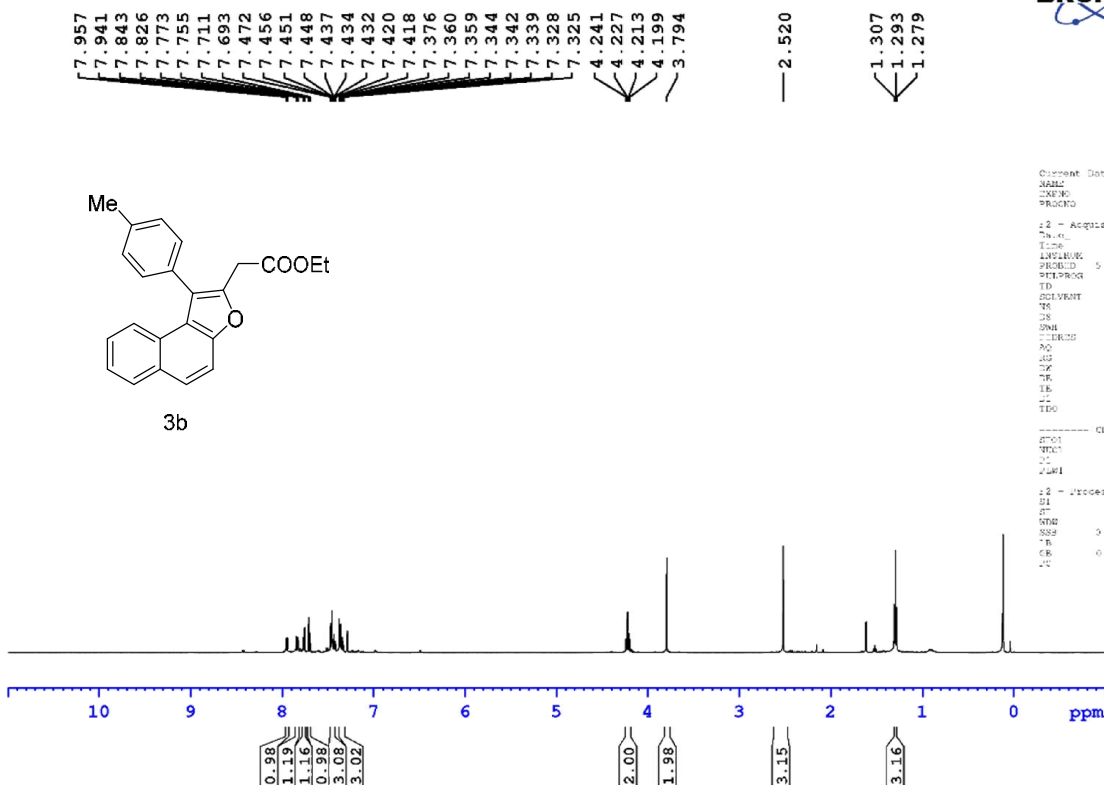


SY-AP-111-B



Regioselective cascade synthesis of Naphthofurans

SYAP106A



Current Data Parameters
 NAME Oct01-2015
 DATE_ 22
 TIME 17:05
 LVDIAGN 4041
 PRGNAME 5 nm HAD30-B37
 PRGPRG 4930
 TD 66236
 SOLVENT CDCl3
 NS 2
 DS 2
 SWH 10000.000 Hz
 FIDRES 0.112385 Hz
 AQ 3.276499 sec
 SFO 50.0130 MHz
 TE 300.2 K
 LB 1.0000000 sec
 TD 1

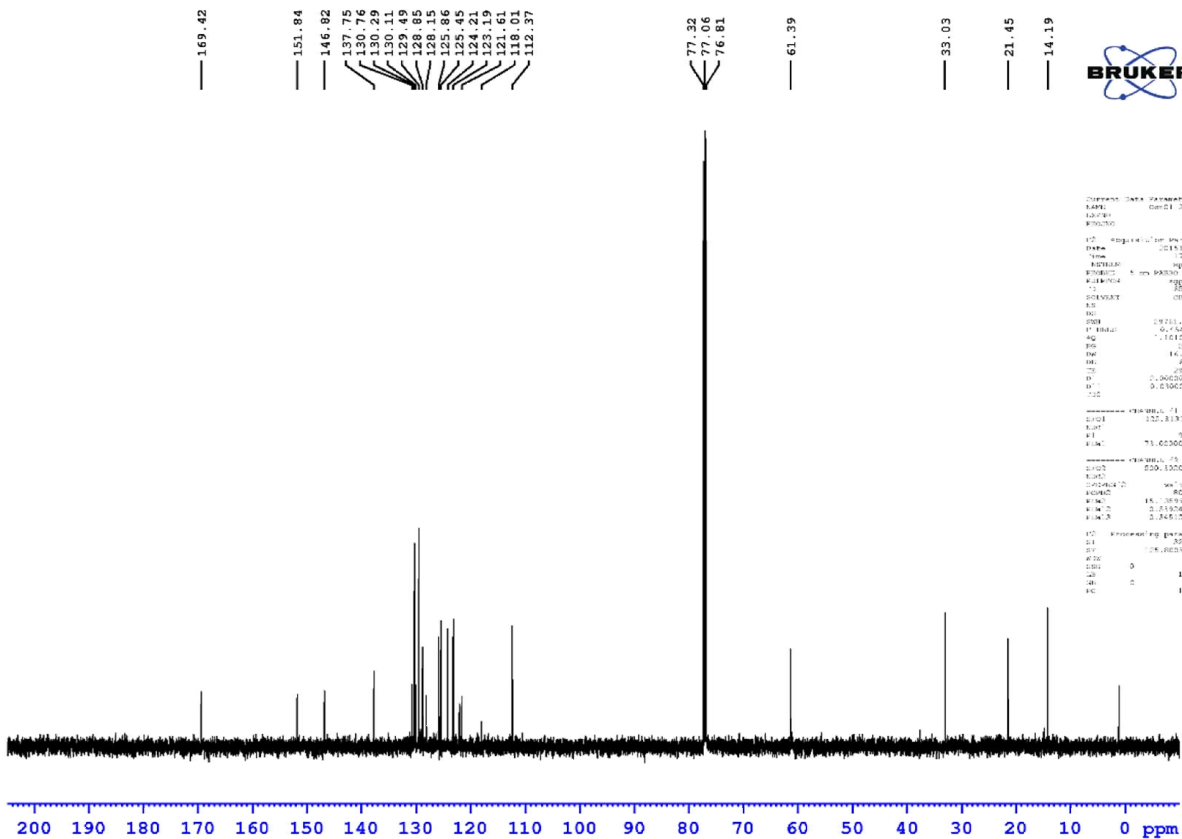
===== CHANNEL f1 =====
 F101 500.1303000 MHz
 P1 15.00 usec
 PL1 0.00 dB
 FWHM 15.1259988 Hz

===== CHANNEL f2 =====
 F201 125.2606000 MHz
 P2 15.00 usec
 PL2 0.00 dB
 FWHM 15.1259988 Hz

===== CHANNEL f3 =====
 F301 75.0253000 MHz
 P3 15.00 usec
 PL3 0.00 dB
 FWHM 15.1259988 Hz

===== CHANNEL f4 =====
 F401 37.5126500 MHz
 P4 15.00 usec
 PL4 0.00 dB
 FWHM 15.1259988 Hz

SYAP106A



Current Data Parameters
 NAME Oct01-2015
 DATE_ 22
 TIME 17:05
 LVDIAGN 4041
 PRGNAME 5 nm HAD30-B37
 PRGPRG 4930
 TD 66236
 SOLVENT CDCl3
 NS 2
 DS 2
 SWH 10000.000 Hz
 FIDRES 0.112385 Hz
 AQ 3.276499 sec
 SFO 50.0130 MHz
 TE 300.2 K
 LB 1.0000000 sec
 TD 1

===== CHANNEL f1 =====
 F101 125.2606000 MHz
 P1 15.00 usec
 PL1 0.00 dB
 FWHM 15.1259988 Hz

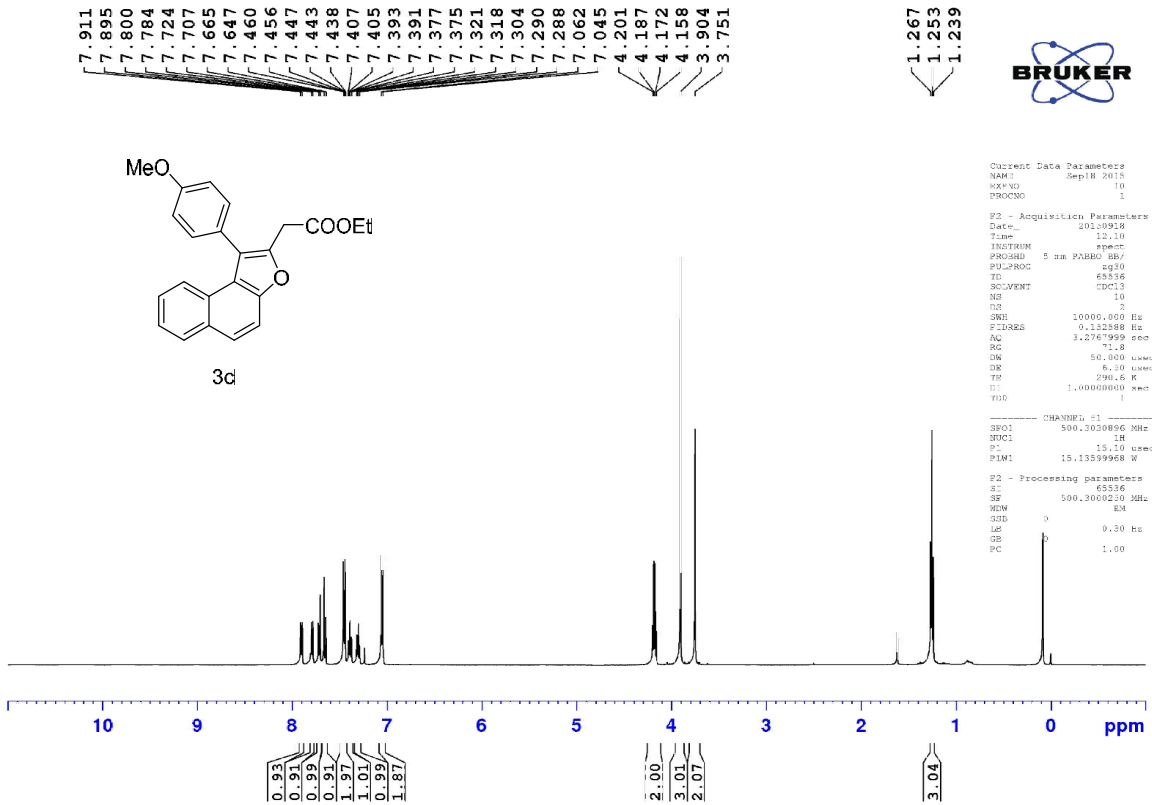
===== CHANNEL f2 =====
 F201 75.0253000 MHz
 P2 15.00 usec
 PL2 0.00 dB
 FWHM 15.1259988 Hz

===== CHANNEL f3 =====
 F301 37.5126500 MHz
 P3 15.00 usec
 PL3 0.00 dB
 FWHM 15.1259988 Hz

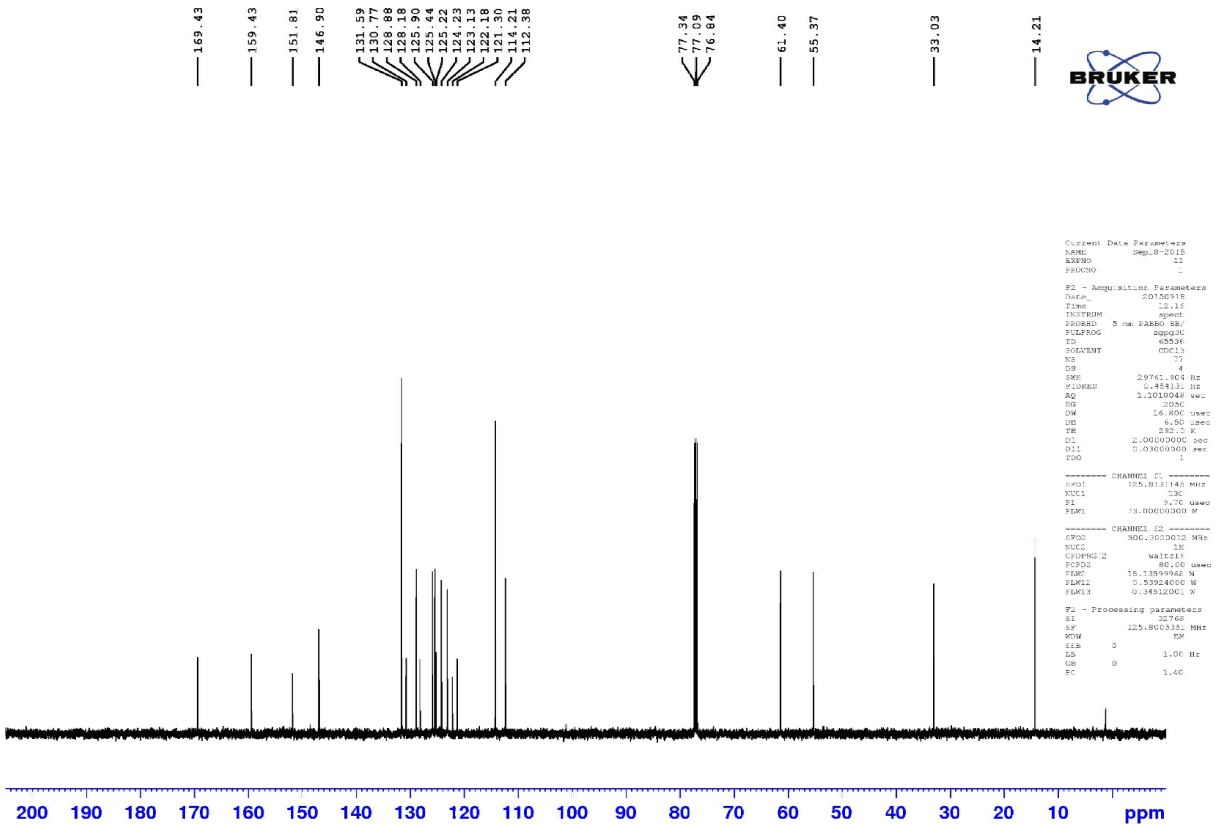
===== CHANNEL f4 =====
 F401 18.7563250 MHz
 P4 15.00 usec
 PL4 0.00 dB
 FWHM 15.1259988 Hz

Regioselective cascade synthesis of Naphthofurans

SYAP106B

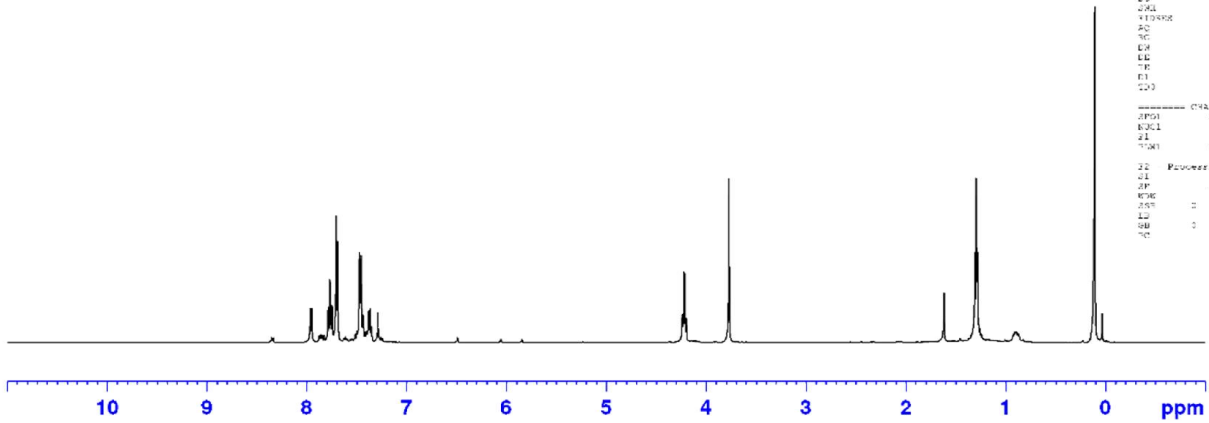
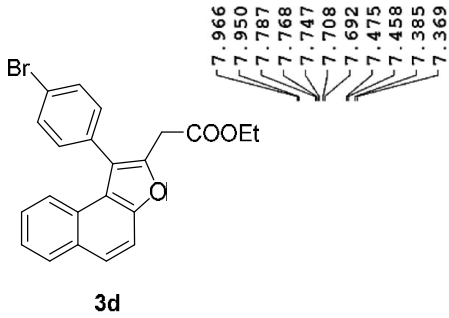


SYAP106B



Regioselective cascade synthesis of Naphthofurans

SYAP104



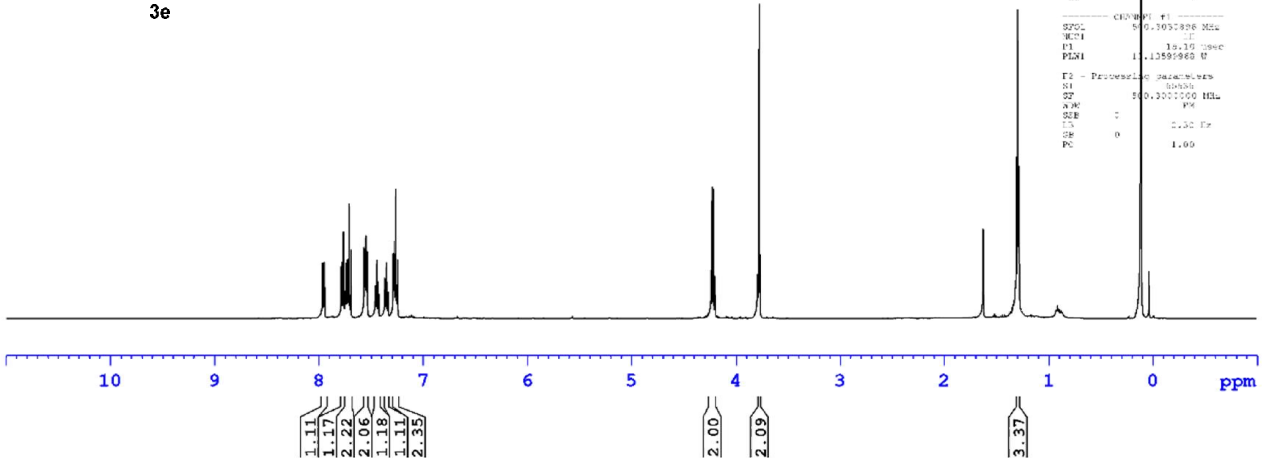
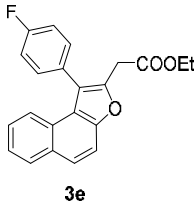
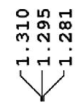
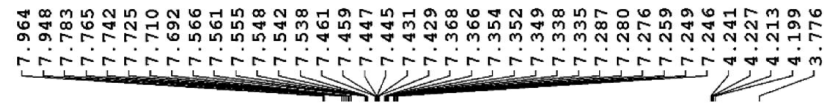
SYAP104A



```
Current Data Parameters
NAME        20160104
EXPNO      25
PROCNO     25
PROCNAME   25
F2 - Acquisition Parameters
Date_      20160104
Time       16.18
INSTRUM    spect
PROBHD     5 mm PABBO BB
PULPROG    zgpg30
VS         60000
SOLVENT    CDCl3
NS         643
DS         4
AQ         1.1018887 sec
RG         326.500
FIDRES     0.103400 Hz
AQRES     16.480 umsm
SFO1       125.000000 MHz
SFO2       77.000000 MHz
PC         2.3800000 sec
D1         0.3380000 sec
TD         65536
===== CHANNEL f1 =====
NUC1       13C
P1         12.00
PL1        0 dB
===== CHANNEL f2 =====
NUC2       1H
P2         12.00
PL2        0 dB
===== PROCESSOR PARAMETERS =====
SI         32768
SF         600.1320012 MHz
GPGPROG   waltz16
PCPDPRG   60.0000000 MHz
PLM1      0.4442200 MHz
PLM2      0.4442200 MHz
PLM3      0.4442200 MHz
F2 - Processing parameters
SI         32768
SF         125.0000000 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.00
```

Regioselective cascade synthesis of Naphthofurans

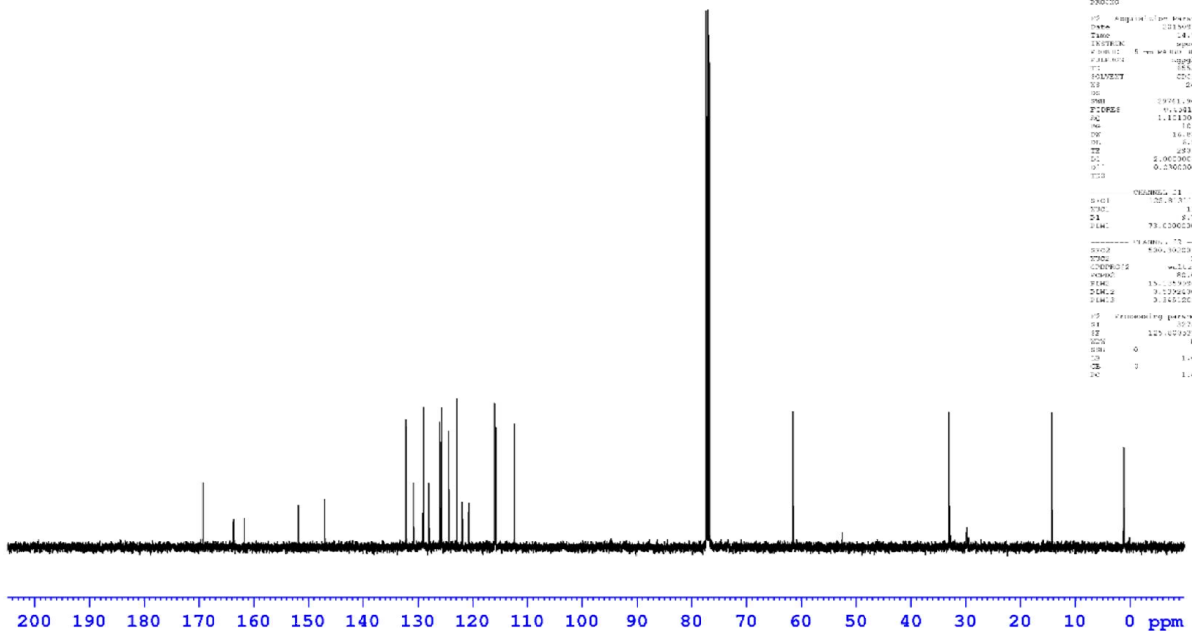
SYAP105B



```

Current Data Parameters
NAME: SYAP105B
EXPNO: 2
PROCNO: 1
F2 - Acquisition Parameters
Date_ : 20230226
Time: 14.49
INSTRUM: spect
PROBHD: 5 mm BBOBO
PULPROG: zgpg30
TD: 65536
SOLVENT: CDCl3
NS: 1024
DS: 2
SFO: -0.0000000 MHz
AQ: 0.1310000 sec
RG: 101
FIDRES: 0.0000000 Hz
AQ: 0.1310000 sec
PC: 0.0000000 sec
TE: 300.2 K
D1: 0.0000000 sec
ED: 1
  
```

SYAP105B

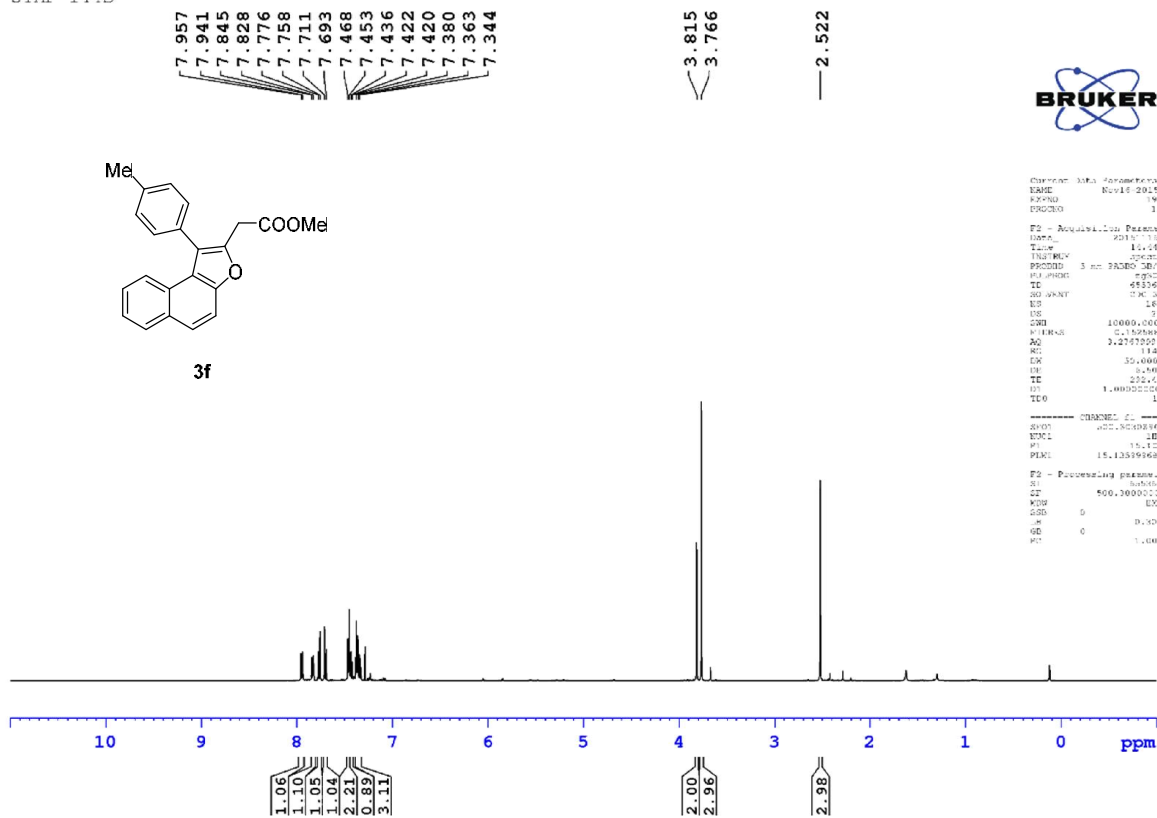
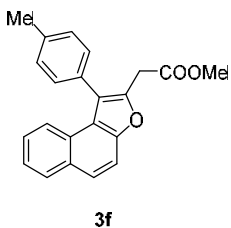


```

Current Data Parameters
NAME: SYAP105B
EXPNO: 2
PROCNO: 1
F2 - Acquisition Parameters
Date_ : 20230226
Time: 14.49
INSTRUM: spect
PROBHD: 5 mm BBOBO
PULPROG: zgpg30
TD: 65536
SOLVENT: CDCl3
NS: 1024
DS: 2
SFO: -0.0000000 MHz
AQ: 0.1310000 sec
RG: 101
FIDRES: 0.0000000 Hz
AQ: 0.1310000 sec
PC: 0.0000000 sec
TE: 300.2 K
D1: 0.0000000 sec
ED: 1
  
```

Regioselective cascade synthesis of Naphthofurans

SYAP-144B



```

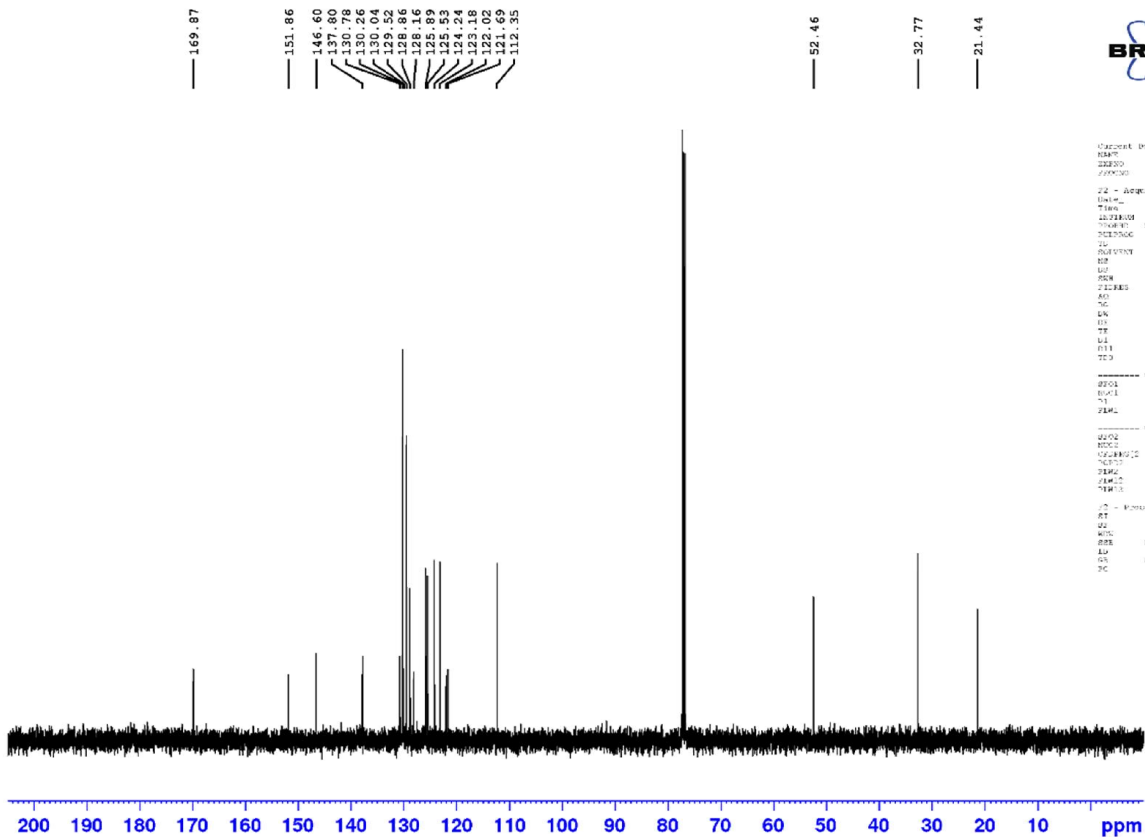
Current Data Parameters
NAME      Nov16 2015
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20151116
Time     11:51
INSTRUM  spect
PROBHD   5 mm QNP1H/
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        16
DS        4
SWH       10000.000 Hz
FIDRES    0.182000 Hz
AQ         1.2277557 sec
RG         114
DE         32.000000 cm
TE         300.2 K
DECO      1.0000000000000000
TEO        1

===== CHANNEL f1 =====
NUC1      13C
P1         12.00
PL1        0.00
PC1        15.133999999999999

F2 - Processing parameters
SI
SF         500.1300000 MHz
WDW        EM
SSB         0
GB          0
PC          1.00
    
```

SYAP-144B



```

Current Data Parameters
NAME      Nov16 2015
EXPNO    1
PROCNO   1

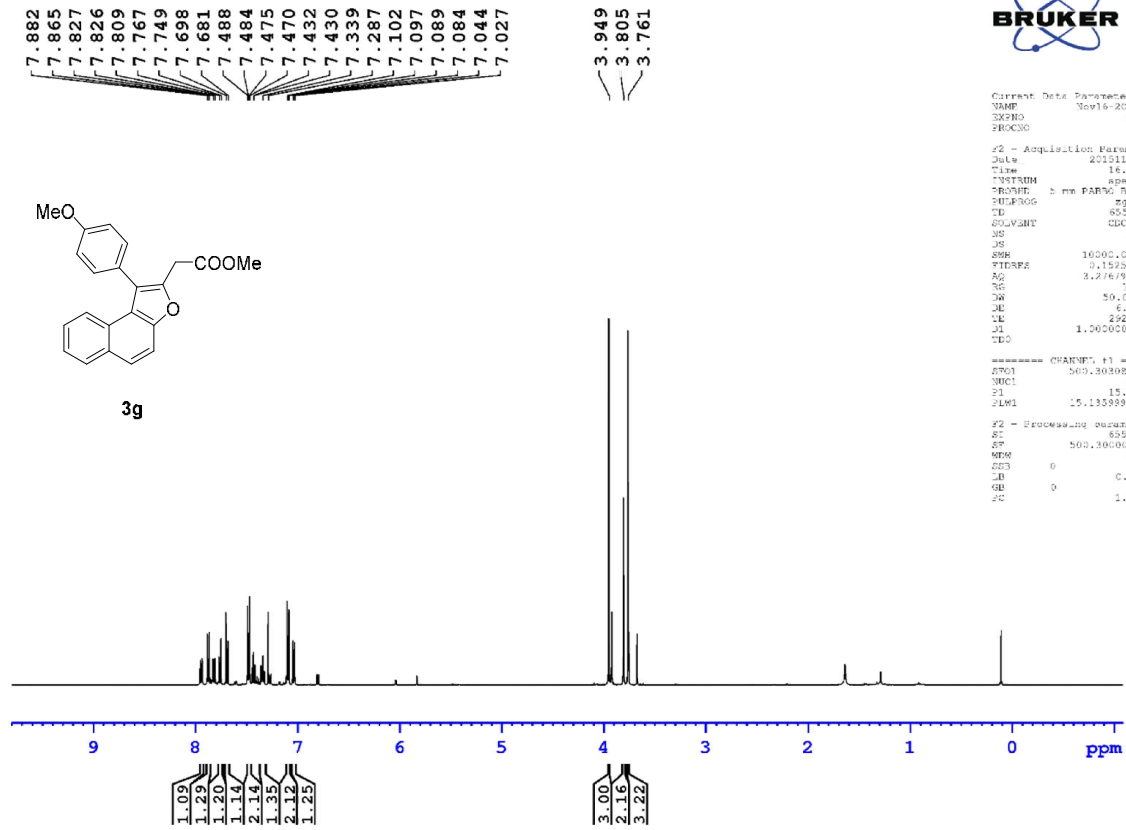
F2 - Acquisition Parameters
Date_    20151116
Time     11:51
INSTRUM  spect
PROBHD   5 mm QNP1H/
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        16
DS        4
SWH       75811.000 Hz
FIDRES    0.184000 Hz
AQ         1.2012548 sec
RG         9000
DE         32.000000 cm
TE         300.2 K
DECO      1.0000000000000000
TEO        1

===== CHANNEL f1 =====
NUC1      13C
P1         12.00
PL1        0.00
PC1        15.133999999999999

F2 - Processing parameters
SI
SF         125.7600000 MHz
WDW        EM
SSB         0
GB          0
PC          1.00
    
```

Regioselective cascade synthesis of Naphthofurans

SYAP143A



```

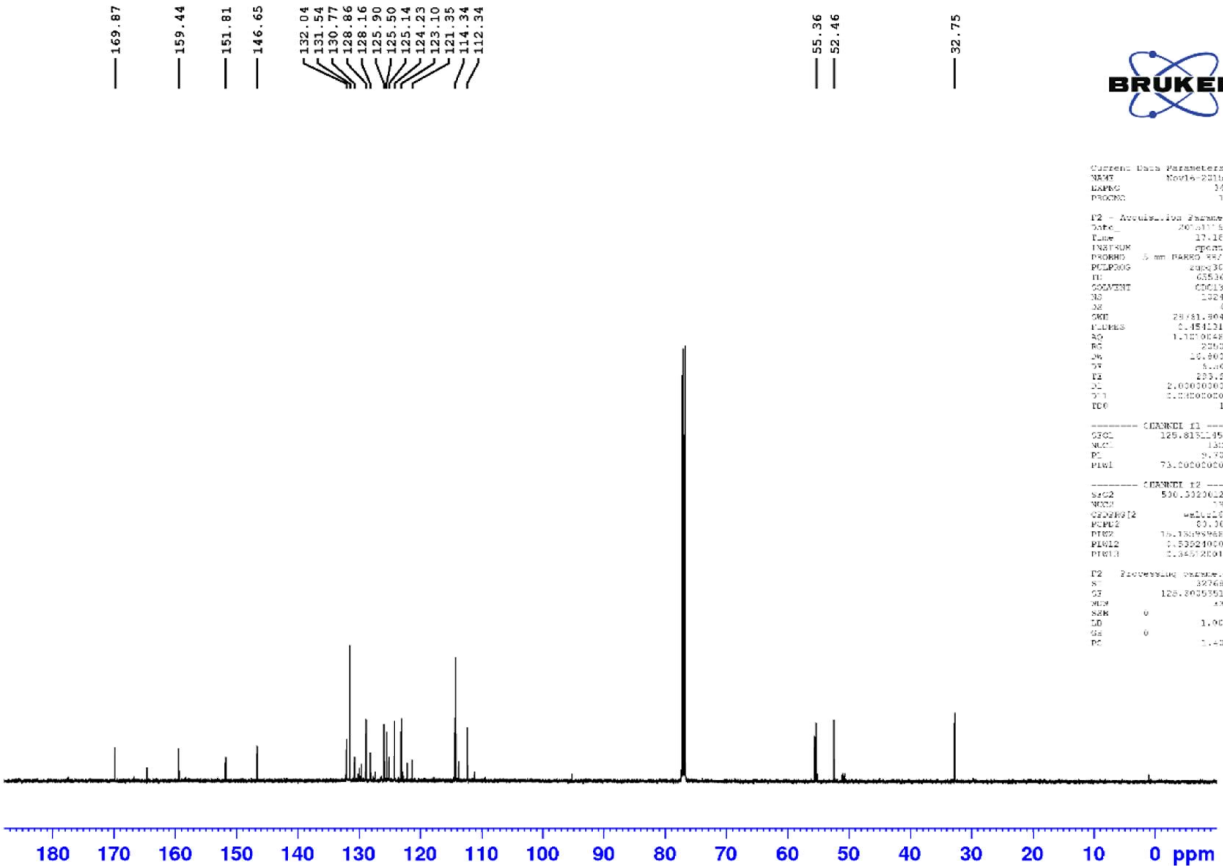
Current Data Parameters
NAME      Nov16-2015
EXPNO    33
PROCNO   1

F2 - Acquisition Parameters
Date_    20151116
Time     16.22
INSTRUM  spect
PROBHD   5 mm PABBO 90/
PULPROG  zg30
TD        65536
SOLVENT  CDCl3
NS        16
DS        4
SFO      10000.000 Hz
FIDRES   0.152888 Hz
AQ        3.276799 sec
RG        360
AQ        50.000 usec
DE        6.50 usec
TE        296.2 K
D1        1.0000000 sec
DELTA    -

===== CHANNEL f1 =====
NUC1      13C
P1        15.10 usec
PLW1     15.13389868 W

F2 - Processing parameters
SI        0
SF        500.1300000 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
    
```

SYAP143A



```

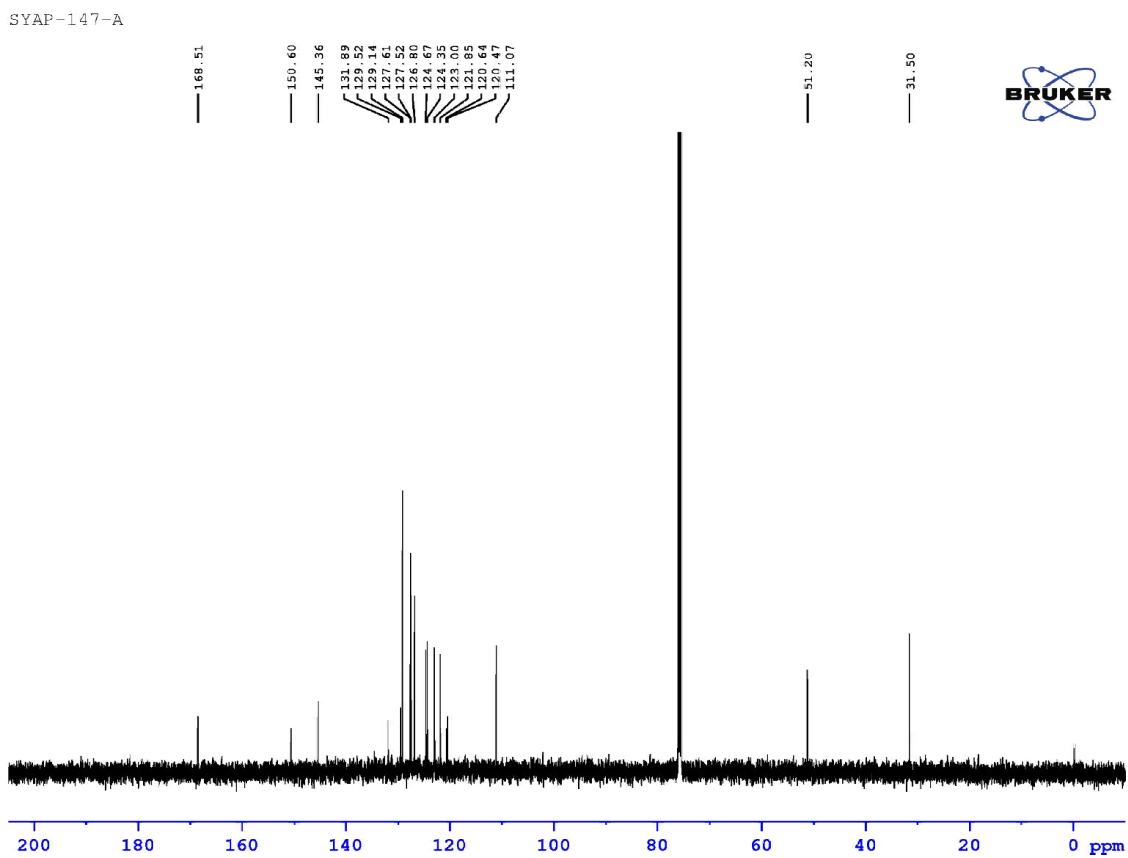
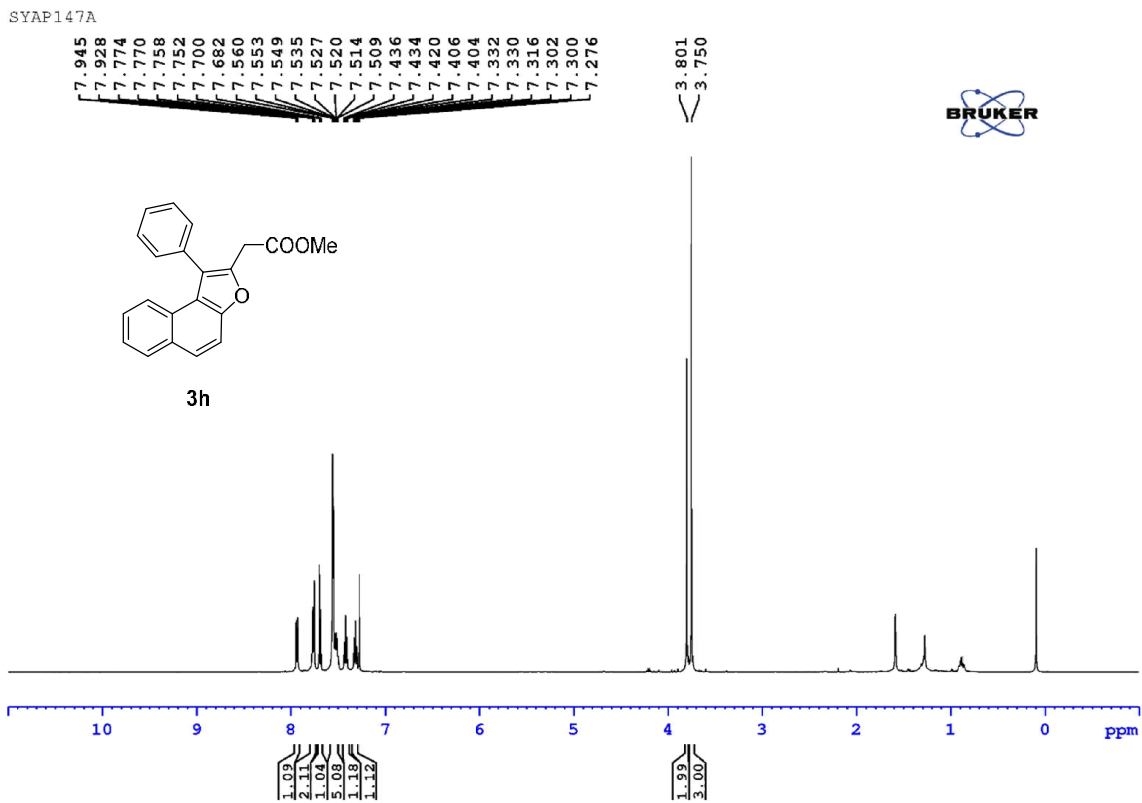
Current Data Parameters
NAME      Nov16-2015
EXPNO    31
PROCNO   1

F2 - Acquisition Parameters
Date_    20151116
Time     17.10
INSTRUM  spect
PROBHD   5 mm PABBO 90/
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        16
DS        4
SFO      125.813145 MHz
FIDRES   0.1709648 Hz
AQ        3.276799 sec
RG        360
AQ        50.000 usec
DE        6.50 usec
TE        296.2 K
D1        1.0000000 sec
DELTA    -

===== CHANNEL f1 =====
NUC1      13C
P1        15.10 usec
PLW1     15.13389868 W

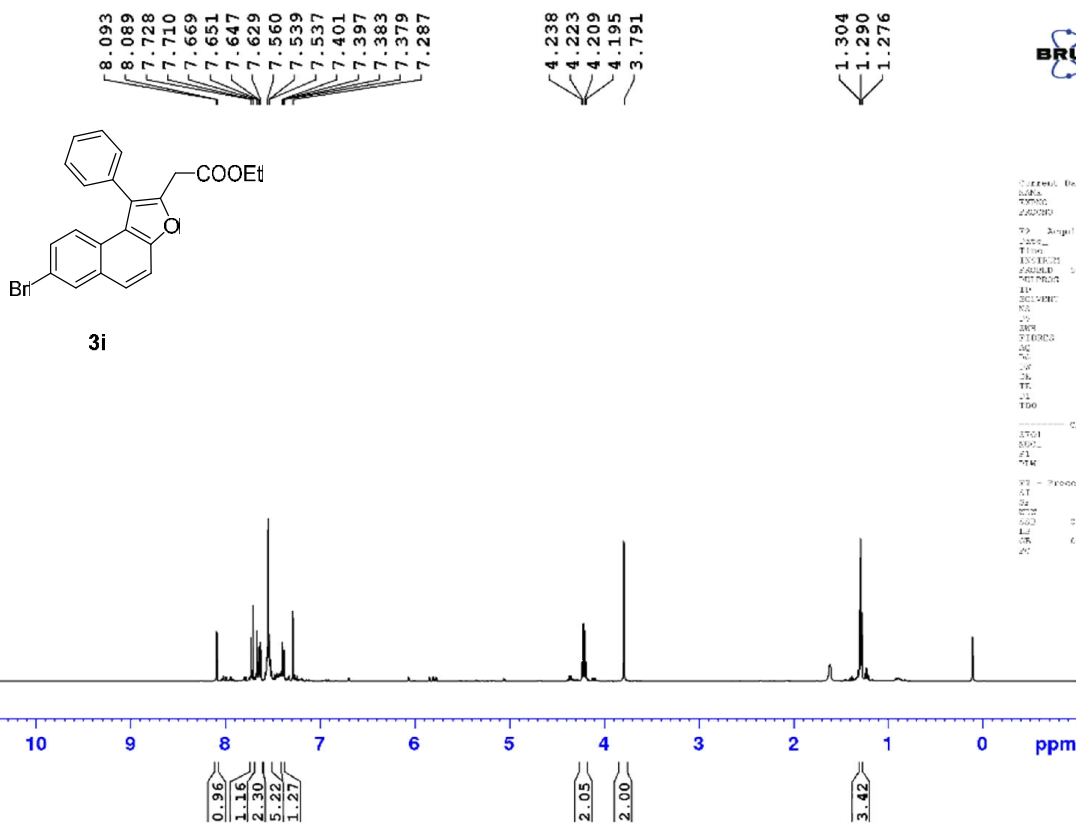
F2 - Processing parameters
SI        0
SF        125.813145 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
    
```


Regioselective cascade synthesis of Naphthofurans



Regioselective cascade synthesis of Naphthofurans

SYAP138A

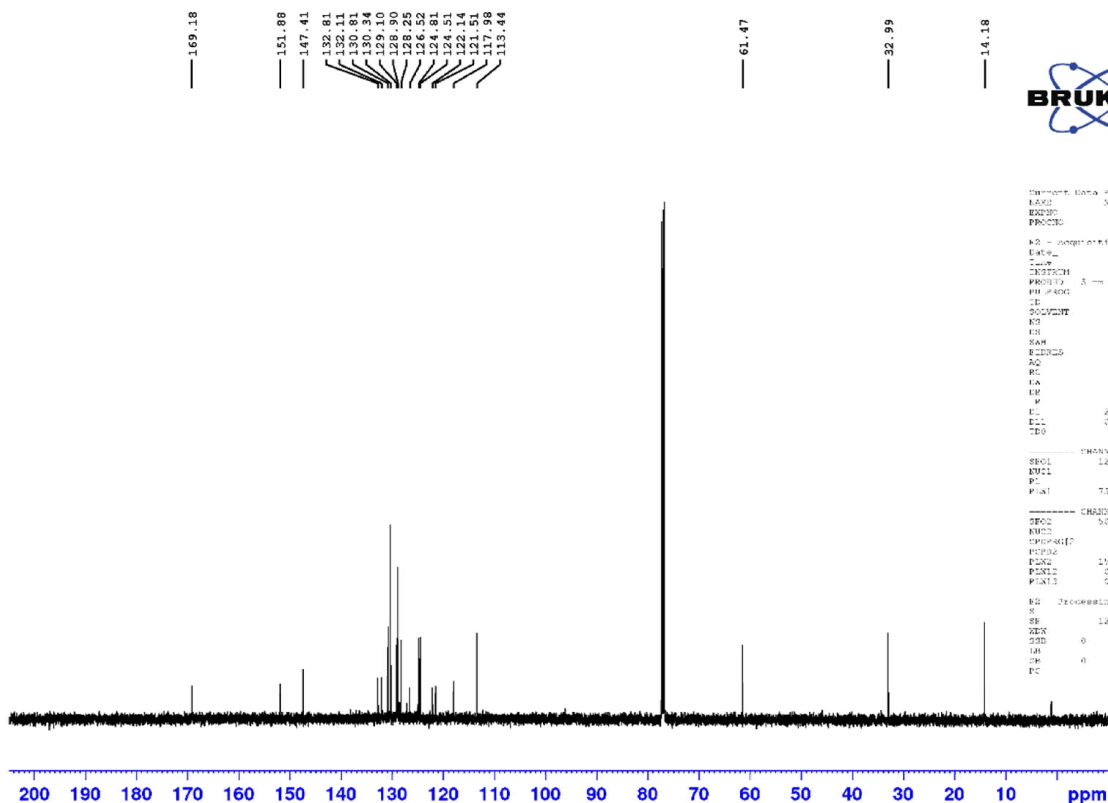


BRUKER

```

Current Data Parameters
NAME      SYAP138A
EXPNO    17
PROCNO   1
F2 - Acquisition Parameters
Date_    20121119
Time     15.43
INSTRUM spect
PROBHD  5 mm EASY-130
PULPROG zgpg30
SOLVENT CDCl3
NS       4
DS       4
SWH      7000.000 Hz
FIDRES   0.12550 Hz
AQ        3.276999 sec
RG        661
SF        50.000 MHz
WDW       EM
SSB       0
GB        0
PC        1.0000000 sec
TD        65536
----- CHANNEL f1 -----
NUC1     13C
P1       12.0000000 sec
PL1      0.000000000000000000
NUC2     1H
P2       4.0000000 sec
PL2      0.000000000000000000
PC       1.00
  
```

SYAP138A



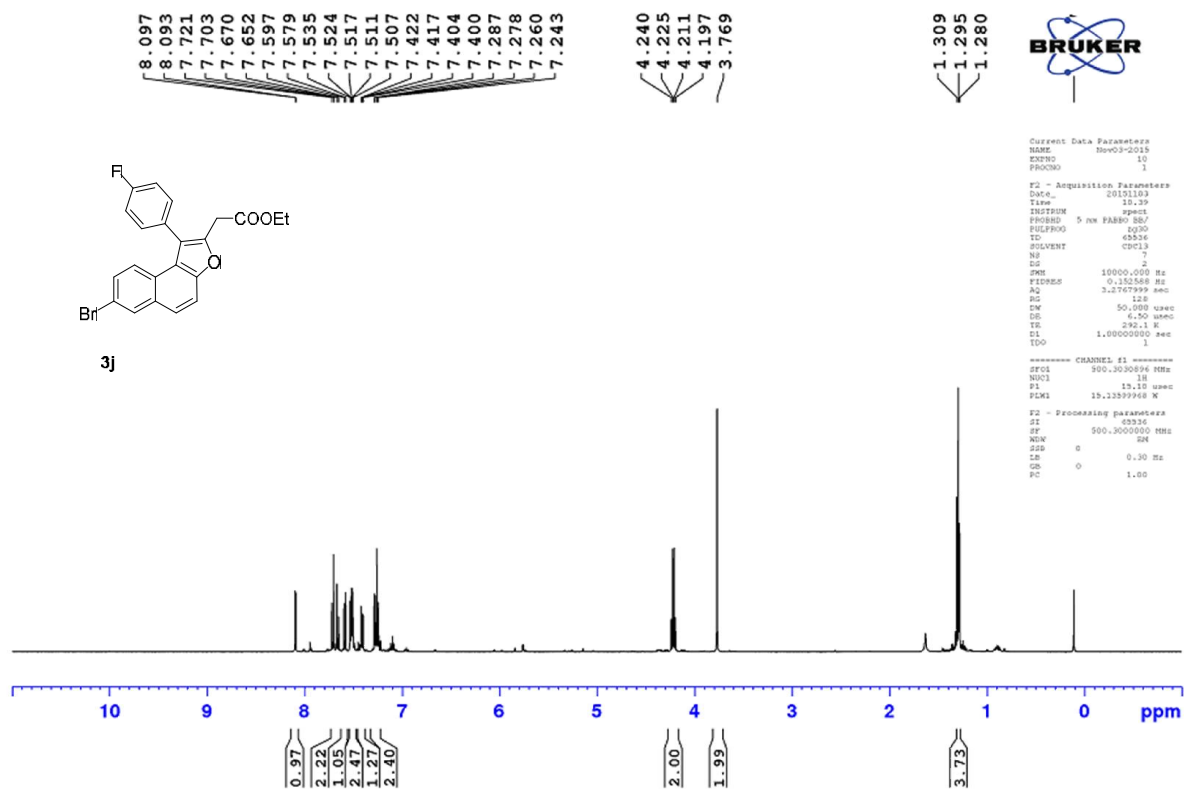
BRUKER

```

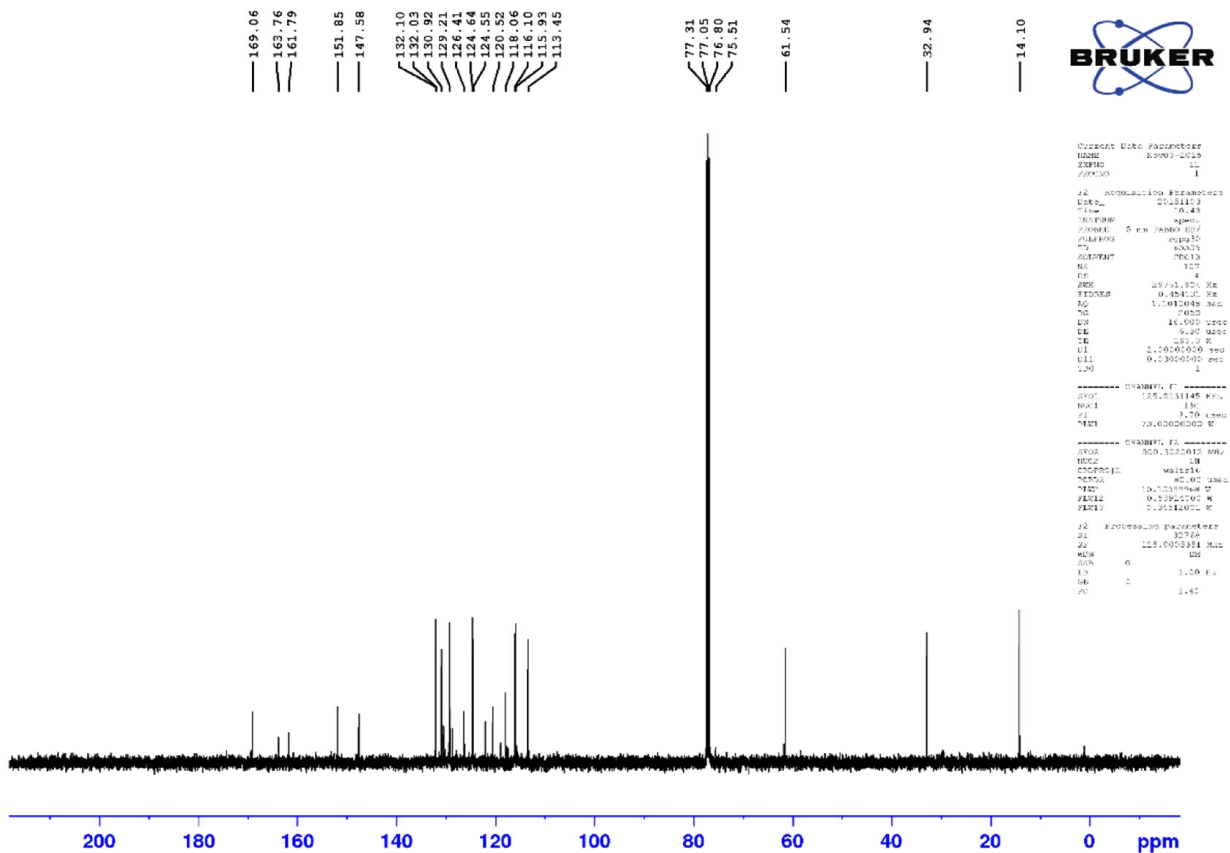
Current Data Parameters
NAME      SYAP138A
EXPNO    18
PROCNO   1
F2 - Acquisition Parameters
Date_    20121119
Time     12.50
INSTRUM spect
PROBHD  5 mm EASY-130
PULPROG zgpg30
SOLVENT CDCl3
NS       4
DS       4
SWH      125.000 MHz
FIDRES   0.12550 Hz
AQ        3.276999 sec
RG        661
SF        125.000 MHz
WDW       EM
SSB       0
GB        0
PC        1.0000000 sec
TD        65536
----- CHANNEL f1 -----
NUC1     13C
P1       12.0000000 sec
PL1      0.000000000000000000
NUC2     1H
P2       4.0000000 sec
PL2      0.000000000000000000
PC       1.00
  
```

Regioselective cascade synthesis of Naphthofurans

SYAP138B

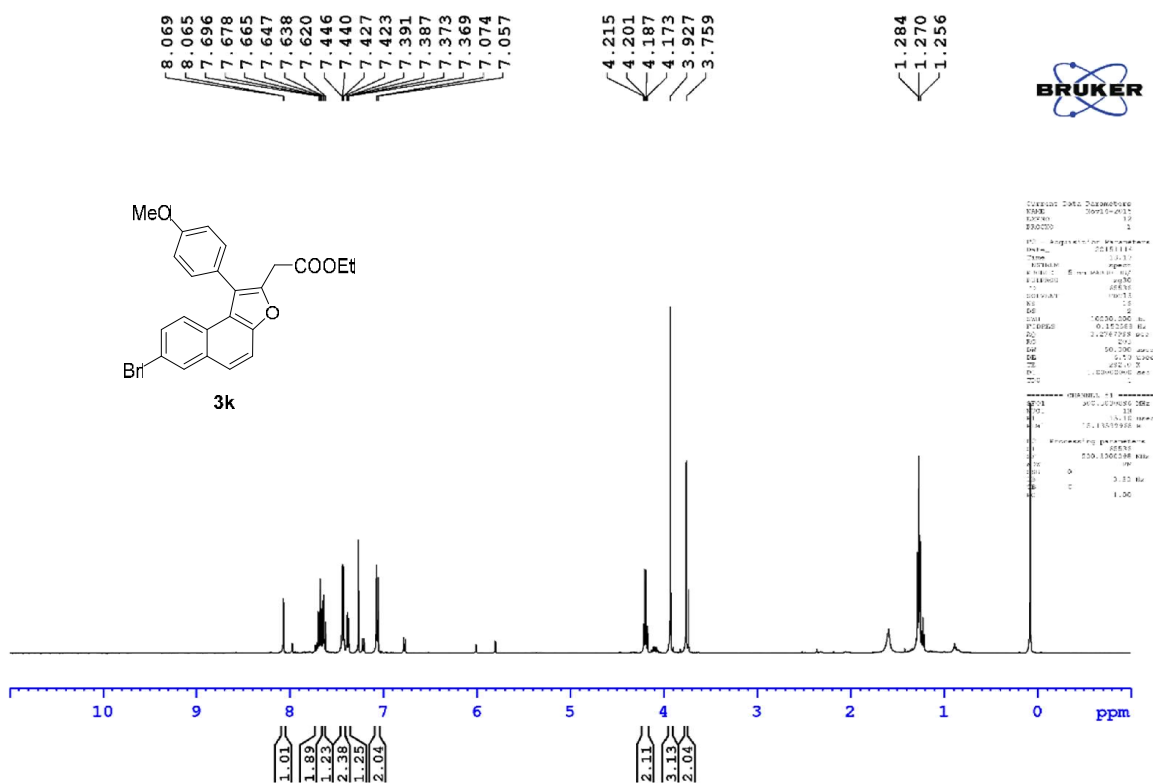


SYAP138B

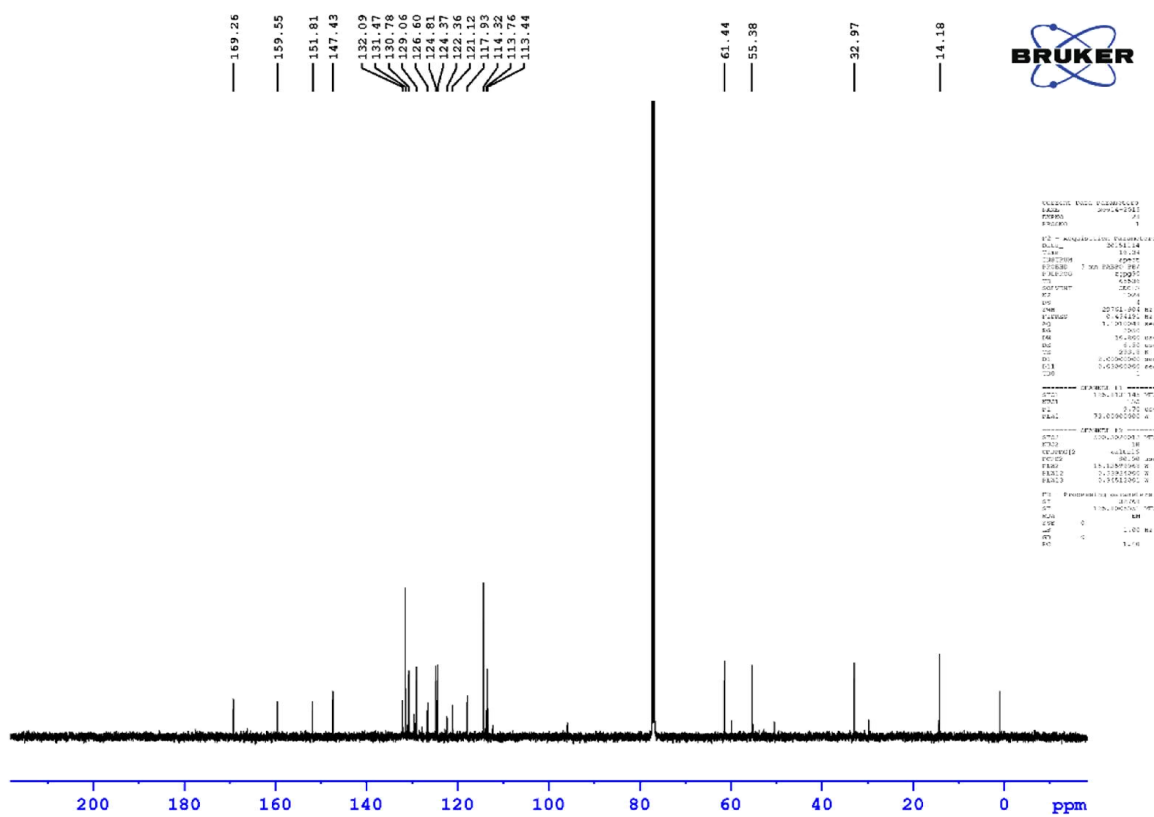


Regioselective cascade synthesis of Naphthofurans

SYAP-142A

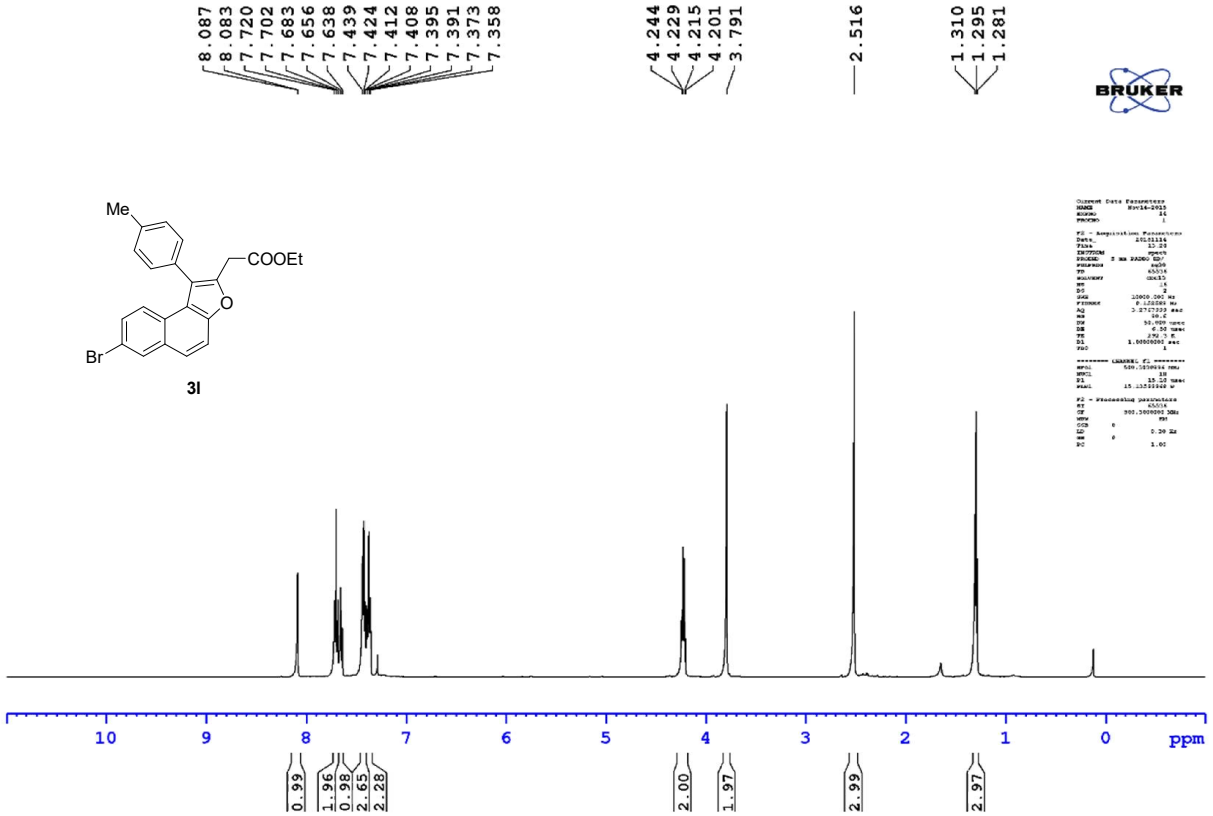


SYAP-142A

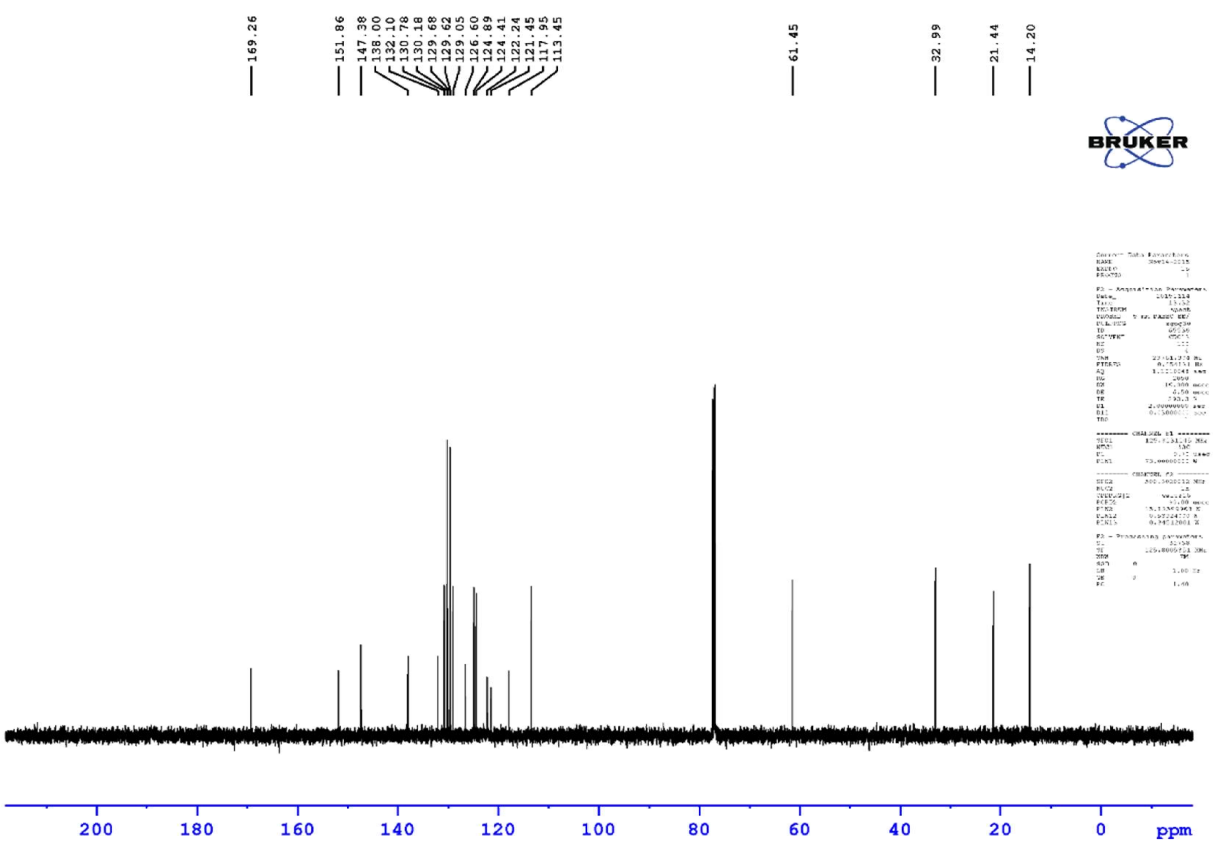


Regioselective cascade synthesis of Naphthofurans

SYAP-142B

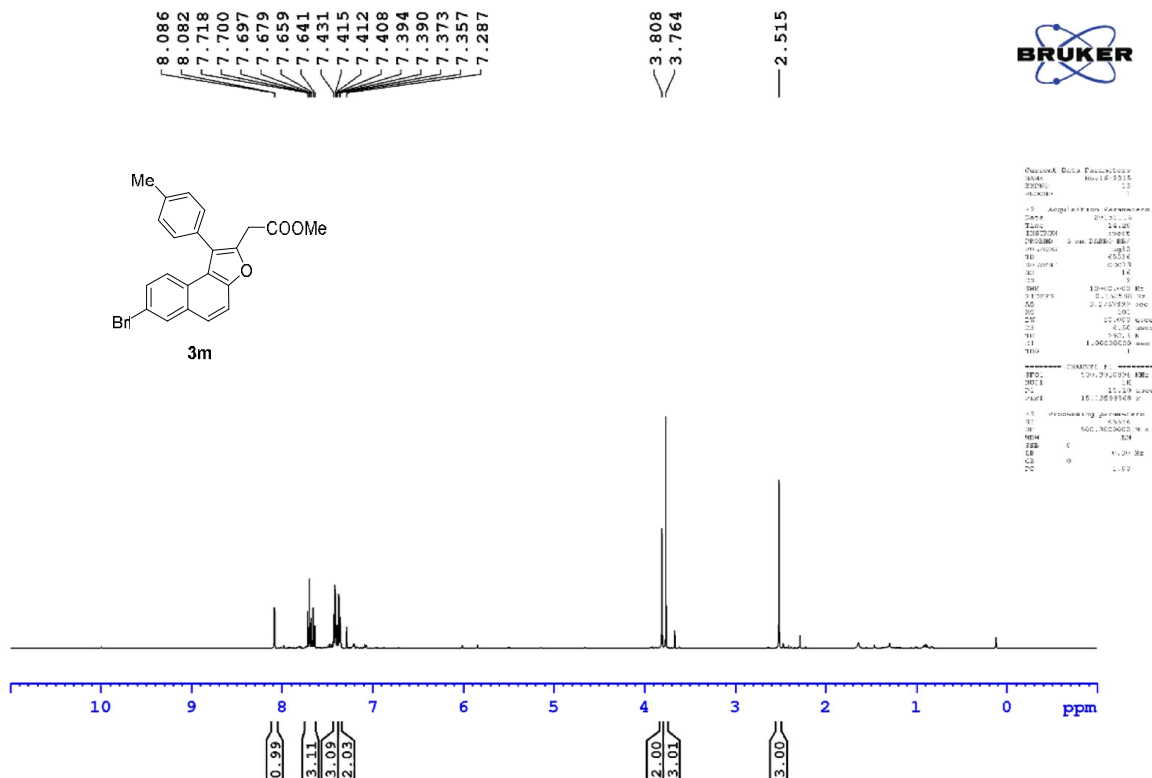


SYAP-142B

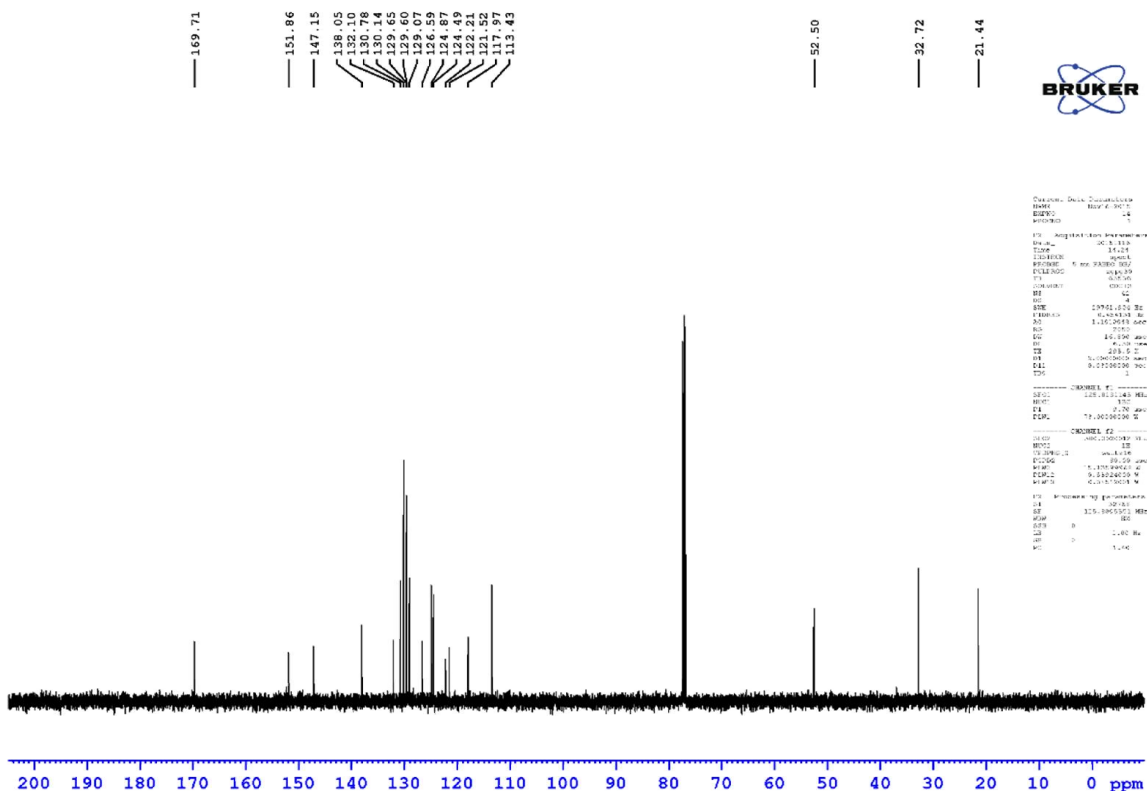


Regioselective cascade synthesis of Naphthofurans

SYAP-145A

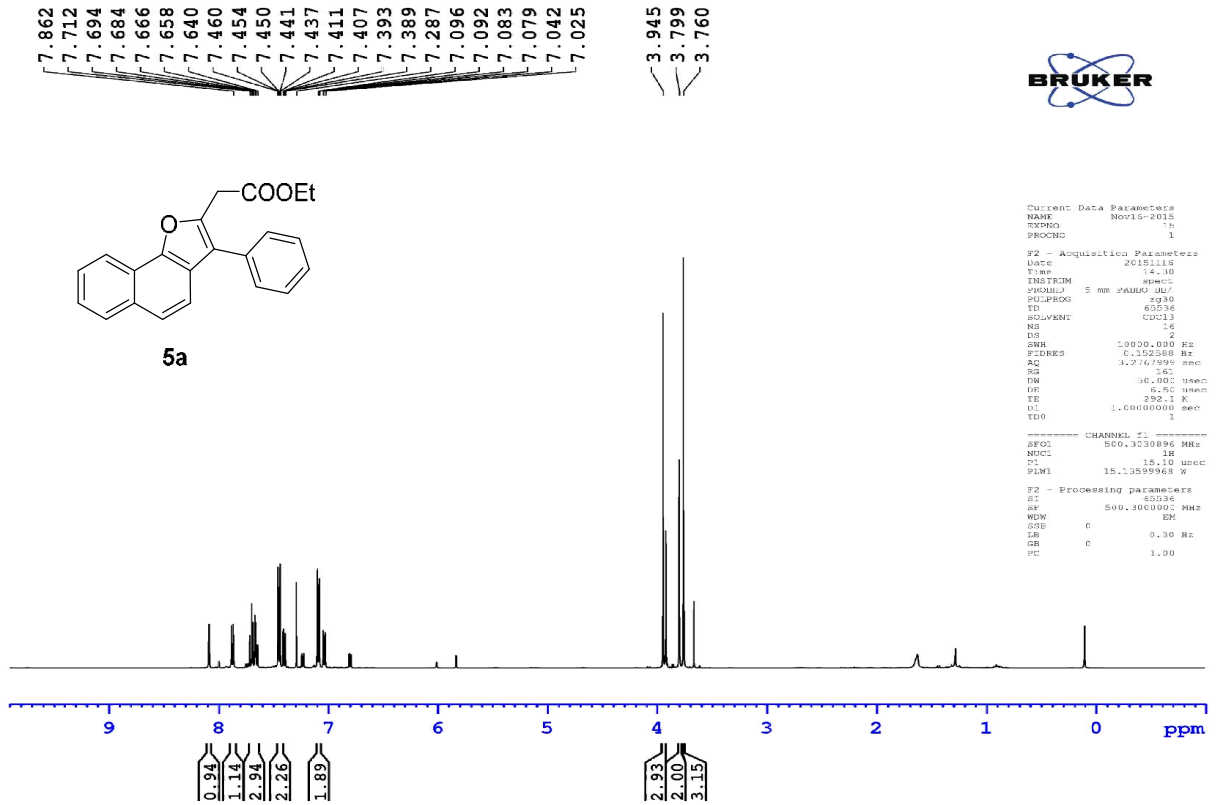


SYAP-145A

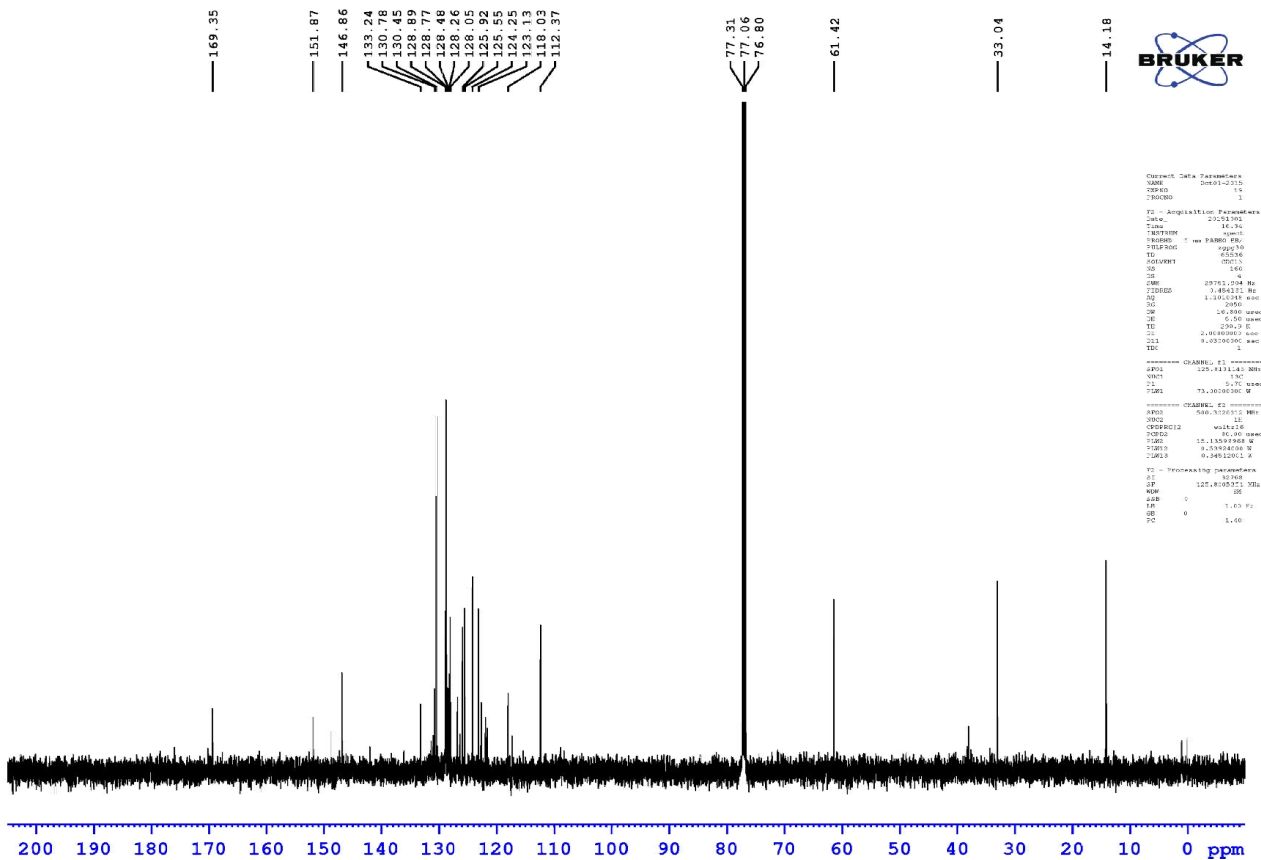


Regioselective cascade synthesis of Naphthofurans

SYAP-145B

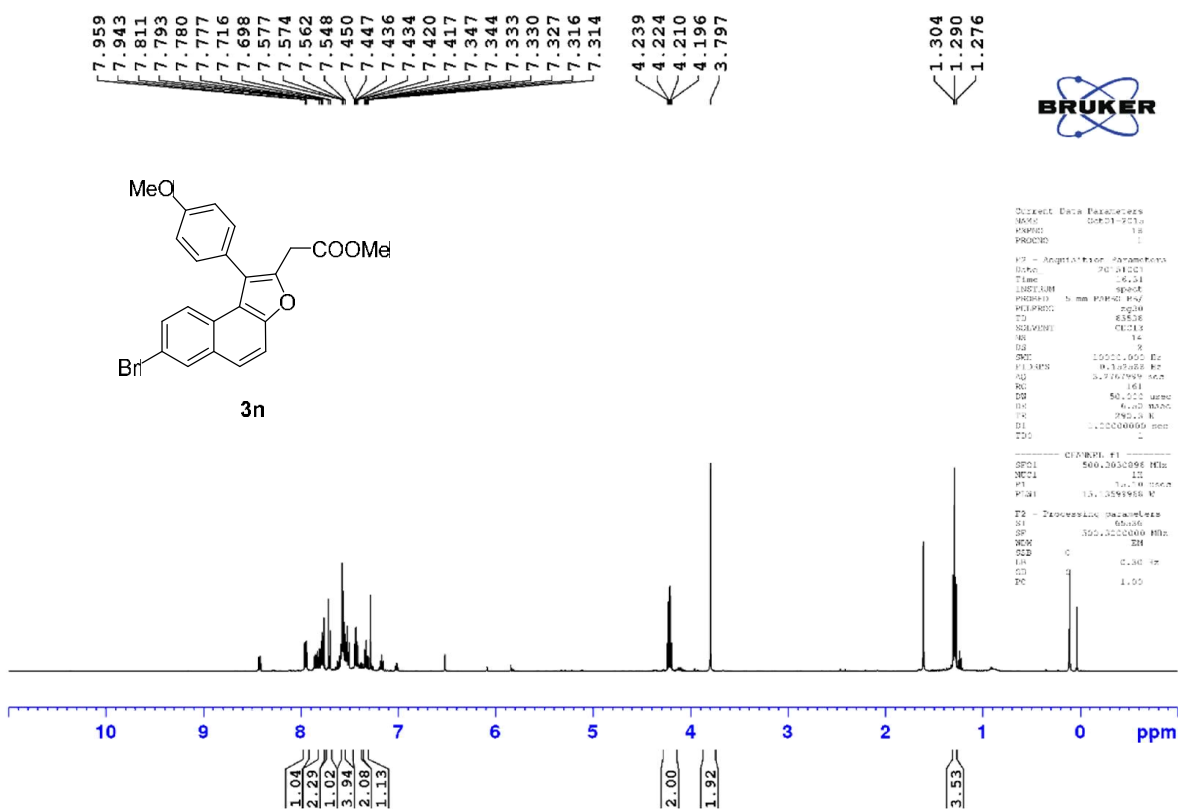


SYAP112A

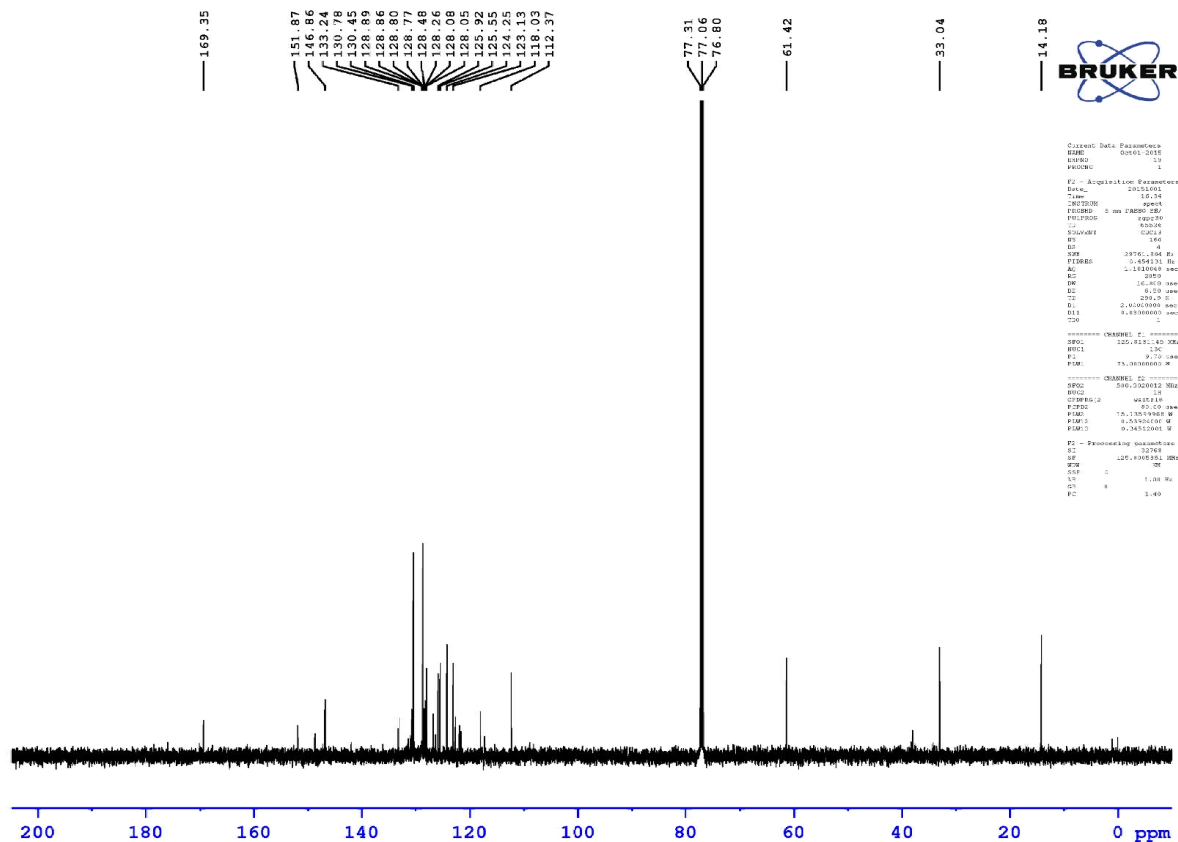


Regioselective cascade synthesis of Naphthofurans

SYAP112A

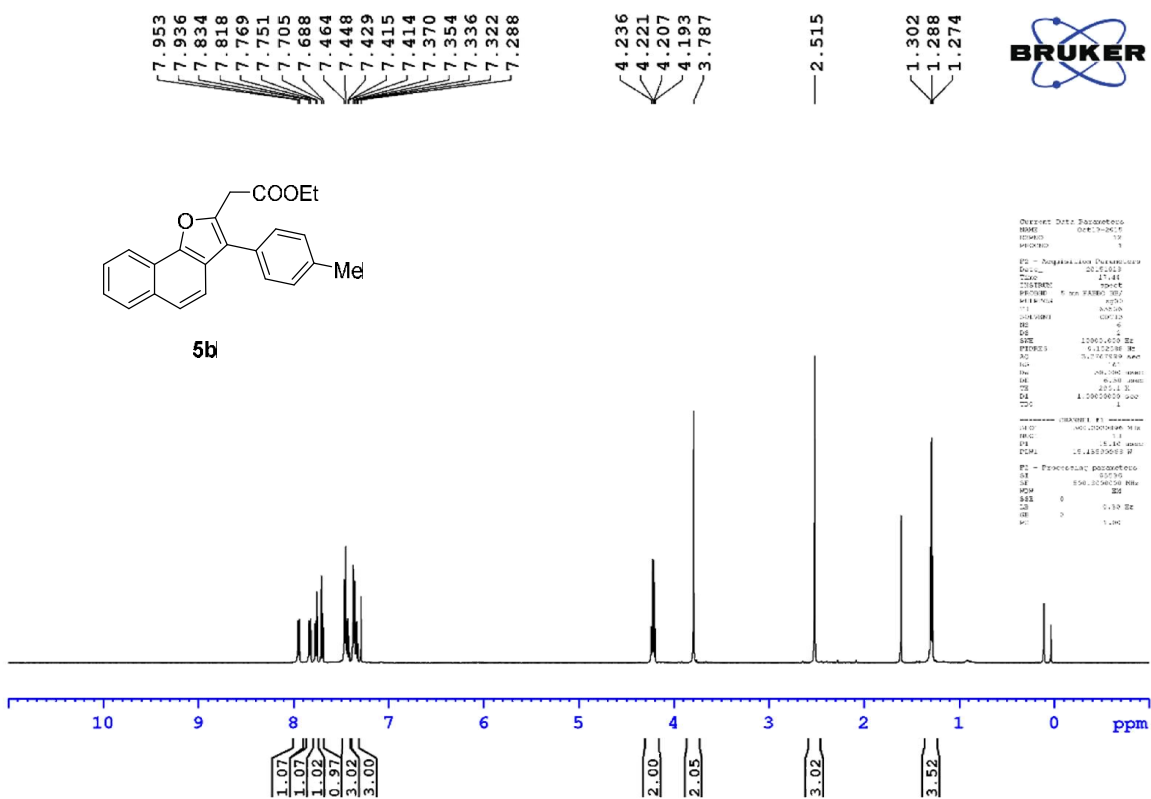


SYAP112A

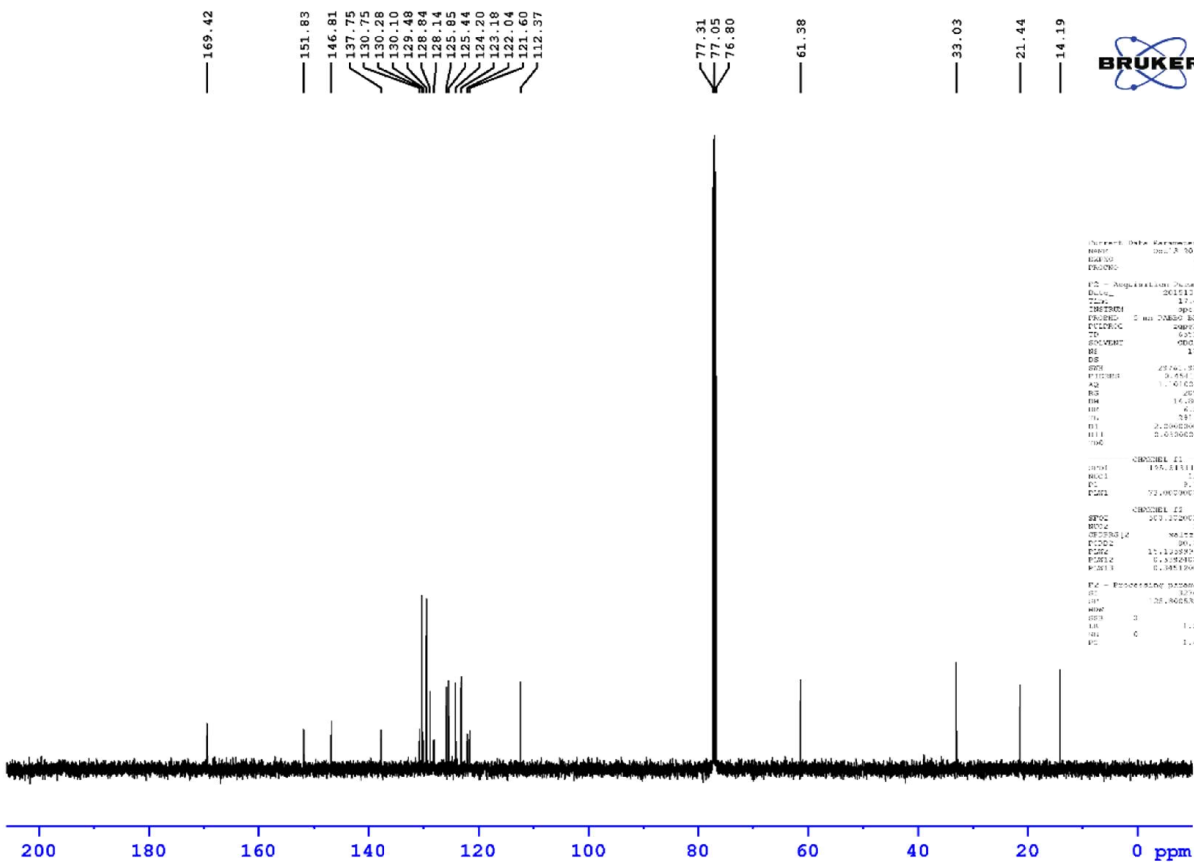


Regioselective cascade synthesis of Naphthofurans

SYAP-116B

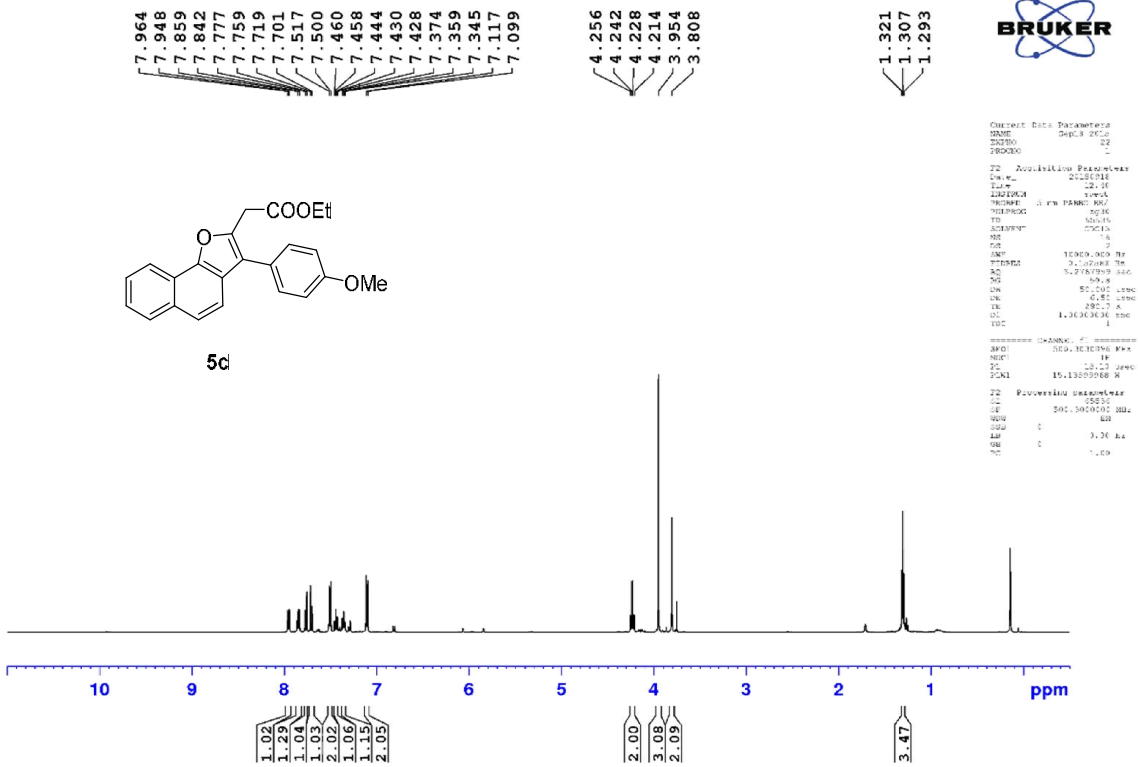


SYAP116-B

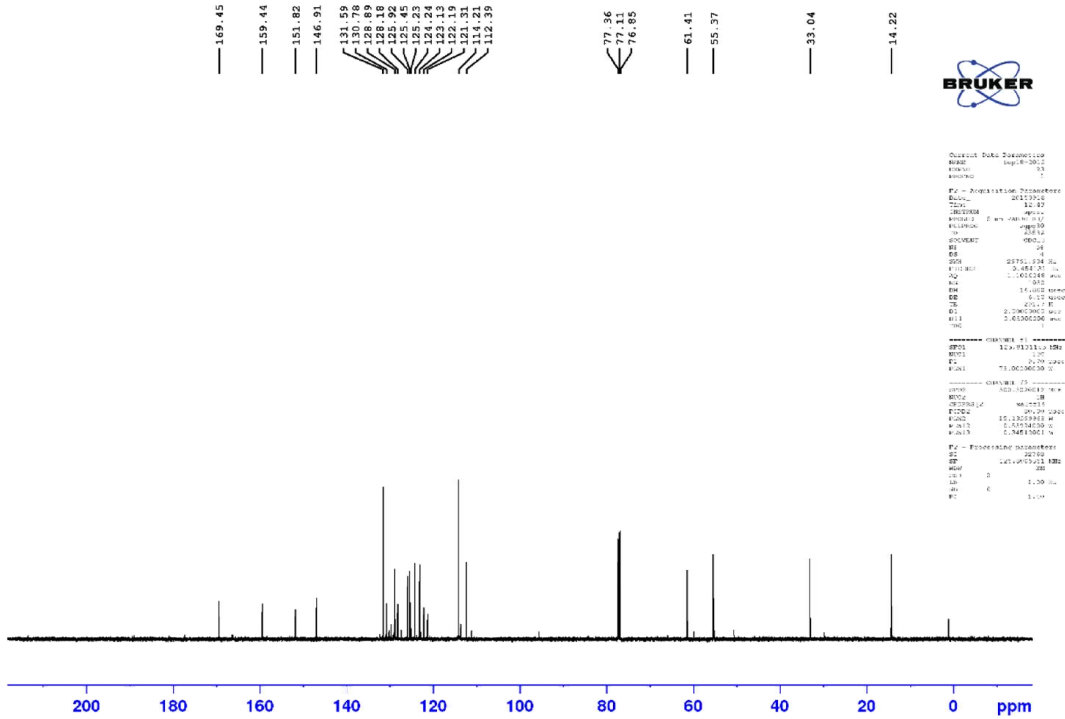


Regioselective cascade synthesis of Naphthofurans

SYAP108A

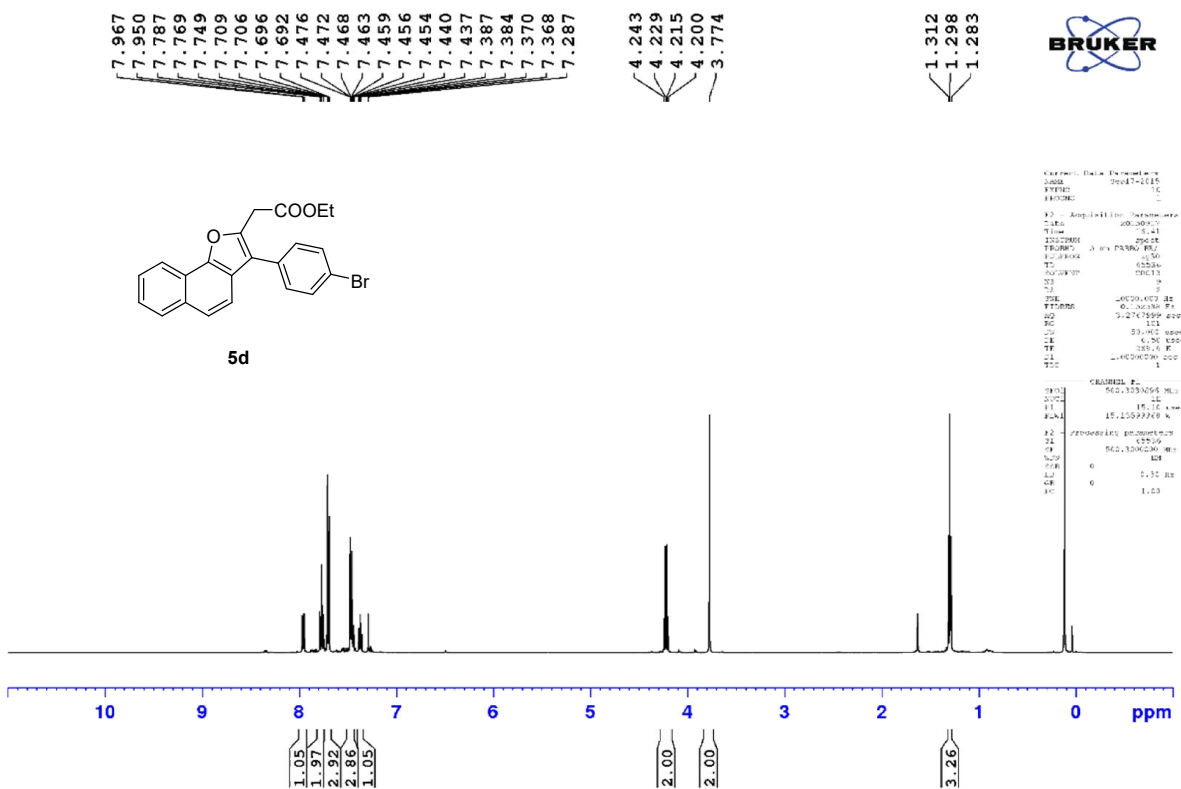


SYAP108A

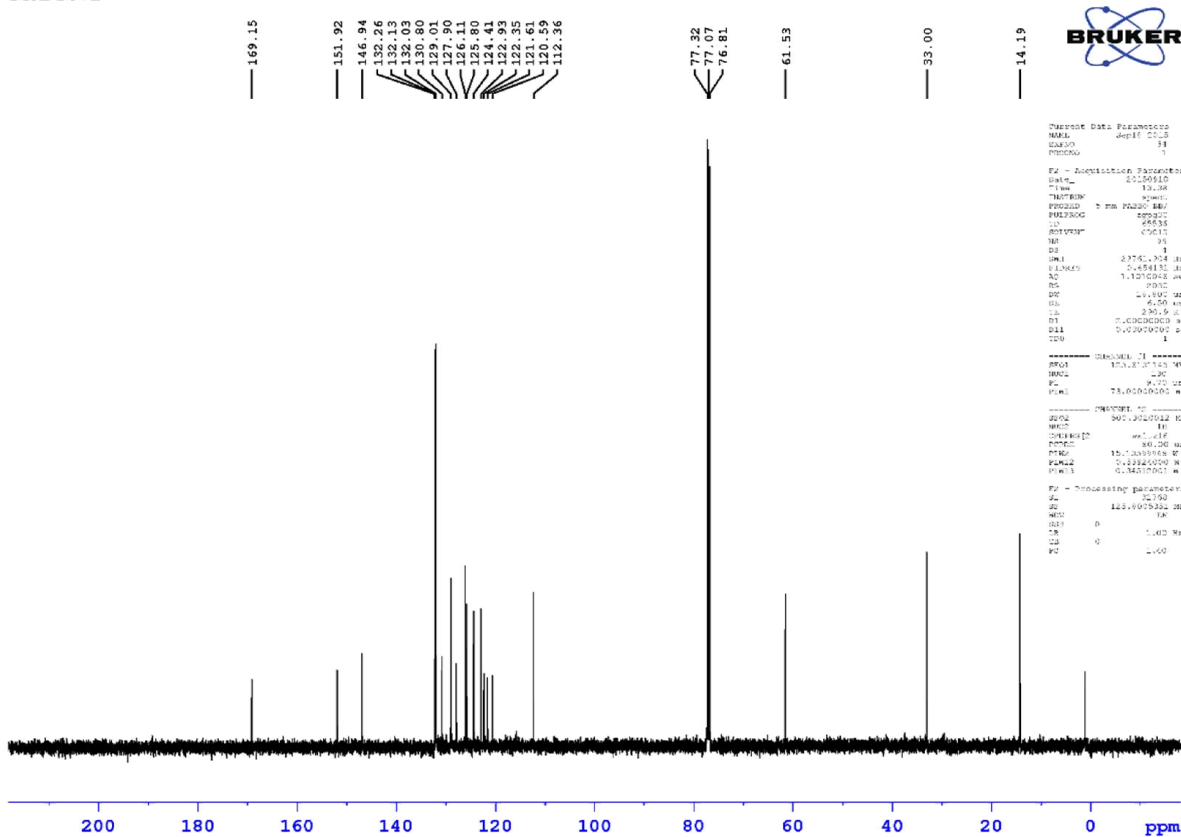


Regioselective cascade synthesis of Naphthofurans

SYAP107B



SYAP107B



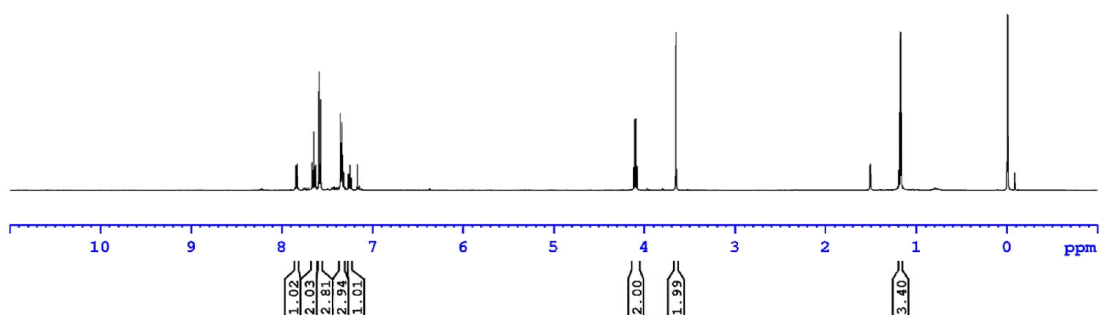
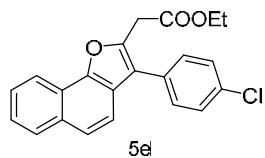
Regioselective cascade synthesis of Naphthofurans

SYAP107A

7.845
7.829
7.665
7.647
7.628
7.588
7.571
7.354
7.350
7.346
7.341
7.337
7.335
7.332
7.318
7.316
7.265
7.263
7.249
7.246
7.235
7.232

4.121
4.107
4.093
4.079
3.652

1.190
1.176
1.162



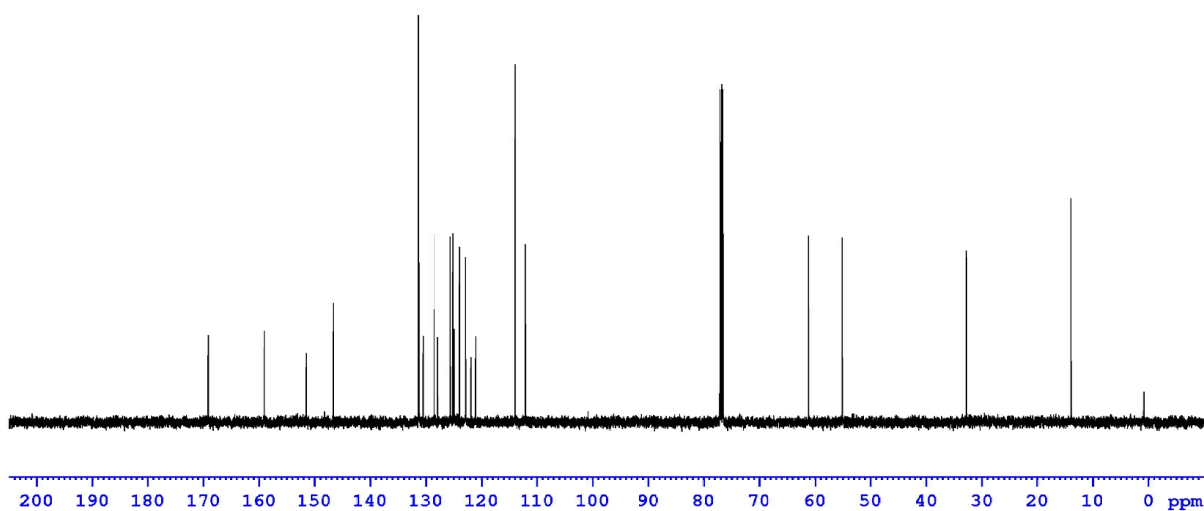
SYAP107A

169.13
159.13
151.51
146.60
131.29
130.47
128.58
127.88
125.60
125.14
124.92
122.83
121.88
121.00
113.91
112.08

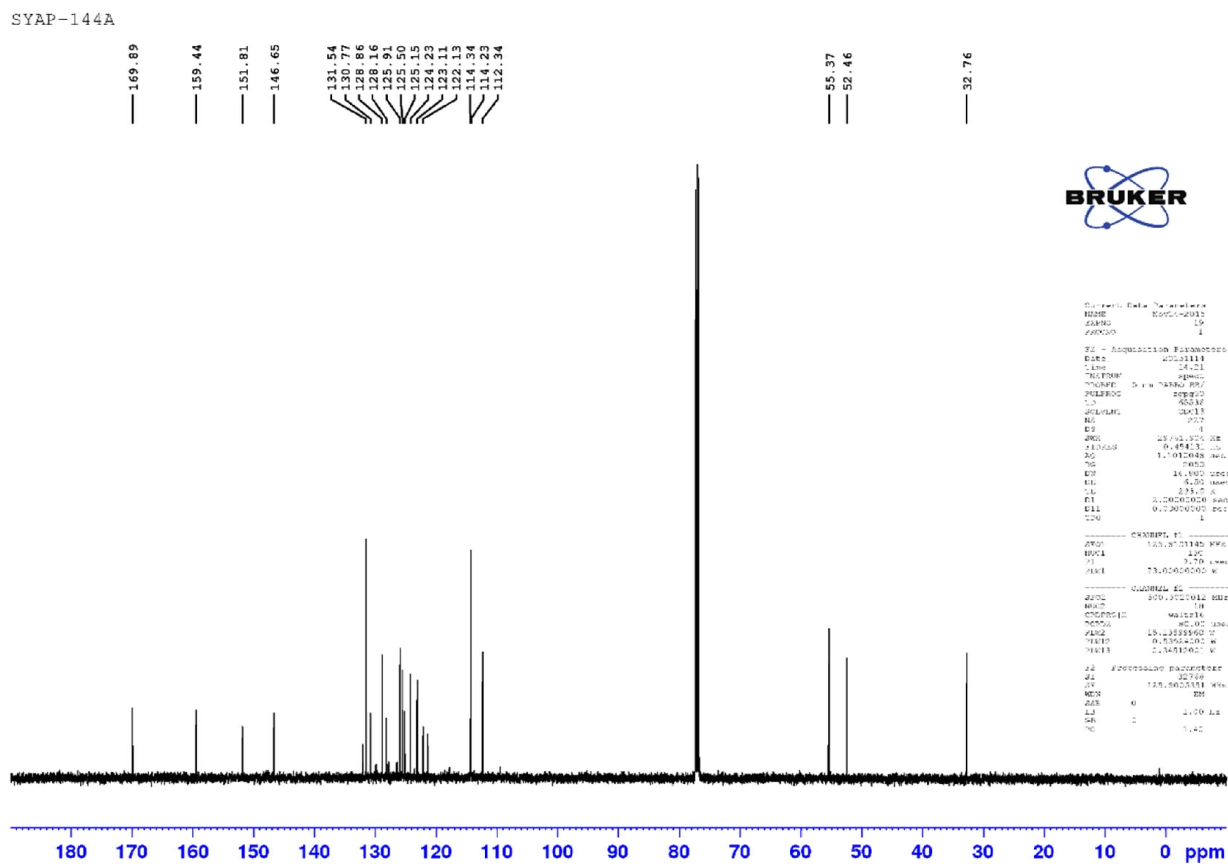
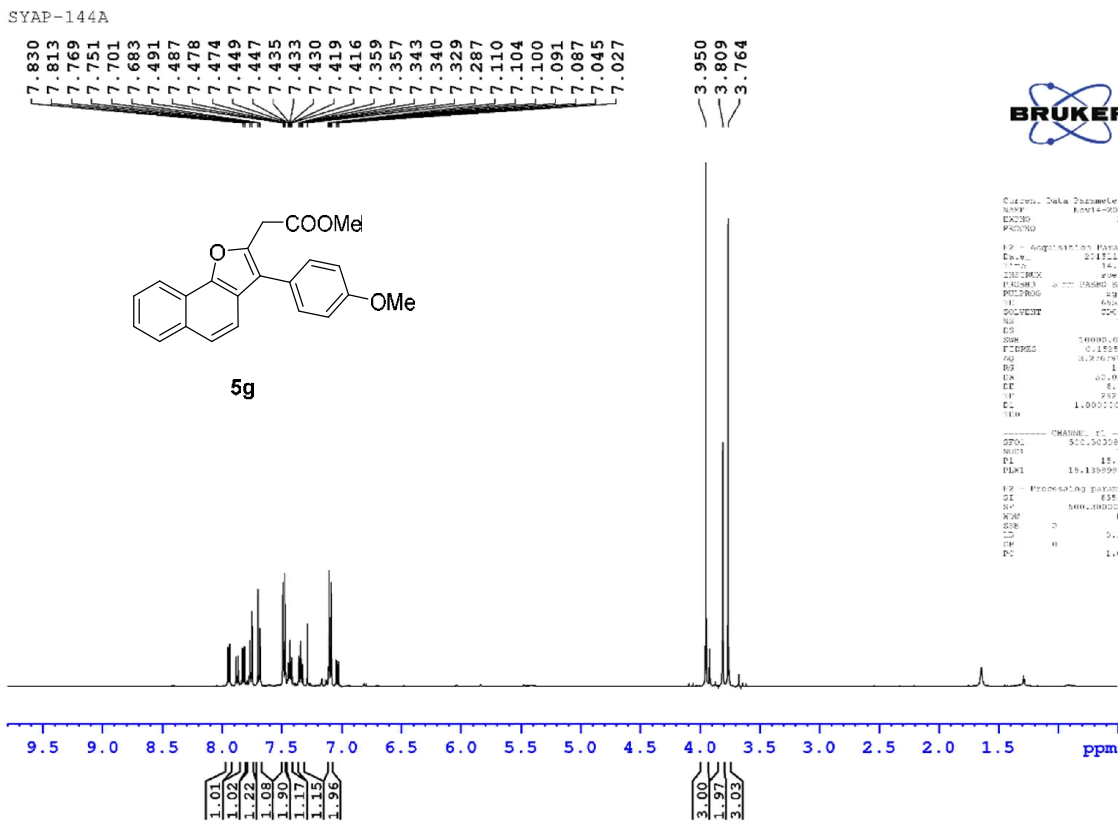
61.10
55.07

32.73

13.91

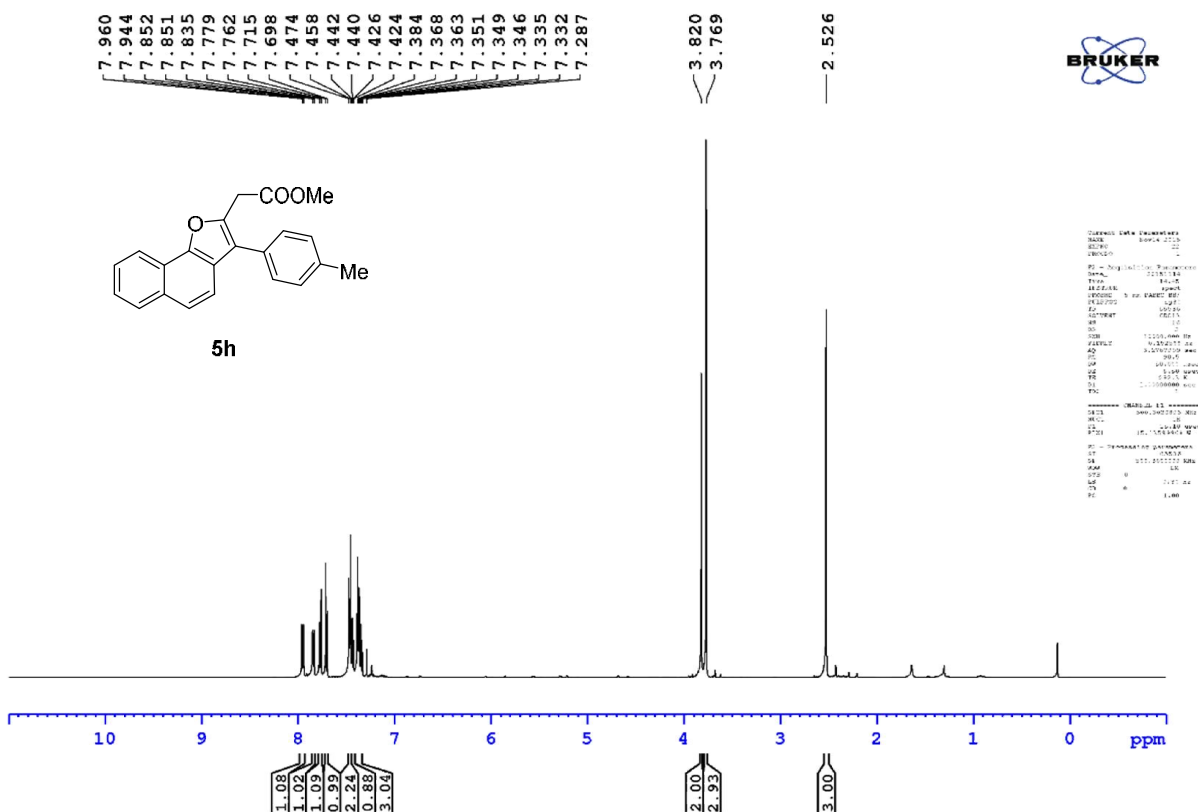


Regioselective cascade synthesis of Naphthofurans

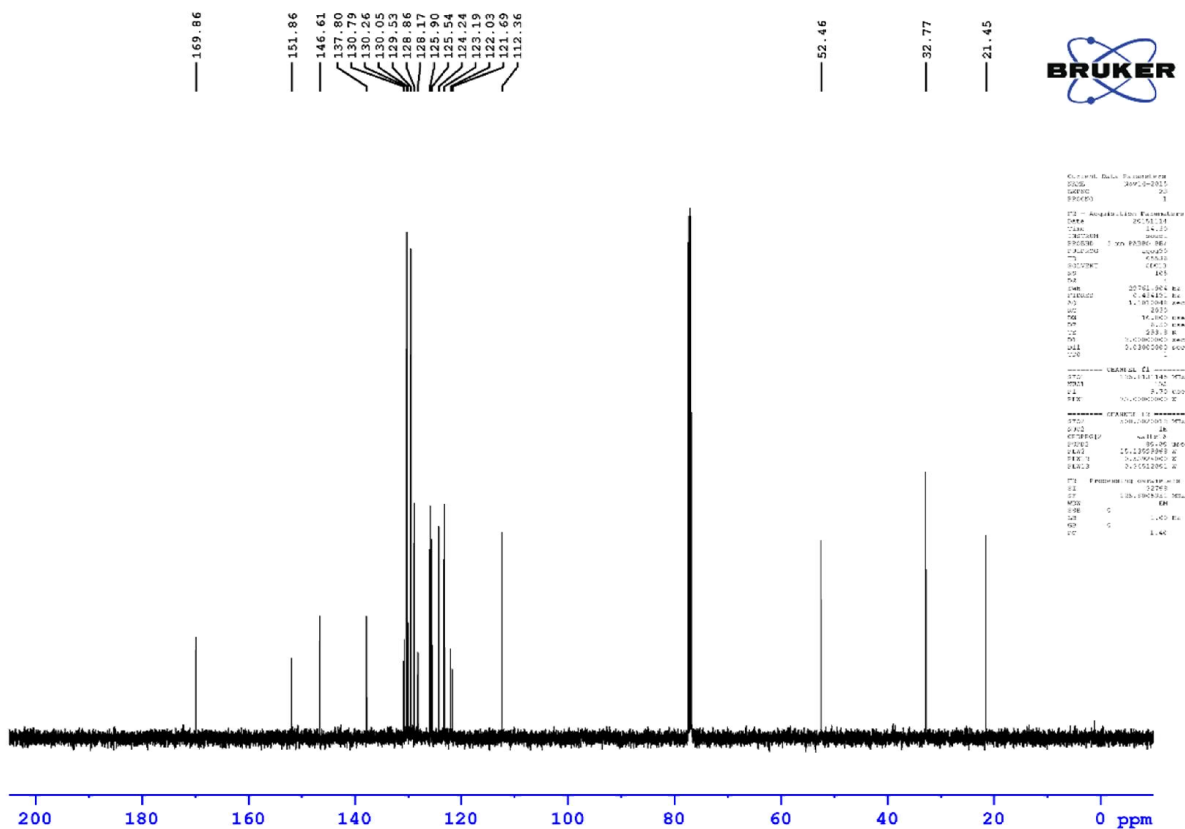


Regioselective cascade synthesis of Naphthofurans

SYAP-143B

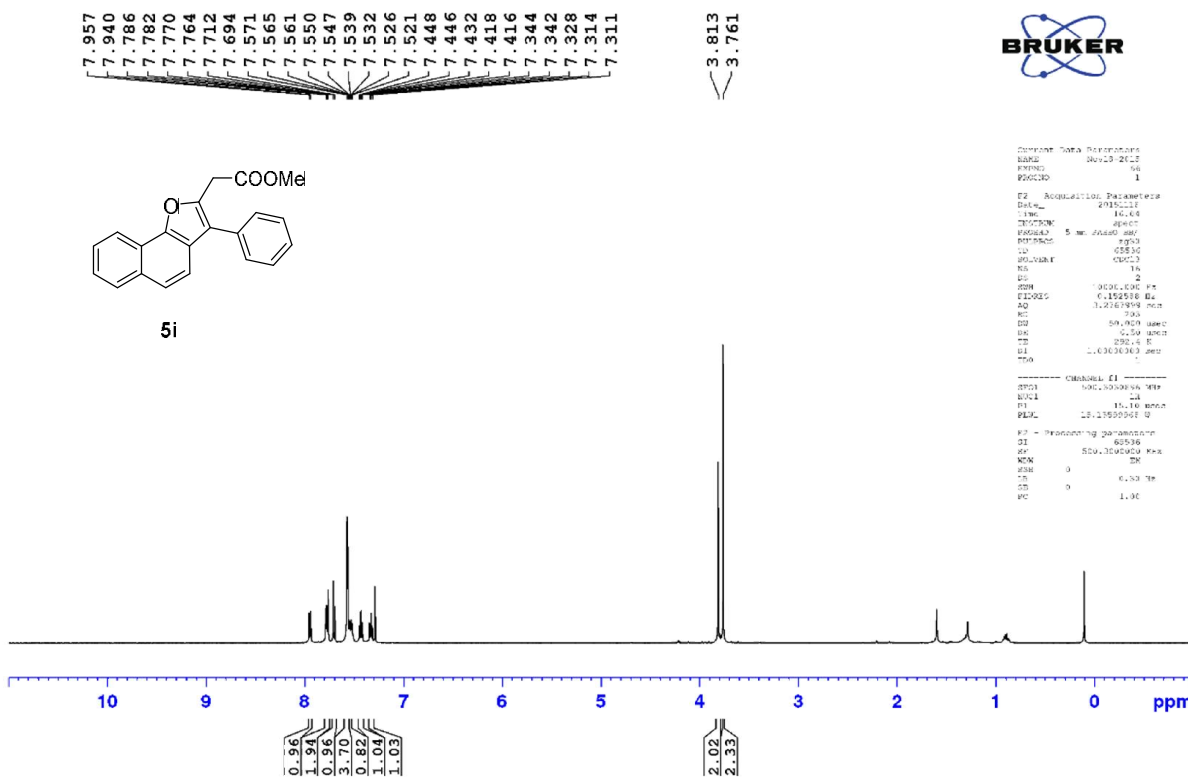


SYAP-143B

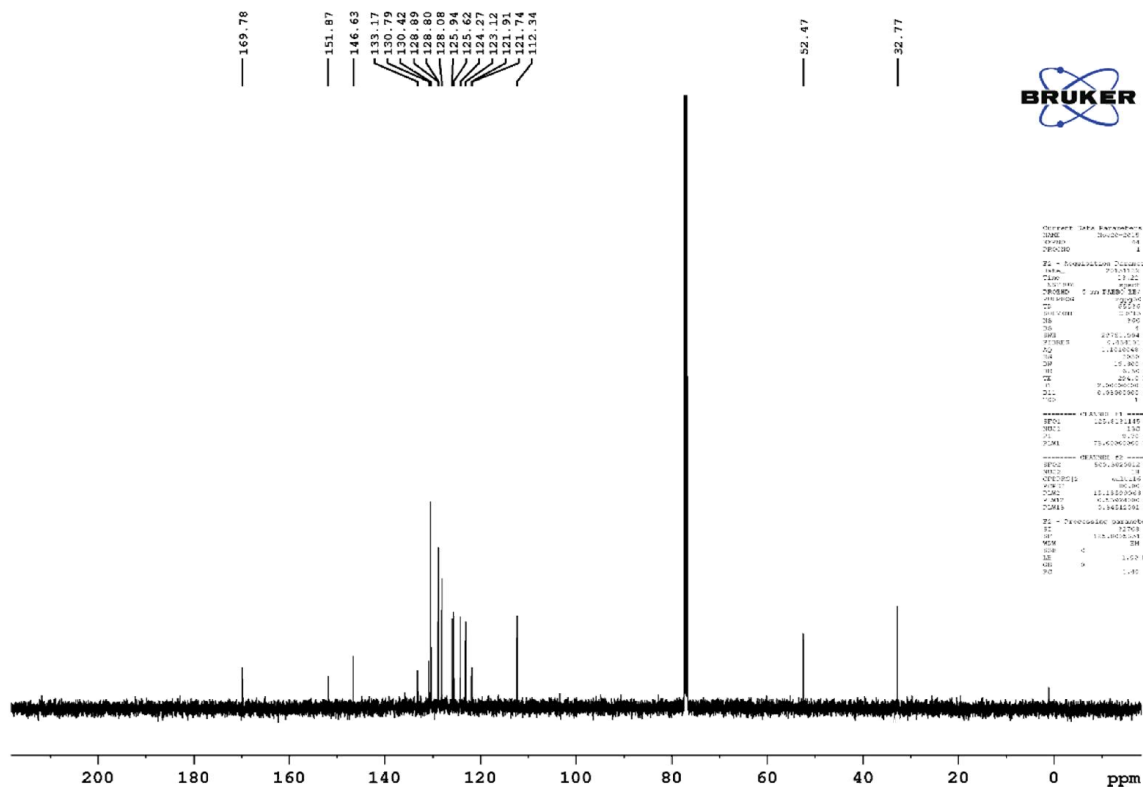


Regioselective cascade synthesis of Naphthofurans

SYAP147A

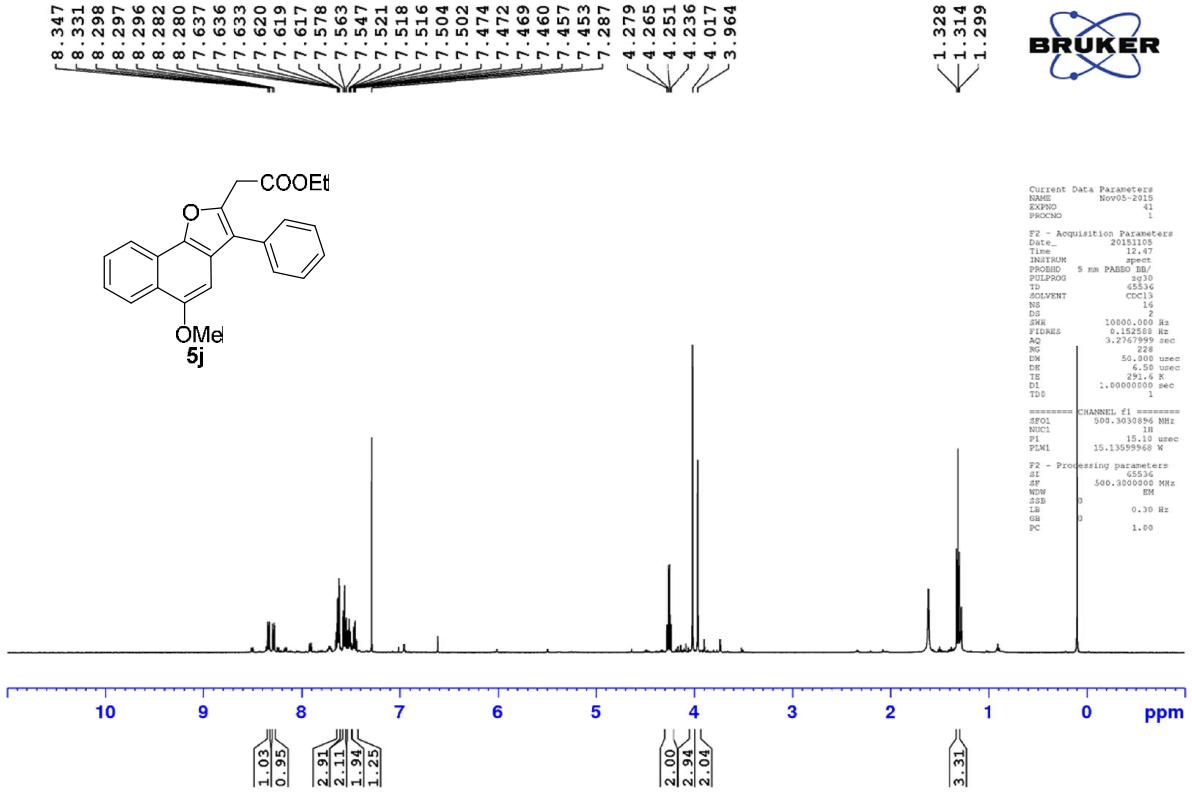


SYAP-147-A



Regioselective cascade synthesis of Naphthofurans

SYAP139A



```

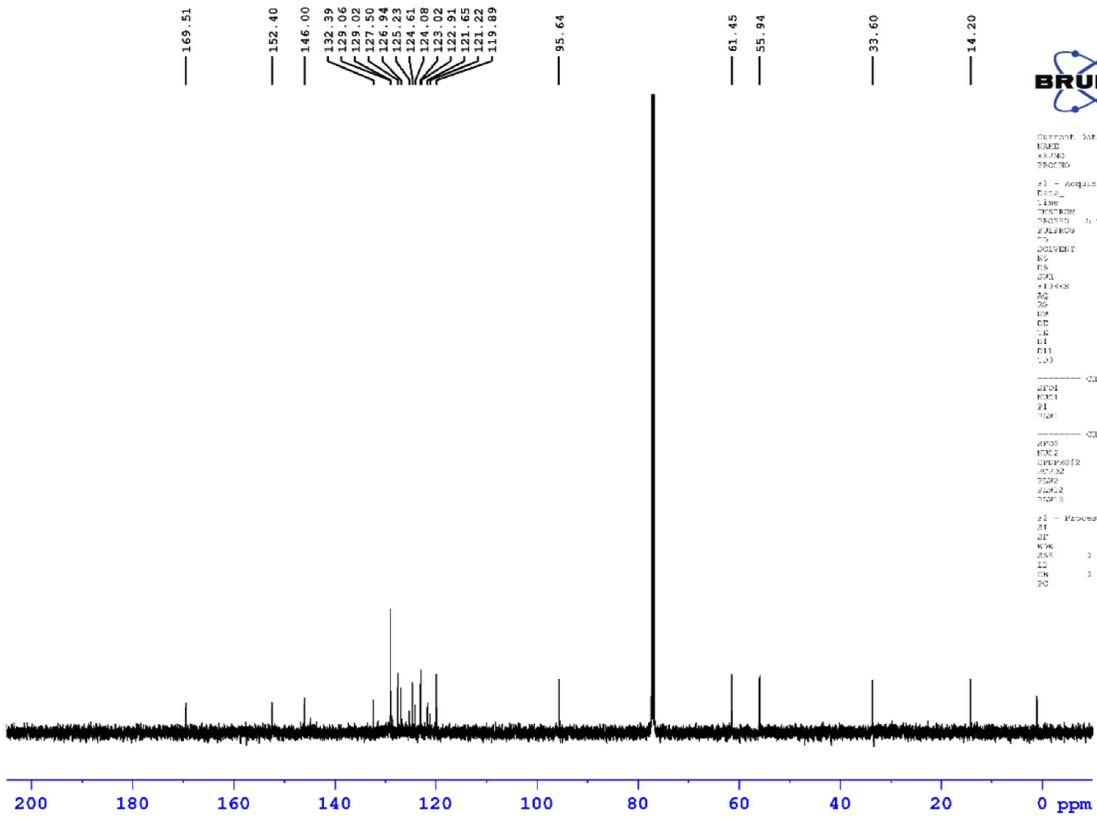
Current Data Parameters
NAME      3003-2315
EXPNO     41
PROCNO    1

F2 - Acquisition Parameters
Date_     20151105
Time      12.47
INSTRUM   spect
PROBHD    5 mm PABBO BB
PULPROG   zgpg30
TD         65536
SOLVENT   CDCl3
NS         16
DS         2
SWH        10000.000 Hz
FIDRES     0.152059 Hz
AQ          3.2767999 sec
RG          50.00
DM          50.000 usec
DE          6.50 usec
TE          291.4 K
D1          1.0000000 sec
TD0         1

===== CHANNEL f1 =====
SFO1       500.300896 MHz
NUC1       13C
P1          15.10 usec
PL1         15.1359968 W

F2 - Processing parameters
SI          32768
SF          500.300896 MHz
WDW         EM
SSB         0
LB          0.30 Hz
GB          0
PC          1.00
    
```

SYAP139A



```

Current Data Parameters
NAME      30035-2315
EXPNO     42
PROCNO    1

F1 - Acquisition Parameters
Date_     20151105
Time      13.02
INSTRUM   spect
PROBHD    5 mm PABBO BB
PULPROG   zgpg30
TD         65536
SOLVENT   CDCl3
NS         16
DS         4
SWH        25766.094 Hz
FIDRES     0.33114 Hz
AQ          1.1012948 sec
RG          50.00
DM          16.000 usec
DE          8.50 usec
TE          291.3 K
D1          2.3000000 sec
D11        0.0500000 sec
TD0         1

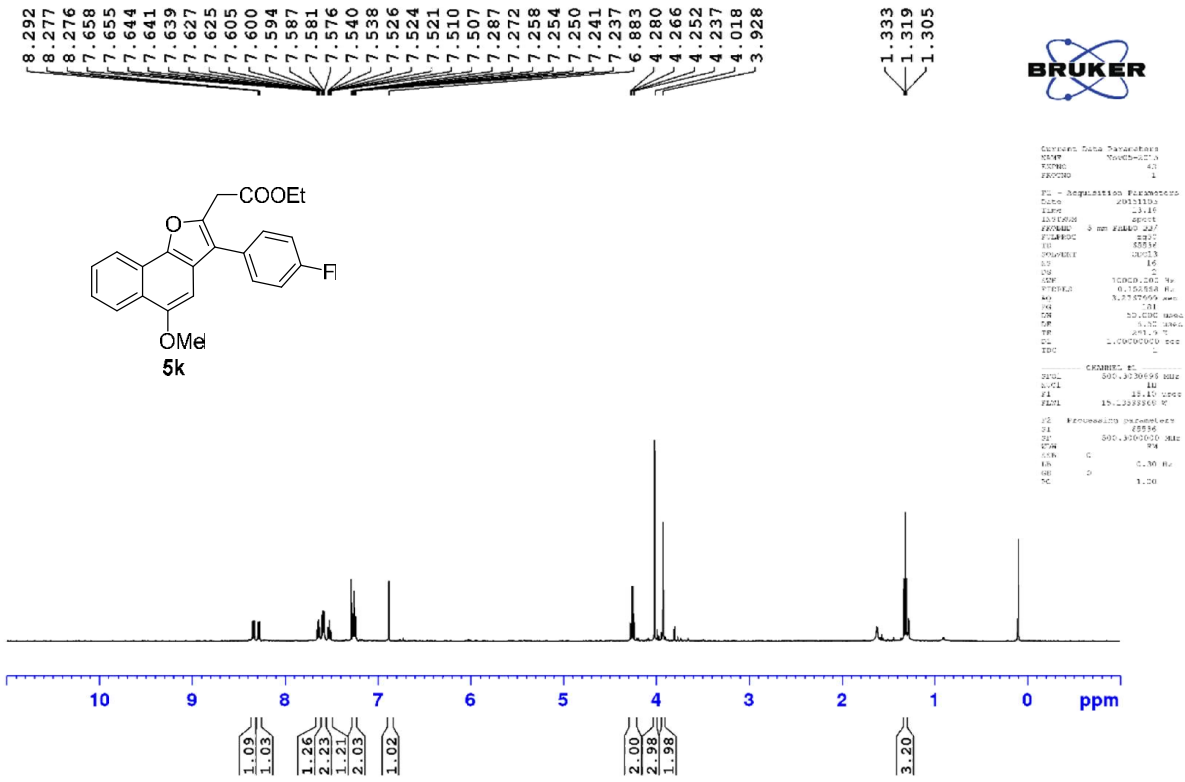
===== CHANNEL f1 =====
SFO1       125.761142 MHz
NUC1       13C
P1          0.150 usec
PL1         33.0000000 W

===== CHANNEL f2 =====
SFO2       500.300896 MHz
NUC2       1H
P2          16.000 usec
PL2         15.1359968 W
===== CHANNEL f3 =====
SFO3       62.8157505 MHz
NUC3       13C
P3          0.1400000 usec

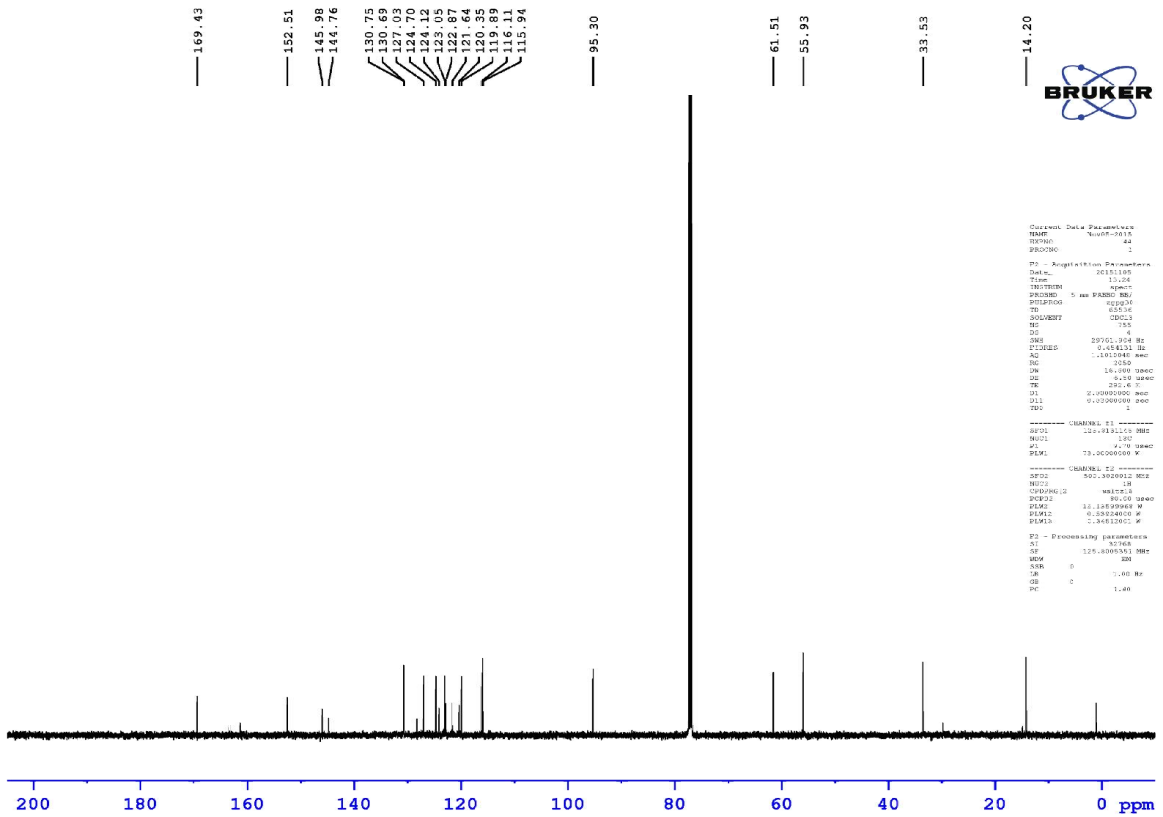
F1 - Processing parameters
SI          32768
SF          125.761142 MHz
WDW         EM
SSB         0
LB          1.00 Hz
GB          0
PC          1.00
    
```

Regioselective cascade synthesis of Naphthofurans

SYAP-140-A

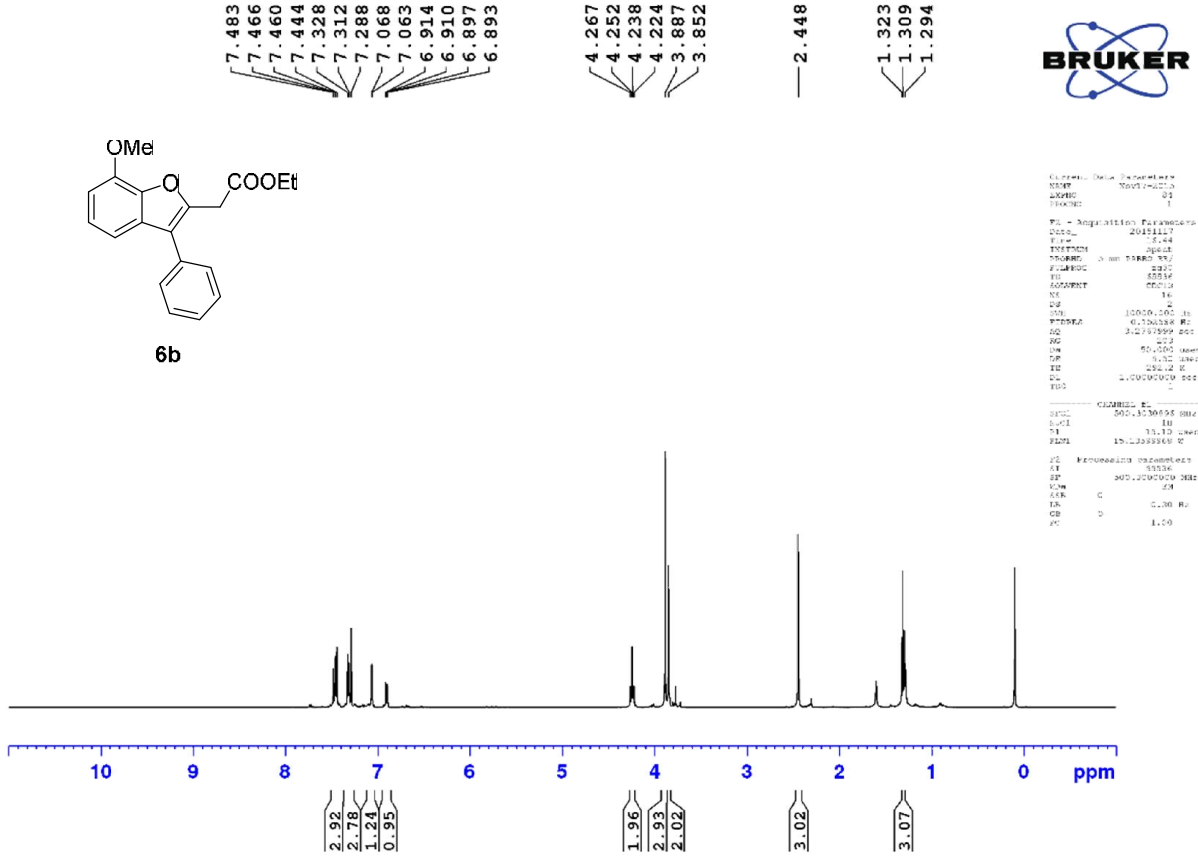


SYAP-140-A

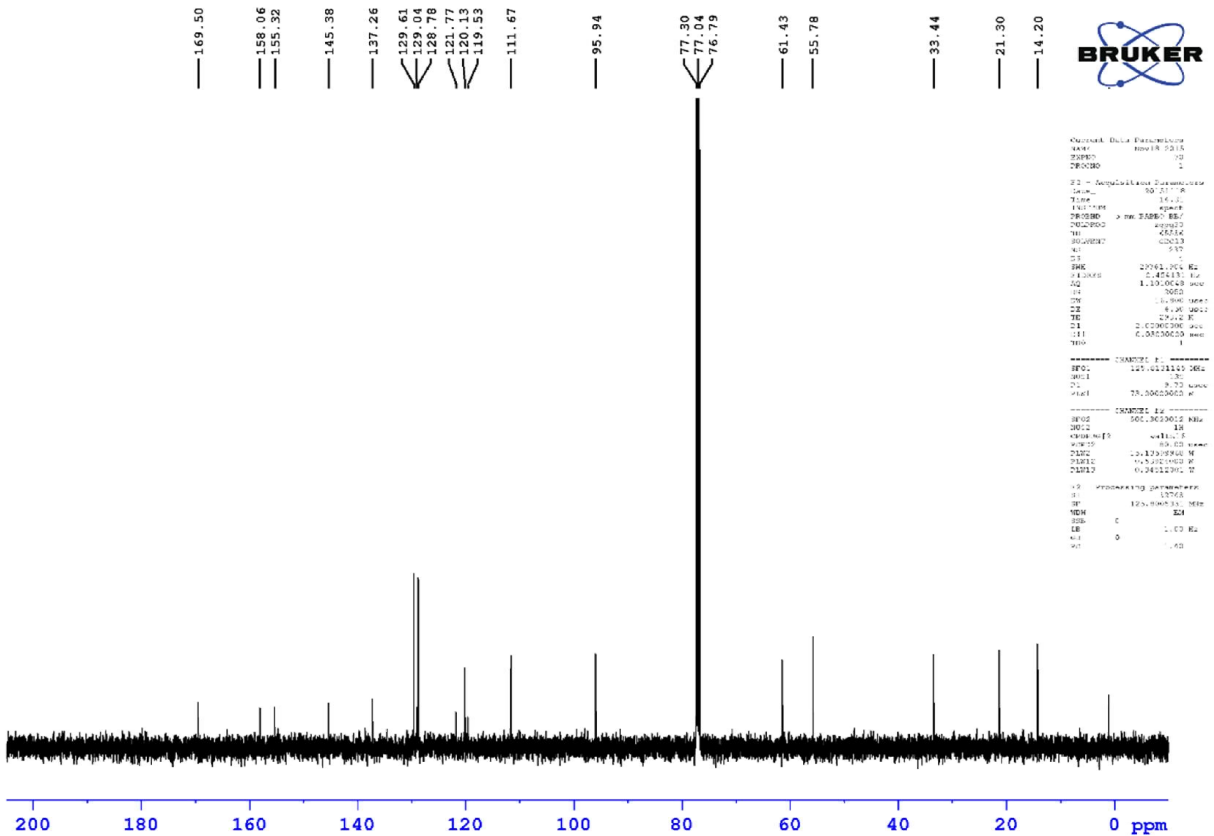


Regioselective cascade synthesis of Naphthofurans

SYAP-147B-DOWN

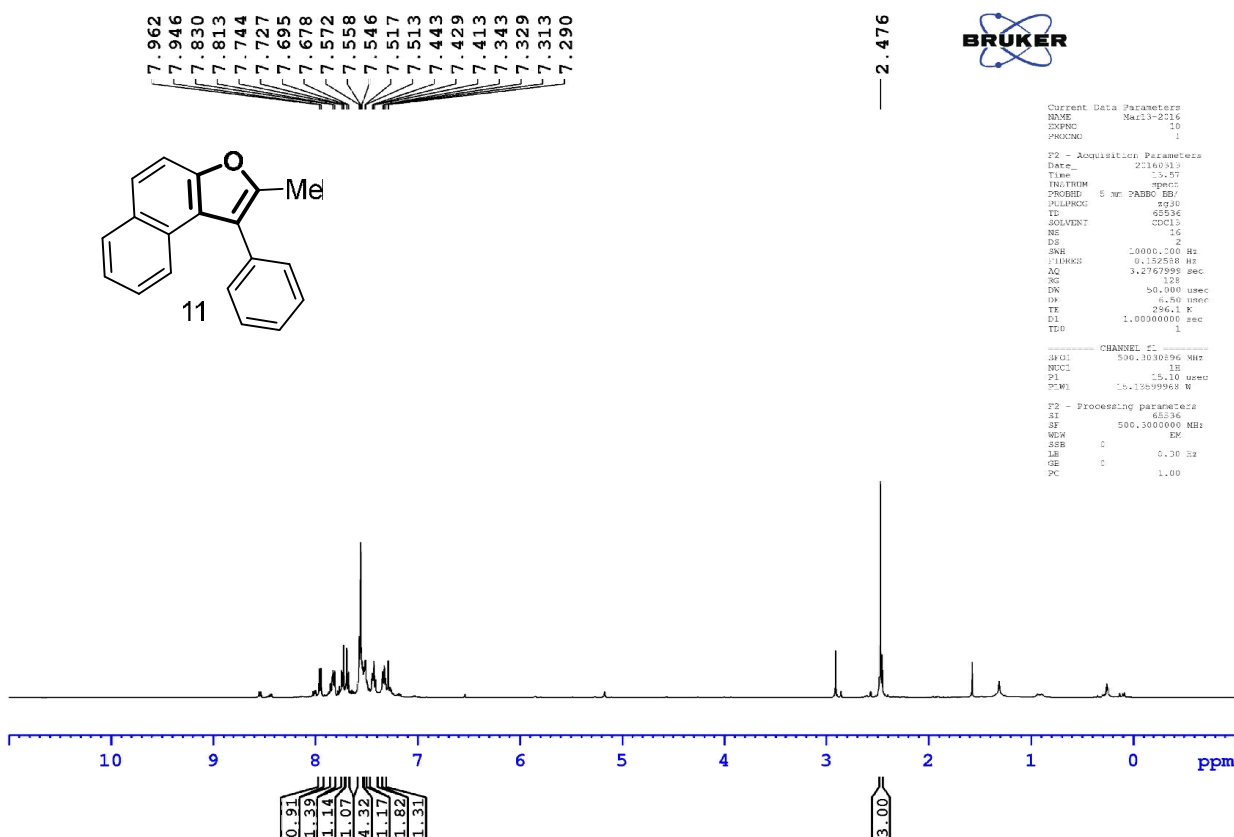


SYAP-147B-DOWN

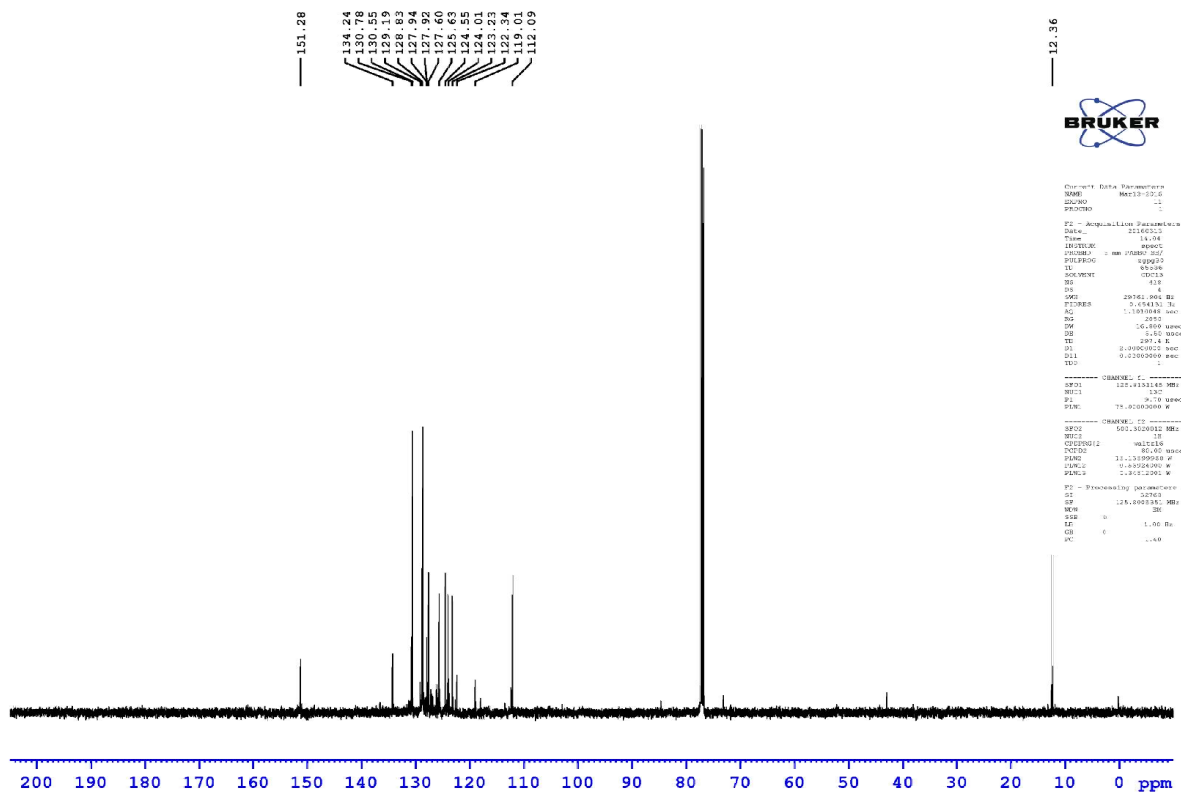


Regioselective cascade synthesis of Naphthofurans

SYRK2-11A



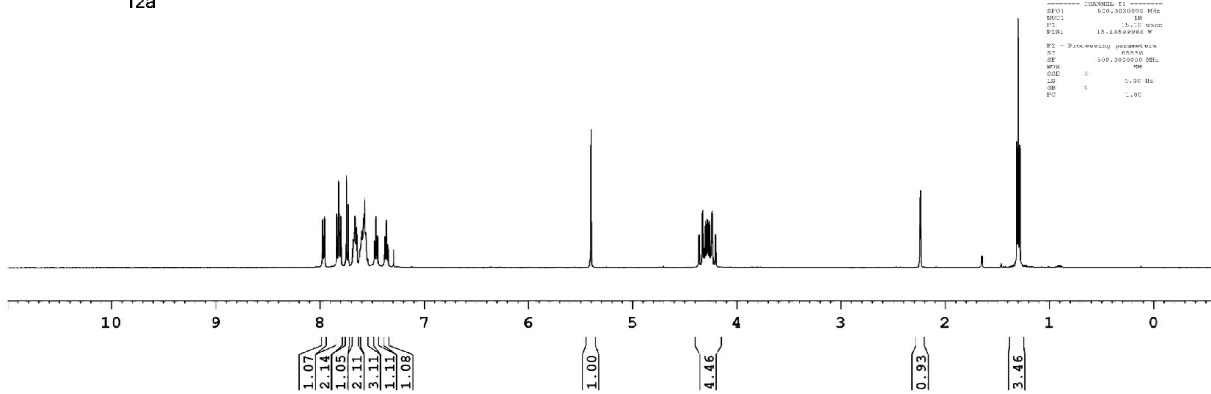
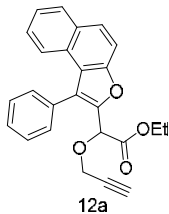
SYRK2-11A



Regioselective cascade synthesis of Naphthofurans

SYAP2-10A

7.972
7.956
7.839
7.820
7.816
7.799
7.746
7.728
7.680
7.665
7.648
7.599
7.581
7.573
7.569
7.560
7.557
7.477
7.476
7.461
7.447
7.445
7.379
7.377
7.362
7.348
7.346
5.398
4.361
4.357
4.329
4.324
4.314
4.307
4.300
4.291
4.286
4.277
4.271
4.262
4.255
4.248
4.241
4.236
4.232
4.204
4.200
2.236
1.310
1.296
1.282



```
Current Data Parameters
NAME      5a22-2016
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20160228
Time     15.00
INSTRUM  spect
PROBHD   5 mm PABBO BB
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        4
DS        4
SWH       29761.668 Hz
FIDRES    0.454131 Hz
AQ        1.1018648 sec
RG         512
SQ         15.000 usec
DE         8.50 usec
TE        291.7 K
SFO       2.00000000 sec
SFI       0.93000000 sec
SFD       1

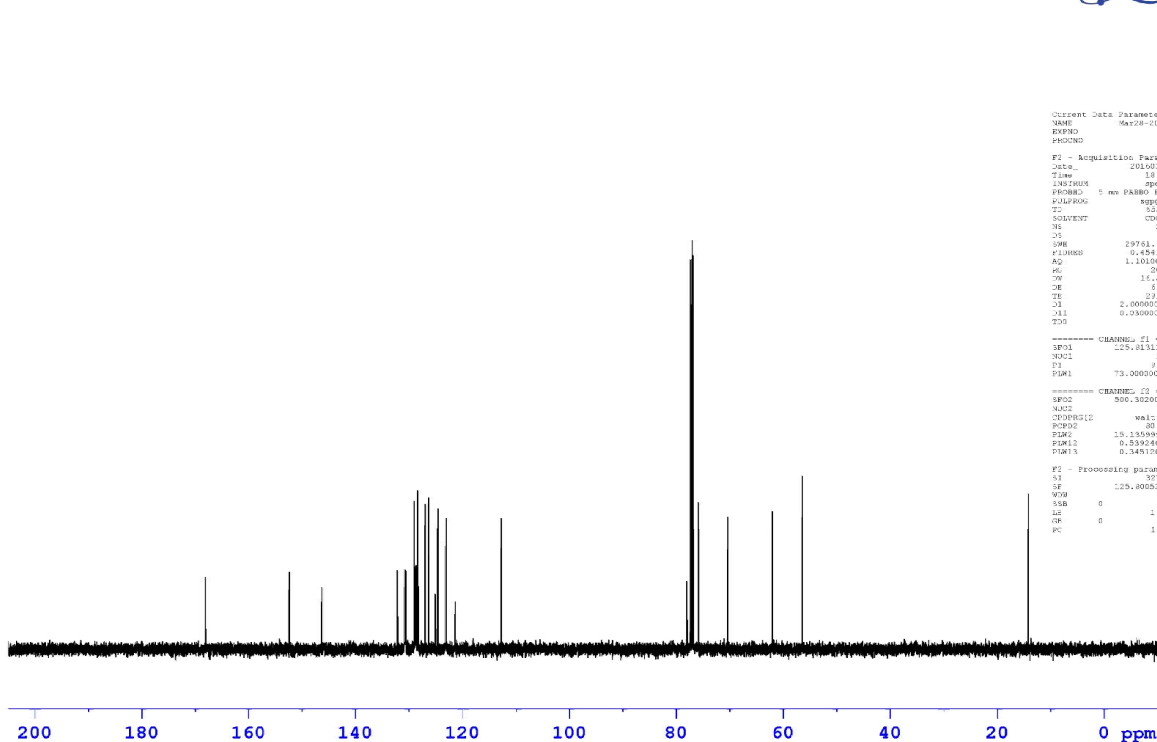
===== CHANNEL f1 =====
NUC1      13C
P1        8.00 usec
PL1       0.00000000 W

===== CHANNEL f2 =====
NUC2      13C
P2        8.00 usec
PL2       0.00000000 W

F2 - Processing parameters
SI        32768
SF        100.6260150 MHz
WDW       EM
SSB       0
LB        0.50 Hz
GB        0
PC        1.60
```

SYAP2-10A

169.11
152.41
146.27
132.15
130.84
130.71
130.61
128.82
128.68
128.41
128.23
126.98
126.32
125.08
123.10
123.00
121.36
112.72
78.01
75.83
70.36
62.03
56.42
14.14



```
Current Data Parameters
NAME      5a22-2016
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20160228
Time     15.00
INSTRUM  spect
PROBHD   5 mm PABBO BB
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        4
DS        4
SWH       29761.668 Hz
FIDRES    0.454131 Hz
AQ        1.1018648 sec
RG         512
SQ         15.000 usec
DE         8.50 usec
TE        291.7 K
SFO       2.00000000 sec
SFI       0.93000000 sec
SFD       1

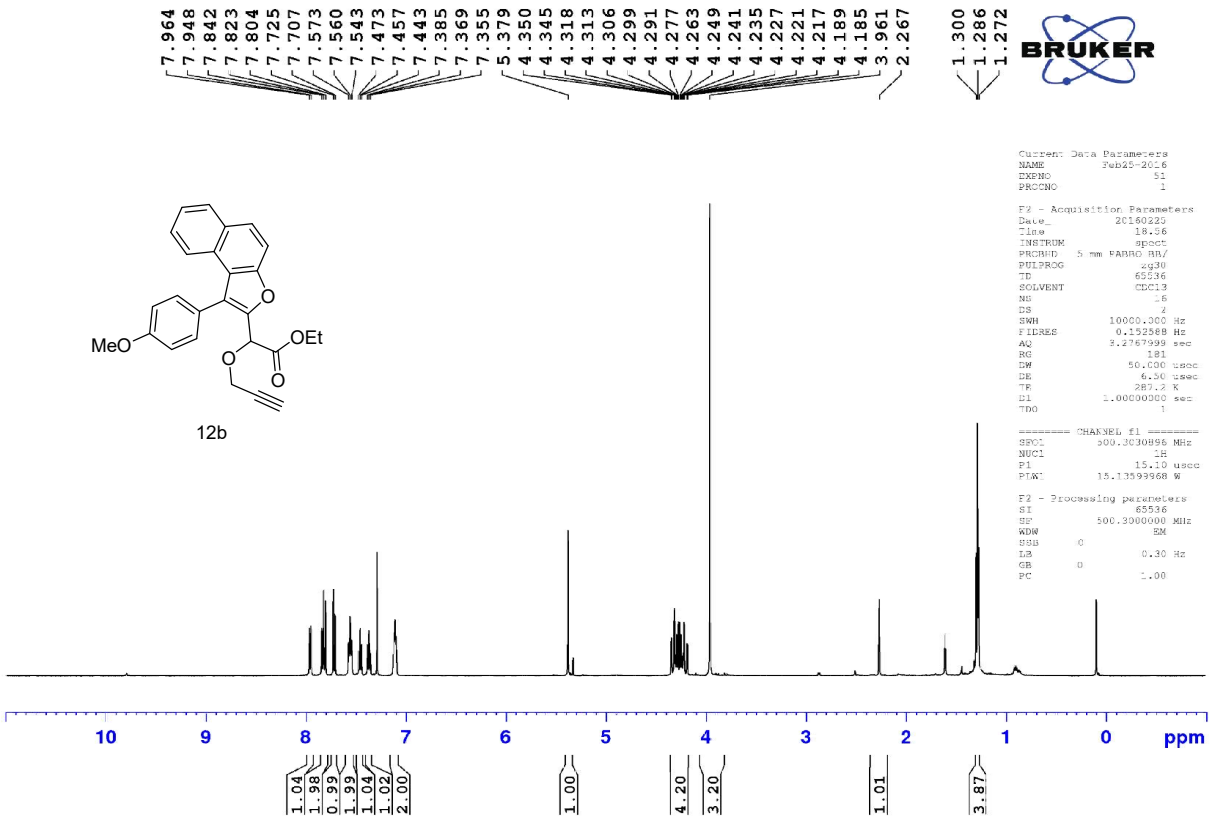
===== CHANNEL f1 =====
NUC1      13C
P1        8.00 usec
PL1       0.00000000 W

===== CHANNEL f2 =====
NUC2      13C
P2        8.00 usec
PL2       0.00000000 W

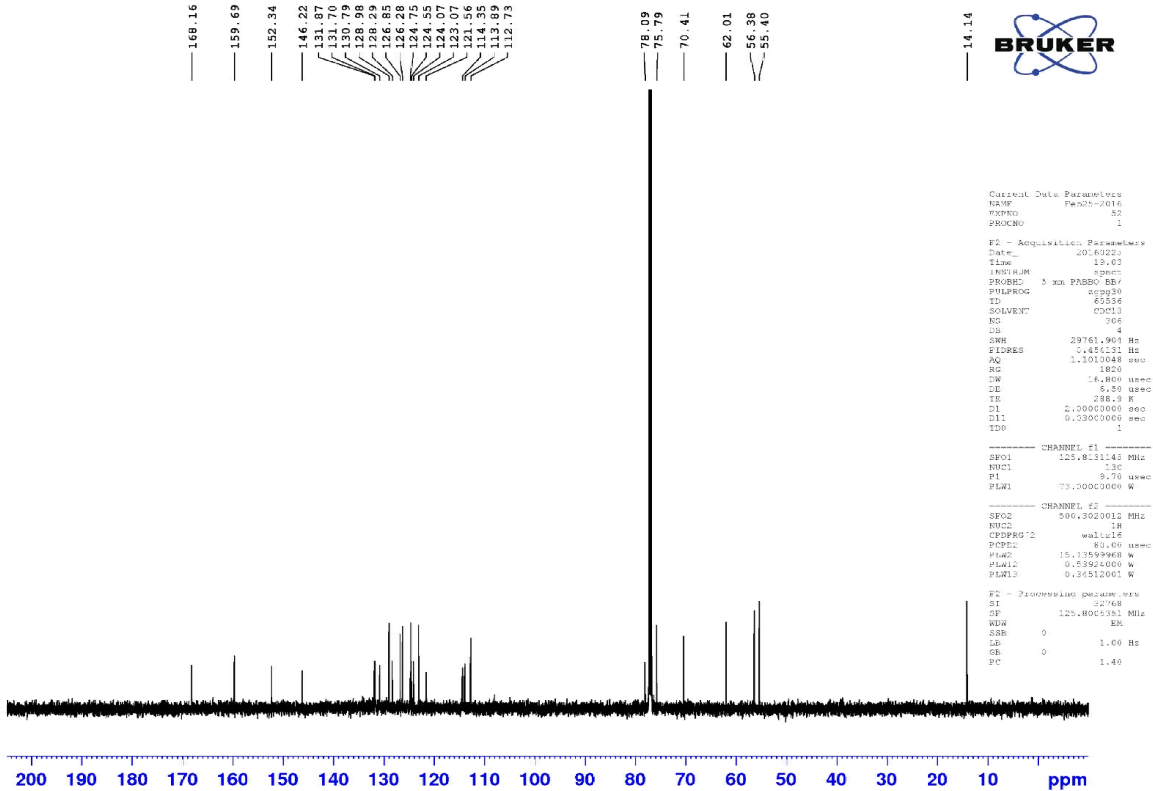
F2 - Processing parameters
SI        32768
SF        100.6260150 MHz
WDW       EM
SSB       0
LB        0.50 Hz
GB        0
PC        1.60
```

Regioselective cascade synthesis of Naphthofurans

SYAP-193-A-2

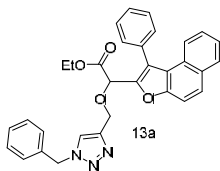
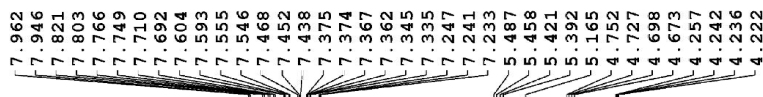


SYAP-193-A-2



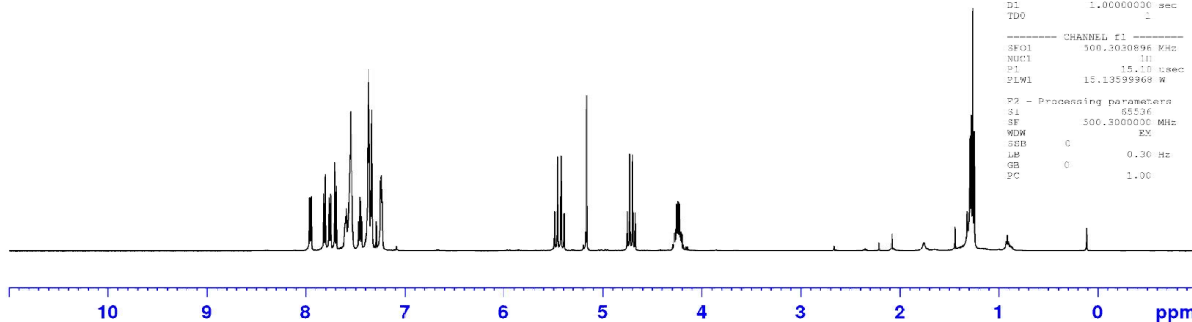
Regioselective cascade synthesis of Naphthofurans

SYAP2-11B

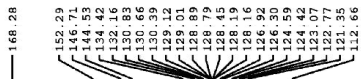


Current Data Parameters
NAME: Msc2-2016
EXPER: 42
PROCNC: 1

F2 - Acquisition Parameters
Date_: 20160321
Time: 2.45
INSTRUM: spect
PROBHD: 5 mm F4BBO BB/
PULPROG: zgpg
TD: 65536
SOLVENT: CDCl3
NS: 16
DS: 2
SWH: 10000.036 Hz
F2 - F1: 0.152988 Hz
AQ: 2.2767999 sec
RG: 201
DM: 50.000 usec
DE: 6.50 usec
TE: 290.2 K
D1: 1.0000000 sec
TDO: 1

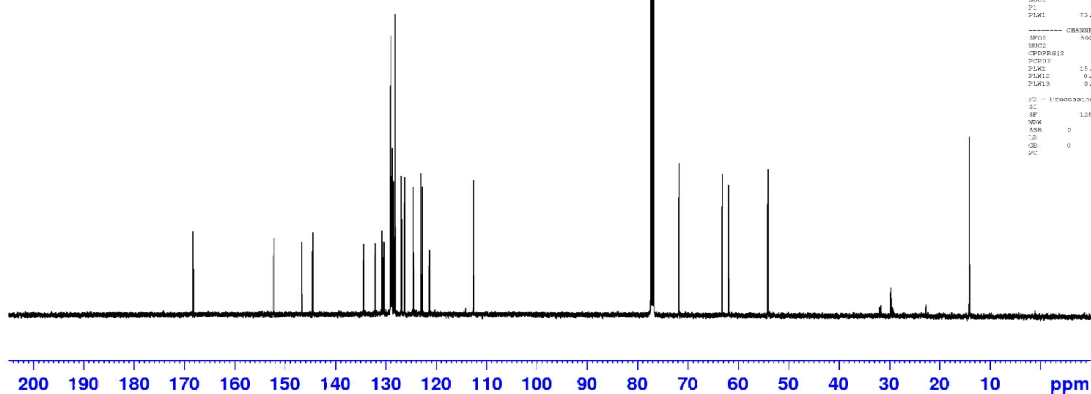


SYAP2-11B



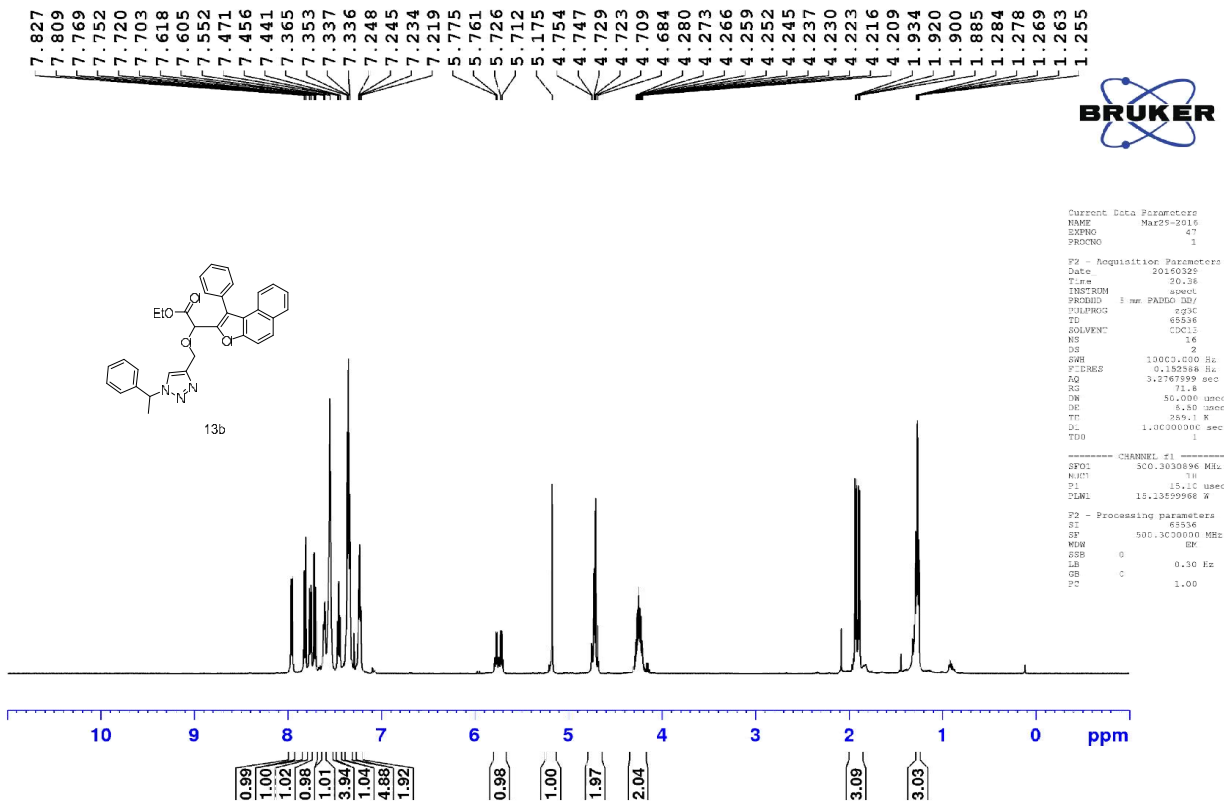
Current Data Parameters
NAME: Msc2-2016
EXPER: 43
PROCNC: 1

F2 - Acquisition Parameters
Date_: 20160321
Time: 3.41
INSTRUM: spect
PROBHD: 5 mm F4BBO BB/
PULPROG: zgpg
TD: 65536
SOLVENT: CDCl3
NS: 16
DS: 2
SWH: 29761.924 Hz
F2 - F1: 0.152988 Hz
AQ: 1.1010101 sec
RG: 201
DM: 50.000 usec
DE: 6.50 usec
TE: 290.2 K
D1: 2.0000000 sec
TDO: 0.0000000 sec

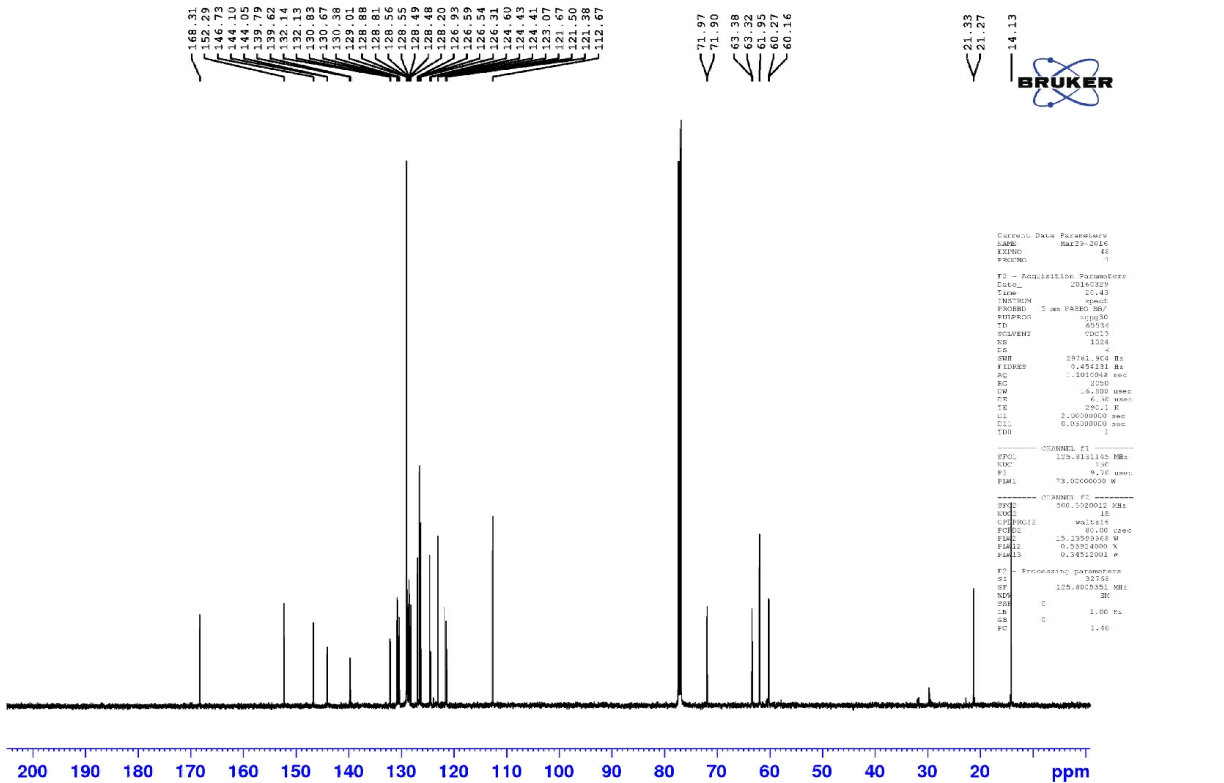


Regioselective cascade synthesis of Naphthofurans

SYAP2-11A

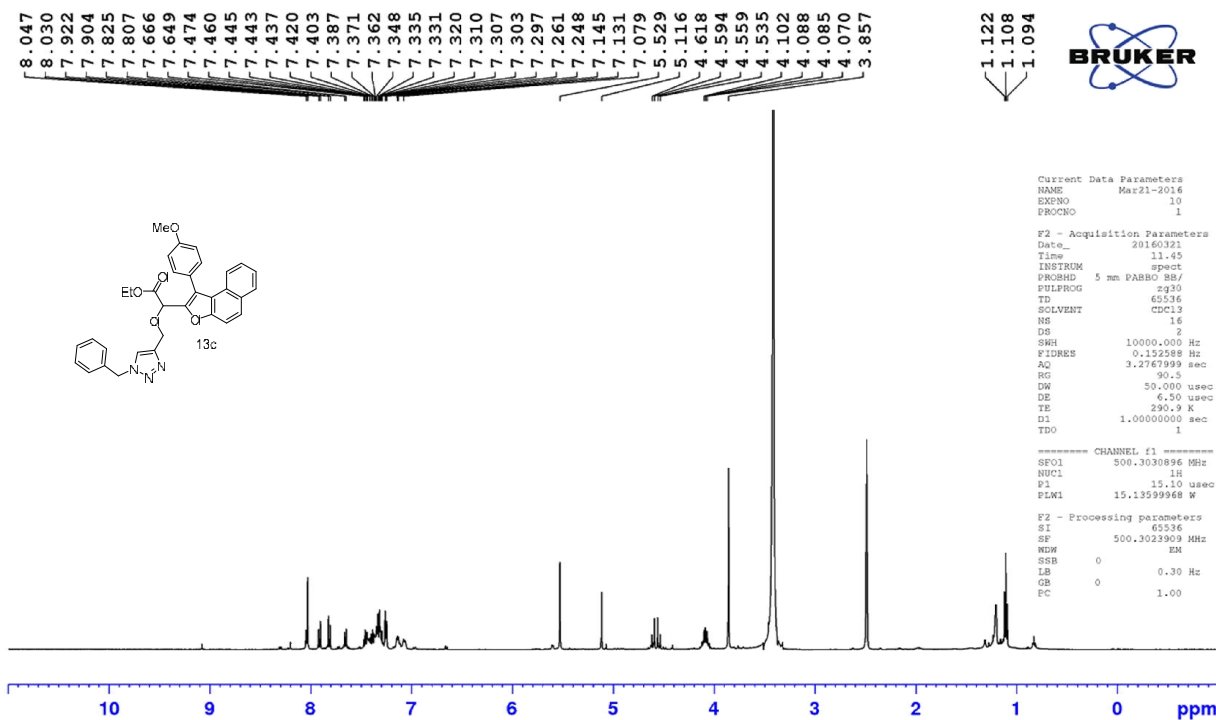


SYAP2-11A

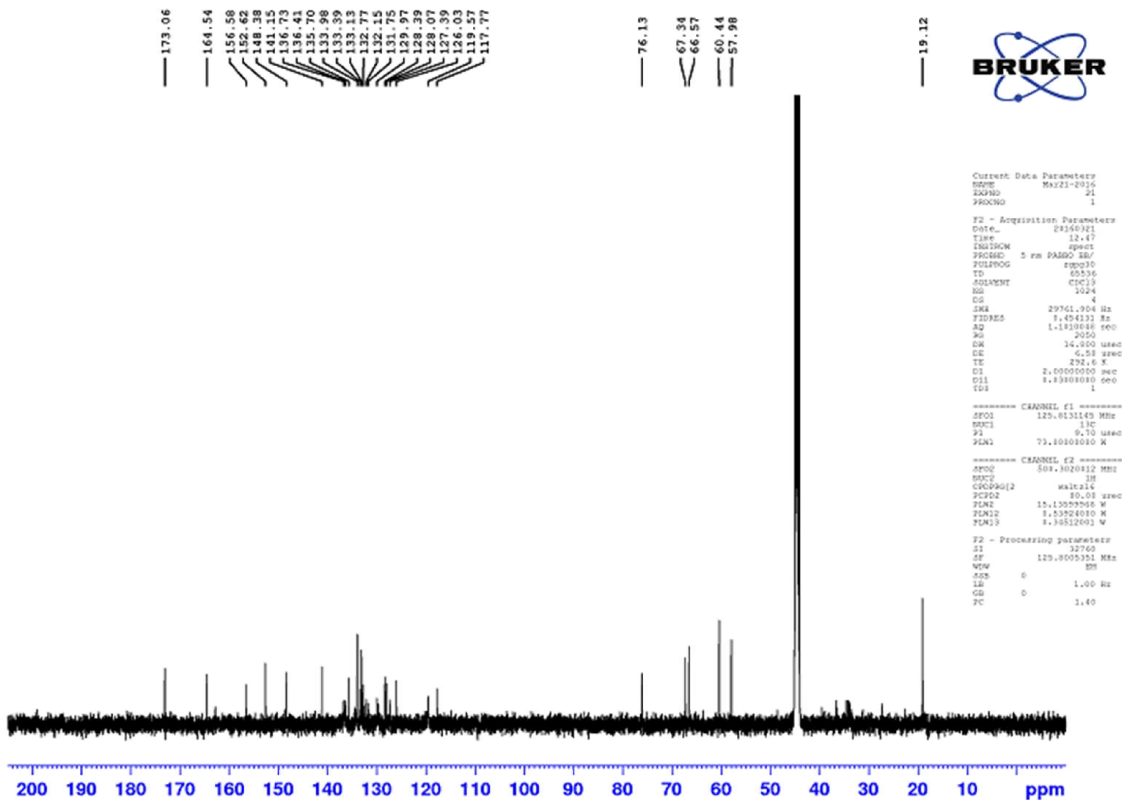


Regioselective cascade synthesis of Naphthofurans

syap--2-3a-new

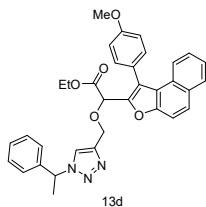
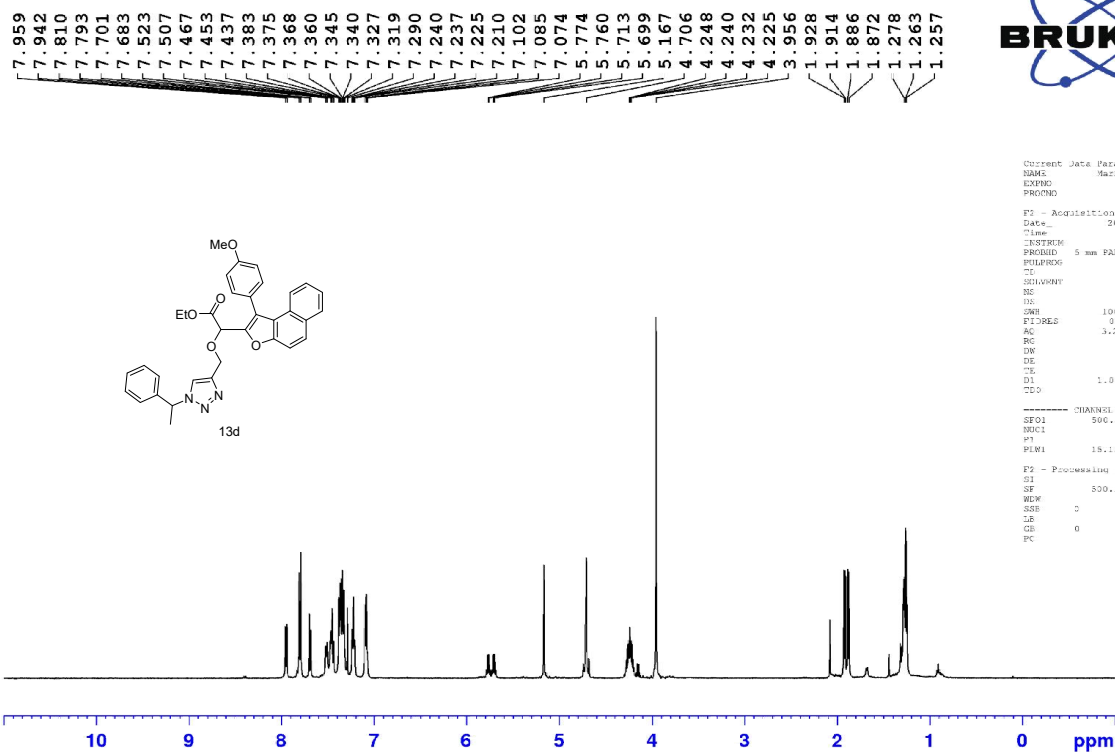


syap--2-3a-new



Regioselective cascade synthesis of Naphthofurans

SYAP-2-6A



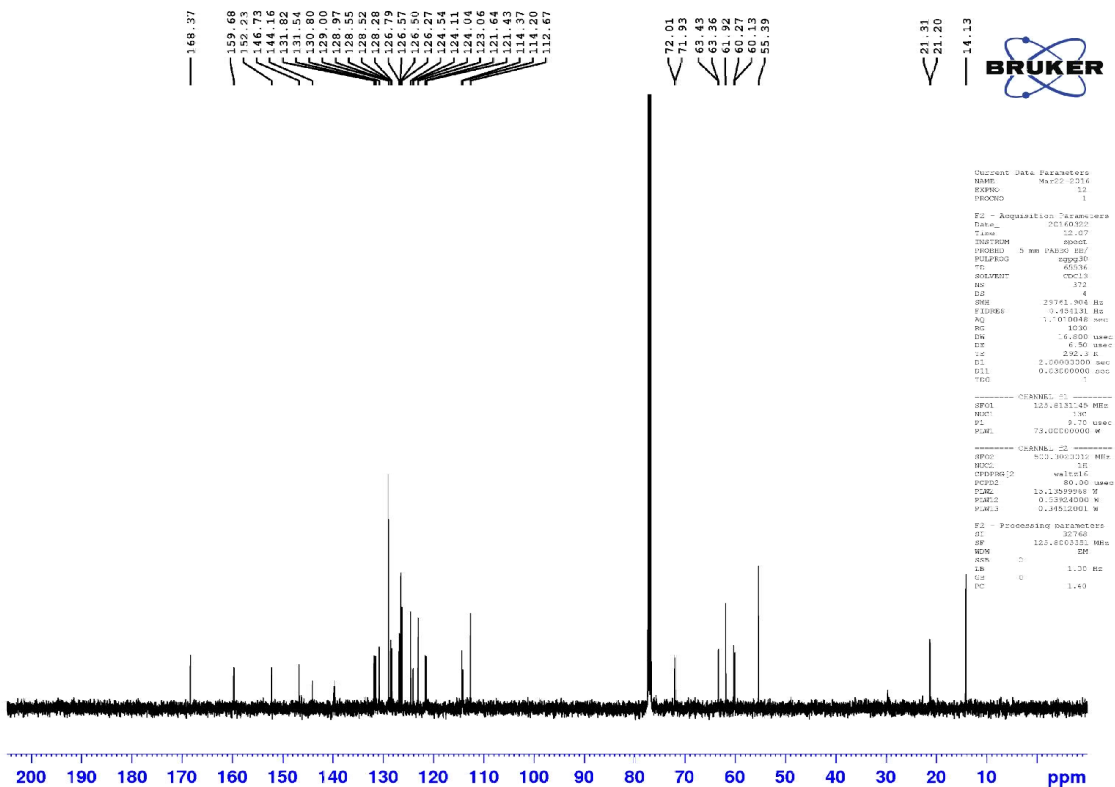
Current Data Parameters
NAME: Mar22-2016
EXPNO: 11
PROCNO: 1

F2 - Acquisition Parameters
Date_: 20160322
Time: 11.50
INSTRUM: spect
PROBHD: 5 mm PABBO D5/1
PULPROG: zgpg30
TD: 65536
SOLVENT: CDCl3
NS: 6
DS: 4
SWH: 10000.200 Hz
FIDRES: 0.122588 Hz
AQ: 3.2761999 sec
RG: 313
DW: 30.000 usec
DE: 4.50 usec
TE: 296.1 K
D1: 1.00000000 sec
TDO: 2

----- CHANNEL f1 -----
SFO1 506.303896 MHz
NUC1 13
P1 15.10 usec
PLW1 15.13599562 W

F2 - Processing parameters
SI 65536
SF 500.300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

SYAP-2-6A



Current Data Parameters
NAME: Mar22-2016
EXPNO: 12
PROCNO: 1

F2 - Acquisition Parameters
Date_: 20160322
Time: 12.07
INSTRUM: spect
PROBHD: 5 mm PABBO D5/1
PULPROG: zgpg30
TD: 65536
SOLVENT: CDCl3
NS: 372
DS: 4
SWH: 25761.904 Hz
FIDRES: 0.051131 Hz
AQ: 1.000048 sec
RG: 1050
DW: 16.800 usec
DE: 6.50 usec
TE: 292.1 K
D1: 2.00000000 sec
D11: 0.05000000 sec
TDO: 2

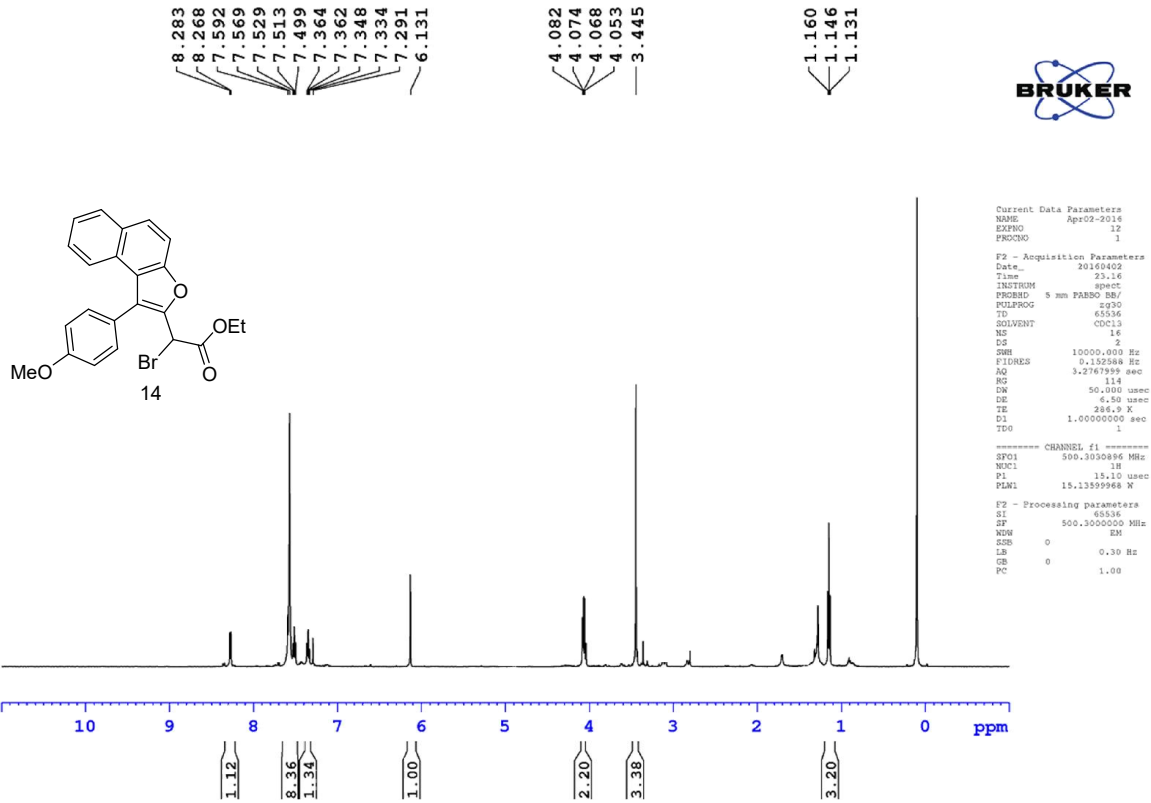
----- CHANNEL f1 -----
SFO1 125.761140 MHz
NUC1 13C
P1 9.70 usec
PLW1 73.00000000 W

----- CHANNEL f2 -----
SFO2 125.76000000 MHz
NUC2 13C
P2 9.70 usec
PLW2 73.00000000 W

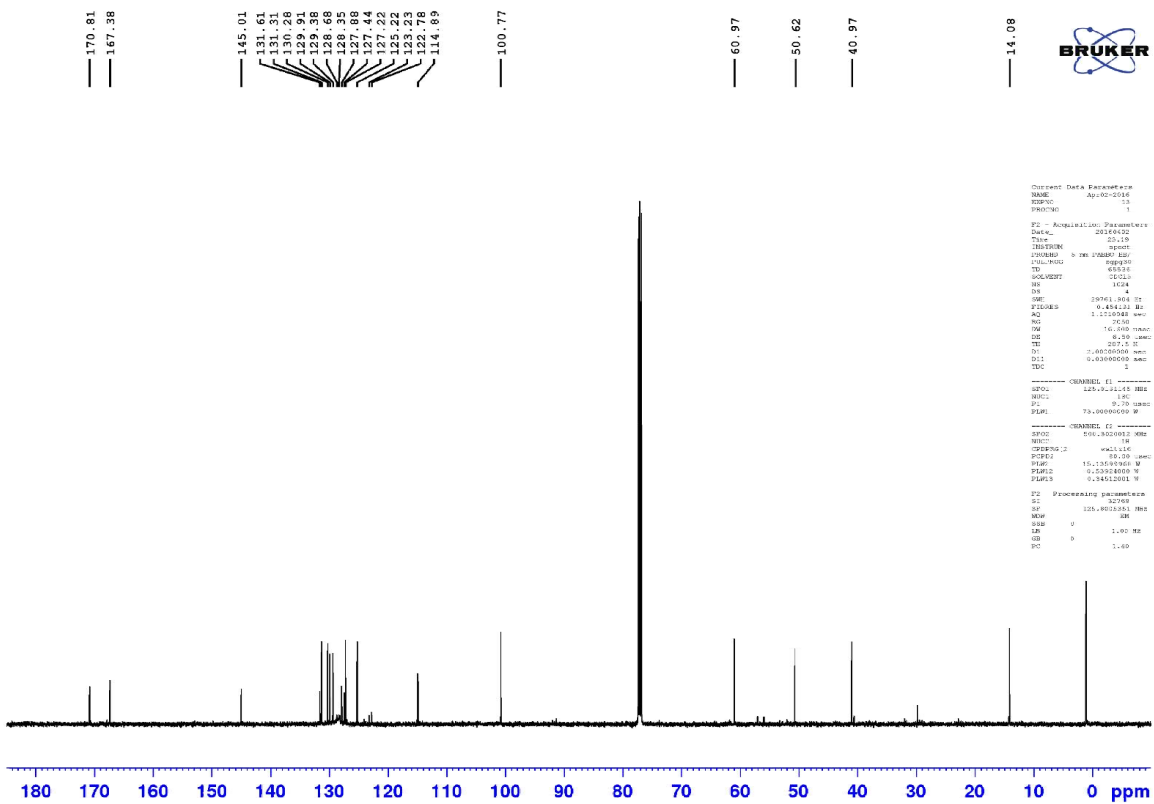
F2 - Processing parameters
SI 65536
SF 125.760000 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

Regioselective cascade synthesis of Naphthofurans

SYAP2-12

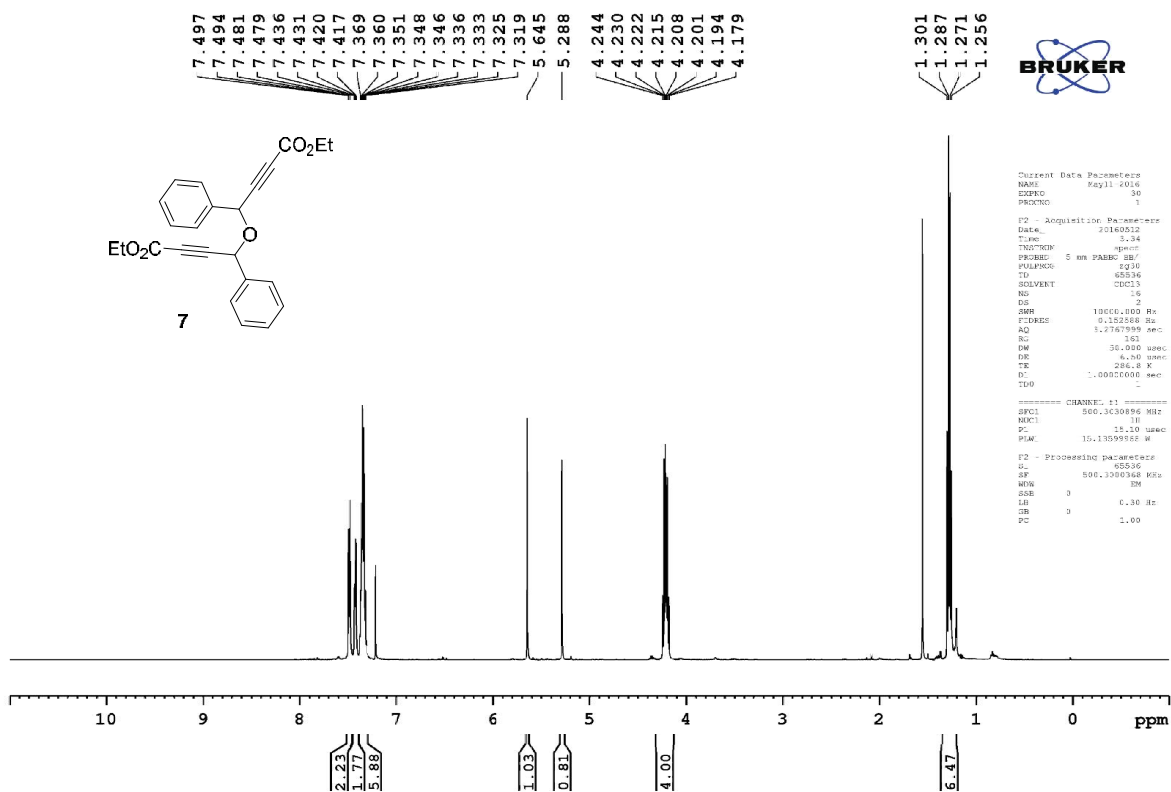


SYAP2-12

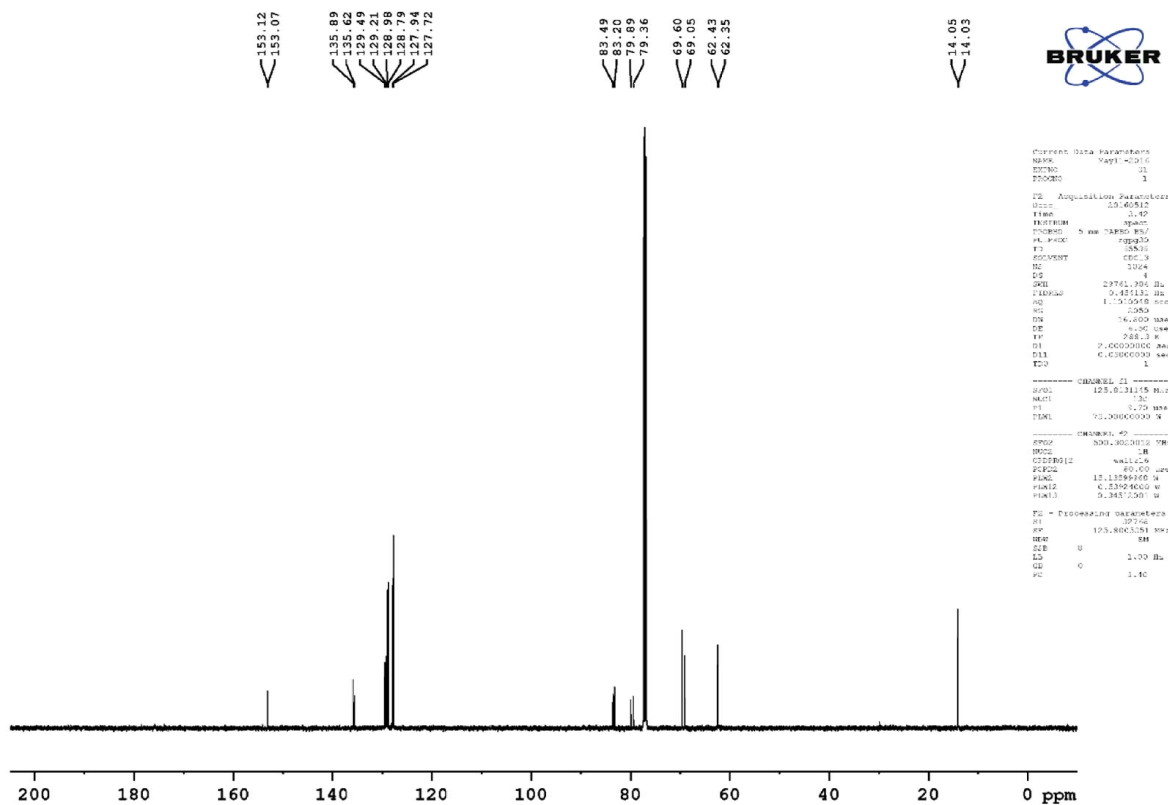


Regioselective cascade synthesis of Naphthofurans

SYRK2-51A-ETHER

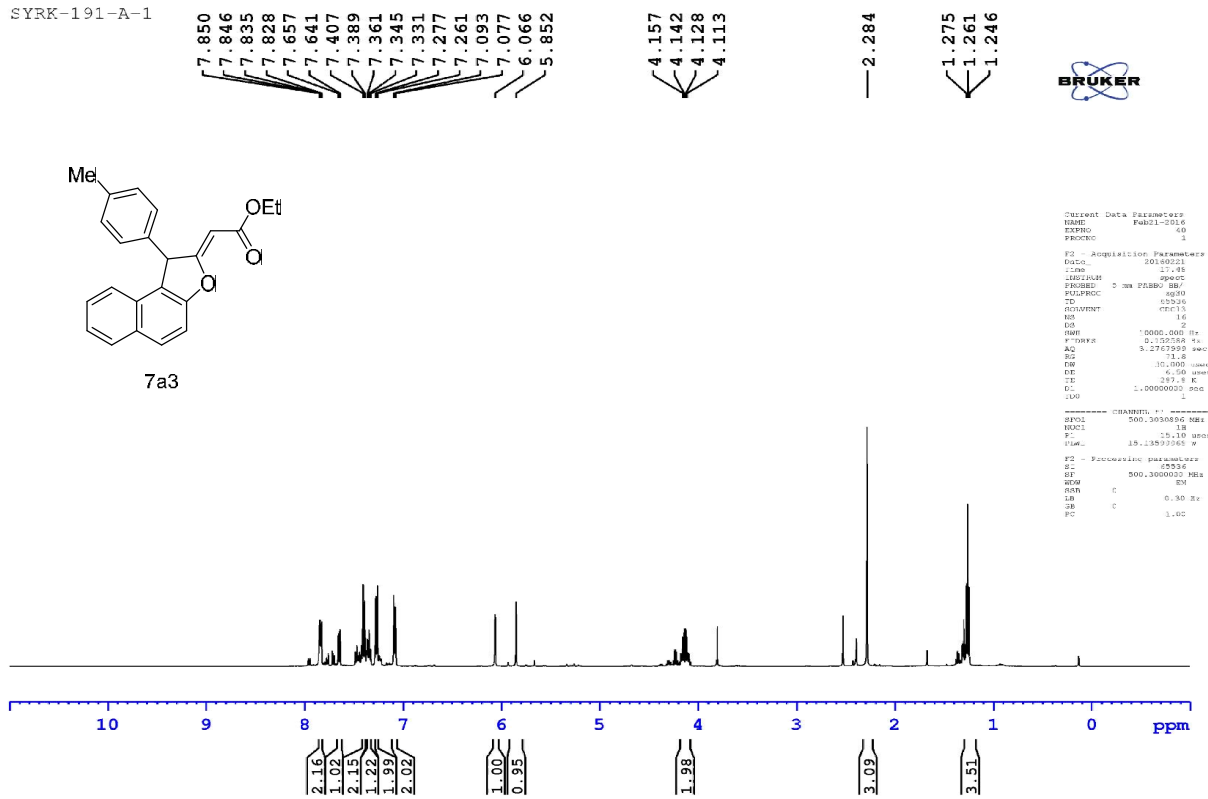
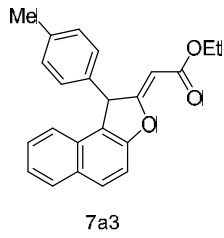


SYRK2-51A-ETHER



Regioselective cascade synthesis of Naphthofurans

SYRK-191-A-1



```

Current Data Parameters
NAME      Fabc1-2016
EXPNO    40
PROCNO   1

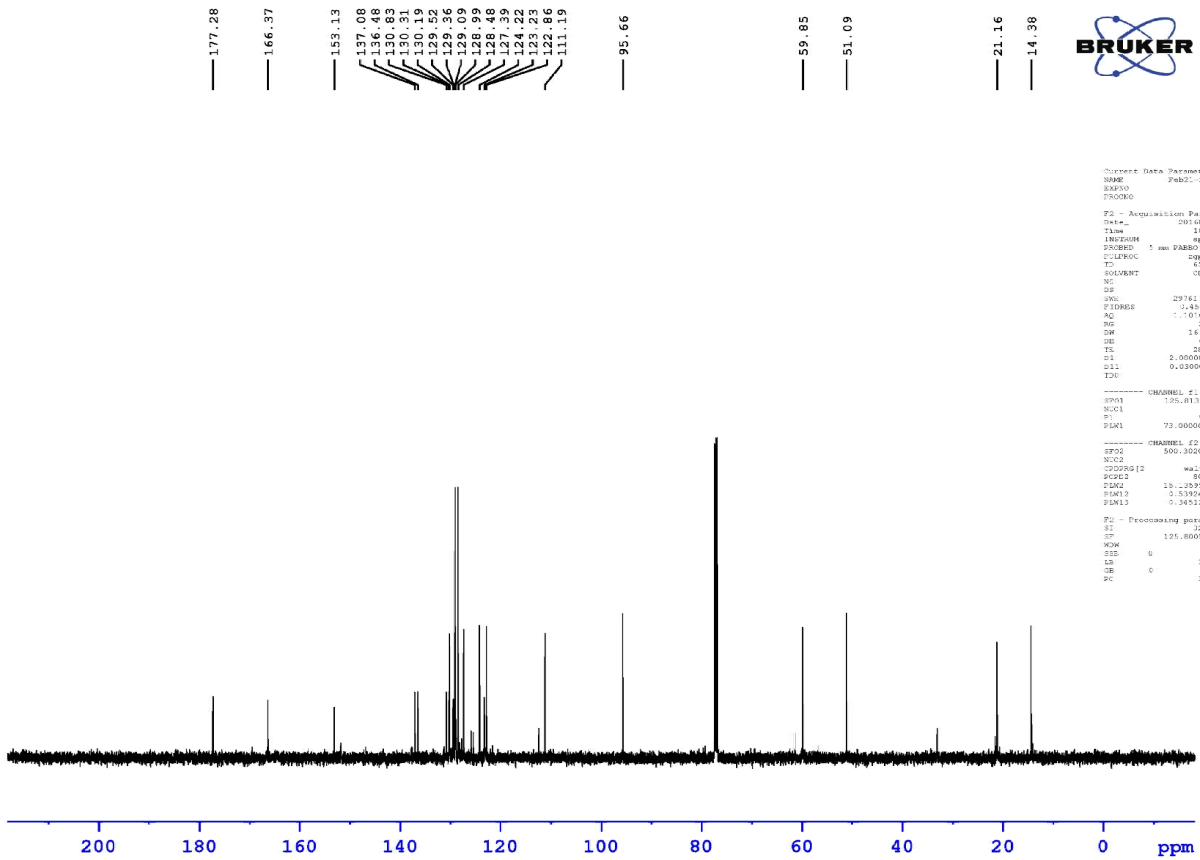
F2 - Acquisition Parameters
Date_    20160221
Time     17.45
INSTRUM  spect
PROBHD   5 mm PABBO BB/
PULPROG zgpg30
TD        65536
SOLVENT  cdcl3
NS        2
DS        4
SWH       10000.000 MHz
FIDRES    0.132056 Hz
AQ         3.2747999 sec
RG         31.8
FW         10.000 MHz
DT         6.50 usec
TE        299.8 K
GC         1.00000000 sec
LQD        1

----- CHANNEL f1 -----
NUC1      13C
P1         19.10 usec
PL1        15.13593065 W

F2 - Processing parameters
SI         32768
SF         500.1360000 MHz
SOLVENT   CDCl3
NS        65536
DS         4
SWH       16.800 MHz
FIDRES    0.30 Hz
TE        1.00

```

SYRK-191-A-1



```

Current Data Parameters
NAME      Fabc1-2016
EXPNO    41
PROCNO   1

F2 - Acquisition Parameters
Date_    20160221
Time     18.41
INSTRUM  spect
PROBHD   5 mm PABBO BB/
PULPROG zgpg30
TD        65536
SOLVENT  cdcl3
NS        2
DS        4
SWH       23741.901 MHz
FIDRES    0.144171 Hz
AQ         1.0100628 sec
RG         30.0
FW         16.800 MHz
DT         6.50 usec
TE        288.2 K
GC         3.00000000 sec
LQD        1

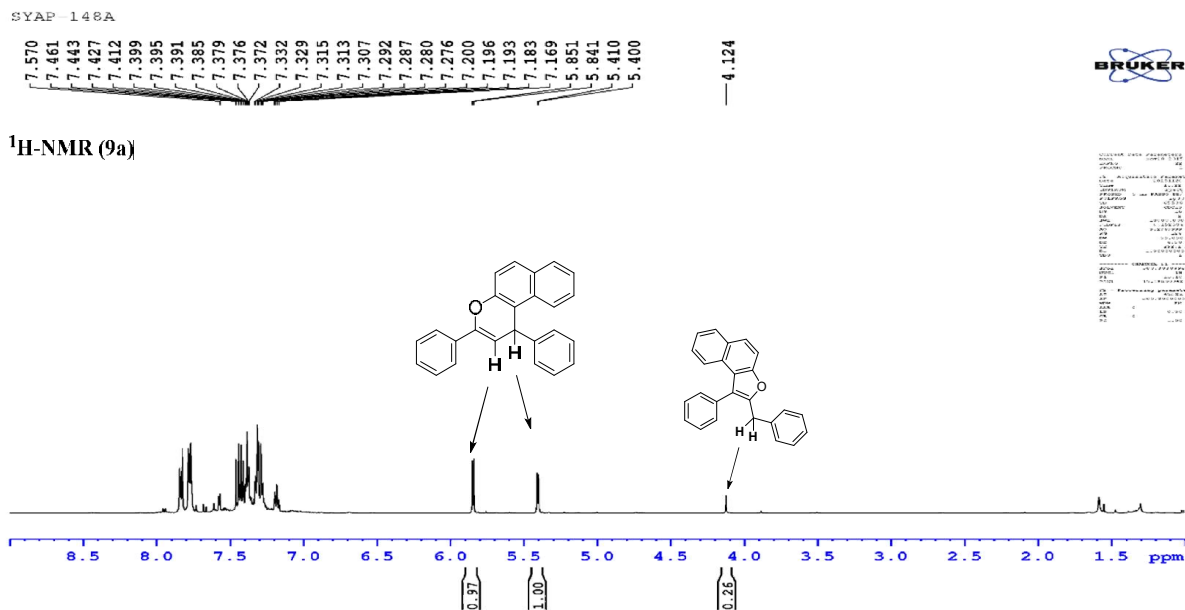
----- CHANNEL f1 -----
NUC1      13C
P1         7.00 usec
PL1        73.00000000 W

----- CHANNEL f2 -----
NUC2      13C
P2         15.00 usec
PL2        80.00000000 W

F2 - Processing parameters
SI         32768
SF         125.8005151 MHz
SOLVENT   CDCl3
NS        65536
DS         4
SWH       1.00 MHz
FIDRES    1.00
TE        1.00

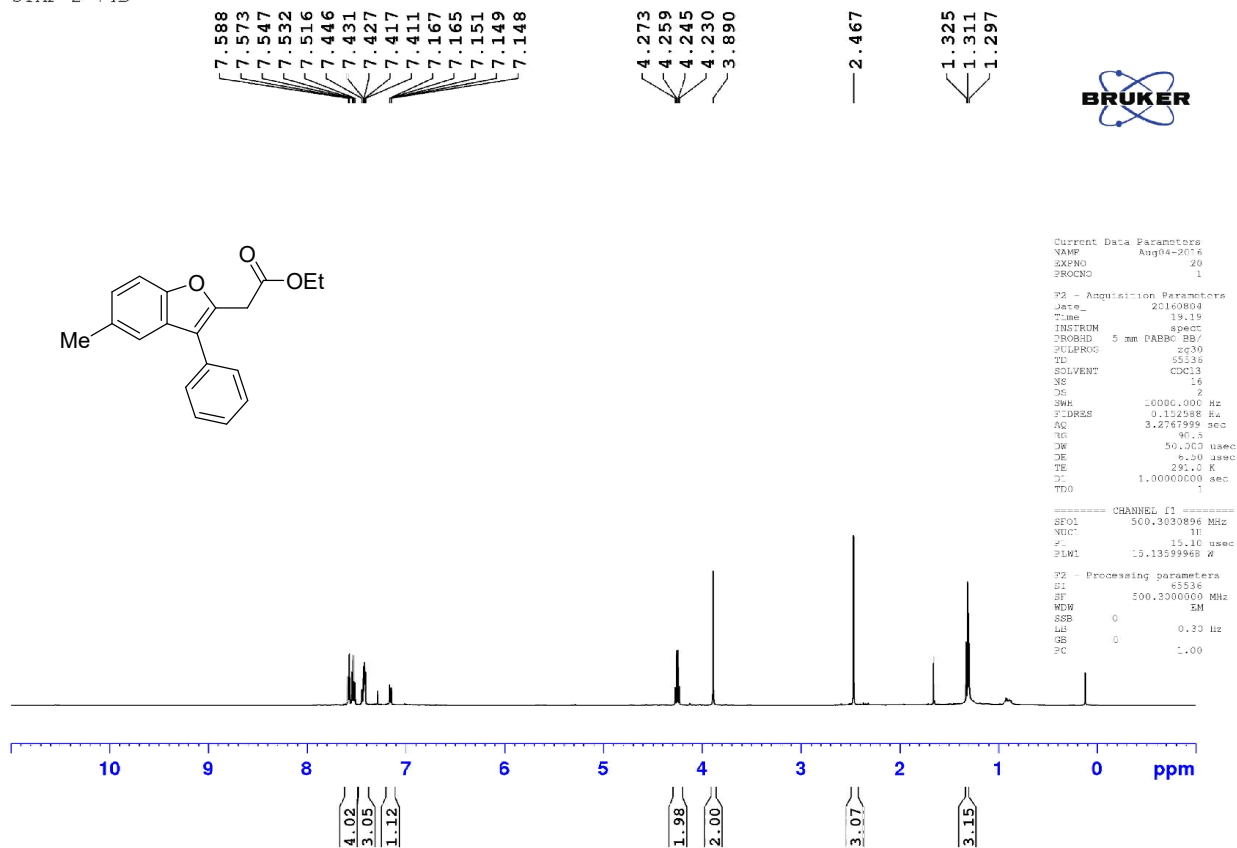
```

Regioselective cascade synthesis of Naphthofurans

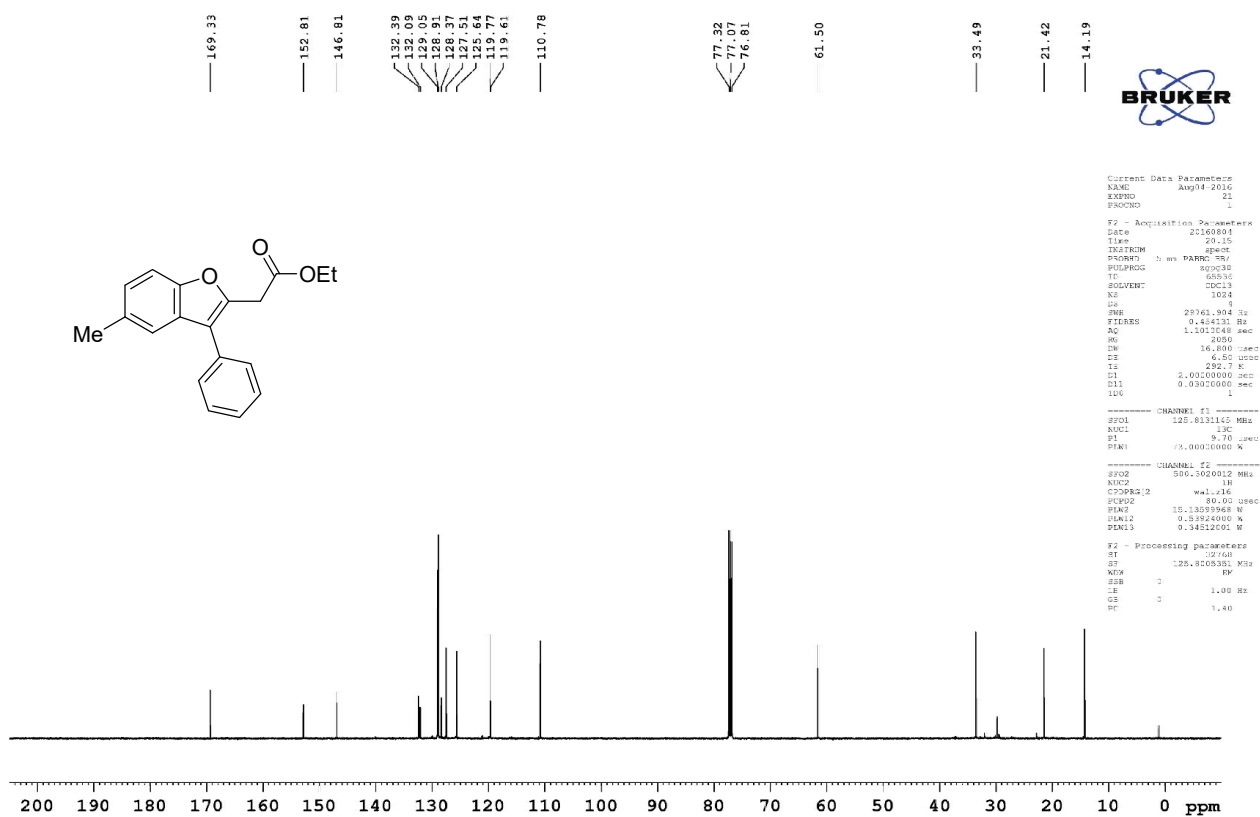


Regioselective cascade synthesis of Naphthofurans

SYAP-2-74B

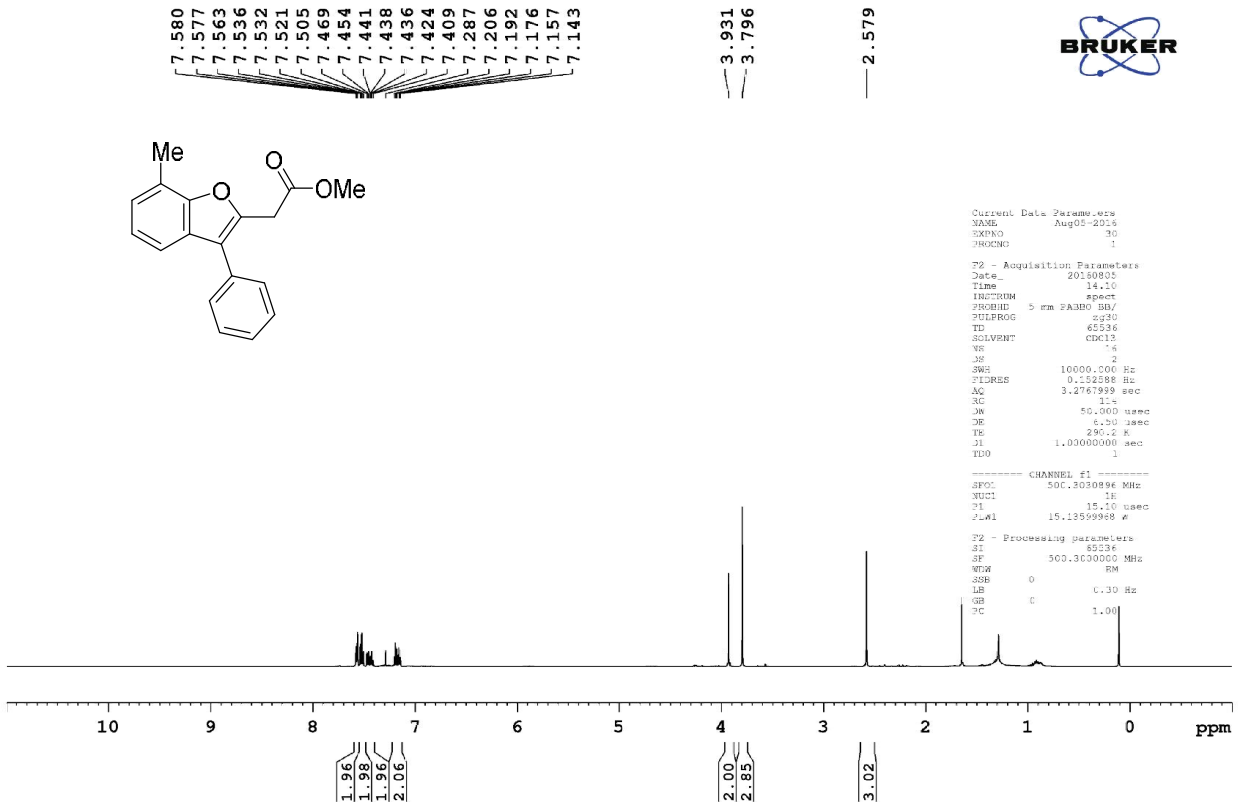


SYAP-2-74B

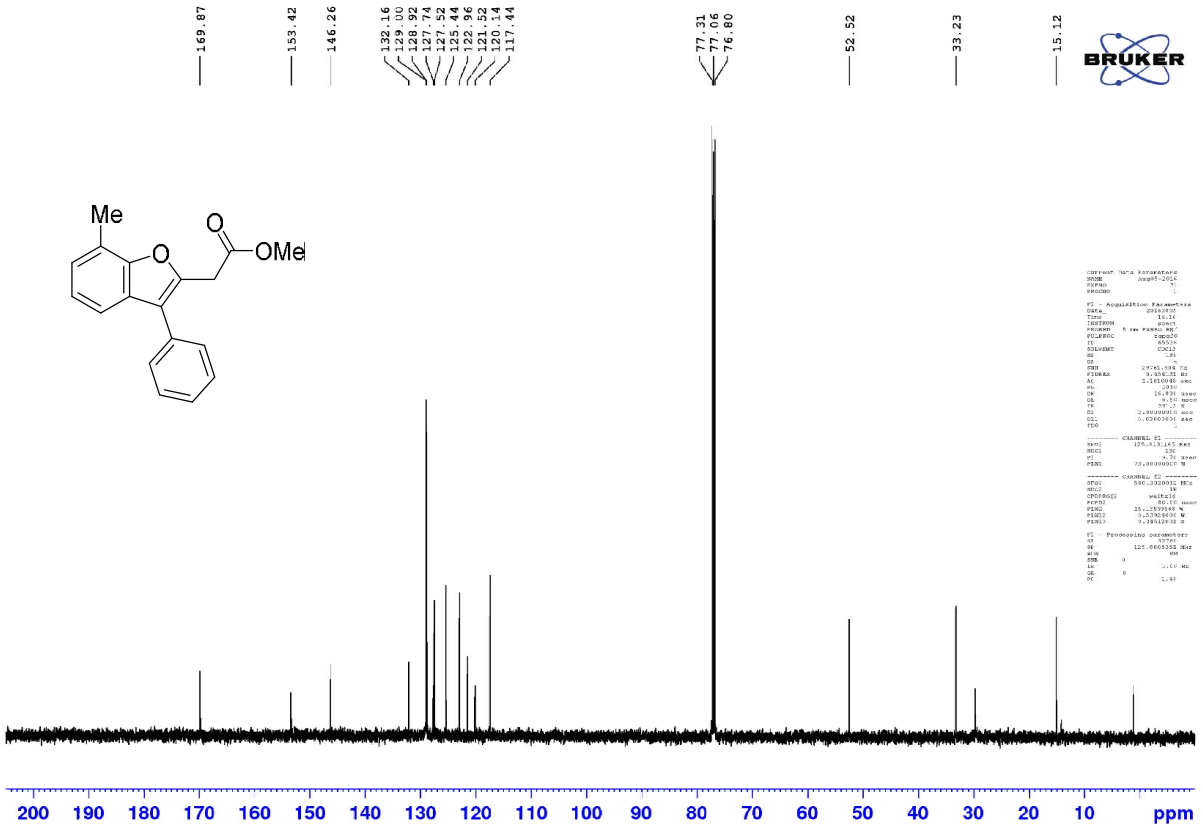


Regioselective cascade synthesis of Naphthofurans

SYAP-2-76A

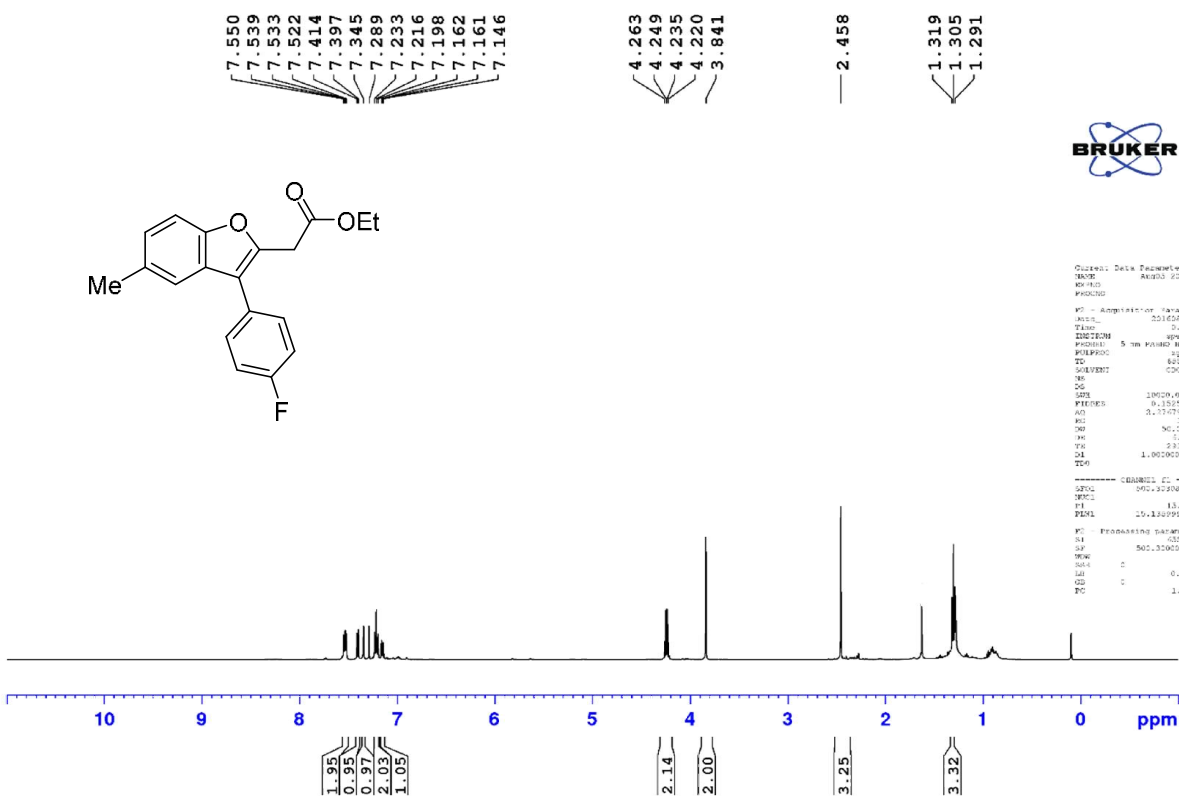


SYAP-2-76A



Regioselective cascade synthesis of Naphthofurans

SYRK2-100



SYRK2-100

