

Supplementary information

Direct amide bond formation using radiofrequency heating

Thomas K. Houlding, Kirill Tchabanenko, Md. Taifur Rahman and Evgeny V. Rebrov

Department of Chemistry & Chemical Engineering, Queen's University Belfast, UK

RF coil properties

Nickel ferrite recycling efficiency

^1H and ^{13}C NMR spectra of products

RF coil properties

Table S1. RF field properties for 4 and 5-turn coils

	5-turn coil	4-turn coil
Frequency, kHz	287	312
Theoretical field@200A, mT	18.4	19.4
Theoretical field@250A, mT	23.0	24.3

Nickel ferrite recycling efficiency

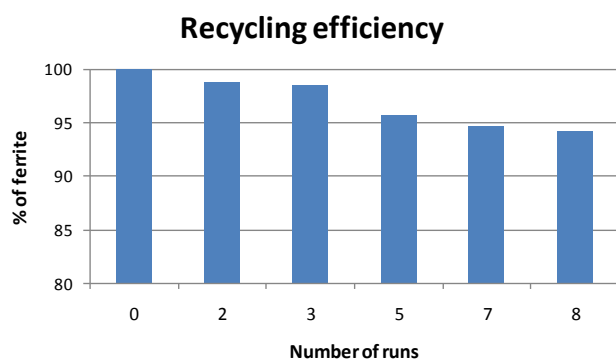
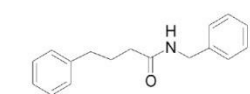
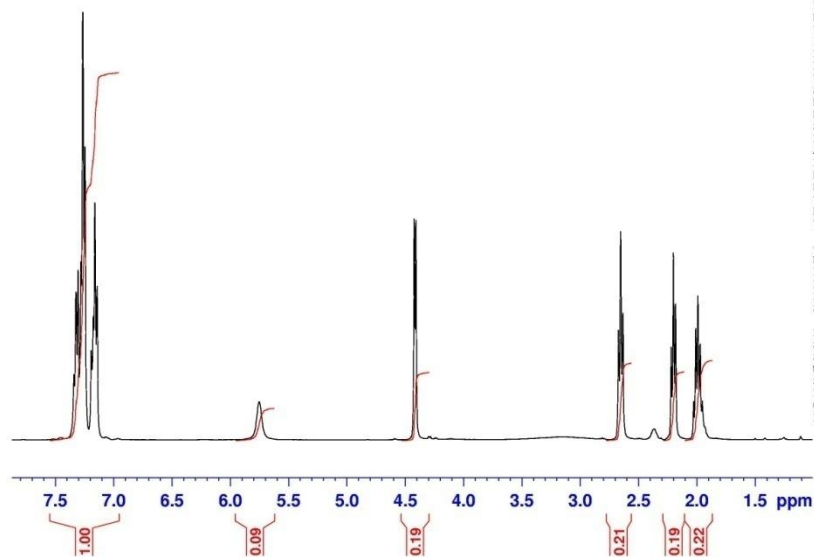


Figure S2 Efficiency of ferrite recycling by magnetic separation shown as a percentage of the initial amount of ferrite

¹H and ¹³C NMR spectra of products



Amide 1, ¹H, 400MHz, CDCl₃

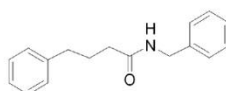


Current Data Parameters
NAME Jul25-2012-tchabenko
EXPNO 30
PROCNO 1

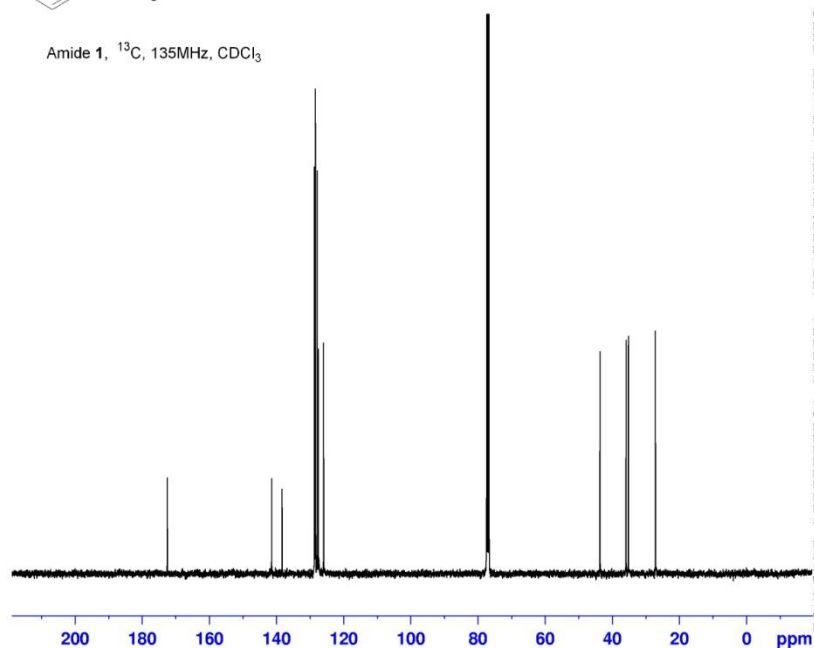
F2 - Acquisition Parameters
Date_ 20120725
Time 18.11
INSTRUM AVIIL400
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 80.6
DW 60.800 usec
DE 16.66 usec
TE 299.0 K
D1 1.0000000 sec
TDO 1

----- CHANNEL f1 -----
NUC1 1H
P1 11.00 usec
PL1 6.00 dB
PL1W 32.2000076 W
SFO1 400.1124708 MHz

F2 - Processing parameters
SI 32765
SF 400.1100153 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Amide 1, ¹³C, 135MHz, CDCl₃



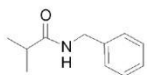
Current Data Parameters
NAME Jul25-2012-tchabenko
EXPNO 31
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120725
Time 19.05
INSTRUM AVIIL400
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 96150
SOLVENT CDCl3
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.250010 Hz
AQ 1.9999700 sec
RG 1150
DW 20.800 usec
DE 6.50 usec
TE 300.3 K
D1 1.0000000 sec
D11 0.0300000 sec
TDO 1

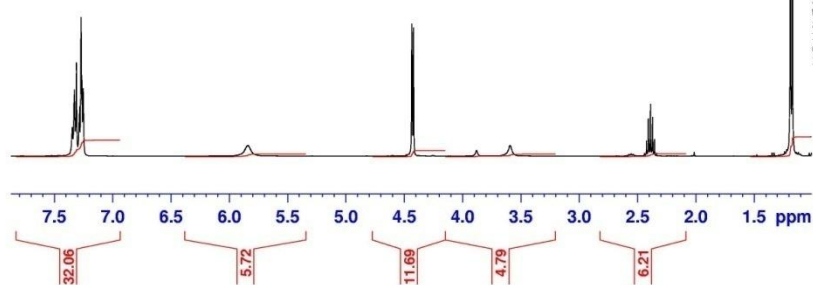
----- CHANNEL f1 -----
NUC1 13C
P1 9.00 usec
PL1 -4.30 dB
PL1W 96.67987061 W
SFO1 100.6178003 MHz

----- CHANNEL f2 -----
CPDPRG2 waltz64
NUC2 1H
PCPD2 60.00 usec
PL2 -6.00 dB
PL12 8.74 dB
PL13 13.29 dB
PL2W 32.20000076 W
PL12W 1.08107519 W
PL13W 0.37918913 W
SFO2 400.1116004 MHz

F2 - Processing parameters
SI 131072
SF 100.6077400 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 1.40



Amide 2 ^1H 400 MHz, CDCl_3

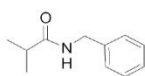


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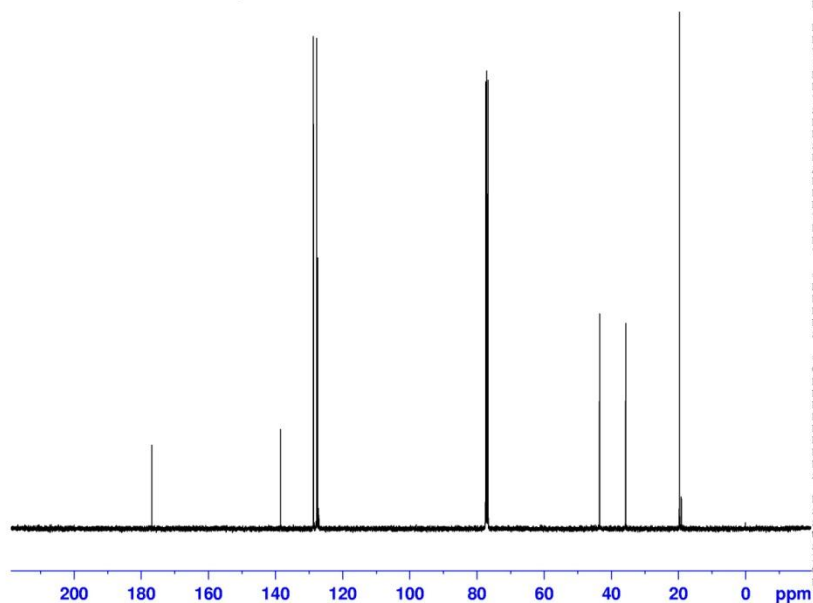
NAME      Jun21-2012-tchabenko
EXPNO     1
PROCNO    1
Date_     20120622
Time      1.24
INSTRUM   AVIII_400
PROBHD    5 mm PABBO BB-
PULPROG   zgpg30
ID        65536
SOLVENT   CDCl3
NS        16
DS        2
SWH       8223.685 Hz
FIDRES    0.125483 Hz
AQ        3.9846387 sec
RG        90.5
DW        60.800 usec
DE        17.04 usec
TE        300.1 K
D1        1.00000000 sec
TD0       1
    
```

```

===== CHANNEL f1 =====
NUC1      1H
P1        9.20 usec
PL1       -6.00 dB
PL1W      32.20000076 W
SFO1      400.1124708 MHz
SI        32768
SF        400.1100101 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
    
```



Amide 2 ^{13}C 135 MHz, CDCl_3



```

Current Data Parameters
NAME      Jun21-2012-tchabenko
EXPNO     1
PROCNO    1
    
```

```

F2 - Acquisition Parameters
Date_     20120622
Time      2.18
INSTRUM   AVIII_400
PROBHD    5 mm PABBO BB-
PULPROG   zgpg30
TD        96150
SOLVENT   CDCl3
NS        1024
DS        4
SWH       24038.461 Hz
FIDRES    0.250010 Hz
AQ        1.9999700 sec
RG        2050
DW        20.800 usec
DE        6.50 usec
TE        300.0 K
D1        1.00000000 sec
D11       0.03000000 sec
TD0       1
    
```

```

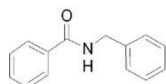
===== CHANNEL f1 =====
NUC1      13C
P1        8.00 usec
PL1       -4.30 dB
PL1W      96.67987061 W
SFO1      100.6178003 MHz
    
```

```

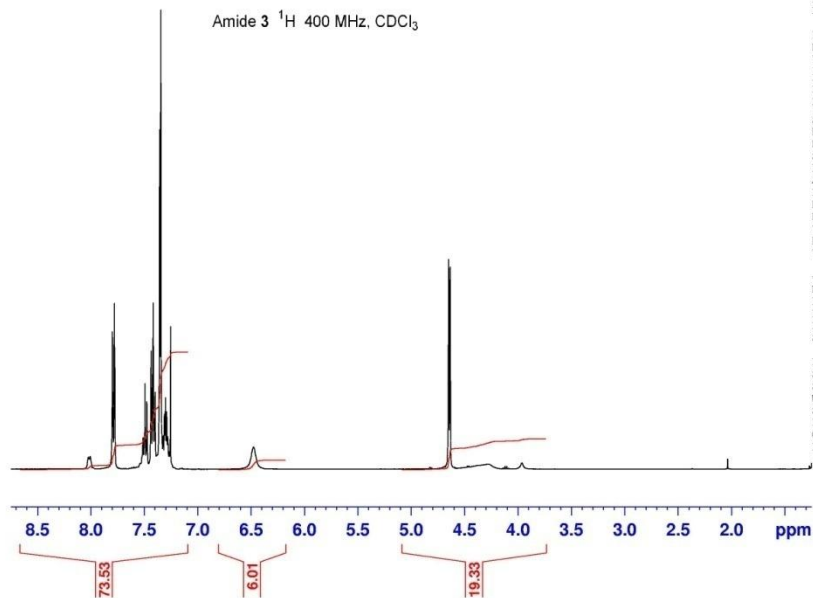
===== CHANNEL f2 =====
CPDPRG2   waltz64
NUC2      1H
PCPD2     60.00 usec
PL2       -6.00 dB
PL12      10.29 dB
PL13      13.29 dB
PL2W      32.20000076 W
PL12W     0.75658178 W
PL13W     0.37918913 W
SFO2      400.1116004 MHz
    
```

```

F2 - Processing parameters
SI        131072
SF        100.6077400 MHz
WDW       EM
SSB       0
LB        1.00 Hz
GB        0
PC        1.40
    
```



Amide 3 ^1H 400 MHz, CDCl_3

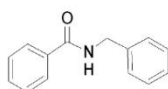


Current Data Parameters
NAME Jun20-2012-tchabenko
EXNO 10
PROCNO 1

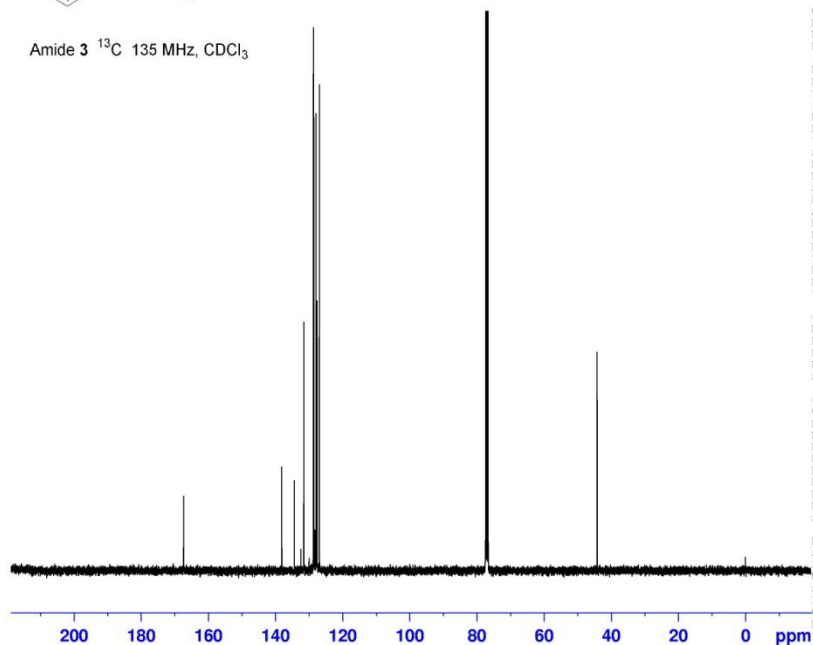
F2 - Acquisition Parameters
Date_ 20120621
Time 5.41
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 144
DW 60.800 usec
DE 17.04 usec
TE 300.3 K
D1 1.0000000 sec
TD0 1

----- CHANNEL f1 -----
NUC1 ^1H
P1 9.20 usec
PL1 -6.00 dB
PL1W 32.20000076 W
SFO1 400.1124708 MHz

F2 - Processing parameters
SI 32768
SF 400.1100128 MHz
WEM EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Amide 3 ^{13}C 135 MHz, CDCl_3



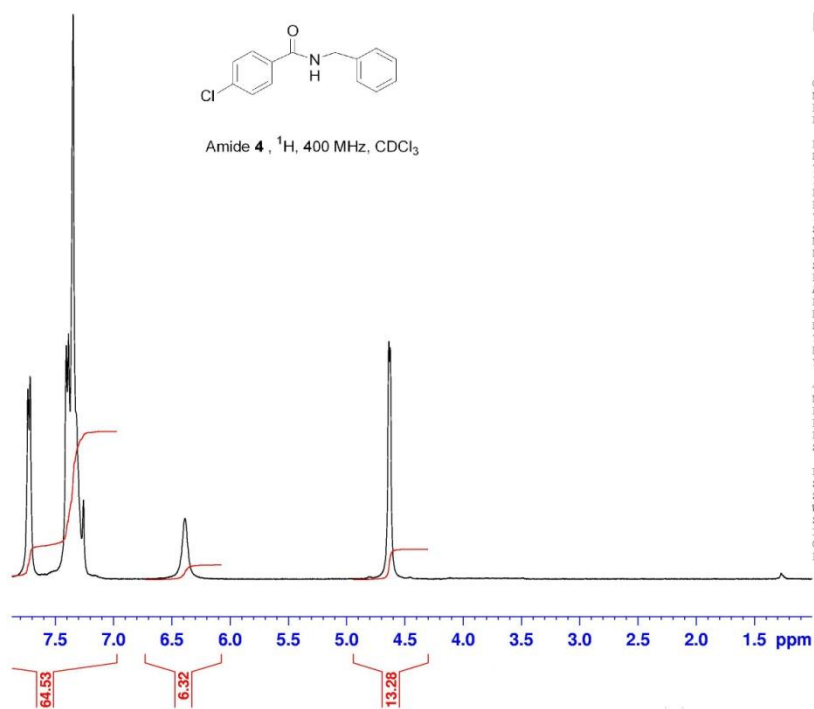
Current Data Parameters
NAME Jun20-2012-tchabenko
EXNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120621
Time 6.35
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 96150
SOLVENT CDCl3
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.250010 Hz
AQ 1.9999700 sec
RG 1820
DW 20.800 usec
DE 6.50 usec
TE 300.2 K
D1 1.0000000 sec
D11 0.0300000 sec
TD0 1

----- CHANNEL f1 -----
NUC1 ^{13}C
P1 8.00 usec
PL1 -4.30 dB
PL1W 96.67987061 W
SFO1 100.6178003 MHz

----- CHANNEL f2 -----
CPDPRG2 waltz64
NUC2 ^1H
P2 60.00 usec
PL2 -6.00 dB
PL12 10.29 dB
PL13 13.29 dB
PL2W 32.20000076 W
PL12W 0.75658178 W
PL13W 0.37918913 W
SFO2 400.1116004 MHz

F2 - Processing parameters
SI 131072
SF 100.6077400 MHz
WEM EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

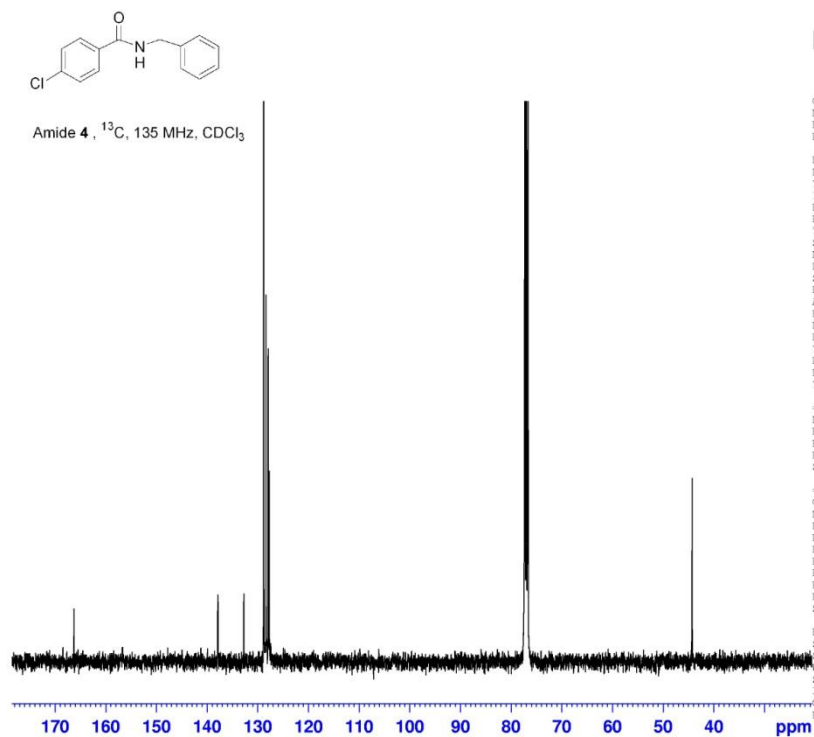


Current Data Parameters
 NAME Sep07-2012-tchabenko
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120907
 Time 9.55
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 ID 65336
 SOLVENT CDCl_3
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 181
 DW 60.800 usec
 DE 16.66 usec
 TE 303.2 K
 D1 1.0000000 sec
 TDO 1

----- CHANNEL f1 -----
 NUC1 ^1H
 P1 11.00 usec
 PL1 -6.00 dB
 PL1W 32.20000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100117 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



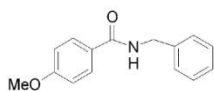
Current Data Parameters
 NAME Sep07-2012-tchabenko
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120907
 Time 10.49
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 ID 96150
 SOLVENT CDCl_3
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 1440
 DW 20.800 usec
 DE 6.50 usec
 TE 303.2 K
 D1 1.0000000 sec
 D11 0.03000000 sec
 TDO 1

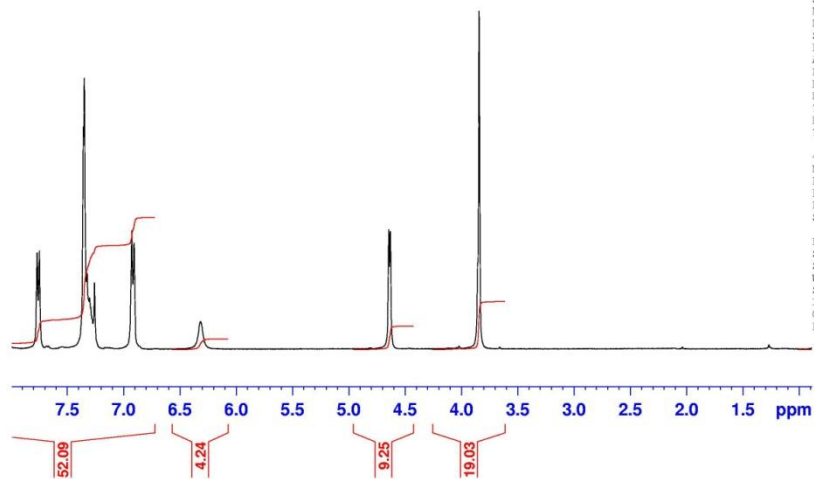
----- CHANNEL f1 -----
 NUC1 ^{13}C
 P1 9.00 usec
 PL1 -4.50 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

----- CHANNEL f2 -----
 CPDPRG2 waltz64
 NUC2 ^1H
 FPCP2 60.00 usec
 PL2 -6.00 dB
 PL12 8.74 dB
 PL13 13.29 dB
 PL2W 32.20000076 W
 PL12W 1.08107519 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077400 MHz
 WDW EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.40



Amide 5, ^1H , 400 MHz, CDCl_3

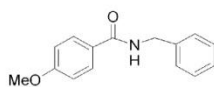


Current Data Parameters
 NAME Sep06-2012-tchabenko
 EXPNO 10
 PROCNO 1

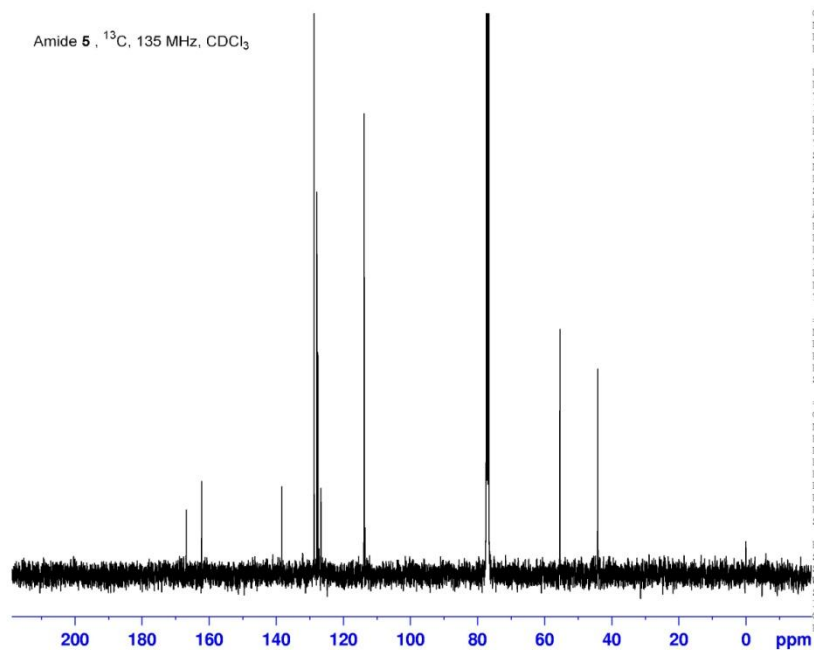
F2 - Acquisition Parameters
 Date_ 20120906
 Time 12.50
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 ID 65336
 SOLVENT CDCl_3
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 203
 DW 60.800 usec
 DE 16.66 usec
 TE 303.2 K
 D1 1.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 ^1H
 P1 11.00 usec
 PL1 -6.00 dB
 PL1W 32.20000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100111 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



Amide 5, ^{13}C , 135 MHz, CDCl_3



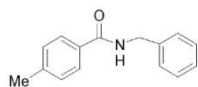
Current Data Parameters
 NAME Sep06-2012-tchabenko
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120906
 Time 22.07
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 ID 96150
 SOLVENT CDCl_3
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 303.2 K
 D1 1.0000000 sec
 D11 0.03000000 sec
 TDO 1

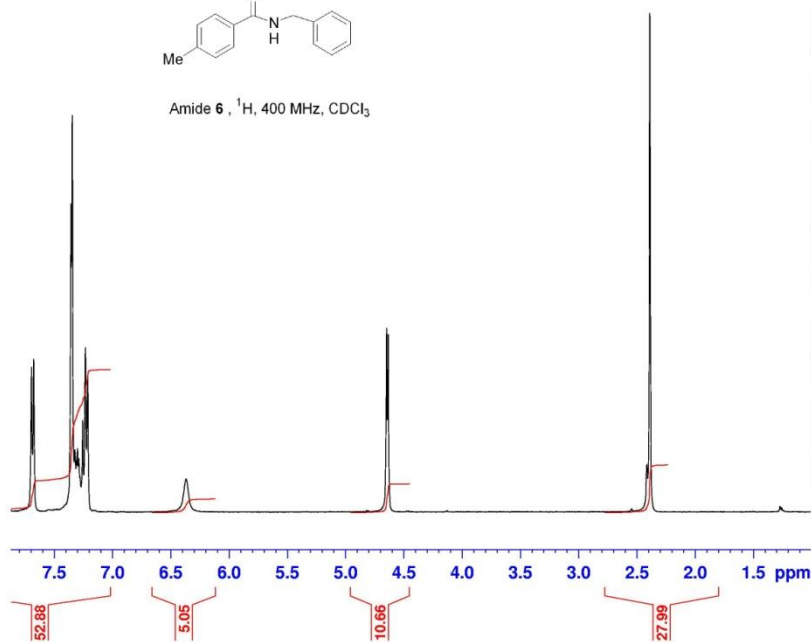
===== CHANNEL f1 =====
 NUC1 ^{13}C
 P1 9.00 usec
 PL1 -4.30 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz64
 NUC2 ^1H
 PCPD2 60.00 usec
 PL2 -6.00 dB
 PL12 8.74 dB
 PL13 13.29 dB
 PL2W 32.20000076 W
 PL12W 1.08107519 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077400 MHz
 WDW EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.40



Amide 6, ¹H, 400 MHz, CDCl₃

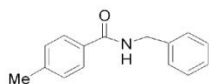


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NAME Sep07-2012-tchabenko
EXPNO 20
PROCNO 1

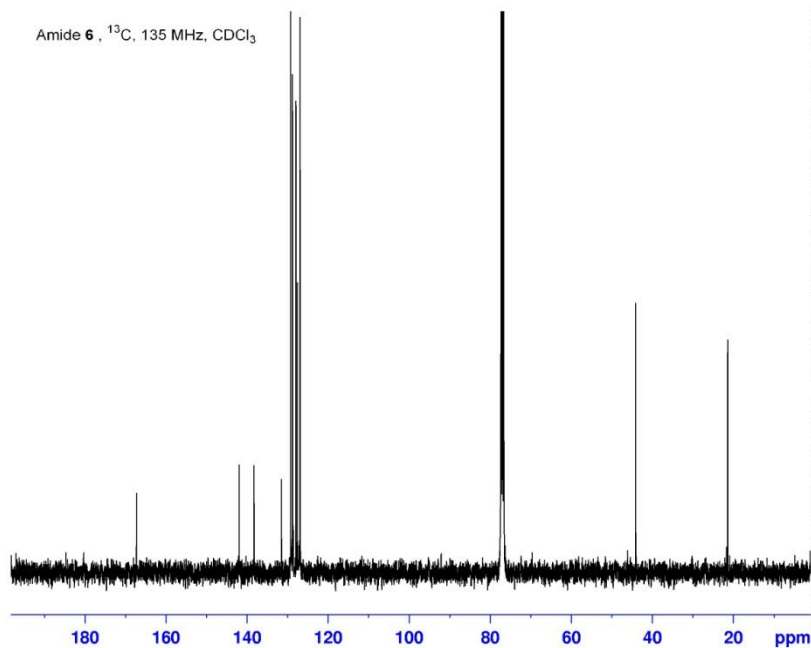
F2 - Acquisition Parameters
Date_ 20120907
Time 13.58
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65336
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 181
DW 60.800 usec
DE 16.66 usec
TE 303.2 K
D1 1.0000000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 1H
P1 11.00 usec
PL1 -6.00 dB
PL1W 32.20000076 W
SFO1 400.1124708 MHz

F2 - Processing parameters
SI 32768
SF 400.1100119 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Amide 6, ¹³C, 135 MHz, CDCl₃



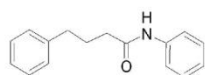
Current Data Parameters
NAME Sep07-2012-tchabenko
EXPNO 21
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120907
Time 14.51
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 96150
SOLVENT CDCl3
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.250010 Hz
AQ 1.9999700 sec
RG 1820
DW 20.800 usec
DE 6.50 usec
TE 303.2 K
D1 1.0000000 sec
D11 0.03000000 sec
TDO 1

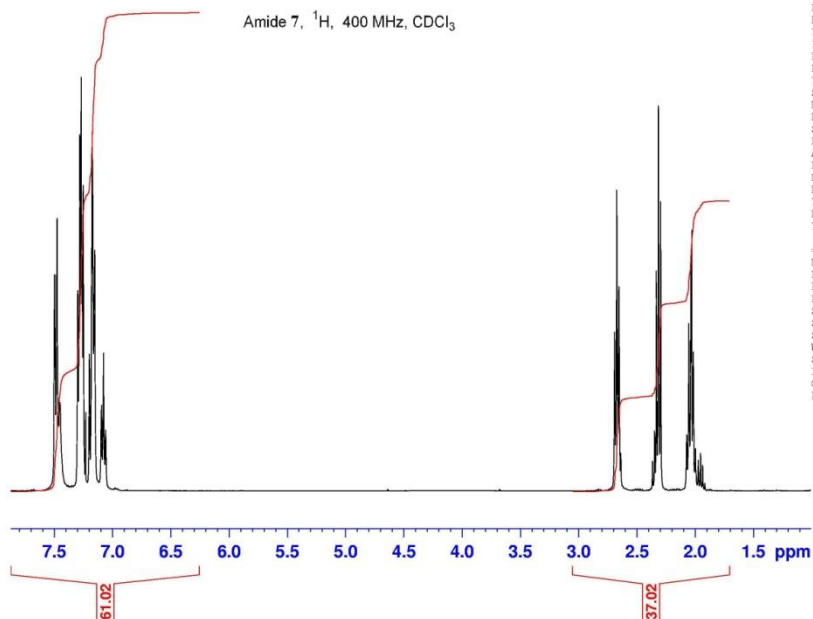
===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.30 dB
PL1W 96.67987061 W
SFO1 100.6178003 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz64
NUC2 1H
PCPD2 60.00 usec
PL2 -6.00 dB
PL12 8.74 dB
PL13 13.29 dB
PL2W 32.20000076 W
PL12W 1.08107519 W
PL13W 0.37918913 W
SFO2 400.1116004 MHz

F2 - Processing parameters
SI 131072
SF 100.6077400 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 1.40



Amide 7, ^1H , 400 MHz, CDCl_3

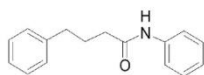


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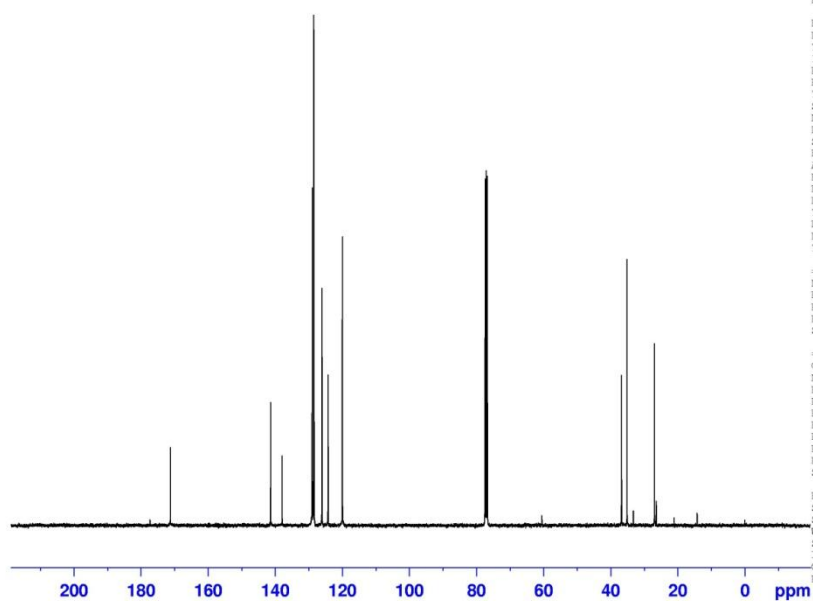
NAME Jun25-2012-tchabenko
EXPNO 25
PROCNO 1
Date_ 20120626
Time 8.16
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zg30
ID 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 50.8
DW 60.800 usec
DE 17.04 usec
TE 299.9 K
D1 1.0000000 sec
TDO 1
    
```

```

===== CHANNEL f1 =====
NUC1 1H
P1 9.20 usec
PL1 -6.00 dB
PL1W 32.20000076 W
SFO1 400.1124708 MHz
SI 32768
SF 400.1100219 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00
    
```



Amide 7, ^{13}C , 135 MHz, CDCl_3



```

Current Data Parameters
NAME Jun25-2012-tchabenko
EXPNO 28
PROCNO 1
    
```

```

F2 - Acquisition Parameters
Date_ 20120626
Time 9.46
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
ID 96150
SOLVENT CDCl3
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.250010 Hz
AQ 1.9999700 sec
RG 2050
DW 20.800 usec
DE 6.50 usec
TE 300.7 K
D1 1.0000000 sec
D11 0.0300000 sec
TDO 1
    
```

```

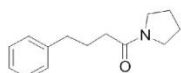
===== CHANNEL f1 =====
NUC1 13C
P1 8.00 usec
PL1 -4.30 dB
PL1W 96.67987061 W
SFO1 100.6178003 MHz
    
```

```

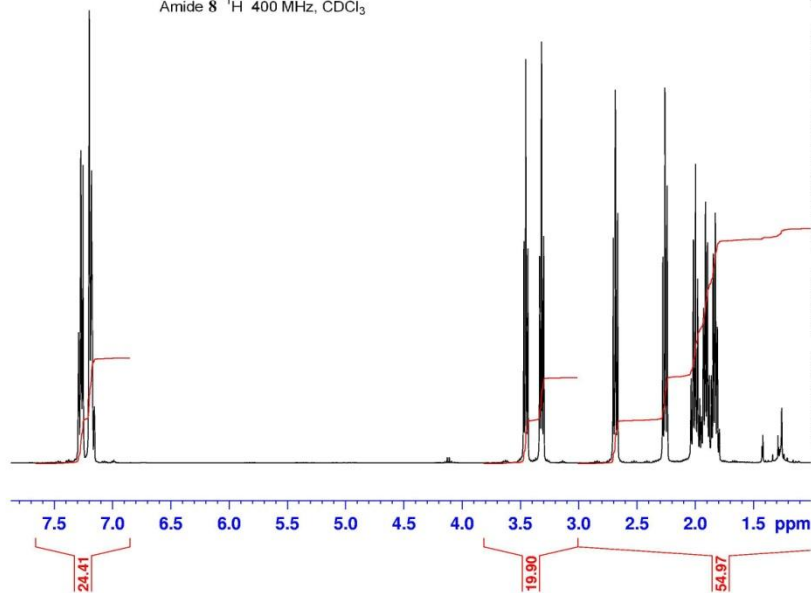
===== CHANNEL f2 =====
CPDPRG2 waltz64
NUC2 1H
PCPD2 60.00 usec
PL2 -6.00 dB
PL12 10.29 dB
PL13 13.29 dB
PL2W 32.20000076 W
PL12W 0.75658178 W
PL13W 0.37918913 W
SFO2 400.1116004 MHz
    
```

```

F2 - Processing parameters
SI 131072
SF 100.6077400 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 1.40
    
```



Amide 8 ^1H 400 MHz, CDCl_3

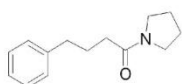


Current Data Parameters
 NAME Jun28-2012-tchabenko
 EXPNO 10
 PROCNO 1

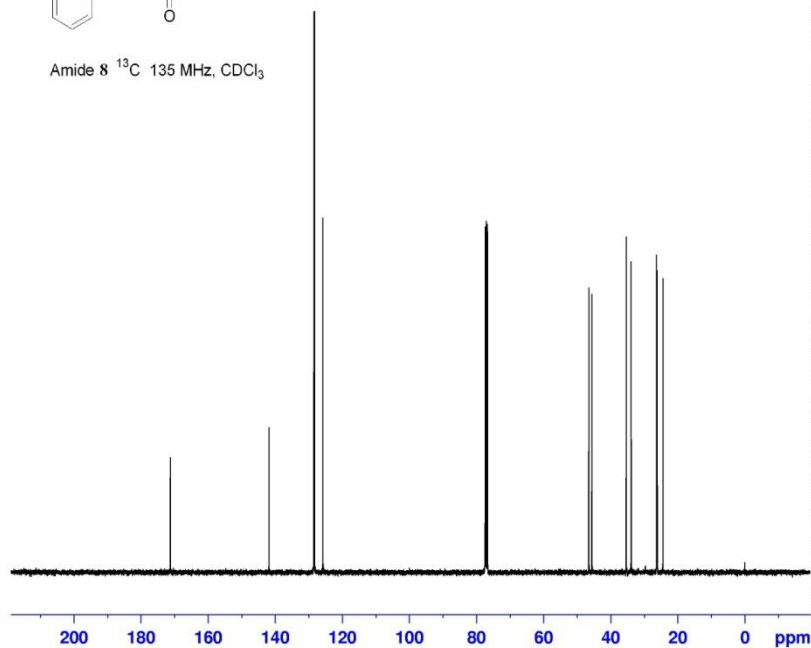
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 Date_ 20120628
 Time 16.12
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 TD 65336
 SOLVENT CDCl_3
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 71.8
 DW 60.800 usec
 DE 17.04 usec
 TE 300.0 K
 D1 1.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 ^1H
 P1 9.20 usec
 PL1 -6.00 dB
 PL1W 32.2000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100091 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



Amide 8 ^{13}C 135 MHz, CDCl_3



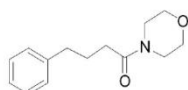
Current Data Parameters
 NAME Jun28-2012-tchabenko
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120628
 Time 21.28
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 TD 96150
 SOLVENT CDCl_3
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.0000000 sec
 D11 0.0300000 sec
 TDO 1

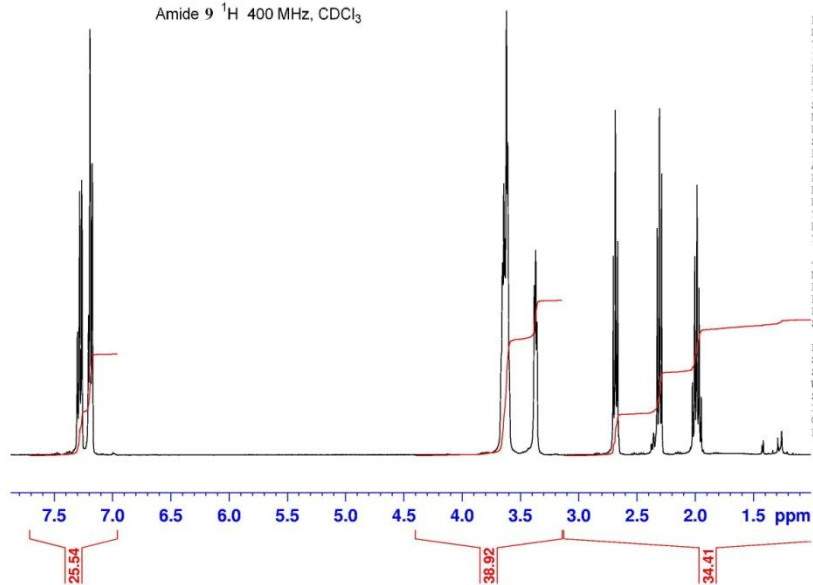
===== CHANNEL f1 =====
 NUC1 ^{13}C
 P1 8.00 usec
 PL1 -4.30 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz64
 NUC2 ^1H
 FPCPD2 60.00 usec
 PL2 -6.00 dB
 PL12 10.29 dB
 PL13 13.29 dB
 PL2W 32.2000076 W
 PL12W 0.75658178 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077400 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



Amide 9 ¹H 400 MHz, CDCl₃

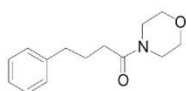


Current Data Parameters
 NAME Jun26-2012-tchabenko
 EXPNO 10
 PROCNO 1

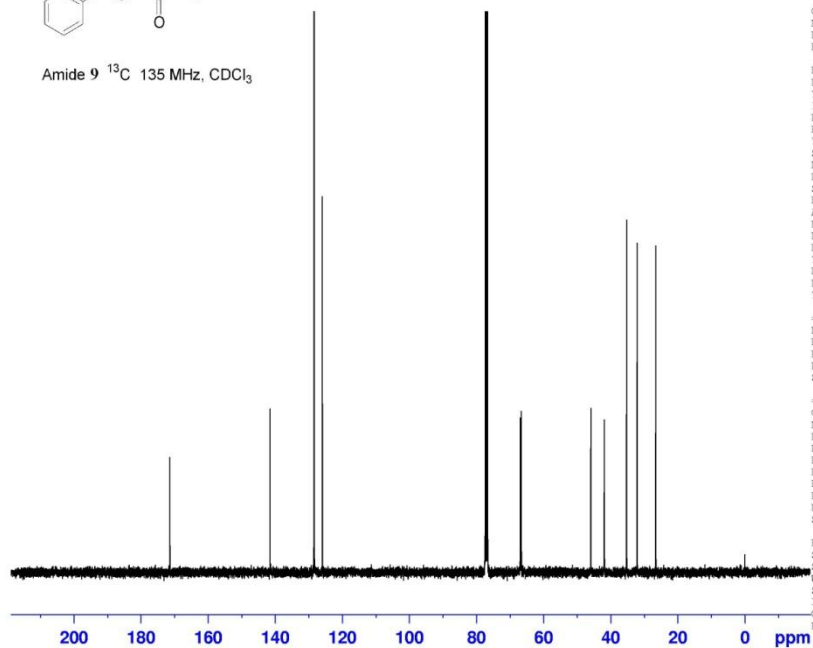
F2 - Acquisition Parameters
 Date_ 20120627
 Time 6.03
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 ID 65336
 SOLVENT CDCl3
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 114
 DW 60.800 usec
 DE 17.04 usec
 TE 300.0 K
 D1 1.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.20 usec
 PL1 -6.00 dB
 PL1W 32.20000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100104 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



Amide 9 ¹³C 135 MHz, CDCl₃



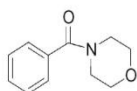
Current Data Parameters
 NAME Jun26-2012-tchabenko
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120627
 Time 6.57
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 ID 96150
 SOLVENT CDCl3
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 301.0 K
 D1 1.0000000 sec
 D11 0.03000000 sec
 TDO 1

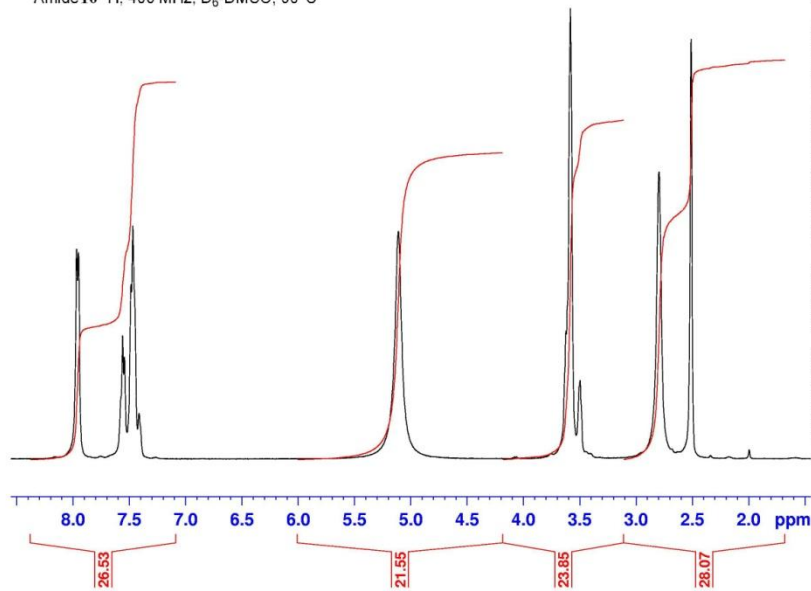
===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -4.30 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz64
 NUC2 1H
 F2PCP2 60.00 usec
 PL2 -6.00 dB
 PL12 10.29 dB
 PL13 13.29 dB
 PL2W 32.20000076 W
 PL12W 0.75658178 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077400 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



Amide 10 ¹H, 400 MHz, D₆-DMSO, 90°C

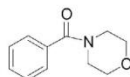


Current Data Parameters
NAME Jul27-2012-tchabenko
EXPNO 12
PROCNO 1

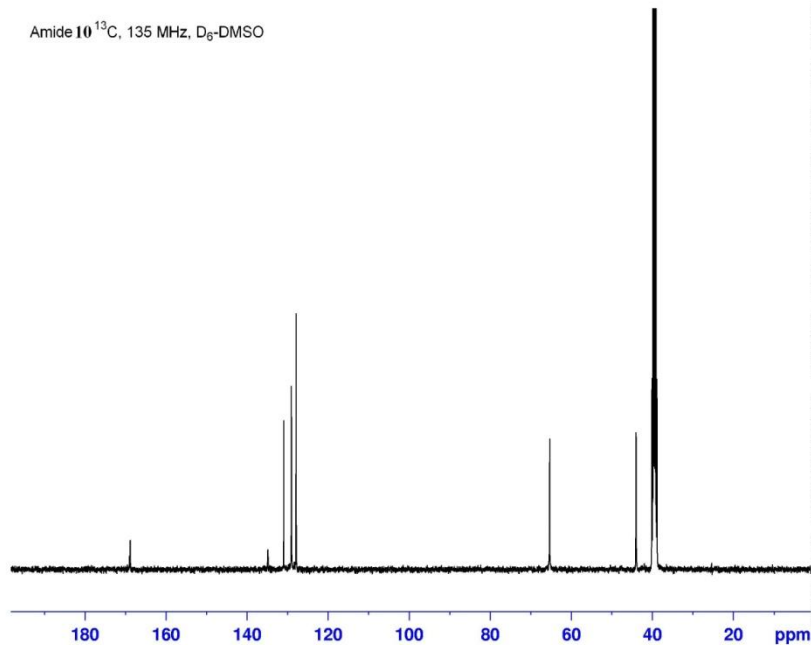
F2 - Acquisition Parameters
Date_ 20120727
Time 12.53
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65336
SOLVENT DMSO
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 101
DW 60.800 usec
DE 16.66 usec
TE 363.6 K
D1 1.0000000 sec
TD0 1

----- CHANNEL f1 -----
NUC1 1H
P1 11.00 usec
PL1 -6.00 dB
PL1W 32.20000076 W
SFO1 400.1124708 MHz

F2 - Processing parameters
SI 32768
SF 400.1100000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Amide 10 ¹³C, 135 MHz, D₆-DMSO



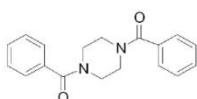
Current Data Parameters
NAME Jul27-2012-tchabenko
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120727
Time 12.17
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 96150
SOLVENT DMSO
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.250010 Hz
AQ 1.9999700 sec
RG 1820
DW 20.800 usec
DE 6.50 usec
TE 300.2 K
D1 1.0000000 sec
D11 0.0300000 sec
TD0 1

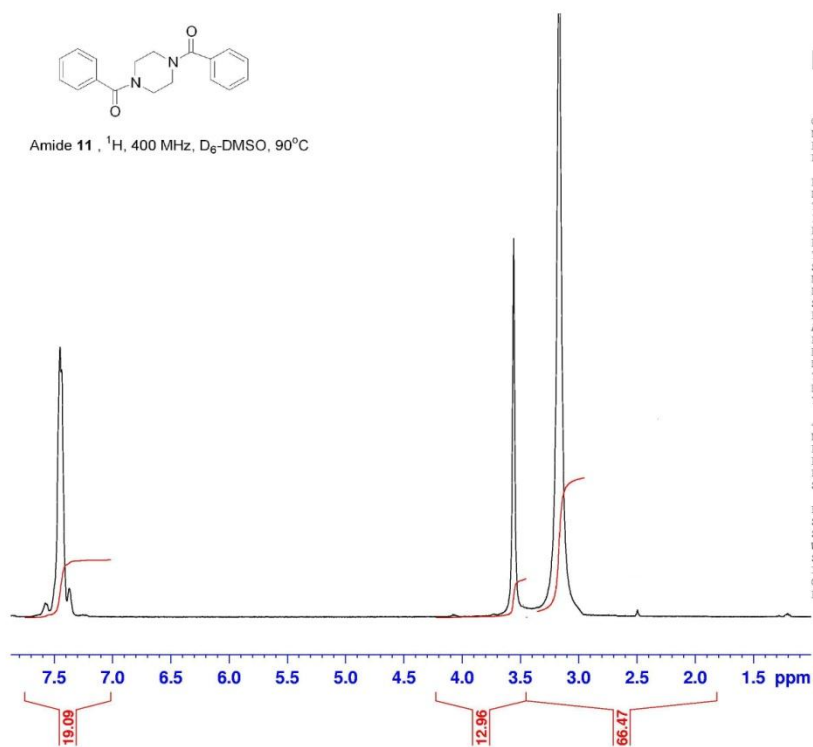
===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.30 dB
PL1W 96.67987061 W
SFO1 100.6178003 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz64
NUC2 1H
PCPD2 60.00 usec
PL2 -6.00 dB
PL12 8.74 dB
PL13 13.29 dB
PL2W 32.20000076 W
PL12W 1.08107519 W
PL13W 0.37918913 W
SFO2 400.1116004 MHz

F2 - Processing parameters
SI 131072
SF 100.6077903 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 1.40



Amide 11, ^1H , 400 MHz, $\text{D}_6\text{-DMSO}$, 90°C

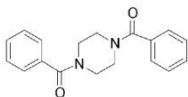


Current Data Parameters
 NAME Sep08-2012-tchabenko
 EXPNO 20
 PROCNO 1

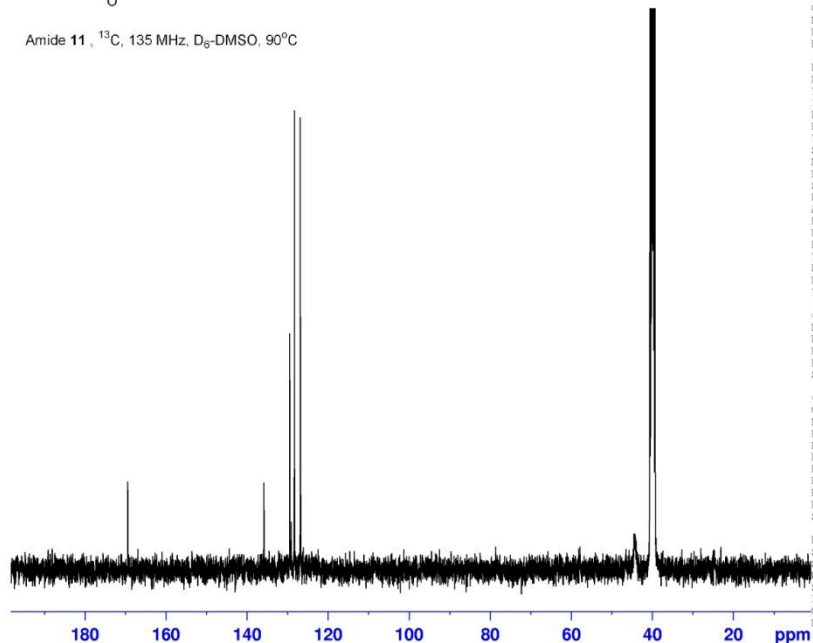
F2 - Acquisition Parameters
 Date_ 20120908
 Time 14.38
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 TD 65336
 SOLVENT DMSO
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 128
 DW 60.800 usec
 DE 16.66 usec
 TE 362.5 K
 D1 1.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 ^1H
 P1 11.00 usec
 PL1 -6.00 dB
 PL1W 32.20000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100000 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



Amide 11, ^{13}C , 135 MHz, $\text{D}_6\text{-DMSO}$, 90°C



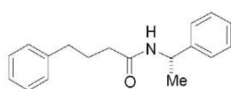
Current Data Parameters
 NAME Sep08-2012-tchabenko
 EXPNO 21
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120908
 Time 15.02
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 TD 96150
 SOLVENT DMSO
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 363.2 K
 D1 1.0000000 sec
 D11 0.0300000 sec
 TDO 1

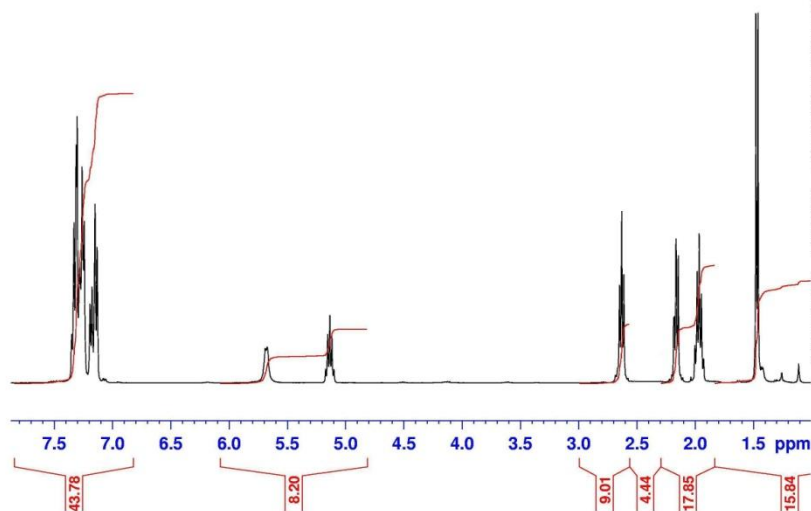
===== CHANNEL f1 =====
 NUC1 ^{13}C
 P1 9.00 usec
 PL1 -4.30 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz64
 NUC2 ^1H
 PCPD2 60.00 usec
 PL2 -6.00 dB
 PL12 8.74 dB
 PL13 13.29 dB
 PL2W 32.20000076 W
 PL12W 1.08107519 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077903 MHz
 WDW EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.40



Amide 12 ^1H , 400 MHz, CDCl_3

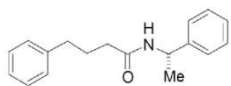


Current Data Parameters
 NAME Jul24-2012-tchabenko
 EXPNO 20
 PROCNO 1

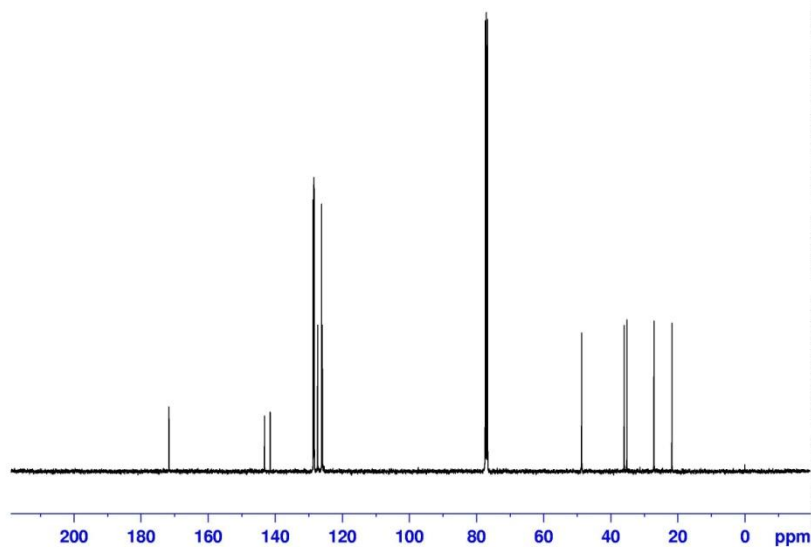
F2 - Acquisition Parameters
 Date_ 20120724
 Time 22.46
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 TD 65336
 SOLVENT CDCl_3
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 64
 DW 60.800 usec
 DE 16.66 usec
 TE 298.6 K
 D1 1.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 ^1H
 P1 11.00 usec
 PL1 -6.00 dB
 PL1W 32.20000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100146 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



Amide 12 ^{13}C , 135 MHz, CDCl_3



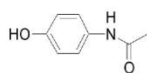
Current Data Parameters
 NAME Jul24-2012-tchabenko
 EXPNO 21
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120724
 Time 23.40
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 TD 96150
 SOLVENT CDCl_3
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 1290
 DW 20.800 usec
 DE 6.50 usec
 TE 300.2 K
 D1 1.0000000 sec
 D11 0.03000000 sec
 TDO 1

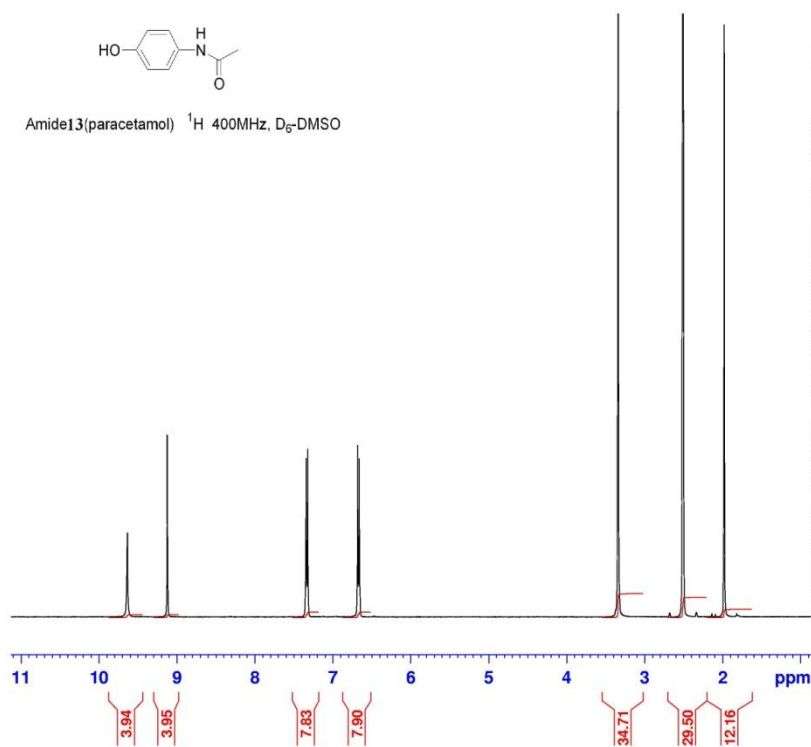
===== CHANNEL f1 =====
 NUC1 ^{13}C
 P1 9.00 usec
 PL1 -4.30 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz64
 NUC2 ^1H
 FPCP02 60.00 usec
 PL2 -6.00 dB
 PL12 8.74 dB
 PL13 13.29 dB
 PL2W 32.20000076 W
 PL12W 1.08107519 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077400 MHz
 WDW EM
 SSB 0
 LB 2.00 Hz
 CB 0
 PC 1.40



Amide13(paracetamol) ¹H 400MHz, D₆-DMSO

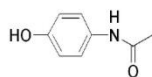


Current Data Parameters
NAME Jul05-2012-tchabenko
EXPNO 20
PROCNO 1

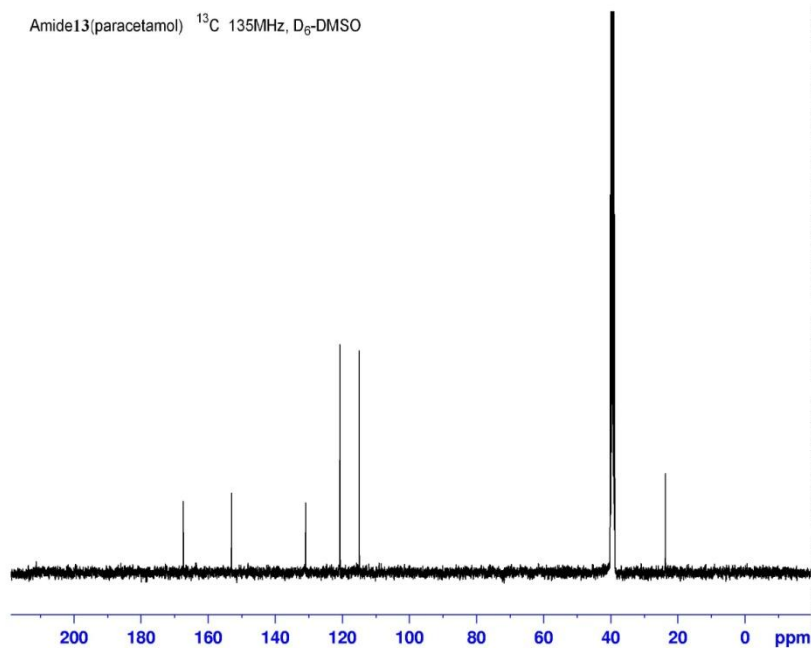
F2 - Acquisition Parameters
Date_ 20120706
Time 3.47
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65336
SOLVENT DMSO
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 181
DW 60.800 usec
DE 17.04 usec
TE 299.1 K
D1 1.0000000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.20 usec
PL1 -6.00 dB
PL1W 32.20000076 W
SFO1 400.1124708 MHz

F2 - Processing parameters
SI 32768
SF 400.1100000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Amide13(paracetamol) ¹³C 135MHz, D₆-DMSO



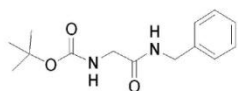
Current Data Parameters
NAME Jul06-2012-tchabenko
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120706
Time 11.07
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 96150
SOLVENT DMSO
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.250010 Hz
AQ 1.9999700 sec
RG 1820
DW 20.800 usec
DE 6.50 usec
TE 299.2 K
D1 1.0000000 sec
D11 0.0300000 sec
TDO 1

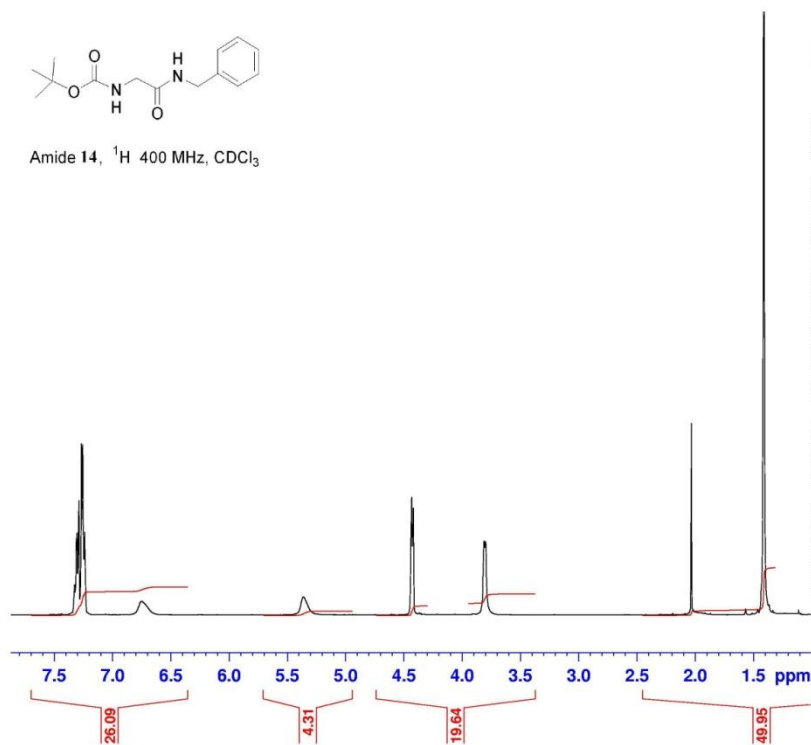
===== CHANNEL f1 =====
NUC1 13C
P1 8.00 usec
PL1 -4.30 dB
PL1W 96.67987061 W
SFO1 100.6178003 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz64
NUC2 1H
PCPD2 60.00 usec
PL2 -6.00 dB
PL12 10.29 dB
PL13 13.29 dB
PL2W 32.20000076 W
PL12W 0.75658178 W
PL13W 0.37918913 W
SFO2 400.1116004 MHz

F2 - Processing parameters
SI 131072
SF 100.6077903 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 1.40



Amide 14, ¹H 400 MHz, CDCl₃

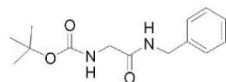


Current Data Parameters
 NAME Jun18-2012-tchabenko
 EXPNO 10
 PROCNO 1

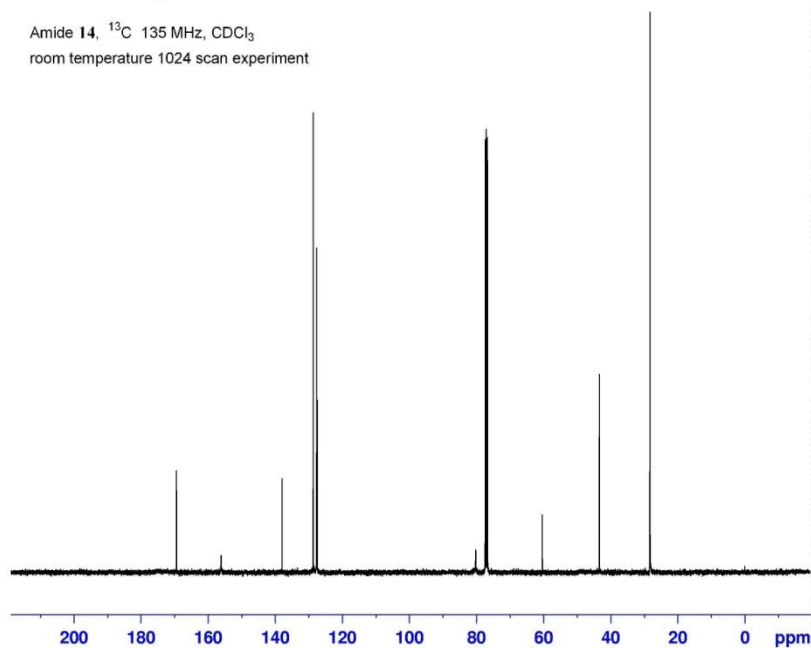
F2 - Acquisition Parameters
 Date_ 20120618
 Time 14.01
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 TD 65336
 SOLVENT CDCl3
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 57
 DW 60.800 usec
 DE 17.04 usec
 TE 299.1 K
 D1 1.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.20 usec
 PL1 -6.00 dB
 PL1W 32.2000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100070 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



Amide 14, ¹³C 135 MHz, CDCl₃
 room temperature 1024 scan experiment



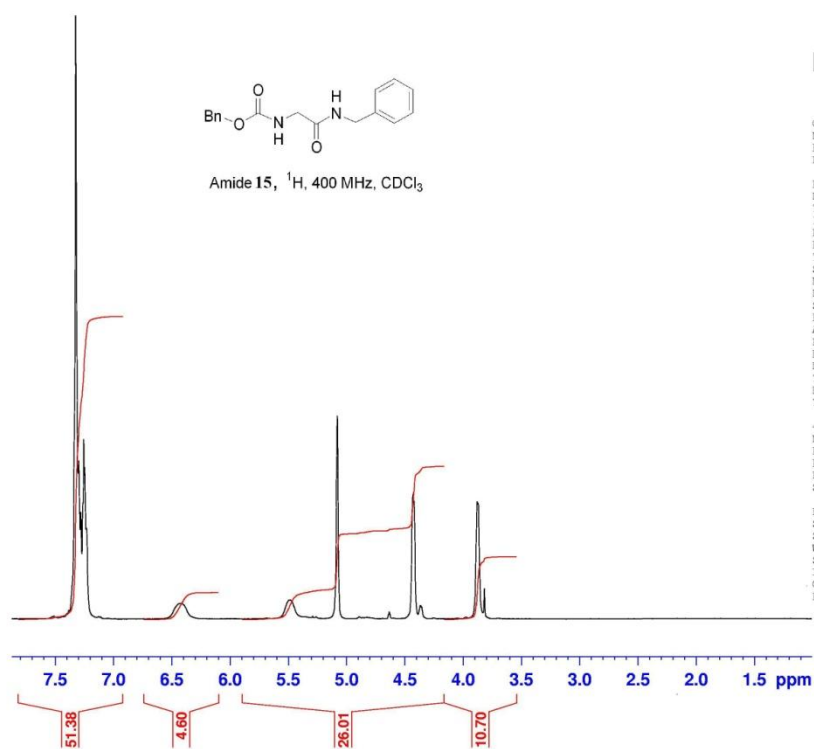
Current Data Parameters
 NAME Jun18-2012-tchabenko
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120618
 Time 14.55
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 TD 96150
 SOLVENT CDCl3
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 299.9 K
 D1 1.0000000 sec
 D11 0.03000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -4.30 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz64
 NUC2 1H
 FPCPD2 60.00 usec
 PL2 -6.00 dB
 PL12 10.29 dB
 PL13 13.29 dB
 PL2W 32.20000076 W
 PL12W 0.75658178 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077400 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

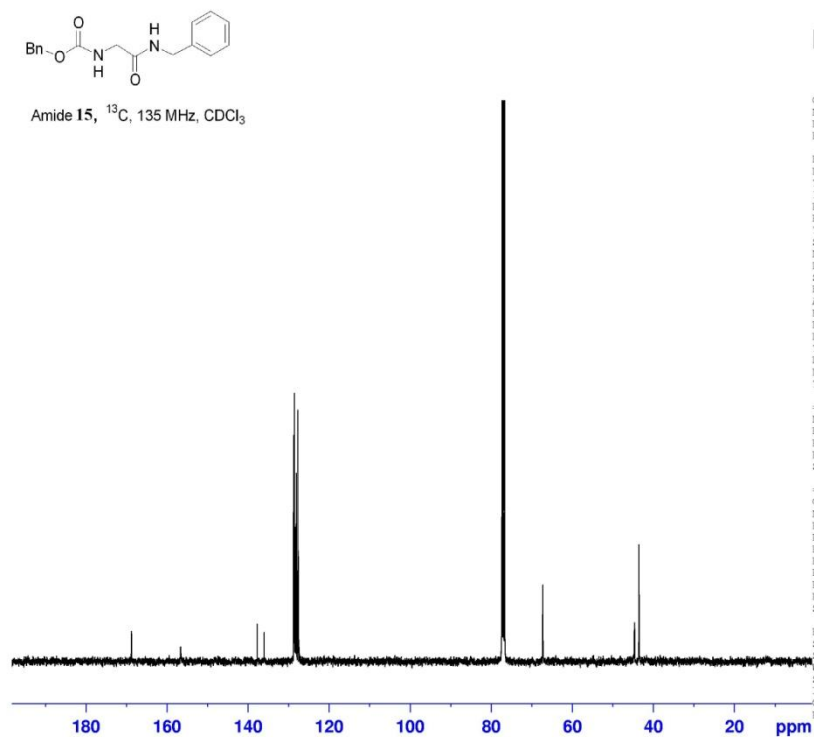


Current Data Parameters
 NAME Jul26-2012-tchabenko
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120727
 Time 0.37
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 TD 65336
 SOLVENT CDCl3
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 128
 DW 60.800 usec
 DE 16.66 usec
 TE 298.6 K
 D1 1.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 11.00 usec
 PL1 -6.00 dB
 PL1W 32.20000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100122 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



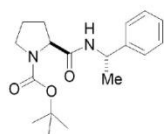
Current Data Parameters
 NAME Jul26-2012-tchabenko
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120727
 Time 1.30
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 TD 96150
 SOLVENT CDCl3
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 1290
 DW 20.800 usec
 DE 6.50 usec
 TE 300.2 K
 D1 1.0000000 sec
 D11 0.03000000 sec
 TDO 1

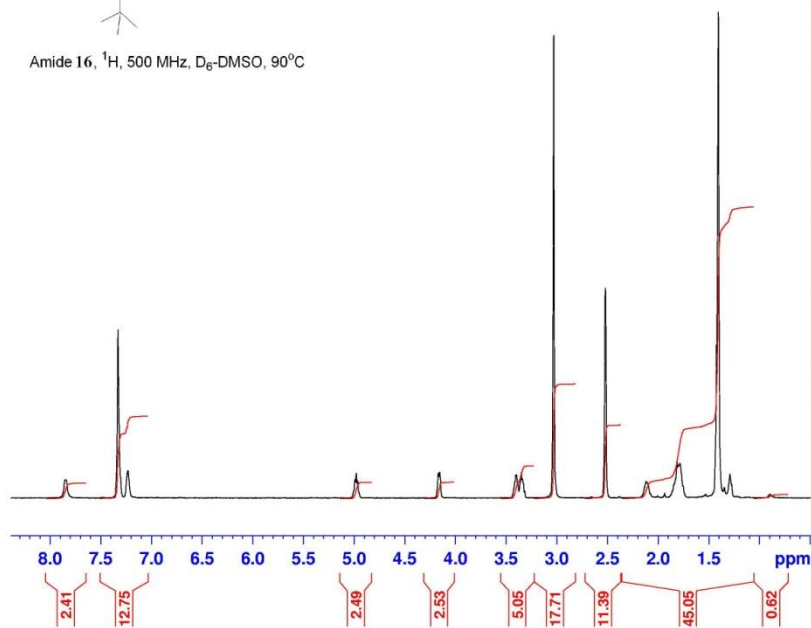
===== CHANNEL f1 =====
 NUC1 13C
 P1 9.00 usec
 PL1 -4.30 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz64
 NUC2 1H
 FPCPD2 60.00 usec
 PL2 -6.00 dB
 PL12 8.74 dB
 PL13 13.29 dB
 PL2W 32.20000076 W
 PL12W 1.08107519 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077400 MHz
 WDW EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.40



Amide 16, ^1H , 500 MHz, $\text{D}_6\text{-DMSO}$, 90°C

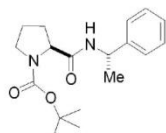


Current Data Parameters
NAME KT251
EXPNO 10
PROCNO 1

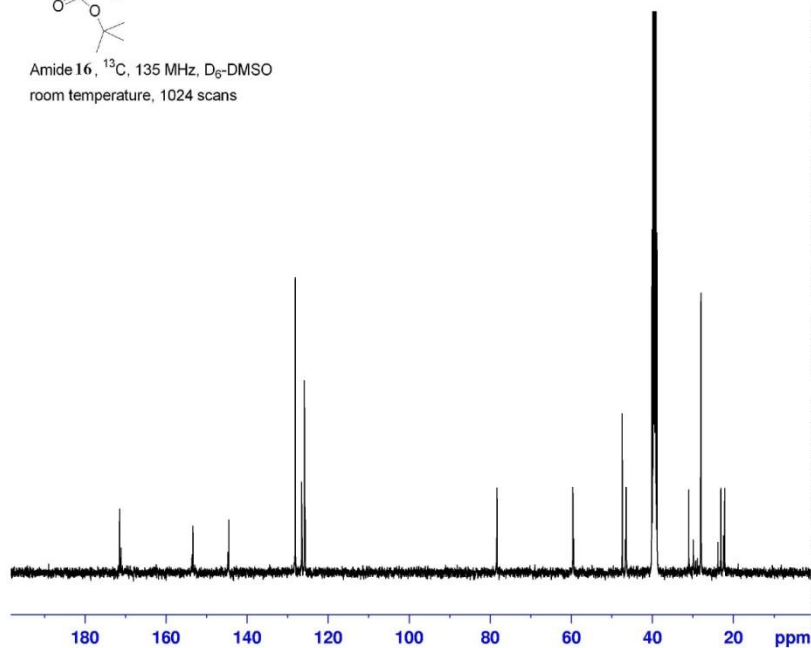
F2 - Acquisition Parameters
Date_ 20120704
Time 14.25
INSTRUM spect
PROBHD 5 mm Multinucl
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 32
DS 0
SWH 7507.507 Hz
FIDRES 0.114555 Hz
AQ 4.3647475 sec
RG 322.5
DW 66.600 usec
DE 7.11 usec
TE 363.0 K
D1 4.0000000 sec
MCREST 0.0000000 sec
MCWRK 0.0150000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 6.00 usec
PL1 -3.00 dB
SFO1 500.1325007 MHz

F2 - Processing parameters
SI 32768
SF 500.1299947 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00



Amide 16, ^{13}C , 135 MHz, $\text{D}_6\text{-DMSO}$
room temperature, 1024 scans



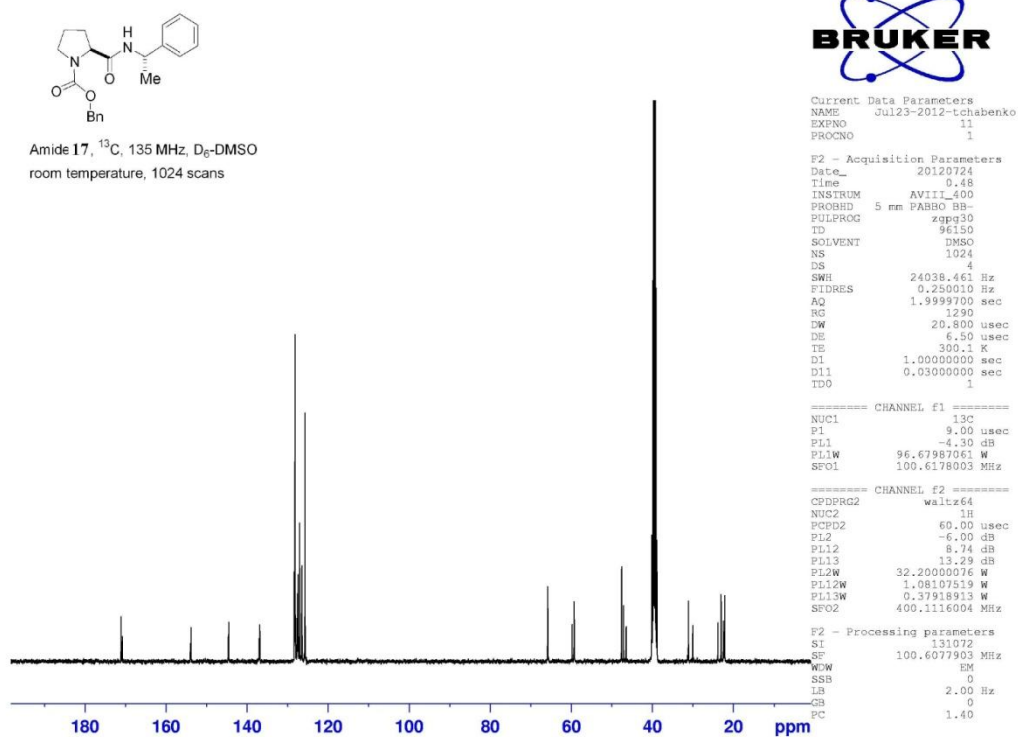
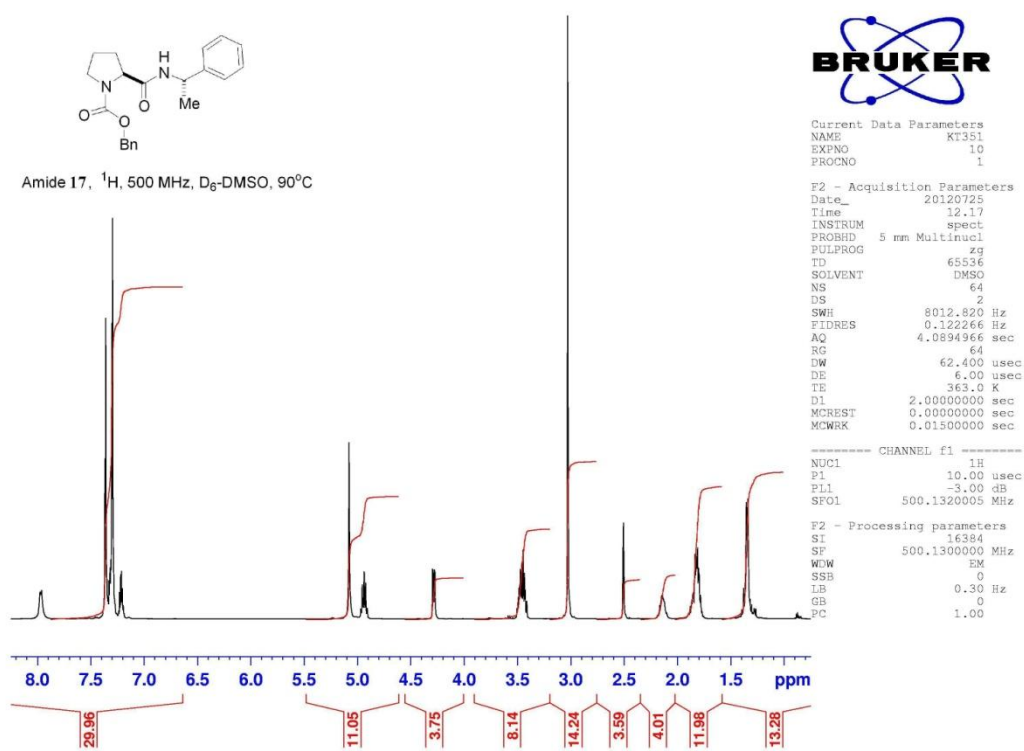
Current Data Parameters
NAME Jul05-2012-tchabenko
EXPNO 10
PROCNO 1

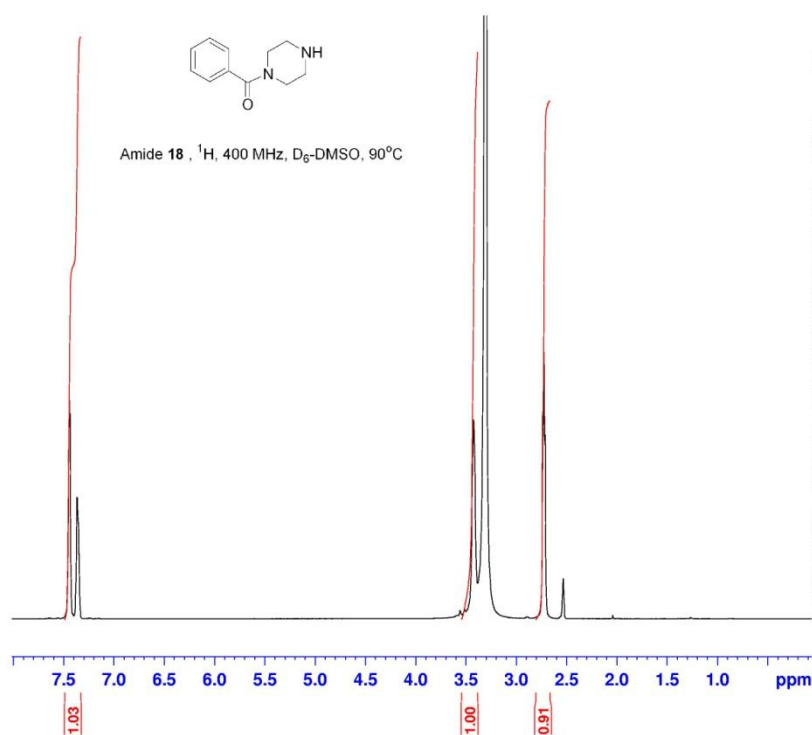
F2 - Acquisition Parameters
Date_ 20120705
Time 11.32
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 96150
SOLVENT DMSO
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.250010 Hz
AQ 1.9999700 sec
RG 1620
DW 20.800 usec
DE 6.50 usec
TE 299.8 K
D1 1.0000000 sec
D11 0.0300000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.00 usec
PL1 -4.30 dB
PL1W 96.67987061 W
SFO1 100.6178003 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz64
NUC2 1H
PCPD2 60.00 usec
PL2 -6.00 dB
PL12 10.29 dB
PL13 13.29 dB
PL2W 32.20000076 W
PL12W 0.75658178 W
PL13W 0.37918913 W
SFO2 400.1116004 MHz

F2 - Processing parameters
SI 131072
SF 100.6077903 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 1.40



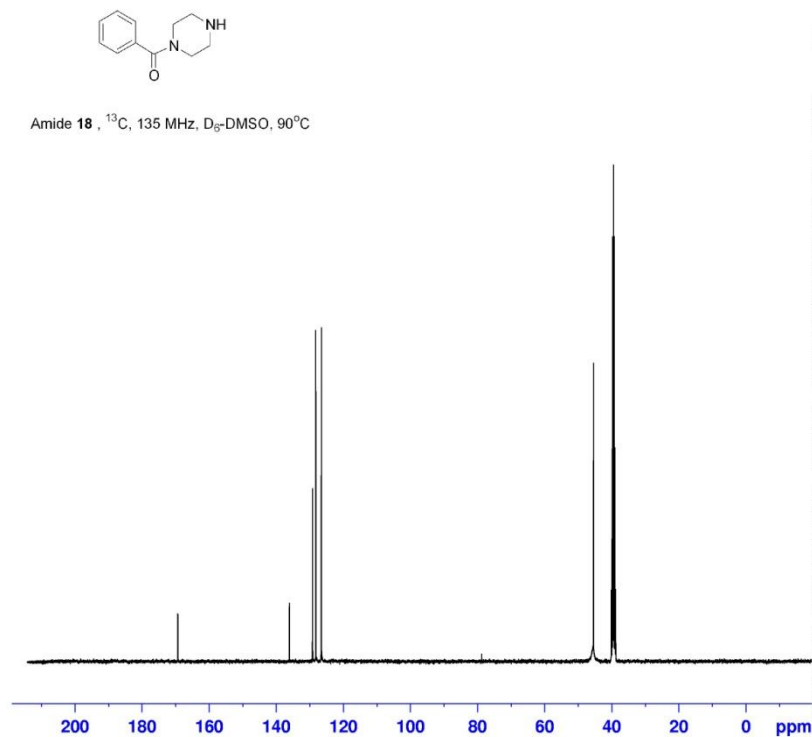


Current Data Parameters
NAME Sep11-2012-tchabenko
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120911
Time 9.05
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65336
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 18
DW 60.800 usec
DE 16.66 usec
TE 363.7 K
D1 1.0000000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 ^1H
P1 11.00 usec
PL1 -6.00 dB
PL1W 32.20000076 W
SFO1 400.1124708 MHz

F2 - Processing parameters
SI 32768
SF 400.1118906 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



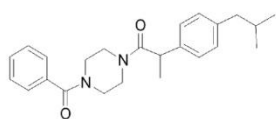
Current Data Parameters
NAME Sep11-2012-tchabenko
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120911
Time 9.59
INSTRUM AVIII_400
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 96150
SOLVENT CDCl3
NS 1024
DS 4
SWH 24038.461 Hz
FIDRES 0.250010 Hz
AQ 1.9999700 sec
RG 2050
DW 20.800 usec
DE 6.50 usec
TE 363.2 K
D1 1.0000000 sec
D11 0.0300000 sec
TDO 1

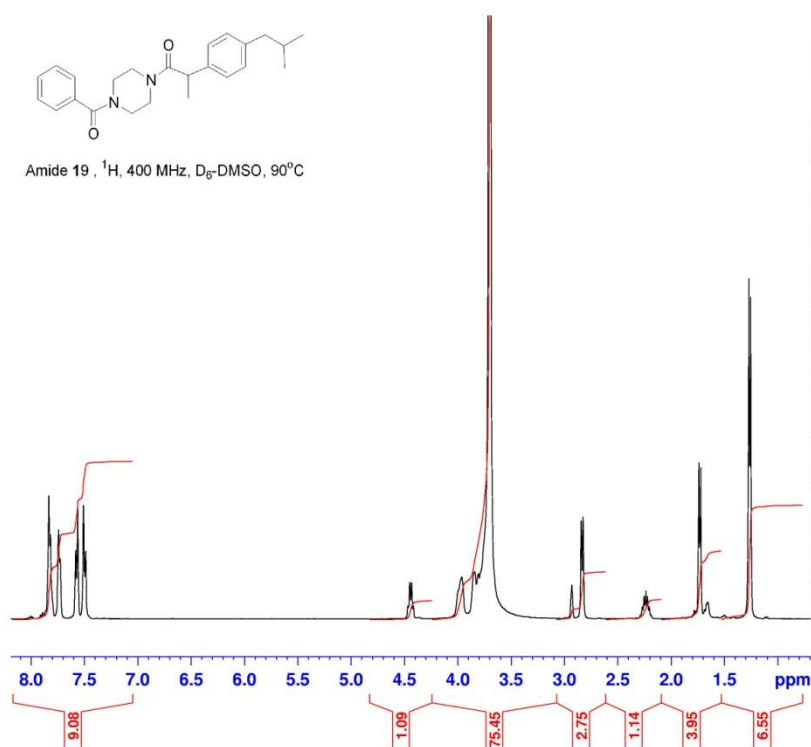
===== CHANNEL f1 =====
NUC1 ^{13}C
P1 9.00 usec
PL1 -4.30 dB
PL1W 96.67987061 W
SFO1 100.6178003 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz64
NUC2 ^1H
PCPD2 60.00 usec
PL2 -6.00 dB
PL12 8.74 dB
PL13 13.29 dB
PL2W 32.20000076 W
PL12W 1.08107519 W
PL13W 0.37918913 W
SFO2 400.1116004 MHz

F2 - Processing parameters
SI 131072
SF 100.6082722 MHz
WDW SW
SSB 0
LB 2.00 Hz
GB 0
PC 1.40



Amide 19, ¹H, 400 MHz, D₆-DMSO, 90°C

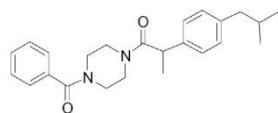


Current Data Parameters
 NAME Sep12-2012-tchabenko
 EXPNO 20
 PROCNO 1

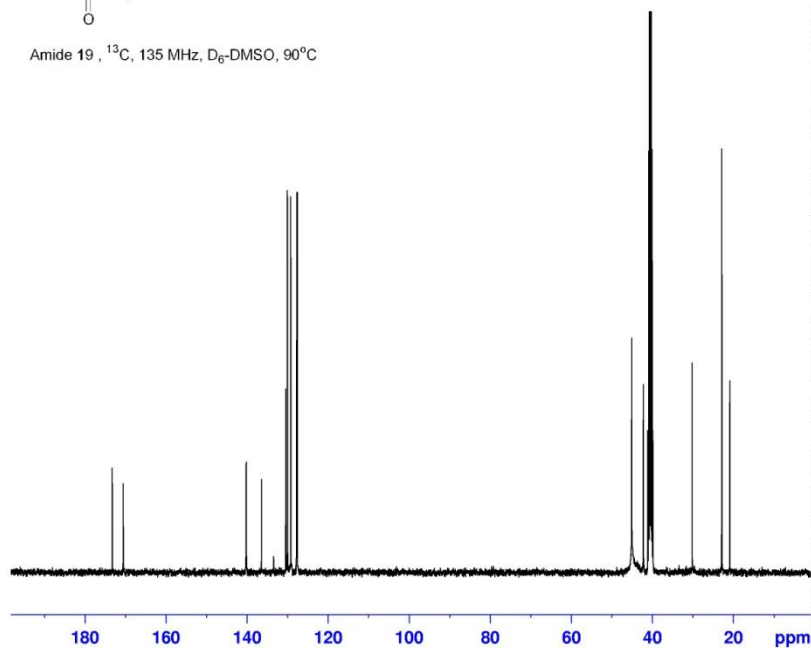
F2 - Acquisition Parameters
 Date_ 20120912
 Time 14.54
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 ID 65336
 SOLVENT DMF
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.9846387 sec
 RG 18
 DW 60.800 usec
 DE 16.66 usec
 TE 363.2 K
 D1 1.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 11.00 usec
 PL1 -6.00 dB
 PL1W 32.20000076 W
 SFO1 400.1124708 MHz

F2 - Processing parameters
 SI 32768
 SF 400.1100000 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



Amide 19, ¹³C, 135 MHz, D₆-DMSO, 90°C



Current Data Parameters
 NAME Sep12-2012-tchabenko
 EXPNO 21
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120912
 Time 15.48
 INSTRUM AVIII_400
 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 ID 96150
 SOLVENT DMF
 NS 1024
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.250010 Hz
 AQ 1.9999700 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 363.2 K
 D1 1.0000000 sec
 D11 0.03000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 9.00 usec
 PL1 -4.30 dB
 PL1W 96.67987061 W
 SFO1 100.6178003 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz64
 NUC2 1H
 PCPD2 60.00 usec
 PL2 -6.00 dB
 PL12 8.74 dB
 PL13 13.29 dB
 PL2W 32.20000076 W
 PL12W 1.08107519 W
 PL13W 0.37918913 W
 SFO2 400.1116004 MHz

F2 - Processing parameters
 SI 131072
 SF 100.6077400 MHz
 WDW EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.40