

Supporting Information

A Practicable Synthesis of 2,3-Disubstituted 1,4-Dioxane Bearing Carbonyl Functionality from α,β -Unsaturated Ketones using Williamson Strategy

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Federal University, 19 Mira Street, 620002 Yekaterinburg, Russian Federation*

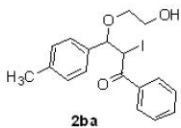
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^1H and ^{13}C NMR spectra of synthesized compounds:

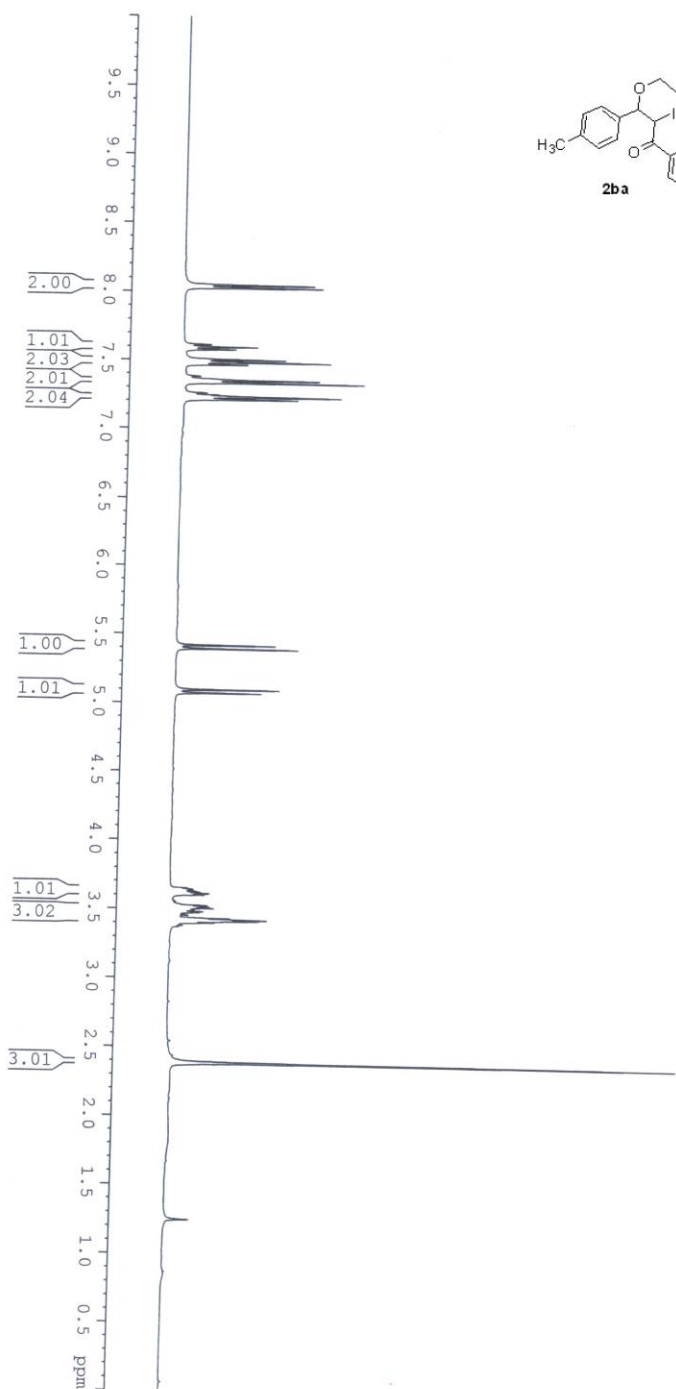
¹H of VBAR-2ba



8.050
8.046
8.031
8.028
7.615
7.597
7.579
7.505
7.486
7.467
7.353
7.333
7.231
7.211

5.419
5.394
5.099
5.073

3.631
3.623
3.614
3.610
3.601
3.527
3.519
3.513
3.505
3.482
3.474
3.435
3.423
3.415
3.409
3.401
2.386

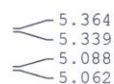
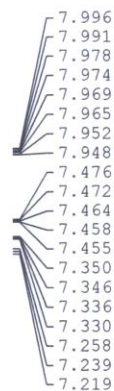


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EXPNO 379
PROCNO 1

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PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 16
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 67.81
DW 60.800 usec
DE 6.50 usec
TE 297.3 K
D1 1.0000000 sec
TD0 1

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NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
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SSB 0
LB 0.30 Hz
GB 0
PC 2.00

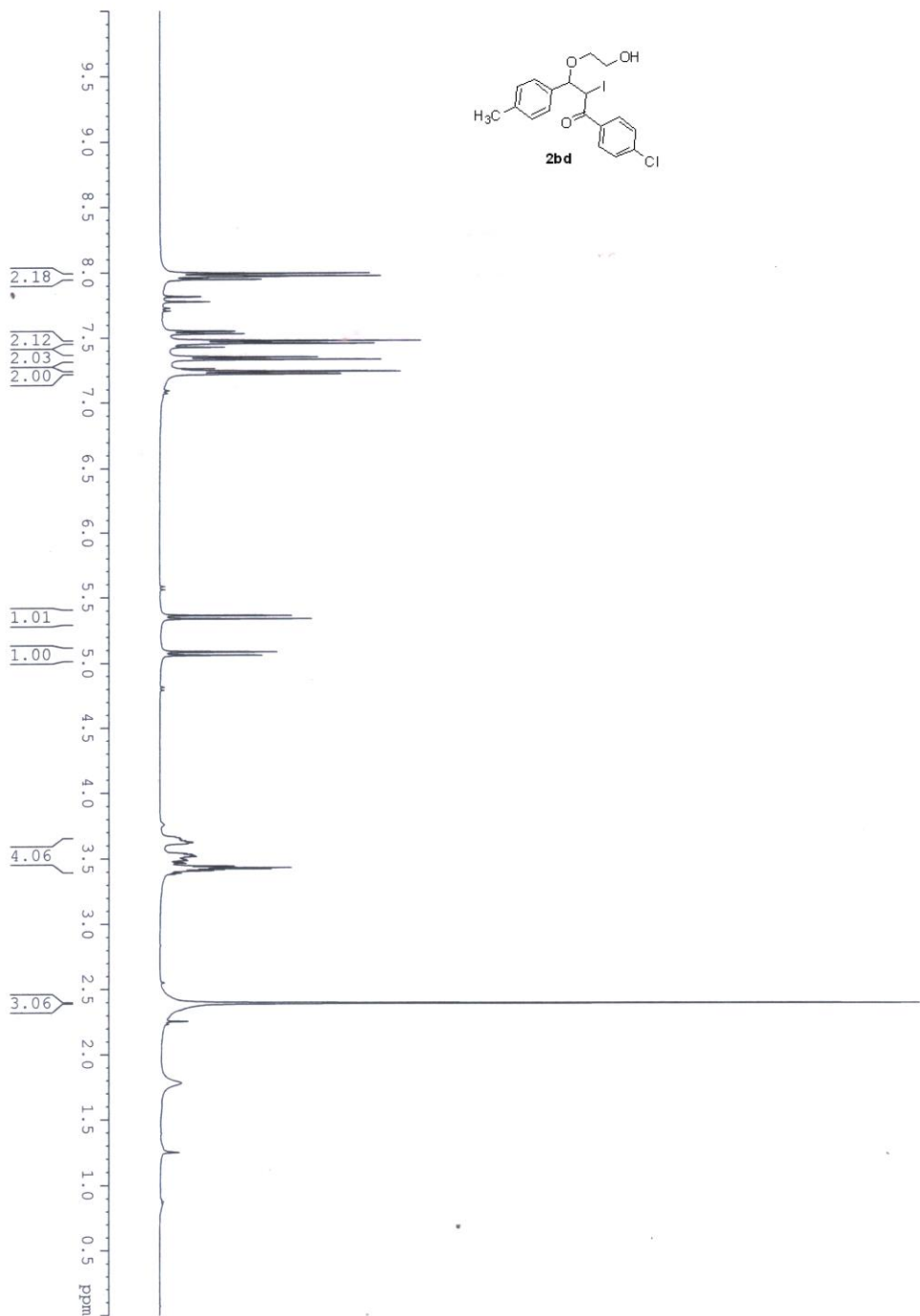
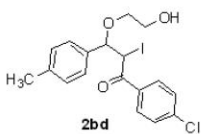


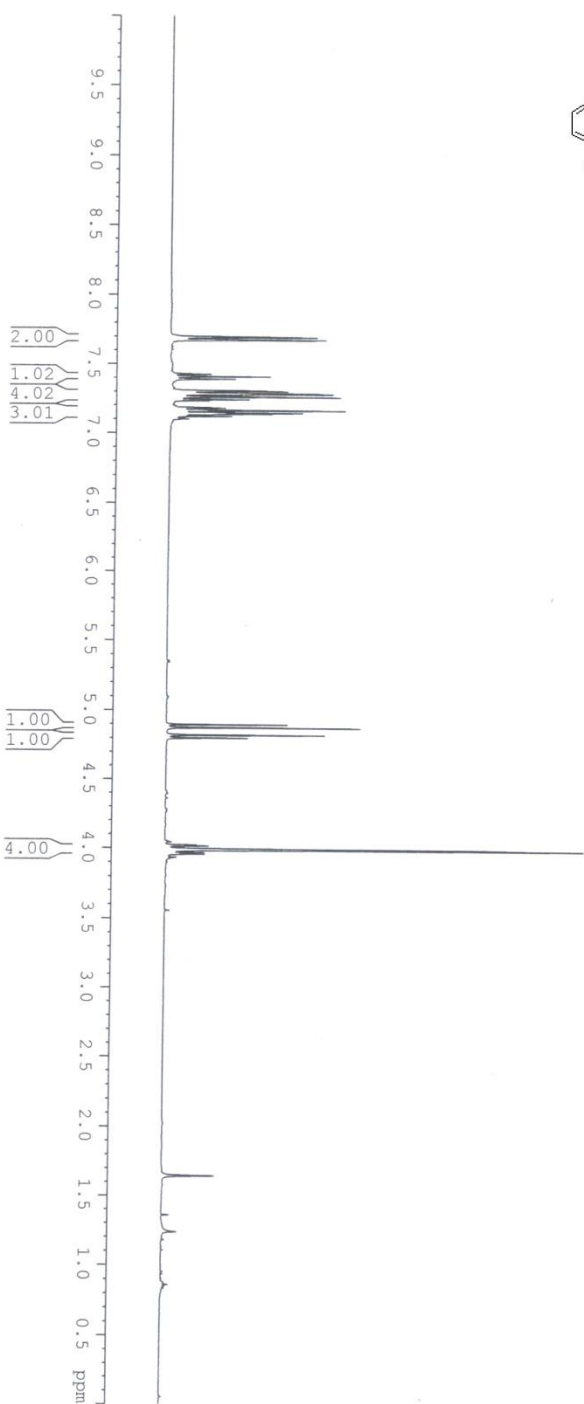
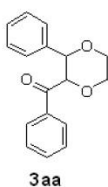
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 EXPNO 301
 PROCNO 1

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 PULPROG zg30
 TD 32768
 SOLVENT CDCl3
 NS 16
 DS 1
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9922944 sec
 RG 57.28
 DW 60.800 usec
 DE 6.50 usec
 TE 294.2 K
 D1 1.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 SFO1 400.1524711 MHz
 NUC1 1H
 P1 14.75 usec
 PLM1 12.00000000 W

F2 - Processing Parameters
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 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 2.00





Current Data Parameters
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EXPNO 632
PROCNO 1

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PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 54.07
DW 60.800 usec
DE 6.50 usec
TE 299.3 K
D1 1.00000000 sec
TD0 1

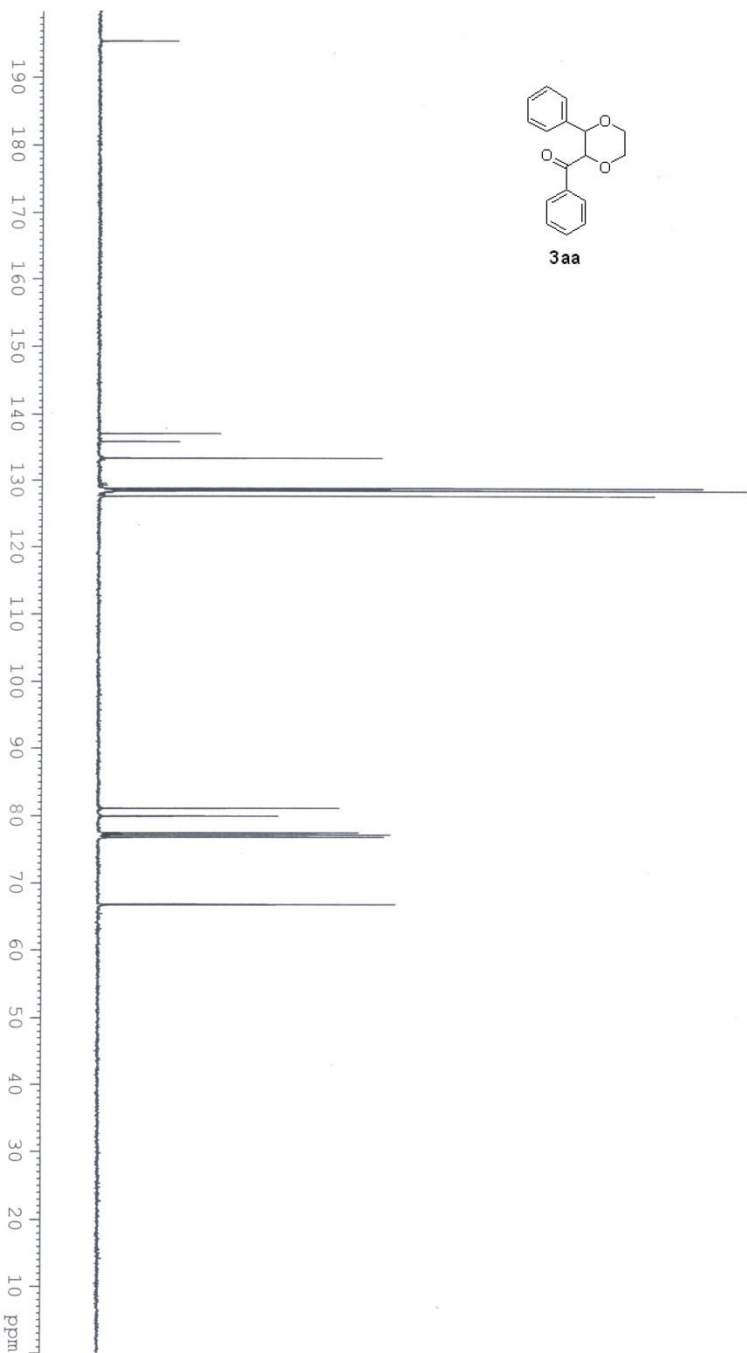
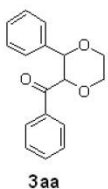
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NUC1 1H
P1 14.75 usec
PL1 12.00000000 W
PLM1
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SF 400.1500207 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

13C of VBAR-263/1

195.43

137.07
135.86
133.39
128.79
128.57
128.40
127.61

81.09
79.95
77.47
77.15
76.83
66.75
66.68



Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 633
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180802
Time 12.57
INSTRUM spect
PROBHD 5 mm PABBO BH/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 87.66
DW 20.800 usec
DE 6.50 usec
TE 300.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.6278588 MHz
NUC1 13C
PI 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPDZ 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

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SI 16384
SF 100.6177902 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 2.00

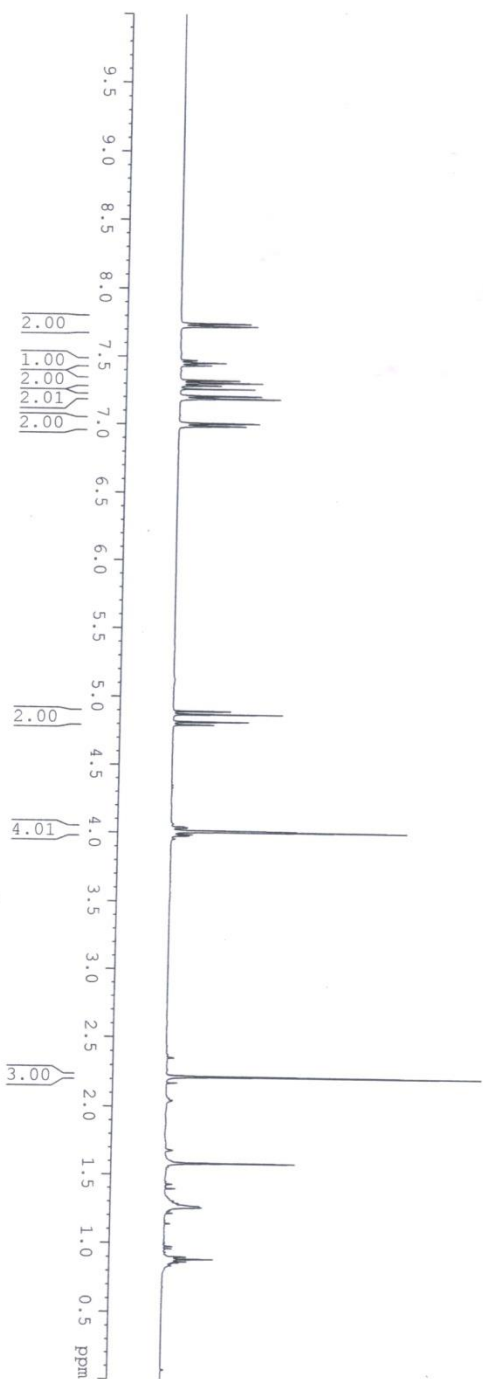
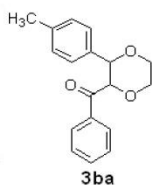
1H OF VBAR-271

7.744
7.742
7.723
7.720
7.472
7.453
7.438
7.434
7.324
7.304
7.285
7.260
7.208
7.188
7.006
6.986

4.894
4.872
4.818
4.795

4.042
4.012
4.007
3.986
3.976

2.218



Current Data Parameters
NAME Dr. A. MAJEE 2017
EXNO 948
PROCNO 1

F2 - Acquisition Parameters
Date 20171214
Time 10.33
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 120.16
DW 60.800 usec
DE 6.50 usec
TE 296.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLM1 12.00000000 W

F2 - Processing Parameters
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WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



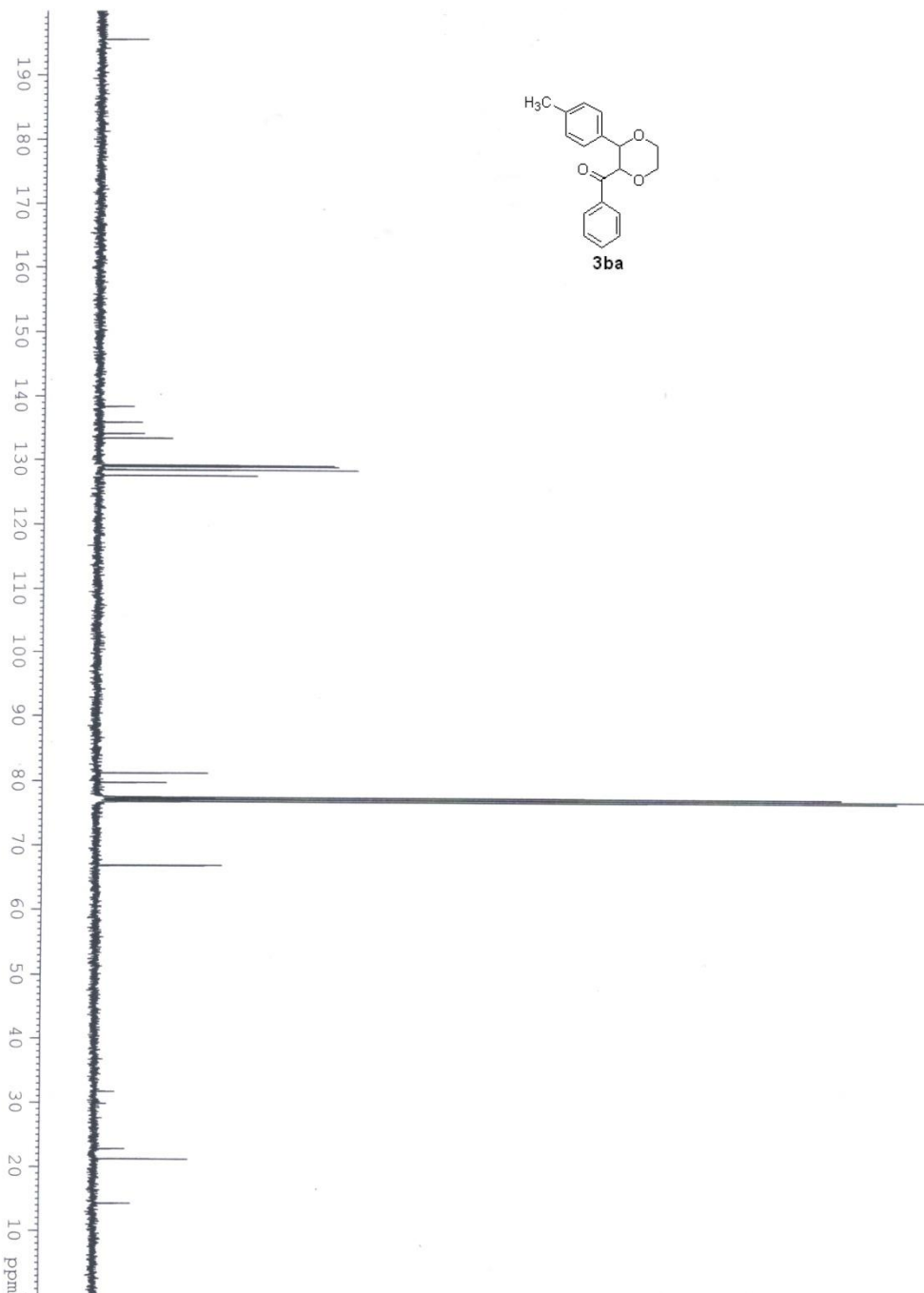
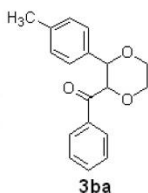
¹³C OF VBAR- 271

— 195.53

138.34
135.86
134.11
133.37
129.12
128.92
128.42
127.54

81.16
79.76
77.47
77.15
76.83
66.81
66.74

— 21.23



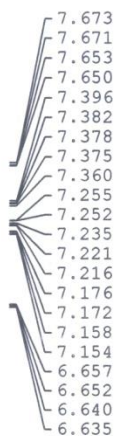
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NAME Dr. A MAJEE 2017
EXPNO 950
PROCNO 1

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Time_ 12.14
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 512
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 186.42
DW 20.800 usec
DE 6.50 usec
TE 295.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

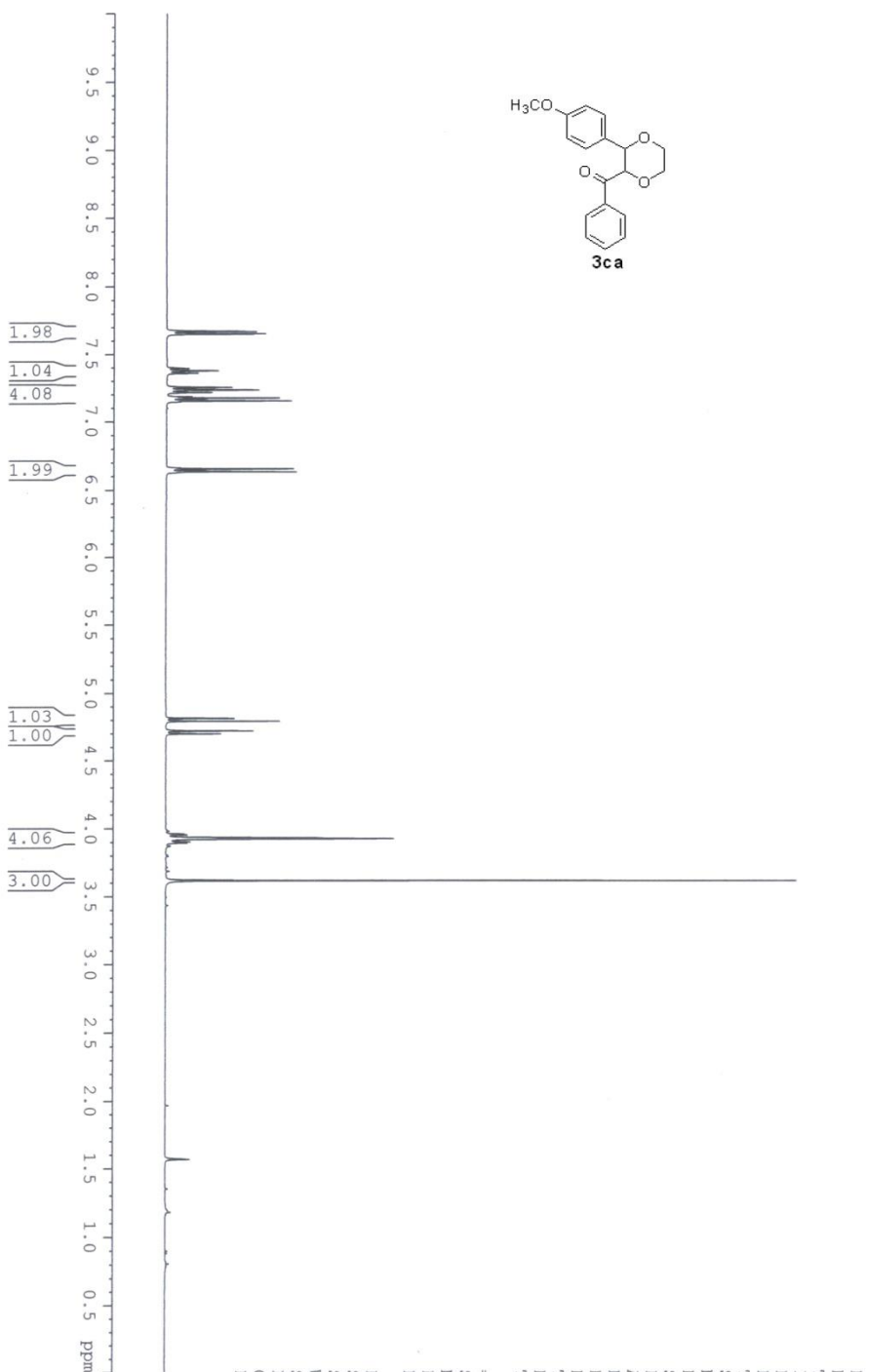
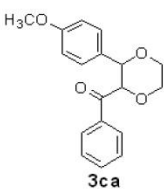
CHANNEL F1
SF01 100.627858 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL F2
SF02 400.151606 MHz
NUC2 1H
CPRPG12 waltz16
PCPD2 90.00 usec
PLM2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.617858 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



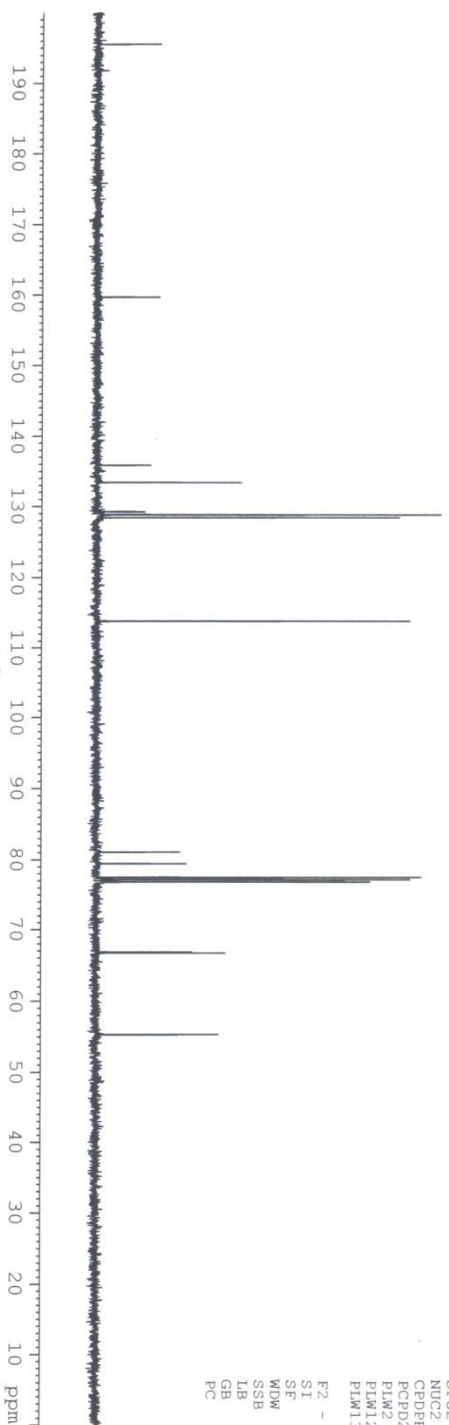
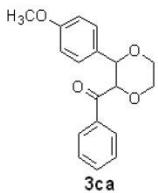
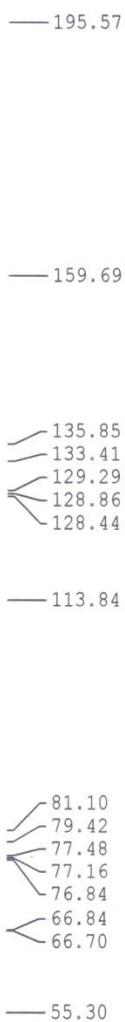
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NAME Dr. A MAJEE 2018
EXPNO 67
PROCNO 1



F2 - Acquisition Parameters
Date_ 20180131
Time 17.28
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 16
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 62.69
DW 60.800 usec
DE 6.50 usec
TE 294.6 K
D1 1.0000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500388 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



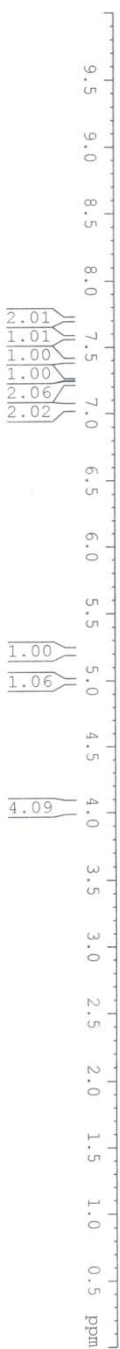
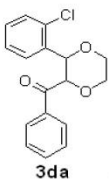
Current Data Parameters
NAME Dr. A. MAJEE 2018
EXPNO 70
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180131
Time 17.52
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 260
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 186.42
DW 20.800 usec
DE 6.50 usec
TE 295.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing Parameters
SI 16384
SF 100.6177884 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 591
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180724
Time 9.49
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 93.46
DW 60.800 usec
DE 6.50 usec
TE 298.8 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLM1 12.00000000 W

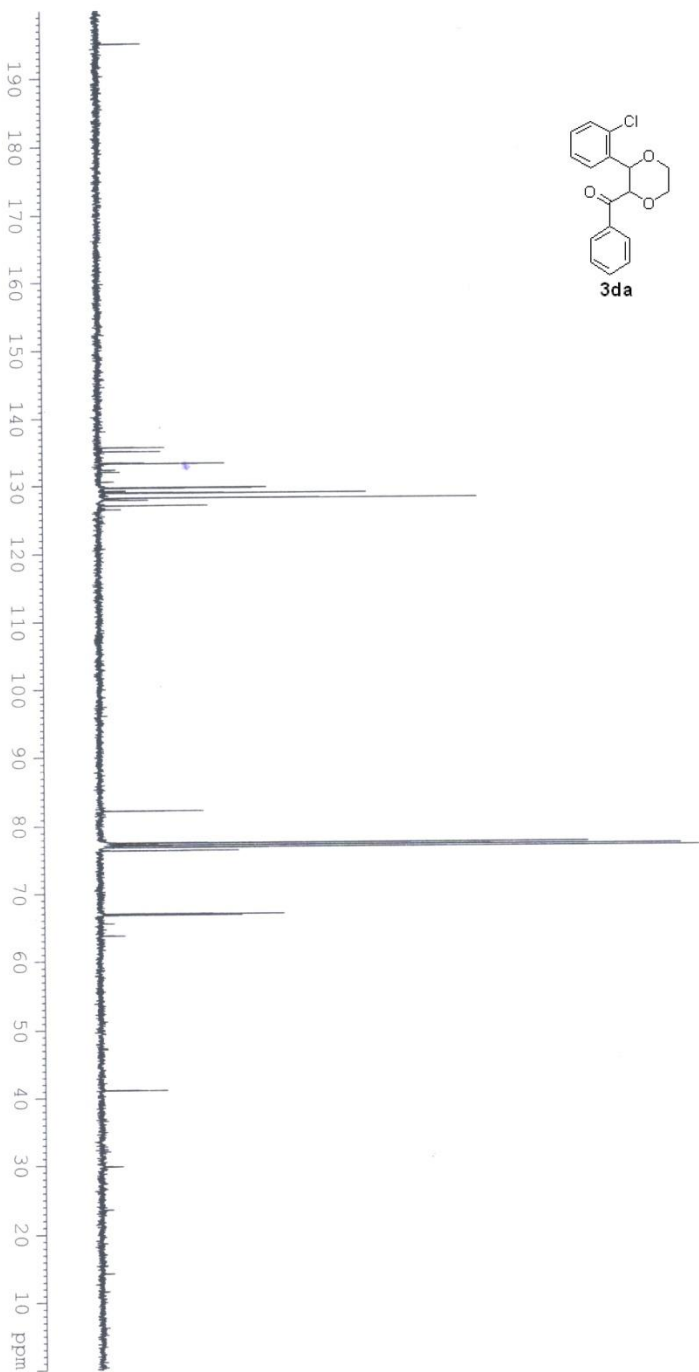
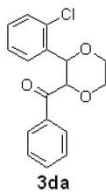
F2 - Processing parameters
SI 16384
SF 400.1500113 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

13C of VBAR-263/24

195.09

135.67
135.08
133.37
133.26
129.68
129.60
128.94
128.89
128.13
127.04

82.19
77.47
77.15
76.83
76.35
66.92
66.73



Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 592
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180724
Time 10.22
INSTRUM spect
PROBHD 5 mm PABO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 87.66
DW 20.800 usec
DE 6.50 usec
TE 300.4 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SF01 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SF02 400.1516006 MHz
NUC2 1H
PCPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177858 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
FC 2.00

¹H of VBAR 15B

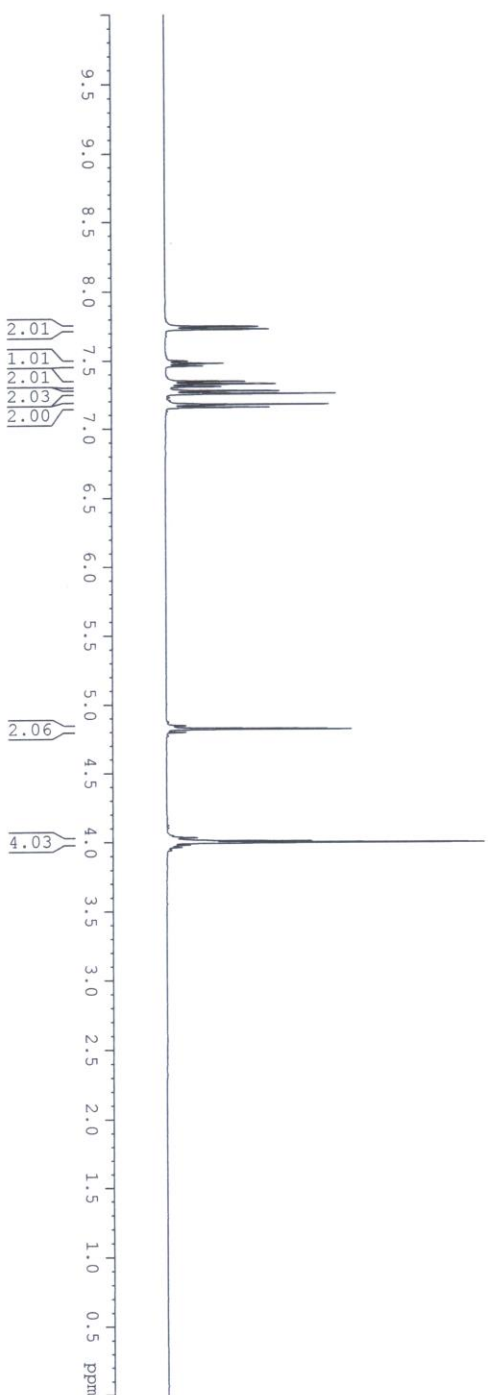
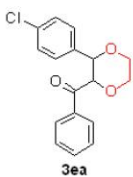


Current Data Parameters
NAME Dr. A MAJE 2020
EXPNO 351
PROCNO 1

F2 - Acquisition Parameters
Date_ 20200916
Time 17.47
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 93.46
DW 60.800 usec
DE 6.50 usec
TE 297.9 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
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SF 400.1500123 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 2.00

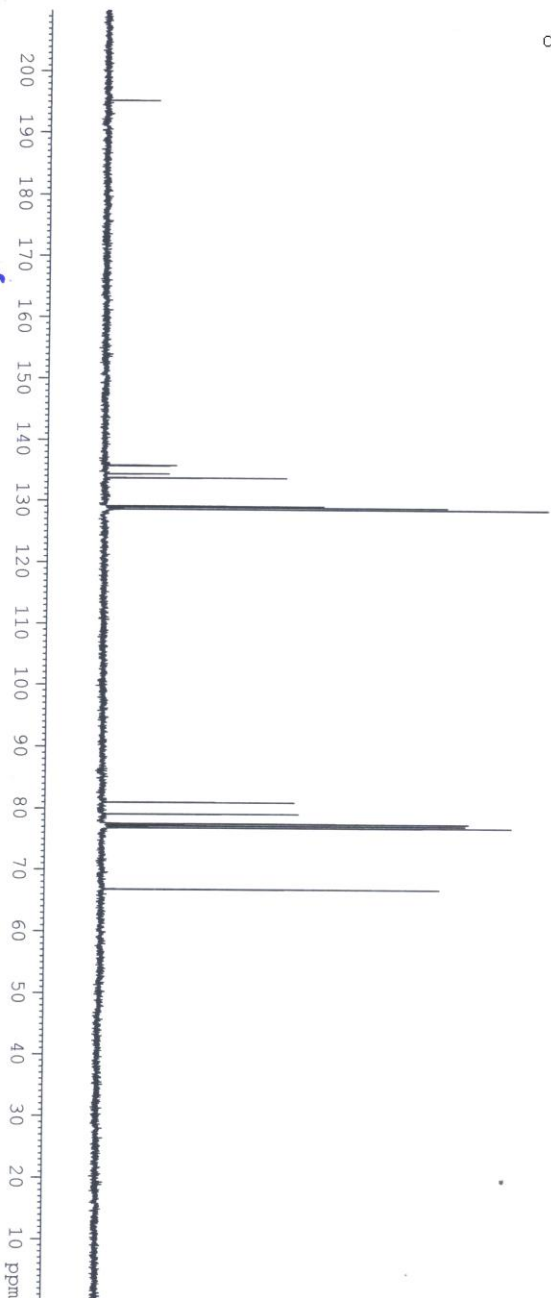
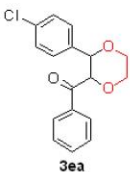


¹³C of VBAR 15B

195.11

135.76
135.66
134.35
133.69
129.10
128.89
128.59

80.96
79.05
77.47
77.15
76.83
66.76



Current Data Parameters
NAME Dr. A MAJE 2020
EXPNO 352
PROCNO 1



F2 - Acquisition Parameters
Date_ 20200916
Time 18.03
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 320
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 93.46
DW 20.800 usec
DE 6.50 usec
TE 298.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.627858 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SFO2 400.151606 MHz
NUC2 1H
CEDEPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177855 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

7.742
7.739
7.721
7.718
7.495
7.476
7.458
7.345
7.324
7.309
7.306
7.301
7.293
7.288
7.259
6.906
6.884
6.879
6.862

4.866
4.844
4.833
4.811

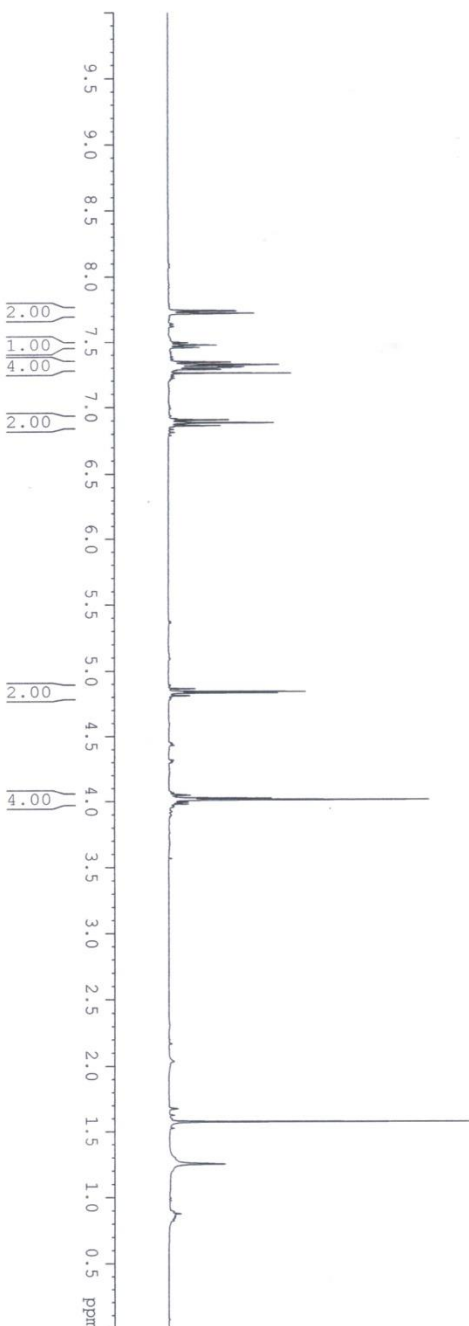
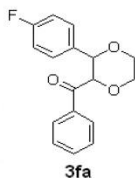
4.048
4.024
4.013
3.993



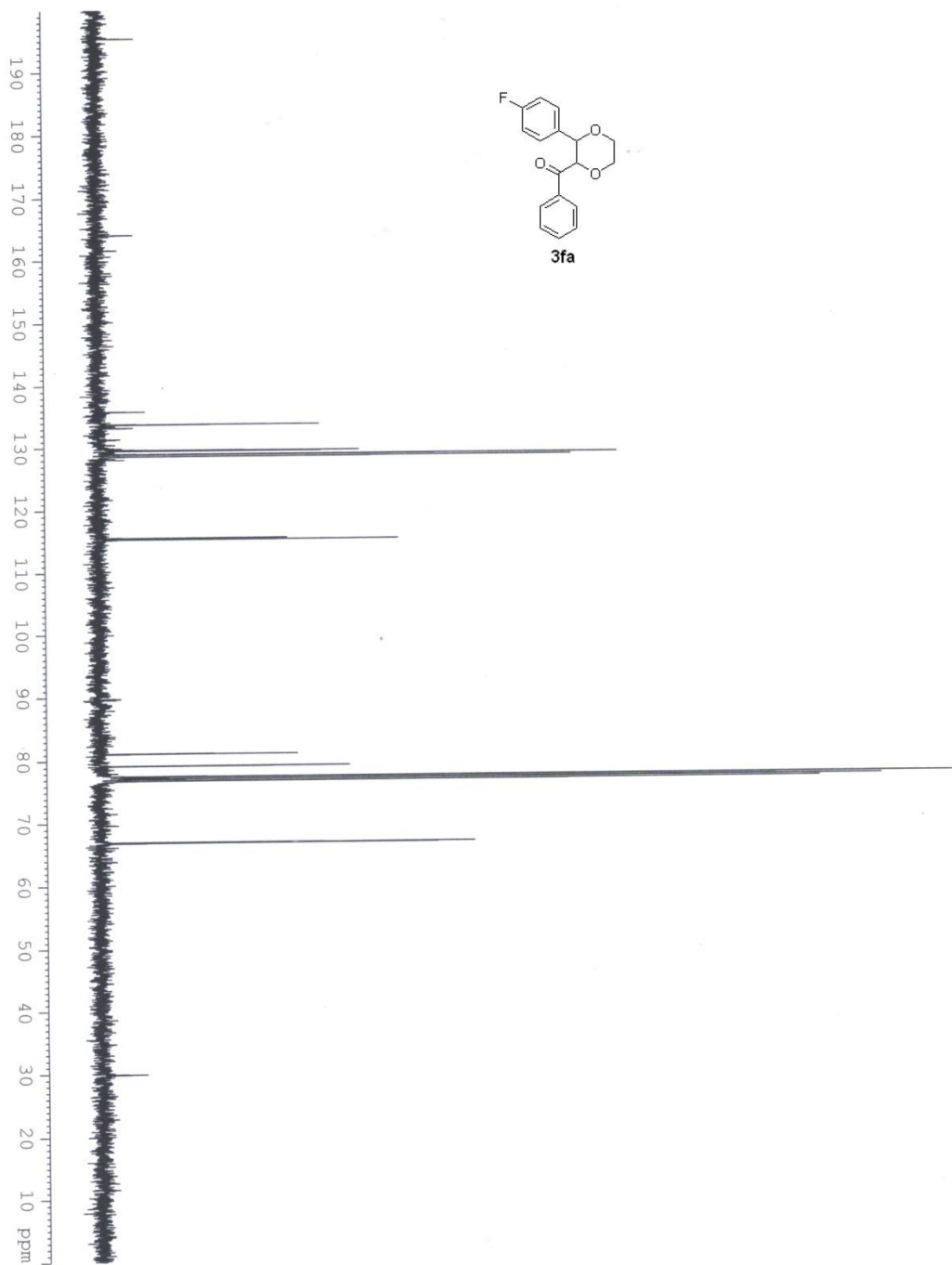
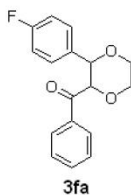
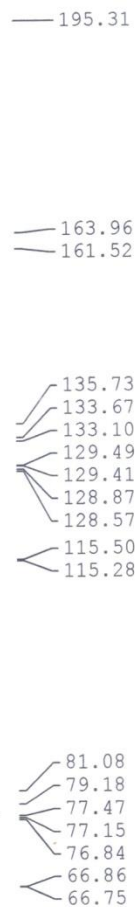
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NAME Dr. A MAJEE 2018
EXPNO 56
PROCNO 1

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Time_ 17.05
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 20
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 186.42
DW 60.800 usec
DE 6.50 usec
TE 294.1 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.150097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



¹³C of VBAR 263/2



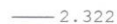
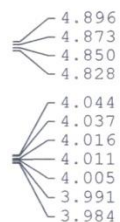
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 NAME Dr. A MAJE 2018
 EXPNO 57
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20180129
 Time 17.56
 INSTRUM spect
 PROBD 5 mm PABO BB/
 PULPROG zgpg
 TD 32768
 SOLVENT CDCl3
 NS 1024
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.681574 sec
 RG 186.42
 DW 20.800 usec
 DE 6.50 usec
 TE 295.5 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TDO 1

CHANNEL f1
 SFO1 100.6278588 MHz
 NUC1 13C
 P1 8.90 usec
 PLW1 54.00000000 W

CHANNEL f2
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG12 waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W

F2 - Processing Parameters
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 SF 100.6177845 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

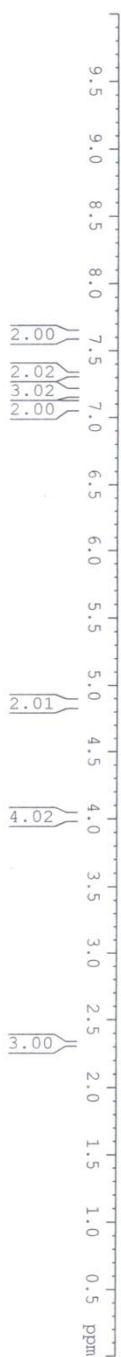
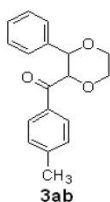


Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 112
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180215
Time 11.33
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 106.66
DM 60.800 usec
DE 6.50 usec
TE 296.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SE01 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500094 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



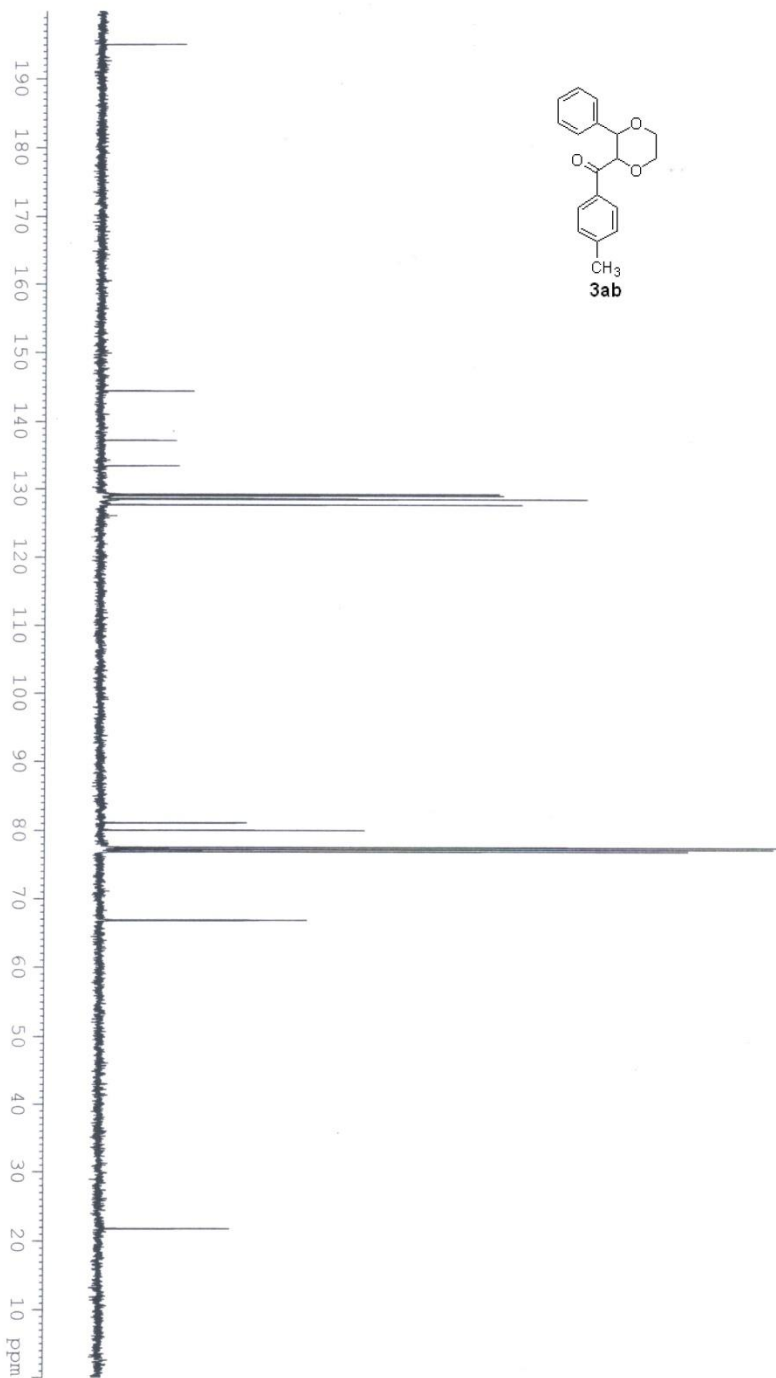
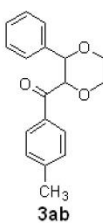


195.01

144.41
137.16
133.39
129.16
128.97
128.55
128.43
127.63

81.02
79.97
77.48
77.16
76.84
66.79
66.71

21.77



Current Data Parameters
NAME Dr. A MAJE 2018
EXNO 113
PROCNO 1

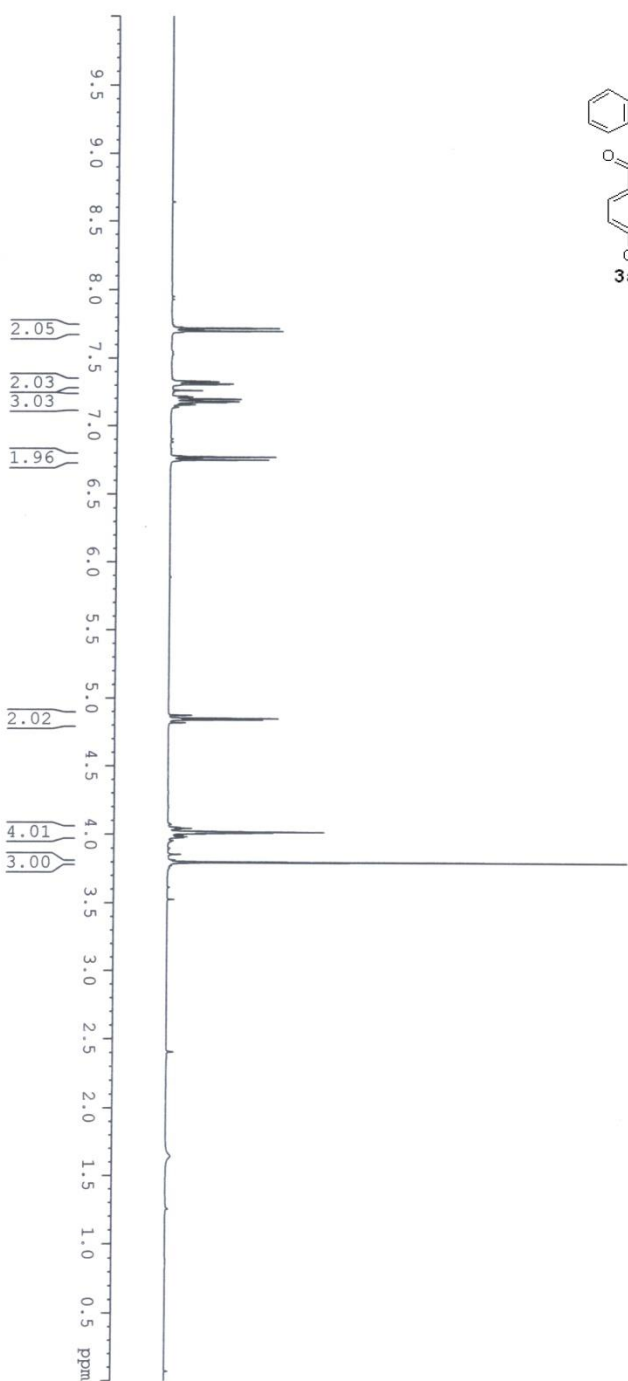
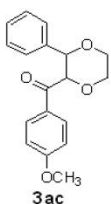
F2 - Acquisition Parameters
Date_ 20180215
Time 11.51
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 312
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 106.66
DW 20.800 usec
DE 6.50 usec
TE 296.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL F1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL F2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177866 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

¹H of VBAR-263/7

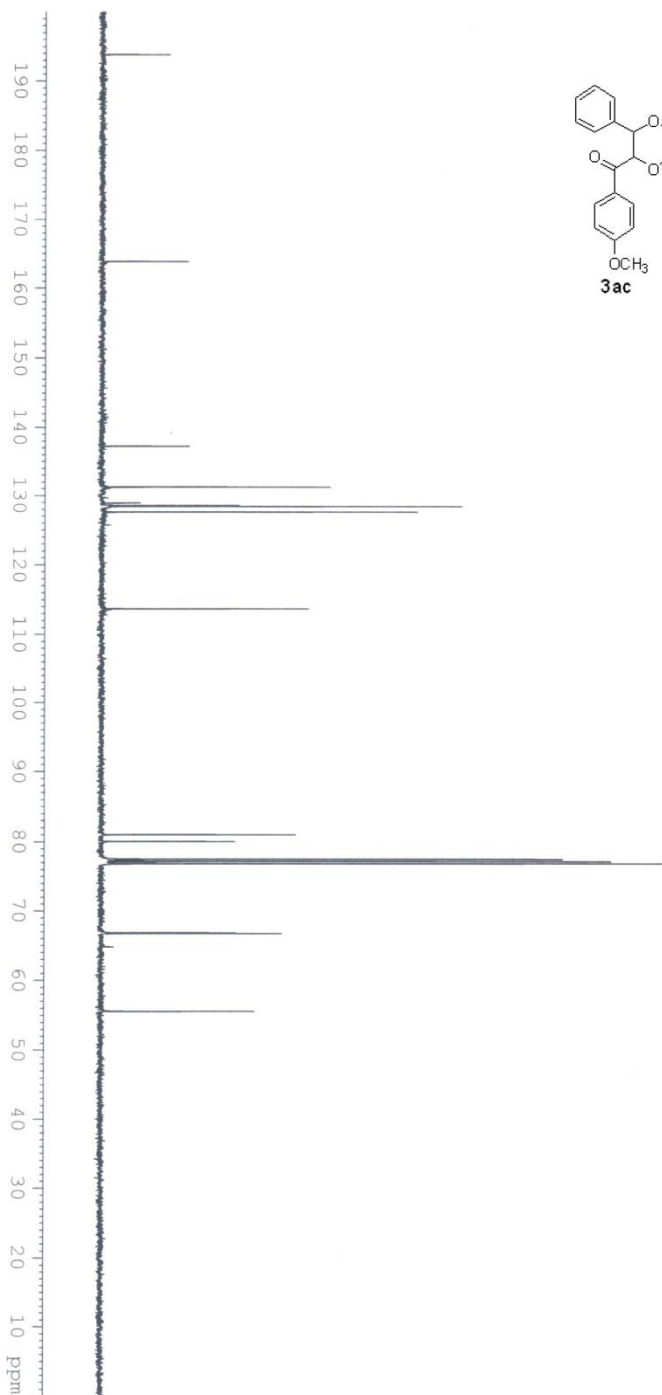
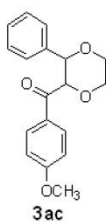
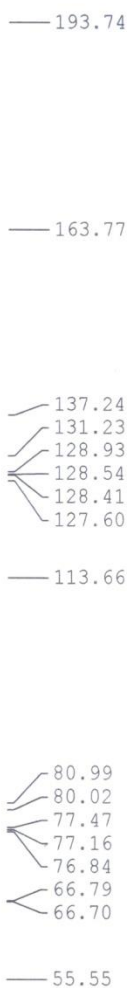


Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 118
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180216
Time_ 17.02
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 16
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 106.66
DW 60.800 usec
DE 6.50 usec
TE 295.6 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500095 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



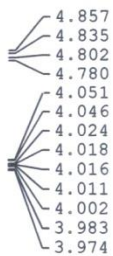
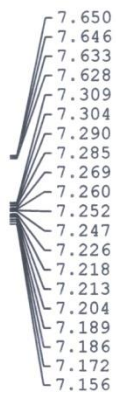
Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 119
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180216
Time 17.35
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 106.66
DW 20.800 usec
DE 6.50 usec
TE 296.3 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

===== CHANNEL f2 =====
SFO2 400.1516006 MHz
NUC2 1H
CPRPG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

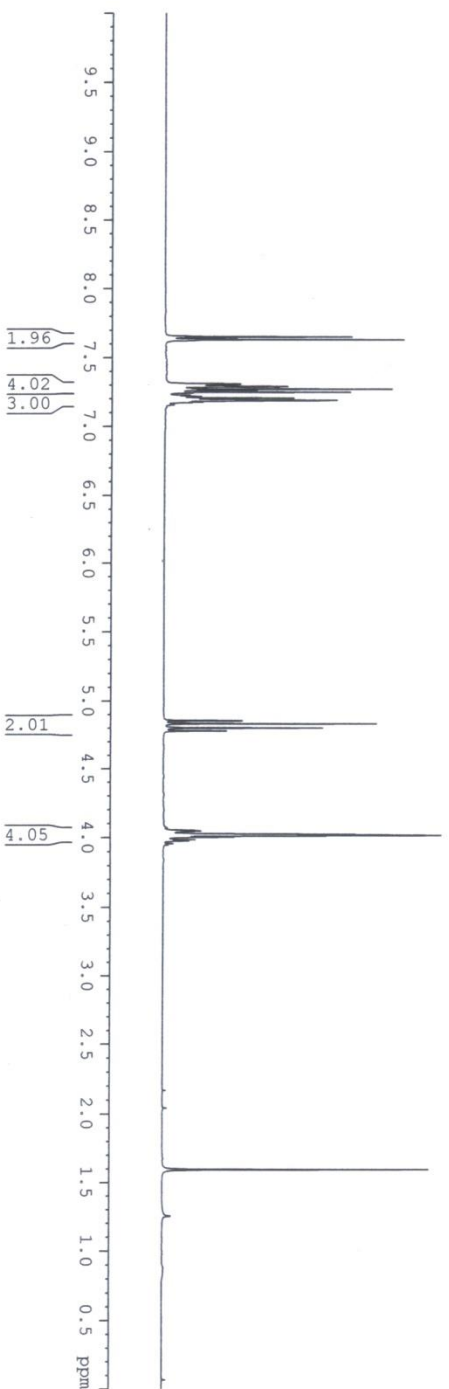
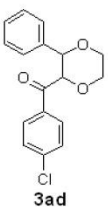
F2 - Processing parameters
SI 16384
SF 100.6177866 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



Current Data Parameters
NAME Dr. A. MAJEE 2018
EXPNO 147
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180223
Time_ 17.57
INSTRUM spect
PROBHD 5 mm PABBO BH/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 16
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 106.66
DW 60.800 usec
DE 6.50 usec
TE 296.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 ¹H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

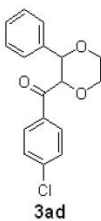


¹³C of VBAR-263/8

— 194.37

139.96
136.92
134.13
130.21
128.77
128.54
127.56

81.31
80.01
77.47
77.15
76.83
66.77
66.71



Current Data Parameters
NAME Dr. A. MAJE 2018
EXPNO 148
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180223
Time 18.12

INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 248

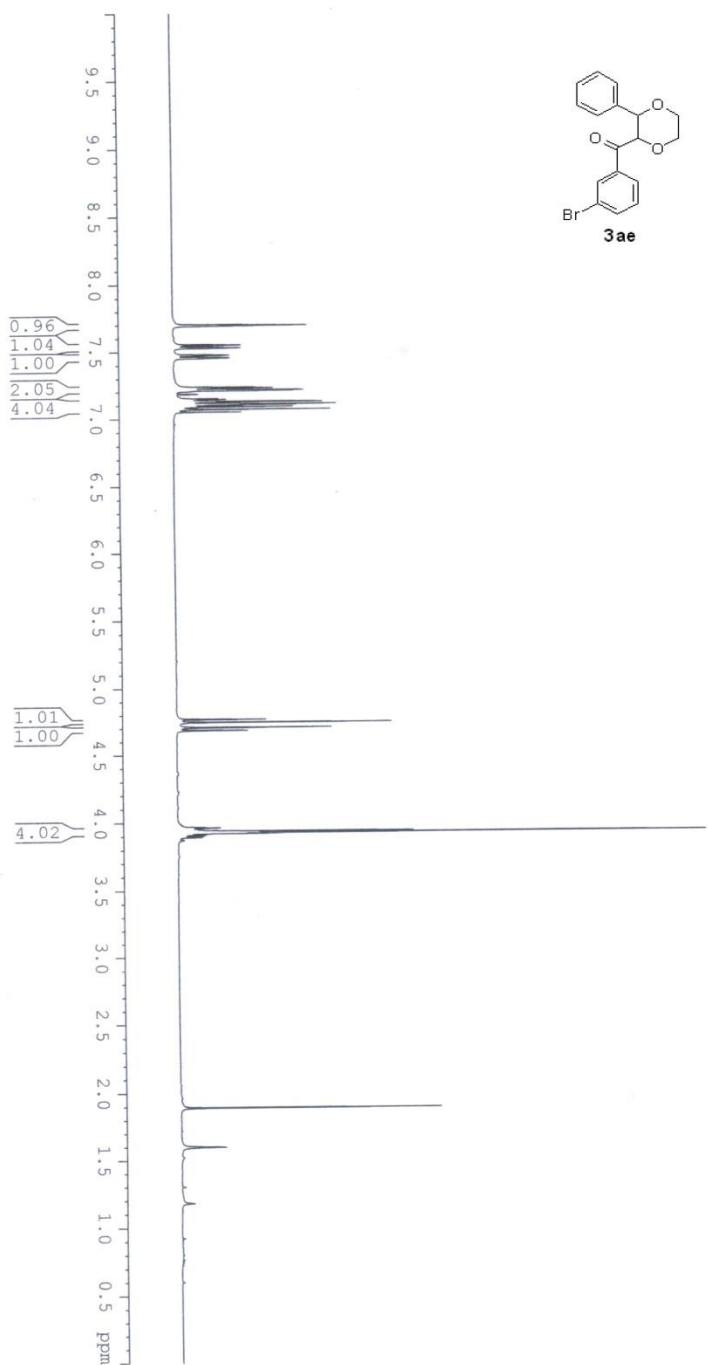
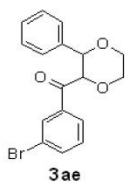
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 106.66
DM 20.800 usec
DE 6.50 usec
TE 296.4 K
D11 2.00000000 sec
D1 0.03000000 sec
TD0 1

CHANNEL F1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL F2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing Parameters
SI 16384
SF 100.6177861 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

¹H of VBAR 263/27



Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 535
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180701
Time 11.21
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 47.25
DW 60.800 usec
DE 6.50 usec
TE 300.0 K
D1 1.00000000 sec
TDO 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

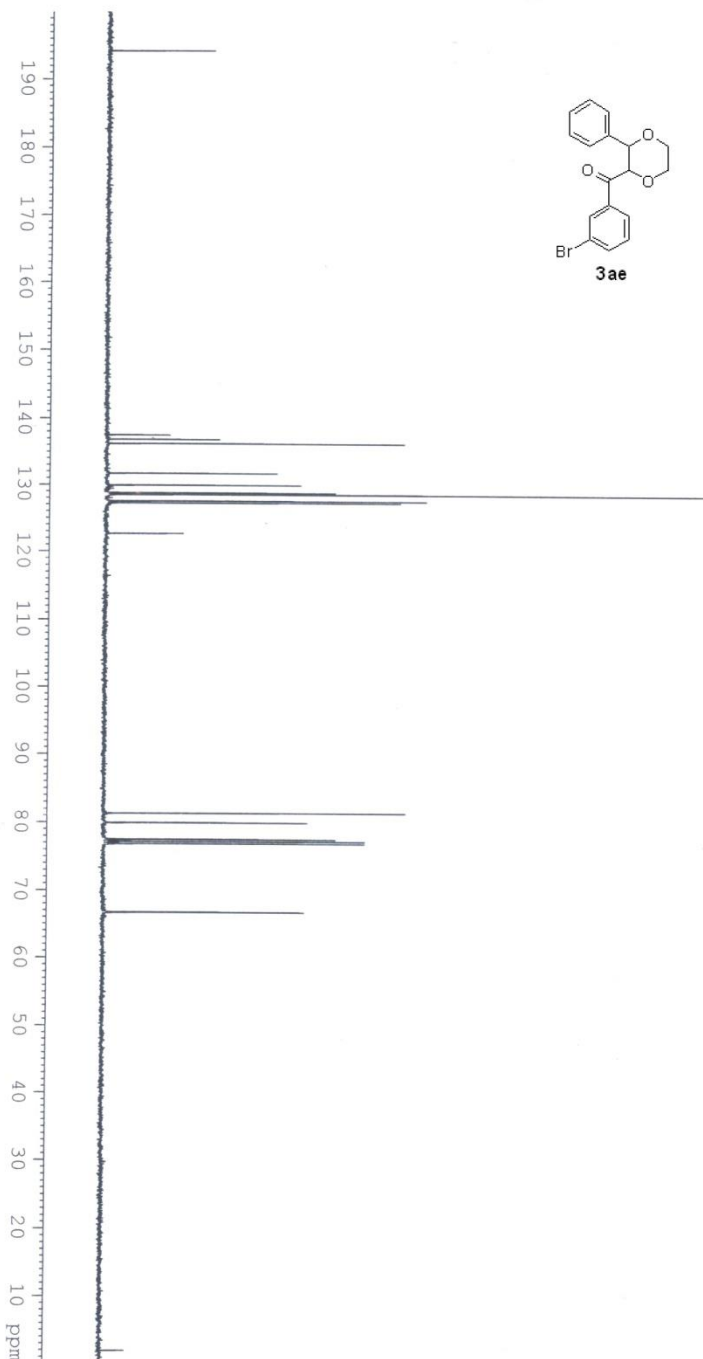
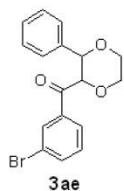
F2 - Processing parameters
SI 16384
SF 400.1500398 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

¹³C OF VBSSM 263/27

194.19

137.48
136.81
136.17
131.71
129.93
128.76
128.48
127.51
127.24
122.66

81.31
79.94
77.47
77.15
76.83
66.69
66.65



Current Data Parameters
NAME Dr. A. MAJE 2018
EXPNO 536
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180701
Time 11.41
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 320
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 77.59
IW 20.800 usec
DE 6.50 usec
TE 300.5 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.6278588 MHz
NUC1 ¹³C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SFO2 400.1516006 MHz
NUC2 ¹H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177916 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 2.00

7.657
7.636
7.259
7.211
7.191
7.113
7.093
7.011
6.991

4.863
4.841
4.822
4.800

4.019
3.998
3.994
3.973

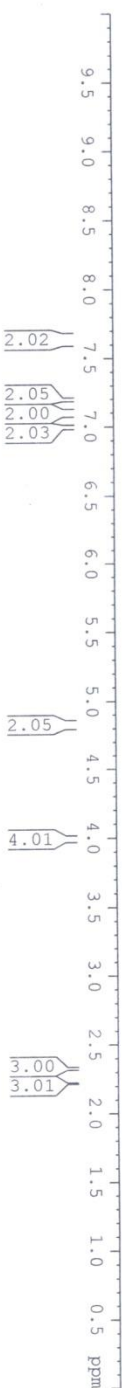
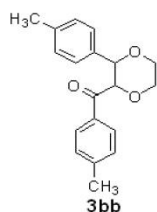
2.332
2.223



Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 569
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180714
Time_ 17.51
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9932944 sec
RG 67.81
DW 60.800 usec
DE 6.50 usec
TE 300.8 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.150097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50

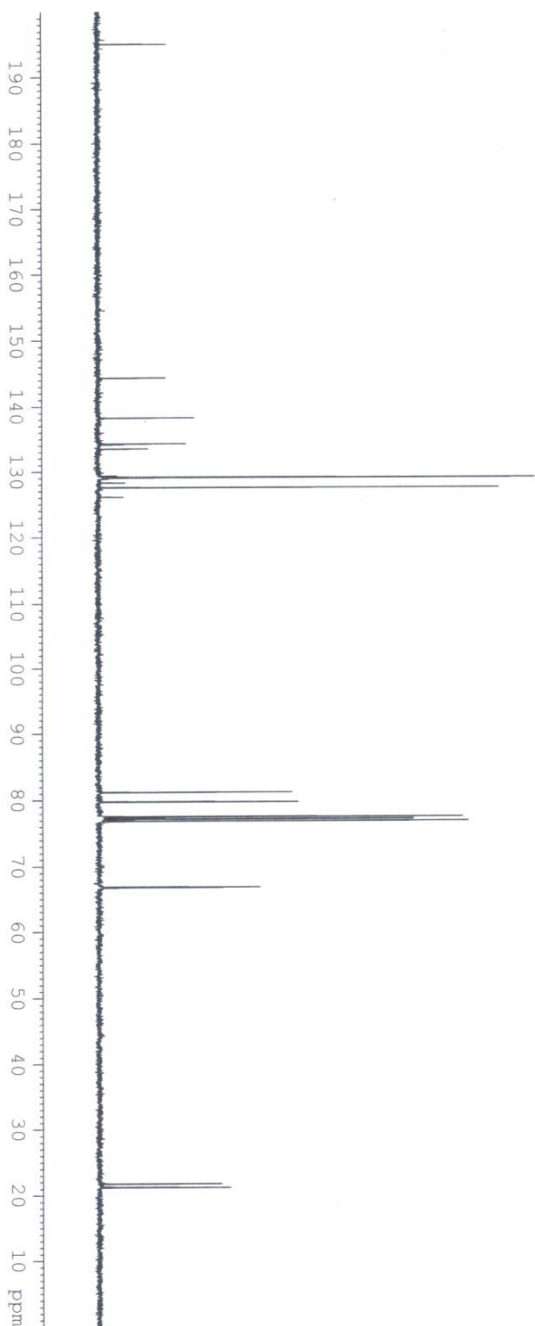
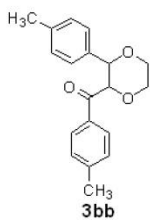


195.01

144.29
138.23
134.25
133.46
129.12
129.07
129.04
127.54

81.14
79.71
77.47
77.15
76.84
66.79
66.71

21.73
21.21



Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 570
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180714
Time 18.15
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 400
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 87.66
DW 20.800 usec
DE 6.50 usec
TE 301.3 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

CHANNEL F1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PL1 54.00000000 W

CHANNEL F2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SE 100.6177867 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 2.00

7.608
7.602
7.597
7.585
7.580
7.574
7.219
7.214
7.209
7.196
7.192
7.114
7.094
6.947
6.928

4.761
4.738
4.699
4.677
3.970
3.966
3.958
3.942
3.933
3.922

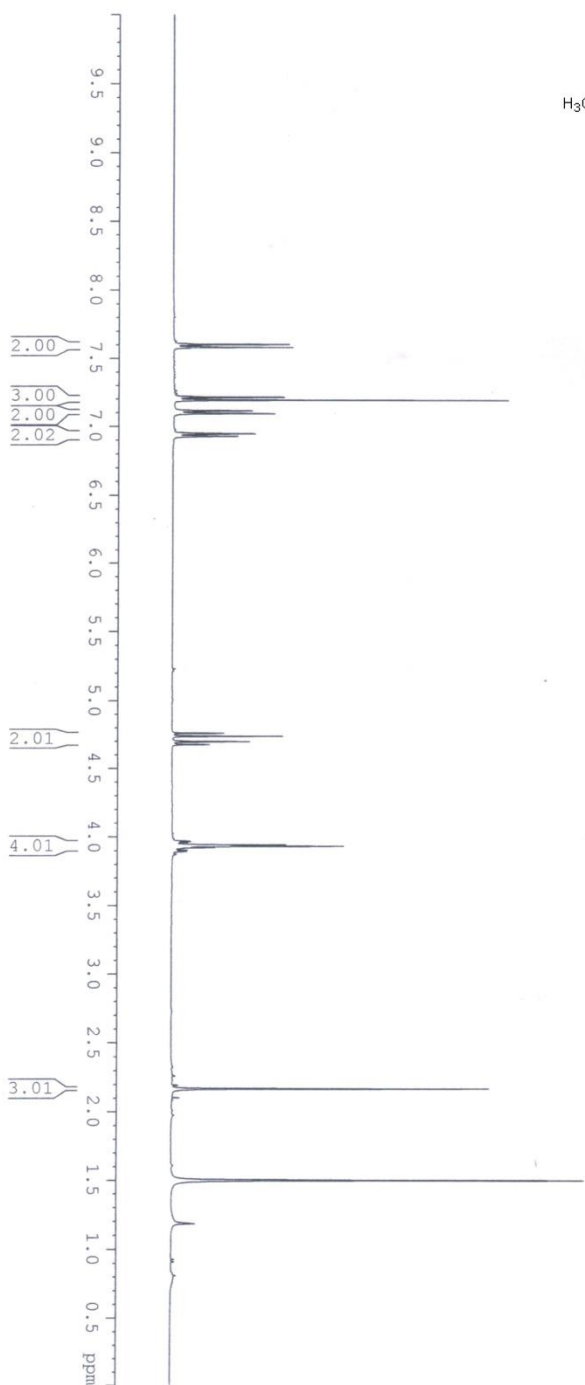
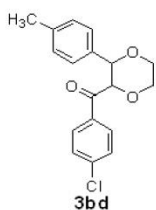
2.168



Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 244
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180403
Time_ 16.09
INSTRUM spect
PROBHD 5 mm PABO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 64
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 186.42
DW 60.800 usec
DE 6.50 usec
TE 296.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLM1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.1500368 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00





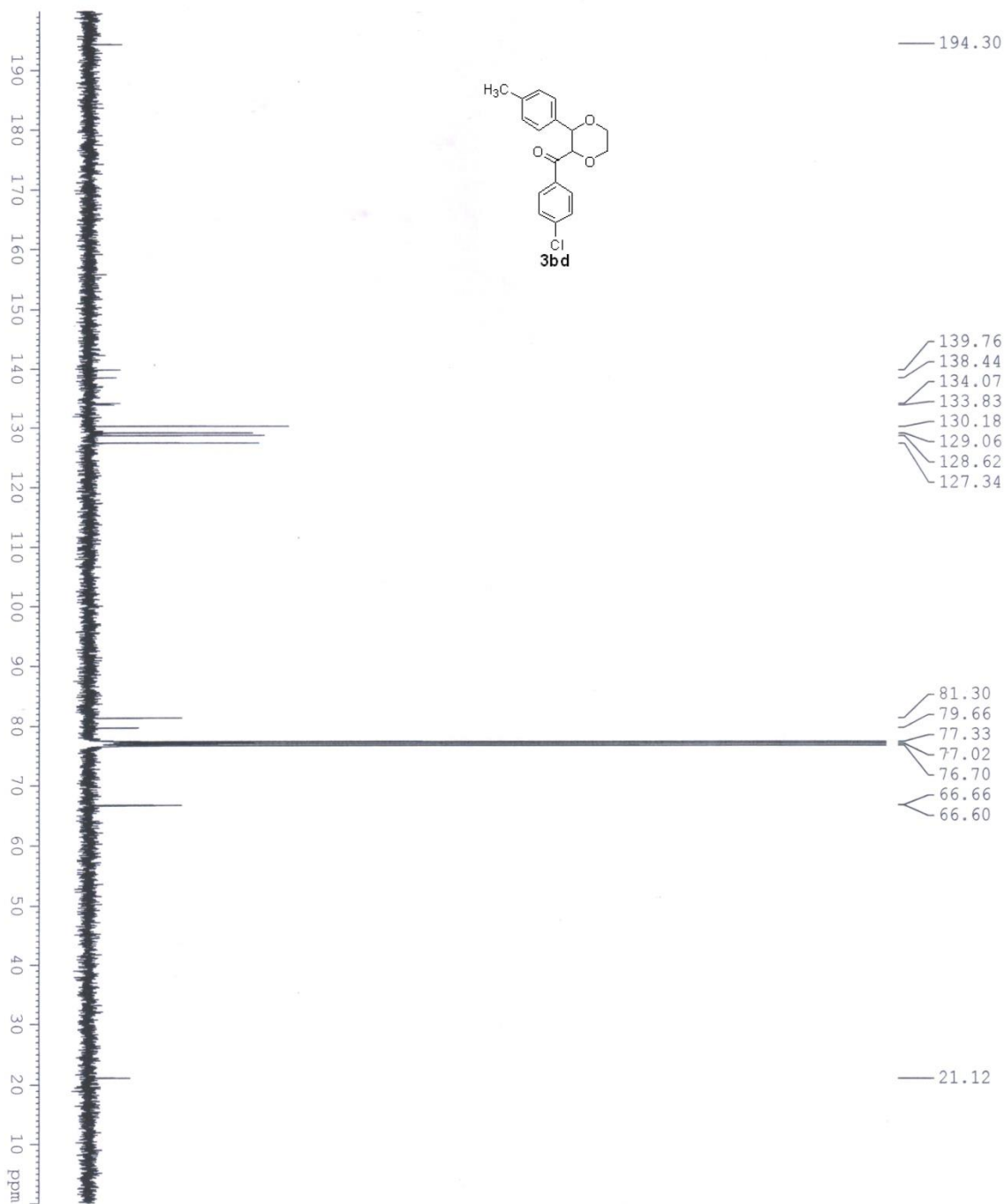
Current Data Parameters
NAME Dr. A MAUE 2018
EXPNO 249
PROCNO 1

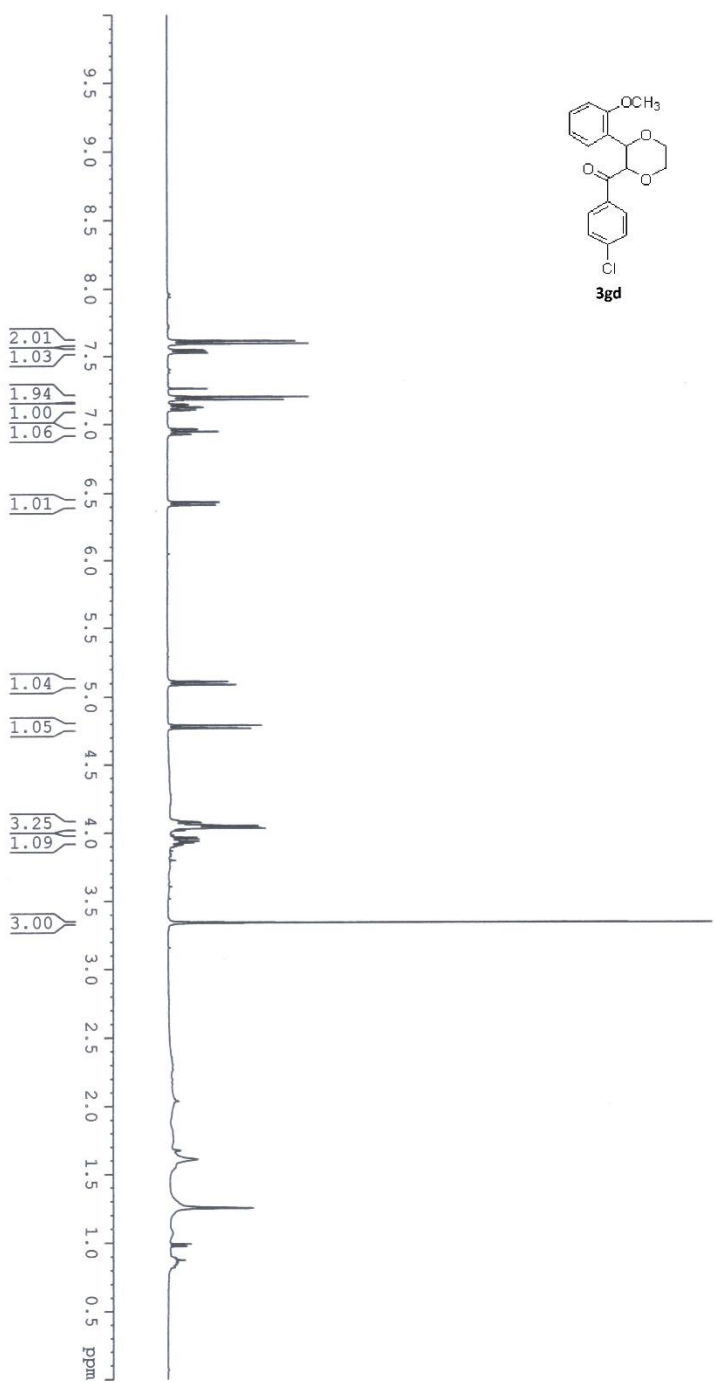
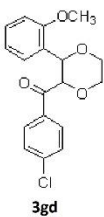
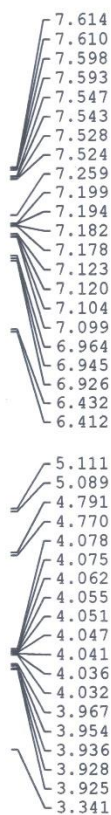
F2 - Acquisition Parameters
Date_ 20180403
Time 18.05
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 1024
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 120.16
DW 20.800 usec
DE 6.50 usec
TE 297.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL F1
SFO1 100.6278588 MHz
NUC1 ¹³C
P1 8.90 usec
PL1 54.00000000 W

CHANNEL F2
SFO2 400.1516006 MHz
NUC2 ¹H
CPCPRG12 waltz16
PCPD2 90.00 usec
PLM2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.617980 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
FC 1.40



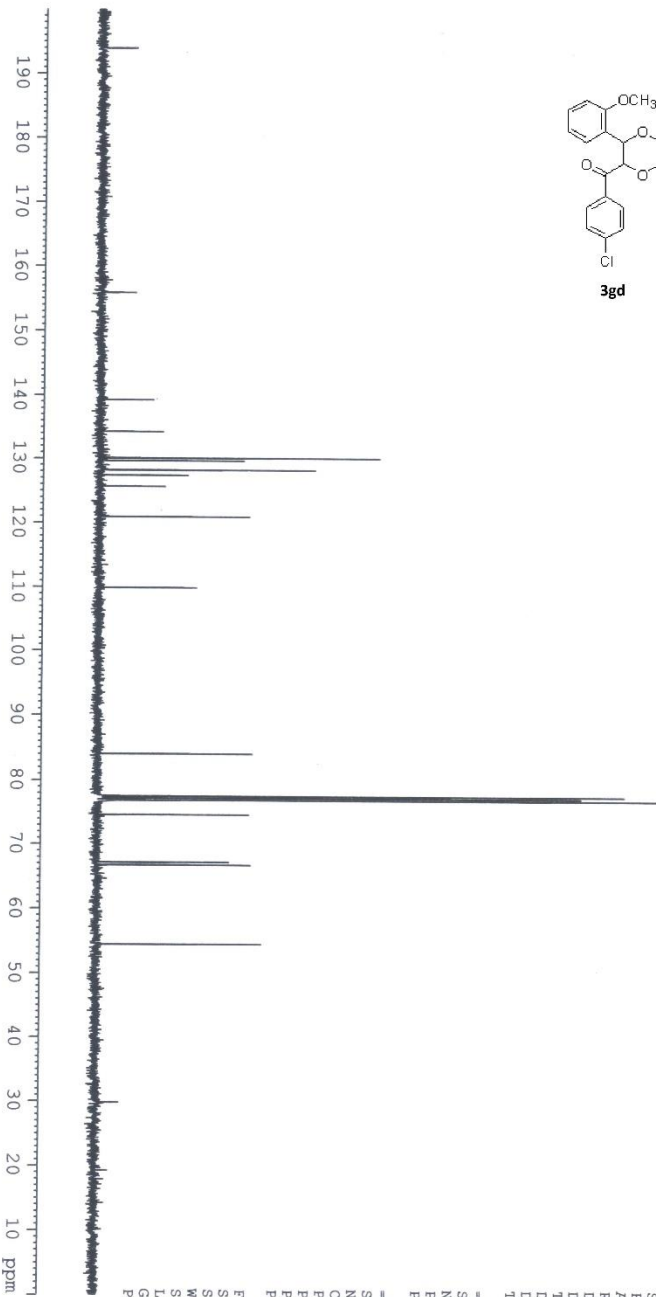
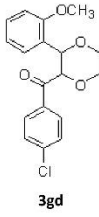


Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 227
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180329
Time 16.28
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 87.66
DM 60.800 usec
DE 6.50 usec
TE 298.9 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

193.87
155.85
139.26
134.22
130.05
129.61
128.16
127.36
125.62
120.88
109.89
84.00
77.47
77.15
76.84
74.55
67.13
66.69
54.47



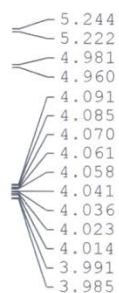
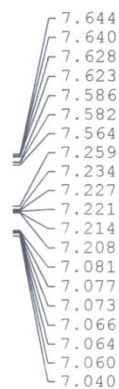
Current Data Parameters
NAME Dr. A. MATEE 2018
EXPNO 228
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180329
Time 16.46
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 320
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 47.25
DW 20.800 usec
DE 6.50 usec
TE 299.6 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL F1
SF01 100.627858 MHz
NUC1 13C
P1 8.90 usec
PLM1 54.00000000 W

CHANNEL F2
SF02 400.151606 MHz
NUC2 1H
CPCPRG12 waltz16
PCPD2 90.00 usec
PLM2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177851 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

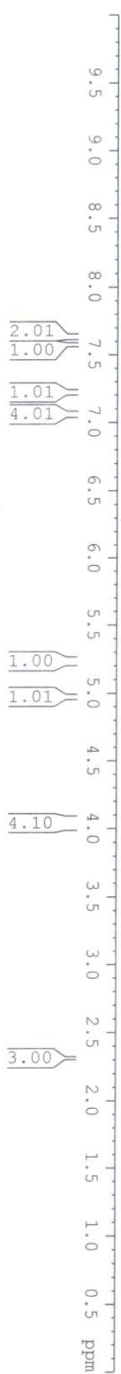
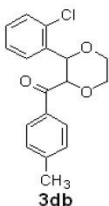


Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 596
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180724
Time_ 14.43
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 Sec
RG 93.46
DW 60.800 usec
DE 6.50 usec
TE 302.2 K
D1 1.00000000 Sec
TD0 1

===== CHANNEL f1 =====
SF01 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing Parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

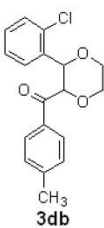


— 194.58

144.18
135.23
133.50
133.22
129.66
129.60
129.06
129.00
128.89
127.04

82.10
77.47
77.16
76.84
76.37
66.94
66.74

— 21.75



Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 597
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180724
Time_ 15.15
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 87.66
DE 20.800 usec
TE 303.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

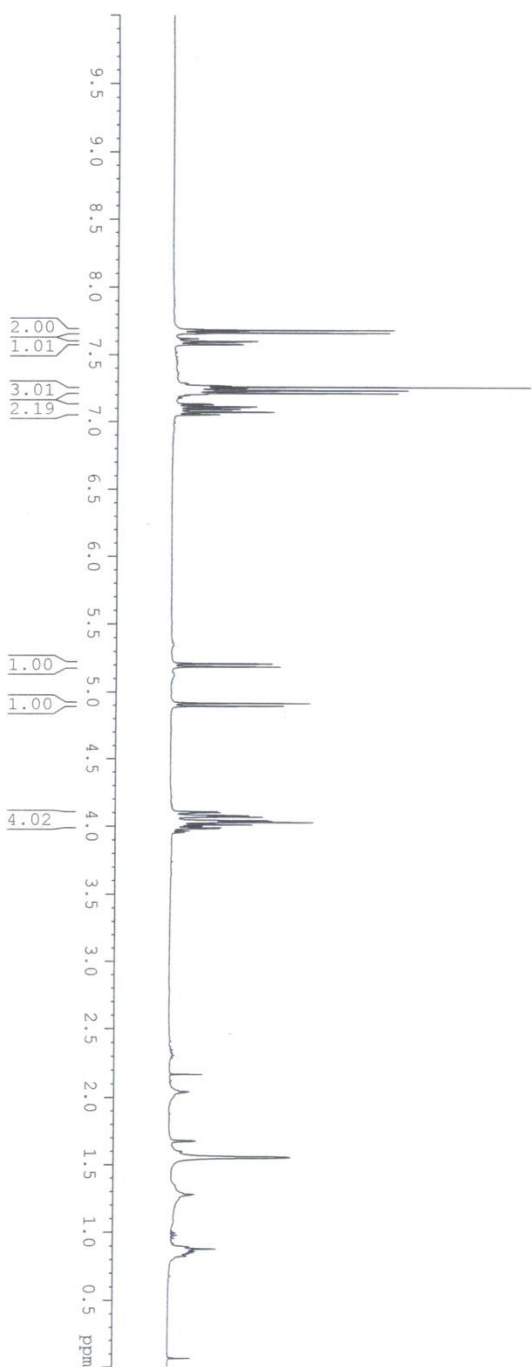
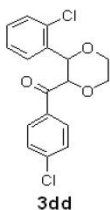
F2 - Processing parameters
SI 16384
SF 100.617829 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 2.00

¹H of VBAR-263/12



Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 229
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180329
Time 16.56
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 64
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 148.91
DW 60.800 usec
DE 6.50 usec
TE 298.9 K
D1 1.00000000 sec
TD0 1



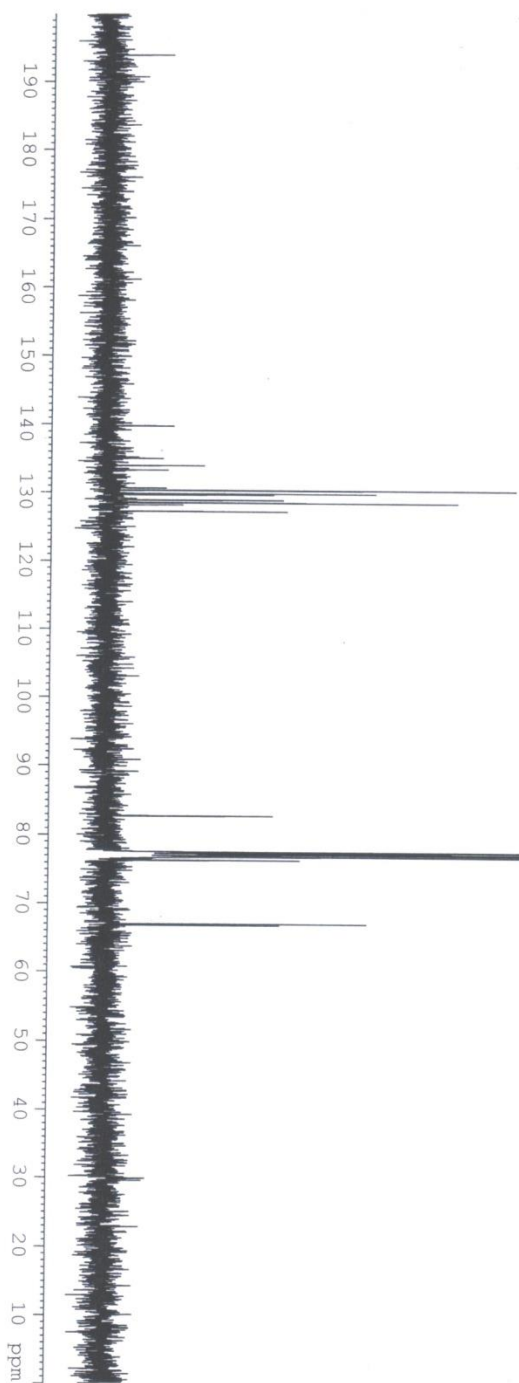
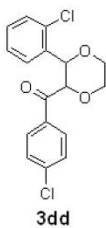
===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

¹³C of VBAR-263/12

— 193.94

139.77
134.99
133.95
133.28
130.32
129.82
129.64
128.88
128.46
127.19

82.71
77.46
77.15
76.83
76.32
66.93
66.74



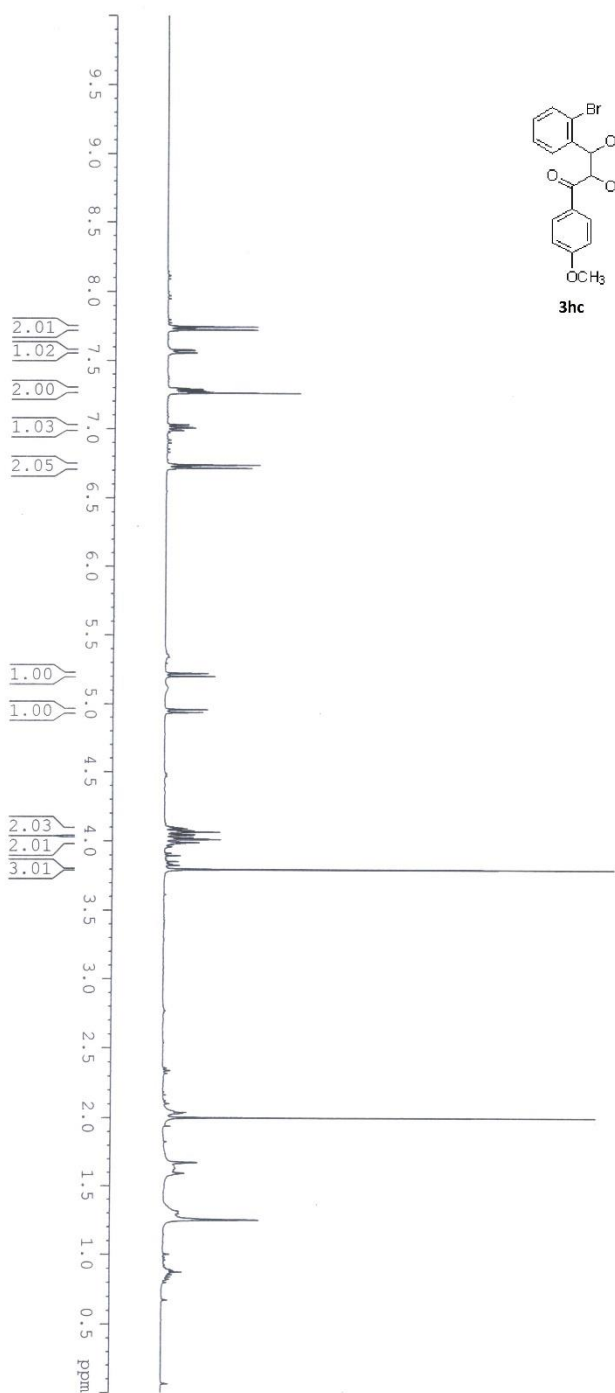
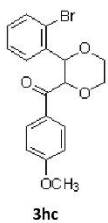
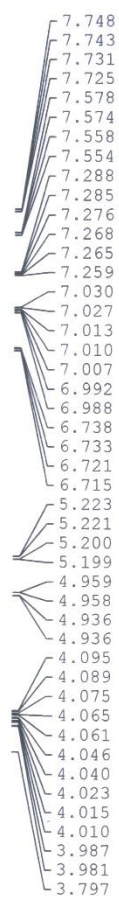
Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 230
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180401
Time 13.31
INSTRUM spect
PROBHD 5 mm PABO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 1024
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 186.42
DW 20.800 usec
DE 6.50 usec
TE 298.6 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLM1 54.00000000 W

CHANNEL f2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLM2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177843 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 580
PROCNO 1

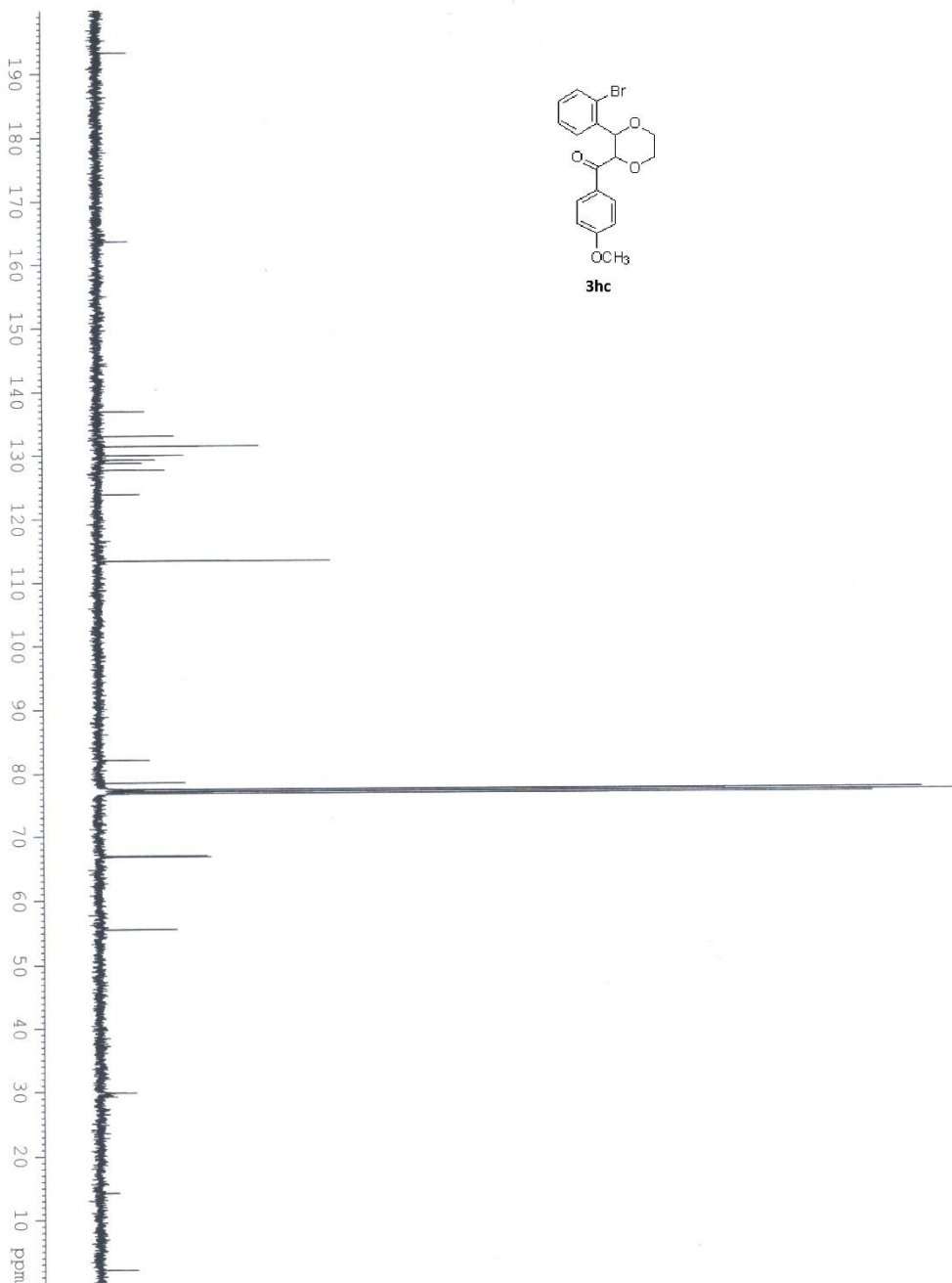
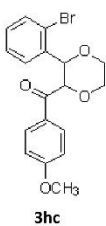
F2 - Acquisition Parameters
Date_ 20180718
Time_ 16.46
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 120.16
DW 60.800 usec
DE 6.50 usec
TE 296.1 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

13C of VBAR 263/32

193.26
163.63
136.89
133.00
131.37
129.92
129.21
128.73
127.63
123.80
113.39
82.14
78.55
77.47
77.15
76.83
66.89
66.73
55.54



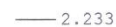
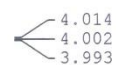
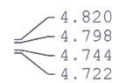
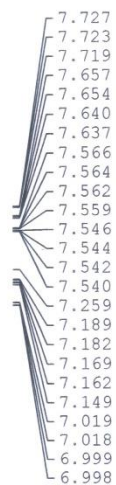
Current Data Parameters
NAME Dr. A. MAJE 2018
EXPNO 581
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180718
Time_ 17.08
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 400
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.681574 sec
RG 120.16
DW 20.800 usec
DE 6.50 usec
TE 297.1 K
D1 2.0000000 sec
D11 0.0300000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 100.627858 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.0000000 W

===== CHANNEL f2 =====
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.0000000 W
PLW12 0.3223100 W
PLW13 0.1621200 W

F2 - Processing parameters
SI 16384
SF 100.6177858 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 2.00

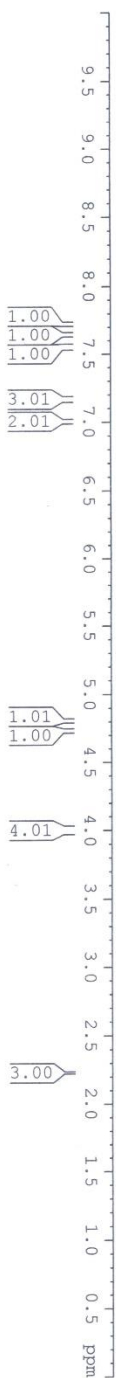


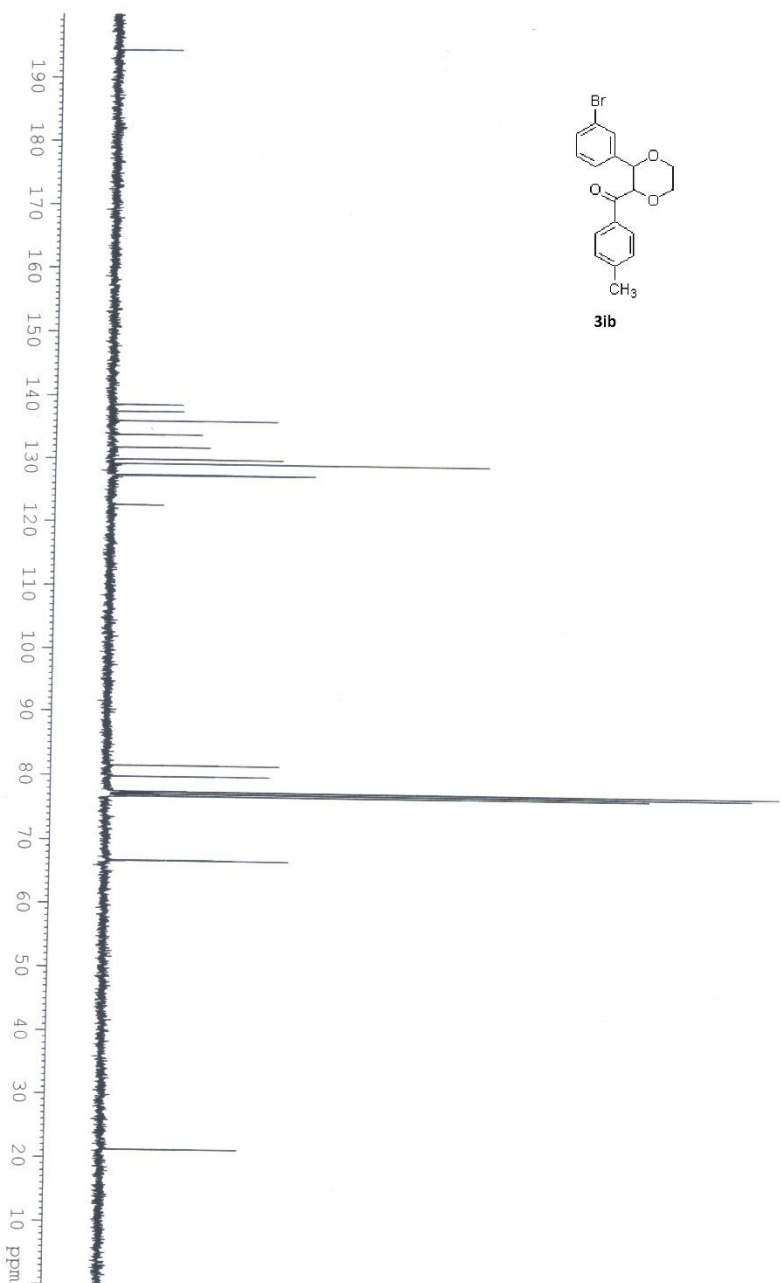
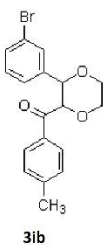
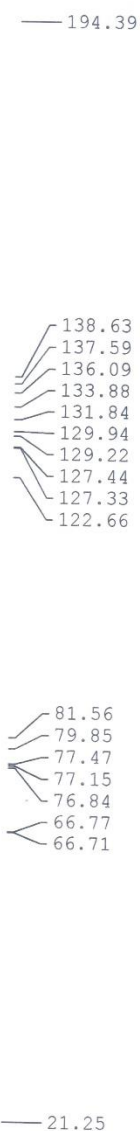
Current Data Parameters
NAME Dr. A MAJEE 2018
EXPNO 545
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180706
Time 11.50
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 87.66
DW 60.800 usec
DE 6.50 usec
TE 299.4 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.150097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00





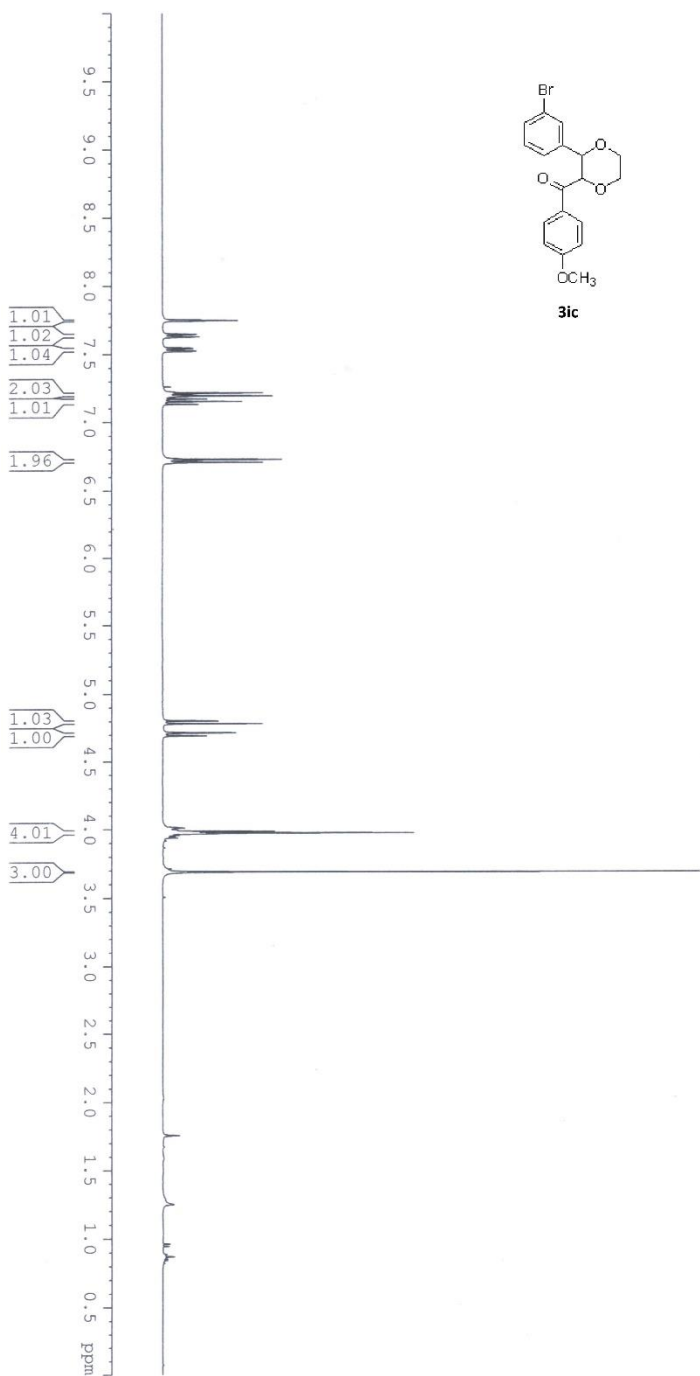
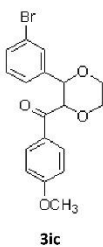
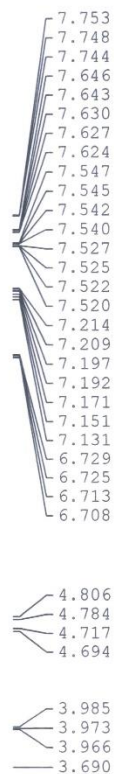
Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 546
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180706
Time 12.13
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 400
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 87.66
DW 20.800 usec
DE 6.50 usec
TE 300.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.627858 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SFO2 400.151606 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177844 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 2.00

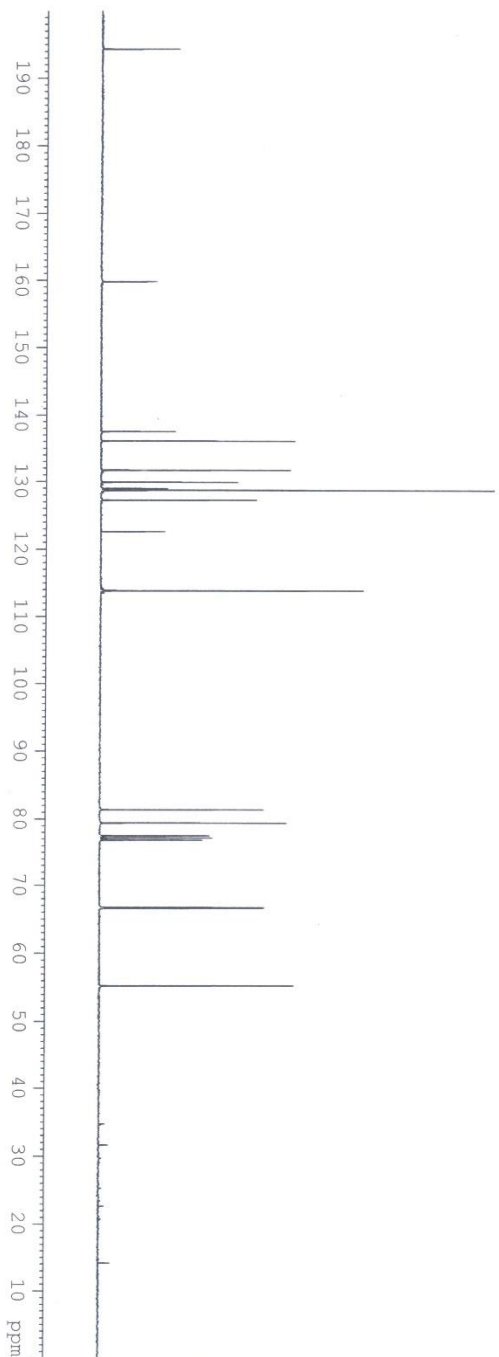
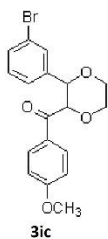


Current Data Parameters
NAME Dr. A. MAJEE 2018
EXPNO 548
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180707
Time 10.05
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 16
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 30.11
DW 60.800 usec
DE 6.50 usec
TE 299.3 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.1500094 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.50

13C OF VBAR-263/30



Current Data Parameters
NAME Dr. A MAJE 2018
EXPNO 549
PROCNO 1

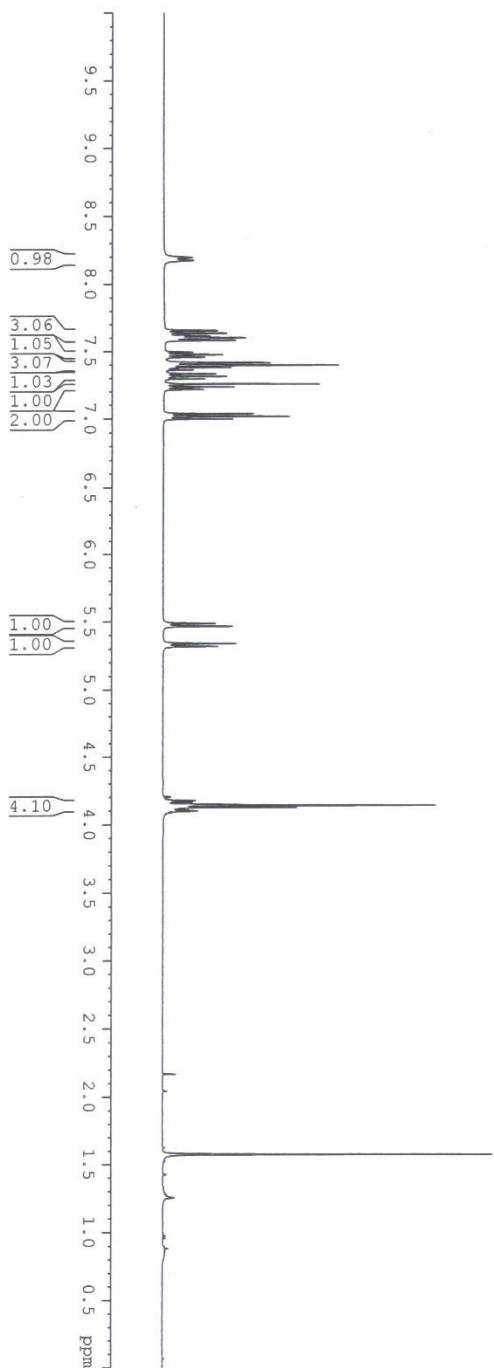
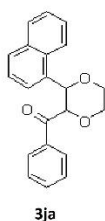
F2 - Acquisition Parameters
Date_ 20180707
Time 10.24
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 320
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 77.59
RG 20.800 usec
DE 6.50 usec
TE 300.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.627858 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SFO2 400.151606 MHz
NUC2 1H
CDEPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177961 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 2.00

1H of VBAR-263/10



Current Data Parameters
 NAME Dr. A. MAYEE 2018
 EXPNO 156
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20180226

Time 16.47
 INSTRUM spect
 PROBD 5 mm PABBO BB/
 PULPROG zg30
 TD 32768
 SOLVENT CDCl3
 NS 30
 DS 1
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9922944 sec
 RG 168 31
 DM 60.800 usec
 DE 6.50 usec
 TE 295.8 K
 D1 1.00000000 sec
 TD0 1

===== CHANNEL f1 =====
 SFO1 400.1524711 MHz
 NUCL1 1H
 P1 14.75 usec
 PLW1 12.00000000 W

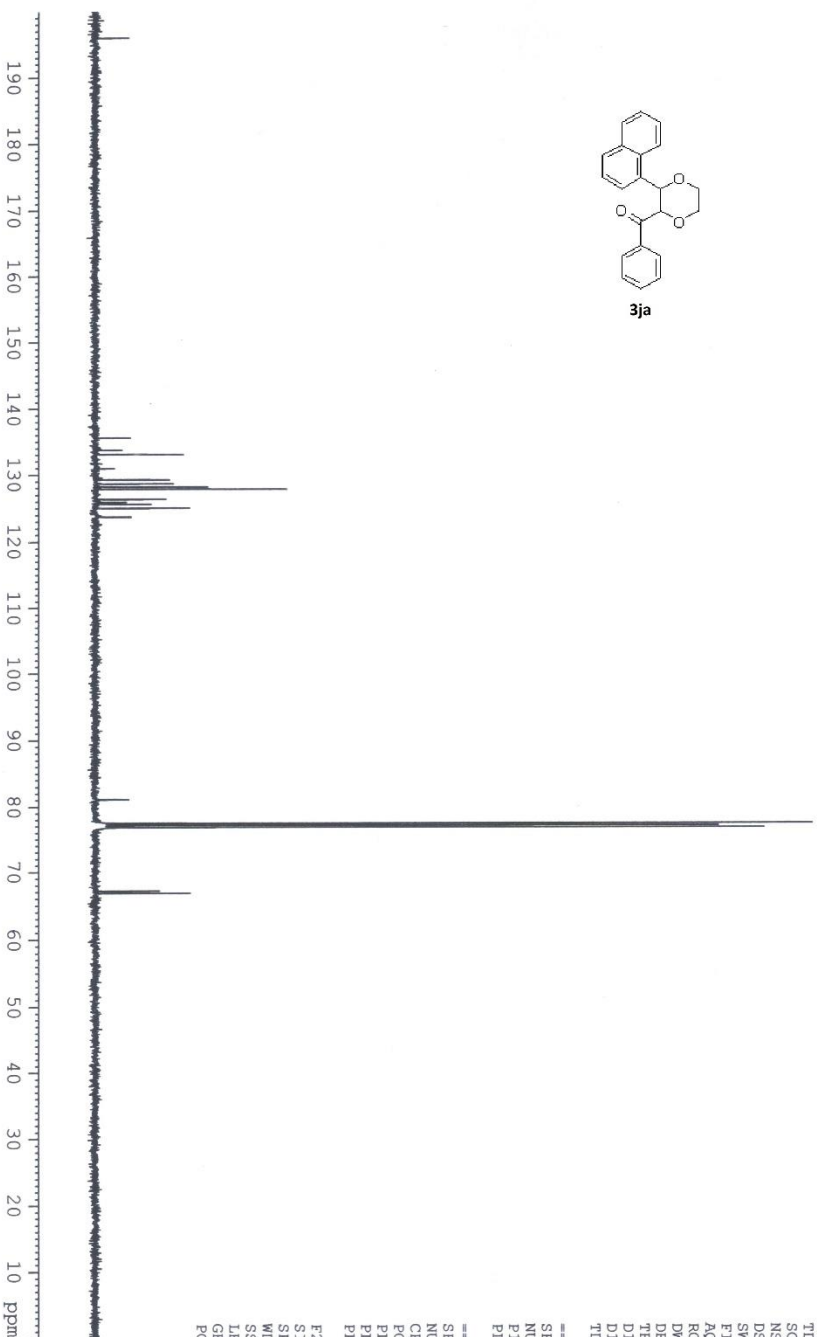
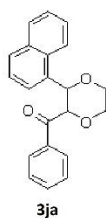
F2 - Processing parameters
 SI 16384
 SF 400.150097 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

¹³C of VBAR-263/10

195.97

135.61
133.74
133.07
130.96
129.29
128.69
128.20
127.84
126.37
125.92
125.65
125.06
123.74

81.12
77.46
77.15
76.83
67.18
66.82



Current Data Parameters
NAME Dr. A. MAJEE 2018
EXPNO 159
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180226
Time 17.37
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 186.42
DW 20.800 usec
DE 6.50 usec
TE 296.7 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SF01 100.627858 MHz
NUC1 ¹³C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SF02 400.151606 MHz
NUC2 ¹H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177854 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40