

Supporting Information

**FeCl₃/ZnI₂-Catalyzed Regioselective Synthesis of
Angularly Fused Furans**

Amrita Dey[†] and Alakananda Hajra^{*†}

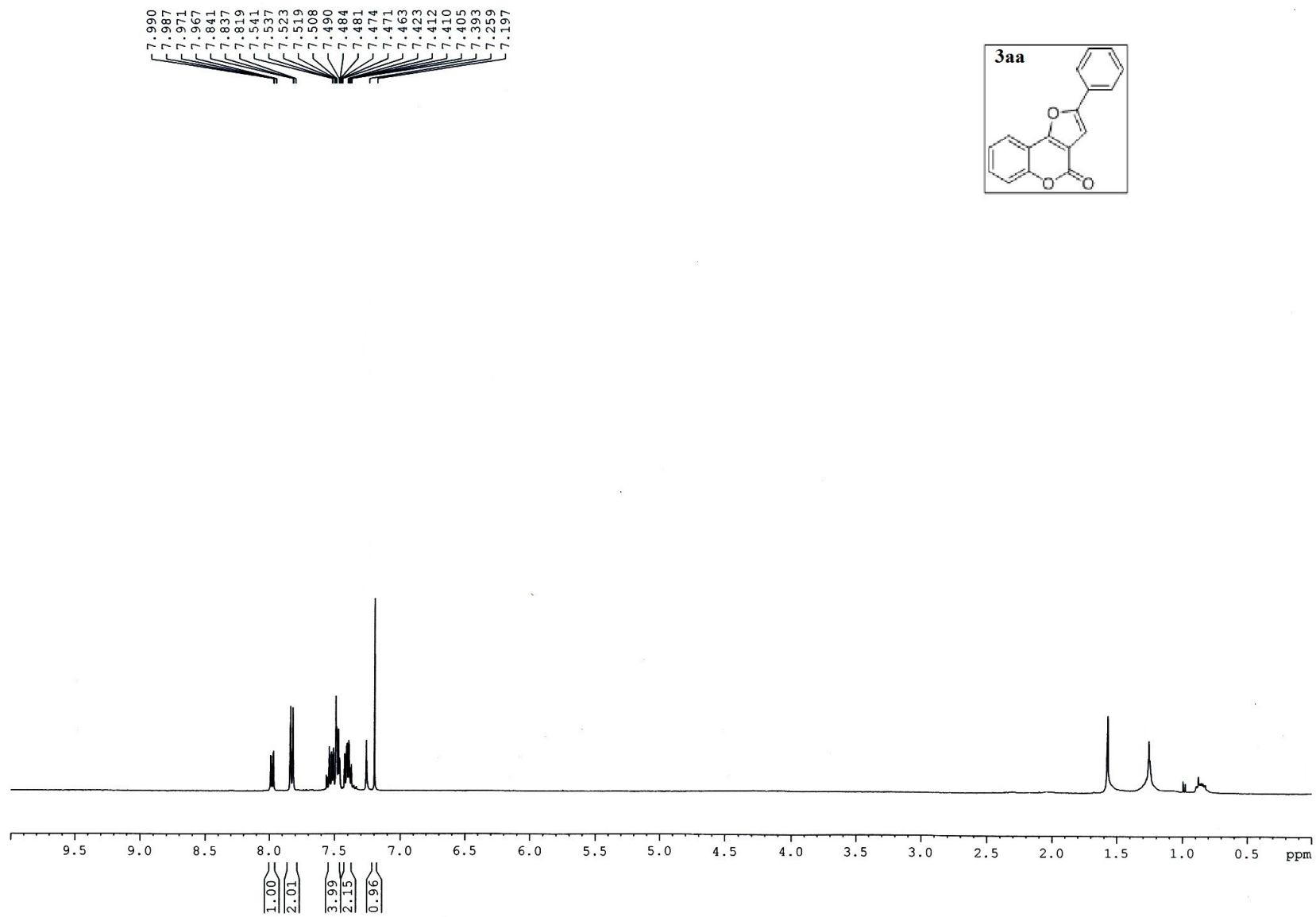
[†]*Department of Chemistry, Visva-Bharati (A Central University), Santiniketan 731235, India*

Email: alakananda.hajra@visva-bharati.ac.in

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1. NMR spectra [^1H and $^{13}\text{C}\{\text{H}\}$] of synthesized products:



— 158.45
 — 152.75
 — 141.38
 — 130.78
 — 129.30
 — 129.17
 — 128.71
 — 124.75
 — 124.71
 — 124.62
 — 120.95
 — 117.55
 — 117.29
 — 112.90
 — 102.82

< 77.47
 < 77.16
 < 76.84



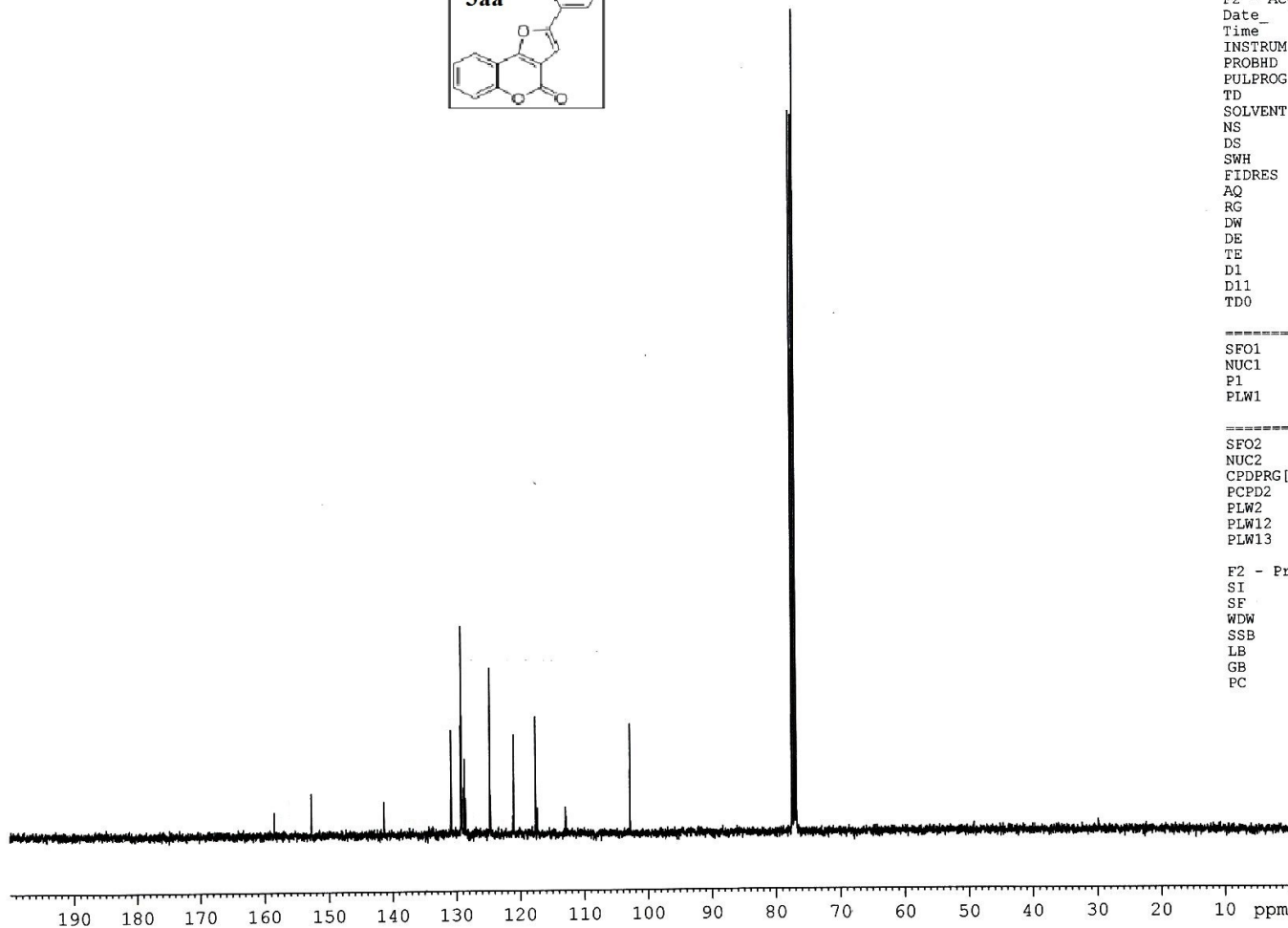
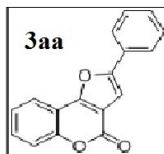
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 EXPNO 1125
 PROCNO 1

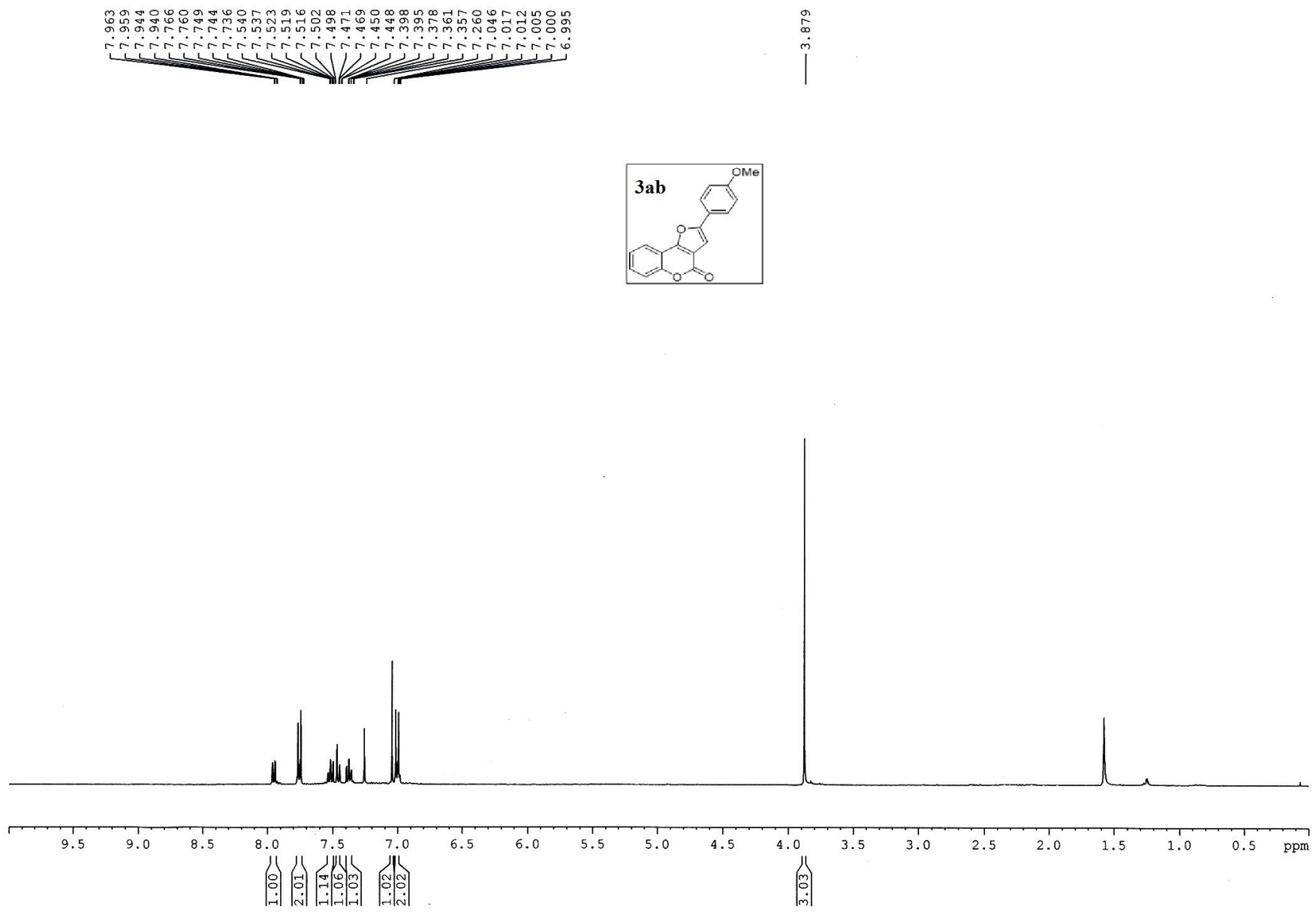
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 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 600
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 148.91
 DW 20.800 usec
 DE 6.50 usec
 TE 297.3 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TD0 1

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

===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W
 PLW13 0.16212000 W

F2 - Processing parameters
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 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



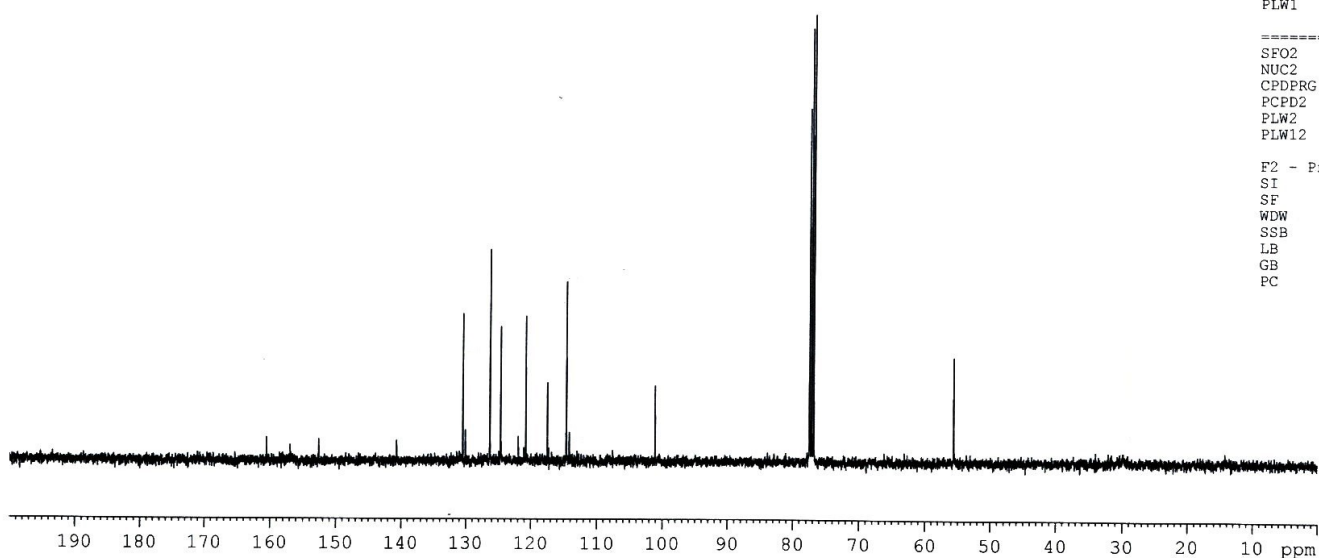
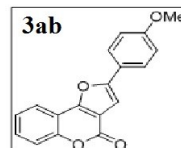


— 160.55
— 156.96
— 152.62

— 140.72
— 130.48
— 130.09
— 126.32
— 124.68
— 124.59
— 121.98
— 120.81
— 117.51
— 114.64
— 114.19
— 101.12

77.47
77.15
76.83

— 55.57



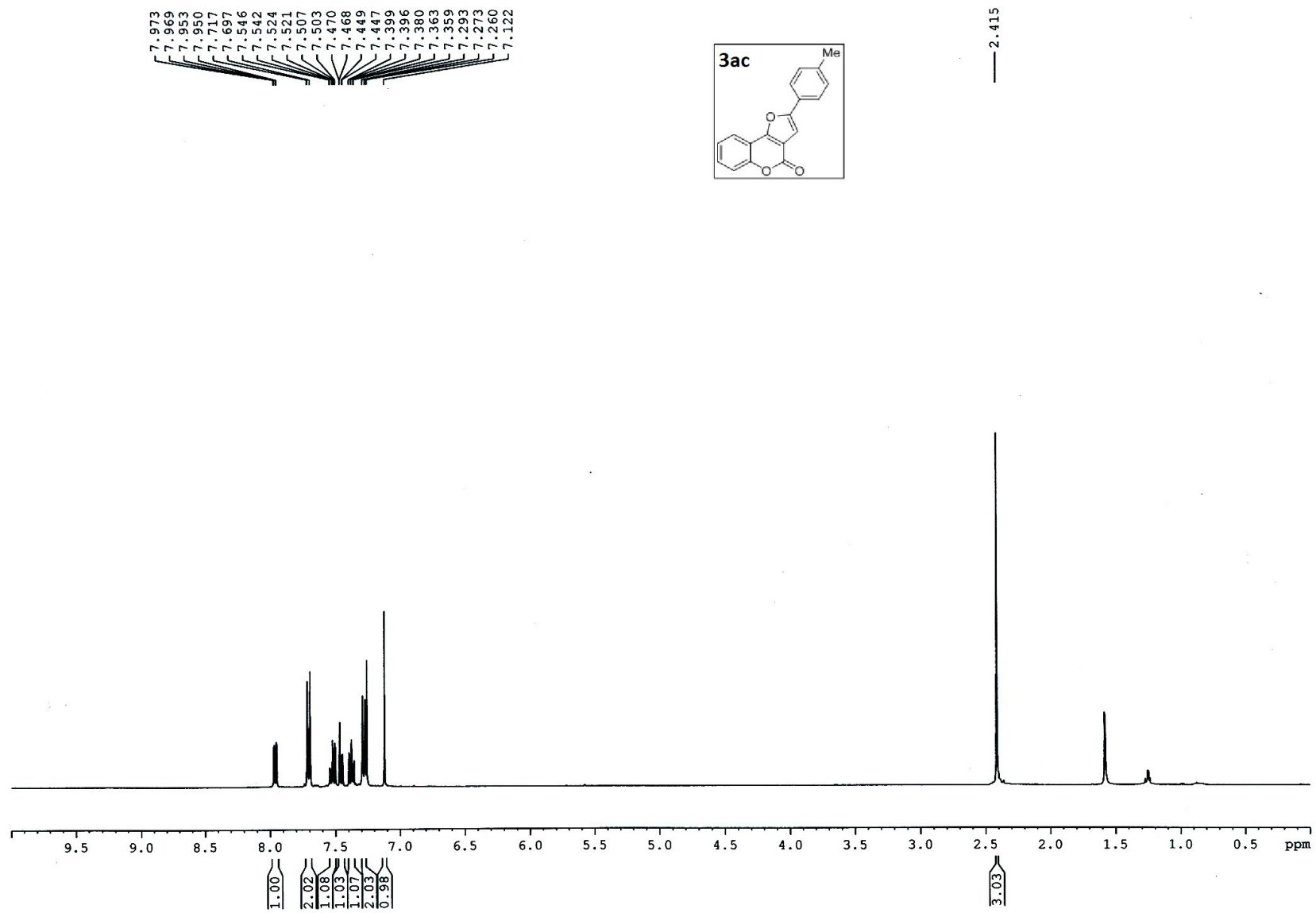
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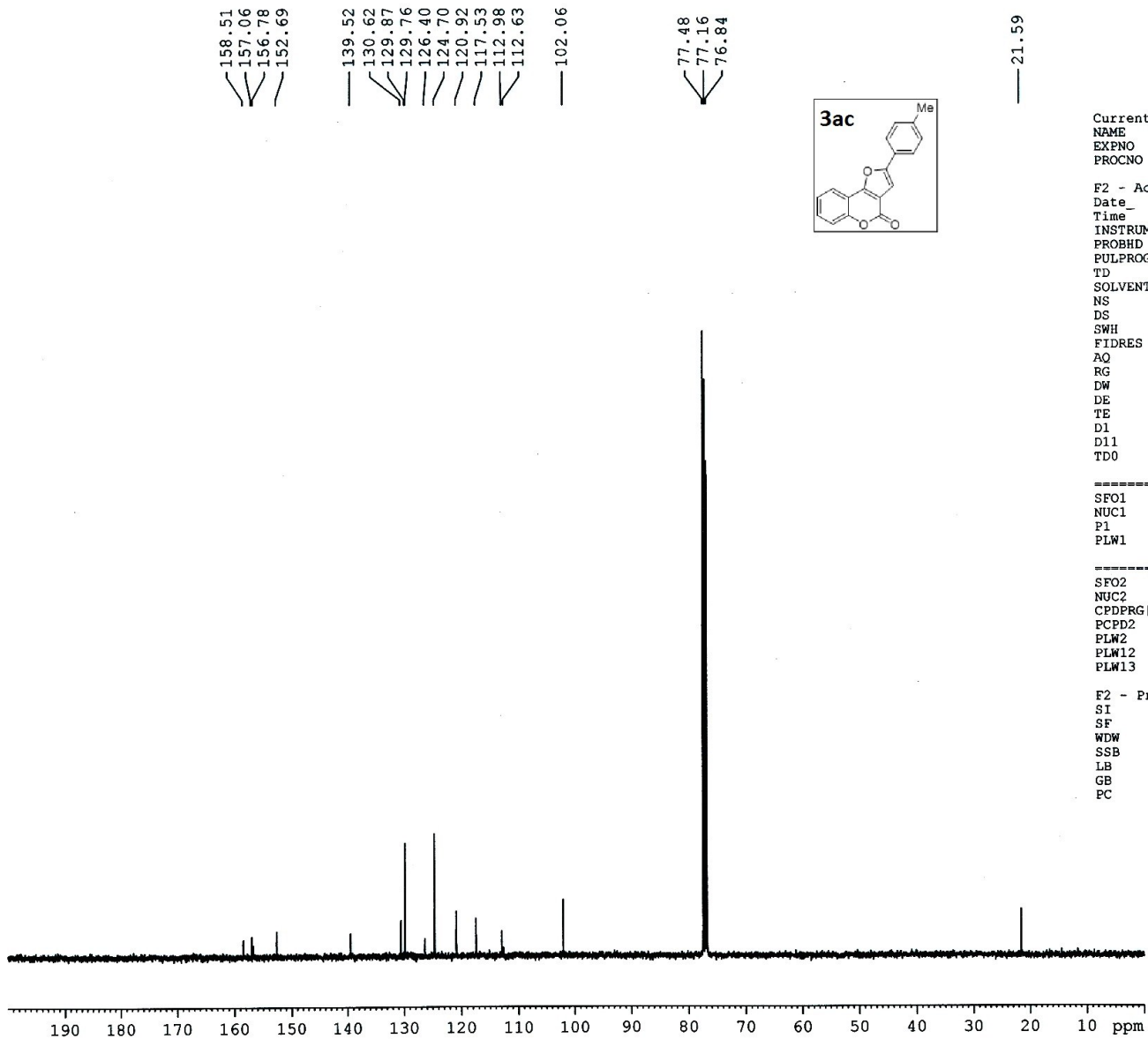
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SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 186.42
DW 20.800 usec
DE 6.50 usec
TE 297.5 K
D1 2.0000000 sec
D11 0.0300000 sec
TD0 1

=====
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.0000000 W

=====
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.0000000 W
PLW12 0.32231000 W

F2 - Processing parameters
SI 16384
SF 100.6177840 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40





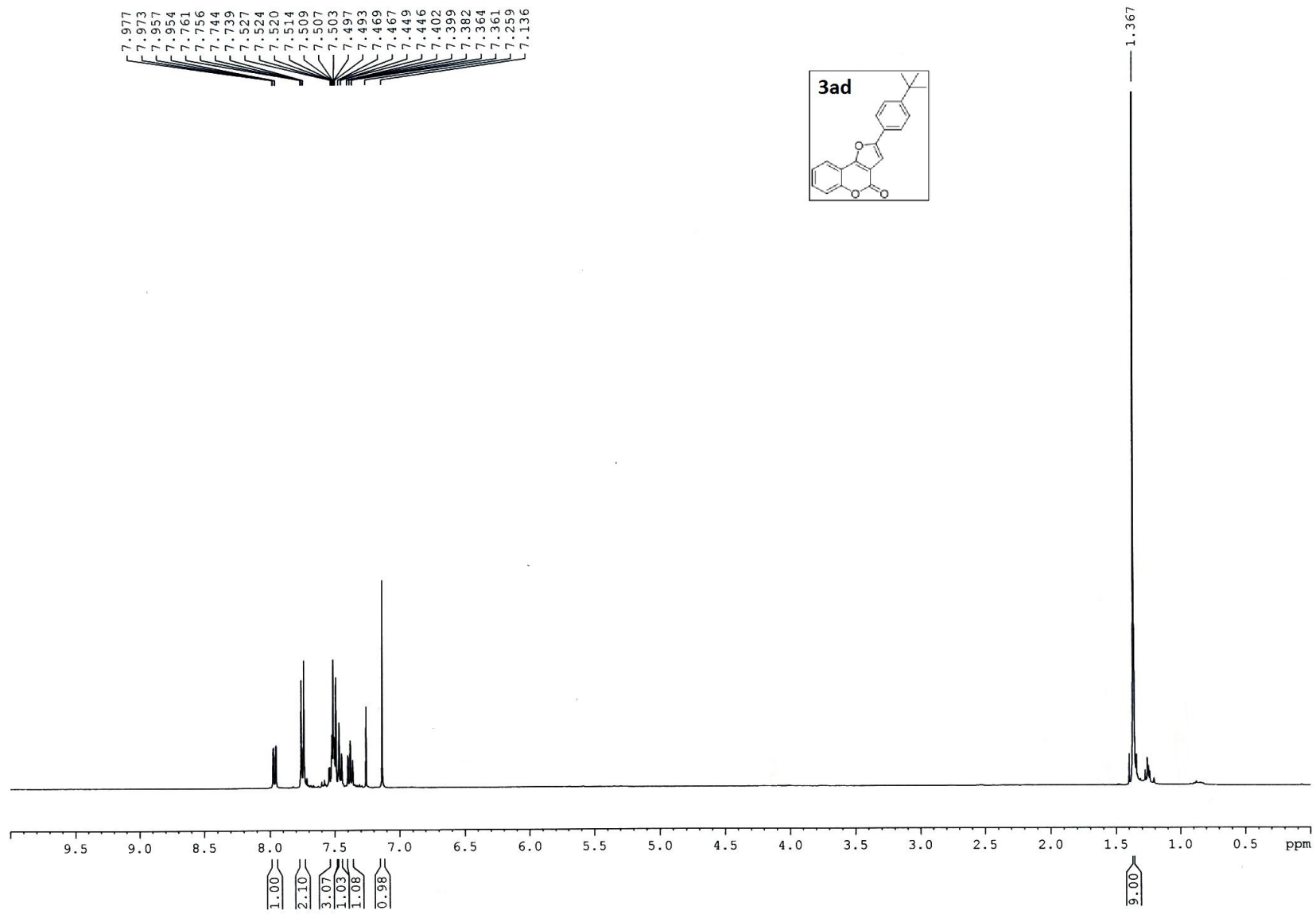
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 EXPNO 1208
 PROCNO 1

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 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 640
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 168.31
 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
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W
 PLW13 0.16212000 W

F2 - Processing parameters
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 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

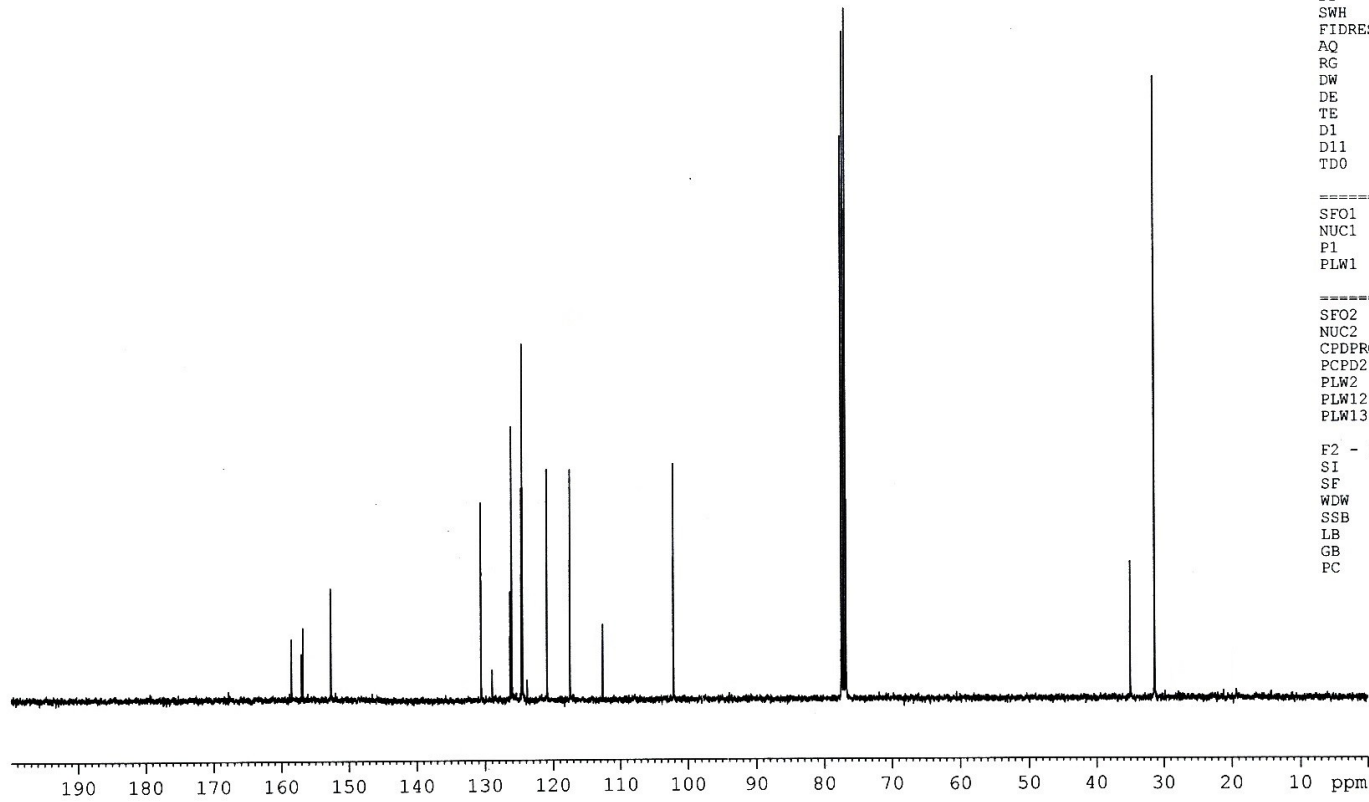
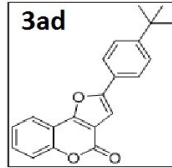


158.46
157.00
156.78
152.67
152.64

130.58
129.02
126.32
126.09
124.67
124.53
123.86
120.88
117.47
112.64
102.13

77.47
77.15
76.83

34.97
31.32



Current Data Parameters
NAME Dr.A.HAJRA 2017
EXPNO 93
PROCNO 1

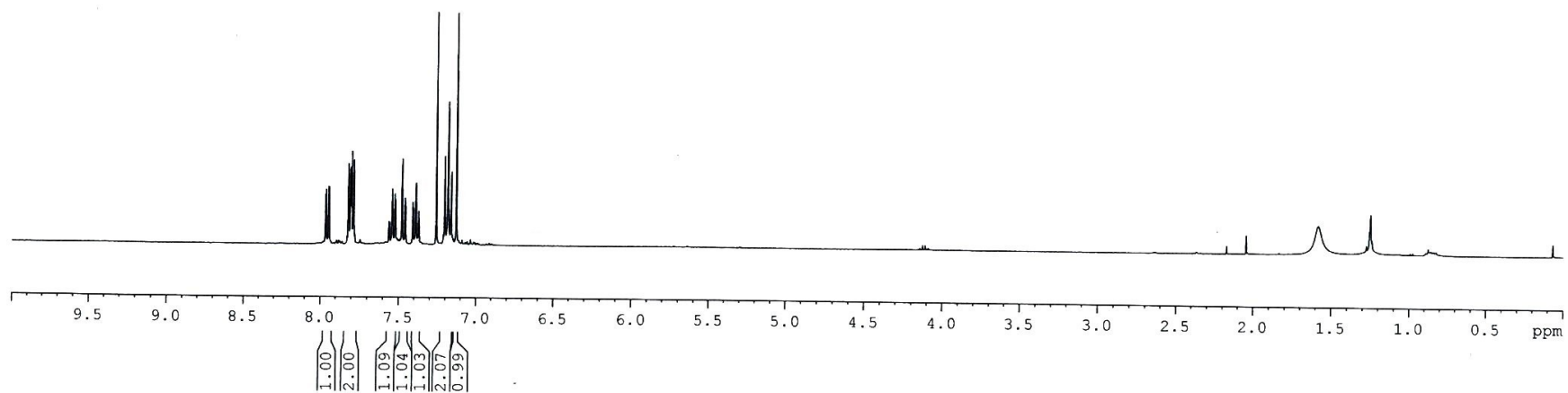
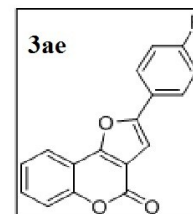
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PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 600
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 120.16
DW 20.800 usec
DE 6.50 usec
TE 296.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

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

===== CHANNEL f2 =====
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177873 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

7.967
7.964
7.948
7.944
7.821
7.816
7.808
7.803
7.799
7.791
7.786
7.565
7.558
7.542
7.539
7.525
7.521
7.479
7.460
7.458
7.411
7.408
7.391
7.373
7.370
7.259
7.205
7.200
7.184
7.179
7.167
7.129



164.52
162.33
157.05
155.86
152.75

131.71
130.85
126.72
126.64
125.45
124.78
121.91
120.90
117.59
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116.28
112.83
112.67
102.57

77.47
77.15
76.84



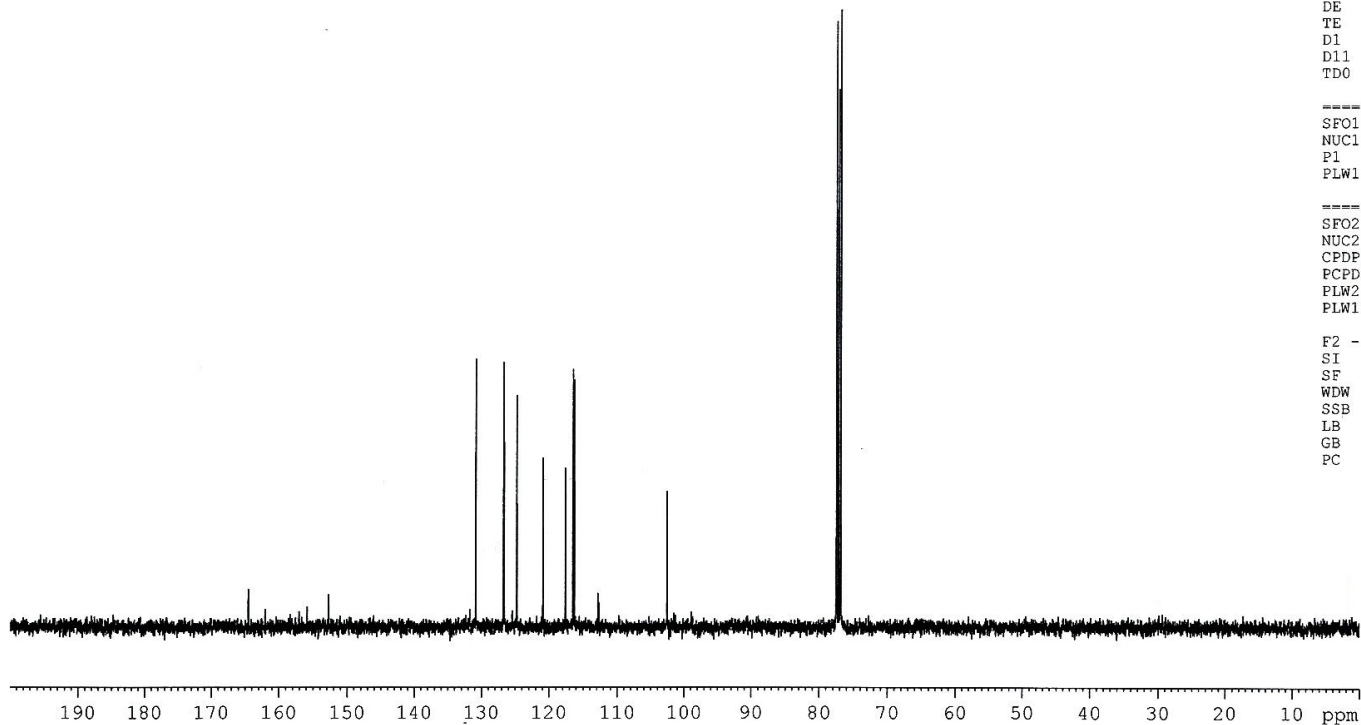
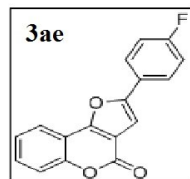
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EXPNO 1235
PROCNO 1

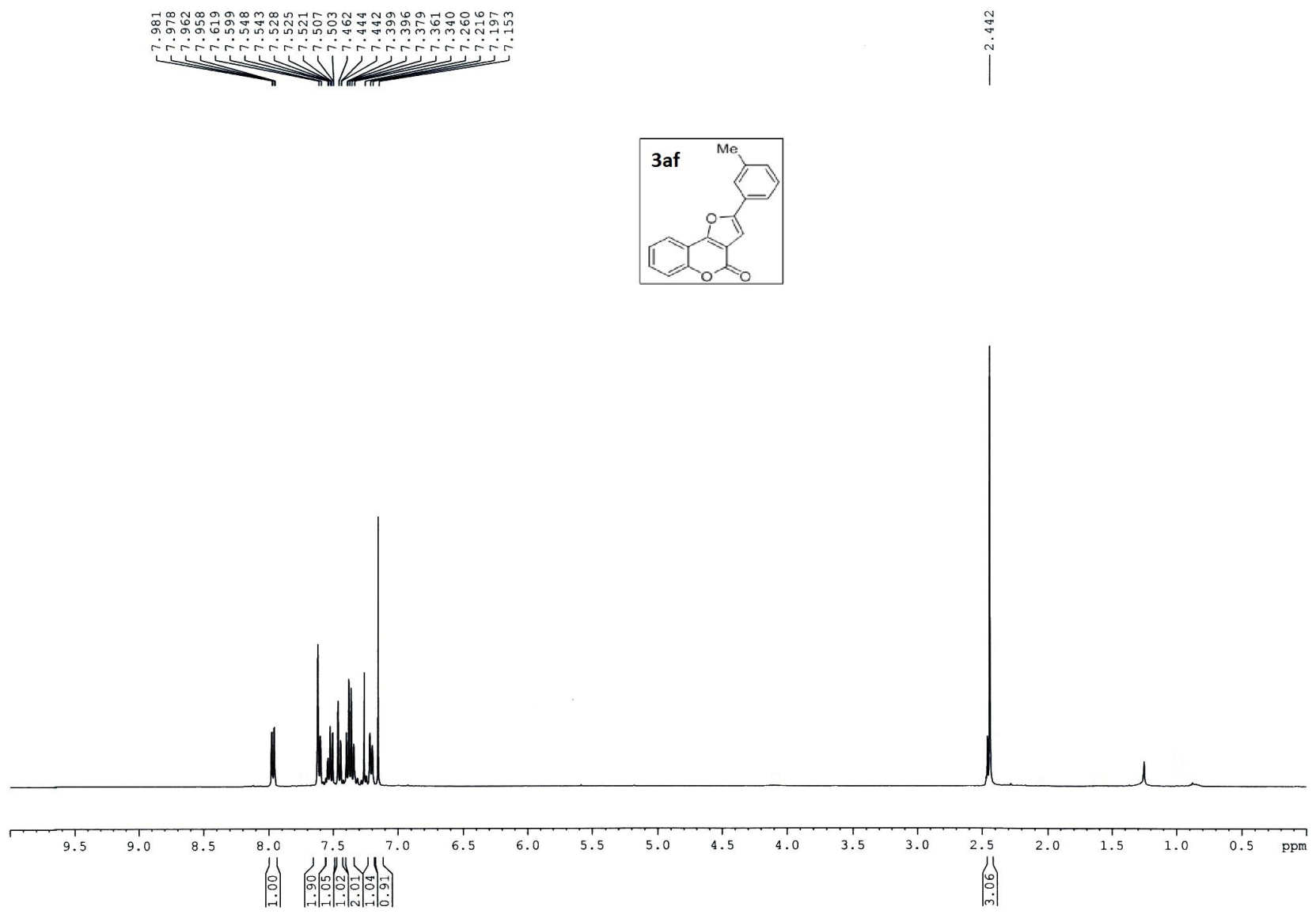
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PULPROG zgpg
TD 32768
SOLVENT CDCl3
NS 600
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 186.42
DW 20.800 usec
DE 6.50 usec
TE 295.2 K
D1 2.0000000 sec
D11 0.0300000 sec
TDO 1

===== CHANNEL f1 =====
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.0000000 W

===== CHANNEL f2 =====
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.0000000 W
PLW12 0.32231000 W

F2 - Processing parameters
SI 16384
SF 100.6177850 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

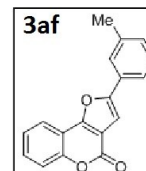




158.42
 156.93
 152.72
 138.91
 130.69
 130.12
 129.07
 128.99
 125.26
 124.69
 121.90
 121.47
 120.94
 117.52
 117.31
 112.92
 102.66

77.47
 77.15
 76.84

21.63



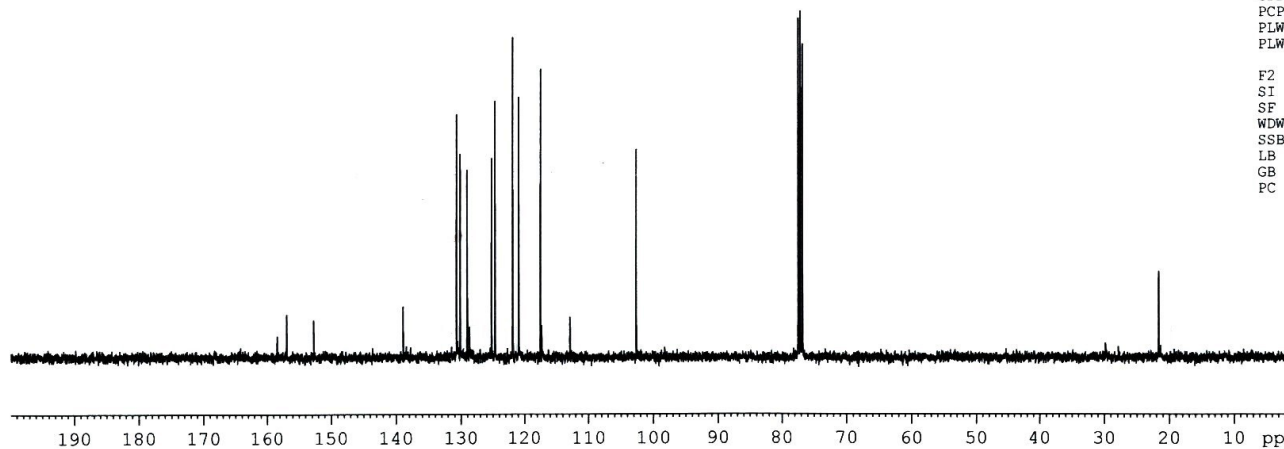
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 EXPNO 105
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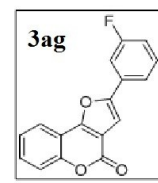
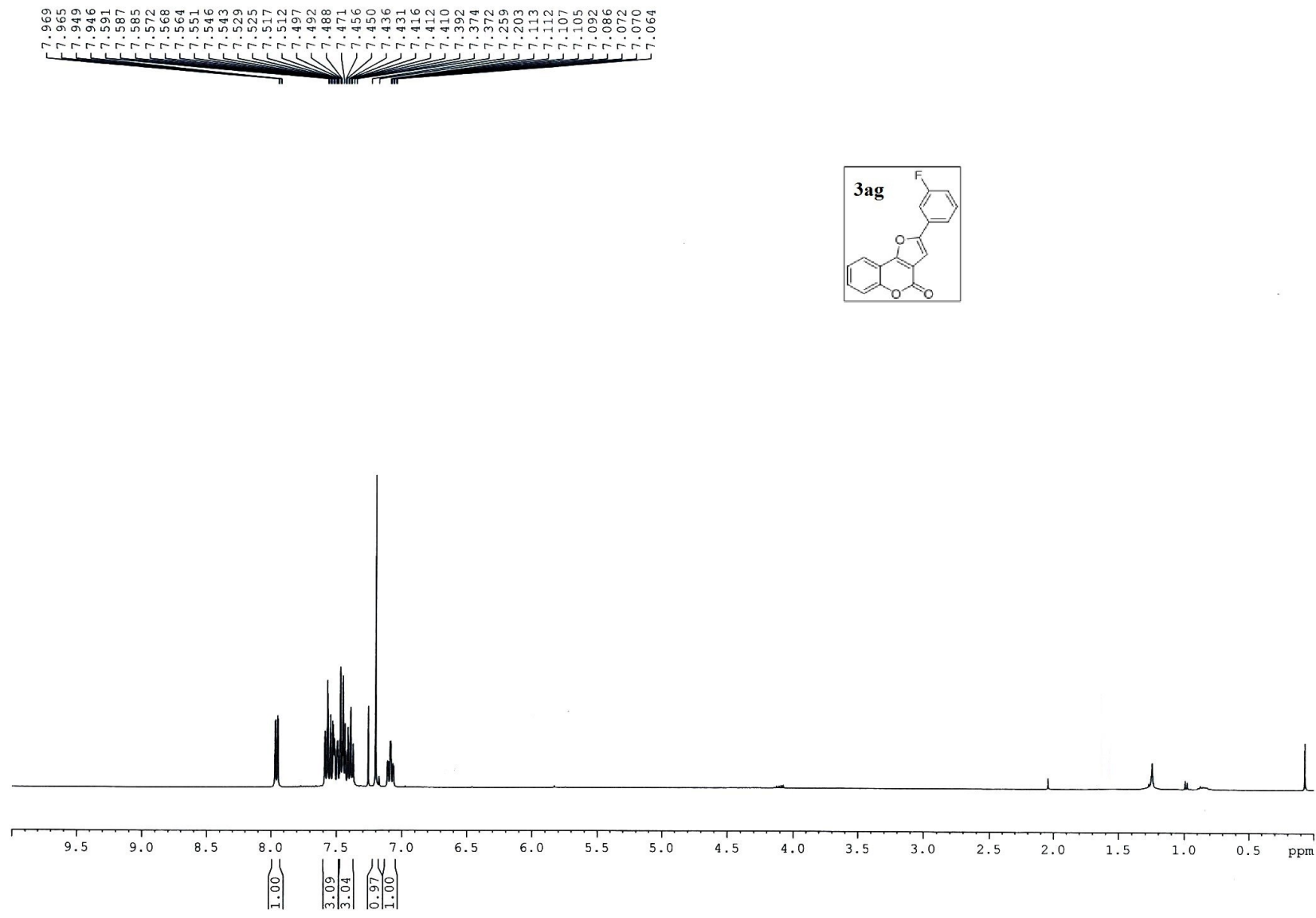
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 Time 18.35
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 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 590
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 106.66
 DW 20.800 usec
 DE 6.50 usec
 TE 295.7 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
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W

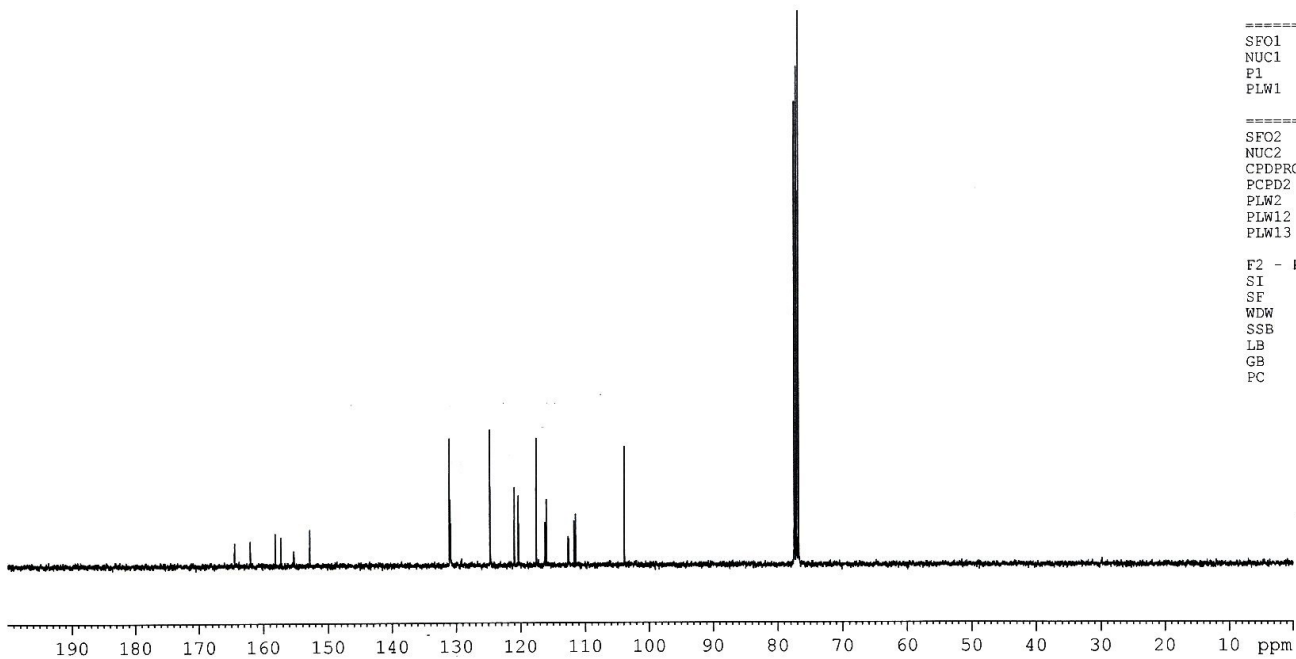
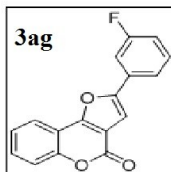
F2 - Processing parameters
 SI 16384
 SF 100.6177858 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40





164.48
162.03
158.17
157.29
155.31
152.85
131.06
130.94
130.86
124.82
124.69
121.00
120.40
120.37
117.59
116.26
116.04
112.69
112.58
111.75
111.51
103.91

77.46
77.15
76.83



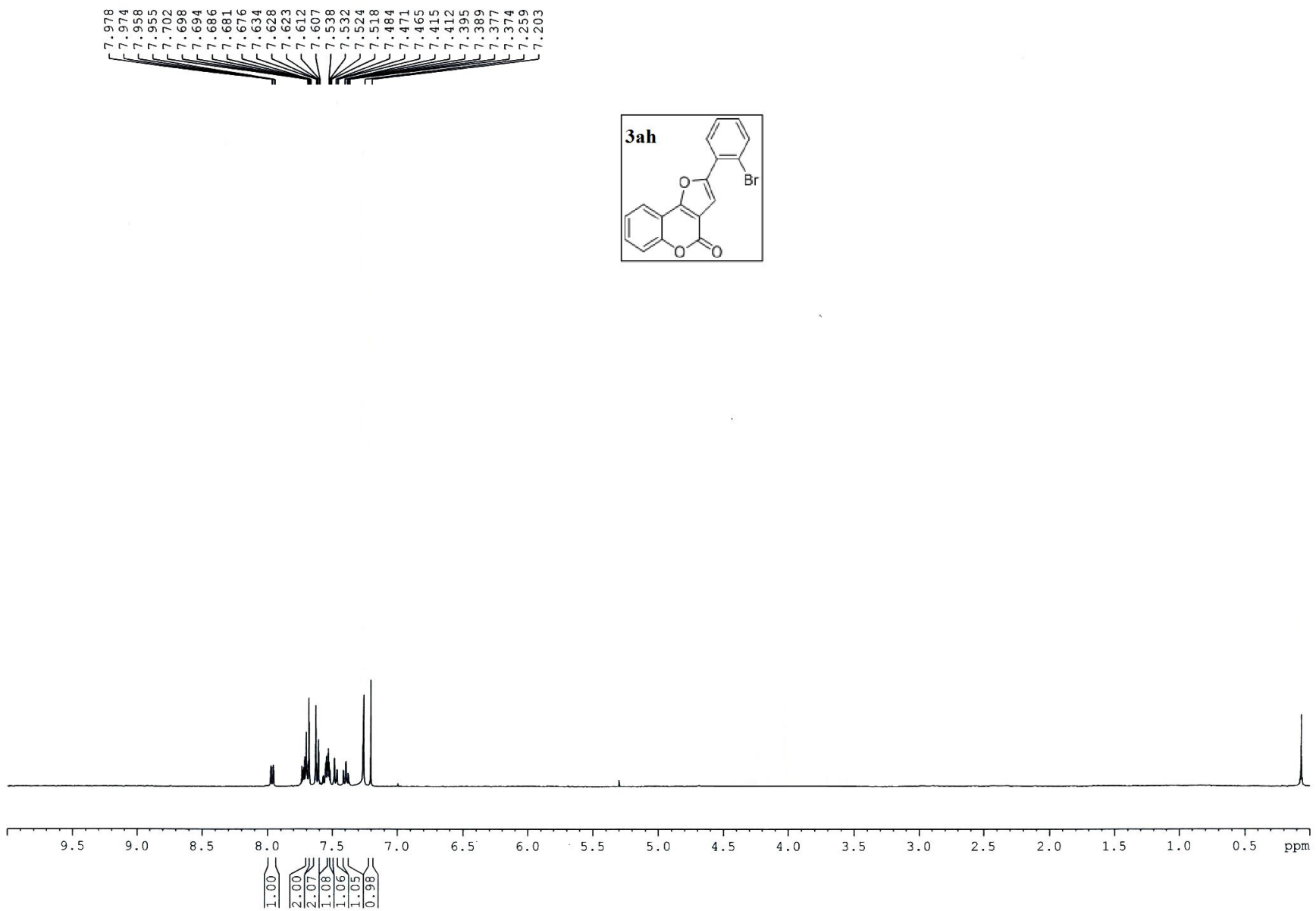
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EXPNO 1219
PROCNO 1

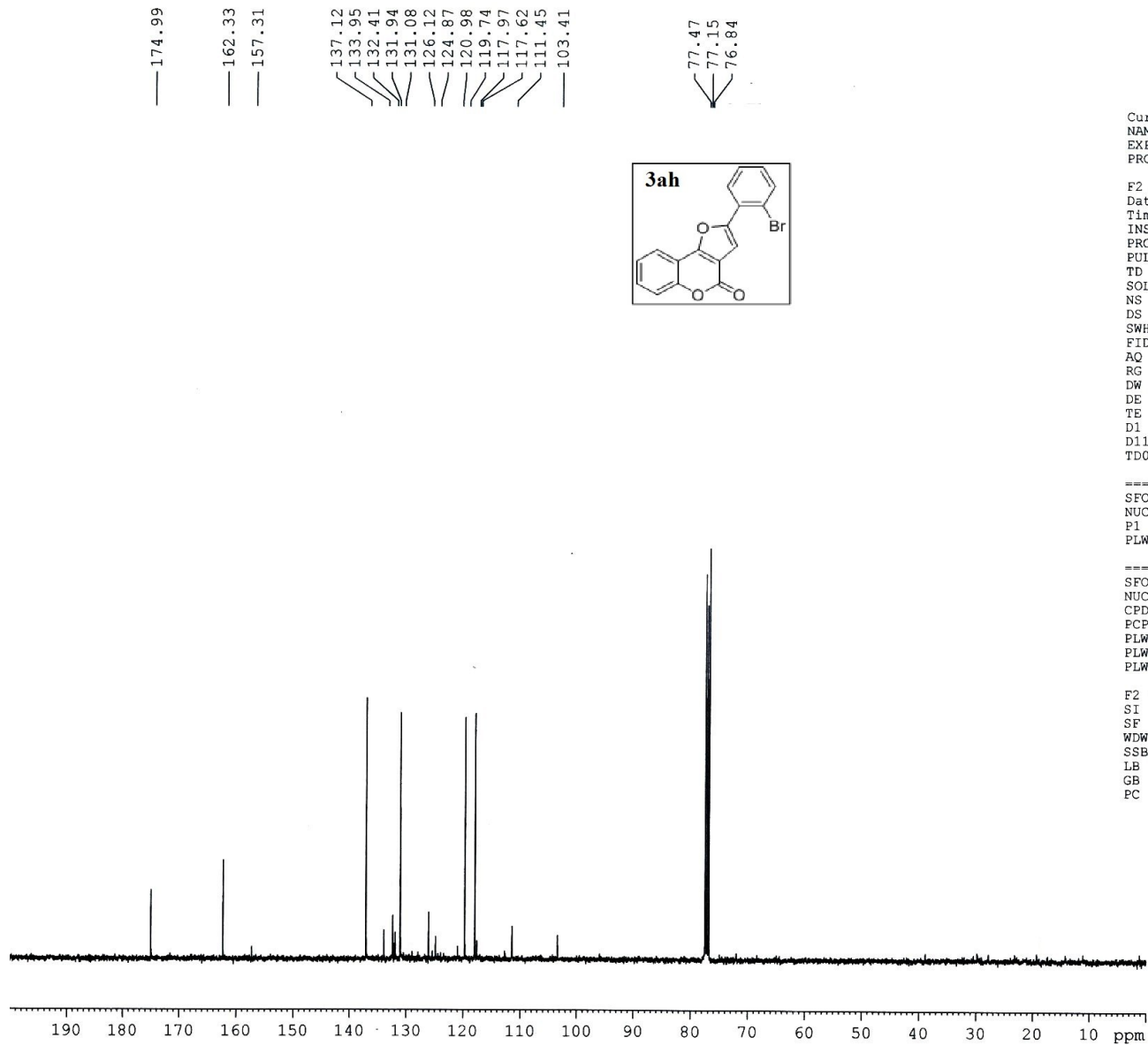
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Time 13.52
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PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 148.91
DW 20.800 usec
DE 6.50 usec
TE 296.3 K
D1 2.00000000 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
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177860 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40





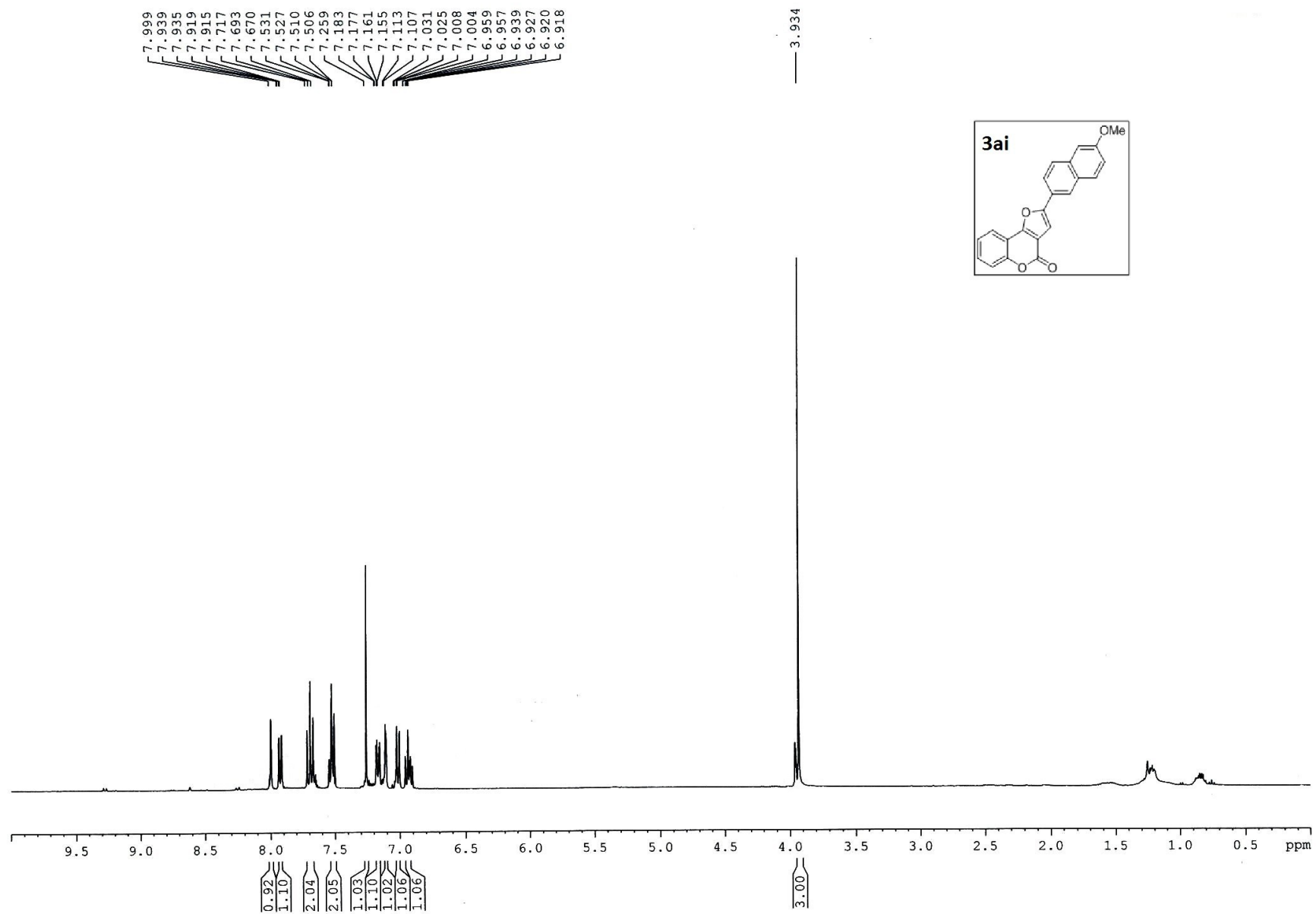
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 NAME Dr.A.HAJRA 2016
 EXPNO 1246
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20161119
 Time 13.38
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDC13
 NS 640
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 135.7
 DW 20.800 usec
 DE 6.50 usec
 TE 298.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TDO 1

===== CHANNEL f1 =====
 SFO1 100.6278588 MHz
 NUC1 13C
 P1 8.90 usec
 PLW1 54.0000000 W

===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 ECPD2 90.00 usec
 PLW2 12.0000000 W
 PLW12 0.32231000 W
 PLW13 0.16212000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177852 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



162.36
158.87
139.67
137.06
134.73
133.21
132.92
131.29
131.04
130.99
129.59
129.34
128.49
127.11
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119.94
119.78
119.70
117.96
106.05

77.48
77.16
76.84

55.54



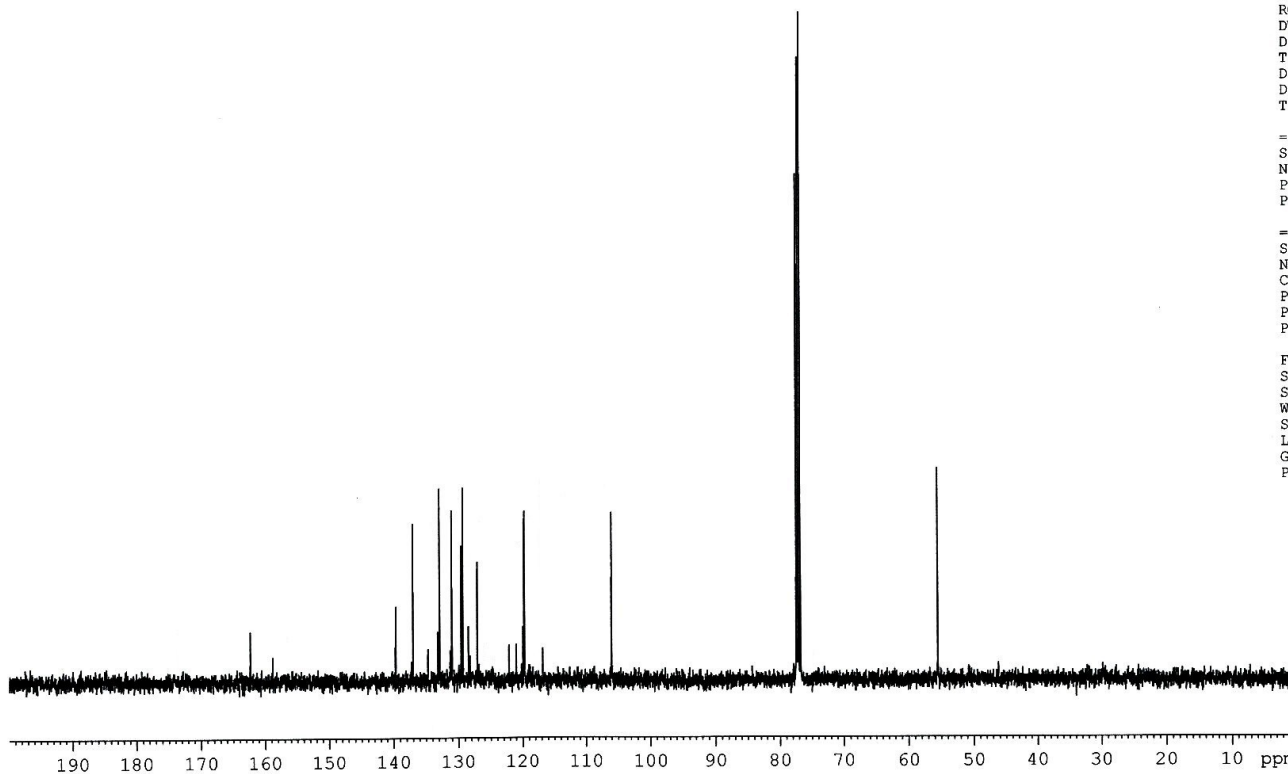
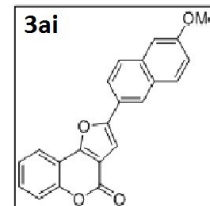
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NAME Dr.A.HAJRA 2017
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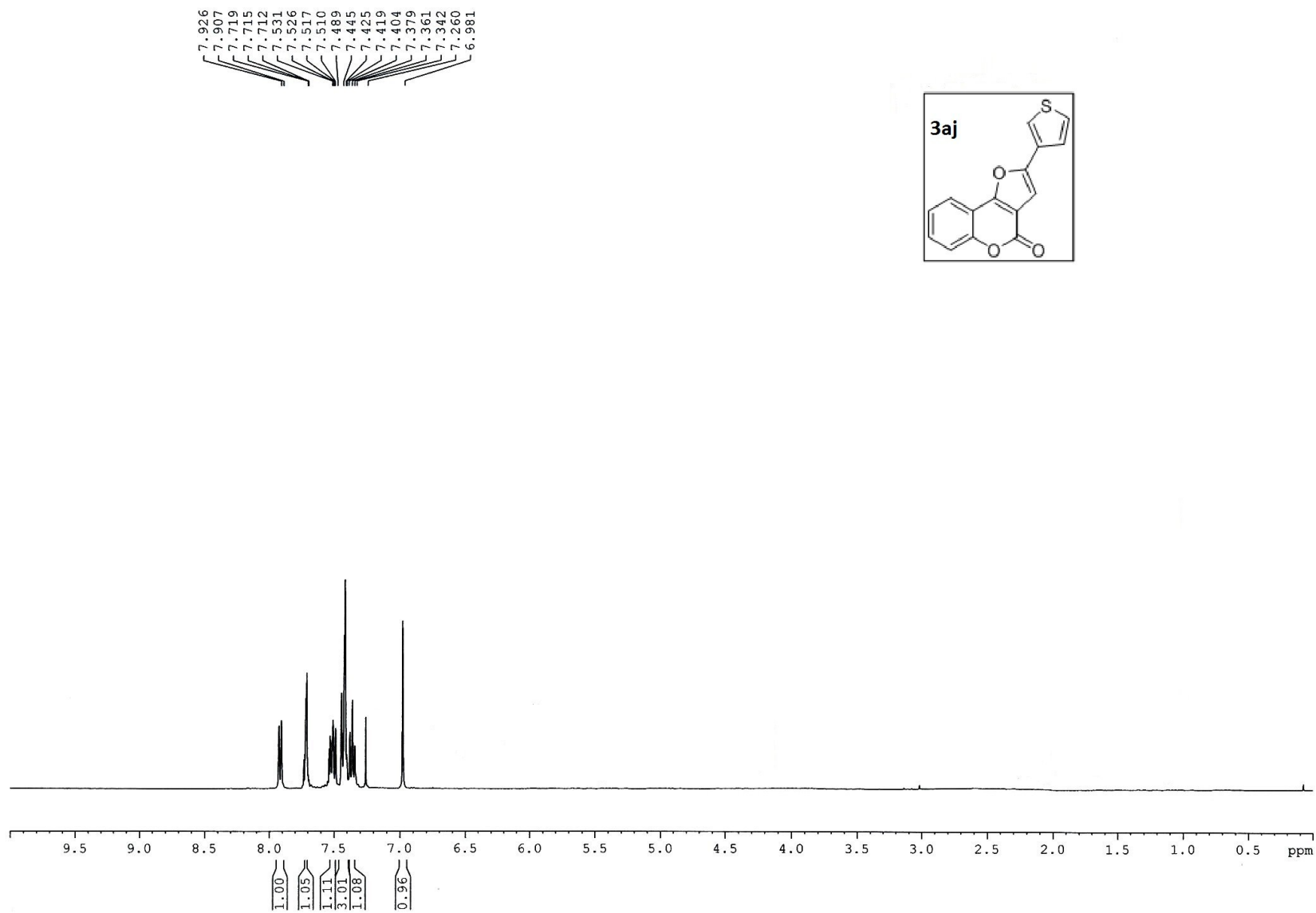
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Time_ 19.30
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PULPROG zgdc
TD 32768
SOLVENT CDCl3
NS 1024
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 168.31
DW 20.800 usec
DE 6.50 usec
TE 298.2 K
D1 2.0000000 sec
D11 0.0300000 sec
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
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W

F2 - Processing parameters
SI 16384
SF 100.6177834 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

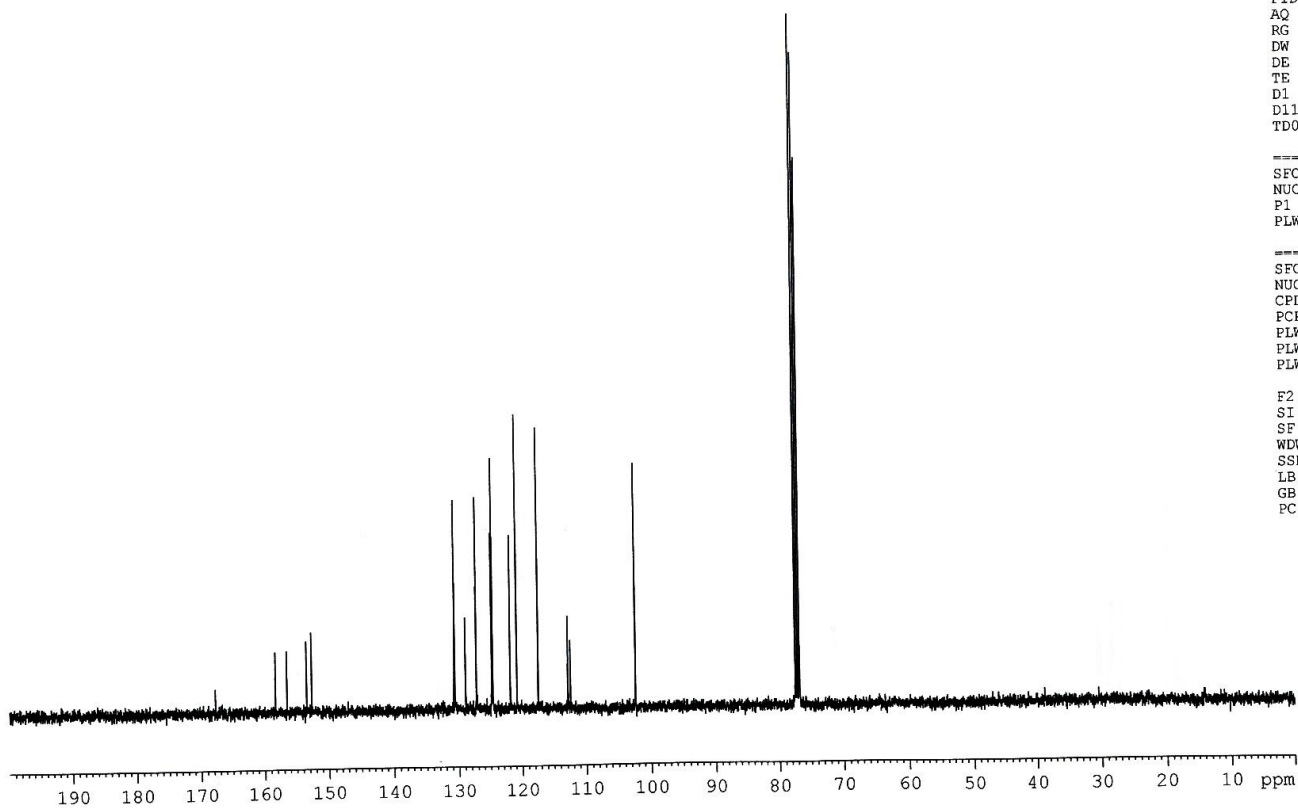
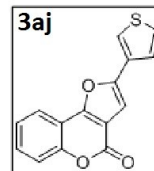




— 167.79
 — 158.33
 — 156.55
 — 153.49
 — 152.70

 — 130.66
 — 128.97
 — 127.27
 — 124.85
 — 124.69
 — 121.91
 — 120.86
 — 117.49
 — 112.84
 — 112.44
 — 102.41

— 77.48
 — 77.16
 — 76.84



Current Data Parameters
 NAME Dr.A.HAJRA 2017
 EXPNO 567
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20170411
 Time_ 19.31
 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 67.81
 DW 20.800 usec
 DE 6.50 usec
 TE 300.1 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TDO 1

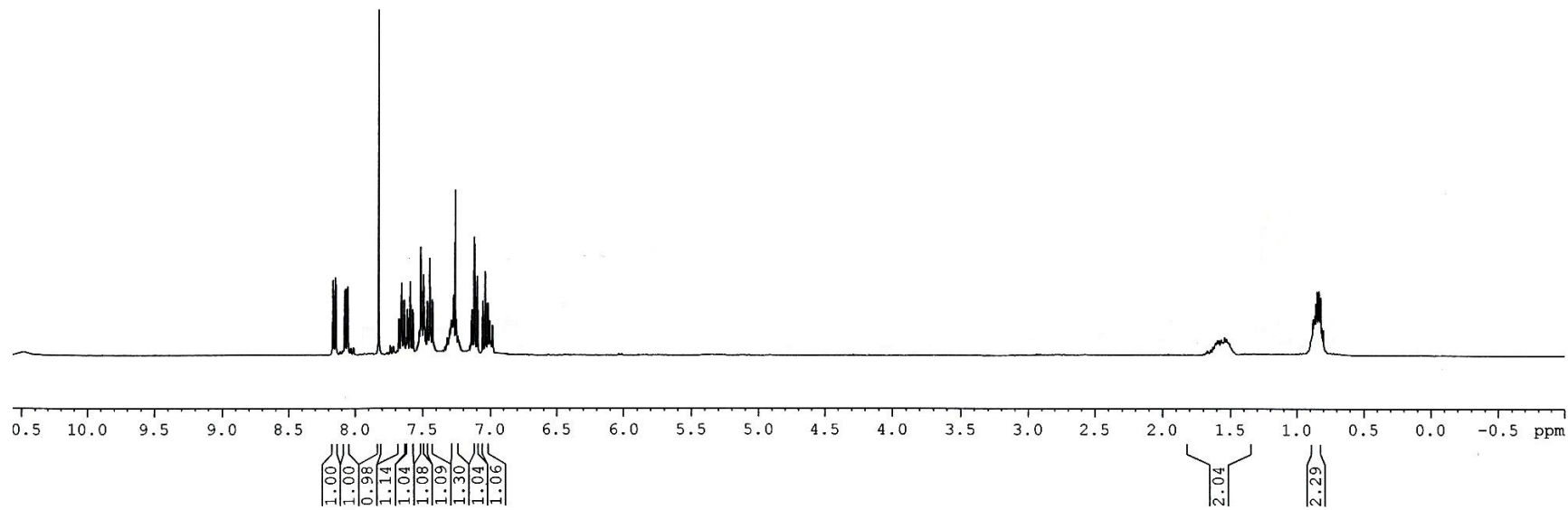
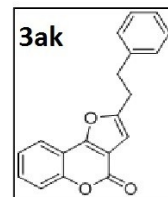
===== CHANNEL f1 =====
 SFO1 100.6278588 MHz
 NUC1 13C
 P1 8.90 usec
 PLW1 54.0000000 W

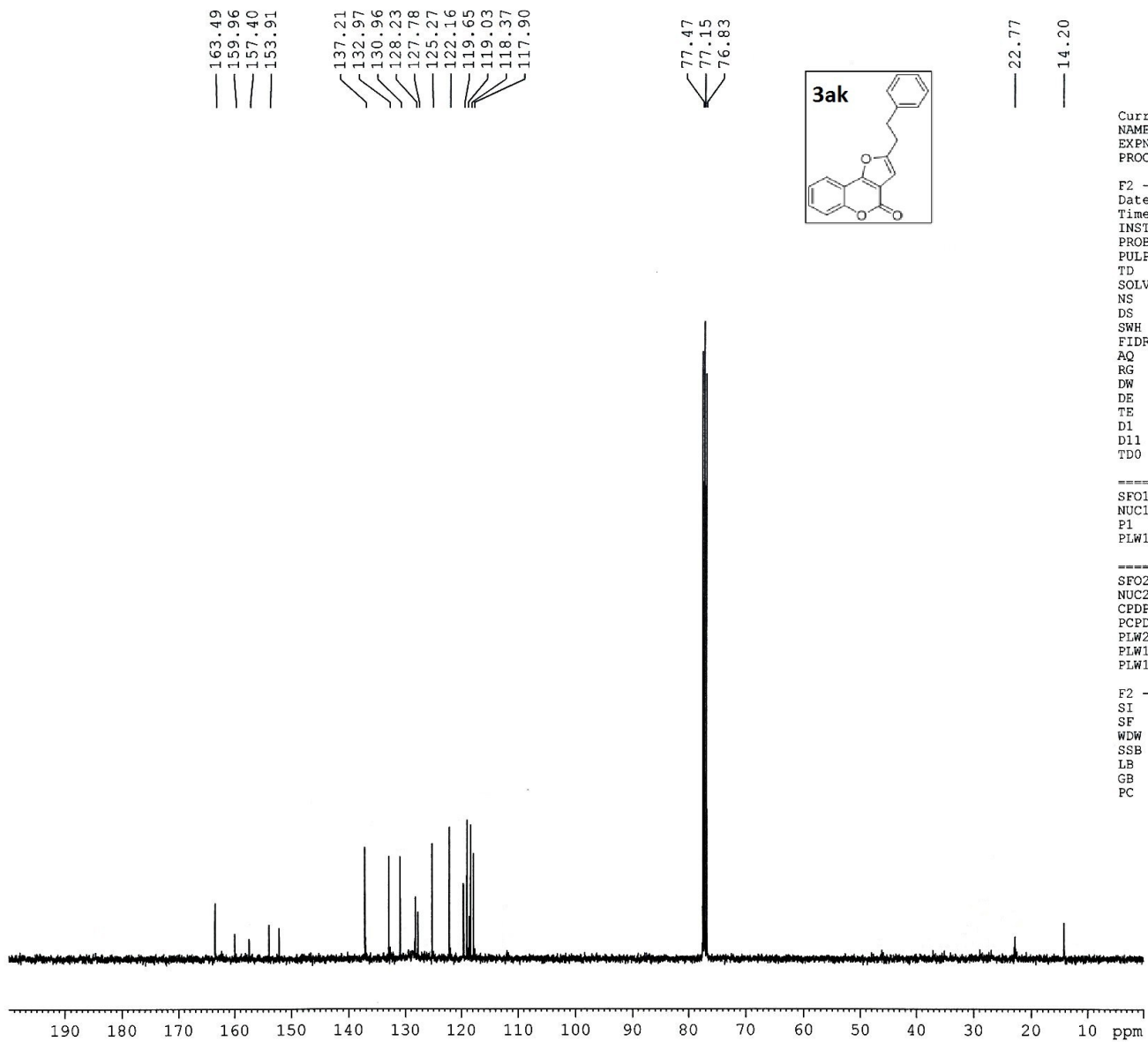
===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.0000000 W
 PLW12 0.32231000 W
 PLW13 0.16212000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177853 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

8.167
8.164
8.147
8.143
8.077
8.074
8.058
8.054
7.824
7.677
7.673
7.658
7.655
7.652
7.638
7.633
7.613
7.609
7.594
7.591
7.588
7.574
7.569
7.513
7.505
7.492
7.466
7.447
7.428
7.426
7.289
7.283
7.271
7.259
7.252
7.117
7.097
7.095
7.057
7.055
7.037
7.019
7.016

1.671
1.664
1.649
1.645
1.631
1.629
1.622
1.609
1.596
1.583
1.572
1.567
1.560
1.553
1.548
1.543
1.538
1.529
1.526
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1.507
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0.875
0.870
0.865
0.858
0.849
0.839
0.832





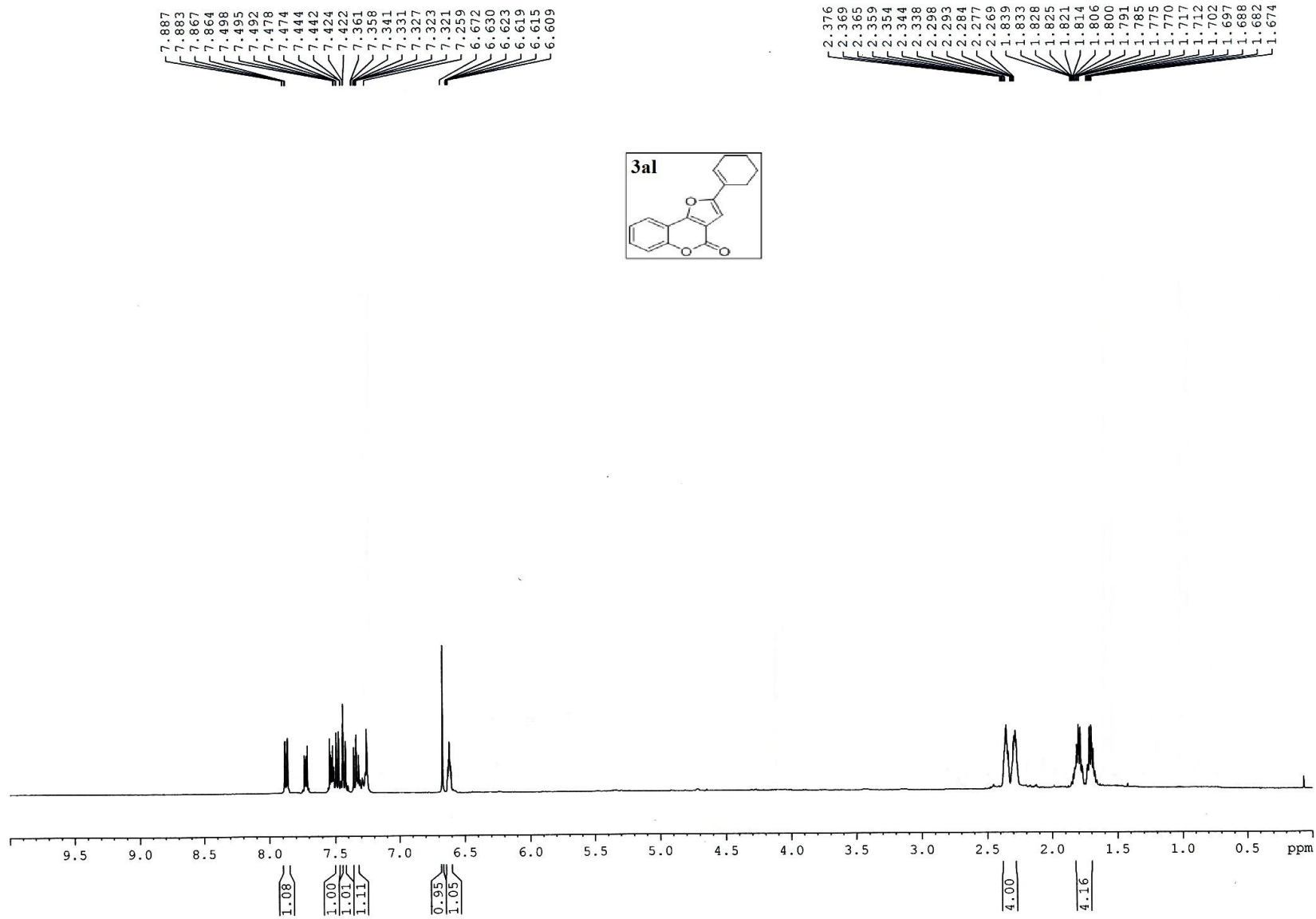
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 NAME Dr.A.HAJRA 2017
 EXPNO 402
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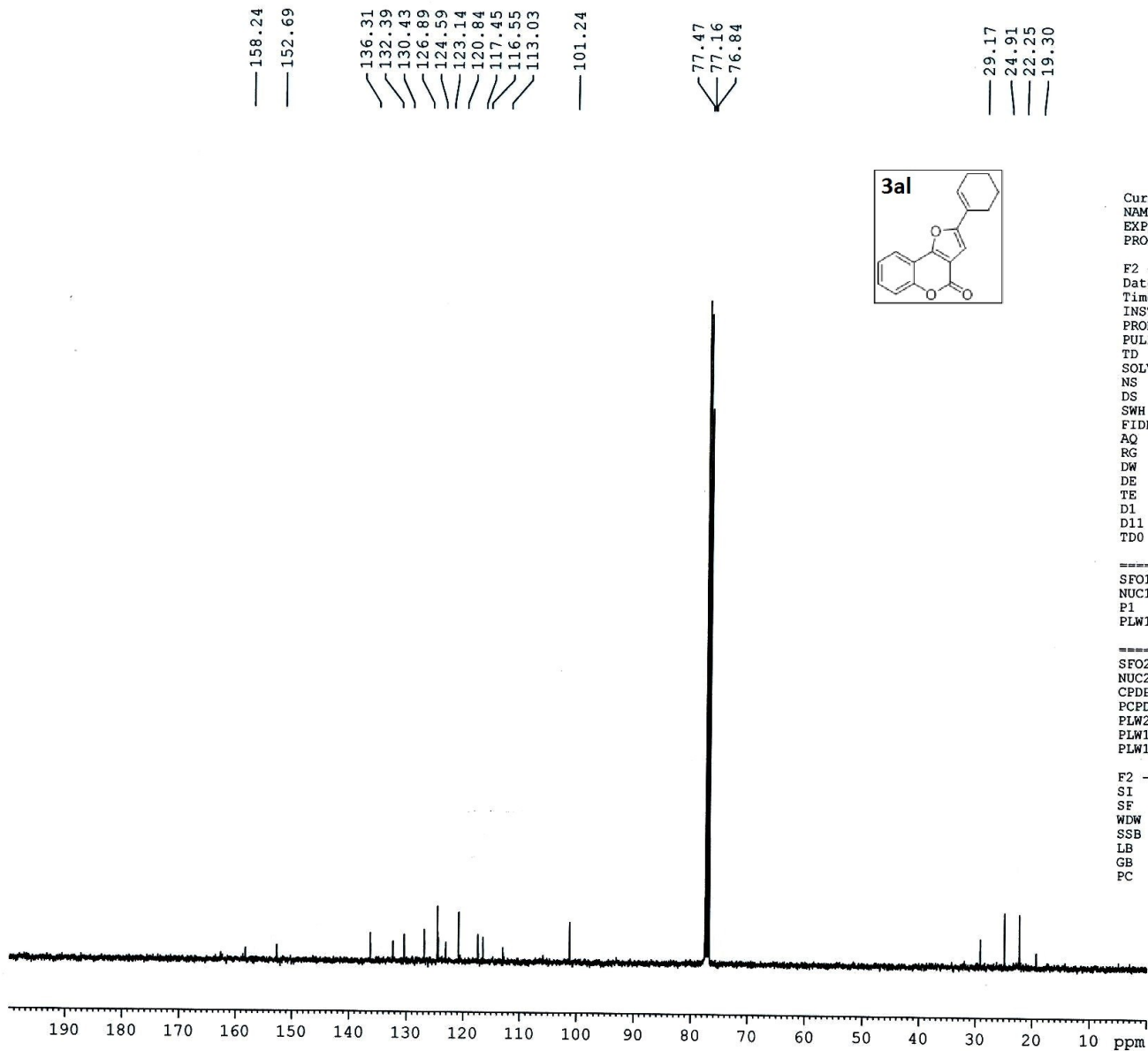
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 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 640
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 62.69
 DW 20.800 usec
 DE 6.50 usec
 TE 297.7 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TD0 1

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

===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W
 PLW13 0.16212000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177860 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40





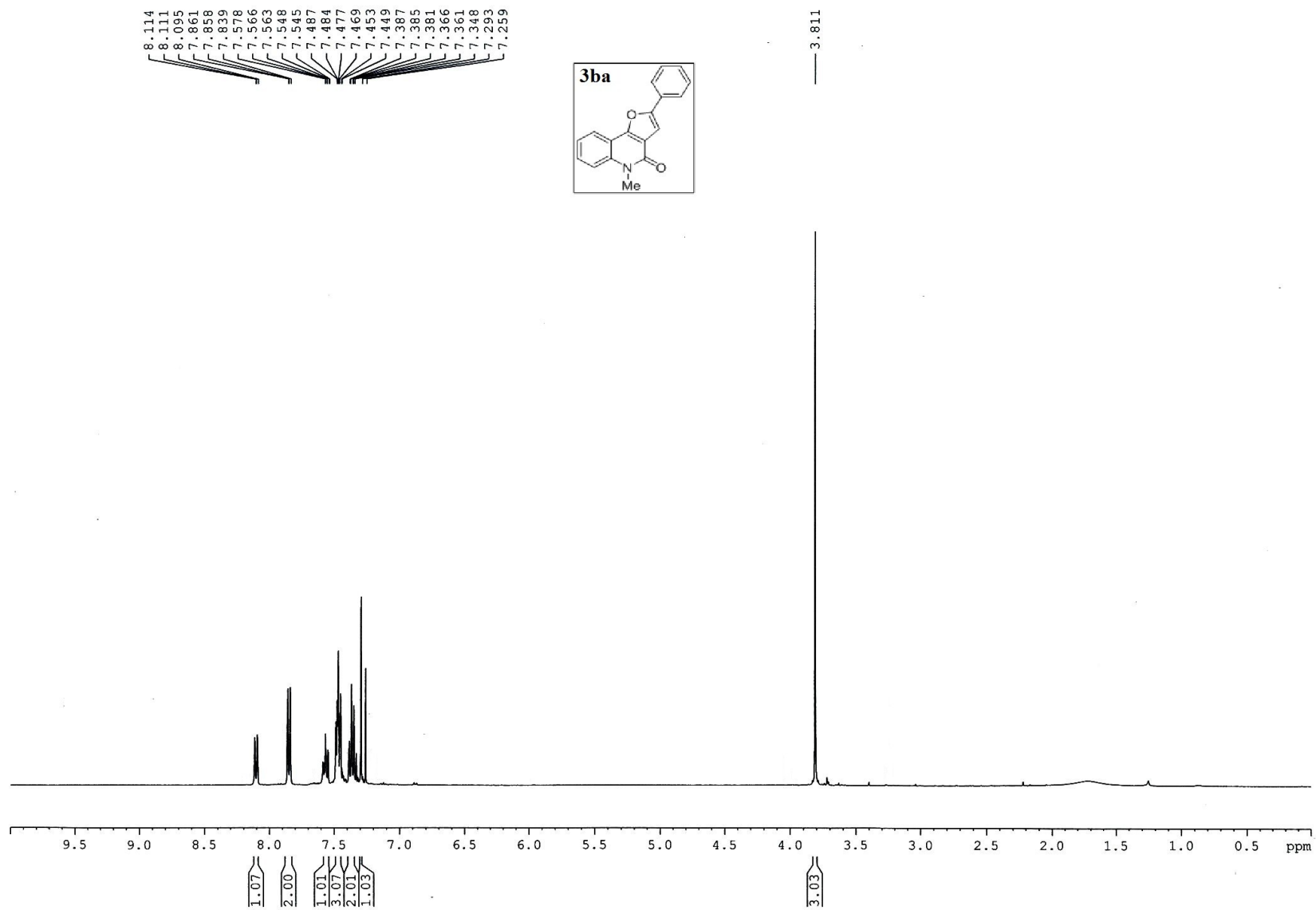
Current Data Parameters
 NAME Dr.A.HAJRA 2017
 EXPNO 400
 PROCNO 1

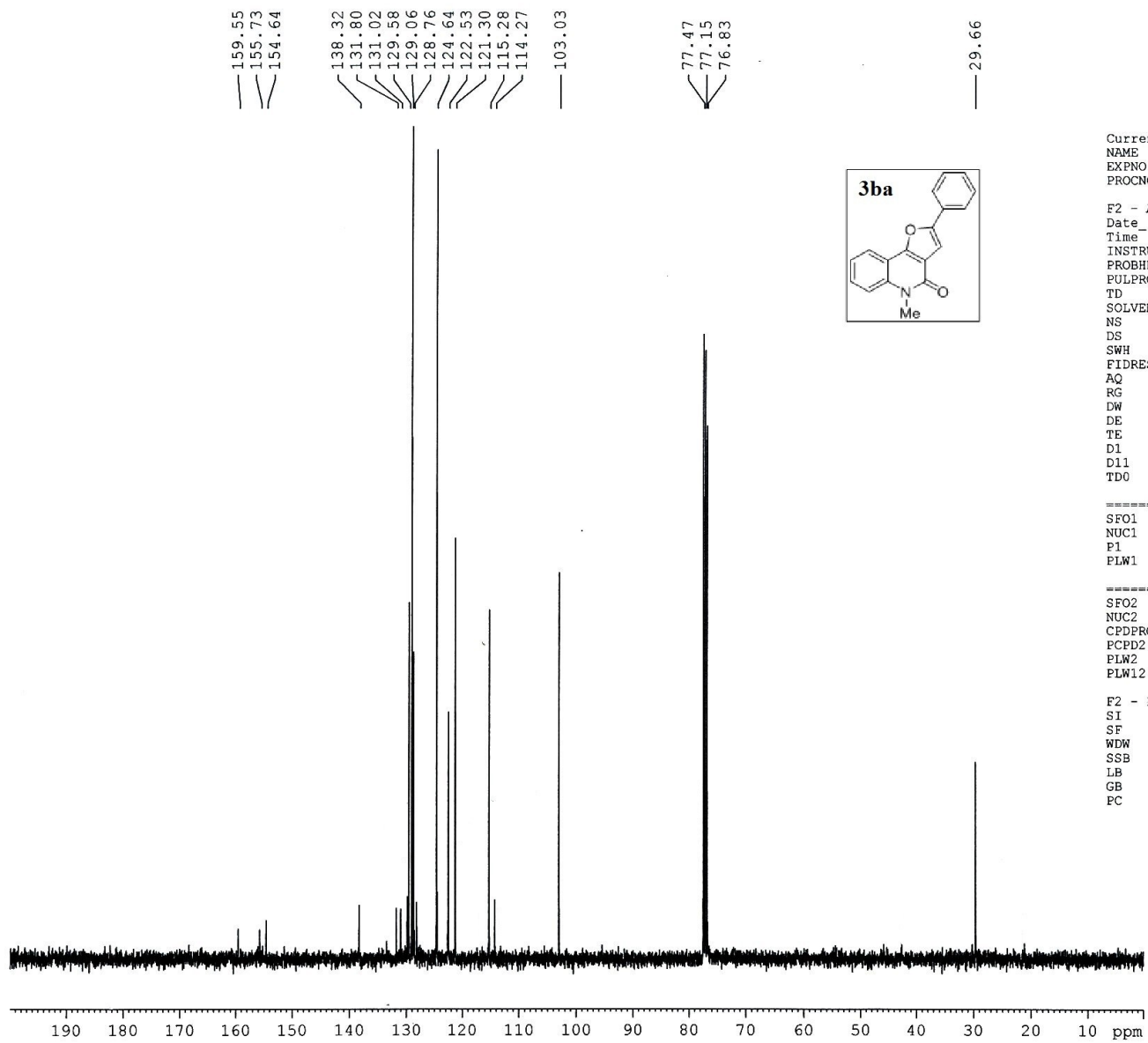
F2 - Acquisition Parameters
 Date_ 20170306
 Time 14.20
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 800
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 186.42
 DW 20.800 usec
 DE 6.50 usec
 TE 297.5 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TD0 1

===== CHANNEL f1 =====
 SFO1 100.6278588 MHz
 NUC1 13C
 P1 8.90 usec
 PLW1 54.0000000 W

===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.0000000 W
 PLW12 0.32231000 W
 PLW13 0.16212000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177841 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40





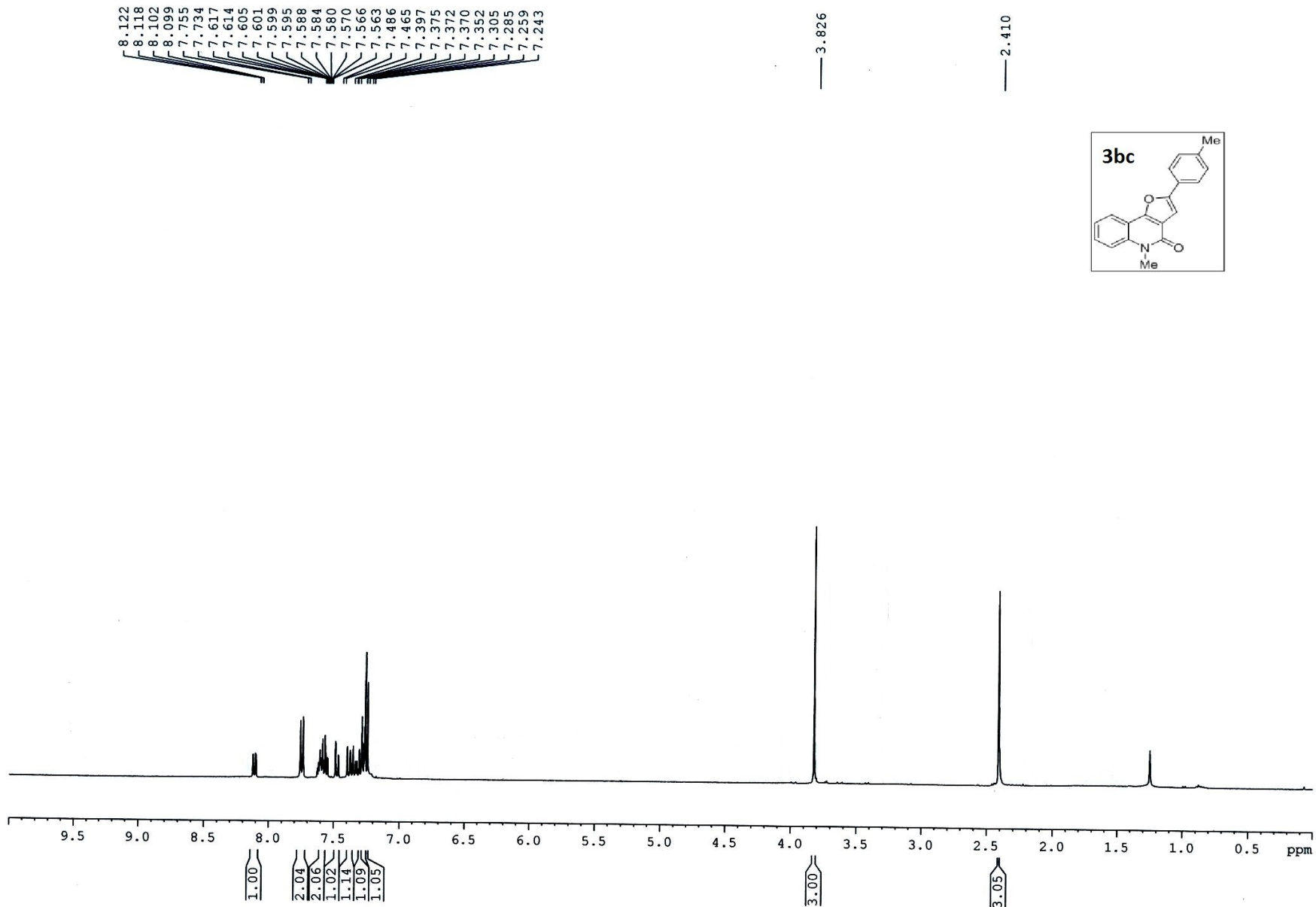
Current Data Parameters
 NAME Dr.A.HAJRA 2016
 EXPNO 1358
 PROCNO 1

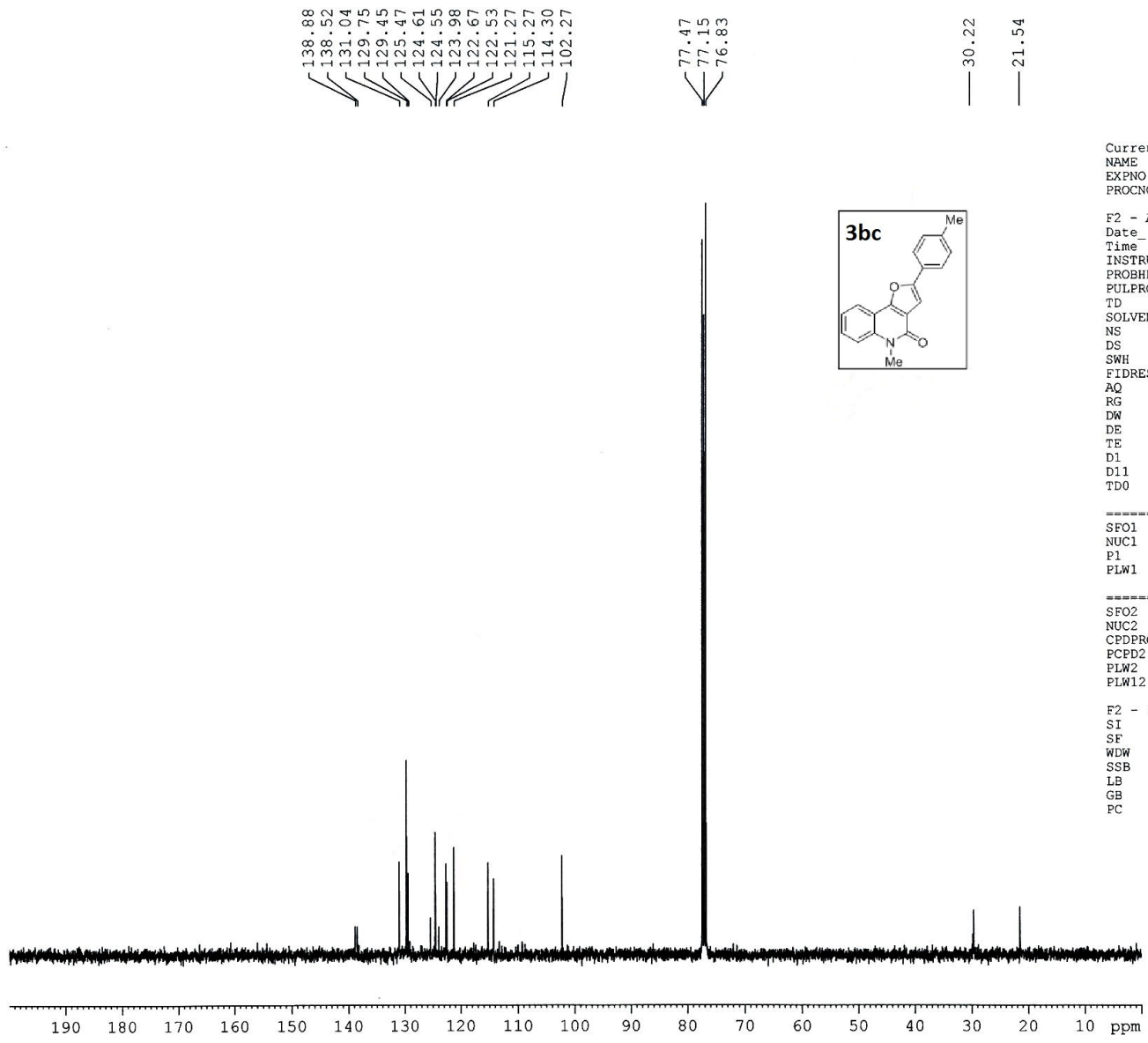
F2 - Acquisition Parameters
 Date_ 20161213
 Time 12.44
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 624
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 186.42
 DW 20.800 usec
 DE 6.50 usec
 TE 298.1 K
 D1 2.0000000 sec
 D11 0.03000000 sec
 TD0 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
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177848 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40





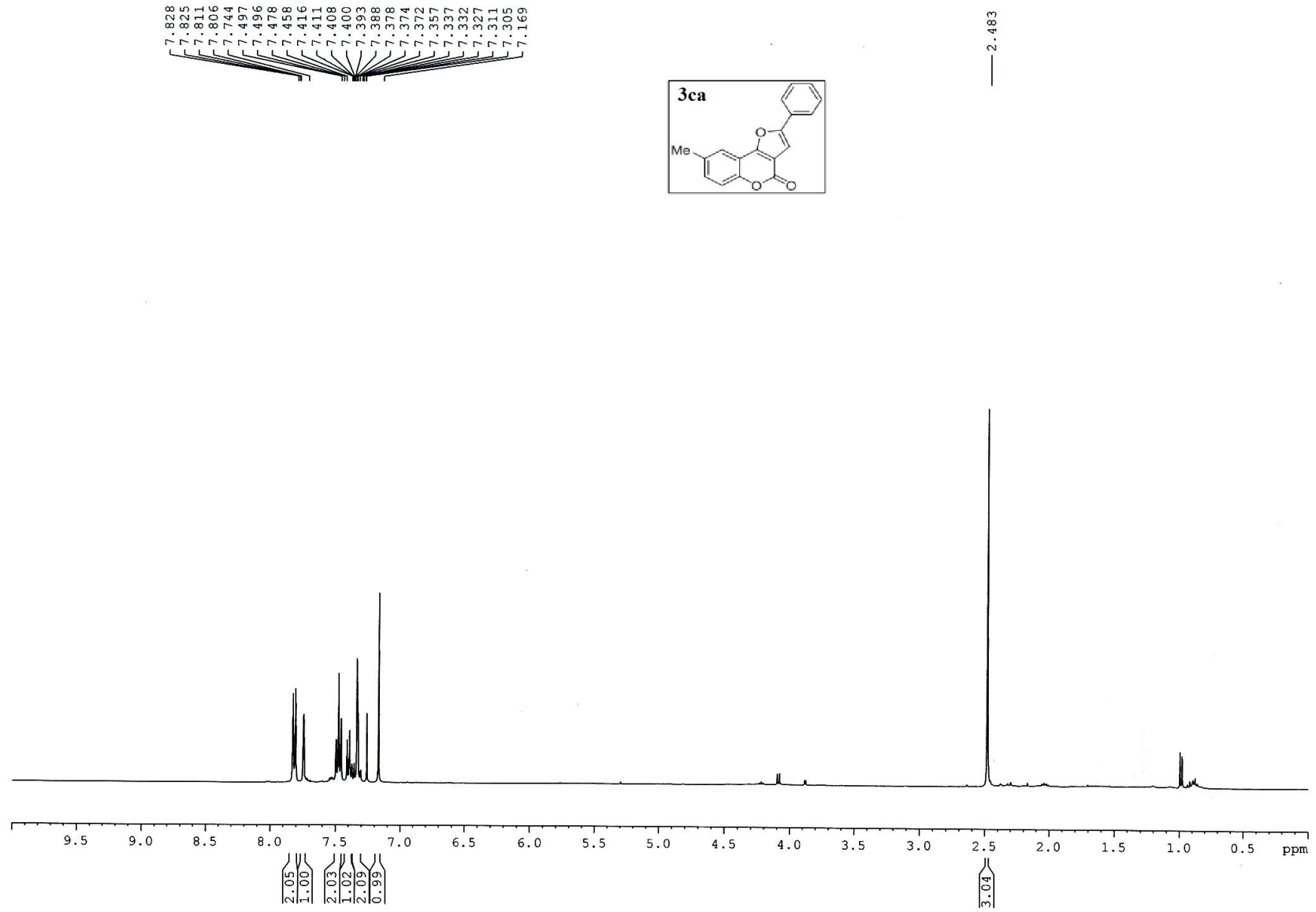
Current Data Parameters
 NAME Dr.A.HAJRA 2016
 EXPNO 1457
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20161228
 Time 11.47
 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 295.2 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TD0 1

===== CHANNEL f1 =====
 SFO1 100.6278588 MHz
 NUC1 13C
 P1 8.90 usec
 PLW1 54.0000000 W

===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.0000000 W
 PLW12 0.32231000 W

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



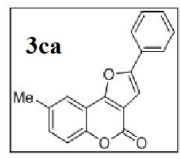
158.60
157.09
156.57
150.99

134.58
131.82
131.04
129.22
129.15
128.96
124.68
120.66
117.26
112.56

102.85

77.46
77.14
76.83

21.11



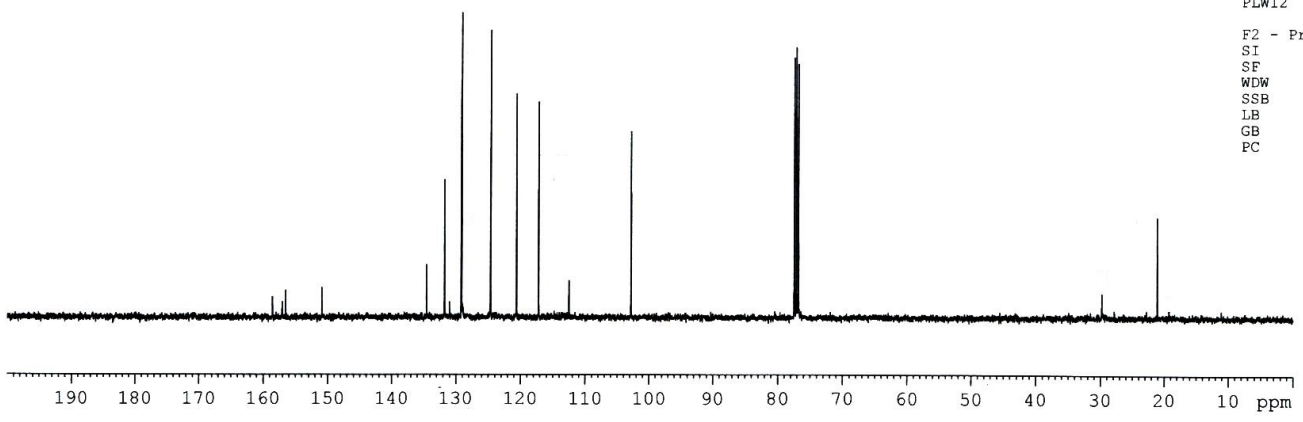
Current Data Parameters
 NAME Dr.A.HAJRA 2016
 EXPNO 1243
 PROCNO 1

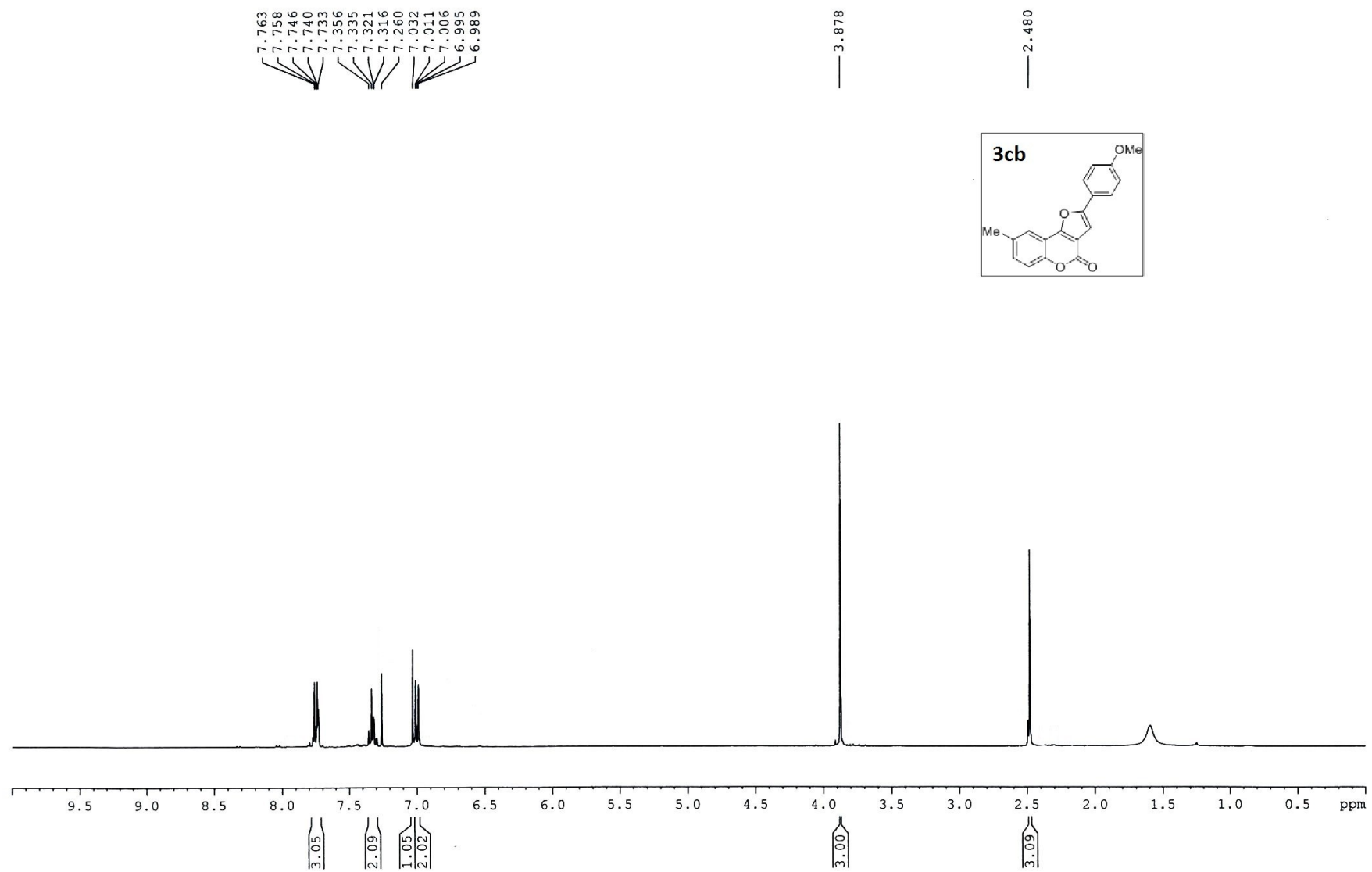
F2 - Acquisition Parameters
 Date_ 20161119
 Time_ 11.21
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg
 TD 32768
 SOLVENT CDCl3
 NS 600
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 186.42
 DW 20.800 usec
 DE 6.50 usec
 TE 298.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TD0 1

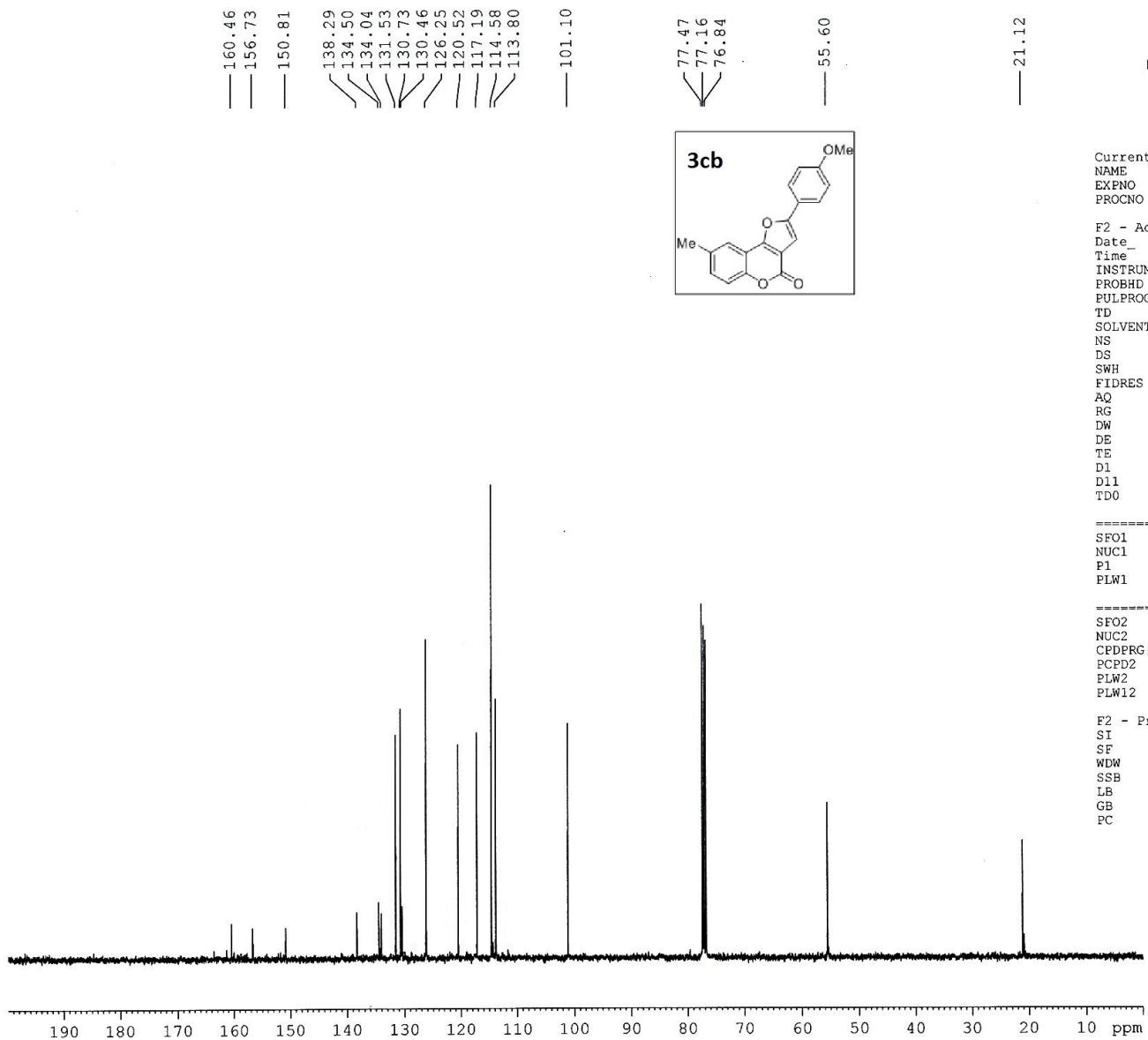
===== CHANNEL f1 =====
 SFO1 100.6278588 MHz
 NUC1 13C
 P1 8.90 usec
 PLW1 54.0000000 W

===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.0000000 W
 PLW12 0.32231000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177852 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40







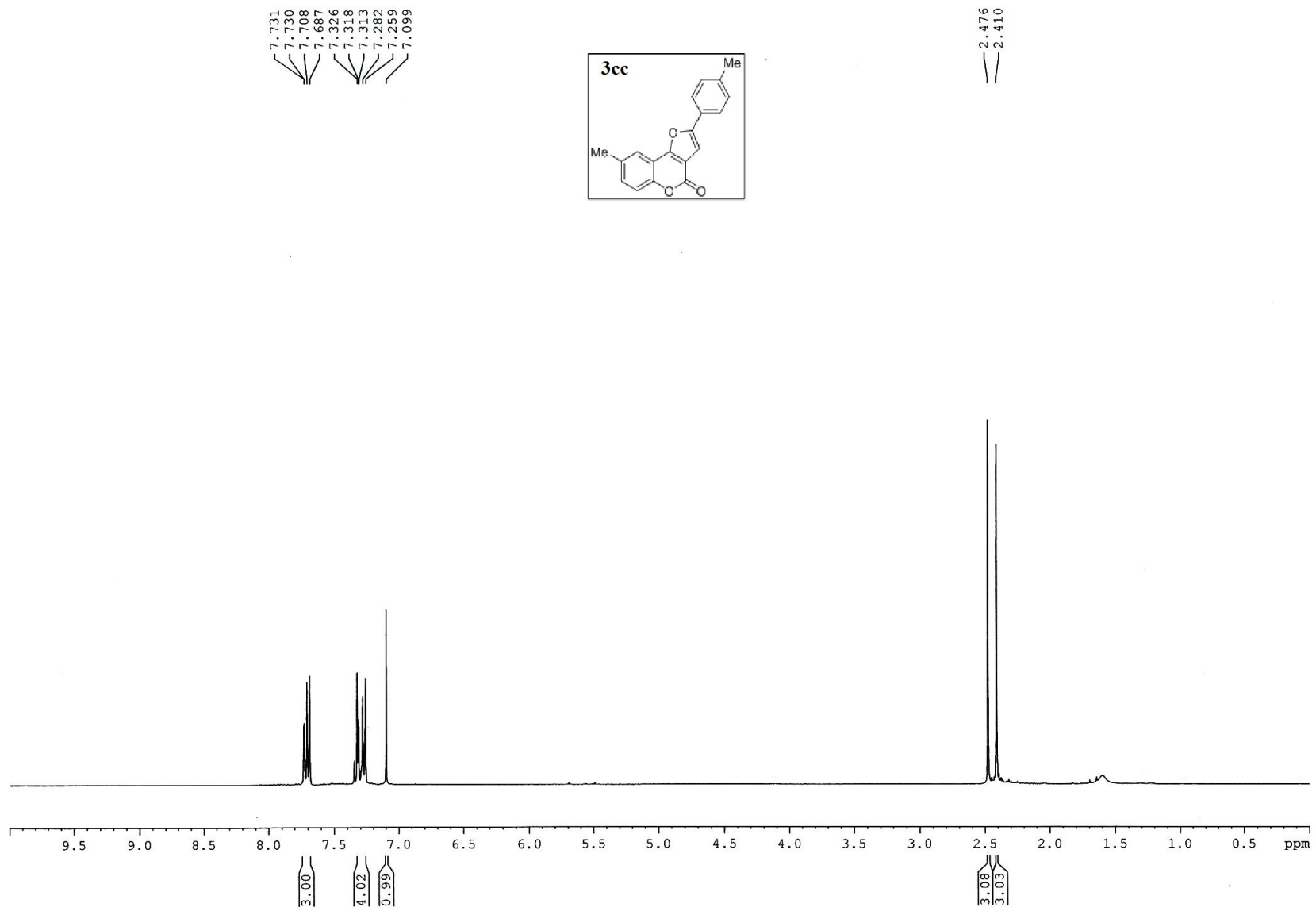
Current Data Parameters
 NAME Dr.A.HAJRA 2016
 EXPNO 1483
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20161230
 Time 11.44
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDC13
 NS 648
 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 295.2 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
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W

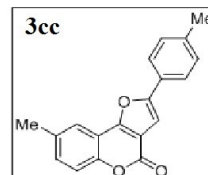
F2 - Processing parameters
 SI 16384
 SF 100.6177858 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



158.69
 156.86
 150.92
 139.42
 134.54
 131.67
 129.84
 126.48
 124.64
 120.61
 117.23
 112.64
 112.59
 102.07

77.48
 77.16
 76.84

21.56
 21.12



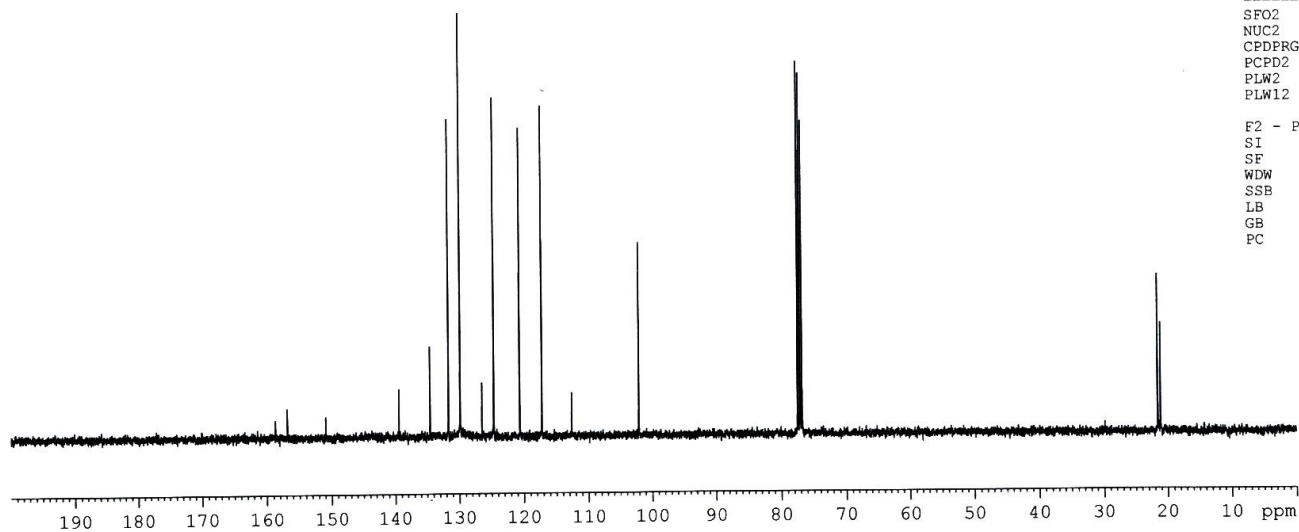
Current Data Parameters
 NAME Dr.A.HAJRA 2016
 EXPNO 1242
 PROCNO 1

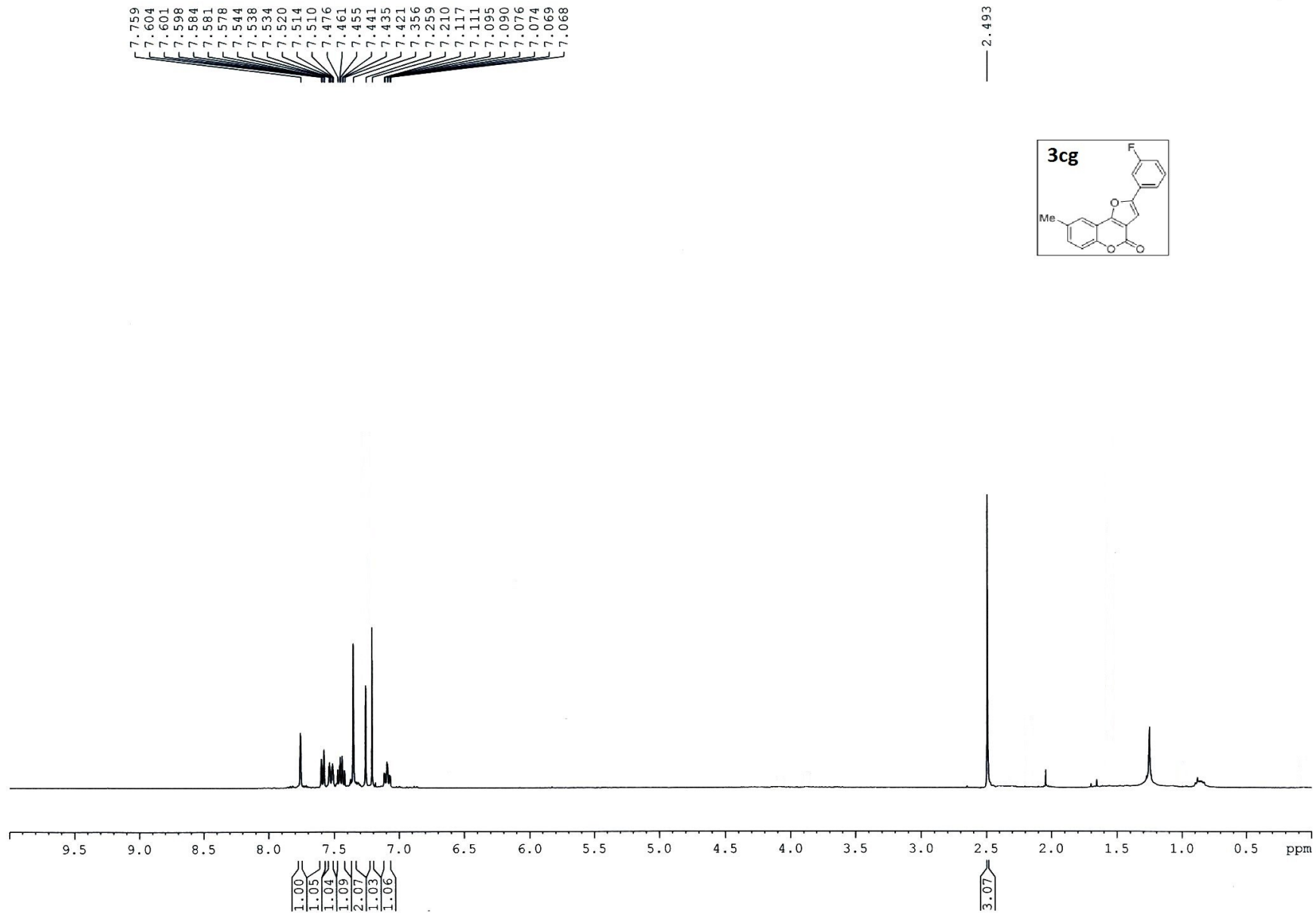
F2 - Acquisition Parameters
 Date 20161118
 Time 19.42
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg
 TD 32768
 SOLVENT CDCl3
 NS 512
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 186.42
 DW 20.800 usec
 DE 6.50 usec
 TE 298.0 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TD0 1

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

===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177836 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



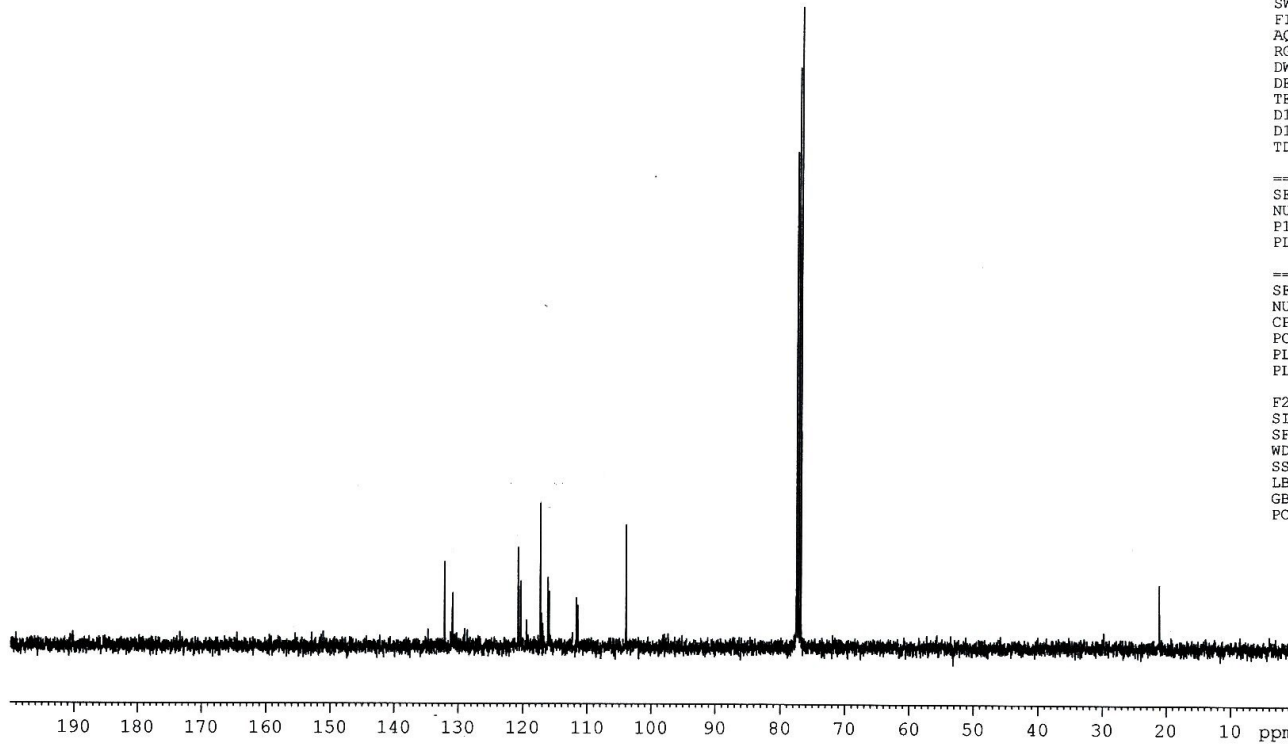
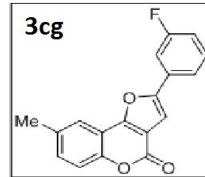


— 2.493

134.79
132.15
130.94
130.86
120.74
120.40
120.38
119.49
117.34
117.17
116.95
116.19
115.98
112.42
111.76
111.51
103.99

77.47
77.15
76.83

— 21.12



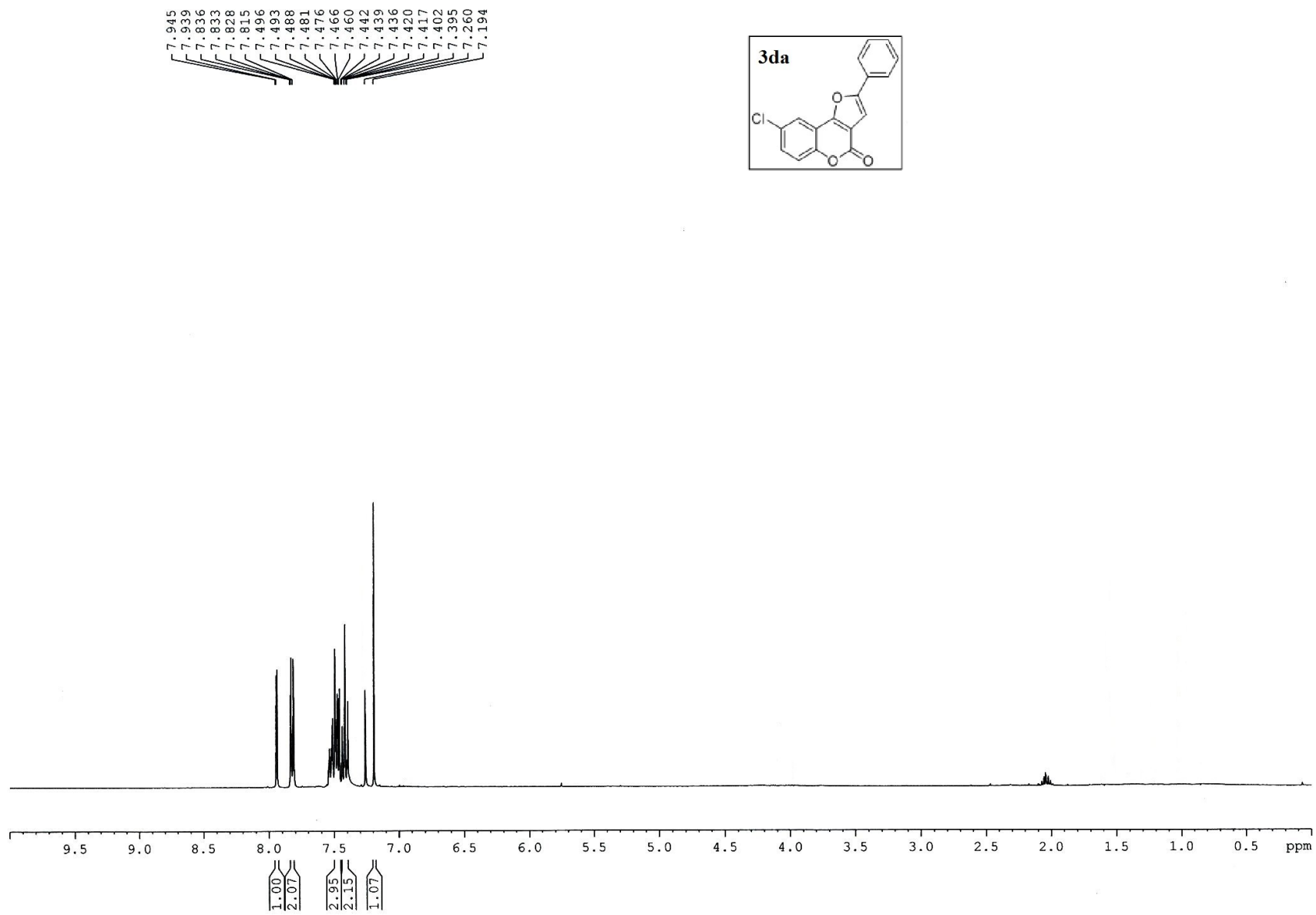
Current Data Parameters
NAME Dr.A.HAJRA 2016
EXPNO 1249
PROCNO 1

F2 - Acquisition Parameters
Date_ 20161119
Time 20.42
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg
TD 32768
SOLVENT CDC13
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 =====
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

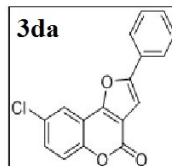
==== CHANNEL f2 =====
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W

F2 - Processing parameters
SI 16384
SF 100.6177841 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



157.81
157.43
155.66
132.63
131.05
130.66
129.59
129.34
129.24
128.98
128.57
124.81
120.45
118.98
102.88

77.47
77.15
76.84



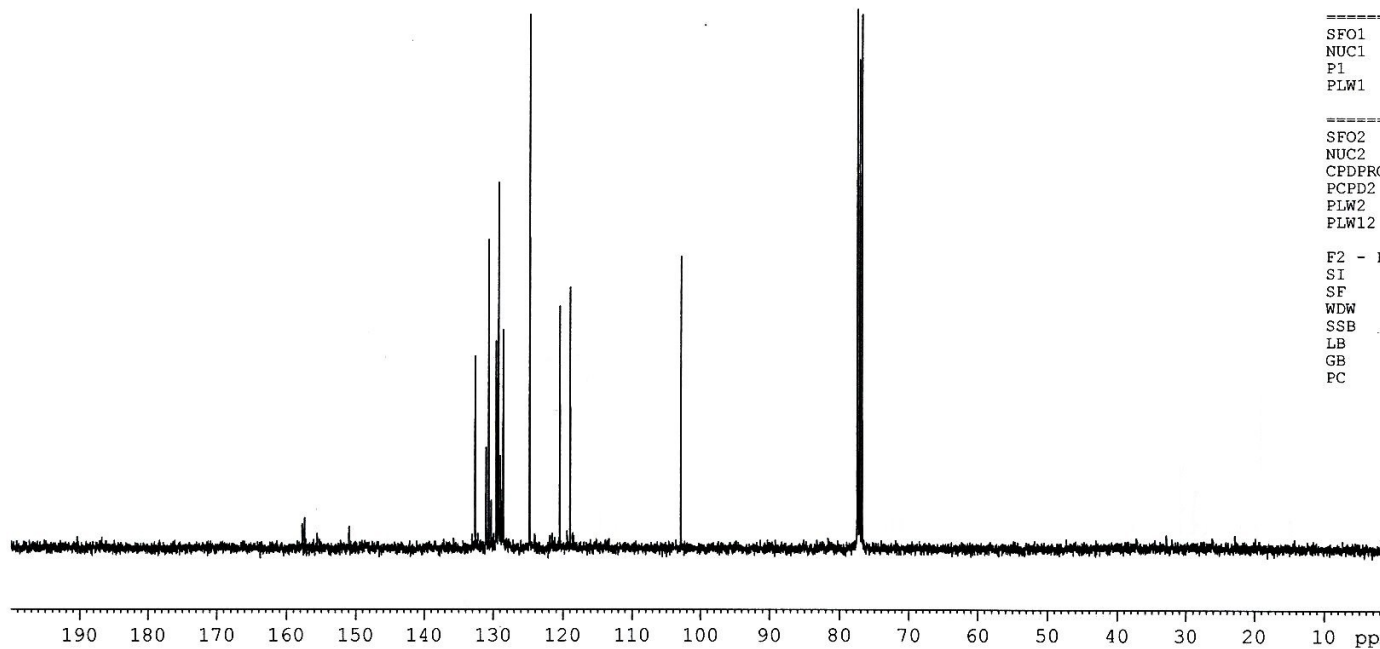
Current Data Parameters
NAME Dr.A.HAJRA 2016
EXPNO 1392
PROCNO 1

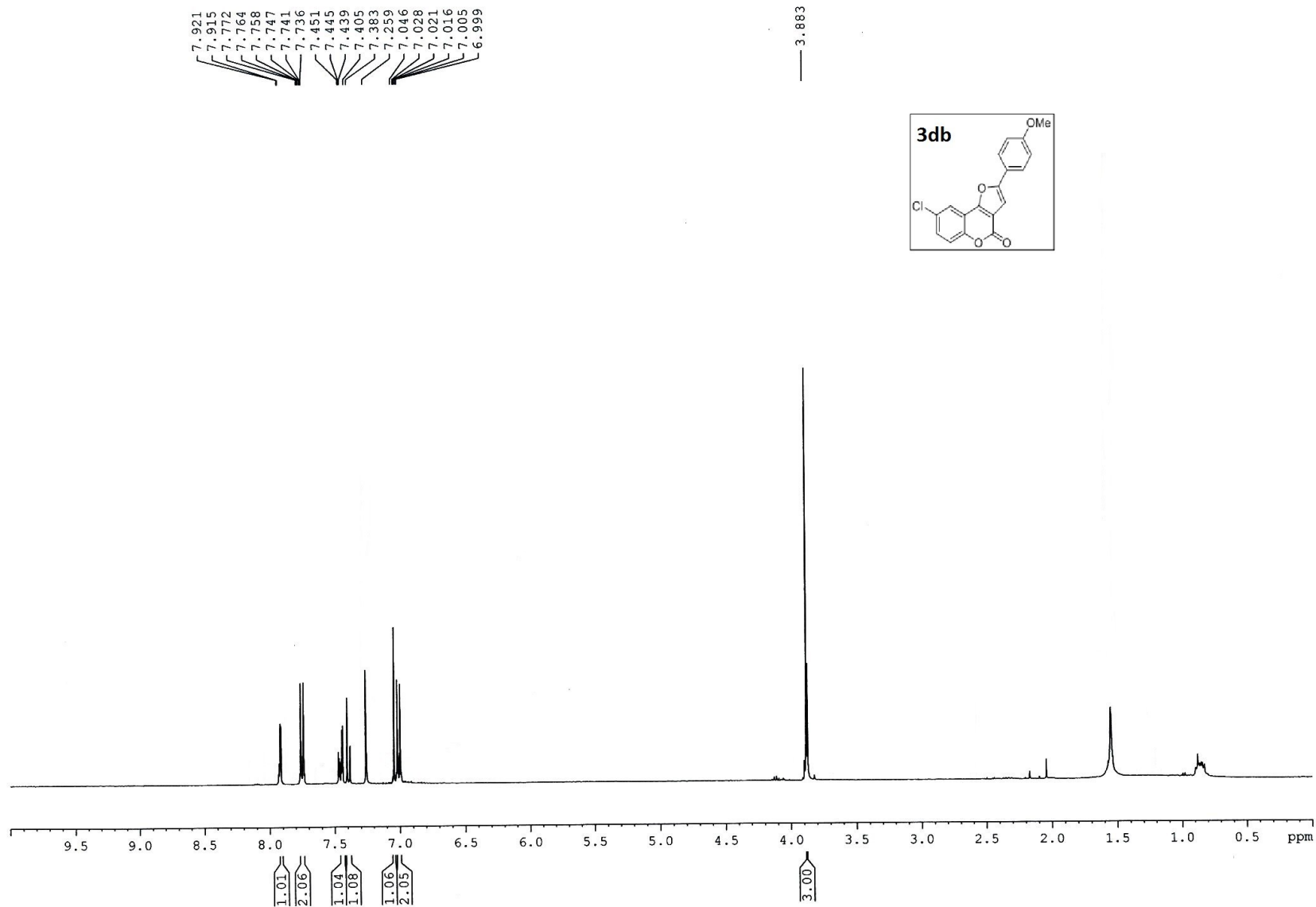
F2 - Acquisition Parameters
Date_ 20161217
Time 15.06
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 186.42
DW 20.800 usec
DE 6.50 usec
TE 296.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

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

===== CHANNEL f2 =====
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W

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



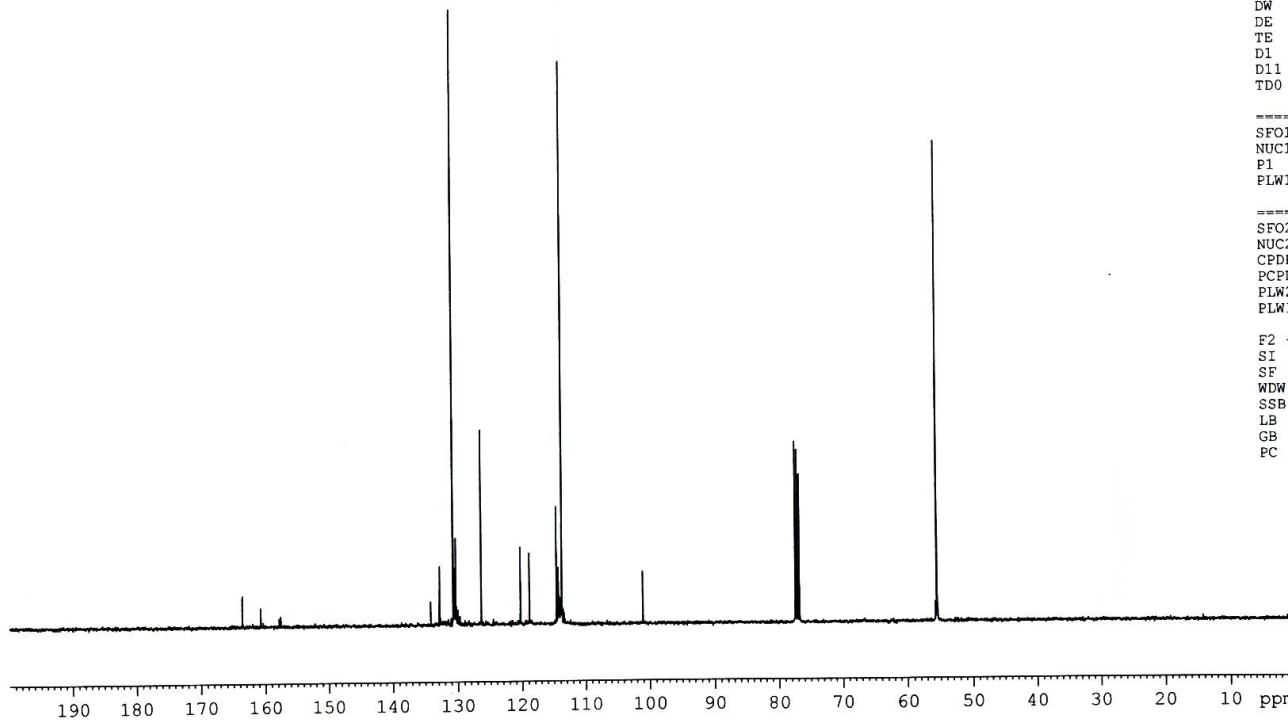
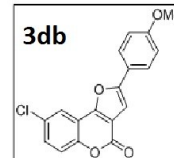


163.59
160.76
157.47

134.13
132.76
130.69
130.45
130.29
126.38
120.26
118.86
114.65
113.78
101.09

77.48
77.16
76.84

55.56



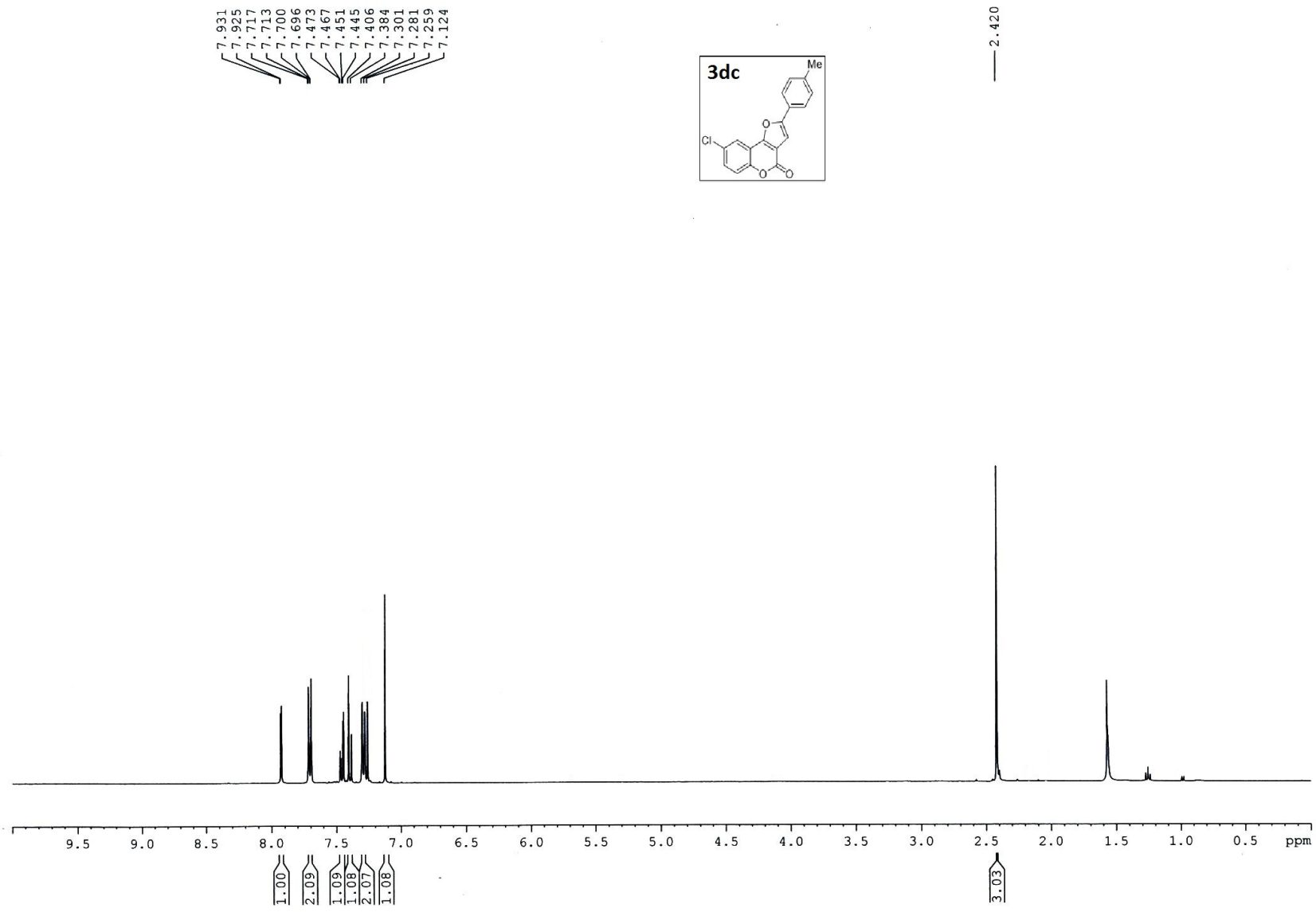
Current Data Parameters
NAME Dr.A.HAJRA 2016
EXPNO 1419
PROCNO 1

F2 - Acquisition Parameters
Date_ 20161220
Time 17.33
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 298.0 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
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W

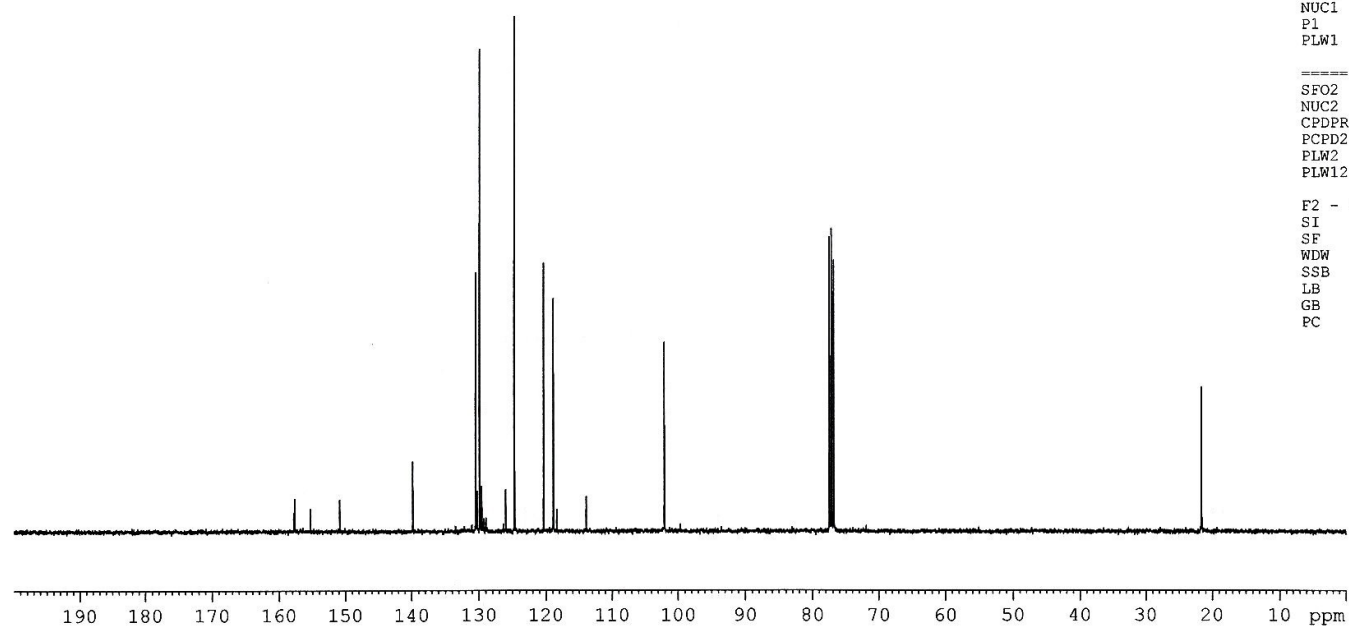
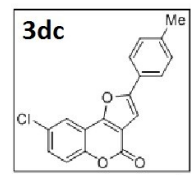
F2 - Processing parameters
SI 16384
SF 100.6177870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



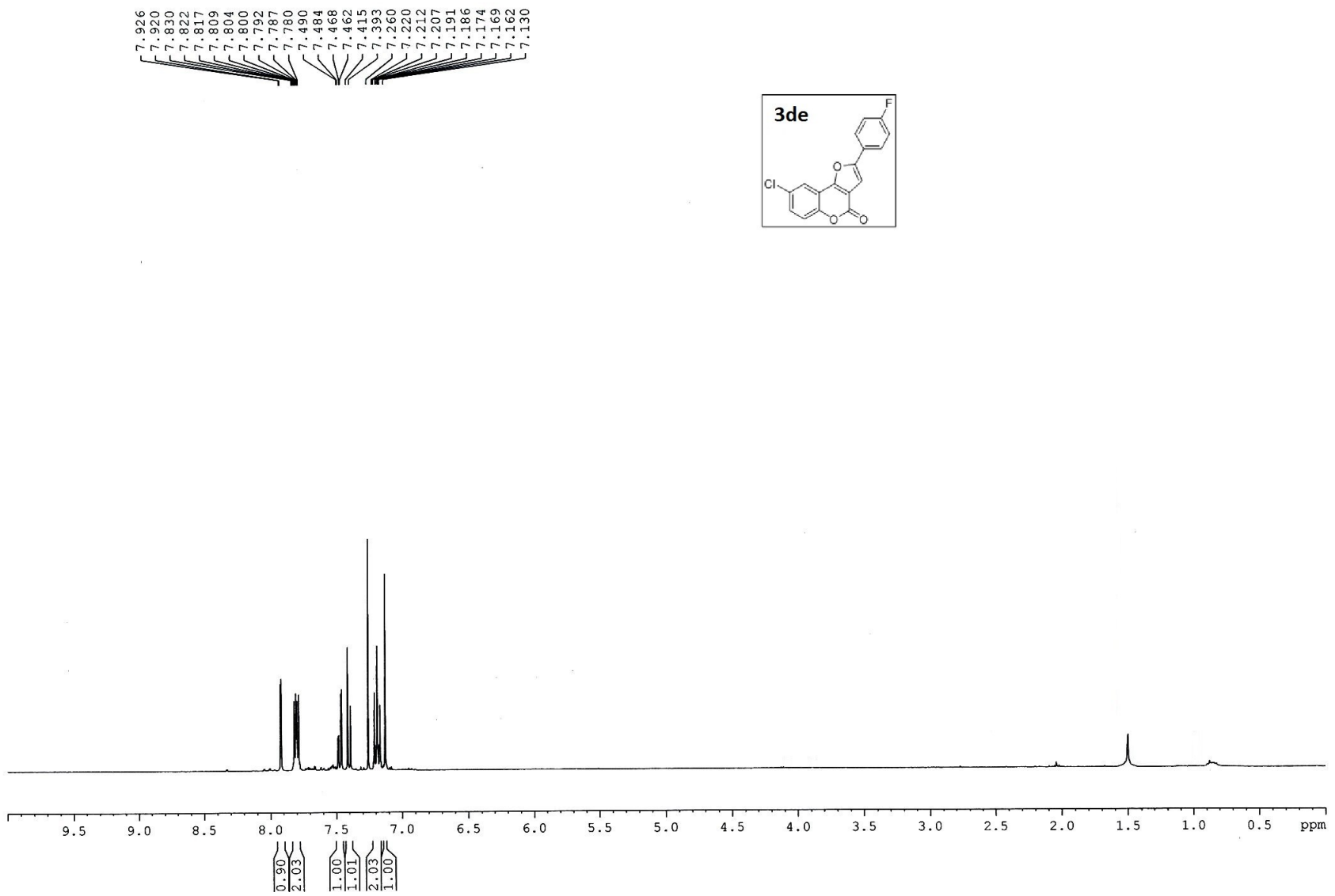
157.69
 155.41
 150.90
 139.84
 130.47
 130.25
 129.90
 129.61
 126.05
 124.74
 121.23
 120.38
 118.92
 113.96
 102.07

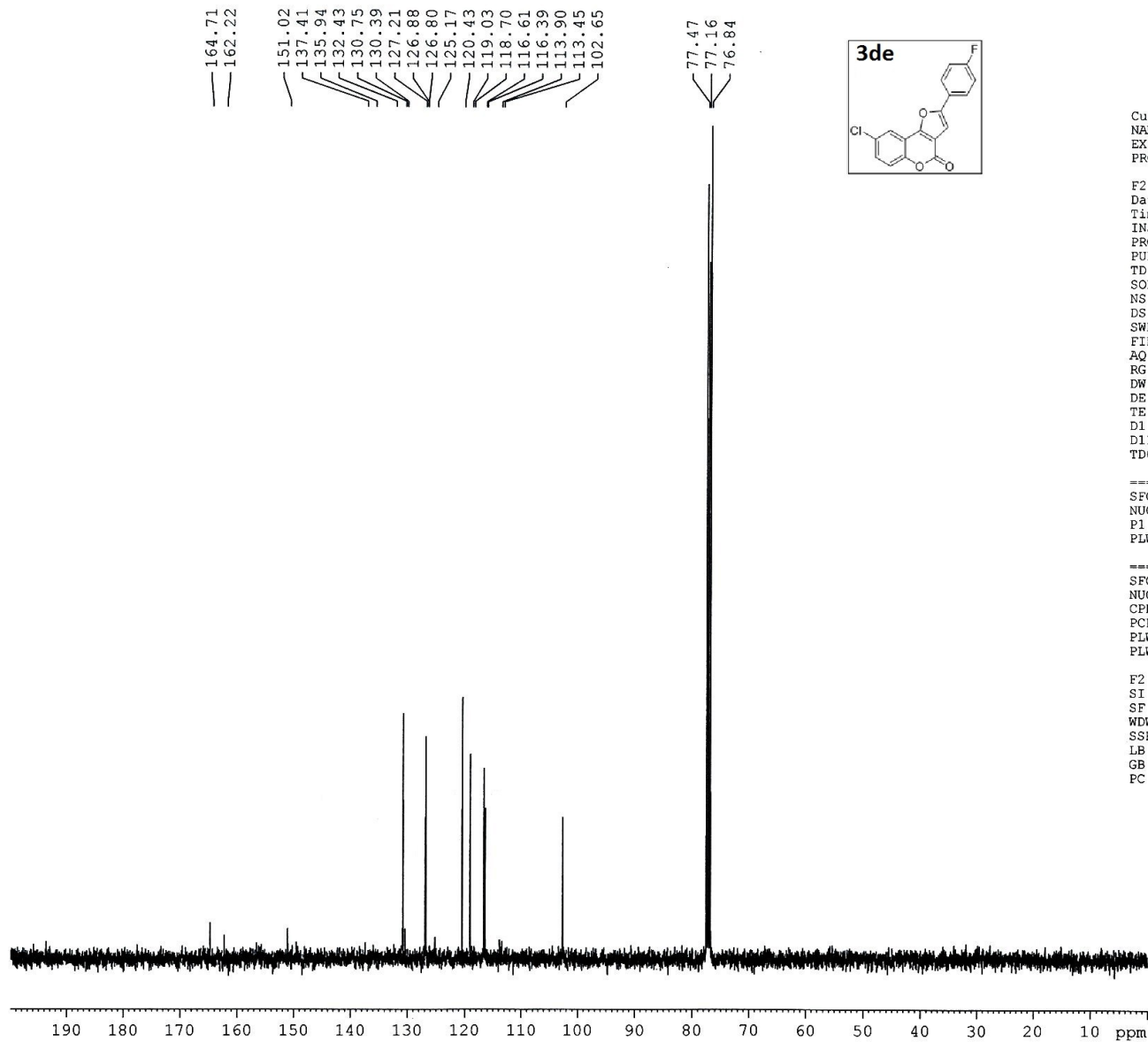
77.48
 77.16
 76.84

21.58



Current Data Parameters
 NAME Dr.A.HAJRA 2016
 EXPNO 1389
 PROCNO 1
 F2 - Acquisition Parameters
 Date_ 20161217
 Time 11.45
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDC13
 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 295.3 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
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W
 F2 - Processing parameters
 SI 16384
 SF 100.6177855 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40





```

Current Data Parameters
NAME      Dr.A.HAJRA 2016
EXPNO     1407
PROCNO    1

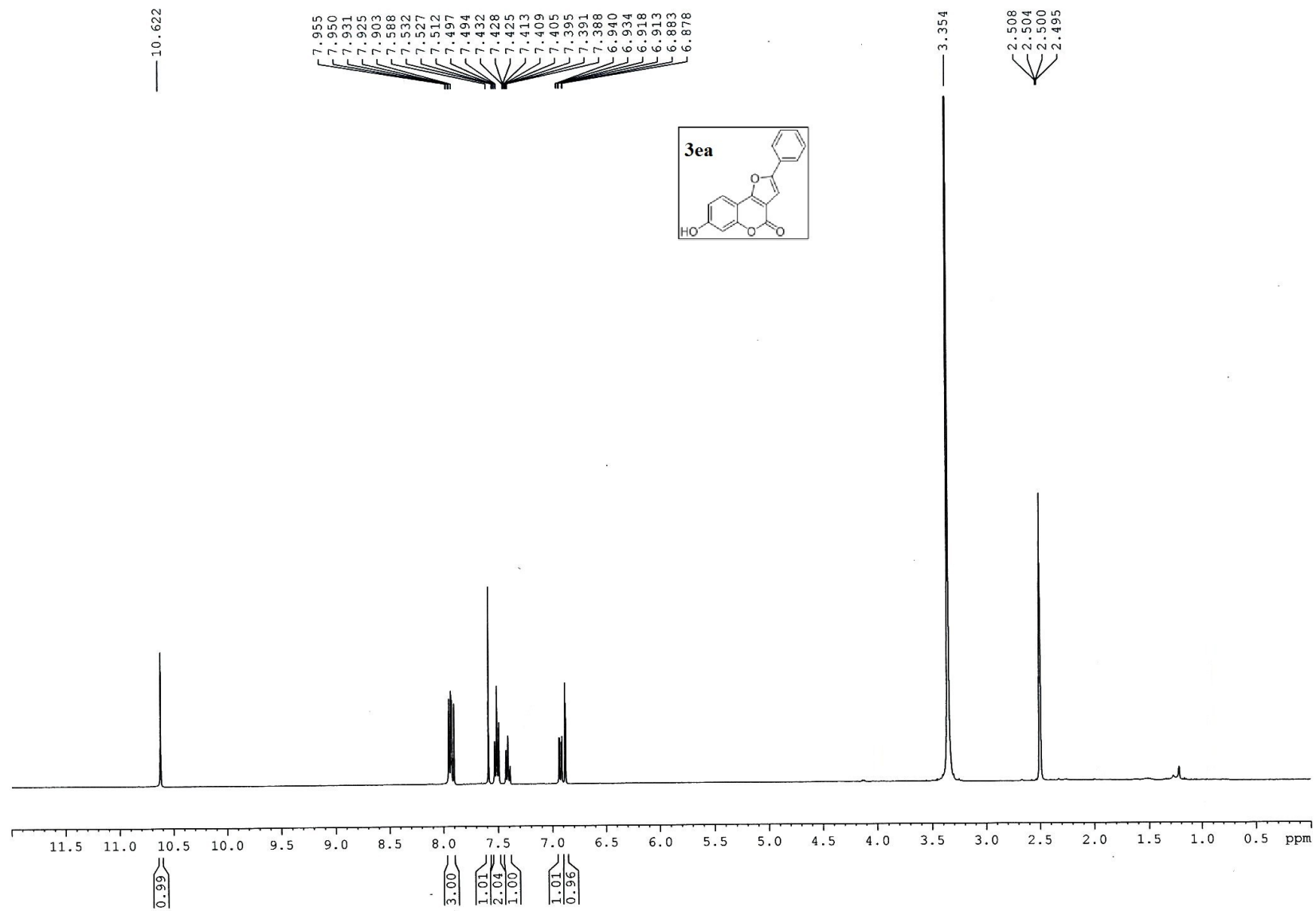
F2 - Acquisition Parameters
Date_     20161218
Time      20.16
INSTRUM   spect
PROBHD    5 mm PABBO BB/
PULPROG   zgdc
TD         32768
SOLVENT   CDCl3
NS         2048
DS         2
SWH        24038.461 Hz
FIDRES     0.733596 Hz
AQ         0.6815744 sec
RG         186.42
DW         20.800 usec
DE         6.50 usec
TE         298.0 K
D1         2.00000000 sec
D11        0.03000000 sec
TD0        1

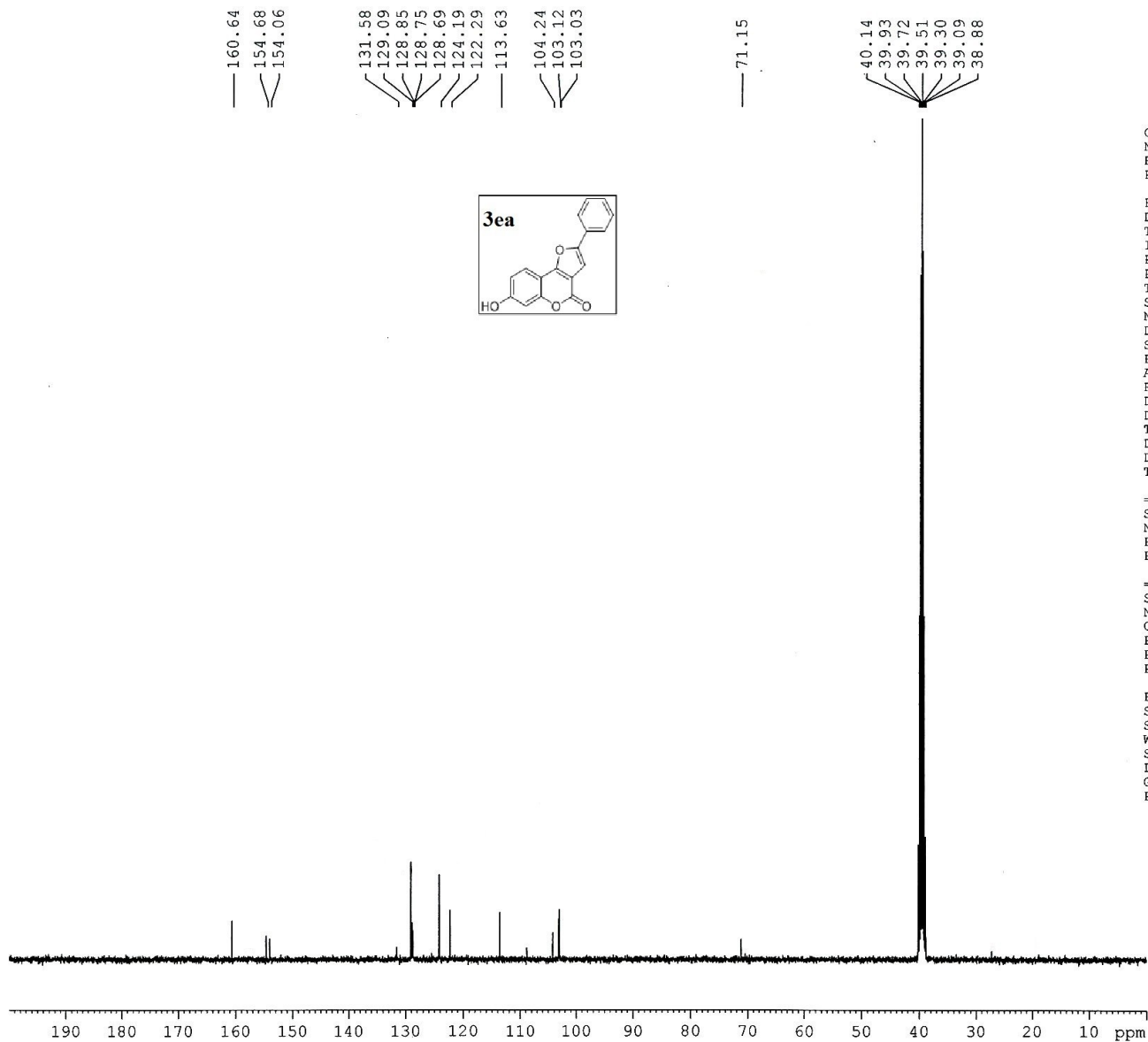
===== CHANNEL f1 =====
SFO1      100.6278588 MHz
NUC1       13C
P1         8.90 usec
PLW1       54.00000000 W

===== CHANNEL f2 =====
SFO2      400.1516006 MHz
NUC2       1H
CPDPRG[2]  waltz16
PCPD2     90.00 usec
PLW2      12.00000000 W
PLW12     0.32231000 W

F2 - Processing parameters
SI         16384
SF         100.6177831 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40

```





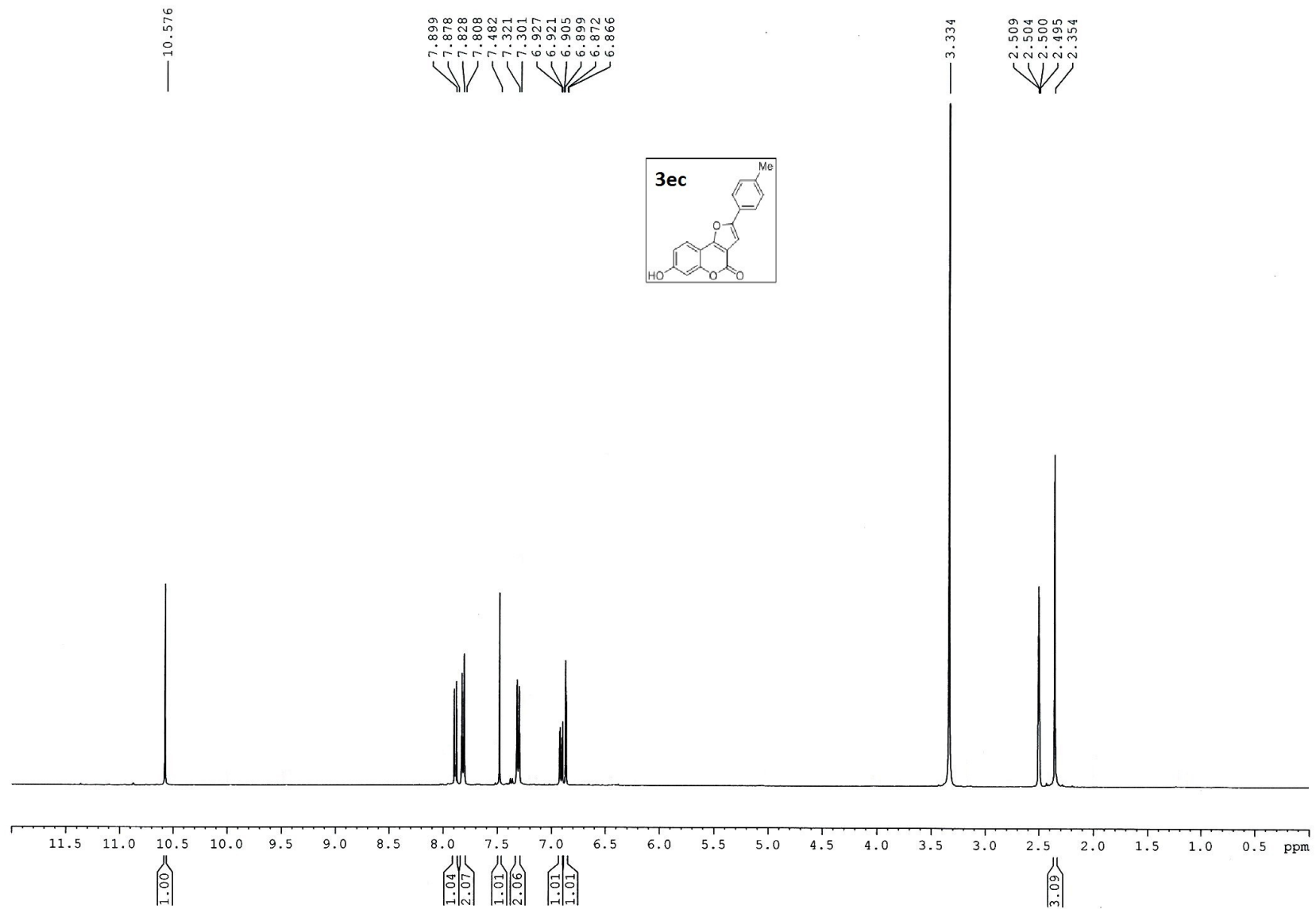
Current Data Parameters
 NAME Dr.A.HAJRA 2016
 EXPNO 1377
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20161214
 Time 20.16
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT DMSO
 NS 600
 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 297.3 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
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W

F2 - Processing parameters
 SI 16384
 SF 100.6178437 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



160.54
157.64
157.12
154.93
153.99

138.53

129.65
126.09
124.17
122.22

113.59
108.82
104.29
103.02
102.26

40.14
39.93
39.72
39.51
39.30
39.09
38.89

20.97



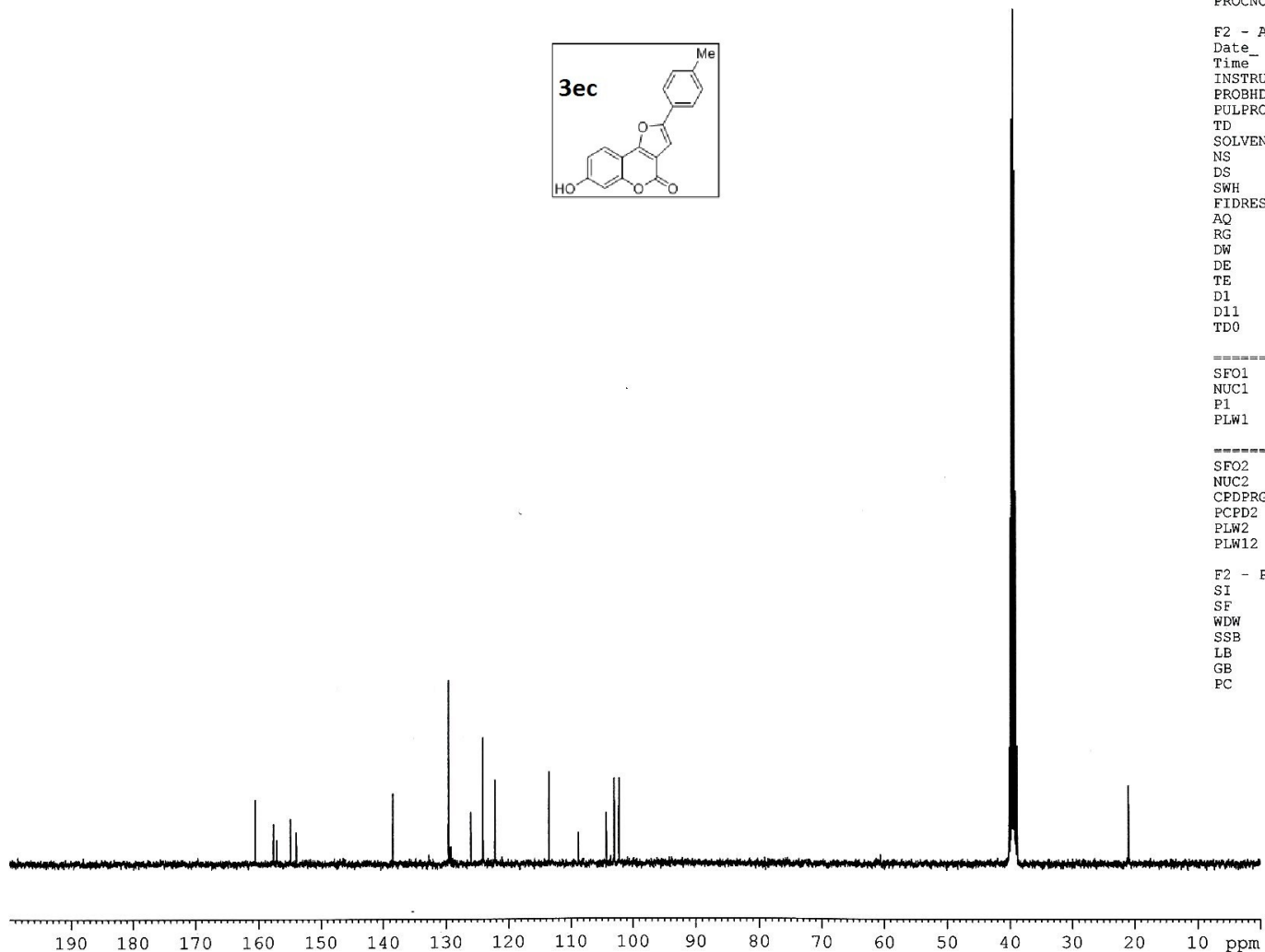
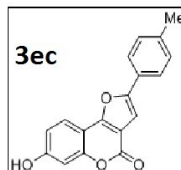
Current Data Parameters
NAME Dr.A.HAJRA 2016
EXPNO 1384
PROCNO 1

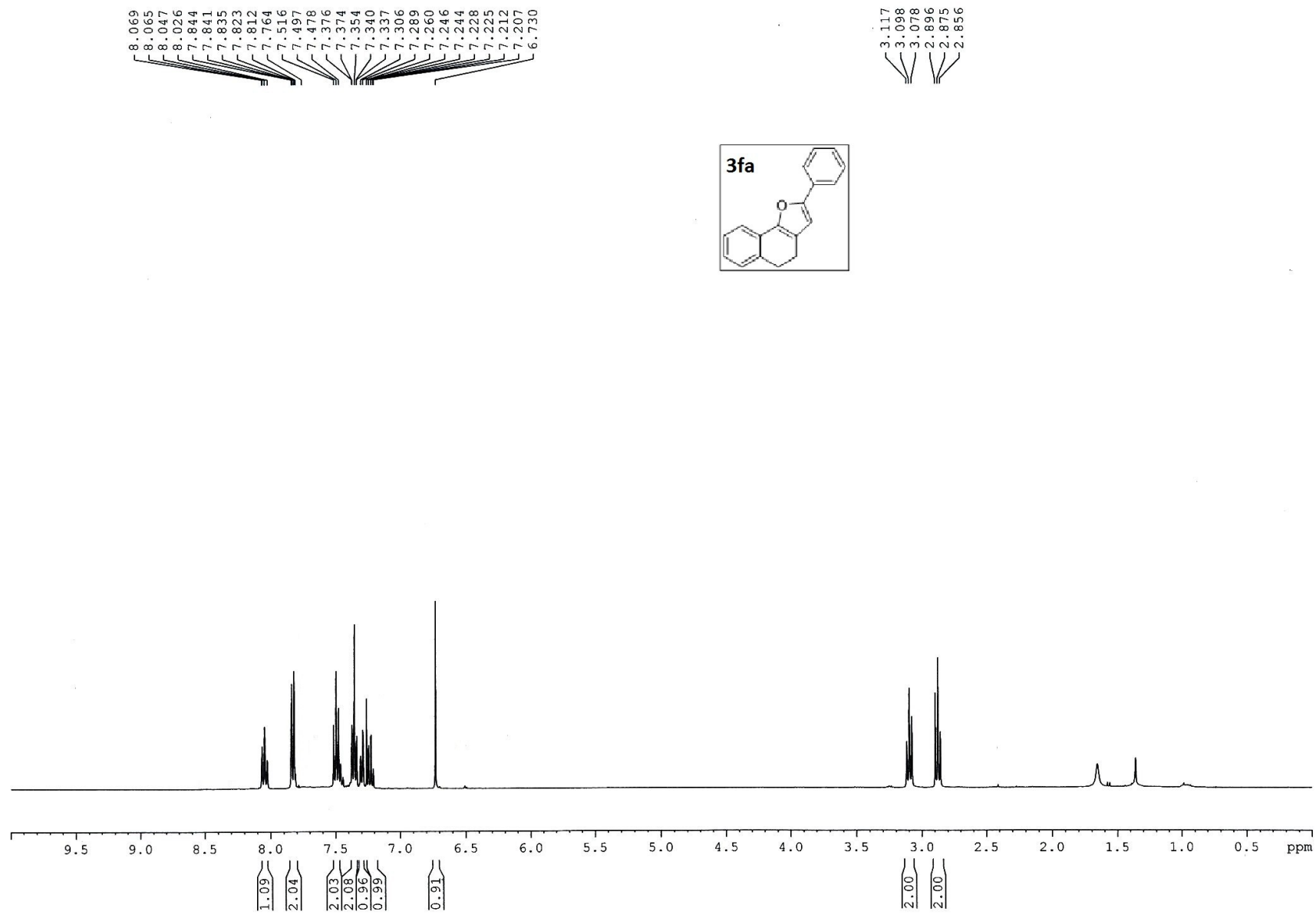
F2 - Acquisition Parameters
Date_ 20161216
Time 10.58
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT DMSO
NS 600
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 106.66
DW 20.800 usec
DE 6.50 usec
TE 294.4 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

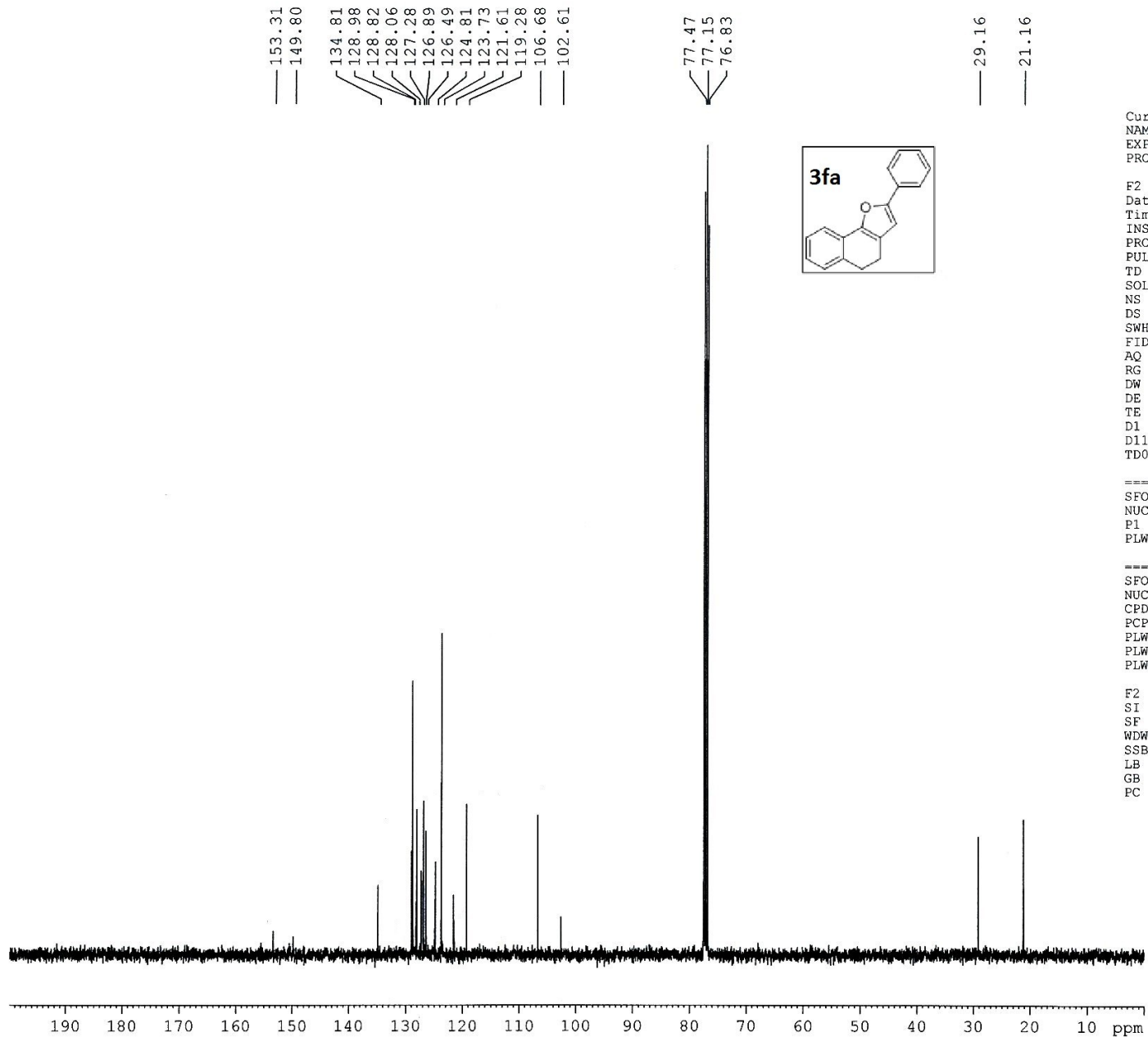
===== CHANNEL f1 =====
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

===== CHANNEL f2 =====
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W

F2 - Processing parameters
SI 16384
SF 100.6178417 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40







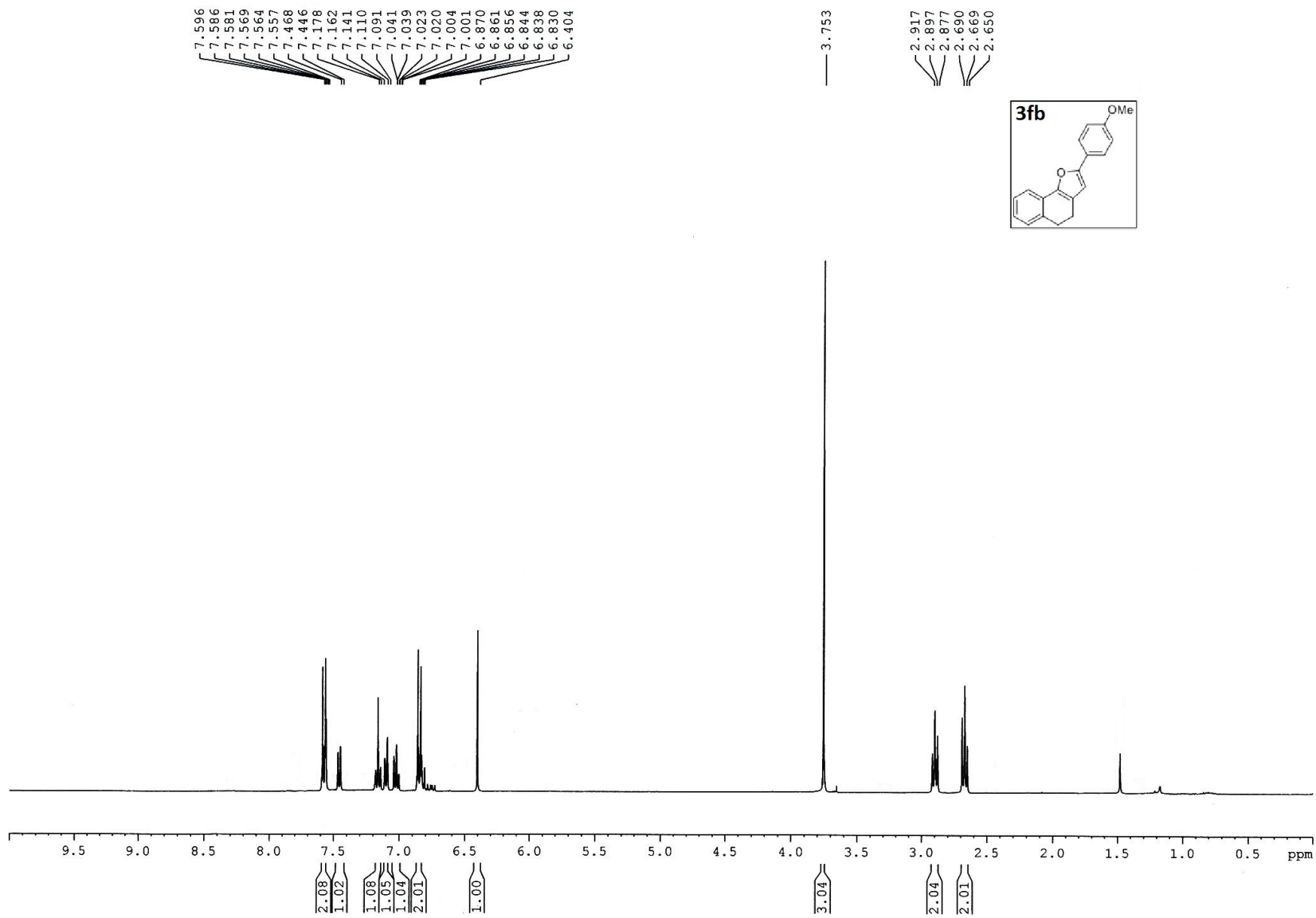
Current Data Parameters
 NAME Dr.A.HAJRA 2017
 EXPNO 91
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20170113
 Time 18.45
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 380
 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 295.8 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
 CPDPRG[2] 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
 PC 1.40



— 159.06
 — 153.40
 — 149.11
 — 134.58
 — 128.22
 — 128.00
 — 126.84
 — 126.17
 — 125.18
 — 124.21
 — 121.65
 — 119.02
 — 114.41
 — 114.27
 — 105.14

77.47
 77.15
 76.83

— 55.45

— 29.17
 — 21.19



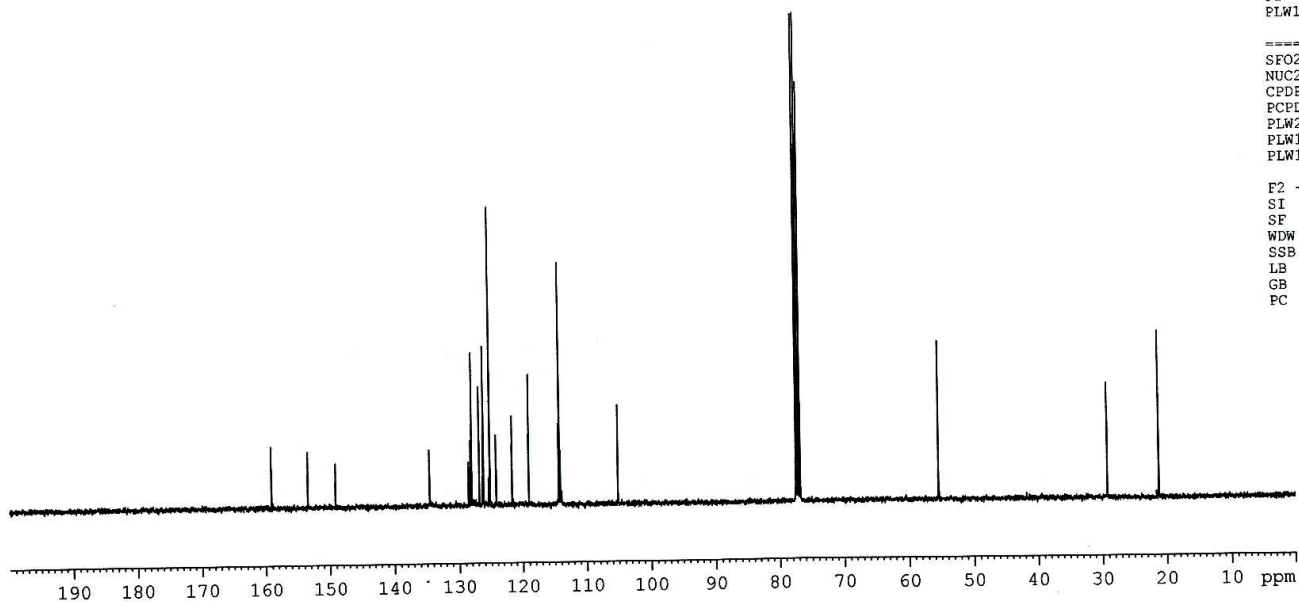
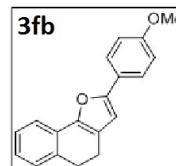
Current Data Parameters
 NAME Dr.A.HAJRA 2017
 EXPNO 154
 PROCNO 1

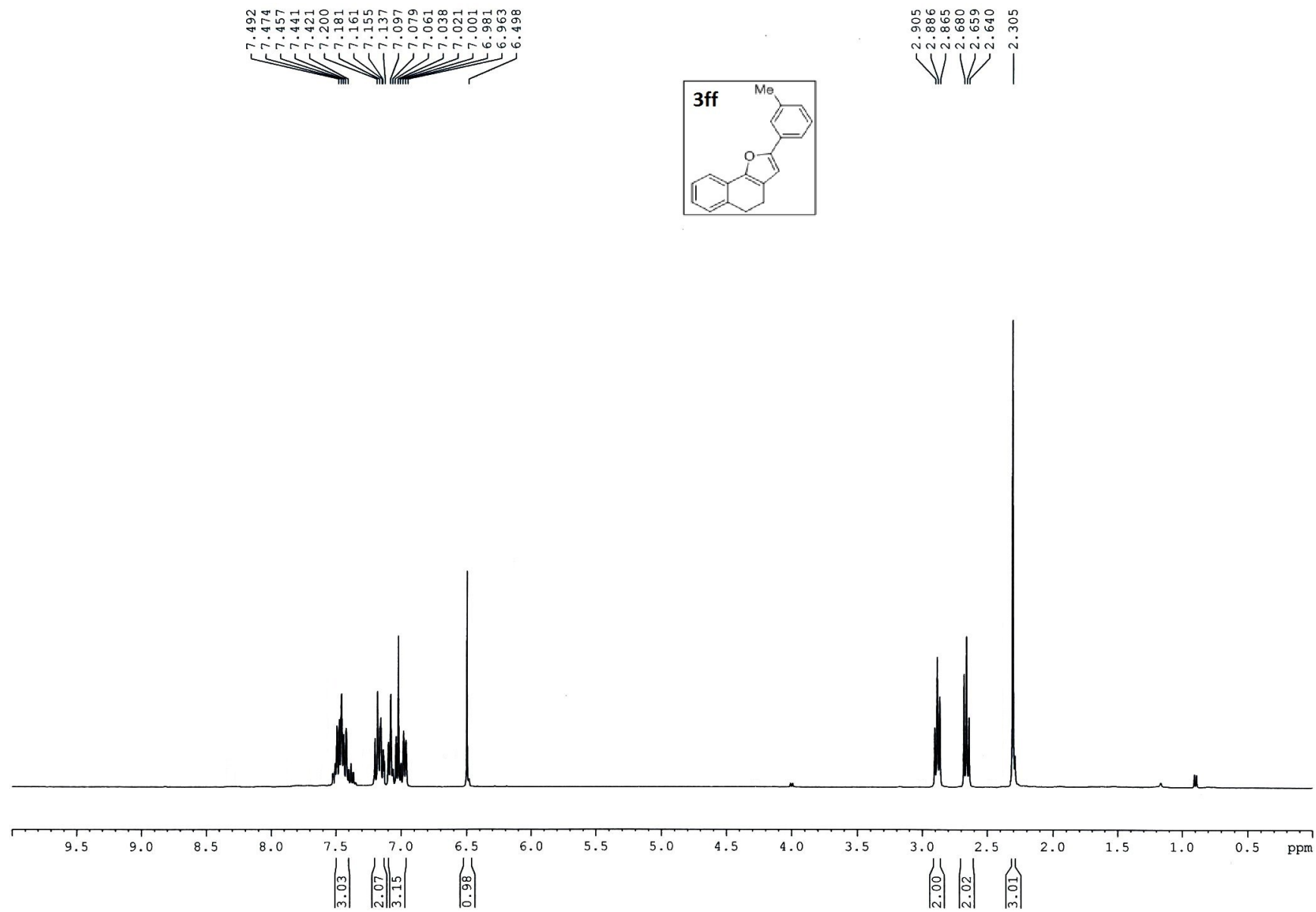
F2 - Acquisition Parameters
 Date_ 20170123
 Time 20.40
 INSTRUM spect
 PROBHD 5 mm PABBO BB/
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 640
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 0.6815744 sec
 RG 106.66
 DW 20.800 usec
 DE 6.50 usec
 TE 292.7 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TDO 1

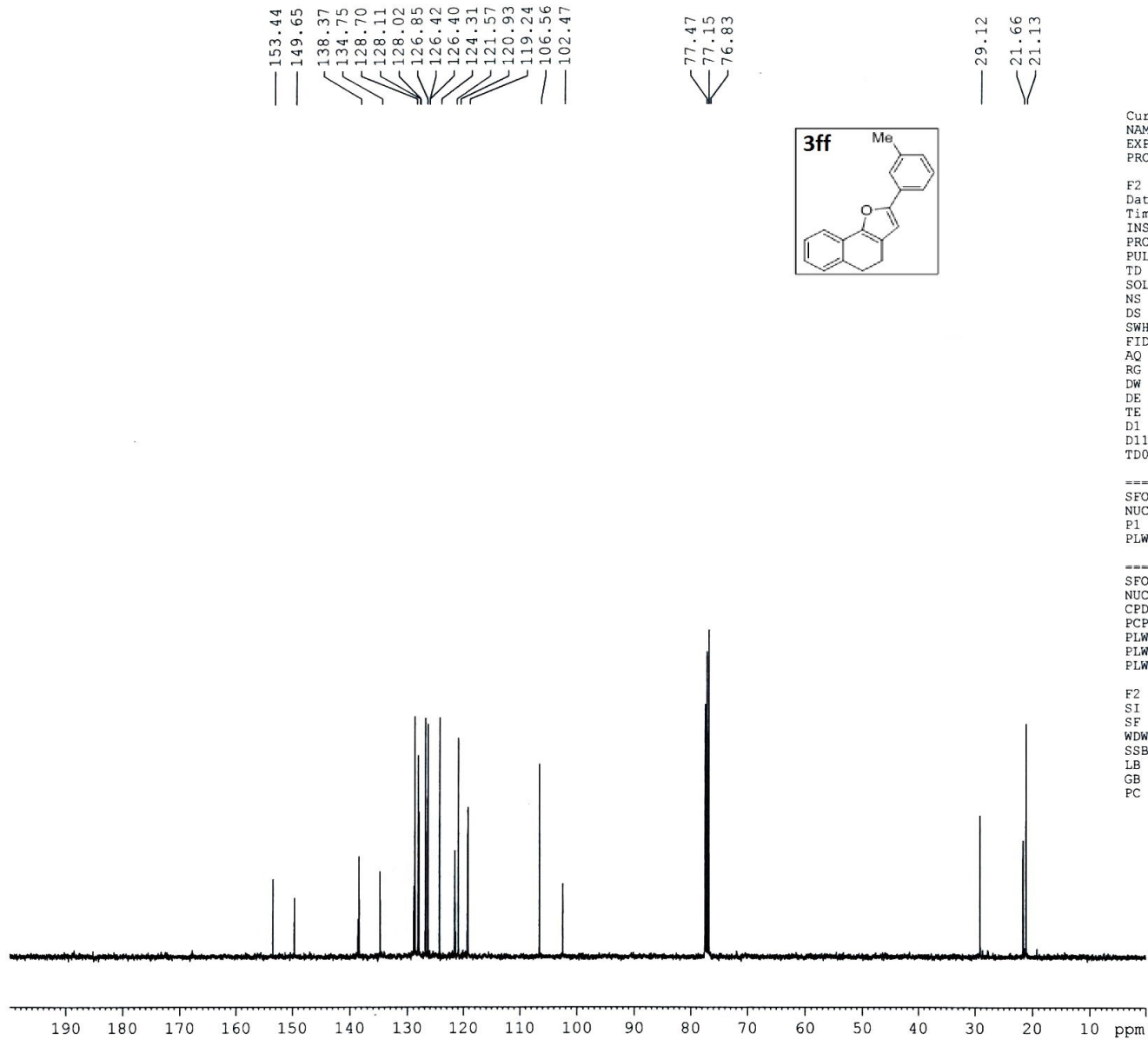
===== CHANNEL f1 =====
 SFO1 100.6278588 MHz
 NUC1 13C
 P1 8.90 usec
 PLW1 54.00000000 W

===== CHANNEL f2 =====
 SFO2 400.1516006 MHz
 NUC2 1H
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W
 PLW13 0.16212000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177890 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40







Current Data Parameters
 NAME Dr.A.HAJRA 2017
 EXPNO 106
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20170116
 Time_ 18.58
 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 295.4 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
 CPDPRG[2] waltz16
 PCPD2 90.00 usec
 PLW2 12.00000000 W
 PLW12 0.32231000 W
 PLW13 0.16212000 W

F2 - Processing parameters
 SI 16384
 SF 100.6177917 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40