

Supplementary Material

Unequivocal synthesis of substituted thiazolo[3,2-*a*]benzimidazoles

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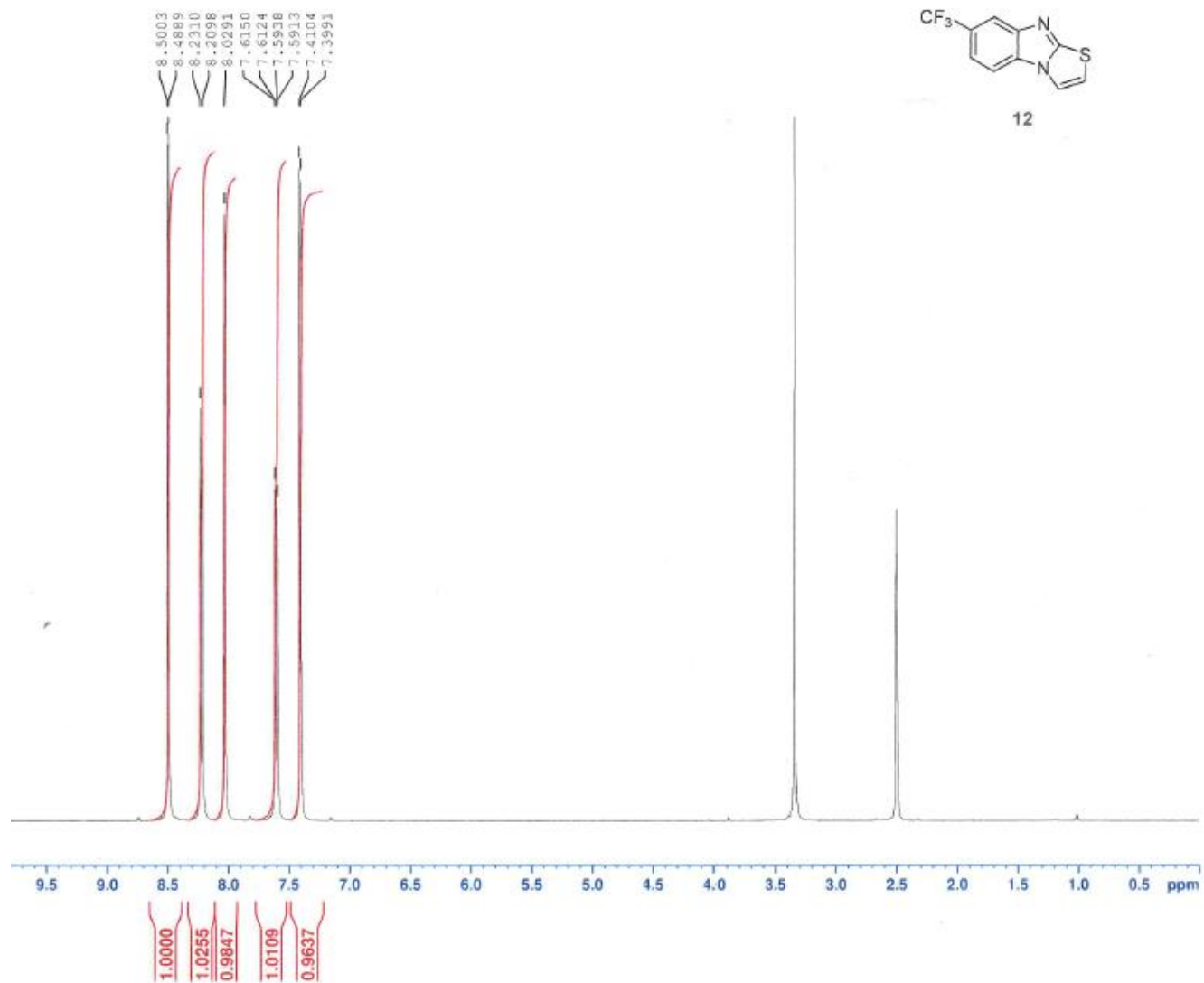
Auckland Cancer Society Research Centre, School of Medical Sciences, Faculty of Medical and Health Sciences, and Maurice Wilkins Centre for Molecular Biodiscovery, The University of Auckland, Private Bag 92019, Auckland 1142, New Zealand

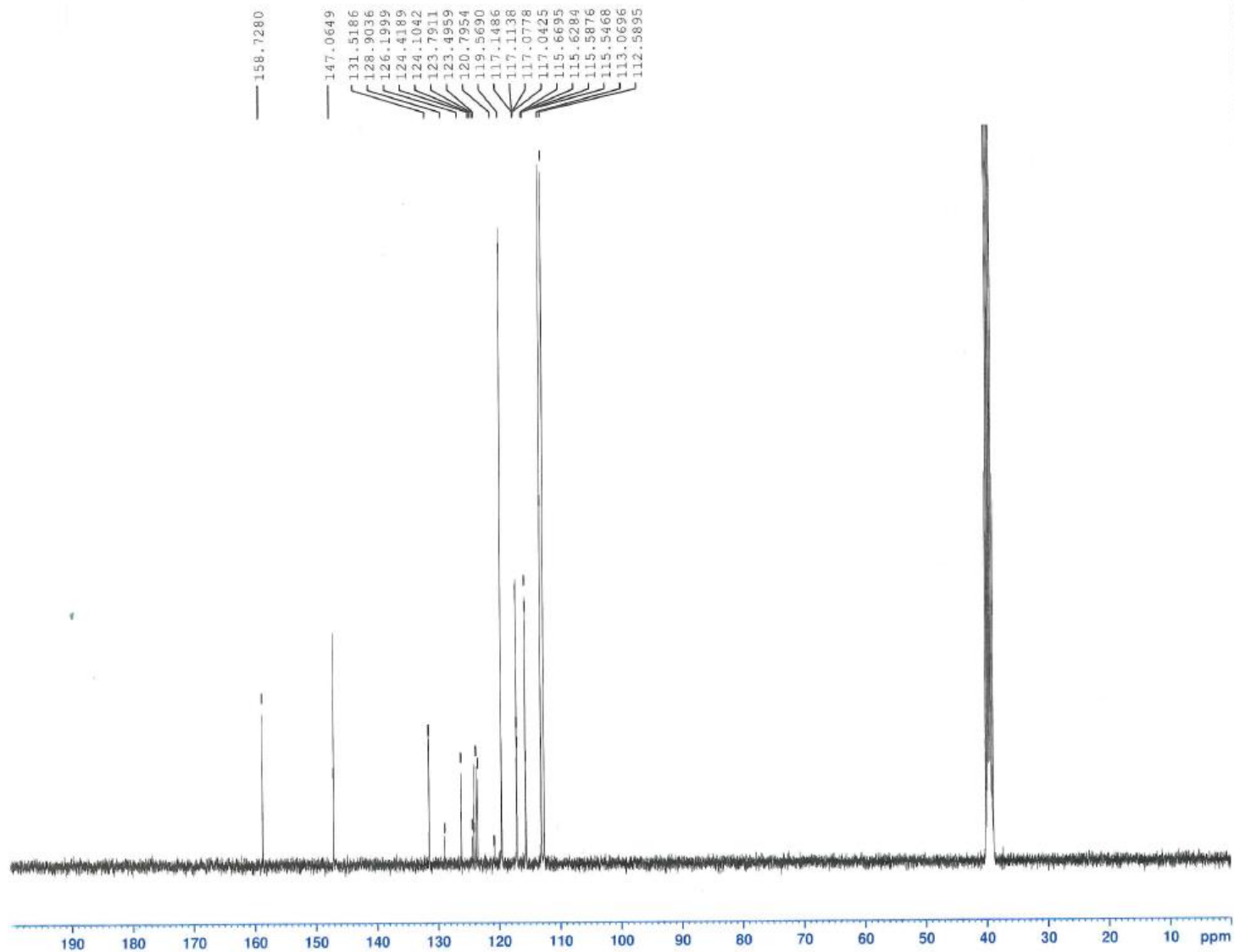
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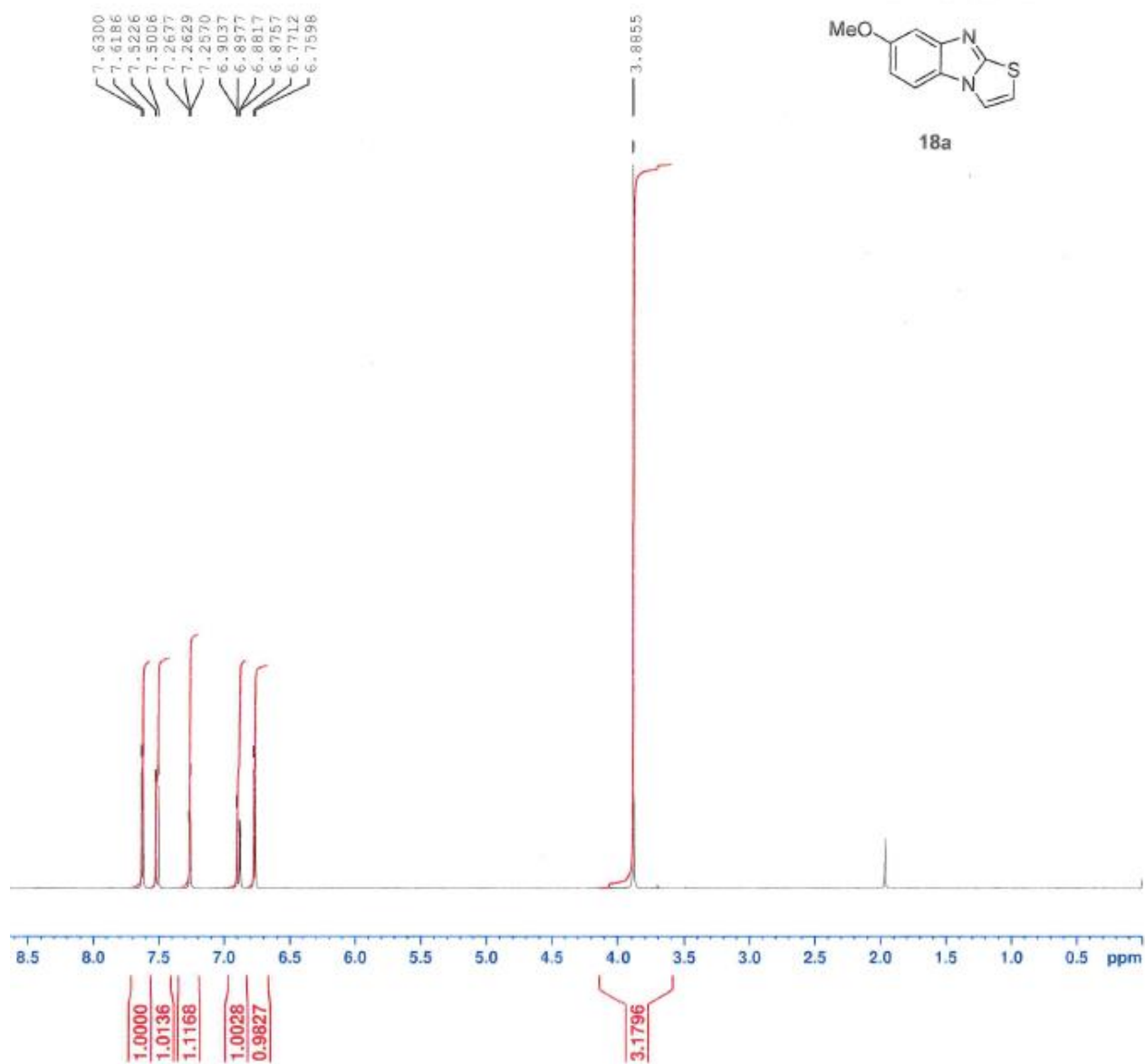


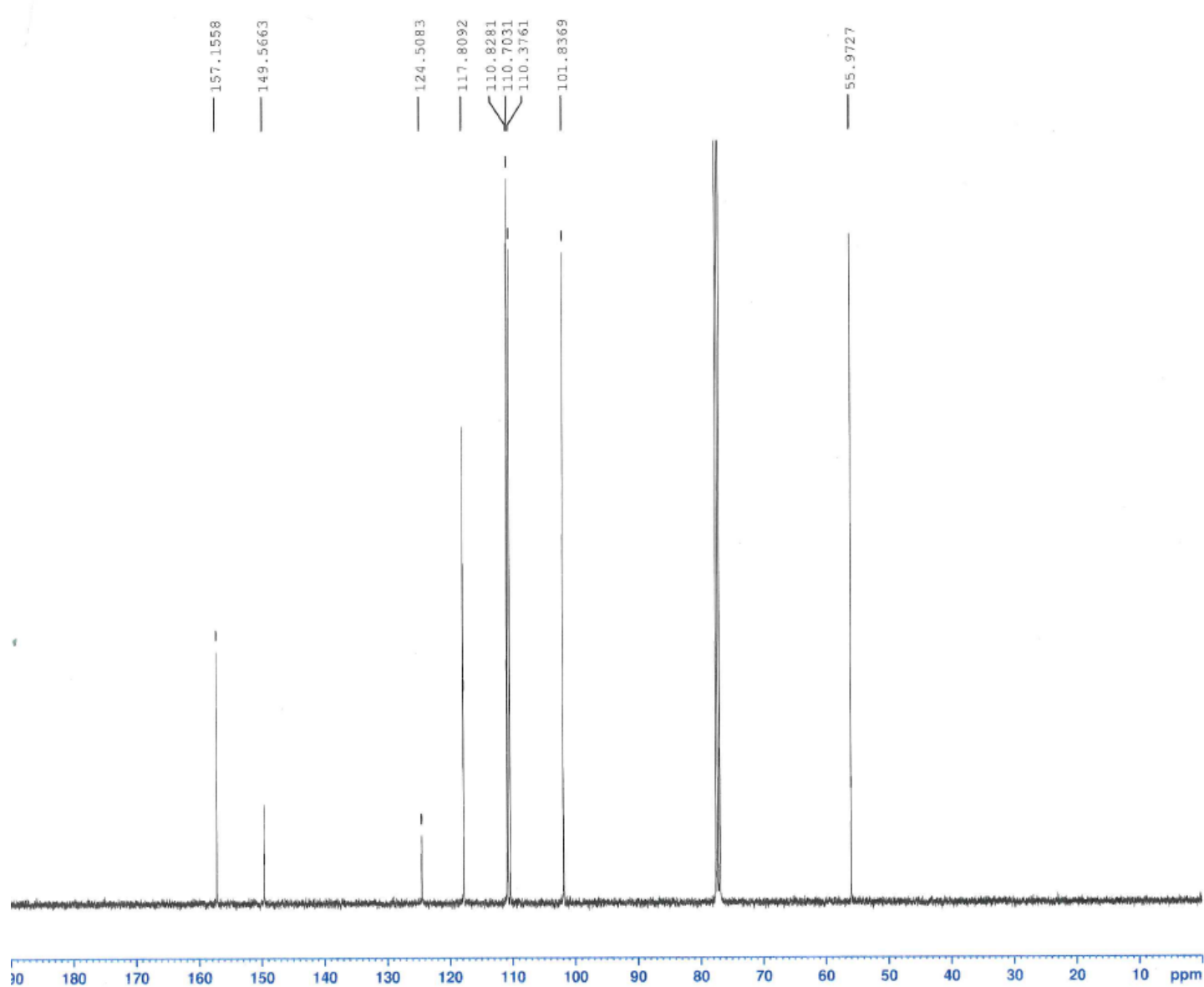
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Current Data Parameters
NAME      May29-2020
EXPNO    7
PROCNO   1

F2 - Acquisition Parameters
Date_    20200529
Time     14.43 h
INSTRUM  spect
PROBHD   zgpg30
PULPROG  zgpg30
TD       65536
SOLVENT  DMSO
NS       1412
DS       4
SWH      24038.461 Hz
FIDRES   0.733598 Hz
AQ       1.3631488 sec
RG       198.55
DN       20.800 usec
DE       6.50 usec
TE       298.1 K
D1       0.63999999 sec
D11      0.03000000 sec
TD0      1
SFO1     100.6228298 MHz
NUC1     13C
P1       10.00 usec
PLW1     48.1739979 W
SFO2     400.1316005 MHz
NUC2     1H
CPDPRG2  waltz16
PCPD2    90.00 usec
PLW2     13.18999981 W
PLW12    0.30142000 W
PLW13    0.15161000 W

F2 - Processing parameters
SI       32768
SF       100.6128171 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
    
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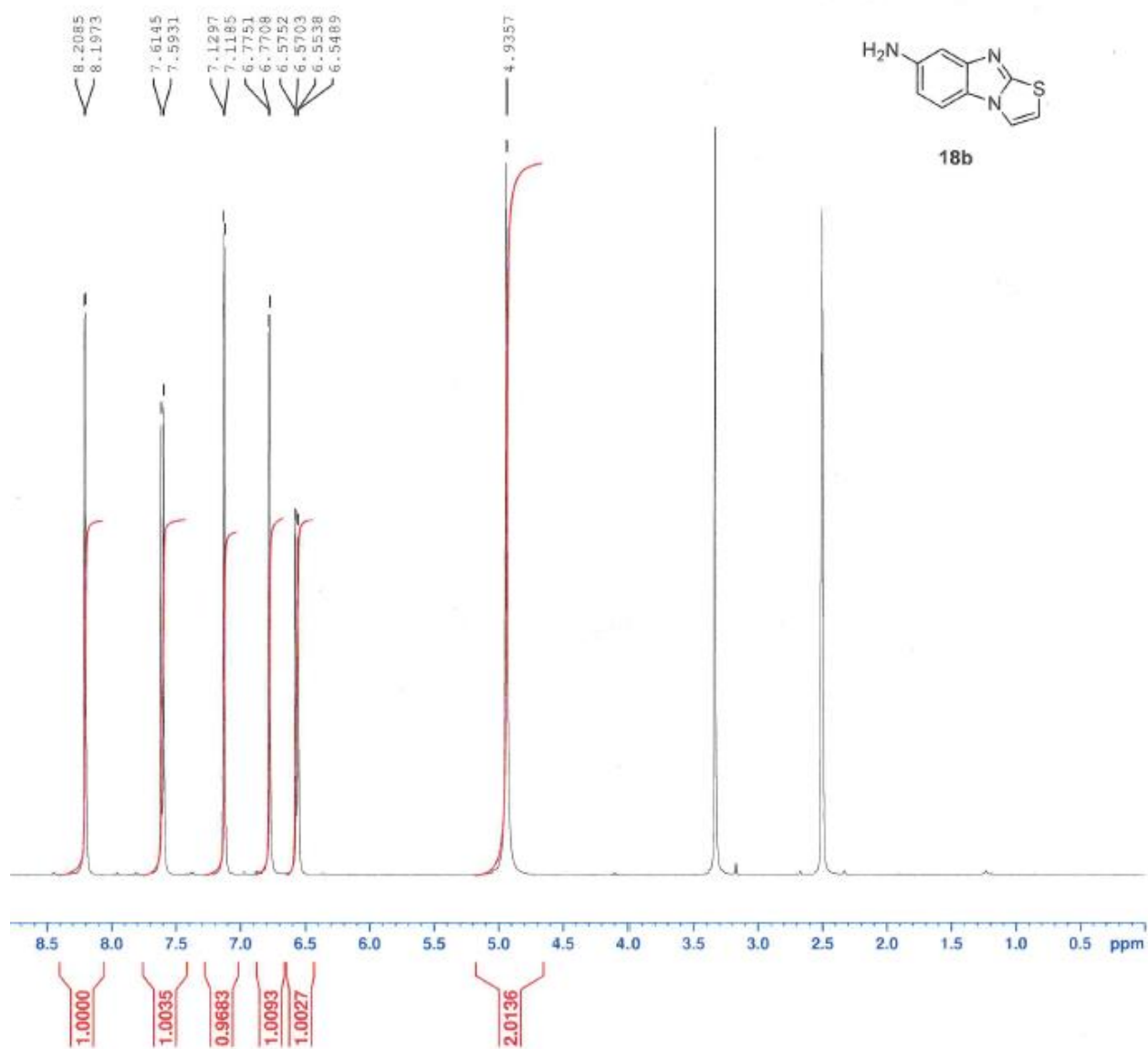


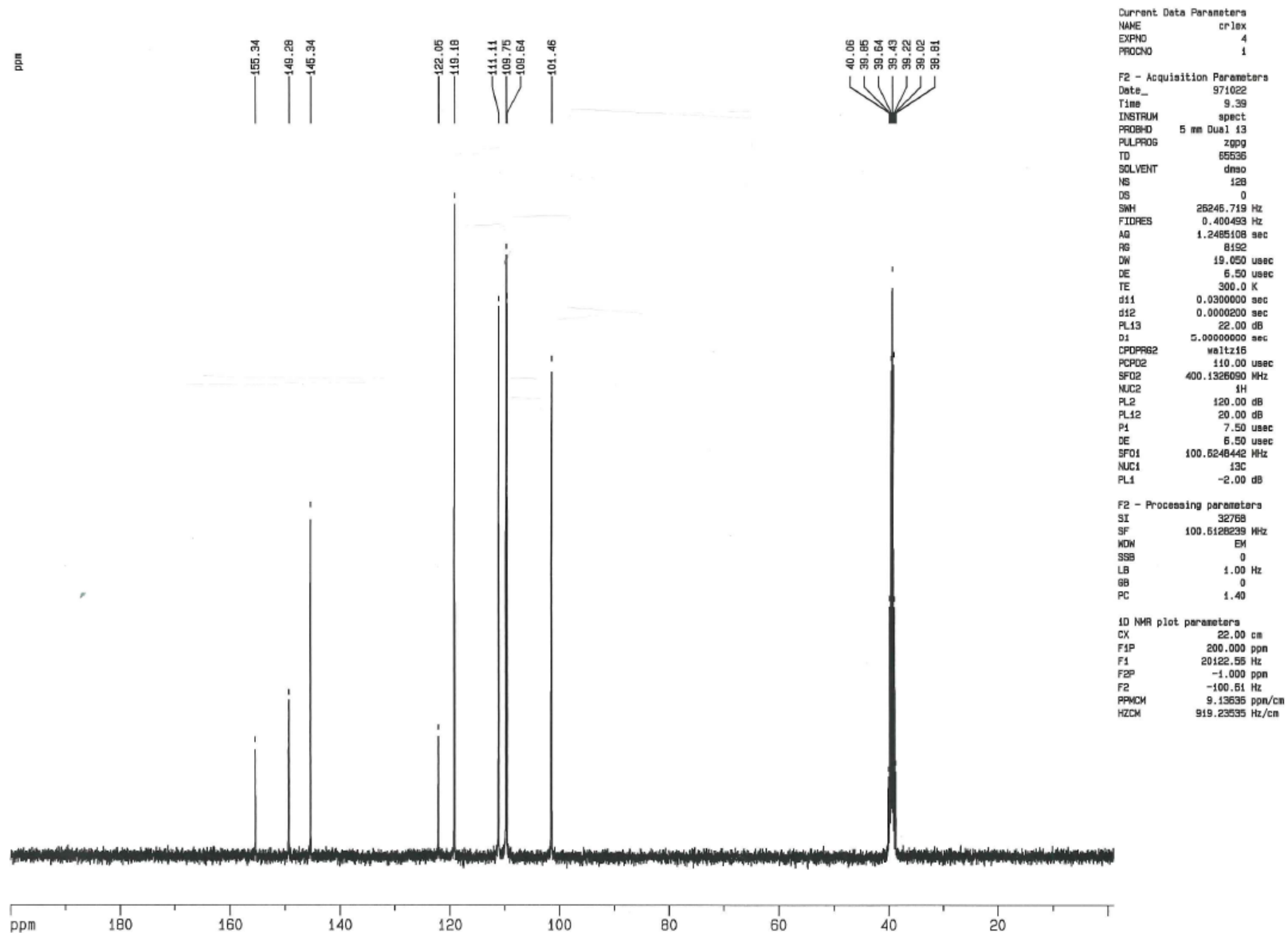


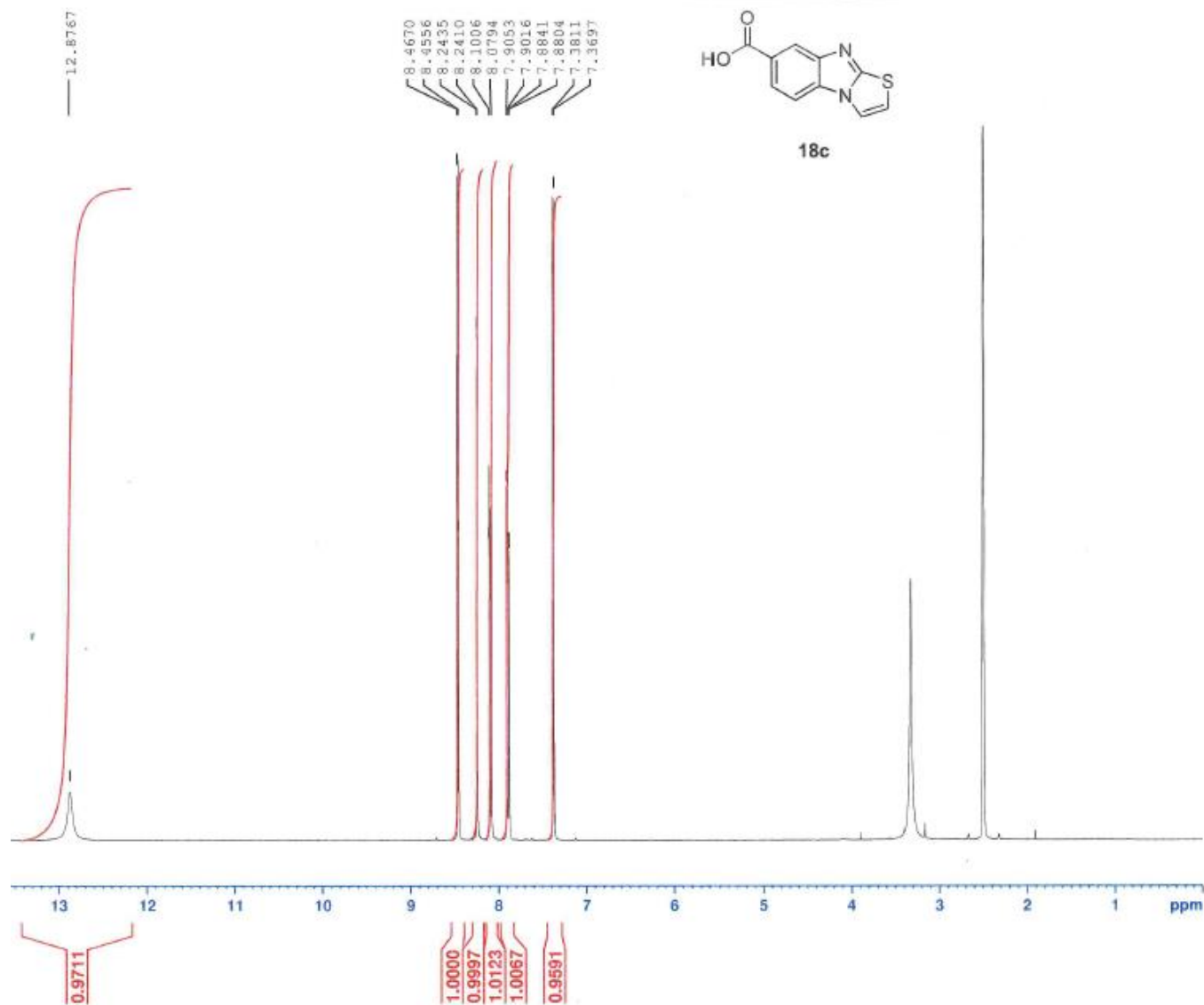
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Current Data Parameters
NAME      Jun23-2020
EXPNO    22
PROCNO   1

F2 - Acquisition Parameters
Date_    20200623
Time     17.44 h
INSTRUM  spect
PROBHD   Z108618_0860 4
PULPROG  zgpg50
TD       65536
SOLVENT  CDCl3
NS       2000
DS       4
SMH      24038.461 Hz
FIDRES   0.733596 Hz
AQ       1.3631468 sec
RG       198.55
DW       20.800 usec
DE       6.50 usec
TE       298.0 K
D1       0.63999999 sec
D11      0.03000000 sec
TD0      1
SF01     100.6228298 MHz
NUC1     13C
P1       10.00 usec
PLW1     48.17399979 W
SF02     400.1316005 MHz
NUC2     1H
CPDPRG12 walz16
PCPD2    90.00 usec
PLW2     13.19999981 W
PLW12    0.30142000 W
PLW13    0.15161000 W

F2 - Processing parameters
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SF       100.6127514 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
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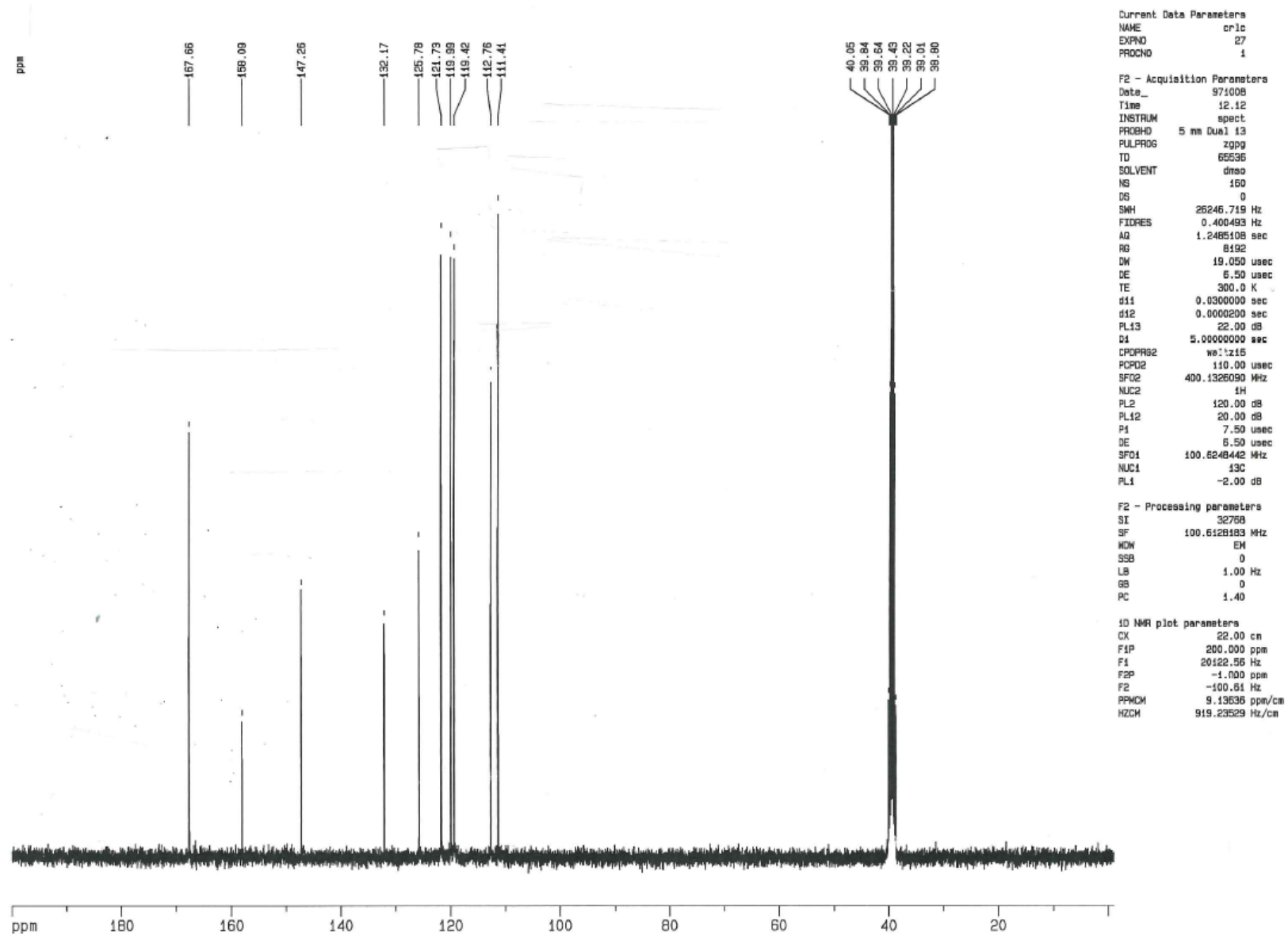


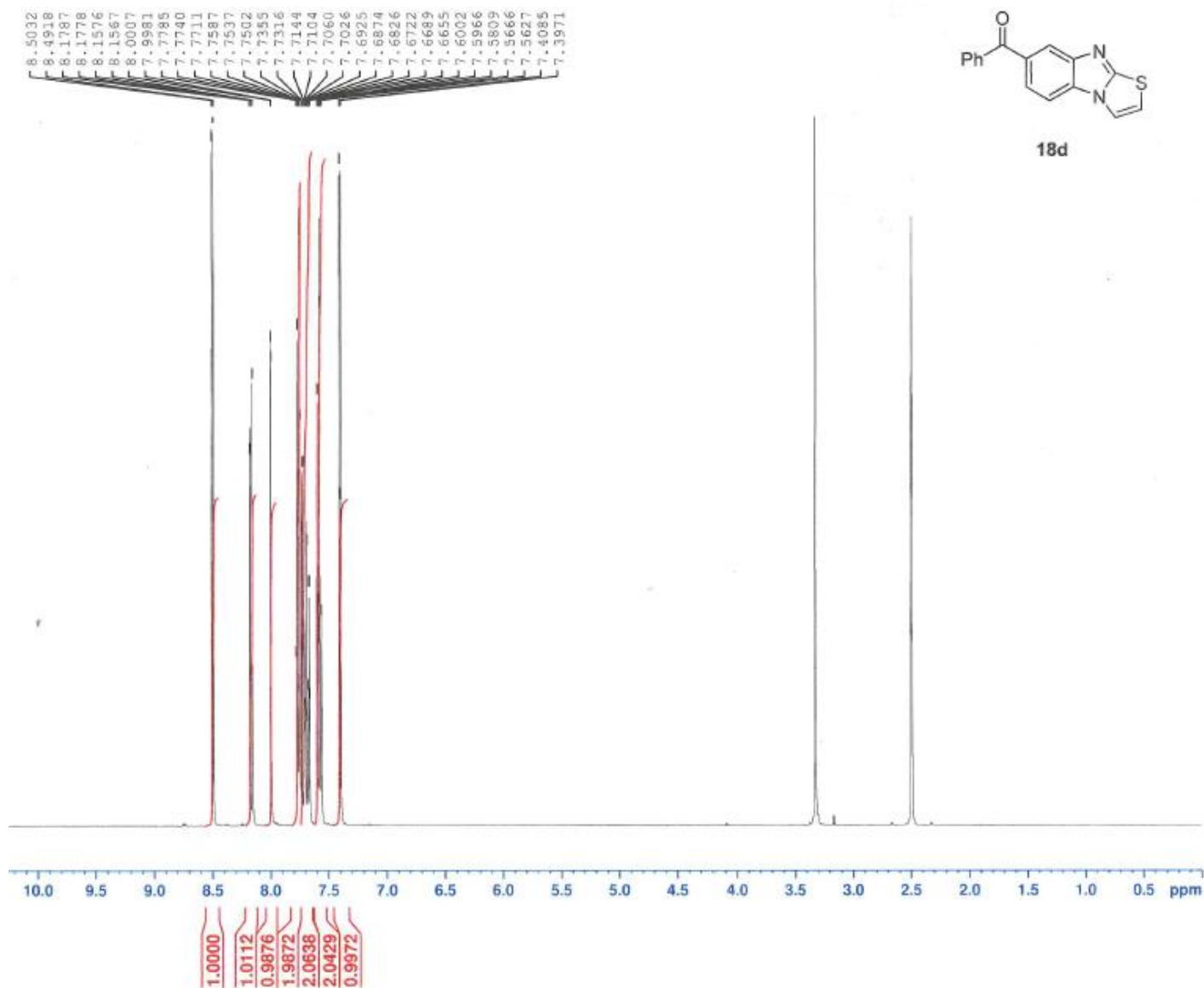


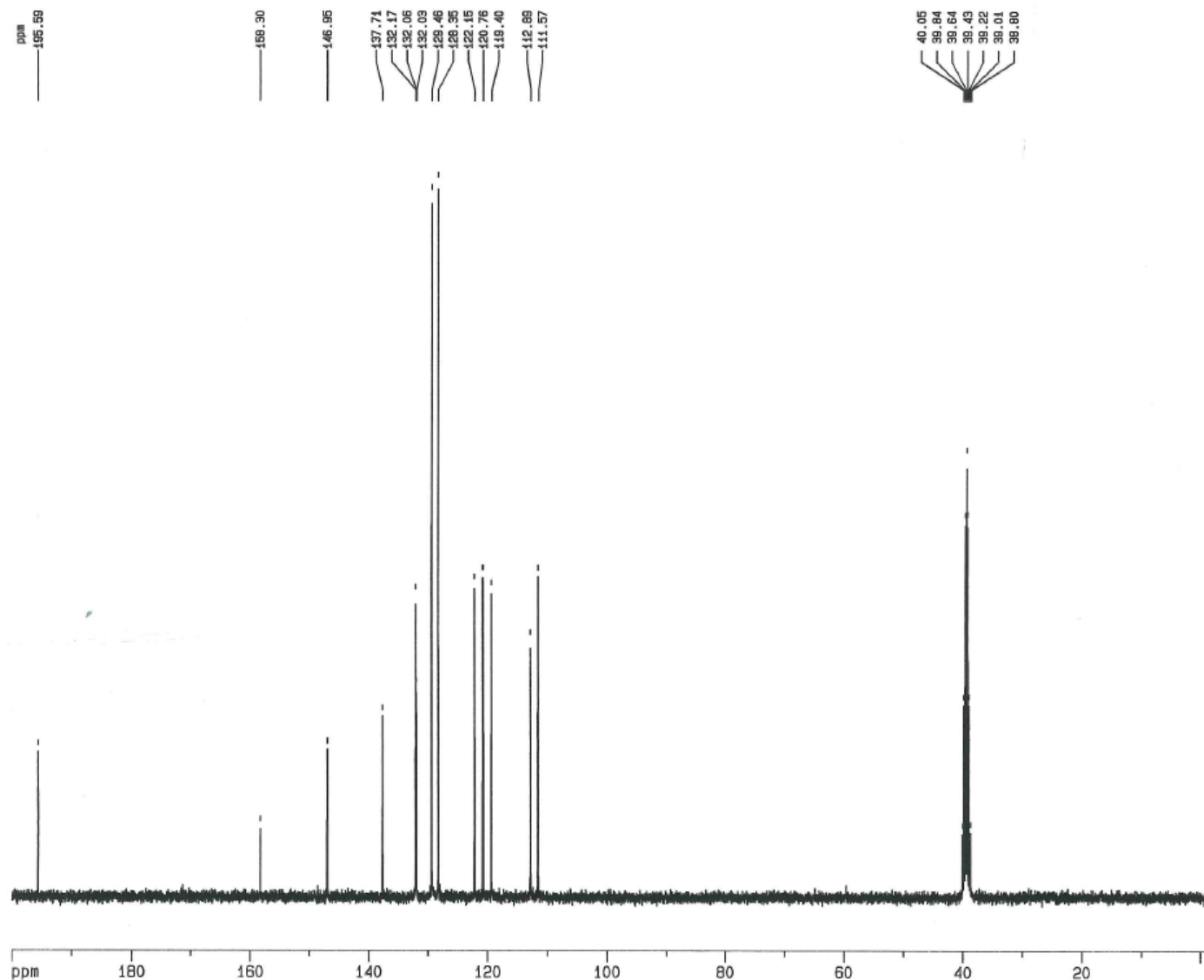
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 NAME Jul29-2020
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20200729
 Time 11.35 h
 INSTRUM spect
 PROBRD Z108618_0860 1
 PULPROG zg30
 ID 65536
 SOLVENT DMSO
 NS 64
 DS 2
 SWH 8032.820 Hz
 FIDRES 0.244532 Hz
 AQ 4.0894465 sec
 RG 198.55
 DM 62.400 usec
 DE 5.50 usec
 TE 298.0 K
 D1 1.00000000 sec
 TD0 1
 SF01 400.1324708 MHz
 WUC1 1H
 D0 4.33 usec
 F1 13.60 usec
 PLW1 13.19999981 W

F2 - Processing parameters
 SI 65536
 SF 400.1300216 MHz
 NDX 0
 SSB 0
 LW 0.30 Hz
 GB 0
 PC 1.00





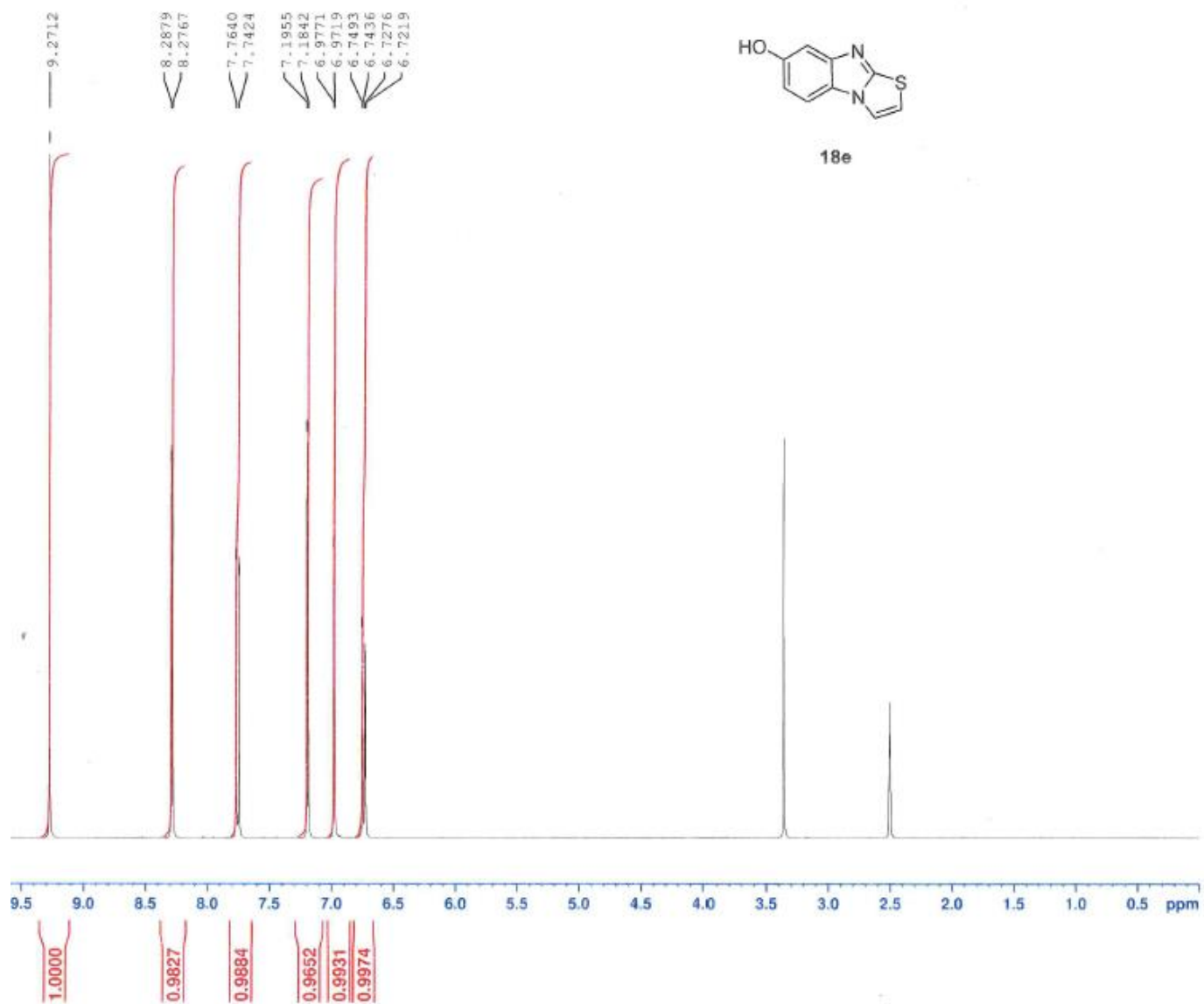


Current Data Parameters
 NAME cr1e.fr
 EXPNO 21
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 970919
 Time 12.02
 INSTRUM spect
 PROBHD 5 mm QNP 13
 PULPROG zgpg
 TD 65536
 SOLVENT dmsd
 NS 72
 DS 0
 SMH 26246.719 Hz
 FIDRES 0.400493 Hz
 AQ 1.2485108 sec
 RG 6502
 OW 19.050 usec
 DE 6.50 usec
 TE 300.0 K
 d11 0.0300000 sec
 d12 0.0000200 sec
 PL13 22.00 dB
 D1 5.0000000 sec
 CPOPRG2 waltz16
 PCPD2 110.00 usec
 SFO2 400.1326090 MHz
 NUC2 13C
 PL2 120.00 dB
 PL12 20.00 dB
 P1 7.50 usec
 DE 6.50 usec
 SFO1 100.6248442 MHz
 NUC1 13C
 PL1 -2.00 dB

F2 - Processing parameters
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 SF 100.6126256 MHz
 NDN EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

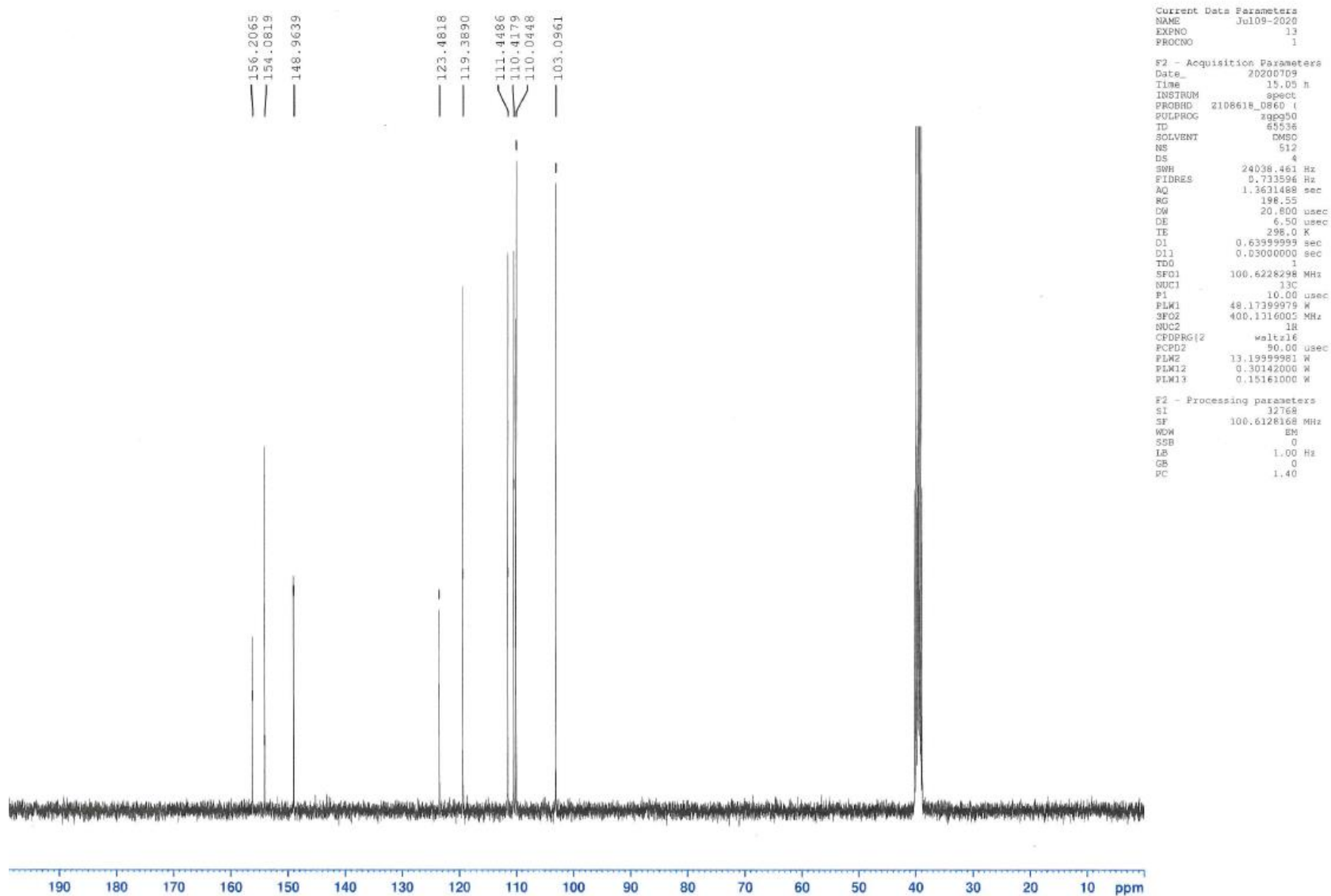
1D NMR plot parameters
 CX 22.00 cm
 F1P 200.000 ppm
 F1 20122.56 Hz
 F2P -1.000 ppm
 F2 -100.61 Hz
 PPMCH 9.13636 ppm/cm
 HZCM 919.23636 Hz/cm

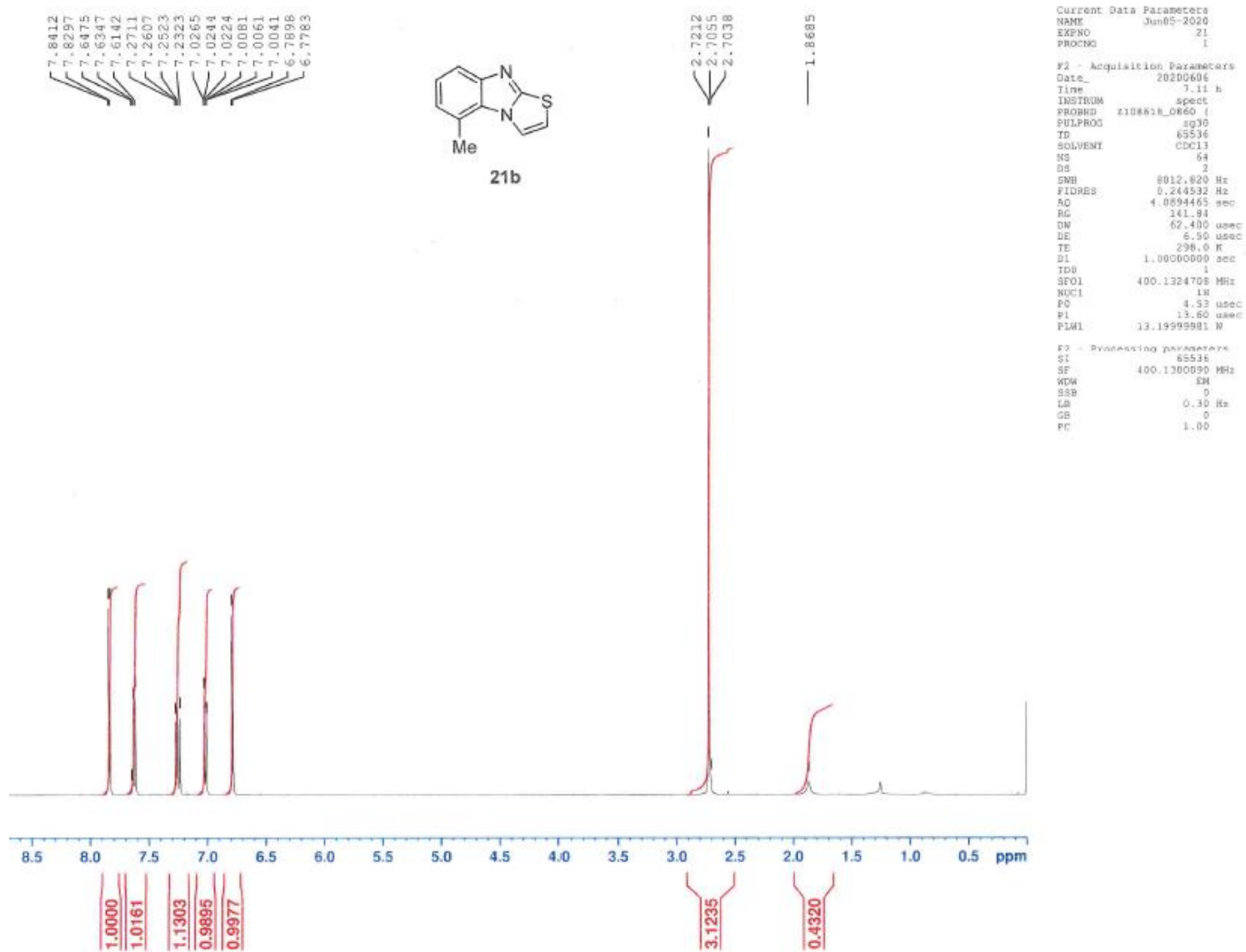


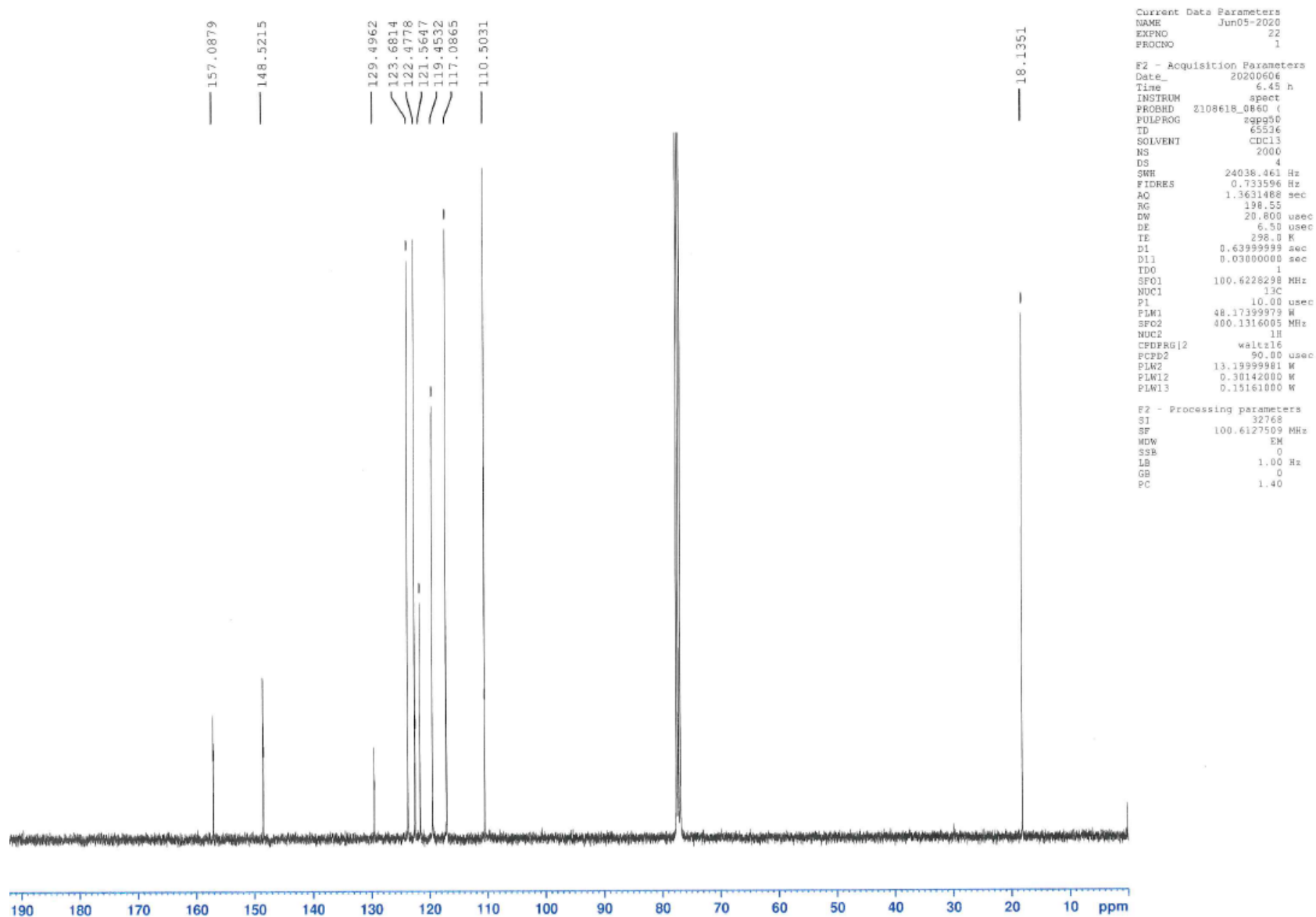
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 NAME Jul09-2020
 EXPNO 12
 PROCNO 1

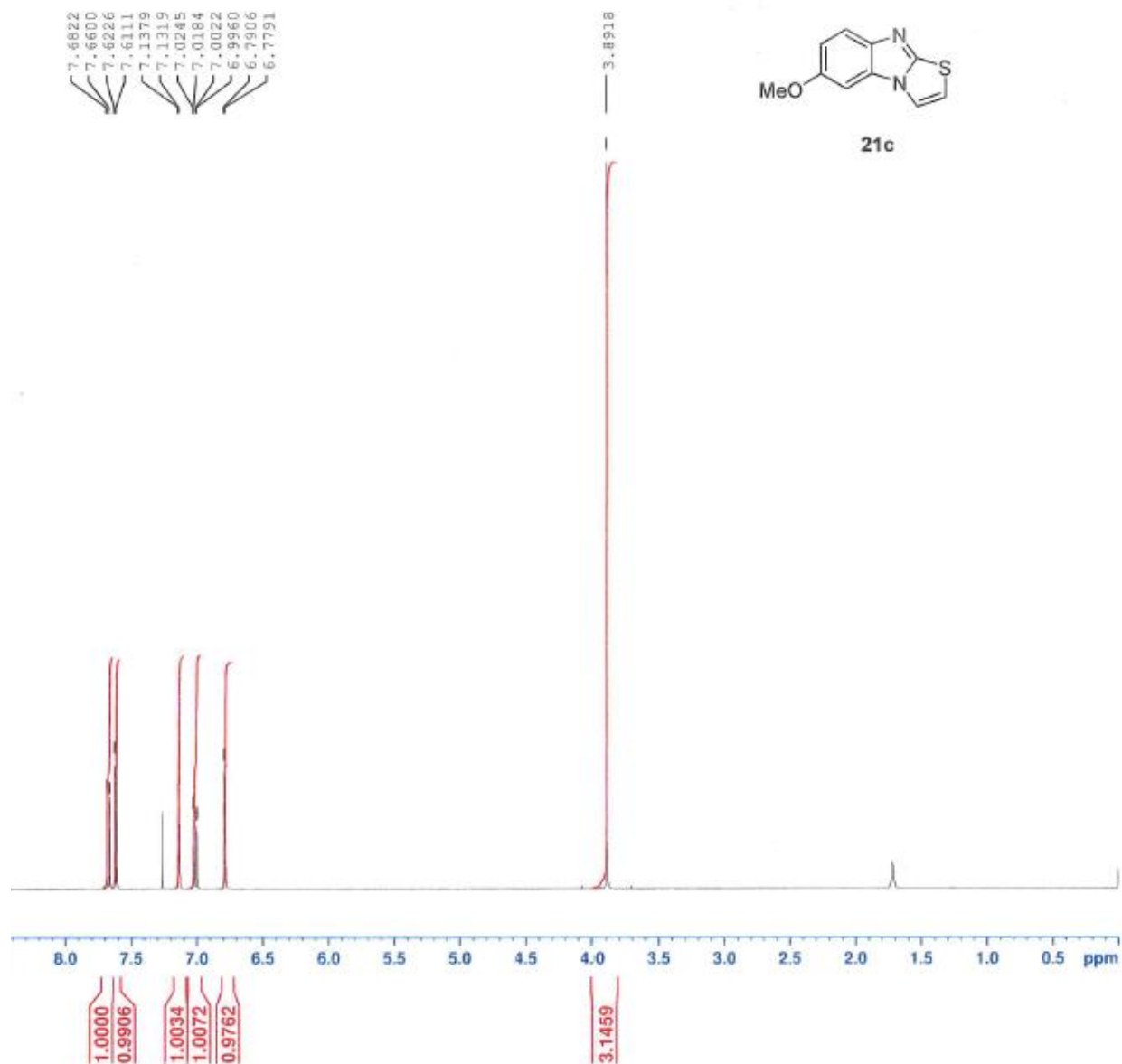
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 Date_ 20200709
 Time 14.46 h
 INSTRUM spect
 PROBRD z108610_0960 f
 PULPROG zg30
 ID 65516
 SOLVENT DMSO
 NS 64
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.244532 Hz
 AQ 4.0894465 sec
 RG 141.84
 DN 62.400 usec
 DE 6.50 usec
 TE 296.0 K
 D1 1.0000000 sec
 ID0 1
 SFO1 400.1324708 MHz
 NUC1 13
 PC 4.53 usec
 F1 13.60 usec
 P1M1 13.1999981 W

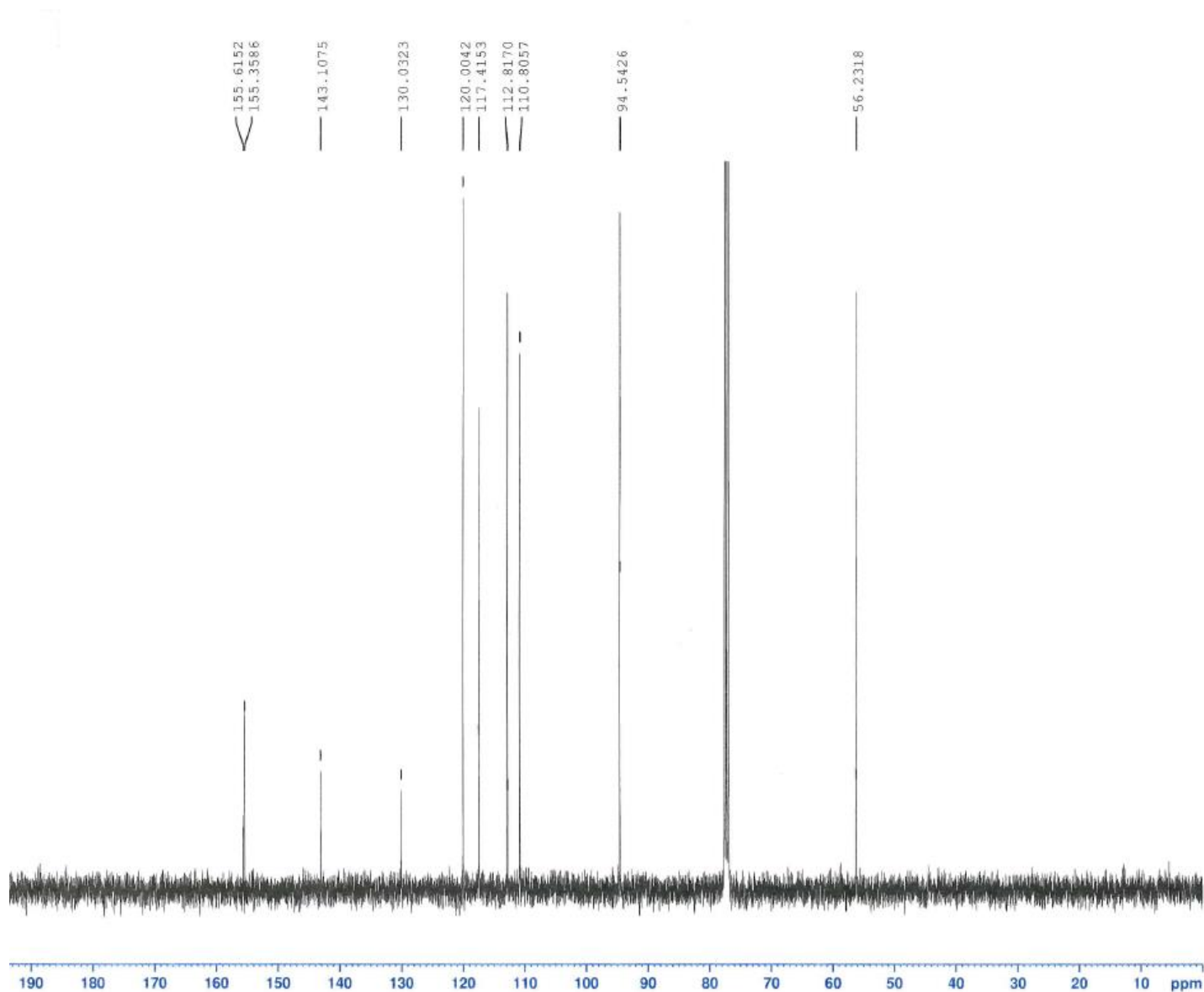
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 SF 400.1300025 MHz
 WDM EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00









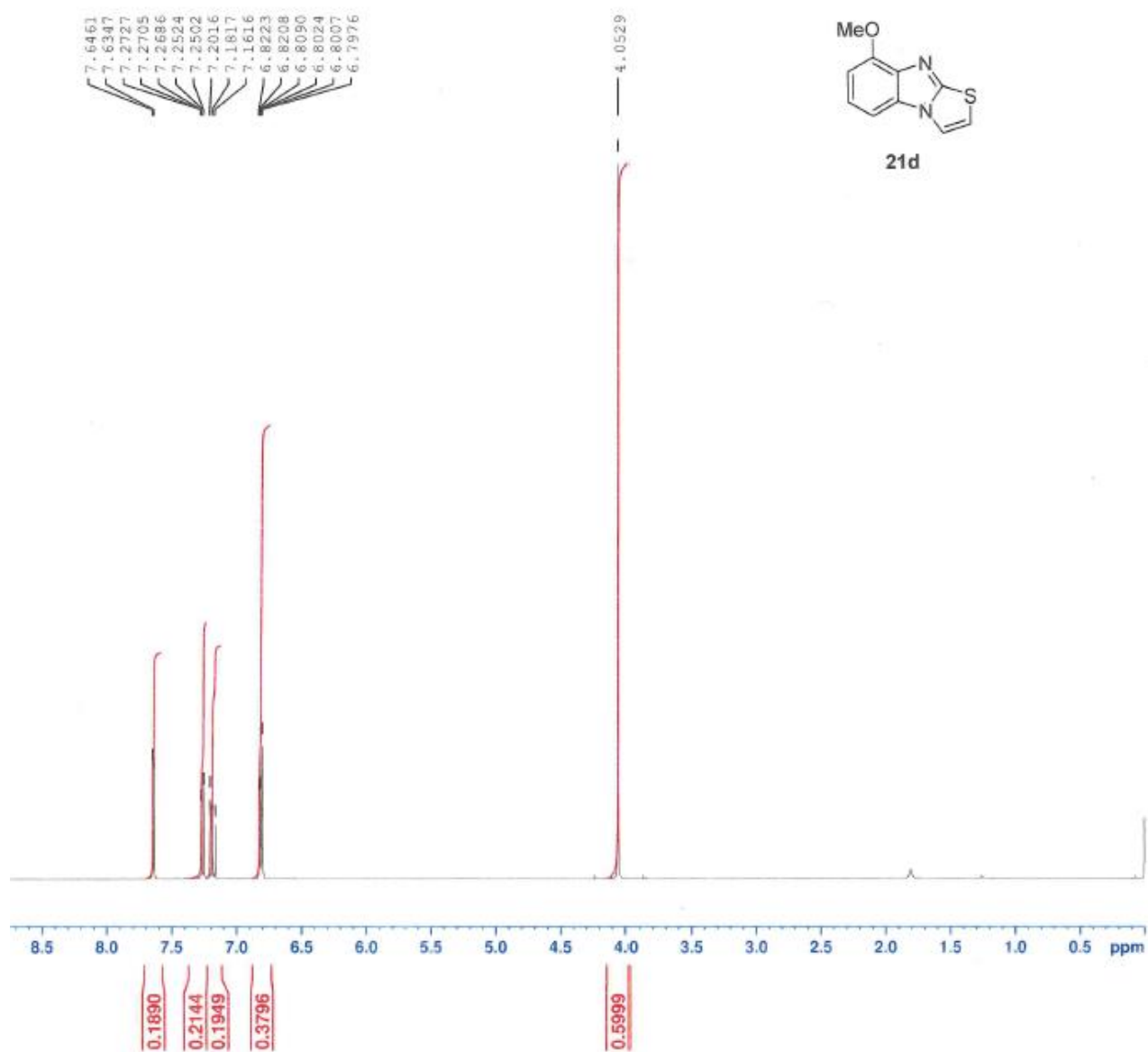


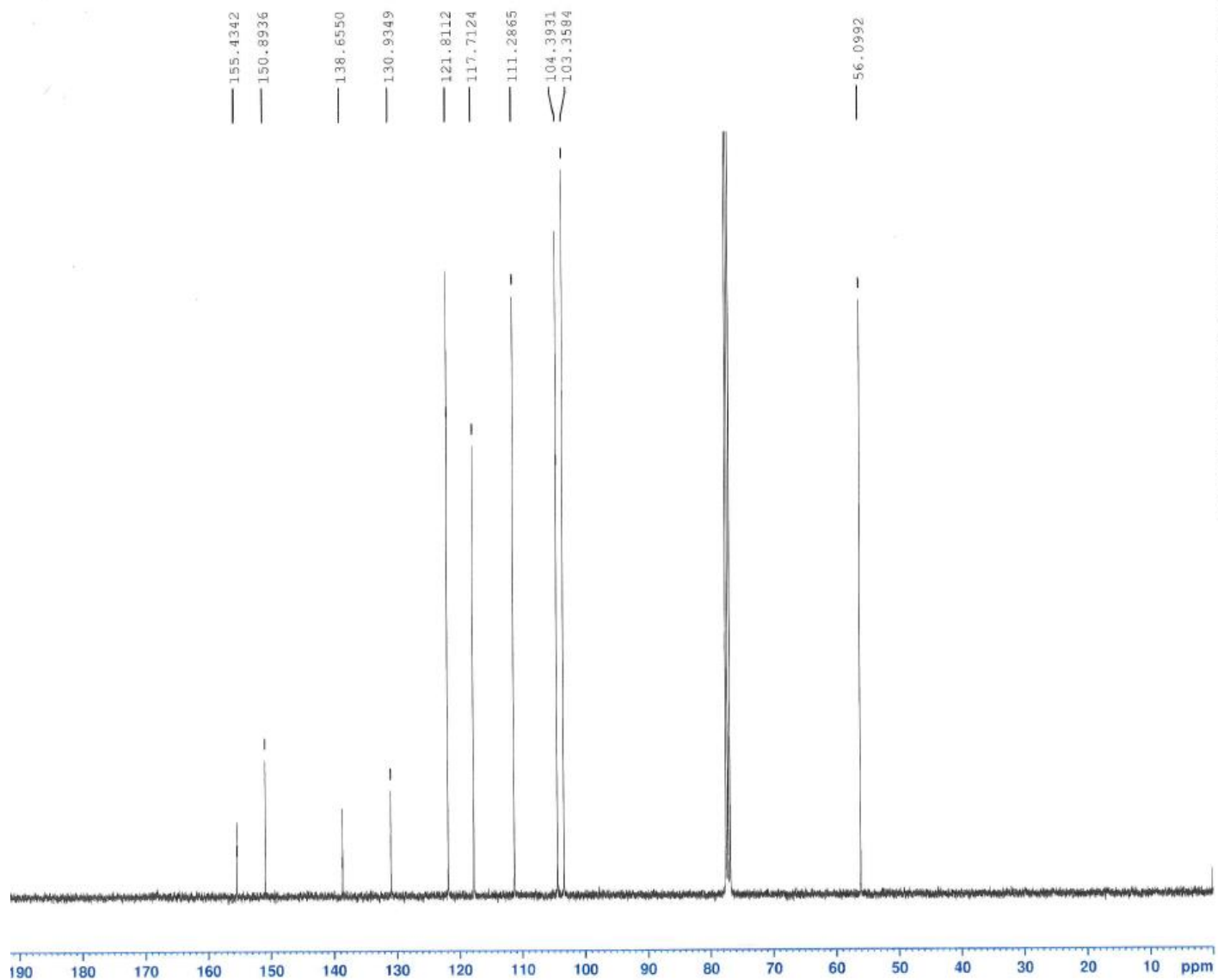
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Current Data Parameters
NAME      Jun23-2020
EXPNO    14
PROCNO   1

F2 - Acquisition Parameters
Date_    20200523
Time     14.32 h
INSTRUM  spect
PROBHD   z108618_0860 (
PULPRDG  zgpg50
TD        65536
SOLVENT  CDCl3
NS        700
DS        4
SWH       24038.461 Hz
FIDRES    0.733596 Hz
AQ        1.3631488 sec
RG        198.55
DR        20.800 usec
DE        6.50 usec
TE        298.0 K
D1        0.63999999 sec
D11       0.03000000 sec
TD0       1
SFO1      100.6228298 MHz
NUC1      13C
P1        10.00 usec
PLW1      48.17399979 W
SFO2      400.1316005 MHz
NUC2      1H
CPDPRG12 waltz16
PCPD2     90.00 usec
PLW2      13.19999981 W
PLW12     0.30142000 W
PLW13     0.15161000 W

F2 - Processing parameters
SI        32768
SF        100.6127487 MHz
WDW       EM
SSB       0
LB        1.00 Hz
GB        0
PC        1.40
    
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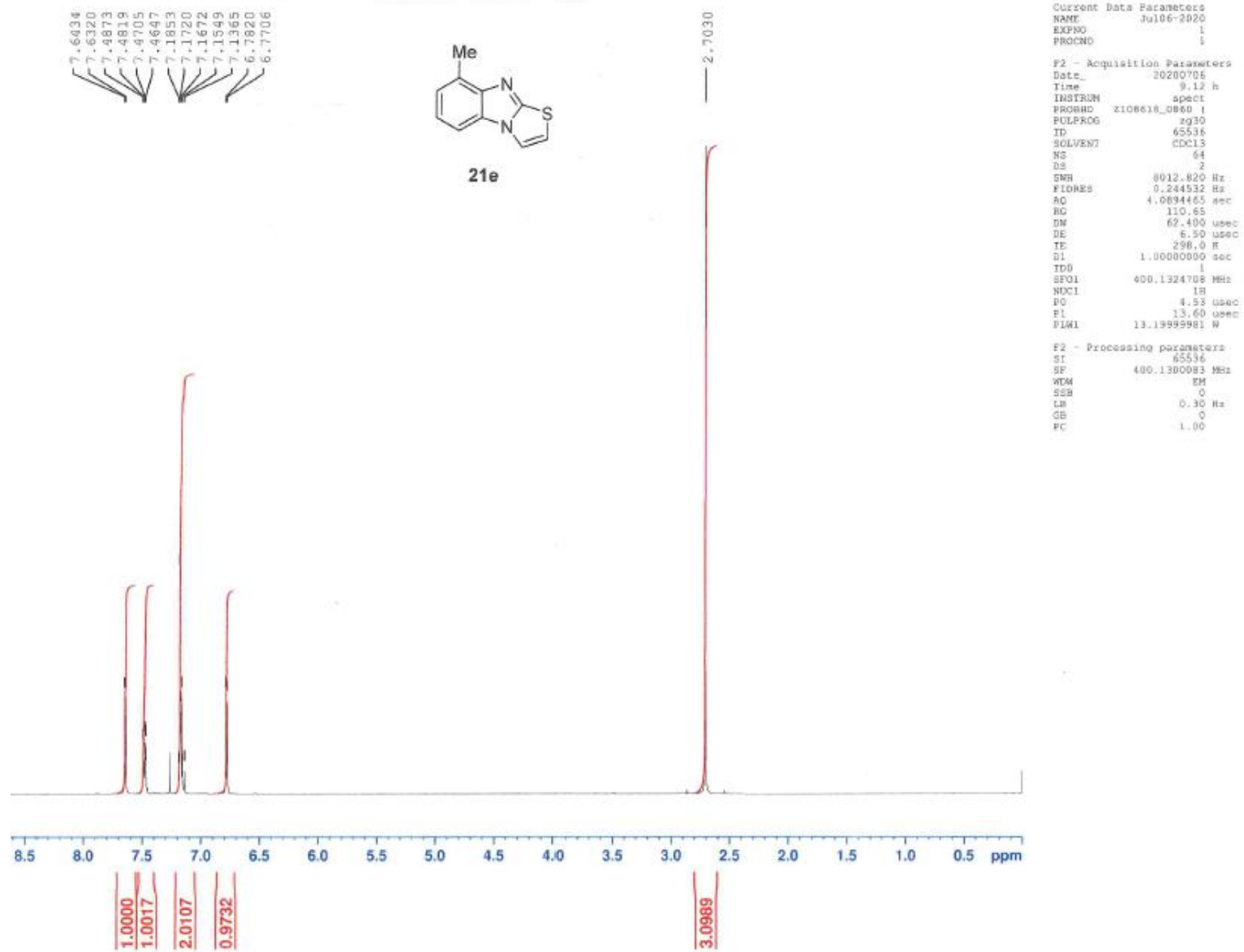


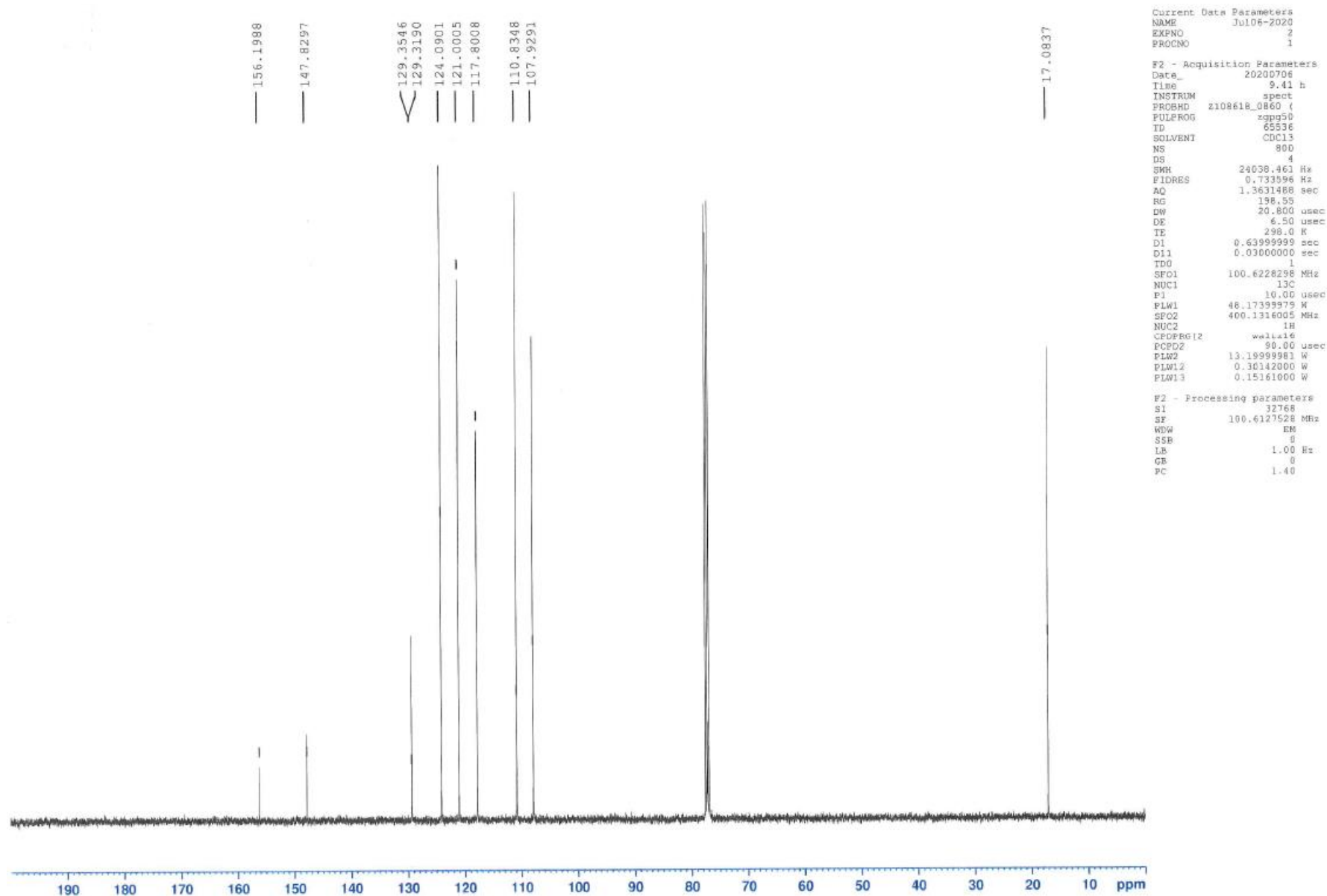


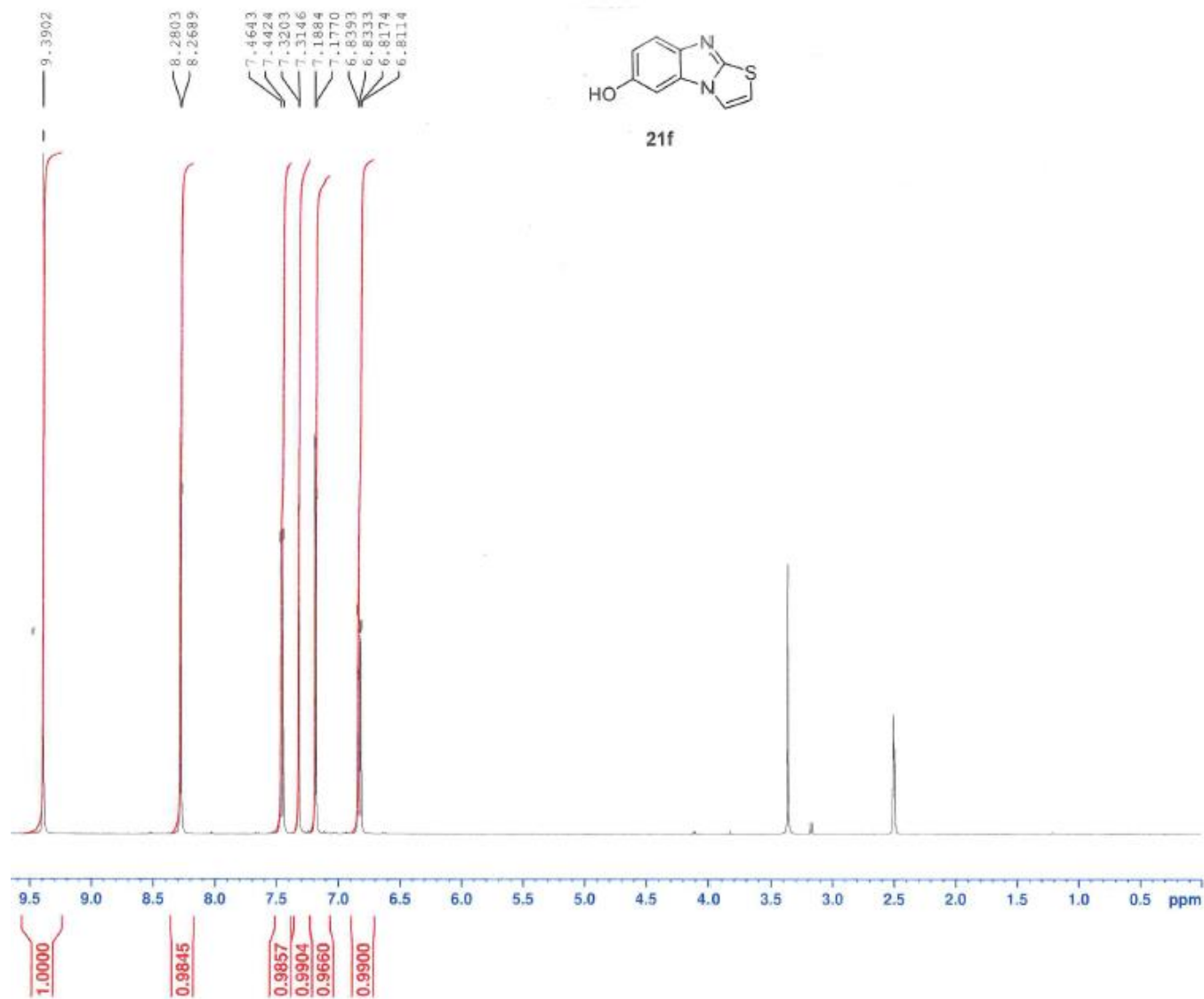
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EXPNO    5
PROCNO   1

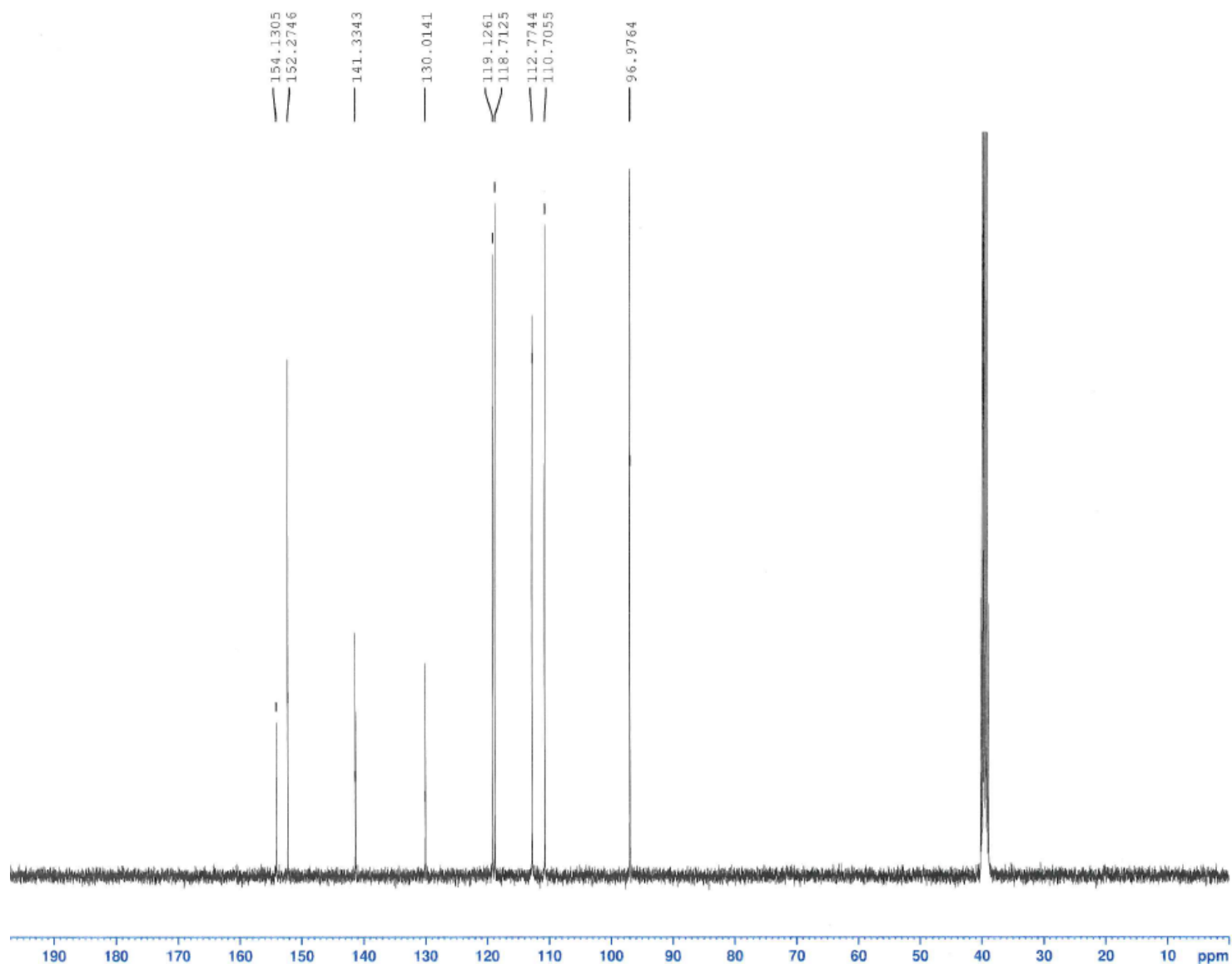
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Date_    20200605
Time     12.37 h
INSTRUM  spect
PROBHD   210661H_0860 1
PULPROG  zgpg50
TD        65536
SOLVENT  CDCl3
NS        2000
DS        4
SWH       24038.461 Hz
FIDRES    0.711596 Hz
AQ         1.3631488 sec
RG         198.55
DW         20.800 usec
DE         6.50 usec
TE         298.0 K
D1         0.6399999 sec
D11        0.0300000 sec
TD0        1
SFO1       100.6228298 MHz
NUC1       13C
P1         10.00 usec
PLW1       48.17399979 W
SFO2       400.1316005 MHz
NUC2       1H
CPDPRG2   waltz16
PCPD2     90.00 usec
PLW2       13.19999981 W
PLW12     0.3042000 W
PLW13     0.15161000 W

F2 - Processing parameters
SI         32768
SF         100.6127523 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
```





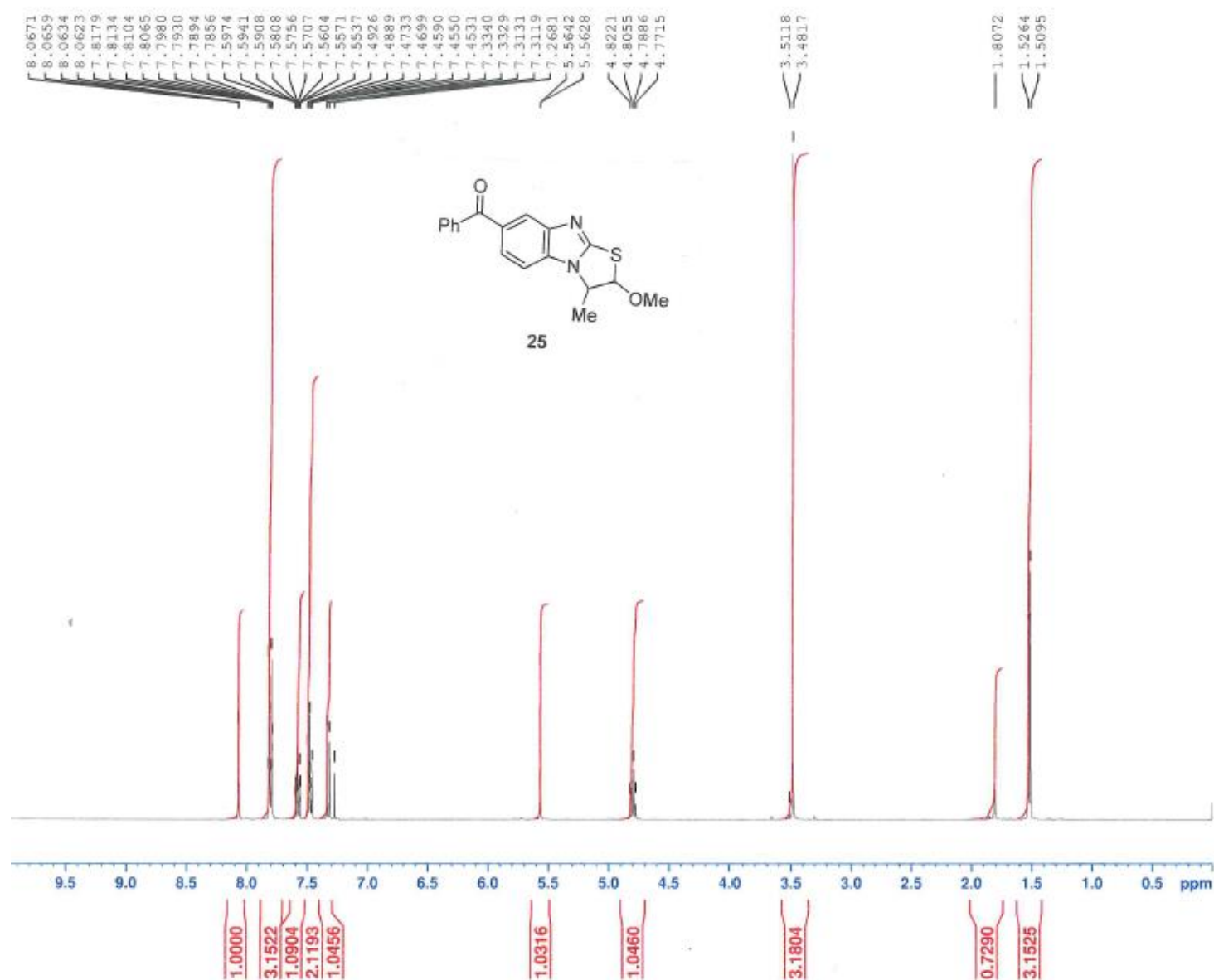




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Current Data Parameters
NAME      Jul09-2020
EXPNO     9
PROCNO    1

F2 - Acquisition Parameters
Date_     20200709
Time      14.05 h
INSTRUM   spect
PROBHD    Z108618_0860 4
PULPROG   zgpg50
TD         65536
SOLVENT   DMSO
NS         514
DS         4
SWH        24036.461 Hz
FIDRES     0.733596 Hz
AQ         1.3631488 sec
RG         198.55
DM         20.800 usec
DE         6.50 usec
TE         298.0 K
D1         0.63999999 sec
D11        0.03000000 sec
TDO        1
SFO1       100.6228298 MHz
NUC1       13C
P1         10.00 usec
PLW1       48.17399979 W
SFO2       400.1316005 MHz
NUC2       1H
CPDPRG12   waltz16
PCPD2      90.00 usec
PLW2       13.19999981 W
PLW12      0.30142000 W
PLW13      0.15161000 W

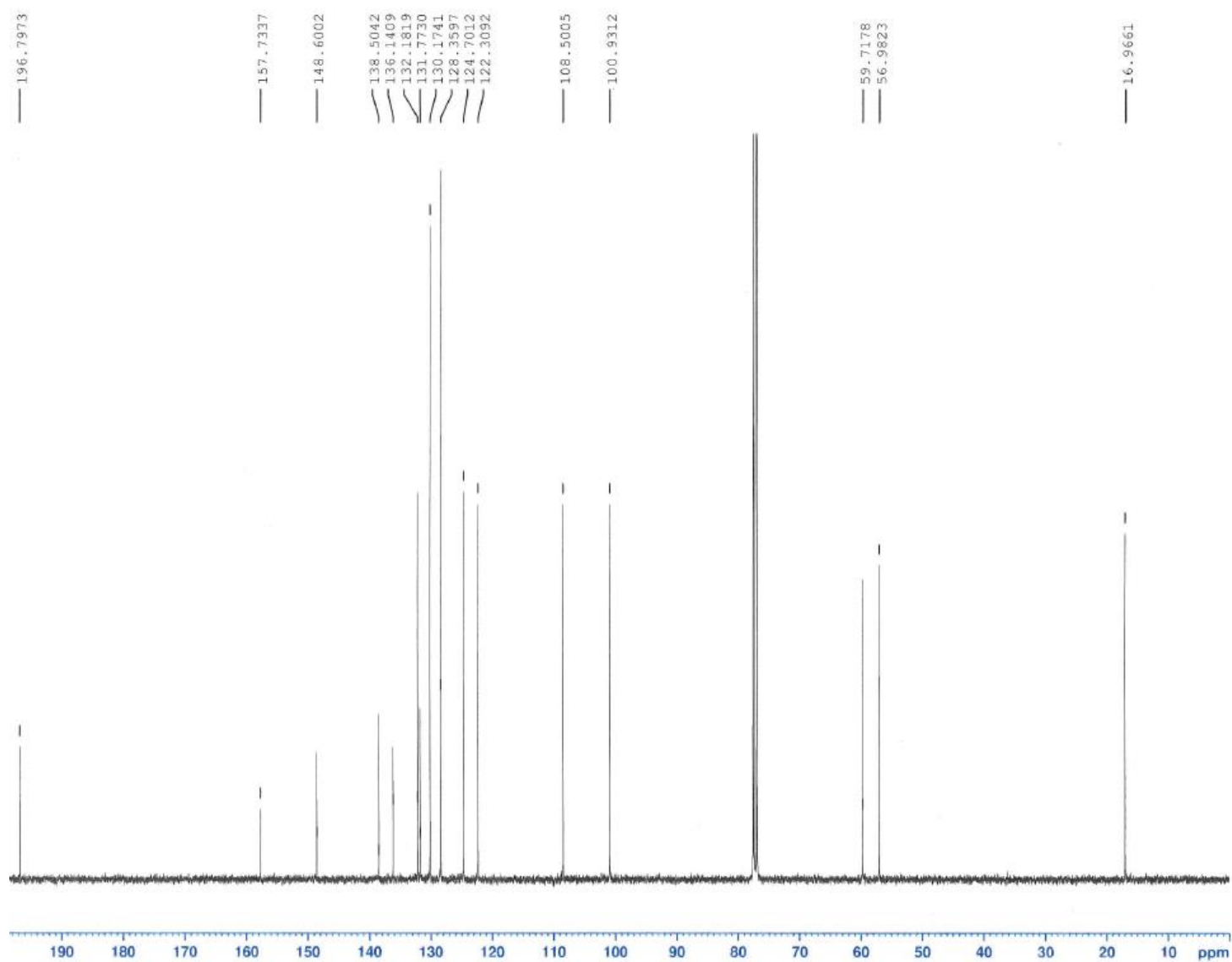
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SI         32768
SF         100.6128163 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
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Current Data Parameters
 NAME Jun21-2020
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20200623
 Time 10.02 h
 INSTRUM spect
 PROBRD E108618_0860 ()
 PULPROG zg30
 TD 65536
 FIDRES 0.244532 Hz
 AQ 4.0894465 sec
 RG 110.65
 DW 62.400 usec
 DE 6.50 usec
 TE 298.2 K
 D1 1.00000000 sec
 TDO 1
 SFO1 400.1324708 MHz
 NUC1 1H
 PU 4.53 usec
 PI 13.60 usec
 PLW 13.19999981 W

F2 - Processing parameters
 SI 65536
 SF 400.1300060 MHz
 MDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

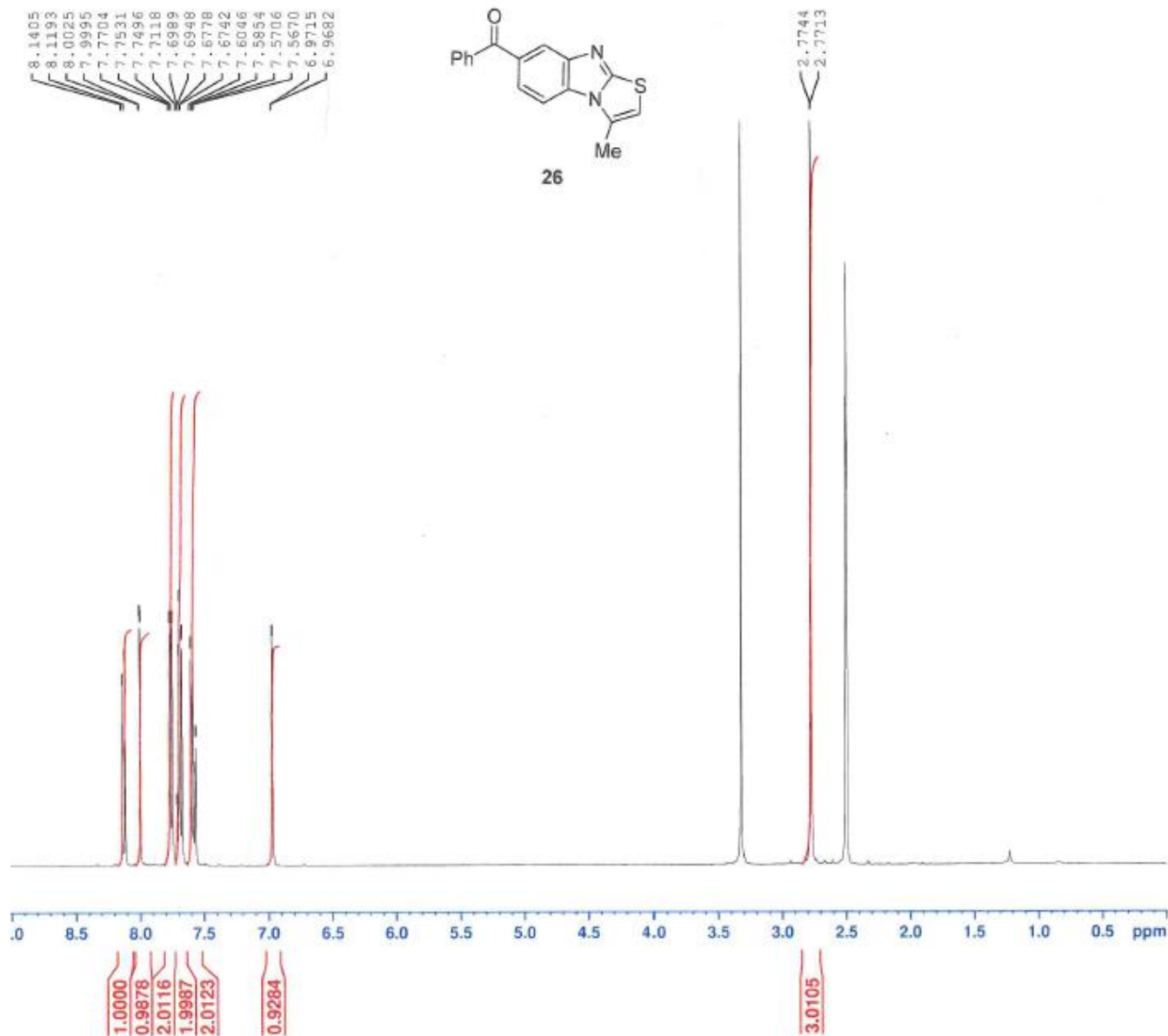


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Current Data Parameters
NAME      Jun23-2020
EXPNO     4
PROCNO    1

F2 - Acquisition Parameters
Date_     20200623
Time      10.52 h
INSTRUM   spect
PROBHD    2106618_0860 i
PULPROG   zgpg30
TD         45536
SOLVENT   CDCl3
NS         1161
DS         4
SWH        24038.461 Hz
FIDRES     0.733596 Hz
AQ         1.3631488 sec
RG         398.55
DW         20.800 usec
DE         6.50 usec
TE         298.0 K
D1         0.63999999 sec
D11        0.03000000 sec
TD0        1
SFO1      100.6228298 MHz
NUC1       13C
P1         10.00 usec
PLW1       48.17399979 W
SFO2       400.1316005 MHz
NUC2       1H
PCPDZ      waitz16
PCPDZ2     90.00 usec
PLW2       13.19999981 W
PLW12      0.30142000 W
PLW13      0.15161000 W

F2 - Processing parameters
SI         32768
SF         100.6127515 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
    
```



Current Data Parameters
 NAME Jul29-2020
 EXPNO 5
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20200729
 Time 12.07 h
 INSTRUM spect
 PROBHD z108618_0860 (4
 PULPROG zg30
 TD 65536
 SOLVENT DMSO
 NS 64
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.244532 Hz
 AQ 4.0894465 sec
 RG 198.55
 DW 62.400 usec
 DE 6.50 usec
 TE 298.0 K
 D1 1.00000000 sec
 TDO 1
 SFO1 400.1324708 MHz
 NUC1 1H
 PG 4.53 usec
 P1 13.60 usec
 PLW1 13.19999981 W

F2 - Processing parameters
 SI 65536
 SF 400.130024 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

