

**Phenothiazine and amide ornamented dihydropyridines via molecular hybridization approach: Design, synthesis, biological evaluation and molecular docking studies**

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**Supplementary Information**

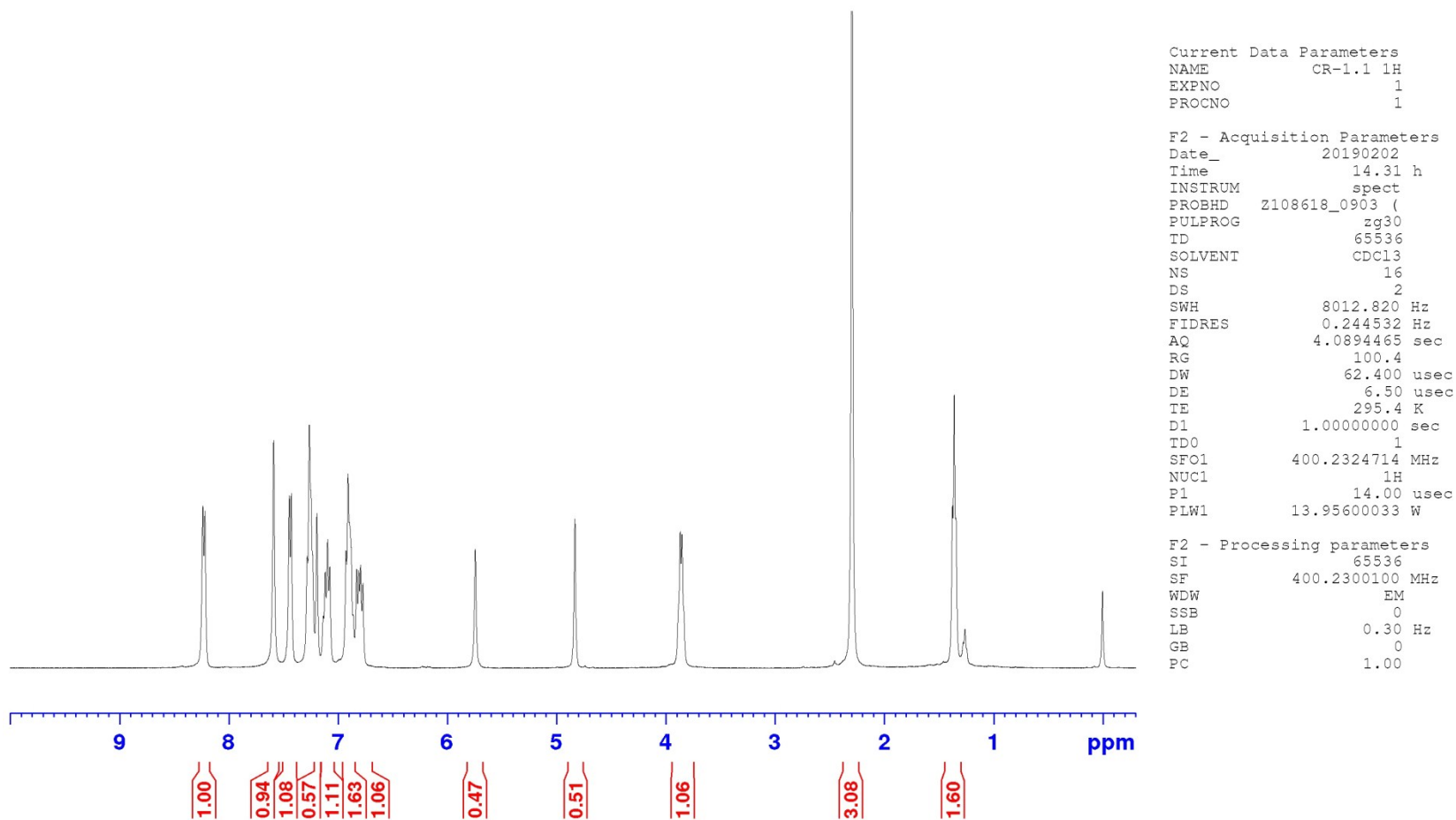


Figure S1 <sup>1</sup>H NMR Spectrum of 7a

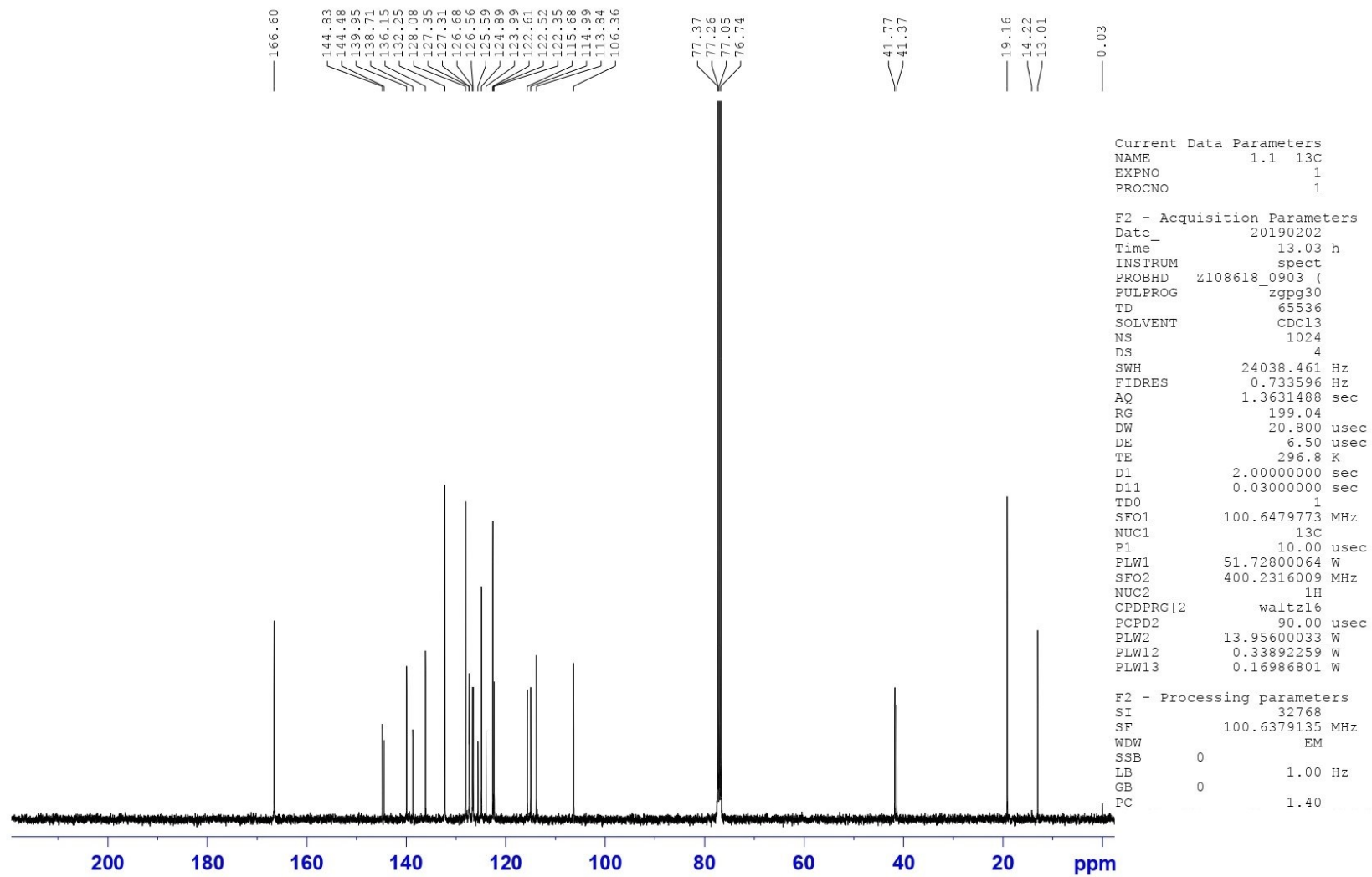


Figure S2 <sup>13</sup>C NMR Spectrum of 7a

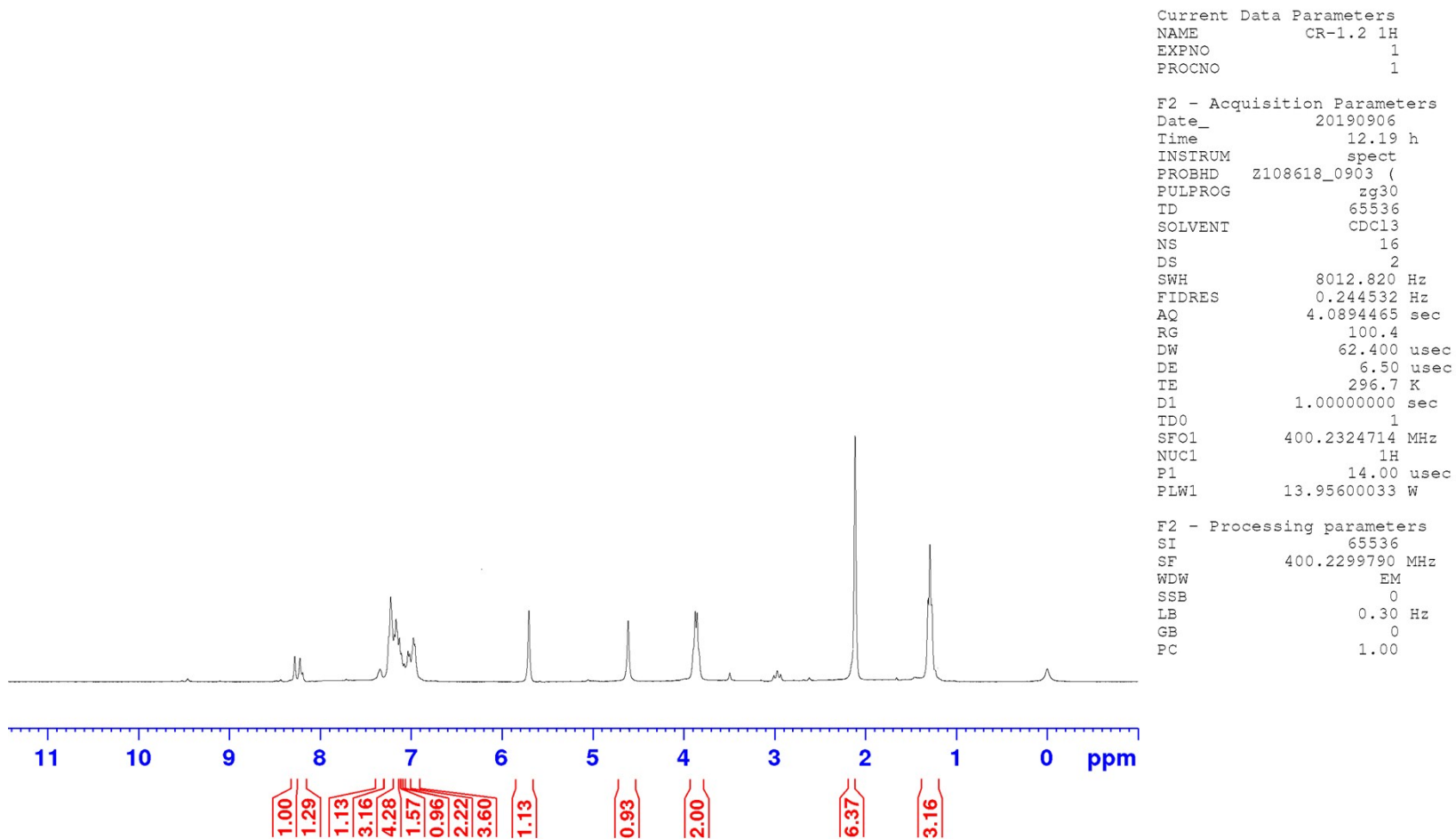


Figure S3 <sup>1</sup>H NMR Spectrum of 7b

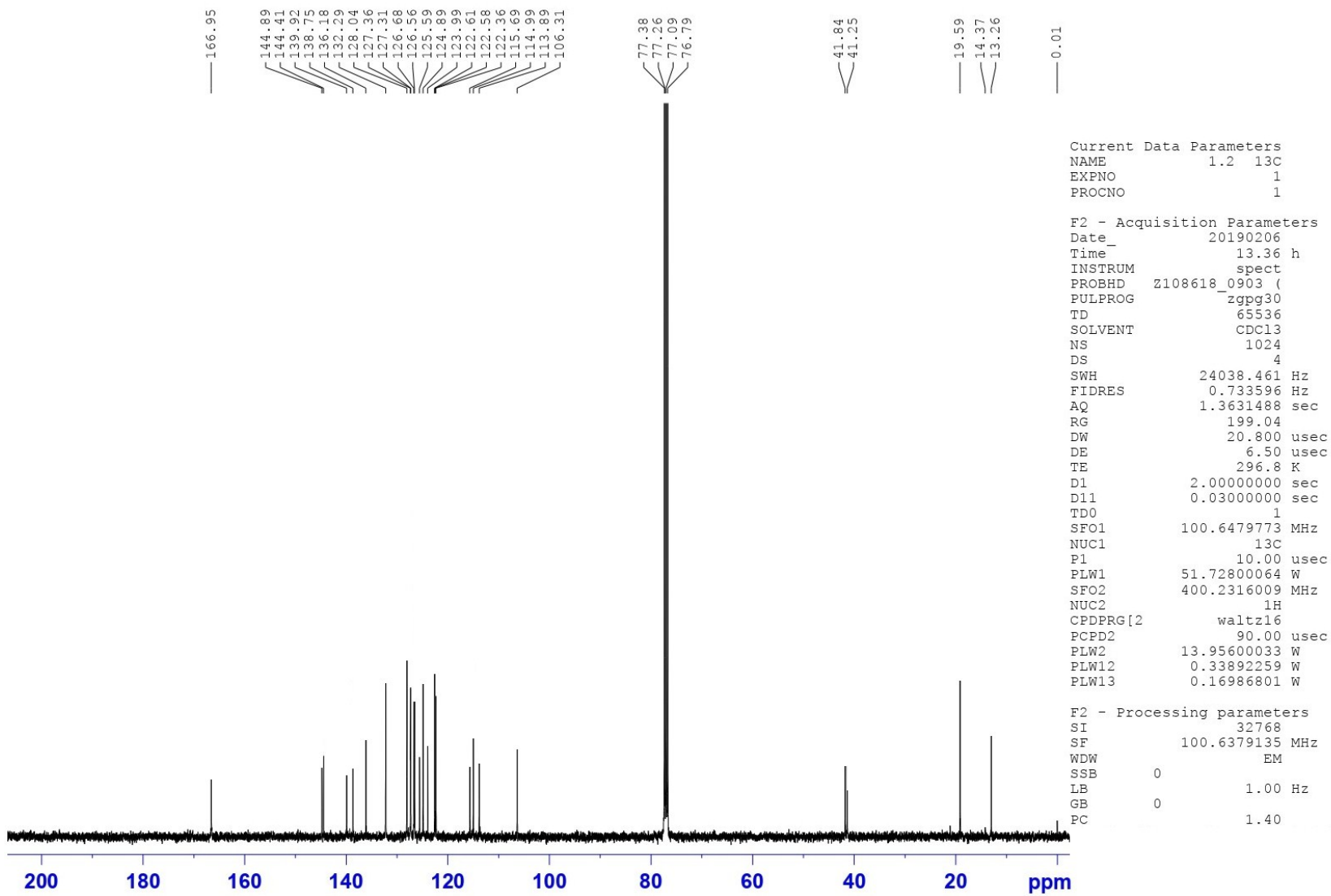


Figure S4  $^{13}\text{C}$  NMR Spectrum of 7b

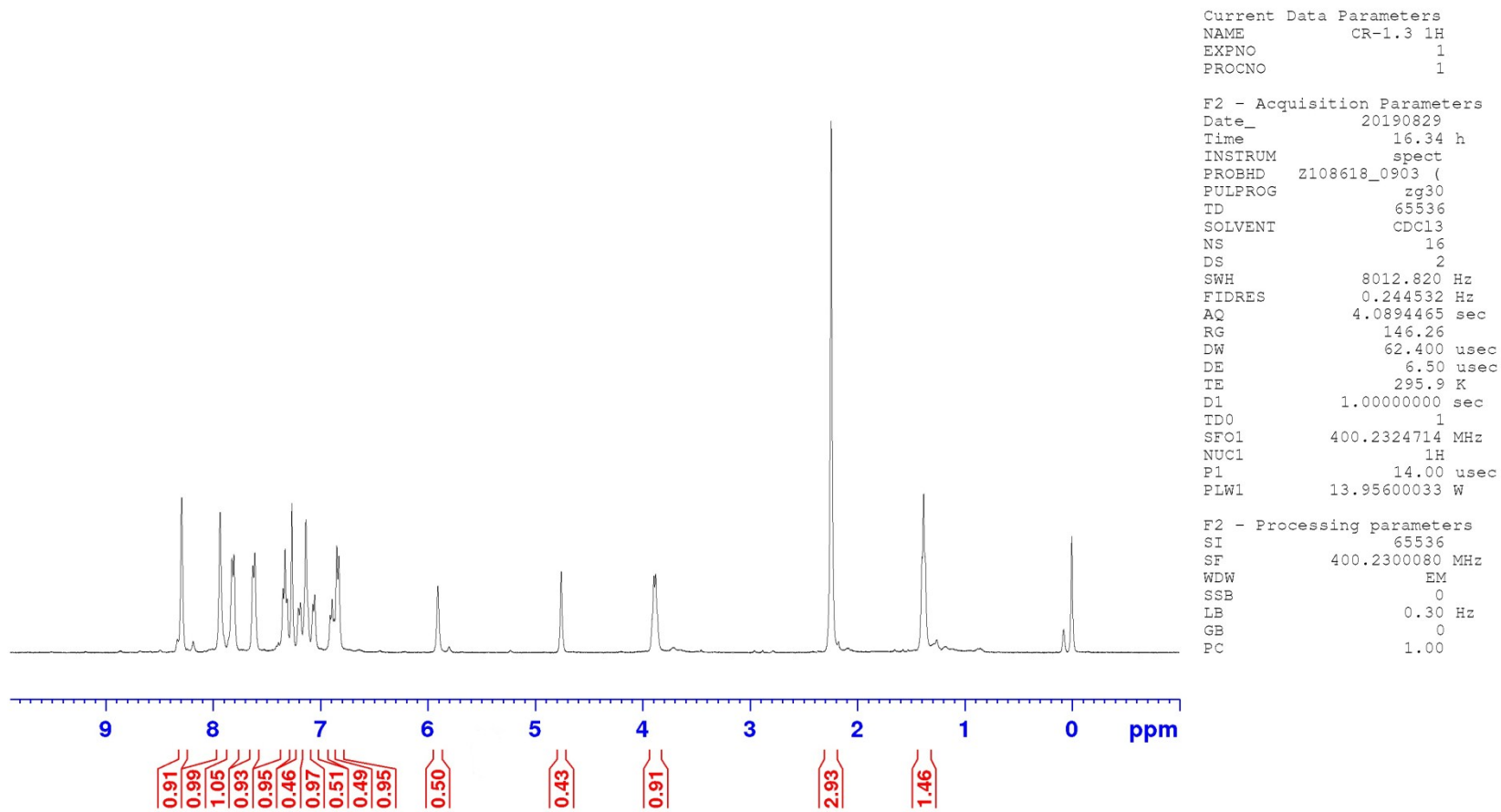
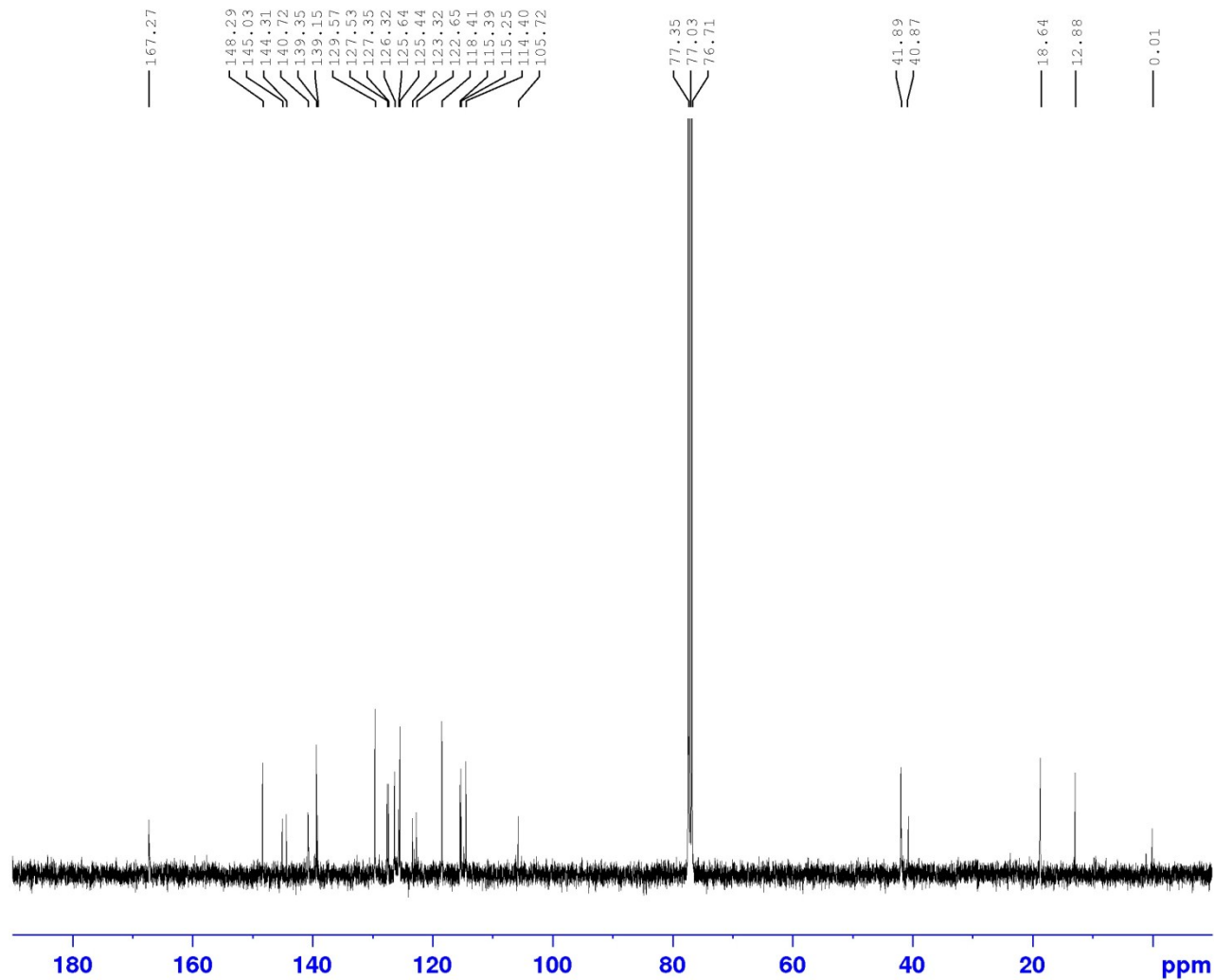


Figure S5  $^1\text{H}$  NMR Spectrum of 7c



Current Data Parameters  
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 PROCNO 1

F2 - Acquisition Parameters  
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 INSTRUM spect  
 PROBHD z108618\_0903 (  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 1024  
 DS 4  
 SWH 24038.461 Hz  
 FIDRES 0.733596 Hz  
 AQ 1.3631488 sec  
 RG 199.04  
 DW 20.800 usec  
 DE 6.50 usec  
 TE 297.3 K  
 D1 2.00000000 sec  
 D11 0.03000000 sec  
 TD0 1  
 SFO1 100.6479773 MHz  
 NUC1 13C  
 P1 10.00 usec  
 PLW1 51.72800064 W  
 SFO2 400.2316009 MHz  
 NUC2 1H  
 CPDPRG[2] waltz16  
 PCPD2 90.00 usec  
 PLW2 13.95600033 W  
 PLW12 0.33892259 W  
 PLW13 0.16986801 W

F2 - Processing parameters  
 SI 32768  
 SF 100.6379135 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 1.40

Figure S6 <sup>13</sup>C NMR Spectrum of 7c

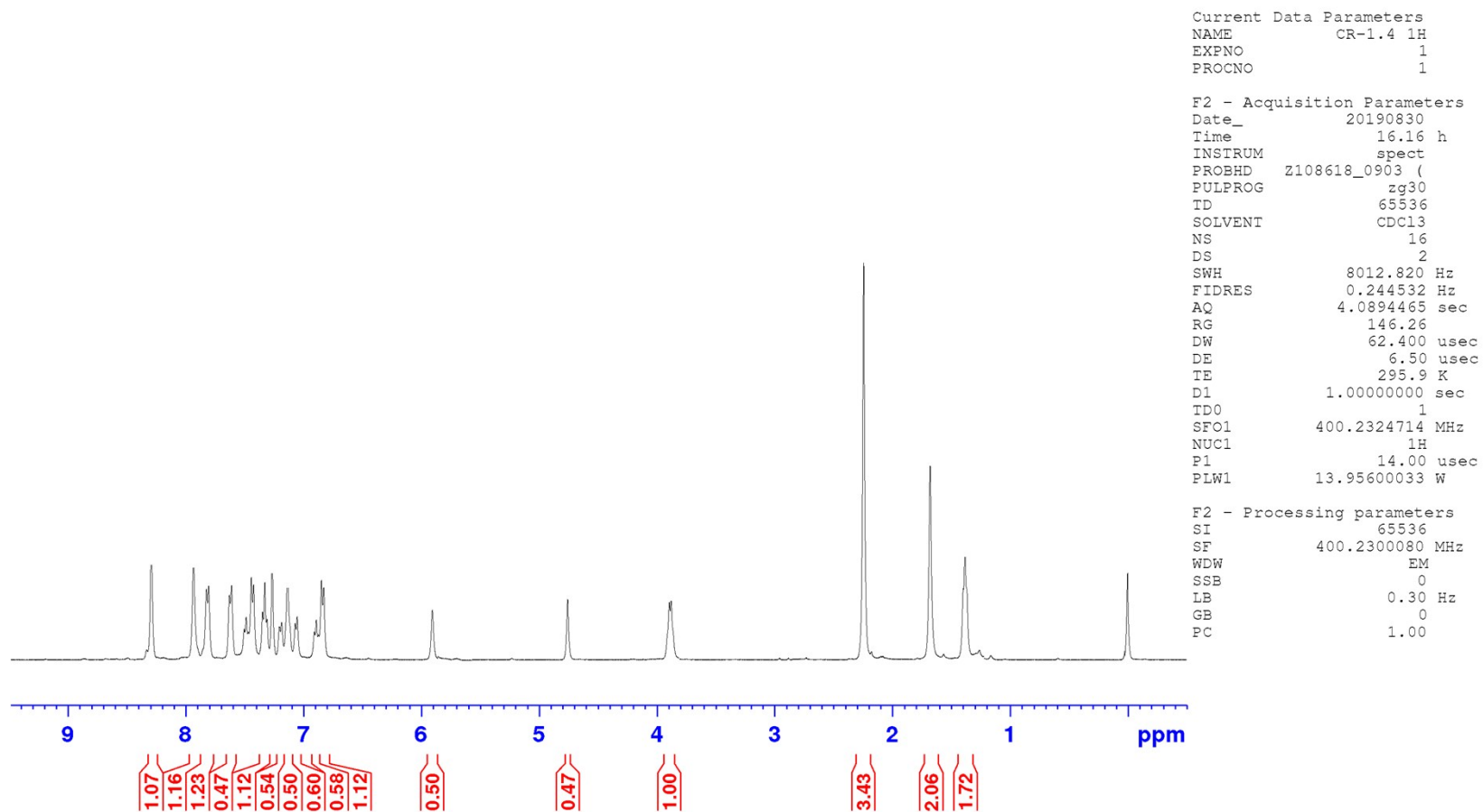


Figure S7 <sup>1</sup>H NMR Spectrum of 7d



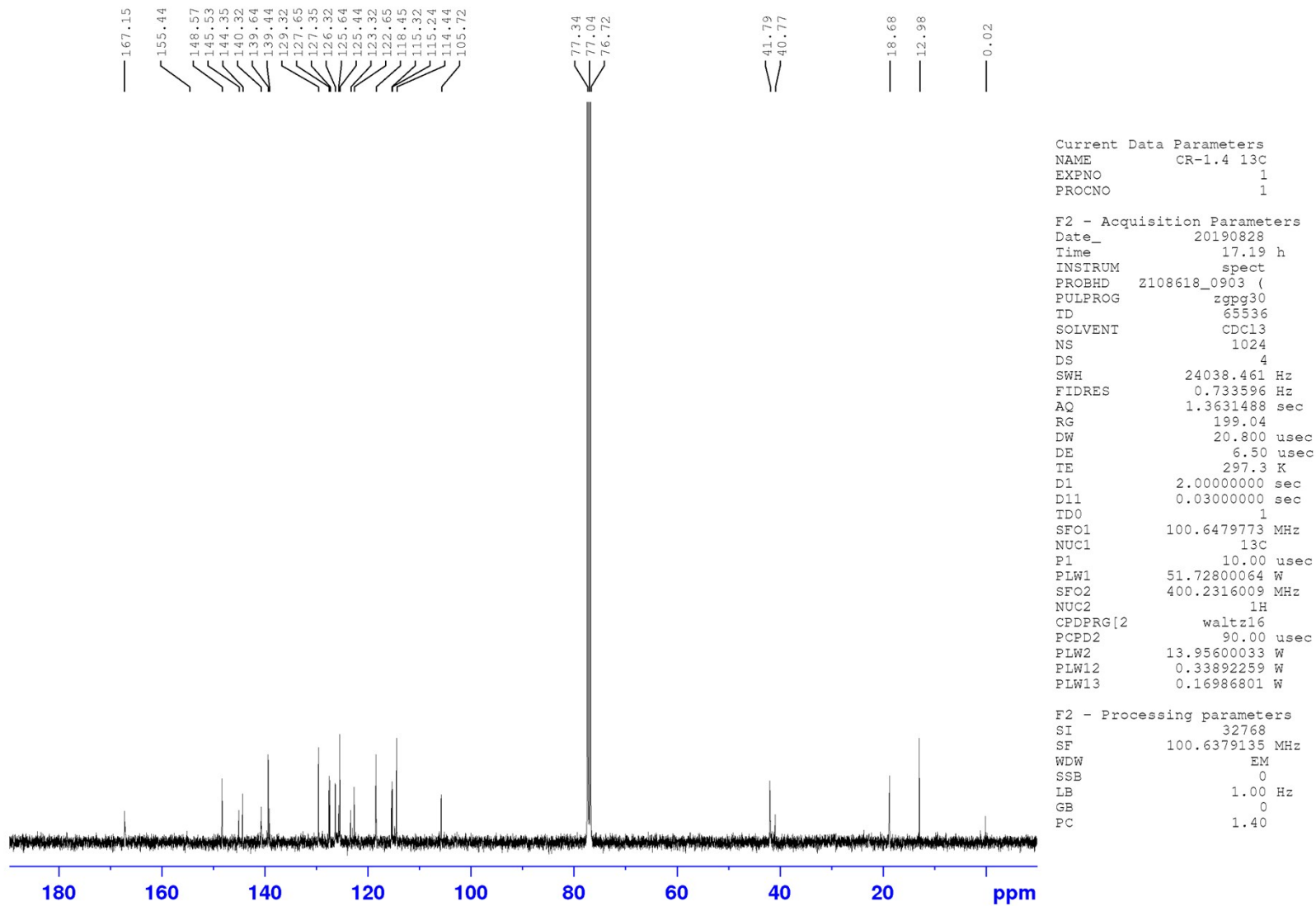


Figure S8 <sup>13</sup>C NMR Spectrum of 7d

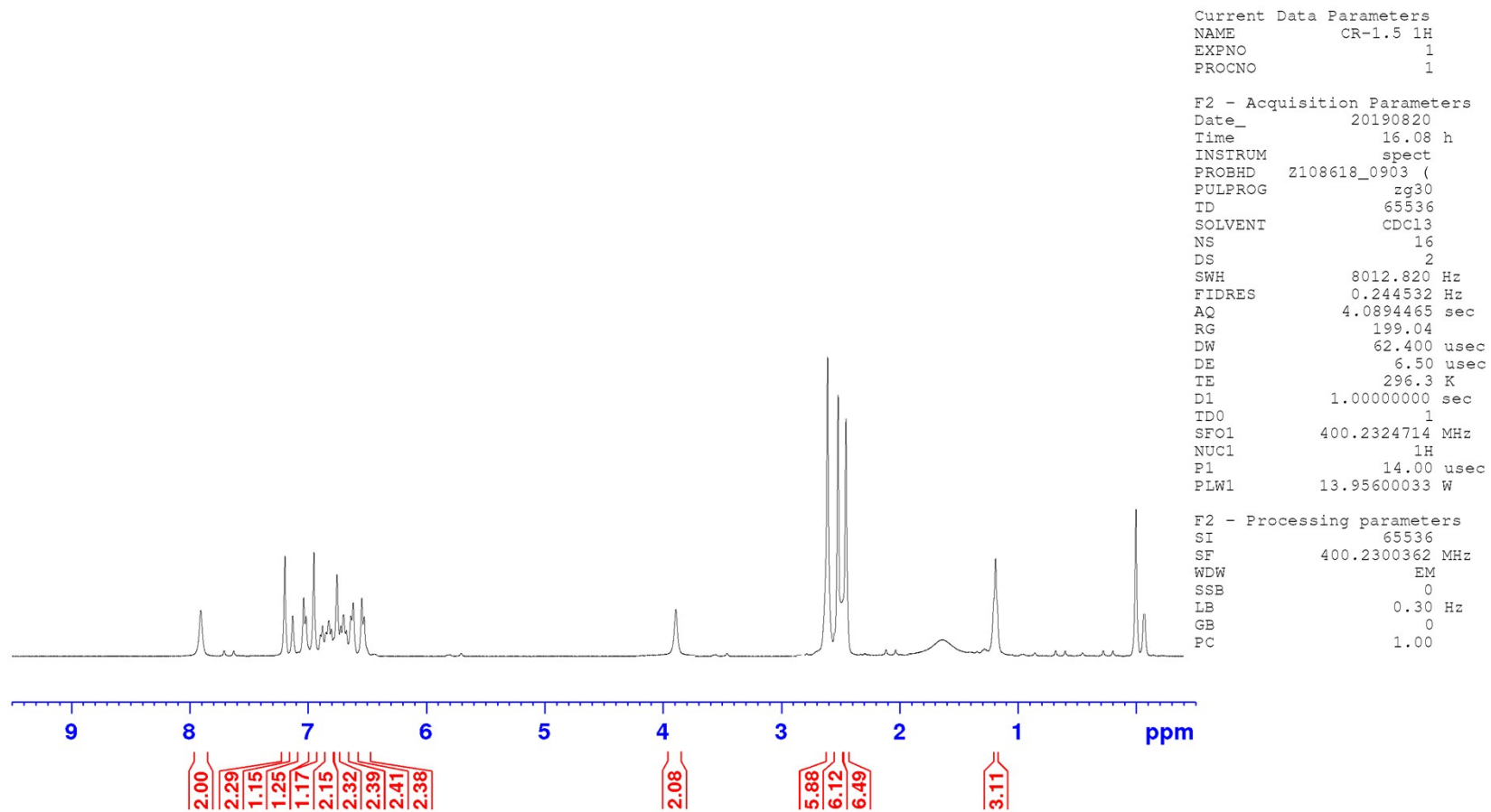


Figure S9 <sup>1</sup>H NMR Spectrum of 7e

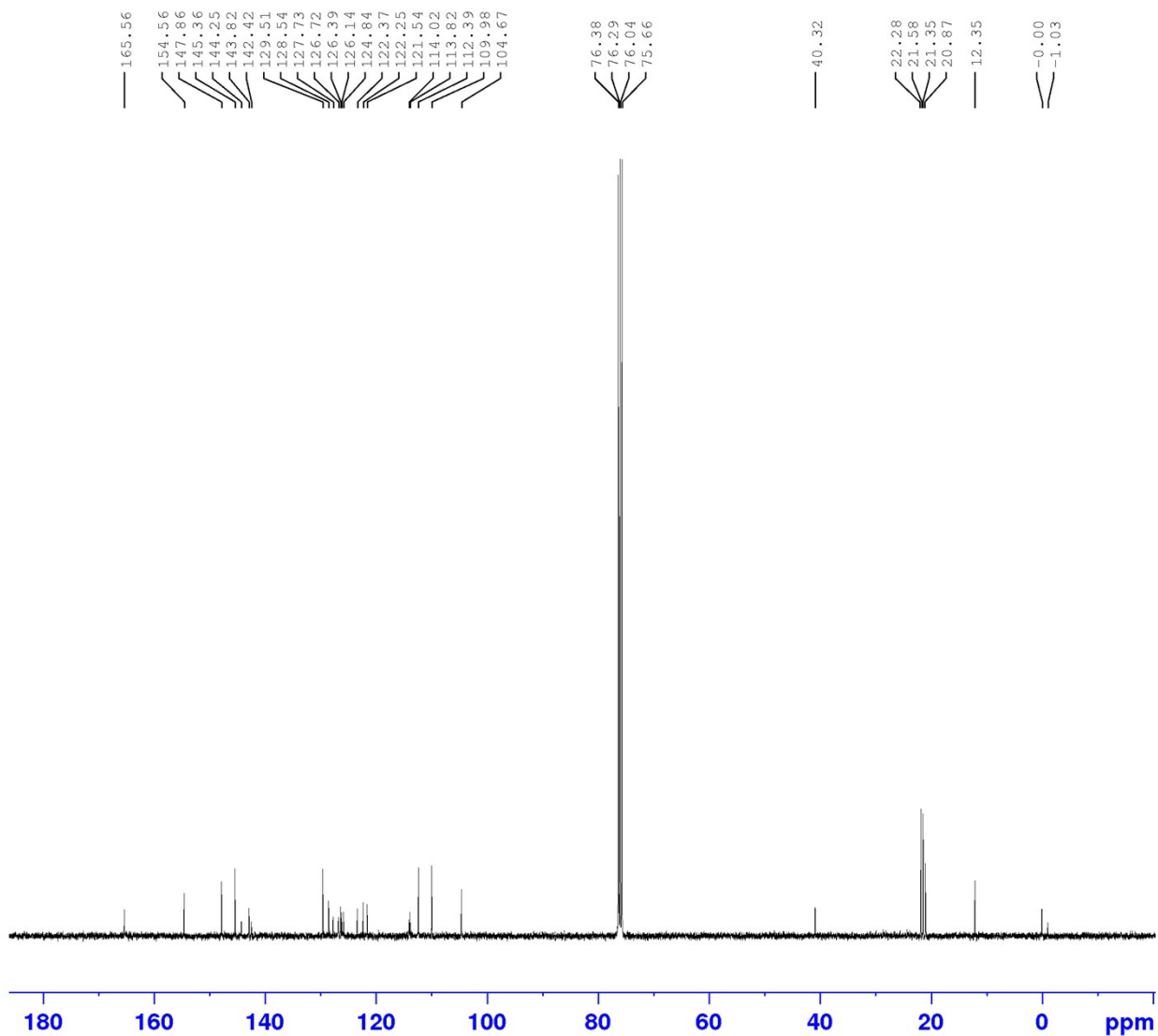


Figure S10  $^{13}\text{C}$  NMR Spectrum of **7e**

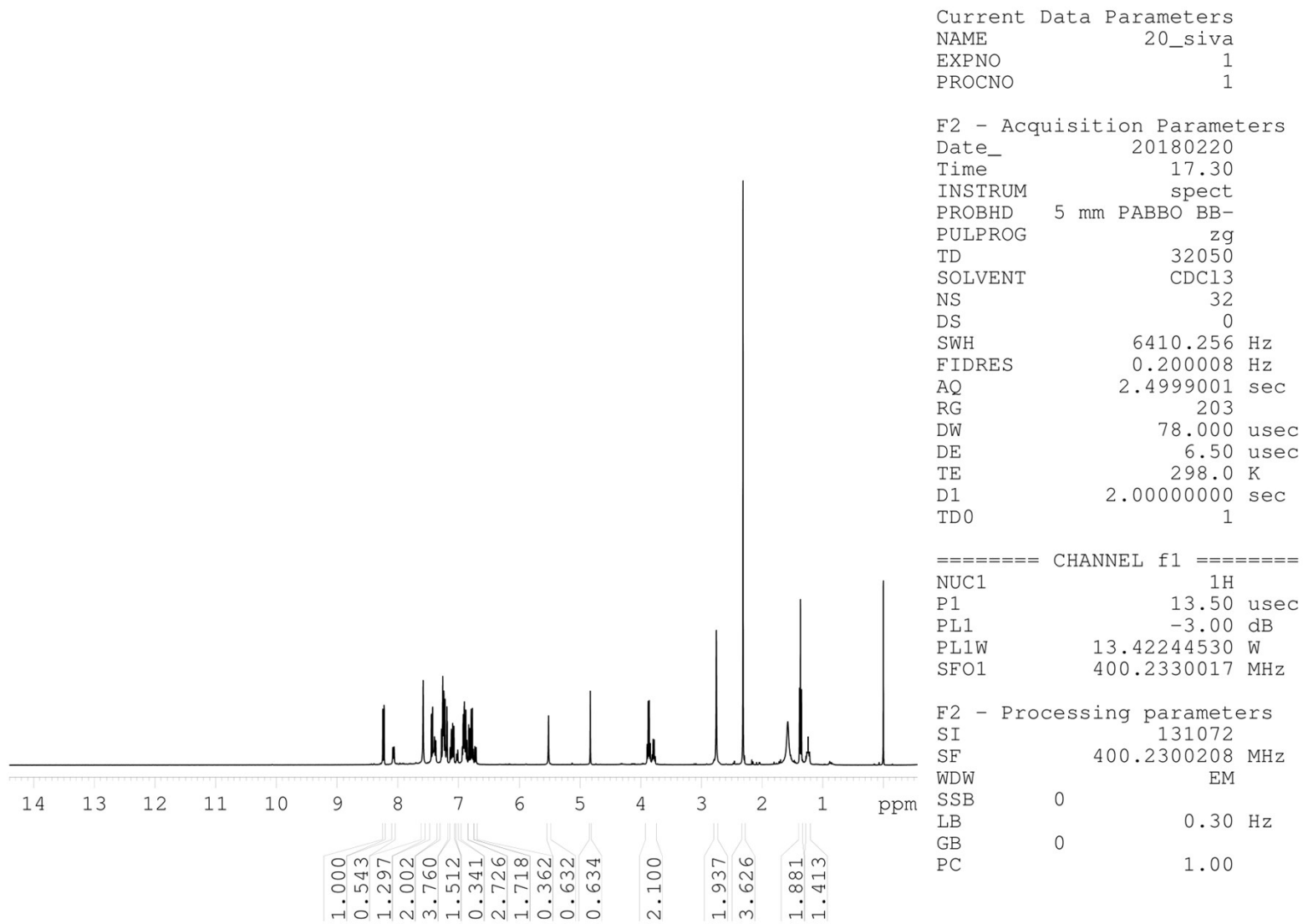


Figure S11 <sup>1</sup>H NMR Spectrum of 7f

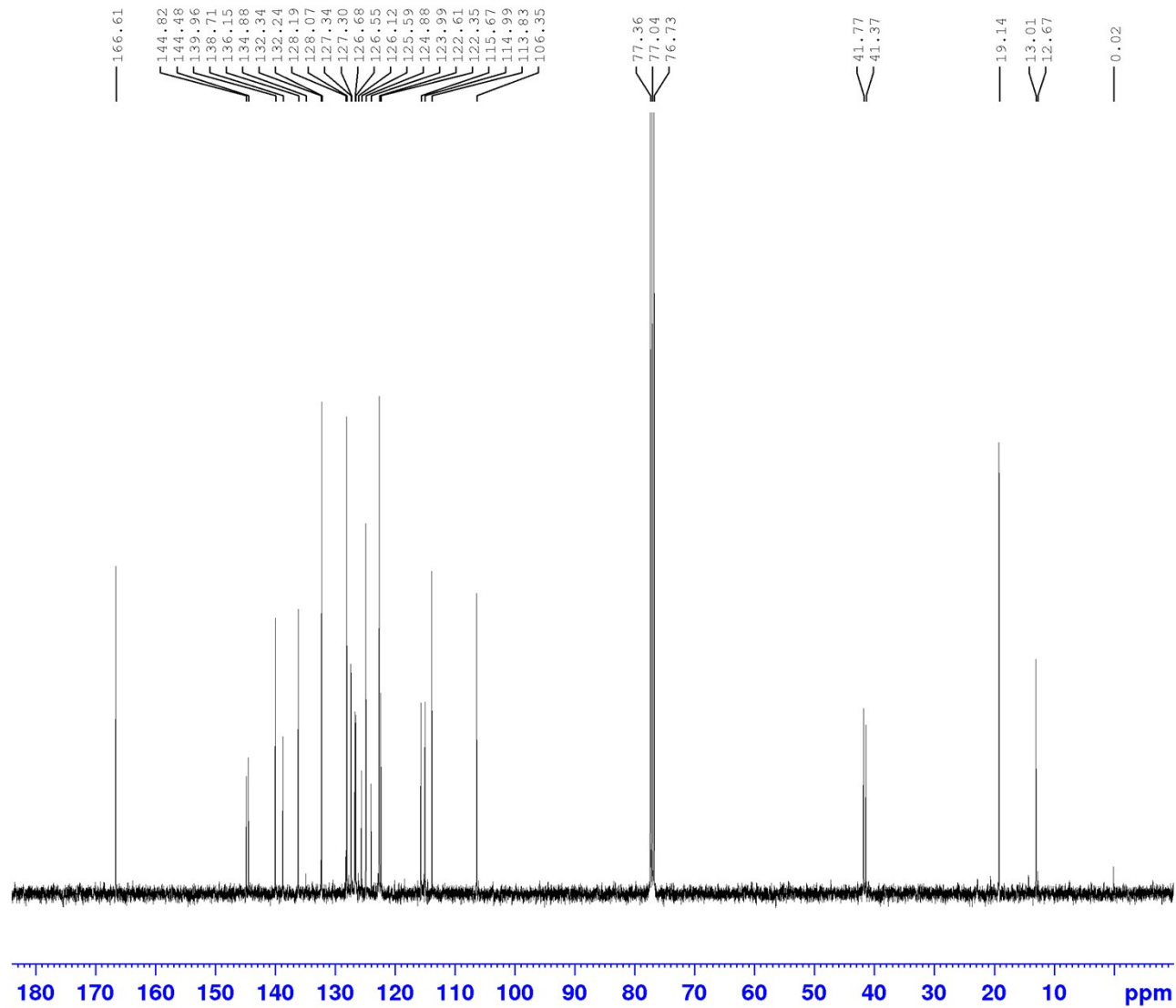
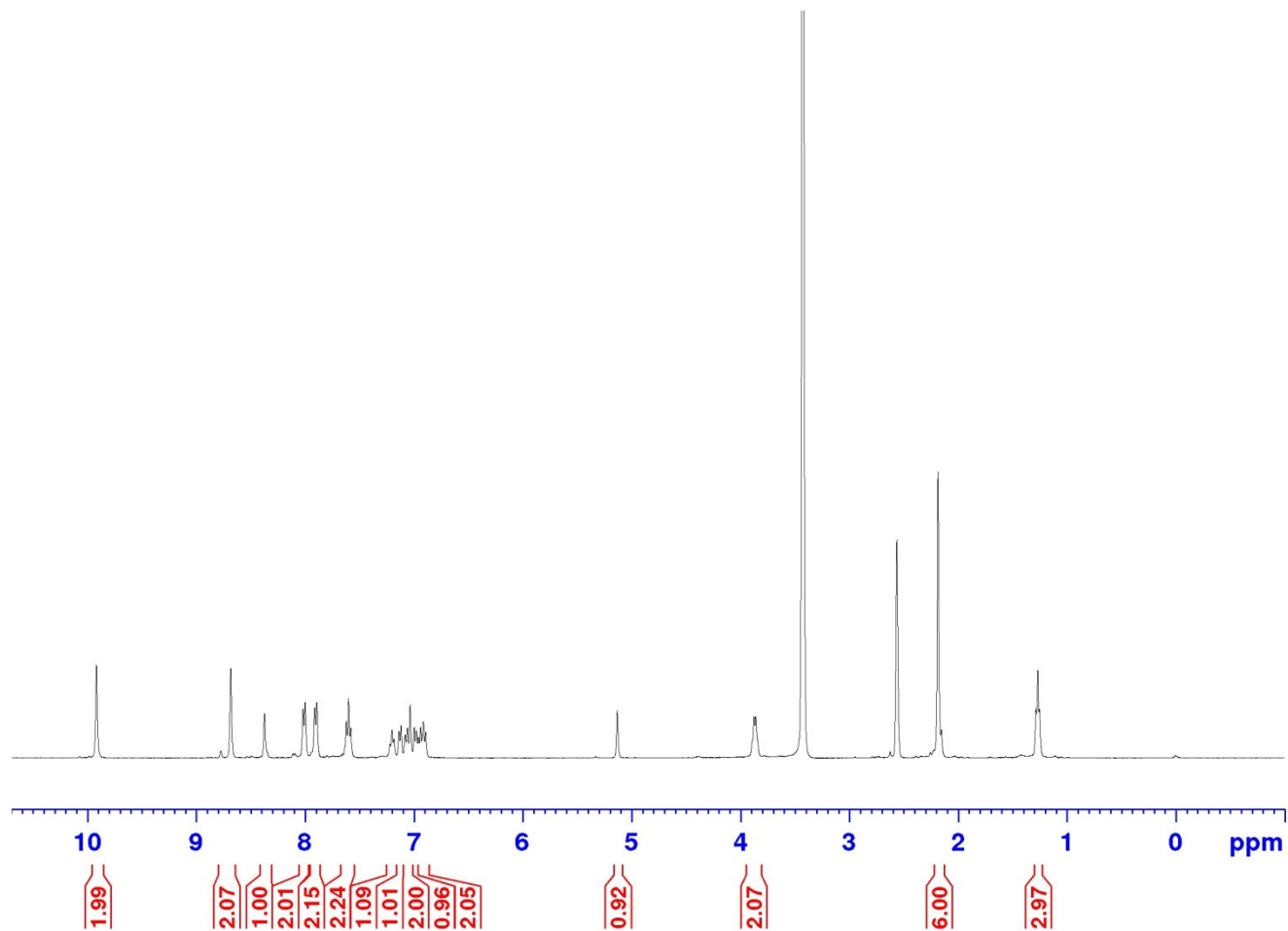


Figure S12  $^{13}\text{C}$  NMR Spectrum of **7f**



Current Data Parameters  
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 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20181019  
 Time 12.52 h  
 INSTRUM spect  
 PROBHD Z108618\_0903 (  
 PULPROG zg30  
 TD 65536  
 SOLVENT DMSO  
 NS 16  
 DS 2  
 SWH 8012.820 Hz  
 FIDRES 0.244532 Hz  
 AQ 4.0894465 sec  
 RG 100.4  
 DW 62.400 usec  
 DE 6.50 usec  
 TE 296.1 K  
 D1 1.00000000 sec  
 TD0 1  
 SFO1 400.2324714 MHz  
 NUC1 1H  
 P1 14.00 usec  
 PLW1 13.95600033 W

F2 - Processing parameters  
 SI 65536  
 SF 400.2299783 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

Figure S13 <sup>1</sup>H NMR Spectrum of 7g

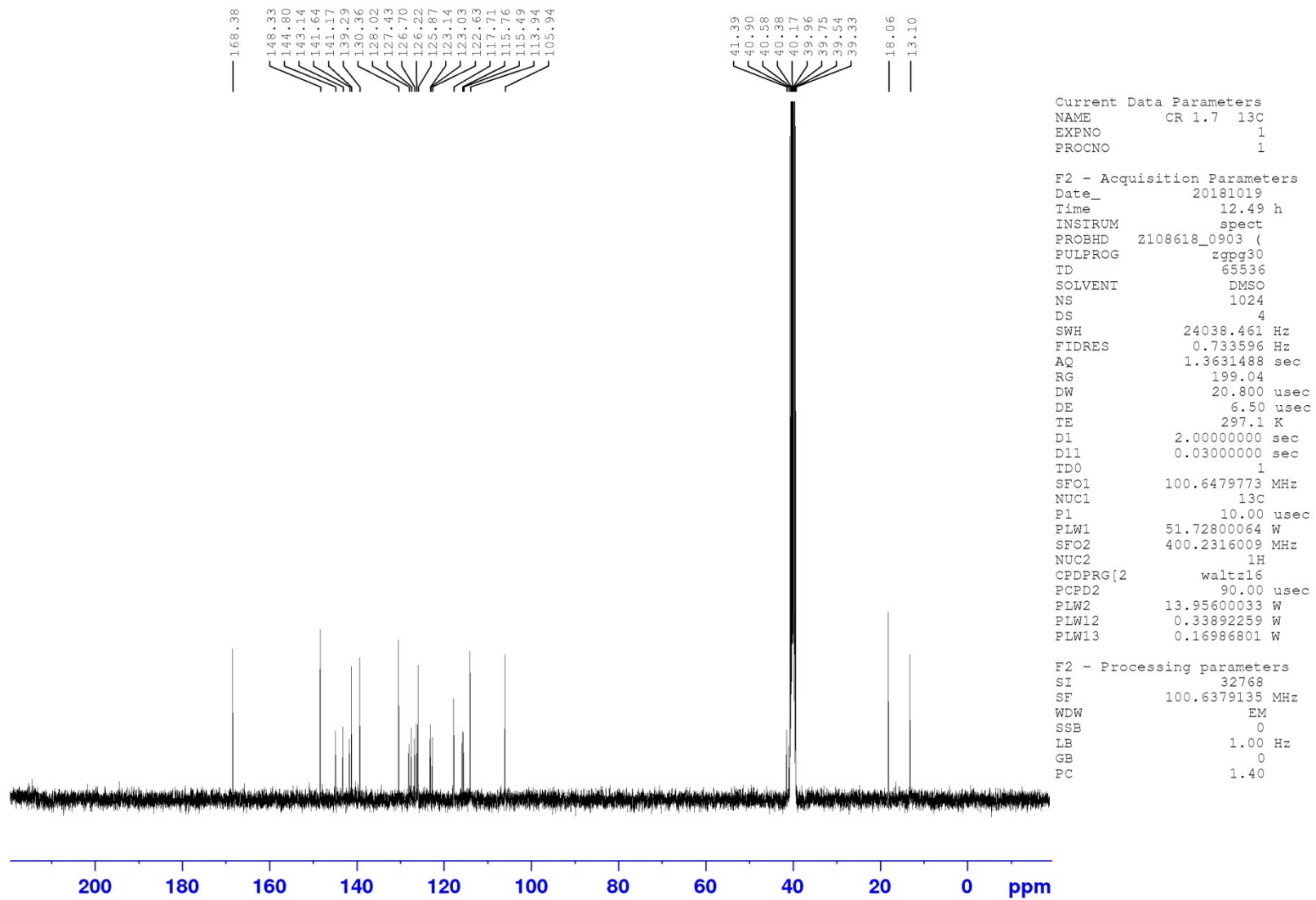


Figure S14 <sup>13</sup>C NMR Spectrum of 7g

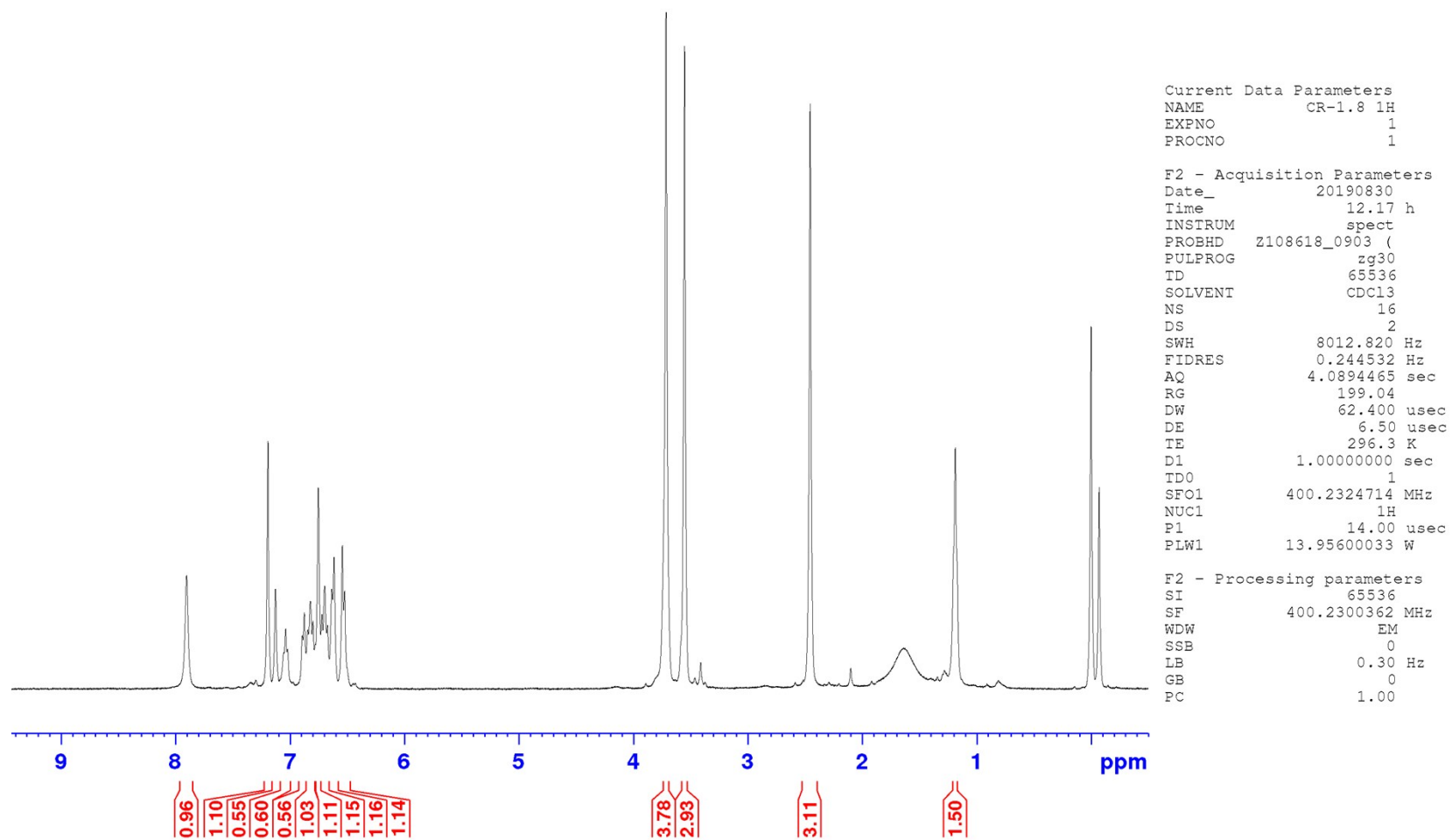


Figure S15  $^1\text{H}$  NMR Spectrum of **7h**



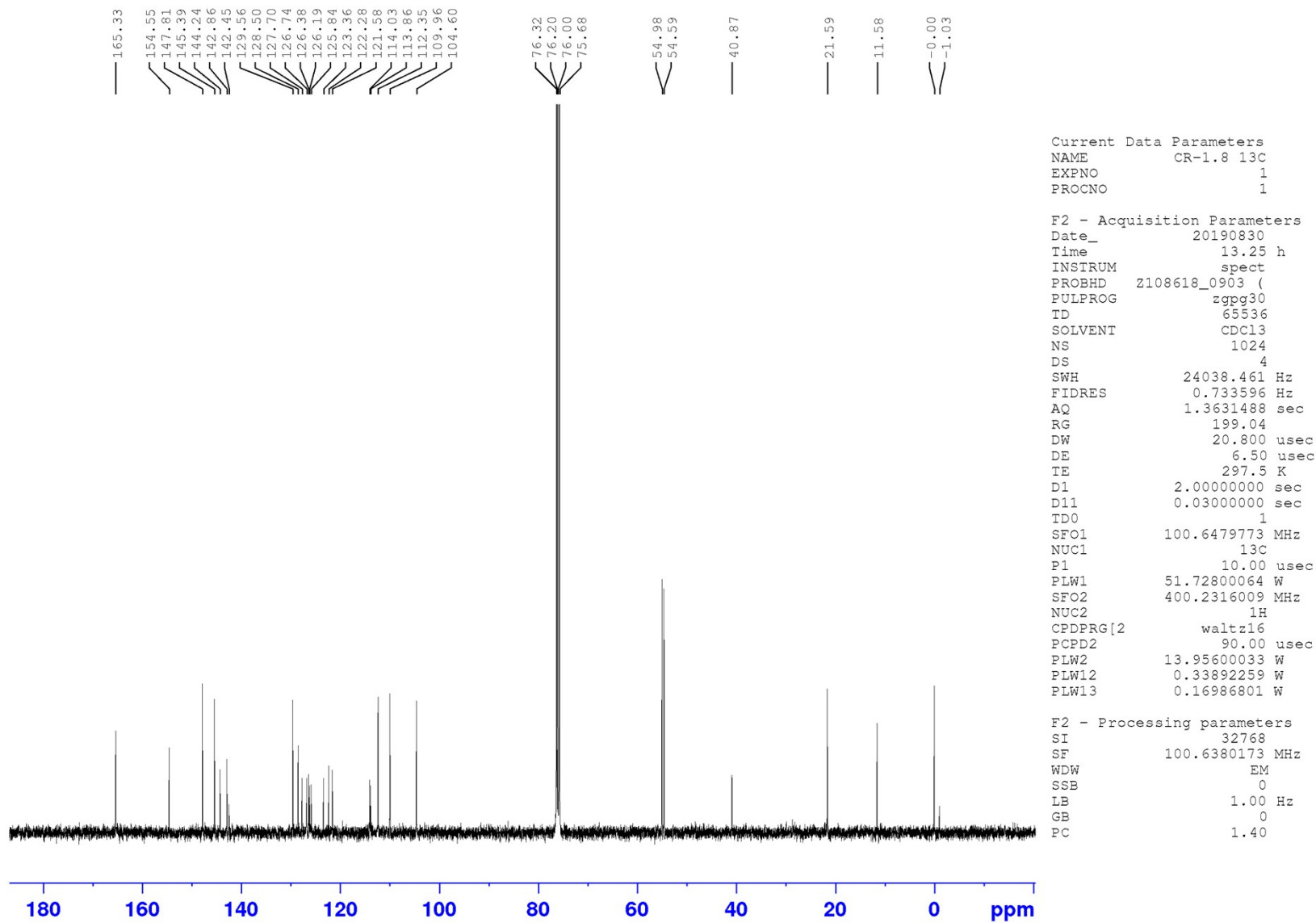


Figure S16 <sup>13</sup>C NMR Spectrum of 7h

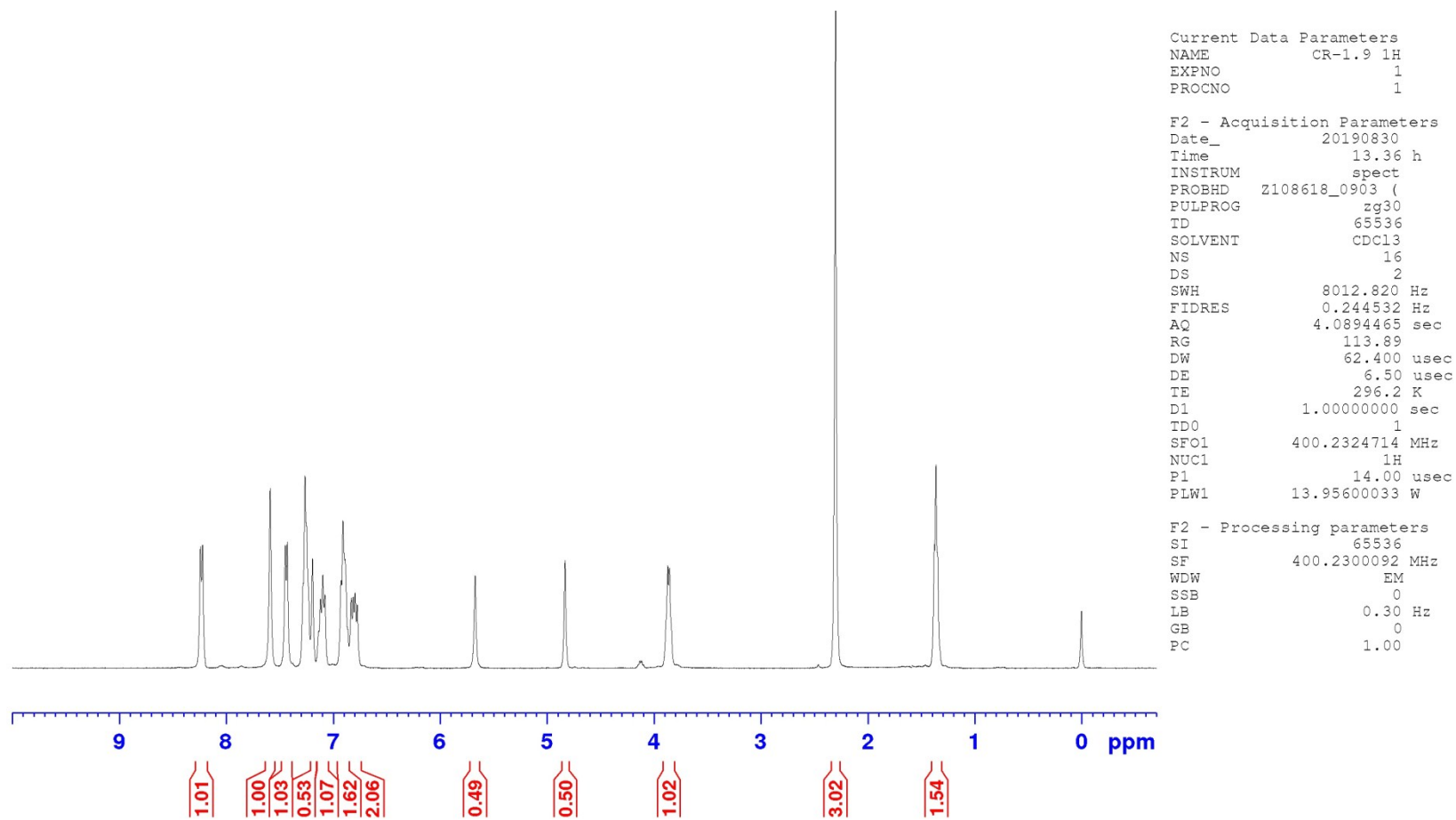
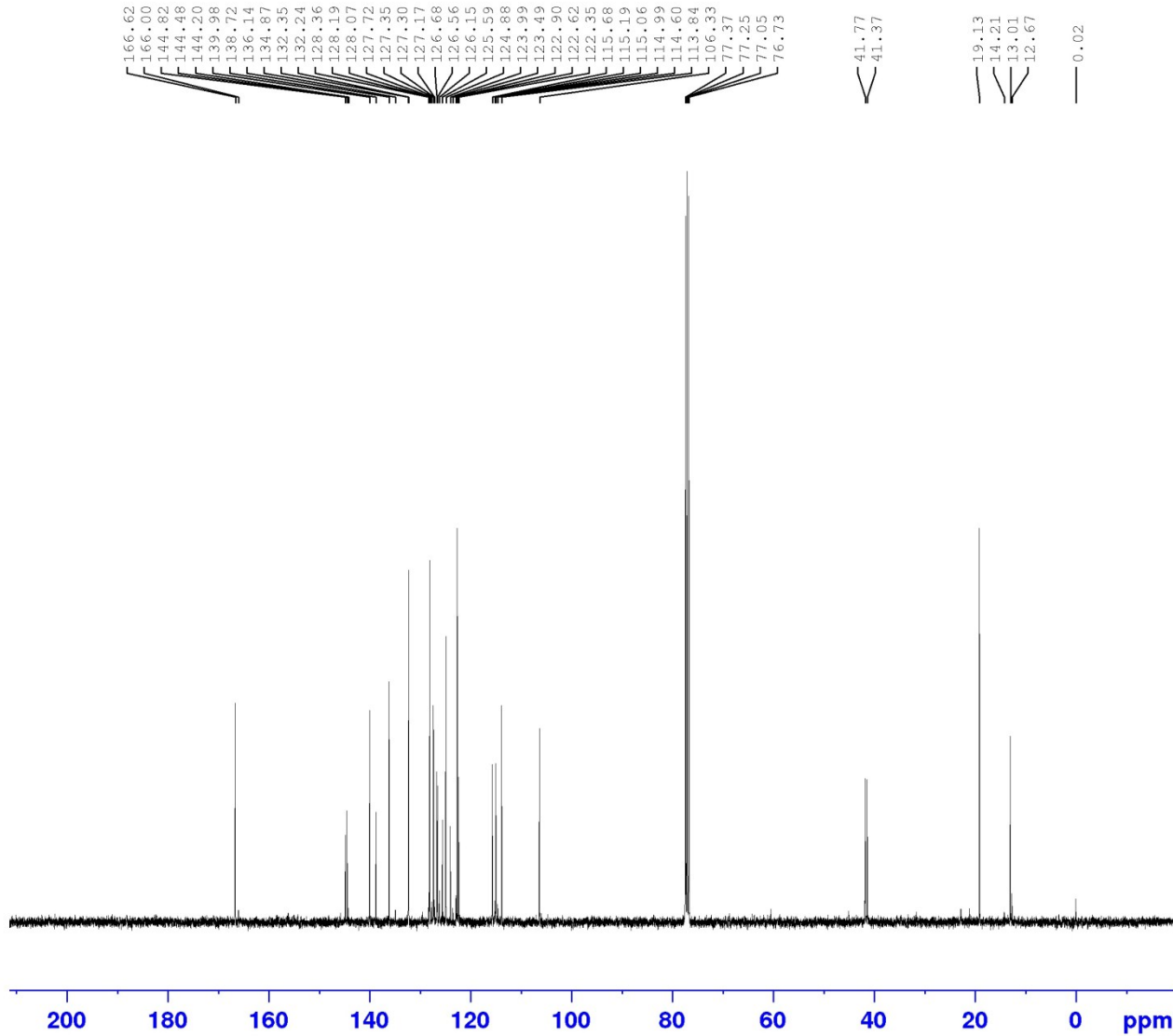


Figure S17 <sup>1</sup>H NMR Spectrum of 7i



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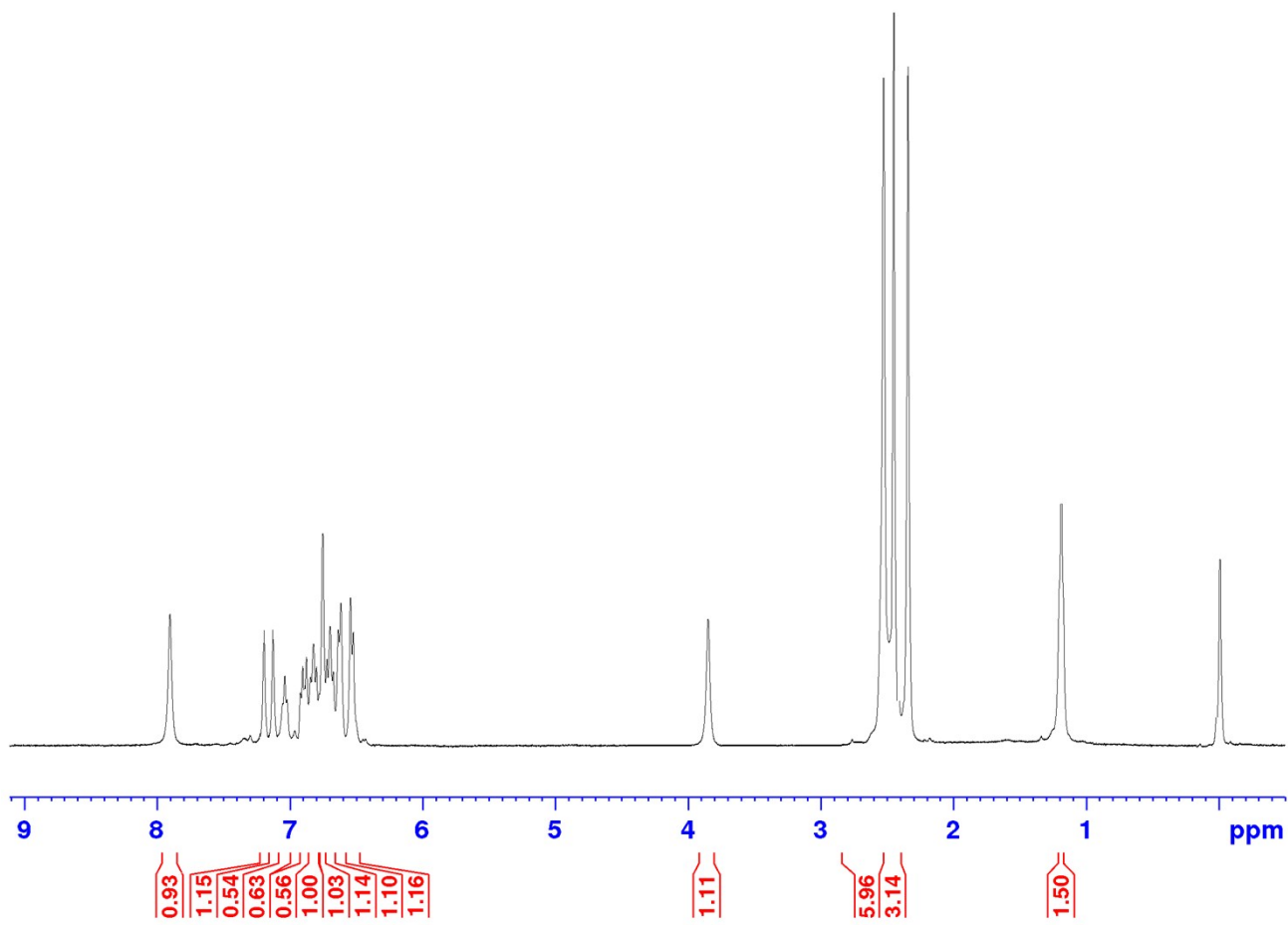
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EXPNO         1
PROCNO        1

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Time          14.49 h
INSTRUM       spect
PROBHD        Z108618_0903 (
PULPROG       zgpg30
TD            65536
SOLVENT       CDCl3
NS            1024
DS            4
SWH           24038.461 Hz
FIDRES        0.733596 Hz
AQ            1.3631488 sec
RG            199.04
DW            20.800 usec
DE            6.50 usec
TE            297.6 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           1
SFO1          100.6479773 MHz
NUC1          13C
P1            10.00 usec
PLW1          51.72800064 W
SFO2          400.2316009 MHz
NUC2          1H
CPDPRG[2]    waltz16
PCPD2         90.00 usec
PLW2          13.95600033 W
PLW12         0.33892259 W
PLW13         0.16986801 W

F2 - Processing parameters
SI            32768
SF            100.6379135 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.40

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Figure S18 <sup>13</sup>C NMR Spectrum of 7i



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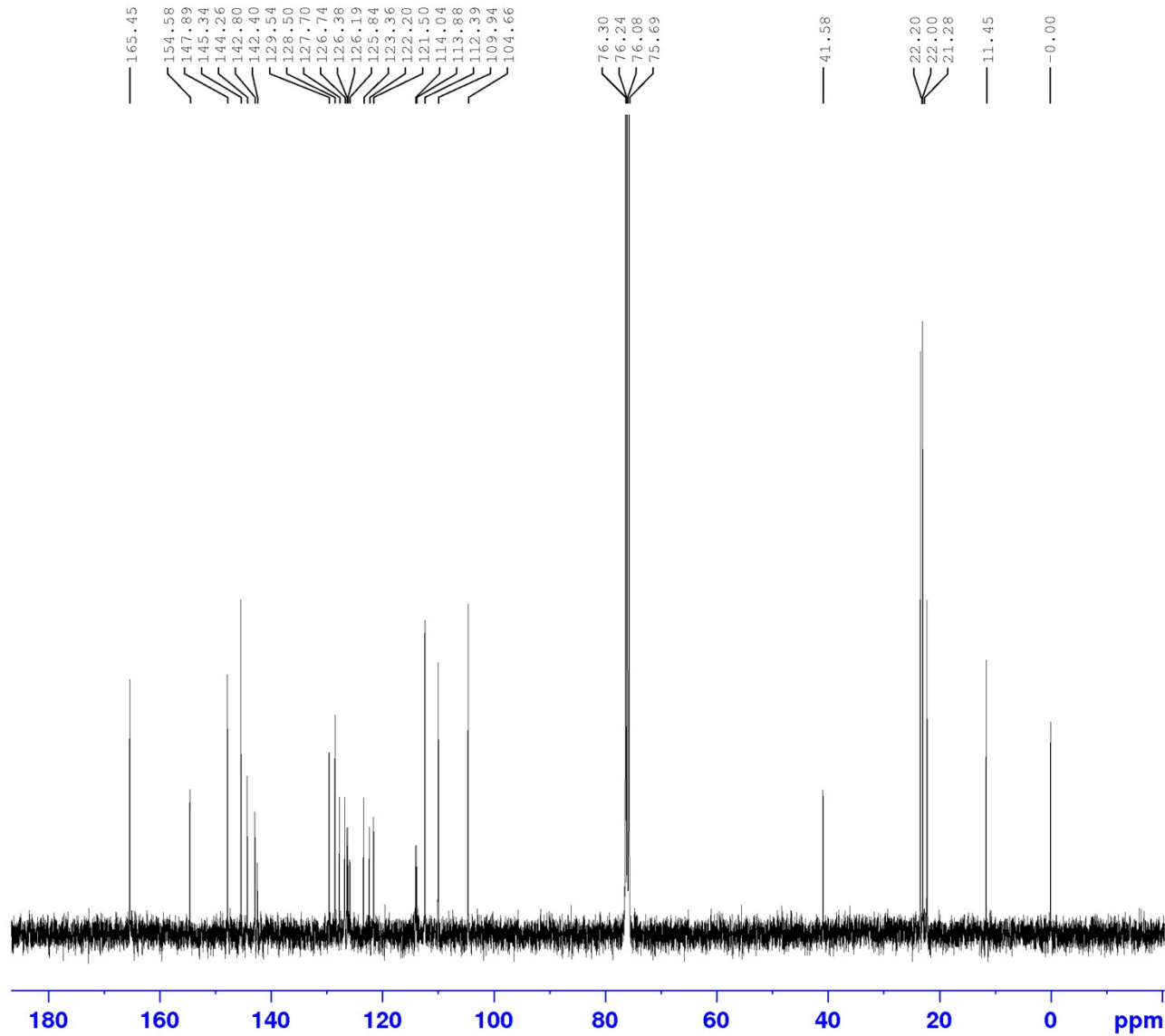
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EXPNO         1
PROCNO        1

F2 - Acquisition Parameters
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Time          12.03 h
INSTRUM       spect
PROBHD        Z108618_0903 (
PULPROG       zg30
TD            65536
SOLVENT       CDCl3
NS            16
DS            2
SWH           8012.820 Hz
FIDRES        0.244532 Hz
AQ            4.0894465 sec
RG            199.04
DW            62.400 usec
DE            6.50 usec
TE            296.3 K
D1            1.00000000 sec
TD0           1
SFO1          400.2324714 MHz
NUC1          1H
P1            14.00 usec
PLW1          13.95600033 W

F2 - Processing parameters
SI            65536
SF            400.2300362 MHz
WDW           EM
SSB           0
LB            0.30 Hz
GB            0
PC            1.00

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Figure S19 <sup>1</sup>H NMR Spectrum of 7j



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Current Data Parameters
NAME          CR-1.10 13C
EXPNO         1
PROCNO        1

F2 - Acquisition Parameters
Date_         20190818
Time          15.25 h
INSTRUM       spect
PROBHD        Z108618_0903 (
PULPROG       zgpg30
TD            65536
SOLVENT       CDCl3
NS            1024
DS            4
SWH           24038.461 Hz
FIDRES        0.733596 Hz
AQ            1.3631488 sec
RG            199.04
DW            20.800 usec
DE            6.50 usec
TE            297.5 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           1
SFO1          100.6479773 MHz
NUC1          13C
P1            10.00 usec
PLW1          51.72800064 W
SFO2          400.2316009 MHz
NUC2          1H
CPDPRG[2]    waltz16
PCPD2         90.00 usec
PLW2          13.95600033 W
PLW12         0.33892259 W
PLW13         0.16986801 W

F2 - Processing parameters
SI            32768
SF            100.6380173 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.40

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Figure S20 <sup>13</sup>C NMR Spectrum of 7j