

PROTON DMSO (C:\Bruker\TOPSPIN) abari 25



repeated

Current Data Parameters
NAME drMashooq-PD-1a
EXPNO 10
PROCNO 1

P-1

F2 - Acquisition Parameters

Date_ 20181015
Time 12.37
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 10.32
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====

SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters

SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

3.7-3.9 (4H, s, OCH_3)

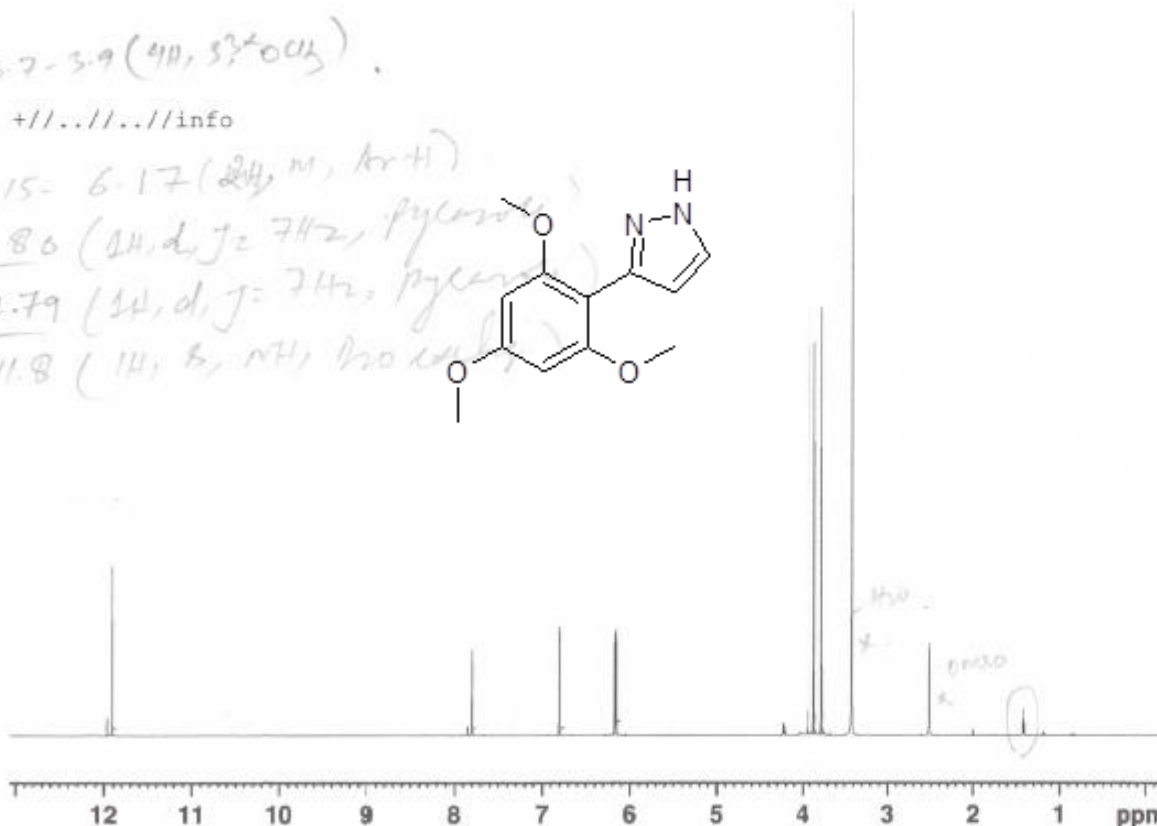
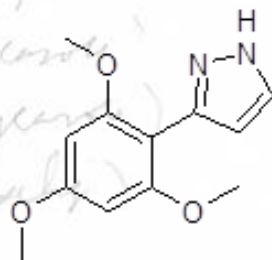
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6.15- 6.17 (2H, m, ArH)

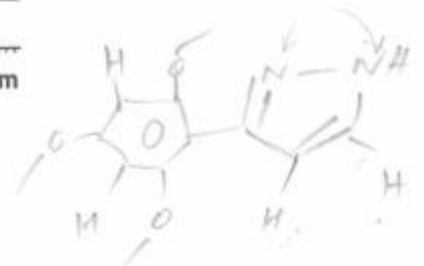
6.86 (1H, d, J= 7Hz, pyrrole)

7.79 (1H, d, J= 7Hz, pyrrole)

11.8 (1H, s, NH, broad)



¹H NMR SPECTRA OF COMPOUND P1



C13CPD DMSO (C:\Bruker\TOPSPIN) abari 25



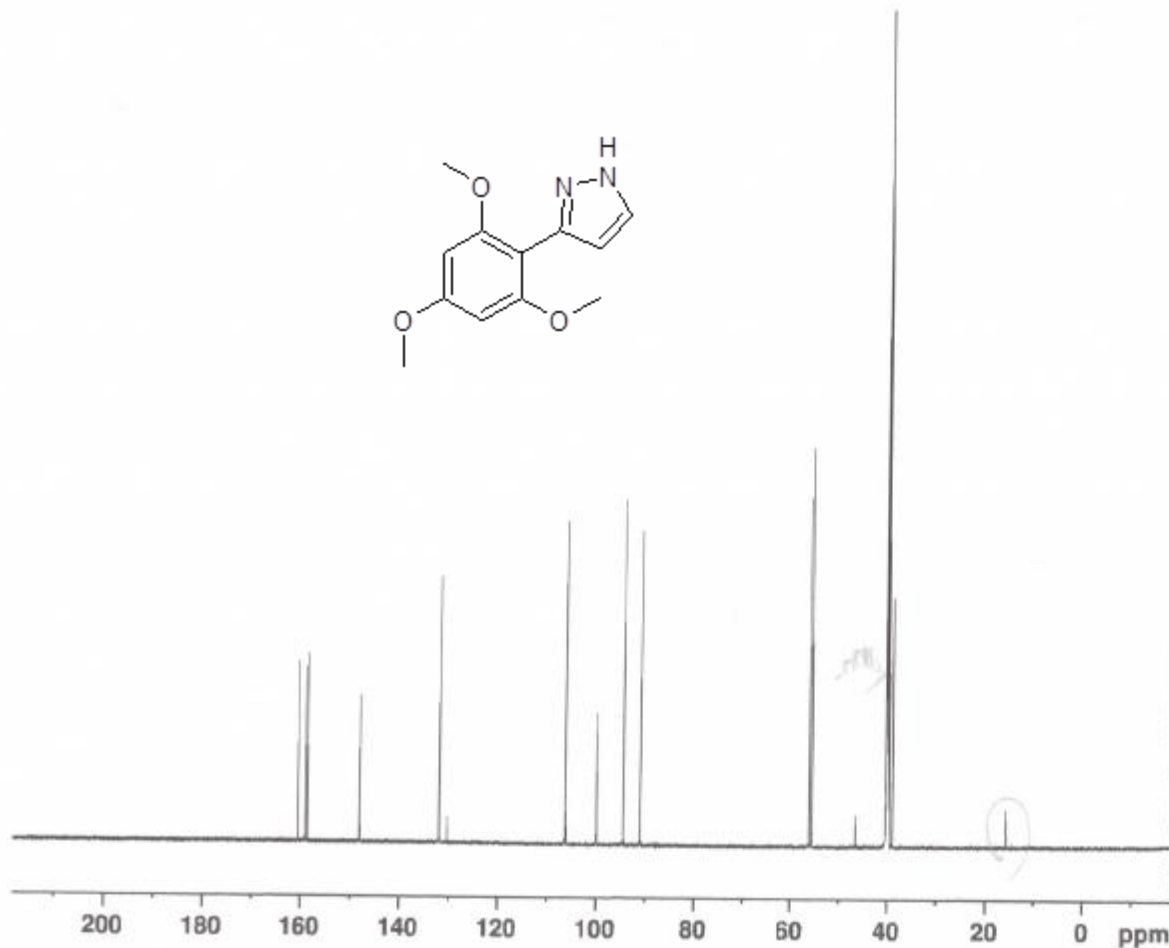
Current Data Parameters
NAME drMashooq-PD-1a
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181015
Time 12.49
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
ID 65536
SOLVENT DMSO
NS 209
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

===== CHANNEL f1 =====
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

===== CHANNEL f2 =====
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG2 waltz216
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
S1 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P1

PROTON DMSO (C:\Bruker\TOPSPIN) abari 26



Current Data Parameters
NAME drMashooq-P-2
EXPNO 10
PROCNO 1

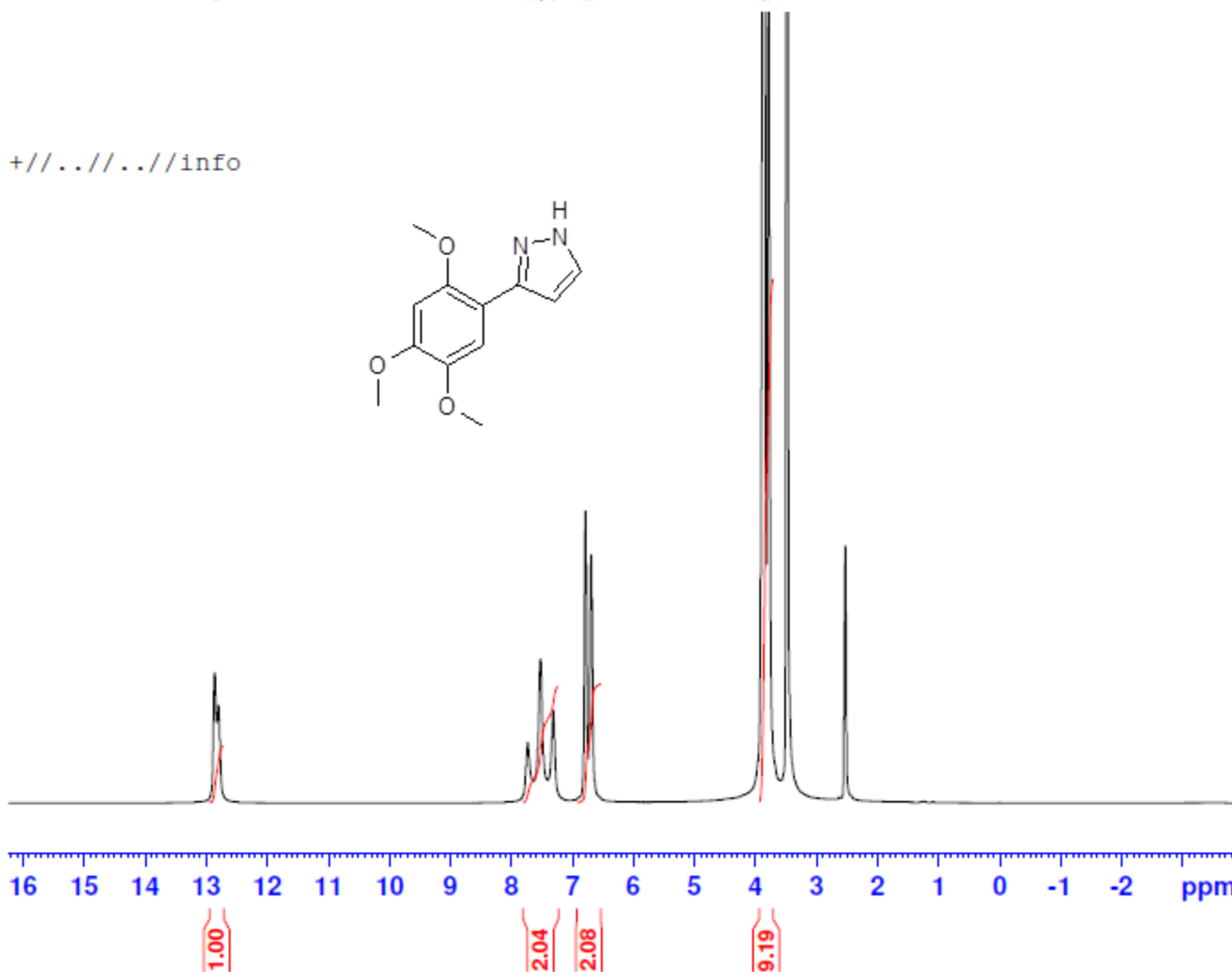
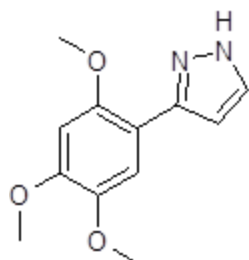
F2 - Acquisition Parameters

Date_ 20180926
Time 14.50
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 7.86
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

+//...//...//info



¹H NMR SPECTRA OF COMPOUND P2

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 26



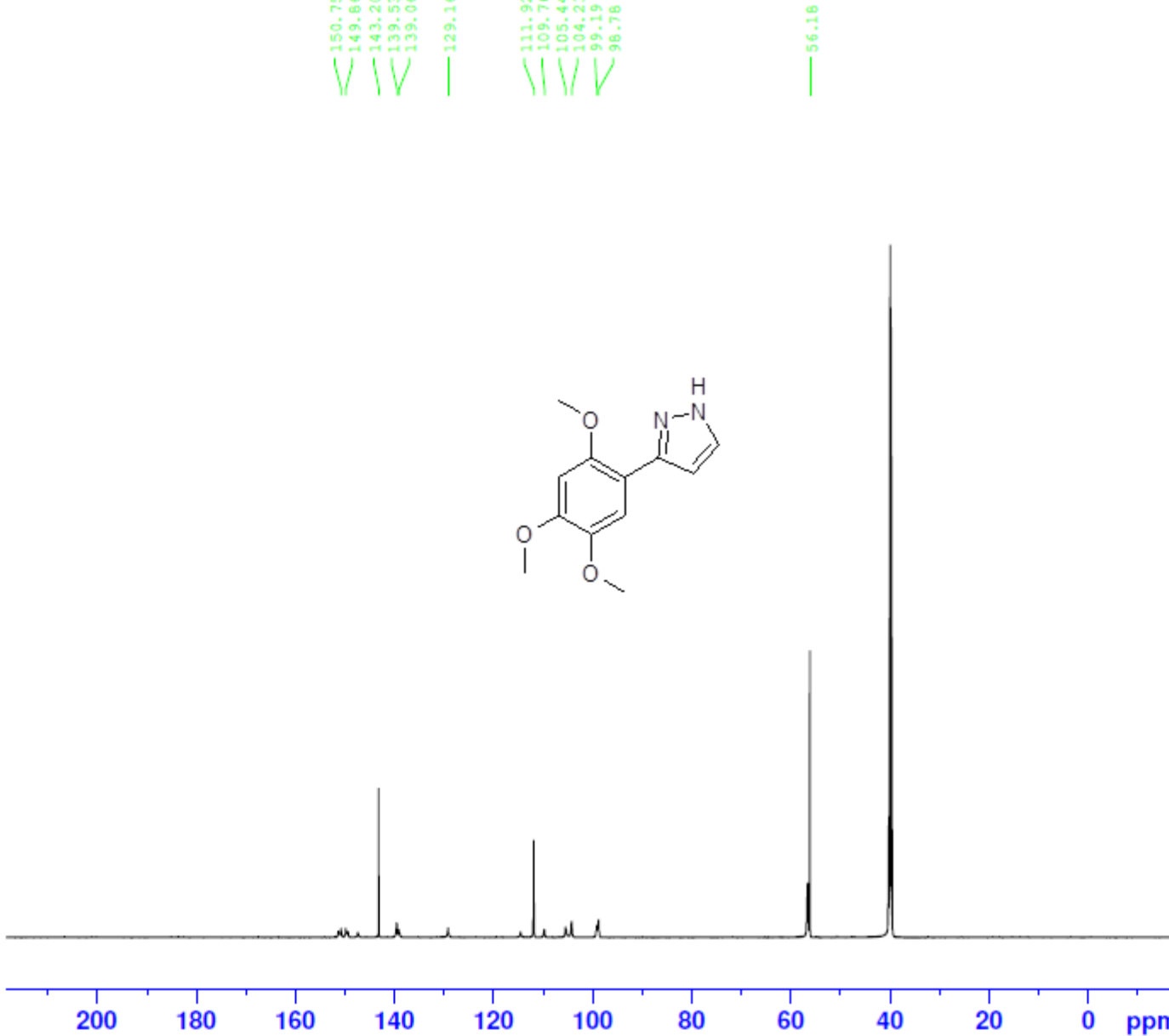
Current Data Parameters
NAME drMashooq-P-2
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time_ 15.32
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 839
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P2

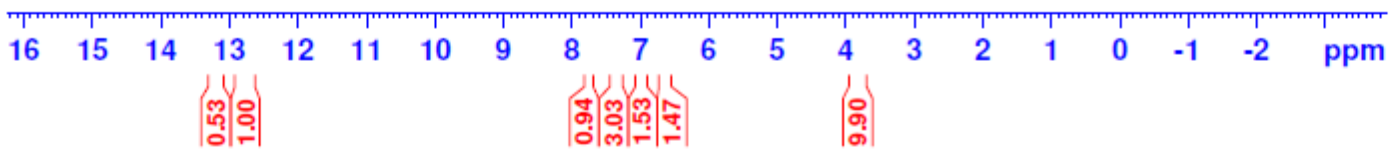
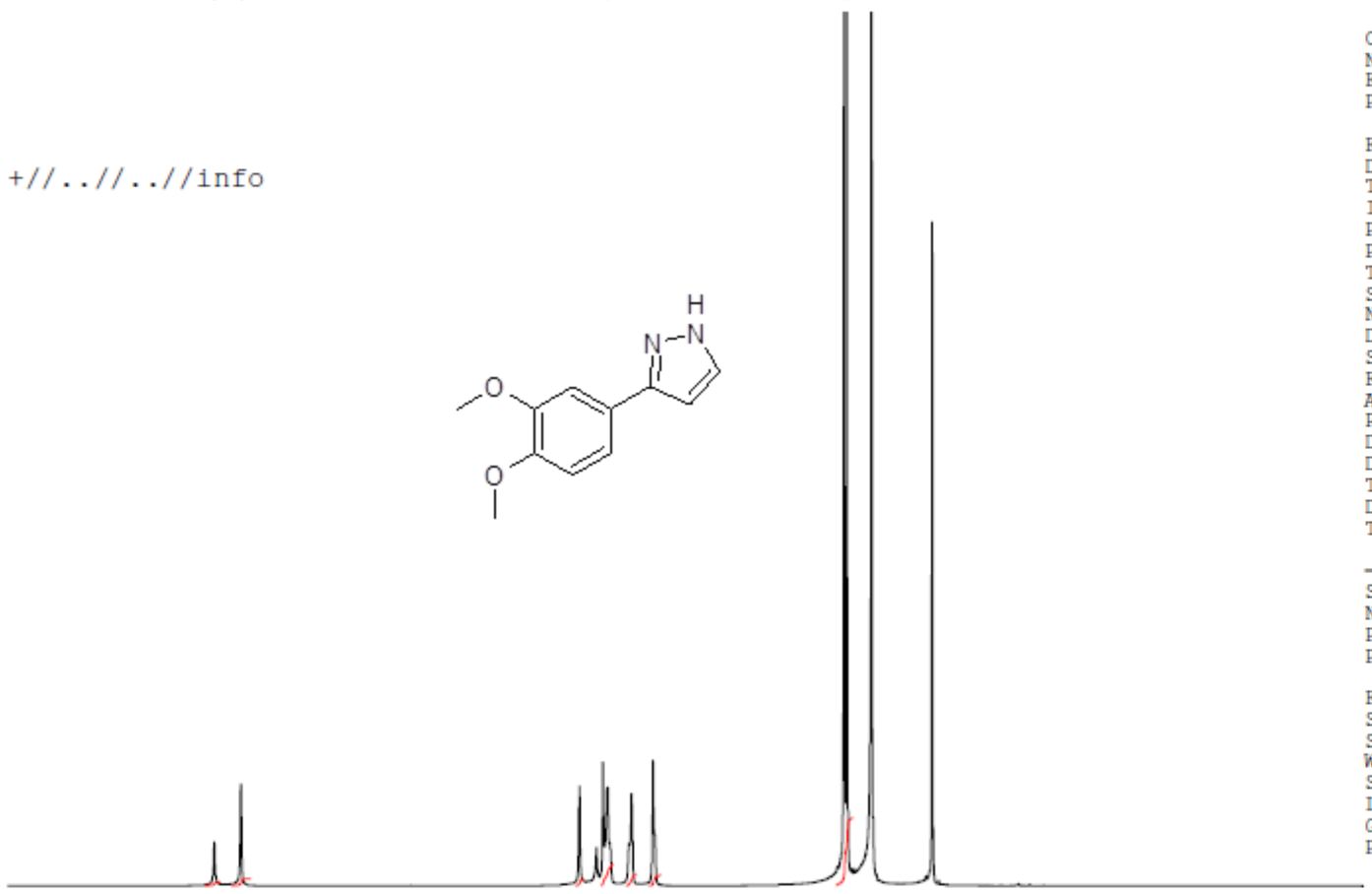
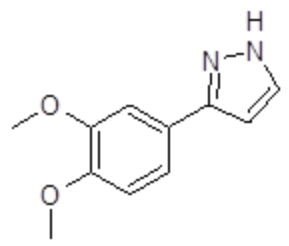
PROTON DMSO (C:\Bruker\TOPSPIN) abari 27

13.12
12.76

7.75
7.40
7.34
7.31
6.96
6.64

3.82
3.76

+//...//...//info



Current Data Parameters
NAME drMashooq-P-3
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time 15.37
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 14.16
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

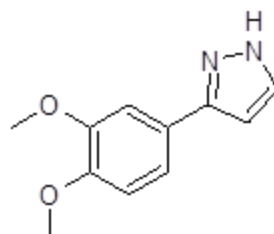
F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

¹H NMR SPECTRA OF COMPOUND P3

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 27

150.57
149.21
148.69
140.40
130.18
127.32
118.08
112.33
109.27
102.03
101.86

55.96



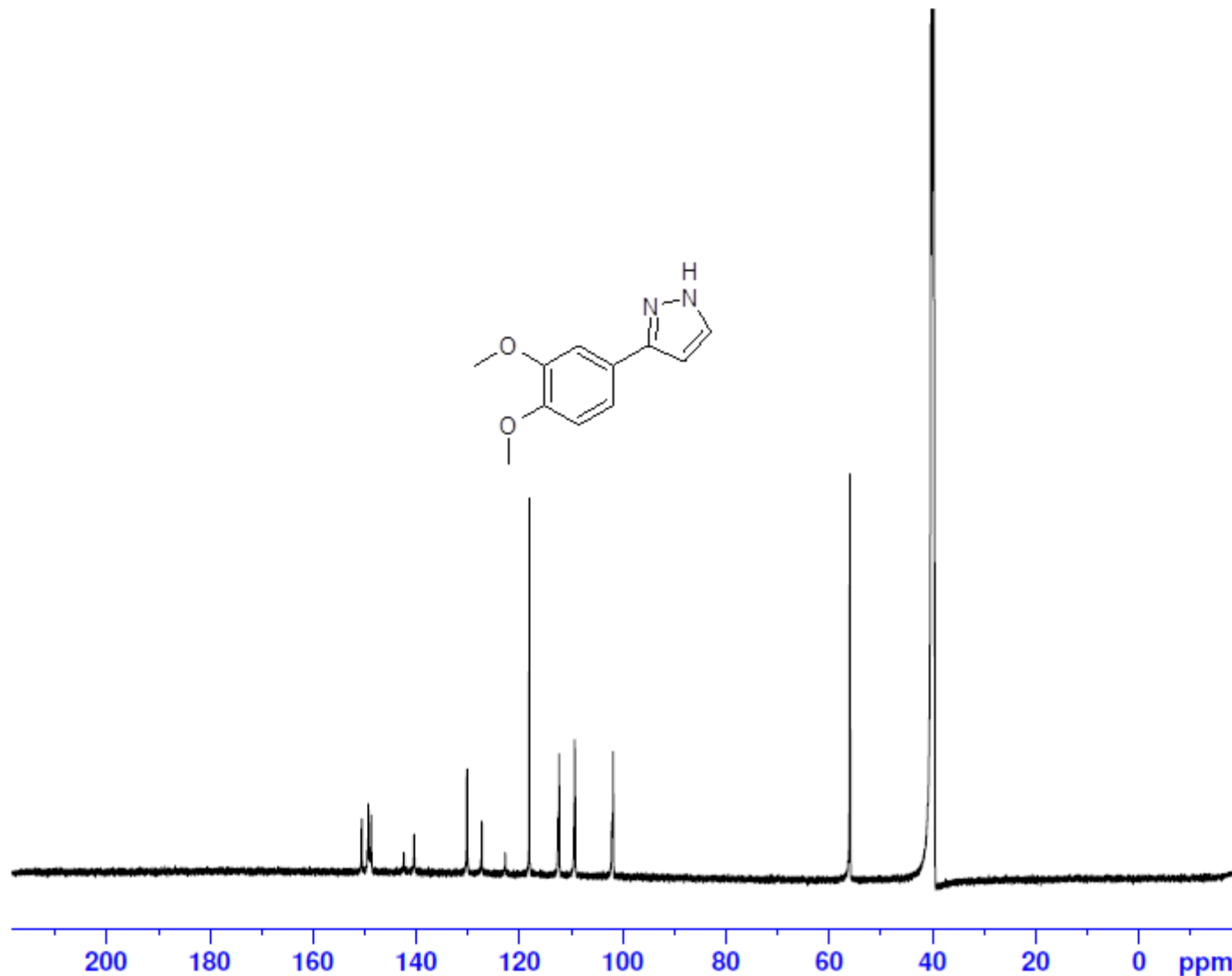
Current Data Parameters
NAME drMashooq-P-3
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time 15.39
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P3

PROTON DMSO {C:\Bruker\TOPSPIN} abari 28



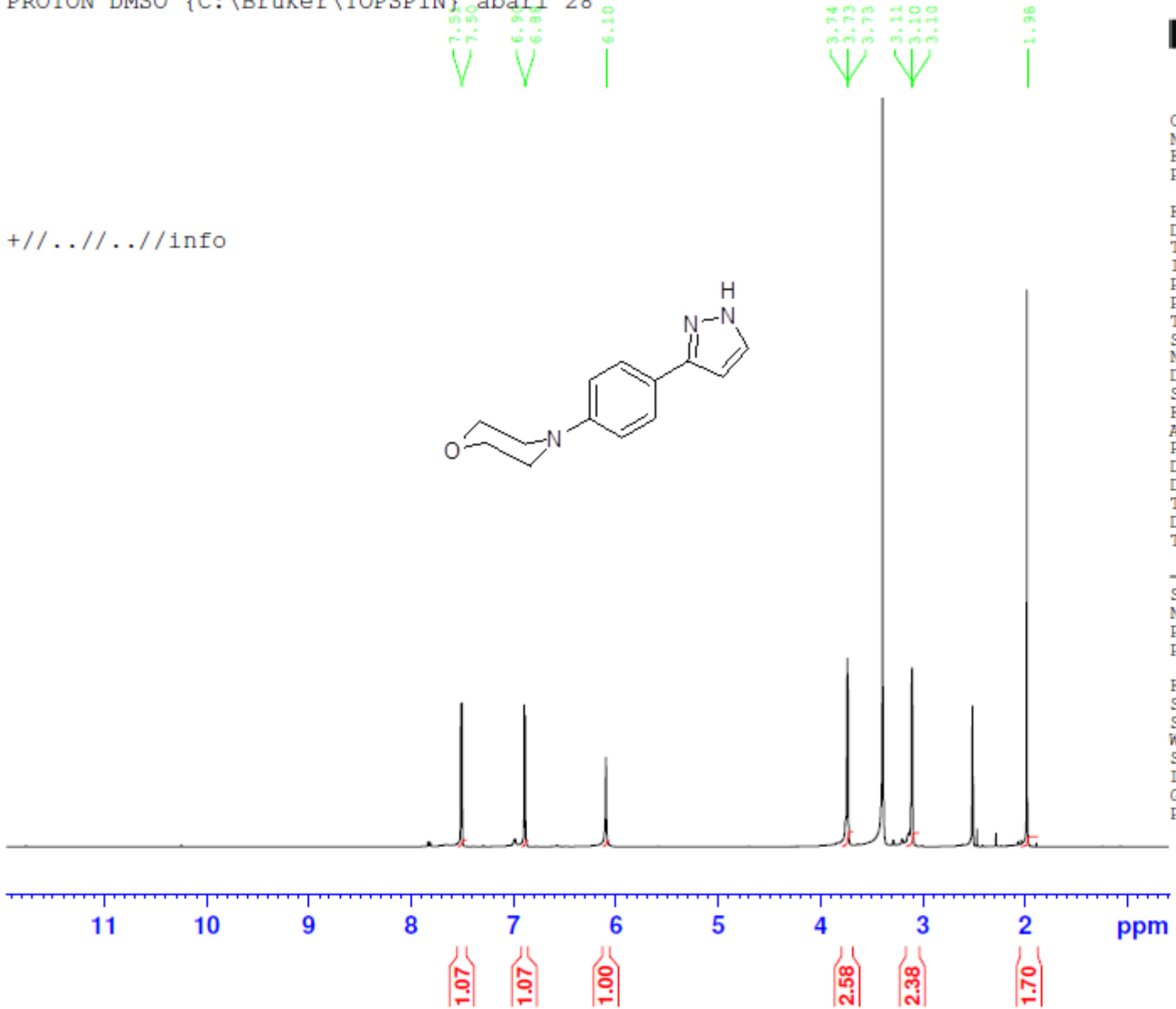
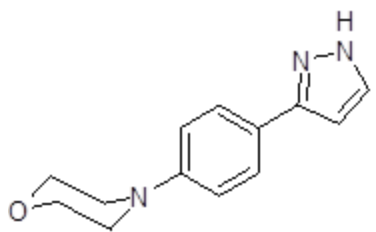
Current Data Parameters
NAME drMashooq-P-4
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time 16.32
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 12.56
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

+//...//...//info



¹H NMR SPECTRA OF COMPOUND P4

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 28



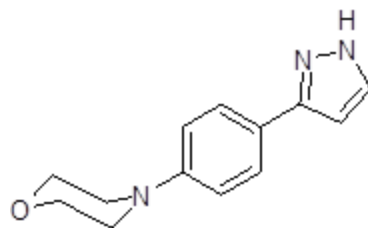
Current Data Parameters
NAME drMashooq-P-4
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time 17.22
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

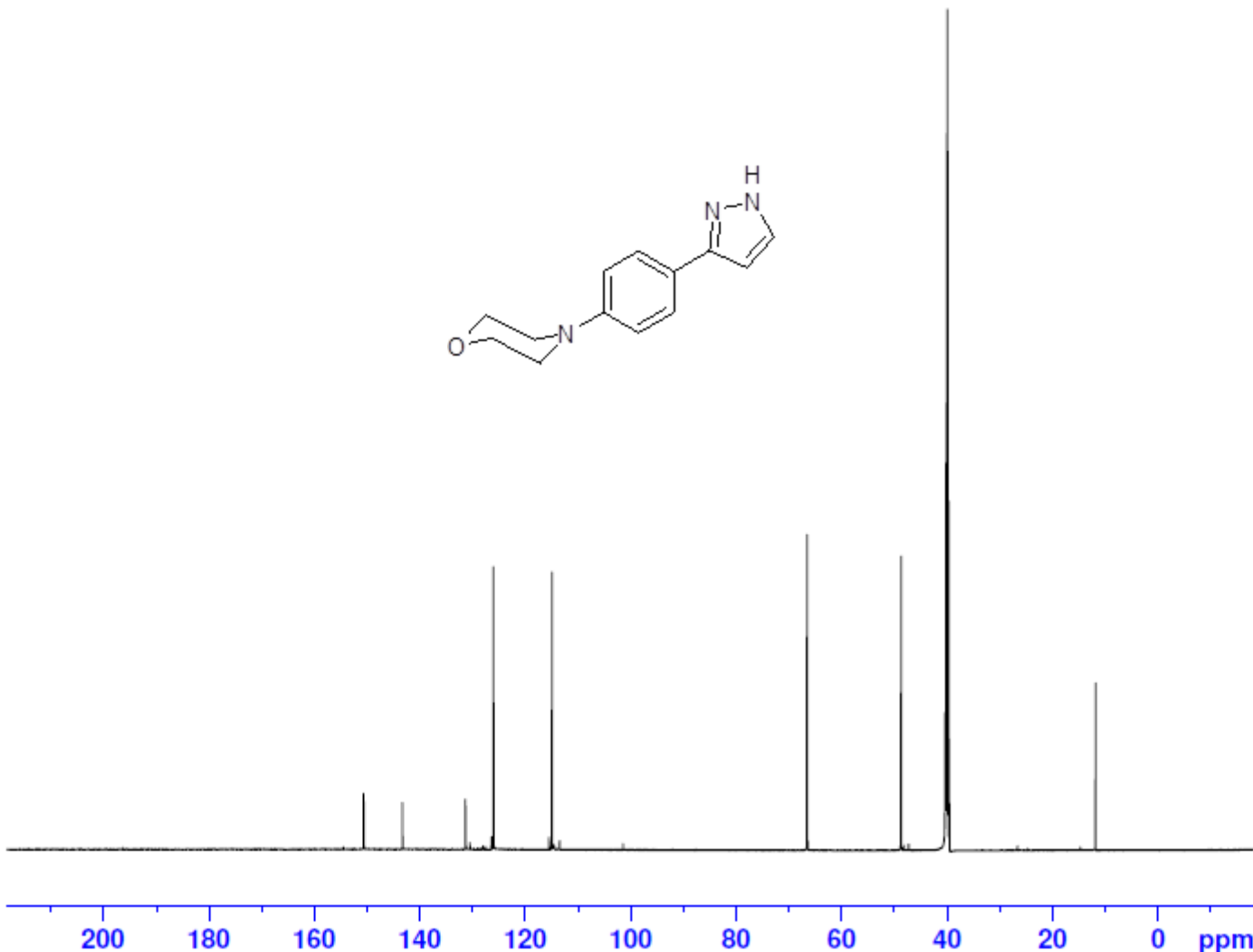
----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



150.62
143.30
131.31
126.03
114.91
66.53
46.69
11.78

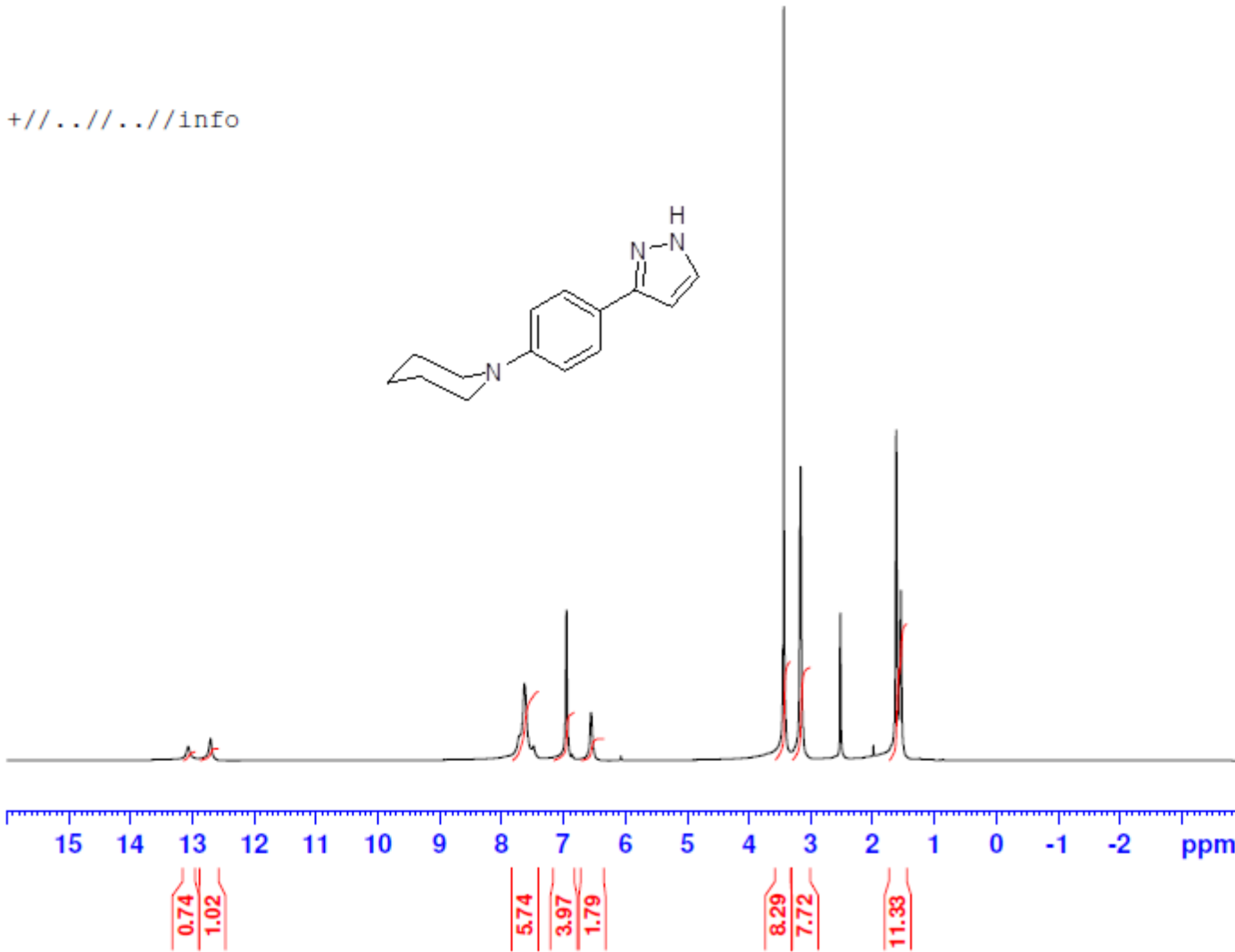
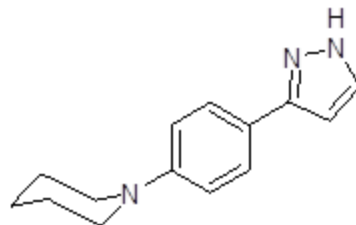


¹³C NMR SPECTRA OF COMPOUND P4

PROTON DMSO (C:\Bruker\TOPSPIN) avari 32



+//...//...//info



Current Data Parameters
NAME drMashooq-P-5
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time_ 20.12
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 11.14
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

¹H NMR SPECTRA OF COMPOUND P5

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 32



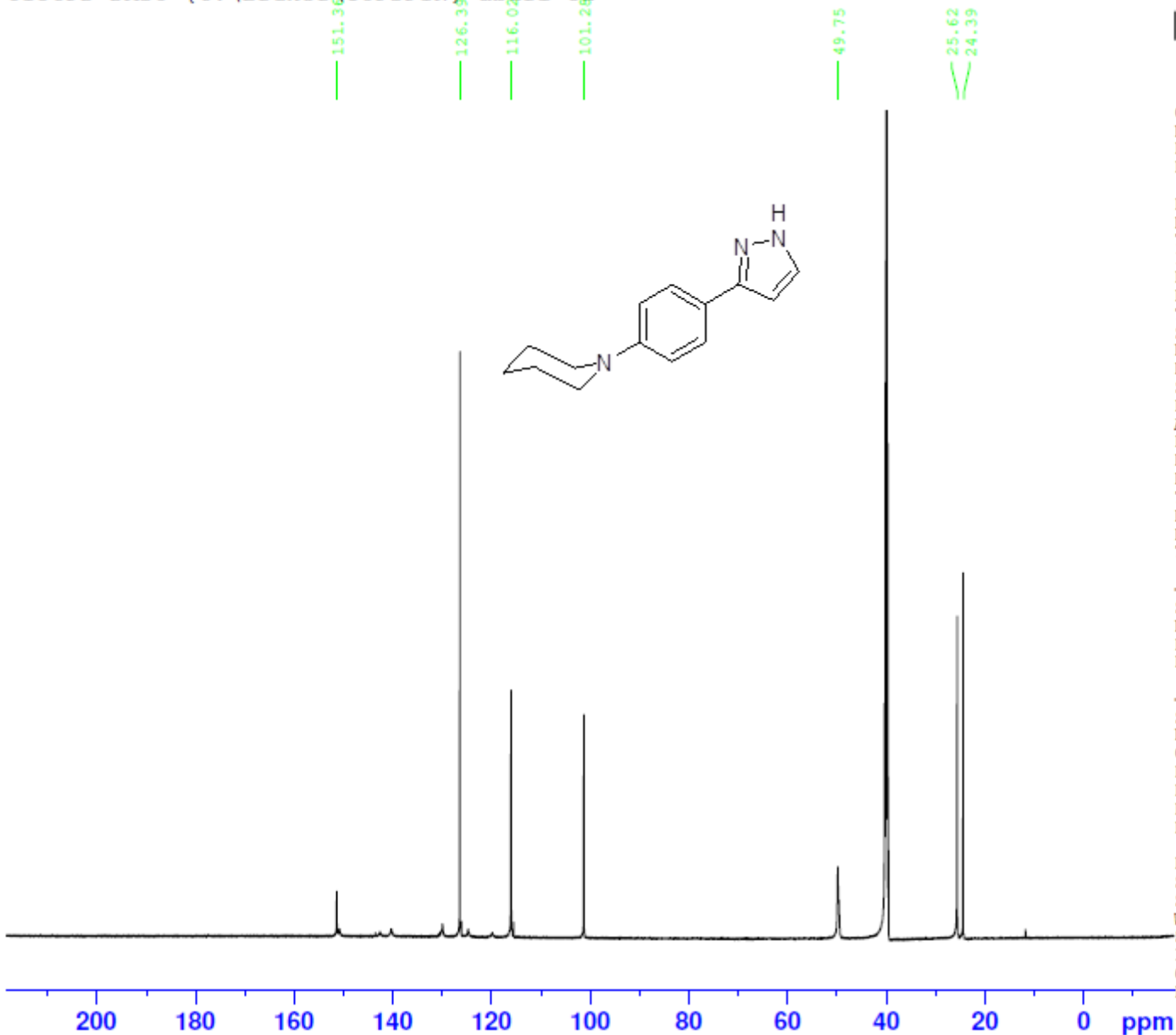
Current Data Parameters
NAME drMashooq-P-5
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time_ 21.02
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³ C NMR SPECTRA OF COMPOUND P5

PROTON DMSO {C:\Bruker\TOPSPIN} abari 29

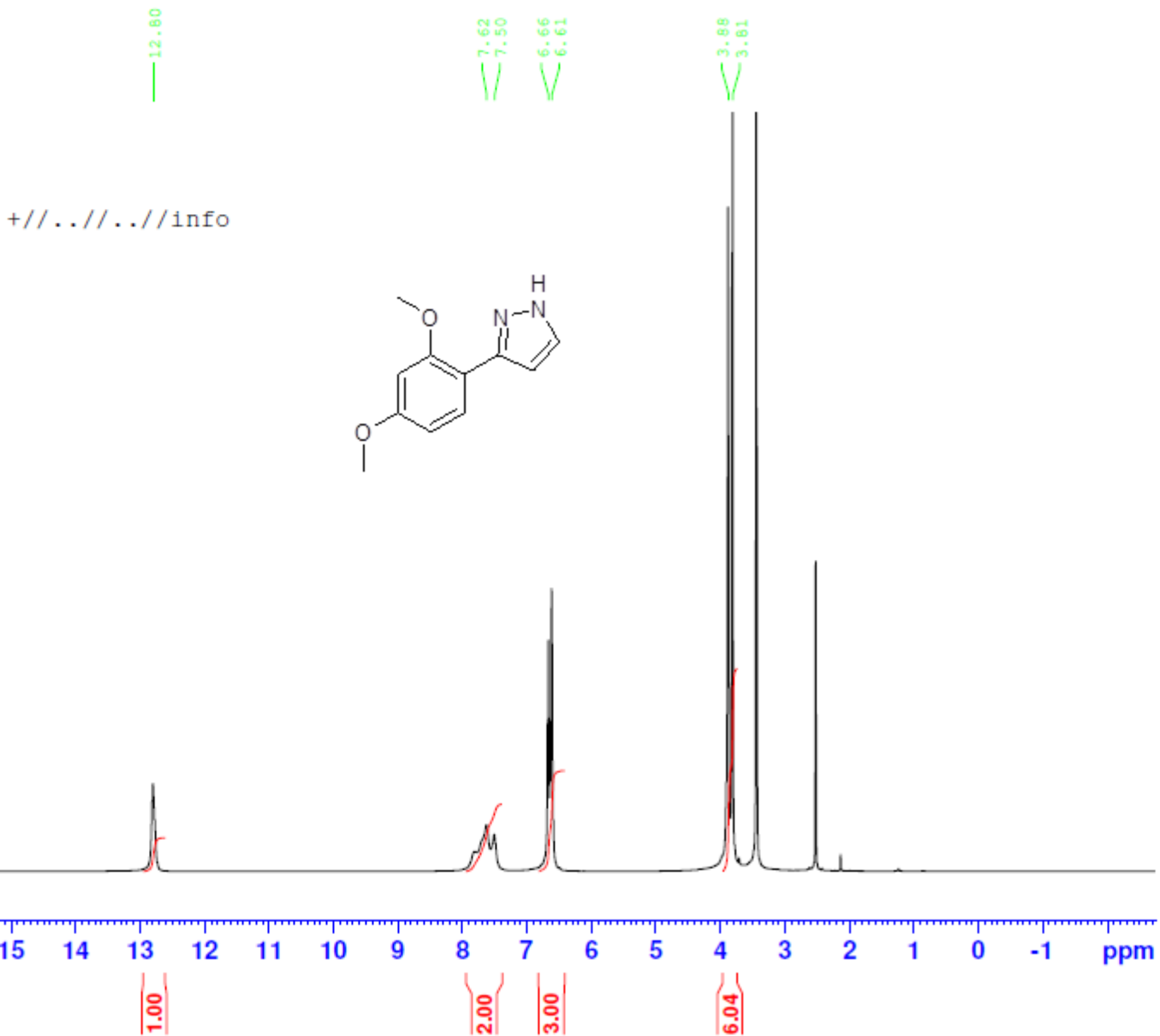


Current Data Parameters
NAME drMashooq-P-6
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time 17.27
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 10.32
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

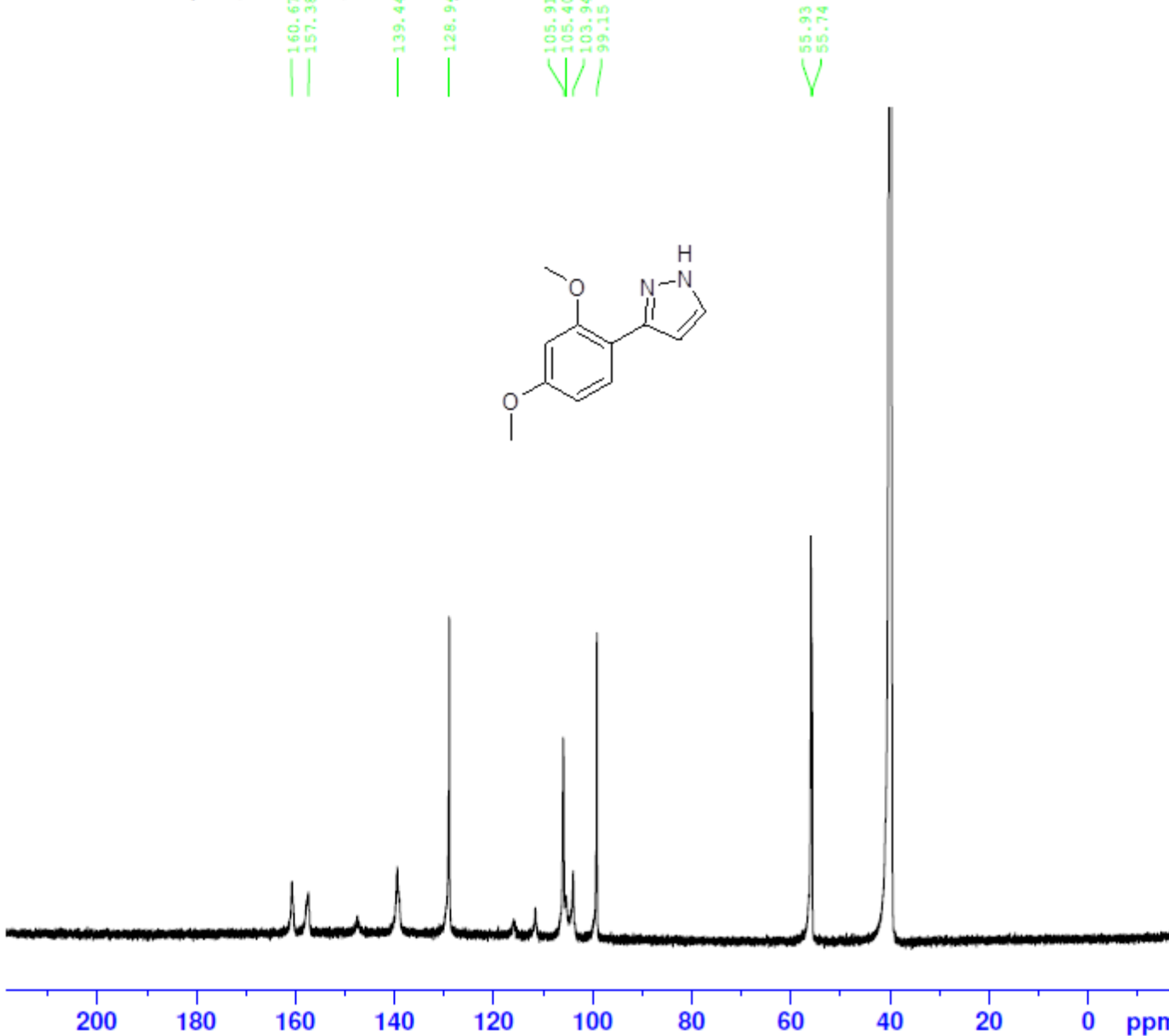
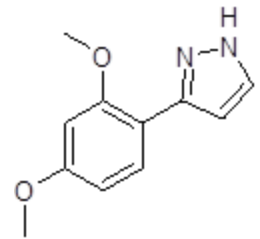
----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



¹H NMR SPECTRA OF COMPOUND P6

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 29



Current Data Parameters
NAME drMashooq-P-6
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time 18.17
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

¹³C NMR SPECTRA OF COMPOUND P6

PROTON DMSO (C:\Bruker\TOPSPIN) avari 33

13.22
12.86
7.76
7.58
6.91
6.63
3.78
3.67
3.50
2.52
2.02
1.21



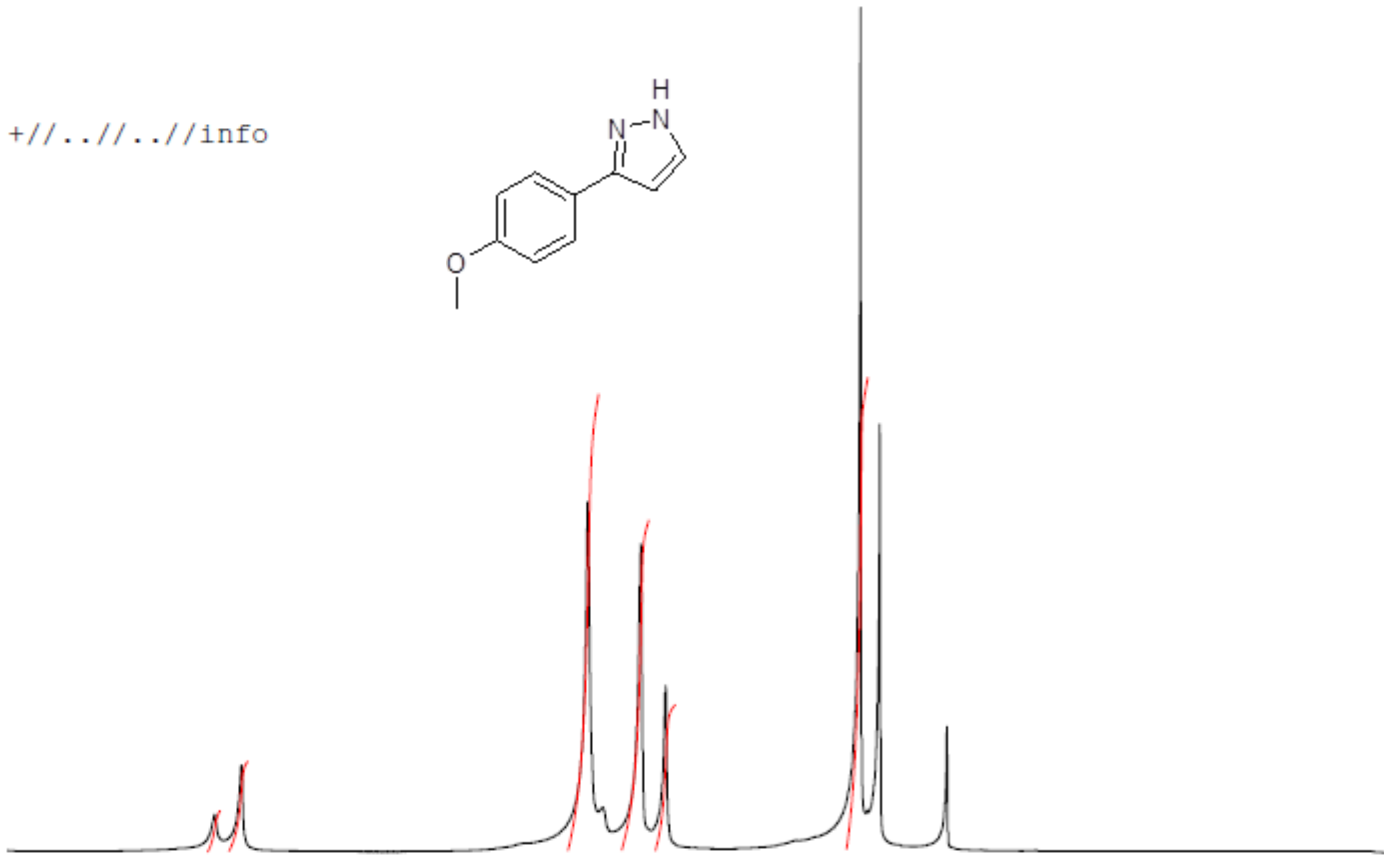
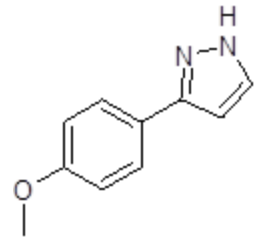
Current Data Parameters
NAME drMashooq-P-7
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time_ 21.08
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.324343 sec
RG 12.56
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

+//...//...//info



16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 -1 -2 ppm

0.47
1.00
5.05
3.66
1.63
5.24

¹H NMR SPECTRA OF COMPOUND P7

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 33



Current Data Parameters
NAME drMashooq-P-7
EXPNO 11
PROCNO 1

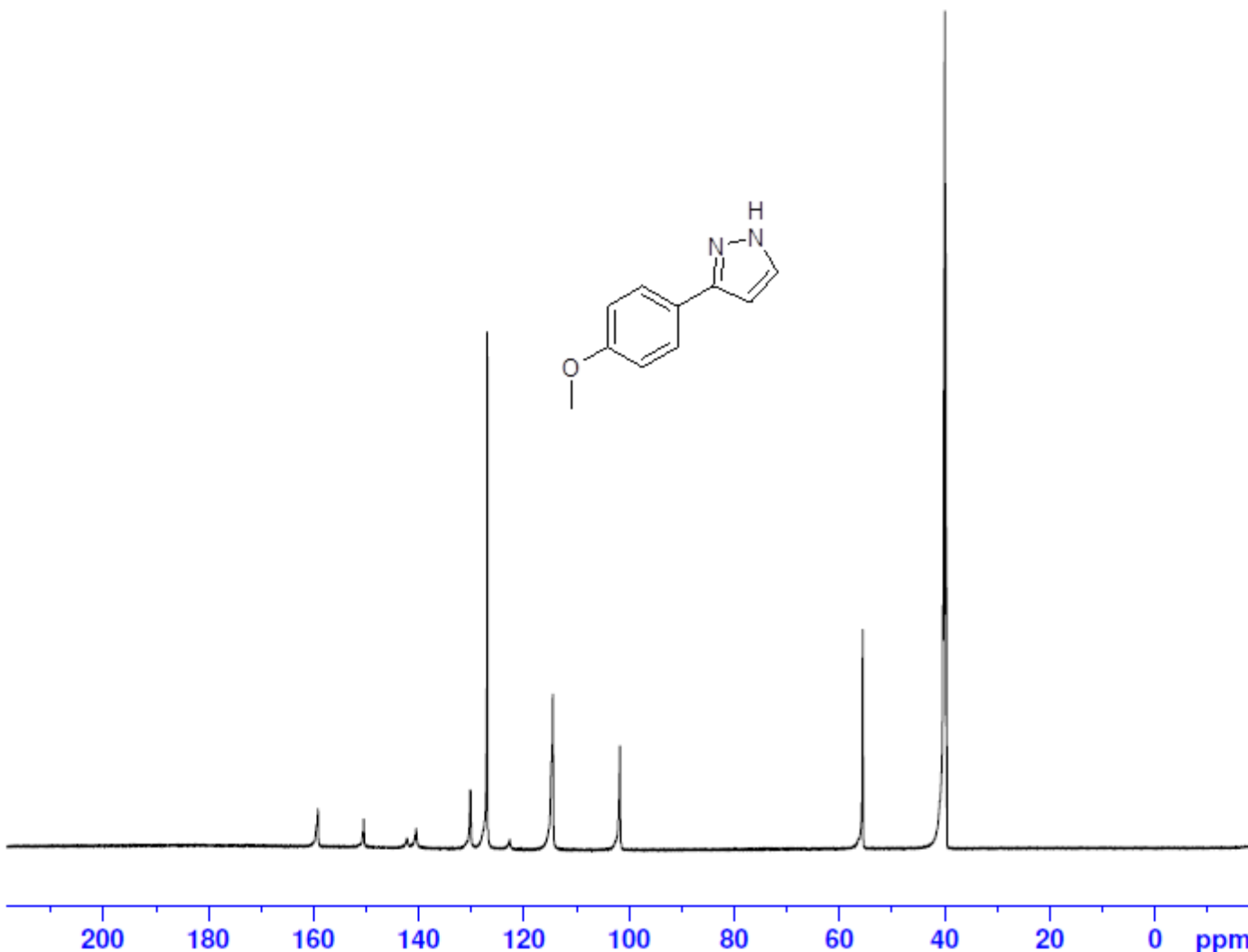
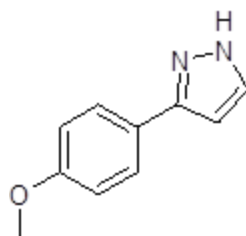
F2 - Acquisition Parameters
Date_ 20180926
Time 21.58
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

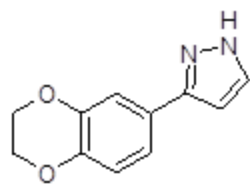
159.14
150.47
142.21
140.48
130.16
126.92
114.48
101.72
55.54



¹³C NMR SPECTRA OF COMPOUND P7

PROTON DMSO {C:\Bruker\TOPSPIN} abari 31

+//...//...//info

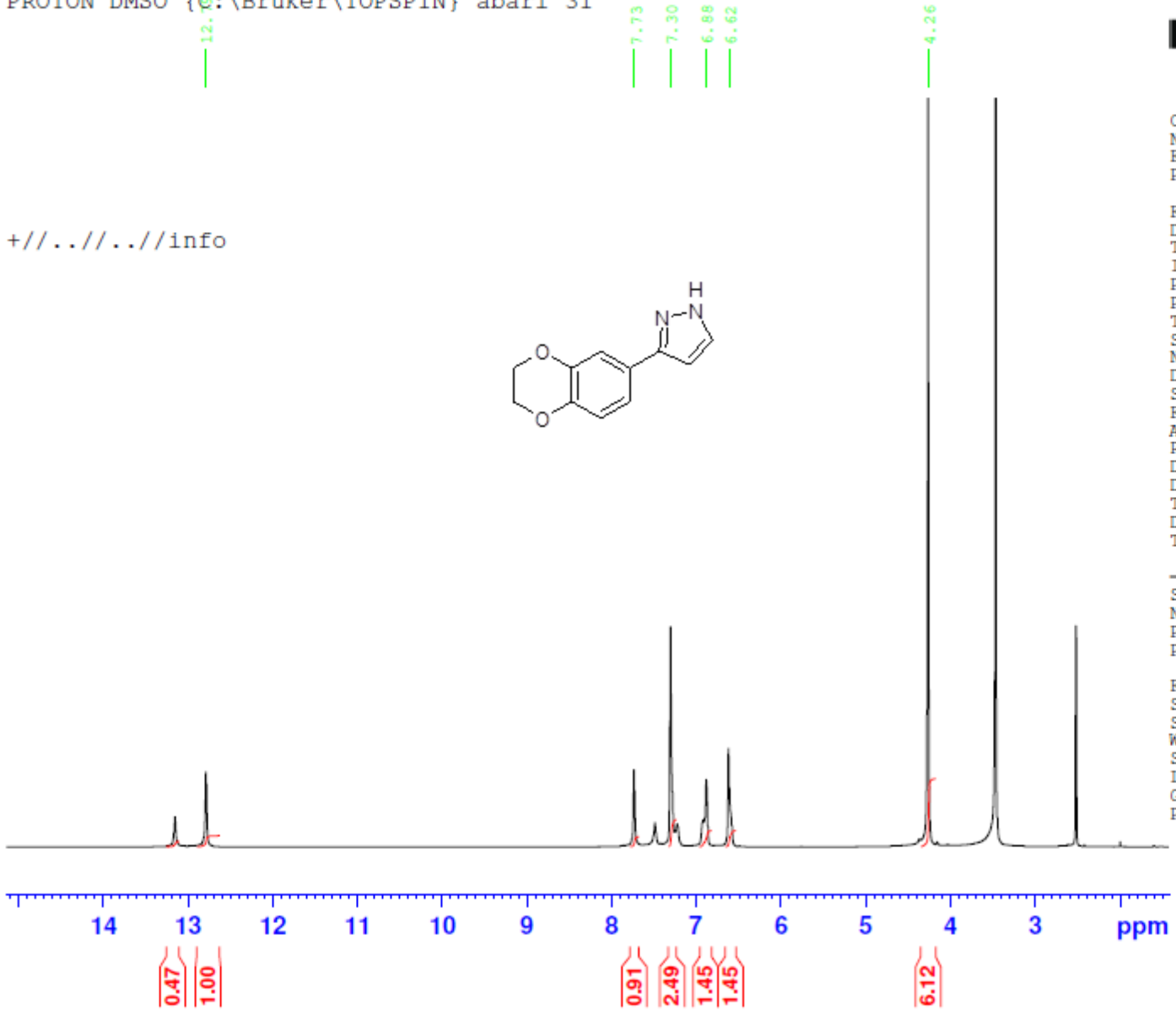


Current Data Parameters
NAME drMashooq-P-9
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time 19.17
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 10.32
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



¹H NMR SPECTRA OF COMPOUND P9

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 31



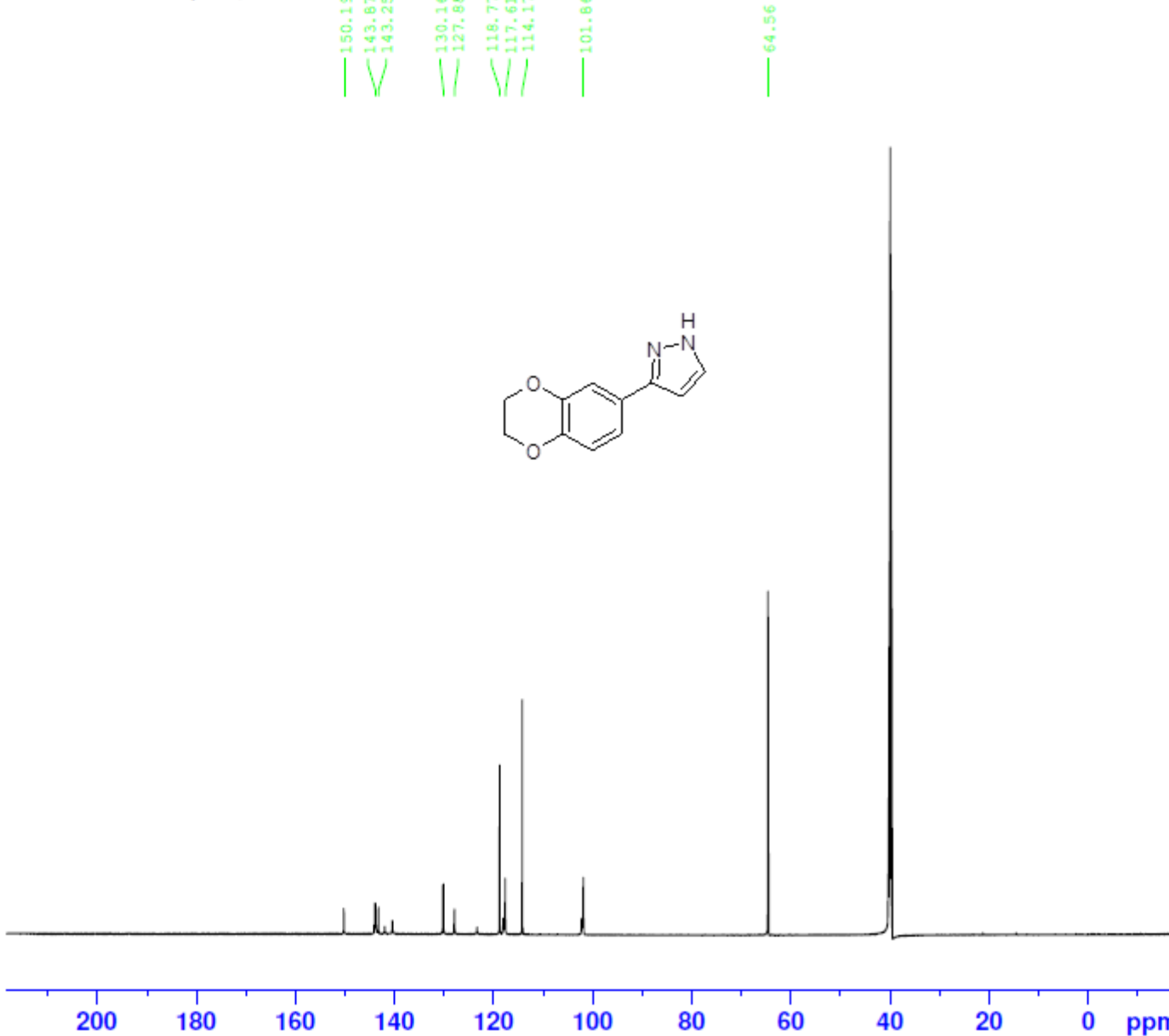
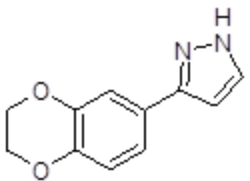
Current Data Parameters
NAME drMashooq-P-9
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180926
Time 20.07
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P9

PROTON DMSO (C:\Bruker\TOPSPIN) abari 27

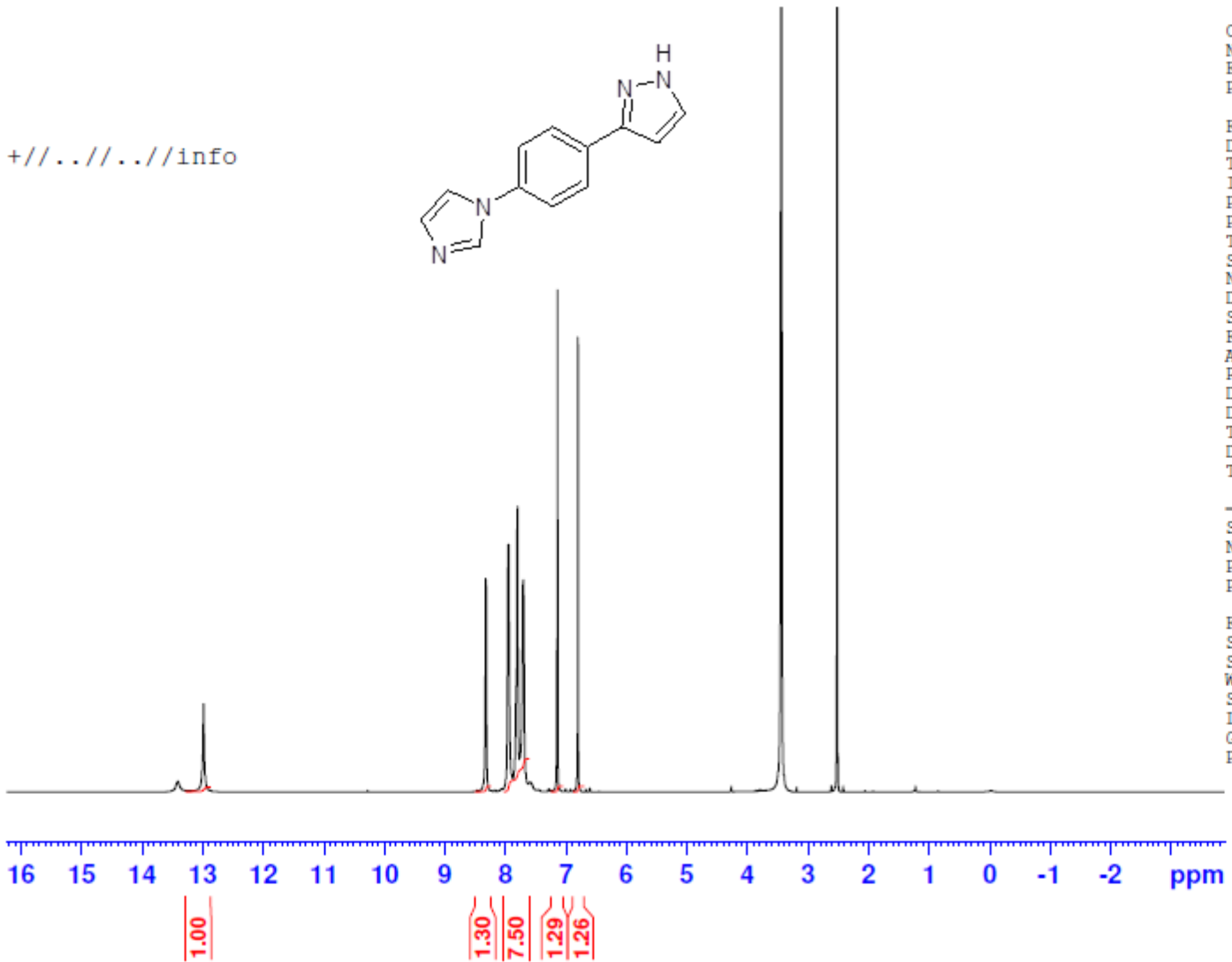


Current Data Parameters
NAME drMashooq-P-10
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181015
Time 13.47
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 12.56
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



¹H NMR SPECTRA OF COMPOUND P10

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 27



Current Data Parameters
NAME drMashooq-P-10
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date_ 20181015
Time 14.38
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----

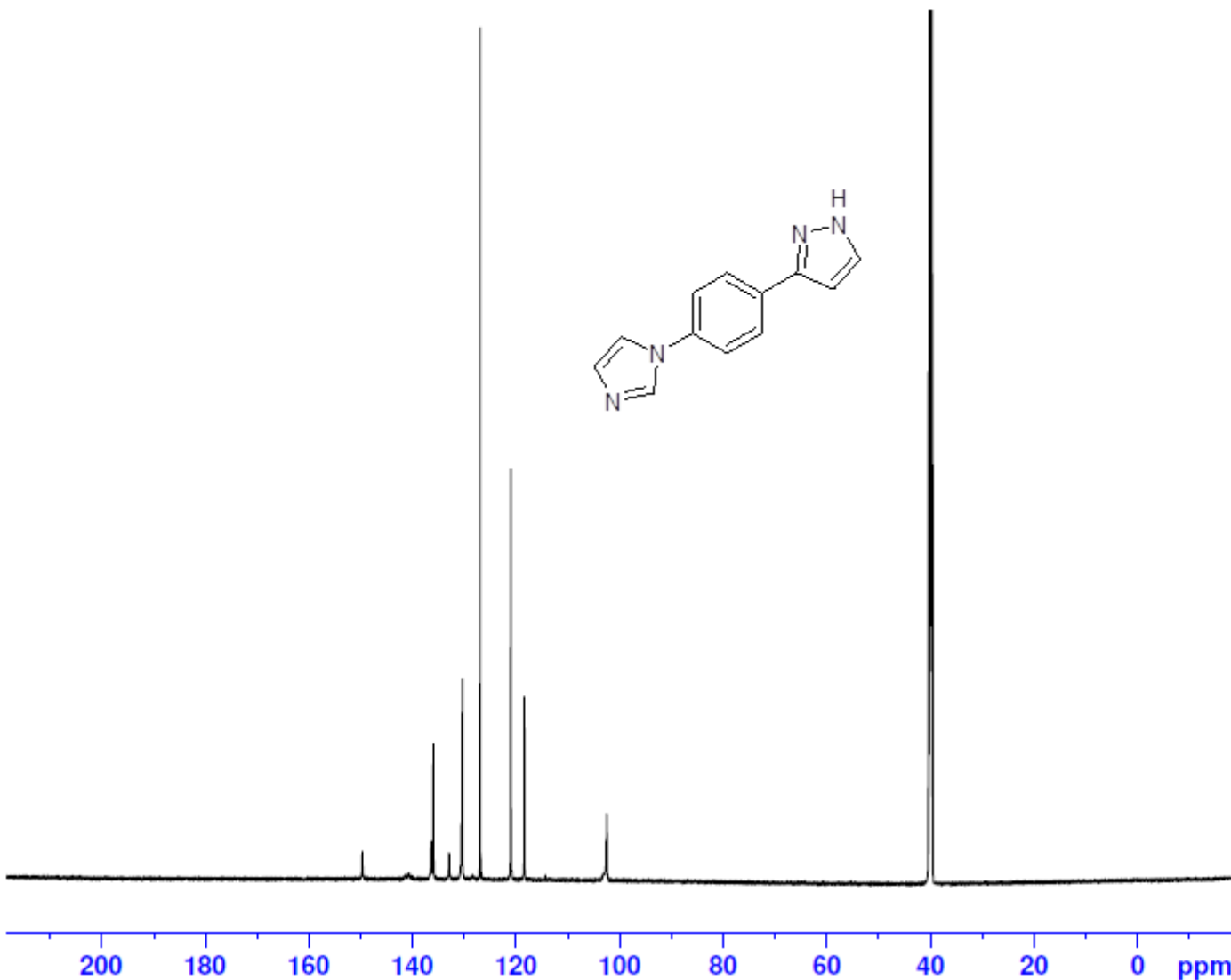
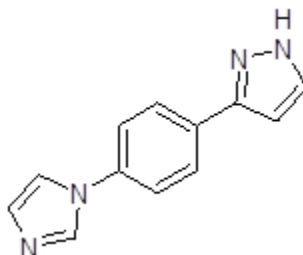
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----

SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters

SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

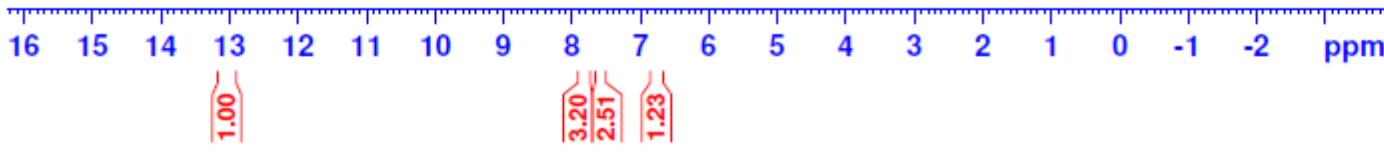
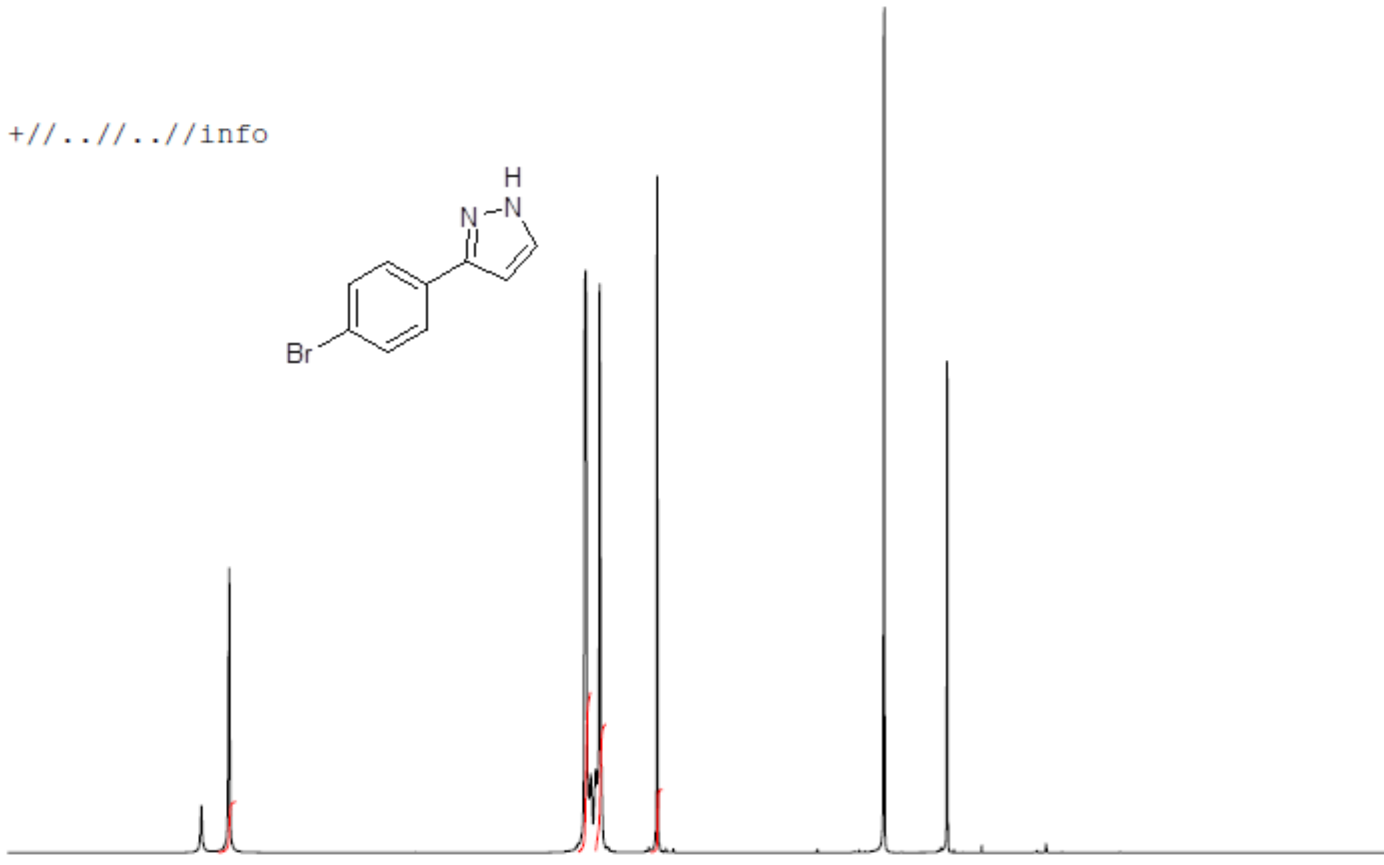
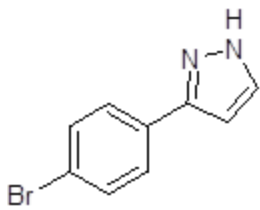


¹³C NMR SPECTRA OF COMPOUND P10

PROTON DMSO (C:\Bruker\TOPSPIN) abari 8



+//...//...//info



Current Data Parameters
NAME drMashooq-P11
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181113
Time 20.40
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 11.14
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

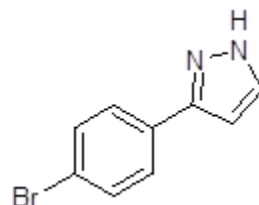
----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

¹H NMR SPECTRA OF COMPOUND P11

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 8

149.47
133.56
132.56
131.98
130.56
127.60
120.68
102.45



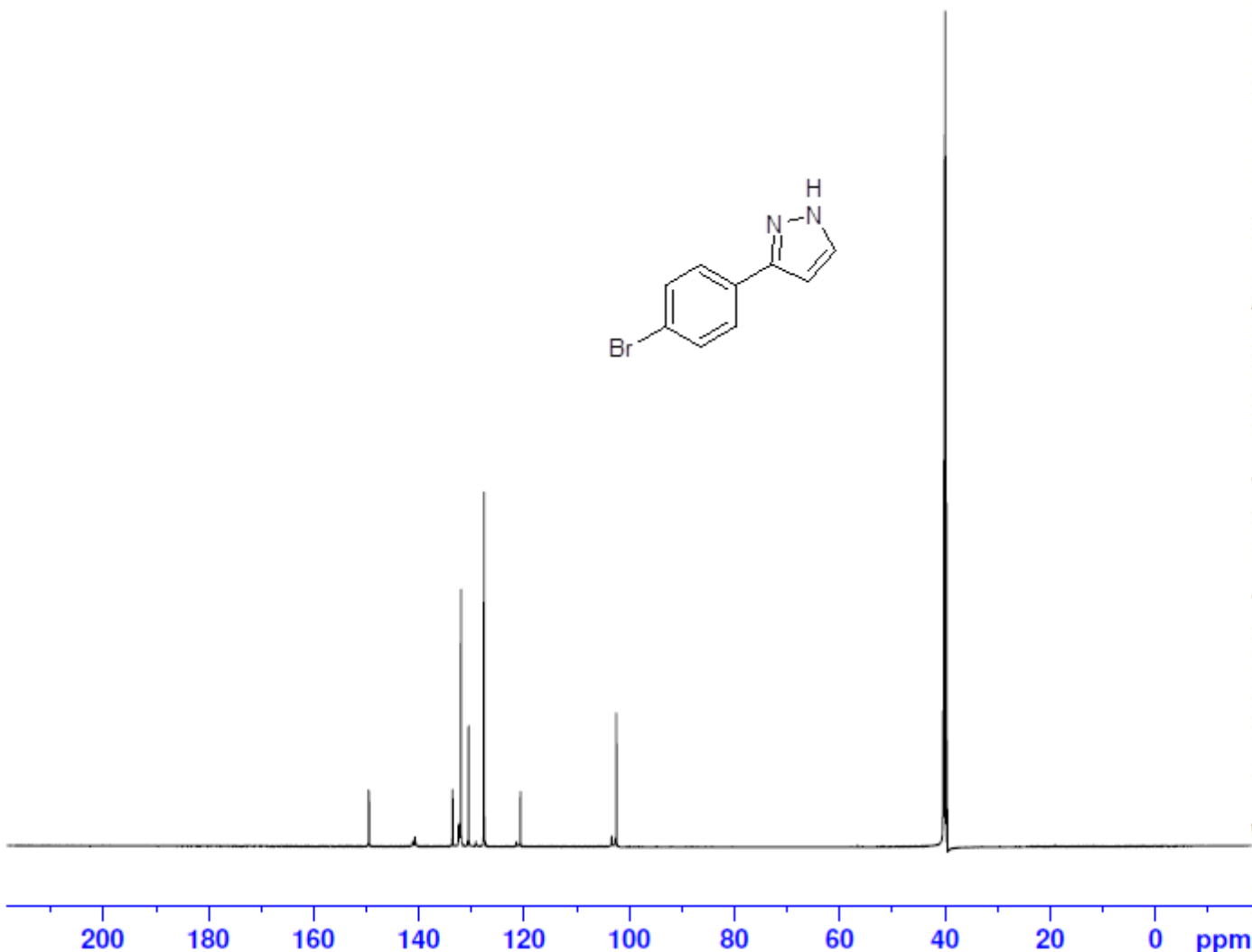
Current Data Parameters
NAME drMashooq-P11
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181113
Time_ 21.30
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P11

PROTON DMSO {C:\Bruker\TOPSPIN} abari 43

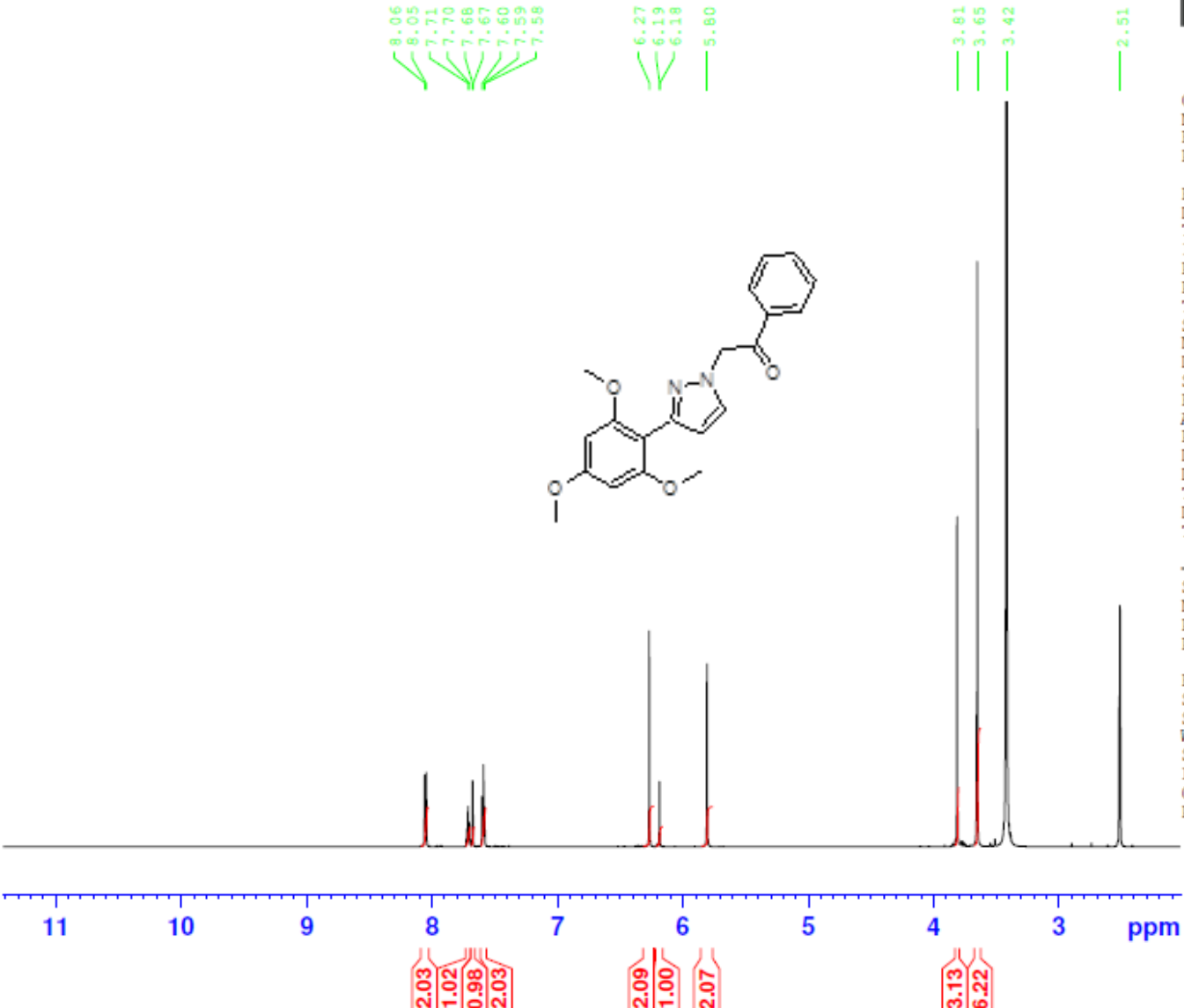
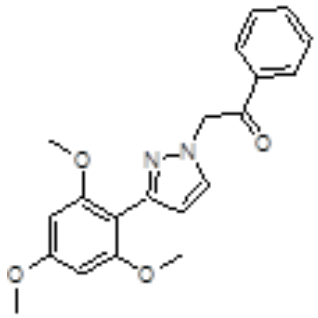


Current Data Parameters
NAME drMashooq-PD-1-R
EXPNO 12
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181018
Time 14.22
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 12.56
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



¹H NMR SPECTRA OF COMPOUND P12

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 43



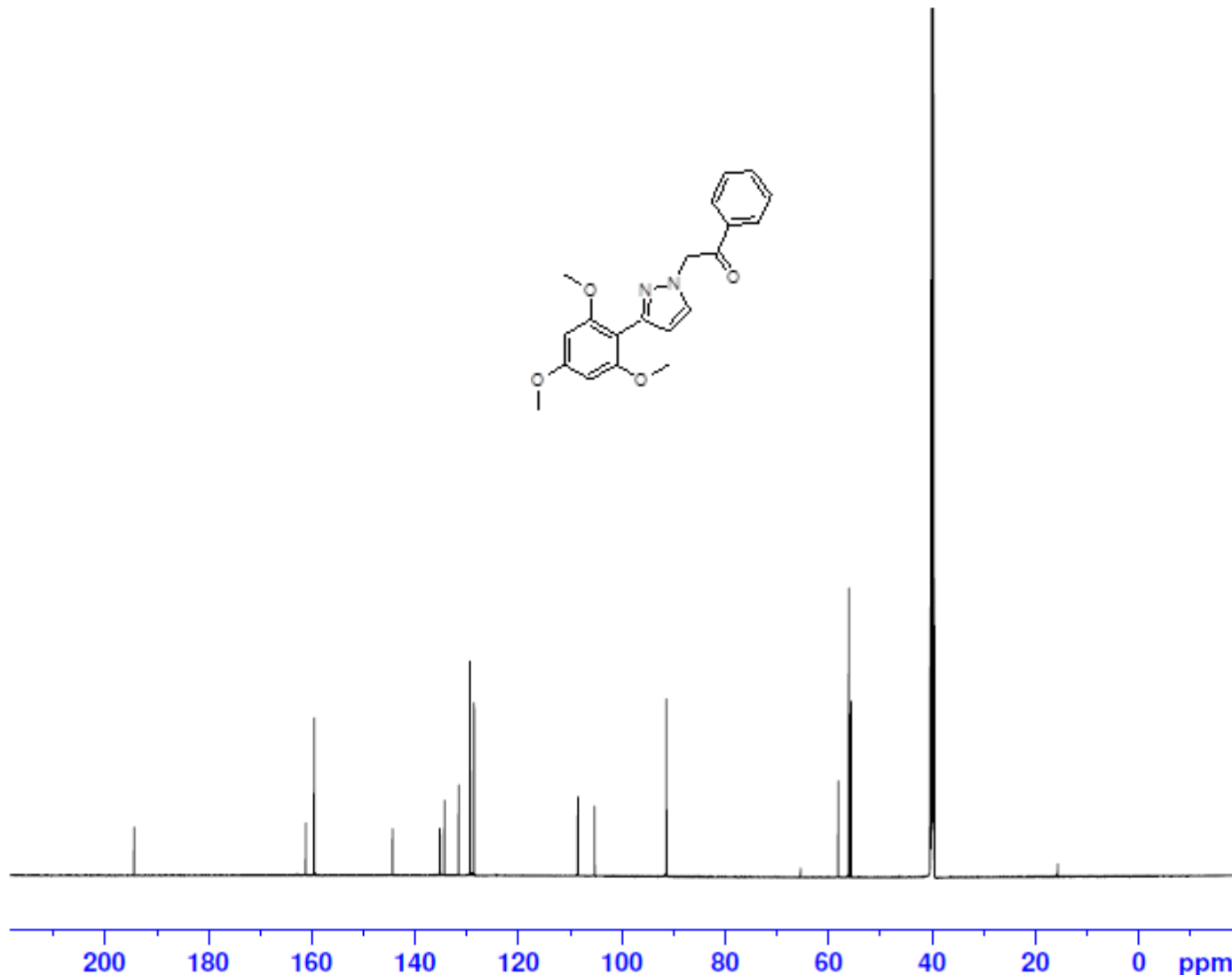
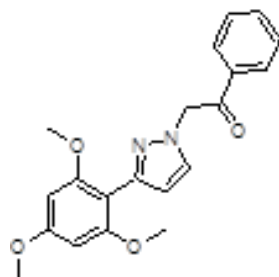
Current Data Parameters
NAME drMashooq-PD-1-R
EXPNO 13
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181018
Time 17.16
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 2000
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P12

PROTON DMSO {C:\Bruker\TOPSPIN} abari 10



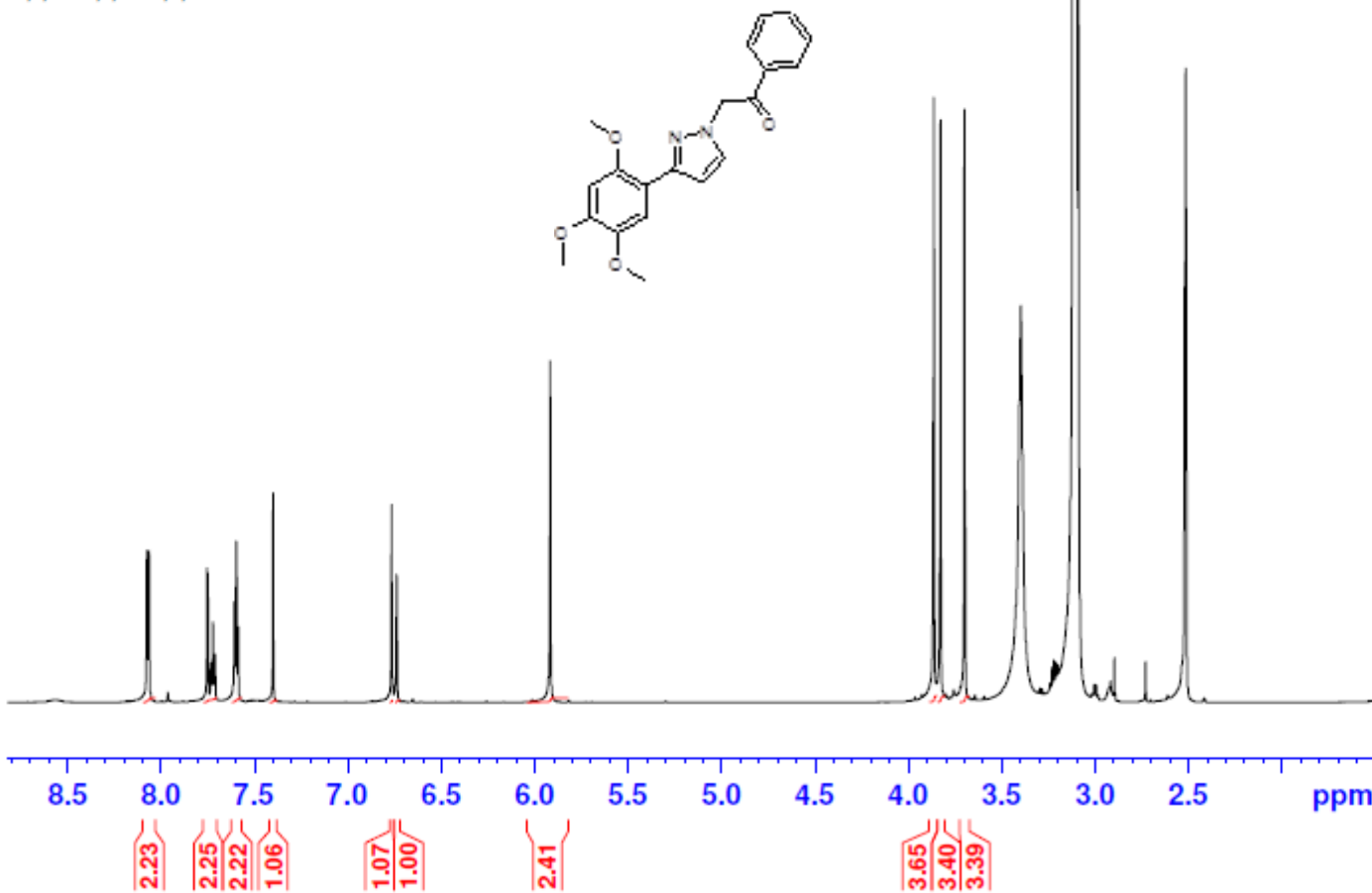
Current Data Parameters
NAME drMashooq-PD2
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181113
Time 22.29
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 8.97
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

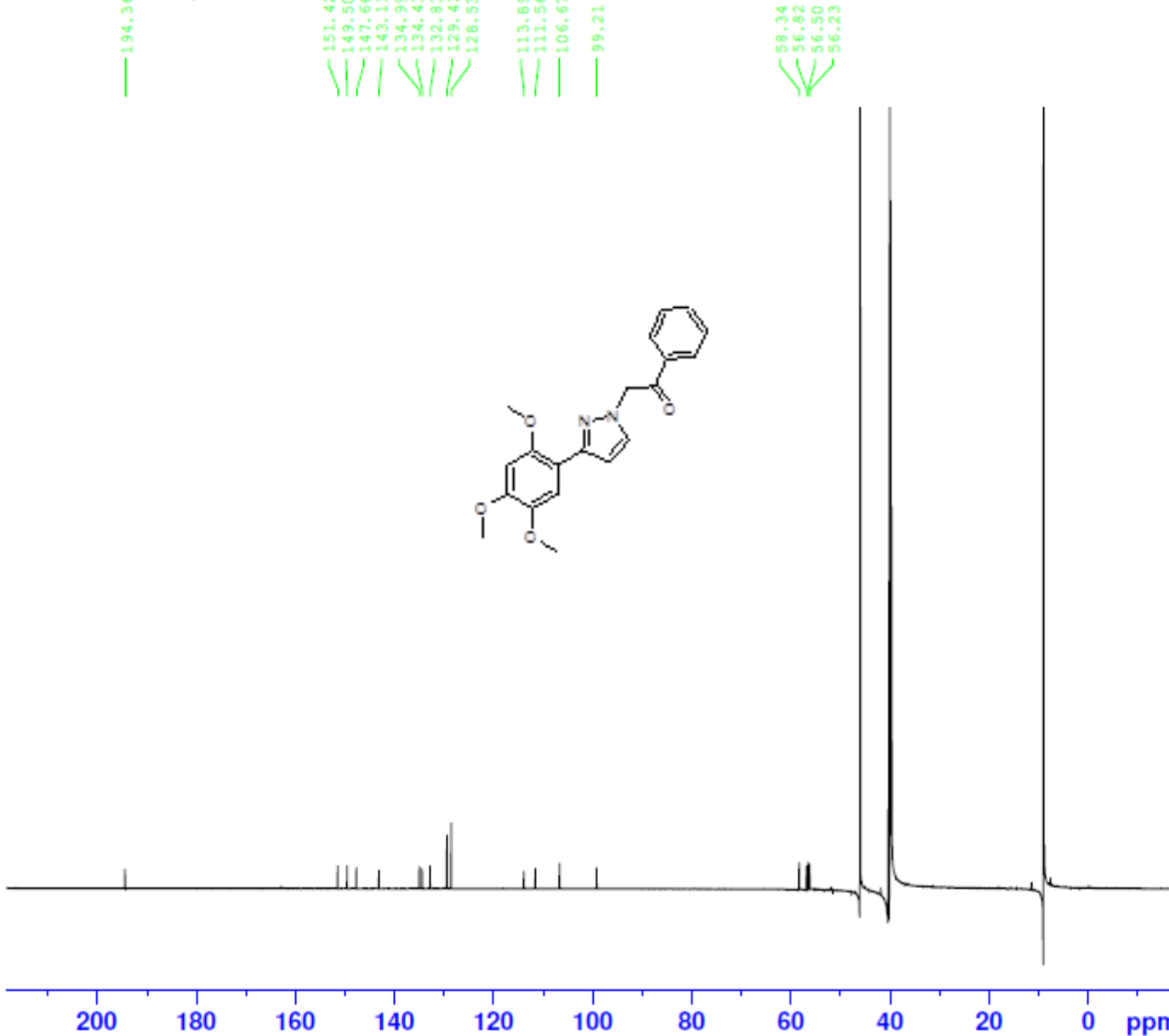
F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

+//...//...//info



¹H NMR SPECTRA OF COMPOUND P13

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 10



Current Data Parameters

NAME drMashooq-PD2
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date_ 20181113
Time 23.19
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----

SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----

SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

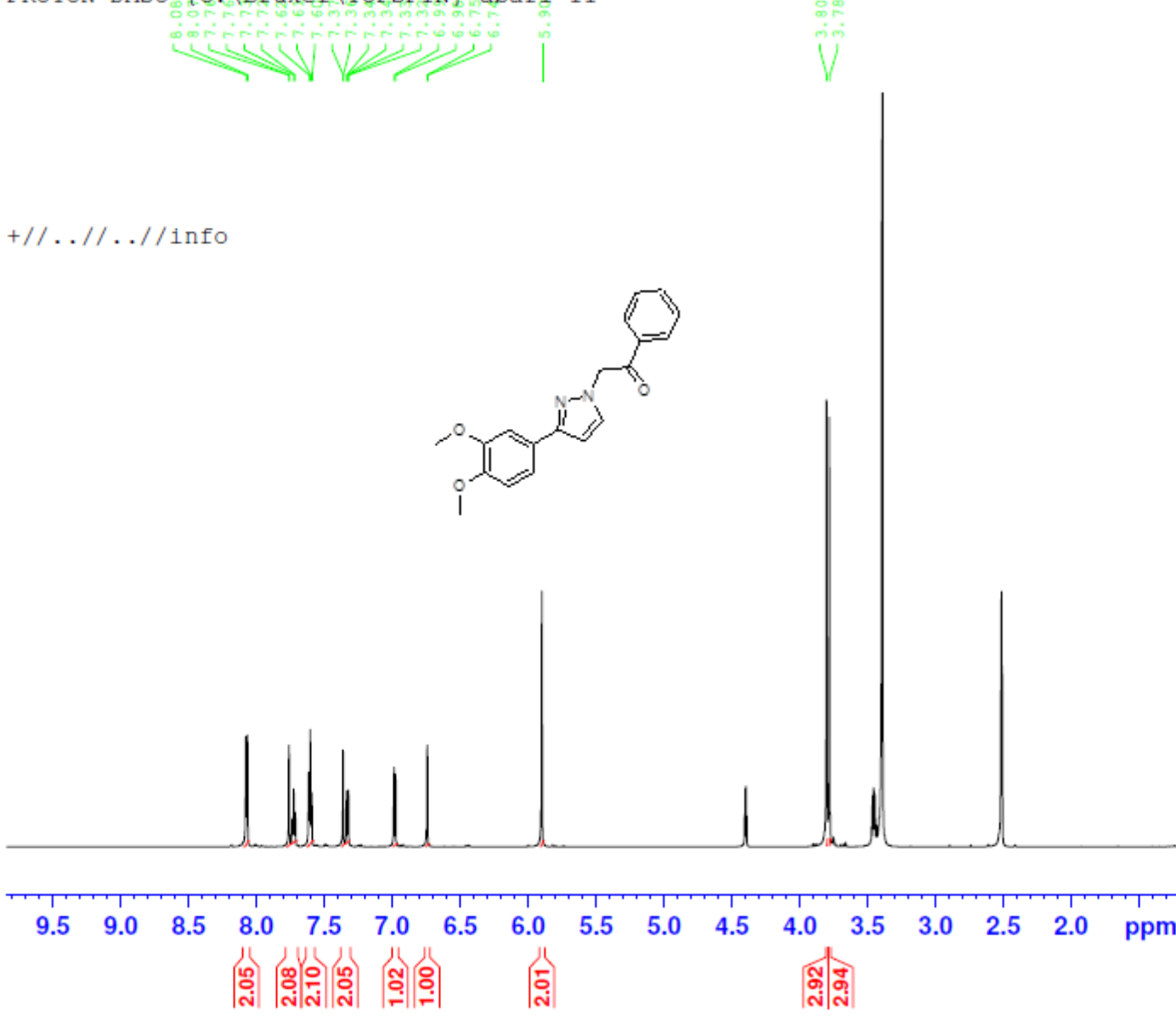
F2 - Processing parameters

SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

¹³C NMR SPECTRA OF COMPOUND P13

PROTON DMSO (C:\Bruker\TOPSPIN) abari 11

+//...//...//info



Current Data Parameters
NAME drMashooq-PD3
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181113
Time 23.24
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 14.16
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

¹H NMR SPECTRA OF COMPOUND P14

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 11



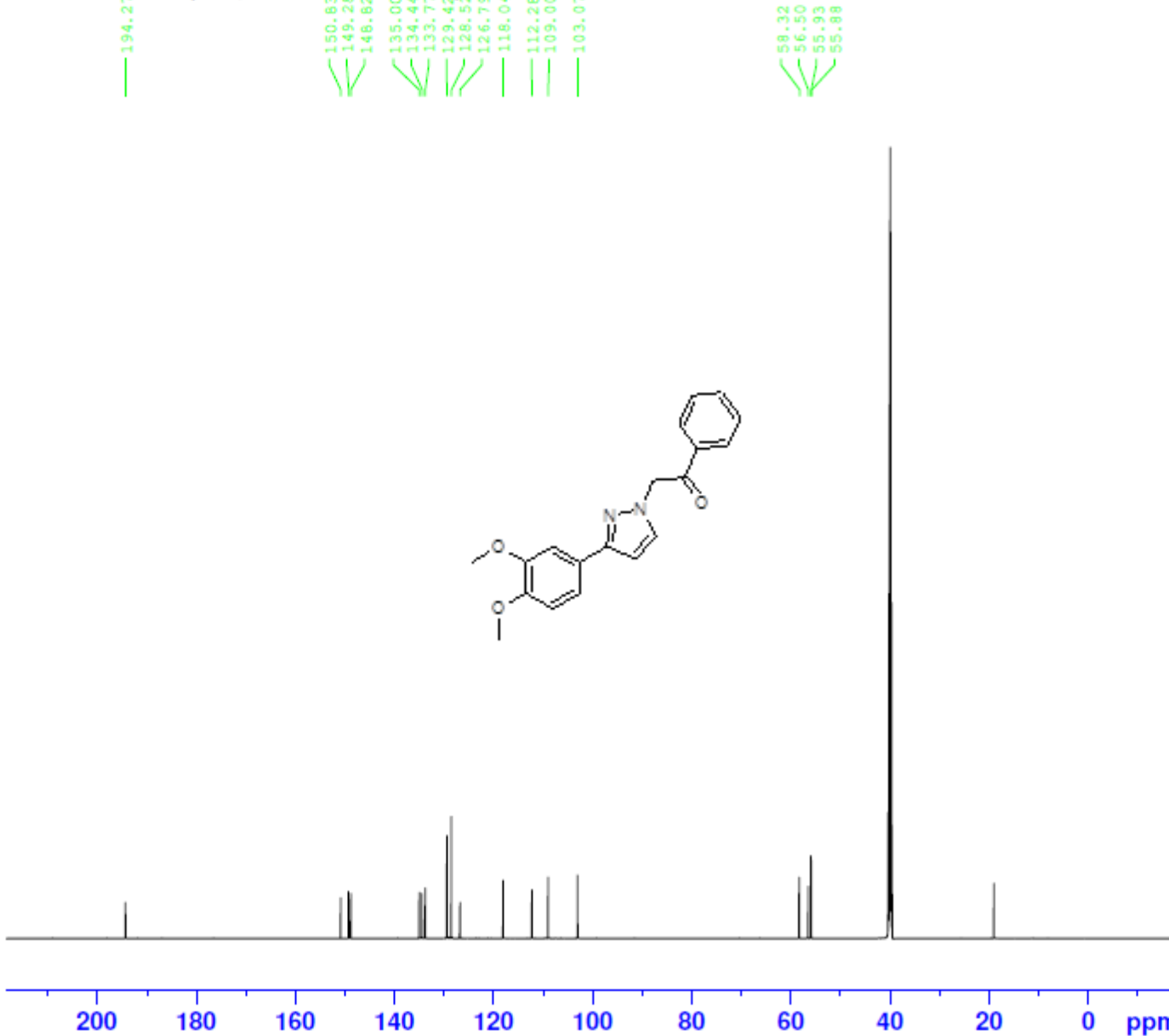
Current Data Parameters
NAME drMashooq-PD3
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181114
Time 0.14
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P14

PROTON DMSO (C:\Bruker\TOPSPIN) abar1 13



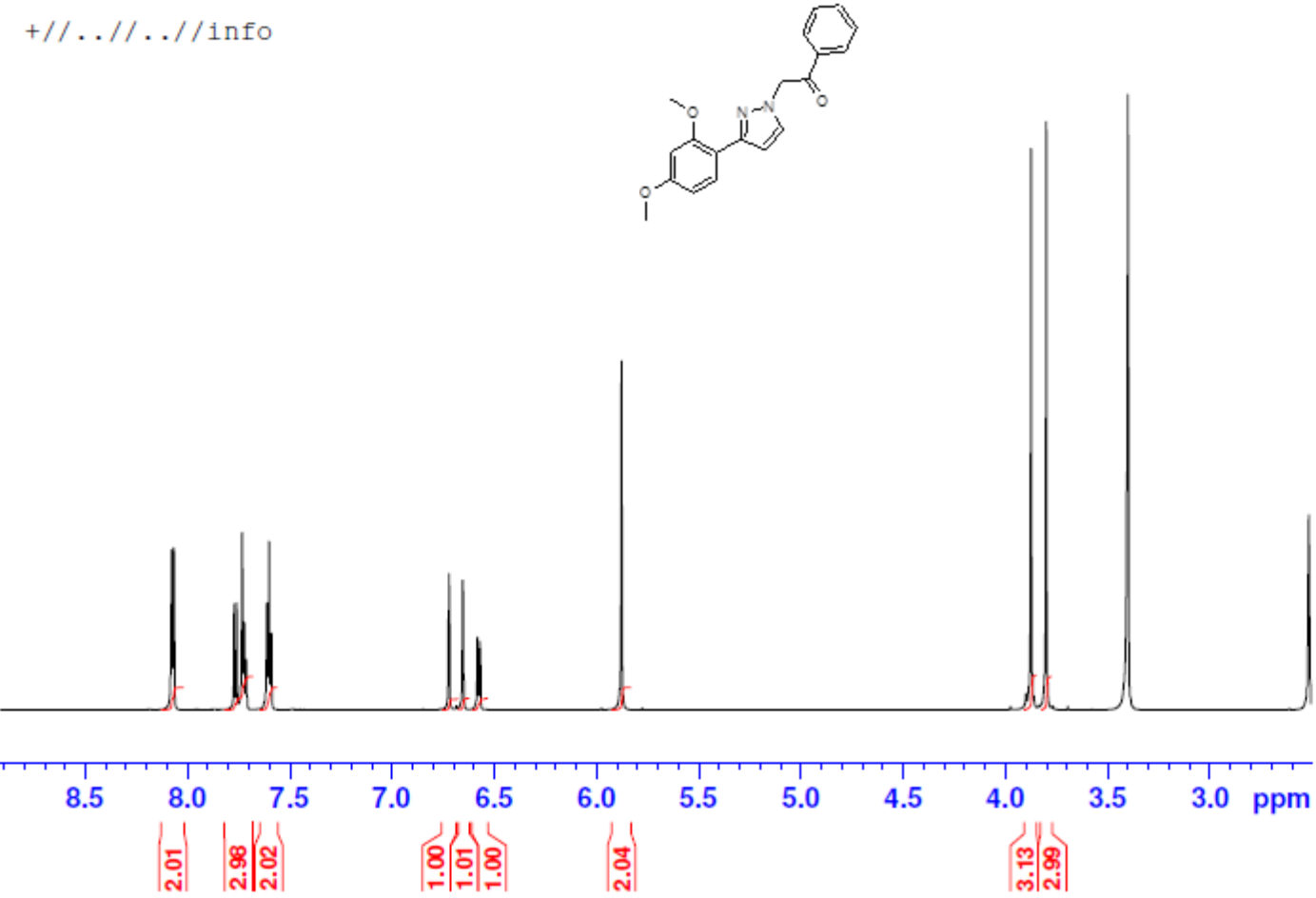
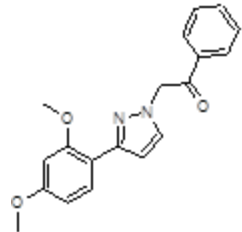
Current Data Parameters
NAME drMashooq-PD12
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181114
Time 1.13
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 12.56
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

+//...//...//info



¹H NMR SPECTRA OF COMPOUND P15

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 13



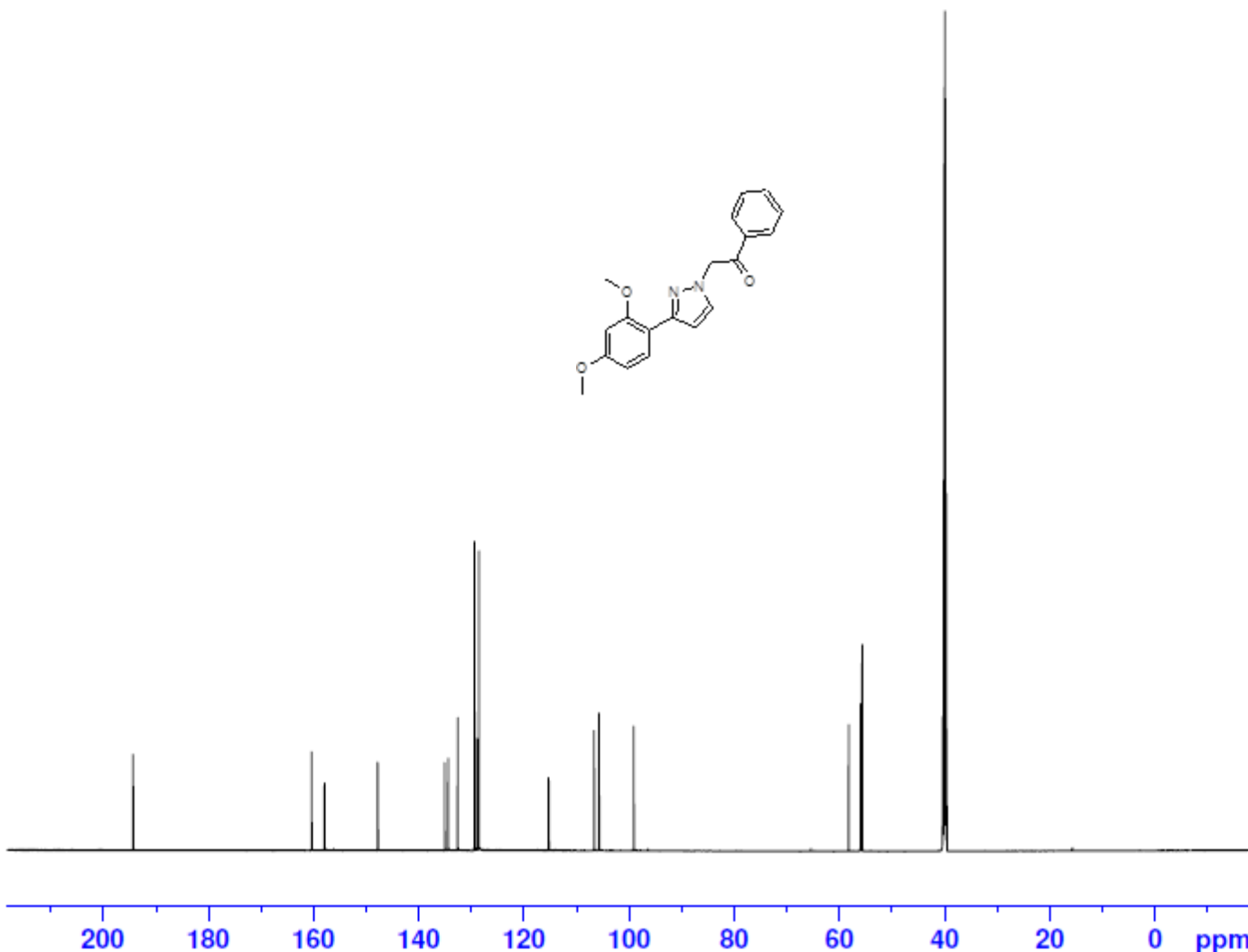
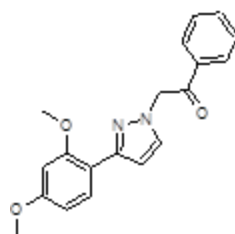
Current Data Parameters
NAME drMashooq-PD12
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181114
Time 2.04
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P15

PROTON DMSO {C:\Bruker\TOPSPIN} abari 12



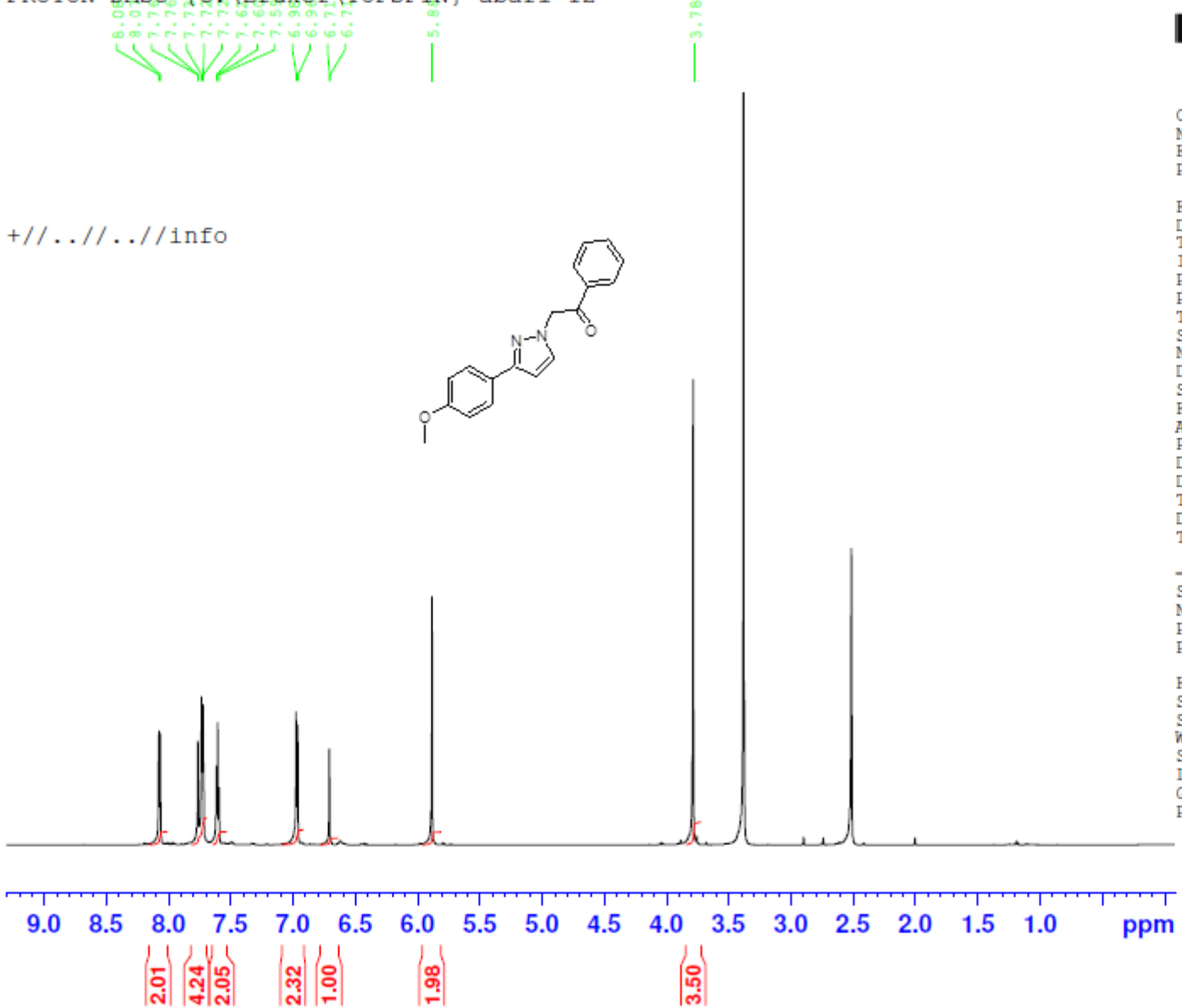
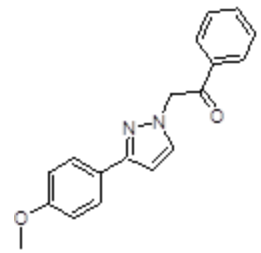
Current Data Parameters
NAME drMashooq-PD7
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181114
Time 0.18
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 14097.744 Hz
FIDRES 0.215115 Hz
AQ 2.3243434 sec
RG 31.35
DW 35.467 usec
DE 31.86 usec
TE 295.0 K
D1 1.00000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 700.1743238 MHz
NUC1 1H
P1 8.00 usec
PLW1 9.64999962 W

F2 - Processing parameters
SI 65536
SF 700.1700000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

+//...//...//info



¹H NMR SPECTRA OF COMPOUND P16

C13CPD DMSO {C:\Bruker\TOPSPIN} abari 12



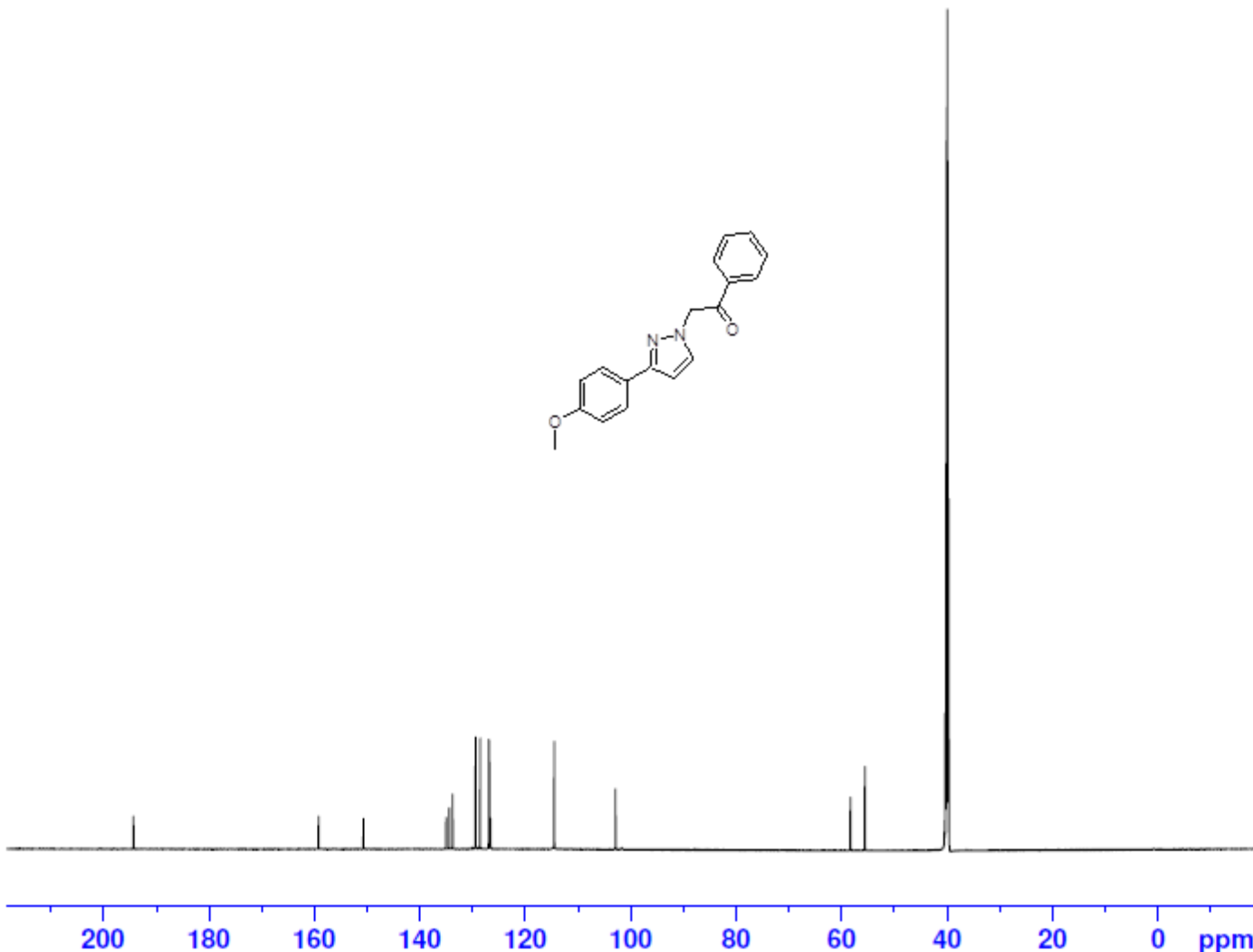
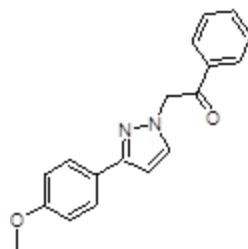
Current Data Parameters
NAME drMashooq-PD7
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181114
Time 1.08
INSTRUM spect
PROBHD 5 mm CPTCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 1024
DS 4
SWH 41666.668 Hz
FIDRES 0.635783 Hz
AQ 0.7864320 sec
RG 172.3
DW 12.000 usec
DE 18.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 176.0754915 MHz
NUC1 13C
P1 12.00 usec
PLW1 121.00000000 W

----- CHANNEL f2 -----
SFO2 700.1728007 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 65.00 usec
PLW2 9.64999962 W
PLW12 0.14618000 W
PLW13 0.06176000 W

F2 - Processing parameters
SI 32768
SF 176.0578870 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR SPECTRA OF COMPOUND P16