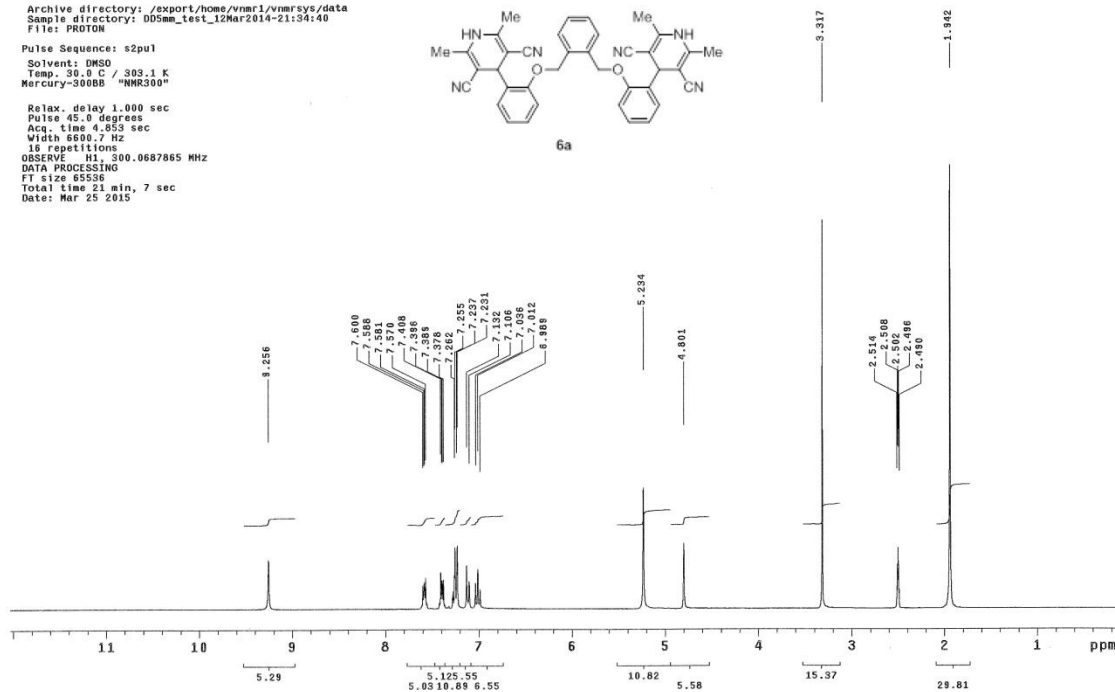
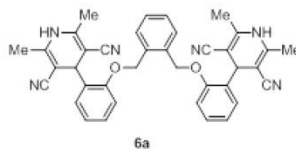


Refai-RK167-DMSO-H

Archive directory: /export/home/vmr1/vmr/sys/data
Sample directory: DDSmm_test_12Mar2014-21:34:40
File: PROTON

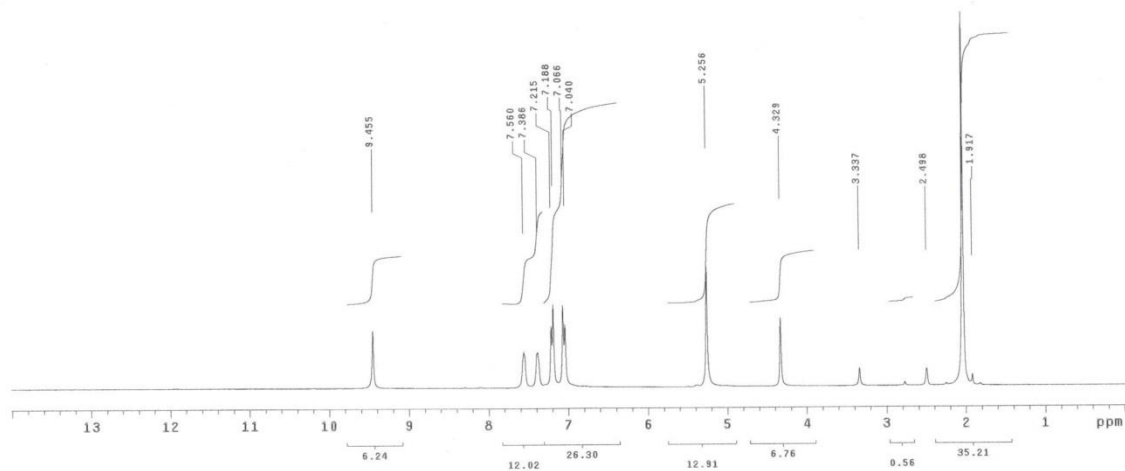
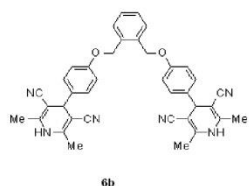
Pulse Sequence: s2pu1
Solvent: DMSO
Temp.: 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.853 sec
Width 6600.7 Hz
16 repetitions
OBSERVE H1, 300.0687865 MHz
DATA PROCESSING
FT size 65536
Total time 21 min, 7 sec
Date: Mar 25 2015



¹H NMR spectrum of compound 6a

IsmaeelAbdulShafy-HA1-DMSO-1H
 Archive directory: /export/home/vnmr1/vnmrsys/data
 Sample directory: D05mm_test_12Mar2014-21:34:40
 File: PROTON
 Pulse Sequence: s2pul
 Solvent: DMSO
 Temp: 30.0 C / 303.1 K
 Mercury-300BB "NMR300"
 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 4.853 sec
 Width 6600.7 Hz
 28 repetitions
 OBSERVE H1, 300.0687873 MHz
 DATA PROCESSING
 FT size 65536
 Total time 43 min, 34 sec
 Date: Dec 16 2015



¹H NMR spectrum of compound 6b

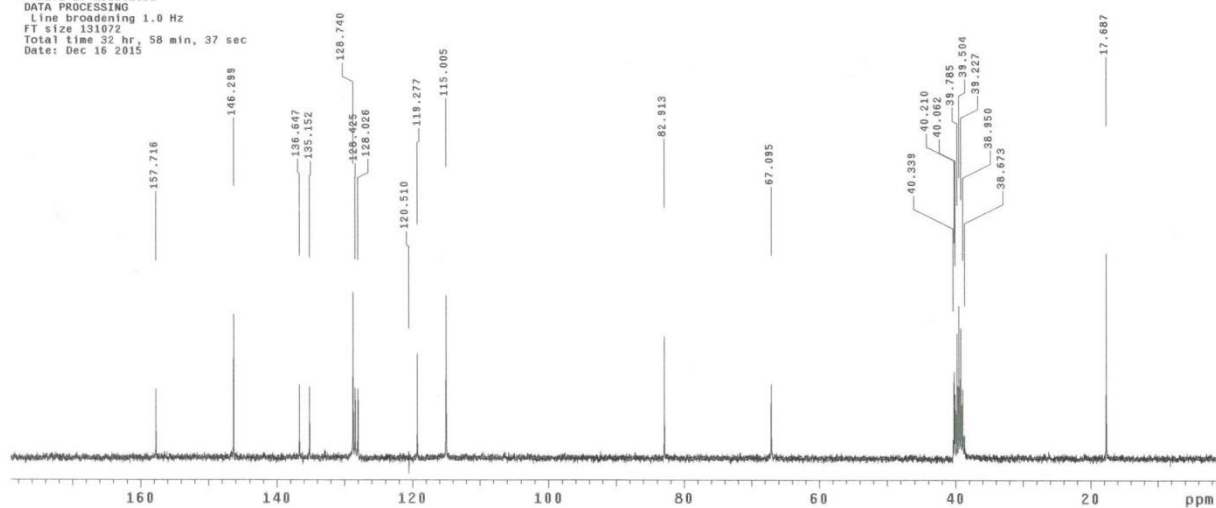
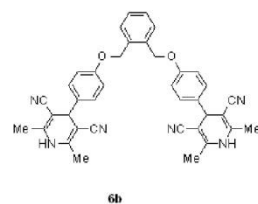
IsmaeelAbdulShafy-HA1-DMSO-13C

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: D05mm_test_12Mar2014-21:34:40
File: PROTON

Pulse Sequence: s2pul1

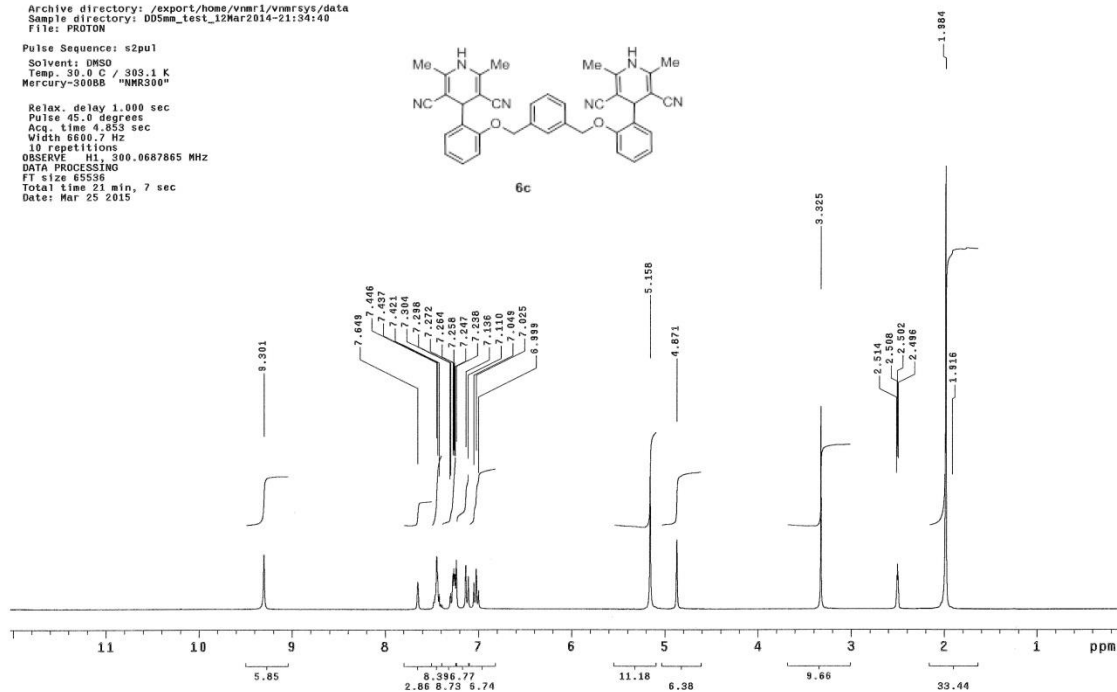
Solvent: DMSO
Temp: 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Pulse 45.0 degrees
Acq. time 1.815 sec
Width 18761.7 Hz
752 repetitions
OBSERVE C13, 75.4523963 MHz
DECOUPLE H1, 300.0702830 MHz
Power 33 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 32 hr, 58 min, 37 sec
Date: Dec 16 2013



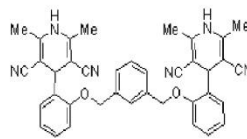
¹³C NMR spectrum of compound 6b

Refai-RK168-DMSO-H
 Archive directory: /export/home/vnmr1/vnmrsys/data
 Sample directory: D05mm_test_12Mar2014-21:34:40
 File: PROTON
 Pulse Sequence: s2pu1
 Solvent: DMSO
 Temp: 30.0 C / 303.1 K
 Mercury-300BB "NMR300"
 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 4.853 sec
 Width 6600.7 Hz
 10 repetitions
 OBSERVE H1, 300.0687865 MHz
 DATA PROCESSING
 FT size 65536
 Total time 21 min, 7 sec
 Date: Mar 25 2015

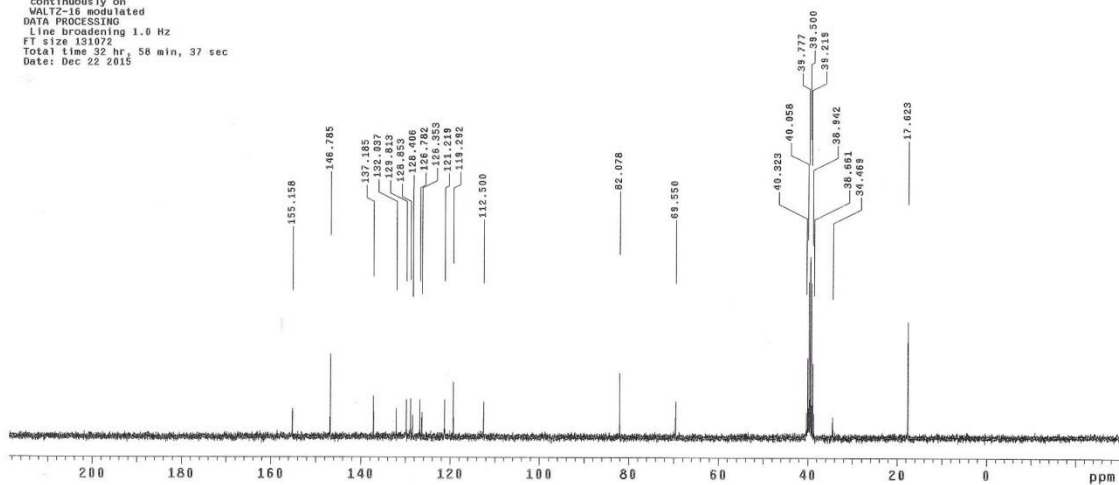


¹H NMR spectrum of compound 6c

RefaieKassab-RK168-DMSO-13C
 Archive directory: /export/home/vmr1/vmr5ys/data
 Sample directory: DD5mm_test_12Mar2014-21:34:40
 File: PROTON
 Pulse Sequence: s2pu1
 Solvent: DMSO
 Temp. 30.0 C / 303.1 K
 Mercury-3000B "HMR300"
 Pulse 45.0 degrees
 Acq. time 1.015 sec
 Width 18761.7 Hz
 1336 repetitions
 OBSERVE C13, 75.4523965 MHz
 DECOUPLE H1, 300.0762830 MHz
 Power 33 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 131072
 Total time 32 hr, 58 min, 37 sec
 Date: Dec 22 2015

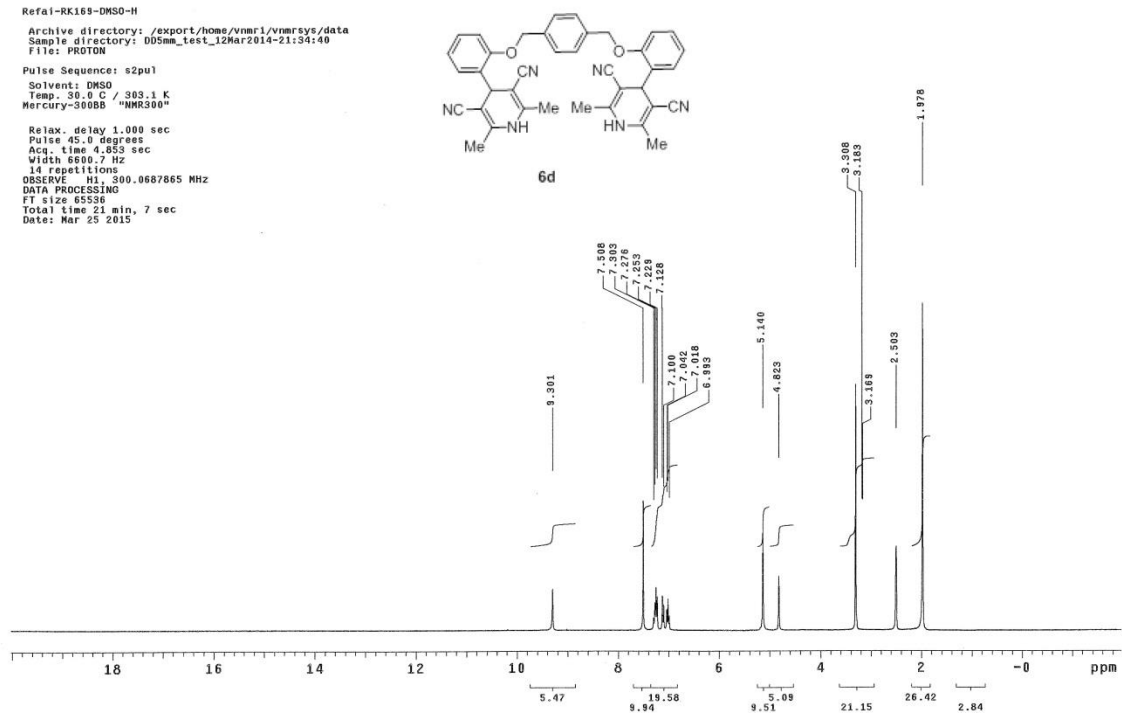


6c



¹³C NMR spectrum of compound 6c

Refai-RK169-DMSO-H
 Archive directory: /export/home/vnmr1/vnmrsys/data
 Sample directory: D05mm_test_12Mar2014-21:34:40
 File: PROTON
 Pulse Sequence: s2pu1
 Solvent: DMSO
 Temp. 30.0 C / 303.1 K
 Mercury-300BB "NMR300"
 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 4.053 sec
 Width 6600.7 Hz
 14 repetitions
 OBSERVE H1, 300.0687865 MHz
 DATA PROCESSING
 FI size 65536
 Total time 21 min, 7 sec
 Date: Mar 25 2015



¹H NMR spectrum of compound 6d

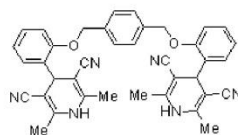
RefaleKassab-RK169-DMSO-13C

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: D05mm_test_12Mar2014-21:34:40
File: PROTOM

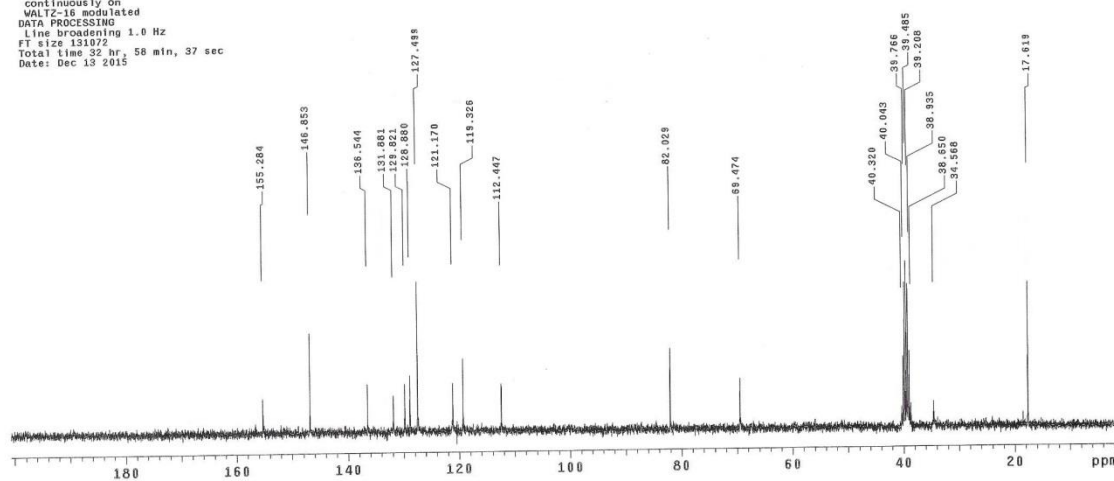
Pulse Sequence: s2pu1

Solvent: DMSO
Temp: 30.0 C / 303.1 K
Mercury-300SB "HNK300"

Pulse 45.0 degrees
Acq. time 1.015 sec
Width 18761.7 Hz
1200 repetitions
OBSERVE C13, 75.4523965 MHz
DECOUPLE H1, 300.0702830 MHz
Power 33 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 32 hr, 58 min, 37 sec
Date: Dec 13 2015



6d



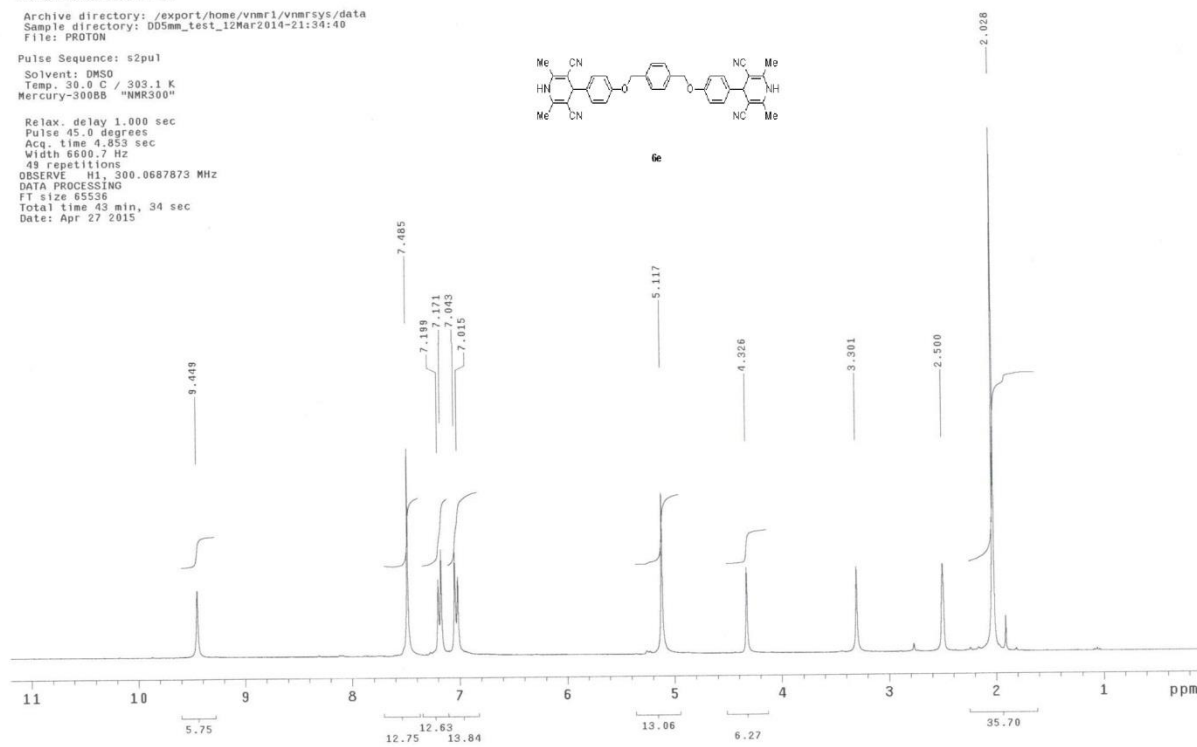
¹³C NMR spectrum of compound 6d

ShareefHamed-DMSO-PP-1H

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: DD5mm_test_12Mar2014-21:34:40
File: PROTON

Pulse Sequence: s2pu1
Solvent: DMSO
Temp. 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.853 sec
Width 6600.7 Hz
49 repetitions
OBSERVE H1, 300.0687873 MHz
DATA PROCESSING
FT size 65536
Total time 43 min, 34 sec
Date: Apr 27 2015



¹H NMR spectrum of compound 6e

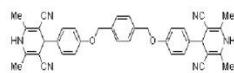
ShareefHamed-PP-DMSO-13C

Archive directory: /export/home/vmr1/vnmrsys/data
Sample directory: D05mm_test_12Mar2014-21:34:48
File: PROTON

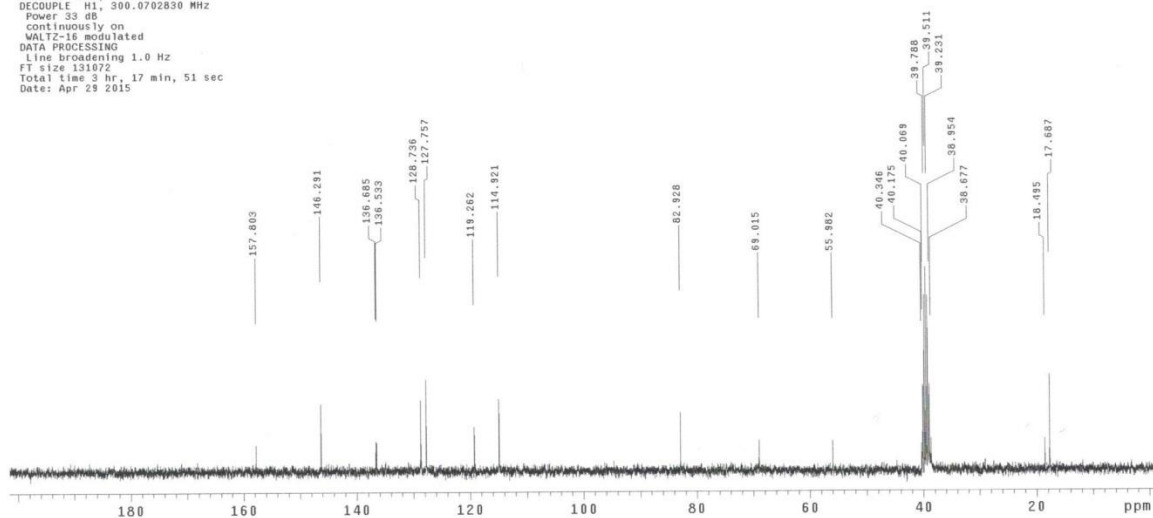
Pulse Sequence: s2pul

Solvent: DMSO
Temp. 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Pulse 45.0 degrees
Acq. time 1.815 sec
Width 18761.7 Hz
1000 repetitions
OBSERVE C13, 75.4523954 MHz
DECOUPLE H1, 300.0702850 MHz
Power 33 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 3 hr, 17 min, 51 sec
Date: Apr 29 2015



6e



¹³CNMR spectrum of compound 6e

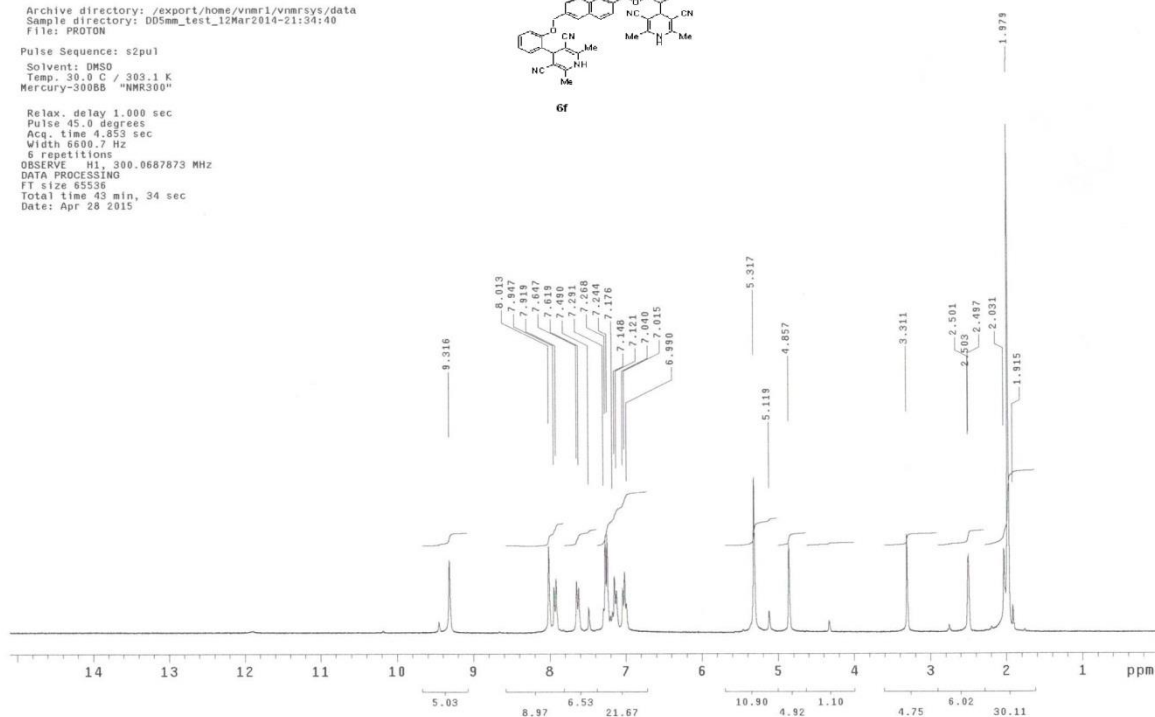
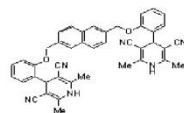
ShereefHamed-ON-DMSO-H

Archive directory: /export/home/vmrl/vnmr/sys/data
Sample directory: D05me_Test_12Mar2014-21:34:40
File: PROTON

Pulse Sequence: s2pul

Solvent: DMSO
Temp: 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.853 sec
Width 6500.7 Hz
6 repetitions
OBSERVE H1, 300.0687873 MHz
DATA PROCESSING
FT size 65536
Total time 43 min, 34 sec
Date: Apr 28 2015

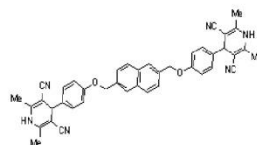


¹H NMR spectrum of compound 6f

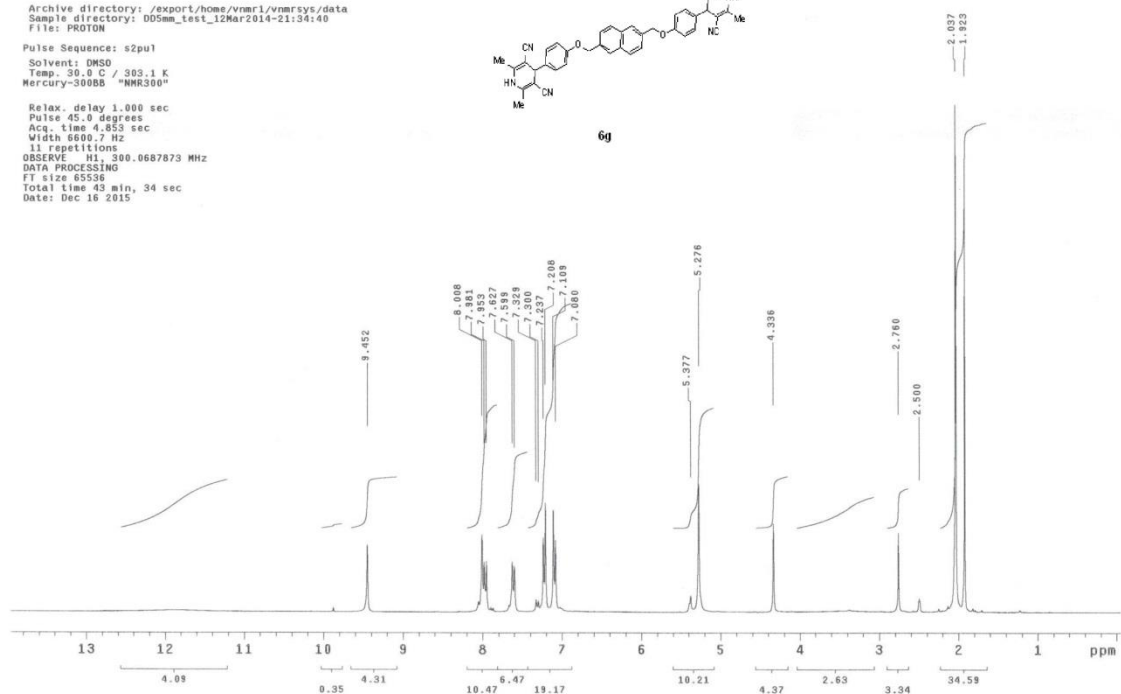
IsmaeelAbdulShafy-Har2-DMSO-1H
 Archive directory: /export/home/vnmr1/vnmrsys/data
 Sample directory: D05mm_test_12Mar2014-21:34:40
 File: PROTON

Pulse Sequence: s2pu1
 Solvent: DMSO
 Temp: 30.0 C / 303.1 K
 Mercury-300BB "NMR300"

Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 4.853 sec
 Width 6600.7 Hz
 11 repetitions
 OBSERVE H1 300.0607873 MHz
 DATA PROCESSING
 FT size 65536
 Total time 43 min. 34 sec
 Date: Dec 16 2015



6g



¹H NMR spectrum of compound 6g

IsmaeelAbdulShafy-Har2-DMSO-13C
 Archive directory: /export/home/vnmr1/vnmrsys/data
 Sample directory: D05mm_test_12Mar2014-21:34:40
 File: PROTON

Pulse Sequence: s2pu1

Solvent: DMSO

Temp: 30.0 C / 303.1 K

Mercury-300SB "NMR300"

Pulse 45.0 degrees

Acq. time 1.815 sec

Width 18761.7 Hz

684 repetitions

OBSERVE C13, 75.4523963 MHz

DECOUPLE H1, 300.0702830 MHz

Power 33 dB

continuously on

WALTZ-16 modulated

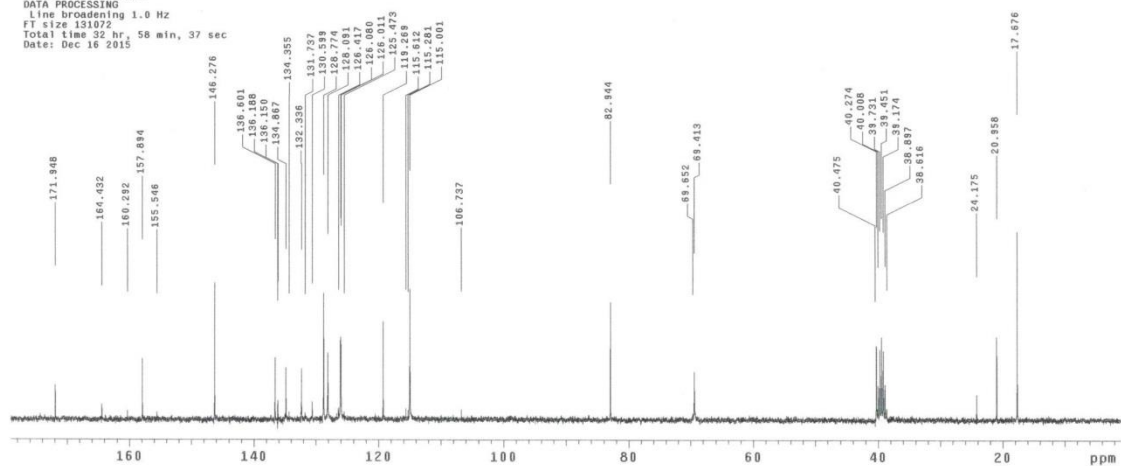
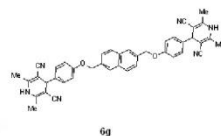
DATA PROCESSING

Line broadening 1.0 Hz

FT size 131072

Total time 32 hr, 58 min, 37 sec

Date: Dec 16 2015



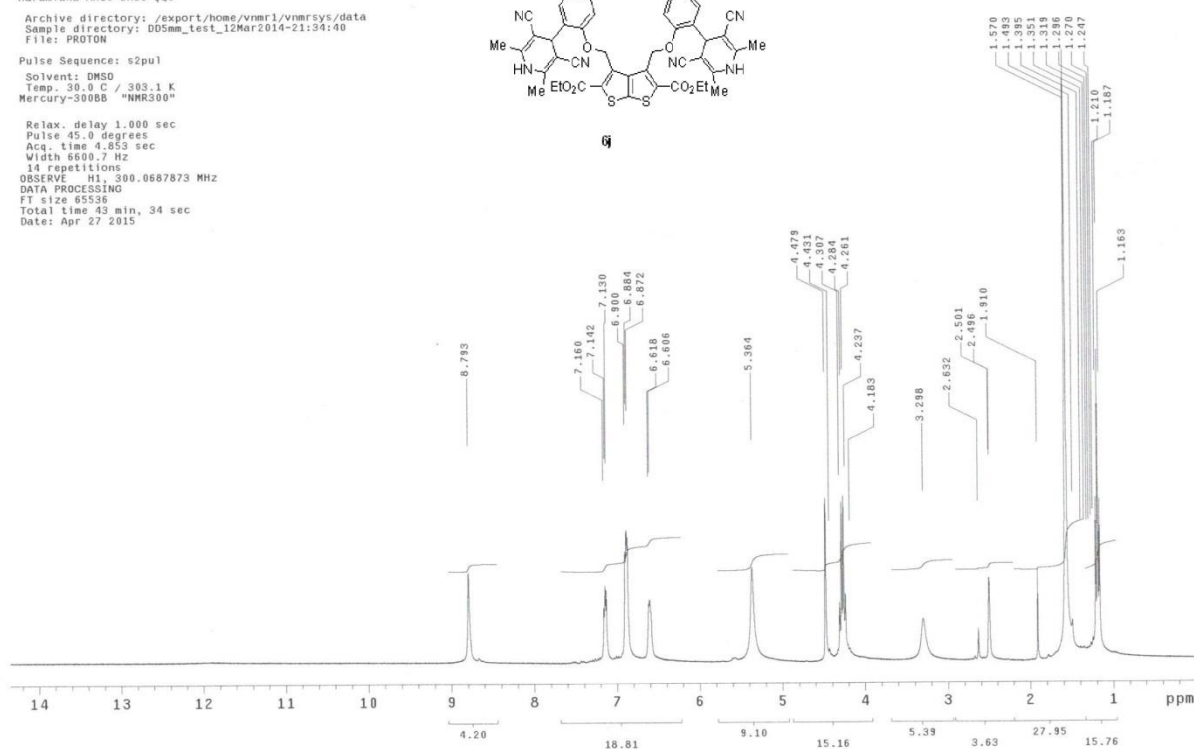
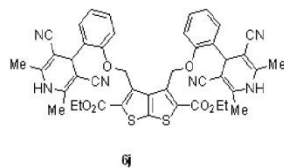
¹³C NMR spectrum of compound 6g

MaramTaha-AH19-DMSO-640

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: DD5mm_test_12Mar2014~21:34:40
File: PROTON

Pulse Sequence: s2pu1
Solvent: DMSO
Temp. 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.053 sec
Width 6600.7 Hz
14 repetitions
OBSERVE H1, 300.0687873 MHz
DATA PROCESSING
FT size 65536
Total time 43 min, 34 sec
Date: Apr 27 2015

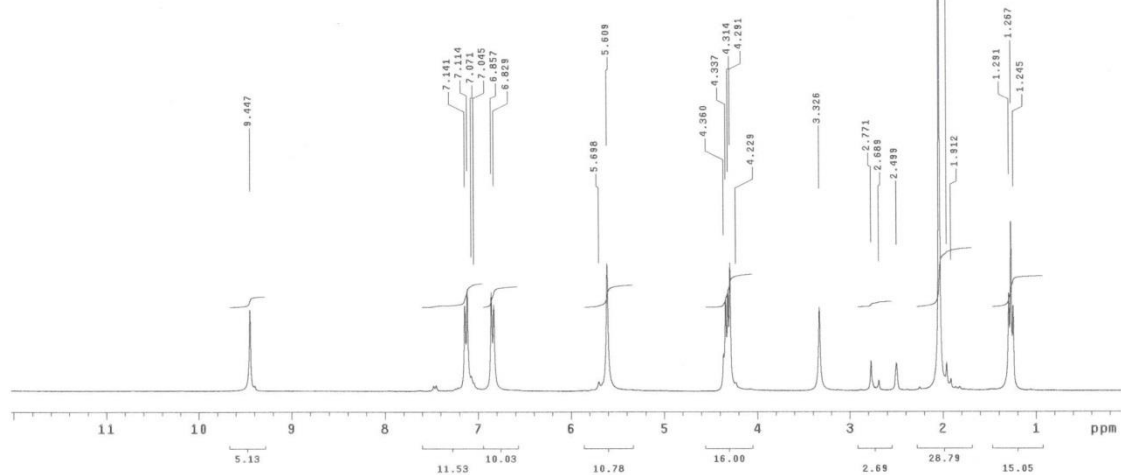
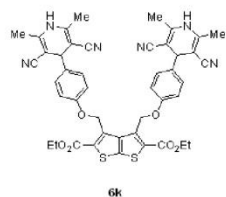


¹H NMR spectrum of compound 6j

IsmaeelAbdulShafy-HAr3-DMSO-1H
 Archive directory: /export/home/vnmr1/vnmrsys/data
 Sample directory: D05mm_test_12Mar2014-21:34:40
 File: PROTON

Pulse Sequence: s2pu1
 Solvent: DMSO
 Temp: 30.0 C / 303.1 K
 Mercury-300B6 "NMR300"

Relax, delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 4.853 sec
 Width 6600.7 Hz
 3 repetitions
 OBSERVE H1, 300.0687873 MHz
 DATA PROCESSING
 FT size 65536
 Total time 43 min, 34 sec
 Date: Dec 16 2015



¹H NMR spectrum of compound 6k

IsmaelAbdulShafy-Har3-DMSO-13C
 Archive directory: /export/home/vmr1/vmr/sys/data
 Sample directory: DD5mm_test_12Mar2014-21:34:40
 File: PROTON

Pulse Sequence: s2pu1

Solvent: DMSO

Temp: 30.0 C / 303.1 K

Mercury-3000B "NMR300"

Pulse 45.0 degrees

Acq. time 1.815 sec

Width 18761.7 Hz

768 repetitions

OBSERVE C13, 75.4523963 MHz

DECOUPLE H1, 300.0702630 MHz

Power 33 dB

continuously on

WALTZ-16 modulated

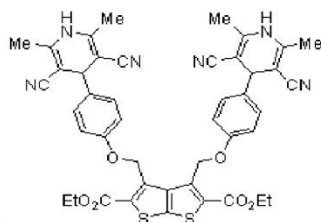
DATA PROCESSING

Line broadening 1.0 Hz

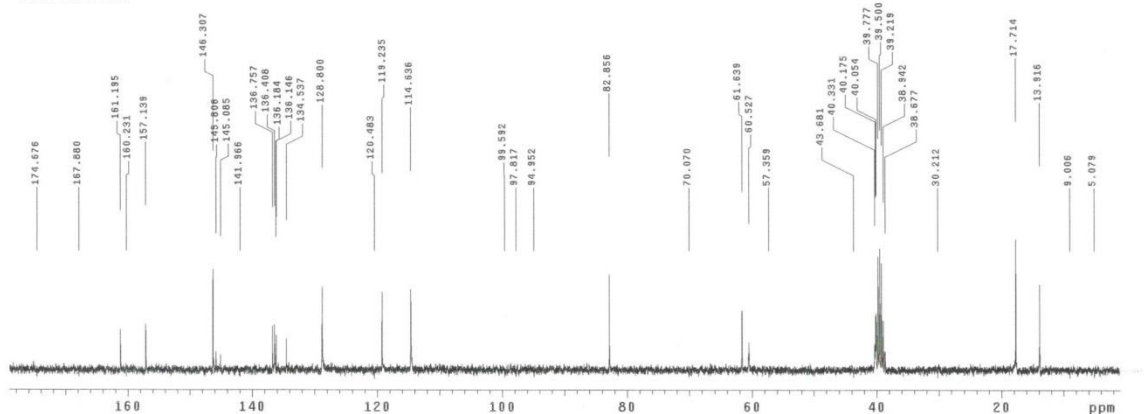
FT size 131072

Total time 32 hr, 58 min, 37 sec

Date: Dec 16 2015

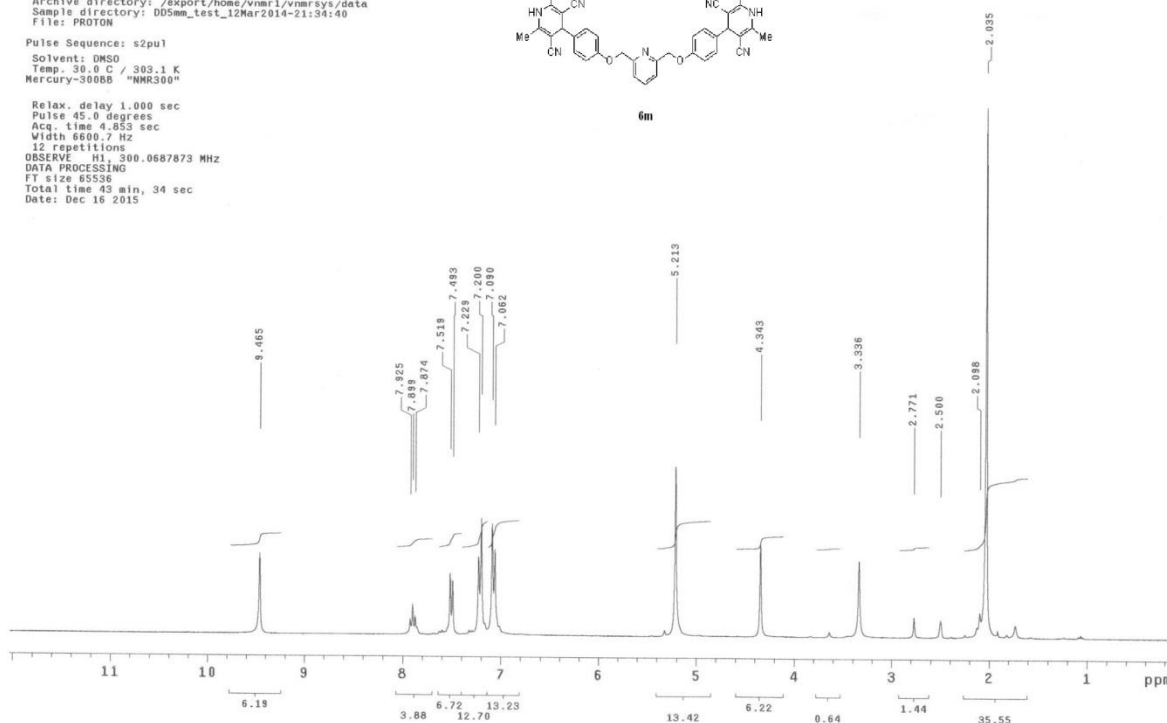
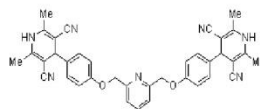


6k



¹³C NMR spectrum of compound 6k

IsmaelAbdulShafy-HA4-DMSO-1H
 Archive directory: /export/home/vnmr1/vnmrsys/data
 Sample directory: DD5mm_test_12Mar2014-21:34:40
 File: PROTON
 Pulse Sequence: s2pu1
 Solvent: DMSO
 Temp: 30.0 C / 303.1 K
 Mercury-300BB "NMR300"
 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 4.053 sec
 Width 6600.7 Hz
 12 repetitions
 OBSERVE H1: 300.0687873 MHz
 DATA PROCESSING
 FT size 65536
 Total time 43 min, 34 sec
 Date: Dec 16 2015



¹H NMR spectrum of compound 6m

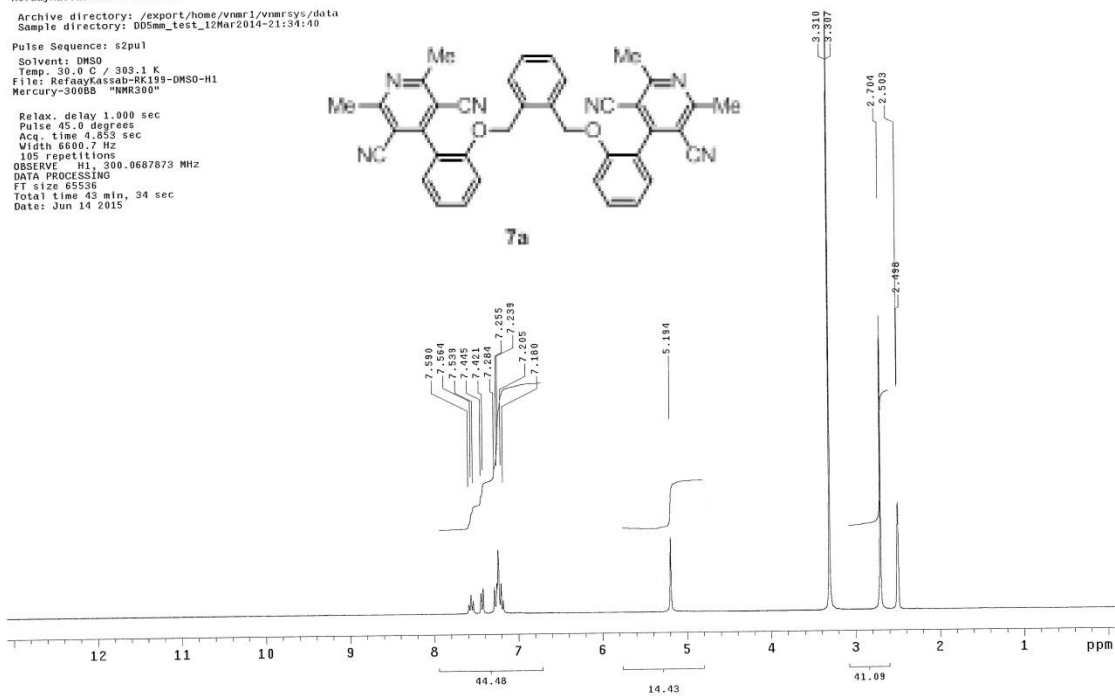
RefaayKassab-RK199-DMSO-H1

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: D05mm_test_12Mar2014-21:34:40

Pulse Sequence: s2pul

Solvent: DMSO
Temp: 30.0 C / 303.1 K
File: RefaayKassab-RK199-DMSO-H1
Mercury-300BB "NMR300"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.853 sec
Width 6600.7 Hz
105 repetitions
OBSERVE H1, 300.068783 MHz
DATA PROCESSING
FT size 65536
Total time 43 min, 34 sec
Date: Jun 14 2015



¹H NMR spectrum of compound 7a

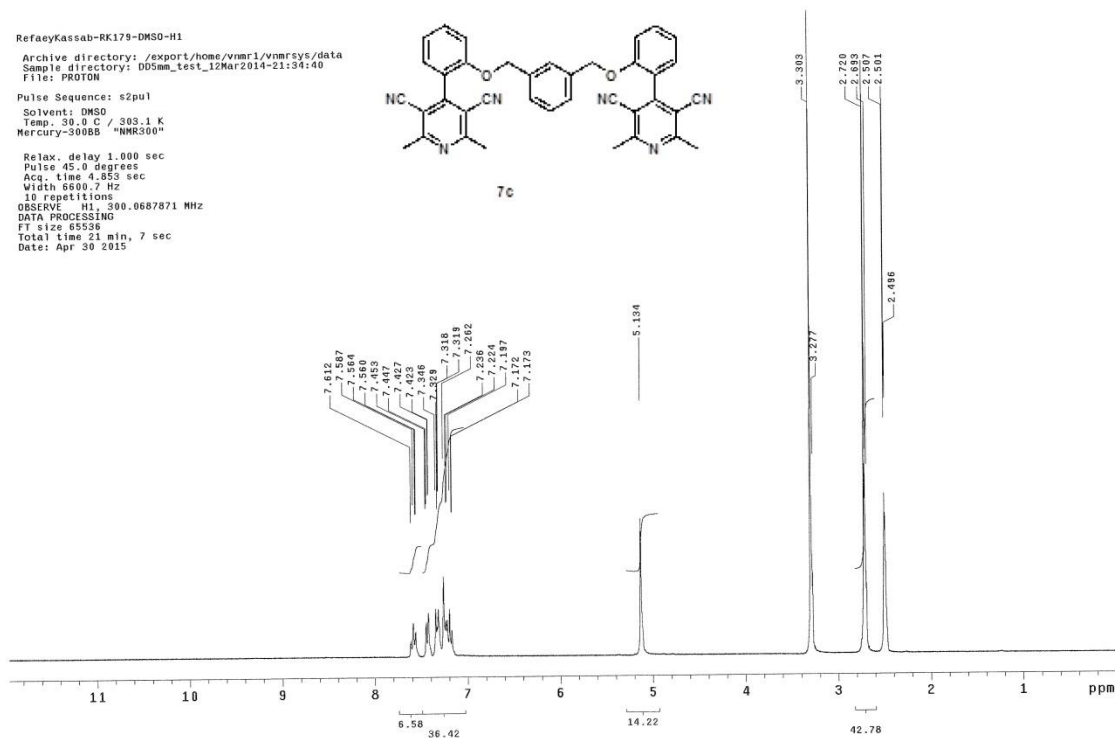
RefaeYKassab-RK179-DMSO-H1

Archive directory: /export/home/vnmr1/vnmrSYS/data
Sample directory: D05mm_test_12Mar2014-21:34:40
File: PROTON

Pulse Sequence: s2pul

Solvent: DMSO
Temp. 30.0 C / 303.1 K
Mercury-300BB "HNMR300"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.855 sec
Width 6600.7 Hz
10 repetitions
OBSERVE H1, 300.0687871 MHz
DATA PROCESSING
FT size 65536
Total time 21 min, 7 sec
Date: Apr 30 2015



¹H NMR spectrum of compound 7c

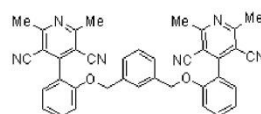
Refalekassab-RK208-DMSO-C13

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: D05mm_test_12Mar2014-21:34:40
File: PROTON

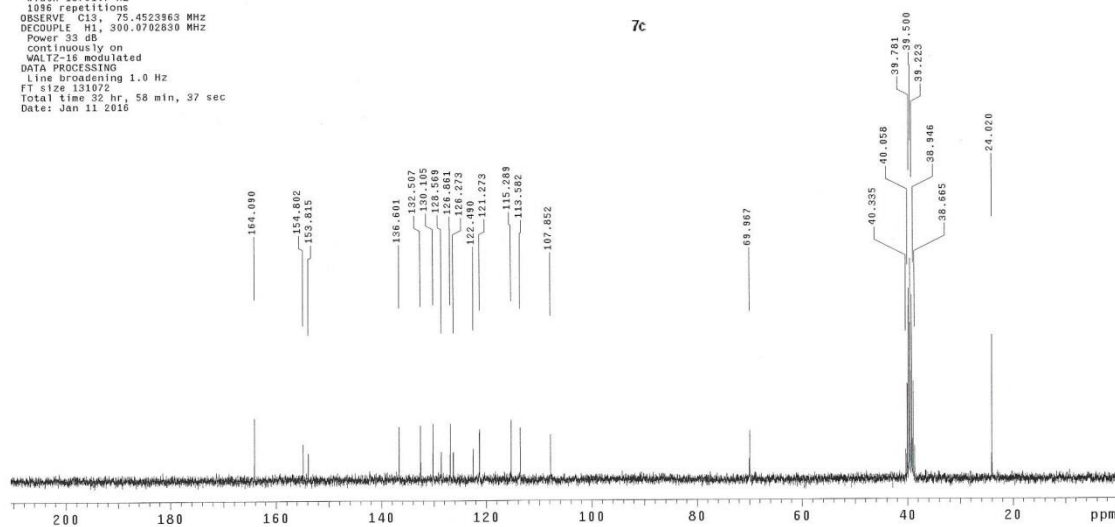
Pulse Sequence: s2pul

Solvent: DMSO
Temp. 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Pulse 45.0 degrees
Acq. time 1.815 sec
Width 18761.7 Hz
1096 repetitions
OBSERVE C13, 75.4523863 MHz
DECOUPLE H1, 500.0702639 MHz
Power 33 dB
Continuously on
WALTZ-16 is modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 32 hr, 58 min, 37 sec
Date: Jan 11 2016



7c



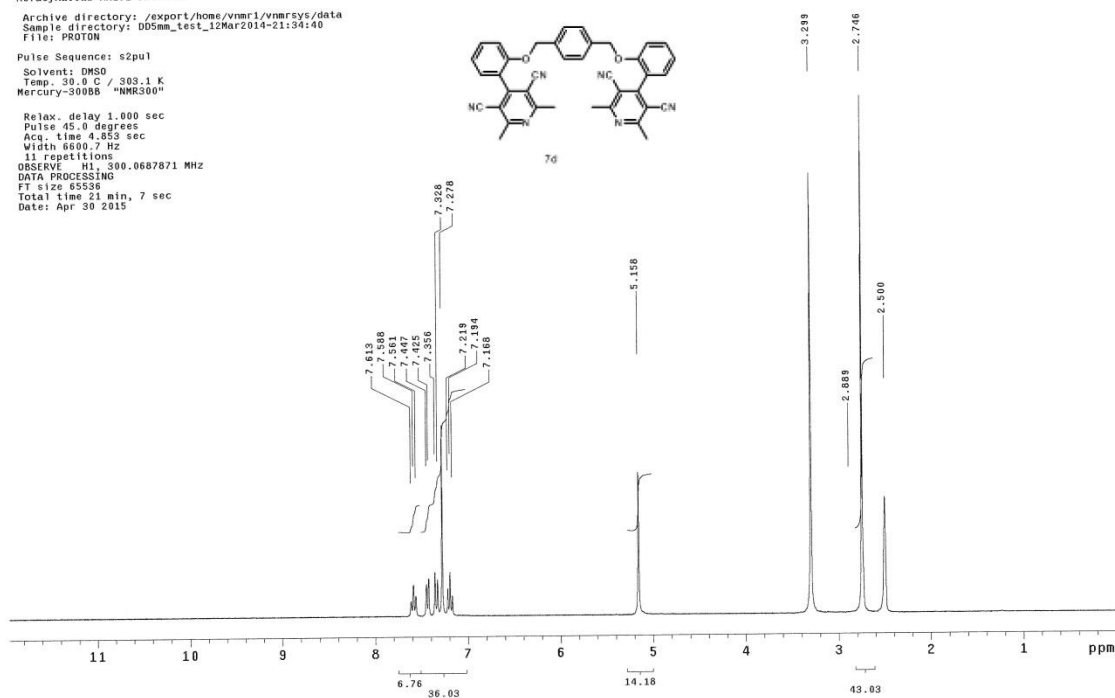
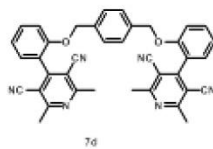
¹³C NMR spectrum of compound 7c

RefaeYKassab-RK182-DMSO-H1

Archive directory: /export/home/vnmr1/vnmrSYS/data
Sample directory: D05mm_test_12Mar2014-21:34:40
File: PROTON

Pulse Sequence: s2pu1
Solvent: DMSO
Temp: 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.855 sec
Width 6600.7 Hz
11 repetitions
OBSERVE H1, 300.0687871 MHz
DATA PROCESSING
FT size 65536
Total time 21 min, 7 sec
Date: Apr 30 2015



¹H NMR spectrum of compound 7d