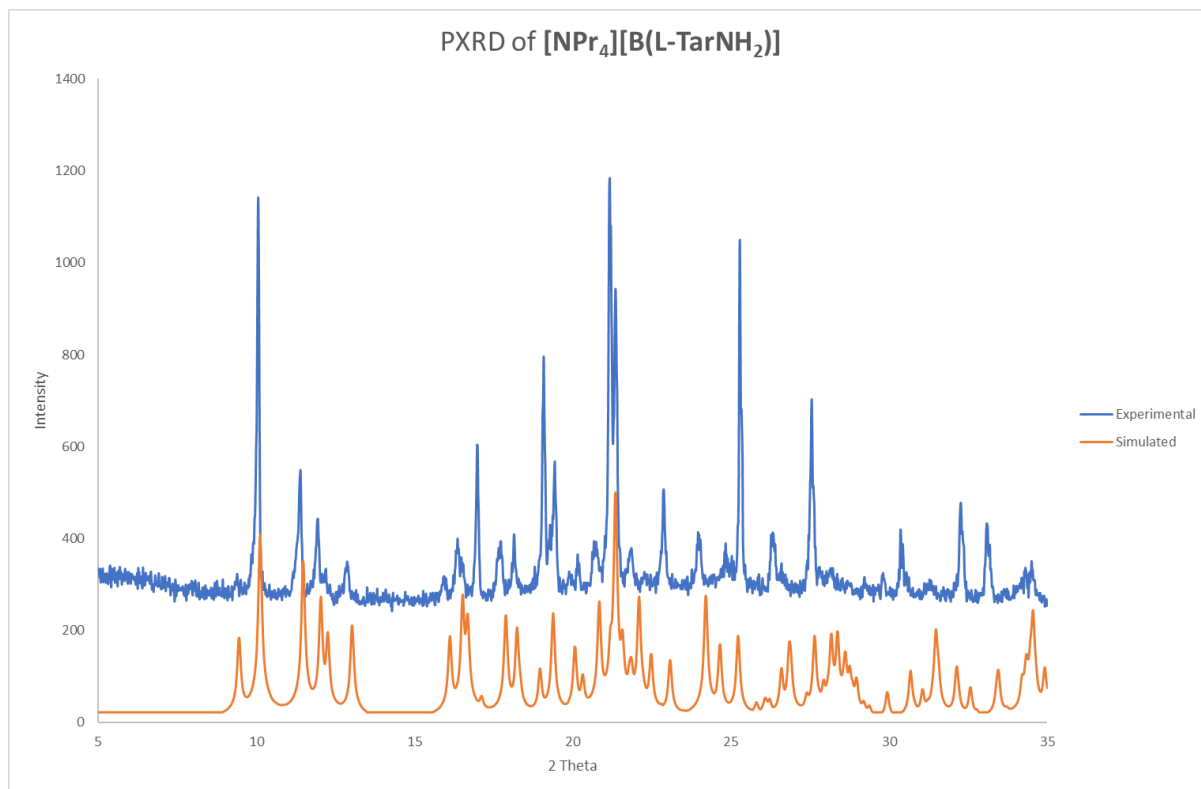


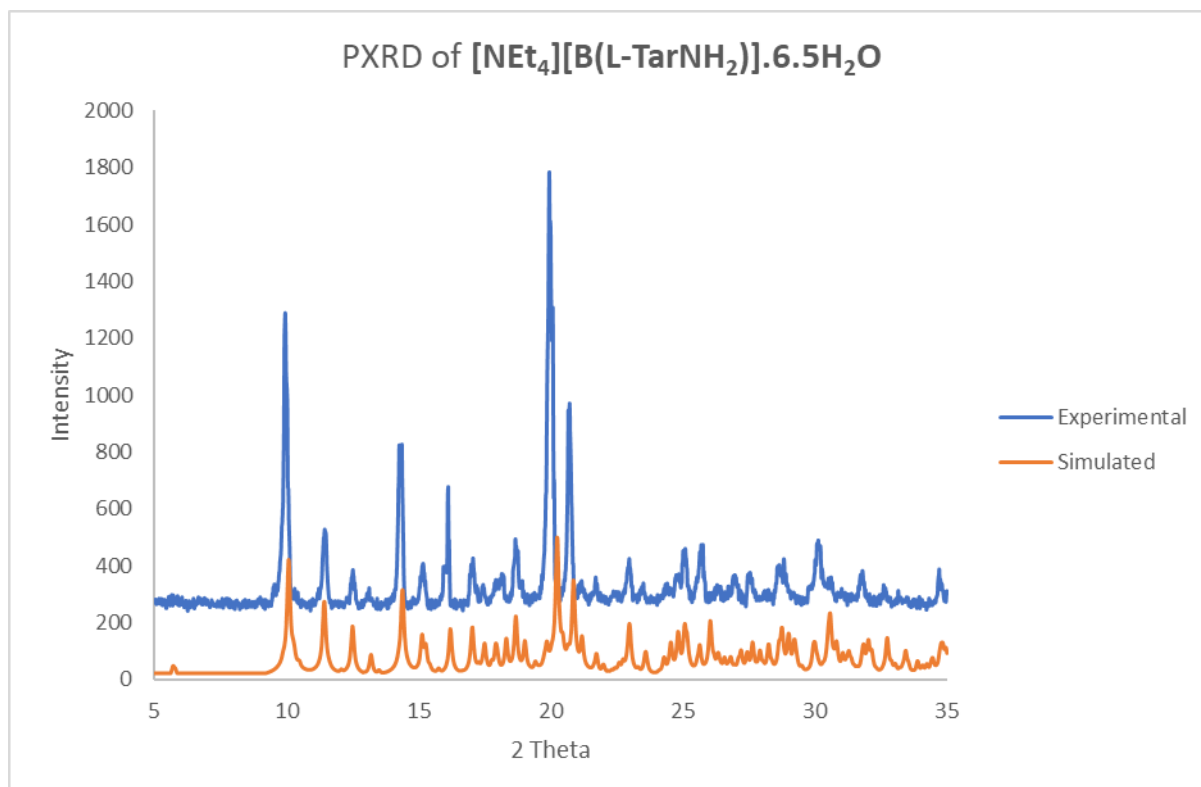
Supplementary Information: Soeipto et al., Acta Cryst C

Powder X-Ray Diffractograms:

1) $[\text{NPr}_4][\text{B}(\text{L-TarNH}_2)_2]$

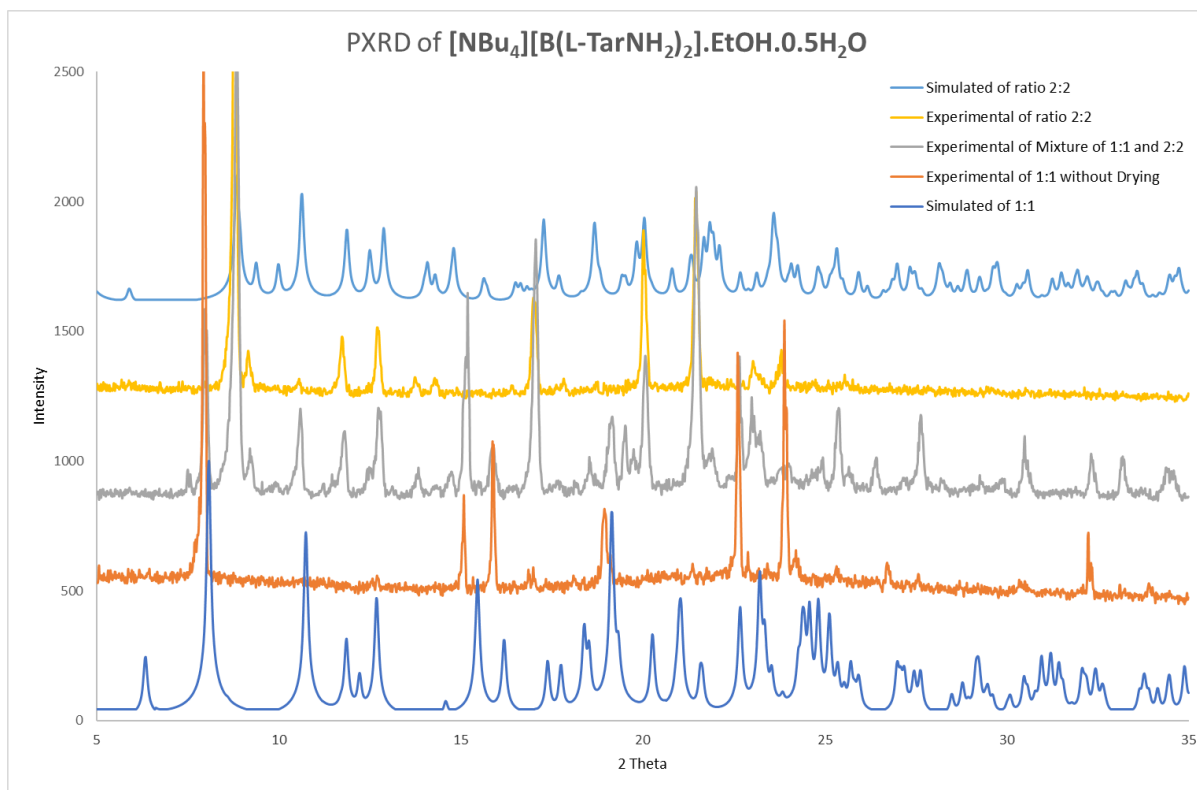


2) $[\text{NEt}_4][\text{B}(\text{L-TarNH}_2)_2] \cdot 6.5\text{H}_2\text{O}$

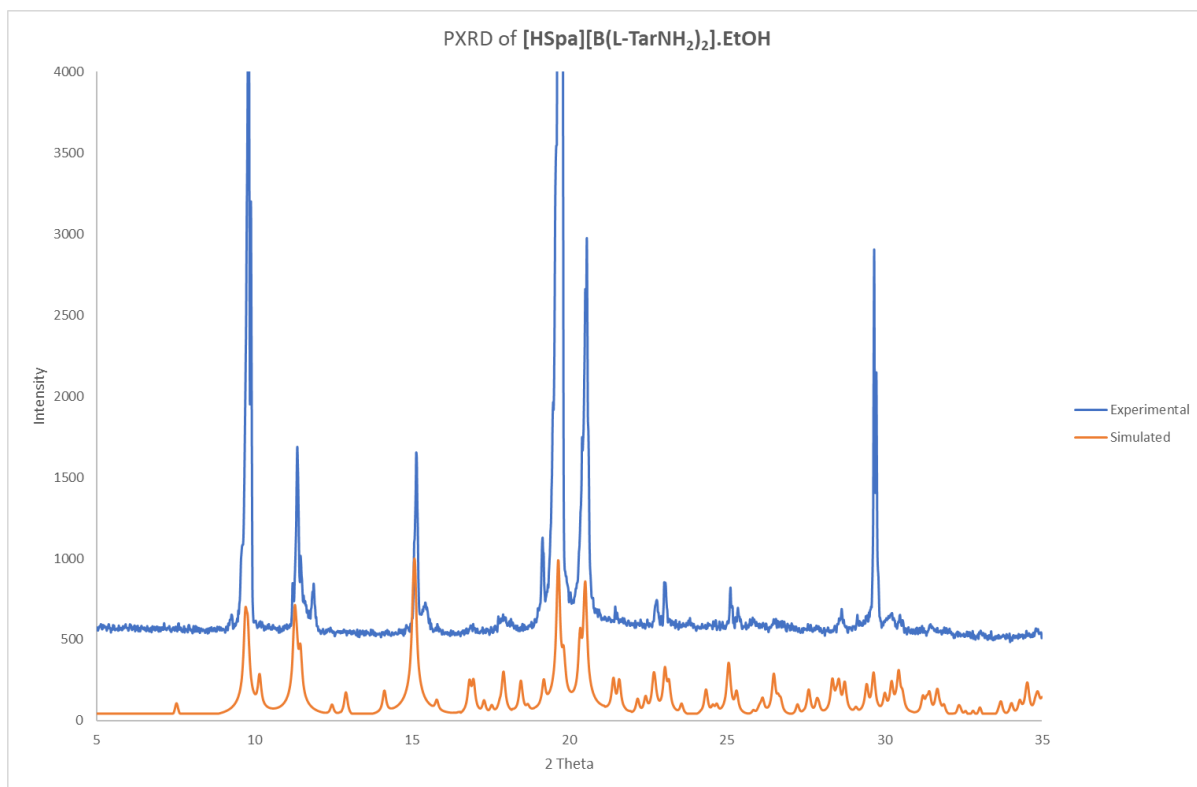


3) $[\text{NBu}_4][\text{B}(\text{L-TarNH}_2)_2]\cdot\text{EtOH}\cdot 0.5\text{H}_2\text{O}$

(Note p-XRD patterns can change over time as **3** desolvates to a different crystalline form when left to dry, poor crystal quality of the new phase has prevented its full characterisation)



4) $[\text{HSpa}][\text{B}(\text{L-TarNH}_2)_2]\cdot\text{EtOH}$



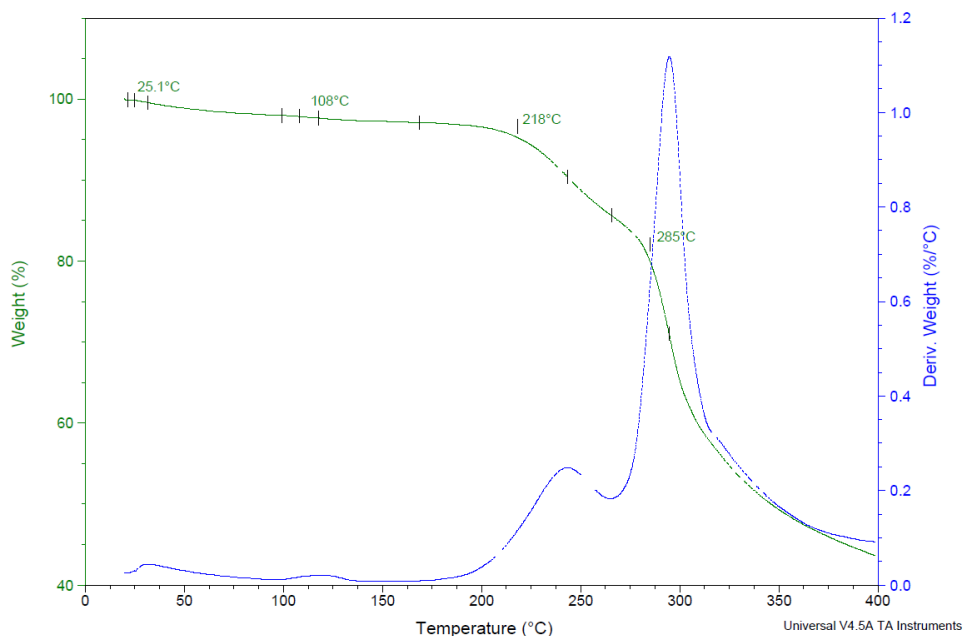
Thermal Gravimetric Analysis

1) $[\text{NPr}_4][\text{B}(\text{L-TarNH}_2)_2]$

Sample: NPr4
Size: 3.4270 mg

TGA

File: C:\...120190924\NPr4.001
Operator: 0
Run Date: 24-Sep-2019 11:07
Instrument: TGA Q5000 V3.15 Build 263

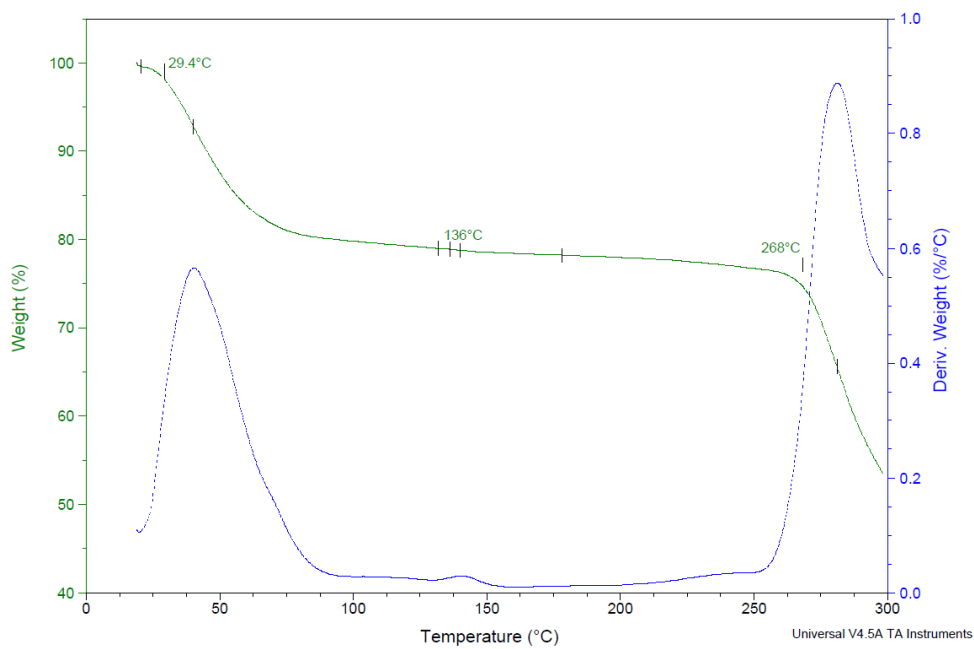


2) $[\text{NEt}_4][\text{B}(\text{L-TarNH}_2)_2] \cdot 6.5\text{H}_2\text{O}$

Sample: Aris 40
Size: 2.1660 mg

TGA

File: C:\...20190919\Aris 40.001
Operator: 0
Run Date: 19-Sep-2019 16:48
Instrument: TGA Q5000 V3.15 Build 263



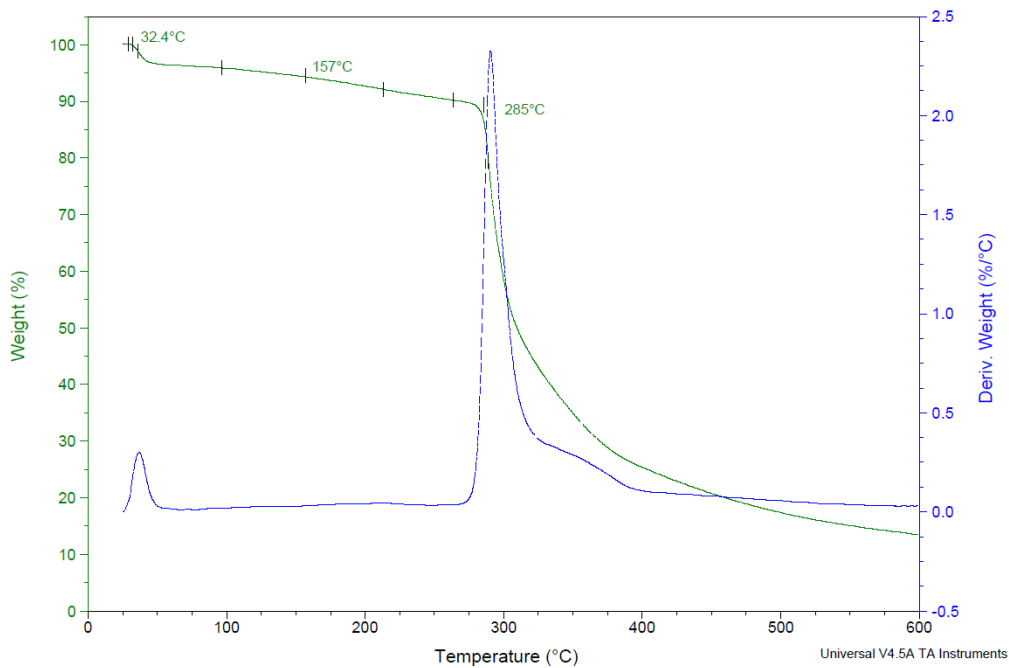
3) [NBu₄][B(L-TarNH₂)₂].EtOH.0.5H₂O

Sample: ARIS 36-2_N2
Size: 0.6890 mg

TGA

File: C:\...20200529\ARIS 36-2_N2.001

Run Date: 29-May-2020 11:58
Instrument: TGA Q5000 V3.15 Build 263



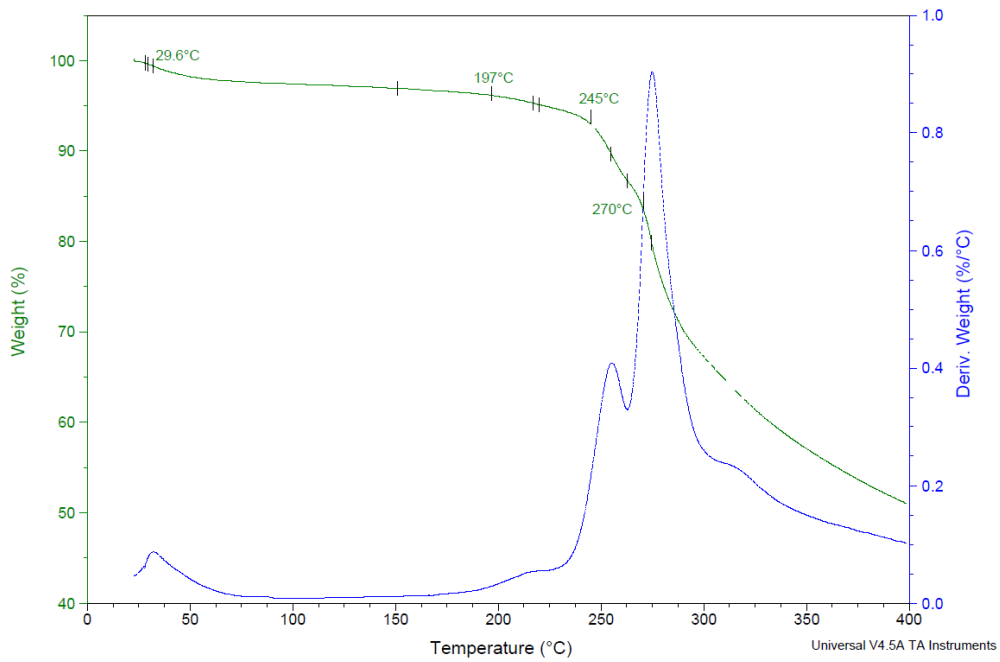
4) [HSpa][B(L-TarNH₂)₂].EtOH

Sample: ARISLspa_Air
Size: 1.3040 mg

TGA

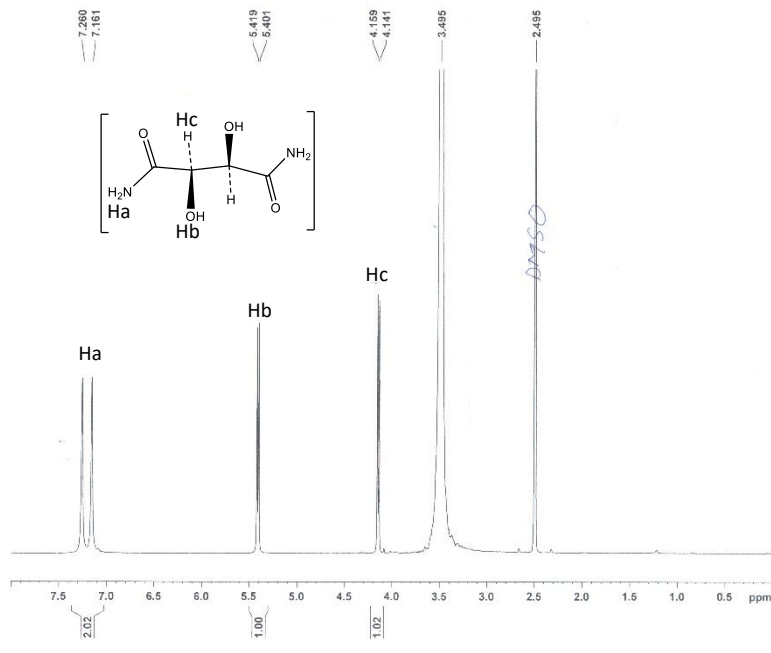
File: C:\...20200423\ARISLspa_Air.001

Operator: 0
Run Date: 23-Apr-2020 14:37
Instrument: TGA Q5000 V3.15 Build 263



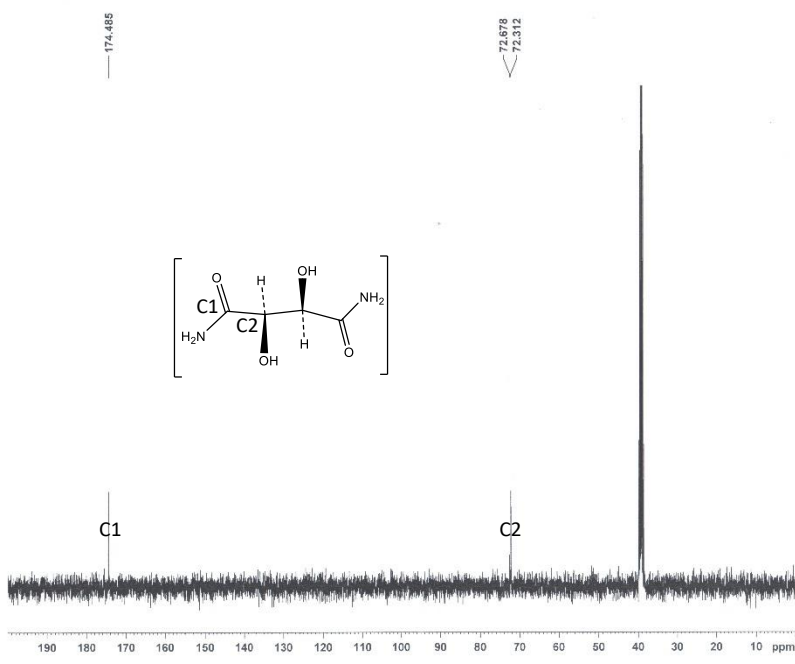
NMR Spectra (Bruker 400MHz)

L-Tartramide ligand for reference.



```

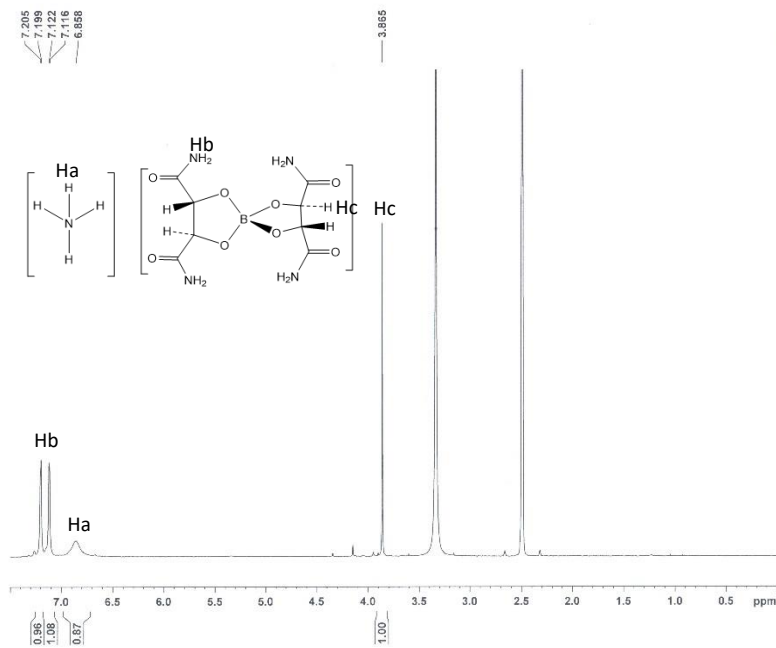
NAME tartramide_1
EXPNO 1
PROCNO 1
Date_ 20191121
Time 17.02
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 823.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 128
DW 60.800 usec
DE 6.00 usec
TE 294.6 K
D1 1.00000000 sec
D10 1
===== CHANNEL f1 =====
NUC1 1H
P1 15.80 usec
PL1 -1.00 dB
PL1W 12.17476940 W
SFO1 400.1324710 MHz
SI 32768
SF 400.1300054 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00
    
```



```

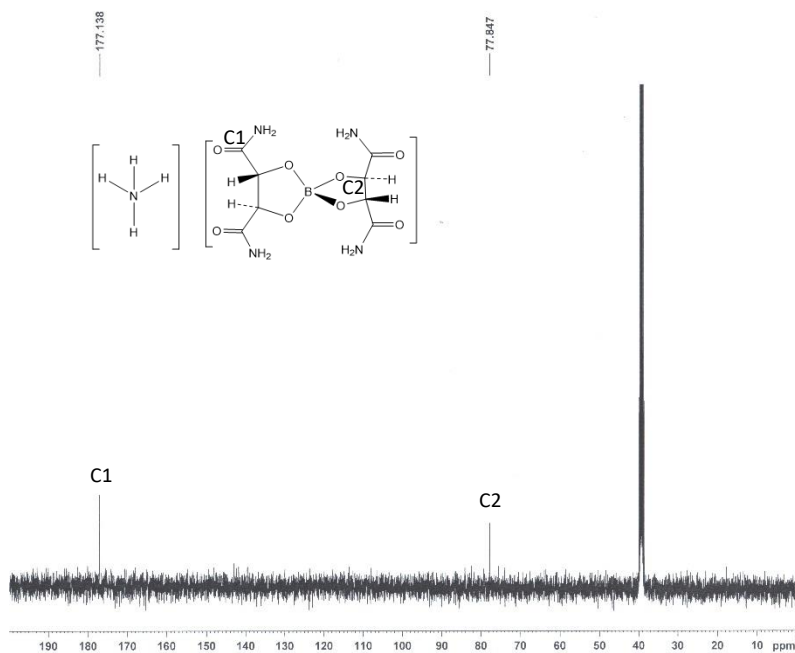
NAME Tartramide_CNMR
EXPNO 1
PROCNO 1
Date_ 20200528
Time 14.48
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 40
DS 2
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 228
DW 20.800 usec
DE 6.00 usec
TE 295.0 K
D1 2.00000000 sec
D11 0.03000000 sec
D10 1
===== CHANNEL f1 =====
NUC1 13C
P1 8.60 usec
PL1 -3.00 dB
PL1W 60.64365387 W
SFO1 100.6228298 MHz
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL12 14.39 dB
PL13 18.00 dB
PL2W 12.17476940 W
PL12W 0.35193387 W
PL13W 0.15327128 W
SFO2 400.1316006 MHz
SI 32768
SF 100.6128330 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
    
```

Ammonium bis(L-tartramido)borate $[NH_4][B(L-TarNH_2)_2]$ for reference.



NAME NH4_BTartramide_HNMR
 EXPNO 1
 PROCNO 1
 Date 20200528
 Time 14.52
 INSTRUM spect
 PROBHD 5 mm F4BBO BB-
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 8
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.125483 Hz
 AQ 3.3846397 sec
 RG 812
 DW 60.800 usec
 DE 6.00 usec
 TE 294.6 K
 D1 1.0000000 sec
 TD0 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 15.80 usec
 PL1 -1.00 dB
 PL1W 12.17476940 W
 SFO1 400.1324710 MHz
 SI 32788
 SF 400.1300054 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

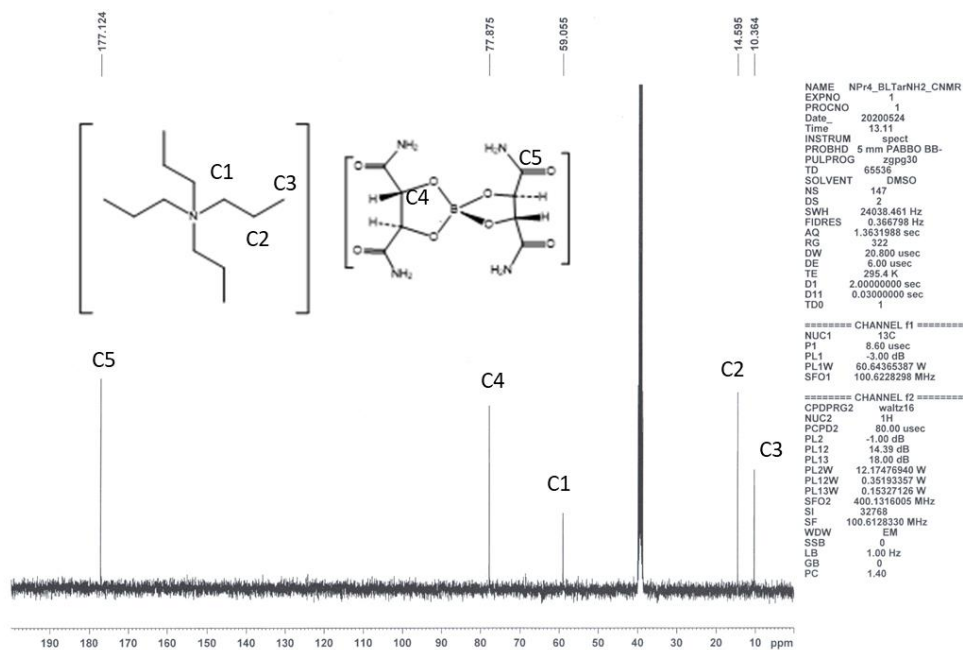
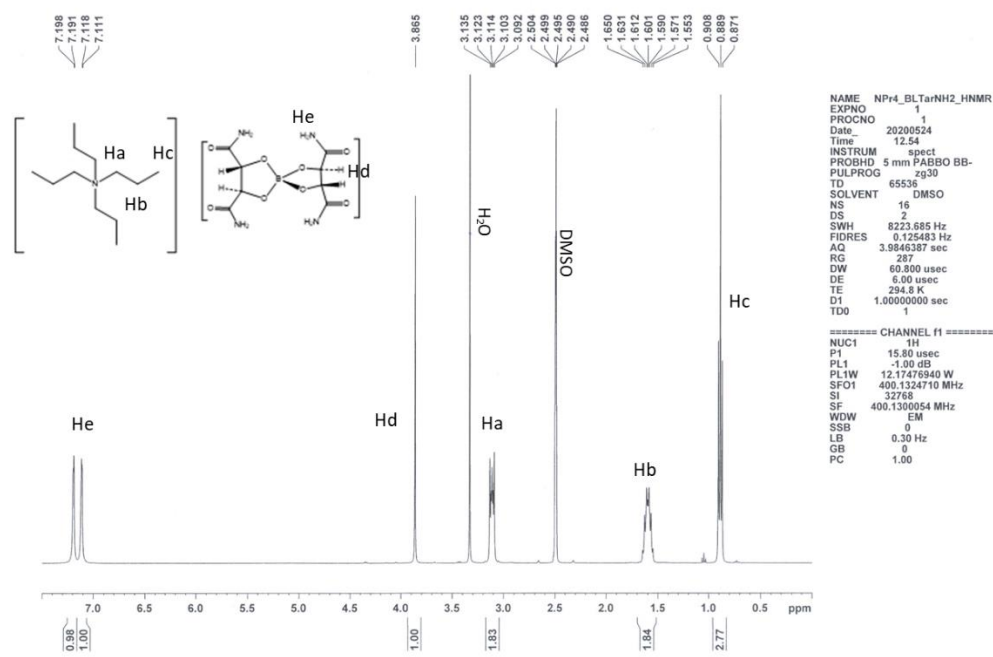


NAME NH4_BTartramide_CNMR
 EXPNO 1
 PROCNO 1
 Date 20200528
 Time 15.02
 INSTRUM spect
 PROBHD 5 mm F4BBO BB-
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 69
 DS 2
 SWH 24038.461 Hz
 FIDRES 0.360798 Hz
 AQ 1.3531988 sec
 RG 144
 DW 20.800 usec
 DE 6.00 usec
 TE 295.2 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TD0 1

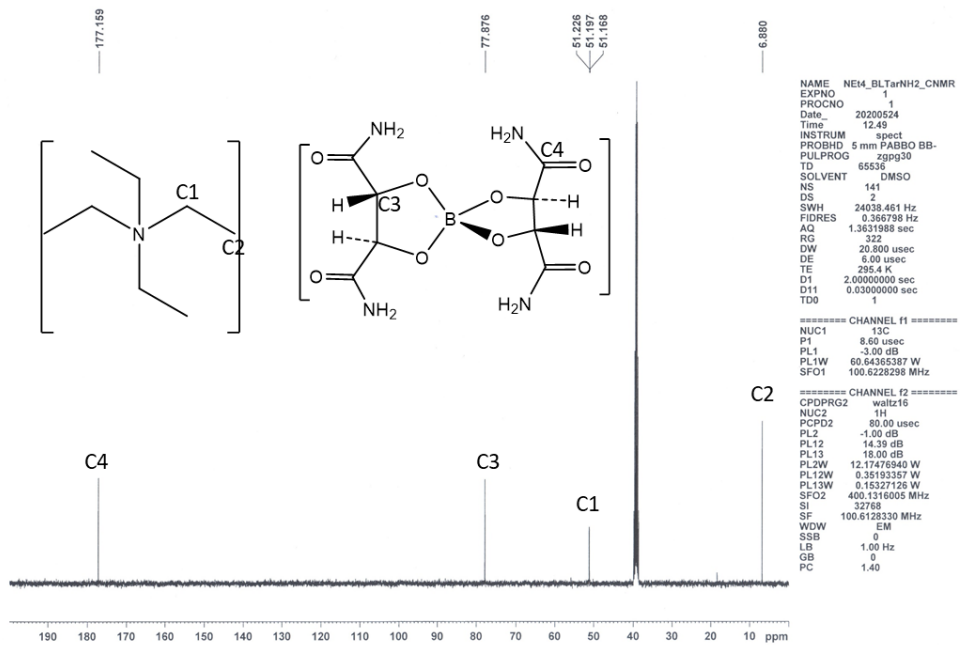
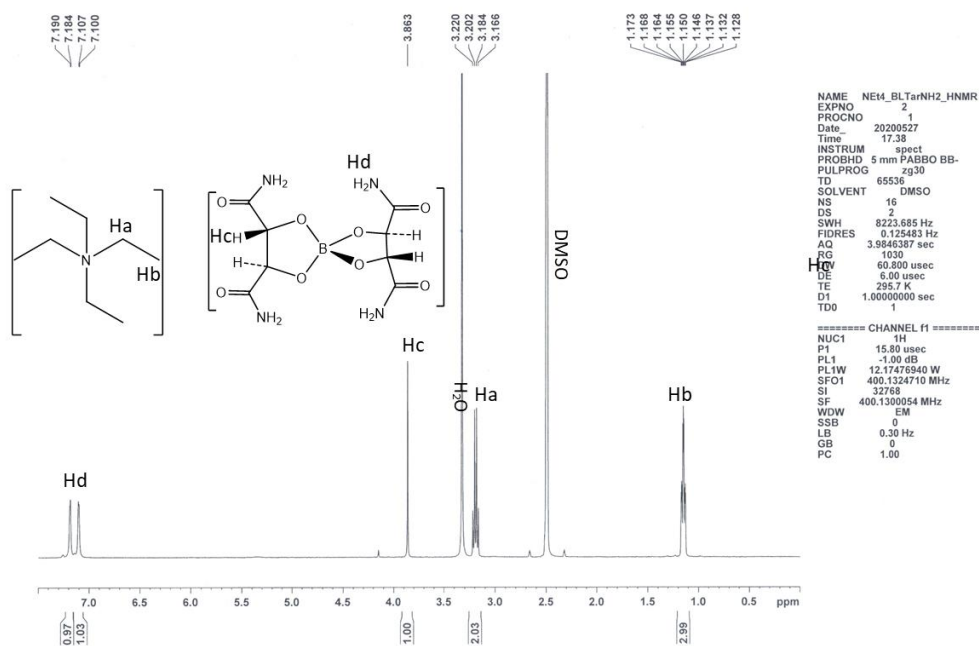
===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -3.00 dB
 PL1W 60.64365387 W
 SFO1 100.6282398 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -1.00 dB
 PL12 14.39 dB
 PL13 18.00 dB
 PL2W 12.17476940 W
 PL12W 0.35193357 W
 PL13W 0.13327126 W
 SFO2 400.1316005 MHz
 SI 32788
 SF 100.6128330 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

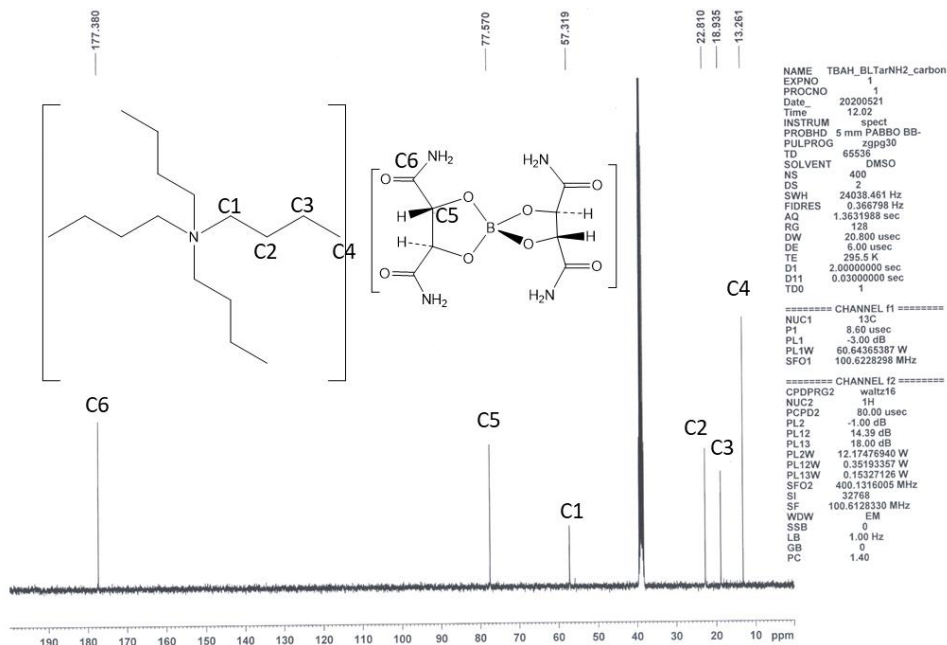
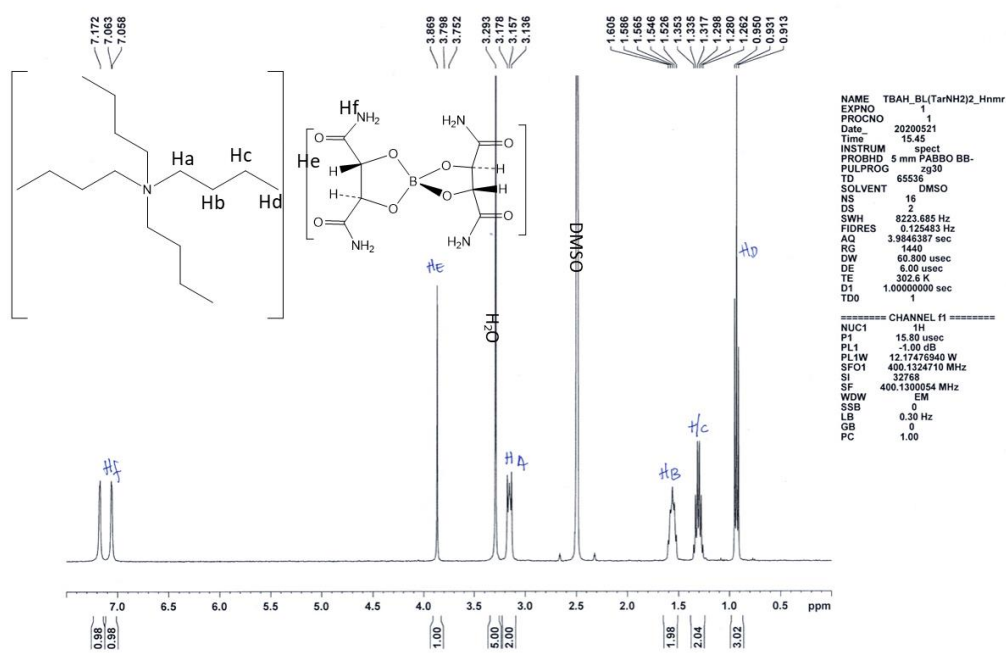
1) [NPr₄][B(L-TarNH₂)₂]



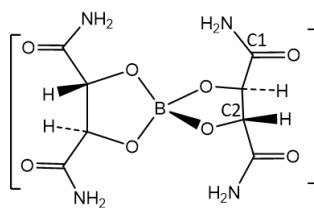
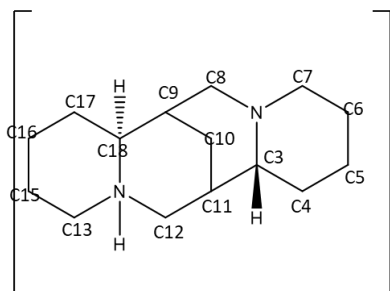
2) [NEt₄][B(L-TarNH₂)₂].6.5H₂O

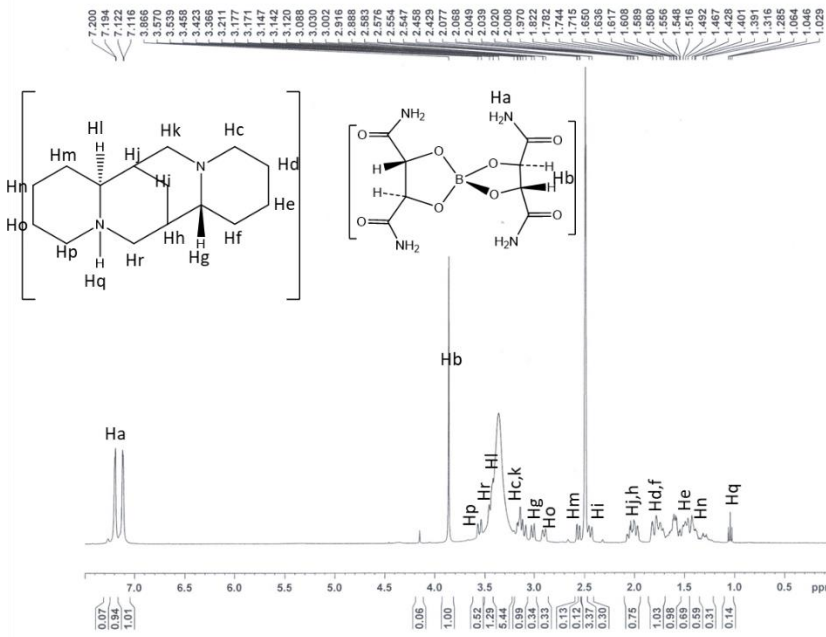


3) [NBu₄][B(L-TarNH₂)₂].EtOH.0.5H₂O



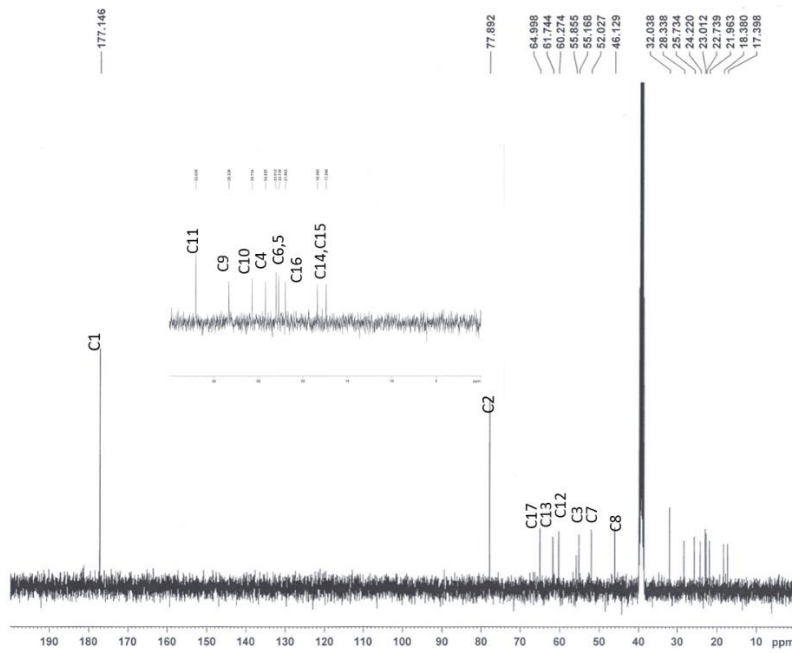
4) [HSpa][B(L-TarNH₂)₂].EtOH





NAME HSpa_BLTarNH2_HNMR
EXPNO 1
PROCNO 1
Date_ 20200525
Time 18.58
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 287
DW 60.800 usec
DE 6.00 usec
TE 294.5 K
D1 1.00000000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 1H
P1 15.80 usec
PL1 -1.00 dB
PL1W 12.17476940 W
SFO1 400.1324710 MHz
SI 32768
SF 400.1300954 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



NAME HSpa_BLTarNH2_CNMR
EXPNO 1
PROCNO 1
Date_ 20200524
Time 13.37
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 171
DS 2
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3531988 sec
RG 181
DW 20.800 usec
DE 6.00 usec
TE 295.4 K
D1 2.00000000 sec
D11 0.63000000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.60 usec
PL1 -3.00 dB
PL1W 60.64365387 W
SFO1 100.6228298 MHz

===== CHANNEL f2 =====
CPDPRG2 waitz16
NUC2 1H
PCPD2 80.00 usec
PL2 -1.00 dB
PL12 14.39 dB
PL13 18.00 dB
PL1W 12.17476940 W
PL12W 0.35193357 W
PL13W 0.15327126 W
SFO2 400.1316005 MHz
SI 32768
SF 100.6128330 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40