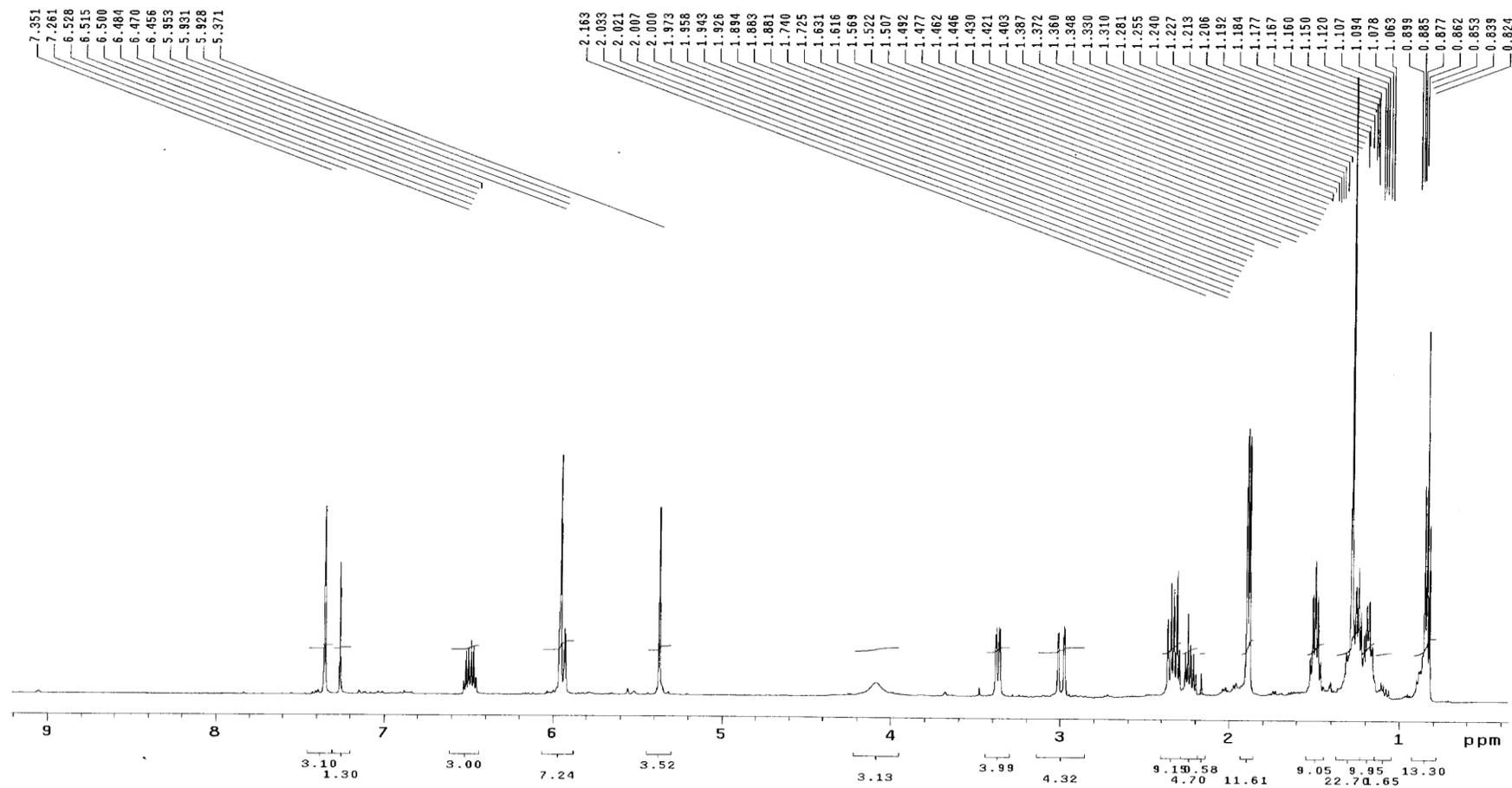


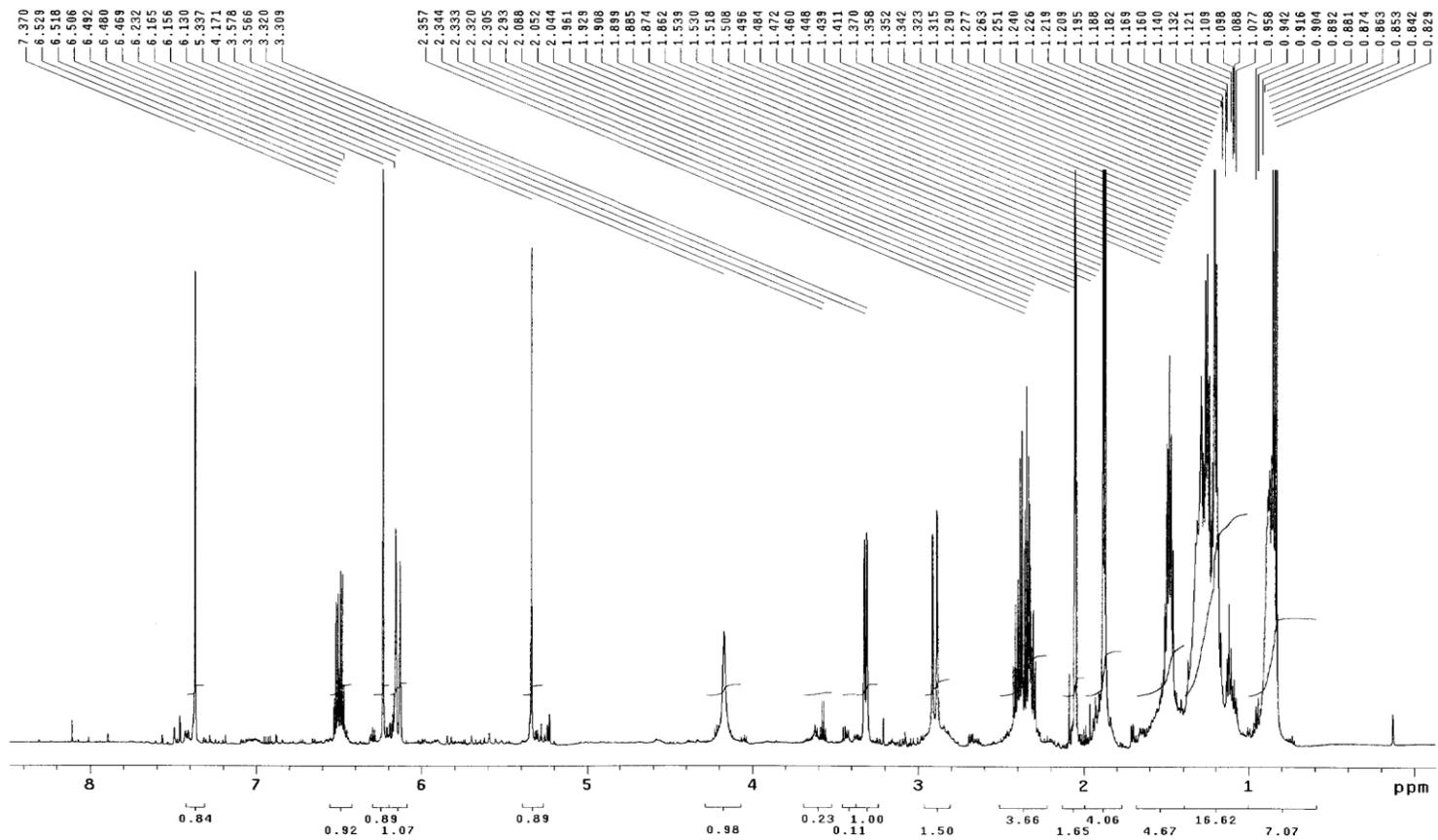
# Compound 1 H-NMR IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 1H-NMR hq-16 IN CDCL3 07.04.24



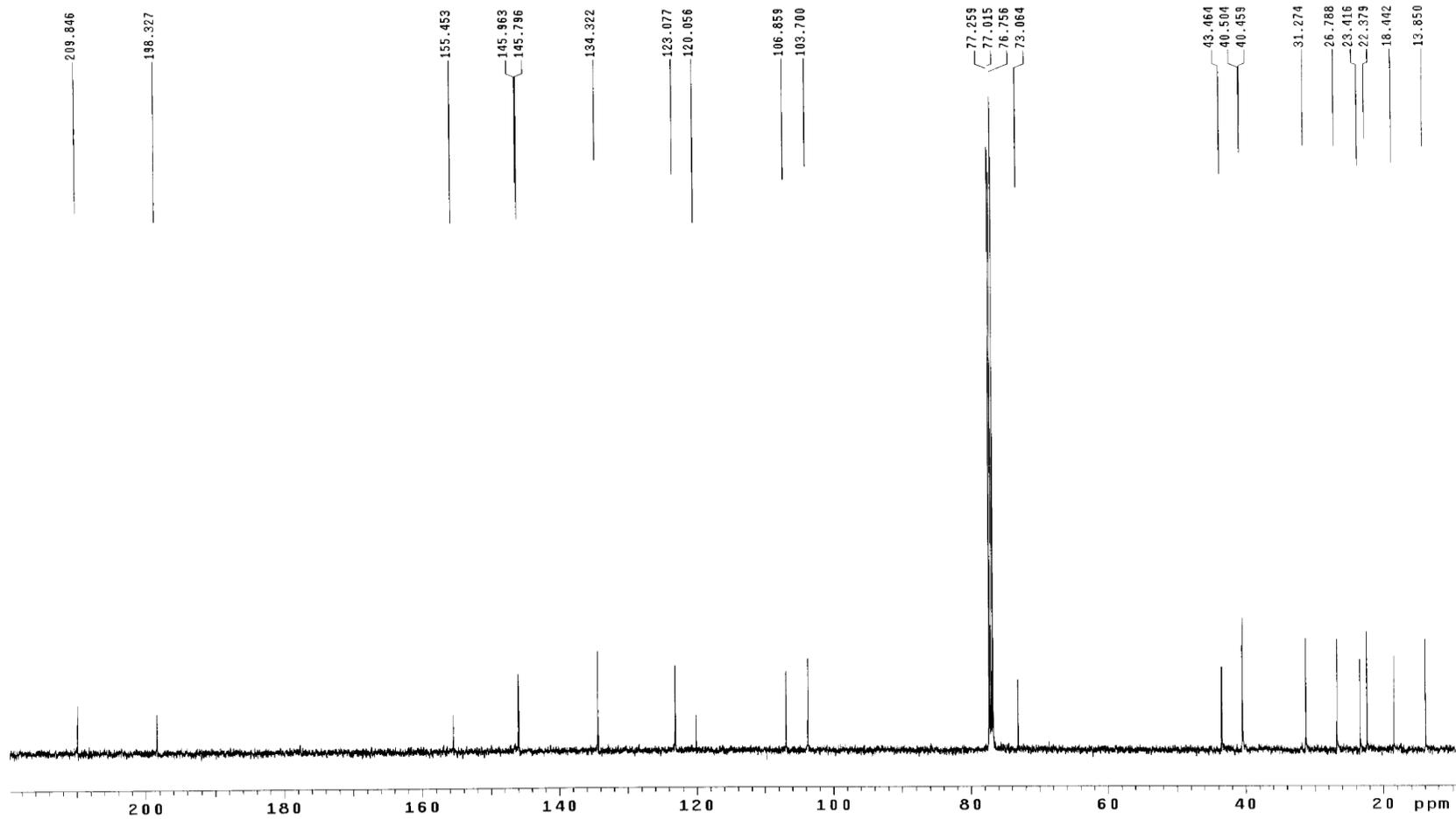
# Compound 1 H-NMR IN CD<sub>3</sub>COCD<sub>3</sub>

VNS-600 1H-NMR hq-16 IN CD3COCD3 08.12.24



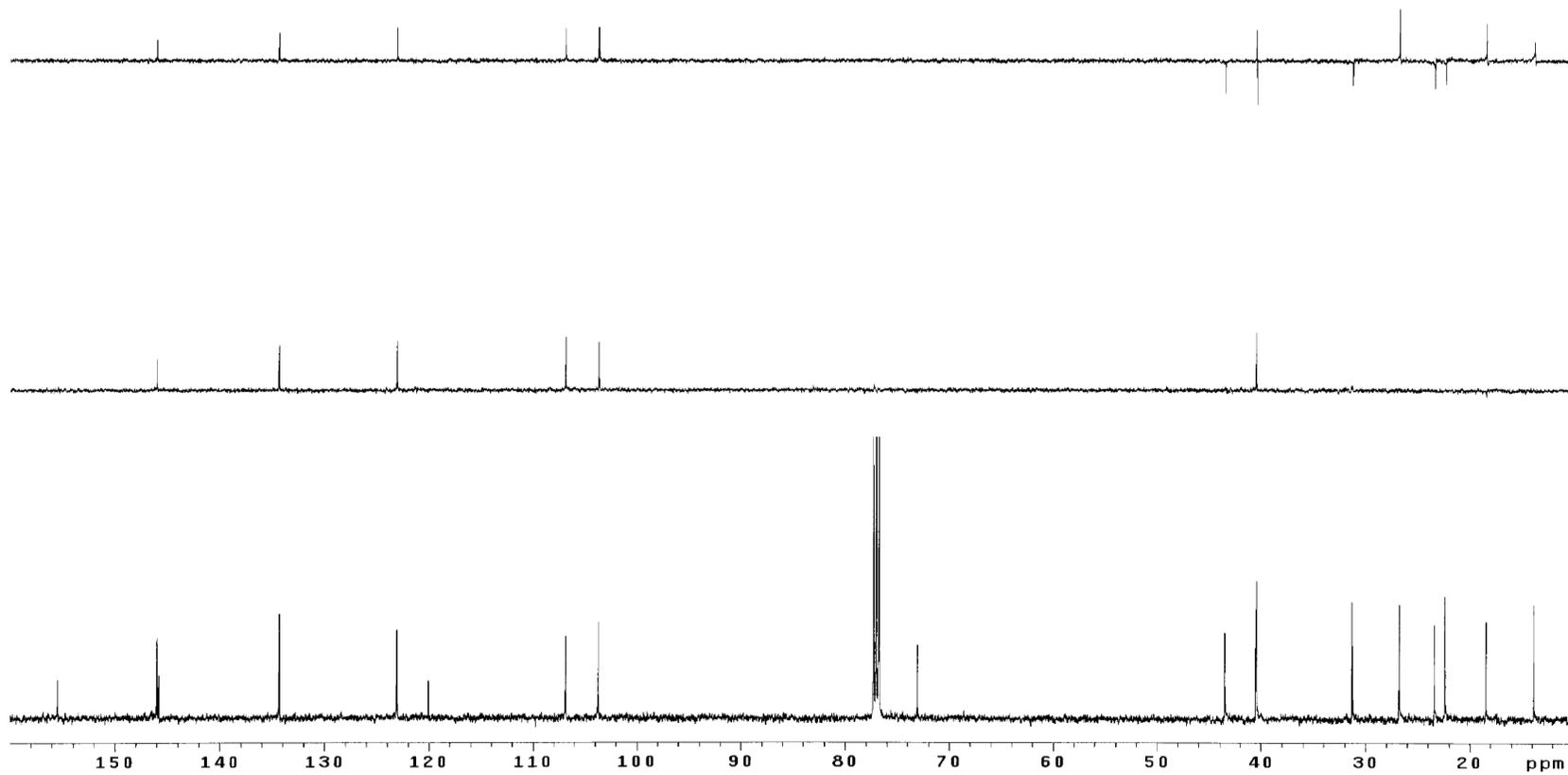
# Compound 1 C-NMR IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-500 13C-NMR HQ-16 IN CDCL3 2007.04.26



Compound 1 DEPT-NMR IN CD<sub>3</sub>Cl<sub>3</sub>

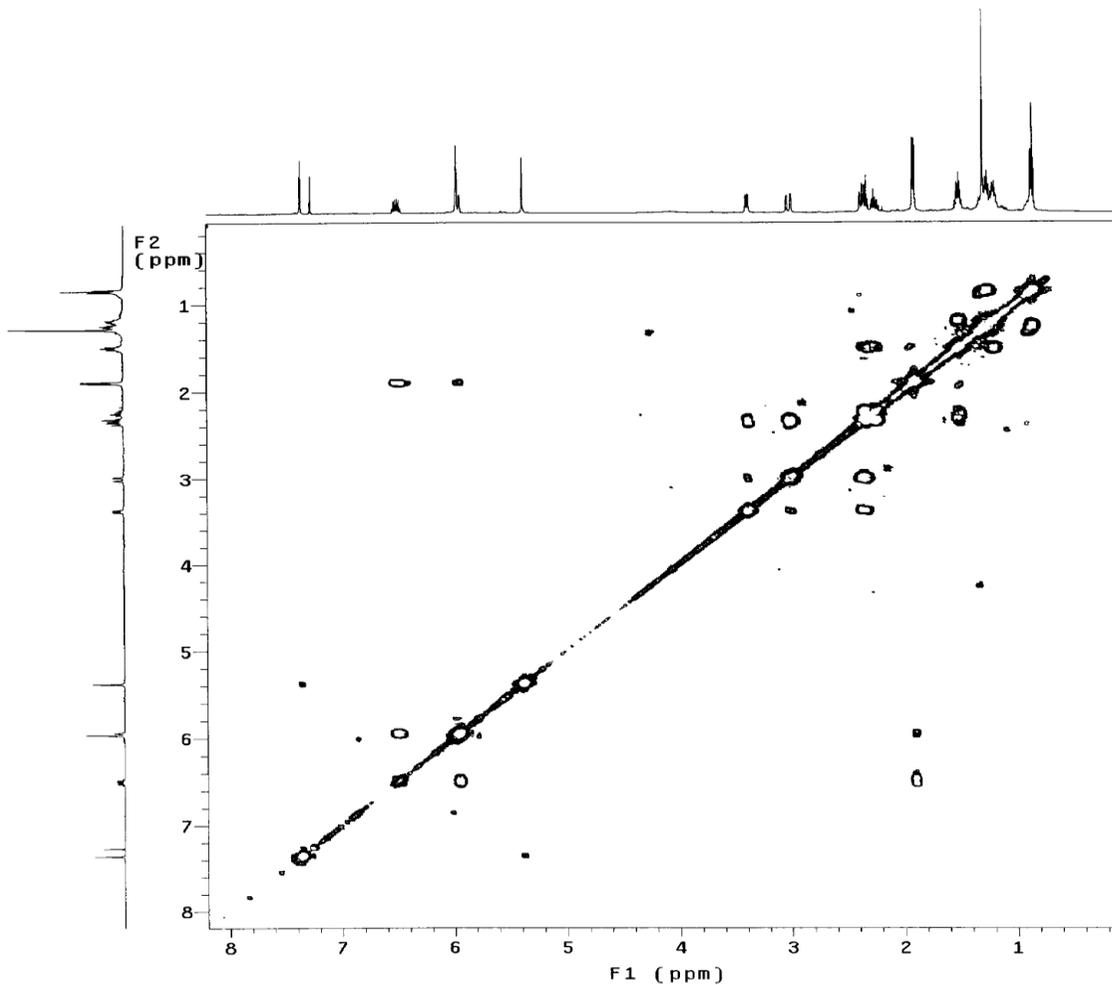
INOVA-500 DEPT-NMR HQ-16 IN CDCL<sub>3</sub> 2007.06.27



Compound 1 gCOSY IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 gCOSY HQ-16 IN CDCL3 07.05.21

Solvent: CDC13  
Temp. 25.0 C / 298.1 K  
INOVA-500 "IMM-501"  
  
Relax. delay 1.000 sec  
Acq. time 0.126 sec  
Width 4070.6 Hz  
2D Width 4070.6 Hz  
2 repetitions  
256 increments  
OBSERVE H1, 499.7702080 MHz  
DATA PROCESSING  
Sine bell 0.063 sec  
F1 DATA PROCESSING  
Sine bell 0.031 sec  
FT size 1024 x 1024  
Total time 10 min, 17 sec

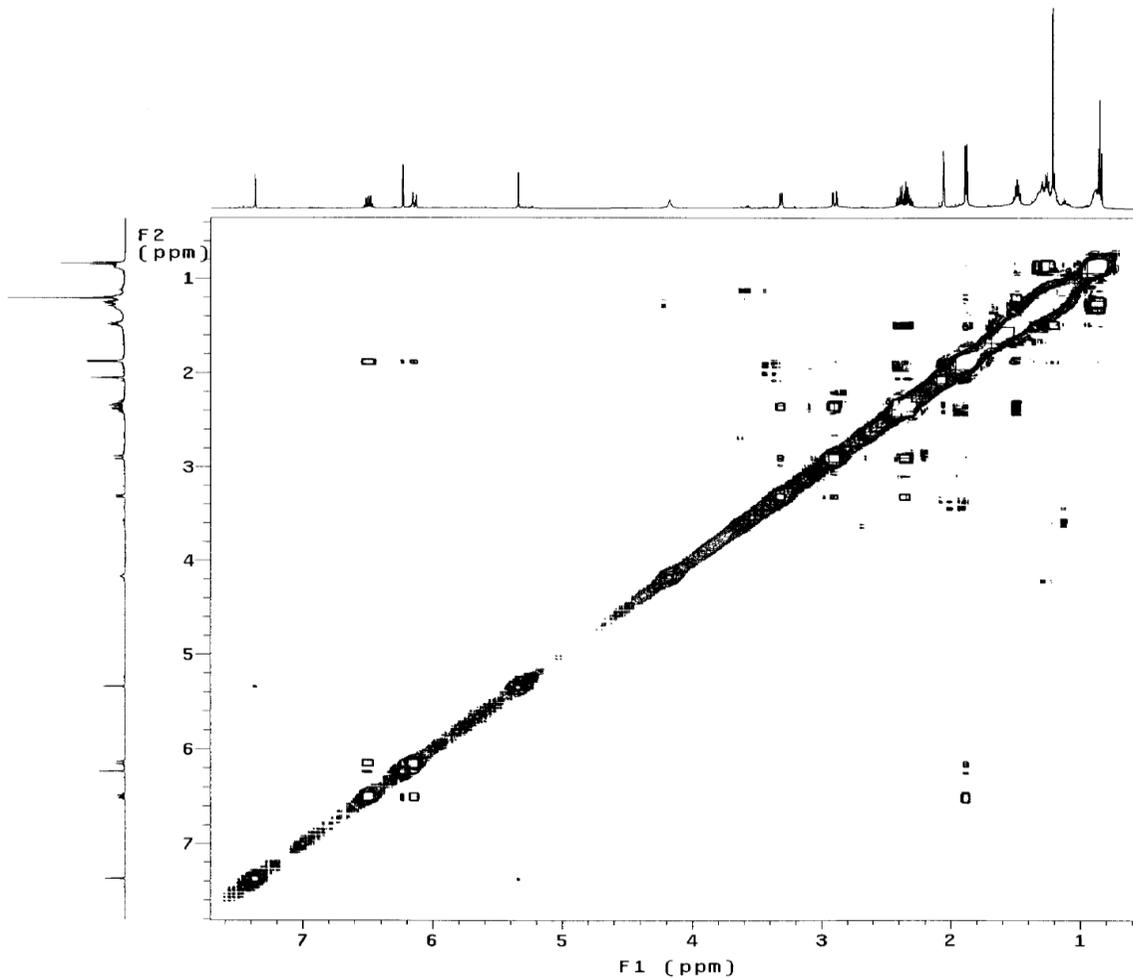


# Compound 1 gCOSY IN CD<sub>3</sub>COCD

VNS-600 gCOSY hq-16 IN CD<sub>3</sub>COCD<sub>3</sub> 08.12.24

Solvent: acetone  
Ambient temperature  
Operator: vnmr2  
VNMR-600 "wormhole"

Relax. delay 1.301 sec  
Acq. time 0.205 sec  
Width 10000.0 Hz  
2D Width 10000.0 Hz  
2 repetitions  
256 increments  
OBSERVE H1, 599.6981281 MHz  
DATA PROCESSING  
Sine bell 0.099 sec  
F1 DATA PROCESSING  
Sine bell 0.009 sec  
F1 size 4096 x 4096  
Total time 13 min, 28 sec

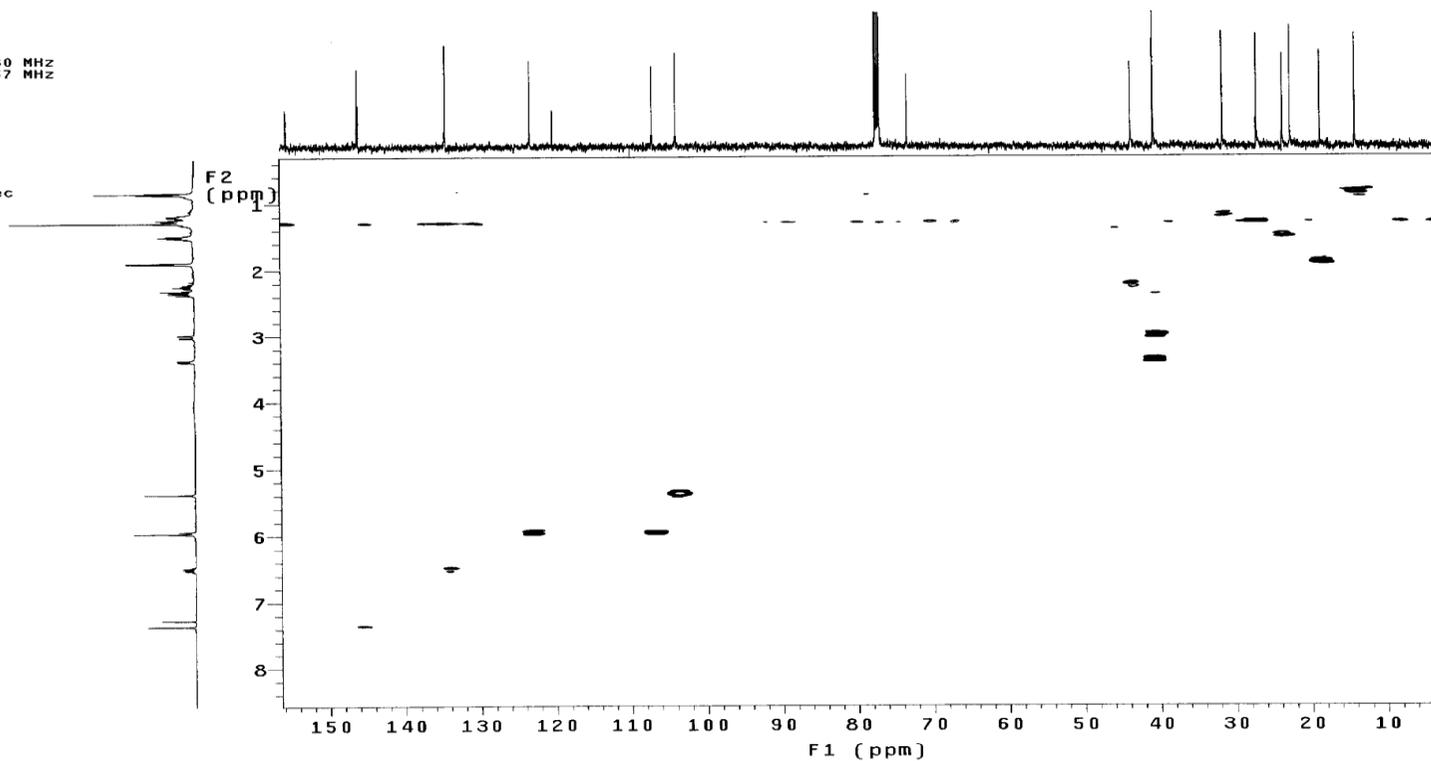


# Compound 1 gHMQC IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 1H-NMR HQ-16 IN CDCL3 07.05.21

Solvent: CDC13  
Temp. 25.0 C / 298.1 K  
User: 1-14-97  
INOVA-500 "IMM-501"

Relax. delay 1.000 sec  
Acq. time 0.213 sec  
Width 4797.6 Hz  
2D Width 21175.2 Hz  
16 repetitions  
160 increments  
OBSERVE H1, 499.7702080 MHz  
DECOUPLE C13, 125.6780857 MHz  
Power 48 dB  
on during acquisition  
off during delay  
GARP-1 modulated  
DATA PROCESSING  
Sine bell 0.042 sec  
F1 DATA PROCESSING  
Sine bell 0.004 sec  
FT size 2048 x 4096  
Total time 55 min, 32 sec

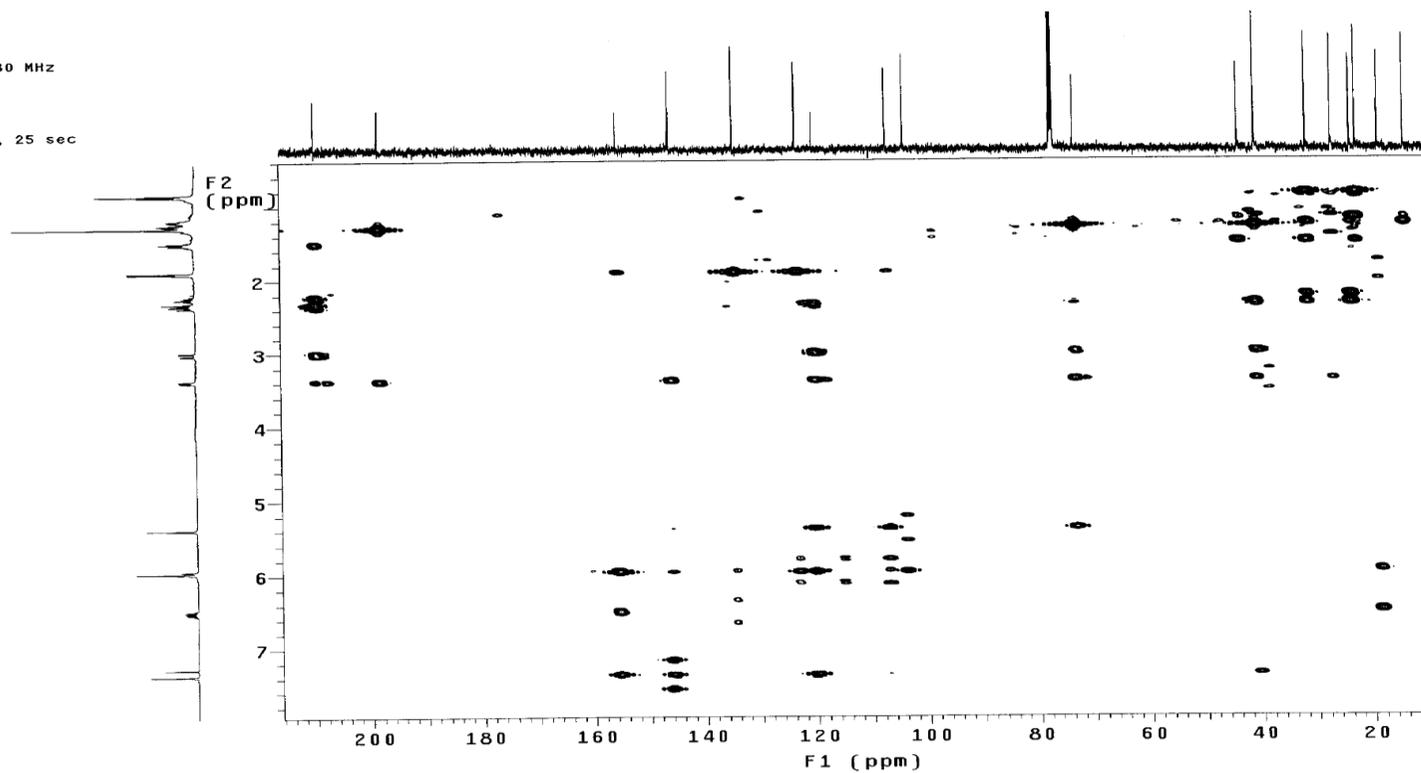


# Compound 1 gHMBC IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 gHMBC HQ-16 IN CDCL3 07.05.21

Solvent: CDCl<sub>3</sub>  
Temp. 25.0 C / 298.1 K  
User: 1-14-87  
INOVA-500 "IMM-501"

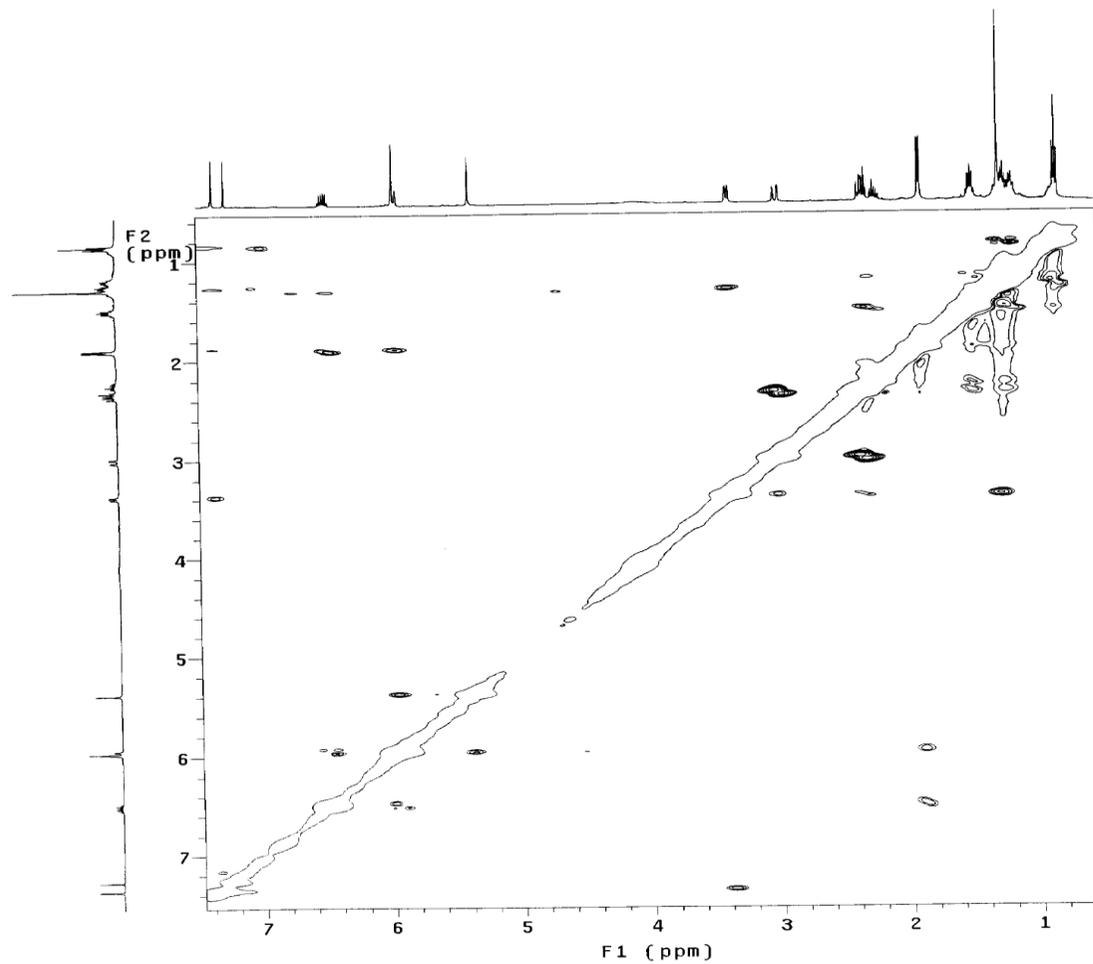
Relax. delay 1.000 sec  
Acq. time 0.219 sec  
Width 4668.8 Hz  
2D Width 26411.4 Hz  
24 repetitions  
256 increments  
OBSERVE H1, 499.7702080 MHz  
DATA PROCESSING  
Sine bell 0.049 sec  
F1 DATA PROCESSING  
Sine bell 0.004 sec  
FT size 2048 x 4096  
Total time 2 hr, 14 min, 25 sec



# Compound 1 NOESY IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 NOESY HQ-16 IN CDCL3 07.07.04

Solvent: CDC13  
Temp. 25.0 C / 298.1 K  
INOVA-500 "IMM-501"  
  
Relax. delay 1.600 sec  
Mixing 0.800 sec  
Acq. time 0.132 sec  
Width 3887.5 Hz  
2D Width 3887.5 Hz  
8 repetitions  
2 x 200 increments  
OBSERVE H1, 499.7702083 MHz  
DATA PROCESSING  
Gauss apodization 0.031 sec  
F1 DATA PROCESSING  
Gauss apodization 0.008 sec  
FT size 2048 x 2048  
Total time 2 hr, 18 min, 28 sec

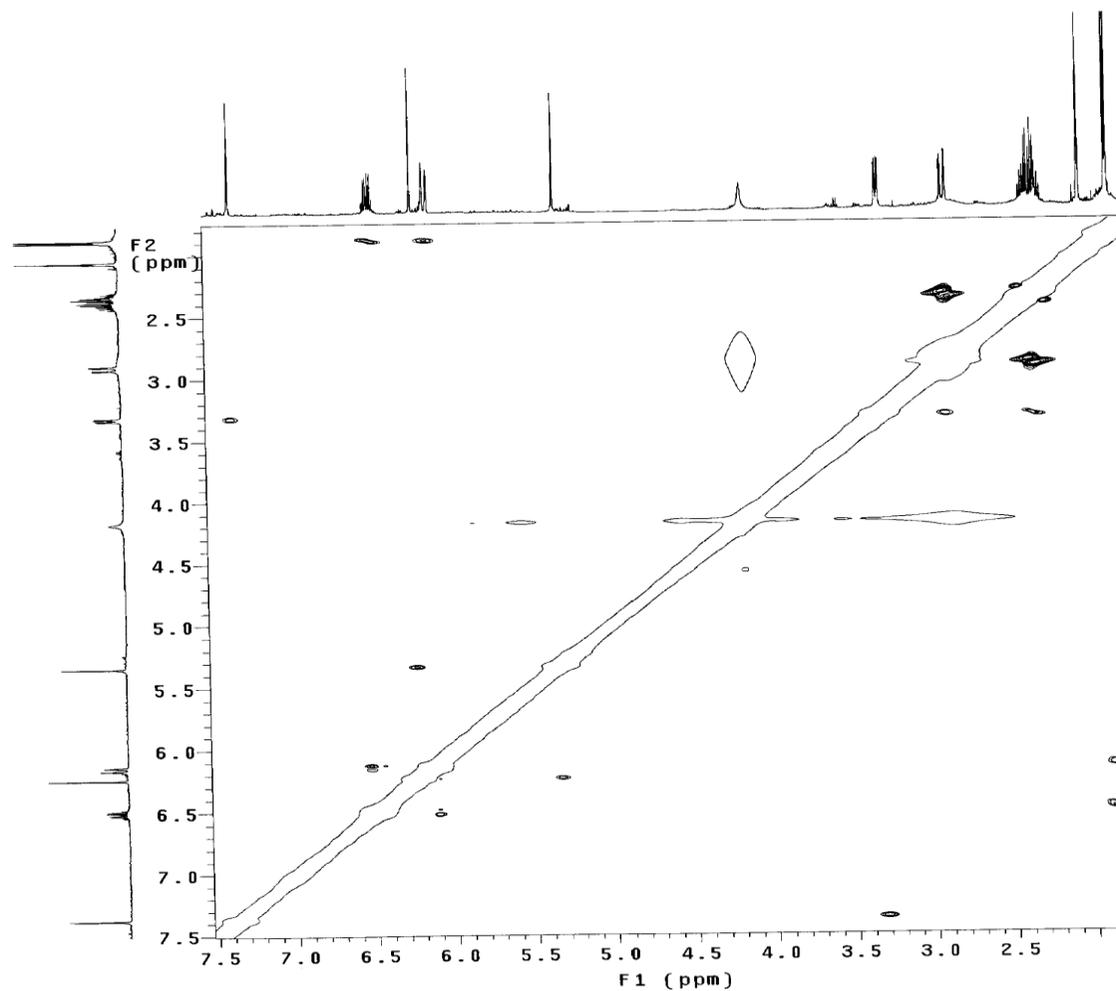


# Compound 1 NOESY IN CD<sub>3</sub>COCD<sub>3</sub>

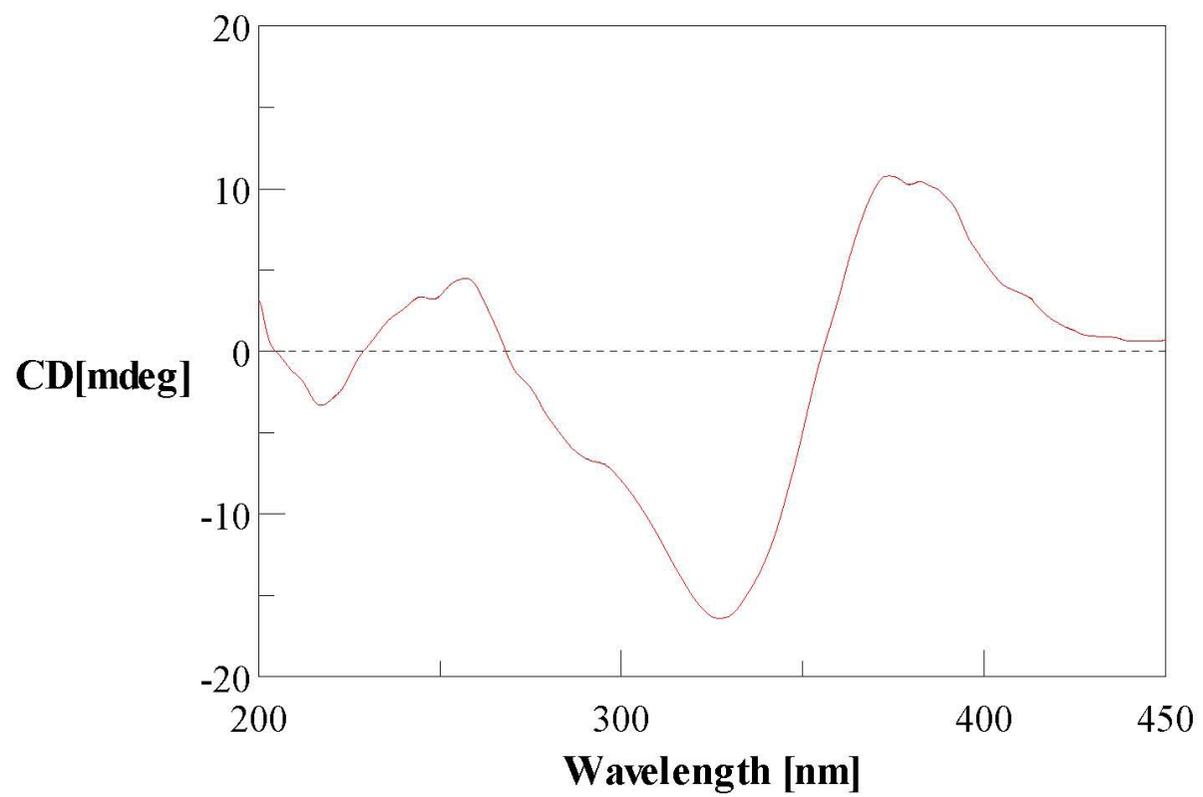
VNS-600 NOESY hq-16 IN CD<sub>3</sub>COCD<sub>3</sub> 08.12.24

Solvent: acetone  
Ambient temperature  
Operator: vnmr2  
VNMR-600 "wormhole"

Relax. delay 1.200 sec  
Mixing 0.600 sec  
Acq. time 0.197 sec  
Width 5186.7 Hz  
2D Width 5186.7 Hz  
16 repetitions  
2 x 200 increments  
OBSERVE H1, 599.6981281 MHz  
DATA PROCESSING  
Gauss apodization 0.034 sec  
F1 DATA PROCESSING  
Gauss apodization 0.010 sec  
FT size 4096 x 4096  
Total time 3 hr, 38 min, 3 sec

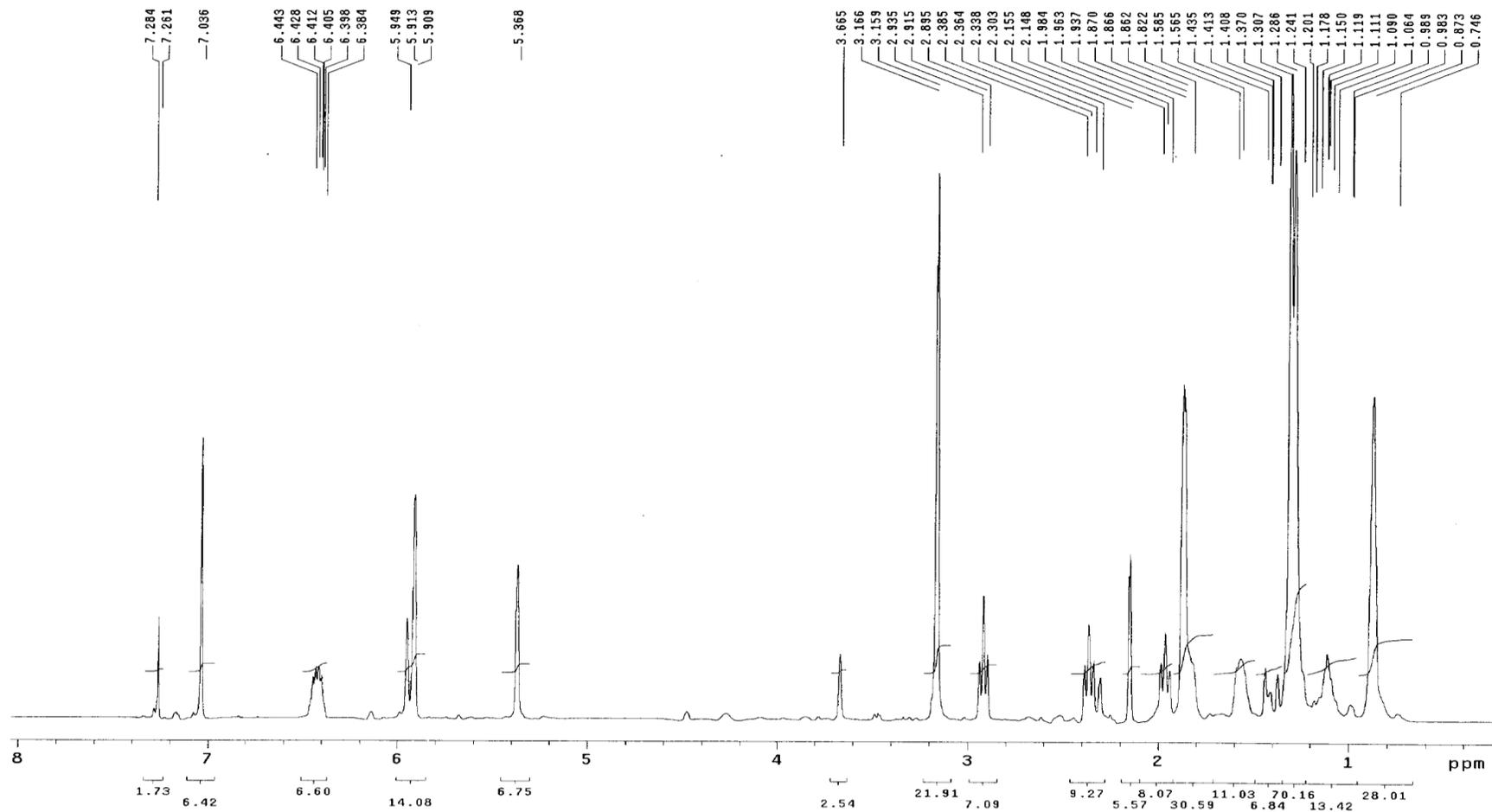


**Compound 1 CD**



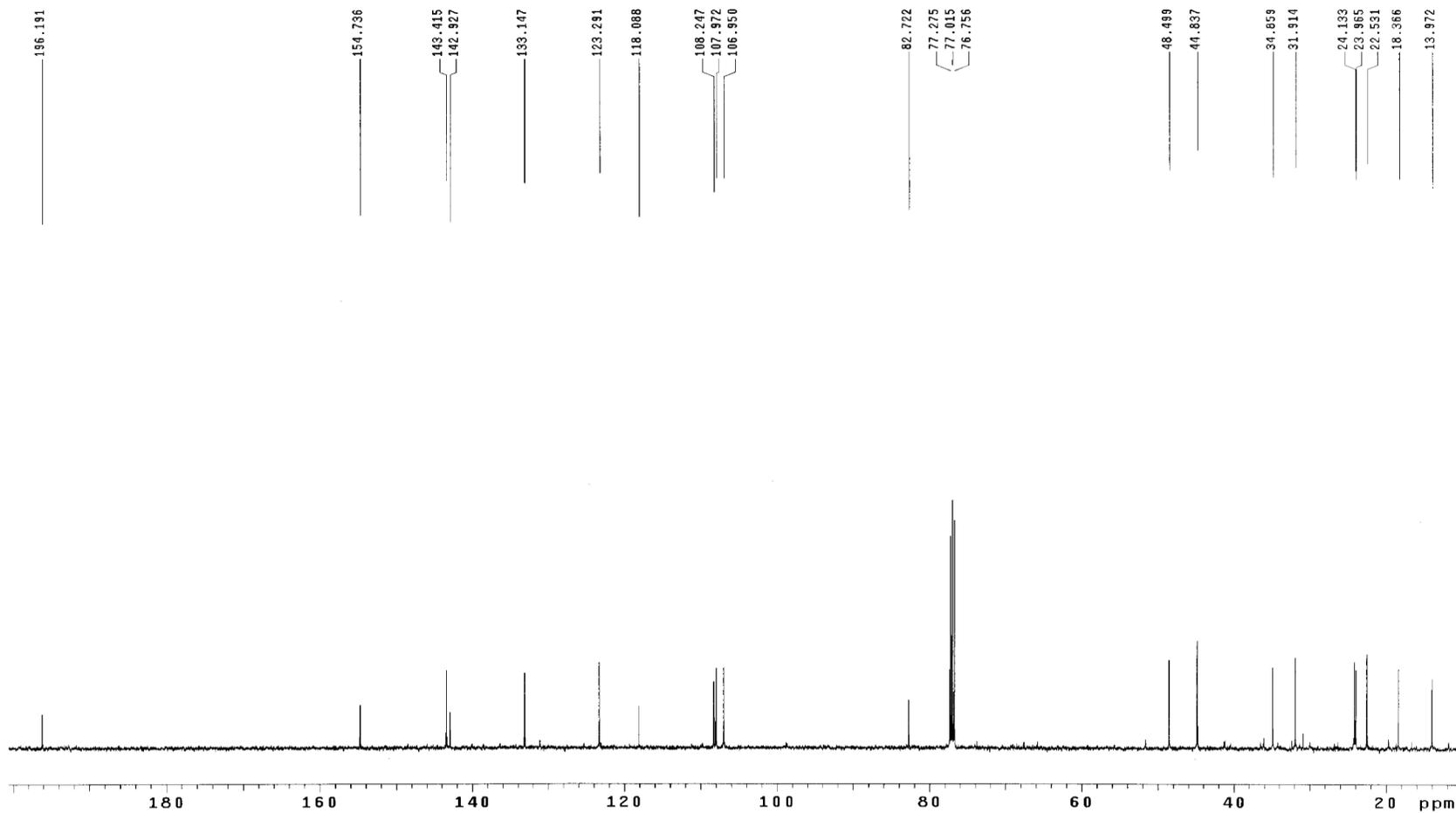
# Compound 2 H-NMR IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 1H-NMR hq-13 IN CDCL3 07.04.24



# Compound 2 C-NMR IN CD<sub>3</sub>Cl<sub>3</sub>

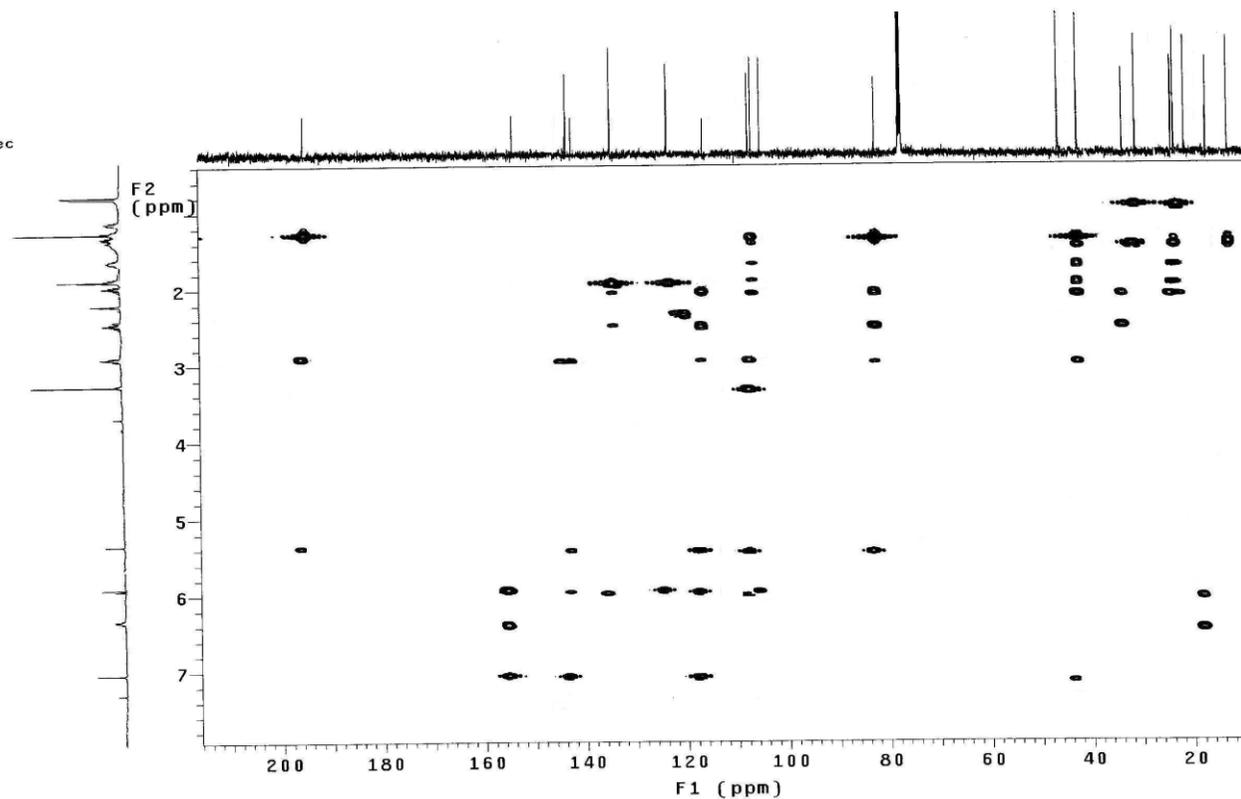
INOVA-500 13C-NMR HQ-13 IN CDCL3 2007.04.26



# Compound 2 <sup>g</sup>HMBC IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 <sup>g</sup>HMBC HQ-13 IN CDCL3 07.05.21

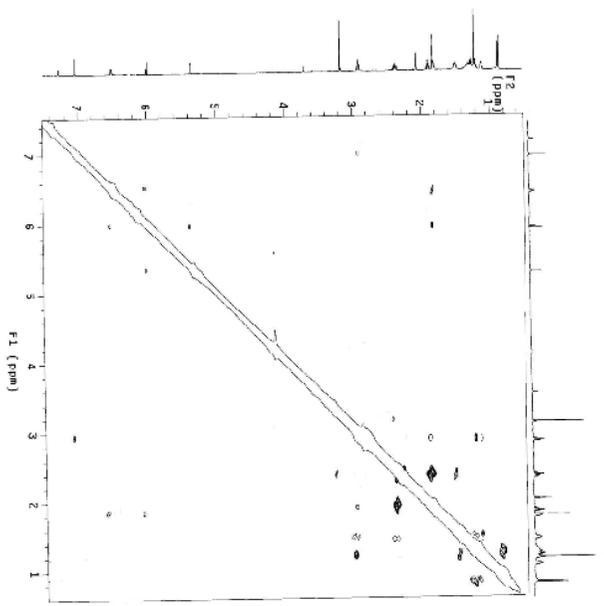
Solvent: CDCl<sub>3</sub>  
Temp. 25.0 C / 298.1 K  
User: 1-14-87  
INOVA-500 "IMM-501"  
Relax. delay 1.000 sec  
Acq. time 0.219 sec  
Width 4668.8 Hz  
2D Width 26411.4 Hz  
24 repetitions  
256 increments  
OBSERVE H1, 499.7702080 MHz  
DATA PROCESSING  
Sine bell 0.049 sec  
F1 DATA PROCESSING  
Sine bell 0.004 sec  
FT size 2048 x 4096  
Total time 2 hr, 14 min, 25 sec



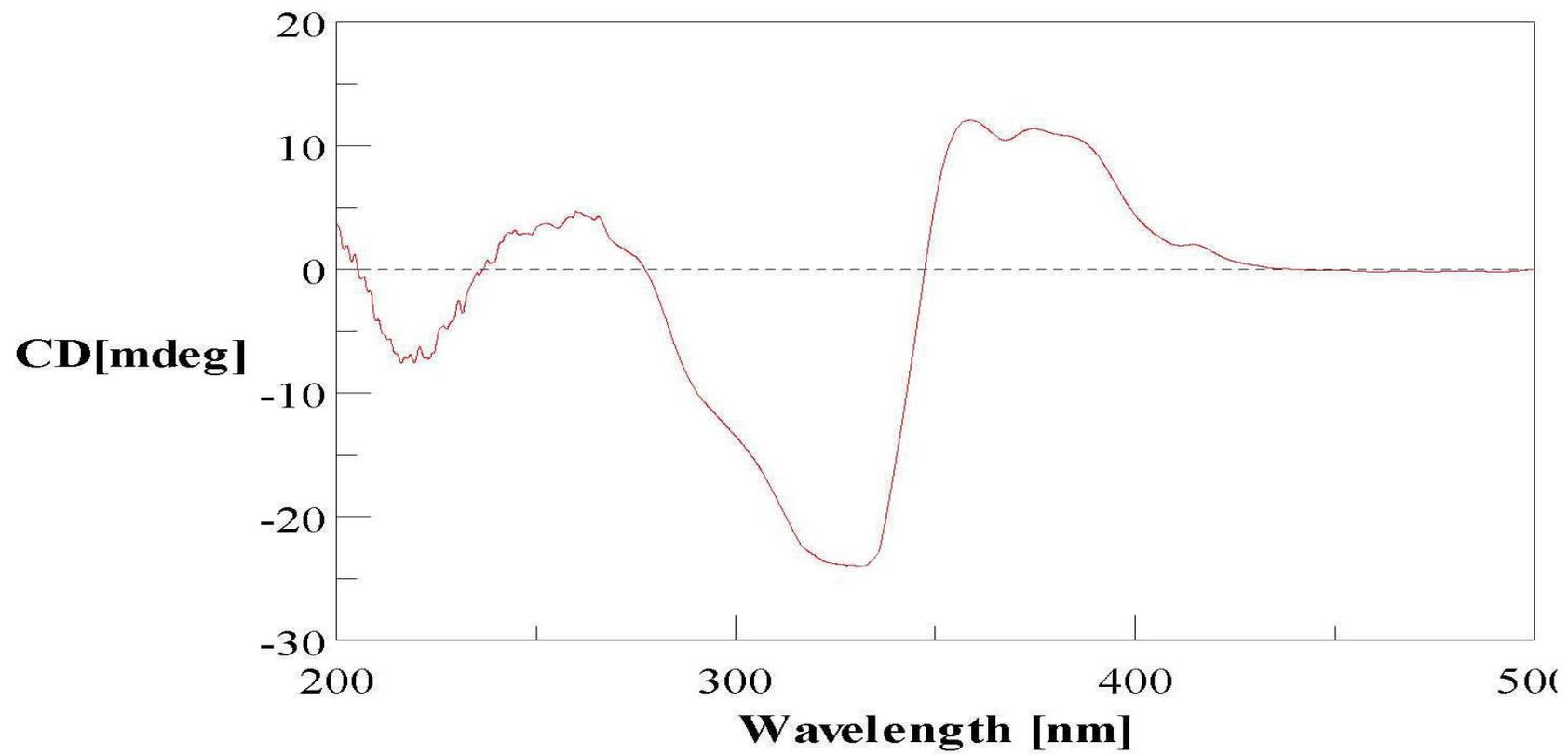
# Compound 2 NOESY IN CD<sub>3</sub>Cl<sub>3</sub>

Amplitude Temperature  
ZMASOFT: vsmrsm01r  
NAME: 2  
PULPROG: zgpg30  
RG: 320  
SF: 500.136000 MHz  
AQ: 0.10000000 sec  
RG: 320  
SI: 32768  
WDW: EM  
SSB: 0  
LB: 3.00 Hz  
GB: 0  
PC: 1.00  
DATA ACQUISITION 0.134 sec  
F1: 100.6261300 MHz  
F2: 500.1360000 MHz  
F2 - F1: 400.0098700 MHz  
TD: 65536  
SFO: 500.1360000 MHz  
AQ: 0.10000000 sec  
RG: 320  
SI: 32768  
WDW: EM  
SSB: 0  
LB: 3.00 Hz  
GB: 0  
PC: 1.00

NAME: 2 NOESY IN-13

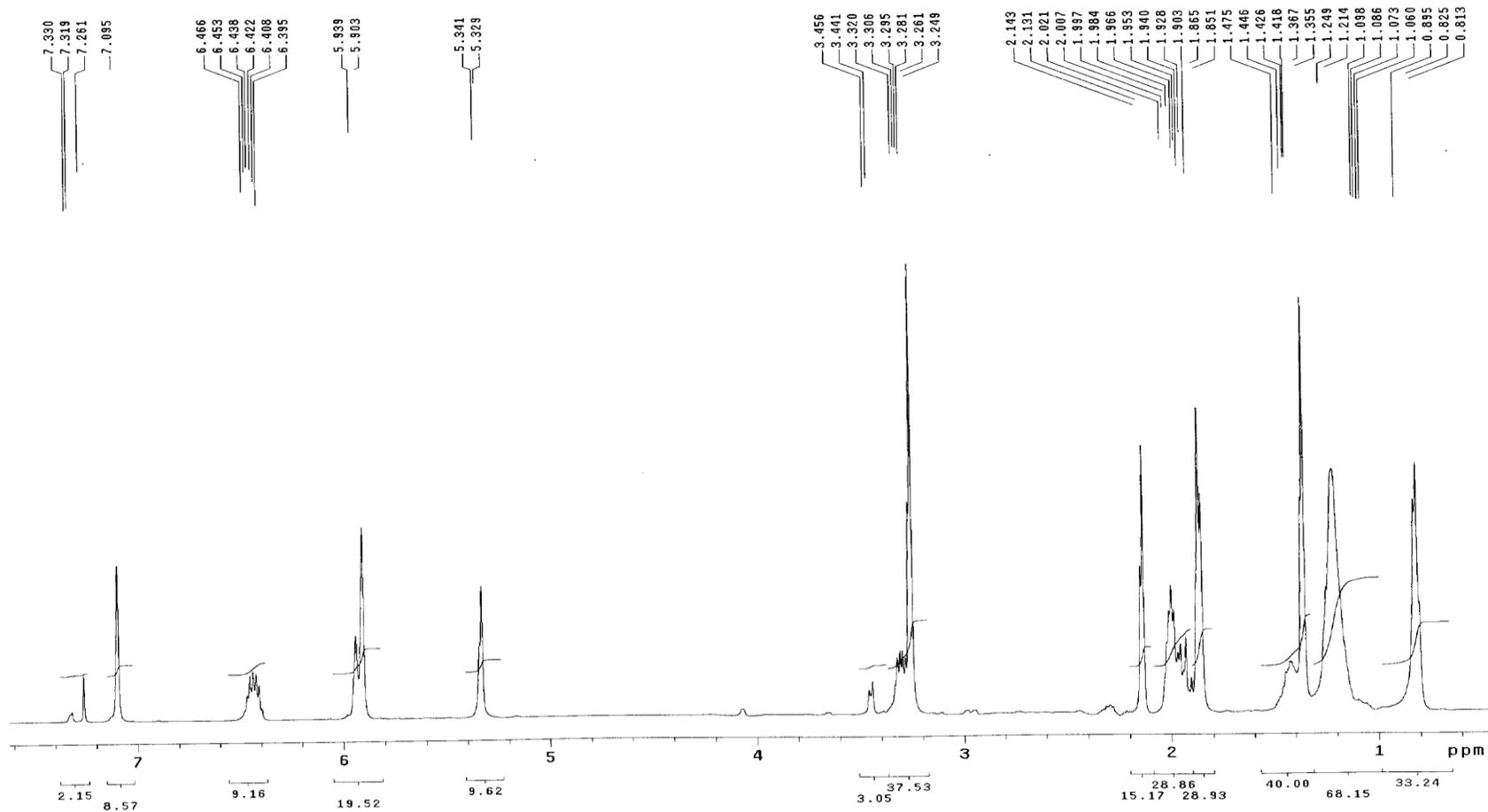


Compound 2 CD



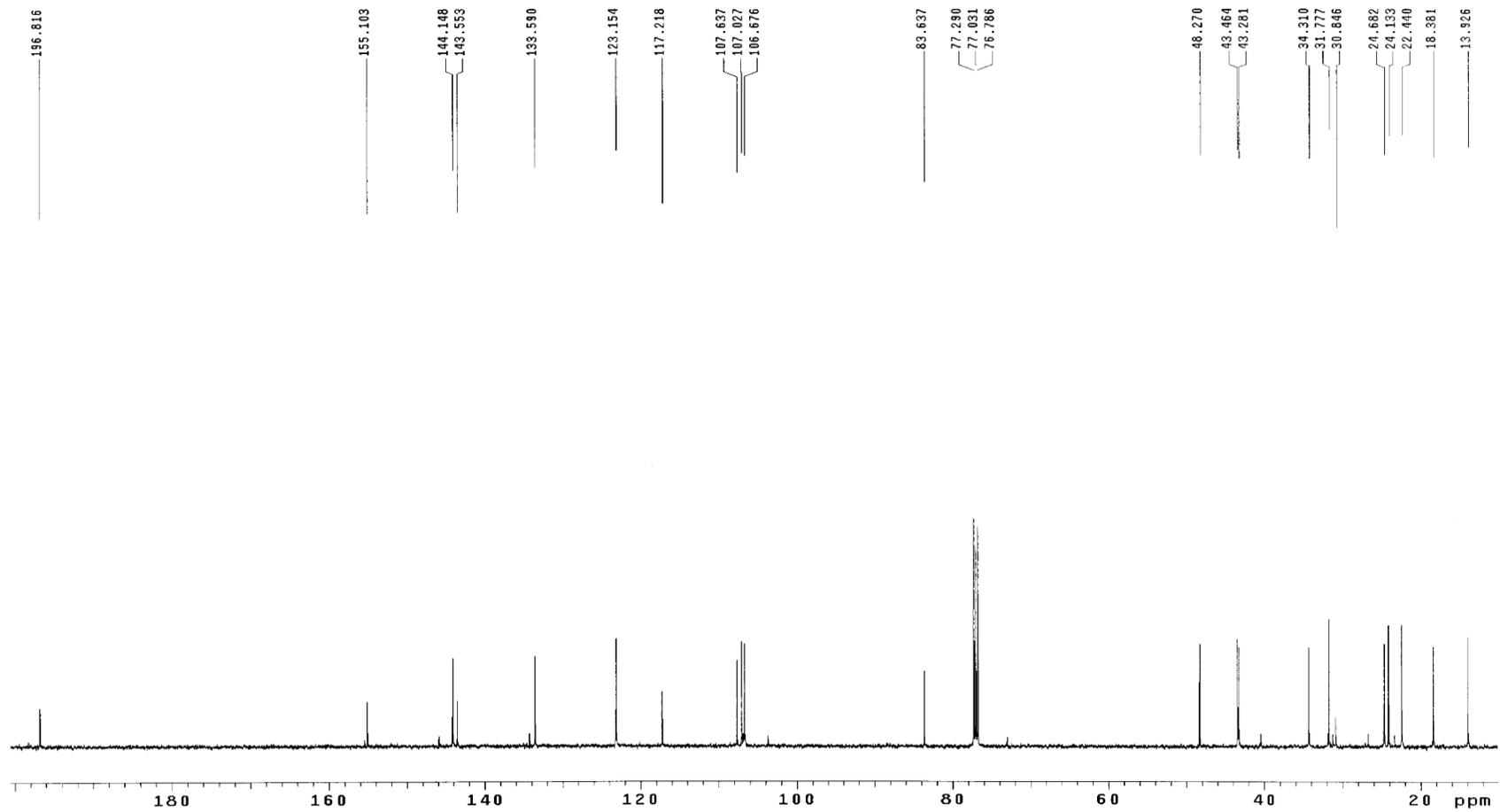
# Compound 3 H-NMR IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 1H-NMR hq-1H IN CDCL3 07.04.24



# Compound 3 C-NMR IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-500 13C-NMR HQ-14 IN CDCL3 2007.04.26

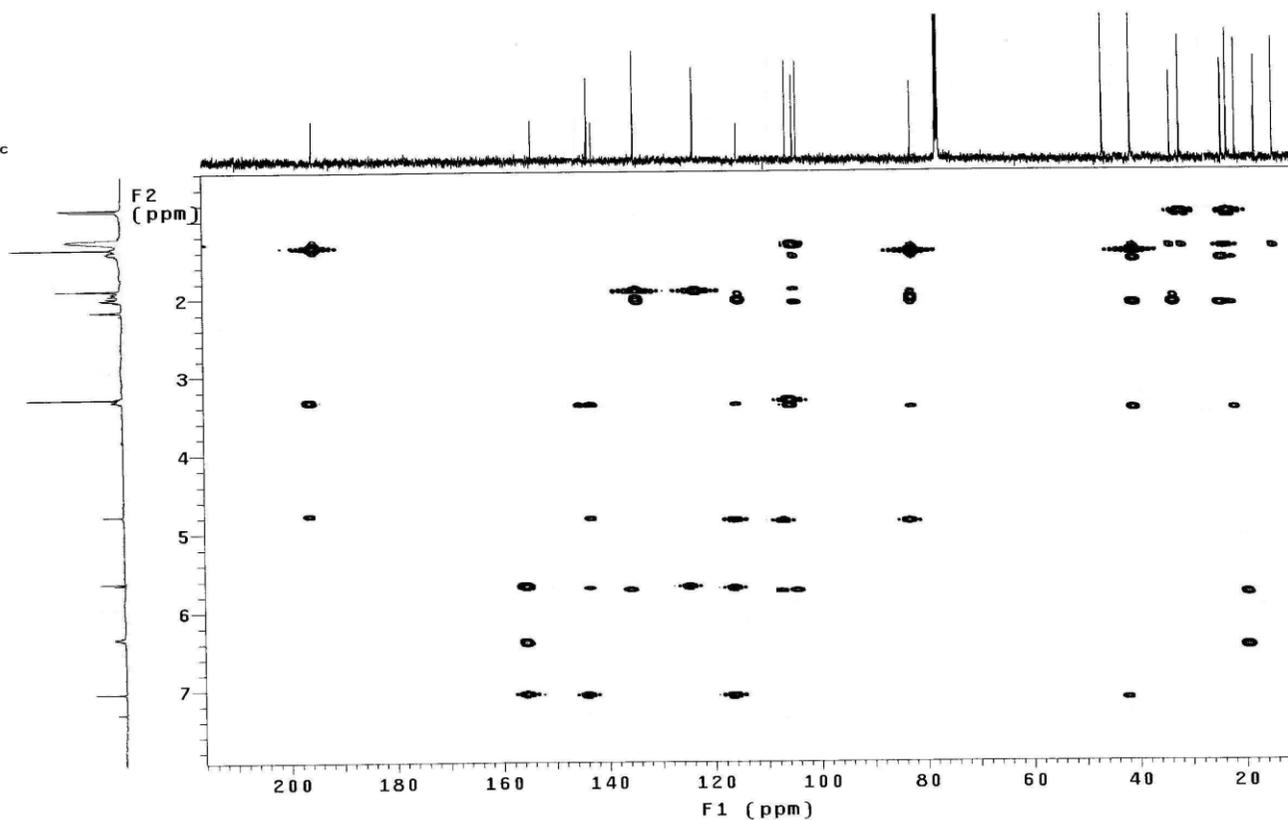


# Compound 3 gHMBC IN CD<sub>3</sub>Cl<sub>3</sub>

INOVA-501 gHMBC HQ-14 IN CDCL3 07.05.21

Solvent: CDC13  
Temp. 25.0 C / 298.1 K  
User: 1-14-87  
INOVA-500 "IMM-501"

Relax. delay 1.000 sec  
Acq. time 0.219 sec  
Width 4668.8 Hz  
2D Width 26411.4 Hz  
24 repetitions  
256 increments  
OBSERVE H1, 499.7702080 MHz  
DATA PROCESSING  
Sine bell 0.049 sec  
F1 DATA PROCESSING  
Sine bell 0.004 sec  
FT size 2048 X 4096  
Total time 2 hr, 14 min, 25 sec

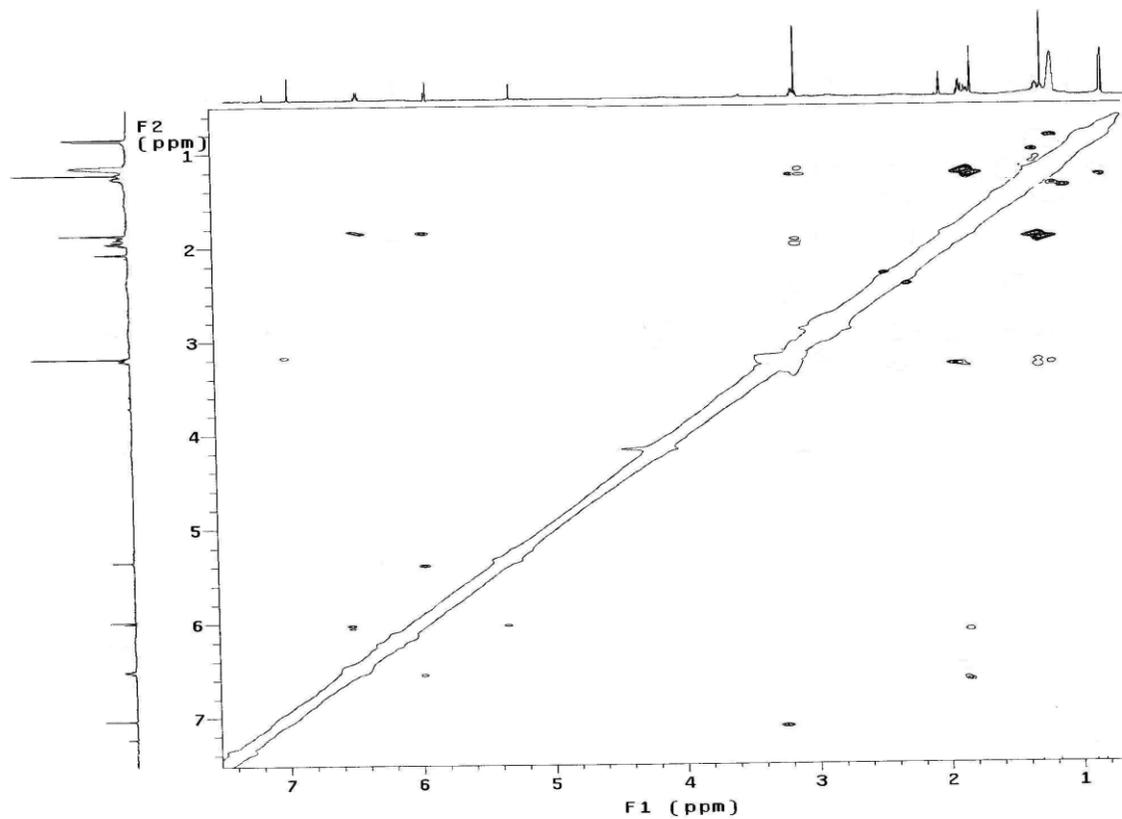


# Compound 3 NOESY IN CD<sub>3</sub>Cl<sub>3</sub>

VNS-600 NOESY hq-14

Ambient temperature  
Operator: vnmr2  
VNMR-600 "wormhole"

Relax. delay 1.200 sec  
Mixing 0.600 sec  
Acq. time 0.197 sec  
Width 5186.7 Hz  
2D Width 5186.7 Hz  
16 repetitions  
2 x 200 increments  
OBSERVE H1, 599.6981281 MHz  
DATA PROCESSING  
Gauss apodization 0.034 sec  
F1 DATA PROCESSING  
Gauss apodization 0.010 sec  
F1 size 4096 x 4096  
Total time 3 hr, 38 min, 3 sec



Compound 3 CD IN CD<sub>3</sub>Cl<sub>3</sub>

