

**Ring contraction of 1,3-diphenylbenzo[1,2,4]triazinyl radicals to  
1,2-diphenylbenzimidazoles**

**Supporting Information**

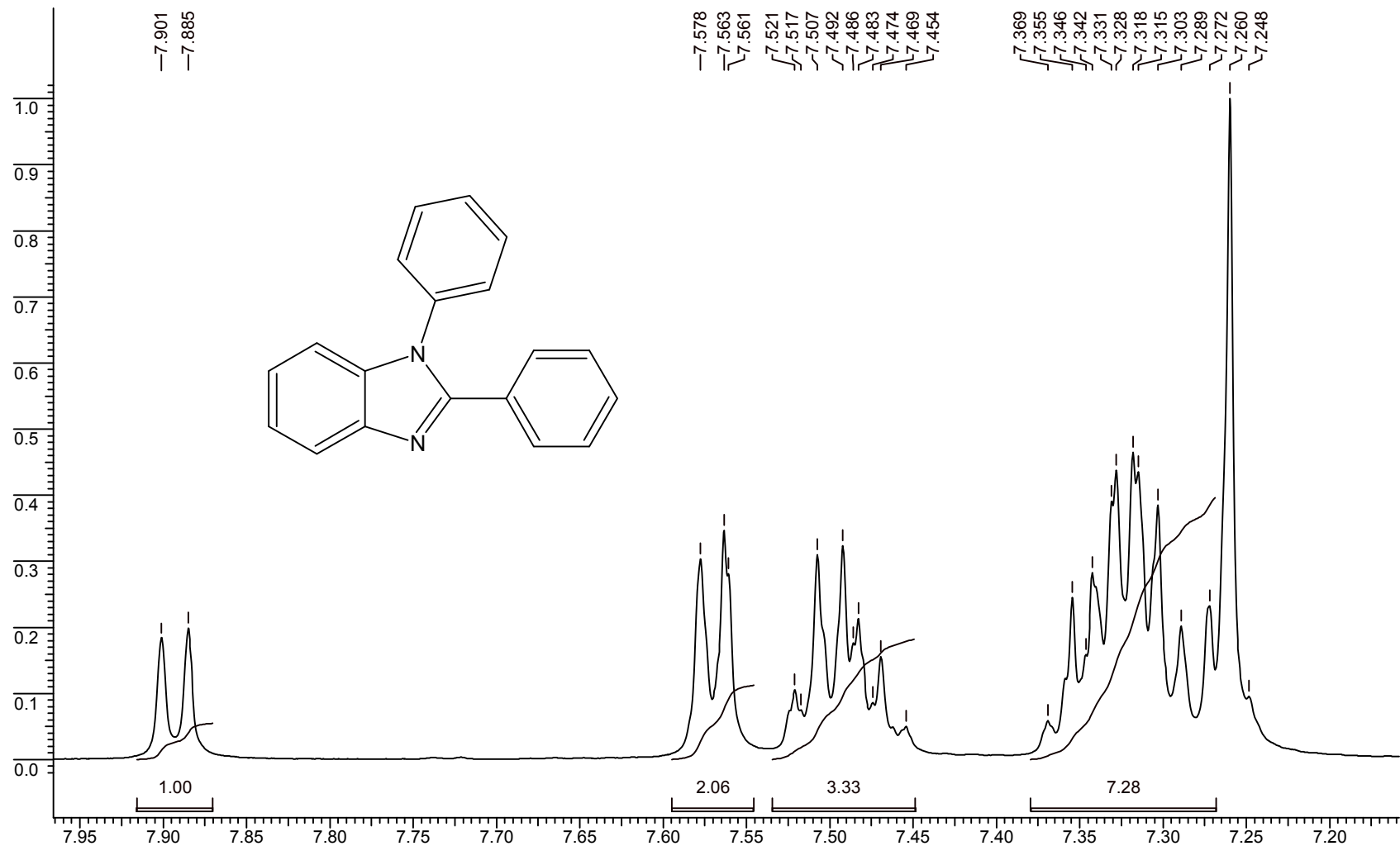
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## **$^1\text{H}$ and $^{13}\text{C}$ NMR Spectra**

**1,2-Diphenylbenzimidazole (9a)**



Current Data Parameters

NAME Andrey  
EXPNO 33  
PROCNO 1

F2 - Acquisition Parameters

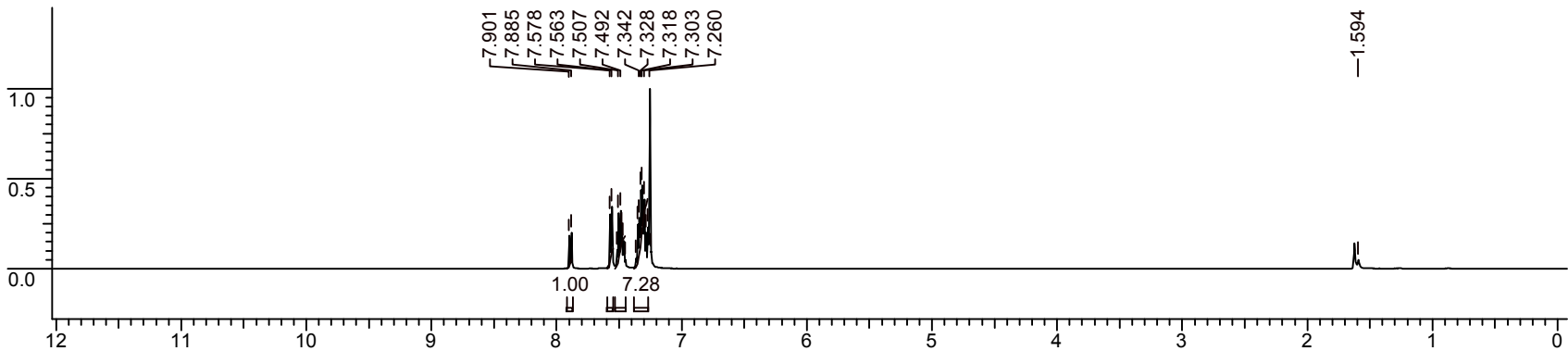
Date\_ 20111018  
Time 20.10  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 10330.578 Hz  
FIDRES 0.157632 Hz  
AQ 3.1719923 sec  
RG 161  
DW 48.400 usec  
DE 6.50 usec  
TE 296.8 K  
D1 1.00000000 sec

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

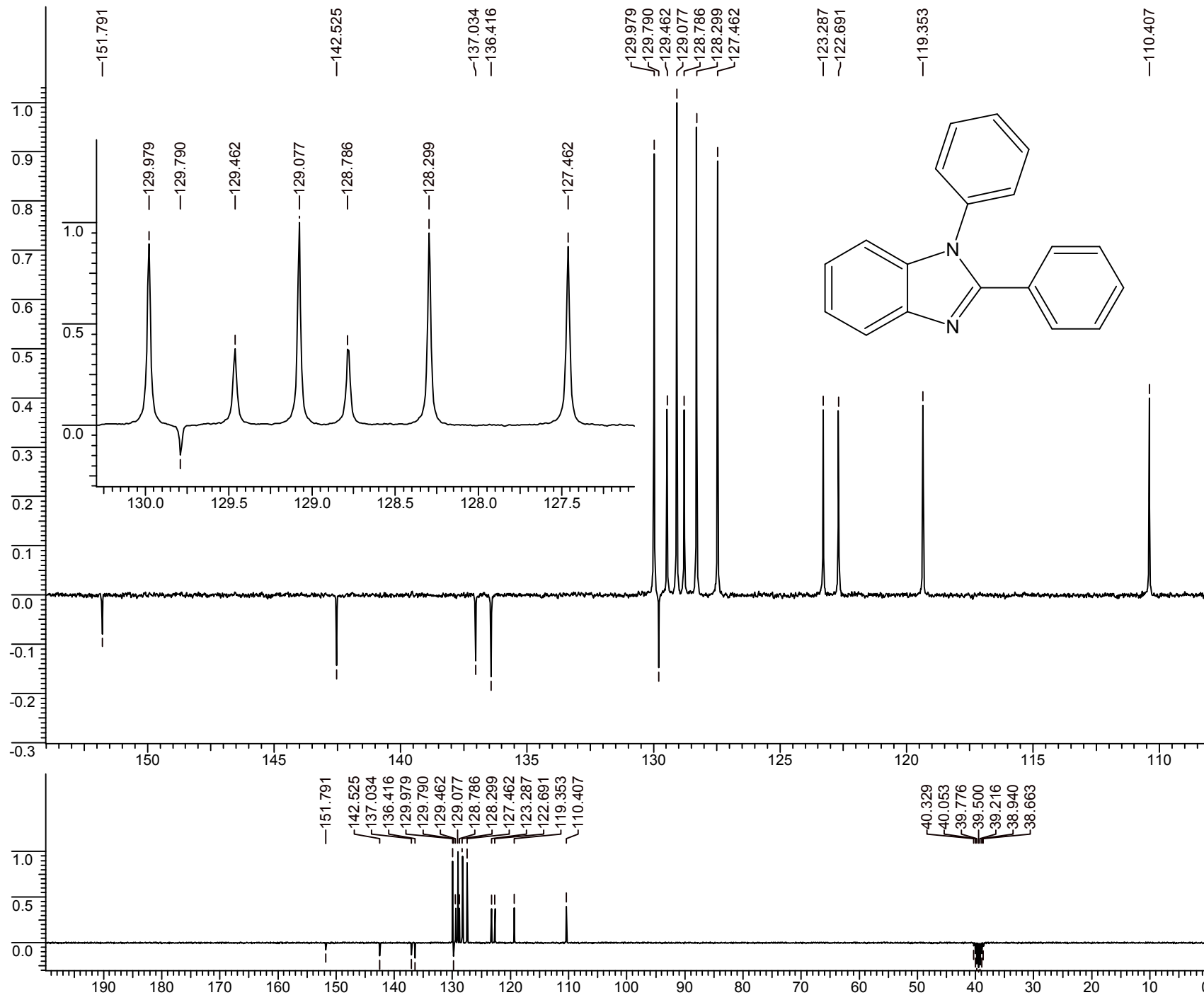
NUC1 1H  
P1 11.00 usec  
PLW1 15.41699982 W  
SFO1 500.0361158 MHz

F2 - Processing parameters

SI 65536  
SF 500.0330407 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00



**1,2-Diphenylbenzimidazole (9a)**



Current Data Parameters

NAME Andrey  
EXPNO 502  
PROCNO 502

F2 - Acquisition Parameters

Date\_ 20120313  
Time 17.14  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT DMSO  
NS 385  
DS 4  
SWH 17985.611 Hz  
FIDRES 0.274439 Hz  
AQ 1.8219508 sec  
RG 16384  
DW 27.800 usec  
DE 6.00 usec  
TE 298.2 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.00000000 sec  
d20 0.00689655 sec  
DELTA 0.00000908 sec  
TD0 1

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

NUC1 13C  
P1 7.13 usec  
p2 14.26 usec  
PL1 -2.00 dB  
SFO1 75.4752953 MHz

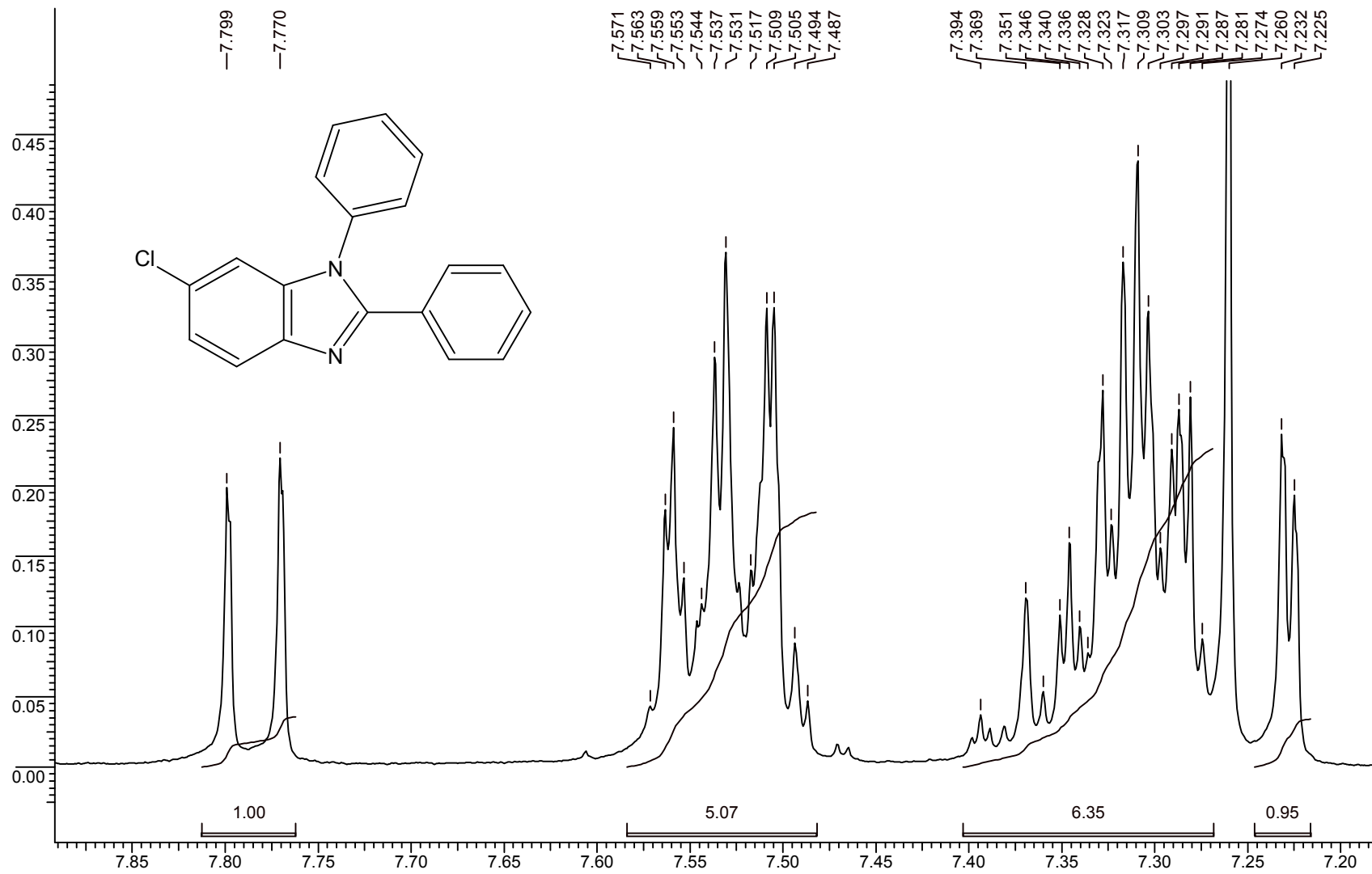
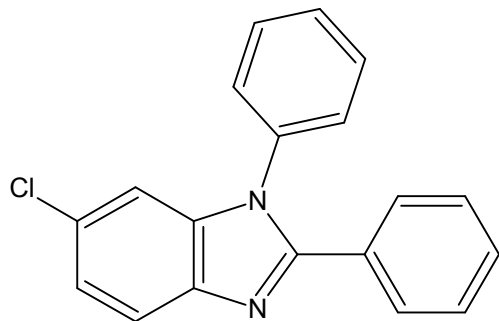
===== CHANNEL f2 =====

CPDPRG2 waltz16  
NUC2 1H  
PCPD2 110.00 usec  
PL2 0.00 dB  
PL12 22.00 dB  
SFO2 300.1312005 MHz

F2 - Processing parameters

SI 32768  
SF 75.4677919 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

**6-Chloro-1,2-diphenylbenzimidazole (9b)**



Current Data Parameters  
 NAME Andrey  
 EXPNO 461  
 PROCNO 461

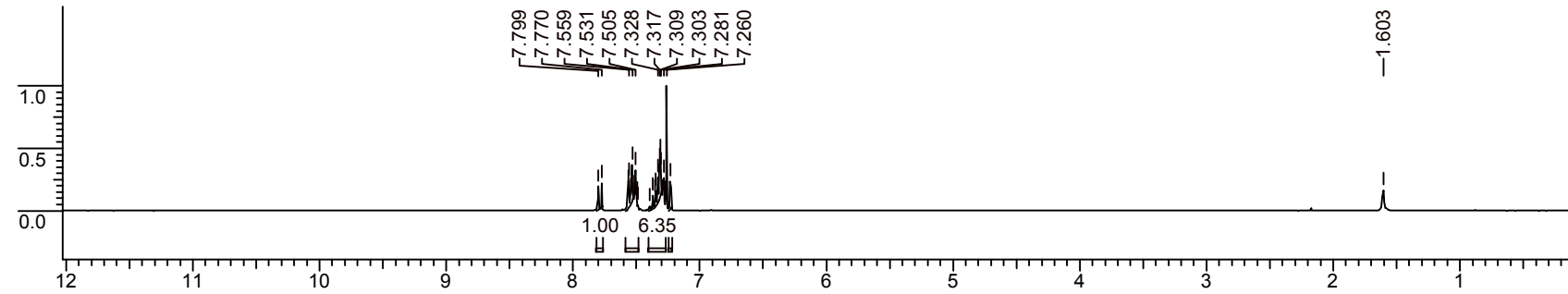
F2 - Acquisition Parameters  
 Date\_ 20120119  
 Time 19.14  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094190 Hz  
 AQ 5.3084660 sec  
 RG 456.1  
 DW 81.000 usec  
 DE 9.00 usec  
 TE 293.2 K  
 D1 1.0000000 sec  
 TD0 1

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 9.00 usec  
 PL1 0.00 dB  
 SFO1 300.1318534 MHz

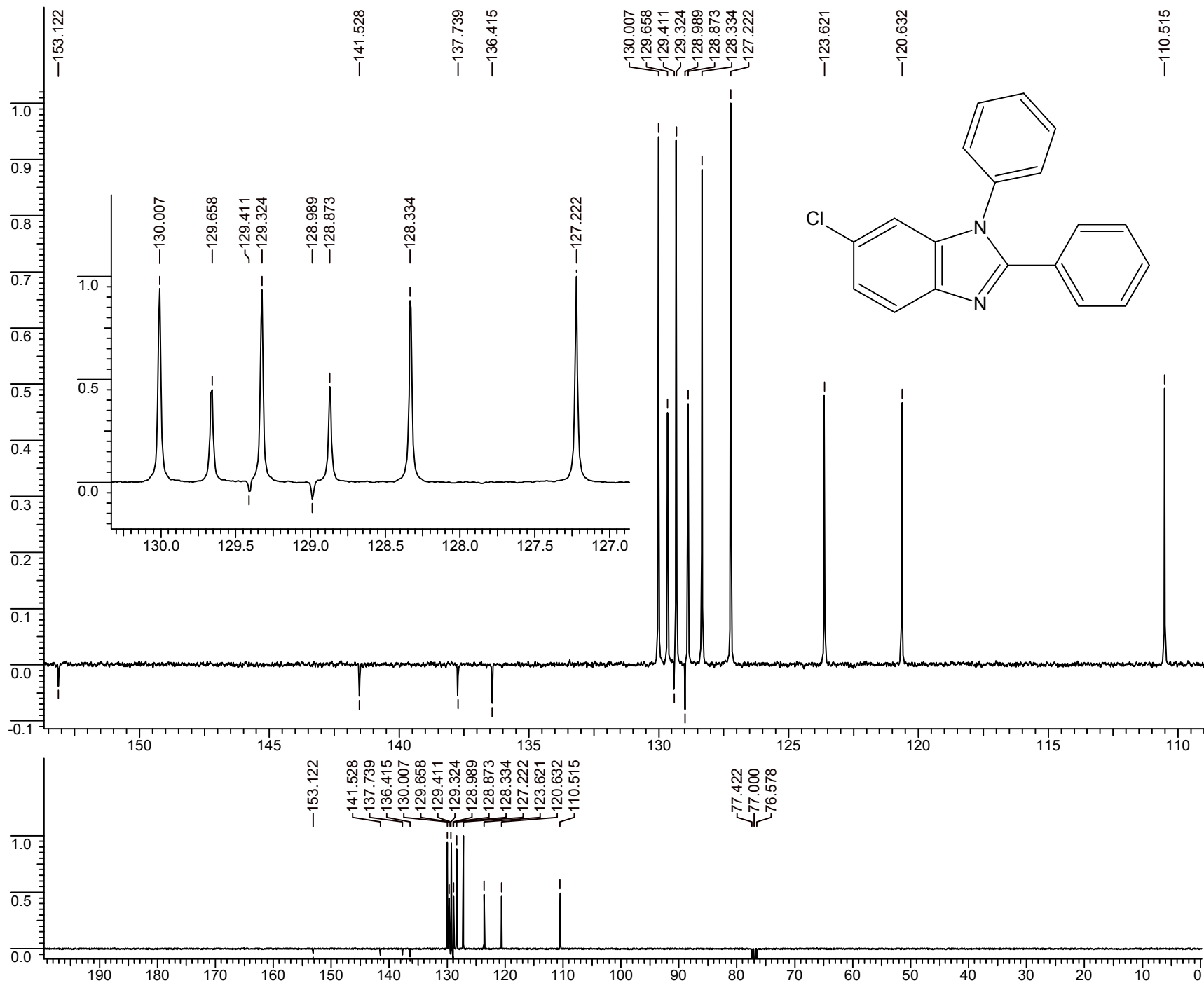
F1 - Acquisition parameters  
 ND0 2  
 TD 256  
 SFO1 300.1314 MHz  
 FIDRES 12.056327 Hz  
 SW 10.284 ppm  
 FnMODE undefined

F2 - Processing parameters  
 SI 32768  
 SF 300.1300061 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 QF  
 SF 300.1300000 MHz  
 WDW SINE  
 SSB 0  
 LB 0.30 Hz  
 GB 0.1



**6-Chloro-1,2-diphenylbenzimidazole (9b)**



Current Data Parameters

NAME Andrey  
 EXPNO 466  
 PROCNO 466

F2 - Acquisition Parameters

Date\_ 20120119  
 Time 22.19  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG jmod  
 TD 65536  
 SOLVENT CDCl<sub>3</sub>  
 NS 1200  
 DS 4  
 SWH 17985.611 Hz  
 FIDRES 0.274439 Hz  
 AQ 1.8219508 sec  
 RG 2896.3  
 DW 27.800 usec  
 DE 6.00 usec  
 TE 291.2 K  
 CNST2 145.000000  
 CNST11 1.000000  
 D1 2.00000000 sec  
 d20 0.00689655 sec  
 DELTA 0.00000908 sec  
 TD0 1

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

NUC1 13C  
 P1 7.13 usec  
 p2 14.26 usec  
 PL1 -2.00 dB  
 SFO1 75.4752953 MHz

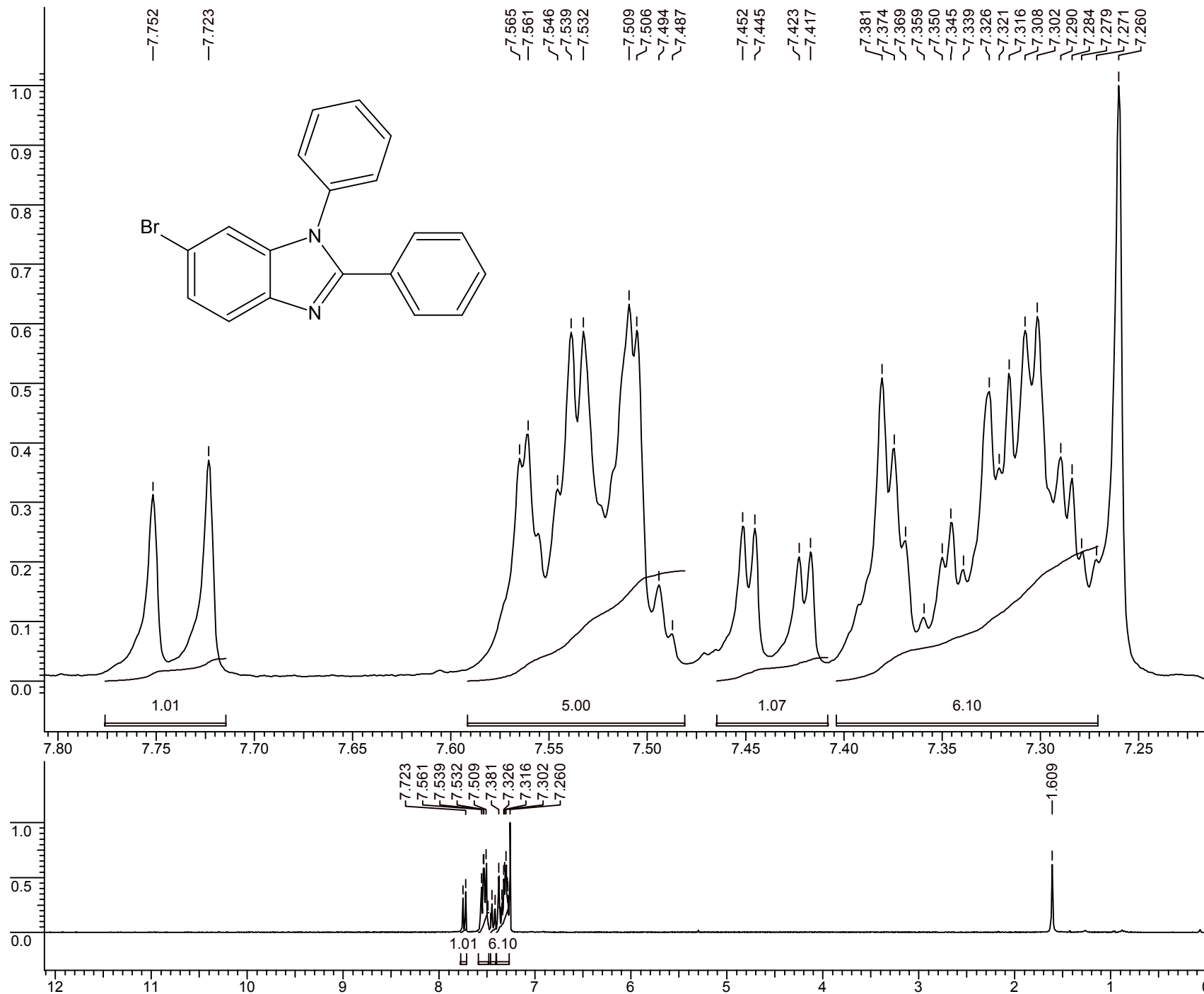
===== CHANNEL f2 =====

CPDPRG2 waltz16  
 NUC2 1H  
 PCPD2 110.00 usec  
 PL2 0.00 dB  
 PL12 22.00 dB  
 SFO2 300.1312005 MHz

F2 - Processing parameters

SI 32768  
 SF 75.4677532 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

**6-Bromo-1,2-diphenylbenzimidazole (9c)**



Current Data Parameters

NAME Andrey  
 EXPNO 453  
 PROCNO 453

F2 - Acquisition Parameters  
 Date\_ 20111215  
 Time 19.43  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094190 Hz  
 AQ 5.3084660 sec  
 RG 574.7  
 DW 81.000 usec  
 DE 9.00 usec  
 TE 297.2 K  
 D1 1.00000000 sec  
 TD0 1

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

NUC1 1H  
 P1 9.00 usec  
 PL1 0.00 dB  
 SFO1 300.1318534 MHz

F1 - Acquisition parameters

ND0 2  
 TD 256  
 SFO1 300.1314 MHz  
 FIDRES 12.056327 Hz  
 SW 10.284 ppm  
 FnMODE undefined

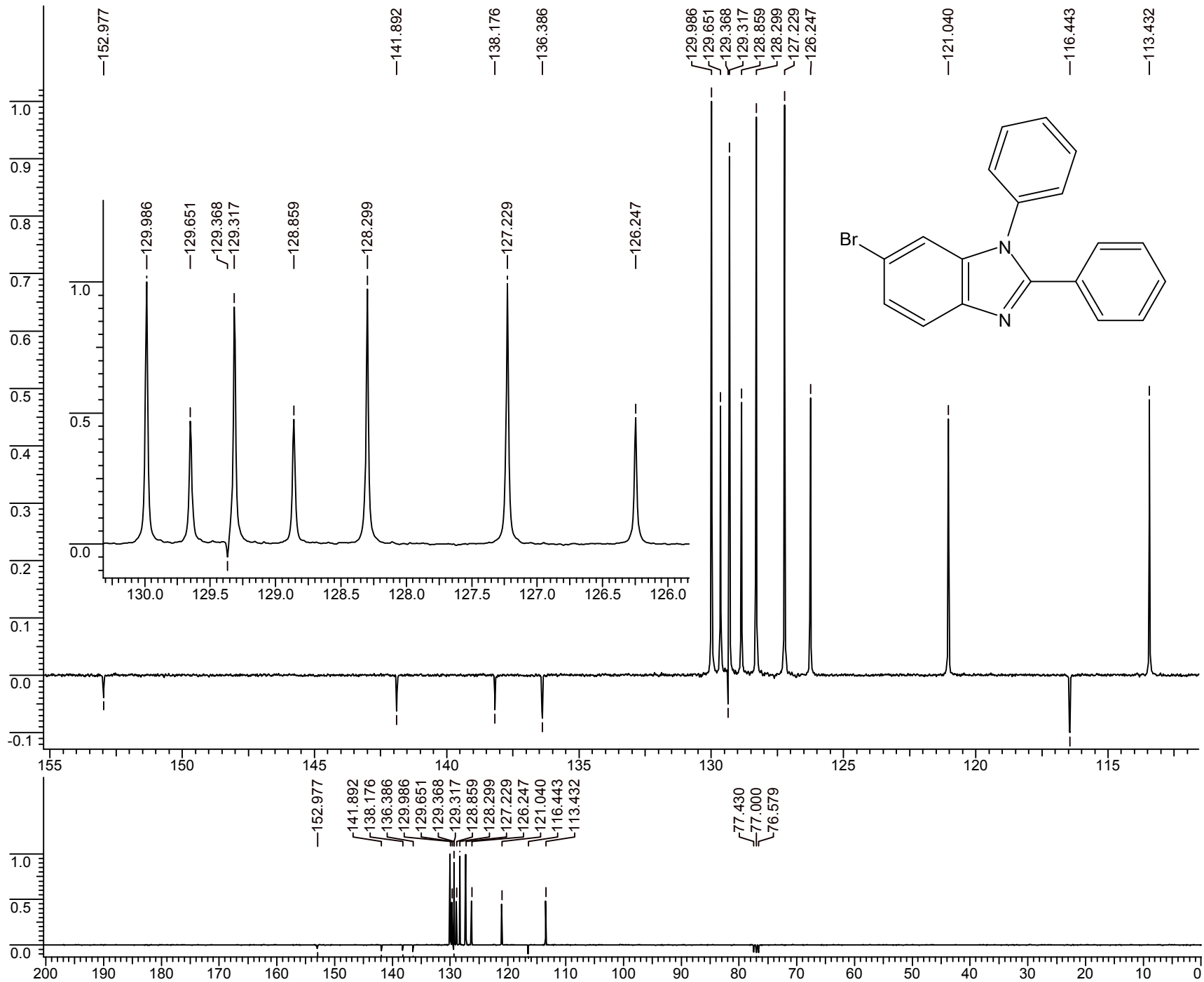
F2 - Processing parameters

SI 32768  
 SF 300.1300059 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters

SI 1024  
 MC2 QF  
 SF 300.1300000 MHz  
 WDW SINE  
 SSB 0  
 LB 0.30 Hz  
 GB 0.1

**6-Bromo-1,2-diphenylbenzimidazole (9c)**



Current Data Parameters  
NAME Andrey  
EXPNO 454  
PROCNO 454

F2 - Acquisition Parameters  
Date\_ 20111215  
Time 20.06  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT CDCl3  
NS 1200  
DS 4  
SWH 17985.611 Hz  
FIDRES 0.274439 Hz  
AQ 1.8219508 sec  
RG 16384  
DW 27.800 usec  
DE 6.00 usec  
TE 297.2 K  
CNST2 145.000000  
CNST11 1.000000  
D1 2.00000000 sec  
d20 0.00689655 sec  
DELTA 0.00000908 sec  
TD0 1

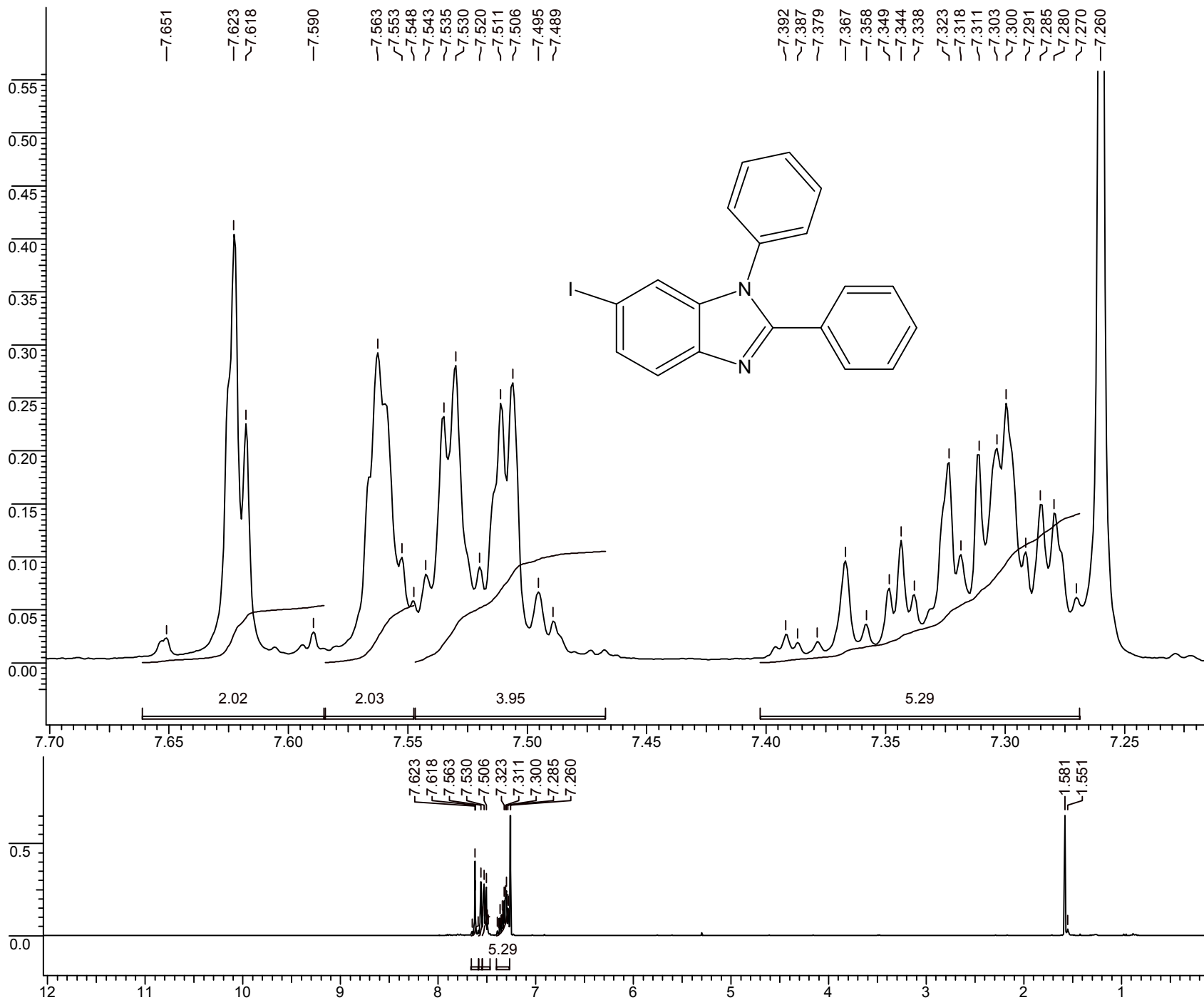
==== CHANNEL f1 =====  
NUC1 13C  
P1 7.13 usec  
p2 14.26 usec  
PL1 -2.00 dB  
SFO1 75.4752953 MHz

==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 110.00 usec  
PL2 0.00 dB  
PL12 22.00 dB  
SFO2 300.1312005 MHz

F2 - Processing parameters  
SI 32768  
SF 75.4677559 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



**6-Iodo-1,2-diphenylbenzimidazole (9d)**



Current Data Parameters

NAME Andrey  
 EXPNO 445  
 PROCNO 445

F2 - Acquisition Parameters  
 Date\_ 20111203  
 Time 18.08  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 32  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094190 Hz  
 AQ 5.3084660 sec  
 RG 645.1  
 DW 81.000 usec  
 DE 9.00 usec  
 TE 296.2 K  
 D1 1.00000000 sec  
 TD0 1

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

NUC1 1H  
 P1 9.00 usec  
 PL1 0.00 dB  
 SFO1 300.1318534 MHz

F1 - Acquisition parameters

ND0 2  
 TD 256  
 SFO1 300.1314 MHz  
 FIDRES 12.056327 Hz  
 SW 10.284 ppm  
 FnMODE undefined

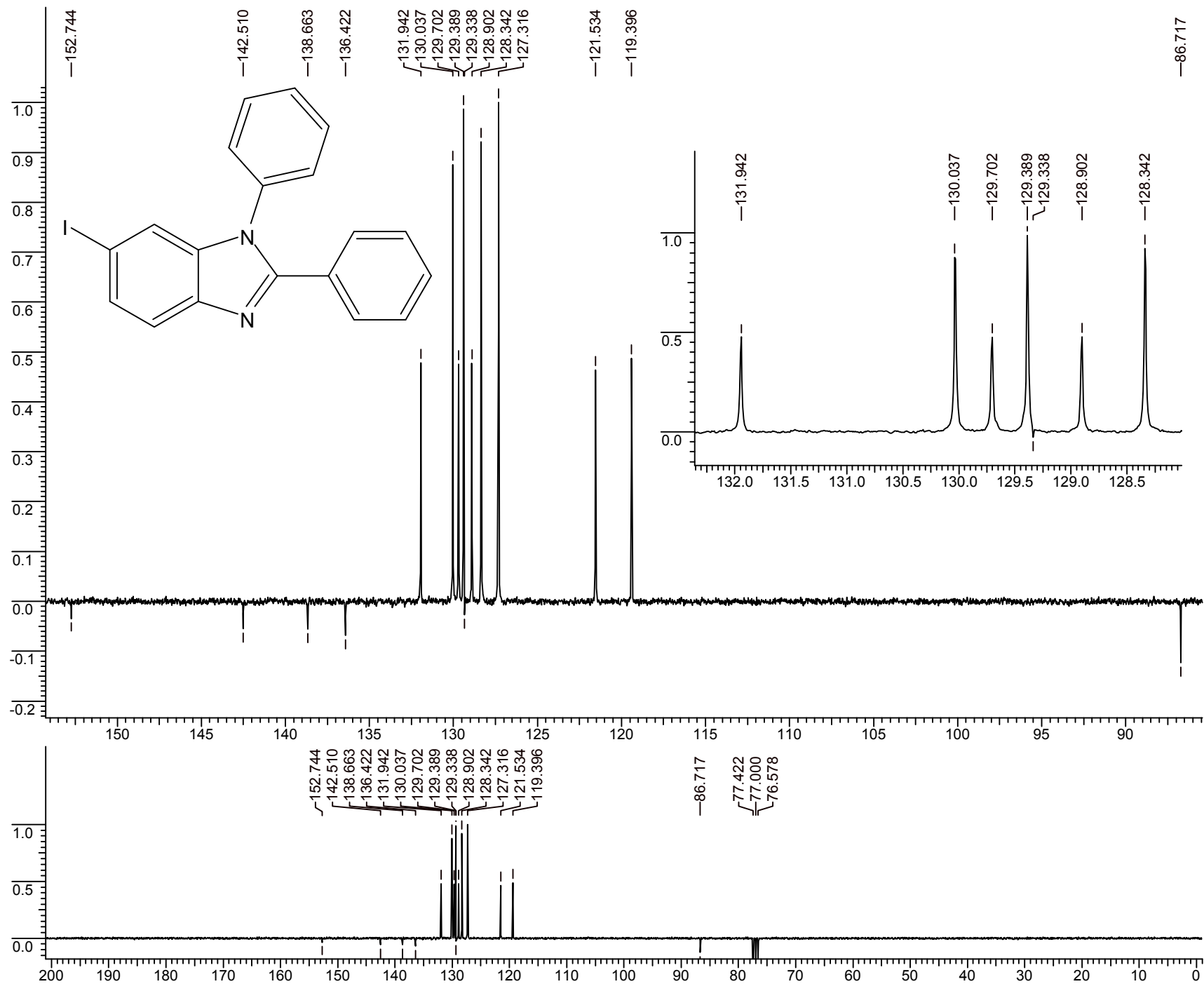
F2 - Processing parameters

SI 32768  
 SF 300.1300063 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters

SI 1024  
 MC2 QF  
 SF 300.1300000 MHz  
 WDW SINE  
 SSB 0  
 LB 0.30 Hz  
 GB 0.1

6-Iodo-1,2-diphenylbenzimidazole (9d)



Current Data Parameters  
NAME Andrey  
EXPNO 446  
PROCNO 446

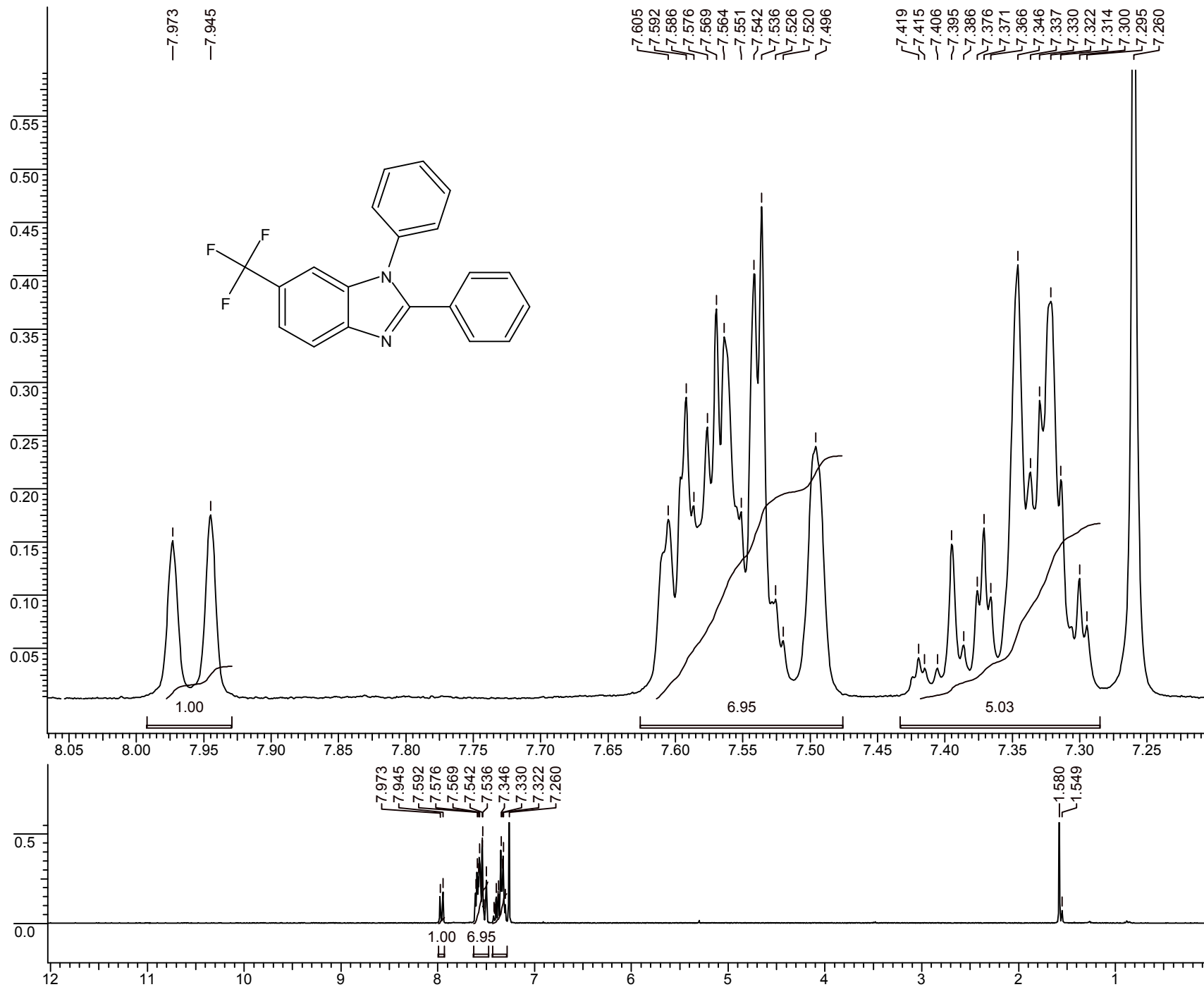
F2 - Acquisition Parameters  
Date\_ 20111203  
Time 18.25  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT CDCl3  
NS 1200  
DS 4  
SWH 17985.611 Hz  
FIDRES 0.274439 Hz  
AQ 1.8219508 sec  
RG 16384  
DW 27.800 usec  
DE 6.00 usec  
TE 296.2 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.0000000 sec  
d20 0.00689655 sec  
DELTA 0.00000908 sec  
TD0 1

=====  
CHANNEL f1  
=====  
NUC1 13C  
P1 7.13 usec  
p2 14.26 usec  
PL1 -2.00 dB  
SFO1 75.4752953 MHz

=====  
CHANNEL f2  
=====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 110.00 usec  
PL2 0.00 dB  
PL12 22.00 dB  
SFO2 300.1312005 MHz

F2 - Processing parameters  
SI 32768  
SF 75.4677526 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

### 1,2-Diphenyl-6-(trifluoromethyl)benzimidazole (9e)



#### Current Data Parameters

NAME Andrey  
EXPNO 438  
PROCNO 438

F2 - Acquisition Parameters  
Date\_ 20111117  
Time 2.34  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 6172.839 Hz  
FIDRES 0.094190 Hz  
AQ 5.3084660 sec  
RG 456.1  
DW 81.000 usec  
DE 9.00 usec  
TE 298.2 K  
D1 1.00000000 sec  
TD0 1

#### ===== CHANNEL f1 =====

NUC1 1H  
P1 9.00 usec  
PL1 0.00 dB  
SFO1 300.1318534 MHz

#### F1 - Acquisition parameters

ND0 2  
TD 256  
SFO1 300.1314 MHz  
FIDRES 12.056327 Hz  
SW 10.284 ppm  
FnMODE undefined

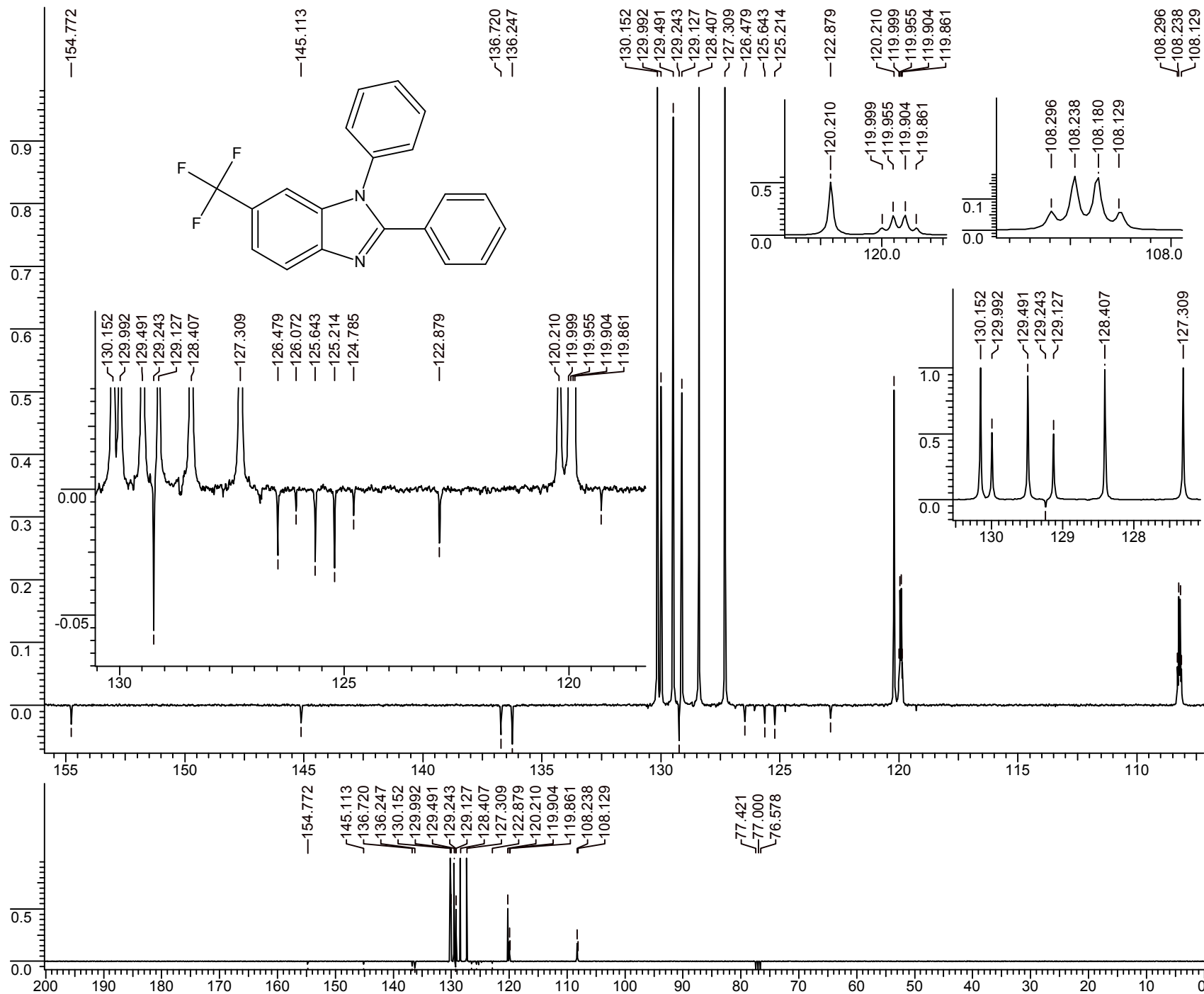
#### F2 - Processing parameters

SI 32768  
SF 300.1300063 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

#### F1 - Processing parameters

SI 1024  
MC2 QF  
SF 300.1300000 MHz  
WDW SINE  
SSB 0  
LB 0.30 Hz  
GB 0.1

**1,2-Diphenyl-6-(trifluoromethyl)benzimidazole (9e)**



Current Data Parameters

NAME Andrey  
EXPNO 439  
PROCNO 439

F2 - Acquisition Parameters

Date\_ 20111117  
Time 2.47  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT CDCl3  
NS 6931  
DS 4  
SWH 17985.611 Hz  
FIDRES 0.274439 Hz  
AQ 1.8219508 sec  
RG 16384  
DW 27.80 usec  
DE 6.00 usec  
TE 298.2 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.00000000 sec  
d20 0.00689655 sec  
DELTA 0.00000908 sec  
TD0 1

==== CHANNEL f1 =====

NUC1 13C  
P1 7.13 usec  
p2 14.26 usec  
PL1 -2.00 dB  
SFO1 75.4752953 MHz

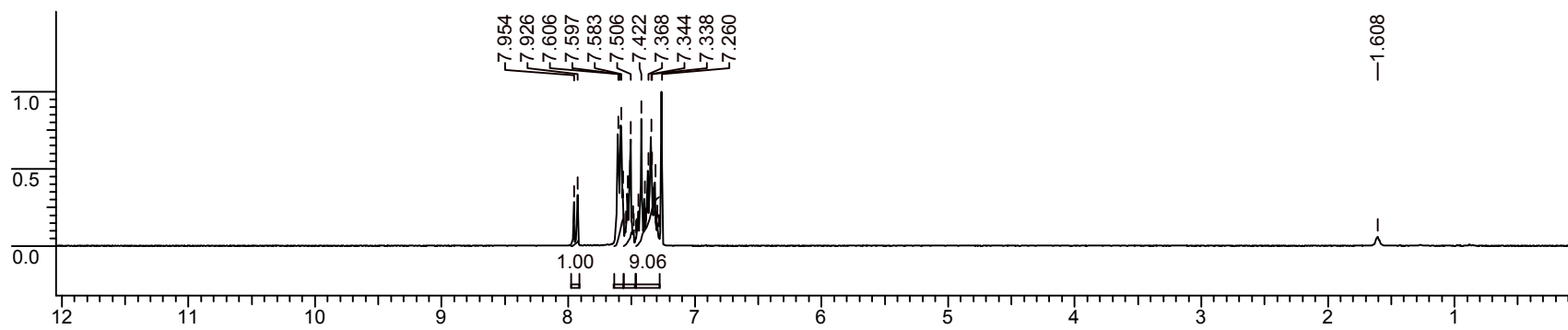
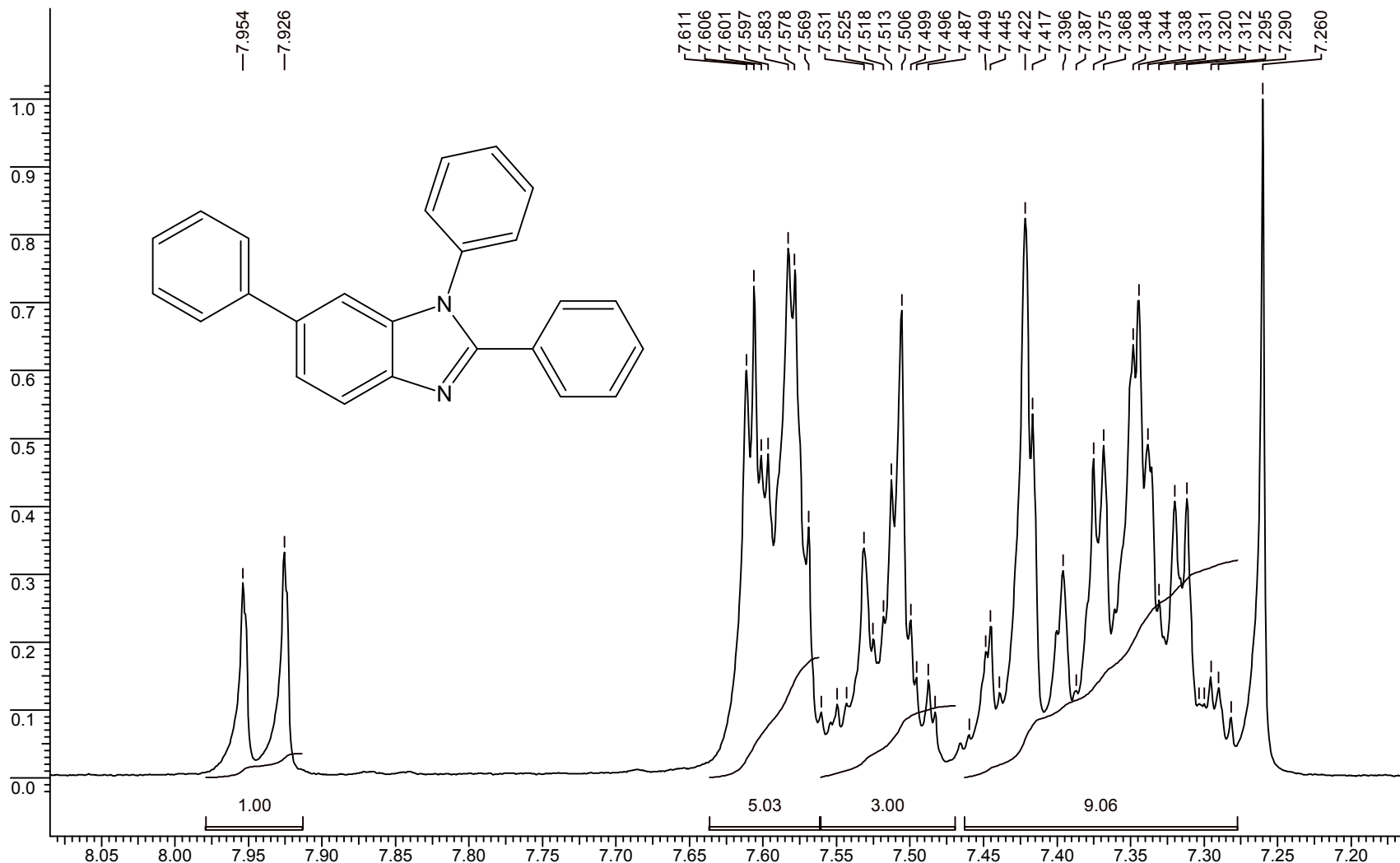
==== CHANNEL f2 =====

CPDPRG2 waltz16  
NUC2 1H  
PCPD2 110.00 usec  
PL2 0.00 dB  
PL12 22.00 dB  
SFO2 300.1312005 MHz

F2 - Processing parameters

SI 32768  
SF 75.4677510 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

**1,2,6-Triphenylbenzimidazole (9f)**



Current Data Parameters

NAME Andrey  
EXPNO 455  
PROCNO 455

F2 - Acquisition Parameters

Date\_ 20111228  
Time 15.43  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 6172.839 Hz  
FIDRES 0.094190 Hz  
AQ 5.3084660 sec  
RG 512  
DW 81.000 usec  
DE 9.00 usec  
TE 296.2 K  
D1 1.00000000 sec  
TD0 1

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

NUC1 1H  
P1 9.00 usec  
PL1 0.00 dB  
SFO1 300.1318534 MHz

F1 - Acquisition parameters

ND0 2  
TD 256  
SFO1 300.1314 MHz  
FIDRES 12.056327 Hz  
SW 10.284 ppm  
FnMODE undefined

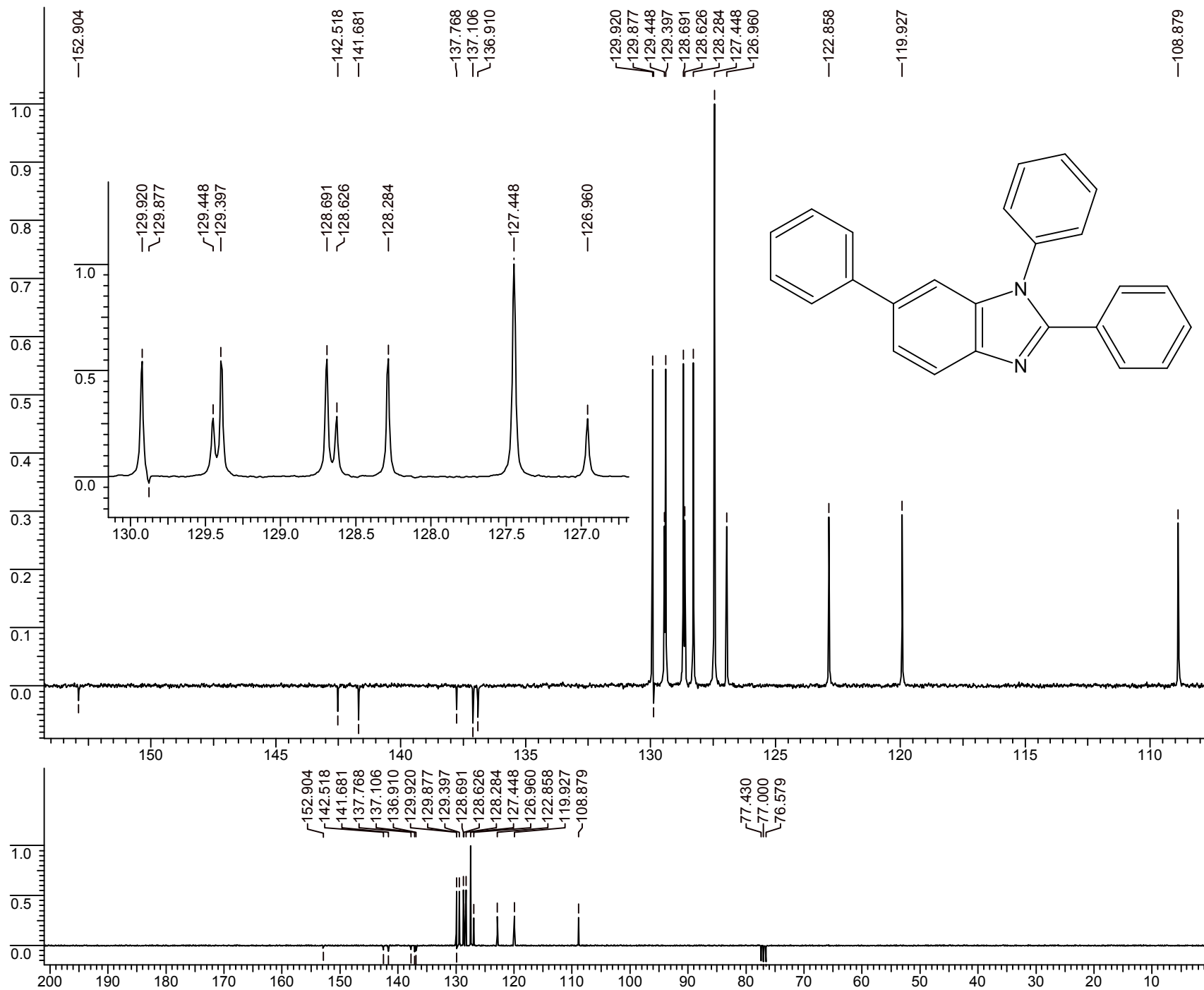
F2 - Processing parameters

SI 32768  
SF 300.1300059 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

F1 - Processing parameters

SI 1024  
MC2 QF  
SF 300.1300000 MHz  
WDW SINE  
SSB 0  
LB 0.30 Hz  
GB 0.1

**1,2,6-Triphenylbenzimidazole (9f)**



Current Data Parameters

NAME Andrey  
EXPNO 456  
PROCNO 456

F2 - Acquisition Parameters

Date\_ 20111228  
Time 15.59  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT CDCl3  
NS 1200  
DS 4  
SWH 17985.611 Hz  
FIDRES 0.274439 Hz  
AQ 1.8219508 sec  
RG 16384  
DW 27.800 usec  
DE 6.00 usec  
TE 296.2 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.00000000 sec  
d20 0.00689655 sec  
DELTA 0.00000908 sec  
TD0 1

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

NUC1 13C  
P1 7.13 usec  
p2 14.26 usec  
PL1 -2.00 dB  
SFO1 75.4752953 MHz

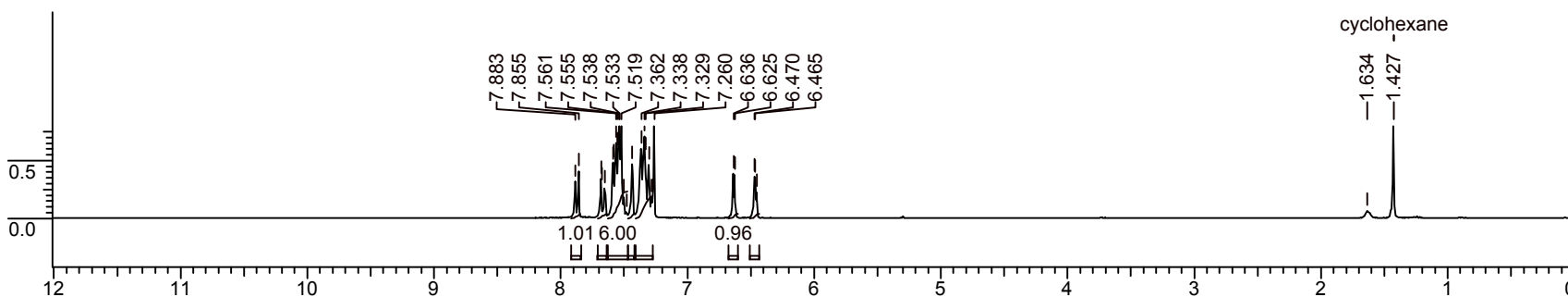
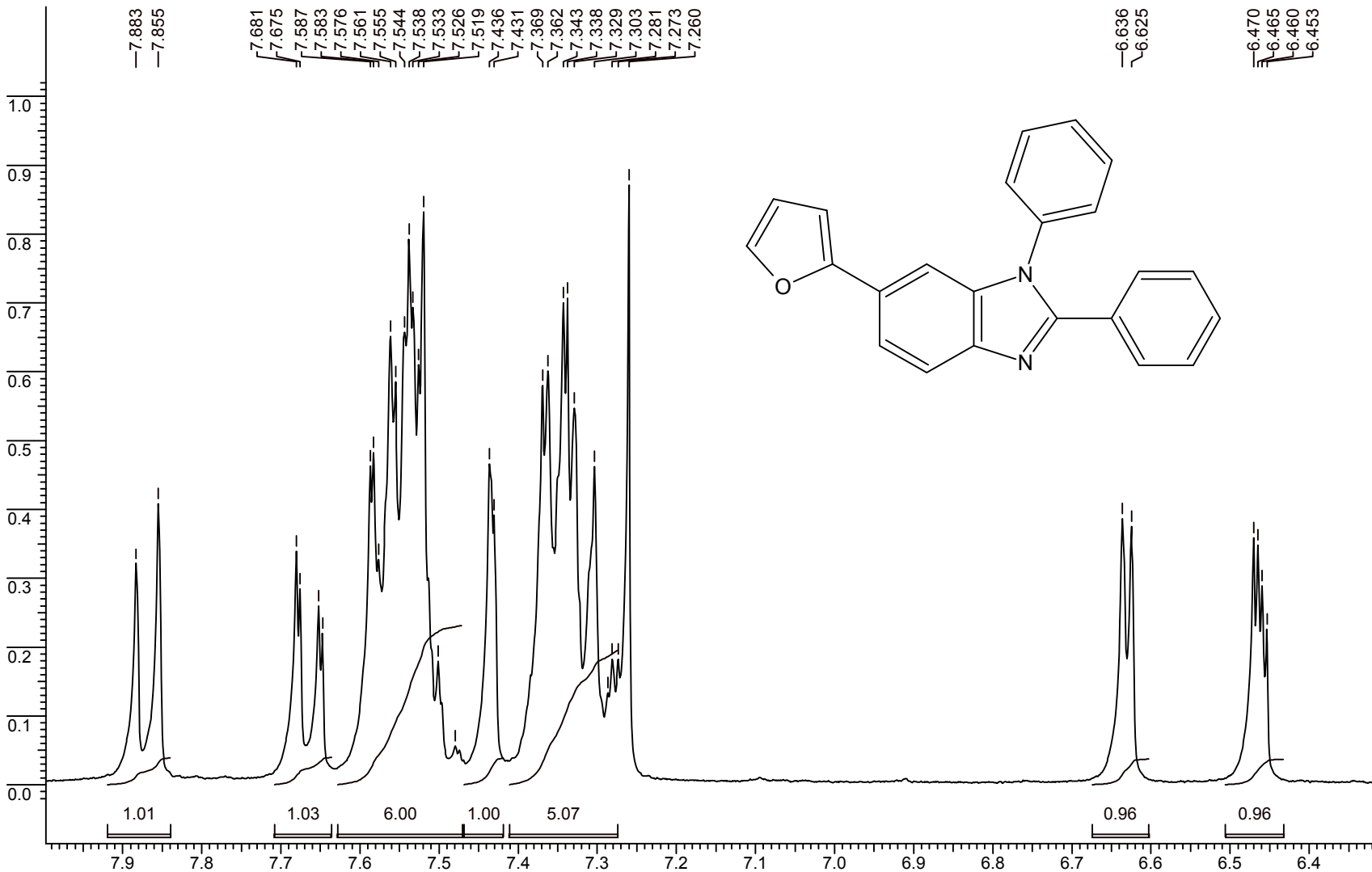
===== CHANNEL f2 =====

CPDPRG2 waltz16  
NUC2 1H  
PCPD2 110.00 usec  
PL2 0.00 dB  
PL12 22.00 dB  
SFO2 300.1312005 MHz

F2 - Processing parameters

SI 32768  
SF 75.4677531 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

**6-(Fur-2-yl)-1,2-diphenylbenzimidazole (9g)**



Current Data Parameters  
NAME Andrey  
EXPNO 458  
PROCNO 458

F2 - Acquisition Parameters  
Date\_ 20111230  
Time 16.40  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 6172.839 Hz  
FIDRES 0.094190 Hz  
AQ 5.3084660 sec  
RG 456.1  
DW 81.000 usec  
DE 9.00 usec  
TE 296.2 K  
D1 1.00000000 sec  
TD0 1

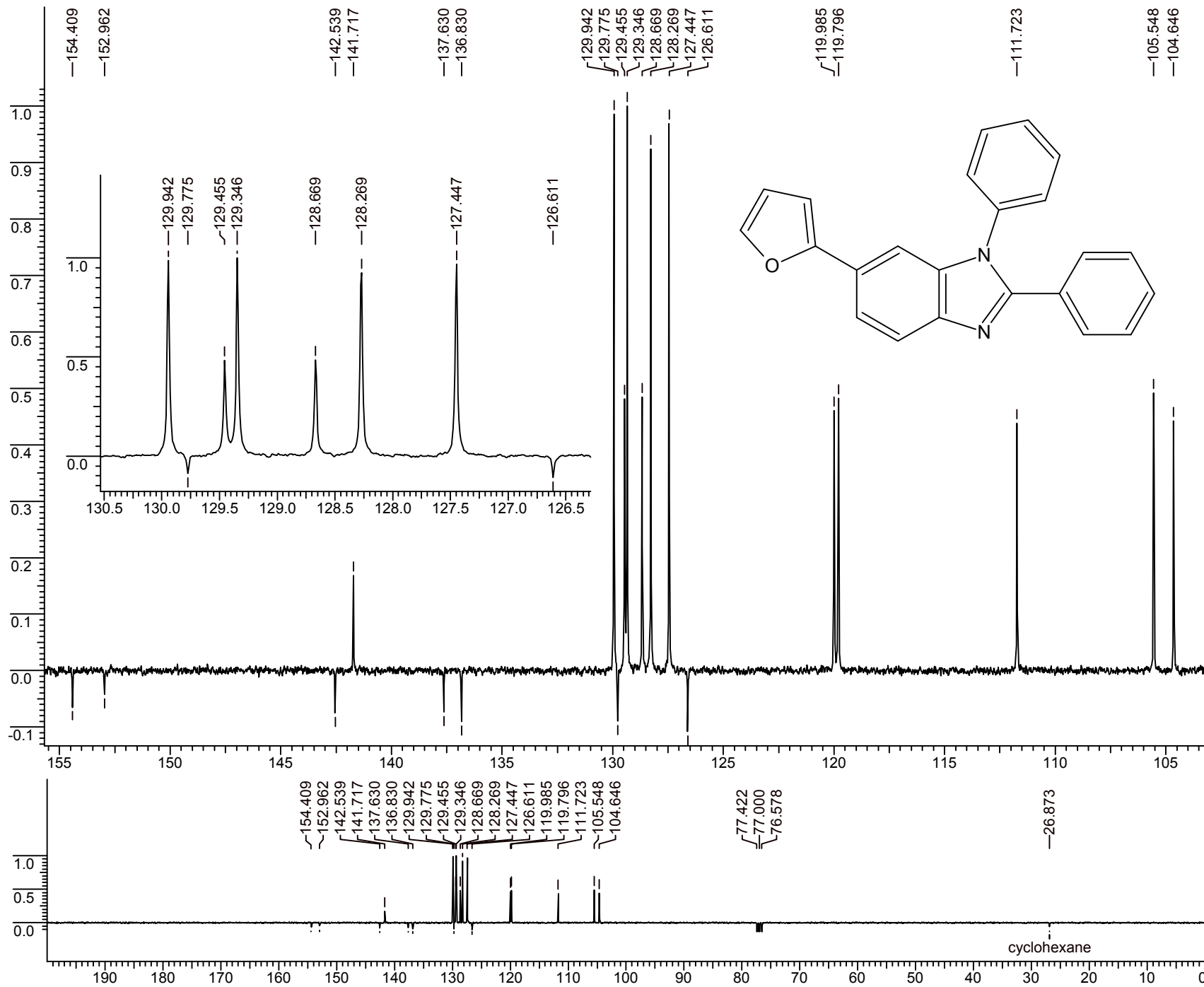
===== CHANNEL f1 =====  
NUC1 1H  
P1 9.00 usec  
PL1 0.00 dB  
SFO1 300.1318534 MHz

F1 - Acquisition parameters  
ND0 2  
TD 256  
SFO1 300.1314 MHz  
FIDRES 12.056327 Hz  
SW 10.284 ppm  
FnMODE undefined

F2 - Processing parameters  
SI 32768  
SF 300.1300058 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 QF  
SF 300.1300000 MHz  
WDW SINE  
SSB 0  
LB 0.30 Hz  
GB 0.1

**6-(Fur-2-yl)-1,2-diphenylbenzimidazole (9g)**



Current Data Parameters  
 NAME Andrey  
 EXPNO 459  
 PROCNO 459

F2 - Acquisition Parameters  
 Date\_ 20111230  
 Time 17.02  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG jmod  
 TD 65536  
 SOLVENT CDCl3  
 NS 1200  
 DS 4  
 SWH 17985.611 Hz  
 FIDRES 0.274439 Hz  
 AQ 1.8219508 sec  
 RG 3649.1  
 DW 27.800 usec  
 DE 6.00 usec  
 TE 296.2 K  
 CNST2 145.0000000  
 CNST11 1.0000000  
 D1 2.00000000 sec  
 d20 0.00689655 sec  
 DELTA 0.00000908 sec  
 TD0 1

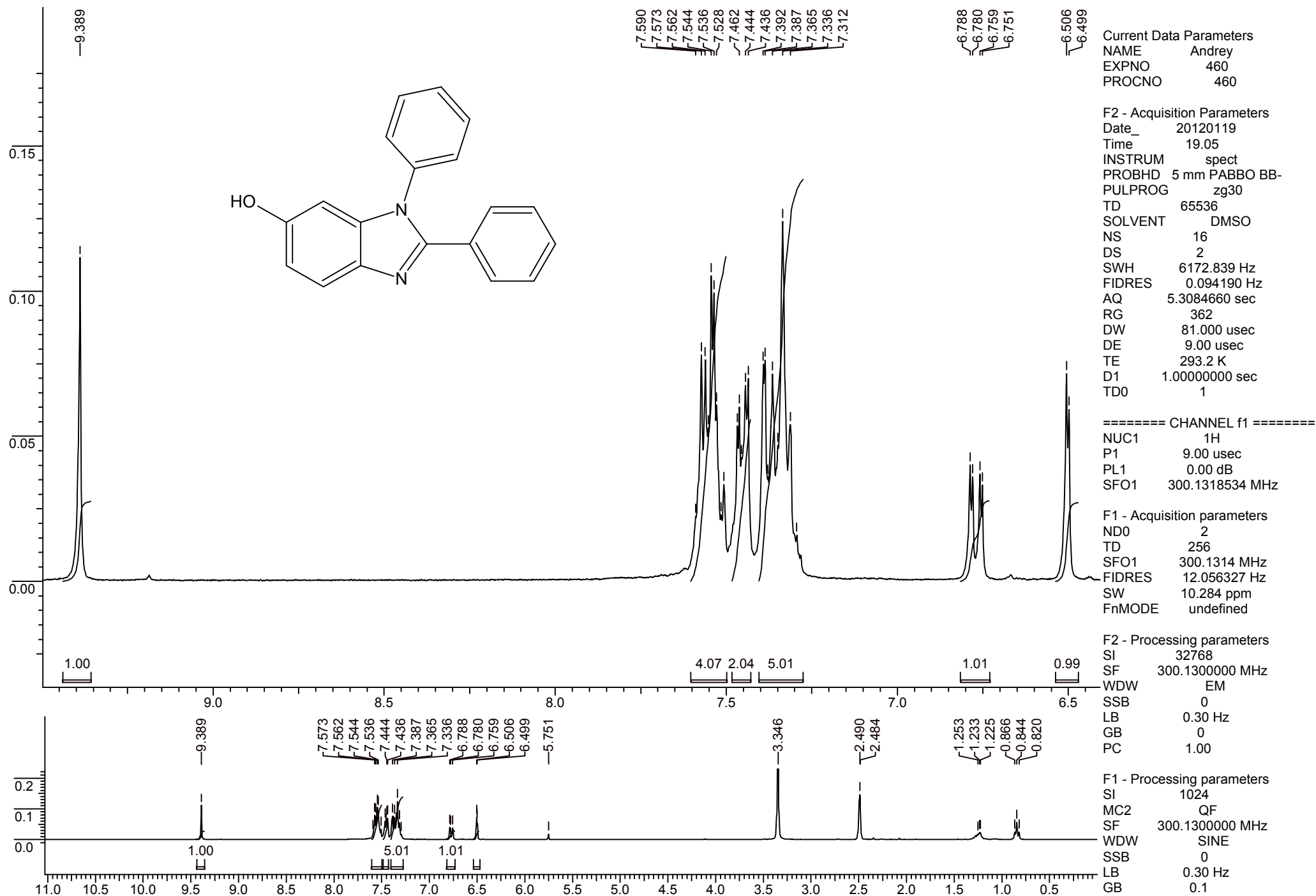
==== CHANNEL f1 =====  
 NUC1 13C  
 P1 7.13 usec  
 p2 14.26 usec  
 PL1 -2.00 dB  
 SFO1 75.4752953 MHz

==== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 PCPD2 110.00 usec  
 PL2 0.00 dB  
 PL12 22.00 dB  
 SFO2 300.1312005 MHz

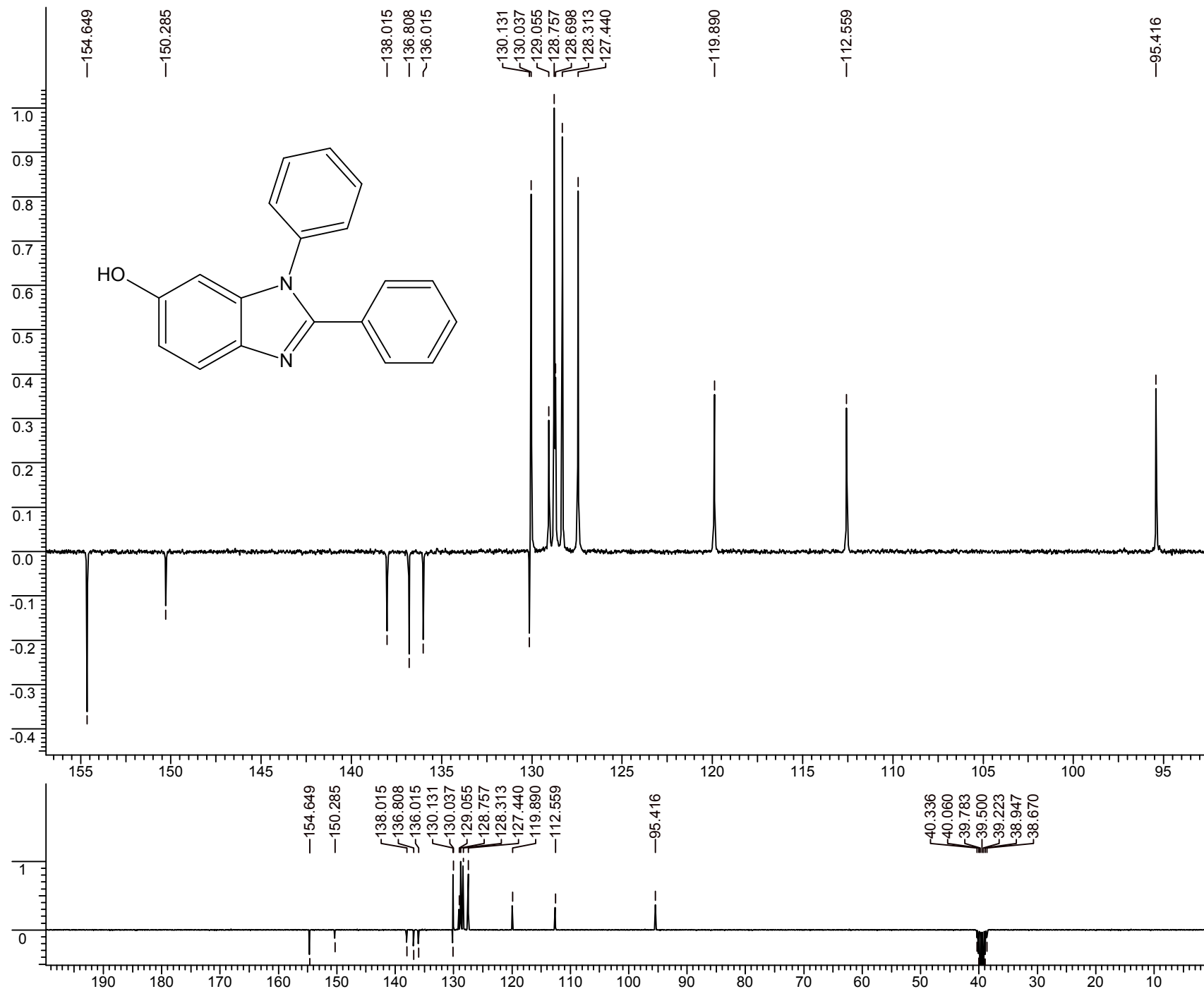
F2 - Processing parameters  
 SI 32768  
 SF 75.4677531 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40



## 1,2-Diphenylbenzimidazole (10)



## 1,2-Diphenylbenzimidazole (10)



## Current Data Parameters

NAME Andrey  
EXPNO 465  
PROCNO 465

## F2 - Acquisition Parameters

Date\_ 20120119  
Time 20.41  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT DMSO  
NS 1200  
DS 4  
SWH 17985.611 Hz  
FIDRES 0.274439 Hz  
AQ 1.8219508 sec  
RG 4597.6  
DW 27.800 usec  
DE 6.00 usec  
TE 292.2 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.00000000 sec  
d20 0.00689655 sec  
DELTA 0.00000908 sec  
TD0 1

## ===== CHANNEL f1 =====

NUC1 13C  
P1 7.13 usec  
p2 14.26 usec  
PL1 -2.00 dB  
SFO1 75.4752953 MHz

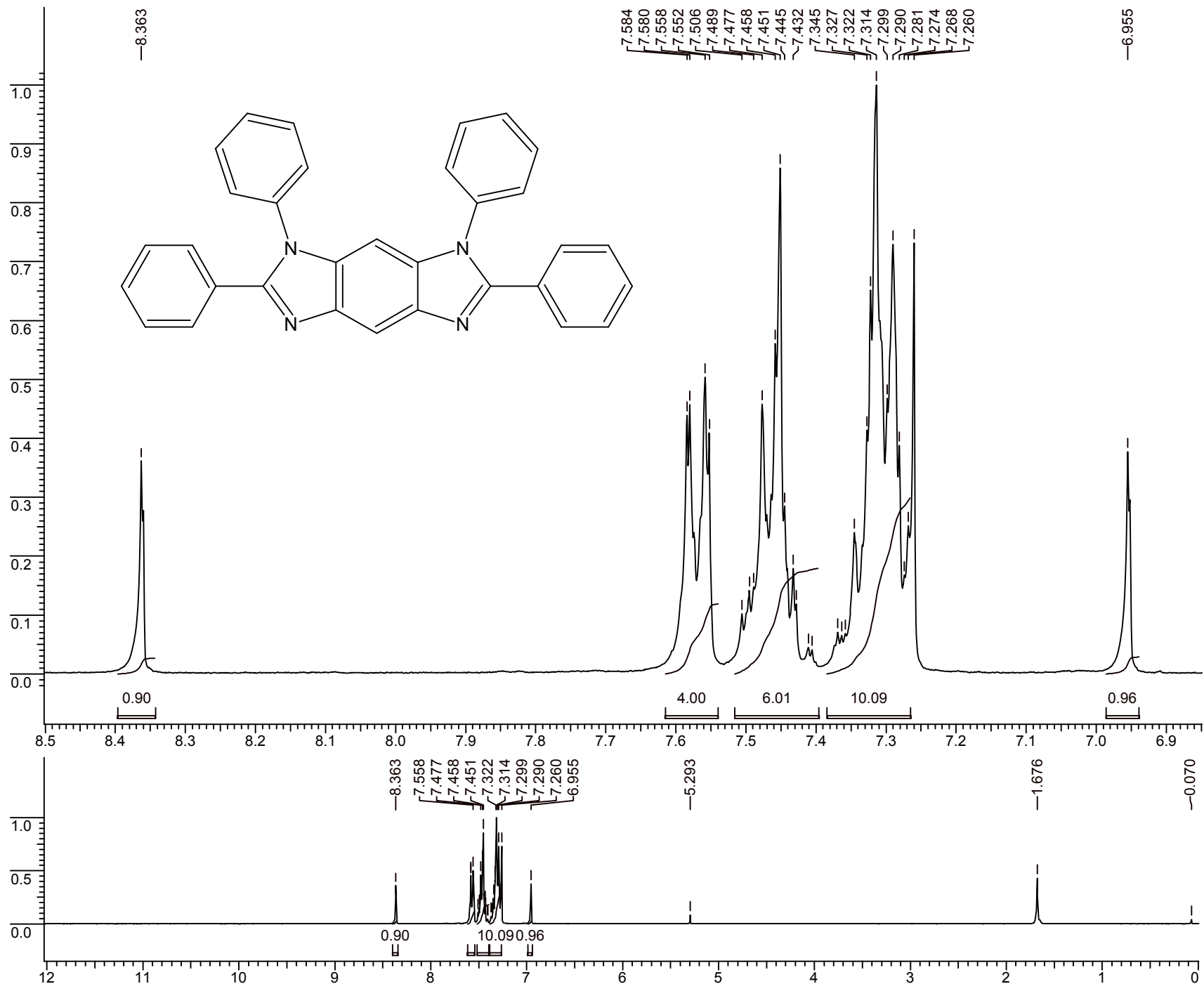
## ===== CHANNEL f2 =====

CPDPRG2 waltz16  
NUC2 1H  
PCPD2 110.00 usec  
PL2 0.00 dB  
PL12 22.00 dB  
SFO2 300.1312005 MHz

## F2 - Processing parameters

SI 32768  
SF 75.4677872 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

**1,2,6,7-Tetraphenyl-1,7-dihydrobenzo[1,2-d:4,5-d']diimidazole (11)**



Current Data Parameters  
 NAME Andrey  
 EXPNO 473  
 PROCNO 473

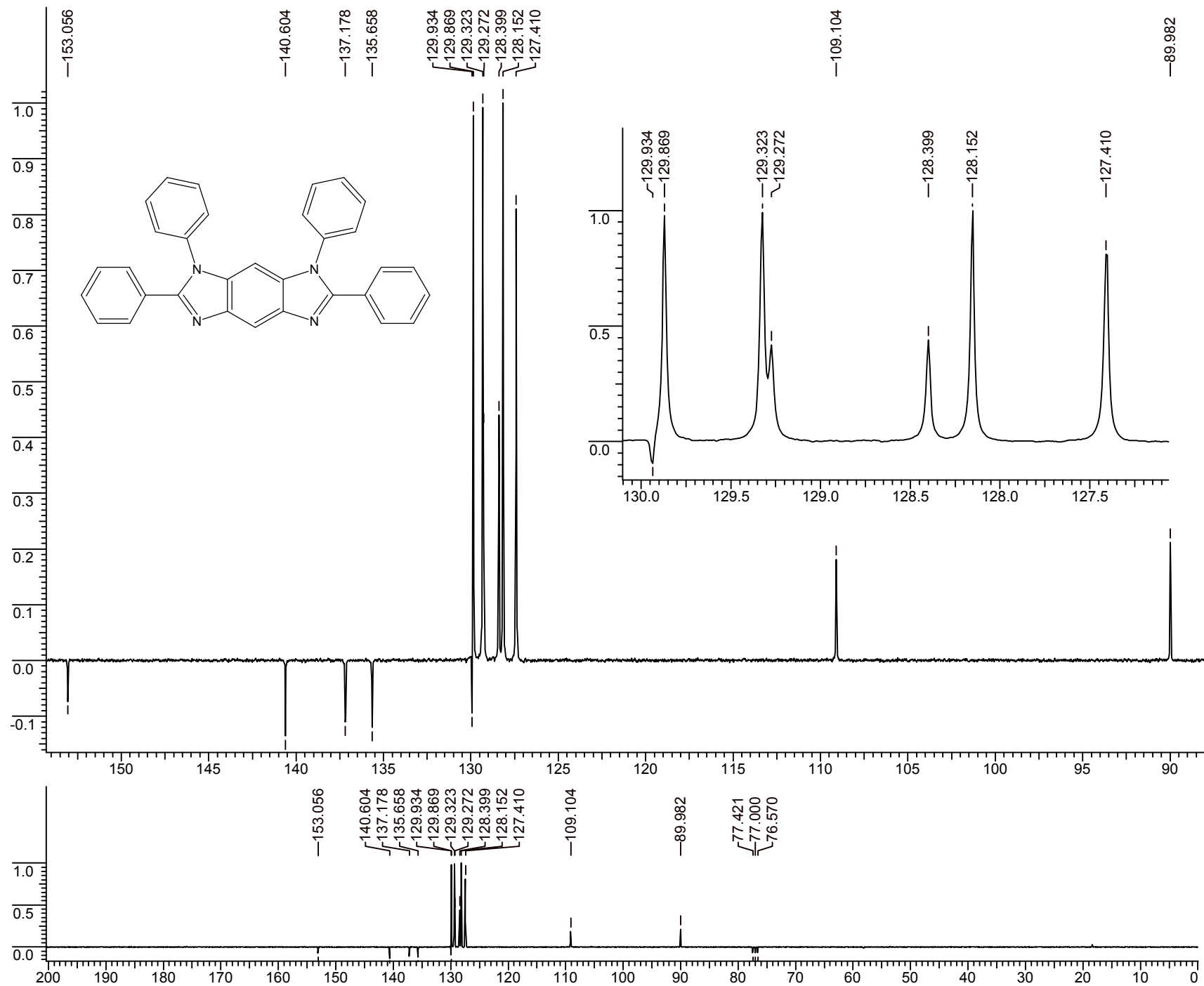
F2 - Acquisition Parameters  
 Date\_ 20120130  
 Time 17.56  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB-  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094190 Hz  
 AQ 5.3084660 sec  
 RG 362  
 DW 81.000 usec  
 DE 9.00 usec  
 TE 297.2 K  
 D1 1.00000000 sec  
 TD0 1

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 9.00 usec  
 PL1 0.00 dB  
 SFO1 300.1318534 MHz

F1 - Acquisition parameters  
 ND0 2  
 TD 256  
 SFO1 300.1314 MHz  
 FIDRES 12.056327 Hz  
 SW 10.284 ppm  
 FnMODE undefined

F2 - Processing parameters  
 SI 32768  
 SF 300.1300061 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 QF  
 SF 300.1300000 MHz  
 WDW SINE  
 SSB 0  
 LB 0.30 Hz  
 GB 0.1

*1,2,6,7-Tetraphenyl-1,7-dihydrobenzo[1,2-d:4,5-d']diimidazole (11)*

## Current Data Parameters

NAME Andrey  
EXPNO 475  
PROCNO 475

## F2 - Acquisition Parameters

Date\_ 20120130  
Time 20.31  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT CDCl3  
NS 1200  
DS 4  
SWH 17985.611 Hz  
FIDRES 0.274439 Hz  
AQ 1.8219508 sec  
RG 16384  
DW 27.800 usec  
DE 6.00 usec  
TE 297.2 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.0000000 sec  
d20 0.00689655 sec  
DELTA 0.00000908 sec  
TD0 1

## ===== CHANNEL f1 =====

NUC1 13C  
P1 7.13 usec  
p2 14.26 usec  
PL1 -2.00 dB  
SFO1 75.4752953 MHz

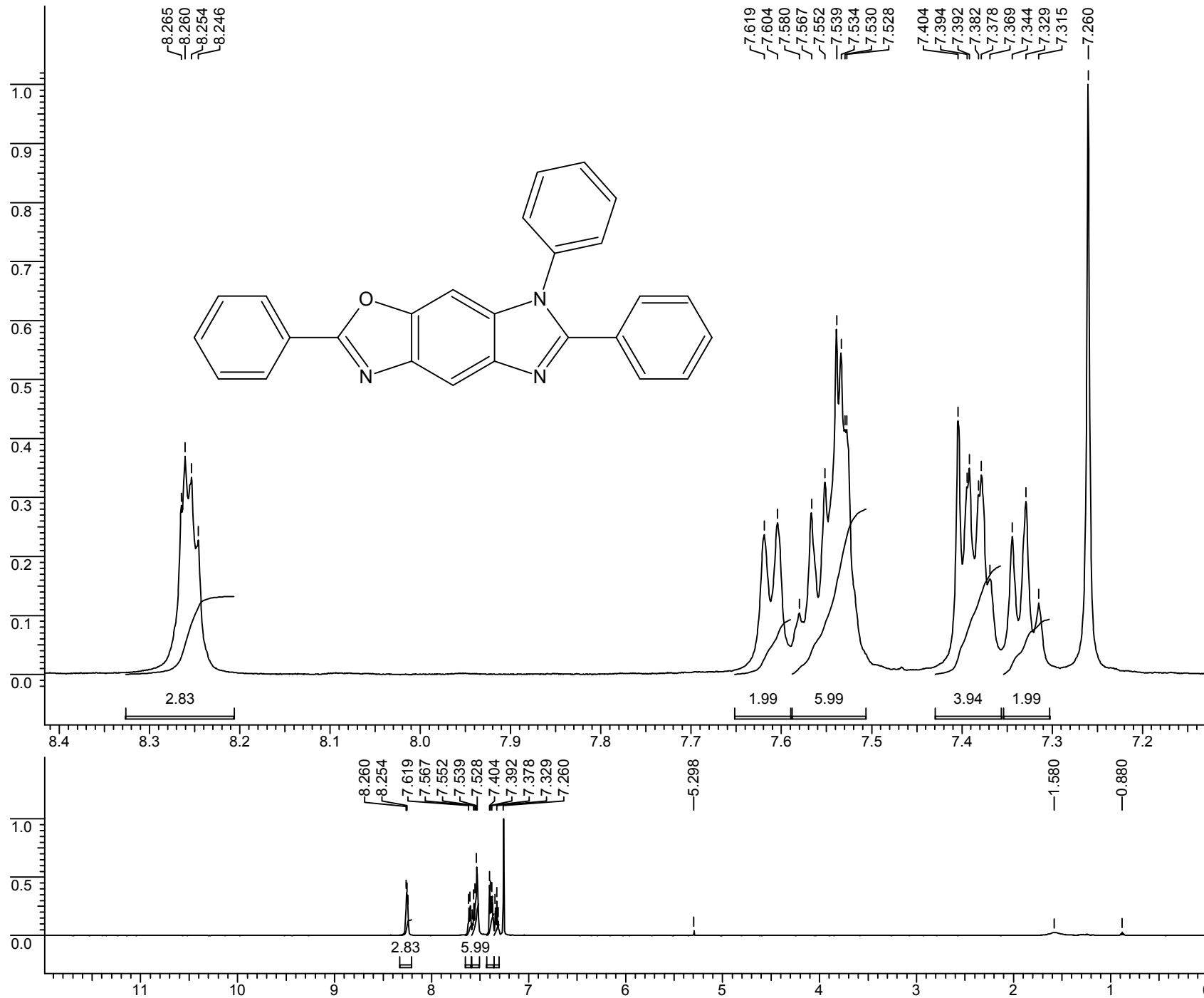
## ===== CHANNEL f2 =====

CPDPRG2 waltz16  
NUC2 1H  
PCPD2 110.00 usec  
PL2 0.00 dB  
PL12 22.00 dB  
SFO2 300.1312005 MHz

## F2 - Processing parameters

SI 32768  
SF 75.4677549 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

### 2,6,7-Triphenyl-7H-imidazo[4,5-f]benzoxazole (12)



#### Current Data Parameters

NAME Andrey  
EXPNO 261  
PROCNO 1

#### F2 - Acquisition Parameters

Date\_ 20130510  
Time 20.40  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 10330.578 Hz  
FIDRES 0.157632 Hz  
AQ 3.1719425 sec  
RG 181  
DW 48.400 usec  
DE 6.50 usec  
TE 295.6 K  
D1 1.00000000 sec  
TD0 1

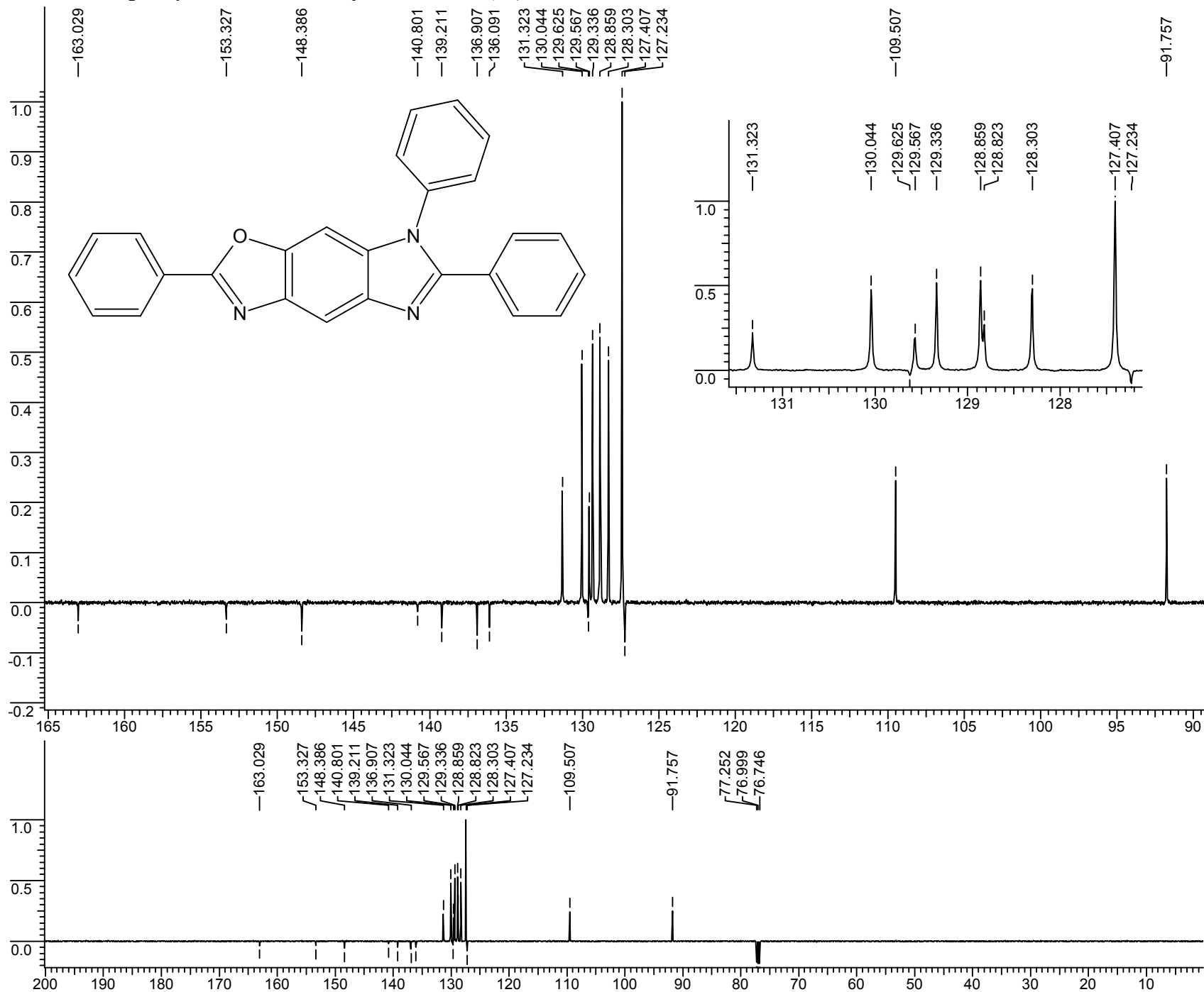
#### ===== CHANNEL f1 =====

SFO1 500.0361158 MHz  
NUC1 1H  
P1 11.75 usec  
PLW1 15.41699982 W

#### F2 - Processing parameters

SI 65536  
SF 500.0330403 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

**2,6,7-Triphenyl-7H-imidazo[4,5-f]benzoxazole (12)**



Current Data Parameters

NAME Andrey  
EXPNO 262  
PROCNO 1

F2 - Acquisition Parameters

Date\_ 20130510  
Time 20.59  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT CDCl3  
NS 512  
DS 4  
SWH 29761.904 Hz  
FIDRES 0.454131 Hz  
AQ 1.1010048 sec  
RG 2050  
DW 16.800 usec  
DE 6.50 usec  
TE 296.5 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.00000000 sec  
D20 0.00689655 sec  
TD0 1

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

SFO1 125.7459782 MHz  
NUC1 13C  
P1 8.70 usec  
P2 17.40 usec  
PLW1 138.00000000 W

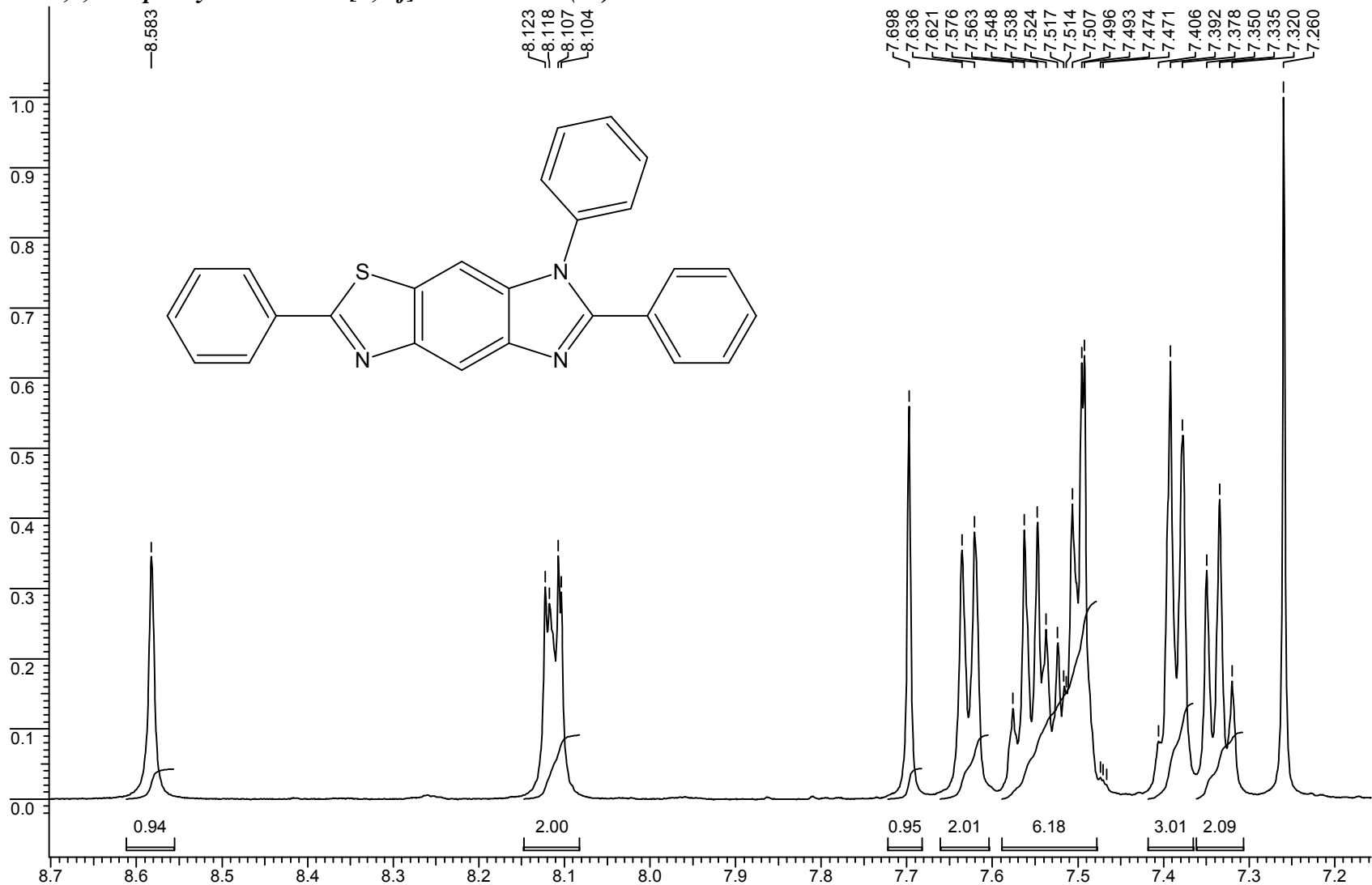
===== CHANNEL f2 =====

SFO2 500.0350280 MHz  
NUC2 1H  
CPDPRG[2] waltz16  
PCPD2 80.00 usec  
PLW2 15.41699982 W  
PLW12 0.33258000 W

F2 - Processing parameters

SI 32768  
SF 125.7334126 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

**2,6,7-Triphenyl-7H-imidazo[4,5-f]benzothiazole (13)**



Current Data Parameters

NAME Andrey  
EXPNO 269  
PROCNO 1

F2 - Acquisition Parameters

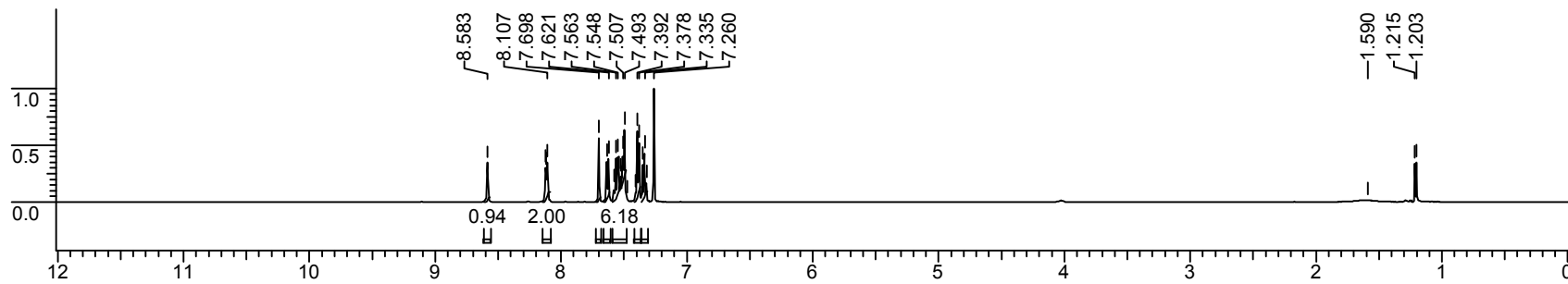
Date\_ 20130513  
Time 20.33  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 10330.578 Hz  
FIDRES 0.157632 Hz  
AQ 3.1719425 sec  
RG 161  
DW 48.400 usec  
DE 6.50 usec  
TE 296.0 K  
D1 1.0000000 sec  
TD0 1

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

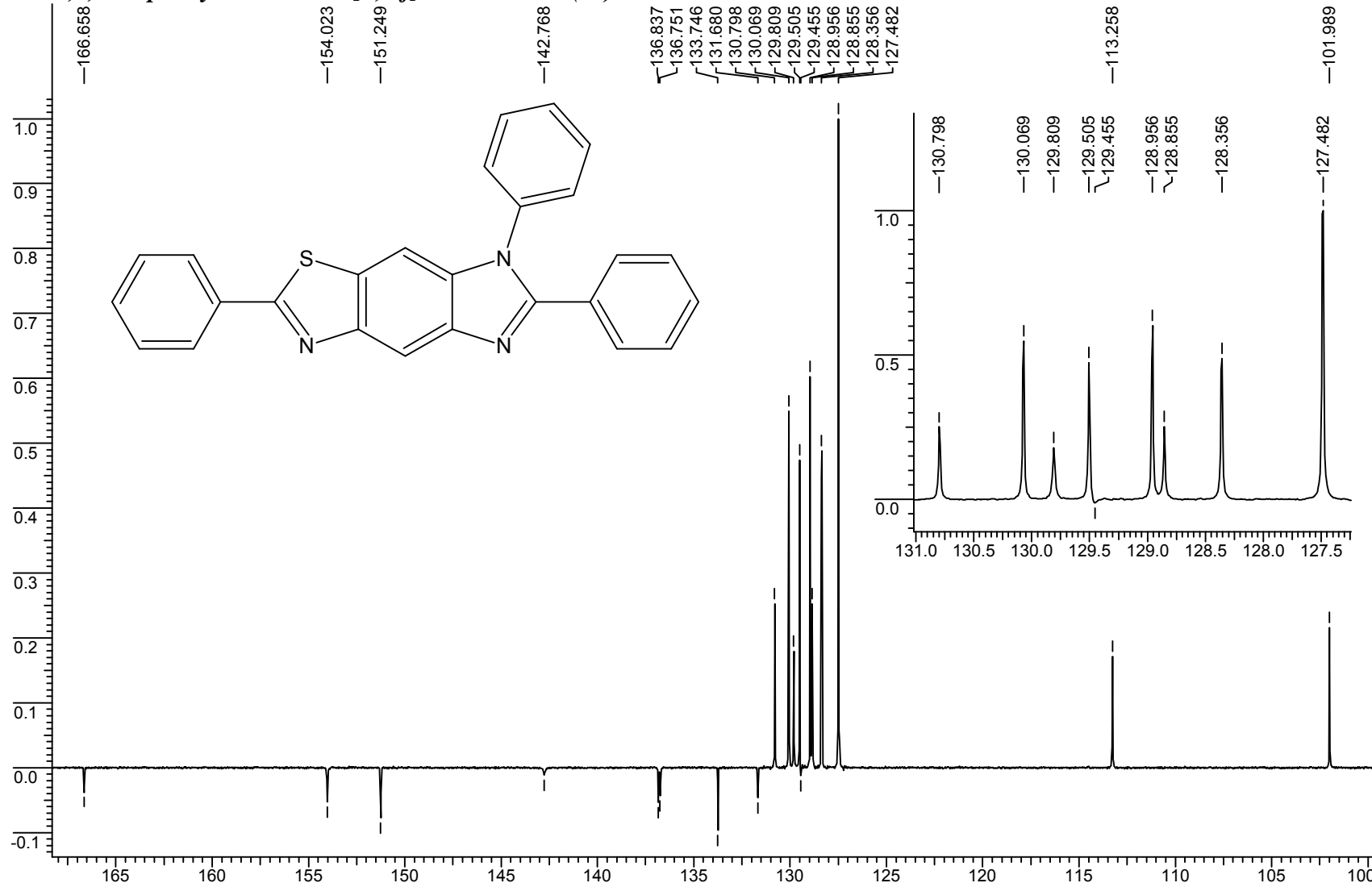
SFO1 500.0361158 MHz  
NUC1 1H  
P1 11.75 usec  
PLW1 15.41699982 W

F2 - Processing parameters

SI 65536  
SF 500.0330405 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00



### 2,6,7-Triphenyl-7H-imidazo[4,5-f]benzothiazole (13)



#### Current Data Parameters

NAME Andrey  
EXPNO 271  
PROCNO 1

#### F2 - Acquisition Parameters

Date\_ 20130513  
Time 22.27  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG jmod  
TD 65536  
SOLVENT CDCl3  
NS 10000  
DS 4  
SWH 29761.904 Hz  
FIDRES 0.454131 Hz  
AQ 1.1010048 sec  
RG 1820  
DW 16.800 usec  
DE 6.50 usec  
TE 296.3 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.00000000 sec  
D20 0.00689655 sec  
TD0 1

#### ===== CHANNEL f1 =====

SFO1 125.7459782 MHz  
NUC1 13C  
P1 8.70 usec  
P2 17.40 usec  
PLW1 138.00000000 W

#### ===== CHANNEL f2 =====

SFO2 500.0350280 MHz  
NUC2 1H  
CPDPRG[2] waltz16  
PCPD2 80.00 usec  
PLW2 15.41699982 W  
PLW12 0.33258000 W

#### F2 - Processing parameters

SI 32768  
SF 125.7334114 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

