

Supporting Information

Radical reactions of [60]fullerene with beta enamino carbonyl compounds mediated by manganese(III) acetate

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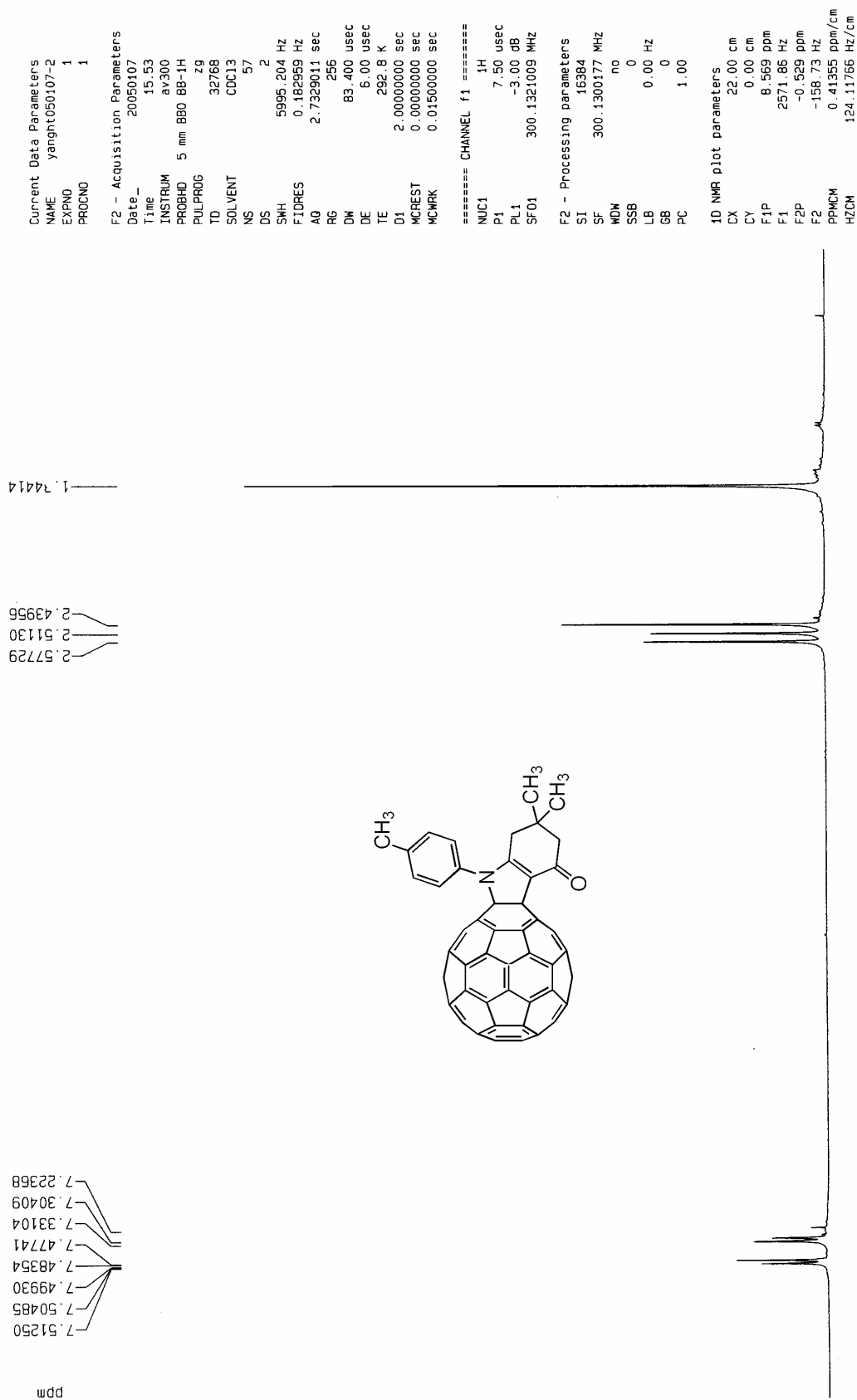
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gwang@ustc.edu.cn; Fax: +86-551-360-7864

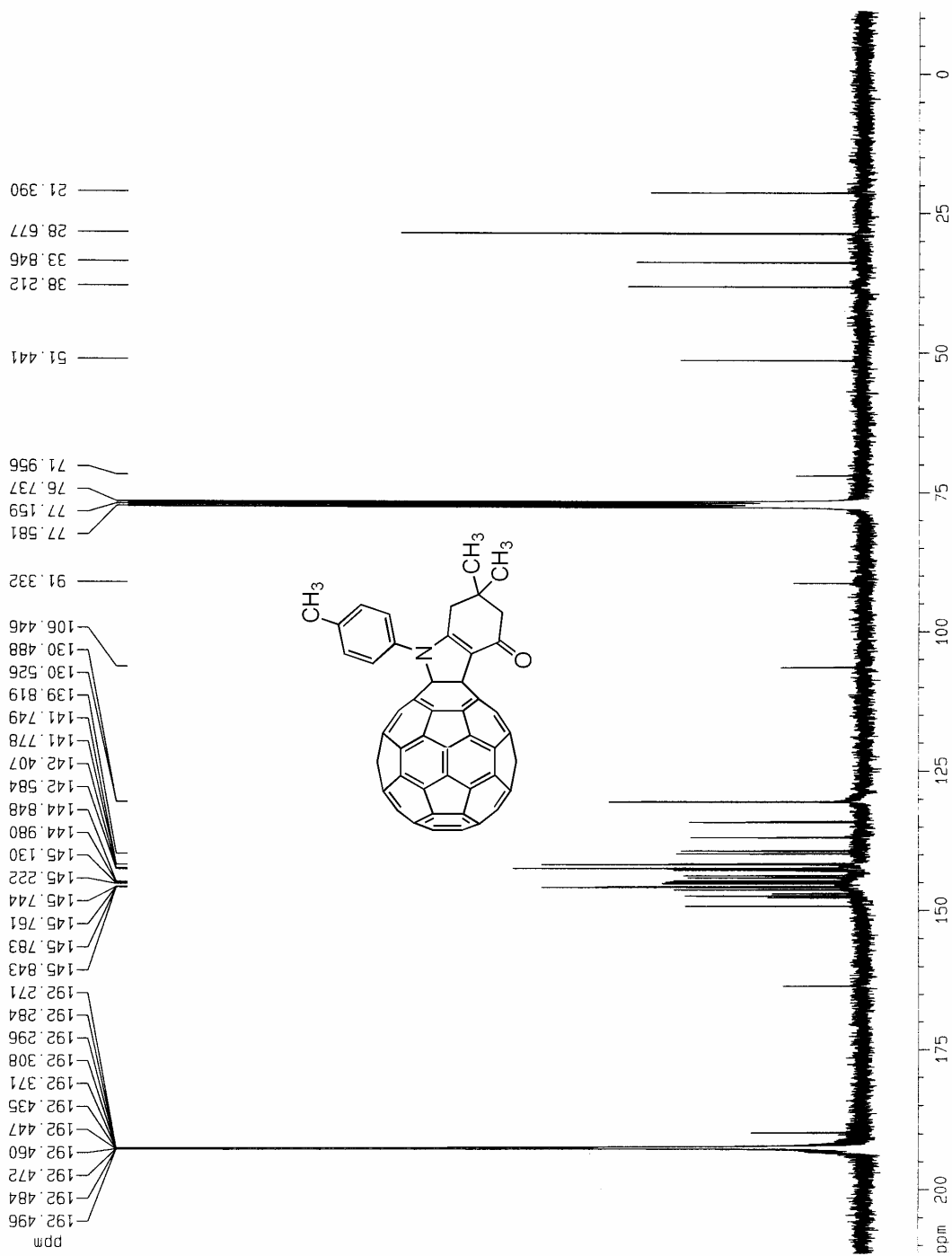
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| | |
|---|------|
| ¹ H NMR spectrum of 2a | S2 |
| ¹³ C NMR spectrum of 2a | S3-7 |
| ¹ H NMR spectrum of 2b | S8 |
| ¹ H NMR spectrum of 2c | S9 |
| ¹ H NMR spectrum of 2d | S10 |
| ¹ H NMR spectrum of 2e | S11 |
| ¹ H NMR spectrum of 2f | S12 |
| ¹ H NMR spectrum of 2g | S13 |
| ¹ H NMR spectrum of 2h | S14 |

¹H NMR spectrum of 2a



¹³C NMR spectrum of 2a



Current Data Parameters
 NAME yanght040107-2c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20050110
 Time 17.27
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zgdc
 TD 65536
 SOLVENT CDCl3
 NS 17065
 DS 2
 SWH 30120.462 Hz
 FIDRES 0.459602 Hz
 AQ 1.0879476 sec
 RG 9195.2
 DM 16.600 usec
 DE 6.00 usec
 TE 291.9 K
 D1 2.00000000 sec
 d11 0.03000000 sec
 MCREST 0.00000000 sec
 NCMRK 0.01500000 sec

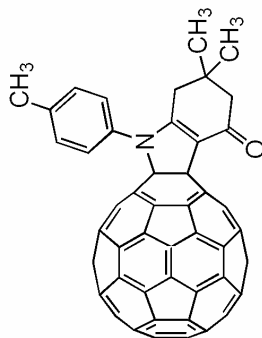
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 NUC1 13C
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 PL1 -6.00 dB
 SF01 75.4752958 MHz

==== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 120.00 dB
 PL12 16.00 dB
 SF02 300.1315007 MHz

F2 - Processing parameters
 SI 131072
 SF 75.4677662 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
 F1P 211.458 ppm
 F1 15958.27 Hz
 F2P -11.243 ppm
 F2 -648.46 Hz
 PPMCM 10.12276 ppm/cm
 HZCM 763.94196 Hz/cm

¹³C NMR spectrum of 2a



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Current Data Parameters
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EXPNO 2
PROCNO 1

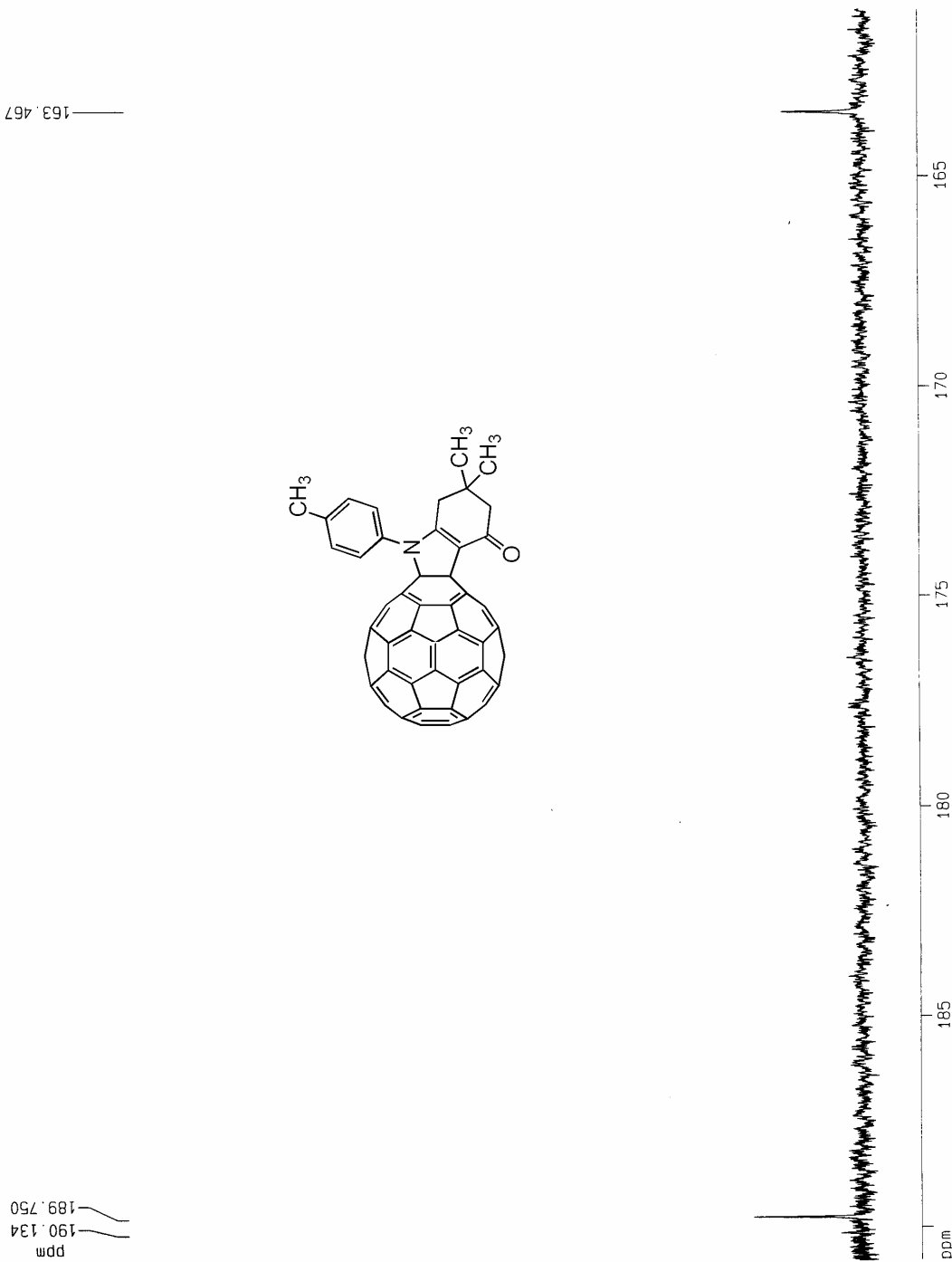
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NS 17065
DS 2
SWH 30120.482 Hz
FIDRES 0.459602 Hz
AQ 1.0879476 sec
RG 9195.2
DM 16.600 usec
DE 6.00 usec
TE 291.9 K
D1 2.00000000 sec
d11 0.03000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

===== CHANNEL f1 =====
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P1 2.40 usec
PL1 -6.00 dB
SF01 75.4752956 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 120.00 dB
PL12 16.00 dB
SF02 300.1315007 MHz

F2 - Processing parameters
SI 131072
SF 75.4677662 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters
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CY 0.00 cm
F1P 190.789 ppm
F1 14398.39 Hz
F2P 161.022 ppm
F2 12151.96 Hz
DPMCH 1.35304 ppm/cm
HZCM 102.11059 Hz/cm
  
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Current Data Parameters
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 EXPNO 2
 PROCNO 1

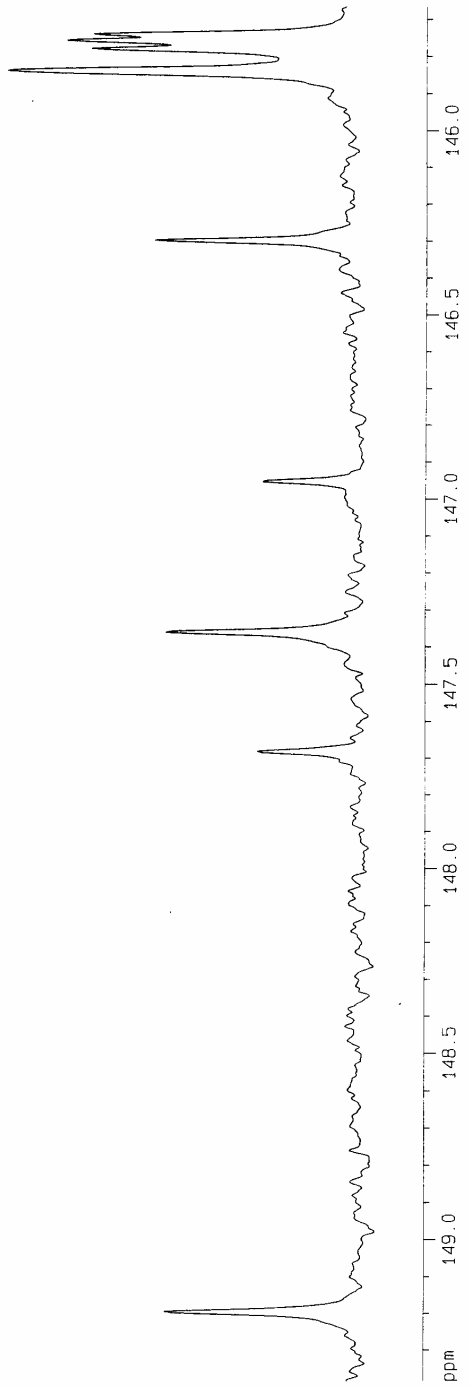
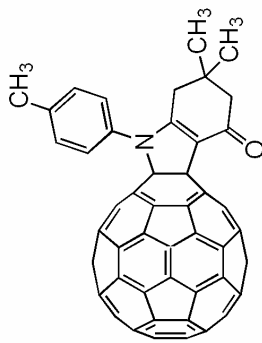
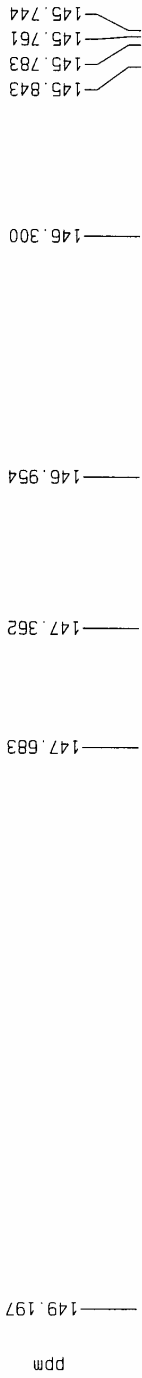
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 TD 65536
 SOLVENT CDCl3
 NS 17065
 DS 2
 SWH 30120.482 Hz
 FIDRES 0.459602 Hz
 AQ 1.0879476 sec
 RG 9195.2
 DW 16.600 usec
 DE 6.00 usec
 TE 291.9 K
 D1 2.00000000 sec
 d11 0.03000000 sec
 MCREST 0.00000000 sec
 MCMRK 0.01500000 sec

==== CHANNEL f1 =====
 NUC1 13C
 P1 2.40 usec
 PL1 -6.00 dB
 SF01 75.4752958 MHz

==== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 120.00 dB
 PL12 16.00 dB
 SF02 300.1315007 MHz

F2 - Processing parameters
 SI 131072
 SF 75.4677662 MHz
 MDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
 F1P 149.387 ppm
 F1 11273.91 Hz
 F2P 145.667 ppm
 F2 10993.15 Hz
 PPMCM 0.16911 ppm/cm
 -ZCM 12.76202 Hz/cm



Current Data Parameters

NAME yanght040107-2c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters

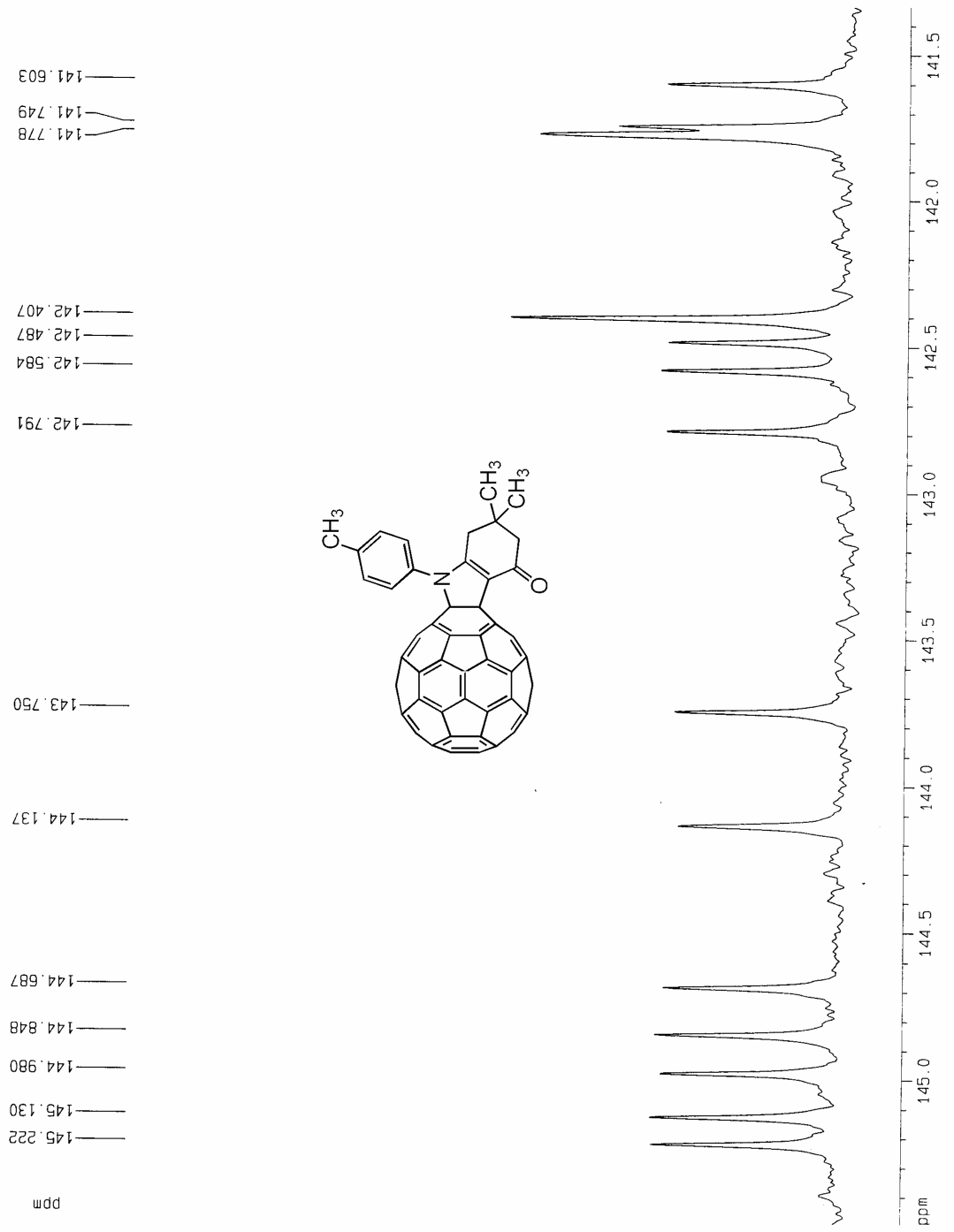
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 NS 17055
 DS 2
 SWH 30120.482 Hz
 FIDRES 0.459602 Hz
 AQ 1.0879476 sec
 RG 9195.2
 DW 16.600 usec
 DE 6.00 usec
 TE 291.9 K
 D1 2.0000000 sec
 d11 0.0300000 sec
 MCREST 0.0000000 sec
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===== CHANNEL f1 =====
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 PL1 -6.00 dB
 SF01 75.4752958 MHz

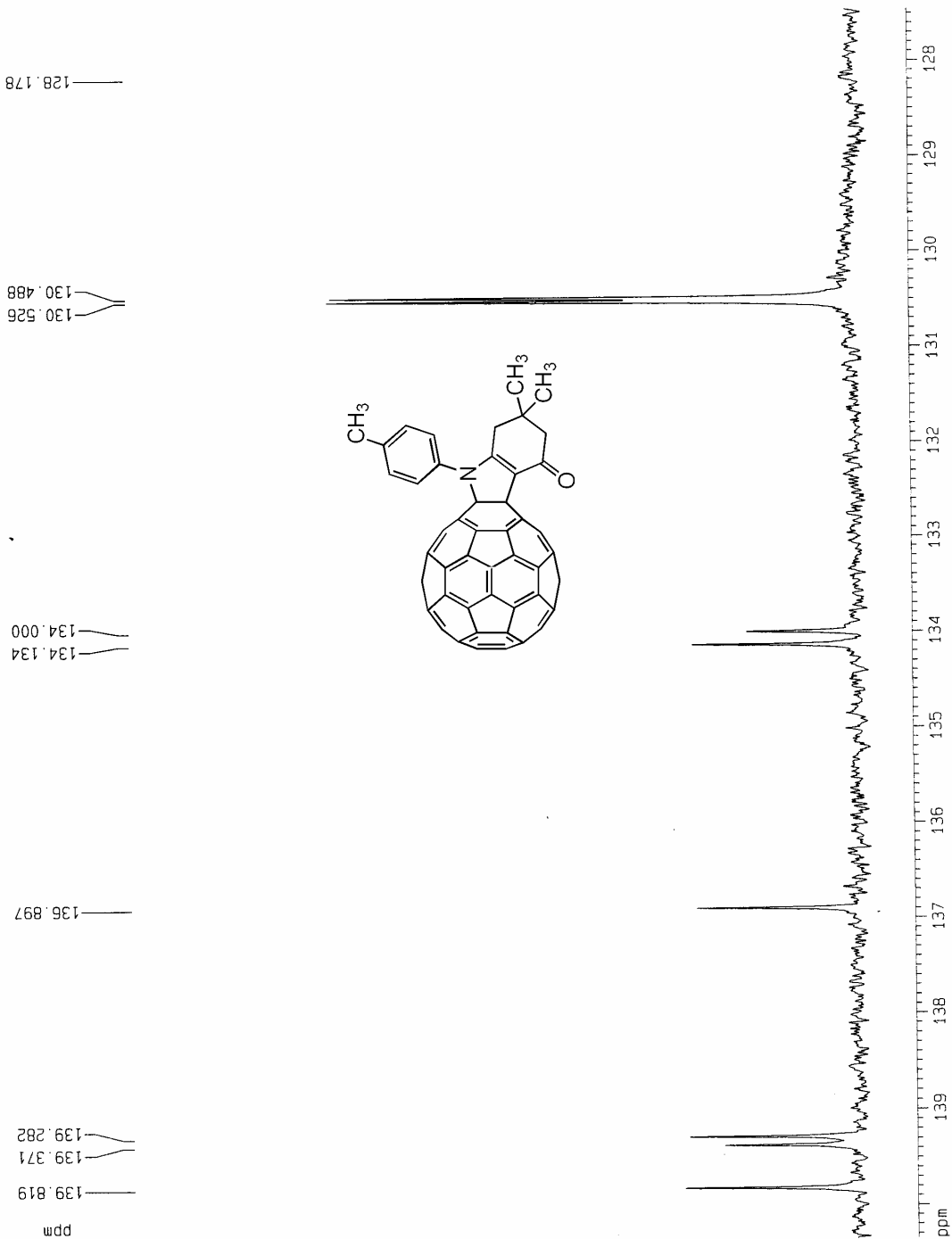
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 NU2C 1H
 PCPD2 80.00 usec
 PL2 120.00 dB
 PL12 16.00 dB
 SF02 300.1315007 MHz

F2 - Processing parameters
 SI 131072
 SF 75.4677662 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
 F1P 145.492 ppm
 F1 10979.93 Hz
 F2P 141.334 ppm
 F2 10666.19 Hz
 PPMCM 0.1897 ppm/cm
 HZCM 14.26128 Hz/cm



¹³C NMR spectrum of 2a



Current Data Parameters
 NAME yang1040107-2c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20050110
 Time 17.27
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zgdc
 TD 65536
 SOLVENT CDCl3
 NS 17065
 DS 2
 SWH 30120.482 Hz
 FIDRES 0.459602 Hz
 AQ 1.0879475 sec
 RG 9195.2
 DM 16.600 usec
 DE 6.00 usec
 TE 291.9 K
 D1 2.0000000 sec
 d11 0.0300000 sec
 MCREST 0.0000000 sec
 MCWRK 0.0150000 sec

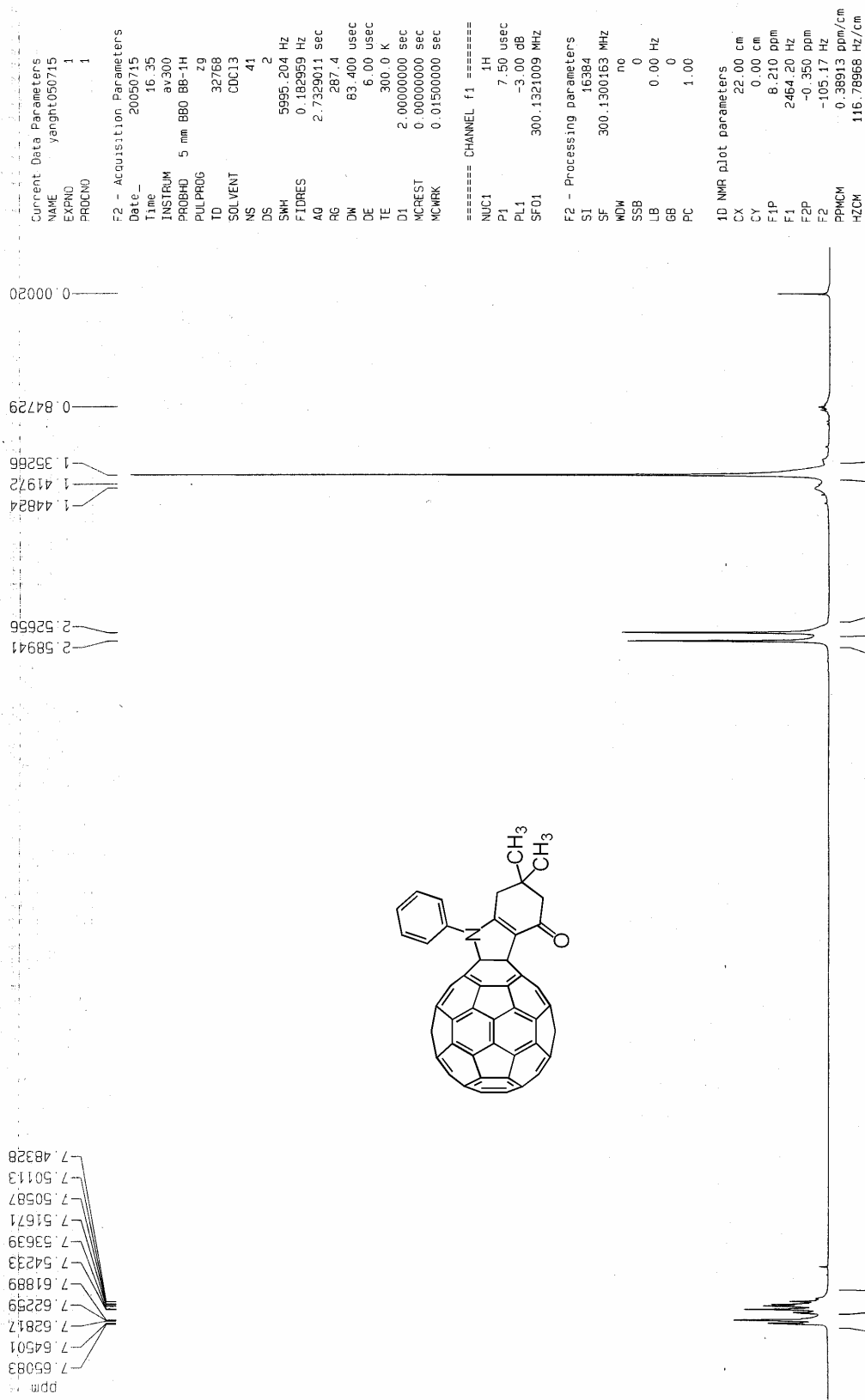
==== CHANNEL f1 =====
 NUC1 13C
 P1 2.40 usec
 PL1 -6.00 dB
 SF01 75.4752958 MHz

==== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 120.00 dB
 PL12 16.00 dB
 SF02 300.1315007 MHz

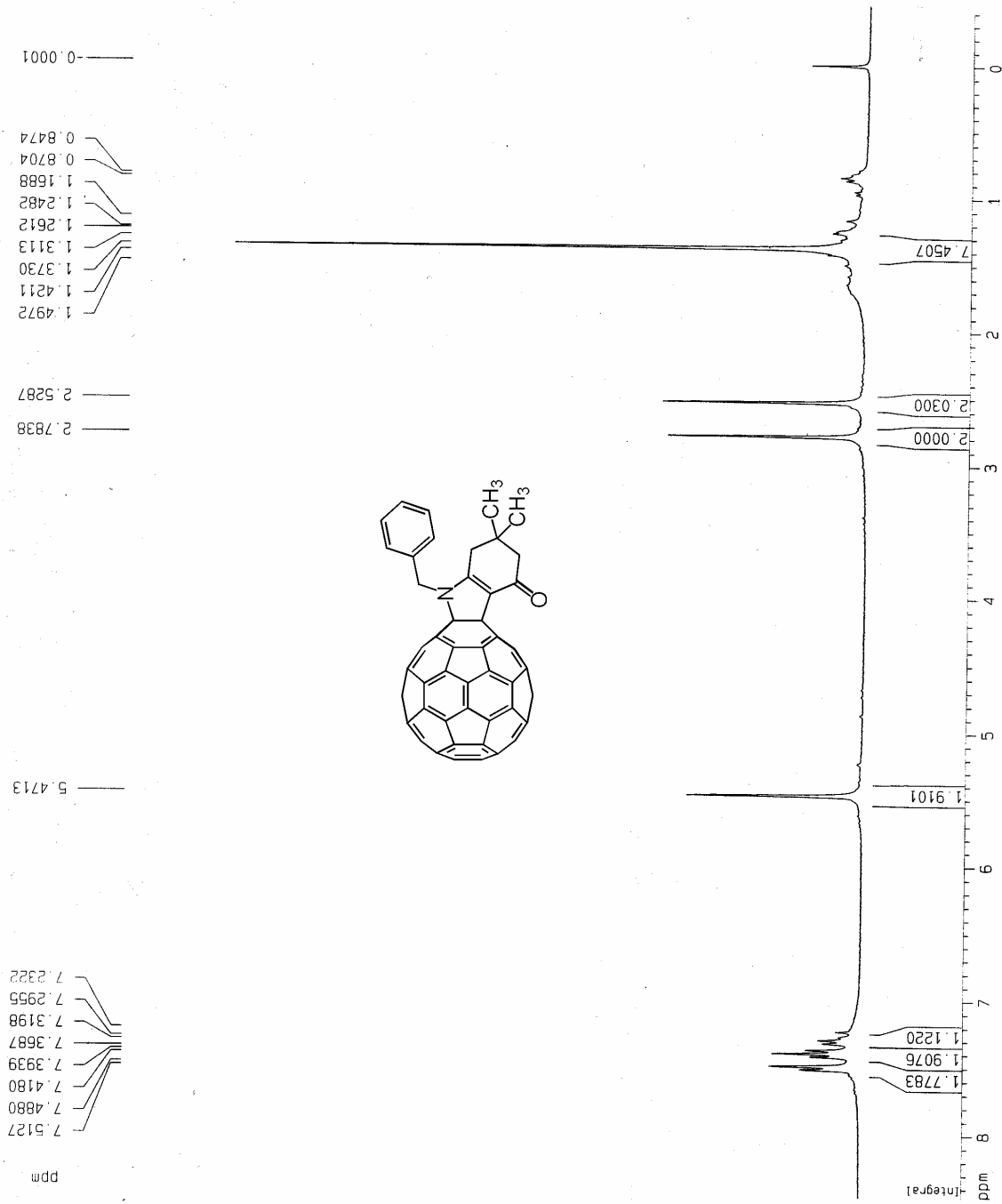
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 SI 131072
 SF 75.4677662 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
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 F1 10592.11 Hz
 F2P 127.452 ppm
 F2 9618.54 Hz
 PPMCM 0.58639 ppm/cm
 HZCM 44.25326 Hz/cm

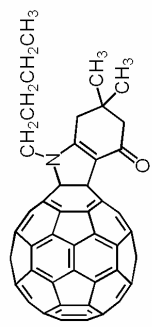
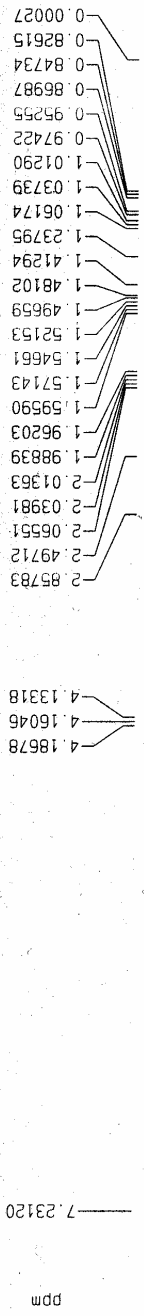
¹H NMR spectrum of 2b



¹H NMR spectrum of 2c



¹H NMR spectrum of 2d



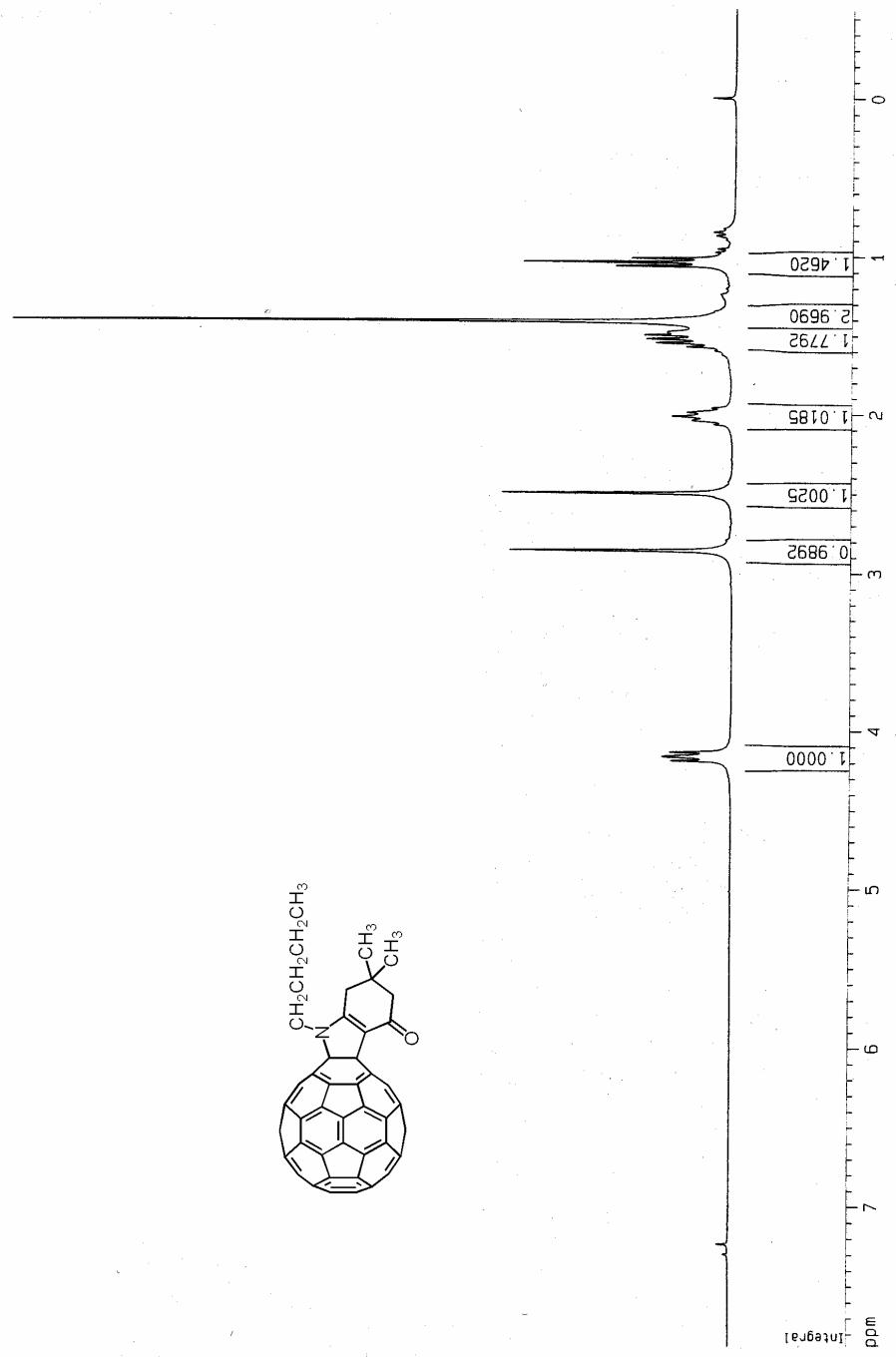
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 EXPNO 1
 PROCNO 1

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 Date_ 20050523
 Time 15.28
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 32
 DS 2
 SWH 5995.204 Hz
 FIDRES 0.182959 Hz
 AQ 2.7329011 sec
 RG 203.2
 DM 83.400 usec
 DE 6.00 usec
 TE 297.5 K
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 MCREST 0.00000000 sec
 MCNRK 0.01500000 sec

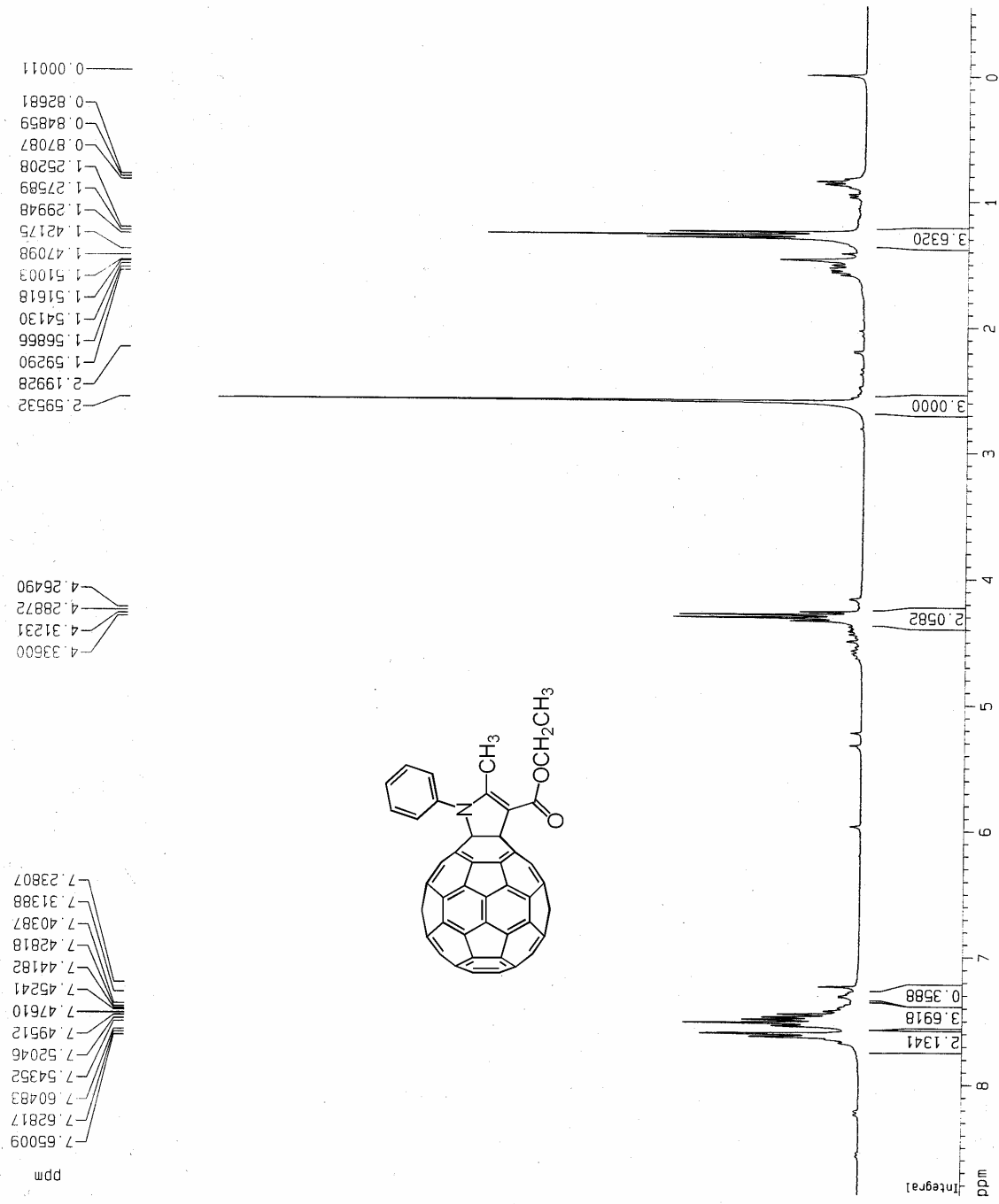
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 PL1 -3.00 dB
 SF01 300.1321009 MHz

F2 - Processing parameters
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 SF 300.1300152 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
 FIP 7.879 ppm
 F1 2364.82 Hz
 F2P -0.559 ppm
 F2 -167.64 Hz
 PPMCM 0.38354 ppm/cm
 HZCM 115.11167 Hz/cm



¹H NMR spectrum of 2e



Current Data Parameters
 NAME yangt050526
 EXPNO 1
 PROCNO 1

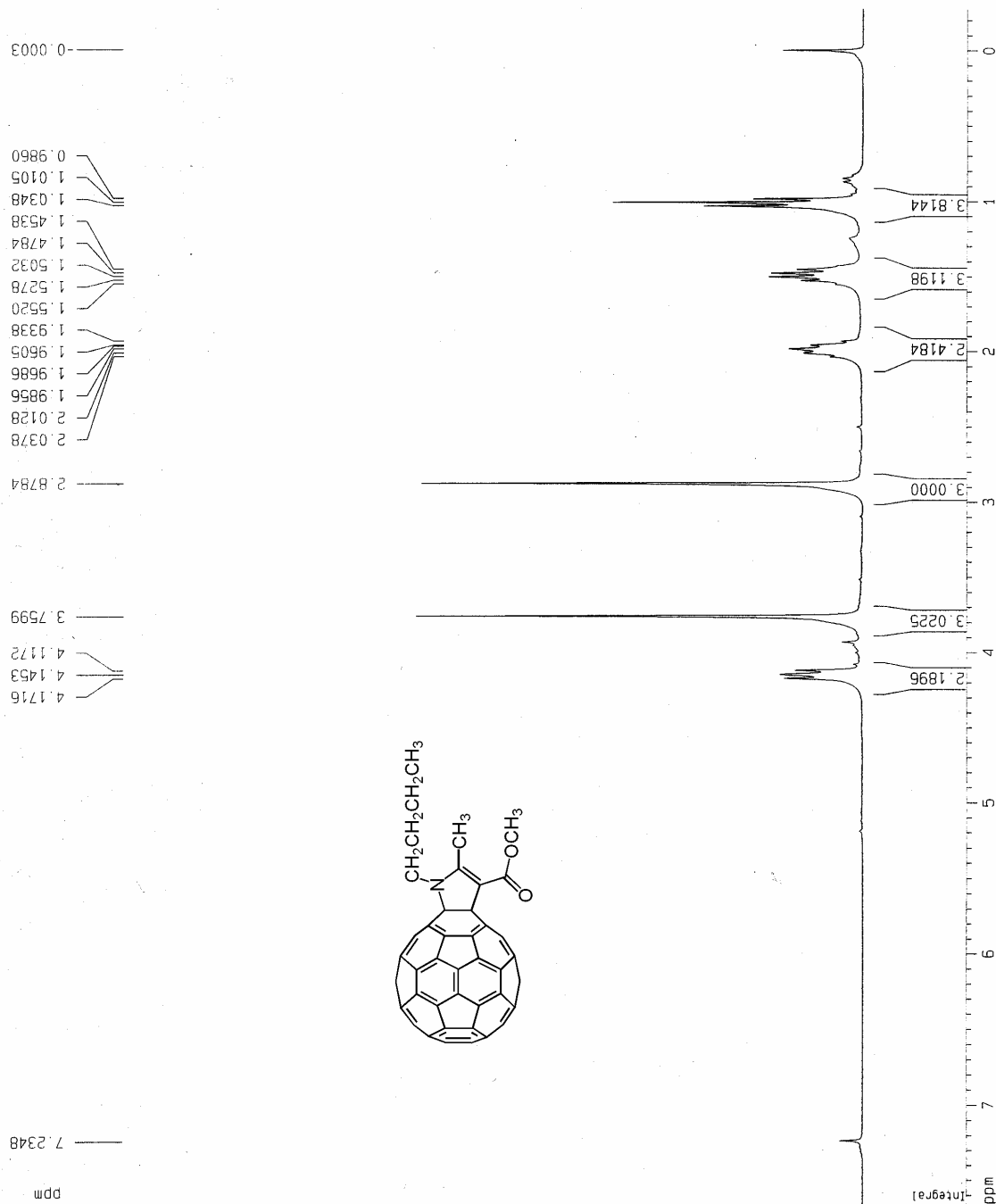
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 Time 15 25
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 PROBHD 5 mm BBO BB-1H
 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 32
 DS 2
 SWH 5995.204 Hz
 FIDRES 0.162959 Hz
 AQ 2.7329011 sec
 RG 322.5
 DW 83.400 usec
 DE 6.00 usec
 TE 296.5 K
 D1 2.00000000 sec
 MCREST 0.00000000 sec
 MCWRR 0.01500000 sec

==== CHANNEL f1 =====
 NUC1 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SF01 300.1321009 MHz

F2 - Processing parameters
 SI 16384
 SF 300.1300141 MHz
 MDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

4D NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
 FJP 8.882 ppm
 F1 2665.68 Hz
 F2P -0.555 ppm
 F2 -166.54 Hz
 PPMCM 0.42894 ppm/cm
 HZCM 128.73714 Hz/cm

¹H NMR spectrum of 2f



Current Data Parameters
 NAME yanght050627
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20050627

Time 15.03
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 32
 DS 2
 SWH 5995.204 Hz
 FIDRES 0.091480 Hz
 AQ 5.4657526 sec
 RG 362
 DM 83.400 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 MCREST 0.00000000 sec
 MCHRK 0.01500000 sec

===== CHANNEL f1 =====
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 P1 7.50 usec
 PL1 -3.00 dB
 SF01 300.1321009 MHz

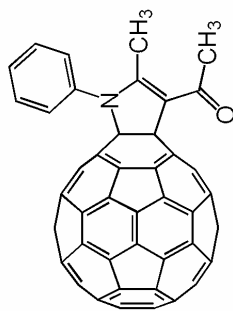
F2 - Processing parameters
 SI 16384
 SF 300.1300137 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

ID NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
 F1P 7.650 Dpm
 F1 2298.85 Hz
 F2P -0.278 Dpm
 F2 -83.48 Hz
 PPMCM 0.36080 Dpm/cm
 HZCM 108.28774 Hz/cm

¹H NMR spectrum of 2g

7.2324
7.3726
7.3990
7.4599
7.4823
7.5063
7.5167
7.5419
7.5637
7.6388
7.6614
7.7017
7.7277
ppm

2.8946
2.6663
2.5877
2.5248
2.0523
1.4851
1.2384
0.8617
0.8381
-0.0122



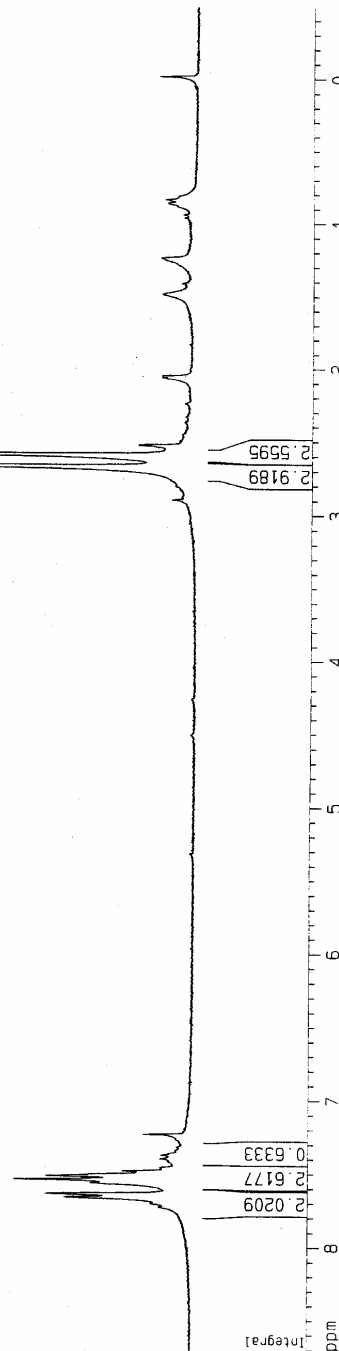
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 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 64
 DS 2
 SWH 5995.204 Hz
 FIDRES 0.182959 Hz
 AQ 2.7329011 sec
 RG 287.4
 DW 83.400 usec
 DE 6.00 usec
 TE 296.7 K
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 MCREST 0.00000000 sec
 MCWPK 0.01500000 st

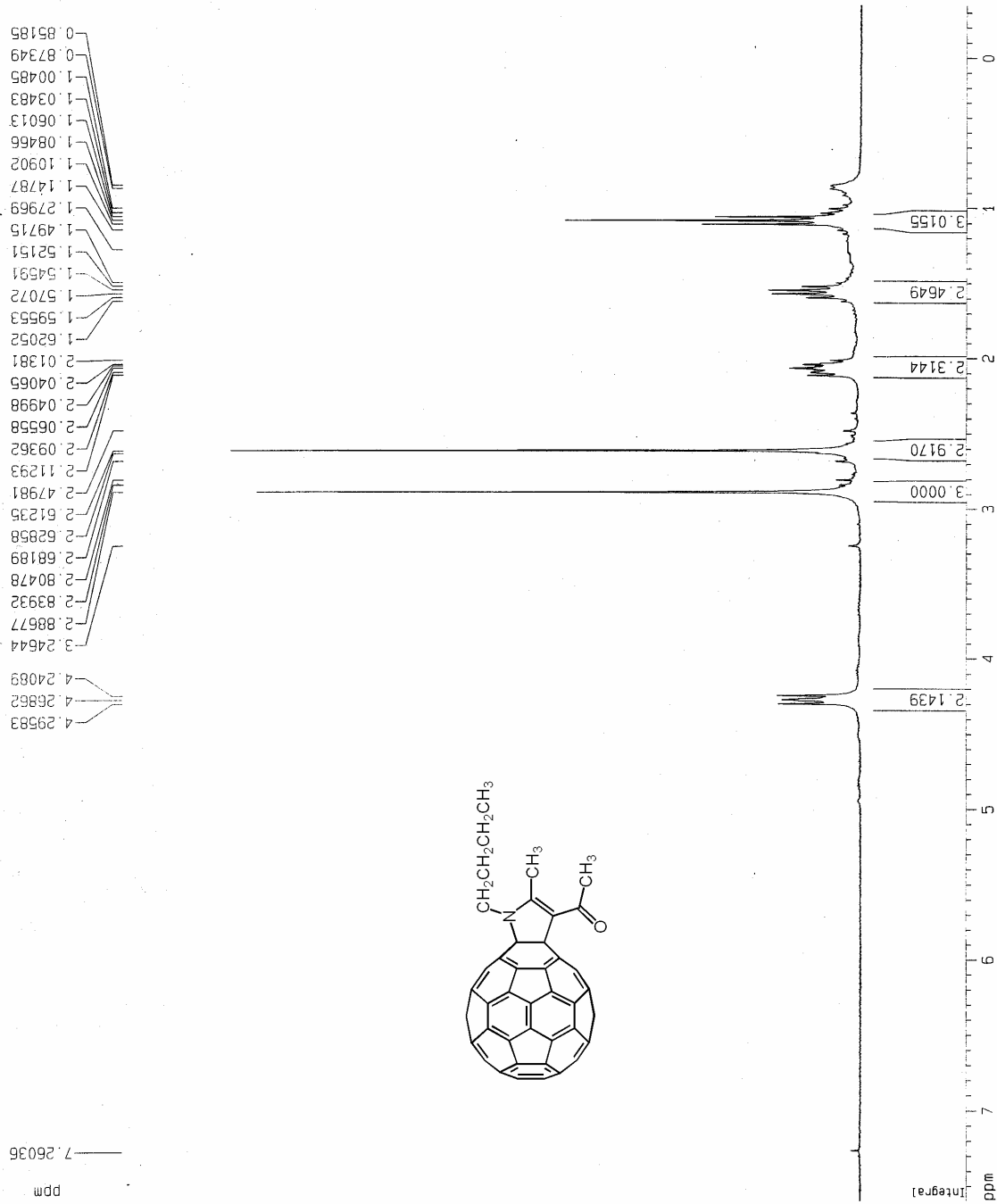
==== CHANNEL f1 =====
 NUC1 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SF01 300.1321009 MHz

F2 - Processing parameters
 SI 16384
 SF 300.1300152 MHz
 MDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
 F1P 8.705 ppm
 F1 2612.90 Hz
 F2P -0.490 ppm
 F2 -146.96 Hz
 PPMCM 0.41798 ppm/cm
 HZCM 125.44823 Hz/cm



¹H NMR spectrum of 2h



Current Data Parameters
 NAME Yanght050711
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20050711
 Time 17.30
 INSTRUM av300
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 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 64
 DS 2
 SMH 5995.204 Hz
 FIDRES 0.182959 Hz
 AQ 2.7329011 sec
 RG 406.4
 DM 83.400 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 MCREST 0.00000000 sec
 MCMRK 0.01500000 sec

===== CHANNEL f1 =====
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 P1 7.50 usec
 PL1 -3.00 dB
 SF01 300.1321009 MHz

F2 - Processing parameters
 SI 16384
 SF 300.1300065 MHz
 MDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.00 cm
 CY 0.00 cm
 F1P 7.594 ppm
 F1 2279.33 Hz
 F2P -0.350 ppm
 F2 -105.12 Hz
 PPMCM 0.36112 ppm/cm
 HZCM 108.38436 Hz/cm