

Supporting Information

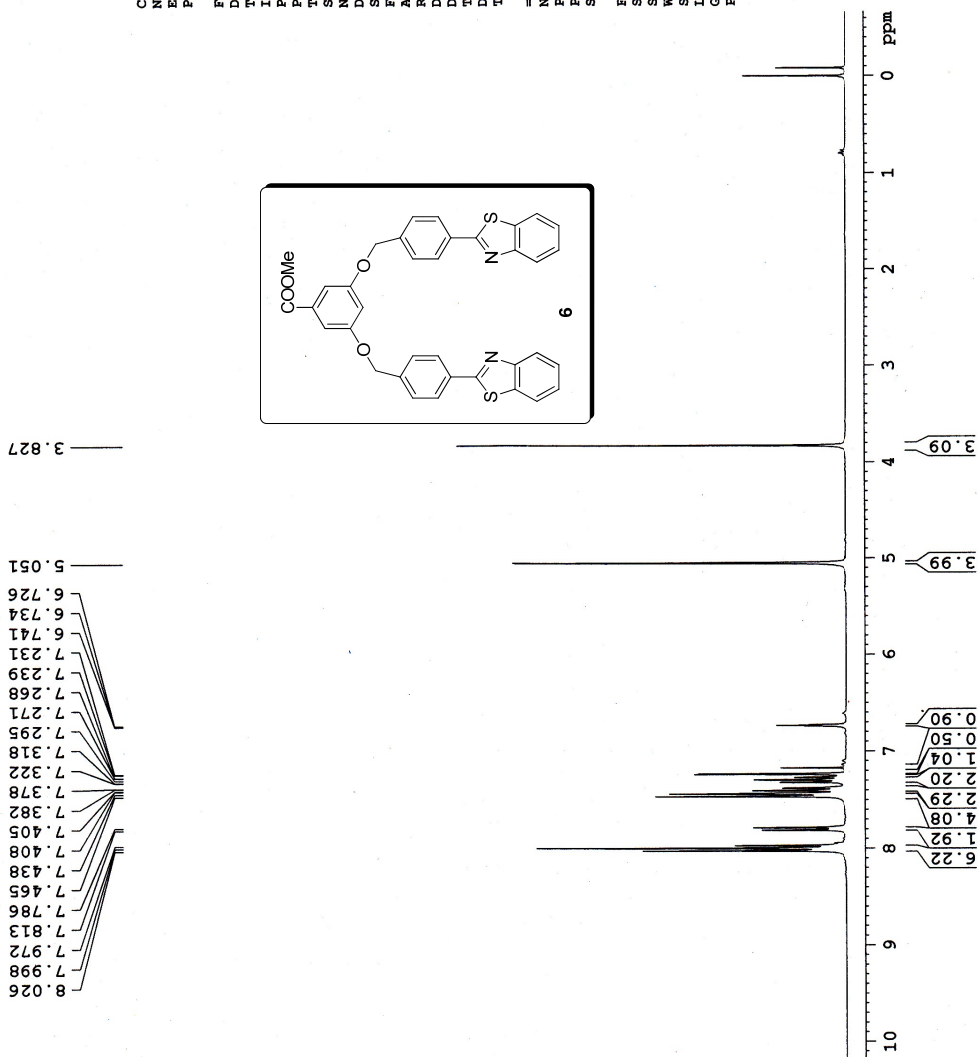
Synthesis, photophysical and electrochemical properties of Fréchet type dienone core dendrimers with benzothiazole surface unit

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Spectroscopic data for dendrons 6, 8, 9, 11 and second generation dendrimers 3

Spectroscopic data

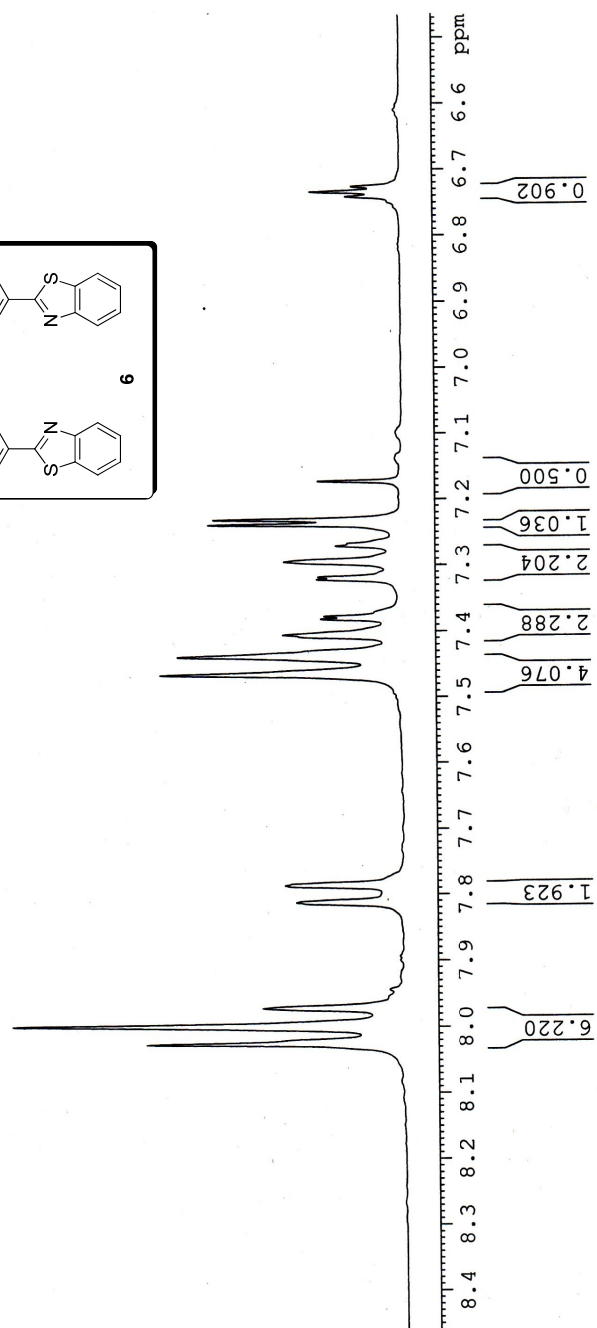
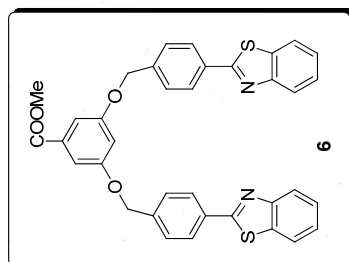


Current Data Parameters
NAME VKBT-25
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20090512
Time_ 14.29
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 6172.839 Hz
FIDRES 0.094190 Hz
AQ 5.3084660 sec
RG 114
DW 81.000 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 12.40 usec
PL1 0.00 dB
SFO1 300.1318534 MHz

F2 - Processing parameters
SI 32768
SF 300.1300320 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Expanded ¹H NMR Spectrum (CDCl₃, 300 MHz) of the compound 6



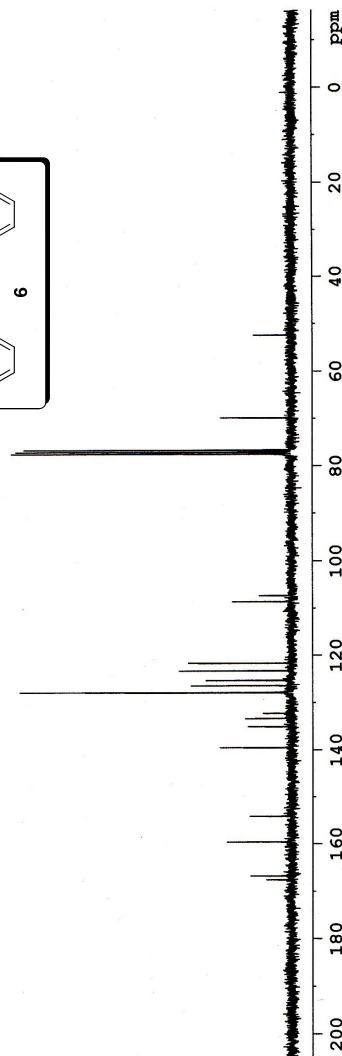
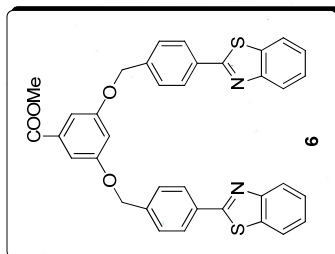
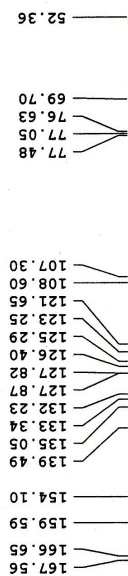
Current Data Parameters
NAME VKET-25
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
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Time 14.37
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 100
DS 4
SWH 17985.611 Hz
FIDRES 0.274439 Hz
AQ 1.8219508 sec
RG 574.7
DW 27.800 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1

===== CHANNEL f1 =====
NUC1 ¹³C
P1 8.10 usec
PL1 -1.00 dB
SFO1 75.4752953 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 ¹H
PCPD2 80.00 usec
PL2 0.00 dB
PL12 16.19 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR Spectrum (CDCl₃, 75 MHz) of the compound 6

FT2 - Acquisition Parameters	
Date_____	20121219
Time_____	20:39
INSTRUM_____	spect
PROBHD_____	13-1
PULPROG_____	zg30
TD_____	65536
SOLVENT_____	CDCl3
NS_____	16
DS_____	2
SWH_____	6172.839 Hz
FIDRES_____	0.094190 Hz
AQ_____	5.3084660 sec
RG_____	287.4
WDW_____	81.000
SSB_____	0.000
DE_____	6.00 usec
TE_____	300.0 K
TD_____	1.00000000 sec
TD0_____	1

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===== CHANNEL f1 =====
NUC1      LH
P1        13.15 usec
P1L1      0.00 dB
SF01      300.1318534 MHz

F2 - Processing parameters
SI        32768
SF        300.1300077 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00

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Current Data Parameters
NAME VKC-241
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20121219
Time_ 19.45
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 820
DS 4
SWH 17985.611 Hz
FIDRES 0.274439 Hz
AQ 1.8219508 sec
RG 512
DE 27.800 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1

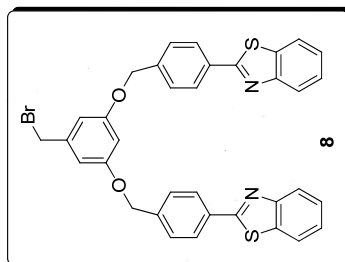
===== CHANNEL f1 =====
NUC1 13C
P1 9.30 usec
PL1 0.00 dB
SFO1 75.4752953 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 0.00 dB
PL12 15.68 dB
PL13 16.00 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
GB 1.00 Hz
FC 1.40

167.55
159.87
154.14
140.02
139.66
135.07
133.35
127.85
127.82
126.38
125.27
123.27
121.64
108.43
102.25

77.45
77.02
76.60
69.61
33.40



200 180 160 140 120 100 80 60 40 20 0 ppm

¹³C NMR Spectrum (CDCl₃, 75 MHz) of the compound 8



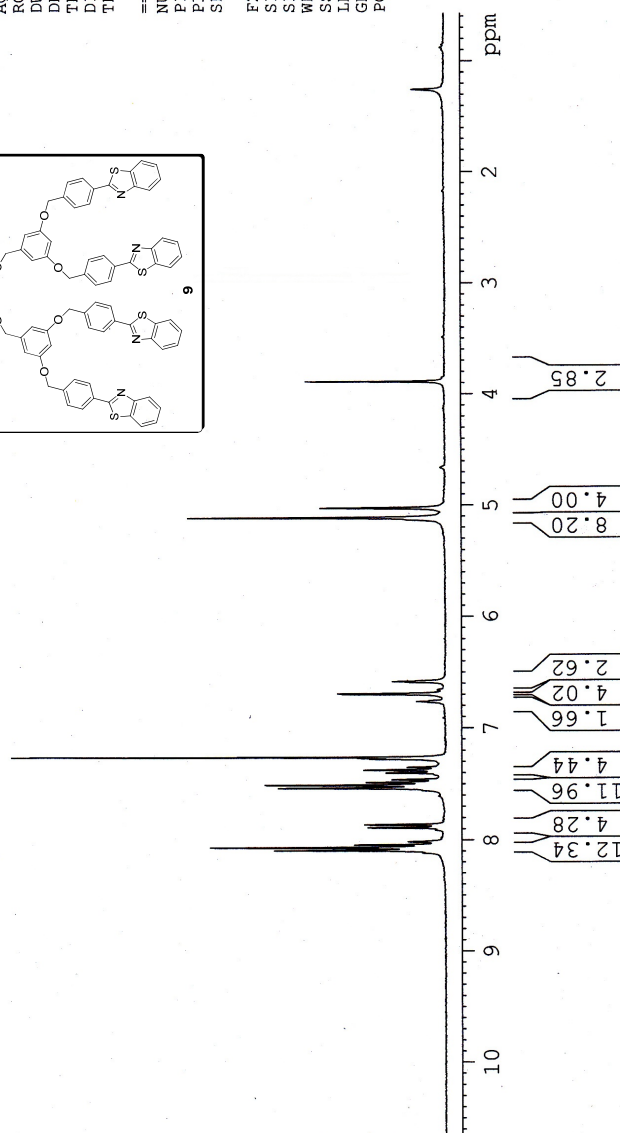
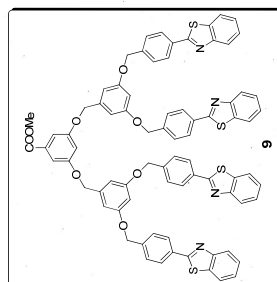
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NAME VKC-245
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20121229
Time_ 5.54
INSTRUM spect
PROBHD 5 mm DUL 13C-1
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 6.00 usec
TE 300.0 K
D1 1.00000000 sec
TD0 1

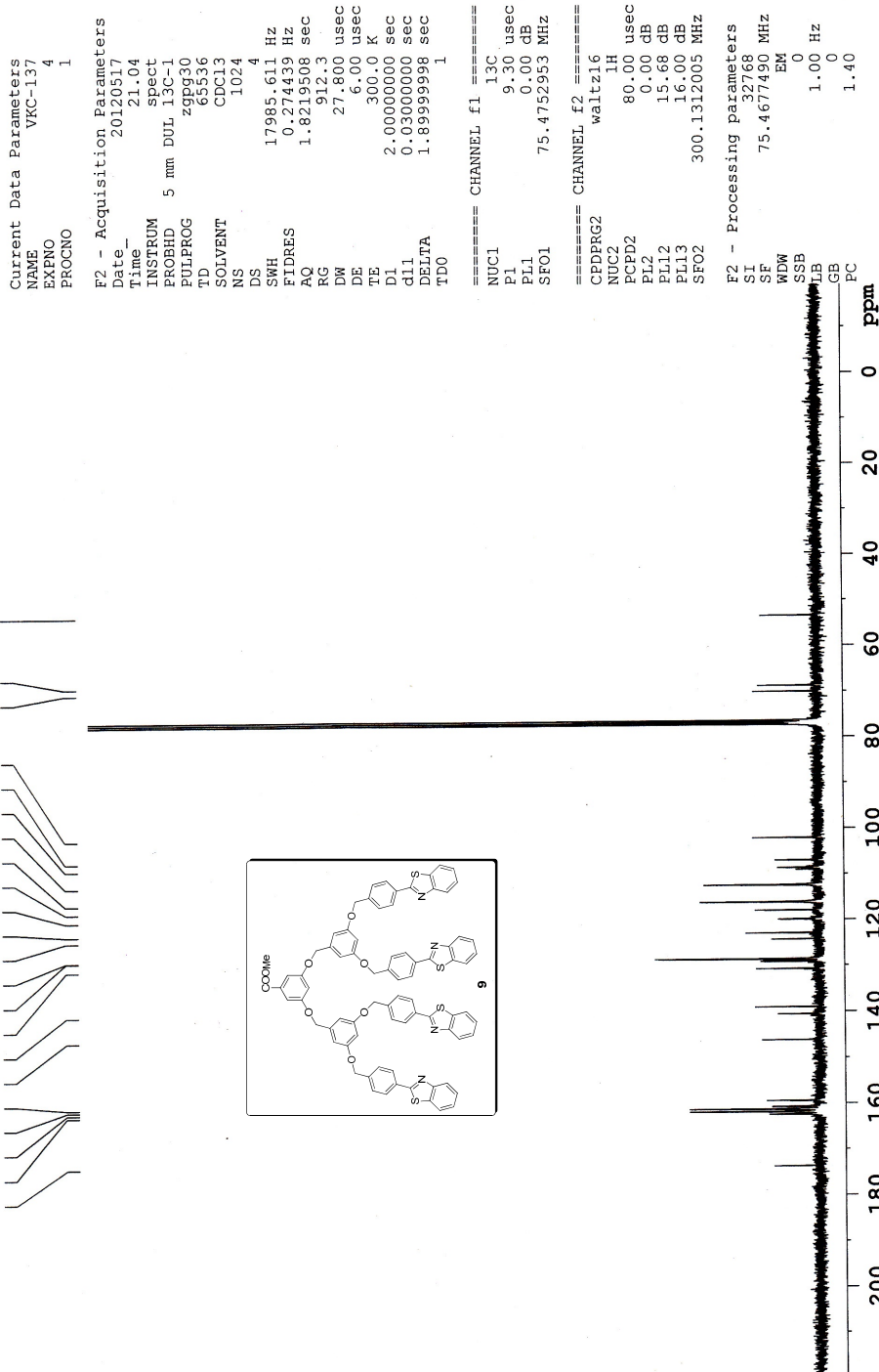
===== CHANNEL f1 =====
NUC1 1H
P1 13.15 usec
PL1 0.00 dB
SFO1 300.1318534 MHz

F2 - Processing parameters
SI 32768
SF 300.1300060 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

8.097
8.070
8.046
8.017
7.891
7.865
7.538
7.511
7.487
7.462
7.403
7.377
7.352
7.280
7.272
7.262
6.771
6.765
6.699
6.693
6.661
6.585
5.114
5.026
3.890



¹H NMR Spectrum (CDCl₃, 300 MHz) of the compound 9



¹³C NMR Spectrum (CDCl₃, 75 MHz) of the compound 9



Current Data Parameters
NAME VKC-251
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters

Date_ 20121228
Time_ 20.03
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 6172.839 Hz
FIDRES 0.094190 Hz
AQ 5.3084660 sec
RG 256
DW 81.000 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec
TD0 1

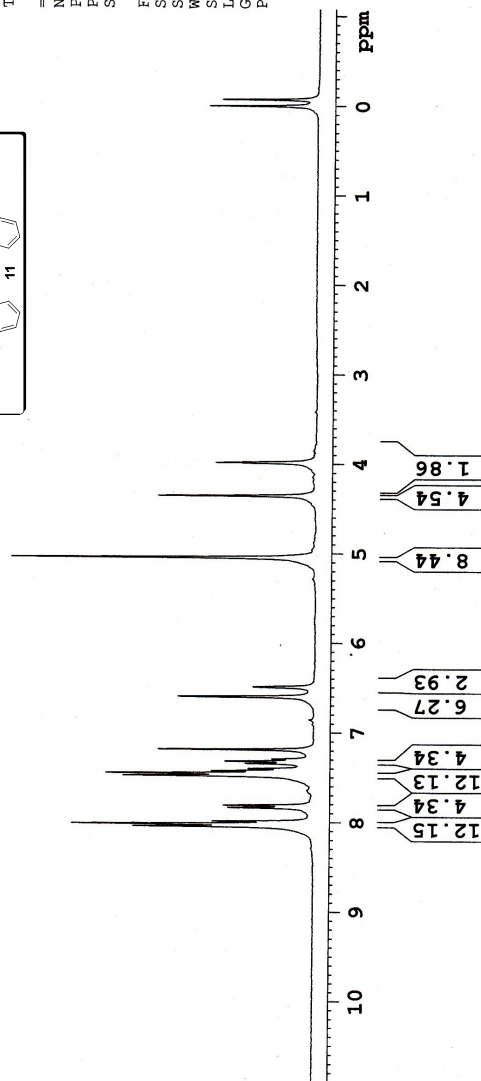
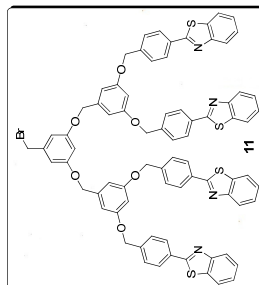
===== CHANNEL f1 =====

NUC1 1H
P1 13.15 usec
PL1 0.00 dB
SFO1 300.1318534 MHz

F2 - Processing parameters

SI 32768
SF 300.1300288 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

8.048
8.021
7.990
7.839
7.812
7.481
7.455
7.429
7.402
7.344
7.319
7.294
7.187
6.601
6.493
5.045
4.356
4.025



¹H NMR Spectrum (CDCl₃, 300 MHz) of the compound 11



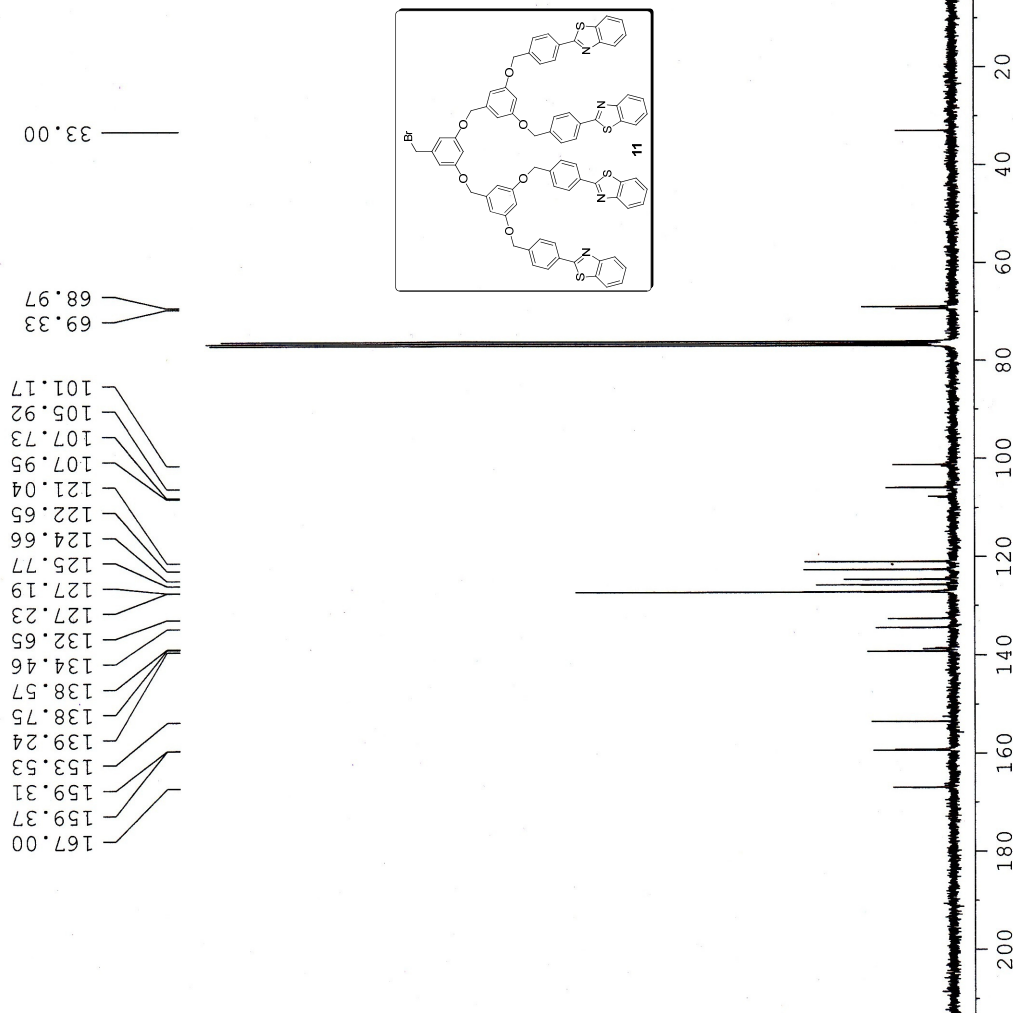
Current Data Parameters
NAME VKC-176
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20121019
Time_ 20.18
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 1024
DS 4
SWH 17985.611 Hz
FIDRES 0.274439 Hz
AQ 1.8219508 sec
RG 1625.5
DW 27.800 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.30 usec
PL1 0.00 dB
SFO1 75.4752933 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 0.00 dB
PL12 15.68 dB
PL13 16.00 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677932 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹³C NMR Spectrum (CDCl₃, 75 MHz) of the compound 11



Current Data Parameters
NAME VKC-260
EXPNO 1
PROCNO 1

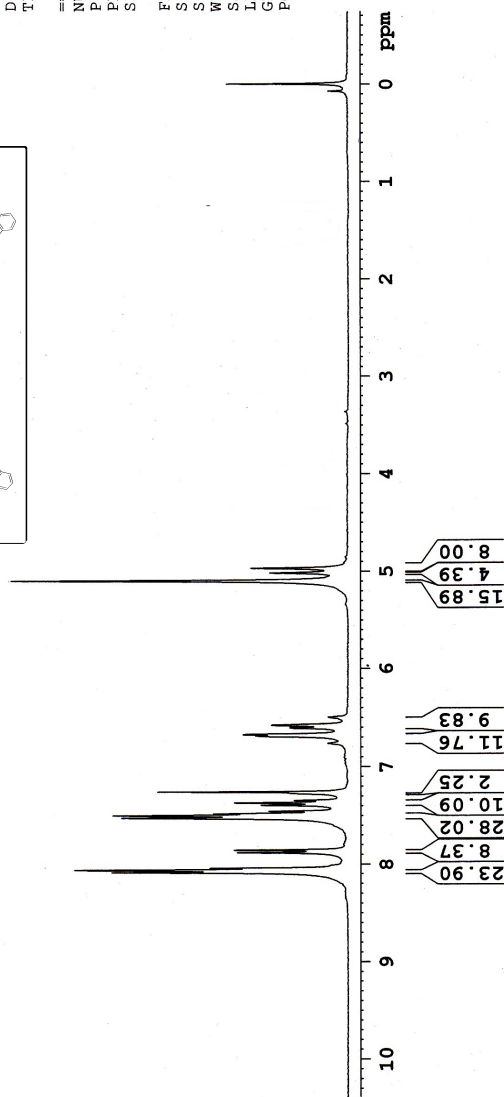
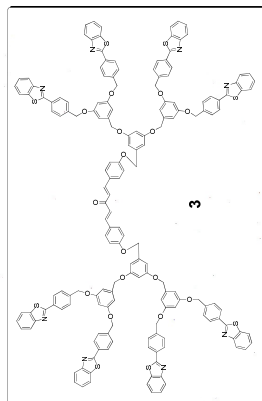
F2 - Acquisition Parameters
Date_ 20130113
Time_ 15.14
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 6172.839 Hz
FIDRES 0.094190 Hz
AQ 5.3084660 sec
RG 256
DW 81.000 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 13.15 usec
PL1 0.00 dB
SFO1 300.1318534 MHz

F2 - Processing parameters
SI 32768
SF 300.1300071 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

0.000

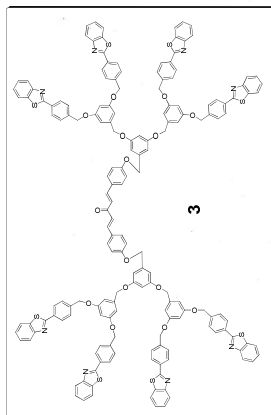
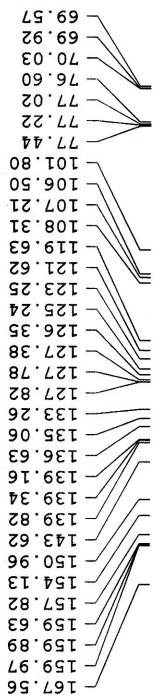
8.089
8.063
8.043
8.015
7.883
7.857
7.528
7.503
7.483
7.457
7.396
7.371
7.347
7.259
6.764
6.689
6.675
6.605
6.578
6.497
5.101
5.019
4.971



¹H NMR Spectrum (CDCl₃, 300 MHz) of the dendrimer 3



0.00



Current Data Parameters
NAME VFC-260
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130113
Time_ 15.28
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 1977
DS 4
SWH 17985.611 Hz
FIDRES 0.274439 Hz
AQ 1.8219508 sec
RG 2298.8
DW 27.800 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TDO 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.30 usec
PL1 0.00 dB
SFO1 75.4752953 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 0.00 dB
PL12 15.68 dB
PL13 16.00 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
GB 1.00 Hz
PC 1.40

¹³C NMR Spectrum (CDCl₃, 75 MHz) of the compound 3