Supporting Information

Synthesis and characterization of bifunctional dendrimers. Preliminary use for the coating of gold surfaces and the proliferation of human osteoblasts (HOB).

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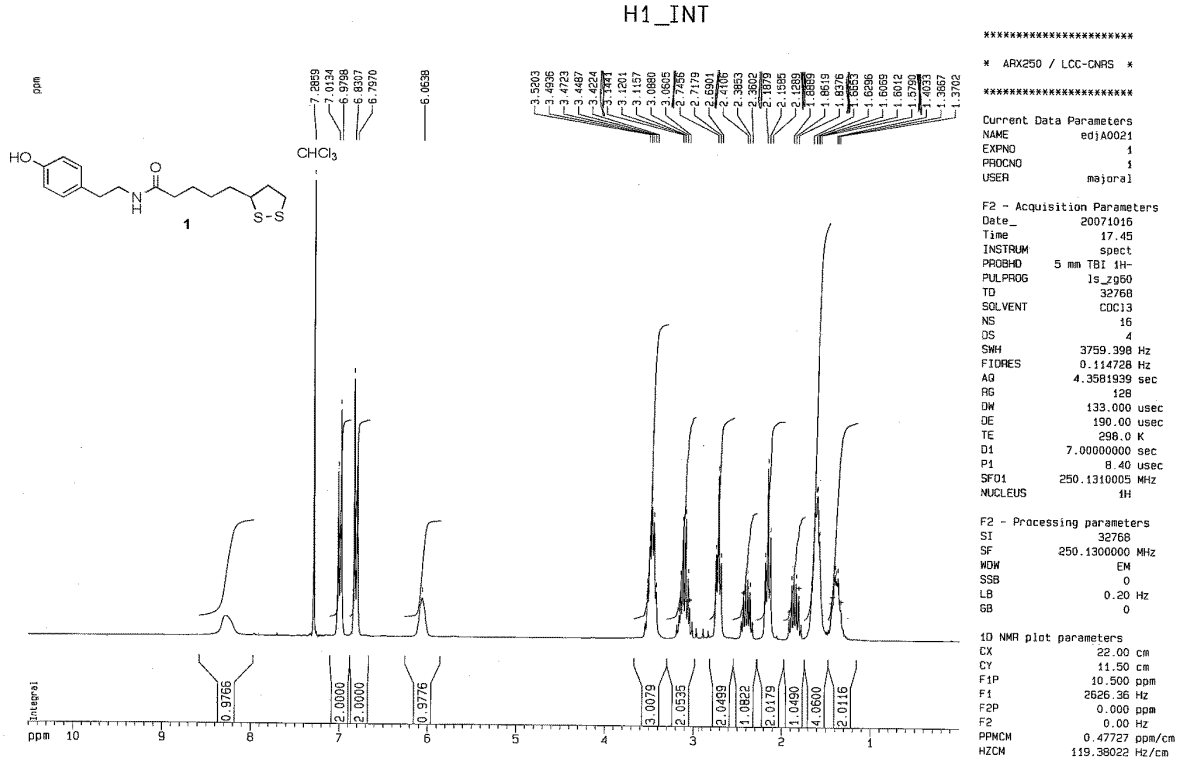
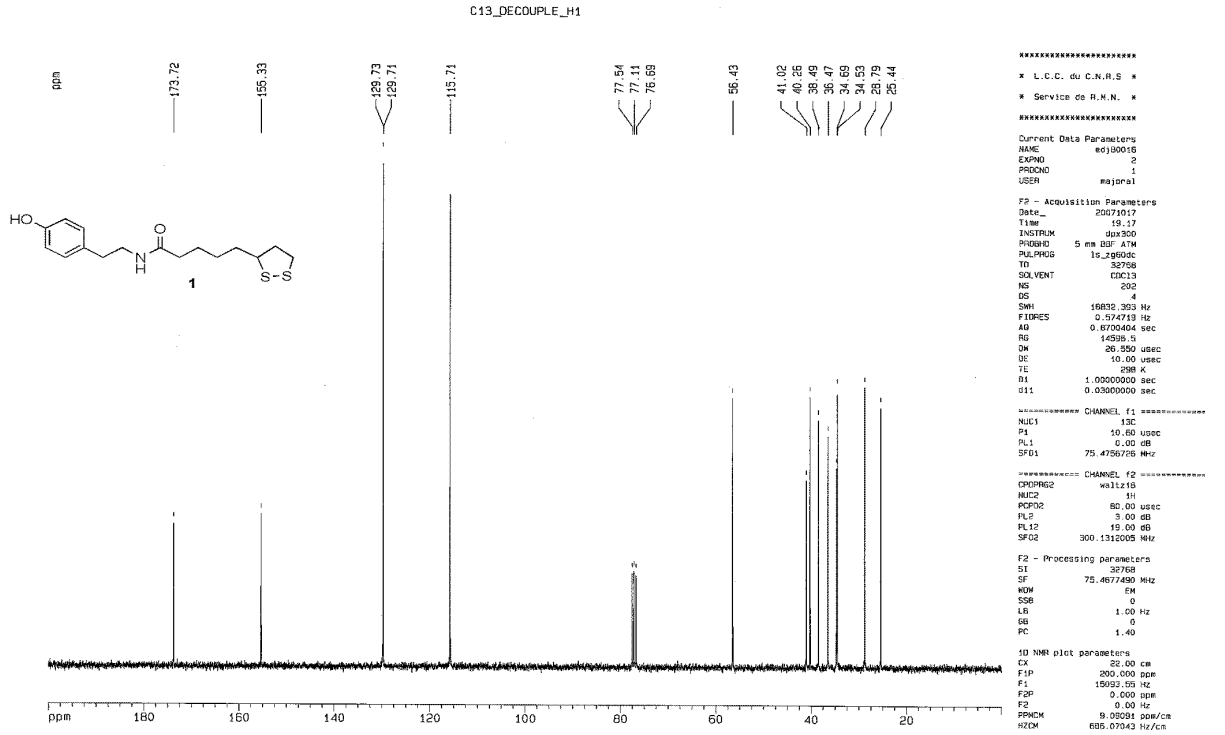
NMR spectra of all compounds

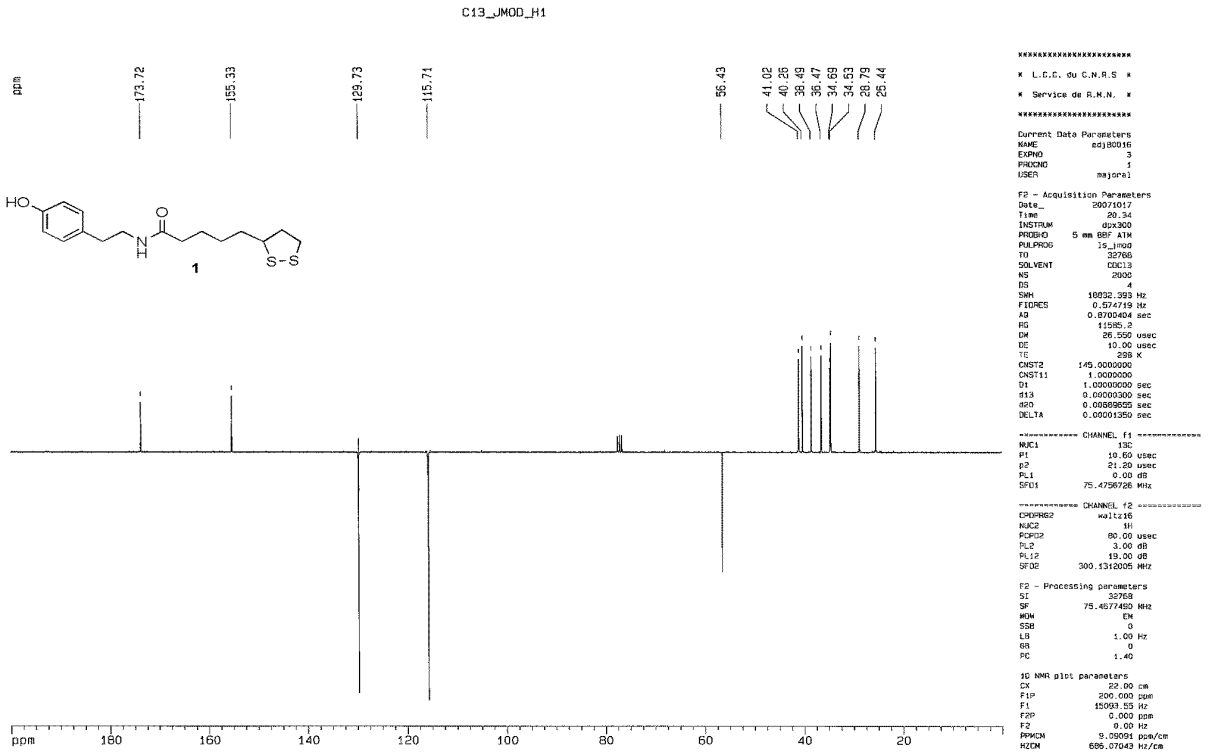
^{1}H NMR spectrum of compound **1**



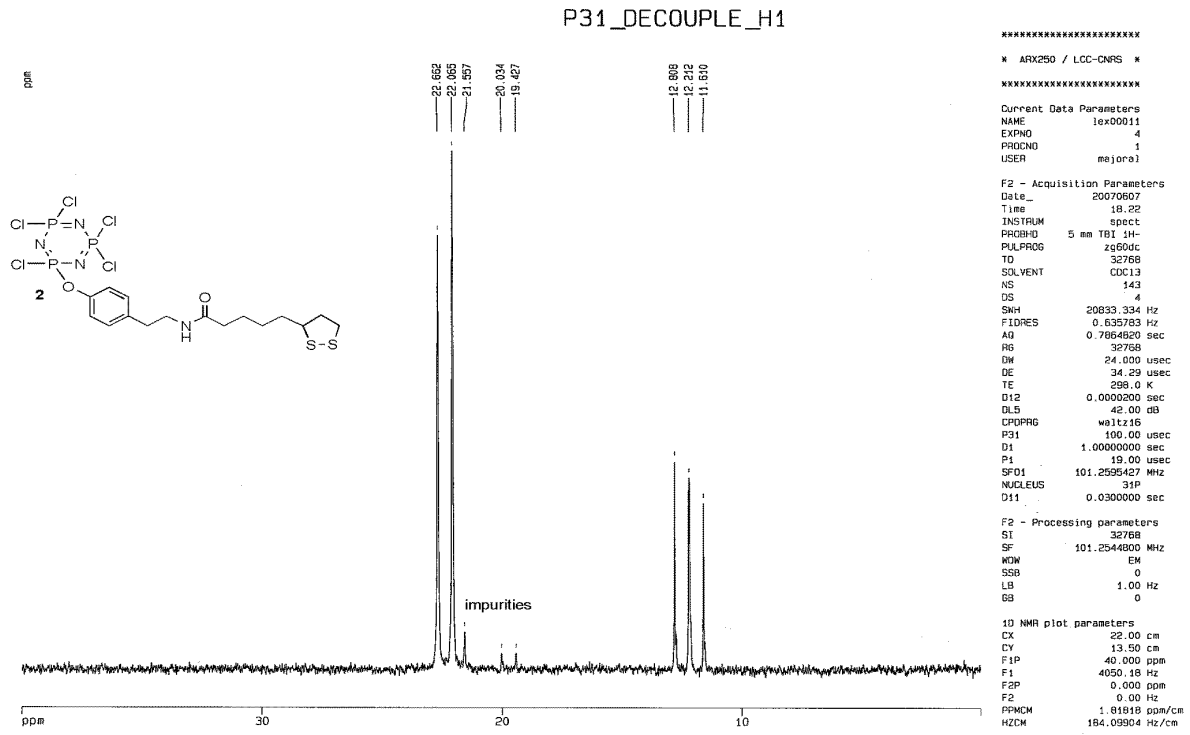
^{13}C {^{1}H} NMR spectrum of compound **1**



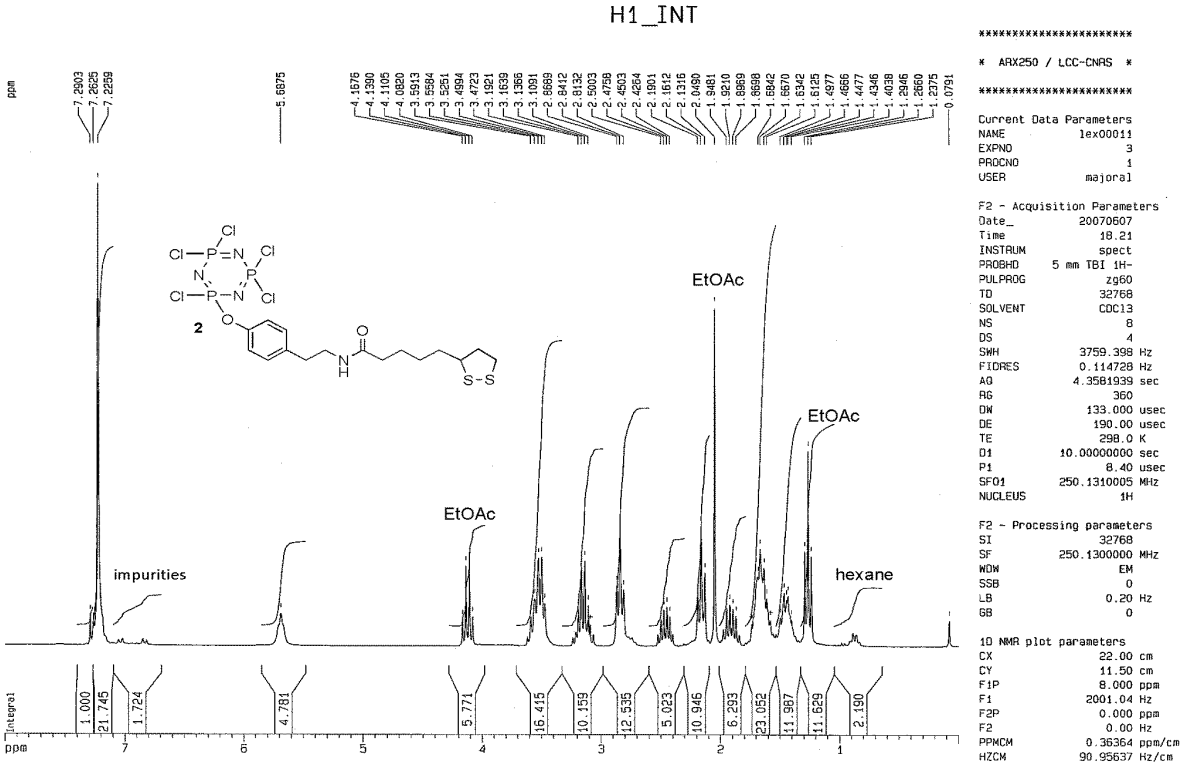
^{13}C Jmod NMR spectrum of compound **1**



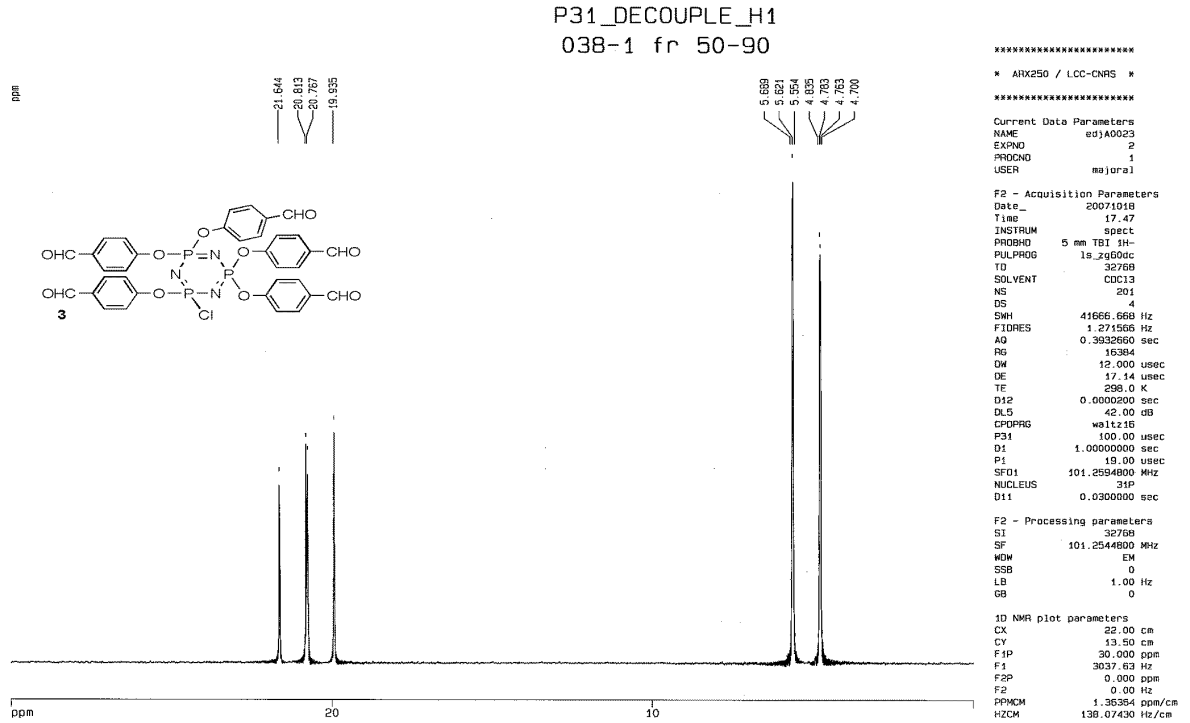
^{31}P {^{1}H} NMR spectrum of compound **2**



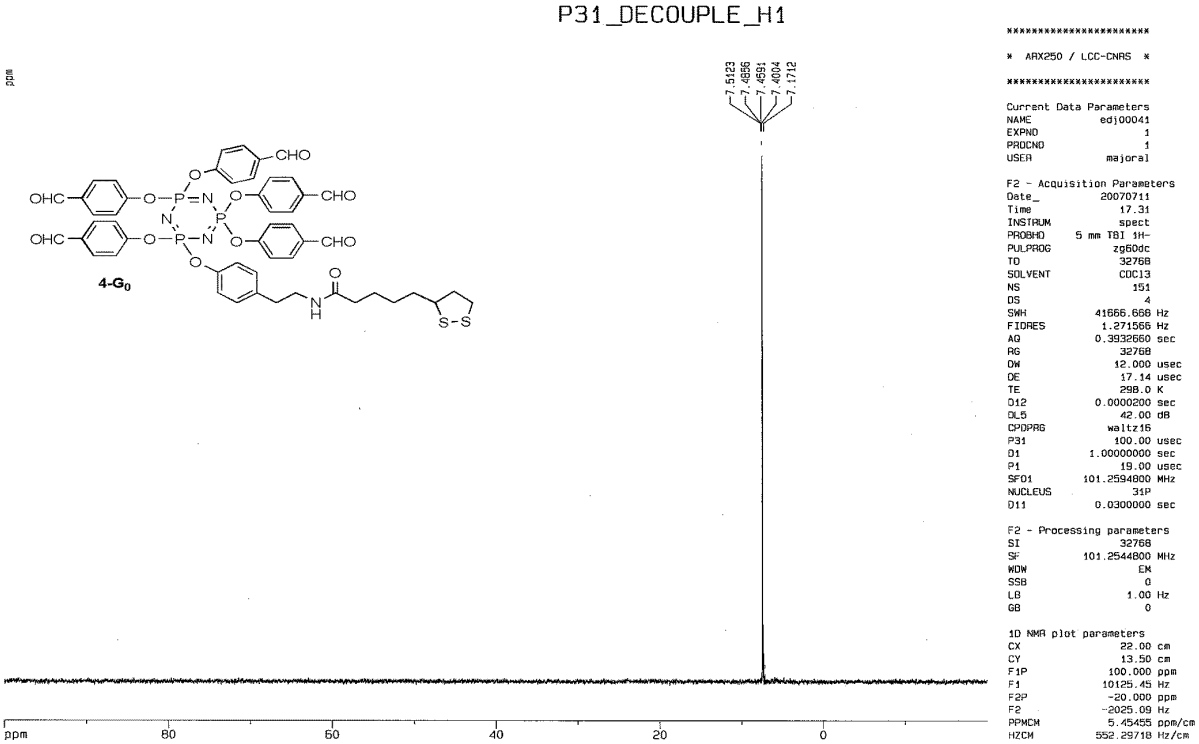
^{1}H NMR spectrum of compound **2**



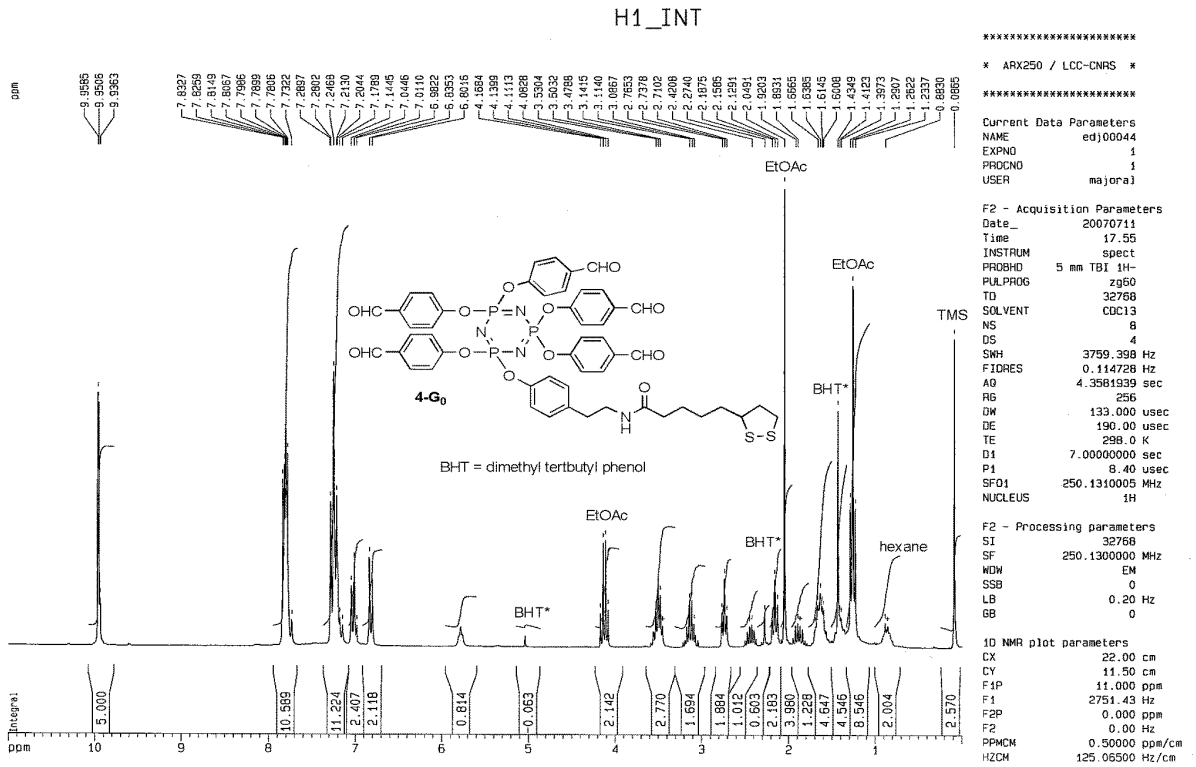
^{31}P {^{1}H} NMR spectrum of compound **3**



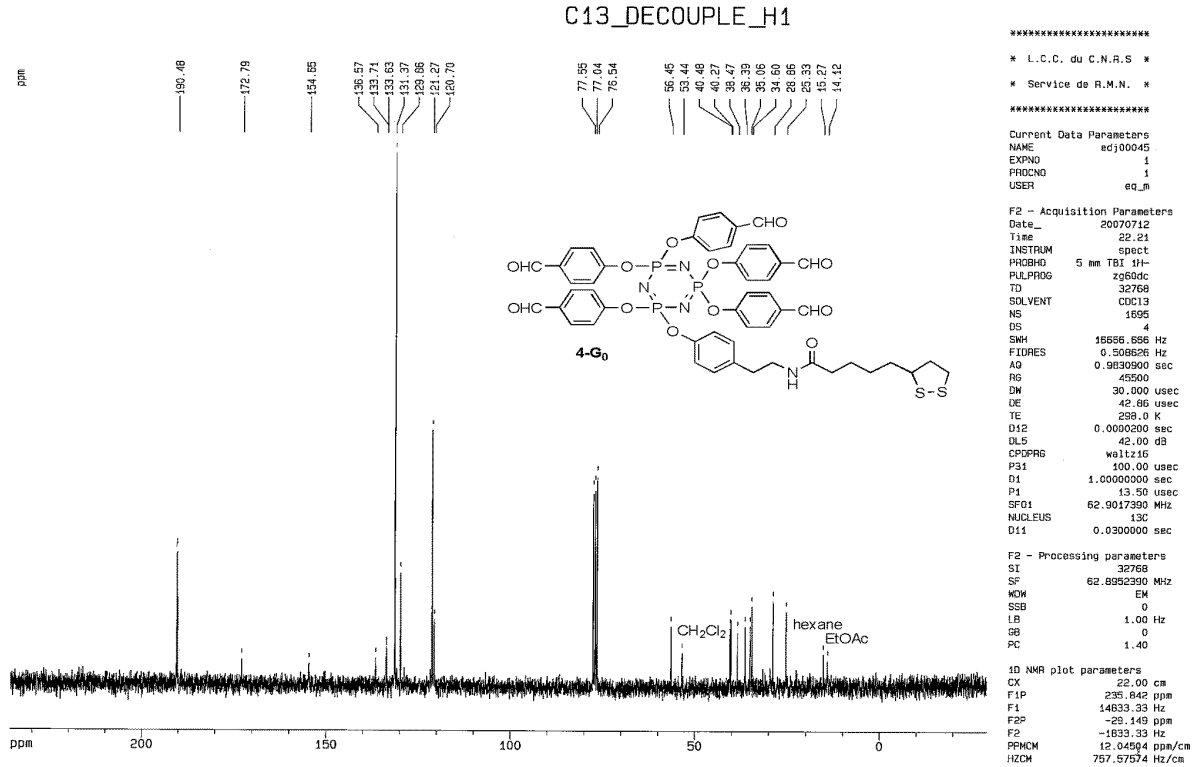
^{31}P {^{1}H} NMR spectrum of compound **4-G_0**



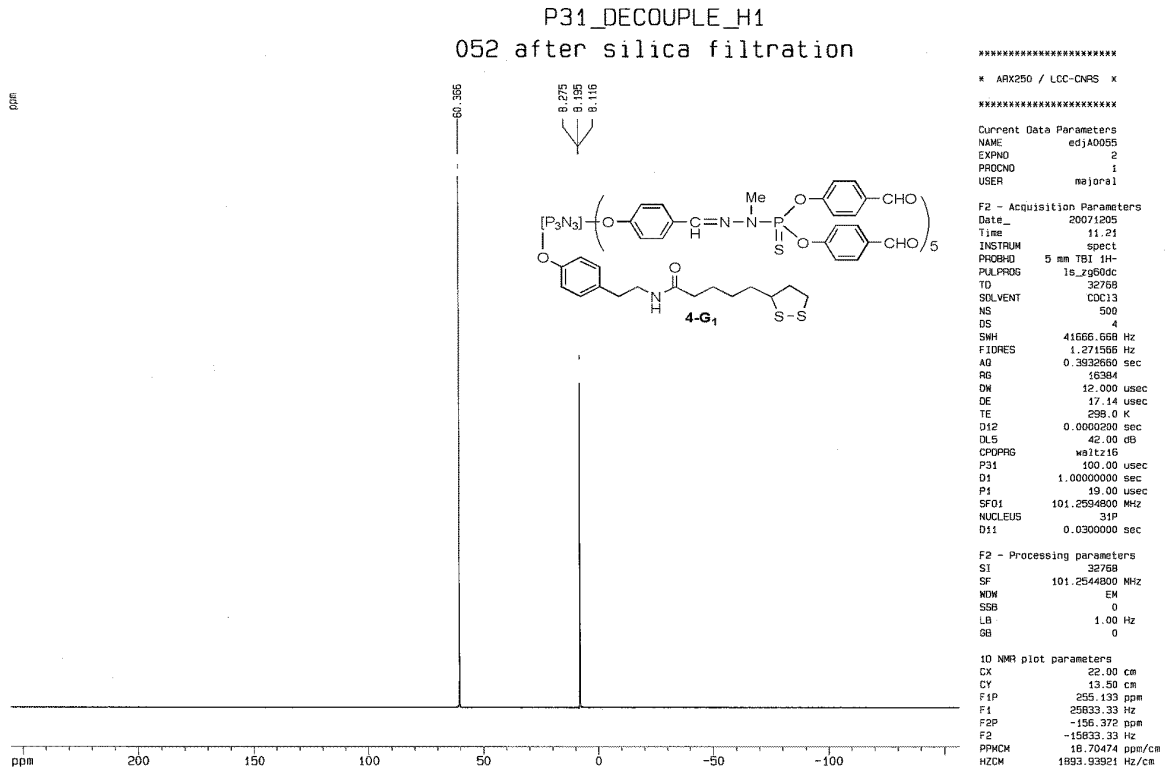
^{1}H NMR spectrum of compound **4-G$_0$**



^{13}C {^{1}H} NMR spectrum of compound **4-G$_0$**



^{31}P {^{1}H} NMR spectrum of compound **4-G$_1$**

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PROCNO                   1
USER              majoral

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TE                  298.0 K
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DL5                 42.00 dB
CPDPRG             waltz16
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P1                  19.00 usec
SFO1           101.2594800 MHz
NUCLEUS               31P
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F2 - Processing parameters
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SSB                      0
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GB                       0

1D NMR plot parameters
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CY                   13.50 cm
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F1               25833.33 Hz
F2P               -156.372 ppm
F2               -15833.33 Hz
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HZCM          1893.93921 Hz/cm
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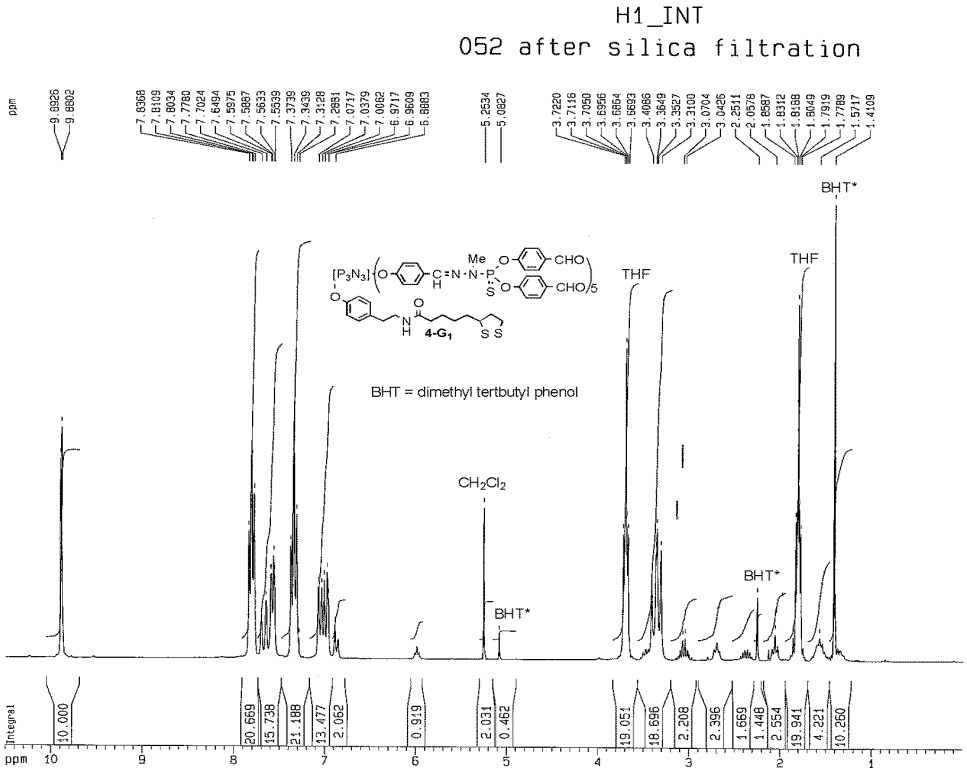
^{1}H NMR spectrum of compound **4-G$_1$**

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**********************
*  ARX250 / LCC-CNRS  *
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PROCNO                   1
USER              majoral

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RG                     128
DW                 132.000 usec
DE                 188.57 usec
TE                  298.0 K
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P1                   8.40 usec
SFO1           250.1310005 MHz
NUCLEUS               1H

F2 - Processing parameters
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WDW                     EM
SSB                      0
LB                    0.20 Hz
GB                       0

1D NMR plot parameters
CX                   22.00 cm
CY                   11.50 cm
F1P                10.500 ppm
F1               2626.36 Hz
F2P                0.000 ppm
F2                 0.00 Hz
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HZCM          119.38022 Hz/cm
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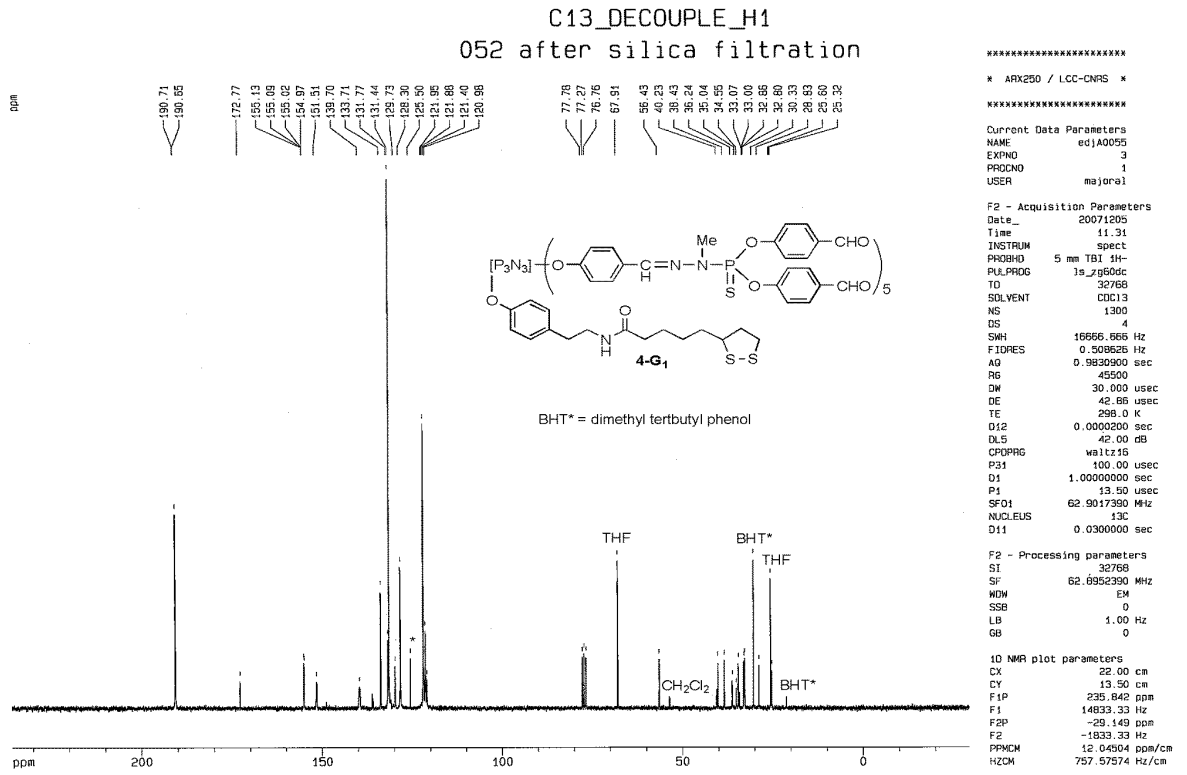
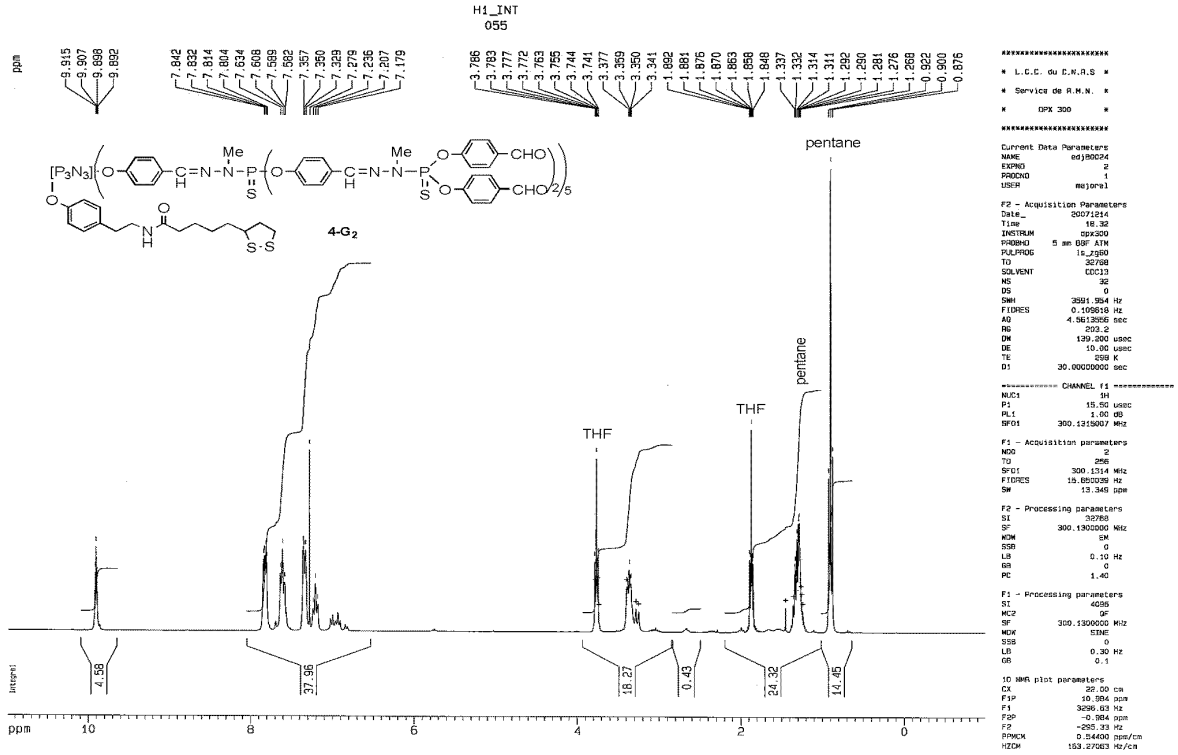
^{13}C {^{1}H} NMR spectrum of compound **4-G$_1$**

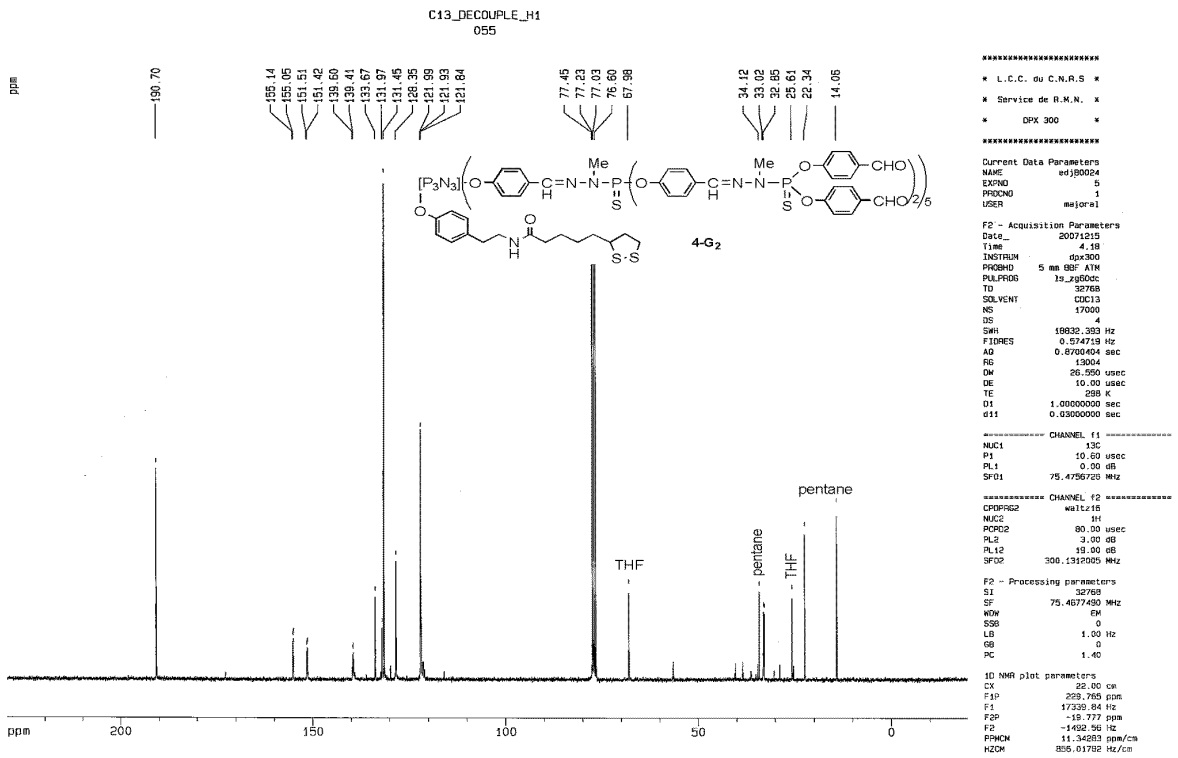


^{31}P {^{1}H} NMR spectrum of compound **4-G$_2$**

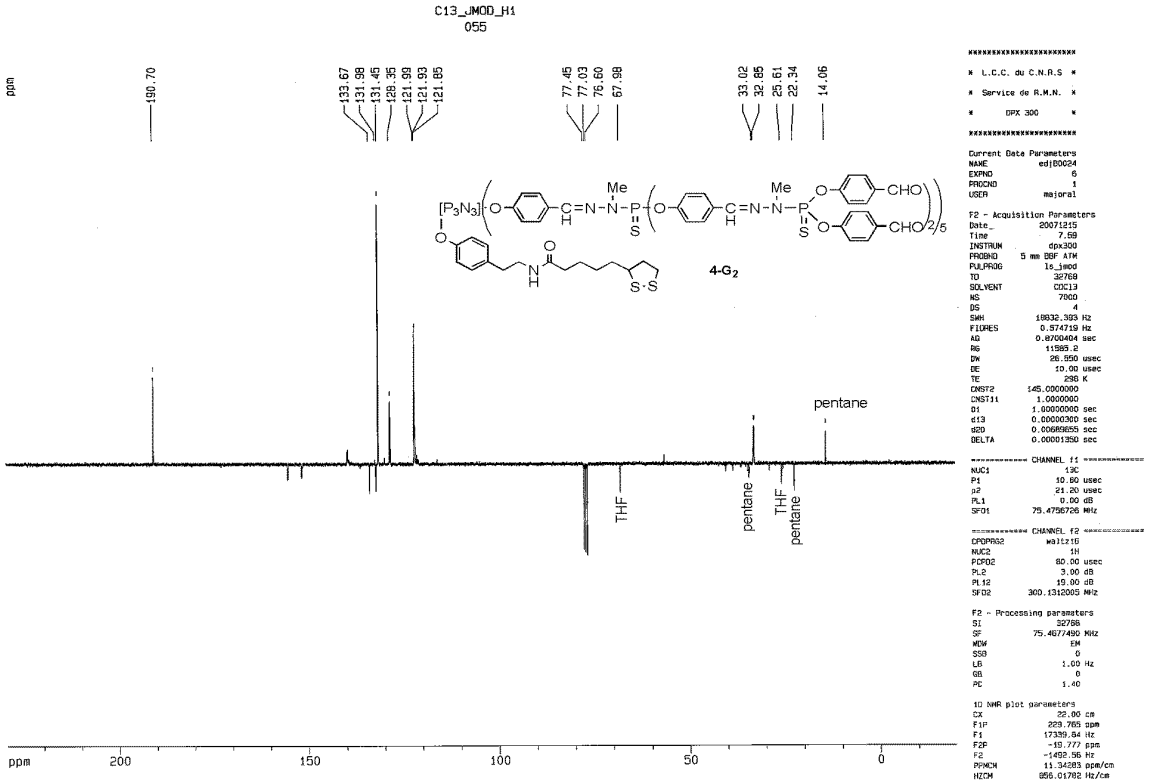
^{1}H NMR spectrum of compound **4-G$_2$**



^{13}C {^{1}H} NMR spectrum of compound **4-G$_2$**



^{13}C Jmod NMR spectrum of compound **4-G_2**



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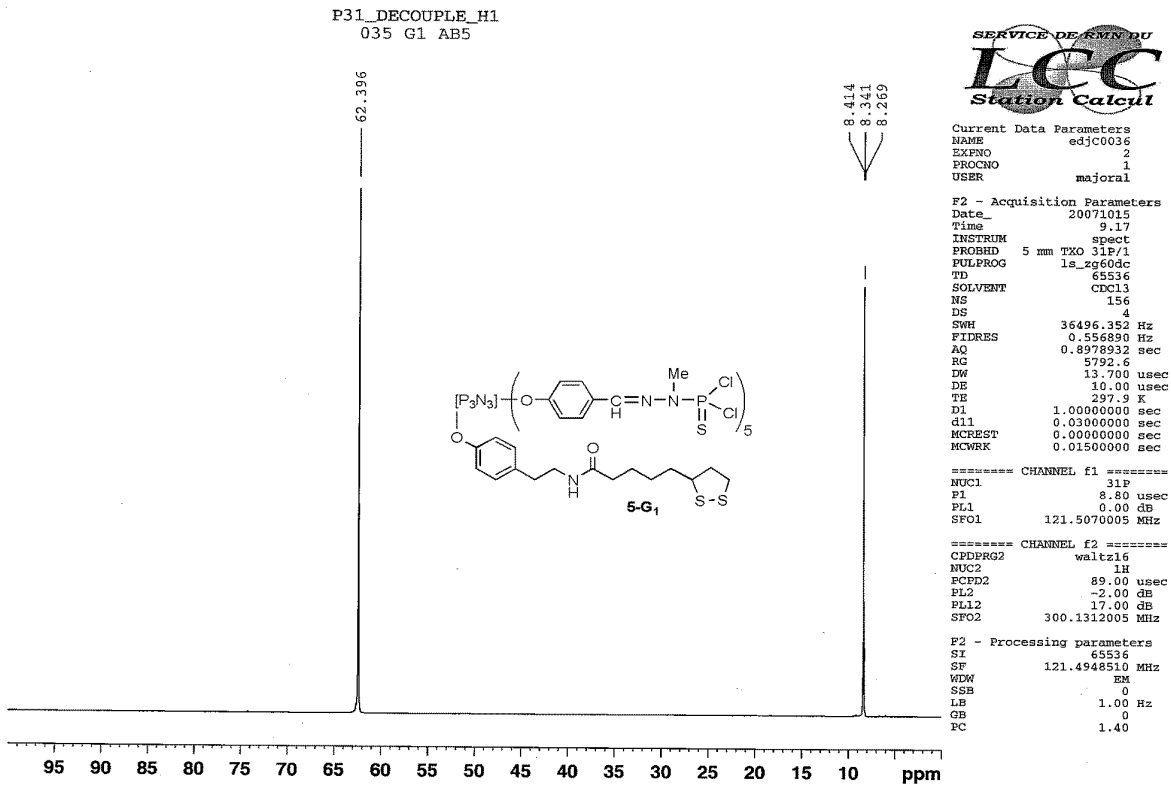

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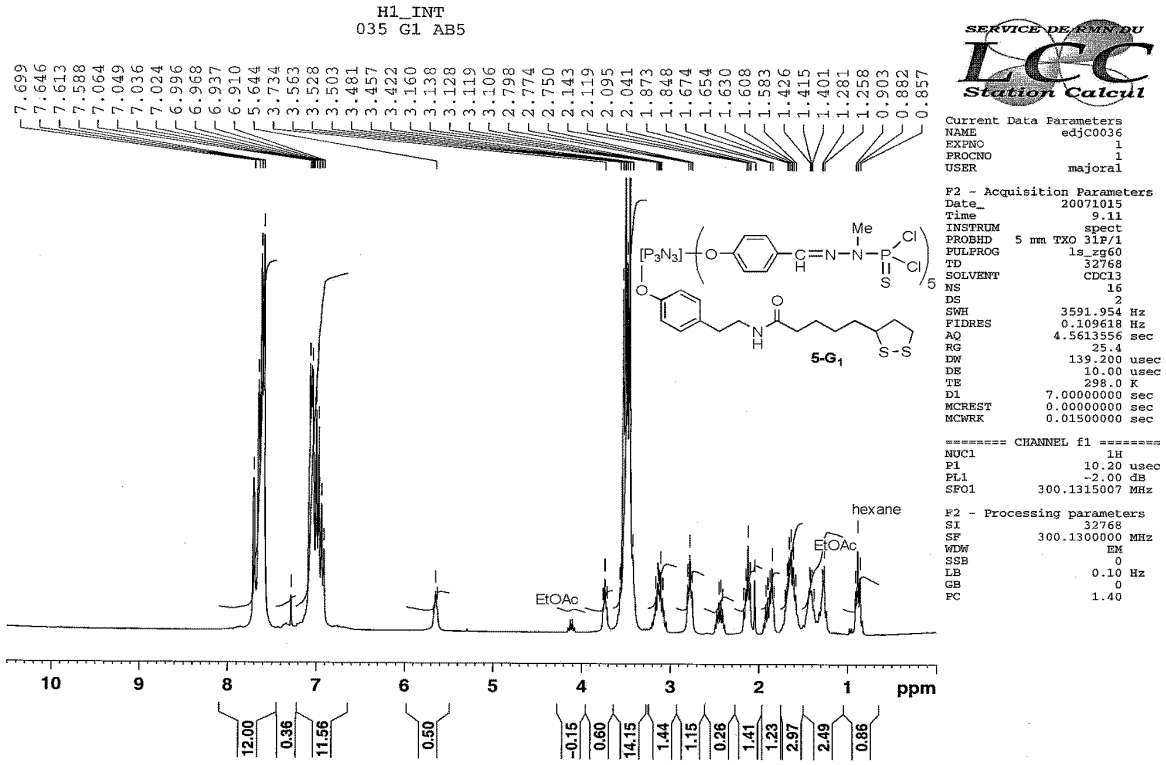
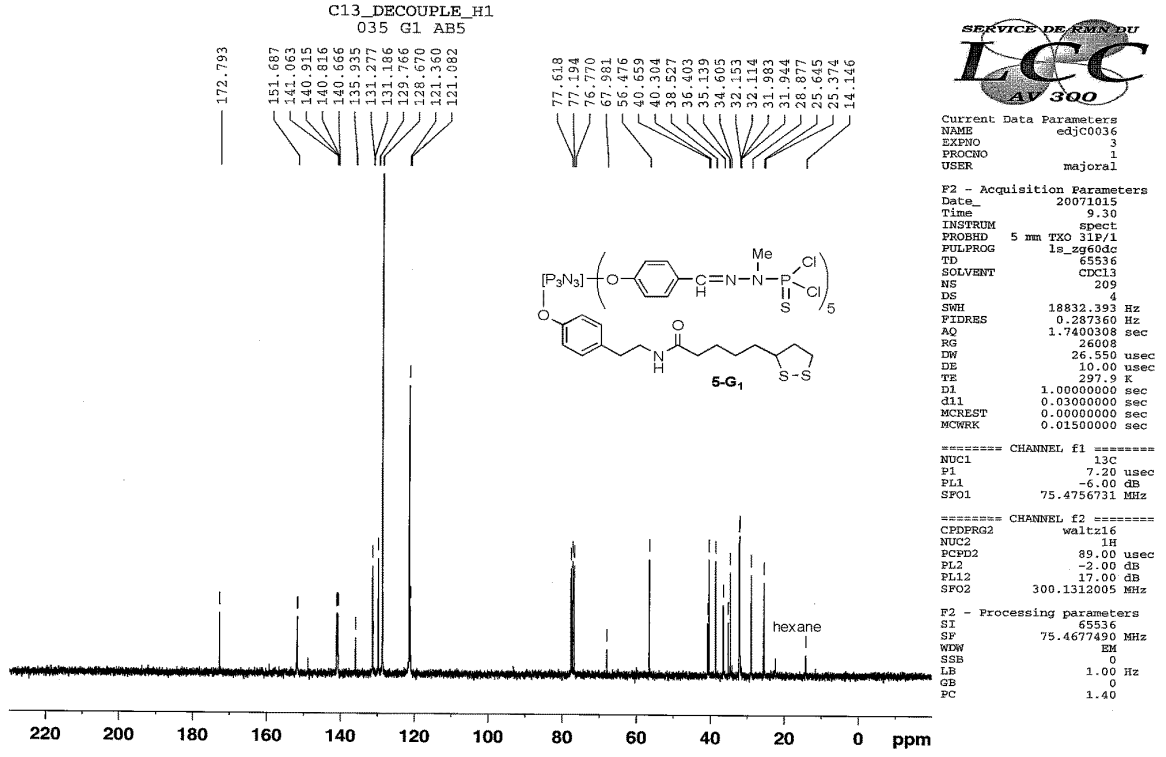


^{13}C {^{1}H} NMR spectrum of compound **5-G$_1$**



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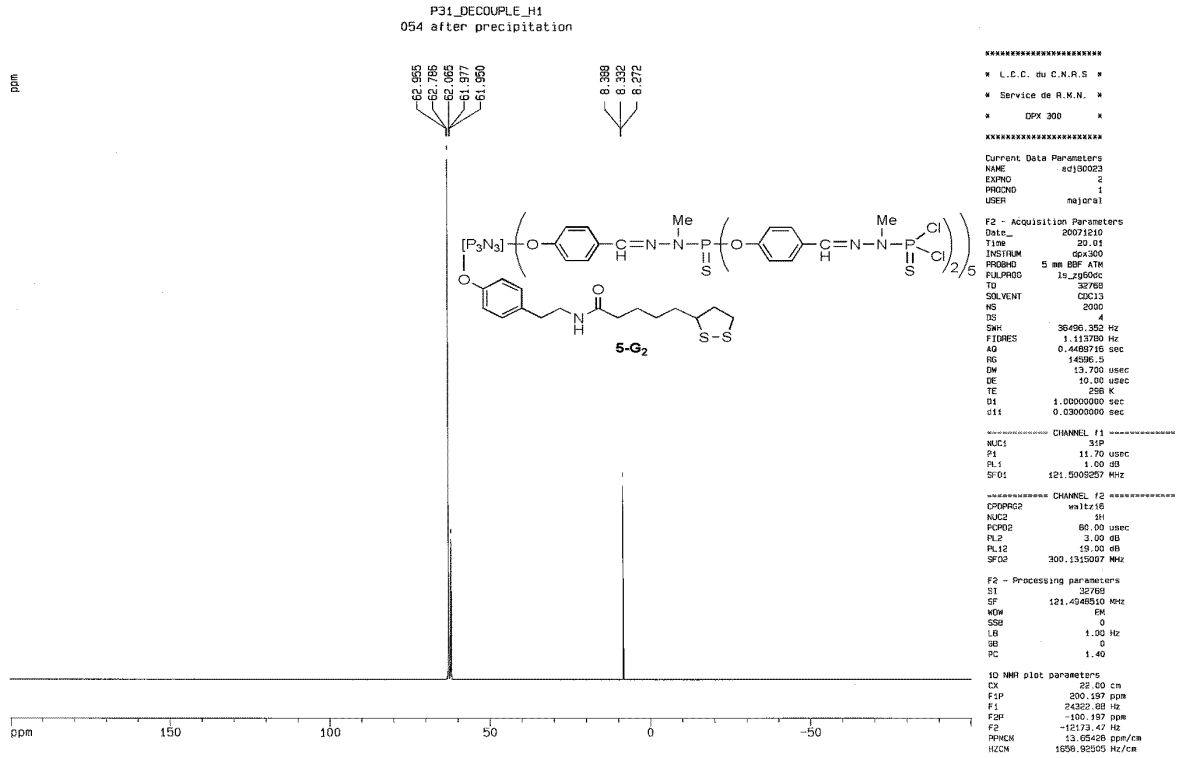

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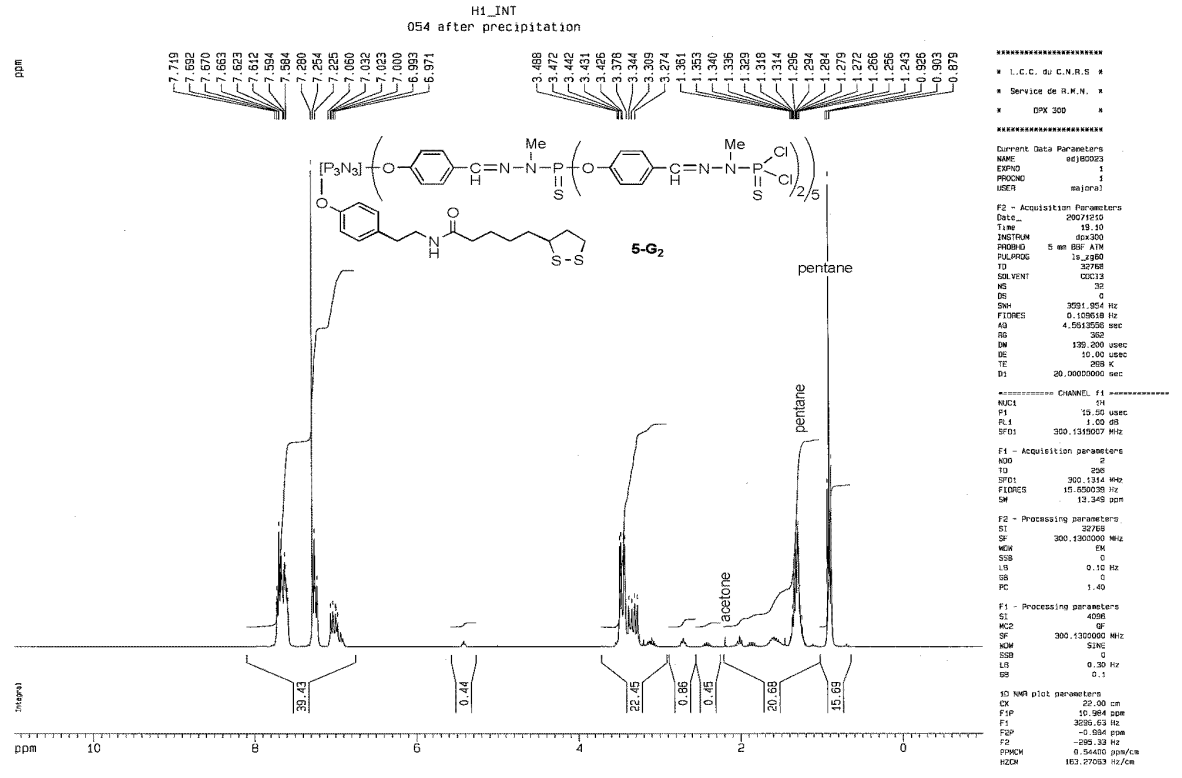

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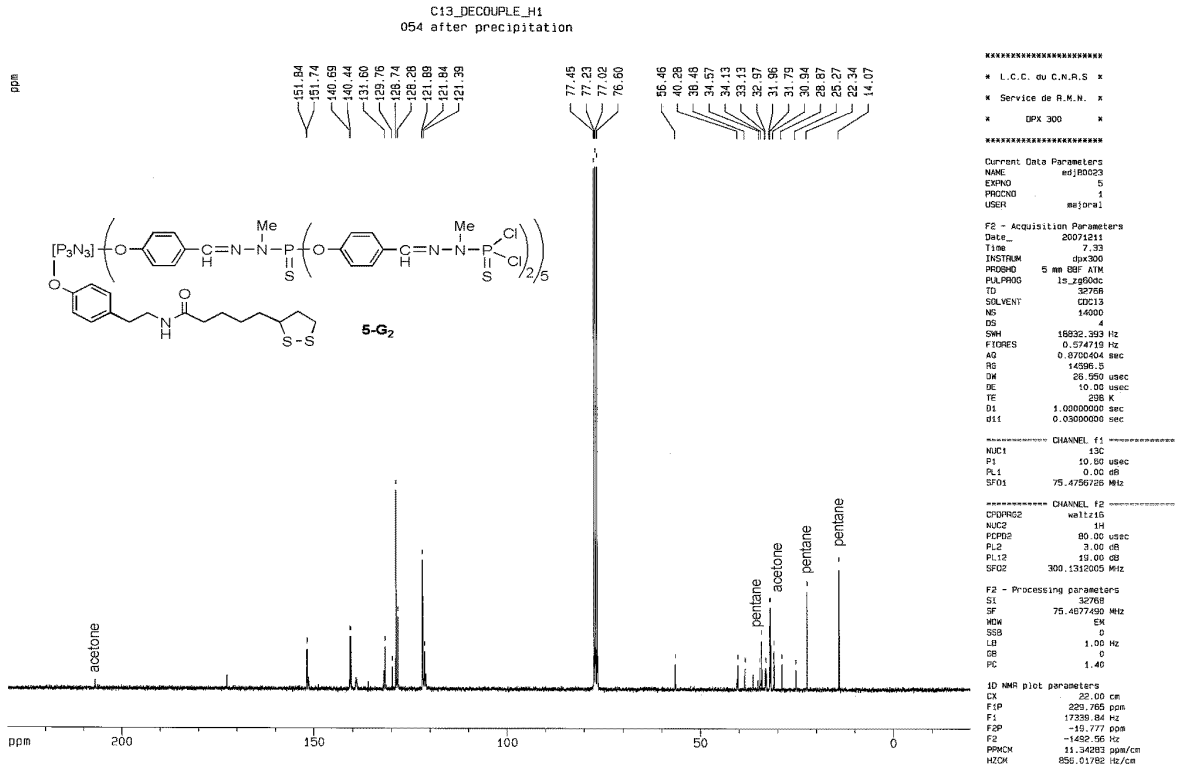
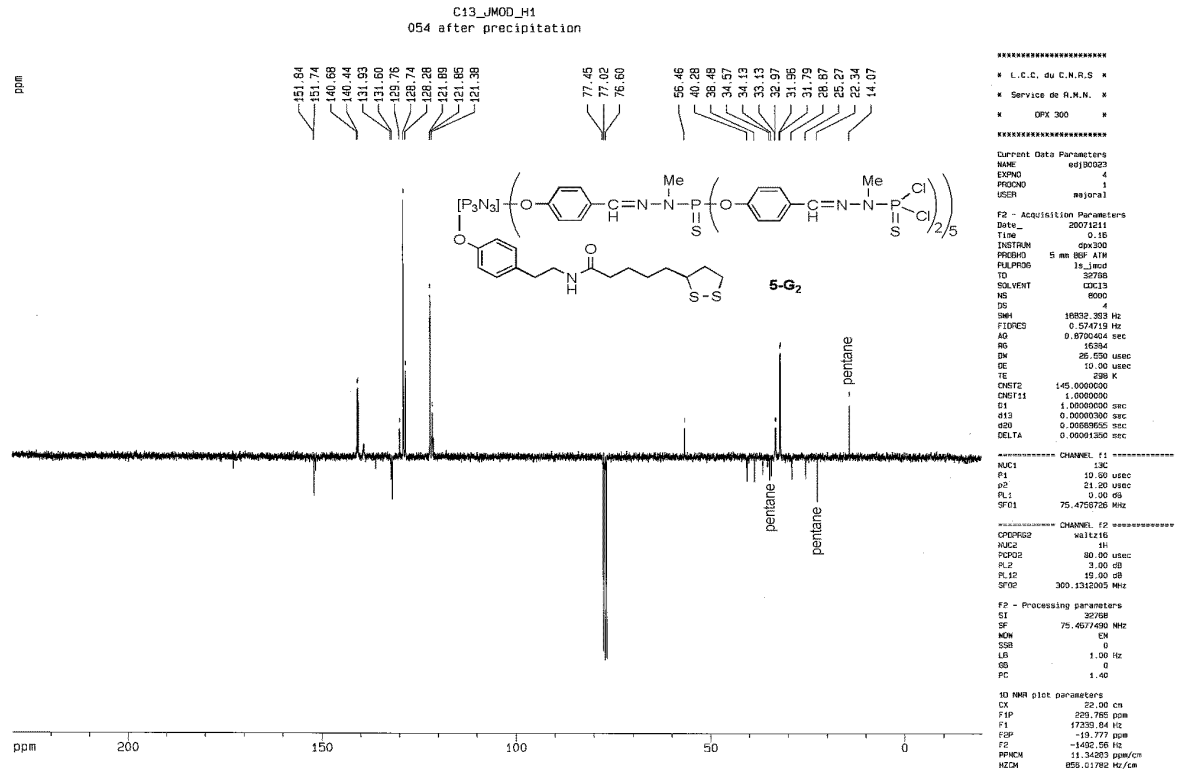
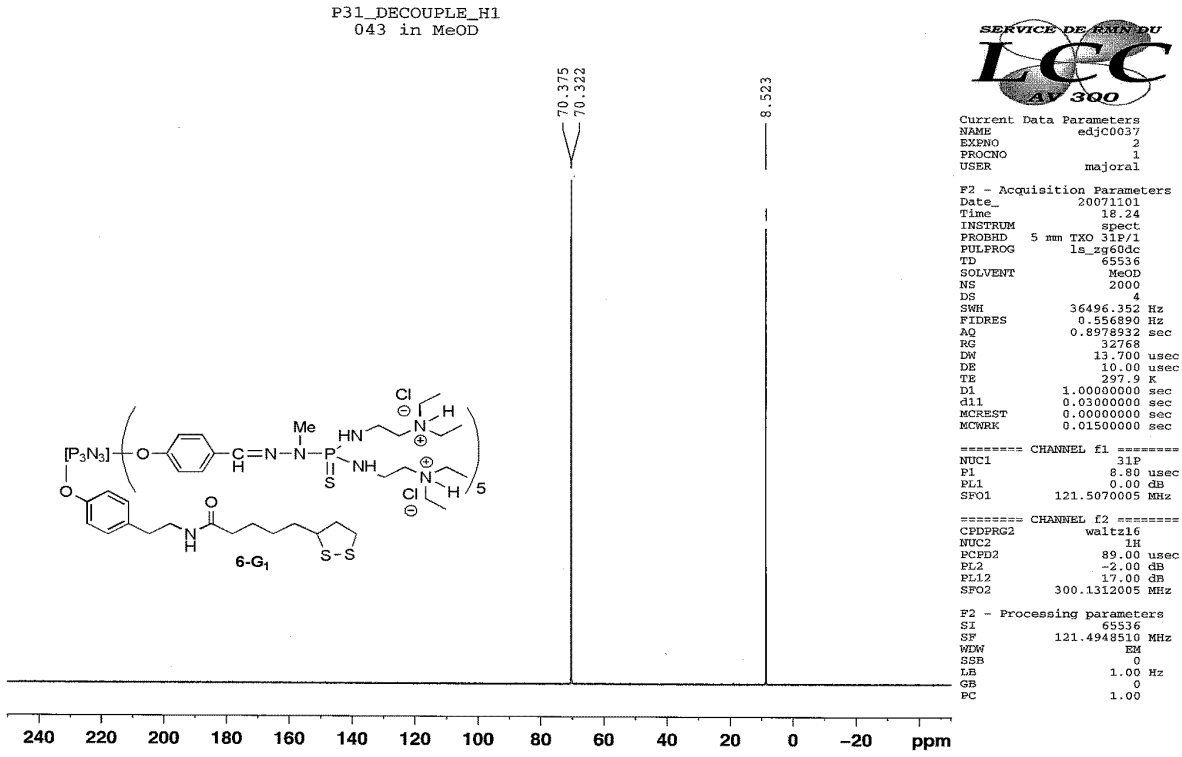


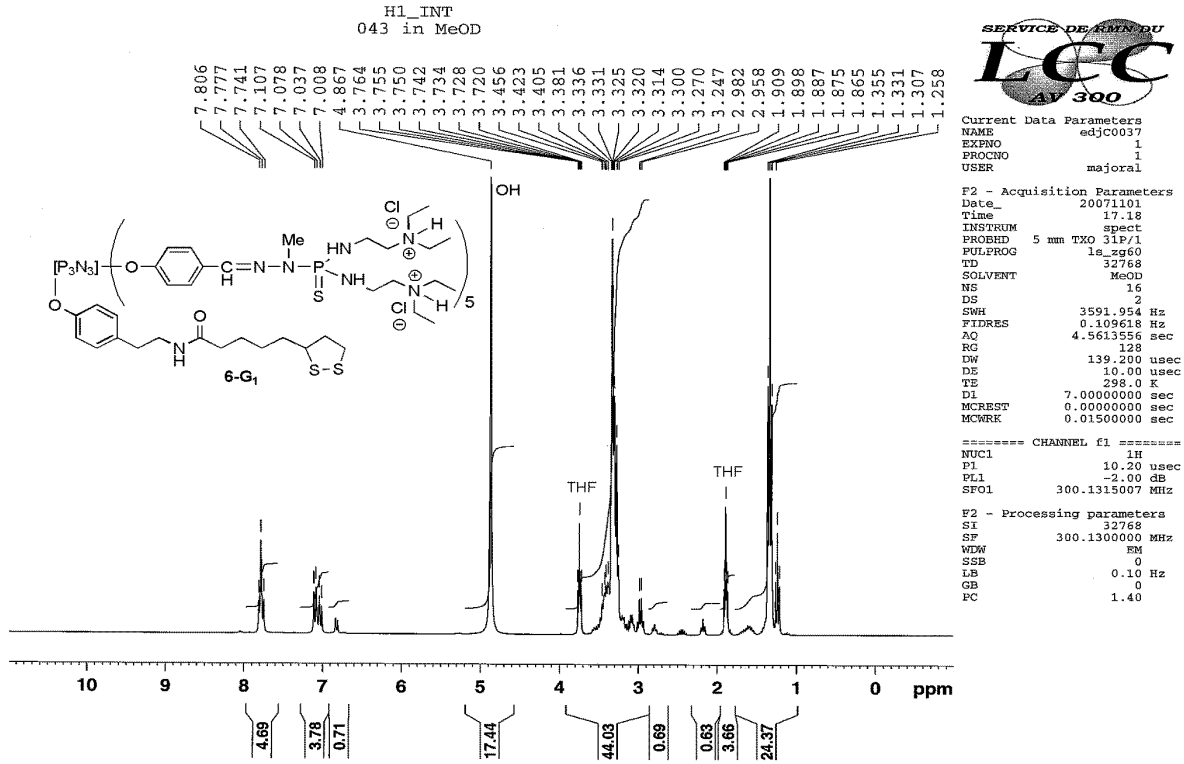
^{13}C Jmod NMR spectrum of compound **5-G_2**



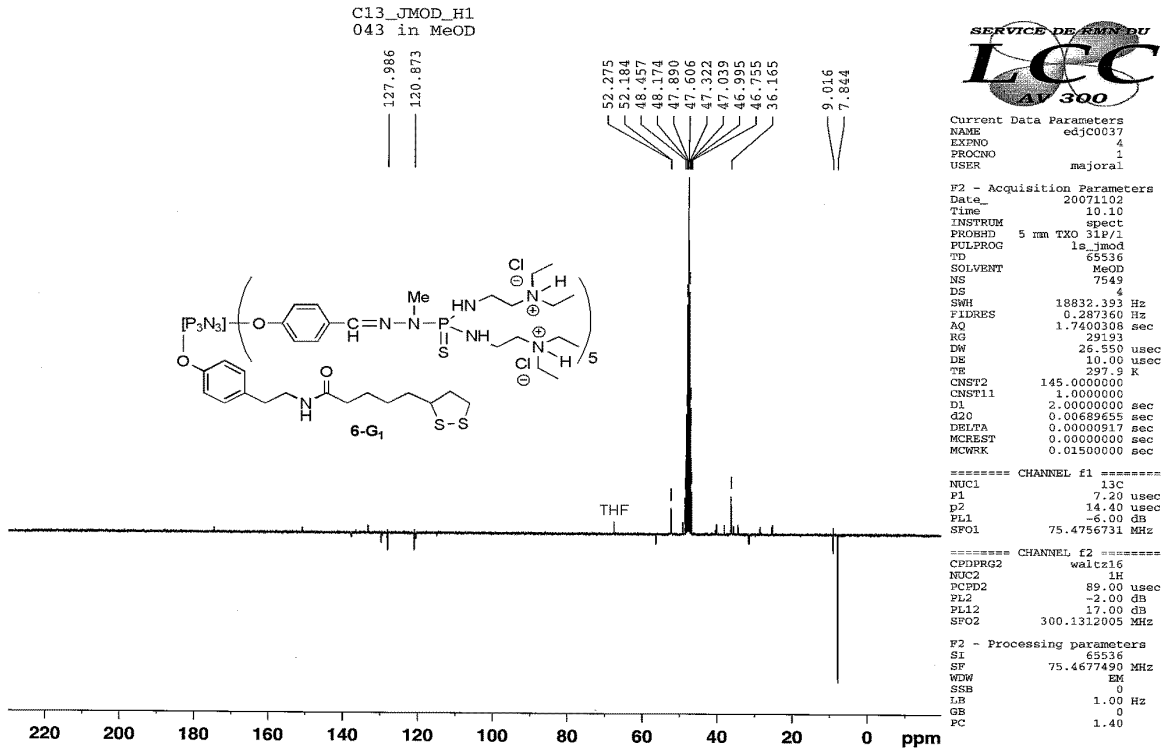
^{31}P $\{^{1}H\}$ NMR spectrum of compound **6-G$_1$**



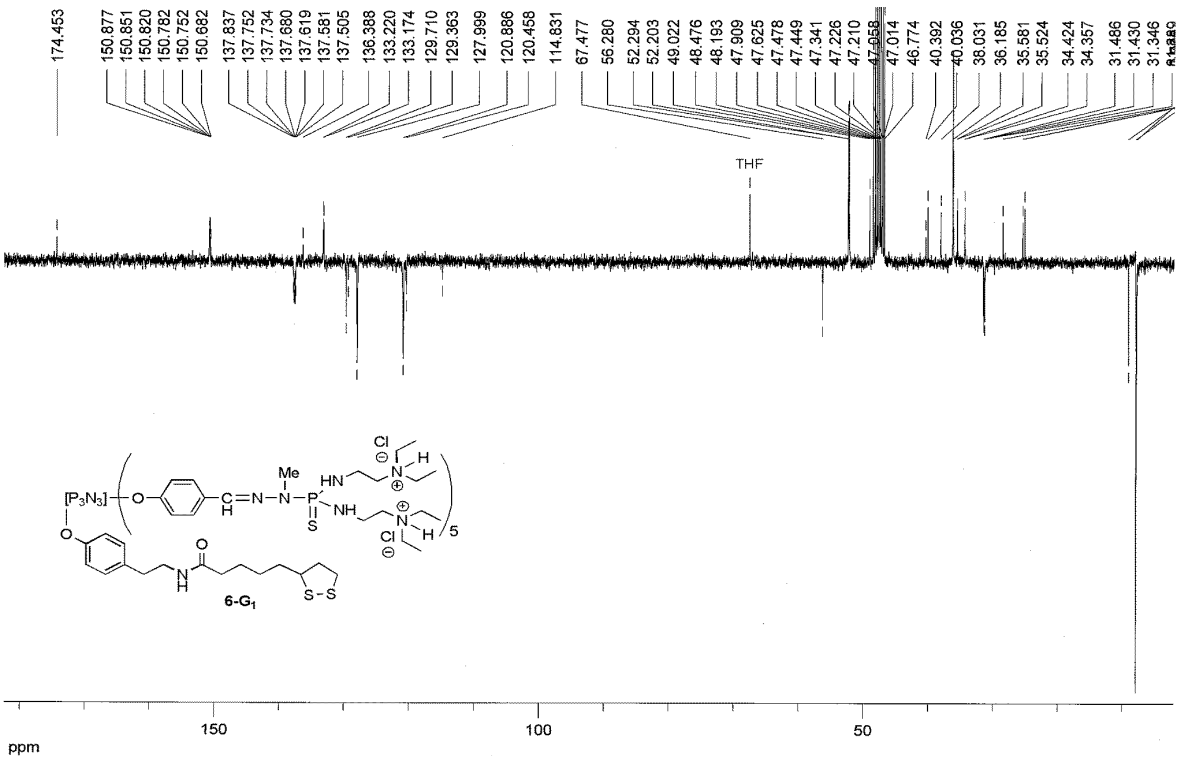
^{1}H NMR spectrum of compound **6-G$_1$**



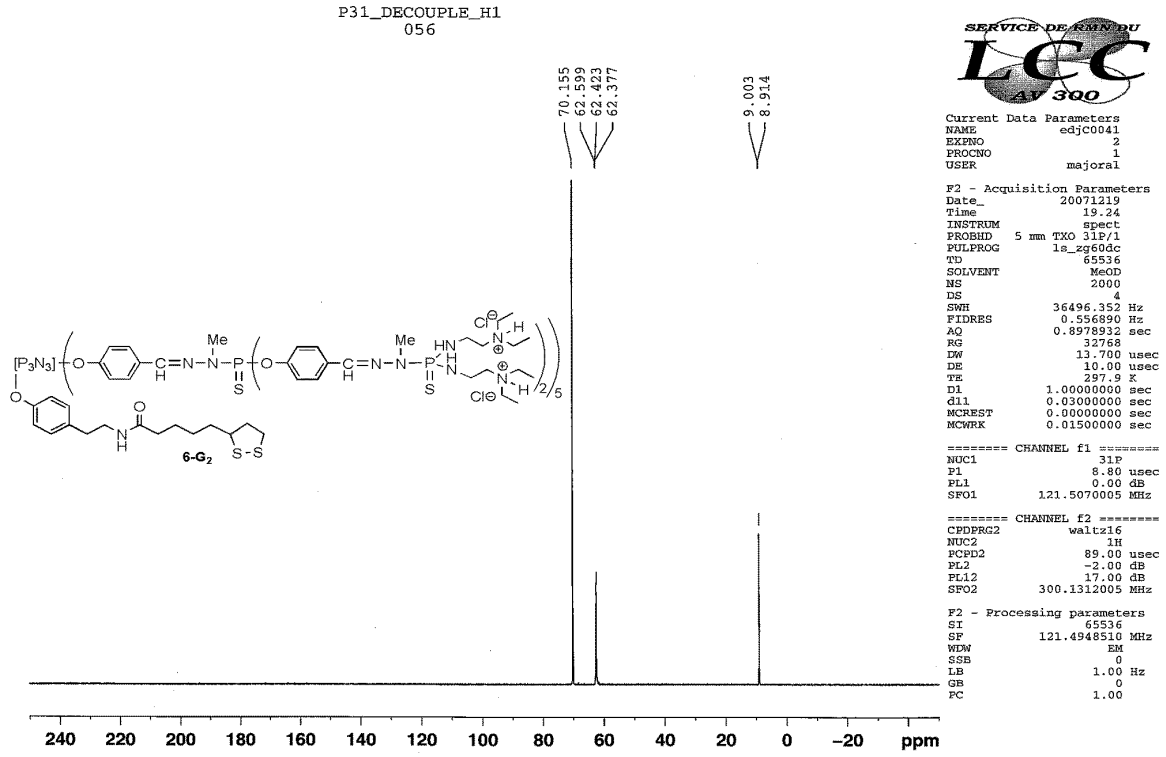
^{13}C Jmod NMR spectrum of compound **6-G$_1$**



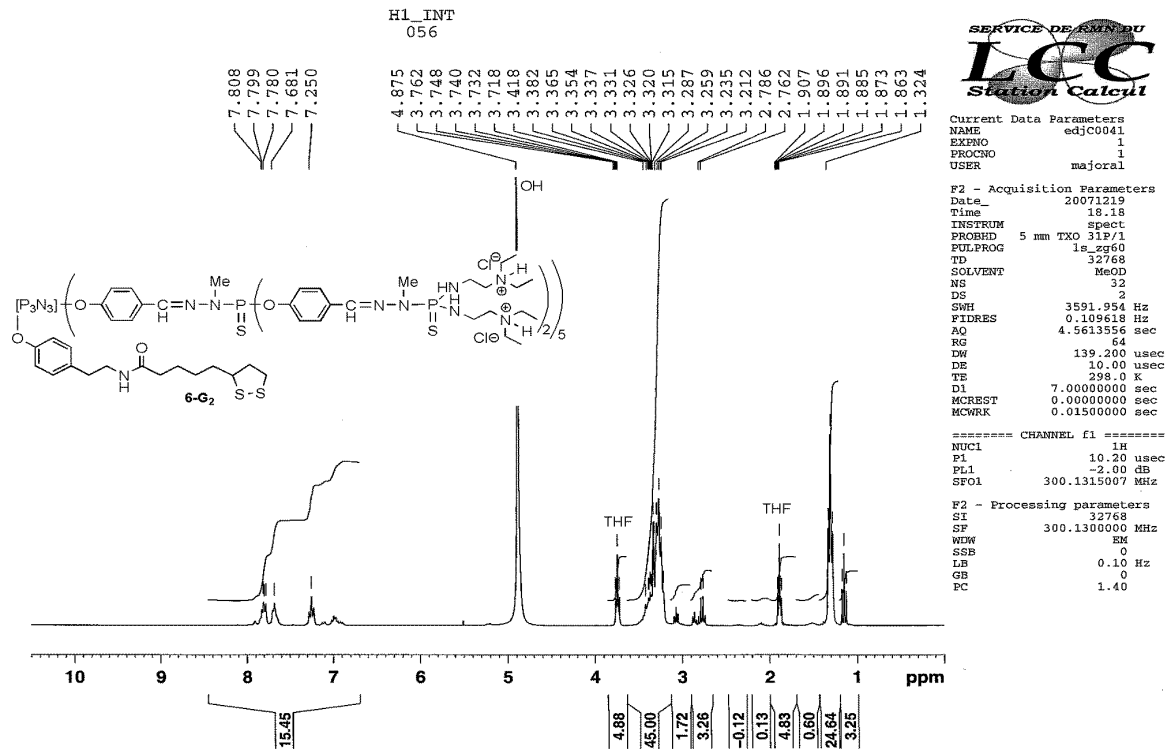
^{13}C Jmod NMR spectrum (expanded) of compound **6-G$_1$**



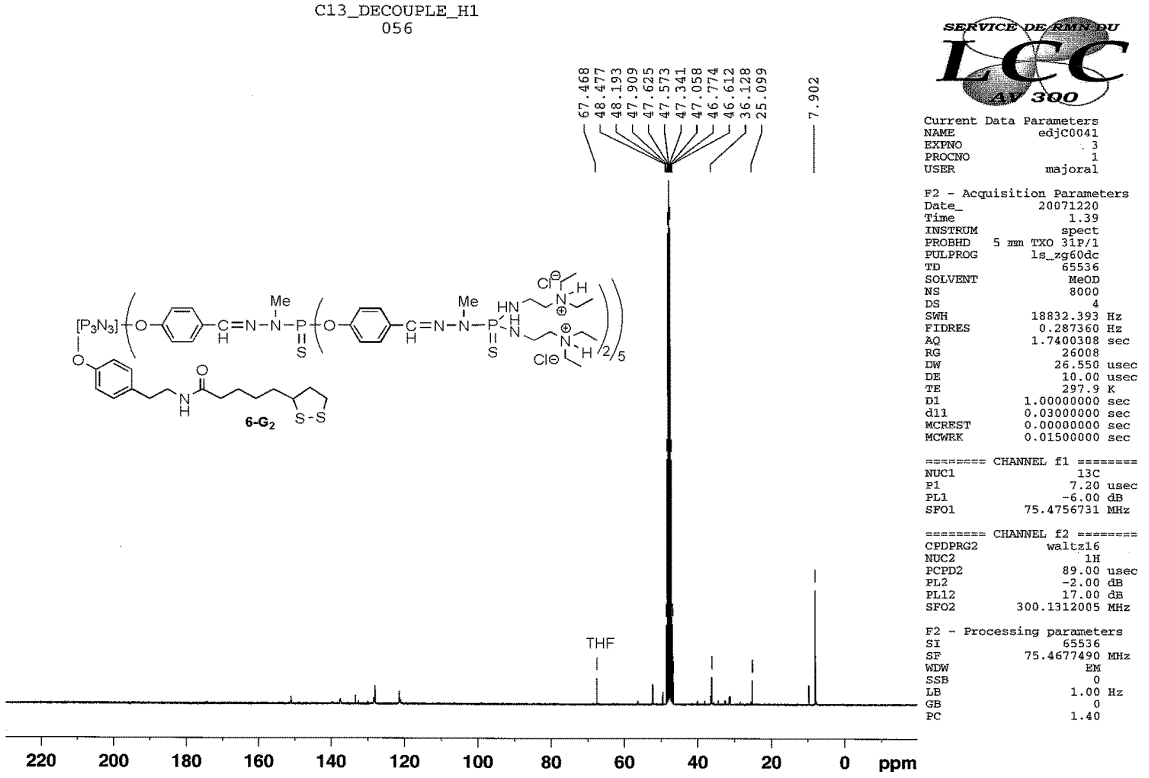
^{31}P $\{^{1}H\}$ NMR spectrum of compound **6-G$_2$**



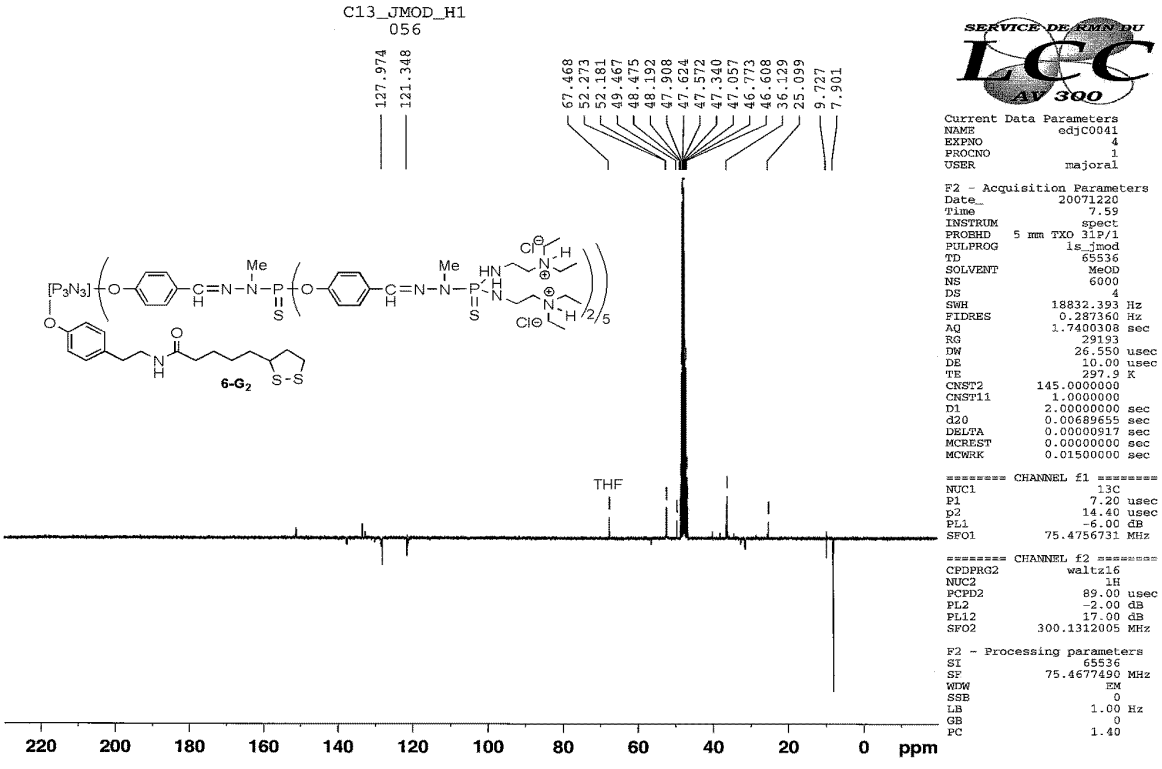
^{1}H NMR spectrum of compound **6-G$_2$**



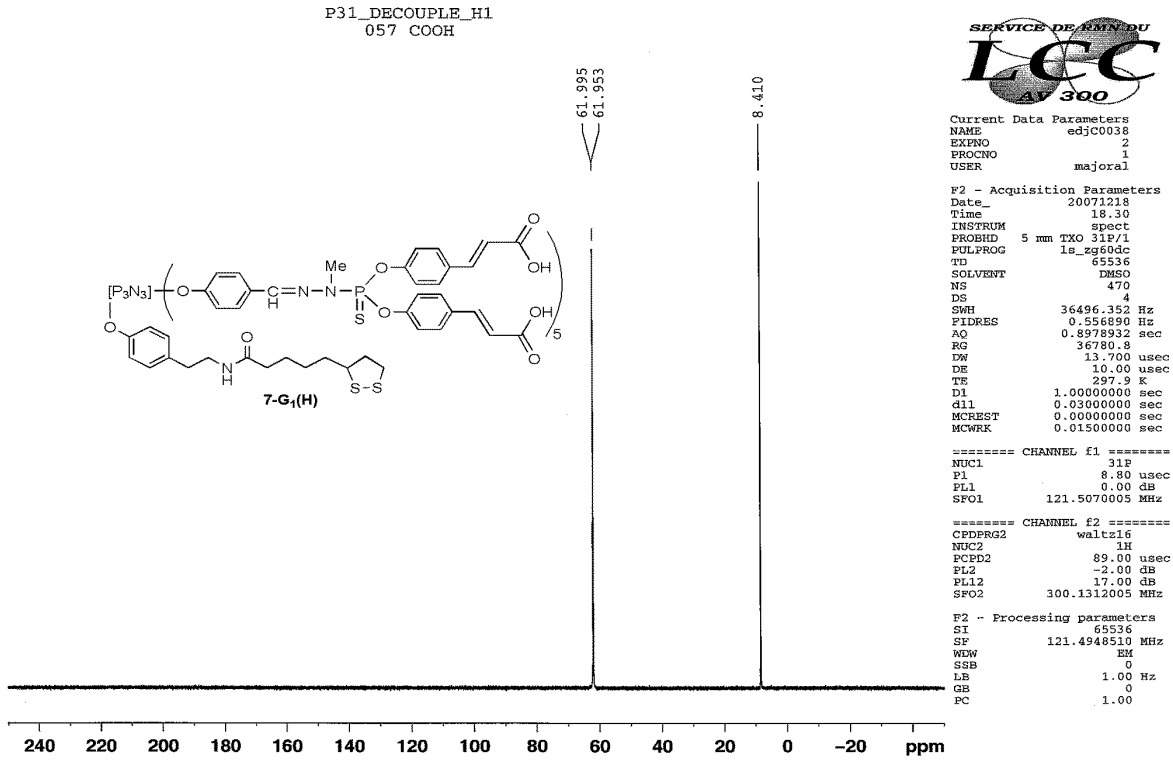
^{13}C {^{1}H} NMR spectrum of compound **6-G$_2$**



^{13}C Jmod NMR spectrum of compound **6-G$_2$**



^{31}P $\{^{1}H\}$ NMR spectrum of compound **7-G_1**

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USER                 majoral

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DE                    10.00 usec
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d11               0.03000000 sec
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======== CHANNEL f1 ========
NUC1                     31P
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PL1                     0.00 dB
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F2 - Processing parameters
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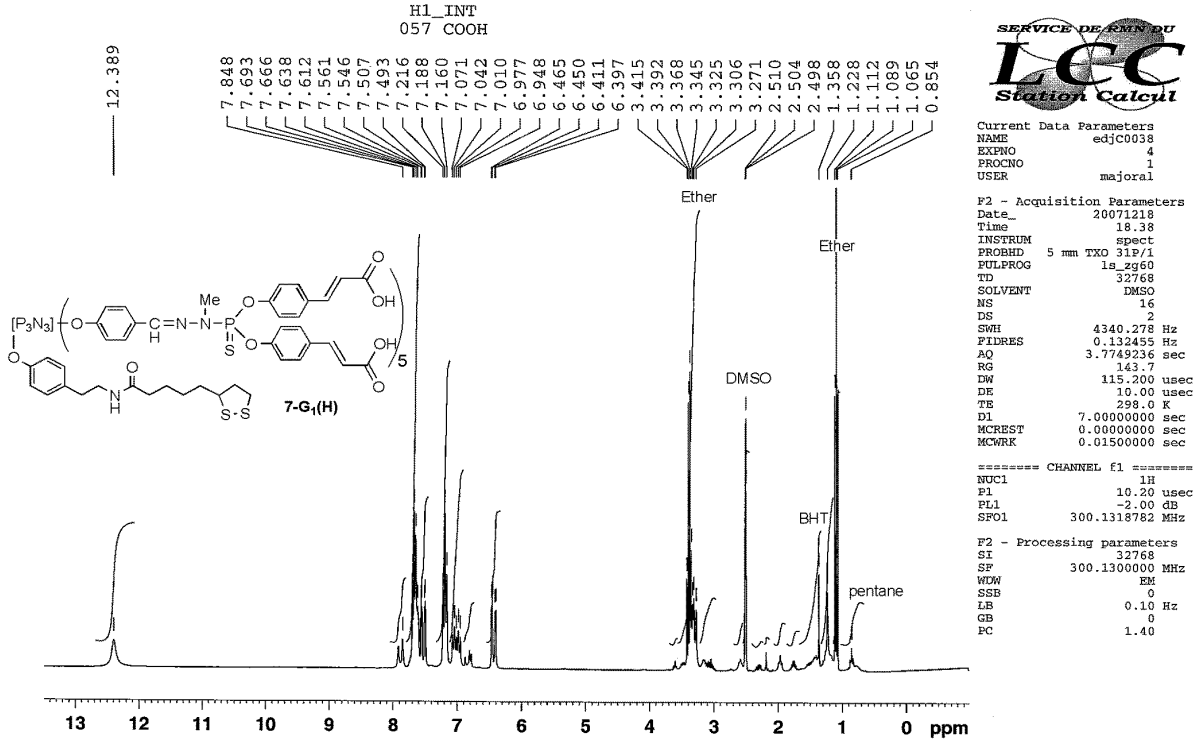
^{1}H NMR spectrum of compound **7-G_1**

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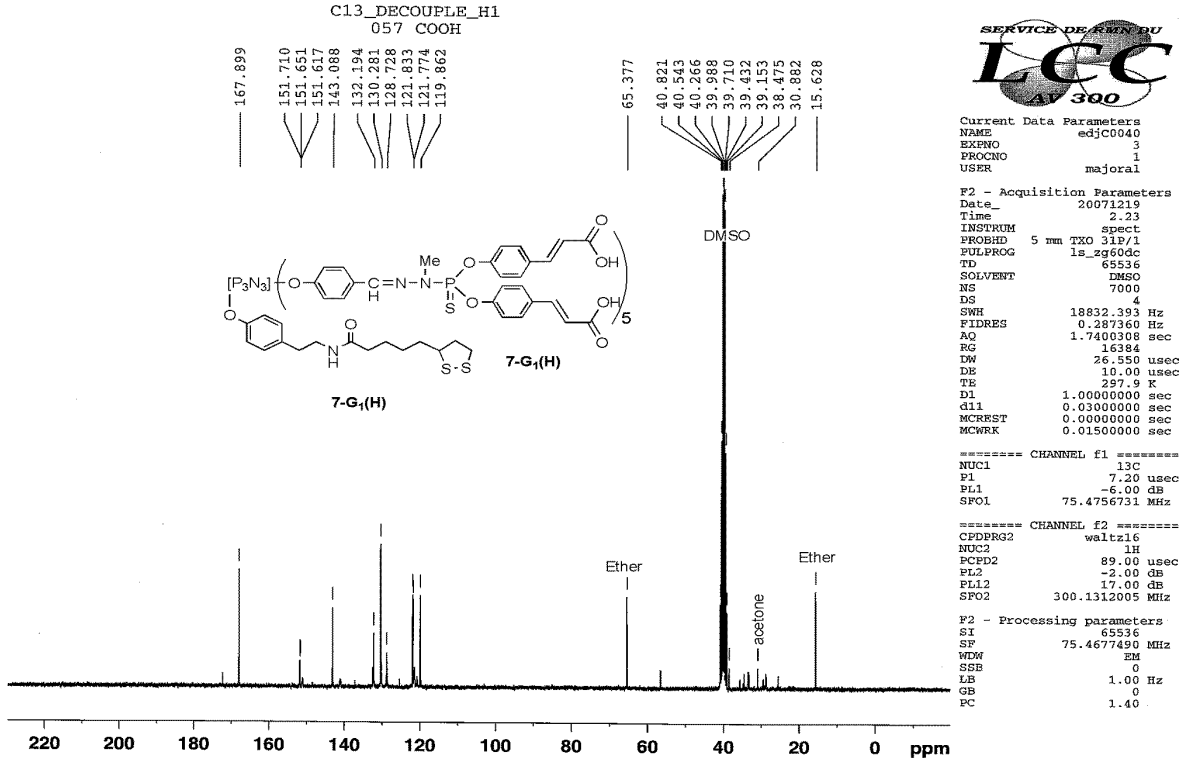
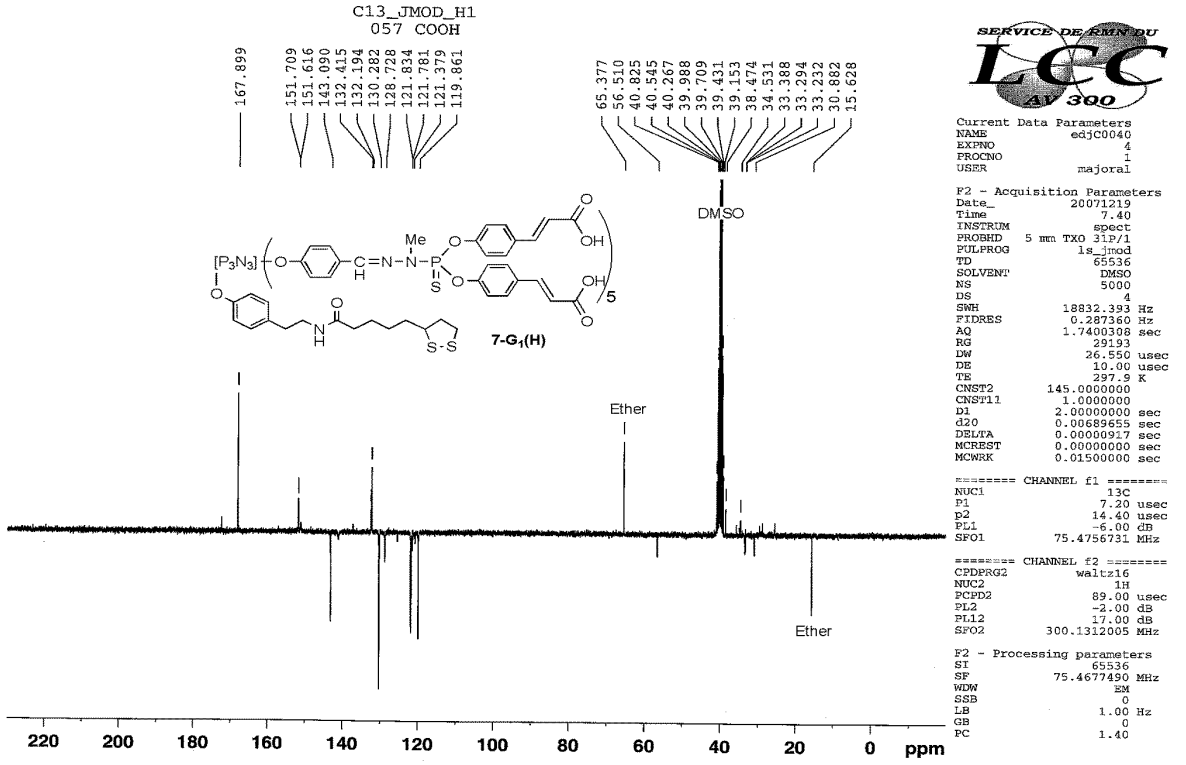
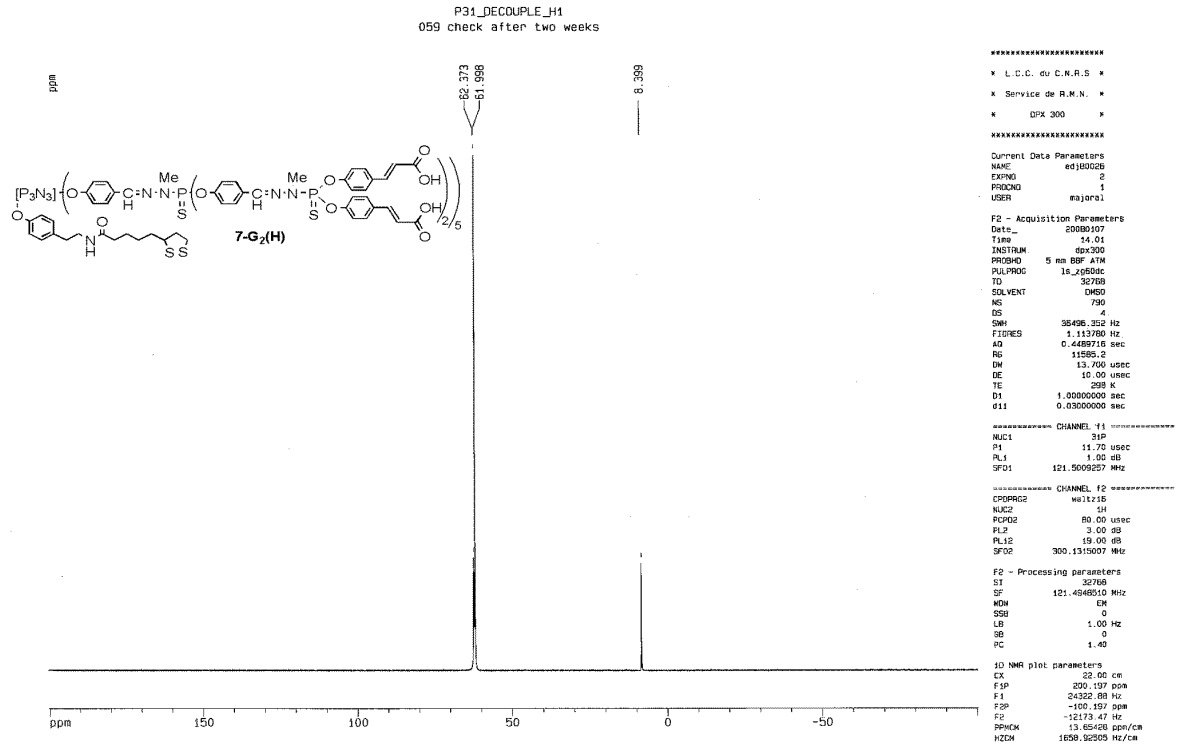
^{13}C {^{1}H} NMR spectrum of compound **7-G_1**



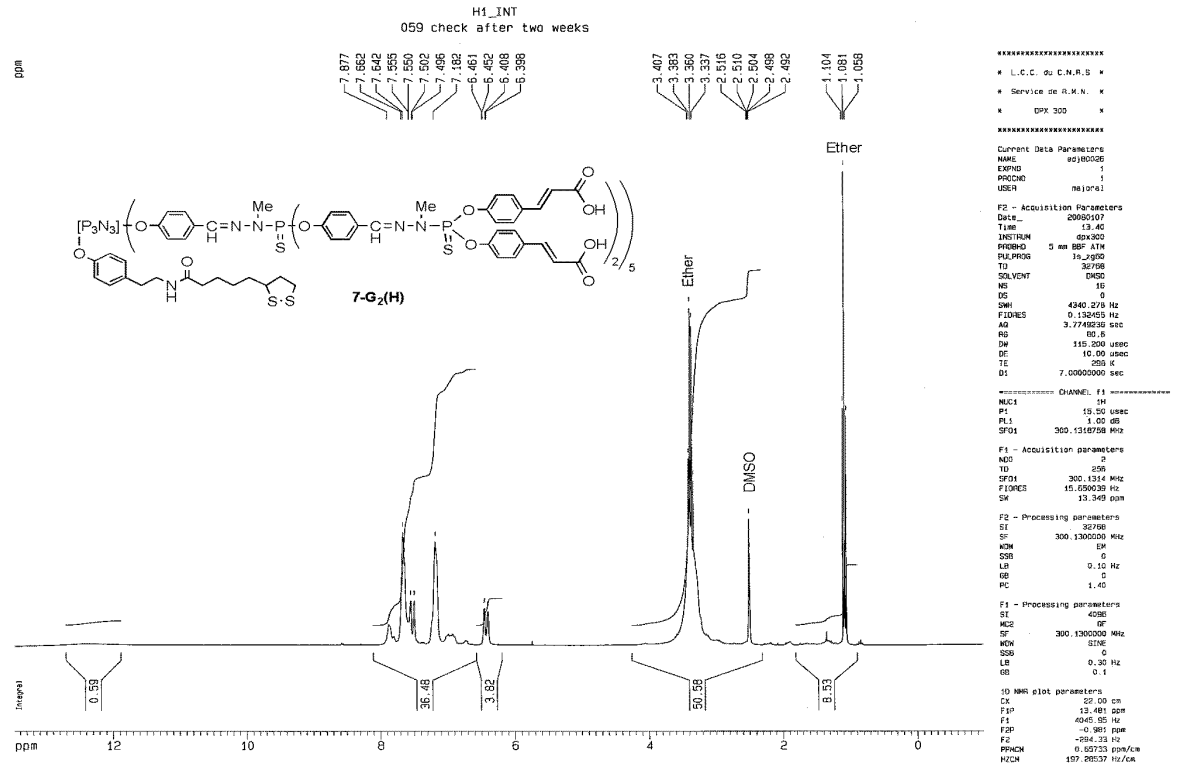
^{13}C Jmod NMR spectrum of compound **7-G_1**



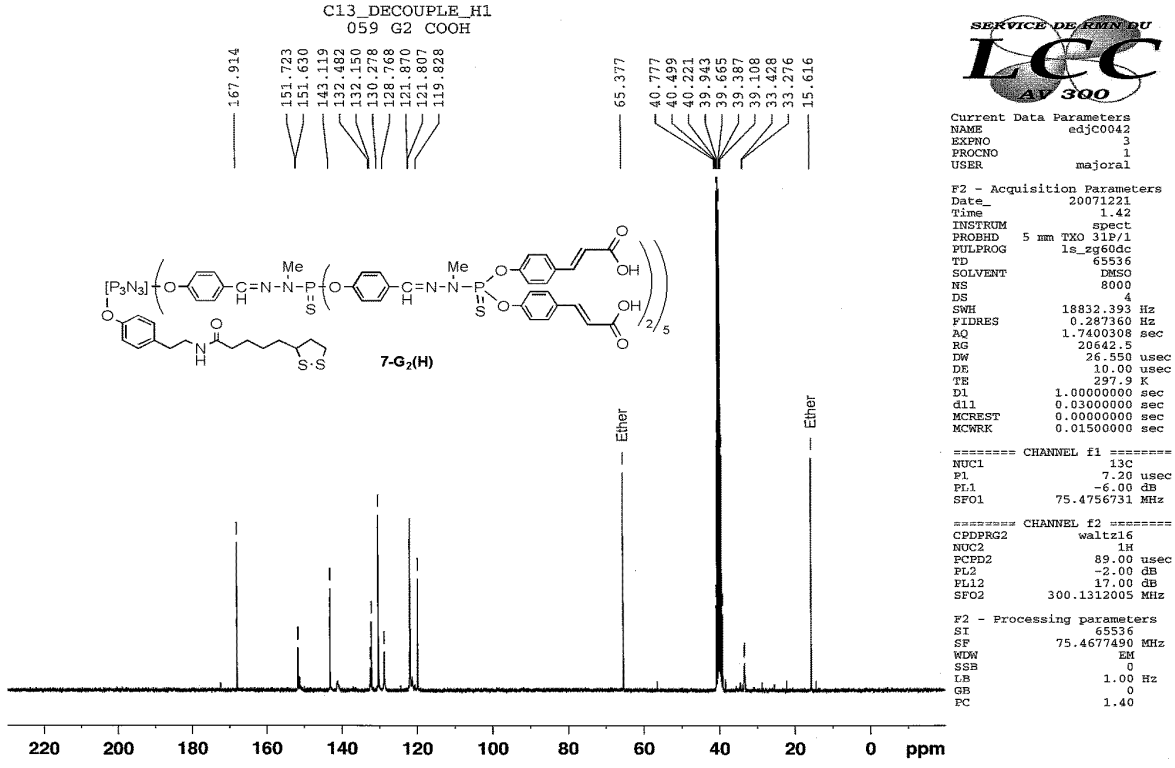
^{31}P {^{1}H} NMR spectrum of compound **7-G_2**



^{1}H NMR spectrum of compound **7-G_2**



^{13}C {^{1}H} NMR spectrum of compound **7-G_2**

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======== CHANNEL f1 ========
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NUC2                    1H
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PL2                  -2.00 dB
PL12                 17.00 dB
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F2 - Processing parameters
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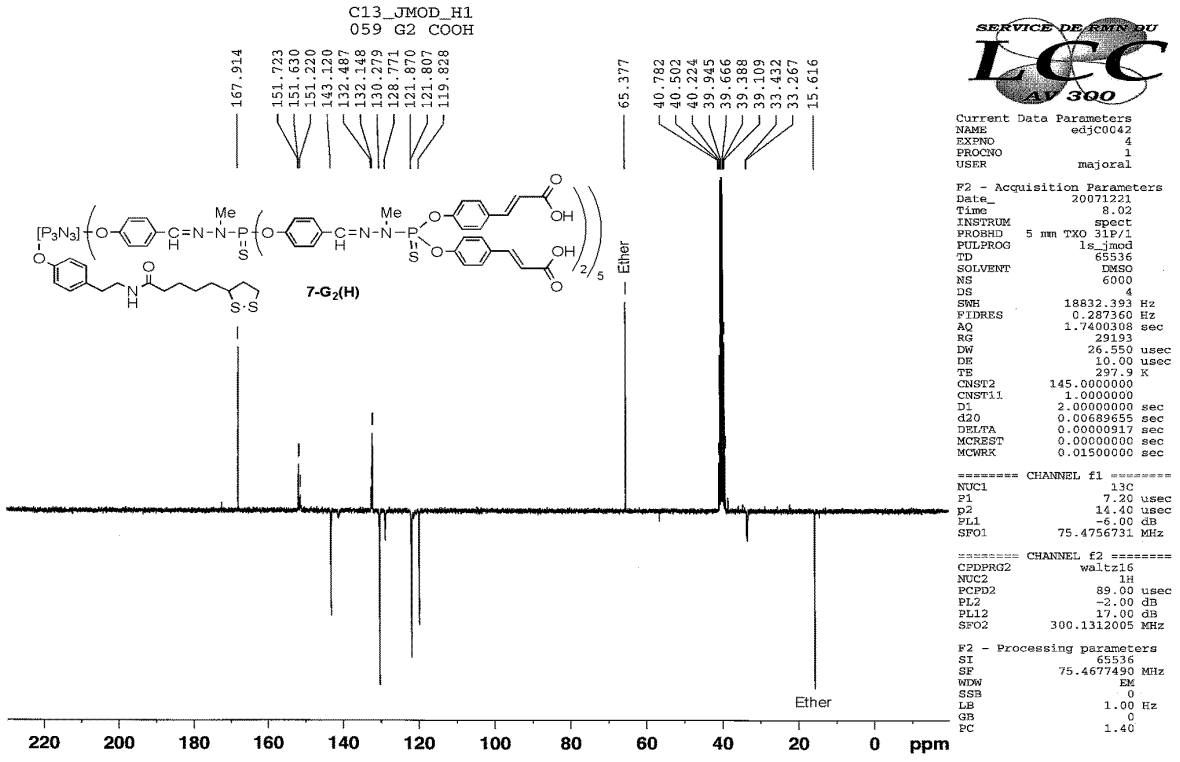
^{13}C Jmod NMR spectrum of compound **7-G_2**

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PROCNO                      1
USER                 majoral

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CNST11             1.0000000
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======== CHANNEL f1 ========
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======== CHANNEL f2 ========
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NUC2                    1H
PCPD2                89.00 usec
PL2                  -2.00 dB
PL12                 17.00 dB
SFO2           300.1312005 MHz

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

Contact Angle Goniometry

Water contact angles measured on a non-functionalized gold surface (control) and on gold coated with either **6-G$_1$** (G$_1$(+)) or **7-G$_1$** (G$_1$(-)).