

## Bimetallic Anilido-Aldimine Al or Zn Complexes for Efficient Ring-Opening Polymerization of $\epsilon$ -Caprolactone

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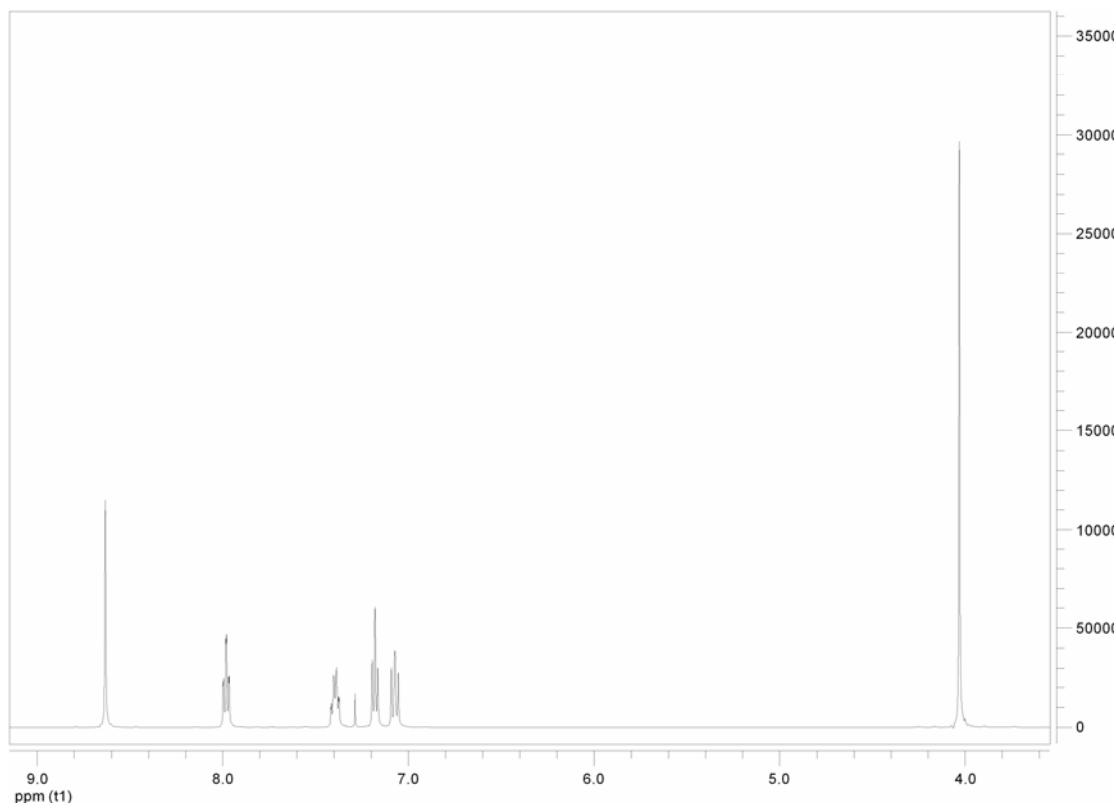


Figure 1. <sup>1</sup>H NMR spectrum of **A**

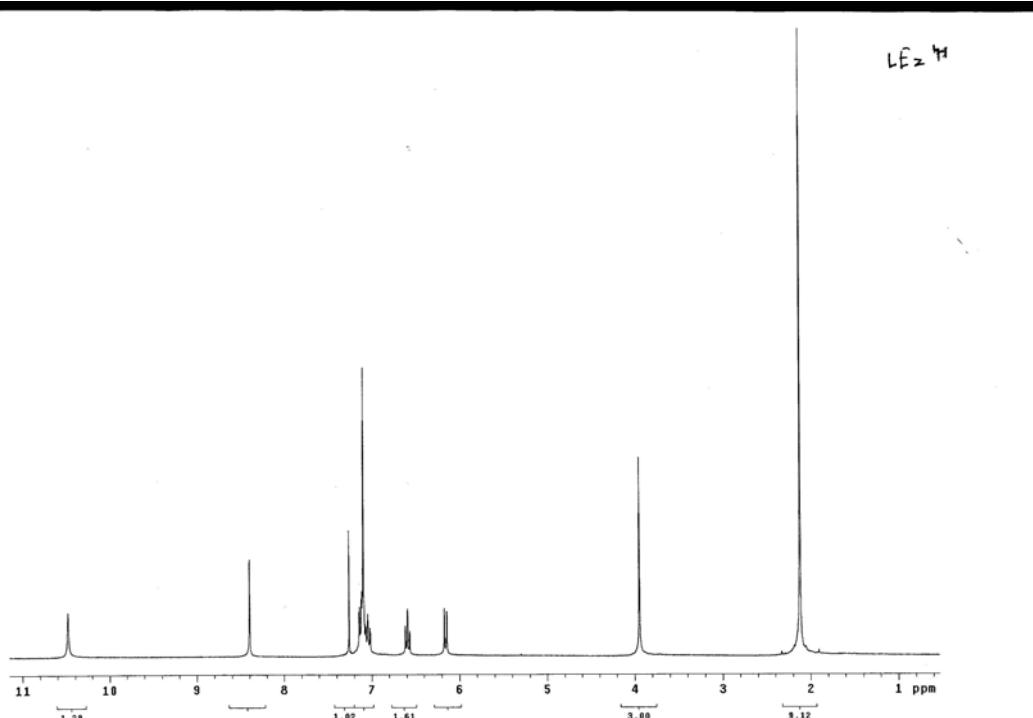


Figure 2. <sup>1</sup>H NMR spectrum of **L<sup>1</sup>H<sub>2</sub>**

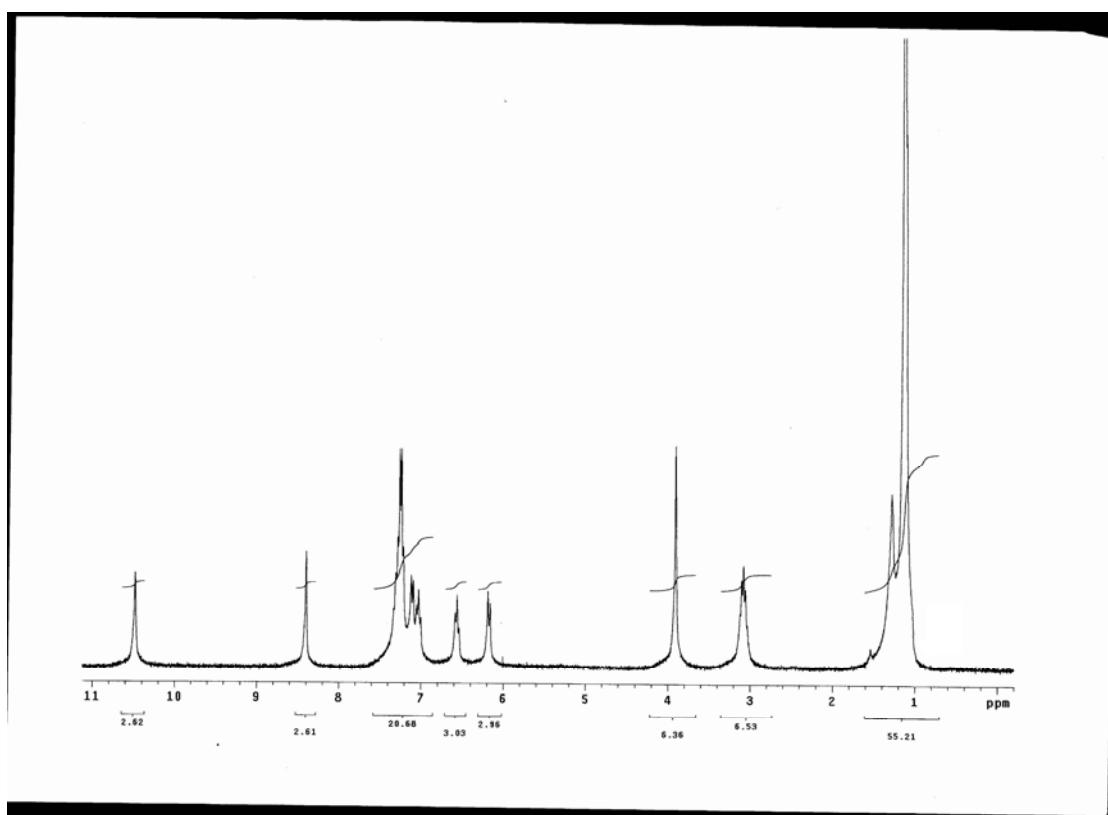


Figure 3.  $^1\text{H}$  NMR spectrum of  $\mathbf{L}^2\text{H}_2$

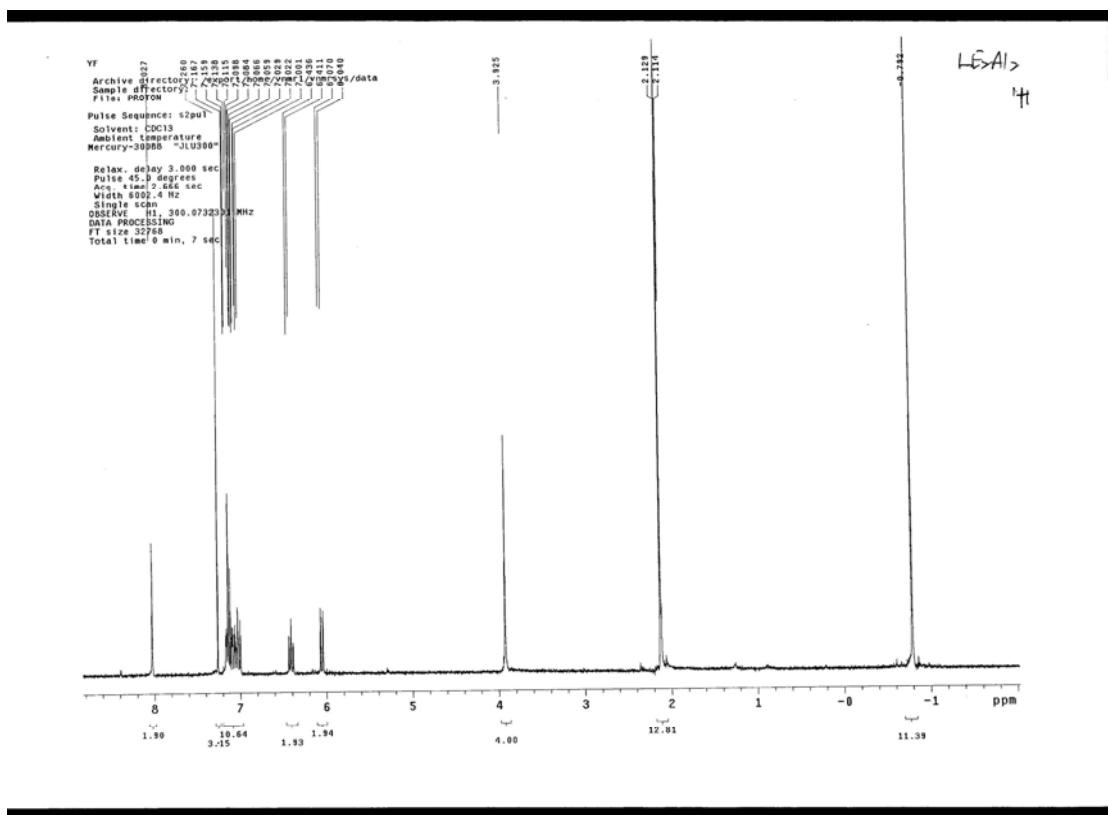


Figure 4.  $^1\text{H}$  NMR spectrum of **1**

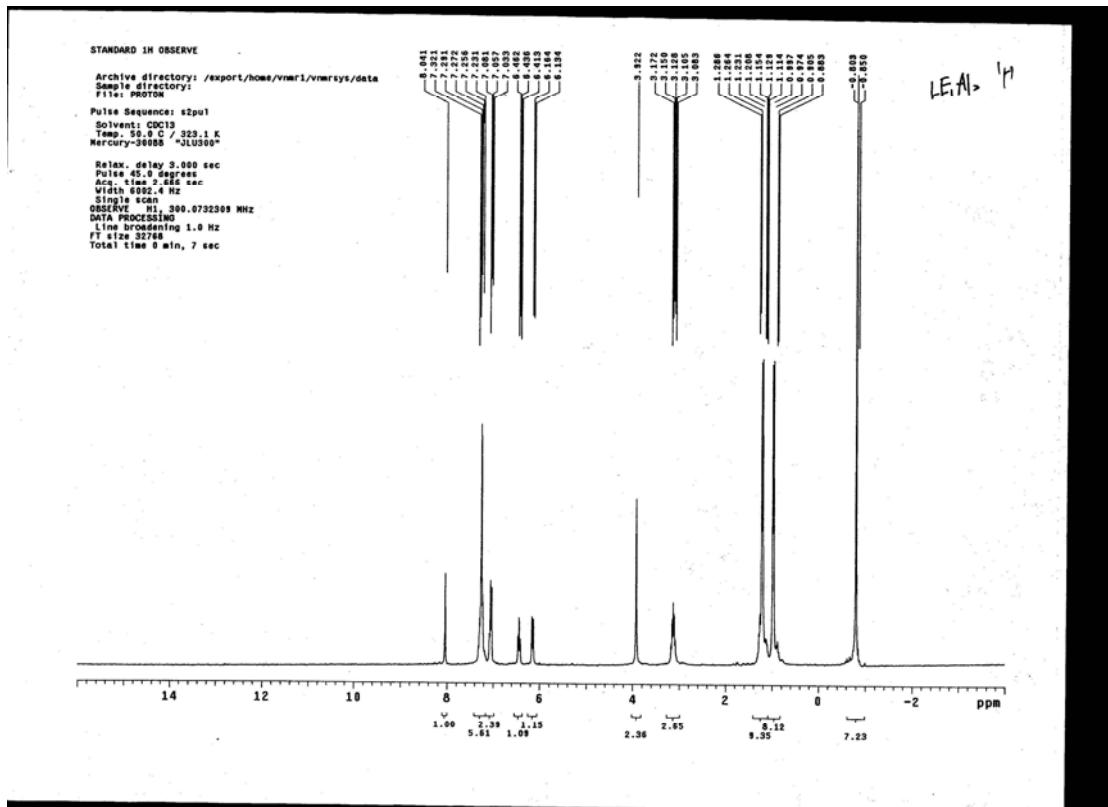


Figure 5.  $^1\text{H}$  NMR spectrum of **2**

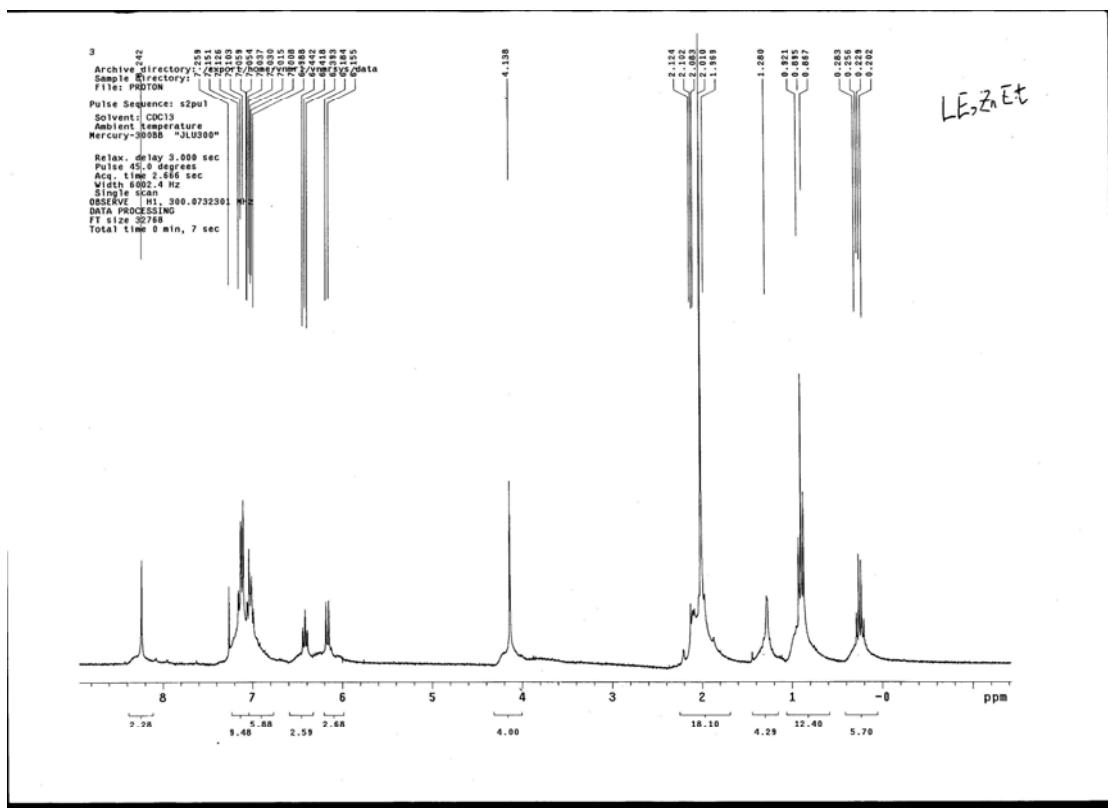


Figure 6.  $^1\text{H}$  NMR spectrum of **3**

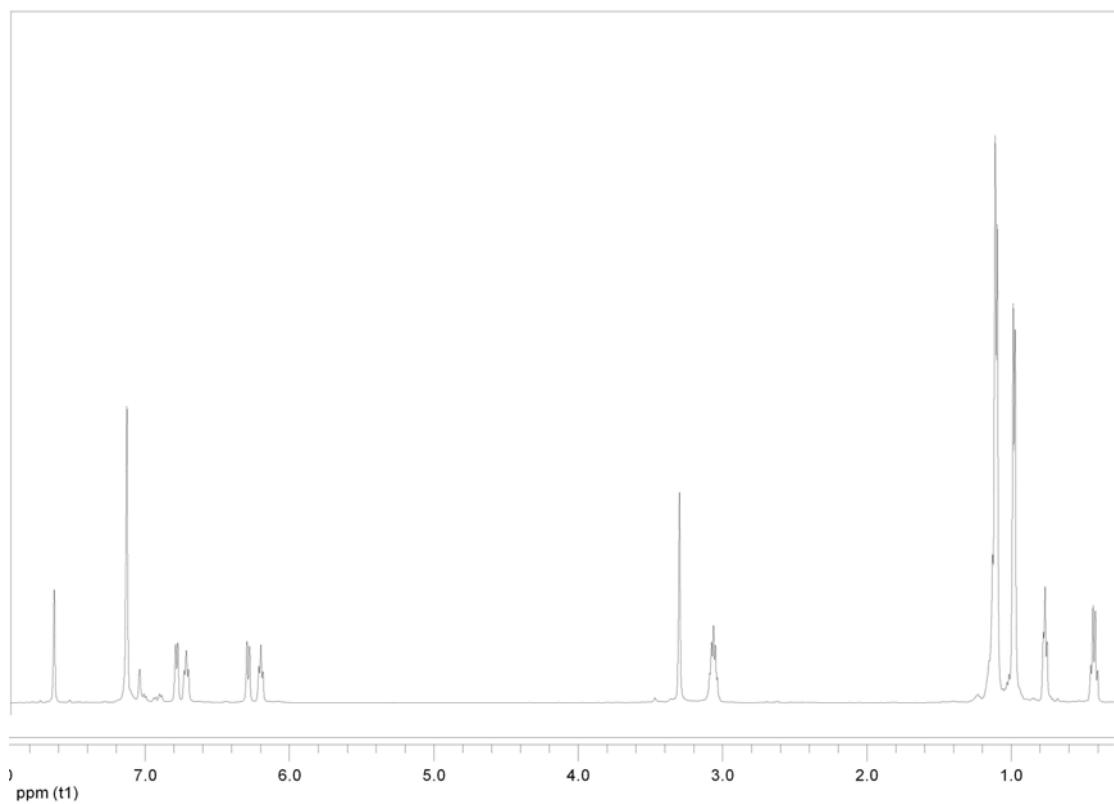


Figure 7.  $^1\text{H}$  NMR spectrum of **4**

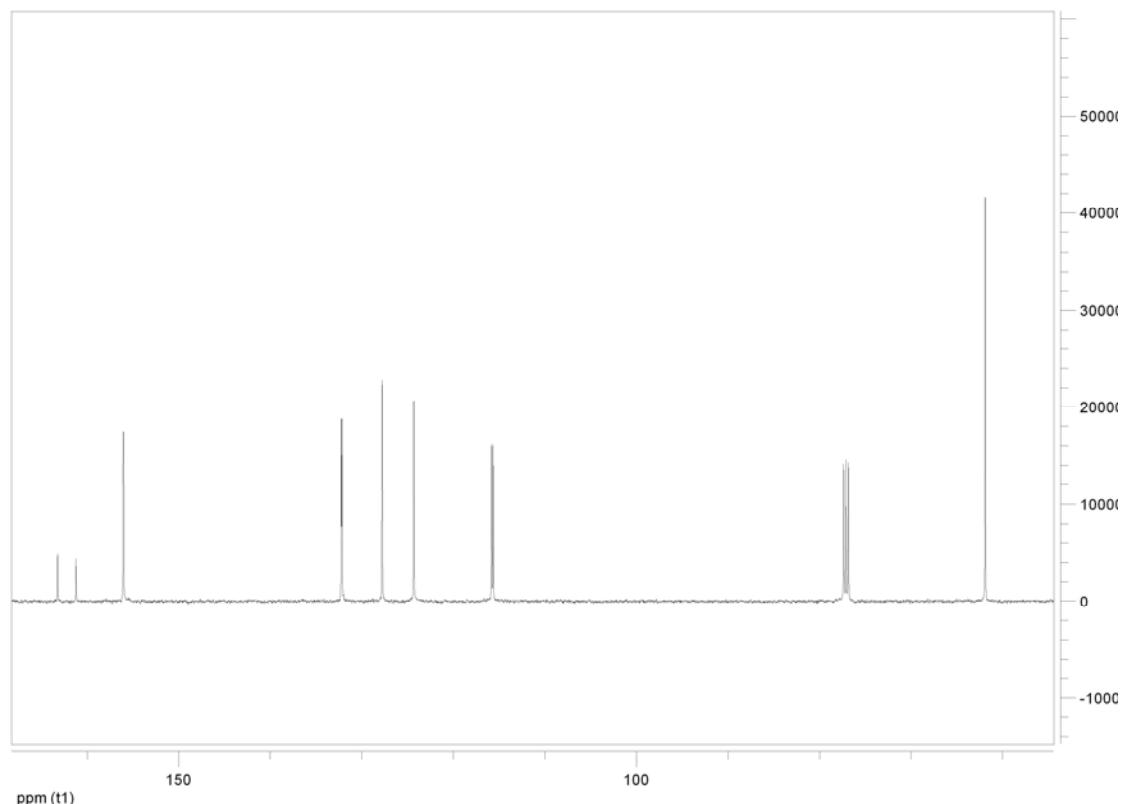


Figure 8.  $^{13}\text{C}$  NMR spectrum of **A**

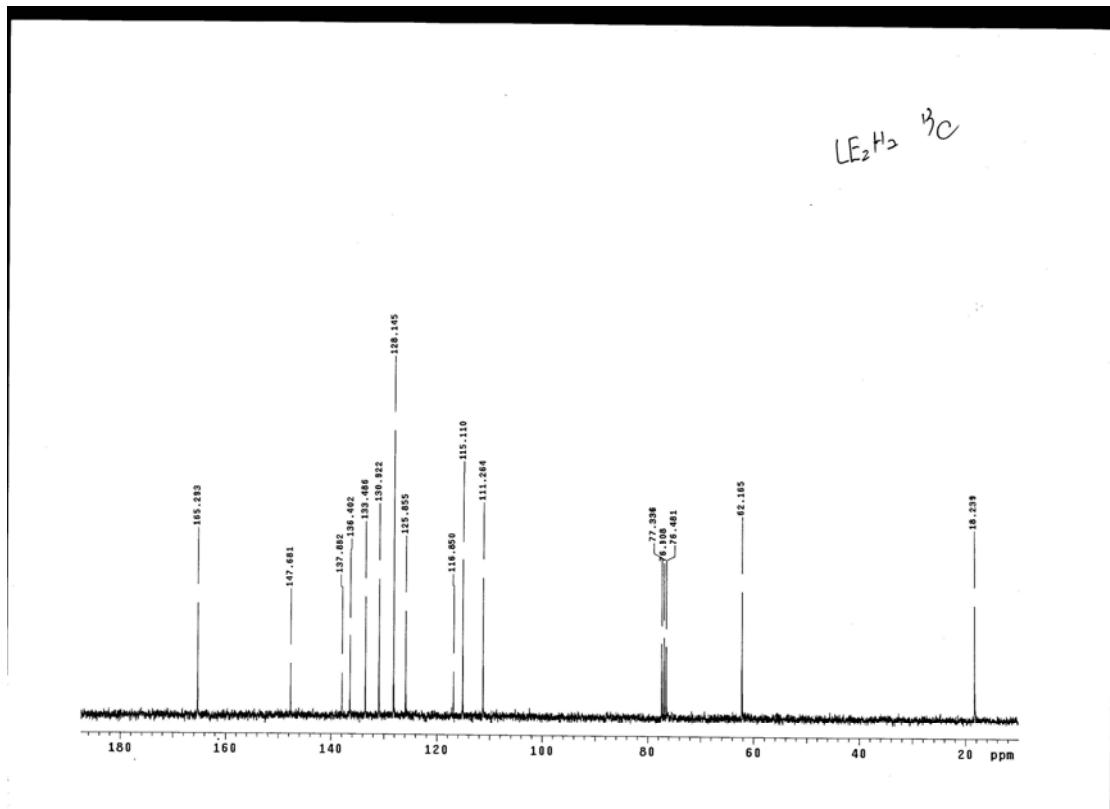


Figure 9.  $^{13}\text{C}$  NMR spectrum of  $\text{L}^1\text{H}_2$

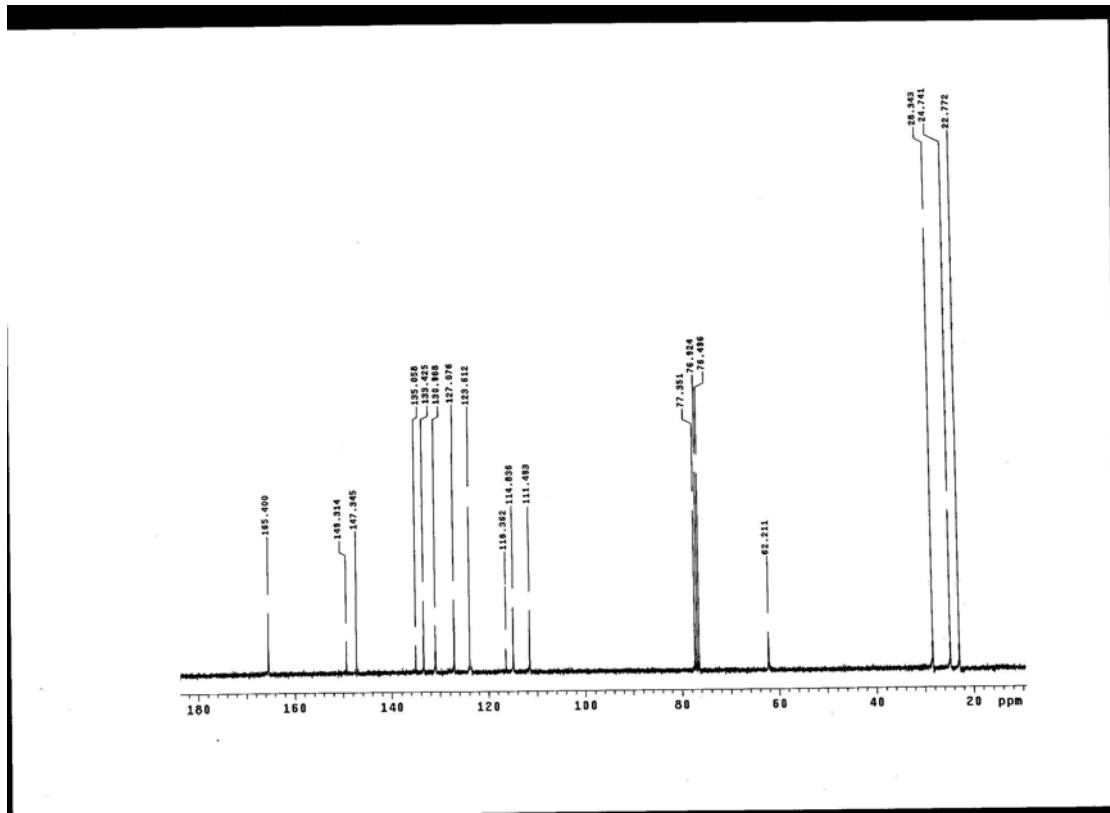


Figure 10.  $^{13}\text{C}$  NMR spectrum of  $\text{L}^2\text{H}_2$

```

YV-C
exp2 s2pu1

SAMPLE          SPECIAL
date Dec 21 2005 temp not used
solvent   CDCl3 gain 20
file      exp spin not used
ACQUISITION exp n  not used
sw       18667.9 pw90 14.600
at       0.300 p1fa 20.000
tp      10400.0 r1 0.998
t0        0.700 t1 0.998
ss       18 in
d1      1.000 dp 0
dt     1000.0 dppg y
ct      2564 PROCESSING 1.00
tn TRANSMITTER C13 lb 1.00
C13 f1 not used
sfrq    75.462 DISPLAY
tfrq    745.3 sp -1111.0
tpfrq   60 r1 1474.5
pw     7.300 rfp 1134.1
DECOUPLER rfp 0
dn      H1 fp 82.0
dof     0 1p -259.0
dm      YV  PLOT
dw      40 wc 250
dpwcr  40 sc 0
def     17263 ts 47
nm      ph 4

```

*LE<sub>2</sub>A<sub>2</sub>* | <sup>13</sup>C

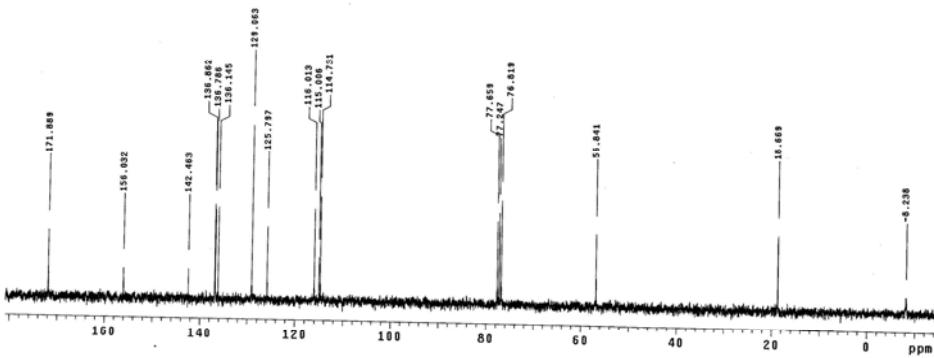


Figure 11. <sup>13</sup>C NMR spectrum of **1**

```

YV-C
exp2 s2pu1

SAMPLE          SPECIAL
date Oct 25 2005 temp not used
solvent   CDCl3 gain 20
file      exp spin not used
ACQUISITION exp n  not used
sw       18667.9 pw90 14.600
at       0.300 p1fa 20.000
tp      10400.0 r1 0.998
t0        0.700 t1 0.998
ss       18 in
d1      1.000 dp 0
dt     1000.0 dppg y
ct      25672 PROCESSING 1.00
tn TRANSMITTER C13 lb 1.00
C13 f1 not used
sfrq    75.462 DISPLAY
tfrq    745.3 sp 1136.6
tpfrq   60 r1 1474.5
pw     7.300 rfp 1155.0
DECOUPLER rfp -82.4
dn      H1 fp -232.3
dm      YV  PLOT
dw      40 wc 250
dpwcr  36 sc 37
def     17263 ts 6
nm      ph 6

```

*LE<sub>2</sub>A<sub>2</sub>* | <sup>13</sup>C

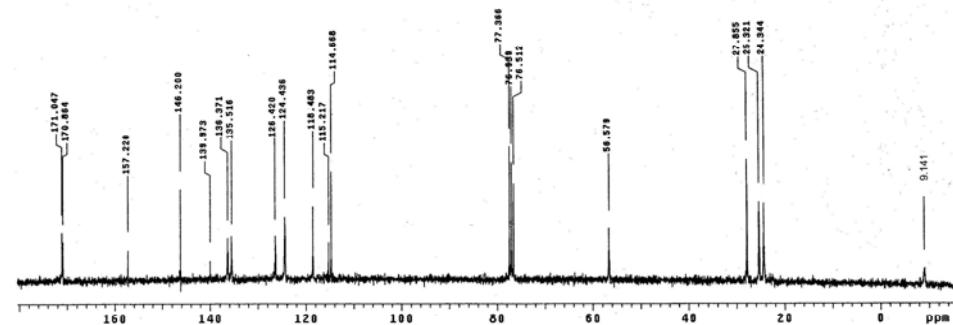


Figure 12. <sup>13</sup>C NMR spectrum of **2**

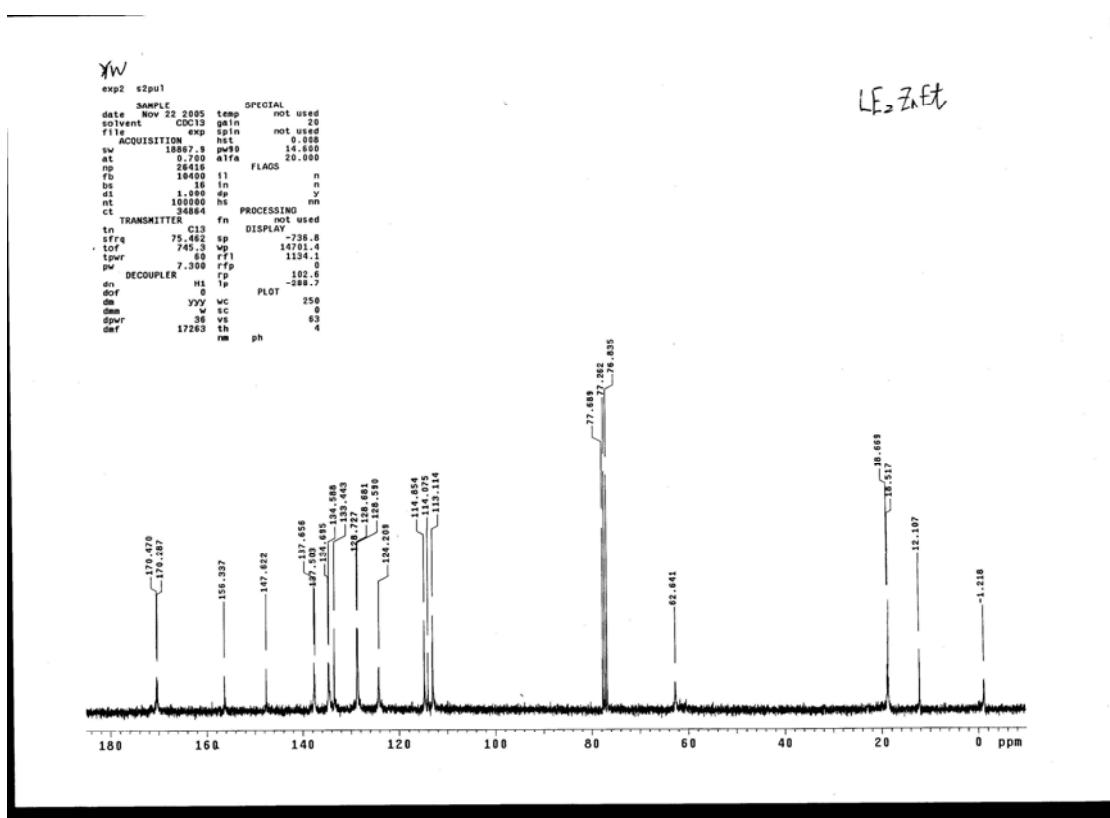


Figure 13.  $^{13}\text{C}$  NMR spectrum of **3**

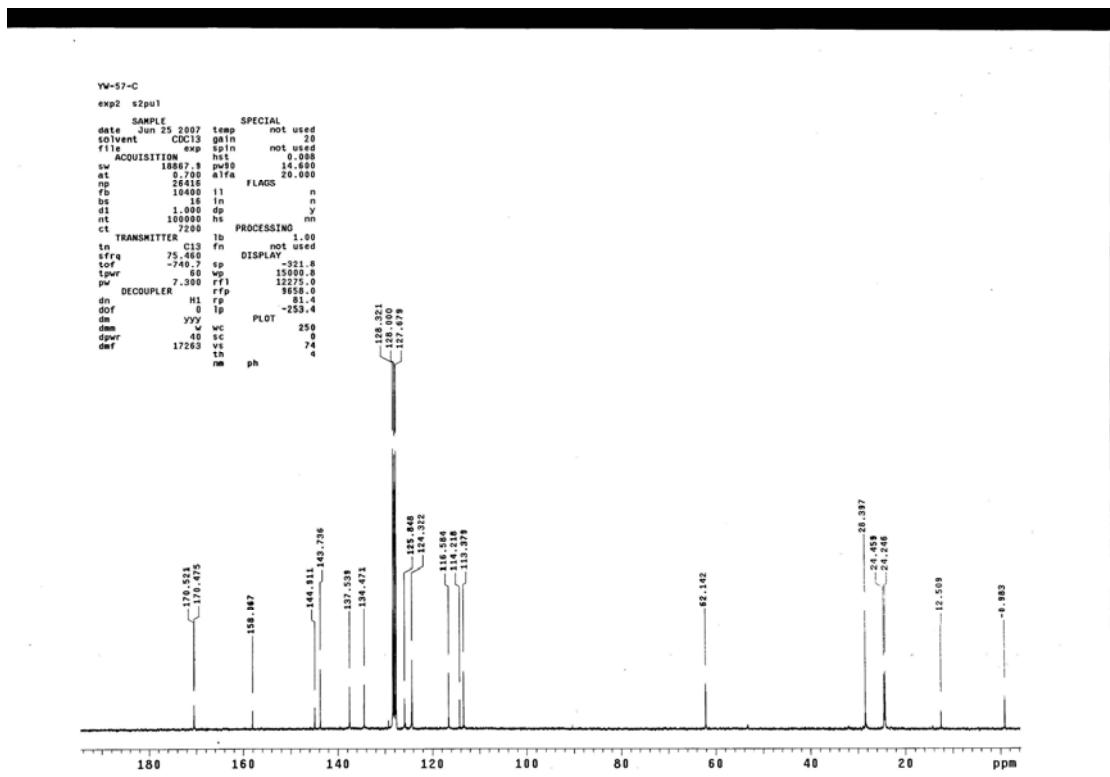


Figure 14.  $^{13}\text{C}$  NMR spectrum of 4

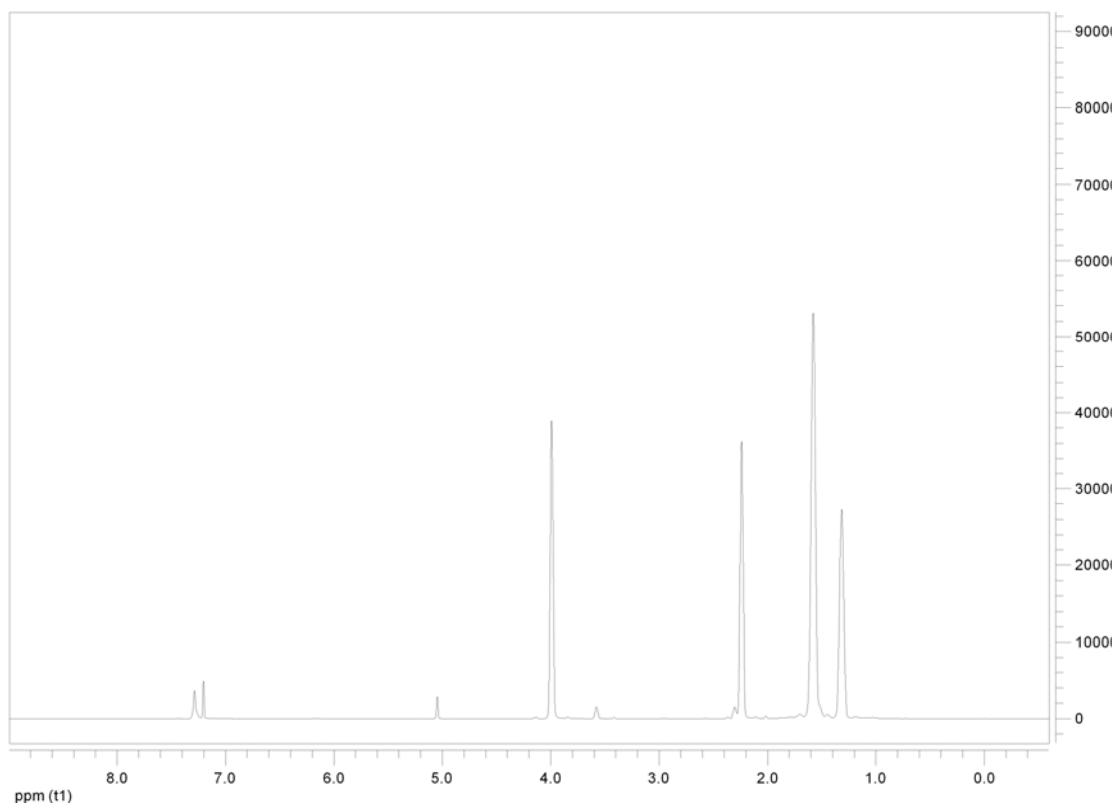


Figure 15. <sup>1</sup>H NMR spectrum of PCL (entry 5)

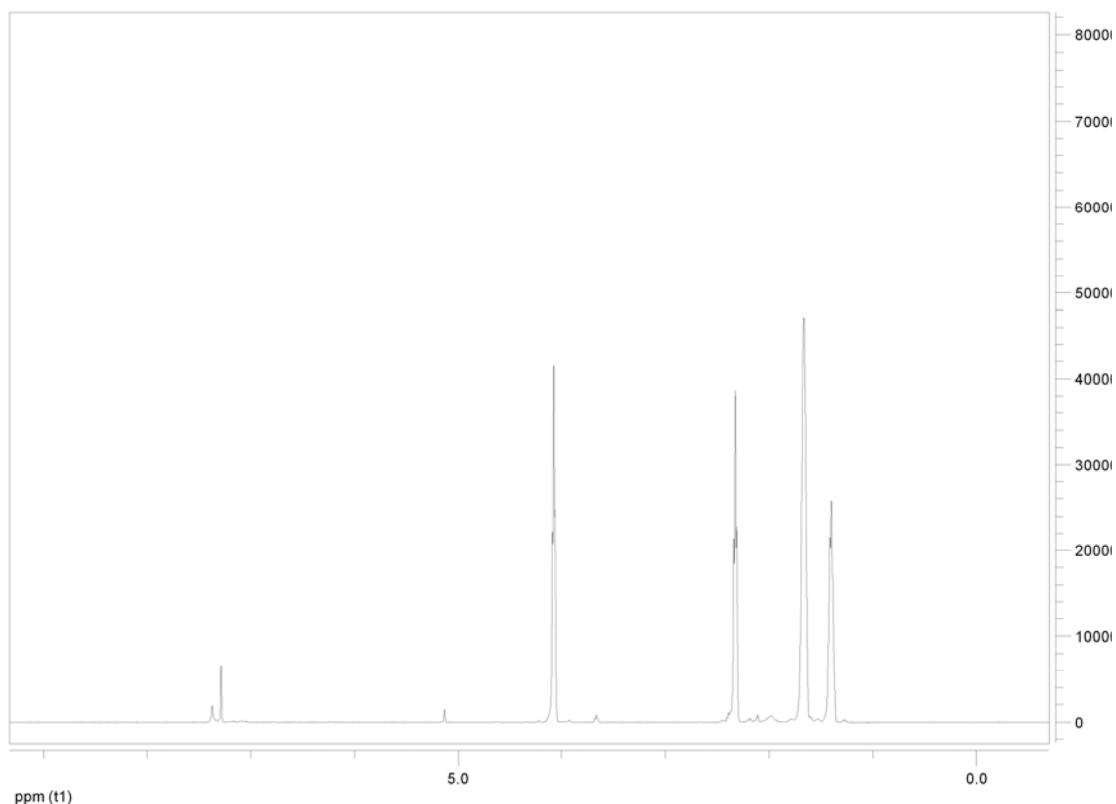


Figure 16. <sup>1</sup>H NMR spectrum of PCL (entry 6)

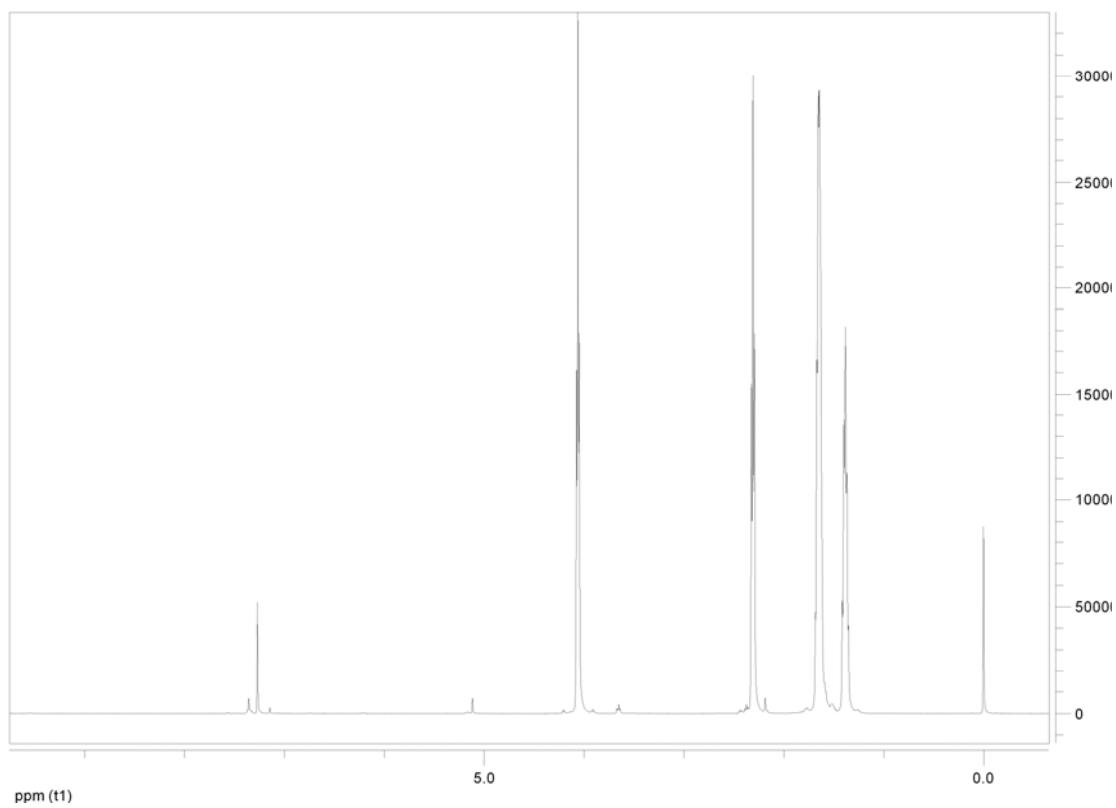


Figure 17. <sup>1</sup>H NMR spectrum of PCL (entry 7)

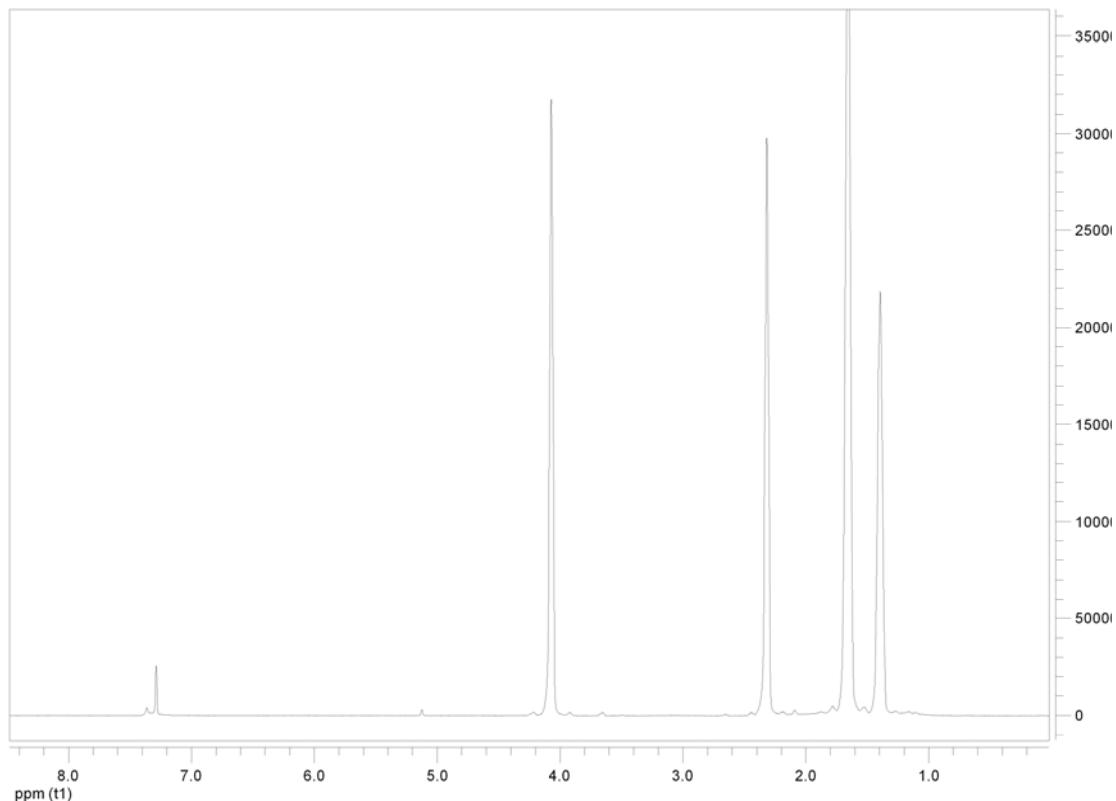


Figure 18. <sup>1</sup>H NMR spectrum of PCL (entry 10)

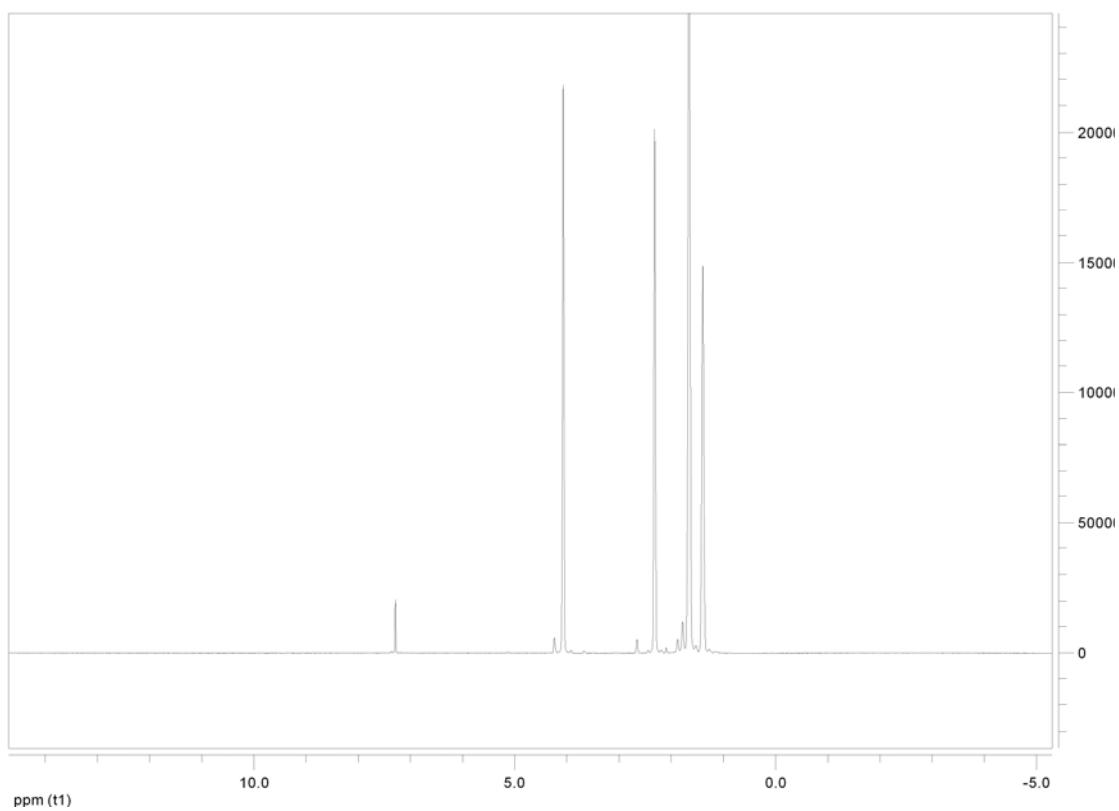


Figure 19. <sup>1</sup>H NMR spectrum of PCL (entry 13)

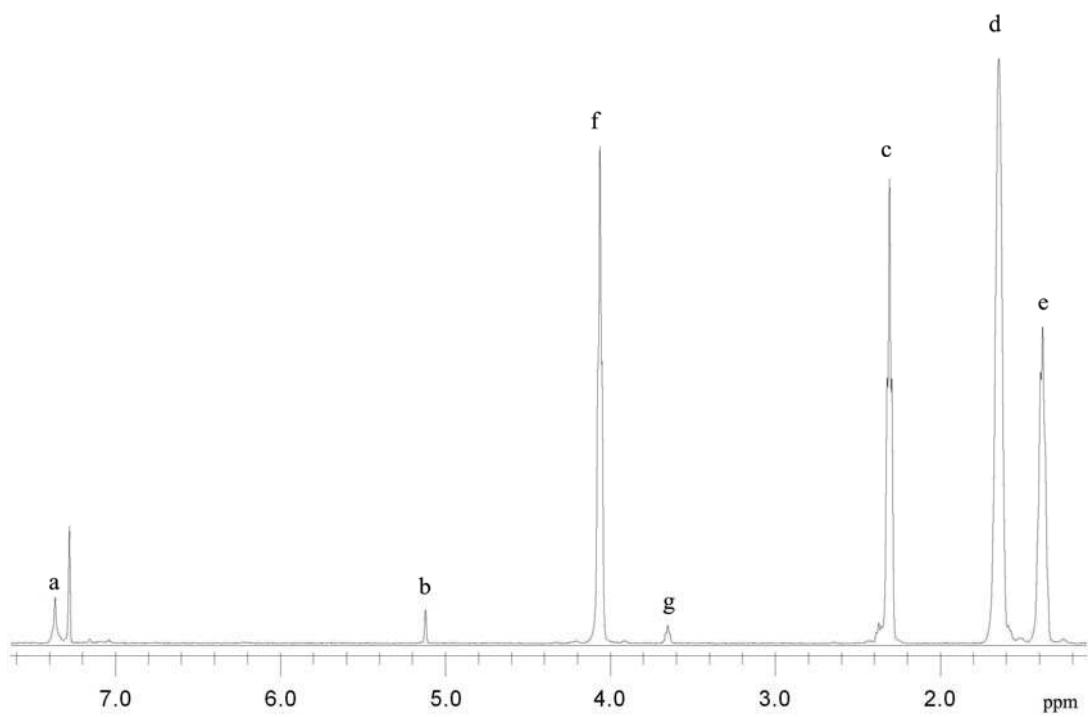


Figure 20. <sup>1</sup>H NMR spectrum of PCL (entry 15)

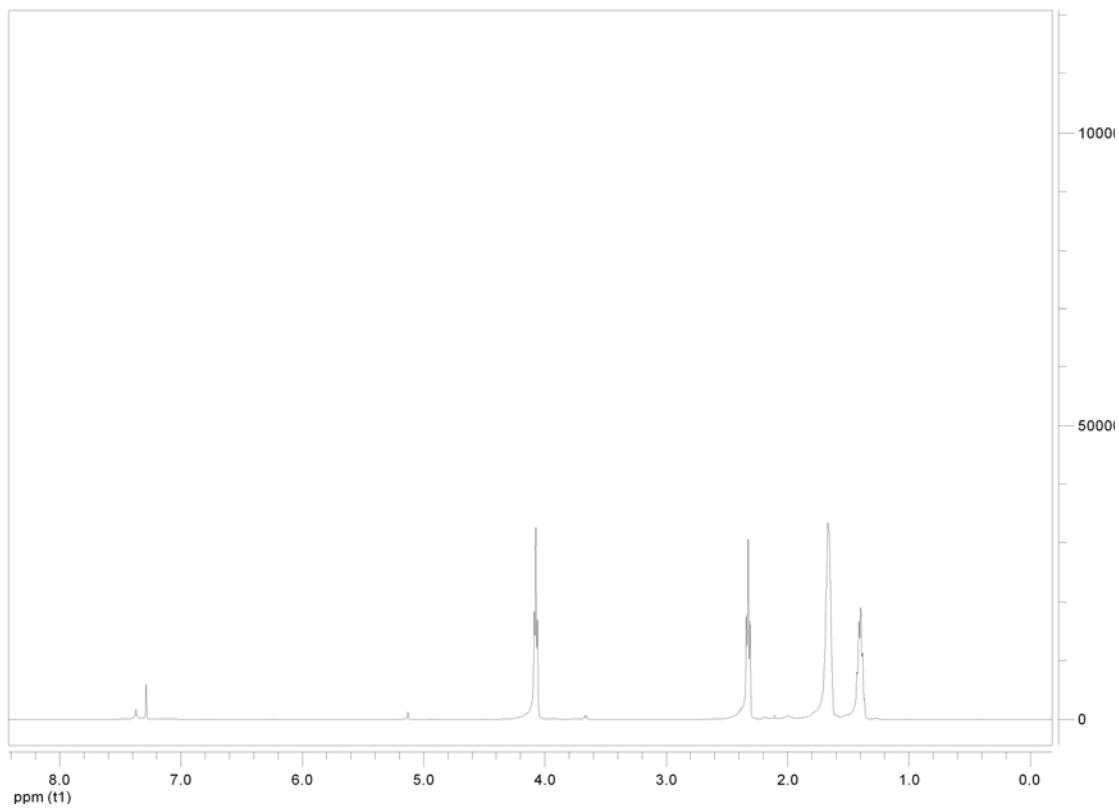


Figure 21. <sup>1</sup>H NMR spectrum of PCL (entry 16)

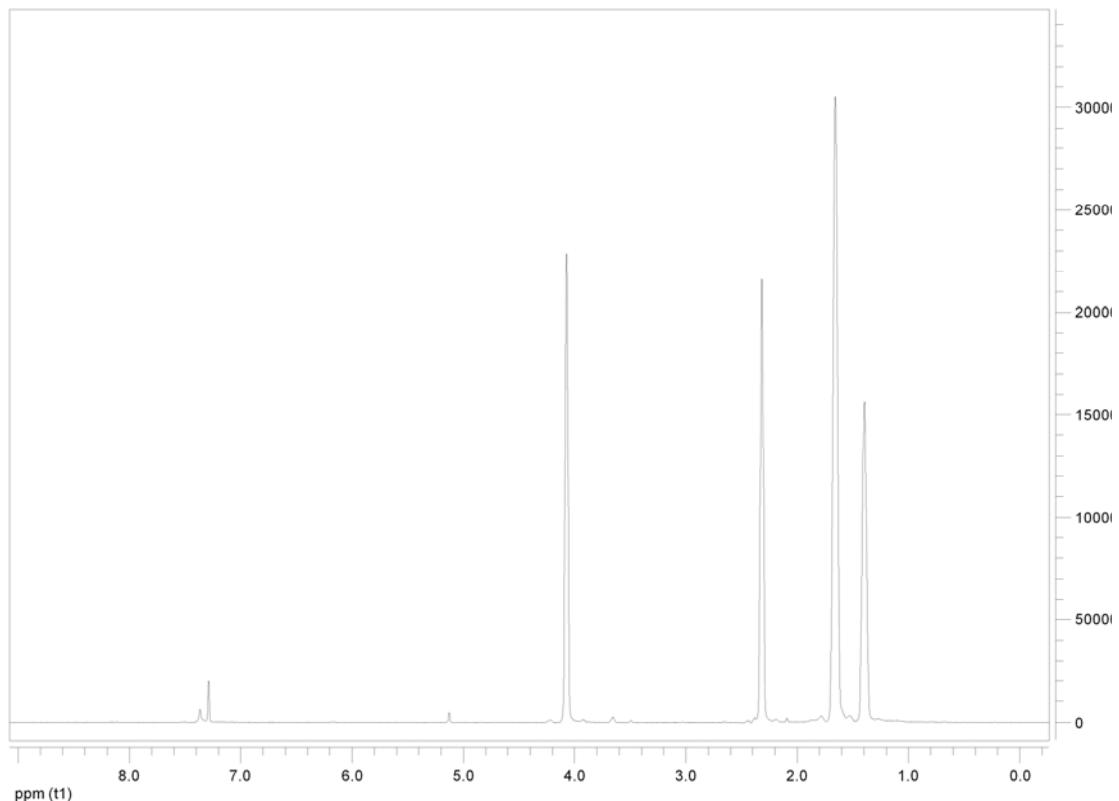


Figure 22. <sup>1</sup>H NMR spectrum of PCL (entry 17)

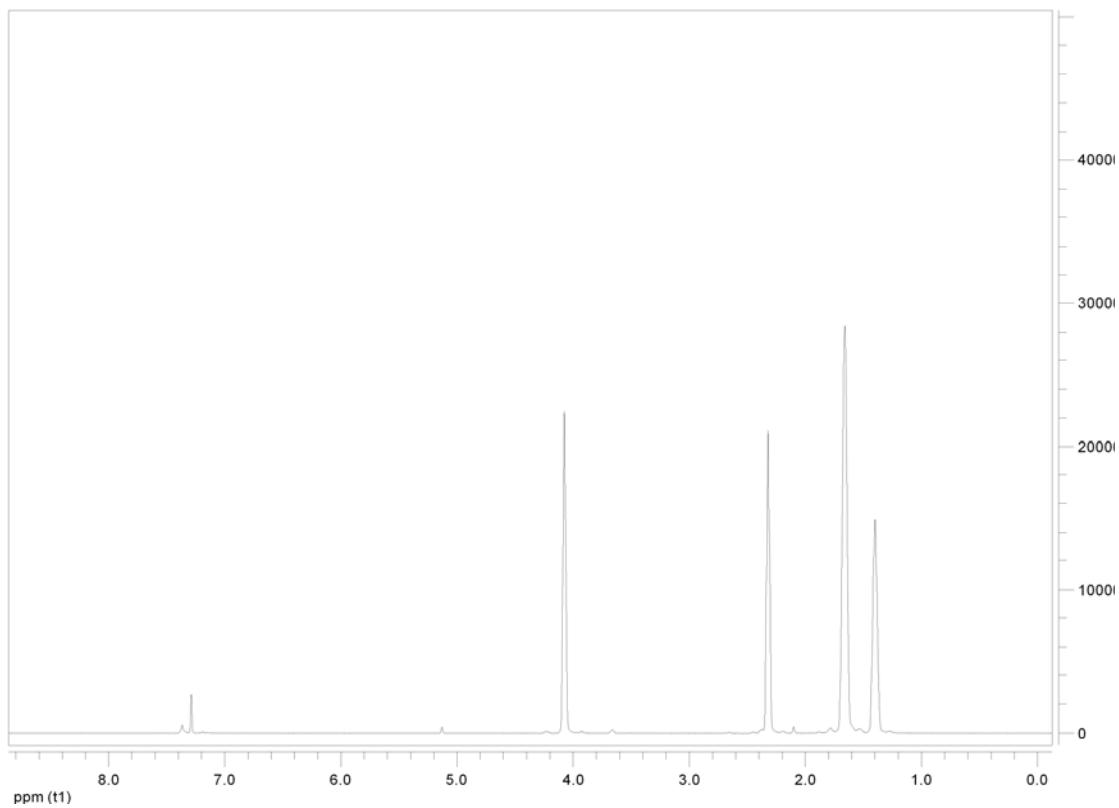


Figure 23.  $^1\text{H}$  NMR spectrum of PCL (entry 20)

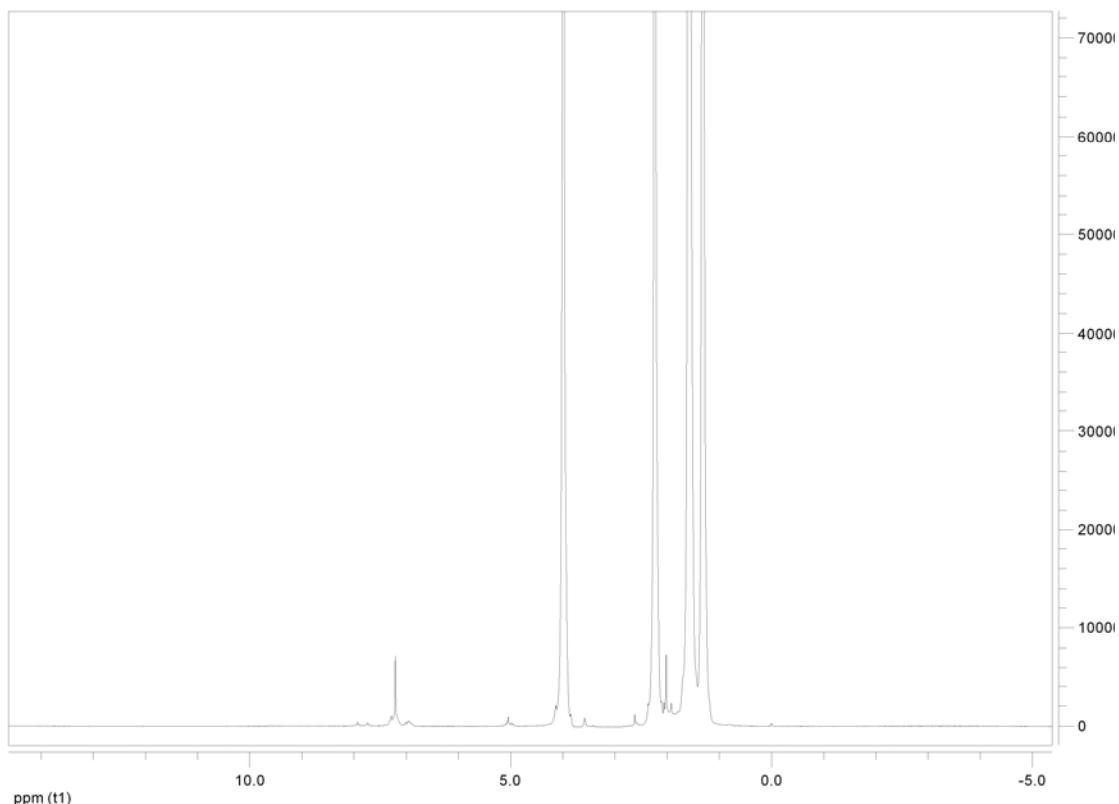
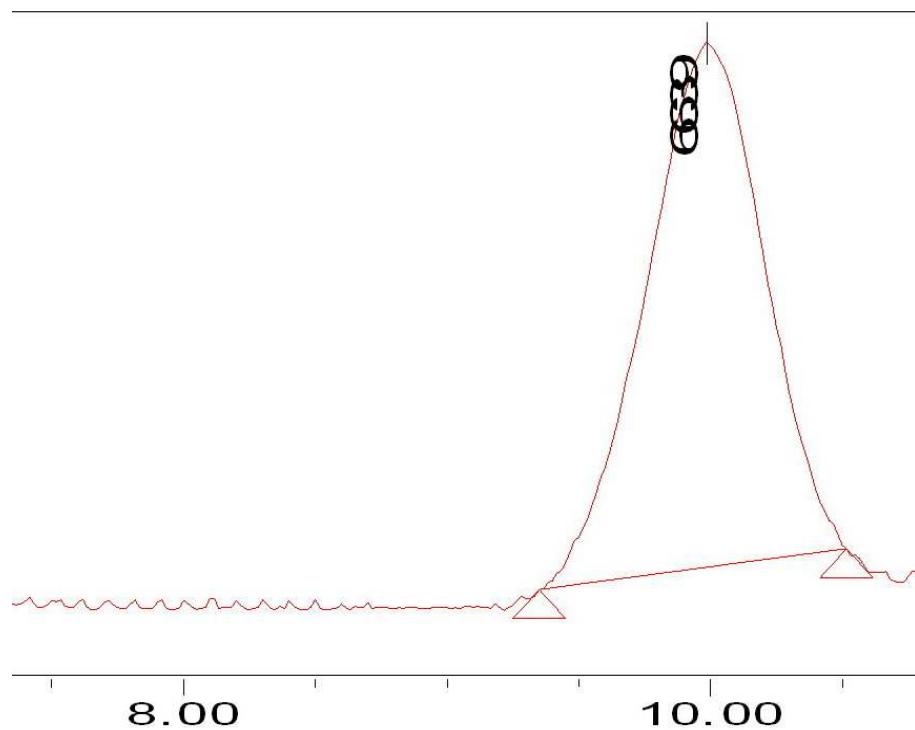
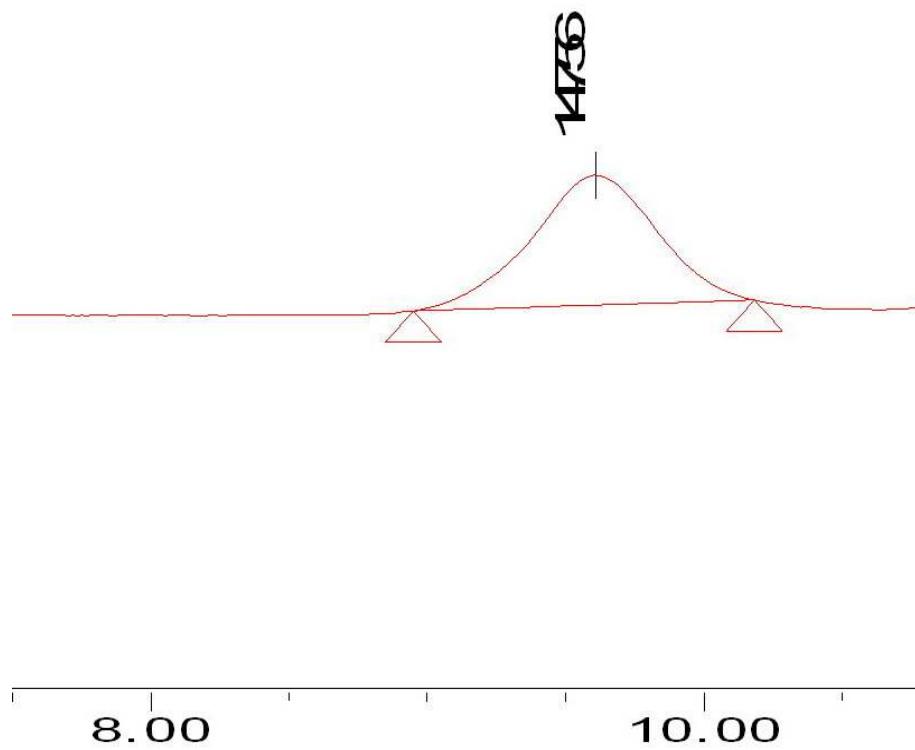


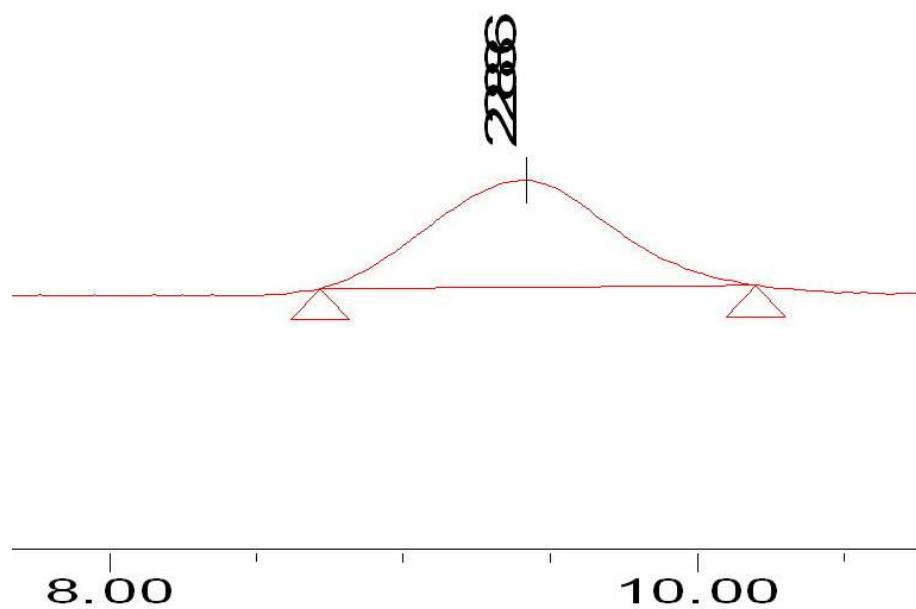
Figure 24.  $^1\text{H}$  NMR spectrum of PCL (entry 23)



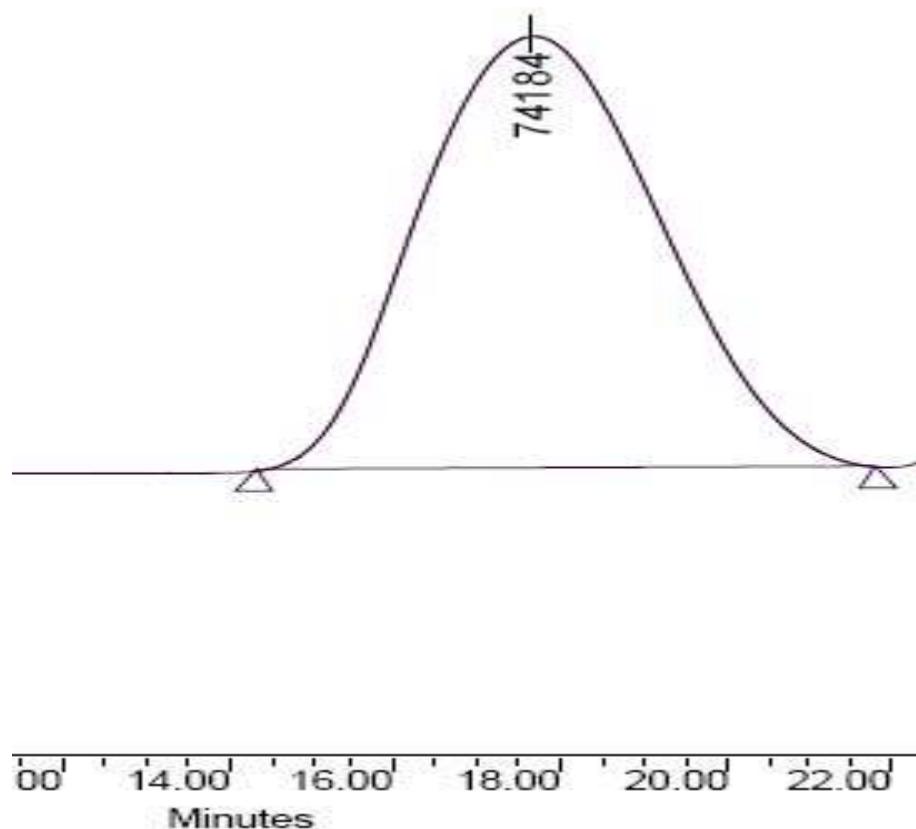
**Figure 25.** GPC elution curve of PCL (entry 5)



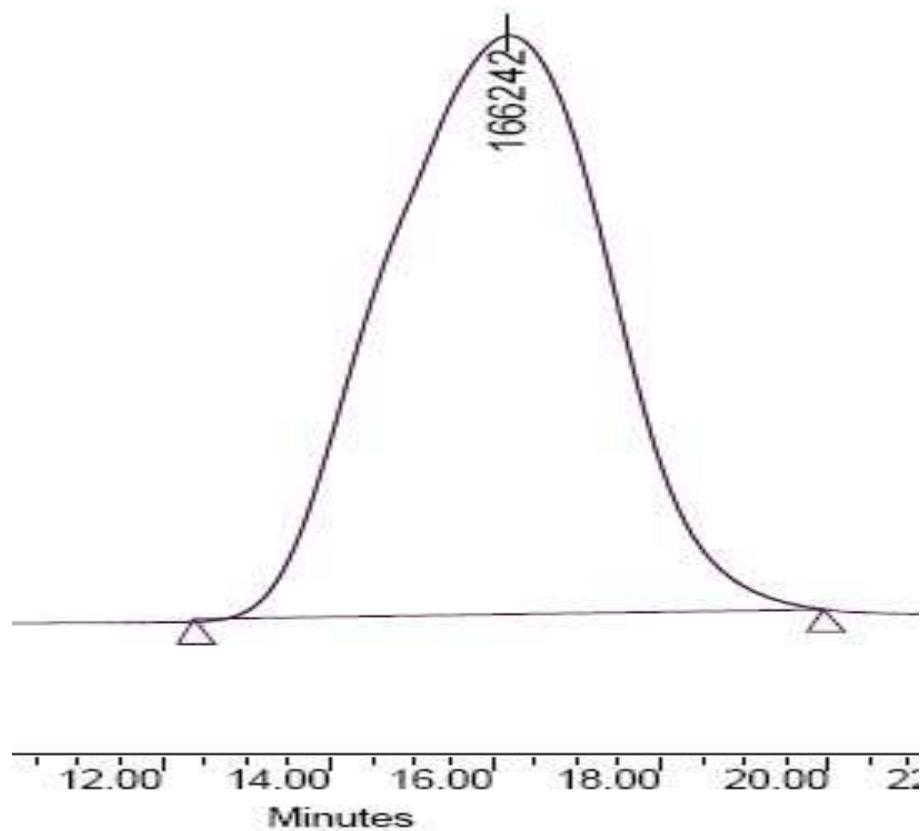
**Figure 26.** GPC elution curve of PCL (entry 6)



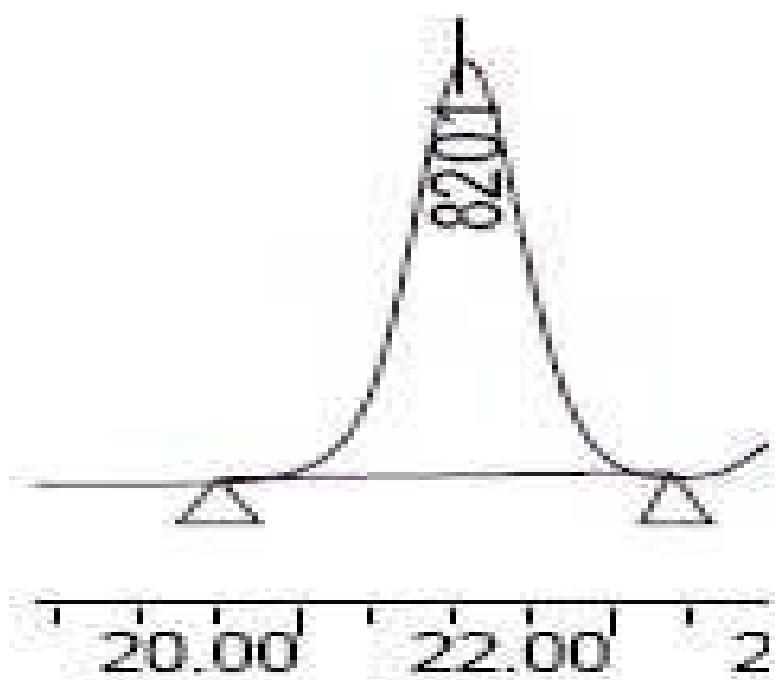
**Figure 27.** GPC elution curve of PCL (entry 7)



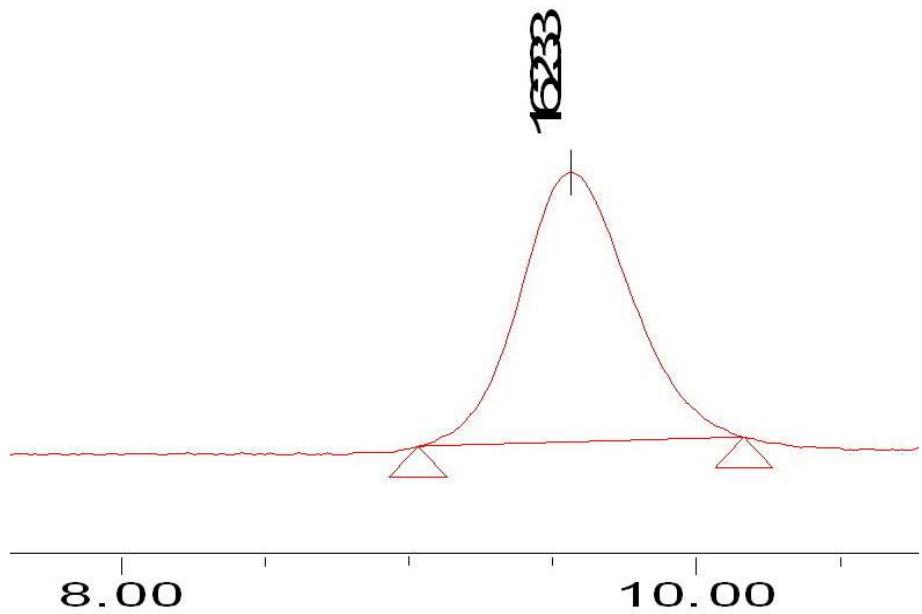
**Figure 28.** GPC elution curve of PCL (entry 10)



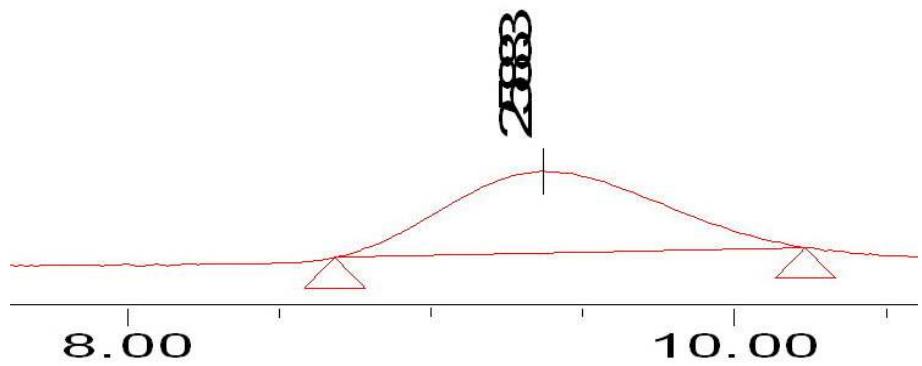
**Figure 29.** GPC elution curve of PCL (entry 13)



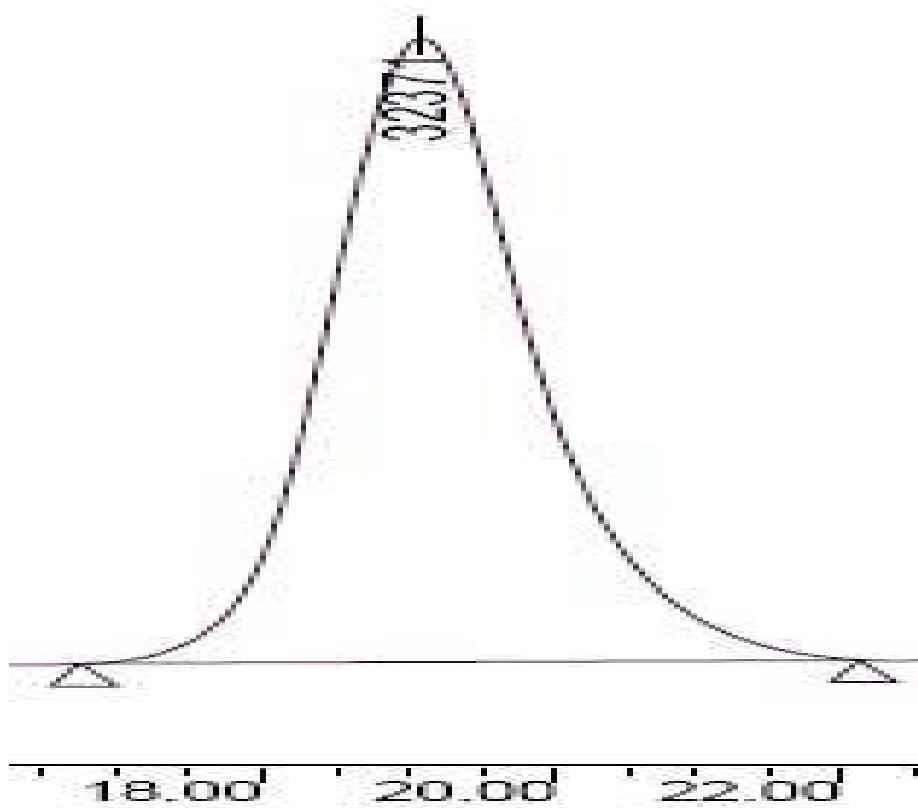
**Figure 30.** GPC elution curve of PCL (entry 15)



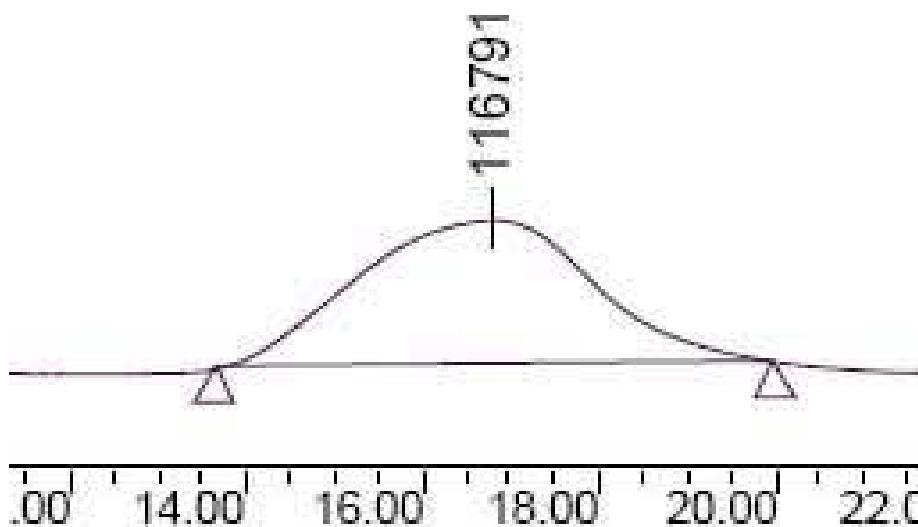
**Figure 31.** GPC elution curve of PCL (entry 16)



**Figure 32.** GPC elution curve of PCL (entry 17)



**Figure 33.** GPC elution curve of PCL (entry 20)



**Figure 34.** GPC elution curve of PCL (entry 23)