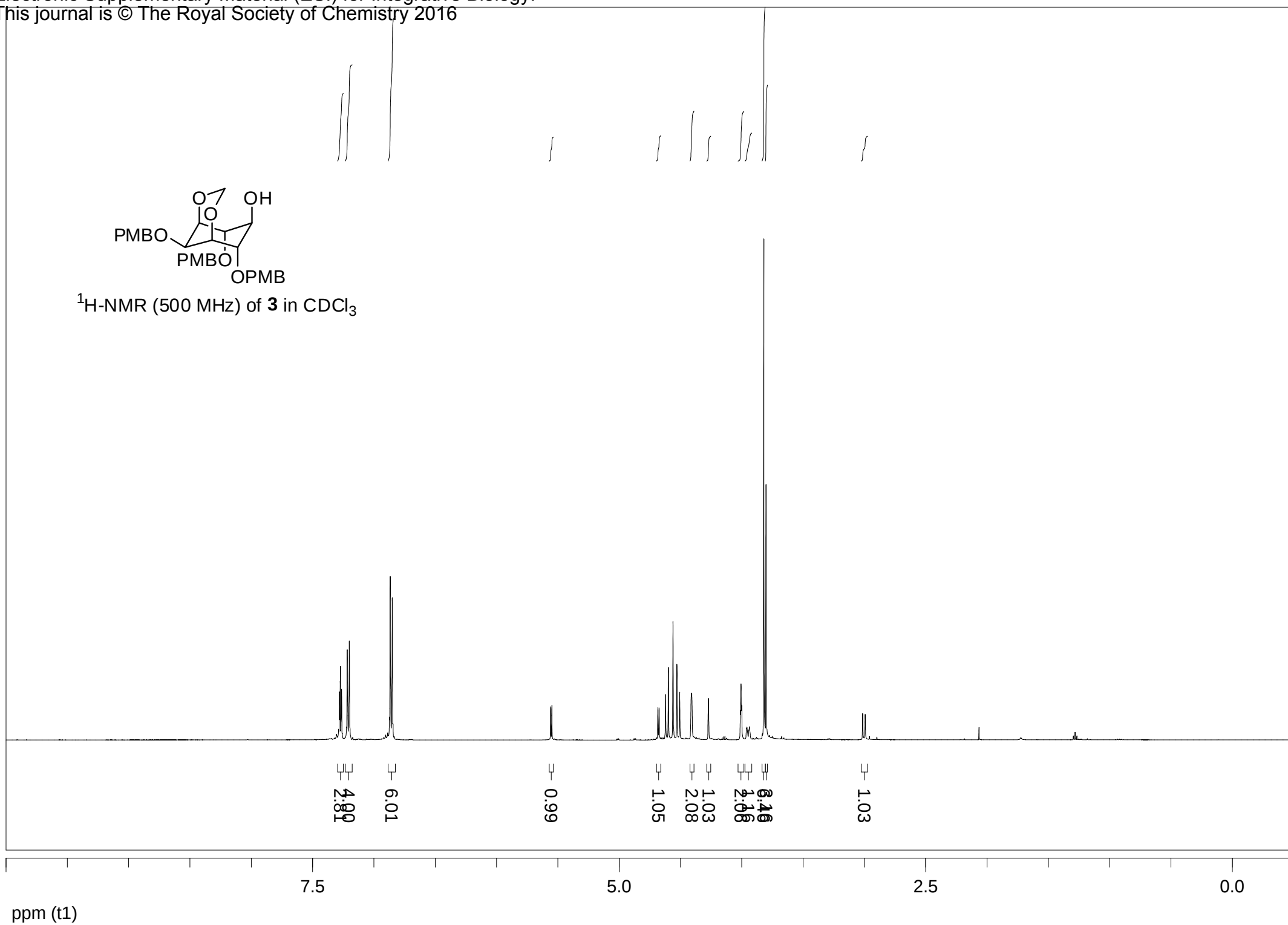
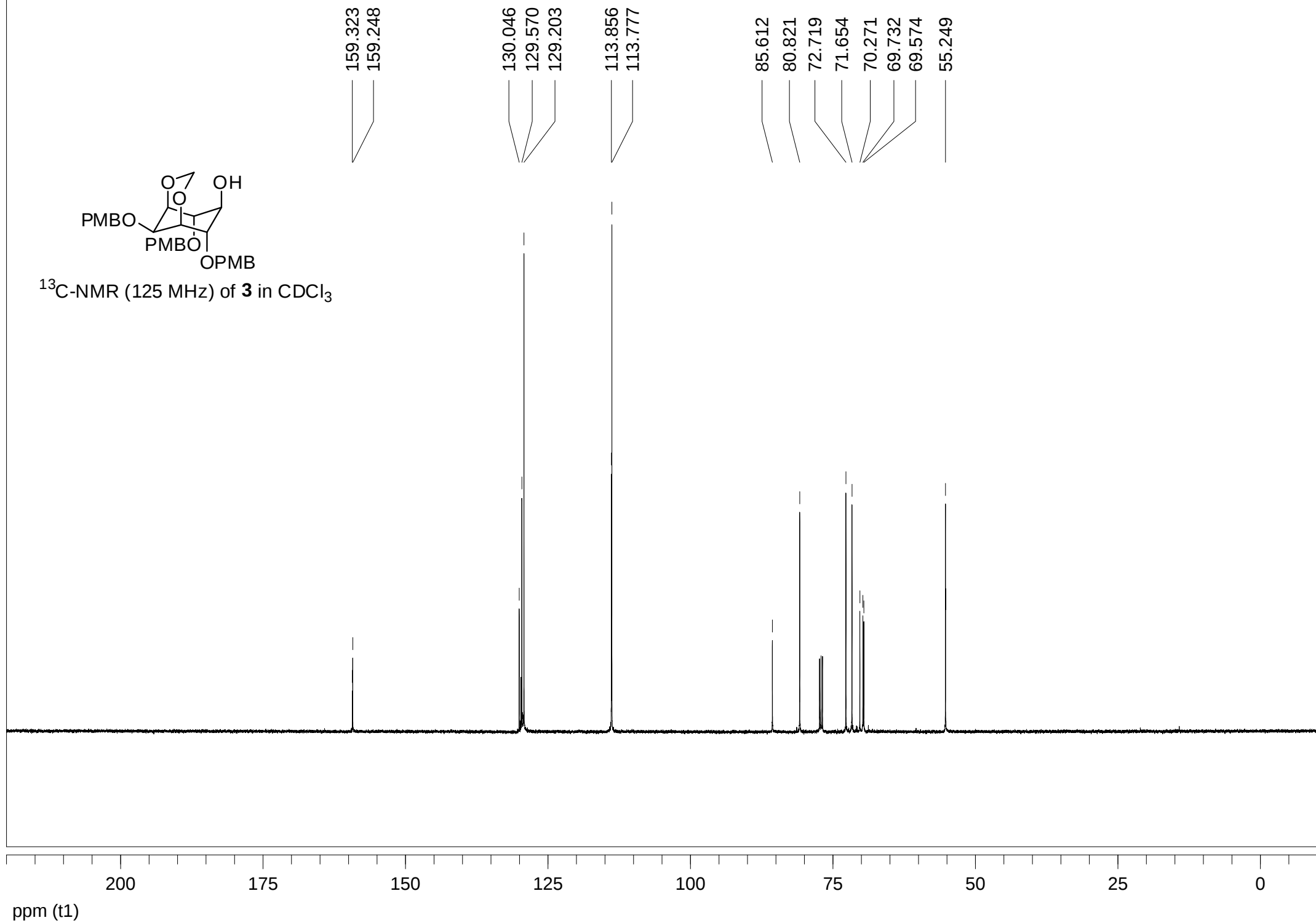
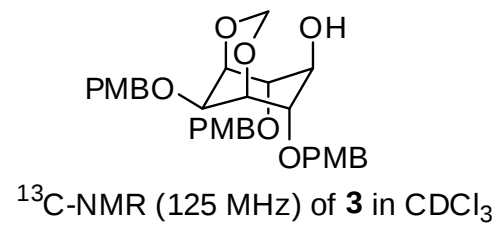
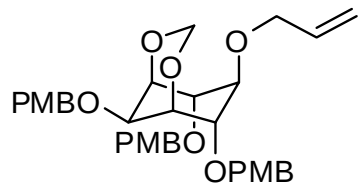


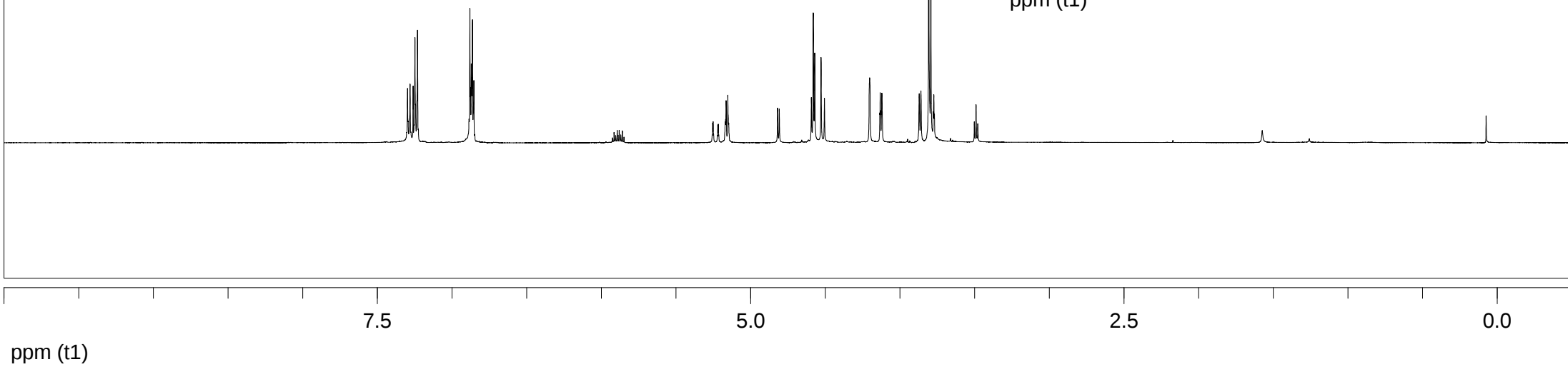
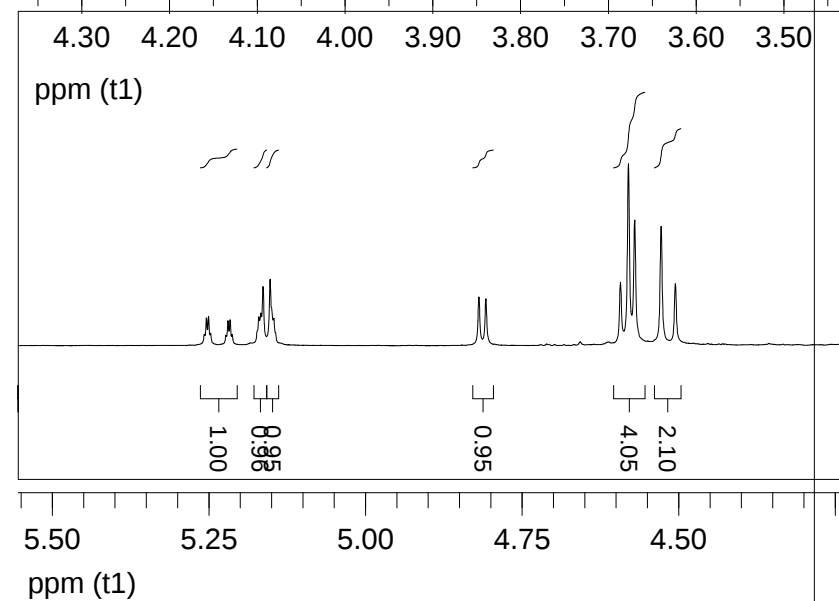
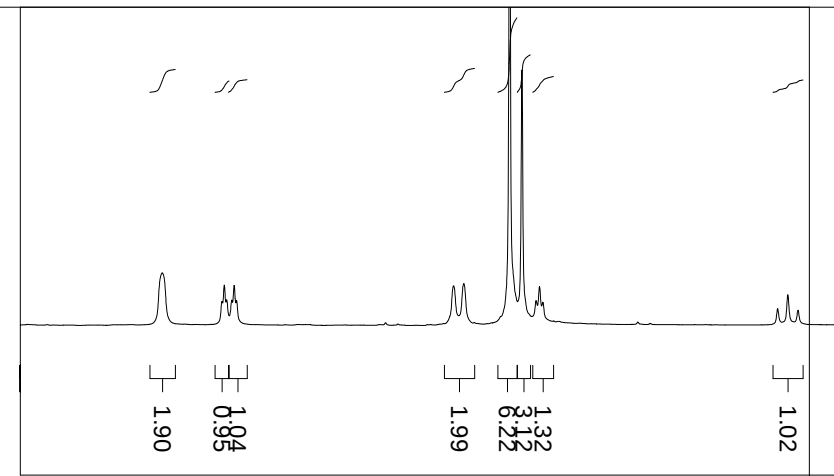
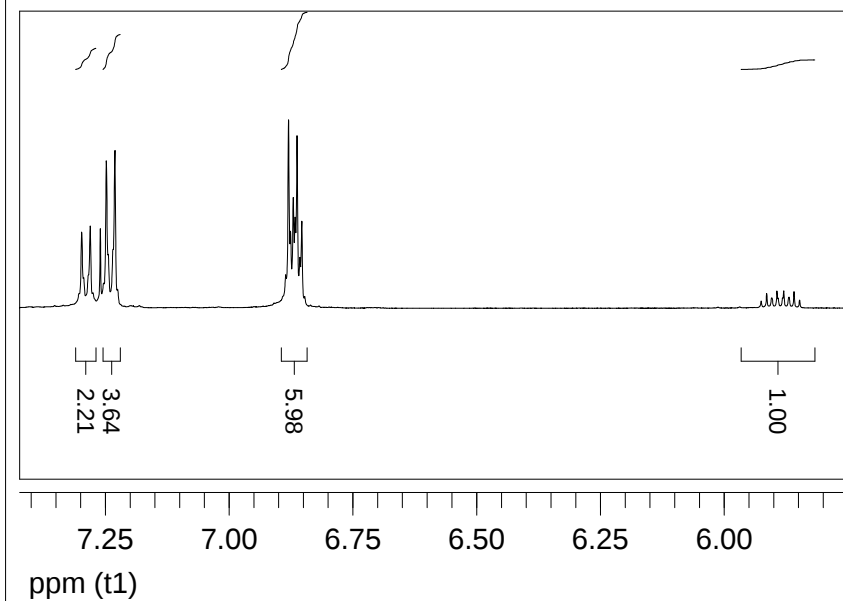
^1H -NMR (500 MHz) of **3** in CDCl_3

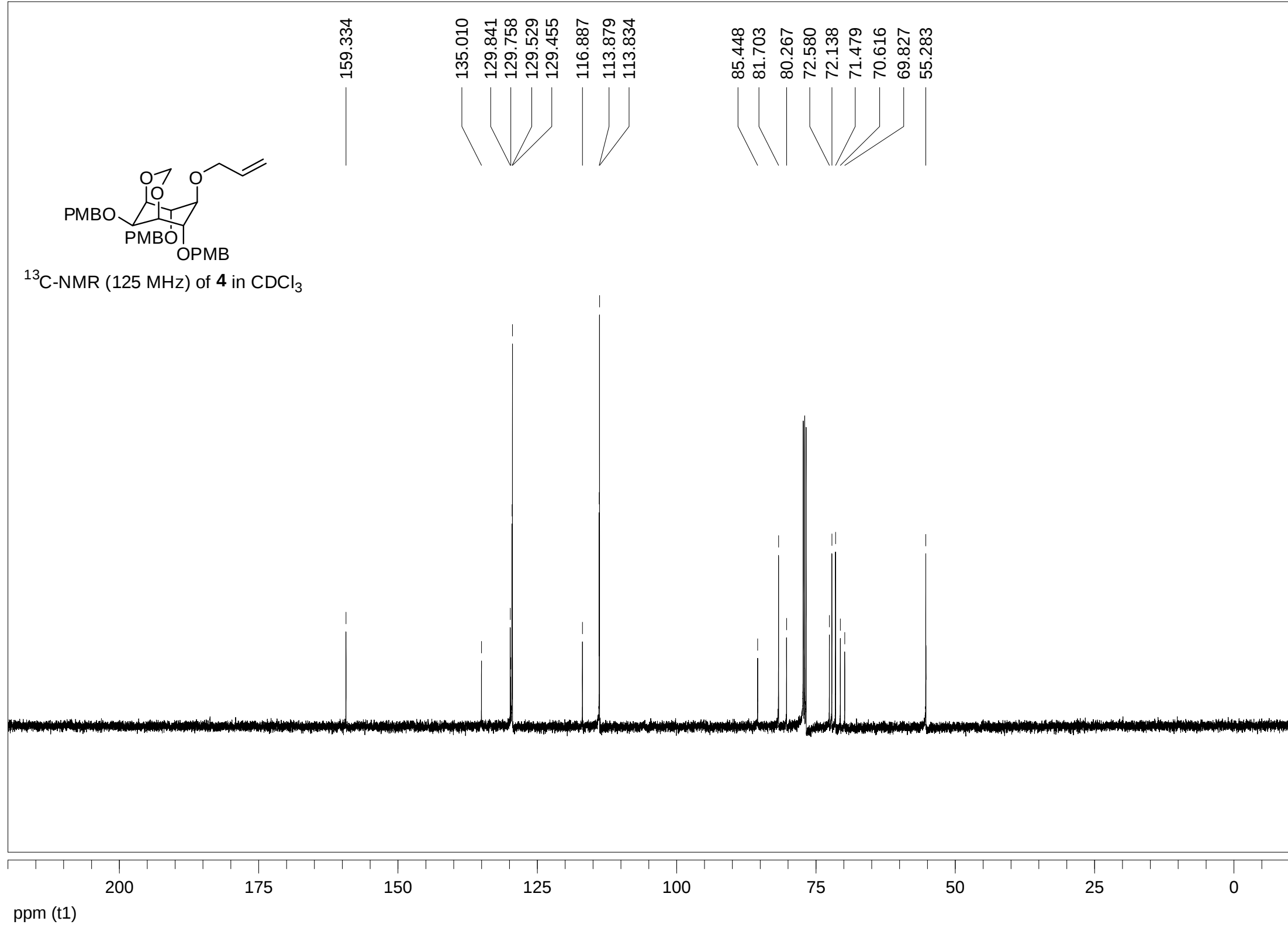
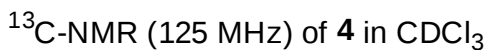


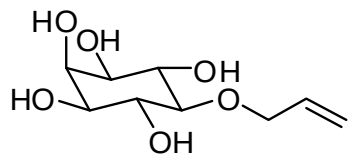




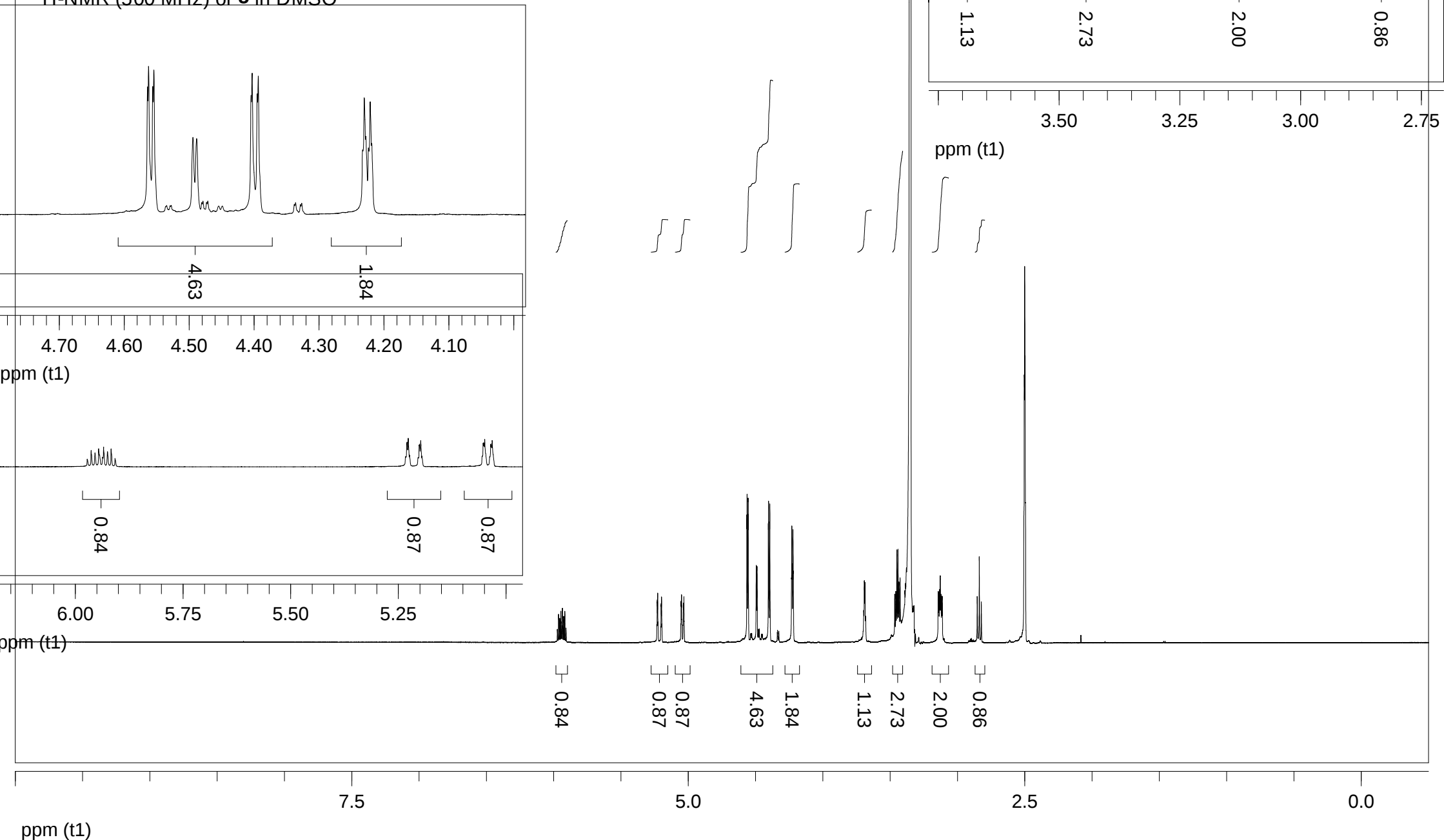
$^1\text{H-NMR}$ (500 MHz) of **4** in CDCl_3

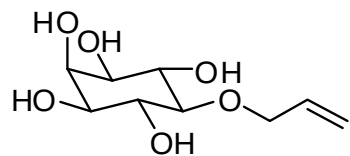




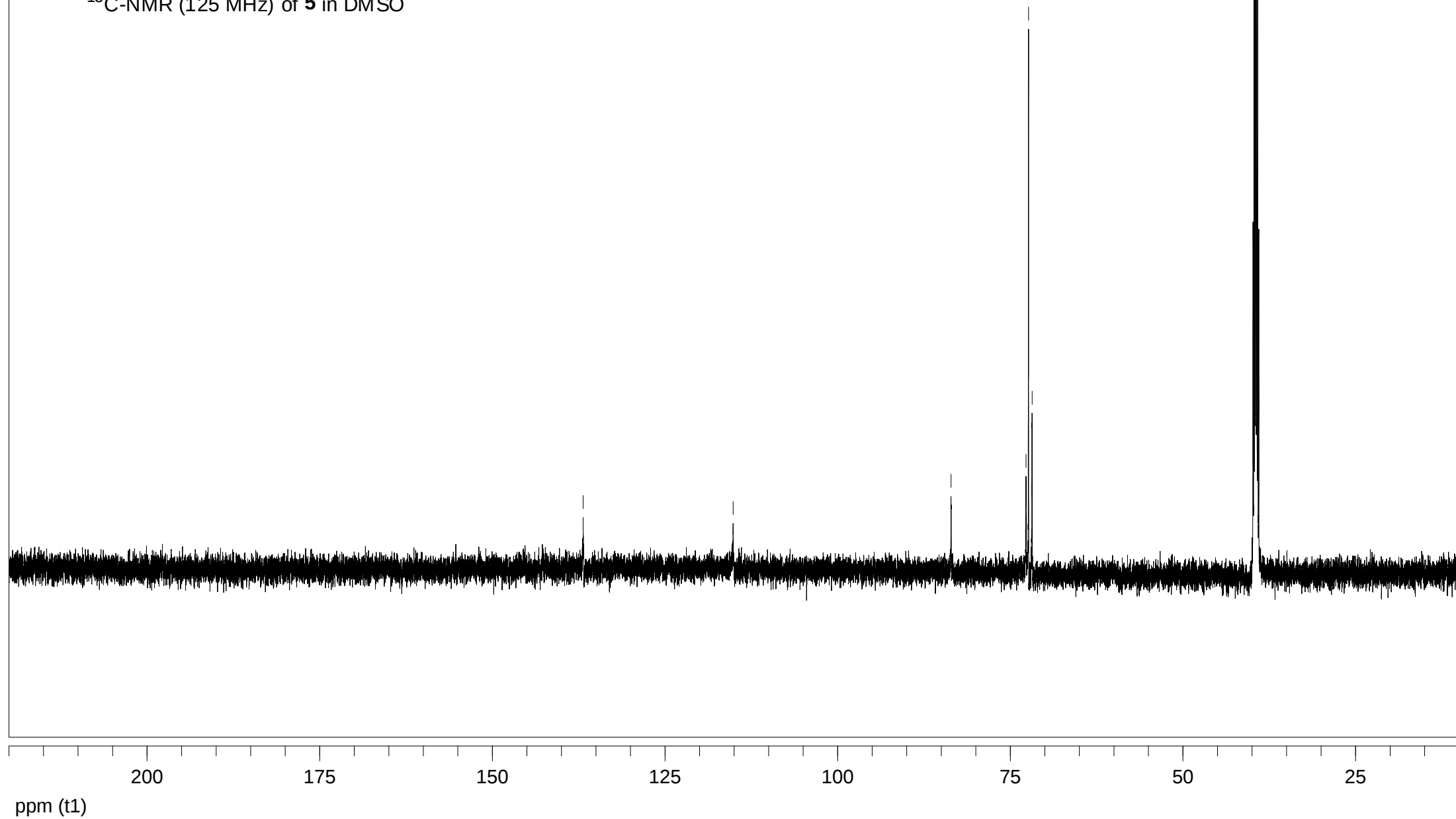


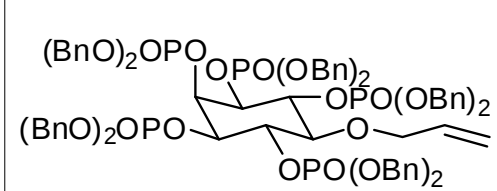
¹H-NMR (500 MHz) of **5** in DMSO



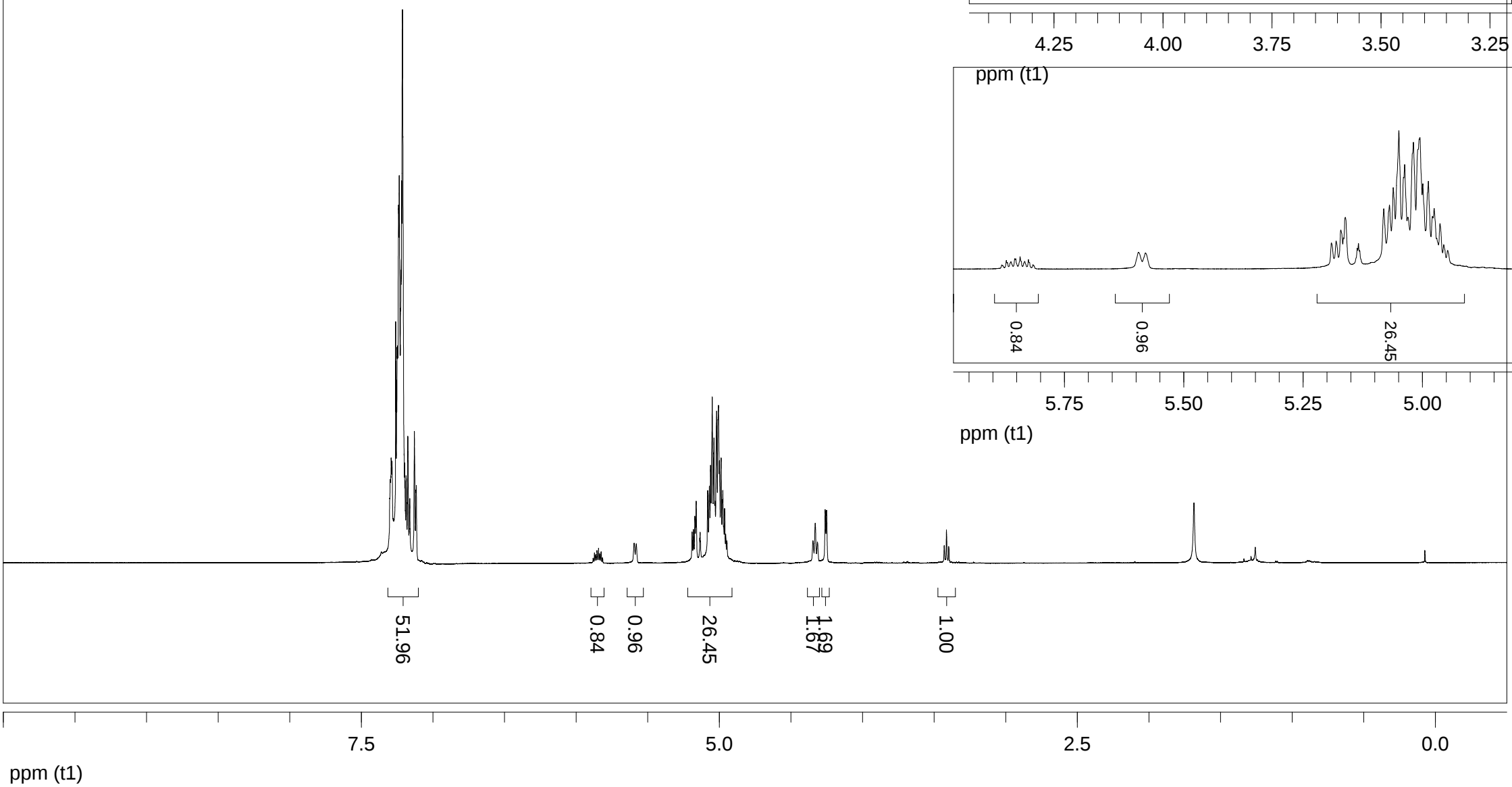


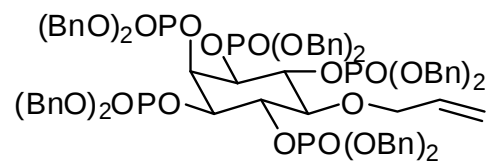
^{13}C -NMR (125 MHz) of **5** in DMSO



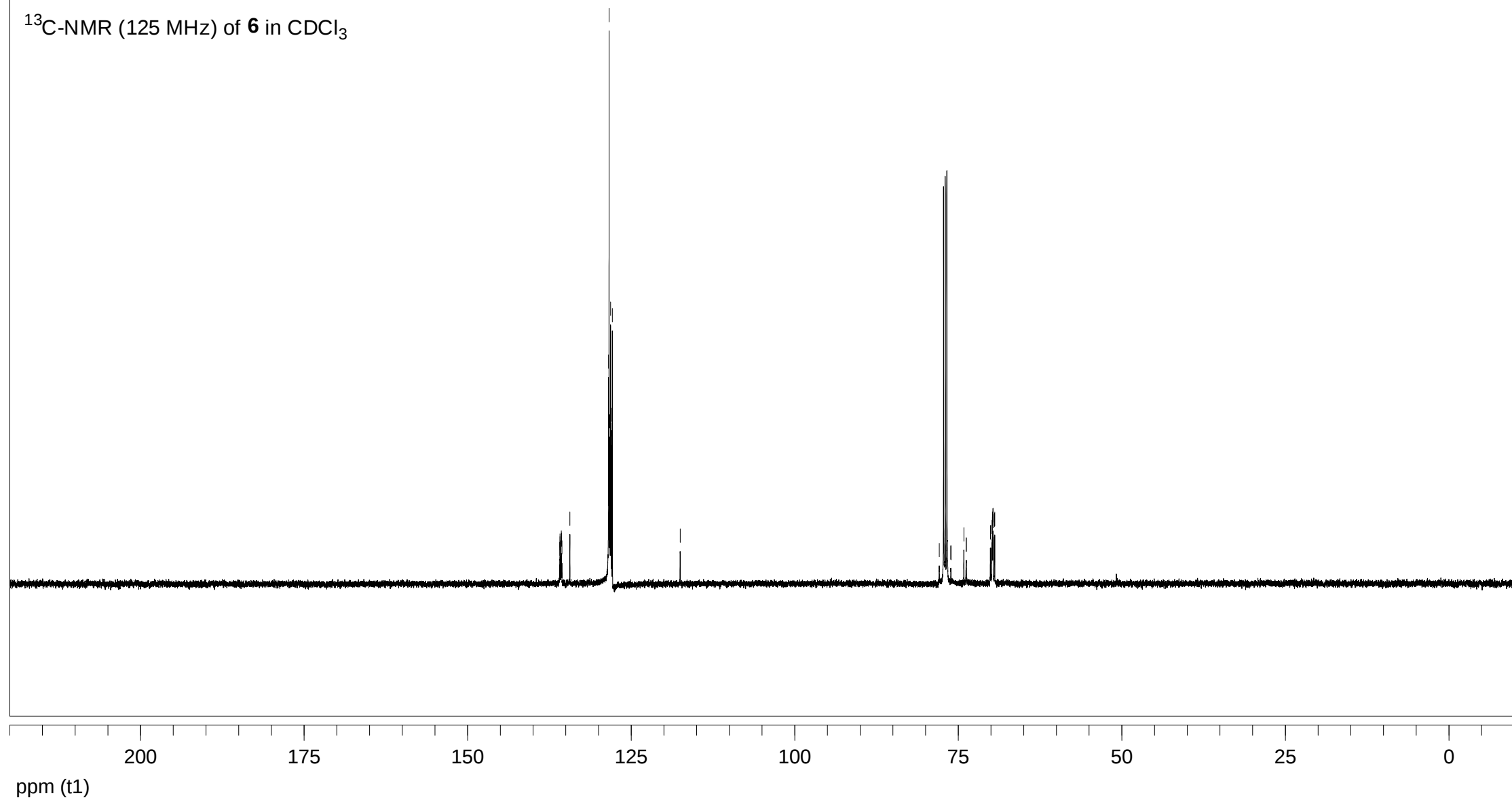
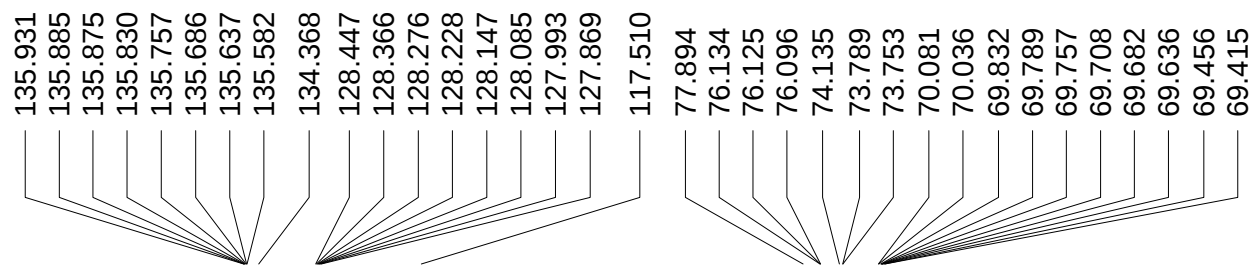


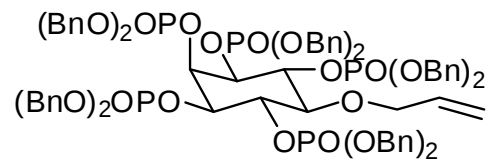
$^1\text{H-NMR}$ (500 MHz) of **6** in CDCl_3



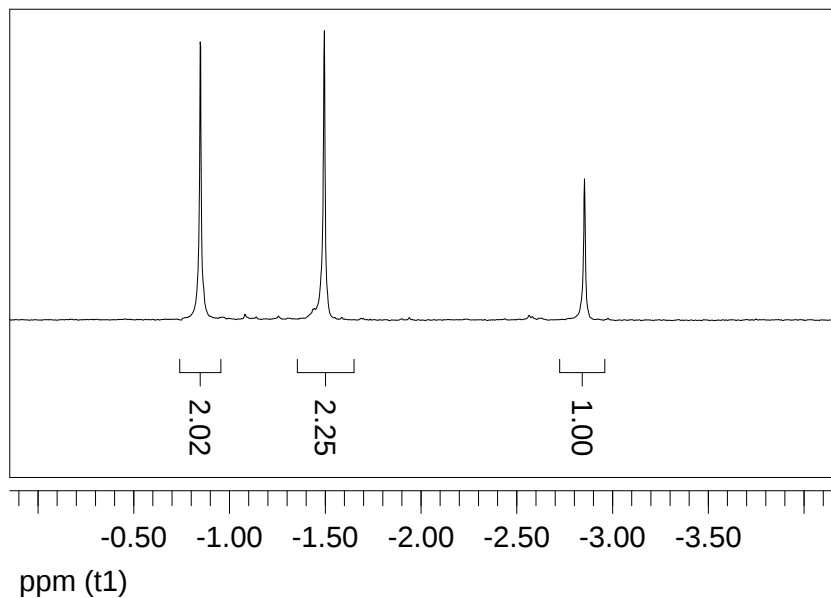


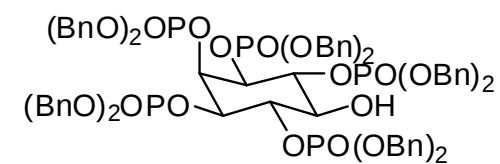
^{13}C -NMR (125 MHz) of **6** in CDCl_3



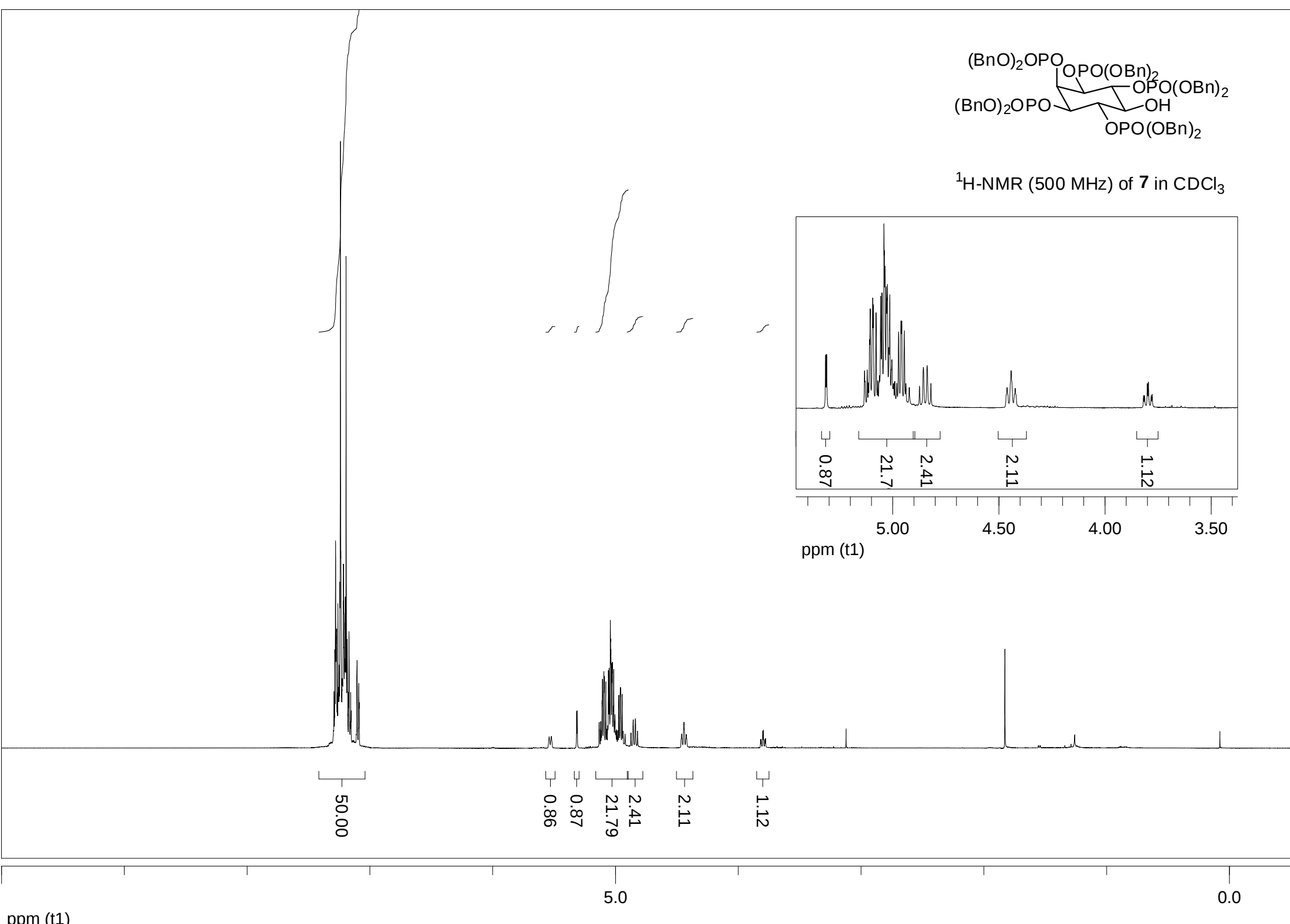


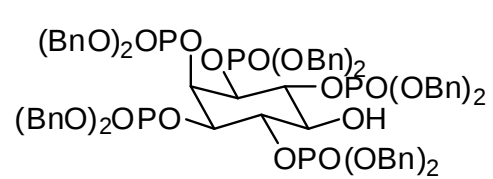
^{31}P -NMR (202 MHz) of **6** in CDCl_3





^1H -NMR (500 MHz) of **7** in CDCl_3

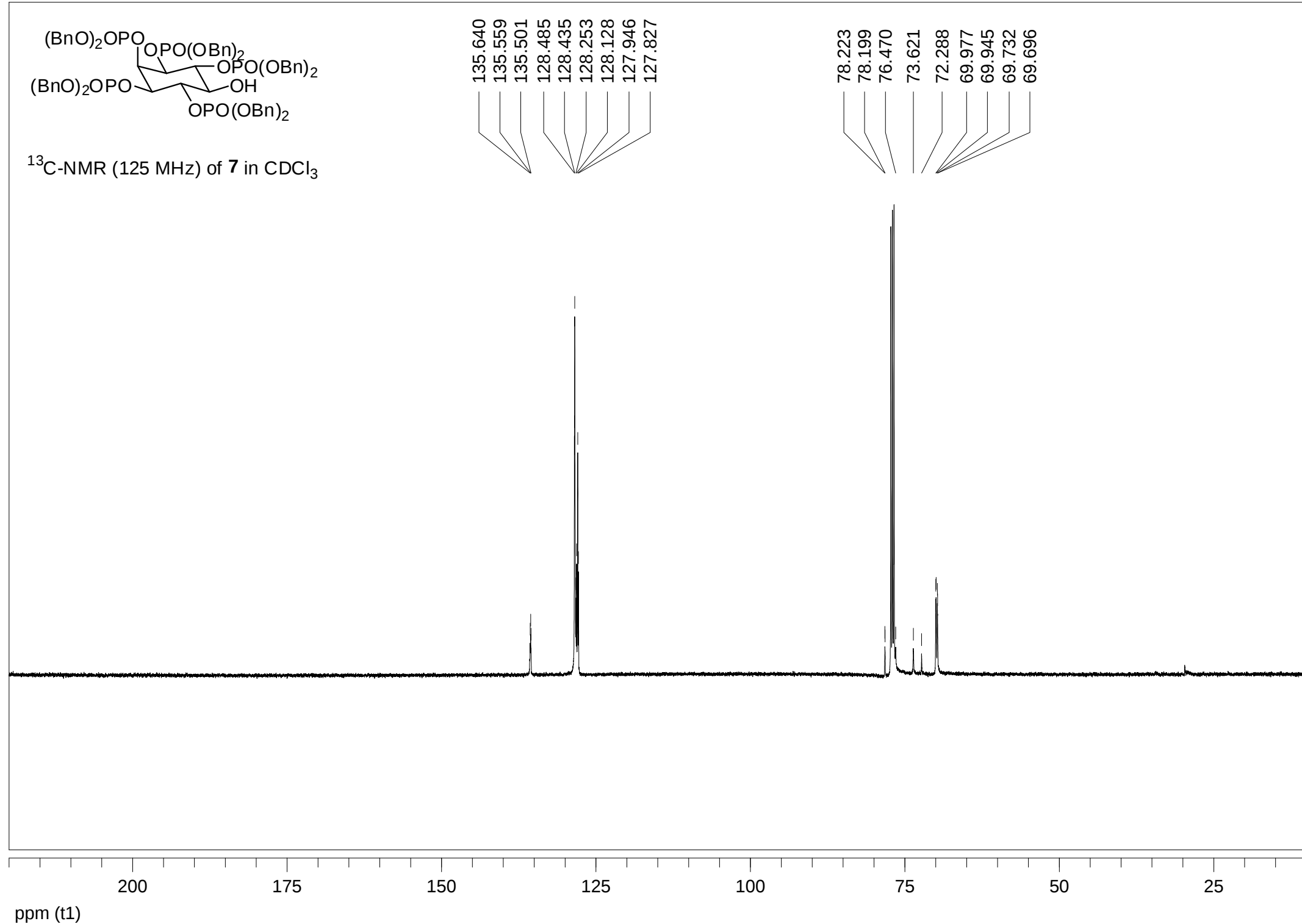


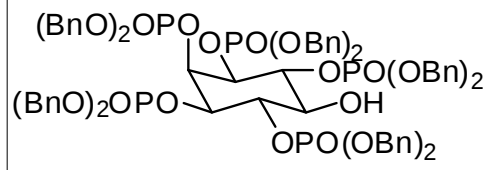


^{13}C -NMR (125 MHz) of **7** in CDCl_3

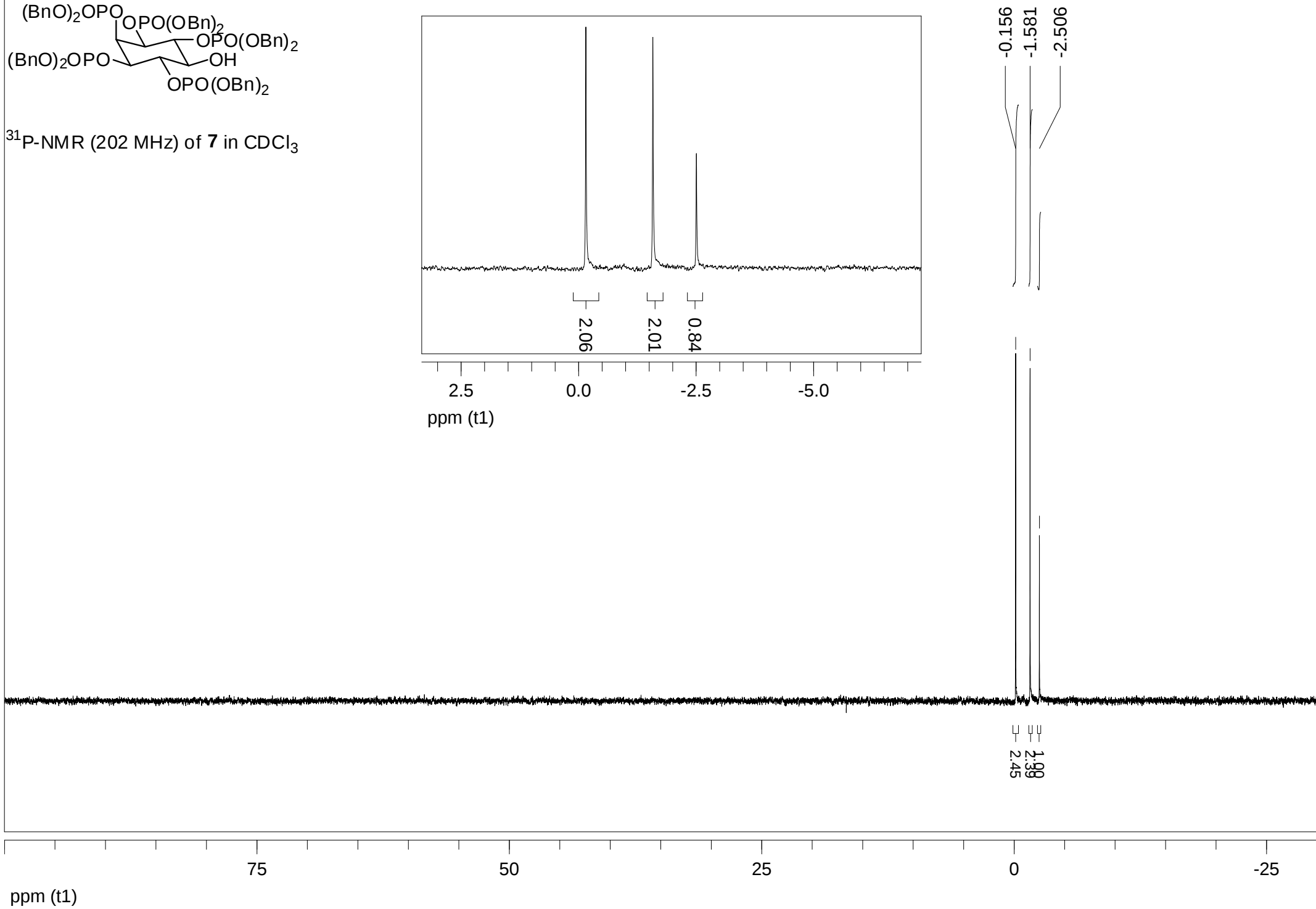
135.640
 135.559
 135.501
 128.485
 128.435
 128.253
 128.128
 127.946
 127.827

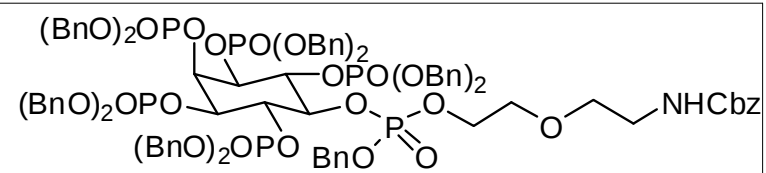
78.223
 78.199
 76.470
 73.621
 72.288
 69.977
 69.945
 69.732
 69.696



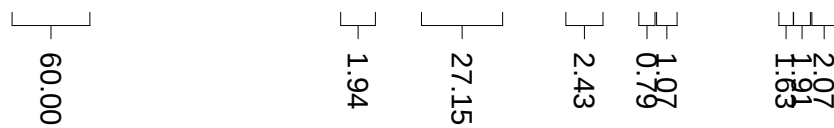
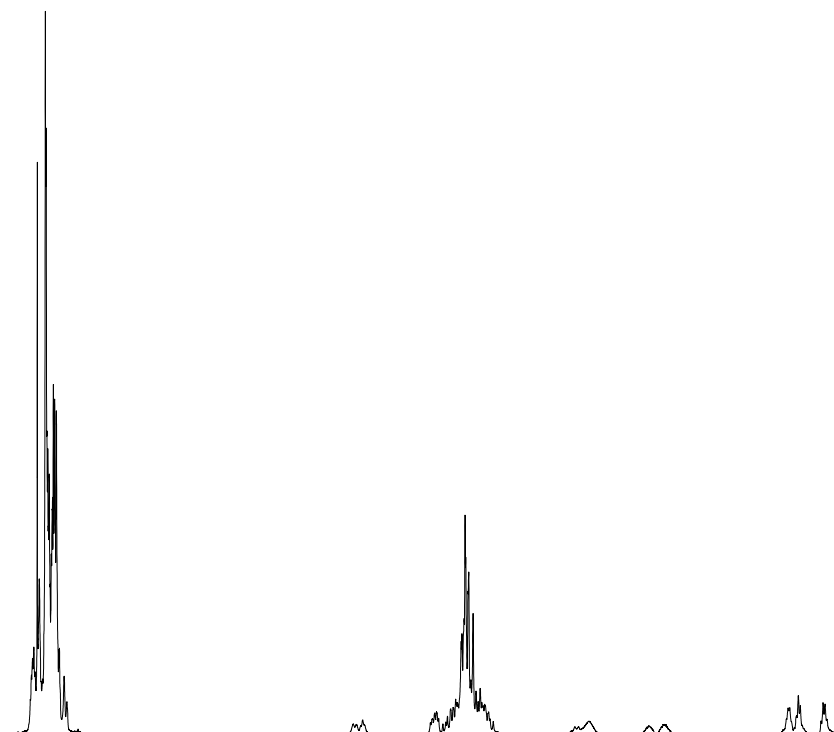
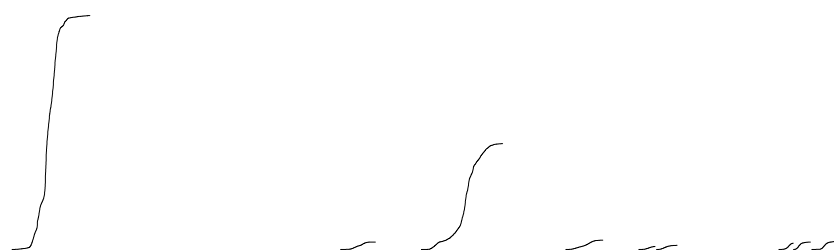


^{31}P -NMR (202 MHz) of **7** in CDCl_3





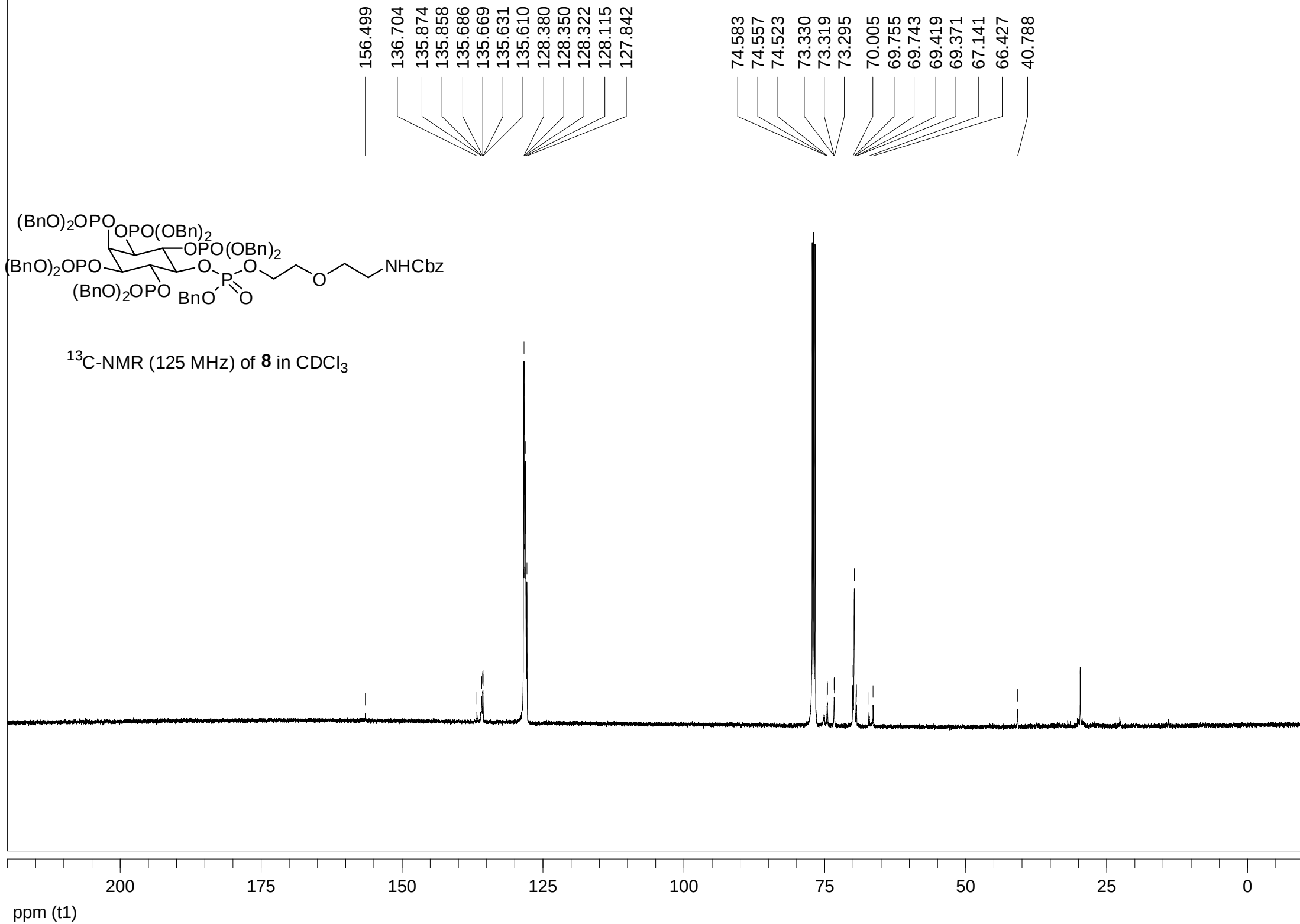
^1H -NMR (500 MHz) of **8** in CDCl_3

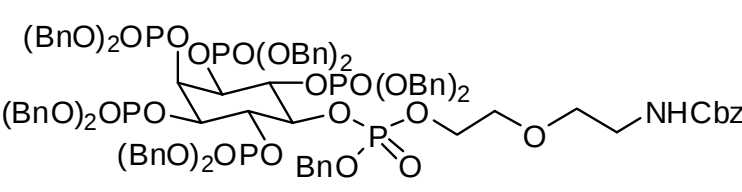


5.0

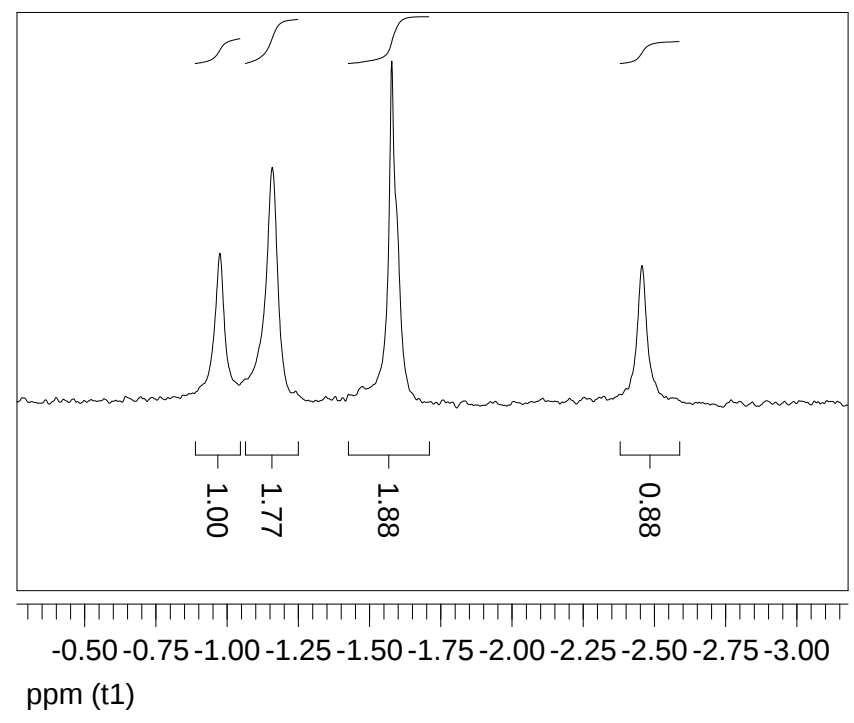
0.0

ppm (t1)

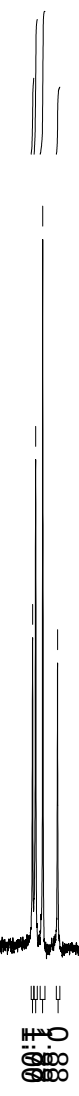


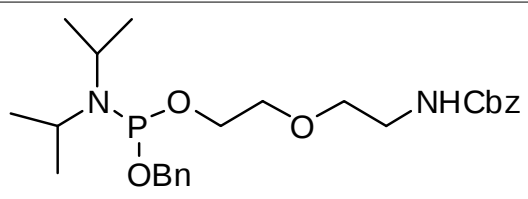


³¹P-NMR (202 MHz) of **8** in CDCl₃

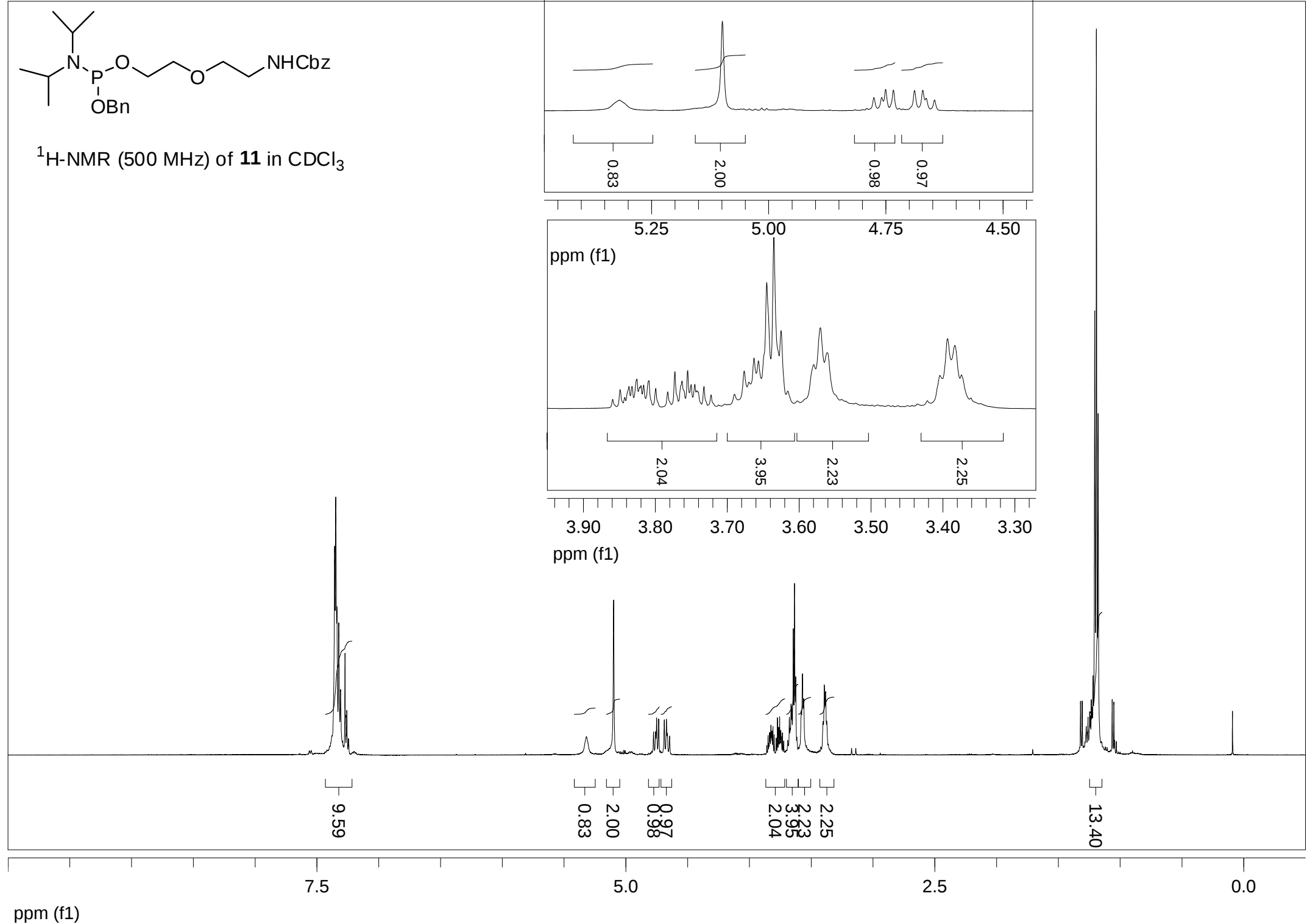
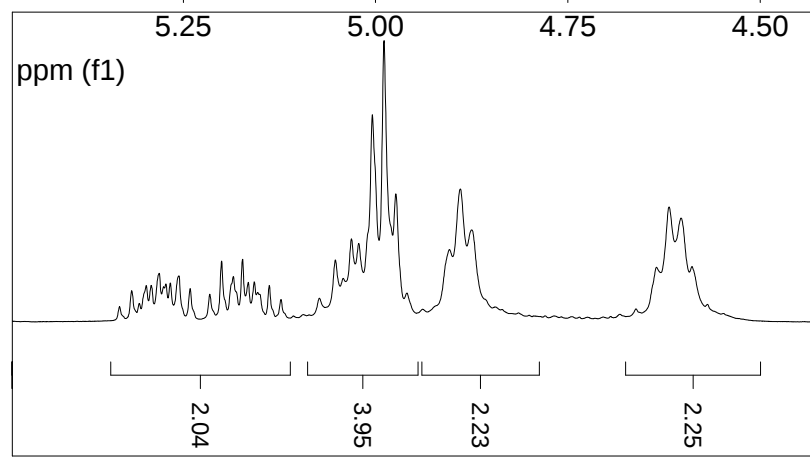
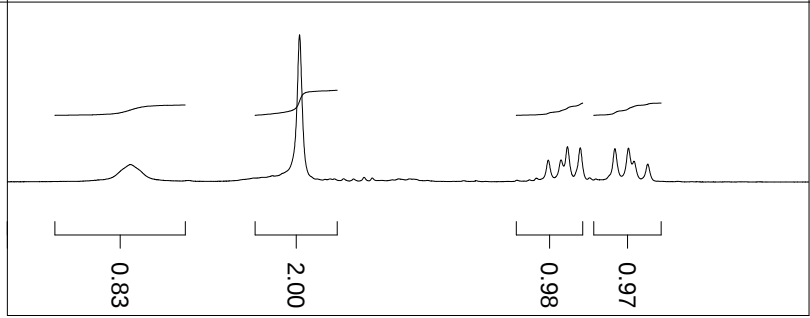


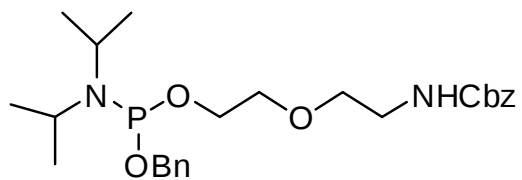
-0.975
-1.158
-1.578
-2.456



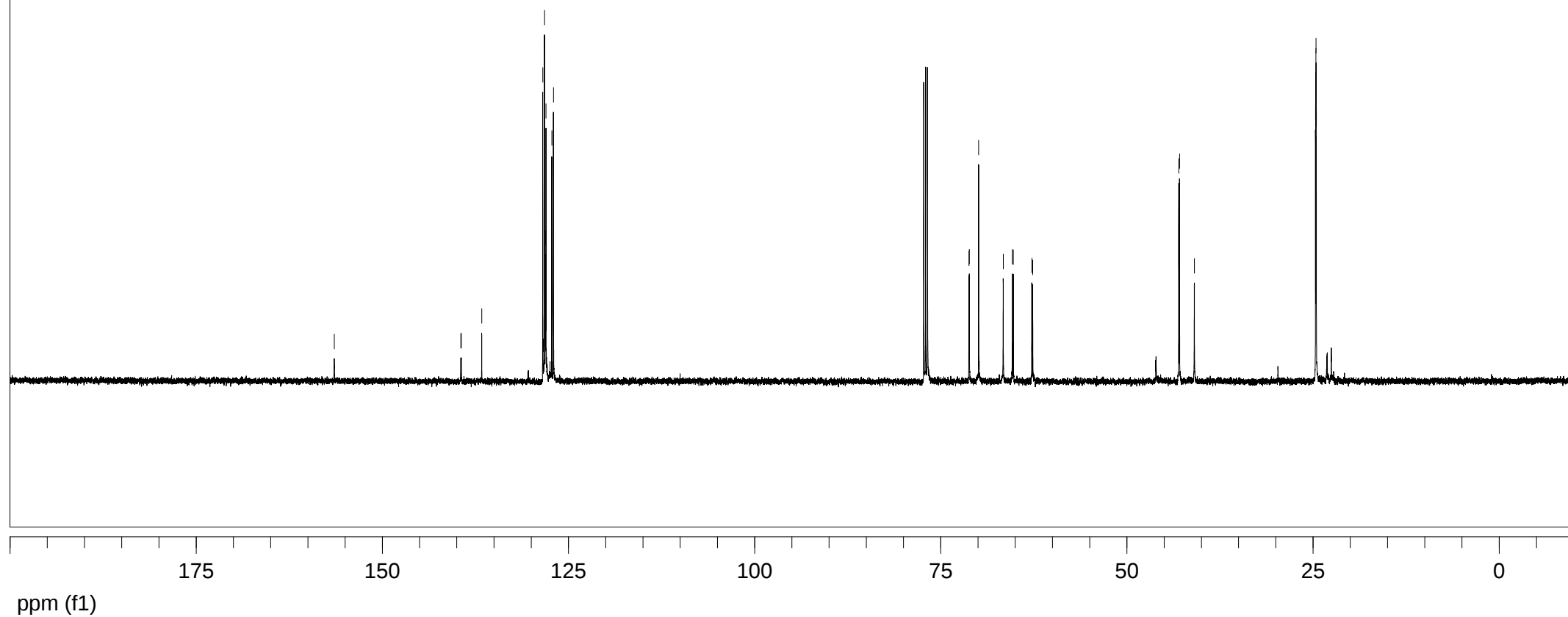
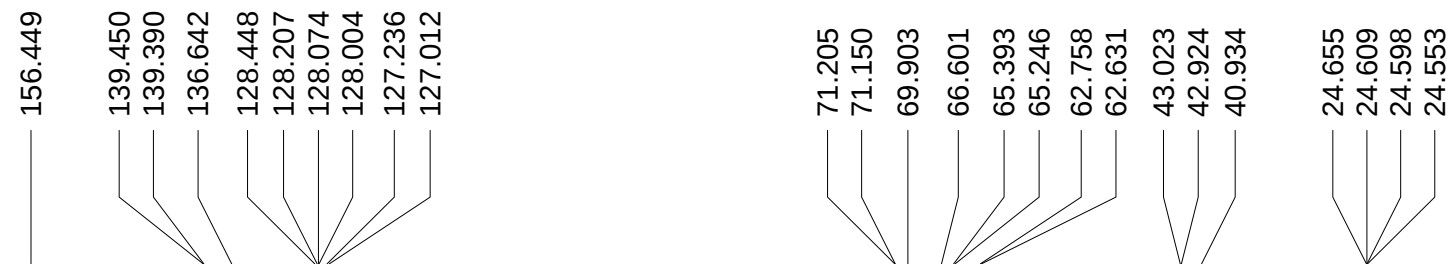


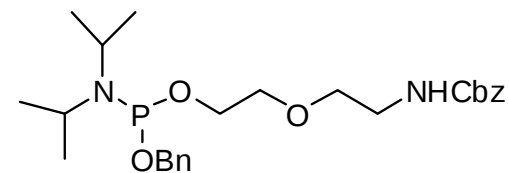
$^1\text{H-NMR}$ (500 MHz) of **11** in CDCl_3



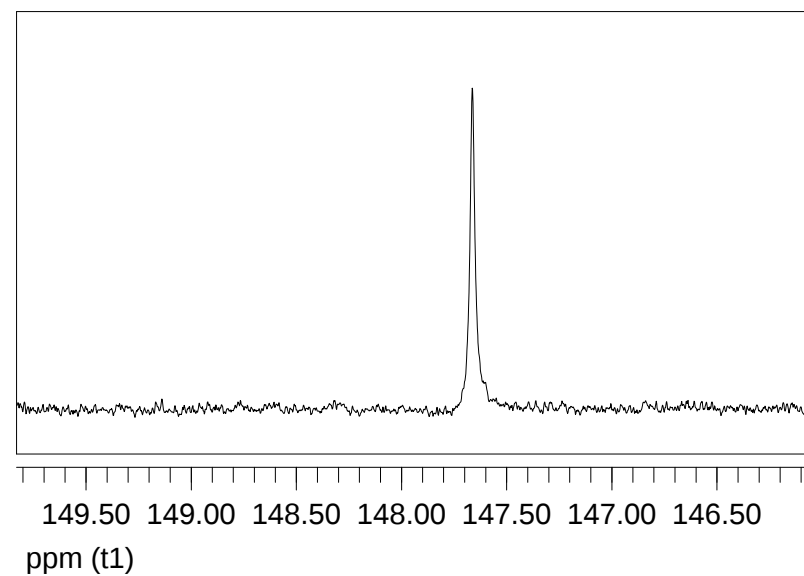


^{13}C -NMR (125 MHz) of **11** in CDCl_3

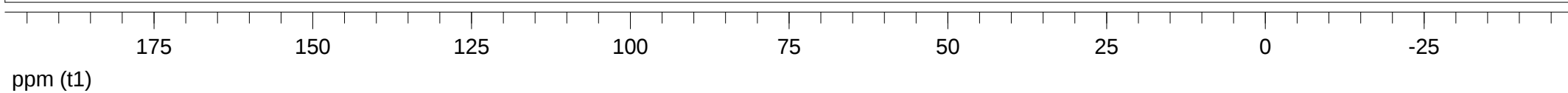


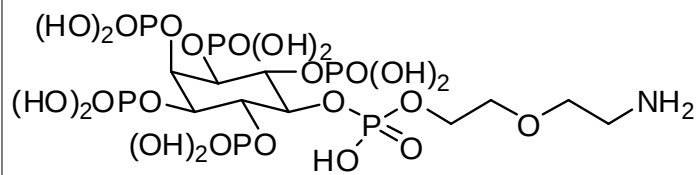


^{31}P -NMR (202 MHz) of **11** in CDCl_3

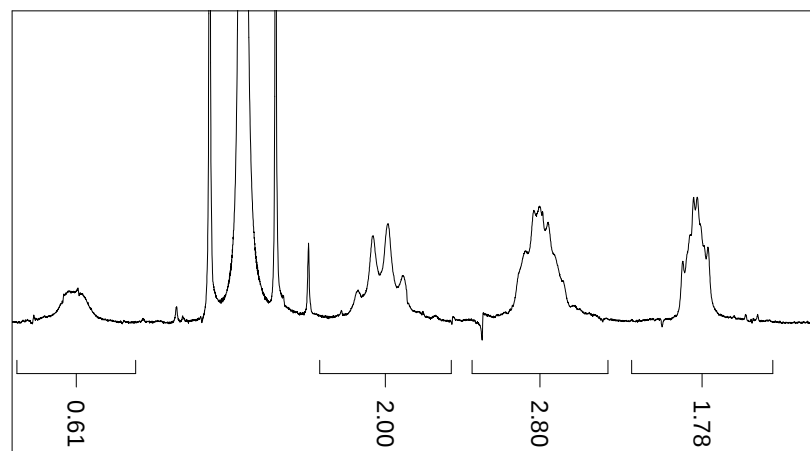


147.663

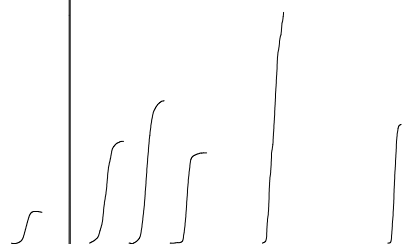




¹H-NMR (500 MHz) of free acid **12** in D₂O



5.00 4.90 4.80 4.70 4.60 4.50 4.40 4.30 4.20
ppm (t1)



0.61 2.00 2.80 1.78 4.54 2.34

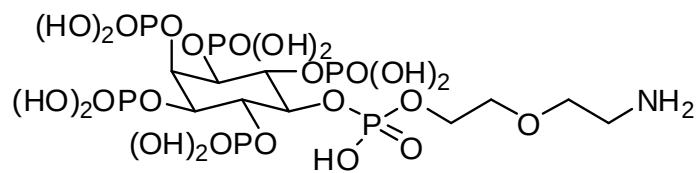
ppm (t1)

7.5

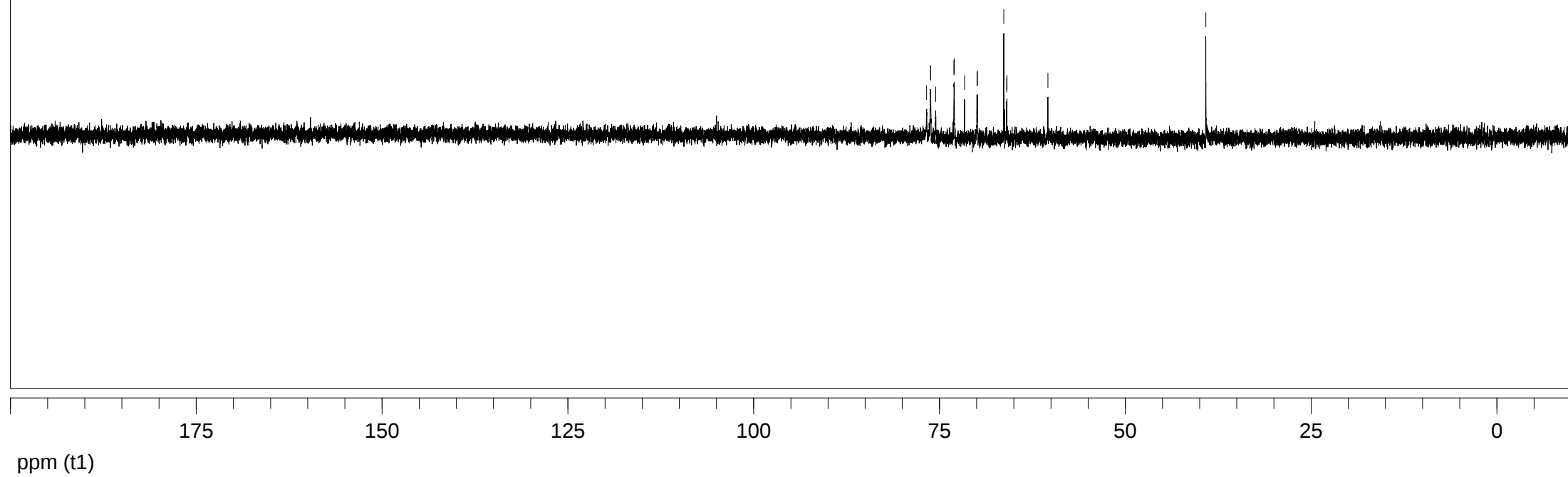
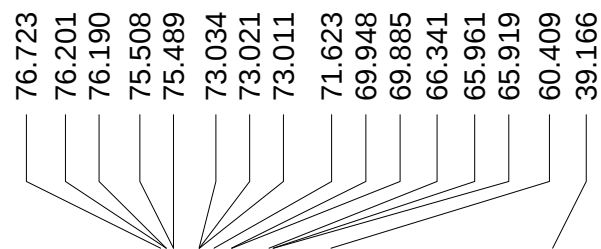
5.0

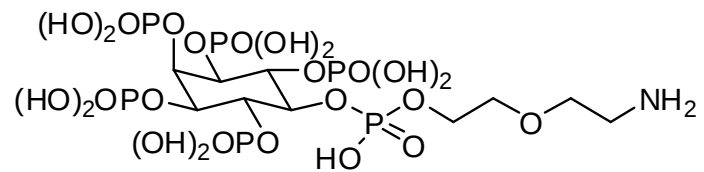
2.5

0.0



^{13}C -NMR (125 MHz) of free acid **12** in D_2O





^{31}P -NMR (202 MHz) of free acid **12** in D_2O

