

Supplementary Material

Synthesis and structure of salts of a sterically shielded, lipophilic, C₂-symmetric, fluxional aluminate

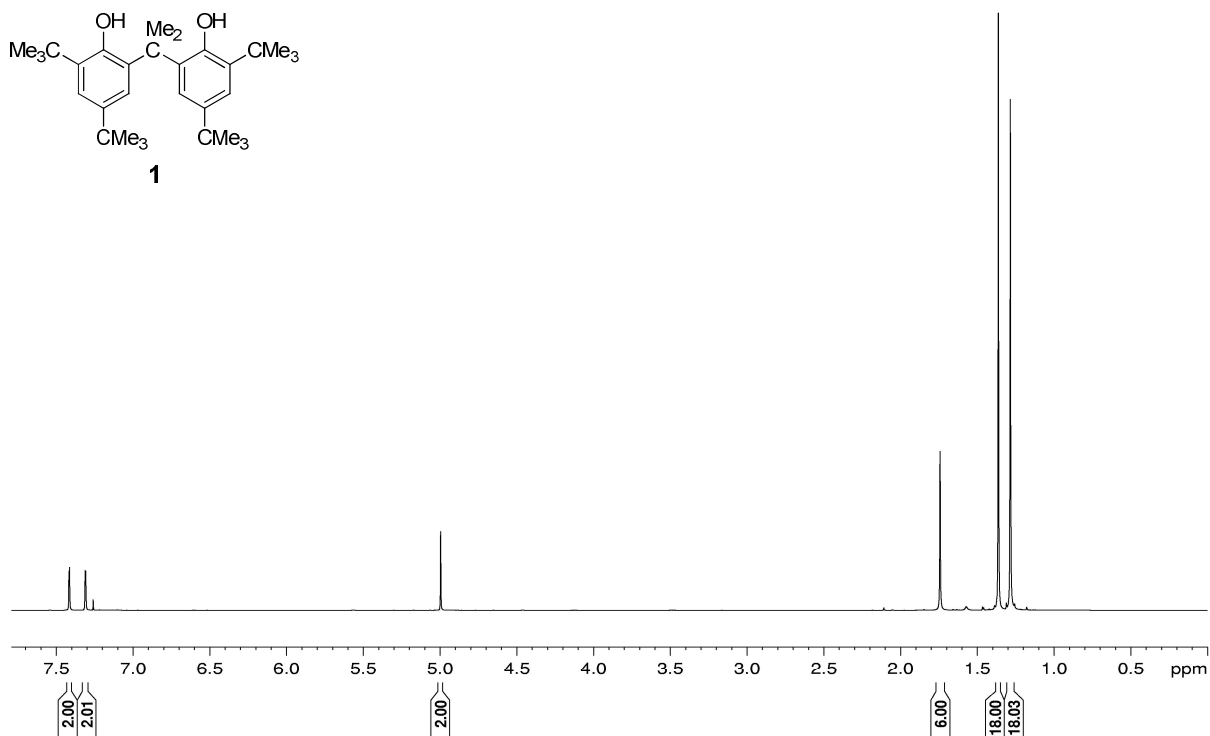
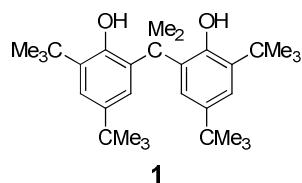
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Heidelberg, Germany

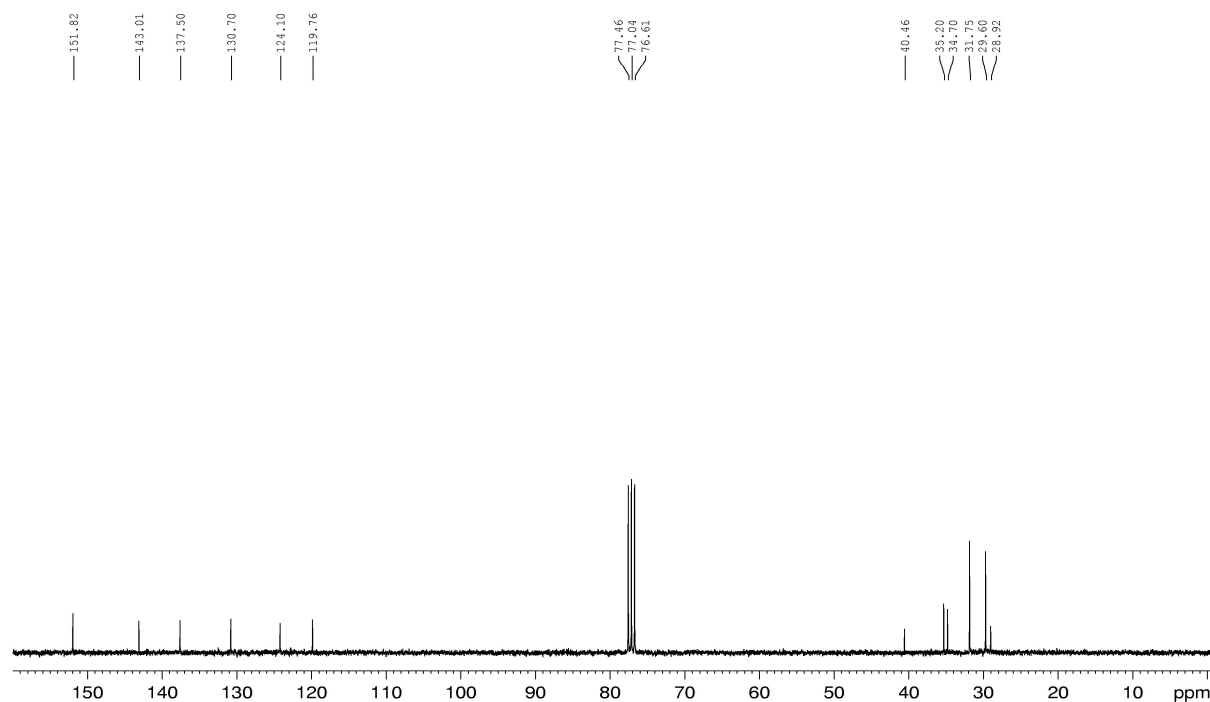
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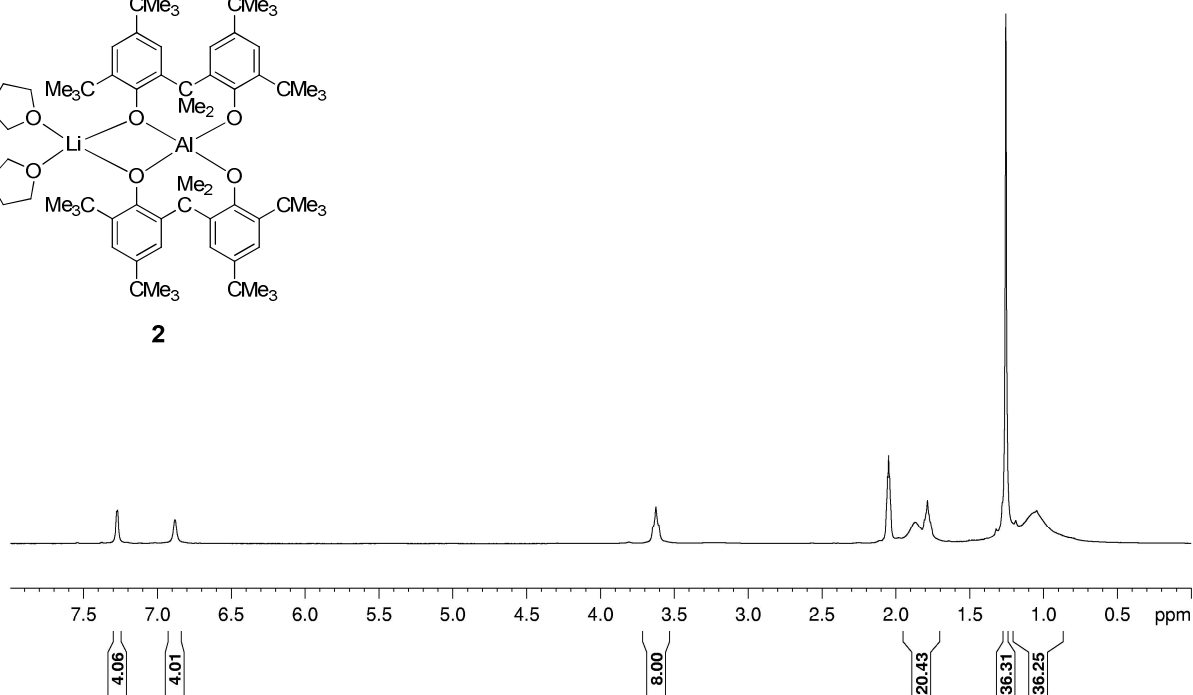
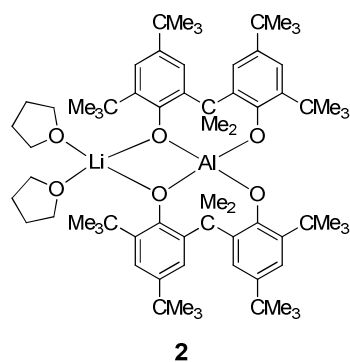
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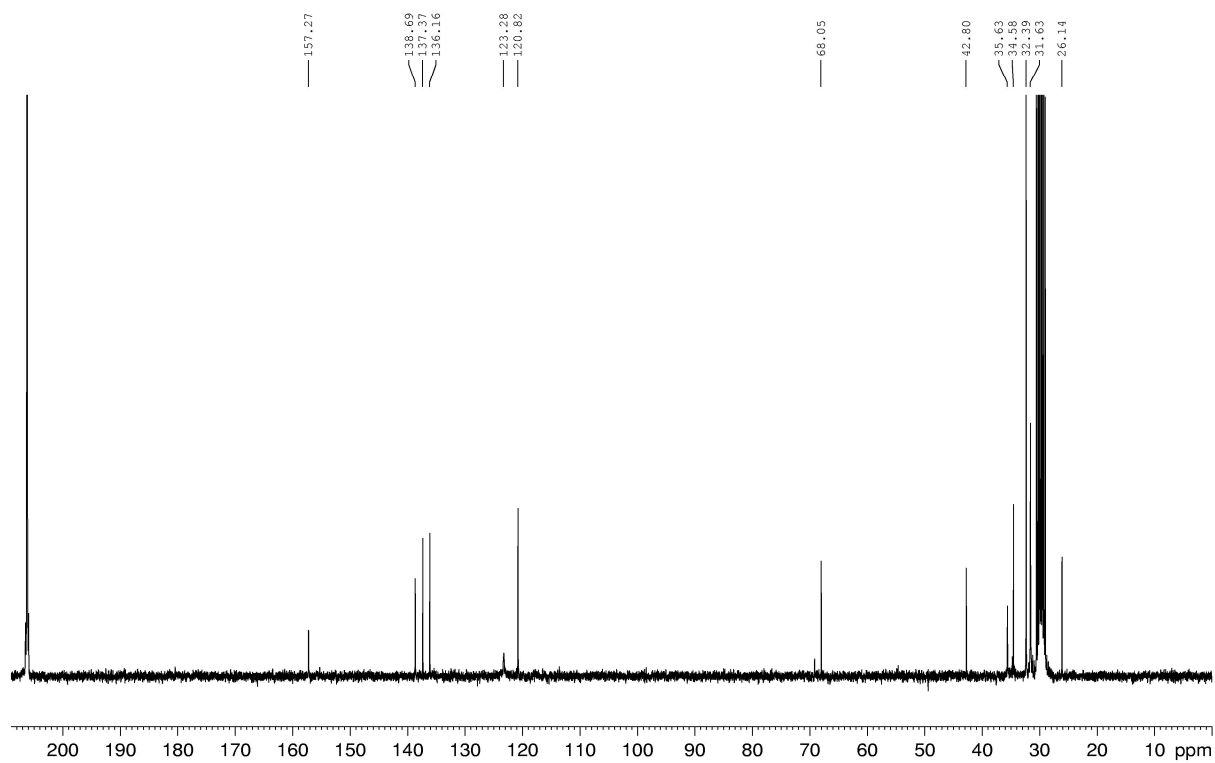
¹H NMR spectrum of 6,6'-(propane-2,2-diyl)bis(2,4-di-*tert*-butylphenol) (**1**) in CDCl₃ (600.2 MHz, 300 K)



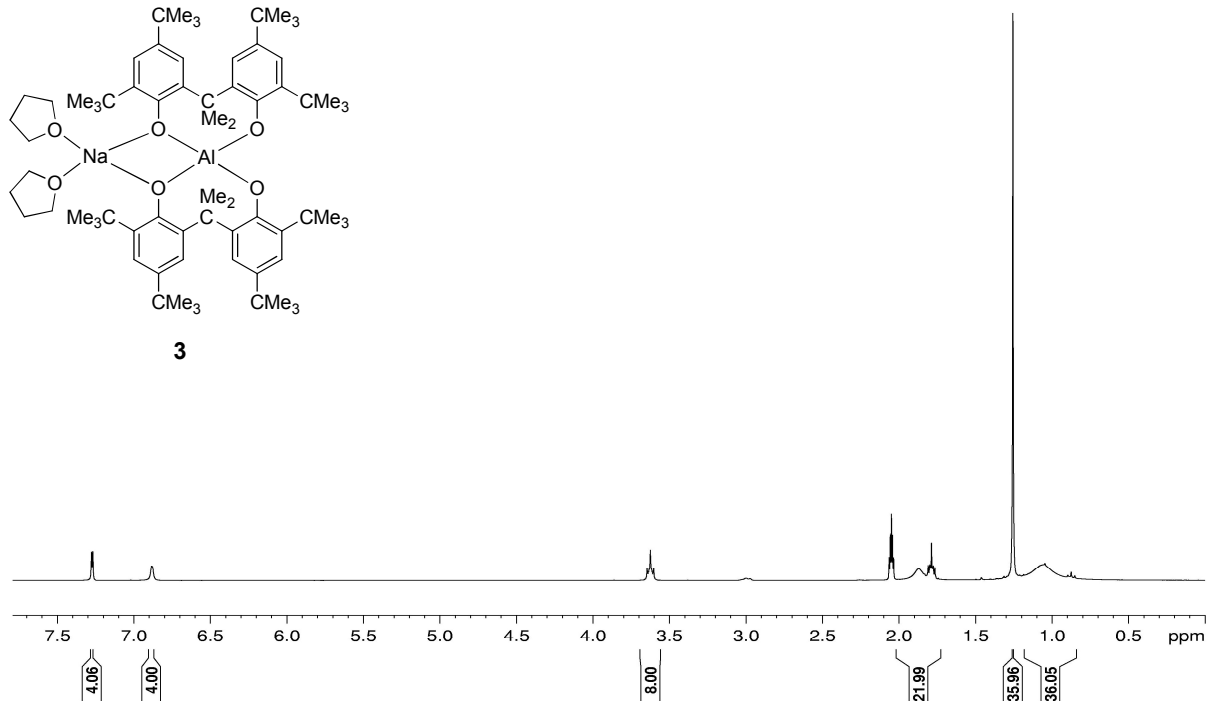
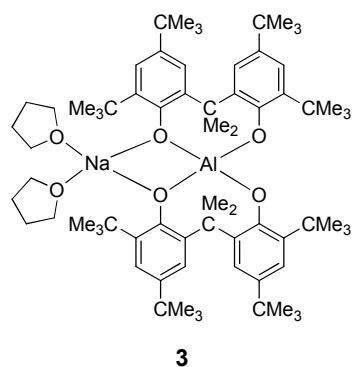
¹³C{¹H} NMR spectrum of 6,6'-(propane-2,2-diyl)bis(2,4-di-*tert*-butylphenol) (**1**) in CDCl₃ (75.4 MHz, 300 K)



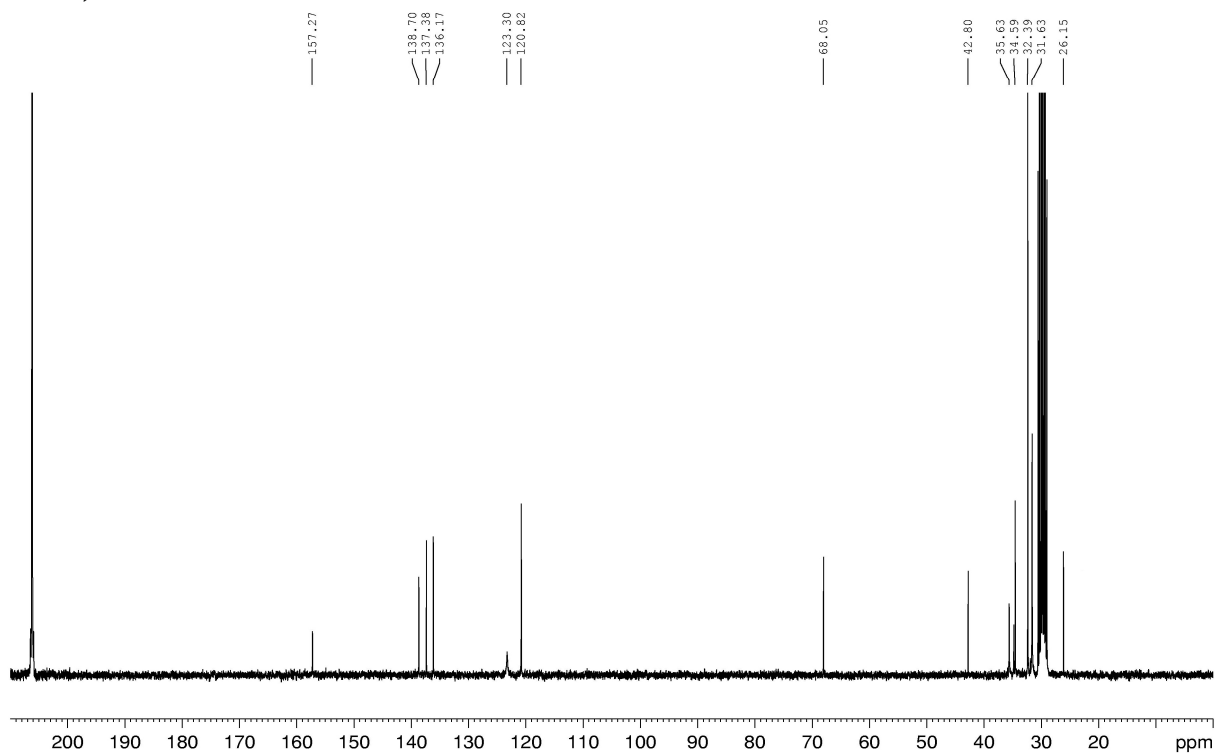
^1H NMR spectrum of bis(tetrahydrofuran)lithium almebate (**2**) in acetone- d_6 (300.5 MHz, 300 K)



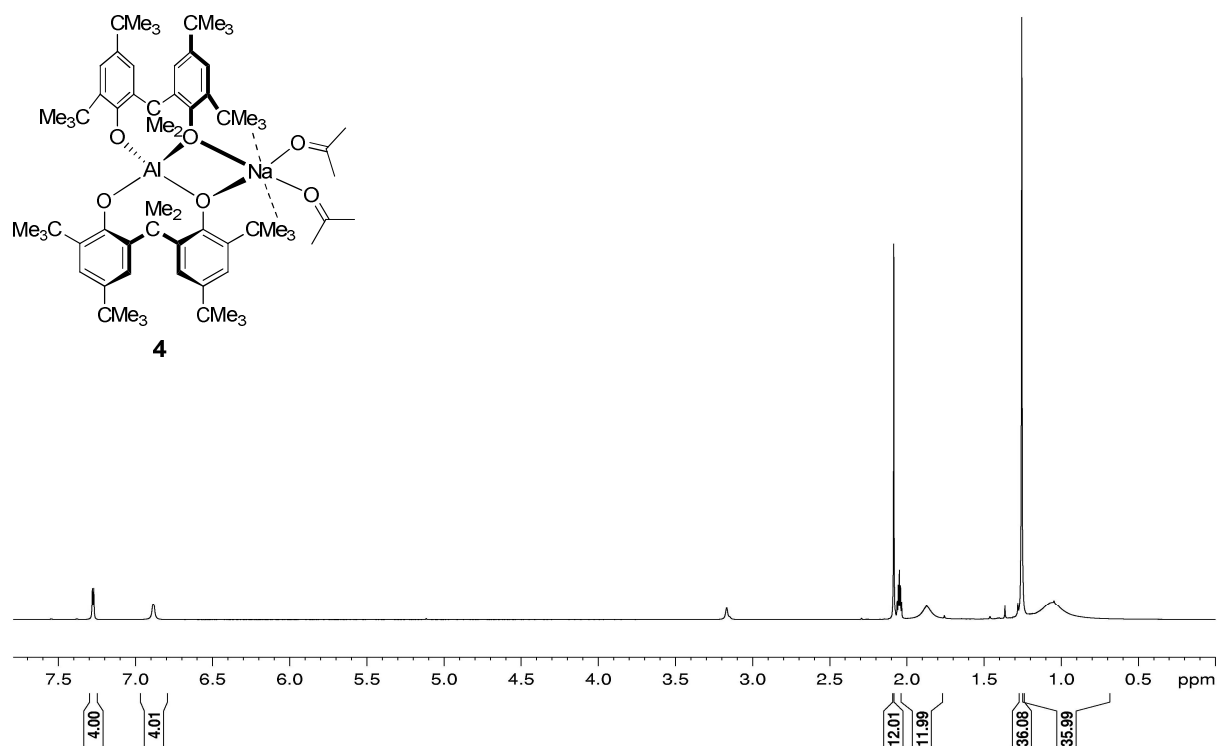
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of bis(tetrahydrofuran)lithium almebate (**2**) in acetone- d_6 (75.4 MHz, 300 K)



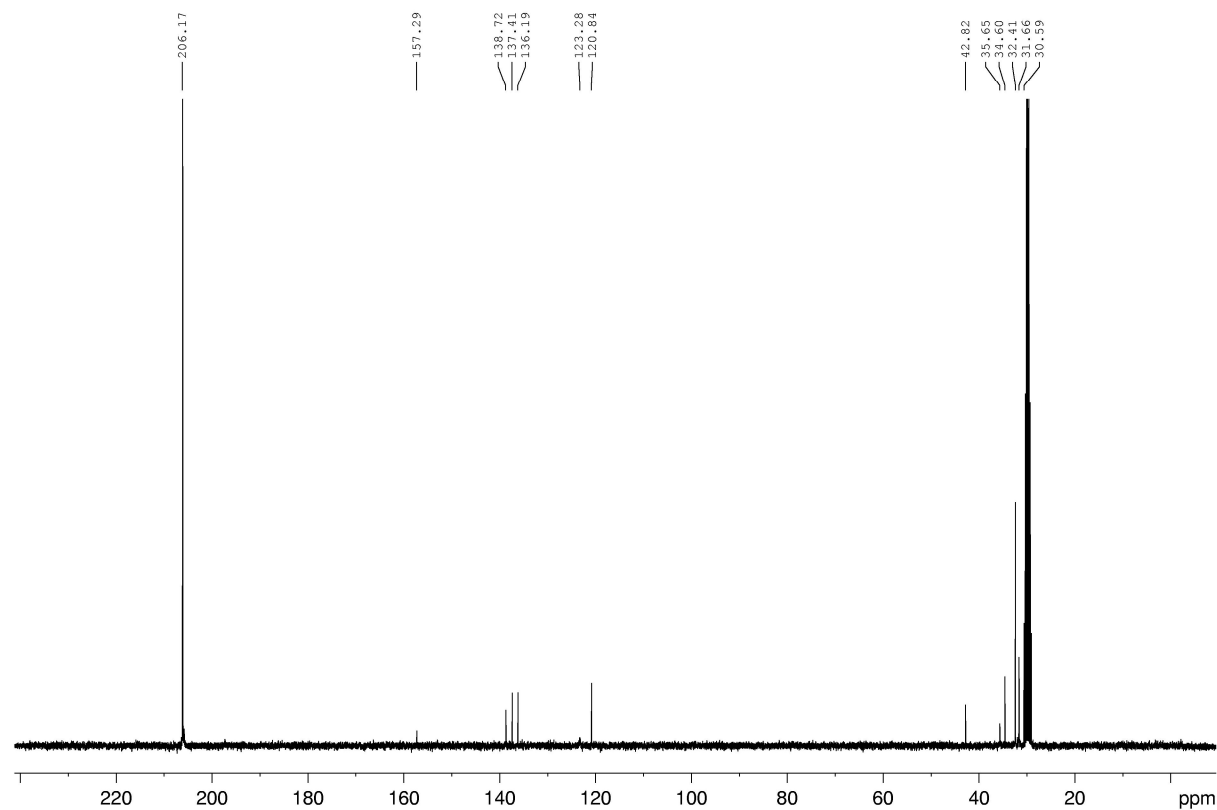
^1H NMR spectrum of bis(tetrahydrofuran)sodium almebate (**3**) in acetone- d_6 (300.5 MHz, 300 K)



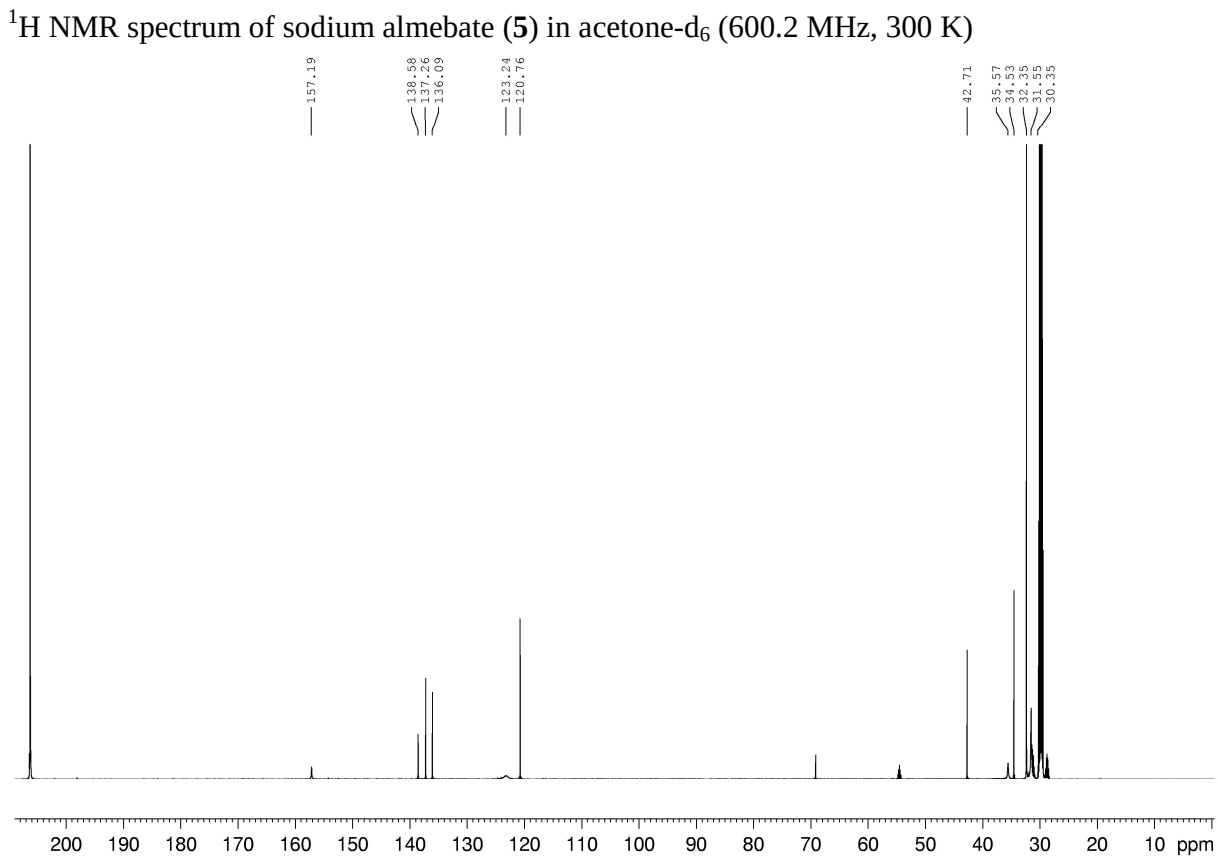
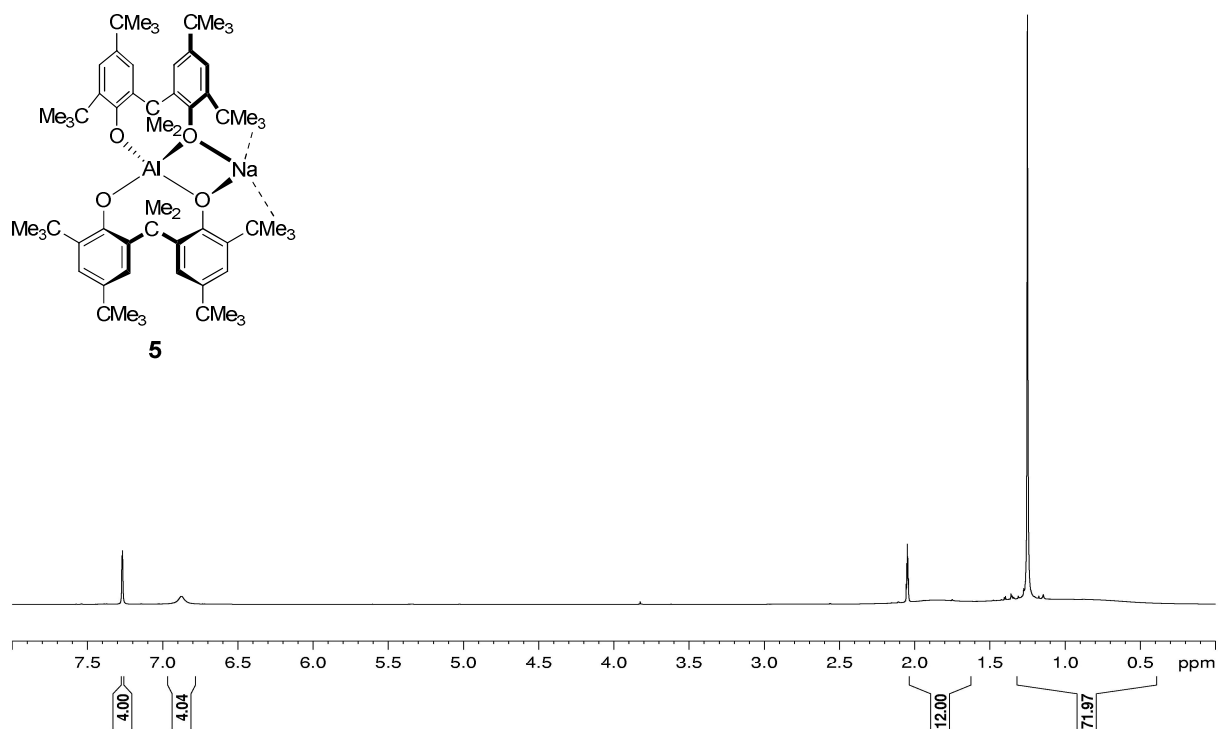
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of bis(tetrahydrofuran)sodium almebate (**3**) in acetone- d_6 (75.5 MHz, 300 K)

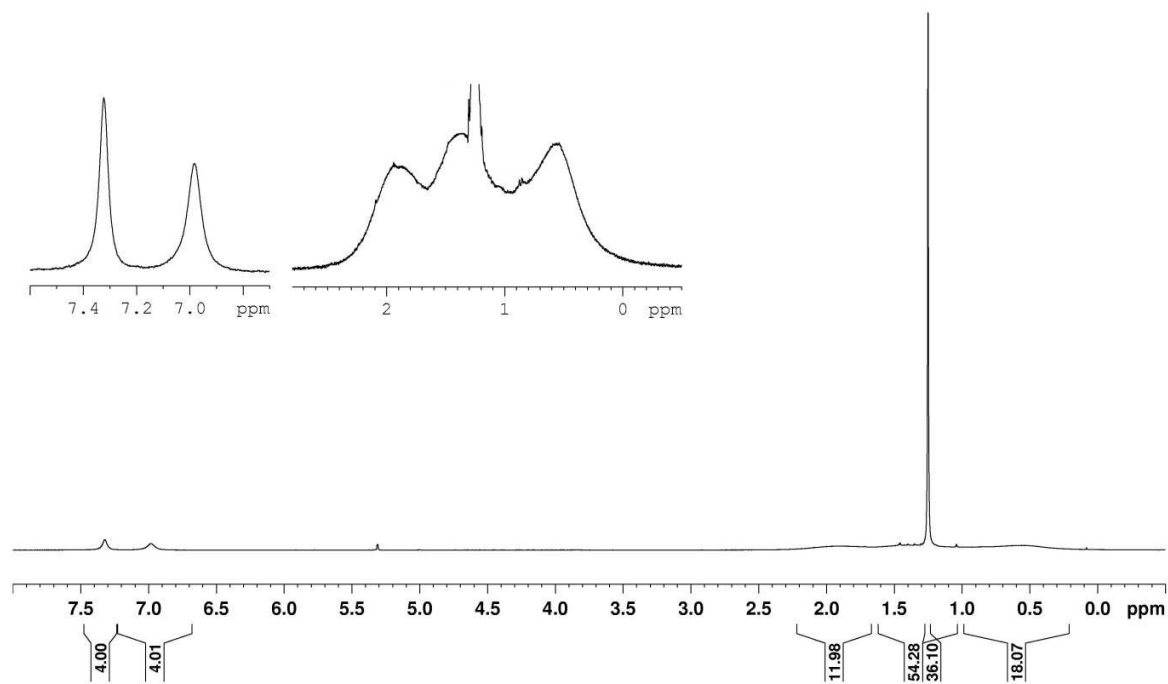


^1H NMR spectrum of bis(acetone)sodium almebate (**4**) in acetone- d_6 (300.5 MHz, 300 K)

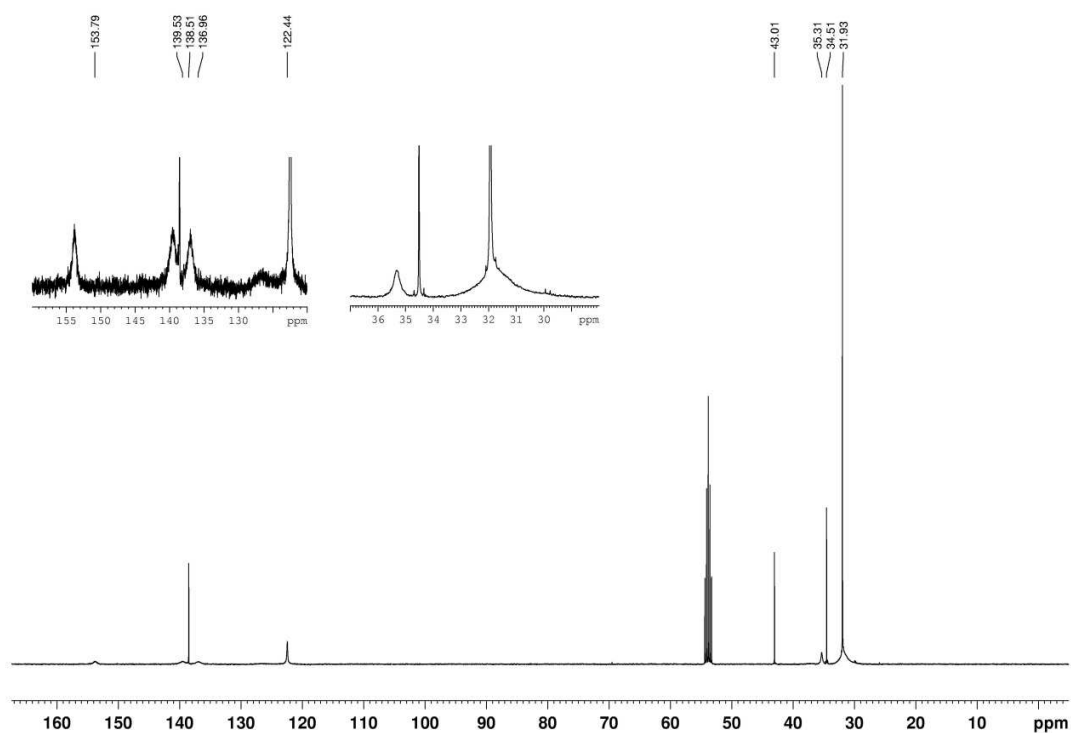


$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of bis(acetone)sodium almebate (**4**) in acetone- d_6 (75.5 MHz, 300 K)

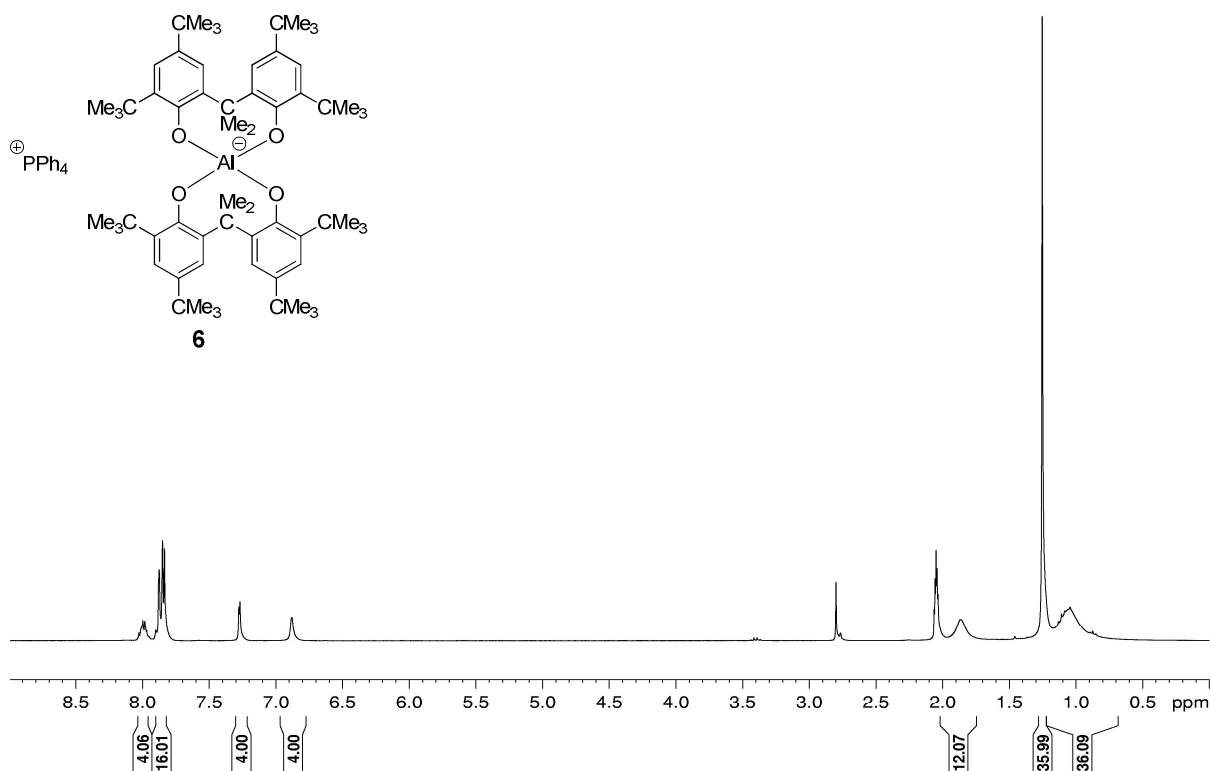




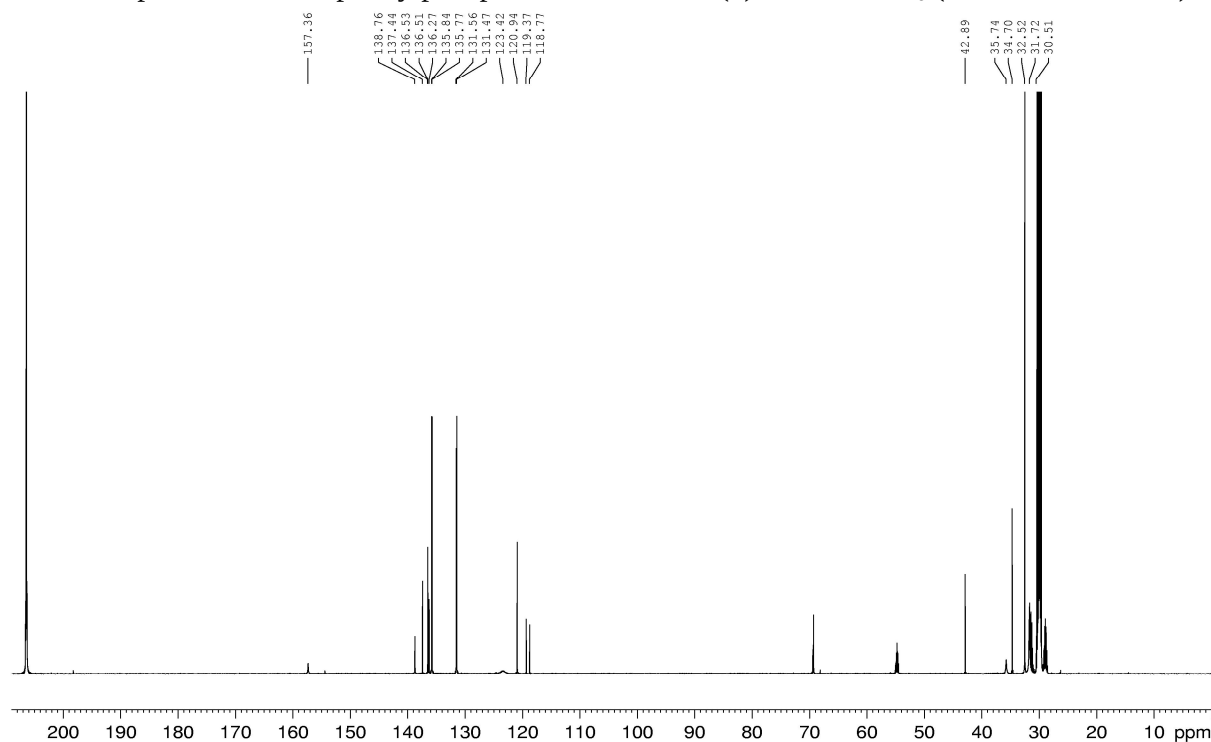
^1H NMR spectrum of sodium almebate (**5**) in CD_2Cl_2 (400.1 MHz, 300 K)



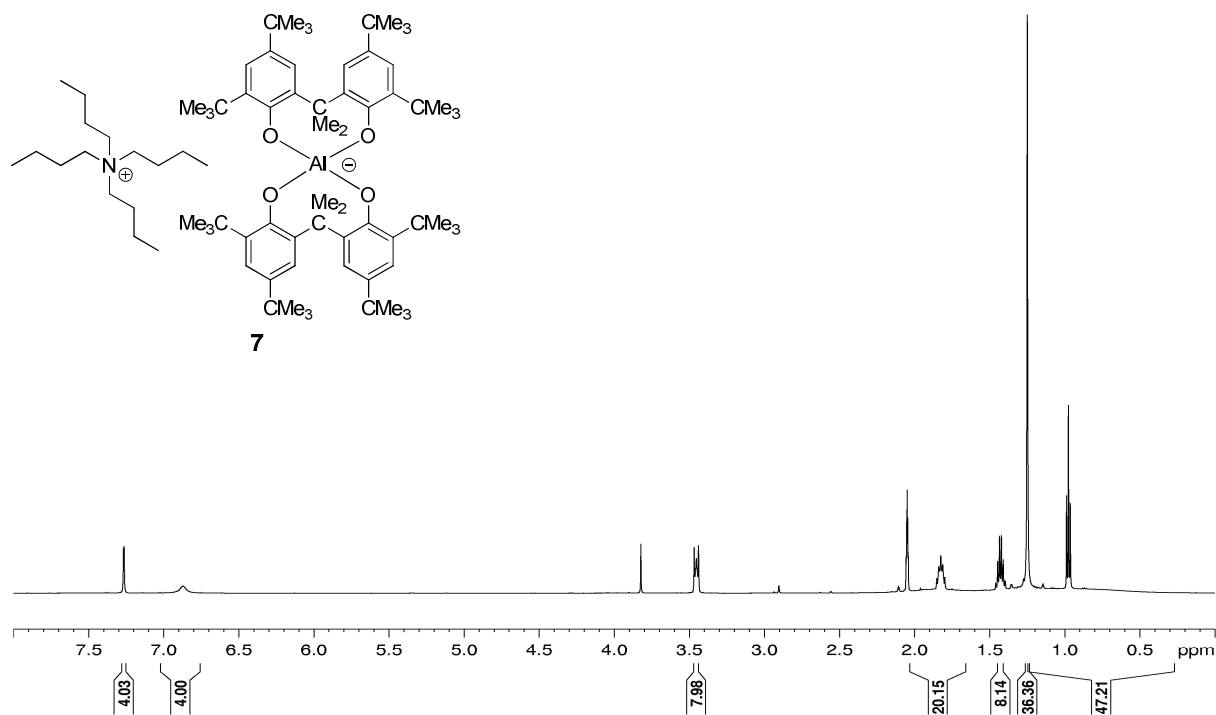
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of sodium almebate (**5**) in CD_2Cl_2 (100.6 MHz, 300 K)



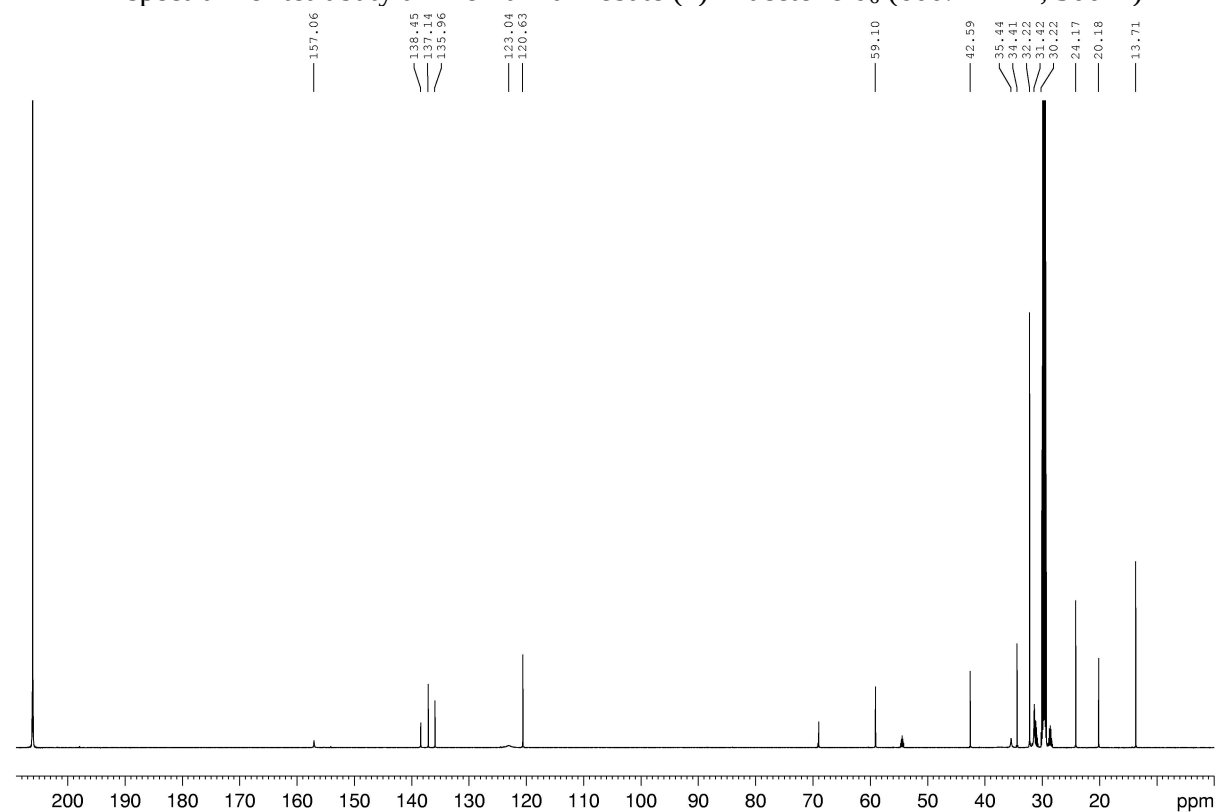
¹H NMR spectrum of tetraphenylphosphonium almebate (**6**) in acetone-d₆ (300.5 MHz, 300 K)



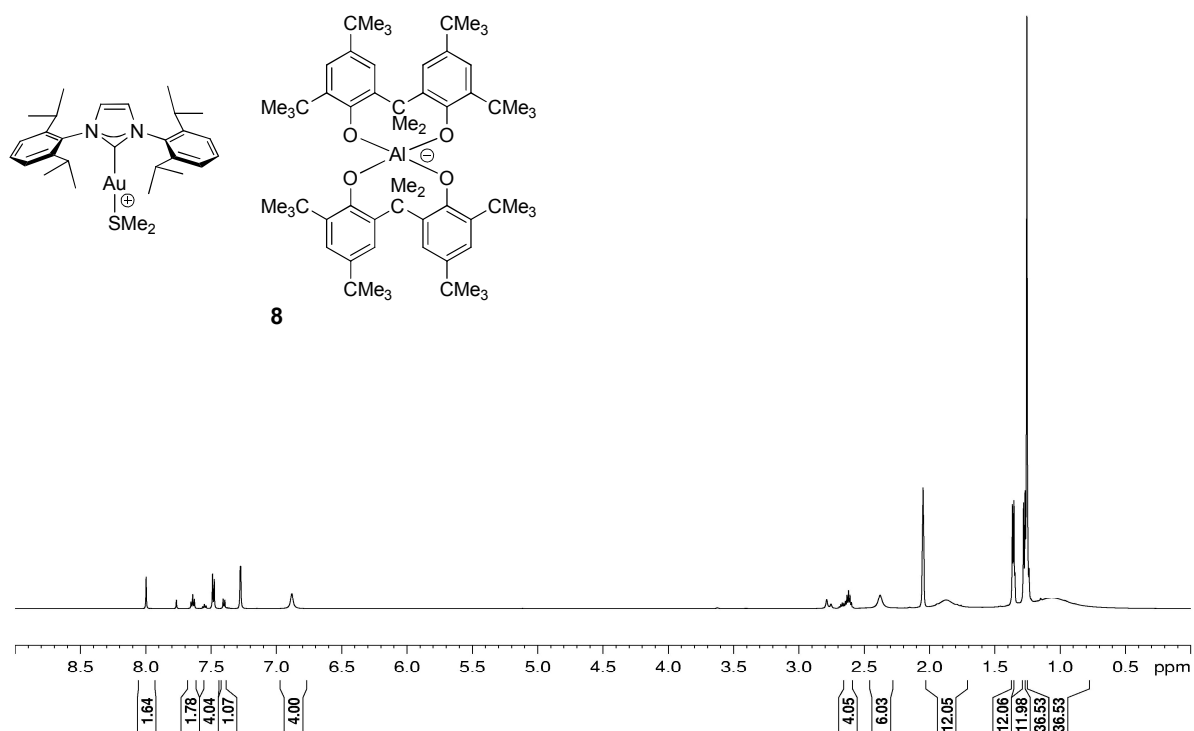
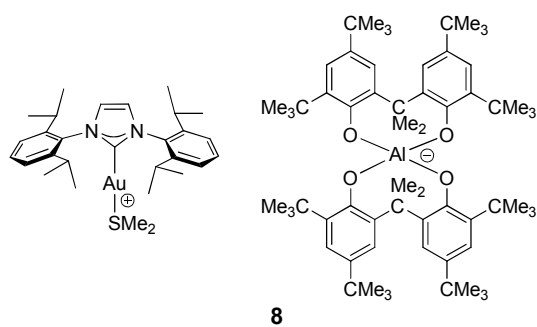
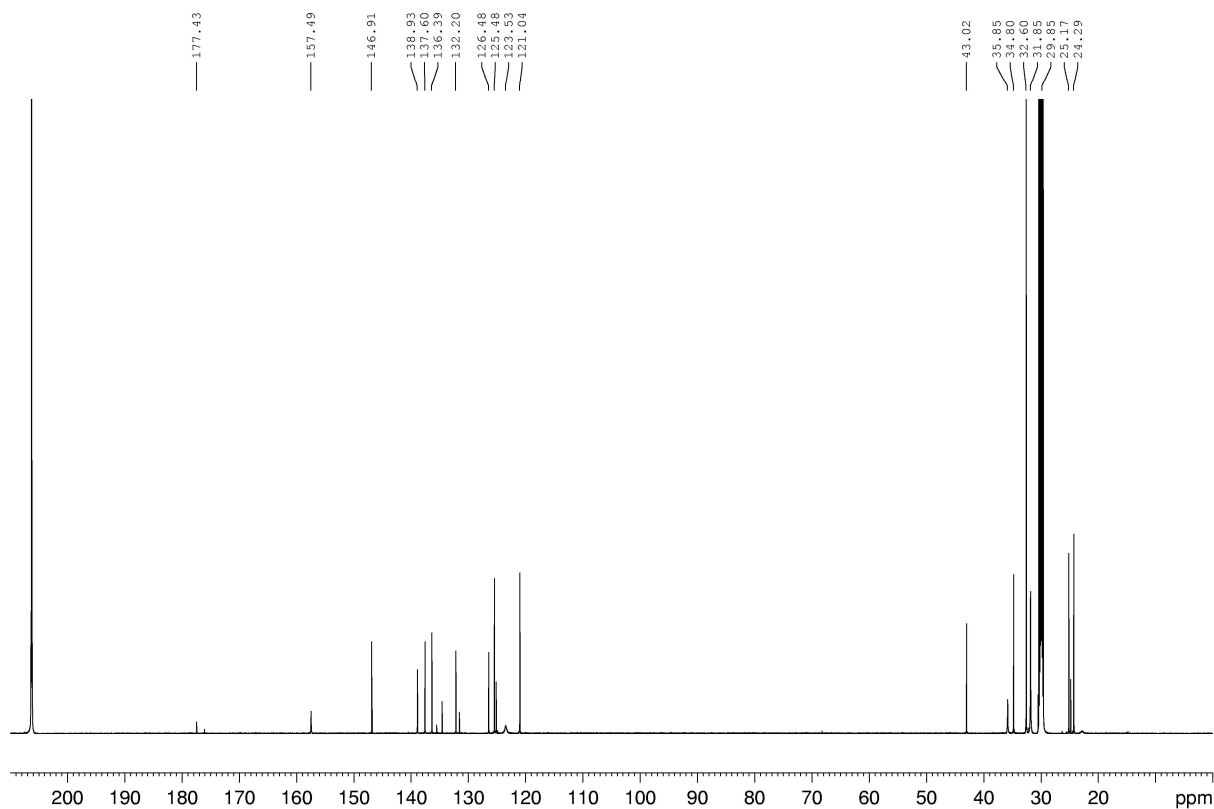
¹³C{¹H} NMR spectrum of tetraphenylphosphonium almebate (**6**) in acetone-d₆ (150.9 MHz, 300 K)

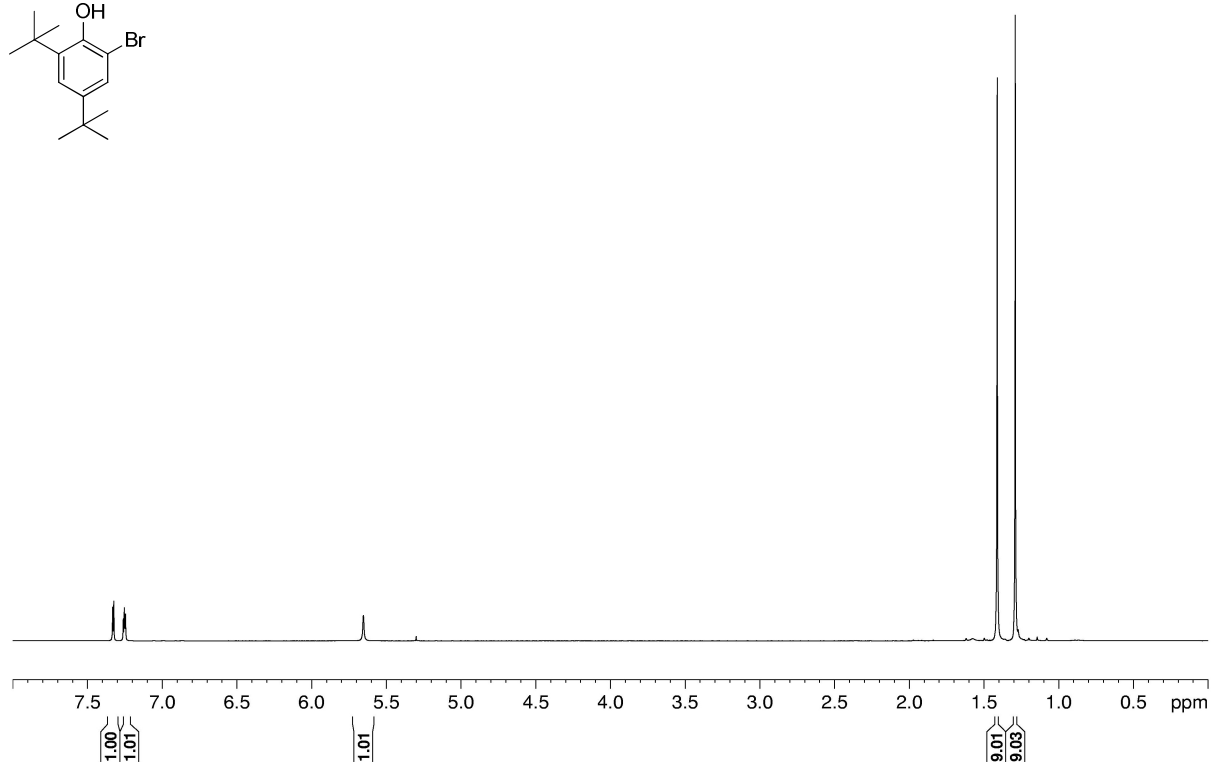
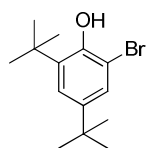


¹H NMR spectrum of tetrabutylammonium almebate (7) in acetone-d₆ (600.2 MHz, 300 K)

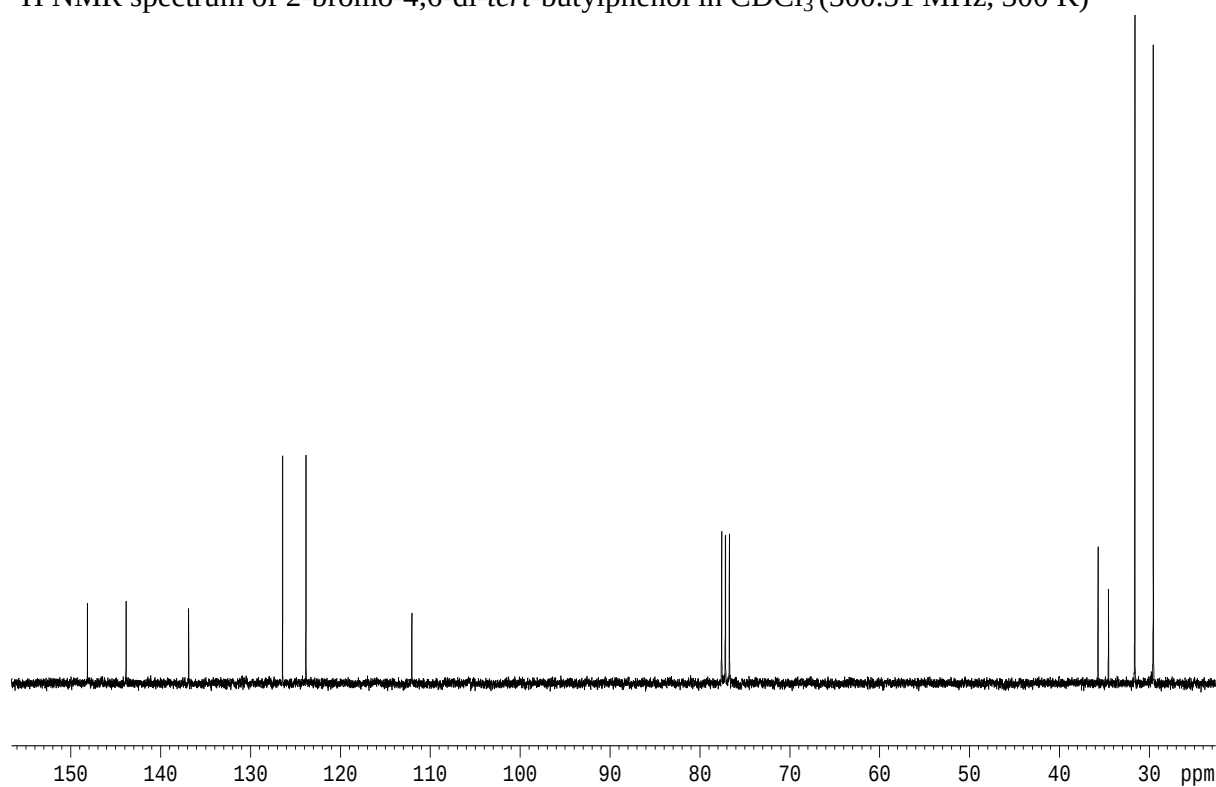


¹³C{¹H} NMR spectrum of tetrabutylammonium almebate (7) in acetone-d₆ (150.9 MHz, 300 K)

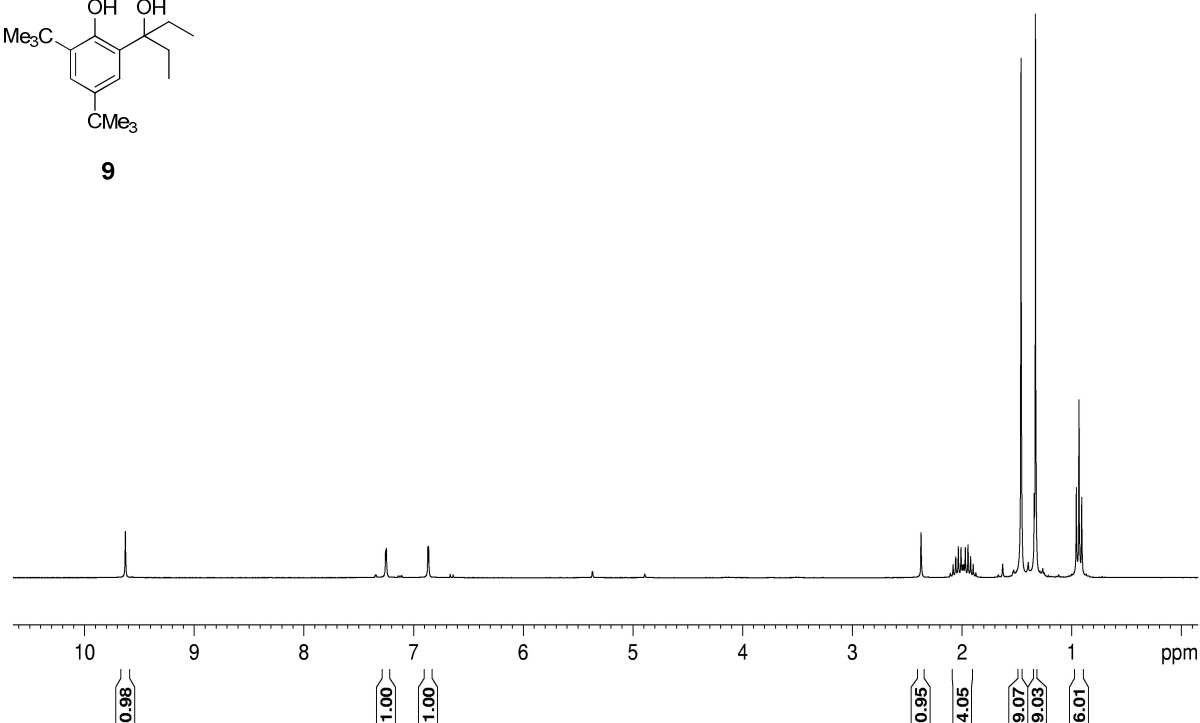
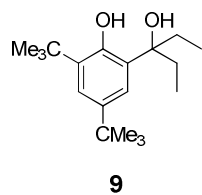
¹H NMR spectrum of IPrAu(SMe₂) almebate (**8**) in acetone-d₆ (600.24 MHz, 300 K) $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of $\text{IPrAu}(\text{SMe}_2)$ almebate (**8**) in acetone- d_6 (150.9 MHz, 300 K)



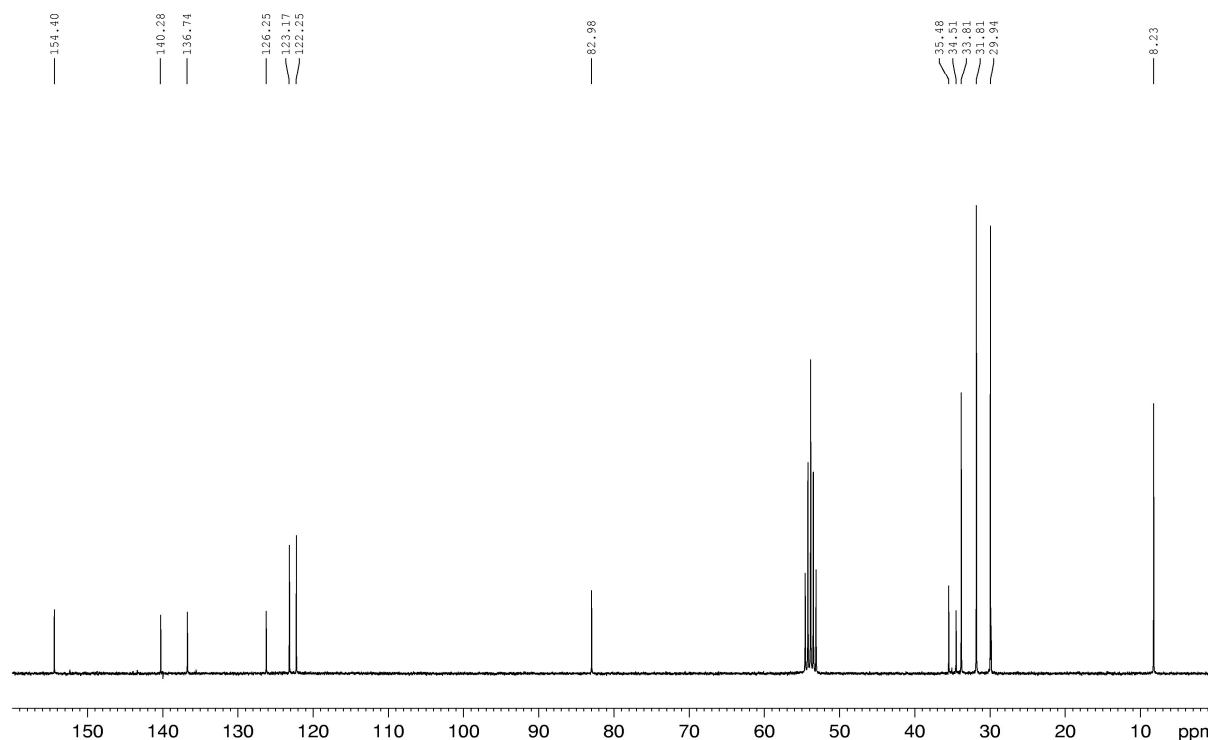
^1H NMR spectrum of 2-bromo-4,6-di-*tert*-butylphenol in CDCl_3 (300.51 MHz, 300 K)



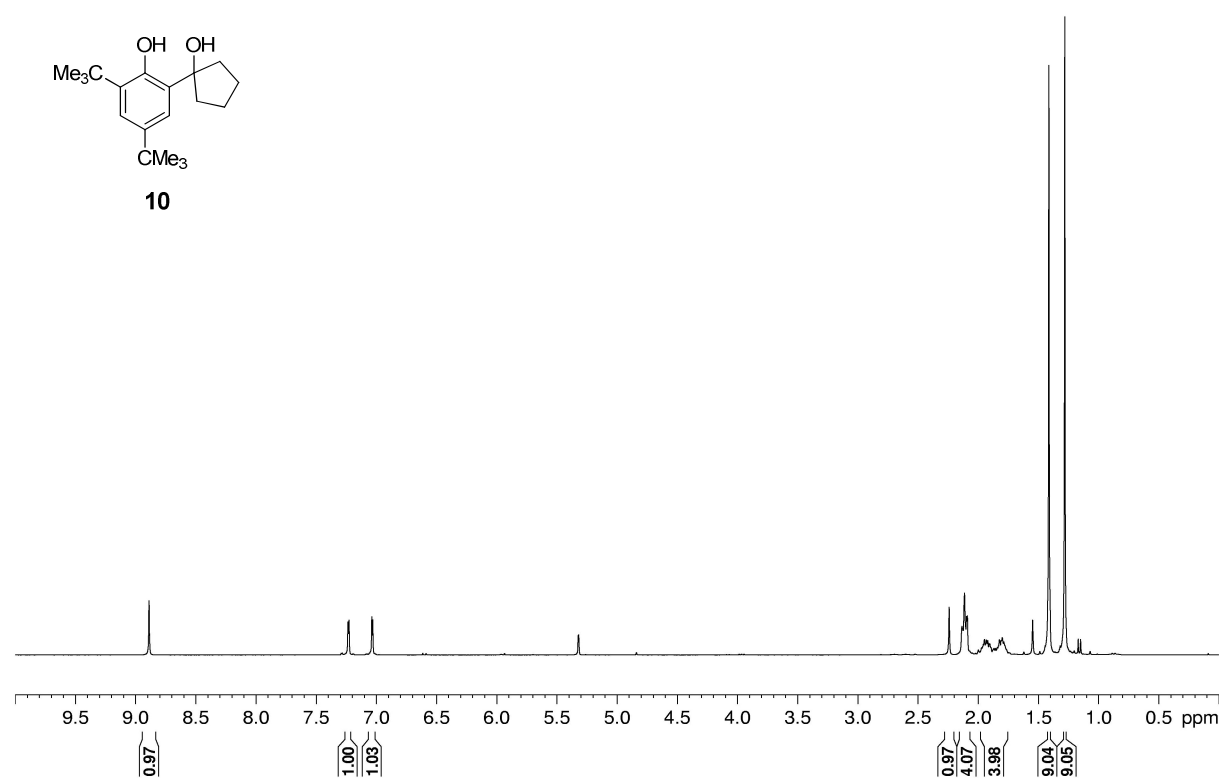
$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of 2-bromo-4,6-di-*tert*-butylphenol in CDCl_3 (75.4 MHz, 300 K)



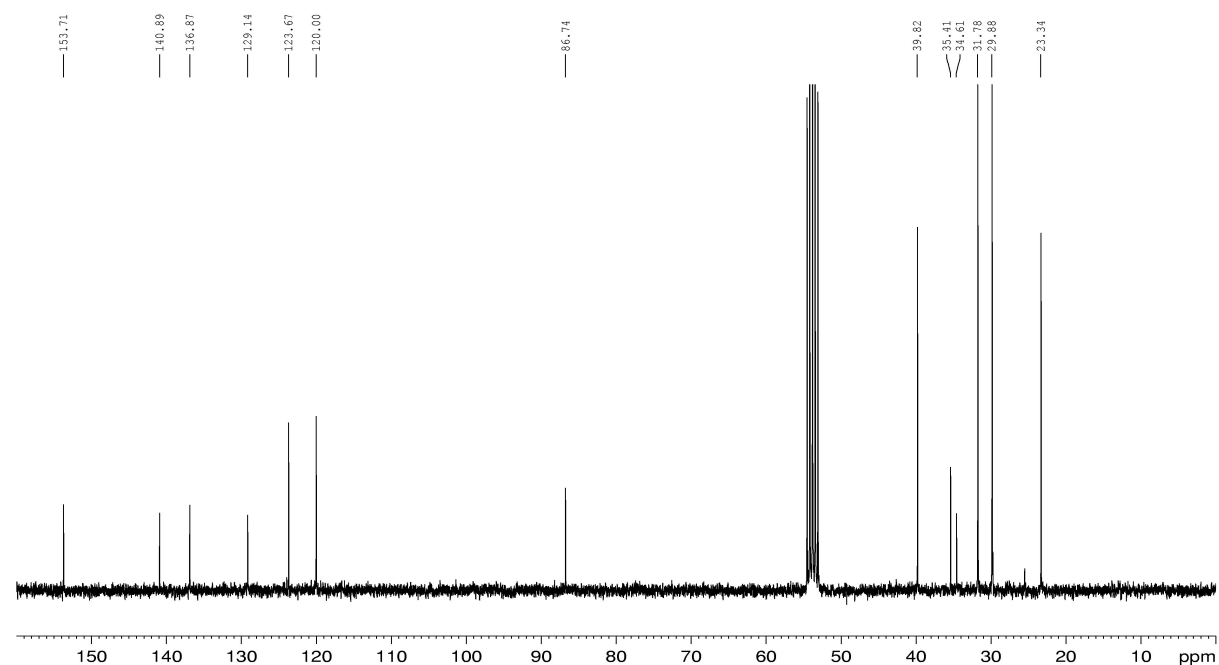
^1H NMR spectrum of 2,4-di-*tert*-butyl-6-(3-hydroxypent-3-yl)phenol (**9**) in CD_2Cl_2 (300.51 MHz, 300 K)



$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of 2,4-di-*tert*-butyl-6-(3-hydroxypent-3-yl)phenol (**9**) in CD_2Cl_2 (75.4 MHz, 300 K)



¹H NMR spectrum of 2,4-di-*tert*-butyl-6-(1-hydroxycyclopentyl)phenol (**10**) in CD₂Cl₂ (300.51 MHz, 300 K)



¹³C{¹H} NMR spectrum of 2,4-di-*tert*-butyl-6-(1-hydroxycyclopentyl)phenol (**10**) in CD₂Cl₂ (75.4 MHz, 300 K)