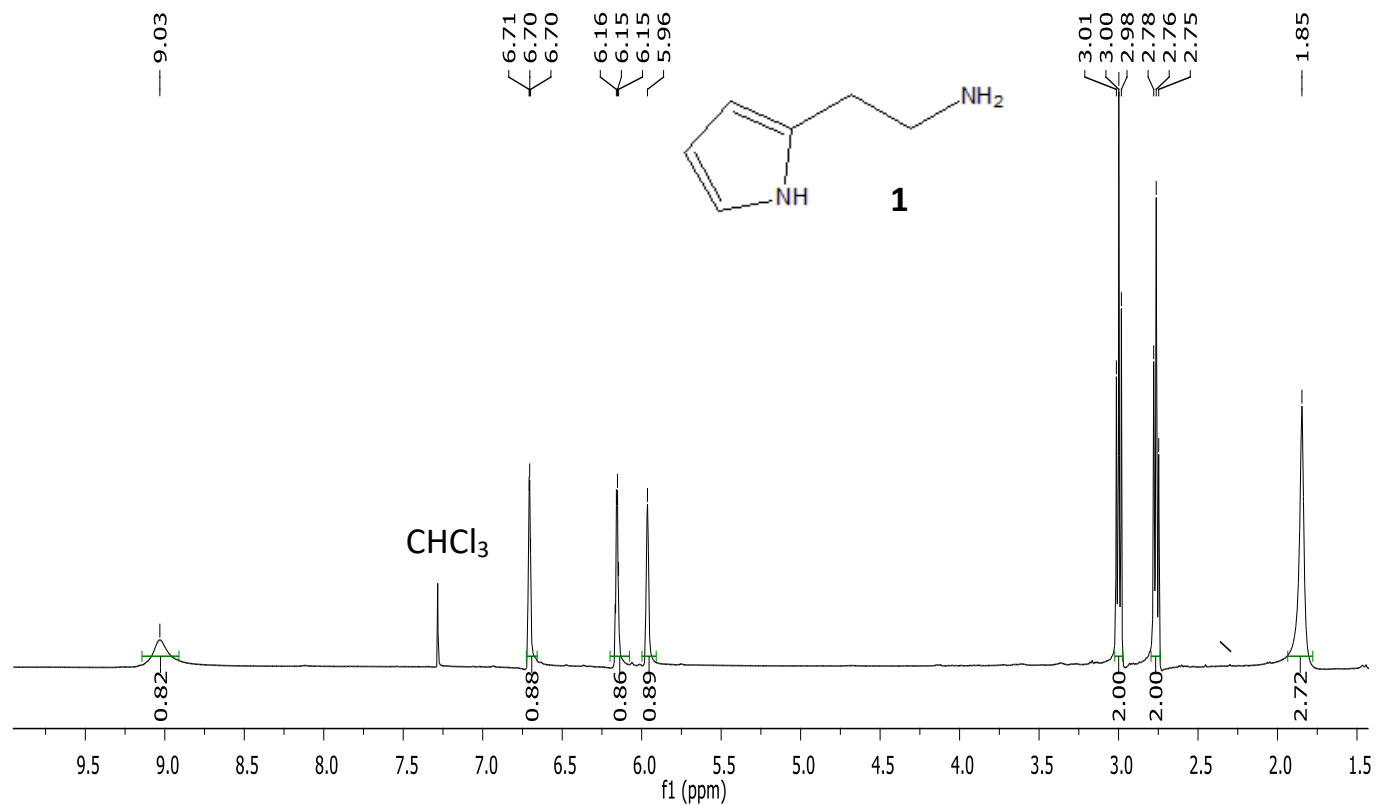


Supplementary Materials: New Histamine-Related Five-Membered N-Heterocycle Derivatives as Carbonic Anhydrase I Activators

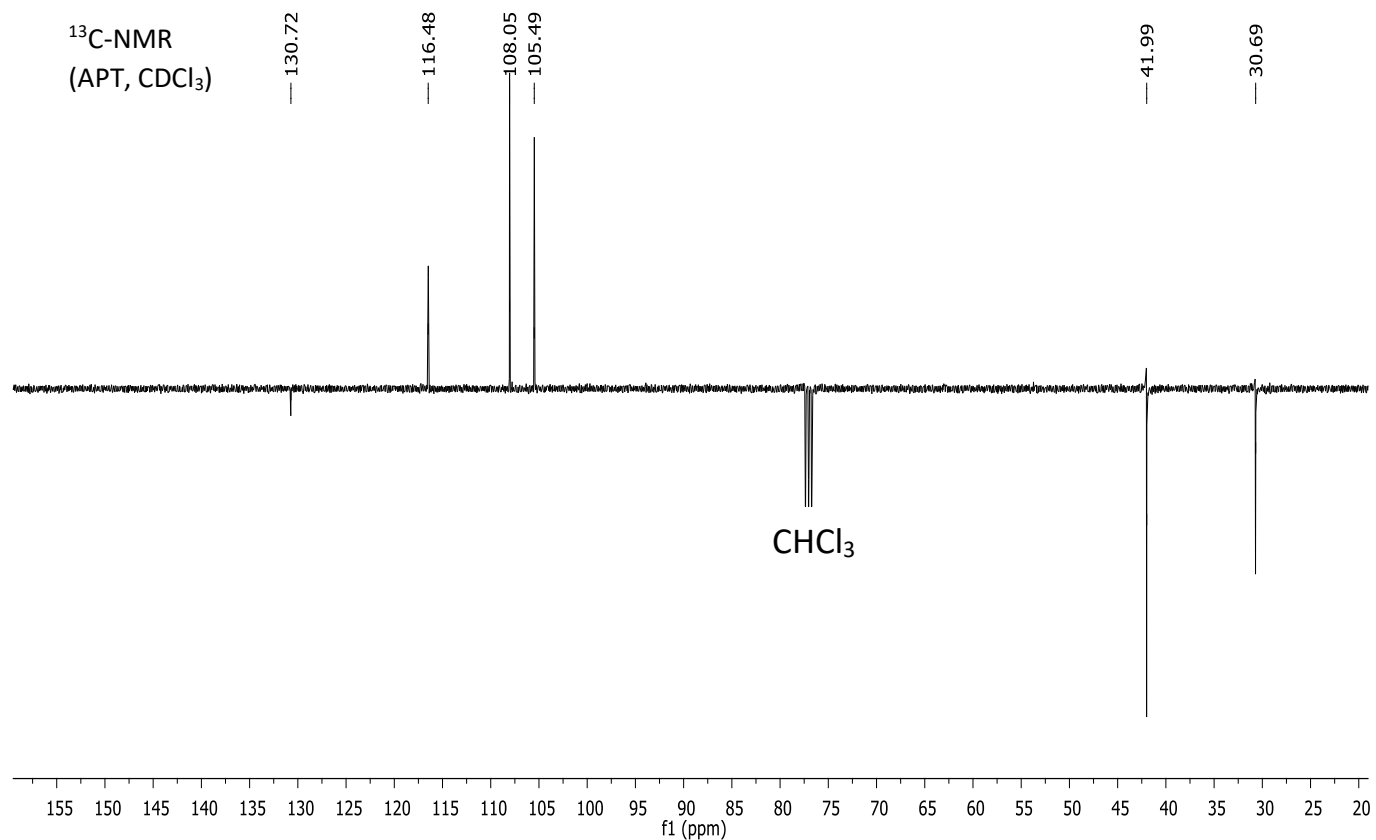
Niccolò Chiaramonte, Alessio Gabellini, Andrea Angeli, Gianluca Bartolucci, Laura Braconi, Silvia Dei, Elisabetta Teodori, Claudiu T. Supuran and Maria Novella Romanelli

¹H and ¹³C-NMR spectra of the final compounds

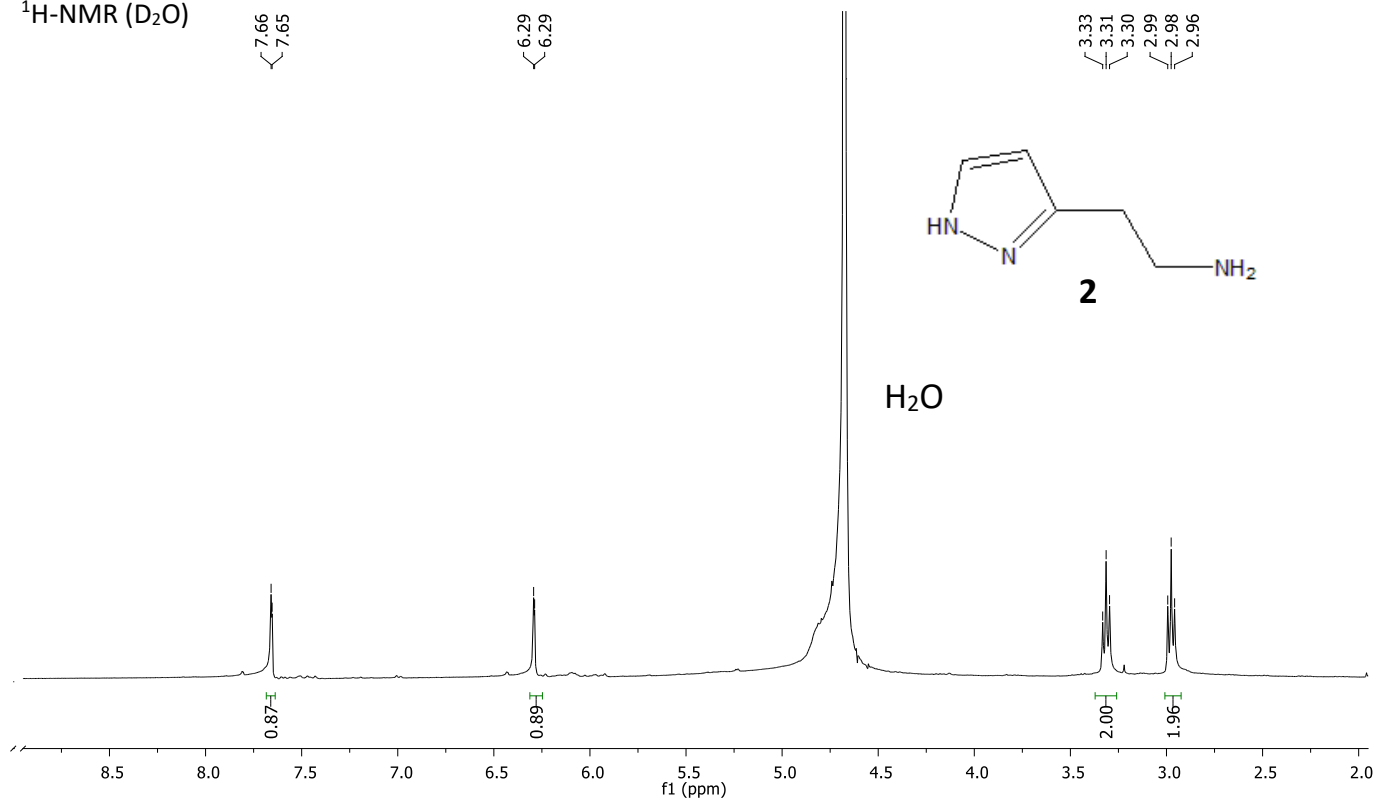
$^1\text{H-NMR}$ (CDCl_3)



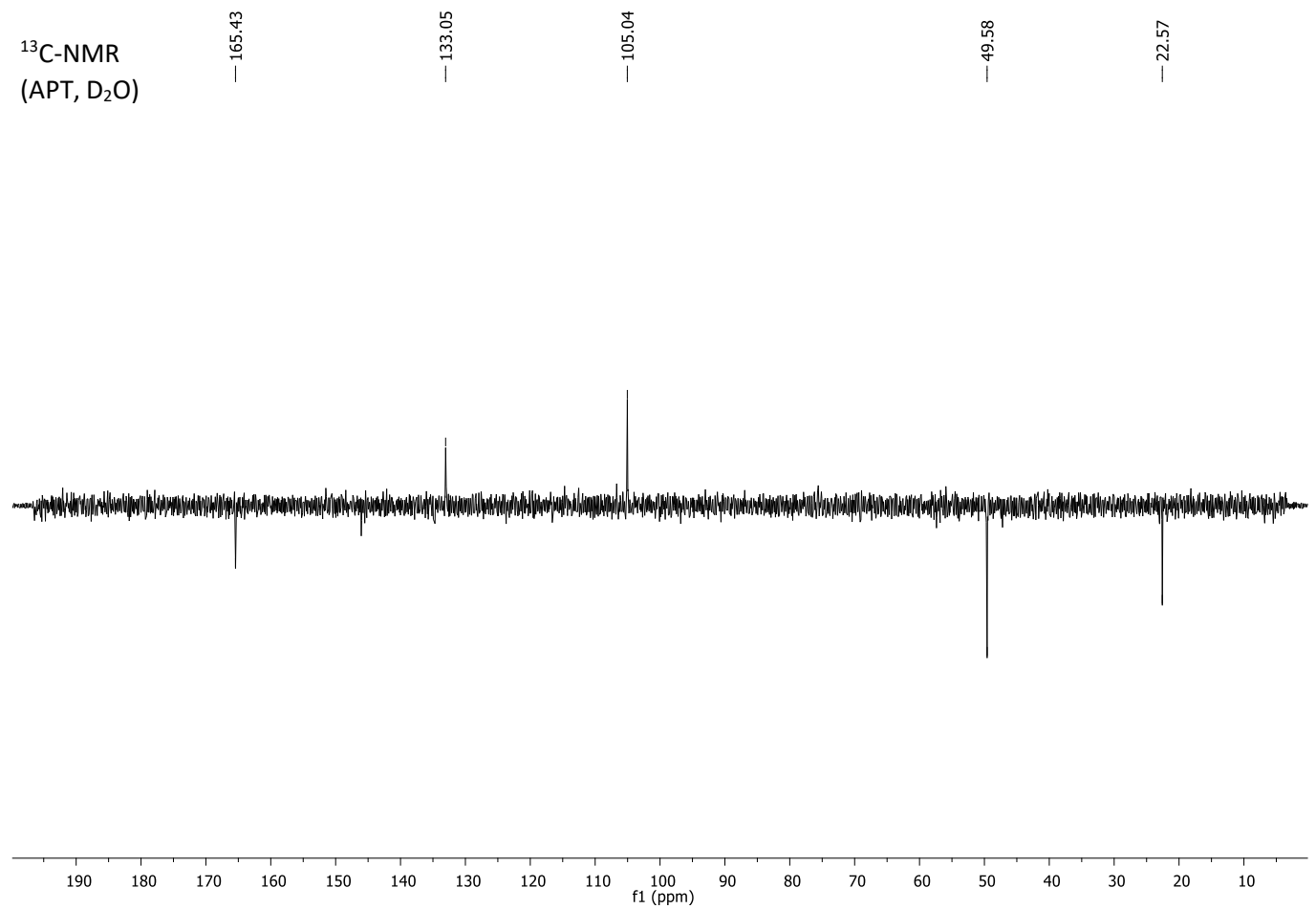
$^{13}\text{C-NMR}$
(APT, CDCl_3)



^1H -NMR (D_2O)

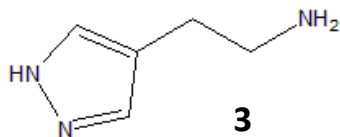


^{13}C -NMR
(APT, D_2O)

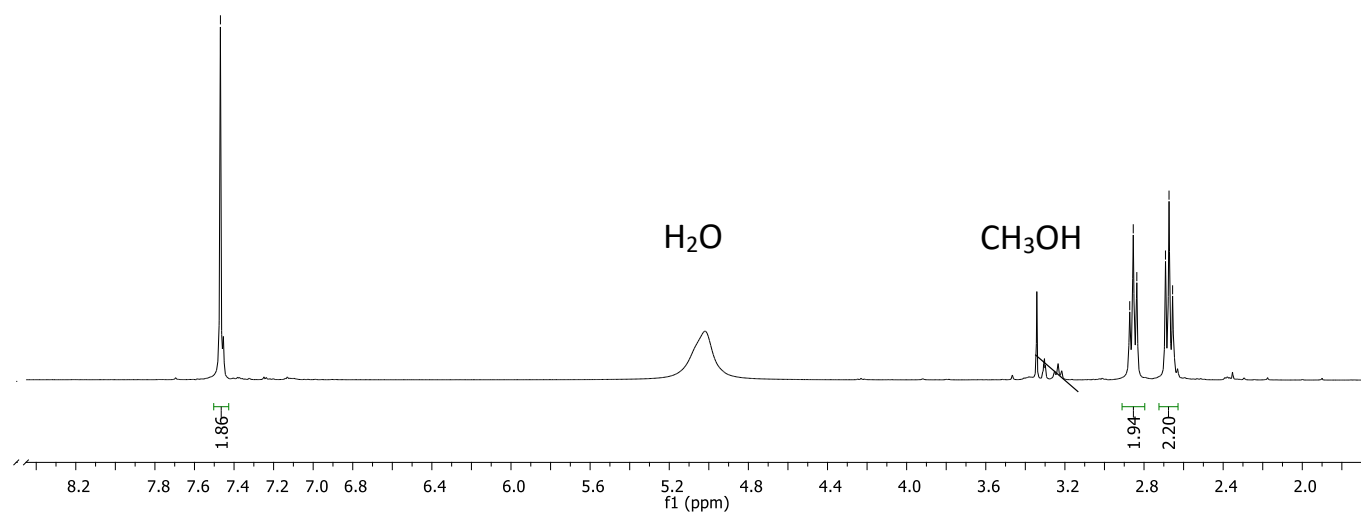


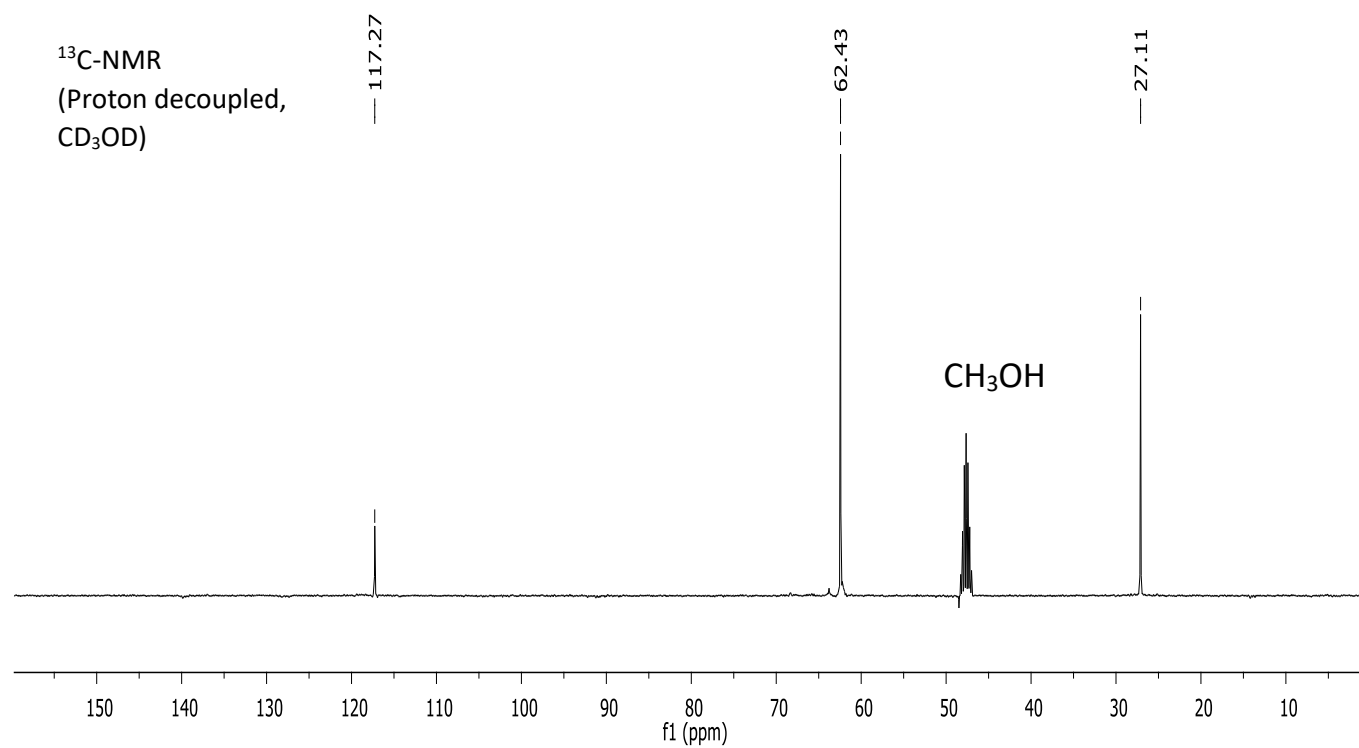
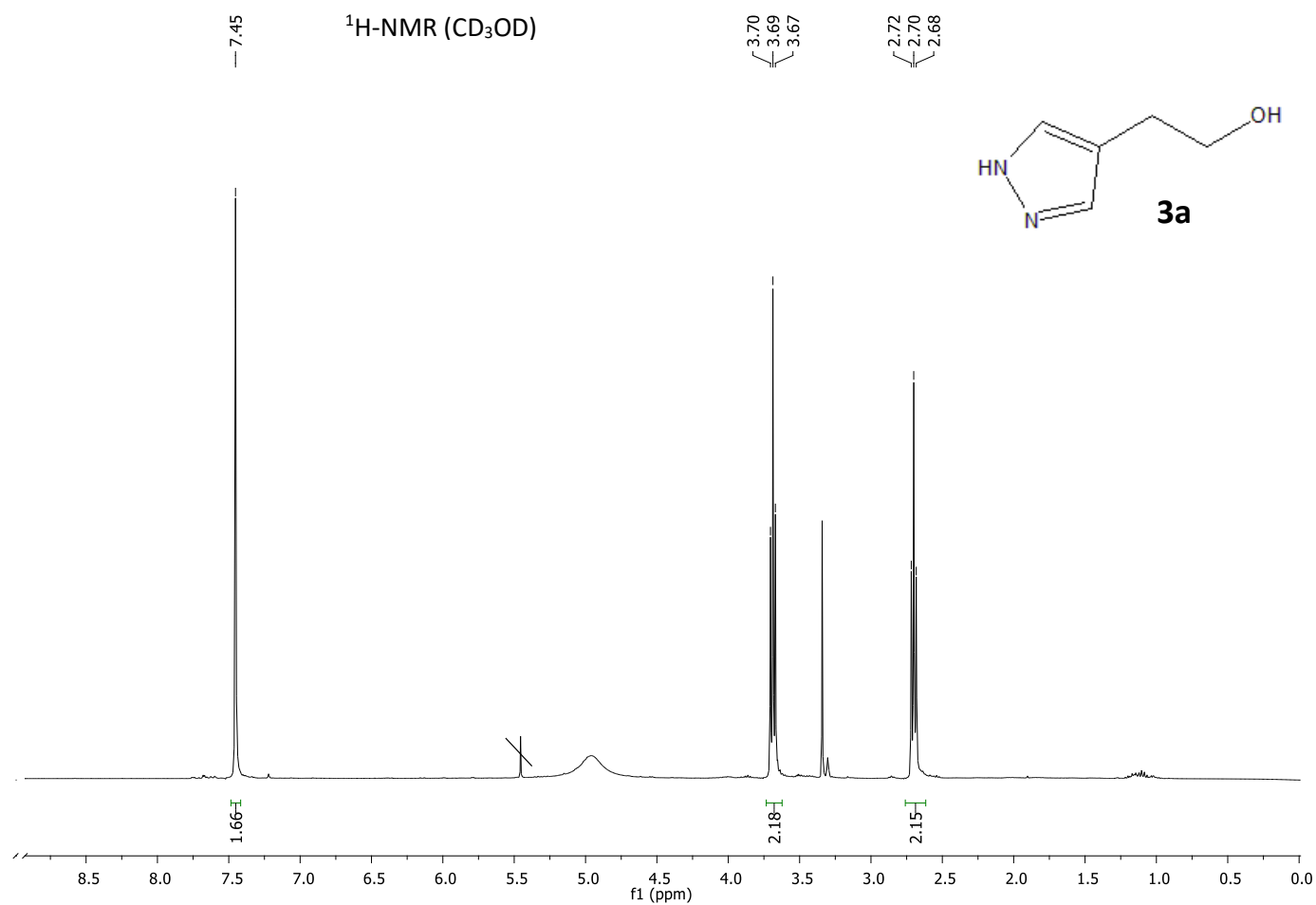
¹H-NMR (CD₃OD)

— 7.47

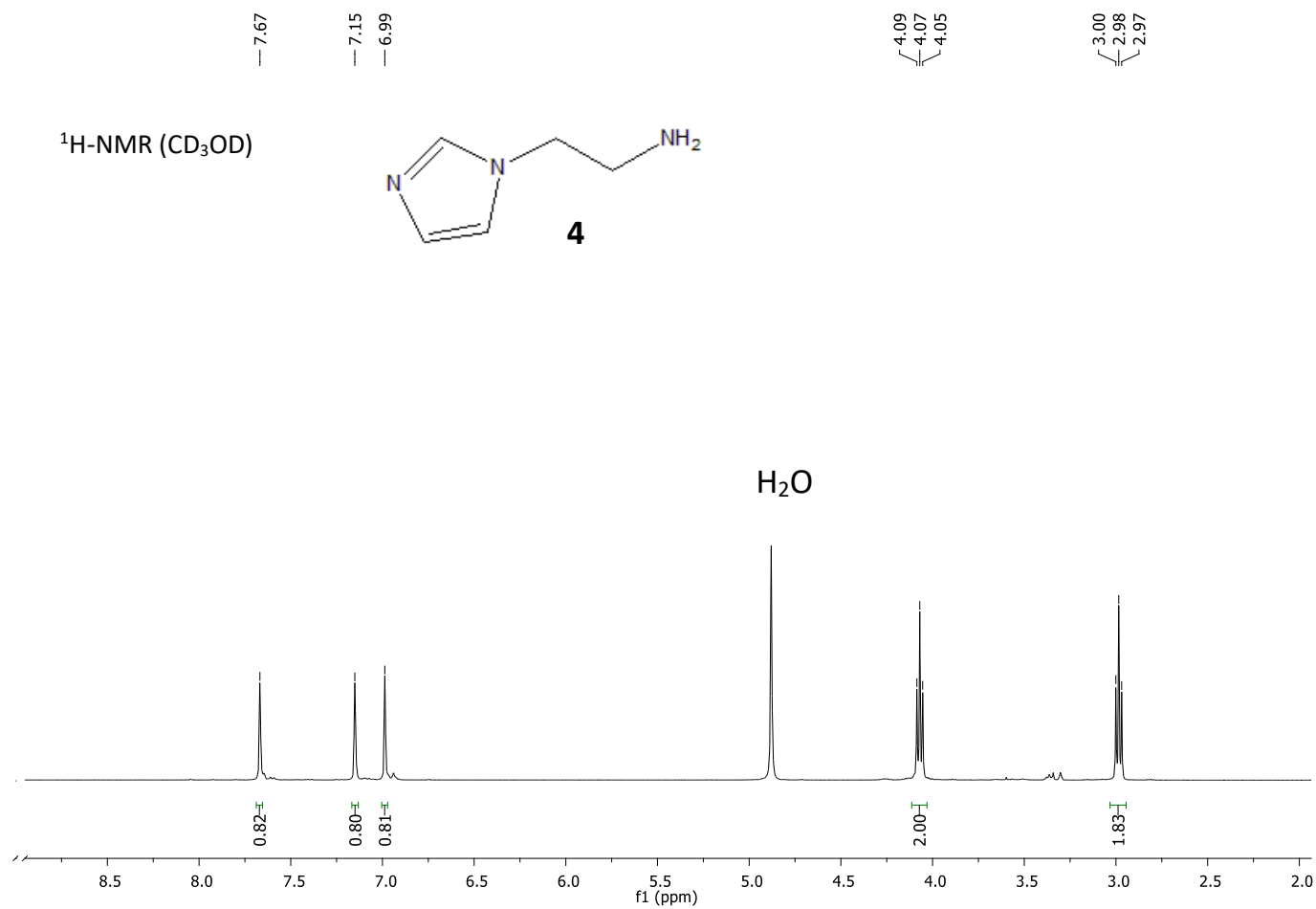
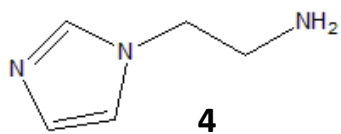


2.87
2.85
2.84
2.69
2.67
2.66

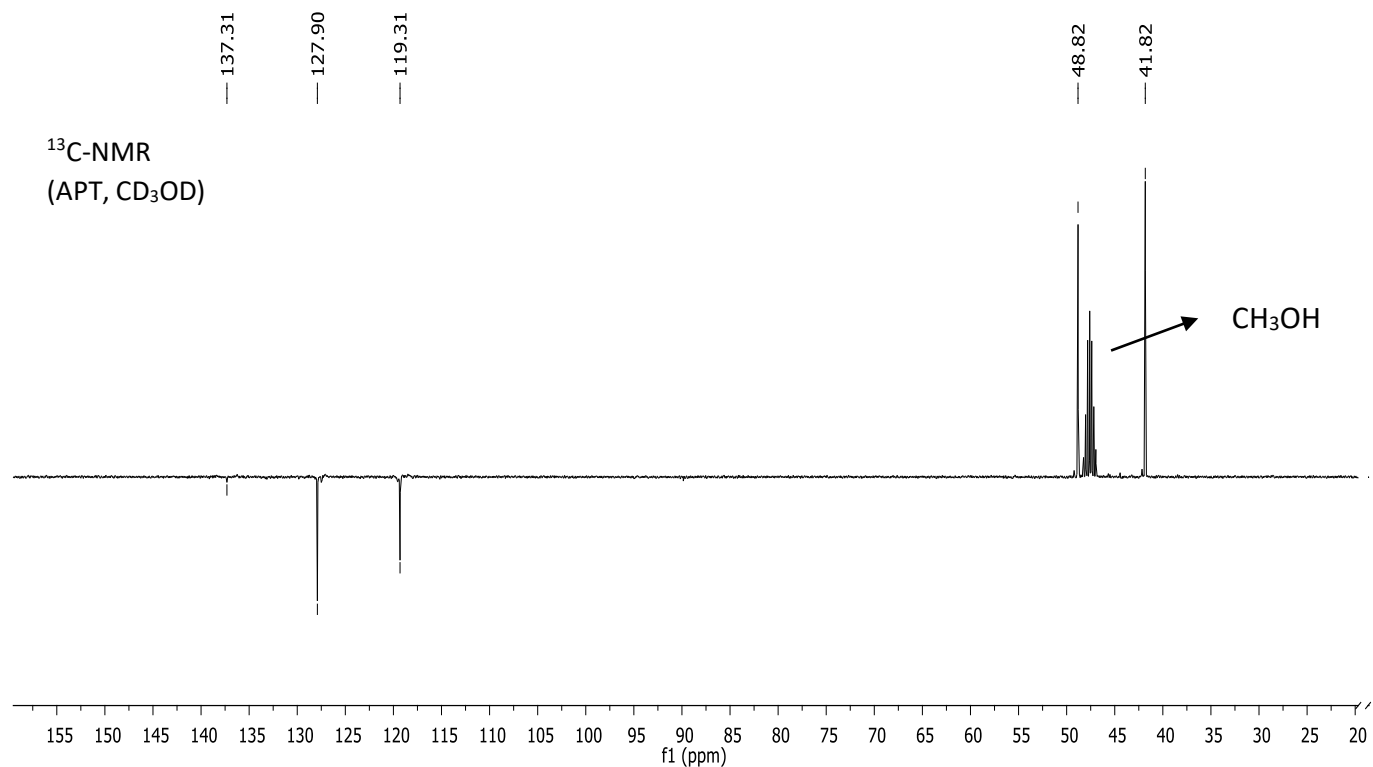


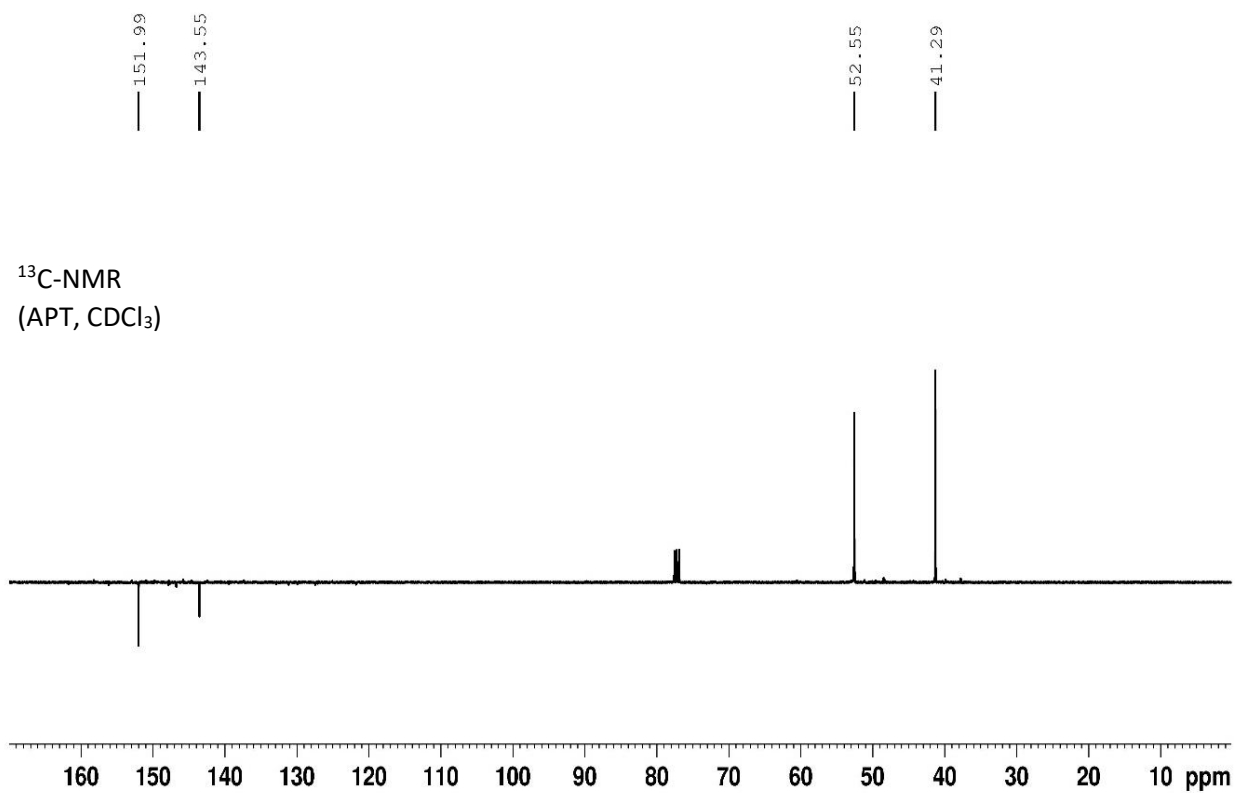
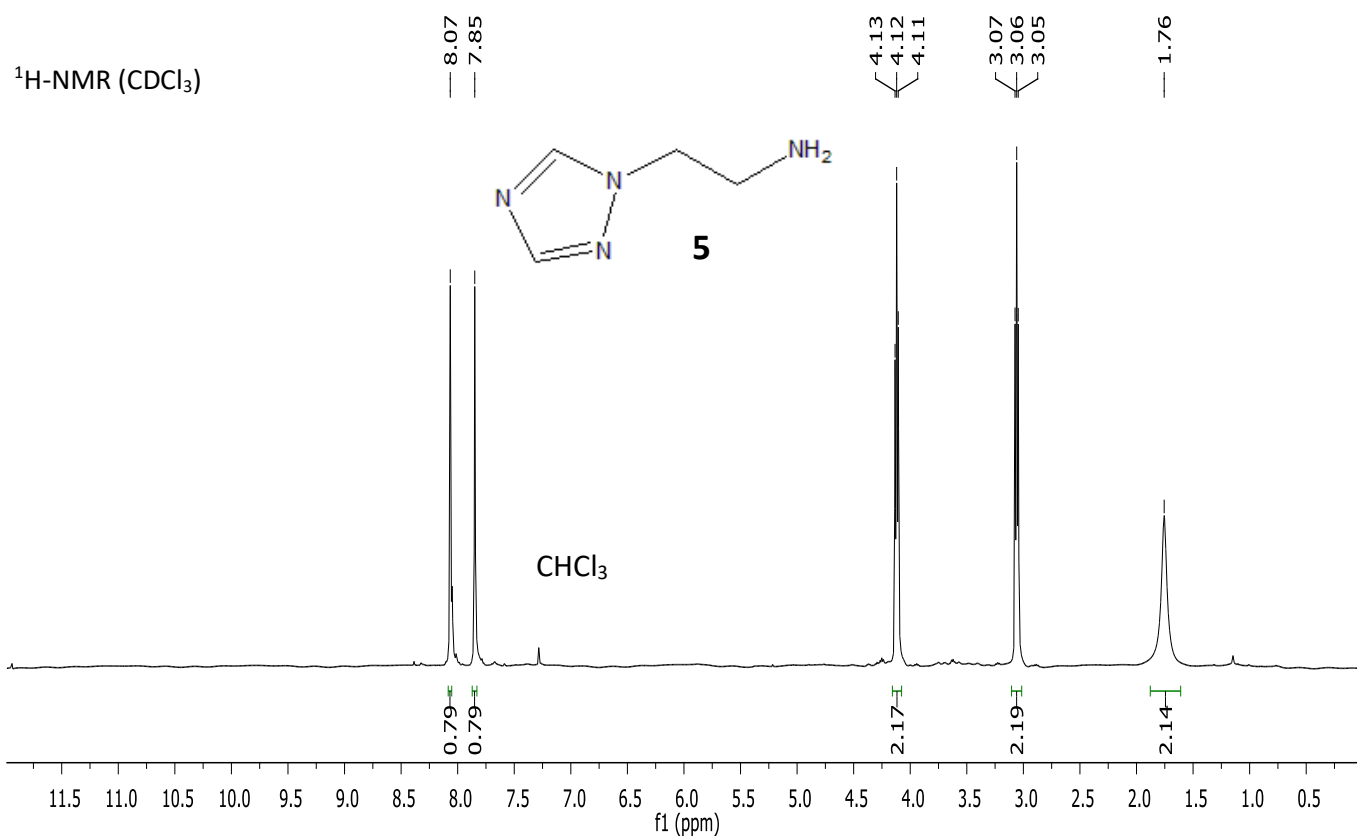


$^1\text{H-NMR}$ (CD_3OD)

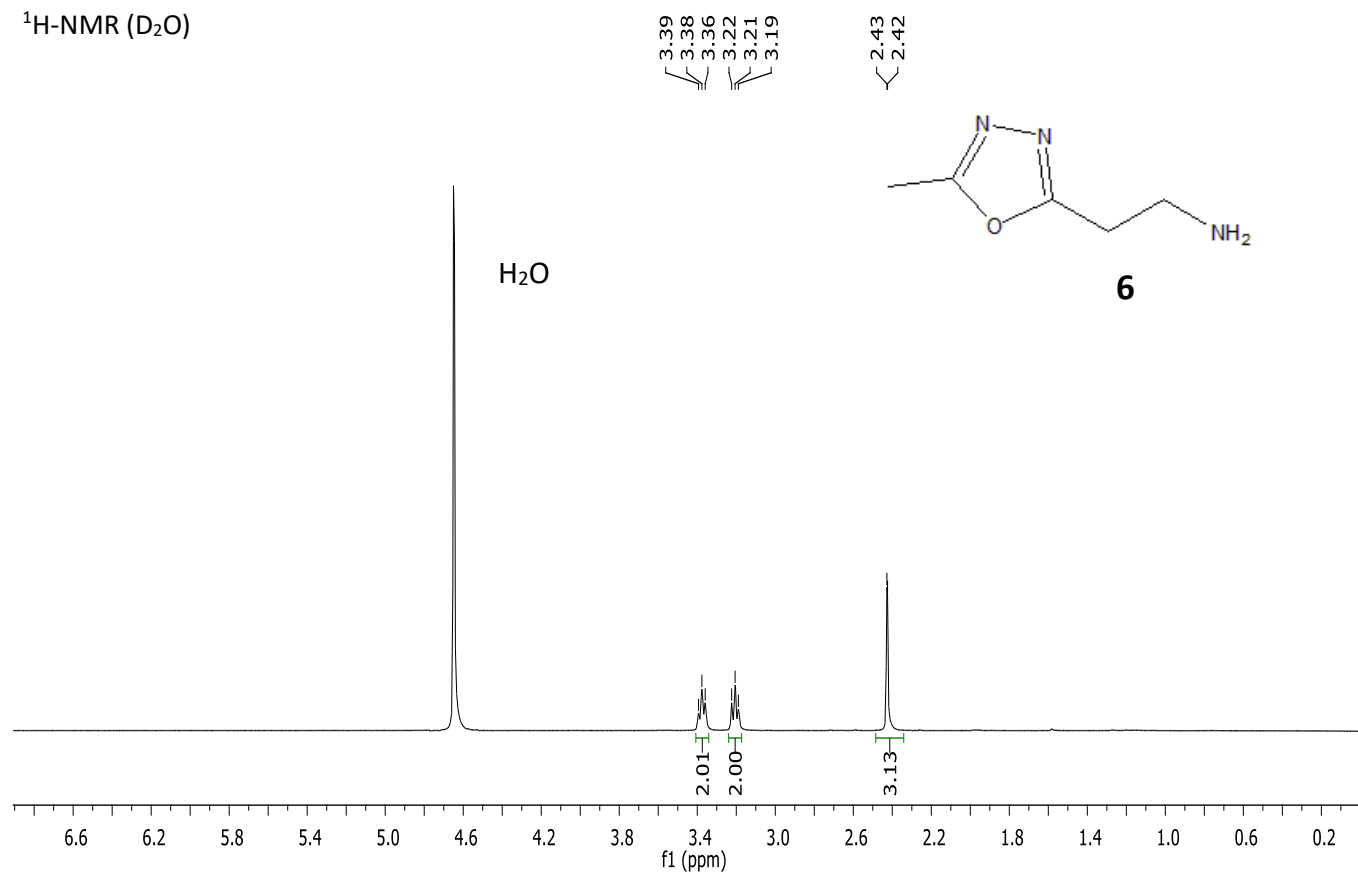


$^{13}\text{C-NMR}$
(APT, CD_3OD)





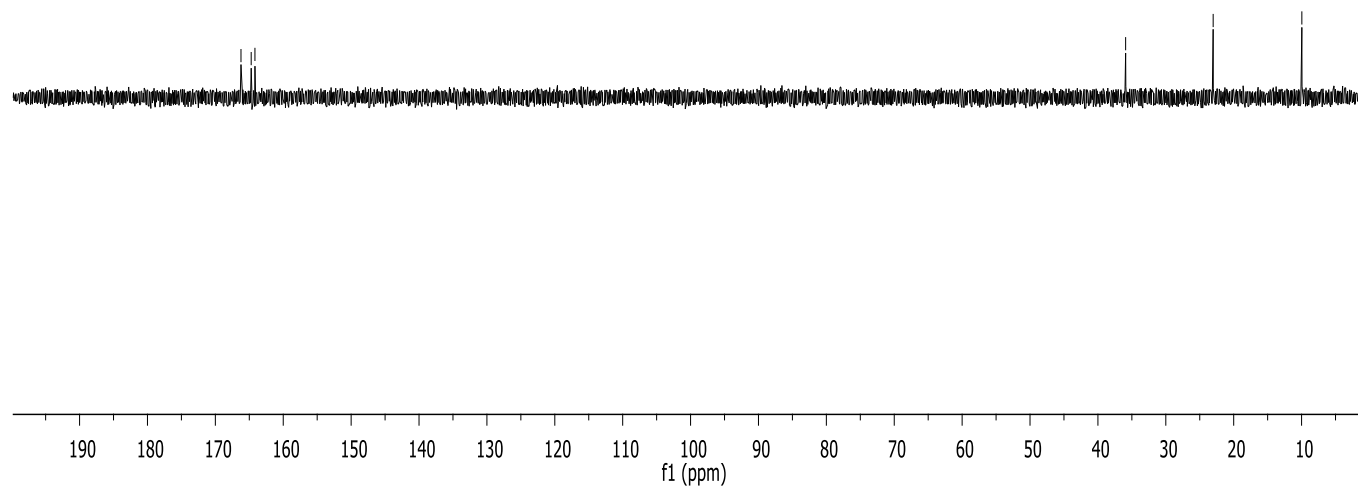
$^1\text{H-NMR}$ (D_2O)



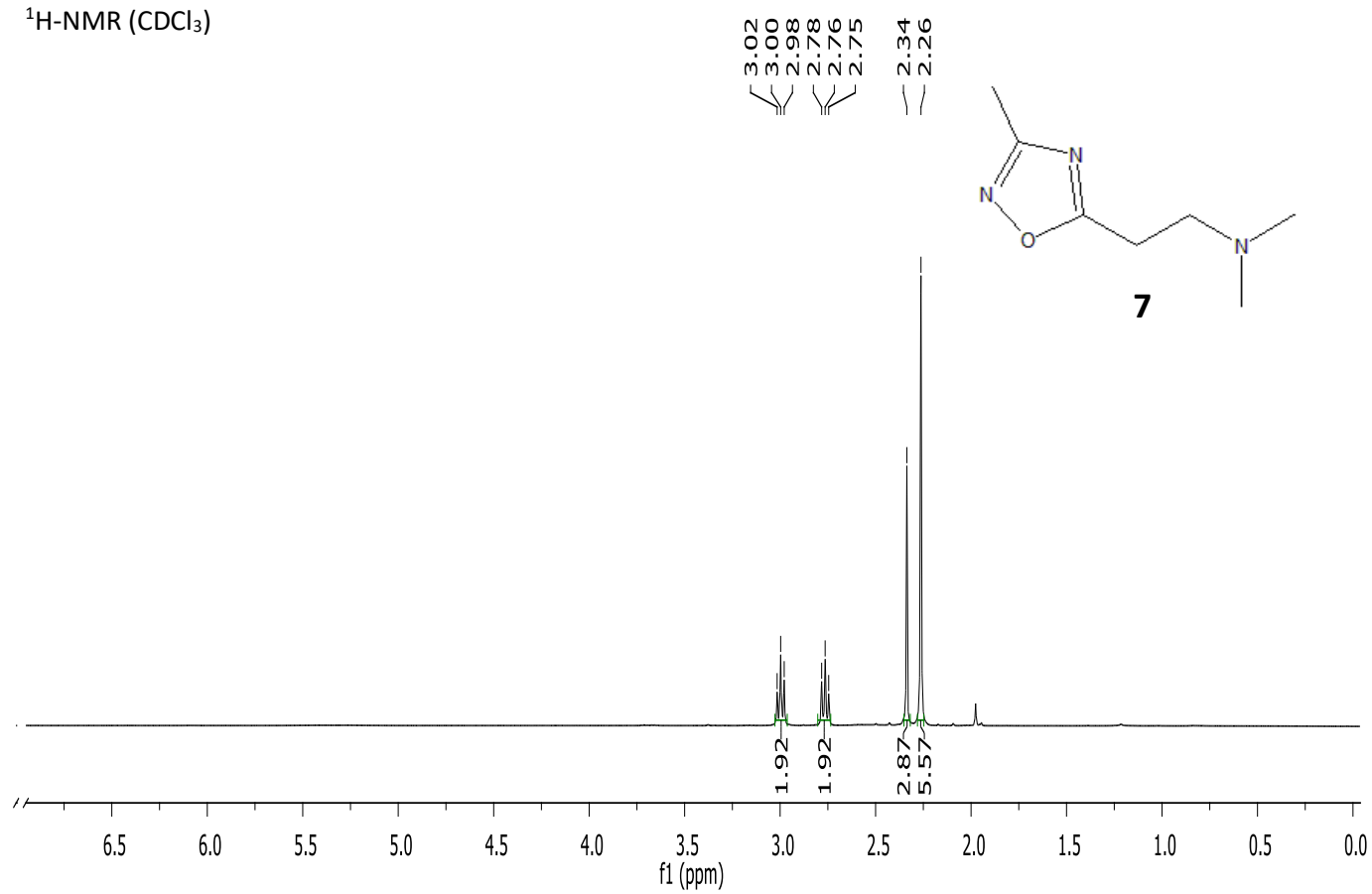
166.23
164.72
164.17

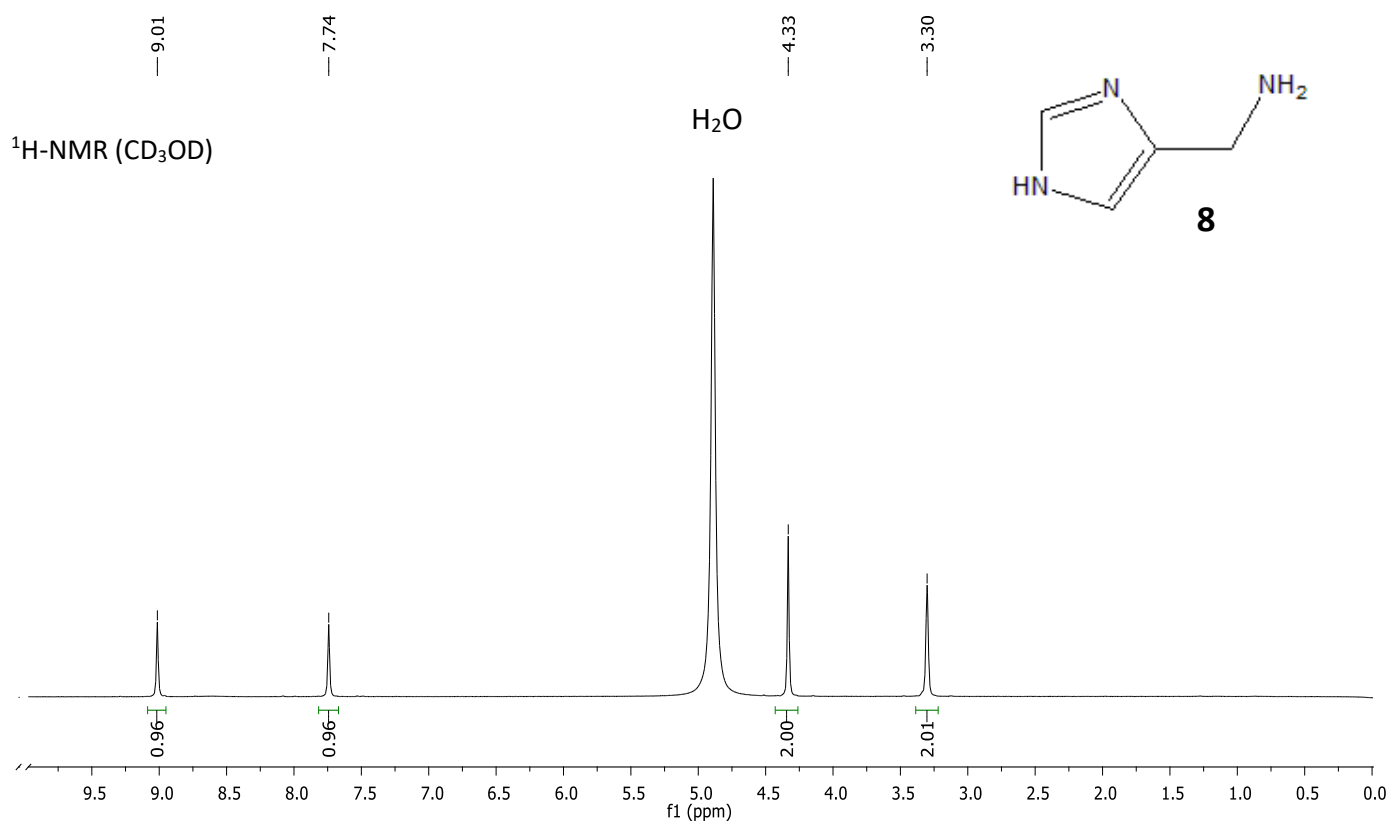
6 (oxalate salt)
 $^{13}\text{C-NMR}$
(Proton decoupled, D_2O)

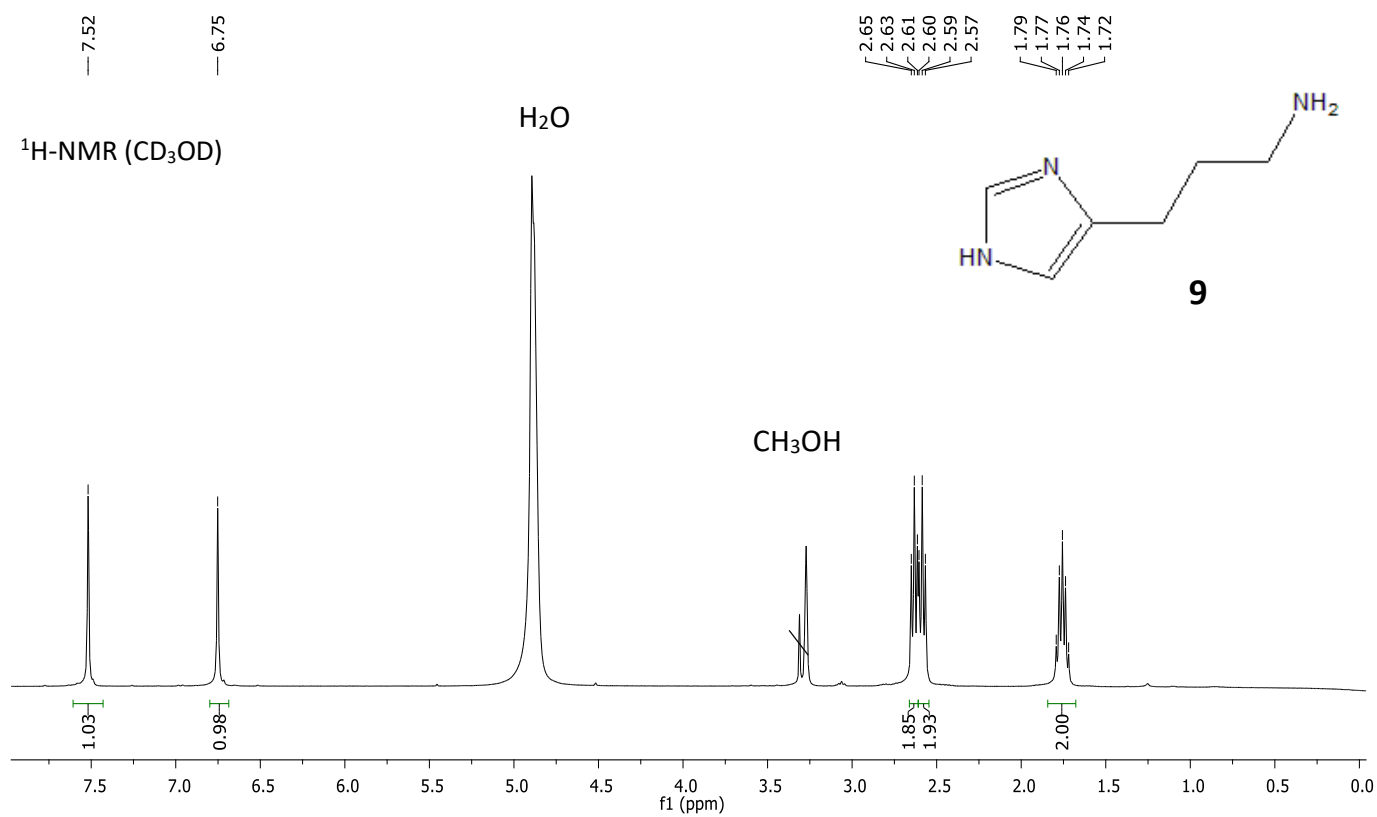
35.92
23.02
9.96

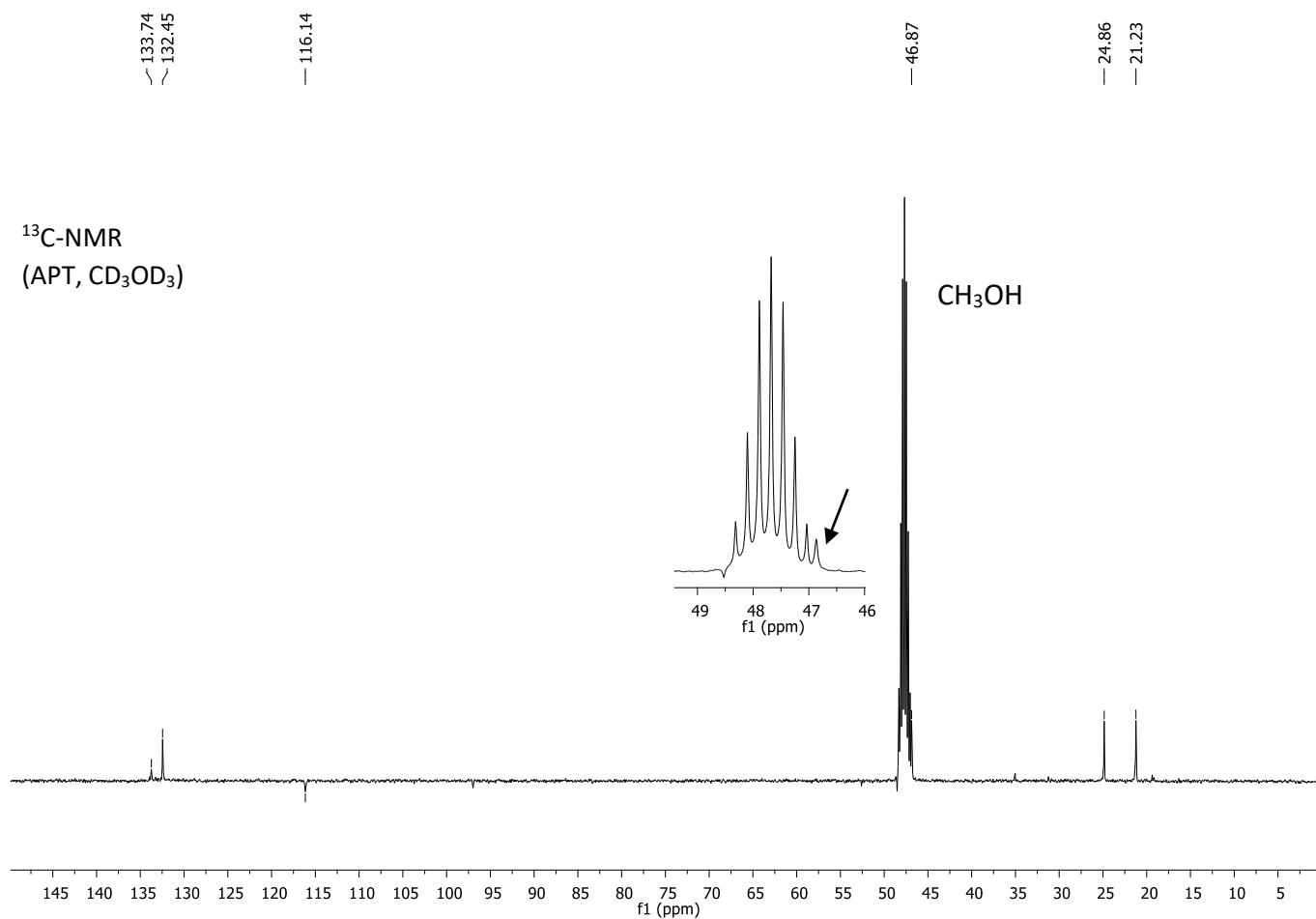
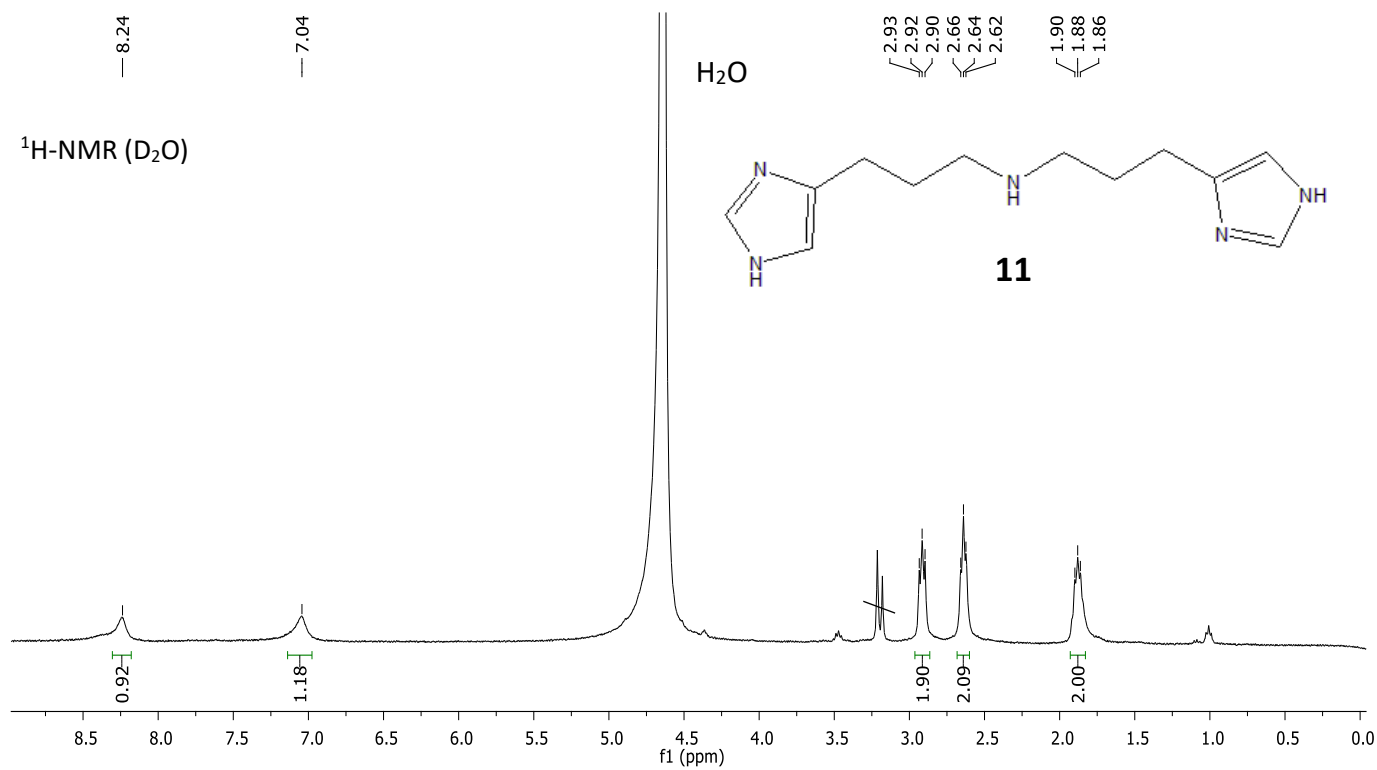


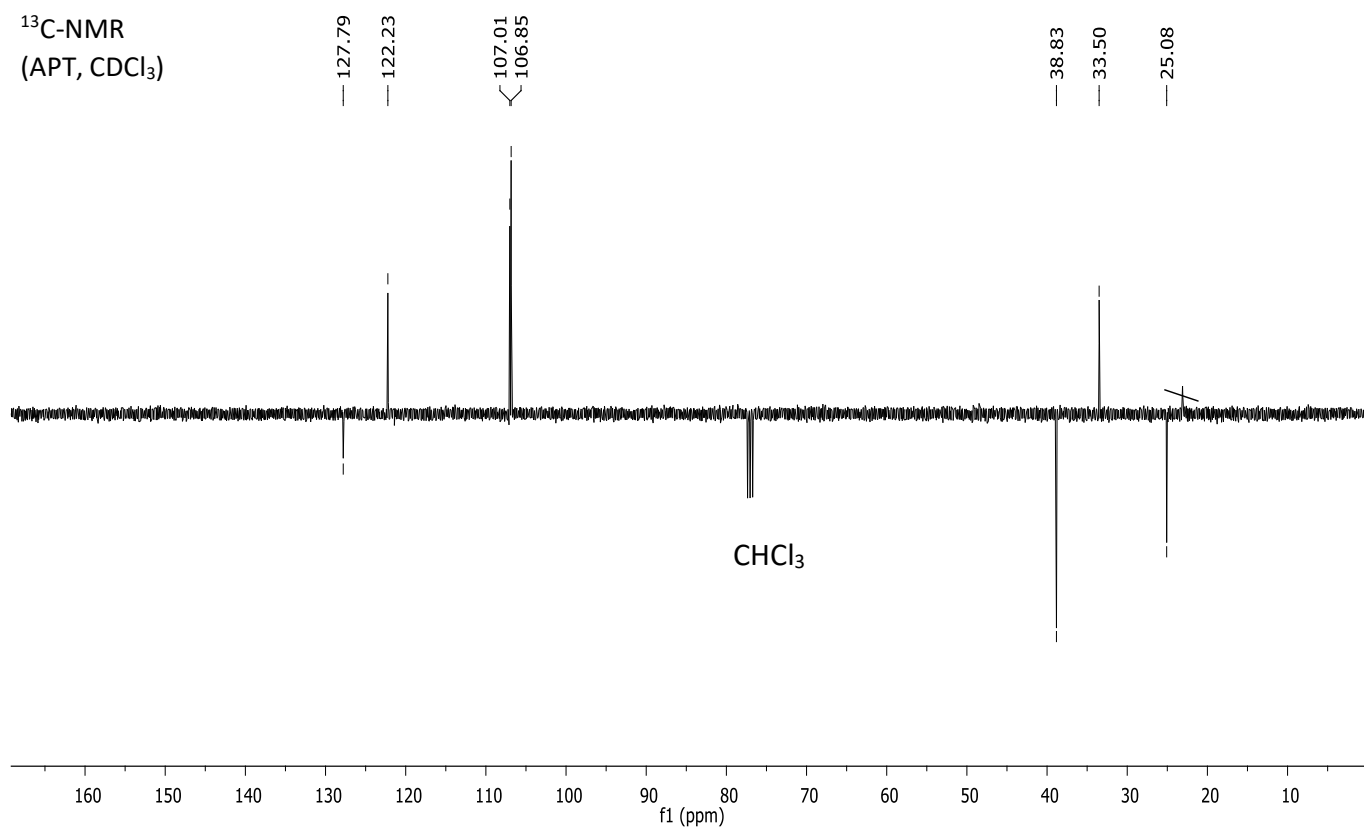
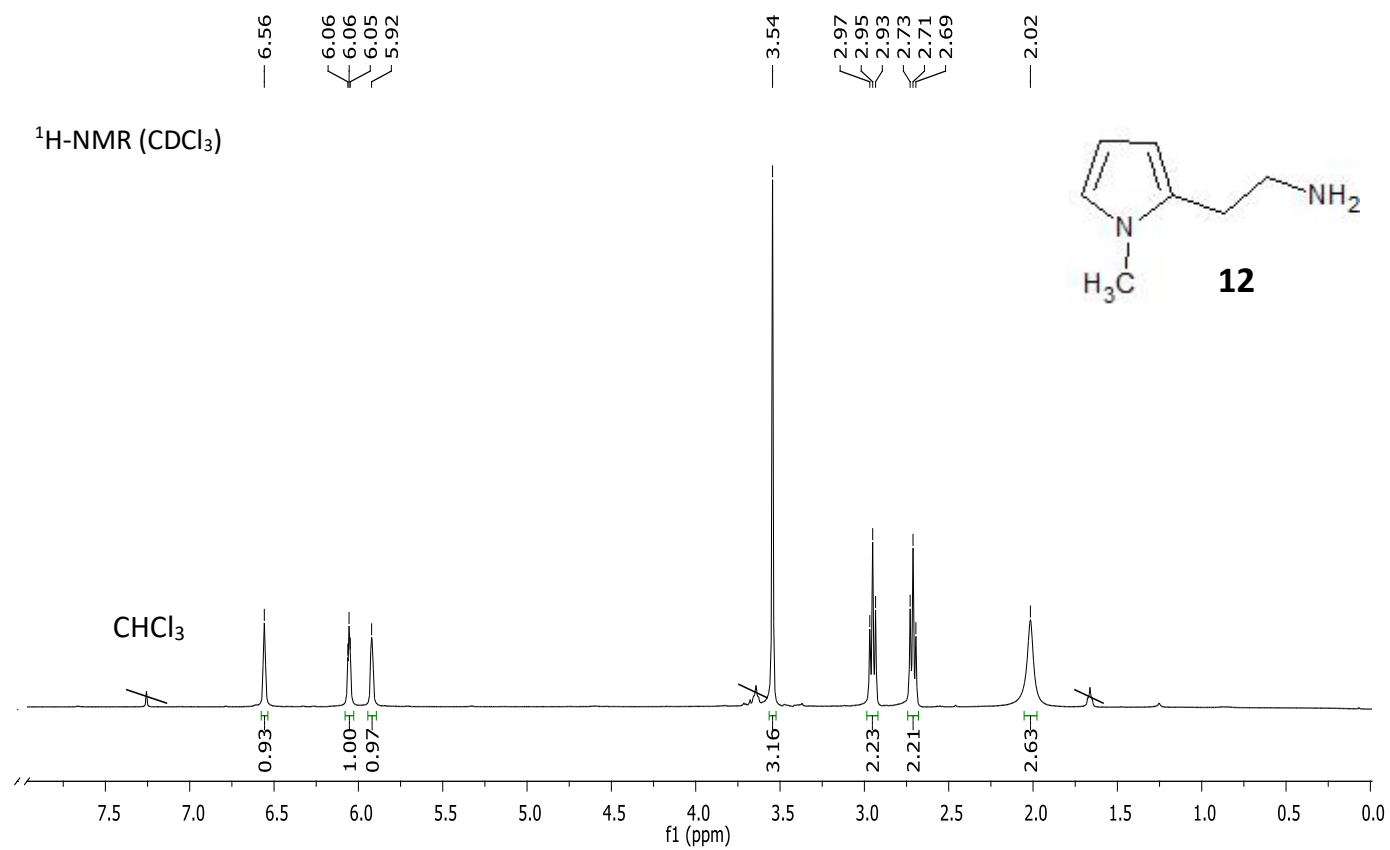
^1H -NMR (CDCl_3)

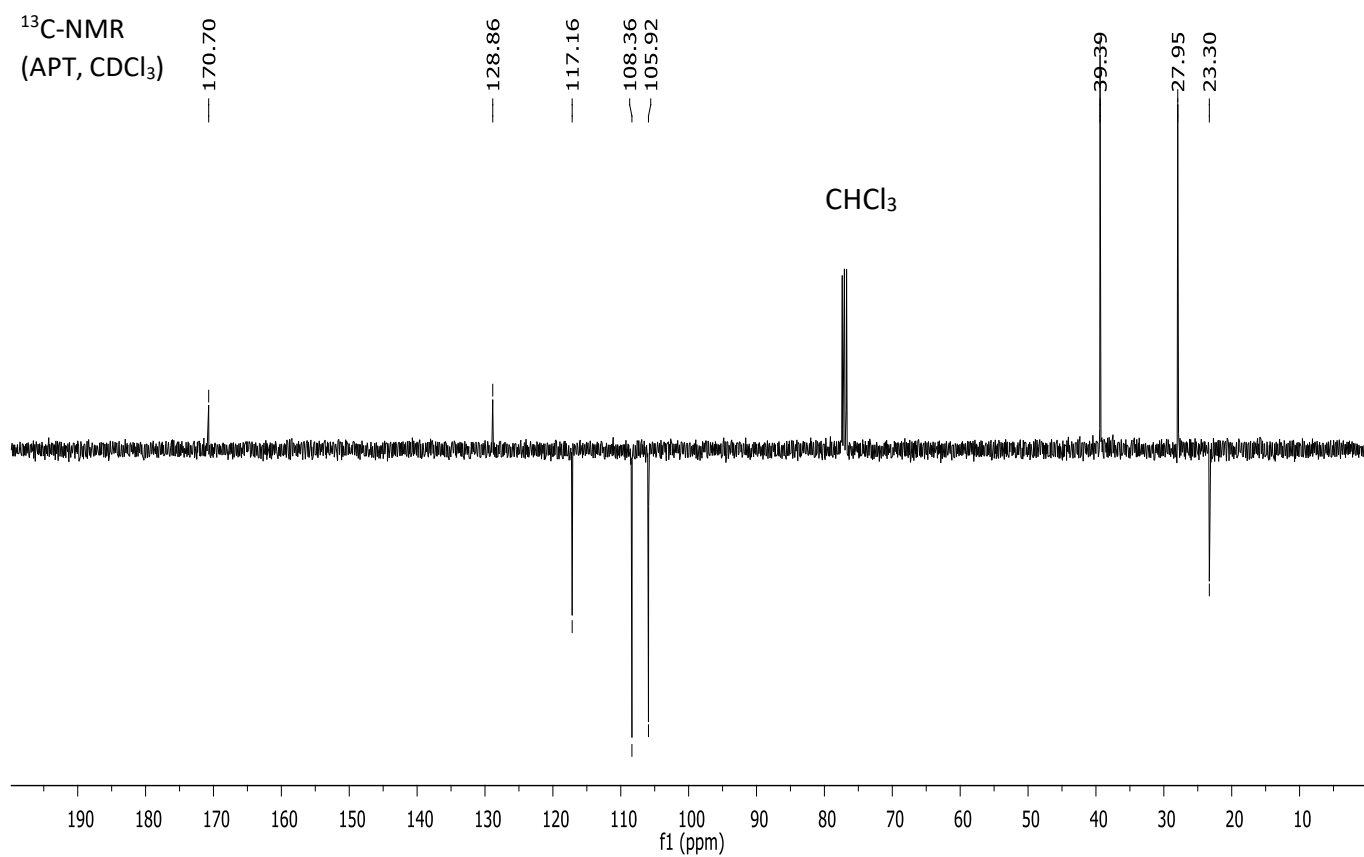
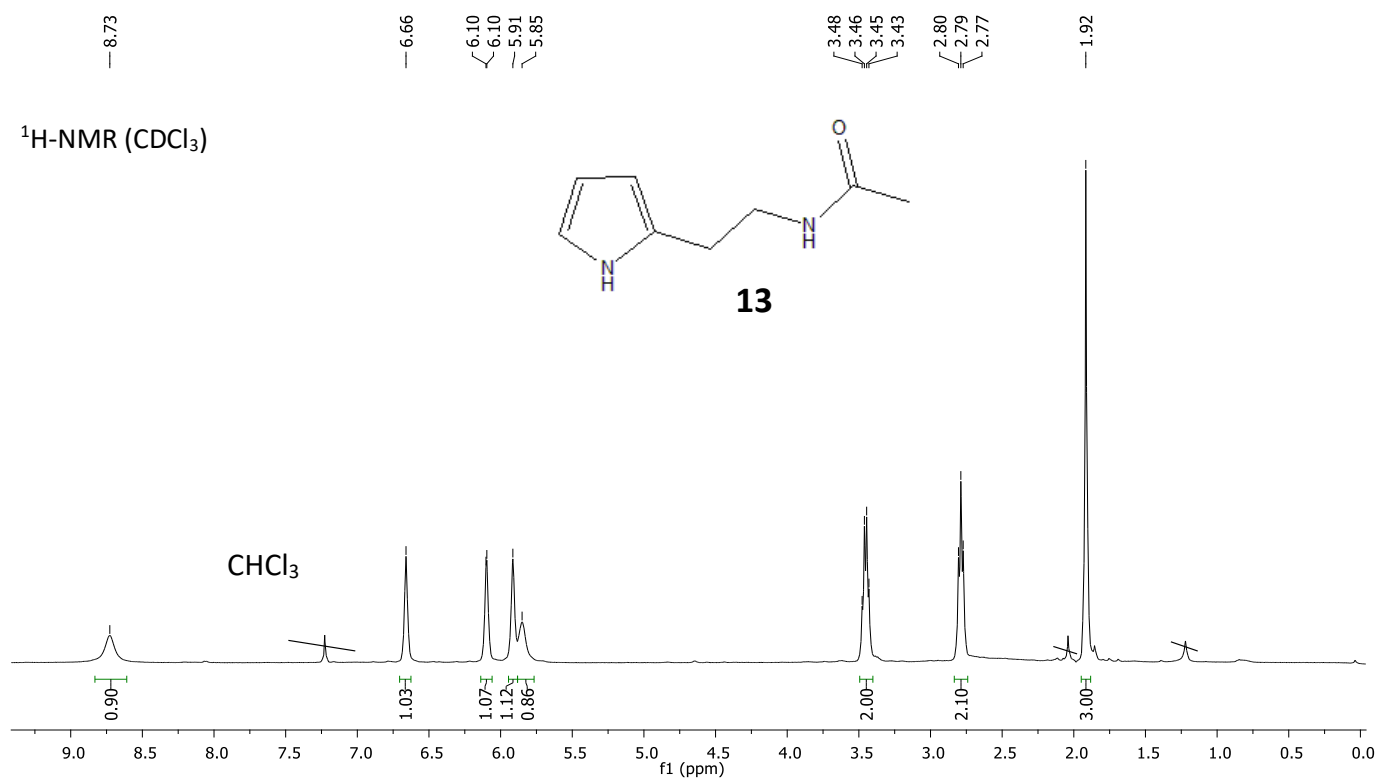


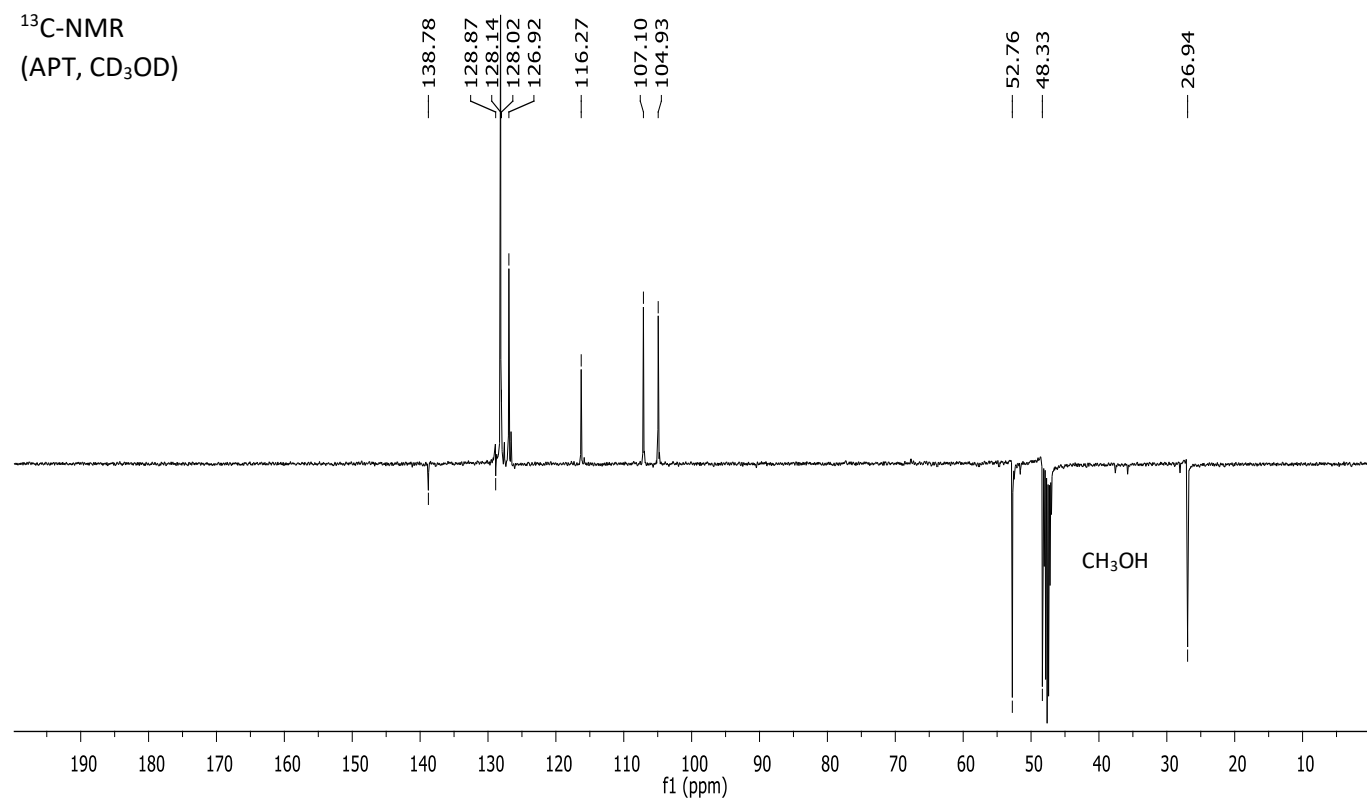
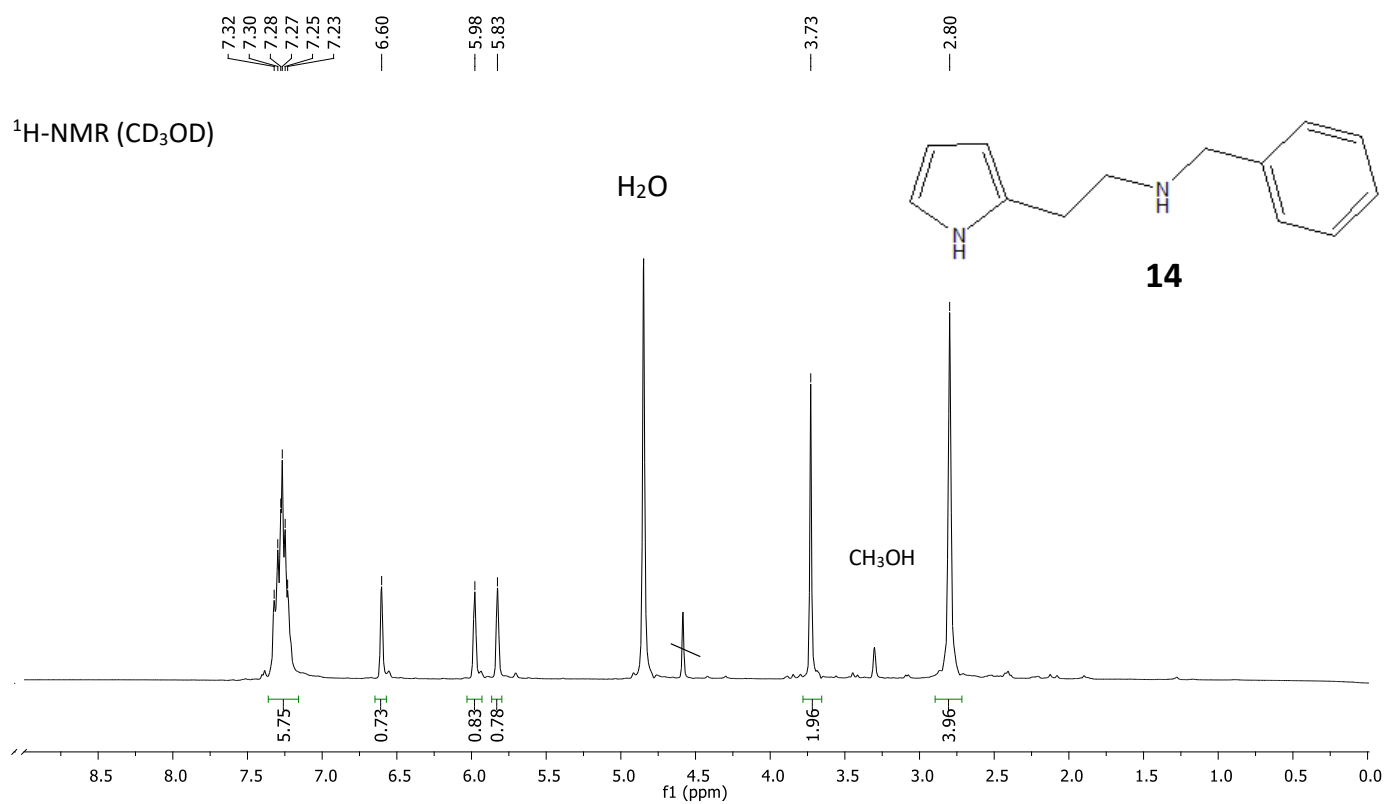


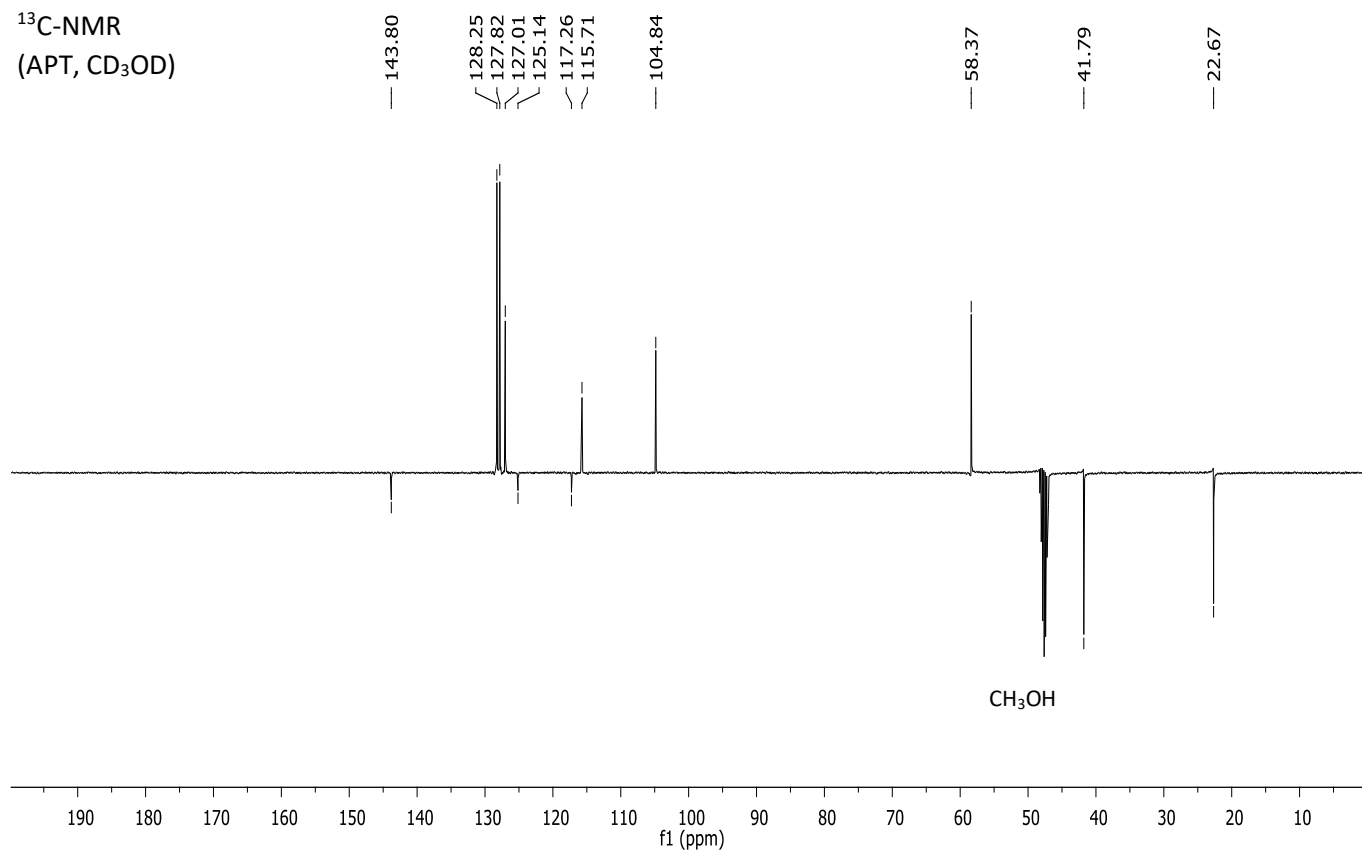
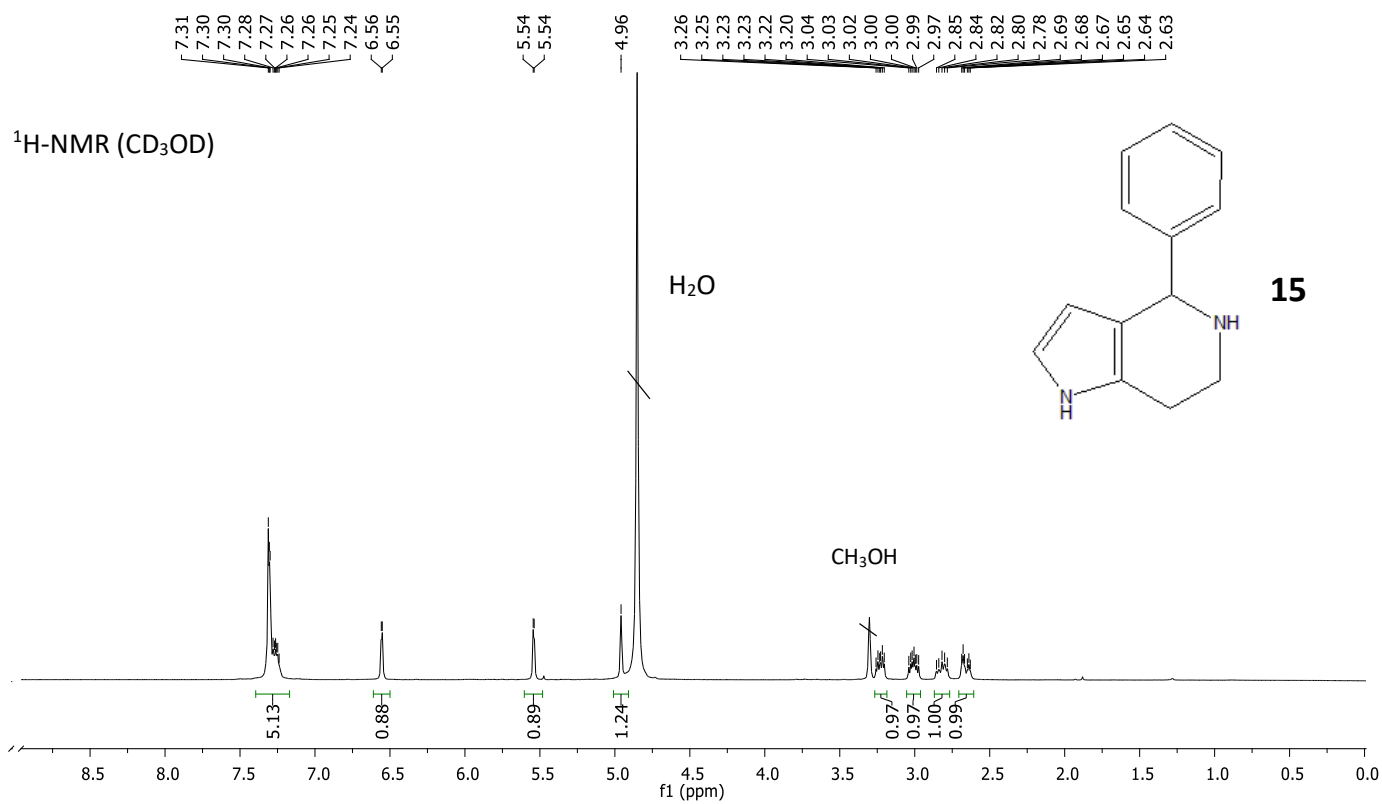


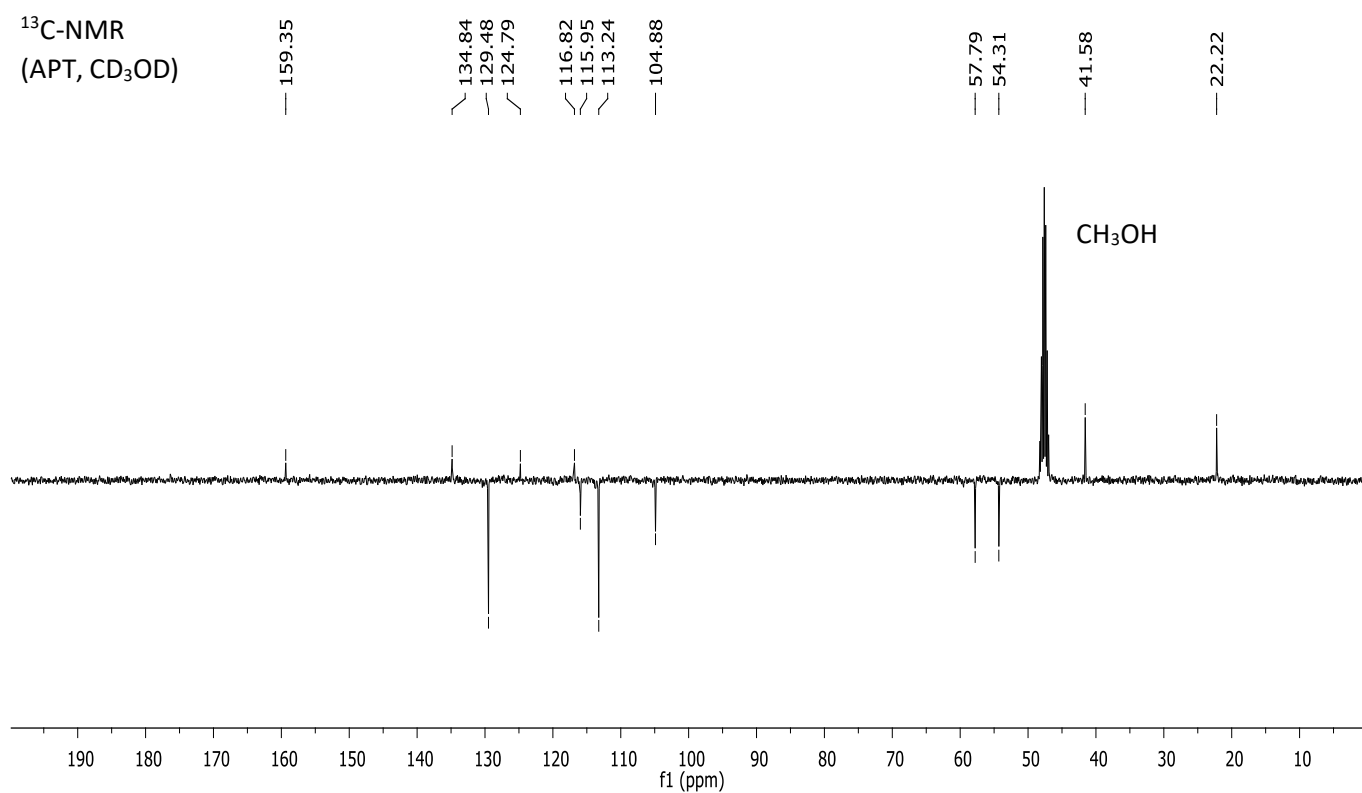
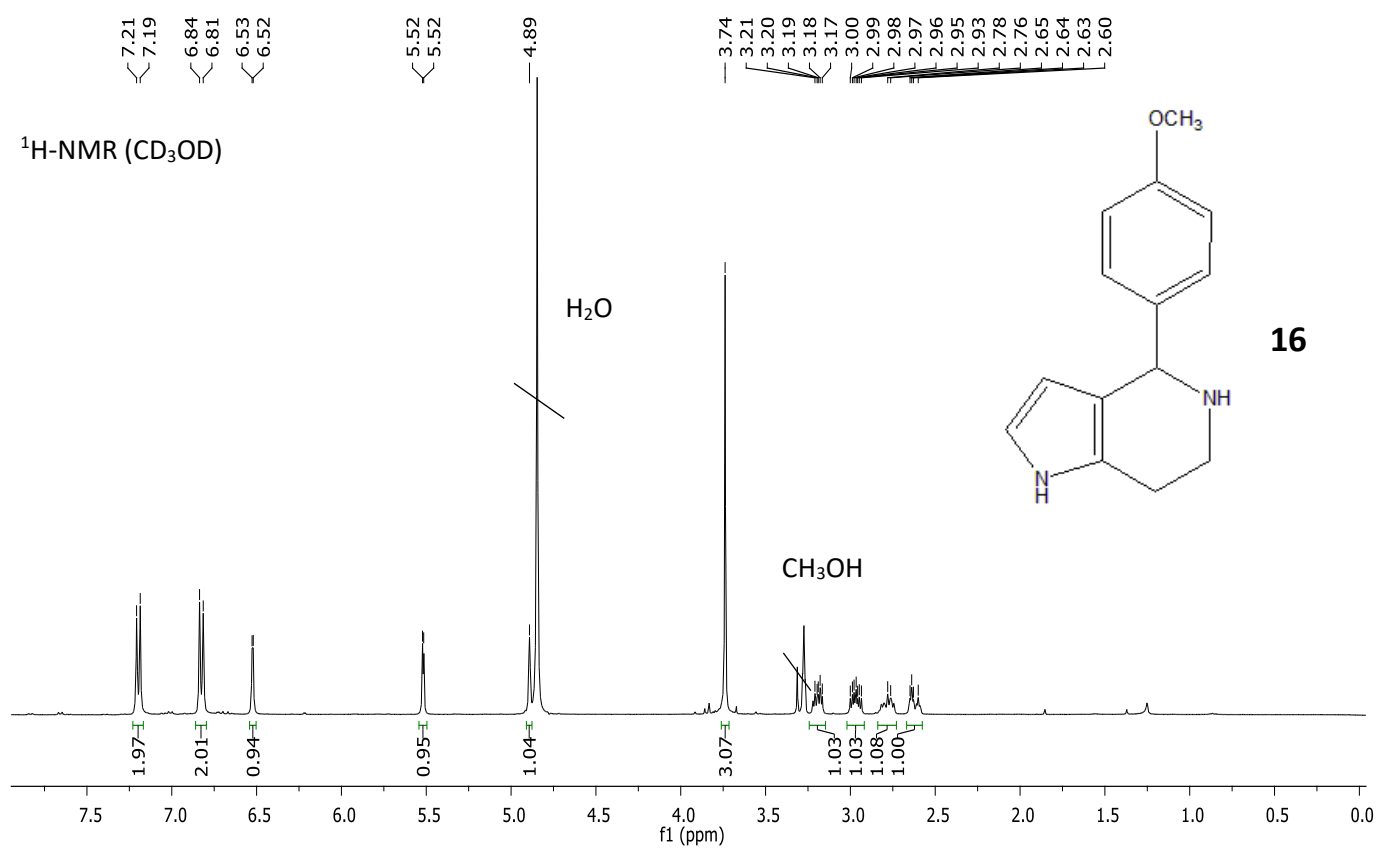


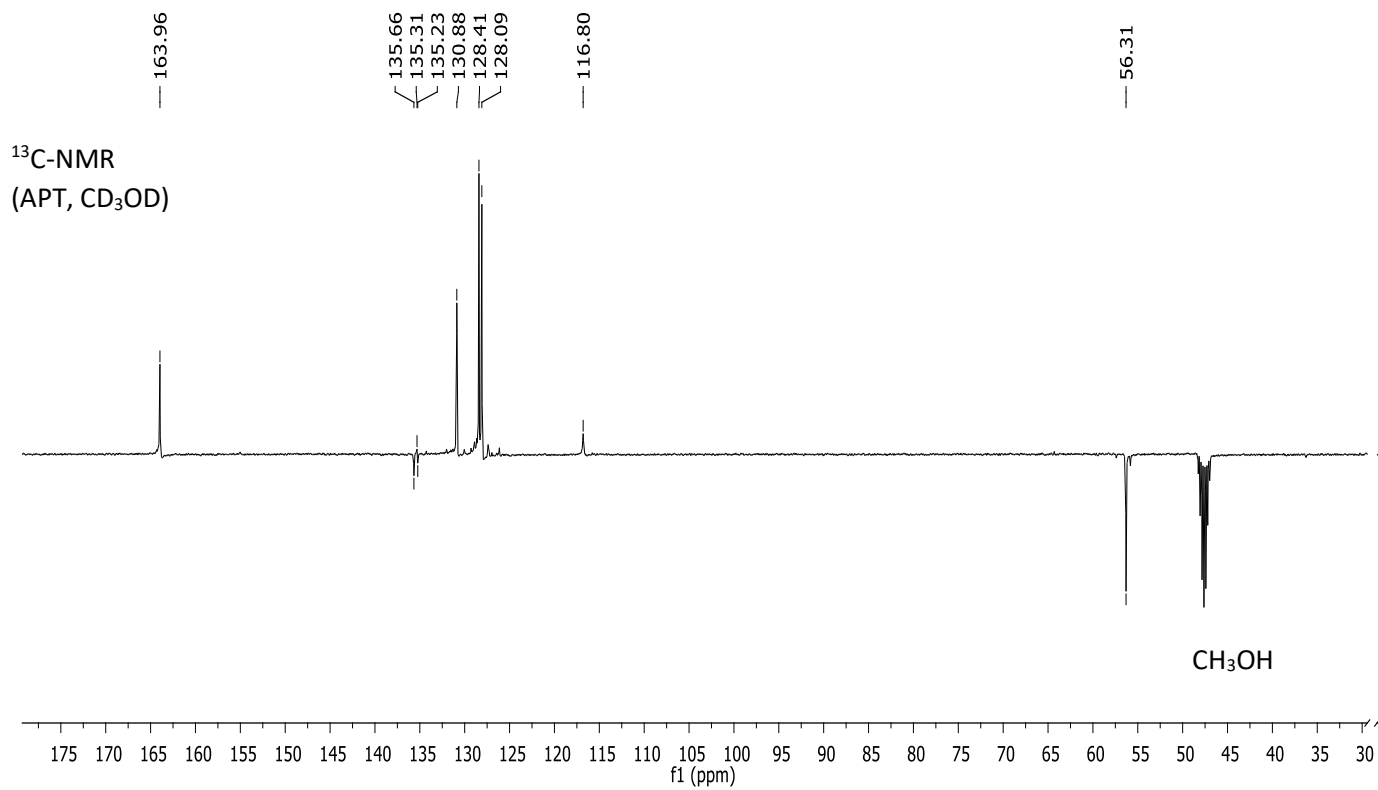
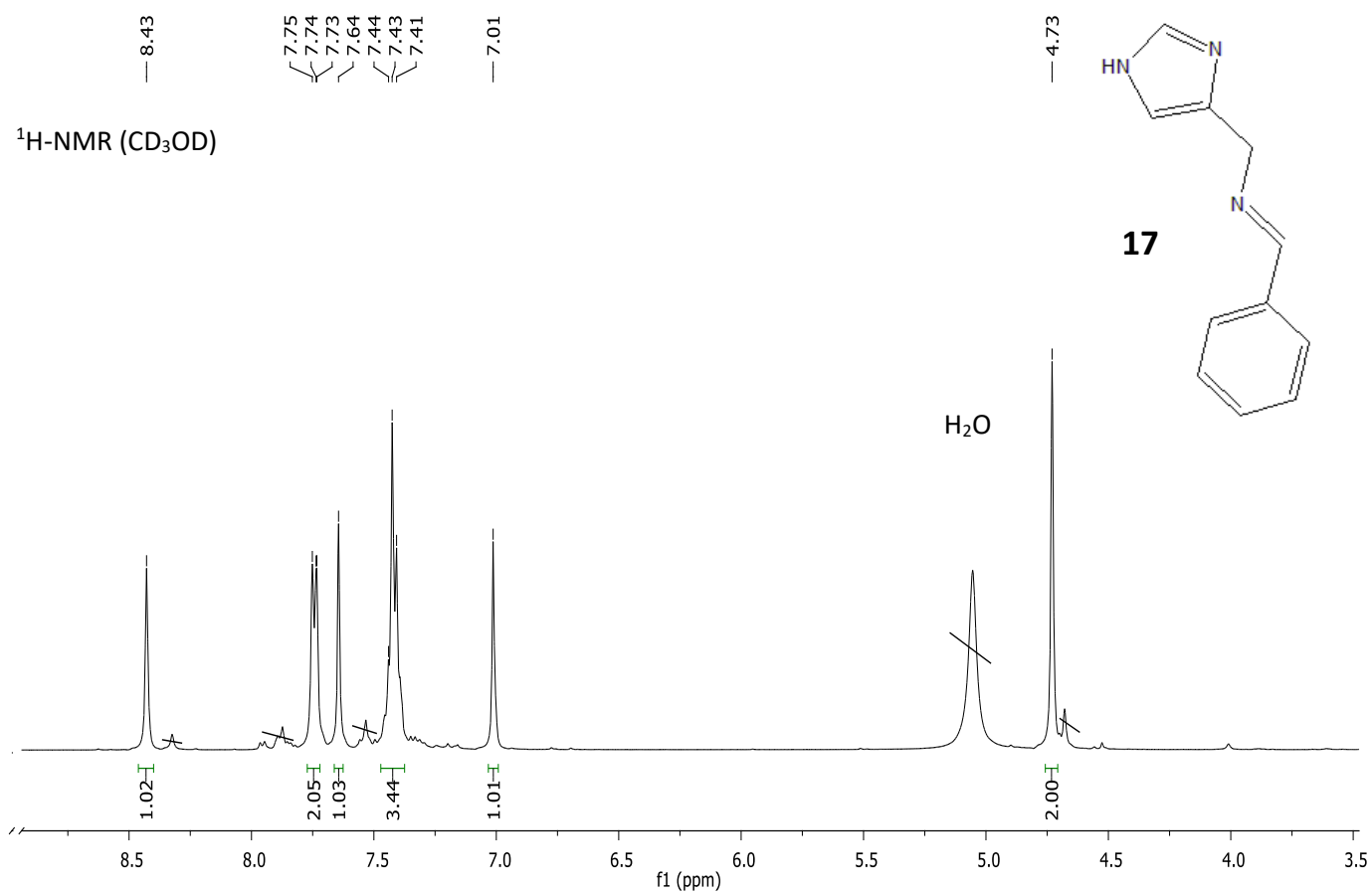


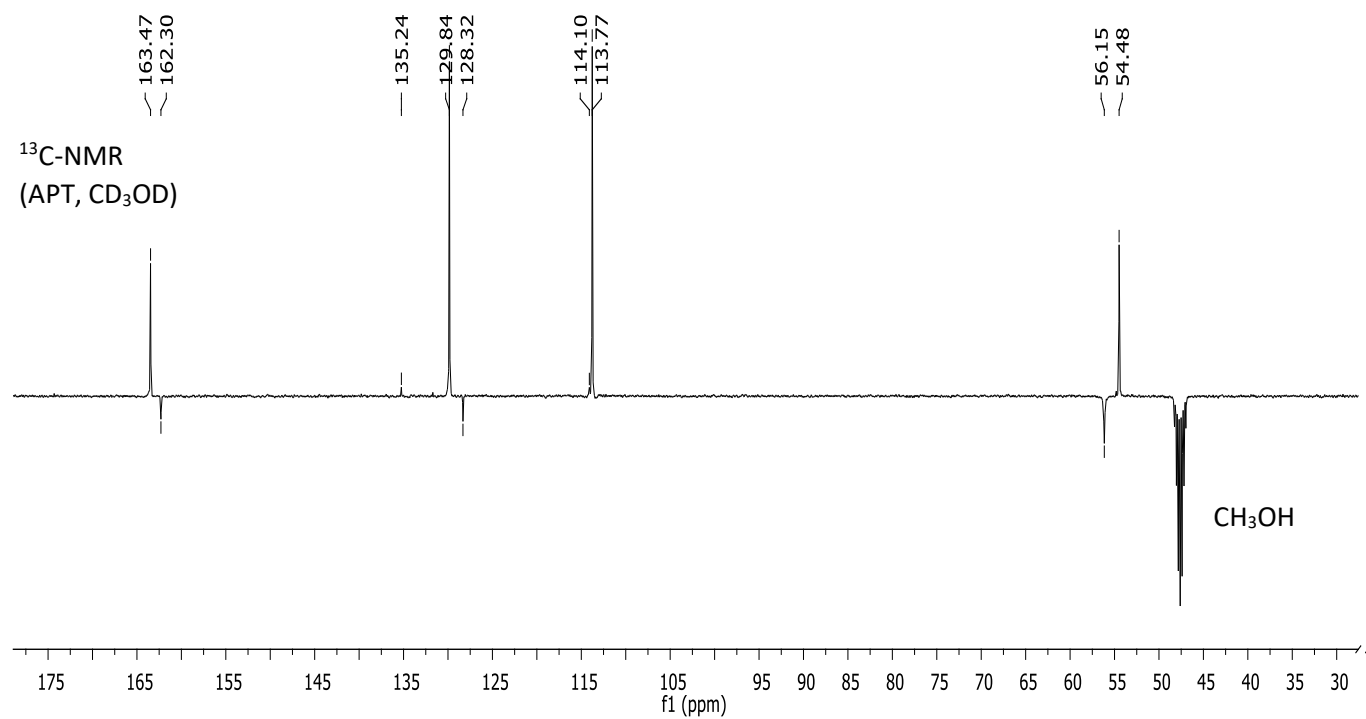
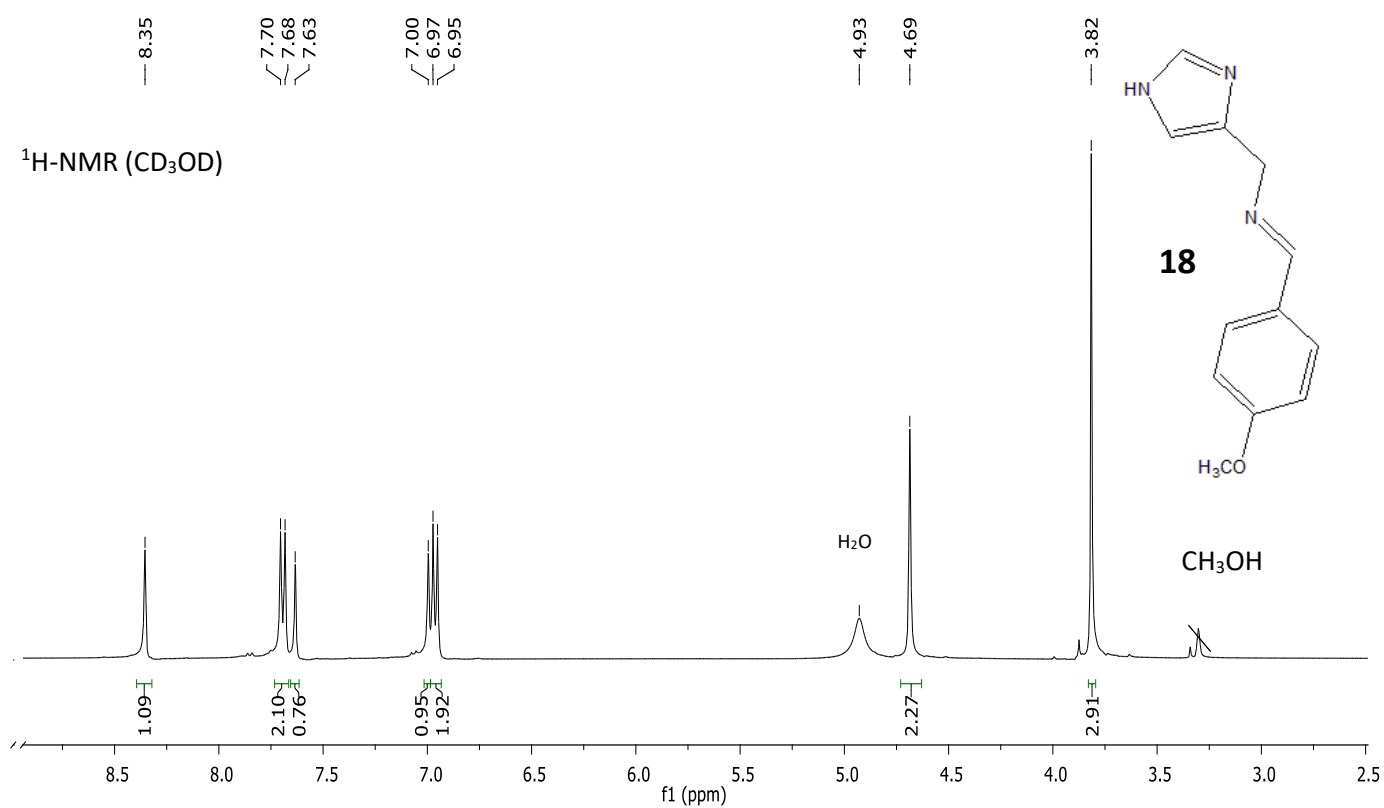


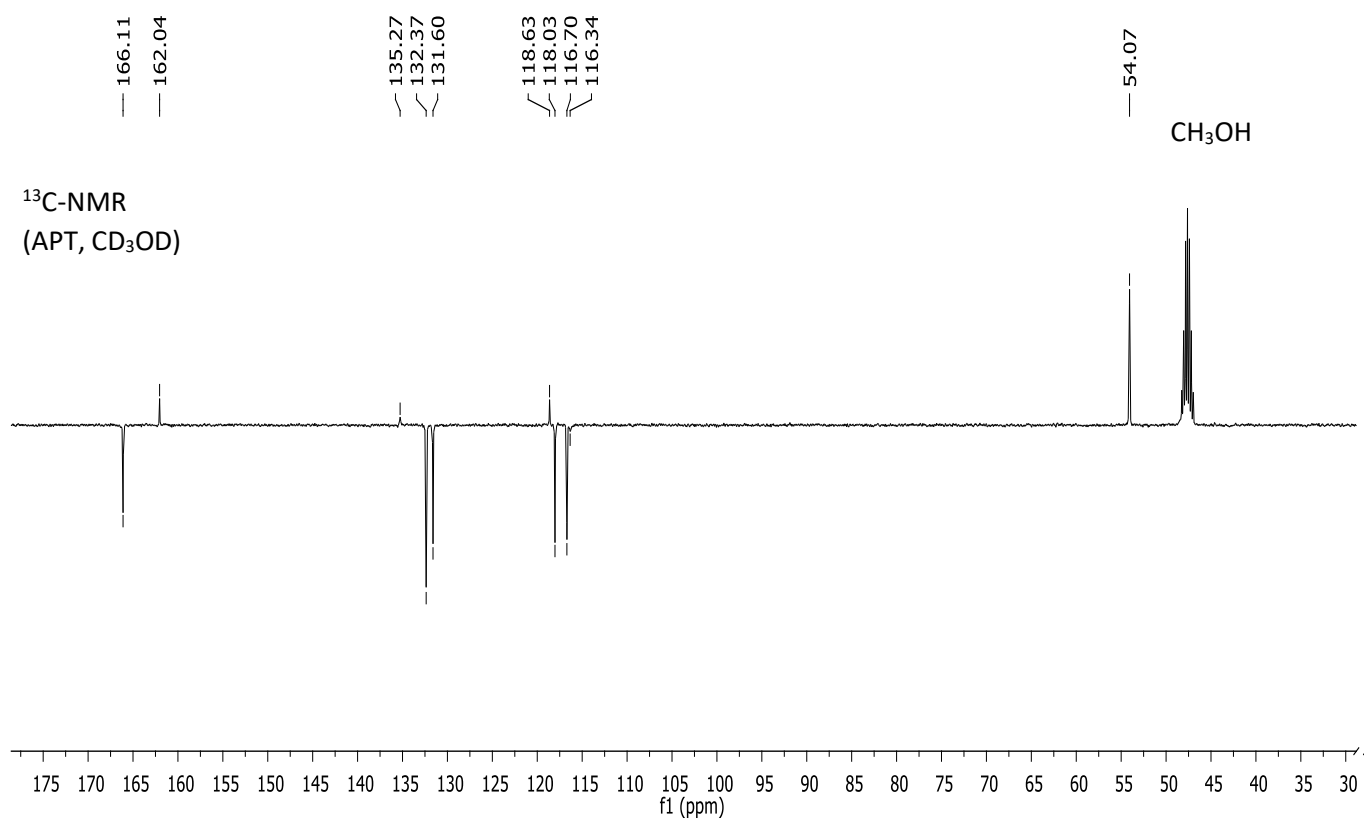
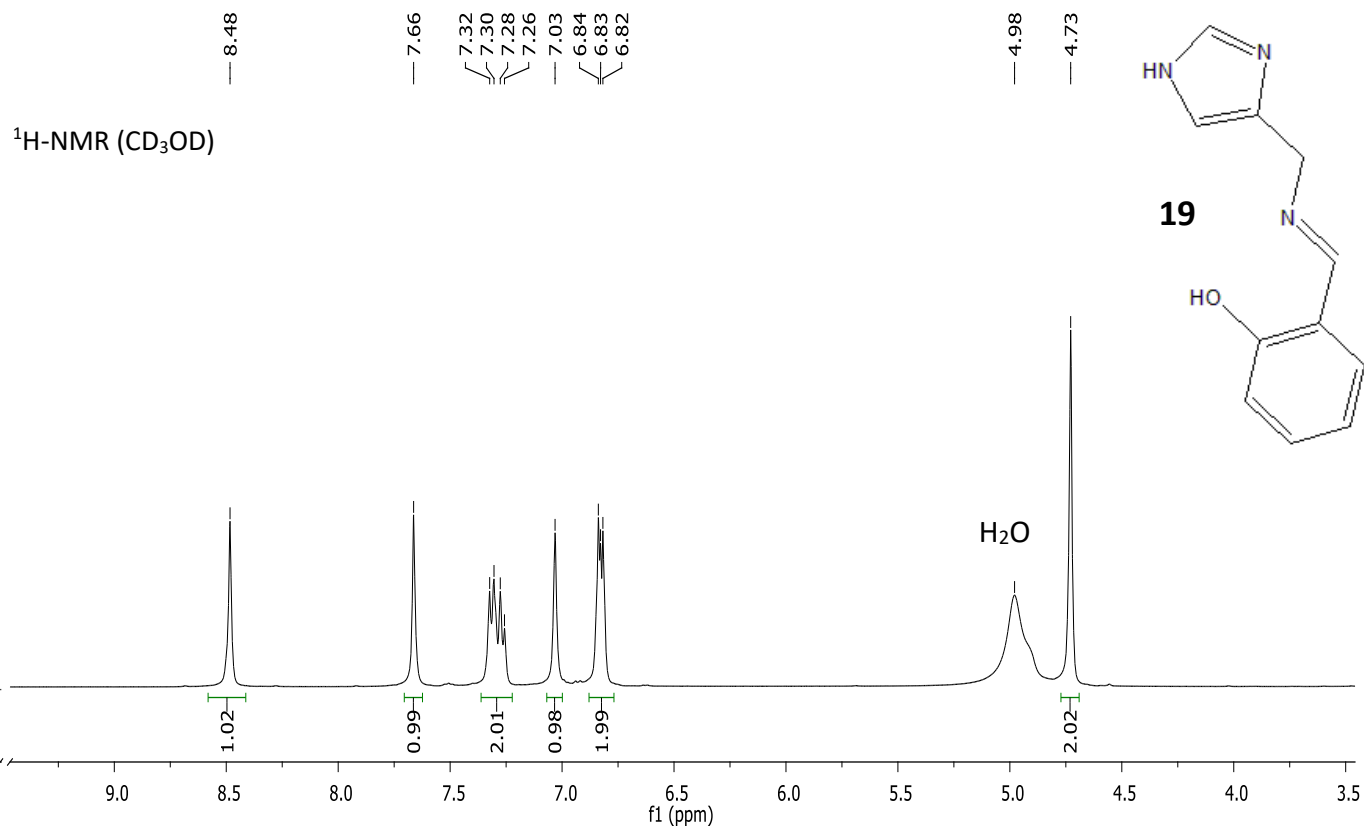
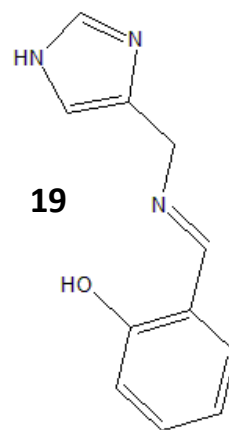


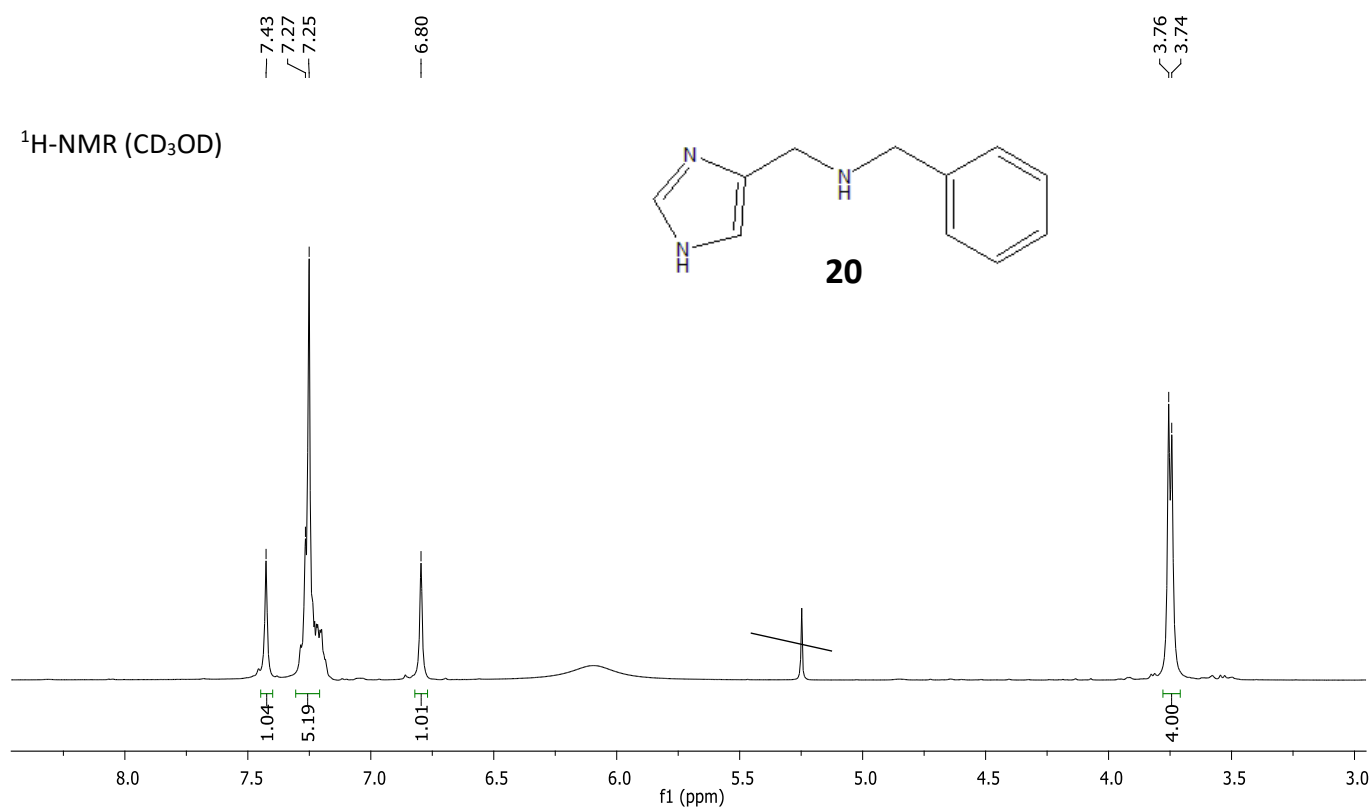






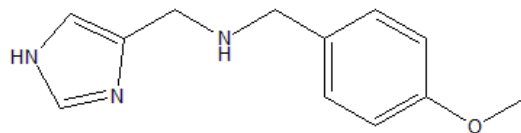






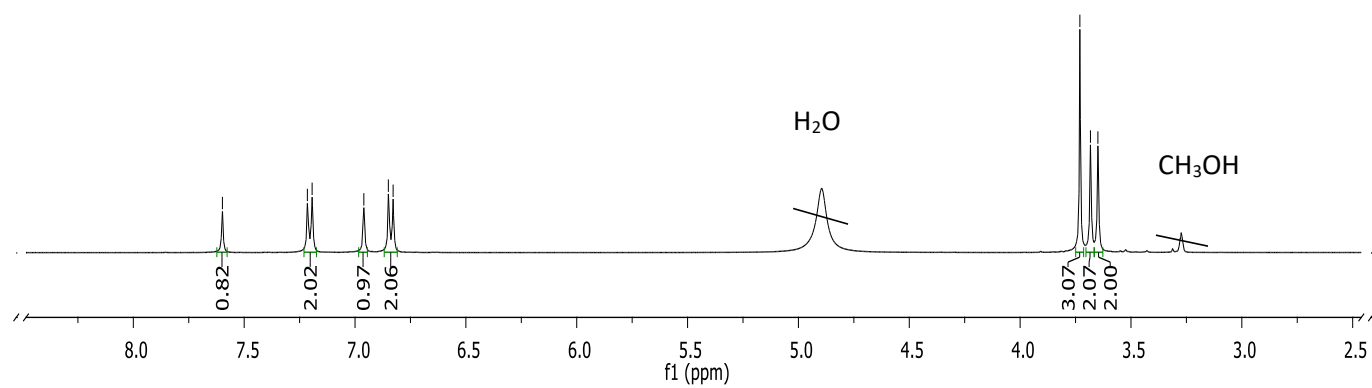
$^1\text{H-NMR}$ (CD_3OD)

7.60
7.21
7.19
6.96
6.85
6.83



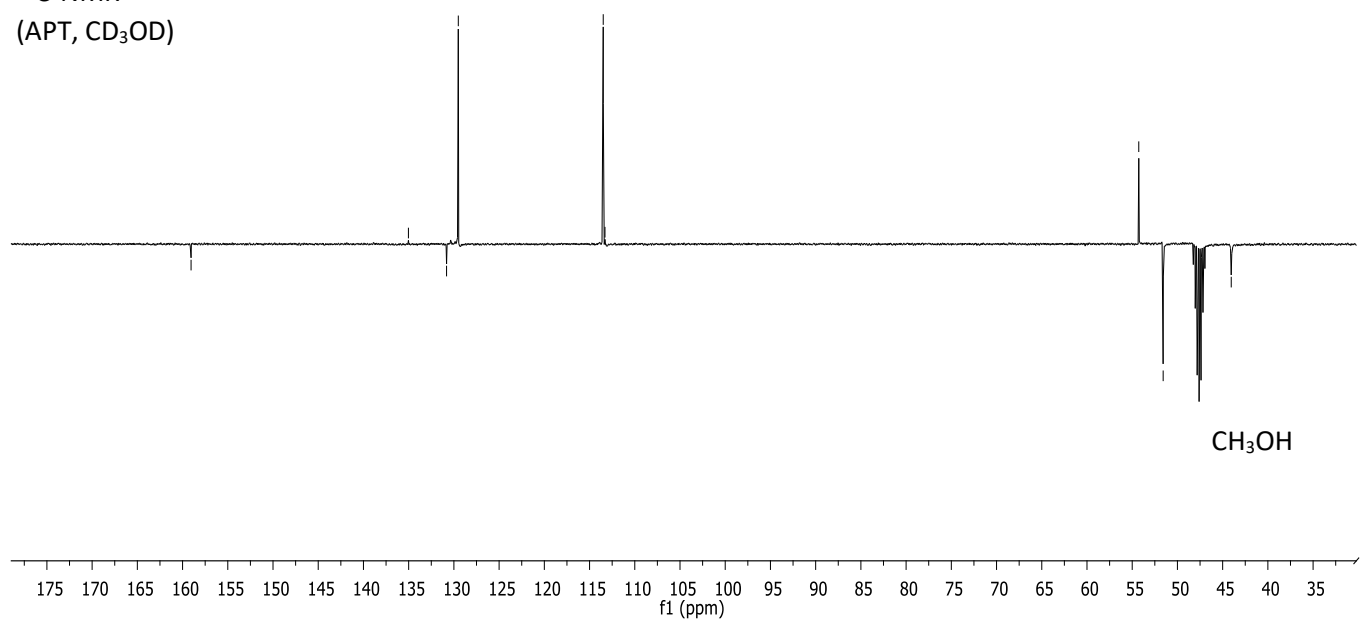
21

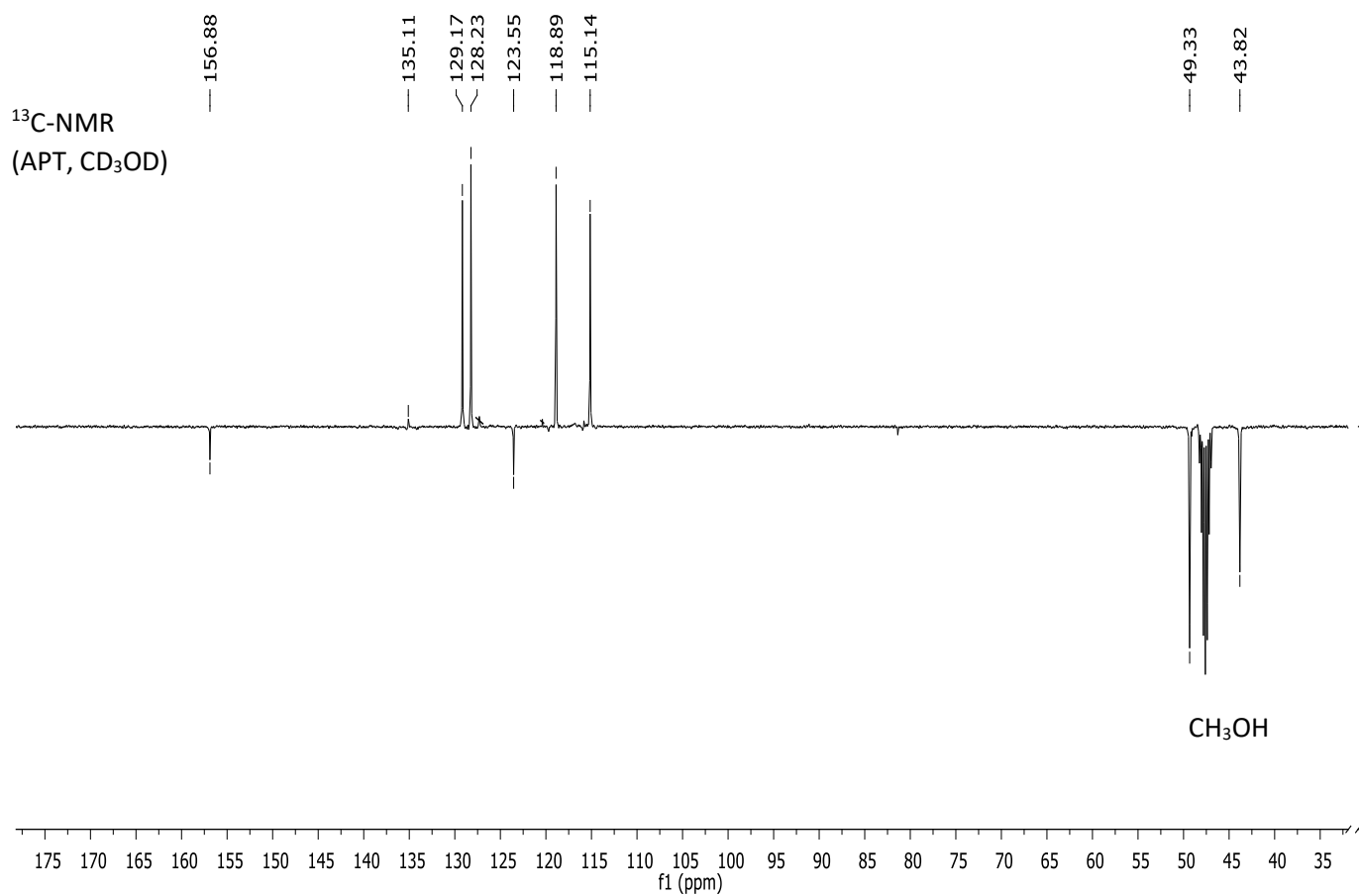
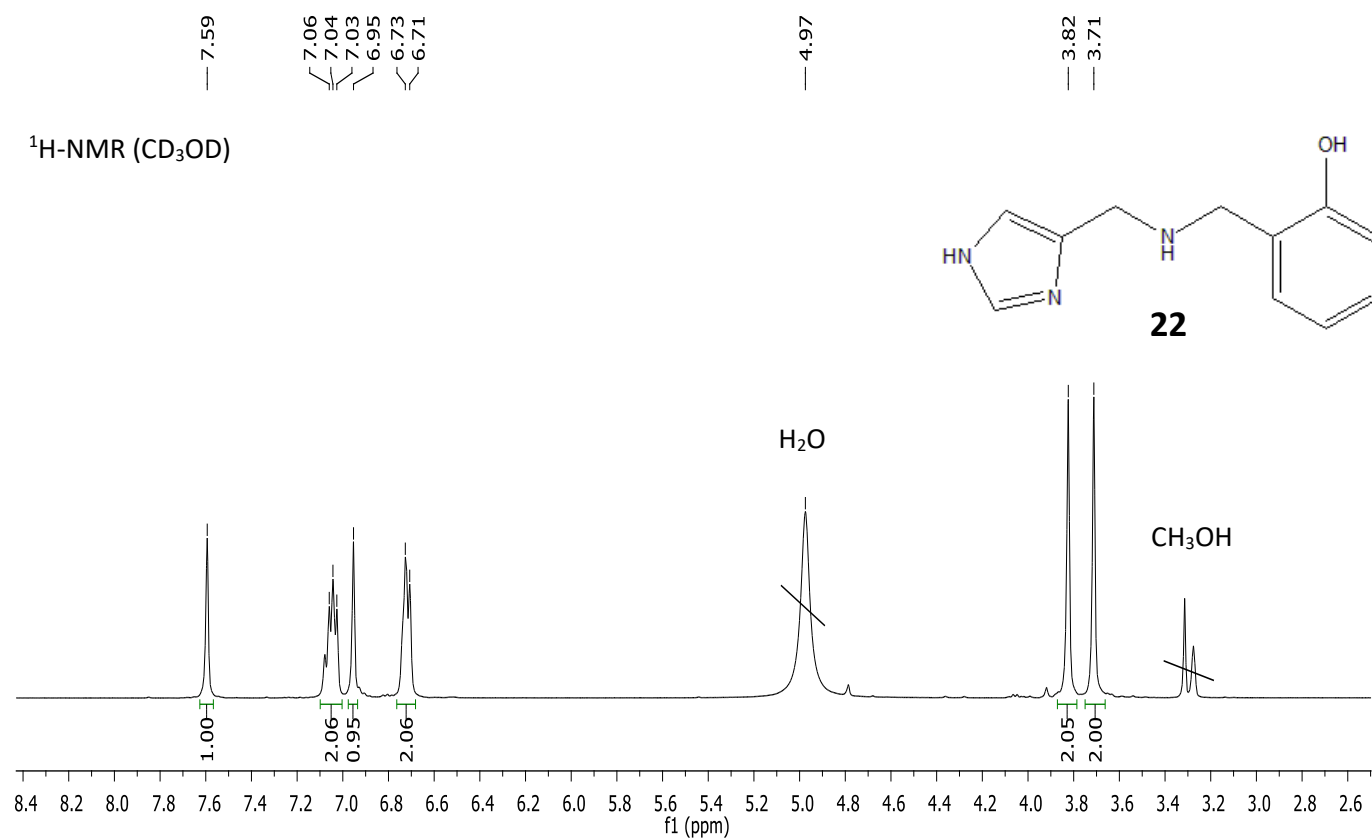
3.73
3.68
3.65

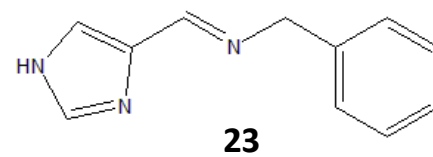


$^{13}\text{C-NMR}$
(APT, CD_3OD)

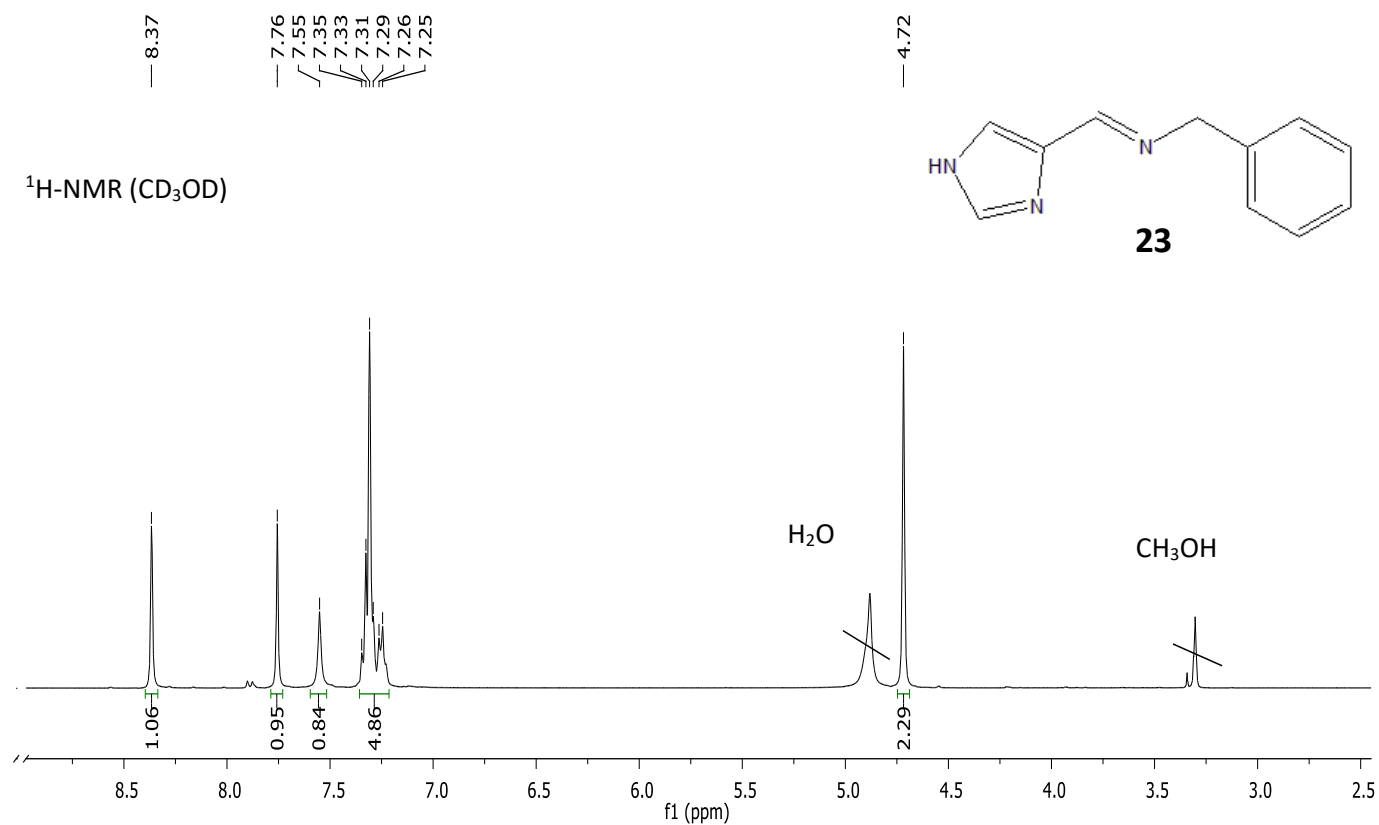
159.06
135.03
130.81
129.51
113.49
113.29
54.28
51.58
44.05







$^1\text{H-NMR}$ (CD_3OD)



$^{13}\text{C-NMR}$
(Proton decoupled,
 CD_3OD)

