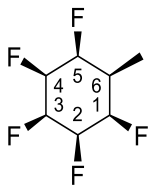
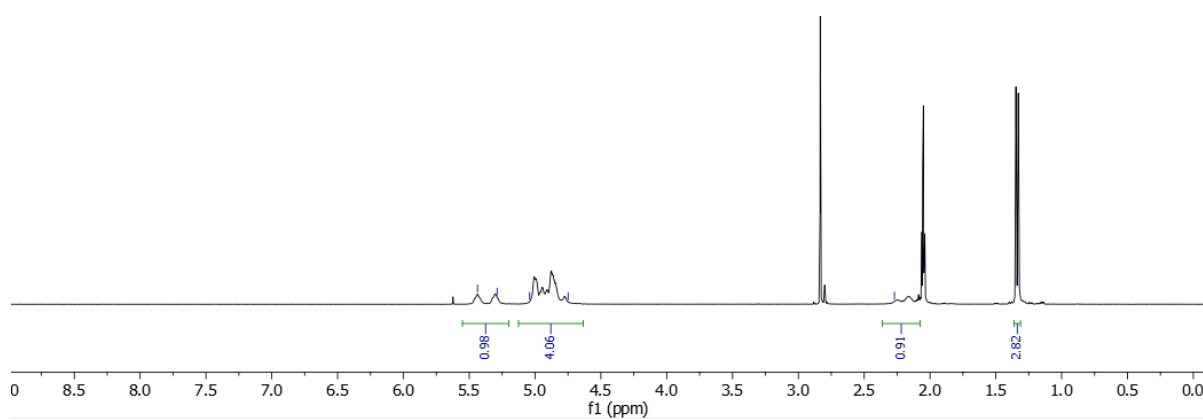


NMR Spectra

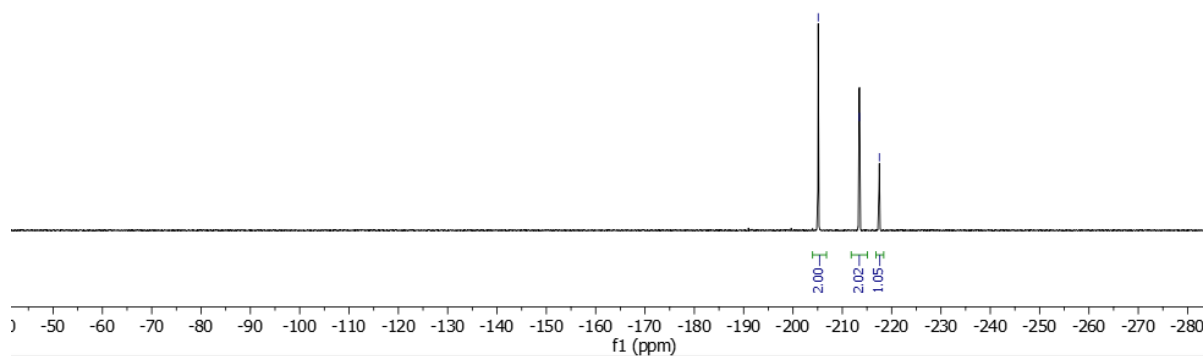
(1R,2R,3s,4S,5S,6r)-1,2,3,4,5-pentafluoro-6-methylcyclohexane (**3**)



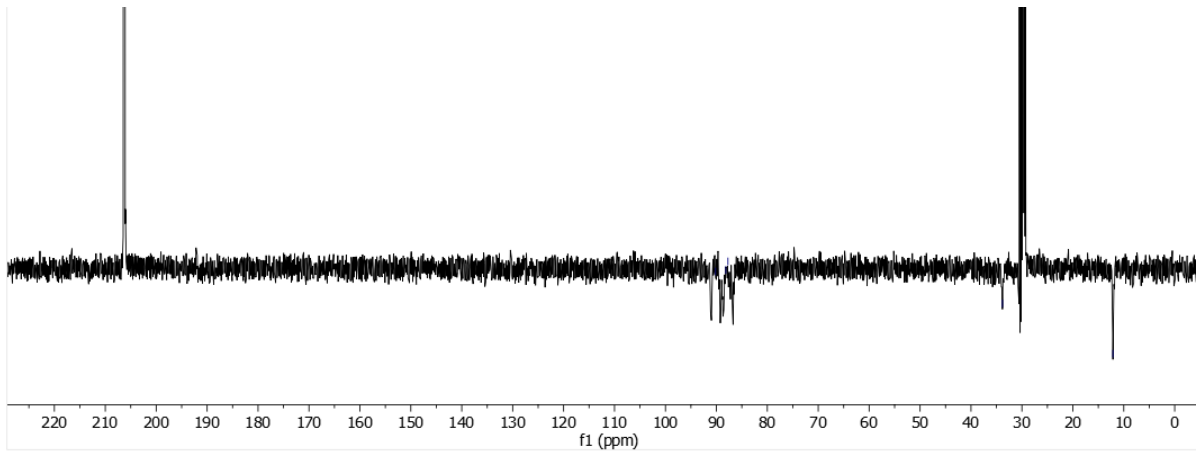
^1H NMR (400 MHz, Acetone- d_6)



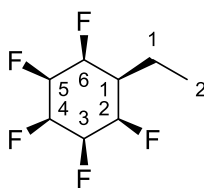
^{19}F NMR (377 MHz, Acetone- d_6)



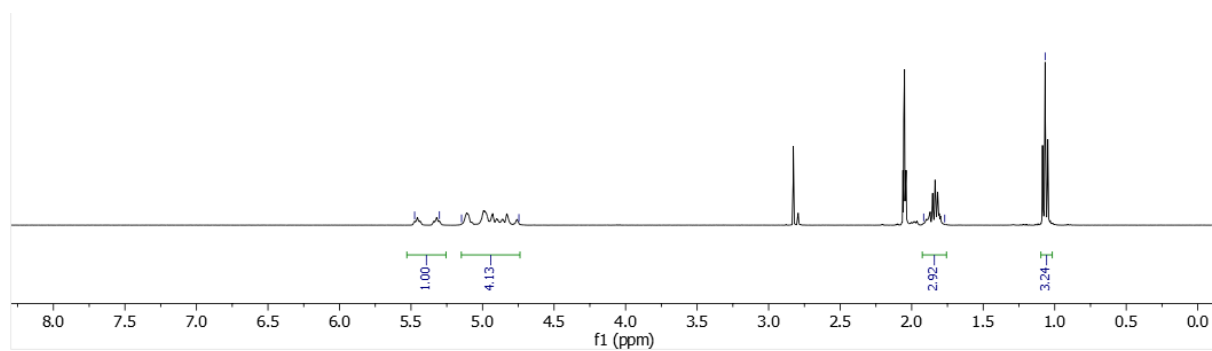
^{13}C NMR (101 MHz, Acetone)



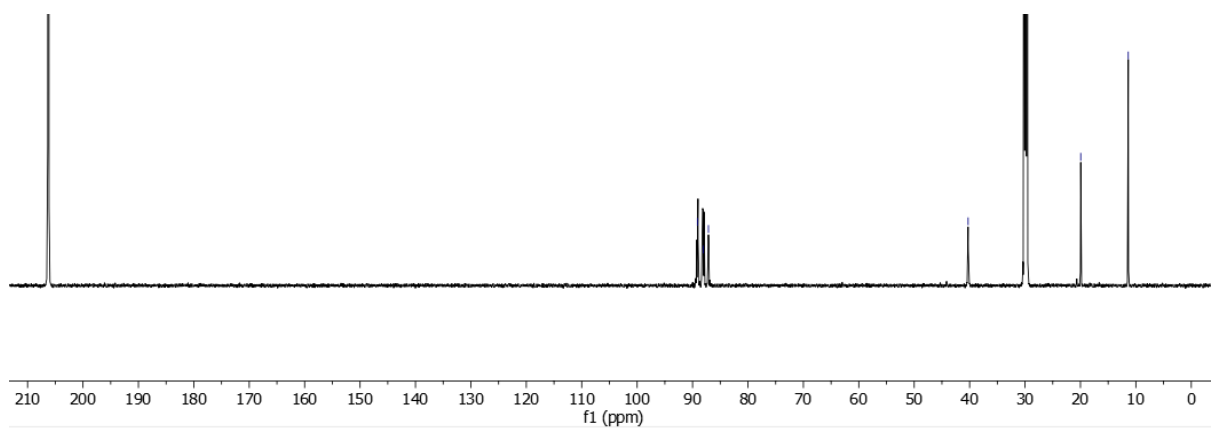
(1*r*,2*R*,3*R*,4*s*,5*S*,6*S*)-1-ethyl-2,3,4,5,6-pentafluorocyclohexane (**4**)



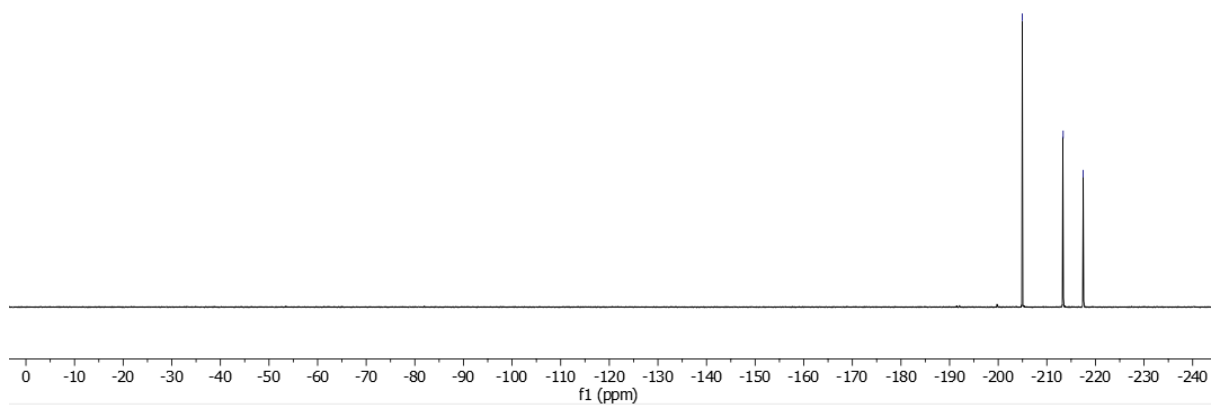
^1H NMR (400 MHz, Acetone)



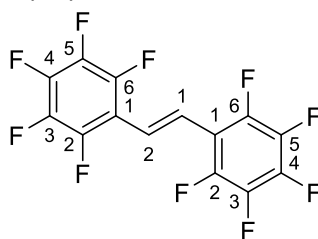
^{13}C NMR (176 MHz, Acetone)



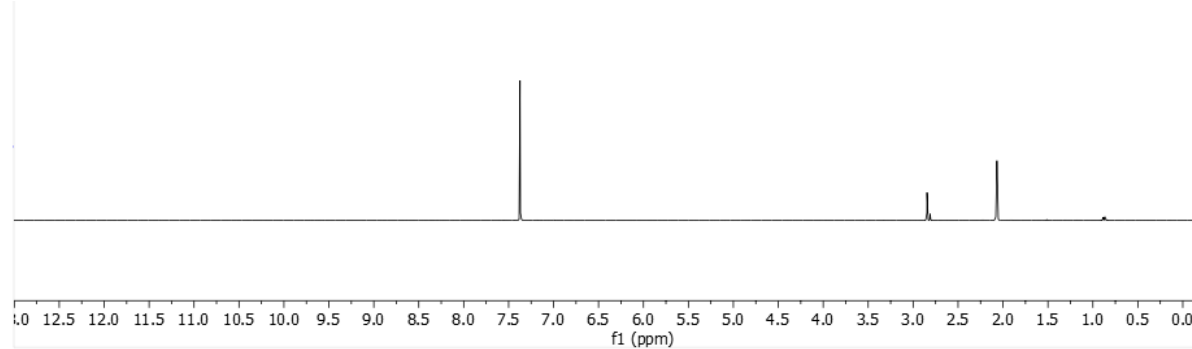
^{19}F NMR (377 MHz, Acetone)



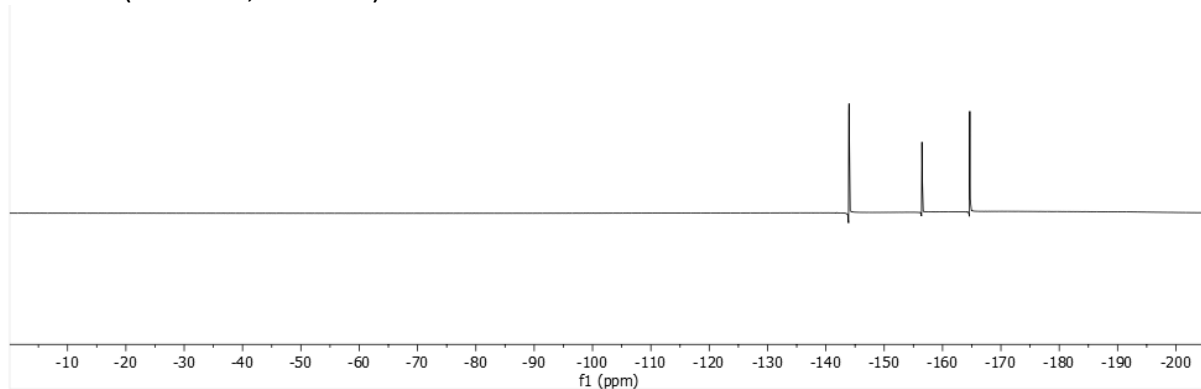
(E)-1,2-bis(perfluorophenyl)ethene (**11**)



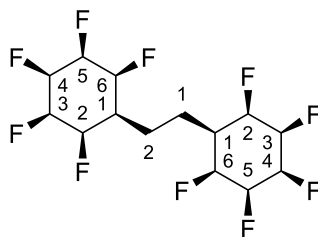
^1H NMR (400 MHz, Acetone)



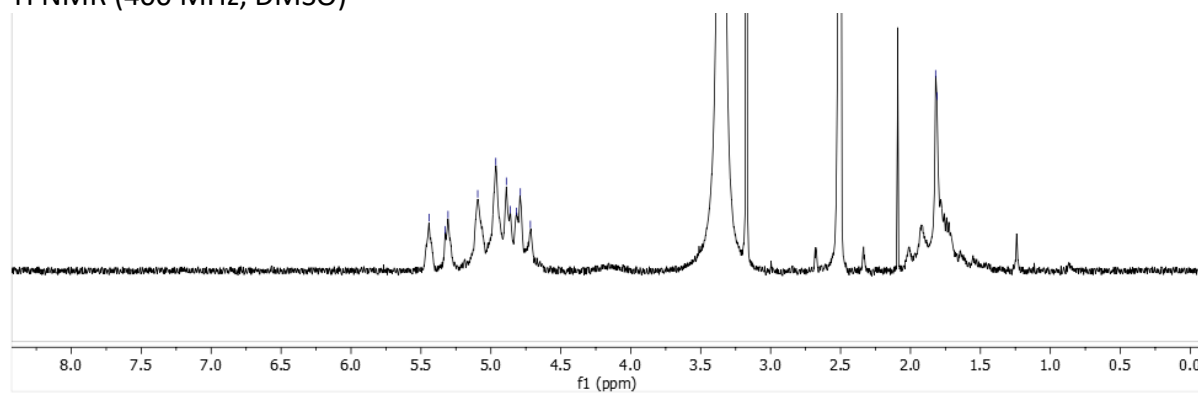
^{19}F NMR (376 MHz, Acetone)



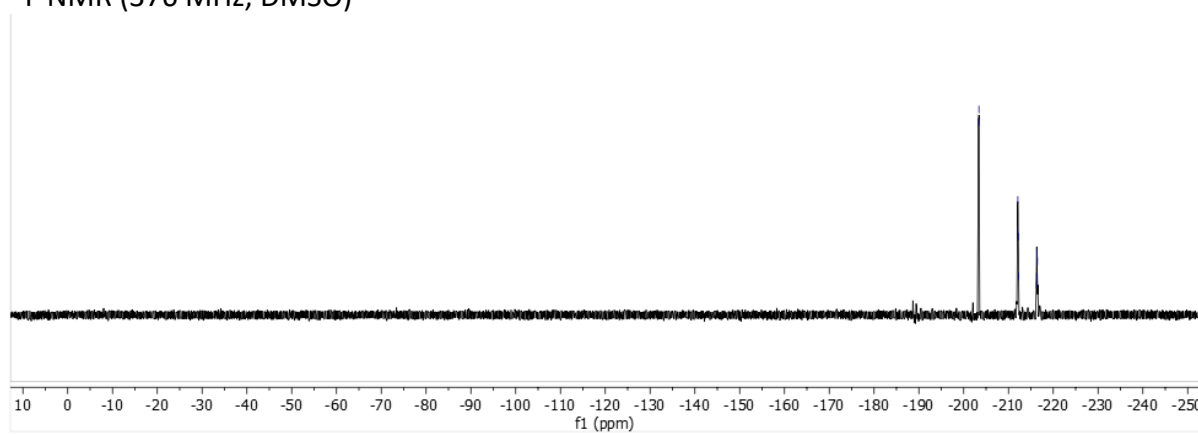
1,2-bis((1*r*,2*R*,3*R*,4*S*,5*S*,6*S*)-2,3,4,5,6-pentafluorocyclohexyl)ethane (**5**)



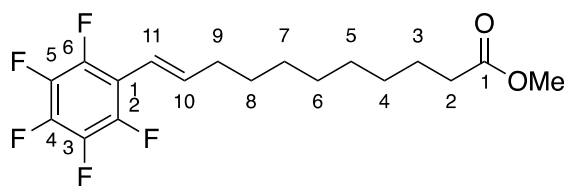
^1H NMR (400 MHz, DMSO)



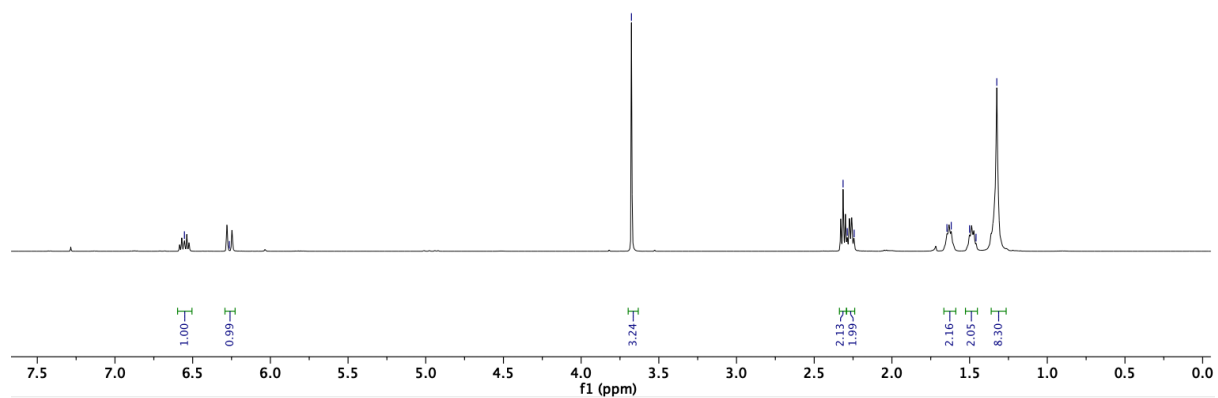
^{19}F NMR (376 MHz, DMSO)



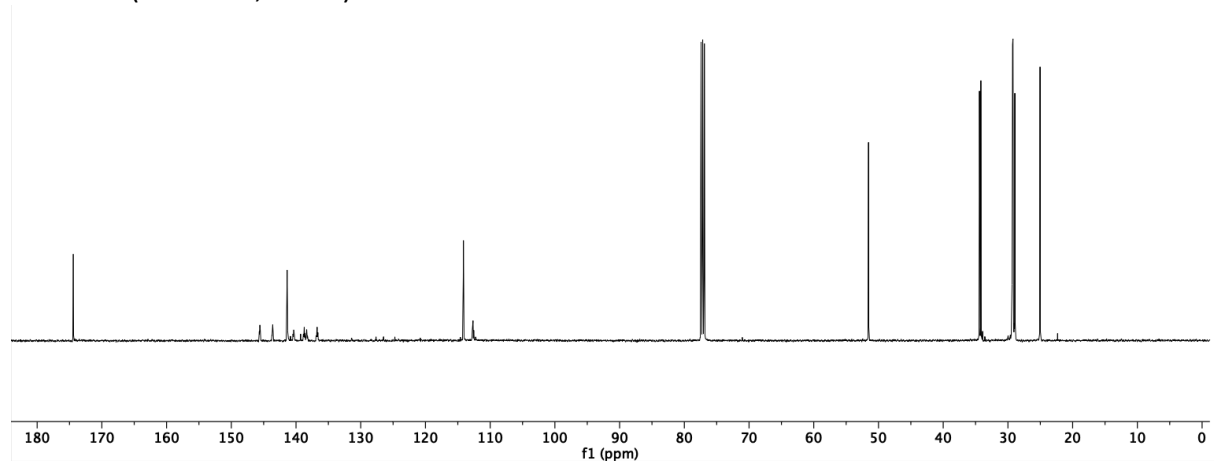
methyl E-11-(perfluorophenyl)undec-10-enoate (**13**)



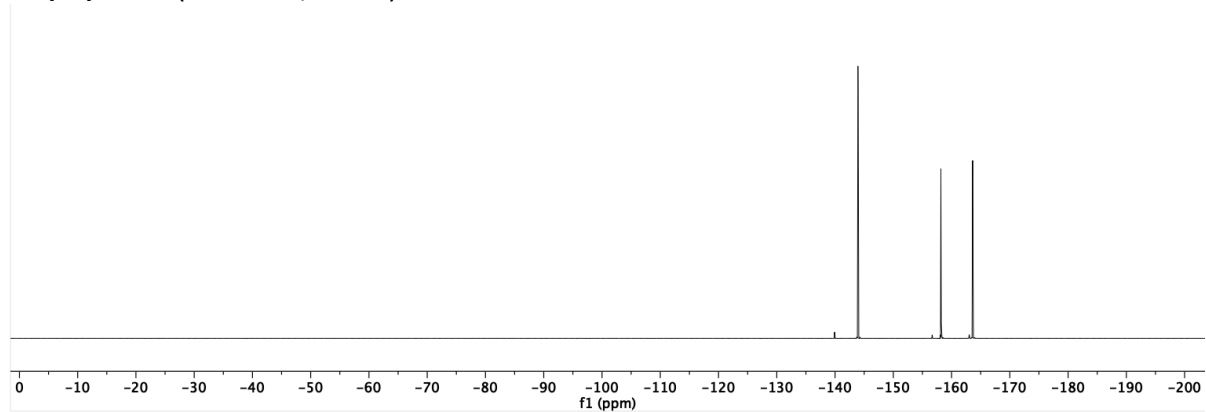
^1H $\{^{19}\text{F}\}$ NMR (500 MHz, CDCl_3)



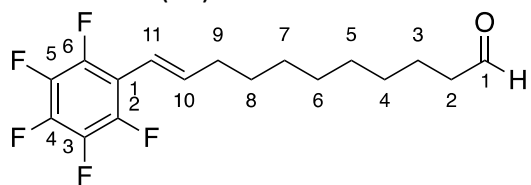
^{13}C NMR (126 MHz, CDCl_3)



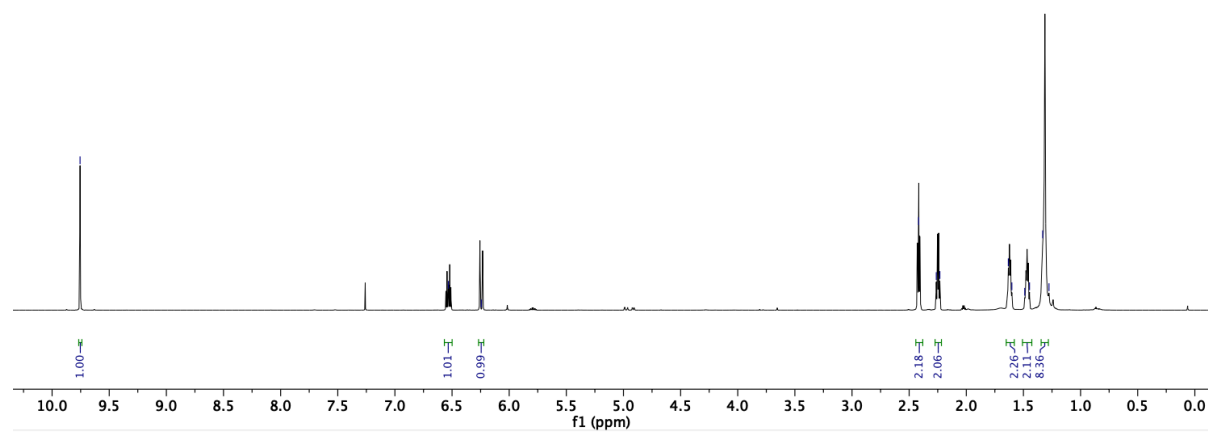
^{19}F $\{^1\text{H}\}$ NMR (470 MHz, CDCl_3)



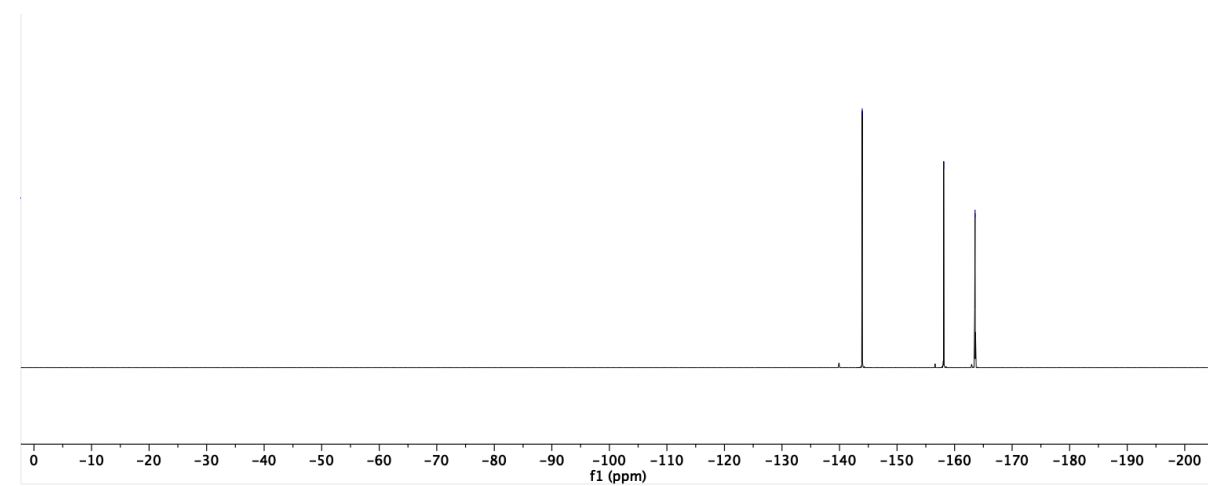
E-11-(perfluorophenyl)undec-10-enal (**14**)



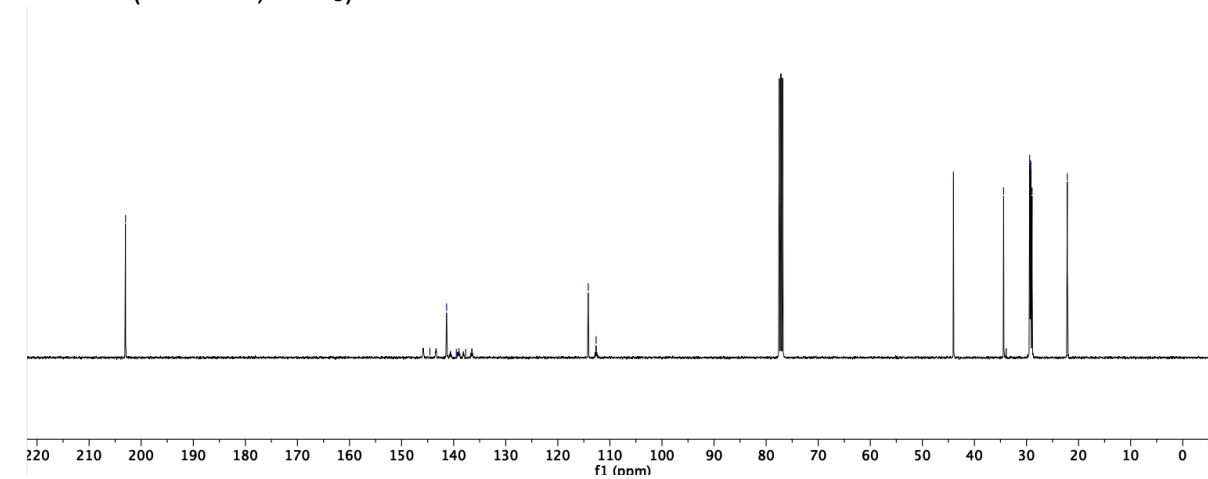
^1H NMR (700 MHz, CDCl_3)



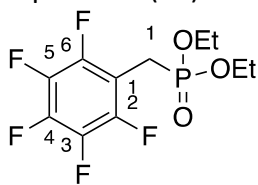
^{19}F NMR (377 MHz, CDCl_3)



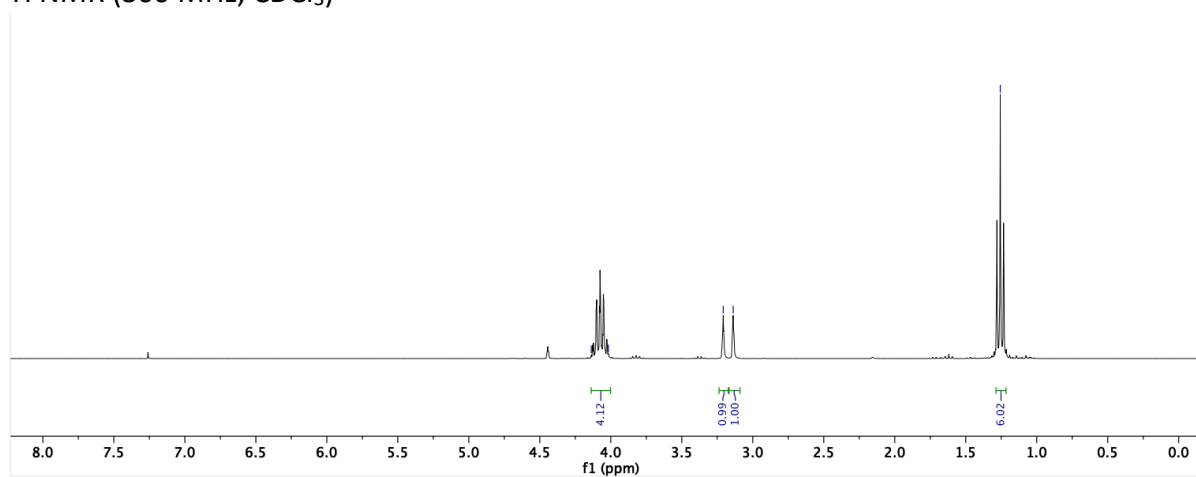
^{13}C NMR (101 MHz, CDCl_3)



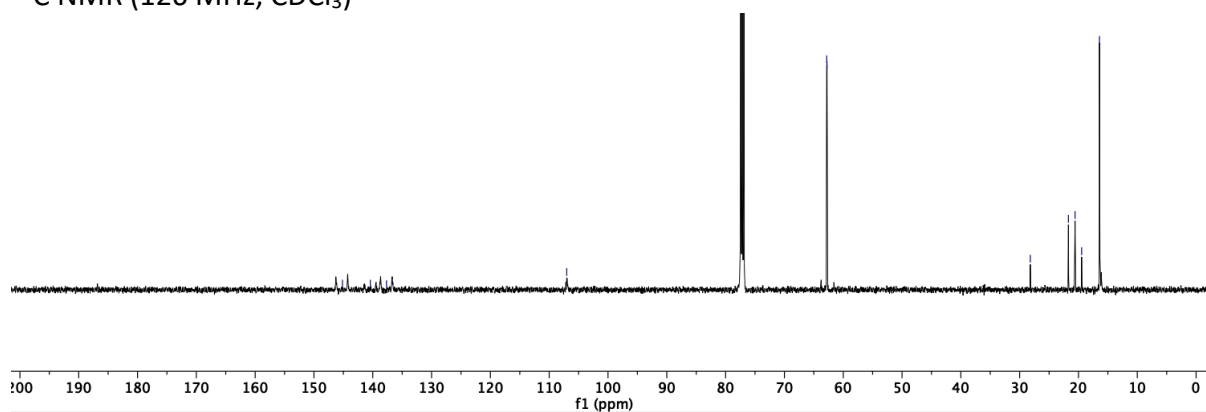
diethyl ((perfluorophenyl)methyl)phosphonate (**15**)



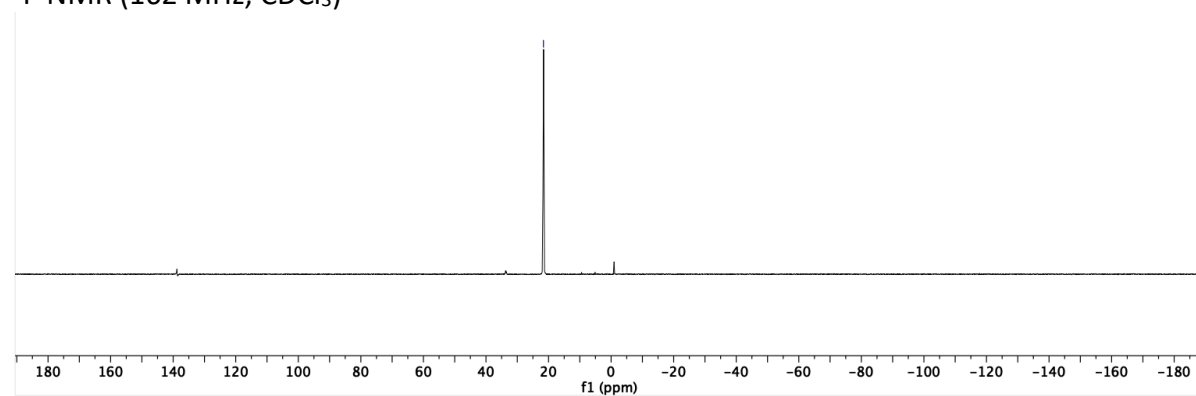
^1H NMR (300 MHz, CDCl_3)



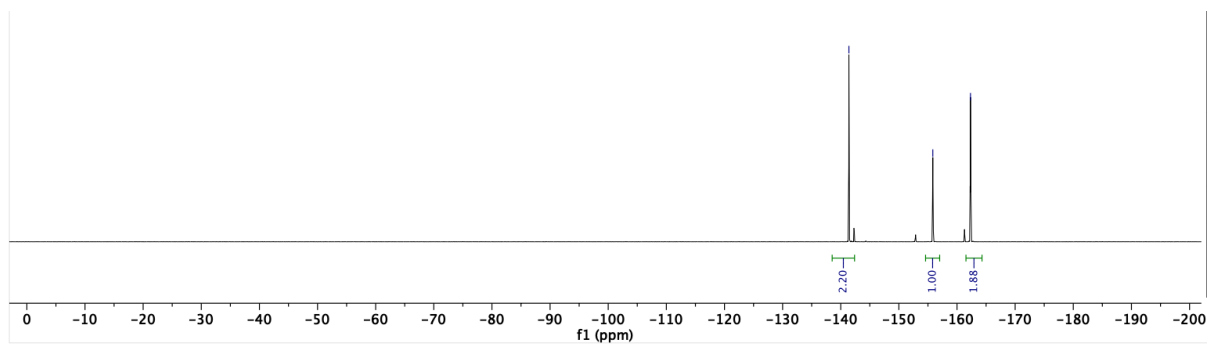
^{13}C NMR (126 MHz, CDCl_3)



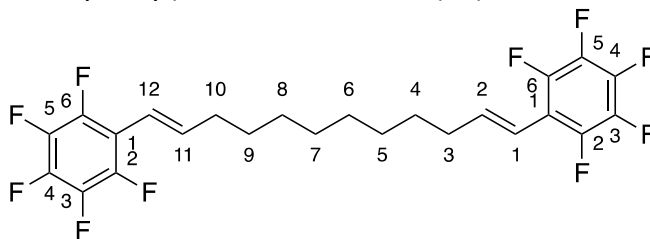
^{31}P NMR (162 MHz, CDCl_3)



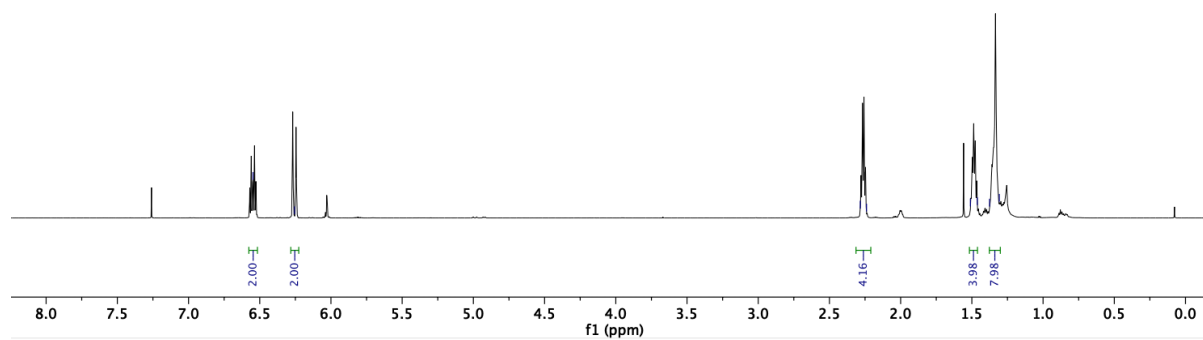
^{19}F NMR (376 MHz, CDCl_3)



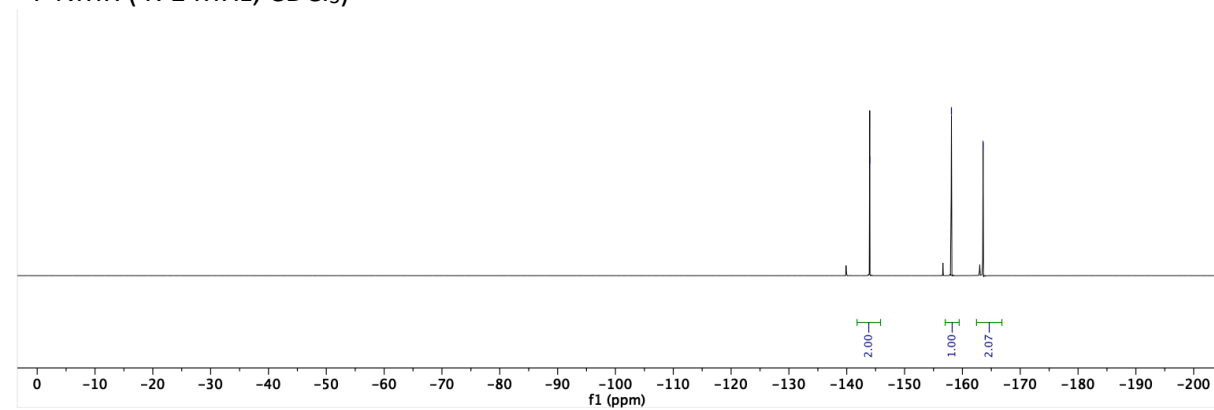
(1E,11E)-1,12-bis(perfluorophenyl)dodeca-1,11-diene (**16**)



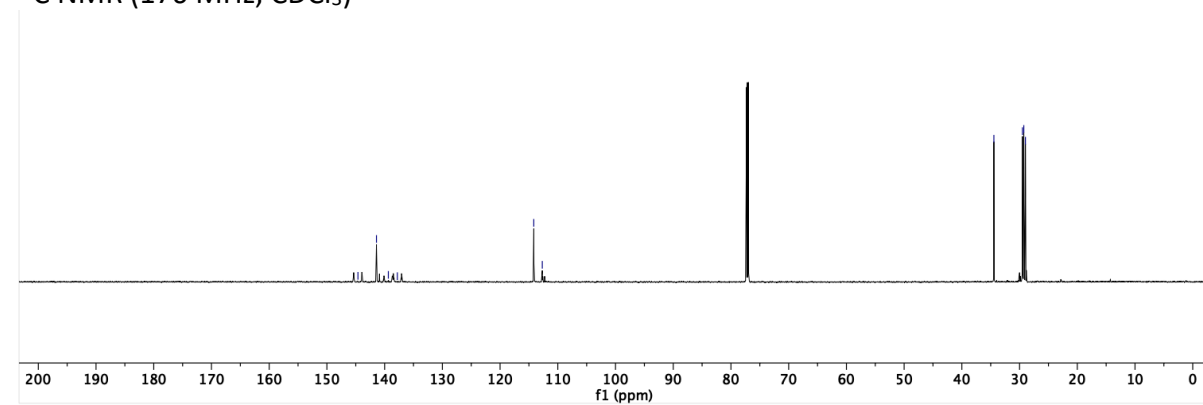
^1H NMR (700 MHz, CDCl_3)



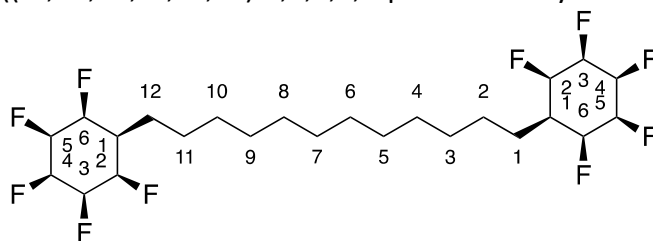
^{19}F NMR (471 MHz, CDCl_3)



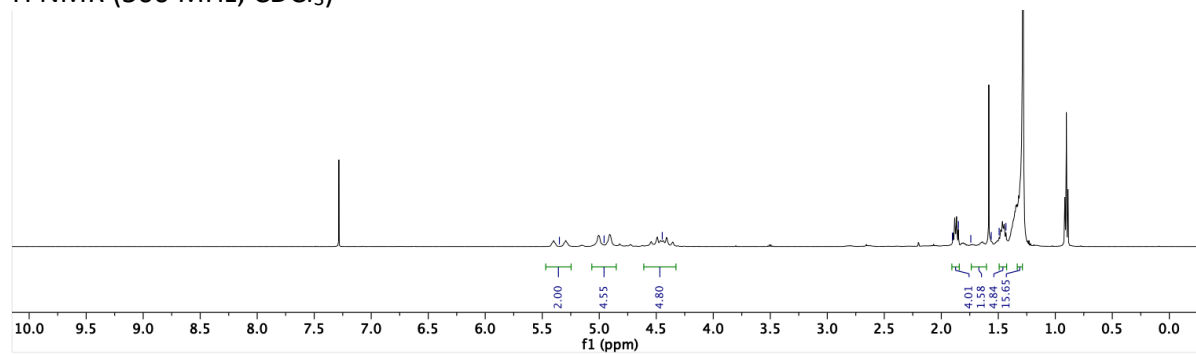
^{13}C NMR (176 MHz, CDCl_3)



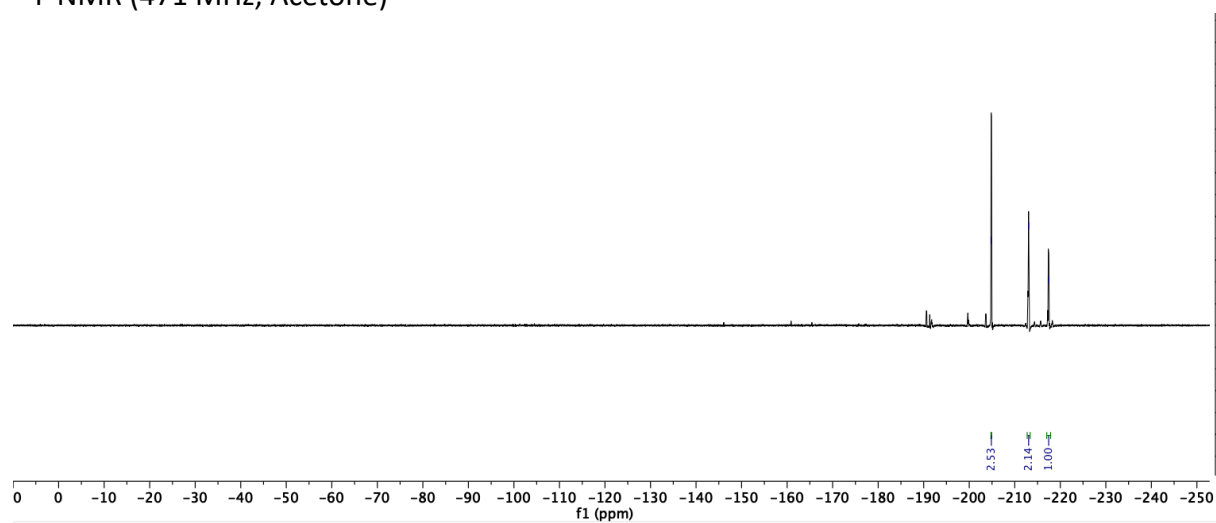
Synthesis of 1,12-bis((1*r*,2*R*,3*R*,4*s*,5*S*,6*S*)-2,3,4,5,6-pentafluorocyclohexyl)dodecane (**6**)



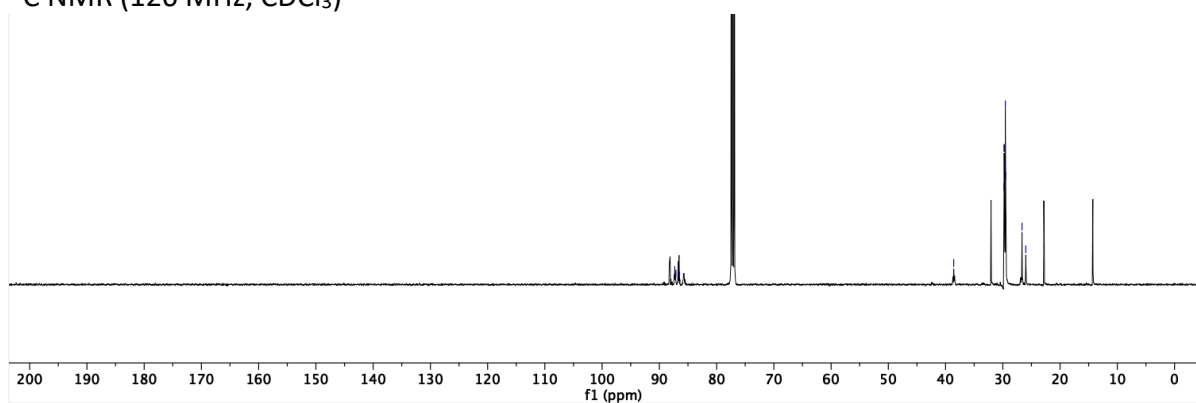
^1H NMR (500 MHz, CDCl_3)



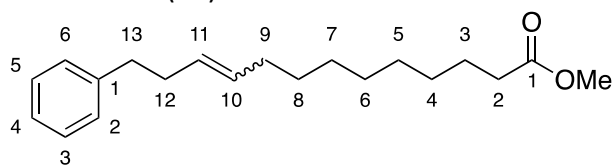
^{19}F NMR (471 MHz, Acetone)



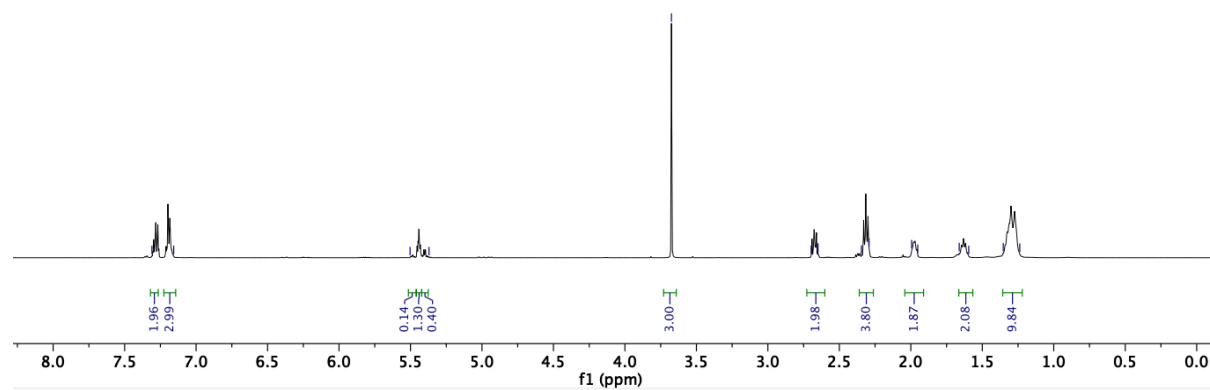
^{13}C NMR (126 MHz, CDCl_3)



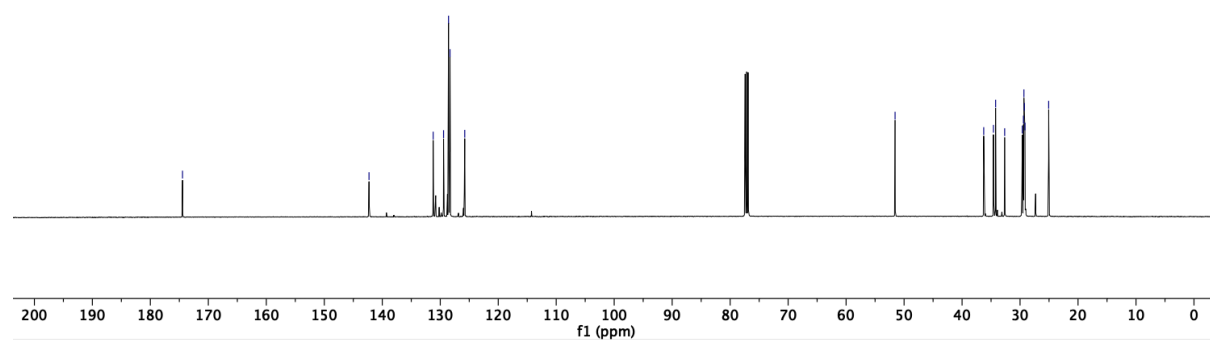
methyl 13-phenyltridec-10-enoate (**19**)



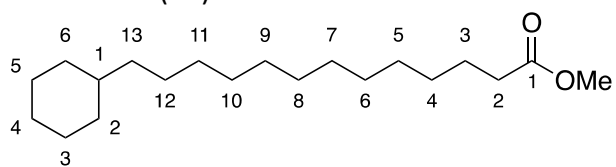
^1H NMR (500 MHz, CDCl_3)



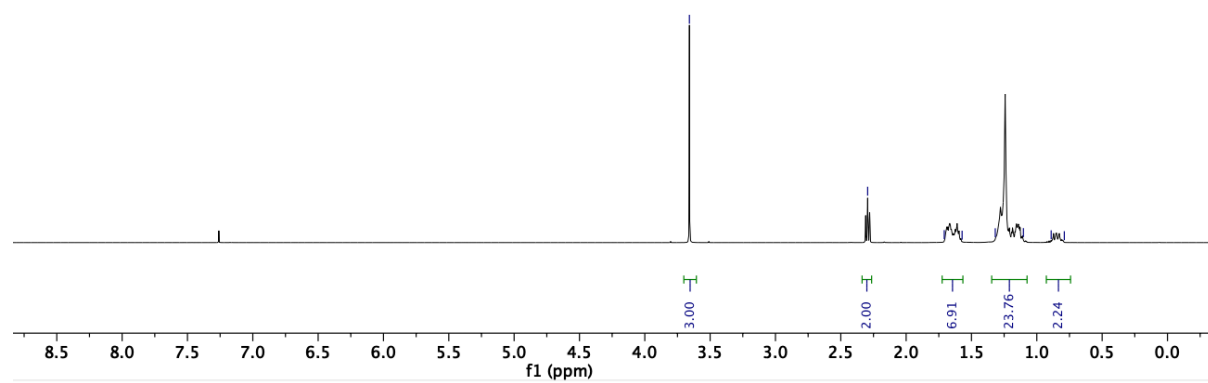
^{13}C NMR (126 MHz, CDCl_3)



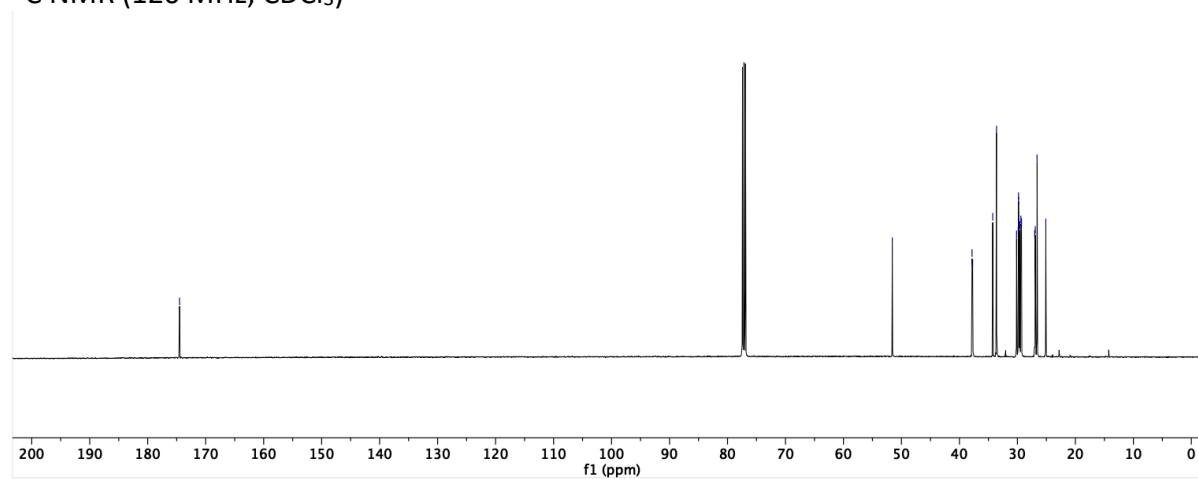
methyl 13-cyclohexyltridecanoate (**20**)



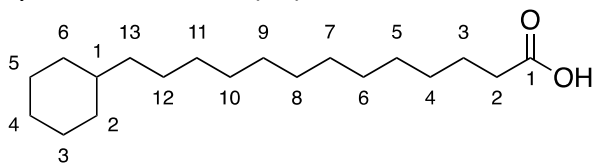
^1H NMR (500 MHz, CDCl_3)



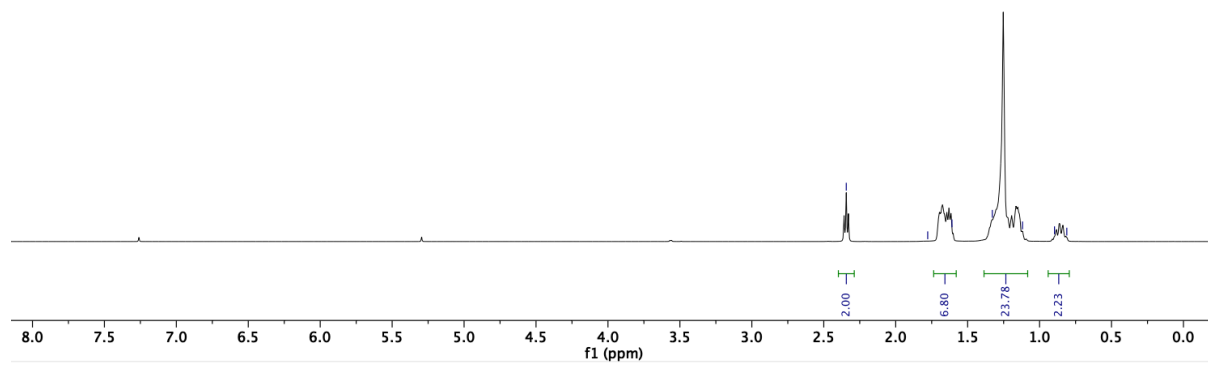
^{13}C NMR (126 MHz, CDCl_3)



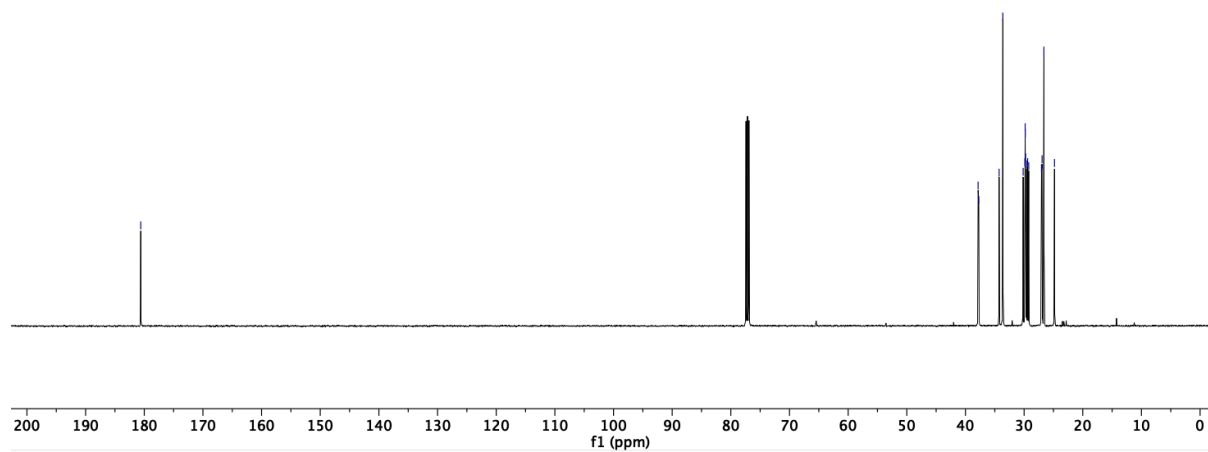
Synthesis of 13-cyclohexyltridecanoic acid (**21**)



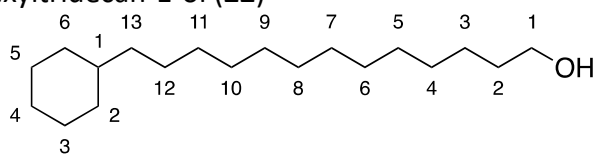
^1H NMR (500 MHz, CDCl_3)



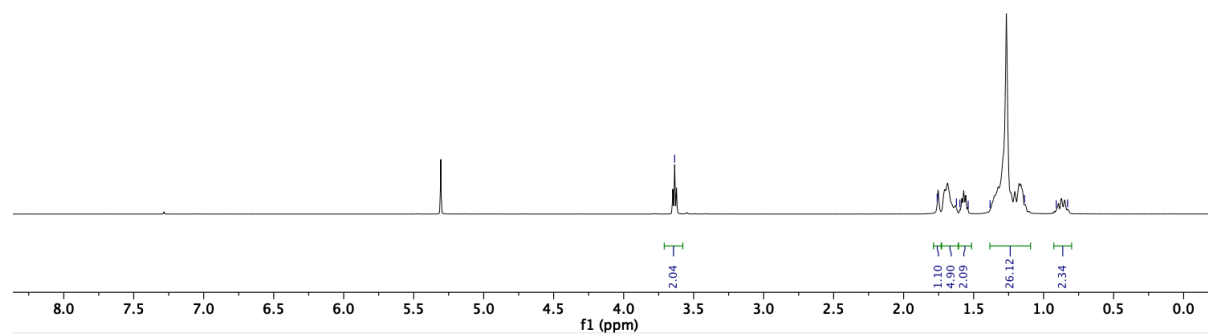
^{13}C NMR (126 MHz, CDCl_3)



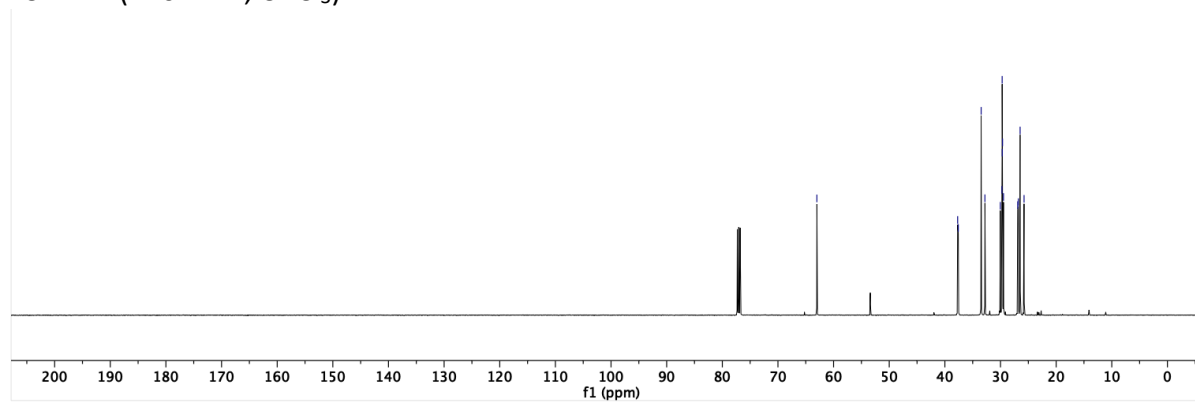
Synthesis of 13-cyclohexyltridecan-1-ol (**22**)



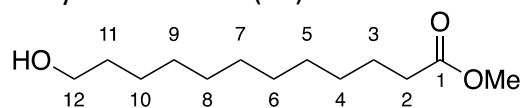
^1H NMR (500 MHz, CDCl_3)



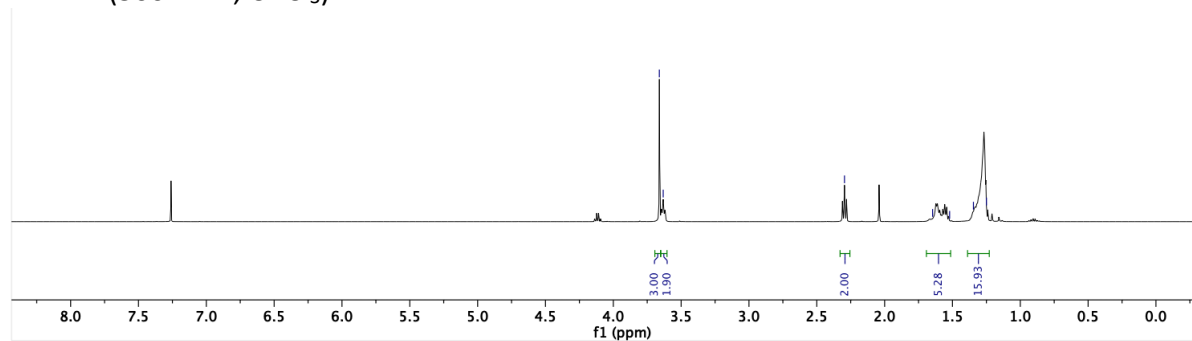
^{13}C NMR (126 MHz, CDCl_3)



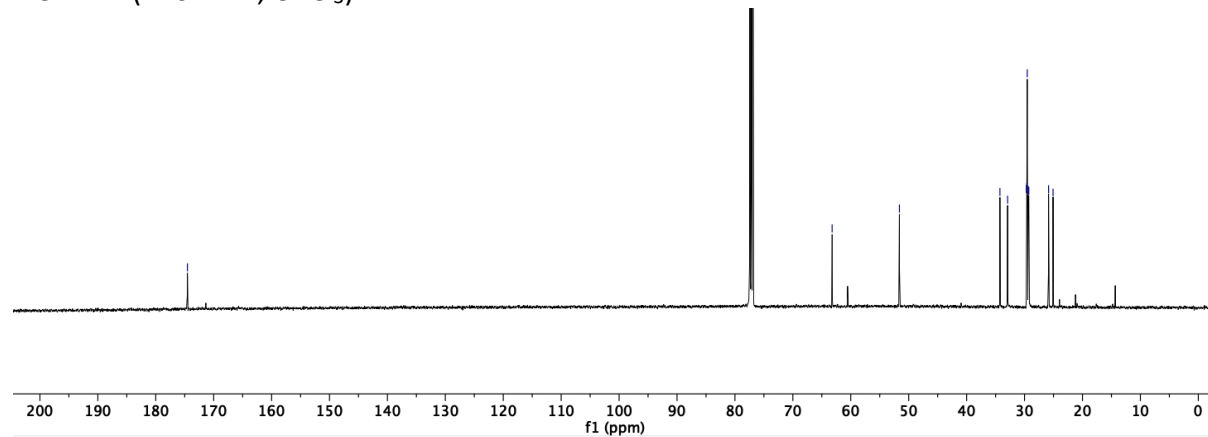
Synthesis of methyl 12-hydroxydodecanoate (**23**)



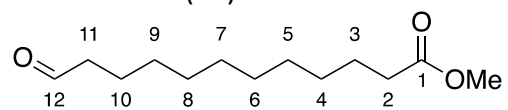
^1H NMR (500 MHz, CDCl_3)



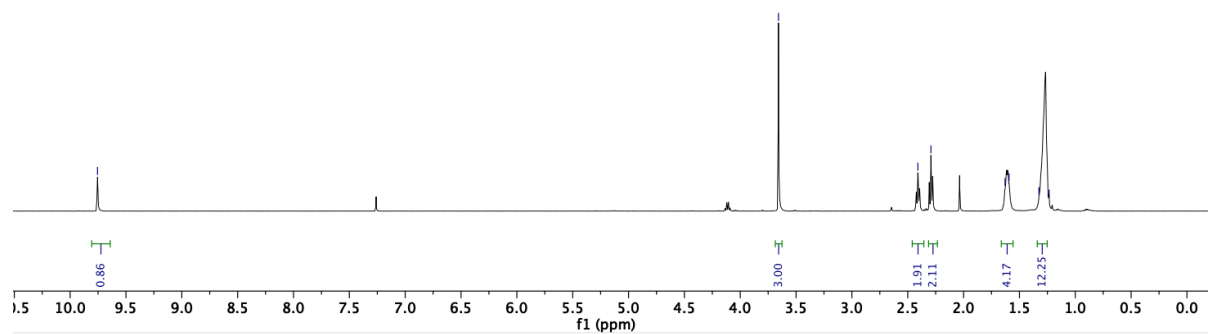
^{13}C NMR (126 MHz, CDCl_3)



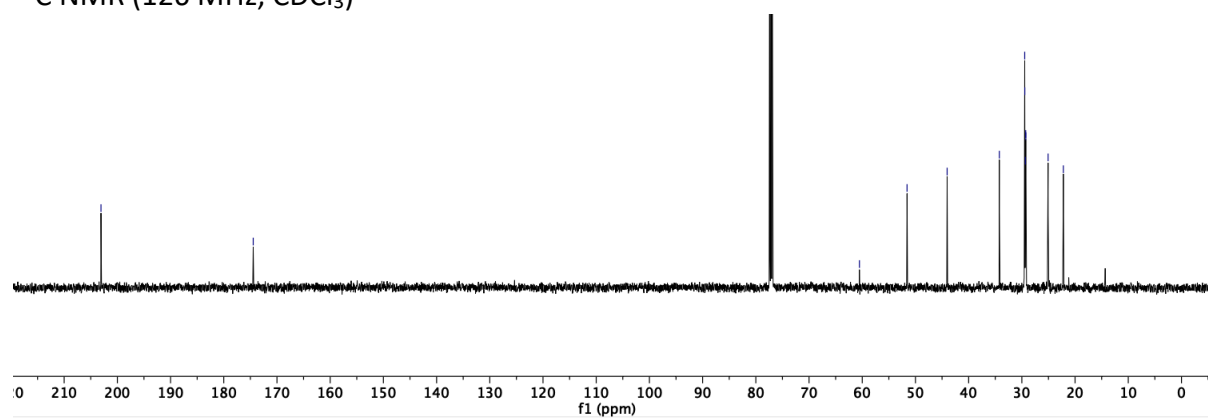
Synthesis of methyl 12-oxododecanoate (**24**)



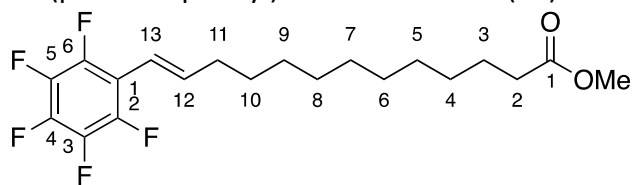
^1H NMR (500 MHz, CDCl_3)



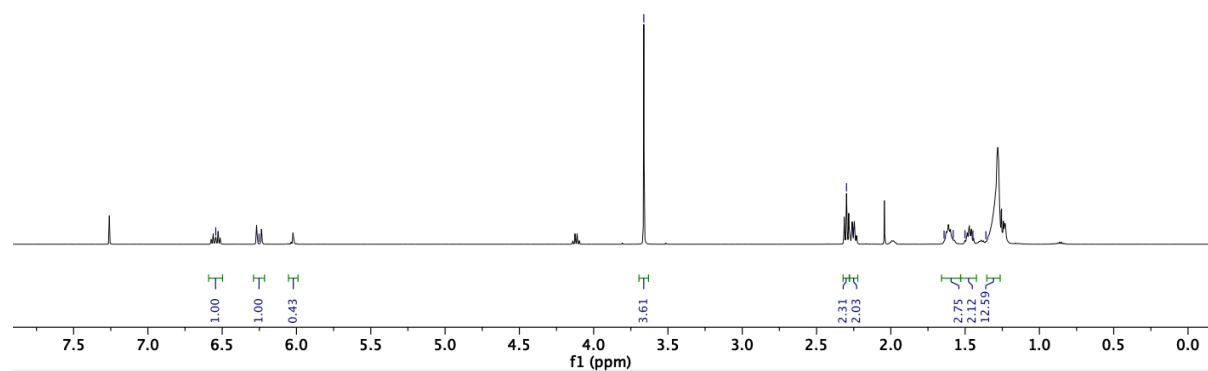
^{13}C NMR (126 MHz, CDCl_3)



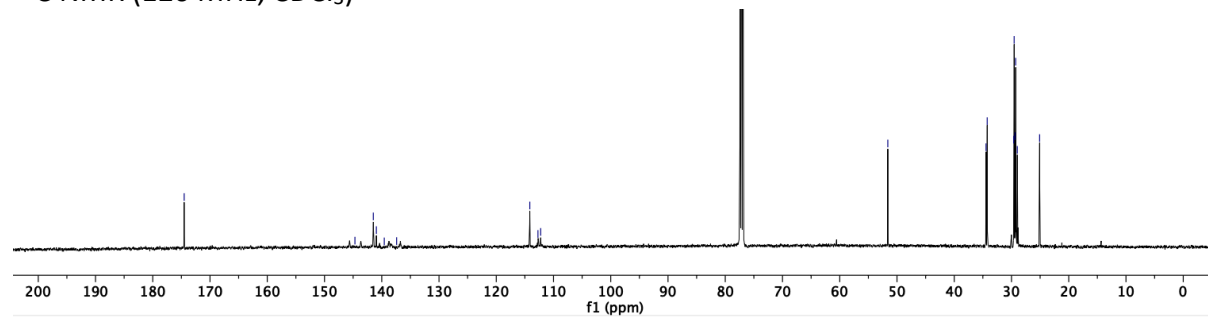
Synthesis of methyl *E*-13-(perfluorophenyl)tridec-12-enoate (**27**)



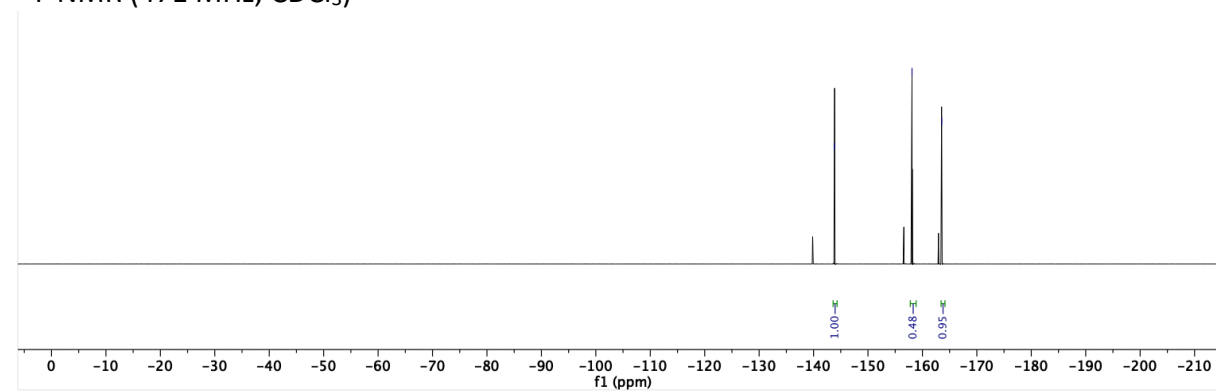
^1H NMR (500 MHz, CDCl_3)



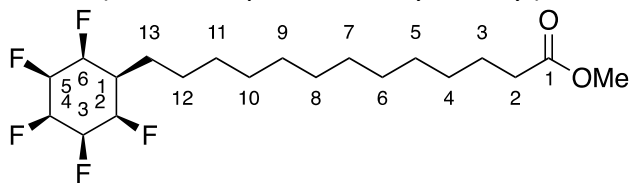
^{13}C NMR (126 MHz, CDCl_3)



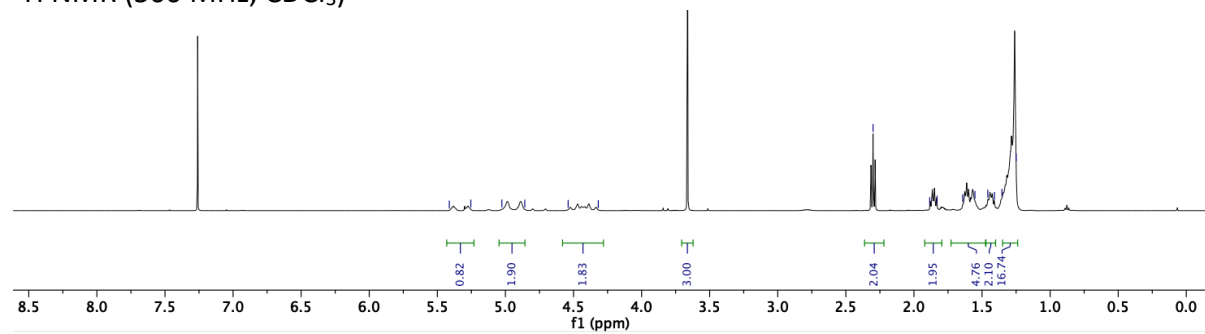
^{19}F NMR (471 MHz, CDCl_3)



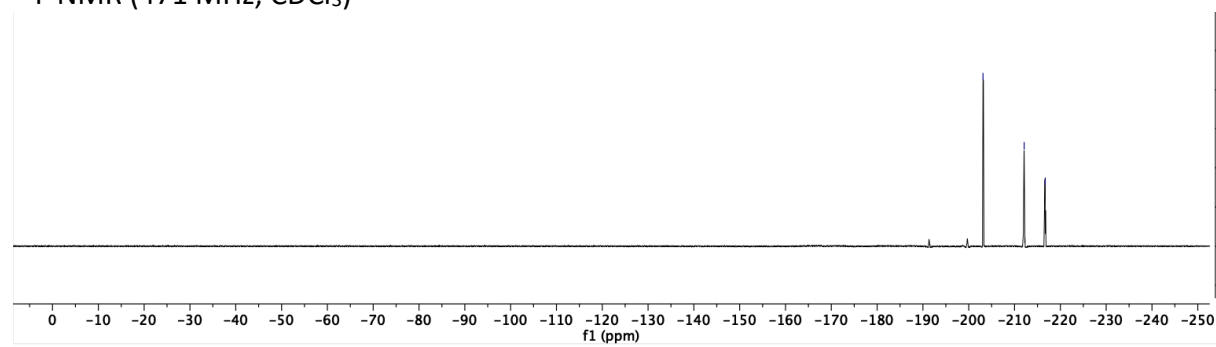
methyl 13-((1*r*,2*R*,3*R*,4*s*,5*S*,6*S*)-2,3,4,5,6-pentafluorocyclohexyl)tridecanoate (**28**)



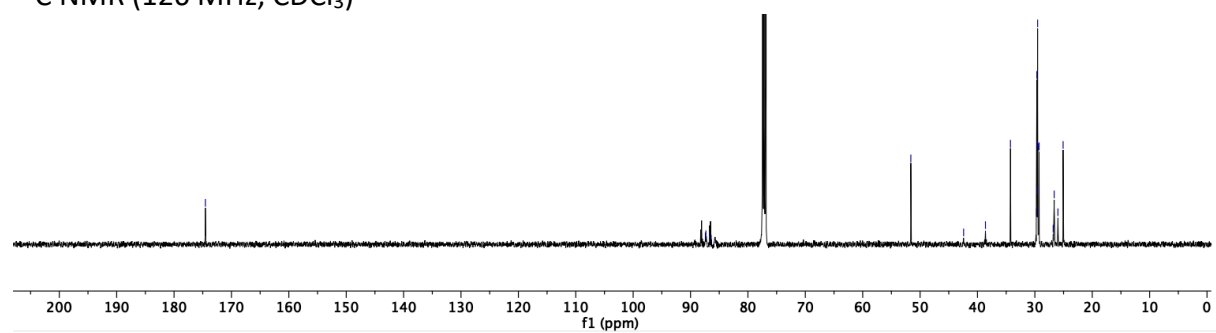
^1H NMR (500 MHz, CDCl_3)



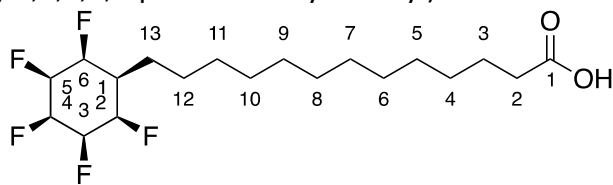
^{19}F NMR (471 MHz, CDCl_3)



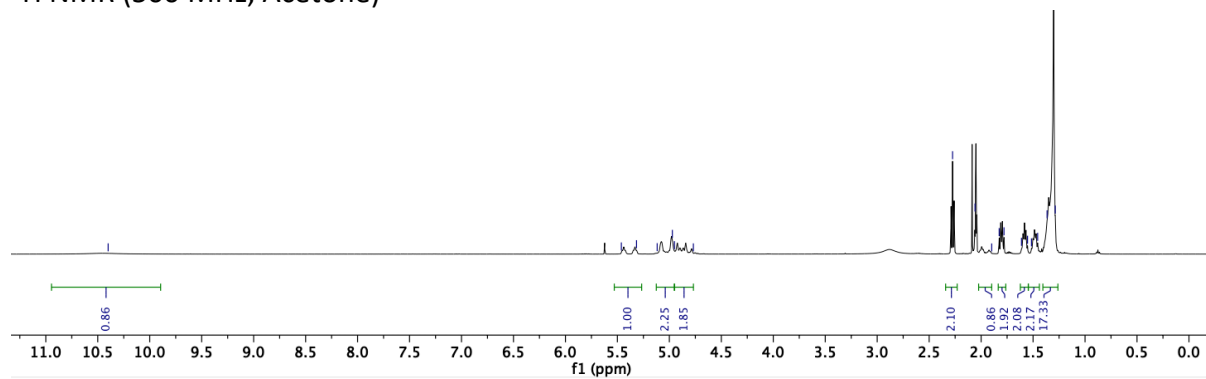
^{13}C NMR (126 MHz, CDCl_3)



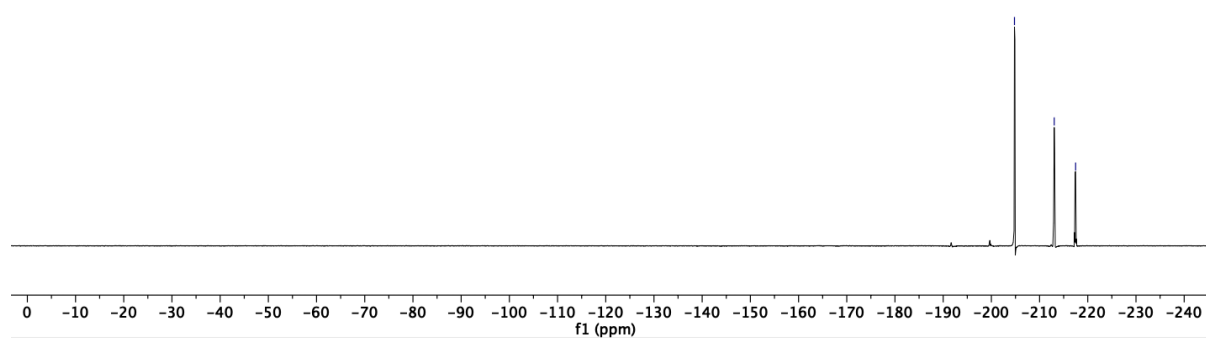
13-((1*r*,2*R*,3*R*,4*s*,5*S*,6*S*)-2,3,4,5,6-pentafluorocyclohexyl)tridecanoic acid (**7**)



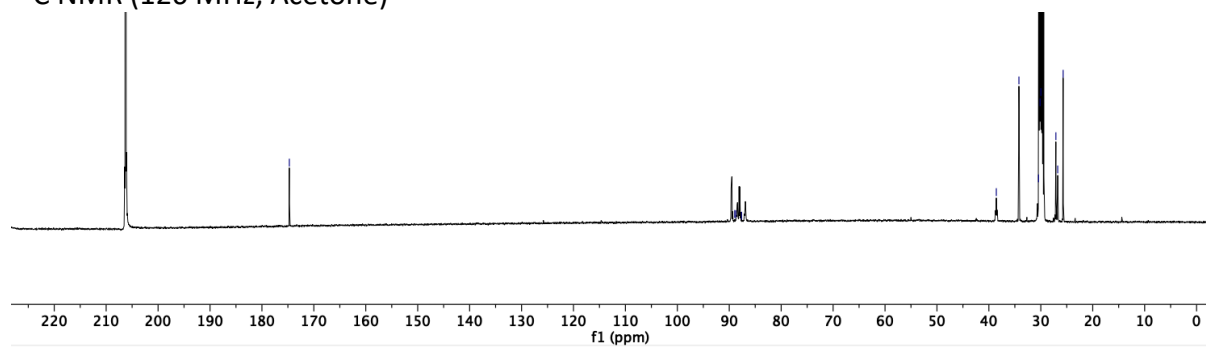
^1H NMR (500 MHz, Acetone)



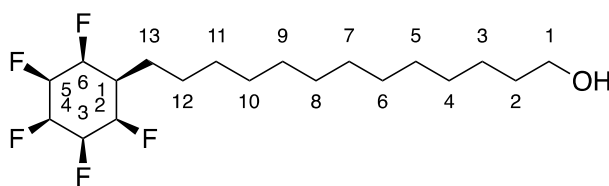
^{19}F NMR (471 MHz, Acetone)



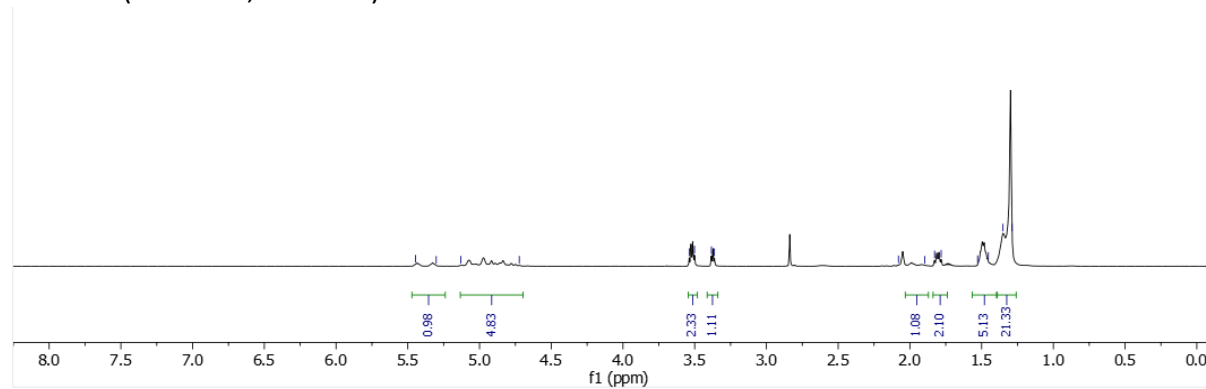
^{13}C NMR (126 MHz, Acetone)



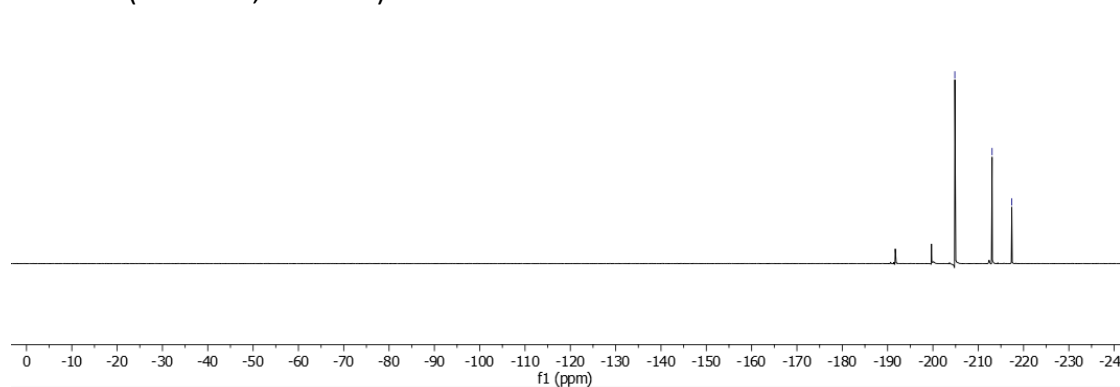
13-((1*r*,2*R*,3*R*,4*s*,5*S*,6*S*)-2,3,4,5,6-pentafluorocyclohexyl)tridecan-1-ol (**8**)



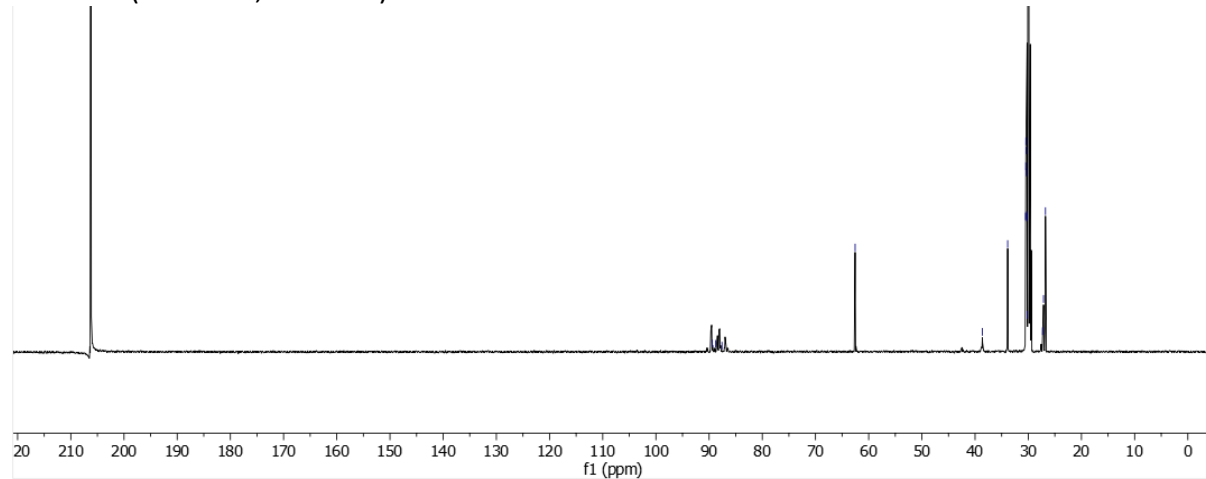
^1H NMR (500 MHz, Acetone)



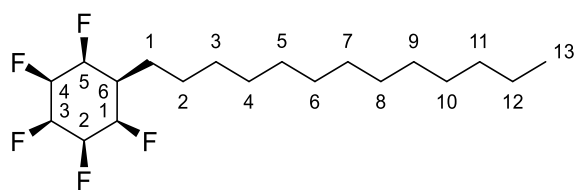
^{19}F NMR (470 MHz, Acetone)



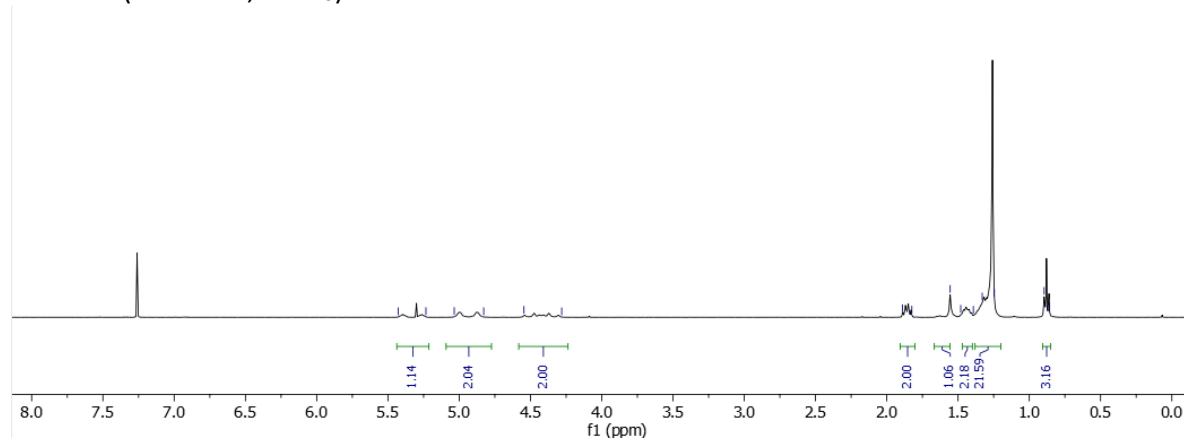
^{13}C NMR (126 MHz, Acetone)



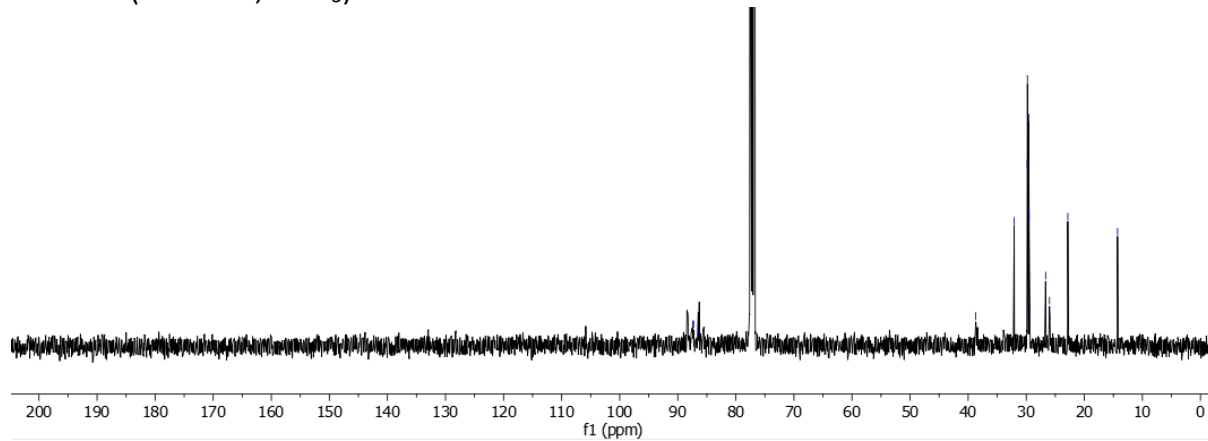
(1R,2R,3s,4S,5S,6r)-1,2,3,4,5-pentafluoro-6-tridecylcyclohexane **9**



^1H NMR (400 MHz, CDCl_3)



^{13}C NMR (101 MHz, CDCl_3)



^{19}F NMR (376 MHz, CDCl_3)

