Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry.

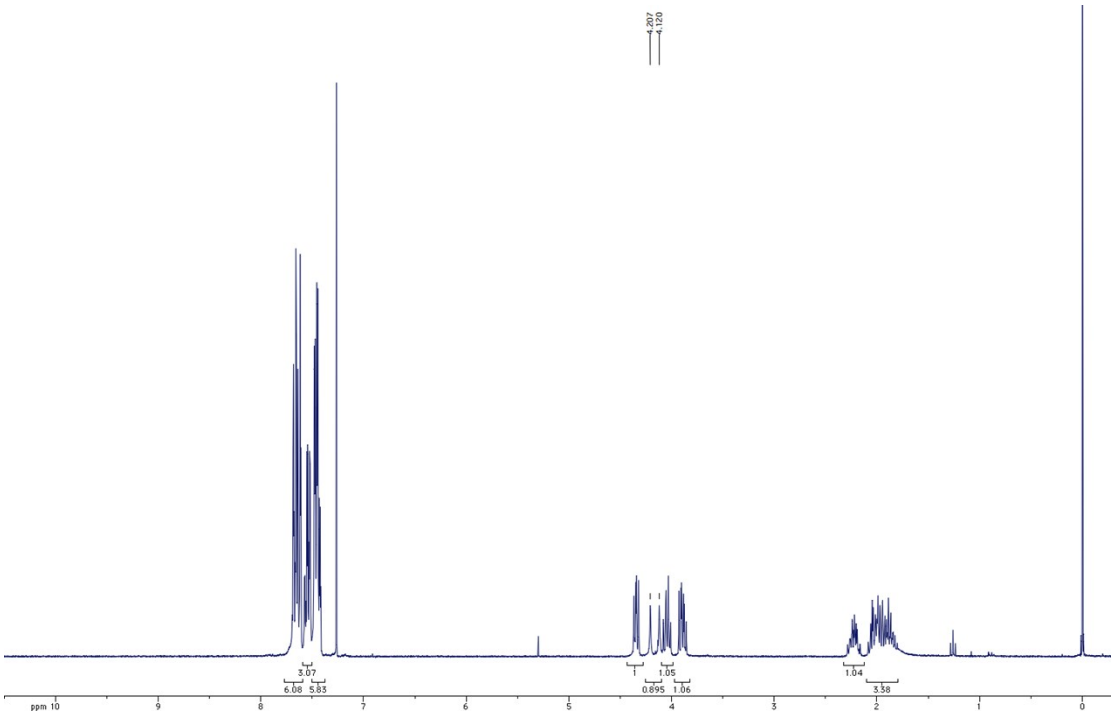
Synthesis, structure and pyrolysis of stabilised phosphonium ylides containing saturated oxygen heterocycles

R. Alan Aitken,[a*] Nazira Karodia,[b,c*] Hollie B. McCarron,[a] Cécile Rouxel,[a] Nina Sahabo[b] and Alexandra M. Z. Slawin[a]

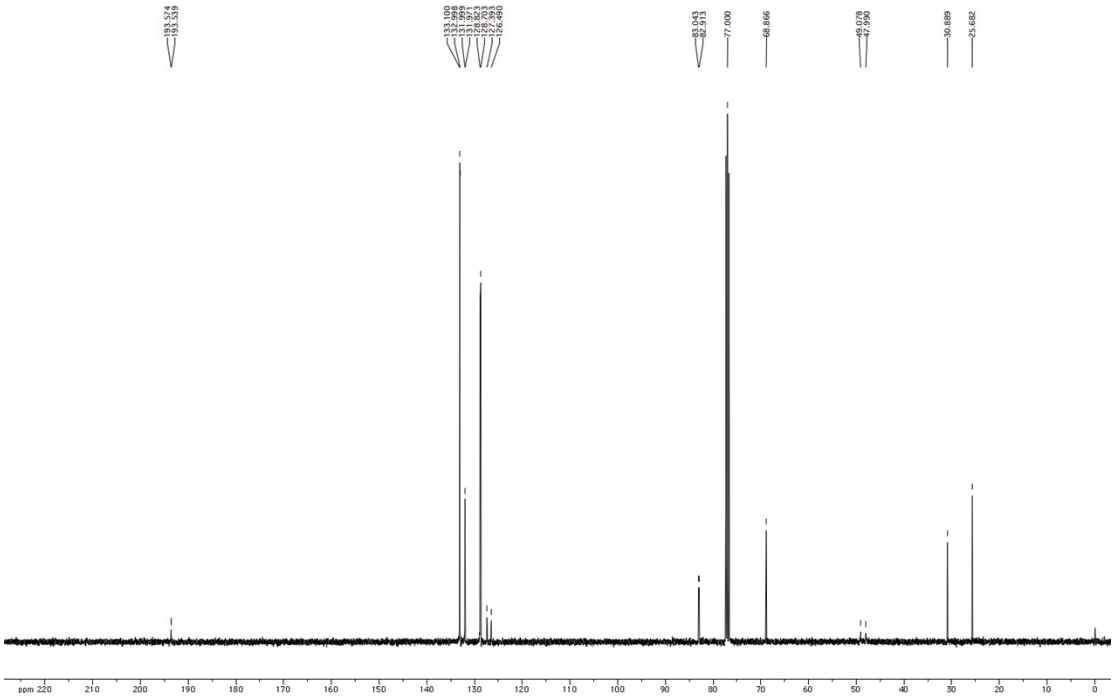
Supplementary Information

^{1}H and ^{13}C NMR Spectra

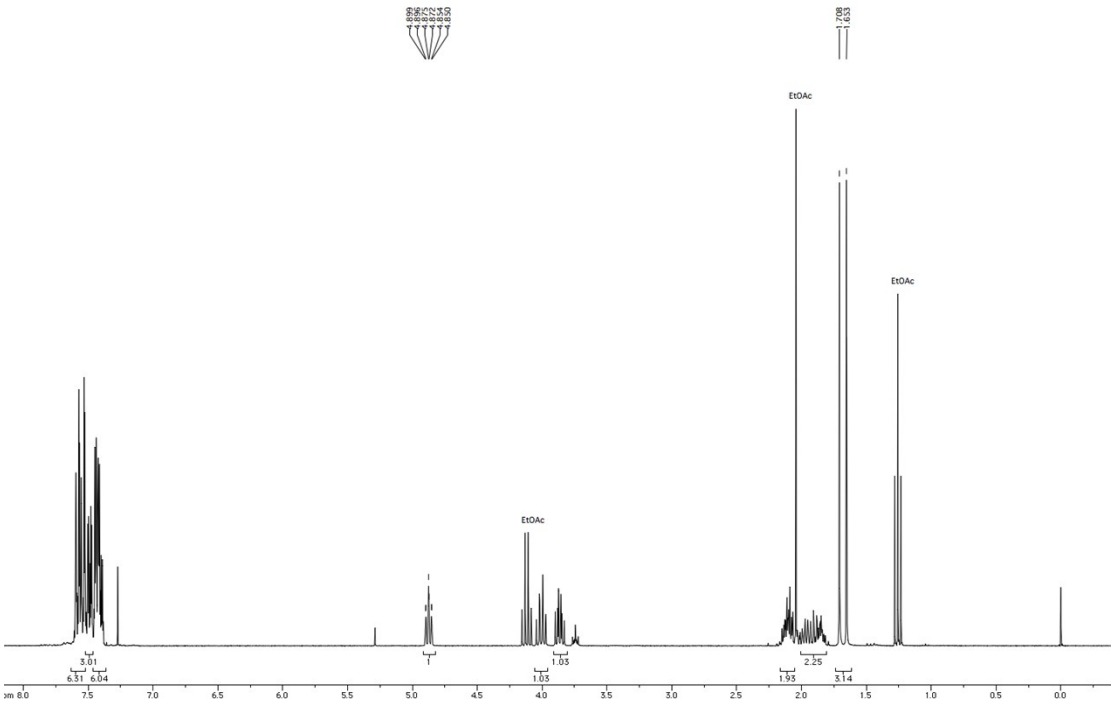
^{1}H NMR spectrum of ylide **6**



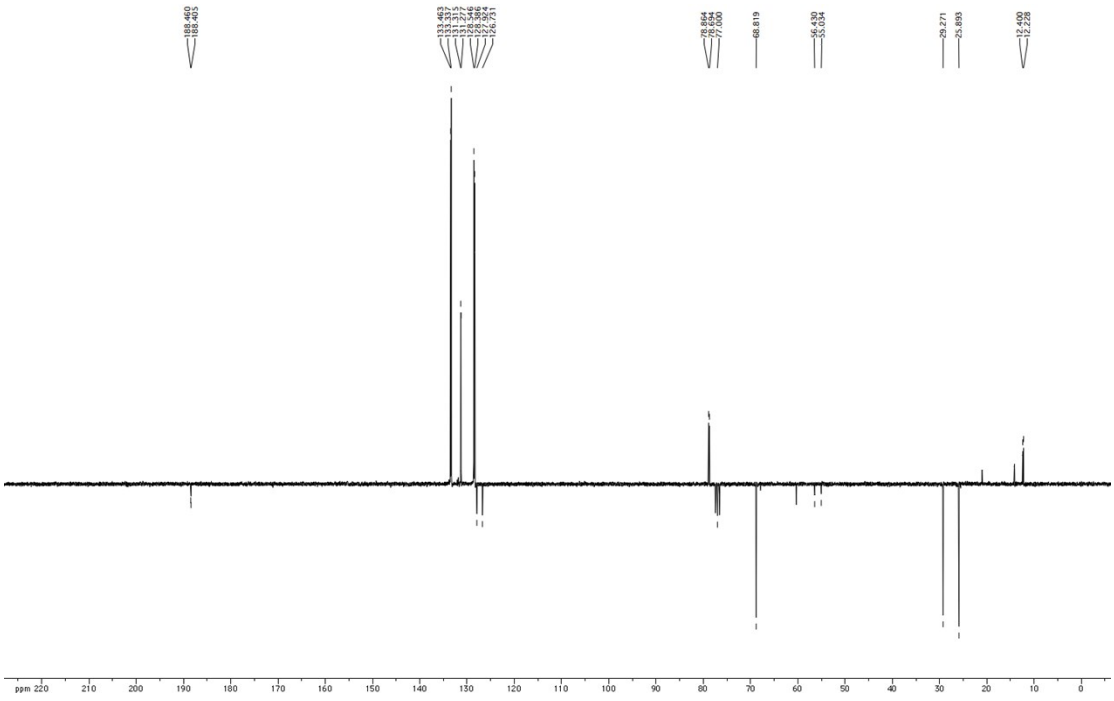
^{13}C NMR spectrum of ylide **6**



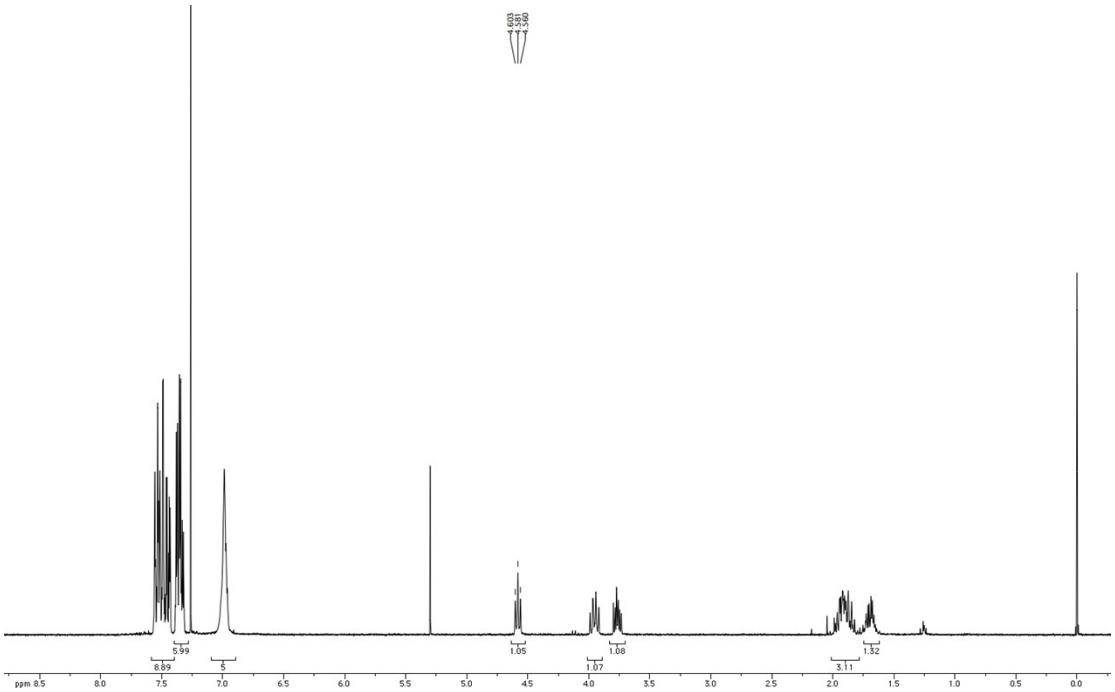
^{1}H NMR spectrum of ylide **7**



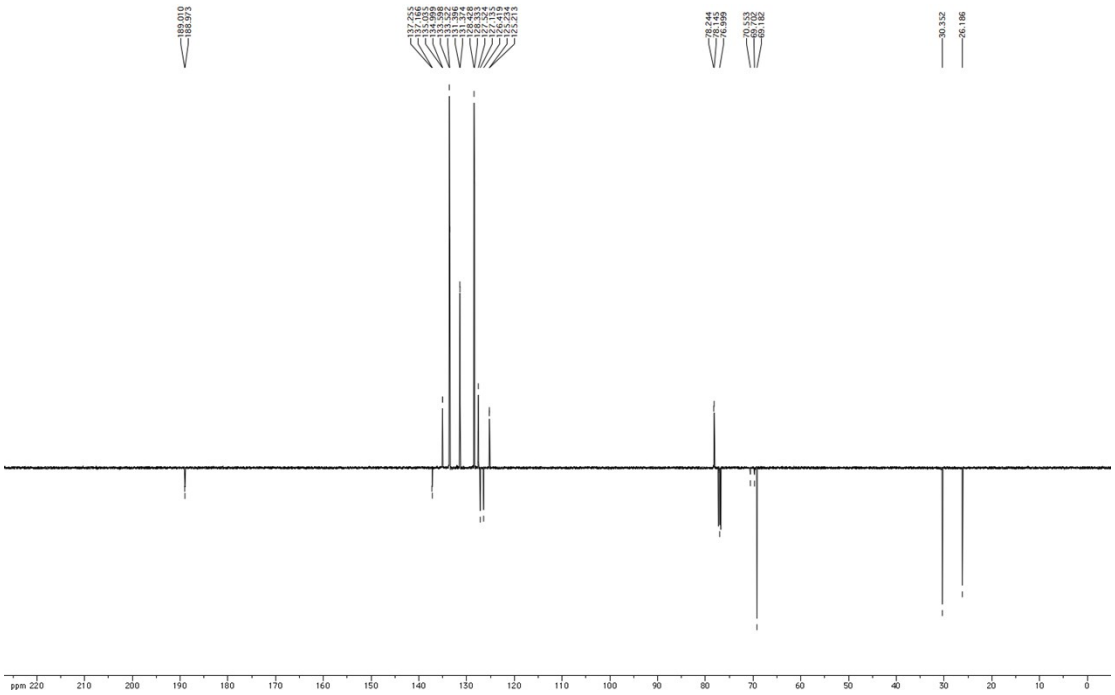
^{13}C NMR (DEPTQ) spectrum of ylide **7**



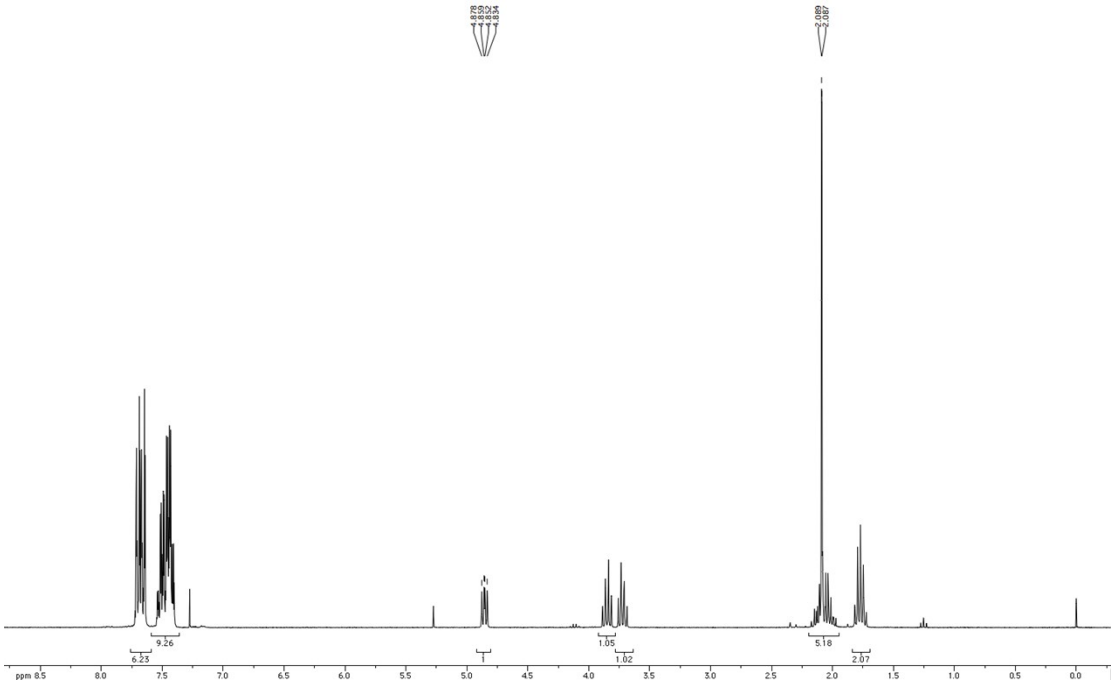
^{1}H NMR spectrum of ylide **8**



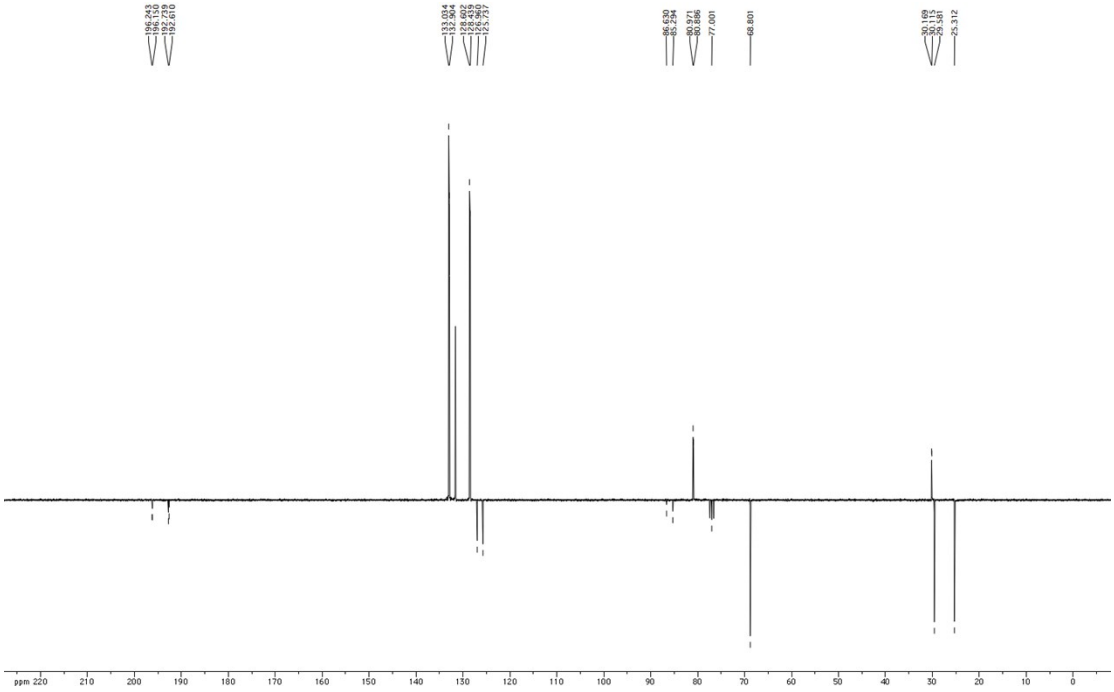
^{13}C NMR (DEPTQ) spectrum of ylide **8**



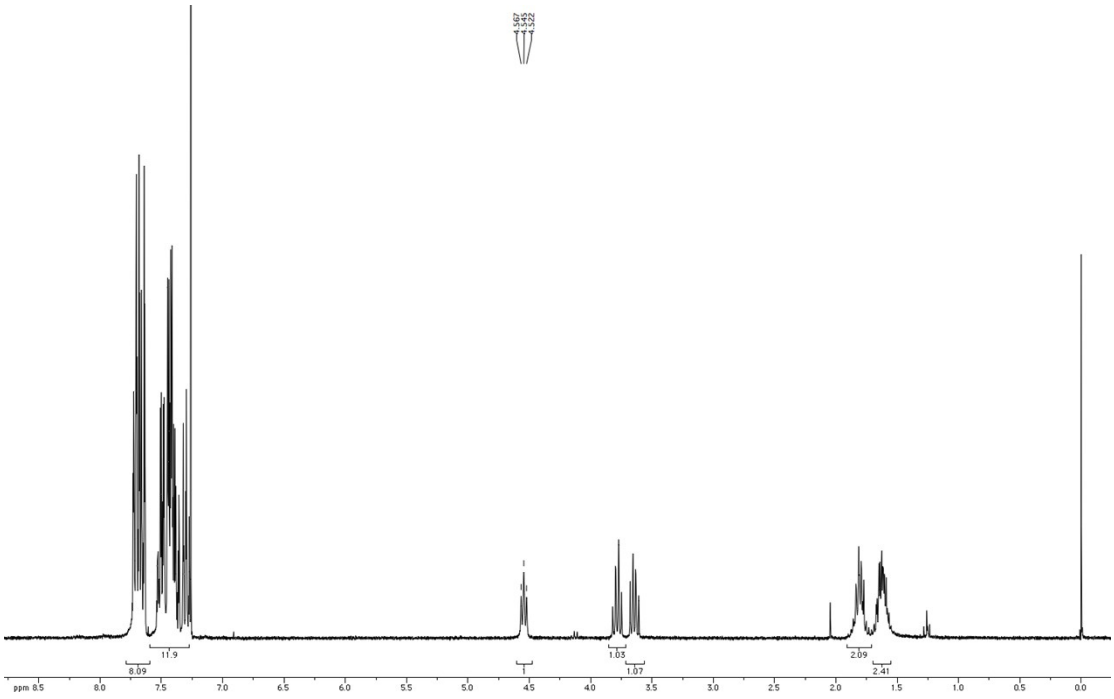
^{1}H NMR spectrum of ylide **9**



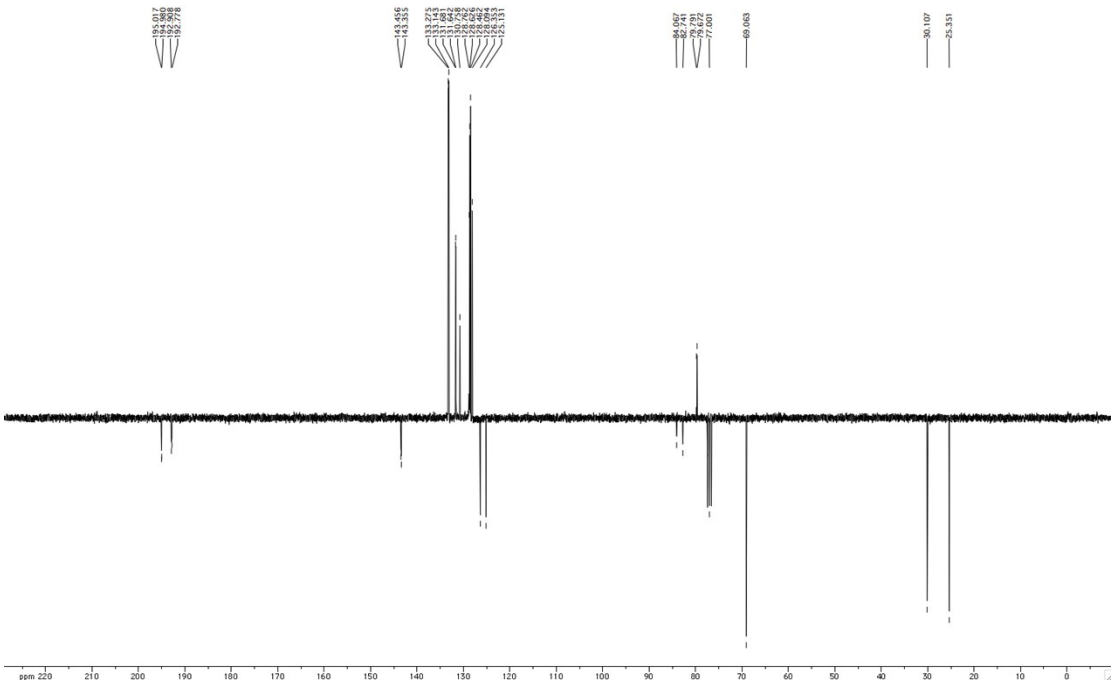
^{13}C NMR (DEPTQ) spectrum of ylide **9**



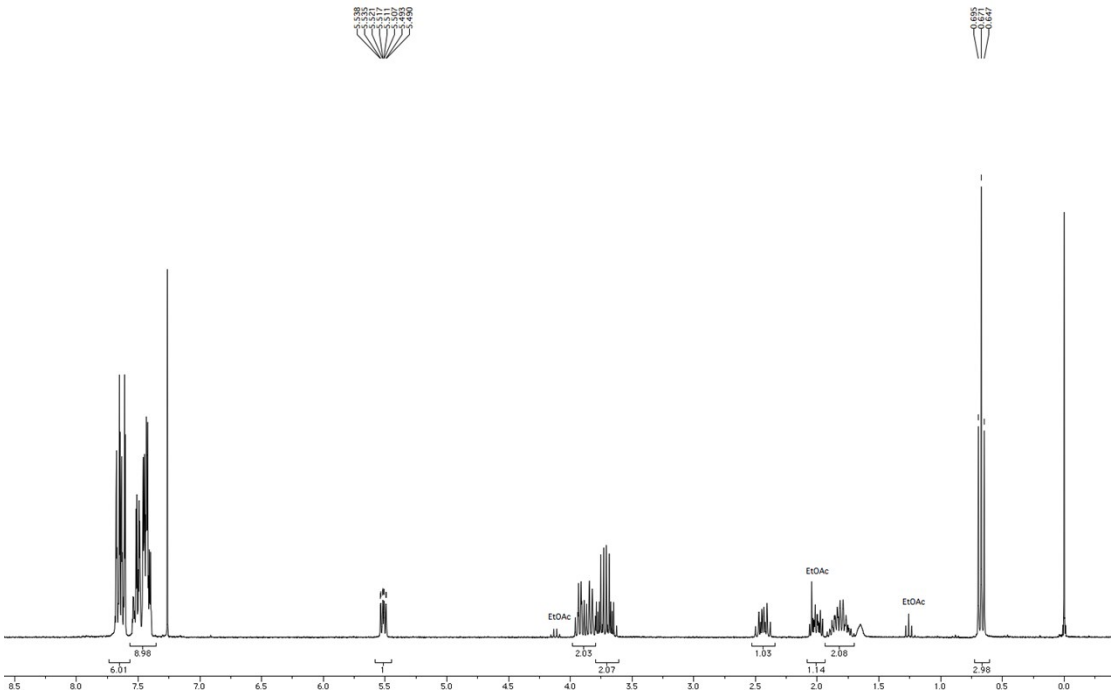
^{1}H NMR spectrum of ylide **10**



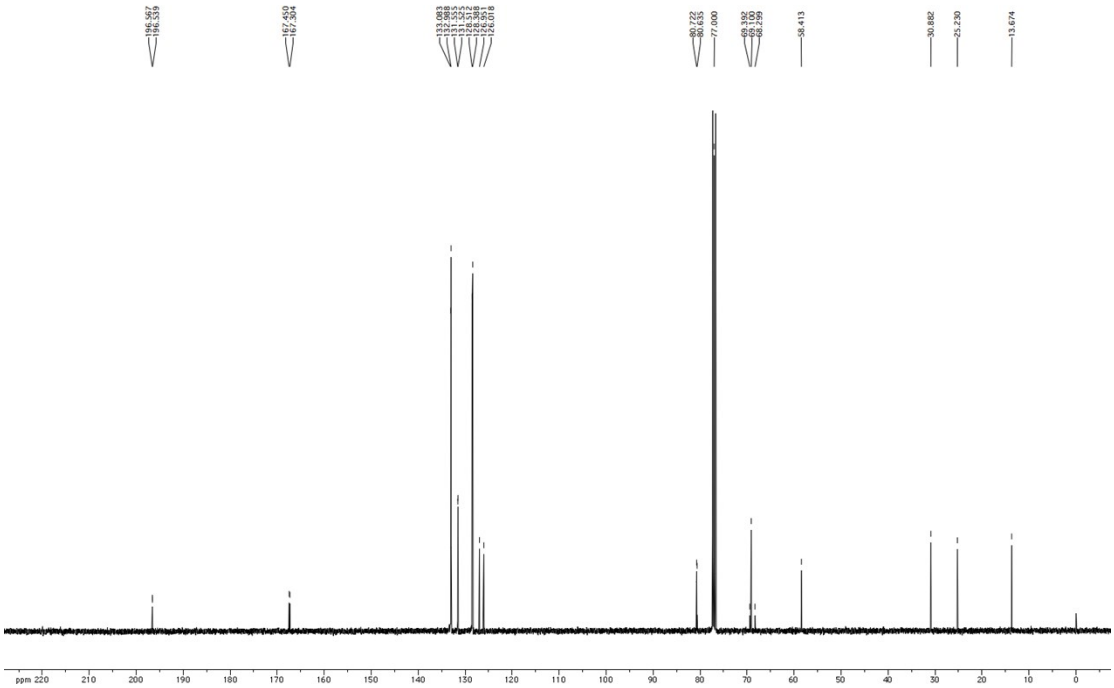
^{13}C NMR (DEPTQ) spectrum of ylide **10**



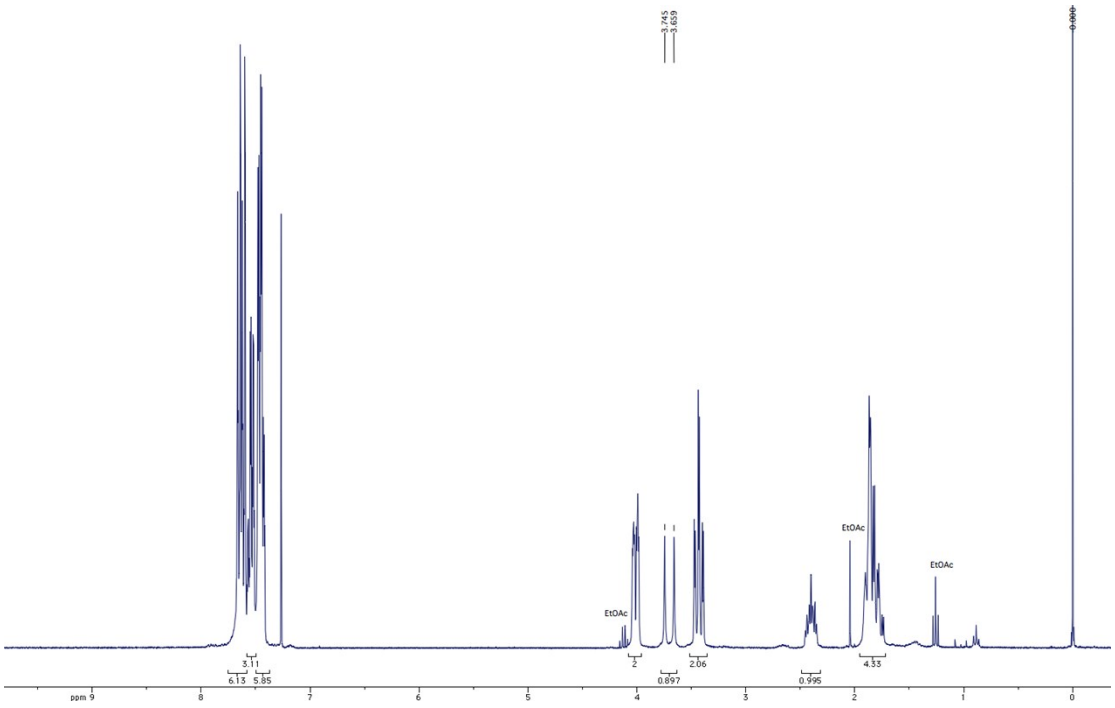
^{1}H NMR spectrum of ylide **11**



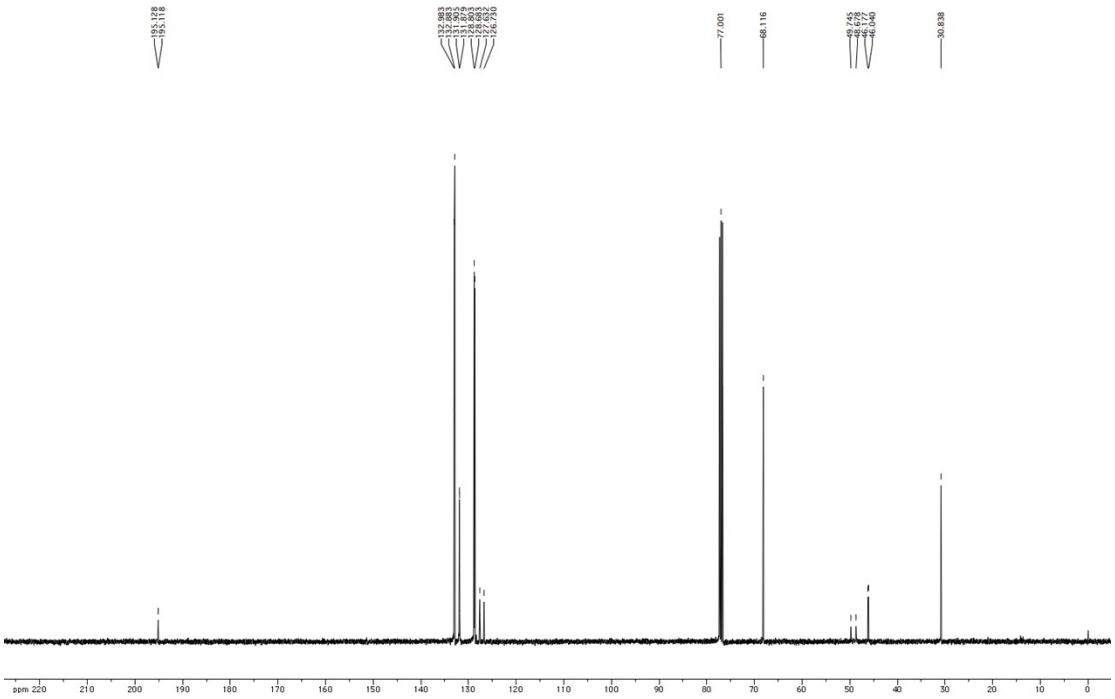
^{13}C NMR spectrum of ylide **11**



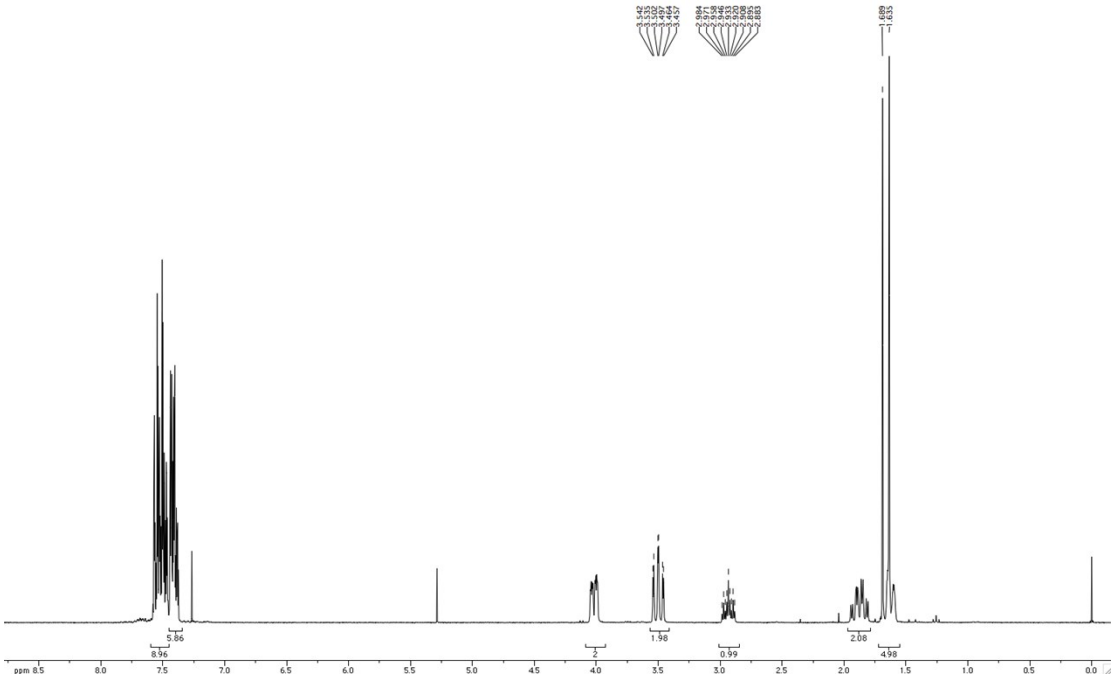
^{1}H NMR spectrum of ylide **12**



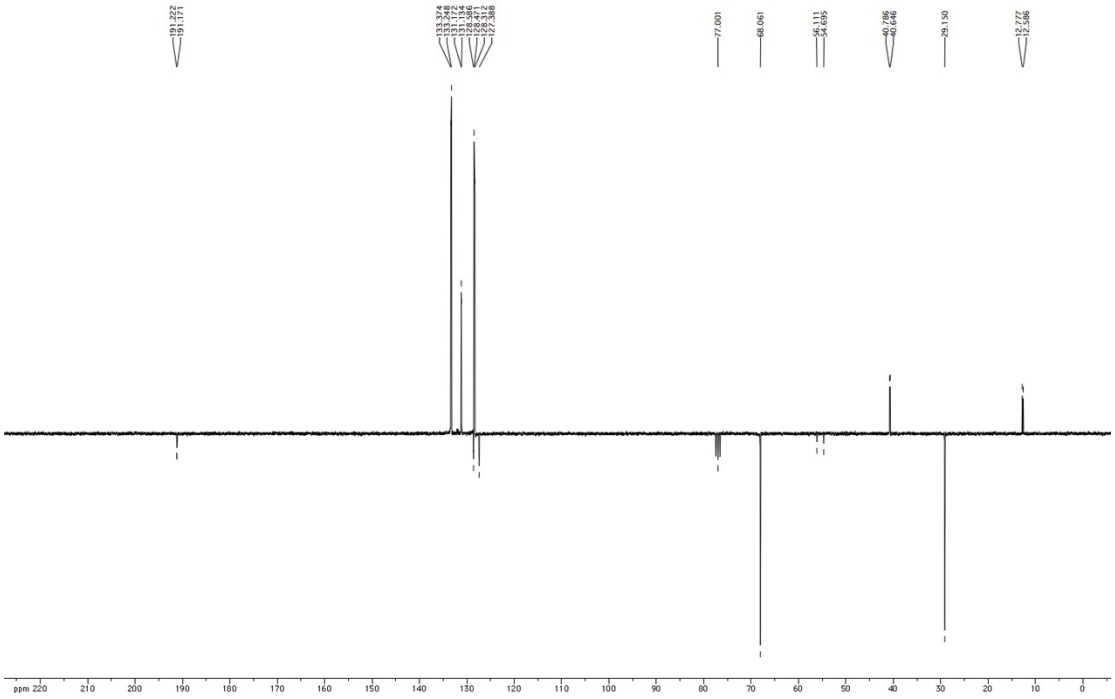
^{13}C NMR spectrum of ylide **12**



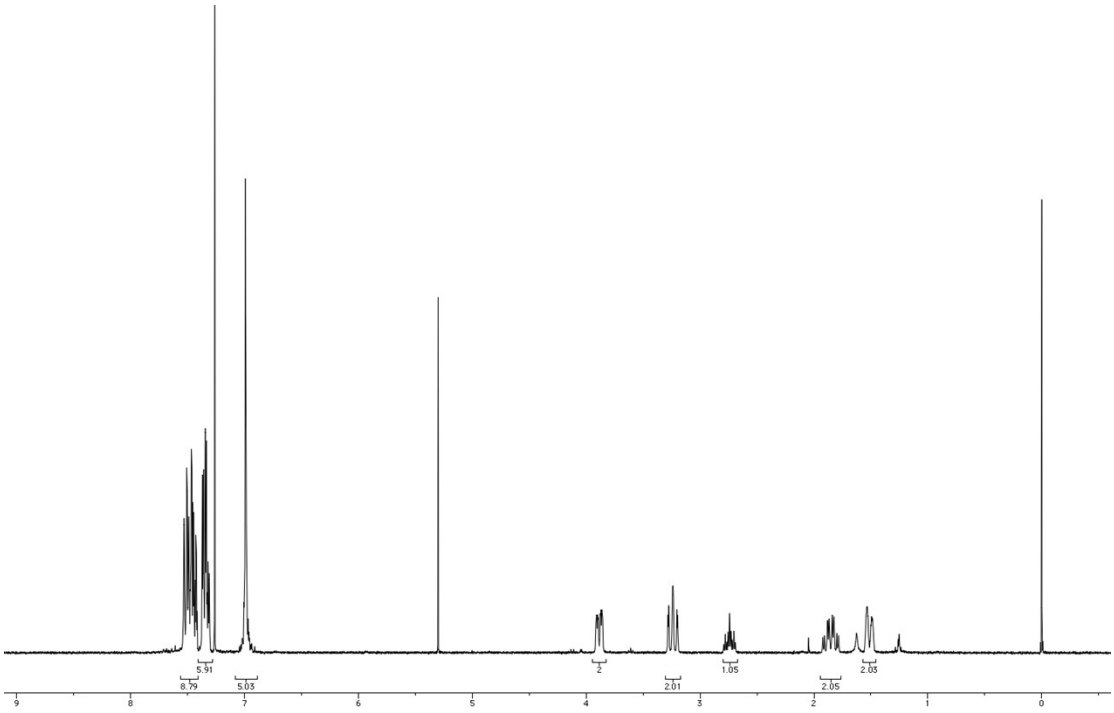
^{1}H NMR spectrum of ylide **13**



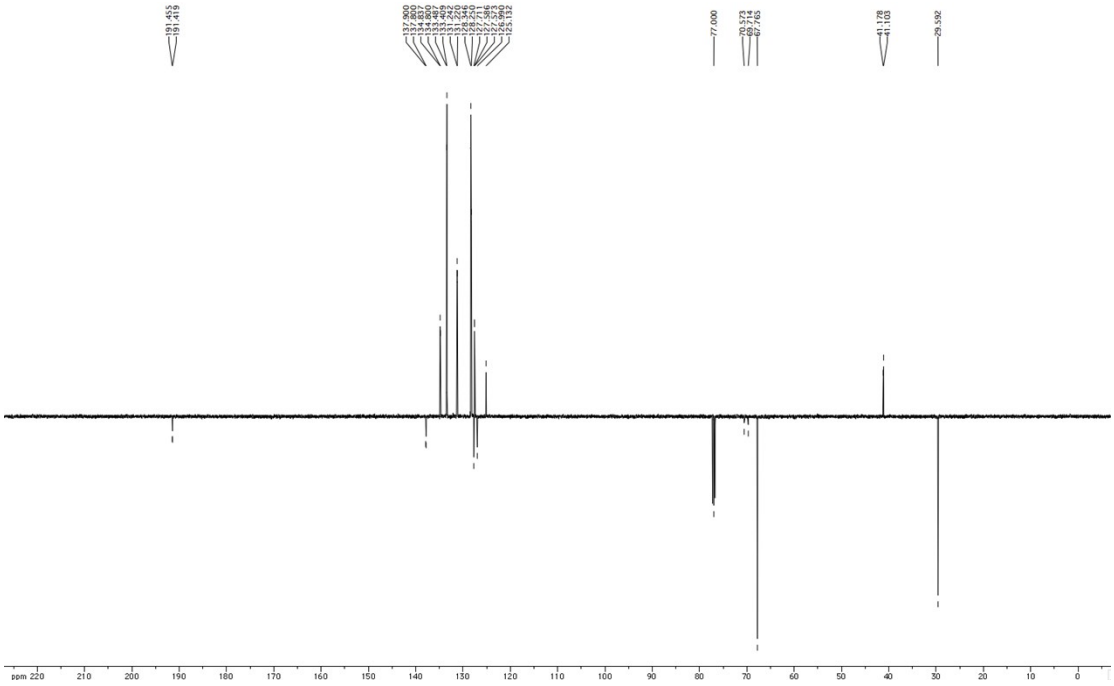
^{13}C NMR (DEPTQ) spectrum of ylide **13**



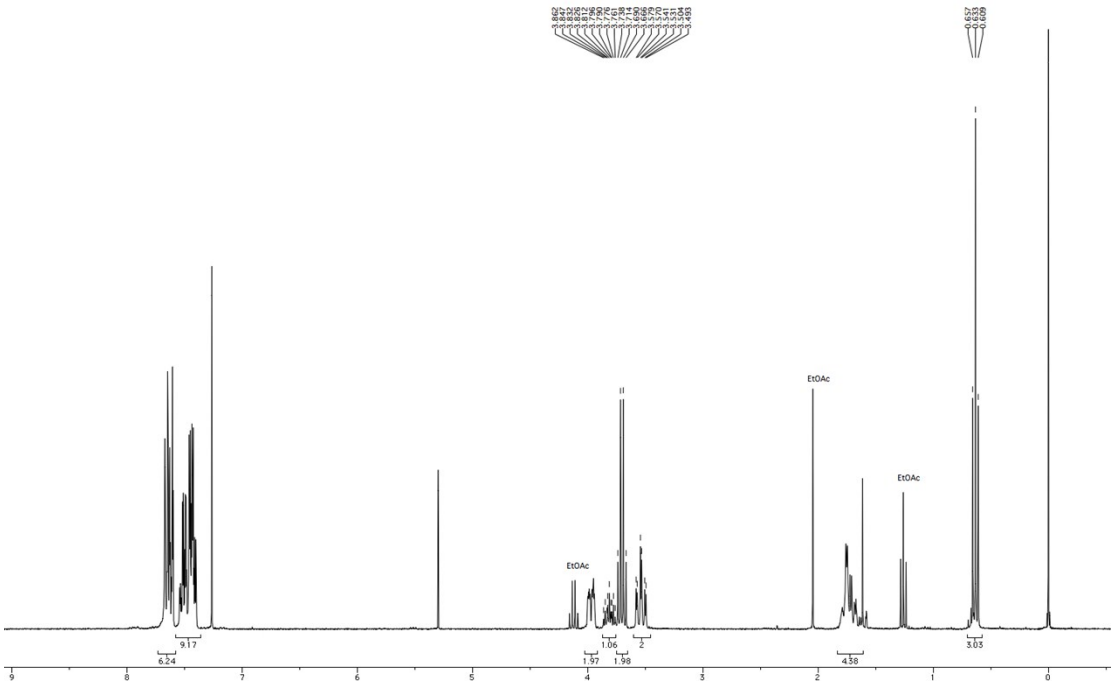
^{1}H NMR spectrum of ylide **14**



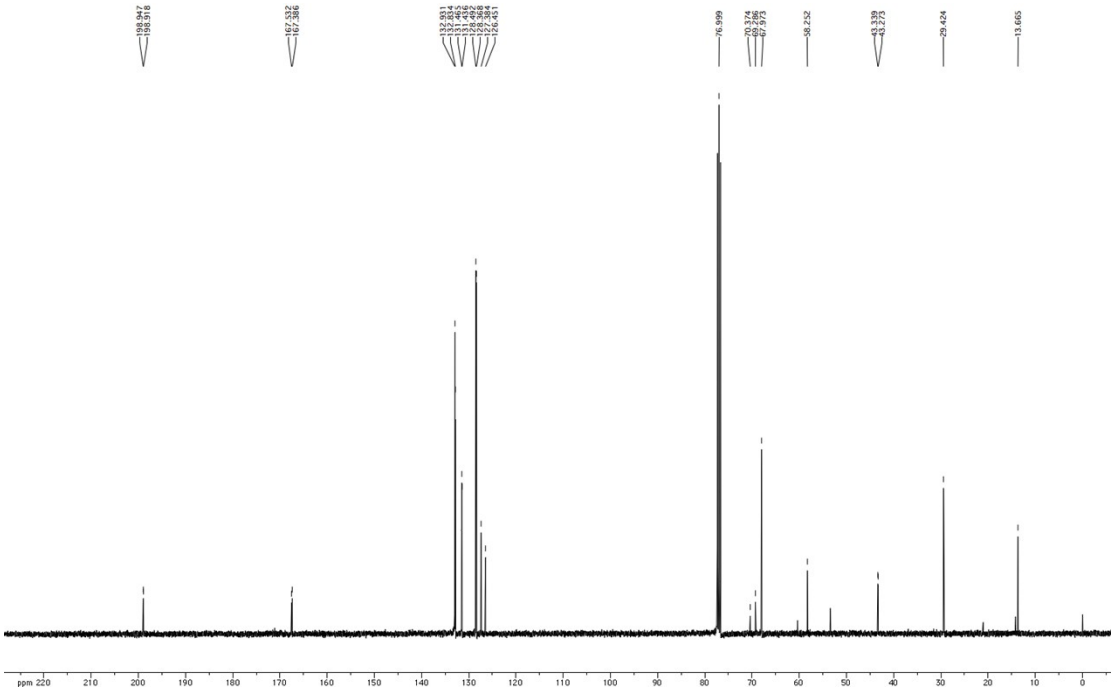
^{13}C NMR (DEPTQ) spectrum of ylide **14**



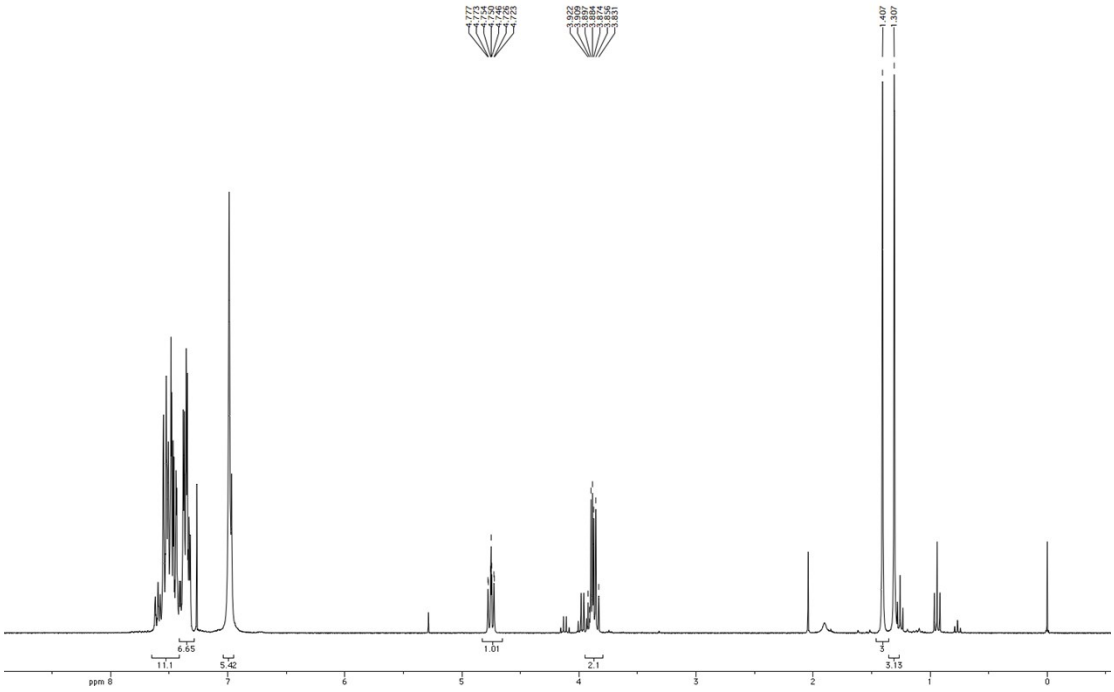
^{1}H NMR spectrum of ylide **15**



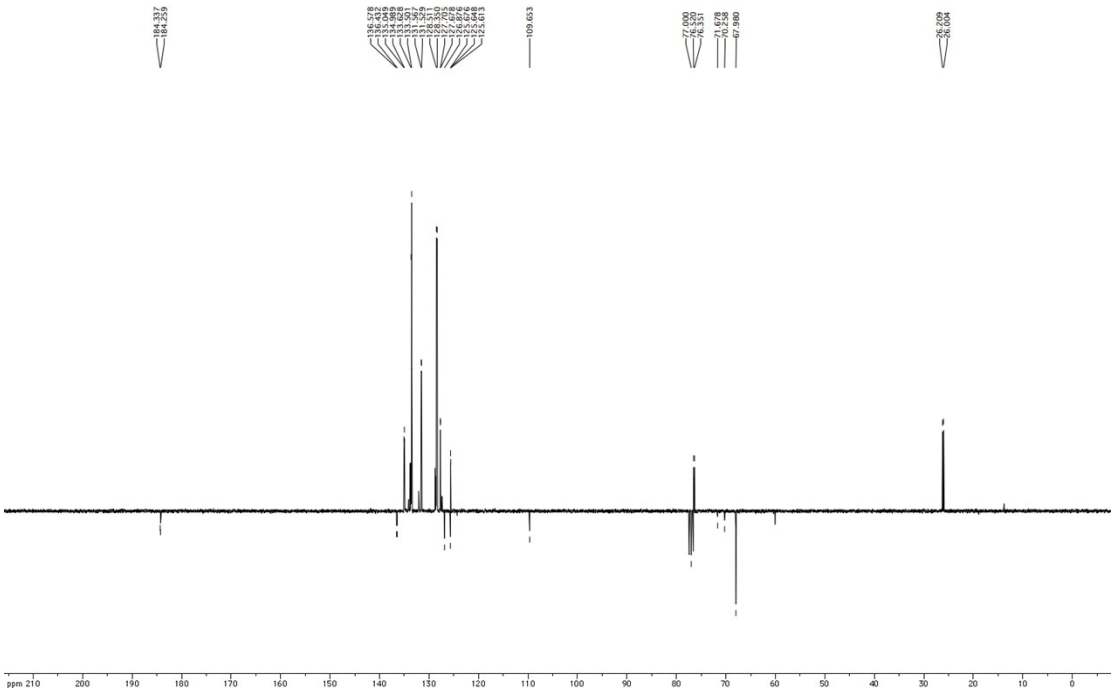
^{13}C NMR spectrum of ylide **15**



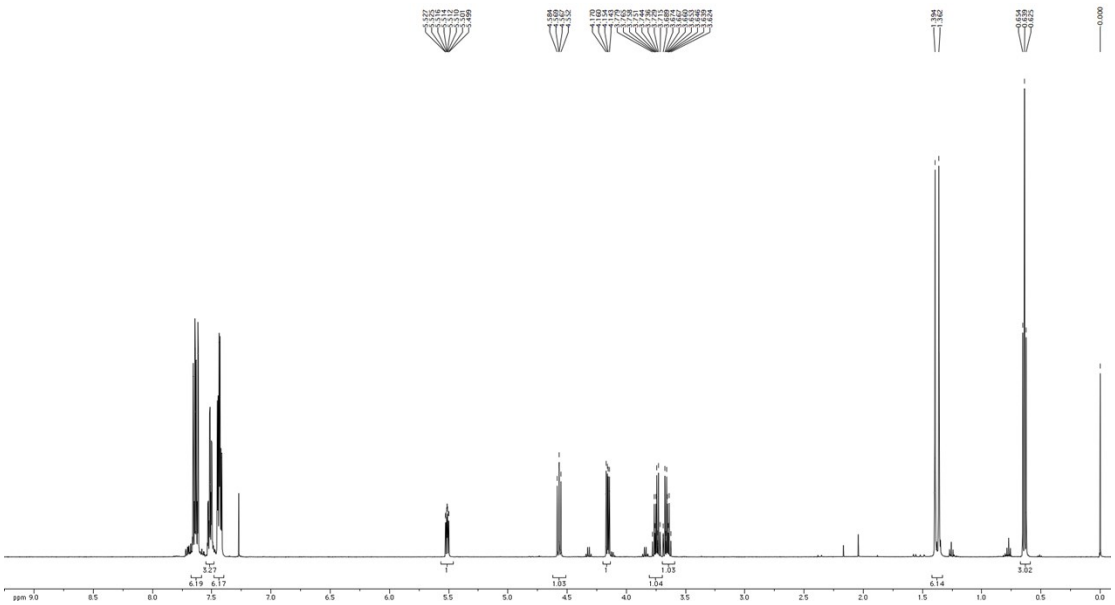
^{1}H NMR spectrum of ylide **16**



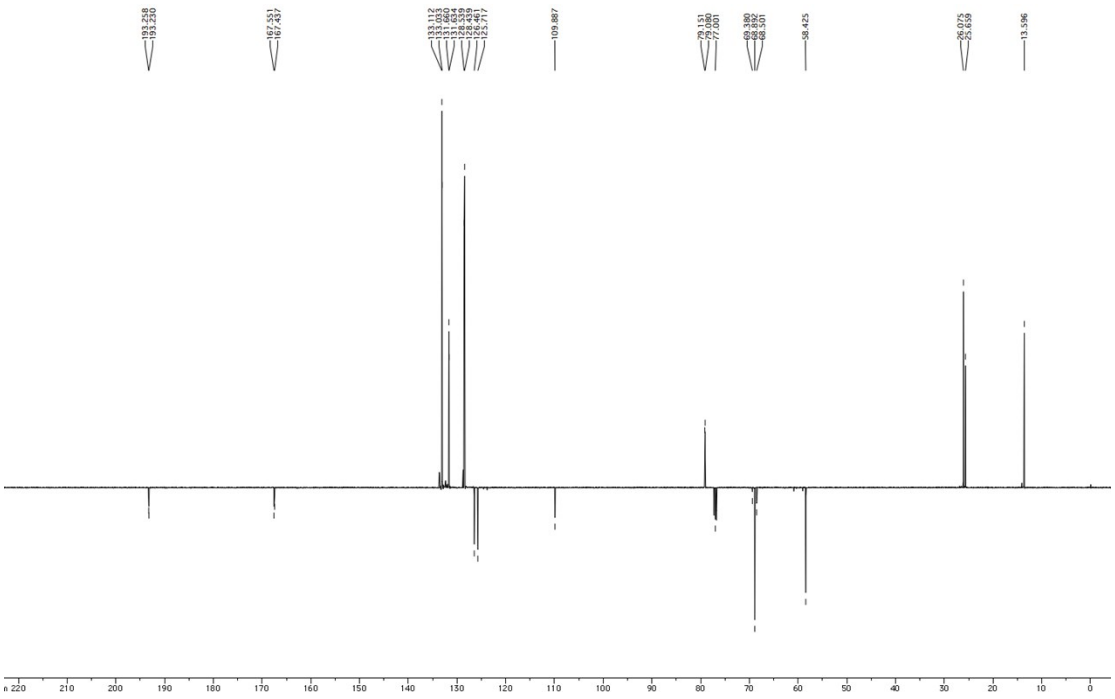
^{13}C NMR (DEPTQ) spectrum of ylide **16**



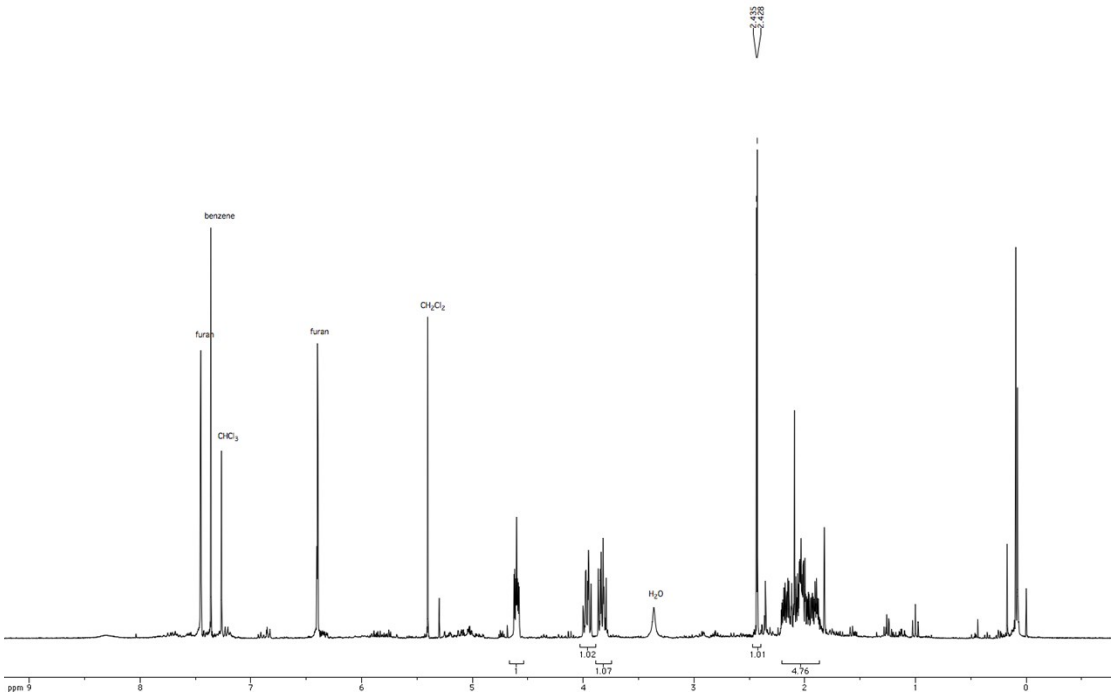
^{1}H NMR spectrum of ylide **17**



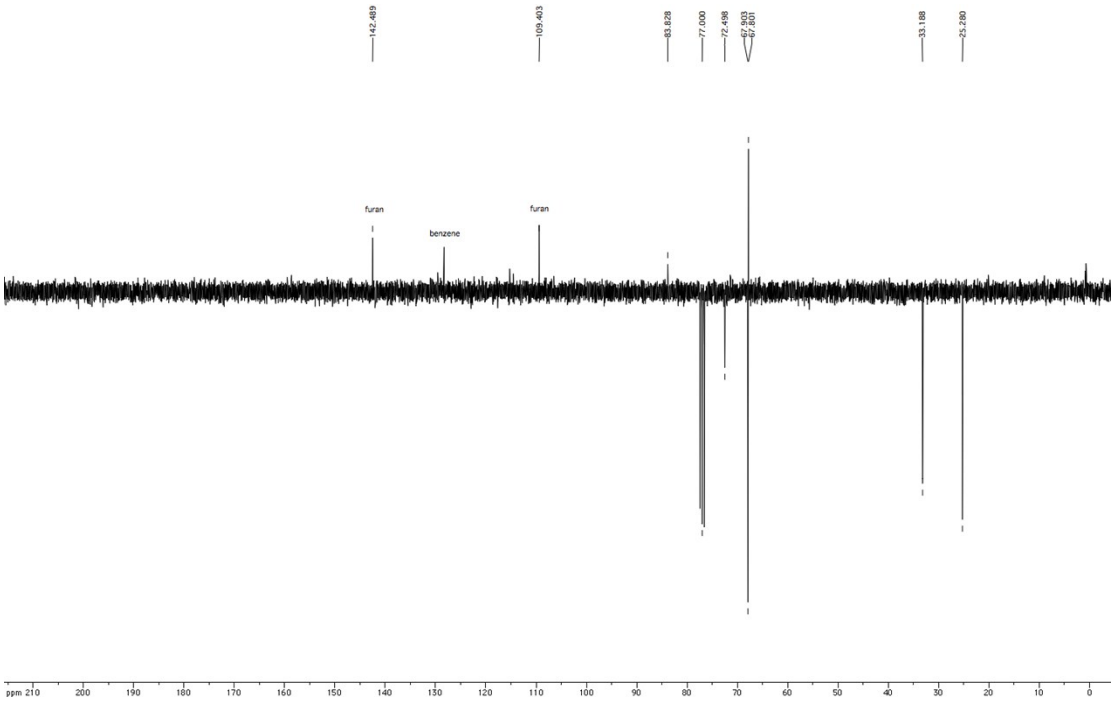
^{13}C NMR (DEPTQ) spectrum of ylide **17**



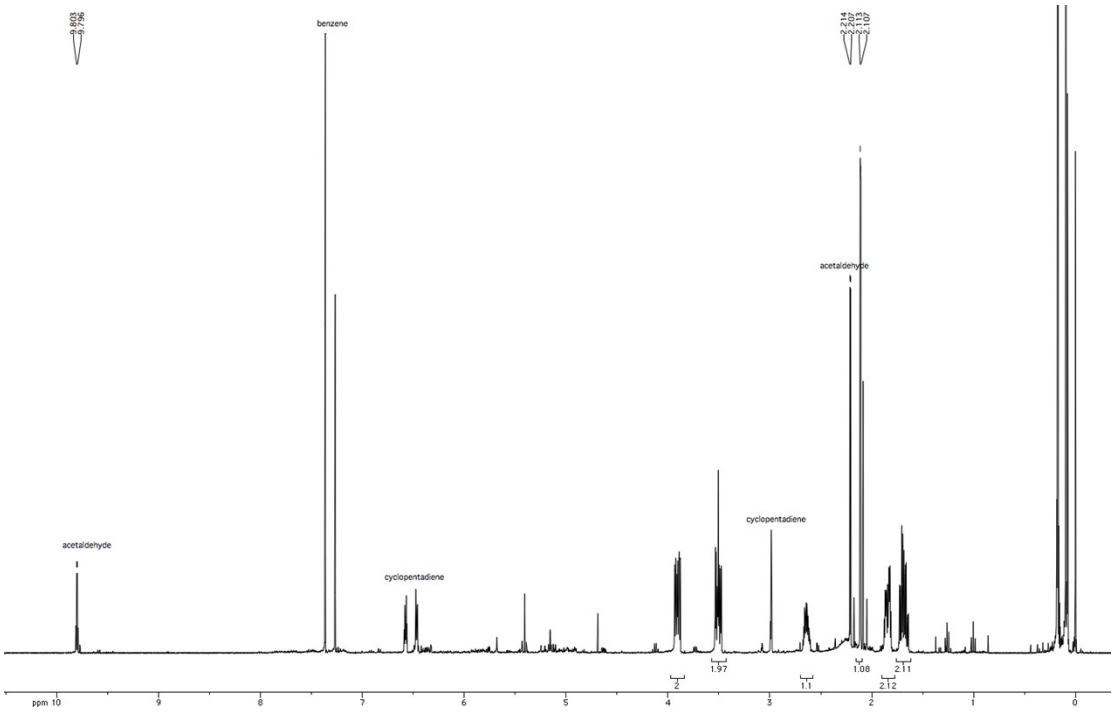
^{1}H NMR spectrum of FVP product from **6** containing alkyne **18**



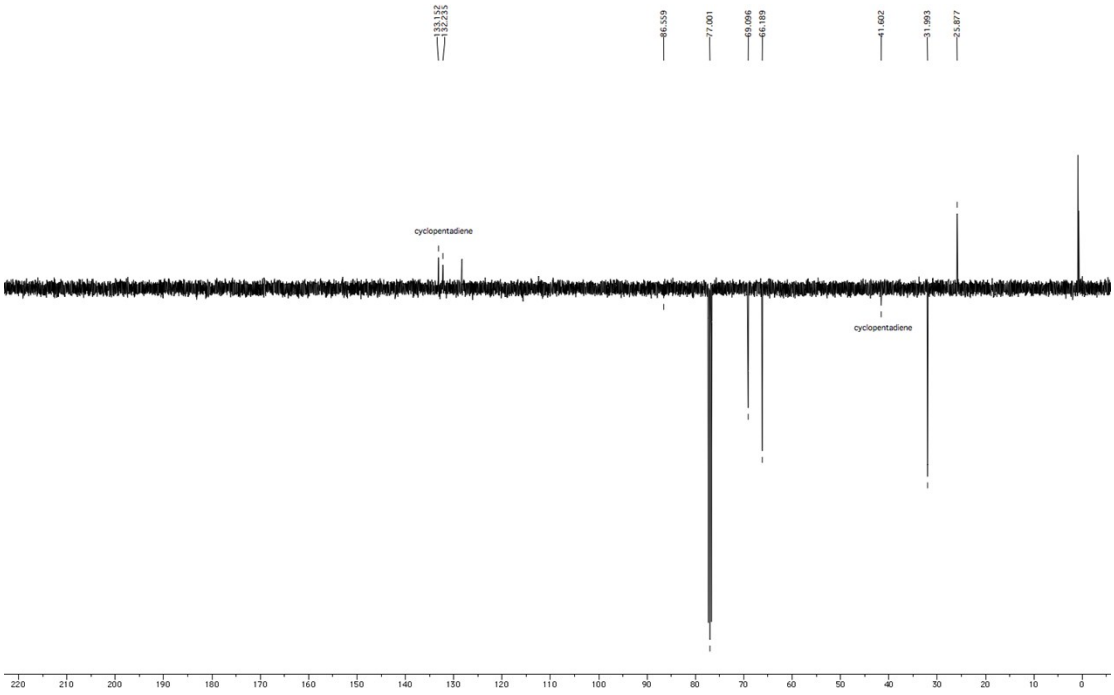
^{13}C NMR (DEPTQ) spectrum of FVP product from **6** containing alkyne **18**



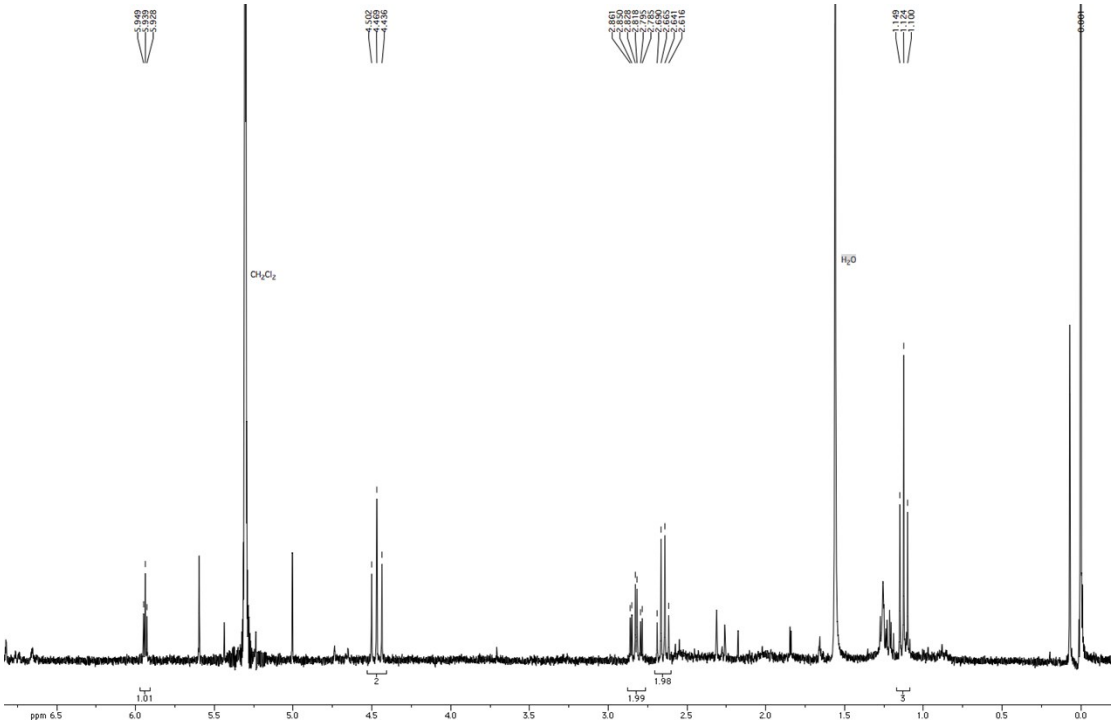
^{1}H NMR spectrum of FVP product from **12** containing alkyne **19**



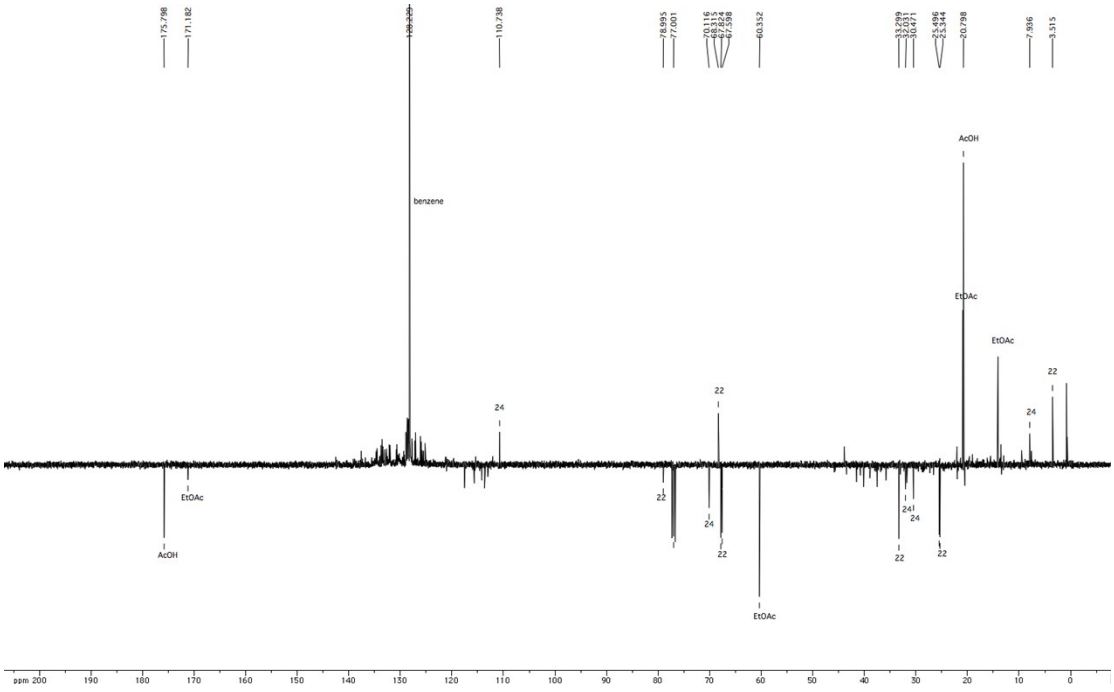
^{13}C NMR (DEPTQ) spectrum of FVP product from **12** containing alkyne **19**



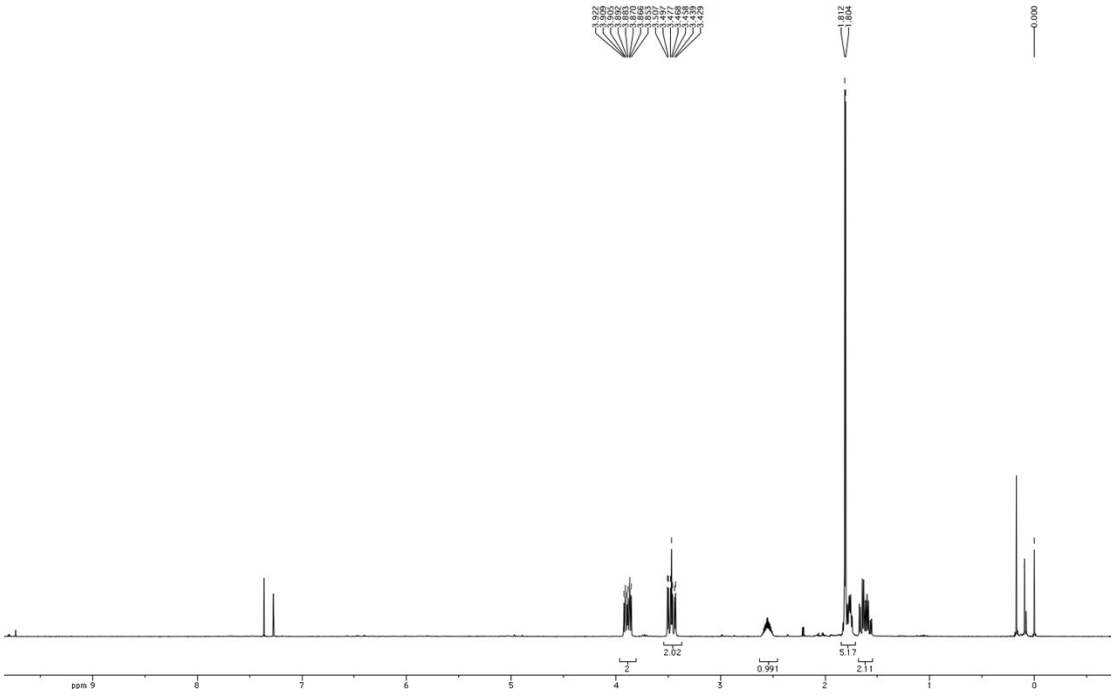
^{1}H NMR spectrum of FVP product from **7** containing compound **24** (after prep. TLC)



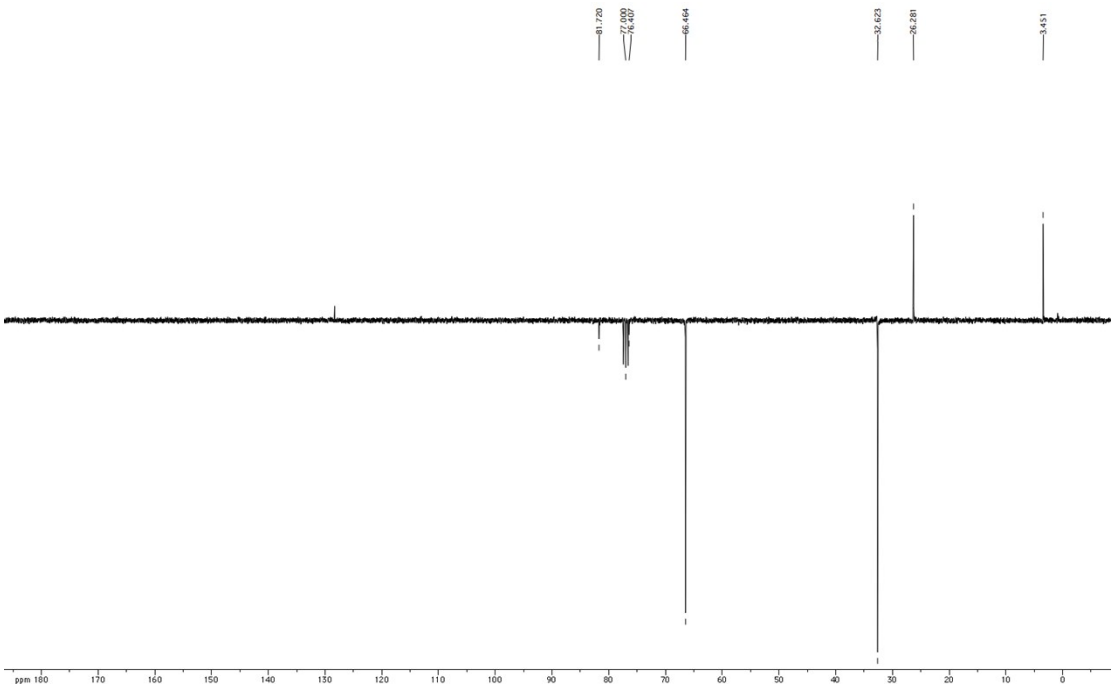
^{13}C NMR (DEPTQ) spectrum of FVP product from **7** containing compounds **22** and **24**



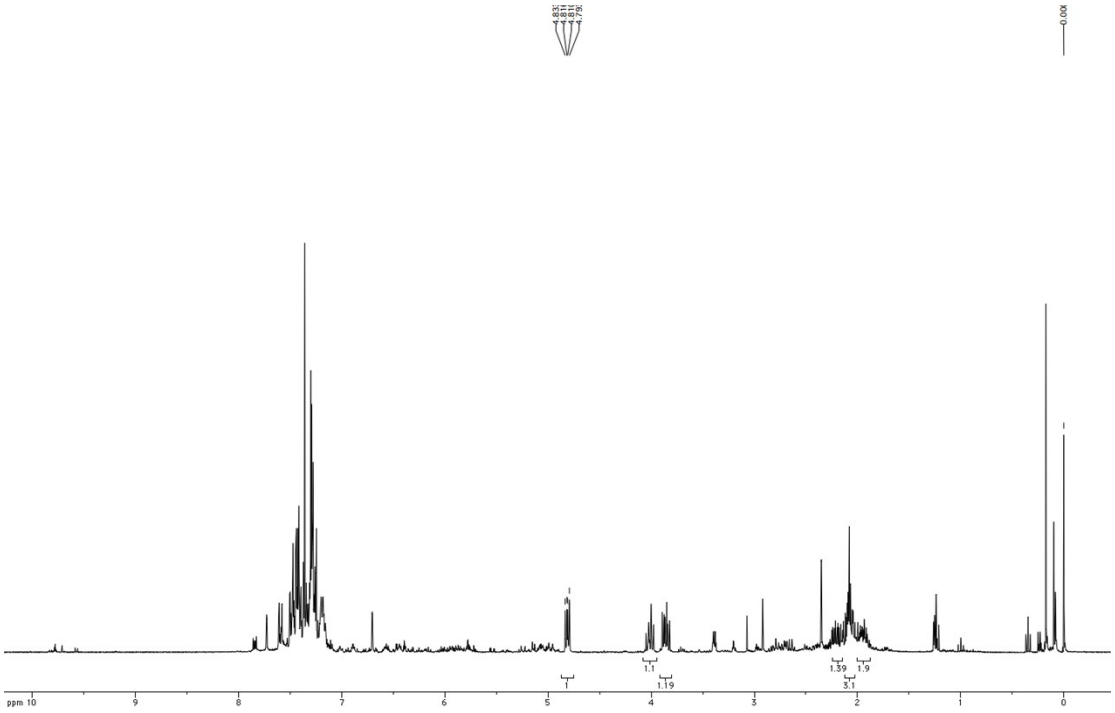
^{1}H NMR spectrum of FVP product from **13** containing alkyne **25**



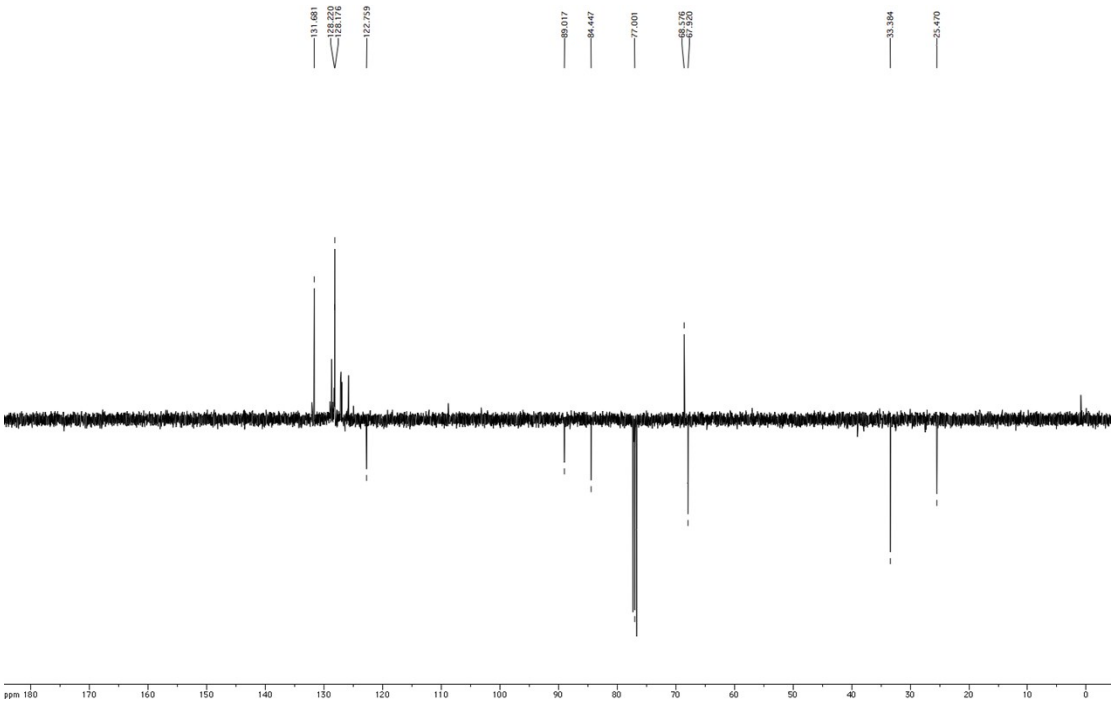
^{13}C NMR (DEPTQ) spectrum of FVP product from **13** containing alkyne **25**



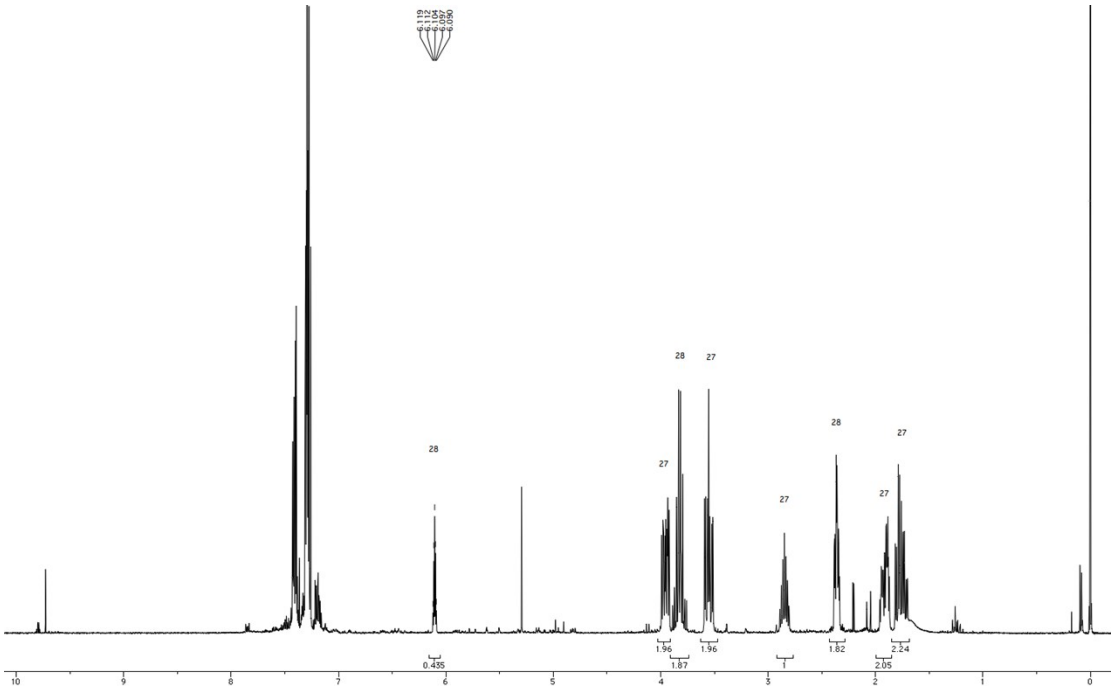
^{1}H NMR spectrum of FVP product from **8** containing alkyne **26**



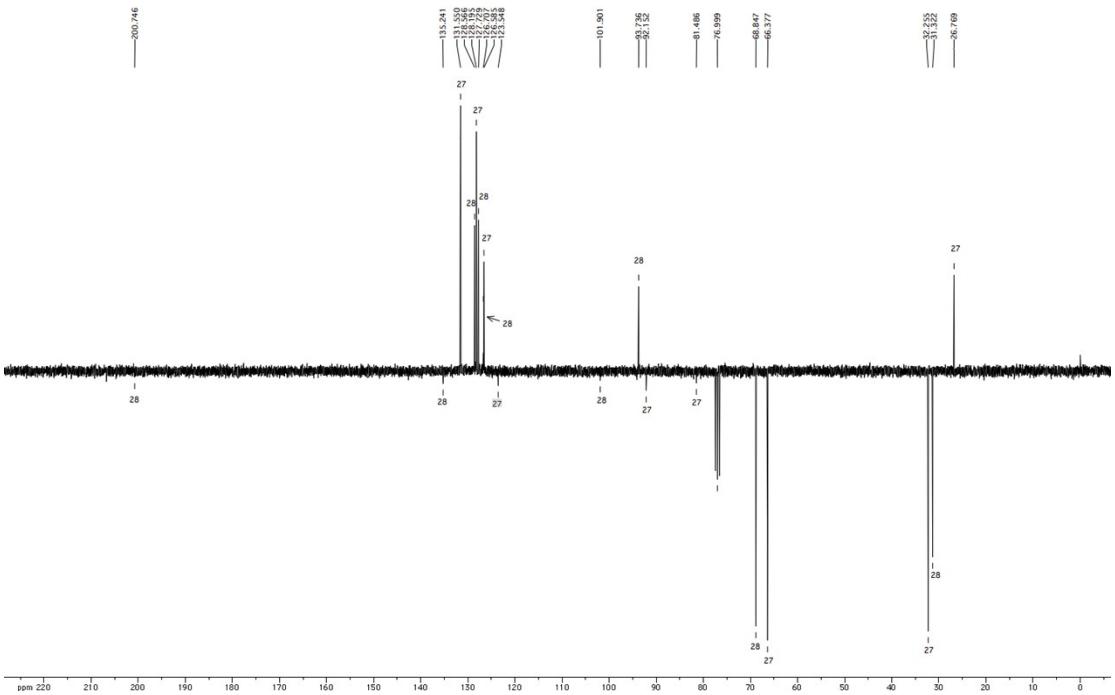
^{13}C NMR (DEPTQ) spectrum of FVP product from **8** containing alkyne **26**



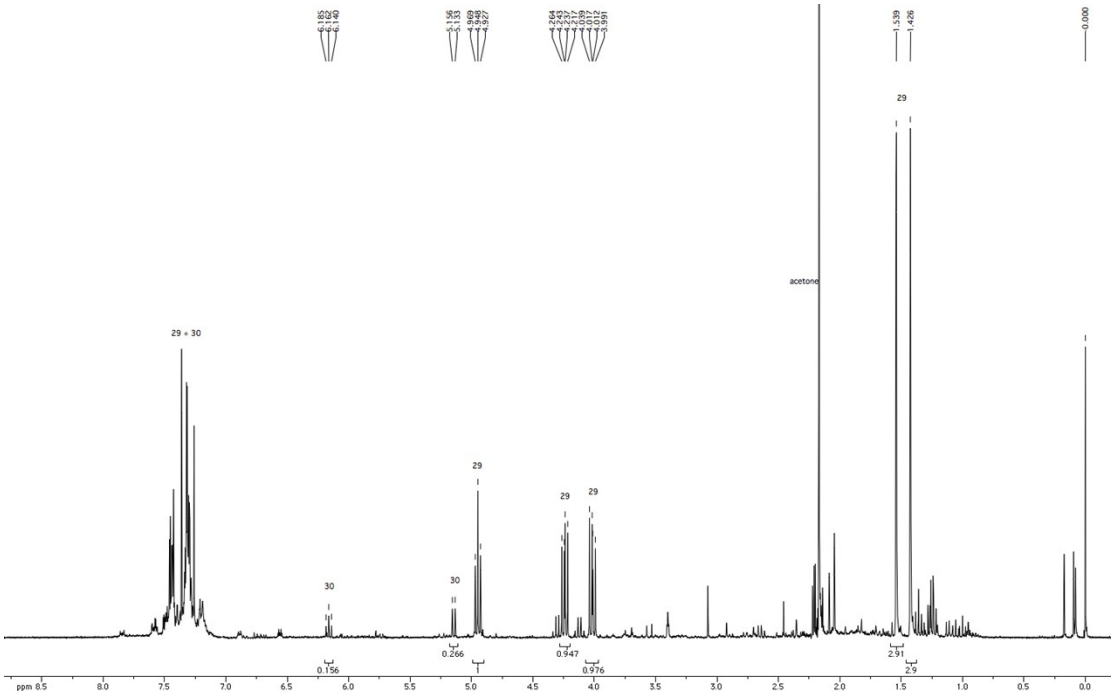
^{1}H NMR spectrum of FVP product from **14** containing alkyne **27** and allene **28**



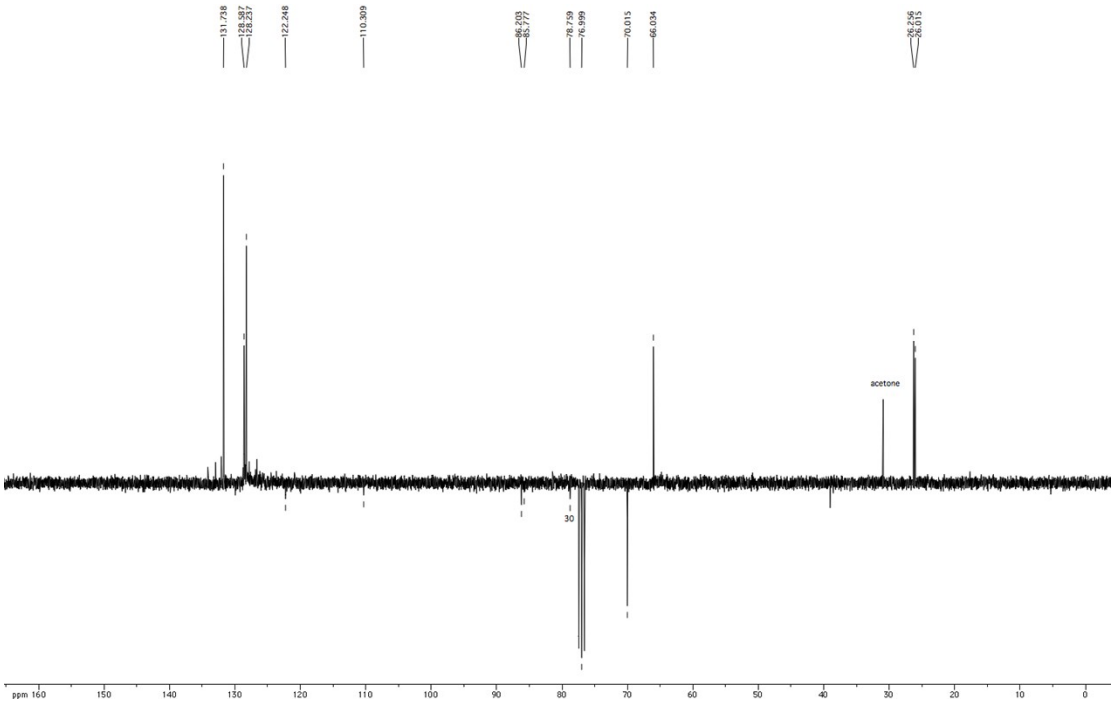
^{13}C NMR (DEPTQ) spectrum of FVP product from **14** containing alkyne **27** and allene **28**



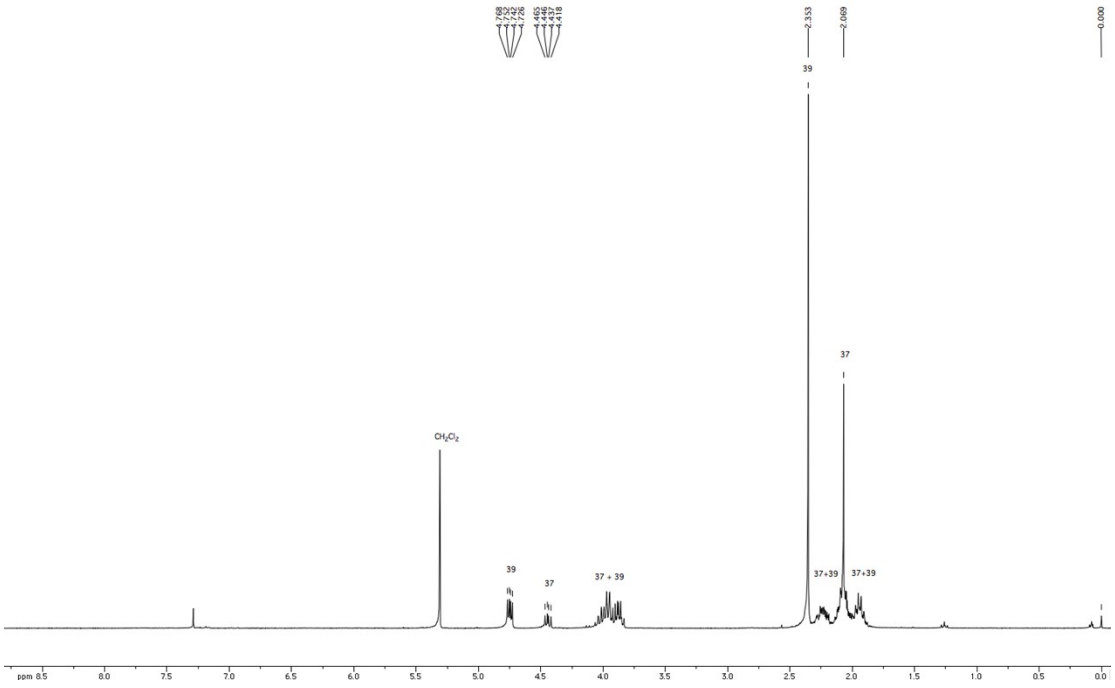
^{1}H NMR spectrum of FVP product from **16** containing alkyne **29** and oxete **30**



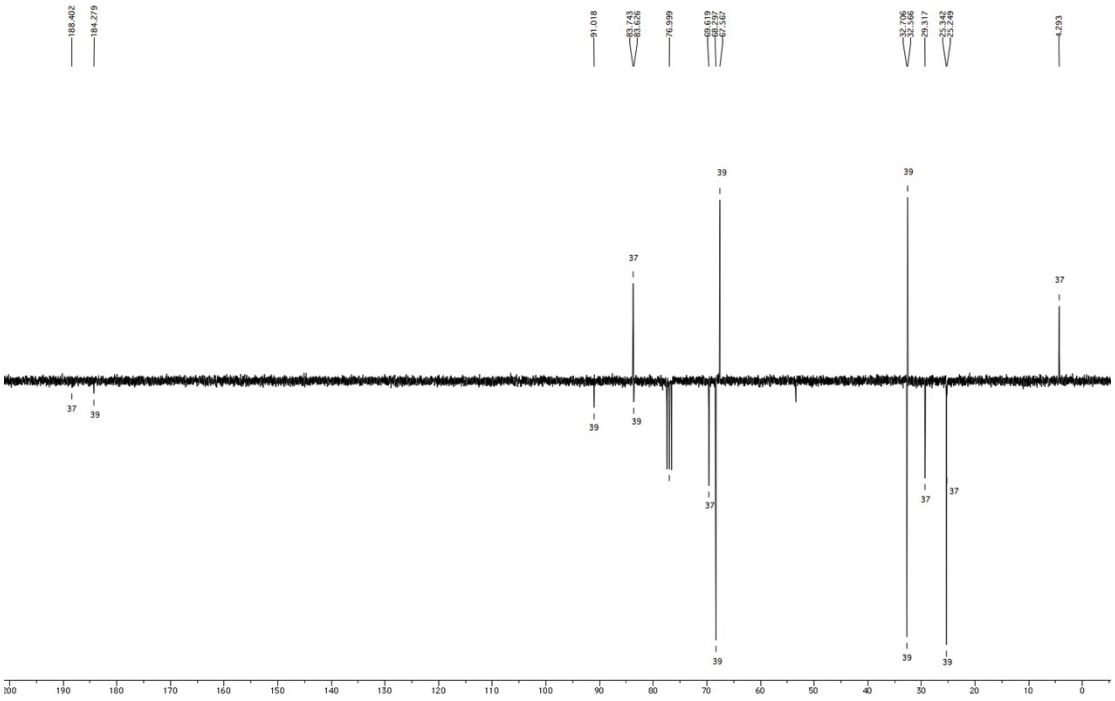
^{13}C NMR (DEPTQ) spectrum of FVP product from **16** containing alkyne **29** and oxete **30**



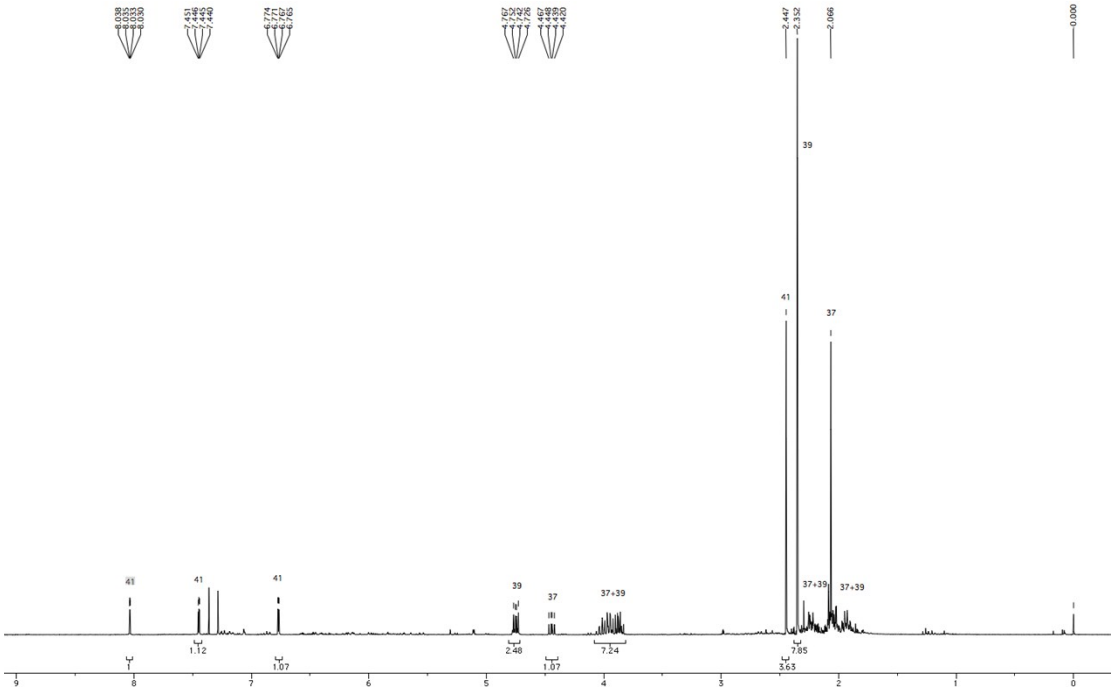
^{1}H NMR spectrum of 500 °C FVP product from **9** containing alkynes **37** and **39**



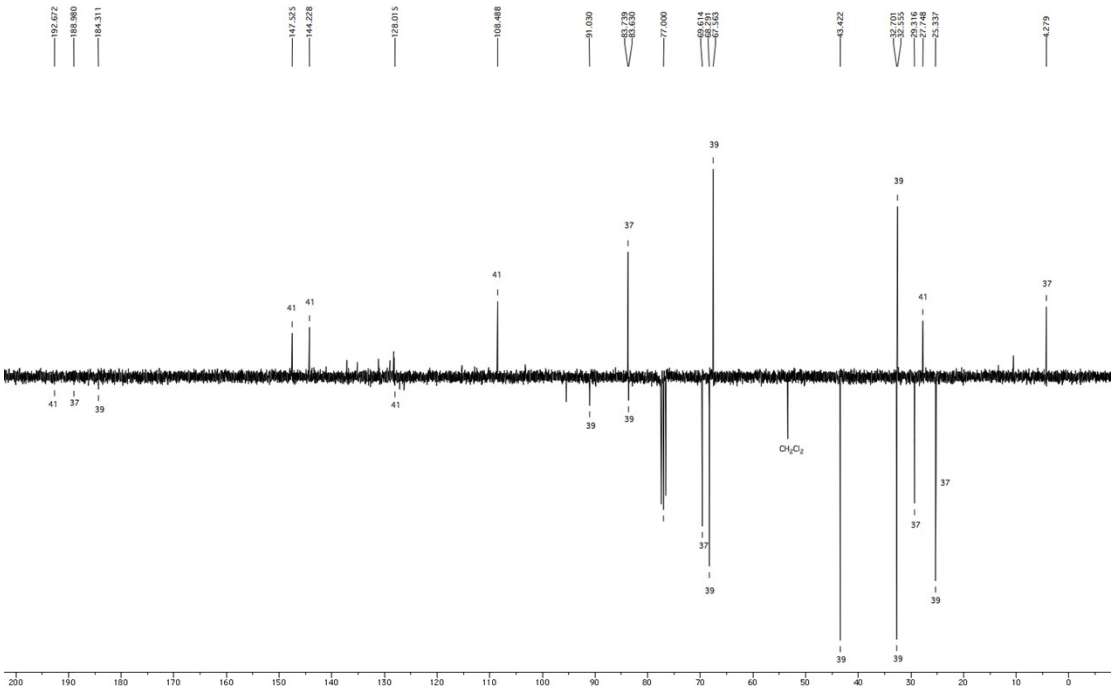
^{13}C NMR (DEPTQ) spectrum of 500 °C FVP product from **9** containing alkynes **37** and **39**



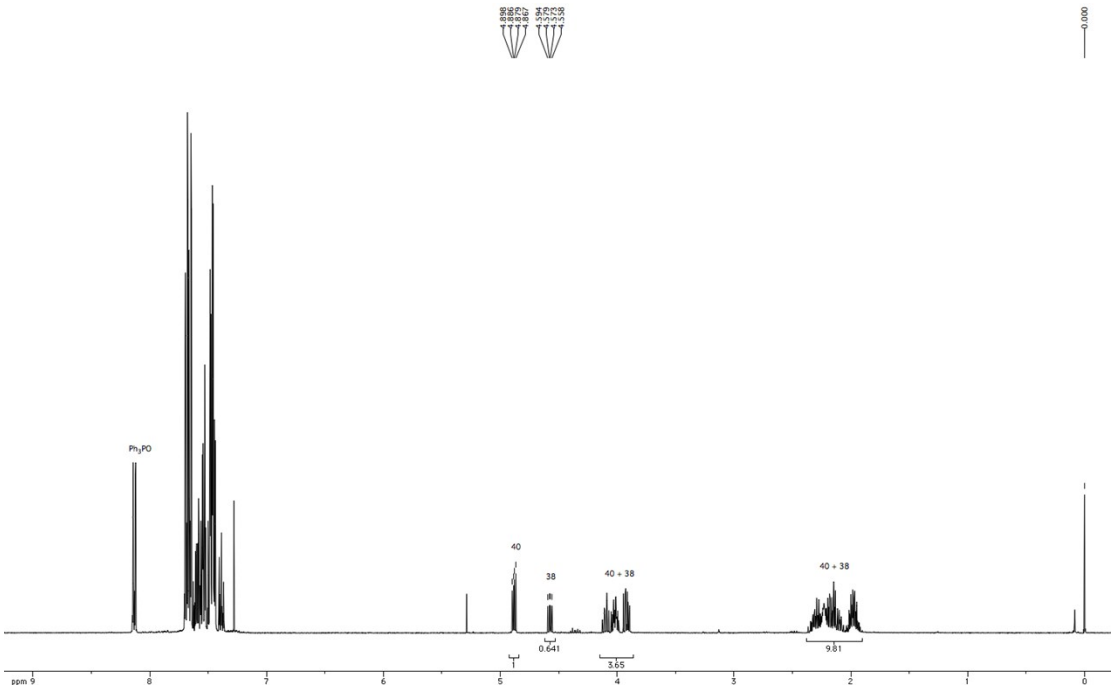
^{1}H NMR spectrum of 700 °C FVP product from **9** containing **37**, **39** and **41**



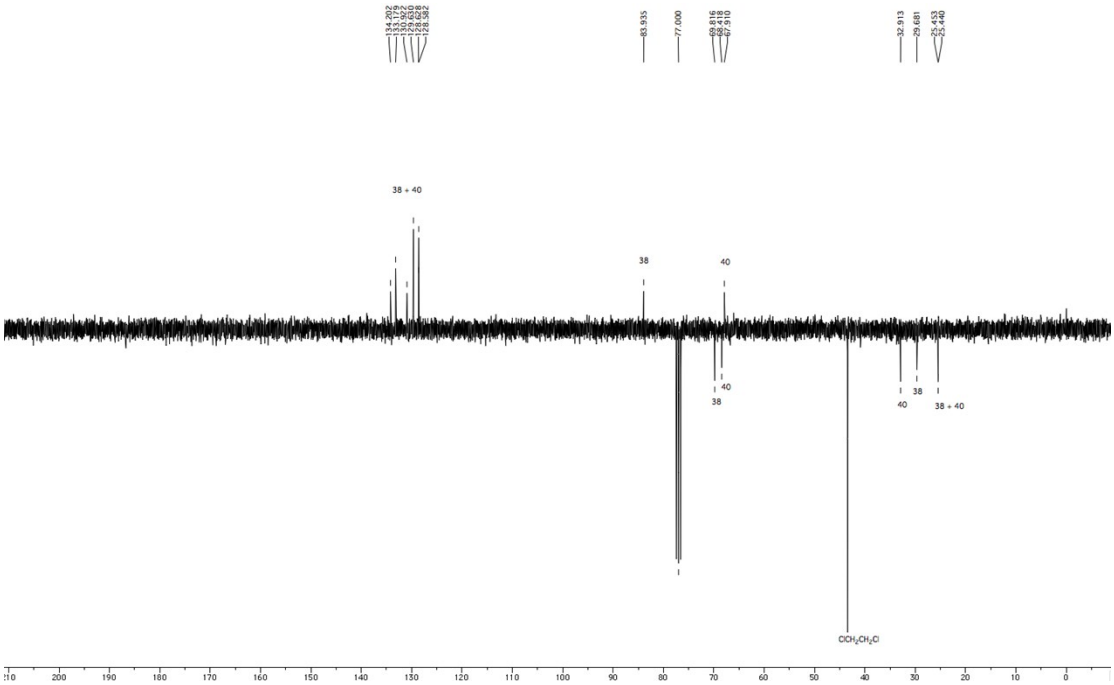
^{13}C NMR (DEPTQ) spectrum of 700 °C FVP product from **9** containing **37**, **39** and **41**



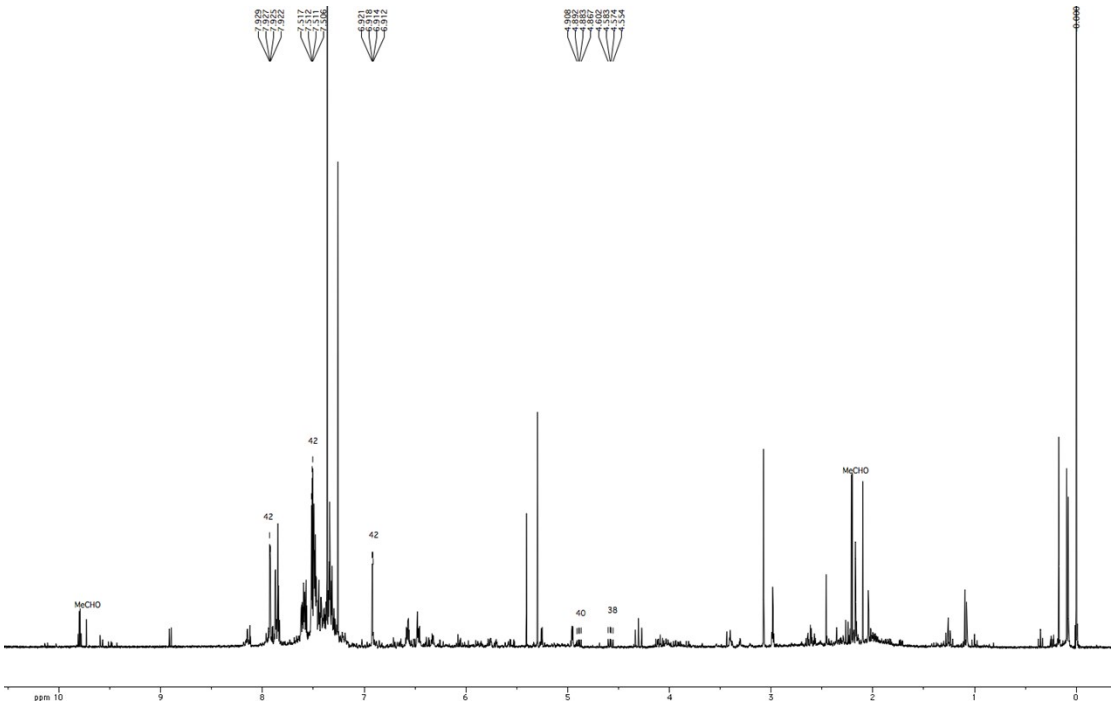
^{1}H NMR spectrum of 500 °C FVP product from **10** containing alkynes **38** and **40**



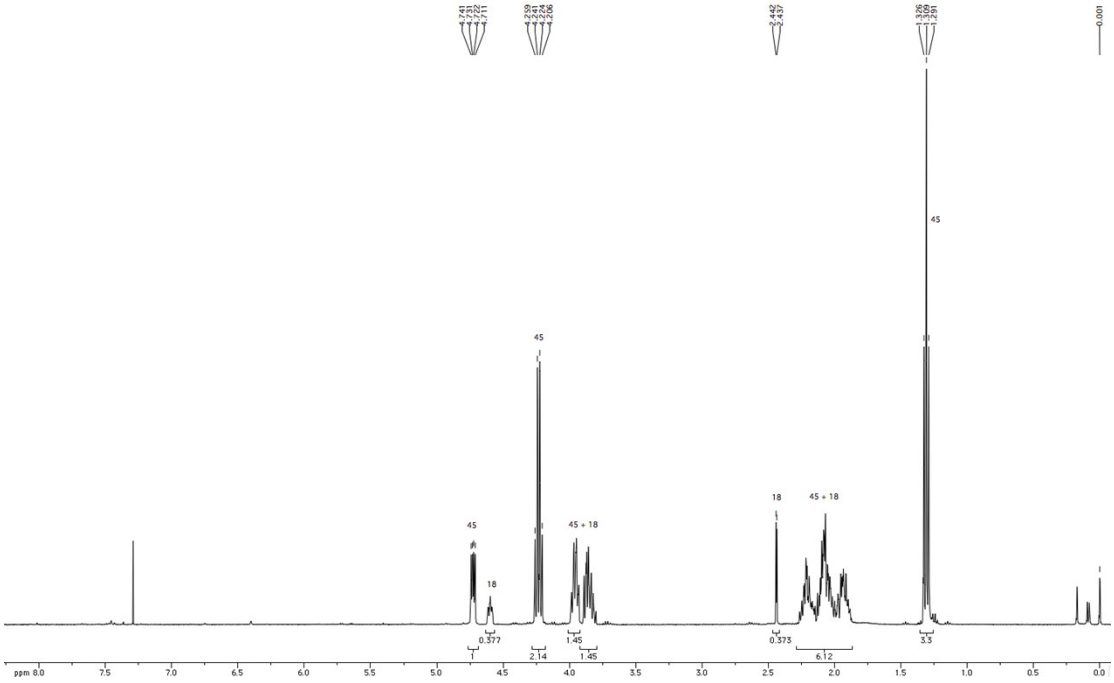
^{13}C NMR (DEPTQ) spectrum of 500 °C FVP product from **10** containing alkynes **38** and **40**



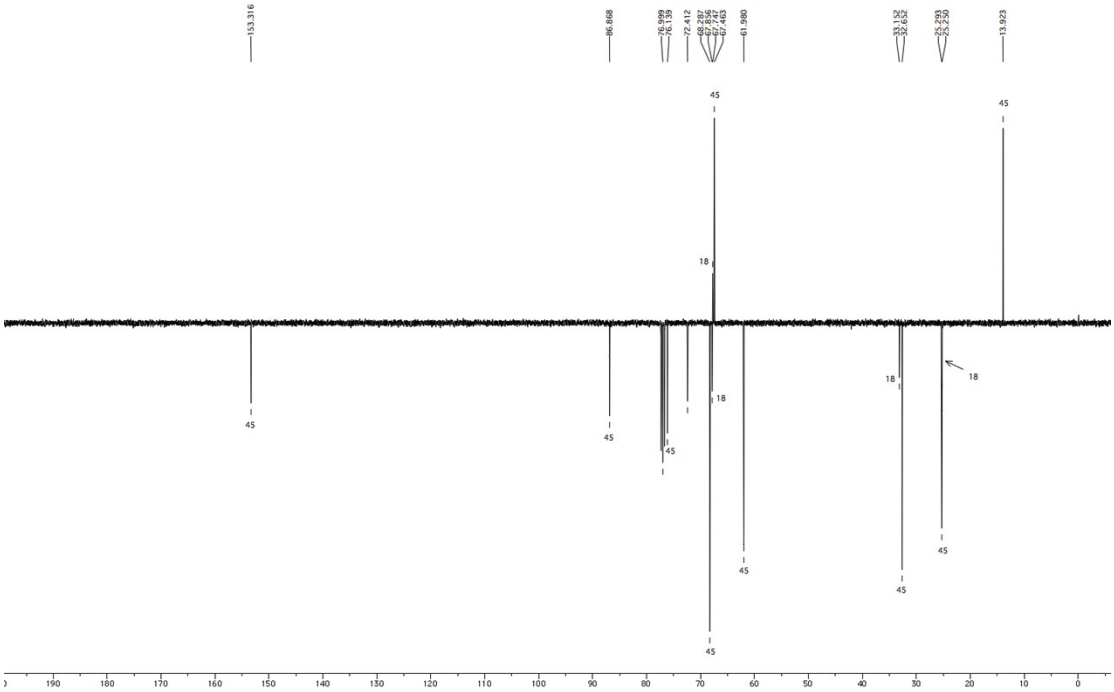
^{1}H NMR spectrum of 700 °C FVP product from **10** containing **38**, **40** and **42**



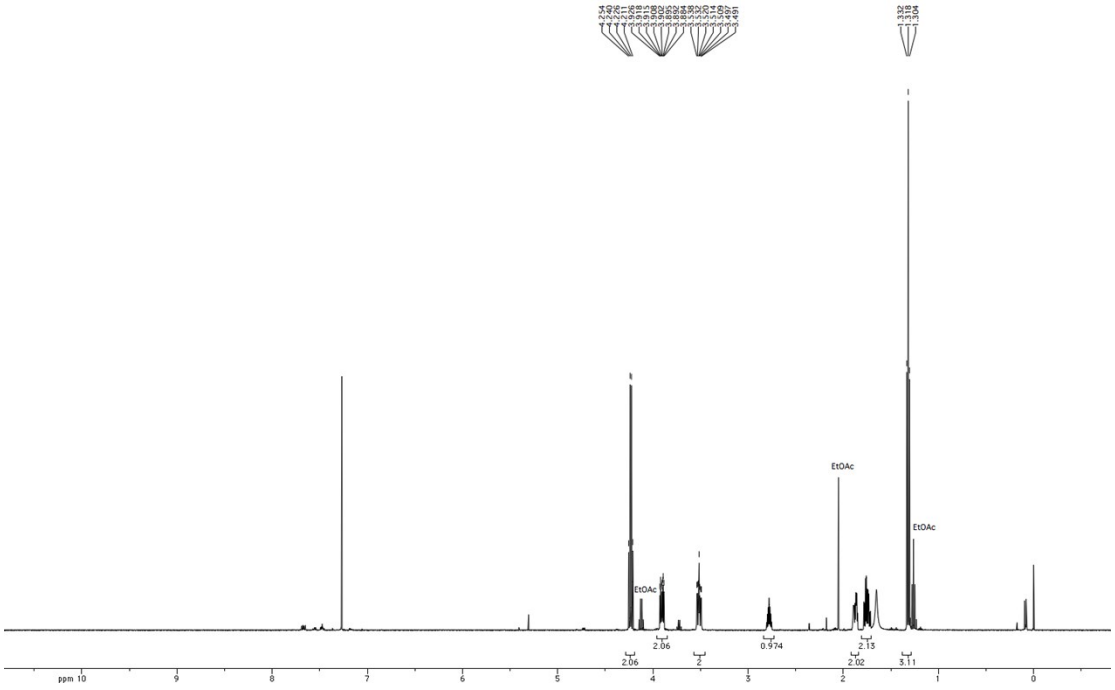
^{1}H NMR spectrum of FVP product from **11** containing alkynes **45** and **18**



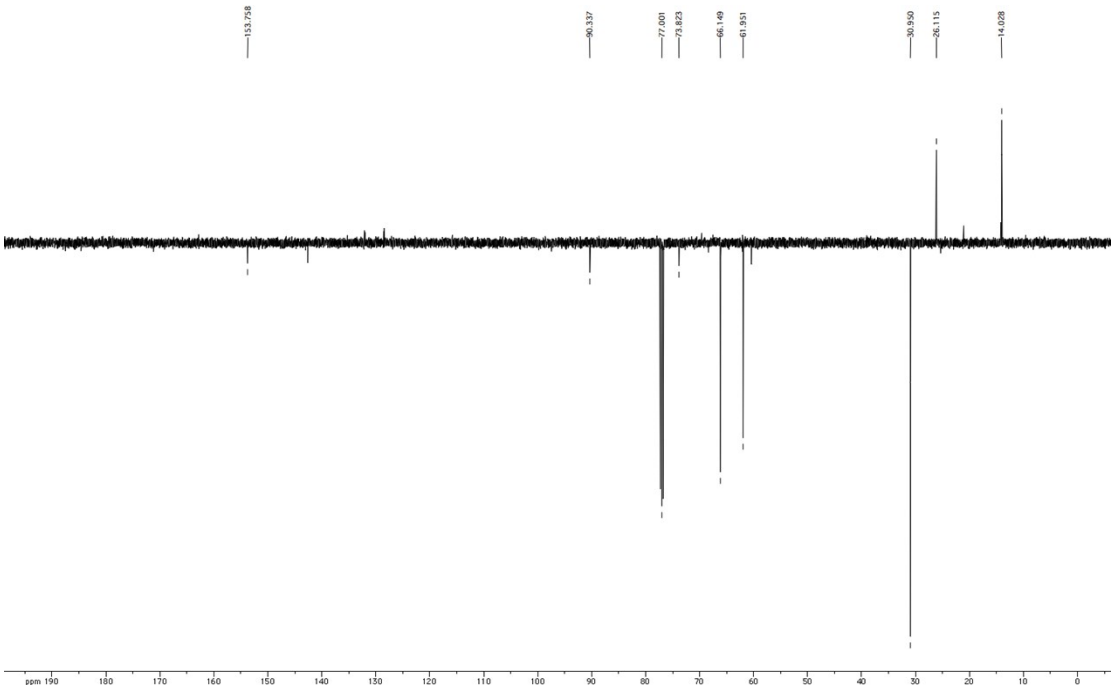
^{13}C NMR (DEPTQ) spectrum of FVP product from **11** containing alkynes **45** and **18**



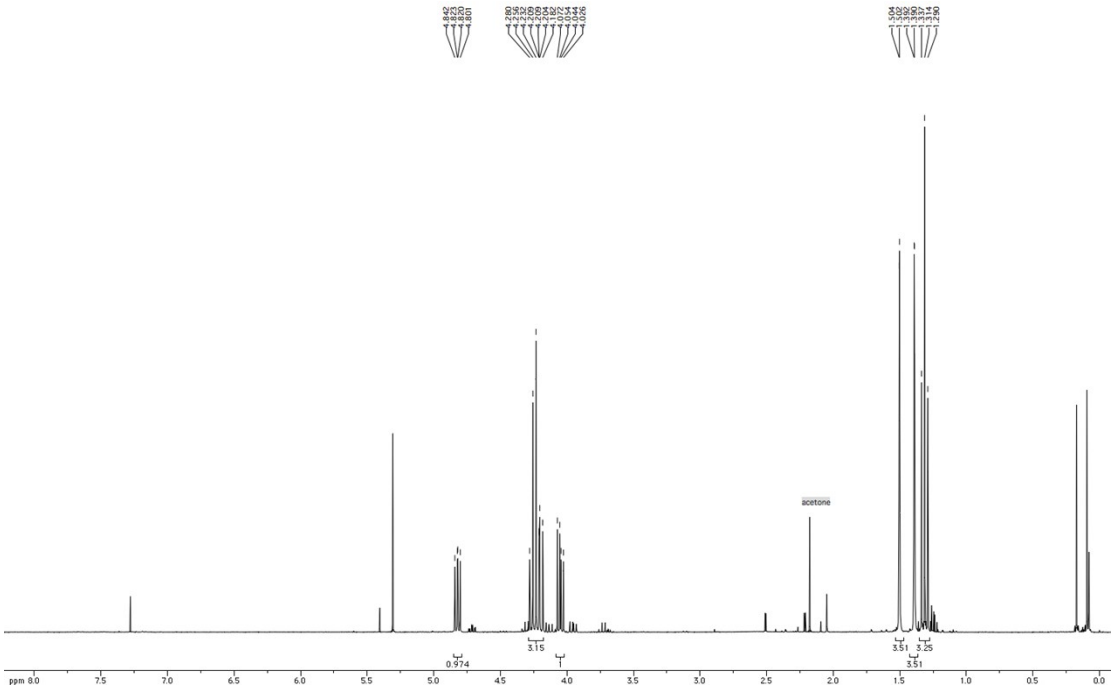
^{1}H NMR spectrum of FVP product from **15** containing alkyne **46**



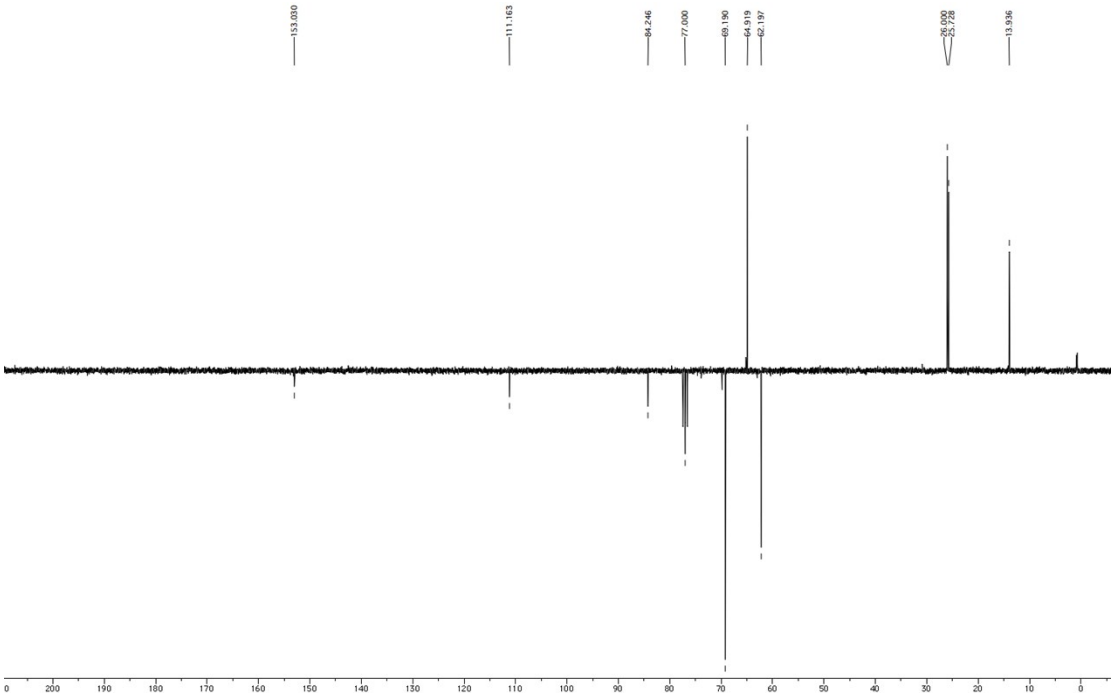
^{13}C NMR (DEPTQ) spectrum of FVP product from **15** containing alkyne **46**



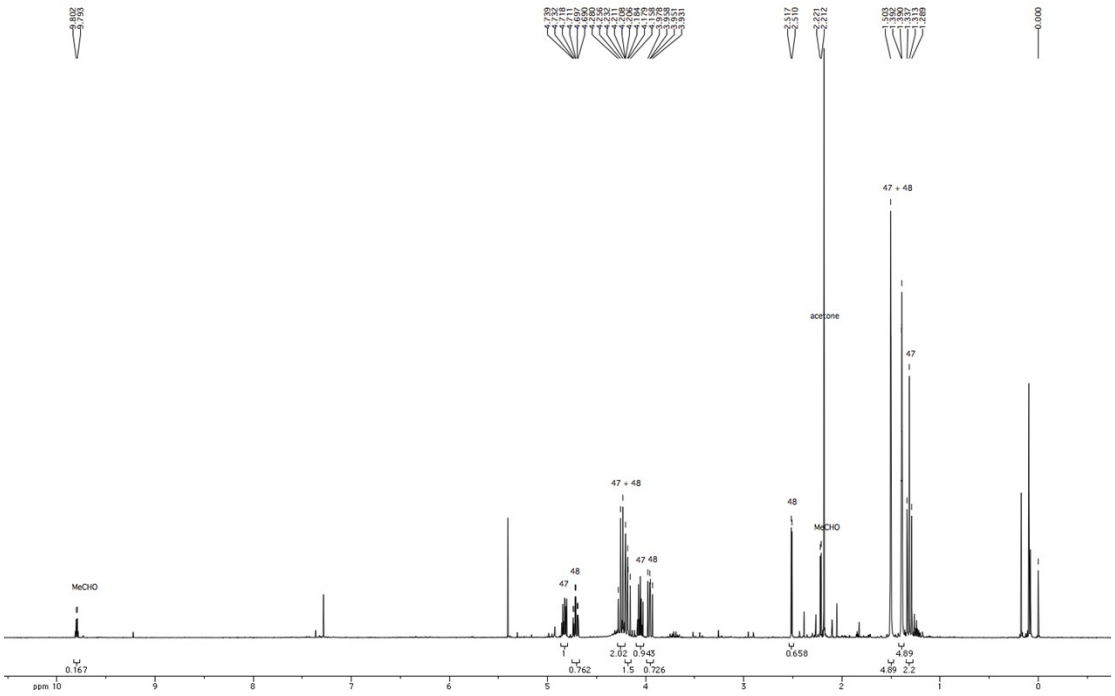
^{1}H NMR spectrum of 600 °C FVP product from **17** containing mainly alkyne **47**



^{13}C NMR (DEPTQ) spectrum of 600 °C FVP product from **17** containing mainly alkyne **47**



^{1}H NMR spectrum of 650 °C FVP product from **17** containing alkynes **47** and **48**



^{13}C NMR (DEPTQ) spectrum of 650 °C FVP product from **17** containing alkynes **47** and **48**