Assignment of structures is a central problem which NMR is well suited to address. Explains how both $^{13}$C NMR spectra and low and high resolution proton NMR spectra can be used to help work out the structures of organic compounds.

- $^{13}$C NMR Background
  - Carbon-13 NMR
- Interpreting C-13 NMR Spectra
- Symmetry in NMR
- $^{13}$C NMR and Geometry
- $^{13}$C NMR and Electronics
- More About Electronics
- Proton NMR Background
- Chemical Shift in $^1$H NMR
- Low Resolution Proton NMR Spectra
- High Resolution Proton NMR Spectra
- Integration in Proton NMR
- Multiplicity
- More About Multiplicity
- Determine Structure with Combined Spectra
- More Practice with NMR Spectroscopy

Chapter 5: Structure Determination II: Nuclear Magnetic Resonance
- Section 5.1: The origin of the NMR signal
- Section 5.2: Chemical equivalence
- Section 5.3: The NMR experiment
- Section 5.4: The basis for differences in chemical shift
- Section 5.5: Spin-spin coupling
- Section 5.6: $^{13}$C-NMR spectroscopy
- Section 5.7: Determining unknown structures
- Section 5.8: NMR of phosphorylated molecules
- Section 5.P: Problems for Chapter 5

NMR Appendix. Useful Charts for NMR identification