6.1: Chapter Objectives and Preview of C-13 Nuclear Magnetic Resonance Spectroscopy

> **Learning Objectives**
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> After completing this chapter, you should be able to
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> - fulfill all of the detailed objectives listed under each individual section.
> - solve road-map problems which will require the interpretation of ^{13}C NMR spectra in addition to other spectral data.
> - define, and use in context, the key terms introduced in this chapter.

In the previous chapter, ^{1}H Nuclear Magnetic Resonance (NMR) was discussed. The theory for NMR spectroscopy is the same for all NMR spectroscopy. In the presence of a magnetic field, a sample can absorb electromagnetic radiation, specifically in the radiofrequency (rf) region, based on the function of certain nuclei in the molecule. This chapter will focus on carbon nuclear magnetic spectroscopy (^{13}C NMR) and what type of information you can glean from spectra and how it complements ^{1}H NMR for the determination of a structure of a molecule.

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