7.1: Chapter Objectives and Preview of Correlation NMR Spectroscopy

Chapter Objectives and Preview Correlation NMR Spectroscopy; 2-D NMR

> **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 may require the interpretation of 2D NMR spectra in addition to other spectral data.
> - define, and use in context, the key terms introduced in this chapter.

In Section 5 and Section 6, the focus was on one-dimensional (1D) techniques to elucidate structures of organic molecules. Complex molecules like polymers or biomolecules can be hard to elucidate solely with proton and carbon NMR, which while powerful techniques don't quite solve the entire picture. This is where correlation NMR spectroscopy can be used and many of these experiments are two-dimensional (2D) techniques. While there are many correlation NMR spectroscopy experiments that can be run, this chapter will focus on the more common ones to be used.