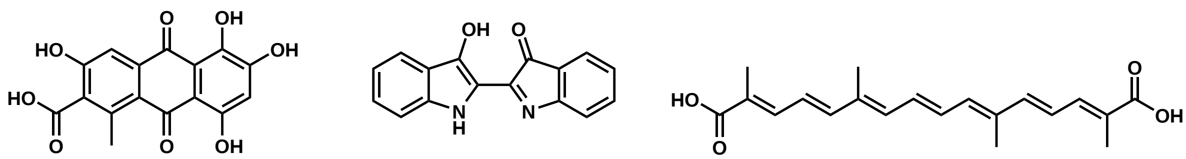
3.1: Chapter Objectives and Preview of Ultraviolet Spectroscopy

Learning Objectives

After completing this chapter, you should be able to

- fulfill all of the detailed objectives listed under each individual section.
- analyze problems which may require the interpretation of ultraviolet spectroscopy.
- define, and use in context, the key terms introduced in this chapter.

Many of the pigments that are responsible for the beautiful colors in nature are conjugated compounds. Many of the early organic dyes used for pigmenting cloth and art are conjugated compounds. These included the crimson pigment - kermesic acid, the blue dye - indigo, and the yellow saffron pigment - crocetin. A common feature of all these colored compounds, displayed below, is a system of extensive pi bonds. In this chapter, we will look at how ultraviolet (UV) spectroscopy is a technique that is only applicable to conjugated compounds giving information on the nature of the conjugated pi electron system.



Kermesic Acid **Indigo** **Crocetin**

3.1: Chapter Objectives and Preview of Ultraviolet Spectroscopy is shared under a not declared license and was authored, remixed, and/or curated by Lauren Reutenauer.