

Chem 431 Chapter 6 Study Questions (Pages to read: 132-159)

- What do we mean by the term “electromagnetic radiation?” What are the main components of a wave? What are the different regions of the electromagnetic spectrum, and what types of transitions are being probed with energies in each of these regions?
- How does Young’s double slit experiment demonstrate the diffraction of radiation?
- How do we define refraction, reflection, polarization, scattering, absorption, emission, fluorescence, and phosphorescence of radiation?
- What is the photoelectric effect and how is it demonstrated?
- Why do atomic spectra differ so greatly from molecular spectra?
- What is black-body radiation?
- What is the Beer-Lambert law and how is it used for quantitative analysis?

Chapter-end problems: 3,5,6,7,8,9,10,12,14,15,18,19