

Ocean Optics Spectrometers

The department has two Ocean Optics Spectrometers available for use either for classroom demonstrations or for student projects in room 330. The spectrometers' wavelength coverage is about 350-1000 nm, and their spectral resolution better than 1 nm. These spectrometers come with software for either absolute (e.g., emission) or comparison (e.g., transmission or reflectance) spectra. With a fiber optic to restrict the light source, and a USB connection to a PC computer, these are relatively easy to use, and can easily demonstrate blackbody spectra and spectral lines of elemental light sources. Transmission and reflectance are more difficult, but reasonably good information can be obtained by careful work. The example below is a reflectance spectrum of a rock powder, from an upper-division undergraduate using just a tungsten-filament bulb as a light source. Contact Oct { I wgtlgtk(621-4: 28, o ct { B r r 0 tk qpcQf w+\"vq\"uej gf wrg\"wug0

