Atlas of Reflectance Spectra of Terrestrial, Lunar and Meteoritic Powders and Frosts from 92 to 1800 nm Jeffrey Wagner, Bruce Hapke and Eddie Wells Dept. of Geology & Planetary Science, Univ. of Pittsburgh

The reflectance spectra of powdered samples of selected minerals, meteorites, lunar materials and frosts are presented as an aid in the interpretation of present and future remote sensing data of solar system objects. Spectra obtained in separate wavelength regions have been combined and normalized, yielding coverage from 92 to 1800 nm. Spectral features include relfectance maxima in the far UV region produced by valence-conduction interband transitions, and reflectance minima in the near UV, visible and near IR regions, produced by charge transfer and crystal field transitions. Specific maxima and minima are diagnostic of mineral type and compostion; additionally, the minerals present in mixtures such as meteorites and lunar samples can be determined.