Spectral Database building and Comparison Studies through Rock and Mineral data acquisition on the SOC-100 reflectometer Bethany Choate, Imaging Science

The SOC-100 reflectometer, despite the possibility of measuring previously unrecorded data, is limited in its acquisition. Size, texture, and heat absorption properties are major restrictions on samples. The SOC-100 has been measuring hemispherical directional reflectance of, but is not completely limited to, rocks, minerals, and metals. Results of these measurements are being used to simultaneously characterize the instrument, provide a comparison to the SOC-400 reflectometer, and build an extensive database of rock and mineral spectra.