reflection electron energy loss spectroscopy (REELS)

Any technique in which a specimen is bombarded with a focused low energy $(E_0 < 10 \, \mathrm{eV})$ electron beam and the energy distribution of the reflected electrons is measured. This energy distribution contains features corresponding to discrete losses of energy of the reflected electrons due to excitation of vibrational and plasmon states and provides information on the type and geometric structure of compounds at the surface of the specimen.

Source:

PAC, 1983, 55, 2023 (Nomenclature, symbols and units recommended for in situ microanalysis (Provisional)) on page 2025