

## Rutherford backscattering (RBS)

**Synonym:** backscattering spectroscopy

Any technique using high energy particles directed toward a sample, in which the bombarding particles are detected and recorded as function of energy and/or angle. The technique is mostly used for determining depth distributions of elements based on the energy of the backscattered particle. In general,  $\text{He}^+$  or  $\text{H}^+$  particles are used at energies in the order of 100 keV to some MeV. Also referred to as backscattering spectrometry (BSS).

**Source:**

PAC, 1979, 51, 2243 (*General aspects of trace analytical methods - IV. Recommendations for nomenclature, standard procedures and reporting of experimental data for surface analysis techniques*) on page 2246