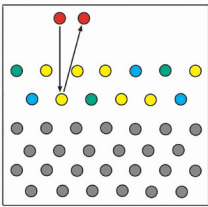
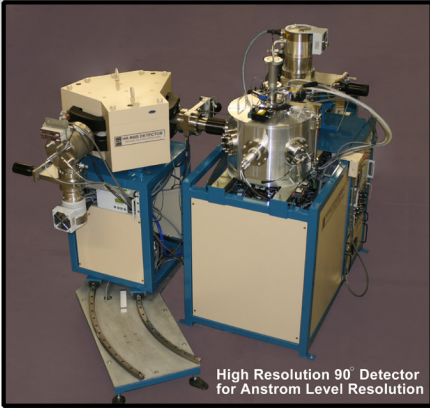


Analysis

MeV BEAM SURFACE ANALYSIS



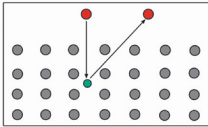
RUTHERFORD BACKSCATTERING (RBS)

Measurement of elemental composition and thin film thickness

Sensitivity from a few atomic percent for light elements to 10 ppm for heavy elements

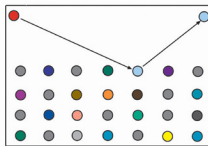
- Absolute stoichiometric ratios
- Depth profiling to 3 microns
- No standards required

High Resolution RBS Detector System provides Angstrom level thin film resolution



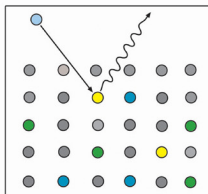
CHANNELING

Measurement of structure, orientation, purity and damage in crystalline materials



ELASTIC RECOIL DETECTION (ERD)

Measurement of depth profiles of light elements in solids
(¹H and ²H with He⁺ beam)

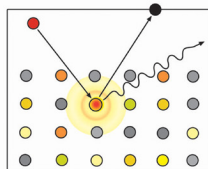


PARTICLE INDUCED X-RAY EMISSION (PIXE)

Ideal analysis tool for trace elemental analysis, very low background and high sensitivity (0.1 to 10 µg/gram in small samples)

µPIXE & µRBS

Precise spatial and elemental analysis



NUCLEAR REACTION ANALYSIS (NRA)

Enhanced sensitivity to selected elements using nuclear reactions, e.g.

¹⁵N + H at 6.385 MeV for hydrogen profiling

⁴He + ¹⁶O at 3.04 MeV for increased sensitivity to oxygen