

Energy Dispersive Spectroscopy (EDS)

Both high-resolution electron microscopes (SEMs) are equipped with liquid nitrogen-cooled sapphire Si(Li) EDS detectors offering highest peak to background ratio and outstanding resolution.

The following analysis can be performed by EDS:

- Detection of chemical compositions beginning with Beryllium
- Determination of phase compositions
- EDS point- & area-analysis
- Line scans – element distribution along a line
- Mapping – elements distribution in defined area
- Quantitative analysis
- Particle phase analysis

Examples:

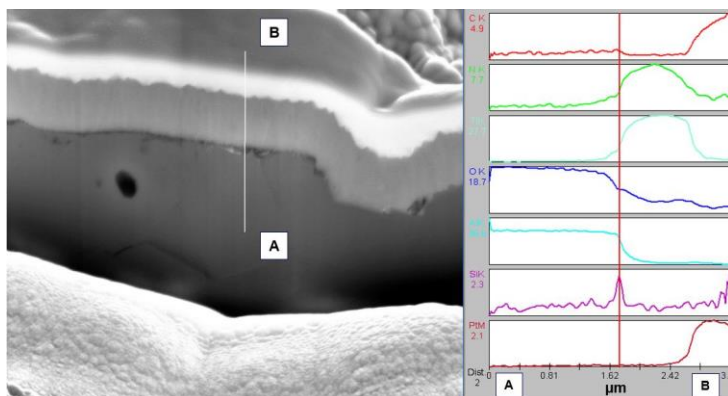


Figure 1: Example of EDS-linescan through FIB-prepared cross-cut

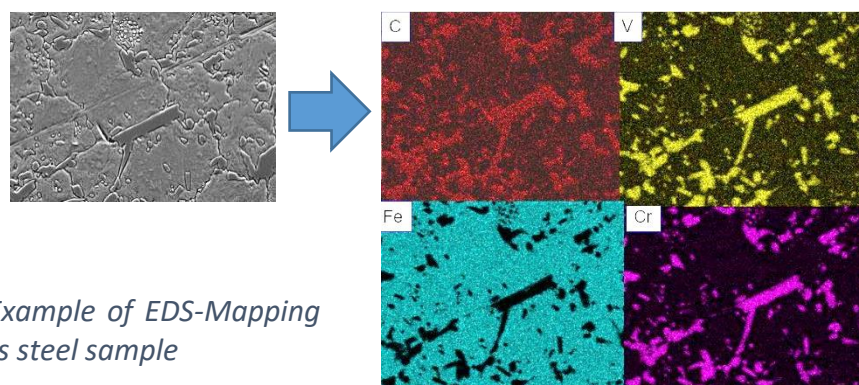


Figure 2: Example of EDS-Mapping on stainless steel sample