



Surface Investigation

Surface morphology or analytical imaging, which is an advanced form of high spatial resolution imaging, uses sophisticated microscopes to produce images of products, samples and objects that cannot be seen with the naked eye. These images originate from the exposed surface of the sample or product. Surface structures & defects can be observed.

Electron microscopes produce images of a sample by scanning the surface with a focused beam of electrons. The electrons interact with atoms in the sample, produce various different signals/type of electrons that reflect from the sample surface. The different electrons reflecting from the sample surface contain different information about the surface topography and composition of the sample. The electron beam is scanned in a raster scan pattern, and the position of the beam is combined with the detected signal to produce an image.