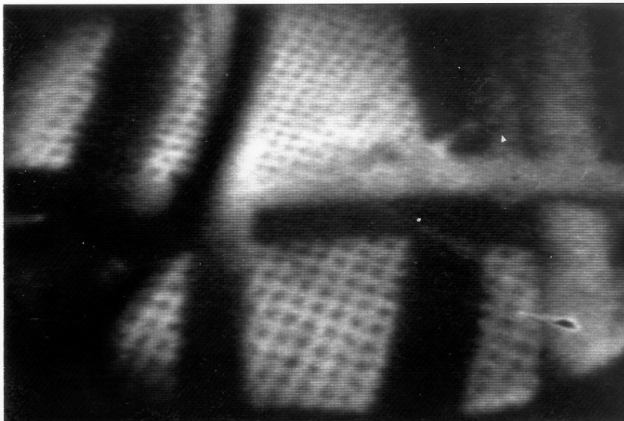


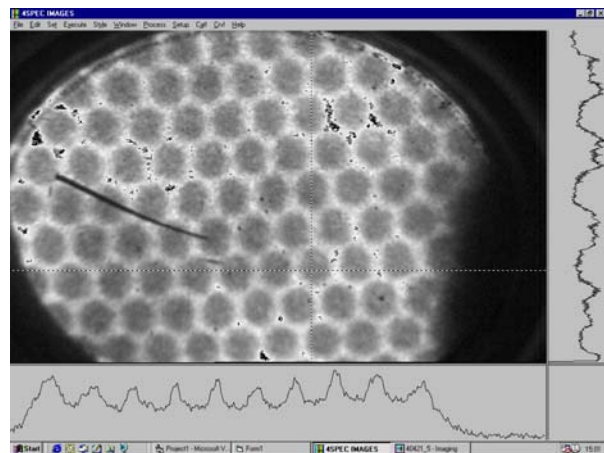
High resolution imaging is a combination of superior focusing properties of the analyzer, lens system and resolution of the imaging detector.

New lens features

- Guaranteed spatial resolution of 0.2 μm .
- Angular acceptance for ARXPS ± 25 deg
- Computer controlled zoom facility
- Lens System magnifications 60x – 600x continuously adjustable
- Continuously adjustable IRIS mechanism for angular acceptance adjustments.



Electron image with an electron gun illuminating a set of two meshes: a stainless steel woven mesh on the top of a copper SEM test mesh with spacing 17 μm and 5 μm etched bars. Sharp contrast between the shadow and the electron illuminated area shows the resolutions below 2 μm demonstrating capabilities of the lens system.



Spatial image with the spectrometer in the spectrum mode. An electron image of a micro-channel plate with 8 μm distance between the hole centers shows the resolutions below 1 μm while focus aperture was open accepting angle of ± 6 degrees during the imaging process.

Imaging Detector System CCDXM

CCDXM is a two-dimensional detector used on a CCD read-out and is used in all ESA imaging spectrometers for high resolution chemical mapping.

The read-out has the TV frame collection speed of 25 frames/sec
Minimum camera resolution is 758x480.

The system can accommodate cameras with resolutions of up to 4k x 4k x 16 bit.