



CATHODOLUMINESCENCE



High spatial resolution cathodoluminescence

System composed of:

- » High resolution scanning electron microscope (Jeol)
- » UV-visible-IR detection in continuous wave (Horiba Jobin Yvon): retractable parabolic mirror, monochromator, CCD camera, photomultiplier for imaging
- » CL-Link module (Horiba Jobin Yvon) developed in collaboration with GEMaC: beam control for profiles and mapping acquisition
- » Liquid helium flow cryostat (Gatan)
- » Electron blanker designed and developed in GEMaC for time-resolved cathodoluminescence, single-channel UV-visible and photon counting device.

Specifications :

- » spectral range in continuous regime CL: 190-1000 nm
- » time resolution in time-resolved CL: 100 ps in the range 190-500 nm
- » sample temperature range: 5K-300K
- » ultimate spatial resolution: 1.2 nm