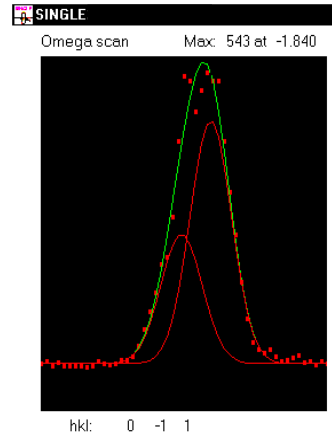


The laboratory is equipped with two single-crystal X-ray diffractometers:

- STOE STADI IV 4-circle diffractometer equipped with Mo source and point detector, operating with the SINGLE software (Angel and Finger, 2011) to perform high-accuracy and high-precision unit-cell parameter determination:

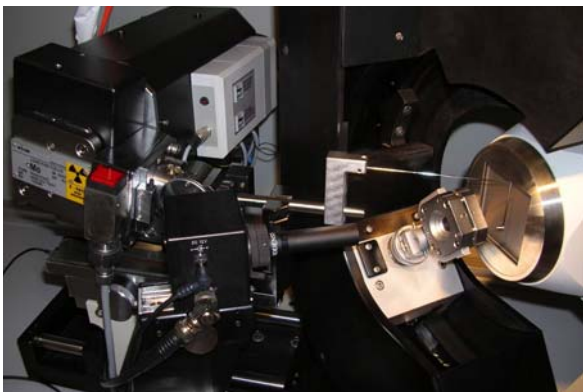


Point detector STOE STADI IV

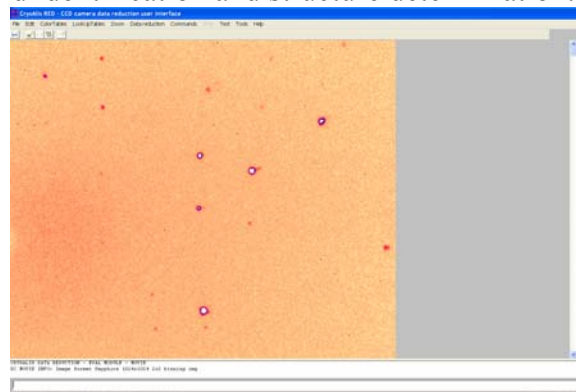


Diffraction peak centered using SINGLE

- STOE STADI IV 4-circle diffractometer equipped with Mo source and area detector CCD detector (Oxford Diffraction) suitable for rapid identification and structure determination:



CCD area detector STOE STADI IV

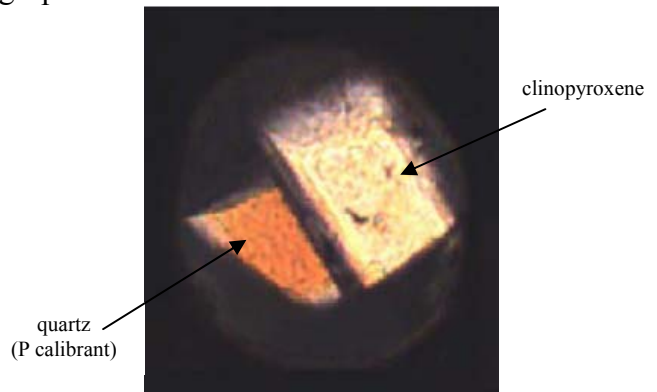


Diffraction pattern collected using a CCD detector

Three diamond anvil cells (DAC, ETH type) are available to perform *in-situ* high pressure measurements to reproduce in the laboratory the high-pressure conditions of the Earth's mantle:



Diamond anvil cell (ETH type)



View through the diamonds into the DAC