

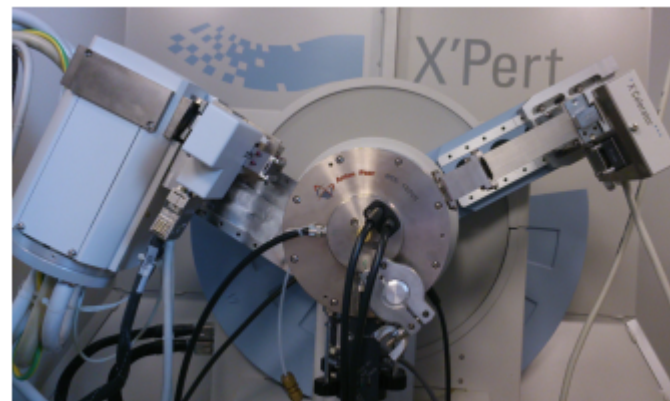
PANALYTICAL X'pert Pro MPD diffractometer

Cu anode (8,1 keV)

This instrument allows multiple configurations. It is essentially dedicated to the qualitative analysis of polycrystalline samples as powders (phase identification) under conventional conditions, controlled atmosphere or controlled temperature from -190 to 1200°C using Anton Paar chambers. It also allows the determination of unit cell parameters, refinement of structures and quantitative analysis by Rietveld method.

Specificities:

- Sealed tube with copper anode.
- Two-circle goniometer θ - θ .
- X'Celerator rapid linear detector.
- Rear monochromator.
- Measurement in Bragg-Brentano geometry for conventional analyzes in flat sample holder.
- Silicon (zero background) sample holder for the analysis of small quantities in reflection.
- Transmission measurements (Debye-Scherrer) on capillaries (parallel beam with Goebel mirror).
- 0.04 or 0.02 ° Soller slits, programmable divergence slits (1/2 to 1/32 °)
- 15-position automatic sample changer.
- Measurements under controlled temperature within
 - a high temperature Anton Paar HTK 1200N chamber (ambient to 1200°C)
 - or a low temperature Anton Paar TTK 450 device (-190 to 170°C).



**Sample in the high temperature
Anton Paar HTK 1200N chamber**



**Sample in the low temperature
Anton Paar TTK 450 chamber**