

PANALYTICAL X'pert Pro MPD diffractometer

Co anode (6,9 keV)

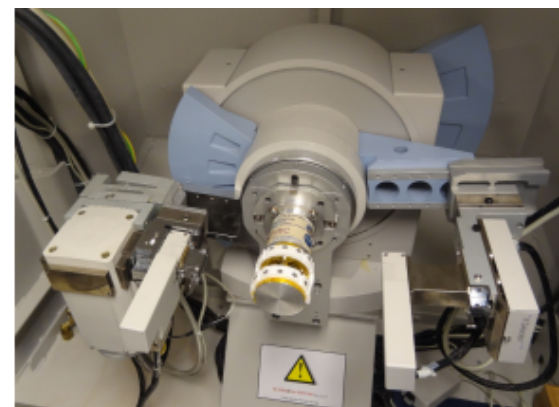
This instrument allows multiple configurations. It is essentially dedicated to the qualitative analysis of polycrystalline samples as powders (phase identification) under conventional conditions or under controlled atmosphere. It also allows the determination of unit cell parameters, refinement of structures and quantitative analysis by Rietveld method. Equipped with a cobalt anode, this diffractometer is particularly used to study materials containing iron under anaerobic conditions.

Specificities:

- Sealed tube with cobalt 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 atmosphere within a chamber developed at IMPMC.



Automatic sample changer



Sample under controlled atmosphere in home made chamber