

Beam tube	6T (thermal source)
Monochromators	Cu 220 P.G. 002
Incident wavelength	0.90 Å, 1.55 Å, 2.35 Å
Collimation	$\alpha_1 = 14', 28', 57'$ $\alpha_2, \alpha_3 = 10', 30'$
Range of monochromator angles	$2\theta = 27^\circ$ or 42°
Ranges of spectrometer angles	$-28^\circ < 2\theta < 140^\circ$ $-90^\circ < \omega < 90^\circ$ $-180^\circ < \chi < 180^\circ$ $-180^\circ < \varphi < 180^\circ$ $-5^\circ < \nu < 26^\circ$
Detector	^3He
Ancillary equipment	<ul style="list-style-type: none"> ★ Displex 5 K - 300 K ★ ^4He cryostat 1.5 K - 300 K ★ Cryomagnet 7.5 T, 12 T ★ Dilution cryostat 30m K ★ High pressure cell

The diffractometer is equipped with two vertically focusing monochromators :

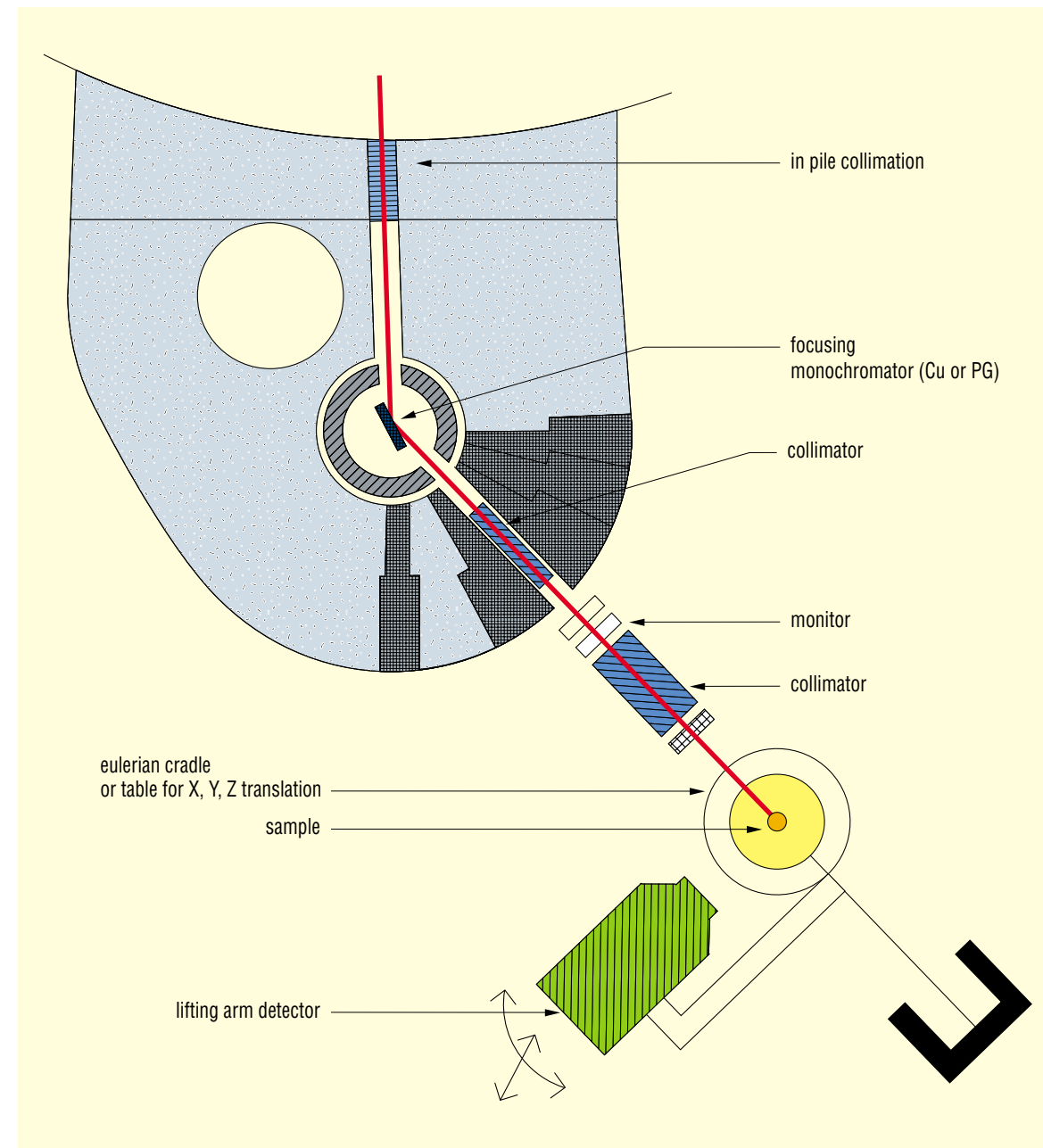
- 1) Copper (220) $\lambda = 0.90 \text{ \AA}$ (Er filter)
- 2) pyrolytique graphite (002) $\lambda = 1.55$ and 2.35 \AA (PG filter).

Depending on the aim of experiment a high flux configuration (bent monochromator, relaxed collimation) or high resolution configuration (planar monochromator, short wavelength, tight collimation) can be easily used.

Two types of diffractometer can be mounted :

- 1) 4-circles geometry : with an Eulerian (deported) cradle for structural studies of large unit cells (cell volumes of more than 1000 \AA^3) and high resolution studies (phase transitions, etc...).
- 2) Lifting counter geometry using cryomagnet, dilution cryostat and high pressure cell for magnetic studies.

The spectrometer is controlled by a Windows NT PC computer.



General layout of the diffractometer 6 T2.

Responsibles : A. Goukassov
J.-M. Kiat

e-mail : gukasov@llb.saclay.cea.fr
e-mail : kiat@llb.saclay.cea.fr