Beam tube	6 T (thermal source)
Monochromators	Cu 220 P.G. 002
Incident wavelength	0.90 Å, 1.55 Å, 2.35 Å
Collimation	α_1 = 14', 28', 57' α_2, α_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	^{3}He
Ancillary equipement	★ Displex 5 K - 300 K ★ ^{4}He 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) λ = 0.90 Å (Er filter)

2) pyrolytique graphite (002) λ = 1.55 and 2.35 Å (PG filter).

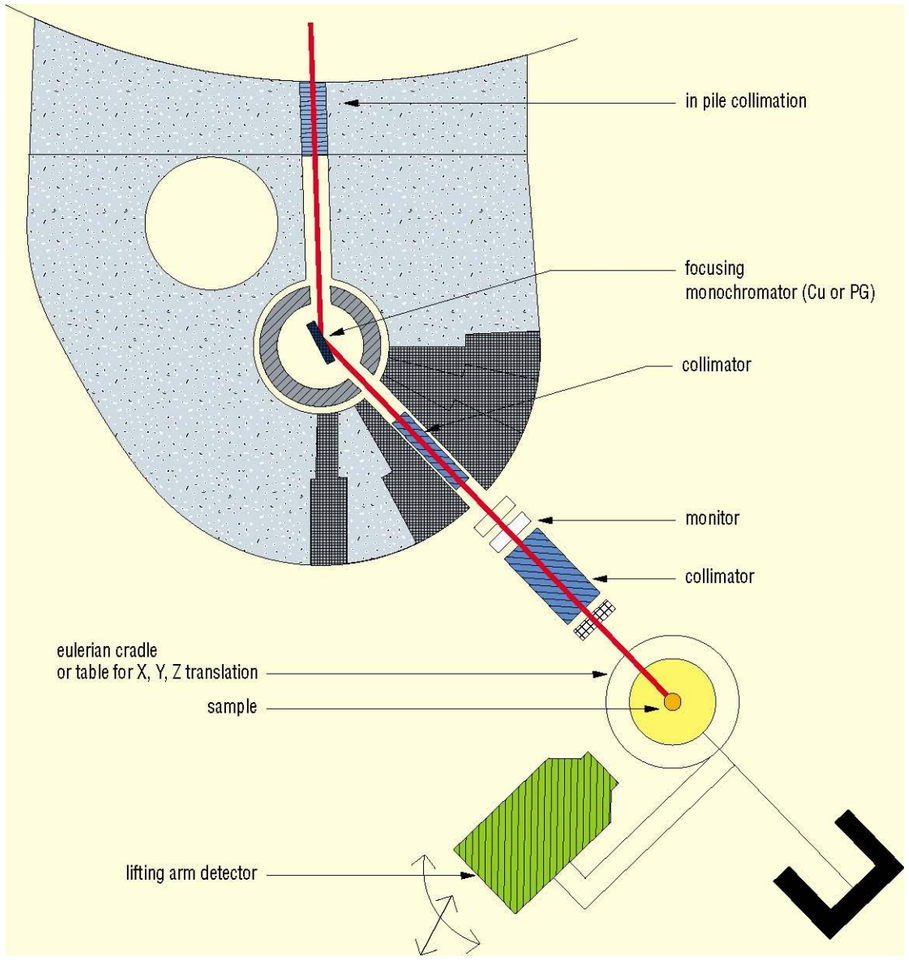
Depending on the aim of experiment a high flux configuration (bent monochromator, relaxed collimation) or high resolution configuration (planar monochromator, short wavelength, tight collimation) can be easily used.

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 Å) 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.

Thermal Neutron Four-Circle Diffractometer with Lifting Counter 6 T2



General layout of the diffractometer 6 T2.

Responsible : A. Goukassov e-mail : arsen.goukassov@cea.fr

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