

Beam tube	Neutron guide G1 (cold source), supermirror coating $2\theta_c$ (cutoff : 3 Å)
Monochromators	Mechanical selector (DORNIER) $2 \text{ \AA} < \lambda < 40 \text{ \AA}$ with $\Delta\lambda/\lambda$ between 5% and 10% (hwhm) depending on the tilt angle (between 0 and 10°).
Max. beam size at specimen	2.5 x 3 cm ²
Typical size	0.7 x 0.7 cm ²
Beam collimation	with 2 diaphragms between 0.7 and 2.5 cm diameter, distant from 2.5 or 5 m depending on the distance between sample and detector.
Detector	BF ₃ position sensitive multidetector made of 30 concentric rings of 1 cm width. First ring radius : 3 cm ; last ring radius : 32 cm
Typical range of accessible scattering vectors	$2 \times 10^{-3} < q (\text{\AA}^{-1}) < 0.5$
Available sample surroundings	- automatic sample changer for 16 different samples for temperature between 10 and 80°C - cryostat (2 K) and displax (10 K) - furnace ($50 < T(^{\circ}\text{C}) < 300$)
Data collection and instrument control System	EURO modules from LLB (independent and intelligent IEEE 488 instruments)
Computer driving :	PC and WINDOWS operating system

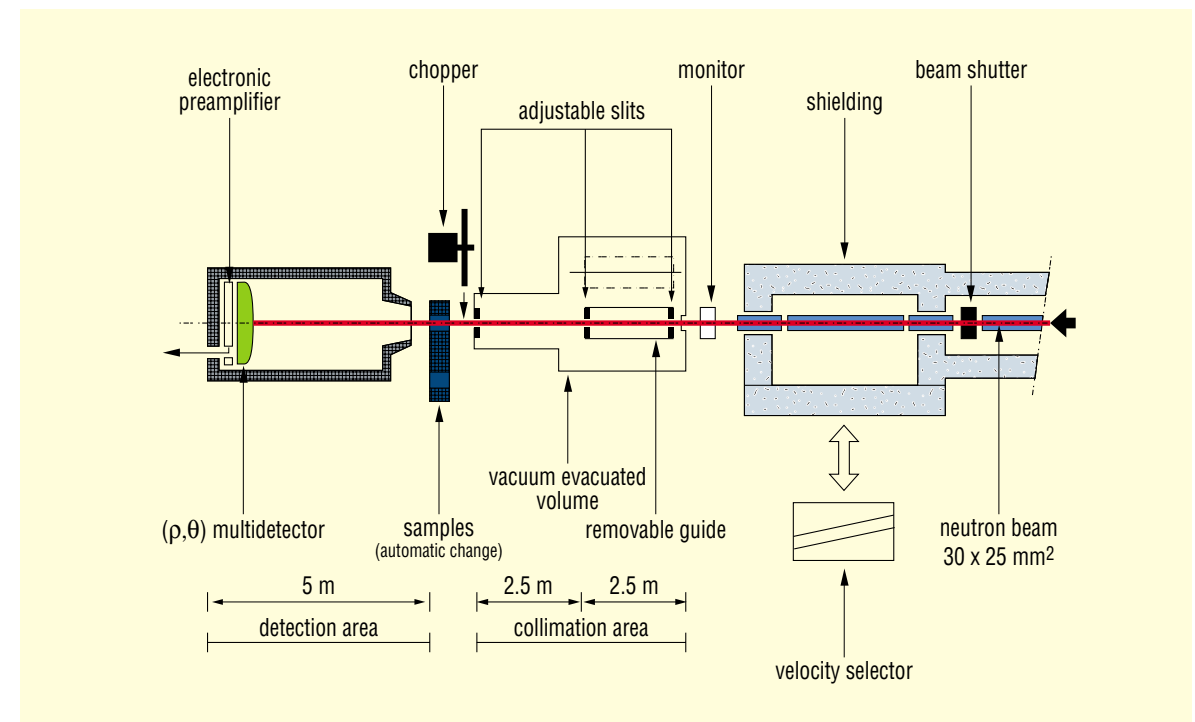
PACE is a small angle neutron scattering spectrometer dedicated to the study of isotropic scattering. It is equipped with a position sensitive multidetector made of 30 concentric rings centred around the beam. This is its main feature making treatment and rapid estimation of data specially easy.

The monochromator is provided by Dornier Embh, and has the particularity of being very compact that allows retracting it without substantial handling. The experimentalist can thus easily work on white beam using the time of flight method.

The monochromator also allows to reach small wavelengths (down to 2 Å) that offers the possibility of extending the scattering vector range to high values without shadow due to the sample surroundings.

The spectrometer is equipped with a sample changer that allows to plan the automatic measurement of 16 different samples.

It is computer-driven with a WINDOWS software that allows a complete automatic adjustment of the spectrometer (centring of the beam and samples, attenuator optimisation...) and measurement programming.



General layout of the spectrometer G 1-2.

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