

Critical Points to be Addressed in a VLS-PGM Proposal

In addition to the scientific value of an application for beamtime, the following points do affect the evaluation of the proposal.

Please, make sure that your proposal addresses these points clearly.

1. Sample list

The list of samples has to be complete and accurate. The number of samples intended to study should also include all the reference materials.

Attach relevant documentation such as information of hazardous materials for safety review.

All samples have to be vacuum compatible materials. The system operates at a pressure better than 1×10^{-7} torr

How big is each sample?

2. Correct estimate of requested shifts

A good rule of thumb is 1 hour per sample per element → 8 samples in an 8 hours shift if only one element is investigated. This include all the beamline alignment setup and pumping time.

If more elements are present in the same sample, multiply the shifts by the number of elements - e.g. to collect data from the AlPO_4 sample for both the Al L-edge and P L-edge you will need two hours; to collect data from some Petalite mineral (a lithium aluminum tectosilicate mineral $\text{LiAlSi}_4\text{O}_{10}$) for the Li K-edge, Al L-edge and P L-edge you will need three hours –

Please indicate whether your project has multiple phases. For example, you may require an initial allotment of beam time for a proof-of-concept or technique refinement phase, followed by a later allocation of beam time for the main experiment.

3. Capability to make efficient use of the beamtime

The peer review committee must be convinced that the group has the capability to use the requested beamtime effectively.

Some factors that will be taken into account are the following:

- a. Previous experience in Soft X-ray spectroscopy. Indicate which team members or collaborators will contribute to experiment planning and data analysis.
- b. Previous experience in synchrotron work.
- c. Size of the team of experimentalists compared to the proposed experiment. Indicate clearly how many team members will be performing experiments on site at the CLS.
- d. Experimental plan. Provide enough details to convince the committee that you have planned carefully your experiment and will make optimal use of the beamtime.
- e. Publication record, including articles that are currently in press.

Note that these items are not individually critical but they do affect the evaluation of the proposal.

Feel free to contact the beamline staff for any information about beamline capability, specifications, guides and other information.