

Rapid Access for Beamtime on I05

Researchers wishing to run samples *via* rapid access mode must submit an electronic Rapid Access Proposal using the template available from [User Office web pages](#).

Completed templates and sample sheets should be emailed directly to the Diamond User Office: useroffice@diamond.ac.uk

These are guidelines only, and applicants with proposals or experiments that lie outside of these are encouraged to contact I05 beamline staff to discuss their requirements.

1. Arrangements

Successful rapid access proposals will be allocated a typical time slot of 24 hours (3 shifts). The allocation is decided as part of the proposal review. It cannot exceed 72 hours (9 shifts).

2. Objectives

Rapid Access Mode is to provide a route for data collection on samples that are timely and of high scientific interest.

It is **not** to be used for the routine measurement of samples, for large numbers of samples, or for lengthy experiments – these should be applied for using other access modes.

The samples that are envisaged to be measured in rapid access are

- (a) fresh from growth samples, provided they have been characterised for the essential properties to give a chance of success in the short rapid access time slot.
- (b) Samples from previous beam times, where the data analysis reveals that few additional data will clarify an open point.
- (c) Samples of on-going growth optimisation work (mostly grown in-situ in the HR-AREPS end station chambers), where a status check can lead to full optimisation of the growth recipe.

All proposals will be judged by the standards of scientific interest.

3. Criteria

1. Rapid Access mode is available for academic use only; industrial users should contact the Industrial Liaison Office.
3. As soon as a proposal has been deemed successful, the sample(s) will be scheduled in the next available rapid access slot.
4. The normal maximum number of samples allowed per application is 2. (However, if more than 2 samples are required, please ensure the reasons are very clear.)
5. If possible, up to 3 crystals of each sample should be prepared.
6. Only low risk materials (as assessed by the DLS health and safety group) are allowed.
7. Only non-moisture sensitive samples can be handled, i.e. samples that require no other Diamond facilities than the ones provided in the I05 sample preparation room (SPR).

4. Safety Considerations

Full hazard declarations must be included the time of submission of the proposal.

Generally, only low-risk materials will be accepted for this access mode and samples that can be considered one of the following:

- Radioactive
- Highly reactive, e.g. explosive
- Biohazardous

will only be considered on a case by case basis, with special arrangements being made for these exceptions.

5. Data Collection

Data collection is the responsibility of the user group.

6. Sample Mounting

Sample mounting is the responsibility of the user group. Normally this requires preparation time in advance of the beam being available to be sure that the sample to be measured is ready in time.

Note that we cannot offer the use of any Diamond facilities other than the ones in the beamline rooms for rapid access experiments. This excluded sample gluing in a glove box or any x-ray diffraction sample orientation determinations.