

Central Laser Facility *Octopus* and *Ultra* facilities: <u>Call for access</u>

Period: Access from January 2024 to June 2024

Deadline: 17:00 GMT (PROMPT) Tuesday 25th July 2023

Access modes:

Direct Access: Octopus and Ultra

Continuation of Approved Programmes: Octopus and Ultra

<u>Please carefully read all the information below before submitting an application.</u>
<u>Failing to follow the guidelines may result in your proposal being returned without review.</u>

Where to apply

Before applying

Types of access mode and guidance

Direct Access

Continuing Programme Access

Proposal assessment criteria

Where to apply

Applications are made through the STFC online submission system, which can be found here:

https://proposal.facilities.rl.ac.uk/

Further information can be found under "Calls for access to Octopus and Ultra" on the Central Laser Facility website:

https://www.clf.stfc.ac.uk/Pages/Access-to-Octopus-and-Ultra.aspx

All applications are peer reviewed by a Facility Access Panel (FAP) comprising of UK and international academics.



Before applying

Applicants are strongly recommended to contact an appropriate CLF staff member to discuss requirements before applying, even if you have previously submitted a proposal.

Eligibility for access to *Octopus* and *Ultra* through this call:

- UK academics: All academics, including those from Research Council institutes (including STFC staff) and those with Research Council senior or advanced research fellowships (or their equivalent) and Royal Society and Royal Academy of Engineering fellowships, will be eligible for access to the STFC facilities.
- 2) UK Postdoctoral Researchers: Postdoctoral researchers from universities are eligible for access.
- 3) Applicants must hold a position that lasts for the duration of the above scheduling period.

Applicants to *Octopus* please note:

Octopus offers access across all microscope systems (see brochure and website for further information on the techniques available).

The facility operates with more than one user group simultaneously. All applicants *must* apply for sufficient access to cover the use of each microscope required. For example, a group intending to use two different Octopus microscopes simultaneously for one week on each should apply for two weeks of access. Applicants must include in their proposal a detailed breakdown of which Octopus microscopes they require, and the amount of time required on each. Proposals will be returned if this information is not provided.

Applicants to *Ultra* please note:

Ultra offers access across three separate laser systems (see brochure for further information).

- Each laser system has both complementary (unique) and common capabilities. It is strongly recommended, especially for new applicants, that you contact an Ultra staff member to discuss your specific needs. This is particularly important in the coming call, as there will be some reconfiguration of the labs due to the planned HiLUX project.
- Should an applicant require the in-parallel use of multiple laser systems or separate experiments, the time requested should be calculated in one week blocks as the sum of the time requested for each experiment. For example, a group intending to use two different laser systems simultaneously for one week should apply for two weeks of access.
- Multiple user groups may be present at any one time. We therefore ask that all applicants base the personnel resourcing of their user-time on the figure of three people present at any one time on a particular instrument, with justification given to and permission sought from Ultra group leader Greeg Greetham if extra numbers are required.

Access Modes

Direct Access

Maximum four weeks of access during six month allocation period

Maximum two A4 page scientific case, including all figures (include scale bars for microscopy images), references, etc. Font size no less than 10 pt.



All science cases must adhere to the following format and use the headings marked in red:

- Introduction and Aims: Detail of the research idea / goals, aims and objectives. Define the major hypotheses to be tested.
- Preliminary Data: Include data observed or collected directly from research and/or development activities.
- Justification for Facility and Equipment Requested: Explain why you need access to the specific Facility – why can this not be done outside the specific Facility requested?
- Measurable Expected Outcomes: Describe the impact of the proposed work (international / national / academic / industrial / etc.)
- Experimental Design & Methodology: Provide a detailed experimental methodology and work plan in tabular or Gantt chart form.

If the application is a resubmission of a previously failed proposal select Yes under Step 2 Facility & Funding and explain in up to 900 characters how you addressed the reviewer's comments and how that has resulted in a materially different/improved submission.

Research Council grant funding is not a requirement for Direct Access. We encourage the submission of proposals aimed at collecting preliminary data to support future grant applications. Where this is the intention, it should be clearly stated in the proposal.

Direct Access proposals from applicants who already have Programme Access awarded as principal or co-investigator will only be considered if they are for a different project; this should be clearly demonstrated in the proposal, which should include an explanation as to why the Direct Access application is an entirely different project, for which it would not be appropriate to use existing Programme time.

Although grant funding is not a requirement for Direct Access proposals, the panel will take funding into consideration when differentiating similarly ranked proposals, so please ensure that relevant grant funding is clearly identified in your application.

<u>Continuation of Approved Programmes</u>

- Access time as part of an Approved Programme
- Maximum three A4 page continuation case, including figures, references, etc.
 - Up to one A4 page of progress to date (where time has already been used), including preliminary data. If the access time has not been delivered at the time of writing, please state this
 - Up to two A4 pages of a detailed set of objectives, measurements and experimental plan (tabular or Gantt chart form) for this period referring to the original proposal, with any changes to the original Programme clearly highlighted
- Font size no less than 10 pt

Successful programme access applicants are required to submit a summary of their progress so far and an outline of the experimental programme to be carried out in the new allocation round. The role of the FAP is to ensure that the work is progressing according to plans put forward during the Programme. Groups with an approved programme are free to submit individual Direct Access proposals which clearly fall *outside* of the programme. However they should not submit 'top-up' proposals for experiments that do fall inside the programme. Any group with an already Approved Programme



who wishes to also submit a Direct Access applications should make clear in the first paragraph of the Direct Access science case how the proposal differs from the Approved Programme.

Criteria for assessment of all proposals

Applications will be assessed within the following criteria

Category 1. Absolute pre-requisite, without which an application will not be recommended for funding.

- Scientific excellence: specific objectives of the project
- International competitiveness
- For programme access, grant funding to support the work for the duration of the proposed programme

Category 2. Supporting evidence which increases the confidence in a successful outcome. Where any of these are not met the risk and any proposed remedial or mitigation action must be identified. Where any criteria are not met any recommendation for funding would be subjected to close scrutiny by STFC. If approved for funding, STFC is likely to make an award contingent on remedial action to address the concerns highlighted before funds are committed.

- Productivity of Investigator
- Productivity of grant supported staff (where relevant)
- Quality of leadership/management
- Suitability of Institution/Group

Category 3. Important additional criteria: training, UKRI funded research, strategic alignment, opportunities and plans which must be addressed in the application.

- Potential for economic impact
- Quality of impact plan (where applicable)
- Applicants are advised to consult the guidance on the above for further information
- Training
- Alignment with UKRI priority areas (e.g. demonstrated through allocation of strategically aligned grant funding)
- Originating from Fellow Residents of the Research Complex
- Combined access with Diamond or other major facilities at Harwell
- Associated with Facility developments aligned with STFC strategy

Each facility access proposal will normally be assessed by at least two referees. Referees and panel members are required to disclose conflicts of interest, personal or institutional, where this arises in relation to a proposal they have been asked to assess. Applicants who lobby or canvass members of the peer review panels or their officers about their research proposal will be disqualified.

In addition, please note the following:

We endeavour to provide access to all proposals supported by Research Council grants. However, because of limited capacity we are unable to guarantee access to all grant-funded proposals. Where the panel feels that a grant-supported application has not provided adequate information on its



proposed use of CLF facilities, we may ask for clarification and resubmission of the proposal in the following round before access can be awarded.

Applications that involve access to both the CLF and other facilities at Harwell (e.g. Diamond Light Source, ISIS) are encouraged. For applications of this type, the scientific advantages of a joint facility approach should be clearly explained in the proposal, as well as any technical issues, e.g. current status of applications to the partner facility, beam-time already awarded, etc. Note that for access to other Harwell Campus facilities separate applications need to be made to the other facility.

Proposals involving collaboration with someone who is not a co-investigator on the proposal require a letter of support from that person. This letter should be emailed to the CLF User Office after submission of the proposal, with the number of the proposal clearly identified in the email subject line.

The CLF User Office requests *thorough and formal* reports for all Direct Access and ongoing Programmes. Repeated failure to supply requested reports may lead to the Facility Access Panel (FAP) deferring your proposal. If you are still due access in the current access period prior to the call deadline, you must ensure that the peer review panel can view a report after the current call closes by sending a copy to the FAP coordinator Sarah Needham.

The Government has announced the establishment of the Global Challenge Research Fund (GCRF) (http://www.ukri.org/research/global-challenges-research-fund/) to support research that addresses challenges faced by developing countries. This extends to facility access, meaning that if your proposal is compliant with Official Development Assistance (ODA) guidelines, this fund may be used to support facility access, including travel and subsistence to/from the partner country for investigators and collaborators. Consequently, the CLF encourages such proposals. If the research in your proposal is relevant, and will, or could be, conducted in collaboration with a developing country on the Development Assistance Committee (DAC) list (see link above), please provide us with additional information. Specifically, please include in your proposal key information that explicitly addresses the key questions below (max 1 page, to be appended to your science case):

- Which country/ countries on the Development Assistance Committee (DAC) list will directly benefit from this proposal?
- What development challenge in these countries is the proposal designed to address, and what evidence demonstrates a credible need for this specific proposal?
- How will the outcome of the proposed activities promote the economic development and/or welfare of a country or countries (not the individuals involved) on the DAC list?

The CLF can provide additional guidance prior to proposal submission if required.