

## **Subject header: Special call for Microcrystal Electron Diffraction (MicroED)**

We are pleased to announce that a special call for Microcrystal Electron Diffraction (MicroED) proposals, at eBIC, is now open. **The deadline for proposal submission is 17:00hrs (BST) on Thursday 30<sup>th</sup> September 2021.** This call will provide access to MicroED for a limited number of selected user proposals (Academic users only). Initially **only on-grid MicroED data collection with a Ceta-D detector and EPU-D data collection software on the Talos Arctica (200 keV) will be available.**

Proposals will be evaluated with respect to scientific merit, technical feasibility and sample suitability. Applications should include evidence that the proposed samples are suitable for MicroED experiments. All grids must be pre-screened, demonstrating that they have the appropriate ice thickness, that the majority of the EM grid support film remains intact, and that there is a reasonable crystal distribution. The best way to show this is to include TEM grid atlas images and images of the crystals at higher magnifications in the proposal.

For MicroED proposals that require CryoFIB time to achieve the desired sample thickness, please indicate this in the application. More information about how to demonstrate the grid quality for CryoFIB can be found in [this document](#).

In this call, we will focus on protein microcrystal samples and crystals samples that require CryoFIB. However, applications for small molecule samples will also be considered. If your proposal is successful, session will be allocated from the Mid-October 2021. Sessions will run from 9:00 am to 17:00 pm (one shift), with a maximum 4 grids (microcrystals) or 2 grids (lamellae) per shift. Please indicate number of shifts you would like to request in the proposal (we will allocate between 1-2 shifts).

All proposals need to be submitted through the User Administrator System ([UAS](#)). Once logged into the UAS you should choose the “rapid access” route for the Talos Arctica instrument and also add that this is for MicroED application.

For technical inquiries about proposed experiments please contact [Yun.Song@diamond.ac.uk](mailto:Yun.Song@diamond.ac.uk).

Please see below the publication for information about microED workflow in eBIC:

<https://www.frontiersin.org/articles/10.3389/fmolb.2020.00179/full>