CREDO – Terms of Access

Effective as of 26th July 2024.

Introduction

This document outlines the terms of user access to the CREDO instrument and the accessory laboratory facilities.

The small-angle X-ray scattering instrument CREDO is operated, maintained and managed by the Research Group for Biological Nanochemistry, part of the Institute of Materials and Environmental Chemistry, HUN-REN Research Centre for Natural Sciences (abbreviated henceforth as RGBNC).

The forms and documents referenced herein are all accessible from the homepage of the instrument (<u>https://credo.ttk.hu/documents</u>).

Terms used in this document

- **Experimental Project:** a measurement plan involving small-angle scattering experiments on the CREDO instrument, in order to answer a well-defined scientific question
- Main proposer: the person initiating the experimental project
- Beamtime: the scheduled time interval in which the experiments are performed
- **Local contact:** the member of the RGBNC attending at the beamtime and supporting the guest researchers
- **External participants / Users:** persons present at the beamtime including or sent by the main proposer in order to perform the measurements

Terms of academic access

Apart from in-house use (where the main proposer is a member of the RGBNC), access for external, academic users is provided free of charge if all the following conditions apply:

- the research project is a non-profit one, no industrial parties are involved
- the acquired results will be published in a peer-reviewed journal, with due reference of the instrument used, the local contact listed among the authors and financial support to the RGBNC also acknowledged. Before submitting the manuscript, the explicit consent of the local contact is sought.
- the acquired results will be made open, according the philosophy of Open Science and the FAIR data principles (an embargo period of at most 1 year applies by default, which can be extended for the duration of the peer review process of an already submitted manuscript)

- an experimental report will be submitted at most 3 months after the end of the beamtime
- the proposer and the users give their consent to RGBNC to use their data according to the regulations of the GDPR
- the Scientific Data Policy of the RGBNC is adhered to

Waiving one or more of the above criteria is possible. In such cases, the terms need to be clarified in a case-by-case basis, but the operating and material costs needs to be covered by the proposer.

Process of application for a beamtime

Anyone can apply for beamtime at CREDO who is affiliated at a university, research institution or industrial corporation, both from Hungary and from abroad. Application starts with filling out and submitting the beamtime application form.

The application comes in three forms:

- pilot project: intended for a feasibility study, at most one day, at most two samples. When successful, can be upgraded to a normal project
- normal project: for a single beamtime, at most 5 workdays in the same week
- continuation project: application for another beamtime in the same scientific topic

Required data in the proposal

Each beamtime proposal must contain:

- The main data of the Proposer (name, workplace, e-mail address, phone number).
- A clear and concise statement of the scientific problem to be addressed with small-angle scattering and why this technique is required to solve that problem
- The scientific background and importance of the problem must also be elaborated.
- Samples and materials planned to be used at the experiments must be explicitly declared
- All risks and security concerns need to be stated which the planned experiments might pose to the infrastructure, environment or to human health
- The Proposer is responsible for obtaining all required licenses and permissions for the measurements (e.g. for biological experiments). If the study requires one, its availability must be stated.
- By submitting a proposal, the Proposer declares that
 - (s)he and all other participants at the measurements will fully adhere to the local safety regulations at the infrastructure. (S)he also understands that experiments cannot be commenced or continued before obtaining briefing and permission from the local

representative of the RGBNC. The representatives of the RGBNC have the right to suspend the experiments if they deem the experiments hazardous in any way.

- all materials and samples have been declared in the proposal, as well as all the hazards and risks these or the experiment might pose to property or health.
- (s)he fully understands and accepts the terms in this document.
- (s)he is open for further discussion pertaining to the planned measurements, including the disclosure of information needed for the successful execution of the measurements to RGBNC.
- The representatives of the RGBNC declare that
 - they will handle the information in the submitted proposal at full discretion, i.e. apart from the review committee, these will not be handed over to third parties for any reason.
 - they will do everything in its power to make the instrument perform at its best during the measurement time.
- Neither the Proposer, nor the RGBNC is bound to actually perform the experiments if the proposal is not accepted, or no agreement can be reached (e.g. on the exact date of the beamtime). The Proposer is entitled to revoke her/his application before commencing the measurement. In this case all intellectual property remains solely with the Proposer.

Evaluation of the beamtime proposals

On receipt, the beamtime applications are evaluated with respect to feasibility, scientific importance and expected impact. The evaluation is performed primarily by the members of RGBNC, or third-party experts. Applications are evaluated in a continuous fashion, in at most 20 working days.

When an application is accepted, a proposal ID will be assigned and a beamtime will be scheduled, taking into account the proposers' and the local contacts' availabilities.

Before the beamtime

At least one week before the beamtime, a sample declaration form has to be sent to the local contact, declaring all samples to be measured during the beamtime, in order to allow time for evaluation regarding work safety.

Alternatively, the sample declaration form can be presented on-site at the start of the beamtime. However, in this case the local contact has the right to deny measurement of any samples (s)he deems dangerous.

Performing experiments

• Experiments start on the first day of the allocated beamtime.

- External users may only stay in the laboratory when accompanied by the local contact.
- Experiments can only be commenced after on-site safety instructions by the local contact, which also needs to be attested by the signatures of the participants.
- On-site experiments involving setting up the data collection can only be done during normal working hours (8:00-16:00 or 9:00-17:00 as agreed upon beforehand). Outside this period, only automated data acquisition can run.
- External participants must to follow the instructions of the local contact. If local contact deems the experiment dangerous, (s)he has the right to terminate the beamtime.

After the beamtime

- The final results (averaged scattering patterns and curves for each sample) are handed over to the external participants present on premises in an data format understandable by most programs (ASCII, NeXus, HDF5, Excel®...). By default, further processing and interpretation of the data is not the responsibility and task of the local contact or the RGBNC.
- An experimental report including the results (scattering curves) and their short discussion is to be sent back at most 3 months after the end of the beamtime. An accepted experimental report is a prerequisite of the continuation of the project and scheduling more beamtimes in the same scientific topic.
- The local contact and the RGBNC can be contacted for further help with analyzing the data, which will be addressed on a best-effort basis.

Data privacy and ownership

Beamtime proposals: The information in the beamtime applications is considered private and the property of the proposer. No details will be published or shared with third parties, except for the needs of evaluation. The requirements of non-disclosure applies to all the reviewers.

Personal data: The following personal information is collected and stored:

Kind of data	Required	Duration of storage	Usage	Shared with 3 rd parties
Name, affiliation, e-mail address and phone number of the main proposer	yes	At most two years after the beamtime	Contacting the main proposer about issues of beamtime	no
Name, affiliation, phone number of the external participants	yes	At most two weeks after the beamtime	Contacting the external participants about the measurements	no
Project title, and	yes	infinitely	Saved as metadata	yes

the name and		in the	
affiliation of the		experimental data	
main proposer		files	

- **Acquired data:** The acquired data is the shared property of the proposers (or their affiliations) and the RGBNC. Securely storing the data is the responsibility of the RGBNC. Acquired data includes the detector images and corresponding metadata (including user-supplied data such as sample names and descriptions), scattering patterns and curves.
- **Derived data:** works and data created from the acquired data by the proposers is the sole property of the proposers and will not be stored or published in any way. All data evaluation procedures performed by members of the RGBNC, including the used algorithms and the results are the shared property of the proposers and the RGBNC and will be stored and backed up on-site.

Shared ownership of intellectual property means:

- the proposers are free to publish and share the data, as well as create derivative works therefrom, with due acknowledgement of RGBNC. No limitation is imposed: academic, educational and for-profit usage are also permitted.
- after an embargo period of 6 months, the RGBNC is free to publish and share the data, as well as create derivative works therefrom for academic and educational use, with due acknowledgement of the proposers and with their implicit consent. Explicit consent will be sought for uses other than educational. For-profit uses of the data without the consent of the proposers is not allowed. Before the embargo period, an explicit consent is required from the proposers.

Validity

This document is valid starting on the date of its announcement. An up to date version of this document is always found at the homepage of the instrument. Each version of this document is valid only for proposals submitted after its announcement and before the announcement of the next version.