



CONSORTIUM FOR THE CONSTRUCTION, EQUIPMENT AND EXPLOITATION OF THE SYNCHROTRON LIGHT LABORATORY

RESOLUTION OF THE DIRECTOR OF THE CONSORTIUM FOR THE CONSTRUCTION, EQUIPMENT AND EXPLOITATION OF THE SYNCHROTRON LIGHT LABORATORY, DATED 23RD JANUARY 2023, APPROVING THE REGULATORY RULES FOR THE RESEARCHERS ACCESS TO THE INSTRUMENTATION OF THE ALBA SYNCHROTRON LIGHT LABORATORY, ITS ASSIGNMENT AND CORRESPONDING FINANCIAL SUPPORT

The Consortium for the Construction, Equipment and Exploitation of the ALBA Synchrotron Light Laboratory (hereinafter "CELLS") manages the economic, technical and administrative cooperation of the administrations involved, for the construction, equipment and exploitation of the Synchrotron Light Laboratory.

The CELLS built and equipped the ALBA Synchrotron Light Laboratory, located in the municipality of Cerdanyola del Vallès (Barcelona), being in operation since 2012. In 2022 the Joint Electron Microscopy Center was added to the instrumentation of the ALBA Synchrotron Light Source.

The operational goal of ALBA Synchrotron Light Laboratory is to benefit the society and the development of the science by providing services and instruments for research and specifically, enabling research and knowledge which fosters the transformation and productive drive of the country as outlined in the objectives of the Spanish Science, Technology and Innovation Law 17/2022, aligned with the research and innovation strategy of the European Union.

In response to the increasing number of demands for using the ALBA Synchrotron Light Laboratory instrumentation, these rules regulate the conditions under which researchers from Spanish or foreign institutions, public or private, will be able to access the instrumentation of the ALBA Synchrotron Light Laboratory to carry out their public research projects, as well as usage of resources and corresponding financial support, which will be funded through the CELLS budget.

Access of researchers to the ALBA Synchrotron Light Laboratory facility of the CELLS is based on the principles applicable to "Infraestructuras Científicas Técnicas Singulares" (ICTS) and combines criteria of scientific excellence and relevance of proposals for achieving goals laid out in RIS3. These strategies are based on the enhancement of economic specialization and knowledge that best fit their innovation potential based on the assets and capabilities of the territory.

By virtue of the above-mentioned, it is resolved

Article 1.- Scope

These rules are intended to regulate the conditions of access of researchers from Spanish or foreign institutions, public or private, to the instrumentation of the ALBA Synchrotron Light Laboratory, to carry out public research projects, as well as usage of resources of the different research projects and corresponding financial support, funded through the CELLS budget.

In this regard, public research is defined as research with the goal to publish or disseminate by other means all results, becoming part of the scientific literature.

Research projects are not governed by these rules when research participants use the research findings in a confidential manner and they are not published or spread in scientific literature, due to business purposes. Instead, they must sign a specific commercial agreement.



Article 2.- Applicants and beneficiaries

Applicants and beneficiaries for the corresponding calls, for which the CELLS will grant access for research projects to the instrumentation of the Research Infrastructure being operated, may be investigators affiliated to a Spanish or foreign research institution, public or private, that want to submit a scientific proposal related to the provided instrumentation.

Article 3.- General definitions

In the scope of these rules and respective calls for proposals, the following terms and/or expressions shall have the below meanings:

3a. General Definitions

- Instrumentation: The instrumentation at the ALBA Synchrotron Light Laboratory comprises:
 - o A set of experimental beamlines based on the Synchrotron
 - o A set of transmission electron microscopes
- Access cycle: access period to the facility of the ALBA Synchrotron Light Laboratory covering corresponding calls for proposal.
- Main proposer (MP): person who is responsible for the entire contents of a scientific proposal and its submission.
- Co-proposers: people participating in the scientific proposal of a MP, endorsing and adding value to it.

3b. Beamlines

- Experimentation shift: each time unit which forms the total period of realization of an experiment detailed in a scientific proposal. The experimentation shift has a duration of 8 hours.
- Beamtime: total time period of realization of an experiment detailed in a scientific proposal with access to experimental beamlines of the Synchrotron Light Laboratory measured in shifts. Beamtime can be distributed in several visits.
- End station: branch of an experimental beamline.

3c. Microscopes

- Experimentation session: each time unit which forms the total period of realization of an experiment detailed in a scientific proposal. As per January 2023, the experimentation shift has a duration of 8h in the Cryo-TEM and of 4h in the Materials Science dedicated microscope.
- Beamtime: total time period of realization of an experiment detailed in a scientific proposal with access to the instrumentation of the Synchrotron Light Laboratory measured in sessions. Sessions can be distributed in several visits.

Article 4.- Types of proposals

Researchers, potential beneficiaries of the calls for proposals for the access to the instrumentation of the ALBA Synchrotron Light Laboratory, will submit scientific proposals of two types:



4.1. Standard proposals

Standard proposals are those submitted by a single Main Proposer (MP) requesting access to perform experiments within an access cycle and beamtime will be granted within that requested access cycle. Several visits can be applied within the same access cycle.

4.2. BAG proposals

BAG (*Block allocation group*) proposals are those submitted by a spokesperson representing multiple Main-Proposers (MP) and their co-proposers requesting identical or similar experimental conditions on one or multiple instrumentations. The aim of BAG proposals is to simplify the access to instrumentation with high throughput capabilities or highly specialized environments; therefore, this access mode is only available on specific instrumentations. The spokesperson is responsible for managing the proposal and that all MP's follow their commitments according to this regulatory. The access is granted for two access cycles, e.g. a full year.

Article 5.- Health and safety conditions of the scientific proposals

It is the responsibility of the MP to identify and explain in detail in their scientific proposal any risk for people or the facility due to samples, their manipulation, and equipment used within the facility of the ALBA Synchrotron Light Laboratory during transportation, execution of the experiment, eventual storage, and final disposal of the material. The MP is also responsible for the implementation of all risk mitigation plans determined during the safety evaluation. In this regard, together with the electronic application, researchers must include documentation regarding the measures and equipment necessary for the completion of the experiment and the safety measures used.

Any failure in fulfilling this requirement may lead to a non-concession or cancellation of the beamtime for safety reasons.

The CELLS shall check these measures and reserves the right to deny access for safety reasons.

Article 6.- Calls for proposals

For the access to the instrumentation of the ALBA Synchrotron Light Laboratory, the CELLS will implement two annual calls for proposals on a competitive concurrence rules, to be published on its institutional website: www.cells.es/users.

The different calls for proposals will include and specify all the necessary information so that potential beneficiaries can submit the corresponding applications, such as experimental instrumentation for which access is open, access cycle, deadline and place for submission of applications.

Article 7.- Access proposal submission and documentation

Applications for researchers' access to the instrumentation of the ALBA Synchrotron Light Laboratory must be submitted only and compulsorily in electronic format¹, if not spelled out otherwise within the competitive concurrence rules, from their account at the *ALBA Office User Portal* (<https://useroffice.cells.es>).

¹ During 2023 applications for researchers' access to the electron microscopes will be done through e-mail, while CELLS is updating its User Portal. Whenever "electronic application" is written it is understood as electronic for the beamlines and via e-mail for the electron microscopes.



MP/s must fill in the application form stating the names of each and all of the users who will need access to the instrumentation of the ALBA Synchrotron Light Laboratory to perform the experiment, type of proposal submitted, under the terms indicated in article 4, description of the experiment and in which instrumentation they want to perform it, samples and their implications for health and safety and any other compulsory information (or additional one that researchers consider appropriate) indicated in the form.

CELLS reserves the rights to move experiments from the proposed instrument to another appropriate instrument, based on the availability, appropriacy, and feasibility.

Electronic applications, together with attached documentation, shall remain as a draft and may be edited until MP/spokesperson decide to submit it. It is recommended to submit the final proposal as far in advance as possible before the proposal deadline. After submitting the proposal, researchers receive a confirmation of receipt with the date of registration.

Article 8.- Deadline and place for submission of applications

Applications, together with attached documentation, must be submitted by the deadlines indicated in the corresponding calls for proposals. Any application received beyond the date and time set forth in the corresponding call for proposals will be considered out of time and, consequently, will not be considered.

Electronic applications and all attached documentation must be submitted through the electronic portal indicated in article 7 of these rules; for all other cases, spelled out in the call, the proposer has to follow the exact procedure defined in the specific call. It will be necessary for the proper submission that all researchers taking part in the experiment are registered in the mentioned electronic portal independent from an electronic or other submission.

Article 9.- Criteria of technical selection and of scientific quality evaluation of the proposals

Detailed scientific proposals submitted on due time and appropriate manner will be evaluated according to the following criteria, to determine the ones that will have access to the use of the instrumentation of the ALBA Synchrotron Light Laboratory:

- i. Criteria of technical feasibility:
 - It can be guaranteed that the proposed work can be executed in a safe way at the proposed instrumentation.
 - The proposed workflow is accessible and available at the proposed instrumentation.
 - Criteria regarding the availability of usage of resources according to the ALBA operation calendar.
 - The operational risks are acceptable.
- ii. Criteria of scientific quality evaluation of the proposal.

For each proposal evaluation, excellence and originality will be the first criteria to be taken into account.

Furthermore, the following sub criteria will be considered:

- Scientific publications and submitted reports of previous experiments performed in the ALBA Synchrotron.



- Commitment that the group submitting the proposal has the financial, technical and human resources necessary to carry out the experiments during the proposed period.
- Promoting access of early career researcher, defined as those proposers who obtained their PhD in the last ten years.
- Proposals fitting in the European strategies and framework programs in place. These criteria will operate once the proposals have been evaluated technically and scientifically.

iii. Other criteria:

- The proposed work is following the ethical principles CELLS.
- No other restrictions prohibit the execution of the experiments.

Article 10.- Phases of the procedure for the granting of access to the instrumentation of the ALBA Synchrotron Light Laboratory and competent bodies

The procedure by which final access to the instrumentation of the ALBA Synchrotron Light Laboratory will be granted is divided into the following phases:

- a) Phase of technical selection: corresponding scientist will determine whether the experiment detailed in the submitted proposal is technically feasible, in accordance with that established in article 9 i).
- b) Phase of scientific quality evaluation: an international Evaluation Panel will determine the scientific quality of the submitted proposals that have passed the previous phase of selection and make a first classification of all of them, in accordance with evaluation criteria from article 9 ii).
- c) Phase of granting of access: based on the results of the previous phases and under consideration of 9 iii), a Selection Committee will definitely classify scientific proposals and determine the ones that will finally have access to the instrumentation of the ALBA Synchrotron Light Laboratory, under the terms established in article 14.

All proposals shall be evaluated and the final resolution published within a period of less than three month starting with the closing of the call and following the defined procedure.

Article 11.- Technical selection of proposals

Upon expiration of the deadline for submission of proposals according to the corresponding call, proposals submitted on due time and appropriate manner shall be reviewed by the corresponding instrument scientist. She or he will determine whether the experiment detailed in the proposal can be performed at the instrumentation of the ALBA Synchrotron Light Laboratory, exclusively from the technical point of view, e.g. based on the criteria described in 9 i). The technical reviewer may propose to adjust the requested amount of usage of resources or to change the proposed instrumentation to another according to availability, appropriacy and feasibility to the international Evaluation Panel.

Article 12.- Evaluation of scientific quality of the proposals and of resources and competent bodies availability.

Members of the international Evaluation Panel are well-renowned members of the international scientific community; for practicality, the panel is divided in individual subpanel according to techniques or scientific areas. The panel and each subpanel are formed by a chairman, a secretary and a variable number of reviewers. Membership of the panel and operation is governed by the code of conduct of CELLS. Particularly, the evaluation shall be carried out free of conflict of interest as regulated in the CELLS manual for best practice and government and the CELLS antifraud plan.



Each of the eligible proposals will be independently reviewed by at least two reviewers of the international Evaluation Panel according to those evaluation criteria mentioned in article 9 ii) and under consideration of the input of the technical review.

Ultimately, the reviews of each proposal will be discussed in the review panel meeting within the responsible subpanel and a unanimous provisional ranking of proposals for usage of resources is suggested by the chair of the international Evaluation Panel to the Selection Committee.

In cases of overlap between different subpanels, the proposal is discussed in the individual subpanel and an agreement of the provisional ranking is agreed on between the chairs of the different subpanels.

Article 13.- Final health and safety evaluation

In parallel with the scientific evaluation described in the previous article, the Group of Health and Safety of the CELLS will analyze the health and safety aspects of the scientific proposals that the international Evaluation Panel has considered with appropriate scientific quality, giving them the following colour codes:

- WHITE:

Proposal pending of evaluation by the Group of Health and Safety because according to the first classification made by the international Evaluation Panel has no beamtime but sufficient scientific quality. The Group of Health and Safety will only re-evaluate this proposal in case that the circumstances described therein would allow it to have beamtime.

- GREY:

Experiment pending of approval by the Group of Health and Safety of the CELLS, waiting for some requested documentation or information from MPs.

This proposal will not have assigned beamtime until all the documents or additional information have been provided and the Health and Safety Group has re-evaluated it.

In case of scientific proposals with this code, it will be communicated to the corresponding researchers that in a period of fifteen days from the notification of the award resolution described in article 14 of these rules, they must provide the necessary documentation or information. If the researchers can not obtain this documentation or information within the specified period, they will communicate it in writing to the User Office, justifying the reasons for the delay and stating that proceedings have been initiated to achieve them. The Selection Committee will decide whether to give a special period not exceeding 10 working days more for the correction of the documentation or assign another proposal classified as A, according to the following article.

- GREEN:

Proposal evaluated and accepted by the Group of Health and Safety of the CELLS.

- YELLOW:

Proposal evaluated and accepted by the Group of Health and Safety of the CELLS, with a moderate risk identified. The CELLS staff control will be required at the beginning of the experiment.



- **RED:**

Proposal evaluated and accepted by the Group of Health and Safety of the CELLS, with high risk identified. Permanent control is required during the presence of this risk.

- **BLACK:**

Proposal evaluated by the Group of Health and Safety of the CELLS and not accepted due to an identified risk that can not be controlled in the facility of the ALBA Synchrotron Light Laboratory.

The report from the Group of Health and Safety of the CELLS with the colour coding of the proposals, together with their scientific evaluation from the international Evaluation Panel referred in article 12, will be submitted to the Selection Committee for the purposes established in the following article.

Article 14.- Resolution of the granting of access, competent body and notification to those interested

Based on the scientific evaluation and the provisional classification made by the international Evaluation Panel under the terms of article 12 of these rules, and having regard to the report from the Group of Health and Safety of the previous article, the Selection Committee, composed of the Director of the CELLS and the Scientific Director of CELLS, will finally decide which scientific proposals and with how many shifts/session are awarded to access the proposed instrumentation of the ALBA Synchrotron Light Laboratory.

Based on the evaluation of the technical reviewer, the input of the international Evaluation Panel, and eventually other policies, CELLS reserves the right to adjust the requested amount of usage of resources or to change the proposed instrumentation to another according to availability, appropriacy and feasibility.

The granting decision, which puts an end to the administrative procedure, will be issued within a maximum period of four months from the submission of electronic applications and will classify scientific proposals in the following categories:

i. Proposals labelled “A+”:

Proposals that are fully fulfilling with the evaluation criteria established in article 9 and are finally selected by the Selection Committee.

Expected the operational conditions are not changing due to external conditions like pandemic conditions, impossibility to operate, catastrophes or impacts of wars or other major force circumstances which cannot influenced by CELLS, these proposals will have guaranteed access to the awarded resources on the corresponding instrumentation.

An addendum to the resolution will be published in case of the change of the operational conditions. Access which cannot be provided because of other reasons will be provided in the following cycle, if possible.

ii. Proposals labelled “A”:

Proposals that, despite being of a sufficient scientific quality, are below the threshold for awarding access defined by the Selection Committee, based on the outlined review process.



These proposals will not be directly granted with access due to the fact of not having necessary resources on the instrumentation, but will go to a reserve list. In case of cancellations or changes in the circumstances they will pass to category A+. Otherwise, these proposals may be re-submitted by the proposers in the following call.

iii. Proposals labelled “B”:

Proposals without enough scientific quality, not fulfilling the evaluation criteria of article 9.

These proposals shall not be granted with access. In the notification of the corresponding granting decision, the reasons why the proposal has received this classification shall be detailed.

Against the granting resolution an appeal for reversal may be lodged before the CELLS Management or administrative appeal before the courts of this jurisdiction.

Once the researchers are given notice that their proposals have been granted with access to instrumentation and that they may perform their experiment, CELLS shall coordinate with them the dates for the experiments of the Access cycle for each instrumentation. Once the dates of the experiment are set, CELLS shall start coordinating the administrative issues including the management of the financial support which may correspond. In case that the Health and Safety Office of CELLS had not received correctly any required additional documentation or information before the experiment, access will be denied for safety reasons.

Article 15.- Personal data protection

Pursuant the personal data collected in each call, its treatment is subject to the provisions of Regulation (EU) 2016/679, of the European Parliament and of the Council, of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and to the rest of applicable regulations. The data that will be requested will be the minimum necessary and will be supported by the legal basis (legitimacy) and purpose indicated in the calls; its treatment will be carried out in accordance with the specific procedures designed by CELLS based on the analysis of risks and safety measures applicable to them, which are included in the corresponding Activity Register.

The person responsible for the processing of personal data is the Director of CELLS and the Data Protection Officer is the person who is the CELLS Subdirector. The owners of personal data may request access to them, as well as their rectification, deletion, portability and limitation or opposition to their treatment by means of a letter addressed to the Data Protection Officer through the electronic mail dpd@cells.es or, at the postal address Carrer de la Llum, 2-26. 08290, of Cerdanyola de Vallès, indicating "Ref. Data protection".

Article 16.- Data policy and Storage of experimental data

The users shall accept the CELLS data policy when applying for beamtime (this data policy can be downloaded with the regulatory rules and the call for proposals in ALBA User Office webpage).

Article 17.- Financial support for proposals with access to the experimental beamlines of the ALBA Synchrotron Light Laboratory

If researchers submit their applications, according to articles 7 and 8 of these rules and also fulfil all other necessary conditions, their scientific proposal shall automatically enter the funding programme, without the need to submit an additional application.



Proposals labelled “A+”, whose researchers effectively stay in the ALBA Synchrotron Light Laboratory, shall be entitled for funding of their travel expenses and their stay. The proposals classified as A+ with experiments in remote access, shall be entitled for funding the transport of samples. The following rules shall apply:

The maximum number of researchers from Spanish research centers that may be funded per experiment is three (3), subject to the available budget of the CELLS. The days of experiment (plus the day before and the day after, to cover the travel from the researcher’s centre to the ALBA Synchrotron Light Laboratory) will be funded.

For experiments with special safety measures, the CELLS may consider to fund four (4) researchers from Spanish centres, subject to the available budget of the CELLS.

A Spanish research center is in this context any institution publicly or privately funded and located in Spain or funded by the Spanish government. Researchers employed by CELLS or resident collaborators employed by other institutes and stationed at ALBA Synchrotron Light Laboratory are excluded from this funding opportunity.

Researchers from foreign centers may receive support to perform experiments in the ALBA Synchrotron Light Laboratory through European funding programmes within the existing European programmes, specific cooperation agreements or through any other means they may have obtained.

In exceptional cases, when the preparation of the experiment compulsorily needs to be done in the ALBA Synchrotron Light Laboratory and its research group has no additional funding, it will be funded as being part of the experiment. Such cases require explicit CELLS User Office authorization and shall be subject to budget availability. In any such case, the funding is restricted to a maximum of two (2) researchers and to a maximum of 3 days for the sample preparation.

Article 18.- Type and amount of financial support

Financial support for having access to the ALBA Synchrotron Light Laboratory covers the following items:

1) Travel expenses from researcher’s centers to the ALBA Synchrotron Light Laboratory

a) Travel from outside of Barcelona metropolitan area:

i. Public transport:

- i.1) Financial support shall be granted for travel by plane, bus or train from the researcher’s centre to Barcelona. Travel tickets shall be obtained through CELLS travel agents; the researcher must not pay for the ticket and, therefore, he will not be obliged to prove this expense, since the travel agency shall directly invoice the CELLS.
- i.2) Funding of travel expenses by CELLS shall cover the cheapest ticket of the means of transport being used. If the researcher uses another kind of ticket, the additional cost shall be payable by the researcher or the researcher’s entity.
- i.3) For other travel expenses (taxis or public transport to reach the ALBA Synchrotron Light Laboratory) and/or other expenditure, each funded researcher shall receive 50 euros.

ii. Rental car or own car:



In order to cover travel expenditures, each researcher shall receive the following amounts:

- ii.1) Whether the researcher's centre is less than 300 km away: 80 euros per researcher.
- ii.2) Whether the researcher's centre is between 300 and 650 km: 150 euros per researcher.
- ii.3) Whether the researcher's centre is more than 650 km away: 200 euros per researcher.

b) Travel expenses within the metropolitan area of Barcelona:

Funded researcher shall receive 15 euros per beamtime day for travel expenses and other expenditure which is difficult to substantiate.

2) Living expenses

The researcher will be funded in the terms that will be communicated by the User Office staff (either through allowance or agreements with hotels or restaurants).

3) Accommodation expenses

The CELLS covers the accommodation, which includes breakfast. The User Office will provide more detailed information about the procedure in the preparation phase of the experiment.

4) Sample transport expenses in remote access experiments

The allowance will be received for the transport of the samples. The price of the transport's enterprise will be reimbursed to the user or it will be managed through an enterprise with which CELLS keeps an agreement.

The financial support described above shall be subject to the available budget of the CELLS.

Article 19.- Application for expenses

After the experiment, funded researchers shall provide the required documentation and apply for their financial support according to the rules set out in article 18.

Article 20.- Obligations by researchers who have been allocated beamtime

All researchers must submit the following documents after the experiment:

- a) A quality questionnaire, through their account at the ALBA User Office Portal (<https://useroffice.cells.es>), evaluating technical, administrative, scientific and computing assistance received.
- b) A report on the performed experiment. These reports must be submitted within a maximum time limit of three (3) months after the corresponding experiment.
- c) The following sentence must be added, in the corresponding language, to section 'acknowledgements' of all publications resulting from data obtained in the ALBA Synchrotron Light Laboratory:

Catalan: *Aquests experiments han estat realitzats a la línia del Laboratori de Llum Sincrotró ALBA amb la col·laboració del seu personal ó Aquests experiments han estat realitzats al Joint Centre for Electron Microscopy at ALBA amb la col·laboració del seu personal.*



Spanish: *Estos experimentos se han realizado en la línea del Laboratorio de Luz Sincrotrón ALBA con la colaboración de su personal o Estos experimentos se han realizado en el Joint Centre for Electron Microscopy at ALBA con la colaboración de su personal.*

English: *These experiments were performed at the beamline of the ALBA Synchrotron Light Facility with the collaboration of ALBA staff or These experiments were performed at the Joint Centre for Electron Microscopy at ALBA with the collaboration of its staff.*

- d) All published papers relating to the data obtained in the ALBA Synchrotron Light Laboratory must be notified and entered through their account at the portal of the CELLS User Office.
- e) Researchers authorise the CELLS to publish their research topic. Additional documentation may be requested (such as images, graphics, presentations, etc.) in order to spread the results of the experiment in the different CELLS communication channels (annual report, newsletter, website, etc.).
- f) When this is so required, e.g. in cases of funding through European programmes, a signed satisfaction form must be submitted confirming that experiments have effectively been performed in the ALBA Synchrotron Light Laboratory.

Failure to comply with previous commitments may make it impossible to submit new scientific proposals for the access to the instrumentation of the ALBA Synchrotron Light Laboratory for a period of three (3) years.

Article 21.- Repeal of previous rules

These rules repeal all previous ones.

Caterina Biscari
Director