

1. Create an ARIA account

You can access all the information related to Instruct and their services through [Instruct-ERIC webpage](#). The first step in order to request an access to any service/technology is to [create an ARIA account](#).

2. Submit a proposal

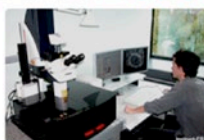
Once registered, the user is allowed to submit a proposal through the [Instruct web Proposal page](#). To apply for services from Instruct-ES, you can find us in the 3D Structural analysis/Electron microscopy section:

Select what you want to apply for



3D Structural Analysis

- Electron Microscopy
- Magnetic Resonance Techniques
- X-Ray Techniques



Biomolecular Analysis

- Imaging
- Mass Spectrometry
- Molecular Biophysics



Sample Preparation

- Crystallisation
- Nanobody Discovery
- Protein Production

3. Select Services

The services offered by the Instruct-ES centre are the following:

Electron Microscopy Sample Characterization

CNB-CSIC, Madrid, Spain

The facility will provide support and expertise to researchers with samples in the first stages of characterization. Samples will be analysed by negative staining in search of the best conditions. Once found, samples will be subjected to different vitrification conditions in search of the best parameters, which will be tested in a cryomicroscope Talos Arctica 200 kV equipped with a Falcon III electron direct detector. The best grids will be used to acquire some data for image processing, to check the real quality of the sample (it is advisable to contact the Instruct Image Processing Centre for support in the data processing).

Short Description:

1. Negative stain to check if the sample has some problems during the shipping.
2. Samples will be subjected to different vitrification conditions in search of the best parameters.
3. Grids will be tested in a cryomicroscope Talos Arctica 200 kV equipped with a Falcon III electron direct detector.
4. Step 2 and 3 will be repeated up to the end of the access if necessary.
5. If the quality of the sample is good, some data will be acquired for 2D image processing for a deeper understanding of the sample performance (it is advisable to contact the Instruct Image Processing Centre for support in the data processing).

Electron Microscopy CNB-CSIC, Madrid, Spain

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The best grids will be used to acquire data for image processing (it is advisable to contact the [Instruct Image Processing Centre](#) for support in the data processing).

Electron Microscopy Image Processing I2PC, Madrid, Spain

A service for single particle analysis of cryoEM data. The dataset will be processed by our team in a period of approximately 2-3 weeks, with frequent interaction with the user to discuss and share the results.

A single proposal can contain more than one service, i.e. users can combine an image acquisition service with further image processing. In that particular case, our service also includes real time data processing, to better assess the quality of the data being acquired.

Proposals containing a combination of several technologies/services are encouraged. To further add new services (referred as "Visits" in the website), clic on "Save & Add another".

Visit Detail:


Sample 1
(Brief description of sample 1, few lines)

849 characters remaining

Save & Add AnotherAdd and Continue


Here is an example of a proposal containing several services:

1st Visit x ☰




Electron Microscopy, CNB-CSIC, Madrid, Spain

Remote Access
 Physical Access




2nd Visit x ☰




Electron Microscopy Sample Characterization, CNB-CSIC, Madrid, Spain

Remote Access
 Physical Access




3rd Visit x ☰



Electron Microscopy Image Processing, I2PC, Madrid, Spain

Remote Access



Instruct-ES, National Center for Biotechnology
CSIC, Darwin 3, Campus UAM Cantoblanco, 28049, Madrid, Spain

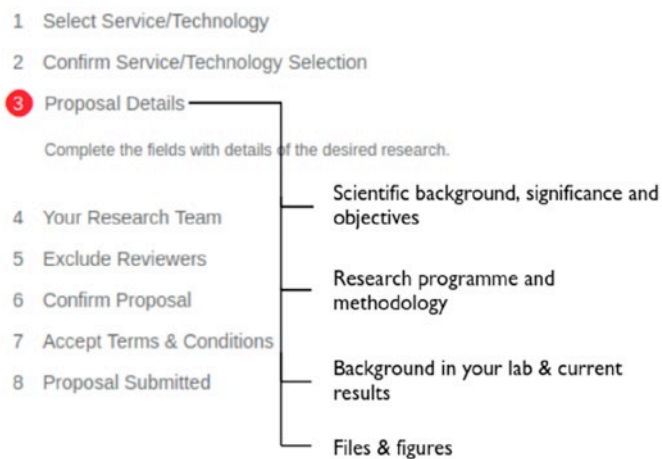
+34 915854510 | i2pc@cnb.csic.es | cryoemcsic_facility@cnb.csic.es | Acknowledgements

4. Sample description and proposal objective

Next, users must provide a description of the sample and the objective of the proposal:

Your Proposal Progress

Your draft proposal has been assigned a PID: 18799



After submitting the proposal, it is first evaluated in scientific terms by an external committee and then it is subjected to a technical evaluation. Once the proposal is accepted, we will contact the user for further actions regarding sample/grid shipping or cryoEM data transfer (either movies or aligned micrographs).