Elettra
Sincrotrone
Trieste

Tips and tricks for successful proposals

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Elettra Sincrotrone Trieste

Access to our facility

ACADEMIC RESEARCH

Free access to national and international users, granted through international peer-review process

Laserlab Europe

IAEA

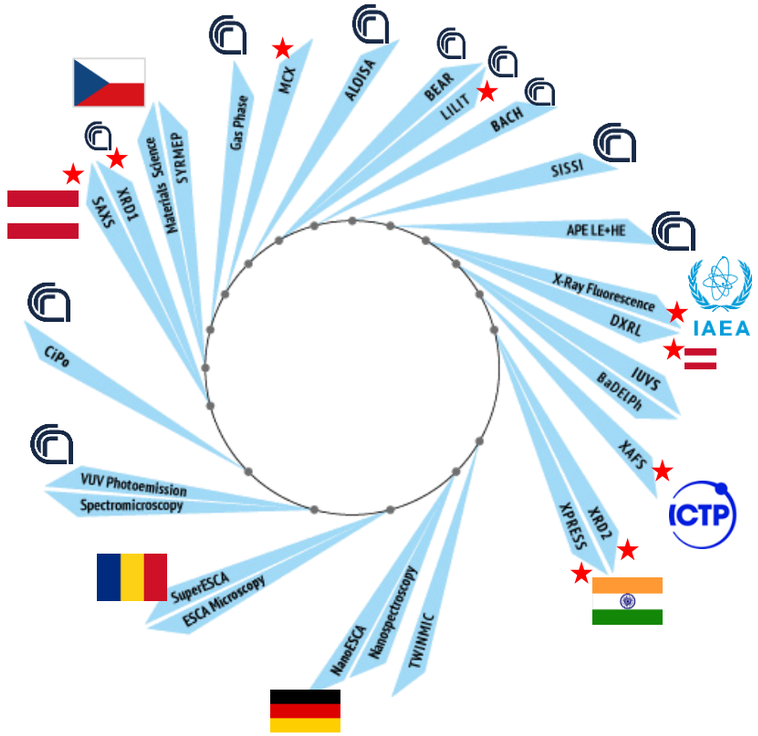
ICTP

nffa.eu
nanoscience foundries & fine analysis

nephews
Neutrons and Photons Elevating Worldwide Science

POC

ReMade @ ARI



INDUSTRIAL RESEARCH

Direct access through Industrial Liaison Office (ILO)

We provide:

- Analytical measurements
- Co-development of instrumentation, industrial production protocols and procedures
- Consultancy

Confidentiality guaranteed (NDA)

Fee based on cost recovery or specific funding programs

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Peer review proposals

Academic researchers are requested to publish their scientific results in the literature

Two calls per year (mid March, mid September)

Normal proposals

- Beamtime allocated during the semester after the call for proposals

Long term proposals

- Allocation over 2 years (4-semesters)
- No need to submit new proposals relating to the project every 6 months; but report after the 1st year
- **complex equipment** (time-consuming to assemble and dismount) transferred to Elettra for the project. During the two-year period, the instrument will be available also to other users

Academic research success rate

High competition:

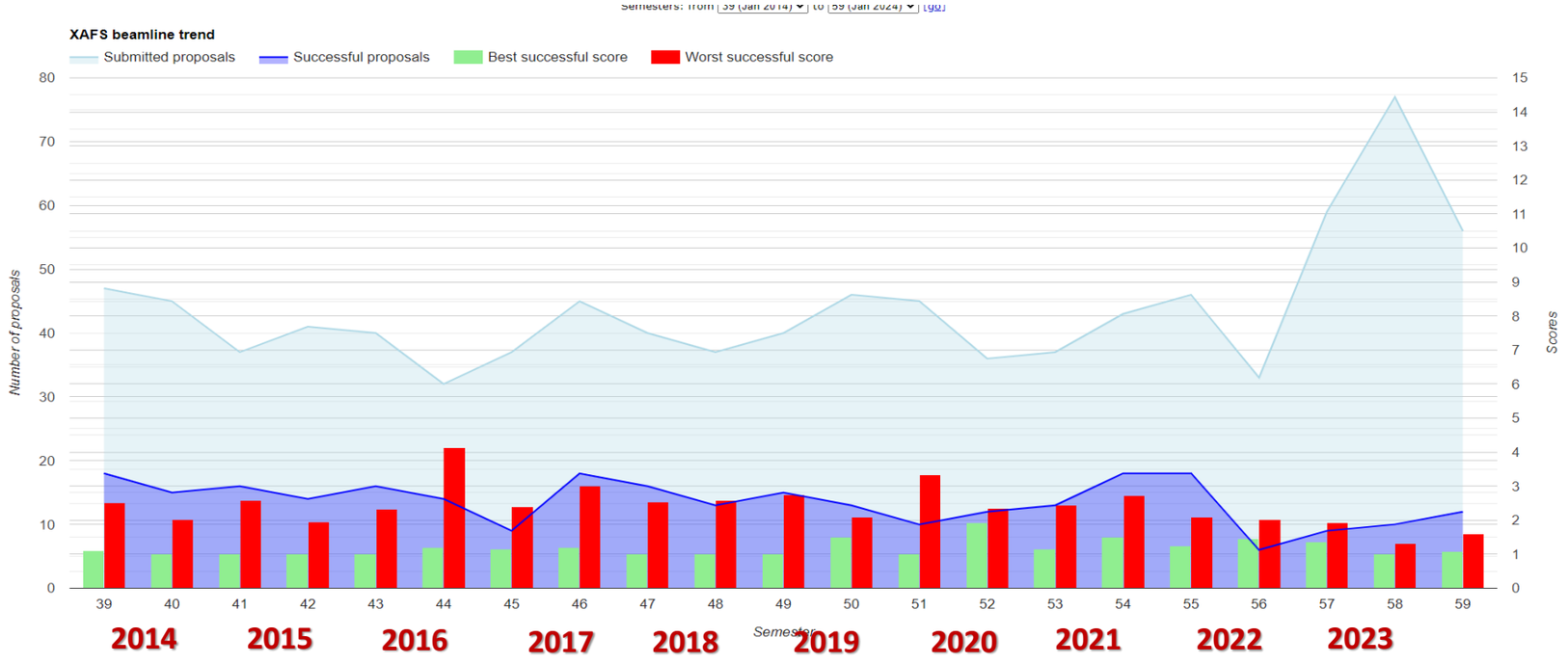
chance of success = 50%

(on average)

Success rate @ XAFS

Only 30% of proposal is scheduled

Writing good proposal is crucial!



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How to write a good proposal?

- Having a good research topic
- …and convincing **others** (proposal reviewers)!

The general idea

Proposal = competition

Proposals are a competition

In 2 pages all the necessary info about your research including:

- A good **background** (current knowledge and a frame for your topic)
- The **experiment** you want to do, with details on the equipment you need
- The expected **outcome** and the data analysis procedure you will use
- Any **preliminary** results
- **Justification** for the **time** requested and for the choice of beamline

Elettra
Sincrotrone
Trieste

Submitting a proposal in real life

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New submissions

https://vuo.elettra.eu/

Elettra Sincrotrone Trieste

VUO - Virtual Unified Office

VUO - Welcome to the Virtual Unified Office

Login

Username:
Password: [Login]

Please note that in case you log in from a new location you will be asked to insert a validation code that will be sent to you via email.

Indicate as username your identification code (USER ID) or your e-mail and the password

Lost password

If you've already registered but can't remember your password, don't register again.
Click here to reset your password.
If you have lost your password and your e-mail has changed please contact us.

Registration

If you are a new user select this link and follow the registration procedure.

Visits to the Elettra laboratory

If you are planning a visit to our laboratory just click here and fill the form. You will be contacted by our visitors office.
Se intendi pianificare una visita al nostro laboratorio seleziona questo link ed inserisci i dati della tua richiesta. Sarai contattato dal nostro "Ufficio visite" quanto prima.
Our visits statistics

Open Access Data Portal

The Elettra and CERIC Open Access Data Portal provides access to raw scientific data acquired during experiments. The data are published as Open upon explicit request by their Principal Investigator, in accordance to the facility's data policy or through other special agreements like for those regarding Covid-19. The Elettra scientific data policy is available here.

Calendar

For details on Beamtime Allocation Calendar have a look to Elettra or FERMI Calendars.

Seminars

Forthcoming seminars@Elettra
Forthcoming seminars@CNR-IOM

Publication Search & Submission

Please note that all publications resulting from measurement runs or research done at Elettra must be entered into the Elettra Publication Database.
Authors are invited to submit their publications through Elettra's Publication Submission page for each contribution - journal article, conference presentation, book or book chapter, thesis, contributed news articles, etc.
Only published contributions should be submitted to Elettra's Publications Database.
Publications can be searched for through Elettra's Publication Search page.

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www.elettra.eu

Iscritta al Registro delle Imprese di Trieste
Società di interesse nazionale
ai sensi dell'art. 10, comma 4,
L. 19 ottobre 1999 n. 370

Your Proposals

Submit a proposal for small molecules or macromolecular crystallography (evaluated monthly - more info)
Small molecules or macromolecular crystallography proposal still in editing (evaluated monthly)

Submit a new proposal (Elettra/FERMI/Offline facilities)
FERMI: Deadline on Tuesday 03 June 2025 at 23:59 CET

Re-submit a proposal
Edit a partially complete proposal

Already submitted proposals

BEST (BEam time SaTisfaction)

Achievements on a past proposal.
A brief textual report of the experiment results. This information is necessary for EU supported proposals and also to submit the "Experimental report"
Experimental report on a past proposal.
More detailed information about experiment results in rtf/pdf formats. (This report will be used for evaluating future proposals)

General information - 1

Add Proposal

Proposal Title

Like the title of a paper

Proposal Objectives *(min 30 characters) max 400 characters*

- like the abstract of scientific paper
- clear statement on essence of proposal
- details are given in the following sections

Proposal Category

For purely statistical purposes please specify if your research is done in collaboration with industrial companies
Collaboration with Industry ☐

Check the box below if you require financial support through the ICTP-Elettra Users Programme (for scientists from developing countries)
ICTP-Elettra Users Programme Support Requested ☐

Proposal Category
In case of continuation or resubmission please specify your Previous Proposal Number

Application Category
Motivations of Long Term request

- Normal
- Long term

- **New:** If you are submitting this experiment plan for the first time or it has little correlation with your previous work at Elettra
- **Continuation:** Experiment complemetary/conclusive to an experiment already performed at Elettra.
- **Resubmission:** Proposal submitted in a previous call but modified or rewritten according to the suggestions of the proposal review panel.

European Union statistics information
Discipline
Specific discipline

Chemistry,Earth Sciences & Environment, Energy Engineering and Technology,Humanities, Information and Communication technologies, Life Sciences and Biotech, Materials Science, Mathematics, Physics, Social sciences

General information - 2

- Careful and informed choice
- Correct beamline (target the proposal) and correct beam time in shifts

Experimental Requirements

Beamline Required

Please specify the 'Second beamline required' only if you can ALTERNATIVELY use either the first beamline or the second one.

Alternative beamline required

Please specify the total number of shifts required (1 shift is 8 hours). If this is a Long Term proposal you have to specify the number of shifts required for this semester.

Shifts Required: 0

Proposal Category

Please select accurately this field because the 'Research Area' determine also the scientific committee that will evaluate your proposal

Research Area

Experimental Requirements

Please specify the Electron Beam Requirements:
- Multi bunch: normal operation - high intensity
- Few bunch: special operation - low intensity only for time resolved experiment.

Electron Beam Requirements: Multi Bunch

Photon Energy (eV)

Photon Energy Resolution (eV)

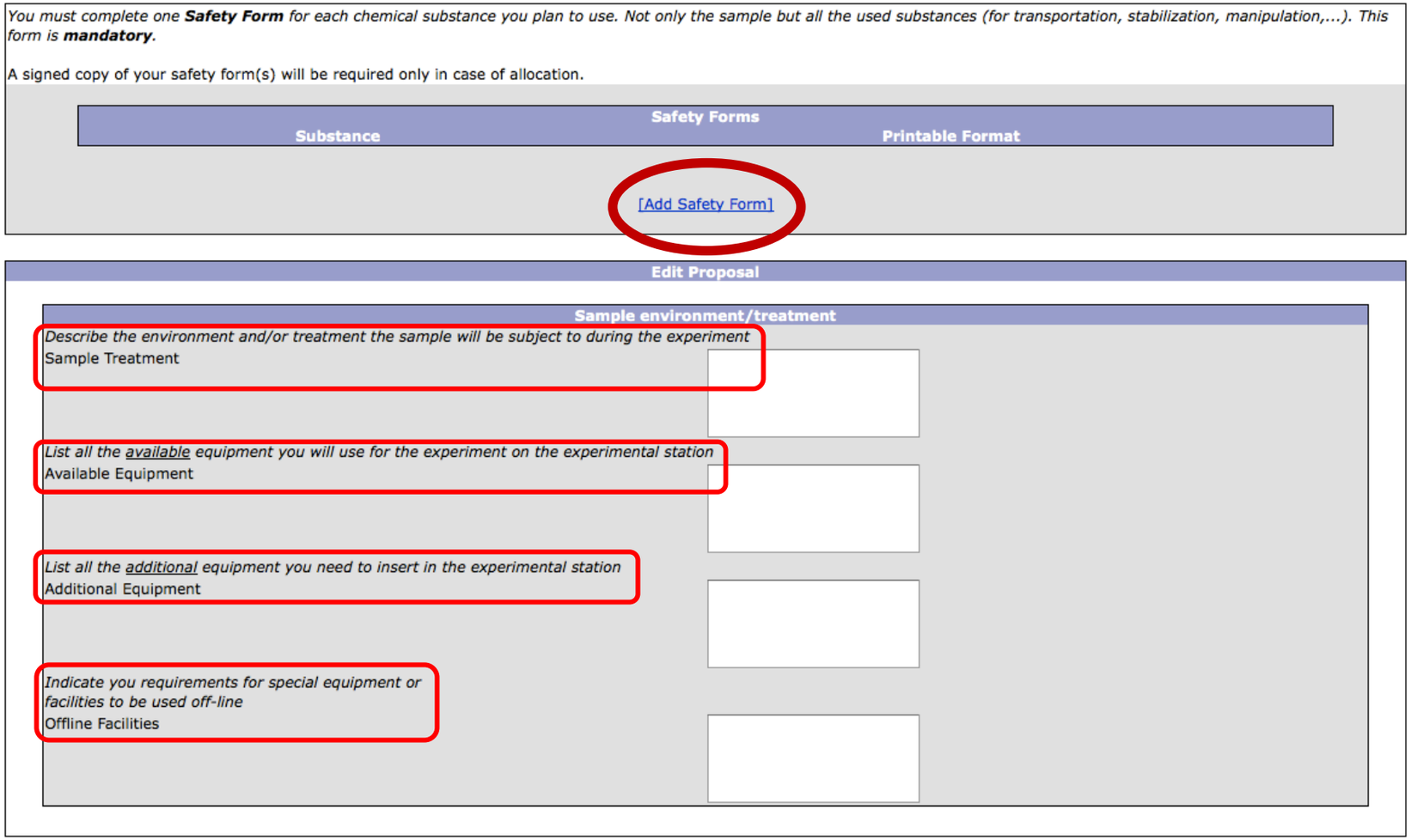
Other requirements

[Save & Continue] [Exit without saving]

-Atoms, molecules and plasma
-Protein and macromolecular crystallography
-Condensed matter
- electronic and magnetic structure
-Catalytic Materials/Surface science
-Instrumentation and Technological materials
- Life and Medical Sciences,
- Polymers and Soft Matters
-Scattering
-Hard Condensed Matter- Structures

Sample description

Give details about your sample, and add a safety form for every substance you intend to use, not only samples but also other substances used for transportation, stabilization, manipulation, etc.



*You must complete one **Safety Form** for each chemical substance you plan to use. Not only the sample but all the used substances (for transportation, stabilization, manipulation,...). This form is **mandatory**.*

A signed copy of your safety form(s) will be required only in case of allocation.

Safety Forms	
Substance	Printable Format

[Add Safety Form]

Edit Proposal

Sample environment/treatment

Describe the environment and/or treatment the sample will be subject to during the experiment
Sample Treatment

List all the available equipment you will use for the experiment on the experimental station
Available Equipment

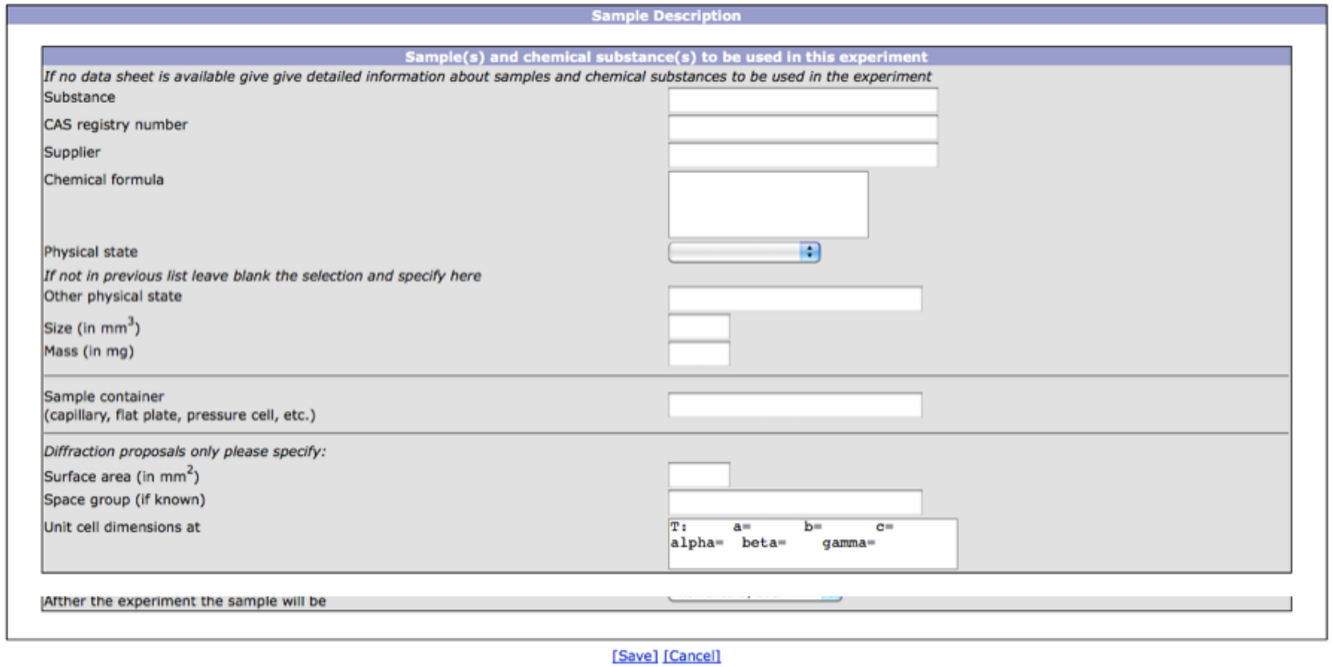
List all the additional equipment you need to insert in the experimental station
Additional Equipment

Indicate you requirements for special equipment or facilities to be used off-line
Offline Facilities

[Save & Continue] [Delete this Proposal]

Safety form

- The safety form is **mandatory** (if you do not complete at least one you will not be able to submit your proposal)
- You will be given the possibility to update your safety forms 3 weeks before the scheduled date of your experiment, in case you need to change, delete or add new materials. An e-mail from the VUO will let you know when editing is available
- A signed copy of your safety form(s) will be required only in case your proposal is scheduled, you do not need to send a signed copy for the evaluation step. All signed safety forms should arrive at Elettra before your experiment starts


Sample Description

Sample(s) and chemical substance(s) to be used in this experiment

If no data sheet is available give give detailed information about samples and chemical substances to be used in the experiment

Substance

CAS registry number

Supplier

Chemical formula

Physical state

If not in previous list leave blank the selection and specify here

Other physical state

Size (in mm^3)

Mass (in mg)

Sample container
(capillary, flat plate, pressure cell, etc.)

Diffraction proposals only please specify:

Surface area (in mm^2)

Space group (if known)

Unit cell dimensions at

T: a= b= c=
alpha= beta= gamma=

Afther the experiment the sample will be

[Save] [Cancel]

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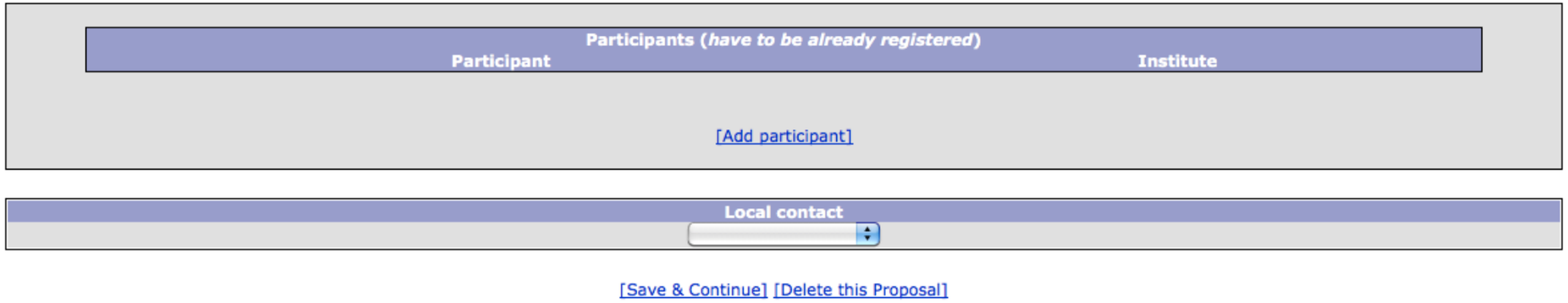
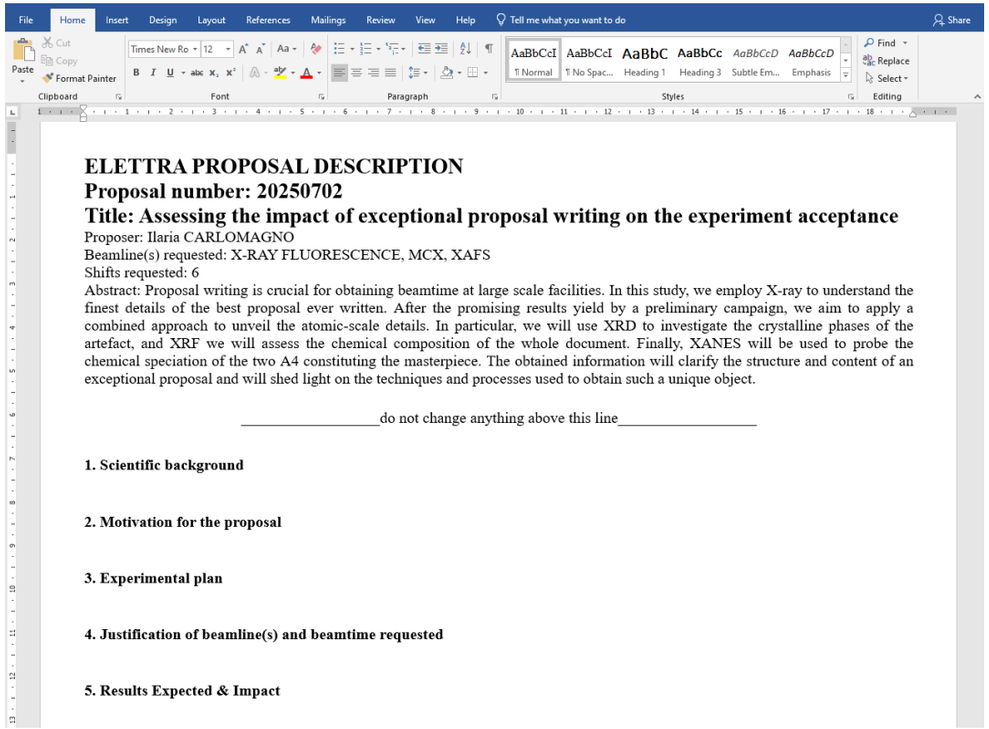
Local contact and participants

- The user completing the proposal is considered the (main) **proposer**
- All official communications will be sent to the proposer only
- No limit to the number of **participants**.
  To add a participant, click on [Add participant] – they must be registered VUO users!
  Modifications to the participant list is possible before the start of your experiment: contact the Users Office
- If you wish to include Elettra staff, ask permission first!
- The **Local contact** is the beamline scientist you interact with to prepare your proposal and who will probably assist you during your experiment. The menu will show you the options for the beamline you requested



Proposal description



ELETTRA PROPOSAL DESCRIPTION
Proposal number: 20250702
Title: Assessing the impact of exceptional proposal writing on the experiment acceptance
Proposer: Ilaria CARLOMAGNO
Beamline(s) requested: X-RAY FLUORESCENCE, MCX, XAFS
Shifts requested: 6
Abstract: Proposal writing is crucial for obtaining beamtime at large scale facilities. In this study, we employ X-ray to understand the finest details of the best proposal ever written. After the promising results yield by a preliminary campaign, we aim to apply a combined approach to unveil the atomic-scale details. In particular, we will use XRD to investigate the crystalline phases of the artefact, and XRF we will assess the chemical composition of the whole document. Finally, XANES will be used to probe the chemical speciation of the two A4 constituting the masterpiece. The obtained information will clarify the structure and content of an exceptional proposal and will shed light on the techniques and processes used to obtain such a unique object.

_____do not change anything above this line_____

1. Scientific background

2. Motivation for the proposal

3. Experimental plan

4. Justification of beamline(s) and beamtime requested

5. Results Expected & Impact

1. Background

- Set the scene for the interest of your research
- Indicate fundamental and societal importance of your work
- Refer to any previous measurements or preliminary characterization
- Relevant figures can be useful
- Avoid vague or too broad aims
- Write in a simple way and be clear

Reviewers are expert in many different fields, but not necessarily in yours!

2. Motivation for the present proposal

- Be specific on what you want to do, specifying the class of samples you intend to measure
- Say why you are doing it
- Say what kind of information your measurements will give on your systems
- If you want to measure your samples at some special conditions (temperature, pressure, electric field, …..) mention it in this section and why these conditions are important
- What results are you expecting?
- How these results will allow to answer specific questions?
- What will be the impact of answering this question on your field of research and what is the importance of your study

Just because something has not been done before
does not mean it is worth doing now

If there are plenty of studies of the same kind or a large plethora of results
be convincing about why you want to go in the pool
and what will be the added value of your proposal

3. Experimental plan

- **how** you are going to carry out the **experiment** at synchrotron
- (No need to describe the recipe of how you prepare your samples)
- **How many** samples you intend to measure
- Specify the **setup** needed (furnace? Cryostat? Operando setup?)
- Be specific of the **conditions** of the measurements (e.g. temperature/pressure)
- Show reviewers you are **ready** and prepared
- Allow beamline scientists to make feasibility assessment
- Ask a **reasonable** number of beamtime shifts (1 shift = 8 hours)

Prior discussion with beamline scientist is strongly advised

4. Explain why this work calls for access to Elettra (or FERMI)

Specify the **characteristics of the beamline** that are essential for performing your work

- Energy resolution
- Equipment available
- …..

If you have **experience**, you can mention it here
(but new users are still welcome!)

If you have requested beamtime on different beamlines for the same project you can mention it here including the proposal number for the other beamline

5. References

- Illustrate importance of topic by citing one or two **milestone** papers in your field
- Cite **recent exciting** developments in or around specific topic of proposal
- Indicate level of your research by citing **your own** recent, **relevant** publications (with or without Elettra data)

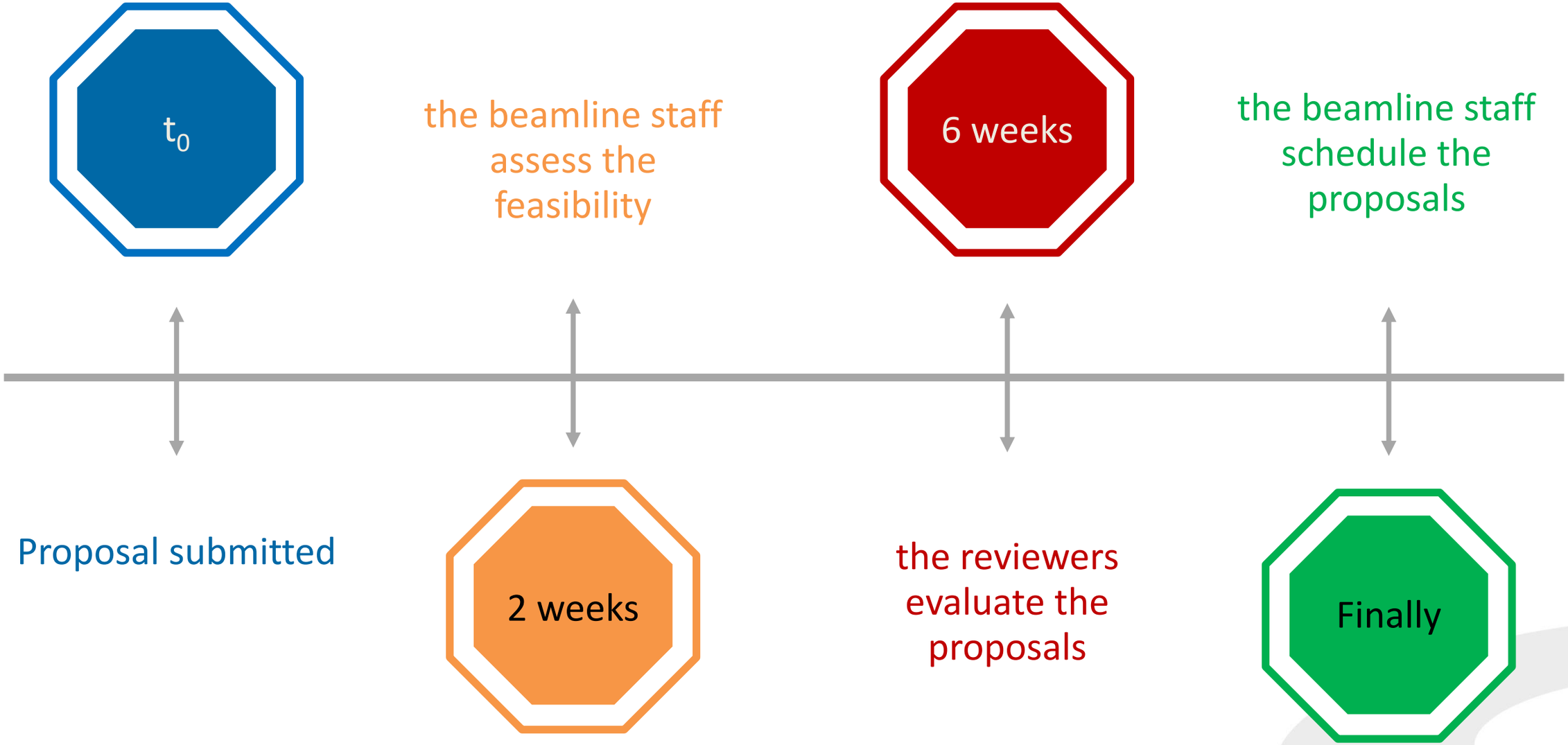
Do not expect that reviewers will have time to read all the references:
give all essential information in the proposal

Final steps

- Upload the file (RTF or pdf)

- Click on Check and definitely submit this proposal
  or Save in editing status to submit later

Evaluation timeline



Proposal rating

1.0 -1.5 points Highly innovative research proposal of exceptional quality and outstanding scientific and/or practical relevance. **It must get beamtime.**

1.6 -2.0 points A well-conceived and original research proposal, with strong potential for making an important contribution to an active field of research. No alternative analytical tool is available. It **should definitely** get beamtime

2.1 -2.5 points Very good proposal, with a relevant scientific case and likely to produce significant results. The need for Elettra or FERMI is evident and it **should** get beamtime under normal circumstances.

2.6 -3.0 points A potentially excellent proposal which is lacking some information, e.g., preliminary results, further explanations, etc. Although not groundbreaking, it is near cutting-edge and likely to produce significant results. The need for Elettra or FERMI is evident. It **may** get beamtime, unless there are too many exceptional proposals.

3.1 -4.0 points Elettra or FERMI may be required and the science interesting, although in a well-worked area of research. It is of lower priority in a competitive environment. It **may** get beamtime, if the pressure on the beamline is not heavy.

4.1 -5.0 points Doubts exist regarding the scientific content of the proposed project, or the scientific case is not clear, or there is no clear requirement for Elettra or FERMI. It **should not** get beamtime, unless there is no demand on that particular beamline.

After the beamtime

Through the VUO: BEST (BEamtime SaTisfaction form)

Achievements

- *outline of the main results of your beamtime*

Experimental report

- *2 pages*
- *Report of the experiment, what has been measured, possibly preliminary results (not a full analysis!)*

Mandatory
for the submission
of new proposals

Final remarks

Proposals must be scientifically compelling and competitive

- Very few proposals are rejected for technical reasons
- Almost all submitted proposals could be done with useful results
  - *Could they be done?*
  - *Should they be done?*
  - *Must they be done?*
- The proposals must be geared towards research specifically benefitting from SR measurements
- Strong scientific case where SR could give a result which would allow a field to significantly advance

Final remarks

Lots of proposals

- reviewers have many proposals to review and discuss
- proposal must be **self-contained**
- all important information should be given in the proposal
- reviewers don’t have time to get extra information from references
- poorly written proposals have high chance of a poor grade (typos, errors, non-respect of template and format)
- structure is important: **clear** and **easy to read**
- Doubts? Ask for help!

Final remarks

Contact beamline staff

- **In advance** (3-4 weeks before the deadline)
- To identify clearly whether and how the experiment can be done and whether it can give you the answers you need
- Advise on number of shifts required for each experiment

About the beamline staff…

- …deals with technical feasibility
- … **does not** evaluate the scientific merit of your proposal

Multitechniques proposals

Central European Research Infrastructure Consortium

CERIC-ERIC is an integrated multidisciplinary and multiprobe Research Infrastructure open for external basic and applied users in the fields of Materials, Biomaterials and Nanotechnology.

With a single entry point it allows to use excellent facilities in 7 European Countries.

The access is free for basic users and commercial for industrial users. Free access is by international peer review selection and open publication, industrial and/or proprietary use is at market costs.

The partners

Austria, **Czech Republic, Italy, Poland, Romania, Serbia** and **Slovenia.**

Croatia and **Hungary** participate as Observers pending accession.

Member States appoint one **Representing Entity** each, who has the capability to support the scientific and technical operation of CERIC-ERIC through a **Partner Facility**, complementary to all others in an overall multi-technique Infrastructure.

The facilities

Austria (Graz University of Technology) light and X-ray scattering laboratories, Austrian SAXS beamline at Elettra.

Czech Republic (Charles University Prague) surface analysis, thin film growth and studies of reaction mechanism on catalyst surfaces

Italy (Elettra Sincrotrone Trieste) XAS, XRD, imaging…

Poland (Polish Ministry of Science and Higher Education) techniques based on synchrotron radiation in the soft x-ray range

Romania (National Institute of Material Physics) HRTEM and EPR laboratories

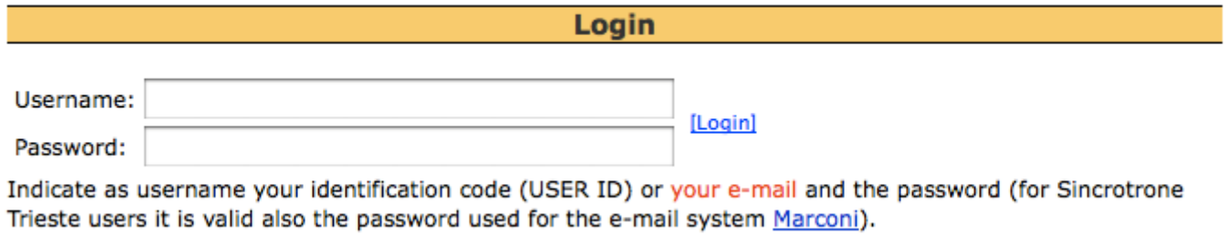
Slovenia (National Institute of Chemistry) NMR spectroscopy

Croatia (Ruđer Bošković Institute) ion beam techniques

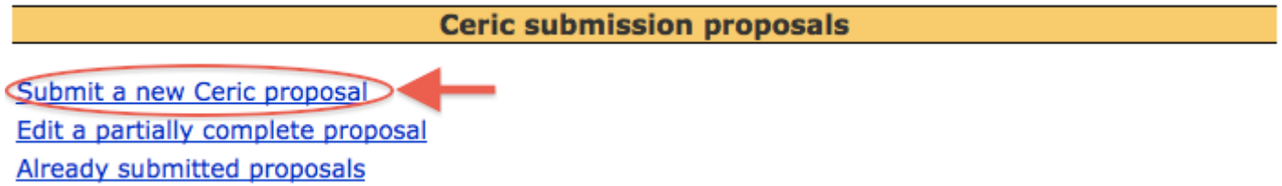
Hungary (Budapest neutron centre) Neutron scattering

Two calls/year

Proposals must be submitted through the CERIC Virtual Unified Office (**CERIC VUO**).



and choose **"Submit a new CERIC proposal"**:



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Consortium

https://www.ceric-eric.eu/

...good luck with your future proposals!