

# Users Application Guide for General Proposal of Synergetic Extreme Condition User Facility (The First Round in FY2025)

Synergetic Extreme Condition User Facility (SECUF) is a large research infrastructure built by the Institute of Physics, Chinese Academy of Sciences and co-constructed by Jilin University. SECUF is designed to provide international top-class extreme experimental conditions such as extremely low temperature, strong magnetic field, ultra-high pressure, and ultra-fast light field for domestic and foreign users to conduct frontier research in material science such as material synthesis, physical characterization, quantum regulation, and ultra-fast processes. The SECUF - Beijing part has been fully transferred to trial operation and opened for use by domestic and foreign users in early 2023. The first round of general proposal application for the year 2025 is now open to users on March 1st, 2025.

To carry out experiments using SECUF, users need to log in to the Chinese Academy of Sciences Large Research Infrastructures User Service Platform (<https://lssf.cas.cn/en/index.jsp>), register a scientific research user account and submit the proposal application online. The deadline for the first round of general proposal application for 2025 is March 31st, 2025. After the review of proposal is approved, specific experimental time can be reserved one or more times according to the approved experimental time (valid for one year).

The following is the application operation guide.

## 1. Sign up

*Notice: If you are using this platform for the first time, please refer to the following steps to complete the registration. If you have already used this platform to open one account, please skip the registration steps.*

1.1 Open the website: <https://lssf.cas.cn/en/index.jsp>.

1.2 Click "[SIGN UP](#)" at the top right corner.



1.3 Agree: privacy policy and information security.

1.4 Please fill in your registration information and click "[Register](#)".

1.5 To the registered email address to activate the account, then complete the registration.

## 2. Proposal Application

2.1 Open the website: <https://lssf.cas.cn/en/index.jsp>. Click "[LOG IN](#)" at the top right corner, and fill in Username and Password then click "[LOGIN](#)".



Select the type of login account

Account

Username

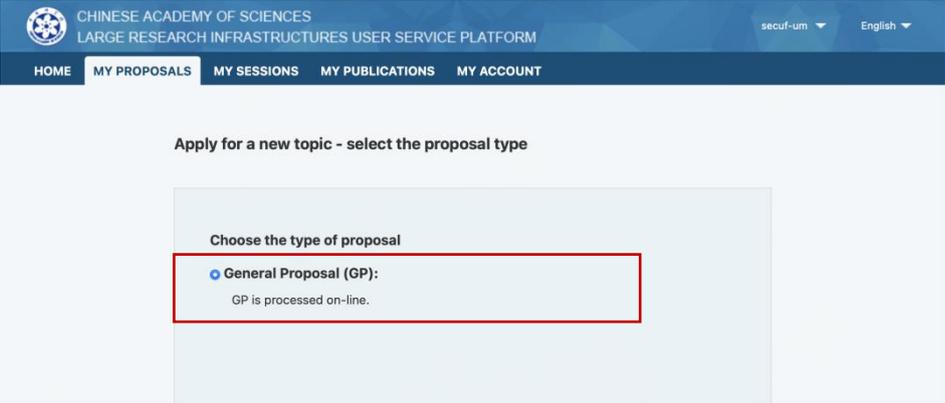
Password:

Remember the password   Forgive the password?

LOGIN   SIGN UP

2.2 Click: "[Useful Links>Create a new proposal](#)".

2.3 Choose: General Proposal (GP) then click "[next](#)".



CHINESE ACADEMY OF SCIENCES  
LARGE RESEARCH INFRASTRUCTURES USER SERVICE PLATFORM

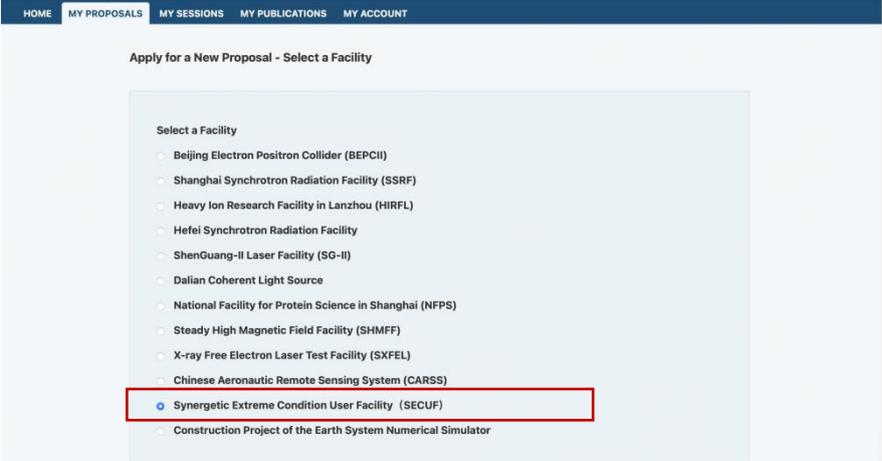
HOME   MY PROPOSALS   MY SESSIONS   MY PUBLICATIONS   MY ACCOUNT

Apply for a new topic - select the proposal type

Choose the type of proposal

General Proposal (GP):  
GP is processed on-line.

2.4 Select a Facility- Synergetic Extreme Condition User Facility (SECUF) and click "[next](#)".



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Apply for a New Proposal - Select a Facility

Select a Facility

- Beijing Electron Positron Collider (BEPCII)
- Shanghai Synchrotron Radiation Facility (SSRF)
- Heavy Ion Research Facility in Lanzhou (HIRFL)
- Hefei Synchrotron Radiation Facility
- ShenGuang-II Laser Facility (SG-II)
- Dalian Coherent Light Source
- National Facility for Protein Science in Shanghai (NFPS)
- Steady High Magnetic Field Facility (SHMFF)
- X-ray Free Electron Laser Test Facility (XFEL)
- Chinese Aeronautic Remote Sensing System (CARSS)
- Synergetic Extreme Condition User Facility (SECUF)
- Construction Project of the Earth System Numerical Simulator

2.5 Choose "[I have read and agree to the terms](#)" and then click "[next](#)".

2.6 Fill in the proposal information.

It is divided into four sections, you can switch to fill in. You can click "[Save](#)" in the upper right corner to save it at any time during the filling process.

a. Science Overview

Title: please fill in the user proposal title.

Abstract: please fill in the user proposal abstract.

Main Science Area: please choose.

Other Science Area / Experimental method: May not be filled in.

Science Case: please click "[Download template](#)". Fill in the form as required and convert it to PDF format, then upload it through "[Upload](#)".

**\*Please stamp the official seal of the institution on the first page of the project application and upload the electronic version at the “Science Overview- Science Case”**

The screenshot shows the 'Science Overview' form. It has a sidebar with navigation options: Science Overview (selected), Investigators, Beamline/Terminal, and Auxiliary materials. The main content area includes:

- Title\***: A text input field.
- Abstract\***: A large text area.
- Main Science Area\***: A list of radio buttons for various scientific fields: Physics (selected), Chemistry, Astronomy, Earth science, Biology, Agronomy, Forestry, Material science, Medical science, Energy science, Nuclear science, Environmental science, Electronics, communications and Automatic Control, Aerospace science, Engineering and Technology, Metrology, and other.
- Other Science Area**: A list of checkboxes for the same fields as above.
- Experimental method**: A list of checkboxes for: diffraction, scattering, absorption, soft X-ray, microbeam, imaging, and other.
- Science Case**: A section with a dark blue header. Below it, text reads: "Please prepare your science case by modifying the template Upload the document containing your scientific case. This must be a PDF which is not more than 20 pages long (A4) with a maximum file size of 20MB." There is a [Download template](#) link and an **Upload Science Case** section with a file selection button and an **[Upload]** button.

b. Investigators

The screenshot shows the 'Investigators' section. It has a sidebar with navigation options: Science Overview, Investigators (selected), Beamline/Terminal, and Auxiliary materials. The main content area includes:

- Two bullet points: "Principal Investigator (PI) has overall responsibility for all aspects of a proposal, including preparation and submission of the proposal." and "Co-Investigator (Co-I) can not edit and submit proposal."
- Investigator** table:

Account/Name/Org	Role	Operation
	Principal Investigator	
- Auxiliary contact** section with three input fields:
  - Secondary contact person Name :
  - Secondary contact person Phone :
  - Secondary contact person mail :
- A button labeled "Add Investigator in the system" is highlighted with a red box.

Principal Investigator: The login user account defaults to the principal

investigator. The principal investigator is responsible for all aspects of the proposal and is the primary contact for the proposal.

Co-Investigator: you can click "[Add investigator in the system](#)" at the top right corner, select users who have registered on the platform as proposal participants. The co-investigators should include all the people who are the main participants of the proposal and who are going to visit SECUF.

Auxiliary contact: The principal investigator can designate a secondary contact person for contact during the proposal review and implementation process.

### c. Beamline/Terminal

Choose Beamline/Equipment/Terminal/Service: Choose the station to be applied for and "[Click here for more details](#)", you can download the detailed text and pictures of this experimental station. "[XXX station -Additional form download](#)" is the sample information form to request this station.

Every proposal is eligible for application at one Beamline/Equipment/Terminal/Service. If access to multiple Beamline/Equipment/Terminal/Service is desired, please use the copy button to proceed.

Beamline/Equipment/Terminal/Service

Ultra-low temperature high pressure physical property measurements - cubic anvil cell station

[Click here for more details](#)

Ultra-low temperature high pressure physical property measurements - cubic anvil cell (CAC) station aims to regulate the quantum states of matters via accurate physical-property measurements under high hydrostatic pressures. This station adopts a unique miniature CAC that can generate hydrostatic pressures up to 15 GPa and integrates it with specially designed cryostat and superconducting magnet; it provides users the option to measure physical properties such as electrical transport, magnetic susceptibility, and AC specific heat under multiple extreme conditions including high hydrostatic pressure, extremely low temperature and strong magnetic field. New measurement techniques can also be jointly developed according to research needs. This station provides two sets of cryostat and superconducting magnet systems for use with CAC: (1) a He4 cryostat and 9 T magnet unit, (2) a dilution refrigerator and 12 T magnet unit, which can be used for high-pressure physical-property measurements under conditions of 1.5-300 K, 0-9 T and -0.02-30 K, 0-12 T, respectively. The CAC adopts three-axis compression geometry and the sample is immersed in the liquid pressure transmitting medium. These factors ensure an excellent hydrostatic pressure conditions in CAC and thus are conducive to obtaining the intrinsic pressure effects and the evolutions of the quantum state of matters.

[Ultra-low temperature high pressure physical property measurements - cubic anvil cell station—Additional form download](#)

Additional form for Beamline/Equipment/Terminal/Service

Please download the source table and submit a PDF version of the completed document.

Upload additional form for Beamline/Equipment/Terminal/Service

选取文件 未选择文件 [Upload]

Requested time

The time unit is . Please round to 1 decimal place.

Requested time \* :

Additional form for Beamline/Equipment/Terminal/Service: please fill in the form "[XXX station -Additional form download](#)" as required and convert it to PDF format, then upload it through "[Upload](#)".

Requested time: Please fill in the total number of experimental hours applied for this experimental station. The current round of proposal application experimental time is valid for one year from the time of notification of proposal review results.

### d. Auxiliary materials

Submitted application/ Publications: If there are historical topics and historical results filled in this platform, you can read the selection, and these two will be used as a reference for the review.

Additional materials: Here you can upload relevant supporting materials that will help the proposal review, including published papers, technical achievements, etc. The attachment format must be PDF.

The screenshot shows a web interface with a sidebar on the left containing navigation options: Science Overview, Investigators, Beamline/Terminal, and Auxiliary materials. The main content area is divided into three sections:

- Submitted application:** A table with columns: NO., Proposals Name, Science Area, Facility, Beamline/Equipment/Terminal/Service, Allocated experimental time, and Used experimental time.
- Publications:** A table with columns: NO., Title, Authors, Journal, Year, PROPOSAL, and Facility.
- Additional materials:** A section with instructions: "You can also upload additional materials that are helpful for the application. This must be a PDF which is not more than 20 pages long (A4) with a maximum file size of 20MB." Below this is an "Upload additional materials" section with a file selection button (labeled "选取文件 未选择文件") and an "Upload" button. Below the upload section is a table with columns: NO., File Name, and Operating.

- e. If the proposal information has been completed, you can click "Submit proposal" in the upper right corner, and there will be a prompt for successful submission.
- f. It is recommended that the same proposal applicant to apply for no more than three proposals in the current round of proposal applications.

### 3. Search and copy proposals

#### 3.1 Search and Copy Proposals

Click "[Home- Useful Links- List of my proposals](#)", you can view the content of submitted proposals and the status of proposal review. If you want to apply for another SECUF station using the same topic and content you have already filled out, you can do so by clicking on the "[Action Buttons- Copy Proposals](#)".

The screenshot shows a navigation bar with links: HOME, MY PROPOSALS, MY SESSIONS, MY PUBLICATIONS, and MY ACCOUNT. Below the navigation bar, there are two main sections:

- To Do List:** A section with a clipboard icon and the text "To Do List".
- Useful Links:** A section with a link icon and the text "Useful Links". It contains four links: "Create a new proposal", "List of my proposals" (highlighted with a red box), "Add publications", and "List of my publications".

#### 3.2 Notification of Results

The results of this round of proposal application will be notified to the applicants by e-mail in early June 2025. Applicants can also check the progress and results in real time through the Chinese Academy of Sciences Large Research Infrastructures User Service Platform (<https://lssf.cas.cn/en/index.jsp>).