

# CEM3 - FEI Talos Arctica 200 keV

Site: Rm. A09, B2, Interdisciplinary Research Building of Science and Technology

Contact: Dr. Irene Deli / Ms. Yu-Hua Chang

Service: Automated condition screening and publication quality studies of both cryo-EM and cryo-TM

## Booking & Review

DAAIS Online [Facility Reservation System](#)



- (1) **Account Register:** Both User and Lab Supervisor/PI need to create an account first on the **DAAIS Online Facility Reservation System**.
- (2) **Service Request:** User submits a “Service Request” on the **System** for the machine time of the next two months. When the capacity of an instrument is nearing full, booking by a lab should not exceed 2 days every week. The booking procedures need to be done before the machine time, an afterward make up application is not accepted.
- (3) **Case Review:** Each “Service Request” will be auto-emailed by the **System** to the PI for an online approval first, then the “Request” will be forwarded to ASCEM for a further review and arrangement, or the case will be considered as “cancelled”.

## Online Booking Time Slots

- (1) 09:00 – 12:00. (2) 14:00 – 18:00, the afternoon slot can include 18:00 - 09:00 overnight data collection if needed (please set up before 17:30 and then facility manager will check parameters and align machine again.).
- Before the first booking, please initiatively contact staff for guide of the booking system.
- **User Training:** For the first time use of CEM3, please also submit a “Service Request” on the **System** for a “ASCEM Training Course”, then choose “Talos Training (EPU)”.

Academia Sinica Cryo-EM Center (ASCEM) 108.01.01起	
Facility/Equipment	
Apply	<a href="#">ASCEM Training Course</a>
Apply	<a href="#">CEM 1, JEM1400 Cryo-EM</a>
Apply	<a href="#">CEM 2, FEI Tecnai F20 TEM-1</a>
Apply	<a href="#">CEM 3, Talos Arctica</a>
Apply	<a href="#">CEM 4, Titan Krios</a>
Apply	<a href="#">CryoEM software support 冷凍電顯軟體服務建置</a>
Apply	<a href="#">FEI Vitrobot-2</a>
Apply	<a href="#">FEI Vitrobot-3</a>

## Deadline for booking and cancellation

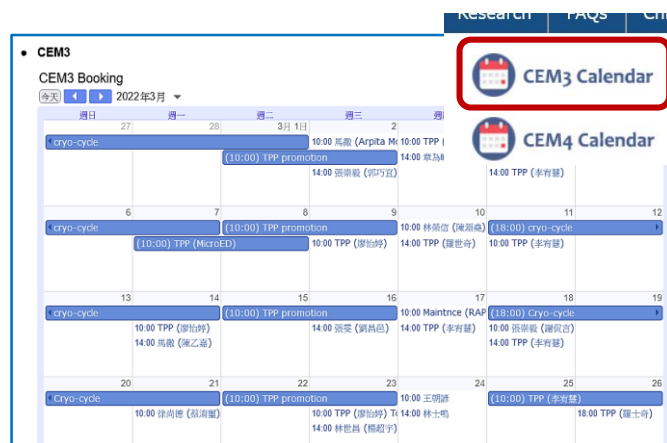
- After booking the time slot on the Facility Reservation System, facility manager will post it on the “CEM3 Calendar” of ASCEM website.
- It still can be booked no later than 48 hours in advance, and canceled 48 hours in advance, please be sure to

## CEM3 - FEI Talos Arctica 200 keV

contact facility manager to confirm.

Contact the manager within the specified period if any adjustment is needed. Once the manager clicks “approve” for the machine time on the **System**, cancellation for refund will not be accepted.

- Manager retains the right to adjust the machine time depending on the machine condition as well as to arrange time for routine maintenance of machines as needed (2 to 3 days every two weeks).



### Notes for Sample Delivery

- Grids must be delivered to facility staff at least **two working days** before the machine time. Specify the grids by filling in the [Grid Location Form \(Example\)](#) and submit the form on site or by emailing for clipping and uploading preparation. **Note:** Damaged grids can't be clipped. The clipping service, as a part of the usage of CEM3/4, is operated by ASCEM staff before loading the sample grids onto CEM3/4 and only consumables is charged.
- Samples will be uploaded one time every day, 12 grids maximum are allowed each time, i.e. 6 for morning case and 6 for afternoon (including overnight data collection case) case. Applicants need to be on site when collecting data.

### Data Collect

- User can optionally choose On-the-fly motion correction (default parameter). It is free, time saving, space saving ~1/25x. Choose the requirements while submitting a “Service Request” on **DAAIS Online Facility Reservation System**.

*Do "on-the fly motion correction"? :	<input type="radio"/> Yes (Default parameter) <input type="radio"/> Yes (User defined parameter ) <input type="text"/> <input type="radio"/> No
---------------------------------------	---

- For using preset parameters, please choose “**Yes (Default Parameter)**”.
- For modifying parameters, please reach a consensus with your PI first, then choose “Yes (User defined parameter)” and remark new parameter values.

## CEM3 - FEI Talos Arctica 200 keV

### ● Data transfer and storage

On-the-fly Motion Correction Service	Output files	Default Mode for Data transfer
	corrected images	Data is transferred to ASGC by ASCEM.
Use	raw images	User brings own storage device to ASCEM for data download and saving. (Please contact Facility Managers for exceptions.)
Not Use	raw images	User brings own storage device to ASCEM for data download and saving. (Please contact Facility Managers for exceptions.)

- User data will be periodically deleted to release facility computer resource for continuous data input. Basically, CEM3 will keep experiment data for about two months, and motion corrected micrographs for about four months. Any change will be notified by Facility managers.
- The data computing and storage services provided by ASGC will follow the regulations of ASGC, including charging schemes.

### Case Closure

- The applicant must complete the “**Time and Charge Confirmation**” for closing each individual case on the **DAAIS Facility Reservation System**. The **System** will email a link to guide the next steps, the applicant and the Supervisor/PI can complete the procedures via the link or directly log in the **System** to **close** the “**Pending Cases**”. Then, ASCEM will compile all the **closed** cases monthly and email a **payment notice** to the Supervisor/PI.

▶ Case ( [New cases](#) [Disposed & Pending case](#) [Not-closed cases](#) , [Closed cases](#) , [Integrated query](#) )

[Service Request - Disposed & Pending case](#)

No.	Date of application	Applicant	PI	G

### Charge & Pay

(Start from 2023.08.01, Currency: NTD)

Charge for Data Collection <a href="#">Details</a> (Extra fee will be charged if the facility consumables are used.)	Regular Time (Mon - Fri 8:30-17:30)	Off Time (Mon - Sun)
CEM3 (FEI Talos Arctica 200 keV)	13,000 / day, for academia users	
	100,000 / day, for industry users	

- To promote the academic research and the application of cryoEM, and under the recommendations of DAAIS, all academia users, no matter it is AS or non-AS budgets being used to pay, share the same charge scheme and discount from August 1, 2023 in accordance with the announcement in the ASCEM User Committee Meeting held on July 18, 2023.
- Each case will be charged according to the record on the **DAAIS Facility Reservation System**.
- If the charge has not been paid for over than six months after receiving the **payment notice** due to user reasons,

## CEM3 - FEI Talos Arctica 200 keV

the booking authority of the whole lab members will be suspended temporarily until the charge is paid.

**Pay by AS budgets** - It will be charged via AS intramural budget accounts and will be charged on the 7th day after sending out the payment notice.

**Pay by non-AS budgets** - including MOST or NSTC projects. Please provide the payment notice to the accountant of your institute for assistance and pay the charge as soon as possible by one of the three methods below.

**Method 1: 【User-DAAIS】** Directly go to DAAIS office and **pay cash or check** (payee: Academia Sinica). The receipt will be immediately issued on site.

**Contact:** Mr. Eric Wen-Chih Chiu, DAAIS, Rm. A102, Interdisciplinary Building of Science and Technology, Academia Sinica.

**Provide information to DAAIS:** facility name used, receipt title, service statements/lists.

**Method 2: 【User-DAAIS】** Send a **check by registered mail** (payee: Academia Sinica). The receipt will be issued by DAAIS after receiving the check.

**Mailing address:** Mr. Eric Wen-Chih Chiu, DAAIS, Rm. A102, Interdisciplinary Sci. & Tech. Building, No. 28, Ln. 70, Sec. 2, Academia Rd., Nankang, Taipei 11574, Taiwan (R.O.C.)

**Enclosed information for DAAIS:** facility name used, receipt title, service statements/lists.

**Method 3: 【User-Facility】** **Telegraphic or ATM transfer.** The receipt will be issued by DAAIS after receiving the proof of the payment.

**BENE NAME:** ACADEMIA SINICA      **BANK A/C:** 004056030013

**BENEFICIARY ADDRESS:** NO. 128, SEC. 2, ACADEMIA ROAD, NANGANG DIST., TAIPEI 115, TAIWAN, R.O.C.

**BANK NAME:** LAND BANK OF TAIWAN NAN KANG BRANCH (Swift Code: LBOTTWTP004)

**BANK ADDRESS:** NO. 364, NANKANG ROAD SEC.1, TAIPEI 115, TAIWAN, R.O.C.

**Provide information to Facility (contact: Ms. Hsin-Hua Lin):** proof of payment, receipt title, and number of receipts to be issued.