

CEM4 – Grids Store & Retrieve

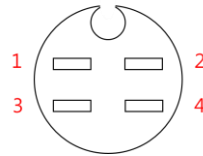
Operating location: Rm. A8, B2, Interdisciplinary Research Building of Sci. & Tech.

Contact: Dr. Chun-Hsiung Wang

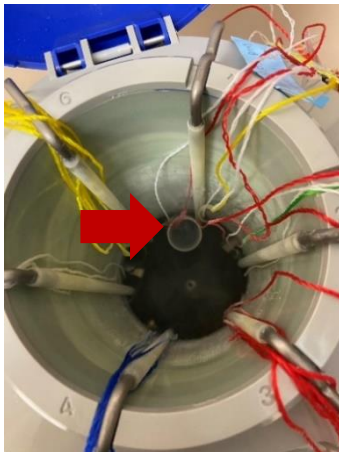
Service: Data Collection for High-Resolution Structures

Guidelines

1. A few days before data collection, discuss and decide the imaging parameters of the grids with the Manager, including counting/super resolution, magnification, total dose, fraction, defocus, etc.
2. CEM4 alignment is necessary whenever any imaging parameter is changed. If an impromptu adjustment is requested, the alignment will be conducted in the assigned operation time.
3. Basically, the grids for CEM4 should have been quality confirmed by CEM3-Screening. If new grids will be adopted, please have them ready two days before the operation time, and inform the Manager the grids to be used, including the centrifuge tube, number and storage place.
4. When conducting data collection (on computer), please mark “VV” (space + capital VV) behind the **sample name** for the grid to be retrieved, and leave a centrifuge tube on the computer desk for keeping the grids.
5. User needs to record the grids order by him/herself.
6. User needs to proactively confirm the grid order for data collection and storage place with Manager.



7. **The liquid nitrogen tanks are shared by different labs**, so do place your centrifuge tubes within the stainless steel spoon in a vertical position to avoid samples falling out. Also, don't place too many centrifuge tubes in one stainless steel spoon, it might lead to samples falling out from the top when attempting to retrieve tubes from the bottom, resulting in a loss of temperature control.
8. After samples are arranged, do place the accessories back and reseal the cover in its original position to maintain a low-temperature environment for all samples.



Error: a centrifuge tube is not properly placed.



Error: the tank accessory is not placed back inside the tank.

9. **If you are uncertain about the process, contact facility staff.**