

R.I. Consortium for Nanoscience and Nanotechnology
Field emission scanning electron microscope usage policy

A. Hours of Operation

1. Monday to Friday from 9:00 am to 4:30 pm for supervised usage, 24/7 for independent users. All appointments are listed on our [reservation calendar](#).

B. Specimen Preparation

1. Inform the manager if you will need training on specimen preparation. Also confirm with the manager that your specimen is suitable for analysis. Certain conditions are not suitable depending on the type of analysis to be performed (e.g. "dirty" specimens, residual solvents).
2. **Regular FE-SEM (i.e., not cryogenic)**. Users should prepare specimens prior to the appointment **in consultation with the instrument manager**. Only imaging time will be charged for regular FE-SEM. There will be no charge for assisting in regular specimen preparation.
3. **Cryo-SEM**. Cryo-SEM requires modifying the instrument - regular SEM cannot be performed when set for cryo operation. As such, users should contact the manager well in advance for cryo-SEM operation (2-4 week lead time recommended). Both specimen preparation time and imaging time will be charged if performed by the manager. Cryo-specimens cannot be stored in this facility.

C. Training

1. New users must contact the instrument manager by emailing engimg@etal.uri.edu with a brief description of the type of work to be performed and approximate time frame.
2. New users will be asked to complete and submit a "User Registration Form".
3. Users must contact the manager to schedule training prior to analyzing their specimens. All training sessions are one-on-one. Training will be ongoing and will be provided during scheduled time. **Users cannot use new modes of operation for which they have not been trained.**
4. Instrument manager will train in all steps from sample preparation to imaging.
5. Beginner users will become advanced users after the manager has deemed that users are sufficiently trained to work independently. Advanced users will prepare samples and operate the instrument. The manager will be available to assist.

D. Instrument Usage

1. The instrument must be reserved by emailing engimg@etal.uri.edu **after consulting availability** on the [reservation calendar](#).
2. The minimum facility usage charge will be 0.5 and 1.0 hour for regular and cryo-SEM, respectively. Click here to view [user rates](#).
3. It is recommended that users schedule at least 1.0 and 2.0 hours for regular and cryo-SEM operation, respectively.
4. Only the time actually required for user's sample preparation (if any) and imaging will be charged.
5. *Users in training* will be charged for sample preparation and microscope time. However, *advanced users* will be charged only for microscope time.
6. The charge for FE-SEM training, which includes specimen preparation, alignment, and imaging, is the same as the hourly facility usage charge.

7. The user will respect the instruction on the corresponding standard operating protocol, available as a hard copy in the facility, and the directions given to them by the instrument manager during training and subsequent usage.
8. The instrument manager will revoke user rights in case of instrument misuse.
9. The **hours must be logged in** using the [web form](#) 24 h after instrument use, at the latest.
10. The **use of the facility must be acknowledged** in any publications by including the following text in the Acknowledgements section: "*The SEM data was acquired at the RI Consortium for Nanoscience and Nanotechnology, a URI College of Engineering core facility partially funded by the National Science Foundation EPSCoR, Cooperative Agreement #OIA-1655221.*"

E. Data Management

1. All results (images, spectra, etc.) are stored in local hard drive. Users will be allowed to copy their files from the local PC **using a USB flash drive**. Data will not be stored indefinitely and it is the user's responsibility to save their data in a timely manner.
2. We plan to offer cloud service via *Google Drive* in future.