

R.I. Consortium for Nanoscience and Nanotechnology

X-ray diffraction system 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. Approximately 1 g of dry powder is needed for routine XRD powder diffraction analysis. Contact instrument manager for small volume samples.
2. Only non-toxic materials can be handled in powder form in the facility. Any toxic material must be embedded in an amorphous matrix to avoid generation of aerosols and must be loaded in a sample holder before coming into the facility. The user is responsible for bringing the appropriate personal protective equipment, cleanup and waste disposal when handling toxic materials. Contact instrument manager prior to sample preparation.

C. Training

1. 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.
2. Instrument manager will train in all steps from sample preparation to data acquisition and use of the ICDD database. Users will be responsible for advanced data processing and interpretation as it applies to their sample type.
3. 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 1.0 hour. Click here to view [user rates](#).
3. Instrument warm-up, measurement, and cool down will be charged.
4. The charge for XRD training is the same as the hourly facility usage charge.
5. 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.
6. The instrument manager will revoke user rights in case of instrument misuse.
7. The **hours must be logged in** using the [web form](#) 24 h after instrument use, at the latest.
8. The **use of the facility must be acknowledged** in any publications by including the following text in the Acknowledgements section: "*The XRD 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.