

Code Number: _____

Date: _____

User Registration

Characterization Facility

For Non-University of Minnesota users

Full name (Last, First): _____

Phone: work _____ home/cell _____

E-mail Address _____

Company _____

Mailing Address _____

Fill out all fields above completely and write legibly.

User Agreement

I agree that

- all publications containing results obtained in the Characterization Facility will include the following acknowledgment: "Parts of this work were carried out in the Characterization Facility, University of Minnesota, which receives partial support from NSF through the MRSEC program.";
- use of Facility equipment requires training by designated staff (I MAY NOT train other users or let them operate the equipment during my session);
- sessions cancelled less than 48 hours in advance will be charged in full;
- surcharges on training fees (below cost) may apply if I do not follow up with usage;
- not using an instrument within 2 weeks of training mandates additional billed assistance;
- if I have a usage lapse of 3 months or more, I must first e-mail the specialist for permission to use the instrument and at the specialist's discretion, schedule an assisted session to reinforce my operation skills;
- I am obligated to inform designated staff of any damages caused to equipment and I will assume financial responsibility to repair any damages overtly caused by my user error, failure to inform staff of damages will garner additional charges;

Signature: _____

Date: _____

Safety Training Requirements

Our mission is to provide a safe research environment in which each individual can work and interact with a certain level of confidence about the facility and the actions of others that are involved with the facility. All occupants and people working in the Characterization Facility must comply with the Minnesota Employee Right to Know Act (MERTKA). This regulation requires employees to be trained and certified in a qualified laboratory health and safety training program. Although the Characterization Facility is an instrument facility and not qualified as a laboratory, we require basic lab safety training before you may use our facilities. Qualified training is usually provided by your department and/or principal investigator. The University of Minnesota also provides classes on every third Thursday at Boynton, call or go online to Environmental Health and Safety for details. You must certify to us that you have this training.

I have taken the following MERKTA or other departmental training:

Type of Training	Date of training
Applicant's Signature	

In the instance that training was not provided to you, complete the training modules (specified below) at http://www.dehs.umn.edu/training_newlabsafety.htm. Please note that users must have completed safety training within a year of registration, and it is the user's responsibility to renew his/her training annually.

The three online training tutorials include; **Introduction to Research Safety, Chemical Safety, and Chemical Waste Management**. Take all three of the training tutorials. An e-mail with a record stating you took the tutorial will be sent to your U of M account (the record of your training can also be viewed at any time via MyU)

Note: If a researcher works with any form of **human blood, human body fluids (such as spinal fluid, synovial fluid, vaginal fluid, sperm), and/or infectious agents (such as viruses, bacteria, fungi, rickettsia)** he or she will also need to complete the online module **Preventing Employee Exposure to Bloodborne and Other Pathogens** on the main training page under **Biological Materials**.

For x-ray instrumentation, select **Radioactive Materials** from the DEHS training page and complete the **Radiation Safety Orientation** in the **Online** section. You will also need to view the safety tape *Double-Edged Sword* (from 1678, located in the biomedical library in Diehl Hall) and complete the accompanying questionnaire. Please ask for this questionnaire and fill it out while you watch the video. Bring the questionnaire from the tape and the result form of the online training with you to your instrument training.

Characterization Facility Instruments

Please select a maximum of three to four instruments upon initial registration. If you desire training on additional instruments after you have been trained on the ones initially selected, please email charfac@umn.edu with your request.

Proximal Nanoprobes

- Hysitron Triboindenter
- Micromechanical Tester
- MTS Nanoindenter XP
- SPM/AFM
- Tencor P-10 Profilometer

Scanning Electron Microscopy (SEM)

- SEM

Transmission Electron Microscopy (TEM)

- FEI Tecnai T12
- JEOL 1200 EX
- FEI Tecnai G2 Spirit BioTWIN

Surface and Thin-Film Analysis

- Auger Electron Spectroscopy
- IBA/RBS
- Contact Angle Meter
- Ellipsometer
- XPS SSX-100

Vibrational Spectroscopy

- FTIR
- Raman

Visible Light Microscopy

- VEM

X-ray Diffraction & Scattering

- Panalytical X'pert
- Bruker-AXS D-5005
- SAXS-2D
- SAXS-6m
- SAXSess
- Microdiffractometer
- Bruker D8 Discover
- Bruker D8 Advance
- Laue Diffractometer

Sample Preparation

- Hard Material Prep Lab
- Microtome
- Staining
- Bench/Hood 1
- Bench/Hood 2
- Critical Point Dryer

All instruments are not included, instruments that require training on prior instruments and all sample prep techniques are not listed, if the instrument or technique you would like is not listed please indicate which instrument you would like to use and contact the specialist of that instrument for further evaluation.

Instrument: _____

If you plan to work with a specialist and do not require training please indicate the specialist you would like to work with.

Specialist: _____

Return all forms to the drop box located outside 15 Shepherd Labs, email as a .pdf to charfac@umn.edu, or fax to 612-625-5368.