

Code Number: \_\_\_\_\_

Date: \_\_\_\_\_

# User Registration

## Characterization Facility

For University of Minnesota users

Full name (Last, First): \_\_\_\_\_

Department: \_\_\_\_\_

Phone: work \_\_\_\_\_ home/cell \_\_\_\_\_

U of M Email: \_\_\_\_\_

X500 Username: \_\_\_\_\_

Advisor/P.I. Name: \_\_\_\_\_

Advisor Department: \_\_\_\_\_

Advisor Email: \_\_\_\_\_

Advisor Phone: \_\_\_\_\_

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.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## User Category

Please select which category best describes you. If other, please specify.

- Undergraduate
- Graduate Student
- Post Doctorate
- Professor
- Other: \_\_\_\_\_

# 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](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](mailto: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](mailto:charfac@umn.edu), or fax to 612-625-5368.

## Characterization Facility

### University of Minnesota Users Only Billing Form

Please provide this form to your departmental accounting staff. If you are using a Sponsored account fill in the project field, if you using a Non-Sponsored account, fill in the program field, and if you are using a Cost Share account, fill in the program, projects, and cost share field with CS. **All information must be provided or form will be disregarded.**

User Name \_\_\_\_\_

Department \_\_\_\_\_

Faculty member associated with this funding \_\_\_\_\_

Nickname for Account (10 characters maximum) \_\_\_\_\_

This account is in effect until (date)\* \_\_\_\_\_

#### EFS Account String:

Fund (Required)	DeptID (Required)	Account (Required)	
----	-----	<u>720403</u>	
Program	PCBU	Project	Act
-----	<u>UMSPR</u>	-----	<u>1</u>
CF1 (if applicable)	CF2 (if applicable)	EmplID (if applicable)	CS
-----	-----	-----	--

#### User Departmental Accounting Staff

Name of Departmental Staff providing account to user \_\_\_\_\_

Date \_\_\_\_\_ Signature \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ E-mail \_\_\_\_\_

Date entered into JAWS & Initials: \_\_\_\_\_

\*Required. Billing account strings will be deactivated upon expiration date. The user and user department are responsible for providing updated EFS-billing information five business days in advance of the expiration date to ensure uninterrupted service. The CharFac requires three business days to edit or set up billing strings.

If an invoice for billed work or purchased products returns as a voucher error, the user account will be deactivated until a valid account is provided. If an invalid EFS string is provided for a service charge the user will be charged the hourly rate for the length of time it takes to correct it.