

Ferris State University Shimadzu Core Laboratory

User Policy

Instructions

1. Beginning April 21, 2023, this updated *Shimadzu Core Laboratory for Academic and Research Excellence* (SCL) policy shall be in effect. This policy shall supersede all previous use/user agreements signed between the SCL management and Faculty/Staff users of the SCL.
2. For Users of SCL instruments and services, each individual intramural researcher, faculty member, and their students/lab personnel shall
 - a. Be allowed to use the SCL for research projects only if the principal investigator/faculty assumes all responsibility for their students' actions - whether the PI is present or not in the SCL.
 - b. Complete all required safety requirements for lab use including
 - i. Laboratory Chemical Safety CITI Training Modules
 - Proof of completed CITI training by emailing completion certificates to the SCL director is needed for entry into the SCL instrument areas and for the individual SCL Safety Training.
 - ii. Individual SCL Safety training by SCL personnel
 - Each lab user will be required to sign an individual SCL “*Work Agreement*” form after this training.
 - c. Be trained on each instrument to be utilized by their lab members.
 - i. Each faculty/staff member shall be trained and qualified by SCL laboratory personnel on each instrument that they shall use for their research and academic studies.
 - ii. Each student worker performing assays in the SCL shall be trained by their faculty/staff supervisor. by SCL laboratory personnel, or by Shimadzu Corporation technicians on each instrument they shall use for their research.
3. **Failure to comply with any of the sections and requirements of this agreement may result in revocation of individual or group access to the SCL and/or its instruments.**

Safety Training

Prior to being given access to the lab and to individual instrument training, perspective users will be required to take the CITI Laboratory Chemical Safety Course offered by Ferris State University through the Safety, Health, Environment and Risk Management (SHERM) office. Evidence of completion of these safety courses, such as emailing the course certificate to the SCL director, will be required to validate this agreement. In addition, SCL safety training will be given by the SCL manager/director or SCL personnel prior to each individual user, including signing of this User Agreement.

Instrument Training

Faculty and student training will be done individually on each desired instrument for each user by SCL personnel, a qualified faculty investigator, or by Shimadzu Corporate technicians. Training on an instrument DOES NOT permit use of any other instrument.

Users who have not used an instrument for more than one year will be required to retake the training.

Instrument Reservation and Sign-In/Sign-Out

Faculty, staff and student users are **required to reserve instrument** time on the respective Shimadzu instrument calendars using the *Calendar Application of the Microsoft Email account*. Each instrument has an individual calendar for sign-up. The calendars may be found using the following names:

1. Varian 400 MHz NMR
2. Shimadzu LC-MS/MS 8040
3. Shimadzu Prominence Prep Semi-preparative HPLC
4. Shimadzu GC/MS-QP2010 Ultra
5. Shimadzu Axima MALDI-TOF MS
6. Shimadzu 2600 UV-Vis Spectrophotometer
7. Shimadzu Biospec UV-Vis Nano
8. Applied Biosystems Step-One Plus Real Time qPCR Instrument

Please, be respectful of the research and students of others when scheduling instrument usage. If a user does NOT start instrument usage within the first 30 minutes after the scheduled start time on a calendar, another desiring use of the instrument shall be granted instrument access.

For each instrument, each faculty member or principal investigator (PI) shall be given a unique username and password to log into the software of each SCL instrument. All persons associate with this faculty member/principal investigator shall use the faculty/PI username and password. It is the **responsibility of the faculty member to keep record of their usernames and passwords** to each instrument on which they are trained. It is the **responsibility of the faculty member to backup any data that they have gotten on the respective instruments**. Instrument data files may be erased once every semester.

Please report ALL instrumentation problems in a timely manner. Users misusing and abusing equipment and/or the SCL space, including incidents that results in instrument damage may be liable to additional charges and/or revoking of SCL privileges.

Classes Using Lab SCL Instruments or Educational Space

All classes performed in the Shimadzu Core Laboratory shall be performed during regular business hours (weekdays, 8 AM to 5 PM, except university holidays).

Work During Regular Hours

Faculty/staff and students having completed the CITI Laboratory Chemical Safety Training courses, the individual SCL safety training, and trained on an instrument(s) may use instrument(s) or use the educational area for study during regular business hours (8 AM to 5 PM, Monday to Friday, except university holidays).

Faculty Work Outside of Regular Hours

Faculty/staff having completed the CITI Laboratory Chemical Safety Training courses, the individual SCL safety training, as well as training on the desired SCL instruments may use the SCL outside of regular lab business hours, including morning, evenings, and weekends. Each will be given key-card access to the ASC building and the SCL. If the faculty/staff is present, these may have student assistants in the SCL when working outside of regular lab hours.

Student Work Outside of Regular Hours

For the safety of students and facilities, student afterhours work, including evenings and weekends, shall NOT be permitted. However, in RARE exceptions, faculty may go through a request process and, if then

approved by their respective department chair, dean, and the SCL director, be permitted LIMITED usage of the SCL afterhours. The request shall include the following, go through the proper approval channels listed, and then be sent to the SCL Director:

1. The research faculty/staff has documented in writing the need and imperative to use the SCL outside of normal business hours,
2. The name and contact information of the “buddy” (see below) is listed on the request,
3. The time(s) and date(s) or date range for which the SCL is to be used afterhours is listed on the request,
4. The reason(s) the data could not be collected during regular work hours is listed on the request,
5. The request contains evidence that students and “buddies” have completed the required CITI Laboratory Chemical Safety Training and individual SCL safety training,
6. The request is submitted to the SCL director at least one (1) week prior to the requested time of SCL access, and
7. The request has been approved as being needed and imperative by the dean and department chair of the research faculty/staff that desire to use the SCL facilities afterhours.

Student(s) fully approved by this process may utilize SCL instruments after-hours. These students will be given key-card access to the ASC building and the SCL.

A “Buddy System” shall be observed for all students working in SCL outside of regular workhours, such that a companion, trained in lab safety as outlined in point three (3) above, shall be present at all times after-hours with the research student. The Buddy shall not handle any instruments unless previously trained and authorized on the instrument by the SCL management.

Reagents and Labware

All consumable reagents, materials, and labware shall be provided by the user. If this is not possible or if SCL reagents, materials or labware are utilized, the user shall be charged for the use of SCL reagents, materials and labware.

Laboratory Charges

A copy of laboratory charge rates shall be given to all users of the SCL upon request to the SCL director. Because the SCL is financially responsible for waste disposal and instrument cleaning, each user of the LC-MS, HPLC, and ddPCR, will be charged a maintenance fee. If SCL personnel perform the analyses, an additional usage surcharge will be applied. Each month, an end-of-month statement/summary of charges will be sent to all users. Payment is expected before the first of the following month.

SCL LABORATORY RULES

General

1. Treat the laboratory and those using it with respect.
2. Respect off-limit areas of the lab.
3. Food and drinks are only allowed on the carpeted area; lab materials and PPE are not allowed in the carpeted areas, except for the specimens to be visualized in the microscope room.
4. Inform the SCL director of broken instruments, labware or, where applicable, low stocks of reagents or consumables.
5. No earplugs, headphone or other device that may block hearing malfunctions or problems is permitted in the Shimadzu Core Lab.

6. Personal Protective Equipment shall be used as appropriate, including gloves, eye protection, and closed-toed shoes, with maximized coverage of skin. Long hair should be out of the face.
7. Use of instruments is permitted only with proper training and permission.
8. All instrument usage times are to be reserved and respected.
9. ***Only trained and authorized persons are allowed beyond the yellow chain by the Varian 400 MHz NMR.***
10. ***If a sudden exhaust of gas with loud noise is observed and heard from the NMR instrument or if the oxygen sensor alarm sounds, IMMEDIATELY EXIT the Shimadzu Core Laboratory and call 911.***

In the event of a life-threatening medical emergencies, call 911 immediately.

Intramural Faculty User Agreement Statements:

- 1) ***If data is obtained using the SCL instrumentation that results in publication, I, the faculty member/Principle Investigator, agree that the Ferris State University Shimadzu Core Laboratory for Academic and Research Excellence will be acknowledged in said publication.***
- 2) ***I have read this SCL User Agreement and the attached SCL Rules. I agree to all conditions and will fulfill all responsibilities accordingly specified, and I will ensure that my students agree and follow the conditions of this agreement as well.***
- 3) ***I understand that I, as principal investigator/faculty, am responsible for the conduct of my students, and that I will be provided a copy of this signed document for my records.***