

Analytical Instrumentation Facility Lab Use Policy

The following policy applies for use of the equipment maintained by the Analytical Instrumentation Facility (AIF). All users are expected to comply with the guidelines as set forth by the University and Environmental Health and Safety Office, in addition to the guidelines listed below.

Lab Access

Access to the various labs and equipment in AIF is granted as long as the following conditions are met:

- Completion of AIF Safety Training by AIF staff and/or EHS approved training.
- Valid use agreement, which is current and has sufficient funds.
- Completion of training on the equipment or process in the lab with an authorized AIF staff member.
 - Training may take several sessions and it is up to the discretion of the AIF to determine if a user is performing at a competency level that will allow unsupervised access and use of the equipment.
- After hours and weekend access to users will be granted only after:
 - The user has demonstrated a use of the equipment competently over a period of time.
 - The user does not require the assistance of AIF staff for operation.
- Users should not be in the labs by themselves.
 - Users should always perform hazardous procedures during peak hours to ensure that others are around in the case of an emergency.
 - Users should avoid being in the lab without having another person present or checking on them frequently.
- AIF is a core facility in the Research Triangle Nanotechnology Network (RTNN), one of sixteen sites in the NSF-supported National Nanotechnology Coordinated Infrastructure.
 - As a user of AIF, you will periodically receive emails from the "RTNN Assessment Team" containing links to short surveys regarding your demographic information and AIF experience. We encourage you to complete these surveys, as they are critical to our continued NSF funding.

Loss of Access

Access to the various labs and equipment can be revoked at the discretion of AIF if any of the following (but not limited to) occur:

- No valid agreement approved by PI
- Unsafe operation of equipment that could lead to harm of the user, other users or the equipment.
- Using access privileges to provide access to unauthorized users.
- Failure to report time used on the equipment.
- Failure to follow instructions provided to them by the Lab Manager.
- Failure to maintain the lab in a clean and orderly fashion.

User Responsibilities

- Users are responsible for informing AIF staff of any hazards that may be present from their samples such as radioactivity, reactivity, health hazards, etc.
- Knowing where the laboratory Safety plan is located.
- Following the proper safety procedures while using the laboratory and as stated in the Safety Plan.
- Follow the instructions for safe operation of equipment as instructed.

- Do not make any modifications to equipment. (If modification is needed contact the Lab Manager to make the changes).
- Know proper emergency shutdown for equipment.
 - Wear proper personal protective equipment (PPE)
- Users are responsible for the collection and storage of their own data.
 - While most data is stored locally on instruments, it is the user's responsibility to copy his/her data for archiving.
 - Users are also responsible for erasing sensitive data from laboratory computers.
- Report anyone anonymously that you feel is using the equipment or lab in an unsafe manner (you see you say) <https://www.aif.ncsu.edu/about-us/report-safety-and-ethics-issues/>

Lab Usage Charges and Costs

- Prior Authorization
 - All users are required to have a valid agreement approved by their PI prior to using the equipment.
- All equipment and labs are subject to an hourly usage fee and in some cases maybe a daily charge.
 - There is a minimum hourly charge for all equipment of *at least* 1 hr. The following equipment has other minimum time requirements during the normal work day from 9am – 5pm:
 - XPS -3hrs min
 - The following equipment has minimum time requirements all the time:
 - FIB – 2hrs min
 - Cryo SEM – 2hrs min
 - Empyrean XRD – 2hrs
 - Titan TEM – 2hrs min
 - In situ stages also require a minimum of instrument usage:
 - Poseidon Liquid Stage – 2010F TEM – 3hrs min
 - Aduro Heating Stage – Titan TEM – 2hrs min
 - Aduro Heating Stage – Quanta FIB – 2hrs min
 - Gas Stage – Titan TEM – 4hrs min
 - Billing is charged at the amount of time signed-up for or the amount of time actually used, whichever is greater.
 - Time billed is for the amount of time that the equipment is occupied for and not usable by another person.
 - All users are required to sign-up for equipment through *the Lab Management system* after they have received proper training and are eligible to sign-up.
 - You should be ready for your appointment at the time that it is ready.
 - Failure to show up after 15 min will result in the cancelation of your time and you will incur a cost for the time you signed-up for unless the time is used by another individual.
 - Cancellation should be at least 24 hrs in advance to prevent being charged for the time.
 - In the case of certain equipment, users are required to pay for consumables (such as nanoindenter tips, AFM tips, Protochips substrates, etc.) or supply their own consumables.
 - All users are required to fill out the usage for the proper equipment listed at <https://labs.mendixcloud.com>
 - Users who do not fill out the online forms may have their access removed.
- Training
 - All training on instruments is to be conducted by AIF Staff.
 - Cost for training incurs the cost of the equipment and the cost of the Staff time.
 - Titan training is provided free of equipment charge for the first 10hrs of training.
 - Training may take several sessions and it is up to the discretion of the AIF to determine if a user is performing at a competency level that will allow unsupervised access and use of the equipment.
- Supplies
 - AIF provides some supplies for proper handling and analysis of samples.
 - However, you will be required to provide certain items that are not deemed routine to equipment use.

- Improper or negligent use of equipment which results in breakage or excessive down time will be charge to the users account on record.
 - Excessive downtime will be charged if the instrument is not usable for a long period due to user negligence.
 - Cost of repair or replacement of an item will be charged to the PI if the user is found to have caused the damage due to negligence or improper use of equipment.
- Short Courses
 - Short courses are billed at \$50/person for all internal users with a valid BAF and \$350 for external users.
 - Cancellation must be done at least 24hrs prior to attending the course or the user will be billed for the fee.

Acknowledgement Statement

Publications that include results obtained at AIF should acknowledge the facility with this statement:

This work was performed in part at the Analytical Instrumentation Facility (AIF) at North Carolina State University (NCSU), which is supported by the State of North Carolina and the National Science Foundation (award number ECCS-1542015). The AIF is a member of the North Carolina Research Triangle Nanotechnology Network (RTNN), a site in the National Nanotechnology Coordinated Infrastructure (NNCI).

After you have results published, please submit bibliographic information via the Contact Us page at (www.aif.ncsu.edu/about-us/contact-us).

The AIF reserves the right to disallow use or access of the lab or equipment by any user not following the proper procedures or if they believe a user is a threat to their own safety or to the safety of others around them. This handout is designed as an overview of the requirements for operating the equipment. You should be aware that there are more detailed instructions on the use of the equipment (usually near the equipment) that more precisely details use and safety. You are required to follow these instructions while using the equipment.

User Signature

Date

Staff Signature

Date