

LEO User Experience

Laboratory & Equipment Operations

Go Live - July 1, 2020

- RIMS replacement - Begin using LEO July 1, 2020
- User-friendly
- Mobile friendly
- Consistent look and feel across all core facilities

- Log in at www.leo.psu.edu

Log in

Log in using your PSU user ID and password

Laboratory Equipment Operations

Use your WebAccess credentials to log in to LEO

If you are having trouble logging in to LEO, it is likely that you haven't registered.
Please go to LEO Registration to 1) *Create a User Profile* and 2) *Add a Billing Account*.

Landing Page

- Click on any item in the menu bar, colored box, or icon
- Return to the Landing Page from anywhere within the application by clicking on LEO at the top left
- Logout by clicking on Logout at the top right

The screenshot shows the LEO Landing Page dashboard. At the top, there is a navigation bar with the following items: LEO, Calendar, Tool control, Area Access, Status dashboard, Welcome, Leeanna, and Logout. The main content area is divided into several sections:

- Validation Needed:** A yellow box containing the text: "There are items that require validation. Please review them now, they will be automatically validated within 5 days of completion."
- Upcoming reservations:** A green box containing the text: "FESEM: Apreo Starting on Thursday, June 18th @ 11:00 AM Ending on Thursday, June 18th @ 12:30 PM"
- Alerts & outages:** A red box containing the text: "Resource outage: Test Resource Power outage"
- Current laboratory usage:** A blue box containing the text: "You are using the FESEM: Apreo for the project named [09-378] Materials Research Institute - Nanofab F [6391510003] since Wednesday, June 17th, 2020 @ 9:09 PM."
- Access Control:** A green box containing the text: "You are not logged in to an access controlled area. Click here to log in."

At the bottom of the dashboard, there is a grid of icons and labels for various functions:

- Calendar:** Represented by a calendar icon showing the date 17.
- Tool Control:** Represented by a microscope icon.
- View Usage/Billing Info:** Represented by a calculator icon.
- Request a LEO Billing Account:** Represented by a wallet icon with a coin.
- Configuration Agenda:** Represented by a gear and a wrench icon.
- Contact Staff:** Represented by a person icon and a vertical list with letters A, B, and C.
- News:** Represented by a yellow bell icon.
- Safety:** Represented by a yellow warning triangle with an exclamation mark.

Your Information

- Validation Needed
 - Click on the yellow box to validate your usage within 5 days of completion
- Upcoming Reservations
 - Click on green boxes to login to reserved instruments or access areas
- Alerts & Outages
 - Read red boxes for important or urgent information
- Current Usage
 - Click on blue boxes to logout of instruments and areas

LEO Calendar Tool control Area Access Status dashboard Welcome, Leeanna Logout

Validation Needed

There are items that require validation. Please review them now, they will be automatically validated within 5 days of completion.

Upcoming reservations

FESEM: Apreo
Starting on Thursday, June 18th @ 11:00 AM
Ending on Thursday, June 18th @ 12:30 PM


Alerts & outages

Resource outage: Test Resource
Power outage


Current laboratory usage

You are using the **FESEM: Apreo** for the project named [09-378] Materials Research Institute - Nanofab F [6391510003] since Wednesday, June 17th, 2020 @ 9:09 PM.


You are not logged in to an access controlled area. [Click here to log in.](#)




Calendar




Tool Control




View Usage/Billing Info




Request a LEO Billing Account




Configuration Agenda



Contact Staff



News



Safety

Calendar

NEW

You **MUST** have a reservation
in order to log in to a tool!

Calendar

- View Reservations
 - By individual tool
 - Multi-tool display
 - By personal schedule
- View Laboratory Usage
 - By individual tool
 - By personal schedule
- Create, Edit, Cancel Reservations
 - Select any tool configuration options, if applicable

The screenshot shows a web-based reservation calendar. At the top, there are navigation links for 'Calendar', 'Tool control', and 'Status dashboard'. The main interface is a calendar grid with days of the week (Mon 10/28, Tue 10/29, Wed 10/30, Thu 10/31) and time slots from 7am to 4pm. A sidebar on the left contains a search bar, a 'Personal schedule' link, and a list of tools categorized by process type. The 'Current tool' is 'Sputter: Kurt Lesker CMS-18 #1'. The calendar shows several reservations: a blue block for 'Gold Deposition' (10:00 - 11:30) on Tue 10/29, a blue block for 'Guy Lavallee (gpl107)' (11:15 - 1:45) on Wed 10/30, and a red block for 'Replacing Matching Network' (9:30 - 11:00) on Thu 10/31. Annotations with arrows point to various elements: 'Switch to Laboratory Usage view' points to the 'Reservations' dropdown; 'Currently viewing an individual tool calendar' points to the top navigation area; 'Switch to Personal schedule' points to the 'Personal schedule' link; 'Offline reservation' points to the red 'Replacing Matching Network' block; 'Regular reservations' points to the blue 'Gold Deposition' and 'Guy Lavallee' blocks; 'Tool is offline' points to the 'Sputter: Kurt Lesker CMS-18 #1' tool entry in the sidebar; and 'Tool is in use' points to the 'Sputter: Kurt Lesker CMS-18 #2' tool entry in the sidebar.

Switch to Laboratory Usage view

Reservations

Calendar

Tool control

Status dashboard

Currently viewing an individual tool calendar

Mon 10/28

Tue 10/29

Wed 10/30

Thu 10/31

7am

8am

9am

10am

11am

12pm

1pm

2pm

3pm

4pm

Search for a tool

Personal schedule

Current tool:
Sputter: Kurt Lesker CMS-18 #1

IEE
MCL
NANO
Characterization
Etching
Lithography
LTCC
RTA
Sample
Staff
Thin Film Deposition
ALD
Anneal
Electroplating
Evaporation
Evaporator: Lab 18
Evaporator: Parylene
Evaporator: Semicore
Evaporator: Temescal FC2000
Furnaces
PECVD
PZT
PZT Depo Spin Bench 1
PZT Depo Spin Bench 2
RTP 600S
RTP 810 Allwin
Sputtering
Sputter: 4Wave Ion Beam
Deposition System
Sputter Coater (Nanofab)
Sputter: Kurt Lesker CMS-18 #1
Sputter: Kurt Lesker CMS-18 #2
Sputter: Kurt Lesker CMS-18 #3
Sputter: Kurt Lesker CMS-18 #4

Switch to Personal schedule

Offline reservation

Regular reservations

10:00 - 11:30
Gold Deposition

11:15 - 1:45
Guy Lavallee (gpl107)

9:30 - 11:00
Replacing Matching Network

Tool is offline

Tool is in use

Calendar

- View tool list hierarchy
 - Core Facility
 - Area
 - Technique
 - Tool name
- Expand/Collapse all tool categories
- Show all tools/Show qualified tools only
- Search by any criteria

LEO Calendar Tool control Status dashboard

Reservations ▾

Toggle buttons and search box

Personal schedule

Current tool:
Sputter: Kurt Lesker CMS-18 #1

IEE
MCL
NANO
Characterization
Etching
Lithography
LTCC
RTA
Sample
Staff
Thin Film Deposition
ALD
Anneal
Electroplating
Evaporation
Evaporator: Lab 18
Evaporator: Parylene
Evaporator: Semicore
Evaporator: Temescal FC2000
Furnaces
PECVD
PZT
PZT Depo Spin Bench 1
PZT Depo Spin Bench 2
RTP 600S
RTP 810 Allwin
Sputtering
Sputter: 4Wave Ion Beam
Deposition System
Sputter Coater (Nanofab)
Sputter: Kurt Lesker CMS-18 #1 🔥
Sputter: Kurt Lesker CMS-18 #2 👤
Sputter: Kurt Lesker CMS-18 #3 🔥
Sputter: Kurt Lesker CMS-18 #4

< > Today

Mon 10/28 Tue 10/29 Wed 10/30 Thu 10/31

7am
8am
9am
10am
11am
12pm
1pm
2pm
3pm
4pm

10:00 - 11:30
Gold Deposition

11:15 - 1:45
Guy Lavallee (gpl107)

9:30 - 11:00
Replacing Matching Network

Select a tool from the tool list.
Click anywhere in the white space of the tool calendar to create a new reservation

Click on your reservation to edit it or cancel it

Reservations

Reservations

- A valid billing account (project) is required in order to make a reservation
- Tools may have configuration options
 - Select the desired configuration
 - Add any additional information, as needed

The screenshot shows a web interface for creating a reservation. The main window is titled "Choose tool configuration" and contains two dropdown menus for "SCQEMS1" and "SCQEMS2". The SCQEMS1 dropdown is set to "Gold (Au) for Quorum EMS Sputter Coater" and the SCQEMS2 dropdown is set to "Platinum (Pt) for Quorum EMS Sputter Coater". Below these is an unchecked checkbox labeled "I will configure the tool myself". A text area for "Do you have anything else to add? (Optional)" contains the instruction: "Please provide any additional information regarding tool configuration for your reservation (using less than 3000 characters)". A green button at the bottom right says "Create this reservation".

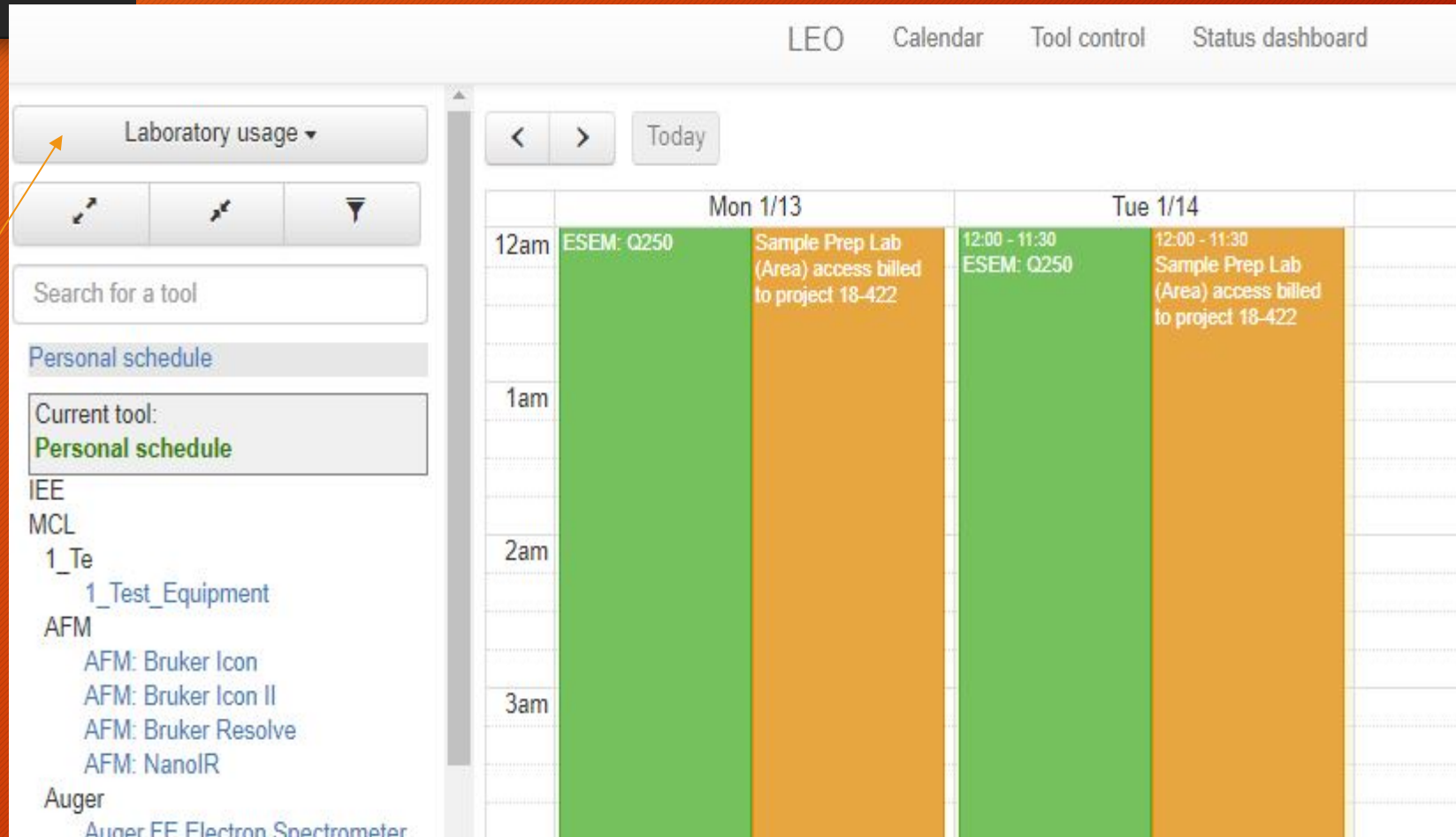
Two pop-up windows are overlaid on the main form. The first pop-up, titled "Which project is this for?", contains the text "Associate your reservation with a project. A fee will be charged to that project if you miss your reservation." and a dropdown menu with the placeholder text "Please select a project". An arrow points from the "Please select a project" text in the pop-up to the "Please select a project" text in the main form's dropdown menu. The second pop-up is partially visible behind the first one.

Laboratory Usage view

Laboratory usage view of Personal schedule showing tool use and area access login (Sample Prep Lab)

Laboratory Usage

- Switch from Reservation View to Laboratory Usage view



Laboratory usage ▾

Which type of events would you like to view on the calendar?

- Reservations
- Laboratory usage
- Multi-tool display

Tool Control

Log in to tools via green
Upcoming reservations boxes
on the Landing Page

Upcoming reservations

FESEM: Apreo

Starting on Thursday, June 18th @ 11:00 AM

Ending on Thursday, June 18th @ 12:30 PM

FESEM: Verios

Starting on Friday, June 19th @ 10:30 AM

Ending on Friday, June 19th @ 11:45 AM

Tool Control

Tool Control - Summary

- Tool is operational and idle
- Click *Start using tool*
- Interlock will open

LEO Calendar Tool control Area Access Status dashboard

↗ ↘ ▼

Search for a tool

Current tool:
Sputter Coater: Quorum EMS 150R S

EESL
LIME Lab
MCL
Electrical Characterization
Electron Microscopy
Mechanical Testing
Molecular Spectroscopy
MSC Furnace Lab
Optical Microscopy
Particle Technology
Sample Prep
Surface Analysis
Surface Metrology
AFM: Bruker Icon
AFM: Bruker Icon II
AFM: Bruker Resolve 🔥
Nanoindenter 🔥
Profilometer: Zygo NexView 3D 🔧
Thermal Analysis

Sputter Coater: Quorum EMS 150R

Summary Details Report a problem Post a comment

✔ This tool is **operational and idle**.

🔧 > This tool is not working properly

💬 > Can a staff member help me with the tool?
Leeanna Horner (lrm14) wrote this comment on Tuesday, June 16th, 2020 @ 8:03 PM

SCQEMS1: Platinum (Pt) for Quorum EMS Sputter ⌵

SCQEMS2: Silver (Ag) for Quorum EMS Sputter Co ⌵

Charge tool usage to which project?
[09-378] Materials Research Institute - Nanofab F [6391510003] ⌵

▶ Start using the Sputter Coater: Quorum EMS 150R S

Tool Control

Tool Control - Summary

- Log Out
 - Enter the quantity of all consumables used in the tool run, if applicable
 - Click *Stop using the tool*
 - A confirmation message will appear when you have successfully finished using the tool

Sputter: Kurt Lesker CMS-18 #1 [Summary](#) [Details](#) [Report a problem](#) [Post a comment](#)

You are using this tool for the project named [432-48 1001 C FESEM] since Thursday @ 3:40 PM.

Sputtering is fun
William Drawl (wrđ1) wrote this comment on Monday, January 13th, 2020 @ 2:10 PM

CMS-18 Source #1 Material: Palladium Sputtering

CMS-18 Source #2 Material: Gold Sputtering

CMS-18 Source #3 Material: Aluminum (Al) Sputtering

How much Palladium Sputtering was used?
 ang

How much Gold Sputtering was used?
 ang

How much Aluminum (Al) Sputtering was used?
 ang

Stop using the Sputter: Kurt Lesker CMS-18 #1

Disable Tool Confirmation ×

You have successfully finished using the Sputter: Kurt Lesker CMS-18 #1.

Close

Tool Control

Tool Control - Summary

- View of a tool in use

Status Icon:
This tool is in use

LEO Calendar Tool control Area Access Status dashboard

Cluster Tool: Applied Materials (PECVD)

Summary Details Report a problem Post a comment


You are using this tool

for the project named [13-407] Materials Research Institute - Nanofab F [6391510003] since Thursday @ 8:44 PM.

Please enter a brief description of the work performed, or make any notes you'd find useful for reference

Comment / Description of Run

Stop using the Cluster Tool: Applied Materials (PECVD)

EESL
LIME Lab
MCL
NANO
Characterization
Deposition & Growth
ALD
CVD
Cluster Tool: Applied Materials (PECVD) 
Evaporation

Tool Control

Tool Control - Details

The screenshot shows a web interface for tool control. At the top, there is a navigation bar with links for "LEO", "Calendar", "Tool control", "Area Access", and "Status dashboard". Below this, there are three icons: a double-headed arrow, a single-headed arrow, and a downward-pointing triangle. A search bar labeled "Search for a tool" is present, with "Current tool: Nanoindenter" displayed below it. On the left side, there is a vertical list of categories: "EESL", "LIME Lab", "MCL", "NANO", "Characterization", "Deposition & Growth", "ALD", and "CVD". The main content area is titled "Nanoindenter" and has three tabs: "Summary", "Details" (which is active), and "Report a problem". Below the tabs, there is an information icon followed by text stating that Tim Tighe (tbt1) is primarily responsible for the tool and can be contacted at tbt1@psu.edu. It also mentions that problem reports are automatically emailed to tbt1@psu.edu. The location is listed as "None". A phone icon is followed by the text "You may dial the phone that is closest to the Nanoindenter at extension 814-863-8408." At the bottom, there is a wrench icon followed by a link to "Task & comment history for this tool".

LEO Calendar Tool control Area Access Status dashboard

↔ ↗ ▼

Search for a tool

Current tool:
Nanoindenter

EESL
LIME Lab
MCL
NANO
Characterization
Deposition & Growth
ALD
CVD

Nanoindenter

Summary **Details** Report a problem Post a comment

[Tim Tighe \(tbt1\)](#) is primarily responsible for this tool and can be contacted with any questions or concerns about the tool.
Problem reports for the Nanoindenter are automatically emailed to tbt1@psu.edu.

The Nanoindenter is located in room None.

You may dial the phone that is closest to the Nanoindenter at extension 814-863-8408.

[Task & comment history for this tool](#)

Tool Control

Tool Control - Report A Problem

LEO Calendar Tool control Area Access Status dashboard

Welcome, Leeanna Logout

↗ ↘ ▼

Search for a tool

Current tool:
Nanoindenter

EESL
LIME Lab
MCL
NANO
 Characterization
 Deposition & Growth
 ALD
 CVD
 Cluster Tool: Applied Materials (PECVD)
 Evaporation
 Evaporator: Lab 18
 Evaporator: Parylene
 Evaporator: Temescal FC2000

Nanoindenter

Summary Details **Report a problem** Post a comment

Use this form to report a problem relating to the currently selected tool. The laboratory staff will be notified of the problem by email and the details of the problem will be visible to everyone on the website. Please provide a **detailed** description of the problem so that the laboratory staff have enough information to resolve the problem efficiently.

This problem represents a safety hazard to the laboratory and should be regarded as urgent. Notify the laboratory safety officer of this issue.

Shut down the tool so that it may not be used until this problem is resolved.

Report problem

Tool Control

Tool Control - Post A Comment

The screenshot shows a web interface for tool control. At the top, there is a navigation bar with links for 'LEO', 'Calendar', 'Tool control', 'Area Access', and 'Status dashboard'. On the right side of the navigation bar, it says 'Welcome, Leeanna' and 'Logout'. Below the navigation bar, there are three icons: a double-headed arrow, a single-headed arrow, and a downward-pointing triangle. A search bar labeled 'Search for a tool' is present. Below the search bar, a box labeled 'Current tool:' contains the text 'Nanoindenter'. On the left side, there is a vertical list of categories: 'EESL', 'LIME Lab', 'MCL', 'NANO', 'Characterization', 'Deposition & Growth', 'ALD', 'CVD', 'Cluster Tool: Applied Materials (PECVD)', 'Evaporation', 'Evaporator: Lab 18', 'Evaporator: Parylene', 'Evaporator: Temescal FC2000', 'Furnaces & RTAs', and 'Anneal: MBL (Black Max)'. The main content area is titled 'Nanoindenter' and has four tabs: 'Summary', 'Details', 'Report a problem', and 'Post a comment'. Below the tabs, there is a paragraph of text: 'Use this form to comment on the operating status of the selected tool. The comment will be visible to everyone on the website for **informational purposes**. (Note: if there is something wrong with the tool then please report a problem instead of creating a comment). You may remove the comment at any time because you are its author.' Below this text is a dropdown menu labeled 'How many days would you like the comment to be visible?' with the value '30 days' selected. Below the dropdown is a text input field labeled 'What would you like to say?'. At the bottom of the form is a 'Post comment' button.

LEO Calendar Tool control Area Access Status dashboard Welcome, Leeanna Logout

Nanoindenter

Summary Details Report a problem Post a comment

Use this form to comment on the operating status of the selected tool. The comment will be visible to everyone on the website for **informational purposes**. (Note: if there is something wrong with the tool then please report a problem instead of creating a comment). You may remove the comment at any time because you are its author.

How many days would you like the comment to be visible? 30 days

What would you like to say?

Post comment

EESL
LIME Lab
MCL
NANO
Characterization
Deposition & Growth
ALD
CVD
Cluster Tool: Applied Materials (PECVD)
Evaporation
Evaporator: Lab 18
Evaporator: Parylene
Evaporator: Temescal FC2000
Furnaces & RTAs
Anneal: MBL (Black Max)

Tool Control

Tool Control - Summary

- View of a tool that is offline
- Tool list -- same look and function as calendar tool list

LEO Calendar Tool control Area Access Status dashboard

Search for a tool

Current tool: **Nanoindenter**

EESL
LIME Lab
MCL
Electrical Characterization
Electron Microscopy
Coater: Denton
Coater: Emitec
Coater: Leica

Nanoindenter

Summary Details Report a problem Post a comment

🚫 This tool is shut down.

🔥 > Something is broken **Someone Reported a Problem**

💬 > My sample is stuck in the chamber
Leeanna Horner (lrm14) wrote this comment on Thursday, June 18th, 2020 @ 8:28 PM **Someone Posted a Comment**

Surface Metrology

AFM: Bruker Icon 🕒 🕒

AFM: Bruker Icon II 🕒

AFM: Bruker Resolve 🕒 🍂

Nanoindenter 🔥

Profilometer: Zygo NexView 3D 🛠️

Status Icons:

This tool has a delayed logout in effect

This tool has a scheduled outage

This tool is unavailable because a resource is unavailable

This tool is shut down

This tool requires maintenance

Status Dashboard

Showing tools in use ▾




Filter by...

- All tools
- Tools in use
- Problematic tools
- Idle tools

Status dashboard

Area occupancy **Tool status & usage**

Showing tools in use ▾

| Tool | User | In use since... |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------|
| ECL: System 1  | Jeff Long (jal13) on behalf of None | Friday @ 12:05 PM |
| ESEM: Q250  | Leeanna Horner (lrm14) | Thursday @ 3:01 PM |
| Sputter: Kurt Lesker CMS-18 #2  | William Drawl (wrd1) | Friday @ 10:03 AM |

Tool Status & usage

- View who is logged in to tools
 - All tools
 - Tools in use
 - Problematic tools
 - Idle tools

Area Occupancy

- View who is logged in to access areas

Status dashboard

Area occupancy Tool status & usage

Staff members are highlighted in green.

Sample Prep Lab (Area)

| User | Since | Working on project... |
|----------------|--------------------|-----------------------|
| Leeanna Horner | Thursday @ 3:36 PM | 18-422 |

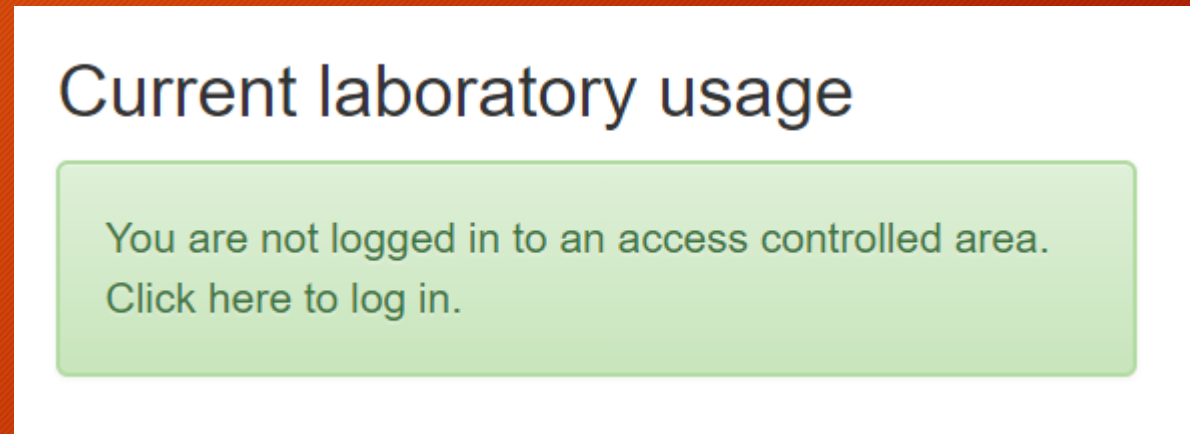
Area Access

If you are authorized to use an access-controlled area

- Log in to the area by clicking on the green box or *Area Access* on the main menu

Access Areas include:

- Machine shop
- MCL sample prep lab
- LTCC lab



Area Access

- Choose a billing account (project)
- Choose the Area

LEO

Calendar

Tool control

Area Access

Status dashboard

New area access record

Customer: Leeanna Horner (Irm14)

Which of the customer's projects would you like to bill?

[09-378] Materials Research Institute - Nanofab F [6391510003]

[13-407] Materials Research Institute - Nanofab F [6391510003]

[18-422] MRI CONFERENCE [800000008927]

[19-005] Research Collaboration Development Progr [6398810000]

Leeanna Horner (Irm14) has access to the following areas. Which would you like to bill for access?

Sample Prep Lab

LTCC Lab

Create area access record

Area Access

- Once logged in to an Area you will see the information on the Landing Page
- Click on top blue box to change the project your access is charged to
- Click on the bottom blue box to log out of the area

Validation Needed

There are items that require validation. Please review them now, they will be automatically validated within 5 days of completion.

Upcoming reservations

Sputter: Kurt Lesker CMS-18 #1
Starting on Friday, January 10th @ 1:15 PM
Ending on Friday, January 10th @ 2:00 PM

Alerts & outages


New Ion Beam Etching (IBE) System
There is a new IBE system being installed in the cleanroom next to the new Temescal evaporator. Testing and Qualification of the system should begin mid to late January.

Current laboratory usage


You are using the **Sputter: Kurt Lesker CMS-18 #1** for the project named [432-48 1001 C FESEM] since Thursday, January 9th, 2020 @ 1:48 PM.

You are logged in to the **sample prep lab (area)**. Usage time is being billed to the project named 13-407. Click to bill to a different project at any time.


You are logged into the **sample prep lab (area)**. Click here to log out of the area.




Calendar




Tool Control




View Usage/Billing Info




Request a LEO Billing Account




Configuration Agenda



Contact Staff



RIMSPay



Safety

Transaction Validation

NEW

You **MUST** validate all transactions you have performed within 5 days of occurrence.

Transaction Validation

Notification of transaction(s)
in need of validation will be
on the Landing Page

Validation Needed

There are items that require validation. Please review them now, they will be automatically validated within 5 days of completion.

Transaction Validation

Validating a Transaction

- Needs to be done within 5 working days
- After 5 working days, transactions will be auto validated

DO NOT RELY ON AUTO VALIDATION!
Get into the habit of checking and validating all transactions within 5 working days!

Transaction validation

This page displays transactions conducted by laboratory staff on behalf of users. You can filter by which staff member performed the work, and when, by using the dropdown boxes below.

Each charge can be validated, which means that you have confirmed that the charge is legitimate and correct, and no adjustment needs to be made to it. Press the green 'Validate' button on an individual row to validate a charge. Charges that have already been validated are highlighted in **green**.

Each charge can also be contested, which means that an adjustment is needed. Press the yellow 'Contest' button on an individual row to contest the charge. Charges that are already being contested are highlighted in **yellow**.

View charges for Leeanna Horner during

Tool usage

| ID | Operator | User | Project | Start - End | Duration | Tool | Validate | Contest |
|-----|-----------------------|----------------|--------------------------|-------------------------------------------------------------------------------------|----------------------|-----------------------------------|-----------------------------------------|----------------------------------------|
| 129 | Leeanna Horner (lm14) | Leeanna Horner | [432-48 1001 NANO FACIL] | Thursday, January 9th, 2020 @ 3:01 PM - None | In progress | ESEM: Q250 | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |
| 128 | Leeanna Horner (lm14) | Leeanna Horner | [432-43 30KR MIC SCHOOL] | Thursday, January 9th, 2020 @ 2:31 PM - Thursday, January 9th, 2020 @ 3:01 PM | 30 minutes 1 seconds | Coater: Denton | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |
| 127 | Leeanna Horner (lm14) | Leeanna Horner | [432-48 1001 C FESEM] | Thursday, January 9th, 2020 @ 2:20 PM - Thursday, January 9th, 2020 @ 2:29 PM | 9 minutes 15 seconds | AFM: Bruker Icon | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |
| 126 | Leeanna Horner (lm14) | Leeanna Horner | [432-48 1001 C FESEM] | Thursday, January 9th, 2020 @ 1:48 PM - Thursday, January 9th, 2020 @ 1:57 PM | 8 minutes 29 seconds | Sputter: Kurt Lesker CMS-18 #1 | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |
| 88 | Leeanna Horner (lm14) | Leeanna Horner | [432-48 1001 C FESEM] | Wednesday, November 6th, 2019 @ 10:51 AM - Wednesday, November 6th, 2019 @ 10:51 AM | 12 seconds | Sputter Coater: Quorum EMS 150R S | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |

Transaction Validation

- Black - Waiting for validation
- Yellow - Contested
- Green - Validated
- Red - Contested & Denied

Transaction validation

This page displays transactions conducted by laboratory staff on behalf of users. You can filter by which staff member performed the work, and when, by using the dropdown boxes below.

Each charge can be validated, which means that you have confirmed that the charge is legitimate and correct, and no adjustment needs to be made to it. Press the green 'Validate' button on an individual row to validate a charge. Charges that have already been validated are highlighted in green.

Each charge can also be contested, which means that an adjustment is needed. Press the yellow 'Contest' button on an individual row to contest the charge. Charges that are already being contested are highlighted in yellow.

View charges for Leeanna Horner during

Tool usage

| ID | Operator | User | Project | Start - End | Duration | Tool | Validate | Contest |
|-----|------------------------|----------------|--------------------------|-------------------------------------------------------------------------------------|----------------------|-----------------------------------|-----------------------------------------|----------------------------------------|
| 129 | Leeanna Horner (lrm14) | Leeanna Horner | [432-48 1001 NANO FACIL] | Thursday, January 9th, 2020 @ 3:01 PM - None | In progress | ESEM: Q250 | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |
| 128 | Leeanna Horner (lrm14) | Leeanna Horner | [432-43 30KR MIC SCHOOL] | Thursday, January 9th, 2020 @ 2:31 PM - Thursday, January 9th, 2020 @ 3:01 PM | 30 minutes 1 seconds | Coater: Denton | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |
| 127 | Leeanna Horner (lrm14) | Leeanna Horner | [432-48 1001 C FESEM] | Thursday, January 9th, 2020 @ 2:20 PM - Thursday, January 9th, 2020 @ 2:29 PM | 9 minutes 15 seconds | AFM: Bruker Icon | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |
| 126 | Leeanna Horner (lrm14) | Leeanna Horner | [432-48 1001 C FESEM] | Thursday, January 9th, 2020 @ 1:48 PM - Thursday, January 9th, 2020 @ 1:57 PM | 8 minutes 29 seconds | Sputter: Kurt Lesker CMS-18 #1 | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |
| 88 | Leeanna Horner (lrm14) | Leeanna Horner | [432-48 1001 C FESEM] | Wednesday, November 6th, 2019 @ 10:51 AM - Wednesday, November 6th, 2019 @ 10:51 AM | 12 seconds | Sputter Coater: Quorum EMS 150R S | <input type="button" value="Validate"/> | <input type="button" value="Contest"/> |

Transaction Validation

Contesting a transaction

- Enter the correct information in the appropriate fields
- Enter a Contest Reason and a Contest Description
- Contested transaction will be accepted or denied by a staff member

Contest Usage Event

You have selected the Usage Event detailed below to contest. Please select a general reason this item should be contested and enter a description of the specifics. Once this form is submitted the Usage Event will be placed in contested status until an administrator can review the record and address it as needed.

Tool

Start

End

Operator

| Customer | Project | Percent |
|-----------------------------------------------------|-------------------------------------------------------------|-------------------------------------|
| <input type="text" value="Leeanna Horner (lrm14)"/> | <input type="text" value="[432-48 1001 C FESEM] [13-407]"/> | <input type="text" value="100.00"/> |

Contest Reason

Contest Description

Usage and Billing Information

View your usage and billing information by billing cycle

Change

Monthly billing cycles will run from the 25th to the 24th of the following month

Usage and billing information for June, 2020

This page presents a monthly report of your laboratory usage and billing information. Approved adjustments are reflected in the Billing information data but not in the Usage data.

View information for

Adjustment activities **are not included** in the usage information.

Supplies and consumables

Silver (Ag) for Quorum EMS Sputter Coater

Quantity 200

Purchased from Leeanna Horner (lrm14) on Tuesday, June 16th, 2020 @ 8:03 PM

Charged to project [09-378] Materials Research Institute - Nanofab F [6391510003]

Platinum (Pt) for Quorum EMS Sputter Coater

Quantity 200

Purchased from Leeanna Horner (lrm14) on Tuesday, June 16th, 2020 @ 8:03 PM

Charged to project [09-378] Materials Research Institute - Nanofab F [6391510003]

Area access

LTCC Lab

Tuesday, June 16th, 2020 @ 9:04 PM

Tuesday, June 16th, 2020 @ 9:04 PM

Charged to project [13-407] Materials Research Institute - Nanofab F [6391510003]

Sample Prep Lab

Tuesday, June 16th, 2020 @ 8:40 PM

Tuesday, June 16th, 2020 @ 8:41 PM