Procedure for Using the Research Operations Service Center

General Information:

- The service center tools are available during regular university business hours.
    - Standard hours: 8:00am – 5:00pm
    - Holidays, semester breaks, and summer: 7:30am – 4:00pm

- Any researcher/Principle Investigator (PI)/group member who wishes to utilize the service center's instruments and equipment must have a Billing Authorization Form on file which authorizes the service center to electronically bill for those services. PIs will assign a 3-letter code to their funding source.   Contact Becky Hellman for more information or with questions.

- Reservations to use equipment are made using an online system called BookitLab. This system is also utilized for logging the equipment use time during a reservation. Users must select the appropriate 3-letter billing code for their reservation. Instructions for using BookitLab are attached to this document.   Contact Aaron Reinholz to get a BookitLab account setup or for questions about using it.

- For some service center labs, users that are properly trained and will be frequent users of an instrument may be given card key access to that lab. In other cases, a temporary lab access card may be available for check-out during the reservation time.

- Undergraduate students are not allowed to work unsupervised in the labs.

Primary Points of Contact:

R1A Lab 1124, 1132, R2 Lab 152 and Class 100 Cleanroom
    (o) 701-231-5339   greg.strommen@ndsu.edu

R2 Labs 112, 116, and Class 10,000 Cleanroom
    (o) 701-231-5336   frederik.haring@ndsu.edu

R1A Labs 1124, 1132, 1226, 1232, 1236, 1238, 1240 - Combinatorial Materials Research Labs
    (o) 701-231-5927   james.bahr@ndsu.edu

General Service Center Operations Questions/Issues
    (o) 701-231-5338   aaron.reinholz@ndsu.edu

Finance/Administrative
    (o) 701-231-5872   becky.hellman@ndsu.edu
    (o) 701-231-7380   shanna.nelson@ndsu.edu

BOOKITLAB EQUIPMENT MANAGEMENT SYSTEM

BookItLab is an online Lab Management Software that has been acquired by the RCA Research Operations Core Facility/Recharge Center for instrument scheduling and management.

Major Aspects of This System:

(1)	**Equipment Reservations**	**Replaces the Outlook Calendar that has been used previously.**
(2)	**Logging Instrument Use Time**	**This will be done electronically in the BookItLab app. Replaces the paper log sheets that have been used previously.**
(3)	**Incidents/Events**	**A user can submit information or a question about events that occurred during the reservation. This automatically notifies the Research Ops staff.**
(4)	**Billing**	**As before, prior to using equipment a billing authorization form will be filled out and provided to recharge center staff. This information will be entered into BookItLab.**

Billing will occur monthly through Peoplesoft. For NDSU users, the billing information will be an export from BookItLab that is submitted to NDSU accounting. For external users, the billing will be an e-mail invoice.

Detailed information about the monthly billing will be provided to PIs, though the format may be a bit different than previously.

Training Topics
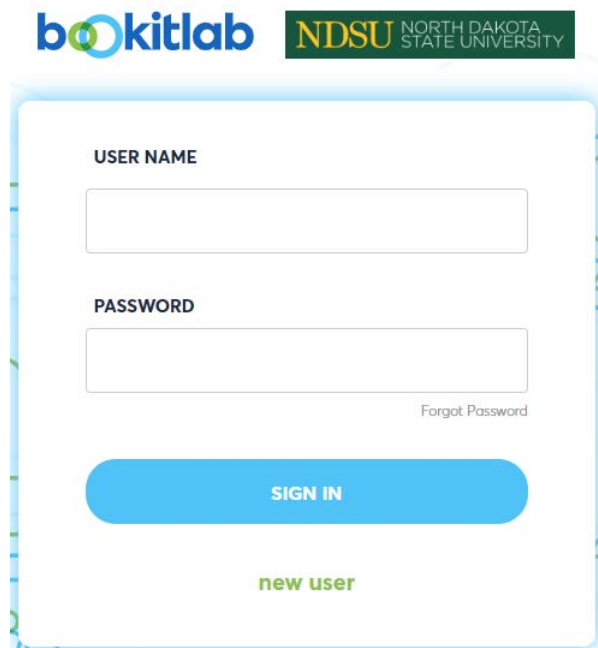
A username and a default password will be assigned and provided to you by e-mail.

During your initial login you will be required to set a new password.
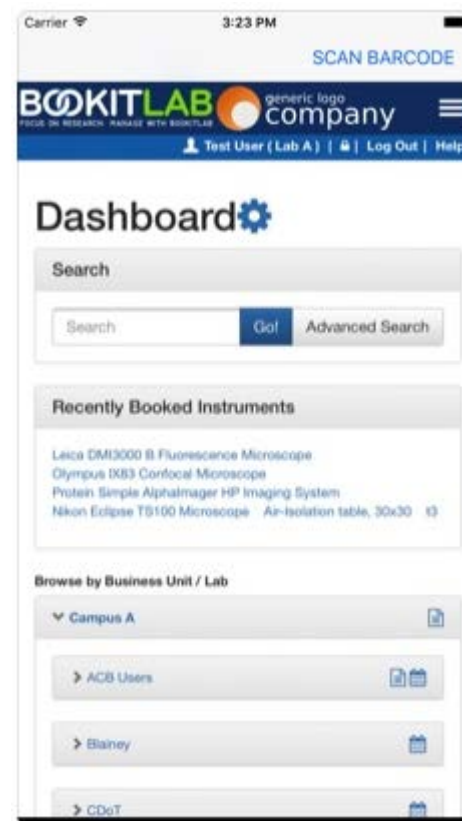
<u>Desktop</u>

<u>Mobile App</u>
Available in the Google Play Store and the Apple Store.

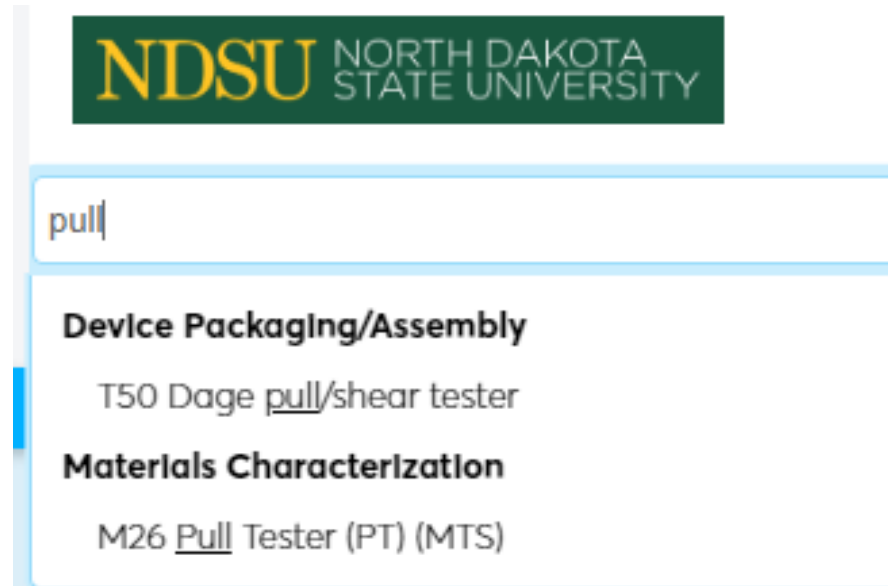https://core.bookitlab.com/ndsu

USING THE WEB-BASED APP ON A PC

https://core.bookitlab.com/ndsu
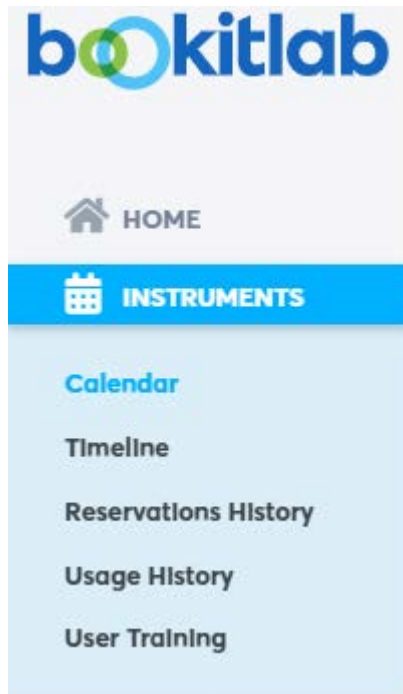
There are numerous ways to find an instrument to make a reservation. These instructions describe one of these ways.

Select **INSTRUMENTS** and then **CALENDAR**

Begin typing name of an instrument and options will pop-up. Select the instrument.

MAKING AN EQUIPMENT RESERVATION

ONLINE SERVICE 📄 ⚠ ⓘ   × M26 Pull Tester (PT) (MTS)

START TIME   10/03/2019   📅   03:00 PM   🕐

END TIME   10/03/2019   📅   04:00 PM   🕐

(1) Select Date/Time For Reservation

Note: The reservation request must be made reasonably far in advance of the start time if it requires approval by the staff.

USER GROUP ⓘ   N/A

(2) Select Budget Code From Pull-Down List. (this will be the same 3 letter code as we've been using)

BUDGET NUMBER ⓘ   Account 1   × ▾

REPETITIVE RESERVATION

NEED TUTORING FOR THIS RESERVATION ⓘ

ORDER STATUS ⓘ   Pending   ▾

(3) Remarks (Optional): Type In Any Information That Is Relevant To The Reservation

REMARKS ⓘ

The reservation will indicate a status of "pending" if it requires approval by service center staff.

(4) Click on Create Reservation

CREATE RESERVATION

Notes About Reservation Approvals:

- **If you have not been trained on an instrument, then a training time will need to be coordinated with the appropriate Research Ops staff.**

- **If you are trained on an instrument, but it is in a lab that you don't have card access, then a staff member will need to approve the reservation to confirm they're available to let you in.**

- **If you are trained on an instrument and you have access to the lab, then the reservation should be approved automatically.**

CARD ACCESS (UNIVERSITY REGULAR HOURS) PROVIDED TO:
Trained Users Who Will Be Using Equipment Longer Term

Lab 1132 – MCAL (DSC, DMA, TGA, TMA, HPLC, GCMS, BET, Pycnometer)
Lab 1124 – MCAL (NI, CSAM, Optical Profiler, UV, Corrosion)
Lab 112 – Reliability (Temp Chambers, Electronics Testing, Cross-section equipment)
Lab 116 - MCAL (Tensile tester, SEM, Contact Profiler)

FROM THE HOME / DASHBOARD

IMPORTANT: When using an instrument you <u>must</u> log in to BookItLab and click "Start Usage", then Start Usage again on the screen that pops up.

The time log created is what is used for billing. This replaces the paper log sheets that have been used previously. If usage time is not logged, then the full reservation time will be billed.

Dashboard ⚙ 🔔

Reservation Started!

Your reservation 21 for T61 Battery Tester has started. To modify this ongoing reservation before its original end time, please **click here**.

Your reservation time for T61 Battery Tester has arrived. **Start Usage**

1) Click

Once the reservation start time has arrived and the reservation is approved, this block should be displayed in the dashboard.
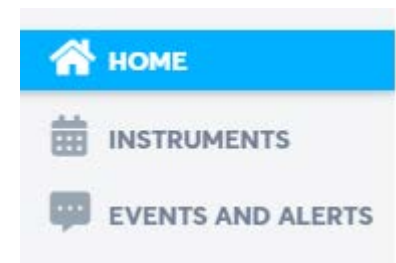
This screen will appear

Usage Screen

Online Service :	T61 Battery Tester
Budget Number:	Account 1
Reservation :	10/31/2019 9:00:00 AM - 10/31/2019 9:30:00 AM

Start Usage

2) Click.
Make sure a message similar to this appears.

T61 Battery Tester - Instrument activated successfully. You can now start using it.

3) Click Home to get back to the Dashboard view

🏠 **HOME**

📅 **INSTRUMENTS**

💬 **EVENTS AND ALERTS**

Note: The equipment usage logging is critically important. It is anticipated that many people will do this through their smartphone, but as necessary we will place some kiosk iPads in the labs to log into BookItLab for this purpose.

USING AN INSTRUMENT
(After Reservation Is Approved)

FROM THE HOME / DASHBOARD VIEW

Dashboard ⚙ 🔔

   🔍 Enter an asset name or asset attribute

Reservation Started!

Your reservation 34 for T29 LPKF Circuit Board Milling Machine, T61 Battery Tester has started. To modify this ongoing reservation before its original end time, please **click here**.

Your reservation time for T29 LPKF Circuit Board Milling Machine has arrived. **Start Usage**

Currently Active Usages ⟳ **More Details**

USER	ONLINE SERVICE	DURATION (HRS)	PLANNED TIME OUT		START
NDSU test user	T61 Battery Tester	0.00	10/31/2019 9:30:00 AM	**Log Off**	10/31/2019 9:06 AM

This block will appear on the dashboard after you "start usage".

IMPORTANT: When done using an instrument you must "Log Off" in BookItLab. This establishes the end time for the billing.

Notes About Logging Instrument Time:

- **If there are any issues with the logged time that need to be corrected, please discuss with Research Ops staff or use the Incidents/Events feature to describe the issue. We can manually correct these after the fact if required.**

EVENTS/ALERTS

The Events/Alerts feature can be used to report observations of equipment issues, out of consumable supplies, or other relevant information to recharge center staff.

FROM THE HOME / DASHBOARD

NDSU test user

Events and Alerts

- HOME
- INSTRUMENTS
- EVENTS AND ALERTS

Events and Alerts

# ▼	EVENT START	REPORTED BY	ASSET	SERVICE GROUP

Click the + to "add new" event.

EVENT DETAILS

ASSET	Please select an asset
EVENT TYPE	Please select an EventType
EVENT TYPE STATUS	Please select an Event Type Status
EVENT START	10/24/2019 09:10 AM
ALERT START	

RECURRING EVENTS

SUBJECT

Formats ▾ B I

DESCRIPTION

Enter Info About the Event.

Then click "SAVE".

EVENT COMMENTS

Formats ▾ B I

NEW COMMENT

ATTACHMENT   Choose File   No file chosen

Update User Info – upper right corner

Select User Details, then Edit User Details to update user information (contact info, etc.)

USER DASHBOARD SETTINGS

☐ All		
☑ Currently Active Usages	↧	↥
☑ Instrument Incidents/Events	↧	↥
☑ Request Charts	↧	↥
☑ My Upcoming Schedule	↧	↥
☑ Pending Service Request Projects	↧	↥
☑ Ongoing Requests	↧	↥
☑ Browse By Unit Tree View of All Resources	↧	↥
☑ Awaiting Requests/Steps	↧	↥
☑ Credits And Balance	↧	↥
☑ TimeLine	↧	↥

Dashboard ⚙ 🔔

You can customize the dashboard view a bit by activating/deactivating particular items and moving them up/down in the order they are displayed.
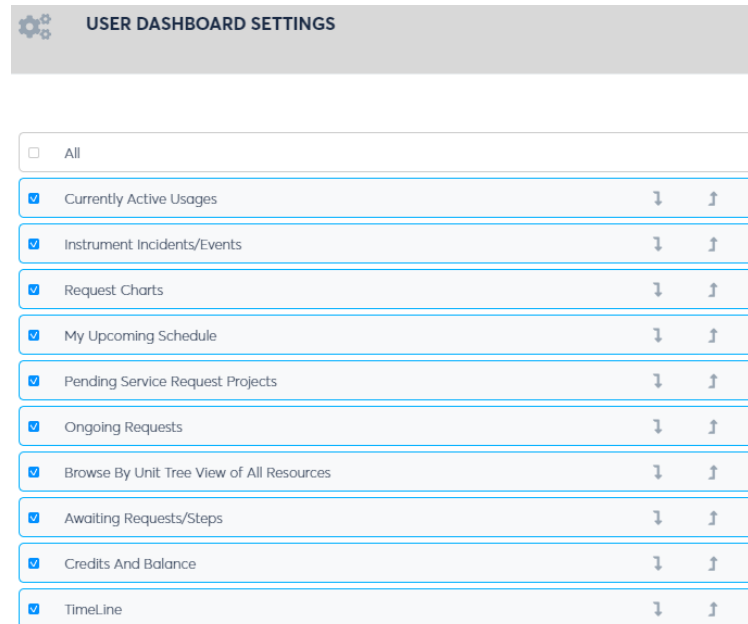
USING THE MOBILE DEVICE APP

(1) **Search on BookItLab in Apple store or Google Play store**

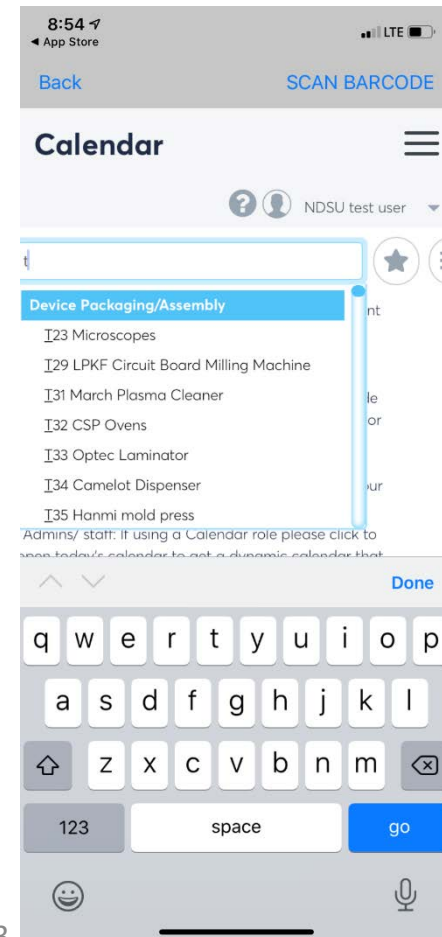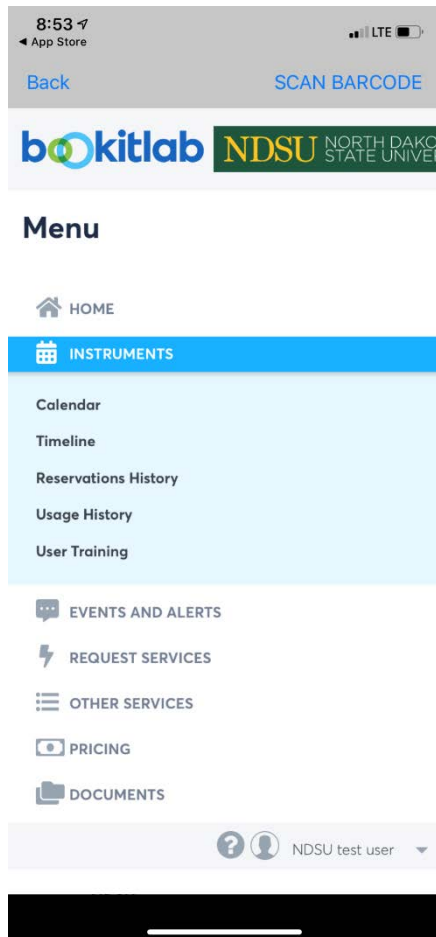**(2)** **After loading the app and opening, type "ndsu" when it prompts for institution initials.**

There are numerous ways to find an instrument to make a reservation. These instructions describe one of these ways.

Select **INSTRUMENTS** and then **CALENDAR**

Begin typing name of an instrument and options will pop-up. Select the instrument.

MAKING AN EQUIPMENT RESERVATION

(1) Select Date/Time For Reservation

(2) Select Budget Code From Pull-Down List

(3) Remarks (Optional): Type In Any Information That Is Relevant To The Reservation

(4) Scroll down and click on Create Reservation
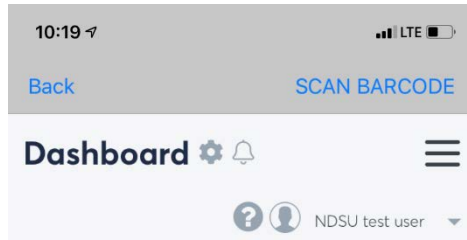
Notes About Reservation Approvals:

- If you have not been trained on an instrument, then a training time will need to be coordinated with the appropriate Research Ops staff.

- If you are trained on an instrument, but it is in a lab that you don't have access, then a staff member will need to approve the reservation to confirm they're available to let you in.

- If you are trained on an instrument and you have access to the lab, then the reservation should be approved automatically.

USING AN INSTRUMENT
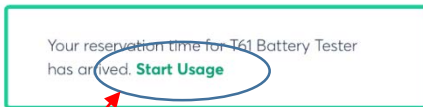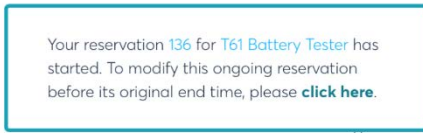## (After Reservation Is Approved)

FROM THE HOME / DASHBOARD VIEW

IMPORTANT: When using an instrument you must log in to BookItLab and click "Start Usage", then Start Usage again on the screen that pops up.

The time log created is what is used for billing. This replaces the paper log sheets that have been used previously. If usage time is not logged, then the full reservation time will be billed.
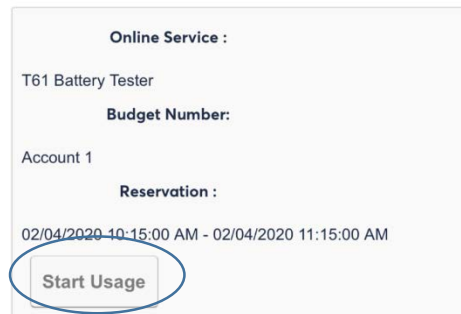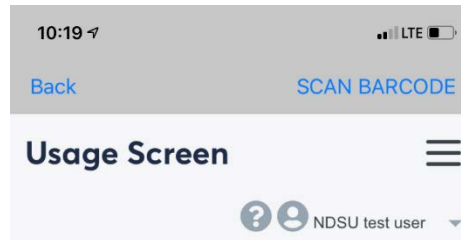
1) Click

Once the reservation start time has arrived and the reservation is approved, this block should be displayed in the dashboard.

This screen will appear

2) Click.
Make sure a message like this pops up.

T61 Battery Tester - Instrument activated successfully. You can now start using it.

3) Click. Then select Home to get back to the main Dashboard view.

USING AN INSTRUMENT
(After Reservation Is Approved)

FROM THE HOME / DASHBOARD

This block will appear on the dashboard after you "start usage".

Back   SCAN BARCODE

Dashboard ⚙ 🔔   ☰

Currently Active Usages ⟳   ⌃

USER	ONLINE SERVICE	DURATION (HRS)	PLANNED TIME OUT		START
NDSU test user	T61 Battery Tester	0.03	02/04/2020 11:15:00 AM	**Log Off**	2/4/2020 10:19 AM

Show [3 ▾] entries   Previous [1] Next

© BookitLab - Core Facilites   v:9.0.7201.27117 server time: 02/04/2020 11:20:36 AM   Terms Of Use
Management Software By   -05:00 system time: 02/04/2020 10:20:36 AM Last

IMPORTANT: When done using an instrument you must "Log Off" in BookItLab. This establishes the end time for the billing.

USING AN INSTRUMENT
(After Reservation Is Approved)

Notes About Logging Instrument Time:

- **If there are any issues with the logged time that need to be corrected, please discuss with Research Ops staff or use the Incidents/Events feature to describe the issue. We can manually correct these after the fact if required.**

OTHER FEATURES

Other Features of the App – similar to instructions for web-based PC app.

- **Events/Alerts**
- **Other Features**

Equipment with Per Experiment Rates:

Follow the standard procedure for making a reservation and logging use time.

In addition, within the reservation (after it is approved) there will be an "Offline Services" box. Either the User or the Service Center Staff can enter the number of samples that will be processed. The billing will be based on the number of samples rather than the amount of time the equipment is used.

1) Click

2) Select the appropriate sample type (e.g. BET Samples)

3) Enter the number of samples

4) Click Submit button

NON-STANDARD USE CASES

Equipment that you start running during business hours and let run automatically after-hours:

Follow the standard procedure for making a reservation. If you know the time duration in advance that is to be run, enter it in the remarks.

Start using equipment during business hours and initiate the log using the "Start Usage" process. Do not "Log Off".

The next day service center staff will log off and adjust the end time to the appropriate time.

NON-STANDARD USE CASES

Equipment With Per Day Rates:

Follow the standard procedure for making a reservation. The reservation will automatically be made for an 8 hour period.

Follow the standard procedure to "Start Usage" and "Log Off".

The fixed daily charge will be applied.

If you are using the instrument for multiple days, this process will need to be followed for each day individually.

NON-STANDARD USE CASES

Sputterer Charges for Deposition Material:

Follow the standard procedure for making a reservation and logging use time.

In addition, within the reservation (after it is approved) there will be an "Offline Services" box. Either the User or the Service Center Staff can select gold target or platinum target. In the Quantity box indicate the thickness of the deposition in 1000 angstrom units. For example if the deposition is 1000 angstroms enter 1. The billing will be a combination of the time the sputterer was used plus the gold or platinum material charge.

OFFLINE SERVICES

	SERVICE TYPE	QUANTITY	UNITS	DATE	REMARKS
		No matching records found			

Previous   Next

Show 10 ▼ entries

Add New

1) Click

2) Select Gold Target or Platinum Target

3) Enter the deposition thickness for quantity (1 = 1000 angstroms)

4) Click Submit button

Add New Offline Service

SERVICE TYPE	Gold Target
SERVICE DATE	03/04/2020 04:15 PM
USER GROUP	BookitLab Administrators
USER	Aaron Reinholz
BILLING CODE NUMBER	B1

QUANTITY 1

DISCOUNT FACTOR 1

REMARKS

Reference reservation 162 on instrument T04
Kurt Lesker CMS-18 Sputterer (PVD1)