How to Use Badger

Badger is CNM2's tool access and reservation system. It provides users with access, information about equipment status, and their charges. Each badger account is linked with every user's unique email account. This allows only qualified users on the equipment. Users found abusing their privileges or attempting to circumvent the Badger system will have their lab access suspended or revoked. The following guide details the steps required to create and use the main features of Badger.

Creating an Account

1. Select "New Member?" as shown below:

🛓 Badger Lab Management Software		×								
Welcome to Badger Lab Management Software at UC Davis										
Email										
Password										
Principal accord	All Labs Login News	Lab Cancel New Member?								
by logging in rabbop	View Agreement	ooniona.								
	Lost Password?									

2. Fill out the following requirements in RED:

🍰 Badger Lab Ma	anagement Software	×
Complete this f Click 'Set Pass Once your acco	form to create a new member account. Asterisk fields are required word' to submit the form and bring up the password setting do unt has been approved you will receive an email notification.	uired. ialog.
Email*		
Lab Code*		
First Name*		
Last Name*		
Lab*		
Account*		
Advisor*		-
Address 1		
Address 2		
City		
State		
Zip Code		
Phone*		
Fax		
Alt Phone		
	Set Password View Instructions	

- <u>Email</u>: Be sure to use your UC Davis email account.
- <u>NCNC Entry Code</u>: Choose any 6-digit number. This code will allow you to access rooms valid to members only
- Lab: Choose NCNC (Northern California Nanotech Center).
- <u>Account</u>: Must have a valid account typically in the form 3-1234567 provided by your PI. This will be your account where your equipment rates will be charged
- <u>Advisor</u>: Enter the name of the advisor you are working under.
- <u>Phone</u>: Input your phone number.

3. Once required fields are filled, click "Set Password".

🛓 Badger Lab Ma	anagement Software	x
Complete this f Click 'Set Pass Once your acco	form to create a new member account. Asterisk fields are req word' to submit the form and bring up the password setting d ount has been approved you will receive an email notification.	uired. ialog.
Email*	BadgerTest@ucdavis.edu	
Lab Code*	123456	
First Name*	Badger	
Last Name*	Test	
Lab*	NCNC -	
Account*	3-1234567	
Advisor*	Cory Wolin	-
Address 1		
Address 2		
City		
State		
Zip Code		
Phone*	916-123-1234	
Fax		
Alt Phone		
	Set Password View Instructions	

4. Create a password with a minimum of 8 characters for your Badger account.

🕌 Set or Change Password 🛛 🗙
Password: Confirm Password: OK Cancel

5. Wait for a confirmation e-mail after your application form is approved by staff.

 Welcome to Badger Lab Management Software
 ■ Inbox x

 Image: noreply-ucdavis@badgerIms.com
 to me •

 Dear New Member,
 Dear New Member,

 Welcome to Badger. The application you completed earlier has been approved. You may now log in.
 Staff can assist you in using the application. You will need to be trained and qualified on a piece of equipment before you may reserve or use it.

Logging on

1. Double click the badger icon located on the desktop.



2. Enter your email and password.

NOTE: Only enter the portion of your email preceding the @ symbol. <u>Example</u>: Email Address: <u>Imfirst</u>@ucdavis.edu

🍰 Badger Lab Management Softwar	e	— X					
Welcome to Badger La	Management Software	at UC Davis					
Email	imfirst						
Password	•••••						
	All Labs Login News	Lab Cancel New Member?					
By logging in I accep	t the terms of the lab agr	eement.					
	View Agreement						
	Lost Password?						

How to Recover as Lost Password

1. Select "Lost Password?"

🕌 Badger Lab Management Software		×
Welcome to Badger Lat	Management Software	at UC Davis
Email		
Password		
By logging in l acception	All Labs Login News t the terms of the lab agr View Agreement Lost Password?	Lab Cancel New Member? eement.

2. Enter your full email and click "OK".



You will be notified that a temporary password has been emailed to you.



3. Check your email for the temporary password:



4. Log into Badger with your temporary password.

🛓 Badger Lab Management Software		23
Welcome to Badger Lab	Management Software a	at UC Davis
Email	user	
Password	•••••	
By logging in I accept	All Labs Login News the terms of the lab agre View Agreement Lost Password?	Lab

5. Under "Window" menu, select "Change Password".

🔮 UC Davis College of Eng	
Window Equipment Act	🛃 Set or Change Password 🛛 🔀
Resource SH Change Password	Password:
E <u>x</u> it Na	Confirm Password:
	OK Cancel
Input your powers and and alight "OK"	

6. Input your new password and click "OK'

Accessing and Enabling Equipment

In order to use any equipment within the facility, you must be qualified by staff. You are charged for all of the time that you keep the tool "enabled" whether you use all or any part of your reservation. Therefore, it is important to "disable" the tool after you are done using it. If you are unable to access a tool, please contact staff.

1. Once logged into badger, double click "Northern California Nanotechnology Center"

ndow Equipment Action Poservation Action	ons History Act	ions Supplies	Reports He	lp					
NCNC BEAM SHOP XRF NMRF	Reservatio	ns History	Maintena	nce Policy	Equipmen	t Status			
Iorthern California Nanotechnology Center	Nano_CV	D_ncnc Reserva	tions						
the Area	Multipl	e Days Per Maci	nine View 🔘	Multiple Macl	hines Per Day	View			
(COOL)		Mon, SEP 21	Tue, SEP 22	Wed, SEP 23	Thu, SEP 24	Fri, SEP 25	Sat. SEP 26	Sun, SEP 27	Mor
🗠 Lithography	0:00			,		,	,		
 Deposition 	0:30								
Deposition	1:00								
🕶 Etching	1:30								
	2:00								
	2:30								
∽ Other	3:00								
	3:30								
Electron Microscopy	4:00								
	4:30								
	5:00								
	5:30								
	6:00								
	6:30								
	7:00								
	7:30								
	8:00								
	8:30								_
	9.00								_
	9.30								_
	10:00								
	10.50								
	11:20								
	12:00								
	12.00	4				1			

2. Under "Research Area", select the category that contains the equipment that you want to enable.



- 3. Pick the name of the equipment that you want to enable.
- 4. Open "Equipment Actions" tab.

🛓 UC Davis College of Engineering (mtbbui@ucdavis.e	edu) Badger					
Window Equipment Actions Restruction Actions	History Action	s Supplies	Reports H	lelp		
NCNC PEAM SHOP MEET NMRF	Reservations	History	Maintena	ance Policy	Equipmen	t St
Northern California Nanotechnology Center	Brewer1 Res	servations				
Research Area	Multiple D	ays Per Mac	hine View 🤇	Multiple Mac	hines Per Day	/ Vie
		Mon, SEP 21	Tue, SEP 22	Wed, SEP 23	Thu, SEP 24	Fr
P Lithography	0:00					
Brewer1*	0:30					
	1:00					
— A Solitec1_ncnc*	1:30					
Solitec2 nenc*	2:00					
	2:30					
— A KSuss_MA4-1_ncnc*	3:00					
	3:30					
- A KSUSS_MA4-2_ncnc" (ncansiz	4:00					
 Deposition 	4:30					<u> </u>
	5:00					<u> </u>
• Etching	5:30					
• Analytical	6:00					<u> </u>
Analytical	0:30					<u> </u>
- Other	7:00					
Cleatron Microscopy	1.30					
- Electron microscopy	0.00					-
	0.00					



- 5. From the drop-down menu, click "Enable"
- 6. Your email address will appear next to the equipment that you enabled as shown:





<u>NOTE</u>: Remember to disable the equipment once done using to allow other users to operate the machine. To do this, select "Disable" under "Equipment Actions".

Making a Reservation

Reservations are an important courtesy to other users to inform them of the tool availability. Those who make reservations are given priority in using the machine. Lastly, if you are 30 minutes late to your reservation or if you finish your session ahead of your scheduled reservations, then it will be automatically cancelled and an email will be sent to notify the list serv.

1. Select "Reservations" tab to view the calendar for this week. Then select a specific piece of equipment to see the reservations for it.

UC Davis College of Engineering (mtbbui@ucdavis.edu)) Badger									x
Vindow Equipment Actions Reservation Actions	History Actions	s Supplies	Reports He	elp						
	Reservations	listory	Maintena	nce Policy	Fauipmen	t Status				
	Brewer1 Rec	vations	mantena	i oney	Equipment	l otatuo				_
Northern California Nanotechnology Center	Multiple D	ave Der Mael		Multiple Mae	hinon Dor Day	View				
🗠 Research Area	· Multiple D						0.1.050.00	0 050 07		1
- Electron Microscopy	0:00	MON, SEP 21	Tue, SEP 22	Wed, SEP 23	Thu, SEP 24	Fri, SEP 25	Sat, SEP 26	Sun, SEP 27	Mon	
	0.00								— -	
	1:00									
	1:30								+	
	2:00									
	2:30									
	3:00								=	
	3:30									
	4:00									
	4:30									
	5:30									
	6:00									
	6:30									
	7:00									
	7:30									
	8:00									
	8:30									
	9:00									
	9:30									
	10:00									
	11:00									
	11:30									
	12:00								-	
		4								

 To see other weeks, click the "Reservation Actions" tab and select "Next" to view subsequent weeks or "Previous" to view previous weeks.



3. Click and drag to highlight the time you would like to reserve as shown:

LC Davis College of Engineering (mtbbui@ucdavis.e	du) Badger							l	- 6	3	X
Window Equipment Actions Reservation Actions	History Action	s Supplies	Reports He	lp							
	Basapustions	lliatory	Maintanar	Delieu	Fauinman	t Statua					
NCNC BEAM SHOP ARF NMRF	Reservations	HISTOLY	Maintenar	ICe Policy	Equipmen	l status					_
Northern California Nanotechnology Center	Solitec1_ncn	IC Reservation	ns								
P− Research Area	Multiple D	ays Per Mach	nine View 🔾	Multiple Macl	nines Per Day	View					
0 Lithography		Mon, SEP 21	Tue, SEP 22	Wed, SEP 23	Thu, SEP 24	Fri, SEP 25	Sat, SEP 26	Sun, SE	P 27 N	lon	
	0:00									_	
Brewer1*	1:00									-	
- 👍 Solitec1_ncnc*	1:30										
Solitoc2 none*	2:00										
	2:30										
- A KSuss_MA4-1_ncnc*	3:00									_	
KSuss_MA4-2_ncnc* (hcansiz	4:00										
Deposition	4:30										
Deposition	5:00										
► Etching	5:30										
- Analytical	6:30									-	
C Other	7:00									-1	
oulei	7:30										
 Electron Microscopy 	8:00										
	8:30									_	
	9:30									-1	
	10:00										
	10:30										
	11:00										
	11:30									_	-
	12.00	•									

- Select the "Reservation Actions" tab on the tool bar and click "Make" to reserve the highlighted time slots. Similarly, press "delete" to remove the highlighted reservation.
- 5. A pop-up will appear, select "OK" at the bottom

Agent mtbbui@ucdavis.edu Machine Solitec1 ncnc
Agent mtbbui@ucdavis.edu Machine Solitec1 ncnc
Machine Solitec1 ncnc
Member mtbbui@ucdavis.edu 👻
Project No Charge 👻
Nickname
Description
Account No Charge 👻
Process default
iCalendar OK Cancel



5. Your email will appear in the highlighted slots after making the reservation.

🐇 UC Davis College of Engineering (mtbbui@ucdavis.ed	du) Badger							_	
Window Equipment Actions Reservation Actions	History Action	s Supplies	Reports He	lp					
	Reconvetions	History	Maintonar	Dolicy	Equipmon	t Statue			
NCIIC DEAM SHOP ARI MININ	California and	Descention	Maintena	rolley	Lquipmen	i Status			
Northern California Nanotechnology Center	Solitec1_hci	ic Reservatio	ns						
Research Area	Multiple D	ays Per Macl	hine View 🔾	Multiple Mac	hines Per Day	View			
		Mon, SEP 21	Tue, SEP 22	Wed, SEP 23	Thu, SEP 24	Fri, SEP 25	Sat, SEP 26	Sun, SEP 27	7 Mon
♀ Lithography	0:00								-
- A Brewer1*	0:30								
	1:00								
- A Solitec1_ncnc*	1:30								
- A Solitec2_ncnc*	2:00								
	3:00	/	mthbui@uc						
The KSuss_MA4-1_IICIIC	3:30		mtbbui@uc						+
KSuss_MA4-2_ncnc* (hcansiz	4:00		mtbbui@uc						+
- Deposition	4:30		mtbbui@uc						
Deposition	5:00		mtbbui@uc						
► Etching	5:30		mtbbui@uc						
 Analytical 	6:00		mtbbui@uc	_					
, and y doub	0.30		mtbbui@uc	_					
◦ Other	7:30		mubul@uc						
- Electron Microscopy	8:00								
	8:30								
	9:00								
	9:30								
	10:00								
	10:30								
	11:00								
	12:00								
	12.00	•							

Equipment status

Please check the equipment status before using the machine

The following symbols indicate the status of the equipment:

A Nanometrics_ncnc*

EVG_420_ncnc*

Plasmatherm790_RIE_ncnc*

Machine is up

Problem Reported

Machine is down

To view the description of the problem, select a tool and then select "Maintenance" tab.

UC Davis College of Engineering (napio@ucdavis.e	edu) Badger				
Window Equipment Actions Process Actions	Reservation Actions	History Actions	Staff Actions Supplies Report	s Help	
NCNC	Reservations	listory Main	tenance Policy Equipment S	Status Staff Charge	s
Northern California Nanotechnology Center	Plasmatherm790	Jnresolved ∠ Com	enance Record ments YYYY/M	M/DD	
- Brewer/Vac-HotPlate_ncnc (cd		Resolved 🖌 Prob	lems From: 2014 / 2014 / 2015	Sear	ch
 	Resolved?	Туре	Time Submitted	Submitter	Subject
— ☆ Dicing Saw_ncnc*		SHUTDOWN	2015/03/03 01:18:30	cdwolin@ucdavis.e	
-					
- 👍 PG_ncnc* (mnirving@ucdavis.e					
- A Solitec1_ncnc* - Solitec2_ncnc*					
- Technics_RIE_ncnc*					
 A Xactix_XeF2_Etch_ncnc* A Dektak_2_ncnc* 					
- Pektak_3030_ncnc*					

Reporting a Problem

In order to keep tools running with minimal down-time, it is the user's responsibility to report any issues with the tool using Badger. This also prevents other users from using and possibly further damaging the machine.

1. To report a problem, select "Equipment actions".



2. Select "Report Problem" or "Shutdown"

Equipment Actions					
Enable					
Disable	-				
<u>S</u> hutdown	C				
Report Problem					
Make <u>C</u> omment	P				
Qualify User					
Browse Manual	14				

3. Type a description of the issue and click "Submit". These messages will notify other users through the list serv

<u></u>	Problem Report	×					
Equipment: gold_carbon sputter coater							
From:	rravicha@ucdavis.edu						
To:	To gold_carbon sputter coater Problem List>						
Subject:							
]					
	Submit Cancel						

Financial Data

1. Open "Reports" tab.

🛓 UC Da	vis College of Engineer	ing (mtbbui@ucdavis	.edu) Badger									x
Window	Equipment Actions	Reservation Action	IS History Action	s Supplies	Reports He	elp						
NCNC	BEAM SHOP	XRF NMRF	Reservations	History	maintena	nce Policy	Equipmen	t Status				
Northe	ern California Nanotech	nnology Center	Brewer1 Res	Brewer1 Reservations								
o∽ Re	search Area		Multiple E	Multiple Days Per Machine View O Multiple Machines Per Day View								
	Sociel Area		Mon, SEP 21	Tue, SEP 22	Wed, SEP 23	Thu, SEP 24	Fri, SEP 25	Sat, SEP 26	Sun, SEP 27	Mon		
P~ Ele	ectron Microscopy		0:00									^
			0:30									

- 2. Select "Financial Detail" under the drop-menu.
- 3. Select "Display"

📓 Badger Member Financial Detail Report for NCNC 🛛 🗆 🖾						
Lab		NCNC	-			
Report		Member Financial D	etail 🔻			
Account type	all	•				
Activity type	all	•				
Equipment	all	•				
Account	*]			
Display data from	08/2015		to 09/2015			
Cancel			Display			
Enter the requested information above and click display.						

ReportsHelpFinancial DetailFinancial SummaryReservationsAdvisor Financial DetailAdvisor Financial SummaryPI Financial DetailPI Financial Summary

4. To check the amount of time spent on each machine, view the "amount" column on the far right.

🛓 Member Financial Detail								_ 🗆 X
item	type	bdate	agent	project	project_type	account	amount	cost
Brewer1	eq_activity	2015-08-28 1	mtbbui@ucd	No Charge	no charge	No Charge	26.0	0.00
Brewer1	eq_activity	2015-08-28 1	mtbbui@ucd	No Charge	no charge	No Charge	27.0	.00
Dektak XT	eq_activity	2015-09-03 1	mtbbui@ucd	No Charge	no charge	No Charge	25.0	00
Dektak XT	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charg	10.0	- 00
KSuss_MA4-2_ncnc	eq_activity	2015-09-03 1	mtbbui@ucd	No Charge	no charge	No Charg	1277.0	000
KSuss_MA4-2_ncnc	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charge	144.0	0 0
MRL_Furnace_ncnc	eq_activity	2015-09-03 1	mtbbui@ucd	No Charge	no charge	No Charge	179.0	0.00
Nanometrics_ncnc	eq_activity	2015-08-28 1	mtbbui@ucd	No Charge	no charge	No Charge	41.0	000
Nanometrics_ncnc	eq_activity	2015-08-28 1	mtbbui@ucd	No Charge	no charge	No Charg	4.0	000
Nanometrics_ncnc	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charg	49.0	000
Plasmatherm790_RIE_ncnc	eq_activity	2015-08-31 1	mtbbui@ucd	No Charge	no charge	No Charge	49.0	00
Plasmatherm790_RIE_ncnc	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charge	213.0	.00
Solitec1_ncnc	eq_activity	2015-09-03 1	mtbbui@ucd	No Charge	no charge	No Charge	13.0	0.00
Solitec1_ncnc	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charge	23.0	0.00
1								

The time spent on each equipment are shown in minutes

5.	To check your tota	I cost on each mad	chine, view the	"cost" column.
----	--------------------	--------------------	-----------------	----------------

Ammunial Member Financial Detail									X
item	type	bdate	agent	project	project_type	account	amount	cost	
Brewer1	eq_activity	2015-08-28 1	mtbbui@ucd	No Charge	no charge	No Charge	26.0	0.00	
Brewer1	eq_activity	2015-08-28 1	mtbbui@ucd	No Charge	no charge	No Charge	27.0	0.00	
Dektak XT	eq_activity	2015-09-03 1	mtbbui@ucd	No Charge	no charge	No Charge	25.0	-1.00	
Dektak XT	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charge	10.0	-1.00	
KSuss_MA4-2_ncnc	eq_activity	2015-09-03 1	mtbbui@ucd	No Charge	no charge	No Charge	1277.0	0.00	
KSuss_MA4-2_ncnc	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charge	144.0	0.00	
MRL_Furnace_ncnc	eq_activity	2015-09-03 1	mtbbui@ucd	No Charge	no charge	No Charge	179.0	0.00	
Nanometrics_ncnc	eq_activity	2015-08-28 1	mtbbui@ucd	No Charge	no charge	No Charge	41.0	0.00	
Nanometrics_ncnc	eq_activity	2015-08-28 1	mtbbui@ucd	No Charge	no charge	No Charge	4.0	0.00	
Nanometrics_ncnc	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charge	49.0	0.00	
Plasmatherm790_RIE_ncnc	eq_activity	2015-08-31 1	mtbbui@ucd	No Charge	no charge	No Charge	49.0	0.00	
Plasmatherm790_RIE_ncnc	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charge	213.0	0.00	
Solitec1_ncnc	eq_activity	2015-09-03 1	mtbbui@ucd	No Charge	no charge	No Charge	13.0	0.00	
Solitec1_ncnc	eq_activity	2015-09-04 1	mtbbui@ucd	No Charge	no charge	No Charge	23.0	0.00	
▲									
						Chart	Print	Save Clo	se

The cost is reported in dollars, and reflects the individual equipment rates

If you have any questions about your equipment usage, please submit an email to Paula Lee (pjlee@ucdavis.edu)

Equipment Rates

To find the rate for your piece of equipment, please visit:

Equipment	Rate (Overall usage cap: \$800/month)
Brewerl	\$10/hour
DPSS UV Laser	\$25/hour
CHA-Ebeam	\$30/hour
Critical point dryer	\$40/hour
Dektak_2	\$18/hour
Dektak_3030	\$18/hour
Dektak XT	\$25/hour
DicingSaw	\$30/hour
EVG 501 Bonder	\$50/hour
EVG 620 Mask_Bond Aligner	\$40/hour
EVG 810 Plasma Activation	\$60/hour
Gold_carbon sputter coater	S-
KSuss_MA4-1	\$25/hour
KSuss_MA4-2	\$25/hour
Lesker_Sputter	\$30/hour
Nano_CVD	\$40/hour
Nanometrics	\$18/hour
Plasmatherm790_RIE	\$20/hour
Programmable Oven	S-
Rapid_Thermal_Processor	\$40/hour
Solitec1	\$18/hour
Solitec2	\$18/hour
Spin_Rinse_Dryer_3	\$1/hour
Technics_RIE	\$20/hour
Xactix_XeF2_Etch	\$50/hour

http://cnm2.engineering.ucdavis.edu/wp-content/uploads/sites/11/2013/06/Eqpt-Rates.pdf