# INRF/BiON New User Checklist

- I. Fill out an Account Authorization Form, Key Issuance Form, & Emergency Notification Form.
- II. Read the following: <u>INRF Chemical Hygiene Plan</u>, <u>Lab Safety Manual</u> and <u>MSDS</u> <u>Literature</u> found online or available in the INRF office.
- III. Complete <u>INRF & BiON Safety Assessment</u>. You must receive a score of 80% or higher. Once complete print result to submit to INRF.
- IV. Complete EH&S "<u>Lab Safety Fundamentals</u>," "<u>Hazardous Waste safety training</u>," & "<u>Hazardous Materials Incidents Emergency Procedures Training</u>" and print out the EH&S completion certificates to submit to INRF. Users may sign up for the courses through the <u>UC Learning Center</u>. Please contact INRF staff to set up a UCI Net ID.
- V. Read and complete the Policy Compliance Agreement.
- VI. Complete the <u>Chemical Usage Form</u>.
- VII. Complete the User Agreement, Waiver Release and provide a copy of a Certificate of Insurance.
- VIII. Submit documentation from steps I through VII by email to inrf@uci.edu.
- IX. Complete an <u>on-line slide orientation</u>, an <u>on-line orientation quiz</u>, and request an <u>on-site orientation</u>.
- X. Receive Keycard from INRF office and proceed with on-site orientation.
- XI. Please request cleanroom suit from INRF staff if you are a full-time user.
- XII. Please request equipment training by filling out the on-line training request form.

UCI Integrated Nanosystems Research Facility Engineering the Microworld at The University of California, Irvine

### **ACCOUNT AUTHORIZATION FORM**

For Commercial Users

THIS FORM MUST BE COMPLETED BY ALL USERS OF INRF and BiON

User's Name		
Phone Number	E-mail Address	
	Billing/Authorization Information	
Company Name		
Company Contact for Billing Purposes		
Company Address		
City, State		
Phone Number	Fax Number	

### **Billing Rates and Terms and Conditions**

- 1) Billing will be sent at the beginning of each month and is due and payable in 30 days in US Dollars.
- 2) Billing will be based on user classification per the rates listed below and current equipment usage rates which are posted to the INRF website and are subject to change annually.
- 3) A one-time fee of \$750 will be charged. The cost may be shared by up to 3 users per company per orientation.
- 4) User can purchase specialty supplies from our Clean Room Store, which will be included in the billing.
- 5) Company purchase orders are preferred.

# Please select the appropriate Rate Structure

	<u>Use of Cleanroom</u>	
User Classification	Hourly Rate	Monthly Cap Rate Per User
INRF & BiON Access	\$110 per hour	\$4,400 per month
INRF Access Only	\$110 per hour	\$3,648 per month
BiON Access Only	\$110 per hour	\$2,850 per month
Guest User <sup>1</sup>	N/A	N/A

<sup>1</sup>Guest Users are defined as observers that do not perform work in the facility. Guest users are prohibited from touching any equipment in the facilities.

AGREEMENT: I authorize UCI to bill my company for facility use and agree to the cleanroom billing rate specified above. I understand that any supplies purchased or equipment used in INRF or BiON will also be included in the billing.

Authorized Company Signature	Date
Name and Title	

For billing questions, contact: Marc Palazzo at mdpalazz@uci.edu or 949-824-8125 Phone

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# **CLEAN ROOM KEY ISSUANCE FORM** THIS FORM MUST BE SIGNED BY ALL ISSUED ELECTRONIC KEYS

Name			Title:
	Last,	First	
Status:	UCI User Academic User	Commercial User	ponsor User Technical Administrative
AGRE	EMENT: It is understood and	l agreed that:	
2.) 3.) 4.)	immediately. The key issued to me may not	be reproduced except by nediately to the INRF Bus	m key issued to me and I will report its loss/theft the University of California, Irvine. iness Office on termination of my employment or my rged for the same fee.
	stand the above agreement and	take responsibility for the	e key issued to me.
Signed_			Date
AUTH	ORIZATION:		
PI/Sup	ervisor		INRF Facility Administrator
INRF U	se Only		
Key Seri	al #	Date Issued	``Date Returned
INRF A	ssigned User Name	INRF	Assigned Account Number
User Sta	tus		



# **INRF Emergency Notification Information**

Full name	
Department	
Spacial modical o	anditions and allorates that modical personnel should be aware of
Special medical c	onditions and allergies that medical personnel should be aware of:
Person to not	ify in the event of emergency
Name	
Relationship	
Address	
Work phone	
Home phone	
Alternate eme	rgency contact
Name	
Relationship	
Address	
Work phone	
Home phone	



### **Chemical Usage Form**

THIS FORM MUST BE COMPLETED BY ALL USERS OF INRF THAT ACCESS WET PROCESSING AREAS

User Name: \_\_\_\_

### Check all Classes of Hazardous Material that apply, see Hazardous Material SOP for INRF at: http://www.ehs.uci.edu/programs/sop\_library/index.html

Acids	Toxic Compounds	Toxic Gases
Hydrofluoric Acid	Water Reactive Chemicals	Reactive or Explosive Chemicals
Ammonium Fluoride	Pyrophoric Substances	Carcinogens
Bases	Cryogenic Fluids	
Solvents	Asphyxiant Gases	
Oxidizers	Flammable Gases	

Other, please explain:

### Process (Check all that apply, see: <u>http://www.inrf.uci.edu/facility/sop/wet-dry/</u>)

Alcohol NAOH	Glass Etch	Nickel Etch
Si Etch usin KOH	Gold Etch	Silicon RCA-1
Buffered Oxide Etch	HF (2%) Dip	Silicon RCA-2
Nickel Electroless Plating	Isotropic Si Etch using HNA	Silicon Solvent Clean

#### Process name/title (Attach SOP):

#### PI/Supervisor Certification:

I certify that this individual has received training specific to the hazards involved in working with the material or process checked off, including work area decontamination and emergency procedures.

Authorized PI Signature	Date	
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#### User Acknowledgement:

By checking the applicable boxes above and signing below, I acknowledge that I have read and understood the SDS and Standard Operating Procedure (SOP) for each chemical and process.

I have located the SDS on file with INRF/BiON at: http://www.inrf.uci.edu/msds/.

The chemical I plan to use is not found in the INRF online SDS Database. I will submit a chemical request form (<u>http://www.inrf.uci.edu/safety/standard-procedures/</u>) and SOP (if applicable).

User Signature

Date \_\_\_\_\_

PI / Company:	 
User:	 
Department:	 
Project:	 

**INRF Research Story** 

# UCI Integrated Nanosystems Research Facility

• Engineering the Microworld at The University of California, Irvine

### **Policy Compliance Agreement**

All users of the INRF and BiON Cleanrooms (students, staff, faculty, and industrial visitors) are expected to act in a professional manner giving courtesy and respect to other users in our research community. The actions of any one user has the potential to affect the successful outcome of research and the safety of all users in our shared community. Therefore it is essential that our users and their responsible PI or Supervisor understand our policies to promote a safer, cleaner and more useable lab.

#### The following is required of all Users:

### **I. MINIMUM COMPETENCIES**

- A. Have prior experience working in a lab environment or have a research group that will mentor you
- B. UCI EH&S Safety Training Certification
  - a. Lab Core Safety/ Lab Safety Fundamentals
  - b. Hazardous Waste
- C. Know and understand basic hazards of chemicals in the INRF (See Lab Safety Manual pgs.7-11)
- D. Understand proper procedures for collection, storage and disposal of hazardous waste (Lab Safety Manual pg. 12)

II. READ (All documentation can be found at: http://www.inrf.uci.edu/safety/standard-procedures/)

- A. Lab Safety Manual
- B. INRF & BiON Policy Overview
- C. Chemical Hygiene Plan
- D. The MSDS Literature and SOP's for each chemical that you use
- E. The SOP's for each equipment that you use

**III. BE RESPONSIBLE** (Each user is responsible for the equipment and chemical used. Each user must follow the minimum guidelines or be subject to consequences, potentially including expulsion)

- A. Wear proper personal protective (PPE) gear and safety glasses or chemical splash goggles at all times
- B. Always log-in when entering the Facility and log-out when leaving
- C. Fill out the log for all equipment that you use
- D. Complete Chemical In-Use forms for all chemicals presently in use, including contact phone number.
- E. Leave all equipment in the same or better condition it was found. This includes turning off microscopes and cleaning spinners when you are finished using.
- F. Store all personal equipment or supplies in designated areas or lockers. DO NOT store chemicals in your locker.
- G. Follow the proper disposal procedures for all chemicals. If you do not know how to dispose of something, ask staff.
- H. Notify staff immediately in the case of an accident resulting in a chemical spill, broken equipment or injury
- I. Each user will be issued an access card for entering the lab. Users will not share their access card with anyone and must report to staff if lost or stolen.
- J. Report potential safety hazards to Staff
- K. Pay close attention to Do's and Don't signs

### **IV. RESPECT**

- A. Treat all equipment and experiments in the lab as if they are your own. DO NOT dispose of or dismantle an experiment or chemical without first checking with staff
- B. If you observe someone failing to follow policy or proper procedure, help them in a kind manner to understand
- C. Make an appointment with Lab Staff for equipment or process training, DO NOT interrupt staff for personal training when they are working
- D. Attend weekly Lab Meetings whenever possible as this is dedicated time with our Lab Manager

### **Policy Violations**

Users that violate INRF/BiON Policies and Procedures as specified in this agreement and in our Lab Safety Manual will be subject to the following consequences listed below. Lab Staff reserves the right to enforce additional consequences if deemed necessary. *Safety Violations will result in immediate 2 week suspension.* 

1 <sup>st</sup> – 3rd Occurrence:	Written warning to the violator and responsible PI/Supervisor
4th Occurrence:	2 week suspension from INRF and BiON Cleanroom(s)
5th Occurrence:	30 day suspension from INRF and BiON Cleanroom(s) and requirement to re-take the Lab
	Orientation for an additional cost of \$150 internal / \$350 external user.

### Lab Protocol Violations include (but are not limited to):

- Improper Use of Lockers (ex: storing chemicals, leaving a mess)
- Improper Entry (ex: Using another users key card or username, not logging in, signing in as a guest when you are a user)
- Failure to follow SOP's for equipment or processes (this will lead to suspension from tool)
- Failure to log equipment use and parameters
- Failure to clean up after yourself (ex: after use of spinner, wet bench and utensils)
- Using equipment or supporting infrastructure that you are not trained or authorized to use
- Removing another users samples from equipment or chemicals
- Altering process parameters during another users run
- Theft or unauthorized removal of equipment, materials or chemicals (may result in expulsion)

#### Safety violations include (but are not limited to):

- Failure to comply with the buddy policy
- Improper chemical glove use (ex: touching equipment or door handles with chemical gloves)
- Unauthorized use of the wet bench (users must be qualified before use)
- Improper use of chemical fume hoods or wet benches
- Improper chemical handling, transport, storage, use or labeling
- Improper waste disposal or failure to clean and dispose of empty chemical bottles
- Bringing non-approved chemicals, materials, or people into the lab
- Not following Do's and Don't signs in the lab
- Failure to immediately respond to and/or report equipment problems, injuries or safety hazards including chemical spills

#### PI/Supervisor Acknowledgment

- 1.) I certify that the user named below has met the minimum competencies as listed under section I
- 2.) I have read and understand the INRF & BiON Policies listed in the Lab Safety Manual and will ensure that user violations are limited
- 3.) I understand that there are consequences to policy violations that could potentially lead to additional cost and expulsion of the user named below

PI/Supervisor Signature

PI/Supervisor Name (Printed)

#### User/ Employee Acknowledgment

- 1.) I have read and will follow the policies in the Lab Safety Manual
- 2.) I understand that failure to follow these policies may endanger the entire lab environment and serious consequences will result in loss of lab privileges.
- 3.) I understand that I will be held responsible for any damage caused if I fail to follow these policies.
- 4.) I understand that I may be included in photos and/or videos taken during lab usage and they may be shown for INRF purposes

User Signature

Name (Printed)

Date

E-mail

Date

E-mail

Participant's Name:\_\_

Please Print

### UNIVERSITY OF CALIFORNIA, IRVINE

### Integrated Nanosystems Research Facility (INRF)

### Waiver of Liability, Assumption of Risk, and Indemnity Agreement

**Waiver**: In consideration of being permitted access to or to participate in any way in the activities, work and research within the Integrated Nanosystems Research Facility (INRF) hereinafter called "the activity", I, for myself, my heirs, personal representatives or assigns, do hereby release, waive, discharge, and covenant not to sue The Regents of the University of California, their officers, employees, and agents from liability from any and all claims including the negligence of The Regents of the University of California, their officers, employees and agents, resulting in personal injury, accidents or illnesses (including death), and property loss arising from, but not limited to, participation in the activity.

Signature of Participant Date

Assumption of Risks: Participation in the activity carries with it certain inherent risks that cannot be eliminated regardless of the care taken to avoid injuries. The specific risks vary from one activity to another, but the risks range from 1) minor injuries such as scratches, bruises, and sprains to 2) major injuries such as eye injury or loss of sight, chemical exposure, heart attacks, and concussions to 3) catastrophic injuries including paralysis and death.

I have read the previous paragraphs and I know, understand, and appreciate these and other risks that are inherent in the activity. I hereby assert that my participation is voluntary and that I knowingly assume all such risks.

**Indemnification and Hold Harmless:** I also agree to **INDEMNIFY AND HOLD** The Regents of the University of California, **HARMLESS** from any and all claims, actions, suits, procedures, costs, expenses, damages and liabilities, including attorney's fees brought as a result of my involvement in the activity and to reimburse them for any such expenses incurred.

**Severability:** The undersigned further expressly agrees that the foregoing waiver and assumption of risks agreement is intended to be as broad and inclusive as is permitted by the law of the State of California and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full legal force and effect.

Acknowledgment of Understanding: I have read this waiver of liability, assumption of risk, and indemnity agreement, fully understand its terms, and understand that I am giving up substantial rights, including my right to sue. I acknowledge that I am signing the agreement freely and voluntarily, and intend by my signature to be a complete and unconditional release of all liability to the greatest extent allowed by law.