



Memorandum

Date: March 24, 2017

To: CAMCOR Users

From: Kurt Langworthy, CAMCOR Director;  
Shannon Boettcher, CAMCOR Faculty Advisory Committee Chair

CC: David Conover, Vice President for Research and Innovation (VPRI)  
James Hutchison, Associate Vice President for Research (VPRI)  
Stacy Williams-Wright, Divisional Budget Director (VPRI)  
Melodi Jayne, Business Manager, Research Core Services (RCB)

Dear CAMCOR Users,

The faculty advisory committee for CAMCOR (S. Boettcher, Dave Johnson, Darren Johnson, B. McMorran, M. Pluth), and director (K. Langworthy) announce the following rate, and lab policy changes for fiscal year 2018 (beginning July 1<sup>st</sup>, 2017.):

**Semiconductor lab changes:**

**1) New user policy. Please see pages 3-5, below.**

**2) Per-hour based fee model**

We are transitioning the fee model from \$25/day (regardless of time in lab), to \$10/hour based on the proxy card sign-in and sign-out record. The maximum daily charge will be capped at 4 hours/day, and the minimum charge for day-use lab access is 1 hour/day. Billing will be based on 0.5-hour increments.

**3) Per-use surcharge for evaporator usage**

Due to the high maintenance costs of maintaining thermal evaporators, stocking liquid nitrogen, and stocking consumables for the evaporators, a per-use fee of \$15 will be charged for each pump-down cycle (logged) on the evaporators in the semiconductor lab.





**Electron Microprobe Facility - Changes:**

- 1) Internal rate for instrument time will decrease from \$45/hr to \$10/hr.
- 2) An internal rate for priority services (i.e. bumping another internal user) will be established at \$15/hr for instrument time.

**Nanofabrication Facility - Changes:**

- 1) Access to the Zeiss SEM will require scanned entry into the semiconductor lab (or nanofabrication lab suite), resulting in an effective \$10/hr charge. To compensate for the lab access charge, the internal instrument rate will decrease from \$45/hr to \$35/hr.





## **Semiconductor lab user policy**

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The semiconductor processing, and nanofabrication lab suites are important parts of CAMCOR's shared user facility, which support research and development activities in both academia and the private sector. To ensure the safety, quality, and availability of the labs, the CAMCOR advisory committee has approved the following user policy:

### **Training requirements**

#### **General lab safety training**

All semiconductor processing lab (room 73) users are expected to have adequate knowledge about how to work safely in the lab and be able to respond appropriately to any emergency that may occur in the lab. Users are required to complete a general lab safety-training course and pass a lab safety exam before they are allowed to work in the semiconductor processing lab space. One free safety training class will be offered every month for new users. Additional safety-training classes may be requested on-demand at \$100/class. Tool-specific training may be required for some instruments in the facility.

Contact Dr. Fuding Lin for training course offerings: [flin@uoregon.edu](mailto:flin@uoregon.edu); 541-346-8628

#### **Tool specific training**

Before being allowed to use specific instruments in the lab, users are required to demonstrate their ability to safely use the tool, and obtain approval from the lab manager. Formal training is required before using the following tools: thermal evaporators, HF etch hood, acid and base hood, plasma etcher, tube furnace, gold sputtering system, carbon coating system, photolithography room, four-point probe. The cost of training is \$65/hour, estimated training time for each tool can be found in Table-1, below.





## **Lab use etiquette**

### **Label it!**

Since the lab space is shared by many users, all containers in use must be clearly labeled. The label should at least show the user's initials and indicate what's in the container. Repeated violations of this rule could result in suspension of one's privilege to use the lab.

### **Keep the work space clean!**

A clean work space is essential for productivity and safety, therefore every lab user is required to clean up their work space thoroughly after work is completed. If the work needs to continue into the next day, please notify the lab manager and obtain approval in advance.

### **Reserving and logging tool usage**

To encourage forward planning, users who reserve instruments in advance will have priority, over those who do not reserve instruments. For tools that require activity logging (such as evaporators), a new log entry should be created before using the tool. Failure to log usage on instrumentation may result in suspension from the lab.

### **Storage space for special projects**

Users may not store any project-specific material, or tool in the shared lab without lab manager's approval. If temporary storage in the lab is necessary, all items need to be clearly labeled and stored in closed containers, if applicable. Unlabeled or improperly labeled samples/materials may be disposed without notice.

### **Reporting problems**

Please notify the lab manager immediately if any problem or potential concern is found while you're using the lab.





**User incurred damage**

Users are liable for any damage to lab properties due to negligence or improper use. CAMCOR reserves the right to recover the full cost of repair from the user who caused the damage.

**Lab supplies**

Lab users are expected to supply all materials and tools necessary for their project. However, for user's convenience the semilab may provide limited quantities of basic safety and cleaning supplies as well as commonly used solvents/chemicals, including goggles, gloves, Kimwipes, labeling tools, acetone, IPA, methanol, DI water, Liquid N2, Sulfuric acid, HCl, compressed air, N2, Ar, O2. High value consumables such as: Au, Pt, and Alumina-coated tungsten boats may be purchased by users from the lab stock.

**Table 1: Estimated training times**

Thermal evaporators	1.5 h	Photolithography room	1.0 h
HF etching station	1.0 h	Gold sputter system	0.6 h
Acid/Base hood	0.6 h	Carbon coater	0.6 h
Tube furnace	0.4 h	4-point probe	0.6 h
Plasma cleaner	0.6 h	Probe station	0.6 h

If you have any questions, please contact CAMCOR lab director, Kurt Langworthy (klangwor@uoregon.edu).

Thank you,  
CAMCOR Director and Faculty Advisory Committee

