

HOW TO BECOME A USER OF THE WHITAKER INSTITUTE LITHOGRAPHY AND FABRICATION FACILITY

To gain access to the Whitaker Institute Lithography and Fabrication Facility in Clark Hall you must do the following:

1. Write a short but concise description of yourself and your research. This description should clearly address the following questions:
 - a. How much experience do you have with microfabrication?
 - b. What research group or department are you associated with?
 - c. Who is your advisor?
 - d. What do you plan to do in lab?
 - e. How long and how often do you plan to work in the microfabrication facility?
2. Submit this letter together with a detail process flow description of what you plan to do, to the director of the laboratory (Prof. A.G. Andreou, agagroup@olympus.ece.jhu.edu) AND to the laboratory manager Mr. Huy Vo (huyvo@bme.jhu.edu).

The lab manager and director of the lab will review your application and approve your application. It is strongly recommended that you discuss your project with the lab manager before official application to minimize delays in the approval process.

Once you are approved to use the lab you must satisfy the following training requirements before working in the lab

- a. Pick up, read and understand the laboratory safety manual
 - b. Attend the introduction to the clean room seminar.
 - c. Complete satisfactory a quiz (85% correct answers) on lab policies, safety, and code of conduct.
 - d. Schedule a walk-through to get familiar with the facility.
 - e. Sign a form pledging safe use of the facility
 - f. Under supervision, get familiar with the equipment then prove that you can safely operate the equipment independently then have the lab coordinator sign you up as a qualified user.
3. Your supervisor must also agree to contribute to the fees for the lab. The fees for lab usage are listed in the table below.
 4. Payments will be made through the University's M&S mechanism, a system of internal transfer from an identified research grant to the microfab budget. Please give to Huy Vo

the budget number for the grant that will be supporting the microfab activity for the project along with the active dates for the research award. All microfab activity for an investigator and team will be charged to the budget number provided to Mr. Vo.

5. A standard charge will be for certification of a user by Mr. Vo and a disposable gown. In addition there will be a monthly rental of storage space for chemicals and supplies. The time spent using any of the equipment should be recorded in a notebook next to the equipment. If Mr. Vo is to be involved in a project he will give a good faith estimate of the time involved prior to the project but the charge will be for the actual time used in the project.

6. Table of lab fees:

Category I (Fixed Fees)	\$
Clean room space/storage fee	300
per month per PI group	
A unit equals to 2 cubic feet	
(1 Unit Minimum Fee)	
User certification and gown	150
per user - a one time fee	
Student course fee	120
per user a one time fee	
Total Fixed Fees	
Category II (Hourly Fees)	\$
One Hour Minimum Fee	
General Lab Use (per hour)	0
etch, microscope, profilometer	
Photolithography (per hour)	5
Evaporation (per hour of diffusion pump use)	40
Oxidation (per hour)	10
Plasma (per hour)	6
Category III (Tech Effort)	\$
Mr. Vo hourly fee	30