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## **Silicon Bay and Special Projects Bay Protocol** **Laboratory Policy**

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Protocol for general use of the Silicon and Special Projects Bays.

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### **1.0 Responsibilities:**

- 1.1 It is every one's responsibility to understand and adhere to all Michigan Nanofabrication Facility lab policies and procedures.
- 1.2 Failure to follow any of the policies or procedures may lead to removal from the lab.

### **2.0 References:**

- 2.1 Material Safety Data Sheets (MSDS)
- 2.2 Chemical Hygiene plan

### **3.0 Engineering and Administrative Controls**

- 3.1 N/A

### **4.0 Procedure:**

- 4.1 No user or project is more important than the safety of the users or the laboratory.
- 4.2 Clean up after yourself! Be sure your work area is cleaner when you leave than when you arrived.
- 4.3 Put all processing tools on the correct shelf or storage area. This includes but not limited to: cassettes/wafer holders/ beakers/ cassette handles/etc.
- 4.4 Do NOT leave bottles of chemicals on the floor in front of the benches unless you are actively using them. When you leave the area, be sure to put the chemicals back to their proper storage area.

- 4.5 Personal Protective Equipment (PPE) is **MANDATORY** at the wet benches for all tasks.
  - 4.5.1 Mask Clean Bench: chemical resistant gloves, latex glove not vinyl
  - 4.5.2 Solvent Bench: chemical resistant gloves, latex glove not vinyl.
  - 4.5.3 Acid/Base: chemical resistant gloves, apron, goggles and face shield.
  - 4.5.4 PFC: chemical resistant gloves, apron, goggles and face shield.
  - 4.5.5 Special Project Benches: chemical resistant gloves, apron, goggles and face shield.
    - 4.5.5.1 Quench to Spin/Rinse/Dryer (SRD): latex gloves and a wipe under the cassette.
- 4.6 All beakers that have samples/wafers soaking in them **MUST** be labels follows: User name/ chemical/ start date/completion date/contact number.
  - 4.6.1 Improperly labeled bottles, beakers, and samples shall be considered hazardous waste and will be discarded according to the Chemical hygiene plan and OSEH requirements.
  - 4.6.2 If wafers or chemicals need to sit for more than forty eight (48) hours. Anything sitting longer may be discarded, so please be sure you finish your processing before then. We expect the bench work areas clutter-free.
  - 4.6.3 Bottles of chemicals must be labeled. There should be no cryptic codes. See the policy on Labeling Photo-resist Bottles.
    - 4.6.3.1 Any beaker or chemical bottle labeled improperly shall be considered Hazardous waste and will be discarded.
  - 4.6.4 Beakers may sit in designated locations only. Designated areas are taped areas on benches. Beakers sitting outside the marked areas will be discarded **IMMEDIATELY**, unless they are actively being used.
    - 4.6.4.1 Active use: users are at the beaker or nearby and will be back shortly (less than say 5 minutes). There is a label on the beaker indicating active use (i.e. "gone to lunch", "processing all day", etc.).
- 4.7 If you empty a solvent bottle less than  $\frac{1}{2}$  full, you **MUST** fill it. If you empty the clean room wipe stack less than  $\frac{1}{4}$  full, you **MUST** fill it. If you use the last pipette or swab, you must replace it. Your processing is **NOT** complete until these things are done.
- 4.8 When retrieving chemicals from the supply shelf, take the most empty bottle first. Do not ignore it, so that you don't have to clean it.
- 4.9 **NO** user shall work with chemicals (any wet bench) in the laboratory without another user present.
- 4.10 Do not open an oven door if there is a note stating it is in use.
- 4.11 No user may give/share their access card, user id or user password to another user.

## 5.0 Accident Procedures:





5.1 Read all MSDS prior to using any chemical.

5.2 Report all accidents (injuries, spills, fires) to the SSEL manager or other SSEL staff. For emergencies during non-business hours, call the SSEL Emergency on call member at (734) 764-4127 or the Dept. of Public Safety at (734) 763-1131.

