



### **SDSU – Microfabrication Facilities Instructions**

1. All users are required to wear overalls and other covering. No exceptions.
2. Enter your start time in the login ledger.
3. Maintain a journal and a personal (labeled) cleanroom box
4. Make sure you have read all the sections in this instruction sheet and the appendices
5. Make sure you have read the MSDS & manufacturer's instructions sheet before you begin the experiment.
6. Follow Sections I to III.
7. Before you leave the lab, enter end time with comments about any anomalies noticed or any chemical spills (small or big).

#### **Section I - Bringing in New Chemicals/Liquids**

1. When preparing to use any chemical, please take personal responsibility in reading the MSDS sheets & manufacturer's instructions sheet to avoid accidents and mishandling. These will provide you information about any special handling procedure (like ventilation, usage of special gloves, masks) to be used.
2. If you are bringing new chemical – please print out 2 copies of MSDS sheets and manufacturer's instruction sheet (if available) to be added to the Cleanroom Folder & MEMS Lab folder.
3. Also please get permission from Dr. Sam Kassegne & the Cleanroom Manager regarding the usage of any new chemicals.
4. When handling hazardous chemicals make sure you have a buddy other than the person or the team involved in the experimentation.

#### **Section II - Lab Etiquettes**

1. Please clear your workstation
2. Clean the equipment you were handling.
3. If the levels of basic chemicals and liquids (Acetone, De-ionized water, Isopropyl alcohol, Methanol) are less than  $\frac{1}{4}$  in the container, please refill the squirt bottles.
4. If the chemicals are not available, please notify Cleanroom Manager.



5. Do NOT discard any used chemicals in the drain, use in the designated waste containers.
6. Do NOT discard chemically tainted wipes in the common thrash, use the designated thrash bin.
7. If the experiment is to be continued in your absence,
  - a. Move the experimental set up to an undisturbed or unused location.
  - b. Cover the chemicals
  - c. Do leave a 'do not disturb' note with your name near your set up.
  - d. Make sure you check the set up frequently.
  - e. Never leave a hot plate on in your absence

### **Section III - Chemical spills**

1. In case of basic chemical spills (Acetone, Isopropyl alcohol, Methanol), use chemical spill kit and/or tissues to clean the surface till dry
2. In case of photoresist or other chemicals spills, use chemical spill kit and/or tissues to clean the surface till dry. Report to Cleanroom Manager about the spill location and nature.
3. Most non-viscous photoresist spills can be cleaned with acetone and tissues.  
**Report to Cleanroom Manager about the spill location and nature & document in the login ledger.**
4. In case of mercury spill, **REPORT TO DR. SAM KASSEGNE IMMEDIATELY ABOUT THE SPILL LOCATION AND NATURE & document in the login ledger.** And evacuate the area.

### **Appendices**

1. Fire Safety – refer to Appendix A
2. Emergency evacuation assembly points – refer to Appendix B
3. CPR – refer to Appendix C
4. MSDS – refer to Appendix D
5. Manufacturer's Sheet – refer to Appendix E

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