MFC Safety Regulations

1. All Persons using the MicroNanoFabrication Facility must be given a fire & safety tour. Also instruction on proper chemical use and disposal by the Lab Engineer. Every one is also REQUIRED to take the Risk Management Lab Safety Class.
2. Everyone must wear safety glasses or prescription glasses while in the Lab. contact lenses are discouraged
3. Everyone will wear proper cleanroom attire, including latex gloves.
4. Be considerate of others people’s projects.
5. Pay close attention while working in the lab. It is not a place for play.
6. Know and review the “Emergency Response Guides” posted in and around the Lab.
7. NO SMOKING, EATING OR DRINKING ARE ALLOWED ANYWHERE IN THE LAB.
8. Anyone using acids or other hazardous chemicals will wear the aprons, goggles or face shield and chemical gloves provided in the Lab.
9. All chemicals to be used must be cleared through the Lab Manager, MSDS are REQUIRED for all chemicals brought into the Lab.
10. MSDS sheets are available for all Lab chemicals. They are located in the gowning area as well as on the chemical storage closet doors and on the MFC web site http://mfc.engr.arizona.edu
11. The Lab Engineer will train all individuals to perform all chemical process correctly and certify that individuals may use chemicals without supervision.
12. All chemical processing must be done under a fume hood.
13. Shorts or dresses may be worn under the cleanroom suits.
14. Closed toed shoes are required. ABSOLUTELY NO SANDALS.
15. Anyone using acids or other hazardous chemicals will wear the aprons, goggles or face shield and chemical gloves provided in the Lab.
16. NO NEW CHEMICALS MAY BE BROUGHT INTO THE LAB WITHOUT THE APPROVAL OF THE LAB MANAGER. TWO COPIES OF THE CHEMICAL MSDS MUST BE PROVIDED TO THE MFC.
17. ALWAYS CLEAN UP AFTER YOURSELF. Dispose of chemicals when you are finished with them. If you leave and plan to return COVER AND LABEL ANYTHING LEFT IN THE SINK AREA. Rinse all containers. Be considerate of your fellow workers: Wipe up chemical spills or water splashes. Leave the area neat, clean and ready for the next user.
18. NEVER LEAVE ANYTHING UNCOVERED OR UNLABELED IN THE SINK. It will be disposed of. People who habitually leave unlabeled chemicals in the sink will be banned from the Lab.
19. Empty chemical bottles must be rinsed thoroughly. Fill and rinse 2 – 3 times then take a small length of pH paper and drop it into the bottle. If the bottle is “neutral” the bottle can be put in the Yellow Chemical Waste can, if not it must be rinsed until it tests neutral.
20. BE CERTAIN WHAT CHEMICALS MAY BE POURED DOWN THE DRAIN. All commonly used MFC provided chemicals may be poured directly down the drain flushing with DI water. NO SOLVENTS MAY GO DOWN THE DRAIN. If chemicals cannot go down the drain they must be disposed of properly. The Lab Engineer will provide proper containers and procedures.

21. Extreme care must be taken when using equipment and chemicals. If you spill chemicals on yourself or splash them in your eyes call the Lab Engineer or Manager IMMEDIATELY. Get any effected area into running water IMMEDIATELY. Hands in the sink, eyes in the eyewash and rinse in water for 10 minutes. If the effected area is large step directly into the safety shower and remove all clothing. Remain in the shower for at least 10 minutes and depending on the nature and seriousness of any injury medical attention will be sought promptly. There is an HF neutralizing salve, Calcium Glucinate, available in the Lab to treat minor HF burns.

22. When using chemicals
   - Be familiar with all recipes being used.
   - Know water and chemicals ratios prior to mixing.
   - ALWAYS ADD ACID TO WATER, not the reverse.

23. THE LAB ENGINEER WILL CERTIFY ALL STUDENTS USING ANY LAB EQUIPMENT. DO NOT USE ANY EQUIPMENT YOU HAVE NOT BEEN PROPERLY TRAINED TO USE. DO NOT USE ANY SHORTCUTS.

24. Log books are located near each piece of equipment in the Lab. Log all appropriate information each time equipment is used.

25. If there are problems with any lab equipment or key consumables are low or out contact the Lab Engineer ASAP.

26. Know where all fire exits and alarms are located

27. In case of a fire alarm EXIT IMMEDIATELY. If it is a fire drill, go to the nearest fire exit and meet by the palm trees outside the South entrance of the ECE building. DO NOT STOP TO TAKE OFF LAB ATTIRE.

28. If a real fire is seen, get to the nearest fire exit and PULL THE FIRE ALARM AS YOU IMMEDIATELY EXIT THE BUILDING.

29. All broken glass or quartz must be disposed of in the proper “sharps” containers.

30. Aisles must be kept free from obstructions.

31. Immediately report any hazardous conditions to Lab Management.