

MEMS Lab Guidelines and Etiquette

General:

After working, please clean your area, glassware, and put all materials used back in their designated location

Label EVERYTHING!!! This includes a beaker full of water, waste, or a tray full of developer.

Place full waste bottles at the bottom of the red fire cabinet.

Cleanroom:

Google Calendar: For Reservation, please sign up on the google calendar at least 24 hours in advance to get priority. If you are more than 10 minutes late, your reservation is forfeited. As a courtesy, if you can remember to, please use the google calendar to let your other labmates know when you are working.

Sign in Sheet: Sign in is required anytime any piece of equipment is used in the cleanroom.

Certification: In order to work alone in the cleanroom, you must have at least level I certification.

Required gowning: Booties and hairnet are **always** required in the cleanroom. If the temperature is reasonable (Below 80), please wear the cleanroom labcoats as well. Gloves, close toed shoes, pants, goggles, and masks should be worn at appropriate times for your own safety.

Before leaving the cleanroom, ensure that all gases, vacuums, and other equipment are tuned off. Before leaving lab, please walk around the exterior of the cleanroom to ensure that none of the gases or vacuums have been left on.

Electrochemistry

Google Calendar: For Reservation, please sign up on the google calendar at least 24 hours in advance to get priority. If you are more than 10 minutes late, your reservation is forfeited. As a courtesy, if you can remember to, please use the google calendar to let your other lab-mates know when you are working.

Sign in Sheet: Please sign in each time the Solartron is used

Certification: Level II+ will include proper electrochemistry training. If you do not have this certification, please contact Miekko or Maria for proper training.

Reference Electrode: This electrode is very sensitive and can easily break if not stored or used properly. Please ensure that the electrode tip is stored in saturated KCl electrode filling solution.

Solar Fabrication

Gas Tanks: Please ensure that gas tanks that are used are tied down to a seismically stable table.

Labeling: Please label materials placed on hot plate for a long period of time with a start and end date. Also, be sure to label what it is.

Safety: Wear masks when working with dangerous solvents. Be sure to read the MSDS for any new materials so that you understand the dangers of the material.

Buffered HF

Buffered HF is an acid that does not act like most strong acids. Please note:

1. It attacks oxides which includes glass and metals, so it must be stored in plastic.
2. If you get HF on you rinse with water, and place some calcium gluconate gel on the burn.
3. If you notice the burn later, treat it with calcium gluconate as soon as possible.
4. And HF burn does not hurt so it is easy to not notice it

Protective clothing: Please wear the long blue lab coat, gloves and safety glasses when working with HF.