

# Lab Safety Plan for Workshop Room (Rm113)

## 1. Basic Information

**1.1 Laboratory Locations Covered by this Plan.** Nanophotonics Center (Engineering & Technology Lab Building) Rm 113 (Workshop Room).

### 1.2 Location of (M)SDSs, and any Other Laboratory Documents for this Room

In the Literature Holder mounted on the wall next to the door

## 2. Emergency Assistance Information

### 2.1 Group's Emergency Contact Information

Prof. Jing Li                      806-401-9289

Weiping Zhao                    806-317-5636

### 2.2 Advisors

Prof. Hongxing Jiang    806-834-5739 (Office)

Prof. Jingyu Lin            806-834-5383 (Office)

### 2.3 Secretary

Qing Feng                      806-834-2094 (Office)

### 2.4 TTU Environmental Health and Safety (EH&S)

Daytime Emergencies (M-F, 8:00 am -5:00 pm)      806-742-3876

Non-daytime Emergencies (24 hrs/day, 7 days/week)      806-742-3328

### 2.5 TTU Emergency Maintenance

Any Time                      806-742-3328

### 2.6 TTU Police (UPD)

Emergency 9-911

Non-Emergency 806-742-3931

**3. Required Training for Working in this Room**

3.1 Safety Awareness Training

3.2 Hazard Communication

3.3 Chemical Hygiene Plan Training

3.4 Laboratory Safety

**4. Standard Operating Procedures (Attached)**

**5. Record of Training (on the door)**

# Lab safety

Note for lab safety training/talk on Nov.20,  
2011

Environmental Health & Safety website: <http://www.depts.ttu.edu/ehs/Web/>

# Required documents

- SOPs for anything potentially dangerous
  - Including how to change MOCVD bubbler, dump sharp/chemical waste, use fume hood
- **Lab safety plan** – must have, in written form
  - Approved by PI
  - Risk analysis from EHS (optional)
  - eg. annual inspection, training
- MSDS
  - Storage(flammable/reactive)
  - Shipping requirements

# Training

- Location of first-aid, fire extinguishers and spill kits
- Personal Protective Equipments (PPE)
  - Gloves: one time use, take care to dispose in regular trash
  - Body cover: no exposed skin
  - Shoes: full foot coverage, no cloth or absorbent materials
  - Eyewear, respirator/ventilation
- Waste management
  - Waste chemicals: separately stored in labeled containers mark with full name and date.
  - Waste sharp items: special container or sharp edge secured



# Training

- Chemical Hygiene
  - Designated area - fume hood: sash below mark
  - Separate flammable/reactive/waste inside fume hood
  - Glassware: rinse after use, label if left in fume hood
  - Store chemicals accordingly
    - Separate flammable/inflammable, base / acid, HF
    - Specialized cabinet / refrigerator (EHS can provide)
  - Handle spills: call (2-3876) immediately if unsure
    - Use spill kits if comfortable
  - HF: especially dangerous, penetrate gloves in seconds.

## Chemical safety



### Precautions:

- Always wear protective clothing, including a face mask, goggles, rubber gloves, and apron when handling corrosive chemicals.
- Use the chemicals only in the designated area;
- Do not transport chemicals around the room in beakers.
- Never pour chemicals back into the original container.

## Storage waste chemical

Store chemicals in accordance with compatibility. Incompatible chemicals coming into contact can generate extremely violent chemical reaction resulting in catastrophic explosions.

- Store waste chemical near the floor to minimize the danger of falling from shelves.
- Store in areas that are cool, dry, and well-ventilated, and away from sunlight.
- Storage area should not be subject to rapid changes in humidity or temperature.

## Disposal chemical

Appropriate and adequate disposal of waste is critical in preventing unnecessary risk to the environment, as well as lowering the likelihood of unsafe conditions

### Hazardous Waste Disposal Pickup Request Form

- Select waste type –chemical/Bio waste
- Fill out the form completely
- Transaction Number will be sent by email after fill out the pick up request form. Label all containers with this transaction number.
- Once the form submitted, the pick-up will be scheduled for **Tuesday** and **Thursday** accordingly