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 off inside-out and dump 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

- 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