

## **Safety Officer Responsibilities**

### **Individual Safety**

- Encourage students to wear hazard-appropriate PPE while in lab including members from other groups
- Keep lab coats and gloves out of chemical-free spaces (e.g., NMR room, bathrooms, kitchenettes, outdoors ect.) and laundered often
- Complete online safety training annually and require new students (including undergrads) to complete this before starting lab work
- Be familiar with emergency procedures in case of an accident

### **Lab Space Management**

- Do not allow eating, drinking, dipping, or smoking in the lab
- Remind students to keep lab spaces (floors, fume hoods, benches) clean and uncluttered
- Keep fume hood sashes at the proper working height with nothing blocking air flow in the back
- Keep electrical cords in good condition and away from hot surfaces
- Ensure lines or equipment with a vacuum are equipped with traps
- Always attend to open flames

### **Safety Equipment**

- Keep all safety equipment unblocked such as eyewashes, showers, extinguishers and the phone
- Make sure eyewash stations and emergency showers are regularly flushed
- Purchase chemical spill kits, first aid kits and calcium gluconate gel for HF from the stockroom
- Be familiar with classes of fire extinguishers (red ABC and yellow D) and their locations
- Know the location of emergency gas shut off valves

### **Chemical Storage**

- Label anything containing chemicals with the chemical name(s)
- Store chemicals separately from waste and segregate them by hazard
- Store gas cylinders securely; tag them as full, in use, or empty
- Store flammable liquids in flammable cabinets or rated refrigerators
- Keep doors to flammable storage cabinets tightly shut when they are not in use
- Do not keep more than 10 gallons total of flammable liquids (including waste) per bay outside of flammable cabinets

### **Hazardous Chemical Use**

- Handle volatile and hazardous chemicals in fume hoods
- Store and use toxic gases inside ventilated cabinets or fume hoods
- Do not use mercury-containing equipment or thermometers in lab (these devices should be relinquished to EHS unless an exception is in place for your lab)
- Ensure peroxide-forming chemicals show no evidence of peroxide formation (e.g., crystals); they should be disposed of two years after opening
- Be cautious when handling Class A peroxide forming chemicals—these can form explosive peroxides without concentration and should be dated when obtained and used/discarded within 3 months (*butadiene, chlorobutadiene, divinyl acetylene, isopropyl ether, potassium amide, potassium metal, sodium amide, tetrafluoroethylene, vinylidene chloride*)

### **Hazardous and Biomedical Waste**

- Ensure waste bottles are in good condition and compatible with their contents and that contents are compatible with one another
- Label all waste "Hazardous Waste;" spell out all chemical contents clearly
- Cap waste containers tightly while waste is not being added
- Store all waste bottles in secondary containers that are in good condition with no chemical residue or spills
- Store large or filled waste bottles in designated satellite accumulation areas
- Discard sharps (syringes, needles, razor blades) into approved boxes; affix lid to sharps box before adding sharps waste
- Do not overfill sharps containers; make sure lids are closed properly when boxes are full

### **Bio Safety**

- Use blenders, grinders, and centrifuges appropriately; be sure they are in good condition
- Use plastic items instead of glass items if possible
- Ensure the following signs are posted:
  - Appropriate BL1/BL2 Laboratory Practices
  - Biohazard door sign
  - Biohazard labels on equipment
  - State certification near door (if registered with the State Department of Public Health)
  - Universal spill response poster
  - Yellow incident procedure card
- Ensure lab personnel are properly trained to use the biosafety cabinet (open flames are attended, UV lamp off when lab is occupied, viewing screen at appropriate position)
- Ensure biosafety cabinets are certified and in proper condition
- Handle BL2+ materials in biosafety cabinets
- Label appropriate disinfectants with the name, concentration, and date (and/or expiration date); store them in proper locations in the laboratory