

# Lab Safety Practices

Do's and Dont's while you are using  
the ChE Lab

### Safety Checklist for Laboratory Users<sup>1</sup>

YES NO

	YES	NO
1. Do you wash your hands before leaving the laboratory?		
2. Do you wear appropriate attire in the laboratory (lab coat, safety goggles, gloves, shoes)?		
3. Are the appropriate hazard signs and emergency numbers posted on the outside of the laboratory door?		
4. Are all containers in your lab properly labeled? Do you know how to interpret these labels?		
5. Do you know where to find Material Safety Data Sheets (MSDS's) for all chemical used in your laboratory?		
6. Are the chemicals in your lab properly stored?		
7. Have you been instructed in the proper use and handling of the chemicals in your laboratory?		
8. Have you been instructed in the location and use of safety devices (safety showers, eye washes, laboratory hoods, etc.) in your laboratory?		
9. Are you aware of emergency procedures in the event of a chemical exposure, spill, fire, or explosion?		
10. Do you know how to properly segregate and dispose of chemicals that you will use?		
11. Are all mechanical engineering controls (e.g., fume hoods) operating properly?		
12. Do you know whom to notify if working in a laboratory alone after normal hours?		
13. Have you attended the Laboratory Use Orientation and Safety Seminar conducted by the Department?		
14. Have you attended laboratory specific training provided by your laboratory supervisor?		
15. Do you know where your laboratory Standard Operating Procedures (SOP's) is stored and how to use them?		
16. Are you familiar with the protocol that you are following? Do you feel comfortable performing the procedure without additional information or demonstration?		

# **GENERAL GUIDELINES**

# Always Wear Proper PPE



Figure 1. Personal protective equipment<sup>3</sup>

# Always Practice Good Housekeeping



# Clean any spills



# No eating and/or drinking



Do not block stairs nor any exit

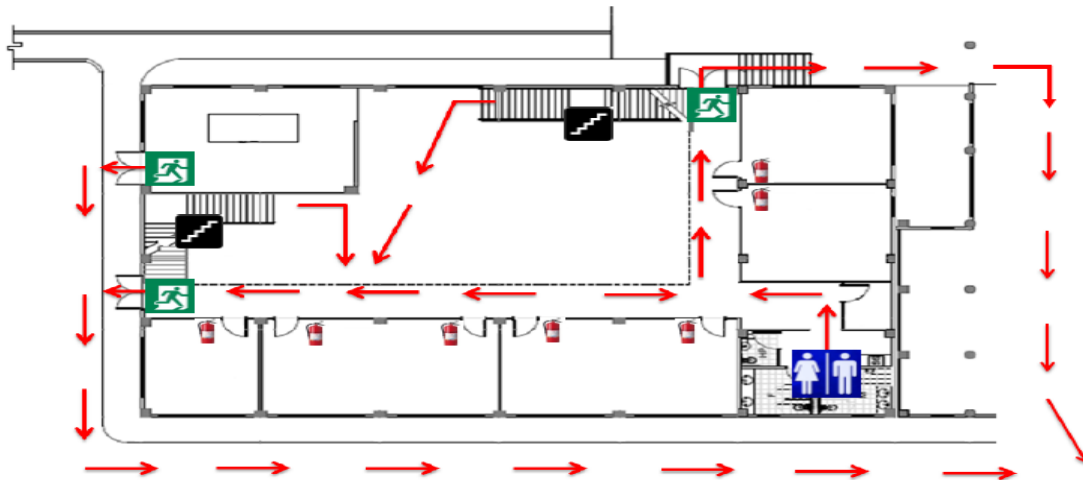




# In Case of Emergency

Know all exits, the location of the emergency phone, and the location of and how to operate fire extinguishers, alarms, fire blankets, eye washes, first-aid kits, and emergency showers.

## **EMERGENCY EVACUATION ROUTE** In case of Fire or Earthquake Do not use Elevator



Pilot Plant- 1st Floor

**MUSTER  
AREA**

### LEGEND

- STAIR
- ELEVATOR
- RESTROOM
- FIRE EXIT
- FIRE HOSE CABINET
- FIRE ALARM
- EXIT ROUTE
- FIRE EXTINGUISHER

**TELEPHONE HOTLINES**  
BUREAU OF FIRE PROTECTION  
928-8363 (City Hall)  
931-9894 (New era)  
UP DILIMAN POLICE  
928-3615 & 981-8500 loc 4008 & 113  
BOMB SQUAD  
436-0948 and 924-3101  
UNIVERSITY HEALTH SERVICE  
981-8500 loc 111  
COE SECURITY GUARD  
981-8500 loc 3151 & 3107  
MERALCO  
631 1111 and 16-211

# In Case of Emergency

Be familiar with common first aid procedures during incidents of burns, eye contact with dust and chemical irritants, ingestion of chemicals, cuts and bruises from broken glassware and machine parts.



# **CHEMICAL SAFETY**

# Know your MSDS



**Material**

**M**aterial

**S**afety

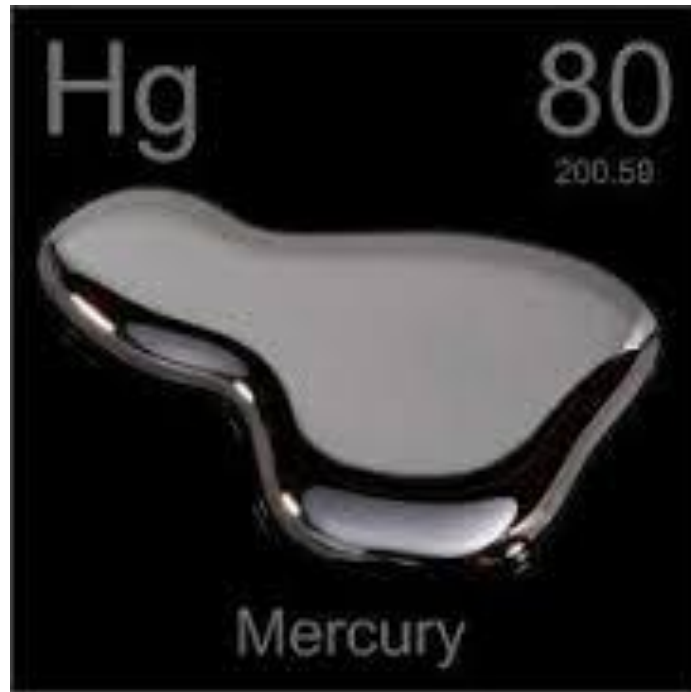
**D**ata

**S**heets

Store Waste Properly. Do not mix  
incompatible chemicals



# Know how to deal with certain chemicals



Keep flammable reagents away from heat sources.



# **ELECTRICAL SAFETY**



# Do not use/touch damaged equipment



Do not use wet electrical equipment/sockets



**HEAT, GLASSWARE, NOISE SAFETY**

# Label Equipment that operate at high temperature



Allow hot equipment/glassware to cool down before storage



Do not use broken glassware



# Properly dispose of broken glassware



Use of headphones/earphones is not allowed





# Read the ChE Laboratory Safety Manual

Department of Chemical Engineering  
College of Engineering  
University of the Philippines  
Diliman, Quezon City

## Laboratory Safety Manual 2015

### TABLE OF CONTENTS

#### **Emergency Information:**

- Emergency Telephone Numbers
- Basic First Aid
- First Aid Responder
- First Aid Boxes
- Emergency (Fire) Alarms
- Coping with an Emergency
- Health and Safety Procedures in the ChE Department
- Risk Assessments

#### **Local Rules and Advice:**

- Preventing Fires and Floods
- Personal Safety
  - Safety Checklist for Laboratory Users
  - Personal Protective Equipment
  - Laboratory Chemical Fume Hood
  - Chemical Storage Cabinets
  - Safety Showers
  - Eyewash Stations
  - Safety with Chemicals
  - Safety with Electricity
  - Safety with Machines and Transport
  - Safety with Glassware
  - Safety with Refrigerators, Freezers & Cryogenics
  - Safety when Heating and Cooling Down
  - Noise and Safety
  - Outside Regular Working Hours
  - Unattended Experiments
  - Pregnancy
  - Tidiness

**BE CAREFUL.**

**BE OBSERVANT.**

**BE RESPONSIBLE.**

**END**