

## **SAFETY RULES FOR UNDERGRADUATE STUDENTS**

### **Department of Chemistry – The University of Illinois at Chicago**

The following is a list of basic safety rules for the laboratory. Please sign the statement at the end of this list to indicate you have read and understood the rules.

1. **Eye protection must be worn in the laboratory at all times during an experiment!** (“during an experiment” is defined as the moment the teaching assistant’s laboratory introduction has concluded until the very last student in the lab has put away all experimental equipment and reagents). **Proper eye protection consists of wearing chemical safety goggles splash-proof!** Students with prescription glasses need to wear goggles over their glasses. Unprotected contact lenses are particularly dangerous in the case of chemical splash and vapor exposure. They should not be worn in the laboratory at all. If a chemical splashes into your eyes, rinse it out immediately and thoroughly using the eye wash fountain. Flushing the eyes from chemical exposure should be at least for 15 minutes as per UIC chemical hygiene plan.

2. Increase the degree of protection (use safety face shields, laboratory hoods, etc.) when the hazards increase. When using a laboratory hood, set the equipment and chemicals back at least 15 centimeters from the hood. Be certain that the hood is operating properly prior to execution of your work! Never evaporate flammable solvents on a hot plate in an open system. An efficient condenser system must be used. Nonflammable, nonporous lab aprons afford excellent protection. Always remove lab aprons (or lab coats) before leaving the laboratory.

3. **Gloves must be worn in the laboratory at all times during an experiment** to avoid skin contact with hazardous materials. Always, even after wearing gloves, wash your hand with soap and water before leaving the lab! **To avoid contaminating door knobs and other items, gloves must be removed before leaving the lab!** When you return to the lab, you are required to put on a new pair of gloves.

4. You should understand the hazards associated with the chemicals involved before you start the experiment. If you are unsure about the hazards and the protection that you need, Material Safety Data Sheets (MSDSs) or Safety Data Sheets (SDSs) which provide detailed information, are available. (Ask your teaching assistant).

5. Tie back long hair, do not apply cosmetics in the laboratory and remove jewelry before entering the laboratory.

6. **Clothes should cover the body from the neck all the way to the ankles!** Students should wear fitted clothing not susceptible to fire that covers arms, torso, legs, and feet while working in the laboratory. Wear clothing you can remove easily in case of accident. Clothing should protect you from accidental spills and splashes.

7. **Shoes should cover the entire foot!** Wear practical shoes. Shoes with high heels, open-toe and open-top shoes or shoes made of woven materials are prohibited in the laboratory. Sandals and flip-flops are not appropriate!

8. Take care not to ingest anything in the laboratory! Food, gum, beverages, and tobacco products are prohibited in the laboratory.

9. Pipetting by mouth is prohibited! Never inhale or taste chemicals!

10. Use of any distracting electronic devices while in laboratory is prohibited!

11. Flames are never allowed when flammable gases or liquids are in use. Always alert others before lighting a flame!

12. In case of an injury, such as a cut or a burn, notify your teaching assistant immediately. In case of a fire or an imminently dangerous situation notify everyone who may be affected immediately. Be

prepared and alert to what is going on around you. In case of a serious cut, stem the flow of blood by pressing with a towel. Avoid other forms of first aid. The most important action is to inform your teaching assistant so that he or she can arrange transport to the appropriate medical facility.

13. Be certain that you understand the proper use and operation of all laboratory equipment.

14. **It is prohibited to work in the laboratory alone!** It is prohibited to leave experiments unattended or to perform unauthorized experiments.

15. Know the location and operation of: Fire Extinguishers, Exit Doors, Eye Wash Stations, Safety Showers, Fire Alarm Boxes.

16. Never force glass tubing into rubber stoppers. Use proper lubricant and safety technique when inserting anything through corks or rubber stoppers. (Ask your teaching assistant)

17. Always check your glassware and discard any glassware with chips, breaks, or obvious flaws. Place broken glassware in the proper receptacles. Do not allow it to accumulate on the bench top.

18. Clean up spills immediately as directed by your teaching assistant! Never place materials on the floor! Always clean glassware - do not allow the dirty ones to accumulate!

19. Follow your teaching assistant's directions for disposal of chemicals. Improper disposal results in possible personal hazard or environmental contamination!

The University's policy regarding social distancing, feeling ill, and the mandatory mask requirement must be followed.

**Work in the laboratory presents some possible dangers and requires a serious attitude, coordination with others, and acceptance of certain rules. Inattention, lack of common sense, and game playing are factors that can make the laboratory an unsafe place. Neglect or disregard of any of the above rules may cause bodily harm, disfigurement and/or death to you or those around you.**

I, the undersigned \_\_\_\_\_ UIN \_\_\_\_\_

have read carefully and understood in full above stated safety rules of American Chemical Society as adapted by the UIC Department of Chemistry and I am sworn to follow them as well as all instructions that my teaching assistant gives me. I also understand that any violation of any of these rules will result in me being expelled from the lab period in which the violation occurred and receiving a grade of 0 (zero) for this particular lab experiment.

Signature \_\_\_\_\_ Date \_\_\_\_\_