#### **BELLARMINE UNIVERSITY**

#### **DEPARTMENT OF CHEMISTRY & PHYSICS**

# CHEMISTRY LABORATORY RULES AND REGULATIONS

Please read the following carefully and keep this document with you at all times when in the laboratory. Your lab instructor will go over these rules and regulations with you at the beginning of the lab course and it is up to you to make sure that you fully understand all that follows at that time. Remember: these rules are for your own protection and if followed by all will result in a safe laboratory environment. A copy of this document can be found in the public folder (and web-site if appropriate) for each lab course and one is posted in each lab. **IF IN DOUBT ABOUT ANYTHING ASK. THE LABORATORY IS NO PLACE TO MAKE ASSUMPTIONS!** 

## 1. EYE PROTECTION

Since eyes are especially vulnerable in the chemistry laboratory, approved safety goggles <u>MUST BE WORN AT ALL TIMES</u>. Failure to do so will result in <u>IMMEDIATE EXPULSION</u> and an unexcused absence for that experiment.

Eye injuries, whether chemical or mechanical, must always be considered serious. The best procedure in case of chemical injury to the eye is immediate and prolonged (15 - 20 minutes) flushing with water. Eyes must be forced open to be washed well. Make sure you know the locations of the eyewash stations in the lab.

## 2. PROTECTIVE CLOTHING

Clothing must offer protection against chemical splashes and spills. A lab coat is required for all chemistry laboratory courses unless specified otherwise by your instructor. Legs and feet must be completely covered by long pants, close-toed shoes, and socks as necessary so that no skin is exposed. Bare feet or any type of open shoe or sandal may not be worn into the chemistry laboratory. Likewise, short pants and skirts are not permitted. Even when wearing a lab coat, it is recommended that you do not wear your best clothes to lab.

#### 3. FIRST AID

In case of minor cuts or burns, report them immediately to your instructor or the laboratory manager. Minor first-aid treatment can be given within the building.

# 4. SERIOUS INJURY

If a person is seriously injured, do not attempt to move the person. Notify your instructor immediately. Stay with the person until help arrives.

# 5. SMOKING, EATING OR DRINKING

Smoking, eating or drinking are not allowed in the teaching laboratories or the stockroom.

# 6. CHEMICAL FUMES

Exercise great care in noting the odors of fumes and avoid breathing fumes of any kind.

# 7. CHEMICAL SPILLS AND BENCH TIDINESS

Small spills should be cleaned up using the appropriate method. If in doubt or for larger spills, contact your instructor or the laboratory manager for instructions. You are responsible for keeping your bench tidy at all times. Do not use the analytical balances for weighing out NaOH and KOH. Use the top-loading balances for this purpose. It is your responsibility to keep all balances clean at all times. Failure to do so will result in a lowering of everyone's lab grade by 5% for the first offense, 10% for the second and so on. All items not required to run an experiment (e.g. book bags, coats, etc.) must not be placed in the aisles or on the bench tops. In P-274 use the adjacent student lounge. In P-210 use the area next to the windows.

## 8. <u>RUNNING EXPERIMENTS</u>

Do not change the experimental procedure in any way unless instructed to by the instructor. Always know the chemicals you are working with and what to do in case of an accident or spillage. You have the right of access to the Material Data Safety (MSD) sheet for any chemical you are using. Please contact the lab manager for access to the MSD sheets. Never take chemicals out of the lab. Keep transportation of chemicals to a minimum in the lab. Always transport chemicals in an appropriate container. If a chemical container is empty and needs refilling take the empty container to the stockroom for refilling. You are not allowed to take chemicals out of the stockroom unless the lab manager or a designated work-study student gives them to you. Put all ring stands and supports back where you found them. Make sure they are put away properly and that they do not block the aisles. You are not allowed to work alone in a lab. Make sure there is always at least one other person in the lab with you.

#### 9. LAB HOURS

You are not allowed to work in the lab outside of times regularly scheduled for your lab section unless given permission by the instructor. Working in the lab after hours is expressly forbidden except for students enrolled in senior research and upper division courses. Such students must have the permission of their supervisor for each occasion and are not allowed to work alone under any circumstances. Lab work is not allowed when the University is officially closed.

#### 10. <u>FIRE</u>

Familiarize yourself with the location and proper use of the fire extinguishers. Should a fire alarm sound while you are working in the lab, turn off any heat source and leave the building by the nearest exit. Try to remain together as a group and await further instructions.

# THE MOST DISTRESSING AND SERIOUS LABORATORY ACCIDENTS ARE CAUSED BY CLOTHING CATCHING FIRE.

#### STOP - DROP - ROLL

When a person's clothing catches fire, the first thing to do is to throw that person to the floor and roll them so as to smother the flames quickly. Never let the person remain in a standing position even if you must trip or knock them down; this procedure will prevent injury to the respiratory passages and the eyes by the flames which would naturally rise and envelop the head.

#### STOP - DROP - ROLL

Never turn a fire extinguisher of any type on a person whose clothing is on fire. Eye injuries may result from a dry-chemical type and frostbite from the "snow" of the carbon dioxide type. Do not use the safety shower to extinguish a person on fire.

#### STOP - DROP - ROLL

# 11. THE SAFETY SHOWER IS MAINLY INTENDED TO BE USED IN CASES WHERE CORROSIVE CHEMICALS ARE SPILLED OR SPLASHED OVER A LARGE BODY AREA AND MUST BE WASHED OFF RAPIDLY.

<u>DO NOT</u> attempt to use the shower to extinguish clothing on fire. Clothing soaked with strong acid or base should be removed. This is no time for modesty. Plenty of running water is the best first-aid treatment for all acid and base accidents. Rapid and immediate treatment is essential. Use lots of water; a little water or a damp cloth may be worse than no water at all because of the heating effect.

## 12. GLASSWARE

THROW AWAY CRACKED OR CHIPPED GLASSWARE IMMEDIATELY and obtain replacements from the stockroom. Broken glassware must be placed in the special trashcan labeled <u>BROKEN GLASS ONLY</u>. Your lab fee for this course only covers \$30.00 worth of broken glassware. It is therefore necessary for the department to charge you replacement costs for broken glassware above this value.

## 13. <u>USED CHEMICALS</u>

If no disposal procedures are given with a particular experiment ask your instructor or the laboratory manager about the disposal of used chemicals. Most chemicals cannot be poured down the sink. NEVER DISPOSE OF A CHEMICAL WITHOUT CHECKING WITH YOUR INSTRUCTOR.

**Student Safety Acceptance Form**