RULES FOR THE PROTECTION AND SAFETY OF STUDENTS IN THE CHEMISTRY LABORATORY

The following rules are not intended to make life difficult for you. Rather they are for your protection. If you follow them carefully the laboratory will be a safe place in which to work.

The chemistry laboratory is not a play-room. Many of the chemicals you will encounter are flammable, or poisonous, or could cause burns. The apparatus, too, can be hazardous at times. If apparatus and chemicals are not properly used they could cause serious injury either to yourself or to others. For these reasons you should read, and think carefully about, the following regulations.

1) You are not allowed to work in the laboratory unless a supervisor is present.
2) You must wear safety glasses in the laboratory. You are expected to buy your own. They are available from Chapter One and other local stores.
3) You must wear suitable clothing: no loose or hanging sleeves or hair or other items of clothing. Shoes must be of the closed type – no slippers.
4) Always follow your supervisor's instructions carefully.
5) Treat chemicals as dangerous until you know better.
6) Never taste or smell chemicals unless instructed to do so by your supervisor. They may be poisonous.
7) Try not to get chemicals on your hands or skin generally. Some of them are caustic (they cause burns). Immediately after handling corrosive or poisonous substances, even if you only touched the bottle, always rinse your hands under the tap.
8) Fuming or volatile chemicals are best handled in the fume cupboards - or failing this, near a window.
9) Never eat or drink in the laboratory. You do not know what you may have picked up on your fingers. By the same token always wash your hands before you leave the laboratory.
10) There is a shower in the laboratory which you can dive under if you spill a lot of something dangerous (e.g. concentrated sulfuric acid) on yourself. Make sure you know where it is and how to work it. Cool, calm action can avoid injury from even the largest spills.
11) There is an eye-bath in the laboratory. You can use it to rinse things out of your eyes. Make sure you know where it is and how it works.
12) There are fire extinguishers in the laboratory. Make sure you know where they are and how to use them. Acquaint yourself with the type of fire that each is to be used with.
13) Stay at your bench unless there is good reason to move. Do not wander aimlessly around the laboratory. NEVER run in the laboratory!
14) Do not sit down to do experimental work (except titrations). You may need to move quickly to avoid danger!
15) Do not clutter the floor with bags or stools. When you need to move quickly you don't want to trip up!
16) Do not work with a cluttered bench. Keep things in order and keep books and so on to a minimum. Cluttered benches lead to accidents.
17) Do not reach right over the bench. Go round the bench to the sink, for example.
18) Never heat substances in sealed test tubes or other containers. They may explode.
19) When doing work with test tubes, especially heating them, make sure that the tube is pointed away from

yourself and others. Things can sometimes shoot out of the end.

20) Clean up spills and broken glass-ware immediately. They can be dangerous to others (and you!) if left.
21) Always work with small quantities of substances. This will make any danger smaller, too.
22) When handling glass-ware (for example pushing glass tubes through stoppers etc.) make sure that you find out the proper way to do it. People have been known to push broken-off tubes through their hands! The golden rule is to keep your hands as close together as possible and cover the glass with a cloth.

We should be grateful if you would also observe the following rules which are not directly connected with safety.

1) Do not throw solid matter (e.g.. filter paper) into the sinks. They easily get blocked up. Put solid waste into the trash can. Always leave your sink completely empty.
2) Report all breakages to the supervisor. We need to know what we are losing so that we can restock.
4) Please do not write on the benches. It is difficult to clean writing off.
5) Leave your bench as you would like to find it, even if it wasn't too good when you arrived!
6) Some laboratory apparatus is coated with plastic e.g. clamps and test-tube racks. Make sure you keep clamps well away from heat and don't put very hot test-tubes in racks. You CAN put them on the bench, since the bench is more heat-resistant, unless they are extremely hot. In the latter case rest them on a gauze to cool.

ADVICE TO STUDENTS

1) Attendance at practicals is compulsory. If you do not attend, your mark will automatically be zero, unless you present a medical certificate. (Medical certificates may be obtained from the campus nurse at no charge.) In some cases, *if you act in good time,* it may be possible to attend another section of the practical.
2) Time is very limited during practicals. In order to make the best possible use of your time in the laboratory, study the manual carefully before coming to the practical. Consult other sources when you encounter difficult material.
3) Always complete as much as possible of the calculation before clearing up your apparatus. The calculations may indicate that you need to repeat some parts of your experiment. Your lecturer can advise you on this.
4) Always discuss your results with your lecturer or laboratory supervisor before leaving.
5) Most practicals will be evaluated by means of a short quiz at the beginning of the next practical. In order to obtain the best grade you must complete all the practical work and answer the questions in the problem section at the end of the section. You must also think carefully about the reasoning behind the procedures you are asked to carry out.