

SAFETY IN THE LAB

Many of the chemicals you will be working with in these experiments may be toxic or corrosive, you must be careful with all chemicals and treat them with respect. Be aware that some chemicals can do harm to your clothing and/or your body. You should always wear protective goggles over your eyes in the laboratory. Even though you may be extremely careful in the lab, there is always a chance that someone else working near you may be careless. You are encouraged to get a lab coat or an apron to wear in the lab to protect your clothing from unintended spills. Even though most of the chemicals are not harmful, in the sense of being highly toxic or caustic, some may leave stains on clothing or eat holes in clothing.

Safety in the laboratory is of utmost importance. No child's play or horsing around will be tolerated. Students who endanger themselves or others may be expelled from the lab. There are a few precautions you should take:

- 1) Never bring food or drink into the laboratory.
- 2) Treat all chemicals as if they are dangerous unless you are told otherwise by the instructor.
- 3) Heed the warnings in the lab manual that alert you to chemicals that are toxic or corrosive - handle these with extreme care.
- 4) Work with concentrated acids and other noxious chemicals in the hood, as instructed in the manual. Do not carry the concentrated acids from the hood. Take only the amount you need in your test tube or beaker.
- 5) Be careful when using open flames in the laboratory. Make sure the flame is not going to burn people or hardware in the laboratory. Be especially careful about reaching over a flame, you can burn yourself or your clothing doing this. Always turn off the gas to extinguish the flame if you leave your work area and immediately after completing any procedures that require a flame. Do not use a flame with organic solvents.
- 6) If you get any chemicals on your hands, you should wash your hands immediately. Some chemicals may work slowly to burn or cause irritation of the skin. It is a good idea to wash your hands well when you finish in the lab.

- 7) Always leave your work area clean when you finish. You should make a habit of cleaning all glassware that you use at the end of each experiment so it will be clean and ready to use for the next lab session. Some experiments require a strict exclusion of water so washing the glassware just before using it in these experiments can ruin results.
- 8) You should read the lab manual for each experiment before going to the laboratory, so you have a general idea of what you will be doing in each experiment. Taking 5 minutes or so to read over the experimental procedure before starting the experiment may save you a lot of time and frustration later. You should also complete the Prelab Exercise for each experiment and hand it in before starting the experiment.
- 9) Try to have a positive attitude about the lab experience. Think of it as enlightening explorations and an opportunity to experience things you read about in the text.

Good Luck!!!