BASIC SAFETY PRINCIPLES

Review your Ch.E.320 notes to remember safety precautions and emergency procedures before undertaking any laboratory work, and follow all safety instructions carefully.

- Become thoroughly acquainted with the location of safety facilities such as fire extinguishers and exits, and telephones.

- Become familiar with the experimental operations and the potential hazards of the chemicals used in the experiment. This requires a review of the precautions on the labels and on the materials safety data sheets. Do not heat flammable liquids directly over a burner or on an electrical device that can generate sparks or that has a surface temperature in excess of that which might cause auto-ignition. Keep flammable liquids away from direct sunlight.

- When an emergency (fire, injury, etc.) occurs, notify a supervisor nearby and others in the area about the nature of the emergency immediately.

- During an emergency, if you are directed to leave the room, promptly-cease any additions of reagents or reactants, stop the experiment, and turn off all burners or other energy producing-consuming devices.

- If chemicals have been spilled on someone, wash the affected area thoroughly. If chemicals are in the eyes, irrigate with plenty of water for at least 15 minutes. If hazardous chemicals are ingested, encourage the victim to drink large amounts of water while en route to medical assistance. Attempt to learn what substances were ingested and inform the medical staff.

- Anyone overcome with smoke or fumes should be removed to uncontaminated air and treated for shock.

- Do not move any injured persons unless they are in further danger. Keep them warm. Never give anything by mouth to an unconscious person.

- Do not touch a person in contact with a live electrical circuit.

- Mouth suction must never be used to fill pipettes, to start siphons, or for any other purpose.

- When handling electric wires, never use them as supports and never pull on live wires.

- Always wash hands, face and arms with soap and water before leaving the laboratory.

In case of emergency, call the appropriate fire or medical facility, and

- Report the location of the emergency; give your name, telephone number, and building and floor number. Meet the ambulance or fire crew at the place you indicated or send someone else if you cannot go.
- Report the nature of the emergency, whether an explosion has occurred and whether there has been a chemical or electrical fire.
- If individuals are involved, report how many and whether they are unconscious or trapped.