

# SCHOOL OF LIFE SCIENCES & CHEMICAL TECHNOLOGY

## LABORATORY SAFETY RULES

### INTRODUCTION

THESE LABORATORY SAFETY RULES ARE DRAWN UP BY THE LSCT SAFETY COMMITTEE FOR THE SAFETY OF ALL STUDENTS, STAFF AND VISITORS OF THE SCHOOL.

THE SAFETY RULES MUST BE OBSERVED BY ALL THE STUDENTS, STAFF AND VISITORS WHILE CONDUCTING PRACTICALS AND PROJECTS IN THE LABORATORIES INCLUDING THE GREENHOUSE, CENTRE FOR AQUATIC SCIENCE AND TECHNOLOGY AND THE CHEMICAL ENGINEERING LABORATORIES/WORKSHOPS.

ANY ONE WHO FAILS TO OBSERVE ANY OF THE SAFETY RULES WOULD BE REQUESTED TO LEAVE THE LABORATORIES.

### LABORATORY SAFETY CONDUCT:

1. Laboratory overalls must be worn while in the laboratory.
2. Covered shoes must be worn at all times in the laboratory. In the Greenhouse and the Center for Aquatic Science and Technology, rubber boots shall be worn.
1. Long hair must be tied back.
2. Gloves and eye goggles must be worn when you work with any corrosive, toxic and other obnoxious chemicals.
3. Pipetting by mouth is strictly prohibited.
4. Chemicals must not be handled with your bare hands.
5. All volatile solvents, acids, ammonia and smelly chemicals must be handled in the fume-hoods to avoid building up of such volatile chemicals in the laboratory.
6. Broken glassware must be swept up immediately and placed in designated boxes for broken glasses.

7. Food and drinks must not be consumed in the laboratories.
8. Unauthorized experiments are not allowed in the laboratories.
9. Students may work in the laboratory outside the scheduled laboratory period only under the following circumstances:
  - a) There must be a lecturer in the building who has given the student permission to be there. The lecturer should be informed before the student leaves the laboratories.
  - b) A student is not allowed to work alone. There must be another student or a technical support officer present.
  - c) Condition (b) may be waived with a lecturer's permission if a simple operation, e.g. weighing is done.
10. The instruction/operation manuals to equipment must be followed closely while operating any equipment to avoid unnecessary breakdown of the equipment.
11. Any accident must be reported to the lecturer or the technical support officer immediately. The person reporting the accident, a lecturer or a technical support officer shall complete the Accident Report and submit a copy to the Chairman of the LSCT Safety Committee within 24 hours of the accident.
12. Wash your hands thoroughly before you leave the laboratory.

### **GOOD LABORATORY HOUSEKEEPING**

1. Personal articles, such as books, files, handbags and jackets must not be placed on the bench-tops.
2. Make sure that the LPG gas valves are turned off before you leave the laboratory.
3. All naked flames must not be left unattended.
4. Equipment and apparatus removed from a laboratory for use in another laboratory must be returned to their original position immediately after use.
5. All reagents and materials to be carried over the next practical session must be labeled. Any unlabeled materials will be disposed of.
6. Person using the autoclaves, high speed centrifuges, ultracentrifuge and instruments must sign the respective log books. Autoclaved materials must be removed as soon as practicable.

7. All biological materials and disposable apparatus come into contact with biological materials must be placed in biohazard bags. These materials must be autoclaved prior to disposal.
8. Ensure that all equipment and bench-tops are kept clean and dry before you leave the laboratory.
9. Remove all your belongings from the laboratory at the end of your experiment.
11. Hazardous waste must not be poured into the sink drain. They must be deposited into labeled receptacles designated for separate classes of hazardous waste, i.e. water soluble solvents, water insoluble solvents, toxic chemicals, acids etc.