NATIONAL SUN YAT-SEN UNIVERSITY

Department of Chemistry
Safety Guidelines for General Chemistry Laboratory

Amended in September 2008.

I. The laboratory is equipped with first aid facilities such as first aid kits, fire extinguishers, fire blankets, eye-washing devices, protective gowns, and showerheads. All students and teaching assistants working in the laboratory are required to familiarize themselves with locations of the aforementioned facilities and equipment as well as how to use them. Should an accident occur, teaching assistants and faculty members shall be notified immediately, first aids shall be provided for injured personnel, and other working personnel shall be evacuated accordingly.

II. During an experiment, students and teaching assistants are required to wear safety goggles (glasses are considered a form of safety goggles but not contact lenses), wear white, long-sleeved lab coats, trousers (covering all the way to the ankles), and safety shoes (alternatively, shoes completely covering the feet may be worn, but not flip-flops or sandals). Violators shall not be allowed into the laboratory and will be penalized according to regulations listed in the course outline.

III. Food and beverages are strictly prohibited in the laboratory. Violators will immediately have their food and beverages confiscated an also will be penalized for the violation. Students who wish to leave the laboratory during an experiment (e.g., to go to restroomsor to drink water) are required to ask a faculty member or teaching assistant for approval; students who leave the laboratory during the experiment prior to asking a faculty member or teaching assistant for approval will be marked absent for the class.

IV. Smoking and engagement in activities unrelated to an experiment in the laboratory (e.g., answering phones, listening to MP3s, talking and playing loudly, running, and chatting) are strictly prohibited; violators will be marked absent for the class.

V. Experiments must be performed according to the experiment manual and instructions given by teaching assistants. Faculty members or teaching assistants may immediately stop violators from performing an experiment and penalize them according to the severity of violation(s).

VI. Students handling chemicals in the laboratory must read labels on the chemical containers prior to using them. Students shall immediately consult the teaching assistant should they have any related questions or concerns (e.g., questions about chemical properties and safety). Students are prohibited from handling chemicals with no or unclear labels to avoid possible danger.

VII. Strong acids, strong alkali, toxic chemicals, and volatile solvents shall only be handled inside a fume hood to avoid inhalation of vapor and with appropriate equipment and protections to avoid direct contact of skin and the chemicals. Should there be skin contact with the chemicals, immediately rinse with large amount of water.

VIII. Do not use spatulas, droppers, and beakers from public areas to remove chemicals from the containers. Taking the aforementioned apparatuses and chemical containers back to one’s workbench is also prohibited. The workbench, fume hood in the public areas, and the balance areas shall remain clean.

IX. Liquid wastes created from an experiment shall be collected according to their types and not be

poured into the sink. The liquid wastes shall be managed accordingly before placing it into the trash can.

X. Students shall acquire knowledge of correctly utilizing experiment apparatuses and equipment. Should they have any questions when operating apparatuses or equipment, they shall consult a teaching assistant first. Students who cause damages to the apparatuses or equipment due to incorrect use will be asked to pay for the original prices.

XI. A student may not leave a work area when using a fire source; the fire source must be first turned off prior to leaving the work area.

XII. Do not use broken or damaged glassware to avoid it from bursting during an experiment or causing danger or injuries. Do not leave unwanted glassware in the sink or trash cans; unwanted glassware shall be collected and put away by teaching assistants.

XIII. The use of a thermometer as a replacement of stirring rod is forbidden; the use of graduated cylinders as a replacement of beakers or Erlenmeyer flasks to conduct experiments is also prohibited.

XIV. Students are required to clean and tidy up apparatuses, equipment, and workbench after an experiment. The students' experiment data shall be checked and signed by a teaching assistant prior to them leaving the laboratory. The public areas shall be cleaned by the student on duty after the experiment (responsibilities of the student on duty are listed in the "Checklist of Responsibilities for Students on Duty"). Prior to the start of a class, the student on duty shall visit the laboratory and help teaching assistant(s) perform relevant preparatory works. The student on duty shall also wait for all students to finish their experiments to tidy up the experiment areas and complete his/her assigned tasks. The student on duty may leave the laboratory fulfilling his/her responsibilities and being checked and approved by the teaching assistant(s).

XV. The aforementioned guidelines shall be announced by teaching assistants from each class at the beginning of the first semester and before all class begin. All students are required to read, remember, and comply with the guidelines. The students' department of study, teaching assistant(s), and faculty members of the Department of Chemistry shall not be responsible for danger or injuries to students due the students' personal negligence or failure to comply with the rules.