QUEENS COLLEGE – STUDENT LABORATORY SAFETY AGREEMENT

CHEMISTRY & BIOCHEMISTRY

This safety contract states the laboratory safety rules that are to be followed by everyone in the laboratory in order to ensure a safe working environment for all (i.e., Teaching Assistants, students, faculty and staff). Complete the last page and return only the last page to the Teaching Assistant (TA). The other pages are to be used as a safety guide and should be placed in your laboratory notebook for referral. (If you are asked to present these pages and fail to do so, you will lose 10 points in your total laboratory grade.)

PERSONAL PROTECTIVE EQUIPMENT AND PROPER ATTIRE

- 1. ANSI Z87-approved safety glasses or goggles MUST be worn at all times while in the lab except during pre-lab lecture or when the TA informs you that it is safe to remove them.
- 2. Appropriate gloves MUST be used at all times while working with chemicals (even when chemicals are in closed containers) and must be removed before leaving lab. Do not handle personal items such as pens with gloves on.
- 3. A lab coat MUST be worn at all times while conducting experiments in the lab.
- 4. Dress properly for lab. Clothing must cover the body from the shoulders down to toes. Lab coats are mandatory when the lab activities require them.
 - a. No bare midriffs or ankles.
 - b. No tank tops or low-cut tops.
 - c. No shorts or cropped pants. Knee- and ankle-length skirts are acceptable only if they are worn with leggings (no nylons or tights) or sweat pants; knee-high socks under ankle-length skirts are OK.
 - d. Shoes must be closed-toed and completely cover the heel and top of the foot. No sandals, slippers, or heels.
- 5. Long hair, hanging items (jewelry, hoodie strings etc.), and loose or baggy clothes must be secured.

GENERAL RULES

- 6. Students are required to practice disciplined and responsible conduct at all times when present in the laboratory. (Playing around in the laboratory, sitting or leaning on the lab benches, and/or disorderly behaviors are not permitted at any time. Be alert and proceed with caution at all times in the lab.)
- 7. Pre-lab reading assignments are to be completed prior to entering the laboratory. Thoroughly read all experimental procedures prior to entering the laboratory. It is your responsibility to familiarize yourself with the hazards of each laboratory and each chemical you will be handling.
- 8. Use of food/drink (beverages, chewing gum, tobacco, etc.) and cosmetics in the laboratory is prohibited.
- 9. Use of cell phones, radios, MP3 players, and/or headphones is prohibited in the lab. Store these with your personal items in designated areas
- 10. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times. Bring only your lab manual, lab book and other necessary materials to the work area. All backpacks, coats, and other personal items must be stored away from benches, fume hoods, and all chemicals. Keep aisles clear.
- 11. All written and verbal instructions are to be followed carefully. If you do not understand a direction or part of a procedure, ask the TA before proceeding.
- 12. Unsupervised presence of students in the lab is prohibited. Persons not participating in the course are not allowed in the lab without prior TA approval.
- 13. Students should work on experiments authorized by the course instructor and supervised by the TA only. If a student performs an unauthorized experiment and is hurt or hurts another person, the student who performed the experiment may be dismissed from the lab and may be subject to further disciplinary proceedings in accordance with Queens College policies and procedures.
- 14. Chemicals and equipment may NOT be removed from the laboratory without prior permission. Authorization and supervision by the TA responsible for the lab is required prior to removing any item from the lab.
- 15. Fume hood sashes must be closed when not in use. Fume hood sashes are not to be opened beyond the 18" mark when in use. Never stick your head into the fume hood.
- 16. Each student must execute experiments only in the work space designated to them and must personally monitor their experiments in progress. Do not move the equipment/glassware unless such a move is approved by the TA and/or stockroom personnel.
- 17. Hands and pens/pencils are to be kept away from face, eyes, and mouth while using chemicals or equipment. Hands are to be washed with soap and water after performing all experiments, especially before going to the restroom or leaving the lab for any other reason.
- 18. All work surfaces and apparati are to be cleaned each day by the student at the end of the experiment. Inventory and return of all equipment/glassware (clean and in working order) to the proper location is a requirement. Broken or missing items must be replaced through the Stockroom.
- 19. Proper disposal of all chemical waste is a must. Check the label on the waste container thoroughly before adding chemical waste to the container. Waste containers are not to be over filled. When the container is almost full notify the supervisor. (This is vital! Many harmful events in chemistry laboratories happen because of improper disposal of chemical waste.) Do not leave random glassware with chemicals in the waste tray. Dispose! Do not leave!

QUEENS COLLEGE – STUDENT LABORATORY SAFETY AGREEMENT

CHEMISTRY & BIOCHEMISTRY

- 20. Sinks are to be used only for water and solutions that are permitted by the TA. Mixing of chemicals in sinks is not allowed. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in their proper waste containers (and that is NOT the sink).
- 21. If you have medical conditions or issues that may be affected by lab conditions and/or chemicals (e.g. allergies, pregnancy, or starting a new medication), check with your physician prior to working in the lab. If your medical condition or issue requires an accommodation, please contact the Office of Special Services (Frese Hall, Room 111).
- 22. Do not attempt lab work if you are unwell and your condition could interfere with your ability to function safely in the lab. Discuss makeup lab options with your TA.

HANDLING CHEMICALS

- 23. All chemicals in the lab are to be considered dangerous and should be used with caution. Chemicals are not to be touched, tasted, or smelled.
- 24. You must read the label on the reagent/chemical bottles thoroughly prior to use or transfer to verify that you have the correct reagent/chemical.
- 25. Only the directed amount should be used /transferred. Unused chemicals must not be returned to their original container, but disposed in the appropriate waste container. Do NOT be wasteful!
- 26. Proper disposal of waste into the appropriate waste containers must be practiced. Your TA must confirm which container to pour the waste.
- 27. All reagent bottles and waste containers must be capped when not in use. Reagent bottles must not be removed from their designated dispensing area.
- 28. Flammable solvents must not be used anywhere near open flame.
- 29. Acids must be handled with care and as directed by the TA. Always add acid to water, not water to acid.
- 30. Secured and careful transport of acids and other chemicals from one part of the lab to another must be practiced. Personal protective equipment (safety glasses, gloves, lab coat, etc.) must be worn at all times, including when transporting chemicals. You should always consider that any chemical may cause severe injuries and act accordingly.
- 31. Any spills must be promptly reported to the TA or any supervising figure present. As directed by the supervising authority, clean-up of small spills should be performed immediately.

HANDLING GLASSWARE AND OTHER EQUIPMENT

32. Never handle broken glass with your bare hands. Use the dust pan and broom provided to clean up the broken glass.

Place the broken glass in the containers marked "broken glass". Go to the stockroom and replace the piece of glassware.

- 33. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.
- 34. Fill wash bottles ONLY with distilled water and use it only as intended, e.g., rinsing glassware and equipment, or adding water to a container. Label bottle with a marker.
- 35. Unplug hotplates when not in use. When removing an electrical plug from its socket, grasp the plug, not the electrical cord.
- 36. Hands must be completely dry before touching an electrical plug or switch.
- 37. Report damaged electrical equipment immediately. Look for signs of damage such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.
- 38. Do not use a piece of equipment until its proper use is demonstrated by the TA.

ACCIDENTS and INJURIES

- 39. Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the TA immediately, no matter how trivial you believe it may be.
- 40. Report fires to the TA immediately.
- 41. If a chemical splashes in your eye(s) or on your skin, immediately flush with running water from the eyewash station or safety shower for at least 15 minutes. Notify the TA immediately. Seek medical attention. (Nurse Frese Hall, 3rd floor)
- 42. Know the location of the following safety equipment:
 - a. Fire extinguisher
 - b. Safety shower
 - c. Eye wash
 - d. Chemical spill kit

EMERGENCY PROCEDURES

In the event of a fire alarm while you are working in the laboratory, immediately turn off any Bunsen burners or hotplates you are using and leave the building by the shortest route as designated by your TA. DO NOT use the elevators. Proceed to the assembly area with your TA. You must remain with your TA until you have been dismissed by supervising personnel.

In the event of a serious injury or someone becomes ill, immediately turn off any burners or hotplates and evacuate to the hallway until supervising personnel give you additional instructions. <u>DO NOT leave until you have been dismissed by supervising personnel.</u>

QUEENS COLLEGE – STUDENT LABORATORY SAFETY AGREEMENT

STUDENT SIGNATURE _____

CHEMISTRY & BIOCHEMISTRY

| out the agreement agair | and will not be | e allowed into t | he laborato | ry until s | uch time as it has be | en submitted. | |
|--|---|--|---|-------------------------------------|---|--|----------------------|
| Student Name: Instructor Name: Department: Course Number: | | | | - - - | | | |
| Course Section (circle or | • | Tu W | Th | F | | | |
| Course Time (circle whe | n your lab <u>star</u> | ts): Morning | (8 am – 11 a | ım) | Afternoon (12 pn | n – 4 pm) | Evening (after 4 pm) |
| Semester: | | | | | | | |
| rules in order to ensure removal from the labora College policies and prod | o the safety rule my own safety, tory, loss of cre cedures. I also u | as well as the sedit for the expension | safety of oth eriment, and t I will be he | ers. I am I/or furt Id financ | aware that violation her disciplinary proce ially responsible for | ns of the agree eedings in acco the laboratory | ordance with Queens |

DATE _____

Please print the information below and return only this signed page to the TA. If we cannot read this information, you will be asked to fill