QUEEN'S UNIVERSITY SUPPORT STAFF
POSITION SUMMARY

DEPARTMENT: Chemistry

POSITION TITLE: Laboratory and Student Training Coordinator

POSITION NUMBER: 00500918 **GRADE:** 7

JOB SUMMARY:

Reporting to the Department Head, the Laboratory and Student Training Coordinator will perform laboratory coordination and administrative duties related to the Chemistry undergraduate laboratory program. Duties include: supervision of the work of the graduate Teaching Assistants (TAs) in the labs; weekly or biweekly meetings with TAs; responsibility for all safety aspects of the assigned laboratories, including safety protocols for the experiments, safety instruction for students and TAs, and monitoring the conduct of students and TAs in the laboratory; consultation with chemical technologists and faculty in the implementation of new/revised experiments; consultation with chemical technologists for the day-to-day operations of the laboratories; responsibility for ensuring that lab marks are correctly and promptly entered by TAs; supervision of undergraduate students hired to implement and test new/revised experiments; responsibility for revising the instructional materials each year; responsible for ensuring equipment in laboratories is in a serviceable condition; participation in the TA assignment process and the TA awards process; organization of annual TA day; responsibility for the TA training program.

The incumbent requires a comprehensive understanding of chemical synthesis techniques and chemical laboratory equipment and possesses strong organizational, communication, time-management, interpersonal, and problem-solving skills.

KEY RESPONSIBILITIES:

- Undergraduate Laboratory Learning Experience Coordination: Coordinate and oversee the scheduling and delivery of assigned undergraduate laboratories in Chemistry; in consultation with course instructors and TAs, coordinate evaluation of laboratory learning experience; complete TA Agreements for all supervised TAs; assess and order texts and other learning materials associated with assigned laboratories; supervise and instruct TAs in the relevant chemical techniques, in the efficient use of laboratory equipment, in the effective communication with undergraduates in the laboratory and in the assessment of written lab reports; meet weekly or bi-weekly with the TAs to instruct them in the details of upcoming experiments; oversee TAs in their supervision of undergraduate student learning in the laboratory.

- Chemical Education: The coordinator is expected to keep abreast of developments in the field of chemical education. The coordinator will pay special attention to improving and updating the laboratories and will be expected to develop and test new experiments in consultation with faculty and chemical technologists. The lab manuals will be revised/updated annually. The coordinator will be familiar with, and regularly research, potential new experiments and relevant teaching laboratory equipment upgrades and new equipment developments. The coordinator will provide supportive, detailed business plans to the Department Head and Manager when requesting additional equipment.
- Administrative: The coordinator is responsible (with clerical assistance) for organizing students into sections and to ensure that lab marks are entered promptly by TAs; in accordance with department policy on missed labs, the coordinator follows-up on student absences; the coordinator participates in the TA assignment process and in the selection of TA award recipients; the coordinator consults with Science Stores and technical personnel to ensure that necessary instructional and other materials are available for purchase by students, that laboratory equipment is in a serviceable condition, and that all consumables required for the delivery of the specified laboratories are available.
- Supervisory: The coordinator supervises the work of the graduate Teaching Assistants in the labs; consults with Chemical Technologists in the implementation of new/revised experiments and in the day-to-day operations of the laboratories; supervises undergraduate summer students hired to implement and test new or revamped experiments and/or equipment.
- Safety: The coordinator is responsible for all safety aspects of the assigned labs. This includes safety training of the Teaching Assistants and monitoring the labs on a regular basis to ensure that proper safety protocol is followed. The coordinator will develop laboratory course policies and procedures in keeping with OH&S Act and Ontario Regulations for all assigned hands-on experiments, and all related laboratory equipment. The coordinator will report any safety concerns or incidents to the Department Safety Officer. The coordinator will be actively involved in the Departmental Safety Committee and will be a leader on safety issues. This includes advocating for chemical safety within the department and conducting monthly safety inspections including checks on fire extinguishers, eye wash stations, and emergency showers in the department. The coordinator will undertake other safety related responsibilities as assigned.
- Student training: The coordinator will meet weekly or biweekly, as appropriate, with supervised TAs to instruct them on technical aspects of upcoming laboratories, to assist and advise them on laboratory instruction techniques, and to advise on marking the student laboratory reports; the coordinator will serve as a leader in TA teaching and learning within the department. Specifically, the coordinator will organize "TA day" for chemistry TAs, organize the selection of annual TA award winners, and meet with TAs one-on-one throughout the year to work with them on improving their teaching skills.
- Other: The coordinator will be accessible during regular working hours to troubleshoot teaching equipment that malfunctions during usage or arrange for a service technician visit. The coordinator will identify any building maintenance or repair concerns to the Department Manager and will liaise with Department IT technician on a computer related concerns.

REQUIRED QUALIFICATIONS:

- A Masters or PhD in Chemistry combined with relevant experience.
- Specialized training in chemical synthesis and the usage of chemical laboratory equipment.
- Software skills associated with preparation of instructional materials, data entry, and basic data analysis.
- Experience working in an environment of multiple, diverse laboratories.
- Teaching/communication and leadership experience.
- WHMIS and First Aid (CPR) certification.
- Knowledge of Queen's University procedures, policies and regulations would be an asset.
- Consideration will be given to an equivalent combination of education and experience

SPECIAL SKILLS:

- Leadership: Ability to direct a team of Teaching Assistants; ability to interact with faculty and chemical technologists in the development of new experiments; ability to instruct staff, students and faculty members on safety protocols and in the proper use of laboratory equipment; ability to coordinate and lead instruction sessions for TAs; ability to supervise undergraduate students in the development of new experiments.
- Self-directed: Must be self-motivated and have strong desire to adopt and implement new ideas and techniques.
- Organization: Ability to work to deadlines and prioritize.
- Communication skills: Excellent oral skills required to communicate with undergraduates and with TAs, one-on-one, in small groups, and in larger groups; excellent written communications skills require for preparing lab manuals, written instructions, and safety procedures. Strong interpersonal, motivational and supervisory skills required.
- Computer skills: working knowledge of spreadsheets, word-processing, PeopleSoft, Moodle and appropriate chemistry/educational software related to the undergraduate laboratory program.
- Time management: ability to make efficient and effective use of time.

DECISION MAKING:

- Manage and deal with problems related to laboratories (missed labs or tests, accidents and safety related issues, questions about marking, difficulties with TAs etc.)
- Oversee and review the assignment of grades by TAs to ensure consistency and fairness in the marks assigned and prompt assessments.
- Judgement of when to bring concerns to Department Head or Head's Delegate.
- Based on cost/benefit analyses make recommendations for implementing new experiments and the repair or replacement of laboratory equipment.
- Assist in TA assignment decisions.
- Assist in the selection of TA award winners.

SIGNATURES:

	Date
Incumbent	
Manager	
Department Head/Director or Designate	