

Job Description



Job Title:	Manager, Analytical Lab Services and Safety Coordinator
Department:	Chemical Engineering
Reports To:	Director, Technical Operations
Jobs Reporting:	None
Salary Grade:	USG 10
Effective Date:	October 2019

Primary Purpose

This position is responsible for the provision of analytical and general chemistry services to support graduate and post-doctoral research in the Department of Chemical Engineering, including funded external research interests. The incumbent is required to manage the Chemical Engineering Analytical Services Laboratory and all aspects of its safe operation. The position is also accountable for the provision of laboratory safety services for the department.

Key Accountabilities

Administration

- Maintain and promote the department's shared Analytical Instrumentation Laboratory and all aspects of its functioning, including usage, scheduling and all related charges.
- Assist in the hiring and supervision of casual technicians when necessary to maintain sample turnaround during busy periods in the departmental instrumentation lab.
- Oversee all the safety documentation (training records, safety and hazard reports) for the department on the appropriate SHAREPOINT site.

Analytical Instrumentation

- Be proficient in the use of analytical equipment and possess a working knowledge of the associated limitations and operating parameters.
- Provide advice in the maintenance of existing analytical instrumentation department-wide.
- Recommend the upgrading or replacement of existing analytical instrumentation when required.
- Instruct researchers and students in the proper use of the analytical instrumentation.
- Assist faculty in the acquisition of new analytical instrumentation, which includes the writing of equipment grant proposals.
- Calibrate, operate, service and maintain departmental analytical instruments.

Analytical Services

- Provide departmental analytical and general chemistry services and consultation for research.
- Provide analytical services for, and collaborate with, researchers across campus as well as clients from outside the university.
- Perform analyses on request of clients and in agreement with the department protocols.
- Provide independent audits of analytical methods used by researchers.
- Expand and/or update knowledge and expertise by attending company, supplier and/or manufacturer training programs concerning analytical instruments or methods of analyses, with special emphasis on new devices and techniques.

Instruction

- Instruct researchers and students in the appropriate implementation of quality control protocols.
- Instruct researchers and students in the proper use of all Analytical Lab instruments

Job Description



- Provide seminars regarding analytical chemistry and instrumental analysis, upon request of the Director – Technical Operations.

Safety

- Function as the departmental Safety Officer, providing laboratory and chemical safety information for researchers and maintaining communication between the department and the UW Safety Office.
- Plan and conduct the termly inspections of all ChE laboratories with the department safety sub-committee and advise researchers of safety issues identified.
- Maintain the department Safety Incident statistics for reporting at the department meetings.
- Create and issue “Safety Alerts” to advise all researchers of a serious safety incident or breach, when they occur, to help promote a “continuous learning” environment.

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- A university degree in Chemical Engineering or Chemistry. A Master’s degree is preferred.

Experience

- A minimum of three years of analytical lab equipment use and maintenance experience, with specific emphasis on developing a client-focussed and “Safety First” culture.

Knowledge/Skills/Abilities

- Demonstrate the capability and desire to participate in a continuous learning environment
- Knowledge of laboratory equipment functionality and troubleshooting is required.
- Must possess excellent analytical skills, as well as technical, organizational, communication and problem-solving skills.
- Proficient in time management of completing deadlines while maintaining close attention to details and accuracy.
- Must have a good working knowledge of Word, Excel, SharePoint, PowerPoint, Learn, Quest, etc.
- A working knowledge of business cases regarding capital equipment life cycles is important.

Nature and Scope

- **Contacts:** Students, researchers, teaching assistants and co-op students in laboratory settings; course instructors who specialize in a variety of disciplines; and chemical engineering staff and faculty members. External contacts include equipment sales people and technical support reps, plus third-party technicians for all the Analytical Lab equipment.
- **Level of Responsibility:** Manages the Analytical Lab, ensuring all users are fully trained, following all safety and equipment protocols to ensure the proper use of equipment. This involves the management and supervision of co-op students, as required.
- **Decision-Making Authority:** Responsible and accountable for the smooth operation of all Analytical Laboratory equipment and the assigned laboratory tasks that use it. Works with little supervision from the Director. Manages multiple clients, analysts and deadlines while maintaining details, accuracy and safety. The projects and tasks are scheduled as dictated by needs of the researchers and the school term.
- **Physical and Sensory Demands:** Moderate demands, typical of a technical position operating within a teaching laboratory environment, that may involve some lifting of equipment, rearranging of furniture,

Job Description



and standing for extended periods of time. Incumbent must be able to project his/her voice to communicate with students in a laboratory setting. Requires exertion of physical or sensory effort resulting in slight fatigue, strain or risk of injury.

- **Working Environment:** A small part of time is spent in a computerized office environment generating reports, consulting or performing administrative functions. The majority of the time is spent in laboratory environments, where the possibility for exposure to toxic and/or reactive chemicals exists. Risk and stress levels are increased when the incumbent must deal with a hazardous chemical spill or laboratory accident.