

Nipissing University
JOB DESCRIPTION

JOB TITLE: Central Analytical Facility Technologist

DEPARTMENT: Chemistry/Biology

CLASSIFICATION: Technologist C

WAGE GRADE: 80

EMPLOYMENT DEFINITION (STATUS): Full-time Support Contract

SUPERVISOR: Dean of Arts & Science

DATE LAST REVISED: March 2012

SUMMARY OF FUNCTIONS:

The Central Analytical Facilities (CAF) Technologist reports to the Office Administrator, Arts & Science and receives day-to-day guidance from the Department Chair or Designate. The Technologist is responsible for managing, setting up, maintaining and trouble-shooting all CAF equipment and all major technical equipment of the department; providing technical support, developing methods and protocols for researchers and professors; performing assigned analytical tasks; ordering and maintaining inventory for chemicals and supplies; collecting chemical wastes and maintaining a safe working environment; maintaining a high-quality water supply for CAF and other research purposes; and broadening the analytical services provided by the CAF to researchers and their collaborators. Evening and weekend analytical work in the CAF may be required.

DUTIES & RESPONSIBILITIES:

I) Performing analytical tasks (35%)

- Prepare reagents and solutions
- Analyze samples for researchers, professors and collaborators
- Writing test reports for professors / collaborators

II) Managing, setting up, maintaining and troubleshooting all CAF equipment and major technical equipment (20%)

- Set a schedule for students or researchers who are going to use CAF instrument
- Set up instruments based on methods and protocols for CAF users
- Maintain all equipment in CAF and other research labs
- Replace worn-out or broken parts and empty gas cylinders
- Update software and keep lab records
- Keep records pertaining to warranties of technical lab equipment
- When requested, assist in the maintenance of greenhouses and growth chambers

III) Providing technical support, developing methods and protocols (15%)

- Train students and researchers to operate instruments
- Write and update Standard Operation Procedures for each instrument
- Develop new analytical methods or protocols to meet research requests
- Develop quality control procedures for specific analytical methods
- When requested, supervises students and student employees and provide feedback on overall performance

IV) Maintaining inventory for all chemicals and supplies in the CAF (10%)

- Develop and maintain a relational database for inventory control and cost control
- Place orders, and maintain an inventory, for chemicals and supplies

V) Collecting chemical wastes and maintaining a safe working environment

(10%)

- Develop lab safety policy for CAF users
- Coordinate chemicals in the CAF for disposal
- Updates MSDS sheets / database in accordance to new and discontinued chemicals
- Clean glassware and working areas
- Maintain lab safety

VI) Miscellaneous

(10%)

- Develop new web resources for CAF users
- Costing analytical services
- Assist in identifying new collaborators for CAF services
- Assists in the set-up and decommissioning phase of lab experiments / projects
- Coordinate the shipping of lab samples/specimens
- Learn to operate additional research instruments
- Assists the Chair in the management of budgets

Other duties as assigned by supervisor.

QUALIFICATIONS:

Education:

- The incumbent requires a Bachelor of Science degree in Chemistry with a concentration in Analytical Chemistry
- Cross training in Biology or Engineering would be considered an asset

Training and/or experience may be substituted for formal academic training at the discretion of the University.

Training & experience:

- Two or three years of chemical analysis experience in a chemistry lab
- One or two years of practical experience in operating AAS, HPLC and GC-MS in chemistry labs
- Practical experience in operating PCR and Microplate Reader

Knowledge required:

- Computer skills in MS Office, database and web design
- Mechanical aptitude
- Knowledge of safe working practices, WHMIS, First Aid and QC/QA
- Knowledge of legislations and regulations pertaining to general lab safety and disposal of hazardous materials
- Good organization, communication and time management skills

POSITION RELATIONSHIPS:

Supervised by: Dean of Arts & Science

Receives day-to-day guidance from the Department Chair or Designate

INTERPERSONAL RELATIONSHIPS/PERSONAL CONTACTS:

Internal: Faculty Staff and Students

External:

- Chemical Company Representatives: consulting and ordering
- Equipment Company Representatives: equipment repairs and warranties

MATERIALS UTILIZED:

- Hazardous chemicals
- Computers
- High pressure gas
- Equipment and tools (HPLC, GC-MS, AAS, PCR, Centrifuge, Microarray Reader, oven, trolley, confocal microscope, tools and so on)

PHYSICAL DEMANDS:

- Able to stand 2-3 hours
- Able to sit and walk periodically
- Able to work in a noisy and odorous environment with mental concentration and manual dexterity

WORKING CONDITIONS:

- Exposure to hazardous chemicals
- Work in a noisy and odorous environment periodically
- Potential hazards, such as high pressure gas and liquid, UV radiation, high temperature, moving motor and sharp parts on a regular basis

I have read my position description and it has been reviewed with my supervisor. I understand what my duties and functions are, and I will carry out all of my responsibilities as herein described.

Employee Name (Please Print)

Date

Employee Signature

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Approvals

Supervisor

Date

Human Resources

Date