

Nipissing University
JOB DESCRIPTION

JOB TITLE: Central Analytical Facility Technologist

DEPARTMENT: Office of Graduate Studies and Research

CLASSIFICATION: Technologist C

WAGE GRADE: WG 80

EMPLOYMENT DEFINITION (STATUS): Full-time Support

SUPERVISOR (POSITION TITLE): Central Analytic Facilities Manager

DATE CREATED/REVISED: August 2026

SUMMARY OF FUNCTIONS:

The Central Analytical Facilities (CAF) Technologist reports to the Central Analytic Facilities Manager and supports the day-to-day operation of the CAF by maintaining, setting up, and troubleshooting CAF equipment. Key duties include providing technical support to CAF users, assisting with the development of methods and protocols for researchers and professors, and performing assigned analytical tasks. The CAF Technologist contributes to effective day-to-day operations by maintaining chemical and supply inventories, assisting with ordering, collecting chemical waste, maintaining a safe working environment, and supporting the high-quality water supply used for CAF and other research purposes. Evening and weekend analytical work in the CAF may be required.

DUTIES & RESPONSIBILITIES:

Analytical Tasks (40%)

- Prepare reagents and solutions
- Analyze samples for researchers, professors and collaborators
- Execute current methods and test newly developed methods
- Write test reports for professors and collaborators
- Calibrate and fine-tune various instruments daily, weekly, or monthly to support optimal performance
- Ensure QA/QC procedures are followed during analyses
- Ensure accurate documentation of analyses conducted using CAF equipment

Equipment Operations and Maintenance (25%)

- Schedule use of CAF instruments for students or researchers
- Set up instruments according to established methods and protocols for CAF users
- Maintain CAF equipment and designated equipment in other research labs
- Replace worn or broken parts and empty gas cylinders
- Update software and maintain lab records
- Support operation of electron microscope and confocal microscope as required
- Assist with the maintenance of greenhouses and growth chambers

Technical Support and Protocol Development**(10%)**

- Train students and researchers on instrument operation
- Assist with writing and updating Standard Operating Procedures
- Assist with the development of new analytical methods and protocols to meet research requests
- Follow quality control procedures for specific analytical methods
- When requested, assist students and student employees and provide guidance on lab procedures and work quality

Lab Safety and Chemical Waste Management**(10%)**

- Coordinate chemicals in the CAF for disposal
- Support the safe handling and disposal of chemicals in the CAF
- Clean glassware and working areas
- Maintain safe lab practices

Operational and Research Support**(10%)**

- Assist in identifying new collaborators for CAF services
- Assist with CAF profiles, promotional content, tours, and other lab spaces
- Assist in the set-up and decommissioning of lab experiments and projects
- Coordinate the shipping of lab samples and specimens
- Learn to operate research instruments
- Provide support to adjacent research labs when directed by supervisor

Inventory, Records, and Student Support**(5%)**

- Assist with scheduling, record keeping, reports, and data tracking
- Support the hiring, training, and scheduling of students
- Maintain chemical and supply inventories for the CAF

Other duties as assigned.

QUALIFICATIONS:

Education: Bachelor's degree in Chemistry required; Master's degree in a relevant science discipline considered an asset.

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

Training, Experience, Knowledge & Skills Required:

- Five (5) years of analytical chemistry experience
- One (1) to (2) two years of hands-on experience operating analytical instrumentation, including ICP, LC-MS, GC-MS, and IC
- Practical experience in operating a microplate reader
- Capacity to maintain accuracy and attention to detail
- Computer skills in MS Office
- Mechanical aptitude
- Knowledge of safe working practices, WHMIS, First Aid and QC/QA
- Knowledge of legislation and regulations pertaining to general lab safety and disposal of hazardous materials

- Good organization, communication, and time management skills

RELATIONSHIPS/CONTACTS:

Supervised by: Central Analytic Facilities Manager

Internal Contacts: Students, Staff and Faculty

External Contacts:

- Chemical Company Representatives

MATERIALS UTILIZED:

- Hazardous chemicals
- Computers
- High-pressure gas
- Equipment and tools (LC-MS, IC, ICP, Centrifuge, microplate reader, oven, trolley, microscopes, tools, etc.)

PHYSICAL/MENTAL DEMANDS & WORKING CONDITIONS:

- Ability to stand for periods of 2-3 hours at a time
- Ability to alternate between sitting and walking as required
- Able to work in a noisy and odorous environment with mental concentration and manual dexterity
- Exposure to hazardous chemicals
- Work in a noisy and odorous environment periodically
- Exposure to potential hazards on a regular basis, including high-pressure gas and liquids, UV radiation, high temperatures, moving motors, and sharp parts

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 my responsibilities as herein described.

Employee Name (Please Print)

Employee Signature

Date

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Approvals

Supervisor

Date

Human Resources

Date