nwmo

NUCLEAR WASTE   SOCIÉTÉ DE GESTION
MANAGEMENT   DES DÉCHETS
ORGANIZATION   NUCLÉAIRES

The ***Nuclear Waste Management Organization*** is responsible for the safe, long-term management of used nuclear fuel in Canada. The approach it is implementing, known as Adaptive Phased Management (APM), involves developing a centralized underground repository, supported by a robust social and technical research program in collaboration with Canadian universities, consultants and international waste management organizations.

Join our growing team of scientists, engineers and other professionals to work collaboratively with Canadians in implementing our management approach in a manner that safeguards people and respects the environment, now and in the future.

Development Intern/Summer Student Opportunity –
Safety and Technical Research
(One position available)

We are currently seeking a developmental student with the Safety and Technical Research department at our Toronto office at 2 St. Clair Avenue East, 4th Floor, and Toronto.

Responsibilities:

The Safety and Technical Research team currently runs many computer models in the fields of engineering, chemistry and physics. We work with a variety of computer software programs, including COMSOL Multiphysics and MathWorks MATLAB.

Reporting to the Manager Engineered Barrier Science, the student will support the various activities of the entire department. We are looking for students interested in solving problems using logic and intuition to help develop our models including advancing the physics being modelled, optimizing for performance, testing and validation.

The ideal candidate is somebody who is willing to learn the software and programming skills required to help drive our work forward. Existing programming knowledge is a bonus, specifically in the MATLAB programing language with emphasis on parallel performance, statistics and machine learning. There will be opportunities for the student to participate in a wide spectrum of tasks, such as:

- Perform simple calculations (e.g. using Excel spreadsheet, MATLAB or by hand) and documentation;

- Assist in the development of numerical models including optimization, extension and sensitivity analysis (eg. using MATLAB);

- Assist in advanced numerical (finite element) analysis using commercial analysis software (e.g. COMSOL);

- Conduct literature research on specific technical topics and prepare the study report;

- Perform verification of calculations done by other staff;

- Review and quality check technical reports and drawings prepared by other staff;
- Assist in inputting technical reports and drawings into configuration management software to ensure quality assurance;
- Assist in the development of technical illustrations and presentations using MS Office and other software;
- Conduct vendor and market search for specific engineering services or products;
- Assist in the preparation of procurement documents;

The student will be given tasks based on business need and the student's knowledge/skill level. Training and guidance will be provided to the student regarding the assigned tasks. Occasional travel to NWMO's local facility and vendor sites may be required.

Student Qualifications & Experience:

- Currently enrolled in the third year of a Bachelor's Degree program of engineering, mathematics, chemistry, computer science with or related field with a focus on numerical modelling;
- Knowledge in the development of software including any programming language is required. Specifically, use of and experience with MATLAB would be a valuable asset;
- Knowledge in the finite element method and experience in COMSOL (or similar software packages) would be a valuable asset;
- Knowledge of office applications (i.e. MS Word, MS Excel, MS PowerPoint, Acrobat Professional, etc.) is required;
- Ability to draft and edit scientific documents of a technical nature;
- Good oral and written communication skills;
- Good organizational skills and ability to manage large datasets;
- Attention to detail;

The applicant must be eligible to work in Canada and must be able to meet security clearance requirements.

Employment period:
May 1 – Aug 31, 2019.

Eligibility:
Students must be returning full-time to their program at their University following the completion of their work term or be a full-time student requiring the work term or co-op placement to graduate.

The NWMO supports the principles and practices of diversity and is committed to providing a respectful, accessible, and inclusive environment for all persons with disabilities in a way that is respectful of the dignity and independence of people with disabilities and in a manner which takes into account the person's disability and embodies the principles of integration and equal opportunity. The NWMO will provide accommodation to applicants with disabilities. If you require accommodation, please **Contact Us**.

Please submit your application including your resume and cover letter) by Tuesday March 12, 2019 via e-mail quoting **Development Intern/Summer Student Opportunity – Safety and Technical Research** to: **Employment@nwmo.ca**