Research Officer, Performance-based Codes - Fire

Priority may be given to the following designated employment equity groups: women, Indigenous peoples* (First Nations, Inuit and Métis), persons with disabilities and racialized persons*.

* The Employment Equity Act, which is under review, uses the terminology Aboriginal peoples and visible minorities.

Candidates are asked to self-declare when applying to this hiring process.

City: Ottawa
Organizational Unit: Construction
Classification: RO
Tenure: Continuing
Language Requirements: English

Work Arrangements: Due to the nature of the work and operational requirements, this position will require some physical presence at the NRC work location identified, in the form of a hybrid work arrangement (a combination of working onsite and offsite).

Your Challenge

Great Minds. One Goal. Canada's Success.

Help bring research to life and drive your career forward with the National Research Council of Canada (NRC), Canada's largest research and technology organization.

We are looking for a Research Officer (RO), Performance-based Codes - Fire, to support our Construction Research Centre with research of international calibre and the development and application of advanced technologies. The RO would be someone who shares our core values of Integrity, Excellence, Respect and Creativity.
NRC Construction is implementing the “Platform to Decarbonize the Construction Sector at Scale” to accelerate and scale up new technologies to help transition the Canadian construction sector towards decarbonization and contribute to the emerging low-carbon economy. It will also establish new codes, standards, specifications, and guidelines to position the sector to achieve its 2050 greenhouse gas (GHG) carbon reduction targets. These investments will help spur the growth of Canada’s clean technology sector and help achieve Canada’s international commitments to reduce GHG emissions.

As a Research Officer, you will work as a member of the Fire Safety Unit with researchers and technical experts in world-class facilities, and will collaborate internally with others as well as externally with stakeholders in the construction industry.

Responsibilities include:

- Developing proposals for new research initiatives, performance criteria, compliance paths, design guidelines, regulatory requirements, probabilistic and reliability-based models, prevention measures, and innovative technologies and protocols to minimize the impact of fire occurrence on life safety, the environment and the economy.
- Supporting the transition of the National Model Codes to performance-based codes by developing new knowledge and applying current performance-based approaches where appropriate.
- Providing scientific evidence for the development of technical standards and regulations.
- Providing input into the overall direction and research priorities of the Fire Safety Unit within the context of the Research Centre business plan.

Screening Criteria

Applicants must demonstrate within the content of their application that they meet the following screening criteria in order to be given further consideration as candidates:

Education

PhD in engineering, science, architecture or a relevant area of expertise is preferred.

An equivalent combination of a related PhD or Master’s degree in engineering, science, architecture or a relevant area of expertise, with significant relevant experience may be considered.

For information on certificates and diplomas issued abroad, please see Degree equivalency

Experience

- Significant experience in fire science and engineering, including experience in evaluating structural fire behaviour and developing or optimizing solutions to fire and life safety challenges.
- Significant experience in applying and/or developing Canadian building and fire codes, including developing alternative solutions.
- Significant experience in the full spectrum of research activities including identification of research needs, proposal writing, project management, data production and analysis, and reporting through written documentation, presentations and publishing.
- Significant experience in experimental design and analysis, including data collection and analysis, overseeing data production, and ensuring data quality.

The following assets will be considered:
Experience in fire risk assessment and fire risk mitigation.
Experience working with building codes committees.
Experience in structural/seismic engineering.
Experience in business development, marketing activities, and/or the development of partnerships and collaborations.
Experience in working in multidisciplinary teams.

**Significant experience: 2–6 years’ experience**

**Condition of Employment**

Reliability Status

**Language Requirements**

English

Information on language requirements and self-assessment tests

**Assessment Criteria**

Candidates will be assessed on the basis of the following criteria:

**Technical Competencies**

- Knowledge of fire safety engineering, fire science, fire protection and mitigation systems.
- Knowledge of Canadian building and fire codes and the Canadian code development process.
- Knowledge of numerical fire modelling and life hazard prediction techniques.
- Knowledge of experimental techniques in evaluation of fire behaviour from small to full scale, design and conduct of such experiments and data analysis.
- Knowledge of project management principles and practices.

**Behavioural Competencies**

- Research - Communication (Level 3)
- Research - Teamwork (Level 2)
- Research - Creative thinking (Level 3)
- Research - Results orientation (Level 2)
- Research - Networking (Level 2)

Competency Profile(s)

For this position, the NRC will evaluate candidates using the following competency profile(s): Research

View all competency profiles

**Relocation**

Relocation assistance will be determined in accordance with the NRC's directives.
Compensation

This position is classified as a Research Officer (RO), a group that is unique to the NRC. Candidates are remunerated based on their expertise, outcomes and impacts of their previous work experience relative to the requirements of the level. The salary scale for this group is vast, from $57,220 to $161,754 per annum, which permits for employees of all levels from new graduates to world-renowned experts to be fairly compensated for their contributions.

NOTE: Please note that the full RO/RCO salary scale has five levels. Salary determination will be based on a review of the candidate’s expertise, outcomes and impacts of their previous work experience relative to the requirements of the level. As such, the initial salary could be within another level of the RO/RCO salary scale (i.e., above or below the intended level for this position).

NRC employees enjoy a wide-range of competitive benefits including comprehensive health and dental plans, pension and insurance plans, vacation and other leave entitlements.

The NRC Advantage

The National Research Council of Canada (NRC) is the Government of Canada's largest research organization supporting industrial innovation, the advancement of knowledge and technology development. We collaborate with over 70 colleges, universities and hospitals annually, work with 800 companies on their projects, and provide advice or funding to over 8000 Small and Medium-sized Enterprises (SMEs) each year.

We bring together the brightest minds to deliver tangible impacts on the lives of Canadians and people around the world. And now, we want to partner with you. Let your expertise and inspirations make an impact by joining the NRC.

At the NRC Employee wellness matters. We offer flexible work schedules as well as part-time work to help employees maintain work-life balance. We are one of the few federal organizations that close our offices during the December holiday season. We offer professional learning and development opportunities such as conferences, workshops, and a suite of mentorship, award and recognition programs. Diversity enables creativity and innovation. Fostering a diverse, inclusive, welcoming and supportive workplace is important to us, and contributes to a more inclusive Canadian innovation system. We welcome all qualified applicants and encourage you to complete the employment equity self-declaration questions during the job application process. Please let us know of any accommodation measures required to help you to be assessed in a fair and equitable manner. Please note that the information you provide will be treated confidentially.

Help us solve problems for Canada. Grow your career with us today!

Notes

- A pre-qualified list may be established for similar positions for a one year period.
- Preference will be given to Canadian Citizens and Permanent Residents of Canada. Please include citizenship information in your application.
- The incumbent must adhere to safe workplace practices at all times.
- We thank all those who apply, however only those selected for further consideration will be contacted.

Please direct your questions, with the requisition number (19088) to:
E-mail: NRC.NRCHiring-EmbaucheCNRC.CNRC@nrc-cnrc.gc.ca

Closing Date: 15 March 2024 - 23:59 Eastern Time.

For more information on career tools and other resources, check out Career tools and resources
