



RESEARCH ASSOCIATE – CANADIAN NEUTRON BEAM LABORATORY

Job Title	Research Associate – Canadian Neutron Beam Laboratory	Job ID	77804
Location	Central Campus	Regular/Temporary	Temporary
Job Type	Limited Term (>12 months)	Open Date	2026/07/30
Employee Group	Unifor Unit 1, Staff	Close Date	2026/09/12
Department	Physics and Astronomy		
Salary Grade/Band	Grade 10	Full/Part Time	Full-Time
Salary Range	\$38.46 - \$54.06	Job Code	JD0969
Contract Duration	24.3 months	Existing Vacancy	Yes – Newly Created Position
Hours per Week	35	Target Number of Openings	1

Posting Details

Schedule	35 Hours per Week. 8:30A.M. – 4:30P.M., Mondays to Fridays. A 60-minute unpaid meal period is provided each day.
Education Level	PhD in relevant field.
Career Level	Requires 3 years of relevant experience.

**Anticipated Fill Date – Early October 2026*

Job Description

Should the successful applicant be a Unifor Unit 1 bargaining unit member, who meets the eligibility conditions of Article 19.02 of the Unifor Unit 1 Collective Agreement, then the Limited Term Assignment will be defined as a Career Growth Opportunity in accordance with Article 19 of the Unifor Local 5555 Unit 1 Collective Agreement.

JD #: JD0969

Unit/Project Description:

Based at the 5 MW McMaster Nuclear Reactor, the Canadian Neutron Beam Laboratory (CNBL) is an emerging neutron beam facility that will enable Canada's strong neutron user community to perform basic characterization of materials for both fundamental and applied research. Experiments at the CNBL also provide Canadian users with essential training and foundational measurements to leverage effective use of major international neutron sources.

The CNBL is building up a team of neutron scientists, technicians, and programmers with interests in both instrumentation and materials research to develop a suite of five neutron diffractometers at the MNR. It has an operational neutron diffractometer (MAD) and is commissioning a small-angle neutron scattering (MacSANS) instrument. The other three instruments include a powder diffractometer, neutron reflectometer, and neutron stress scanner, which are newly funded through the CFI Innovation Fund project "Building a Future for Canadian Neutron Scattering" (PI: Bruce Gaulin), a national collaboration of 17 universities. The CNBL is currently housed within the Department of Physics & Astronomy at McMaster University. More information about the CNBL is available here: <https://nuclear.mcmaster.ca/neutron-beams/>

The CNBL is seeking a research associate to serve as an instrument scientist by contributing to the design, development, and commissioning of ongoing instrumentation projects and supporting the scientific experiments of external users as a Local Contact. Your research activities will leverage collaborations with external researchers to capitalize on the growing suite of neutron instruments available at the CNBL.

Job Summary:

Responsible for overseeing and managing the planning, development, implementation and analysis of multiple research and experimental results.

Purpose and Key Functions:

- Oversee and manage the planning, development, implementation and analysis of multiple research and experimental results.
- Work with faculty members to establish long term research programs.
- Design and analyze experiments and results.
- Gather research related materials for scientific experiments.
- Author papers for publications and research proposals for submission to granting agencies.
- Interpret, publish and patent experimental results.
- Perform scientific and technical observations while monitoring experiments and recording results
- Use statistical methods to optimize experimental conditions.
- Prepare and keep biomolecules stable.
- Develop novel methods to synthesize new precursors.
- Build and maintain a program network of research collaborators and partners.
- Read job related periodicals and journals, and attend meetings and conferences to discuss research related technologies and results.
- Provide advice and train students and colleagues regarding research and experiments.
- Deliver presentations and report research results at conferences.
- Use hand tools to assemble or disassemble lab equipment.
- Schedule activities for graduate students, coordinate group meetings, events and monthly reports.
- Order instruments and supplies as required.
- Perform routine maintenance on equipment.
- Identify problems and develop solutions to complex problems.
- Ensure safe handling and storage of chemicals.
- Perform scientific and technical observations while monitoring experiments and recording results

Supervision:

- Provides functional guidance to others on an ongoing basis.

Requirements:

- PhD in a relevant field.
- Requires 3 years of relevant experience.

Assets:

- Experience with scattering techniques (preferably neutron) is mandatory, including competency in data refinement/analysis and diffraction, reflectometry, small-angle scattering, or stress scanning.
- Experience with neutron instrument design and development is a strong asset, including particle transport codes, neutronics, or optics.
- Familiarity with programming in Python 3.0 for data analysis.
- Team-oriented with effective communication skills in an interdisciplinary environment.

Additional Information:

- Applicants must complete all degree requirements before starting their appointment.
- Application review will commence mid-September for an anticipated start date in Fall 2026.

Nuclear Operations Security Provisions

Security clearances and background checks are necessary due to the sensitive nature of the nuclear facility's operations and regulatory licensing (Nuclear Safety Control Act) requirements. As a condition of employment for this Appointment, you must successfully complete the appropriate and necessary security screenings / clearances (documentation will follow in a separate email). You will be advised in writing by the University whether this condition has been met upon the University's receipt of the results. If you are unsuccessful in these processes, you will not be able to meet the job requirements and therefore any offer of employment will be rescinded or will result in your employment with the University will be terminated.

Being a Nuclear Energy Worker

You will be declared a Nuclear Energy Worker. Given the nature of the work environment where you will be performing your duties, which includes entering and working in radiological hazardous environments, the University requires the use of protective equipment such as respirators, protective clothing, and gloves, as necessary to enter these areas. The University is committed to fostering a safe and healthy work environment.

How To Apply

To apply for this job, please submit your application online.

https://careers.mcmaster.ca/psp/prcsprd/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_APP_SCHJOB.GBL?Page=HRS_APP_JBPST&Action=U&SiteId=1001&FOCUS=Applicant&JobOpeningId=77804&PostingSeq=1

Employment Equity Statement

McMaster University is located on the traditional territories of the Haudenosaunee and Mississauga Nations and within the lands protected by the “Dish With One Spoon” wampum agreement.

The diversity of our workforce is at the core of our innovation and creativity and strengthens our research and teaching excellence. In keeping with its Statement on Building an Inclusive Community with a Shared Purpose, McMaster University strives to embody the values of respect, collaboration and diversity, and has a strong commitment to employment equity.

The University seeks qualified candidates who share our commitment to equity and inclusion, who will contribute to the diversification of ideas and perspectives, and especially welcomes applications from indigenous (First Nations, Métis or Inuit) peoples, members of racialized communities, persons with disabilities, women, and persons who identify as 2SLGBTQ+.

As part of McMaster's commitment, all applicants are invited to complete a confidential Applicant Diversity Survey through the online application submission process. The Survey questionnaire requests voluntary self-identification in relation to equity-seeking groups that have historically faced and continue to face barriers in employment. Please refer to the [Applicant Diversity Survey - Statement of Collection](#) for additional information.

Job applicants requiring accommodation to participate in the hiring process should contact:

- [Human Resources Service Centre](#) at 905-525-9140 ext. 222-HR (22247), or
- [Faculty of Health Sciences HR Office](#) at ext. 22207, or
- [School of Graduate Studies](#) at ext. 23679

to communicate accommodation needs.

Interview Experience

At McMaster University, we believe in a comprehensive and inclusive interview process. Our interview methods encompass a variety of approaches that allow our hiring teams to provide a flexible and accessible experience for engaging with our candidates. Throughout your recruitment process at McMaster, you may be requested to participate in a variety of formats, that may include in-person, virtual or recorded interviews. If you have any questions as you move through the hiring process, please reach out to talent@mcmaster.ca or the HR contact associated with your position of interest.

AI Statement

McMaster and its third-party partners may use AI tools to screen, assess, or select applicants during the hiring process. Please note that currently our recruitment platform does not use AI nor is it part of our current recommended recruitment process.