

JOB DESCRIPTION

Research Scientist Fundamental Physics Using Ultra-Cold Neutrons

BASIC FUNCTION

The primary function focuses on facilitating the construction and exploiting the facility for Ultra Cold Neutrons (UCN) and the initial neutron EDM experiment at TRIUMF. The goal is for the incumbent to bring their research program to world-class status by innovating and pursuing relevant technology that advances the field of fundamental neutron physics. The position also provides the opportunity for the incumbent to support his/her own research activities through research grants obtained from funding agencies in Canada and abroad.

ORGANIZATIONAL RELATIONSHIPS AND CONTACTS

The position reports to the Particle Physics Group Leader. Internal contacts include interaction with other Scientists at TRIUMF, Engineers, Division Heads and Management team members, as well as all members of the Particle Physics Group and the Science Division. Additional contacts include the collaborators from Canadian, Japanese and other international Universities and Institutions. All relationships are characterized by professionalism, respect and competence.

SUPERVISORY JURISDICTION

The incumbent is expected to maintain an active research program that relies on the training and support of postdoctoral fellows, graduate and undergraduate students. Within the UCN project the supervision of engineering and technical staff is expected.

KEY AEAS OF RESPNSIBILITY

- 1. Provides scientific leadership in the field fundamental neutron physics.
- 2. Interacts with the international and Canadian community to foster further collaboration.
- 3. Through the research program, represents and promotes TRIUMF via international collaborations, publications, conferences, committees and forums.
- 4. Participates in the training aspects of technicians, undergraduate- and graduate students.
- 5. Carries out research that enables the division to deliver on its objectives along with the priorities of its program of work.
- 6. Uses available resources to maintain an effective and visible scientific program that achieves results.
- 7. Actively participates in the strategic planning process of the division that defines the science goals and strategies of the division.
- 8. Responsible for ensuring that the safety and quality standards of TRIUMF experiments are consistent with the TRIUMF standard operating procedures.
- 9. Interacts with professional organizations of scientists using the TRIUMF facilities
- 10. Maintains own research projects, and may apply for NSERC or other funding grants



Research Scientist Fundamental physics using Ultra-Cold Neutrons

Continued, page 2

KNOWLEDGE, SKILLS AND QUALIFICATIONS

Critical scientific thought and effective experimental strategy are necessary as the program grows to maintain the status as a national centre of excellence in Canada and a recognized site of high-calibre research on the international stage. Effective problem solving is mandated for the decisions and issues encountered day-to-day. Strong communication and interpersonal skills are essential requirements to be effective in the role. The incumbent is expected to have excellent relationship building skills, demonstrated leadership qualities and the ability to delegate. Research-specific knowledge and skills include a strong background and training in particle, nuclear or atomic physics research, with a strong interest in fundamental physics using UCN, at the Ph.D. level.

CRITICALITY OF POSITION:

This position will continue to leverage TRIUMF's unique infrastructure to enhance TRIUMF as a leader in the field of Particle and Nuclear Physics worldwide.

Safety on the Job - Standard Worker Responsibilities

From WorkSafeBC's "Safety on the job is Everyone's Business"

- Know and follow health and safety requirements affecting your job
- If you don't know how to do something safely, ask for training before you begin work
- Work safely, and encourage your colleagues to do the same
- Correct any unsafe conditions or immediately report them to your supervisor
- Immediately report any injury to a first aid attendant or supervisor
- Take the initiative. Make suggestions to improve health and safety