## **% TRIUMF**

## **Research Scientist**

<u>TRIUMF</u> is Canada's particle accelerator centre, and one of the world's leading laboratories for particle and nuclear physics and accelerator-based science. We are an international centre for discovery and innovation, advancing fundamental, applied, and interdisciplinary research for science, medicine, and business.

We're passionate about accelerating discovery and innovation to improve lives and build a better world. Equity, diversity, and inclusion are integral to excellence and enhance our ability to create knowledge and opportunity for all. Together, we are committed to building an inclusive culture that encourages, supports, and celebrates the voices of our employees, students, partners, and the people and communities we serve.

TRIUMF's multiuser cyclotron drives an on-line isotope separator, which delivers large quantities of rare or exotic atoms or isotope that enables detailed studies including probing the degree of parity violation in atoms and weak decays, time-reversal symmetry breaking in weak decays and induced electric dipole moments, and Cabibbo-Kobayashi-Maskawa matrix unitarity. Our Research Scientists and their university collaborators have developed inhouse facilities including atom traps optimized for atomic physics and for nuclear decays, a laser-polarized beamline producing large quantities of precisely polarized nuclei, and high-efficiency precisely characterized gamma and beta detector arrays. An ion-trap complex also adds many capabilities, including production, decay, and atomic spectroscopy of highly-charged ions. The rare beams of atoms or molecules can also be used for studies that search for the electron EDM.

We also have an expert team to develop and support experimental electronics and DAQ development, gas and photo detector technology, cryogenics engineering, and accelerator physics groups, accustomed to enabling precision efforts geared towards modern discovery potential. TRIUMF experimentalists routinely interact with nuclear and particle theorists from TRIUMF and university teams, whose interests include weak nuclear decays including their isospin breaking corrections and double beta decay matrix elements, as well as more exotic dark matter searches and fundamental force investigations with atom interferometry.

To allow us to continuously build and advance world-class science and programs, we are committed to supporting and developing the next generation of passionate and innovative scientists and researchers. As part of this commitment, we are currently accepting applications from early career physicists to join our Nuclear Physics Department and test fundamental physics with atomic, molecular and nuclear techniques. This is a full-time TRIUMF Board Appointed tenure-track appointment, and is considered equivalent to a faculty position at a Canadian university. This appointment will be at the equivalent rank of Assistant Professor, but in exceptional cases other levels can be considered.

You will have the opportunity to develop and lead experimental research programs at TRIUMF and maintain and support these through successful grant applications. A large portion of your time will be spent on independent, self-directed research and developing new capabilities or experimental facilities as needed. Other expected responsibilities include:

- Providing leadership and mentorship to undergraduate and graduate students and postdocs
- Contributing through internal and external community service and facility coordination
- Participating in TRIUMF research programs, and fostering further collaboration through your interactions with the Canadian and international physics communities

You will also be required to successfully complete the TRIUMF in-house radiation safety training course and be designated as a TRIUMF Nuclear Energy Worker.

Applicants for this position must possess:

- A PhD in Physics and thesis work on measurements of nuclear or atomic properties
- Knowledge of atomic and nuclear experimental techniques, with expertise in one or more techniques and knowledge of associated technologies
- The ability to plan and execute atomic or nuclear measurements with high precision
- The ability to develop and lead a team with diverse backgrounds, knowledge, and skill sets
- Effective problem-solving, interpersonal and oral and written communication skills

All qualified applicants are encouraged to apply and will be given serious consideration, and in the case of equal qualifications, preference will be given to a Canadian Citizen of Permanent Resident.

TRIUMF is located on the south campus of the University of British Columbia, in the heart of Pacific Spirit Park in Vancouver, BC. We offer a competitive total compensation package, including comprehensive benefits, attractive salary, and an excellent opportunity to enhance your career portfolio in a high profile national research facility.

TRIUMF is an equal opportunity employer, and we welcome applications from all qualified candidates. Your complete application package should be submitted by email to <u>recruiting@triumf.ca</u> and will include the following in one complete PDF file:

- Subject line: 761
- Employment Application Form
- Cover letter indicating salary expectations
- CV
- Statement of research accomplishments and research plan
- Arrange for at least 3 referees to submit reference letters directly to the email above

## Application closing date: March 31, 2020

It is important to note that due to operation necessity, TRIUMF will as needed, make hiring decisions that could pre-empt the application closing date. Accordingly, we suggest candidates submit expressions of interest in a timely fashion.