



Physicist: Experimental Officer, Gamma-Ray

Comp. #650

[TRIUMF](#) 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.

Our 500 MeV cyclotron provides the proton driver beams for the majority of TRIUMF's current on-site research programs, including nuclear physics, and there are two Isotope Separator On-Line (ISOL) facilities on-site. The [ISAC](#) facility has been producing and accelerating radioactive ion beams with the highest power driver beam in the world since 1999. The Advanced Rare Isotope Laboratory ([ARIEL](#)) is currently under development and will expand TRIUMF's (and Canada's) capabilities to produce and study radioactive isotopes for cutting edge research.

We are currently recruiting a Physicist whose ultimate primary responsibility will be to plan and set-up experiments within these facilities. The incumbent will initially provide scientific support to the [ARIEL](#) project during the development phase before transitioning fully to [ARIEL/ISAC](#) Experimental Support during the physics exploitation phase. The Physicist will work in tandem with other specialists and facility personnel to ensure the success of the rare-isotope science program at TRIUMF, and will manage, maintain, operate, repair and plan deployment of gamma-ray and electron/positron detectors. They will also maintain and operate [SEBT3A](#) and [ILE1B](#) beamlines and support gamma-ray and lepton spectroscopy experiments with [GRIFFIN](#), [GPS](#), [TIGRESS](#), [DSL](#), and other [ISAC](#) experiments as needed. Specific responsibilities include:

- Managing and planning maintenance, repair and deployment of:
 - the fleet of specialized HPGe detectors and suppressors, Si(Li) detectors, LaBr detectors, liquid scintillator neutron detectors and beta-counting detectors associated with the [TIGRESS](#), [GRIFFIN](#), [DESCANT](#), [GPS](#), [SPICE](#) and [PACES](#) facilities;
 - the fleet of BGO and LaBr detectors associated with the [DRAGON](#) facility;
 - the fleet of Si(Li) detectors associated with the [TITAN E-BIT](#) facility
- Managing [TIGRESS](#), [GRIFFIN](#), [TITAN LN2](#) and other autofill systems
- Procuring, monitoring and managing the budget for inventory of tools, spare parts, etc. needed for associated tasks
- Providing experiment-specific training as required, through written documents and on-the-job training, and expert input and planning advice for experimental campaigns
- Managing, planning use of and operating the [SEBT3A](#) and [ILE1B](#) beamlines and managing a detector laboratory
- Providing assistance with detector problems for the above experiments, including after hours
- Providing day-to-day and technical oversight to technicians and undergraduate students

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.

As our ideal candidate, you are collaborative and have demonstrated communication and interpersonal skills. You are experienced at self-planning and time management, and you have:

- Substantial hands-on experience with the gamma-ray and lepton detectors listed above
- An advanced degree in nuclear or atomic physics combined with at least of 4 years of relevant and practical work experience, or the equivalent combination of education and work experience

When submitting your application as detailed below, please include a detailed CV with a list of publications, and arrange for 3 letters of recommendation or reference to be sent directly to the email below.

TRIUMF offers a creative, diverse and inclusive team environment, located on the South campus of the University of British Columbia in Vancouver, BC.

We offer a comprehensive benefits package, a competitive starting salary, and an excellent opportunity to enhance your career portfolio in a high profile national research facility.

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

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

- Subject line: Competition 650
- [Employment Application Form](#)
- Cover letter indicating salary expectations
- CV

Applications will be accepted until 2018-09-01