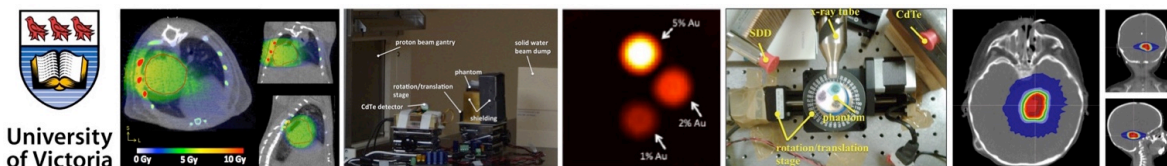


Research Fellowship in Medical Physics
University of Victoria
Department of Physics and Astronomy



The XCITE Lab invites applications for a one-year research fellowships in the Department of Physics and Astronomy of University of Victoria to start as soon as possible.

The researcher will be responsible for the optimization of x-ray imaging with state-of-the-art photon-counting detectors for baggage and food scanning. Specifically, the researcher will develop models for optimal scanning parameter selection to achieve the highest accuracy of contaminant segmentation. Upon a successful completion of the proposed project, novel food and baggage scanners will be developed and food quality and air travel security will be improved. The researcher will get a unique opportunity to participate in hardware and software development of an x-ray imaging system that will be directly used by customers and will be exposed to entrepreneurship.

The research involves experimental measurements as well as software development and is funded by the Natural Sciences and Engineering Research Council (NSERC) Alliance grant in collaboration with an industrial partner.

The ideal candidate will have a Ph.D. in medical physics, physics, engineering, computer science or a related field. Applicants with an MSc or even highly motivated applicants with a BSc will be considered. Background in radiation physics, medical imaging or machine learning are essential. Thorough knowledge of x-ray interactions, x-ray detection, x-ray image formation and programming and mathematical skills are desirable. Candidates from underrepresented groups are highly encouraged to apply.

Victoria is the capital city of British Columbia and is located on the southern tip of Vancouver Island. Victoria offers its residents a small-town feeling with all the benefits of modern urban living. With its exhilarating ocean and mountain sceneries and year-round mild climate, Victoria is a very attractive destination for people loving outdoor activities or a relaxed lifestyle.

To apply, please send a letter expressing your interest, curriculum vitae and the names of three references as soon as possible but no later than September 30th, 2020, to:

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