



5009 CHAPEL SQUARE, ST. FRANCIS XAVIER UNIVERSITY, ANTIGONISH, NS, CANADA, B2G 2W5

Job: Postdoctoral Research Associate in trace gas emissions and micrometeorology

Description: The FluxLab research group, within the Department of Earth Sciences at St. Francis Xavier University, invites applications for a Postdoctoral Associate in the area of trace gas emissions and micrometeorology. Based in beautiful Antigonish, Nova Scotia, the candidate will conduct applied research related to emissions quantification, footprint modelling, and dispersive atmospheric transport. He or she will be responsible for developing algorithms to fit within a suite used for detecting and attributing fugitive emissions in fossil energy developments. The candidate is also expected to undertake validation experiments at sites across North America, analysis of field data, and writing of scientific papers. The successful candidate will work in team of ~20 technicians, graduate, and undergraduate students. It is expected that the candidate will take on leadership and management roles within the research group, and a strong advisory role in graduate student projects.

Basic Qualifications: Candidates should have completed a PhD in Micrometeorology, Atmospheric Physics, Environmental Engineering, or a related field. He or she must have excellent computational literacy and facility in R, one additional programming or scripting language, and ideally Python and SQL. Prior experience or training in the use of Cavity Ringdown, Off-Axis Integrated Cavity, or Tunable Diode laser instrumentation is desirable (especially in the field), as is experience with the use of supercomputing clusters. Candidates must also demonstrate excellent communication skills, and an interest in managing relationships with external research stakeholders including private industry, provincial and federal regulators. A valid driver's license is also required.

Appointment: The anticipated start date is mid-July 2016, subject to budgetary approval. The proposed appointment is for one year, renewal up to three years based on performance. This is a full-time appointment at 37.5 hours per week with a benefits package. We offer a competitive salary starting at \$45,000, commensurate with experience.

Research Unit: The successful applicant will work within Dave Risk's dynamic FluxLab group, which specializes in trace gas monitoring for industrial and polar applications. The group works with over 30 industry partners and governmental regulators, and the candidate is likely to build a very strong network of contacts. Extensive and unpublished trace gas and meteorological datasets are already in hand, and the candidate's efforts should quickly translate into publications. Infrastructure includes trucks equipped with various bulk gas and isotopic analyzers, gas chromatographs, gas blending facilities, a FLIR emission camera, and supercomputing resources provided by ACE-Net. There would also be some capacity to take on sessional teaching appointments within Earth Sciences, Physics, Chemistry, or Engineering. The lab group provides a casual but fast-moving research environment that provides excellent opportunities for personal growth. <http://www.fluxlab.ca>. With this project, the FluxLab aims to measurably reduce GHG emissions from industry, and seeks a candidate motivated to make a difference.

Application Process: Applicants should provide a cover letter, curriculum vitae, and contact information for three referees. Samples of research output (posters, published articles) are also welcomed. Applications should be sent electronically (single pdf preferred) to Dave Risk (drisk@stfx.ca) with the subject header "Let's reduce emissions". The review of applications will begin on June 24, 2016 and will continue until the position is filled. We thank all applicants for their interest in St. Francis Xavier University, but only those selected for interviews will be contacted.

