



Postdoctoral Research Associate –

Methane Emissions Quantification & Mitigation

The Energy and Emissions Research Lab (EERL) at Carleton University is seeking a highly motivated Postdoctoral Research Associate to further pioneering research in methane measurement and mitigation as part of our team. The successful candidate will have the opportunity for significant research impact, contributing to new and ongoing methane emissions inventory development; monitoring, reporting, and verification (MRV) protocols; mitigation policy and regulatory impact analysis; and formal and informal dissemination of insights to stakeholders across government, industry, and academia. They will collaborate closely with students, research associates, and project partners, and will have the opportunity to support a wide range of existing projects relevant quantifying and reducing anthropogenic methane emissions. Additionally, the candidate will assist with report writing, grant applications, journal publications, and conference presentations.

The position is open immediately for an initial one-year appointment, with the likelihood of extension based on success with our team and funding availability.

Candidate Qualifications:

Candidates must have completed a Ph.D. degree in Mechanical, Aerospace, Chemical, or Environmental Engineering, Atmospheric Sciences, or in a closely related field. The ideal candidate would have direct research experience and skills in one or more of the following areas:

- Emissions characterization in the oil and gas industry and inventory development
- Measurement Reporting & Verification protocols (MRV)
- Regulatory impact analysis
- Waste sector emission measurement

Desired Technical Skills & Experience:

- General love of problem solving, attention to detail, and desire to learn while tackling new challenges;
- Strong data analysis skills with experience in uncertainty analysis and statistical methods;
- Analysis and simulation skills (e.g. MATLAB or Python);
- Excellent written and oral communication skills (English);
- Ability to take initiative and work independently in a dynamic environment;
- Track record of peer-reviewed publications and willingness to present at academic conferences;
- Experience with ArcGIS or QGIS tools;
- Experience in conducting research or working in the oil and gas industry or waste sector;
- Willingness to travel for field experiments and perform technical tasks in field conditions.

Please clearly outline in your cover letter how you meet some (or all!) of these criteria.

Position and Salary Conditions:

The Postdoctoral Research Associate is a full-time grant-funded position based at Carleton University in Ottawa, ON, Canada. Salary is negotiable to be commensurate with the applicant's qualifications and experience.

Applications:

Applications will be reviewed on an ongoing basis until the position is filled. Applications must include a CV, publication history, and a cover letter clearly outlining how past research and experience provide the essential qualifications to undertake the project. Additionally, contact information for three references should be available upon request.

We encourage you to apply even if your skills and experience don't exactly match the qualification requirements. Please explain in your cover letter how your skills are relevant to the posted position.

Please direct applications to: Professor Matthew Johnson (Scientific Director of EERL)
eerl@carleton.ca

EERL is committed to fostering diversity within its community as a source of excellence, cultural enrichment, and social strength. We welcome applications from those who would contribute to the further diversification of our group and university including, but not limited to: qualified women, visible minorities, First Nations, Inuit and Métis peoples; persons with disabilities; and persons of any sexual orientation or gender identity and expressions.

Energy & Emissions Research Lab (EERL):

Carleton University's Energy and Emissions Research Lab (EERL) is one of Canada's premier environmentally-focussed research labs, internationally renowned for its highly-cited interdisciplinary research designed to understand, quantify, model, and mitigate airborne pollutant emissions from global upstream energy production. Led by Prof. Matthew Johnson, EERL collaborates with a wide range of stakeholders to provide actionable data to reduce emissions. The lab leverages its unique expertise in advanced data analytics, extensive field measurements, cutting-edge measurement technologies, and unparalleled experimental capabilities to inform regulations, drive mitigation efforts and ultimately make a significant impact both in Canada and worldwide.