

Postdoctoral Research Associate

The Energy and Emissions Research Lab (EERL) at Carleton University is seeking a highly motivated Postdoctoral Research Associate to join our dynamic team and bring their expertise to the cutting-edge research in methane measurement and mitigation. Specifically, a successful candidate will lead various stages of methane emissions inventory development and the dissemination of data to stakeholders across academia, industry, and government. They will collaborate closely with students, research associates, and project partners, and will have the opportunity to support and lead a wide range of existing projects relevant to oil and gas and waste sector emissions. Additionally, the candidate will assist with report writing, grant applications, journal publications, and conference presentations.

The position is open immediately with funding secured for an initial appointment until March 31, 2026, with the possibility of extension based on 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
- Inventory development and/or Measurement Reporting & Verification protocols (MRV)
- Waste sector emission measurement

Desired technical skills & Experience:

- Strong data analysis skills and statistical background (e.g. understanding of statistical methods/models for the characterization and propagation of uncertainty such as Monte Carlo, Bayes);
- 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;
- Proficiency in 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) <u>eerl@carleton.ca</u>

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) conducts cutting-edge, internationally renowned, highly-cited interdisciplinary research designed to understand, quantify, model, and mitigate airborne pollutant emissions associated with global upstream energy production. Headed by Prof. Matthew Johnson, EERL combines advanced experimentation and simulation in both large-scale controlled lab experiments and field work, leveraging a range of advanced optical diagnostics and experimental capabilities unparalleled in Canada.