Co-op Student or Research Associate

The Energy and Emissions Research Lab (EERL) at Carleton University, Ottawa, Canada is accepting applications for immediate co-op placements. As part of our broader campaign to measure methane emissions from the energy and waste sectors, EERL is conducting UAV-based aerial measurements in winter 2026. The successful applicant will be a part of a collaborative team responsible for ensuring UAV equipment readiness for the upcoming fieldwork, payload / sensor integration and communication, and development of ground-control systems. The position is open immediately with funding secured for an initial 4 months (co-op duration) with the possibility of extension.

Candidate Qualifications:

It's preferable that a candidate has a degree or is currently an upper-year student enrolled in a program in Electrical, Electronics, Communications, Computer, or Mechanical Engineering, or in a closely related field. The candidate should have direct research experience and skills in the following areas:

- Hands-on experience in hardware integration, specifically including development of Arduino or Raspberry Pi based systems;
- Strong programming skills in C++ and Python;
- Knowledge and experience with communication protocols for compact remotely-controlled systems design;
- Experience with UAVs (drones) preferred;
- Experience with embedded systems and PCB design preferred;
- Excellent written and oral communication skills (English);
- Ability to take initiative and work independently in a dynamic environment;
- Willingness to travel for field experiments and perform technical tasks in the field conditions.

Please clearly outline in your cover letter how you meet all or a number of these criteria.

Position and Salary Conditions:

The Co-op is a full-time position based at Carleton University in Ottawa, ON, Canada. The initial appointment will be for up to 4 months with funding of $23.40 / hour for a 40-hour week. The position has the potential to be extended up to 8 months, in line with the co-op term duration.

Applications:

Applications will be reviewed on an ongoing basis until the position is filled. Applications must include a CV, and a cover letter clearly outlining how past research and experience provide the essential qualifications to undertake the project. We encourage candidates to share examples of prior relevant work projects. Additionally, contact information for three references should be available upon request.

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 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 to apply.

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, Canada Research Professor in Energy & Combustion Generated Pollutant Emissions, 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.