Project Officer, FlareNet and Energy & Emissions Research Lab.

The NSERC FlareNet Strategic Network (FlareNet), led out of Carleton University's Energy & Emissions Research Lab (EERL), is seeking a Project Manager whose work and responsibilities will be central to the operations, success, and impacts of FlareNet and EERL. The position is a 1-year renewable contract position located at Carleton University. Salary will be commensurate with experience and is anticipated to be in the range of $60,000-82,000/year plus benefits.

The Project Officer's responsibilities will include:

- Administration of all financial aspects of FlareNet and EERL research including but not limited to control and accountability on a day-to-day basis and preparing financial reports for NSERC, the Scientific Advisory Board (SAB), and Board of Directors (Board) as required
- Liaising with partner University departments (Research Accounting, Research Services, and other departments as necessary) to ensure timely processing of all financial and other reporting
- Ensuring that all NSERC reporting requirements are met
- Overseeing day-to-day management of the Network including administrative and executive assistance to the Scientific Director
- Managing the communications of the Network and working to ensure that partners and researchers are fully informed about ongoing activities; coordinating transfer of data and reports as appropriate
- Procuring, editing, and compiling up-to-date technical and financial data for research projects in a timely manner and in accordance with any reporting requirements of relevant funding agencies and partners. This may include, but is not limited to:
    - Project progress reports (both financial and narrative)
    - Annual progress reports (both financial and narrative)
    - FlareNet Budgets
- Organizing meetings of the Board of Directors and maintaining agendas and minutes of meetings
- Scheduling regular internal network program meetings and meetings of the Scientific Advisory Board
- Developing and managing content of the FlareNet and EERL websites
- Promoting research collaboration among all network participants, exchanges of personnel among labs, and interfaces with network partners including:
    - Assisting in arranging exchanges of personnel among facilities including travel and logistics
    - Coordinating schedules of major facilities, and working with partners to organize field measurements
- Working with news media to draft and submit new releases and profile-raising stories as appropriate; making summary materials, imagery, and videos available upon request; fielding and directing outside inquiries for information such that technical experts within EERL and FlareNet can promote the importance of our research and the impacts of its results
- Assisting HQP trainees where possible to help them advance their careers by promoting themselves, their projects, and their collaborative work within FlareNet and EERL
- Working to create an environment that enhances the collective training experiences of HQP
- Other duties as required to contribute to the success of EERL and FlareNet

Qualifications

The following skills, experience, and qualifications are required:

- Completion of a √
- A minimum of 2-4 years of experience with:
    - Administration of large projects;
    - Financial reporting;
    - Academic and industrial partners; and
    - Research accounting systems
- Ability to multi-task and prioritize, with strong organizational and administrative skills
- Excellent written communication skills including ability to edit and contribute to development of written reports and funding applications
- Excellent interpersonal and communication skills
- Excellent research and analytical skills
- Proficient in the use of computers and associated software
- Ability to work well in a dynamic environment with minimal supervision
- Flexibility in identifying and solving problems and tackling new tasks as necessary

Qualified applicants are encouraged to submit resumes with cover letter asap. The target start date is as early as December 1, 2021, and applications will be accepted and reviewed as they arrive until the position is filled.

About EERL and the NSERC FlareNet Strategic Network

Carleton University's Energy and Emissions Research Lab (EERL) conducts internationally renowned, highly-cited interdisciplinary research designed to understand, quantify, model, and mitigate greenhouse gas and airborne pollutant emissions associated with global upstream energy production. Headed by Prof. Matthew Johnson, EERL conducts large-scale experiments at three main facilities – the large-scale flare measurement lab and optical sensor technologies labs at Carleton University, and the boundary layer wind tunnel facility at Western University – and employs a range of advanced optical diagnostics and experimental capabilities unparalleled in Canada. These large-scale experiments are backed by extensive field work, and as of 2019 EERL has successfully completed field measurement studies on four continents.

EERL is currently the lead institution of the NSERC FlareNet Strategic Network (www.flarenet.ca) and collaborates closely with government and industry nationally and internationally, drawing direct and in-kind support from the Natural Sciences and Engineering Research Council (NSERC), Natural Resources Canada (NRCan), Environmental Defense Fund (EDF), Petroleum Technology Alliance of Canada (PTAC), the World Bank Global Gas Flaring Reduction (GGFR) partnership, Department of National Defense (DND) Canada, and Environment & Climate Change Canada (ECCC). EERL boasts a highly-skilled and seasoned team of Ph.D. and Masters-level engineers with a broad range of technical expertise and extensive field experience.

Notable ongoing and recent projects of EERL include:
- Large-scale airborne methane measurement surveys at oil and gas production sites across western Canada backed by field work including controlled methane releases and in-situ wind measurements

- Flare volume flow rate and composition measurements at oil production sites in Ecuador's Amazon Basin as part of a World Bank led mitigation project in collaboration with Petroamazonas EP.
- Quantitative assessment of detection sensitivity and measurement accuracy of a novel airborne methane measurement platform deployed in Northern British Columbia in collaboration with BC OGRIS and BC MERC
- Flare black carbon measurements and upstream production sites in Western Canada in collaboration with industry partners in the FlareNet strategic network as part of ongoing to develop improved black carbon emissions factors for NPRI reporting in Canada.
- Fenceline spectroscopic measurements of atomic emission signatures in flare flames in North Dakota as part of FlareNet research to understand prevalence of liquid carry-over into flare systems at upstream production sites.
- Measurements of methane destruction efficiencies and carbon conversion efficiencies of flares with and without crossflow using large-scale experimental facilities at Carleton University and Western University

NSERC FlareNet Strategic Network

FlareNet is a partnership of five Canadian Universities – Carleton University, University of Alberta, Western University, University of British Columbia, and University of Waterloo – backed by national and international partners including Natural Resources Canada, Petroleum Technology Alliance of Canada (PTAC), World Bank Global Gas Flaring Reduction (GGFR) partnership, Environment and Climate Change Canada (ECCC), Alberta Energy Regulator (AER), and National Research Council (NRC). The core objective of FlareNet is to quantify flare generated pollutant emissions to enable science-based regulations, accurate pollutant inventories, understanding of climate forcing and health implications, and engineered mitigation strategies to mitigate environmental impacts in the energy sector.

Background

Emissions from flaring are a significant global concern. Satellite data suggest worldwide flared volumes exceed 140 billion m^3 annually, where much of it is associated with development of unconventional oil and gas resources. In addition to being an important source of climate forcing CO_2 and methane emissions, flaring is implicated as a critical source of black carbon and other air toxic species. However, data and models to accurately predict flare emissions are critically lacking such that current emission factors relied upon to calculate pollutant inventories and guide regulation are questionably relevant. This creates significant barriers to mitigation, especially internationally. Moreover, there are specific pollutant emissions concerns with flaring in applications such as flowback operations, which have potential to entrain and burn aerosol species originating as injected fracturing fluids and/or returning formation liquids. Understanding these issues is critical to developing standards and regulations to prevent emission of key pollutants. More broadly, carbon pricing mechanisms (a key part of national and international regulatory strategies and pledges under COP26) will continue to have limited impact on flares without the ability to accurately quantify emissions, especially the enhanced climate forcing impacts associated with emitted methane and black carbon. The NSERC FlareNet strategic network integrates leading Canadian researchers and national and international partners capable of meeting these research challenges. Through ambitious, collaborative, large-scale experiments, FlareNet is designed to significantly advance fundamental and applied research in pollutant mitigation, directly impacting new policy and regulation in Canada and internationally.