

Funded Postdoctoral Scholar Position in Air Quality Research

Job Description

Professors Patrick Hayes' and James King's research groups, in the Departments of Chemistry and Geography at University of Montreal, are currently seeking to hire a postdoctoral scholar to develop new methods for characterizing the emissions of airborne particulate matter (PM_{2.5}). The planned work is part of a study to better understand the impacts of the smelting industry on air quality in the province of Quebec.

The successful candidate will conduct field work at a site in northern Québec to deploy a system of optical particle counters (OPCs) and meteorological stations, among other instruments. The resulting data will be utilized to study the emissions from operations and other processes occurring at a smelter such as the transport of raw materials, the smelting of ores, and the aeolian erosion of raw materials.

The position is renewable for a second year. Information regarding salary and benefits can be provided upon request. The postdoctoral scholar will be based at the new Campus MIL in Montréal, with frequent travel (3 - 4 trips per year) to field sites in northern Québec.

University of Montreal is ranked among Canada's top three research universities, and living in the city of Montreal has many academic, financial and cultural advantages, including the presence of four major universities and a relatively low cost of living.

Required Job Qualifications

- A Ph.D. degree in atmospheric science, atmospheric chemistry, geography or a closely related field.
- Experience with measurements of atmospheric aerosols.
- Intermediate or advanced knowledge of spoken and written French, or willingness to learn French.
- The applicant must have received their Ph.D. diploma within the past 5 years.

Preferred Qualifications

- Experience conducting and analyzing meteorological measurements, and in particular wind measurements.
- Previous experience with field work.
- Knowledge of different methods for mining large datasets (neural networks, etc.).

Application

Applicants should send a CV, the names of two references, and a brief statement of research interests (approximately 1 page) to Professors Hayes (patrick.hayes@umontreal.ca) and King (js.king@umontreal.ca). Priority consideration will be given to applications submitted before August 1st, 2024. The appointment will begin fall 2024 or winter 2024-2025.

Professor Hayes' research website: <https://hayesgroup.wixsite.com/home>

Professor King's research website: <https://draeolus.com/>