

POSTDOCTORAL POSITION AVAILABLE PEACH: A ROUTE TO LARGE SCALE CARBON DIOXIDE REMOVAL

The University of Calgary Climate Solutions Group seeks a postdoctoral researcher to join our transdisciplinary research and development team focused on large-scale carbon dioxide removal. The successful candidate will lead our team's efforts to verify the principle and technical elements of the proposed PEACH Direct Air Capture device at the lab scale and then develop and assess models for determining life cycle impacts and costs of scaled terrestrial and marine systems. The team intends to demonstrate a complete pilot system by 2025, while developing regulatory and governance criteria for the possible implementation of technical pilot(s) at the field scale in 2028. The PEACH electrochemical capture system uses a novel method of modifying aqueous solution chemistries to readily uptake CO₂, which can be further processed to provide a carbon-containing stream for storage in geological or ocean settings. The intention is that the system would be powered by renewable electricity on terrestrial or marine platforms.

Required Qualifications

- a PhD in Chemistry, Chemical Engineering, Geochemistry, Ocean Science, Material Science, or related discipline, in the last 3 years.

Preferred Qualifications (Ideal candidates will have at least one of the following):

- Experience with the geochemistry of natural waters, including the oceans
- Experience with numerical modeling of the (geo)chemistry of aqueous solutions
- Laboratory experience with geochemical, electrochemical and/or battery technology experiments
- Experience with materials characterization, including surface/interface analysis.
- Interest in climate technology innovation and taking part in a startup company

Please review the [Postdoc Eligibility Guidelines](#) for more information prior to applying.

Application details:

Evaluation of applications will begin on February 18, 2022 and continue until the position is filled. Interested applicants may direct any inquiries about the position to Prof. Steve Larter (slarter@ucalgary.ca). To apply, please submit your application via email as a **single PDF file** with the **subject line: PEACH Postdoctoral application – [Your name]** to slarter@ucalgary.ca

All applications must include the following documents:

- 1) **one-page cover letter** expressing interest in this position, including date of availability, suitability and motivation for the role
- 2) current **curriculum vitae** (CV) that includes a list of all publications
- 3) A **one-page research and innovation statement** summarizing previous research and innovation experience as appropriate
- 4) official or unofficial copy of **diploma(s)/university certificate(s)**; and
- 5) the names and contact information of at least **two (2) referees** with knowledge of your research and academic experience to support your application

Only those applicants selected for interviews will be contacted further.

Applicants who are not Canadian citizens or Permanent Residents of Canada are advised to visit [Information for International Postdoctoral Scholars](#) for more information. To learn more about postdoctoral scholar opportunities at the University of Calgary and all we have to offer, view our [Postdoc Careers website](#).

About us



Five research groups are represented in the Climate Solutions Group: From the Faculty of Law, the research group of Prof. [Anna Maria Hubert](#); from the Schulich School of engineering, the research group of Prof. [Md Kibria](#); and, from the Faculty of Science, the research groups of Profs. [Venkataraman Thangadurai](#), [Ben Tutolo](#), and [Steve Larter](#).

About the University of Calgary

The University of Calgary is Canada's leading next-generation university – a living, growing and youthful institution that embraces change and opportunity with a can-do attitude. Located in the nation's most enterprising city, the university is making tremendous progress on its Eyes High journey to be recognized as one of Canada's top five research universities, grounded in innovative learning and teaching and fully integrated with the community it both serves and leads. The University of Calgary inspires and supports discovery, creativity and innovation across all disciplines. For more information, visit ucalgary.ca.

Additional information

The terms and conditions of employment are covered under the UCalgary and PDAC Collective Agreement. To find out more about postdoctoral scholar program at the University of Calgary visit our [Postdocs](#) website.

About Calgary, Alberta

Calgary is one of the world's cleanest cities and has been named one of the world's most livable cities for years. Calgary is a city of leaders – in business, community, philanthropy and volunteerism. Calgarians benefit from the strongest economy in the nation and enjoy more days of sunshine per year than any other major Canadian city. Calgary is less than an hour's drive from the Rocky Mountains and boasts the most extensive urban pathway and bikeway network in North America.

The University of Calgary and our research team recognize that a diverse staff/faculty benefits and enriches the work, learning and research experiences of the entire campus and greater community. We are committed to removing barriers that have been historically encountered by some people in our society. We strive to recruit individuals who will further enhance our diversity and will support their professional success while they are here. We encourage all qualified applicants to apply, however preference will be given to Canadian citizens and permanent residents of Canada.