



## UNIVERSITY OF CALGARY

### Postdoctoral Scholar position

<b>Area:</b>	aqueous geochemistry and reactive transport
<b>Duration:</b>	1 year, with the possibility of extension
<b>Start date:</b>	1 October 2020
<b>Salary:</b>	≥\$45,000/year plus Plan C Postdoctoral Health Insurance benefits

The **Department of Geoscience** in the Faculty of Science at the University of Calgary is accepting applications for a Postdoctoral Scholar in **aqueous geochemistry and reactive transport** as part of the Tutolo Reactive Transport Group. This full-time fixed term position is for one year and may be renewed contingent on satisfactory performance and availability of funding.

#### **Job Description:**

The successful candidate will be permitted to lead a project of their choosing within the context of the active research projects in the Reactive Transport Group, led by Dr. Benjamin Tutolo. Possible project topics include, but are not limited to, silicification of carbonate rocks, diagenesis in alkaline lakes, complex organic molecule generation in hydrothermal systems, neutron scattering investigations of porosity evolution, non-traditional isotope investigations of mineral-fluid reaction rates, and geologic CO<sub>2</sub> mineralization.

The candidate will be based in the Tutolo Reactive Transport Group, which is part of the Department of Geoscience, and will have routine access to an extensive suite of analytical tools, including (MC)-ICP-MS, TIMS, ICP-OES, GC-MS, LC-MS, FT-ICR-MS, a fully outfitted stable isotope facility, NMR, XRD, Raman and SEM microscopy, and high performance computers outfitted with geochemical modeling and thermodynamic software, all hosted at the University of Calgary.

More information about active research can be found on the RTG website:

<https://www.ucalgary.ca/reactive-transport/research>.

#### **Major Duties/Responsibilities may include:**

- Perform experiments examining water-rock interactions at ambient to hydrothermal temperatures
- Analyze experimental run products using analytical techniques geared towards both solid and fluid characterization
- Run reactive-transport simulations of relevant water-rock interactions
- Present and report research results and publish scientific results in peer-reviewed journals in a timely manner
- Maintain a safe, collegial, interactive, and welcoming research environment

**Qualifications:**

The position requires excellent communication and interpersonal skills, intellectual independence, and a willingness to explore unfamiliar aspects of the geosciences. The successful candidate will also possess:

- Recent PhD\* in the geosciences or a closely related field, including but not limited to geology, geochemistry, or sedimentology.
- Experience performing aqueous geochemical experiments and using geochemical equilibrium and/or reactive transport models is highly desirable.
- Firm grasp of aqueous geochemistry
- Research experience in an aqueous geochemical laboratory, preferably performing experiments and analyses
- Experience using geochemistry as a tool to decipher Earth processes and Earth's history
- Experience with geochemical and/or reactive transport modeling
- Excellent written and oral communication skills

\*To be eligible as a Postdoctoral scholar at the University of Calgary, you must have been awarded a **PhD** or equivalent degree within **five (5) years immediately preceding the appointment**. Please review the [Postdoc Eligibility Guidelines](#) for more information prior to applying for this position

**Application details:**

More information about ongoing research in the Reactive Transport Group may be found at:

<https://www.ucalgary.ca/reactive-transport/research>. Inquiries about possible projects can be directed to Dr. Benjamin Tutolo ([benjamin.tutolo@ucalgary.ca](mailto:benjamin.tutolo@ucalgary.ca)).

This position is located in Calgary, Alberta. The University of Calgary offers a collegial, bustling geoscience community and world-class instrumentation in a modern city at the heart of the Canadian energy industry, just over an hour from the Canadian Rockies. The successful candidate is expected to relocate if necessary, to begin work as soon as possible.

For full consideration, please submit your applications **on or before September 23, 2020** via email to [benjamin.tutolo@ucalgary.ca](mailto:benjamin.tutolo@ucalgary.ca).

All applications must be submitted as a **single .pdf document** and must include:

- a one-page cover letter including date of availability, suitability and motivation for the role
- a one-page research statement summarizing previous research experience
- current curriculum vitae (CV) with a list of all publications
- unofficial or official copy of diploma(s)/university certificate(s); and
- the names and contact information including email addresses for at least two referees with knowledge of your research and academic experience

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

*Only those applicants selected for interviews will be contacted further. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada, although others are encouraged to apply.*

To learn more about postdoctoral scholar opportunities at the University of Calgary and all we have to offer, view our [Postdoc Careers website](#).

### **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](http://ucalgary.ca).

To succeed as one of Canada's top universities, where new ideas are created, tested and applied through first-class teaching and research, the University of Calgary needs more of the best minds in our classrooms and labs. We're increasing our scholarly capacity by investing in people who want to change the world, bringing the best and brightest to Calgary to form a global intellectual hub and achieve advances that matter to everyone.

### **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 recognizes 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.*