



UNIVERSITY OF CALGARY

Postdoctoral Associate position:

Area: Phosphorite diagenesis and ancient ocean chemistry

Timeframe: 1 year with the possibility of extension depending on progress

Start date: Fall 2023 (negotiable)

Salary: \$50,000/year plus benefits

Application Deadline: July 15, 2023

Applications are invited for a Postdoctoral Associate to study the processes leading to the genesis of sedimentary phosphorite deposits and their implications for evolving seawater chemistry. The successful candidate will perform simulated diagenesis experiments in the Reactive Transport Group laboratory at the University of Calgary (<https://www.ucalgary.ca/reactive-transport/lab>), with access to a purpose-built experimental laboratory and an extensive in-house suite of fluid and solid analytical equipment. The project is funded as part of the Natural Resources Canada Targeted Geoscience Initiative, in the context of guiding exploration efforts for targeting REE-enriched phosphorite units as potential critical mineral resources.

The successful candidate will have the opportunity to work on other active research projects the University of Calgary (www.geoscience.ucalgary.ca/reactive-transport/).

Candidates should have a PhD in Geoscience or a related field. The ideal candidate will have experience working in a laboratory setting. Experience characterizing fluid and solid chemistry using techniques such as ICP-MS, ICP-OES, IC, Raman, and/or XRD will be considered advantageous. Success in the RTG laboratory requires excellent communication and interpersonal skills, intellectual independence, and scientific curiosity.

Major Duties/Responsibilities:

- Perform process-based experiments to simulate the process of phosphorite formation
- Analyze experimental run products using fluid and solid characterization techniques
- Numerically simulate the fate of phosphorus during sedimentary diagenesis and its implications for REE enrichments and seawater chemistry
- Present and report research results at conferences, in peer-reviewed journals, and to the funding agency in a timely manner
- Maintain a safe, collegial, interactive, and welcoming research environment.

Application details:

Interested applicants should contact please contact Dr. Benjamin Tutolo (benjamin.tutolo@ucalgary.ca) to apply and/or inquire for more details. **Members of underrepresented groups, particularly women and people of color, are specifically encouraged to apply.**

Attach in **ONE single PDF** document the four documents listed below:

- a CV with a list of publications;
- a 2-page cover letter expressing interest in this position and summarizing previous research experience.
- the contact information of two referees that are familiar your research and academic experience.

The application package should be sent to benjamin.tutolo@ucalgary.ca. Applications will be reviewed as they are received; **all applications received by July 15, 2023 will receive full consideration**. Only those who have been selected for interviews will be contacted further.

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.