

PhD studentship opportunity – Rare earth elements in clay deposits: dating and chemical speciation

The Department of Geological Sciences at the **University of Saskatchewan** invites applications for a **funded, full-time PhD studentship**. The start date would be May 2027, Sep 2027 or Jan 2028.

About the Position:

The project focuses on the sedimentary deposits enriched in rare earth elements (REE) in Saskatchewan. The student will investigate how the REE are associated with the deposits and develop geochronological methods to understand their diagenetic and enrichment history. This research will contribute to our understanding of critical mineral formations in Canada. The skills gained through this project will be applicable to a variety of sedimentary deposits.

The student will be based full-time on the Saskatoon campus of the University of Saskatchewan in Canada. The PhD student will be supervised by Dr. Man-Yin Tsang (<https://artsandscience.usask.ca/profile/MTsang>) in the Department of Geological Sciences at the University of Saskatchewan.

Required qualifications:

- Research-based Master's degree in a related discipline, such as Geoscience, Mineralogy, Chemistry, or Physics.
- Strong academic performance (GPA $\geq$ 80%).
- Conducting lab experiments with care and attention to detail.
- Comfortable with mathematical calculations.
- Proficient in written and verbal communication in English.
- An international student would need to secure a student visa prior to the start date.

Preferred qualifications:

- Research experience relevant to REE speciation, clay mineralogy, mineral irradiation, electron spin resonance, or synchrotron analysis.

How to Apply:

Please email with the subject '**PhD REE**' to Dr. Man-Yin Tsang at my.tsang@usask.ca

Your email should include:

1. Curriculum vitae
2. Transcripts (online screen captures are okay at this stage)
3. The intake questionnaire at the end of this document

Suitable candidates will be contacted for further information. Review of applications will begin in Nov 2026 and continue until the position is filled. The PhD student will receive a stipend but will be responsible for tuition and student fees. More information about the Geological Sciences PhD program can be found here:

<https://grad.usask.ca/programs/geological-sciences.php>

The [University of Saskatchewan](#) is one of Canada's 15 leading research-intensive universities, USask provides a highly collaborative research environment with some of the best facilities and analytical tools in Canada, including a synchrotron facility (the Canadian Light Source). The [Department of Geological Sciences](#) is recognized internationally for excellence in research and training. Our faculty, students, and staff explore physical, chemical, and biological processes that have shaped our planet over the last 4.6 billion years.

[Tsang Lab Research Interest Form]

Thank you for your interest in joining our research team!

Please take ~20 mins to answer the following questions. You are not expected to spend too much time on this application and we only expect short answers – and there are no “wrong answers”. This is not a test, but an opportunity for us to learn more about you and your interest in our group. This helps both you and us understand if we are a good mutual fit, and what type of work would be most suitable for you on the team. If we are a good fit, we will set up meetings to discuss further.

1. Please introduce yourself. What specifically interests you in joining our team?

2. If you are aiming for specific opportunities that have been advertised, or if you have a research idea that you would like to pursue, please specify.
Additional:
 - *Potential graduate students:* when would you be able to start?

3. Do you have any specific background that may be helpful for studying the area(s) of interest you mentioned above? (These can be courses, background, experiences, skills, talks attended, reflection from papers read, etc.)

4. What skills or knowledge would you like to gain before you graduate from this Usask program?
What is your current career goal?

5. Anything else you would like to tell me? (Optional)

Thank you for your responses!