

Stephen Schroeder

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SKILLS

PROGRAMMING

Competent

NumPy • Pandas • Matplotlib
• Wolfram Language • Matlab

Familiar

C++ • SQL

LABORATORY

Basic chemistry skills • XRD • ICP-OES

MISCELLANEOUS

LaTeX • Science Communication

• Resource Estimation • Geologic Mapping • Petrographic Microscopy

COURSEWORK

UNDERGRADUATE

Geostatistics • Mining Geophysics

• Aqueous Geochemistry • Physical Hydrogeology • Geochemical Processes
• Siliciclastic Sedimentology
• Surficial Systems • Write & Review Scientific Reports • Engineering Geology
• Structural Geology • Field Methods

PRESENTATIONS

RISE GERMANY PRESENTER

August 2018 | Heidelberg, Germany
Presented findings from work done on Oligocene paleoenvironment project to a group of multidisciplinary students.

UNDERGRADUATE RESEARCH NIGHT PRESENTER

December 2018 | Calgary, AB
Created a presentation to share my research experience, and help undergraduate students aspiring to get involved in academic research.

LANGUAGES

NATIVE

English

INTERMEDIATE

German • French

EDUCATION

BSC HONORS IN GEOLOGY | UNIVERSITY OF CALGARY

In Progress - Graduation April 2019 | Calgary, AB

- Thesis Title: Carbon Storage Dynamics of Saline lakes in the Cariboo Plateau, British Columbia
- Interpreted aqueous and mineral data using Geochemists' Workbench
- Modelled lake geochemistry and potential to sequester atmospheric CO₂
- Prepared rock and aqueous samples for Optical Emission Spectrometry, Ion Chromatography, and X-Ray Diffraction analysis

EXPERIENCE

UNDERGRADUATE RESEARCHER | UNIVERSITY OF CALGARY

January 2019 - Present | Calgary, AB

Held a grant-funded position to perform undergraduate research. Responsible for experimental design, literature review, and geochemical modelling of pyrite oxidation.

- Thesis Title: Laboratory Constraints on the Kinetics of Pyrite Oxidation in Alkaline Waters

PODCAST HOST | ENDEAVOUR PODCAST

July 2018-Present | Calgary, AB

Hosted a weekly podcast, interviewed academics of diverse backgrounds and communicated their stories and science to the general public. Developed and maintained podcast hosting and social media.

RESEARCH ASSISTANT | PALEOENVIRONMENTAL DYNAMICS GROUP

Summer 2017, Summer 2018 | Heidelberg, Germany

Supported research on Oligocene palaeoceanography and cryosphere modelling. Prepared, weighted, and diluted samples for ICP-OES analysis.

- Interpreted data and its relevance to the paleoclimate model
- Identification of foraminiferal morphospecies under a microscope
- Analysis of microscope and stable isotope data using Excel
- Proven ability to work collaboratively and effectively in a team

STUDENT ASSISTANT | UNIVERSITY OF CALGARY

September 2016 - May 2017 | Calgary, AB

Volunteered in a lab setting, supporting research on Swift Current Creek vertebrate fossil material.

AWARDS & HONORS

UNDERGRADUATE STUDENT RESEARCH AWARD

January 2019 | Natural Sciences and Engineering Research Council of Canada
Awarded one of 3 competitive research grants available to the Geoscience department. The grant supported my research on pyrite oxidation.

RESEARCH INTERNSHIPS IN SCIENCE AND ENGINEERING SCHOLARSHIP

May 2018 - August 2018 | German Academic Exchange Service

One of 79 Canadian Undergraduate students to receive the RISE scholarship, which funds travel and a stipend to assist a graduate student's research at an academic institution in Germany.