



Valerie Breanne Rosen

Ph.D. Student in Geological and Environmental Sciences, admitted Winter 2015

Bio

EDUCATION AND CERTIFICATIONS

- B.S. with Departmental Honors, Stanford University , Department of Geological & Environmental Sciences (2013)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Investigating the application of stable Ni isotopes as a biosignature for methanogens in the geologic record. Developing a chemistry protocol for analyzing the stable Ni isotope composition of both abiotic and biotic samples in Stanford University's picotrace metal-free clean laboratory.

LAB AFFILIATIONS

- Kate Maher, Environmental Isotope Geochemistry (1/3/2011)

Publications

PUBLICATIONS

- **Evaluating solute dynamics and methane transformation in high-elevation Rocky Mountain fens using a transporter-transformer framework** *CHEMICAL GEOLOGY*
Martin, V., Winnick, M., Saccardi, B., Bill, M., Conrad, M. E., Carroll, R. W. H., Maher, K.
2025; 698

PRESENTATIONS

- Silicate weathering rates and solute fluxes along an erosional gradient, Middle Fork of the Feather River, CA, PP13C-1845 - American Geophysical Union (2011 Fall Meeting) (12/5/2011 - 12/9/2011)
- A Sr and Mg isotopic study of soil and stream waters along an erosional gradient, Sierra Nevada, California, EP41D-0829 - American Geophysical Union (2012 Fall Meeting) (12/3/2012 - 12/7/2012)