

## Hannah Jansen

---

### Project Geochemist

<b>Expertise</b>	Environmental Geochemistry, Geomicrobiology
<b>Education</b>	Ph.D. (Geochemistry), 2017 University of Colorado at Boulder, Boulder, Colorado, USA  B.S. (Environmental Geosciences), 2012 University of Notre Dame, Notre Dame, Indiana, USA
<b>Certifications</b>	MSHA

### Professional Experience

2019 – Present	<i>Itasca Denver, Inc. Lakewood, Colorado</i> <i>Project Geochemist</i>
2017 – 2019	<i>Colorado State University, Fort Collins, Colorado</i> <i>Postdoctoral Researcher in Environmental Chemistry</i>
2012 – 2017	<i>University of Colorado at Boulder, Boulder, Colorado</i> <i>Graduate Research Assistant</i>
Summer 2011, 2012	<i>Pacific Northwest National Laboratory, Richland, Washington</i> <i>Science Undergraduate Laboratory Intern</i>
2010 – 2012	<i>University of Notre Dame, Notre Dame, Indiana</i> <i>Research Assistant</i>

### Project Experience

**Geochemistry:** Characterized hyperalkaline water-rock reactions leading to iron oxidation and hydrogen production in ultramafic rocks; sampled hyperalkaline wells and evaluated fluid geochemistry in the Sultanate of Oman; evaluated iron mineralogy and oxidation states in complex altered ultramafic rocks.

**Stable Isotope Analysis:** Analyzed stable isotope signatures of carbon and hydrogen in methane from microbial cultures to distinguish between abiotic and biotic signatures.

**Data Analysis:** Statistically analyzed and manipulated data using R programming language to analyze large microbial datasets, model methane isotope dynamics, and graphically display data.

### Research

Investigated effects of oil and gas wastewater on agricultural soil health, plant immune response, and soil microbial community.

Monitored Columba River vadose zone for uranium contamination using colorimetric complexing agents.

*Page 2 of 2*

Determined pH ranges under which arsenic and mercury adsorb onto common bacterial species to investigate potential for microbial remediation strategies.

Synthesized and analyzed minerals incorporating neptunium and uranium into their crystal structures to characterize nuclear waste crystallization.