# Kseniya Vialichka

(508) 685-9503 | kseniyav@uoregon.edu

## **EDUCATION**

University of Massachusetts Lowell, Lowell MA
Bachelor of Science in Geoscience Summa Cum Laude | May 2022, 3.85 GPA
University of Oregon, Eugene OR
Doctorate | September 2022 - Present

## **CURRENT LAB WORK**

# Stable Isotopes Lab, University of Oregon, Eugene MA

September 2022 - Present

- Loading samples and corresponding standards into carousel vacuum chamber
- Skillfully operating the MAT235 mass spectrometer to acquire triple oxygen isotope signatures
- Executing precise lasering of samples and guiding the conversion process to isolate O<sub>2</sub> molecules effectively
- Proficiently operating and maintaining the high-temperature conversion elemental analyzer (TC/EA) to acquire deuterium signatures
- Analyzing and interpreting data, seamlessly integrating it into the broader context of the hydrothermal alteration history of the samples

#### RESEARCH EXPERIENCE

- Antarctica's Dry Valleys alluvial fan influence on grain size distribution (2020-2021)
- Geology of New England accreted terrain compositions (2021)
- Columbia River Basalt Chief Joseph Dike swarm paleoaltimetry (2022-present)
- Karoo South Africa mineral grain analysis for  $\delta^{18}$ O and  $\Delta^{'17}$ O (2022-2023)
- Kamchatka VC caldera paleoaltimetry (2023-2024)
- Dharwar India whole rock analysis for  $\delta^{18}$ O and  $\delta$ D (2023-present)

#### **PUBLICATIONS**

• Paleoaltimetry and paleotectonic reconstruction using triple oxygen and hydrogen isotopes: depleted  $\delta^{18}O$  and  $\delta D$  values in ignimbrites of Verkhneavachinskaya caldera in Kamchatka (manuscript under Review)

## RELEVANT SKILLS

- MELTS
- HydroTherm
- Spyder
- GIS

# **CONFERENCE PRESENTATIONS**

 AGU23 | Oral Presentation: Triple Oxygen and Hydrogen Isotope Geochemistry of Intracaldera Deposits of Verkhneavachinskaya Caldera Kamchatka

## **AWARDS & HONORS**

2020 RISE Innovation Award President of National Earth Science Honor Society of Sigma Gamma Epsilon at UML Alpha Alpha Honors Society Omicron Delta Kappa Honors Society Kennedy College of Sciences Ambassador Lokey Scholarship Delta Alpha Pi Honors Society