THOMAS WILLIAMS

+1-401-499-8983 | thomas_williams@brown.edu | www.twilliams.info Department of Earth, Environmental, and Planetary Sciences, 324 Brook Street, Providence, RI, 02912

EDUCATION & QUALIFICATIONS:

Brown University

Sept. 2021 – Present

PhD Student, Dept. of Earth, Environmental, and Planetary Sciences

• Advisors: Stephen Parman and Alberto Saal

Brown University

2025

MSc in Earth, Environmental, and Planetary Science

- Thesis: Lunar volcanic gas cloud chemistry: Constraints from glass bead surface sublimates
- Advisors: Stephen Parman and Alberto Saal

University of Oxford, Worcester College

Oct. 2016 - June 2020

MEarthSci Earth Sciences, Dept. of Earth Sciences

- Awarded a First Class Honours master's degree
- Thesis: "Damaran Leucogranites of the Uis Tin Belt, Northern Namibia: Field Relations, Geochemistry, Origin, and Emplacement"
- Supervisor: Laurence Robb

PUBLICATIONS:

• Williams, T.A., Parman, S.W., Saal, A.E., Akey, A.J., Gardener, J.A., and Ogliore, R.C. Lunar volcanic gas cloud chemistry: Constraints from glass bead surface sublimates. *Icarus*, 438, 116607 (2025).

EXPERIENCE:

Accenture plc

Dec. 2020 - July 2021

Management Consultant Analyst, London, UK

• HR transformation for a large multinational mining firm

Volcanology and Igneous Petrology Lab

Aug. 2020

Graduate Research Assistant, Department of Earth Sciences, Oxford University

• Magmatic and eruptive evolution of the 1883 caldera-forming eruption of Krakatau

AfriTin Mining

June 2019 - Aug. 2020

Exploration Geologist Intern, Uis, Namibia

• Geochemical and petrological pegmatite-hosted mineral exploration.

Volcanology and Igneous Petrology Lab

Aug. 2019 - Sept. 2019

Undergraduate Research Assistant, Department of Earth Sciences, Oxford University

• Magmatic and eruptive evolution of the 1883 caldera-forming eruption of Krakatau

Presentations:

- Williams, T.A., Parman, S.W., Saal, A.E., Akey, A.J., and Gardener, J.A. Inferring Lunar Volcanic Gas Cloud Evolution from Atom Probe and TEM Analyses of Glass Bead Surface Sublimates (poster), Lunar and Planetary Sciences Conference, March 2024.
- Williams, T.A., Huber, C., Parman, S.W. Constraining MORB and OIB Volatile Concentrations and Degassing Processes with a New Lattice Boltzmann Method (oral), American Geophysical Union Fall Meeting, December 2023.
- Williams, T.A., Parman, S.W., Saal, A.E., Ogliore, R.C., Iskakova, M., A.J. Akey, and J.A. Gardner. *Constraining Lunar Volatiles via Nanoanalysis of Pristine Sample Surfaces* (oral), Geochemistry, Mineralogy, and Petrology Seminar, Brown University, Providence, RI, April 2023.
- Williams, T.A., Parman, S.W., Saal, A.E., Ogliore, R.C., Iskakova, M., and A.J. Akey. *Nanoanalysis of Sublimates on Pristine Lunar Orange Glass Beads* (poster), Lunar and Planetary Sciences Conference, March 2023.
- Williams, T.A., Parman, S.W., Saal, A.E. Lunar Volatiles: Nanoscale Analysis of (de)Sublimates on Lunar Glass Beads (oral), Geochemistry, Mineralogy, and Petrology Seminar, Brown University, Providence, RI, March 2022.

INVITED PRESENTATIONS:

• Williams, T.A., Parman, S.W., Saal, A.E., Akey, A.J., and Gardener, J.A. Inferring Lunar Volcanic Gas Cloud Evolution from Atom Probe and TEM Analyses of Glass Bead Surface Sublimates (oral), New England Society for Microscopy Spring Symposium, Expected April 2024.

Non-Refereed Publications:

- Williams, T.A., Parman, S.W., Saal, A.E., Akey, A.J., and Gardener, J.A. Inferring Lunar Volcanic Gas Cloud Evolution from Atom Probe and TEM Analyses of Glass Bead Surface Sublimates. *Lunar Planet. Sci. LV*, 1574 (abstract).
- D'Hondt-Gorbea, C.M., Khan, D., Williams, T.A., Parman, S.W. Lunar Volcanic Degassing in Multi-Component Systems and Implications for Volatile Element Speciation. *Lunar Planet. Sci. LV*, 2622 (abstract).
- Williams, T.A., Parman, S.W., Saal, A.E., Ogliore, R.C., Iskakova, M., and Akey, A.J. Nanoanalysis of Sublimates on Pristine Lunar Orange Glass Beads. *Lunar Planet. Sci. LIV*, 1441 (abstract).

GRANTS, FELLOWSHIPS, AND AWARDS:

2023	Conference Travel Grant, Brown University (\$650)
2023	Lipman Research Award, Geological Society of America (\$2500)
2023	Conference Travel Grant, Graduate Student Council, Brown University (\$100)
2022	Conference Travel Grant, Brown University (\$650)
2021-2022	University Fellowship, Brown University
2019	Burdett-Coutts Foundation Travel Grant, Oxford University (£650)
2019	Research Travel Grant, Worcester College, Oxford University (£400)
2018	Research Travel Grant, Worcester College, Oxford University (£400)
2016-2020	Scholar of Worcester College for academic performance, Oxford University (£600)

OUTREACH AND SERVICE:

Geochemistry Seminar Organiser

Spring 2023

• Schedule and host speakers for the Brown DEEPS weekly Geochemistry seminar.

DEEPS CORES 2021 - Present

- Creating Earth Science lesson plans for high school students.
- Assisting students with writing Summer@Brown applications.

UNIQ Summer School

June 2019

• Helping students from diverse backgrounds to make successful applications to Oxford.

MEDIA:

• "Why the Moon shimmers with shiny glass beads" (Chris Woolston, the ampersand)

PROFESSIONAL DEVELOPMENT:

Sheridan Center Teaching Seminar, Reflective Teaching, Brown University, RI	Fall 2022
MENTORING:	
D'Hondt-Gorbea, C.M., Brown University, RI	2023 - 2024
Teaching Experienceg:	

Teaching Assistant, EEPS 0010. Face of the Earth, Brown University, RI

Spring 2025