

Gustavo Marchant Allende

PhD Student in Earth and Planetary Sciences at Purdue University
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RESEARCH INTERESTS

High-Temperature Geochemistry — Experimental Petrology — Planetary Science — Lunar Geology

EDUCATION

2025 – Now **Ph.D. in Earth and Planetary Sciences**, Purdue University, *West Lafayette, IN*
2021 – 2025 **B.A. in Geology, magna cum laude, minor in Statistics**, Macalester College, *St. Paul, MN*

RESEARCH EXPERIENCE

2025 – Now **Purdue University, EAPS**, Graduate Research Assistant
Advisor: Dr. Kelsey Prissel
Topics:

2024 **MIT, EAPS**, Summer Research Intern (MSRP)
Advisor: Dr. Nicole Xike Nie
Rock-melt diffusion in the upper mantle via a peridotite xenolith from the Tariat region, Mongolia.

2023 **Macalester College, Department of Geology**, Summer Research Assistant
Advisor: Dr. Emily C. First
Orange glass from the Moon: new perspectives on olivine crystallization from Ti-rich magma.

TEACHING EXPERIENCE

GEOL165 – History & Evolution of the Earth, Macalester College, Lab Assistant, Spring 2025
GEOL160 – Dynamic Earth & Global Change, Macalester College, Lab Assistant, Fall 2024
STAT112 – Introduction to Data Science, Macalester College, Teaching Assistant, Spring 2023 & Fall 2024

CONFERENCE ABSTRACTS

† oral, ‡ poster

‡ **G. Marchant Allende**, N.X. Nie, Z. Lin, E. First (2024). *Rock-melt diffusion in the upper mantle via a peridotite xenolith from the Tariat Region, Mongolia.* 51st National Diversity in STEM Conference, Phoenix AZ.

†‡ **G. Marchant Allende**, N.X. Nie, Z. Lin (2024). *Rock-melt diffusion in the upper mantle via a peridotite xenolith from the Tariat Region, Mongolia.* 2024 MIT Summer Research Program, Cambridge MA.

† **G. Marchant Allende**, E. First, B. Welsch (2023). *Orange glass from the Moon: new perspectives on olivine crystallization from Ti-rich magma.* 50th National Diversity in STEM Conference, Portland OR.

HONORS, AWARDS, AND SCHOLARSHIPS

2025 **Ross Fellowship**, Purdue University

2025 **Phi Beta Kappa member**, Macalester College chapter

2025 **Hugh S. Alexander Endowed Prize**, Department of Geology, Macalester College

2024 **Outstanding Poster Presentation Award, Geology Section**, 2024 NDiSTEM Conference

2021 – 2025 **Davis United World College Scholar**, Davis UWC Foundation

2019 – 2021 **United World College Scholar**, UWC Robert Bosch College

SERVICE, MENTORSHIP, AND OUTREACH

2025 – Now **PATHS mentor**, empowering LGBTQ+ youth and young adults interested in careers in STEAM.
2024 – 2025 **SACNAS**, Macalester College chapter, founding member.
2024 – 2025 **GeoClub**, Macalester College, co-president.
2021 – Now **United World Colleges (UWC)**, National Committee of Chile, social media team.

SOCIETY MEMBERSHIPS

AGU American Geophysical Union
GSA Geological Society of America
SACNAS Society for the Advancement of Chicanos/Hispanics and Native Americans in STEM

Updated 9th July, 2025