

Objective

PhD Candidate and researcher at University of Michigan's Department of Earth & Environmental Sciences - seeking to apply robust background in carbonate chemistry, paleoclimate, and paleoceanography to a collaborative role in research coordination and project management related to carbon capture technologies.

Education

2021–present

Ph.D. Earth and Environmental Sciences

University of Michigan - Ann Arbor

Research topics: Carbonate chemistry, Paleoclimate, Isotope geochemistry

Awards & Distinctions: NSF Graduate Research Fellowship, Outstanding Graduate Student Instructor Award, Mark Robbins Innovative Teaching Award

2017-2021

B.A. Chemistry (Cum Laude), concentration in Maritime Studies (Highest Honors)

Williams College (& participant of the Williams-Mystic Maritime Studies Program)

Awards & Distinctions: Stephen H. Tyng Scholarship, Dennis W. Nixon Prize for Marine Policy, American Chemical Society Division of Analytical Chemistry Undergraduate Award, Class Musician Award, Sigma Xi Associate Member - Geosciences, Outstanding Teaching Assistant Award - Chemistry

Skills

Programming languages: R, Matlab, Python, Java, Mathematica.

Software: Microsoft Office (Word/Excel/PowerPoint), ArcGIS Pro, Adobe Illustrator, Canva.

Laboratory: Mass spectrometry (IRMS, GC/LC-MS), SEM/EDS, IR/Raman spectroscopy.

Languages: English, Tagalog (Elementary).

Interpersonal: Mentorship, public speaking, management, administration.

Selected Publications

- In prep **Quizon, A.A.**, Petersen, S.V., Winkelstern, I.Z., Wehmiller, J.F. End-Last Interglacial transition and substantial ice sheet melt detected at Sankaty Head Cliff, Massachusetts. [In prep for submission to *Geology*.]
- In prep **Quizon, A.A.**, Scholz, S.R., Petersen, S.V., Escobar, J., Jaramillo, C. 'Vital' (disequilibrium) effects in turrillid gastropods - a case study with Mid-Miocene Colombian fossils. [In prep for submission to *Geology*.]
- In review **Quizon, A.A.**, Gomes, L.D., Petersen, S.V., VanDeVelde, J. Seawater salinity and oxygen isotopes along the U.S. East Coast from 24°N to 44°N. [Submitted to (*Nature*) *Scientific Data*.]
- 2025 **Quizon, A.A.**, Petersen, S.V., deWinter, N.J., Vellekoop, J. Clumped isotope thermometry (Δ_{47}) measurements in marine gastropods suggest equilibrium precipitation. *Geochimica et Cosmochimica Acta*, 410, 234-249.
- 2025 Winkelstern, I.Z., Petersen, S.V., Curran, H.A., Phillips, C., **Quizon, A.A.**, Glumac, B., Griffing, D. Cooling Climate Across Last Interglacial High Stands on El Salvador and Great Inagua, The Bahamas. *The Depositional Record*.
- 2019 Subhas, A.V., McCorkle, D.C., **Quizon, A.**, McNichol, A.P., & Long M.H. (2019). Selective preservation of coccolith calcite in Ontong-Java Plateau sediments. *Paleoceanography & Paleoclimatology*, 34(12), 2141-2157.

Professional Employment History

2021-present

University of Michigan - Dept. of Earth & Environmental Sciences

Research: Analyzed isotope data ($\delta^{13}\text{C}$, $\delta^{18}\text{O}$, Δ_{47}/Δ_{48}) in seashells to reconstruct paleoclimate (i.e., sea surface temperatures), paleoceanography (i.e., ice sheet behavior, ocean circulation changes), and paleophysiology (i.e., how carbonate shells form).

Teaching: (1) Introduction to Environmental Science in the Rocky Mountain West (based at Camp Davis Field Station) - assisted students during field tours, created/led/graded lab and project assignments, taught lectures, organized hands-on activities during lectures; (2) Introduction to Oceanography - graded problem sets and assignments, supervised lab experiments, organized interactive demonstrations during lecture; (3) EARTH Camp - ran field trips (e.g., UM Biological Station, museums, national park hikes) to introduce high school students from the metro-Detroit area to the geosciences.

2018-2021

Williams College - Dept. of Geosciences, Dept. of Chemistry

Research: Analyzed bulk sediment isotopes ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$) from the Bering Sea to study how the biological pump (i.e., ocean carbon cycling) changed across geologic time.

Teaching: General Chemistry II - answered questions, graded weekly problem sets.

2018

Woods Hole Oceanographic Institution - Dept. of Marine Chemistry & Geochemistry

Research: Analyzed weight%/ $\delta^{13}\text{C}/^{14}\text{C}$ in foraminiferal & coccolith calcite from core top sediments to interpret dissolution trends and how they impact global carbon cycling.

Leadership & Committee Experience

2025-present

GeoClub EBoard - Co-President

Organized professional and social events for the organization and EARTH department (e.g., professional development and science communication workshops, career panels, alumni networking events, graduate student retreat, potluck socials, end-of-year banquet).

2024-present

Community Support Committee, Earth & Environmental Sciences

Assisted with development of initiatives to create a more welcoming environment in the department regarding community building events, department climate, curriculum, etc.

2024-2025

GeoClub EBoard - Outreach & Career Development Coordinator

Organized/led professional development workshops (e.g., Excel/R softwares, academic funding, Zotero, poster prep) & career panels to introduce students to geoscience careers.

2023-2025

Unlearning Racism in Geoscience (URGE) - Pod Facilitator

Led curriculum discussions, organized deliverables, delegated team responsibilities, etc.

2022-2025

Michigan Geophysical Union (MGU) - Organizing Committee Member, 2025 Co-Chair

Organized several student-led geosciences research symposia. Responsibilities included: coordinating oral and poster presenters, assigning judges and distributing awards, organizing registration forms, booking/scheduling spaces for program events, etc.

2022-2024

Center for Research on Learning & Teaching (CRLT)'s Foundational Course Initiative (FCI) - Team Member for restructuring EARTH 222/223: Introduction to Oceanography
Helped renovate the course with new innovations (e.g., 'GradeCraft') and interactive demonstrations, created supplemental resources (e.g., math 'toolkit', video tutorials), etc.

Other Activities

2023-present

Dexter Community Orchestra - Cellist.
2024 UMMNH Science Communication Fellow.

2022-present

2019

St. Mary Student Parish - Pianist.

Save The Bay Aquarium - Volunteer.