

BP Blakley

PhD Candidate | ORCID: [0009-0005-4064-5916](https://orcid.org/0009-0005-4064-5916) | website: bpblakley.com | bblakle2@jh.edu

Education

Johns Hopkins University , Baltimore, MD Doctor of Philosophy (PhD), Earth and Planetary Sciences Advisor: Sarah M. Hörst, PhD.	Aug. 2024-Present
Pasadena City College , Pasadena, CA Geology	Feb. 2021-May 2024
School of The Art Institute of Chicago (SAIC) , Chicago, IL Bachelor of Fine Arts (BFA), Concentration in Fashion, Fiber & Material Studies	Aug. 2006-May 2010
Wake Technical Community College , Raleigh, NC Associate in Arts for transfer (AA), Liberal Arts	Aug. 2005-May 2006

Research Experience

Graduate Research Assistant; National Science Foundation (NSF) Graduate Research Fellow, <i>Planetary HAZE Research (PHAZER) Laboratory</i> , Johns Hopkins University, Baltimore MD. Advisor: Dr. Sarah Hörst	Aug. 2024-Present
Visiting Researcher; PRECISE Fellow, <i>The Laboratory for Origins and Astrobiology Research (LOAR)</i> , Purdue University, West Lafayette, IN. Supervisor: Dr. Ben K. D. Pearce	June 2026
Visiting Researcher, Modern SEM Techniques Workshop, <i>Lunar and Planetary Institute</i> , Houston, TX. Supervisor: Dr. Brian Balta	August 2025
Visiting Researcher, <i>University of Northern Iowa</i> , Cedar Falls, IA. Supervisor: Dr. Joshua Sebree	June 2025
NSF REU Researcher, <i>Astrophysical Materials Laboratory</i> , Northern Arizona University, Flagstaff, AZ. Supervisor: Dr. Will Grundy	June 2023-Feb. 2024
Research Assistant; Science Communications Intern, <i>Lunar Trailblazer Mission</i> , Caltech, Pasadena, CA. Supervisor: Dr. Bethany Ehlmann	Jan. 2022-Dec. 2024
Research Assistant, <i>Pasadena City College</i> , Pasadena, CA. Supervisor: Dr. Michael Vendrasco	Jan.-May 2023
Research Assistant; Caltech Connections Undergraduate Researcher, <i>Caltech</i> , Pasadena, CA. Supervisor: Dr. Sadie Dutton (PhD '23) under the Blake Research Group	Feb.-Jul. 2022
Research Assistant; Maximizing Student Potential in STEM (MSP) Intern, Planetary and Exoplanetary Atmospheres Group, <i>Jet Propulsion Laboratory (JPL)</i> , Pasadena, CA. Supervisor: Dr. Glenn Orton	Jan.-June 2022
Research Assistant; Student Independent Research Internship (SIRI), Planetary and Exoplanetary Atmospheres Group, <i>Jet Propulsion Laboratory (JPL)</i> , Pasadena, CA. Supervisor: Dr. Glenn Orton	Sep.-Dec. 2021

Honors, Fellowships, and Awards

NSF Graduate Research Fellowship (\$159k)	Sep. 2024-May 2029
Modern SEM Techniques Workshop Travel Grant	Aug. 2025
Wayne Loel Scholarship, Geology, Pasadena City College	June 2024
Bruce Carter Field Award, Geology, Pasadena City College	June 2024

Peer-Reviewed Publications

- B.P. Blakley**, et al., “The equilibrium vapor pressures of ammonia and oxygen ices at outer solar system temperatures,” *Planetary and Space Science*, 244. DOI: 10.1016/j.pss.2024.105863. 2024.
- B.L. Ehlmann, et al., including **B.P. Blakley**, “The Lunar Trailblazer Mission: Science Motivation and Implementation of a Pioneering 2 Small Satellite for Lunar Water and Lunar Geology in the NASA SIMPLEX program,” *Journal of Geophysical Research*. (Accepted Feb. 2026)
- W.M. Grundy, et al., including **B.P. Blakley**, “Laboratory measurement of volatile ice vapor pressures with a quartz crystal microbalance,” *Icarus*, 410. DOI: 10.1016/j.icarus.2023.115767. 2023.

Conference Presentations

- “Characterizing Water-soluble vs Water-insoluble Titan Tholins,” Poster, #2677, Dec. 2025
American Geophysical Union, New Orleans, LA
- “Study of Uranian Satellite Volatiles,” Oral presentation, #343, Oct. 2023
American Astronomical Society (AAS), Division for Planetary Sciences (DPS) 55, San Antonio, TX
- “Laboratory Reflectance Study of Water-Ice-Regolith Mixtures for Modeling of Lunar Water Scenarios,” Poster, #2578, Mar. 2023
Lunar and Planetary Science Conference 54, Houston, TX
- “Identifying hexamer structures in alcohol:water mixes,” Poster, Aug. 2022
SoCal Undergraduate Chemistry Research Symposium, Irvine, CA

Teaching and Mentoring Experience

- Instructor, *Self-publish Your Own Science “Zine” Workshop*, Baltimore, MD Mar. 2025
- Teaching Assistant, *Code/Astro—Python Programming and Open-Source Software Workshop*, Pasadena, CA June 2022

Academic Service and Leadership

Representation and Leadership

- Co-president, *Earth and Planetary Sciences (EPS) Graduate Organizing Committee*, Johns Hopkins University Sep. 2025-Present
- Member, Equity, Diversity & Inclusion Committee; Careers sub-committee; Strengthening Mentoring sub-committee, Johns Hopkins University EPS Sep. 2025-Present
- Chair, *Planetary People Accomplishing and Learning Side-by-side (Planetary PALS)*, Johns Hopkins University EPS Jan.-May 2025
- Organizer, *Summer Weekly Writing Group*, Johns Hopkins University EPS May-Aug. 2026
- Undergraduate Liaison/Facilitator, *Caltech Connections—Astronomy Research Mentorship Program*, Caltech Oct. 2022-May 2024

Mission Involvement

- Guest Observer, NASA Dragonfly Jan. 2026
- Student Collaborator, NASA Lunar Trailblazer Jan. 2022-Dec. 2024

Science Communication and Outreach

Self-published comic book, <i>Pluto and the Other Habitable Zone</i>	May 2026
Congressional Visits, <i>Scientist Network for Advancing Policy (SNAP)</i> Washington, DC/Virtual	Aug. 2025
McClintock Letters Initiative/Science Homecoming OpEd published in <i>IndyWeek</i> , Durham, NC	June-Aug. 2025
Day of Action (Congressional visits), <i>The Planetary Society</i> , Washington, DC	Mar. 2025
Engage Audiences with NASA's Science Activation Program <i>AAS DPS 56</i> Splinter Meeting, Boise, ID	Oct. 2024
Founding Member (2021); President (2022-2023), <i>PCC Astronomy Club</i> , <i>Pasadena City College</i> , Pasadena, CA	Sep. 2021-Apr. 2023

Professional Affiliations

American Geophysical Union
Division for Planetary Sciences of the American Astronomical Society

Selected Work Experience

Digital Marketing Manager, <i>Everest Group</i> , Remote Offices, US	Oct. 2020-May 2024
Director of Acquisition (Growth), <i>Vivante Health</i> , Remote Offices, US	Jan.-Aug. 2020
Manager, Campaign Marketing and Brand (2017-2018); Director, Marketing Operations (2018-2020), <i>TurnTo Networks</i> , New York, NY/ Remote, US	Nov. 2018-Jan. 2020
Web Designer (2014-2016); Senior Specialist, Digital Marketing (2016-2017), <i>DeVry Medical International/Ross University School of Veterinary Medicine</i> , North Brunswick, NJ	June 2014-Nov. 2017