

DR. LYNNAE C. QUICK
The Johns Hopkins University Applied Physics Laboratory

EDUCATION:

2013	Ph.D., Earth & Planetary Sciences, The Johns Hopkins University
2011	M.A., Earth & Planetary Sciences, The Johns Hopkins University
2009	M.S., Physics, The Catholic University of America
2005	B.S., Physics, North Carolina Agricultural and Technical State University

PROFESSIONAL EXPERIENCE:

11/2025 –	Planetary Scientist, Planetary Exploration Group, The Johns Hopkins University Applied Physics Laboratory
02/2022 – 11/2025	Associate Branch Head (Associate Lab Chief), Planetary Geology, Geophysics and Geochemistry Laboratory, NASA Goddard Space Flight Center
05/2019 – 11/2025	Ocean Worlds Planetary Scientist, Planetary Geology, Geophysics, and Geochemistry Laboratory, NASA Goddard Space Flight Center
01/2017 – 05/2019	Planetary Geologist, The Center for Earth and Planetary Studies (CEPS), National Air and Space Museum, Smithsonian Institution
01/2016 – 01/2017	Research Scientist, The Planetary Science Institute
08/2015 – 12/2015	CRESST Postdoctoral Fellow, NASA Goddard Space Flight Center & University of Maryland Baltimore County
08/2013 – 08/2015	NASA Postdoctoral Program (NPP) Fellow, Planetary Geodynamics Laboratory, NASA Goddard Space Flight Center

RESEARCH INTERESTS: ocean crystallization and crystallization of crustal fluid reservoirs on the icy moons and dwarf planets with emphasis on the Galilean satellites and Ceres; cryovolcanism and cryomagmatism on Europa, Ceres, and Triton; silicic volcanism on Venus; geophysical processes and habitability of low-mass, H₂O-rich exoplanets; surface science at asteroid Apophis

SELECTED MISSION EXPERIENCE & LARGE TEAM INVOLVEMENT

2022 –	OSIRIS-APEX: Co-I focusing on particle/dust ejection at asteroid Apophis
2018 –	Dragonfly Mission: science team member and Lead for the Guest Investigator Program
2014 –	Europa Clipper Mission: Co-I for the Europa Imaging System (EIS)
2023 – 2025	Habitable Worlds Observatory (HWO) • HWO Project Solar System Theme Lead (2024 – 2025) • Member, Science, Technology, Architecture Review Team (START) (2023 – 2025) ○ Co-Chair, Solar System Observations Sub-Working Group ○ Steering Committee, Solar Systems in Context Working Group ○ Steering Committee, Characterizing Exoplanets Working Group
2017 – 2022	NASA SSERVI Toolbox for Research and Exploration (TREX) Team
2016 – 2020	Dawn Mission: Associate Team Member for Dawn at Ceres focusing on brine dynamics and eruptions and formation of the faculae (i.e., “bright spots”) in Occator crater

SELECTED HONORS AND AWARDS:

2024	NASA Goddard Space Flight Center Special Act Award: Organizing and Co-Convening The Uranus Flagship: Investigating New Paradigms for Outer Planet Exploration Workshop
2023	NASA Planetary Science Division Early Career Award (ECA)
2022	NASA Early Career Achievement Medal

2021	American Astronomical Society Division for Planetary Sciences (DPS) Harold C. Urey Prize
2021	North Carolina Agricultural and Technical State University College of Science and Technology Alumni Achievement Award
2021	Asteroid (2001 SV 291) Renamed Asteroid (37349) Lynnaequick
2015	NASA Astrobiology Program Early Career Collaboration Award
2013	NASA Postdoctoral Program (NPP) Fellowship, NASA Goddard Space Flight Center

SELECTED SCIENTIFIC SERVICE:

2015 -	<i>Mentor of 12 undergraduate and graduate students</i> from the Europa ICONS, NASA Pathways, GEM Fellowship, National Air and Space Museum, NASA GSFC CRESST, and NASA OSTEM Internship Programs
2026 -	<i>Planning Committee</i> , AIP TEAM-UP Together Student Experience Conference
2025 -	<i>Member</i> , Division for Planetary Sciences (DPS) Prize Subcommittee
2020 -	<i>Steering Committee</i> , Nexus for Exoplanet System Science (NExSS) Research Coordination Network
2020-	<i>Steering Committee</i> , NASA Network for Ocean Worlds (NOW) Research Coordination Network
2018 -	<i>Executive Committee Member</i> , Outer Planets Assessment Group (OPAG)
2017 -	<i>Reviewer</i> , Geophysical Research Letters, Nature Astronomy, Nature Geosciences, Journal of Geophysical Research: Planets, Icarus, The Astrophysical Journal (ApJ) Letters, The Planetary Science Journal
2014 -	<i>Group Chief, Panelist, & External Reviewer</i> , Proposals to NASA Goddard Internal Funding Programs, NASA's ROSES Programs, and the German Research Foundation (DFG)
2023 - 2025	<i>Member</i> , Habitable Worlds Observatory (HWO) Science, Technology, Architecture Review Team (START)
2020 - 2025	<i>Co-Chair</i> , Earth and Planetary Systems Science Section, The National Society of Black Physicists (NSBP)
2020 - 2025	<i>Programming Committee Member</i> , Annual Conference of The National Society of Black Physicists (NSBP)
2023 – 2024	<i>Co-Convener</i> , The Uranus Flagship Workshop: Investigating New Paradigms for Outer Planet Exploration Meeting
2021 – 2023	<i>Associate Editor</i> , Science Advances
2020 – 2022	<i>Member</i> , Ocean Worlds and Dwarf Planets Panel, National Academy of Sciences Planetary Science and Astrobiology Decadal Survey 2023-2032
2020	<i>Science Organizing Committee</i> , LPI Brines Across the Solar System: Modern Brines Workshop, Lunar and Planetary Institute, Houston, Texas
2019 – 2020	<i>Science Organizing Committee</i> , Exoplanets in Our Backyard: Solar System and Exoplanet Synergies on Planetary Formation, Evolution and Habitability, Lunar and Planetary Institute, Houston, Texas
2018	<i>Science Organizing Committee</i> , 2 nd Europa Deep-Dive Workshop: Composition, Lunar and Planetary Institute, Houston, Texas
2017 – 2018	<i>Co-Convener & Science Organizing Committee</i> , Cryovolcanism in the Solar System Workshop, Lunar and Planetary Institute, Houston, Texas
2016 – 2017	<i>Member</i> , NASA Roman Solar System Working Group
2013 – 2015	<i>Member and Lead</i> , Venus Exploration Analysis Group (VEXAG) Early Career Scholars Focus Group
2014 – 2015	<i>Steering Committee</i> , Venus Science Priorities Workshop for Laboratory Measurements and Instrument Definition

It is a wonderful honor to be nominated to serve on the DPS Committee, and I am grateful to be considered with this slate of candidates. My research involves applying principles of fluid dynamics and heat transfer to model eruptive processes and ocean crystallization throughout our solar system and beyond, with a focus on cryovolcanic processes on the icy moons, Ceres, and volatile-rich exoplanets. As a member of the Nexus for Exoplanet System Sciences (NExSS) steering committee, the SOC for the first Exoplanets in Our Backyard Workshop, the NSBP Conference Programming Committee, and co-convener of the inaugural Cryovolcanism in the Solar System Workshop, my research background and community involvement are necessarily interdisciplinary and have consistently involved working across the physics, planetary science, and astrophysics communities to produce successful results. As each field has its own culture and norms, I will bring with me the ability to successfully navigate across these professional boundaries as a member of the DPS committee.

I came to planetary science having first obtained physics degrees from universities which, despite their robust programs in the broader STEM fields, did not offer geology or planetary science courses. Through my roles as co-chair of NSBP's Earth and Planetary Systems Sciences section, and as the Lead for the Dragonfly Mission's Guest Investigator Program, I have worked to support accomplished STEM students and other early career researchers who, despite their limited exposure to planetary science, are in a position to make significant contributions to our field through mentorship and inclusion in planetary science research and exploration. To that end, I would bring a commitment to work with DPS partner organizations to ensure that the planetary science community remains open and welcoming to individuals for whom the path to planetary science may have been unclear or riddled with historical and systemic barriers that have inhibited their full participation.

To this role I would also bring a resolve to ensure that members of our community receive the support they need during this unprecedented time. Uncertainties in funding and employment have led to an all-time high in extended postdoctoral tenures and increased challenges in obtaining permanent positions for early career scientists, while mid- and late-career scientists have had to transition to new roles, in many cases outside of planetary science, as they navigate the unique challenges that they are currently facing in their careers, and resources to support scientists from diverse backgrounds have been pulled back and/or eliminated. DPS must support its membership by adopting policies that consider professional achievements and milestones within the context of the many challenges that the current environment has wrought.

Lastly, I would bring a commitment to ensuring that DPS supports our planetary analysis groups as they navigate the many uncertainties that have been brought on by recent changes in AG support and infrastructure. As a member the OPAG executive committee, I have seen firsthand how these changes have affected our community, and am committed to providing a supportive and effective infrastructure for the AGs moving forward.

Lynnae C. Quick