

AIAA GHS October Professional Event on Planetary Protection

By Tracie Prater



The October professional lecture for the AIAA Greater Huntsville Section featured Dr. Chelsi Cassilly, a planetary protection microbiologist at NASA's Marshall Space Flight Center. Dr. Cassilly has a bachelor's degree in molecular biology from Lipscomb University and a doctorate in microbiology from the University of Tennessee, Knoxville. She has over ten years of experience in scientific research, including biology, biochemistry, microbiology, chemistry, and immunology. Most recently, she conducted research as a post-doctoral fellow at Harvard Medical School in Boston, Massachusetts. She joined Jacobs in February of 2021 as a Planetary Protection Microbiologist supporting the Space Environmental Effects team. While at MSFC, she has worked on the Mars Sample Return mission, Europa Lander mission concept, and Space Launch System. Dr. Cassilly's talk provided an introduction to the field of planetary protection, why planetary protection is important, and planetary protection requirements. The overview also included a discussion of common and newer/novel methods for treatment and cleaning of spacecraft as well as particular considerations for Mars and Europa.