**Paula Carolina Araneda Noboa**

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**EDUCATION**

**M.S. in Geology July 2021**

Temple University, Philadelphia, PA 19122

M.S. Thesis: “Dry Oxidation of Ferrous and Mixed-Valence Smectites and Its Implications for the Oxidative History of Mars”

**B.S. in Geology;** Minor: Astronomy **May 2019**

Towson University, Towson, MD 21252

**PROFESSIONAL SKILLS**

*Field and Laboratory Techniques:* field geologic mapping, rock and mineral identification, stratigraphic and structural analysis, topographic map interpretation, soil and water sampling, Scanning Electron Microscope, petrographic microscope analysis, X-ray Diffraction analysis, UV-Vis analysis, handling of hazardous chemicals

*Computer Skills*: Microsoft Office, ArcGIS, introductory Python experience

*Languages*: English, Spanish, German (DSD II diploma for German; native Spanish speaker)

**RESEARCH AND WORK EXPERIENCE IN GEOLOGY FIELD**

*TU Geo Careers Cohort Undergraduate Researcher (Dr. Amy Williams Life on the Edge lab)* Sept. 2018-May 2019

Towson University, Towson, MD

* Found biosignatures on Mars analog rock samples using the Scanning Electron Microscope (SEM); identified different species of diatoms and biosignatures found on the samples

*Lab Assistant for GEOL 121 in the Physics, Astronomy, and Geosciences Department* Feb. 2018-May 2019

Fisher College of Science and Mathematics, Towson University, Towson, MD

* Setting up necessary materials for laboratories and exams for introductory geology course

*Student Technical Assistant for the Water Supply Program, Water and Science Administration* Summer 2019

Maryland Department of the Environment, Baltimore, MD

* Data entry and updating databases for the Water Supply Program
* ArcGIS mapping of all water sources in the state of Maryland and their respective information
* Extensive Excel work for data analysis and data organization

*Teaching Assistant for Mineralogy in the Department of Earth and Environmental Sciences* Aug.-Dec. 2019

College of Science and Technology, Temple University

* Instructor for the laboratory component of the Mineralogy course, including presentations and demonstrations
* Created and graded assignments and tests

*Research Assistant (Dr. Steve Chemtob Lab, Department of Earth and Environmental Sciences)* May 2020-July 2021

College of Science and Technology, Temple University

* Completed independent research project that culminated in the writing of a Master’s Thesis
* Synthesized mineral samples under anoxic conditions in the laboratory
* Analyzed samples using X-Ray diffraction and UV-Vis spectroscopy

**PRESENTATIONS**

**Araneda, P.C.**, Chemtob S.M. Dry Oxidation of Ferrous and Mixed-Valence Smectites and Its Implications for the Oxidative History of Mars. Poster presented at: 2020 Lunar and Planetary Science Conference (LPSC); March 2020; Houston, TX.