

[Alejandro Garcia](#) is a 1st year PhD student in the Department of Earth and Environmental Science at Rutgers University-Newark. His research broadly focuses on the electrical signature of carbonate precipitation in sands and soils. In particular he studies calcite which can be used in soil stabilization and can be precipitated both abiotically and biotically. He is also interested in studying carbonate precipitation as it relates to carbon capture in geologic reservoirs and of the potential for SIP and TDIP to study these processes at the field scale.



Before attending Rutgers, Alejandro attended Florida International University (FIU) where he received a B.S. and M.S. in Geosciences (2015 and 2018 respectively). Alejandro always knew he wanted to pursue a scientific career and found Geoscience while he was an undergraduate. While in the Geoscience program, he was introduced to Geophysics and was particularly drawn to its quantitative approach and combination of field and laboratory work. From there he discovered his interest in studying the electrical properties of materials and dealing with the ambiguity present when trying to relate electrical signals to the physical and chemical properties that produce them. During his M.S. he began doing research focused on SIP and presented a poster at [AGU-New Orleans \(2017\)](#) about the electrical signature of biofilms and microbial growth. Alejandro has demonstrated his aptitude for research and academics by being accepted to the FIU Honor's College (undergraduate) and receiving a Department of Energy Fellowship (masters). After graduation, Alejandro plans to pursue postdoc opportunities.

For more information about his research please contact [Alejandro Garcia](#).

Interested in being highlighted, or know a student who should be? Please email [Matthew Sirianni](#) for more information about the Student Spotlight. We are also seeking research highlights that showcase use of near-surface geophysics in other [AGU sections and focus groups](#). If you are interested in writing a short, one-page highlight, please contact [Kisa Mwakanyamale](#).