

The South Carolina Association of Environmental Professionals invites you to attend!

- Date:** Thursday, July 16, 2026
- Time:** 6:30 pm (social) 7:00 pm (meeting start time) – **Please RSVP**
- Where:** SC Power Team Office – 1201 Main Street, Suite 1710,
Columbia, SC 29201 or Zoom ([link below and must register to access](#))
- Cost:** No charge for paid members or first-time attendees
- Speaker:** Gabriel Franco, PhD Student, Geochemist, University of South Carolina
- Topic:** “REE Extraction in Seawater from The Amundsen Sea”

It is known that ocean dynamics correlates with the climate, but to what extent? For us to better understand it, we need sophisticated analytical techniques that allow us to analyze element concentration variations at the PPT to PPQ levels in seawater and observe how they correlate with ocean circulation and the climate. Therefore, in this presentation, I walk you through an analytical methodology we developed to analyze rare earth elements at these minuscule concentrations. Then, we will look at the data generated with this methodology and how they constrain ice-ocean interactions in western Antarctica.

Gabriel is a geochemist and PhD student at the University of South Carolina who applies neodymium isotopes and rare earth element concentrations as ocean circulation tracers to better understand how past and current ocean circulation correlates with the climate. He has worked on rare earth elements in seawater, shark teeth, and sediments. Previously, he has also researched isotopes in both volcanic rocks and meteorites and worked for Rio Tinto. He holds an MS from Arizona State University and a BS from University of Brasília.

Zoom Link: <https://us02web.zoom.us/join/12yu1EvFQB642qgMbLFdEA> (this is just to register; separate link to Zoom room and access code will be sent on the night of the presentation)



Our Sponsors



❖ Who are we?

- SCAEP was founded in 1992 as a non-profit organization with the following objectives in mind:
- Promote harmony, cooperation, and mutual understanding among environmental consultants, regulatory agencies, educational professionals, business professionals, etc.
- Allow members of the various disciplines represented, both public and private, the opportunity to interact at a social level
- Encourage the transfer of technical information
- Provide a vehicle for continuing technical education
- Foster the highest standards of Professional Ethics within the environmental field
- Combat unfair practices within the environmental field

❖ Why Join or Sponsor SCAEP?

- PE/PG Credit Hours!
- Networking with professionals
- Food and drinks (some “fortified”) at each meeting
- A forum to present new research and interesting topics (PGs get 2 credit hours for presenting!)
- Two memberships when you sponsor SCAEP
- We always have fun and the whole group is pretty much AWESOME 😊
- Membership fees are only \$35/calendar year and \$15 for students