Richard E. Rosas

Department of Oceanography, Texas A&M University

3146 TAMU, O&M 313, College Station, TX 77843

Email: rrosas@tamu.edu

Education

Texas A&M University, College Station, TX	2020 - Present
Doctor of Philosophy in Oceanography	

University of Delaware, Newark, DE	2018
Bachelor of Science in Marine Science	

Research Experience

Ph.D. Student, Texas A&M University 2018 - Present
Thesis Advisor: Dr. Niall Slowey
Thesis: *High Resolution Study of a Coral Reef's Carbonate Chemistry in the Gulf of Mexico*
Implemented a moored buoy and accompanying benthic sensor array to measure water quality parameters that control carbonate speciation.

Geologic Survey of the South Atlantic Argentina Margin - Texas A&M University Fall 2019
PI: Dr. Niall Slowey
Conducted a coring cruise paired with a multichannel seismic, multibeam and sub-bottom profiler survey. These efforts are to understand water circulation during the Pre-Pleistocene and portions of the Cenozoic

Geologic Survey of Coastal Ecuador, Salinas and Guayas Estuary - Texas A&M University Spring 2019
PI: Dr. Niall Slowey
Used multibeam and side-scan sonar to map portions of the Ecuadorian coast for the purpose of future harbor construction. Partnered with personnel from INOCAR and the Ecuadorian Navy.

MD Sea Grant REU   Summer 2017
Advisor: Dr. Jeremy Testa
A Box Model Analysis on the Delaware Bay Estuary
Utilized a box-model approach to quantify net
biogeochemical production and interactions in the DE Bay
Estuary.

Undergraduate Field Research, *R/V Atlantis*   Spring 2017
 – University of Delaware
Chief Scientist: Dr. George Luther
Worked under Dr. Luther and Dr. Timothy Shaw to collect
trace metal samples and evidence of oxygen radicals during
a hydrothermal vent cruise utilizing *DSV Alvin.*

Undergraduate Field Experience, Little Cayman   Winter 2017
- University of Delaware
Professor: Dr. Mark Warner
A study abroad program focused on coral reef ecosystems
and biodiversity utilizing scuba diving techniques.

Undergraduate Field Research – University of Delaware   Fall 2016 - Spring 2018
Advisor: Dr. Arthur Trembanis
Aided in sediment sampling, autonomous vehicle launches
for aerial surveys, and sonar data collection for bathymetric
surveys to measure coastal resilience on Delaware Coasts.

Honors and Awards

Louisiana, Texas Sea Grant Program (LATXSPG) Ocean   Fall 2020 - Present
Acidification Graduate Research Fellowship.

Texas A&M University Louis Stokes Alliance for Minority   Fall 2018 - Present
Participation (TAMUS LSAMP) Bridge to Doctorate (BTD)
Fellowship.

Susanne and Steve Leininger Scholarship.   Fall 2018 - Present

National Science Foundation S-STEM Scholar   Fall 2018 – Present

Presentations

Slowey, N., **R. Rosas,** E. Hickerson, G. Schmahl, J. Walpert, C. DuFore, and R. Perry, 2019, *poster*, Installing Sensors at the Coral Reef of the Flower Garden Banks National Marine Sanctuary to Study Ocean Acidification ad other Environmental Processes, AGU Fall Meeting, San Francisco, CA.

Rosas, R., and N. Slowey, 2019, *poster*, High Resolution Study of a Coral Reef's Carbonate Chemistry System in the Gulf of Mexico: Hypothesis and Methods, TAMUS LSAMP Symposium, College Station, TX.

Rosas, R., and J. Testa, 2017, *poster*, Quantifying Net Transport and Transformation of Carbon, Oxygen and Nutrients in the Delaware Bay Estuary, CERF, Providence, RI.

Teaching Experience and Service

Texas Science and Engineering Fair Judge   2019 - 2021
Junior division volunteer judge for the Spring State Science Fair,
College Station, TX.

University of Delaware Tutor   Fall 2015 - Spring 2018
Tutor for introductory chemistry and biology students,
Newark, DE.

Memberships and Skills

American Geophysical Union – Member Since 2009
Alumni of Phi Sigma Pi, AH Chapter, 2018
IANTD Open Water and Nitrox Certified Diver