# Amanda M. Tazaz

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Amanda.Tazaz@gmail.com

**Education:** 

Ph.D. Oceanography Florida State University 2013 M.S. **Applied Economics** Florida State University 2018 B.S. **Economics** Florida State University 2008 B.S. Marine Biology Florida International University 2006

## **Dissertation:**

Isotopic characterization of methane obtained from hypersaline environments Advisor: Dr. Jeffrey Chanton

Citizenship: United States citizen

ORCID: Open Science Framework (OSF):

0000-0002-0927-3131 <u>https://osf.io/9wbyj/</u>

**Experience:** 

**2022 – Present Senior Research Associate,** Florida Center for Research in Science,

Technology, Engineering, and Mathematics (FCR-STEM)

Florida State University

2017 – 2022 Associate in Research, Florida Center for Research in Science,

Technology, Engineering, and Mathematics (FCR-STEM)

Florida State University

2013 – 2017 Assistant in Research, Florida Center for Research in Science,

Technology, Engineering, and Mathematics (FCR-STEM)

Florida State University

2011 - 2013 Graduate Research Assistant, Florida Center for Research in Science,

Technology, Engineering, and Mathematics (FCR-STEM)

Florida State University

**2008-2013** Graduate Research Assistant, Earth, Ocean and Atmospheric Science

Florida State University

Research Focus: Biogeochemical Oceanography

**Teaching Assistant,** Oceanography

Florida State University Course: Marine Mammals

**2006 - 2007 Laboratory Instructor,** College of Arts and Sciences

Florida International University

Course: Human Biology, General Chemistry, Chemistry and Society

**2006 - 2007 Laboratory Research Assistant, College of Arts and Sciences** 

Florida International University

#### **Funded Research Grants and Contracts:**

Foundations for Success: Developing Effective Mathematics Educators through Cognitively Guided Instruction (10/1/2021-9/30/2022)

R. Schoen, Principal Investigator; A. Tazaz, Project Manager

Funding source Children's Board of Hillsborough County (\$101,970)

Foundations for Success: Developing Effective Mathematics Educators through Cognitively Guided Instruction (6/1/2021-9/30/2021)

R. Schoen, Principal Investigator; A. Tazaz, Project Manager

Funding source Children's Board of Hillsborough County (\$26,565)

Foundations for Success: Developing Effective Mathematics Educators through Cognitively Guided Instruction (10/1/2018-9/30/2022)

R. Schoen, Principal Investigator; W. Secada, L. Levi, Co-Investigator; A. Tazaz, Project Manager

Funding source Office of Innovation & Improvement, U.S. Department of Education (\$9,733,865)

Follow-up to the Replicating the CGI Experiment in Diverse Environments (7/1/2018-6/30/2022) R. Schoen, Principal Investigator; W. Secada, Co-Investigator; A. Tazaz, Project Manager Funding source Institute of Education Sciences (IES) U.S. Department of Education (\$1,100,000)

FCR-STEM Learn: Foundations for Success in STEM (10/1/2014-7/31/2018) R. Schoen, Principal Investigator; **A. Tazaz**, C. Ganley, M. Hurdal, Co-Investigators Funding source Math and Science Partnership (MSP) Florida Department of Education (\$4,600,156)

#### **Current Research:**

Foundations for Success: Developing Effective Mathematics Educators through Cognitively Guided Instruction (10/1/2018-9/30/2022)

Funding source Office of Innovation & Improvement, U.S. Department of Education (\$9,733,865)

Title: Project Manager

The Foundations for Success project will provide evidence-based professional development in mathematics for 2,790 elementary teachers and 120 school principals in the state of Florida. The program will integrate evidence-based practices for teaching traditionally underserved and underrepresented students and teachers. The program evaluation will include a multisite cluster-randomized trial to enable causal inference regarding teacher and student outcomes.

Follow-up to the Replicating the CGI Experiment in Diverse Environments (7/1/2018-6/30/2022) Funding source Institute of Education Sciences (IES) U.S. Department of Education (\$1,100,000)

Title: Project Manager & Cost-Benefit Analysis Advisor

Follow-up to the replicating the CGI experiment in diverse environments is a follow-up study to a large-scale, randomized controlled trial studying the effectiveness of cognitively guided instruction (CGI). The study will follow-up with the schools and research participants five years after the randomized control trial and examine the long-term effects of the program on students and teachers.

Improvement of Elementary Fractions Instruction: Randomized Controlled Trial Using Lesson Study with a Fractions Resource Kit (2015-2019)

Funding source Institute of Education Sciences (IES) U.S. Department of Education (\$3,499,825)

Title: Research Project Manager (2017-present)

Improvement of Elementary Fractions Instruction is a large-scale, multisite randomized controlled trial studying the effects of a fractions resource tool-kit and lesson study on upper elementary grades teachers and students understanding of fractions. The study is occurring in multiple sized school districts across the United States.

FCR-STEM Learn: Foundations for Success in STEM (2014-2018)

Funding source Math and Science Partnership (MSP) Florida Department of Education (\$4,600,156)

Title: Co-Principal Investigator and Research Project Director

FCR-STEM Learn: Foundations for Success in STEM is a large-scale, multi-site randomized controlled trial studying cognitively guided instruction (CGI) and the incorporation of a lesson study type model of teacher planning. The study is occurring in a multiple sized school district across Florida. The study has 510 teacher participants that were randomly assigned by grade level teams to treatment, enhanced treatment or wait-list control. The study will monitor the effects of this teacher professional development on approximately 9,000 students over the course of 3 years.

Replicating the CGI Experiment in Diverse Environments (2012-2017) Funding source Institute of Education Sciences (IES) U.S. Department of Education (\$3,427,000)

Title: Research Project Director

Replicating the CGI experiment in diverse environments is a large-scale, randomized controlled trial studying the effectiveness of cognitively guided instruction (CGI). The study is an efficacy trial occurring in a large-sized school district. The study has approximately 210 teacher participants that were randomly assigned by school to either treatment or control. The study will monitor the effects of this teacher professional development on approximately 7,000 students over the course of 4 years.

**Research Projects:** 2018-Present Foundations for Success: Developing Effective Mathematics Educators through Cognitively Guided Instruction. (Funded by Office of Innovation & Improvement, U.S. Department of Education) 2018-Present Follow-up to the Replicating the CGI Experiment in Diverse Locations. (Funded by Institute of Education Sciences (IES) U.S. Department of Education) 2017-2019 Improvement of Elementary Fractions Instruction: Randomized Controlled Trial Using Lesson Study with a Fractions Resource Kit. (Funded by Institute of Education Sciences (IES) U.S. Department of Education) 2014-2018 FCR-STEM Learn: Foundations for Success in STEM. (Funded by Math and Science Partnership (MSP) Florida Department of Education) Replicating the CGI Experiment in Diverse Locations. (Funded by 2013-2017 Institute of Education Sciences (IES) U.S. Department of Education) 2012 - 2013Redefining the boundaries of biogenic methane: Methane from endoevaporites. (Funded by National Aeronautics and Space Administration (NASA)) 2011-2013 Integrating STEM into secondary school teaching. (Funded by Helios Foundation)

2008 – 2012 Methanogenesis in hypersaline environments. Microbial mat research in Guerrero Negro, Mexico. (Funded by National Aeronautics and Space Administration (NASA))

**2008** Gulf of Mexico Gas Hydrate Research Consortium (Funded by U.S. Department of Energy)

2006 - 2007 Behavioral response of predation in Sea Turtles (Funded by National Science Foundation (NSF))

Oceanographic Research Skills:Statistical Software Skills:Ion ChromatographGretl softwareGas ChromatographOptimal Design softwareIsotope Ratio Mass SpectrometerStatistix statistical programProficient in ecological sampling techniquesStata statistical packageSAS statistical packageSAS statistical program

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**Professional Development Short Courses:** 

August 1-12, 2016 Quasi-Experimental Design and Analysis

Northwestern University Institute for Policy Research

Lead Course Facilitator: Thomas D. Cook

February 2-6, 2015 Cost-Effectiveness and Benefit-Cost Methods for Evaluators

Teachers College, Columbia University

Lead Course Facilitators: Henry M. Levin, Clive Belfield & Brooks

Bowden

July 7-18, 2014 Summer Research Training Institute on Cluster-Randomized Trials

Northwestern University Institute for Policy Research

Lead Course Facilitator: Larry Hedges

## **Fellowships and Awards:**

Florida Education Fund Carl Crawford Award 2012

• Florida State University Leadership Award Nominee 2012

Florida State University Seminole Torchbearer 2011

• Student Poster Award, American Geophysical Union Fall meeting 2009

• Florida State University Fellows Society

McKnight Doctoral Fellowship recipient 2008

• Dean's List, Florida State University 2007-2008

• Florida Bright Futures recipient 2002

## **University Service:**

**2009 – 2013** 17<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup> Congress of Graduate Students

Deputy Speaker for Finance – 19<sup>th</sup> thru 21<sup>st</sup> Congress

Florida State University

2012 Member, Florida State University Vice-President for Research Search

Committee

#### **Department Service:**

**2021 – Present** Member, Department Faculty Hiring Search Committee

2008 – 2013 Thalassic Society

Earth, Ocean and Atmospheric Science at FSU

Organization Treasurer 2009-2011

Salmonole 5k Run event organizer 2009 - 2012

2010 –2011 FSU College of Arts and Science Leadership Council

Earth, Ocean and Atmospheric Science Graduate Student Representative

# **Community Service:**

2012 Florida Education Fund Brain Bowl Mathematics Judge

2011 and 2012 Capital Regional Science and Engineering Fair Judge

## **Peer Reviewed Publications:**

- Kelley, C.A., Bebout, B., Chanton J.P., Beaudoin, C.S., Detweiler, A.M., Frisbee, A., Nicholson, B.E., Poole, J., **Tazaz**, **A.M.** & Winkler, C. (2020). The effect of bacterial sulfate reduction inhibition on the production and stable isotopic composition of methane in hypersaline environments. Aquatic Geochemistry, Special Edition & 25(5-6) <a href="https://doi.org/10.1007/s10498-020-09381-z">https://doi.org/10.1007/s10498-020-09381-z</a>
- Ganley, C.M., Schoen, R.C., LaVenia, M., & **Tazaz, A. M.** (2019). The Construct Validation of the Math Anxiety Scale for Teachers. AERA Open, 5(1). <a href="https://doi.org/10.1177/2332858419839702">https://doi.org/10.1177/2332858419839702</a>
- Schoen, R. C., Bray, W., Wolfe, C. M., **Tazaz, A.M.**, & Nielsen, L. (2017). Developing an assessment instrument to measure early elementary teachers' mathematical knowledge for teaching. The Elementary School Journal, 118(1), 55-81. <a href="https://doi.org/10.1086/692912">https://doi.org/10.1086/692912</a>
- **Tazaz, A. M.,** Bebout, B.M., Chanton, J.P., Kelley, C.A., Poole, J. (2013). Redefining the isotopic boundaries of biogenic methane: Methane from endoevaporites. ICARUS, 224(2), 268-275. https://doi.org/10.1016/j.icarus.2012.06.008
- Kelley, C. A., J.A. Poole, A.M. Tazaz, J.P. Chanton, B. Bebout (2012). Substrate limitation for methanogenesis in hypersaline environments. Astrobiology, 12(2), 89-97. <a href="https://doi.org/10.1089/ast.2011.0703">https://doi.org/10.1089/ast.2011.0703</a>

#### **Evaluations and Technical Reports:**

- Schoen, R. C., Bray, W.S., **Tazaz, A. M.,** & Buntin, C. K. (2022). A description of the Cognitively Guided Instruction professional development program in Florida: 2013–2020. Learning Systems Institute, Florida State University. <a href="https://doi.org/10.33009/fsu.1643828800">https://doi.org/10.33009/fsu.1643828800</a>
- **Tazaz, A.M.** & Schoen, R. C. (2020). Measuring implementation of the first two years of the Teacher Development Group model for professional development based on CGI (Research Report No. 2020–01). Tallahassee, FL: Florida State University.
- Schoen, R. C., LaVenia, M., **Tazaz, A.M.,** Farina, K., Dixon, J. K., & Secada, W. G. (2020). Replicating the CGI experiment in diverse environments: Effects on grade 1 and 2 student mathematics achievement in the first program year (Research Report No. 2020–02). Florida State University. <a href="https://doi.org/10.33009/fsu.1601237075">https://doi.org/10.33009/fsu.1601237075</a>
- Schoen, R. C., Yang, X., **Tazaz, A.M.**, Bray, W., & Farina, K. (2019). Development and initial field test of the 2016 K-TEEM (Knowledge for Teaching Early Elementary Mathematics) test (Research report No. 2019-01). Tallahassee, FL: Florida State University. https://doi.org/10.33009/fsu.1581610055
- Schoen, R. C., LaVenia, M., & **Tazaz**, **A. M.** (2018). Effects of the first year of a three-year CGI teacher professional development program on grades 3–5 student achievement: A multisite cluster-randomized trial (Research Report No. 2018-25). Tallahassee, FL: Learning Systems Institute, Florida State University. <a href="http://doi.org/10.33009/fsu.1562595733">http://doi.org/10.33009/fsu.1562595733</a>

- Schoen, R. C., LaVenia, M., **Tazaz, A.M,** & Farina, K. (2017). Replicating the CGI Experiment in Diverse Environments: Effects of Year 1 on Student Mathematics Achievement. (Research Report No. 2017–01). Tallahassee, FL: Learning Systems Institute, Florida State University.
- Schoen, R., LaVenia, M., Champagne, Z., Farina, K., & **Tazaz**, **A.M.** (2016). Mathematics performance and cognition (MPAC) interview: Measuring first- and second-grade student achievement in number, operations, and equality in spring 2015 (Research Report No. 2016–02). Florida Center for Research in Science, Technology, Engineering, and Mathematics. Tallahassee, Fl. <a href="https://doi.org/10.17125/fsu.1493238666">https://doi.org/10.17125/fsu.1493238666</a>
- **Tazaz, A.M.** & Schoen, R.C. (2014). Replicating the CGI Experiment in Diverse Environments: Fidelity of Implementation after year 1 of the program (Report No. 2014–01). Learning Systems Institute. Tallahassee, Fl.

# **Curriculum Development:**

- King, L., Dyehouse, M., **Tazaz, A.,** Schoen, R., Blumsack, S., & Wilson, R. (2013). Clarifying Water Quality: A CPALMS Lesson Study Resource Kit for Math and Science Grades 6-7 (Lesson Study Resource Kit ID#43517). Tallahassee: CPALMS/Florida State University. <a href="http://www.cpalms.org/Uploads/docs/CPALMS/initiatives/lessonstudy/CPALMS\_Resource\_Kit\_Sci\_Math\_Water\_Quality\_6-8.pdf">http://www.cpalms.org/Uploads/docs/CPALMS/initiatives/lessonstudy/CPALMS\_Resource\_Kit\_Sci\_Math\_Water\_Quality\_6-8.pdf</a>
- **Tazaz, A.,** King, L., Dyehouse, M., Schoen, R., Wilson, R., Blumsack, S., & Green, C. (2013). Planning for a Rainy Day: A Lesson Study Model Eliciting Activity Toolkit. Tallahassee, FL: Learning Systems Institute, Florida State University. DOI:10.17125/fsu.1517867082. <a href="https://doi.org/10.17125/fsu.1517867082">https://doi.org/10.17125/fsu.1517867082</a>

# **Manuscripts (under review):**

- Schoen, R. C., Rhoads, C., Perez, A. L., **Tazaz, A. M.,** & Secada, W. G. (Under Review). Impact of cognitively guided instruction on elementary school mathematics achievement: Five years after the initial opportunity. [Submitted to American Educational Research Journal. Status: Submitted]
- **Tazaz, A.M.** & Schoen, R.C. (Under Review). Did you get what you paid for? An implementation analysis of the Cognitively Guided Instruction (CGI) teacher professional development program. [Submitted to Educational Leadership. Status: Submitted]

## **Manuscripts (in preparation):**

- **Tazaz, A.M.** (in preparation). Cost Analysis of the Cognitively Guided Instruction (CGI) teacher professional development program.
- **Tazaz, A.M.** & Schoen, R.C. (in preparation). Linking Fidelity of Implementation to teacher change in a randomized control trial.

## **Invited Presentations and Lecture:**

Tazaz, A.M. (2020, June). Managing Online Research Surveys. Oral presentation and lecture. FSU Office of Research Development. Pivoting on Research: A webinar series on new research ideas and strategies for a new time. June 5, 2020. <a href="https://www.research.fsu.edu/research-offices/ord/events/pivoting-on-research-series/pivoting-on-research-part-three/">https://www.research.fsu.edu/research-offices/ord/events/pivoting-on-research-series/pivoting-on-research-part-three/</a>
Video archive: <a href="https://www.youtube.com/watch?v=CdebTSdPYwO">https://www.youtube.com/watch?v=CdebTSdPYwO</a>

#### **Oral and Posters Presentations:**

- Ran, H., Secada, W. G., Rhoads, C. H., Schoen, R. C., **Tazaz, A. M.**, & Liu, X. (2022, April). The long-term effects of Cognitively Guided Instruction on elementary students' mathematics achievement. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Schoen, R. C., Rhoads, C., **Tazaz, A. M.,** Secada, W. G., & Stone, A. (2021, September). Impact of Cognitively Guided Instruction on elementary school math achievement: Five years after the initial opportunity. Paper presented at the annual conference of the Society for Research in Educational Effectiveness. [Conference held virtually.]
- Schoen, R. C. & **Tazaz**, **A.** M. (2019, June). CGI in Florida: Results of Three Randomized Trials (So Far). Oral presentation. Cognitively Guided Instruction 10th Biennial National Conference, Minneapolis, Minnesota.
- Schoen, R.C., LaVenia, M., & **Tazaz**, **A. M.** (2019, April). Effects of a CGI program on grades 3-5 students: a multisite cluster randomized trial. Oral Presentation. American Educational Research Association (AERA) 2019 Annual Meeting, Toronto, Canada.
- Schoen, R., Kisa, Z., & **Tazaz**, **A**. (2019, March). Beyond the Horizon: Examining the Associations Among Professional Development, Teachers' Subject-Matter Knowledge, and Student Achievement. Oral Presentation. Society for Research on Educational Effectiveness, Washington, DC. March 2019.
- Ganley, C.M., Schoen, R.C., LaVenia, M., & **Tazaz, A. M.** (2018, April). The Development and Validation of the Math Anxiety Scale for Teachers. Oral Presentation. American Educational Research Association (AERA) 2018 Annual Meeting, New York City, New York.
- Bauduin, C., Schoen, R., **Tazaz, A.M.**, Bray, W., Steele, L. & Sadler, C. (2017, June). Forging Connections Together: A Weekly Math Meeting Model to Support Teacher Learning. Oral presentation. Cognitively Guided Instruction 9th Biennial National Conference, University of Washington, Seattle, Washington. June, 2017.
- Schoen, R. C., **Tazaz, A. M**., & Levi, L. (2017, June). Replicating the CGI Experiment: Description of a Professional Development Model and Results of Recent Randomized Controlled Trials. Oral presentation. Cognitively Guided Instruction 9th Biennial National Conference, University of Washington, Seattle, Washington. June, 2017.

- Schoen, R., LaVenia, M., & **Tazaz**, **A**. (2017, March). Effects of a two-year Cognitively Guided Instruction professional development program on first and second grade student achievement in mathematics. Oral Presentation. Society for Research on Educational Effectiveness, Washington, DC. March 2017.
- Kelley, C.A., Bebout, B., Chanton J.P., Beaudoin, C.S., Detweiler, A.M., Frisbee, A., Nicholson, B.E., Poole, J., & **Tazaz**, **A.M.** (2016). The effect of molybdate inhibition of sulfate reduction on the production of stable isotopic composition of methane in hypersaline environments. Poster presentation. American Geophysical Union Fall Meeting, San Francisco, CA. December 2016.
- Champagne, Z. M., Schoen, R. C., & **Tazaz**, **A.** M. (2016). What's the Difference? Two Important Ways to Think About Subtraction. Oral Presentation. National Council of Teachers of Mathematics (NCTM) Annual Conference, San Francisco, CA. April 2016.
- Bray, W. S., Bauduin, C., & **Tazaz, A. M**. (2016). Kids Can Do It! Expanding Early Problem—Solving Opportunities. Oral Presentation. National Council of Teachers of Mathematics (NCTM) Annual Meeting, San Francisco, CA. April 2016.
- Ganley, C.M., Schoen, R.C., LaVenia, M., **Tazaz, A. M.** & Razzouk, R. (2016). Exploring relations between teacher math anxiety and other teacher characteristics. Oral Presentation. American Educational Research Association (AERA) Annual Meeting, Washington, DC. April 2016.
- Bray, W., **Tazaz A.M.**, Bauduin, C. (2015). Beyond addition and subtraction: Expanding problem-solving in the early grades. Invited Oral presentation. FCR-STEM Meeting, December 2015.
- Schoen R., Lavenia, M., **Tazaz A**. (2015) Measuring early teachers' knowledge and beliefs about mathematics teaching and learning. Poster presentation. IES Meeting Conference, Washington DC. December 2015.
- Bauduin C., Schoen, R., **Tazaz, A**. (2015) Students' interpretation of the Equal Sign. Oral Presentation. Florida Council of Teachers of Mathematics (FCTM) Annual Meeting. Orlando, Fl. October 2015.
- Schoen R., Secada, W., **Tazaz A**. (2015) Results after the first year of a randomized-controlled trial of CGI. Invited Oral Presentation. Cognitively Guided Instruction 8<sup>th</sup> Biennial National Mathematics Conference, Los Angeles, CA. June 2015.
- Schoen, R. C., Dixon, J.K., **Tazaz, A.**, & Childs, K. J. (2015). Investigating associations among professional development, mathematical knowledge for teaching, and pedagogical content beliefs. Oral presentation. Annual conference of the Association of Mathematics Teacher Educators (AMTE), Orlando, FL. February 2015.
- Bray, W., Schoen, R. C., Nielsen, L., Wolfe, C., & **Tazaz**, A. (2015). Developing a Measure of Mathematical Knowledge for Teaching for Primary Grades Teachers. Oral presentation. Annual conference of the Association of Mathematics Teacher Educators (AMTE), Orlando, FL. February 2015.

- **Tazaz A.M.,** Wilson R.M., Schoen R., S. Blumsack, L. King, M. Dyehouse (2014). Rain, Rain, Go Away! Stormwater MEA Toolkit. Invited Oral presentation. FCR-STEM Meeting, May 2014.
- **Tazaz A.M.,** R. M. Wilson, R. Schoen, S. Blumsack, L. King, M. Dyehouse (2013). Utilizing Model Eliciting Activities (MEA's) to engage middle school teachers and students in storm water management practices to mitigate human impacts of land development. Oral presentation. American Geophysical Union (AGU) Fall Meeting, December 2013.
- Schoen R., **Tazaz A.**, Brooks L. (2013) Studying the Effects of CGI Professional Development on Teachers and Students. Oral Presentation. Cognitively Guided Instruction 7<sup>th</sup> Biennial National Mathematics Conference, Des Moines, IA, July 2013.
- **Tazaz A.M.,** Detweiler A.M., Bebout, B.M., Nicholson B.E., Mauney M.T., Kelley C.A., Chanton J.P.(2013). Methane production and isotopic analysis from hypersaline microbial mat incubations when sulfate reduction is inhibited. Oral Presentation. Association for the Sciences of Limnology and Oceanography (ASLO) Aquatic Sciences Meeting, New Orleans, LA, February 2013.
- Mauney M.T., **Tazaz A.M.**, Bebout, B.M., Chanton J.P., Kelley C.A., Nicholson B.E., Detweiler A.M., Davila A.F. (2013). Isotopic analysis of methane bubbles obtained from Mars analogue hypersaline environments. Oral Presentation. Association for the Sciences of Limnology and Oceanography (ASLO) Aquatic Sciences Meeting, New Orleans, LA, February 2013.
- Nicholson B.E., Kelley C.A., Detweiler A.M., Bebout, B.M., Mauney M.T., **Tazaz A.M.,** Chanton J.P., Davila A.F. (2013). Stable carbon isotopes and rates of methane produced in the hypersaline environments of the Atacama desert, Chile and Baja California Sur, Mexico. Poster Presentation. Association for the Sciences of Limnology and Oceanography (ASLO) Aquatic Sciences Meeting, New Orleans, LA, February 2013.
- Dyehouse M., **Tazaz A**., King L., Martone R. (2012). The Integrated STEM Project: Utilizing Model Eliciting Activities to Merge Science, Engineering, Mathematics, and English Language Arts. Oral Presentation. 2012 FCR-STEM Conference, St. Petersburg, Fl, December 2012.
- Schoen R., Blumsack S., **Tazaz A**., King L., Wilson R. (2012) Integrating Math and Science through Unit Conversions. Oral Presentation. 2012 FCR-STEM Conference, St. Petersburg, Fl, December 2012.
- Bebout, B., Bramall N.E., Kelley C.A., Chanton J.P., **Tazaz A.M.,** J. Poole, Nicholson B., Detweiler A., Gupta M., Ricco A.J.(2012). Methane as an Indicator of Life on Mars: Necessary Measurements and Some Possible Measurement Strategies. Oral presentation. Lunar and Planetary Institute: Concepts and Approaches for Mars Exploration meeting, June 2012.

- **Tazaz, A. M.;** Chanton, J. P.; Kelley, C. A.; Poole, J.; Bebout, B. M. (2012). Redefining isotopic boundaries for biogenic methane: How hypersaline environments provide insight on Mars research. Oral paper presentation. McKnight Research Conference, Tampa, FL, February 2012.
- Kelley, C. A., Poole J.A., **Tazaz A.M.**, Chanton J.P., Bebout B. (2011). <sup>13</sup>C-enriched methane produced biologically at hypersaline Mars analog sites. Oral presentation. 2011 Geological Society of America Annual Meeting, Minneapolis, MN, October, 2011.
- **Tazaz, A. M.;** Bebout, B. M.; Chanton, J. P.; Kelley, C. A.; Poole, J.; (2011). Isotopic expansion of traditional biogenic methane boundaries obtained from data collected from Mars analogue hypersaline ponds. Oral presentation. 242<sup>nd</sup> ACS National Meeting, Denver, CO, August 2011.
- Bebout, B., **Tazaz A.M.**, Kelley C. A., Poole J., Davila A., Chanton J.P. (2011). The Stable Isotopic Composition of Biogenic Methane in Mars Analogue Hypersaline Environment. Oral presentation. Lunar and Planetary Institute: Analogue Sites for Mars Missions: MSL and Beyond meeting, March 2011.
- **Tazaz, A. M.;** Chanton, J. P.; Kelley, C. A.; Poole, J.; Bebout, B. M.; (2011). Isotopic methane data from hypersaline ponds extends the traditional biogenic methane boundaries. Oral presentation. Association for the Sciences of Limnology and Oceanography (ASLO) Aquatic Sciences Meeting, February 2011.
- Bebout, B., **Tazaz A.M.**, Kelley C. A., Poole J., Davila A., Chanton J.P. (2010). Methane as a biomarker in the search for extraterrestrial life: Lessons learned from Mars analog hypersaline environments. Oral presentation. American Geophysical Union Fall Meeting, December 2010.
- Kelley, C. A., Poole J., **Tazaz A.M.**, Chanton J.P., Bebout B. (2010). Unusually high stable carbon isotopic values of methane from low organic carbon Mars analog hypersaline environments. Poster presentation. American Geophysical Union Fall Meeting, December 2010.
- **Tazaz, A.M.,** Chanton J.P., Kelley C.A., Poole J., Bebout B. (2010). Traditional biogenic methane boundaries extended in hypersaline ponds. Oral presentation. 5<sup>th</sup> Annual Thalassic Society Oceanography Symposium Tallahassee, Fl, November 12, 2010.
- Bebout, B., Chanton J.P., Kelley C. A., **Tazaz A.M.,** Poole J., Cortés A.L., Maldonado J.G. (2010). Methanogenesis in hypersaline environments Analogs for Ancient Mars? Oral presentation. 38<sup>th</sup> COSPAR Scientific assembly, July 2010.
- Kelley, C. A., Poole J., Chanton J.P., **Tazaz A.M.**, Bebout B., (2010). Methanogenesis in Hypersaline Environments. Oral presentation. Association for the Sciences of Limnology and Oceanography (ASLO) Summer Meeting, June 2010.
- **Tazaz, A.M.,** Chanton J.P., Kelley C. A., Poole J., Bebout B. (2009). Methane Production in Extreme Environments. Poster presentation at American Geophysical Union meeting, December 2009.

- Poole, J.A., Kelley C. A., Chanton J., **Tazaz A.M.**, Bebout B. (2009). Methanogens in hypersaline environments and their substrates for methane production. Poster presentation at American Geophysical Union meeting, December 2009.
- **Tazaz, A.M.,** Chanton J.P., Kelley C. A., Poole J., Bebout B. (2009). Methane Production in Extreme Environments. Poster presentation at 4<sup>th</sup> Annual Thalassic Society Oceanography Symposium Tallahassee, Fl, November 6, 2009.
- **Tazaz, A.M.,** Lapham L.L., Chanton J.P. (2008). Biological Processes at Mississippi Canyon 118. Poster presentation at 3<sup>rd</sup> Annual Thalassic Society Oceanography Symposium Tallahassee, Fl, November 13, 2008.
- **Tazaz, A.M.,** Lapham L.L., Chanton J.P. (2008). Sulfate distribution across MC118. The Gulf of Mexico Hydrate Research Consortium annual meeting. Oral presentation. University of Mississippi. Oxford, MS October 14-15, 2008.

# **Organizational Affiliations:**

- American Geophysical Union (AGU)
- American Educational Research Association (AERA)
- Association for the Sciences of Limnology and Oceanography (ASLO)
- Association of Mathematics Teacher Educators (AMTE)
- Black in Marine Science (BIMS)
- Black Women in Ecology, Evolution, and Marine Science (BWEEMS)
- Florida Council of Teachers of Mathematics (FCTM)
- Florida Education Fund McKnight Doctoral Alumni Association
- Florida State University Fellows Society
- National Council of Teachers of Mathematics (NCTM)
- Society for Research on Educational Effectiveness (SREE)