

# Environmental Engineering Department News

## Texas A&M University-Kingsville

### Special Points of interest:

- May Commencement
- Senior Design Awards
- Student Achievements
- Student Organizations

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## EVEN Highlights



May 2017—August 2017

### Student Achievements

**May 2017 Graduates—Master of Science:** Chisara Anoruo, Alexandra Juarez, Trent Pinion, Bavand Sadeghi, Gurupreet Siddhu and Qianjin Zheng; **Bachelor of Science:** Richard Buckalew, Daniel Guerra, Eduardo Lopez, Shelby Loveland, Tabata Lua Cervantes, and Jennifer Paiz. **Congratulations!!!**



*Pictured M.S.: Trent Pinion, Bavand Sadeghi and Gurupreet Siddhu; BS: Jennifer Paiz, Richard Buckalew, Tabata Lua Cervantes and Shelby Loveland*

EVEN Senior Design Team, Aries received **2nd Place Best Report Award** at the **College of Engineering Senior Awards Banquet** on May 11, 2017. The Project Title was Constructed Wetland for the City of Kingsville Wastewater Treatment Plant. Pictured right are **Daniel Guerra, Jennifer Paiz, Dr. Breanna Bailey, Dr. Mohammad Alam, Richard Buckalew and Tabata Lua Cervantes**.



**FY2017 Environmental Engineering Selected Seniors** are:

**Outstanding Senior:** Shelby Loveland; **Academic Excellence:** Richard Buckalew; **Outstanding Service:** Tabata Lua Cervantes

**Dr. Saritha Karnae** took the EVEN 6329 Monitoring & Measurements Lab class to the **Kingsville Wastewater Treatment Plant**. The students were given on-site lab and site tour of the facility and were provided with detailed information on application of physical, chemical and biological treatments learned in class along with water quality parameters being measured and reported. (pictured right)



**PhD Student, Francisco Haces Fernandez** received the **Good Neighbor Scholarship Award** for the Fall 2017—Summer 2018 semester.

**PhD Student, Shooka Khoramfar** received **3rd Place** for her poster titled “*Full-Scale Biological Treatment Unit for Removal of VOCs from a Remote Oil and Gas Production Facility*” at the student poster competition during the **2017 A&WMA Annual Conference and Exhibition** which was held in Pittsburgh, PA on June 5-8, 2017. **Shooka** was also awarded **3rd Place** for her poster at the **Engineering Graduate Poster Competition** on April 13, 2017.



### Student Organizations

If you are interested in joining the **AAEES Student Organization** please contact **Courtney Davis** (BS), Vice-President at [tamuk.aees@gmail.com](mailto:tamuk.aees@gmail.com). If interested in joining the **AWMA Student Organization** please contact **Mohammad Umer Shafiq** (MS), President at [AWMA.tamuk@yahoo.com](mailto:AWMA.tamuk@yahoo.com). If you are a PhD student and interested in joining the **Association of Doctoral Students (ADS)** please contact **Johnson Ajedegba** (PhD), President at [adstamuk@gmail.com](mailto:adstamuk@gmail.com).



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## Student Achievements (cont.)

### Dissertation/Thesis Defenses:

**Kailas Malwade** successfully defended his dissertation titled “Microwave-Swing Adsorption for the Capture and Recovery of Hazardous Air Pollutants Using Engineered Carbon-Based Adsorbents” on July 24, 2017. Chair: **Dr. David Ramirez**.

**Mary “Cate” Ball** successfully defended her Project titled “Rainfall-Driven Diffusive Hydrograph and Runoff Model for the Arroyo Colorado in South Texas” on July 24, 2017. Chair: **Dr. Omar Al-Qudah**, Co-Chair **Dr. Kim D. Jones**.

**Olusola F. Fasae** successfully defended his Project titled “A Decision-Support System Incorporating Cost Benefit Analysis for Green Infrastructure in a Mixed-Use Development for the Lower Rio Grande Valley” on July 14, 2017. Advisor: **Dr. Kim Jones**.

**Nida N. Shaikh** successfully defended her Thesis titled “Characterization of Working and Breathing Losses of Hazardous Air Pollutants Emitted from Organic Liquid Storage Tanks” on June 13, 2017.. Advisor: **Dr. David Ramirez**.

**Bavand Sadeghi** successfully defended his Project titled “Assessment of Air Pollutant Emissions from Fossil Fuel Power Plants over the U.S. Using 2014 eGRID and 2014 NEI”, on May 5, 2017. Advisor: **Dr. Kuo-Jen Liao**.

**Taufiqul Alam, Muhammed Chowdhury, Javier Guerrero, and Olatunde Samuel Olatunji** all passed the **Environmental Engineering Doctoral Qualifying Examination** given on June 14, 2017.

### Summer Internships:

**Jalil Ghobadi** (PhD) is working with **Markel Corporation** in Philadelphia, PA as an **Environmental-Chemical Engineer Intern**. **Jalil** will also be presenting his research at the **2017 International Congress on Membranes and Membrane Processes Conference** in San Francisco, CA on July 29-August 4, 2017.

**Ruiqiang Zong** (PhD) is working with **HomeAway** in Austin, TX as a **Data Scientist**.

**Onyinyechi Anyanso** (MS) is an HSE Intern with **Cummins Inc.** in Walton, KY as an **Environmental Intern**.

**Hunter Balzen** (MS) is working with **Booz Allen Hamilton** in San Antonio, TX as an **Environmental Intern**.

**Yvonne Dives-Gomez** (BS) is working with **Talon LPE, Environmental Services** in San Antonio, TX as an **Environmental Intern**.

**Ibrahim Elkashlan** (BS) is working with **Port of Corpus Christi, Environmental Planning Compliance Department** in Corpus Christi, TX. as an **Environmental Intern**.

## Department News

**Dr. Kim D. Jones** was asked to give the **Address to TAMUK Class of 2017 May Commencement**. It was clear by the standing ovation that everyone enjoyed and appreciated his speech. (pictured right)

**Dr. David Ramirez** assisted with the **Summer FEST Camp** held at TAMUK from June 26th-June 30th. 28 boys and girls from area Middle Schools joined in on the fun learning all about robotics, water distillation, nuclear engineering, making a bridge, etc. **Dr. Jianhong Ren, Isabella Aguirre and Kristen Hernandez** participated at the **Youth STEM Camp** by demonstrating a water filter project on June 27-29, 2017.

**Dr’s Lee Clapp, Jennifer Ren, Yaneth Gamboa, PhD Students Joseph Nnadi, Kailas Malwade, Shooka Khorramfar, MS Students Isabella Aguirre, and Kristen Hernandez** assisted a **Residential Summer Camp** with activities for a group of 8th graders (about 30) visiting from **Texas A&M University-Kingsville Rio Grande Valley Engineering Initiative** on July 12th. Three STEM-related stations were set up: Flume, GC-MS, and a Water Plant Model for the students to learn and ask questions. All engineering departments participated in this STEM event.





## Faculty/Staff News

**Stephan J. Nix** was recognized May 11, 2017 at the [Senior Design Awards](#) ceremony for **Professor of the Year for Environmental Engineering**. **Dr. Nix** retired on July 31, 2017 from TAMUK after serving 6 1/2 years as Dean for the College of Engineering and 11 months as Professor with Environmental Engineering teaching Environmental and Civil Engineering classes. **Catherine Allen** received the **Outstanding Staff Award for the College of Engineering** on May 11, 2017 at the [Senior Design Awards](#) ceremony.



The **EVEN Doctoral Program** was visited and evaluated by external reviewers **Dr. Lambis Papelis** from [New Mexico State University](#) and **Dr. Mark Widdowson** from [Virginia Tech](#). Both reviewers provided positive evaluations focused on faculty and student achievements and potential for growth in April, 2017.

### Please Welcome our New EVEN Faculty!

**Dr. Yaoxing Wu** earned her **Ph.D. in Environmental Engineering** from [Nanyang Technological University \(NTU\)](#), Singapore. Dr. Wu's research aims to understand and control hazardous chemical emissions from building materials and consumer products in indoor environment through cross-media mass transfer modeling and chamber tests. Her teaching interests include, but are not limited to, air pollution control, air quality modeling, environmental monitoring, and environmental exposure assessment.



**Dr. Min Zhong** earned her **Ph.D. in Environmental Engineering Sciences** from [University of Florida](#), Gainesville, FL. Dr. Zhong's research interests focus on atmospheric aerosols, and how these aerosols impact air quality, climate, and human health. To accomplish her research goals, she integrates laboratory experiments, ambient monitoring, satellite-based remote sensing, and a suite of modeling tools.



**Dr. Juan Cesar Bezares-Cruz** earned his **Ph.D. in Civil Engineering** from the [University of Texas at El Paso](#), El Paso, TX. Dr. Bezares' interests are environmental fate and transport of micro pollutants in engineered and natural systems, enhancement of advanced oxidation processes for sustainable water production and interaction of bacteria with estrogenic chemicals in granular suspended matter.



“Collaborative Research: The Texas AUM System AGEP Alliance: A Model to Advance historically Underrepresented Minorities in the STEM Professoriate” PI: Linda Chaloo, **Lee Clapp**, Rajab Chaloo, Marybeth Green, Shad D. Nelson, from [National Science Foundation](#) for **\$504,027** for period 9/1/17—8/31/22. Proposal Awarded.

“CAREER: Surface Water-Groundwater Sustainability of Coupled Human-Natural Coastal Systems in the Southern US”, PI: **Tushar Sinha**, from [National Science Foundation](#) for **\$532,857** for period 06/01/2018—05/31/2023. Proposal Submitted

“CAREER: Adsorption of Highly Salty Water Components onto Designed Amphiphilic GO Membranes”, PI: **Lucy Mar Camacho**, from [National Science Foundation](#) for **\$500,207** for period 09/01/2018—08/31/2023. Proposal Submitted

Sankarasubramanian, J.L. Sabo, K.L. Larson, S.B. Seo, **T. Sinha**, R. Bhowmik, A. Ruhi Vidal, K. Kunkel, G. Mahinthakumar, E.Z. Berglund and J. Kominoski (2017), *Synthesis of Public Water Supply Use in the U.S.: Spatiotemporal Patterns and Socio-Economic Controls*, [Earth's Future](#), DOI: 10.1002/2016EF000511.

Xiao, C., Balasubramanian, S., **Clapp, L.** (2017), *Rheology of viscous CO<sub>2</sub> foams stabilized by nanoparticles under high pressure*. [Industrial & Engineering Chemistry Research](#), DOI:10.1021/acs.iecr.7b01404.

## Institute for Sustainable Energy and the Environment (ISEE) News

“Development of Ecological Risk and Vulnerability Assessment Decision Support System for Improved Sustainable Coastal Development”, PI: **Kim Jones** / Co-PI: **Augusto Sanchez**, from [Texas Sea Grant Program](#) for **\$257,345** for period 02/01/2018—01/31/2020. Proposal Submitted

ISEE provided assistance to the [Low Rio Grand Valley Stormwater Task Force](#) and [University of Texas at Rio Grande Valley](#) faculty to organize and manage the 19th Annual Lower Rio Grande Valley Water Quality and Management Conference at South Padre Island, Texas, May 23-27, 2017. Ph.D. students Mohamed Elansary and Ahmed Mahmoud won the first and second prizes, respectively, in the graduate student poster competition. Ahmed Mahmoud and MS students Olusola Fasae, Josie Rios and Tolu Fasae provided support and presented technical results from their research topics focused on Green Infrastructure for the South Texas.

Feel free to visit our website: <http://tamuk-isee.com>

## Alumni News

**Theresa Perez** (BS Class of '14) is working at [Valero Energy Corporation](#) in San Antonio, TX as an **Environmental Engineer**. (pictured right)



**Chisara Anoruo** (MS Class of '17) is working with [Texas Commission on Environmental Quality](#) in Houston, TX as an **Environmental Engineer**.

**Wei Yang** (MS Class of '14) is working with [Howard Energy Partners](#) in San Antonio, TX as an **Environmental Specialist**. (pictured right)



**Gurupreet Siddhu** (MS Class of '17) is working with [RSB Environmentals](#) in Houston, TX as an **Entry-Level Environmental Engineer**.



**Christopher Fuller** (MS Class of '96) is working with [Fugro Marine Geosciences, Inc.](#) in Houston, TX as **Senior Oceanographer**. (pictured right)



**Eric Davila** (MS Class of '05) is working with the [Hidalgo County Regional Mobility Authority \(HCRMA\)](#) in Pharr, TX as the new **Chief Development Engineer**.

**Tabata Lua Cervantes** (BS Class of '17) is working with [Texas Commission on Environmental Quality](#) in Dallas, TX as an **Environmental Engineer**. (pictured right)

\*\*\***LinkedIn is a great way to stay in touch with our Alumni—please connect with Catherine Allen when you can.**\*\*\*

## Upcoming Events

**Friday, August 11, 2017 Commencement** will be held at **10 a.m. for Undergraduates and Graduate Students**. Environmental Engineering students graduating are: **PhD Student: *Kailas Makwade***, **MS Students: *Mary C. Ball and Oluola Fasae***, **BS Student: *Crescencio S. Fonseca***. **Congratulations Graduates!!!**

**Dr. Lucy Camacho** was invited to be at the [KBH Desalination Plant](#) in El Paso, Texas celebrating its 10th year. The invitation was given to researchers that have been or are conducting research at the **Chihuahua Laboratory of the Desalination Plant**. This summer **PhD Student Samuel Olatunji** and **Dr. Camacho** will be taking the MD unit to the plant to test the membranes that were developed by **MS Alumni Trent Pinion** and **Dr. Camacho** last spring.

**First Class Day for Fall Semester 2017 is August 23rd!** No Registration after September 8th. Good Luck to the new semester!! 🙌👍

**ISEE** will hold its **19th Annual EPA Region 6 Stormwater Conference** at the Hilton Palacio del Rio in San Antonio, TX on September 17-21, 2017. [The EPA Region 6](#), in partnership with the [Municipal Separate Storm Sewer Systems \(MS4s\)](#), and [States in Region 6](#) and co-sponsored by [Texas A&M University-Kingsville Institute for Sustainable Energy and the Environment](#) are inviting stormwater professionals to participate. Online registration for the 2017 EPA Region 6 Stormwater Conference can be found at [https://moneyconnect.tamuk.edu/C20209\\_ustores/web/store\\_main.jsp?STOREID=200](https://moneyconnect.tamuk.edu/C20209_ustores/web/store_main.jsp?STOREID=200) **EPA Region 6 Outstanding Green Infrastructure & Low Impact Development Project Competition** will be held on Tuesday, September 19, 2017. **Certification Courses** have been added to the **EPA Region 6 Conference** with the [San Antonio River Authority \(SARA\)](#) and [Certified Inspector of Sediment and Erosion Control \(CISEC\)](#). If you are interested in obtaining a certification, please visit the website (separate registration is required) <http://tamuk-isee.com/epa2017conference/> [The Hilton-Palacio Del Rio](#) rooms are all filled however a second room block has been established at the [Emily Morgan Hotel—The Hotel of the Alamo](#) to accommodate attendees registering for the conference. If you would like to reserve a room at the [Emily Morgan Hotel](#) please click on the group rooming link [https://secure3.hilton.com/en\\_US/dt/reservation/book.htm?execution=e1s1](https://secure3.hilton.com/en_US/dt/reservation/book.htm?execution=e1s1)



**Go Javelina's !!!!**