

NEWSLETTER

P.1 CEE ALUMNI
HONORED
Inaugural CEE Awards
Event honors three
outstanding alumni

P.2 2013 DORMAN
LECTURE
Insight into America's
infrastructure

P.3 HIGH PRIORITY
RESEARCH
USC Aerosol Lab
tackles pollution
impact



Distinguished alumni were recognized for their contributions to the field of engineering during the 2013 inaugural CEE Awards Event. From left are: Calvin Kam (B.S., '99), Geraldine Knatz (Ph.D., '79), and Albert Dorman (M.S., '62).

CEE Department Alumni Honored at Inaugural Event

Three distinguished alumni of the department were recognized for their extraordinary feats in the field of engineering at the inaugural CEE Awards Event this past January.

Albert Dorman (M.S., '62) was presented with the Lifetime Achievement Award, the highest honor awarded at the event. Mr. Dorman was recognized for the breadth of his contribution to the engineering community and for his overall work experience, which includes civil engineer of record at Disneyland in Anaheim, California, and founding chairman of AECOM Technology Corporation, a NYSE-traded global company with over 40,000 employees.

Geraldine Knatz (Ph.D., '79) was awarded the Senior Alumni Award. She was recognized for her leadership and trailblazing efforts as the first female executive director of the Port of Los Angeles, the nation's number one container port.

Calvin Kam (B.S., '99) was presented with the Junior Alumni Award, recognizing his impressive work as the vice president for Strategic Innovation with Optima and for co-founding GSA's National 3D, 4D, and Building Information Modeling Program.

Event attendees included members of the community, staff, faculty, Department Chair Dr. Lucio Soibelman, Vice Dean for Faculty Affairs Dr. Timothy Pinkston, and Vice Dean for Administration Linda Rock.

Dr. Sami F. Masri and Dr. L. Carter Wellford organized and coordinated the awards nominations, and department members collectively determined the winners. The event is part of the department's greater effort to build a strong USC Sonny Astani Department of Civil and Environmental Engineering community and strengthen its alumni network. ■

2013 ALBERT DORMAN DISTINGUISHED LECTURE SERIES

ASCE President Focuses on America's Infrastructure Issues



ASCE President Greg DiLoreto presented at the 2013 Albert Dorman Distinguished Lecture. Pictured here, from left, are: Patrick Natale (ASCE Executive Director), Albert Dorman, Greg DiLoreto (ASCE President and Dorman speaker), and Dr. Soibelman

ASCE President Greg DiLoreto visited USC this past March to discuss a topic that seems to always be on the minds of students: grades. However, the marks that concerned DiLoreto were not based on academic achievement, but on the condition of America's infrastructure.

As part of the 2013 Albert Dorman Distinguished Lecture Series, DiLoreto addressed a crowd of more than 100 attendees, which included Dean Yortsos and several members from the Dean's office, the lecture series' namesake Albert Dorman, and CEE faculty, students, staff, and alumni. His topic was the ASCE 2013 Report Card of America's Infrastructure, which examines the state of America's infrastructure and provides important information about the core elements of every major city. DiLoreto was eager to share with the audience the Report Card's new digital format, which makes the report accessible via tablet app, phone app, and website, and ultimately makes it more sharable.

"We're excited about this new format since it means the Report Card is always available to you – you can read it on the go and you can reference it whenever you're in a meeting or need to illustrate an infrastructure issue," DiLoreto said.

In the ASCE's 2013 Report Card, America's infrastructure received an overall grade of D+, which is a slight improvement from a D in 2009. DiLoreto explained that one reason for the low grade is the lack of proper maintenance and investment in infrastructure; modernization and maintenance are essential for improving the day-to-day operations of a city. However, DiLoreto stressed that infrastructure maintenance is more than a necessary expense to improve our daily lives; it's an investment that would save our cities money in the long-term.

In spite of the lackluster marks of certain sectors, according to DiLoreto, six sectors saw improvements since 2009. He highlighted tangible improvements in America's roads, bridges, solid waste, drinking water, wastewater, and railroads. DiLoreto explained that the reason for certain sectors' improvements was quite simple. "In sectors where investment was made – by both the public and private sectors – and innovative solutions pursued, the grades rose," he said.

According to DiLoreto, America has been able to thrive in the 21st century because of its high quality infrastructure. "Infrastructure is the foundation that connects the nation's businesses, communities, and people, driving and improving our quality of life," he said. However, as demonstrated by the 2013 Report Card, infrastructure systems are failing to keep pace with the current and expanding needs of the country. Investment in infrastructure must be improved and leaders at the federal, state, and even local levels must blaze the way for innovative solutions; it is essential for America's continued growth and success, argued DiLoreto.

"A D+ is a grade we cannot accept as a country," stated DiLoreto. In his concluding remarks, he challenged the lecture's attendees to make a commitment for the nation's future and to invest in the American infrastructure system as it is "the source of our prosperity." ■

FACULTY NEWS

High Priority Research Underway in Aerosol Lab

If residents of the region, the nation and the world are breathing easier, they have reason to thank Dr. Costas Sioutas, Fred Champion Professor in Civil and Environmental Engineering, and his fellow researchers in the USC Aerosol Lab.

Dr. Sioutas has been part of a collaborative effort investigating how exposure to airborne particulate matter (PM) affects health and how the impact varies with the source, chemical composition, and physical size. He and his associates have investigated the physical and chemical properties of pollutants emitted from different sources (traffic, power plants, airports, harbors, and atmospheric reactions), how those pollutants are distributed within communities, and what the implications are for human exposure.

Long-range studies have uncovered the underlying mechanisms that produce the adverse health effects associated with exposure to air pollutants generated by a variety of sources, including traffic (light and heavy duty vehicles, natural gas buses, and biodiesel vehicles), harbor and airport operations, power plants, and photochemically induced atmospheric reactions. The findings from the lab have been used to revise the U.S. EPA National Air Quality Standards (NAAQS) on PM, and to promulgate Senate Bill 25 (Protection of Children's Health) in the state of California.

In 2011, Dr. Sioutas won the 2011 Haagen-Smit Prize recognizing his research published in *Atmospheric Environment*. That research about freeway exposures was used to inform state and federal legislation regarding the placement of high schools at distances from roadways that will reduce the risk of children's exposure to deleterious pollutants.

Researchers at the lab have been motivated by the emerging scientific literature linking mortality and morbidity to exposure to PM. Dr. Sioutas and his associates have collaborated with some of the nation's top air pollution investigators in concert with the U.S. EPA through the Southern California Particle Center (SCPC).



Dr. Costas Sioutas received the Use-Inspired Research Award at the USC Viterbi School of Engineering – 2013 Faculty and Staff Annual Awards Luncheon. From left: Dr. Lucio Soibelman, Dragana Davidovic (Director of Research Services), Dr. Payam Pakbin, Dr. Costas Sioutas, and Dr. Erik Johnson.

With a total funding exceeding \$40 million so far, this has been one of the largest consortia in U.S. history to investigate sources, exposure assessment, and health effects of air pollutants.

In addition to funding from the SCPC, research at the USC Aerosol Lab has also been underwritten by the National Institutes of Health (NIH), the California Air Resources Board (CARB), and the South Coast Air Quality Management District (AQMD). ■

FACULTY NEWS

Faculty Awards

Congratulations to our faculty for receiving the following awards:

- **Professor Hank Koffman** received the 2013 USC Mellon Mentoring Award for Faculty Mentoring Undergraduate Students
- **Professor Costas Sioutas** received the Use-Inspired Research Award at the 2013 USC Viterbi School of Engineering Faculty and Staff Annual Awards Luncheon

- **Professor Patrick Lynett** received the 2013 ASCE Walter L. Huber Civil Engineering Award for pioneering research in wave modeling and prediction
- **Professor Lucio Soibelman** has been elected as a fellow to the American Society of Civil Engineers



During the 2013 Staff Recognition Luncheon last April, USC President Max Nikias congratulated two Astani CEE staff members for their dedication and service to USC. Tessie Jamanila, business manager, was recognized for 35 years of service and Evangeline Reyes, budget technician, was recognized for 20 years of service to USC.



The 2013 faculty retreat took place in January at the USC Wrigley Institute for Environmental Studies on Catalina Island. The faculty discussed important topics such as strategic planning, hiring strategy, and curriculum changes.

CELEBRATION MARKS CEE EARLY CAREER CHAIR APPOINTMENT

Dr. Burcin Becerik-Gerber was honored at a cocktail party and private dinner last November celebrating her appointment as the inaugural holder of the Stephen Schrank Early Career Chair in Civil and Environmental Engineering.

“The appointment recognizes Burcin’s exceptional distinction and promise in her field,” says Dean Yortsos. Her research focuses on the automation of data needed for complex built environments and on formalizing processes to improve sustainability, and maintainability.

Stephen Schrank (BSCE ’69, MBA ’74), the chair’s donor and namesake, has shown great commitment to USC and specifically the Sonny Astani Department of Civil and Environment Engineering. Through his financial support, Schrank strives to transform the department and enable it to garner the recognition he believes it deserves. The Early Career Chair is an emblem of Schrank’s greater vision for the future of the department. ■



Dr. Burcin Becerik-Gerber was honored as the inaugural holder of the Stephen Schrank Early Career Chair in Civil and Environmental Engineering. Pictured from left: Dr. Lucio Soibelman, Stephen Schrank, Dr. Burcin Becerik-Gerber, and Dean Yanniss Yortsos.

New Faculty Grants

Dr. Burcin Becerik-Gerber / Project Title: *Kiewit Lidar Lab* / Agency: *Kiewit*

Dr. Burcin Becerik-Gerber / Project Title: *An Integrated Mobile Sensor System for Occupancy and Behavior Driven Building Energy Management* / Agency: *National Science Foundation*

Dr. Roger Ghanem / Project Title: *Confident Predictions of Reservoir and Well Bore Flow Using Reduced Models and Data* / Agency: *URS Energy & Construction Inc.*

Dr. Patrick Lynett / Project Title: *Tsunami Modeling in Support of the USGS Application for Risk Reduction Project* / Agency: *Southern California Earthquake Center (SCEC)*

Dr. Patrick Lynett / Project Title: *RAPID: Reconnaissance Survey of Activity Concentrations Following the 11 March 2011 Japan Tsunami* / Agency: *National Science Foundation*

Dr. Burcin Becerik-Gerber and Dr. Sami F. Masri / Project Title: *An Inexpensive Vision-Based Approach for the Autonomous Detection, Localization and Quantification of Pavement Defects* / Agency: *National Academy of Sciences (aka: NCHRP)*

Dr. Constantinos Sioutas / Project Title: *Development of a Versatile Aerosol Concentrator Enrichment System (VACES) for the University of Vienna* / Agency: *University of Vienna*

Dr. Patrick Lynett / Project Title: *Development of a “Spot-Application” Tool for Rapid, High-Resolution Simulation of Wave-Driven Nearshore Hydrodynamics* / Agency: *Office of Naval Research (ONR)*

Dr. Constantinos Sioutas / Project Title: *Source Apportionment of PM_{2.5} (Particulate Matter smaller than 2.5 μ m) in the 8 STN / chemical speciation sites of the state of California* / Agency: *Office of Environmental Health Hazard Assessment (OEHHA)*

GRADUATE STUDENT NEWS

Elham Hemmat-Abiri Selected as Teaching Assistant Fellow



Photo by Lance Hill

Elham Hemmat-Abiri, Astani CEE Ph.D. student, has been selected as a Teaching Assistant Fellow for one academic year for the USC Center for Excellence in Teaching. The CET TAF Chair recommended Elham to apply for the position because she is a three-time consecutive recipient of the Astani CEE Outstanding TA award. In the past four years, Elham has been a TA ten times for different undergraduate and graduate courses in the Astani CEE Department. Last semester (Spring 2013), Hemmat-Abiri was a TA for CE 225: Mechanics of Deformable Bodies with Dr. Vincent Lee.

According to the CET webpage, the Teaching Assistant Fellows (TA Fellows) program for outstanding USC TAs is a two-fold program which:

- Primarily produces TA training materials used to enhance TA instruction across the University. TA Fellows work collaboratively combining their personal teaching expertise with research on best practices to create cutting-edge materials to be used by teaching assistants.
- Secondarily the TA Fellows program provides professional development for the TA Fellows through monthly workshops.

TA Fellows receive advanced training in the modern theory and practice of pedagogy from CET Fellows and other experts at USC. ■



Ph.D. Dinner

Graduating Ph.D. students celebrated at a dinner at the University Club in April. From left, top row are Mike Pirbazari, Hung Leung Wong, Roshanak Varjavand, Hamed Haddad Zadegan, Ramakrishna Tipireddy, Lucio Soibelman, Seyed Ali Bolourchi Yazdi, and Chanin Chuen-Im: From left, bottom row, are: Ryan Thacher, Charles DeVore, Erik Johnson, Sami Masri, and Jiin-Jen Lee

SPRING 2013 Ph.D. EVENTS

- Ph.D. Seminar Series – *Spring 2013 semester*
- Graduating Ph.D. Dinner – *April 22nd at the University club*
- Ph.D. Hiking Trip – *May 11th at Temescal Canyon Gateway Park. The event was attended by 10 Ph.D. students, 3 guests, and 2 staff members. The trip was organized by Jennie Craig, CEE Graduate Advisor and the hike was led by Dragana Davidovic, CEE Director of Research Services.*



Investigating Context-awareness in the Built Environment

Smart buildings, which integrate technology with building systems to automatically and efficiently deliver what people in the buildings need at any given time, require an accurate knowledge of both the built environment and the people within the buildings. Such knowledge, also known as context-awareness, is critical to the operations of buildings and provision of various services to building occupants.

Nan Li is focusing his research on indoor context-awareness. He uses advanced sensing, reasoning and actuating technologies to monitor changing indoor ambient environments, recognize patterns of occupancy and occupant locations, and control building systems based on dynamic loads and occupant needs. His research has important application in two areas: search and rescue and efficient energy management.

With feedback from LAFD, Nan's research has resulted in an indoor localization framework that can optimize on-scene ad-hoc sensing network setup, obtain contextual information from building information models, compute location information with a novel localization approach, and visualize target locations in their spatial context. This line of research has important utility for locating first responders and trapped occupants at building emergency scenes.

Regarding the application of his research in energy management, Nan has been working on two projects funded by the Department of Energy (DOE) and National Science Foundation (NSF), investigating proactive and reactive controls of building systems, based on occupancy monitoring and energy usage prediction, that aim to reduce building energy consumption.

Nan is supervised by Dr. Burcin Becerik-Gerber and his work has been published in 23 journal or conference papers. His research was recognized with a Fiatch Student Scholarship, a USC Diploma in Innovation Award, and the department's Best Research Assistant Award for 2010–2011.



Nan Li's research in context-awareness in the built environment has important applications in search and rescue and efficient energy management.

Born in Zhejiang, China, Nan earned his bachelor's degrees in civil engineering and economics from Tsinghua University. Since he joined USC in 2009 as a Viterbi fellow, he has earned master's degrees in civil engineering and computer science, and is expecting to complete his Ph.D. in civil engineering in 2013. ■

UNDERGRAD STUDENT NEWS



Student Recognition Awards

THE ORDER OF TROY:

Walter Bowser, B.S. Civil Engineering (Structural Engineering)
Channing Brace, B.S. Civil Engineering (Structural Engineering)
Kameron Burk, B.S. Civil Engineering (Structural Engineering)
Omar Dana, B.S. Civil Engineering
Adam Laufer, B.S. Civil Engineering (Building Science)
Samuel Levy, B.S. Civil Engineering
Alex Nothnagel, B.S. Civil Engineering
Thomas Palmieri II, B.S. Civil Engineering
Thomaz Paschoal, B.S. Civil Engineering
Karl Tingwald, B.S. Civil Engineering
Jana Tokuhama, B.S. Civil Engineering (Structural Engineering)
Charlie Tran, B.S. Civil Engineering (Structural Engineering)

THE ORDER OF ARETE:

Hossein Ataei, Ph.D. Civil Engineering
Jennifer Schlesinger, M.S. Civil Engineering
(Construction Engineering)
Winnie Siau, M.S. Environmental Engineering
Pianpian Wu, M.S. Environmental Engineering

DAVID M. WILSON ASSOCIATES AWARD:

Alex Nothnagel, B.S. Civil Engineering
Zhe Zhang, B.S. Environmental Engineering

Recipients of the Order of Troy, the Order of Arete, and the David M. Wilson Associates awards are pictured above.



Talent Shines at 2013 Show



Yanwen Cai performed a traditional Chinese song on the Erhu at the department's second annual talent show.

Students, faculty, and staff members from across the Sonny Astani Department of Civil and Environmental Engineering gathered last February to show off their talent at the department's second annual Talent Show. The event, which was held at the Parkside Performance Café, was a great success and was attended by more than 60 people.

Acts ranged from art exhibitions to musical performances and dance numbers. Many international students shared skills and instruments that were important to their culture. Yanwen Cai, a civil engineering/building science major from Shenzhen, China, played the Erhu, a traditional Chinese instrument. Despite having only two strings, the Erhu has a remarkably wide range which can imitate many natural sounds such as birds and horses. It is this somber yet beautiful sound that inspired Cai to learn the instrument.

Faculty members also shared their international heritage. Dr. Felipe de Barros, who joined the CEE faculty as an assistant professor this year, gave a guitar performance that was strongly influenced by his Brazilian heritage.

The CEE Talent Show was organized in 2012 by Charles DeVore, a CEE Ph.D. student and teaching assistant. After a wonderful showing in its inaugural year, the CEE Talent Show became an annual event that provides members of the diverse CEE community the opportunity to gather and share their talents and cultures. ■

Astani CEE Organizations – Spring 2013

ASC CONSTRUCTION MANAGEMENT COMPETITION

Last February, USC CMAA sent seven teams each comprised of six students and two alternates to the annual student construction case competition sponsored by the Associated Schools of Construction. The teams traveled to Sparks, Nev. for the competition and brought home several prizes: the Design Build Team took 2nd place in their category, the Commercial Team took 3rd place, and Sylvia Tran from the Mixed Use Team took first place in an alternate competition.

CONSTRUCTION MANAGEMENT SYMPOSIUM

The student-run Construction Management Symposium celebrated its 19th year with an evening-long event last April, which brought together professionals and students to discuss topics relevant to the architecture, engineering, and construction industries. A cocktail reception was followed by a formal dinner which featured speakers John Morris, director of Metropolitan Water District; David R. Pettijohn,

the director of water resources at the Los Angeles Department of Water and Power; and Eric Garner, a prominent water rights attorney with extensive state and international experience. The event was moderated by Professor Ed Reynolds Jr. Next year's symposium is set for fall 2014 and the topic will be "Rebuilding the World Trade Center."

2013 ASCE PACIFIC SOUTHWEST CONFERENCE

The USC campus was the site for the 2013 ASCE Pacific Southwest Conference this past April, which attracted civil engineering student competitors from 18 universities from the western U.S. and Hawaii. USC's team took first place in the Environmental Design Competition for its design of a municipal sewer system for a small community. The event was co-hosted by USC, LMU, and Cal Baptist. ■

CONGRATULATIONS TO OUR GRADUATES

Ph.D. Hooding and Awards Ceremony

The 2013 USC Viterbi School of Engineering Ph.D. Hooding and Awards Ceremony took place on Thursday, May 16th at Bovard Auditorium. Charles DeVore received the Best Dissertation Award, Nancy Daher was acknowledged for receiving the Astani CEE Department awards for Best Research Assistant and Best Teaching Assistant, and Ryan Thacher was also acknowledged for receiving the Viterbi Undergraduate Research Mentoring Award.

CIVIL ENGINEERING:

Hossein Ataei / Dissertation Chair: James Anderson /
Dissertation: *Effect of the Air Blast on Glazing Systems Safety: Mitigating the Injuries from Flying Glass*

Seyed Ali Bolourchi Yazdi / Dissertation Chair: Sami F. Masri /
Dissertation: *Studies into Computational Intelligence Approaches for the Identification of Complex Nonlinear Systems*

Chanin Chuen-Im / Dissertation Chair: Jiin-Jen Lee / Dissertation: *A Coastal Development Idea for Gulf of Thailand to Improve Global Trades*

Charles DeVore / Dissertation Chair: Erik Johnson /
Dissertation: *Damage Detection Using Substructure Identification*

Hamed Haddad Zadegan / Dissertation Chair: Roger Ghanem /
Dissertation: *Data Worth Analysis in Geostatistics and Spatial Prediction*

Ziyi Huang / Dissertation Chair: Jiin-Jen Lee / Dissertation: *Open Channel Flow Instabilities: Modeling the Spatial Evolution of Roll Waves*

Reza Jafarkhani / Dissertation Chair: Sami F. Masri / Dissertation: *Studies Into Vibration-Signature-Based Methods for System Identification, Damage Detection and Health Monitoring of Civil Infrastructures*

Hyoung-Jin Kim / Dissertation Chair: Jiin-Jen Lee / Dissertation: *Numerical and Experimental Study on Dynamics of Unsteady Pipe Flow Involving Backflow Prevention Assemblies*

Ramakrishna Tipireddy / Dissertation Chair: Roger Ghanem /
Dissertation: *Modeling and Algorithms for Stochastic Upscaling*



HOODING CEREMONY

The 2013 USC Viterbi School of Engineering Ph.D. Hooding and Awards Ceremony took place on Thursday, May 16th at Bovard Auditorium. Pictured from left are: Roger Ghanem, Lucio Soibelman, Charles DeVore, Erik Johnson, and Hamed Haddad Zadegan

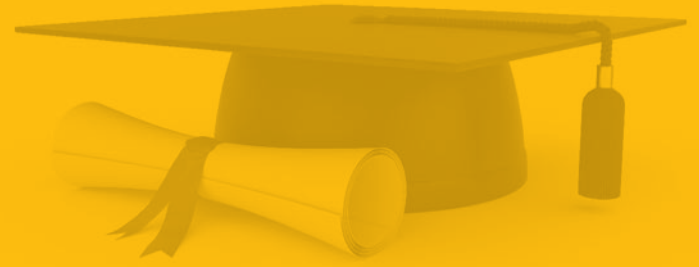
Roshanak Varjavand / Dissertation Chair: Hung Leung Wong /
Dissertation: *Numerical Simulation of Seismic Site Amplification Effects Anticipated*

ENVIRONMENTAL ENGINEERING:

Winnie Kam / Dissertation Chair: Constantinos Sioutas /
Dissertation: *Particulate Matter (PM) Exposure for Commuters in Los Angeles: Chemical Characterization and Implications to Public Health*

Nancy Daher / Dissertation Chair: Constantinos Sioutas /
Dissertation: *Toxico-Chemical Characterization and Source Identification of Size-Fractionated Particulate Matter in Urban Environments*

Ryan Thacher / Dissertation Chair: Massoud Pirbazari / Dissertation: *Electrokinetic Transport of Cr(VI) in Aquifers and Reduction by Chemical and Biological Methods: Zero-Valent Iron Nanoparticle and Microbial Fuel Cell Technology*



RECEPTION CELEBRATION

The 2013 Astani CEE Commencement Reception was organized by Dr. Emily Caviglia, Director of the CEE Undergraduate Programs, and took place at South Gerontology Lawn on May 17th. Graduates, family, friends, faculty, and staff attended the event. Congratulations to all the graduates.



HIGH-ACHIEVING STUDENTS

Graduating students who demonstrated extraordinary service, leadership, and academic achievement were awarded the Order of Troy, the Order of Arete, or the David M. Wilson Associates Award.

CEE Alumni Update

Dr. Harish Phuleria, a former Ph.D. student advised by Dr. Costas Sioutas, is now an assistant professor at the Indian Institute of Technology, Bombay. His 2007 dissertation is entitled “Measurement and Methods of Assessing the Impact of Prevalent Particulate Matter Sources on Air Quality in Southern California.”

Dr. Sangyoung Son, advised by Dr. Patrick Lynett, graduated with his Ph.D. in 2012. He has recently accepted a position as an assistant professor in the Department of Civil and Environmental Engineering at the University of Ulsan in Korea. His research focuses on coastal engineering and its impact on beach erosion, tsunami hazards, and coastal disasters in Korea. ■

KEEP IN TOUCH: If you have an address change or want to share information about your professional experiences please email ceenewsletter@usc.edu.



Dr. Lucio Soibelman

Chair's Message

As we look forward to another academic year, I am eager to share some of the exciting news at the Sonny Astani Department of Civil and Environmental Engineering in this Fall 2013 newsletter.

In our last newsletter, we welcomed Dr. Ketan Savla, Dr. Felipe de Barros, and Dr. George Ban-Weiss to our faculty and I am pleased to introduce two more excellent new faculty members. **Dr. Amy Childress**, who is leaving her position as Chair of the Civil and Environmental Engineering Department at the University of Nevada, Reno, will serve as the new director of the Environmental Program at the Sonny Astani Department of Civil and Environmental Engineering. Dr. Childress has expertise in

seawater desalination, wastewater reclamation, and water and energy technologies. Her research efforts focus on advanced water and wastewater treatment processes to reduce energy consumption in clean water production and to reuse water during energy production and other industrial processes, and on new methodologies to leverage uncommon sources to produce energy. I am also excited to welcome **Kelly Twomey Sanders**, who is currently finishing her Ph.D. at the University of Texas, Austin. Her research investigates various aspects of the energy-water nexus to inform better decision-making using tools such as synthesis, lifecycle assessment, geographic information systems, and power market modeling. We look forward to having both of them join us as we continue our hiring efforts during the next two to three semesters.

To accommodate our growing faculty, Kaprielian Hall is undergoing a very ambitious transformation characterized by physical changes and upgrades to its facilities. Our student services area has already been renovated and we are in the process of renovating the main office, adding a new lounge and kitchen area to

increase faculty and student interaction, and converting the former Foundation for Cross-Connection Control and Hydraulic Research space into a new copy room, conference room, and part-time lecturers' office. In addition, we are making upgrades to all Ph.D. student and faculty offices to maximize space for our growing Ph.D. student and faculty populations. In Biegler Hall, we are installing an elevator, creating a new updated water quality research lab, and renovating the Ph.D. student offices.

Our doors remain open throughout this transitional period, so please don't hesitate to visit the department and tour our newly-enhanced space. I appreciate your continued support of the department and its ongoing endeavors, and encourage you to keep us informed of any interesting developments in your lives and careers. ■