

## *Sonny Astani Civil and Environmental Engineering*

# NEWSLETTER

SPRING 2016

P.2

BIEGLER HALL RENOVATIONS  
ACCOMMODATE GROWING  
DEPARTMENT

P.5

DOCTORAL STUDENT EXCELS  
WITH ENVIRONMENTAL  
ELECTRICAL GRID RESEARCH

P.7

USC CONSTRUCTION MANAGEMENT  
ALUMNI ASSOCIATION HOLDS  
FIRST EXPO

## Exceptional Professor Retires

**Dr. James Anderson**, Professor at the Sonny Astani Department of Civil and Environmental Engineering (CEE), will retire at the end of the spring 2016 semester after more than 40 years of service with USC. Dr. Anderson received his Ph.D. in Structural Engineering from the University of California, Berkeley, in 1969. Before coming to USC, he held a consulting position with Sargent & Lundy Engineers, where his research was focused on improving structural design, especially in terms of earthquake resistance. He joined USC as an Assistant Professor in 1974.

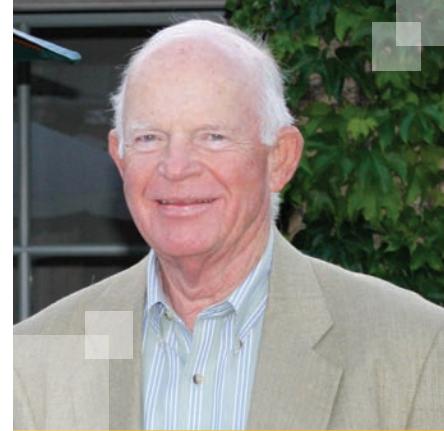
He had great success during his years at USC, receiving a number of major national awards for his research work. He provided a focused response to the failure of structural joints in steel structures that occurred during the 1994 Northridge earthquake and made important contributions to new design codes and retrofit procedures to deal with design shortcomings that resulted in that structural damage.

Dr. Landon Carter Wellford, colleague and past CEE Astani Chair, notes Dr. Anderson has the “exceptional ability to identify the important design issues facing the industry, especially relative to the seismic hazard.”

Dr. Anderson graduated a very large number of Ph.D. students who have been extremely successful, serving in high-level university positions (including president), executive positions in prominent structural engineering companies, and professorial positions in universities. His students are characterized as being broadly prepared in structural engineering research, analysis, and all aspects of practice, with the background and ability to understand structural design, identify important design issues that require attention, and originate new ideas leading to improved structural performance.

A continuous positive influence on his colleagues, Dr. Anderson was always “doing his best to support their careers and ideas and to be involved in social activities with them,” says Dr. Wellford.

Post-retirement, Dr. Anderson looks forward to spending more time with his wife at their home in Rancho Palos Verdes, Calif. ■



Dr. James Anderson will retire at the end of this semester after more than 40 years at USC.

*[Dr. Anderson has the] exceptional ability to identify the important design issues facing the industry, especially relative to the seismic hazard.”*

*Dr. Landon Carter Wellford*

# NEWSLETTER



## BIEGLER HALL RENOVATIONS ACCOMMODATE GROWING DEPARTMENT

Biegler Hall's second floor now includes offices for our Ph.D. students and professors, including Dr. Amy Childress, Dr. Adam Smith, and Dr. Qiming Wang. The renovations have added new restrooms, a kitchen, and a work area. The updated space also includes the environmental engineering laboratory, which was developed last year, so professors and students no longer have to travel to another building to conduct their research.



Lt. Gen. Hank Hatch serves as the fifth Albert Dorman Lecturer.

## Retired U.S. Army Corps of Engineers Commander Delivers Dorman Lecture

*Lt. Gen. Hank Hatch, retired Chief of Engineers and Commander of the U.S. Army Corps of Engineers, gave a lecture titled "Engineering a Sustainable Future," at the fifth annual Albert Dorman Lecture on Feb. 2. The lecture series was named in honor of Dorman, a USC alumnus, architect, and civil engineer. The series invites speakers to discuss the positive effects engineering has on society. This year's lecture drew 80 attendees – its largest audience ever – that included Dean Yannis Yortsos, Dorman, and members of the U.S. Army Corps of Engineers Los Angeles District.*

# STAFF NEWS



## Alexis Matthews, *Graduate Advisor*

**Alexis Matthews** will guide students toward their academic and career goals and coordinate all events for Master's degree and Doctoral students. Matthews is working toward her Ed.D. in Educational Psychology and will soon be a triple USC graduate.



## Jake Kirchner, *Budget Analyst/Research Administrator*

**Jake Kirchner** will assist in proposal submissions and monitor post-award activities throughout the life of departmental grants. Kirchner is a University of California, Berkeley, alumnus with a background in both equity analysis and Web development.



## Aaron McLean, *Budget Analyst/Research Administrator*

**Aaron McLean** serves as a new Budget Analyst/Research Administrator. He will manage the accounts, as well as prepare proposals. Originally from Ann Arbor, Mich., McLean received his Bachelor of Business Administration in Management from Eastern Michigan University and worked in accounting at the University of Michigan.



## Karli Wong, *Budget Analyst/Research Administrator*

**Karli Wong** has been brought in as a new Budget Analyst/Research Administrator and has over six years of experience working with grants at both the Children's Hospital Los Angeles and Harvard T.H. Chan School of Public Health. She will help with preparing proposals, creating monetary budgets, and research grants. Along with working at Harvard University, she received her Research Administration Certificate there, as well a Bachelor of Science degree in College Management from the University of Massachusetts Boston.

# NEWSLETTER

## FACULTY NEWS



*Dr. Bora Gencturk, Assistant Professor*

**Dr. Bora Gencturk** will join the Sonny Astani Department of Civil and Environmental Engineering in August 2016. He earned a Bachelor of Science degree in Civil Engineering from Boğaziçi University in Turkey and Master's and Ph.D. degrees in Civil Engineering from the University of Illinois at Urbana-Champaign. Prior to joining USC, he was an Assistant Professor in the Civil and Environmental Engineering Department at the University of Houston.

Dr. Gencturk's research interests include using novel materials for environmental durability, advanced structural testing and measurement, probabilistic methods, life-cycle assessment, and field investigations. He has received the Young Investigator Award from the National Science Foundation: Faculty Early Career Development (CAREER) program, as well as the Broadening Participation Research Initiation Grant in Engineering (BRIGE). He will teach courses on structural dynamics, earthquake engineering, and structural reliability.

Dr. Gencturk will also take a leadership role in renovations of the Brandow & Johnston Structures and Materials Research Laboratory. The laboratory will receive advanced equipment for material characterization and structural testing, which will enable researchers at the Viterbi School to investigate pressing infrastructure problems in the United States, including aging-induced deterioration and hazard resilience, among others. ■

### FACULTY HONORS & AWARDS

- **Dr. Kelly Sanders**, Assistant Professor, received the Outstanding Educator Award from the Orange County Engineering Council (OCEC).
- **Dr. Erik Johnson**, Professor and Associate Chair, is a 2016 recipient of the Aerospace Distinguished Alumnus Award from the Department of Aerospace Engineering at the University of Illinois.
- **Dr. Ketan Savla**, Assistant Professor and John and Dorothy Shea Early Career Chair in Civil Engineering, received the George S. Axelby Outstanding Paper Award from the IEEE Controls System Society for his paper "Robust Distributed Routing in Dynamical Networks."

- **Dr. Sami Masri**, Professor, received an award from JPL titled "Development of an Innovative Hybrid Data-Driven Methodology for Computational Shock Response Prediction."
- **Dr. George Ban-Weiss**, Assistant Professor, received two awards from Lawrence Berkeley National Laboratory for his research "Analysis and Characterization of Urban Heat Islands" and "Solar-Reflective Cool Walls: Benefits, Technologies, and Implementation."
- **Dr. Adam Smith**, Assistant Professor, has been awarded a grant from the U.S. Department of Agriculture, or USDA. The grant goes toward research to improve water resource quality and quantity.

# GRADUATE STUDENT NEWS



Dr. Lucio Soibelman (left) and Dr. Erik Johnson (right) present an Outstanding TA Award to Pedram Oskouie.

## GRADUATE STUDENTS TAKE HOME RA AND TA AWARDS

Dr. Lucio Soibelman and Dr. Erik Johnson presented the Outstanding RA Award to **Arian Saffari** and Outstanding TA Awards to **Pedram Oskouie** and **Trevor Krasowsky** during the Department's Research Assistant and Teaching Assistant Awards on Oct. 2 at the Parkside Café.



Dr. Lucio Soibelman (left) gives Trevor Krasowsky an Outstanding TA Award.

## Doctoral Student Excels with Environmental Electrical Grid Research

**Rebecca Peer** is a second-year Ph.D. student, Provost Fellow, and Women in Science and Engineering (WiSE) Top-off Fellowship recipient. Her research, advised by Dr. Kelly Sanders, focuses on how climate change might impact the electrical grid spanning the Western United States and Canada. Potential changes, such as rising air and water temperatures, changing precipitation patterns, and rising sea levels, can adversely affect the power generation sector and impose complex feedback loops that have not yet been modeled extensively. Considering that electricity is crucial to maintaining quality of life, human health, and a safe food and water supply, Peer's research is critical to ensuring a reliable power grid. Her work leverages partnerships, data analyses, and information she gathered during a 2015 summer internship with the Western Electricity Coordinating Council, the entity charged with ensuring the reliability of the Western power grid. ■



Graduate student Rebecca Peer studies environmental effects on the electrical grid.



*Arian Saffari earned the Outstanding RA Award, as well as the USC Ph.D. Achievement Award, for 2016.*

# NEWSLETTER

## UNDERGRADUATE STUDENT NEWS



*The winning USC Preconstruction Competition team with leader Professor Henry Koffman.*

### USC STUDENTS TAKE FIRST PLACE IN 2015 NATIONAL PRECONSTRUCTION COMPETITION

A group of USC students, led by Professor Henry Koffman, won first place at the 2015 National Preconstruction Competition in Chicago in October as part of the Associated Schools of Construction (ASC) Region 3 Conference. This is the second year in a row USC has won first place. According to the ASC Region 3 website, the Preconstruction Services Competition is a problem-based competition with “the objective of exposing the student competitors to the everyday occurrence of preconstruction services in today’s construction industry.”



### USC STUDENTS PLACE IN VARIOUS CIVIL ENGINEERING COMPETITIONS

USC's Construction Management Association of America (CMAA) student chapter took second place in Design Build, Virtual Design and Construction, and Preconstruction Services events at the Associated Schools of Construction (ASC) 2016 SPARKS competition in Nevada. At the American Society of Civil Engineers (ASCE) Pacific Southwest Conference, the ASCE student chapter team earned third place overall, placed first for Jeopardy, the mystery event and the technical paper, and took second place in the environmental competition.



*Design Build students were one of the CEE teams to take home a win at the ASC 2016 SPARKS competition.*

# ALUMNI ANNOUNCEMENTS



CMAA holds first Architecture Engineering Construction (AEC) Technology Expo.

## USC Construction Management Alumni Association Holds First Expo

CMAA held its first **Architecture Engineering Construction (AEC) Technology Expo** on Sept. 22 at the Ronald Tutor Campus Center Ballroom. The expo featured a panel of professionals, including Zach Scheel, Co-founder and CEO of Rhumbix; Joshua DeStefano, BIM Manager at DPR Construction; Stacey Tester, Regional Manager of PlanGrid; Cody Nowak, VDC Manager at Martin Bros.; Kermin Chok, Arup Structural Group Associate; and Steve Cook, Leader of the Healthcare Construction Technology program at Walsh Construction. Moderated by USC alumnus Kameron Burk, the panel discussed emerging architecture, engineering, and construction technologies. The expo featured multiple booths showcasing some of these new technologies. ■

## Volunteers Needed for Construction Alumni Group Redevelopment Project

The 46-year-old Blazer Youth Services Community Club, which helps nurture social skills, foster critical thinking, and enrich education among inner-city students, is in dire need of physical improvements so it may continue serving local children. The **USC Construction Alumni Group** is seeking alumni and students to team up on preconstruction activities, especially those with experience in creating environmental impact reports, formal proposals, schematic designs, construction budgets and estimates, pro forma funding and budgets, feasibility studies, and schedules.

The Blazer Redevelopment Project doesn't require expenditures by volunteers, just time. The Construction Alumni Group anticipates volunteers will need to attend four meetings to begin the initial site investigation and create an action list, follow up with preliminary findings, create a conceptual design, as well as review and plan future steps. Some meetings may be phone conferences. ■



The Blazer club, which is two miles from campus, needs major renovations.

If you, or your company, are interested in volunteering your knowledge and experience to help this cause, please email the USC Construction Alumni Group at [usccconstructionalumni@gmail.com](mailto:usccconstructionalumni@gmail.com).



Chair Dr. Lucio Soibelman

## Chair's Message

Greetings! Our faculty has continued to grow and change as our Department moves toward greater success. I will be sad to see **Dr. James Anderson** leave, after providing 46 years of service, but I wish him a happy retirement. I am excited to introduce **Dr. Bora Gencturk** as a part of our faculty this fall, as well as our newest member, **Dr. Daniel McCurry**, who will arrive in 2017. I am also proud of the awards presented to our newer faculty, such as **Kelly Sanders'** Outstanding Educator Award and **Adam Smith's** first grant from the USDA.

These past four years as chair have been quite astounding. Our Department has hired 10 new faculty members. The Dean demonstrated his commitment to the Department by funding this rapid growth, providing resources for the needed facility renovations for new offices and labs, and for the new faculty hires startup funding. The accumulated amount of the startup packages for the new hires is about \$6.5 million. Since our new hires joined the faculty, they have proven to provide a positive impact on our Department through their research and teaching. Their numerous awards and honors have transformed our Department into one of the most distinguished members of the Viterbi School.

Another way of measuring the school's commitment to improving the quality of the Department is through the recent renovations of our facilities. This has created needed space and required quality to allow our faculty to perform its research and manage its work. The total project costs (construction, furniture, and miscellaneous expenses) for CEE projects from 2012 to present is \$5,177,200 and covers 30,800 square feet of renovated space. This gives our Department the equipment, space, and convenience needed for a productive work environment. Our Department looks beautiful, and I invite everyone to come on by and see it. ■



### DAVID M. WILSON AFFILIATES

#### *Civil and Environmental Engineering Alumni Supporting Students*

Watch for news about our first-ever "CEE Alumni Back to Campus Day" in 2017. Special events are being planned, including a tour of our newly renovated laboratories and offices.

AGC | ASCE | Chi Epsilon | CMAA | EERI | GCEEA