# UCLA Civil & Environmental Engineering

UCLA HENRY SAMUELI SCHOOL OF ENGINEERING AND APPLIED SCIENCE | FALL 2018



#### **Shared Vision for Samueli Engineering:**

"Dedicated to serving the common good in a global city that thrives on innovation and teems with opportunity, UCLA Samueli is a new kind of engineering school. Collaborative. Entrepreneurial. Fearless. Dedicated to excellence. And driven by the conviction that anything is possible."



## **MESSAGE FROM THE CHAIR**

- PROFESSOR ERTUGRUL TACIRGOLU-



This summer our department underwent a leadership transition, and I am pleased to write you as our new department chair. I replace Jonathan Stewart, who completed a six year term in June 2018. Under Jon's leadership, our department continued its rise in academic excellence, and underwent

sustainable changes in the way the department operates, which streamlined many of our day-to-day operations. Having arrived at this milestone, I would like to take this opportunity to share with you my thoughts regarding the state of the department and the opportunities we have to grow and improve the department in the years to come.

People are our principle strength.

Our students are second to none ... and that is not hyperbole. Our ASCE student chapter, which has approximately 80% membership among the student body, received the **2018 Robert Ridgway Award** for the best student chapter in the nation. We are delighted, but student achievements are not surprising, given the extraordinary selectivity in the admission process (UCLA has received the most applicants for undergraduate admission among US universities for over two decades). We also celebrate many achievements among our former graduate students and post docs, including faculty appointments and major promotions.

Among faculty, we are diverse with respect to experience (from new assistant professors to senior global leaders), expertise, and background. Excellence is the common characteristic – we are among the most highly rated instructors in UCLA Engineering, while also boasting some of the brightest and most impactful and productive research

groups in the United States. From congressional testimony to major awards from professional societies, notable faculty achievements are highlighted in this newsletter. This year, we look forward to continued growth in our faculty ranks, with several open searches.

As a department, we must face a series of challenges to become the best of which we are capable (paraphrasing John Wooden).

The national funding picture for engineering and science is murky, threatening some lines of research. We are facing this as a department by revisiting our strategic plan for faculty hiring and targeting new research threads to respond to pressing societal needs. Examples including our efforts on carbon-neutral construction, regional assessment of risks to infrastructure from natural hazards, and innovations in mitigating environmental threats are described in short pieces in this newsletter.

Like many of our peer institutions, we face challenges with respect to our instructional and research facilities. The department is confronting this issue, in collaboration with UCLA Engineering leadership, with a sensible space policy that adjusts to dynamic research needs and maximizes the use of shared resources among our students and faculty.

As an urban infrastructure laboratory of unmatched complexity, diversity, and ever-present threats from natural hazards, Los Angeles is a truly amazing place to be a Civil Engineer. Leveraging the strength of our people, we will address the challenges that confront us to serve this teeming metropolis, the State of California, and the Nation. It is my pleasure to serve in pursuit of these endeavors.

Ertugrul Taciroglu, Ph.D. *Professor and Chair* 

### By the Numbers

Freshman enrollees
(35% female,
17% under-represented minority).

Freshman applicants, 2018 class

Affiliated NAE Faculty Members

#1

UCLA rank among public universities, (Times Higher Education, 2017-18; US News and World Report, 2018) **#2** 

Rank of Online MS in Engineering Program, (US News and World Report, 2018)

#17

Rank of Graduate Civil Engineering Program (US News and World Report, 2018)

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## — MILESTONES —

#### **IN MEMORIAM**



Lucien A. Schmidt, March 16, 2018
Professor of Engineering and
Applied Science, UCLA, 1970-1993.
Chair, Mechanics and Structures
Department, 1976-1979. Member,
National Academy of Engineering.
Expert in creating efficient methods
for structural optimization.



Gary C. Hart, October 21, 2017
Professor of Engineering and Applied Science, UCLA, 1968-2001. Expert in probabilistic structural dynamics. He was particularly noted for his contributions in system identification, building dynamics from wind loads, estimation of structural damping, analysis of reinforced masonry structures, and performance of isolation systems for structures.

#### **RETIRED**

Mladen Vucetic, July 1, 2018
Professor, Geotechnical Engineering,
UCLA, 1987-2018. Expert in soil
dynamics, laboratory testing,
centrifuge testing. His retirement
was marked in June 2018 with
a symposium held at the new
Mong Learning Center and Luskin
Conference Center on the UCLA



campus. The event was jointly organized by the Cal Geo Student chapter, ASCE/GI Los Angeles Section Geotechnical Group, and the C&EE Department.

#### **ESTABLISHED**

Leslie A. and Dennis J. Drag Distinguished Lecture Series in Civil Engineering, November 2017 Inaugural lecture by ASCE President Kristina Swallow on November 17, 2017.



#### **TESTIFIED**



Professor, UCLA, July 19, 2017
Testimony given to the U.S. House of Representatives Committee on Science, Space and Technology.
Dr. Sant focused on carbon upcycling which converts carbon dioxide into a novel building material.

Gaurav N. Sant, Associate

#### **APPOINTED**

Ertugrul Taciroglu, July 1, 2018
Department Chair, C&EE Department, UCLA.



Scott J. Brandenberg, November 1, 2018, Associate Dean for Diversity and Inclusion, Samueli School of Engineering, UCLA.

**July 2018,** Chair, Earthquake Engineering and Soil Dynamics Committee, Geo-Institute, American Society of Civil Engineers.

#### **NAMED**



Ronald T. Eguchi, 2017 C&EE Distinguished Alumnus and Lecture, December 2017

Mr. Eguchi is the President and CEO of ImageCat, Inc., a risk management company specializing in the development and use of advanced technologies for risk assessment and reduction.

#### **LAUNCHED**

The Carbon Capture Challenge: A UCLA student competition, \$25,000 prize, April 2018

Organized by the Institute for Carbon Management, in this challenge UCLA students are invited to design a personal carbon-capture device, a modest tool with a worthy purpose: empowering individuals across the globe to participate in protecting the environment. Student teams will work with faculty mentors and present to industry representatives at the ICM Student Competition Showcase. The winning design will receive support for potential commercialization.

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## STUDENT AWARDS AND RECOGNITIONS



Joanna (Angelica) Sanchez-Nunez (BS 2018) was awarded the 2018 American Concrete Institute (ACI) Southern California Chapter Student Scholarship. Angela conducted undergraduate research with Professor Henry Burton. Starting in the Fall of 2018, she will begin graduate studies at the University of Washington.



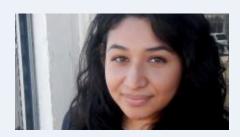
Suraj Patel (BS 2017) was recognized as the ASCE Region 9 Outstanding Civil Engineering student. Patel served as the UCLA ASCE President 2016-2017.



Yushu Hu, (BS, continuing) received the 2017 Alfred R. Cooper Young Scholar Award from the American Ceramics Society, in recognition of excellence in research, engineering, and/or study in glass science or technology. Her undergraduate research with Professor Mathieu Bauchy is investigating glass relaxation, which is key in the manufacturing of large screens.



Megyn Rugh (PhD candidate) received the Biolargo Graduate Fellowship in Environmental Engineering from the National Water Research Institute. In her work with Professor Jennifer Jay, Megyn is researching antibiotic resistant genes in stormwater biofilters. Megyn will also investigate metal co-selection for antibiotic resistance within these systems.



Cristina Echeverria-Palencia (PhD candidate) received the Graduate Student Diversity, Equity, and Inclusion Award from UCLA Chancellor Gene Block in May 2018. Christina's research is being conducted under the advisement of Professor Jennifer Jay. She is the first full-time undocumented doctoral student in the Environmental Engineering group. The award was given to recognize her work on recruitment, retention, program implementation and resource development for traditionally underrepresented students. Specifically, she co-founded the Instructional Opportunities Committee (IOC) to address professional development disparities between undocumented and documented students. Moreover, she was pivotal in launching the University of California Presidential Fellowship for UCLA undocumented AB540 graduate students, which funded its first cohort of undocumented graduate students in the Fall of 2017.



Alexandra Polasko (Ph.D. student) received several recognitions, including 1st Prize in a Student Paper Competition at the Emerging Contaminants Summit (2018), Finalist recognition in the American Society for Microbiology Agar Art Competition for her work entitled Don't Cry Over Spilt Bacteria (2017), 3rd Place in the UCLA Gradslam Competition (2017), and Outstanding MS Student award from the C&EE Department (2018). Alexandra is advised by Professor Shaily Mahendra.



Victoria Whitener (Ph.D. candidate) was awarded first place in the categories of grant writing and individual presentation at the Spring Green Expo, which is a showcase for innovative sustainability solutions hosted by the Metropolitan Water District of Southern California. Her Ph.D. research is being supervised by Professor Jennifer Jay.

Additional student recognition:
Alessandro Zulli, Dean's Prize for
Excellence in Science (2018).
Advisor: Mahendra
Meng Wang, Sustainable Nanotechnology Organization Student Award
(2017). Advisor: Mahendra
Cayla Whiteside (BS 2018).
Department Outstanding BS Award
Mehrdad Shokrabadi (Ph.D., 2018).
Department Outstanding Ph.D. Award.
Advisor: Burton

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## **FACULTY AWARDS AND RECOGNITIONS**



Professor Shaily Mahendra was recognized with two major honors this past academic year. In Fall 2017, Dr. Mahendra received the 2017 Paul L.

Bush Award from the nonprofit Water Environment & Reuse Foundation in recognition of her groundbreaking research in developing promising environmentally friendly technologies to remove pollutants from water.

The honor, awarded annually since 2001, is considered the top recognition in the field of water quality for early- to mid-career researchers. It includes a \$100,000 grant for her research.

In Summer 2018, the Government of India recognized Dr. Mahendra with the Non-Resident Indian Welfare Society Mahatma Gandhi Pravasi Samman Award, which is given to non-resident Indians for outstanding services, achievements, and contributions. "Pravasi Samman" translates to non-resident honor. It is a prestigious award for global achievement and is given to only about 30 people per year among over 16 million Indians living outside India.



Professors **Gaurav Sant** and **JR DeShazo** advanced to the finals of the \$20 million **NRG COSIA Carbon XPRIZE** by successfully creating a version of concrete that is nearly carbon-dioxide-neutral. Working to upend one of the most stalwart of construction materials, the Carbon Upcycling team, which developed eco-friendly concrete, is sharing in the \$5 million prize.

The international competition, which began in 2015 and is scheduled to conclude in 2020, challenged teams to develop carbon technologies that convert carbon dioxide emissions from power plants and industrial facilities into viable products. The eco-friendly building material, called CO2NCRETE, was developed by the UCLA Carbon Upcycling team and offers similar strengths and functionality as traditional concrete.

Ten finalists have been selected from a field of 27 semifinalists by an independent judging panel of eight international energy, sustainability and carbon dioxide experts. The teams have been awarded an equal share of a \$5 million milestone prize.

Thomas Sabol, an Adjunct Professor with the CEE department, was recognized with the Lifetime Achievement Award by the American Institute of Steel Construction (AISC). This award distinguished contributions to the structural steel industry and provides special recognition of service to AISC and the structural steel design/construction/academic community.





Professor Jiann-wen (Woody)
Ju was awarded the ICDM-3
Conference Lifetime
Achievement Medal by the
Third International Conference
on Damage Mechanics,
July 4-6, 2018 (Shanghai,
China). This medal recognizes
achievements in the field of
damage mechanics.

Professor Jonathan P. Stewart was awarded the Bruce Bolt Medal by COSMOS, the Earthquake Engineering Research Institute, and Seismological Society of America. This medal recognizes accomplishments in the use of strong-motion earthquake data and leadership in the transfer of scientific and engineering knowledge into practice or policy to improve seismic safety.



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## **Undergraduate and Pre-College Student Research Experiences**

#### Middle Schoolers Learn About Climate Change and Water Quality

Professor Jennifer Jay and Ph.D. students Megan Rugh and Wayne Hung engaged groups of middle school students to research how climate has changed over the last several decades at a location selected by the students. Student groups also participated in hands-on activities to demonstrate natural water treatment systems. The project culminated in a visit to the UCLA campus, with a poster session and panel discussion.



### **Undergraduate and High School Students Contribute to Next-Generation Liquefaction** (NGL) Project

During the 2017/2018 academic year numerous UCLA graduate, undergraduate, and high-school students worked on the Next Generation Liquefaction (NGL) database project under the supervisions of Professors S.J. Brandenberg, J.P. Stewart, and Dr. P. Zimmaro. Earthquake-induced liquefaction is the sudden loss of strength and stiffness exhibited by saturated sandy soils during strong ground shaking. Engineers have developed

UCLA undergraduate student Asante Parker describes climate change to local middle schoolers.

► UCLA undergraduate student Luke Apodaca (second from left), with his group of middle school students and their poster on natural water treatment systems.

procedures for evaluating whether liquefaction will occur at a specific site for a particular ground shaking level, but the number of case histories is remarkably small, involving earthquakes prior to 1999. Led by Professor

Jonathan Stewart, with collaborators in the PEER center and the Southwest Research Institute, the NGL project was launched to (1) improve and expand the case history database, (2) undertake supporting studies to augment case history data for important conditions, and (3) provide an open, collaborative process for model development. Professor Scott Brandenberg was recently named as the lead for the database team, with also includes Professor Dong Youp Kwak (Ph.D., 2014) and Project Scientist Dr. Paolo Zimmaro.

The NGL project is a worldwide collaborative effort among universities, research centers, and engineering firms in nations having substantial liquefaction risk. One of the project goals is to develop an open and transparent database of liquefaction case-histories. The students performed hands-on activities on selected case-histories from several nations worldwide. They became familiar with engineering practices such as geotechnical site investigations and laboratory tests, post-earthquake reconnaissance, and computer science skills such as the use of relational databases. They also collaborated as a group on finding efficient solutions to properly organize,

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Practicing the scientific method and the process of research hones the students' analytical and critical thinking skills, which are important to their success.

Prof. Burton with his summer

Burton, Morolake Omoya, Daniella

Nkrumah-Boateng, Eleanor Hunts

research intern group. (left to right): Laxman Dahal. Henry

and Zhengxiang Yi.

store, and process big data. Their contributions will help advance the practice of liquefaction hazard assessment. The following UCLA students participated in this effort: Arielle Sanghvi, Bryan Ong, Chris Nicas, Michael Winders, Naoto Inagaki, Omar Issa, Siddhant Jain, Trini Inouye, Wyatt Iwanaga, Tristan Buckreis, Honor Fisher, and Allison Lee. Two high school students, Sayra Salgado and Emma Averil, also joined the research team as part of the UCLA High-school summer research program. See http://uclageo.com/NGL/ for more information.

## "Solid as a Rock - or Not?" - At the Laboratory for the Chemistry and Construction Materials (LC2), high school and undergraduate students are engaged in research activities.

Under the supervision of **Professor Gaurav Sant**, high school and undergraduate students study topics such as corrosion behavior of alloys, mineral reactivity, and carbon dioxide mineralization. A third-year high school student, **Nathan Deng**, and an undergraduate student at CEE, **Natalia Ramirez**, are studying the dissolution of ultramafic rocks and the differences in the reactivities of its component minerals to evaluate the influences of chemical composition and mineral structure on dissolution rate. **Sadie Sarkisian**, a high school student, is investigating routes for accelerating carbon dioxide mineralization reactions to efficiently produce concrete-equivalent materials. A senior high school student, **Lars Peterson**, is studying the corrosion behavior of titanium alloys in

contact with simulated body fluids using electrochemical analysis coupled with time-resolved microstructural and high-resolution surface characterizations. Practicing the scientific method and the process of research hones the students' analytical and critical thinking skills, which are important to their success.

#### **Summer Research with HBCU Students.**

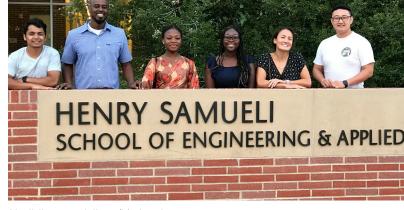
As part of the UC-HBCU Initiative sponsored by the University of California Office of the President, Professor Henry V. Burton hosted three undergraduate researchers during summer 2018. Laxman Dahal (Howard University), Camille Wallace (Howard University) and Daniella Nkrumah-Boateng (Morgan State University)

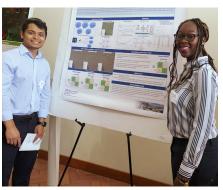
worked on research related to (a) seismic risk assessment of building portfolios, (b) development of controlled rocking building systems, and (c) machine-learning-based prediction of earthquake

induced building damage, respectively. The UC-HBCU Initiative encourages UC faculty to actively engage in collaboration and cooperation with faculty and students at HBCUs (Historically Black Colleges and Universities).

Such efforts serve to strengthen and enrich our mission

of teaching, research and public service.





◄ Prof. Burton's summer interns, Laxman Dahal (left) and
Daniella Nkrumah-Boateng, with their research poster.

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## STUDENT ORGANIZATION NEWS

#### American Society of Civil Engineers at **UCLA (ASCE at UCLA)**

President: Mahsa Sheykhsoltan http://www.ascebruins.org

ASCE at UCLA is one of the largest and most active student groups on campus. President Mahsa Sheykhsoltan notes, "ASCE provides students in civil engineering and related fields with academic, professional, and social experiences outside of the classroom. We continue to grow every year and introduce new events and projects in our club. This year, our hardworking officer board is looking forward to build off of last year's successes and create new opportunities for members!"

For the first time in ASCE at UCLA's 59 year history, we received the prestigious ASCE Robert Ridgway Award, which is awarded to the most outstanding out of 347 domestic and international student chapters. The award citation states: "For excellence in the effective and meritorious conduct of its affairs as a Student Chapter of ASCE through the ability and professional diligence of the Chapter officers, members and faculty advisors."

Additional honors include a Letter of Recognition for Community Service recognition as the Distinguished Chapter in ASCE Region 9 for the past 2 years. These and other awards are possible because of the tremendous energy, enthusiasm, hard work, and leadership of the student chapter members.

#### **Engineers Without Borders (EWB)**

Co-Presidents: Anish Gosala and Jenny Nguyen http://www.ewbucla.org

EWB-UCLA undertakes projects in developing countries to help the local population while cultivating in students project management and teamwork skills. Current projects include designing and building a library equipped with solar panels for an e-learning center in Sm'echa-Zala, Ethopia, designing a low-cost, permanent off-grid water system on a Navajo Native American reservation in Arizona, and remodeling a schoolhouse in San Sebastian, Nicaragua.

EWB-UCLA is a non-profit student run organization.

#### Graduate Student Water Resources Group (GSWR)

Co-Founders: Maryam Ghajar and Sonali Abraham maryamghajar@ucla.edu sonaliabraham@ucla.edu

GSWR was founded to serve UCLA graduate students pursuing studies in multidisciplinary fields related to water. Through advocacy and student programs, we seek to raise awareness and cultivate understanding of issues related

to water scarcity, sustainable water infrastructure, water supply and demand management, and water quality. Student programs organized by GSWR include field trips, info sessions and networking between students and faculties.

#### California Geotechnical Engineering Association (CalGeo)

President: Brandon Duong http://calgeobruins.org/

CalGeo at UCLA is the bridge between students and professionals in the geotechnical engineering industry. We host information sessions, field trips, conferences, and more!

#### Chi Epsilon (XE)

President: Bryan Hong

https://sites.google.com/site/chiepsilonatucla/

XE is a national civil engineering honor society dedicated to the purpose of maintaining and promoting the status of Civil Engineering as an ideal profession.

#### **Earthquake Engineering Research Institute** (EERI)

uclaeeri@gmail.com

EERI is dedicated to the advancement of earthquake engineering education and research for the purpose of reducing seismic hazard worldwide.

#### Institute of Transportation Engineers (ITE)

President: Dario Qiu

https://iteucla.wordpress.com/

ITE is an international association educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs.

#### Society of Women in Engineering (SWE)

President: Sohni Thakkar http://www.seas.ucla.edu/swe/

SWE is a not-for-profit educational and service organization that empowers women to succeed and advance in the field of engineering, and to be recognized for their life-changing contributions as engineers and leaders.

#### Tau Beta Pi (TBP)

http://engineering.ucla.edu/student-clubs/

TPB is a national engineering honor society offering free drop-in tutoring and review sessions for lower division math and science courses, organizing engineering competitions, and planning mentorship and outreach events.

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## RESEARCH HIGHLIGHTS



## **ROLE OF TALL BUILDINGS** in the Resilience of Urban Centers

Tall buildings have become a staple of central business districts, reflecting the intersection of increased urbanization with constraints of limited land space. When analyzed for their response to earthquakes, traditional engineering methods consider the building as "an island," where seismic

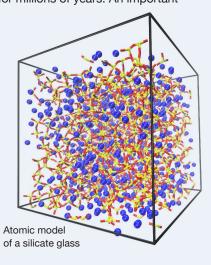
impacts are constrained within its footprint. In an NSF project led by Professors Henry Burton and John Wallace, the critical role of building performance in minimizing the impact of earthquakes at the community level is being investigated. Using downtown Los Angeles as a test bed, and engaging local building officials and practitioners, the team is studying how buildings actually respond using sensor networks, developing a framework for assessments of resilience of dense urban cores with tall buildings, and creating tools that enhance data use and visualization by scientists, engineers, social scientists, and policy makers.

Alternative and novel sensors are being used to capture important building responses to enable better performance assessment. Structural models have been developed with advanced characterization of response to earthquake ground motions, which have been used to generate engineering demand parameters for the resilience-based assessment. More information from an NSF Science360 news piece is available at https://www.youtube.com/watch?v=m4jwvcLpdM U&feature=youtu.be.

"Waste not, want not."

- Predicting the long-term durability of vitrified nuclear waste using machine learning.

56 million gallons of radioactive waste are stored in the Hanford site in Washington State—a legacy of nuclear weapon production since World War II. These nuclear wastes are expected to be immobilized by turning them into solid glasses (i.e., vitrification) and placed in geological depositories for millions of years. An important



concern is the ability of these glasses to resist corrosion when exposed to water over geological time. Professor **Mathieu Bauchy** and his group are applying machine learning to predict dissolution rate of glasses exposed to water. This model can be used to predict the long-term durability of nuclear waste glasses and ensure the safety of vitrification operations.

## Towards Healthier Surfing – Are antibioticresistant pathogens colonizing surfers?

Southern California is renowned for its beaches and surfing culture. Could pathogens create a health risk for those hitting the waves?

C&EE researchers Megyn Rugh (Ph.D. student) and Professor Jennifer Jay have found methicillin-resistant Staphylococcus aureus (MRSA) at numerous beaches in Southern CA. With support from a Sea Grant and partnerships with the Surfrider Foundation, Heal the Bay, and the UCLA Institute of the Environment and Sustainability, they are launching a broader effort to investigate whether



this antibiotic-resistant pathogen is colonizing surfers.

This study addresses an important knowledge gap. Other research showing problems with antibiotic resistance in people exposed to high levels of antibiotic resistant bacteria has shown correlation but not causation. A temporal study with surfers can reveal a colonization following a particular exposure when water is impaired.

The research includes nasal swab specimens from surfers and a control group to answer questions about water exposure, health, and antibiotic use.

For more information, or to get involved in the research, please visit the UCLA Spark website.

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## **Recent PhD Degrees (Fall 2017-Summer 2018)**

#### **Kioumars Afshari**

Advisor: Jonathan Stewart Observation-informed methodologies for site response characterization in seismic hazard analysis

#### **Peng Guo**

Advisor: Gaurav Sant Studies on cement design and steel corrosion towards sustainable reinforced concrete

#### **Laurie Huning**

Advisor: Steven Margulis Improving the understanding of the spatiotemporal variability of hydrometeorology across the Sierra Nevada

using a novel remote sensing reanalysis approach

#### Michelle Miro

Advisor: Jay Famiglietti Science-based approaches to water resources management: Studies in remote sensing, groundwater and California's Central Valley

#### **Christopher Segura**

Advisor: John Wallace Seismic Performance Limitations of Slender Reinforced Concrete Structural Walls

#### Zhenhua Wei

Advisor: Gaurav Sant Phase change materials and clinkeringfree cementation for sustainable building materials

#### Yazhou Xie

Advisor: Jian Zhang Seismic Modeling, Quantifying and Protection of Highway Bridges Considering Shaking and Lateral Spreading

#### Shu Zhang

Advisor: Shaily Mahendra Biodegradation of 1,4-Dioxane in Co-Contaminant Mixtures

## **Faculty Appointments/Promotions Obtained by PhD Graduates** and Postdoctoral Scholars 2016-18

#### Kamil Bekir Afacan, Ph.D., 2014

Promoted to Vice Chair, Eskisehir Osmangazi University, Turkey, 2018 Advisor: Scott Brandenberg

#### Roger Babcock, Ph.D., 1991

Promoted to Professor, University of Hawaii, 2018 Advisor: Michael K. Stenstrom

#### Janet Barco, Visiting Scholar & Postdoc, 2007-2010

Appointed as Assistant Professor, University of Medellin, Columbia, 2018 Advisors: Terri Hogue, Michael K. Stenstrom

#### Phillip Gedalanga, PhD., Postdoc, 2011-17 Appointed as Assistant Professor, California State University, Fullerton, CA, 2017

Advisor: Shaily Mahendra

#### Jian Huang, Postdoc, 2012-2015

Appointed as Associate Professor, Shanghai Institute of Ceramics, Chinese Academy of Sciences, 2017. Advisor: Gaurav Sant

#### Anoop Krishnan, Postdoc, 2016-2017:

Appointed as Assistant Professor, Indian Institute of Technology, Delhi, 2017 Advisors: Mathieu Bauchy and Gaurav Sant

#### Dong Youp Kwak, Ph.D. 2014

Appointed as Assistant Professor, Hanyang University, Ansan, South Korea, 2018 Advisors: Scott Brandenberg and Jonathan Stewart

#### Anne Lemnitzer, Ph.D., 2009

Promoted to Associate Professor, UC Irvine, Civil & Environmental Engineering, 2018 Advisors: Jonathan Stewart and John Wallace

#### Ji Yun Lee, Postdoc, 2016-17

Appointed as Assistant Professor, Washington State University, 2017 Advisor: Henry Burton

#### Yun Liu, PhD., Postdoc, 2016-17

Appointed as Assistant Professor, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China, 2017 Advisor: Shaily Mahendra

#### Saber Moradi, Postdoc, 2016-17

Appointed as Assistant Professor, Ryerson University, Canada, 2017 Advisor: Henry Burton

#### Monday Uchenna Okoronkwo, Postdoc, 2015-18

Appointed as Assistant Professor, Missouri University of Science and Technology, 2018 Advisor: Gaurav Sant

#### Isabella Pignatelli, Postdoc, 2014-2015

Appointed as Assistant Professor, Universite de Lorraine, France, 2016. Advisors: Gaurav Sant and Mathieu Bauchy

#### Peerapong Pornwongthong, Ph.D., 2014

Promoted to Associate Dean for Research and Development, King Mongkut's University of Technology, Bangkok, Thailand, Dec. 2016 Advisor: Shaily Mahendra

#### Diego Rosso, Ph.D., 2005

Promoted to Professor, UC Irvine, 2018 Advisor: Michael K. Stenstrom

#### Ali Shafiee, Ph.D., 2016

Appointed as Assistant Professor, Cal Poly Pomona, Civil Engineering Department, 2018 Advisors: Scott Brandenberg and Jonathan Stewart

#### Yuchuan Tang, Ph.D., 2009

Appointed as Associate Professor, School of Civil Engineering, Southeast University, China, 2017 Advisor: Jian Zhang

#### Bu Wang, Postdoc, 2015-2018

Appointed as Assistant Professor, University of Wisconsin, Madison, 2018 Advisors: Gaurav Sant and Mathieu Bauchy

#### Keiji Yanase, PhD., 2009

Promoted to Full Professor, Fukuoka University, Japan, 2017 Advisor: Jiann-wen (Woody) Ju

#### Eric Yee, Ph.D., 2011

Promoted to Associate Professor, KEPCO International Nuclear Graduate School, 2016 Advisor: Jonathan Stewart

#### Samuel Yniesta, Ph.D., 2016

Appointed as Assistant Professor, Ecole Polytechnique de Montreal, 2016 Advisor: Scott Brandenberg

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## **INDUSTRY OUTREACH**

#### **C&EE Industry Advisory Board (IAB)**

The Industry Advisory Board met with C&EE faculty on February 23, 2018 in the beautiful new Luskin Conference Center to review the department's strategic plan as well as provide guidance about department growth and organization, use of space, and curriculum issues. IAB met new faculty member, Associate Professor David Jassby, learning about his research in water treatment using desalination, membrane separation processes, membrane material fabrication, electrochemistry, and environmental applications of nanotechnology. Brian Taylor, Professor of Urban Planning; Director, Lewis Center for Regional Policy Studies; Director, Institute of Transportation Studies, led a discussion on faculty recruitment in Transportation Engineering. Board members were treated to a tour of the C&EE labs, as well as the new Engineering VI state-of-the-art facility.

#### **CEE Partners Program**

Connect your organization with C&EE department students, faculty, and staff for an experience tailored to your needs. Enjoy exclusive recruitment opportunities, networking with faculty and professional colleagues, advance knowledge of cutting edge technical developments, and research partnership opportunities.

- Complimentary booth and info session at ASCE Career Fairs
- Recognition on digital displays and department web page
- Faculty engagement in student recruiting
- Extended networking with peer companies, faculty and public agencies
- Invitations for your company representatives to deliver on-campus seminars
- Invitations to C&EE and other engineering special events
- Opportunities for collaborative research with C&EE students and faculty

Learn more here:

http://www.cee.ucla.edu/industry/

#### **Career Fair Solicitation**

At UCLA C&EE, companies recruit from some of the brightest undergraduate and graduate students in the nation. C&EE consistently produces top engineers with strong technical backgrounds and leadership experience. ASCE at UCLA student chapter hosts two C&EE Career Fairs every year. The career fairs attract more than 300 undergraduate, graduate and post-graduate C&EE students. http://www.ascebruins.org/career-fair.htm

#### Dates:

Fall Career Fair: 11/1/18, 10am - 2pm Winter Career Fair: 1/31/19, 10am - 2pm

More information: http://www.ascebruins.org/uploads/5/5/4/6/55461833/asce-at-

ucla-career-fair-registration-form-2018-2019.pdf

**Platinum** 



Silver



**Bronze** 















**Public Sector** 



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## UCLA Civil & Environmental Engineering

Engineering Sustainable Infrastructure for the Future

UCLA Civil and Environmental Engineering 420 Westwood Plaza 5731 Boelter Hall Los Angeles, CA 90095

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Phone: 310-825-2471



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Newsletter Content Manager: Helen Weary Editor, writer: Professor Jonathan P. Stewart

### **Giving to C&EE at UCLA**

Gifts to the Engineering Annual Fund enable the UCLA Samueli Engineering to provide world-class engineering educational programs and support advanced interdisciplinary research. Your annual support will allow the School to provide valuable resources to ensure academic success, including scholarships and fellowships to outstanding students, innovative new courses, and state-of-the-art laboratories, teaching and research facilities. You may select to give specifically to Civil and Environmental Engineering. Learn more here: https://giving.ucla.edu

Interested in donating to a specific student group? Find out more by visiting their respective websites or contacting CEEHELP@seas.ucla.edu.

#### **Alumni Events**

The UCLA Henry Samueli School of Engineering and Applied Science's proudest assets are our more than 31,000 alumni. In Southern California and around the world, our alumni show tireless dedication to the school, community service, and the profession of engineering. Find information about alumni events and organizations, ways to get involved or make a gift, profiles of prominent alums and information about networking at www.engineering.ucla.edu.

Fall Football Tailgate: The annual alumni reunion at the Rose Bowl will be October 6 2018. Come to connect with new and old friends, as well as some professors. Pre-registration required. More information here.

