

Bench marks

DEPARTMENT OF CIVIL, ENVIRONMENTAL
AND GEODETIC ENGINEERING



THE OHIO STATE UNIVERSITY



Department of Civil, Environmental and Geodetic Engineering
470 Hitchcock Hall | 2070 Neil Avenue | Columbus, OH 43210
ceg.osu.edu

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On the cover: CEGE students collaborate on a class project near the Lane Avenue Bridge. Learn about CEGE's engineering reconnaissance efforts in Puerto Rico on pages 8 - 9. Celebrate alumni service and recognition on pages 14 - 15. Photo courtesy of CEGE Communications



TO ALUMNI AND FRIENDS

linear structural dynamics and practiced as a senior engineer at Thornton Tomasetti. Prof. Massari expands our ability to expose students to real-world practice and professionalism throughout the curriculum to ensure that our students can transition smoothly through capstone projects and into practice. Outside of the classroom, our professors of practice continue to contribute to the fields of civil, environmental and geodetic engineering, such as performing engineering evaluations in storm-ravaged Puerto Rico (read more on pages 8-9).

Greetings!

It is my great pleasure to offer my first welcome to our Buckeye community of civil and environmental engineers and friends. I am excited to begin serving as the Civil, Environmental and Geodetic Engineering Department Chair this year. We have a vibrant community of students that sets us apart from many other programs by once again having our degree paths filled to their enrollment limits. This year we number 612 civil engineers, 146 environmental engineers and 70 graduate students in our academic programs. Our students are guided by an energetic team of faculty and academic advisors. These individuals are supporting our students in their growth to strong contributions in practice and advances in engineering knowledge when they join the ranks of our existing graduates.

This year we welcome four faculty who bring new directions to the structural engineering group. Prof. Natassia Brenkus has expertise in structural durability through alternate corrosion protection systems in large structures. Prof. Lisa Burris is evaluating the performance properties of new cementitious materials with lowered energy and resource demands. Prof. Nan Hu is interested to integrate multi-functionality into structural members, including origami shape-changing concepts. These tenure-track Assistant Professors bring new experimental capacity to our teaching and research missions.

Our fourth faculty hire is Prof. Anthony Massari who joins us as an Assistant Professor of Practice. He has a background in structural health monitoring and non-

Sadly, along with the growth of the department in new areas, we must sometimes say good-bye to long-time members of our community: Prof. Frank Croft and Hojjat Adeli joined the ranks of our emeritus faculty this year upon their retirements. I know that they have had strong influences on the many students who have passed through our programs as Prof. Croft and Adeli's names have often come up in conversations that I have had with alumni during the fall semester (learn more about their contributions on page 18).

In closing, I look forward to the opportunity to relay more exciting initiatives from the Civil, Environmental and Geodetic Engineering in the coming years as Chair. We will be upgrading student space and research facilities to support growth with our new faculty hires. We will be enhancing our curriculum to capitalize on new interdisciplinary expertise among our instructional team. We will be developing faculty expertise in the areas of resilient infrastructure, environmental microbiology and hydrology through new faculty hires in this academic year. As ever, our strengths are compounded by the contributions of our alumni and friends who are engaged directly with Ohio State and those who are leading accomplishments elsewhere in the world (read more on pages 14-15).

All the Best,

Allison A. MacKay

Chair, Department of Civil, Environmental and Geodetic Engineering

CEGExperiences



(6) Undergraduate student Emma van Dommelen installs an air quality sensor on a Campus Area Bus Service (CABS) vehicle as part of a data collection collaboration between CEGE and Ohio State's Department of Transportation and Traffic Management, March 2017. **(7)** Ohio State University President Michael V. Drake, M.D. and Tarunjit Butalia, CEGE research associate professor, show their Buckeye pride during President

Drake's visit to a Coal Combustion Products Program research site as part of his State Tour, June 2017. **(8)** Rongjun Qin, Assistant Professor of Geodetic Engineering and leader of Ohio State's Geospatial Data Analytics Group, demonstrates how satellite data can aid those affected by natural disasters, June 2017. **(9)** (from left to right) Susheela Suguness, Greg Boyer, '85, Ohio State Civil Engineering Alumni Society Board of Directors, Ryan Ohly, Civil Engineering Alumni

Society Scholarship recipient and Sugu Suguness, MS, CE ('85) and Chair, CEGE External Advisory Board, pose for a photo at the College of Engineering's 16th Annual Scholarship Luncheon, April 2017. **(10)** Daniel Pradel, Professor of Practice in Geotechnical Engineering, works with a student in CEGE's Materials Lab, October 2017.

(1) Faculty emeritus Vince Ricca (right) chats with civil engineering student William Sumlin on the Lane Ave. bridge, May 2017. **(2)** The Ohio State University Airport is decked out for the groundbreaking for the Austin E. Knowlton Executive Terminal and Aviation Learning Center, August 2017. **(3)** CEGE student Asia Doss builds a lead for the Ohio State women's

basketball team, March 2017. **(4)** Members of the Steel Bridge team shore up their structure during OVSC competition, April 2017.

(5) (from left to right) Monica Mosure, CEGE student Taylor Covault, Tom Mosure, CEGE student Amrian Johnson and Tommy Mosure celebrate the creation of the Mosure Family / ms consultants Civil Engineering Support

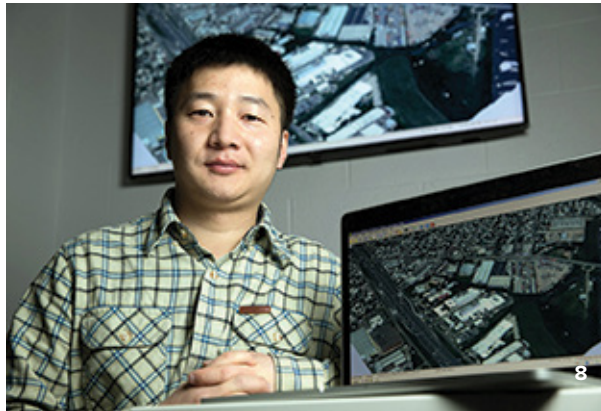
Fund, which will enhance CEGE's capstone program, October 2016.



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10



WELCOME OUR NEW FACULTY MEMBERS



Natassia Brenkus, PhD
Assistant Professor

Professor Brenkus received her BS, ME and PhD from the University of Florida. Her recent work has focused on alternative corrosion protection systems to improve bridge performance and lengthen structure life, including a project to facilitate easier tendon maintenance and replacement using wax products in post-tensioned structures. This work has influenced Florida's bridge design and construction practices.

Her research interests include prestressed and post-tensioned concrete design and long-term performance, structural durability and behavior, and computational modeling.



Lisa Burris, PhD
Assistant Professor

Professor Burris earned her BS and MS in Architectural and Civil Engineering (respectively) from Kansas State University and her PhD in Civil Engineering from the University of Texas at Austin.

Professor Burris' research focuses on reducing the environmental impact of cementitious binders while also finding solutions to the many durability issues plaguing reinforced concrete structures. She joins Ohio State's faculty after having held the position of postdoctoral fellow in the School of Civil and Environmental Engineering at the Georgia Institute of Technology.



Nan Hu, PhD
Assistant Professor

Professor Hu received a BEng in civil engineering from Hunan University, China and a MEng in civil engineering from Central South University, China. He went on to earn his MS in Engineering Mechanics and PhD in Civil Engineering from Michigan State University.

Dr. Hu's research focuses on the conceptual development and demonstration of structural components and systems that enable shape-changing, adaptive, multi-functional features beyond their traditional role of carrying loads. He joins the CECE faculty after he served as a postdoctoral researcher at Dartmouth College.

FORMER CHAIR NAMED ASSOCIATE DEAN



Anthony Massari, PhD, PE
Assistant Professor of Practice

Professor Massari earned a BS in Civil and Environmental Engineering from the New Jersey Institute of Technology and a MS in Structural Engineering from the University of California at Berkeley. He later attended the California Institute of Technology where he received an MS in Applied Mechanics and a PhD in Civil Engineering.

He also served as a senior engineer at Thornton Tomasetti, where he worked on stadium and high-rise building structure projects. His areas of research interest include computational modeling, nonlinear structural dynamics, behavior of structural systems, earthquake engineering, performance-based design and structural health.

Dorota A. Grejner-Brzezinska, professor and former chair of the Department of Civil, Environmental and Geodetic Engineering, was named Associate Dean for Research in the College of Engineering. Appointed September 1, 2017, she will lead the research endeavors of over 950 faculty and staff, oversee the college's research operations and grow strategic industry partnerships.



Regarding her new role, Professor Brzezinska said "I am eager to work with college leadership, faculty and staff to continue growing our signature research programs, seek strategic hires and leaders in those areas, identify new strengths we can build on and utilize research to attract the best, brightest and most diverse talent to our labs and classrooms."

HAGENBERGER ASSUMES DUAL ROLES

Michael J. Hagenberger, Associate Professor of Practice, was named Associate Chair of the Department of Civil, Environmental and Geodetic Engineering in July 2017. In this role, Professor Hagenberger will support the department chair in administrative matters and will coordinate departmental teaching assignments and updates of CEGE's curriculum.



In December 2017, Professor Hagenberger was appointed as Associate Dean for Facilities and Capital Planning in the College of Engineering. He will provide administrative oversight, planning, prioritization and coordination of capital projects, renovation projects and physical space management in the college.

**“THE LONG-TERM REBUILDING OF
PUERTO RICO IS STILL TO COME.”**



Professor Pradel inspects landslide-affected homes along Logo dos Bocas in Puerto Rico. Photo courtesy of Daniel Pradel

REBUILDING PUERTO RICO

CEGE PROFESSOR ON NSF ENGINEERING RECONNAISSANCE MISSION

In September 2017, two Category 5 hurricanes devastated much of the Caribbean, including the U.S. territory of Puerto Rico; first Hurricane Irma, and ten days later, Hurricane Maria. Many slopes on the island were already saturated when Maria made landfall on September 20, 2017. The tenth most-intense Atlantic hurricane on record, Maria inflicted widespread damage, numerous fatalities and created an ongoing humanitarian crisis in Puerto Rico.

Understanding how extreme events such as hurricanes, earthquakes, tsunamis and tornadoes affect civil engineering infrastructure is crucial to both the design of new structures and the retrofitting of existing ones.

Daniel Pradel, professor of practice in the Department of Civil, Environmental and Geodetic Engineering visited Puerto Rico in early November 2017, as part of the Geotechnical Extreme Events Reconnaissance (GEER) team, a program funded by the National Science Foundation. He and his fellow experts assessed damage to many of the island's buildings, dams, slopes, lifelines and bridges.

Dr. Pradel has considerable experience as a consulting, geotechnical, engineer and has participated in several post-disaster teams, including the 2015 Ghoraka earthquake in Nepal, the 2011 Tohoku earthquake and tsunami in Japan and the 1994 Northridge earthquake in California.

Sponsored by the National Science Foundation, the GEER Associa-

tion's intent is to turn "disasters into knowledge" by collecting important, perishable, post-disaster data that engineers, scientists and government officials can later use to improve the design and safety of infrastructure.

Upon arriving at its destination, the team found the damage to infrastructure to be widespread, which restricted access to sites with critical infrastructure. "It is difficult to bring relief to people and implement repairs," Pradel said.

He observed landslides, rockslides and debris blocking bridge spans and culverts that created debris dams. The buildup of water behind these debris dams resulted in the overtopping of bridges and damaged their columns. High velocity water flow resulted in major scour that eroded bridge abutments and dam spillways, as well as washed

away roads and utility line destruction.

"The power grid is in shambles" said Pradel. "The amount of destruction is on par with what I observed in Japan, after the 2011 tsunami."

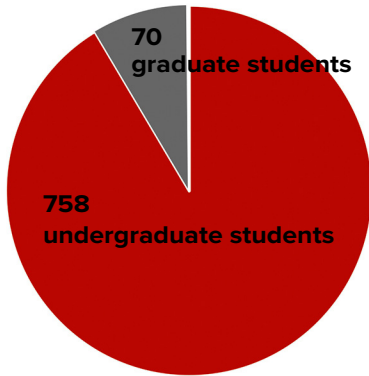
Dr. Pradel is confident that the lessons learned here will help future, practicing engineers but he knows that, in the meantime, progress on this Caribbean island will come slowly. "Temporary repairs are being made but the long-term rebuilding of Puerto Rico is still to come."



A house (middle right) on the west side of Puerto Rico affected by ocean surge and the damaged spillway of Guajataca Dam (bottom right)
Photos courtesy of Daniel Pradel

CEGE STUDENTS AT A GLANCE

Autumn 2016 Enrollment **828**



18

countries represented

Undergraduate students

612 Civil Engineering

146 Environmental Engineering



28%

of CEGE students
are women

88% of CEGE students gain experience
outside of the classroom
internships | co-ops | research | part-time work

WHY WE GIVE

"We felt that Ohio State has focused correctly on students and raising the quality of the education they receive. Our ability to contribute to that was important to us."

- Robert Redfield



Mr. Redfield is pictured here with the late Dr. Carolyn Merry, Professor and former Chair, CEGE, and Brutus Buckeye. Bob graciously donated \$100,000 in 2017 in Carolyn's memory to upgrade the department's undergraduate education facilities.

Photo courtesy of CEGE Communications

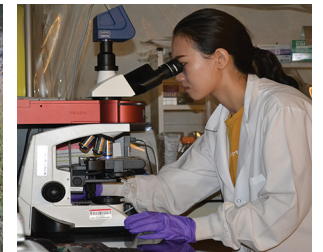
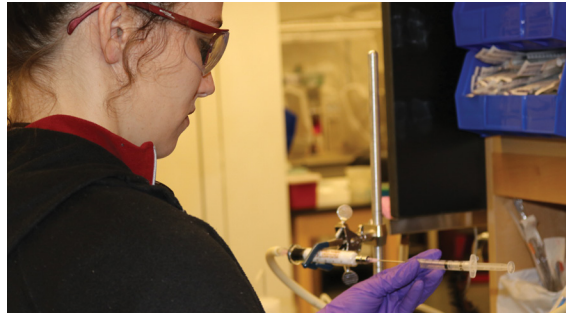
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For a complete list of CEGE scholarship funds, visit
ceg.osu.edu/alumni-donors/opportunities-give



FACULTY ACHIEVEMENT

CEGE faculty demonstrate diverse and scholarly accomplishments while they educate tomorrow's engineering leaders. We celebrate all of our faculty members' achievements and proudly present these highlights of their recent accomplishments.



Jeffrey M. Bielicki (1), Assistant Professor of Environmental Engineering, was awarded the Lumley Research Award at the College of Engineering's 20th Annual Distinguished Faculty Awards, held on April 27, 2017. Made possible by an endowment established by John H. and Mildred C. Lumley, the award recognizes a faculty member's research contributions and productivity over the five-year period prior to his or her nomination. Professor Bielicki's *Energy Sustainability Research Laboratory* addresses issues in which environmental systems and policy interact. Shown with Professor Bielicki, is Rudy Buchheit, Associate Dean, Academic Affairs and Administration, College of Engineering.

Karen Dannemiller (2), Assistant Professor of Environmental Engineering, was selected as a recipient of the 2017 Outstanding Research Mentor Award (ORM) at Ohio State's Denman Undergraduate Research Forum, held on March 29, 2017. The ORM recognizes the leadership and support faculty research mentors provide to undergraduate students presenting in the forum, one of the largest events of its kind in the country. This year, over 650 students, including more than 100 Buckeye engineers, presented research to the university community. Pictured with Professor Dannemiller is Ohio State University President Michael V. Drake, M.D.



Dorota Grejner-Brzezinska (3), Professor and former chair of CEGE, was awarded the Institute of Navigation (ION) Distinguished Service Award for 2016. The citation recognizes Professor Brzezinska's "extraordinary service to the Institute of Navigation." Dr. Brzezinska served as President of the Institute from January 2015 - February 2017. The Institute of Navigation is a non-profit, professional organization dedicated to advancing Positioning, Navigation and Timing (PNT).

Daniel Pradel (4), Professor of Practice of Geotechnical Engineering, was named a commissioner as part of ABET's Engineering Technology Accreditation Commission, in July 2017. ABET accredits college and university programs in the disciplines of applied and natural science, computing, engineering and engineering technology at the associate, bachelor and master degree levels.



Halil Sezen (5), Professor of Structural Engineering, was awarded the prestigious Fulbright U.S. Scholar Grant by the U.S. Department of State in June 2017. The program, sponsored by the U.S. Department of State's Bureau of Educational and Cultural Affairs, is the U.S. government's flagship, international exchange program. His research will involve investigation of fiber reinforced polymer and shape memory alloy materials for retrofit and other structural engineering applications.





Abdollah Shafieezadeh (6), Assistant Professor of Structural Engineering, (shown here with Rudy Buchheit, Associate Dean, CoE) received the College of Engineering's Lumley Research Award during the 20th Annual Distinguished Faculty Awards in April 2017. Shafieezadeh's *Risk Assessment and Management of Structural and Infrastructure Systems (RAMSIS) Laboratory* conducts research aimed at risk and resilience assessment and improvement of aging structural and infrastructure systems against natural and manmade hazards.

Professor Shafieezadeh was also named Lichtenstein Endowed Professor of Civil, Environmental and Geodetic Engineering on August 18, 2017. Named for distinguished Ohio State alumnus, Abba G. Lichtenstein, PhD, PE, the professorship focuses on transportation infrastructure with a particular emphasis on condition assessment and risk analysis of transportation systems.

Linda Weavers (7), John C. Geupel Endowed Professor of Environmental Engineering, was named President of the Association of Environmental Engineering and Science Professors (AEESP). The organization is made up of over 700 members in universities throughout the world who provide education in the sciences and technologies of environmental protection.

FACULTY SPOTLIGHT

The Department of Civil, Environmental and Geodetic Engineering is pleased to announce the promotion of **Alper Yilmaz** from the rank of Associate Professor to that of Professor. The promotion, announced by the College of Engineering in April of 2017, was approved by Ohio State's Board of Trustees at its June 2017 meeting.



Professor Yilmaz received his PhD from the University of Central Florida in 2004 and joined Ohio State's geodetic engineering faculty in 2006. He serves as Director of CEGE's *Laboratory for Photogrammetric Computer Vision (PCVLab)*. The PCVLab's goal, he stated, is to "expand the sphere of photogrammetry and computer vision knowledge by solving complex image analysis and understanding tasks." Lab members predominately use mobile platforms such as smart phones, unmanned aerial systems (UAS) and unmanned ground vehicles (UGV) for data acquisition as they address the following research topics:

- Localization and mapping
- Social network analysis
- Visual tracking
- Sensor fusion
- Object detection

Professor Yilmaz serves as a senior member for numerous professional societies and as editor for prominent publications such as *Photogrammetric Eng. and Remote Sensing Journal*. His extensive record of service to Ohio State includes Senator, University Senate, 2013 - 2016 and selected member, President and Provost's Leadership Institute, 2013-2015. Dr. Yilmaz is the recipient of numerous citations at Ohio State including the CoE Lumley Research Award, 2012 and the Lumley Interdisciplinary Research Award, 2015.

ALUMNI SPOTLIGHT

SERVICE TO HIS COUNTRY AND HIS PROFESSION

CEGE GRAD LEADS SOCIETY OF AMERICAN MILITARY ENGINEERS



Col. Sal M. Nodjomian, P.E., F.SAME USAF (Ret.), (left) takes the oath of office as National President of the Society of American Military Engineers, May 2017
Photo courtesy of SAME

Sal Nodjomian's nearly 24-year career in the United States Air Force afforded him the opportunity to travel the world and serve his country, all while employing his skills as an engineer. Now, retired from active service, Col. Nodjomian (MS '94 CE) has found a new way to serve his country and profession. In May of 2017, he was sworn in as the National President of the Society of American Military Engineers (SAME), a non-profit organization that leads collaborative efforts among public and private sector entities to identify and resolve national security infrastructure-related challenges.

The society, established in 1920, enabled Sal to influence training and education programs, professional development activities and mentoring events for its 30,000 members, opportunities he described as "incredibly satisfying."

Col. Nodjomian stated that the opportunity with SAME was another way to "pay forward the gifts that were bestowed on me. As with most volunteer activities, the more you give, the more you get back!"

Sal also serves as Executive Vice President for Matrix Design Group, an engineering consulting firm with 11 offices worldwide. He is energized by Matrix's multidisciplinary approach to its clients' needs. Using the analogy of a track relay race, he said "The most dangerous part of any track relay race is the hand off." Matrix addresses the challenges that arise from these various "hand offs" or transitions that take place during a project's design phase by applying this multidisciplinary expertise to everything from the initial planning and economic analysis, to its multi-faceted engineering requirements.

These transitions, according to Sal, are opportunities to learn and grow, both personally and professionally. He recounted the many "back to the drawing board" moments he had while in graduate school at Ohio State that served as the basis for this philosophy. "I have the fondest memories of my time at Ohio State," Nodjomian said.

Col. Nodjomian is proud of his chosen profession and is confident in its future role in society. Recounting his Air Force experiences, he said "Planes don't fly, satellites don't launch, intelligence doesn't get gathered, unless engineers are there to facilitate critical operations." The same goes for the civilian world. "Civil engineers set the stage for other engineering disciplines to do what they do."



Jim Roberts (BS '84 CE) was presented with the Ohio State University Alumni Association's Robert M. Duncan Alumni Citizenship Award on September 15, 2017.

He serves as vice president of Jobes Henderson and Associates, a civil engineering firm located in Newark, Ohio. He created the Newark Stormwater Utility, improving drainage systems for the city and played a major role in the utility design of large projects on Ohio State's Columbus campus.

Mr. Roberts is a lifelong supporter of the American Heart Association and served as president of Licking County's local chapter. He is also a loyal supporter of Heath High School, serving on the Heath Board of Education for 16 years, 13 of those as president.

He continues to support his alma mater by serving as an usher in Ohio Stadium and donating to the university's athletic programs. He also participates in Pelotonia each year, fundraising to help find a cure for cancer and encouraging others to ride as well.



Joe O'Neal (BS '55, MS '55, CE) was honored with the College of Engineering's Distinguished Alumni Award for outstanding achievement in engineering at the 20th Annual Alumni Award celebration on November 17, 2017.

Mr. O'Neal is the founder of Ann Arbor construction company, O'Neal Construction, where he served as president from 1961 until 2009. A passionate advocate for conservancy efforts, he is the founding director and current chair of the Treeline Conservancy, a proposed greenway, urban trail corridor in Ann Arbor. In the Buckeye tradition of paying forward, Mr. O'Neal also serves on the advisory board for the Community Music School of Ann Arbor.

At the awards event, Dean David B. Williams stated to Mr. O'Neal and his fellow recipients, "Tonight we celebrate you and the tremendous impact Buckeye engineers, architects and planners have on our world through your teaching, entrepreneurship, award-winning designs and service to others."

Photos courtesy of CoE Communications

ALUMNI SOCIETY



**SUPPORT STUDENTS
ASSIST FACULTY
CONNECT WITH PEERS**

Ohio State's Civil Engineering Alumni Society plays a role in the academic endeavors of the College of Engineering, CEGE and civil engineering students by supporting technical seminars and other events related to the fields of civil, environmental and geodetic engineering and by sponsoring departmental scholarships. Photos courtesy of CoE Communications and University Communications

Visit ce.alumni.osu.edu for more information.

KEEP IN TOUCH



Please share your good news with us!

Send updates to satterfield.3@osu.edu

OUTREACH

SUSTAINABLE AND RESILIENT TANZANIAN COMMUNITY UPDATE

BRINGING WATER TO MARWA VILLAGE

Water now flows at the medical clinic in the Tanzanian village of Marwa, thanks to the efforts of students and staff of the Sustainable and Resilient Tanzanian Community (SRTC) organization. During their trip to Tanzania in May of 2017, Ohio State students, including 18 CEGE undergraduates, worked with peers from the University of Dodoma, local laborers and project managers to complete the project.

The rainwater harvesting system collects rainwater through a series of gutters. The water then flows into a 28,000 liter storage tank made of masonry block and concrete. The benefits of doctors and nurses having access to clean, potable water at the clinic, or dispensary, as the villagers refer to it, quickly became evident. Eight childbirths at the clinic in the months immediately following the system's installation, were made easier (and safer) because of this new resource.

The project's scope, funded through SRTC's Buckeye Funder crowdsourcing campaign, also includes plans for a similar system to be installed at the primary school in the nearby sub-village of Lesierway. With these systems completed, the group will continue its efforts to design and build a treatment and distribution system for the village to receive water from the nearby Pangani River. Employing such a system will liberate the women of Marwa from hours spent traveling to procure and transport water for the village's citizens. This time may now be devoted to addressing issues such as the public health of Marwa and a burgeoning women's enterprise program.

In May of 2018, 12 CEGE students will convene in Tanzania with 10 counterparts from Ohio State's School of Environment and Natural Resources and 12 Tanzanian students from the University of Dodoma, to begin the next phase of this life-changing, service learning project.

Bringing **safe, accessible, and clean** water to sustain and enrich our lives and livelihoods.



Maji Marwa

Marwa • Pattel • Lesierway • Njakatai • OSU • UDOM • KiHO • Same District

LEARN MORE | GET INVOLVED

Contact: **Tony Duke** duke.73@osu.edu

614.688.2443 (office)

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CEGE FACULTY MEMBERS ANNOUNCE RETIREMENTS

Professor Hojjat Adeli

After 34 years of teaching and research activities at Ohio State, CEGE Professor Hojjat Adeli retired in September of 2017.



Professor Adeli received bachelor's and master's degrees from the University of Tehran in 1973 and completed his PhD in Civil Engineering at Stanford University in 1976. He joined the faculty of the Department of Civil, Environmental and Geodetic Engineering in 1983. He was the founder and director of CEGE's *Knowledge Engineering Lab* at Ohio State.

Dr. Adeli held many leadership positions during his time at Ohio State and was consistently recognized for his scholarly accomplishments. Examples of these include:

- Chair, Graduate Studies Committee, CEGE, 1996 - 2000
- Editor-in-Chief and Founder, *Computer-Aided Civil and Infrastructure Engineering*, 1986 - 2017
- The Ohio State University Distinguished Scholar Award, 1998
- Charles E. MacQuigg Outstanding Teaching Award, Ohio State College of Engineering, 2007
- Fellow, American Neurological Association, 2014

Always progressing toward his personal goal of performing pioneering and high-impact research, Professor Adeli's work crossed many disciplines, including engineering, computer science, medicine and applied mathematics.

Professor Frank Croft

Frank Croft, Associate Professor and Associate Chair, CEGE, announced his retirement in June, 2017.



Professor Croft earned his BS in Aerospace Engineering from the Indiana Institute of Technology, an MS from West Virginia College of Graduate Studies and a PhD in Civil Engineering from Clemson University. He joined the faculty of Ohio State in 1984 where he devoted himself to teaching, scholarship, outreach and service.

His numerous scholarly and administrative accomplishments include the following:

- Section Head, Department of Engineering Graphics, 1999 - 2006
- Associate Chair, CEGE, 2013 - 2017
- ABET Team Chair, Engineering Accreditation
- Chair, Undergraduate Curriculum Committee, CEGE 2013 - 2017
- Charles E. MacQuigg Outstanding Teaching Award, 1994, 2009
- Ralph L. Boyer Award for Excellence in Undergraduate Teaching Engineering Innovation, 2014

Professor Croft always employed an open door, student-oriented approach to teaching, helping students to learn and grow in ever-changing engineering and engineering graphics environments. He was consistently recognized as an outstanding educator by peers and students alike.

UPCOMING EVENT



 **THE OHIO STATE UNIVERSITY**
COLLEGE OF ENGINEERING

Department of
Civil, Environmental and
Geodetic Engineering

2017 T.H. Wu Distinguished Lecture Friday, February 9, 2018 | 3:30 pm | CBEC 130

Edward Kavazanjian, Jr., Ph.D., P.E., D.GE., NAE

Professor Kavazanjian is a Regents Professor and the Ira A. Fulton Professor of Geotechnical Engineering at Arizona State University. He earned his bachelor and master of science degrees from the Massachusetts Institute of Technology and his PhD from the University of California at Berkeley. He is recognized for his work on the properties of municipal solid waste, the design and construction of waste containment systems, geotechnical earthquake engineering and the emerging field of biogeotechnical engineering. Dr. Kavazanjian will present his lecture, *Geo-Alchemy (Turning Sand into Sandstone) and other Biogeotechnologies*.



Reception with light refreshments following lecture | PDH credits available

More information at ceg.osu.edu | RSVP to Kevin Satterfield at satterfield.3@osu.edu

Photography by Kevin Satterfield except where indicated and as follows:

Pages 4 - 5

- (1, 2, 5, 6, 7, 9) Courtesy of College of Engineering Communications
- (3) Courtesy of Ohio State University Athletics
- (4) Courtesy of ASCE Student Chapter, The Ohio State University
- (8) Courtesy of The Ohio State University Alumni Association

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- (1) Courtesy of Lisa Burris
- (2) Courtesy of College of Engineering Communications
- (3, 5) Courtesy of ASCE Student Chapter, The Ohio State University
- (4) Courtesy of Tony Duke
- (6) Courtesy of the Society of Environmental Engineers, The Ohio State University

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All photos courtesy of CoE Communications and University Communications

CONTACT US

We welcome your comments and questions about *Benchmarks*.

Please contact:

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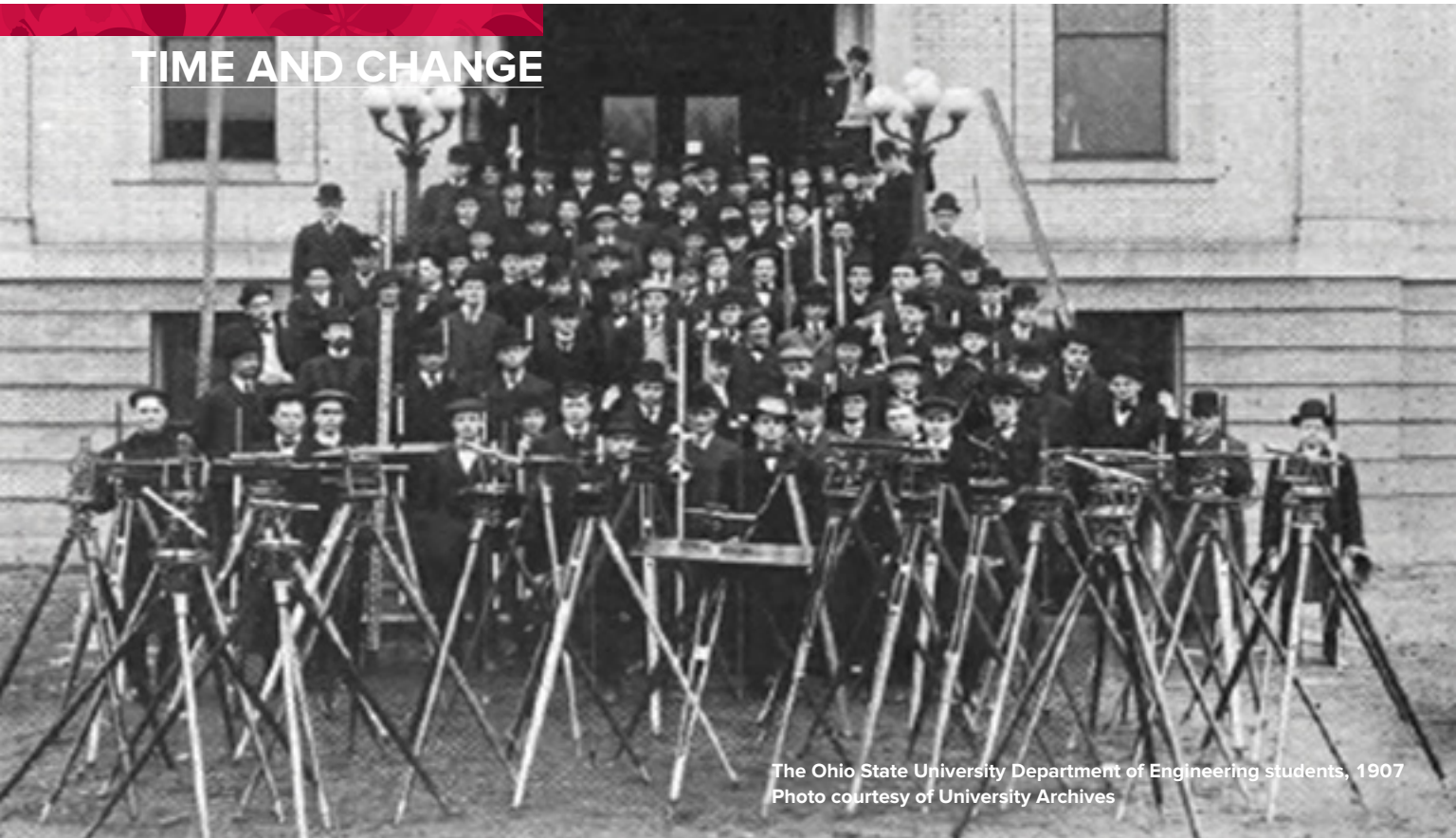
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TIME AND CHANGE



The Ohio State University Department of Engineering students, 1907
Photo courtesy of University Archives