



TEXAS TECH UNIVERSITY

Department of Civil, Environmental & Construction Engineering™



CECE CONNECTIONS

ISSUE 2 | FALL 2023



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Graduate Civil
Engineering
Program
Moves Up 16
Places to #64 in
Rankings!

647 CECE
Undergraduates
and
163 Graduate
Students

98 Graduate and
Undergraduate
Department
Scholarships
Awarded

5.5 Million
Dollars in New
Research
Awards

1.8 Million
Dollar
Renovation of
Teaching Lab
Space

32 Full-Time Faculty

4 Research Centers



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Producing world class, adaptable, and impactful engineers by prioritizing personal, empathetic, and long-term relationships between faculty, staff, and students.

Message from the Chair



**W. Andrew Jackson, Ph.D., P.E., BCEE, F.
AAAS**

Department Chair

Email: andrew.jackson@ttu.edu

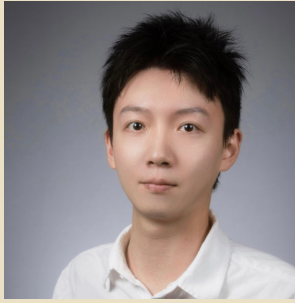
Dear CECE Community,

Greetings! The CECE department has had a tremendous year, which is appropriate for the 100th anniversary of Texas Tech University! This edition of CECE Connections highlights the accomplishments of our students, faculty, and staff as well as some of our alums. The department graduated 116 BSCE, 32 BSCONE, and 18 MENVE students last year. These graduates were 100% employed and almost all had multiple offers. This fall our enrollment remains strong, with 445 CE, 117 CONE, and 109 ENVE majors. In addition, our graduate enrollment remains strong with 101 MS and 52 PhD students enrolled. These students are doing great things as you will read about below, including qualifying and even winning national competitions, performing outreach and service, and winning awards. Students are our number one priority and this year we have adopted a Value Statement (see cover page) that I am hopeful captures that priority and the spirit of our department.

We have many new faces in the department including 7 new faculty members across all areas of the department. These new faculty members are complemented by 4 new staff members. We are very excited about these new hires and the infusion of energy and new expertise they can share with our students. I hope you will take a few minutes and check out their profiles. Our existing faculty have also had a banner year. CECE faculty successfully competed for numerous grants last year including a new Center of Excellence in Climate Resilient Equitable Housing. This center will complement our ongoing research efforts through the Water Resource Center, Wind Engineering Center, and Transportation Center. Research in the department increased by 34% over the last year and I am confident that as our new faculty establish their own research programs our research productivity will continue to increase. I invite you to read about a few of the new research initiatives in the department and the impactful research that is being done.

Finally, I would like to acknowledge the great support we have from our alums. The department benefits from the advice and financial support of so many of our alums including the Advisory Council, Academy members, and individuals. Inside this edition we highlight a few of these activities. I welcome you to contact me at any time. Engagement by our alum is critical to the success of the department and our mission to educate the next generation of Red Raider Engineers!

NEW FACULTY



Min Deng, Ph.D.
Assistant Professor
CECE - Construction
Engineering

Dr. Min Deng is an assistant professor of construction engineering in CECE at Texas Tech University. He completed his Ph.D. from the Department of Civil and Environmental Engineering at the University of Michigan in 2023, where he also obtained an M.S. in Robotics from the Department of Robotics. His current research areas include human factors interacting with intelligent buildings, robot-assisted building management, and digital twins for robotic construction.



Hadis Matinpour, Ph.D.
Assistant Professor
CECE - Water
Resources

Dr. Hadis Matinpour is an assistant professor of water resources engineering. She received her Ph.D. in Civil Engineering from the University of Buffalo in 2019 and completed postdoctoral work in Mechanical Engineering at the University of California-Santa Barbara from 2019 to 2021. Her primary research interest revolves around unraveling the intricate mechanisms of mixing and transport phenomena within the context of environmental fluid mechanics.



Sunghyun Park, Ph.D.
Assistant Professor
CECE - Structural
Engineering

Dr. Sunghyun Park is an assistant professor of structural engineering in CECE at Texas Tech University. He earned his B.S. and M.S. degrees of architectural engineering from Kyungpook National University in South Korea, and his Ph.D. in civil engineering from the University of Texas at Austin in 2021. After receiving his Ph.D., he worked as a postdoctoral fellow at Ferguson Structural Engineering Laboratory at the University of Texas at Austin.

Dr. Park's research focuses on the design and behavior of steel structures, particularly the stability and stiffness of bracing systems, and structural redundancy. His research combines various methodologies, including field tests, laboratory tests, and finite element analysis parametric studies. He teaches advanced design of steel structures.



Zhiheng Wang, Ph.D.
Assistant Professor
CECE - Structural
Engineering

Dr. Zhiheng Wang is an assistant professor of civil engineering in CECE at Texas Tech University. He received his M.S. degree in Civil Engineering and Engineering Mechanics from Columbia University in 2016. Dr. Wang was a Postdoctoral Fellow in the Department of Civil and Environmental Engineering at University of Southern California where he had obtained his Ph.D. degree in 2022. His team researches the intersection of statistics, data science, and engineering applications. The group develops novel methodologies and algorithms for uncertainty quantification, scientific machine learning, sensitivity analysis, risk and reliability assessment, data assimilation, and model validation in the context of science and engineering. He serves as a member of the American Society of Civil Engineers (ASCE), Engineering Mechanics Institute (ASCE-EMI) Probabilistic Methods Committee (PMC). He is also a member of Society for Industrial and Applied Mathematics (SIAM) and American Institute of Aeronautics and Astronautics (AIAA).



Pawel Polaczyk, Ph.D.
Assistant Professor
CECE - Transportation
Engineering

Dr. Pawel Polaczyk is an assistant professor of transportation and pavement engineering. Dr. Polaczyk is originally from Warsaw, Poland, where he received his B.S. degree in Civil Engineering on transportation from Warsaw University of Technology in 2004. His M.S. and Ph.D. degrees in Civil Engineering focused on geotechnology and materials engineering were completed at the University of Tennessee, Knoxville in 2020. Before joining Texas

Tech, Dr. Polaczyk had over 15 years of experience in transportation and pavement engineering with academia, industry, and government agencies. His research is focused on infrastructural materials and pavement engineering (asphalt, asphalt mixtures, pavement design, testing and evaluation, and pavement maintenance), and he worked on research projects sponsored by the US Department of Energy (DOE), the Federal Highway Administration (FHWA), and the Tennessee Department of Transportation (TDOT).



Shane Walker, Ph.D., P.E.
Professor, Director
of Water Resources
CECE - Water
Resources

Dr. Shane Walker is a professor of environmental engineering and water resource engineering, who joined CECE in August 2023 as the Director of the Water Resources Center. Dr. Walker received his B.S. in Civil Engineering from Texas Tech University, and he completed his M.S. in Environmental & Water Resource Engineering and Ph.D. in Civil Engineering degrees from the University

of Texas at Austin. Before he rejoined TTU, Dr. Walker was previously a professor at The University of Texas at El Paso (UTEP) and Director of the Center for Inland Desalination Systems (CIDS). Dr. Walker's research focuses on sustainable water treatment, especially high recovery inland desalination, potable reuse, and beneficial reuse of treated produced water.

NEW STAFF



Stephanie West
Business Manager

Stephanie West is the Business Manager in the Department of Civil, Construction, and Environmental Engineering where she oversees the Administration and Finance for the department. For nearly 14 years, she has been an integral part of the Texas Tech University community, where she thrives on commitment to excellence and service. She serves as Staff Senate President-Elect, is a Distinguished Staff recipient, and is a non-traditional student.



Peter Harris
Senior Business
Assistant

Peter, who has B.A. and M.A. degrees in theater from Texas Tech, oversees the office and reconciles transactions and reimbursement requests. He worked for TTU and TTUHSU in 1990-2002. Peter's father, the late Harold W. Harris (B.S. Civil Engineering from Texas Tech, 1953) taught Concrete Design at Tech in the 1980s-90s, partnered with Horn Professor Dr. Kishor Mehta. Peter's mother, the late Virginia Harris, got her B.S. in Ed., M.Ed. and Ed.D. degrees from Tech, and taught there in 1980-86.



Jacob Jahn
Academic Advisor
& Graduate
Representative

Jacob Jahn is the Academic Advisor for the Construction Engineering and Environmental Engineering programs, as well as the Graduate Representative for the CECE graduate programs. He joined the department in March 2023. Previously, he obtained his B. A. in Physical Anthropology with a concentration in Forensics in 2019 and his M. S. in Forensic Science specializing in Forensic

Science specializing in Forensic Investigation. During his Undergrad, he was a member of the Goin' Band from Raiderland. He is a 3rd generation student, with both of his grandparents attending TTU in the late 60s and his mother in the early 90s.



Rita Smith
Administrative
Coordinator

Rita Smith is an Administrative Coordinator in the College of Civil Engineering. Some of her job duties include reviewing funding regulations for awards and ensures spending complies with university, funding, and federal guidelines with grant specialists. Coordinates special events related to research programs, including seminars, workshops, and promotional events. Processes department procurement card reconciliations and travel applications. She also assists with general administrative support for the office as needed. Before being employed by Texas Tech University, Rita worked at South Plains College and has many years of experience in Higher Education. Rita is currently studying for her Bachelor's in Business Administration.

RETIREMENT



Susan Sechrist

Susan Sechrist retires after 23 years of service. Susan has greeted visitors for over two decades. Susan was hired by Dr. McDonald in 2000 and has worked for 4 other chairmen. The department wished her the best and is thankful for her many years of dedication.

CECE STUDENT AWARDS AND ACHIEVEMENTS

Katherine Vaught Recipient of the 2023 James A. “Jim” McAuley Distinguished Engineering Student Award

This award is presented to a single student in the College per academic year who shows outstanding academic achievement, leadership, and service to the community. Katherine is the third CECE student to ever win this prestigious award since it was founded in 2000.



Katherine Vaught

Construction Engineering Students Garnish Awards at Design Build and TEXO Foundation Competitions

The Associated General Contractors of America (AGC) Student Chapter at Texas Tech University captured multiple awards at competitions during the 2022-23 school year. The Texas Tech High Plains Design and Construction team at Texas Tech, consisting of four Construction Engineering students and an Architecture student, won first place in the Regional Competition of the Design-Build of America (DBIA). This competition involved students designing a building to full architectural and engineering specifications and submitting their designs to judges. Victory in the Regional Competition put Texas Tech into the second phase at the National DBIA Conference in Las Vegas in November 2023. The team members were Cameron Barton, Team Lead and Project Executive; James (JD) Davis, Project Superintendent; Zoe Lockett, Project Manager; Jacob Martinez, Preconstruction/ Estimator; and Jonathan Pere, Lead Principal Architecture/Designer. AGC also competed in the annual TEXO Foundation competition in Dallas, Texas. The three TTU AGC teams made up the top three teams regionally in the Commercial and Heavy Civil Competitions.



TTU Design-Build Student Team



TTU TEXO Student Teams

CECE Student Group Wins 1st Place in Environmental Regional and National Design Competitions

Kieran Atkin, Leah McDonald, Brennan Riley, Mathew Rotman, and Elizabeth Routon, recent CECE graduates of the 5-year ABET accredited Master of Environmental Engineering Program at TTU, won 1st prize in the Water Environment Federation sponsored national design contest in wastewater design. Their journey to the national title began with a victory at the regional level during the Texas Water 2023 conference held in Houston, April 2023. Their project was to upgrade the Walnut Creek WWTP and Hornsby Bend Biosolids Management Plant in Austin, Texas. The team submitted a written report and presented their design at the conference. Their 1st place standing qualified them to compete at the national Water Environment Federation conference in Chicago this last October. They competed with teams from across the USA, Canada, and Central America. Their project won 1st place in the wastewater design group.



Congratulations!
Student Design
Competition

TEXAS TECH
UNIVERSITY

1st Place



Water Environment
Association of Texas



Congratulations Mathew Rotman, Elizabeth Routon, Leah McDonald, Kieran Atkin, and Brennan Riley

The TTU Team shown on a congratulatory poster following their victory in the state Water Environment Association of Texas (WEAT) student design competition. L-R: Mathew Rotman, Elizabeth Routon, Leah McDonald, Kieran Atkin, and Brennan Riley.

2023 Outstanding Student Award recipients

The Civil Environmental and Construction Engineering Advisory Council (CECEAC) selected three students to be recognized for Outstanding Student Awards. Students are selected based on academic performance, but also contributions to the department, TTU, their profession, and the community.

Katherine Vaught is the recipient of the Spring 2023 Outstanding Student Award for Civil Engineering. In May 2023, Katherine graduated Summa Cum Laude from Texas Tech University with a B.S. in Civil Engineering. Katherine was involved in and led many service efforts while at TTU. She served as the president of Engineering Ambassadors from 2020 to 2023. In this role Katherine worked to recruit prospective students while supporting current students at TTU. Katherine currently works at Oncor Electric Delivery in Fort Worth TX.



Katherine Vaught

Brennan Riley is the recipient of the Spring 2023 Outstanding Student Award for Environmental Engineering. Brennan graduated from Texas Tech University in August 2023 with B.S. and M.E. degrees in Environmental Engineering. Brennan excelled in academic research, service, and



Brennan Riley

in the research lab. Brennan was active in the Engineering Ambassadors program and was also active in the Society of Environmental Professionals (SEP). Brennan was a member of the WEAT student group which placed first in the regional and national Student Design Competition. Beyond academic and service activities. After graduation, Brennan began her career as a Water/Wastewater Treatment Engineer at Freese and Nichols, Inc. in Pearland, Texas.

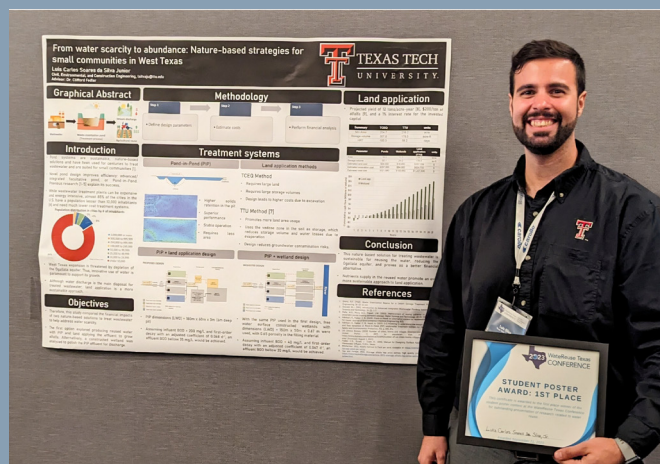
Andrew Blick received the Spring 2023 Outstanding Student Award for Construction Engineering. Andrew received a B.S in Construction Engineering from Texas Tech in May 2023 and is a standout in the field of Construction Engineering. He played an instrumental role in revitalizing the Associated General Contractors student chapter. Andrew's unwavering passion for construction engineering paved the way for his future endeavors. He is now employed at ExxonMobil.



Andrew Blick

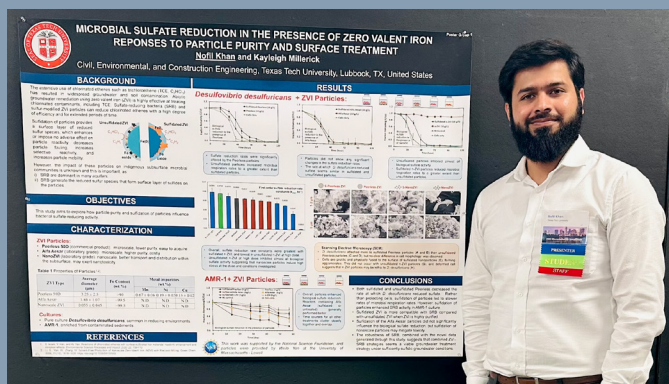
Graduate students Win Conference Presentation Awards

Luis Silva was awarded 1st place in the Student Poster competition at the 2023 WaterReuse Texas Conference. His poster was focused on innovative nature-based strategies to alleviate water scarcity in small communities in West Texas. Two approaches used Pond-in-Pond systems for wastewater treatment: the first used constructed wetlands for polishing and effluent discharge, and the second reused the water for land application to irrigate an alfalfa crop. His participation in the 2023 WaterReuse conference was supported by the Water Resources Center.



Luis Silva presenting at WaterReuse Texas Conference

Nofil Khan was awarded best poster award at The International Symposium on Bioremediation and Sustainable Environmental Technologies held in Austin, Texas. This event brought together experts and researchers from around the world to explore advancements in bioremediation and environmental technologies. Nofil's poster presentation, titled "Microbial sulfate reduction in the presence of zero valent iron: responses to particle purity and surface treatment", sheds light on crucial aspects of particle treatment and its compatibility with sulfur reducing bacteria. His findings have significant implications for effective groundwater treatment technologies. Nofil is advised by Dr. Kayleigh Millerick.



Nofil Khan presenting at Bioremediation Symposium

STUDENT ORGANIZATIONS

American Society of Civil Engineering Student Chapter (ASCE)

The J.H. Murdough Student Chapter at Texas Tech University recently hosted the ASCE Region 6 Student Symposium, emphasizing the chapter's commitment to excellence in Civil Engineering. Notable achievements included the Steel Bridge team securing an impressive second place in aesthetics and Timber Strong claiming the top spot in the BIM Model aspect of the competition. Additionally, the chapter took a proactive role by crafting rules for the mystery design competition, showcasing a dedication to shaping the engineering discourse and fostering creative thinking. Complementing these achievements, the chapter initiated social events to enhance student interactions, contributing to a vibrant community that currently has 120 members. Looking ahead, there is a strong emphasis on continued growth to further strengthen the Civil Engineering community at Texas Tech. In the broader context of ASCE activities at Texas Tech, recent general meetings featured esteemed companies, providing valuable networking opportunities for members. Competition teams, including Steel Bridge, Concrete Canoe, Timber Strong, and Sustainable Solutions, are making significant strides in their respective projects, securing partnerships and progressing in design work. Community service remains integral, with ASCE actively participating in events like Catch the Engineering Bug and Tech or Treat. Financially, the chapter has seen success through fundraising events, reinforcing its ability to support diverse activities. Officer meetings, community engagement, and social events, such as spirited tailgates, collectively contribute to ASCE's thriving presence, showcasing a dedication to engineering excellence and active community involvement.

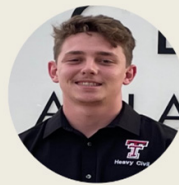


ASCE Student team members posing for a moment of collaboration

American General Contractors (AGC) Student Chapter

The student chapter of the American General Contractors (AGC) had a busy and fruitful year. The chapter provides our members insight on the construction industry with the steadfast goal of furthering each members' knowledge of the industry, facilitating interaction and communication with the business world, building a spirit of teamwork among the diverse membership, enhancing the community at large, and developing the leadership and organizational skills of each member. The chapter has 20 members and participate in a number of activities. This year the chapter sponsored two design teams who successfully competed at DBIA and ASC TEXO (see student awards). The chapter also invited general contractors to speak during the spring and fall semester and sponsors networking and employment opportunities between students and employers. This effort included a workshop on job fair preparation.

2023 AGC Officers



JD Davis

President



Justin Gana

Vice President



Zoe Luckett

Treasurer



Jacob Sauder

Social Chair



Pablo Esquivel

Secretary

Society of Environmental Professionals (SEP)

This year SEP also organized multiple invited talks by Texas Tech alum to CECE students including ones from Chris Leney, Vice President of Cura Emergency Services, and Jimmy Gibson Vice President of Freese and Nichols, Inc. Service work included volunteering at the Booker T. Washington Community Garden. SEP also sponsored the design team that won the national design competition in wastewater design.



SWE team student members at the Booker T. Washington Community Garden event



Jimmy Gibson, the Vice President of Freese and Nichols, Inc., speaking to SEP members and SEP members working at the at Booker T. Washington Community Garden

Chi Epsilon Announces Fall 2023 Events

Chi Epsilon, the National Civil Engineering Honor Society, has been working hard in and out of the classroom. Some highlights from this academic year include the 2023-2024 start of the year guest lecture, the founding of a Chi Epsilon Co-Ed Intramural Soccer Team, and a group social event for overachievers in engineering. These are just a few of many events that Chi Epsilon has hosted this year participate in to engage fellow students, faculty, and alumni. Further, the organization organizes and participates in outreach activities at local grade schools across Lubbock and other philanthropy across the city. Student members complete ten hours of tutoring for other CECE students, providing help with courses such as solids and statics. Caitlin King, secretary, notes: "Chi Epsilon is a Civil Engineering Honor Society, with only the top students of the Civil, Environmental, and Construction engineering majors invited into membership. It has been an honored tradition at Texas Tech since our first class was initiated in 1975." The organization is aided in their efforts by CECE mentor and current Academy Inductee, Ameri Gurley.



Officers of Chi Epsilon, L-R: President Abigail Torres, Drew Manther, Editor Alberto Delgadillo, Marshal Jack Tompkins, Secretary Caitlin King, Editor Sayuri Almeida; and President Casey Dukes carry Vice President Obichukwu Njideaka-Kevin before the Fall 2023 membership initiation ceremony.

Society of Women Engineers (SWE)

This fall, Civil Engineering students participated in the TTU Society of Women Engineers-led effort in the Schlumberger Service to Succeed (S2S) Challenge. TTU won for the third consecutive year, with 1158 total hours of service in a six-week period. Congrats to our hard-working students! Each fall, CECE faculty participate in Catch the Engineering Bug, a STEM outreach event involving middle school girls from Lubbock and surrounding counties. This year, there were 50 participants from 14 different schools in the Lubbock area! Dr. Ameri Gurley, Instructor in CECE, gave a lecture to the visiting students on Stress and Strain. The event was entirely organized and hosted by engineering students, who are co-advised by CECE's Dr. Amrika Deonarine.



Catch the Engineering Bug students build spaghetti towers with the help of SWE volunteers.

Ashley Idehen visits National Society of Black Engineers (NSBE) Annual Convention

Ashley Idehen, an environmental engineering student in the CECE Department and was the National Technical Outreach and Community Help (TORCH) Chair for the National Society of Black Engineers (NSBE) attended the NSBE's Annual Convention in Texas with the Texas Tech chapter. The convention offered programs such as scholarships, workshops, and leadership training to help attendees succeed in their engineering careers. During the convention, she hosted a hackathon event where members used their problem-solving skills to create technical solutions for the Kansas City education system.

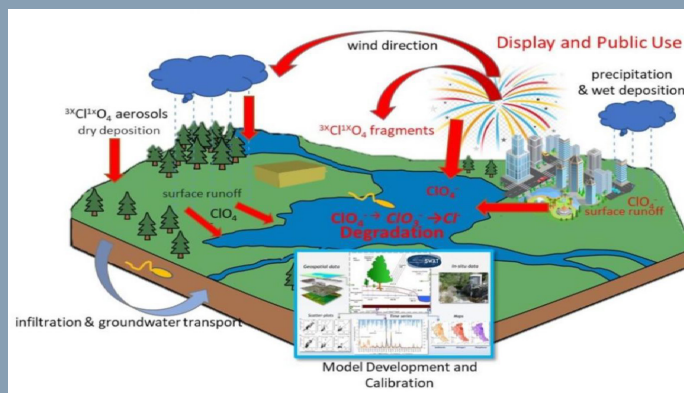


Ashley Idehen speaks to the NSBE convention about the Civic Technical Hackathon event she hosted.

RESEARCH HIGHLIGHTS

TTU Secures \$2.5 million grant from EPA for Research into Fireworks Effects

CECE Department Chair Dr. W. Andrew Jackson, President's Excellence in Research Professor of Environmental Engineering, along with Engineering researchers Todd Anderson (College of Arts and Sciences), and Balaji Rao (Whitacre College of Engineering), have received a \$2.5 million grant from the Environmental Protection Agency (EPA) for their study, "Assessing Perchlorate Occurrence in Ambient Waters Following the Usage of Fireworks". Their research includes Investigating Perchlorate Impacts from Fireworks, Quantifying Risks to Drinking Water Sources, and Enhancing Water Resource Management.



Conceptual Model of ClO_4 flux to environment from fireworks and subsequent fate

Dr. Nejat Leads HUD Research Center of Excellence

Dr. Ali Nejat, Associate Professor of Construction Engineering, is taking lead in the Department of

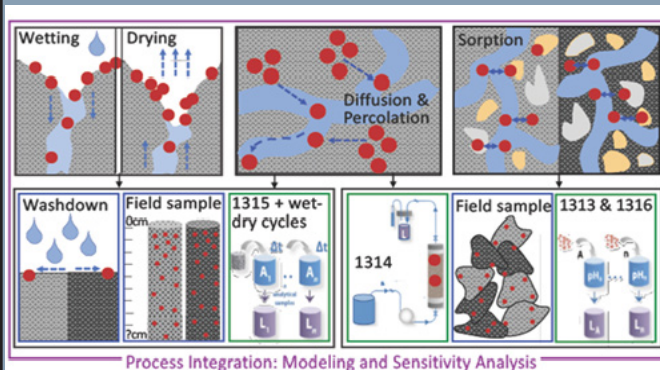


Dr. Ali Nejat

Housing and Urban Development (HUD) Research Center of Excellence. This HUD-funded project will focus on helping local, state, and federal agencies anticipate and address post-disaster needs. The \$3.2 million grant brings Texas Tech together with Texas A&M University at Galveston, Texas Southern University, Stony Brook University, the University of Kansas, and the University of Waterloo to establish the Center of Excellence in Climate Resilient Equitable Housing (CECREH). CECREH joins the other two Centers of Excellence nationwide previously funded by HUD to conduct housing and committee development research through innovative approaches and to underserved communities, with HUD making funds available to Hispanic-Serving Institutions.

Dr. Guelfo Explores Transport of PFAS

Dr. Jennifer Guelfo's has been awarded a new project, Assessing PFAS Leaching from Concrete and Asphalt with Vanderbilt University and CSIRO in Australia. The \$1.6 million dollar project will focus on assessing the leaching of PFAS from impacted concrete and asphalt due to the widespread use of aqueous film-forming foams (AFFF) in US Department of Defense (DOD) facilities. The project aims to understand the role of fundamental phenomena such as wetting and drying cycles, diffusion, percolation, and sorption through bench-scale, field-scale, and modeling efforts.



Conceptual diagram of the project.

Structures Faculty Working to Reduce the Impact of Wind Hazards

CECE structures faculty members have been working on projects funded by the National Science Foundation (NSF) to investigate the impact of wind hazards on civil infrastructure and develop strategies and methods for substantially reducing the impact. Dr. Delong Zuo is a member of a multi-institution team led by Iowa State University that recently received a \$14 million award from NSF to design a national testing facility for enhancing the resiliency of infrastructure in major windstorms such as tornadoes. As a Co-Principal Investigator of the team, Dr. Zuo is charged with leading the development of the testing protocols, which are critical for the operation of the facility. If constructed, this national facility will enable researchers and engineers to better understand the loading on structures by extreme winds and the effects of windborne debris on structures, which will lead to improved resilience of structures to wind hazards. In addition, Dr. Xinzhong Chen is currently working on a project supported by a NSF award to develop efficient analysis frameworks for assessing inelastic response of tall buildings under wind loads. This project will generate new fundamental knowledge beyond current linear elastic design frameworks and contribute to the development of performance-based wind design, which can lead to tall buildings with improved performance, safety and economy.



Dr. Xinzhong



Dr. Zuo

Faculty Secure New Grants to Improve Transportation

Researchers at TechMRT are investigating approaches to improve the holistic transportation infrastructure in Texas and the nation. This work includes projects in pavements, advanced sensing technologies, and embankments. Dr. Moon Won is leading efforts in concrete pavements. This research collects information on the behavior and performance of continuously reinforced concrete pavements (CRCPs) in Texas, analyzes the data, and develops a platform as repository of all the concrete pavement information. Another effort is developing a deflection-based slab thickness design of CRCP whitetopping which is a modification to the current Mechanistic-Empirical (ME) design method. Dr. Liu is focused on using advanced sensing technologies to enhance the efficiency of existing highway systems in terms of reducing congestion and improving safety. A major focus is developing enabling data modeling and analytic tools, particularly, artificial intelligence and machine learning methods for accurate processing of infrastructure-based high-resolution data with enhanced computational efficiency for real-time applications. Dr. Seo is leading an effort to develop guidelines for evaluation of embankment conditions in bridge approach slabs and pavement structures. The TechMRT Center new research projects total more than 2.6 million dollars.



TechMRT researchers installing sensors

FACULTY AND STAFF AWARDS

Dr. Millerick Receives Abell-Hanger Faculty Award for Outstanding Engineering Education

Dr. Kayleigh (Kay) Millerick was awarded the Abell-Hanger Faculty Award for outstanding engineering education. This award recognizes Dr. Millerick's excellence in classroom teaching, student advising, teaching innovations, and engineering education. Named after philanthropists George T. Abell and Gladys Hanger Abell, this annual award highlights the critical role of faculty members in shaping the future of our engineering students.



Dr. Kayleigh Millerick

Dr. Reible Receives Fellowship



Dr. Danny Reible

Dr. Danny Reible, Donovan Maddox Distinguished Engineering Chair, was inducted as a Fellow into the National Academy of Inventors at their annual meeting June 25-27, 2023, in Washington DC. He was inducted for his efforts to make his work in passive sampling commercially available to help assess and manage contaminated sediments.

Dr. Hoyoung Seo wins Rawls Distinguished Undergraduate Educator Faculty Award for Inspiring the Next Generation of Engineers

Dr. Hoyoung Seo, Associate Professor of Geotechnical Engineering, was awarded the Jerry S. Rawls Distinguished Undergraduate Educator Faculty Award for his exceptional dedication to engineering education. This award celebrates his commitment to innovative and creative teaching, both inside and outside the classroom.



Dr. Hoyoung Seo

Paving the Way for a Better World: Dr. Lin Recognized for Women's History Month, Publishes Research on Polar Ice Sheets

Dr. Ting Lin, Assistant Professor in Structural Engineering and Director of Multi-Hazard Sustainability (HazSus) Research Group, was recognized during the Women's History Month in March 2023 as an engineer tackling climate change <https://texastechuniversity.exposure.co/women-making-history>. "Ting Lin's new build for creating sea-level rise models could alter the course of our future". She has recently published journal articles such as "Probabilistic Sea Level Rise Hazard Analysis Based on the Current Generation of Data and Protocols" in Journal of Structural Engineering and "A Semi-Empirical Framework for Ice Sheet Response Analysis Under Oceanic Forcing in Antarctica and Greenland" in Climate Dynamics.



Dr. Ting Lin

Kishor Mehta receives Distinguished Service Award

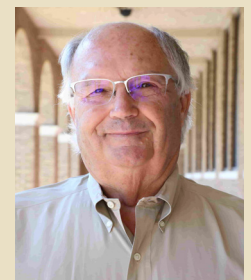
In recognition of his years of service and research in wind engineering at Texas Tech University Kishor Mehta was presented with the Distinguished Service Award at the Matador Evening Celebration during homecoming weekend. The award was established in 1977 to recognize outstanding service to University or the Alumni Association.



Dr. Kishor Mehta

Brad Thornhill receives 2022 Orval Leroy Lewis Staff Award

Brad (Jack) Thornhill, Unit Manager for the Water Resources Center, was recognized for his contributions to the department with the Orval Leroy Lewis Award. This award recognizes those staff who consistently perform their duties at the highest level and go beyond those duties in support of the department.



Brad Thornhill

DISTINGUISHED ALUMNI INDUCTED INTO CECE ACADEMY

We are proud to announce the Fall 2023 inductees to the Academy for Civil, Environmental, and Construction Engineering (CECE). The Academy strives to recognize and celebrate the professional, civic or humanitarian achievements of CECE graduates who have at least 10 years of professional experience and are outstanding leaders in their fields. Academy membership provides an avenue that facilitates engagement between alumni, current students, and the CECE Department and TTU. The academy meets regularly with the Chair to make recommendations regarding education, student group activities, and provides financial support for scholarships, students activities and other department needs. The newest members of the academy were inducted on September 29, 2023.



Treasurer of the CECE Academy, Jill Rankin presenting Patrick Allbritton, PMP, CFM, CBCP B.S. Civil Engineering, 1986; M.S. Engineering and Environmental Management, 2000; M.S. Military Science, 2008 Colonel (Retired), United States Air Force; Associate Vice President for Auxiliary Services, Texas Tech University



Vice President of the CECE Academy, Jacob Kirkland presenting Spandana Tummuri, Ph.D., PE, ENV M.S. CE Ph.D. Climate Change Studies Vice President and Operations Lead, Jacobs, Houston, Texas



Treasurer of the CECE Academy, Stephanie Griffin presenting Guy Bradley, PE, PMP B.S. Civil Engineering, 1999 MBA from Texas A&M, Corpus Christi Director of Utility Management, BGE, Inc., Dallas, Texas



Vice President of the CECE Academy, Jacob Kirkland presenting Ameri B. Gurley B.S. CE, 2002 MSCE, 2003 Lecturer, Civil, Environmental and Construction Engineering, Texas Tech University



President of the CECE Academy, Stephanie Griffin presenting David Smith, PE B.S. Civil Engineering, 2003 Operations Manager, Halff, Lubbock and Midland, Texas



President of the CECE Academy, Stephanie Griffin presenting Teresa Dellies in memoriam of Michael (Mike) Dellies, PE, CFM, FASE, MSCE | B.S. CE, 1983 | M.S. CE, 2003

NEW ENDOWED SCHOLARSHIPS

John Nixon & Bobby Evans Transportation Engineering Scholarship

John Nixon and Bobby Evans both dedicated their careers to the great state of Texas with the Texas Department of Transportation (TxDOT). The families of John Nixon and Bobby Evans are honoring these two Texas Tech civil engineering graduates through establishment of the “John Nixon & Bobby Evans Transportation Engineering Scholarship.” This scholarship is to provide funding for full-time or part-time graduate students in the Civil, Environmental, and Construction Engineering Department (CECE) with a strong preference given to students pursuing the field of transportation engineering. Anyone wishing to contribute to the scholarship endowment should contact the Department Chair, Dr. Andrew Jackson.

John Nixon and Bobby Evans both passed away in 2023. John was an avid Red Raider fan who graduated in 1950 with a Bachelor of Science in Civil Engineering. John spent 34 years working for TxDOT, starting in Munday, Texas and then moving to Austin in 1954 to work in the Road Design Division. He later served many years in Austin as director of what is now the TxDOT Research and Technology Implementation Division. He managed many research projects to make it safer to travel on Texas highways including the evolution of traffic impact barriers, guard rail safety end improvements, implementation of center turn lanes, and pavement design to reduce hydroplaning.

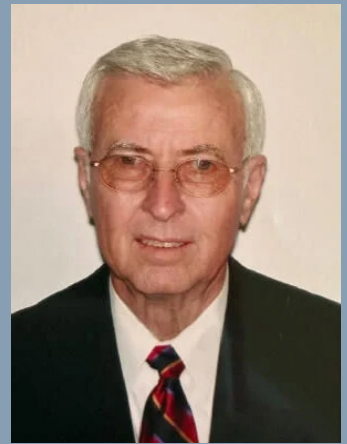
James R. “Bobby” Evans graduated from Texas Tech in 1958, also with a Bachelor of Science in Civil Engineering. He worked for TxDOT for 42 years in various positions as a civil engineer in Lubbock, San Angelo, Del Rio, and Tyler.

While serving as District Engineer in Tyler he initiated the Adopt-A-Highway program, which has spread throughout the world. The successful successful program earned Bobby a feature article in Reader’s Digest, and the Phoenix Award from the Society of American Travel Writers. Bobby was awarded the Community Builders Award from the Grand Lodge of Texas in 1996. The International Adopt-A-Highway Association conferred honorary membership to Bobby in 2007. In October 2010 he received the Gibb Gilchrist Award from Texas A&M University for outstanding service in highway engineering with TxDOT.

John was inducted into the Texas Tech CECE Academy in 1992 and Bobby was inducted in 1994. John proudly welcomed his daughter Deborah (Nixon) Dixon into the Academy in 1994, becoming the only father-daughter members to date.



John Nixon



James Robert
“Bobby” Evans

Terracon donates \$50k to support scholarships in Civil Engineering

Terracon, a prominent engineering consulting firm, has pledged \$50,000 to the Whitacre College of Engineering at Texas Tech University. The donation aims to fund scholarships for students pursuing studies in Civil Engineering. This significant contribution will provide financial assistance to aspiring engineers, encouraging them to excel in their academic pursuits and contribute to the field of Civil Engineering. With this act of philanthropy, Terracon demonstrates its commitment to nurturing future talents and fostering innovation in the engineering industry.



Terracon presents scholarship check to Dr. W. Andrew Jackson, Chair of the CECE Department.

Debra Wittenbach Scholarship for Environmental Engineering Excellence

The Wittenbach couple created the Stuart (B.S. in Agronomy, 1979) and Debra Wittenbach Scholarship for Environmental Engineering Excellence. The newly established endowed scholarship will financially support students majoring in

environmental engineering and can even be used in the fifth year of the master's program, a year not usually funded by traditional four-year scholarships. Wittenbach spent 41 years in the oil and gas industry, from 1981 to 2022. During the 2010s, he learned about and became interested in the Environmental Engineering program at his alma mater. When asked about the couple's motivation, Wittenbach said, "What I see is that being able to give back and help a young man or woman be able to get through school and go into the discipline that I've been able to have for these past years is, to me, our chance to give back," Wittenbach said. "We're paying it forward for somebody else to be able to make a difference in this world and help him or her out. That's really the end goal." The couple's hope is that by helping students achieve their academic goals, it will have a ripple effect on the industry and help create solutions to the problems of today and tomorrow. "There's some sharp young men and women out there, and we've just got to give them a shot at it," Wittenbach said. "For Debra and I to put the scholarship out there is really just to prime the pump, help them get through the school, and get out there to make the difference we know they can."

Read the full article at: <https://ttuadvancement.exposure.co/perfect-timing>



Stuart Wittenbach (B.S. in agronomy, 1979), shown with his wife Debra Wittenbach.



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