### Your Link to the Department of Civil Engineering

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SACRAMENTO STATE Department of Civil Engineering



# CHAIR'S MESSAGE





Dear Colleagues, Alumni, and Friends,

The Fall semester is in full swing and the campus, especially the Department, is buzzing with students and activities. I am immensely excited to see faculty resuming and embarking on new scholarly activities and research endeavors, especially those that serve our own communities in the Sacramento region. A great example of this is Dr. Zoi Dokou's work with the City of Sacramento that you can read about in this issue.

As we come out of the shadows of the pandemic, one of my main priorities has been to revive the several student clubs in our Department that were adversely impacted during the pandemic and online operation. I am happy to report that the student club meetings are happening again in-person and have been well attended. For those looking to hire, our annual Fall inperson Career Fair and "An Evening with Industry" events are scheduled for October 21st and November 10th, respectively, are great opportunities to meet our students.

This summer, we met with 72 transfer students and 78 freshmen at the new student orientation to welcome them to the civil engineering program. Enrollment in the undergraduate program has remained steady in recent times. The Department is also excited to welcome Dr. Tongren Zhu as the new faculty in the Environmental Engineering area.

Finally, I would like to take this opportunity to especially thank Ms. Cassandra Smith, our editor for the CE Connection newsletter over the past several years, as this will be her last issue of CE Connection. Cassandra has done a remarkable job in highlighting the achievements of our students, faculty, staff, and alumni through her articles, and strengthening the connections between the Department and our community of civil engineers. I cannot thank her enough for her efforts, especially during the transition phase of a new Department chair and in welcoming the new editor. On behalf of the Department, I share our heartfelt gratitude for her contributions and wish her all the best in her future endeavors.

Yours sincerely, Ghazan Khan Chair, Department of Civil Engineering



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Looking for a way to support the Civil Engineering Department? We have four different funds that enhance our ability to educate students:



- The Ken Kerri Endowment Fund Provides support for faculty and student enrichment activities.
- The CE Freshman Scholarship Fund—Scholarships to an outstanding first-year student.
- The Graduate Environmental/Water Resources Scholarship Fund — Scholarships to deserving graduate students in the environmental or water resources engineering areas.
- The Department Trust Fund These resources support student attendance and participation at conferences and competitions, senior design project team expenses, and equipment for labs when other funds are not available.



To donate to any of these funds, go to http://bit.ly/ceonlinedonate and follow the directions for online donations.  Or mail a check made out to the appropriate fund to:

Attn: Ashley Mihok California State University, Sacramento Department of Civil Engineering 6000 J Street, MS 6029 Sacramento, CA 95819  For additional questions on how to give, contact:

Nebrisa Fish Director of Development (916) 278-2453 nebrisa.fish@csus.edu

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### **Upcoming Events**

### November 10, 2022:

**An Evening with Industry** at the Sacramento State Alumni Center 5:00 pm

Please consider supporting the Department of Civil Engineering.

As we transition back to our in-person traditional events during the year, and on-campus classes, your dollars will be incredibly important to support the department.

http://bit.ly/ceonlinedonate

### www.csus.edu/ecs/ce

Like us, and follow us to stay up to date on current CE News and Events!





# 13th Annual Ken Kerri Luncheon Returns to Campus



Over one hundred people were in attendance for the 13th annual Ken Kerri Endowment Fund Luncheon, which was the first in-person event since the pandemic shuttered such gatherings in 2020. This was not a small feat by any stretch, and was one recognized by Dr. Ghazan Khan, Chair of the Dept. of Civil Engineering, as he took the stage to welcome guests to the beloved tradition honoring the late Dr. Kenneth Kerri.



"It's good to see everyone," he commented, a nod to the event's departure from virtual meetings that have kept friends and community apart for over two years. Immediately, the room broke into thunderous applause.

"I met him in 2013," Dr. Khan continued on, speaking to the room of the late professor's devotion and commitment to his work. "Then I went to a meeting in Washington, DC, and he was there. I asked him what he was doing here, since this was a transportation meeting. He replied, 'I'm a civil engineer. This is part of what I do.""

Many others throughout the event voiced similar stories of gratitude and wonder regarding the man whose endowment fund has helped fund alumni research, the Concrete Durability Lab, and support student activities such as the PCI club. A number of those in attendance were alumni that benefited from the gift of the endowment fund, and the legacy that Ken Kerri left behind.

"Dr. Kerri was a mentor of mine," Nicole Morgan, part of the class of '99, said fondly. "When I graduated, we stayed in touch. In 2009, he encouraged me to go from private [sector] to public. Then the Governor appointed me to the State Water Board. I wouldn't be here today if not for him."

E. Juaquin Esquivel was the keynote speaker, having been appointed to the State Water Resources Control Board also by Gov. Gavin Newsom—in 2019. His presentation, "Water in the 21st Century," highlighted California's upcoming and ongoing projects to combat drought Dr. Kerri was a mentor of mine...Then the Governor appointed me to the State Water Board. I wouldn't be here today if not for him.

-NICOLE MORGAN

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concerns and "promote resiliency" by the year 2023. While he acknowledged that the State is facing an unprecedented water crisis, he proposed that it is also an opportunity for upgrading technology and invest in methods that will promote access to clean water and sanitation in ecofriendly ways.

"Sac State isn't just a University," he observed. "It is helping to ensure that this important work can continue."

Many alumni and professionals in attendance hold a similar mindset, valuing the quality education that the school provides to all of its students. Cesar Montes de Ora, who graduated from Sac State in 2006, likes to keep in touch with the University, and makes it a goal of his to hire Sac State graduates. "Being in Folsom makes it easy to do so," he comments. He knows and trusts that students from Sac State





will receive the same quality education he himself received as a student, even though more than 15 years have passed since his graduation.

This is, in part, because the endowment fund allows the Civil Engineering curriculum to remain fluid and up-to-date with the ever-changing demands and needs of the industry outside of the University's walls. This, in turn, keeps the civil engineering community connected in a unique way—one that even a pandemic couldn't break.

Bill Busath, Director of Utilities for the City of Sacramento, felt that connection in a strong way among those in the room. "A lot of my favorite people are in this room," he beamed. "These are people I have known for years. It's wonderful to be able to look people in the eye and speak to them again."





### SAVE THE DATE An Evening with Industry IS RETURNING!

For the first time in two years, the Dept of Civil Engineering's annual "An Evening with Industry" event will be held in person and take place on November 10, 2022 at 5:00 PM. The guest speaker for this year's event is Ms. Sharon K. Tapia, P.E., Division Manager, Division of Dam Safety in the California Department of Water Resources.

The faculty, staff, and colleagues of the Dept. of Engineering are eager to welcome professionals, students, and alumni back to campus for a night of networking, interaction, and discovery. Please, come join us.

Those interested in participating are encouraged to register early, as spots fill fast for this event. Contact Ms. Ashley Mihok to reserve your spot: <u>Ashley.mihok@csus.edu</u>.

#### EVENT DATE: November 10, 2022 | 5:00 pm

#### GUEST SPEAKER: Ms. Sharon K. Tapia

## RIVERSIDE

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### Sac State Team Gives Back

## WHILE RENOVATING NEIGHBORHOOD

Dr. Zoi Dokou, who has been with Sac State for just over three years, was the recent recipient of the Anchor University Strategic Investment Grant, which is awarded to projects that are, in Dr. Dokou's words, "...committed to develop relationships and partnerships with local communities in the region to address local needs and challenges." Funded by Sac State and University Enterprises, Inc, the grant is one of nine that were awarded this past year on campus, with this being a newly recognized project. We interviewed Dr. Dokou to learn more about this project, which commenced only a short time ago, and what it will entail for both Sac State students and the community of Dixieanne.

### Tell me more about this project. What does it entail?

The City of Sacramento has recently initiated a project titled "Dixieanne Neighborhood Clean & Green Alleys" which aims to clean and beautify residential alleys in the community of Old North Sacramento with permeable interlocking pavers, fencing repairs, shade trees, and public art, to allow them to function as safe, low-stress corridors for pedestrians, bicyclists, and play areas for kids. The Civil Engineering Department has been collaborating with the City of Sacramento over the years, and will contribute to this important effort, by providing expertise on the permeable pavement effectiveness, which is designed to minimize localized flooding and augment recharge to the local aquifer.

This project will provide hands-on experiences for Sac State students, by connecting them to industry partners and community-based organizations involved in the project.

### The following outcomes are to be achieved by this project include:

1. Outreach to disadvantaged communities as part of the Anchor University's goals.

- 2. Training opportunities for graduate and undergraduate students. This will be the basis for a thesis or project research for an MS student in the CE department.
- 3. Collaboration with the City of Sacramento project participants, local industry, and other stakeholders.

One of our graduate students, Joaquin Fraga Hernandez, will be primarily working on the project, and I am hoping to also attract undergraduate students interested in stormwater management to be involved in the project and collaborate with the graduate student, city officials, and local engineers.

> This project will provide hands-on experiences for Sac State students, by connecting them to industry partners and community-based organizations involved in the project.

#### Who helped to make this possible?

Our involvement was initiated after conversations with Fedolia "Sparky" Harris, Principal Planner with the City of Sacramento Public Works Department, who is leading the "Dixieanne Neighborhood Clean & Green Alleys" project. He approached the Department Chair, Ghazan Khan, who then contacted me due to my expertise in the topic, for potential collaboration. This work will also be in collaboration with the Office of Water Programs, and I am looking forward to collaborating with Brian Currier, Christian Carleton, and Professors Cristina Poindexter and John Johnston from CE Department on it. The researchers at the Office of Water Programs and my colleagues at the department have extensive research experience in stormwater management and their collaboration and expertise will be vital to the success of the project.

#### What does the future hold?

The City has already begun workingin the neighborhood. Joaquin was on site with the City's project manager to observe the exploratory borings taken by Geocon Consultants. I am hoping that this work will contribute to the justification of future grant funding from external sources and ultimately scaling the program to other neighborhoods in the city of Sacramento. I am very excited to start working on this project and collaborating with the City of Sacramento and OWP and I am hoping that this is only the beginning of a long partnership that can serve disadvantaged communities in the region.

Information about the overall project that the City of Sacramento is implementing: "The Dixieanne Clean & Green Alleys project" can be found here:

> http://www.cityofsacramento.org/Public-Works/Transportation/Planning-Projects/ Dixieanne-Neighborhood-Clean-and-Green-Alley-Projects



### **Thank You!**

Our Annual Civil Engineering Golf Tournament is Now Two Digits Strong! The Department of Civil Engineering would like to thank all who attended our 10th annual Golf Tournament on Friday, October 14.

For the first time, the event was held at Top Golf in Roseville and was a day of fun and networking for everyone.

As always, thank you for all your support, and we look forward to seeing you all next year. In the meantime, keep an eye on our website for up-to-date information on all the events going on with the Department.

# Sac State Wins 1st Place At ASCE's Mid-Pacific Concrete Canoe Competition



Each year, it's tradition for students representing Sacramento State at the ASCE Concrete Canoe competition to choose a theme to coincide with their build. The theme selected for the 2022 competition paid tribute to retro videogames of the 80s, with their canoe aptly christened "Warhead" bearing a design reminiscent of Torpedo Ted from Super Mario Bros.

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ERSITY credit

1<sup>st</sup> Place



"It was fun nostalgia for all of us," Tyler Bernard, President of the Concrete Canoe Club, explained of the theme choice.

### "We were all nerds, and it was fun to get some of that representation at the competition."

The "all of us" that Tyler mentions references the team of nine that accompanied the canoe to this year's competition, hosted by UC Davis. Being practically in Sac State's backyard helped keep things grounded for the small team, who witnessed hundreds of other participants travel to the area from universities across the region.

According to the ASCE's official website, the competition, "...requires students to collaborate as teams and use engineering skills to design and construct a seaworthy canoe made entirely of concrete." Categories for the competition ranged from technical proposals, to a professional project presentation, to the final canoe prototype itself, which was then put to the ultimate test by carrying the canoe into water for the first time and participating in the "dunk test" where students completely submerge their canoes underwater to see if it pops back up, if it does they can move on to the next part of the competition: a series of several races utilizing the rowing skills of the very team that built the canoe.

Despite confidence in their build, the sheer size of many of the other groups appeared daunting at times. "There were so many other large groups of people there," Tyler recalls. "At the awards banquet, we were sitting and waiting for the organizers to announce the winners and we were surrounded by schools that had groups of fifty or more supporting them. And then, at the back, there was our little table, with our little group."

At the end of the day, size didn't matter. When it was announced Sac State's team had taken home first place, the cheers of the small team filled the hall as they congratulated and embraced one another.

It was a triumph that Tyler and the team were extraordinarily proud of, and one that almost didn't come to fruition. The challenges of the pandemic made a comeback for the club, overseen by faculty advisor Jose Garcia, Ph.D, questionable and uncertain. But one by one, Tyler and her co-Project manager Candice Mitchell encouraged others to join in their attempt of securing a win for the club and their university. There were, as with all builds, problems that had to be solved, and strategies that had to be revised. For Tyler, who is returning to Sac State in the Fall as a senior, they were all worth it in order to secure the win for the Concrete Canoe team.



"Through all the trials and tribulations of this competition year, we were able to win first place with our canoe prototype. But an award doesn't mean as much as the feeling of being able to bring this amazing competition club back to life after remote learning with a group of amazing peers, alumni, and faculty. We were able to build a team, build memories and build life-long friendships in addition to an awesome canoe. That is what made every mix design meeting, every paddling practice, every latenight writing session, and every construction day worth it to see our team back to its former glory." With contributions from Tyler Bernard





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