

IMPACT

KANSAS STATE UNIVERSITY

FALL 2019

CARL R. ICE COLLEGE OF ENGINEERING



KANSAS STATE
UNIVERSITY

FROM THE DEAN

Six years ago in fall 2013 my image and words filled this space in Impact. As before, the departure of a dean for a new position has necessitated the naming of an interim, and I am pleased and proud to be the holder of that title once again.

Back then we were just two years into the University Engineering Initiative Act, or UEIA, the 10 years of funding provided by the Kansas Legislature in support of increasing the number of engineering graduates in three state schools — K-State, KU and Wichita State.

The UEIA is now in year eight of 10. Collectively, K-State, along with KU and WSU, have met and exceeded the required goal of 1,365 new engineering graduates by the year 2021.

But that money was most needed and well spent, and I am currently working with the KU and WSU engineering deans, and our government relations team, to extend the state funding of this initiative beyond the current ending time of FY 2022. Kansas Governor Laura Kelly has stated she recognizes the success of this program and intends to continue to support it. While I can offer no details on at what level or how it will be supported, I was excited to hear her message and am hopeful sometime in 2020 we will have more formal affirmation this state funding will continue.

The cover of that 2013 issue of Impact was all about the groundbreaking festivities surrounding the beginning of construction of Engineering Hall, which we have now been occupying since 2015. This issue is highlighted with the festivities celebrating the first named academic college at Kansas State University, the Carl R. Ice College of Engineering, and the new signage reveal in Engineering Hall. Another departmental or unit naming, now totaling five, is also marked in this issue with photos and a story on the Mike Wiegiers Department of Electrical and Computer Engineering.

Along with the news of the continuing generosity of our alumni and friends, you'll find reports on our grant-funded faculty research, first-place-winning student creative inquiry teams and more.



INTERIM DEAN CLARK, LEFT, AND COLLEGE ADVISORY COUNCIL CHAIR, ROGER FARRELL

And while we have had and will continue to have challenges to address, I am excited for the future of our college and K-State. We recently completed an 18-month process resulting in a campus-level strategic plan that aligns with our land-grant mission and college goals to remain first and foremost a place of high-quality education with outstanding and highly recruited students, hard-working and award-winning faculty, and remarkably generous and supportive alumni.

I am looking forward to another great year, thankful for the opportunity to serve the college and very glad to be a member of the K-State family.

Gary A. Clark, Ph.D., P.E.
Interim Dean

IMPACT

KANSAS STATE UNIVERSITY

FALL 2019

CARL R. ICE COLLEGE OF ENGINEERING



ON THE COVER: CARL R. ICE COLLEGE OF ENGINEERING BANNER WELCOMES ALL TO EAST PLAZA ENTRANCE OF ENGINEERING HALL.

ABOVE: CONCRETE CANOE CREATIVE INQUIRY TEAM MEMBERS WORK ON THEIR ENTRY FOR 2019.

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IMPACT

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MIKE AND LYNN WIEGERS

TAKING PART IN THE LEGACY

Citing the long history of naming campus buildings after individuals and the newer trend of commercial facility naming, Mike Wieggers, EE '82, found it "logical and inevitable" that universities would begin naming other components such as departments, centers and colleges.

"When my wife, Lynn, and I witnessed the incredible gifts of Dr. Min Kao, Carl and Mary Ice, and others, we were inspired by their generosity," Wieggers said. "So when Dean Dawson gave us the opportunity to support the ECE department with a naming investment, we wanted to participate."

Thus came about the fourth named department in the Carl R. Ice College of Engineering — the Mike Wieggers Department of Electrical and Computer Engineering, whose official signage reveal was celebrated Oct. 25 in Engineering Hall.

"This naming gift provides funds for what we think matters: a great engineering education that will benefit the citizens of Kansas via high-tech jobs."

"Industry and alumni contributions become more important to mitigate tuition and fee increases as state funding for higher education decreases," Wieggers said. "This naming gift provides funds for what we think matters: a great engineering education that will benefit the citizens of Kansas via high-tech jobs."

Wieggers is vice president, consumer engineering, at Garmin International Inc. in Olathe, Kansas, where he directs day-to-day operations of its worldwide consumer engineering group. Joining the company in 1993 as lead engineer in marine product design, during his tenure he has served in a variety of technical and business leadership capacities in all Garmin consumer product segments.



"I remember my classes and particularly the ECE labs, which gave me hands-on experience that proved invaluable in the workplace," he said. "We hope our naming gift provides productive services and experiences for today's students as well."

The couple established the Wieggers Family Scholarship nearly a decade ago because of their desire to help K-State students, but their interest in philanthropy is something that has developed over time.

"Thoughts of providing scholarships, let alone naming the ECE department, were not in my imagination while attending K-State. Like many, I had dreams more focused on personal success than philanthropy," Wieggers said.

"But gifts like ours have benefited students, faculty and staff since K-State was founded in 1863," he said, "and we are very excited to be one of the names behind the story."

"Each named campus building or program represents a chronicle of success, generosity and a belief in the next generation," he said. "We are humbled to be part of that legacy."

by Mary Rankin





SUSTAINABLE AGRICULTURE THROUGH MODERN TECHNOLOGY

Using autonomous robots on the ground and unmanned aircraft vehicles in the air, Ajay Sharda, associate professor of agricultural and biological engineering, is leading research efforts to reduce overuse of pesticides and promote water-sustaining irrigation methods.

“These projects are different from other approaches,” Sharda said, “where so often robotic systems are developed first and then applications are explored. But these projects, from the get-go, have a defined objective with a critical and globally needed application already in mind.

“Such approaches are letting us collect data on crop health and growth on an unprecedented scale not possible before. We expect the actionable knowledge derived from the data will help with optimal use of crop input, thus diminishing the impact agriculture has on the environment and opening new horizons for more efficient crop production.”

by Mary Rankin



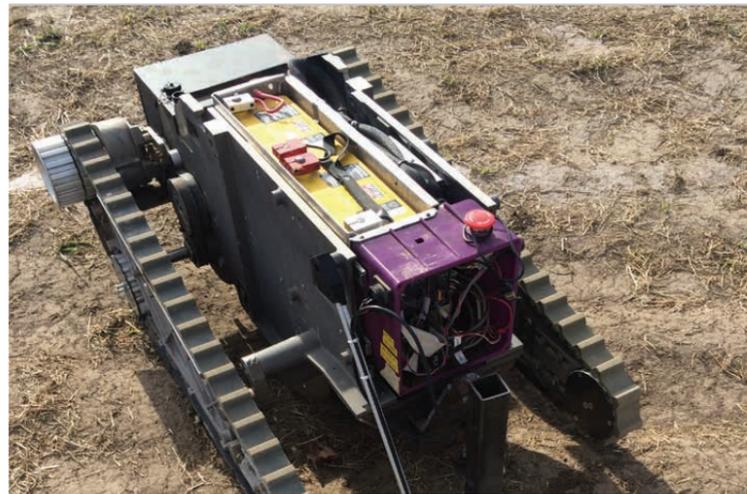
ENOUGH WATER FOR ALL

According to the USDA, agriculture annually consumes approximately 80% of ground and surface water in the United States. Irrigated farms in the U.S. use approximately 91.2 million acre-feet of water every year on 56 million acres that are 17% of the total cropland.

K-State researchers will soon take the lead in providing knowledge for whole-field irrigation decisions as well as site-specific, variable-rate irrigation techniques with a nearly \$500,000 USDA Agriculture and Food Research Initiative grant administered by Sharda. This research will advance robust models for irrigation scheduling and practices for efficient on-farm water management, ensuring sustainable water is available for crop production.

The project originated with and is co-sponsored by the National Science Foundation's Cyber-Physical Systems, and co-investigator with Sharda is Pavithra Prabhakar, associate professor of computer science.

“There has been limited research to determine spatial characteristics of irrigation water use,” Sharda said. “Our proposal



will develop rapid and robust methods to accurately capture canopy temperature — using a sensing suite aboard a small unmanned aircraft vehicle — on a dense spatial and temporal scale for precision irrigation strategies, and formulate easy-to-implement management methods for irrigators.”

Spatial canopy temperature, along with meteorological parameters measured using a ground reference system, will generate spatial crop-water stress maps for irrigation water demands.

“This project will also explore sensing-system design requirements for successful, all-season canopy temperature reconnaissance,” Sharda said. “We will be able to develop computational algorithms to quantify, in real time, crop-water stress at critical growth stages throughout the growing season, as well as use small, unmanned aircraft flying protocols for data collection and efficient control of irrigation systems.”

CUTTING PESTICIDE USE

Agricultural producers annually spray nearly \$15 billion worth of chemicals yet still lose 37% of crop yield to pest damage. As the industry moves to sustainably intensify production to feed a growing population, a high priority is to reduce farmers’ costs by making fewer, more efficient chemical applications, and at the same time limiting impact on the environment.

This is the focus of research at Kansas State University recently funded by a five-year, \$882,920 grant from the U.S. Department of

Agriculture under the National Robotics Initiative 2.0: Ubiquitous Collaborative Robots.

Sharda is principal investigator for the project and co-principal investigators are Dan Flippo, assistant professor of biological and agricultural engineering, and Brian McCormick, associate professor of entomology.

“These projects, from the get-go, have a defined objective with a critical and globally needed application already in mind.”

Their goal is to develop a vision system to sense and identify presence of insects in order to conduct site-specific targeted chemical applications using autonomous robotic systems.

“This will create a paradigm shift in sustainable crop production and provide new opportunities for using intelligent operating systems to improve pest control applications and reduce yield gaps,” Sharda said.

The proposed computer vision approach to locate insect incidence and severity, as well as use of a decision tool to conduct directed spray employing an autonomous robotic system, he said, will be a fundamental change from existing techniques of agricultural chemical spray applications.

BHC RHODES

Civil Engineering • Surveying • Utilities

2019 COMPANY OF THE YEAR



The Carl R. Ice College of Engineering honored BHC RHODES as the 2019 Company of the Year at its 36th annual Career Fair recognition event, Sept. 25, in the engineering complex atriums.

BHC RHODES has been a long-time supporter of the college serving as a partner in the Engineering Leadership and Innovation, or ELI, program; providing civil engineering scholarship support; contributing to civil engineering enhancement needs; and funding the BHC RHODES Smart Cities Lab, which benefits research efforts across the entire college.

The company, founded in 1992, delivers outstanding expertise in engineering and surveying services with offices in Overland Park, Kansas City and Dodge City, Kansas. It strives to be a recognized leader in the industry by staying engaged with customers and within the profession. With a focus on building trusted

relationships and delivering exceptional service, BHC RHODES is dedicated to establishing the company’s reputation of being the “no problem” place.

“Years ago we recognized our education and college experience at K-State helped position us for success,” said Kevin Honomichl, 1986 graduate in civil engineering, president of BHC RHODES and current member of the Carl R. Ice College of Engineering Advisory Council. “Being active in the college is a way to stay engaged with fellow K-State alumni and with what is happening with research so we can see how it applies to our practice.

“If you view engagement with your university through only an academic lens, you are missing a world of perspective, opportunity and relationships,” he said. “Engagement is a key tool in our talent development program to stay connected with great students we may want to hire, and find opportunities to get our young professionals involved with the college so they have the opportunity to give back to the next generation of engineers.”

“BHC RHODES is a great friend and supporter of the college,” said Gary Clark, interim dean of the Carl R. Ice College of Engineering. “As an ELI partner, when it is their scheduled time to host a career spotlight for students, they always bring fun, engaging and innovative presentations that truly inspire our students and spark their interest in professional engineering careers.”

The Carl R. Ice College of Engineering Company of the Year, established in 1974, is selected annually with the distinction awarded based on exhibited commitment to engineering education, as well as high standards and quality performance in the engineering profession.



"All of us here today came to celebrate Carl and Mary — two K-Staters who have set the standard for what it means to inspire through leadership, service and philanthropy."

— Greg Willems, president and CEO, KSU Foundation



Carl R. Ice College of Engineering Naming Celebration

October 18, 2019

"It will be our task to continue this heritage . . . and mark with pride the significance of what the Ices have done for our college and our campus."

— Gary Clark, interim dean, Carl R. Ice College of Engineering





Giving back
was the only way

JOHN AND LINDA LEE



“The best way to improve the engineering profession is to continue to support women in this field,” said John Lee, 1979 K-State graduate in electrical engineering.

To back up that belief, he and his wife, Linda, have established the John and Linda Lee Engineering Scholarship in support of K-State engineering students who are participants in the Women in Engineering program, with a preference for those studying electrical and computer engineering.

During his career, Lee, senior director, electric distribution engineering for Xcel Energy in Denver, has had the opportunity to work with and manage strong and diverse engineering teams.

“In those experiences,” he said, “I personally found the teams with women engineering professionals to be better ones — more balanced, able to accomplish more and frankly, more fun. Yet even today it is still difficult to recruit and retain women in engineering, and in particular, electrical and computer engineering.”

A second motivation behind the scholarship takes on a more personal note.

“My aptitude for engineering is almost entirely due to my mother, Roberta,” Lee said. “She has always had the curiosity and ability to ‘figure it out.’ Engineering was not an obvious career choice for women in her day but she would have made a great engineer.”

And for the Lees, as with so many others, K-State has always been about family. Linda, John’s brother, David Lee, both 1979 graduates in business, and John all attended K-State at the same time and have a special bond because of it.

Linda’s father, William Young, was a 1949 K-State graduate in mechanical engineering and her mother, Orena, worked in the dean’s office while he was in school.

“We have other family and friends as well who attended or are in school here now,” John said. “Because of these attachments, we wanted to give back to the university and help provide others with the opportunities we had. It seemed only appropriate to put our family name on the scholarship.”

“The best way to improve the engineering profession is to *continue to support women* in this field.”

The Lees’ bond with K-State, however, goes beyond simply getting an education. It has and continues to provide life experiences they value greatly.

“We have developed friendships that follow us wherever we go — even in other parts of the world, you can bond with fellow K-Staters,” John said, referencing the many new connections he and Linda have made through the Traveling Wildcats program.

“Our careers and many of our experiences all come back to K-State,” he said. “It was an easy decision to give back in this way.”

by Mary Rankin



Featured here are four first-place standings — two at the international level, and two at the regional level...

CREATIVE INQUIRY TEAMS

continue their

WINNING WAYS

Each year hundreds of students from K-State engineering participate in creative inquiry teams. This year 20 teams participated at multiple levels of competition.

Featured here are four first-place standings — two at the international level, and two at the regional level — once again assuring that students from K-State engineering leave their mark at these events.

REMOTE-CONTROL-FOCUSED ROBOTICS TEAM

The Mercury Remote Rover Squad, from the Kansas State University Robotics Competition Team, took first place in international competition at the Oklahoma State University Mercury Remote Robot Challenge, April 26-27 in Stillwater, Oklahoma.

In addition to the first-place overall award, the squad also won first place among the Big 12 Conference schools and was recognized with the Best Video Presentation award.

The Mercury Remote Robot Challenge is an international, interscholastic robotics competition that challenges competitors to design and build a robot capable of performing a mission. The robot must be operated remotely over the internet from



at least 50 miles away, presenting a unique engineering challenge in which electrical and mechanical design, embedded programming, wireless communication and latency all play a large role.

Each team's robot must accomplish tasks such as picking up and launching a ping pong ball, driving through a darkened tunnel, slaloming through obstacles and racing, all while being controlled remotely from more than 50 miles away. The pilots are not in contact with the ground team and must drive using only an onboard camera.

Read more at bit.ly/MercuryRover2019.

FOUNTAIN WARS TEAM TAKES FIRST

It was nothing less than the best for students of the Kansas State University Fountain Wars Team in 2019. The creative design group from the Carl R. Ice College of Engineering, brought home first-place honors in an international competition.

For the ninth time in the past 10 years, a team from K-State finished in the top three in the Fountain Wars Competition, a segment of the G.B. Gunlogson Student Environmental Design Competition.

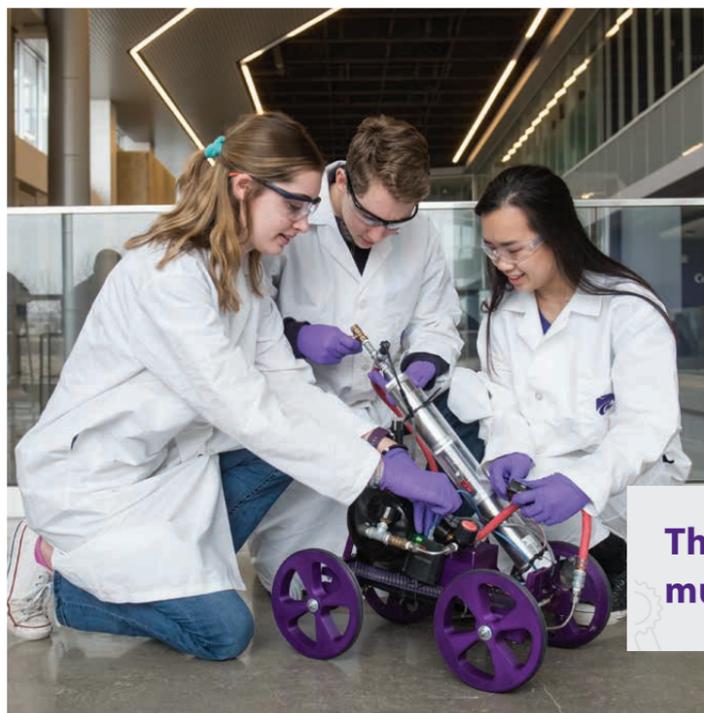
The outdoor event is a hands-on, real-time design contest in which students construct and model a water fountain entry before judges at the American Society of Agricultural and Biological Engineers' annual international meeting, this year July 7-8 in Boston, Massachusetts.

"We couldn't be more pleased with the outcome," said Trisha Moore, team adviser and assistant professor of biological and agricultural engineering. "The students put in many hours of planning and testing design concepts in preparation for the competition. To bring home first place is such a validation of that effort."

Read more at bit.ly/FountainWars2019.

CHEM-E-CAR TEAM BRINGS HOME TOP PRIZE

For the third time in the past five years, the Kansas State University Chem-E-Car team took first place at the American Institute of Chemical Engineers 2019 Mid-America Student Regional Conference, this year's event hosted by Missouri University of Science and Technology April 13 in Rolla, Missouri.

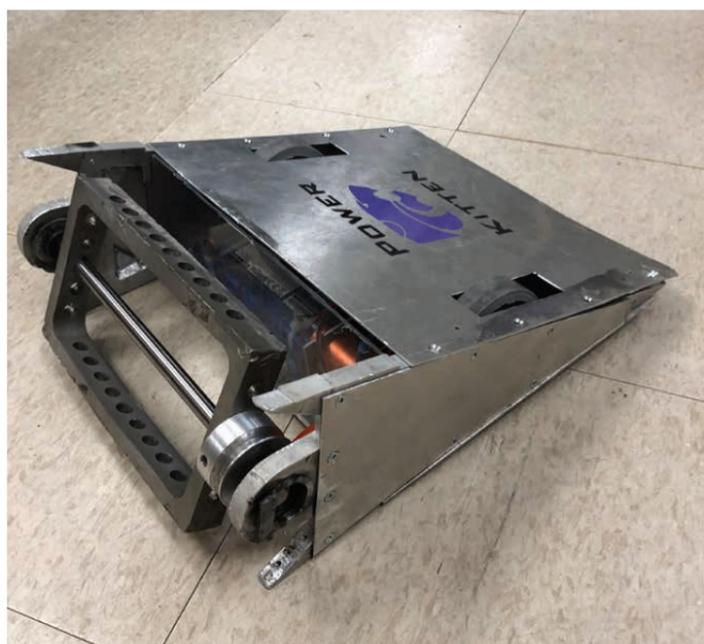


The team designed and constructed its winning entry, Wildcat Workout, powered by a chemical energy source to safely carry a specified load over a given distance and stop. Chemical sources could be from homemade batteries, biological catalysts, pressure reactions, thermodynamic reactions or other related choices. Each team's entry had to pass a safety inspection to prove there were no chemical, mechanical, electrical or pressure hazards.

"The competition is not about having the fastest, biggest or longest lasting car," said Katharine Kellogg, senior in chemical engineering, "but is about having the best control over your reaction so you can make the car go an exact distance."

Read more at bit.ly/ChemECar2019.

This year 20 teams participated at multiple levels of competition.



ROBOTICS TEAM WINS REGIONALS

The Combat Robotics Squad, from the Kansas State University Robotics Competition Team, took first place in the regional competition, BOTSKC, April 7 in Liberty, Missouri.

The event, sponsored by the National Robotics League, is a double-elimination, single-combat battle tournament bracket. For each battle, two teams put their robots into opposite corners and the first team to break, flip or otherwise incapacitate the other robot wins.

The squad competed in the 15-pound weight class against 33 other entrants. In addition to head-to-head battles, teams compete in video interviews and written documentation segments.

"We fought five times in our path to second place overall in the battle section," said Isaiah Garrett, senior in computer engineering. "However, our stellar interviews and documentation pulled us into first place by overall points."

Read more at bit.ly/CombatRobotics2019.

CHE SENIOR NAMED GOLDWATER SCHOLAR



Gabrielle Phillips, senior in chemical engineering, is among the 2019 recipients of the prestigious national Barry M. Goldwater Scholarship.

Established by Congress in 1986 to honor Sen. Barry M. Goldwater from Arizona, the scholarship is a premier undergraduate award for students interested in research careers in engineering, mathematics or the natural sciences.

Mentored by Ruth Welti, university distinguished professor of biology, Phillips researches and characterizes plant genes at the Kansas Lipidomics Research Center. She also has worked with Kathrin Schrick, associate professor of biology, as part of her research of plant molecular biology.

In summer 2019 Phillips participated in the Baylor College of Medicine SMART program where she studied the impact of vitamin D on obesity and diabetes.

"This scholarship is a huge testament to all of the mentorship and support I have received throughout my time in college."

In summer 2017 Phillips interned at the Institute of Bioprocess Engineering at Technische Universität Kaiserslautern in Germany, where she worked to increase the efficiency of pharmaceutical production of plant cell lines. In 2016 she helped program a virtual reality headset to better understand the neural pathway of balance reflexes at the Human Biomechanics Design Lab at Wichita State University.

"This scholarship is a huge testament to all of the mentorship and support I have received throughout my time in college," Phillips said. "I am very grateful to all of the people who helped me in the lab and classroom, and in the many other aspects of university life."

Phillips is a member of the University Honors Program, Tau Beta Pi engineering honor society, Engineering in Medicine and Biology Society, Steel Ring and Mortar Board. In addition to the Goldwater scholarship, she has received

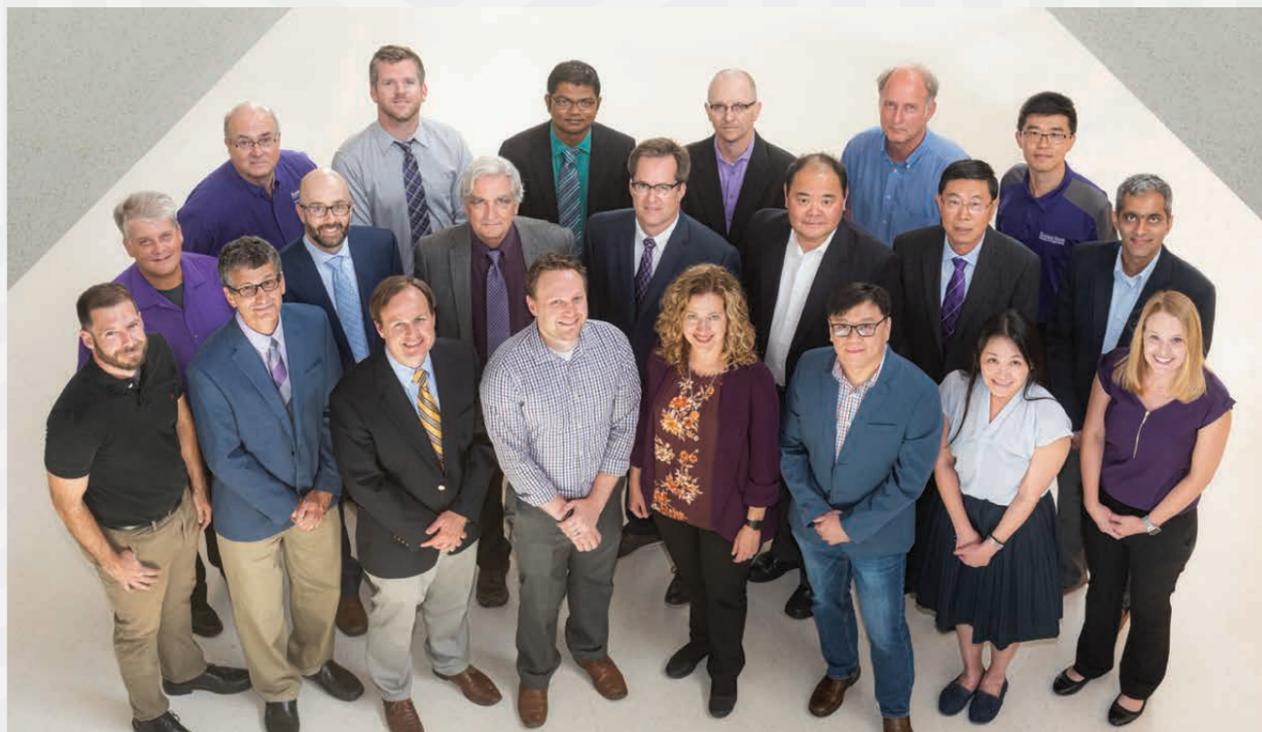
research scholarships that include a Kansas-IDEA Network of Biomedical Research Excellence Star Trainee award, Office of Undergraduate Research and Creative Inquiry Research Grant, and a Johnson Cancer Research Center Undergraduate Research Award. She was also awarded a research internship in science and engineering from the German Academic Exchange Service.

"Between chemical engineering and pre-medicine, I'm taking five years to graduate," she said, "so the Goldwater is helpful for finishing this last year. After graduation, I hope to attend a medical scientist training program to earn an M.D. and a Ph.D."

"With this training, I will be able to see patients in the clinic while also running a research lab to improve the quality of care and treatment I can offer my patients. I'm still in the process of applying, but I am excited for the opportunity to combine my passions for research and medicine in my career."

Goldwater awardees receive up to \$7,500 annually for college-related expenses. In the 2019-2020 academic year, the Goldwater scholarship was awarded to nearly 500 students across the nation. With 77 Goldwater scholars to date, Kansas State University ranks among the nation's top 10 universities for producing Goldwater scholars.

College Awards 24 Named Faculty Positions



FRONT ROW, FROM LEFT: WILLIAM HAGEMAN, SCOTT SCHIFF, CHRISTOPHER JONES, DEREK CLEMENTS, JENNIFER ANTHONY, ROBBY, URARA HASEGAWA, LISA WILKEN
 SECOND ROW, FROM LEFT: STEVE WARREN, KEVIN WANKLYN, WILLIAM DUNN, PAUL KARR, JOHN WU, DONGHAI WANG, AJAY SHARDA
 THIRD ROW, FROM LEFT: DWIGHT DAY, JARED HOBECK, SUPREM DAS, DAN FLIPPO, MITCHELL NEILSEN, BIN LIU
 NOT PHOTOGRAPHED: LANDON MARSTON, JONGCHUL SONG, JESSICA HEIER STAMM

The Carl R. Ice College of Engineering at Kansas State University announces the naming of 24 faculty members as recipients of either a Keystone Research Scholar or Cornerstone Teaching Scholar award funded as a part of the Carl R. Ice Faculty Development Initiative Match Program.

The initiative, established by K-State alumni Carl and Mary Ice in 2019, enhances the college's ability to improve retention and graduation rates, ensuring students obtain the best possible learning experience as the awards enable the college to recruit and retain the most highly sought-after faculty.

The Cornerstone Teaching Scholar award recognizes faculty who are exemplary in teaching undergraduate courses and who demonstrate a commitment to student engagement and success in the Carl R. Ice College of Engineering. Awardees are nominated by their department head for a three-year appointment.

The Keystone Research Scholar award recognizes faculty members who have made outstanding research contributions that address urgent national and global issues. This named position allows the college to recruit and retain dynamic scholars who are in high demand at universities throughout the nation. Nominated by their department heads, these awardees also receive a three-year appointment.

The Ices established 20 opportunities for individual donors to fund one or two of the awards in their names, and the dean of engineering will then fill each of these positions with a second matched faculty award named in honor of both the original donor and Carl and Mary Ice. Five of the matching opportunities are still available.

The following faculty members, listed alphabetically by department, have been designated either Keystone or Cornerstone scholars as awarded by the 11 named alumni donors and the Ice Faculty Development Initiative Match:

Architectural engineering and construction science

Derek Clements, instructor, Mark C. Nyquist Cornerstone Teaching Scholar

Paul Karr, instructor, D. Craig and Dalene D. Nelson – Carl and Mary Ice Cornerstone Teaching Scholar

Jongchul Song, associate professor, D. Craig and Dalene D. Nelson Cornerstone Teaching Scholar

Biological and agricultural engineering

Dan Flippo, assistant professor, Patrick Wilburn Keystone Research Scholar

Ajay Sharda, associate professor, Patrick Wilburn – Carl and Mary Ice Keystone Research Scholar

Donghai Wang, professor, Robert and Becca Reichenberger – Carl and Mary Ice Keystone Research Scholar

Lisa Wilken, associate professor, Mark C. Nyquist – Carl and Mary Ice Cornerstone Teaching Scholar

Chemical engineering

Jennifer Anthony, interim department head and associate professor, Wayne and Barbara Harms – Carl and Mary Ice Cornerstone Teaching Scholar

Urara Hasegawa, assistant professor, Warren and Gisela Kennedy Keystone Research Scholar

Bin Liu, associate professor, Wayne and Barbara Harms Keystone Research Scholar

Civil engineering

Christopher Jones, associate professor, Wallis-Lage Family Cornerstone Teaching Scholar

Landon Marston, assistant professor, Peggy and Gary Edwards Cornerstone Teaching Scholar

Scott Schiff, teaching professor, Wallis-Lage Family – Carl and Mary Ice Cornerstone Teaching Scholar

Computer science

Mitchell Neilsen, professor, Warren and Gisela Kennedy – Carl and Mary Ice Keystone Research Scholar

Robby, professor, Peggy and Gary Edwards – Carl and Mary Ice Keystone Research Scholar

Electrical and computer engineering

Dwight Day, associate professor, David and Lynda Dawson Cornerstone Teaching Scholar

William Hageman, assistant professor, Daniel and Judi Burk Cornerstone Teaching Scholar

Steve Warren, professor, Robert and Becca Reichenberger Cornerstone Teaching Scholar

Industrial and manufacturing systems engineering

Suprem Das, assistant professor, David and Lynda Dawson – Carl and Mary Ice Keystone Research Scholar

Jessica Heier Stamm, associate professor, Gisela and Warren Kennedy Cornerstone Teaching Scholar

John Wu, associate professor, Gisela and Warren Kennedy – Carl and Mary Ice Cornerstone Teaching Scholar

Mechanical and nuclear engineering

William Dunn, professor, Don and Linda Glaser – Carl and Mary Ice Cornerstone Teaching Scholar

Jared Hobeck, assistant professor, Daniel and Judi Burk – Carl and Mary Ice Keystone Research Scholar

Kevin Wanklyn, teaching associate professor, Don and Linda Glaser Cornerstone Teaching Scholar

CLARK ASSUMES INTERIM DEAN DUTIES



Gary Clark, senior associate dean of the Carl R. Ice College of Engineering has been appointed interim dean of the college by Charles Taber, K-State provost and executive vice president, and will continue until a regular appointment is made following a national search for a new dean.

Clark replaced Darren Dawson, who accepted the position of president of the University of Alabama in Huntsville. It is Clark's second time serving as interim dean of the college. He also served in the position during the 2013-14 academic year.

"Dean Dawson has well-positioned the college for success," Clark said. "As interim, it will be my goal to continue that path of excellence as we move forward to attract more outstanding undergraduate and graduate students as well as the best possible candidates for the next dean of engineering at Kansas State University."

Clark joined Kansas State University in 1994 with teaching and research responsibilities. In 2005 he was named head of the biological and agricultural engineering department and in 2009 he became the college's senior associate dean. Along with serving as the college's senior associate dean, he is a professor of biological and agricultural engineering and a registered professional engineer.

HUTCHINSON NAMED ASSOCIATE DEAN



Stacy Hutchinson, professor of biological and agricultural engineering, has been selected as associate dean for research and graduate programs in the Carl R. Ice College of Engineering.

Hutchinson received a bachelor's degree in civil engineering from Montana State University and was commissioned as a 2nd Lieutenant in the U.S. Army in 1990. She served as a U.S. Army Corps of Engineers officer and received the Army Achievement and Army Commendation Medal for exemplary performance.

She completed both a master's and doctoral degree in civil engineering at Kansas State University in 1996 and 1998, respectively, and was then employed as an environmental engineer for the Ecosystem Research Division of the Environmental Protection Agency in Athens, Georgia.

Hutchinson returned to K-State as an assistant professor in biological and agricultural engineering in 2000, was promoted to associate professor in 2006 and full professor in 2014. She has served as interim director of the Urban Water Institute; was a visiting professor at Ecole d'Ingénieurs Purpan, Toulouse, France; and a Fulbright specialist at the National Mining University, Dnipro, Ukraine.

ANTHONY STEPS IN FOR EDGAR AS INTERIM DEPARTMENT HEAD



Jennifer Anthony, associate professor, has been named interim department head of the Tim Taylor Department of Chemical Engineering.

The post had previously been held by James Edgar, University Distinguished Professor, who accepted a temporary position as a program manager at the National Science Foundation, Division of Materials Research, Electronic and Photonic Materials program in Alexandria, Virginia.

Anthony received her bachelor's degree in chemical engineering from the University of Colorado Boulder, and

completed both master's and doctoral degrees at the University of Notre Dame. She was a postdoctoral scholar at the California Institute of Technology before joining the faculty here in 2005.

Her research involves novel materials such as nanoporous molecular sieves and ionic liquids with a focus on the role of solvent in molecularly designing materials for specific applications. These efforts include a variety of experimental methods designed to aid understanding of their fundamental properties and to investigate potential applications for the materials.

NEW TO ACADEMIC SUCCESS CENTER AND RECRUITMENT OFFICE



Keleigh Schettler is the new Academic Success Center coordinator for the Carl R. Ice College of Engineering.

Schettler settled in Manhattan nine years ago and during that time completed her undergraduate degree in animal science and industry; garnered a husband, two dogs, two cats, and a pet lobster;

and traveled the globe. She is currently working on completing her master's degree in animal science and industry with an emphasis in anatomy and physiology.

Mitchell Pivovar became recruitment coordinator for the Carl R. Ice College of Engineering in June 2019. He graduated from K-State with a bachelor's degree in journalism and mass communications with an emphasis in public relations in 2018. As an undergraduate he was involved with FarmHouse Fraternity where he served as social media and website chair.

As a recruitment coordinator, Pivovar meets new prospective students and helps current students, such as Engineering Ambassadors, succeed both professionally and personally.

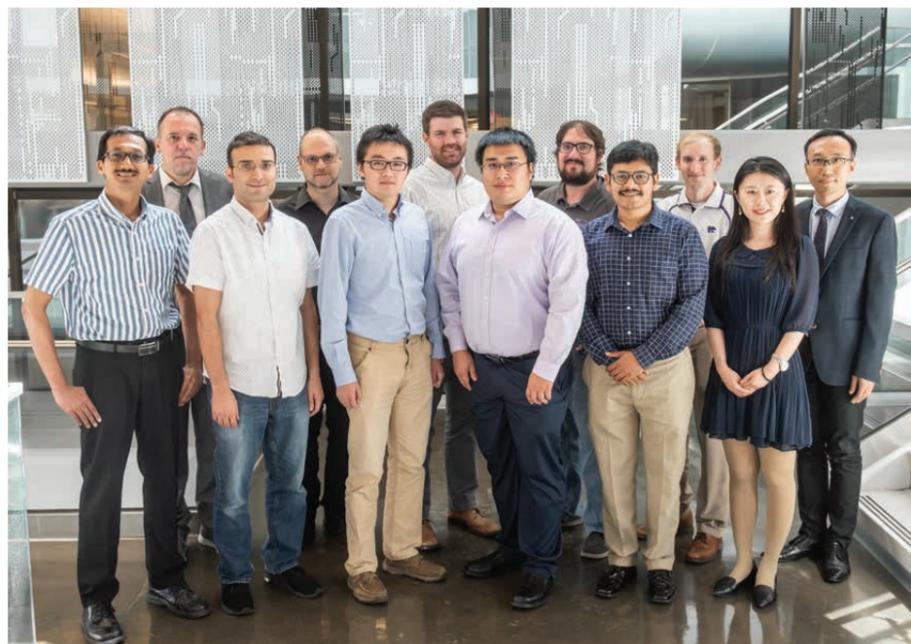
Pivovar has served as worship director at a Manhattan church, The Well, for three years and is founder and director of MHK Worship. He and his wife, Elaina, who is currently pursuing a master's degree in marriage and family therapy from K-State, live in Manhattan.



COLLEGE AWARDS

Front row, from left: **Jessica Heier Stamm**, IMSE associate professor, James L. Hollis Award for Excellence in Undergraduate Teaching; **Lisa Wilken**, BAE associate professor, Myers-Alford Memorial Teaching Award; **Prathap Parameswaran**, CE assistant professor, Outstanding Assistant Professor Award; second row, from left: **Hongyu Wu**, ECE assistant professor, Outstanding Assistant Professor Award; **Arlene Jacobson**, BAE, Engineering Support Staff Employee of the Year; **Trisha Moore**, BAE assistant professor, Dean's Award of Excellence in Service; **Donghai Wang**, BAE professor, Engineering Distinguished Researcher Award; third row, from left: **Hayder Rasheed**, CE professor, Dean's Award of Excellence in Research; **Mitzi Farmer**, MNE, Engineering Unclassified Staff Award of Excellence; **Steve Warren**, ECE professor, Larry E. and Laurel Erickson Public Service Award; **Derek Clements**, ARE/CNS instructor, Clair A. Mauch Steel Ring Advisor of the Year; back row, from left: **Todd Easton**, IMSE associate professor, Robert R. and Lila L. Snell Excellence in Undergraduate Teaching Award; **Fred Hasler**, ARE/CNS associate professor, Charles H. Scholer Faculty Award; **William Hageman**, ECE assistant professor, Dean's Award of Excellence in Teaching; **Behrooz Mirafzal**, ECE associate professor, Frankenhoff Outstanding Research Award

Not pictured: **Eric Fitzsimmons**, CE assistant professor, Outstanding Assistant Professor Award



NEW FACULTY

Front, from left: **Raj Kumar Pal**, MNE assistant professor; **M. Hosein Ghasemi Baboly**, MNE instructor; **Kexing Lai**, ECE research assistant professor; **Xiaolong Guo**, ECE assistant professor; **Parth Panchmatia**, CE teaching assistant professor; **Yachao Chen**, CHE teaching assistant professor; back row, from left: **Francesco Maiorana**, CS instructor; **Pascal Hitzler**, CS professor; **Andrew Sneed**, ARE/CNS instructor; **Jake Hamilton**, ARE/CNS instructor; **Charles Carlson**, ECE teaching assistant professor; **Shih-Kang "Scott" Fan**, MNE professor

Not pictured: **Husain Aziz**, CE assistant professor; **Lior Shamir**, CS associate professor; **Scott Thompson**, MNE associate professor

RECOGNITIONS

1952

Ross Roepke (AGE) reports having been employed in the advanced planning office at the Arnold Engineering Development Center in Tennessee, the premium wind tunnel complex in the world. There he had been responsible for planning, development and finding funding for new facilities needed in the 21st century. Those facilities are now used to test aircraft models, engines, missiles, rockets and spacecraft under development. Roepke said throughout his "exciting career" he had benefited from the basic sciences he acquired during his K-State education. He has returned for Engineering Open House celebrations several times over the past 67 years.

1990 | 1998

Sheila Hayter (ME), group manager with Integrated Applications Center at the DOE National Renewable Energy Laboratory, Golden Colorado; and Julia Keen (ARE, M.S. '05), professor in the GE Johnson Department of Architectural Engineering and Construction Science in the Carl R. Ice College of Engineering, were two of seven U.S. women engineers highlighted in "Women in the Refrigeration and Air-conditioning Industry: Personal Experiences and Achievements," a publication of the United Nations Environment Programme.

DEATHS

1958

Dale M. Cook (CHE) died May 19, 2019, in Pekin, Illinois. He began his career as a chemical engineer for Corn Products Company, later known as CPC International, at its Argo, Illinois, technical center. He joined the engineering staff at CPC's Pekin plant in 1970, was promoted to plant manager for CPC affiliate Peterson Puritan Packaging Co. in Danville, Illinois, and later promoted to vice president of operations for that company. In 1996 he joined Fluid Packaging Company in Lakewood, New Jersey, as vice president of operations, retiring in 2001. He is survived by his wife, Sharon; daughters, Linda and Michelle; and sons, Mark and Michael.

1961

Jagdish "Jack" Sheth (CHE), North Port, Florida, died Sept. 20, 2019. He spent his career as a chemist in the flooring industry, retiring to Florida in 2001 where he was an active volunteer at a local library bookstore and as a respite worker at a hospice. He is survived by his wife, Lotte; son, Mark; daughters, Nancey and Kristy; and six grandchildren and three great-grandchildren.

We are interested in following the career paths and accomplishments of our alumni, focusing on promotions and advancements, awards and honors, job changes and retirements, as well as death notices.

Please email your information in these categories to impact@engg.k-state.edu or send it to —

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