



Alumni Connections

IMSE Newsletter Summer 2014

New generation technologies prepare students for modern-day engineering

Minutes before their next mission, three armed soldiers realize a part from their tank has gone awry. Without missing a beat they identify the problem, print the part, assemble the piece and head into battle.

These are the type of scenarios modern-day engineers predict in preparation for tomorrow, as new generation technologies such as 3-D printers advance and bode an industrial revolution. The implication has leaders in defense, aerospace, automotive, health care and schools rethinking their strategies and operations as they prepare to join the trend.

Shuting Lei, professor of industrial and manufacturing systems engineering (IMSE) at Kansas State University, ponders the same questions. Specifically, as 3-D printers evolve, what impact will they have on current students and recent graduates?

Such technology will inevitably change the way engineers manufacture and distribute products. Lei says that the ability to print in real time shortens the development cycle

and could potentially reduce or eliminate the need for traditional manufacturing techniques that currently require manpower, tools, assembly lines and supply chains.

"Industry is on the verge of significant change and it's imperative that our students are introduced to new manufacturing technologies as we prepare them to enter the workforce," said Lei. "As educators, this is our highest priority."

In February 2014, Lei unveiled the IMSE department's first 3-D printer. He introduced the new technology to his manufacturing students and challenged them with a project that turned textbook methods into hands-on experience. The project required a three-phase approach: design, print and test.

"Students learned the advantages associated with 3-D printing like direct bottom-up manufacturing and ease of making complex shapes," said Lei. "They also realized the imperfections of current 3-D printing technologies like the limitations on materials and speed."

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From the department head

*"By changing nothing, nothing changes."
– Tony Robbins*

This is an exciting time to be part of the K-State IMSE family. As we prepare to enter another academic year, we find ourselves on the eve of significant change. Enrollments continue to grow the department, the department may move into new space and the faculty are considering significant curriculum innovations.

This past spring, the K-State College of Engineering broke ground on our complex expansion. The additional space will enable us to meet the needs of our growing program. Proudly, we are operating at record highs because of the outstanding reputation our faculty and students have earned as leaders in engineering education. This means that within the next two years we fully anticipate a departmental renovation or relocation, which will provide our faculty and students with better office space, new technologies and state-of-the-art labs/facilities.

Under the new leadership of Darren Dawson, dean of the College of Engineering, the IMSE future looks bright. Our faculty and graduate students are on the brink of cutting-edge discoveries, and we are ready to take our program to the next level. This fall faculty and graduate students will begin a concentrated effort to recruit the best and brightest students to join our research teams.

I feel confident moving forward with these ambitious goals because of the excellence we already exemplify. Every year our faculty, students and alumni impress me with their professional and personal accomplishments. This year was no exception. I'm thrilled to highlight their success stories in this edition of Alumni Connections.

Within these pages you will see that now, more than ever, we need your continued support. Our bold approach to progress the department will indeed take a collaborative effort. Regular updates will follow, but please visit us at imse.k-state.edu where you will find current information about our program and research endeavors.

Make sure to stop by the office next time you're in the area. Our space may look different, but will forever remain home to your proud alma mater.

Go Cats!



Bradley A. Kramer
Department Head



Alumni spotlight

IMSE alumnus inducted into college hall of fame

Lt. Gen. Robert L. Caslen, a 1989 MSIE graduate, was inducted into the College of Engineering Hall of Fame at Kansas State University's Seaton Society banquet. This is the highest honor bestowed on its alumni by the college. Recipients are graduates of at least 20 years who have reached peak performance in their professional endeavors and who are committed to maintaining the highest standards of their profession. Twelve IE alumni have received this distinguished award since its inception in 1989.

Caslen is the 59th superintendent of the U.S. Military Academy at West Point. He is responsible for the oversight and development of future leaders and works to excel the institution as a forerunner in academic excellence. Prior to his current appointment, Caslen served as chief of the Office of Security Cooperation-Iraq. He has served the nation through multiple deployments and is an honored veteran who has commanded in numerous positions up through the division level. A leader among peers, he is decorated with a multitude of distinguished awards and medals.

The Kansas State University IE operations research and systems analysis program "brought me to levels intellectually that I never thought possible," said Caslen. "Kansas State University provided me one of the best educational opportunities I could have ever asked for and has helped me in my career significantly." View his video at <http://tinyurl.com/qzjyfq>.

The Seaton Society banquet was an opportunity to pay tribute to Caslen in celebration of his professional accomplishments, service to society and dedication to Kansas State University and the College of Engineering.



Lt. Gen. Robert L. Caslen, '89 MSIE alumnus

Researchers work to improve nighttime driving conditions



Left to right: Mohammed Obeidat, Ph.D. graduate student, and Dr. Malgorzata Rys

From the distracted 16-year-old driving home from her friend's house to the slow-moving 78-year-old meeting his daughter for dinner, driving is a risk people take every day. Relatively few of us think about the mental and physical conditions needed to operate our vehicles. Instead, we likely autopilot from one destination to the next, adjusting to complex environments as quickly as a blink of an eye.

"Drivers of all ages face challenges," said Malgorzata Rys, associate professor in the Department of Industrial and Manufacturing Systems Engineering. "It's my job to identify the problems and find effective solutions."

Originally from Poland, Rys and her husband moved to Manhattan for her husband's career at Kansas State University where she later became a two-time graduate. With a doctorate in industrial engineering and more than 25 years' experience, her research centers on human

factors/ergonomics with an emphasis on highway safety.

Early in her career, Rys established a partnership with the Kansas Department of Transportation (KDOT), which has extended more than 20 years. One of her many projects resulted in the development and implementation of the original rumble strip, which is now used throughout the state. Since then she has been the principal or co-principal investigator on more than 50 local and national projects.

Today, Rys and her graduate students are working with KDOT on a project that will improve nighttime driving conditions.

"Roadway guide sign visibility during darkness is fundamental to driver safety, especially elderly drivers," Rys said. "Guide sign visibility can be improved by external sign illumination or the use of retroreflective sheeting on signs." Through her research, Rys hopes to identify a cost-effective sign with optimum visibility.

"Overhead highway signs are very important for enhancing driver guidance," said Rys. "The objective of these signs is to provide drivers with information regarding destinations and other driving maneuvers required to safely reach specific destinations."

The Federal Highway Administration estimates that 38 million drivers will be over age 70 by 2020. Motivated by these numbers, Rys feels it's especially important to understand the needs of this growing demographic. She said that as people age their mental and physical health starts to deteriorate. These changes make it more difficult for them to hear, see and react. All of which place them at greater risk for automobile accidents, especially at night when driving risks are heightened.

With this in mind, Rys and her team have developed multiple driving scenarios to test various problems.

"The older we get the more difficult it is to adjust to the glare of headlights or read a sign on a dark-lit road," said Rys. "Our research must consider all the internal and external factors that could hinder our ability to process and react to important information. At night the decision-making process is even more complicated, so we have to design a method comparable for drivers of all ages and experience."

The research team will field test each scenario over two-week intervals using university volunteers and predetermined metrics. In-between cycles, statistics are used to analyze the complex data. With sufficient information, an optimized solution will be designed and presented to KDOT for suggested use throughout Kansas.

From road sign visibility to rumble strip safety, Rys' research extends her outside of academia where she aspires to solve real-world problems. "Every day I get to evaluate and design systems that improve the safety and well-being of humans. Just knowing that the results of my research have the potential to save lives on our modern roadways is the biggest reward imaginable."

New generation technologies prepare students for modern-day engineering

(continued from front cover)

Until recently, 3-D printers have been cost prohibitive to consumers, even though they have existed for decades. Finally at an affordable price point, the IMSE department purchased the 3-D printer for use in classroom projects and graduate research. Motivated and fully engaged, Lei's students pioneered the first project. The new technology enabled them to conceptualize an idea and watch it materialize.

"The printer connected to a laptop takes a 3-D computer model and slices it into layers," said Ryan Manes, undergraduate research assistant for Lei. "A robot moves the heated extruder head along each layer and

lays down the molten thermoplastic one layer at a time until a three-dimensional part appears."

With one successful project under his belt, Lei's long-term goal is to integrate 3-D printing into more IMSE courses. Ideally, he would like every student in the department to have an opportunity to learn the technology and operate the software firsthand. By exposing students to the early stage developments of this game-changing technology, Lei intends to prepare them for the manufacturing evolution that is guaranteed to change world industry as we know it today.

Student entrepreneur uses IE skills to launch successful business



Most industrial engineer (IE) graduates don't expect their first job title to be photographer. Josh Mais, a K-State senior, does. An entrepreneur at heart, Mais has carved his own career path, one which doesn't involve your typical industry internship or nerve-racking job interview. Instead he plans to use the lessons learned from his IE course work to pursue a dream career in real estate photography.

This is a unique transition for an inspiring IE, but at age 21 Mais already operates a successful business that combines both skill sets. His idea took flight over winter break of his sophomore year when he worked as a real estate photo editor. It took only a few days on the job for him to realize the need for better real estate photography. In typical IE fashion, he was motivated to develop a solution that would improve this niche market.

That summer he researched the industry and created a vision for a potential business plan. Fall semester he enrolled in the courses necessary to get a minor in business and entrepreneurship in addition to his IE degree. The K-State Venture Incubator provided him with office space, supplies and mentorship to help him get his entrepreneurial dream started. Within three months he had developed a network of professional contacts, built a website from scratch and officially launched his business called Kansas City Spaces. As a one-man operation, he offers premium photography, video and

floor plans, single property websites, and Google Business Views to real estate agents, multifamily housing corporations and businesses within the Greater Kansas City area.

Immediately, satisfied customers like A.J. Gentry, a realtor at Urban KC Living, praised his work. "Having Josh take my photos helps sell my listings quicker and at a higher price," said Gentry. "He wants you happy with his services and it shows."

Through research and hard work, Mais taught himself search engine optimization (SEO), which in a matter of months earned him a top spot on Google's organic search for real estate photographers in Kansas City. If that weren't impressive enough, he also earned the competitive certified title of Google Trusted Photographer. This allows him to offer his customers 360-degree virtual tours of their businesses on Google Search, Google Maps and Google+.

"In my business I apply the same type of principles that IEs do within companies," Mais said. "I've developed an efficient process that allows me to decrease the amount of time needed to take and edit photos at the lowest cost possible without sacrificing quality."

This process is outlined in detail in his business plan, which recently won first place in the K-State Launch Competition. Among the 365 students who entered, he

was challenged to write a business plan and pitch it to local investors and business owners. Mais' proposal for Kansas City Spaces impressed the judges and earned him \$6,000 to continue his entrepreneurial dream.

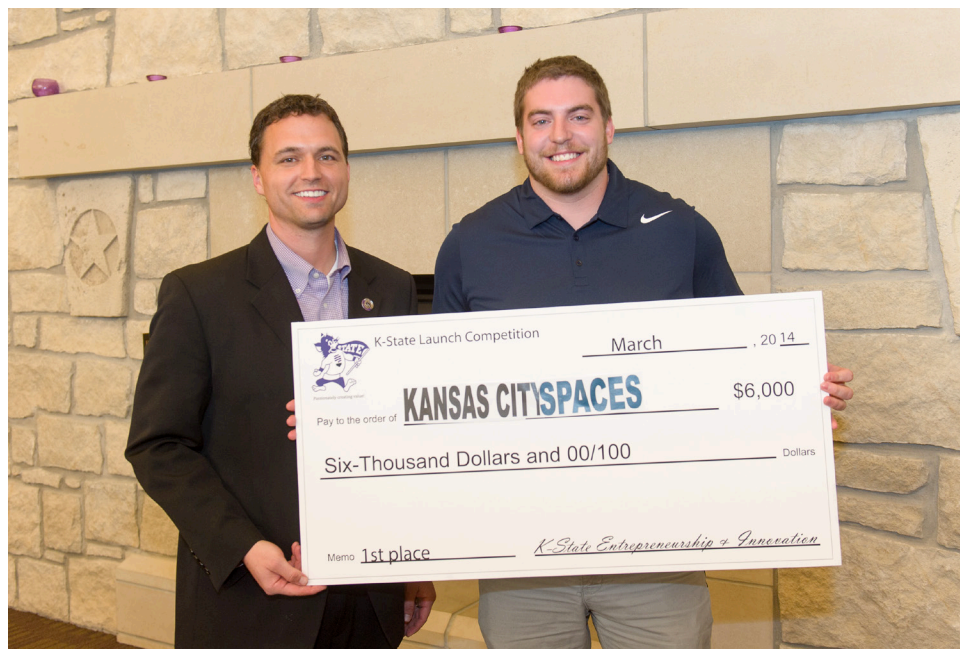
"Josh exemplifies the skills we hope all students will learn: the ability to creatively solve problems, work effectively under strict deadlines, and to recognize the importance of a strong work ethic, persistence and intellectual integrity," said Chad Jackson, director of K-State's Center for the Advancement of Entrepreneurship.

Mais is scheduled to graduate in May 2015. While his peers excitedly accept positions from companies like Deloitte Consulting or J.B. Hunt Transportation, Mais instead plans to grow his company.

"IE was the smart choice that I thought I could be successful at and enjoy," he said. "I'm not sure where the business will take me, but an IE background offers options down the road."

Mais' postgraduation aspirations may not fit the traditional mold, but his guiding principles do. With belief in himself and support from his family, Mais plans to continually strive to deliver excellence in quality, which for any industrial engineer is the ultimate definition of success.

Learn more about Kansas City Spaces at kansascityspaces.com.



Chad Jackson, director of the Center for the Advancement of Entrepreneurship, awards Josh Mais, IE student, winner of the 2014 K-State Launch Competition.



Multidisciplinary research aims to improve local ecosystems

The National Science Foundation recently awarded a team of K-State researchers that includes Jessica Heier Stamm, IMSE assistant professor, with \$1.4 million to study water supply and water quality in the Great Plains. The Smoky Hill River Watershed — which extends from central Kansas to eastern Colorado — is the focus of the study.

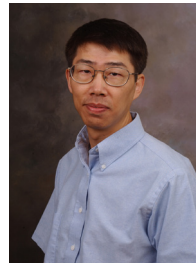
Water systems in the Great Plains are under significant pressure — they support recreation, community life, agriculture and native ecosystems, and they are impacted by weather variability, such as the current drought. Heier Stamm said the purpose of the research is to introduce an integrative coupled model of the human, hydrological and ecological subsystems to predict impact on water resources from climate variability and change, land use and human activity.

Melinda Daniels, adjunct professor of geography at Kansas State University and associate research scientist at the Stroud Water Research Center in Pennsylvania, is leading the research team. Joining her are seven researchers from the College of Arts & Sciences, the College of Agriculture and the College of Engineering, as well as one from Auburn University.

Representing the IMSE department, Heier Stamm will research how farmer and community decision models can be integrated with ecosystems and hydrology models to better understand the behavior of the system. She will lead the development of an integrative policy optimization framework to identify water system management strategies that improve outcomes and are robust to uncertainty.

Ultimately, the team's objective is to recommend sustainable policies and procedures for land and water use so local farmers and communities members can continue to benefit from the freshwater resource while sustaining invaluable ecosystems.

FACULTY PROMOTIONS



Shuting Lei — Professor

Kansas State University promoted the Department of Industrial and Manufacturing Systems Engineering's Shuting Lei to professor in fall 2013. An invaluable member of the IMSE faculty for more than 15 years, Lei specializes in advanced manufacturing research.

Zhijian (Z.J.) Pei — Professor

ZJ Pei was selected for the Carl R. and Mary T. Ice Industrial Engineering Professorship in May 2014. Pei has been a K-State IMSE faculty member since 2000. He is internationally recognized as a scholar and trailblazer in manufacturing research. As the Ice professor, Pei will lead funded research endeavors as well as facilitate industrial collaborations with university partners.



NEW STAFF

Michele Bradfield

Project Coordinator — Industrial and Manufacturing Systems Engineering

Michele Bradfield has spent the last eight years as a communications and marketing specialist for both nonprofit and government agencies. She joined the IMSE staff in February 2014. In her role as project coordinator, she oversees the department's marketing and events. In addition, she serves as the graduate coordinator supporting faculty and students with their programmatic needs.



College of Engineering expansion update

Kansas State University's College of Engineering began a major expansion to the engineering complex in April 2014. This multimillion dollar project is scheduled for completion in fall 2015. Construction will integrate updates to the existing buildings, while expanding the complex by 108,000 square feet. Spearheading the project is the University Engineering Initiative Act, or UEIA, passed by the Kansas Legislature to address the projected workforce demand for engineers in the state. Over a 10-year period ending in 2021, the student body of the college is projected to grow by at least 750 students. The additional space will allow for collaboration, team building and interdisciplinary opportunities in modern facilities. The expansion will set the tone for future renovations throughout the college to include the IMSE department.





IMSE Spring Awards Banquet

Department of Industrial and Manufacturing Systems Engineering awards recognize superior academic achievement. These accomplishments were celebrated at the spring awards banquet. Students who earned honors include:

- Sarah Newell, Stilwell, Outstanding IMSE Freshman
- Gabrielle Lobo, Overland Park, Outstanding IMSE Sophomore
- Marylynn Griebel, Stockton, Outstanding IMSE Junior
- Patrick Hawn, Hutchinson, Outstanding IMSE Junior
- Adam Robl, Salina, Outstanding IMSE Senior
- Ryan Aeschliman, Topeka, Jacob Smaltz Valedictorian Award

In addition, the Institute of Industrial Engineers (IIE) recognized three students for their outstanding involvement and contribution to the IMSE department. These honors went to:

- Tom Bolton, Overland Park, Alpha Hardcharger Award
- Jessica Aschenbrenner, Topeka, Beta Hardcharger Award
- Andrew Ewing, Wamego, Gamma Hardcharger Award



Nibal Albashabsheh, Ph.D. student in industrial engineering, Jordan, was awarded the International Graduate Student Scholarship by the Konza and Manhattan Rotary clubs in May 2014. Albashabsheh will use her \$500 gift to continue her studies at K-State under Jessica Heier Stamm, IMSE professor. Pictured left to right: Betty Stevens, vice president of Manhattan Rotary Club; Nibal Albashabsheh, Ph.D. student in IMSE; Nanxi Li, Ph.D. student in MNE; and Dick Wertzberger, president of Manhattan Rotary Club.

Find Us On Social Media



B.S. Industrial Engineering

- Megan Arpin, Randolph
- Paige Bower, Arkansas City
- Josh Dohrmann, Anamosa, Iowa
- Ryan Manes, Kansas City, Missouri
- James Mullin, Lenexa
- Peter T. Rasmussen, Lawrence
- Sarah Stoltz, Wichita
- Kelsi Taton, Stillwater, Oklahoma
- Kraig Thompson, Manhattan
- Erin Vetter, Overland Park
- Joshua Westhusin,
College Station, Texas

B.S./M.S. Industrial Engineering

- Levi DeLissa, Meade
- Derrick Schmitz, Centennial, Colorado
- Scott J. Whittle, Wichita
- Eric Zinke, Seneca

Graduate Degrees

- Julie Allen, Kansas City, Missouri
- Blair Crosswhite, St. Joseph, Missouri
- Jeffrey Ewing, Apollo, Pennsylvania
- Kevin Joy, Forestville, Maryland
- Allison Karnowski, Wamego
- Joseph Moore, Wichita
- Thomas Rhein, Wichita
- Michael Scurfield, Wichita
- Mike Sprenkel, Bentonville, Arkansas
- Benjamin Weber, Ottumwa, Iowa
- Randal Hickman, Manhattan
- Meng Zhang, China

CONGRATULATIONS GRADUATES!





Two IMSE students named outstanding graduating seniors

Congratulations to two IMSE students who were named Outstanding Graduating Seniors last spring by Pat Bosco, K-State vice president for student life and dean of students. Megan Walden and Andrew Waldman were two of 18 students to win this prestigious award. They were selected among peers based on their significant leadership and contribution to improve student life at Kansas State University.

Walden, industrial engineering, Wichita, was an Army ROTC cadet, Alpha Delta Pi sorority member, Student Government Association representative, Wildcat Warm-up counselor and more. She will serve in the Army as a commissioned officer in field artillery or engineering.

"In my variety of involvement experiences, leading and following, the lessons I have learned are the importance of understanding what motivates individuals, how to adjust your leadership style to different personalities, and the impact developing others can have on an organization and the individual," Walden said.

Waldman, BSMS industrial engineering, minor in business and leadership studies, Shawnee, participated as a K-State student ambassador, president of Beta Theta Pi fraternity and K-State Singers just to name a few. He will work for Deloitte Consulting in Kansas City.

"In addition to the incredible opportunities I have had through leadership activities, my life has most been changed by the friends I've made," Waldman said. "In all of my experiences, I have been surrounded by people who continuously challenge me to do better and be better."



2014-2015 OFFICERS

Alpha Pi Mu

President, Adam Robl
 Vice president, Patrick Hawn
 Secretary, Melissa McGuire
 Treasurer, Kyle Neely
 Advisor, Todd Easton

Ryan Manes, president 2013-2014

Entering the department I was really interested in the human aspect of engineering. Alpha Pi Mu taught me real-life skills necessary to succeed in the business world, like effective organization and communication. I would tell students to get involved young and give 100 percent even if you don't know where you're going yet.

Society of Manufacturing Engineers

President, Andrew Pruett
 Vice president, Jermaine Rhone
 Secretary, Samuel Martin
 Treasurer, Hannah Tritschler
 Spatula co-chair, Cameron Garwood and Ryan Deters
 Open House, Karlee Fischer
 Co-chair, Margaret Mosley
 Advisor, Timothy Deines

Kyle Neely, president 2013 – 2014

As president of SME, I learned that it is important to see all aspects of the organization in order to run it. Knowing this made it easy to solve problems within. My favorite part was selling the K-State grill spatulas, a product that I'm really proud of.

Institute of Industrial Engineers (IIE)

President, Bryce Garver
 Vice president, Alex Nottingham
 Secretary, Hannah Niederee
 Treasurer, Jess Aschenbrenner
 Open House chair, Andrew Pruett and MaryLynn Griebel
 Chapter development, Gabrielle Lobo and Jessica Nicholson
 Intramurals, Patrick Hawn and Will Jones
 Historian, Samuel Martin
 Advisor, Margaret Rys

Tom Bolton, president 2013-2014

Getting involved made my time at K-State infinitely better. I gained invaluable experience that helped me succeed in the classroom and excel as an intern with Wal-Mart and ExxonMobile. My one piece of advice for students is to get involved early. The bonds you build will last throughout the entire program.

FACULTY AWARDS

Todd Easton, associate professor, received the 2014 Commerce Bank Outstanding Teaching Award at K-State's All-University Awards Ceremony. Easton was one of four faculty members to receive the honor, sponsored by Commerce Bank and the William T. Kemper Foundation, to recognize excellence in undergraduate teaching.



Malgorzata Rys, associate professor, received the Charles H. Scholer Faculty Award from the K-State College of Engineering. This honor is awarded annually to one outstanding faculty member who extends student learning outside of the classroom, has earned respect among students and colleagues, and offers significant support to student organizations.

Todd Easton, associate professor; **Shuting Lei**, professor; and **Malgorzata Rys**, associate professor, were three of 15 faculty members selected for the Dean's Awards of Excellence presented by the K-State College of Engineering. Recipients were chosen based on the positive impact they had on the college throughout the school year.



Jessica Heier Stamm, assistant professor, was voted the 2013-2014 Outstanding undergraduate teacher by senior students in the Department of Industrial and Manufacturing Systems Engineering. Annually this award celebrates one professor for their excellence in teaching, research and leadership.

Alumna receives professional progress award

Anita Ranhotra, BSIE, '94, MEM '01 alumna, was honored with the 2014 Professional Progress award. This honor recognizes successful alumni in the midst of their professional careers and accomplishments within the first 20 years after graduation.

Ranhotra is a product integrity process improvement manager for Hallmark Cards, based in Kansas City, Missouri. She joined the company in 2000 and is responsible for leading a team focused on large end-to-end process change initiatives. Ranhotra started her career with The Limited and Payless ShoeSource, where she worked as an engineer in production and project management.

"I owe a lot of my success to the IMSE department," Ranhotra said. "Faculty and peers from the program encouraged me to get involved in leadership positions where I was mentored to develop my skills. I've always been grateful for their guided support and vowed early on to give back."

Give back is exactly what Ranhotra has done. At K-State she holds leadership positions on the IMSE Professional Academy and Advisory Committee. For the College of Engineering she serves as a board member for the Multicultural Engineering Program. Her service extends well beyond K-State to the local and international level as an officer for the Institute of Industrial Engineers (IIE). In 2010 she was recognized by IIE as the Outstanding Young Industrial Engineer of the Year.



Anita Ranhotra, '94 IE alum and '01 M.S. graduate

In remembrance: L. Stuart Curtis Sr., 1938 - 2014

L. Stuart Curtis Sr., BSIE, '63, MSIE, '64 alumnus and longtime engineering advisory committee member, passed away on Sun. June 22, 2014.

Prior to attending college, Curtis served in the U.S. Army/Infantry. He then worked in the engineering department for the Martin Marietta Co. at Vandenberg Air Force Base in California. He returned to Kansas to attend Kansas State University where he became a two-time College of Engineering graduate, earning both B.S. and M.S. degrees in industrial engineering.

After graduation he joined his small family contract machining company in Dodge City, Kansas, where he had worked since age 8. Realizing that a product line was needed to assure steady work for all employees, Curtis used his slide rule and engineering knowledge to design many standard gears and gearboxes that are still the heart of Curtis Machine Inc.'s products. Today, Curtis Machine is the largest manufacturer of right

angle and off-angle bevel gear boxes (in Curtis' torque range) in the nation. Curtis' designs have been copied all over the world. Stuart acquired the first computer (other than the gas company) to be in Dodge City, KS. Using the Fortran and hexadecimal knowledge he acquired at K-State, he totally programmed this computer to meet the company's needs.

For his outstanding professional success, K-State honored him with the Distinguished Service Award in 1994 and inducted him into the College of Engineering Hall of Fame in 2012.

Curtis is survived by his wife, Janie, HE '63; and his sons, Stuart Jr., BSIE, and John, BSNE from Kansas State and MSNE from the Massachusetts Institute of Technology. Memorial contributions may be made to the Mayo Clinic, Department of Development, 200 First St. SW, Rochester, MN 55902 in memory of Mr. Lloyd Stuart Curtis Sr.



2014-2015 Advisory Council and Professional Academy

2014-2015 Advisory Council

The Industrial and Manufacturing Systems Engineering Advisory Council is comprised of professional leaders who are interested in the vitality of the K-State IMSE department. The council helps the department strengthen its learning, research and outreach programs; improve its facilities; expand its base of support; and serve its alumni. Council members actively participate in the continual assessment of the department's progress and the development of department/industry partnerships.

Members include: **Chris Althoff**, Invoyent LLC; **Kristine Amy**, ExxonMobil Chemical; **Catherine E. Boltz**, Honeywell; **Brian Brooks**, Lockheed Martin Aeronautics; **Jay Christensen**, JCPenney; **Sara Coash**, Hallmark Cards; **Laura Cranmer**, OtterBox; **Dave Dohrmann**, DAD Manufacturing Inc.; **Kelly Foster**, Hormel Foods Corp.; **Kyle Grabill**, Garmin International; **Darren Haverkamp**, Hill's Pet Nutrition/Colgate-Palmolive; **Patrick Hessini**, CHS Inc.; **Bryce Hushka**, ExxonMobil; **Dan Janatello**, Blue Cross Blue Shield of Kansas City; **Lori Jester**, Hospira Inc.; **Kerry Kaiser**, J.B. Hunt; **Jeff Kerbs**, Wal-Mart Stores US; **Kenneth Norton**, Deloitte Consulting LLP; **Justin Salmans**, Cessna Aircraft Co.; **Michelle Schlie**, Frito-Lay; **Anthony J. "Tony" Veith**, Spirit AeroSystems Inc.; and **Susan Zidek Van Houten**, HD Supply Inc.

2014-2015 Professional Academy

The IMSE Professional Academy was designed to help K-State IE alumni stay connected and facilitate student/alumni relations. The academy assists department initiatives through scholarships and recruitment. It also facilitates networking, mentorship and learning opportunities for its members.

Members include: **Sara Coash**, Hallmark Cards; **Bob Davis**, Anheuser Busch Co. Inc. (retired); **Dave Dohrmann**, DAD Manufacturing; **John English**, University of Arkansas; **Kyle Grabill**, Garmin International Inc.; **Perry Hengry**, HENT Inc.; **Patrick Hessini**, VP Transportation and Distribution; **Jeffrey Hopkins**, Netsmart; **James Lee**, Frontier Electronic Systems Inc.; **Larry Loomis**, Marion National Bank; **Amy Martens**, Blue Cross Blue Shield; **Ryan McGuire**, JB Hunt Transport; **Anita Ranhotra**, Hallmark Cards; **Larry Strecker**, Strecker Consulting LLC (retired); **Tony Veith**, Spirit Aerosystems Inc.; **Julie Vick**, Procter and Gamble; **Ken Ward**, Centres LLC; **Christ Althoff**, Invoyent LLC; **Susan Ziedek Van Houten**, HD Supply Inc; and **Doug Gish**, Deloitte Consulting.

For more information or to learn how to get involved, contact the IMSE department at 785-532-3720 or imse@k-state.edu.



A perfect match

When Ben and Jen (Bolton) Tryon graduated in 2008 and 2009, respectively, they both understood what it means to receive scholarships. For the alumni couple, scholarships meant less pressure to work and more time to focus on academics and extracurriculars. It meant they were more competitive in the job market through traditional learning in the classroom and through hands-on learning in student leadership roles.

"We benefitted from the College of Engineering's strong emphasis on the development of problem-solving capability, the practicality of the knowledge base and its application in industry," Ben said. "Outside the classroom, the campus is student-centric and allows student leaders to develop their sense of self-reliance and personal accountability, both of which translate exceptionally well to the workplace."

Now employed with Anadarko Petroleum Corp. in Houston, Ben leveraged his company's charitable match benefit to increase the size of his gift to K-State. Jennifer did the same with her matching benefit through ExxonMobil Foundation.

Jennifer credits the tremendous generosity of those who supported their education as inspiration for the Benjamin and Jennifer Tryon Industrial Engineering Scholarship.

"Our hope is that we can help provide opportunity for others in the K-State family while



continuing to support the academic programs that shaped our future," she said.

With help from IMSE alumni and friends like the Tryons, scholarships helped 58 students during the 2013 fiscal year. Ways to support K-State students, faculty, facilities and programs include pledges, estate planning, corporate partnerships and employer matching gifts. Contact the engineering development office at 785-532-7609 to learn more about the versatility and ease of including K-State in your financial plan.

"Our K-State experiences were in large part made possible by the tremendous generosity of those before us."

- Jennifer (Bolton) Tryon, '09 IMSE

Three ways to invest in IMSE

The dedication and involvement of K-State IMSE alumni and partners help continue traditions, as well as support students and faculty. With your support, we will mold future leaders in the engineering profession. We invite you to explore the opportunities to give. Here are a few options to consider:

Pledge

Creating a pledge can help you spread out your gift commitment and helps the college in budget forecasting and knowing areas it will be able to support through expected philanthropic gifts.

Matching

Increase the impact of your gift to K-State by utilizing your company's matching gift program. Companies encourage philanthropic behavior by matching their employees' charitable donations to eligible organizations, including higher education institutions.

Planned Giving

There are many creative ways to support the IMSE department through planned giving. Work with our development team to create a win-win solution for you and K-State.

You can help!

You can become part of our exciting future. We invite you to contact a member of our development staff today and begin the discussion about how you can make a difference.

For more information, please contact:



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Upcoming events

Monday Aug. 25	Friday Sep. 5	Saturday Oct. 4
Welcome Back Students	IMSE Professional Academy Meeting	IE Tailgate
Friday Oct. 17	Friday Dec. 12	Saturday April 11
IMSE Advisory Meeting	Fall Commencement	Open House



For more information on these and other events, visit our website:
imse.k-state.edu   