Once again, we are happy to present our annual newsletter from K-State electrical and computer engineering. This has been an exciting and challenging year as we continue to explore new opportunities within the very real constraints of a land-grant university in the state of Kansas. As you look through the different articles and photos, you will see we have had a lot going on. Activities include preparing our ABET accreditation materials in advance of our October 2017 accreditation visit, and development of a new undergraduate degree program in biomedical engineering.

As with other departments in the College of Engineering, ECE faculty and staff have spent countless hours preparing documentation for the upcoming accreditation review visit this fall for both our computer engineering and electrical engineering programs. If all goes well, at this time next year, we will know whether our programs are ABET-accredited for another six years. Another major effort in place since the summer of 2016 has been development and approval of a new undergraduate program in biomedical engineering, set to begin in the fall semester of 2018. This program builds on the strength of our bioengineering emphasis area in electrical engineering, and we see it as a way to grow undergraduate enrollment and research in our department.

This newsletter also highlights many of the recent student and faculty accomplishments. We are proud of the excellence these recognitions promote, and it is exciting to see our incoming students enroll this summer and consider what great accomplishments each of them will make while here with us. We applaud as well the achievements of many of our alumni. Whether through recognition at our Seaton Society celebration, or those of you being recognized by your employers or professional societies, we love hearing about our alums’ accomplishments. Please let us know your recent news by sending a quick note to alumminews@ece.ksu.edu. And please plan to join us at our annual department banquet the evening of Friday, Oct. 20.

Go Cats!

Don M. Gruenbacher  
Department Head  
Electrical and Computer Engineering
FULBRIGHT EXPERIENCE ALLOWS NATARAJAN TO EXPAND HORIZONS

From Jan. 1 to Feb. 11, 2017, Bala Natarajan visited DIT University in India as a Fulbright specialist. The Fulbright Specialist Program, established in 2001 by the U.S. Department of State, Bureau of Educational and Cultural Affairs, pairs highly qualified U.S. academics and professionals with host institutions abroad to share their expertise, strengthen institutional linkages and gain international experience while building capacity at their overseas host institutions.

Set in the foothills of the Himalayan Mountains, DIT University offered a scenic setting for a productive visit that was fruitful across multiple dimensions. One of the main goals of the specialist project was to empower and train faculty in research and teaching, so that a six-week visit can have a lasting impact on both students and the university.

With almost daily presentations on research topics ranging from 5G wireless, IoT and cyber physical systems, statistical learning and data science, and game theory, to one-on-one meetings with faculty, and undergraduate and graduate students, the visit helped advance the research enterprise at DIT.

In order for students and faculty to better understand and appreciate the teaching style at U.S. higher educational institutions, Natarajan also offered two short courses — "Performance of Digital Modulation Schemes" and "Information Theory" — for a university-wide audience. He also conducted workshops on "How to Become a Successful Researcher" and "Effective Teaching Methodologies" that were appreciated by students, faculty and university leadership.

In addition to academic activities, Natarajan had the opportunity to explore the mountains in and around DIT University. With the famous resort town of Mussourie less than 25 km away, the area offered many hiking trails and scenic vistas. Staying on campus, Natarajan enjoyed interactions with students and was able to participate in many student events including Indian Republic Day celebrations.

"While I started this project with the hope of assisting DIT University expand and advance its research and academic programs, I believe I was the one who benefited more — with a fresh and a better understanding of the role of research and learning in different communities," Natarajan said. "These global experiences help you grow as a person and celebrate our similarities rather than focus on our divisions."

Natarajan hopes to continue working with DIT University and other institutions around the world to not only advance research and education, but to better understand how technology can help transform lives across the globe.

"These global experiences help you grow as a person and celebrate our similarities rather than focus on our divisions." — Bala Natarajan

"Local\'s participate in "Prayer to the River Ganga" at Haridwar."

"These global experiences help you grow as a person and celebrate our similarities rather than focus on our divisions."

— Bala Natarajan

"Local\'s participate in "Prayer to the River Ganga" at Haridwar."

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NATARAJAN AT DIT UNIVERSITY

LOHRI FESTIVAL AT HOSTEL IN MUSSOURIE

LOCALS PARTICIPATE IN "PRAYER TO THE RIVER GANGA" AT HARIDWAR
MINIATURIZATION OF MICROELECTRONIC DEVICES

Great demand exists for miniaturization of microelectronic devices in various engineering sectors, including defense and commercial industries, as well as portable personal electronics. This would allow various electronic components to be integrated with sensors/actuators to realize multifunctional microsystems. However, it has been challenging to meet all the requirements of small size, light weight and multi-functional, while enhancing performance.

Jungkwun Kim, ECE assistant professor, has dedicated his research to finding engineering solutions to these challenges by utilizing nanotechnology and microfabrication. Accordingly, Kim’s Nano Micro Electronics Laboratory in ECE has focused on development of the 3D microfabrication process and its applications, including an integrated 3D inductor for smart devices and flexible energy storage.

Under his direction, the Nano-Micro Electronics Laboratory has been developing a UV-LED lithography system as a versatile 3D microfabrication method. The UV-LED lithography system comprises UV-LED array as a light source, a tilt-rotational stage underneath the light source to control a light-exposure angle and a computer as the main control.

The Nano-Micro Electronics Laboratory has focused on development of micro-scale-power electronic devices. Most commercial switching frequencies for power converters are in the low-(0.5-10) MHz regime, with research being conducted to push these frequencies up to 100 MHz and beyond. In the nearer term, miniaturized inductors with sufficient inductance and power-handling capability in the range of 5-10 MHz are of great interest. Kim has utilized a 3-D, lithographically defined, micromachining technology to fabricate the micro 3-D power inductor with highly dense windings. This approach resulted in a great reduction of overall power-chip size to within cubic inches, and has demonstrated high efficiency of 96 percent at 20W and 93 percent at 50W, respectively. This has produced the smallest power converter with the highest power efficiency when compared to similar specs of power converters.

To circumvent the cost and need for specialized equipment for nanofiber fabrication and metal deposition, low-cost materials and simple fabrication processes are greatly needed. Kim has developed an accessible method to generate metal-coated fabric electrodes for a flexible battery application. This demonstrated flexible battery has great potential for use as a future, low-cost, flexible energy-storage device.

Hongyu Wu, ECE assistant professor, addresses emerging technical challenges in power and the energy sector with systems engineering approaches that integrate mathematical optimization, computer and network systems, communication engineering, cyber physical systems, control and social science.

His areas of emphasis include the following:

- Planning, operation and control of the electric grid (smart grid, microgrid)
- Transactive energy systems (electricity market + smart distribution grid)
- Internet of Things (IoT) — Smart home/building energy management systems
- Big data — forecasting of renewable generation and electricity load
- Synergy among electricity, water, food, transportation and other critical infrastructures
- Mathematical modeling and optimization of large-scale systems

Wu is an IEEE senior member and has extensive academic, national laboratory and industrial experiences in his research areas. Prior to joining K-State, he worked as a post-doc at the Robert Galvin Center for Electricity Innovation at Illinois Institute of Technology, and as a research engineer in the Power Systems Engineering Center at the National Renewable Energy Laboratory. He has published more than 50 book chapters, has peer-reviewed journal and conference papers, and holds three software records/copyrights. His papers were selected as IEEE Power and Energy Society General Meeting Best Papers in 2015 and 2016. He has served on a number of technical review committees in national laboratories and governmental agencies.
KANSAS STATE UNIVERSITY NAMED DISTINGUISHED PROFESSOR

Deia Bayoumi, Cary, North Carolina, is a 2000 graduate of Kansas State University with a master’s degree in electrical and computer engineering. He also has an MBA from DeSales University, a professional engineer license from Ohio’s Engineers and Surveyors Board, and an executive certificate in technology, operations and value chain management from MIT Sloan Management. He is currently employed by ABB as head of global product management for distribution transformers, responsible for managing an estimated $1 billion product portfolio. Before appointment to his current position, Bayoumi had several progressive leadership positions at ABB including vice president technology and engineering for its HVDC North America business, and vice president and general manager for its substation automation business. His accomplishments include IEEE senior member status; ABB Inc.’s Inventor of the Year two years in a row; three U.S. issued patents; and more than 22 patent applications worldwide.

Kansas State University honored five professors as 2017 university distinguished professors, a lifetime title that is the highest honor the university bestows on its faculty members. One professor who received that distinction is ECE’s Deia Bayoumi.

Distinguished professors are appointed following a university-wide nomination and evaluation process conducted by the provost. Each received a personalized plaque and medallion at the university’s fall 2017 commencement ceremonies.

Bayoumi holds the Logan-Fetterhoff electrical and computer engineering faculty of distinction chair. His research focuses on reliability, automation and optimization of power distribution systems. His work has provided innovative and practical solutions for electricity distribution as well as large-scale integration of renewable energy resources in the system to decrease dependence on fossils fuels.

He joined Kansas State University in 1983 and served as the ECE department head from 2004 to 2007. He has engaged in 38 funded research projects with about $8.8 million in total funding, largely from the National Science Foundation. He has been the lead principal investigator on 28 of these projects. Bayoumi has published more than 225 articles and reports with more than 60 refereed journal papers and his research has received more than 2,400 citations.

Bayoumi is an Institute of Electrical and Electronics Engineers, or IEEE, fellow and has served in many leadership positions in IEEE Power and Energy Society, or PES, during the past 20 years, including chair of the Power and Energy Education Committee and editor of IEEE Transactions on Power Systems.

He serves on the advisory committee of DistribuTECH, a premier conference focused on automation of power distribution systems, for more than 25 years. The National Academies selected Bayoumi for a 2014-2015 Jefferson Science Fellowship and he served as a senior scientific advisor in the Economic Policy Office of the State Department’s Bureau of East Asian and Pacific Affairs as a part of the fellowship.

Bayoumi has received several awards during his professional career, including the IEEE PES Douglas M. Staszesky Distribution Automation Award in 2012 and the Outstanding Alumni Award from Birla Institute of Technology and Science in 2014. At Kansas State University he received the College of Engineering’s Erickson Public Service Award in 2011 and Frankenhoff Outstanding Research Award in 2012.

Bayoumi earned his doctorate in electrical engineering from Texas A&M University in 1983; his master’s degree in electrical engineering from the University of Maine, Orono in 1979; and his bachelor’s degree in electrical engineering from Birla Institute of Technology and Science in Pilani, India, in 1975.

“Our five newest university distinguished professors truly demonstrate the higher order leadership in teaching, research and service,” said April Mason, university provost and senior vice president. "Their accomplishments are key in our goal to become a Top 50 public research university by 2025, and I want to congratulate them on their newest achievement in becoming university distinguished professors.”
TWO NEW FACULTY JOIN ECE DEPARTMENT

Mohammad B. Shamdand, will join the ECE department as an assistant professor in August 2017. He received his bachelor’s degree in electrical engineering from Qatar University, Doha, Qatar, in 2010. He received master’s and doctorate degrees in electrical engineering from Texas A&M University in 2012 and 2015, respectively. He was previously a research professor at Texas A&M.

Sungo Kim, joined the ECE department as an associate professor in June 2017. He was previously an assistant professor in the ECE department at the New York Institute of Technology. His research interests are plasma medicine, plasma physics and nanomaterials for flexible, transparent and stretchable electronics and biomedical applications. He earned his B.S. in electrical engineering with the Presidential Award at Houn University in Korea in 1996. He received his master’s and doctorate degrees in electrical engineering from Inha University in Korea in 1998 and 2000, respectively.

NEW ECE STAFF POSITIONS

Brenda Geiler was hired as ECE accountant in August 2016. She has been at K-State more than 29 years with the majority of that time in Student Services, Career and Employment Services, and Counseling Services. She lives on a farm west of Junction City. Her hobbies and interests include fishing, trying a new Pinterest idea or recipe, and spending time with family. She received the University Support Staff Meritorious Service Award in April 2017.

Garrett Peterson is the new ECE academic adviser and instructor, joining the department in August 2016. He previously worked at Garmin International in Olathe in the aviation weather radar group as a design engineer. He received his B.S. in EE from K-State in 2015 and is currently pursuing his Ph.D. here in EE. Peterson serves as primary academic adviser to freshmen and sophomores in ECE. He also teaches the new student design project course that gives students a broad overview of electrical and computer engineering in a semester-long design project. He replaces Andy Fund who became assistant dean for student services in the College of Engineering in May 2016.

STAFF RETIREMENT

Steve Booth, ECE electronics technician, retired Dec. 16, 2016, after 32 years of dedicated service. Booth has served a critical role over the years in setting up labs, creating kits, fixing equipment and helping in every way possible. He plans to spend the first year of his retirement remodeling his home and spending time with family.

Kevin Myren has joined ECE as an electronics technician. He came to Ft. Riley in 2006 as a member of the U.S. Army, and after serving six years with two deployments to Iraq as a Blackhawk Helicopter crew chief, decided to further his education at K-State, graduating in 2016 with a B.S. in mechanical engineering. He worked three years in the INSE department assisting students in the manufacturing shop, and will strive to continue to help ECE students create strong finished products.

You are cordially invited to the ECE Annual Banquet, Friday, Oct. 20, 2017, at the K-State Alumni Center. For more details or to RSVP, send an e-mail to rsvp@ece.ksu.edu.
The goal of the Kansas State University Robot Competition Team, or KSURCT, is to teach students — no matter what their major — how to apply their knowledge and skills to designing a competition robot. Members’ activities include impromptu classes on soldering, programming, board design, coding robotics, and 3D modeling.

KSURCT takes part in several competitions across the nation, including the following recent events:

- **Competition Robot Vehicle**: California to solve a maze as fast as possible with an AI robot.
- **Micromouse – competition held in California**: To represent K-State in the competition.
- **BotSKC – combat robotics competition**: To learn the design process and documentation of building a fighting robot.
- **Mercury Challenge – task-oriented maze**: To place a driver at least 50 miles from the robot.

Members' activities include impromptu classes on soldering, programming, board design, coding robotics, and 3D modeling. The club fosters the tradition of learning through competition next year, entertaining students with its endeavors.

The team had a large influx of members in the past year, allowing it to form several teams and compete in more than one event at a time. Both teams and the Mercury Challenge bot competed in more than one event at a time. Both teams and the Mercury Challenge bot competed in more than one event at a time.

The team also displayed its new tools to assist KSURCT students in their endeavors.

The team also displayed its new tools to assist KSURCT students in their endeavors.

### ECE GRADUATES

#### M.S. and Ph.D. graduates

**December 2016**

Jeffery Lee Chai
Futing Fan
Chao He
Cody Kaufmann
Joshua Ryan Melander
Narges Montazeri Shahatori
 Alan Phung
Kyle Dean Rogge

**Kan Chen** – Natarajan (Ph.D.)

Dissertation: Physical Layer Security in Co-Operative Mimo Networks — Key Generation and Reliability Evaluation

#### B.S. graduates

**December 2016**

Majid Adel Alkhalil, Safwa, Saudi Arabia
Abdulrahim Adam Alkhiary, Jeddah, Saudi Arabia
Douglas Stephen Anjard, Overland Park
Valerie Jean Binsse, Haifa, Israel
Kevin Andrew Brashears, Desoto
Brian Richard Brazzil, El Dorado
Zhongze Fang, Jinan, China
Sile Hu, Hohhot, China
Alexander David Johnson, Hohhot, China
Kevin John Johnson, Overland Park
Joseph Michael Lang, Lyndon
James Luke Lawson, Goddard
Talshon Li, Ingham, China
Derek James Lingo, Tonganise
Linshen Luo, Shijan, China
Daniel Richard Miller, Shawnee
Gregory Thomas Moats, St. Marys
Paul William Naab, Emporia
Sunny N Patel, Oakley
Jesus Orlando Rangel Robert, Canavas, Venezuela
Timothy Scott Sample, Olathe
Aaron William Streit, Independence, Mo.
Danielle Lynette Suppas, Great Bend
Luke Alexander Terrell, Overland Park

#### M.S. and Ph.D. graduates

**May 2017**

Edward Avery Ashby
Ryan David Dardick
Etham Mark Grother
Riley Thomas Harrington
Michael Langford
Tianyu Lin
Wenda Liu
Fatehullah Nassery
Nicholas Michael Oberiski
Chintan Arunkumar Raval
Todd Willier Richards
Kyle Dean Rogge
Saeed Saud M. Saeed
Laura J. Tolle
Te Xu

Mohammad Nazaf Faqiry – Das (Ph.D.)

Dissertation: Efficient Double-Auction Mechanisms in the Energy Grid with Connected and Islanded Microgrids

Akanasha Singh – Mizrafi (Ph.D.)

Dissertation: A Boost-Current Source, Inverter-Based Generator-Converter Topology for Direct-Drive Wind Turbines

#### B.S. graduates

**May 2017**

Khaled Abdullah Alfaikakawi, Kuwait City, Kuwait
Murtada Adel Aisad Al, Qatif, Saudi Arabia
Tanner Lee Armstrong, Topeka
Brendan Michael Bonavía, Topeka
Brandon Alan Bowell, Salina
Justin Brickey, Manhattan
Muhammad Ibrahim Burt, Dubai, United Arab Emirates

Nolan Patrick Casimine, Newton
Dustin Earl Chew, Plano, Texas
Daniel M. Clausing, Lawrence
Whitney Rae Cox, Olathe
Levi Mathias Eck, Andale
Lawym Edmonds, Valley Falls
Dalton Jay Graber, Perryton
Alex Scott Hamilton, Manhattan
Michael Joseph Hotujac, Overland Park
Brandon Edward James, Lenexa
Peter Lemoine Jensen, Lenexa
Andrew Dale Johnson, Wichita
Nasser Mutlaa Juma, Manhattan
Ethan Koehl, Bixby, Okla.
Joshua Thomas Langford, Littleton, Colo.
James Douglas Lightwine, Olathe
Eleazar Lopez, Dodge City
Harrison Kevin Manase, Antananarivo, Madagascar
Blake Steven Martin, Lenexa
Myra Lynn McLenon, Menom
Karan Mehra, Overland Park
Grant Allen Meyerhoff, Wichita
Jacob Joseph Miles, Overland Park
Matthew Ryan Moran, Lenexa
Dishan Anupama Nathiya, Manhattan
Elkana Kibomai Nnyamberi, Topoika
Michael Rhett Pepple, Holcomb
Meng Rao, Nanjing, China
Matthew Wayne Sanner, Gardner
John Westthroppe Shaver, Olathe
Keli Rae Sleveley, Effingham
Abdulfattah Alaadie Shodunke, Sabe, Nigeria
Jacob Aaron Slous, Wichita
Blake Charles Smathers, Olathe
Jacob L. Sowers, Cummings
Dylan Thomas Stidham, Lawrence
Luke John Waliser, St. Marys
Li Wang, Dalian, China
Earl Richard Watkins, Hutchinson
Thomas A. Woodward, Highland Ranch, Colo.
Tyler Michael Wright, Hutchinson
Tianlu Wu, WuXi, China
Hang Zhang, Luoyang, China
Hangyu Zhang, Chengdu, China

IN MEMORIUM

Justin Keith Brickey
Jan. 16, 1984 – July 5, 2017
Class of 2017

Justin Brickey served in Iraq and achieved the Iraq Campaign Medal with two campaign stars, Army Commendation Medal, Combat Infantry Badge, as well as many other decorations and medals. He was honorably discharged after eight years of service in the U.S. Army. He was a senior in the engineering program at K-State, and a part of the Engineering Club, and Iraqi and Afghan Veteran’s Clubs. In his free time, he enjoyed playing bongo, saxophone, and loved spending time outdoors. His ’73 Volkswagen Bug was his pride and joy. Brickey’s family accepted his posthumous diploma at the May 2017 commencement ceremony.

WHAT HAVE YOU BEEN UP TO?

We would like to feature alumni news in future issues of ECE UPLINK. Please send your news to alumnews@ece.ku.edu with your latest news and accomplishments.

K-State Electrical and Computer Engineering
During the spring semester, students in the electronics design club developed a project to expand the normal curriculum by offering a wide range of experiences that would be useful once they have completed their degrees.

Working with a high-altitude balloon, also called the space balloon, challenged students by allowing them to apply core curriculum — programming and data retrieval of natural phenomena; PCB board design, fabrication and testing; and mechanical structuring and physical operations — to a more advanced project, and thus design a project from concept to product to field testing.

The goal of the high-altitude balloon project was to build a fully functional payload system that would take in atmospheric data, save that data and then manage to communicate with ground control for retrieval of that data. This promoted the challenging engineering task of sending equipment to a height of 20 miles above the earth's surface, requiring several considerations in design and testing be taken before the launch date.

The team of eight launched the balloon this past spring with the intention of following it using an automatic packaging report system that sends received latitude and longitude coordinates to on-the-ground towers already in place. Data is received and logged so the balloon can be tracked. Unfortunately, the team lost communication with the balloon, so data could not be retrieved. Other researchers that have launched similar balloons have found them up to a year later.

Meanwhile, those who live in Eastern Kansas, or who may be passing through the Lawrence area anytime soon, are asked to be on the lookout for a bright orange parachute attached to a Styrofoam cube. Contact information is posted on the side of the cube, and team members would love to have the equipment back and be able to release the footage. They would also appreciate anyone spreading the word about their sighting and recovery request.

ELECTRONICS DESIGN CLUB MEMBERS PREPARE FOR LAUNCH — 3, 2, 1 ….

SUCCESSFUL BALLOON LAUNCH — MARCH 11

The 2017 Engineering Open House kicked off Friday, March 31 for engineering students, following this year’s theme of “Engineered to Inspire.” The ECE departmental theme was “Mars’ Landing — To Infinity and Beyond.” Students adapted this theme and performed an original skit starring a spaceman, Tanner Weins, landing on Mars and saving a group of partying Martians — main Martian, Zach Darpinian — by fixing their boom box with his electrical engineering skills (photo left).

April 1 launched the All-University Open House and ECE answered the call with dynamic, interactive, creative displays designed and built by its students. For the departmental display, a team of 20 students developed and launched a high-altitude weather balloon.

Harold Vandeks, junior in computer engineering, received the Department’s Choice Award for Best Open House Project for his 2.4-GHz power detector (photo right).
Kansas State University's Wildcat Wind Power team stormed the competition and came away with second place in the 2017 Engineering Challenge of the Collegiate Wind Competition.

The event, April 20-22 at the National Wind Technology Center near Boulder, Colorado, featured teams from 10 of the universities that participated in the U.S. Department of Energy's 2016 Collegiate Wind Competition.

For the technical challenge, teams were focused on testing a small-scale wind turbine in a wind tunnel with the additional challenge of testing a turbine in yawed inflow. To participate, teams had to design and build a turbine that is able to yaw, which allows the turbine to adjust to changing wind directions; that is safe, reliable and effective; and that uses sound electrical, mechanical and aerodynamic practices. The turbine also had to feature a load system that could match the power being generated.

The team prepared for the challenge during the school year by building and improving a wind tunnel for testing its turbine, and developing a computer-controlled data acquisition system. The mechanical engineering students tried new techniques for blade-building, and the electrical engineering students enhanced electronics and controls, said Ruth Douglas Miller, associate professor of electrical and computer engineering. Douglas Miller and Warren White, associate professor of mechanical and nuclear engineering, are faculty advisers to the team.

The second-place finish provides great momentum, White and Douglas Miller said, as Kansas State University has been selected to participate in the 2018 Collegiate Wind Competition, May 7-10, 2018. The competition will feature 12 teams.

KANSAS ENTREPRENEURSHIP CHALLENGE AWARDS STUDENT ENTREPRENEURS

The team of Tyler O'Briant and Sam Rozell, both EE, placed fourth in the recent Kansas Entrepreneurship Challenge with their pitch for Eyas, a drone system designed for use by law enforcement and emergency management personnel.

UNDERGRADUATE STUDENT NEWS

Robert I-Jen and Sophia Shui-Kun Jung Graduate Scholarship in Engineering for Returning Students

Qihui Yang, ECE Ph.D. student

Weiwei Zhang, ECE Ph.D. student

Md Md, ECE, is a Notable Scholarly Graduate Student for his published work “An individual-level network model for a hypothetical outbreak of Japanese encephalitis in the USA.”

K-State Electrical and Computer Engineering
## COLLEGE OF ENGINEERING AWARDS SIX KEYSTONE RESEARCH SCHOLARS

The impact of faculty research plays a major role in establishing the reputation of a college and university. This belief propelled the College of Engineering at Kansas State University to establish the Keystone Research Scholars Program to recruit and retain top scholars, who though in the early stages of their academic careers, are in high demand for faculty positions throughout the country.

"By providing targeted funding for these early-career faculty members to pursue groundbreaking research," said Darren Dawson, dean of the College of Engineering, "we are enabling these talented men and women to join our college and take their intellectual pursuits to the highest levels of achievement here." Based on previous records of outstanding research accomplishment, faculty members are nominated by their department head for these positions. Each Keystone Research Scholar receives a three-year appointment with a salary increase and discretionary funds to support travel, specialized equipment and additional graduate students to join his or her research team. Funded by a gift from Michelle Munson, 1996 electrical engineering graduate, and her husband, Serban Simu, the following six recipients have been named as Michelle Munson-Serban Simu Keystone Research Faculty Scholars:

<table>
<thead>
<tr>
<th>Department of Electrical and Computer Engineering</th>
<th>HONOR ROLL OF GIVING</th>
<th>July 1, 2016 – June 30, 2017</th>
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<tr>
<td><strong>INDIVIDUALS</strong></td>
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<tr>
<td>$100,000 and above</td>
<td>Kenneth L Stuckey*</td>
<td>Richard and Setsuko Reeves</td>
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<td>$50,000 – $99,000</td>
<td>Rich and Marilee Donaldson</td>
<td>Caterina Scoglio and Fabio Schiattarella</td>
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<td>$10,000 – $49,000</td>
<td>Mitch and Molly Snyder</td>
<td>Daniel and Judi Burk</td>
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<td>$5,000 – $9,999</td>
<td>Dan and Gilbert Ferguson</td>
<td>Thomas and Rebecca Hopkins</td>
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<td><strong>CORPORATIONS</strong></td>
<td>Intel Programmable Solutions Group</td>
<td>Texas Instruments Foundation</td>
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<td>$100,000+</td>
<td>ConocoPhillips</td>
<td>Phillips 66 Company</td>
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**Program Elements and Benefits**

*In addition, these faculty members receive discretionary funds to support travel, specialized equipment and additional graduate students to join their research teams.

**Matching gifts**

For more information about creating a matching gift, contact your human resources department at www.found.ksu.edu/matching.

**How to get your generous support**

Please return this card to ICORI Foundation, 1506 E 12th St, Kansas State University, K-State UPLINK • Summer 2017
Members of the electrical and computer engineering advisory council met in October 2016 to align with the engineering college advisory council meeting.

Bob Beims          Gabe Hernandez
Mark Brown         Mackenzie Martin
Dan Burk           Ben McBride
Dan Croft          Navin Nagiah
Greg Deiter        Jesse Schriner
William Dowling    Matt Spexarth
Glen Fountain      Jeff Thetge
Don Gemaehlich     Terry Weaver
Leslie R.E. Gordon Don Gruenbacher