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Welcome!

Greetings from the students, faculty, and staff of the School of Electrical and Computer Engineering (ECE) at Oklahoma State University (OSU). We are pleased to send you our most recent edition of the 2015 ECE Newsletter, which highlights the exciting activities and contributions of the OSU ECE Community. As the new Head of the School, I am amazed at the quality of our students, the dedication of our faculty, and the great support provided by our staff.

In this edition you will be introduced to our newest faculty, Drs. Yuanxiong (Richard) Guo, Nishantha Ekneligoda, and Subhash Kak. Drs. Guo and Ekneligoda are assistant professors working critical problems in energy systems and power electronics. Dr. Kak is an international scholar who has made diverse contributions in quantum cryptography to archaeoastronomy. We are privileged to have Drs. Guo, Ekneligoda, and Kak on the ECE team.

We have structured this Newsletter into a series of featured articles and columns to give you a peek into our School. As you will notice in the opening pages of the Newsletter, our School collaborates with other universities around the globe, including universities in Asia and South America. We do so through a series of high-quality exchange programs, summer camps, and competitions. The impact of these activities on our students and visitors reaches beyond academics; the programs prepare students and visitors for the global economy of ECE technologies.

Our students are the gems of our School and we could easily turn our Newsletter into a book by sharing their success stories. But in the interest of space, we have chosen to feature Hung La and Sasha Beling. Dr. La graduated from OSU in 2014 and is now a tenure-track assistant professor at the University of Nevada. Sasha Beling is a BSEE major, class of 2006, who is now a registered patent attorney. Please read more about the good things they are doing as a result of their education at OSU.

No university would be a dynamic place without school clubs, organizations and societies. In ECE, the student chapters of IEEE and Eta Kappa Nu (HKN) form the backbone of ECE’s extracurricular activities. These organizations provide tutoring, sponsor competitions, and expose students to the world of their profession. As you will find in the article “The Next Generation,” the success of these organizations is accomplished by a partnership of dedicated students and professors.

Not only do we celebrate the accomplishments of our students and faculty, we take great pride in the accomplishments of our alumni. Ray O. Johnson (OSU BSEE 1984) is featured in our “On the Shoulder of Giants” column. His career path includes positions as Senior VP and Chief Technology Officer at Lockheed Martin and member of the Board of Directors, QxBranch. He is living proof of the power of a great engineering education, namely that of ECE-OSU.

In the closing pages, please take note of the awards and recognitions received by our faculty. These awards confirm my belief that the School has the right kind of faculty to give our students a great education and to further advance the knowledge-base of electrical and computer engineering.

Finally, the School is indebted to the volunteers of the ECE Industrial Advisory Board (IAB). The IAB met in March, 2015 to review the ECE programs and provide feedback to strengthen them. They were invaluable participants in our recent ABET accreditation, which I will share more about in the Newsletter. I sincerely appreciate the IAB’s contributions and look forward to working with them in the future.

I hope by reading our Newsletter that you will come to appreciate the quality and strength of our educational and research programs, and feel more connected with the people whose efforts make those programs possible. There are many ways to give to the students of ECE-OSU. On the back of our Newsletter are possible suggestions for donations to scholarships, endowments and equipment funds. All contributions—large or small—are greatly appreciated. Moreover, if you find yourself in Stillwater, do feel free to visit and share your stories with us. Go Pokes!

Sincerely,
Jeffrey L. Young
Professor and Head

P.S. As with so many things in the School, the ECE faculty perform many invaluable service activities to ensure our success. One such example is the Publicity Committee, who worked countless hours writing and editing this Newsletter. My genuine thankfulness is extended to them.

P.S.S. To achieve excellence, we need feedback. Please feel free to offer comments on ways in which we can improve our communications to you via our newsletter, web pages, and brochures.
FEATURE ARTICLE: International Impact

When it comes to international impressions, landlocked Oklahoma is probably the last thought on anyone’s mind. However, Oklahoma State University has been making an impact since the 1950s. It began with Alemaya University in Ethiopia, with the legacy of Henry G. Bennett, former OSU president. Throughout the last 65 years, OSU’s international presence has only grown, spreading across the globe.

“We’ve been leading the way in the last few years in this international venture with China, Vietnam, South America and a few other places,” James Stine, Ph.D. and professor of electrical and computer engineering (ECE), says. “The idea is to really develop and support these international institutions and foster a relationship between OSU and these locations.”

Keith Teague, Ph.D., ECE professor and former ECE department head, has been fostering a relationship between Oklahoma State University and Vietnam for the last seven years.

“The Vietnam Ministry of Education and Training (MOET) has established several programs to increase the quality of their universities and make them more competitive internationally,” Teague explains.

One of these programs is the Advanced Program, which has a goal of developing degree programs at Vietnamese universities, patterned after U.S. programs and taught in English in Vietnam.

“The U.S. remains the gold standard in higher education, and many would like to duplicate the best parts of our system,” Teague says. “MOET and the Vietnamese Education Foundation, a federally funded U.S. program, select and fund top Vietnamese students for graduate study in the U.S. We have accepted a number of these excellent students in ECE and CEAT, and then they return to Vietnam after completing their advanced degree.”

Teague worked closely with Phan Quang Thé, Ph.D. and president of Thai Nguyen University of Technology (TNUT), to establish an agreement stating that OSU would support TNUT’s development of an electrical engineering curriculum – the same one used at OSU – with all costs paid for by TNUT and MOET.

“In order to get the full effect, for the last three to three and half years, we’ve been hosting Vietnamese faculty members here in Stillwater,” Teague says. “They come here and attend classes, improve their skills, work in our labs and experience our teaching methods and culture firsthand. Then they take these experiences home and implement them into their ECE program.”

Vivian Wang, manager of Chinese development, also shares a similar relationship with universities in China. She says OSU is an institutional, strategic partner with Southwest Jiaotong University and Tianjin University, offering traditional student exchange programs, dual degree programs and also faculty training programs.

“The Southwest Jiaotong program currently has 10-15 students studying electrical engineering, and allows our students to go...
abroad, bringing diversity to the classroom, especially at the undergraduate level,” Wang says. “We hope that this program will encourage more American students to choose China as their study abroad destination.”

Tianjin University has been working with OSU’s ECE program for over 20 years. Through this program, Chinese students come to OSU during their summer break to enhance their education.

“Students have loved the Tianjin program, and several have asked if they can come back or do a dual degree program,” Wang says. “They’re housed in university housing and get to experience college just like any other student. They really enjoy getting to know the American culture, and then they’re able to take that knowledge back to China with them.”

In addition to being a leader in higher education, OSU is also known for being a leader in student services and in hospitality.

“Traditionally when you talk about international collaboration, it’s all about academics and research, but OSU also has a very strong student affairs development,” Wang says. “So many international institutions come here to learn about student services. China sees how we take care of our students, and support our student growth, and they want to do the same.”

“When I travel to Vietnam and meet with prospective students, I’ve had them ask me, ‘you’re the only one who does this, why?’” Teague says. “The personal contact makes a difference – now they have someone that they know, and that they can talk to. They have a support system in place.”

China and Vietnam are not the only countries impacted by OSU. Through the Mercury Robot Contest, OSU has spread its innovation to Mexico, Brazil and Columbia, with more countries gaining interest each year.

“The main interest, internationally speaking, is to see how different countries handle senior projects in robotics,” Carl Latino, Ph.D. and associate professor of ECE, says. The Mercury Robot Contest is an international, interscholastic competition involving a basic concept of driving a robot. In this event, a minimum distance of 50 miles must separate the driver and the robot. It began modestly in 2010, where the robot just had to navigate a flat surface track while avoiding obstacles. Now, the robot must climb, descend inclines and perform a mission, all in a timely fashion.

“The competition has definitely grown in popularity – in the 2015 event we had 27 robots from four different countries,” Latino says. “In 2016, the event will take place at three different venues in Stillwater, Okla., Puebla, Mexico and Bogota, Columbia. It’s been a great way to generate friendships between these countries, both new and old.”

At the moment, Latino says that the goal is to expand the amount of international collaboration.

“It’s definitely interesting to see how different countries and different universities perform, and the winning teams are those with different, creative approaches,” Latino says. “This challenge started out as just a small, curiosity-based thing, but now has become an international event. This is opening doors for areas of research in delays, development of sensors in vehicles and it’s a source of many interesting challenges that can become areas of research.”

“ The main interest, internationally speaking, is to see how different countries handle senior projects in robotics. ”

Carl Latino
In addition, when different international teams come together, Latino says everyone can learn something from each other. “You get to see how someone else from another team, or even another country, solves a particular problem, and then next year, you can base your robot off of something you learned in the previous year,” Latino says. “And other countries can learn something from us too.”

This two-way exchange of information creates a dual, international impact that is valuable to both OSU and the counties it interacts with. “When we have this back-and-forth process ingrained, we help each other create research and academic interactions,” Stine says. “This allows us to be a good steward to all universities involved.”

Some could say that OSU’s ECE program is expanding its international impact solely for the money, but Stine says the impact helps broaden academic exploration, as well as cement and strengthen friendships between Oklahoma and other countries. “It’s not just monetary; if you reach out, you get so much in return: interaction, new ideas and new projects,” Stine says. “They have experience, you have experience, so why not collaborate? We have a great university, great campus and great people, so let’s foster great relationships too.”

"The U.S. remains the gold standard in higher education, and many would like to duplicate the best parts of our system."

- Keith Teague
COMING DOWN THE PIKE: The Future of ECE

Although he may be new, Jeffrey Young, head of the School of Electrical and Computer Engineering at Oklahoma State University, is no stranger to impact, innovation and excellence. With his extensive research and solid foundation in the field of electrical engineering, he is the perfect candidate to spearhead the campaign to drive OSU’s electrical and computer engineering (ECE) programs to the next level.

Young says he was drawn to OSU because he felt that there was an opportunity to grow both the instructional and research programs by increasing enrollments, investing in laboratories, increasing research expenditures and securing external funding for prestigious research activities.

With hands-on learning experiences, passionate faculty and top-of-the-line laboratories, ECE students in the College of Engineering, Architecture and Technology (CEAT) have a plethora of resources at their fingertips. But it doesn’t stop there.

“My plan is to use department resources as an investment tool for growth; these investments will occur in both our undergraduate and graduate programs to increase the quality of what we do and to increase our enrollments, graduation rates and research publications,” Young explains. “By growing the School of Electrical and Computer Engineering in all of these areas, companies will come to our school to recruit our students, money will flow into the school for scholarships and laboratory infrastructure and national rankings will increase to solidify our reputation as a leader in engineering education and research.”

With strong leadership and a strong student base backing the ECE school, it will be easy to bring Young’s vision to fruition.

“I believe that in 15 years, the ECE department could be about twice as large as it is now in many of the measurable categories, such as enrollments,” Young says. “There is every reason to believe that ECE and CEAT will be greatly improving its infrastructure by remodeling existing buildings and building new facilities – and these facilities will be powerful reminders to our students and other constituents of the exciting things that are occurring in both electrical and computer engineering.

“I believe that in 15 years, the ECE department could be about twice as large as it is now in many of the measurable categories, such as enrollments.”

- Jeffrey Young

Jeffrey Young, ECE Department Head
Oklahoma State University’s electrical and computer engineering (ECE) program has graduated many alumni who are now thriving in the field. Hung La, now a tenure track assistant professor at the University of Nevada, attributes much of his success to his experiences at OSU and his time spent in the ECE program.

“I grew up in Vietnam, and I actually hadn’t heard about OSU before I met Dr. Keith Teague from the ECE program,” La says. “He looked over my résumé, saw my potential and I was accepted into the doctorate program.”

While working towards his Ph.D. at the ASCC lab under the supervision of professor Weihua Sheng, La received first prize in the 2008 Electrical and Computer Engineering Design Day competition. He also received two best conference paper awards based on innovation for his PhD study.

La received his Ph.D. in electrical and computer engineering in 2011. Afterwards, he continued his post-doctoral research at Rutgers University in New Jersey where he was quickly promoted to a research faculty member.

“In 2014, I also received the ASCE Charles Pankow Award for a robot tech highway bridge inspection system that my team and I developed,” La says. “This is one of the most prestigious awards given by ASCE.”

Without his education from OSU, La says he wouldn’t be as successful as he is today.

“My strong academic background and experiences during my time at the School of Electrical and Computer Engineering have definitely helped me in my professional career,” La says. “I could not have made such an impact without the ECE program and its professors.”
From the Midwest to the West Coast, Sasha Beling knew that Oklahoma State University’s top ranked electrical engineering programs were hard to ignore.

“I spent my first year of college in California, but I wanted to move back closer to home,” Beling says. “I knew that OSU was the logical choice – I felt comfortable and welcomed at OSU within the engineering department.”

Beling remembers that her instructors were engaged with their students, were always approachable and encouraged students to get involved in activities.

“The professors were genuinely interested in our success, and weren’t just concerned with their own research,” Beling says.

Beling graduated from the School of Electrical and Computer Engineering (ECE) at OSU in 2006. She currently works as a registered patent attorney with McAfee & Taft in Oklahoma City, and credits her OSU education for her success in the field of intellectual property law.

“To be eligible to sit for the patent bar examination with the U.S. Patent and Trademark Office, you have to possess the requisite scientific qualifications,” Beling explains. “My electrical engineering degree provided me that eligibility.”

For the third straight year, Beling has also been included in Oklahoma’s Super Lawyers’ list of “Oklahoma’s Rising Stars,” which recognizes the state’s top up-and-coming attorneys.

“My engineering degree helps me when I draft technical patents, especially when they are related to the electrical engineering field,” Beling says. “I feel that my degree from OSU has been worthwhile, given the technical background it gave me and the career it has allowed me to pursue.”

“The professors were genuinely interested in our success, and not just concerned with their own research.”

- Sasha Beling
THE NEXT GENERATION:
Student Activities & Organizations (HKN & IEEE)

Eta Kappa Nu

The Omega Chapter of Eta Kappa Nu (HKN) at Oklahoma State University works to promote excellence in the School of Computer and Electrical Engineering. This semester we provided tutoring hours for several ECEN courses as well as our traditional Introduction to Circuits exam reviews. The goal is to eventually expand to tutor all core ECEN courses (Introduction to Circuits, Network Analysis, Devices and Applications, Signals, and Random Signals). This semester help was available for Circuits, Network Analysis, and Devices and Application.

Members were also able to volunteer at the local public library and help with a “Gathering STEAM” science program for young elementary school children, teaching them basic science like the states of matter through fun experiments using dry ice and fire.

On November 20, 2015, the School of Electrical and Computer Department (ECE) and HKN hosted sixteen, 6th grade students from Stillwater Middle School in an electronic boat building competition. The event was aimed at exposing these bright students to the enjoyable aspects of engineering. It also served as a great recruiting tool for ECE. As a result of the unqualified success of the event, it is likely that this OSU-Stillwater Engineering Design Challenge is destined to expand and become an annual event.

This program is very similar to the Tulsa Engineering Design Challenge led by Prof. Carl Latino, which has created very positive impact in the local community in past several years.

HKN is also working on a Mercury Robotics team and an Oculus Rift demo fund-raiser, where students get to experience the virtual reality platform with a variety of games. We are also in the process of inducting eleven members, which will grow our numbers from five a semester ago to over thirty at the end of this semester. Our gifted members enjoy helping others succeed in the areas of electrical and computer engineering.

Matthew DeKoning
HKN Vice-President
hkn.okstate.edu

Member Matthew DeKoning is helping a team of 6th grader students during the electronic boat building competition.
The Oklahoma State University student branch of Institute of Electrical and Electronics Engineers (IEEE) is a student organization that focuses on informing students about engineering opportunities and resources available to them. This is accomplished by holding monthly meetings to invite students to attend and learn about job opportunities and their engineering profession. At each meeting a company representative is invited to speak about their company in order to give students a better idea of the type of work they would be doing with a computer or electrical engineering degree. In the 2014-15 school year, representatives from Quorum Business Solutions, Rohde & Schwartz, National Instruments, Oklahoma PE Licensing Authority, Grand River Dam Authority, Tinker Air Force Base, and Ennovation Control presented. In the fall of 2015, students have heard from Sandia National Laboratories, American Airlines, ABB, and Valero. OSU IEEE also hosted a Tri-Section meeting in September, in which IEEE members from the Tulsa, Oklahoma City, and Wichita Sections attended.

There are two other main events that IEEE OSU hosts during the school year. In September, there is the annual Fall Picnic. This is an opportunity for students to socialize with faculty and other students in engineering and play a few games of volleyball. The other main event is the annual OSU IEEE Banquet. The main speakers at the 2015 banquet were Ron Sinnes, Director of IP Provisioning at Level3, and Eric Miller, Sports Manager at VYVX. They gave a talk about their IP network and how sports events are delivered over their system. Dr. West also used the banquet as an opportunity to announce ECE scholarships for the next academic year.
From his humble beginnings in Stillwater, Okla. to his reign as a corporate executive, Ray O. Johnson, Ph.D. is a prime example of how Oklahoma State University prepares its graduates for a successful future.

Johnson wound up at OSU’s College of Engineering, Architecture and Technology (CEAT) due to his involvement in the U.S. Air Force. “It was a mutual decision,” Johnson says. “I was on an Air Force sponsored program with a desire to attend a solid electrical and computer engineering (ECE) program.”

Johnson says he has always had an interest in engineering from the start, making the ECE program at OSU a natural decision. “I also worked as an electronic technician for a number of years, so I was very familiar with the electrical engineering field,” Johnson says.

Johnson remembers that his time spent in the School of Electrical and Computer Engineering at OSU was a positive experience. “I had a great time – the undergraduate education experience was excellent, and it certainly supported me as I pursued advanced degrees,” Johnson says. “I had a strong relationship with certain faculty members as well; some served as my mentors and coaches.”

Johnson graduated from OSU with his bachelor’s in electrical and computer engineering in 1984, then went on to pursue his M.S. and Ph.D. in electrical engineering at the Air Force Institute of Technology. After that, he served as a corporate leader for several top-tier industries, eventually becoming the senior vice president and chief technology officer of the Lockheed Martin Corporation in 2006.

While there, Johnson expanded the company’s technological vision and offered strategic, corporate leadership in several areas including: engineering, production operations, program management, supply chain, technology and sustainment. His leadership affected over 72,000 people collaborating on more than 4,000 projects that created some of the country’s most vital security systems.

Johnson currently serves as a member on a number of boards of directors, one of them being QxBranch, a data analytics and quantum computing company. He also serves on the board of a company called Terrestrial Energy, which is developing a fourth-generation, small modular reactor based on an Integral Molten Salt Reactor.

Johnson is a firm believer that a strong academic foundation is invaluable.
“I am now on the board of QxBranch, where computer science and physics play important roles, and Terrestrial Energy, a nuclear company, so you never really know where your career is going to take you,” Johnson explains. “That’s why I believe it’s important to have a strong math and physics background, in addition to a strong engineering background at the undergraduate level.”

His ECE background at OSU has served him well over the years. In 2010, Johnson was inducted into OSU CEAT’s Hall of Fame, and he also received the Distinguished Alumni Award from the Air Force Institute of Technology.

In addition, Johnson has participated in numerous World Economic Forum Annual Meeting sessions and played a critical role in the International Academy of Astronautics Heads of Space Agencies Summit held in Washington, D.C. He is also a Fellow of the Institute of Electrical and Electronics Engineers (IEEE), the International Society for Optical Engineering (SPIE) and the American Institute of Aeronautics and Astronautics (AIAA), a Full Academician of the International Academy of Astronautics (IAA) and chairs the Council on Competitiveness, Technology, Leadership and Strategy Initiative.

Johnson attributes much of his success to his undergraduate education in the electrical and computer engineering program.

“My OSU engineering education laid the foundation for me to hold one of the top engineering jobs in the world, and it allowed me to excel in that position,” Johnson says. “My OSU ECE education served me well, and I am delighted with the direction that the school is headed.”

“I had a great time - the undergraduate education experience was excellent, and it certainly supported me as I pursued advanced degrees.”

- Ray O. Johnson

“My OSU ECE education served me well, and I am delighted with the direction that the school is headed.”

- Ray O. Johnson
New Faculty

Yuanxiong (Richard) Guo

Yuanxiong (Richard) Guo is an Assistant Professor in the School of Electrical and Computer Engineering at Oklahoma State University since August 2014. He received his Ph.D. degree in electrical and computer engineering from the University of Florida, Gainesville, FL in 2014. Prior to that, he received his B.Eng. degree in electronics and information engineering from Huazhong University of Science and Technology, Wuhan, China in 2009, and M.S. degree in electrical and computer engineering from the University of Florida, Gainesville, FL in 2012. His current research interests are in the areas of smart grid, energy systems, sustainable data centers, and mobile computing. He is a recipient of the Best Paper Award in IEEE Global Communications Conference 2011.

Nishantha C. Ekneligoda

Nishantha C. Ekneligoda received his B.S and M.S degrees in electrical engineering from the University of Moratuwa, Sri Lanka in 2003 and 2005. He also has completed a M.S degree in mechanical engineering at Southern Methodist University Dallas, TX in 2008 in the area of control systems. Then, he obtained his Ph.D in electrical engineering at Michigan Technological University in 2012. Next, he worked as an assistant professor in electrical engineering at the Oregon institute of Technology and Tuskegee University from September 2012 to July 2014. He is currently an assistant professor in the School of Electrical and Computer Engineering at Oklahoma State University. His research interests include power electronics, smart grid, non-linear optimal control and game theory, distributed control of power systems, power system dynamics and stability and renewable energy systems. Presently he is working as a reviewer for several IEEE journals in power area.

His teaching courses include power system stability, power electronics and renewables and power system analysis design at Oklahoma State University. He has two Ph.D. students who are working in the area of power electronics and power systems.

Subhash Kak

Subhash Kak is a regents professor in the School of Electrical and Computer Engineering. He moved to the ECE School after completing two terms as head of the computer science department at OSU. Before coming to OSU in 2007, he was with Louisiana State University in Baton Rouge, LA where he served as the Donald C. and Elaine T. Delaune Distinguished Professor of electrical and computer engineering. His research includes cybersecurity, information theory, neural networks, and quantum information. He is known for his development of an instantaneously trained neural network architecture, the theory of decimal sequences, efficient array to multiply matrices and the three-stage quantum cryptography protocol. He was one of the first to consider the problem of quantum information. Outside of engineering he is also noted for his contributions to archaeoastronomy and he has authored 20 books which include The Nature of Physical Reality and The Architecture of Knowledge.
Jeffrey L. Young

received the BSEE degree from Ohio Northern University in 1981 and the MSEE and PhD degrees from the University of Arizona in 1984 and 1989, respectively. He was formerly a Doctoral Fellow and staff engineer with the Hughes Aircraft Company (1982-1991), Tucson, Arizona, and a Professor of Electrical and Computer Engineering at the University of Idaho (1991-2015), Moscow, Idaho. He is currently the OSURF Endowed Chair of Engineering and Department Head of the School of Electrical and Computer Engineering, Oklahoma State University, Stillwater, Oklahoma. He lectures on electromagnetics, antenna theory and design, and microwave circuits. His research interests include antenna theory, electro-optical modulation, ferrite microwave devices, electromagnetic wave propagation in complex media, and modern numerical methods in electromagnetics. Professor Young is a member of USNC-URSI (Commission B), an IEEE Fellow and a registered Professional Engineer in the State of Idaho.

Faculty Honors and Recognitions (2015)

Dr. Aaron Hu
Air Force Summer Faculty Fellowship

Dr. Weili Zhang
Regents Distinguished Research Award Fellow, The Optical Society (OSA)

Dr. Guoliang Fan
Young ECE Alumni Achievement Award, University of Delaware
CEAT Teaching Excellence Award

Dr. Weihua Sheng
CEAT Outstanding Researcher Award

Dr. Daqing Piao
CEAT Research Excellence Award
Honorary Member, Nu Chapter, Phi Zeta, Honor Society of Veterinary Medicine
Finalist, Edmund Optics 2015 Educational Award

Dr. Vignesh Rajamani
Vice President of Member Services for the IEEE EMC Society

Dr. Subhash Kak
Commencement Speaker, Oklahoma State University, Dec 12, 2014.

Dr. Rama Ramakumar

Dr. Qi Cheng
National Research Council (NRC) Research Associateship Award

OSU Regents Professor
Dr. Daniel Grischkowsky
Dr. Subhash Kak
Dr. Rama Ramakumar
Dr. Gary G. Yen

Fellows of Professional Societies
Dr. Daniel Grischkowsky, Fellow of IEEE, the Optical Society (OSA) and the American Physical Society
Dr. R. G. Ramakumar, Fellow of IEEE
Dr. Gary Yen, Fellow of IEEE
Dr. Jeffrey Young, Fellow of IEEE
Dr. Weili Zhang, Fellow of the Optical Society
Dr. Daqing Piao, Fellow of American Society for Laser Medicine and Surgery (ASLMS)

Endowed Chairs and Professorships
Dr. Charles F Bunting, Halliburton Professor of Engineering
Dr. Guoliang Fan, Cal and Marilyn Vogt Professor of Engineering
Dr. Daniel Grischkowsky, Bellmon Professor of Optoelectronics
Dr. R. G. Ramakumar, PSO/Albrecht Naeter Professor
Dr. Jeffrey Young, OSURF Endowed Chair of Engineering
Contact Information
If you have any noteworthy events or would like to see a particular item in the ECE Newsletter please contact:

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lory.ferguson@okstate.edu

School of Electrical & Computer Engineering
Oklahoma State University
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Industrial Advisory Board

The ECE Industrial Advisory Board (IAB) is comprised of dedicated ECE alumni who volunteer countless hours to continuously strengthen the undergraduate academic programs of the School. Meeting in March, 2015, the board reviewed our curriculum, assessed our instructional laboratories, provided feedback on our ABET accreditation processes, and recommended areas for growth. These accomplished individuals have their “fingers on the pulse” of current trends in ECE innovations and work to assure our constituents (students, parents, future employers and alumni) that our programs are always relevant. The faculty and students of ECE extend their gratitude to the members of the IAB, who proudly bleed orange for OSU-ECE.
Per abet.com, “ABET accreditation provides assurance that a college or university program meets the quality standards of the profession for which that program prepares graduates... ABET accreditation is proof that a collegiate program has met standards essential to produce graduates ready to enter the critical fields of applied science, computing, engineering, and engineering technology. Graduates from an ABET-accredited program have a solid educational foundation and are capable of leading the way in innovation, emerging technologies, and in anticipating the welfare and safety needs of the public.”

Naturally, the School of Electrical and Computer Engineering takes accreditation very seriously. Our ECE programs were reviewed in September, 2015. Although the outcome of that review process will be finalized in July, 2016, the preliminary findings of that review are quite positive. This, of course, is good news, as it confirms what we, our students, alumni and faculty already know—our programs are of high quality.

ABET also allowed us to sharpen the way we think about our objectives for the graduating students of ECE. These aspirational statements, approved by our students, faculty, and IAB, guide our thinking and planning. We are pleased to share our objectives with you:

The School of Electrical and Computer Engineering at Oklahoma State University strives to produce outstanding graduates in Electrical Engineering and Computer Engineering who are successful in their careers. Specifically,

• Our Graduates will be widely employed across the range of sub disciplines within electrical engineering and computer engineering, and will be highly sought after by industrial, academic, non-profit, and governmental organizations.
• Our Graduates will compete in a technologically changing world, collaborate in a diverse workforce, and communicate effectively their knowledge and ideas to colleagues, employers, customers, and stakeholders.
• Our Graduates will be recognized leaders, team players, problem solvers, innovators, and entrepreneurs in their profession.
• Our Graduates will identify and contribute to solving grand-challenge problems that improve the lives of people in Oklahoma, the United States, and around the world, serving their communities and their profession to produce a lasting, significant, and positive impact.
• Our Graduates will abide by the highest ethical standards of professional practice.
• Our Graduates will continue to develop professionally throughout their lives by being adaptive learners with a never ending desire to assimilate new knowledge and embrace new technologies.
• Our Graduates will have the knowledge to earn professional registration or certification in their field or earn an advanced post-graduate or professional degree should they choose.

• **Our Graduates will make a positive difference in the world.**
School of Electrical and Computer Engineering | Contribution Form  
College of Engineering, Architecture and Technology

Yes, I want to support the OSU School of Electrical and Computer Engineering. Enclosed is my gift amount of $ ________________________  

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[ ] Glimp Electrical and Computer Engineering Professorship: 26-94380
[ ] Josie Mosely Peters Electrical Engineering Scholarship: 26-97830

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- Dr. Jeffery Young