Mentorship

The link between teacher and student is fundamental to the learning process. This issue explores the ways that Auburn Engineering is reaching out to tomorrow’s engineers.
The history of Auburn Engineering introduced in the fall/winter edition of Auburn Engineering was very popular – it returns in the next issue and details the growth of the program into the twentieth century. The first installment of our history looked at events leading to the creation of a College of Engineering in 1908-09, following the first classes in the 1870s and the subsequent development of curricula in civil, electrical, mechanical and mining engineering. One of the greatest challenges facing soldiers returning from World War II on the GI Bill was housing – and one of the solutions, pictured here, was recycling surplus tugboat superstructures to house male students.
Auburn Engineering

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Front cover: Chemical engineering faculty member Steve Duke (center) coaches students Jane Chung (left) and Rachel Lee from Wrights Mill Road Elementary School for the 2009 Science Olympiad competition. Duke leads a team of chemical engineering students who mentor young people in the fundamentals of science and engineering with a focus on fun and discovery.

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The College of Engineering has taken another giant step toward moving into the realm of the nation’s elite research institutions with the creation of the Auburn University Magnetic Resonance Imaging (MRI) Research Center. A partnership between Auburn University, Siemens Medical Solutions USA, Inc. and East Alabama Medical Center, the research facility will be located in the Auburn University Research Park on the southern edge of campus.

The creation of this center represents the first step in a broader initiative designed to advance Alabama’s intellectual and business capital to the forefront of biomedical engineering and to create a unique resource for the state. It will bring together a number of university partners including the sciences, pharmaceutics, agriculture, veterinary medicine and business, conducting research in concert with College of Engineering faculty. Siemens, one of the world’s largest integrated healthcare firms, will provide on-site expertise and the magnetic resonance imaging equipment.

The facility, currently under design, will house two Siemens MRI units, with room for a third in the future. A 3T unit, the most powerful currently cleared for clinical use with humans, will be used by East Alabama Medical Center. On weekends and evenings, the unit will be available for research use. A powerful 7T research unit will be available to faculty to probe the limits of this technology. By way of explanation, the ‘T’ in the nomenclature of these units reflects their power in tesla units, or magnetic field strength. Most clinical MRI machines now range from one to one and a half tesla.

The MRI center will support not only the discovery of new technologies, but also their transfer to a broad spectrum of medical and pharmaceutical markets and intellectual property commercialization. Indeed, a proposed partnership with UAB will support work on biomedical applications of the imaging technologies being developed at Auburn. Examples of current and potential areas of MRI-related research include cognitive neuroscience, metabolic imaging and pharmaceuticals, as well as diabetes and cardiac research.

We believe that this collaboration establishes a precedent on which cooperation between Auburn and other institutions can build to improve the quality of life in the global community and promote economic development for the state of Alabama. In today’s high-tech economy, the correlation between a state’s economic well-being and the strength of its research and development capabilities is well documented. The Auburn MRI Research Center is designed to address this reality, and we are excited to lead the way in this technology in Alabama. We will bring you more details on this exciting project in the next issue of Auburn Engineering – stay tuned!

From the Dean

Larry Beeryfield
She is only 11 years old, but Megha Tippur, a fifth grader at Wright’s Mill Road Elementary School in Auburn, wants to be an engineer, just like her dad.

While her father, Auburn mechanical engineering faculty member Hareesh Tippur, has been teaching his students about experimental mechanics and optical metrology, Megha has been spending a few afternoons a week observing, listening and discovering – vital skills for an aspiring engineer.

Megha and 40 of her classmates have been readying themselves for this year’s Science Olympiad competition. With the help of Wrights Mill Road teacher Susie Criswell and volunteer coaches who are Auburn chemical engineering students, they’re putting science and engineering to work in real ways.
It all started with a parent

It is Megha’s second year participating in Science Olympiad, but students from Wrights Mill Road and Auburn’s Department of Chemical Engineering have been working together for longer than that. The partnership began as an opportunity for Auburn chemical engineering faculty member Steve Duke to support his kids’ after-school activities and teach young people about science.

Today, more than four years later, Duke’s children have moved on from Wrights Mill, but his students in the Auburn chapter of the American Institute of Chemical Engineers (AIChE) continue to volunteer coach the school’s fourth- and fifth-graders for Science Olympiad competitions. They develop practice schedules and plan for each session on their own time, in addition to the time they spend with the Wrights Mill Road students. This spring, 15 members spent six to eight weeks coaching sessions for outreach hours as part of their membership with AIChE.

“There’s no magic coaching material,” says Duke. “Our students come up with their own lesson plans each week. They’ll create practice games or strategies and offer prizes to motivate the kids. It’s not just a one-time afternoon project. They are extremely devoted to their teams.”

Practice makes perfect

“Students from all over the region, 30 public and private schools, compete against each other,” says Criswell. “Whatever events they do, they have to learn to incorporate all five senses and rely on teamwork to be successful. Science Olympiad teaches students to address challenges head-on and introduces them to different types of career choices in science and engineering.”

For Auburn Engineering students, it’s all about having fun with engineering and getting kids interested in science.

Local Science Olympiad competitions expose K-12 students to science and problem-solving in an array of hands-on events at competitions across the country. Projects may involve calculating the work on a given force and distance in “Simple Machines” or making a rubber band-propelled can race car. Wrights Mill Road students can participate in two or three such events from a menu of 22 at local competitions each year.

On a sunny afternoon in early March, Megha and her teammates, fifth-graders Savannah Bayens and Liz Smith, and fourth-grader Carolyn Cowper, sit around a table mulling over stacks of marbles, batteries, circuits and other household...
items. They build them into tower after tower, noting every detail of how it can be erected in a particular shape. They’re practicing for the “Write It, Do It” event. Last year, Megha brought home a gold medal in this event, which requires students to build a model from a page of instructions written by another student. She is confident when she talks about her plans to win again.

“We can’t touch the example they show us,” said Megha. “That’s why it’s about having good instructions, patience and being a good builder.”

Her group’s coach, chemical engineering senior Jaki Fleming, prepares the four girls with building and writing drills – they take turns writing instructions for each other and building what they describe.

“I look forward to spending time with them each week,” says Fleming. “We get to know each other fairly well because we share a good part of our afternoons together for a month or two. It’s also a neat opportunity to show young girls that engineering and problem-solving isn’t just guy stuff – it’s fun, and it can be girl stuff, too.”

Outside, Auburn freshman Daniel Pulliam’s group – which includes fourth-graders Penelope Josephson, Maggie McBride and John Kwon – is painting their race car for the “Car Can Race” event. They choose black with a white stripe because they think it will look cool racing down the track at competition.

On Auburn senior Adam Warnke’s team, there are high-fives all around when a team member races across the school’s lawn and answers a question correctly.

His group is practicing for “Elements, Compounds and Mixtures,” a project that requires students to label a substance as one of the three, based on its characteristics. Warnke rewards them with a candy prize for each correct answer.

“It was their idea to race for their questions,” says Warnke. “They’re getting creative about how they want to practice each week because they’re excited about the competition and the chance to win. They’re having fun learning new things.”
More like friends

While there are many opportunities for Auburn Engineering students to volunteer their time and serve as mentors to younger students, the chance to coach Science Olympiad is unique for both student and mentor. It’s a long-term service project that focuses on science, technology, math and engineering fields.

“Kids are amazing. We have fun hanging out together, working on their events. We talk about how to make the car faster and I try to use what I’m learning in my classes and what I like about engineering to explain the basics to them. They pick up on it pretty quickly,” says Pulliam.

“In other volunteer work I’ve done, you don’t end up spending that much quality time with the kids,” says senior Tyler Case. “This time is much more individualized. You work in small groups of three or four kids and pretty soon you’re able to hold their attention for an hour. Suddenly, you realize that you’ve gotten a group of 9-year-olds to enjoy science.”

“It doesn’t feel like work,” adds Pulliam. “We’re more like friends than mentors. And I think the kids like having an older friend they can learn from.”
At 32, Mark Spencer is a pioneer in the world of open-source technology. Founder, chairman and chief technology officer of Digium, Inc., a company specializing in the development of private branch exchange (PBX) software and open-source telephony software, he began cutting his entrepreneurial teeth in the eighth grade when he wrote and sold a grading program to his teacher for $5.

In junior high, Mark completed a science fair project on neural networks. By high school, he was designing integrated circuit structures. While a computer engineering student at Auburn, he began his first start-up company, Linux Support Services, and was creating an open-source telephone switch called Asterisk – technology that would thrust him to the forefront of open-source telecom systems.

In the midst of his huge success in a field that is constantly changing, Mark refuses to take full credit for his accomplishments. Instead, he acknowledges the help he received along the way, including his early mentor and friend Auburn electrical engineering faculty member Thad Roppel.

Mark met Roppel while working on one of three science fair projects that won first place. He called Auburn’s College of Engineering and asked if someone could help him with neural networks. The secretary connected him to Roppel, a young assistant professor at the time, and before long Spencer was hanging out at the department’s microelectronics lab.

“I didn’t count the cost in terms of the time it would take,” says Roppel. “So pretty soon I was struggling to keep up with this exceptionally vigorous youth and all of his questions and ideas, together with my own research and teaching requirements. In spite of this, Mark was such an inspiration that I was delighted to work with him on evenings and weekends, at his house and in my lab.”

“Mark found a listening ear in Dr. Roppel which allowed him to keep moving on,” says Mark’s mother Samia, an alumni professor of French in Auburn’s Department of Foreign Languages and Literatures. “As Mark developed ideas, Dr. Roppel was always available and supportive.”
Seeing Potential

Despite the challenges of his own early career, Roppel took the time to acknowledge Mark’s talents. “He was instrumental in the development of Mark’s growth and confidence,” says Spencer’s father William, retired department head of educational foundations, leadership and technology in Auburn’s College of Education. “He worked to nurture Mark’s interests and recognize his potential.”

“Thad suggested that I look into neural networks, which was an area that I hadn’t done any work in. He gave me the confidence to go out and do more sophisticated research, without any sense of limitation because of my age,” says Mark. “He encouraged me to seek mentoring from many other people who ended up influencing my business career, such as Mark Smith, the founder of Adtran.”

In addition to his technological side, Mark dabbles in music and art. “I learned quickly that Mark is multidimensional,” says Roppel. “I was amazed with his latest synthesizer compositions or his sculptures made from scrap computer parts. He is a licensed pilot and has a wide range of ideas about technology that make conversation with him fascinating.”

The son of two educators, Mark is certainly not a stranger to learning. His parents also played a crucial role in his pursuit of discovery. “They certainly financially and physically supported the things I was involved in – even all the travel to science events,” recalls Mark.

“I was quite impressed with the support Mark had from his parents,” adds Roppel. “I believe that made a world of difference in his early development.”

A Driving Force

As the result of the early guidance that Mark found from those who recognized his ingenuity, he and the company he started before he even had a college degree have become a driving force in the industry. Digium now employs 125 people who sell a variety of products and services and does about half of its business outside the United States. The company is expanding its products to reach a broader range of customers beyond small businesses and continues to offer developers enhanced services.

“I knew Mark would be successful because of his intellectual talent and his persistence,” says Roppel. “I did not anticipate his success in this particular field, but I knew he had the skills to do some significant work.”

Rewarding the Extra Effort

With five decades of combined teaching experience, William and Samia Spencer understand the challenge of helping students reach their full potential. They also believe it takes more than a book and a lecture.

In honor of faculty members who go beyond the classroom to help students develop their skills and interests, the Spencers, along with their son Mark, have established the university’s first faculty/student mentoring award. The Mark A. Spencer Creative Mentorship Award is designed to identify mentorship as a critical component of teaching and to applaud faculty who give students an avenue to develop their interests and talents.

“We believe that this award is important for the university as a means of recognizing this element of the educational process,” says Samia. “We hope it will motivate others to see the value of this type of faculty recognition and create more of these types of awards.”

The award is unique in that it acknowledges the interdependence of a mentor and mentee and rewards the collaborative work of both the faculty member and the student. It carries a $10,000 stipend, to be split between the chosen faculty member and their mentored student(s).

Thad Roppel, associate professor in the Department of Electrical and Computer Engineering, was the first recipient of the award during the College of Engineering’s Spring Awards Ceremony in March.

“Mark was a good student, but it was the extra effort by Dr. Roppel that allowed Mark to grow in his interest and skill. We wanted to create an award that recognizes those who seek opportunities to teach and nurture students,” says Samia.

“I am honored and grateful to receive this award,” says Roppel. “I’m hopeful that this award will help identify mentoring as a crucially important professional activity in its own right, and not just something that we do on the side when we have spare time.”

To be eligible for the award, faculty candidates must be a member of the engineering faculty and students must be undergraduates enrolled in the College of Engineering. The faculty candidate must have a tangible mentoring relationship with a student that focuses on a project directed toward solving a problem or reaching a goal. Applications are due each January and are reviewed by an awards committee. Recipients are recognized at the College of Engineering’s annual spring awards reception.
Software complexity is a well-recognized and much debated issue. It is also one that has gotten easier for software engineers to manage thanks to an application developed by faculty member James Cross and research associate Larry Barowski in the Department of Computer Science and Software Engineering (CSSE). In the past year, it has been used more than two million times by individuals in 173 countries.

jGRASP is a free, lightweight integrated development environment (IDE) created specifically to provide automatic generation of software visualizations. This allows the user to view the software in ways that make it easier to understand and that make defects easier to identify during development and maintenance. “The failure to manage IT complexity is the single biggest reason that IT systems so often fail,” explains Cross. “And when complexity is the culprit, the failures can be catastrophic, expensive and highly visible.”

In an ideal world, software would be written so that any developer familiar with the language and base technology could easily understand the code, as well as edit and add to it. However, many applications fail to meet these criteria or have been updated so many times by so many teams and individuals that they are no longer easy to comprehend. “Of course, unnecessary complexity is not limited to software,” says Cross. “One simply needs to look at our tax codes, warranties or many other everyday documents to see how prevalent complexity has become in our daily lives.”

jGRASP is designed to help programmers who are writing or updating software to quickly visualize and understand existing source code, so that edits and updates can be done cleanly and efficiently. These characteristics also make it an excellent learning tool for students who are new to software development.

The jGRASP team, which also includes CSSE faculty members Dean Hendrix and David Umphress, has a simple goal: to be the best available IDE for students in programming, data structures and algorithms courses. At Auburn, these are critical foundations for all students majoring in computer science, computer engineering, software engineering and the software option of wireless engineering.

So how is jGRASP measuring up? Currently, institutions using jGRASP include more than 200 colleges and universities, 48 community colleges and 37 high schools and districts. jGRASP use has grown steadily every year since its first release.

The development of the pre-Java versions of GRASP was supported by research grants from NASA Marshall Space Flight Center, the Department of Defense Advanced Research Projects Agency (DARPA) and the Defense Information Systems Agency (DISA).

“jGRASP is currently supported by a grant from the National Science Foundation, which has enabled our team to continue software visualization research and evaluation and the extension and maintenance of this IDE,” explains Cross. “However, this grant plays out in 2009. The proposals we have pending are for research rather than support for our growing user base. As we move into the outreach phase of this project, we need private funding from both individuals and companies to support maintenance and updates.”

jGRASP (jgrasp.org) is implemented in Java and runs on all platforms with a Java Virtual Machine v. 1.5 or higher. The jGRASP Web site offers downloads for Windows, Mac OS and a generic file suitable for Linux and other systems. For languages other than Java, jGRASP is a useful source code editor. It can be configured to work with most free and commercial compilers for any programming language. With appropriate funding, planned updates will include development of plug-ins for Eclipse and Net Beans, as well as support for C/C++ and other programming languages.

“jGRASP is helping us put Auburn and our department on the map,” says Cross. “We’re hoping that additional funding will help cement that standing, making us the go-to place for software visualization in computing education and research.”

Value Added

The widespread use of jGRASP has an added benefit in that each time users launch the software they are greeted with a splash screen that displays Auburn University and the Samuel Ginn College of Engineering – increasing awareness of Auburn Engineering across the globe.

“We are fielding calls and e-mails from individuals who have used jGRASP, inquiring about our undergraduate and graduate programs,” explains Cross. “Many companies also use this software – again increasing awareness of the Auburn name.”
Hands-on experience is an important part of an engineering education. Whether it’s co-ops, internships or competition teams, the practical knowledge students gain during their college years is essential to their ability to become successful engineers.

From aerospace to wireless engineering, student competition teams are one of the ways Auburn Engineering provides students with opportunities to test their skills. One such organization is Auburn’s Student Projects and Research Committee (SPaRC).

“SPaRC was founded in 2006 as the brainchild of faculty member Scotte Hodel,” says electrical and computer engineering faculty member and SPaRC adviser Thad Roppel. “He conceived it as a way to provide students with a meaningful extracurricular activity that would last over multiple semesters and give them project management experience in addition to technical skills.”

This year’s SPaRC team brought home the first place trophy from the 2009 SoutheastCon Robotics Competition, held in March in Atlanta. The Auburn team topped a field of approximately 45 colleges and universities, including Florida, Alabama, University of Alabama – Birmingham, Tennessee, Mississippi State, Clemson and Virginia Military Institute.

Their robot, nicknamed Aub-E, was designed to navigate an astroturf playing field to collect aluminum cans and plastic and glass bottles. It had to autonomously find, pick up and sort each item into pre-loaded plastic bags. It also had to collapse into a 12” x 12” x 18” space prior to starting each round.

Auburn’s final score was 331, with the next closest score being Tennessee’s 265. In addition to the trophy, the team also received a large traveling plaque to display for a year and a substantial check for the school’s student chapter of the Institute of Electrical and Electronics Engineers (IEEE).

“SPaRC is a fantastic student organization because it seeks to give students project-oriented work outside of the classroom,” says team member Zach Lamb. “It’s able to coordinate several multi-faceted team projects simultaneously, and the competition teams are small enough for everyone to contribute something worthwhile to the final product.”
Electrical and computer engineering students have traditionally made up the SPaRC team, but this year's group included students from other areas of study such as mechanical, aerospace, computer science and software engineering and business.

A Confident Partner

Faculty members and graduate students from across the college have been an essential part of the SPaRC program. But the commitment of one particular alumnus has helped the team develop into an award winning program. Electrical and Computer Engineering Industrial Advisory Board member Julian Davidson was one of the first to see the potential of SPaRC.

“Mr. Davidson responded enthusiastically when Dr. Hodel proposed SPaRC at the Spring 2006 board meeting,” says Roppel. Davidson and his wife Dorothy allocated $12,000 for the first year and larger amounts each subsequent year. Their investment has been the sole source of the team’s support.

“It’s always a validation when alumni like the Davidsons see the value of organizations like SPaRC,” says Roppel. “Their continued support of the program is greatly appreciated, as it allows students to better prepare for their careers as engineers.”

ASCE Teams Also See Success

SPaRC isn’t the only team that’s been successful this year. Auburn’s American Society of Civil Engineers (ASCE) teams and hovercraft team have also thrived during the 2008-2009 school year.

The Auburn chapter placed second in the 2009 ASCE regional competition held in Nashville. The students competed against 25 schools in the Southeast, with the University of Florida taking first place honors.

Vanderbilt University hosted more than 800 students at the event, including one team from China. The competition spanned two days, during which students competed in 14 events. Auburn finished first in two and top five in six.

Professional Paper – 1st place
Geotechnical Competitions – 1st place
Transportation – 2nd place
Concrete Cylinders – 2nd place
Balsa Bridge – 3rd place

Experience that Pays Off

Students benefit from SPaRC in many ways, the most notable of these being the ability to gain valuable work experience without leaving campus. Several companies have expressed interest in SPaRC students for summer internships, co-op positions and permanent employment. The team members’ experience makes them highly marketable to companies looking for entry level engineers who can hit the ground running.

This is exemplified by one student’s experience during a recent job interview. Sam Misko was one of 72 applicants for a job with the Air Force’s Guardian Angel developmental test center at Nellis Air Force Base in Las Vegas.

“I was the only one that they flew out to interview in person for the job,” says Misko, “and between my diverse résumé and portfolio – due mainly to my involvement with SPaRC – I was able to impress the professionals with whom I interviewed.”

Misko says his participation and leadership in SPaRC projects gave him the experience that all employers are looking for: project management, teamwork, assorted technical skills, in-depth knowledge of current technology, technical writing, and most importantly, communication leadership within diverse multi-disciplinary teams.

“This is what set me apart from all the other applicants in my field and gave me the confidence and knowledge to represent myself well,” he says. “Because of this, I was able to get the job that I wanted the most. My time with SPaRC provided me with some of the most rewarding experiences and memories of my Auburn career.”
As Does the Auburn Hovercraft

The hovercraft team finished with two second place awards and a fourth place finish at their most recent competition, held in South Lyon, Mich.

After several technical difficulties during practice, including an accident which destroyed the craft’s hull, the team finished second in the Formula 2 division of competition, which limits total engine displacement to 500 cubic centimeters, and the Formula S division, which allows an engine of unlimited displacement. The team also placed fourth out of 15 entries in the overall endurance race, a 25-lap contest.

Honoring Hodel’s Dedication

SPaRC founder and electrical and computer engineering faculty member Scotte Hodel passed away on Jan. 9 after a year-long battle with lymphoma. During his 20 years as an Auburn faculty member, Hodel developed a reputation as not only an excellent electrical engineering professor, but also a dedicated mentor and a faithful friend.

“He was a great mentor academically and spiritually, though he didn’t take a ‘supervisor’ mentality, but that of a friend,” said Brandon Eidsen, graduate student in electrical engineering. “He was indeed significant in my student career, but, more than that, Dr. Hodel was significant in my life. And, if I had to guess, I’m not the only one of his students who would make that comment.”

As a faculty member, Hodel is remembered for his love and concern for his students. He served nearly 10 years as faculty adviser to the student branch of IEEE and was an enthusiastic mentor for student competition teams. In recognition of his teaching excellence, he received the 2007 College of Engineering Pumphrey Award.

“Dr. Hodel was visionary in his concept of a long-term project management experience for our students,” says current SPaRC adviser Thad Roppel. “He was skillful, energetic and thoughtful in the way he worked closely with the students.”

Hodel’s research activities encompassed applications of automatic control and linear algebra. His software development accomplishments include much of the Octave control systems toolbox, which provides open-source freeware functionality compatible with MATLAB. He was a senior member of IEEE and served as associate editor for several IEEE publications.

“We have to say thanks to Scotte for the original idea for the Student Projects and Robotics Committee,” says Roppel. “Since its inception, many students have worked on projects that have provided them with a greater appreciation for designing within real-world constraints, and this experience has figured prominently in their success in job interviews. This year’s win is a small tribute to his foresight and commitment to students.”

The College of Engineering has established the A.S. Hodel Scholarship in Electrical and Computer Engineering in memory of his achievements in the field. Contributions toward the endowment may be mailed to:

Allyson Dozier
Office of Engineering Development
1320 Shelby Center
Auburn, AL 36849
Memo line on check: Hodel Scholarship

“The competition was amazing for the team,” said David Branscomb, team adviser. “Everyone was impressed with our engineering efforts and bravery against surmounting odds. Despite adversity, our team performed very well.”

Many teams from across the college participated in competitions during the year, such as the Design/Build Fly team and NASA’s University Student Launch Initiative rocket team. Auburn’s Baja SAE team finished ninth at home (see page 24), while the Formula SAE team posted an eighth place finish at the series’ FSAE California competition.
As a boy, Bruce Tatarchuk spent countless afternoons playing baseball with friends in the yard of his parents’ home outside of Bensenville, Ill., a western Chicago suburb near O’Hare Airport. Their games were often interrupted by the sound of airplanes passing overhead. Back then, he was a long way from Alabama and the cutting-edge chemical engineering research for which he is now widely known, but Tatarchuk’s fondness for his small-town upbringing would one day lead him south to Auburn. And he plans to keep engineering strong in the state he has called home for 28 years by recruiting world-class graduate researchers, developing relationships with small businesses and producing economical solutions to everyday problems through new technologies. We think he’s a force to be reckoned with.
The lab rat

Like many engineers, Tatarchuk was drawn to physics, math and chemistry as a young student. While he was intrigued with the idea of chemical engineering, he wasn’t sure what a chemical engineer actually did. But by the time he arrived at the University of Illinois Urbana-Champaign as a freshman, he knew he had chosen the right major. The curriculum was perfectly suited to his strengths, offering more physical chemistry than most undergraduate engineering programs.

In the classroom, Tatarchuk was exposed to many distinguished chemistry faculty members and became interested in research. One of them was Roger Schmidts, who would later become provost at Notre Dame. He recruited Tatarchuk into his program and offered him an opportunity for undergraduate research. Under Schmidts’ advisement, Tatarchuk conducted his undergraduate thesis and three semesters of research.

At the time, Illinois did not accept graduate students who had received undergraduate degrees from the university, as a matter of diversity of academic background. “They felt it would give graduate students the opportunity to experience new cities, peers and influences,” Tatarchuk recalls. “Wisconsin had the number one program and that’s where I knew I would be headed.”

He graduated in 1976, married Shawna, whom he met as a freshman, the next week and promptly began his graduate program at the University of Wisconsin-Madison the week after. In Madison, Tatarchuk found Jim Dumesic, National Academy of Engineering member, and became his first doctoral student. During this time, Tatarchuk began to realize the strengths and limitations of his work, which consisted mainly of reaction engineering, math modeling and catalysis.

“On a molecular scale, I realized that there was so much more interaction at the quantum level,” he says. “I saw that there was more than just a dimensionless number between zero and one.”

Based on this discovery and his work in Dumesic’s lab at Wisconsin, Tatarchuk decided to pursue research and academia. He began interviewing for faculty positions in 1980, a time that Tatarchuk calls “crazy for the energy field.”

“There were great opportunities at companies like Chevron, who wanted to hire an unbelievable number of engineers,” he says. “Universities on the other hand would give you a desk you had to clean off and junk you had to clean up. Then, they’d tell you to go out and solve the world’s problems, recruit students and get grants,” he adds.

Though he had never been to Alabama, he liked the friendly environment and the small town, familiar feel of Auburn. “When I interviewed, I was looking at the quality of life and work,” Tatarchuk says. “That’s always been part of Auburn. It is upbeat, but not a megatropolis.”

The college showed great interest in supporting his work, so he accepted a position as an assistant professor.

The professor

Tatarchuk maintained his passion for recruitment and became involved with recruiting world-class graduate students to Auburn, an activity he is involved with to this day. He was one of the first faculty members at Auburn to begin flying in prospective students from around the country.

“For the first eight years, we’d send out fliers,” he recalls. “They’d say, ‘Are you interested in any information from Auburn?’ Then we would offer any of them that responded an expense-paid trip to Auburn to visit the school.”

Tatarchuk only had a 7 percent acceptance rate on his trip offers, but of that, close to half who visited the campus would enroll. The tables soon turned and entering classes grew. “We went head-to-head with Florida, Georgia Tech, NC State, LSU and basically any other schools in the Southeast,” he says. “Not unlike today, the biggest competitor back then was industry.”

Today, Tatarchuk, Ginn Distinguished Professor and director of Auburn’s Microfibrous Materials Manufacturing Center, holds 40 U.S. and foreign patents, operates a lab team of 26 and works with an array of organizations, from small businesses to
government agencies to develop ultracapacitors, gas masks, clean air conditioning filters and synthetic fuels for mobile fueling stations, among many other new technologies.

“We’re different from most research or academic programs because we work from the molecular level all the way to prototype and presentation,” Tatarchuk says.

He admits that it’s not always easy and sometimes can be frustrating, but he remains focused on the goal – taking research through a number of developmental phases, prototypes and demonstration – to learn a few things, abandon old ideas and determine the societal and economic benefits of taking something all the way to commercialization.

“We operate like any other team,” he says. “We’ve adopted a position to run the ball. We work from horizon to horizon, from the molecular to the end product, for industry and the consumer.”

On a micro scale, his group develops chemical reactions and processes that run faster on surfaces. They work with catalysts, electrochemical structures and filter materials, then scale it up and figure process controls, but along the way, they discover many other fundamental areas that need attention.

“You don’t know the cost until you demo it on a large scale,” Tatarchuk says. “At the one gram level of a new catalyst or molecularly active surface, you don’t know its true value until you can demo it in a new device, such as a new filter media for a gas mask.”

The Entrepreneur

It’s no secret that Tatarchuk is passionate about helping populate Auburn’s new research park, located on South College Street. One such development is IntraMicron, a business spun off from Tatarchuk’s work with microfibrous materials to generate synthetic fuels. IntraMicron recruits new employees from a pool of highly qualified Auburn chemical engineering graduates.

“We’re able to keep some of the best and brightest doctoral students here in the Auburn area,” Tatarchuk adds. “And, we’re turning over a profit with a fibrous product and have the capability to scale up and commercialize.”

As IntraMicron’s CEO, Tatarchuk has played a major role in bringing funding to the fledgling business, which includes a $1.25 million contract with the U.S. Navy. The catalyst structure they’ve developed produces JP5 fuel for Navy aircraft that can be accessed remotely for refueling, instead of on a fleet of aircraft carriers.

They are also working on a carbon monoxide catalyst for FA-18 fighter pilots who are exposed to exhaust in the cabin of their planes. It is the same type of breathing filtration material that can be used inside stock cars and in escape masks.

“In developing this technology for escape masks, we asked ourselves ‘What do you do when the fire alarm goes off?’ because 3,000 people a year perish that way,” Tatarchuk says. “We wanted an affordable alternative that is simple to wear and easy to manufacture.”

His group’s filters for air conditioning units are molecularly designed, built and tested. They save electricity and are retrofittable to home units, as well as those used by nursing homes and hospitals, where transplant patients, bone marrow surgeries and chemotherapy treatments require protection from airborne diseases.

“Auburn is really making moves with entrepreneurial activities,” Tatarchuk says. “There are more opportunities to do research and development with small business and technology transfer, and Auburn has the capability to become the engineering hub that UAB has created for Birmingham in medicine.”
SPOTLIGHT ON BIOSYSTEMS

The crash landing of a jet in the Hudson River this year illustrated the threat posed by planes and birds colliding in midair. Data from the Federal Aviation Administration shows that there was a 328 percent jump in bird-plane collisions between 1990 and 2007. Bird strikes are increasing because airports are an ideal bird habitat, providing plenty of shelter and food, primarily in retention ponds constructed for stormwater runoff.

In a research project funded by the FAA, a team of Auburn researchers is designing and building a prototype airport retention pond that cleans runoff to meet water-quality standards but does not attract birds. Collaborators in the comprehensive project include biosystems engineering faculty member Kyung Yoo, as well as wildlife sciences professor Jim Armstrong, fisheries professor Claude Boyd, forestry associate professor Latif Kalin and wildlife scientist Brad Blackwell.

The first phase of the project involves pinpointing the pond conditions and characteristics that birds find most appealing, based on the analyses of data over an extended period of time of specific ponds and according to a rigid schedule. Armstrong heads up this phase of the project. His team located 40 stormwater retention ponds from which they will collect and record information, including surface area, depth and bank slope, as well as plant life and related observation of other wildlife.

Boyd’s role will be to identify specific pond parameters and water-purifying systems necessary to effectively filter common airport pollutants from the stormwater that collects in airport ponds.

Yoo, soil and water engineer for the project, will incorporate Boyd’s water-quality results into the original data to design a prototype pond. Kalin will evaluate the prototype pond’s hydrologic functions and pollutant-reduction capabilities, how changes in pond characteristics affect water quality and how effective the model pond would be at larger airport ponds.

A prototype pond will be constructed in Auburn, and researchers will put it through stringent testing, tweak the design as needed and present it to the FAA as a proven, effective bird-detering retention pond model that airports can incorporate into their bird management programs.
AEROSPACE

Researchers in faculty member Brian Thurow's lab have been developing advanced laser diagnostics suitable for measurements in high-speed and reacting propulsion-related flows. The centerpiece of this development is a home-built, pulse-burst laser system capable of producing high-energy pulses at repetition rates exceeding 1 MHz and wavelengths ranging from 266 to 1064 nanometers. Used in conjunction with a high-speed camera capable of 500,000 frames per second, the laser can be used to take high-speed flow measurements using techniques such as planar laser-induced fluorescence and simple flow visualization.

The instrumentation will be used to study problems related to missiles, airplanes and helicopters. The flow associated with most applications is turbulent and, therefore, inherently 3-D and complex. Thurow's research group is the only one in the world with this 3-D imaging capability.

One of the most significant applications of the system has been for the acquisition of 3-D flow images. For 3-D imaging, a galvanometric scanning mirror is used to scan the high-repetition laser sheet through the flow field with a high-speed camera recording the image at each scan location. A 3-D image can then be reconstructed from the stack of 2-D images. The overall acquisition process can be completed in tens of microseconds.

CHEMICAL

Auburn Engineering researchers Mark Byrne and Jacek Wower (Animal Sciences) have developed a way to control the release of drugs into the body and, as a result, reduce the frequency of doses and side effects from multiple medications. Their work involves harnessing the power of nucleic acids to control the rate, release amount and delivery location of medications throughout the body.

Byrne and Wower, along with doctoral student Siddarth Venkatesh, use tiny RNA molecules called aptamers to control the release of drugs. For each patient, the drug delivery can be set to occur at various rates or under certain conditions, including exposure to an enzyme or reaching a specific temperature. Unlike past studies, this technology is capable of delivering doses of multiple drugs at different rates or a single drug at controllable and extended rates from one medical device.

The research team, which also includes doctoral student Padma Sundaram, is also using gold nanoparticles for targeting specific cells to deliver injectable drugs. The gold nanoparticles are biodegradable or excretable and can be injected directly into the bloodstream along with the medication. The combination could prove to be an important step for providing multiple-drug releasing carriers capable of delivering the right amount of medication at the right time.

CIVIL

As new guidelines have been proposed regarding construction site runoff, erosion and sediment control is quickly becoming a focus within the construction industry. To address these new regulations, the Alabama Department of Transportation has teamed with Auburn's Highway Research Center to develop methods for evaluating erosion and soil control best management practices (BMPs) used at highway construction sites. The current challenge facing the industry includes a lack of scientific understanding on traditional BMPs and the utility of new technologies that are constantly introduced. Therefore, a standard means to evaluate these BMPs using both intermediate- and field-scale testing is needed.

In response to this need, an innovative testing facility has been designed to conduct both intermediate- and field-scale testing under controlled conditions to evaluate current and future erosion and sediment control BMPs. The intermediate-scale experiments are designed to mimic real-world conditions experienced on highway construction sites and are conducted under simulated rainfall. The field-scale facility focuses on testing different ditch check practices as well as drop inlet protection devices with respect to sediment control.

The NCAT facility enables researchers to test erosion and sediment control solutions in a small-scale, real-world environment.
Faculty member Sanjeev Baskiyar has received a Defense Advanced Research Projects Agency (DARPA) award for more than $160,000. According to his proposal, “Enhanced Micro-Architectures for Real-time Systems,” Baskiyar will use the funding to conduct research related to innovative micro-architectures for high speed computing.

This research provides parallel data paths that could ultimately solve a large number of problems in computer architecture and fault tolerance, ranging from latency, cache coherence and fault detection.

DARPA is the central research and development organization for the U.S. Department of Defense. DARPA’s mission is to maintain technological superiority of the U.S. military and prevent technological surprise from harming national security. The agency funds researchers in industry, academia and government to conduct high-risk, high-reward research and development projects that will benefit U.S. national security. Projects include biology, medicine, computer science, chemistry, physics, engineering, mathematics, material sciences, social sciences, neuroscience and more.

Faculty member Mark Halpin has developed a new course for the Institute of Electrical and Electronics Engineers (IEEE) Expert Now series, covering topics in the area of power quality. Co-sponsored by the Industry Application Society (IAS) and the IEEE Power and Energy Society, Halpin’s course provides an emphasis on IEEE and IEC standards. Technical areas to be covered include voltage sags, grounding, harmonics, voltage flicker and transients.

IEEE Expert Now is a series of interactive online learning courses based on the association’s best educational tutorials and workshops from conferences around the world. These courses have been developed by recognized experts in a wide range of engineering and research technologies.

In collaboration with the National Center for Asphalt Technology, a group of researchers, including faculty members Jeffrey S. Smith and Alice E. Smith, are working on the development of a hot mix plant production control system. The overall goal of the project is to address quality problems faced during the production process of hot mix asphalt (HMA) by designing a control system that considers the variations in input parameters, such as aggregate gradation and moisture content, and prescribes process parameters for the HMA to conform to specifications.

The project team is currently focused on analyzing the variability on gradation and moisture content of the aggregate used in HMA production. In tandem with these efforts, the project team is developing a computer simulation model of the HMA production process. When the analysis of variation in aggregate is complete, the results will be used within the simulation model to develop the control system and test its validity. The process will make for better quality HMA, resulting in more durable, better roads, as well as lower building costs, as the process will be optimized and quality assured, thus avoiding construction penalties.

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MECHANICAL

Faculty member Pradeep Lall has been awarded a NASA grant in integrated vehicle health management (IVHM) of electronic systems. The award is for $450,000 over three years. His research focuses on the development of systems capable of providing the leading indications of system failure.

IVHM systems are being developed by NASA for aerospace applications. Ultra-high reliability in critical avionics systems used in autonomous control, navigation, flight prediction and self-separation require methods and frameworks that will allow interrogation of damage-state of complex power-semiconductor systems and sub-systems to determine the remaining useful life prior to repair or replacement. Lall’s efforts focus on prognostics health management of electrical systems and sub-systems.

The IVHM technologies being developed at Auburn will be part of highly integrated systems used by NASA with advanced smart sensors, diagnostic and prognostics software for sensors and components, model based reasoning systems for subsystem and system level managers, advanced on-board and ground-based mission and maintenance planners, and a host of other software and hardware technologies.

Lall’s research at Auburn has resulted in an extensive framework involving a fusion of physics-based damage accumulation methods with advanced-models and data analysis techniques. It is envisioned that the technologies being developed will provide both real-time and life-cycle vehicle health information which will enable informed decision making and logistics management. Electrical systems health state will be continuously updated in knowledge databases and critical failure modes will be identified, updated and reported for life cycle condition trending.

POLYMER AND FIBER

Each year, a large amount of low-value forest biomass accumulates from underbrush and forest thinning operations. This material contains valuable chemical compounds that could be incorporated into bio-based polymeric products, such as hydrogels, films, laminates, adhesives, and everyday plastics. Faculty member Gisela Buschle-Diller, in cooperation with the U.S. Department of Agriculture’s Forest Product Laboratories in Madison, Wisc., works on the reclamation, isolation and fractionation of sugar derivatives, polyphenols and furan compounds and their conversion into high-value hybrid-polymers and biocomposites. These materials are environmentally friendly, biodegradable and from renewable underutilized resources. They find applications in a multitude of areas, most importantly in the biomedical field.
On May 25, 1961, President John F. Kennedy articulated a vision for space exploration that included “landing a man on the moon and returning him safely to Earth” before the end of the decade. In so doing, he boldly committed our nation to accomplishing this daring mission and assigned responsibility to the newly created National Aeronautics and Space Administration (NASA) whose human space flight program had little more than 15 minutes of experience in space. It was Apollo 11’s mission to the moon in July 1969 that saw this dream realized and subsequent Apollo missions that continued to define our nation’s space program. Auburn engineers were among those who made this possible and played key roles in executing this massive undertaking.
T.K. “Ken” Mattingly, a 1958 aeronautical engineering graduate, was selected by NASA in 1966 to be part of the fifth astronaut class. During his 19-year assignment to NASA, he flew three space flights and logged 504 hours in space, including spacewalking between Earth and the moon. He also supported the Apollo 8 and 11 missions and was the astronaut representative in the development and testing of the Apollo spacesuit and backpack.

Mattingly was scheduled to be the command module pilot for Apollo 13, but was removed from flight status 72 hours prior to launch due to exposure to German measles. Instead of making his first flight into space, he joined the ground team in its spectacular rescue of the Apollo 13 crew after an in-flight explosion placed their safe return to Earth in doubt. He ultimately flew as command module pilot on Apollo 16 and as spacecraft commander on two space shuttle missions.

In recognition of his distinguished career, NASA presented Mattingly with an Ambassador of Exploration Award that he has chosen to display in the Samuel Ginn College of Engineering. This award – a lunar sample which is part of the 842 pounds of moon rocks and soil collected during the six expeditions from 1969 to 1972 – is presented by NASA to recognize the heroic efforts of the early pioneers of space exploration.

The moon rock was presented to Mattingly and the college at a ceremony on March 26 in the Shelby Center for Engineering Technology. In presenting the award, Christopher Scolese, acting administrator of NASA, said, “We are here this afternoon to honor a true hero of 20th century exploration. We owe T.K. a deep debt of gratitude. He is a rare individual – dedicated and dependable – which is what America needed during those first flights to the moon.”

It is fitting that Mattingly chose Auburn as the home for his award. “I was a student sitting in Ramsay Hall when Sputnik went up. It was a scary time for all of us and one full of uncertainty. Since stress and uncertainty can either immobilize or inspire, it was fortunate that Auburn and the country chose the latter response,” said Mattingly. “The Auburn experience taught me to recognize limitations and work around them. The faculty taught, by example, the importance of personal and professional integrity, teamwork, leadership and hard work. Auburn has always been, and will always be, a very special place. I am honored to say thanks, on behalf of all of us who were fortunate enough to have benefited from the Auburn experience and participated in the Apollo Program, and to entrust this lunar sample to the College of Engineering for safe keeping and as an inspiration for future generations of Auburn engineers.”

Recipients of the award select a museum or educational institution where their lunar sample will be publicly displayed in their name to help inspire a new generation of explorers. “You can imagine my excitement when I received the call from T.K. that he had chosen the college,” says Larry Benefield, dean of engineering. “We are indeed honored and proud that T.K. is also an ambassador for the college. He represents what an Auburn engineer can become.”
Threatening weather and stiff competition couldn’t stall the 88 teams that participated in this year’s Baja SAE Alabama event, held April 16-19. Hosted by the Samuel Ginn College of Engineering at Auburn’s National Center for Asphalt Technology test track in Opelika, the Society of Automotive Engineers (SAE) student competition drew college students from schools around the globe to design, build and race a prototype of an off-road, all-terrain vehicle. The Auburn team finished ninth overall ahead of Georgia Tech, LSU, Clemson, Virginia Tech, Tennessee Tech and Alabama.

There were challenging new twists and turns, including an enhanced course from the 2006 event with higher jumps, longer rock crawls and a rougher sandpit. The four-day competition included a four-hour, wheel-to-wheel endurance race and short events in acceleration, traction, maneuverability, suspension, design report, design evaluation and manufacturing cost. The competition was a true test of the students’ ability to translate their engineering skills to real-world design.

To view event photos, please visit http://photos.eng.auburn.edu/2009/baja09
Timothy D. Cook, 1982 industrial and systems engineering, also holds an MBA from Duke University. He joined Apple Inc. in 1998 and soon established new supply chain management strategies that resulted in a corporate turnaround ranked best in the world by AMR Research in 2008. Cook is responsible for worldwide sales and operations, and also assumed day-to-day operations of Apple in the absence of CEO Steve Jobs during his medical leave. Cook currently serves as a member of the Department of Industrial and Systems Engineering Alumni Council and the Auburn Alumni Engineering Council.

Lavon F. Jordan, 1962 mechanical engineering, earned a master’s degree in industrial engineering in 1969. His career began at General Research Corp., with Jordan eventually founding Frontier Technology Inc. in 1985 and co-founding the Defense Planning and Analysis Society in 1995. He has made significant technical and programmatic contributions to the American defense industry and is recognized in the aerospace community as a pioneer in quantitative planning and systems analysis. He is a member of the Auburn Alumni Engineering Council and the Engineering Eagles Society.

Leslie F. Kenne, 1970 aerospace engineering, is the first female ROTC cadet to graduate from Auburn, the first ROTC-commissioned female officer in the United States Air Force (USAF) and the first female to attend the USAF Test Pilot School. She earned a master’s degree from Webster College and attended the Armed Forces Staff College and the Kennedy School of Government at Harvard. She served as division chief and deputy director of acquisition for fighters, bombers and munitions at the Pentagon and was deputy chief of staff for Warfighting Integration. She was the first female to achieve the rank of lieutenant general in the USAF. Today, she is president of the Kenne Group and serves on Auburn’s Wireless Engineering Advisory Board.

James W. Kennedy, 1971 mechanical engineering, was a co-op student at Marshall Space Flight Center (MSFC) in Huntsville while earning his undergraduate degree. Following graduation, Kennedy earned a master’s degree from Georgia Southern University and after working for Emerson Electric returned to MSFC. He served as chief of various space shuttle program offices and played a key role in the launch of the first space shuttle. In 2001, Kennedy was selected to serve as deputy director of MSFC. Two years later, he was named the eighth director of NASA’s Kennedy Space Center, a position he held until his retirement in 2007.

Anthony J. Topazi, 1973 electrical engineering, was an Alabama Power co-op student and went on to hold numerous leadership positions with the utility and its parent company, Southern Company. In 2004, he became president and CEO of Mississippi Power and was named by the governor as chair of Momentum Mississippi, a new organization focused on developing the state’s economy. He was cited for his work during Hurricane Katrina, when his team restored power to the state in 12 days. He created and chaired the Gulf Coast Renaissance Corp., a nonprofit organization devoted to the development of affordable housing, for which he has raised $67 million. He is a member of the Auburn Alumni Engineering Council.

In the projects category, the new Shelby Center for Engineering Technology was inducted in concert with four other Shelby centers in the state. Made possible through the efforts of Sen. Richard Shelby, they are dedicated to enhancing the areas of engineering, mathematics and science. Auburn is joined by Shelby Hall at the University of Alabama, Shelby Interdisciplinary Biomedical Research Building at the University of Alabama at Birmingham, Shelby Center for Science and Technology at the University of Alabama at Huntsville, and Shelby Engineering and Science Center at the University of South Alabama.
You’re from San Antonio . . . what put Auburn on the map for you?

In a way, my mother did. She is a 1980 Auburn graduate, and of course, that made a difference. She was with me when I toured the campus during the spring of my junior year in high school. I think back to my high school classmates – they would never have believed that I’d be here now as a chemical engineering student and a ROTC cadet. I’ve changed so much. I am not the person they would remember.

What was your first impression of Auburn?

Well, Auburn was not the only university that I shopped, so when I compared our campus to the others what stands out is the friendliness. Auburn feels smaller than it actually is and that means a lot to me. When I toured the other schools, the feeling I got was that nobody was willing to take the time. When I took the Auburn admissions tour I was also impressed with . . . just the look of the campus. I especially liked what I saw in the College of Engineering during my Cupola student tour. When I actually got here in the fall as a freshman, I was terrified.

That’s a surprise . . . what was the problem?

A lot of it was being thrust right into the middle of my first week in ROTC (laughing). I was running around, all over the place. People were screaming at me. I was on the phone with my mom, trying to make sense of it. She was in ROTC as well, Army for her, Navy for me. But it all worked out. ROTC took me out of my comfort zone, out of my shell, and put me in a place where I could grow into a leader. Everything I had been involved with before, was just as a participant, never as someone in charge of making things happen. My ROTC career has given me the chance to do and see things that would have been impossible otherwise. My leadership in Cupola Engineering Ambassadors builds on this training. I feel that I can bring direction and planning to my efforts here.

What direction do you plan to take in chemical engineering?

It depends, in part, on what I will do in the Navy when I graduate. My interest in chemical engineering from the beginning was in biomedical engineering, and I can see a career that would lead to medical school and beyond if given the opportunity. If I am billeted somewhere else, I will have to make my plans conform to the opportunities that are presented. I feel that Auburn is preparing me well, the chemical engineering faculty in particular, including Dr. [Chris] Roberts, the department chair. It has not been easy, I can tell you that, and this comes from someone who in the past would never even have publicly admitted to a bad grade. Now I’m just happy to be here, and surviving!
Tell us about your experiences in chemical engineering . . .

The chemical engineering curriculum has been the most challenging and rewarding experience I could have asked for at Auburn. I sometimes gripe about the work load and stress, but I also know that nothing worth having is ever attained easily. The professors in our department strive to challenge their students in every way possible. We are constantly asked to take on more than we think we can manage, but it seems that we ultimately realize that we are more capable than we give ourselves credit for. I also have to say that they don’t give us the work unless we have the resources to carry it out. Our professors are really accessible and their doors are always open. They are always available for extra assistance. I know that when I graduate in the spring, I will have a degree and the skills necessary to work as a professional. I won’t be afraid of the challenges before me because I believe that my time at Auburn will have prepared me to take on anything.

You’ve done better than the credit you give yourself, particularly in leadership roles.

That’s something else I have been allowed to grow into. In addition to the challenges that ROTC presents, our professors put you in front of their students in every way possible. We are constantly asked to take on more than we think we can manage, but it seems that we ultimately realize that we are more capable than we give ourselves credit for. I also have to say that they don’t give us the work unless we have the resources to carry it out. Our professors are really accessible and their doors are always open. They are always available for extra assistance. I know that when I graduate in the spring, I will have a degree and the skills necessary to work as a professional. I won’t be afraid of the challenges before me because I believe that my time at Auburn will have prepared me to take on anything.

What are your goals for the Cupola Engineering Ambassadors this year?

I want to increase our efforts at outreach and visibility, and improve the productivity of our membership. I think that these are essentially three facets of our overall desire to make a greater impact on the College of Engineering and the student body. During the past year, we expanded our student appreciation days to make more engineering students aware of the group’s role and function in the college. We did this by having some fun food events – those always attract students – at places such as the Davis Hall patio. I feel that by increasing our level of interaction with students we will be able to do a better job of recruiting the next class of Cupolas, and ultimately increase our participation in other facets of the college.

Finally . . . words of advice to incoming freshmen?

That’s easy. I would tell every incoming freshman to take advantage of all that you can while you’re at Auburn. There is so much to do here that’s beyond the classroom, and there is literally something available for everybody, no matter what your interests may be. I live my life by my planner, and I can’t think of wanting to do it any other way. At times it may not seem this way, but the truth is, everything goes by so fast, including your college experience. Make the most of it.
Wiggins Hall
A Father’s Legacy

“Many of the things that George Petrie said in the Auburn Creed I first learned from my father,” Dwight Wiggins recounts from his cell phone in the Atlanta airport. “Particularly what he said about work . . . ‘that this is a practical world and that I can count only on what I earn.’"

Wiggins is on his way to Auburn for a board meeting of the Auburn University Foundation – one of a number of assignments the energetic oil executive has accepted for his alma mater. He has also served on the Auburn Alumni Engineering Council and the Engineering Campaign Leadership Team, a steering committee that helped raise a record $116.7 million for Auburn Engineering during the “It Begins at Auburn” campaign.

When the 1962 mechanical engineering graduate arrives on campus, he is greeted by an ever-changing landscape from the campus that in his day was smaller, simpler and cooled by ceiling fans and transom windows instead of air conditioning. And now, behind Shelby Center, he sees the beginnings of a new building as bulldozers scrub red clay and construction crews twist rebar into steel bones. Scheduled for completion in the fall of 2011, the Dwight L. Wiggins Mechanical Engineering Hall will be joined by the College of Engineering’s Advanced Research Laboratory as Phase II of the Shelby Center, the $108 million, 331,000-square-foot complex that is reshaping the look and vision of Auburn Engineering.

The new facility, made possible in part to a generous gift by Dwight and his wife Sally, will be dedicated to the namesake of the man who was Dwight’s major inspiration in life, and a beacon, he recalls, for integrity, courage and empathy. “I have always tried to live by his words to treat people with respect and not take credit for the work of others,” he explains.

“I hope to share more than just a name with my father,” Wiggins adds. “During my career, I have counseled many others that opportunity knocks not just once, but many times throughout life if hard work, honesty and the highest ethical principles are your calling card. To the extent that I can do this, I hope the new ME building serves as something worthwhile to my dad’s memory.”
The 2009 Cupola Report

A recognition of the 2008 contributors to the Samuel Ginn College of Engineering

We have made every attempt to include all donors to the Auburn Engineering family. However, if you or someone you know is not listed, please contact the Office of Engineering Development at 1320 Shelby Center, Auburn, AL 36849 or 334.844.2578.

For Engineering donor societies, if you prefer your name to be listed differently, please contact Apryl Mullins at mulliat@auburn.edu.

For a listing of donors who gave prior to 2008, please see previous issues of the Cupola Report at www.eng.auburn.edu/cupola-report.
Named for the visionary and philanthropic leadership of Samuel L. Ginn, Auburn Engineering’s new Ginn Society recognizes alumni and friends whose ongoing support represents a demonstrated commitment to Auburn Engineering’s current and future success. Because many of our donors give over the course of years, the various circles of this society acknowledge the cumulative gifts of our donors of $10,000 or more.

**Visionary Circle**

$5,000,000 +

The loyalty and foresight of these donors reflect their commitment to Auburn Engineering in providing the finest in engineering instruction and research. The generosity of these individuals is critical to moving the college to new heights of excellence.

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- Mr. and Mrs. Dwight L. Wiggins Jr. ’62

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*deceased
### Wilmore Circle

John Jenkins Wilmore, who served Auburn for 55 years, began his career at the A&M College of Alabama, as Auburn was then known, as an assistant in the mechanics laboratory. In 1893, he became the first professor of mechanical engineering and in 1908 was named the first dean of engineering and mines. He also served as chief executive of the institution and chairman of the executive committee.

### Scholar Level $500,000 +

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<td>Mr. Joe W. Forehand Jr.</td>
<td>$500,000 +</td>
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<tr>
<td>Mr. M. Miller Gorrie</td>
<td>$500,000 +</td>
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<tr>
<td>Mr. Cotton Hazelrig</td>
<td>$500,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. John D. Jones</td>
<td>$500,000 +</td>
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<tr>
<td>Mr. Horner C. Lavender Jr.</td>
<td>$500,000 +</td>
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<tr>
<td>Mr. Francis T. Payne</td>
<td>$500,000 +</td>
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<tr>
<td>Dr. Richard D. &amp; Ms. Marjorie</td>
<td>$500,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Edgar L. Reynolds</td>
<td>$500,000 +</td>
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| $250,000 +

### Dunstan Circle

Arthur St. Charles Dunstan, Auburn's second professor of electrical engineering, doubled as superintendent of the power plant and guided the installation of lines and wiring which provided lighting for campus buildings, and subsequently, the town of Auburn. Known for his "nimble mind and keen sense of humor," he taught at Auburn for nearly 52 years and was considered an authority on every phase of electrical engineering.

### Scholar Level $100,000 +

<table>
<thead>
<tr>
<th>Name</th>
<th>Contribution</th>
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<tbody>
<tr>
<td>Mr. Sam B. Allison</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. James Thomas Allemy</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. Gerald B. Andrews Sr.</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Diaco Aviki</td>
<td>$100,000 +</td>
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<tr>
<td>Dr. Kenneth J. Barr</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. William M. Brackney</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Rodney Bradford</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. J. B. Brasswell</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. L. Owen Brown</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Roger J. Campbell</td>
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<tr>
<td>Dr. Tony J. &amp; Ms. Tracey H. Catanzaro</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Wesley M. Cauthen</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. J. Edward Chapman</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Ronald M. Dykes</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. William C. Edwards</td>
<td>$100,000 +</td>
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<tr>
<td>Mrs. Margaret Long Forsythe</td>
<td>$100,000 +</td>
</tr>
<tr>
<td>Mr. Maury D. Gaston</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Alfred F. Gentile Sr.</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. H. Vince Groome</td>
<td>$100,000 +</td>
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<tr>
<td>Ms. Louise K. Hall</td>
<td>$100,000 +</td>
</tr>
<tr>
<td>Mr. &amp; Mrs. Robert H. Harris</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Roger R. Hemminghaus</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. John S. Henley Jr.</td>
<td>$100,000 +</td>
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<tr>
<td>Dr. Andrew C. Hsu</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. James T. McMichael</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. William R. McNair</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. C. Phillip McWane</td>
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<tr>
<td>Mr. &amp; Mrs. John L. Rawls Jr.</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. W. Allen Reed</td>
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<td>Mr. &amp; Mrs. William B. Reed</td>
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<tr>
<td>Mr. Thomas B. Sellers</td>
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<tr>
<td>Mr. &amp; Mrs. Thomas D. Senkbell</td>
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<td>Mr. Wilbur T. Shinhosher</td>
<td>$100,000 +</td>
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<tr>
<td>Dr. &amp; Mrs. R. E. Simpson</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. &amp; Mrs. Albert J. Smith Jr.</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. James H. Stewart Jr.</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. Jon Stryker</td>
<td>$100,000 +</td>
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<tr>
<td>Ms. Pat Stryker</td>
<td>$100,000 +</td>
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<tr>
<td>Mr. William J. Ward</td>
<td>$100,000 +</td>
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</tbody>
</table>
Erskine Ramsay was a leading engineer in Alabama’s mining industry and held more than 40 patents. President of two coal companies, Ramsay contributed $500,000 to five Alabama colleges, including $100,000 to Auburn – at the time, the largest contribution to a state institution in Alabama. The college awarded Ramsay an engineer of mines degree and inducted the philanthropist as an honorary member of Tau Beta Pi in recognition of his contributions to the college.

Fellow Level
$25,000 +

Mr. Ted Landers ’71
Mr. William B. Lee ’81
Mr. Lumm Loo ’78
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Mr. & Mrs. Harry A. Manson ’58
Mr. Charles D. McCrary ’73
Mr. Milton E. McGregor ’64
Mr. Charles D. Miller ’80
Mr. & Mrs. Stephen R. Miller ’72
Mr. Seth H. Mitchell Jr. ’48
Mr. & Mrs. Max A. Mobley ’72
Mr. Charles N. Moody ’63
Mr. & Mrs. F. Brooks Moore ’48
Mr. & Mrs. Larry J. Morgan ’68
Mr. & Mrs. Kevin E. Mullins ’99
Dr. R. Mark Nelms ’80
Mr. & Mrs. Earl B. Parsons Jr. ’60
Mr. J. Norman Pease II ’55
Mr. James Louis Peeler ’58
Mr. Lonnie H. Pope Sr.
Mr. Ben M. Radcliffe* ’46
Mr. & Mrs. H. Frederick Rainey ’42
Mr. & Mrs. William L. Rainey ’66
Mr. Mack A. Riley ’50
Mr. Ray A. Robinson ’55
Mr. Walter H. Rudder* ’28
Mr. Yetta G. Samford Jr. ’45
Mr. & Mrs. David Scarborough ’65
Mr. & Mrs. Douglas W. Smith
Mr. Larry Edward Speaks * ’62
Mr. & Mrs. William V. Swan ’35
Mr. John A. Taylor ’53
Mr. & Mrs. Max A. Mobley Jr.
Mr. & Mrs. T. Keith King Sr. ’58
Mr. & Mrs. D. Dale York ’76

Scholar Level
$50,000 +

Mr. Joseph E. Atchison
Mr. & Mrs. Joseph F. Barth III ’71
Mr. Jack W. Boykin ’61
Mr. John J. Boykin ’39
Dr. Bice H. Brackin ’69
Mr. Dan H. Broughton ’63
Mr. Harris D. Bynum ’58
Mr. Steven C. Bates ’85
Mr. & Mrs. James M. Chandler III ’84
Mr. & Mrs. William R. Clark ’42
Mr. James L. Cooper Jr. ’81
Mr. & Mrs. James H. Corbitt ’58
Dr. Daniel W. Duncan ’37
Mr. * & Mrs. J. Burl Galloway
Mr. & Mrs. Robert O. Haack Jr. ’83
Mr. & Mrs. W. George Hirston III ’67
Mr. & Mrs. James H. Ham III ’66
Mr. & Mrs. Frank A. Hamner ’58
Mr. & Mrs. John K. Hodnette
Mr. * & Mrs. Charles B. Hopkins Jr. ’43
Mr. & Mrs. Bruce E. Imsand ’74
Mr. & Mrs. Richard J. Kearley Jr. ’49
Mr. T. Keith King Sr. ’58
Mr. Minga C. LaGrone Jr. ’51
Mr. William F. Land ’49
Mr. & Mrs. Edwin L. Lewis ’72
Mr. Ronald C. Lipham ’74
Mr. & Mrs. Fred W. Mace ’57
Mr. Steven J. Marceau ’65
Dr. William Gaston Martin* 1907
Mr. & Mrs. Jesse D. May ’85
Mr. John F. Meagher Jr. ’49
Mr. & Mrs. Joseph A. “Buz” Miller ’83
Mr. & Mrs. William B. Mills ’60
Mr. * & Mrs. Leonard A. Morgan ’53
Mr. David R. Motes ’77
Mr. & Mrs. Christopher J. Peterson ’71
Dr. & Dr. Michael S. Pindzola
Mr. Thomas L. ’69 & Ms. Barbara Ray
Mr. E. Todd Sharley Jr. ’65
Mr. Grady L. Smith ’42
Mr. Ladell M. Smith* ’39
Mr. J. Ernest Warren ’65
Mr. R. Conner Warren ’67
Mr. & Mrs. D. Dale York ’76

Gen. Jimmie V. Adams ’57
Mr. Robert B. Allan ’42
Mr. John P. ’76 & Mrs. Cynthia M. Anderson ’76
Dr. & Mrs. Larry D. Benefield ’66
Dr. J. Temple Black
Mr. Edward T. Blackmon ’93
Dr. Dwight S. Bond ’56
Mr. & Mrs. Russell F. Boren ’54
Dr. David B. Bradley ’65
Mr. & Mrs. John R. Bray ’57
Mr. & Mrs. Felix C. Brendle Jr. ’73
Mr. & Mrs. Thomas D. Burson ’58
Mr. & Mrs. Henry M. Burt Jr. ’58
Mr. Otis William Bynum* ’30
Mr. * & Mrs. Marshal S. Caley ’33
Mr. & Mrs. Donald E. Carmon ’88
Mr. & Mrs. Benjamin F. Carr Jr. ’60
Mr. & Mrs. Joe Mark Chambers Jr. ’72
Mr. Jing-Yau Chung
Ms. Trudy Craft-Austin
Dr. Malcolm J. Crocker
Brig. Gen. & Mrs. Robert L. Davis ’74
Mr. * & Mrs. Wallace Lamar Dawkins ’48
Mr. Donald E. Dennis ’54
Mr. Stanley G. DeShazo ’57
Mr. J. Andrew Douglas* ’17
Mr. & Mrs. Melvin Lee Drake Jr. ’77
Mr. & Mrs. Lewis H. Eberdt Jr. ’54
Mr. & Mrs. Joe D. Edge ’70
Mr. Joseph Etheridge
Mr. Edwin W. Evans ’60
Mr. Jim W. Evans ’67
Mr. & Mrs. Paul R. Flowers Jr. ’66
Cpt. & Mrs. Davis R. Gamble Jr. ’74
Mr. & Mrs. John W. Gibbs ’72
Mr. Vernon W. Gibson Jr. ’57
Mr. Gary R. Godfrey ’86
Mr. William H. Goodyear* ’71
Mr. & Mrs. Lamar T. Hawkins ’63
Ms. Karen Hayes ’81
Mr. & Mrs. Dennis S. Hill ’79
Mr. E. Erskine Hopkins* ’46
Mr. C. Fletcher Horn ’40
Mr. James H. Hunt Jr. ’44
Mr. & Mrs. Carver G. Kennedy ’52
The dedication of Ginn Society members testifies to the importance of private support and reflects the commitment of those who believe in the vast potential of Auburn Engineering. Their record of giving has enabled the college to build a strong foundation for prosperity and growth.
The college’s Keystone Society consists of alumni and friends who recognize the importance of private support in our ongoing success. These members have risen to the challenge of moving the college boldly into the future by making the highest commitment to annual giving – $50,000 or more – to the college’s unrestricted fund over a five-year period. These gifts enable Auburn Engineering to take advantage of emerging educational opportunities.

**Warren Fleming**

*’43 Aerospace  
Owner, Warren Fleming Associates (retired)*

At Auburn, Warren Fleming was vice president of Sigma Chi and lettered in track. An ROTC member, he was inducted into Scabbard and Blade military society and Spade honorary. Upon graduation, he attended officers’ candidate school and served in the 43H class of the Air Force training and transportation branch. He and business partner Ed Rand began Atlanta’s first self-service laundry, Laundra Lux, growing it into a large chain. After receiving a law degree, Fleming excelled in sales and real estate before retiring from his company, Warren Fleming Associates. He resides in Santa Rosa Beach, Fla.

“Auburn was good to me, and I want to be good to Auburn. I have high regard for the vision for Auburn Engineering,” says Fleming. “With the current situation in state funding, unrestricted Keystone funds are important to the college.”

**Steve Cates**

*’85 Civil Engineering  
Partner, Cates-Kottas Development, LLC*

Co-owner of Cates-Kottas Development, LLC, Steve Cates develops communities in Tennessee. He serves as National Chairman of BUILDPAC, the Political Action Committee of the National Association of Home Builders, and serves with United Way and Junior Achievement of Williamson County. He and his wife, Lyn, and his children, Hannah and Wesley reside in Brentwood, Tenn.

“My successful career as an engineer and developer is a direct result of attending Auburn,” says Cates. “The education taught me how to solve problems, manage multiple tasks and believe in myself. The faculty took an interest in me and gave me the tools necessary to make the most of my opportunities. The Keystone Society allows me to give a gift that provides the same opportunity I received to other students.”

**Glenn Guthrie**

*’62 Industrial Management  
Financial Advisor, Birmingham Investment Group*

Glenn Guthrie began his career in information systems with Sonat, Inc. He later entered the financial management and investment field as a financial advisor for J.C. Bradford & Co. He furthered his career at Smith Barney, later joining Prudential Securities/Wachovia Securities. Now a financial advisor at Birmingham Investment Group, Guthrie resides in Trussville with his wife Carol.

“I feel a responsibility to promote what Auburn stands for – community, principles, faith and education, all of which contributed greatly to my success,” says Guthrie. “Auburn University is my school. I believe in the College of Engineering and the progress we are achieving to make Auburn one of the top 20 engineering programs in the country.”

**Ron Lipham**

*’74 Electrical Engineering  
President, UC Synergetic, Inc.*

Ron Lipham has 36 years of experience in the electric, telecommunication and broadband network engineering and construction field. He has worked in engineering, project management and utility project planning. His company, Utility Consultants, was named one of the top engineering firms in Atlanta in 2008 and merged with Synergetic Design that same year. He is a member of the executive council of the Auburn Alumni Engineering Council.

“I believe Auburn University Engineering gave me the best background to develop my career,” says Lipham. “It is incredible what Dean Benefield has done thus far, and his vision has enhanced and reconfirmed my love for Auburn. I have been blessed in business success, and taking the step forward to the Keystone Society was a natural progression. I look forward to seeing the continued successes of engineering and its impact.”
Allen Reed, ’70 Aviation Mgt.
Chairman and CEO (retired) General Motors
Asset Management and GM Trust Bank

As chairman and CEO, Allen Reed invested more than $160 billion in assets held by General Motors (GM) United States and foreign pension plans. He now serves on the board of directors for Temple-Inland Industries and Legg Mason, Inc. and is a trustee for Morgan Stanley Mutual Funds. He chairs the investment committee for both Aetos Capital Asia, a private real estate investment fund, and the Auburn University Foundation. In 2000, he was recognized as Innovator of the Year by Plan Sponsor magazine and received their Lifetime Achievement Award in 2006. He resides in Johns Island, S.C., with his wife Martha ’69.

“The experience I received in the College of Engineering provided the foundation for a career that took many unexpected and challenging turns,” says Reed. “Supporting the college as it provides similar experiences to students is a small return for the benefits I received at Auburn. An investment in Auburn Engineering offers the potential for students to build a better world for future generations.”

Mr. J. Edward Chapman Jr. ’56
Electrical Engineering
Assistant VP, Network Planning (retired)
BellSouth Telecommunications

Mr. William J. Cutts ’55
Industrial Management
President and CEO
American Tank & Vessel

Dr. Julian Davidson ’50
Electrical Engineering
President, CEO & Owner
Davidson Enterprises

Mr. Charles Edward Davis ’59
Electrical Engineering
Manager (retired)
Boeing

Mr. Charles Earley Gavin III ’59
Textile Management
Founder and Chairman of Board
MFG Chemical

Mr. Ralph B. Godfrey ’64
Electrical Engineering
Senior VP, E-Commerce (retired)
3COM Corporation

Mr. William George Hairston III ’67
Industrial Engineering
President and CEO (retired)
Southern Nuclear Operating Co.

Mr. Robert Harding Harris ’43
Aerospace Engineering
VP and General Manager (retired)
GE Services Co.

Mr. William F. Hayes ’65
Electrical Engineering
Executive Vice President (retired)
Texas Instruments

Maj. James M. Hoskins ’81
Electrical Engineering
CEO and Chairman of Board
Scitor Corporation

Mr. Oliver D. Kingsley Jr. ’66
Engineering Physics
Associate Dean
Auburn University
President and COO (retired)
Exelon Corporation

Mr. Minga (Push) C. LaGrone Jr. ’51
Industrial Management
Owner
Jellico Realty Company

Mr. John Andrew MacFarlane ’72
Mechanical Engineering
Manager, Technology Sales and Licensing
ExxonMobil

Dr. Michael B. McCartney ’57
Civil Engineering
President
McCarty Construction Company

Mr. Charles Douglas McCray ’73
Mechanical Engineering
President and CEO
Alabama Power Company

Mr. James D. McMillan ’61
Chemical Engineering
Washington Representative (retired)
ExxonMobil

Mr. Joe T. McMillan ’58
Chemical Engineering
President (retired)
ExxonMobil Coal & Minerals

Mr. William R. McNair ’68
Electrical Engineering
VP, Network Operations (retired)
BellSouth Telecommunications

Mrs. Olivia Kelley Owen ’77
Civil Engineering
Manager, Global Security
ExxonMobil

Mr. Howard E. Palms ’60
Electrical Engineering
VP, Network Operations (retired)
BellSouth Telecommunications

Mr. Oliver D. Kingsley Jr. ’66
Engineering Physics
Associate Dean
Auburn University
President and COO (retired)
Exelon Corporation

Mr. William Burch Reed ’50
Mechanical Engineering
President
System Controls

Mr. Charles Philip Saunders ’74
Electrical Engineering
Senior Vice President
Operations & Generations Services
Southern Company

Mr. Albert James Smith Jr. ’47
Mechanical Engineering
Partner (retired)
Bright Star Group Ltd.

Mr. Paul Joseph Spina Jr. ’63
Electrical Engineering
Owner and CEO
Spina Enterprises

Mr. Jeffrey Ira Stone ’79
Civil Engineering
President, Central Region
Brasfield & Gorrie

Mr. George Egbert Uthlaut ’54
Chemical Engineering
Senior VP, Operations (retired)
Enron Oil and Gas Company

Mr. T. Keith King ’58
Civil Engineering
Chairman, President and CEO
Volkert & Associates

Mr. William J. Ward ’55
Mechanical Engineering
Regional Manager (retired)
GE Southwest Power System Sales

Mr. Dwight L. Wiggins Jr. ’62
Mechanical Engineering
President (retired)
Tosco Refining Company

Mr. Walter Stanley Wolosz ’69
Aerospace Engineering
Chairman, President and CEO
Simulations Plus

Mr. Thomas Leonard Ray ’69
Electrical Engineering
President
Ray Engineering Group

Mr. William J. Cutts ’55
Industrial Management
President and CEO
American Tank & Vessel

Dr. Julian Davidson ’50
Electrical Engineering
President, CEO & Owner
Davidson Enterprises

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Mr. William F. Hayes ’65
Electrical Engineering
Executive Vice President (retired)
Texas Instruments

Maj. James M. Hoskins ’81
Electrical Engineering
CEO and Chairman of Board
Scitor Corporation
The Engineering Eagles Society consists of loyal supporters who make gifts of $1,000 or more each year to Auburn Engineering and its academic units. These gifts provide vital resources for creating and enhancing programs in which our faculty and students thrive. This society recognizes those whose gifts elevate Auburn Engineering to new heights and help continue our tradition of excellence.

1936
Brig. Gen. Bryghte D. Godbold

1937
Mr. George J. Burrus III*

1938
Mr. Currier Floyd Watts

1939
Col. James Boykin
Dr. Arthur Wiggins Cooper

1940
Mr. Clarence Fletcher Horn

1941
Mr. Morgan W. Bunch
Mr. M. Dow Sellers

1942
Mr. Robert Bruce Allan
Mr. & Mrs. William E. Cannady
Mr. William Hyatt Harwell*
Mr. & Mrs. Henry Frederick Rainey
Mr. Grady Lawrence Smith

1943
Mr. Robert F. Ellis Jr.
Mr. C. Warren Fleming
Mr. Robert Harding Harris
Mr. Nimrod W. E. Long
Mr. & Mrs. Sabert Oglesby Jr.
Lt. Col. Walter Buel Patton
Mr. & Mrs. James Madison Smith
Mr. Warren Stephen Sockwell
Mr. Leonard H. White Jr.

1944
Mr. William H. Lyons Jr.
Mr. Wayman Erskine Vanderford
Mr. James W. Waitzman Sr.

1946
Mr. & Mrs. Dame Scott Hamby
Mr. E. Erskine Hopkins
Mr. & Mrs. Dean Sessamen

1947
Mr. & Mrs. Robert B. Cater Jr.
Mr. Walter Wanzel Griffin
Lt. Gen. Robert Hails
Mr. William R. Hanlein
Mr. Creighton C. Lee
Mr. Harry C. Mickleboro Jr.
Mr. & Mrs. Albert James Smith Jr.
Mr. George W. Whitmire Sr.
Mrs. Margaret P. Luquire

1948
Mr. Sam B. Alison*
Mr. & Mrs. Leonard Dean Braswell
Dr. Jack Hutchinson
Mr. Franklin Lee Jones
Mr. & Mrs. Lionel L. Levy Jr.
Mr. Seth H. Mitchell Jr.
Mr. F. Brooks Moore
Mr. Richard Davison Quina

1949
Mr. William Hitchcock Cole
Mr. Thomas O. Davidson
Mr. Joseph E. Haley
Mr. & Mrs. Elmer Carlton Hill
Mr. & Mrs. Richard I. Kearley Jr.
Mr. & Mrs. Thomas M. Lowe Jr.
Mr. Charles R. Lowman
Mr. Norman R. McCannally
Mr. John F. Meagher Jr.
Mr. Lawrence Montgomery Jr.
Mr. & Mrs. Raymond T. Roser
Mr. & Mrs. Angelo Tomasso Jr.
Mr. & Mrs. Harold P. Ward
Mr. & Dr. Edward Thomas Williams

1950
Mr. Carroll L. Carter
Mr. & Mrs. Tillman G. Crane
Dr. & Mrs. Julian Davidson
Mr. Fred A. Duran
Mr. & Mrs. Alfred F. Gentle Sr.
Mr. & Mrs. Clarence H. Hornsby Jr.
Mr. James Hunnicutt
Mr. John M. McKenzie
Mr. Mervin L. Norton
Mr. William Burch Reed
Mr. Mack Allen Riley
Mr. & Mrs. Myron Jackson Sasscer
Mr. Joseph W. Wilson

1951
Mr. Arthur C. Daughtry
Dr. John Thomas Hartley
Mr. Harvey Ray Houston
Mr. Minga C. LaGrone Jr.
Mr. & Mrs. Leonard L. Mitchum Jr.
Dr. Richard G. Smith Sr.
Dr. Earle Carter Williams
Mr. Robert M. Winter

1952
Mr. Sylvester W. Brock Jr.
Mr. & Mrs. Harry Carl Handlin
Mr. Carver Gager Kennedy
Lt. Gen. & Mrs. Forrest S. McCartney
Mr. Everett W. Strange Jr.

1953
Mr. Walter R. Day Jr.
Mr. & Mrs. Bryan W. Johnson
Mr. Leonard A. Morgan*
Mr. John Albert Taylor

1954
Mr. & Mrs. Fred N. Beason
Mr. & Mrs. Thomas William Caine
Mr. & Mrs. James Harrison Carroll Jr.

* deceased
bold - new member
Mr. Donald Eugene Dennis
Mr. & Mrs. Lewis H. Eberdt Jr.
Mr. Sibley P. Gauntt
Dr. James Guy Mitchell
Mr. William R. Parish
Mr. Jerry D. Parker
Mr. & Mrs. Fred H. Rhinehardt
Mr. & Mrs. George Egbert Uthlaut

1955
Mr. & Mrs. William J. Cutts
Mr. & Mrs. James R. Evans
Dr. James L. Lowry
Mr. & Mrs. James J. Mallett
Mr. James Burton Odom
Mr. & Mrs. John S. Parke
Mr. J. Norman Pease II
Mr. Luther E. Pierce
Mr. Charles E. Sellers
Mr. John Thomas Walter Jr.
Mr. William J. Ward
Mr. William H. Whitaker Jr.
Mr. David E. Wingard*

1956
Mr. Jack Kelso Allison*
Mr. William H. Barlow
Mr. J. Edward Chapman Jr.
Mr. & Mrs. Walter L. Hannum

Mr. John P. Helmick Jr.
Mr. & Mrs. James G. Hughes Sr.
Mr. & Mrs. Edwin E. Ives
Mr. Charles Mathias Jager
Dr. & Mrs. Donald Jacob Spring
Mr. Vernon H. White
Mr. Edward F. Williams III

1957
Gen. Jimmie V. Adams
Mr. & Mrs. John R. Bray
Mr. & Mrs. John Wilford Brown
Mr. Stanley G. DeShazo
Mr. Vernon W. Gibson Jr.
Mr. M. Miller Gorrie
Mr. Bill M. Guthrie
Mr. & Mrs. T. Preston Huddleston Jr.
Mr. Raymond Bryant Jones
Mr. & Mrs. Fred W. Mace
Dr. & Mrs. Michael B. McCartney
Mr. Walter F. Morris
Mr. & Mrs. Roy A. Richardson

Mr. Johnnie V. Robertson
Mr. Jimmy L. Rogers
Mr. & Mrs. James S. Roy
Mr. Cecil C. Spear Jr.
Mr. & Mrs. James Donald Thornburgh
Mr. Michael Larry Tuggle

Mr. & Mrs. William J. Turner Jr.
Mr. Harry W. Watkins Jr.
Lt. Col. Ralph C. Wilkinson

1958
Mr. Charles Frederick Bach
Mr. William M. Brackney
Mr. & Mrs. Thomas D. Burson
Mr. & Mrs. Henry M. Burt Jr.
Mr. & Mrs. James H. Corbitt
Mr. Malcolm L. Gilchrist*
Mr. & Mrs. George Edward Gullatt
Mr. & Mrs. Roger R. Hemminghaus
Mr. & Mrs. Thomas Keith King Sr.
Mr. & Mrs. Harry A. Manson
Mr. & Mrs. Joe T. McMillan
Mr. James L. Murrell
Mr. & Mrs. David S. Neel
Mr. & Mrs. Eltie Ray
Dr. R. E. Simpson
Mr. Larry H. Warren

1959
Mr. Gerald B. Andrews Sr.
Mr. & Mrs. James O’Neal Ballenger
Mr. & Mrs. Roger J. Campbell
Mr. & Mrs. Clarence J. Chappell III
Mr. & Mrs. Charles Edward Davis
Mr. L. Ray Davis
Mr. Harry Arthur Edge Jr.
Mr. & Mrs. Charles Earley Gavin III
Dr. Samuel L. Ginn
Mr. George H. Godwin Jr.
Mr. & Mrs. John K. Jones
Mr. Gerald G. McGlamery Sr.
Mr. & Mrs. Royce Everett Mitchell
Mr. Wynton Rex Overstreet

Mr. Kenneth W. Ray
Mr. Albert Miles Redd Jr.
Mr. Axel Roth*
Mr. George M. Sewell
Mr. & Mrs. Leroy L. Wetzel

1960
Mr. & Mrs. Thomas Glenn Avant
Mr. & Mrs. William D. Bridges
Mr. & Mrs. Charles H. Carlan
Mr. & Mrs. Benjamin F. Carr Jr.
Mr. Elliott L. Dean
Dr. George John Dezenberg
Mr. Edwin W. Evans

Mr. John A. Hartley
Judge & Mrs. Albert O. Howard Jr.
Mr. Charles F. Manfre
Mr. & Mrs. William B. Millis
Mr. Howard E. Palmes
Mr. Earl B. Parsons Jr.

Kenneth Kelly ‘90
Electrical Engineering
Sales Manager, Georgia Power Company

Kenneth Kelly knows the value of an Auburn Engineering education. He remembers fondly his experiences working on the original solar car team. He hopes alumni will continue to give back to the college to ensure that programs like these provide unique opportunities for students to succeed.

A member of the Engineering Eagles Society, the Auburn Alumni Engineering Council and the AT&T Minority Engineering Advisory Board, Kelly supports the college through both finances and time. “It is my wish that others will become compelled to give to Auburn Engineering to strengthen our college and fulfill Dean Benefield’s vision of becoming a top 20 engineering institution,” says Kelly.

“There are three things that led me to contribute. First is the desire to express my appreciation for the opportunities that my Auburn education has afforded me. Second, I have had the opportunity to work with some leaders within Southern Company who demonstrate the importance of giving through their financial contributions and their time. Third, I am hopeful that my efforts will enhance the quality of life for students so that they become inspired to give after their experience at Auburn."
Linda Griggs '75
Industrial Engineering, Mathematics
Information Systems Lead, Southern Company (retired)

After nearly 31 years of working for Southern Company, Linda Griggs retired at the same time as her husband. Currently, they travel and volunteer for their church and the Alabama Symphony Orchestra. Griggs’ career at Southern Company focused on information technology. She spent several years in the product certification and delivery department and worked with a compliance program that monitors financial applications.

Griggs has supported Auburn Engineering for several years, but recently decided to increase her giving and join the Engineering Eagles Society. She believes it is important to support the college to keep it one of the best in the country. “By combining my gift with others given through the Eagles Society, I hope that the college can provide the ‘extra’ things that attract the best students, faculty and staff to Auburn,” she says. “For many years, universities have needed more funding to attract outstanding students, provide scholarships and hire qualified faculty members. I feel a responsibility to give, and I hope that my contribution, along with the match from Southern Company, helps the college achieve those things.”
Mr. & Mrs. William K. Newman  
Mr. Robert Lyons Prince  
Mr. & Mrs. David I. Rach  
Mr. & Mrs. Thomas Leonard Ray  
Mr. & Mrs. Joseph A. Saia  
Mr. & Mrs. Marvin Fred Terrell Jr.  
Mr. & Mrs. Walter S. Woltosz  
1970  
Mr. & Mrs. Malcolm N. Beasley  
Mr. & Mrs. Stanley E. Bryant  
Mrs. Veronica Smith Chesnut  
Mr. & Mrs. Joe D. Edge  
Dr. Martin C. Glover  
Mr. Tommy G. Hendrick  
Mr. & Mrs. Thomas Farrell Higgins  
Mr. & Mrs. James A. Humphrey  
Mr. W. Blake Jeffcoat  
Mr. James R. Lamkin  
Dr. Leon F. McGinnis Jr.  
Mr. George A. Menendez  
Mr. & Mrs. W. Allen Reed  
Mr. & Mrs. Edgar L. Reynolds  
Mr. & Mrs. John Albert Smyth Jr.  
1971  
Mr. & Mrs. William P. Anderson III  
Mr. & Mrs. Joseph F. Barth III  
Mr. William Scott Brown  
Mr. & Mrs. Phillip Franklin Moon  
Mr. & Mrs. John M. Morgan  
Mr. & Mrs. Christopher J. Peterson  
Mr. & Mrs. Thomas D. Senkbeil  
Mr. David Slobensky  
Mr. & Mrs. James Lewis Starr  
Mr. & Mrs. Robert Morgan Waters  
Mr. & Mrs. Joseph D. Weatherford  
1972  
Mr. & Mrs. Glen D. Atwell  
Dr. David Gilbert Burks  
Mr. Daniel M. Bush  
Mr. & Mrs. Joe Mark Chambers Jr.  
Mr. & Mrs. Richard I. Chenoweth  
Mr. & Mrs. James Allen Dowdy Jr.  
Mr. John W. Gibbs  
Mr. & Mrs. Edwin L. Lewis  
Mr. & Mrs. John A. MacFarlane  
Mr. Phillip S. McKinney  
Mr. & Mrs. Stephen R. Miller  
Mr. & Mrs. Max A. Mobley  
Dr. H. Vincent Poor  
Mr. Andrew J. Sharp Jr.  
Mr. & Mrs. Dewitt Uptagraft  
Col. James S. Voss  
Mr. & Mrs. R. Duke Woodson  
1973  
Mr. Charles S. Aiken Jr.  
Mr. Rafael E. Alfonso  
Mr. & Mrs. Felix C. Brendle Jr.  
Mr. & Mrs. John Wendell Chambliss  
Mr. & Mrs. Wendell Harris Duke  
Mr. Gregory Lamar Gibson  
Mr. Charles Douglas McCravy  
Mrs. Marsha H. Reardon  
Mr. Richard Young Roberts  
Mr. John Crawford Robertson  
Mr. & Mrs. Jerry Spurlock Jr.  
Mr. Walter Karl Vollberg  
Mr. James Wade Wesson  
1974  
Mr. Phillip E. Alexander  
Mr. & Mrs. Walter G. Crumpton  
Brig. Gen. & Mrs. Robert L. Davis  
Mr. Ray A. Dimit  
Capt. & Mrs. Davis R. Gamble Jr.  
Mr. Bruce E. Imsand  
Mr. & Mrs. Daniel M. Kennedy Jr.  
Mr. Ronald C. Lipham  
Mr. Robert W. Meinzen  
Mr. Charles Philip Saunders  
Mr. Roger L. Sollie  
Mr. William E. Warnock Jr.  
Mr. & Mrs. Gary L. West  
1975  
Mr. Pete L. Anderson  
Mr. Dennis W. Brown  
Mr. Robert Flourney Bynum  
Mrs. Linda Vanstrum Griggs  
Mr. Ronald Ugee Harris  
Mr. James Monroe Holley IV  
Mr. & Mrs. Joseph S. Johnson Jr.  
Mr. & Mrs. John H. Klingelhoeffer  
Mr. Thomas D. Lampkin  
Mr. William Tom Nabors  
Mr. William S. Pace Jr.  
Mr. Jack B. Porterfield III  
Mrs. Marion Scott Wear  
Mr. William B. Womack  
1976  
Mrs. Cynthia M. Anderson  
Mr. John P. Anderson  
Mr. & Mrs. Robert Jeffrey Benton  
Mr. & Mrs. Terry James Coggins  
Mr. & Mrs. Steven Craig Compton  
Mr. & Mrs. Michael A. DeMaioiris  
Mr. David E. Dixon  
Mr. & Mrs. Dennis W. Henderson  
Mr. Rodney Lon Long  
Mr. & Mrs. Wynne Lane Matthews  
Mr. Michael Alexander McKown  
Mr. William Lynn Moench Jr.  
Mr. Wayne B. Nelson III  
Mr. Kenneth A. Powell  
Mr. Randy Leon Smith  
Mr. & Mrs. Duane Dale York  
1977  
Mr. L. David Compton  
Dr. N. Jan Davis  
Mr. & Mrs. Melvin Lee Drake Jr.  
Mr. & Mrs. C. Houston Elkins Jr.  
Mr. Robert D. Hendrix II  
Mrs. Melissa Brown Herkt  
Mr. David R. Motes  
Mr. David K. Owen  
Mrs. Olivia Kelley Owen  
Mr. & Mrs. Frederick A. Pehler Jr.  
Mr. & Mrs. Harry Glen Rice  
1978  
Mr. Kazem Alereza  
Mrs. Amy Thomas Dobbs  
Mr. Robie L. Elms  
Ms. Kathryn L. Johnson  
Mr. Lum M. Loo  
Mr. Richard R. Miller  
Mr. & Mrs. Henry W. Poellnitz III  
Mr. William W. Rowell  
Mr. James Mark Tolar  
Mrs. Janet W. Varagona  
Mr. Michael J. Varagona  
1979  
Mr. Robert L. Bishop Jr.  
Mr. & Mrs. Wesley Wilkerson Diehl  
Mr. & Mrs. Dennis Steve Hill  
Mr. William A. Lovell Jr.  
Dr. Lewis Nathaniel Payton  
Mrs. Karen Harris Rowell  
Mr. Jeffrey Ira Stone  
Mr. & Mrs. David Carriell Sulkis  
Mr. Mark David Vanstrum  
Mr. Ralph Edward Wheeler  
Mr. & Mrs. Ken Curb Williams  
Mr. Christopher Stephen Woodie  
1980  
Mr. Robert Joseph Brackin  
Mr. & Mrs. William S. Bunch III  
Mr. Charles Phillip McWane  
Mr. Joseph Lamar Holliday  
Mr. & Mrs. Michael Edward Lanier  
Mr. John Timothy McCarty  
Mrs. Laura Ledyard McCarty  
Mr. Charles Donald Miller
Dr. Robert Mark Nelms
Mr. G. Nolan Sparks Jr.
Mr. Charles Chris Spraggins
Mr. & Mrs. Eugene Steele

1981
Mr. Douglas Alan Barnett
Mr. Craig S. Beatty
Mr. James L. Cooper Jr.
Mrs. Linda Figg
Mr. Phillip Alan Forsythe
Mrs. Margaret Long Forsythe
Mr. James Leslie Freind
Ms. Karen Hayes
Mr. & Mrs. Patrick D. Higginbotham
Maj. & Mrs. James M. Hoskins
Mr. William Byron Lee
Mr. Fred F. Newman III
Mr. Michael Arthur Rowland
Mr. & Mrs. Kenneth Abner Smith
Dr. & Mrs. James Michael Stallings

1982
Mr. Philip Randal Carroll
Mr. John R. Caskey
Mrs. Anne M. Cleary
Mr. Shawn E. Cleary
Mr. Timothy Donald Cook
Mr. Maury D. Gaston
Mrs. Gina Victoria Gloski
Mr. & Mrs. Bradley S. Kitterman
Mr. & Mrs. Matthew Ryan
Mr. Charles A. Shariett III
Mr. & Mrs. John Carlton Todd
Ms. Karen Louise Trapane
Mr. Scott Alan Yost

1983
Mr. & Mrs. Christopher T. Bell
Mr. Russell Lee Carbine
Mr. John E. Gipson
Mr. Robert Otto Haack Jr.
Mr. & Mrs. Joseph Austin Miller
Mr. John Paul Raispis
Mr. & Mrs. Terrell Higdon Yon III

1984
Mr. James B. Burrows Jr.
Mr. & Mrs. James M. Chandler III
Mr. Kenneth C. Horne
Mrs. Ann McCammy Johnson
Dr. & Mrs. Gerald G. McGlamery Jr.
Mr. Douglas E. Phillpott
Mrs. Tracy C. Phillpott

1985
Mr. Steven Glenn Cates
Mr. Timothy John Dwyer
Mr. & Mrs. John Newell Floyd Jr.
Mr. & Mrs. Jesse Duane May
Mr. Robert William Mueller
Mr. & Mrs. William B. Stone Jr.
Mr. Michael Kevin Swinson
Mr. & Mrs. Mark H. Yokley

1986
Mr. Charles David Conway
Mr. Gary Ross Godfrey
Mrs. Dara Parr Hosey
Mr. David McCoy Kudlak
Mr. George Lee McGlamery
Mr. Clinton C. McGraw
Mr. Trace Duane Parish
Mr. Martin John Stap
Mrs. Laura Crowe Turley

1987
Mr. David Allan Carr
Mr. Douglas Dwayne Dark
Mr. Jeffrey Curtis Harris
Mr. & Mrs. Michael Ray Ingram
Mr. & Mrs. David Emory Murphy
Mr. & Mrs. Thomas Odom
Mr. Kevin Andrew Partridge
Mr. & Mrs. Glenn Stewart Phillips
Mr. James Roberts
Mr. Steven E. Speaks

1988
Mr. & Mrs. J. Gregory Anderson
Mr. James Michael Arnold
Mr. & Mrs. Donald Edward Carmon
Mr. & Mrs. Frank Arthur Hamner
Mr. & Mrs. Scott Hayward Pearce
Mr. Patrick Jerome Quirk
Mr. Lee Wiley Richards
Mr. Richard Quina Sanchez
Mrs. Veronica Carole Sherard

1989
Ms. Ann Rebecca Guthrie
Mr. Thomas A. Harris
Dr. William Ernst Josephson
Mr. James Otto Mitchell
Mrs. Sarah Johnson Sanchez

1990
Mr. Brian Howard Hunt
Ms. Elaine Jimmerson
Mr. & Mrs. Kenneth Kelly
Mr. Rich Thigpen

1991
Mr. Ruskin Clegg Green
Mr. Randall Cory Hopkins
Mr. Bradley Bernard Johnson
Mr. & Mrs. David Troy Veal

1992
Capt. & Mrs. Jon Christian Bradford
Mr. John Phillip Caraway
Mrs. Christina F. Francis
Mr. & Mrs. Kenneth Craig Moushegian
Mr. & Mrs. James David Noland
Mr. William G. Whitcher

1993
Mr. Michael Boyd Deavers
Mrs. Constance S. Foster
Lt. Cmdr. Jerry Dean Foster
Dr. Andrew Palmer Hanson
Mr. & Mrs. Michael Thomas Hendrick
Dr. and Mrs. C. Robert Karcher
Mrs. Deana Smith Seigler
Mr. & Mrs. Robert W. Wellbaum III

1994
Mr. & Mrs. J. Travis Capps Jr.
Mr. Christopher J. Couch
Mr. & Mrs. John Marshall Croushorn
Mr. James Palmer Heilbron
Mr. & Mrs. Christopher J. Kramer
Mr. & Mrs. Wesley Shane Mize
Mr. Patrick Joseph Quick

1995
Mr. & Mrs. Diaco Aviki
Mr. Daniel Hunter Finch
Lt. Cmdr. Fredrick R. Lyda
Lt. Cmdr. Yvonne R. Lyda

1996
Mr. & Mrs. Jerry Davis
Ms. Ada Nicole Faulk
Mrs. Markell Heilbron
Mr. John Raymond Smith
Mr. Charles Alan Wilson

1997
Mr. Gilbert Fournelle
Mrs. Apryl Tarrant Mullins
Mr. Jerard T. Smith

1998
Mrs. Heather Vann Crozier
Mr. Kirk William Jones
Mr. Marvin Key Warren III
1999
Mr. George Blanks
Ms. Aimee Desiree Byrd
Mr. & Mrs. Sean Patrick Flinn
Mr. & Dr. Zachary B. Stacey

2000
Mr. & Mrs. Benjamin M. Carmichael
Mr. Jason Max Lee
Mr. Bryan Michael Lindsey
Mr. Marshall Chandler McLeod
Mr. Mark A. Spencer

2001
Mr. Brock Harrison Goodwin
Mr. & Mrs. Charles A. Marsh
Mr. Marcus Paul Peters
Mr. & Mrs. K-Rob Thomas
Mr. & Mrs. Gary W. Vaughan

2002
Mr. James Clayton Hamblen III
Mr. Albert William Spratley II
Ms. Emily Johnson Zieman

2003
Mr. Michael LeRoy Foley
Mr. & Mrs. Nathan L. Hanks
Mr. Trent Edward Williams

2004
Mr. Asim Ali
Mr. Nathan Dorris
Ms. Jennifer Goodman
Mr. Patrick L. Hanks
Mr. Scott L. Jernigan
Mr. Charles Richard Lawley
Lt. Timothy E. Lowery
Mr. Charles H. Ping III
Mr. James L. Killian III
Ms. Catherine M. Kolar
Mr. Charles Albert Machemehl Jr.
Dr. Nels Madsen
Mr. & Mrs. Joe Morgan
Mr. Woojin Park
Mr. Hunter Andrew Payne
Mrs. Tallulah Dunlap Quina
Mr. Greg Ruff
Dr. & Mrs. Peter Schwartz
Dr. Shirley Ann Scott-Harris
Mr. Robert Sherrill Jr.
Mr. & Mrs. Douglas W. Smith
Mrs. William and Samia Spencer
Dr. Charles Eugene Stroud
Mr. Jon Stryker
Ms. Ronda Stryker
Dr. Bruce J. Tatarchuk
Mr. Tony Terhaar
Dr. Robert E. Thomas Jr.
Mrs. Mary Lou Tolar
Mr. & Mrs. Thomas Hawley Tuberville
Mrs. Myrna Walker
Mrs. Mary Beth Weed
Dr. Ralph Hing-Chung Zee

Friends
Mr. & Mrs. Ted G. Achorn
Mr. Wicky H. Black
Mrs. Shirley A. Bradford
Mr. & Mrs. Thomas Mark Buford
Mrs. Elizabeth G. Caldwell
Mrs. Mary Caley
Mr. Richard A. Campbell
Mr. & Mrs. David E. Carnahan
Dr. Kai-Hsiung Chang
Mrs. Sandra K. Couch
Ms. Trudy Craft-Austin
Dr. James H. Cross
Mr. Calvin Cutshaw
Mrs. Mary Merritt Dawkins
Dr. Sarah H. Edwards
Mr. Alain Gallet
Dr. & Mrs. Charles H. Goodman
Mrs. Dorothy Chiles Hodnette
Mrs. Joi Hudgings
Mrs. Elizabeth Jones

Charles Goodman, Senior Vice President, Southern Company (Retired)
Patricia Goodman, Adjunct Faculty, Samford University
Jennifer Goodman ’04, Financial Analyst, Southern Power
Katie (Goodman) Hughes ’01, former Rate Specialist, Alabama Power

Though neither are alums, Charles and Patricia Goodman began supporting the College of Engineering when their daughters Katie and Jennifer attended Auburn. To the Goodman family, Auburn was the winning choice because of its engineering reputation. This was one of many reasons they joined the Engineering Eagles Society. “We are indebted to Auburn because of the great academic and social experience it gave our daughters,” says Charles. “We want to give back so future generations can have similar experiences.”

Because both daughters are industrial and systems engineering graduates, Charles and Patricia’s gift goes directly to that department. They both agree, “We hope that in some way it helps the department to maintain its high level of excellence.”

Jennifer became an associate eagle through her company’s matching gift program. She feels that investing in Auburn Engineering is essential for future growth and development. “It’s a good opportunity to give back so people who have the grades but might not be able to afford school have scholarships,” says Jennifer, who was also a recipient of engineering scholarships. “I want to help provide that extra support.”
Annual Scholarships

Some of Auburn Engineering’s donors choose to establish annual scholarships. These funds, which are given each year, are not maintained by principal or earnings and vary depending upon donor contributions. Annual scholarships given in 2008 include:

3M Undergraduate Scholarship Program
Alabama Textile Foundation Scholarship Fund
American Cast Iron Pipe Co. Scholarships
Boeing Aircraft Scholarships
Boeing Minority Scholarship
Brasfield & Gorrie Inc. Scholarship
Brian Camahan Memorial Scholarship
C. E. Gavin III Family Scholarship
Carroll T. Tolar Memorial Scholarship
Cellnet Technology, Inc. Annual Scholars
Chemical Engineering Scholarship
Chevron Oil Key
Chevron Scholarship - Mechanical Engineering
Chevron Scholarships - Electrical Engineering
Chris Couch Aerospace Scholarship
Chuck and Jo Moody Scholarships
Civil Engineering Scholarship
Cleary Family Electrical and Computer Engineering Scholarship
Comer Foundation Industrial Scholarship
Corbitt Scholarship Chemical Engineering
CSSE Industrial Advisory Board
Dennis W. Weatherby Academic Excellence
Danny G. Snow Scholarships
Donald and Dianna Carmon Annual Scholars
E. F. Williams Annual Scholarship in Engineering
Electrical & Computer Engineering Faculty
Electrical Engineering General Scholarship
Engineering Annual Scholarship
Fred W. Martin Aerospace Scholarship
Gerdau Ameristeel Annual Scholarship
Ginn Family Foundation Wireless Annual Scholars
Hess Scholarship in Chemical Engineering
HMB Alabama LLC. Annual Scholarship
ISE Fellowship
John & Rosemary Brown Chemical Engineering Scholarship
John E. & Pattie Gipson/Penta Research, Inc. Scholarship
Julia & Albert Smith Engineering Scholarship
Lee & Diane Drake Annual Scholarship
Philip A. Birdsong Study Abroad Scholars
Polymer and Fiber Engineering Scholarship
Pulp and Paper Curriculum Scholarships
Pulp and Paper Scholarship
R. Conner Warren Engineering Scholarship
Redd Family Foundation Annual Scholarship
Robert and Linda Waters Family Legacy Plan
Robert and Barbara Davis Scholarship
Rocketdyne Annual Scholarship
Rodney Bradford Scholarship Endow
Rufus E. and Peggy F. Simpson Scholarships
Seeds of Love/Willie T. Grant Annual
Stacey Family Annual Scholarship
SWE Sophomore/Junior Scholarships
Thomley/Alabama Power Foundation Annual
Tim Cook Annual Leadership Scholarship
Turner Construction Annual Scholarship
Vodafone US Foundation Scholarship
Weyerhaeuser Student Awards

Corporations and Foundations

In support of the pursuit of excellence that has become synonymous with Auburn Engineering, the following corporations and foundations contributed $25,000 or more in 2008:

Accenture Foundation, Inc
ADTRAN Inc.
Advantest America, Inc.
Advisor Charitable Gift Fund
Alabama Power Foundation, Inc.
Alabama Textile Education Foundation
AMCEE, Inc.
American Cast Iron Pipe Co.
American Gift Fund
American Tank & Vessel, Inc.
Boeing Company
Buckeye Technologies, Inc.
Carroll Air Systems, Inc.
Cellnet Technology, Inc.
Charles D. McCrary Family Legacy
Chevron Oil Company
ChevronTexaco Matching Gift Program
Endowments

Endowments are gifts that provide Auburn Engineering with perpetual income and are essential for the long term security and growth of the college. The Auburn University Foundation invests the principal of the endowed fund and only the allocated income is used to support programs and initiatives designated by the donor. New endowments established in 2008 include:

Alabama Textile Education Foundation Endowment
Captain Davis R. Gamble Jr. Scholarships
Chuck and Jo Moody Endowment
Civil Engineering Class of ‘75
Danny G. Snow Endowment
Douglas W. and Jill Smith Endowment
Dr. Terry E. and Patricia D. Lawler Endowment
George E. and Dorothy Stafford Uthlaut Endowment
John and Cynthia Mace Anderson Endowment
Larry E. Speaks & Associates Endowment
McGlamery Endowed Scholarship in Civil Engineering
Reed Endowed Professorship
Robert L. and Barbara Davis Endowment
Rufus E. and Peggy F. Simpson Endowment
Thomas D. and Frances W. Burson Endowment
Trent Williams Endowment for Scholarship
Wallace Dawkins Memorial Scholarship Fund
Walter and Virginia Woltosz Professorship
William B. and Elizabeth Reed Professorship

Planned Gifts

Planned gifts are pledged today to benefit the college in the future. These gifts include bequests, life income plans, charitable gift annuities, IRA distributions and gifts of life insurance. Planned gifts enable donors to manage their investments and leave a lasting legacy for Auburn Engineering. New planned gifts in 2008 include:

Mr. Sam B. Alison
Ms. Jennie D. Alley
Mrs. Lavinia Marie Blakney
Mr. William Gilbert Blakney
Mr. Dwight Truman Brown ’69
Mr. William E. Cannady ’42
Mrs. Lois Cannady
Mrs. Amy Thomas Dobbs ’78
Mr. Alfred F. Gentle Sr. ’50
Mr. John L. Rawls Jr. ’58
Mrs. Cindy Rawls
Mr. Robert H. Rountree ’49
Mr. Gary L. West ’74
Mrs. Kathy Ashcraft West ’76
Mr. William H. Whitalker Jr. ’55
Mr. Dwight L. Wiggins Jr. ’62

Cisco
Comer Foundation
Continental Automotive Systems US, Inc.
Cypress Semiconductor Corp
Dynetics, Inc.
Electric Machine Control, Inc.
Engent, Inc.
Exxon Mobil Corporation
Exxon Mobil Foundation
Fidelity Charitable Gift Fund
Ford Motor Company Fund
General Electric Foundation
Gerdau Ameristeel
Ginn Family Foundation
Ginn Family Trust
Harris Foundation
Hess Foundation, Inc.
Intel Corporation
Intermap Technologies, Inc.
International Paper
Jim Cooper Construction Co., Inc.
John & Rosemary Brown Family Foundation
John H. Watson Charitable Foundation
Johnson & Johnson
Julia & Albert Smith Foundation

Kemet Electronics Corporation
Kresge Foundation
Larry E. Speaks & Associates, Inc.
Lee Builders Inc.
Malcolm Pirnie Inc.
MeadWestvaco
Milliken Foundation
Minnesota Mining and Manufacturing Foundation, Inc.
Mountain Spirit Foundation
Northrop Grumman Electronic Sensor & Systems Sector
Packaging Corporation of America
Pratt & Whitney Rocketdyne, Inc.
Redd Family Foundation, Inc.
Reed Family Fund
Rock Tenn Company
Shaw Industries
Southern Company
Southern Company Services, Inc
Southern Nuclear Operating Co.
Teledyne Continental Motors Inc.
Teledyne Foundation
Texas Instruments Foundation
Total System Services Inc.
Vertec, Inc.
Vodafone Americas Foundation
In 2002, the Samuel Ginn College of Engineering began challenging graduating seniors to make a gift signifying their class year — $20.02; for the 2007-2008 school year, they were encouraged to make a gift of $20.08.

The Engineering Senior Class Challenge enables students to begin giving back to Auburn Engineering and increases their understanding of the importance of private support. The funds raised as part of the Senior Class Challenge support student activities and projects that create opportunities for future generations of students.

Leading by Example

During the 2007-2008 Senior Class Challenge, several faculty members agreed to match gifts made by the students. Dave Bevly, associate professor in the Department of Mechanical Engineering, was one who decided to match the gift of any mechanical engineering senior who participated.

“Basically, matching senior gifts kills two birds with one stone,” says Bevly. “It provides an avenue for me to contribute to the college which has been very good to me and to my career, while providing a motivation for students to give.”

“I think the best thing about the Senior Class Challenge is that it raises awareness of the importance of giving,” Bevly says. “It also encourages students to start a practice of giving back to the college through an initial step that isn’t financially restricting.”

Jonathan Ryan was one of 22 mechanical engineering students who gave to the Senior Class Challenge. Currently a mechanical engineering graduate student, Ryan works with Bevly and is a recent recipient of a National Science Foundation fellowship.

“I felt like I received an outstanding education here as an undergrad, so I thought giving back was the least I could do,” says Ryan. “I guess it was a way of showing appreciation for the job my professors had done, and everyone else who makes the college what it is.”

Ryan thinks it’s important for students to support their alma mater, if even in a small way.

“It’s a matter of pride. I’m proud to have graduated from the College of Engineering, and so it just seems right to give $20 back,” Ryan says. “Also, $20 isn’t an extremely large donation for an Auburn grad who gets an engineering job. Because an Auburn engineering degree goes such a long way, contributing a small portion back to something that I paid far less for than its actual worth only seems right.”
ENGINEERING
Spirit Store

www.eng.auburn.edu/spiritstore
Readers enjoy *Auburn Engineering* because it keeps them informed and connected to the college. And you can never be too young. Julia Caldwell, class of 2029, gets an early start on the magazine.

Please take a moment to complete this survey to tell us what you think of the magazine.

*Auburn Engineering Magazine Reader Survey*