Dear Friend of the College of Engineering,

This March 30, we will recognize some of our most accomplished alumni at the 41st annual Distinguished Engineers luncheon. Those honored will be David Barr ('71 BSME), group president of Baker Hughes; Dr. Kem Bennett ('70 PhD IE), dean of the College of Engineering at Texas A&M University; Will Hagood ('69 BSCE), senior vice president of HDR Engineering; and Harold Inman ('50 BSPE) past president, Mobil Exploration Norway.

We will also take the time at the luncheon to celebrate the life of another distinguished engineer: Dr. John Bradford, who passed away on January 5, 2007.

John Bradford ('42 BS ChE; '48 MS ChE) served as dean of the College of Engineering for 27 years, from 1955 to 1982. It was Dr. Bradford’s compelling vision of excellence for Texas Tech University and the college that shaped us into one of the best engineering programs in the nation. He recognized the importance of doctoral programs and research, and nurtured new areas of growth that have since brought us international acclaim such as in wind engineering and pulsed power. He aggressively hired the best faculty from across the nation. He advocated for legislative funding for technology-based initiatives that benefited West Texas and the nation. He was a significant leader on the campus, in engineering circles, and in the community.

But Dean Bradford influenced more than just a college and a profession ... he deeply influenced the lives of people, inspiring them toward excellence. Many of our alumni and faculty tribute Dr. Bradford with mentoring them, encouraging them, and helping them chart their course toward distinction.

Dean Bradford understood that excellence is built one person at a time. He knew that through compassion and commitment, a great college helps its students aspire to greatness, empowers its faculty achieve fame, and recognizes its alumni for their distinctions.
This March 30 we will continue Dean Bradford’s commitment toward the college’s people by celebrating his life, and celebrating the accomplishments of our newest distinguished alumni. We hope you can join us at the Distinguished Engineers luncheon at 11:30 a.m. in the Student Union Ballroom.

Texas Emerging Technology Fund

Texas Tech University is launching an initiative in applied nanophotonics to expand the already successful optoelectronics research in the Nano Tech Center into the cutting-edge field of nanophotonics. The university will receive $2 million from the Texas Emerging Technology Fund that will be matched by $2 million from Texas Tech University and $2 million raised from private funds. The $6 million total package will allow Texas Tech to attract three world-class researchers in nanophotonics. This initiative in nanophotonics will establish unique research capabilities, along with commensurate commercialization opportunities, within the state of Texas. More details will be forthcoming. [http://www.governor.state.tx.us/divisions/ecodev/etf/](http://www.governor.state.tx.us/divisions/ecodev/etf/)

Sergey Nikishin in the Texas Techsan

The accomplishments of Electrical and Computer Engineering Associate Professor Sergey Nikishin were featured in the January/February issue of the Texas Techsan, the university’s alumni magazine. His current work at the Nano Tech Center of the Jack Maddox Laboratory is primarily concerned with materials growth, such as AlN, GaN, and AlGaInN, and device fabrication of semiconductors. These materials may be used to produce deep ultraviolet light-emitting diodes and solar blind photodetectors.

Fall 2006 Enrollment

College of Engineering Fall 2006 Enrollment increased by 116 students, or 3.3 percent. Dean Pamela Eibeck attributes the increase to professional recruitment brochures, strong outreach activities, and positive messages to visiting potential students and

Distinguished Engineers

The 2007 Distinguished Engineers have been named: David Barr (’71 BSME), group president, Baker Hughes, Inc.; Kem Bennett (’70 PhD IE), dean, TAMU Dwight Look College of Engineering; William Hagood (’69 BS CE), senior vice president, HDR Engineering, Inc.; and Harold Inman (’50 BSPE), past president, Mobil Exploration Norway. You are invited to join us in honoring these engineers at a luncheon on Friday, March 30 at 11:30 a.m. in the Student Union Ballroom.
J. W. Wright Regents’ Chair

The College of Engineering is pleased to announce that Dr. Alan F. Jankowski has joined TTU as the J. W. Wright Regents’ Chair and professor of mechanical engineering. Prior to joining Texas Tech, Jankowski was in the Chemistry and Materials Science department at Lawrence Livermore Laboratory for 20 years. He pursued his graduate studies in the College of Engineering at Rutgers University as a Trustees Fellow for Graduate Study, a Louis Bevier University Fellow, and a Rutgers Graduate Scholar. He earned an MS (1982), MPh (1983), and PhD (1984) in mechanics and materials science with his thesis on phase transformations and mechanical properties of nanostructured materials. Welcome, Dr. Jankowski.

Engineering Ethics Day 2007

Engineering Ethics Day 2007 is scheduled for Tuesday, February 13. This event is the College of Engineering contribution to Texas Tech Ethics Week, a continuation of the campus conversation on ethics begun at a similar event last year. Students, faculty, staff, alumni, and guests are invited to join the conversation by attending the seminar on Tuesday, February 13 at the Allen Theatre (Student Union Building) from 3:00 p.m. to 5:00 p.m. Keynote speakers are Col. Joe Manous Jr., PhD, PE, academy professor of environmental engineering at the U. S. Military Academy, West Point, New York and David Wight (’64 BS petroleum), retired president and chief executive officer of Alyeska Pipeline Service Company in Anchorage, Alaska. More information about the program and guest speakers will be forthcoming.

Engineering Week

February 19 – 23 is Engineering Week. All facets of engineering will be highlighted with special events during the week including a research open house on Thursday, February 22. High school students from Lubbock and the surrounding communities as well as current Texas Tech students will be invited to attend to learn about engineering research, education, and careers. Watch the Web site for more information: coe.ttu.edu

Faculty Awards

Dr. Gregory B. McKenna, Horn Professor of Chemical Engineering, has been awarded the 2007 Founders’ Award from the Society of Plastics, Engineers Polymer Analysis Division.

Dr. Daniel Cooke,
professor of computer science, received the Technical Achievement Award from the Institute of Electrical and Electronics Engineers Computer Society at their awards banquet in San Diego on October 31. He was chosen to receive the honor for his advances in computer language research leading to computer language used in developing NASA’s new crew exploration vehicle.

**AT&T Scholars Program**

Continuing their four-year commitment to TTU students, the AT&T Foundation recently awarded each of eleven engineering students a scholarship. Recipients are: Antonio Acevedo, Ross Brown, Cameron Busby, Matt Case, William Hilliard, Jesus Martinez, Phebe Moralez, Nestor Natareno, Ernesto Navarrete, Christina Sosebee, and Cody Vasquez. Congratulations!

Pictured are some of the AT&T Foundation scholarship recipients.
Student Best Paper Contest

Daniel McGrath, a PhD student studying systems and engineering management through the Industrial Engineering department, received third place in the Student Best Paper contest in conjunction with the American Society for Engineering Management annual conference held in Huntsville, Alabama, October 25–28. The title of his paper is, "Addressing Independent Natural Variables for Production Modeling: A Case Study Involving Lightning"

Spring 2007 COE Job Fair

The Spring 2007 COE Job Fair is February 13, 14, and 15 in the Student Union Ballroom. Registration is full with 162 companies participating. Each day will have different companies represented so students are encouraged to attend each day in order to meet staff from several businesses.
Engineering Outreach Mentors

Fourteen **Engineering Outreach Mentors** have been named for the 2006/2007 academic year. Chosen from the best-of-the-best engineering students, these scholars will bring engineering expertise to local schools by working with K-12 students and teachers to bring about more understanding regarding the field of engineering. The Engineering Outreach mentors are: Michael Bird (electrical engineering/computer science); Samuel Chanjaplammootil (electrical engineering); Tasha Franklin (electrical engineering); Richard Geer (civil engineering/architecture); Tyler Hays (construction engineering technology); Larry Holloway (mechanical engineering); Garrett Johnson (mechanical engineering); Jacob McFarland (mechanical engineering); Amanda Mitchell (industrial engineering); Benjamin Reading (mechanical engineering); Kayla Sisk (civil engineering); Scott Smith (industrial engineering); Cyril Wafo (electrical engineering); and Keith Wyly (industrial engineering). Read more about these students and their goals at: www.engineeringoutreach.ttu.edu/mentors/2006

Donations

The **Black Family Foundation**, led by C. Robert Black ('58 petroleum), recently gave a gift to support the Black Family Dean's Chair. The proceeds provide scholarships for College of Engineering students with a demonstrated financial need and who maintain a GPA of at least 2.5.

**Will** ('69 civil) and **Karen** ('71 Hagood established a scholarship endowment bearing their name to benefit engineering students.

**Fred** ('70 electrical PhD) and **Ines Yeatts** established a new scholarship for electrical engineering students.

**Alan Smith** ('85 petroleum) created the Alan L. Smith Scholarship Endowment in Petroleum Engineering to benefit undergraduate students majoring in petroleum engineering.

Grants

**Electrical and Computer Engineering**

Industrial Engineering faculty **Drs. Terry Collins** and **James Simonton** received an award from the U.S. Department of Agriculture for the ICRC 2006 – International Cotton Research Center Program.
Drs. James Dickens and John Mankowski received an award from the Air Force Office of Scientific Research for “Advanced Railgun Materials Development.”

A proposal for over $500,000 to research exploration of novel nanomaterials: synthesis, characterization, and engineering by College of Engineering faculty has won a portion of the TTU Vice President of Research grant competition for FY07. Out of seventy-five proposals submitted requesting almost $29 million in funding, only three were funded. Faculty from the Mechanical Engineering department are PI Dr. Yanzhang Ma, Co-PIs Drs. Jharna Chaudhuri, Zhaoming He, and Alan Jankowski, and Dr. Guigen Li from the Chemistry and Biochemistry department.

Dr. Yanzhang Ma was also awarded funding from the U.S. Department of Energy/Carnegie Institution for “Development of a Laser-Heating System for Diamond Anvil Cell in the High Pressure Neutron Beam Line at Spallation Neutrons at Pressure in Oak Ridge National Laboratory.”

Chemical Engineering Assistant Professor Dr. Brandon Weeks received an award from the Applied Research Associates, Inc. for “Chemical Processing of particle Size Characterization for Energetic Materials.”

Simon NASA made a three-year award for “Novel Nanoparticle-Filled Matrices for Thermal Stress Reduction in Polymer Matrix Composites: Multiscale...
Modeling and Experimental Validation.” TTU chemical engineering professor Dr. Sindee Simon is the PI. Co-PIs are Drs. Greg McKenna, Raj Khare, and Jeremy Leggoe, along with Igor Sevostianov, a theoretician from New Mexico State University.

Alumni

Erna L. Grasz, ’85, and her husband Mark Newton, MSEE ’79, went to Tanzania to climb Mt. Kilimanjaro last year and in the process, their hearts were touched by the desperate need for the most basic health and education for the neighboring children and their families. During their visit to Africa, they met a local woman who was personally funding several schools in a village near the national safari parks. Erna and Mark felt compelled to investigate options to assist these efforts, and soon the Asante Africa Foundation, Inc. was born. The foundation works directly with local African communities to fund projects such as building infrastructure as well as aiding teachers by providing necessary supplies and sponsorship. One hundred percent of all donations go directly to the children, schools, and villages of Tanzania and Kenya. For more details about the projects and progress, visit the Web site (http://www.asanteafrica.org) for more details. You can also email at info@asanteafrica.org, or telephone Erna and Mark at 925–292–0245.

Rhyne Rundell, BS’99, MSI ’00, was working recently on behalf of Raytheon in Antarctica when he had the opportunity to bring a little Raider Pride to Mt. Erebus, the most active volcano in Antarctica.

Obituaries

John R. Bradford (’42 BS chemical; ’48 MS chemical) dean of the College of Engineering from 1955 to 1982, died on January 5. He received his bachelor’s and master’s degrees from TTU, and his doctorate in nuclear physics from Case Institute of Technology in Cleveland, Ohio. Dr. Bradford became dean in the College of Engineering at the age of 33. Under his leadership, accreditation was sought for all departments, graduate programs leading to a doctorate degree were developed, and a strong research program was begun. He was known as a significant leader on campus, in engineering circles, and in the
Dr. Bradford touched the lives of many engineering students, personally mentoring them and encouraging them to be bold in their career and personal aspirations. Dr. Bradford was named a Distinguished Engineer in 1974. Our condolences to his wife of 53 years, Betty, and daughters, Penny and Heather.

Arnold Maeker (’46 civil) died on January 9. He was an engineering and design consultant for Buckner Baptist Benevolencies and United Supermarkets. He was responsible for the design of Lubbock’s City Hall, among other professional projects. In his service on Lubbock’s Planning and Zoning Commission, he was a major driving force in recovery efforts after the 1970 tornado. The College of Engineering named Maeker a Distinguished Engineer in 1991. Above all these accomplishments, he was known as a gentleman. Our condolences to his wife of over 50 years, Reuby Tom.

Efrian Rodriguez was killed in a tragic automobile accident while home for the holidays in December. He was a senior in the engineering physics program. Our deepest sympathy to Efrian’s mother, sisters, and family at the loss of this young man with such a promising future.

Interview

ALUMNI HIGHLIGHT

1923 – The bill creating Texas Technological College was signed into law by Governor Pat M. Neff.

1923 – Cecil Pray (’31 civil) was 17 years old and ready to graduate from high school in Brownfield. He took some additional classes at Lubbock High School, and in 1925 began his college career at Texas Technological College as a member of the first class of 914 students when there were only a handful of buildings representing the campus, and very few cars because everyone walked wherever they had to go.

2006 – Cecil Pray celebrated his 100th birthday and reflected on TTU then and now.

As a young civil engineering student, Pray felt the freedom to drop in to say hi to President Paul Whitfield Horn and was always graciously received. He was present when the cornerstone for the current Administration Building was laid in 1924, and later he staked the ground in front of the building for the Double T bench which stands today in perfect proportion. The bench was a gift to the college by the 1931 graduating class.

Mr. Pray speaks fondly of the best professor he ever had – James H. Murdough. Dr. Murdough was such an effective teacher that Pray never forgot the joy of being his student. And the admiration was mutual because in a few years Murdough offered Pray an associate professor position in the civil engineering department at a salary of $4,800. But Pray said he couldn’t afford to take the job because it was less than he was earning in the marketplace.

His civil engineering degree took him to various military and private sector jobs around Texas and Oklahoma. He oversaw building of beacon towers and taxi ways for airports, and supervised construction of many of Lubbock’s brick roads. “The brick doesn’t wear out,” Pray chuckled. In 1953, he and two friends formed their own company, Pioneer Pavers. Pray feels that today’s engineering students are missing an important aspect of the discipline by not having to use a slide rule in their calculations.

Cecil and Mildred, his wife, were married for 67 years before her death. He said that even though he had to postpone his graduation by a couple years in order to make a living for his new bride, the delay was well worth it. The couple had a son who died at birth and two daughters. Their daughters gave them six grandchildren, all TTU alumni. One of his sixteen great grandchildren is a current TTU student.
The College of Engineering is proud to count Cecil Pray among their esteemed graduates.