48th Annual
Distinguished Engineer Awards Luncheon

Friday, April 11, 2014
11:15 a.m.
Sunset Ballroom, Overton Hotel and Conference Center
Lubbock, Texas
2014 Distinguished Engineer Awards Luncheon

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Welcome
Marshall Watson, Ph.D., P.E.
Roy Butler Chair » Petroleum Engineering Chair

Chancellor’s Remarks
Kent Hance
Chancellor » Texas Tech University System

Dean’s Remarks
Al Sacco Jr., Ph.D.
Dean » Whitacre College of Engineering

Lunch

Presentation of Distinguished Engineers

Kenneth Baker
(1942-2013)
Chemical Engineering » 1965
Master of Engineering » 1970

Lori Sisco Flansburg
Mechanical Engineering » 1978, 1984

Erna Grasz
Electrical Engineering » 1985

Louis Gritzo, Ph.D.

Victoria Richards Harkins, Ph.D.
Biochemistry » 1992
Civil Engineering » 1995, 1998

Wade Smith
Mechanical Engineering » 1989

Lloyd Whetzel
Electrical Engineering Technology » 1993

Closing
Kenneth Baker (1942-2013)

Distinguished Engineer » 2014
B.S., Chemical Engineering » 1965
Master of Engineering » 1970
Co-Founder
Baker & O’Brien, Inc.

Kenneth Baker was born in Brownwood, Texas. He grew up in Albany, Texas where he graduated from Albany High School. Baker was proud to be a member of the legendary football team that won the state championship for Albany in both 1960 and 1961. He received the prestigious Eagle Scout award at the age of 16 and enjoyed many years of scouting, both as a teenager and adult. Baker attended Texas Tech University where he graduated with a Bachelor of Science in chemical engineering in 1965. After graduation, he joined Celanese Chemical Company at its chemical plant in Pampa, Texas where he was involved in both process plant design and project management. A short time later, he and several colleagues discovered a mutual interest in a graduate degree program that could be completed off campus. They approached the management of several operating companies and a few colleges to explore options for such a program. In response, Texas Tech University and a group of petrochemical companies jointly established an off-campus graduate degree program. Baker obtained the first Master of Engineering degree in 1970.

Baker worked three years for the United States Environmental Protection Agency at its Research Triangle Park facility in Durham, North Carolina. There, he managed research and development projects on the reduction of air pollution from petrochemical refineries, chemical processes, and power plants. Three years later, Baker made a major career change and became an independent consultant as President of Greene & Associates, Inc., a Dallas-based energy consultancy. He became an acknowledged expert in accident investigations, property damage assessments, business interruption claims, and other incident related matters for the downstream petroleum, natural gas, and petrochemical industries. Baker believed that the enormous variety of professions and jobs in which one can apply an engineering education allowed one to work almost anywhere and contribute to society. Because of his accomplishments, he was recognized as the Dallas Area Outstanding Chemical Engineer in 1982.

In 1989, Baker left Greene to join Muse, Stancil & Co., another Dallas-based energy consultancy, as a vice president and director. There, he met John O’Brien, a fellow chemical engineer. In February 1993, Baker, along with his business partner John O’Brien, founded Baker & O’Brien, Inc., building it into a highly respected international energy consultancy. Baker & O’Brien, Inc. currently has offices in Dallas, Houston, and London, with clients around the globe. In February 2013, the company received congressional recognition from the United States Congress for 20 years of outstanding service. Over the last 30 years, Baker has provided damage assessment and business interruption evaluations for almost every major petroleum and petrochemical accident in North America. He has testified in state, federal, district, and U.S. bankruptcy courts, as well as local and international arbitrations. Baker was a member of the American Institute of Chemical Engineers for 52 years and the American Association of Cost Engineers for 43 years.

Baker was passionate about history and became an avid and sophisticated collector of antique maps. He was fortunate to have traveled all over the world but was always the happiest when he was home at “Baker Ranch.” Baker was a remarkable man with tremendous integrity, ethics, compassion, and humility. He left a lasting impression on all that knew him and loved him. He was a vibrant person with an unwavering spirit. The family considers him their “rock” and that there will never be another Ken Baker. Baker passed away on December 2, 2013, following a courageous battle against cancer. Baker was highly respected by his Baker & O’Brien colleagues, his clients, and his competitors alike. His passing is a loss not only to his family and friends, but also to his many associates in the petroleum, natural gas, and petrochemical industries, as well as the insurance and legal communities.

Throughout his professional career, Baker always supported his alma mater, Texas Tech University. He continued his commitment to education as a member of the Dean’s Council for the Edward E. Whitacre Jr. College of Engineering. Baker once said, “I would like to be remembered as one who has influenced a life and profession in a positive way. Helping others to achieve their ambitions and dreams is a very rewarding experience. Through a Texas Tech engineering education, one can reach for the sky, achieve anything, but stay grounded in practicality.” In Baker’s honor, the family has established the "Ken Baker Memorial Chemical Engineering Scholarship Endowment" at Texas Tech University.

Lori Sisco Flansburg

Distinguished Engineer » 2014
B.S., M.S., Mechanical Engineering » 1978, 1984
Lockheed Martin Fellow
Lockheed Martin Aeronautics

Lori Sisco Flansburg graduated from Caprock High School in Amarillo, Texas as the valedictorian in 1974. She then attended Texas Tech and earned a Bachelor of Science in mechanical engineering in 1978. Shortly after graduation, she joined Texas Instruments in Sherman, Texas, performing design engineering tasks to support the manufacture of ground support radar systems and laser guided missiles.

Returning to Texas Tech, she earned a Master of Science in mechanical engineering in 1984. Flansburg then worked for LTV Aerospace in Grand Prairie, Texas as the structural analysis lead for the design development of a major portion of the B-2 bomber responsible for schedule, budget, and technical performance of the stress analysis effort.

Flansburg joined Lockheed Martin Aeronautics in 1991. From 1991 through 1999, she was the F-22 Forward Fuselage Stress Technical Lead, responsible for the technical integrity of the Forward Fuselage Airframe. She supervised up to 28 other stress engineers to provide analysis support for development, drawing release and loads calibration testing of the F-22 forward fuselage. She also was the interface between the Forward Fuselage Analysis Team and other analysis organizations such as durability and damage tolerance, external loads, vibroacoustic, finite element models, and thermal analysis to ensure these engineering groups adequately supported the drawing review and release cycle.

Flansburg is currently a Lockheed Martin Fellow at Lockheed Martin Aeronautics in Marietta, Georgia, where she has responsibility as the technical coordinator for the Lockheed Martin Analysis Process manuals that consist of 10 analysis manuals on various structural analysis topics used by engineers throughout aeronautics. She is also responsible for the development of the Structural Analysis technical training curriculum and course materials. She personally teaches a number of technical training classes each year.

As a Lockheed Martin Fellow, Flansburg also consults on various programs across the Lockheed Martin Corporation, performs technical reviews, and provides share sessions in her field of expertise for the LM Mechanical Engineering Community of Practice.

Flansburg lives with her husband in Canton, Georgia where they have built a backyard observatory allowing them to share their mutual interest in astronomy and astrophotography.

She is a member of the MMPDS (Metallic Material Properties Development and Standardization) coordination committee. This body develops statistically based material properties, published under the authority of the Federal Aviation Administration, used by the aircraft industry for the design of aircraft structure. She also participates on ASTM (American Society for Testing and Materials) committees and is a member of AIAA (American Institute of Aeronautics and Astronautics) where she has served as a judge of papers for Student Competition for the Structures, Structural Dynamics and Materials Conference. She also judges for SAE Aero Design East® a yearly worldwide competition among university students for the research and design of radio-controlled aircraft.
Erna Grasz

Distinguished Engineer » 2014
B.S., Electrical Engineering » 1985
CEO
Asante Africa Foundation

Erna Grasz attended Texas Tech and graduated in 1985 with a Bachelor of Science in electrical engineering. She earned a Master of Science in electrical engineering and engineering management from Santa Clara University in 1990, and she has several executive leadership and management training certificates from Stanford, MIT Sloan, and UCLA.

As an experienced executive, Grasz established a reputation as a strategic leader with demonstrated success in diverse industries, including medical device, defense research, and semiconductor capital equipment. She previously worked as a program manager at Lawrence Livermore National Laboratory; general manager-vice president at KLA-Tencor; vice president of research and development for Tyco Healthcare - Nellcor, Mallinckrodt Division; and general Manager and VP of R&D at Philips Healthcare.

Grasz co-founded Asante Africa Foundation in 2006 with two African women she met while in Tanzania and Kenya on travel. In 2010, she left the corporate world to manage the organization full time. Her strong leadership and business skills are the foundation of her transition to non-profit work: gather a group of talented individuals, give them a vision and mission to rally around, and then the impossible is achievable.

As CEO of Asante Africa Foundation, she has transformed a three-country organization since its inception of one student in one community to one that currently impacts over 36,000 students and 39 communities in two countries and is poised for greater growth. Beyond the numbers however, Grasz has been the visionary for many of the organizations' innovative programs and practices that impact students and communities far beyond those who are in school.

Her strong belief in local staff and partnerships and developing local talent through concepts such as Tuka Pa Moja (we are together), Lead Together - Side by Side, and Pay it Forward are setting standards for how development organizations should engage with communities where they work. Grasz also initiated the highly sought after Leadership and Entrepreneurship Incubator which focuses on developing leadership talent in youth and preparing them for income generation initiatives. Knowing that the best tools and materials will have little impact on students if educators do not have the knowledge and skills, Grasz is also passionate about strengthening educators and what happens in the classroom.

Grasz leads global management teams in Kenya, Tanzania, U.S., and Canada. In 2013, she was the recipient of the Jefferson Award for public service and has spoken on numerous global panels on leadership, innovative education programs, and philanthropy.

She is an award-winning speaker with Toastmasters International and has published numerous articles on leadership, communication skills, and project management. Grasz also mentors young people locally as well as globally as part of her Pay it Forward philosophy.

Louis Gritzo, Ph.D.

Distinguished Engineer » 2014
B.S., M.S., Ph.D., Mechanical Engineering » 1988, 1990, 1992
Vice President and Manager of Research
FM Global

Dr. Louis Gritzo grew up in New Mexico and attended Los Alamos High School. In 1983, he enrolled at Texas Tech University, earning Bachelor of Science, Master of Science, and Doctor of Philosophy degrees in mechanical engineering and a minor in applied mathematics.

After completing his Ph.D. in 1992, Gritzo spent 13 years of his career at Sandia National Laboratories in Albuquerque, New Mexico, where he rose from technical staff member to manager. He oversaw a department of researchers, engineers, and technologists who provided computational and experimental research, development and application solutions in fire science and technology for the Department of Energy and a number of other federal agencies. He was responsible for the development of government programs in safety and security as well as leading the organization responsible for large scale thermal testing, including the design and construction oversight of a new Thermal Test Complex. He also was member of Sandia’s Advanced Concepts Group think tank.

In 2006, Gritzo relocated to Massachusetts to join FM Global, one of the world’s largest commercial property insurers. He is currently vice president and manager of research for FM Global, overseeing a division of scientists, engineers, and technicians who assess property risk and identify solutions to prevent loss at commercial and industrial facilities for clients including one-third of the Fortune 1000. He leads staff with computational and experimental expertise in fire, explosions, natural hazards – including windstorms, flood, and earthquakes – and risk and reliability analysis. Gritzo also oversees activities at FM Global’s $125-million, 1,600 acre Research Campus in West Glocester, Rhode Island, the world’s largest center for property loss prevention research.

He serves on the governing board of the Global Earthquake Model, as the chair of the research leadership team of the Industrial Research Institute, and on advisory committees for several universities. He has served as chair of the American Society of Mechanical Engineers (ASME) Heat Transfer Division Executive Committee and on the Research Advisory Committee for the National Fire Protection Association. In 2013, he received the 75th Anniversary medal from the ASME Heat Transfer Division. He is also a member of the Texas Tech University Department of Mechanical Engineering Academy.

A frequent speaker, writer and thought leader, Gritzo has been interviewed by national and trade media outlets such as the Wall Street Journal, Business Week, The Discovery Channel, Reuters, Bloomberg, Fast Company and Business Insurance.

Gritzo and his wife Ginger live in Wrentham, Massachusetts, and have three daughters, Leah, Kendra and Jessica. They are members of the Appalachian Mountain Club and the Massachusetts Beach Buggy Association, devoting volunteer time to ensure conservation, access, and stewardship of public lands. His hobbies include motorcycling, snowboarding, snowshoeing, hiking, fishing, and off-road driving.
Wade Smith

Distinguished Engineer » 2014
B.S., Mechanical Engineering » 1989
President and COO
AEP Texas

Wade Smith earned a Bachelor of Science in mechanical engineering from Texas Tech University in 1989, a Master of Business Administration from Abilene Christian University, and is a graduate of The Executive Program-Darden School of Business at the University of Virginia.

Smith began his career with the Central and South West Corporation (CSW) in 1989 as an engineer at the Fort Phantom Power Station in Abilene, Texas. He later worked for several years at CSW’s Okaunion Station and was plant manager at CSW’s Oak Creek facility.

He worked as the director of Florida operations for CSW Energy from 1995-2000 and managed the partnerships that owned two cogeneration facilities in central Florida. CSW merged with American Electric Power (AEP) in 2000. From 2000 to 2004, he was executive director of IPP and wind, and had responsibility for 12 independent power projects.

He then became director of gas turbine and joint venture - generation, where he was responsible for AEP’s combustion turbine-based generation in the east, the company’s wind generation facilities, and the jointly owned coal plants that were not operated by AEP.

Moving to AEP Transmission in February 2008, he worked as managing director of transmission, and then vice president of transmission engineering and project services. He was responsible for directing the capital service function in transmission, with responsibility for Transmission Asset Management, Transmission Projects Engineering, and the Project and Construction Management groups.

He also ensured positioning of the Transmission Engineering and Project Services organization to implement the organization’s growing capital plans developed in alignment with the company’s long-term transmission strategy, and aiding in developing vendor alliances in support of those capital plans.

Smith is currently president and chief operating officer for AEP Texas. As president, he oversees distribution operations serving more than 1 million AEP customers in south, central and north Texas as well as the operating unit’s safety, customer services, marketing, communications, community affairs, governmental affairs, and regulatory functions.

He is chairman of the board of directors for the United Way of the Coastal Bend, on the executive committee of the board of trustees for the Del Mar College Foundation, on the board of trustees of the Texas State Aquarium, a member of the board of trustees for Corpus Christi Medical Center, on the executive committee of the board for the Texas Taxpayers and Research Association, and he is past chairperson for the American Heart Association’s Corpus Christi Heart Walk.
Lloyd Whetzel graduated from Texas Tech University in 1993 with a Bachelor of Science in electrical engineering technology. He began his career in the semiconductor industry and became a Texas Tech student at the same time in 1976 after being accepted as a Texas Instruments (TI) Engineering Development Program participant immediately following high school. By his own admission, his introduction to semiconductors—a decision to work as a facilities mechanic installing the piping and equipment for the TI Lubbock wafer fab—was coincidental.

During his 22 years with TI, Whetzel eventually moved into the process engineering organization; his contributions in process engineering were the beginning of his career progression within TI. In 1998, TI made a decision to close the Lubbock facility. By that time, Whetzel had held engineering and management positions in process engineering, equipment engineering, and manufacturing; and was serving as the Thinfilm and Ion Implant module manager. Whetzel planned to move to TI’s Houston fab to become the Equipment Engineering manager in early 1999.

However, only days before shutting down the facility, an opportunity arose for TI to instead sell the Lubbock facility. Whetzel and a small group of other TI employees made the decision to leave TI, remain in Lubbock, keep the fab operational, and convert it to an analog/mixed-signal foundry. In less than a year, this group, aided by additional employees, established a new company, installed and qualified a semiconductor process technology, developed its own manufacturing software, achieved ISO certification, and began to deliver products.

The resulting organization, X-FAB Texas, Inc., has been in operation for 15 years, and now employs approximately 400 people, up from 35 employees on the first day of operations. More than 40 of the approximately 60 engineers at X-FAB Texas are graduates of Texas Tech. X-FAB Texas has built an excellent relationship with Whittacre College of Engineering faculty and students, providing internship opportunities for hundreds of students over the years. X-FAB Texas continues to partner with Texas Tech faculty on opportunities which are mutually beneficial.

Whetzel is now the president and CEO of X-FAB Texas, and has been a managing director of the company since its inception. He serves as a member of the board of directors for the Fab Owners Association. He also serves on the Dean’s Council for the Whitacre College of Engineering, has served on the Department of Construction Engineering and Engineering Technology Industrial Advisory Board, and has served on the Technical Advisory Board for Texas State Technical Colleges in Sweetwater and Amarillo.

Whetzel has been married for 36 years to his high school sweetheart, Betti, and they have four children, two sons-in-law, two grandsons, and a granddaughter. Their youngest son, Landon, is a sophomore electrical engineering major at Texas Tech. He has a passion for working with children that started with his own kids, coaching most of his children’s sports teams. He has been teaching a first grade Sunday school class at Bacon Heights Baptist Church for 15 years and serves as a counselor during the church’s children’s camp in New Mexico each year.

Whetzel’s other interests include golf, hunting, fishing, snow skiing, and enjoying the music of Stay Sane, a band that includes both of his sons. He is also an avid Red Raider sports fan.
Distinguished Engineers

1998
William "Bill" Horvay
David L. Hirschfeld
Raymond B. Ince
Thomas S. Moore
Steven W. Nancy
Garth Nash
Bill M. Sanderson
David E. Sherburt
Charles F. Winder

1999
Woodrow W. Hitchcock
Rick D. Husband
Herbert A. Mang
Jeff D. Morris
Harry L. Tredenick III

1996
Keh-Shew Lu
James H. Posey
Wolfgang Vogel
Margaret R. Walker
C. Clayton Yeager

1995
William G. Burnett
Patrick R. Gallagher
Bob L. Herd
Larry D. McVay
David G. Wight

1994
Raymond E. Goff
William R. "Bob" Herrin Jr.
Karen S. Hogg
Mary Jo Poirtexter
Louis "Jack" Powers
Arati Prabhakar

1993
Charles A. Bassett II
Jack L. Clem
L. D. "Buddy" Spes Jr.
J. Rex Vardeman
Gary B. Wood

1992
Jack L. Byrd
R. D. Cash
F. Max Merrell
James G. Renfro

1991
Arnold Maeker
E. Dave Newman
Albert A. "Pete" Smith
John Michael Sirinson
Bill G. W. Yee

1990
William A. Blackwell
R. David Damron
Robert E. Dragoo
Bill D. Helton
Allen P. Benton

1989
Chester A. Green
Jerry D. Holmes
Charles E. Houston
Joseph E. Minor
L. Homer Moeller

1988
Melvin Bobo
E. R. Brooks
Larrie F. Judd
H. Bennett Reeves
Noel D. Riemann

1987
George C. Beakley, Jr.
James A. McAuley
J. Garland Threadgill
B. Wyman Tedwell

1986
Gerald L. Farrar
T. Scott Hickman
Robert E. Hogan
George F. Watford

1985
Glenn C. Bandy
James W. Clifton
Jesse L. George, Jr.
Charles L. Harris
James W. Lacy
Robert J. Lewis
Russell H. Logan
Wendell Myers, Jr.
William D. Trammell
Edward E. Whitacre Jr.
Alpha M. Wiggins

1984
Larry C. Edmonson
Robert L. Hale
John C. Mihm
James P. Myers
Thomas J. Reeves
Kenneth W. Robbins

1983
Gary E. Frasher
Harley D. Henry
Leon Ince
E. Carlyle Smith Jr.
Joe A. Stanley
Walter D. Warren

1982
Larry R. Byrd
Paul B. Crawford
Robert B. Dyer
Joseph W. Luckett Jr.

1981
Roger K. Owen
Richard A. Robinson
Ben R. Stuart
Allan J. Tomlinson Jr.

1980
Charles Robert Black
James L. D'Acosta
Hugh H. Fewin
James Harold Yeager

1979
Scott G. Ardbuckle
Lynn H. Elliott
Norman M. Jasper
H. Alan Nelson

1978
Richard W. Hum
T. A. Rogers
Gerald R. Seemann
Horace L. Smith

1977
John S. Ball
Donald R. Clark
A. L. Kinchebe
Owal L. Lewis

1976
Charles Cudl Dikker
Dan T. McDonald
Evan E. Roberts
Bill J. Whitworth

1975
Mack Atcheson
Ray Butler
George Raymond Coffman
George W. Dupree
Herbert S. Enkline
Howard Houston Hinson
Guillermo E. Perea
Bill M. Springer
Louis D. Davidsen
David Charles Williams

1974
John R. Bradford
Henry H. Meredith Jr.
John W. Sheehan
R. L. Williams

1973
James W. Hamel
A. M. L. Kube
Paul C. Nall
James H. Wright

1972
J. Fred Bury
Arthur W. Busch

1971
Roy Butler
Earnest F. Gloya
Edwin B. Locke
Donovan Maddox

1970
Miles Roger Cipps
Lester Lynne Kilpatrick
Jack F. Maddox

1969
R. Trent Campbell
W. Lyle Donaldson
Dysart E. Holcomb

1968
W. Austin Davis
Charles W. Woolridge

1967
William W. Akers
Byron J. Bennett
Charles H. Felts
H. Elliott Knox

Read full biographies of all past Distinguished Engineer Award Winners at www.coe.ttu.edu/de
The measure of a college’s distinction and influence depends greatly upon the achievement of its former students and the positions they earn for themselves in their respective communities and fields of endeavor. To recognize some of the most outstanding former students of Texas Tech University, the Whitacre College of Engineering has established the Distinguished Engineer Award.

This year’s awards mark the 48th anniversary of the program, initiated by Dean John R. Bradford in the 1966-67 academic year.

Purpose and Philosophy

The purpose of this program is to recognize and honor former engineering students who have made significant contributions to society and whose accomplishments and careers have brought credit to the Whitacre College of Engineering at Texas Tech, and to the engineering profession as a whole.

This program does more than honor these former students. It spotlights the accomplishments of the Whitacre College of Engineering, and thereby increases the pride of former students, current students, faculty, and staff.

It likewise presents to the people of Texas and the nation tangible evidence of the effectiveness of the progress of engineering at Texas Tech.

In establishing this program, it was recognized that these awards were to be given for outstanding achievement both inside as well as outside the profession and that no compromises diminishing the significance of the awards would be made.

To be eligible for the Distinguished Engineer Award, an individual must:

• Be distinguished in his/her profession, life work, or other worthy endeavors, and have received recognition from contemporaries.

• Be a person of such integrity, stature, and demonstrated ability that the faculty, staff, students, and alumni will take pride in and be inspired by his/her recognition.

• Have demonstrated a continuing interest in areas outside of the fields of engineering such as to bring honor and prestige to the profession.

• Have been a student in the Whitacre College of Engineering of Texas Tech University.