KERMIT EARL BROWN

1923–2009

Elected in 1987

“For exceptional teaching of university and industry courses and the promotion of cooperative oil and gas drilling and production research.”

BY JAMES BRILL

KERMIT EARL BROWN, professor emeritus of petroleum engineering at the University of Tulsa (TU) and one of the world’s foremost experts on the production of oil and gas, passed away on December 10, 2009, at the age of 86.

He built his career around innovative ideas, applied research, and industry solutions. But Kermit’s love of teaching drove everything he did. Because of his passion for knowledge and his commitment to mentorship, many of his students have become the petroleum industry’s top executives and researchers and have propelled the industry to new heights.

Kermit was elected to the National Academy of Engineering in 1987 and was named a Legend of Production and Operations by the Society of Petroleum Engineers Journal of Petroleum Technology in 2009.

Known for his West Texas folksy demeanor, Kermit was born on a cotton farm in Haskell, Texas, on November 2, 1923. His small high school did not offer enough science and math to enroll in the local junior college, so Kermit taught himself from textbooks and passed the entrance exams on his own. Like many young men in the 1940s, he interrupted his schooling to serve his country, enlisting in the Army Air Corp where he became a World War II reconnaissance pilot flying in Europe.
When Kermit returned from the war, he accomplished two milestone achievements: he married Katherine Bunkley Brown in 1945 and enrolled at Texas A&M University, where he earned two bachelor of science degrees in mechanical engineering and petroleum engineering in 1948.

After graduation, he joined Stanolind Oil & Gas Company (changed to Amoco, and now BP America Production Company) as a petroleum engineer. He then worked for Garrett Oil Tools, Inc. (now part of U.S. Petroleum Equipment, a division of U.S. Oil Company, Inc.) and was a research engineer for the U.S. Atomic Energy Commission. But he felt a calling to expand his scholarship and enrolled at the University of Texas (UT) in 1955 as a teaching assistant and graduate student. He earned both his master's and doctoral degrees from UT and conducted groundbreaking field research that had a long-term influence on the field of artificial lift engineering.

In 1965, as an evaluator for ECPD (Engineers’ Council for Professional Development), now ABET (Accreditation Board for Engineering and Technology), Kermit visited TU to evaluate its petroleum engineering program. At that time the department did not have a full-time chairman, and Dr. E. T. Guerrero served as both dean and chair. Kermit criticized TU in his report for not having appropriate leadership in its petroleum program. When Guerrero read his comments, he asked Kermit: “Why don’t you provide the leadership?” Kermit took Guerrero up on the challenge and arrived at TU in early 1966 as chairman of the petroleum engineering (PE) department.

It is not an exaggeration to say that Kermit’s arrival changed the PE department at the University of Tulsa forever. He was a bold visionary and a risk taker. In 1966, TU had only three full-time faculty members, fewer than 50 undergraduate students, a fledgling Ph.D. program, and no funded research. Kermit’s first order of business was to initiate a research model that is now mimicked by many other universities. He developed the idea of forming a research consortium, where oil companies contribute a small amount of money every year to the university, and TU faculty and students conduct research that is of interest to the industry.
This allowed TU faculty to be grounded in what industry wanted and reduced the petroleum department’s pursuit of government funding for research. At that time it was a radical concept, and not a single petroleum engineering program in the United States had a research consortium. Under his leadership, TU started its first consortium—Tulsa University Drilling Research Projects—in 1966. Kermit established the new research consortium on TU’s North Campus, which housed a full-scale indoor drilling rig donated to the university by Standard Oil Company of New Jersey (now ExxonMobil).

Today, TU’s North Campus has 13 different consortia and joint industry projects covering various aspects of petroleum engineering, unique experimental facilities, and a worldwide reputation of conducting applied research.

With the research program established, Kermit turned his attention to increasing the quantity and quality of the undergraduate student body. He created the Petroleum Engineering Undergraduate Honors Program, which provided scholarship funding to deserving students and was sponsored by the petroleum industry. He traveled around the region presenting engineering seminars to high schools and recruiting the best and brightest students. Many of those early TU scholarship recipients went on to become chief executive officers, presidents, and vice presidents of major oil and gas producing and service companies or created their own successful independent oil and gas companies.

Because of its reputation for applied research and quality students, the petroleum engineering program at TU has been consistently ranked among the top five petroleum programs in the nation.

Kermit’s reputation in research led to his appointment as TU’s vice president of research in June 1968. But the pull of the classroom was too much, and after serving as VP for three years, he returned to teaching until he retired in 1987.

Even in retirement, Kermit found ways to reach out to a new category of students. He taught short courses around the world on his favorite industry topic—artificial lift. Wherever he taught, he was always selling TU, and his classes outside
the United States often brought international students into the TU graduate program. TU now has a booming international student body, which can often be traced back to Kermit’s relationship building overseas.

His indelible love of teaching brought him back to TU in his early 80s, when he volunteered to teach an undergraduate course, without compensation, for four semesters. The students loved his teaching and would wait outside Keplinger Hall, where the petroleum engineering classes were held, and offer to carry his briefcase and books to the classroom. He could often be seen in his office mentoring students after class and gently guiding them through the concepts.

Kermit’s remarkable career also brought him a great deal of recognition. The Society of Petroleum Engineers presented him with several of its international awards, including Distinguished Lecturer, John Franklin Carll Award, and Legend of Production and Operations Award. He also received many outstanding teaching awards, including his induction into the Oklahoma Higher Education Hall of Fame. In 1987 he received the ultimate recognition for an engineer, membership in the U.S. National Academy of Engineering.

As the man who made TU a multimillion-dollar petroleum research resource and the teacher who inspired multiple generations of energy industry leaders, Kermit Brown has left TU a lasting legacy for which the university’s alumni, faculty, students, and consortia members are forever grateful.

His daughter, Sandra Kay Brown Paschal, wrote: “Besides teaching and travelling, our father was an avid skier.” He is survived by his wife, Katherine; his son Stephen Wesley Brown and his wife, Peggy Brown, of Skiatook, Oklahoma; his daughter Sandra Kay Brown Paschal and her husband, Wade, of Tulsa; his son Robert Michael and his wife, Lisa, of Austin, Texas; and his son David Earl Brown of Tulsa. Kermit had eight grandchildren: Stephen and Bryan Brown; Trey Paschal; Katherine Fulda and Nikola Paschal; and Jessica, Melissa, and Michelle Brown. He had four great-grandchildren.