COLLEGE NAMED FOR ALUMNUS CURTIS MEWBOURNE
# TABLE OF CONTENTS

- **02 College News**
  - Renovations ........................................... 2
  - Welcome Back ......................................... 3
  - New Directors ......................................... 4
  - Faculty Searches ..................................... 6
  - Trailblazer ............................................ 7
  - New Faculty ........................................... 18

- **8 Oklahoma**
  - Geological Survey

- **10 Conoco Phillips**
  - School of Geology and Geophysics

- **12 Mewbourne School**
  - of Petroleum and Geological Engineering

- **14 Sarkeys Energy Center**
  - Research Institutes: Overview

- **16 College Named**
  - for Curtis Mewbourne

- **19 Alumni**
  - Alumni Interviews ................................. 19
  - Development Update .............................. 21

---

**Earth & Energy**

*University of Oklahoma Mewbourne College of Earth and Energy*

**Designer:** Old Hat Creative

**Photographers:** Shervin Williams and Associates Commercial Photography, Inc., Spooner Magazine (Kenah Nyanant photo), Norman Porty Pics (5000th graduate photos), Western History Collections, University of Oklahoma Libraries (OGS photos), Bob Taylor

**Contributing Writers:** Niki Chapin, Rachel Clauson, Laura Dean, Douglas Elmore, Linda Goeringer, Sonya Grant, Larry Grillot, OU Public Affairs, R. Paul Philp, Candeh Powell, Chandra Rai, Allison Richardson, Joanna Robinson, Connie Smith

This publication, printed by the Mewbourne College of Earth & Energy, is issued by the University of Oklahoma. 6000 copies have been prepared and distributed at no cost to the taxpayers of the State of Oklahoma. The University of Oklahoma is an equal opportunity institution. The mission of the University of Oklahoma is to provide the best possible educational experience for our student through excellence in teaching, research and creative activity, and service to the state and society.

**For more information, contact:**

University of Oklahoma
Mewbourne College of Earth & Energy
100 East Boyd Street, Room 510
Norman, OK 73019-1006

**Phone:** (405) 325-3821

**Fax:** (405) 325-3180

**Website:** http://www.cee.ou.edu

**Email:** cee@ou.edu
Dear Alumni and Friends,

As I look forward to the second full academic year of the Mewbourne College of Earth and Energy, I continue to refine my goals and vision for this great college. For the next one to two years, my goals are simply to continue to build a strong foundation for the College of Earth and Energy and make sure our students continue to receive a quality education.

However, there are a few specific efforts that will have more emphasis. These include, but are not necessarily limited to:

- Recruiting of petroleum engineering faculty will be a priority, but we also will have additional recruiting activities across the college
- Re-emphasis on the Natural Gas Engineering program
- Implementing the transition of various support services, such as IT (Information Technology)
- Finalizing and initiating plans for the bulk of the Sarkeys Energy Center renovations and remodeling
- Working with university administration to address matters of intellectual property that affect the College of Earth and Energy
- Continuing to support activities associated with the capital campaign
- Continuing to work to develop a forward strategy for Sarkeys Energy Center, the research organization, as a part of the new college
- General day-to-day administration and community outreach
- Involvement in various areas of service to the university, such as the Governor’s advisory committee for biofuels, pre-screening committee for honorary degrees at OU and the Presidential Professorship committee.

I have been gratified by the support (financial and otherwise) by our alumni, industry and other friends of OU, and university administration. It is with this support that the Mewbourne College of Earth and Energy will continue to work toward being an academic leader for end-to-end energy education and basic research. While this implies a focus on exploration, exploitation and extraction processes in petroleum geosciences and petroleum and geological engineering, it also requires that we continue to provide close ties to engineering fundamentals and the science base in geology and geophysics.

I look forward to continuing to work with you to move the Mewbourne College of Earth and Energy forward. As always, I thank each of you for your support for the University of Oklahoma.

Sincerely,

Larry R. Grillot
Dean, Mewbourne College of Earth and Energy • Lester A. Day Family Chair
Sarkeys Energy Center Director
Renovation of the 15-story Sarkeys Energy Center Tower is critical to creating a cohesive and progressive Mewbourne College of Earth and Energy. The renovation also will upgrade the 21-year-old facility to accommodate modern needs for information technology, disability access, computer labs and research laboratory facilities. This includes such projects as converting existing chalkboards in all classrooms to computer-driven “smart boards,” installing or upgrading multimedia equipment in the classrooms and providing students with first-class computer laboratories. This renovation is projected to cost $8.5 million.

The Energy Center atrium, located at the heart of the Energy Center tower, will get a significant remodel as part of the proposed $8.5 million renovation of Mewbourne College of Earth and Energy facilities. A key element of this renovation will be to create two important new student spaces: the Mewbourne College of Earth and Energy Student Services Center and a new Student Study Area. The design in both areas features woodwork, glass and textures reflective of the college’s image. A gift of $1 million is being sought to name these two areas. To honor such an important gift, the university will work closely with the donor to develop appropriate recognition plaques and materials.

**Student Services Center**
This expansive and attractive 655-square-foot facility serves as an important resource for prospective students and parents and for current students seeking advice about academic schedules, scholarships, internships and career opportunities. The center is central to the college’s goal of providing a high level of personal guidance and support.

**Student Study Area**
This functional and comfortable 4,000-square-foot study area is designed to give Earth and Energy students a central place in which to study and work. It also is designed to accommodate team-learning activities.
Mewbourne College of Earth and Energy held its first Welcome Back Barbecue Aug. 29th, under beautiful blue skies on the Sarkeys Energy Center Plaza. The smell of barbecue wafted through the air and music played, as students, faculty and staff mingled, enjoyed wonderful food and browsed information tables hosted by student officers and members of the many student organizations affiliated with the college. The barbecue also was an opportunity to unveil the highly anticipated 2007 College T-shirt. This year’s design, featuring the college logo on the front, the school names on the back and the interlocking OU on the sleeve, was given away along with highlighters at the Mewbourne College of Earth and Energy Student Services table. The Welcome Back Barbecue was a huge success and will definitely become a new Mewbourne College of Earth and Energy tradition.
Mewbourne College of Earth and Energy Announces Two New Directors

ConocoPhillips School of Geology and Geophysics

R. Douglas Elmore, a graduate of the University of Michigan (Ph.D., 1981), Duke University (M.S., 1976) and Earlham College (B.A., 1974), is the new director and the Eberly Chair Professor of the ConocoPhillips School of Geology and Geophysics, as well as the associate provost for the university. Prior to being director, he held the Robert and Doris Klabzuba Chair of Geology.
Elmore is a sedimentologist whose research interests are focused on diagenesis of both carbonates and clastics. He is particularly interested in determining the timing of diagenetic events and is currently working to develop a paleomagnetic/geochemical approach for dating diagenetic events.

Elmore teaches undergraduate Sedimentology and Sedimentary Petrography and an introductory level course called Earth Systems of the Southern Plains, which integrates indigenous knowledge into the geosciences and uses Native American art as a vehicle of learning. He also teaches graduate Paleomagnetism and Clastic Facies as well as a number of seminars.

His goals for the ConocoPhillips School of Geology and Geophysics include filling faculty vacancies; strengthening the geophysics program; increasing both undergraduate and graduate enrollments; and enhancing the educational experience of our students by upgrading our laboratories. During the past year, CPGG hired three new faculty members, including Kurt Marfurt, who holds the Schultz Chair in Exploration Geophysics; and two assistant professors: Megan Elwood Madden and Andy Madden. Currently, the school is in the process of searching for a structural geologist and a computational geoscientist to help in the SCIF lab. Earlier this year CPGG hired an undergraduate recruiter, Gail Holloway. Last year CPGG increased graduate stipends to be competitive with other schools and to recruit top quality graduate students. In fall 2007, 23 new graduate students started their programs in CPGG.

Mewbourne School of Petroleum and Geological Engineering

Chandra S. Rai, a graduate of the University of Hawaii (Ph.D., 1977), Indian School of Mines (M.S., 1971 B.S., 1970), is the new director of the Mewbourne School of Petroleum and Geological Engineering, as well as the Eberly Family Chair Professor.

Following a 17-year career at Amoco Production Co., Rai has been a professor at OU in the Mewbourne School of Petroleum and Geological Engineering since 1999. His current research interests are petrophysics, reservoir characterization and rock and mineral physics. Carl Sondergeld and he are co-principal investigators of the Experimental Rock Physics Consortium, established in 2000 and is funded by eight exploration and production companies.

He teaches several undergraduate and graduate courses – Formation Evaluation With Well Logs, Reservoir Fluid Mechanics Lab, a capstone course, Seismic Reservoir Modeling, and Advanced Reservoir Engineering.

His goal for the Mewbourne School of Petroleum and Geological Engineering is to provide the best educational experience to the student, such that they are in demand by the exploration and production companies today and in the future. Immediate challenges for MPGE are to fill several faculty vacancies and to upgrade and expand undergraduate teaching labs.
Each year, Engineers Without Borders, which is not just for engineers, selects a project in a developing country. The project allows students to put into practice some of the engineering principles they have learned. Upon completion, it also enhances the standard of living in the community and positively impacts the local residents. This year the group traveled to Pradera, a small community several hours from Guatemala’s ancient city, Antigua, and one hour each way from their base in Nueva Concepcion. Their mission: to bring fresh drinking water to the community from an underground spring located approximately one-half-mile up the heavily forested mountain. This project was important because many of the people of the village experience regular bouts of diarrhea and other waterborne illness due to lack of fresh water. Because of EWB, the people of Pradera had fresh water in the center of their community, which can now be turned on and off at their convenience.

In a recent interview, Linda Goeringer, Mewbourne College of Earth and Energy Student Services Coordinator, shared some thoughts on her experience: "It was an honor to be invited by the University of Oklahoma’s chapter of Engineers Without Borders to serve as their first-aid specialist and photo journalist in Guatemala this past July. This experience was both humbling and moving as I observed the resourcefulness and resilience of the people of this small village. The students and the villagers worked side by side exchanging knowledge: the students were given the opportunity to apply what they have learned in the classroom and the villagers demonstrating their own techniques. It was such a privilege to be given this opportunity and, hopefully, I will be invited to participate again next year."

The 2007 group consisted of nine students, Director of Civil Engineering and Environmental Science, Robert Knox; School of Civil Engineering and Environmental Science board member, Steve Vance; and Goeringer.

## Multiple Hires Sought in Petroleum Engineering

**Petroleum Engineering**

The University of Oklahoma Mewbourne School of Petroleum and Geological Engineering invites applications for five faculty positions at all levels from assistant professor to endowed chair professor.

Qualified applicants are requested to submit a letter of intent with three examples of publications, resume, and the names of three references to:

---

**Chair, Faculty Search Committee**

The University of Oklahoma

Mewbourne School of Petroleum and Geological Engineering

100 East Boyd, Sarkeys Energy Center T-301

Norman, OK 73019-1006

---

The University of Oklahoma is an Affirmative Action, Equal Opportunity Employer. Women and minorities are encouraged to apply.
Mewbourne’s Dedication Earns Trailblazer Award

The 2007 Trailblazer Award recipient, Curtis W. Mewbourne, is recognized by his family, friends and peers Nov. 2nd in the Oklahoma Memorial Union Molly Shi Boren Ballroom. Presenting Mewbourne with a plaque are James C. Day and OU President David L. Boren. Mewbourne follows in the footsteps of the 2005 and 2003 recipients, the Lloyd Noble Family and John Nichols.

Established in 2003 at the University of Oklahoma Sarkeys Energy Center and presented biannually to recognize a lifetime commitment to the development of the energy business in Oklahoma, the Trailblazer Award is given to an individual that has contributed in enhancing the quality of life with significant contributions and unselfish recognition through integrity and ethical business endeavors. This award is presented to honor the exceptional individuals in the energy industry who blaze a trail for others to follow, individuals like 2007’s recipient, Mr. Curtis W. Mewbourne.

The Oklahoma Trailblazer Award recognizes those individuals who have courageously pioneered operational or scientific practices, procedures and developments for the energy industry, thus enhancing the quality of life for the citizens of Oklahoma, the nation and the world. Oklahoma Trailblazers exemplify the highest standards, personal integrity, ethics, and service to others. The recipient is an exceptional ambassador for the energy industry and is a role model for future generations to emulate. The award goes to an individual who has demonstrated a lifetime commitment to the development of Oklahoma’s future in the terms of people, facilities, organization and employment.

Curtis W. Mewbourne is most worthy of this award. Mewbourne, originally from Shreveport, La., received a bachelor of science degree in petroleum engineering from the University of Oklahoma in 1958. After serving as an officer in the U.S. Army, Mewbourne began working in the petroleum industry and with his last paycheck, founded Mewbourne Oil Co. in 1965. In 1982 he endowed the Mewbourne Professorship in Petroleum Engineering. It was the first such endowed position in the school as well as in the College of Engineering. He is a founder of the Sarkeys Energy Center, a lifetime member of the University of Oklahoma Alumni Association, has served as a trustee of the University of Oklahoma Foundation, and was the first chairman of the Industry Advisory Board for the School of Petroleum and Geological Engineering. He was honored in 1992 by the College of Engineering as a Distinguished Graduate.

Mewbourne Oil Co. stands alone as the largest supporter of student scholarships and internships over the past 20 years. Mewbourne is director and vice president of the Texas Oil and Gas Association and the U.S. Oil and Gas Association, and he has served as a board member of publicly owned companies in the petroleum and transportation businesses.

On May 5, 2000, the OU Board of Regents approved a new name for the school, the Mewbourne School of Petroleum and Geological Engineering, in honor of alumnus and industry leader Curtis W. Mewbourne. Mewbourne and his family have made the largest gift in College of Engineering history, resulting in a fully endowed school and first named school in the OU College of Engineering. In recognition of his longtime support, OU named the Mewbourne School of Petroleum and Geological Engineering in his honor.

Mr. Mewbourne continues to operate Mewbourne Oil Co., located in Tyler, Texas privately for the benefit of his family. He is a true example of the Oklahoma Trailblazer spirit.
The Oklahoma Geological Survey has the distinction of being the only such agency mandated in a state constitution. The founders believed that natural resources were so vital to Oklahoma’s future that they needed a Constitutional provision for an agency to investigate the state’s land, water, mineral and energy resources and disseminate the results of those investigations to promote the wise use consistent with sound environmental practices. The Survey was established in the 1907 Constitution and the enabling act was signed into law in 1908.

Charles Newton Gould, the first Survey director, came to Norman, Indian Territory, in the summer of 1900 to do field work with the Territorial Geological and Natural History Survey, then return to Norman to found a one-man department of geology in the fall. Gould’s drive, determination and relentless energy made him the perfect person to lay the groundwork for the school and, when the time came, to foster what would become the Oklahoma Geological Survey. He saw the need to blend academics, industry and public needs to study, promote and conserve the natural riches.

The Survey’s second director came in 1908 to lead a field party and teach geology. When Gould’s dual position as head of the Geology Department and director of the Survey became too much to manage, Daniel Webster Ohern took over the department then became director of the Survey in 1911. He left in January 1914 to enter the oil business.

Charles W. Shannon began as an OGS field geologist in 1911, but found himself serving as director in 1924, and Gould returned to the helm as director until 1931, when appropriations were again interrupted by the ever-colorful Gov. William H. Murray. To ensure that geological studies and mapping would continue in spite of the whims of politics, OGS was put under the direction of the University of Oklahoma Board of Regents.

Robert H. Dott’s years as director, from 1935 until 1952, were times of great needs and great changes brought on by the Great Depression and World War II. Dott believed that Oklahoma’s resources needed to be put to use in manufacturing to bring dollars into the state more than the raw materials alone.

Dott established a core and sample library in cooperation with the school and located it in an old Navy barracks on South Base. This building was in use until the new Oklahoma Petroleum Information Center was opened in north Norman in November of 2002.
William E. Ham, the only native Oklahoman so far to head the OGS, was acting director from 1952 to 1954. He served with the OGS from his appointment in 1941 until his sudden and unexpected death in 1970. Ham was noted for his extensive output of publications, and was “the” expert on the Arbuckles and carbonate rocks.

Carl Colton Branson joined the OU School of Geology in 1950 and was director of the school and the OGS from 1954 until 1963, then OGS alone until 1967.

Branson supplemented OU’s geology library with Survey contributions based on an exchange program with other state and federal organizations. This led to a great increase in the library holdings, and the enrichment program continues to this day.

Armed with three degrees from the University of Texas, Charles John Mankin joined the OU faculty as an assistant professor in 1959 and worked part time with the Survey. He became director of the school in 1964, and then OGS in 1967. The school and the OGS again were under one director until 1977, when Mankin stepped down as director of the school.

In 1978 he became director of OU’s Energy Resources Center (later the Energy Resources Institute), and in November of 2000 was appointed director of Sarkeys Energy Center, serving in that capacity until 2006 when the Energy Center was incorporated into the duties of the dean of the newly created CEE. Mankin is a Regents’ Professor at OU and has served on boards, committees, councils, consortiums and commissions for governors, presidents and secretaries of energy; served on study panels of the National Research Council; and held positions in many professional organizations.

During Mankin’s years, the Survey has continued its basic research and mapping, but has modified programs to fit current needs. In 1978 he found money to keep open a seismic station near Tulsa that Humble Oil had given to OU in 1965; the Geophysical Observatory still operates, and is well known for its earthquake data worldwide. In the 1980’s, Mankin was a leader in the effort by the Association of American State Geologists to get funding for basic mapping programs in the United States. Today the STATEMAP program continues, and new quadrangle maps are added on a continuing basis. The most recent OGS acquisition is the OPIC facility in north Norman that houses the core library, the well-data library, publication sales and a conference center.

While all this was happening, the OGS continues its basic mission of research and public service.
Excerpts from a tribute to Charles M. Gilbert delivered by R. Paul Philp at Gilbert’s retirement reception, May 4, 2007

I can recall the first time I met Charles at a symposium in the mid 1980’s. I remember at that meeting hearing this guy from Texas A&M start talking about granites and all sorts of things that made little sense to me; but the thing that stuck in my mind was that he talked and talked and talked with great enthusiasm...some things never change, I guess.

In 1990 a search for the director of the School of Geology and Geophysics was started; and who should we finally end up hiring but the talking geologist from Texas A&M, Charles Gilbert! Being a graduate of the school, Charles was well aware of the history of the school and the role of the alumni and the industry and its stature as a leading School of Petroleum Geology. Charles survived eight years as director before stepping down; but I think in those years the morale of the school was always very positive.

I know that Charles has many interests outside of geology, including the opera, the Lions Club, his family, and grandchildren and great grandchildren, but I sincerely believe his love of geology is infectious and has rubbed off on many generations of students who have passed through here.

So in parting, I would again like to say it has truly been a pleasure to know and work with Charles, and I hope that he will be around the department for many years to come.
ConocoPhillips Makes $6 Million Gift to the School of Geology and Geophysics

The College of Earth and Energy’s School of Geology and Geophysics – the first in the United States to offer a petroleum geology degree – has received one of the largest single corporate gifts ever made to OU, a $6 million contribution from longtime supporter ConocoPhillips.

In March 2007, OU President David L. Boren joined James L. Gallogly, ConocoPhillips executive vice president of refining, marketing and transportation, in announcing the gift, which will benefit students through increased scholarships and fellowships and the creation of a visiting professorship position as well as support renovation and upgrade of the school’s home in the Sarkeys Energy Center.

In recognition of this gift, the OU Board of Regents named the school the ConocoPhillips School of Geology and Geophysics. The gift is the largest in the history of the School of Geology and Geophysics, which was founded in 1900 and has graduated more than 5,000 students.

Geology and Geophysics Student Named both Udall and Goldwater Scholar

Katie Gunderson, a student in the ConocoPhillips School of Geology and Geophysics, is one of only three students nationwide to be named both a Udall Scholar and Goldwater Scholar in 2007.

The Udall recognizes undergraduates who demonstrate a commitment to careers related to the environment or to Native American public policy or health care. This marks the second year in a row that an OU honors student has been named a Udall Scholar. The Barry M. Goldwater Scholarship and Excellence in Education Foundation recognizes undergraduates who intend to pursue careers in science, math or engineering.

Gunderson, daughter of Ken and DeAnn Campbell and Tim and Marilyn Gunderson, is a junior from Heyburn, Idaho, who is pursuing a degree in chemistry and geology. Currently working with David London, professor of geology and geophysics, Gunderson also has conducted research in Tanzania, East Africa, and at the University of Notre Dame.

Her concern for the environment has led her to focus on nuclear waste and how uranium interacts with the environment. This past summer, Gunderson interned at Pacific Northwest National Laboratory, studying nuclear waste products and how they interact with and affect the environment. Following graduation, she plans to pursue a doctoral degree in environmental geochemistry.
The current enrollment of the Mewbourne School of Petroleum and Geological Engineering, founded in 1919, is at its highest with 354 undergraduate and 63 graduate students. At the Mewbourne College of Earth and Energy’s 2007 Spring Convocation Ceremony, the flourishing Mewbourne School witnessed its 5,000th student walk across the stage and receive his diploma. Like his previous peers, Greg Shepherd followed suit in walking across the stage to accept his diploma, unaware he was making history.

Once all the students received their diplomas, Dean Larry Grillot announced the historic moment to all the graduates and attendees, asking the surprised Shepherd back to the stage to receive a special gift, presented by Curtis W. Mewbourne.

Mewbourne, the alumnus and industry leader who generously endowed the Mewbourne School of Petroleum and Geological Engineering, presented Shepherd with a beautifully framed watercolor painting of OU’s Seed Sower.

When Greg Shepherd was asked about the unexpected honor he received at the May 12 College of Earth Energy convocation, he said, “When Dean Grillot announced that I was being honored as the 5,000th graduate from the Mewbourne School of Petroleum and Geological Engineering, it really did not register in my mind. You see, at the time I had so many things going through my head all at once. I was so excited that I had just walked across the stage and graduated, I really was not sure what to do. I actually turned and asked one of my friends if I was supposed to go on the stage. Once the reality of the situation hit me, I felt a tremendous sense of pride that not only did I graduate from such a prestigious school, but coincidentally I was the 5,000th one to do it. I am honored that I have a role, however small, representing what MPGE has accomplished and what it has in store for the future.”

Shepherd, son of Nick and Jackie Shepherd of Shawnee, earned his bachelor of science degree in petroleum engineering. He recently has accepted a full-time position as a field operations/production engineer at Mewbourne Oil Co. in Perryton, Texas. He says it is his goal is “to learn as much as possible about how everything works in the field and use that valuable field experience and knowledge to accelerate my career in the future, possibly into a management position.”
Petroleum Engineering Student Wins UOSA Student Body Presidency for Second Consecutive Year

An international student hailing from a small village in Malaysia and an undergraduate in the Mewbourne School of Petroleum and Geological Engineering at OU, Kenah Nyanat outdid himself in becoming the first international president of the UOSA; and is now the first OU student to be elected as UOSA student body president for two consecutive years.

With a platform focused on enhancing campus technology, guaranteeing student parking availability, improving academic support services, increasing the quality of students’ lives and improving the campus alcohol policy, Nyanat and his running mate Tatianna Cannon have an exciting 2007-2008 school year ahead of them.

Roy Knapp Announces Retirement After Nearly Three Decades

Roy Knapp joined the University of Oklahoma Jan. 1, 1979, as director of the School of Petroleum and Geological Engineering. Now a senior faculty member and the Curtis Mewbourne Professor of Petroleum Engineering in the Mewbourne School of Petroleum and Geological Engineering, in the new College of Earth and Energy, Knapp has announced his retirement after 29 successful years of service.

His primary research interests in petroleum engineering have included microbial enhanced oil recovery and reservoir simulation and engineering. He has taught almost 2,600 OU students. He has taught reservoir engineering fundamentals, petroleum reservoir fluids, numerical methods for engineering calculations, petroleum reservoir development, applied reservoir engineering, flow-through porous media, enhanced oil recovery, reservoir mechanics laboratory, natural gas laboratory, and introduction to engineering. Eight of his 15 doctoral students have been university faculty.

Knapp is a member of the Society of Petroleum Engineers, American Petroleum Institute, American Society for Engineering Education, the Canadian Petroleum Society and the Society for History of Technology. He has served petroleum engineering and SPE on many committees and currently represents the Mid-Continent NA region on the SPE Board of Directors. He also has been active in community service particularly at the university, and was the 2005-06 chair of the OU Faculty Senate.

When asked about his experiences in education, Knapp said, “The Mewbourne School is a special academic department. Our graduates’ careers have shaped the world in which we live. It has been my privilege to have been a member of its faculty for almost three decades.”

Nyanat, son of Thomas Kuud and Janet Wong Nyanat, is a senior from the tropical Borneo island of Miri, Malaysia, pursuing a degree in petroleum engineering. Following in the footsteps of his parents, who value education and believe it to “change your life,” Nyanat chose to attend OU because of his desire to obtain an American education in petroleum engineering. He had heard that OU was one of the “great schools known for engineering.”

Nyanat spent his summer in Houston as a reservoir engineering intern within the Onshore Eastern Business Unit, Reservoir Engineering Department at Dominion Exploration and Production. In the summer of 2006, he worked at the DEPI corporate office as an engineering intern with the E&P Business Development Department. Following graduation, he plans to pursue either a master of business administration degree or a graduate degree in natural gas and management. His career ambitions include exploring engineering opportunities in economics and the business development side of the oil and gas industry.
Institute for Reservoir Characterization (IRC)

The Institute of Reservoir Characterization focuses on integrating geology, geophysics, petrophysics, reservoir engineering and geological modeling for application to clastic reservoir studies, with emphasis on deepwater (turbidite) reservoirs, both locally (mid-continent and west coast of U.S.A., etc.) and globally (Mexico, South America, India, Indonesia, etc.). Numerous graduate students actively participate in studies as part of their degree requirements. There is close interaction with the petroleum industry, which funds most studies and employs program graduates. Many studies incorporate outcrop measurements into the subsurface characterization process. Affiliated facilities include a computing lab with state-of-the-art, industry-standard software and hardware as well as standard core layout/description, petrophysics, rock mechanics and petrographic labs.

Current research activities include stratigraphy of the Barnett and Woodford Shale gas reservoirs, sequence stratigraphy and reservoir characterization of turbidite deposits in various locales, both internationally and in U.S. basins, application of outcrops for quantitative reservoir characterization, and borehole image analysis of reservoirs.

PoroMechanics Institute (PMI)

The University of Oklahoma boasts the top program in the world dedicated to the investigation of the mechanics of porous media, in particular to rock mechanics, with applications to the exploration and production of hydrocarbon energy.

Established in September 1992, the PoroMechanics Institute is a multidisciplinary research unit. Research at the PMI is related to the understanding and application of the mechanics of porous media in general and the investigation of rock mechanics as applied to the exploration and production of hydrocarbons in particular. As such, PMI serves both the petroleum industry and the wider geomechanics community. In addition, the PMI provides state-of-the-art facilities for conducting research and educating university students on poromechanical testing.

The institute has two major research efforts, with funding provided by two consortia: the Rock Mechanics Consortium, and the GeoGenome™ Industry Consortium. The latter is in collaboration with Massachusetts Institute of Technology. These consortia involve 17 domestic/international oil and gas companies,
from the Americas, Europe and the Middle East (e.g., ConocoPhillips, Total, Aramco, Chevron, Halliburton, Hydro, Ecopetrol, etc.). The research efforts and technology transfer (industry deliverables) are conducted by undergraduate and graduate OU students with affiliations in three departments and three colleges.

Institute for Theoretical Geophysics (ITG)

The Institute for Theoretical Geophysics was established in 2002 and is devoted to finding the solutions for theoretical problems related to all aspects of geophysical investigations of the Earth. The problems range from exploration for oil and gas to fundamental studies of earthquakes and the interior of the Earth. The main focus in all these studies is to build those theoretical approaches that can be used to link the various scales of geophysical measurements. Students associated with the ITG are given a solid understanding in those scientific fundamentals required for handling modern geophysical problems.

The institute conducts fundamental studies relating to fluid transport, heat flow, electrical properties, and elastic and viscoelastic properties to microearthquakes. The unique skill of the ITG is that it can utilize small-scale information about a rock (for example the porosity, mineral content and saturation) and make predictions of the seismic and other geophysical measurements made upon the rock.

The group of professors at the ITG, along with their associated students, is capable of solving various aspects of relating geophysical measurements to the physical properties of rocks. As a complement to the work of those directly involved with the ITG, collaboration with other universities takes place making a much richer environment for both students and researchers. Currently the ITG is working with Columbia and the University College of London on areas of mutual interest. In addition, the ITG works with scientists and companies around the world to organize a meeting on the frequency-dependent properties of rocks, to be called “RAINBOW IN THE EARTH.” This year the meeting will be held in Edinburgh, Scotland.

Institute for Energy and The Environment

IEE is dedicated to providing the scientific foundation for solutions to applied environmental problems that impact the infrastructure of energy production and use. To date, IEE research has focused on understanding the processes that control the environmental fate of energy-related substances, such as split hydrocarbons, hydrogen sulfide corrosion and contaminating radionuclides. This work is important for assessing environmental risks, designing appropriate remedial measures and even for environmental forensic analyses. IEE research relates closely to the wider strength of OU in the area of anaerobic microbiology. The university is easily recognized as one of the premier places in the world to study in this discipline. Particular emphasis is on bacteria that produce renewable energy forms, such as ethanol and natural gas.

Current studies concern biotechnological measures for the enhanced recovery of energy from marginal reservoirs, heavy oil production and the control of problematic paraffin deposits. Research activities span the gamut from basic to applied projects. Institute scientists work closely with graduate and undergraduate students to investigate greener solutions to many environmental issues that attend the use and production of energy in the world today.
In recognition of his outstanding and longtime support of the University of Oklahoma and its programs in petroleum and geological engineering and his pioneering leadership in the field, which resulted in the creation of one of the most successful privately owned oil and gas producers in America, the newest college at OU has been named the Mewbourne College of Earth and Energy in honor of Curtis Mewbourne of Tyler, Texas.

The announcement was made during a news conference Nov. 2 on the OU Norman campus featuring remarks by OU President David L. Boren, College of Earth and Energy Dean Larry Grillot and Mewbourne, a 1958 OU petroleum engineering graduate who founded Mewbourne Oil Co. in 1965 with his last paycheck working as a petroleum engineer. Mewbourne continues to operate the company privately for the benefit of his employees and his family.

“In the past quarter century at the University of Oklahoma no individual graduate ... has provided more funding for scholarships and internships than Curtis Mewbourne,” Boren said to the crowd gathered in the Sarkeys Energy Center on the OU campus.

In addition, Mewbourne is being honored this evening with the Trailblazer Award for his professional achievements and lifetime commitment to the energy industry, especially for his support and mentoring of OU students.
Mewbourne has devoted many hours of service to OU and its School of Petroleum and Geological Engineering, serving as the first chairman of the school’s advisory board. He is one of the school’s most devoted alumni leaders and its most important donors, with gifts that include the Curtis Mewbourne Professorship in Petroleum Engineering, which when created in 1982 was the first endowed position for both the school and the College of Engineering, and a $6 million gift, made in 2000, which endowed faculty positions, student scholarships and enrichment activities in the School of Petroleum and Geological Engineering. To honor this gift, the school was named after Mewbourne.

When the College of Earth and Energy was formed on Jan. 1, 2006, bringing together the School of Geology and Geophysics – later named the ConocoPhillips School of Geology and Geophysics – and the Mewbourne School of Petroleum and Geological Engineering, Mewbourne again stepped up to be an alumni leader and generous supporter of the new college. In fall 2006, he made a gift to create two new endowed faculty positions in the newly formed college. And that November, he issued a challenge to alumni and supporters of the college to promote contributions to endowed undergraduate scholarships and graduate fellowships for students in petroleum engineering, geological engineering, geology and geophysics. He pledged to match all those gifts between then and March 2008. Mewbourne Oil stands alone as the largest supporter of student scholarships and internships over the past 25 years.

Mewbourne’s many honors from OU include an honorary Doctor of Humane Letters in 2002 and election to the College of Engineering Distinguished Graduates Society in 1992. A Sarkeys Energy Center founder, he and his wife, Joanne, are founding members of OU’s Seed Sower Society, honoring donors of $1 million or more.

OU’s Mewbourne School awarded its first degree in geological engineering in 1919 and its first degree in petroleum engineering in 1927. It is consistently ranked by U.S. News and World Report among the top five academic programs in the country. More OU petroleum and geological engineering alumni are top executives in Fortune 500 companies than any other school. Last year, the school passed another milestone when it graduated its 5,000th engineer.

The School of Geology and Geophysics, founded in 1900, holds the distinction of being the first school in the nation to offer a degree in petroleum geology. Its graduates are highly recruited by the oil, gas, mining, environmental and water resources industries and by government.
MEWBOURNE COLLEGE OF EARTH AND ENERGY

New Faculty

**I. Yucel Akkutlu** is assistant professor of petroleum engineering at the University of Oklahoma. He received his bachelor of science degree in chemical engineering from Hacettepe University, Ankara and holds master of science and doctoral degrees in petroleum engineering from the University of Southern California, Los Angeles. Prior to joining OU, Akkutlu began an academic career with the University of Alberta, teaching reservoir engineering courses. He currently serves on the editorial board of SPE Journal and the CSUG technical (R&D) committee.

**Kurt J. Marfurt** joined OU in 2007, serving as the Frank and Henrietta Schultz Professor of Geophysics in the School of Geology and Geophysics. Marfurt’s primary research interest is the development and calibration of new seismic attributes to aid in seismic processing, seismic interpretation and reservoir characterization. He has received both best paper (for coherence) and best presentation (for seismic modeling) awards from the SEG and served as the EAGE/SEG Distinguished Short Course Instructor for 2006 (on seismic attributes).

**Megan Elwood Madden** received her first job as a geologist when she was 16, working as a tour guide in a 19th-century copper mine on Michigan’s Keweenaw Peninsula. Those early experiences immersed in rocks led to a bachelor of science degree in geology from the University of Illinois, a doctorate in planetary geochemistry from Virginia Tech, and a postdoctoral research position at Oak Ridge National Laboratory. Madden strives to increase the role of women and other traditionally underrepresented groups in the geosciences by engaging students of all ages in the scientific process and sharing with them the unique stories that can be learned from nature.

**Andrew Madden** regards his choice of college majors, geology, as the best decision he ever made. While earning a bachelor of science in geology from Michigan State University, Madden worked as a teaching assistant, research assistant and interned at the local Dart Oil & Gas Corp. He met his wife, now Megan Elwood Madden, during summer field camp in Utah. After completing a doctorate in geosciences from Virginia Tech, he worked in a postdoctoral research position at the U.S. Department of Energy’s Oak Ridge National Laboratory. His research interests include the intersection of nanoscience, nanotechnology and microbiology with geoscience and sustainability of our water supplies.
J. Denny Bartell, a 1954 geological engineering graduate from OU, has spent a good portion of his time and energy investing in energy-related education and projects at the University of Oklahoma through the creation of the Sarkeys Energy Center, the College of Geosciences, and now the College of Earth and Energy. His influence, beginning in the late 1970’s and continuing through today, has helped make the geology, geophysics and petroleum and geological engineering programs become and remain top-tier programs in the country.

When asked why he has dedicated so much personal time to OU’s energy programs through the years, he humbly explains: “I have found the best way to repay the influence and investment many people from OU have had in my life is through sweat equity.”

Bartell, originally from Shreveport, La, has made Houston his home since 1956. He has been involved as an independent in the exploration business since 1961. In 2001, he and several partners launched “Invictus Exploration,” which eventually became “Legends Exploration.” Their focus has been on large unconventional reserves.

When asked about his experiences as a student at OU, Bartell credits past director Carl Moore with instilling a sense of OU loyalty in him and many of his classmates. He feels that OU truly prepared him for the future and gave him the confidence he needed in the field.

The biggest change Bartell has seen in engineering in the past 10 years has been technology, which is both positive and negative. Computers have brought increased speed, as well as an unhealthy dependency, he says he’s especially noticed the influence of technology on geophysics and drilling.

OU has shaped J. Denny Bartell into the person he is today. While a student, he was privileged to have met his wife, Dixie, some of his best friends and enjoyed his Greek life experience as a Kappa Sig. We would argue that Bartell has inspired the University of Oklahoma as much or more as OU has influenced his life.
Whether it has been sports, a career in the oil business or his dedication to the University of Oklahoma, Bob Stephenson has spent his life pursuing his passions and dreams. Upon graduating from OU in 1950 with a bachelor of arts degree in geology, Stephenson signed a professional baseball contract and spent the next seven years playing baseball, with a two-year stint in the Army during the Korean War. His baseball career began when he signed with the St. Louis Cardinals in 1950. He played one year in Class A, one year in Class AA, two years in AAA and one year in the majors (1955), where he played shortstop for the St. Louis Cardinals. At the close of the 1956 season, he decided it was time to enter the oil business and thus ended his baseball career.

One of the best decisions Stephenson ever made was to earn his college degree before pursuing professional baseball; he sees a college education as the “best insurance to protect yourself.” Stephenson’s oil career began with Pure Oil Co., where he met one of his dearest friends and future business partner, Ray Potts. After Union Oil of California bought out Pure Oil Co., the two friends formed a company called Potts-Stephenson Exploration Company. Upon flipping a coin, and depending on your perspective, Stephenson either won or lost and became the first president of their company. From its formation in 1967, PSEC existed until 1997, when it was sold, but Potts and Stephenson still share a partnership and continue to “actively take part in other geological prospects originated by independent geologists.”

Stephenson credits two relationships as being most influential in his life: his 58 years, and counting, with his wife, Norma, and his 40-year partnership with Potts. Not only is he a dedicated husband and partner, he also has a true love for Norman and the University of Oklahoma, where he is proud to have personally witnessed three dynasties: (1) Wilkerson, (2) Switzer and (3) Stoops. Through the years, he has been a strong supporter of energy education at OU and was influential in the formation of the College of Earth and Energy. It is clear that he has been a major player in every aspect of his life: his education, baseball career, relationships, oil company and influence at OU. Robert “Bob” L. Stephenson is truly in a league of his own!
The College of Earth and Energy, formed on Jan. 1, 2006 and renamed the Mewbourne College of Earth and Energy in November 2007, had a productive and successful year. Both of the schools in the Mewbourne College of Earth and Energy continue to be national leaders, competing well with peer schools for top students and faculty. The goal of the university, shared by its alumni, is to see the academic programs in the ConocoPhillips School of Geology and Geophysics and the Mewbourne School of Petroleum and Geological Engineering continue among the elite programs in the world. To achieve this goal, the college launched an $80 million capital campaign in November 2006.

The campaign goals break down as follows:

- **Fellowships and Scholarship Endowment**: $30 million, current: $8,904,428
- **Faculty Endowments**: $14 million ($7 million in private gifts and $7 million in the Oklahoma Regents for Higher Education match), current: $6,000,000
- **Facilities and Resources**:
  - Sarkeys Energy Tower Renovation: $8.5 million, current: $2,935,652
  - Laboratory Resources and Endowments: $16 million, current: $4,505,045
  - Oklahoma Petroleum Information Center: $2.5 million, current: $0
- **Enrichment Endowments**:
  - Student Enrichment (field camp, field trips, activities, recruitment): $7 million, current: $7,287,208
  - Faculty Research Enrichment: $1 million, current: $1,120,000
  - Library Endowment: $1 million, current: $3,001,480

In March 2007, ConocoPhillips announced a $6 million pledge to the School of Geology and Geophysics to be used for endowing a chair, scholarships and fellowships as well as assist in the Sarkeys Energy Center renovations. In turn, the College of Earth and Energy is proud to rename the school the ConocoPhillips School of Geology and Geophysics.

As of November 2007, nearly $34 million has been contributed from more than 800 corporate and individual gifts toward the $80 million goal, nearly half of which has been given to support student scholarships and fellowships. The leadership and generosity of Curtis Mewbourne, a 1958 graduate of OU’s Mewbourne School of Petroleum and Geological Engineering, has been a driving factor in scholarship and fellowship giving. Mewbourne has agreed to match all undergraduate scholarship and graduate fellowship gifts given by individual donors to the Mewbourne College of Earth and Energy through March 31, 2008. More than 250 individual donors have taken advantage of the opportunity to have their endowed scholarship and fellowship gifts doubled.

This June, renovations to the Sarkeys Energy Tower Renovations began on the first floor in the Energy Center atria. The key element of this phase of the renovation is to create two important new student spaces: the Mewbourne College of Earth and Energy Student Services Center and a new Student Study Area.

For more information on development opportunities, please contact John W. Ritz, Assistant Dean for External Affairs, at jwritz@ou.edu, or Joanna M. Robinson, Director of Development, at jrobinson@ou.edu. They can both be reached at (405) 325-3821.
We want to hear from you!
Send us news of your latest activities and accomplishments.

Name .............................................................................Class year ......................Major  ...........................................................
Home Address ........................................................................................................................................................................
Home Phone .................................................................Business Phone ...............................................................Business Name and your title ........................................................................................................................................
E-Mail Address ..............................................................Your news ..............................................................................
........................................................................................................................................................................................
........................................................................................................................................................................................
Please clip and return this form to:
University of Oklahoma
Mewbourne College of Earth and Energy
100 East Boyd Street, Room 510
Norman, OK 73019-100

You can also e-mail your update to cee@ou.edu

100 East Boyd, Room 510
Norman, OK 73019-1006
ADDRESS SERVICE REQUESTED