



FROM THE DEPARTMENT CHAIR A letter from Karsten Thompson

Greetings Alumni and Friends, I write this midway through a busy fall semester, which has brought all the comforting sights and sounds of the academic year –the energy and buzz of students back on campus, faculty grading midterm exams, excitement about Tiger Football...

At the same time, this year feels different—a little bit slower (in a good way), more permanent (settled into our new location), and with fresh interactions and a more optimistic outlook from industry.

For us, a big change from last year is that moving boxes are gone, and we are now settled into the completely renovated Patrick F Taylor Hall. If you have not visited, please take an opportunity to do so—ideally at the alumni tailgate on MSU weekend (see page 2).

We also feel the absence left by our May 2018 graduates—the largest graduating class in decades. We are very proud of these students, who came in as freshmen just before the downturn and stayed positive and committed through the toughest years and lean hiring markets. Their graduation is notable also because it means we are on the “other side” of

the infamous enrollment cycle. Consider that 10 of our faculty members (hired since 2006) are experiencing something never before seen in their teaching careers: smaller classes than the year before!

We have made a number of new hires, including two new faculty members. Femi Olorode arrived prior to the fall semester, and Jyostna Sharma will join us as an assistant professor in the spring term. Both hires bring industry experience, contributing to our impressive average of more than seven years’ industry experience per person on our full-time faculty.

There is every reason to be optimistic about how the department is positioned for the next decade: a larger and more diverse faculty with a number of truly outstanding teachers, a revised curriculum that integrates modern applications throughout, continued growth in research funding, a state-of-the-art facility on the main campus, and the re-opening of the well facility after extensive renovations.

Let us know how we can serve and partner with you. Or, just drop us a line or come by to say hello.

Geaux Tigers,

Karsten Thompson

PETROLEUM ENGINEERING TAILGATE



Join the department for our annual tailgate before the Homecoming game versus Mississippi State University on Saturday, October 20, 2018 at Patrick F Taylor Hall. The event is scheduled from 12:30–4:30 p.m. Please enter through the west entrance of PFT and enjoy our new home. Weather permitting, we will be located on the Northwest Terrace overlooking Tiger Stadium and Engineering Lane. Please visit our website at lsu.edu/eng/pete for RSVP details.

Below are pictures from our 2017 tailgate.



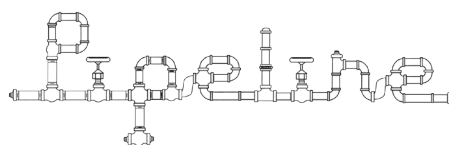
From left to right, our graduates from the 1960s: Don Ray George, Adam “Ted” Bourgoyne, John Hay, Wayne Schneider, Louis Molaison, Bruce Garlington, and Gerry Blankenship.



Recent graduates and soon-to-be alumni, most with graduate degrees from our department.



From left to right, Petroleum Engineering faculty and staff: Fred Thurber, Mauricio Almeida, Andi Donmyer, Karsten Thompson, and Richard Hughes.



LSU PERTT LAB REOPENS IN SECTIONS



MORE WORK TO BE DONE

As work continues on the renovation and enhancements to the LSU Petroleum Engineering Research and Technology Transfer, or PERTT Laboratory, parts of the facility have come back online this fall.

Recently, the area designated as the outdoor classroom for the Production Lab course was updated and made ready for the 100 students enrolled this fall. Another, larger portion of the PERTT Lab will be prepared later in the year, once all final safety systems and experiments are fabricated.

“Seeing students in the new location for the Field Operations Laboratory is exciting, because it’s the first concrete step in reopening the lab after a series of necessary renovations and updates,” said LSU Craft & Hawkins Department of Petroleum Engineering Chair Karsten Thompson. “We expect our first industry customer to be performing testing in Well No. 1 later in the fall and look forward to getting fully back in business as other parts of the lab come online through the rest of the fall semester and in early 2019.”

Work began two years ago on replacing old equipment, making improvements and ensuring the facility was compliant with current safety standards. Then in late 2017, Wesley Williams, LSU Petroleum Engineering professional-in-residence and his team were awarded a \$4.9 million grant by the National Academy of Sciences, Engineering, and Medicine’s (NASEM) Gulf Research Program for the project, “Experiments on

Multiphase Flow of Live Muds in a Full-Scale Wellbore With Distributed Sensing for Kick and Gas-in-Riser Detection/Mitigation.”

The team is comprised of Williams and LSU Petroleum Engineering Professors Babak Akbari, Mauricio Almeida, Yuanhang Chen and Paulo Waltrich.

Their research, done in conjunction with Texas A&M University and Weatherford, focuses on gaps in understanding about the behavior of riser gas under high temperature and pressure. Testing, which is taking place at the PERTT Lab, requires using an existing well retrofitted with pressure and temperature sensors to produce data for validating riser gas models that inform design of pressure barriers and techniques for preventing uncontrolled hydrocarbon releases.

In order to conduct the experiments, however, more work is needed on the facility. The end result, Williams said, will make the PERTT Lab a popular destination for a variety of audiences.

“Our goal for this project was to make a permanent piece of infrastructure that the NAS Gulf Research Program could point to as a premier place where oil and gas research will be performed well into the future,” Williams said. “It will provide a highly instrumented well and support facility as a ‘playground’ for industry, government, and academia to test their equipment and ideas in a safe and controlled environment.”

FACULTY CHANGES



WELCOME

The Craft & Hawkins Department of Petroleum Engineering recently hired five new individuals for academic, research, and staff positions.

We would like to welcome Dr. Olufemi “Femi” Olorode, who began this fall semester as our newest assistant professor. He joins us from Texas A&M University. After completing his PhD in August 2017, he worked as a postdoctoral researcher at TAMU on shale petrophysics projects, developed a new coupled geomechanics and compositional shale-gas reservoir simulator, and taught lab sessions in an undergraduate petrophysics course. His area of research is a great fit for the department, and we look forward to working with Femi.

Mr. Andreau “Trap” Trepagnier and Mr. Herman “Kam” Holt have joined Dr. Wesley Williams, Mr. Doug Hoy, and Mrs. Jeanette Wooden at the Research and Technology Transfer Laboratory (PERTT Lab) as new staff members. Trap, who earned his master of science from the University of Louisiana at Lafayette, is the operations manager at the facility. Prior to this position, he worked for WHC Energy Services as a project

engineer, performing field logistics and quality control for compression station projects. Kam, not to be confused with Dr. Kam, has been hired as a research associate 2. He is currently working on a master of science in our department and has seven years’ experience in the US Marine Corps working in telecommunications and implementing infrastructure upgrades on varying projects.

Lastly, Dr. Otto Luiz Santos, a professional-in-residence for research, and Dr. Renato Peixoto Coutinho, a postdoctoral researcher, have been hired to assist Dr. Williams with his National Academy of Sciences grant work. Drs. Santos and Coutinho both completed their doctorates with our department, in 1989 and 2018, respectively. Dr. Santos began working for Petrobras in 1976 until he arrived in the US to study petroleum engineering—first at Colorado School of Mines, where he completed his master’s in 1982, and then at LSU, where he completed his PhD. He has more than 20 years’ experience in industry and was the coordinator of the drilling area of Petrobras University during periods in the 1980s and the 2000s. He is very well-rounded with industry and university

research experience and is a valuable addition to this grant project. Dr. Coutinho also brings strong research experience to the project, having conducted large-scale field tests at the PERTT Lab. He managed a team of undergraduate engineer interns to complete the design and construction of a high-pressure flow loop, as well as designing and fabricating other apparatuses. His years of research experience at the National Agency of Petroleum and at LSU during his graduate career have led him to this great opportunity with the NAS grant. We would like to welcome all five of these individuals to the department.



PERTT Lab Staff from left to right: Herman “Kam” Holt, Doug Hoy, Jeanette Wooden, Wesley Williams, and Andreau “Trap” Trepagnier.



Femi Olorode



Renato Coutinho and Otto Santos

