

May 2017 NEWSLETTER



Petroleum and Natural Gas Engineering

Saint Francis University

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<https://www.Francis.edu/Petroleum-Natural-Gas-Engineering>

<https://www.facebook.com/PNGEatSFU/>

Dear All:

The start of a new academic semester is always exciting with new ambitions to develop and new ideas to try out. It is also a time to look at the progress we have made and plan for the future. In this newsletter we highlight some of the things that our students and faculty have achieved over the last several months and share some future plans and needs.

We are grateful for your continued support and interest in our PNGE program. We appreciate your participation in PNGE program and truly value your insight and guidance for our program. Your input into our program has been immensely valuable and will continue to impact our students and our Petroleum and Natural Gas curriculum and program. Thank you for everything!

Best Regards,
The PNGE Program at Saint Francis University

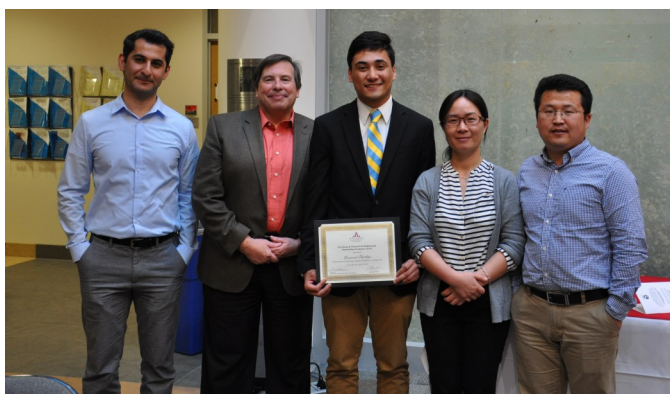


AAPG Student Chapter at SFU is official!

The student chapter of the American Association of Petroleum Geologists (AAPG) is now official at Saint Francis University. The faculty advisor is Dr. Guochang Wang and the officer members from left to right are John Sheesley (Secretary), Jonathan Bruno (Treasurer), Desmend Philips (President) and Jan Vit Suntar (Vice President).

New SPE Student Chapter officers for 2017-2018 is elected!

We welcome our new SPE officers for the upcoming 2017-2018 school year! They are from left to right: Annamarie Bolt (Professional Connection Assistant), Desmend Philips(President), Shannon Szymusiak (Vice President), Guofang Zheng (Treasure), Ali Brown (Secretary). The SPE student chapter conducted different chapter activities and helped other PNGE students get involved, such as SPE conference attendance and petroleum related presentations given on campuses.



PNGE Outstanding Freshman Award

PNGE Freshman, Desmend Philips, has received our Outstanding Freshman Award with his excellent performance during his freshman year at the Ninth Annual School of Science Academic Recognition Ceremony. Desmend was the only recipient of The Gates Millennium scholarship in Western PA. He excels in academics and also serves as the president of both the SPE and AAPG student chapter. Part of his award was the textbook for his sophomore “Reservoir Engineering” course.

SPE/AAPG Service Award

PNGE Sophomore student, Shannon Szymusiak, received the SPE/AAPG Service Award for Excellence in Service to the PNGE program at the Ninth Annual School of Science Academic Recognition Ceremony. Key service rolls for Shannon included president of SPE student chapter and active involvement in our program and SPE student chapter activities. She was awarded a check funded by the PNGE Program.



SPE Scholarship in Pittsburgh Section

Three of our PNGE students, Desmend Phillips (Freshman), Jan Vit Suntar (Sophomore) and Connor Witman (Sophomore) have been awarded scholarships from the Pittsburgh section of SPE in the amount of \$2,500 each. These students received their checks and certificates at the Penn State University SPE student chapter’s awards banquet on April 4, 2017.

Academic Activities

Structural Geology Field Trip

The petroleum engineers and environmental engineers in the course 'Physical and Structural Geology' took a field trip to observe the structure fields in carbonate rocks formed 450 million years ago in Birmingham, PA. This is an annual trip for geology students in our PNGE program and the first year for ENVE students to also have this field trip organized by Dr. Guochang Wang.



Structural Geology Field Trip, Birmingham, PA

Drilling Lab Visit

In April, five PNGE undergraduate students accompanied by Dr. Qin He and Professor Morgan Whited visited the drilling fluids lab and drilling simulation lab at Penn State University. Several drilling simulator operations were demonstrated. They investigated the effects of drilling mud density on the rate of penetration of the drilling bit, and learned what to do when a kick occurs.



Drilling Lab Visit, Penn State University, PA

Coalbed Methane Workshop

Two PNGE students: Shannon Szymusiak and Annamarie Bolt accompanied by Dr. Qin He attended the North American Coalbed Methane 57th Session Conference on April 11 in Canonsburg, PA. They attended the fundamental CBM engineering seminar and the networking event. In this forum, students had opportunities to talk to people from both universities and industry, especially the forum committee members, who provided many suggestions for their future careers.



CBM Workshop, Canonsburg, PA

"Engineering for the Future" Event

Two of our students: Shannon Szymusiak and Annamarie Bolt took advantage of the opportunity to volunteer at the "Engineering for the Future" event at the Carnegie Science Center in Pittsburgh, Pa recently. They had a great time introducing and demonstrating a variety of science related activities to an audience of all ages. They also will serve as ambassadors for our upcoming PNGE High School summer camp at Saint Francis University.

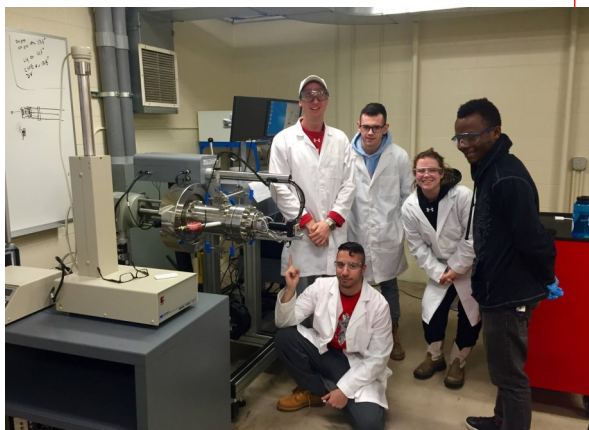


"Engineering for the Future" Event, Pittsburgh, PA

Undergraduate Student Research



Invited lecturer in our junior students' class



Sophomore students are operating PVT cell to test phase behavior of reservoir fluid



Desmond Phillips, PNGE freshman, the recipient of PNGE Outstanding Freshman Award

- Sophomore student Jonathan Bruno has carried out undergraduate research entitled “Magnetic Force Rotation System for Core Sample 3D Geometry Measurement” in the spring of 2017, supervised by Dr. Guochang Wang and funded by Dean’s office at Saint Francis University. His work focuses on building a system to measure the 3D geometry of core samples.
- Junior student Zachary Rohland and John Sheesley have received approval and competitive funding of their 2017 Student Summer Research Proposal “Marcellus Shale Elemental Analysis by X-Ray Fluorescence (XRF)”, which will be supervised by Dr. Guochang Wang and funded by the Student Research Office with an amount of \$3, 875.
- Sophomore Shannon Szymusiak and Freshman Desmond Phillips have received approval and competitive funding of their 2017 Student Summer Research Proposal “Experimental Phase Behavior Analysis of Surfactant Flooding”, which will be supervised by Dr. Alireza Shahkarami and funded by the Student Research Office with an amount of \$1,520.
- Sophomore Jan Vit Sutar will perform “Analysis of Refracturing Candidates Selection Using Data Analytic Techniques”, supervised by Dr. Alireza Shahkarami funded by the Student Research Office with an amount of \$870.
- Freshman Guofang (Frank) Zheng has received approval and competitive funding of his 2017 Undergraduate Summer Research Proposal “Investigation of Additives on Drilling Mud Performance”, which will be supervised by Dr. Qin He and funded by the Student Research Office with an amount of \$1, 700.

AAPG 2017 Annual Conference and Exhibition

Dr. Guochang Wang presented his poster concerning “Application of Horizontal Well Data in 3-D Modeling of Shale Reservoirs” at the AAPG Annual Conference and Exhibition in Houston TX, 2017. Dr. Wang also served as the judge for the student poster competition in two sections of 2017 AAPG annual conference.

Regional Impact of the Petrochemical/ Cracker Plant on Western PA Forum, Titusville, PA

Dr. Qin He attended the “Regional Impact of the Petrochemical/Cracker Plant on Western PA Forum”, which was held in Titusville, PA. A Petrochemical Plant being constructed in Monaca, PA, which will add around 6,000 job positions during construction and then sustain 600 permanent jobs.

Rock Tri-axial System and Mangrove Software Training

Two engineers from Controls Group Inc. offered a three-day training for our lab equipment Advantest Rock Triaxial system in March. PNGE faculty members Dr. Guochang Wang, Mrs. Morgan Whited, and one sophomore student Shannon Szymusiak attended the training. Also, Dr. Guochang Wang attended Mangrove software training in Houston, Texas in April.

Journal of Sustainable Energy Engineering

Dr. Alireza Shahkarami has joined the editorial board of Journal of Sustainable Energy Engineering

SPE Eastern Regional Meeting

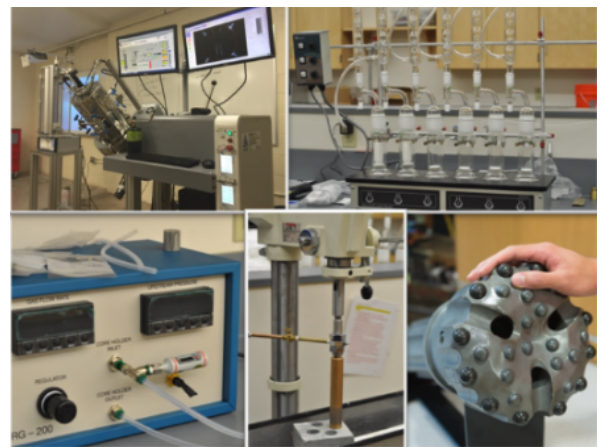
Dr. Alireza Shahkarami, Dr. Qin He, and Dr. Guochang Wang have been serving as search committee members of the 2017 ERM meeting.



2017 AAPG Annual Conference and Exhibition in Houston, TX



Regional Impact of the Petrochemical/Cracker Plant on Western PA Forum, Titusville, PA



PNGE Experimental Labs