# May 2018 NEWSLETTER

# Petroleum and Natural Gas Engineering Saint Francis University

117 Evergreen Drive, Loretto, PA 15940

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

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



Dear Industry Advisory Council Member:

Greetings from the PNGE program at SFU.

In this newsletter, we would like to share with you the progress we have made and highlight some of the things that our students and faculty have achieved. The new year brings the new goals, ideas, and expectations. We believe it will be a exciting and challenging year for us too.

As always, we are grateful for your continued support and interest in our PNGE program. We appreciate your willingness to serve as an Industry Advisory Council member 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 the PNGE curriculum and program. Thank you for everything!

Best Regards,
The PNGE Program at Saint Francis University



Left: Zachary Rohland; Right: Johnny Sheesley

# First PNGE Students Graduating on May

Two of our senior students: Zachary Roland and Johnny Sheesley will be graduating on May 13, 2018. They are the first PNGE graduating students. Zachary Rohland will continue his MBA study at SFU, Johnny Sheesley accepted a position as a Field Technician at Universal Pressure Pumping, Inc. , which will start on May 28, 2018.

	Page 1

#### **Guest Lectures/ Presentations**

Besides regular class teaching, we also invited several speakers to give our students guest lectures covering different topics of drilling engineering, production engineering, stimulation, geology, geography, and software training, etc. It is very valuable for the students to learn more about Petroleum industry from different perspective and get more practical knowledge.



Casing Design Lecture by Jon Benesch, who retired from Schlumberger and has more than 30 years' drilling experience



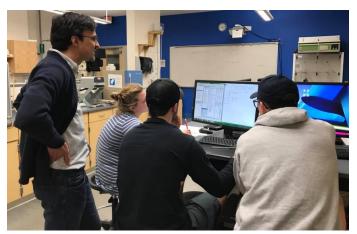
Hoss Belyadi, a senior reservoir engineer at EQT as well as PNGE adjunct professor talking about hydraulic fracturing and economic analysis



Horizontal Drilling Lecture by Robert Ovitz and William Martin from Rex Energy



Timothy Carr, Geology Professor and Department Chair at West Virginia University talking Environment Management in Marcellus Shale Development



Dr. Alireza Haghighat from Eclipse Resources giving our students HIS-Harmony training for nodal analysis for Production Engineering class.

	Page 2

### **SPE/AAPG Student Chapter**

New official members of Student Chapter of American Association of Petroleum Geologist (AAPG) and Society of Petroleum Engineers (SPE) were elected for 2018 Academic year.



Left to right are: Guofang Zheng (Treasure); Ian Gabig (President); Shannon Szymusiak (Vice President); Annamarie Bolt (Industry Liason)



Left to right are: Guofang (Frank) Zheng (treasure); Cornor Witman (secretary); Zachary Rohland(President); Teresa Reid (Vice President).

# **SPE Student Chapter Organizing Mock Interview for PNGE Students**

SPE Student Chapter invited Mr. David Bolt, Vice President of Cormorant Engineering, visited Saint Francis University to do mock interviews with Petroleum and Natural Gas Engineering at Saint Francis University. Bolt has over 30 years of experience in hiring both prospective and veteran engineers. The one-on-one interviews were also filmed for further learning feedback.



PNGE Junior student: Connor Witman is doing mock interview

# SPE Student Chapter Attended "Discovery Space of Central Pennsylvania" Event

SFU SPE student chapter teamed up with the SPE PSU Student Chapter at Discovery Space of Central Pennsylvania to conduct hands-on, fun activities to teach the next generation about petroleum engineering, through core sampling and der-



SFU SPE student chapter members: Shannon Szymusiak, Anna Bolt, Ian Gabig, and Frank Zheng attended this event

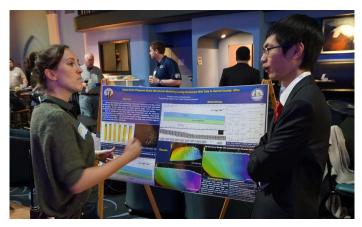
	Page 3

## **Student Academic Achievements**

PNGE students have done different professional activities and achieved a lot both inside classrooms and outside classrooms to learning more about Petroleum Engineering and how to be a good Petroleum Engineer.

# SPE Pittsburgh Annual Pints and Posters

Zachary Rohland (PNGE Senior), John Sheesley (PNGE Senior), and Frank Guofang (PNGE Freshman) presented their research posters alongside researchers from PSU in 2018 SPE Pittsburgh Annual Pints and Posters Session. Zachary won the second best poster award and check of \$1000.



Frank Zhang is presenting his research work on structural modeling of shale gas reservoir



# SPE Pittsburgh Session Scholarship

Four PNGE students from left to right: Shannon Syzmusiak (Junior), Frank Zheng (Sophomore), Anna Bolt (Sophomore) and Ian Gabig (Freshman) received their scholarship (\$2,500 each) from SPE Pittsburgh Section in 2018.



PNGE Students received their SPE scholarship



Top: Johnny Sheesley is presenting his research work on reservoir simulation of shale gas reservoir.

Left: Zachary Rohland won the second best poster award competing with all other graduate students from PSU

Page 4

#### **Geology Field Trip**

Dr. Wang and his students in Geology class went outside for a field trip learning about structure.



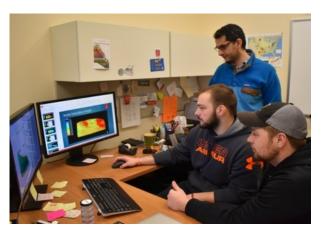
Geological Fieldtrip

# **Environmental Petroleum Engineering : BP Oil Spill**

Four students in the Environmental Petroleum Engineering course presented their final class project on the explosion and oil spill that occurred from the massive, mobile oil rig, Deepwater Horizon. Nicholas King, Connor Witman, Jan Vit Suntar, and Jonathan Bruno presented a petroleum engineer's perspective explaining what happened during the catastrophic BP oil spill in 2010.

#### **Student Research**

Freshman student: Teresa Reid receives the funding of \$1,515 from the Office of Student Research for her 2018 Office of Student Research Grant to study on modeling of Shale gas reservoir with Dr. Qin He.



#### **Industry Visit**

Dr. Qin and one of her students, Shannon Szymusiak, attended CBM forum and visited NIOSH and Halliburton.



Halliburton Visit



PNGE students talking about environmental impacts of BP oil spill

#### **Software Donations**

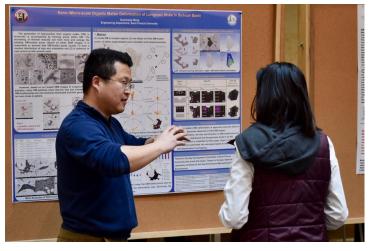
Left: Schlumberger, the world's leading supplier of technology solutions in the oil and gas industry once again made a generous donation of their nearly \$60 million software package to be used by Petroleum and Natural Gas Engineering undergraduates at Saint Francis University. The donation provides 15 licenses and a maintenance contract for the next three years for different Schlumberger software products such as PETREL, ECLIPSE, PIPESIM, VISAGE, MEPO,INTERSECT, and MANGROVE.

	Page 5

### **Faculty Development**

Besides teaching, faculties in Petroleum Engineering program also have done their research work, published papers and applied for grants, etc.

### **Faculty Recent Grants Application**



Dr. Wang presented his research work on Nanomicro scale organic matter deformation in Shale reservoir in Faculty Poster Session

# **Faculty Selective Publications**

- Qin He, Smart Determination of Estimated Ultimate Recovery in Shale Gas Reservoir, 187514-MS SPE Conference Paper, 2017
- Guochang Wang, Issues Concerning Application of Horizontal Well Data in 3-D Modeling of Shale Reservoirs. AAPG Annual Convention & Exhibition in Houston, TX, April 2017.



Dr. Shahkarami attended Annual Technical Conference and Exhibition at San Antonio, TX



Dr. He attended Annual CBM Forum in Canonsburg, PA

	Page 6