

UNCONVENTIONAL

DEPARTMENT OF PETROLEUM ENGINEERING QUARTERLY NEWSLETTER

March 2022

Issue I

2021 Recap

The fall Industry Advisory Council took place on October 21st at the Hilton Garden Inn. We would like to thank the event's generous sponsors: Hess Corporation and the UND SPE Student Chapter. The IAC members attended the DRACOLA grand opening on the first day. UND President Andy Armacost, who cut the ribbon during the dedication ceremony, said, "This facility is a collection of organizations and people with a strong interest in the economy of North Dakota and the oil and gas economy across the United States."

The IAC received an update on the state of the department, and the discussion was primarily focused on how to increase the number of undergrad students during the current decline.

The ABET accreditation visit took place Nov. 14-16, and the PE program received two strengths from the ABET evaluator regarding 'close ties with industry and the NDIC' and 'the establishment of DRACOLA.' The official outcome will be announced by July of this year.

On November 19th, during the Williston Petroleum Banquet, the department received the API outstanding group achievement award, one of the most prestigious recognitions for any institute and industry.

IADC Donates \$10,000 to the IADC UND Student Chapter

We would like to thank the IADC executive committee board for their generous donation of \$10,000 to the UND IADC Student Chapter. This gift will provide tremendous support to students and members as they promote ongoing SC activities and serve the majority interest of the members.



Drilling and Completion Labs (DRACOLA) Updates

As of March 2022, significant progress has been made on the DRACOLA setup. A four-member team is working on the lab setup (Mr. Harry Feilen, Mr. Lannie Fladeland, Mr. Doug Schmidt, and Mr. Robert Jensen) along with several dedicated Ph.D. students from DPE and our new team members, the EERC. Some of the progress made since Aug 2021:

- The drillers cabinet (drillers control room) is being wired and connected to the rig.
- The LabVIEW program is being written.
- Multiple partnerships with leading industry companies/experts continue to be fostered.

Many undergraduate and graduate students have already worked in the lab, making progress on their project design and elective courses by helping with lab setup, equipment maintenance, and making calculations for different lab sections.

Faculty

- Dr. Vamegh Rasouli (Chair)
- Dr. Kegang Ling
- Dr. Hadi Jabbari
- Dr. Minou Rabiei
- Dr. Hui Pu
- Dr. Foued Badrouchi
- Mrs. Bailey Bubach
- Mr. Harry Feilen, Director of DRACOLA

Adjunct Faculty

- John Harju, VP for Strategic Partnerships, EERC
- Charles Gorecki, CEO, EERC
- John Hamling, Principal Engineer, EERC
- Larry Pekot, Principal Engineer and Reservoir Engineering Group Lead, EERC
- Mr. Vibhas Pandey, Senior Engineer at ConocoPhillips
- Mr. Kalyan Venugopal, Schlumberger, Innovation FACTORI Manager
- Dr. Siamak Mishani
- Dr. Rahman Ashena
- Dr. Morteza Dejam
- Dr. Neal Nagal
- Dr. Marisela Nagal



Driller control chair and room



PE Sophomore Named 2022 Goldwater Scholar

We are honored to announce that **Sabrina Sullivan**, a sophomore majoring in petroleum engineering, is a 2022 Goldwater Scholar. Sabrina joins the ranks of the brightest undergraduate researchers in the nation. The organization's 2022 competition awarded 417 new scholarships, chosen from a pool of students nominated by 433 institutions. The Goldwater Scholarship, created in 1986 in honor of the late Arizona Senator Barry Goldwater, is one of the most prestigious scholarships available to undergraduate students studying natural science, engineering, or mathematics. Sabrina worked in the oil and gas field for 14 years and served in the Air Force for four years before transferring to UND to pursue her online undergraduate degree. She continues to work full-time while taking a full-time course load. UND's last Goldwater recipient was in 2013.



Congratulation to our Ph.D. student Ines Benomar for her newborn Mohamed Jad

Graduate Research Achievement Day Award

Nourelhouda Benouadah, a senior UND Petroleum Engineering Ph.D. student working on: **"Hydraulic Fracturing Behavior in the Transversely Isotropic Bakken Shale Formation"** competed against more than 90 Ph.D. students from other UND Colleges. She received the first-place award in engineering, bringing this title back to the UND Petroleum Engineering Department. The last Petroleum Engineering Department winner was in 2020: Ph.D. student Nidhal Badrouchi.



Nourelhouda Benouadah
1st place in engineering GRAD Award

Student Chapters Update

New SPWLA University of North Dakota Student Chapter: The SPWLA UND Student chapter was founded in November 2021 to share and exchange information regarding petrophysics and well logging subjects. The chapter now has ten members, and new members are welcome. On March 3rd, the chapter hosted its first online webinar, "Source Rock Evaluation from Well Logs," by Dr. Quinn Passey. The chapter will arrange a local paper selection, with qualifying papers presented at The SPWLA Annual Symposium, held in Stavanger, Norway, on June 11th, 2022. The deadline for submissions is March 20th.

SEG: SEG hosted three speakers for technical presentations related to geoscience. Speakers from different oil & gas companies, such as ConocoPhillips and Schlumberger, talked about petrophysics and seismic characterization topics.

New SPWLA University of North Dakota Student Chapter: Chapter members were able to virtually attend the IADC Advanced Rig Technology Conference and IADC Managed Pressure Drilling Conference held in August and September, respectively. A total of five members were fortunate enough to attend the November IADC Annual General Meeting in Dallas, TX.

SPE: The last quarter was very productive for the SPE UND SC. The organization has organized more than 12 events, including one visit to the core library, an industry short course, and several webinars. The student chapter has raised funds by volunteering at the career fair and the Alerus Center. The major event was Carbon Capture, Utilization, and Storage, with 12 talks, 10 speakers, and more than 180 participants.



*SPE Visit to North Dakota Geological Survey
(Core Library)*

Department Statistics

- 78 undergraduate students
- 7 Certificates
- 23 Master students
- 70 Ph.D. students
- 1 Visiting Scholars
- 2 Ph.D. graduates in Fall 2021

Upcoming Events

- **May 9 -13:** Last week of classes For Spring 2022
- **May 16:** Summer classes start
- **July 4:** Independence Day
- **Aug 22:** Fall courses start

Contact (WE ARE HERE TO HELP!)

University of North Dakota, College of Engineering & Mines,
Department of Petroleum Engineering

701.777.2533; 701.335.3601

2844 Campus Road
Collaborative Energy Complex Room 113, Stop 8154
Grand Forks, ND 58202-8154

Department Chair:
Undergraduate Program Inquiry:
Graduate Program Inquiry:

vamegh.rasouli@UND.edu
kegang.ling@UND.edu
hui.pu@UND.edu

<https://engineering.und.edu/petroleum/>
Follow our SPE Student Chapter at: <https://linkedin.com/company/spe.und.sc/>
Find our College on Facebook: <https://www.facebook.com/UNDCEM>
or on Twitter: <https://twitter.com/UNDCEM>

