Second Circular

New Tools, New Challenges and New Opportunities for Oil and Gas Exploration AAPG Workshop

Oct. 26-28, 2019 | Beijing, China



The global oil and gas industry is facing new changes. New development on oil and gas accumulation dating, oil and gas dating and tracing technologies, tools and methods in basins, new challenges on deep petroleum accumulations' prediction and evaluation, and new opportunities for the application of artificial intelligence and machine learning (AIML) in oil and gas industry have gradually become the research frontier in global oil and gas industry. The breakthrough related to those areas would led the rapidly development in the oil and gas industry. In face of the new situation in global oil and gas industry, this international academic conference aims to discuss and exchange the international new research achievements in the above fields. At the same time, we welcome the demonstration of the latest technologies, case applications and product demonstrations in relevant fields from all over the world.

1. Conference Topics

(1). New Technologies: Dating and tracing petroleum in basins

- A. Fluid residence age dating (thermochronology, Re-Os isotope dating, etc.)
- B. New methods of assessing source rocks/maturity
- C. Organic-inorganic interaction and oil & gas migration tracing

(2). New Challenges: Deep reservoir evaluation and prediction

- A. Hydrocarbon formation and occurrence in deep basins
- B. T and P fields and phase state of oil and gas
- C. Reservoir diagenesis and fracture evolution

(3). New Opportunities: Artificial intelligence and machine learning (AI/ML) -

impact on research and development of oil and gas industry

- A. AI/ML in oil and gas exploration possibilities and next steps
- B. AI/ML in oil and gas exploitation-possibilities and next steps

2. Conference Schedule and Location

(1). Conference Schedule (Oct.26-28 2019)

- ①Oct. 26, 2019: Registration
- ②Oct. 27, 2019: Opening Ceremony & Conference Oral Presentation
- ③ Oct.28 2019: Conference & Sub-Forum Oral Presentation

(2). Conference Location

PetroChina Science and Technology Exchange Center, Beijing, China

Address: No.10 Huanghe Street, Shahe Town, Changping District, Beijing (Northeast Corner of the crossroad of Huanghe Street and Taihang Road, Shahe Town, Changping District, Beijing)

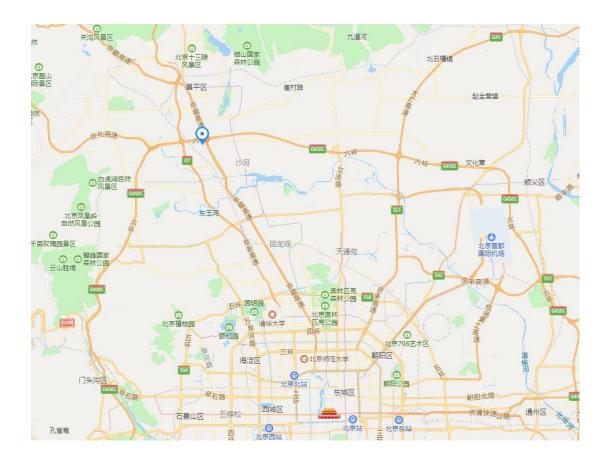
Transportation:

Beijing Capital International Airport is 45 kilometers away, 40 minutes by taxi.

Beijing West Railway Station is 40.9 kilometers away, 1 hour and 20 minutes by taxi.

Beijing South Railway Station is about 42.4 kilometers away, 1 hour and 11 minutes by taxi.

Beijing Railway Station is about 40.3 kilometers away, 1 hour and 16 minutes by taxi.



3. International Participating Experts (Partial)

(In alphabetical order of authors)

 "Relating changes in transport properties to changing mechanical properties in shale using acoustic velocities"

Brandon Schwartz.

Pennsylvania State University. U.S.

 "A Technique for Combining Reservoir Quality and Mechanical Quality for Automated Horizontal Target Optimization"

Carrie Glaser.

FractureID. U.S.

3. "Deep learning applications: relieve the burden of picking training data from seismic interpreters"

Carolan Laudon.

Geophysical Insights. U.S.

"Missing Well Log Prediction Using Deep Recurrent Neural Networks"
 Ehsan Naeimi. IkonScience. U.S.

5. "Quest for Bypassed Oil in Brown Fields: A Case Study in Lower Burgan

Reservoirs of North Kuwait"

Ghadeer Boland. Kuwait Oil Company. Kuwait

6. "Geomechanics-based Hydraulic Fracturing in a Tight Gas Formation in Pakistan:
Turning a Fiasco to a Success"

Hamed Soroush.

PetroLern. U.S.

7. "Machine Learning Regressors and their Metrics to predict Synthetic Sonic and Brittle Zones"

Ishank Gupta.

University of Oklahoma. U.S.

8. "Subsurface Examination via Well log and Seismic data Consolidated Paradigm:
An Analysis of '' J'' field Niger Delta Basin"

Onwuka Julius.

Federal University Oye-Ekiti. Nigeria

 "Machine Learning Based Segmentation of FIB-SEM Reservoir Rock Images for Quantitative Understanding of Reservoir Properties"

Kirill Simonov.

Skoltech, Russia

10. "Quasi-Dry CO2 Fracturing - A New Breakthrough in Liquid CO2 Fracturing"

Liang Jin.

BrightGold Consulting. Houston

11. "Kinetics of hydrocarbon generation from marine Ordovician Goldwyer shales in Canning Basin, Western Australia"

Lukman Johnson.

Curtin University. Australia

12. "A Novel Approach of Monitoring Proppant Consolidation with Dynamic Measurements under Simulated Downhole Conditions"

Mohammad H. Alqam.

Saudi Aramco. Saudi Arabia

13. "Seismic Data Fault Enhancement using Multispectral Fault Discontinuity"

Muhammad Ahmed Raza.

United Energy Pakistan Ltd, Pakistan

14. "Recent Researches and Application of Machine Learning and Artificial

Intelligence (AI) in the Oil and Gas Industry"

Munira Raji.

Octivian Data. England

15. "Update Structural Models in Real time using Artificial Intelligence (AI) while Drilling"

Sunil Garg.

DataVediK. U.S.

16. "Pore Pressure Estimation in Deep Cretaceous Bhuvanagiri Formation of Bhuvanagiri Field of Cauvery Basin, India"

Surbhi Mundra.

Oil & Natural Gas Corporation Limited. India

17. "An Industrial Internet of Things (IIoT) Platform that Enables Agile Development and Deployment of Data Science Solutions in E&P"

Tailai Wen.

Arundo Analytics. U.S.

18. "Depositional Environment, Stratigraphy, Petrophysical and Reservoir
Characteristics, and Basin Model of a deep gas play: Haynesville and Bossier
Formations of East Texas and Northwest Louisiana, USA"

Ursula Hammes.

Texas A&M University. U.S.

 "In situ U-Pb Geochronology of Calcite: A Promising Dating Technique for Petroleum System Evolution"

Zhen Li.

Curtin University. Australia

4. Organizers

Organizer: State Key Laboratory of Petroleum Resources and Propecting, China

American Association of Petroleum Geologists (AAPG)

Petroleum Geology Committee of Chinese Petroleum Society

Petroleum Geology Committee of Geological Society of China

Beijing Petroleum Society

China University of Petroleum (Beijing)

5. Academic Committee

Director: Chengzao Jia, CNPC, China

Susan Nash, AAPG, U.S.

Deputy Director: Rixiang Zhu, Tieguan Wang, Deli Gao, Zhijun Jin, Wenzhi Zhao, Fang

Hao, Longde Sun, Caineng Zou, David Weitz, Lizhi Xiao

6. Organizing Committee

Director: Gensheng Li, China University of Petroleum (Beijing)

Susan Nash, AAPG, U.S.

Deputy Director: Stephen Larter, Taixian Zhong, Zhiliang He, Herong Zheng, Suyun Hu,

Xiongqi Pang

7. Conference Registration and Fees

Please login to the AAPG link below to register and get more information about the meeting:

https://www.aapg.org/career/training/in-person/workshops/details/Articleid/51954/aapg-g tw-new-tools-challenges-and-opportunities#119129-pricing

The registration fee for the conference is \$595 per person and \$295 per person for retinues and students. Registration fees include: admission fees for special reports and sub-forum reports, meeting schedule information, three meals per day, tea breaks during the meeting, etc.

8. Conference Language: Chinese and English (For some oral presentations we would provide simultaneous interpretation)

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9. Contact Information

Secretary-General: Nansheng Qiu(13910633594, qiunsh@cup.edu.cn)

Susan Nash(918-560-2604, snash@aapg.org)

Contacts: Haizhou Wang(18311376863) Langqiu Sun(15901052730) Qingping

Wang(15210877364)

Contact address: State Key Laboratory of Petroleum Resources and Prospecting,

Changping District, China University of Petroleum, Beijing

Zip Code: 102249

E-mail Addrress: prp@cup.edu.cn

China University of Petroleum(Beijing)

State Key Laboratory of Petroleum Resources and Prospecting

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