Geosciences Technology Workshops 2018

Deep and Ultra-deep Petroleum Systems: What we know and don't know

26-28 October 2018 • Beijing, China • Asia Pacific Region



FRIDAY, 26 OCTOBER

8:00 AM-8:05 AM | Venue Safety Announcement

8:05 AM-8:10 AM

Welcome message from Susan Nash, AAPG (Session Chair: Zongju Zhao)

8:10 AM-8:20 AM Welcome message from Professor Zhengzhang Zhao, CPS

8:20 AM-8:30 AM Welcome message from Professor Fang Hao, UPC

8:30 AM-9:10 AM

Challenges and technological development trend of Chinese upstream petroleum industry Chenzao Jia (PetroChina) (Session Chairs: Susan Nash and Yan Song)

9:10 AM-9:50 AM

Application of ground penetrating radar imaging to deepwater (turbidite) outcrops Roger Slatt (University of Oklahoma)

9:50 AM-10:30 AM | Team Break and Group Photo

10:30 AM-11:10 AM

Formation and maintenance mechanism of deep-ultra deep carbonate reservoirs and oil and gas exploration practices Yongsheng Ma (SINOPEC) (Session Chairs: Zhilang He and Mark Tingay)

11:10 AM-11:50 AM

The use of chemostratigraphy to document mudrock variability and construct sequence stratigraphic correlations in deep marine shales: with analogs from the Woodford Shale, Oklahoma and the Graneros Shale, Colorado

Bryan Turner (Morrison Natural History Museum)

11:50 AM-1:30 PM | Lunch Break

1:30 PM-2:10 PM

Is shale evolution a reality in China? Zhijun Jin (SINOPEC) (Session Chairs: Xiongqi Pang and Mason Dykstra)

2:10 PM-2:50 PM

A major deep onshore unconventional play discovered in a mature basin of Northwest Turkey Rob Sadownyk (Valeura Energy)

3:30 PM-3:40 PM | Tea Break

3:40 PM-4:20 PM

An exploration breakthrough in the Huanghua Depression and its significance for the Paleozoic petroleum systems in the Bohai Bay Basin

Xianzheng Zhao (Dagang Oilfield, PetroChina) (Session Chairs: Wenhui Liu and Chun-Hock Tan)

4:20 PM-5:00 PM

Oil below the "Oil Window:" deep mechanism of hydrocarbon field formation Oleg Batalin (Oil and Gas Institute of Russia)

5:40 PM-6:00 PM | Sum Up and Q&A

6:30 PM-8:30 PM **Conference Banquet**

2:50 PM-3:30 PM

Reservoir trends and anomalies in deep-water submarine canyon environments: 21st century progress and limitations derived from outcrop studies of the Upper Cretaceous to Paleogene Great Valley forearc, western California, U.S.A. Jon Rotzien (Basin Dynamics LLC)

5:00 PM-5:40 PM

Shale gas sweet window and exploration prospects of deep shale gas in the upper Yangtze, China Zhiliang He (SINOPEC)

SATURDAY, 27 OCTOBER

8:30 AM-9:00 AM

Deep-water oil and gas in the northern South China Sea Weilin Zhu (Tongji University) (Session Chairs: Shuichang Zhang and Samuel Armacanqui)

9:00 AM-9:30 AM

From deep horizon to deep water, a North Eastern Latin America success story Xavier Moonah (University of West Indies)

10:00 AM-10:30 AM | Team Break

10:30 AM-11:00 AM

Origin of the Ordovician stratabound paleocaves in the southern Tahe oilfield, Tarim Basin, China: constrains from cave morphology and speleothem geochemistry

Heng Zhang (Key Lab - Wuhan and Northwest Oilfield, SINOPEC) (Session Chairs: Paul Mann and Xiaorong Luo)

9:30 AM-10:00 AM

The concept of the sustainable oil and gas field exploration and development applied to drilling of vertical deep and horizontal extended wells in environmentally sensitive areas Sam Armazangui (ICI)

11:00 AM-11:30 AM

Northern Gulf of Mexico Basin: A new frontier in an old battle field (recent key learnings from the deepwater exploration) Waixin (Wayne) Xu (Schlumberger)

11:30 AM-12:00 PM

The creation and fill of accommodation space and sedimentary dynamics on the slopes of deep-water continental margins Mason Dystra (Anadarko)

12:00 PM-1:30 PM | Lunch Break

1:30 PM-2:00 PM

Genesis of deep hydrocarbon accumulations in Chinese basins Shuichang Zhang (RIPED, PetroChina) (Session Chairs: Roger Slatt and Lilhong Zhou)

2:00 PM-2:30 PM

Mega-regional scale, decision-tree analysis for hydrocarbon prospecting on passive, conjugate margins of the circum-Atlantic and Gulf of Mexico Paul Mann (University of Houston)

3:30 PM-4:00 PM | Tea Break

4:00 PM-4:30 PM

The effectiveness of clastic reservoirs for hydrocarbon migration and accumulation in deep basins Xiaorong Luo (Chinese Academy of Sciences) (Session Chairs: Julien Bourdet and Kelai Xi)

4:30 PM-5:00 PM

Seismically-driven characterization of deep-water turbidite systems Bing Wang (China University of Geosciences - Beijing)

5:40 PM-6:00 PM | Sum Up and Q&A

2:30 PM-3:00 PM

Characteristics and genesis of two categories of deep petroleum systems Feiyu Wang (China University of Petroleum - Beijing)

3:00 PM-3:30 PM

Petroleum accumulation and leakage in a deeply buried carbonate reservoir, Níspero Field (Mexico) Julien Bourdet (CSIRO, Australia)

5:00 PM-5:30 PM

Organic-inorganic interaction and their effects on deep petroleum systems Quanyou Liu (SINOPEC)



SUNDAY, 28 OCTOBER

8:30 AM-9:00 AM

Pore structure, fluid flow and mass transport in porous and fractured media: progressive challenges into the deep geological systems Qinhong Hu (University of Texas at Arlington) (Session Chairs: Susan Nash and Jianhua Zhao)

9:00 AM-9:30 AM

A method to reflect oil cracking and oxidization extents Chunfang Cai (CAS)

10:00 AM-10:30 AM | Team Break

10:30 AM-11:00 AM

Genetic mechanisms of the Permian sandstone reservoirs with multistage subsidence-uplift in the Huanghua Depression, Bohai Bay Basin, East China Guanghui Yuan (CUP-Qingdao)

(Session Chairs: Xiugang Pu and Qinhong Hu)

9:30 AM-10:00 AM

Application of quantitative mineralogical analysis and radioisotope techniques in the characterization and dating of deep petroleum systems

Zhen Li (Curtin University, Australia)

11:00 AM-11:30 AM

Advantages of drilling into thick actively generating mature source rocks Munira Raji (Octavian Data Ltd)

11:30 AM-12:00 PM

An innovative workflow for 3-D quantitative characterization of deeply buried carbonate fault-karstic migration carriers of central uplift in Tarim Basin

Fei Tian (Chinese Academy of Sciences)

12:00 PM-1:30 PM | Lunch Break

1:30 PM-2:00 PM

Facies, characterization and early dolomitization of lower cambrian microbialite-dominated reservoir, Tarim Basin, Northwest China: Implications for ultra-deep reservoir quality and distribution Yongjin Zhu (PetroChina Hangzhou Research Institute of Geology) (Session Chairs: Mason Dykstra and Chengyan Lin)

2:00 PM-2:30 PM

The complex diagenetic fluids evolution of a deeply buried carbonate reservoir and their impact on the reservoir quality, Tarim Basin (China) Jiaqing Liu (Chinese Academy of Sciences)

3:30 PM-4:00 PM | Tea Break

4:00 PM-4:30 PM

Hydrocarbon-driving forces in deep tight reservoirs and evaluation of their contribution to hydrocarbon accumulations Xiongqi Pang (China University of Petroleum - Beijing) (Session Chairs: Keyu Liu and Oleg Batalin)

2:30 PM-3:00 PM

Characterization of deep water tidalites: case study from Cauvery and Krishna-Godavari Basins, India Anumita Mondal (Keshava Deva Malaviya Institute of Petroleum Exploration)

3:00 PM-3:30 PM

Evidence of fluid-flow phenomena and their implications on deep and ultra-deep petroleum systems on the Nigeria transform margin Oluwatobi Olobayo (Octavian Data Ltd)

4:30 PM-5:00 PM

'Play-based pore pressure prediction:' using the geoscience of overpressure to improve drilling safety and find new hydrocarbon discoveries Mark Tingay (Petronas, AAPG - Asia Pacific)

5:00 PM-6:00 PM | Summary Q&A