



Register

NOW

SPE Workshop: Complex Reservoir Fluids – De-complexification of the Complexity

18-20 May 2022

Snekkersten, Denmark

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Workshop Programme

About the Workshop

The oil industry has entered a new phase after being exposed to lower oil prices in 2014 with the expectations of "lower and longer". This impacted many new developments with respect to pre-2014 times. As a reaction to such an environment, the industry shifted gears in various dimensions, for example, more constrained/disciplined capital-spending, digitalisation and a continued increase of unconventional oil production. Naturally, this had implications in technology development and research applications. This also brought changes and developments in the area of PVT and fluid characterisation.

This workshop will cover the most recent developments in capturing the behaviour of complex reservoir fluids. Particularly with a focus on the challenging questions of what is needed for fluid properties under various conditions, within the constraint of the current environment. Some of the key elements covered will include:

- Why do we need data, computations or "gold-plated" approaches? – If it was your money would you do it (ask for experiments or extra computations that may be perceived to be not necessary)?
- What does PVT mean in terms of recovery optimisation and flow assurance?
- What are the main obstacles for new technologies and their deployment?
- Why is unconventional PVT different? And does it matter?
- To what extent does reservoir fluid evaluation contribute to the field development plan?
- Digitalisation and new approaches where are we today and what will be next?

Committee

Co-chairs

Birol Dindoruk, University of Houston Tao Yang, Equinor

Members

Simon Andersen, Technical University of Denmark/ Danish Hydrocarbon Research and Technology Centre

Antonin Chapoy, Heriot-Watt University

Raj Deo Tewari-Dr, Petronas

Markus Hays Nielsen, Whitson

Jarle Larsen, Equinor

Niels Lindeloff, TOTAL

Arwa Ahmed Mawlod, Abu Dhabi National Oil Company

Francois Montel, University of Pau and Pays de l'Adour

Shahin Negahban, University of Kansas John Nightswander, Schlumberger Ryosuke Okuno, The University of Texas at Austin Magali Pujol, TOTAL Fredrik Saaf, Shell Henrik Sorensen, Calsep Sander Suicmez, QRI Paul Toplack, Wintershall Martin Trusler, Imperial College Yun Wang, BP Wei Yan, Technical University Denmark Harvey Yarranton, University of Calgary in Alberta

Dengen Zhou, Chevron



About the Society of Petroleum Engineers

The Society of Petroleum Engineers (SPE) is a not-for-profit professional associate whose more than 124,800 members in 134 countries are engaged in oil and gas exploration and production. SPE is a key resource for technical knowledge and providing publications, events, training courses and online resources at **www.spe.org**.

Schedule (All times UTC)

| WEDNESDAY 18 MAY 2022 | | |
|---|--|--|
| 0700 - 0800 | I Welcome and Registration | |
| 0800 - 0815 | I Chairperson's Welcome | |
| 0815 - 0900 | Keynote Session | |
| | Speaker: Erling Halfdan Stenby, Technical University of Denmark | |
| 0900 - 1030 | Session 1: Reservoir Fluid Sampling and Downhole Fluid Analysis | |
| | Session Chairpersons: John Nightswander, | |
| | Schlumberger; Simon Andersen, Technical University of Denmark/ Danish Hydrocarbon | |
| | Research and Technology Centre | |
| 1030 - 1100 | I Coffee Break | |
| 1100 - 1230 | Session 2: Advanced PVT Measurements | |
| | Constan Chairmananan Wai Van Tashnisal | |
| | Liniversity of Depmark: Everyte Okupe | |
| | University of Denmark; Ryosuke Okuno, The University of Texas at Austin | |
| 1230 - 1330 | University of Denmark; Ryosuke Okuno, The University of Texas at Austin | |
| 1230 - 1330 1330 - 1500 | Session Charpersons: Wei Yan, Technical University of Denmark; Ryosuke Okuno, The University of Texas at Austin Lunch Session 3: PVT for Lunconventional Peservoir | |
| 1230 - 1330 1330 - 1500 | Session Chairpersons: Wei Yan, Technical University of Denmark; Ryosuke Okuno, The University of Texas at Austin Lunch Session 3: PVT for Unconventional Reservoir Session Chairpersons: Henrik Sorensen. | |
| 1230 - 1330 1330 - 1500 | Session Chairpersons: Wei Yan, Technical University of Denmark; Ryosuke Okuno, The University of Texas at Austin Lunch Session 3: PVT for Unconventional Reservoir Session Chairpersons: Henrik Sorensen, Calsep; Markus Hays Nielsen, Whitson | |
| 1230 - 1330 1330 - 1500 1500 - 1530 | Session Chairpersons: Wei Yan, Technical University of Denmark; Ryosuke Okuno, The University of Texas at Austin I Lunch Session 3: PVT for Unconventional Reservoir Session Chairpersons: Henrik Sorensen, Calsep; Markus Hays Nielsen, Whitson I Coffee Break | |
| 1230 - 1330 1330 - 1500 1500 - 1530 1530 - 1700 | Session Charpersons: Wei Yan, Technical University of Denmark; Ryosuke Okuno, The University of Texas at Austin I Lunch Session 3: PVT for Unconventional Reservoir Session Chairpersons: Henrik Sorensen, Calsep; Markus Hays Nielsen, Whitson I Coffee Break Session 4: Geochemistry for Reservoir Fluids | |
| 1230 - 1330 1330 - 1500 1500 - 1530 1530 - 1700 | Session Chairpersons: Wei Yan, Technical University of Denmark; Ryosuke Okuno, The University of Texas at Austin I Lunch Session 3: PVT for Unconventional Reservoir Session Chairpersons: Henrik Sorensen, Calsep; Markus Hays Nielsen, Whitson Coffee Break Session 4: Geochemistry for Reservoir Fluids Session Chairpersons: Magali Pujol, TOTAL; Tao Yang, Equinor | |
| 1230 - 1330 1330 - 1500 1500 - 1530 1530 - 1700 1900 - 2130 | Session Chairpersons: Wei Yan, Technical University of Denmark; Ryosuke Okuno, The University of Texas at Austin Lunch Session 3: PVT for Unconventional Reservoir Session Chairpersons: Henrik Sorensen, Calsep; Markus Hays Nielsen, Whitson Coffee Break Session 4: Geochemistry for Reservoir Fluids Session Chairpersons: Magali Pujol, TOTAL; Tao Yang, Equinor Workshop Dinner | |

| 1100 - 1230 | Session 6: CO₂ / H2S Solutions and CO₂ Sequestration Session Chairpersons: Yun Wang, BP; Paul Toplack, Wintershall; Martin Trusler, Imperial College |
|-------------|---|
| 1230 - 1330 | I Lunch |
| 1330 - 1500 | Session 7: Digital and New Approaches Session Chairpersons: Shahin Negahban, University of Kansas; Arwa Ahmed Mawlo, Abu Dhabi National Oil Company; Birol Dindoruk, University of Houston |
| 1500 - 1530 | I Coffee Break |
| 1530 - 1700 | Session 8: Integrated Fluid Management Session Chairpersons: Fredrik Saaf, Shell; Jarle Larsen, Equinor |
| FRIDAY 20 | MAY 2022 |
| 0800 - 0900 | I Welcome and Registration |

| 0900 - 1030 | Session 9: EOR Applications and Modelling Changes |
|-------------|---|
| | Session Chairpersons: Sander Suicmez, QRI; Dengen Zhou, Chevron |
| 1030 - 1100 | I Coffee Break |
| 1100 - 1230 | Session 10: Flow Assurance and its Impact on Reservoir Engineering |
| | Session Chairpersons: Antonin Chapoy, Heriot Watt University; Simon Andersen, Technical University of Denmark/ Danish Hydrocarbon Research and Technology Centre; Harvey Yarranton, University of Calgary in Alberta |
| 1230 - 1300 | I Wrap-up |

THURSDAY 19 MAY 2022 0800 – 0900 | Welcome and Registration 0900 – 1030 | Session 5: Compositional Gradient and Reservoir Connectivity

Session Chairpersons: Niels Lindeloff, TOTAL; Francois Montel, University of Pau and Pays de l'Adour

1030 – 1100 | Coffee Break

Interested in attending?

This workshop will be held in Snekkersten, Denmark. Denmark has produced oil and gas since 1972, a production of great importance to the Danish economy, which creates workplaces both onshore and offshore.

Registration

Visit go.spe.org/22acop to register for this workshop.

General Information

Why Attend?

An SPE workshop is a multi-day event that fosters knowledge sharing in an intensive learning experience.

The workshop's programme committee members solicit presentations from top industry professionals. This ensures a robust technical programme with presentations that are laser focused on critical industry topics.

Income from this event will be invested back into SPE to support many other Society programmes. When you attend an SPE event, you help provide even more opportunities for industry professionals to enhance their technical and professional competence. Scholarships, certification, the Distinguished Lecturer programme, and SPE's energy education programme Energy4me[®] are just a few examples of programmes supported by SPE.

Format

Workshops maximise the exchange of ideas among attendees and presenters through brief technical presentations followed by extended Q&A periods. Focused topics attract an informed audience eager to discuss issues critical to advancing both technology and best practices.

Many of the presentations are in the form of case studies, highlighting engineering achievements and lessons learned. In order to stimulate frank discussion, no proceedings are published and members of the press are not invited to attend.

Workshop Deliverables

The committee will prepare a workshop summary for public release.

Presentation materials will be posted on a dedicated SPE page and will be available to attendees after the workshop.

Sponsorship Opportunites

Sponsorship Support

Workshops offer sponsors unique access to a focused group of key decision makers in the oil and gas industry.



SPONSORSHIP BENEFITS

- Complimentary registrations for company staff.
- Opportunity to distribute a promotional item/gift with sponsors' logo provided by sponsor (subject to SPE approval).
- Opportunity to provide one item of company literature on sponsor table.
- Company logo on event website with link to sponsor's website.
- Company logo on sponsor page of onsite delegate pack given to all attendees upon arrival.
- Company logo displayed on signage at workshop.
- Company logo included in thank you slide displayed in meeting room during all breaks.

For more information on the sponsorship opportunities available, please contact Josh Purnell at jpurnell@spe.org.

Further details on the technical programme, registration and location can be found at: **go.spe.org/22acop**





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