FORCE Summer Newsletter 2022

Dear FORCE members

Summer is upon us, and it is time to take a look back, and see what has happened in FORCE in the last 6 months.

Finally, the world looks familiar again, and we can meet. In person! Though the pandemic forced us to work and meet in totally different ways, FORCE (that is you!) handled this in the most impressive way. After we got through the first shock of everything shutting down, FORCE members quickly adjusted, and started with webinars. This was so popular and easy to access that we broke every previous attendance record in the history of FORCE.

Following the high activity level during the pandemic, FORCE has also had a really great start to 2022, with 19 events, including three «corinars», and two field trips. The field trips to Corinth and to Mongstad has both been fully booked, so it looks like people are ready to travel and meet again. That is great! The network groups have done an amazing job organizing these popular event.

The new TC-EEE startet out 2022 with an impressive 8 webinars. We can't wait to see how the rest of 2022 will turn out.

With everything starting to open up, we are still used to easy access to events via Teams. Therefore, we tried out a new «hybrid» solution by combining webinar and live events. Particiapants could choose upon registration in what way they wanted to attend. Unfortunatly this gave us som challenges, so we will continue to arrange physical live events and webinars, just not at the same time. So, we hope to see more of you here at the NPD premises for more live events in 2022.

In April TC-IE startet up a new network group with Peter Bormann from ConocoPhillips as chair. Data Analytics, Machine Learning and data centric workflows goal is to increase the knowledge of modern data analytics, machine learning and AI applications on subsurface data ranging from production data to geophysics/ geology and written reports. They have already planned their first seminar on November 10th in Valhall. The FORCE 2022 NLP Subsurface Symposium.

Thank you so much to all members who spend your valuable time and effort, sharing your knowledge, bringing in ideas, and creating arenas for all of this to take place. We could not have done this without you!

The FORCE Secretariat

Greetings from Eva Halland

Dear all

This year's summer greeting from me will be about memories, thanks and years to come. I will leave the NPD this summer and thus also from the role as manager of the FORCE secretariat, a position I have had for the last 10 years. A big discussion back then was about ending or continuing with FORCE, and how to organize. This resulted in the structure of FORCE we have today. I think we are all happy with the decision to continue. It has been a fantastic journey to take part in, all the enthusiasm, collaboration, discussions and constantly new ideas for collaboration.

From a situation with a few interested companies, to a situation where new companies call us almost before they are in the pre-qualification process, and all license holders at NCS are members. From a few seminars a year, to more than 30 with almost 3,000 participants.

What we observed when the pandemic hit us is a bit of confusion about what to do. But very quickly, we started with webinars. How quickly all the network groups adapted to this new situation says something about how important the time is for knowledge sharing and discussions.

Although I have held this position for the last 10 years, I have been following Force since it's inception 26 years ago, and FORCE is still evolving with new technical groups and new networking groups. For me, it is also especially nice to see that SAFARI is still going strong. I started and led the SAFARI collaboration in the late 80's, together with the three Norwegian companies. After 7 years, we realized that we did not have the technology we needed to handle all the collected data, therefore, SAFARI became a part of FORCE. The technology advanced and collected and new data could be used. Joining the field trips presented in the webinars is more than impressive. Showing what collaboration and technology can result in. We also see this from the hackathons and machine learning events that have been arranged in the recent years. This is collaboration must continue to meet the future of this industry. I am confident that FORCE is ready to support the coming challenges of an efficient industry, and the demand for clean energy.

Thank you all for discussions and inspiration, I will miss you!

Wish you all in FORCE a continued good cooperation and a well-deserved summer holiday.

Eva Halland, Manager Secretariat, NPD

Greetings from Gerhard V. Sund

Summary from well technology and drilling network

There has been good activity in the Well tech/Drilling Network over the last 12 months. We have arranged quarterly Network Meetings and quarterly Webinars.

The webinars have covered the following topics:

- October 21st (2021) Retrofit MLT (Multi Lateral Technology)
 Presentations by NPD, Vår Energy, Petoro and Equinor
- February 22nd Dual Drilling
 Presentations by Neptune Energy, Aker BP and Lundin
- April 22nd Cyber Security in D&W
 Presentations by Aker BP, Mærsk Drilling and Gassco

The webinars have been popular, and we have been lucky to get very competent volunteers from operating companies for all webinars.

We plan on continuing with quarterly webinars and also network meetings. Next webinar topic is "Fishbone technology" in September 2022.

The administrators of the Well Technology and Drilling Network is Gerhard V. Sund, Chairman, Neptune Bjørn Mysen, Vice Chairman, Aker BP Thor Blunck, Org. committee member, retired Total

Greetings from Balazs Badics

Dear all,

after the challenging 2020, 2021 continued similarly with "home-office" and never-ending Teams meetings, I have taken over the FORCE PSA group coordination from Rolando di Primio in June 2021. Due to the covid-restrictions, and the relative "easiness" of organizing webinars via Teams, where people from several Norwegian locations and even from overseas offices could join, we decided to focus on webinars. We have had 3 successful webinars in 2021 autumn.

In Q1-Q2 of 2022 we continued with the webinar series, to be held on the last Thursday afternoon each month; between 15.00-16.00.

- February 24th: We had Daniel Palmowski (Schlumberger) presenting the methods to model CO2 generation, migration and accumulation, leakage in basin modelling tools (PetroMod), where a record number of people, more than 100, participated). The webinar was recorded, and the link can be found on the FORCE website.
- March 24th: Joachim Rinna, from Aker BP presented their excellent regional results on AI and Machine learning in oil-family classifications, best practices, and methods, where 30-40 people participated in the webinar, which was not recorded due to confidentiality reasons.
- April 28th: Guro Skarstein, from University of Stavanger presented their regional project: "Paleozoic source rock potential of the North Sea", where 30-40 people participated and it was not recorded due to confidentiality reasons.
- Our last event, will be-on June 9th, where Nicolaj Mahlstedt & Brian Horsfield (GEOS¤ & GFZ Potsdam) will be presenting their views and ideas on controls of bulk petroleum compositions in conventional and unconventional petroleum systems.

Best regards & we wish you a good second-half of 2022!

Balazs Badics, Wintershall Dea – Chairman of the Petroleum Systems Network Group

Previous and upcoming events

```
26.-27.01
            Webinar: Underexplored Plays (300 – sold out)
            Webinar: Hywind Tampen – an industrial part of the solution (68)
02.02
16.02
            Webinar: Dual Drilling (84)
            Webinar: The role of basin modelling in CCS applications - play to prospect workflows (142)
24.02.
            Webinar: Vår Energi Retrofit Multilateral Campaign: Existing infrastructure utilization to reduce emissions and costs (51)
10.03.
15.03.
            Webinar: State of the art heat pumps and energy integration (29)
16.03.
            Webinar: The Acorn and VNZ projects: CCS on the UKCS (108)
            Hybrid: Johan Sverdrup: experience from first 2 years of production (85)
17.03
24.03
            Webinar: Machine learning based oil family classification above 62° North – method and some observations (53)
27.-28.04
            Seminar: Joining Forces (30)
            Webinar: The Paleozoic petroleum system in the North Sea (104)
28.04.
02.-06.05
            Field Trip to the gulf of Corinth (15 – sold out)
             Core webinar: The Filicudi discovery (62)
05.05.
            Webinar: Northern Lights: CO2 Shipping expanding global reach of CCS (41)
09.05.
             Webinar: Goliat Retrofit MLT: from target maturation to production performance (53)
12.05.
13.05
             Core webinar: The Edvard Grieg cores, the first oil discovery made by Lundin Energy at the Norwegian shelf (63)
16.05.
            Webinar: Storage resource maturation and beyond: The Northern Lights experience (124)
             Core webinar: Caves, breccias, sinkholes and the evaporites that are not there anymore – Paleokarst features of the Loppa High, Barents Sea (53)
31.05
09.06
            Webinar: Controls of bulk petroleum compositions in conventional and unconventional petroleum systems (31)
14.06
            Field trip: Technology Centre Mongstad (25)
```

Go here to sign up for upcoming events: https://www.npd.no/en/force/events/

FORCE Summer Newsletter 2022

The FORCE Secretariat wishes you a great summer holiday!

May the FORCE be with you -May you be with FORCE

Kind regards, Tone, Linn, Janka, Eli, Aslaug and Stig Morten