



Summer- and vacation time is right around the corner, and the Secretariat will once again use the summer newsletter to honor all of you hard-working Force contributors, who are keeping the activity level high, spending countless hours putting your ideas into action through seminars, lunch&learns and projects. You are very valuable to Force and you make things happen. Well done!

By Mid-June we have had 5 seminars and 6 lunch&learns, welcoming 472 participants. The highest attendance was at the "Advances in siliciclastic and carbonate sedimentology" seminar in April with 86 attendees. Another successful seminar is the "Joining Forces" which was arranged for the 3<sup>rd</sup> time. We received quite a lot positive feedback addressing a well organized seminar with a solid program and brake-out sessions, with 5 different discussion rooms and highly relevant topics. The first seminar day was wrapped up with an evening dinner where the discussions continued. Together with the positive feedback, many also commented that the industry attendance could have been higher. How to get companies more involved is a on the to-do list for the next Joining Forces, most likely to take place in 2020.

Project proposals are increasing and we have 4 new ones, in 2018; "Basmarge", "Seisfarm", "Quam" and "Fluid contact positions on the NCS". Two of them have been presented at lunch&learn seminars and invitations for participation sent to the General Assembly contact. We hope you take some time to consider joining one of these projects, as they are unique opportunities to collaborate, cooperate and share knowledge.

## Summer greetings from the SedStrat network

The SedStrat network consist of 40 members who meet to capture learnings and success factors from previous activities and to discuss new ideas for seminars, field trips and consortia.

The activities so far this year include the seminars "Cores of the Year" and "Advances in siliciclastic and carbonate sedimentology". We also facilitated a Lunch & Learn event to present the consortium 'North Atlantic Provenance Database' run by GEUS and NPD. The biostratigraphers will arrange the meeting "Biostratigraphy NCS Operators Meetings within FORCE" on June 14<sup>th</sup>, whereas other types of "microscopic geology" will be presented in the seminar "Geology under the microscope" in September. In October, we will arrange a 2-day field trip to Jæren together with the Structural Geology network.

Cooperation between the network groups over the years has triggered many ideas which have led to cross-disciplinary field trips and seminars. The seminars "From Seismic Fantasy to Geological Fact" and "Underexplored Plays" are two good examples. These will both be run for the third time this fall. There will also be a 4-day trip to the Gulf of Corinth where the new chairman for the structural geology network will be the excursion guide.

For 2019, we have started the planning of "Cretaceous Park" which is the next episode in a series of seminars that started in 2017 with "Triassic Park". The plan is to run these seminars as biennales and – over time – to cover all prospective stratigraphy on the NCS. We have also started planning a seminar that will capture highlights from the 50-year period since the first commercial discovery was made on Ekofisk in 1969. The high activity level in the networks is the results of years of building a culture where the member companies contribute to a "dugnad" by providing staff to the organizing committees and by sharing knowledge when presenting their work at the seminars. Several foreign geoscientists have expressed to me that the force forum is unique for Norway and we should appreciate the value of it.

My summer greetings go out to all of you that have been involved in Force this year and every year. I am particularly thankful to the organizing committees for all the hard work they put into every single event. I am proud to be a part of a network that is full of enthusiastic and knowledgeable geoscientists that come together to arrange events of the type we have in our portfolio! Hope you all have a great summer. Think safety in outcrops and elsewhere. Looking forward to seeing you again in the fall!

Best regards,
Bjørn Kåre Bryn
Chairman Force Sedimentology & Stratigraphy Network

### Summer greetings from the IOGR group

Yet another busy half-year has passed and the summer holidays are almost upon us. It is time to look back at the last six months. The TC-group has discussed some principal issues as digitalization and how to incorporate Joint Chalk Research in Force. As digitalization is not straight forward, it was not easy to reach a unified definition of what it consists of, and hence the TC invited Roy Ruså from Petoro to give a Lunch and Learn presentation regarding this subject. This resulted in a presentation called "Digitalization – a necessity for further improvement" which was well visited and got very good feedback. TC has suggested to incorporate JCR in Force as a network group called "Carbonate Reservoirs".

The new network groups "Production Optimization and Reservoir Management' and 'Integrated Reservoir Modelling' have now been active for more than a year and have had busy schedules up to now.

The Production Optimization and Reservoir Management network groups have arranged a L&L "Johan Castberg – The Improvement Process" and a full day seminar which was called "Production Optimization and Reservoir Management for a Sustainable Development"

"Integrated Reservoir Modelling" arranged a seminar called "Challenges related to fault modelling workflows" in June.

Improve EOR Competence network arranged a well visited L&L with the topic "EOR – Recent advances of WAG" presented by Arne Skauge and a one-day seminar "CO2-EOR and storage in NCS".

All sessions were held at the NPD offices.

We hope to see you all at the seminars next year and urge you to visit the web-page (<u>www.force.org</u>) and sign up for the Force newsletter.

# Summer greetings from the Improved Exploration group

The Improved Exploration Group have had a very active start to 2018. A new network group, Petroleum Systems, has been initiated. The group will focus on increasing knowledge and awareness, and build competence in petroleum systems to enhance exploration activities on the Norwegian Continental Shelf (NCS). As a result we now have four network groups: Petroleum Systems, Geophysical Methods, Structural Geology and, Sedimentology and Stratigraphy.

The network groups have given two high quality and well attended seminars and three lunch&learns so far this year.

After the summer vacation, we are back with 5 more seminars and two field trips. The two field trips will focus on structural geology and sedimentology. Field trip to Jæren, 3<sup>rd</sup> October, 2 days with structural geology and sedimentology.

Field trip to the Gulf of Corinth, 22-25<sup>th</sup> October. Excellent exposures of faulted continental to shallow marine sediments in pre and syn-rift settings directly applicable to the Norwegian Continental Shelf.

Please refer to the FORCE website for details of all upcoming activities.

Two new projects have been proposed and presented at Lunch & Learn seminars this year. BASMARGE: Basement and Margin Ultra-Deep Imaging Seismic Survey of the Norwegian Offshore Realm, is a joint project of Geology Without Limits (GWL) and the Geological Survey of Norway (NGU) and facilitated by the Geopysical methods network. The main objectives of the BASMARGE project are to validate a new acquisition technology recently developed by Geology Without Limits, and to shed light on the deep basement structures, sub-basalt and sub-salt features and thereby improve the understanding of the tectonic evolution of the Mid-Norwegian Margin and the Barents Sea.

The second project, Fluid contact controls on the Norwegian Continental Shelf, is a project by the University of Bergen and facilitated by the Structural Geology network. The main objectives of the project are to look into nine different generic themes and their impact on fluid contact positions based on results from the PESTOH project at UiB and seismic data on the NCS.

In addition there was a Project presentation - North Atlantic Provenance Database, a joint Geus and NPD project. More information about this will be posted on the website shortly.

Kind regards,
John Berry – AkerBP and Vice Chairman TC Improved Exploration

### Seminars in 2018

### Improved Oil & Gas Recovery 2018

April 19.-20<sup>th</sup> Joining Forces (63)

June 6<sup>th</sup> Co2 EOR and storage on NCS (26)

June 20<sup>th</sup> Challenges related to Fault Modelling

workflows (59)

Sept. 26<sup>th</sup> Production Optimization and Reservoir

Management for a Sustainable development

#### Lunch and learn seminars

Feb. 20<sup>th</sup> Digitalization (52)

May 29<sup>th</sup> Recent advances of WAG (40)

June 13<sup>th</sup> Johan Castberg (28)

#### **Improved Exploration 2018**

March 20<sup>th</sup> Cores of the year (62)

April 17.-18<sup>th</sup> Advances in siliciclastic (86)

Sept.12<sup>th</sup> From seismic fantasy to geological fact

Sept. 25<sup>th</sup> Geology under the microscope

Oct. 3<sup>rd</sup> Field trip to Jæren

Oct. 4<sup>th</sup> Advanced imaging, velocity modelbuilding and

depth uncertainty

Oct. 22<sup>nd</sup> Field trip to Gulf of Corinth

Oct. 31<sup>st</sup> Underexplored plays 3 Nov. 28<sup>th</sup> 30 years of 4D seismic

#### Lunch and learn seminars

June 14th

January 25<sup>th</sup> Project presentation: Ultra-Deep Imaging Seismic Survey (27)

June 5<sup>th</sup> Project presentation: North Atlantic Provenance Database (18)

Biostratigraphy NCS operators meetings within Force (13)

