



Christmas Newsletter  
from FORCE  
2018

## Dear Force members

It's time to wind up yet another great year for Force. Thanks to our hard working members, you have made 2018 so eventful with running projects, arranging seminars and coming together to discuss topics and make plans. We ended up at **23** seminars and **1** field trip, and a total of 1321 attendees. Well done!

Digitalization – it's not a new concept, the industry have been digital for decades. With increasing computer power and large data storage, new digital methods have arisen. A new concept was launched this year with the exciting three day combined workshop/seminar 'Force Hackaton and Advances of Machine Learning on Subsurface Data' and the Symposium on 'Machine Learning on subsurface data'. The attendees at the hackaton programmed hard day and night, and presented 9 projects on subjects like grain size and lithology from core photos, pressure drawdown prediction, geological ages from speicis counts and unsupervised machine learning for more geological AVO, to mention some.

Force is an interesting forum for co-operation and knowledge sharing between our 41 member companies! It's no doubt that the sharing of data and knowledge on the NCS have led to value creation for all that take part in our industry. Let's continue to be active Force members in 2019, join the network groups and sign up for a seminar committee. Your company will benefit from your contribution!

Best wishes for a happy holiday season, and many thanks for your support to Force throughout the year.  
Force Secretariat

## Best wishes for the holiday from the TC-Improved Exploration

The activity in the Improved Exploration network groups have been high in 2018, with 9 seminars, 6 lunch and learns and one field trip. Our seminars and workshops have covered topics from large scale depositional systems to pore size geology. The annual and biannual seminars are very popular, and we have had fantastic feedback. 2018 started with 'Cores of the year' – with cores from Ivar Aasen, Asta Hanstgen and Edvard Grieg fields displayed. At 'Advances in siliciclastic and carbonate sedimentology' depositional systems and tectonic effects were discussed. Two seminars were arranged for the third time; 'From Seismic fantasy to geological fact III' and 'Underexplored plays III'. The 'Geology under the microscope' workshop focused on the topics, 'Reservoir Quality in Carbonates', 'High pressure, high temperature', 'Provenance & Reservoir Quality in Clastics' and 'Pore Scale Methodology & Case Studies'. To mention some of the seminars and workshops.

The Improved Exploration groups have seen a large increase in project proposals launched on the FORCE website in 2018. Several projects have been presented at lunch and learn workshops. With no new projects in 2017, it's gratifying to see that the interest for proposing and joining research projects has increased.

We look forward to seeing you all at our seminars and field trips in 2019. Merry Christmas!

Janka Rom, NPD  
Chairman FORCE TC-IE

## Holiday wishes from the Improved Oil and Gas Recovery group

As the holiday season is upon us, it is time to reflect on the past year. 2018 has been a busy and active year for IOGR and the TC-group would like to thank you all for the contribution at all levels. Hopefully next year will be just as good.

This year started out with much focus on digitalization as well as the issues with incorporating the Joint Chalk Reservoir in Forez. It was decided to incorporate JCR in Forez as a network group called 'Carbonate Reservoirs'.

The new network group had its first meeting in November and Edvard Omdal was elected chairman. This very enthusiastic group is already planning for several seminars next year.

The other groups being 'Improve EOR Competence', 'Production Optimization and Reservoir Management' and 'Integrated Reservoir Modelling' have all been very busy arranging Lunch and Learn sessions as well as seminars. The effort has resulted in presentations regarding WAG, CO<sub>2</sub>, Fault Modelling and digitalization to mention a few.

Production Optimization and Reservoir Management network group has a new chairman as Vincent Kretz has replaced Sigurd Myge Erlandsen.

From the TC IOGR group we wish you all a Merry Christmas and a Happy New Year!

Eli Jens Høgnesen, NPD  
Forez Secretariat and TC-IOGR

## Seminars - Improved Oil & Gas Recovery

April 19.-20 <sup>th</sup>	Joining Forces (63)
June 6 <sup>th</sup>	CO <sub>2</sub> EOR and storage in NCS (26)
Sept. 18-19 <sup>th</sup>	FORCE Hackaton and Advances of Machine Learning on Subsurface Data (76)
Sept. 20 <sup>th</sup>	Symposium – Machine learning on subsurface data (150)
Nov. 28.-29 <sup>th</sup>	30 years of 4D seismic on the Norwegian Continental Shelf (90)

### Lunch and learn seminars

Feb. 22 <sup>nd</sup>	Digitalization – a necessity for further improvement (52)
April 29 <sup>th</sup>	Recent advances of WAG (40)
June 13 <sup>th</sup>	Johan Castberg – The improvement process (28)
June 20 <sup>th</sup>	Challenges related to Fault modelling workflows (61)
Nov. 23 <sup>rd</sup>	Digital EOR from pore to pore (17)
Dec. 3 <sup>rd</sup>	Flow simulator IORCoreSim (13)

## Seminars - Improved Exploration

March 20 <sup>th</sup>	Cores of the year 2018 (62)
April 17.-18 <sup>th</sup>	Advances in siliciclastic and carbonate sedimentology (86)
April 19.-20 <sup>th</sup>	Joining Forces (63)
Sept. 12 <sup>th</sup>	From Seismic fantasy to geological fact III (93)
Sept. 18-19 <sup>th</sup>	FORCE Hackaton and Advances of Machine Learning on Subsurface Data (76)
Sept. 20 <sup>th</sup>	Symposium – Machine learning on subsurface data (150)
Sept. 25 <sup>th</sup>	Geology under the microscope (63)
Oct. 4 <sup>th</sup>	Advanced imaging, velocity model building and depth uncertainty (81)
Oct. 31-Nov. 1 <sup>st</sup>	Underexplored plays III (145)
<b>Lunch and learn seminars</b>	
Jan. 25 <sup>th</sup>	Project proposal for an Ultra-deep imaging seismic survey (27)
June 5 <sup>th</sup>	Project proposal for a North Atlantic provenance database (12)
June 14 <sup>th</sup>	Biostratigraphy - NCS operators meeting within Force (13)
Oct. 2 <sup>nd</sup>	Project proposal for Submarine debris flow (8)
Nov. 7 <sup>th</sup>	Integrated basin studies – linking plate tectonics, mantle dynamics and surface processes to basin evolution (23)
Dec. 17 <sup>th</sup>	Panoche giant injection complex (60)
Oct. 22.-25 <sup>th</sup>	Field trip to Gulf of Corinth (12)

Seasonal greetings  
from the  
FORCE Secretariat

*May the FORCE be with you – may you be with FORCE*