

# Programme DHRTC Technology Conference 2018

Crown Plaza Hotel Copenhagen

## Monday 12 November

Time	Activity
7.30 -	Registration
8.00 - 8.30	Coffee
8.30 - 9.45	<p><b>Welcome</b> <i>Rasmus Larsen, Provost, DTU</i></p> <p><b>The Danish Energy Agency's focus for the future oil and gas production in the North Sea</b> <i>Trine Sannem Mønsted, Head of Division, DEA</i></p> <p><b>DHRTC - 4 years and still much to achieve</b> <i>Morten Jeppesen, Acting Director, DHRTC</i></p>
9.45 - 10.30	Meet the Programmes Break-out session with coffee and quiz
10.30 - 12.00	Technical Presentations (2 parallel sessions)
<p><b>Ekofisk and Tor Fm Recovery Improvement (Everest 2)</b></p> <p>"Outcrop analog studies of chalk - integration of geology and geophysics into geostatistical chalk models" <i>Lars Stemmerik, Professor, Natural History Museum, Copenhagen University</i> <i>Klaus Mosegaard, Professor, Niels Bohr Institute, Copenhagen University</i></p> <p>"Petroleum chemistry - the significance of the molecular details for recovery" <i>Karen Feilberg, Senior Researcher, DHRTC</i></p> <p>"Fracture modelling static and dynamic" <i>Michael Welch and Hamid Nick, Senior Researchers, DHRTC</i></p>	<p><b>Structural Integrity and Pipeline Technology (Everest 1)</b></p> <p>"Possibilities and results in structural monitoring" <i>Rune Brincker, Professor, DTU Civil Engineering</i></p> <p>"Progress in fully nonlinear wave-structure interaction" <i>Jacob Bjarke Hansen Hicks, PhD student, DTU Mechanical Engineering</i></p> <p>"Utilization of Value of Information Theory for Structural Integrity Management Planning" <i>Arifian Agusta Irman, PhD student, DTU Civil Engineering</i></p>
12.00 - 13.00	Lunch
13.00 - 13.30	Radical Innovation <i>Radical Innovation Team</i>

13.30 - 13.45	Introduction to Challenge Café and posters
13.45 - 15.15	Poster session and Challenge Café (1st round)
15.15 - 15.30	Break
15.30 - 17.00	Technical Presentations (2 parallel sessions)
<p><b>Lower Cretaceous - Tight Reservoir Development (Everest 2)</b></p> <p>"Tectonic and sedimentological control on reservoir properties of the lower Cretaceous in the Danish Central Graben"  <i>Ole Rønø Clausen, Associate Professor, Aarhus University, Geoscience</i>  <i>Kresten Anderskov, Associate Professor, Copenhagen University, Department of Geosciences and Natural Resource</i>  <i>Jon Ineson, Senior Researcher, GEUS</i>  <i>Stéphane Bodin, Associate Professor, Aarhus University</i></p> <p>"What we know (and want to know) about the Lower Cretaceous carbonate reservoir with respect to petrophysics and rockmechanics"  <i>Ida Fabricius, Professor, DTU Civil Engineering</i>  <i>Einar Madsen Storebø, PhD student, DTU Civil Engineering</i>  <i>Helle Foged Christensen, Geomechanics specialist, GEO</i></p> <p>"Better recovery from Valdemar: Fluid Behavior and Gas Injection"  <i>Wei Yan, Associate Professor, DTU Chemistry</i>  <i>Alexander Shapiro, Associate Professor, DTU Chemical Engineering</i></p>	<p><b>Enhanced Well Chemistry and Integrity (Everest 1)</b></p> <p>"Reservoir souring treatment in the Halfdan oilfield: laboratory experiments and modelling analyses"  <i>Moein Jahanbani, PhD, DHRTC</i>  <i>Angeliki Marietou, Postdoc, Aarhus University</i>  <i>Hamid Nick, Senior Researcher, DHRTC</i></p> <p>"Modelling and experimental studies of scale formation at well conditions"  <i>Diana Carolina Figueroa Murcia, PhD student, DTU Chemical Engineering</i></p> <p>"Corrosion research leading to enhanced well chemistry and integrity"  <i>Magdalena Rogowska, Project Manager, DTU Mechanical Engineering</i></p>
17.00 - 18.30	Poster session and Challenge Café (2nd round) with beer and snacks
18.30 -	More networking and pre-dinner snacks
19.30 -	Dinner

## Tuesday 13 November

Time	Activity
8.00 - 8.30	Coffee and registration
8.30 - 10.00	Technical Presentations (2 parallel sessions)
<p><b>Well and Production Technology</b></p> <p>"Stability Analysis of Radial Jet Drilling wellbores" <i>Maiya Medetbekova, PhD, DHRTC</i></p> <p>"Coupled Thermo-Hydro-Mechanical-Modelling with Radial Jet Drilling" <i>Hamid Nick, Senior Researcher, DHRTC</i></p> <p>"Improved Cement Material" <i>Ieva Paegle, Postdoc, DTU Civil Engineering</i></p>	<p><b>Operations and Maintenance Technology</b></p> <p>"Systematic rationalization and development of maintenance activities" <i>Niels Henrik Mortensen, Research Manager, DTU Mechanical Engineering</i></p> <p>"Functional modelling for supervisory control in oil and gas production: Recent progress" <i>Morten Lind, Professor Emeritus, DTU Electrical Engineering</i></p> <p>"Advanced Monitoring and Control for Topside Water Treatment Processes: AAU's latest results" <i>Professor Zhenyu Yang, Aalborg University, Department of Energy Technology</i></p>
10.00 - 10.15	Short break - coffee to go
10.15 - 12.00	Theme based technical presentations (2 parallel sessions)
<p><b>Novel Measurements &amp; Monitoring (Everest 1)</b></p> <p><i>Chair: Simon Ivar Andersen, Advisor, DHRTC</i></p> <p>"Application of Microfluids in Oil Recovery investigations" <i>Murat Nulati Yesibolati, Postdoc and Kristian Mølhave, Associate Professor, DTU Nanotech</i></p> <p>"Optical sensing of pH in oil well cement" <i>Søren Døllerup Nielsen, PhD student, Aarhus University</i> <i>Kasper Urup Kjeldsen, Associate Professor, Aarhus University</i> <i>Hans Røy, Associate Professor, Aarhus University</i> <i>Klaus Koren, Assisting Professor, Aarhus University</i></p>	<p><b>Microbiology (Everest 2)</b></p> <p><i>Chair: Hans Røy, Associate Professor, Aarhus University</i></p> <p>"Introduction" <i>Hans Røy, Associate Professor, Aarhus University</i></p> <p>"Fungus: Geomechanical properties" <i>Helle Foged Christiansen, Chief Engineer, Project Director, GEO</i></p> <p>"Self-healing cement" <i>Hans Røy, Associate Professor, Aarhus University</i></p> <p>"Microbiology souring" <i>Mette Hedegaard Thomsen, Associate Professor, Aalborg University</i></p>

<p><i>Ieva Paegle, Postdoc, DTU Civil Engineering</i></p> <p>"Surface properties of reservoir material from nanometer perspective" <i>Tue Hassenkam and Nico Bovet, Associate Professors, Copenhagen University</i></p> <p>"Fast screening Method for Chemical Functionality of Crude Oils" <i>Dmytro Mihrin, PhD student, DHRTC</i></p> <p><b>Modified Seawater Injection (Everest 1)</b></p> <p>"Introduction &amp; examples of existing modified seawater injection projects" <i>Hans Horikx, Advisor, DHRTC</i></p> <p>"Impact of water composition on oil recovery" <i>Arnaud Lager, EOR Advisor, Total</i></p> <p>"Modified seawater and Compaction drive" <i>Ida Lykke Fabricius, Professor, DTU</i></p> <p>" Microbial reduction of sulfate from injected seawater to sulfide" <i>Hans Røy, Associate professor, Aarhus University</i></p> <p>"Consequences of modified seawater on scaling and corrosion" <i>Simon Ivar Andersen, Advisor, DHRTC</i></p>	<p>"Conclusions" <i>Hans Røy, Associate Professor, Aarhus University</i></p> <p><b>Value of information in risk informed decision making (Everest 2)</b></p> <p>"Value of Information in risk informed integrity management of offshore well and load bearing systems" <i>Jianjun Qin, Assistant Professor, Aalborg University, Yue Guan, PhD student, Aalborg University, Akinyemi Olygbenga Akinsanya, PhD student, Aalborg University</i> <i>Kashif Ali, PhD student, Aalborg University</i></p> <p>"The DEMO project for Structural Integrity and Pipeline Technology" <i>Henning Brüske, Postdoc, Aalborg University</i></p>
<p>12.00 - 13.15</p>	<p>Lunch and coffee</p>
<p>13.15 - 13.45</p>	<p>"Towards responsible energy, an introduction to Total R&amp;D" <i>Mr Pierre Esquier, R&amp;D New Ventures Manager, Total</i></p>
<p>13.45 - 14.15</p>	<p>"Industrial application of DHRTC research - A case story" <i>Bjarne André Asheim, Managing Director, Eldor Technology</i></p>
<p>14.15 - 15.00</p>	<p>Reward the poster winners and Concluding remarks <i>LFPs and Morten Jeppesen</i></p>