

# IOR NORWAY 2021

## 14<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON RESERVOIR WETTABILITY & ITS EFFECTS ON OIL RECOVERY

Monday 26<sup>th</sup> April

**13:00 – 15:10 Fundamentals**

**Opening** with Tina Puntervold, UiS  
and Skule Strand, UiS

**Patrick Brady, Sandia National Laboratories**  
*Electrostatics and Oil Recovery from Tight Formations*

**Zahra Aghaeifar, University of Stavanger**  
*Importance of capillary forces during the Low Salinity waterflooding*

**Skule Strand, University of Stavanger**  
*Effect of wettability on ultimate oil recovery during water flooding*

**Maxim Yutkin, KAUST**  
*LSW with dilute seawater is inefficient*

**Discussion and break**

14:15 **Maria Bonto, DTU**

*Measurements of electrokinetic properties of Indiana limestone with two different methods*

**Michael Levant, Total**

*Surface probing with Streaming Potential: the Polymer Flooding Scenario*

**Hassan Mahani, Sharif University**  
*Pore-scale observation of brine-chemistry dependent oil recovery using a calcite microfluidic chip*

**Moataz Abu-Al-Saud, Saudi Aramco**  
*Prediction of SmartWater Synergy with EOR in Carbonates Using Surface Complexation Modeling*

**Discussion**

**Break**

**15:30 – 17:30 Core restorations, measurements, and modeling of wettability**

**Ingebret Fjelde, NORCE**

*Effects of mud exposure on established wettability conditions*

**Ivan Dario Pinerez Torrijos, UiS**

*Reproducing Wettability in Laboratory Core Restorations and the Influence of Solvent Cleaning on Carbonate Wetting*

**Ali Eftekhari, Danish Hydrocarbon**

**Research and Technology Centre (DHRTC)**  
*A mathematical model for better core-scale analysis and faster field-scale simulation of modified-salinity water flooding*

**Discussion and break**

16:30 **Asier Panadero, CEPESA**

*Experiences of numerical simulation impact on permeability curves determination*

**Jhonatan Jair Florez, University of São Paulo**  
*Wettability changes on rock outcrop samples and synthetic plugs with mineralogy similar to carbonate reservoir*

**Jules Reed, Premier Oilfield Group**

*Wettability Restoration: What? Why? Where? When? How?*

**Summary discussions**

**17:30 End of programme**

**Symposium on Reservoir Wettability**

In the symposium we will focus on the main factors affecting reservoir wettability, how reservoir wettability could be described and/or measured, and optimized core restoration procedures.

**26 APRIL**

# NORWEGIAN CONTINENTAL SHELF TOWARDS 2050

13:00 **Opening**

**Klaus Mohn**, Rector at University of Stavanger  
**Ying Guo**, Centre director

The National IOR Centre of Norway,  
University of Stavanger

**Tina Bru**, Minister

Ministry of Petroleum and Energy

**Torgeir Stordal**, Director technology and coexistence, Norwegian Petroleum Directorate

**Sandra Cederholm & Karoline Lillehammer**

Det store bildet, Norwegian Oil & Gas

**Musical entertainment**

**Maria Bue Kessel** (piano and soprano)

## RESERVOIR UTILIZATION COMBINED WITH CCUS & BLUE H2

14:00 **Sveinung Hagen, Equinor**

*An introduction to Low Carbon Solutions in Equinor*

**Jim Stian Olsen, Aker Carbon Capture**

*Learnings from Blue Hydrogen production with Carbon Capture – a source for CCS and CCU*

**Ronald Maritvold, Horisont Energi**

*Barents Blue. A world scale clean hydrogen and ammonia project*

**Questions**

**Break**

## ENERGY-EFFICIENT RECOVERY (SMART WATER & POLYMER)

15:30 **Bilal Rashid, BP**

*Low Salinity EOR in the field: Challenges and Benefits*

**Tina Puntervold, University of Stavanger**

*Is there a Smart Water EOR-potential on the NCS?*

**Mahmoud Ould Metidji, SNF**

*Reducing Carbon Intensity While Maximizing Oil Recovery With Polymer-EOR*

**Questions**

**Summing up**

17:00 **End of programme**

# 27 APRIL

# INDUSTRY VIEWS

13:00 **Opening**

**Bjørn Thore Ribesen, Vår Energi**

*Balder towards 2045*

**Gunnar Hjelmtveit Lille, OG21**

*The importance of IOR in the technology strategy for the Norwegian petroleum industry*

**Ana Todosijevic, Wintershall DEA**

*E&P industry contribution to secure and sustainable energy supply*

**Questions**

## VALUE CREATION

14:00 **Erik Holm Reiso, Rystad Energy**

*Technologies to improve NCS competitiveness*

**Geir Evensen, NORCE**

*Introducing ensemble methods for reservoir management*

**Aksel Hiorth, University of Stavanger**

*IORSim – adding more physics and chemistry to reservoir simulators*

**Questions**

**Musical entertainment**

**Daryna Lishchenko and Nadia Hayes**

**Skånseng** (viola and violin)

**Break**

## WETTABILITY – WHY IS IT IMPORTANT?

15:30 **Kishore Mohanty**

**University of Texas at Austin**

*Corefloods to Evaluate Wettability Alteration*

**Steffen Berg, Shell**

*Spatial Wettability Distribution for Digital Rock Modelling*

**Anthony Kovscek, Stanford University**

*A pore scale view of wettability, voidage replacement ratio, and low salinity fluids*

**Questions**

**Summing up**

17:00 **End of programme**

# 28 APRIL