

**Program for IEA – EOR TCP
3-7 September 2018**

Hotel Schaeffergården, Gentofte, Denmark

Monday, 3 September – Opening

- 15:00 Registration
- 15:00 - 18:00 Executive Committee Meeting
- 19:00 - 21:30 Welcome Reception

Tuesday, 4 September – Workshop with national contributions

- 08:30 Registration

Session A: Studies of fluids and interfaces in porous media

- 08:45 - 08:55 Opening & Welcome
- 08:55 - 09:20 **A1: Direct Experimental Evidence of Model Molecules of Crude Oil Interacting with Reservoirs in Low Salinity Water**
Hui Yang, Jingyao Wang, Fanghui Liu, Yuchen Qian
(Chinese Academy of Sciences, PetroChina – China)
- 09:20 - 09:45 **A2: Direct Visualization of PVT Phase Behavior and Foamy Oil Generation Utilizing a Large State-of-the-Art 2D Hele-Shaw Model**
Hongyang Wang, Farshid Torabi, Fanhua Zeng
(University of Regina – Canada)
- 09:45 - 10:10 **A3: Unravelling the compositional and chemical variations in crude oil and reservoir rock samples from the Danish North Sea fields and the link to wettability and recovery processes**
Karen L. Feilberg, Dmytro Mihrin, Jonas Sundberg
(Technical University of Denmark – Denmark)
- 10:10 - 10:35 Coffee break
- 10:35 - 11:00 **A4: The Microscopic Characteristic of Residual Oil Started up by CO₂ at Pores with Dead End**
Li Shi, Chen Xinglong
(PetroChina – China)
- 11:00 - 11:25 **A5: Reservoir wettability dictates Smart Water EOR potentials – effect of polar crude oil components on carbonate core wettability**
Tina Puntervold, Jon Endre Seljeset Mjøs, Skule Strand
(University of Stavanger – Norway)

11:25 - 11:50 **A6: Modelling of crude oil/brine interface in low salinity waterflooding for EOR**
Miku Takeya, Elakneswaran Yogarajah, Mai Shimokawara, Toyoharu Nawa, Hirofumi Okano
(Hokkaido University, JOGMEC – Japan)

11:50 - 12:15 **A7: Experimental and simulation interpretation of capillary pressure and relative permeability from waterflooding experiments**
Pål Ø. Andersen, Kenny Walrond, Eliana Vasquez, Citra Nainggolan, Reza Askerinezhad, Dag C. Standnes, Svein M. Skjæveland, Ingebret Fjelde
(The National IOR Centre of Norway, University of Stavanger - Norway)

12:15 - 13:15 **Lunch**

Session B: Surfactants and polymers

13:15 - 13:40 **B1: Applicability of Immiscible Foam Flooding in Moderately Viscous Heavy Oil Systems: Experimental Studies**
Jing Zhao, Farshid Torabi
(University of Regina – Canada)

13:40 - 14:05 **B2: PDEA-based amphiphilic polymer enables pH-responsive emulsions for a rapid demulsification**
Qingfeng Hou, Hui Yang
(RIPED – China)

14:05 - 14:30 **B3: New Technology applied into ASP Microemulsified Effluents, from identification to solution using FT-ICR MS: A Colombia case**
Carmen C. Hinds, Camila F. Medina Sandoval, Alvaro Villar Garcia, Jorge A Orrego, Fernando Rojas
(ECOPETROL, Industrial University of Santander – Colombia)

14:30 - 14:55 **B4: Compaction driven IOR in chalk reservoirs**
Leonardo T. P. Meireles, Tijana Voake, Anders Neramoen, Michael J. Welch, Ida L. Fabricius, (DTU, UiS, IRIS – Denmark)

14:55 - 15:20 **Coffee break**

15:20 - 15:45 **B5: Studies on Emulsification Property of ASP Flooding Formulations and its Effect on EOR**
Youyi Zhu, Xiaoxia Liu
(RIPED – China)

15:45 - 16:10 **B6: Thermally Stable Polymers for Harsh Conditions of Middle East Reservoirs: Thermal Stability and Flow Behavior in Carbonates**
Guillaume Dupuis, Sebastien Antignard, aurent Rodriguez, Bruno Giovanetti, Nicolas Gaillard, Stéphane Jouenne, Gilles Bourdarot, Danielle Morel, Alain Zaitoun (SNF, TOTAL, POWELTEC – France)

16:10 - 16:35 **B7: How far into the reservoir is polymer mechanical degradation an issue? – A laboratory investigation**
Siv Marie Åsen,; Arne Stavland, Daniel Strand; Aksel Hiorth
(University of Stavanger, The National IOR Centre of Norway - Norway)

16:35 - 17:00 **B8: Non-Equilibrium Phase and Foamy Oil Behaviour in Heavy Oil Recovery Processes: In-Situ Synchrotron-Based X-Ray Imaging of Foamy Oil**
Ian Gates, Jacky Wang, Toby Bond,
(University of Calgary, Canada Light Source – Canada)

17:00 - 17:25 **B9: Qualifying an "Emulsion" Polymer for Field Use - Lab-scale Assessments on Adsorption and Injectivity**
Kristian Sandengen, Medad Twimukye Tweheyo, Christian M. Crescente, Aurélie Mouret, Isabelle Henaut, David Rousseau
(Equinor, IFP Energies Nouvelles - France)

18:30 **Departure by bus to Copenhagen**

19:00 **Conference dinner at "Aamann's" in Copenhagen**

Wednesday, 5 September – Workshop with national contributions

Session C: Thermal Recovery

08:30 - 08:55 **C1: A New Approach Improving Thermal Recovery Performance of Heavy oil Reservoir**
Guo Erpeng, Yongrong Gao
(PetroChina – China)

08:55 - 09:20 **C2: Nare Colombian Field Preformed Foam Injection**
Hector Arnaldo Rodriguez-Prada
(ECOPETROL - Colombia)

09:20 - 09:45 **C3: Compositional modeling for thermal EOR simulation**
Duncan Paterson, Erling H. Stenby, Wei Yan
(Technical University of Denmark – Denmark)

09:45 - 10:10 **C4: New engineering software for assessment of thermal EOR methods efficiency**
Elena Lubnina, Evgenii Yudin, Aleksandr Lubnin, Natalia Zavalova, Ivan Zavalov
(JSC Zarubezhneft, Moscow Institute of Physics and Technology - Russia)

10:10 - 10:35 **Coffee break**

10:35 - 11:00 **C5: New Approach of Air Injection Effectivity Estimation: Challenges and Opportunities**
Elena Lubnina, Igor Afanasiev, Gennadii Fedorchenko
(JSC Zarubezhneft - Russia)

11:00 - 11:25 **C6: Surveillance System for SAGD Process in Extra-Heavy oil Reservoir**
Yongrong Gao, Erpeng Guo, Hongyuan Wang,
(PetroChina – China)

11:25 - 11:50 **C7: Performance of Cyclic Solvent Injection (CSI) in the presence of Wormhole Networks: The Role of wormhole configuration**
Nathan Abraham David, Mehdi Mohammadpoor, Farshid Torabi
(University of Regina - Canada)

Session D: Gas flooding techniques

11:50 - 12:15 **D1: Understanding the mechanisms of water-soluble gas injection for enhancing oil recovery: a case study for dimethyl ether**
Ali Akbar Eftekhari, Frederik Winkel Lehn, Mohammadreza Mehdizadeh, Hamid M. Nick
(Technical University of Denmark – Denmark)

12:15 - 13:15 **Lunch**

13:15 - 13:40 **D2: Design of a Combined Foam EOR Process Applied to a Naturally Fractured Reservoir**
Eloise Chevalier, Max Chabert, Serge Gautier, Hamid Ghafram
(Solvay, IFP Energies nouvelles, PDO – France)

13:40 - 14:05 **D3: Semi-analytical method for choosing the optimal strategy of the gas recycling process in conditions of limited external gas supplies**
Vladimir Babin, Nikolai Glavnov
(Gazpromneft - Russia)

14:05 - 14:30 **D4: Gas injection modeling in tight formation and shale**
Diego Sandoval, Erling H. Stenby, Wei Yan
(Technical University of Denmark)

Session F: Emerging technologies

14:30 - 14:55 **F1: New applications of scanning transitiometry in Oil and Gas Industry**
Marco-Antonio Aquino-Olivos, Adriana de Jesús Aguirre-Gutiérrez, Oscar-Alejandro Zamarripa-Jiménez, Pedro-Javier Huitzil-Meléndez
(Mexican Petroleum Institute - Mexico)

14:55 - 15:20 **Coffee break**

15:20 - 15:45 **F2: In-situ Carbon Dioxide Generation for EOR Utilizing Microbial Metabolism in Brown Oil Field**
Hiroki Iwama (INPEX Corporation - Japan)

15:45 - 16:10 **F4: Optimization of Microbial Enhanced Oil Recovery Based on Nonisothermal Selective Plugging with a Thermally Active Biopolymer**
Eunji Hong, Moon Sik Jeong, Kun Sang Lee
(Hanyang University – South Korea)

16:10 - 16:35 **F5: Low salinity EOR potential in North Sea sandstone reservoirs after seawater injection**
Skule Strand, Zahra Aghaeifar, Tina Puntervold
(University of Stavanger - Norway)

- 18:00 **Departure by bus to Copenhagen**
- 18:30 **Conference dinner at “Carlsberg Academy” in Copenhagen**

Thursday, 6 September – Symposium

- 08:30 - 08:55 **S1: Pore-Fluid Composition and Mechanical Properties of the Reservoir - Understanding the Geo-mechanical Effects of EOR Fluids**
Reidar I. Korsnes, Mona W. Minde, Merete V. Madland, Udo Zimmermann
(University of Stavanger, The National IOR Centre of Norway - Norway)
- 08:55 - 09:20 **S2: High Throughput Coreflood Experimentation as a Tool for Designing EOR Projects**
Souhail YOUSSEF, Matthieu Mascle, Olga Vizika
(IFP Energies nouvelles - France)
- 09:20 - 09:45 **S3: EOR Test of Asp Flooding With Low Cost and High Efficient After Polymer Flooding in Daqing Oilfield**
Shuling Gao, Xiaolin Wu, Peihui Han, Haibo Liu, Ershuang Gao, Wei Yan
(PetroChina – China)
- 09:45 - 10:10 **S4: Maximizing Value of Information of a Horizontal Polymer Pilot Under Uncertainty**
Dominik Steineder, Torsten Clemens
(OMV - Austria)
- 10:10 - 10:35 **Coffee break**
- 10:35 - 11:00 **S5: Evaluation of the impact of EOR Chemicals on Topside Operations**
Jean-François Argillier, Isabelle Henaut, Myriam Darbouret, Cyril Jermann, Guillaume Vinay
(IFP Energies nouvelles - France)
- 11:00 - 11:25 **S7: The Joint Chalk Research JIP – Status and some EOR results**
Niels Lindeloff, Finn Engstrøm
(Total E&P Denmark – Denmark)
- 11:25 - 11:50 **S8: Increasing oil recovery by injection of hydrocarbon gas**
Artem Penigin, Iskander Mukhametzyanov
(Gazpromneft – Russia)
- 11:50 – 12:15 **S9: History matching real production and seismic data for the Norne field combining seismic inversion**
Rolf J. Lorentzen, Tuhin Bhakta, Dario Grana, Xiaodong Luo, Randi Valestrand, Geir Nævdal
(IRIS IOR Center, University of Wyoming, The National IOR Centre of Norway - Norway)
- 12:15 – 12:30 **Conference Group Photo**
- 12:30 - 13:30 **Lunch**

- 13:30 – 13:55** **S10: Polymer Flood Field Implementation - Pattern Configuration and Horizontal versus Vertical Wells**
Martin Sieberer, Torsten Clemens
(OMV - Austria)
- 13:55 - 14:20** **S11: Enhanced Oil Recovery Guidelines for maximum profit**
Néstor Martínez-Romero, Ulises Neri-Flores, León Daniel Meza-Velazquez, Héctor Silva-Gonzalez, María Guadalupe Galicia-Muñoz
(CNH Mexico - Mexico)
- 14:20 – 14:45** **S12: 20 Years of EOR Research at the PTRC: Working towards a more sustainable industry**
Erik Nickel
(Petroleum Technology Research Centre - Canada)
- 14:45 – 15:10** **Coffee break**
- 15:10 – 15:35** **S13: Enhanced Oil Recovery: Status and Potential in Australia**
Dominic Pepicelli
(Government of South Australia - Australia)
- 15:35 – 16:00** **S14: New Nanotechnology Applied to Chemical Enhanced Oil Recovery at Colombian Fields**
Carmen C. Hinds, Richard D. Zabala, Cesar Patino, Gustavo Maya, Ruben Castro, Camilo Franco, Farid Cortes
(ECOPETROL, UNALMED - Colombia)
- Dinner on your own**

Friday. 7 September – Fieldtrip to Møn

- 09:00** Departure by bus
- 10:45** Arrival at Møns Klint
- 11:00 - 13:00** Guided walk at the chalk outcrops and introduction to Møns Klint
- 13:00 - 14:00** Lunch at Café Møns Klint
- 14:00** Departure by bus to Copenhagen Airport
- 16:00** Arrival at Copenhagen Airport
- 17:00** Arrival at the hotel