

Chemical EOR Workshop

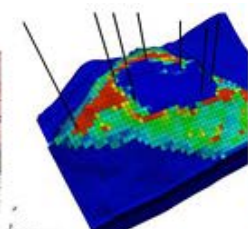
Key Success Factors

4th edition

Hotel Meliá Paris La Défense, France

17-19 June 2019

PROGRAM



Monday 17 June

08:15 *Registration*

09:00 **Welcome and Introduction** (IFP Energies nouvelles)

SESSION 1: FIELD APPLICATIONS OF POLYMER FLOODING

09:15 **Polymer flooding pilot in heavy oil and challenging conditions reservoir – field case**
Juan Manuel Leon Hinstroza, Carmen Hinds* (Ecopetrol)

09:45 **Polymer process performance for different waters compositions in El Corcobo field: lab results and challenges**
Maria Alejandra Hryc* and Federico Martin Hochenfellner (Pluspetrol)

10:15 *Coffee break*

10:45 **Experience in the field application of the biopolymer schizophyllan**
Pankaj Kumar* and Ana Todosijevic (Wintershall Dea)

11:15 **A shear-resistant, high injectivity, reservoir-triggered EOR polymer: from concept to the field**
David Chapell*, Bilal Rashid and Jon Stapley (BP); William Andrews, Peter Reed and Robin Shields (Nalco Champion)

11:45 **The EOR journey in Nimr: from concept to full field development**
Reham Al-Jabri*, Rifaat Mjeni and Abdullah Kindi (PDO)

12:15 *Lunch*

14:00 *Bus to IFP Energies nouvelles Rueil-Malmaison*

14:30 IFP Energies nouvelles Labs visit

17:30 *Bus back to Meliá hotel*

Tuesday 18 June

08:30 *Registration*

SESSION 2: WATER MANAGEMENT

09:00 **Managing high injection water quality for polymer flooding: OMV's experiences and lessons learned**

Roland Albustin, Karl Jamek, Rainer Kadnar*, Martin Klikovics, Christoph Puls and Manuel Vidlak (OMV)

09:30 **Influence of EOR polymers on fouling in production wells & facilities**

Robert Zagitov, Panneer Selvam Venkat, Vinay Mathur, Saumya Mittal, Jaisankar Subramanian, Dibyendu Bagchi and Amitabh Pandey* (Cairn Oil and Gas Vedanta)

10:00 *Coffee break*

10:30 **Assessment of Enhanced-Oil-Recovery-Chemicals production and its potential effect on upstream facilities**

Abdulkareem M. AlSofi*, Ali M. AlKhatib, Hassan A. Al-Ajwad, Qiwei Wang and Badr H. Zahrani (Saudi Aramco)

11:00 **Produced fluid handling and water cycle management plan for large scale ASP expansion in Mangala field**

Anindya Chakraborty* and Rupesh Zampalkar (Cairn Oil and Gas)

SESSION 3: ION OPTIMIZED WATER FLOODING

11:30 **Chemical EOR to improve field recovery: low salinity water flooding and polymer injection, labs analysis and modelling**

Alessandro Botteon*, Moghadasi Leili, Patrizia Pisicchio, Martina Sambiasi*, Tobia Pepe and Chiara Tritto (ENI)

12:00 *Lunch*

13:30 **Anhydrite for low salinity EOR in carbonate: should we have it?**

Takaaki Uetani*, Hiromi Kaido and Hideharu Yonebayashi (INPEX)

SESSION 4: SURFACTANT BASED EOR PROCESS

14:00 **Surfactant-polymer EOR pilot project in Algyó field**

Sándor Puskás, Mária Törő*, Tibor Ördög, Gyula Kálmán, Pál Hanzelik and Zsolt Bihari (MOL Hungarian Oil and Gas); Réka Tabajdi and Imre Dékány (University of Szeged); Árpád Vágó, József Dudás, Roland Nagy and László Bartha (University of Pannonia)

14:30 **Recent learnings on foam-based EOR processes**

Guillaume Batot*, Nicolas Gland, Nicolas Pannacci, Simon Ayache and Aline Delbos (IFP Energies nouvelles); Eloïse Chevallier (Solvay)

15:00 *Coffee break*

15:30 **Update on chemical EOR maturation**

Jeroen Groenenboom* (Shell Global Solutions International BV); Diederik van Batenburg and Diego Wever (Shell Global Solutions BV)

16:00 **Foam to optimize gas injection development scheme: labs evidence**

Martin Bartosek*, Ahmed Abrar, Renna Dario, Elena Braccalenti, Caterina Topin, Franco Masserano, Michela De Simoni and Laura Dovera (ENI)

16:30 **Design of economical polymer and surfactant-polymer processes in high temperature carbonated Um Gudair Kuwaiti field**

N.M. Al-Tameemi, M. A. Al-Subaihi, H.E.A. Al-Mayyan (KOC); Valentin Guillon, Samir Bekri* (IFP Energies nouvelles); Roberto Company (Solvay); Andres Negre (Beicip-Franlab)

17:00 End of the presentations / Group photo

18:00 *Bus to Paris for the Workshop dinner*

19:00 *Dinner at La Maison des Polytechniciens, 12 rue de Poitiers, Paris 7*

22:00 *Bus back to Meliá Hotel*

Wednesday 19 June

08:30 *Registration*

SESSION 5: CHALLENGING RESERVOIRS

09:00 **A study of gel conformance control within fractured carbonate cores by low-field NMR techniques**

Amar J. Alshehri, Jinxun Wang, Hyung T. Kwak, Abdulkareem M. AlSofi* and Jun Gao (Saudi Aramco)

09:30 **On the importance of reservoir rock mineralogy on design and performance of surfactant cEOR processes**

Valentin Guillon* (IFP Energies nouvelles); Eric Delamaide (IFP Technologies Canada)

10:00 *Coffee break*

10:30 **EOR as a pillar for the sustainability of Ecopetrol: from conception to materiality**

José-Francisco Zapata, F. Fernandez, Rodrigo Dalle Fiore, Carolinne H. Chaparro, Carmen Hinds*, Adriano Lobo, Lina Maria Quintero, Jorge Mantilla and Jaime Jimenez (Ecopetrol)

11:00 **High throughput coreflood experimentation as a tool for EOR project design**

Souhail Youssef*, Matthieu Masclé and Olga Vizika (IFP Energies nouvelles)

11:30 **Key challenges in EOR applications in complex, tight and highly fractured reservoirs**

Saja Al Khaburi*, Hamid Ghafram, Abdullah Al Kindi and Rifaat Al Mjeni (PDO);
Eloïse Chevallier and Max Chabert (Solvay); Nicolas Gland and Guillaume Batôt (IFP Energies nouvelles); Ghislain de Jossineau (Beicip-Franlab)

12:00 *Lunch*

13:30 **Polymers and their limits in temperature, salinity and hardness: review of field cases**

Éric Delamaide* (IFP Technologies Canada)

SESSION 6: OFFSHORE APPLICATIONS

14:00 Development of the mixing energy concept to hydrate novel liquid polymers for field injection

Do Hoon Kim, Dennis Alexis, David Espinosa, Anette Poulsen, Taimur Malik, Sophany Thach*, Varadarajan Dwarakanath and Taylor Jordan Isbell (Chevron Energy Technology Company); Mohamad Salman (Chevron Energy Technology Company, currently University of Houston); Peter New, Adam Jackson and Derek McKilligan (Chevron Upstream Europe)

14:30 *Coffee break*

15:00 CO₂ EOR in the North Sea: perspectives from Equinor

Sveinung Hagen*, Torbjørg Klara Fossum, Bengt Olav Neeraas and Bamshad Nazarian (Equinor)

15:30 Results of the UK Captain field interwell EOR pilot

Anette Poulsen, Varadarajan Dwarakanath and Sophany Thach* (Chevron Energy Technology Company); Mike Shook (Mike Shook & Associates); Adam Jackson, Nicolas Ruby and Karl Charvin (Chevron North Sea)

16:00 Conclusions – End of the Workshop

** presenting author*