

**32nd Annual PWS Seminar Agenda
February 8-9, 2022**

DAY 1

- 7:00-8:00 **Registration and breakfast**
- 8:00-8:10 **President's welcome**
- 8:10-8:40 **Keynote address**
- 8:40-10:00 **Session 1 (Co-chaired by Xandra Turner and Chip Westaby)**
Gulf of Mexico seawater injection applications
Lauren Flores, Chevron
- Simplifying produced water de-oiling*
Steinar Asdahl, Stauper Offshore
- Case study: Innovative water treatment solutions offshore*
Jarid Hugonin, Baleen Process Solutions
- Seabox & SWIT: Subsea water management and treatment*
Ojonimi Samuel Haruna, NOV
- 10:00-10:30 **Coffee break**
- 10:30-11:10 **Session 2 (Co-chaired by Morris Hoagland and Ben Samuels)**
Integrated produced water management
Hani Al-Khalifa, Saudi Aramco
- Efficient carbon dioxide capture and utilization using high-TDS produced water*
Brian Mueller, B2K4 Consulting
- 11:10-11:50 **Session 3 (Co-chaired by Ben Samuels and Dan Shannon)**
Experimental investigation of robust polymer gels for blocking unwanted water production in carbonate formations
Mohammed Alabdrabalnabi, Saudi Aramco
- Investigation of the flocculation and dewatering behavior of kaolinite suspensions by dual-functional nanoparticles*
Taha Karaki, Department of Chemical and Petroleum Engineering – University of Calgary
- 11:50-12:50 **Lunch**
- 12:50-1:50 **Operator's panel: Conventional**
- 1:50-2:50 **Session 4 (Co-chaired by Jay Keener and Morris Hoagland)**
Optimizing water treatment systems with inlet water monitoring
Chip Westaby, Turner Designs Hydrocarbon Instruments
- Crystal Clearwater Resources' low-temperature distillation solution*
Scott Carson, Crystal Clearwater Resources
- Produced water reclamation using novel ceramic plate UF membrane technology*
Dirk Martin, Apateq

- 2:50-3:30 **Session 5 (Co-chaired by Lisa Henthorne and Jay Keener)**
Leveraging DOE's PARETO Platform to optimise produced water management at Olympus Energy
Markus Drouven, US Department of Energy
- DOE's PARETO Platform for multi-objective optimization of produced water management*
Andres Calderon, National Energy Technology Laboratory
- 3:30-4:00 **Coffee break**
- 4:00-5:20 **Session 6 (Co-chaired by Rob Bruant and Ivan Morales)**
ESG, sustainability and operational excellence in produced water management
Kelly Bennett, B3 Insight
- Economic, social and environmental cost-benefit modeling of fit-for-purpose produced water treatment and reuse*
Vincent Tidwell, Sandia National Laboratories
- Field demonstration of LM-HT thermal evaporation to generate high-density brine from flowback water*
Michael Grossman, Heartland Water Technology
- Solar radiance for enhancement of pollution plume controlled enhanced evaporation for volume reduction in best management practices of injection-induced seismicity*
Robert Ballantyne, RWI Enhanced Evaporation
- 5:20-6:20 **ESG & Sustainability panel**
- 6:30-7:30 **Cocktail hour**

DAY 2

- 7:00-8:00 **Registration and breakfast**
- 8:00-8:30 **Colin Tyrie Scholarship recipient presentation**
- 8:30-9:30 **Keynote address**
- 9:30-10:30 **Session 7 (Co-chaired by Morris Hoagland and Steve Roeder)**
US EPA National Water Reuse Action Plan and state collaboration on fit-for-purpose produced water treatment and reuse
Mike Hightower, New Mexico Produced Water Research Consortium
- Tapping into the nanoscale for boron removal and produced water beneficial reuse*
Khatera Hazin, CarboNet
- Produced Water quality characterization in the New Mexico Permian Basin*
Pei Xu, New Mexico State University

- 10:30-11:00 **Coffee break**
- 11:00-12:00 **Operator's Panel: Unconventional**
- 12:00-1:00 **Lunch**
- 1:00-2:00 **Roundtables**
1. *High-density, HDPE-lined produced/flowback water evaporation ponds*
Neil Nowak, SCS Engineers
 2. *Suitability of water treatment chemicals for produced water remediation: A data-driven approach*
Clifford Aniakor, Rivers State University
 3. *Membrane distillation for produced water beneficial reuse: Progress and future outlook*
Tijjani El-Badawy, PhD student
 4. *Comparative study of permanganate and peroxide for produced water treatment*
Lyndon Berwick, Carus
 5. *Pilot-scale testing of membrane distillation for produced water desalination in various shale plays*
Ritesh Dinkar Pawar, University of Pittsburgh
 6. *Water's digital transformation*
James Burke, Barreleye
 7. *Produced water line-up enhanced de-oiling in a sustainable way with Mokveld low-shear Typhoon® Valve System*
Daniel Vecchio, Mokveld USA
 8. *Remote monitoring with the Mustang Extreme graphic automation pit monitoring system*
Chad Lavender, Mustang Extreme Environmental
 9. *Subsurface aeration*
Conner Monk, Mustang Extreme Environmental
 10. *Remote pipeline monitoring made simple*
Joshua Ito, TOKU Corp
- 2:00-3:00 **Session 8 (Co-chaired by Brent Halldorson and Lisa Henthorne)**
- A novel and rapid approach to evaluating the effectiveness of produced water solidification and stabilization*
Priscyla Marquez, Department of Civil, Architectural and Environmental Engineering – University of Texas at Austin
- Evaluation of produced water transport options*
Assaad Sakr, CORE Linepipe
- Waste to resource: HyQ's answer for produced water*
Jared Boehs, HyQ Technologies
- 3:00-3:30 **Coffee break**

3:30-4:10

Session 9 (Co-chaired by Ben Samuels and Brent Halldorson)

Case Study: Integrated water facility design and efficiency for produced water injection and recycle

Paul Enggram, Reclaim Water Services

Case study: Innovative water treatment solutions for reinjection

Tony Mossa, Baleen Process Solutions

4:10-5:10

Recycle/reuse panel