



Produce Water Society

33rd Annual Conference Agenda

February 7-9, 2023, Houston, TX

Track I

Day 1February 7, 2023

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|----------|----------|---|-------------------------------|
| 7:00 AM | 8:30 AM | Networking Breakfast & Registration | |
| 8:30 AM | 8:45 AM | Opening Remarks | |
| 8:45 AM | 9:15 AM | Keynote Dr. Partrick Sullivan, Founder & CEO, Oceanit | |
| 9:15 AM | 10:15 AM | Session 1 Overboard Compliance and Excursion Management Chemical Treatment - Meeting OB Discharge Requirements Dave Barbin, Chevron Excursion Management - Cheap Insurance Matthew Goyrich, Mycelex VIRTUAL - RBA under OSPAR Kriti Wadhia, NOV | |
| 10:15 AM | 11:00 AM | Networking Break | |
| 11:00 AM | 12:00 PM | Session 2 Dissolved Organics and WSO – Identification The Evolution of Analytical Methodology used for OB discharge and the Impact of Water-Soluble Organics Identification John Builes, Eurofins Contribution to WSOs from O&G processing Wally Georgia, MaxOil VIRTUAL - Dissolved Organics - what are they, why are they a problem, where do they come from, and why are they showing up more and more frequently? John Walsh, Consultant | |
| 12:00 PM | 1:15 PM | Lunch | |
| 1:15 PM | 2:00 PM | Panel | Offshore PW Regulation |
| 2:00 PM | 3:00 PM | Session 3 Dissolved Organics and WSO - Treatment & Monitoring A Deeper Dive into Water Soluble Organics Removal Jaird Hugonin, Baleen Process Solutions Osorb treatment of WSOs Caleb Smathers, Osorb Online detection of WSOs Tom Vogt, Advanced Sensors (PAC) | |
| 3:00 PM | 3:45 PM | Networking Break | |
| 3:45 PM | 4:30 PM | Panel | Speaker All Call |
| 4:30 PM | 4:45 PM | Closing Remarks | |
| 5:15 PM | 7:00 PM | Welcome Cocktail Reception & Registration | |

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| 7:00 AM | 8:30 AM | Networking Breakfast | |
| 8:30 AM | 8:45 AM | Opening Remarks | |
| 8:45 AM | 9:15 AM | Keynote: | |
| 9:15 AM | 10:15 AM | <p>Session 4 Advancements in Produced Water System Design Produced Water Treatment Optimization - Offshore Gulf of Mexico Kris Bansal, Consultant (Retired from ConocoPhillips)</p> <p>VIRTUAL - A Quantified Approach to Produced Water System Design Andrew Watson, BP</p> <p>The Importance, Benefits and Advances in Monitoring Produced Water Treatment packages in remote, harsh, and unmanned locations. Gerard Cooke, INOV8</p> | |
| 10:15 AM | 11:00 AM | Networking Break | |
| 11:00 AM | 11:45 AM | Panel | Emerging Technologies in PW Mgmt. |
| 11:45 AM | 1:00 PM | Lunch | |
| 1:00 PM | 1:45 PM | Panel | PW Management Regulation & Policies |
| 1:45 PM | 2:45 PM | <p>Roundtables Energy Intensity Drives Cost Impacts and Sustainable Operations Dailey Tipton, Industrial</p> <p>Considerations For Flocculant Viscosity When Treating Wastewater with Neat Liquid Polymers Shaun Primeaux, ChampionX</p> <p>Advanced produced water treatment monitoring Chip Westaby, Turner Designs Hydrocarbon Instruments</p> <p>Optimizing the produced water cycle by means of flow measurement Mark van der Zande, KROHNE</p> <p>Harvesting Kinetic Energy from Produced Water Tan Soo Kiet Chloe, PETRONAS CARIGALI SDN BHD</p> <p>Feasibility study of acoustic leak detection in single phase pipelines/networks Eric Braun, Pipewise</p> <p>Multiphase Desanding: three examples of high- and low-pressure applications where innovative process design is implemented to address sand management in constrained project environments Federico Gayoso, TRANSEPARATION</p> | |
| 2:45 PM | 3:15 PM | Networking Break | |
| 3:15 PM | 4:15 PM | <p>Session 5 PW and Flowback Treatment Challenges Water Treatment Challenges in Deepwater Developments Graeme Smith, Murphy</p> <p>New Zinc Treatment Process Shan Broussard, Siemens</p> <p>VIRTUAL - Scale Modelling AJ Gerbino, OLI</p> | |
| 4:15 PM | 5:00 PM | Panel | Speaker All Call |

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| 5:00 PM | 5:15 PM | Closing Remarks |
| 5:15 | 7:00 PM | Cocktail Networking Event |

Day 3

February 9, 2023

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| 7:00 AM | 8:30 AM | Networking Breakfast | |
| 8:30 AM | 8:45 AM | Opening Remarks | |
| 8:45 AM | 9:45 AM | Session 6 Mitigating Risk in PW management Towards a Life Cycle Approach to Management of Produced Water. Tom Meuzelaar, Life Cycle Geo Mitigating Risks - Integrated Systems Monitoring and Visualizations Umut Ozdogan, Corva Use of Treated Seawater to Prevent and Mitigate Halite Scale Formation in Produced Water Robert Banker, Chevron | |
| 9:45 AM | 10:30 PM | Networking Break | |
| 10:30 AM | 11:15 AM | Panel | PW Mgmt. Role in Energy Transition, CircularEconomy, and ESG |
| 11:15 AM | 12:30 PM | Lunch | |
| 12:30 PM | 1:30 PM | Session 7 PW Sustainability and ESG Approaches Carbonation of PW- Nanobubble & Critical Fluid Approach. A method for decarbonization of oil & gas industry Mark Patton, Hydrozonix ESG & Sustainability Updates Brian Bohm, Apache TBA | |
| 1:30 PM | 2:15 PM | Panel | Speaker All Call |
| 2:15 PM | 2:30 PM | Closing Remarks | |

Track II

Day 1 February 7, 2023

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|----------|----------|---|------------------------------|
| 7:00 AM | 8:30 AM | Networking Breakfast & Registration | |
| 8:45 AM | 9:15 AM | Keynote | |
| 9:15 AM | 10:15 AM | Session 1 PW Membranes Simultaneous treatment of different produced water streams using low-pressure membrane technologies for minimum liquid discharge (MLD). Muhammad Saqib, Nawaz King Abdullah University of Science and Technology (KAUST) Development of produced water reuse and zero liquid discharge systems Yunhwan Kim, Chonnam National University Economic Treatment of Produced Water with Novel Zwitterionic Membranes Lyndsey Wiles, Zwitter Co. | |
| 10:15 AM | 11:00 AM | Networking Break | |
| 11:00 AM | 12:00 PM | Session 2 Evaluating PW Treatment Approaches Evaluation of Biocides for Water Treatment in Permian Hydraulic Fracturing Operations Macy Ayala, ChampionX Hypersaline Produced Water Clarification by Dissolved Air Flotation and Sedimentation with Ultrashort Residence Times Shankar Chellam, Texas A&M University Produced Water DEOiling Using Flotation Prakur Prakash, Chevron | |
| 12:00 PM | 1:15 PM | Lunch | |
| 1:15 PM | 2:00 PM | Panel | Heavy Oil / Oil Sands |
| 2:00 PM | 3:00 PM | Session 3 PW Treatment Evolution Solids Accumulation in Produced Water Tanks: Why it's a problem, and what can you do about it? Mark Wolf, Wolf Process High yield improvement of produced water quality without additional treatment Andy Little, Mokveld Valves TBA | |
| 3:00 PM | 3:45 PM | Networking Break | |
| 3:45 PM | 4:30 PM | Speaker All Call | |
| 4:30 PM | 4:45 PM | Closing Remarks | |
| 5:15 PM | 7:00 PM | Welcome Cocktail Reception & Registration | |

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| 7:00 AM | 8:30 AM | Networking Breakfast | |
| 8:45 AM | 9:15 AM | Keynote Ted Wooten, Chief Engineer, Railroad Commission of Texas | |
| 9:15 AM | 10:15 AM | Session 4 PW Strategic Approaches Global Produced Water Strategies Hani Al Khalifa, Saudi Aramco An Update on Project PARETO: Produced Water Optimization considering Treatment Options and Hydraulic Constraints supported by a User-Friendly Graphical Interface. Markus Drouven, U.S. Department of Energy TBA | |
| 10:15 AM | 11:00 AM | Networking Break | |
| 11:00 AM | 11:45 AM | Panel | State Consortiums |
| 11:45 AM | 1:00 PM | Lunch | |
| 1:00 PM | 1:45 PM | Panel | Injection Restrictions and PW Mgmt. Alternatives |
| 1:45 PM | 2:45 PM | Roundtables Extending the Pressure Temperature Limits of Reverse Osmosis Membranes for the Treatment of Produced Water Rich Franks, Hydranautics Low-Cost Distillation of Produced Water Using Wiped-Film Rotating-Disk (WFRD) Evaporators Maher Tleimat, WRT Inc Surfactant-enhanced dead-end ultrafiltration for tertiary treatment of produced water Hasan Idrees, University of Duisburg-Essen, Germany The Potential of Electrocoagulation and Operational Challenges for Continuous Treatment of Produced Water Mudasar Mahmood, University of Calgary Advanced Treatment Technology Through Thermal Manipulation Jerimey Schlosser, Jerimey- 5th Element Energy Services, LLC /Sewater Produced Water and Recycling Ponds Neil Nowak, SCS ENGINEERS Using Biochar as a Low-Cost Treatment for Flowback Water Kevin Supak, Southwest Research Institute The Use of Buoyancy-Enhanced Membrane Filtration for Produced Water Recycling - A Case Study Peter Christou, Swirltex Inc Meeting SWD Injection Restrictions with Onsite Evaporation Michael Grossman, Heartland Water Technology High strength omniphobic hollow fiber membranes for DCMD of PW: new perspective on effect of process condition on membrane strength properties Tijjani El-badawy, Advanced Membrane Technology Research Center, University of Technology Malaysia | |

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| | | <p>How Ceramic Plate Technology Affects ESG Compliance Brian Ward, APATEQ PWT-S.A.</p> <p>Sunlight-Driven Treatment for Process Water Jeffrey Martin, H2nanO Inc.</p> |
| 2:45 PM | 3:15 PM | Networking Break |
| 3:15 PM | 4:15 PM | <p>Session 5 PW Reuse and Management Options Development of a Human Health and Environmental Risk Assessment Framework for Beneficial Reuse of Treated Produced Water Josh Butler, ExxonMobil</p> <p>VIRTUAL - How Clean is Clean Enough - Measurement Correlations in Reuse Criteria Zacariah Hildenbrand, University of Texas, El Paso</p> <p>Permian Induced Seismicity: Water Balances, Markets, and Risk Mitigation Laura Capper, Energy Makers Advisory Group</p> |
| 4:15 PM | 5:00 PM | Speaker All Call |
| 5:00 PM | 5:15 PM | Closing Remarks |
| 5:15 PM | 7:00 PM | Cocktail Networking event |

Day 3 February 9, 2023

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| 7:00 AM | 8:30 AM | Networking Breakfast | |
| 8:30 AM | 8:45 AM | Opening Remarks | |
| 8:45 AM | 9:45 AM | <p>Session 6 PW Economy Water-Energy Nexus: Changes in Energy Water Markets Ragendra Giri, Saudi Aramco</p> <p>US E&P Activity Data Forecast Ryan Hassle, Rystad</p> <p>Leveraging DOE's PARETO Platform for Produced Water Management Optimization at Aris Water Solutions Markus Drouven, Aris Water Solutions & U.S. Department of Energy</p> | |
| 9:45 AM | 10:30 AM | Networking Break | |
| 10:30 AM | 11:15 AM | Panel | PW Midstream & Capital Markets |
| 11:15 AM | 12:30 PM | Lunch | |
| 12:30 PM | 1:30 PM | <p>Session 7 PW Monetization (IBAT) International Battery Metals Modular & Mobile Lithium Extraction Plant Dr. John, Burba International Battery Metals (IBAT)</p> <p>A Decision-Making Framework to Evaluate Opportunities for Recovery of Rare Earth Elements and Critical Minerals in Produced Water Networks Carl Laird, Carnegie Mellon University</p> <p>TBA</p> | |

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