

# Jacobs WEFTEC 24 Workshops (Sunday, 10/6)

Track		Time	Location
Session Time	Session	Name	
<b>Sunday, 10/6</b>			
	<b><i>W03: Thickening Optimization: Improve Performance and Benefit Multiple Plant Processes</i></b>	8:30-5:00 pm	245
3:30 -3:50 pm	Vice Chair & Speaker Case Study: Co-Thickening or Recuperative Thickening: Which Process is the Better Approach to Increase Digester Capacity for Sunnyvale, CA		<b><i>David Oerke</i></b>
	<b><i>W09: Activated Sludge and Biological Nutrient Removal Process Control: Hands-On in the Real World</i></b>	8:00-5:00 pm	Offsite
	Facilitator		<b><i>David Perry</i></b>
	Speaker		<b><i>Stephanie Cope</i></b>
	Speaker		<b><i>Maddy Fairley-Wax</i></b>
	<b><i>W10: Water Environment Federation/The Water Research Foundation: Doing More, with Less—Implementing Machine Learning Process Controls at Water Resource Recovery Facilities</i></b>	8:30-5:00 pm	345
8:45-10:00 am	Vice Chair & Speaker <i>PART 1: Overview of WRF Research Projects and Machine Learning</i>		<b><i>Bruce Johnson</i></b>
	<b><i>W13 Understanding and Applying Disinfection Fundamentals</i></b>	8:00-5:00 pm	Offsite
	Facilitator		<b><i>Pratyusha Reddy Reddy</i></b>
10:15 am-12:15 pm	Hands On Laboratory Activity or Disinfection Technology Review		<b><i>Matt Noesen</i></b>
	<b><i>W16 Learning to Communicate: Connecting with Audiences and Telling your Story</i></b>	1:30-5:00 pm	352
	Assistant Moderator		<b><i>Jayesh Charthal</i></b>
	<b><i>W17 Assessing Sewer Septicity: Applying Tools to Save Money and Trouble</i></b>	8:30-5:00 pm	346
	Chair & Facilitator		<b><i>Bart Kraakman</i></b>
3:30-4:00 pm	Case Study: How Utilities Are Using Sewer Process Modelling to Solve Network-Treatment Plant Interactions		<b><i>Adrian Romero</i></b>
	<b><i>W18 Navigating the Water Sector's Path to Net Zero</i></b>	8:30-5:00 pm	243
11:00 am-12:00 pm	Scope 2: Reducing Energy Demand & Generating Renewable Energy		<b><i>Emma Shen</i></b>

# Jacobs WEFTEC 2024 Program Participants (Monday, 10/7)

Track		Time	Location
Session Time	Session	Name	
<b>Monday, 10/7</b>			
	<b><i>Building a Hydrogen Future</i></b>	1:30-3:00 pm	244
1:30-1:50 pm	So You Want to Make H2 at Your WRRF? Synergies, Pitfalls and Opportunities		<b><i>Ted Couch</i></b>
	<b><i>Leveraging Automation and Analytics for Better Situational Awareness and Optimization: Part I</i></b>	1:30-3:00 pm	350
1:30-1:50 pm	WRF 5121 Final Report Overview: Long-Term Evaluation of Hybrid Digital Twins at Three Full-Scale WRRFs		<b><i>Bruce Johnson &amp; Cheng Yang</i></b>
	<b><i>Leveraging Digital Technologies to Make Better Decisions</i></b>	1:30-3:00 pm	235
2:00-2:30 pm	Advancing AI-Based Sewer Inspection at West Boise Sewer District		<b><i>Alyce Tolman &amp; Daniel Buonadonna</i></b>
	<b><i>Navigating Nutrient Dynamics: Modeling for Water Quality Excellence</i></b>	1:30-3:00 pm	256
2:00-2:30 pm	Puget Sound Point Source Regional Cost and Rate Study Summary		<b><i>Amanda McInnis</i></b>
	<b><i>Optimization of MBR Technology</i></b>	1:30-3:00 pm	343
2:30-3:00 pm	A Flexible Design Concept for a 180 MGD MBR Facility		<b><i>Colin Fitzgerald</i></b>
	<b><i>Improving Disinfection Processes through Machine Learning</i></b>	1:30-3:00 pm	346
2:30-3:00 pm	From Prediction to Protection: Machine Learning for Wastewater Disinfection Efficiency		<b><i>Joshua Registe</i></b>
	<b><i>Effective Strategies for Managing Organics in IPR/DPR Systems</i></b>	1:30-3:00 pm	340
	Moderator		<b><i>Ryujiro Tsuchihashi</i></b>
	<b><i>Reducing Wet Weather Flows Using Public and Private I/I Removal Solutions</i></b>	3:30-5:00 pm	346
3:30-4:00 pm	Leveraging Grant Funds to Reduce Private System I/I		<b><i>Michelle Collins</i></b>
	<b><i>Advances in Anaerobic Digestion</i></b>	3:30-5:00 pm	344
	Assistant Facilitator		<b><i>Joyce Chang</i></b>
3:30-3:50 pm	Application of the Microbial Hydrolysis Process on an Existing Anaerobic Digestion System		<b><i>Maddy Fairley- Wax &amp; David Perry</i></b>
	<b><i>Consumer Education Fights Back at Collection Systems Under Attack</i></b>	3:30-5:00 pm	356
	Assistant Facilitator		<b><i>Marci Davis</i></b>
	<b><i>Microplastics in WRRFs: Research, Risk, and Regulation Updates</i></b>	3:30-5:00 pm	238
	Moderator		<b><i>Jenny Reina</i></b>
	<b><i>Shaping the Future of Potable Reuse</i></b>	3:30-5:00 pm	340
	Assistant Facilitator		<b><i>Ryujiro Tsuchihashi</i></b>

# Jacobs WEFTEC 2024 Program Participants (Tuesday, 10/8)

Track		Time	Location
Session Time	Session	Name	
<b>Tuesday, 10/8</b>			
	<b><i>Resilient Communities Tackling Climate Challenges</i></b>	8:30-9:30 am	335
8:30-9:00 am	Show Me The Value! Virginia Beach's Flood Model Visualization Tool		<b><i>Leisha Pica</i></b>
	<b><i>Planning Techniques to Support I/I Mitigation, Master Plans and Design</i></b>	8:30-10:00 am	356
8:30-9:00 am	2D or Not 2D: That is the Question		<b><i>Eric Kohnen</i></b>
	<b><i>Learning Exchange: What's Trending in Comms</i></b>	8:30-10:00 am	242
	Lead Facilitator		<b><i>Marci Davis</i></b>
	<b><i>Intercepting Odors and Corrosion: Modeling, Mitigation,</i></b>	8:30-10:00 am	244
8:30-8:50 am	Studying Odor And Corrosion For 168 Kilometers of Large-Diameter Interceptor		<b><i>Steve Graziano</i></b>
	<b><i>Energy Conservation: From a Want to a Must</i></b>	8:30-10:00 am	346
8:30-8:50 am	Green Energy, Less Power, Fewer Chemicals, Cleaner Water, Class A Biosolids: A Transformational Program at Chattanooga's MBEC With a Financial Payback		<b><i>Paul Steele</i></b>
	<b><i>Fundamentals of Biofilm Reactor Design and Operation</i></b>	8:30-10:00 am	238
8:35-8:50 am	Applications and Advantages of Biofilm Reactors		<b><i>Jenny Reina</i></b>
	<b><i>Planning Techniques to Support I/I Mitigation, Master Plans and Design</i></b>	8:30-10:00 am	356
9:00-9:15 am	Significant I/I and SSO Volume Reduction Achieved by Unique GIM Dynamic Models and Optimized Capacity Improvement Projects Under Consent Decree		<b><i>Yan Hartkemeyer</i></b>
	<b><i>Fundamentals of Biofilm Reactor Design and Operation</i></b>	8:30-10:00 am	238
9:10-9:25 am	Design and Project Considerations of Biofilm Reactors		<b><i>William Leaf</i></b>
	<b><i>Innovation in Distributed Infrastructure</i></b>	12:00-12:25 pm	Booth 1053, Hall B
12:00-12:25 pm	Green versus Gray: Advancing a Holistic Approach When Considering Decentralized and Distributed Water Solutions		<b><i>Rick Warner</i></b>
	<b><i>Circular Water Economy: A Conversation with WEF, NACWA, and WaterReuse Leadership</i></b>	1:00-4:15 pm	La Nouvelle Orleans, Ballroom B
3:00-3:40 pm	Moderator		<b><i>Rick Warner</i></b>
	<b><i>Technology Spotlight: Transformation of PFAS in Biosolids</i></b>	1:00-2:30 pm	Booth 841, Hall B
	Assistant Facilitator		<b><i>Maddy Fairley-Wax</i></b>

# Jacobs WEFTEC 2024 Program Participants (Tuesday, 10/8)

Track		Time	Location
Session Time	Session	Name	
<b>Tuesday, 10/8</b>			
	<b><i>Greenhouse Gas Strategies in Action: Measure to Mitigate</i></b>	1:30-3:00 pm	344
1:30-1:50 pm	Be Ambitious: Durham Region's Water and Wastewater Net-zero GHG Roadmap		<b><i>Emma Shen</i></b>
	<b><i>Developments in Hydrothermal Liquefaction for WRRFs</i></b>	1:30-3:00 pm	256
2:30-2:50 pm	Hydrothermal Liquefaction: Technical Risks and Mitigation		<b><i>Lucy Cotter</i></b>
	<b><i>Mechanistic Modeling Developments for Newer Processes</i></b>	1:30-3:00 pm	244
	Assistant Facilitator		<b><i>Jayesh Charthal</i></b>
	<b><i>Microbial Ecology Selection Under Low DO Concentration</i></b>	1:30-3:00 pm	253
	Assistant Facilitator		<b><i>Arifur Rahman</i></b>
	<b><i>Developments in Hydrothermal Liquefaction for WRRFs</i></b>	1:30-3:00 pm	256
	Lead Facilitator		<b><i>Adrian Romero</i></b>
	<b><i>Modeling for Inland Flood Resilience</i></b>	3:30-5:00 pm	350
3:30-4:00 pm	Peterborough Integrated Flood Model: A Comprehensive Approach to Managing Flood Risk		<b><i>Eric Kohnen &amp; Ricardo Santaella</i></b>
	<b><i>Optimizing Membrane Efficiency for Water Reuse and Disinfection</i></b>	3:30-5:00 pm	349
4:00-4:20 pm	Effect of Divalent and Metal Cations on the Organic Compounds Responsible for the Fouling of Ultrafiltration Membrane Treating Algae Laden Water		<b><i>Edwin Castilla-Rodriguez</i></b>
	<b><i>Benefits and Approaches to Moving Dewatering into the Modeling Realm</i></b>	3:30-5:00 pm	338
4:25-4:45 pm	Modeling Approach III: SUMO Extended Model		<b><i>David Oerke</i></b>
	<b><i>Application of Machine Learning and Modeling in Carbon Diversion</i></b>	3:30-5:00 pm	243
	Moderator		<b><i>Arifur Rahman</i></b>
	<b><i>N<sub>2</sub>O Unmasked: Understanding and Taming Emissions</i></b>	3:30-5:00 pm	253
	Assistant Moderator		<b><i>Adrian Romero</i></b>

# Jacobs WEFTEC 2024 Program Participants (Wednesday, 10/9)

Track		Time	Location
Session Time	Session	Name	
<b>Wednesday, 10/9</b>			
	<b><i>Resilient Development: Insights from Urban and Coastal Areas</i></b>	8:30-10:00 am	243
8:30-9:00 am	An Adaptive Tale: Optimizing Resilient Development	<b><i>Jennifer Baldwin, Elise Ibendahl &amp; Richard Crowder</i></b>	
	<b><i>Leveraging Machine Learning for Facility Operations</i></b>	8:30-10:00 am	253
9:30-9:50 am	Utilizing Intelligent O&M to Harness Machine Learning Across the Water and Wastewater Industry	<b><i>Joshua Registe</i></b>	
	<b><i>Optimizing IPR/DPR Projects: Harnessing the Power of Ozone</i></b>	8:30-10:00 am	235
	Assistant Moderator	<b><i>Belle Sexton</i></b>	
	<b><i>Stakeholder Engagement Strategies to Promote Green Infrastructure and Environmental Justice</i></b>	10:30-12:00 pm	356
10:30-11:00 am	Vision to Reality: Building Community Through a Wet Weather Treatment Facility	<b><i>Tina Hastings</i></b>	
	<b><i>Anoxic Reactor Design for Low Energy BNR</i></b>	10:30-12:00 pm	335
10:30-11:00 am	A Utilities Path to Implementing Disruptive Emerging Technologies: From Demonstration to the Full-Scale Implementation of MABR Technology	<b><i>Julian Sandino</i></b>	
	<b><i>Synergizing Digital Solutions and Ozonation for Treatment of Micropollutants</i></b>	10:30-12:00 pm	243
	Assistant Facilitator	<b><i>Jayesh Charthal</i></b>	
	<b><i>Coastal Water Management: Strategies to Eliminate Ocean Discharge</i></b>	1:30-3:00 pm	235
	Assistant Moderator	<b><i>Ryujiro Tsuchihashi</i></b>	
1:30-2:00 pm	Strategic Water Reclamation: CCUA Journey to 100% Reclaimed Water Utilization	<b><i>Marcel Dulay</i></b>	
2:00-2:30 pm	Ocala Wetland Recharge Park: A Nature-Based Solution for Beneficial Reuse	<b><i>Allison Lewis</i></b>	
	<b><i>Innovations in Phosphorus Management: From Models to Solutions</i></b>	1:30-3:00 pm	340
2:30-3:00 pm	Ann Arbor Tackles Stringent Effluent Phosphorus Limits with a Cost-Effective Side-Stream Phosphorus Removal Solution	<b><i>Derek Lycke</i></b>	