

Jacobs Workshops at WEFTEC 2022—*Sunday, 10/9*

Workshop Session		Workshop Time	Room Location
Presentation Time	Presentation Title	Jacobs Presenter Name	
Sunday, 10/9			
	<u>W04—Game-Based Modeling</u>	8:30 am—5:00 pm	345
	Workshop Chair	<i>Heather Stewart</i>	
8:40—9:00 am	Why Do We Use Process Models?	<i>Heather Stewart</i>	
4:15—5:00 pm	Facilitated: Wrap Up and Announcement of Winners	<i>Heather Stewart</i>	
	<u>W09- So You Thought You Were Done? Finding the End Point of Wet Weather Control Programs</u>	8:30 am—5:00 pm	238
9:30—10:00 am	Rapid Fire Question Session with Utility Leaders	<i>Zachary Monge</i>	
3:30—4:30 pm	Facilitated Discussion on Meeting Regulatory Standards	<i>William McMillin</i>	
	<u>W10—Emerging Pathogens and Microconstituents in Wastewater/Water Reuse: Challenges and Opportunities</u>	8:30 am—5:00 pm	256
	Workshop Chair	<i>Jenny Reina</i>	
1:55—2:20 pm	PFAS in Treated Wastewater: Solutions and Technology Updates in the Application of Conventional and Emerging PFAS-selective Adsorbents	<i>Scott Grieco</i>	

Jacobs Technical Sessions at WEFTEC 2022-Monday, 10/10

Workshop Session		Workshop Time	Room Location
Presentation Time	Presentation Title	Jacobs Presenter Name	
Monday, 10/10			
	<u>Fundamentals of Planning for Potable Reuse</u>	1:30 pm—3:00 pm	336
1:30—1:55 pm	New Framework to Develop Industrial Enhanced Source Control Programs for Potable Reuse Projects		<i>Talia Assi</i>
	<u>Monitoring and Mitigation of Nitrous Oxide Emissions From WRRFs</u>	1:30 pm—3:00 pm	343
1:30—1:40 pm	Topic 1: Overview of N2O production in water reclamation facilities and the use of AI/ML for N2O mitigation		<i>Amanda Lake</i>
1:40—1:50 pm	Topic 2: Advances in Monitoring and Best Practices		<i>Amanda Lake</i>
1:50—2:00 pm	Topic 3: Boulder Water Resource Recovery Facility Case Study		<i>Feng Xiang</i>
	<u>Chemical Disinfection Solutions Technology Spotlight</u>	1:30 pm—3:00 pm	Exhibit Hall
	Lead Facilitator, Route 1		<i>Jenny Reina</i>
	<u>Secondary Clarifiers: Old School vs. New School</u>	1:30 pm—3:00 pm	347
2:00—2:15pm	Extensive Sludge Characterization Allows Large New Secondary Clarifiers At The Columbia Boulevard Plant in Oregon To Be Optimized Via 3-D Computational Fluid Dynamics Analysis		<i>Shinjiro Miyawaki</i>
	<u>Digital Water Tools to Evaluate and Optimize Collection Systems</u>	1:30 pm—3:00 pm	244
2:30—2:45 pm	An Incremental, Balanced Approach to Enhanced Wet-Weather Management and Operational Optimization		<i>Josh Hallsten</i>
	<u>The Great UV Dose Debate</u>	1:30 pm—3:00 pm	356
	Vice Chair		<i>Shruti Jagini</i>
	<u>Trends in Improved Assessment and Implementation of Odor and Corrosion Control Strategies in Wastewater Collection Systems</u>	1:30 pm—3:00 pm	
2:00—2:25 pm	Sewer Process and Ventilation Modeling: The Underground Menace		<i>Adrian Romero</i>
	<u>Understanding the Benefits of Low DO Operation</u>	1:30 pm—3:00 pm	339
2:25—2:40 pm	Low Energy Nitrogen Removal: A New Industry Benchmark For Above 35 MGD Wastewater Treatment Plants		<i>Aprilia Vellacott</i>
	<u>Uptake Your Nutrients!</u>	3:30—5:00 pm	344
4:00—4:15 pm	Innovative Strategy and A Case Study For Implementing Watershed Nutrient Management		<i>Natalie Lenz</i>

Jacobs Technical Sessions at WEFTEC 2022—Tuesday, 10/11

Technical Session		Session Time	Room Location
Presentation Time	Presentation Title	Jacobs Presenter Name	
Tuesday, 10/11			
<u>Case Studies in Climate Change Impacts and Adaptability</u>		8:30—10:00 am	
9:25—9:40 am	Preparing for Uncertainty: Climate Resilience Assessment and Adaptation Planning for Water Resource Recovery Facilities	<i>Laurens Van der Tak</i>	
<u>Pyrolysis and Gasification</u>		8:30—10:00 am	347
	Assistant Moderator	<i>Todd Williams</i>	
8:55—9:20 am	Pyrolysis/Gasification: A Pathway to Full-Scale Energy Independence and Decarbonization while Contributing to the Circular Economy	<i>Julian Sandino/Todd Williams</i>	
<u>Knowledge Development Forum: Designing for Emerging and Innovative Technologies</u>		8:30—10:00 am	244
8:55—9:05 am	Facilitating Innovation through Traditional and Alternative Project Delivery	<i>Bruce Johnson</i>	
<u>Application of Process Modeling for Intensification of Secondary Treatment</u>		1:30 pm—3:00 pm	350
	Assistant Moderator	<i>Arifur Rahman</i>	
1:30—1:55 pm	Why Does Proper Simulation Matter In The Acronym Soup of Biofilm Systems? AGS, IFAS, MBBR	<i>Bruce Johnson</i>	
<u>Microplastics: Everything You Want To Know</u>		1:30—3:00 pm	353
	Lead Facilitator	<i>Jenny Reina</i>	
<u>Intensification Intersection: Comparing Process Intensification Technologies</u>		3:30—5:00 pm	256
	Moderator	<i>Tom Constantine</i>	
4:00—4:25 pm	Rapid Mobilization: Case Study On The Accelerated Adoption Of The Mobile Organic Biofilm Process Intensification Technology	<i>Tom Johnson</i>	
<u>Muddied Waters, Managed by Many Models</u>		3:30—5:00 pm	350
4:30—4:55 pm	Coastal Watershed Model and A Resilient Watershed Management Plan For The Highly Urbanized City of St. Petersburg, FL	<i>Swamy Pati</i>	
<u>Process Aeration Modeling and Optimization</u>		3:30—5:00 pm	236
3:30—3:55 pm	Using Gas-Phase Modeling To Track The Fate Of Pure Oxygen At A Large HPO Facility	<i>Paul Steele</i>	
<u>Progress of Carbon Diversion Using Advanced Primary Treatment</u>		3:30—5:00 pm	357
	Moderator	<i>Arifur Rahman</i>	
<u>Stakeholder Engagement and Design for Adapting to</u>		3:30—5:00 pm	356
4:00—4:15 pm	Stormwater Forecasting: A New Indicator To Manage Basin-Scale Urban Runoff Volume	<i>David Bell</i>	

Jacobs Technical Sessions at WEFTEC 2022—Wednesday, 10/12

Technical Session		Session Time	Room Location
Presentation Time	Presentation Title	Jacobs Presenter Name	
Wednesday, 10/12			
	<u><i>Evolution of Biologically-Enhanced Carbon Diversion</i></u>	8:30 —10:00 am	356
	Moderator	<i>Tim Constantine</i>	
8:30—8:50 am	Boehnke and Beyond: A History of Advancements in High-Rate Activated Sludge for Energy Efficient Wastewater Treatment	<i>Arifur Rahman</i>	
	<u><i>Inflow and Infiltration (I/I): Get Off My Property</i></u> <i>Top Abstract for WEFTEC 2022! WEF Program Committee Martha Hahn Memorial Recognition</i>	8:30 —10:00 am	238
8:55—9:20 am	Is Private Lateral Inflow and Infiltration Mitigation Effective?	<i>Michelle Collins</i>	
	<u><i>Delivering the Goods Through Program Management, P3, and PDB</i></u>	8:30—10:00 am	353
9:25—9:40 am	Lessons Learned From The San Jose Cogeneration Facility Project	<i>David Perry</i>	
	<u><i>UV-LED From Lab to Full Scale Operating Facilities</i></u>	8:30—10:00 am	345
	Assistant Moderator	<i>Jenny Reina</i>	
	<u><i>Decarbonization Status and Global Trends</i></u>	10:30—12:00 pm	238
	Moderator	<i>Adrian Romero</i>	
10:30—10:55 am	Role of the Water Sector in the Decarbonization Effort	<i>Emma Shen</i>	
	<u><i>Incorporating Risk Evaluation in Design and Modeling for Utility Management</i></u>	10:30—12:00 pm	343
10:45—10:55 am	UOSA's Risk Based Master Planning	<i>Adrienne Willoughby</i>	
	<u><i>Mitigating Flood Risk in Urban Areas</i></u>	10:30—12:00 pm	347
11:00—11:15 am	Arlington County's Flood Risk Assessment Management Plan: A Blueprint For Living With Water In A Changing Climate	<i>Laurens Van der Tak</i>	
	<u><i>TMDLs... 'Loading' on the River!</i></u>	10:30—12:00 pm	344
11:00—11:15 am	Developing An Alternative To A Point Source Based Approach To Regulating Nutrients In Puget Sound	<i>Amanda McInnis</i>	
	<u><i>MBR LRV Credits I: Can you Prove It?</i></u>	10:30—12:00 pm	336
	Assistant Facilitator	<i>Ryujiro Tsuchihashi</i>	

Jacobs Technical Sessions at WEFTEC 2022—*Wednesday, 10/12* (continued)

Technical Session		Session Time	Room Location
Presentation Time	Presentation Title	Jacobs Presenter Name	
Wednesday, 10/12			
	<u><i>Advances In The MABR For Nutrient Removal</i></u>	1:30—3:00 pm	343
1:50—2:00 pm	Unique Stratification of Biofilm Density in MABR Biofilms: An Experimental and Modeling Study		<i>Mengfei Li</i>
	<u><i>Blue, Green, or Grey Infrastructure: Which Colors Are Best For Your Community?</i></u>	1:30—3:00 pm	253
1:35—1:50 pm	Miami Beach's Blue-Green Stormwater Infrastructure Concept Plan: Not Just 'Living with Water' but 'Thriving With Water'		<i>Dan Wible</i>
	<u><i>Digital Process Evaluation and Optimization for Public Health Protection</i></u>	1:30—3:00 pm	357
	Assistant Moderator		<i>Jenny Reina</i>
	<u><i>Fundamentals of GHG Accounting and The Role of Collection Systems</i></u>	1:30—3:00 pm	
1:30—1:55 pm	Fundamentals of Greenhouse Gas Accounting of Wastewater Utilities		<i>Adrian Romero</i>
	<u><i>Rates, Complaints, and Floodgates: Examples of Successful Stakeholder</i></u>	1:30—3:00 pm	244
1:35—1:45 pm	Don't Sell Your Rate Communications Short! How One Utility Built an Award-Winning Awareness Campaign to Talk about Rate Adjustments		<i>Marci Davis</i>
	<u><i>Advanced Digestion Topics</i></u>	1:30—3:00 pm	344
1:35—1:50 pm	Enhancing Anaerobic Digestion Performance With The Microbial Hydrolysis Process		<i>David Perry</i>
2:00—2:15 pm	Micro-Aerobic Digestion For Advanced Process Stability and Biogas Desulfurization		<i>Bart Kraakman</i>