

WATER ENVIRONMENT
FEDERATION 2019

NUTRIENT REMOVAL AND RECOVERY SYMPOSIUM

JULY 23–25, 2019
MINNEAPOLIS, MINNESOTA

www.wef.org/Nutrients
#Nutrients19



This conference is held by the Water Environment Federation in cooperation with the Central States Water Environment Association and The Water Research Foundation.

The Nutrient Removal and Recovery Symposium will bring together environmental professionals to discuss and debate the current state of the art for nutrient removal, recovery and management.

This WEF event held in cooperation with Central States Water Environment Association and WRF will be held in Minneapolis, Minnesota and will offer in-depth and up to date coverage of challenges and innovative, emerging solutions to nutrient removal and recovery.

Don't miss the sessions on Aerobic Granular Sludge, Mainstream Shortcut Nitrogen Removal, Phosphorus removal and Recovery, Carbon Management, and more.

We look forward to you joining us at this exciting symposium.

SCHEDULE-AT-A-GLANCE

TUESDAY, JULY 23		REGISTRATION OPEN: 7:30 AM - 5:00 PM
8:30 AM – 5:00 PM	Workshop A: Removal and Recovery of Phosphorus: What Does the Future Hold?	
	Workshop B: Fundamentals of Nutrient Removal and Recovery: Theory, Technologies, Operation Troubleshooting using Process Simulators	
12:00 PM – 1:30 PM	Networking Luncheon	
5:00 PM – 6:00 PM	Kickoff Reception	
WEDNESDAY JULY 24		REGISTRATION OPEN: 7:30 AM - 5:15 PM
8:30 AM – 12:15 PM	Opening General Session	
12:15 PM – 1:30 PM	Networking Luncheon	
1:30 PM – 5:15 PM	Session 01: Granular Sludge	
1:30 PM – 3:00 PM	Session 02: Carbon Management for Nutrient Removal	
1:30 PM – 5:15 PM	Session 03: Phosphorus Recovery	
3:45 PM – 5:15 PM	Session 04: Planning and Decision Making	
5:15 PM – 6:45 PM	Networking Reception	
THURSDAY, JULY 25		REGISTRATION OPEN: 8:00 AM - 5:15 PM
8:30 AM – 12:15 PM	Session 05: Biological Phosphorus Removal: Main/Sidestream	
8:30 AM – 10:00 AM	Session 06: High Strength Wastewater Treatment	
	Session 07: Operations Experience at Nutrient Removal Plants	
10:45 AM – 12:15 PM	Session 08: Membrane Aerated Biofilm Reactors	
	Session 09: Ultra-Low Nutrient Effluent and Reuse	
12:15 PM – 1:30 PM	Lunch on your own	
1:30 PM – 5:15 PM	Session 10: Reality Check: Mainstream Shortcut Nitrogen	
	Session 11: Case Studies and Optimization	
1:30 PM – 3:00 PM	Session 12: Microbial Ecology	
3:45 PM – 5:15 PM	Session 13: General Nutrient Management	

PRE-CONFERENCE WORKSHOPS

TUESDAY, JULY 23 | 8:30 AM – 5:00 PM

WORKSHOP PRICING

Through 5/31/19: \$179 member | \$209 nonmember

After 5/31/19: \$199 member | \$229 nonmember

WORKSHOP A:

REMOVAL AND RECOVERY OF PHOSPHORUS: WHAT DOES THE FUTURE HOLD?

There have been concerted efforts to overcome inefficiencies of conventional phosphorus removal processes. Which is also aligned with wastewater utilities embracing a new paradigm of recovery of resources from wastewater. To this end, minimization of chemicals, energy and footprint requirements for phosphorus removal/recovery has been benefited from the use of efficient biological pathways as well as innovative processes. The main objective this workshop is to address needs and challenges of mainstream phosphorus removal and recovery by showcasing and debating about recent advances.

WORKSHOP B:

FUNDAMENTALS OF NUTRIENT REMOVAL AND RECOVERY: THEORY, TECHNOLOGIES, OPERATION TROUBLESHOOTING USING PROCESS SIMULATORS

This short course will cover the fundamental concepts of operating an activated sludge plant to achieve nitrogen and phosphorus removal via a combination of lecture material and hands-on use of a process simulator. The proposed program includes a series of modules with each covering a fundamental concept of biological treatment or nutrient removal that will then be followed up with attendees being led through a series of simulations to demonstrate how the concept is applied to a plant layout. State-of-the-art software SimuWorks™ used in the class is based on the program, GPS-X, developed by Hydromantis. This program is commonly used for treatment process evaluation and design but has been enhanced to serve as a platform for plant O&M manuals and operator training. This software is the basis for the simulator event included in WEFTEC Operations Challenge. Each attendee will be provided with a computer to use for simulations through the course of the course.

REGISTRATION FEES

REGISTRATION CATEGORY	Through: May 31, 2019 (Super Saver)		After: May 31, 2019	
	Member	Nonmember	Member	Nonmember
Full Conference	\$570	\$935	\$745	\$1,205
One-Day Conference	\$400	\$535	\$520	\$660
Student	\$0	\$200	\$0	\$260
OPTIONAL PRE-CONFERENCE WORKSHOPS				
Workshop A	\$179	\$209	\$199	\$229
Workshop B	\$179	\$209	\$199	\$229

Note: Cancellations must be received by July 12, 2019, to be eligible for a refund.

HOTEL ACCOMMODATIONS

Renaissance Minneapolis Hotel, The Depot

225 3rd Avenue South Minneapolis, MN 55401

For Reservations: (866) 211-4611

Reservation Link: <http://bit.ly/NRR19HOTEL>

Book your stay at the Renaissance Minneapolis Hotel by June 24, 2019, to be eligible for the discounted conference rate of \$199 per night. Please note: The conference rate is available on a first-come, first-served basis. When booking, please ask for the WEF Nutrient Removal and Recovery Conference.

CONTINUING EDUCATION CREDITS

0.6 CEUs | 10.5 PDHs | 4.5 GCHs

Attendee may earn Continuing Education Units (CEUs) for participation in workshops, Professional Development Hours (PDHs) for the Opening General Session and technical sessions. General Contact Hours are available for participation in the Opening General Session.

Please note: Credit totals are subject to change. Conference participants are responsible for exploring their state requirements to confirm these educational credits are recognized.



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POSTER PRESENTATIONS

Make sure to check out the poster presentations on display at the Nutrient Removal and Recovery Symposium. Posters will be up from 8:30 AM - 3:00 PM on both July 24th and 25th. The display will change each day so plan to check them all out. See program for latest details.

Save 10% on these titles when you purchase during registration for the Nutrient Symposium.



Activated Sludge and Nutrient Removal

Member: \$95.22

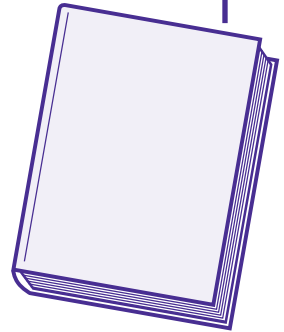
List: \$120.23



Wastewater Treatment Fundamentals I, Liquid Treatment

Member: \$95.22

List: \$133.70



Get the chance to meet the other attendees at the Symposia Receptions.

KICK-OFF RECEPTION

Tuesday, July 23rd | 5:00 PM -6:00 PM

NETWORKING RECEPTION

Wednesday, July 24th | 5:15 PM - 6:45 PM

SPONSORSHIP OPPORTUNITIES

Sponsoring the Nutrient Symposium provides your company with heightened visibility and brand awareness with nearly 300 professionals in your market base. Benefit from an integrated marketing and promotional campaign that positions your organization as a premier source for solutions and advice. Each opportunity offers multiple brand exposures before, during, and after the symposium at price points designed for any marketing plan.

- Conference-Wide Packages
- Branded Giveaways
- Support of the Opening General Session and Networking Events
- Digital Media Advertising
- Onsite Advertising
- Hotel Advertising

SPONSOR BENEFITS:

- Enhanced visibility to conference attendees and WEF members
- Logo recognition on corresponding sponsor slide at the Opening General Session
- Branding on signage recognizing all sponsors on display for duration of conference
- Logo with sponsor directory listing including company website in conference program
- Logo on conference homepage banner recognizing all conference sponsors
- Pre-registered or final registration list in Excel format
- Sponsor badge ribbons

www.wef.org/nutrients-howto-sponsor

CONTACT: Sarah Evans Moretti
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