



EXHIBITOR CALL FOR CONTENT

Gain additional exposure for your company while helping us educate WEFTEC attendees on the exhibit floor!

Thank you for your interest in the Exhibitor Call for Content. With our **Technology Spotlights** (formerly known as *Mobile Sessions*) exhibitors have the opportunity to present technical information on the exhibit floor. During the mobile technology spotlight, WEF will bring attendees to selected booths for presentations focused on specific topics by exhibitor experts. Any exhibitors who can address the subject matter and meet the learning objectives of the topics presented in this call are welcome to submit an abstract.



Please read through this document carefully and completely. In the following pages you will find the 2024 Exhibitor Call **Submission Topics, our **Selection Criteria**, and **How to Submit**.**

The Exhibitor Call for Content will close on **May 14th at 9:00AM Eastern.** After closing, all submissions will be reviewed by select members of the WEFTEC Program Committee. Exhibitors will be notified of acceptance in early summer.

General Requirements

- 1 To submit to the Exhibitor Call for Content, you **must** be an employee of a company exhibiting at WEFTEC 2024.
- 2 WEF Membership is **not** a requirement for submission and/or presentation.
- 3 There is no limit to the number of abstracts that may be submitted; however, **each abstract should be submitted one time only**. Duplicate abstracts will be discounted.
- 4 **All participants must register for WEFTEC 2024**. If selected, you are also responsible for travel and lodging expenses as well as conference registration fees and booth fees.
- 5 Exhibitor booth space must be secured by **June 30th**, or the submission will be considered invalid and removed from the session.
- 6 Your submission must address how you will help ensure that participants achieve the learning objectives.
- 7 The official language of WEFTEC is English.

SUBMISSION TOPICS

Topic & Description

Learning Objectives

Advances in Screw Presses

This spotlight is a follow-on to the Thickening and Dewatering Technical Session. The Technical Session provides the theoretical background to sizing screw presses, while the Technology Spotlight will introduce the attendees to the technology being discussed. This will give attendees the chance to connect theoretical sizing with real-world application of screw presses.

Participants will be able to (1) Translate the theoretical approaches for evaluating dewatering capacity to real world equipment and technology. (2) Introduce screw press technology for dewatering. (3) Identify the constraints and benefits of this technology.

Aeration Diffusers

Curious about aeration diffusers? Then come join this unique opportunity for seeing a practical application of diffuser materials and geometry and cleaning techniques. Special attention will be paid to maintenance and energy requirements.

Participants will be able to (1) Explain how to install, operate, and clean diffusers. (2) Compare the difference between diffuser geometry and materials. (3) Acquire fundamentals about fine-pore diffuser technologies.

Blower Technology – Fundamentals on the Floor

Water resource recovery facilities require high-volume, low-pressure air for several purposes including but not limited to aerated grit removal, channel aeration for mixing, aeration in aeration basins, aeration in aerobic digesters, filter backwash scour air, and membrane scour air. Different blower technologies are appropriate for different applications within the facility. Blower manufacturers will provide a review of the different technologies they provide with a discussion of their practical applications and constraints. Moderators accompanying the groups will provide additional discussion opportunities as required.

Participants will be able to (1) Identify the various blower technologies available. (2) Apply the appropriate applications for the various blower technologies. (3) Observe interior mechanisms of the various blower technologies.

BNR Optimization- Leveraging Sensors and Analyzers

The use of sensors and analyzers for monitoring nutrients and process control is becoming increasingly common at BNR facilities. Attendees will be taken to various exhibitors that supply sensors for measuring ammonium and nitrate and analyzers for ammonia, nitrate, nitrite, and phosphate. Each manufacturer will discuss their instrumentation offerings, selection recommendations, general installation requirements, and typical maintenance procedures.

Participants will be able to (1) Evaluate which technology (sensor or analyzer) is most suitable for specific process streams and treatment objectives. (2) Compare the advantages and limitations of using instruments for optimizing BNR. (3) Discuss maintenance requirements including personnel hours and consumables needed to properly maintain equipment.

Decision Support Systems and Digital Twins for Operations and Maintenance

Are you interested in a better understanding of decision support systems that will improve your existing operations as well as predict the state of your system operations for better decision making, operational stability, and situational awareness? Then come learning about both on-prem and cloud-based solutions to assist you in this area.

Participants will be able to (1) Identify how to advance their existing automation systems using decision support systems. (2) Differentiate for using on-premises and cloud-based decision support systems. (3) Identify data management and analytics capabilities of different decision support systems.

Disinfect with Confidence: Online Instrumentation for Disinfection Processes

Join fellow attendees and learn the latest disinfection online sensors and analyzers from the experts- the exhibitors! Explore the latest options for measuring residual chlorine, UVT, and peracetic acid (PAA). Engage in interactive discussions with exhibitors and utility representatives as they offer their perspective on implementing these cutting-edge technologies.

Participants will be able to (1) Distinguish between disinfection online sensors and analyzers, including UVT sensors and residual chlorine and peracetic acid (PAA) analyzers. (2) Describe the principles of operation for each type of sensor and analyzer. (3) Identify potential applications for each type of disinfection sensor and analyzer based on their unique strengths and limitations.

Enhanced Primary Treatment – Beyond Conventional Settling

This spotlight focuses on technologies that offer the promise of enhanced primary treatment. This topic is of keen interest because improved treatment beyond traditional primary clarifiers provides the benefits of higher water quality; reduced loading and therefore less capital and operations and maintenance costs for downstream biological processes; smaller footprint; and increased carbon diversion for more energy production in downstream anaerobic digestion processes. Participants will be exposed to a wide range of available technologies.

Participants will be able to (1) Identify the various enhanced primary settling technologies and processes available. (2) Compare the alternatives processes. (3) Observe operational and maintenance requirements of the various technologies.

Everything You Wanted to Know about Grit but Were Afraid to Ask

Explore various grit technology ranging from detritors to pista systems on a tailored spotlight for water professionals including engineers and operations & maintenance professionals. Engage in interactive discussions with exhibitors and peers and leave with the confidence to implement these cutting-edge technologies in your own organization.

Participants will be able to (1) Distinguish between different types of grit removal systems and why one selects a grit system. (2) Demonstrate the principles of operation for each grit system. (3) Provide the pros and cons of each type of grit system and identify potential use cases based on their unique strengths and limitations.

Fundamentals of Biosolids Dewatering – Introduction to Various Dewatering Technologies

Come learn some of the fundamentals of biosolids sludge dewatering at a Wastewater Treatment Plant. The spotlight covers various dewatering technologies including but not limited to centrifuges, belt filter presses, gravity belt thickeners and rotary drum thickeners with a guided fundamentals tour of the Exhibit floor. This will be a high-level introduction targeted at young professionals, Operators, City officials and anyone interested in learning about various technologies. Attendees have the opportunity to gain an improved understanding, pros and cons of various dewatering technologies available, while interacting directly with the equipment being discussed.

Participants will be able to (1) Relate the theoretical aspects to the practical aspects (equipment) of the operations, management, and design of biosolids dewatering equipment. (2) Summarize the various types of dewatering technologies at a wastewater treatment plant. (3) Recognize equipment, and companies, who will be great resources moving forward in their careers.

Industrial Water Reuse Equipment

This session is for anyone interested in the conventional and new technologies that enable reuse like ceramic membranes and thermal concentration technologies. Topics such as ultrafiltration (UF); specialty membranes (ceramic); reverse osmosis (RO) membranes; and thermal concentration (evaporation, crystallization will be covered as they apply to industrial settings.

Participants will be able to (1) Identify equipment typically involved in water re-use applications. (2) Distinguish between membrane applications for industrial reuse.

Influent to Effluent

Come learn the fundamentals of Wastewater from influent to effluent while exploring the exhibit floor. This will be a high-level introduction targeted at young professionals, City officials and anyone interested in going back to the basics. This mobile Spotlight will allow attendees the opportunity to gain an improved understanding of treatment and equipment, while interacting directly with the equipment being discussed.

Participants will be able to (1) Relate what is learned in the theoretical aspects to the practical aspects (equipment) of the operations, management and design of wastewater conveyance and treatment. (2) Summarize the fundamental steps of wastewater from collection to effluent.

Made in America: BABAA Compliance Without Waivers

Calling all American Manufacturers: Do you comply with BABA requirements without the need of Waivers? Can you describe how your company complies with BABA requirements without the need for external waivers or complications? This technology spotlight is intended to inform attendees of the large quantity of American Made products within our industry. Small booths to large booths, American made products are throughout the exhibition and this technology spotlight is intended to present a learning opportunity for attendees to hear from American Manufacturers about their dedication to BABA and American made products.

Participants will be able to (1) Assess and compare some of the options available without seeking waivers. (2) Evaluate BABAA compliance and how it relates.

Membrane Aerated Biofilm Reactors (MABR)

Membrane aerated biofilm reactor (MABR) technology provides tremendous benefits in terms of energy efficient oxygen delivery to a nitrifying biofilm, which also allows for process intensification. This session will showcase MABR technology options so attendees can observe the different types of membrane systems as well as the energy and process capacity benefits offered by this groundbreaking technology.

Participants will be able to (1) Identify different types of MABR technology. (2) Determine how MABRs can be implemented into existing tanks. (3) Assess how MABR technology can be used in new applications.

Membrane Bioreactors (MBR)

Membrane bioreactors (MBR) offer the familiarity of activated sludge with the added benefits of better effluent quality, smaller space requirements, and ease of automation. This session will showcase membrane technology options so attendees can observe the different types of membrane systems, air scour systems, and process control systems offered by prominent membrane technology manufacturers.

Participants will be able to (1) Identify different types of MBR technologies. (2) Interpret the differences in membrane system design. (3) Examine membrane air scour options.

Monitors for Odor and Corrosion

The human nose remains the world's most sensitive odor-detection instrument, but innovations in electronic monitoring continue to improve our ability to detect and respond to hydrogen sulfide and other odor compounds before they reach neighbors and other stakeholders and before they cause corrosion damage to infrastructure. Attendees of this session will see innovations in hydrogen sulfide and odor monitoring to improve service quality to constituents, extend asset life, and increase efficiency of operations.

Participants will be able to (1) Apply the use of monitoring tools to detect potentially odorous and/or corrosive conditions early. (2) Evaluate monitoring to optimize odor and corrosion control technology.

Nutrient Removal Intensification Technologies

Nutrient removal intensification technologies can increase treatment capacity and improve nutrient removal performance within smaller footprints and for lower capital and operating costs than conventional alternatives. This technology spotlight will showcase several leading nutrient removal intensification technologies: aerobic granular sludge sequencing batch reactors, selective wasting hydrocyclones, and plant-based mobile biocarriers. Exhibitors will provide an overview of the different technologies with a discussion of core principles and operational considerations. Moderators accompanying the groups will provide additional discussion and facilitate questions and comparisons as needed.

Participants will be able to (1) Explain how aerobic granular sludge, hydrocyclones, and mobile biocarriers intensify secondary treatment processes. (2) Distinguish how nutrient removal is achieved for each technology. (3) Contrast key operational considerations and differences for each technology compared to conventional activated sludge.

Liquid Treatment Technologies for PFAS at Water Resource Recovery Facilities

Join us in the exhibit hall for a guided tour of PFAS removal technologies for wastewater. Explore technologies including foam fractionation, electrochemical oxidation, adsorption, and more. This session focuses on liquid treatment and PFAS. Engage in interactive discussions with exhibitors and peers and leave with the confidence to implement these cutting-edge technologies in your own organization.

Participants will be able to (1) describe different PFAS removal processes such as adsorption, foam fractionation, and electrochemical oxidation. (2) Describe how PFAS treatment technologies are being implemented in municipal facilities for liquid treatment. (3) Recognize drivers for the specific PFAS treatment solutions.

Phosphorus Management of BNR Biosolids for Sequestration

Compare phosphorus management best practices for BNR biosolids including struvite control and sequestration for beneficial reuse in this highly engaging session. An overview of current technology offerings from phosphorus sequestration exhibitors will be provided as well as advances in treatment, equipment, and process control.

Participants will be able to (1) Determine what technologies are available to manage phosphorus in BNR biosolids, control struvite, and sequester phosphorus in biosolids for beneficial reuse. (2) Determine the latest advances in equipment and process control. (3) Determine how to “right size” the technology for your facility.

Sidestream Centrate Treatment Deammonification Technology Innovations

This session will compare sidestream treatment best practices using deammonification to reduce nutrient loading to mainstream from centrate/filtrate recycle. The goal is to provide an overview of current deammonification technology offerings while highlighting advances in treatment, equipment, and process control.

Participants will be able to (1) Establish what technologies are available to reduce nutrient load from recycle streams. (2) Summarize the latest advances in equipment and process control. (3) Determine how to “right size” the technology for your facility.

Small Diameter Rehabilitation Technologies

Join us for an engaging session where we will dive into the world of small diameter pipe rehabilitation technologies. Discover a myriad of innovative technologies designed to address the challenges of rehabilitating smaller pipelines efficiently and effectively. From cured in place pipe (CIPP) and grouting, to pipe bursting and everything in between, this session offers a comprehensive exploration of the latest advancements in small diameter pipe rehabilitation. All to revolutionize the way we maintain and improve our underground infrastructure.

Participants will be able to (1) Differentiate between various small diameter rehabilitation technologies and methods. (2) Recognize the most appropriate rehabilitation methods for various collection system assets.

Tertiary Filtration

During this technology spotlight, exhibitors will showcase both deep bed granular media filter and woven cloth filter manufacturers. Attendees are encouraged to come and learn about how tertiary filters can assist with water reuse and nutrient removal.

Participants will be able to (1) Identify how tertiary filters are applied to nutrient removal. (2) Identify how tertiary filters are applied to water reuse. (3) Differentiate differences between different filter technologies.

Transformation of PFAS in Biosolids

Join us in the exhibit hall for a guided tour of PFAS transformation technologies as they relate to biosolids. Explore pyrolysis, supercritical water oxidation, gasification, hydrothermal processing, and other technologies. Engage in interactive discussions with exhibitors and peers and leave with the confidence to implement these cutting-edge technologies in your own organization.

Participants will be able to (1) Distinguish between different types of PFAS transformation technologies, for biosolids including pyrolysis, supercritical water oxidation, and hydrothermal processing. (2) Describe the principles of design and operation for each technology. (3) Explain the pros and cons of each type of treatment and identify potential use cases based on their unique strengths and limitations.

What Can Ozone Do for IPR/DPR?

Come and hear technical presentations designed by ozone treatment system providers focusing on why you might want to use ozone treatment, how the ozone treatment system can be integrated into the IPR/DPR treatment trains, and what design considerations will be crucial in producing purified water.

Participants will be able to (1) determine how ozone treatment relates to direct and indirect potable reuse. (2) Compare design considerations of ozone treatment systems as it relates to IPR/DPR.

Wise Up Your Watershed with Continuous Monitoring & Control (CMAC)

Due to changes in impervious areas caused by development, many watersheds suffer from excess flows causing solids and nutrient loading during wet weather and not enough flow during dry weather to maintain designated stream uses. The use of real-time control solutions like CMAC allows for automated management of stormwater retention basins during wet weather including early drawdown before storms arrive, the ability to retain stormwater without discharging during the early portion of intense rain events, and the ability to slowly draw down the retention basin after the storm passes to maintain minimal stream flows. This results in reductions in the discharge of suspended solids and nutrients, slows flows that might otherwise cause downstream erosion, and maintains instream flow regimes to the benefit of biological organisms. The session will start with a five-minute introduction to CMAC and its applications prior to visiting manufacturers. The session will visit real-time controls manufacturers who champion this technology.

Participants will be able to (1) Identify how real-time controls like CMAC control runoff and allow settling of suspended solids and nutrient removal thus reducing non-point source pollution to downstream areas. (2) Identify how CMAC systems function in real-time and provide automated wet weather storage and retention options, which can be pre-determined on a catch basis and watershed basis. (3) Differentiate differences between different real-time control technologies and their resultant impacts on watershed health and stability.

HOW TO SUBMIT

To submit, visit this site: <https://ww5.aievolution.com/wef2401/>

On our submission site, you will need to submit a short abstract specific to the Technology Spotlight you are applying to addressing the following:

Standard Guidelines

- An overviewing description of the technology and/or service that will be highlighted in the Technology Spotlight
- How the product fits into the Technology Spotlight topic and adds value- focus on the Learning Objectives
- Product, technology, or service characteristics and uses.
- Key design issues
- Typical level of automation/operator attention required.
- Start-up and shutdown sequences (if applicable)
- Any required ancillary system

Formatting

- Abstracts should be approximately 300-500 words in length.
- Images must be uploaded separately.
- Type the presentation title, authors, and keywords into individual fields, separate from the body of the abstract.
- Copy and paste the body of your abstract into the online system.
- The online system allows for some basic formatting (bold, underline, italics) but will automatically remove formatting such as line spacing, font type and size, and margins.
- Do not attempt to copy and paste from a PDF into the system or include any headers or footers in your document.
- Do not copy and paste a sales brochure.

Content

- Clearly define the objectives, status, methodology, findings, and significance of the investigation or study related to the topic you are submitting to.
- Your abstract and presentation should not be a sales pitch of your product, but instead describe how you will provide a learning opportunity for attendees.
- Present the science behind the technology, product, or service.
- Do not use content that comes directly from a sales brochure.

CRITERIA FOR SELECTION



Overall, abstracts will be reviewed based on their technical merit, educational components, and applicability to the specific topic to which they have been submitted. Specifically, each one is scored on the following criteria:



Applicability

The abstract/presentation should present ideas, concepts, or lessons learned that are transferable to other facilities and situations.



Consequences

The abstract and presentation should address the consequences of the issue or project presented. The consequences, both intended and unintended, could include environmental, economic, and social impacts. Both positive and negative results are encouraged.



Relevance

The abstract should appeal to the WEFTEC audience, presenting breakthrough technologies, new concepts, novel applications of concepts, original ideas, new twists, hot topics, or application of fundamental techniques to today's problems. Further, abstracts should be relevant to the specific topic under which they were submitted.



Content, Clarity & Quality

Authors should prepare clear, concise abstracts and presentations. The quality and content of abstracts and presentations are considered indicative of the presentation at WEFTEC 2024.



Criteria For Exclusion

WEF reserves the right to exclude presentations that have been shown to be a sales pitch, highly commercial in nature, or negative about competitive products based on participant feedback from prior WEF conferences. WEF promotes the education of participants in these sessions and welcomes the submissions from exhibitors who make participants comfortable and provide them with the education we are hoping for.