# WEFTEC 2023 CALL FOR CONTENT

**96th Annual Water Environment Federation Technical Exhibition & Conference**
**McCormick Place Chicago, IL | September 30 – October 4, 2023**

**WEF and the WEFTEC Program Committee are seeking technical program content in the form of abstracts and topical session proposals for WEFTEC 2023. Our vision is to create the most high-quality technical conference that is relevant and timely.**

## WHAT ARE TECHNICAL SESSIONS?

Technical Sessions are 60-to-90-minute sessions consisting of a group of abstracts (presentations) that are related topically. If a submitted abstract is selected for a technical session, the author will be required to submit a full paper/ manuscript and select a presenter for the presentation time given to them. Presentation time lengths vary from 10 minutes to 20 minutes based on Program Committee decisions and session design.

## SUBMISSION TYPES

### INDIVIDUAL ABSTRACT

Individual abstracts reviewed and selected by the Program Committee will be included as 10-to-20-minute presentations held within in 60-to-90-minute technical sessions based on topic/area of interest.
Accepted abstract authors will be required to submit a full paper for the conference proceedings.

### SESSION PROPOSAL

A session proposal submission should consist of a maximum of 3 speakers, 2 facilitators and a complete agenda (max of 90 minutes). The agenda must have a cohesive theme or topic with the goal to ensure knowledge exchange or development. Proposed sessions should also incorporate some form of interaction with attendees.
Speakers selected for your session proposal should not all represent the same utility or organization but should come from different backgrounds and experiences. This includes not having all clients from one consulting organization or manufacturer.
Accepted proposals will be required to submit a collective session paper.

## PREPARATION & SUBMISSION

### GENERAL INFORMATION

- There is no limit to the number of abstracts that may be submitted by an individual, company, organization, or institution.
- Each abstract should be submitted one time only. Duplicate abstracts will be discounted.
- Do **not** submit the same abstract or a very similar one to different topics.
- Membership in WEF is not a requirement for submission and/or presentation.
- All participants must register for WEFTEC 2023 and are responsible for their travel and lodging expenses and registration fees for the conference.
- Registration will open in June 2023.
- The official language of WEFTEC is English.
- Abstracts mentioning equipment should include the manufacturers of the equipment as authors.

## TOPICS AND AREAS OF INTEREST

All submitters will be required to select a topic when submitting both proposals and abstracts. The bullets found under each topic represent the program committee's areas of interest.

### AIR QUALITY AND ODORS
- Air Quality Monitoring
- Collection Systems Odor Management
- WRRFs Odor Management
- Odor and Corrosion Control Technologies

### ASSET MANAGEMENT, PROGRAM DEVELOPMENT, AND RELIABILITY STRATEGIES
- AM Program Development
- Risk/Criticality/Condition Assessments
- Performance Reporting
- Asset Reliability

### BIOSOLIDS AND RESIDUALS
- Innovation in Dewatering Technology
- Understanding Grit Characteristics and Improvements in Management
- Co-digestion of HSW with Wastewater Solids
- Fate of PFAS in Biosolids

### BUSINESS AND ORGANIZATIONAL TRANSFORMATION
- Data Management Strategies and Best Practices
- Systems Procurement and Implementation
- Data Analytics, Business Intelligence, Data Driven Decision Making, Dashboarding
- IT (specifically technology needs, governance, staffing needs, skills gaps, and procurement methods)

### CLIMATE CHANGE ADAPTATION AND METRICS
- GHG Emissions
- Facility-wide Decarbonization
- ESG and Envision

### COLLECTION SYSTEMS
- Collection Utility Operations Staff Certification and Training
- Private Property Challenges and Solutions
- Pressure Pipe Condition and Rehab
- Model versus Monitoring

### DISINFECTION AND PUBLIC HEALTH
- Innovative Disinfection Technologies, Disinfectants, and Applications
- Wastewater-based Disease Surveillance and Pathogens
- Emerging Contaminants
- Public Health Policy and Regulations

### DIVERSITY, EQUITY, AND INCLUSION
- Water/Environmental Stress, Equity, and Justice
- Multigenerational Workforce Issues
- DE&I Implementation Success and Failures
- Indigenous Peoples' Water Issues and Perspectives

### EFFECTIVE UTILITY MANAGEMENT
- Workforce Issues (specifically retention, hiring, career progression)
- Rates, Finance, and Capital Planning

### ENERGY MANAGEMENT AND OPTIMIZATION
- Thermal Processes
- Hydrogen Production from Biosolids
- Biogas Enhancement
- Innovation in Gas Clean-up Technology

### ENERGY RECOVERY
- Thermal Processes
- Hydrogen Production from Biosolids
- Biogas Enhancement
- Innovation in Gas Clean-up Technology

## FUTURE ISSUES AND GLOBAL INSIGHTS

- Water Energy Food Nexus
- Coastal Issues
- Circular Economy

## INDUSTRIAL ISSUES AND TREATMENT TECHNOLOGIES *(industrial settings include food and beverage, downstream oil and gas/refining, upstream oil and gas, chemicals, petrochemicals, pharmaceuticals, power, mining and forest products)*

- Achieving Sustainability Goals
- Industry-specific Challenges and Solutions
- Difficult-to-treat Contaminants in an Industrial Setting
- Unique Technology Applications for the Industrial Market

## INSTRUMENTATION, PROCESS CONTROL, INTELLIGENT WATER SYSTEMS

- Sensor Maintenance and Quality Control
- Data Analytics for Process Optimization, Machine Learning, and Digital Twins
- Process Control
- SCADA and DCS Systems

## MICROCONSTITUENTS, CONTAMINANTS OF EMERGING CONCERN, AND TRACE ORGANIC COMPOUNDS

- Pharmaceuticals and Personal Care Products
- Algal Toxins, Hormones, and Endocrine Disruptors
- Per-and Polyfluroalkyl Active Substances (PFAS)
- Other Emerging Contaminants (including microplastics and nanomaterials)

## ORGANIZATIONAL AND OPERATIONAL RESILIENCY AND SAFETY

- Disaster Recovery and Emergency Operations
- Employee and Public Safety
- Cybersecurity

## PROJECT DELIVERY

- Alternative Project Delivery Methods
- Design Delivery Standards

## PUBLIC COMMUNICATION AND OUTREACH

- Public and Stakeholder Engagement
- PFAS and Emerging Contaminants Communication
- Public Education Program Examples
- Communication Strategies (specifically for utilities without communication teams)

## SMALL COMMUNITIES AND DECENTRALIZED SYSTEMS

- Financing Alternatives
- International/National Case Studies
- Staff Training

## STORMWATER

- Flash Flooding in Urban Areas
- Environmental and Social Justice in Stormwater Settings
- Incorporating Climate Change Impacts in Stormwater Analytics/Design
- Remedies for GSI Design Issues

## WATER REUSE

- Potable Reuse Planning and Implementation
- Maximizing Water Reuse Process Recovery
- RO Concentrate Management and Disposal
- Reuse Treatment Advances and Monitoring/Operations
- One Water Approach, Policy, and Regulations

## WATERSHED MANAGEMENT

- Integrated Planning
- Regional Watershed Management
- Watershed-based Studies, Permitting, and TMDLs
- Water Quality Modeling

**WET WEATHER ISSUES**

- Wet Weather Treatment Process Technologies and Strategies
- Planning for Resiliency
- Chemically Enhanced Primary Treatment
- Impact of Wet Weather on Secondary Treatment

**WRRF: LOW CARBON/ENERGY MAINSTREAM NUTRIENT REMOVAL**

- Low DO BNR and Simultaneous Nitrification/Denitrification
- Shortcut Nitrogen Removal including Mainstream Partial Nitritation /Anammox and Partial Denitrification and Anammox
- Carbon Storage and Utilization for BNR
- Fermentation to Aid Biological Phosphorus Removal (Sidestream EBPR)

**WRRF: LOW FOOTPRINT MAINSTREAM TREATMENT**

- Membrane Bioreactors
- Biofilm and Hybrid Systems (e.g. MABR, IFAS, MBBR, BAF)
- Selective Wasting (i.e. hydrocyclones, surface wasting)
- Aerobic Granular Sludge and Continuous Flow Granulation Technologies
- Ballasted or Encapsulated Technologies

**WRRF: MAINSTREAM NUTRIENT REMOVAL FUNDAMENTALS AND APPLICATIONS**

- Case Studies for Full-Scale Design and Alternative Assessment
- Cost Evaluation and Alternatives Assessment
- Microbial Ecology for Biological Nutrient Removal
- Kinetic and Modeling Studies for Biological Nutrient Removal
- Chemical-based treatment (including P-removal)

**WRRF: PRELIMINARY AND PRIMARY TREATMENT**

- Screenings and Grit Removal
- Influent Pumping and Flow Equalization
- Chemically and Biologically Enhanced Carbon Diversion
- Alternative Primary Treatment Technologies (e.g. filtration, DAFs)
- Septage and FOG Management

**WRRF: SECONDARY AND ADVANCED TREATMENT**

- Aeration, Mixing Efficiency, and Technologies
- Clarifier Modeling and Advancements
- Tertiary Treatment Technologies for Solids/Liquids Separation
- Aerobic or Anaerobic Biological Treatment (non-nutrients)

**WRRF: SIDESTREAM AND ALTERNATIVE NUTRIENT REMOVAL AND RECOVERY**

- Sidestream Treatment Technologies (e.g., Partial Nitritation/Anammox, Post Aerobic Digestion, etc.)
- Phosphorus and/or Nitrogen Recovery
- Struvite Control
- Urine/Source Separation

# GUIDELINES & FORMATTING TIPS

FORMAT AND LENGTH
- Abstracts are limited in length to 1100 words. This is the equivalent of 4.5 pages, double-space, 11-point font Arial with 1-inch margins. The word count does not include graphics, tables, references, or sources.
- At a minimum, the abstract must be one full page or at least 400 words.
- You will be asked to input two learning objectives for the individual abstract and three for the session proposal. The learning objective should clearly what people can take away and learn from your presentation.
- There are individual fields for the presentation title, authors, references, keywords, and learning objective. Use these fields and do not put them in the body of your abstract or session proposal.
- You must copy and paste the body of your abstract into the online system or re-type it. There is no option to upload a document.
- Do not attempt to copy and paste headers or footers into the system.
- Do not put your document into a PDF.
- Formatting of copied and pasted text will be retained. However, simple formatting (such as italics, bold, and underline) can be added using the online submission system. Instructions are provided online during submission.

IMAGES/GRAPHS
- Images, photos, tables need to be uploaded separately.
- We recommend you put any excel tables into a .jpg before uploading.
- It is recommended (not required) that images and tables be no more than 650 pixels wide and not more than 900 pixels high. Simple images/tables can be on the smaller side of the recommended pixels and the more complex it is; the image MAY need to be larger than the recommended size.
- Always check the preview tab to make sure your images are readable.

CONTENT
- Abstracts must clearly define the objectives, status, methodology, findings, and significance of the investigation or study.
- Submissions on hot topics, regulatory issues, and new water or wastewater technologies are especially welcome.

# CRITERIA FOR SELECTION

All abstracts and session proposals will be judged with the following criteria. These criteria are the minimum criteria, and all abstracts meeting these will be considered for the program. The selection process is highly competitive, and submitters should take time to be sure all submissions meet or exceed the following criteria.

APPLICABILITY
The abstract/session proposal should present ideas, concepts, or lessons learned that are transferable and usable at other facilities and situations.

DEMONSTRATED RESULTS/CONCLUSIONS
The topic presented in the abstract/session proposal should be mature and proven, including lessons learned. Depending on the type of abstract, this could measure the extent that plans are developed, or stages/projects are completed.

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

RELEVANCE
The topic presented in the abstract/session proposal should appeal to the WEFTEC audience, presenting breakthrough technologies, new concepts, and novel applications of concepts, original ideas, new twists, hot topics, or application of fundamental techniques to today's problems.

CONTENT, CLARITY, AND QUALITY
Authors should prepare clear, concise abstracts to follow the requirements. The quality and content of the abstract/session proposal are considered indicative of the final paper and presentation at WEFTEC 2023.

## IMPORTANT DATES
DECEMBER 15, 2022
All abstract and session proposal submissions must be submitted by 11:59PM Eastern. After this time, the submission portal will close. Submitters will no longer be able to create or edit existing abstract submissions.

JUNE 2023
By June 1 the primary author of each abstract and session proposal submission will receive a notification letting them know if their submission has been accepted or rejected by the WEFTEC Program Committee.

JULY 2023
All authors whose abstracts have been selected for the program are required to complete a full paper/manuscript for the conference proceedings. Final acceptance for the program will be contingent on receipt of the paper/manuscript and a license agreement signed by all co-authors.

## WHERE TO SUBMIT
**Abstract Submission Site: https://ww3.aievolution.com/wef2301/**
All WEFTEC 2023 submissions (*individual abstracts and session proposals*) must be submitted online.

If you encounter a problem with your submission, please email speakers@wef.org.