Innovations in Process Engineering Conference 2023:
Featuring the Glen T. Daigger Symposium on Sustainable Water Resource Recovery

June 6-9, 2023
Portland, Oregon, USA

Submittal Deadline: January 23, 2023

This conference is jointly hosted by the Water Environment Federation and International Water Association in coordination with the Pacific Northwest Clean Water Association, the IWA USA National Committee, and the IWA Nutrient Removal and Recovery Specialist Group.

The Innovations in Process Engineering Conference is designed to serve as a cutting-edge showcase for the introduction and discussion of innovations and new practices for water resource recovery facilities. The conference will focus on a wide range of topics related to resource recovery, treatment efficacy, efficiency, and enhancements, as well as improved operation through monitoring tools and advanced data analytics.

We are pleased to have Dr. Glen T. Daigger as the honorary chair of this joint WEF and IWA conference. We will have a featured symposium in honor of Dr. Daigger contained within the overall conference. This symposium will highlight his contributions to four main areas: fundamentals and modeling, biological nutrient removal, sedimentation and separation processes, and water reuse. Forward-looking abstracts, especially by young water leaders, are encouraged for these topics.

The conference provides the opportunity to share and participate in discussions of innovations in the tools, technologies, and strategies used for the research, design, and operation of treatment plants. The target audience includes researchers and practitioners energized in leading the discussion and implementation of technical development in our industry. Concentrating heavily on research, development, and innovation, the conference encourages any and all stages and scales of innovation, from well-developed process concepts to bench-scale and pilot-scale research and full-scale demonstrations, including developments in the design and operation of treatment processes, new strategies, operating and monitoring tools, and technologies.

This conference will be an opportunity to highlight and consider the future of water resource recovery facilities. All focuses and disciplines in the field are encouraged. The first four bolded topics will be part of the Daigger Symposium within the overall conference. Examples of topics that will be considered are provided below.

1. **Process fundamentals and modeling**
2. **Nutrient removal and recovery**
3. **Sedimentation and separation processes**
4. **Water reuse**
5. Balancing and optimizing carbon management
6. Enhancing secondary treatment, including densification, ballasted processes, and membranes
7. Contaminants of emerging concern and associated treatment means
8. Process aeration and mixing systems
9. Alternative disinfectants and improved disinfection control
10. Digestion – pretreatment, post-treatment, control, co-digestion
11. Digester gas treatment technologies
12. Optimizing thickening and dewatering processes
13. Advances in sidestream treatment
14. Energy saving/conservation technologies
15. Novel approaches for treatment and resource recovery
16. Advances in process monitoring and control systems and emerging sensor-based and/or data analytics-based controls
17. Advances in process, hydraulic, data, and CFD modeling and non-traditional ways of using traditional models
18. Understanding, monitoring, and selecting for beneficial microbial communities

Examples of topics that should not be submitted to this conference include case studies of well-established technologies, management (biosolids, people/workforce, utility, assets/equipment, finance, construction), collection and conveyance systems, equipment evaluation, project delivery, master/facility planning, surface water quality-related topics, operator training issues, permitting/regulation, and aging infrastructure. These are covered in other WEF and IWA events.

Abstracts are being solicited for both podium and poster presentations. Abstracts should be no longer than two pages in length with an explicit 9,000-character limit (approximately 1000 words), not including references or graphics. Abstracts must be submitted online, with reference bibliography, tables, and graphics uploaded separately. **Abstracts must be received no later than 11:59 PM U.S. Eastern Time on January 23, 2023.**

Abstracts will be evaluated and ranked for selection based on total score using the criteria in the following table:

Abstract Evaluation Criteria				
Scoring Level	**Novelty**	**Technical Content**	**Benefits & Significance**	**Quality**
1	Nothing new	Just a concept	Of no interest to audience	Minimal text, limited discussion of project
2	Chance of small improvement	Well defined concept and clear objectives	Modest benefit to focused audience	Clear relevant text but no tables or figures
3	Modest incremental improvement	Well defined concept, clear objectives and methods	Modest benefit to broad audience	Clear text and either one table or figure
4	Very significant incremental improvement	Clear objectives and methods. Outcomes suggested but not fully described	High interest and benefit to focused audience	Clear text with figures and tables but presentation or logic could be improved
5	Potential breakthrough	Clear objectives, methods described, and (anticipated) conclusions outlined	Broad benefits to broad audience	Well written logical text with high quality figures and tables

Selected abstract authors will be notified in early March and will be encouraged to submit a full manuscript to *Water Environment Research* or *Water Science & Technology* for normal peer review in advance of the conference. There will be no formal conference proceedings. Authors may also choose to submit their original or revised extended abstract prior to the conference to be included in the Mobile App and/or printed abstract booklet. In accordance with Federation policy, accepted authors must confirm participation and submit a speaker biography and may be required to provide other information about their presentation. If materials are not provided by the designated deadlines, speakers may be replaced.

Presenters are expected to register for the Conference and pay the appropriate registration fee. No travel or assistance funds are available for presenters.

The following pages provide greater detail on workshop and session proposal submittal expectations.

For questions and additional information, please contact:
Water Environment Federation
Education & Training – WEF/IWA Innovations in Process Engineering 2023
Email: ProcessEngConf@wef.org
Phone: 703-684-2400 ext. 7450
www.wef.org/ProcessEngingeering

Submitting a Session Proposal
Deadline: January 23, 2023
Submit online at www.wef.org/ProcessEngineering

Session proposals can be presented in different formats from the traditional podium presentation, such as a panel discussion, mini-workshop, and interactive discussion. We are open to various formats and encourage creativity.

With each individual abstract submittal, the committee groups selected abstracts together to form a session. However, with a session proposal, the session coordinator is responsible for finding all presenters and developing the timing and format of the session as a whole. Session coordinators will arrange the program and work with WEF staff to confirm all details. Session proposals should be more interactive than the traditional podium presentations created through individualized abstracts.

As for all submittals, WEF requires each session coordinator to submit their proposal via the online submittal site. The Steering Committee will review all submittals and announce accepted sessions at the same time as the final technical program in early March. There is no requirement for session proposals to submit to conference proceedings.

For complete proposals, WEF requires information on the following items:
- ❖ **Session Title**
- ❖ **Selection of Full or Half Session**
  - o Full Session: 2.5 hours total; 1.5 hours content, 45 min break, 1 hour content
  - o Half Session: either 1.5 hours or 1 hour long (please indicate the length in the description)
- ❖ **Contact Information for Session Coordinator**
  - o This person will be WEF's main contact throughout the process and is expected to work with the speakers throughout the development of the content for the program.
- ❖ **Contact Information for Each Session Presenter**
  - o The selected speakers should be from different companies, utilities, and organizations. As an example, a successful session would not provide content from speakers who are all clients of the same consultant.
- ❖ **Session Description**
  - o Should be no longer than 9,000 characters (approx. 1000 words)
- ❖ **Three Learning Objectives**
- ❖ **Session Agenda**
  - o Should follow Half or Full Session timing listed above
  - o Should include title, timing, and speaker for each portion to be included in the public program
- ❖ **Target Audience** (a suggested list will be provided)

All session proposals must be submitted online by January 23, 2023.
www.wef.org/ProcessEngineering

Submitting a Workshop Proposal
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Pre-conference workshops are additional add-on programs available for conference registrants. A workshop is a highly interactive, hands-on, immersive learning experience. We offer both full day and half-day workshop programs.

Speakers and facilitators are encouraged to brainstorm and incorporate interactive activities to deliver their subject matter expertise and content in a meaningful way to participants. As speakers also help facilitate and support the interactive components, plenty of face time, one-on-one, and small group knowledge is exchanged. **Workshops with interactive components interspersed throughout the program will be prioritized for selection.**

These programs follow strict guidelines so that the highest level of education credits (CEUs) can be awarded for all WEF workshops. In order to be approved for CEUs, workshop agendas and descriptions must be finalized at least 90 days before the event.

As for all submittals, WEF requires each workshop coordinator to submit their proposal via the online submittal site. The Steering Committee will review all submittals and announce accepted sessions at the same time as the final technical program in early March. There is no requirement for workshop proposals to submit to conference proceedings.

For complete proposals, WEF requires information on the following items:
- ❖ **Workshop Title**
- ❖ **Full- or Half-Day Program**
  - o Full-day Workshop: 8:30 a.m.-5:00 p.m.
  - o Half-day Workshop: 8:30 a.m.-12:00 p.m. or 1:30 p.m.-5:00 p.m.
  - o Breaks for all workshops: 10 a.m.-10:30 a.m., 12 p.m.-1:30 p.m., and 3 p.m.-3:30 p.m.
- ❖ **Contact Information for Workshop Coordinator**
  - o This person will be WEF's main contact throughout the process and is expected to work with the speakers throughout the development of the content for the program.
  - o This person will ensure WEF receives all deliverables.
- ❖ **Contact Information for Each Workshop Presenter**
  - o The selected speakers should be from different companies, utilities, and organizations. As an example, a successful workshop would not provide content from speakers who are all clients of the same consultant.
- ❖ **Workshop Description**
  - o Should be no longer than 9,000 characters (approx. 1000 words)
- ❖ **Three Learning Objectives**
- ❖ **Description of All Breakout Group Activities and/or Interactive Components**
- ❖ **Workshop Agenda**
  - o Following Full-day or Half-day workshop timing listed above
  - o Should include title, timing, and speaker for each portion to be included in the public program
- ❖ **Target Audience** (a suggested list will be provided)
- ❖ **Preferences for Room Layout, Attendance, and More**

All workshop proposals must be submitted online by January 23, 2023.
www.wef.org/ProcessEngineering