



Nutrient Removal and Recovery Symposium 2019: 21st Century Vision

July 23 – 25, 2019
Minneapolis, Minnesota, USA

ABSTRACT SUBMITTAL DEADLINE: December 10, 2018

This symposium is organized by the Water Environment Federation, in cooperation with the Central States Water Environment Association and The Water Research Foundation.

Nutrient removal systems have been successfully operated for decades. However, the wastewater industry is currently facing multiple challenges like having to reduce nutrient levels to meet increasingly stringent effluent limits with little to no additional financial resources, water scarcity, and long-term planning uncertainty. These challenges have created a paradigm shift and driven innovation aimed at transitioning from energy intensive wastewater treatment towards low-energy, sustainable technologies and energy positive operation. Resource recovery has also emerged as a viable outlet for nutrients, and indirect and direct potable reuse are being explored to meet nutrient goals below limits of conventional technology.

This symposium will bring together environmental professionals to discuss and debate the current state of the art for nutrient removal, recovery, and management and the parameters that influence technology boundaries. It will provide a forum for the discussion of research collaboration to promote the rapid application of new innovative solutions for nutrient removal and recovery. Additionally, it will examine research, design, operations and planning of nutrient resource management and provide a platform for the discussion of policy approaches to nutrient control, including considerations of environmental and economic aspects. It will provide valuable information for researchers, regulators, designers, technology developers, operators, municipal agencies, industrial dischargers, and others seeking to understand the full picture of the latest developments and practical experiences on this important topic.

The conference program will be developed to include 20-minute presentations followed by a facilitated question and answer period. The symposium will also include pre-conference workshops. Abstracts addressing the following general topics are invited:

- 1. Advancements in Next Generation Nutrient Removal Processes**
- 2. Optimization of Conventional Nutrient Removal Processes**
- 3. Strategies for Meeting Ultra-Low Nutrient Effluent Quality Standards**
- 4. Integrating Nutrient Removal with Reuse Opportunities**
- 5. Operations: Practical Considerations and Training for Nutrient Removal Plants**
- 6. Phosphorus Management Processes**
- 7. Sidestream Processes for Nutrient Removal and/or Recovery**
- 8. Carbon Redirection for Nutrient Removal**
- 9. High Strength Wastewater Treatment**
- 10. Using Recovered Nutrients: Closing the Loop**
- 11. Watershed-Level Nutrient Management**
- 12. Planning and Decision Making: Environmental and Economic Sustainability**
- 13. Small Community Challenges**

Abstracts should be a maximum equivalent of three pages including tables and graphics (encouraged), which are uploaded separately. Abstracts shall be submitted via the online system. To submit an abstract and see more info on what is included within these topics, please visit www.wef.org/Nutrients.

Abstracts must be received no later than 11:59 PM EST on December 10, 2018.

Selected abstract authors will be notified in late January 2019 and will need to complete a final manuscript. In accordance with WEF policy, accepted authors who do not submit a final manuscript by the required deadline will be removed from the program.

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

Abstract Evaluation Criteria – Nutrient Removal and Recovery Conference				
Scoring Level	Innovation	Status of Project	Benefits & Significance	Overall Quality
1	Nothing new. This is another example of something that has been presented frequently.	Just an idea with no plan or results to evaluate.	Of no interest to audience	Minimal text and/or poorly written abstract.
2	Potential for small improvement over conventional approach. Has a new angle on something that has been presented frequently.	Idea with well-developed plan but no results.	Modest benefit to focused audience	Clear text with well-defined concept, objectives, and methods, but no tables or figures.
3	Potential for significant improvement but not yet demonstrated.	Some results presented but much work remaining.	Modest benefit to broad audience	Clear text with well-defined concept, objectives, and methods, with tables and figures that don't enhance or explain the point well.
4	Demonstrated innovation at lab or pilot-scale but not yet demonstrated at full-scale	Preliminary results demonstrating good potential for success.	High interest and benefit to focused audience	Clear text with well-defined concept, objectives, and methods, with supporting tables or figures.
5	Demonstrated significant improvement over previous technologies and at full-scale.	Idea or project fully developed, completed and with well documented results.	Broad benefits to broad audience	Very well written abstract with high quality figures and tables to support conclusions
Scoring Weight	0.23	0.23	0.23	0.31

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

For Questions or Additional Information, Please Contact:

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 Education & Training – Nutrient Removal and Recovery Symposium 2019
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