Membrane technologies are increasingly used in many applications, including municipal water, wastewater, and reuse, as well as in a host of industrial processes, and thus play an integral role in protecting and improving public health.

This conference will explore the development and implementation of membrane technologies, as well as operation and maintenance of membrane equipment and facilities. Membrane technology experts and industry pioneers will provide details on existing and emerging products and systems, discuss information and best practices for treating a wide range of water qualities, and reveal new directions in membrane research and system design and operation.

Planned Technical Program

Abstracts are invited in the following areas.

1. Project Planning, Design, and Procurement
   a. Source water issues
   b. Treatment process selection and site integration
   c. Environmental impacts
   d. Regulatory and permitting challenges and considerations
   e. Pre- and post-treatment
   f. Sustainability measures and carbon footprint
   g. Plant design, 3D, BIM and computer tools/models
   h. New plant construction and retrofit installations
   i. Project and system costs
   j. Alternative project delivery and funding methods
   k. Energy recovery devices and energy reduction options
   l. Procurement strategies

2. Microfiltration and Ultrafiltration
   a. Applications of MF and UF
   b. Integrity testing
   c. Wastewater management handling methods
   d. Ceramic membranes
   e. Open platform concepts

3. Nanofiltration and Reverse Osmosis
   a. Applications for NF and BWRO
   b. Concentrate disposal methods and issues
   c. Seawater Desalination (SWRO)
   d. Intakes and outfalls
   e. System operations

4. Potable Reuse
   a. Direct potable reuse applications
   b. Indirect potable reuse applications

5. Wastewater & Non-Potable Reuse
   a. Membrane bioreactors (MBR)
   b. Non-potable reuse applications
   c. Considerations for membrane use in wastewater treatment
   d. Membrane applications in low nutrient discharge limits
   e. Wastewater membrane fouling control and cleaning

6. Residuals Management and Zero Liquid Discharge
   a. Zero liquid discharge
   b. Concentrate reuse and resource recovery

7. Industrial Applications
   a. Oil and gas/produced water
   b. Food and beverage
   c. Semi-conductor
   d. Power generation
   e. Mining
   f. Metal recovery
   g. Agricultural

8. Plant Operation, Maintenance and Management
   a. Staff training and start-up
   b. Operator certification for advanced treatment
   c. Operator experiences
   d. Smart technology / process instrumentation, monitoring, and controls
   e. System optimization and cost effectiveness
   f. Membrane warranty and replacement
   g. Trouble shooting, fouling, scaling, and cleaning
   h. Emergency preparedness and recovery
   i. Asset management strategies

9. Specific Contaminant Removal
   a. Pharmaceuticals and personal care products
   b. Removal of specific contaminants (e.g. Nitrate, Arsenic, Radionuclides, etc.)
   c. Organics
   d. Removal of uncommon metals (e.g., Molybdenum, Cobalt, Nickel, etc.)
   e. Trace contaminants
   f. Treatment of emerging contaminants

10. Additional Technologies
    a. ED, EDR, EDI
    b. Forward osmosis
    c. Membrane distillation
    d. Membrane fabrication technologies

11. Research, Advances and Innovations in Membranes
Submission of Abstracts

The deadline for submission of abstracts is Thursday, August 27, 2020.

All abstracts must be submitted with the following information included:

- Primary author information (This individual will receive all correspondence and conference information.)
- Co-Author(s): up to three (3) co-author names and email only
- Title of paper
- Disclosure if subject matter previously presented or published (when and where)
- Abstracts cannot exceed 3,000 characters (including spaces and punctuation).
- In your submission, please indicate if you are a Student and you will be contacted to participate in the Student Paper and Poster Competition. Cash awards will be given for best student papers and best student posters in the range of $1,000.

As time and space are limited, papers will be accepted on the basis of quality, originality, relevance to the planned technical program, technical content, education emphasis, timeliness, and relevance to current issues within the membrane industry.

The Planning Committee that consists of experienced membrane technology professionals will evaluate each abstract to determine eligibility and all applicants will be advised if their paper has been accepted or rejected as an oral or poster presentation for the technical program.

Strict instructions and guidelines for accepted submissions will be sent to all eligible authors. We ask that you make note of the important deadline dates below and place them on your calendars. All accepted papers will be published in the conference proceedings and may also be included by AMTA or AWWA in other publications and resource materials.

March 22-26
West Palm Beach, FL
awwa.org/amta/membrane