

# Training Seminars

## Training Categories

- Pm** Polymeric-Membrane Separation Technologies RO/Ultrafiltration
- S** Sales
- F** Fundamentals and Applications
- Wt** Water Treatment
- W** Wastewater Treatment (San Diego Only)

**Whether you're new to the water treatment industry or are a more seasoned professional, AWT's in-depth training seminars are designed to provide you with a better understanding of the industry so that you can perform at a higher level in your career.**

**“All the instructors were great and had good hands-on experience to add content!”**

# Courses Available

## **Pm** **Polymeric-Membrane Separation Technologies RO/Ultrafiltration Training**

This one-day in-depth course is suited for anyone looking for a better understanding of commercial and industrial reverse osmosis, ultrafiltration, EDI, or related membrane technologies.

## **S** **Sales Training**

Recognizing that everyone in the water treatment industry is actually selling, this course will take you from the basics to a full understanding of the process as it relates to this industry. This interactive “how to” session will give you the practical knowledge you will need to develop yourself, your business, and your brand. You will learn about basic and advanced marketing, including how to identify your company’s values and discover and develop your brand image.

## **F** **Fundamentals and Applications Training**

The Fundamentals and Applications course is designed for service technicians new to the industry. This highly interactive class brings the mechanical room into the classroom and focuses on real-world examples; attendees learn directly from leaders in the industry as well as their peers. The curriculum allows for question and answer sessions and fosters learning in a collaborative environment, providing attendees with the knowledge and theory behind the “whys” of their role in water treatment.

## **Wt** **Water Treatment Training**

This intensive three-day training covers regulatory and safety issues, water chemistry and testing, calculations, boiler water treatment, cooling water chemistry, advances in *Legionella* methods and regulations, and much more.

## **W** **Wastewater Treatment (San Diego Only)**

This comprehensive three-day course will cover all aspects of wastewater treatment, including influent and effluent clarification, solids removal and dewatering, chemical application, and how to screen products for application. If your company has passed on wastewater treatment applications because you lack the knowledge to take advantage of these opportunities, now is the time to gain this knowledge and expand your business potential!

### **The Certified Water Technologist (CWT) Exam**

The Certified Water Technologist (CWT) exam is no longer offered at the conclusion of the AWT training seminars. A computer-based exam is available through Pearson Vue; exam centers are located throughout the world.

Visit <http://www.pearsonvue.com/awt/> for more information.

For questions or concerns, contact Angela Pike at (240) 404-6477 or [apike@awt.org](mailto:apike@awt.org)

# Speakers

## **Fundamentals and Applications**

Trace Blackmore, CWT, LEED AP  
*Blackmore Enterprises, Inc.*

Mark Lewis, CWT  
*Southeastern Laboratories, Inc.*

Frank Lecrone III  
*AquaPhoenix Scientific Inc.*

Thomas J. Tinney  
*Lakewood Instruments LLC*

## **Water Treatment**

Trace Blackmore, CWT, LEED AP  
*Blackmore Enterprises, Inc.*

Jay Farmerie, CWT  
*Cyrus Rice Water Consultants, Inc.*

Colin Frayne, CWT  
*Aquassurance, Inc.*

Bruce T. Ketrick Sr., CWT  
*Guardian CSC*

Frank Lecrone III  
*AquaPhoenix Scientific Inc.*

Jim Lukanich, CWT  
*U.S. Water Services, Inc.*

Jon Shaw  
*Advantage Controls, Inc.*

W.E. “Bill” Pearson II, CWT  
*BPearson Consulting LLC*  
*Arthur Freedman Associates, Inc.*

## **Wastewater Treatment**

Rick Brust  
*Clear2O, Inc.*

Kevin Cope  
*Brenntag North America*

David Ritz  
*TGWT Clean Technologies Inc.*

Steve Winter  
*EnviroTech Water Treatment*

# Schedule-at-a-Glance



## **Pm** Polymeric-Membrane Separation Technologies RO/Ultrafiltration Training

Wednesday, February 27, 2019—San Diego, CA

Wednesday, March 27, 2019—Annapolis, MD

7:30 am–8:00 am	Registration/Continental Breakfast
8:00 am–10:00 am	<b>Overview of Semi-Permeable Membranes</b> <ul style="list-style-type: none"><li>• Application</li><li>• Osmosis</li><li>• Process Flow</li><li>• Membrane Limitations</li></ul> <i>Colin Frayne, CWT—Aquassurance, Inc.</i>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Membrane Technology Comparisons</b> <ul style="list-style-type: none"><li>• Pressure-Driven MF/UF/NF/RO</li><li>• Concentration-Driven Membranes</li><li>• Traditional Competing Technologies</li></ul> <i>Colin Frayne, CWT—Aquassurance, Inc.</i>
Noon–1:00 pm	Lunch
1:00 pm–3:00 pm	<b>Components and System Configurations</b> <ul style="list-style-type: none"><li>• Polymeric Membrane Materials</li><li>• Membrane Terminology</li><li>• Sizes, Arrays, Stages, Trains</li><li>• Complete Unit Operations</li></ul> <i>Colin Frayne, CWT—Aquassurance, Inc.</i>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–5:00 pm	<b>Practical Membrane Operations</b> <ul style="list-style-type: none"><li>• RO Design</li><li>• Software</li><li>• Antiscalants</li><li>• Membrane Cleaning</li><li>• Troubleshooting</li></ul> <i>Colin Frayne, CWT—Aquassurance, Inc.</i>
5:00 pm–5:30 pm	<b>Questions and Answers</b>

## **s** Sales Training

Wednesday, February 27, 2019—San Diego, CA

Wednesday, March 27, 2019—Annapolis, MD

7:30 am–8:00 am	Registration/Continental Breakfast
8:00 am–10:00 am	<b>Everyone Sells</b> <ul style="list-style-type: none"><li>• Beginner Sales</li><li>• Complete Company Involvement</li></ul> <i>Russell M. Baskin, CWT—Tower Water Management</i>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Unlocking the Code</b> <ul style="list-style-type: none"><li>• Sales Development</li><li>• Mechanics of Sales</li></ul> <i>Russell M. Baskin, CWT—Tower Water Management</i>
Noon–1:00 pm	Lunch
1:00 pm–3:00 pm	<b>Starting It and Keeping It Going</b> <ul style="list-style-type: none"><li>• Sales Step-by-Step Process</li><li>• Details of Sales Process</li></ul> <i>Russell M. Baskin, CWT—Tower Water Management</i>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–5:00 pm	<b>The Mystery of Selling—Lifeline to Your Success</b> <ul style="list-style-type: none"><li>• Advanced Selling Methods</li><li>• Marketing</li><li>• Your Brand Image</li></ul> <i>Russell M. Baskin, CWT—Tower Water Management</i>
5:00 pm–5:30 pm	<b>Questions and Answers</b>



# Technical Training: Day 1

Thursday, February 28, 2019—San Diego, CA

Thursday, March 28, 2019—Annapolis, MD

## F Fundamentals and Applications Training

7:30 am–8:00 am	Registration/Continental Breakfast
8:00 am–8:05 am	<b>Course Introduction</b>
8:05 am–9:00 am	<b>Role of a Service Technician</b>
9:00 am–10:00 am	<b>Water Treatment—What and Why</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–11:15 am	<b>Water Treatment—What and Why (continued)</b>
11:15 am–Noon	<b>Time Management</b>
Noon–1:00 pm	Lunch
1:00 pm–3:00 pm	<b>Testing Training and Workshop</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–4:30 pm	<b>Testing Workshop</b>
4:30 pm–5:30 pm	<b>Safety</b>
5:30 pm–6:00 pm	<b>Questions and Answers</b>

## Wt Water Treatment Training

7:30 am–8:00 am	Registration/Continental Breakfast
8:00 am–8:05 am	<b>Course Introduction</b>
8:05 am–10:00 am	<b>Water Chemistry</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Health and Safety</b>
Noon–1:00 pm	Lunch
1:00 pm–2:00 pm	<b>Health and Safety (continued)</b>
2:00 pm–3:00 pm	<b>Calculations</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–5:00 pm	<b>Calculations (continued)</b>

## W Wastewater Treatment Training (San Diego Only)

7:30 am–8:00 am	Registration/Continental Breakfast
8:00 am–8:05 am	<b>Course Introduction</b>
8:05 am–10:00 am	<b>What Is Wastewater? Terms, Definitions, and Overview</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Wastewater Chemical Treatment Principles: Coagulation to Flocculation</b>
Noon–1:00 pm	Lunch
1:00 pm–3:00 pm	<b>Evaluation of Waste Treatment Approaches</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–5:00 pm	<b>Wastewater Treatment Process Flow, Equipment, and Application</b>



“ I had an amazing experience at the training session! ”

# Technical Training: Day 2

Friday, March 1, 2019—San Diego, CA  
Friday, March 29, 2019—Annapolis, MD

## F Fundamentals and Applications Training

7:30 am–8:00 am	Continental Breakfast
8:00 am–9:30 am	<b>Boiler Pretreatment</b>
9:30 am–10:00 am	<b>Boiler Operations and Treatment</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Boiler Operations and Treatment (continued)</b>
Noon–1:00 pm	Lunch
1:00 pm–3:00 pm	<b>Cooling Towers and Closed Loops</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–5:00 pm	<b>Cooling Towers and Treatment</b>
5:00 pm–6:00 pm	<b>Questions and Answers</b>

## Wt Water Treatment Training

7:30 am–8:00 am	Continental Breakfast
8:00 am–10:00 am	<b>Testing</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Pretreatment/Filtration/Ultrafiltration/RO</b>
Noon–1:00 pm	Lunch
1:00 pm–3:00 pm	<b>Boiler Treatment</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–6:00 pm	<b>Boiler Treatment (continued)</b>

## W Wastewater Treatment Training (San Diego Only)

7:30 am–8:00 am	Continental Breakfast
8:00 am–9:00 am	<b>Effluent Discharge Parameters</b>
9:00 am–10:00 am	<b>Wastewater Plant Survey</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Jar Testing and Product Selection</b>
Noon–1:00 pm	Lunch
1:00 pm–3:00 pm	<b>Jar Testing and Product Selection (continued)</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–5:00 pm	<b>Jar Testing and Product Selection (continued)</b>

“They did a great job of breaking it down for newer folks.”



# Technical Training: Day 3

Saturday, March 2, 2019—San Diego, CA  
Saturday, March 30, 2019—Annapolis, MD

## F Fundamentals and Applications Training

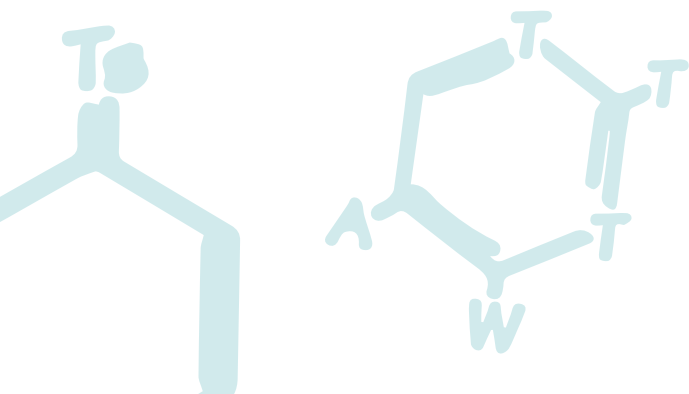
7:30 am–8:00 am	Continental Breakfast
8:00 am–10:00 am	<b>Water Treatment Equipment</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Equipment Workshop</b>
Noon–1:00 pm	Lunch
1:00 pm–1:30 pm	<b>Equipment Workshop (continued)</b>
1:30 pm–2:30 pm	<b>Writing a Service Report</b>
2:30 pm–3:00 pm	<b>Tips and Tricks of the Trade</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–3:55 pm	<b>Bringing It All Together</b>
4:00 pm–6:00 pm	<b>Legionella Training and Update (Optional; held in the Water Treatment Training classroom)</b>

## wt Water Treatment Training

7:30 am–8:00 am	Continental Breakfast
8:00 am–9:00 am	<b>Advances in Feed Equipment</b>
9:00 am–10:00 am	<b>Cooling Water Systems and Principles</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Cooling Water Chemistry, Scale and Corrosion Control</b>
Noon–1:00 pm	Lunch
1:00 pm–3:00 pm	<b>Cooling Water Microbiology</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–4:00 pm	<b>Cooling Water Microbiology</b>
4:00 pm–6:00 pm	<b>Legionella Training and Update</b>

## w Wastewater Treatment Training (San Diego Only)

7:30 am–8:00 am	Continental Breakfast
8:00 am–10:00 am	<b>Biological Treatment: Using Bacteria and Enzymes</b>
10:00 am–10:15 am	Refreshment Break
10:15 am–Noon	<b>Ancillary Application: Foam and Odor Control</b>
Noon–1:00 pm	Lunch
1:00 pm–2:00 pm	<b>Selling Value-Added in the Wastewater Market</b>
2:00 pm–3:00 pm	<b>General Discussion: Question and Answer Period</b>
3:00 pm–3:15 pm	Refreshment Break
3:15 pm–5:00 pm	<b>Review</b>



# Hotel/Travel

## West

February 27–March 2, 2019  
DoubleTree San Diego–  
Mission Valley  
San Diego, CA



## Training Seminars—San Diego, CA

Wednesday, February 27, 2019

**S** Sales Training

**Pm** Polymeric-Membrane Separation Technologies RO/Ultrafiltration Training

Thursday, February 28–Saturday, March 2, 2019

**F** Fundamentals and Applications Training

**Wt** Water Treatment Training

**W** Wastewater Treatment Training

## Hotel Information

**H** DoubleTree San Diego–Mission Valley  
7450 Hazard Center Drive  
San Diego, CA 92108

**Reservations:** (619) 297-5466

**Room Rate:** \$165 single/double

**Reservation Deadline:** Monday, January 28, 2019

*Please mention “2019 AWT Training Seminar” to obtain the group discounted rate.*

Hotel reservations are on a first-come, first-served basis, or until the block has sold out. AWT cannot guarantee the group rate if rooms are still available in the AWT block after Monday, January 28, 2019.

## Travel Information



### Airport

Attendees should fly into San Diego International Airport (SAN).  
The hotel is located 7 miles (15 minutes) from the airport.



# Training Seminars—Annapolis, MD

Wednesday, March 27, 2019

**S** Sales Training

**Pm** Polymeric-Membrane Separation Technologies RO/Ultrafiltration Training

Thursday, March 28–Saturday, March 30, 2019

**F** Fundamentals and Applications Training

**Wt** Water Treatment Training

## Hotel Information



**Hotel Annapolis**  
126 West Street  
Annapolis, MD 21401

**Reservations:** (888) 320-6065

**Room Rate:** \$139 single/double

**Reservation Deadline:** Monday, February 25, 2019

*Please mention “2019 AWT Training Seminar” to obtain the group discounted rate.*

Hotel reservations are on a first-come, first-served basis, or until the block has sold out. AWT cannot guarantee the group rate if rooms are still available in the AWT block after Monday, February 25, 2019.

## Travel Information



### Airport

Attendees should fly into Baltimore/Washington International Airport (BWI). The Hotel Annapolis is located 24 miles (31 minutes) from the airport.

## East

March 27–March 30, 2019

Hotel Annapolis  
Annapolis, MD





# Registration

## AWT Training Seminars 2019

Please complete one registration form for each attendee.

Please check one:  Member  Nonmember

First Name  MI

Last Name  Suffix  (CWT, Ph.D.)

First Name on Badge

Company  Title

Company Address

City  State

ZIP Code  Country

Telephone  Fax

Email Address (Registration confirmation and meeting notices will be sent to this email address.)

In Case of Emergency (Contact name and telephone)

Dietary/Special Accommodation

**Special Volume Discount for AWT Members Only:** Register more than one individual from your company at the applicable registration rate and receive a \$50 discount on subsequent registrants from your company. This makes it more affordable to send additional employees. Discounts do not apply to Sales Training or RO/Ultrafiltration Training.

**Total Payment**  \$

Check enclosed (made payable to "AWT")—Check #

Credit Card:  Visa  MasterCard  American Express

Name as it appears on card

Card Number

Expiration Date  /  Security Code  Billing ZIP Code

Signature

### Payment Options

**Fax:** (301) 990-9771

**Mail:** Association of Water Technologies  
1300 Piccard Drive, Suite LL14  
Rockville, MD 20850

### Cancellation Policy

All cancellations must be received in writing two weeks prior to the seminar and are subject to a \$50 processing fee. No exceptions.

### Questions

**Registration/Course Content:** Angela Pike—(240) 404-6477, apike@awt.org

**Logistics/Accommodations:** Morgan Prior—(240) 404-6480, mprior@mgmtsol.com

San Diego, CA

Annapolis, MD

		Sales Training	Polymeric-Membrane Separation Technologies RO/ Ultrafiltration Training	Fundamentals and Applications Training	Water Treatment Training	Wastewater Treatment Training (San Diego Only)
<b>Early Registration</b> <b>By 1/28/19</b> San Diego, CA <b>By 2/25/19</b> Annapolis, MD	Member 1 <sup>st</sup> Attendee	☐ \$295	☐ \$295	☐ \$650	☐ \$650	☐ \$650
	Member Add'l Attendee(s)			☐ \$600	☐ \$600	☐ \$600
	Nonmember Attendee			☐ \$905	☐ \$905	☐ \$905
<b>Regular Registration</b> <b>After 1/28/19</b> San Diego, CA <b>After 2/25/19</b> Annapolis, MD	Member 1 <sup>st</sup> Attendee	☐ \$295	☐ \$295	☐ \$700	☐ \$700	☐ \$700
	Member Add'l Attendee(s)			☐ \$650	☐ \$650	☐ \$650
	Nonmember Attendee			☐ \$955	☐ \$955	☐ \$955



1300 Piccard Drive, Suite LL14  
Rockville MD 20850

P (301) 740-1421

F (301) 990-9771

[www.awt.org](http://www.awt.org)

**West**

February 27–March 2, 2019  
DoubleTree San Diego–Mission Valley  
San Diego, CA

**East**

March 27–March 30, 2019  
Hotel Annapolis  
Annapolis, MD

# Training Seminars

# 2019

