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Thomas J. Lauro
MEMBER
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Long Island Chapter | Lower Hudson Chapter | Western Chapter

New York Water Environment Association, 525 Plum Street, Suite 102, Syracuse, New York 13204 • nywea.org
# 2020 Catalog of Training Sessions

## CAPITAL CHAPTER
- **February 19, 2020**  |  Blower Technologies, Selection and Energy Evaluation
- **March 18, 2020**  |  Green Infrastructure Maintenance
- **May 7, 2020**  |  Emergency Response and Crisis Management for Water and Wastewater Facilities

## CENTRAL CHAPTER
- **March 18, 2020**  |  Green Infrastructure Maintenance – POSTPONED, DATE TBA
- **May 7, 2020**  |  Emergency Response and Crisis Management for Water and Wastewater Facilities – POSTPONED, DATE TBA

## GENESEE VALLEY CHAPTER
- **February 27, 2020**  |  Emergency Response and Crisis Management for Water and Wastewater Facilities
- **May 14, 2020**  |  Blower Technologies, Selection and Energy Evaluation – POSTPONED, DATE TBA

## LONG ISLAND CHAPTER
- **March 10, 2020**  |  Mathematics for Water and Wastewater Operators

## LOWER HUDSON CHAPTER
- **April 14, 2020**  |  Green Infrastructure Maintenance – POSTPONED, DATE TBA
- **November 4, 2020**  |  Mathematics for Water and Wastewater Operators – POSTPONED, DATE TBA

## WESTERN CHAPTER
- **July 14, 2020**  |  Mathematics for Water and Wastewater Operators – POSTPONED, DATE TBA
- **November 17, 2020**  |  Blower Technologies, Selection and Energy Evaluation – POSTPONED, DATE TBA

## VIRTUAL TRAINING via ZOOM: ALL CHAPTERS
### MEMBRANE BIOREACTORS LUNCH & LEARN WEBINAR SERIES (4-Part Series)
- **June 17, 2020**  |  MBR 101: Types, Terms, Treatment and Components
- **June 24, 2020**  |  MBR System Performance
- **July 1, 2020**  |  MBR Operations
- **July 8, 2020**  |  Fishbone Analysis of MBRs

## VIRTUAL TRAINING via ZOOM: ALL CHAPTERS
### NELLIE J. BROWN LUNCH & LEARN WEBINAR SERIES (1- and 2-Part Series)
- **July 14 & 16, 2020**  |  Fundamentals of Occupational Chemical Exposure
- **July 21, 2020**  |  Confined Space Awareness

## VIRTUAL TRAINING via ZOOM: ALL CHAPTERS
### ANAEROBIC DIGESTION OPERATIONS AND BIOGAS SAFETY TRAINING WEBINAR SERIES (4-Part Series)
- **October 13, 2020**  |  Overview of Anaerobic Digestion; Codigestion
- **October 15, 2020**  |  Operational Overview of Digesters, Importance of Nutrients and Process Control; Digester Start-Up and Sour Digesters
- **October 20, 2020**  |  Biogas Utilization & Safety
- **October 27, 2020**  |  Case Studies; Groundbreaking Genetic Research on Anaerobic Microbes

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Capital Chapter Training Session

February 19  |  Blower Technologies, Selection and Energy Evaluation

Instructors  |  Jennifer Kintzer, Aerzen USA
              |  Scott Trail, Aerzen USA
Location      |  Saratoga County Fire Training Center, 6010 County Farm Road, Ballston Spa, NY 12020
Contact Hours |  RTC 17909-20, 6.0 hours; PDH, 6.0 hours

Course Schedule

8:00 am  |  Registration
8:30 am  |  Welcome and introduction
8:45 am  |  Review of blower technologies in wastewater plant air applications
     a. Positive displacement lobe
     b. Multistate centrifugal
     c. Turboblowers
     d. Low pressure compressor
     e. Geared turbo
10:00 am |  Break
10:15 am |  Proper Selection of blower technologies based on type of application
     Machine sizing factors
     f. Varying pressure applications
     g. Varying flow applications
     h. Low flow applications
     i. High flow applications
     j. Intermittent on-off applications
12:00 pm–1:00 pm |  Lunch
1:00 pm  |  Installation factors (indoor/outdoor, footprint, machine cooling, noise)
2:15 pm  |  Break
2:30 pm  |  Life cycle cost evaluation (Energy, O&M)
3:45 pm  |  Q&A, review
4:00 pm  |  Course adjourned
March 18 Green Infrastructure Maintenance

Instructor Cosimo Pagano, PE, CPESC, CPSWQ, CPMSM
Location Onondaga County WEP Metro WWTP, 650 Hiawatha Boulevard West, Syracuse, NY 13204
Contact Hours PDH, 6.0 hours

Course Schedule
8:00 am Registration
8:30 am Introduction
8:45 am Surface filtration/infiltration systems (Bioretention/rain gardens/swales)
  • Applications
  • Performance and lessons learned
  • Maintenance and inspection procedures
9:45 am Porous Paving (Porous asphalt/porous concrete/pre-cast units)
  • Applications
  • Performance and lessons learned
  • Maintenance and inspection procedures
10:45 am Break
11:00 am Standard management practices (Pond/wetlands/structures)
  • Applications
  • Performance and lessons learned
  • Maintenance and inspection procedures
12:00 pm–1:00 pm Lunch
1:00 pm Sustainable landscape management (Riparian areas/plantings/conservation buffers)
  • Applications
  • Performance and lessons learned
  • Maintenance and inspection procedures
2:15 pm Break
2:30 pm Examples of maintenance for local/regional GI practices
3:45 pm Q&A, discussion
4:00 pm Course adjourned
Central Chapter Training Session

May 7  Emergency Response and Crisis Management for Water and Wastewater Facilities

This program is part of a NYS DOL HAB grant #C19006GG to the Western New York Council on Occupational Safety and Health (WNYCOSH).

Instructors  Nellie J. Brown, MS, CIH
Arthur Wheaton, MLR/HR

Location  Holiday Inn, 75 North Street, Auburn, NY 13021

Contact Hours  ATC 152-2269-17913, 6.0 hours; RTC 17906-20, 6.0 hours

Course Schedule
(A simultaneous crisis scenario/exercise is interspersed throughout the day.)

8:00 am  Registration
8:30 am  Overview of crisis management
  • The business case for crisis management
  (Exercise: Crisis audit of your facility)
  • Elements of a crisis
  • Crisis planning team
  • Developing the crisis management plan
10:15 am  Break
10:30 am  (Exercise: Crisis preparedness – vulnerability analysis)
  • Phases of a crisis
  Exercise: Signal detection
12:00 pm–1:00 pm  Lunch
1:00 pm  • Planning for recovery
  (Exercise: Recovery plan)
  (Exercise: Identifying stakeholders)
  (Exercise: Prioritizing stakeholders)
2:15 pm  Break
2:30 pm  Communicating during and after a crisis
  • Developing core messages
  (Exercise: Communicating with stakeholders and the media)
  • Critical incident stress and debriefing
  (Exercise: Signs of emotional impact)
  • Learning from crisis
4:00 pm  Course adjourned

POSTPONED, DATE TBA
Genesee Valley Chapter Training Session

February 27

**Emergency Response and Crisis Management for Water and Wastewater Facilities**

This program is part of a NYS DOL HAB grant #C19006GG to the Western New York Council on Occupational Safety and Health (WNYCOSH).

**Instructor**
Nellie J. Brown, MS, CIH

**Location**
Wayne County Public Safety Building, 7376 Route 31, Lyons, NY 14489
ATC 152-2269-17914, 6.0 hours; RTC 17906-20, 6.0 hours

**Contact Hours**

**Course Schedule**

*A simultaneous crisis scenario/exercise is interspersed throughout the day.*

- **8:00 am** Registration
- **8:30 am** Overview of crisis management
  - The business case for crisis management
  *(Exercise: Crisis audit of your facility)*
  - Elements of a crisis
  - Crisis planning team
  - Developing the crisis management plan
- **10:15 am** Break
- **10:30 am** *(Exercise: Crisis preparedness – vulnerability analysis)*
  - Phases of a crisis
  - Exercise: Signal detection
- **12:00 pm–1:00 pm** Lunch
- **1:00 pm** Planning for recovery
  *(Exercise: Recovery plan)*
  *(Exercise: Identifying stakeholders)*
  *(Exercise: Prioritizing stakeholders)*
- **2:15 pm** Break
- **2:30 pm** Communicating during and after a crisis
  - Developing core messages
  *(Exercise: Communicating with stakeholders and the media)*
  - Critical incident stress and debriefing
  *(Exercise: Signs of emotional impact)*
  - Learning from crisis
- **4:00 pm** Course adjourned
May 14  |  Blower Technologies, Selection and Energy Evaluation

**Instructor**  |  Jennifer Kintzer, Aerzen USA
**Location**  |  VanLare WWTP Training Room, 1574 Lake Shore Boulevard, Rochester, NY 14617
**Contact Hours**  |  RTC 17909-20, 6.0 hours; PDH, 6.0 hours

**Course Schedule**

8:00 am  |  Registration
8:30 am  |  Welcome and introduction
8:45 am  |  Review of blower technologies in wastewater plant air applications
   a. Positive displacement lobe
   b. Multistate centrifugal
   c. Turboblowers
   d. Low pressure compressor
   e. Geared turbo
10:00 am  |  Break
10:15 am  |  Proper Selection of blower technologies based on type of application
   Machine sizing factors
   f. Varying pressure applications
   g. Varying flow applications
   h. Low flow applications
   i. High flow applications
   j. Intermittent on-off applications
12:00 pm-1:00 pm  |  Lunch
1:00 pm  |  Installation factors (indoor/outdoor, footprint, machine cooling, noise)
2:15 pm  |  Break
2:30 pm  |  Life cycle cost evaluation (Energy, O&M)
3:45 pm  |  Q&A, review
4:00 pm  |  Course adjourned

Genesee Valley Chapter Training Session

POSTPONED, DATE TBA
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<thead>
<tr>
<th>March 10</th>
<th>Mathematics for Water and Wastewater Operators</th>
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<tbody>
<tr>
<td>Instructor</td>
<td>Robert Wither, PE</td>
</tr>
<tr>
<td>Location</td>
<td>Bergen Point WWTP, 600 Bergen Avenue, Babylon, NY 11704</td>
</tr>
<tr>
<td>Contact Hours</td>
<td>ATC 152-7576-17871; RTC 17907-20, 6.0 hours</td>
</tr>
</tbody>
</table>

**Course Schedule**

- **8:00 am**  Registration
- **8:30 am**  Basic mathematics review as it pertains to working at a treatment facility
  (Real world/Applied math or what you should know)
  Decimals, fractions, concentrations, % solids, understanding laboratory results
  from a mathematics perspective, basic equations
- **10:30 am**  Break
- **10:45 am**  Using mathematics to better understand treatment plants
  Calculation of unit process and unit operation organic, hydraulic and solids loadings,
  familiarity with standard treatment facility terms and design ranges
- **12:00 pm–1:00 pm**  Lunch
- **1:00 pm**  The importance of mathematics in at a treatment facility for both
  process control and proper dosing and calculation of mass quantities
  Activated sludge calculations, sludge handling, flow measurement
- **2:30 pm**  Break
- **2:45 pm**  Attendees participation concerning their specific facility
  Discussion and calculations
- **3:45 pm**  Q&A, evaluations and wrap up
- **4:00 pm**  Course adjourned
Lower Hudson Chapter Training Session

POSTPONED, DATE TBA

April 14  Green Infrastructure Maintenance

Instructor  Cosimo Pagano, PE, CPESC, CPSWQ, CPMSM
Location  Slater Chemical Co. Firehouse, 76 Old Glenham Road, Glenham, NY 12527
Contact Hours  PDH, 6.0 hours

Course Schedule

8:00 am  Registration
8:30 am  Introduction
8:45 am  Surface filtration/infiltration systems (Bioretention/rain gardens/swales)
  • Applications
  • Performance and lessons learned
  • Maintenance and inspection procedures
9:45 am  Porous Paving (Porous asphalt/porous concrete/pre-cast units)
  • Applications
  • Performance and lessons learned
  • Maintenance and inspection procedures
10:45 am  Break
11:00 am  Standard management practices (Pond/wetlands/structures)
  • Applications
  • Performance and lessons learned
  • Maintenance and inspection procedures
12:00 pm–1:00 pm  Lunch
1:00 pm  Sustainable landscape management (Riparian areas/plantings/conservation buffers)
  • Applications
  • Performance and lessons learned
  • Maintenance and inspection procedures
2:15 pm  Break
2:30 pm  Examples of maintenance for local/regional GI practices
3:45 pm  Q&A, discussion
4:00 pm  Course adjourned
### Mathematics for Water and Wastewater Operators

**Instructor**  
Robert Wither, PE

**Location**  
Wallkill Golf Club, 40 Sands Road, Middletown, NY 10941

**Contact Hours**  
ATC 152-7576-17873; RTC 17907-20, 6.0 hours

**Course Schedule**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am</td>
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<td>Basic mathematics review as it pertains to working at a treatment facility (Real world/Applied math or what you should know) Decimals, fractions, concentrations, % solids, understanding laboratory results from a mathematics perspective, basic equations</td>
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<tr>
<td>10:30 am</td>
<td>Break</td>
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<tr>
<td>10:45 am</td>
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<td>Calculation of unit process and unit operation organic, hydraulic and solids loadings, familiarity with standard treatment facility terms and design ranges</td>
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<tr>
<td>12:00 pm–1:00 pm</td>
<td>Lunch</td>
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<tr>
<td>1:00 pm</td>
<td>The importance of mathematics in at a treatment facility for both process control and proper dosing and calculation of mass quantities Activated sludge calculations, sludge handling, flow measurement</td>
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<td>2:30 pm</td>
<td>Break</td>
</tr>
<tr>
<td>2:45 pm</td>
<td>Attendees participation concerning their specific facility Discussion and calculations</td>
</tr>
<tr>
<td>3:45 pm</td>
<td>Q&amp;A, evaluations and wrap up</td>
</tr>
<tr>
<td>4:00 pm</td>
<td>Course adjourned</td>
</tr>
</tbody>
</table>

**Lower Hudson Chapter Training Session**  
POSTPONED, DATE TBA
## Mathematics for Water and Wastewater Operators

### July 14

<table>
<thead>
<tr>
<th><strong>Instructor</strong></th>
<th>Robert Wither, PE</th>
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<tbody>
<tr>
<td><strong>Location</strong></td>
<td>Fredonia Technology Incubator, 214 Central Avenue, Dunkirk, NY 14048</td>
</tr>
<tr>
<td><strong>Contact Hours</strong></td>
<td>ATC 152-7576-17872, 6.0 hours; RTC 17907-20, 6.0 hours</td>
</tr>
</tbody>
</table>

### Course Schedule

- **8:00 am** Registration
- **8:30 am** Basic mathematics review as it pertains to working at a treatment facility (Real world/Applied math or what you should know)
  - Decimals, fractions, concentrations, % solids, understanding laboratory results from a mathematics perspective, basic equations
- **10:30 am** Break
- **10:45 am** Using mathematics to better understand treatment plants
  - Calculation of unit process and unit operation organic, hydraulic and solids loadings, familiarity with standard treatment facility terms and design ranges
- **12:00 pm–1:00 pm** Lunch
- **1:00 pm** The importance of mathematics in at a treatment facility for both process control and proper dosing and calculation of mass quantities
  - Activated sludge calculations, sludge handling, flow measurement
- **2:30 pm** Break
- **2:45 pm** Attendees participation concerning their specific facility
  - Discussion and calculations
- **3:45 pm** Q&A, evaluations and wrap up
- **4:00 pm** Course adjourned

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**POSTPONED, DATE TBA**
Western Chapter Training Session

November 17  Blower Technologies, Selection and Energy Evaluation

Instructor  Jennifer Kintzer, Aerzen USA
Location  TBD, Lockport, NY 14094

Contact Hours  RTC 17909-20, 6.0 hours; PDH, 6.0 hours

Course Schedule

8:00 am  Registration
8:30 am  Welcome and introduction
8:45 am  Review of blower technologies in wastewater plant air applications
  a. Positive displacement lobe
  b. Multistate centrifugal
  c. Turboblowers
  d. Low pressure compressor
  e. Geared turbo

10:00 am  Break
10:15 am  Proper Selection of blower technologies based on type of application
  Machine sizing factors
  f. Varying pressure applications
  g. Varying flow applications
  h. Low flow applications
  i. High flow applications
  j. Intermittent on-off applications

12:00 pm–1:00 pm  Lunch
1:00 pm  Installation factors (indoor/outdoor, footprint, machine cooling, noise)
2:15 pm  Break
2:30 pm  Life cycle cost evaluation (Energy, O&M)
3:45 pm  Q&A, review
4:00 pm  Course adjourned

POSTPONED, DATE TBA
Membrane Bioreactors Lunch & Learn Webinar Series (4-part series)

Instructor
Kevin Crane, Kubota Membrane USA Corporation

Contact Hours
PDH, up to 4.0 hours; RTC, up to 4.0 hours

Time
12:00 pm-1:00 pm

Course Outline (Virtual Training via Zoom)

June 17
MBR 101: Types, Terms, Treatment and Components
PART 1
Membrane types
(1 hour)
Terms and definitions
Treatment capabilities and system components

Biological Nutrient Removal
Nitrification/denitrification
Biological phosphorus removal
How MBR technology can improve performance

June 24
Managing MBR System Performance
PART 2
Biofilm, air scour and chemical cleaning and their role in optimizing system performance
(1 hour)

July 1
MBR Operations
PART 3
Operating modes
(1 hour)
System component selection
Control system architecture
Troubleshooting

July 8
Fishbone Analysis of MBRs
PART 4
Retrofitting conventional activated sludge with MBRs
(1 hour)
Case study
Fundamentals of Occupational Chemical Exposure

Instructor
Nellie J. Brown, MS, CIH

Contact Hours
Wastewater, up to 4.0 hours; RTC-17912-20, up to 4.0 hours; Water ATC, Pending

Time
11:00 am-1:00 pm

Course Outline (Virtual Training via Zoom)
- Physical hazards of chemicals: fundamentals, terms, applications
- Health hazards of chemicals: fundamentals, terms, applications
  - Routes of entry
  - Factors affecting adverse health effects from exposure
  - Fate of chemicals in the body
- Acute and chronic exposure
  - Occupational exposure limits
  - Vapor pressure; estimating worst case scenario
  - Occupational exposure limits and atypical work hours
  - Health conditions and/or genetic predispositions
- Using MSDS information to compare risks and find safer alternatives
  - Water solubility
  - Vapor hazard ratio
  - Flash point and explosive limits
  - Hierarchy of controls: ventilation, PPE, work practices
Confined Space Awareness

Instructor
Nellie J. Brown, MS, CIH

Contact Hours
Wastewater, 2.0 hours; RTC-17912-20, 2.0 hours; Water ATC, Pending

Time
11:00 am-1:00 pm

Course Outline (Virtual Training via Zoom)
• Overview of the problem: What is a confined space? How serious is the issue?
• Requirements of the standard, permit-required v. nonpermit-required spaces
• Types of confined space hazards
• Protection and prevention by permit entry procedures: case histories; short scenarios
<table>
<thead>
<tr>
<th>Date</th>
<th>Instructors</th>
<th>Time</th>
<th>Course Outline (Virtual Training via Zoom)</th>
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<tr>
<td>October 13</td>
<td>Instructor, Mark Greene</td>
<td>12:00 pm-1:30 pm</td>
<td>Overview of anaerobic digestion (1.5 hours)</td>
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<tr>
<td>October 15</td>
<td>Instructors, Frank DeOrio and George Bevington</td>
<td></td>
<td>Brief recap and overview of digesters and the importance of nutrients and process control (1.5 hours)</td>
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<tr>
<td>October 20</td>
<td>Instructors, Sara Martin</td>
<td></td>
<td>Design considerations (1.5 hours)</td>
</tr>
<tr>
<td>October 27</td>
<td>Instructors, Frank DeOrio and George Bevington</td>
<td></td>
<td>Case studies (1.5 hours)</td>
</tr>
</tbody>
</table>

Instructors:
- Sara Martin, PE, Critical Path Engineering Solutions, PLLC
- George Bevington, Barton & Loguidice
- Frank DeOrio, Ramboll
- Mark Greene, PhD, Ramboll

Contact Hours:
RTC (17922-20), up to 6.0 hours; PDH, up to 6.0 hours

Virtual Training via Zoom – All Chapters
Locations of Training Sessions

CAPITAL CHAPTER
• Saratoga County Fire Training Center
  6010 County Farm Road, Ballston Spa, NY 12020

CENTRAL CHAPTER

GENESEE VALLEY CHAPTER
• Wayne County Public Safety Building
  7376 Route 31, Lyons, NY 14489

LONG ISLAND CHAPTER
• Bergen Point WWPT
  Southwest Sewer District #3, 600 Bergen Avenue, Babylon, NY 12020

LOWER HUDSON CHAPTER
• Yonkers Joint WWTP
  1 Fernbrook Street, Yonkers, NY 10705

WESTERN CHAPTER
• Fredonia Technology Incubator
  214 Central Avenue, Dunkirk, NY 14048
• Protocol Restaurant
  6766 Transit Road, Williamsville, NY 14221

LOGISTICS
Registration confirmation, directions and other pertinent information will be mailed or e-mailed to the address on the registration form one week prior to each workshop.
Cancellations must be received 10 days in advance of event. Refunds are subject to a $20 administrative fee.
Faculty and Course Titles

- **Anaerobic Digestion Operations and Biogas Safety Training**  
  *Sara Martin, PE, Critical Path Engineering Solutions*  
  Sara Martin is a licensed professional engineer with over 20 years of experience in project development, management and design of various municipal and industrial water, wastewater and utilities projects. Ms. Martin attended Clarkson University where she obtained a Bachelor of Science degree in Civil/Environmental Engineering. She is the owner of Critical Path Engineering Solutions, a Woman-Owned Enterprise specializing in water, wastewater and general infrastructure projects.

- **George Bevington, Barton & Loguidice**  
  George Bevington has over 39 years of experience in the environmental field and possesses a NYS Grade 4A Wastewater Operator license. He has a Bachelor of Science in Civil Engineering from Rochester Institute of Technology in Rochester, NY. Mr. Bevington is employed by Barton and Loguidice serving as a Senior Project Manager in their wastewater division, providing wastewater consulting services to various facilities, specializing in anaerobic digestion of high-strength waste and CHP.

- **Frank DeOrio, Ramboll**  
  Frank DeOrio is a Senior Technical Manager with Ramboll. He has over 40 years of experience in municipal and industrial wastewater treatment including biological and physical-chemical processes, biosolids management, effluent disinfection and anaerobic digestion. He maintains a Professional Wastewater Operator Certification by the Association of Boards of Certification as well as Wastewater Operator Certifications in the states of GA, NY, NJ, PA and MA.

- **Mark Greene, PhD, Ramboll**  
  Dr. Mark Greene is a Subject Matter Expert at Ramboll. He is experienced in the areas of municipal and industrial wastewater treatment, anaerobic digestion for biosolids and high-strength industrial wastewater, as well as environmental process research and development. He has performed original research, project management, technical guidance, feasibility evaluations, treatability studies, field demonstrations, full-scale start-ups, computer modeling and process troubleshooting.

- **Blower Technologies, Selection, and Energy Evaluation**  
  *Jennifer Kintzer, PE, Aerzen USA*  
  Jennifer Kintzer is a professional engineer and manager at Aerzen USA with demonstrated ability in planning, design, and construction of water and wastewater facilities with 27 years of experience in the field. She is a sales professional with the ability to effectively communicate with engineers and utility owners and operators concerning treatment equipment for water and wastewater facilities. Ms. Kintzer is a certified Professional Engineer and Wastewater Treatment Plant Operator in the Commonwealth of Pennsylvania. She holds a Bachelor of Science degree in Civil Engineering Technology from The University of Pittsburgh at Johnstown. Ms. Kintzer is a member of the American Society of Civil Engineers, Society of Women Engineers, Eastern Pennsylvania Water Pollution Control Operators Association, American Water Works Association, Water Environment Federation, and a member of the Editorial Board of Pennsylvania Water Environment Association.

- **Confined Space Awareness**

- **Fundamentals of Occupational Chemical Exposure**

- **Emergency Response and Crisis Management for Water and Wastewater Facilities**  
  *Nellie J. Brown, MS, CIH, Director of Workplace Health and Safety Programs for the Worker Institute at Cornell University’s School of Industrial and Labor Relations, Ithaca, NY*  
  Nellie Brown is a certified industrial hygienist, biologist and chemist. Ms. Brown earned her Master’s degree in a multidisciplinary program in natural sciences and applied science from the SUNY College at Buffalo. She has experience as a licensed wastewater treatment plant operator and has been trained as a lead inspector, an HIV/AIDS test counselor and in mold investigations and site assessments.

- **Arthur Wheaton**  
  Arthur Wheaton is the Director of Western NY Labor and Environmental Programs for Cornell University’s School of Industrial and Labor Relations. Mr. Wheaton has a special interest in health and safety programs and committees. His specialty is integrating lean or high performance principles with health and safety programs to provide a safe working environment and enhance quality, productivity and morale. He has a master of science degree in labor relations and human resources from Michigan State University. Mr. Wheaton also holds a bachelor of science degree in Social Science Pre-Law in Economics, History and Political Science from Michigan State University.
• **Green Infrastructure Maintenance**  
  **Cosimo Pagano, Environmental Design & Research (EDR)**  
  Cosimo Pagano is a Project Manager with Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR). Mr. Pagano has more than 12 years of experience in the study, design and construction phases of wastewater, stormwater, environmental engineering projects. He is a NYS certified Professional Engineer (PE), Certified Professional in Erosion and Sediment Control (CPESC), Certified Professional in Stormwater Quality (CPSWQ), and a Certified Professional in Municipal Stormwater Management (CPMSM). Mr. Pagano holds a Bachelor of Science degree in Environmental/Civil Engineering from the State University of New York College of Environmental Science and Forestry (SUNY-ESF).

• **Mathematics for Water and Wastewater Operators**  
  **Robert Wither**  
  Robert Wither recently retired after over 34 years of service to the NYS Department of Environmental Conservation in the Bureau of Water Permits, Division of Water. He is a licensed Professional Engineer in New York State. He has a Bachelor of Science degree in Chemical Engineering from Rensselaer Polytechnic Institute, Troy, NY, and is the recent past president of NYWEA. Mr. Wither has extensive experience in permit writing, treatment technology, technical assistance, training, operator certification and data management.

• **Membrane Bioreactors Lunch & Learn Webinar Series**  
  **Kevin Crane, Kubota Membrane USA Corporation**  
  Kevin Crane is Regional Sales Manager for Kubota Membrane USA Corporation. He is responsible for managing sales activities related to advanced wastewater treatment capital equipment sales to municipalities and end users. He interfaces with consulting engineers, regulators and contractors to ensure that projects are delivered to meet permit requirements, specs and budget constraints. He has nearly 20 years of experience in the water/wastewater industry in both the public and private sectors. Mr. Crane holds two certifications – California Grade V Wastewater Treatment Plant Operator and Texas Class A Wastewater Treatment Plant Operator.
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<th>SESSION / LOCATION</th>
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<td>NYWEA</td>
<td>92nd Annual Meeting &amp; Exhibition</td>
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<td>New York City Marriott Marquis</td>
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<td>February 19, 2020</td>
<td>Capital</td>
<td>Blower Technologies, Selection and Energy Evaluation</td>
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<td></td>
<td></td>
<td>Saratoga County Fire Training Center, 6010 County Farm Road, Ballston Spa, NY 12020</td>
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<td>February 27, 2020</td>
<td>Genesee Valley</td>
<td>Emergency Response and Crisis Management for Water and Wastewater Facilities</td>
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<tr>
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<td>Wayne County Public Safety Building, 7376 Route 31, Lyons, NY 14489</td>
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<tr>
<td>March 10, 2020</td>
<td>Long Island</td>
<td>Mathematics for Water and Wastewater Operators</td>
</tr>
<tr>
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<td>Bergen Point WWTP, 600 Bergen Avenue, Babylon, NY 11704</td>
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<td>March 18, 2020</td>
<td>Central</td>
<td>Green Infrastructure Maintenance</td>
</tr>
<tr>
<td>POSTPONED, DATE TBA</td>
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<td>OCDWEP Metro WWTP, 650 Hiawatha Boulevard West, Syracuse, NY 13204</td>
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<tr>
<td>April 14, 2020</td>
<td>Lower Hudson</td>
<td>Green Infrastructure Maintenance</td>
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<td>Slater Chemical Fire Co., 76 Old Glenham Road, Glenham, NY 12527</td>
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<td>May 7, 2020</td>
<td>Central</td>
<td>Emergency Response and Crisis Management for Water and Wastewater Facilities</td>
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<td>Auburn Holiday Inn, 75 North Street, Auburn, NY 13021</td>
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<td>May 14, 2020</td>
<td>Genesee Valley</td>
<td>Blower Technologies, Selection and Energy Evaluation</td>
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<td>VanLare WWTP, 1574 Lake Shore Boulevard, Rochester, NY 14617</td>
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<tr>
<td>June 8-12, 2020</td>
<td>NYWEA</td>
<td>Spring Technical Meeting &amp; Exhibition</td>
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<td>Virtual Conference via Zoom</td>
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<tr>
<td>June 17, 2020</td>
<td>NYWEA</td>
<td>Membrane Bioreactors Lunch &amp; Learn Webinar Series / Part 1</td>
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<tr>
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<td>Virtual via Zoom</td>
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<tr>
<td>June 24, 2020</td>
<td>NYWEA</td>
<td>Membrane Bioreactors Lunch &amp; Learn Webinar Series / Part 2</td>
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<td>July 1, 2020</td>
<td>NYWEA</td>
<td>Membrane Bioreactors Lunch &amp; Learn Webinar Series / Part 3</td>
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<td>July 14 &amp; 16, 2020</td>
<td>NYWEA</td>
<td>Fundamentals of Occupational Chemical Exposure,</td>
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<tr>
<td>July 21, 2020</td>
<td>NYWEA</td>
<td>Confined Space Awareness</td>
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<td>July 14, 2020</td>
<td>Western</td>
<td>Mathematics for Water and Wastewater Operators</td>
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<tr>
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<td>Fredonia Tech Incubator, 214 Central Avenue, Dunkirk, NY 14048</td>
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<tr>
<td>October 13, 2020</td>
<td>NYWEA</td>
<td>Anaerobic Digestion Operations and Biogas Safety Training Webinar Series / Part 1</td>
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<tr>
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<td>NYWEA</td>
<td>Anaerobic Digestion Operations and Biogas Safety Training Webinar Series / Part 2</td>
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<tr>
<td>October 27, 2020</td>
<td>NYWEA</td>
<td>Anaerobic Digestion Operations and Biogas Safety Training Webinar Series / Part 4</td>
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<td>November 4, 2020</td>
<td>Lower Hudson</td>
<td>Mathematics for Water and Wastewater Operators</td>
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<td>Wallkill Golf Club, 40 Sands Road, Middletown, NY 10941</td>
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<td>November 17, 2020</td>
<td>Western</td>
<td>Blower Technologies, Selection and Energy Evaluation</td>
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<tr>
<td>POSTPONED, DATE TBA</td>
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<td>TBD, Lockport, NY 14094</td>
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<tr>
<td>DATE</td>
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<td>MEMBER</td>
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<tr>
<td>Capital Chapter Training Sessions</td>
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<td>February 19, 2020</td>
<td>Blower Technologies, Selection and Energy Evaluation</td>
<td>$60.00</td>
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<td>Central Chapter Training Sessions</td>
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<td>March 18, 2020</td>
<td>Green Infrastructure Maintenance</td>
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<tr>
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<td>Emergency Response and Crisis Management**</td>
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<td>April 14, 2020</td>
<td>Green Infrastructure Maintenance</td>
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<td>Western Chapter Training Sessions</td>
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<tr>
<td>July 14, 2020</td>
<td>Mathematics for Water and Wastewater Operators</td>
<td>$60.00</td>
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<tr>
<td>November 17, 2020</td>
<td>Blower Technologies, Selection and Energy Evaluation</td>
<td>$60.00</td>
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<tr>
<td>Virtual Training via Zoom: Membrane Bioreactors Lunch &amp; Learn Webinar Series (1-, 2- &amp; 4-part series) via Zoom</td>
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<tr>
<td>June 17, 2020</td>
<td>MBR 101: Types, Terms, Treatment and Components</td>
<td>$20.00 or All 4/$75</td>
</tr>
<tr>
<td>June 24, 2020</td>
<td>MBR System Performance</td>
<td>$20.00 or All 4/$75</td>
</tr>
<tr>
<td>July 1, 2020</td>
<td>MBR Operations</td>
<td>$20.00 or All 4/$75</td>
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<tr>
<td>July 8, 2020</td>
<td>Fishbone Analysis of MBRs</td>
<td>$20.00 or All 4/$75</td>
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<tr>
<td>July 14, 2020</td>
<td>Fundamentals of Occupational Chemical Exposure**</td>
<td>$20.00 or Both/$35</td>
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<td>July 16, 2020</td>
<td>Fundamentals of Occupational Chemical Exposure**</td>
<td>$20.00 or Both/$35</td>
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<tr>
<td>July 21, 2020</td>
<td>Confined Space Awareness**</td>
<td>$20.00 or $40</td>
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<tr>
<td>October 13, 2020</td>
<td>Anaerobic Digestion Operations and Biogas Safety Training</td>
<td>$20.00 or All 4/$75</td>
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<tr>
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<td>$20.00 or All 4/$75</td>
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<tr>
<td>October 20, 2020</td>
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<td>October 27, 2020</td>
<td>Anaerobic Digestion Operations and Biogas Safety Training</td>
<td>$20.00 or All 4/$75</td>
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<tr>
<td>** Program is part of a NYS DOL HAB grant #C19006GG to WNYCOSH **</td>
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**PLEASE FILL OUT PAYMENT INFORMATION:** (mail to NYWEA, or fax to 315-422-3851)

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NYWEA MEMBER EDUCATION COMMITTEE 21

2020 CATALOG OF TRAINING