

WATER/WASTEWATER AUTOMATION WORKSHOP

The Fundamentals of Process Instrumentation



This popular one day ISA/WEF workshop is heading to California for the first time. Effective process control extends beyond the addition of analyzers. Other issues that need to be addressed include selecting the optimal measurement locations, developing or adopting appropriate control strategies, and maintaining the analyzers.

The workshop will be broken up into two blocks; the first block of the workshop will provide a review of the technologies and principles used in instrumentation that is available for meeting on-line process analytical needs for ammonia, nitrate, phosphate, pH, ORP, dissolved oxygen, suspended solids, turbidity and chlorine.

The second block discusses how to properly apply and maintain these analytical technologies in order to maximize the quality of data they provide, with an understanding of how this impacts cost-of-ownership. We will conclude with an open forum of questions and answers.

Goals/Learning Objectives

- Understand the fundamental measurement principles utilized for the most prevalent analytical instruments utilized in Water Resource Recovery Facilities, including; ammonia, phosphate and nitrate analyzers.
- Define the difference between monitoring and control, and which technologies are applicable to each term.
- Recognize technology limitations, and how they can affect measurements.
- Identify potential errors and interferences for the technologies, and how they influence measurements.
- Discover how position and control strategy of installed instrumentation in the basins affect the measured parameter and efficiency of the treatment process.

Earn up to 6 CWEA contact hours towards Electrical & Instrumentation, Collection System Maintenance, Environmental Compliance Inspector, Plant Maintenance, Mechanical Technologist and Industrial Waste Treatment Plant Operator.

Wednesday, October 31st

Fairfield-Suisun Sanitary District

1010 Chadbourne Road
Fairfield, CA 94534

Thursday, November 1st

Los Angeles County Sanitation Districts

1955 Workman Mill Road
Whittier, CA 90601

Hosted by



Local Sections are handling registration. Please follow registration link carefully, each location is different. Photos by YSI, Paul Cockrell & Hach.

REGISTER SOON ~ WORKSHOPS SELL OUT



Proudly serving members through 17 local sections.

WATER/WASTEWATER AUTOMATION WORKSHOP

The Fundamentals of Process Instrumentation



Workshop Speakers - October 31st, Fairfield

8:00 a.m.	Registration, Coffee and Continental Breakfast
8:30-10:05 a.m.	Welcome - Charles Aycock , ISA/WEF Workshop organizer, City of Roseville
8:30-10:05 a.m.	pH, ORP, DO, Turbidity, TSS Fundamentals Melody White , Hach; Steven Smith , Endress + Hauser
10:05	Breaks
10:25 a.m. - Noon	Ammonia, Nitrate, Phosphorous, Chlorine Fundamentals Tracy Doane-Weideman , Endress + Hauser; Bob Dabkowski , Hach
Noon	Lunch
1:00-2:15 p.m.	Problem Solving Using Instrumentation Fundamentals Bob Dabkowski , Hach; Steven Smith , Endress + Hauser
2:15 p.m.	Break
2:30-3:30 p.m.	Instrumentation - Cost of Ownership Charles Aycock , City of Roseville

NorCal registration is handled by our Redwood Empire Section

Register your team early. Includes continental breakfast and lunch.

Member \$85

Non-member \$110

Student \$25

Registration by Eventbrite only. Note: credit card fee is added at check-out

<https://www.eventbrite.com/e/cwea-waterwastewater-automation-instrumentation-workshop-tickets-47864051667>

Payment method is by credit card only. No refunds, changing the attendee is welcome.



Wednesday, October 31st

**Fairfield-Suisun
Sewer District**

1010 Chadbourne Road
Fairfield, CA 94534

For info about this location, please contact:

Mindy Boele

RES Board

mindy.boele@cityofvacaville.com

Redwood Empire Section is organizing the workshop, please do not contact CWEA's Oakland office for info.

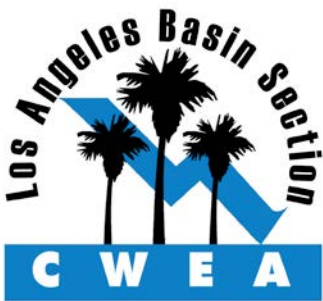
WATER/WASTEWATER AUTOMATION WORKSHOP

The Fundamentals of Process Instrumentation



Workshop Speakers - November 1st, Whittier

8:00 a.m.	Registration, Coffee and Continental Breakfast
8:30-10:05 a.m.	Welcome - Charles Aycock , ISA/WEF Workshop organizer, City of Roseville
8:30-10:05 a.m.	pH, ORP, DO, Turbidity, TSS Fundamentals Melody White , Hach; Steven Smith , Endress + Hauser
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SoCal registration is handled by our Los Angeles Basin Section

Register your team early. Includes continental breakfast and lunch.

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Non-member \$110

Student \$25

Registration by Eventbrite. Note: credit card fee is added at check-out

<https://www.eventbrite.com/e/waterwastewater-automation-workshop-tickets-47822472302>

Payment method is by credit card only. No refunds, changing the attendee is welcome.

Thursday, November 1st

**Los Angeles County
Sanitation Districts**

1955 Workman Mill Road
Whittier, CA 90601

For info about this location, please contact:

John Robinson

LABS Past President

jrobinson@johnrobinsonconsulting.com

The Los Angeles Basin Section is organizing the workshop, please do not contact CWEA's Oakland office for info.