



2015 Water / Wastewater and Automatic Controls Symposium

August 4 to 6, 2015 • Wyndham Lake Buena Vista Resort • Orlando, Florida, USA

Presented by the ISA Water / Wastewater Industries Division - www.isawwsymposium.com

Technical co-sponsors: Florida AWWA Section, WEF Automation and Info Tech Committee, Florida Water Environment Association, Instrumentation Testing Association, and ISA Tampa Bay Section



Program Booklet



Setting the Standard for Automation™

TRAVEL INFORMATION

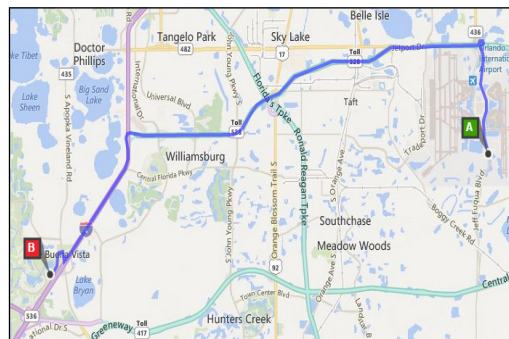
VENUE & ACCOMMODATIONS

The 2015 ISA Water/Wastewater Symposium will be held at **Wyndham Lake Buena Vista Resort Hotel**, near Orlando, Florida. This modern hotel offers luxury accommodations and is located right on the Walt Disney® Resort property. It is also situated close to both Sea World and Universal Studio's theme parks.

HOTEL REGISTRATION

We have arranged a discounted hotel rate of \$89/night for symposium attendees for the Mon, Tues, Wed, and Thurs nights. Please mention "ISA WWAC Symposium" when booking. If registering on-line use the registration link on the symposium website. Regular hotel rates apply after July 15, 2015.

Wyndham Lake Buena Vista Resort
1850 Hotel Plaza Boulevard, Lake Buena Vista, Florida, 32830, USA
(located on the Walt Disney World Resort!)
<http://www.wyndhamlakebuenavista.com>, info@wyndhamlakebuenavista.com
1-877-999-3223 (toll free)
407-828-4444 (local)



MAP & DIRECTIONS

Flying: The hotel is approximately 18 miles from Orlando International Airport (airport code: MCO). The airport has a large number of rental car agencies. Shuttle bus and taxi service from the airport is available via Mears Transportation by visiting www.mears transportation.com or by calling 1-800-223-3868. A one-way taxi trip from the airport to the hotel typically costs around \$40 USD.

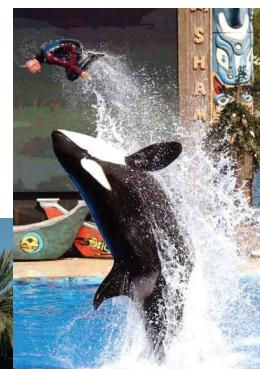
Driving: There are several ways to get to the hotel. If you are driving to the symposium, the hotel is not far from Interstate 4, the Florida 528 Highway, and the Florida Turnpike.

LOCAL ATTRACTIONS

The Orlando area provides a wealth of visitor experiences. Situated in the middle of Walt Disney World®, Wyndham Lake Buena Vista overlooks all of Disney's Florida empire, including Downtown Disney®, right across the street. Being an Official Walt Disney World® Resort means there is a shuttle to all things Disney® and family-friendly amenities like the Oasis Aquatic Playground, as well as Oasis Bar & Grill to keep the whole family full of food and fun in the sun. Be sure to also catch the Disney® Character Breakfast in their Lakeview Restaurant 3 days a week (Tuesday, Thursday, and Saturday), complete with a buffet and photo opportunities with two of the Disney "Fab Five" characters. For more information on local attractions visit www.visitorlando.com.

Distances to Orlando, Florida Attractions

City Walk at Universal Orlando Resort	8.6 miles
Downtown Disney	0.7 miles
Walt Disney World Hollywood Studios	3.6 miles
Walt Disney World Animal Kingdom	6.2 miles
Walt Disney World Epcot Center	3.3 miles
Walt Disney World Magic Kingdom	5.1 miles
Gatorland	10 miles
Universal Studios Orlando Resort	8.2 miles
Kennedy Space Center	58 miles
Prime Outlets	11 miles
SeaWorld	4.7 miles
Wet n Wild	8.5 miles



ABOUT THE SYMPOSIUM

The WWAC Symposium helps professionals in the water and wastewater industries understand how instrumentation, SCADA (supervisory control and data acquisition), and automatic control applications are vital to the treatment and distribution of water; the collection and treatment of wastewater; and the management of stormwater. The symposium also provides an excellent opportunity to gain valuable technical information, networking, professional development, and continuing education credits (CEUs and PDHs).

This 3-day symposium is focused on the challenges associated with automation and instrumentation in the water and wastewater sectors. It features 2 full days of presentations (two speaking tracks), a tour of a local treatment facility, a general reception, networking events, a poster session, and a supplier showcase.

WELCOME MESSAGES



GENERAL SYMPOSIUM CHAIR

It is my pleasure to welcome you to our 2015 ISA Water/Wastewater and Automatic Controls Symposium. Now in its tenth year, we again anticipate record attendance numbers.

Thanks to our strong partnerships with the WEF Automation and Info Tech Committee, the Florida Section of the AWWA, the Florida Water Environment Association, and the Instrumentation Testing Association, we have tailored this year's conference specifically to the needs of automation professionals in the water and wastewater sectors. I would also like to thank our many sponsors, exhibitors, and committee volunteers for being instrumental to our success this year.

We have a strong program planned this year, with over 30 technical speakers, a keynote address, two invited speakers, and two guest speakers. We also have a packed exhibit hall, a great general reception, and top notch catering lined up. Don't forget to also check out our plant tour and the optional training courses on Alarm Management and Asset Management and Enterprise Integration. I look forward to meeting all of you at this year's symposium.

Kevin Patel, PE, MBA
General Symposium Chair



PROGRAM COMMITTEE

On behalf of the entire program committee, I would like to formally welcome you to this year's 2015 WWAC Symposium. Our focus is to help professionals in the water and wastewater industries gain a greater understanding of how automatic control applications, utilizing the latest in instrumentation and intelligent controls technology, can be applied to improve both process measurement water and wastewater processing, collection, treatment, and distribution.

Our symposium is a three day event where attendees will experience a breath of learning and continuing education opportunities. Our symposium starts with two optional training courses on Alarm Management and Asset Management and Enterprise Integration. This is followed by early-bird symposium badge-pick up and a plant tour. Then we have two full days dedicated to technical presentations.

I also encourage you to visit our exhibit hall, talk with our sponsors, and network with your fellow attendees. From these interactions you will find out about new techniques, products and approaches to your daily automation challenges.

We are pleased to welcome the full range of automation professionals in our sector to our symposium. This includes both plant people, including operations, maintenance, engineering and management, as well as plant designers, instrumentation specialists, and system integration firms. Please take advantage of the professional development opportunities afforded to you by our symposium. If you are a Florida resident, make sure to fill out the paperwork to get your FDEP-approved CEUs/PDHs. If you are from out of state, or have an ISA CCST or CAP certification, don't forget to request your ISA training certificate. Come join us!

Joe Provenzano
Program Committee Chair

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2015 Symposium Committee

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 Program Committee Chair..... Joe Provenzano MSc, KPRO Engineering Services
 Past Symposium Chair..... Graham Nasby PEng, PMP, CAP, Eramosa
 Marketing Committee Kevin Patel, Graham Nasby, Pavol Segedy
 Social Media Chair Jon DiPietro, Bridgesoft LLC
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 AWWA, FWEA, ITA Liaison..... Graham Nasby, Eramosa
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 Honors/Awards Chair Dan Machado CSST-III, Cobb County Water System
 ISA Staff Coordinator Rodney Jones, ISA

Program Committee

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Florida Section American Water Works Association

The Florida Section of the American Water Works Association (FSAWWA) is proud to be a technical co-sponsor of the 2015 Water / Wastewater and Automatic Controls Symposium which will be held at the Wyndham Lake Buena Vista Resort in Orlando, Florida on August 4-6, 2015. Control systems are ever so critical to the operation of our nation's utilities. As such, our FSAWWA members have much to gain from this gathering of automation professionals. Attendees earn Florida DEP-approved CEUs and PDHs while networking with their peers and hearing about the latest automatic control applications within the industry. See you in Orlando!

Mark Lehigh

Chair, Florida Section American Water Works Association



Florida Water Environment Association

The Florida Water Environment Association (FWEA) is pleased to be a co-sponsor of the 2015 Water/Wastewater and Automated Controls Symposium, which will be held at the Wyndham Lake Buena Vista Resort in Orlando, FL from August 4-6, 2015. I encourage all FWEA members to take advantage of the reduced FWEA registration fee and consider attending the Symposium to get a better understanding of how instrumentation, SCADA, and automation control applications affect our wastewater collection and treatment systems. There will also be ample opportunities to network with other colleagues in our profession at the Symposium.

Kartik Vaith

Executive Director, Florida Water Environment Association



Water Environment Federation

On behalf of the Water Environment Federation (WEF), it is with great pleasure that I welcome you to the 2015 ISA Water/Wastewater and Automatic Controls Symposium. We believe that the Symposium has an extraordinary technical program thanks to the efforts the symposium's program and organizing committees. We are pleased to be a technical co-sponsor of this year's symposium, and promoting stronger ties between the ISA and WEF. We also welcome you to attend WEFTEC 2015 this fall in Chicago, where several of the WWAC symposium presentations will be showcased at a special WEFTEC session along with several other automation presentations. We encourage all members of the water community to participate in both larger vertical-events like WEFTEC and in focused niche events like the ISA WWAC symposium as together they have a lot of offer.

Barry Liner, PhD, PE

Director, Water Science & Engineering Center



Instrumentation Testing Association

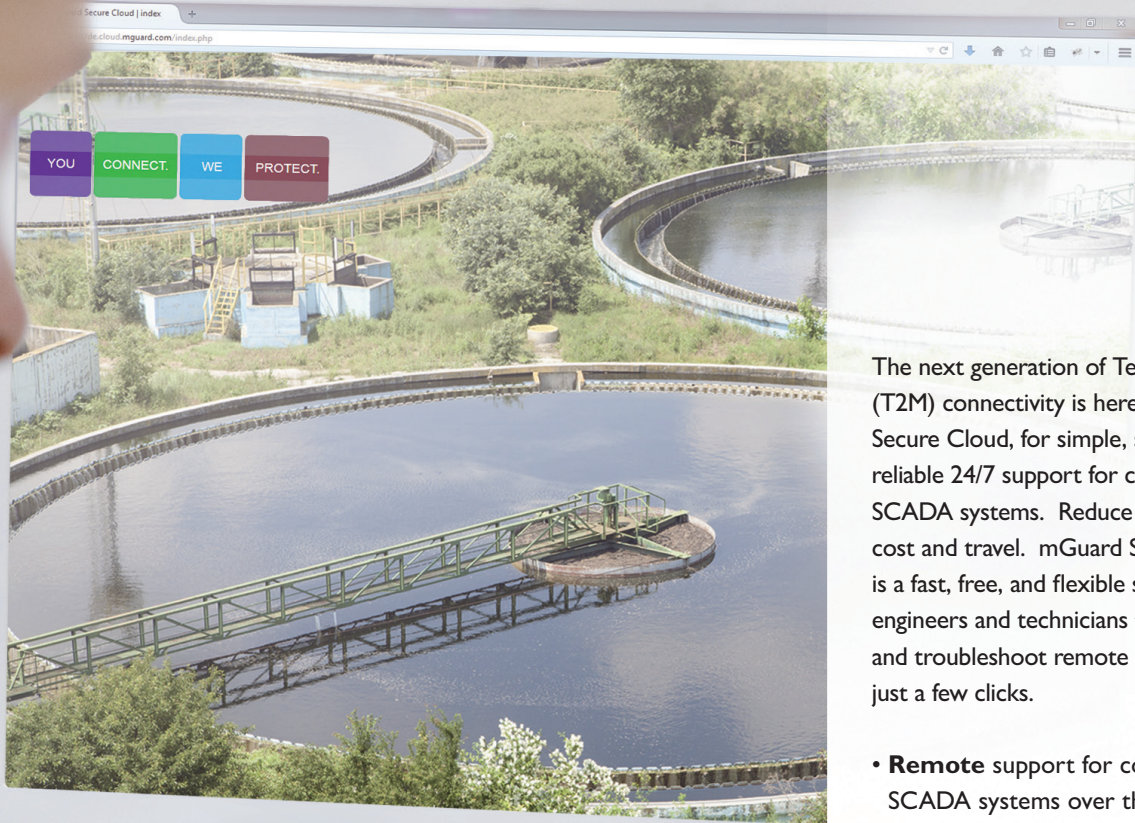
The Instrumentation Testing Association (ITA) is delighted to be a technical co-sponsor of this year's 2015 Water/Wastewater and Automatic Controls Symposium. Instrumentation plays a vital role in the effective treatment of wastewater. The symposium provides an ideal forum to discuss instrumentation best practices, lessons learned and new technologies. The ITA rounds out this experience by providing unbiased third party testing reports on instrumentation products, to help end-users make intelligent instrumentation purchasing decisions. I encourage all instrumentation professionals to participate in the symposium and learn more about the many products and services that the ISA and ITA have to offer.

Tom DeLaura, PE

Executive Director, Instrumentation Testing Association

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KEYNOTE SPEAKER



John S. Young Jr., PE

Retired, American Water
Consultant, John S. Young Jr., LLC

Water Industry – A Utility Perspective: Challenges to Solutions – Closing the Gap

John Young has worked in the water utility industry his entire career. In 2010, John retired from American Water, the largest water/wastewater utility in North America, after a 33 year career. At American Water, he served in numerous technical and management positions including Vice President- Engineering, President – American Water Works Service Company, Chief Water Technology Officer and Chief Operating Officer. Recently, as a utility consultant, he has supported or assessed numerous water utilities including the New York City Department of Environmental Protection, Detroit Water and Sewerage Department (during the Detroit bankruptcy) and PRASA.

John is a registered professional engineer. He holds a B.S. in Civil Engineering from Duke University and an M.S. in Environmental Engineering from the University of North Carolina – Chapel Hill.

INVITED SPEAKERS



Albert Rooyackers

Founder, CTO, and VP of Engineering
Bedrock Automation

Open Secure Automation: Observations for Improved ICS Reliability, Security and Performance

Albert's recent technical endeavors include developing parallel processors for video, hybrid propulsion systems for transportation and currently, as a Bedrock founder and CTO, designing and commercializing a new cyber secure automation platform for the global market. Albert is an active participant in the cyber security arena, and has personally been involved with over 75 cyber security related patents.



John Krajewski

Director of Product Management HMI/SCADA
Schneider Electric | Invensys

Situational Awareness – The Next Leap in Industrial Human Machine Interface Design

John began his career working as a Control System Engineer in the potable water industry. Subsequently, John worked as an Application Engineer for a System Integrator. He then joined Invensys Wonderware in April 2000 as a Senior Application Developer in the Product Marketing Department. John then assumed the role of Product Marketing's Functional Manager of Infrastructure. Recently, John Spent 5 years as a Domain Architect with responsibilities for architectural and functional definition of InTouch and Archestra.

FORUM SESSION:

What is the Future of Automation Technologies in the Water Industry?



Moderator:

Tom DeLaura, PE

Chair, WEF Automation and Information Tech Committee & VP, Eramosa International



Panel Member:

Jeff Miller, PE, ENV SP

Water Solutions Architect, Schneider Electric



Panel Member:

Dan Cote, PE

Senior I&C Engineer, McKim & Creed



Panel Member:

Don Dickinson

Senior Business Development Manager - Water Sector,
Phoenix Contact



Panel Member:

Barry Liner, PE

Director, Water Science & Engineering Center,
Water Environment Federation (WEF)



Panel Member:

Mike Sweeney, PhD, PE

Florida Section of the AWWA &
Deputy Executive-Director, Toho Water Authority

The purpose of the forum session is to share ideas and thoughts on the utilization of automation within the utility of the future. The panel will discuss trends, benefits and challenges within the industry along with how utilities will likely operate and meet goals in the future. Furthermore, the panel seeks to create a brainstorming atmosphere engendering audience participation with the goal of developing a path forward for automation in the future. The discussion will revolve around current and future trends in the industry, needs of utilities, possible future technologies, and how utilities may best plan a roadmap to incorporate them.

We have gathered several industry experts to discuss this topic which will be moderated by Tom DeLaura. Tom has 40 years of experience with automation, and has seen firsthand how it can support and enhance all facets of the water/wastewater business. His active roles at the local and national levels of ISA, WEF and AWWA are examples of his dedication to the industry, and give him a true appreciation for the need to keep automation relevant during the many challenges and changes the wastewater industry is facing.

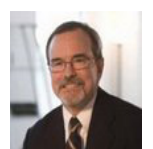
GUEST SPEAKERS



Tom DeLaura, PE

Past Chair, WEF Automation and Information Tech
Committee & VP, Eramosa International

WEF Current News and Trends



Mike Sweeney, PhD, PE

Florida Section of the AWWA &
Deputy Executive-Director, Toho Water Authority

AWWA Current News and Trends

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MONDAY & TUESDAY AUGUST 3 & 4, 2015

Monday, August 3, 2015	
8:00am - 4:00pm	Asset Management and Enterprise Integration Using the ANSI/ISA95 Standard (day 1 of 2)* (Bay Lake)

Tuesday, August 4, 2015	
8:00am - 4:00pm	Asset Management and Enterprise Integration Using the ANSI/ISA95 Standard (day 2 of 2)* (Bay Lake)
8:00am - 4:00pm	Introduction to the Management of Alarm Systems (1 day)* (Park Lake)
12:00pm - 3:30pm	Early Symposium Registration & Badge Pick-Up (Solar Foyer)
2:30pm - 5:45pm	Tour of Treatment Facility (transportation provided)** (Hotel Lobby)

* Short courses are optional. Separate course registration required.

** Limited capacity on tour. Tour leaves hotel lobby at 2:45 pm. Invitations will be sent out 3 weeks prior to tour via e-mail to registered symposium attendees. RSVP required.

OPTIONAL SHORT COURSES

Introduction to the Management of Alarm Systems (IC39C)

Date: Tues., August 4, 2015

Instructor: John Bogdan

Length: 1 day

Credits: 0.7 CEUs / 7 PDHs

Cost: \$720 (\$575 for ISA members)

This course focuses on the key activities of the alarm management lifecycle provided in the ANSI/ISA 18.00.02 standard, Management of Alarm Systems for the Process Industries. The activities include the alarm philosophy development, alarm rationalization, basic alarm design, advanced alarm techniques, Human Machine Interface (HMI) design for alarms, monitoring, assessment, management of change, and audit..

Asset Management and Enterprise Integration Using the ANSI/ISA95 Standard (IC55)

Date: Mon. - Tues., August 3 - 4, 2015

Instructor: Paul Nowicki

Length: 2 days

Credits: 1.4 CEUs / 14 PDHs

Cost: \$1585 (\$1265 for ISA members)

Many facilities have made significant investments in flexible production/asset execution systems and in sophisticated enterprise planning (ERP) systems. Those investments, however, can not yield their full potential until each has access to the information and capabilities of the other. The ANSI/ISA 95 standard addresses that coordination problem by providing a sound, robust definition of business activities and of the information that must flow between those two realms. This course also teaches the terminology used in Information Technology (IT) departments so that manufacturing and IT personnel can effectively work together on integration projects.

OPTIONAL LOCAL PLANT TOUR

As part of the symposium, attendees will have the option of attending a Tour of the Harvest Power Energy Garden. The tour takes place in the early-afternoon of Tues, Aug 4, 2015 at 3:00 PM, with the tour bus leaving the hotel at 2:30 PM, and requires prior-sign-up. Transportation to/from the hotel is provided. The bus will leave the hotel lobby. RSVP Required - registered attendees will receive an invitation via Email 3 weeks prior to the tour.

Symposium attendees are invited to tour the Harvest Power Energy Garden. Harvest Power's Energy Garden in Central Florida is designed to simultaneously address four challenges – to recover energy and nutrients from food waste, manage odors, process biosolids beneficially, and improve the fertilizer end product quality – with one integrated solution. Located at Reedy Creek Improvement District, this anaerobic digester processes 130,000 tons per year of biosolids, fats, oils, grease, and food waste and has 3.2 MW of installed power generation capacity and 3.8 MW of recoverable heat from a biogas-fueled combined heat and power system (CHP), plus class AA granular fertilizer.

Harvest Power has found a higher and better use for Central Florida's pre and post-consumer food waste. Through a patented anaerobic digestion process, Orlando's food and organic waste can be recycled and converted into clean energy, effectively transforming the community's organic waste problem into a sustainable local resource.



WEDNESDAY AUGUST 5, 2015

7:00am	Registration, Badge Pick-up & Breakfast	
8:00am	Opening Remarks (Technical Session Room 1)	
8:15am	<u>Keynote Speaker</u> Water Industry – A Utility Perspective: Challenges to Solutions – Closing the Gap John S. Young, Jr. PE, Retired, American Water and Consultant, John S. Young, Jr, LLC	
9:00am	<u>Invited Speaker</u> Open Secure Automation: Observations for Improved ICS Reliability, Security and Performance Albert Rooyakkers, Founder, CTO, and VP of Engineering, Bedrock Automation	
9:45am	Coffee Break & Exhibits (Exhibit Hall)	
	Track 1 (Technical Session Room 1)	Track 2 (Technical Session Room 2)
10:30am	Migrating to Digital Bus Technology Hassan Ajami, Process Control & Instrumentation (PCI) Anil Gosine, Detroit Water & Sewerage Department	Effectively Deploying Alarm Management to SCADA Systems Graham Nasby, P.Eng., PMP, CAP, Eramosa
11:00am	Challenges and Lessons Learned for the Design and Implementation of Large PROFIBUS Network Francisco Alcalá, CDM Smith James Powell, P.Eng., Siemens Canada Limited	Getting the Most from Your SCADA Data Emile Richard, PE, Portland Water District
11:30am	The Ugly Duckling Becomes a SWAN: The Success Story of Anglian Water's Smart Water Network Jeff Miller, PE, ENV SP, Schneider Electric Ivan Nazzaretto, Schneider Electric	Looking for Trouble on OT Networks: Tools and Techniques to Identify Threats to ICS Communications Bryan L Singer, CISSP, CAP, Kenexis
12:00pm	Lunch & Exhibits (Exhibit Hall)	
1:00pm	Design Assist – Not Just For Construction Projects: Using Alternative Delivery For SCADA System Replacements Charles Aycok, City of Roseville Dean Ford, CAP, Westin Engineering, Inc Dave Kubel, PE, Tesco Controls, Inc	First – Make A Business Case For Cybersecurity Don Dickinson, Phoenix Contact
1:30pm	Southern Nevada Water Systems Controls Upgrade: A Very Large Scale Controls Project Jeff Blue, CAP, Southern Nevada Water System	Data Diode Cybersecurity Implementation Protects Operations Network and Facilitates Transfer of Operations Information to Business Users Dennis Lanahan, Owl Computing Technologies
2:00pm	Making the Case for SCADA Master Planning Raluca Constantinescu, AquaR, Inc.	Demystifying Government-Validated Solutions: Navy Case Study Shows How Critical Infrastructure and Facilities Can Benefit Frank Ignazzitto, Ultra Electronics, 3eTI
2:30pm	Coffee & Exhibits (Exhibit Hall)	
3:45pm	Utilizing Instrumentation and Control Tuning for BNR Optimization Craig Fuller, PE, AECOM Technology Corporation Norman Anderson, PE, Polk County – Utilities Division Charles Nichols, Polk County – Utilities Division David Fitzgerald, PE, D.P. Fitzgerald, Inc Donald Schlicht, PE, Curry Controls Company	Achieving Operator Buy-In of High Performance Graphics Jason Hamlin, City of Lynchburg Carter Farley, PE, InstruLogic Corporation
4:15pm	On Demand Pump Condition and Optimization Jeff Miller, PE, ENV SP, Schneider Electric Brian Hinkle, Schneider Electric	No cCompromises for Secure SCADA Communications – Even Over 3rd Party Networks Norman Anderson, PE, Polk County – Utilities Division Sokha Hay, Tempered Networks
4:45pm	Developing a Utility Analysis and Integration Model (UAIM) Cello Vitasovic, PhD, PE, Metropolitan Water District of Southern California Barry Liner, PhD, PE, Water Environment Federation	WWTP – Lift Station Monitoring & Control: The Process Begins Here Alan Vance, Endress+Hauser Terry Sages, Rockwell Automation
5:15pm	General Reception and Cash Bar (Exhibit Hall)	

THURSDAY AUGUST 6, 2015

7:00am	Breakfast	
8:00am	Opening Remarks (Technical Session Room 1)	
8:10am	Preview of next year's 2016 ISA Water/Wastewater and Automatic Controls Symposium	
8:15am	Invited Speaker Situational Awareness – The Next Leap in Industrial Human Machine Interface Design John Krajewski, Director of Product Management HMI/SCADA, Schneider Electric Invensys	
9:00am	Guest Speaker WEF Current News and Trends Tom DeLaura PE, Chair, WEF Automation and Information Technology Committee & Vice-President, Eramosa International	
9:15am	Guest Speaker AWWA Current News and Trends Mike Sweeney PhD PE, Florida Section of the American Water Works Association (AWWA) & Deputy Executive-Director, Toho Water Authority	
9:30am	2014 Water Wastewater Automatic Control Symposium / Water Wastewater Industry Division Awards Presentation	
9:45am	Coffee Break & Exhibits (Exhibit Hall)	
10:30am	Forum Session What is the Future of Automation Technologies in the Water Industry? Moderator Tom DeLaura, PE Past Chair, WEF Automation and Information Technology Committee & Vice-President, Eramosa International Panel Members: Don Dickinson, Senior Business Development Manager - Water Sector, Phoenix Contact Jeff Miller, PE, ENV SP, Water Solutions Architect, Schneider Electric Dan Cote, PE, Senior I&C Engineer, McKim & Creed Barry Liner PE, Director, Water Science & Engineering Center at Water Environment Federation (WEF) Mike Sweeney PhD PE, Florida Section of the American Water Works Association (AWWA) & Deputy Executive-Director, Toho Water Authority	
12:00pm	Lunch & Exhibits (Exhibit Hall)	
	Track 1 (Technical Session Room 1)	Track 2 (Technical Session Room 1)
1:00pm	Distributed Network Protocol (DNP3) for Water Systems Keith Kolkebeck, United Water	HMI/SCADA is Key in Preventing Unplanned Downtime Matthew Wells, GE Intelligent Platforms
1:30pm	Designing a Wireless Network: Steps / Considerations / Do's & Don'ts Patrick Ho, Eaton	Are You Disrupting the Control Room?: How to Manage Change and Introduce High Performance HMI Concepts in Practice Ryan Kowalski, PE, ARCADIS
2:00pm	Methodology to Develop Optimum Control Strategies: Controlling Wastewater Plant Inflows Maxym Lachance, Eng., Tetra Tech	All Aboard the SCADA Mothership Patrick Cooke, Trihedral Engineering
2:30pm	Poster Session, Coffee & Exhibits (Exhibit Hall)	
3:45pm	Benefits of a SCADA Master Plan Framework for Utilities Manoj Yegnaraman, PE, Carollo Engineers, Inc. Jeff Martin, Carollo Engineers, Inc. Norman Anderson, PE, Polk County – Utilities Division	Flowmeter Verification in Water/Wastewater Industry Alan Vance, Endress+Hauser Steve Milford, Endress+Hauser
4:15pm	The ZYX's of Control Systems Norman Anderson, PE, Polk County – Utilities Division	OPEN
4:45pm	Closing Remarks (Technical Session Room 1)	

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American Water Works Association

FloridaSection

The Florida Section of the American Water Works Association is dedicated to ensuring Florida's present and future generations a sufficient supply of high quality drinking water by providing critical information and opportunities to over 2,500 members. We offer comprehensive technical training and continuing education programs, effective legislative and regulatory policy development, high quality member services and networking opportunities related to the water industry. For more information see www.fsawwa.org



Water Environment Federation
the water quality people®

Founded in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization of 36,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. WEF members, Member Associations, and staff proudly work to achieve our mission to provide bold leadership, champion innovation, connect water professionals, and leverage knowledge to support clean and safe water worldwide. For more information see www.wef.org



Florida Water Environment Association

The Florida Water Environment Association (FWEA) through local chapters, student chapters, committees and Utility Council help to unite Florida's clean water professionals responsible for protecting the environment through education programs, professional development and promotion of sound public policy. For more information see www.fwea.org



Instrumentation Testing Association

Promoting Reliability & Performance of Environment Instrumentation and Automation Technologies

The Instrumentation Testing Association (ITA) is a non-profit technical and educational organization. ITA is internationally governed by 14 treatment facilities (both public and private, industrial and municipal and representative of small, medium and large water, wastewater and industrial systems). ITAs members include water, wastewater and industrial treatment plants, consultants, manufacturers, non-profits, and regulatory organizations. ITA was founded to address instrument performance and reliability issues arising from low bid requirements of procuring instrumentation. For more information see www.instrument.org

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CONTINUING EDUCATIONS CREDITS – CEUs & PDHs

Symposium participants will earn valuable Continuing Education Units (CEUs) and Professional Development Hours (PDHs) by attending the symposium. Participants will receive their choice of CEUs or PDHs from one of the following organizations:

 <p>2.0 CEUs or 20 PDHs</p> <p>water operators wastewater operators engineers</p>  <p>American Water Works Association FloridaSection</p>	<p>Florida state licensed water operators and wastewater operators can earn up to 2.0 Florida Department of Environmental Protection approved CEUs by attending the symposium.</p> <p>Florida state licensed engineers can also earn up to 20 Florida DEP-approved PDHs by attending the symposium.</p> <p>As part of the partnership between the ISA and the Florida Section of the AWWA, official certificates for these CEUs and PDHs will be issued by the FSAWWA (FSAWWA course # 05134010).</p> <p>These CEU credits can be used by both water operators and wastewater operators.</p> <p>Florida Statutes require anyone who operates a drinking water treatment plant or a domestic wastewater treatment plant to be licensed by FDEP. Beginning May 1, 2011, licensure for Water Distribution System Operators became mandatory. CEUs and PDHs that attendees receive at the symposium can be used to satisfy the continuing education requirements for their licenses.</p>	
	<p>Symposium</p> <p>20 PDHs</p>	<p>Symposium attendees also have the option of receiving a certificate for 20 Professional Development Hours (PDHs) from the ISA.</p> <p>These PDHs can be used towards your ISA CAP or CCST certification or towards continuing education requirements in other jurisdictions, as applicable.</p>   <p>Control Systems Engineers</p>
 <p>1.4 CEUs</p>	 <p>1.4 CEUs</p>	<p>For the optional two-day training course on Asset Management and Enterprise Integration Using the ANSI/ISA95 Standard, attendees can receive their choice of:</p> <ul style="list-style-type: none"> • 1.4 CEUs certified by the Florida DEP (issued by the FSAWWA, course # 05134012) • 1.4 CEUs certified by IACET (issued by the ISA)
 <p>0.7 CEUs</p>	 <p>0.7 CEUs</p>	<p>For the optional full-day training course on Introduction to the Management of Alarm Systems, attendees can receive their choice of:</p> <ul style="list-style-type: none"> • 0.7 CEUs certified by the Florida DEP (issued by the FSAWWA, course # 05134011) • 0.7 CEUs certified by IACET (issued by the ISA)




2015 FALL CONFERENCE
We Are One Water



**Join Water Professionals At
Florida's Premier Water Conference**

Opening General Session:
Monday, November 30, 2015, 2:30 to 4:00 pm

Earn CEUs/PDHs:
Monday to Wednesday Workshops and Technical Sessions will be Offered

Operator Events:
Backhoe Rodeo, Tapping Competitions, and Meter Madness

Young Professionals Events:
Luncheon, Water Bowl, and Fresh Ideas Poster Session

Water For People Fundraising Event:
Exhibitor's Raffle Fundraiser

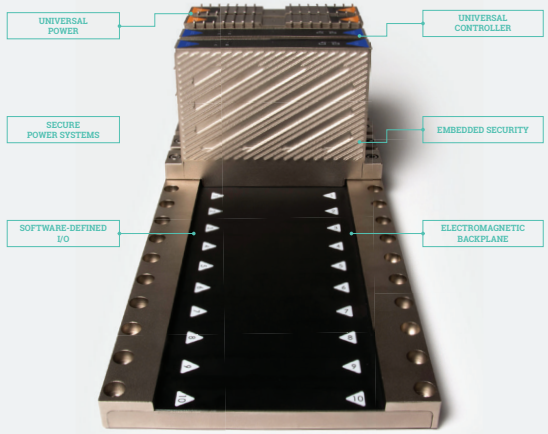
Roy Likins Fundraising Events:
Poker Night and Gold Tournament

**Attendee Registration Opens
on August 3rd**

FOR MORE INFORMATION:
<http://fsawwa.org/2015fallconference>


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About the ISA Water & Wastewater Division

The ISA Water and Wastewater Industries Division (WWID) is concerned with all aspects of instrumentation and automated-control related to commercial and public systems associated with water and wastewater management. Membership in this Division provides the latest news and information relating to instrumentation and control systems in water and wastewater management, including water processing and distribution, as well as wastewater collection and treatment. WWID is invaluable to professionals interested in sanitary technology and engineering, and the operation and maintenance of wastewater facilities. The Division holds an annual symposium that features presentations by industry practitioners and published proceedings. Read more at www.isa.org/wwid

Benefits of WWID Membership

- **Quarterly Newsletter** - The division publishes a quarterly electronic newsletter. Members also have the opportunity to write articles for the newsletter.
- **Annual Symposium** - Attend and participate in the annual WWAC symposium which spans all automation aspects of water and wastewater
- **Networking Opportunities** - A chance to meet, and form relationships with, peers involved with automation in your industry
- **Online Resources** - Gain access to papers and presentations from prior division symposia via the division and ISA websites
- **Industry Knowledge** - Be part of an active group that enhances your knowledge and professionalism on Water and Wastewater topics by obtaining valuable technical information and training in the traditional areas of measurements/sensors, instrumentation systems, data and advanced system/sensor technology.
- **Targeted Training** - At its annual symposium, the WWID offers ISA training courses which are targeted towards areas of specific interest for the water/wastewater automation professional.
- **Technical Writing & Presentation Opportunities** - An opportunity to present your work to your automation peers at the annual WWAC symposium, newsletter and/or ISA Automation Week by way of papers, posters, and Power Point presentations
- **Leadership Opportunities** - Opportunities to take on leadership roles in the division, to help with planning the symposium, writing for the newsletter, updating the website, and moderating the discussion lists.
- **LinkedIn Discussion List & Email Discussion List** - The WWID maintains a LinkedIn Group and Listserv Email mailing list for its members.

More information about the ISA and member benefits can be found at www.isa.org

SYMPOSIUM REGISTRATION

Early-Bird Rate (up until June 15, 2015)

_ Regular Attendee	\$425
_ ISA Member	\$325
_ AWWA or FSAWWA Member	\$375
_ WEF or FWEA Member	\$375
_ ITA Member	\$375
_ Student Registration	\$125
_ Author/Speaker Registration	\$125

Regular Registration (after June 15, 2015)

_ Regular Attendee	\$450
_ ISA Member	\$350
_ AWWA or FSAWWA Member	\$400
_ WEF or FWEA Member	\$400
_ ITA Member	\$400

Your Full Symposium registration includes:

- * 2 full days of papers and presentations
- * poster session
- * networking events
- * tour of a local wastewater treatment facility on Aug 4
- * admission to supplier showcase
- * light breakfasts on Aug 5 and Aug 6
- * full buffet lunches on Aug 5 and Aug 6
- * evening reception on Aug 5, with cash bar
- * name badge
- * list of symposium attendees with contact info
- * printed onsite program booklet
- * printed copy of symposium proceedings

Optional Two-Day Training Course: August 3 - 4, 2015, 8:00am - 4:00pm

Asset Management and Enterprise Integration Using the ANSI/ISA95 Standard (IC55)

Attendees will receive 1.4 CEUs (continuing education units)

_ Regular Price	\$1585
_ ISA Member Price	\$1265

Optional Full-Day Training Course: August 4, 2015, 8:00am - 4:00pm

Introduction to the Management of Alarm Systems (IC39C)

Attendees will receive 0.7 CEUs (continuing education units)

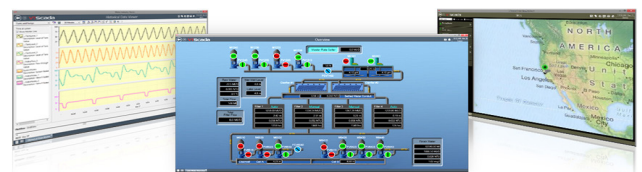
_ Regular Price	\$720
_ ISA Member Price	\$575

Register at www.isawwsymposium.com/register

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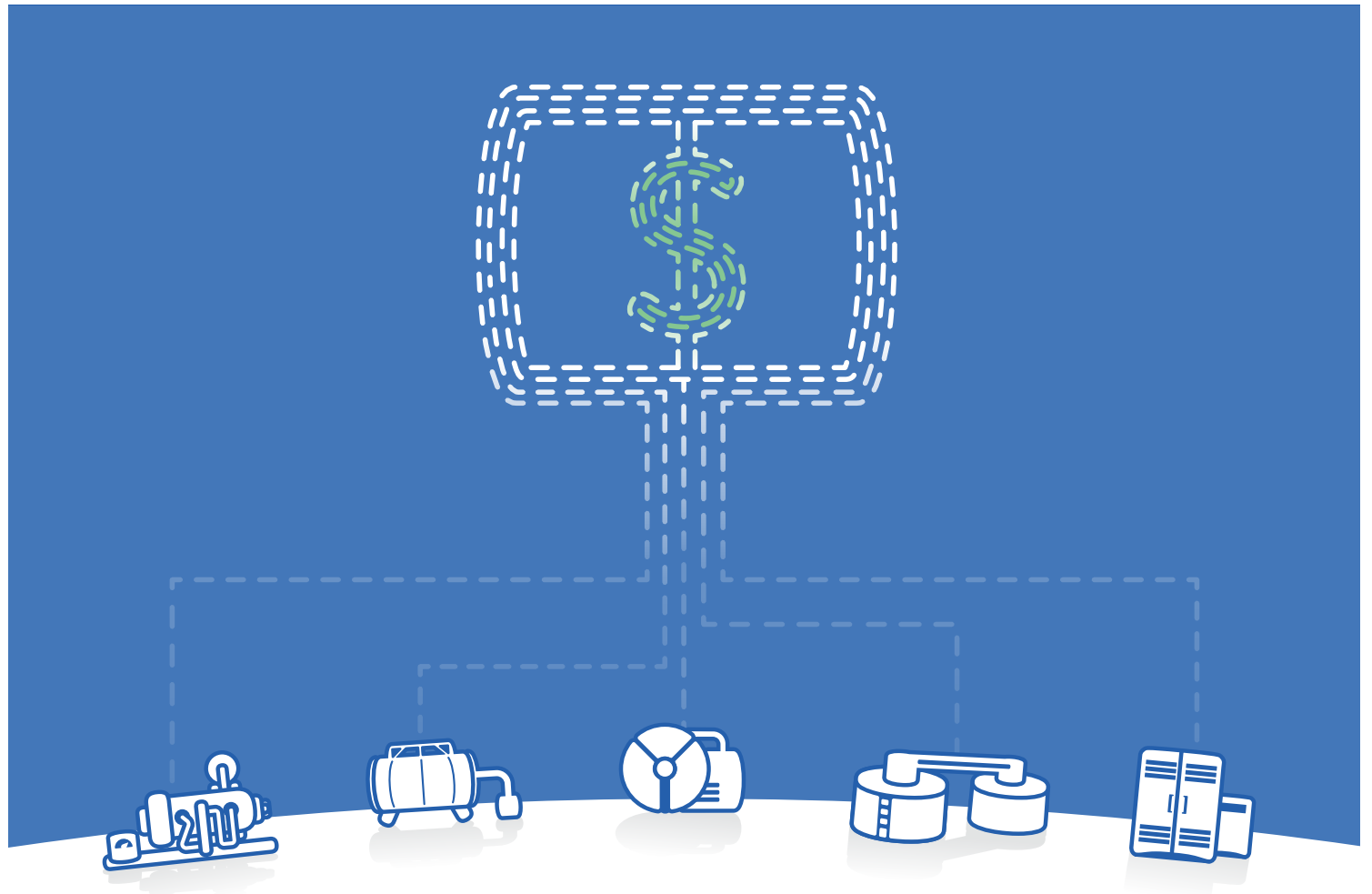


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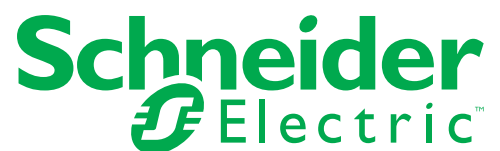
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2016 ISA Water/Wastewater and Automatic Controls Symposium

August 2 to 4, 2016.....Wyndham Lake Buena Vista Resort.....Lake Buena Vista, Florida, USA
Presented by the ISA Water/Wastewater Industries Division – www.isawwsymposium.com
Technical co-sponsors: Florida AWWA Section, the WEF Automation and Info Tech Committee ,
Florida Water Environment Association, Instrumentation Testing Association, and ISA Tampa Bay Section



Call for Abstracts

Presented by the ISA Water/Wastewater Industries Division, in collaboration with the Florida Section of the AWWA (FSAWWA), the Florida Water Environment Association (FWEA), the WEF Automation and Info Tech Committee, and the Instrumentation Testing Association (ITA), the WWAC Symposium helps professionals in the water and wastewater industries understand how instrumentation, SCADA (supervisory control and data acquisition), and automatic control applications are vital to the treatment and distribution of water, and the collection and treatment of wastewater. The symposium also provides an excellent opportunity to gain valuable technical information, networking, professional development, and continuing education credits (CEUs and PDHs).

This 3-day symposium is focused on the challenges associated with automation and instrumentation in the water and wastewater sector. It features: 2 full days of presentations, a tour of a local water/wastewater facility, a general reception, networking events, a poster session, and a supplier showcase. The first day begins with registration, an optional full-day short course on a current SCADA/automation related topic, and a plant tour. The second day kicks off with a keynote speaker, followed by presentations on general topics such as instrumentation, system integration, automation, plant case studies, new technologies and process optimization/automation. The third day starts with an invited speaker, guest speakers and is focused on topics geared towards SCADA, PLC, HMI, Expert Systems, Data Modelling, and Alarm Management. The Tuesday-Thursday timeslot has been selected so that families can easily take their kids to Disney World, both during and before/after the symposium. Proceedings will be published and made available to water/wastewater division members, and papers will be considered for publication in the ISA's technical journal, ISA Transactions (www.isa.org/isatrans/).

Guidelines for Submission

- All authors/speakers must pay the speaker registration fee (\$125)
 - The speaker registration fee is a discounted conference rate (regular \$425)
- 250 word (max 300 words) abstract in US English shall be submitted electronically
- Authors must indicate what format they wish to present in:
 - 30 minute presentation (no paper)
 - 6-12 page paper and 30-minute presentation
 - Large format 3 foot wide x 4 foot high poster
- Final presentations must be on the supplied symposium PowerPoint template
- Final papers must be submitted in MS Word using supplied symposium template
- Papers/presentations/posters accepted for presentation and/or publication will require completion of ISA Rights and Responsibilities form
- Student papers and posters are welcome
- The lead author is the main contact

Submissions

Submit your abstract via email in MS Word format to:

abstracts@isawwsymposium.com AND provenzano2@comcast.net

Deadlines

Abstracts DueDecember 15, 2015
Notification of AcceptanceJanuary 16, 2016
First Draft DueMarch 9, 2016
Final Draft Due.....May 18, 2016

A full author information package, along with sample abstracts, templates and a list of topic ideas can be found at www.isawwsymposium.com

For additional information, contact:

Pavol Segedy, P.E.
General Symposium Chair
HDR Inc.
+ 1 919-427-5313
psegedy@nc.rr.com

Joe Provenzano, M.Sc.
Symposium Program Chair
KPRO Engineering Services
+1 203-560-1816
provenzano2@comcast.net

Rodney Jones
Staff Contact
ISA Symposia
+1 919-990-9418
rjones@isa.org

Topics include but are not limited to:

Speaking Track 1 – General Topics

Instrumentation: New Technologies and Applications
SCADA Security, ISA99, CSET, and Mitigating Risks
Control System Redundancy and Robust Design
Wireless Technologies
System Integration
Automation Techniques for Existing Plants
New Control System Technologies
Plant Case Studies

- Plant Upgrades & New Facilities
- Control System Upgrades & Replacements
- Lessons Learned

Process Optimization

Automated Control Techniques
Project Management Lessons for Integration Projects
Specific Water and Wastewater Challenges

Speaking Track 2 – Future of Automation

SCADA – Supervisory Control and Data Acquisition
Modelling Non-revenue water & collection networks
Energy use modelling and Optimization with SCADA
Capturing and Evaluating Stakeholder Needs
HMI Design for Operator Effectiveness
Effective Use of Multiple HMI Screens
Human Factors and Control Room Design
Intelligent & Expert Systems
Alarm Management & Alarm Rationalization
Implementing of ISA, EEMUA, WEF & AWWA Standards
Call-Out Alarm Rationalization and Techniques
Data Reporting & Presentation Techniques / Strategies
Data Management, Historians, and Data Retrieval
SCADA and the Current Regulatory Environment
Mobile HMIs, Tablets, Remote Access, and Dashboards

WWAC2015_call-for-abstracts-for-WWAC2016_rev2015-07-15.doc

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2015 Water / Wastewater and Automatic Controls Symposium

Founded in 1945, the International Society of Automation is a leading, global, nonprofit organization that is setting the standard for automation by helping over 30,000 worldwide members and other professionals solve difficult technical problems, while enhancing their leadership and personal career capabilities. Based in Research Triangle Park, North Carolina, ISA develops standards; certifies industry professionals; provides education and training; publishes books and technical articles; and hosts conferences and exhibitions for automation professionals.



CONTACTS

Kevin Patel, PE, MBA

2015 General Symposium Chair
Signature Automation
knpatel@sig-auto.com
(469) 619-1241

Joe Provenzano, MSc

Symposium Program Chair
KPRO Engineering Services
provenzano2@comcast.net
(203) 560-1816

Rodney Jones

ISA Staff Contact
rjones@isa.org
(919) 990-9418



International Society of Automation

67 T.W. Alexander Drive
PO Box 12277
Research Triangle Park, NC 27709
E-Mail: info@isa.org
Telephone: (919) 549-8411
Fax: (919) 549-8288
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Note: See symposium website for 2016 exhibitor & sponsorship opportunities

For more information visit:
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