Earn Valuable Continuing Education Unit (CEU) or Professional Development Hour (PDH) Credits

ISA enhances the value of attending this year’s 2015 Water/Wastewater and Automatic Controls Symposium (WWAC)—to be held 4–6 August 2015 in Orlando, Florida, USA—by offering two content-rich technical training courses in conjunction with this industry event. Both of these courses qualify for IACET-approved and FDEP-approved CEUs or for professional development hours:

- **Introduction to the Management of Alarm Systems (IC39C)**—Focuses on the key activities of the alarm management lifecycle provided in the ANSI/ISA18.00.02 standard, Management of Alarm Systems for the Process Industries. (Earn 0.7 CEUs/7 PDHs!)

- **Implementing Business to MES Integration Using the ANSI/ISA95 Standards (IC55)**—Teaches the terminology used in Information Technology (IT) departments so that manufacturing and IT personnel can effectively work together on integration projects. (Earn 1.4 CEUs/14 PDHs!)

Register today to get the most out of your WWAC Symposium experience, and to gain technical know-how and practical skills—direct from industry experts—you can immediately apply at your workplace.

ISA Training: World-class instruction with real-world application

ISA technical training is recognized globally for its unbiased, practical approach to learning. ISA courses draw on the in-depth marketplace experience of more than 100 prominent subject matter experts across virtually all technical fields in automation. Instruction is as innovative—continually reflecting emerging market dynamics and new technologies—as it is flexible—available in a variety of formats, from traditional classroom settings (both offsite and onsite) to online, instructor-assisted courses and live and pre-recorded webinars.

ISA Training:
- Fills in missing knowledge and skills gaps
- Teaches the hows and whys
- Improves the effectiveness of on-the-job training
- Provides continuing education credits
- Expands professional networks

2015 WWAC Symposium

Now in its tenth year, ISA’s 2015 WWAC Symposium offers a unique opportunity for automation, instrumentation, and SCADA professionals in the water and wastewater sectors to gain best-practice insights, share ideas, network, and earn continuing education credits. This three-day, solutions-focused gathering will outline the critical challenges affecting essential processing and distribution of water treatment, and showcase the strategies, techniques, technologies, and people at the forefront of success and innovation. Key topics covered include emerging trends, smart water optimization, system integration, alarm management, human factors, and plant successes.

When: 4–6 August 2015
Where: Wyndham Lake Buena Vista Resort, Orlando, Florida, USA

Conference Registration: Pricing available online

Visit www.isawwsymposium.com for event details and to register.
Implementing Business to MES Integration Using the ANSI/ISA95 Standards (IC55)

**Course Details:**
- **Length:** 2 days
- **Course No.:** IC55
- **CEUs (PDHs):** 1.4 (14)
- **Course Hours:** 8:00 a.m. – 4:00 p.m.
- (Lunch included with registration.)

**You Will Cover:**
- Standards and Models: ANSI/ISA95 Standards | MESA International Model | WBF B2MML XML Schemas
- Business Processes: Procurement | Product Cost Accounting | Product Inventory Control | Maintenance | Production Planning and Scheduling

**Classroom/Laboratory Exercises:**
- Identify key business drivers for integration
- Identify key business processes and objects
- Identify process segment definitions
- Develop shared product definition information

**Includes ISA Standards:**
- ANSI/ISA95.00.02-2001—Enterprise-Control Systems Integration, Part 2: Object Model Attributes
- ANSI/ISA95.00.03-2005—Enterprise-Control Systems Integration, Part 3: Models of Manufacturing Operations Management
- World Batch Forum B2MML Schema Documentation (www.wbf.org)

This course focuses on the key activities of the alarm management lifecycle provided in the ANSI/ISA18.00.02 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.

**You Will Be Able To:**
- Develop an Alarm Management Philosophy
- Identify types of alarms
- Discuss rationalization, classification, and prioritization of alarms
- Design basic alarms
- Determine when advance alarm techniques should be used
- Document alarms for operations
- Design reports for monitoring and assessment of alarm system performance
- Manage changes to alarm systems
- Test and audit alarm systems

**Course Details:**
- **Length:** 1 day
- **Course No.:** IC39C
- **CEUs (PDHs):** 0.7 (7)
- **Course Hours:** 8:00 a.m. – 4:00 p.m. (includes lunch)

**You Will Cover:**
- The Business Case for Alarm Management
- The Common Problems in Alarm Systems
- Alarm Philosophy
- Identification
- Rationalization
- Basic Alarm Design
- Advanced Alarm Design
- HMI Design for Alarms

**Classroom/Laboratory Exercises:**
- Alarm identification
- Alarm objective analysis
- Alarm classification
- Alarm prioritization
- Alarm monitoring

**Includes ISA Standards:**
- ANSI/ISA18.00.02 Management of Alarm Systems for the Process Industries

This course teaches the terminology used in Information Technology (IT) departments so that manufacturing and IT personnel can effectively work together on integration projects.

**You Will Be Able To:**
- Specify the requirements for an enterprise/control integration solution
- Identify the issues involved in the integration of logistics to manufacturing control
- Identify the business processes that need information from manufacturing systems
- Identify the manufacturing control processes that need information from business systems
- Explain the business drivers involved in integration
- Identify the detailed information associated with enterprise/control integration
- Discuss the roles of UML, XML, B2MML in vertical integration
- Apply the ISA95 object models

**Course Details:**
- **Length:** 1 day
- **Course No.:** IC55
- **Instructor:** John Bogdan
- **Date:** 4 August 2015
- **Registration:** www.isa.org/2015/IC39C/WWAC

**Instructor:** Paul Nowicki

John Bogdan has significant experience in alarm management, advanced process control, safety systems, and process optimization, as well as Six Sigma certification. His past work experience includes various positions with Invensys, ABB, and DuPont. He holds a B.S. & M.S. in Chemical Engineering from Washington University in St. Louis, MO. He is currently an independent consultant in alarm management and process control in Vienna, WV.

Paul Nowicki is the Global Information Design Engineer for Heat and Control Inc. With over 30 years of experience in manufacturing, process automation, and control systems, Paul has applied his problem solving capabilities to a wide variety of industrial challenges. Paul has worked in specialty chemical, pharmaceutical, food/beverage, paper, and consumer products facilities. He is an original architect of the ISA S88 Batch Control standards and recently chaired the update committee for Part 1. He has authored numerous papers with a wide range of topics from expert systems and enthalpy control strategies, to project management and team building. Paul often puts his process skills to work with home brewing.

**Space is limited—register early!**

To register or learn more, visit www.isa.org/WWAC/T2015

**Call +1 919-549-8411.**