2015 ISA 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, the WEF Automation and Info Tech Committee , Florida Water Environment Association, Instrumentation Testing Association, and ISA Tampa Bay Section

August 4, 2015 – Optional Short Course

Introduction to the Management of Alarm Systems

ISA Course IC39C

Course Description

Length: 1 day
Date: Tue, August 4, 2015
CEU Credits: 0.7
Course Hours: 8:00 a.m. – 4:00 p.m., includes lunch
Price: $575 for ISA Members, $720 List

Description:
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

You will cover:

- The Business Case for Alarm Management
- The Common Problems in Alarm Systems
- The Alarm Management Lifecycle
- Philosophy
- Identification
- Rationalization
- Basic Alarm Design
- Advanced Alarm Design
- HMI Design for Alarms
- Implementation
- Operation
- Maintenance
- Monitoring and Assessment

- Management of Change
- Audit
- Starting Points for Alarm Management
- Sustaining Alarm Management

Classroom/Laboratory Exercises:

- Alarm identification
- Alarm objective analysis
- Alarm classification
- Alarm prioritization
- Alarm monitoring

Recommended Resources:

- *Alarm Management: Seven Effective Methods for Optimum Performance, by Bill R. Hollifield and Eddie Habibi*

Includes ISA Standards:

- *ANSI/ISA18.00.02 Management of Alarm Systems for the Process Industries*

About the Instructor

John Bogdan has over 35 years of experience in the chemicals / petrochemicals, oil & gas, and power industries. His accomplishments in the areas of alarm management, control and safety systems, process optimization, advanced process control, and advanced regulatory control have included: Leading numerous alarm management projects for clients - conducting alarm system assessments, delivering alarm management training, developing alarm philosophies, and facilitating alarm rationalizations; Training and mentoring fellow members in an alarm management consulting team; and Designing the safety and control systems for a high-hazard, process expansion and control system retrofit project.

John is a voting member of the ISA-18.2 Committee on Management of Alarm Systems in the Process Industries and an ISA instructor in alarm management. He has written and presented papers on alarm management at the Texas A&M Instrumentation Symposium for the Process Industries, the IPS North American Client Conference, the Western Regional Gas Conference, the ISA Automation World 2010, and in Control Engineering magazine.

His past work experience includes various positions with Invensys, ABB, and DuPont. John 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 who is based out of Vienna, West Virginia, USA.

Course Schedule

DAY	Topics, Exercises, Etc.	Time
A.M.	Course Introductions	
	Pre Instructional Survey	0.25 hours
	Section 1 – Incident	0.25 hours
	Section 2 – Alarm Management Drivers	0.25 hours
	Section 3 – Common Alarm Problems	0.25 hours
	Section 4 – Lifecycle Overview	0.50 hours
	Section 5 – Alarm Philosophy	1.00 hours
	Section 6 – Alarm Identification	0.17 hours
	Section 7 – Alarm Rationalization	0.83 hours
P.M.	Section 8 - Incident	0.33 hours
	Section 9 – Detailed Design	0.50 hours
	Section 10 – Implementation	0.25 hours
	Section 11 - Operation	0.33 hours
	Section 12 - Maintenance	0.17 hours
	Section 13 – Monitoring and Assessment	0.50 hours
	Section 14 – Management of Change	0.25 hours
	Section 15 - Audit	0.17 hours
	Section 16 – Getting Started	0.25 hours
	Section 17 - Review	0.50 hours
	Post Instructional Survey	0.25 hours
	Final Course Evaluation	
		7 hours = 0.7 CEUs