ISA Wilmington Delaware
Section

The Sensor
January 2014

In this Issue

1. President's Message
2. Virtualization
3. The Evolution of the SIS
4. New ISA Cybersecurity Specialist Certification

Upcoming Events

Jan 30 – Joint IEEE/ISA Meeting

Feb 25 – Section Meeting at ACE

Mar 25 – WISA Technical Conference

Apr 22 - Shrimp Boil at ACE

Virtualization for Industrial Applications
Frank Hill

Thursday, January 30, 2014
5:30 PM

@ Del Tech Newark Campus

https://www.dtcc.edu/our-campuses/stanton/directions

SECTION OFFICERS 2013 - 2014

Jeff Arbogast
President
Air Liquide
jeffrey.arbogast@airliquide.com

Leata Mullen
Past-President
Applied Control Engineering
mullenL@ace-net.com

Tammy Mukoda
Treasurer
DuPont
tammy.l.mukoda-1@dupont.com

Lee Cline
Program Chair
Rumsey
lcline@rumsey.com

Matt Murphy
Newsletter Editor
DuPont
matthew.f.murphy@dupont.com

George Bentink
Education Chairman
Honors & Awards Chairman
gbentinck2@verizon.net

Nick Sands
Historian
DuPont
nicholas.p.sands@dupont.com

Cullen Langford
Webmaster
CullenL@aol.com

Bill Balascio
Past President
KBR
wbalascio@yahoo.com

Shawn Coughlan
Past President
Applied Control Engineering
coughlans@ace-net.com

Visit Wilmington ISA on the Web!

http://www.isa.org/community/wilmi

Join us for

Virtualization for Industrial Applications
Wilmington ISA Section Meeting

Frank Hill,
Industrial Automation Business Development, Stratus Technologies

Thursday, January 30 (5:30 PM)

Del Tech Newark Campus
Stanton, Delaware

One of the most discussed topics in the Process/Manufacturing sectors these days is Virtualization. Please join us for this informative meeting and find out what it is all about!

President's Message

Jeff Arbogast

We are planning an exciting program of events for the Wilmington ISA in 2014. On Thursday, January 30th, we will host our annual joint meeting with the IEEE Delaware Bay section at the DelTech Stanton Campus. I am particularly interested in the topic of virtualization in an industrial context. On Tuesday, March 25, 2014, we will hold our Wilmington ISA – Industrial Automation Show and Technical Conference at the Crowne Plaza Wilmington North in Claymont, DE (just off of I-95).

Interested in exhibiting?
See https://exhibitatwisa.eventbrite.com to learn more and reserve your space. 8'x10' floor spaces ($650) and 8' table-tops ($550) are available.

Interested in attending the technical conference?
See https://attendwisashow.eventbrite.com to learn more and register for the full-day technical conference ($70 for ISA members, $180 for non-members; including continental breakfast, lunch, and snacks). The agenda includes sessions on safety, reliability, and efficiency/economics along with a panel discussion on the "present and future of industrial automation in the Mid-Atlantic".

Interested in attending only the automation exhibition? You (and the public) may attend free-of-charge. Requested (but not mandatory) pre-registration at https://attendwisashow.eventbrite.com.

In early November, I attended ISA Automation Week (http://www.isaautomationweek.org/) in Nashville, TN. We had an excellent program of presentations applicable to throughout the automation profession. At the Council of Society Delegates (CSD) on November 4th, we considered several motions proposed by the ISA Governance Structure Task Force. Beginning in 2014, ISA will begin direct election of society officers, vice presidents, and executive board members through electronic balloting by individual members (not representative voting through the CSD). The CSD remains composed solely section representatives as the motion to include technical and industrial divisions in the CSD failed.

I encourage you to involve yourself in the various activities of the Wilmington Section. There are many ways to be an active member: participating in section meetings; encouraging others to join ISA and participate in our activities; mentoring others in the automation profession; and participating in section committees (participation in the organization of the Wilmington ISA Show and Technical Conference in March 2014 is a particularly urgent need that we will discuss after our meeting on January 30th).

Stay Active

Please contact me at jeffrey.arbogast@airliquide.com if you are interested in becoming more involved or if you have any questions, suggestions, concerns, or comments about the Wilmington Section and its activities.

Virtualization

Speaker: Frank Hill

Topic: Virtualization for Industrial Applications

Abstract:

Virtualization has dramatically changed how computer infrastructure is deployed, managed, and maintained. In the enterprise IT space virtualization is already used extensively. In 2013 over 65% of applications are being deployed on a virtualized infrastructure. Today, virtualization is rapidly being adopted for industrial automation. This session will describe server virtualization and the many benefits that industrial customers are getting. The software and hardware requirements will be covered including HA clustering and fault-tolerant servers. An example project will show how hardware sizing is done.

Biography:

Frank Hill is the Director of Manufacturing Business Development for Stratus Technologies. Mr. Hill has an extensive manufacturing industry background. Prior to joining Stratus, Mr. Hill led MES business development at Wyeth, Merck & Co., and AstraZeneca for Rockwell Automation. He has also worked in manufacturing leadership at Merck & Company. Mr. Hill has both a Bachelor of Science and a Master of Business Administration degree from Brigham Young University. He is a frequent speaker and commentator on technology-enabled manufacturing solutions.

ISA Cybersecurity Fundamentals Specialist

ISA has developed a knowledge-based certificate recognition program designed for professionals involved in IT and control system security roles that need to develop a command of industrial cybersecurity terminology and an understanding of the material embedded in the ANSI/ISA-62443 standards:

Certificates will be awarded to individuals that complet the two-day classroom course from ISA and pass the 75 question exam.

There are no required prerequisites for this program; however, it is beneficial if applicants possess:

- At least two years of experience in a process control environment
- Three to five years of experience in the IT/cybersecurity field in an industrial setting
- Some level of knowledge or exposure to the ANSI/ISA-62443 standards

Exam Areas Covered

- Understanding the Current Industrial Security Environment
- How Cyber Attacks Happen
- Creating a Security Program
- Risk Analysis
- Addressing Risk with Security Policy, Organization, and Awareness
- Addressing Risk with Selected Security Counter Measures
- Addressing Risk with Implementation Measures
- Monitoring and Improving the CSMS
- Designing/Validating Secure Systems

Wilmington ISA Technical Conference and Trade Show in March 2014

Mark you calendars and be sure to attend the Wilmington ISA Technical Conference and Trade Show on March 25, 2014 at the Wilmington North Crowne Plaza on Naamans Road. This is the largest automation trade show in the North East US. For the technical conference, if you would like to present a paper or know some one who has done interesting work in the automation and process control field that the would like to present, please submit an abstract to Jeff Arbogast as soon as possible.

THE EVOLUTION OF THE SIS IN PROCESS INDUSTRIES

Shawn Coughlan from ACE presented a paper titled "The Evolution of the SIS in Process Industries". Safety Instrumented Systems (SIS) have been an integral part of control system design from the beginning. Their design and implementation has changed

over the years as processes and control systems have become more complex. Today's safety systems can be as simple as an overflow pipe to manage the overfilling of a vessel, or as complex as an SIS that consists of triple redundant sensors, logic solvers, and actuators. This presentation discussed the evolution of safety systems with an emphasis on ISA84.

During the discussion, Coughlan punctuated his discussion of ISA84 requirements with examples of his firsthand experience and observations regarding the implementation of SIS systems in single and multi-site locations. The presentation illustrated how implementing an SIS utilizing the requirements in ISA84 has significantly reduced risk in the process industries.

Shawn Coughlan, P.E., FSE is a Principal and Project Manager with Applied Control Engineering, Inc. (ACE) in Newark, DE. Shawn earned his BS in Mechanical Engineering from Drexel University in 1983. In 2008, he earned his Functional Safety Engineer (FSE) certification from TÜV Rhineland. Early in his career, Shawn worked in the electric generation and the building products (fiberglass) industries as a direct employee. Shawn then spent 15 years with Sharp Design, Inc/Jacobs in southern New Jersey managing and implementing control system projects. He began his tenure at ACE in 2004. At ACE, Shawn leads process control and safety projects in the refining, chemical, pharmaceutical, and building products industries. He also works on safety systems in many industries and processes including reciprocal and centrifugal compressors, fired heaters, tank levels, process flow, reactors, sterilizers, bioreactors, filtration systems, columns, and vacuum systems. Shawn joined ACE's ownership group in 2012.

January Meeting is a production of :

**Rockwell
Panduit
Rumsey**

Question of the Month:

Look for the question of the month in next months issue.

**ISA - Wilmington Section
P O Box 9245
Newark, DE 19714-9254**

Upcoming Wilmington ISA Events

Jan 30– Joint IEEE/ISA Meeting (Note Date Change)

Feb 25 - Section Meeting at ACE

Mar 25 – ISA Technical and Vendor Show at Crowne Plaza

Apr 22 - WISA Shrimp Boil at ACE

2014 Ralph L. Moore Scholarship

The Wilmington ISA will be presenting the Ralph L. Moore Scholarship at the Shrimp Boil on Apr. 22. For information and to complete an application, see http://www.isa.org/community/wilmi.

Application Requirements:

- Applicant must be a high school senior
- Applicant must attend a 4-year college/ university or technical training school
- Applicant pursuing a technical or science degree will receive preferential treatment
- A Wilmington Section ISA member must sponsor the applicant

Mark your calendar

Wilmington ISA Automation Show

March 25, 2014
Crowne Plaza in Wilmington

Information and Registration

https://www.eventbrite.com

Encourage colleagues to join ISA!

Benefits include:

Membership in Local Section
Membership in 2 Divisions
Free access to ISA Standards
Free access to ISA Technical papers
Free access to ISA Webinars