



Wilmington Delaware Section

The Sensor February 2014

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Apr 22 – WISA Shrimp Boil at ACE

May 27 – Section Meeting at ACE

Cyber Security – Securing your Industrial Network by Sven Burkard

5:30 PM, Tuesday, February 25, 2014

@ Applied Control Engineering (ACE)

Newark, DE

(700 Creek View Road, Newark, Delaware 19711)

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Join us for

Cyber Security – Origins, Securing your Network and Best Practices

Wilmington ISA Section Meeting

Presented by: **Sven Burkard, Hirschmann**
(a Belden Company)

Tuesday, February 25, 2014 (5:30 PM)

Location: Applied Control Engineering
(ACE)

Newark, Delaware

RSVP to : Lee Cline lcline@rumsey.com
Directions: www.ace-net.com

Visit Wilmington ISA on the Web!

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

President's Message

Jeff Arbogast

We are in the midst of an exciting program of events for the Wilmington ISA in 2014. On Thursday, January 30th, we held our annual joint meeting with the IEEE Delaware Bay section at the DelTech Stanton Campus. Thank you to all who attended and special thanks to our table-top sponsors of the meeting: Hirshmann, Panduit, Rockwell Automation, Rumsey, and Stratus Technologies. Frank Hill of Stratus gave an interesting and informative talk on industrial application of virtualization. Chris McManes of IEEE-USA also presented on Engineers' Week 2014 (co-chaired on the national level by DuPont along with IEEE-USA). Please see www.discovere.org for more information.

On Tuesday, February 25, 2014, Sven Burkard of Hirschmann will present on "Cyber Security – Origins, Securing your Network, and Best Practices." On Tuesday, March 25, 2014, we will hold our Wilmington ISA Show and Technical Conference at the Crowne Plaza Wilmington North in Claymont, DE (just off of I-95). I hope that you will be able to join us for these events.

Interested in exhibiting? - Please go to <https://exhibitatwisa.eventbrite.com> to learn more and reserve your space. 8'x10' floor spaces (\$650) [only 3 of 19 spaces remain as of February 19th] and 8' table-tops (\$550) are available and allocated first come/first served.

Interested in attending? – Please go to <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 (with talks by Air Liquide, Control Station, Exida, Maverick Technologies, Meridium, and Proconex) along with a panel discussion on the "present and future of industrial automation in the Mid-Atlantic".

At ISA Automation Week 2013, one of our own section members – Danaca Jordan of Eastman Chemicals – was awarded the John McCamey Award which recognizes promising young authors who publish their first article in one of the Society's publications. Through her participation in the ISA Mentor Program, Danaca co-authored the article "[Enabling New Automation Engineers](#)" in the January/February 2013 issue of *InTech*. Please join me in congratulating Danaca.

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 February 25th).

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.

Cyber Security

Speaker: Sven Burkard, Industrial Networking Solution Manager, Hirschmann (a Belden Co.)

Topic: Cyber Security – Origins, Securing your Network, and Best Practices

Abstract:

The world's manufacturing, energy and transportation infrastructures are currently facing a serious security crisis. These critical systems are largely based on legacy SCADA and Industrial Control System (ICS) products and protocols. Many of these products are decades old and were never designed with security in mind. Increasingly, the damage to critical infrastructure from network incidents and cyber attacks is measured in the billions of dollars.

For mission-critical automation and control networks, what's needed are solutions that go beyond physical security and an air gap. Such solutions should include awareness training, best practices, and switch security as well as advanced firewalls and deep packet inspection (DPI). The discussion will cover

- Numerous real-world industrial security penetrations
- Security incident types (80% are unintentional and common to the majority of plants)
- Importance of cyber security and its cost implications
- Limitations of a firewall
- ANSI/ISA-99 and ISA/IEC 62443: dividing the control system into zones and conduits
- Specific solution technologies
- Best practices and achieving security with managed switches
- Managing and monitoring threats

Biography:

During his 16 years with Hirschmann, Sven has developed a knowledge of networking from the day that the company pioneered industrial Ethernet through the introduction of the world's first hardened DIN rail-mounted hub. Hirschmann has maintained its status as the industrial networking leader as technologies have advanced. In his current role Sven provides network/application consultation and design as well as training and troubleshooting.

ISA Cybersecurity Fundamentals Specialist

WISA January Meeting Notes
January 30, 2014

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 complete 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 your 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 someone who has done interesting work in the automation and process control field that they would like to present, please submit an abstract to Jeff Arbogast as soon as possible.

Engineers Week

Prior to the technical presentation, Chris McManes of IEEE-USA provided an information updated regarding Engineers' Week 2014 activities. Engineers' Week 2014 is co-sponsored by IEEE-USA and DuPont. Engineers' Week runs from February 16-22, The Engineers' Week 2014 activities are designed to:

- Celebrate how engineers make a difference in our world
- Increase public dialogue about the need for engineers
- Bring engineering to life for kids, educators, and parents

More than a week-long event, Engineers Week is a year-round commitment to making a difference.

Virtualization for Industrial Applications

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 were deployed on a virtualized infrastructure.

Frank Hill, Director of Manufacturing Business Development for Stratus Technologies, provided an in depth presentation describing the advantages of virtualization and the benefits gained by customers that have deployed virtual projects. In addition to the savings from reduced capital cost, reduced floor space, reduced energy cost, the life cycle benefits from simplifying the maintenance and upgrade activities were explained.

Mr. Hill presented a sample project to visualize how the initial installation is improved and how future upgrades and enhancements are easily deployed in a virtual environment. He also supplied statistics to illustrate the ubiquity of virtualization in the Enterprise IT world and quantify the recent growth in the usage of virtualization in industrial applications.

2013—2014 Program Updates

February Meeting is a production of :

Hirschmann (a Belden Co.)

Question of the Month:

In the enterprise IT space, approximately what % of applications were deployed on a virtualization infrastructure.

Send responses to murphymatt@verizon.net

ISA - Wilmington Section
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Newark, DE 19714-9254

Upcoming Wilmington ISA Events

Feb 25 - Section Meeting at ACE

Mar 25 – ISA Technical and Vendor Show at Crowne Plaza

Apr 22 - WISA Shrimp Boil at ACE

May 27 - Section Meeting 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://exhibitatwisa.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