

2013 Communications Division Spring Symposium

21—23 May 2013 • The Melrose Hotel • Washington DC USA

Industry Experts to converge on Washington DC!

A "Who's Who" of industrial communications experts will be presenting at the 2013 ISA Communications Division Symposium in Washington, D.C. including: noted subject matter experts Peter Fuhr & Wayne Manges both of Oak Ridge National Laboratory, Herman Storey, George Studor, Dr. Penny Chen of Yokogawa Corporation of America and many more.

In addition, ISA100 Wireless Committee will meet so not only will you

be able to learn from these industry leaders as part of the program sessions but you will have the opportunity to chat with experts one-on-one during the breaks and networking sessions over the three days of the event.

Information on the event including program and registration forms can be found from the Division home page at www.isa.org/commdiv. Be sure to check regularly for updates including when each of these individuals

will be making presentations.

Make a difference in your career, at the ISA 2013 Communications Division Symposium by joining us in the nation's capital for **THE** industrial communications event of 2013!

See you in Washington, D.C. on 21-23 May 2013!

Sample Passive Wireless Sensor Workshop Topics:

- SAW/BAW Sensor Technology Breakthroughs
- Passive Sensors for Near Field Communications
- Magnetic & Acoustic PWS thru Steel
- Various Industry & Government User Needs
- 1-on-1 Scheduled User - Developer discussions and much more!

Communication Division session topics include:

- Industrial Wireless
- Supervisory Control & Data Acquisition
- Wireless Backhaul networks
- Asset Management
- Safety Buses
- Speed Apps (30 apps in 60 minutes)
- Industrial Ethernet and
- Cybersecurity.

All Access Pass

Register for the Communications Division Symposium and gain access not only the outstanding technical event of the year but also the Passive Wireless Workshop, ISA100 Standards Meetings, and so much more!

Monday May 20

ISA100 Standards & Practices Committee meetings begin on Monday and will continue through Wednesday.

Tuesday May 21

Introduction to Industrial Wireless communications and the ISA100.11a implementation.

Keynote presentation by Wayne Manges to close the day.

Day 1 of the Passive Wireless Sensors Workshop.

Wednesday May 22

Communications Division Wireless Communications track. Keynote: Solar Storms: Implications for Communications and The Grid,

Passive Wireless Sensors Workshop Day 2.

Thursday May 23

Communications Division Industrial Communications track and Joint Sensors Database Working Group - JANNAF/NASA/ISA

21 May Communications Division Short Course: ISA100 Course

This course focuses on gaining a fundamental understanding of the organizations, technologies, terminology, and steps required in developing a ISA100.11a wireless standard compliant product. Students will become familiar with the market applicability of the current ISA100.11a standard as well as the basic concepts and new terminology. Participants will learn key strategies necessary in developing compliant products that will include understanding significant functional components as well as compliance testing requirements. Additionally, students will gain knowledge of how to work with the Wireless Compliance Institute and the Wireless Toolkit for testing of compliant products.

Upon completion of the course you will be understand: What is the uniqueness of ISA100.11a Wireless Standard? How to develop ISA100.11a Wireless Standard Compliant Product? You will be able to:

- Recognize the marketability of the ISA100 Family of Standards
- Explain the operation of the standard's technology and architecture
- Recognize the functional wireless devices within the standard
- Identify the ISO layers as applied to the standard
- Express the universal applicability of the standard
- Explain how to make a wireless product secure within the standard
- Recognize co-existence issues and methods for handling within the standard
- Begin implementing products consistent with the ISA100.11a Standard
- Identify how to work with the Wireless Compliance
- Institute for product compliance

You will cover: Introduction to the ISA100.11a Standard: Market Overview and Positioning, Family of Standards, Universality, Co-Existence, Architecture

23 May: Communications Division Symposium

In addition to the above keynotes, the excitement continues on Thursday with presentation sessions on:

- Cybersecurity
- SCADA & Remote I/O
- Asset Management and
- Wired and wireless Safety bus applications.

Keynotes:

Wednesday Morning:

Recent Breakthroughs and Implications in Passive Wireless SAW Sensing, Don Malocha, University of Central Florida

Solar Storms: Implications for Communications and The Grid, John Greenhill - Dept of Energy, DHS

Thursday Morning:

NIST Keynote: Future Cyber-Physical Systems - Sivaraj Shyam-Sunder

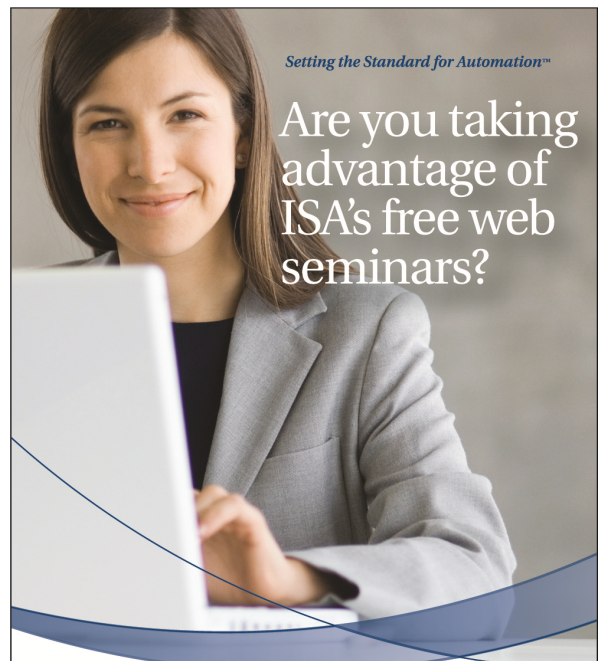
NEON – the Earth Observation Network, Dr. Wee

22 May: “Wireless Wednesday” Communications Division Symposium

The tradition continues, with “Wireless Wednesday” focusing on the burgeoning growth of wireless technology in the industrial automation sector.

In addition to the above keynotes, the following sessions will also including exciting speakers including Herman Storey, and the exciting 30 wireless applications in 60 minutes!


- Industrial Ethernet / Industrial Internet of Things (IIoT)
- Standards and
- Spectrum Management



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21 May: PWST Passive Wireless Sensor Technology Workshop

Building on the success of the 2011 & 2012 workshop this year's event will explore the current state of technology of passive wireless sensor tags (PWST) and their practical applications. As a quick background, a PWST has no battery, no expensive electronics at the sensor site and (of course) no need for a wired connection between the sensor and the data acquisition system. In a manner somewhat similar to a classic passive RFID tag, the PWST responds to a wireless interrogation signal from a reader, but unlike RFID it provides real-time sensor data along with its unique tag id, stored information and range. PWSTs can be manufactured in high volume – even incorporating direct write fabrication - resulting in an inexpensive device. With its considerable read-range (separation distance between reader and device), compatibility with extreme environments, small size, autonomy of sensor installation, and “no onboard power” capabilities, PWSTs have a wider application arena than traditional wireless sensors. The workshop will explore these and other motivations for using PWSTs in a variety of fields, present and demonstrate current technologies, explore current and future applications of PWSTs in various industries (commercial buildings, industrial settings, transportation, aerospace, etc.). A key component of this two-day PWST Workshop is to facilitate discussions between end users and developers/suppliers on application areas of mutual interest.

The following session topics will be on Tuesday:

- PWS Visionary Presentations
- Key User-Developers
- PWS Users

Including presentations by luminaries including Tim McIntyre and George Studor as well as several government agencies located in the greater DC area.

22 May: PWST Passive Wireless Sensor Technology Workshop

The program continues on Wednesday with presentations on:

- SAW sensors,
- Near Field Communication Sensors,
- PWS Physical Switch Sensors,
- Ultrasound Communication & Power Advanced Acoustics Concepts,
- Self-Tuning RFID, and

concluding with 1-on-1 Scheduled User - Developer discussions (Developers Signup for 15 minute blocks of time on User Schedules)

Is it time to join a committee?

Serving on a committee is a great way to help our Section and to sharpen your leadership skills. We have over a dozen committees, from education to exhibits to treasurer, and more. Surely there's a good fit for you!

Just let any of our leaders know the committee in which you are interested. Volunteering on a committee is a great way to learn new skills while you network with other automation professionals.

Our Section benefits,
and you do, too!



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Register for this event

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for the downloadable PDF form or the on-line
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