



Wilmington Section ISA
Box 9254
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Wilmington Section ISA

ISA—The Instrumentation, Systems, and Automation Society



Check out our web page at <http://www.isa.org/~wilmdel/>

Wilmington ISA Section Meeting

**Joe Valencia - Account Manager
AutomaTech, Inc.**

**"Increasing 'Overall Equipment Effectiveness' By Decreasing
Equipment Downtime"**

**5:30 pm Tuesday, Nov. 27, 2001
Del. Tech & Community College
Stanton, DE**

**Take I-95 to Rte.7 North (exit 4B),
to Churchmans Rd.,
use the main entrance.**

Please RSVP to Steve Nann at:

**nann@ellipsys.com
610-328-6400**

ISA SENSOR

Published By
WILMINGTON SECTION ISA

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The Sensor

November 2001

**Next Event : Section Meeting
Tues. Nov. 27th, 2001
Del Tech, Stanton DE
Speaker:
Joe Valencia- AutomaTech, Inc.
Title:
Increasing "Overall Equipment
Effectiveness" By Decreasing
Equipment Downtime**

Joe Valencia is currently an Account Manager with AutomaTech. He received a B.S. degree in Electrical Engineering from Drexel University in June of 1993. He was an Electrical Design Engineer for Techneglas in Wilkes Barre, PA which manufactured television faceplates. There he gained experience with Robotics, Machine-Vision, and HMI/SCADA software. Reduction of downtime was a major accomplishment. In March of 1996, Joe joined Leading Edge Sales as an Application Engineering Manager, whose sales and support team handled the Intellution HMI/SCADA software. He was also responsible for building the Certified Intellution Training Center in the Mid-Atlantic region. After 4 years, Joe moved into sales for AutomaTech.

Abstract:
Ask yourself: how many times was your manufacturing line down last month? How much revenue did you lose last year because of equipment and line downtime? Which lines are causing problems, and what are the primary reasons these lines are going down? How much could you add to your bottom line by reducing downtime by only 10%?

FUTUREEVENT

**Jan. 15th, 2002
Joint ISA – IEEE Dinner
University of Delaware**

**"Dynamic Simulation of a Steam
Generation Process with Co-
generation"**

**Paul S. Fruehauf – Applied Control
Engineering, Inc**

**John V. Hobgood - Air Products and
Chemicals, Inc.**

Every manufacturer experiences downtime, but unfortunately not every manufacturer knows the answers to these questions. This presentation will discuss measuring the "Overall Equipment Effectiveness" (OEE) of manufacturing and process equipment and discuss ways to increase it, resulting in more product at a lower cost and without expensive capital projects.

Directions to Del Tech :

From Wilmington:
Take Interstate 95 South. Take Exit 4 North toward Christiana Hospital. Stay to the right and yield onto Churchmans Road. The next right takes you to the main entrance to the campus.

From Newark:
I-95 North to Exit 4-B, Route 7 "Churchmans Crossing". Continue over the highway overpass to Churchmans Road, Exit 166. Stay in left lane when ramp divides; turn left at traffic light (Churchmans Road). Turn left at next light onto entrance road to College. Almost immediately, turn right on a short, curvy road to stop sign; then turn left.

**Oct. 23,2001 Section Meeting
Speaker:
Richard Dunn - DuPont
Company**

Rick Dunn, a Senior Consulting Engineer with DuPont, highlighted recent changes in US and international standards and guidelines associated with the design and implementation of Safety Instrumented Systems. Rick is actively involved in the development of standards; he is a member of ISA's SP84 Committee, which developed the U.S. standard for Safety Instrumented Systems and is also co-chair of the ISA SP91 committee. In addition, he is a member of the IEC61508 and IEC61511 committees, which are developing and maintaining those two international standards.

After brining the members up-to-speed with a brief history of the standards and guidelines which focused on the definitive AICHE book Guidelines for Safe Automation of Chemical Processes,

Rick touched upon the impact of OSHA CFR PART 1910.119 and the development of the concept of Recognized and Generally Accepted Good Engineering Practice (RAGAGEP). With OSHA's new guidelines, they began fining the manufacturers for "non-compliance". Those events gave impetus to the creation of ANSI/ISA S91.01-1995. A important result of the S91 standard was it exempts basic process control systems from compliance with CFR 1910.119. Rick continued to highlight the history of safety interlock standards with ANSI/ISA

S84.01-1996, draft TR84.01 (Safety Integrity Levels), IEC 61508 (issued in 200), IEC 61511 (due next year), and IEC 62061. After gaining perspective on the existing standards, Rick delved into important details of each standard, the differences between standards and the impact it has on the engineer and the operation.

Rick finally addressed a current issues: interlock testing, third party certification, and the need for ANSI/ISA S84.01 to be updated. Should the US wait, expecting to adopt IEC 61511 or update S84.01? Should ISA issue a transition document to ease move toward IEC 61511? Rick recommends to use the "Guide for Safe Automation" to achieve functional safety and indicated that ANSI/ISA 84.01 is currently accepted as US national consensus standard and is considered a basis for RAGAGEP by OSHA. In summary, the industry trend is towards globalization of the safety standards, which will eventually lead to replacement of S84.01 by IEC 61511.

Thank you, Rick for your excellent presentation that clarified many issues associated with Safety Instrumented Systems standards.

Table top Demo

The Wilmington Section of ISA extends its appreciation to Intellution for its sponsorship at our October meeting. Eric Harrah, and Applications Engineer with Intellution demonstrated their iFix SCADA product. Eric also had information regarding other Intellution automation products, include their new iHistorian process data historian, and iBatch.

Submitted by Steve Nann, Program Chairperson.

Introducing Steven Nann – 2001-2002 Programs Chair.

Allow me to introduce myself - my name is Steve Nann and I recently joined ISA in the Wilmington Section. Currently, I am a Senior Consultant with Ellipsys Inc. – a systems integrator specializing in automation and application of data analysis and historians to the process industry. I am working hard to provide our Section with great speakers to keep us informed of current trends in our industry. When developing topics for the meetings, I try to balance the three pillars of ISA - Instruments, Sensors, and Automation.

Though I am new to ISA and the section, I have worked with many of you during the last decade as a DuPont employee at several sites around the US and in Singapore. My background is in Mechanical Engineering focusing on process control and automation.

President's Message:

Fellow Wilmington ISA members,

I would like to say a few words of thanks to the section leaders and supporters for their contributions to our section activities in 3Q2001. We are also looking for more volunteers to handle more tasks for the section, including the editor for the section newsletter and people to help the section to organize the coming Section's Exhibit & Training Seminars. If you can help, please contact me at :

Kong.V.Nguyen@usa.dupont.com.

I want to thank Jay Kelly for organizing and executing yet another successful golf outing

this year. There were 83 participants, nearly 20% more than last year. I hope that those attended enjoyed the outing this year with beautiful weather condition. My thanks go to the Event Committee members and the supports from Applied Control Engineering, Rose Enclosures, Tri-State Technical Sales, Royal Instruments, Instrumentation.COM, Wilmington Valve & Fitting, and Ives.

Steve Nann, our new Section Program/Arrangement Chair, has put a lot of effort in searching for interesting section meeting topics for the year and inviting professional speakers from different companies to share their knowledge and experience with our members. Thanks for the job well done.

Please show your support and appreciation by putting section meeting attendance on your "to-do" priority list and try to participate in as many section activities as possible. If you have a topic that you would like to covered in the section meeting, please contact Steve at Nann@ellipsys.com.

After serving as our section WebMaster for three years and newsletter editor for nearly a year, Greg McCoy will resign his positions this December due to personal doctor's advice. I want to thank Greg for his excellent contributions. The section is looking for a volunteer to handle the newsletter tasks. Work may take a few hours per month and requires no experience. Please contact Greg at: Greg.McCoy@aspentech.com if you can help.

Kong Nguyen

Farewell Message:

from Greg McCoy

It is with sincere regret to announce that due to medical reasons, I am compelled to resign as Web Editor and Newsletter Editor. The November 2001 issue of the Sensor will be the last I will compose, and my resignation will be effective 1 Dec 2001.

I am a senior member of ISA and took over the Web Editor role from Joseph Smith in December 1998. Building on the foundation established by Joe, our web-pages have become a model of a typical ISA section's website according to District 2 leadership. At more than one District 2 Leadership Workshop, Nancy Ferguson (ISA National's web-master) made references to our web site and even conducted an online tutorial, using our web pages. We are also one of the first ISA sections to provide web access to their section's newsletter.

In December 2000, I also assumed the role of editor of the Sensor. This role requires coordination with the Program Chairperson, the Publications Chair, and other special event chairpersons such as the Scholarship Chair, Shrimp Boil, Golf Outing, and the Automation Show Chairpeople.

I thank the section officers, leaders (past & present), and section members for their support while I served in these roles. It takes the talent and efforts of many individuals to provide the membership a comprehensive set of activities and programs each year. I was just one of those many.

A volunteer is needed to assume

the newsletter editor role. I'd be glad to orient my replacement to the tasks involved, similar to how Joe Smith helped me in transitioning the Web Editor activities.

I still plan to attend as many events as possible.

STANDARDS REPORT

by Cullen Langford

The big news this year is that any ISA member can call up any standard over the net in "view only mode" to read what it says.

And, for \$25/year, ("only pennies a day"), you can have access to all the standards in download, pdf format. This is a wonderful resource one should not ignore.

The Standards by themselves are enough reason to become and stay a member, especially now they are much more available. This was a brave move by ISA to risk immediate income in the hope that in the future the standards will be seen to have more immediate value to the members and result in better support to the Society. Products are built to standards most of us do not even know exist. Yet another ballot in IEC on Fieldbus is due this year. This one is to "end the fighting," if you believe this you have not followed the history of this topic. The S-20 tabsheets are updated and available.

ISA is not the only source of standards of interest to instrument people. The American Society of Mechanical Engineers, ASME, has just issued a complete update of MFC-8M, on the subject of impulse piping between an inline head flow sensor and the secondary instruments.

And just printed, a brand new standard on variable area flowmeters, MFC-18M. I have personal knowledge and was involved in both of these.

Scholarship Applications:

Applications are now being accepted for the **Ralph L. Moore Scholarship**. Any senior high school student who is attending a trade school or college/university is eligible. A member of the Wilmington ISA Section must sponsor the applicant. An application is inserted in this issue. Or contact Dan Roarty, Scholarship Chairperson at: droarty@tycoint.com or 302-292-8866.

New Wilmington ISA Members

We welcome the new members listed below:

Mr Lawrence Brown
10 Rockford mews Ct
Wilmington, DE 19806

Mr Richard R. Dunn
Dupont Engineering
Brandywine Bldg 3458
1007 market St
Wilmington, DE 19898

Submitted by Bob Crowder,
Membership Chairperson

Also, Inserted in this issue is the 50 year Recognition letter to the Wilmington ISA Section from the ISA President, Bob Bailliet

Calendar of Events - 2002

- January 15, ISA-IEEE Joint Mtg.
University of DE
- February 11, Exec. Committee Mtg
Applied Control Engineering
- February 25, Section Mtg.
Del Tech, Stanton Campus
- March 26, Plant Tour - TBD
- April 9, Exec. Committee Mtg.
Applied Control Engineering
- April 30, Shrimp Boil
Wilmington Valve & Fitting Co.
- June 25, Family Picnic
Our Lady of Grace