



# Wilmington Delaware Section

# The Sensor

## January 2013

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### Upcoming Events

- Jan 14                      Understanding Hybrid Cars  
                                 - by Barbara Gonzales
- Feb 26                      Section Meeting at ACE

### Hybrid Cars

Tom Gage and Dick Johnson

**Monday, January 14, 2013**

**6:30 PM**

**@ Delmarva Conference Center**

**Christiana, DE**

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Join us for

## Hybrid Cars

Joint ISA/IEEE Delaware Valley Meeting

Tom Gage and Dick Johnson

**Monday, January 14 (6:30 PM)**

**Delmarva Conference Center**

North Wakefield Drive, Christiana, Delaware

- x Overview of power system
- x System, engine/generator, regenerative braking, transmission system, etc.
- x Differences between power systems of different vehicles.
- x Efficiency comparisons, battery management systems, charging systems
- x Capacity, time to charge, ability to be a flexible load for the utility, V2G, adoption rates, impact to the grid, upgrade considerations

Visit Wilmington ISA on the Web!

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

# President's Message

Jeff Arbogast

Happy New Year! This means that it is time for our annual WISA/IEEE joint meeting on the exciting topic of Hybrid Cars. This meeting was organized by the [Delaware Bay IEEE](#), specifically Steve Steffel and Barbara Gonzales of Delmarva Power. [Tom Gage](#), founder and CEO of California-based EV Grid and former CEO of AC Propulsion (a leading provider of electric vehicle technology) will give the main presentation. This presentation will include a range of information about hybrid vehicles, from an overview of the power system to batteries to vehicle-to-grid initiatives. Dick Johnson will also talk about an E2V pilot project going on in our area. **Please note** that this joint meeting on Hybrid Cars will be held on a **different date and time** than regular WISA meetings and at a **different location** than past WISA/IEEE joint meetings. The meeting will be held on **Monday, January 14<sup>th</sup>** at the **Delmarva Power Conference Center** in Newark, DE with a light dinner at **6:30 PM** followed by the presentation beginning at **7:15 PM**. The joint meeting has had a full house in recent years and we look forward to a good turnout again this year. **Please RSVP to [Lee Cline](#).**

**Please encourage your friends and colleagues to join ISA.** [Member benefits](#) include: access to view ISA standards, access to over 40 technical webinars, access to download over 2500 technical papers presented at ISA conferences and symposia over the years, a subscription to InTech (the magazine of ISA), and online access to ISA Transactions (our scientific journal). ISA members can also apply their full membership fee toward the purchase of an ISA standard (to download or print). **You can even get [rewards](#) for recruiting new members.**

Please make it your New Year's resolution to get more involved in Wilmington ISA. We are planning a strong program for the Winter and Spring months. I look forward to seeing you at our meetings and events.

# Stay Active

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 (organization of the Fall 2013 Wilmington ISA Show is a particular need). Please contact Jeff at [jeffrey.arbogast@airliquide.com](mailto: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.

## Wonders of Hybrid Vehicles

### Hybrid Vehicles

Speaker: Tom Gage and Dick Johnson

You will not want to miss this comprehensive program on hybrid cars. We have a meeting set up for Monday, Jan 14, 2013, light dinner starting at 6:30 pm, program at 7:15

**Topic:** Hybrid Cars

**Program Organizers:** Steve Steffel and Barbara Gonzales, Delmarva

**Speakers:** Tom Gage is an industry expert on EVs from California will give the main presentation. Dick Johnson will talk about the E2V pilot project going on in our area.

Delmarva Power currently uses hybrid vehicles including Ford Escape and other vendors, and has a several years of experience with performance of the fleet. In addition, we plan to speak to the technical details of the power train.

- x Overview of power system
- x System, engine/generator, regenerative braking, transmission system, etc.
- x Differences between power systems of different vehicles.
- x Efficiency comparisons, battery management systems, charging systems
- x Capacity, time to charge, ability to be a flexible load for the utility, V2G, adoption rates, impact to the grid, upgrade considerations

# Driving Directions to the January IEEE/ISA Meeting

WISA October Meeting Notes  
October 23, 2012

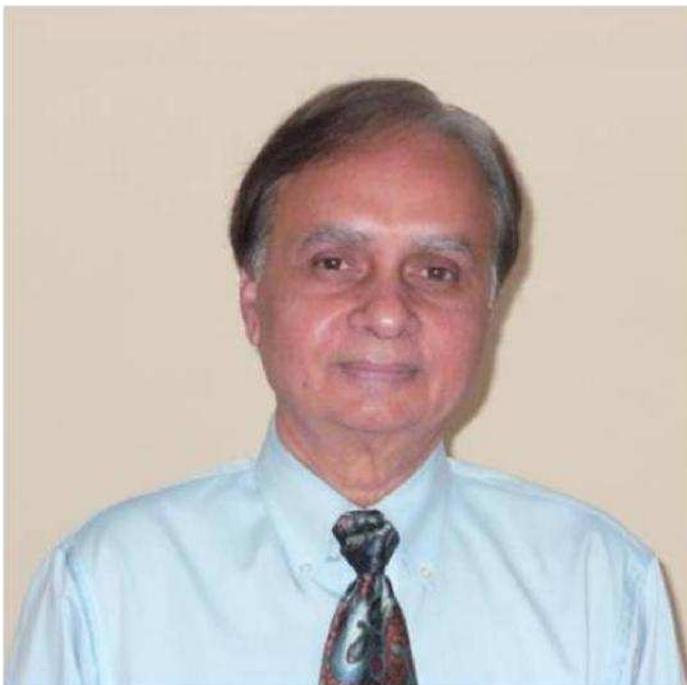
Location: **Delmarva Conference Center**

From I-95:

South on I-95 to the route 273 exit 3, then follow split on exit 3 (3B) south toward Dover, get in the far right lane to exit immediately onto Chapman road. Follow Chapman Road past exits left into University Plaza, past Lawrence Drive, and prepare to make a left onto North Wakefield Drive. Follow North Wakefield (through what looks like a country road) until the road appears to split right and left, and some commercial office buildings show up. Follow the right split. Almost immediately after, South Wakefield turns into Leatherman's Park, and the conference center is just beyond. There are some tennis courts on the right and the conference center is beyond them on the left. There is parking to the right, and further up to the left.

## Acknowledgements

He is one of our own. Congratulations to P.C. Gopalratnam who was elected as a **fellow** of the American Institute of Chemical Engineers (AIChE), which is the highest grade of membership by the institutes board of directors. Gopal is a 32 year employee at Invista (and their predecessor DuPont) and has used his experience and passion for chemistry to train and develop early career engineers.



By Sparky Workman

On Tuesday, October 23, twenty-five members of the Wilmington ISA section and guest joined Tim Cole from ACE for a discussion regarding Control Systems Retrofits. Tim Cole lead the discussion by presenting an assortment of experiences that lead to success, as well as experiences that lead to strengthening the up front preparation for future projects.

Following the short presentation, a forum allowed all members to provide input into the discussion. Some of the topics touched on were:

- ÿ Justification for upgrades
- ÿ Value Proposition
- ÿ Incorporating latest vs. recent technology
- ÿ Networking options and how information from control system should flow into other enterprise systems
- ÿ PDAs, cloud, and other options

There are many technical capabilities that allow advanced process automation that may not be politically feasible. Security and corporate policies need to be considered when developing the scope for the retrofit project

## ISA 2012 Accomplishments: Excerpts from Robert E. Lindeman end of year address

While some of the initiatives to reinvigorate ISA's growth are early in their implementation, indications of forward momentum are remarkable and numerous. When comparing 2012 to-date with the same period in 2011:

- x ISA membership is up nearly 17 percent.
- x ISA's open enrollment training registrations—which include classroom courses; webinars; and online, instructor-assisted courses—are up 31 percent, and are their highest in the past five years.
- x New applications for Certified Automation Professional® (CAP®) certification testing has increased 19 percent, and renewing CAP applications are up 11 percent. Results in both areas are the highest since 2007.
- x New applications for Certified Control Systems Technician® (CCST®) certification testing have increased 10 percent.

## 2012—2013 Program Updates

January Meeting is a production of :

**Delmarva Power**

### Upcoming Wilmington ISA Events

**January 24, 2013 Meeting—Joint meeting with IEEE**  
**Please not the changed date**

**February 26, 2013 Meeting**

**March 26, 2013 Meeting**

**April 23, 2013 - Shrimp Boil at ACE**

**May 28, 2013 Meeting**

**June 25, 2013 WISA Annual Picnic**

Question of the Month:

How much have CCST applications increased in the past 12 months?

Send response to [murphymatt@verizon.net](mailto:murphymatt@verizon.net) to win your prize.

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**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

Mark your calendar

**Wilmington ISA Automation  
Show**

November 2013