



**INCOSE** Chesapeake Chapter  
International Council on Systems Engineering



Power & Energy Society®

*cordially invites you to a Joint*

# **Monthly Dinner and Lecture**

**Wednesday, 20 June 2012 (6:00 – 8:00 pm)**

## ***The Role of Distributed Power Systems in the U.S. Electricity Sector***

**Bradley Schoener, Ph.D.; Energy Program Director - MITRE Corporation**

**Location: Applied Physics Laboratory, Johns Hopkins University  
11100 Johns Hopkins Rd Laurel MD 20723 (Main Entrance – Lobby 1)**

**Presentation:** The US power sector is undergoing the largest overhaul in its history. Despite significant public and private investment in large-scale renewable-energy installations and enthusiasm for an electric vehicle fleet, the U.S. grid infrastructure looks very similar to its 19th century design, unsuited for 21st century supplies and demands. The integration of information technology into the power system will also make the electricity supply more vulnerable to network-wide cyber-attacks or infiltration by adversaries. Policymakers have shown increased interest in Distributed Power Systems (DPS), a combination of distributed generation sources and grid storage. DPS technologies include rooftop solar-cell systems, and combined heat and power applications. They also incorporate distributed energy storage systems, including advanced batteries and vehicle to-grid systems. By using localized sources of generation, electricity consumers in the commercial and residential sectors have an opportunity to bypass the centralized system of generation and dispatch and to meet their own electricity needs and play a role in stabilizing and supporting the grid. DPS also has the potential to decrease electricity-supply vulnerability through the “islanding” of generation and distribution.



**Speaker:** Bradley Schoener, Ph.D. is the Energy Program Director for The MITRE Corporation. In this capacity provides executive leadership, managerial direction, and innovation over substantive classified and unclassified work and activities for at the Department of Energy as well as other Federal Agencies in the energy domain that strengthen integrity and improve stability of the national economic infrastructure. Dr. Schoener is responsible for MITRE sponsored research in the Energy Domain. Serving as Principal Investigator for a portfolio of research projects, Dr. Schoener guides research in energy modeling, emerging technologies and energy, natural resources, and economic infrastructure. Dr. Schoener also has taught in Johns Hopkins University's MBA program at since 1995. In this capacity, he has instructed courses, guided curriculum development of all concentration areas, and shaped the program design.

**Delicious friendly networking buffet dinner:** Soft flour tortillas and corn tortillas; Seasoned ground beef; Sour cream guacamole assorted salsas; and Black Beans and Rice with garden salad dressing, rolls and butter, dessert, coffee and iced tea.

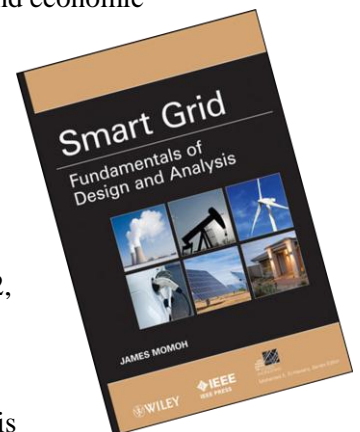
**Dinner Cost:** Guests: **\$25**; INCOSE members: **\$20** if payment is received by June 15<sup>th</sup>, 2012, **\$25** afterwards. To pay by credit card or PayPal, visit our registration webpage for details

<http://www.incose-cc.org/registration/>

**Presentation ONLY: FREE at 7pm in Parsons Auditorium**

**But please register for Lecture Only Option:** There could be a big turnout for this event, for planning purposes please RSVP via [our registration webpage](http://www.incose-cc.org/registration/) even if you don't plan on joining us for dinner.

**Corporate Sponsor:** We wish to thank the Applied Physics Laboratory for supporting the systems engineering profession through use of their facilities.



**Door Prize for this month**  
**Smart Grid: Fundamentals of**  
**Design and Analysis by James**  
**Momoh**

# Our Evening's Agenda

<b>5:45 – 6:00 pm</b>	<b>Arrival and Socializing</b>
<b>6:00 – 6:45 pm</b>	<b>Dinner</b>
<b>6:45 – 6:50 pm</b>	<b>Meet</b>
<b>6:50 – 6:55 pm</b>	<b>Chapter Business Items</b>
<b>7:00 – 8:00 pm</b>	<b>Lecture</b>

## Directions

**JHU APL**, 11100 Johns Hopkins Road, Laurel, Maryland 20723, Phone (443) 778-5000

See APL's Visitor Guide for more: <http://www.jhuapl.edu/aboutapl/visitor/default.asp>

### From Washington DC and Capital Beltway (I-495):

Take I-95 North toward Baltimore, 10 miles to Columbia exit (MD Route 32 West),  
Go 2.5 miles to the Washington DC exit (US Route 29 South).

Go 1.5 miles south and take Johns Hopkins Road exit (bear right at the top of the hill).

### Or from the Capital Beltway (I-495):

Take US Route 29 North (Colesville Road) 10 miles and follow signs for the turn onto Johns Hopkins Road.

### From Baltimore and Baltimore Beltway (I-695):

Take I-95 South toward Washington DC.

Go 13 miles and take Columbia exit (MD Route 32 West).

Go 2.5 miles and take Washington DC exit (US Route 29 South).

Go 1.5 miles south and take Johns Hopkins Road exit (bear right at the top of the hill).

### Once you're on Johns Hopkins Road:

APL is a half-mile west of US Route 29 on your right side. Go past the first entrance, continuing past the pond and take the next right turn onto a tree-lined lane. Park in the visitor's lot on your left side. Enter at the main entrance marked **Building 1** (flagpoles and traffic circle in front).

Dinner is held in the Howard County Room #3 located at the end of the cafeteria hallway to the right of the entryway just before the Guard's desk.

