



INCOSE Chesapeake Chapter

International Council on Systems Engineering

E-Newsletter

March 2012

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21 March 2012 (6:00 – 8:00 pm)

Satellite Observations and Climate

Modeling: What They Can and Cannot Reveal About Future Climate



Speaker: Albert Arking,
Department of Earth and
Planetary Sciences,
Johns Hopkins
University

Presentation: The earth has undergone significant warming over the past century, with an average increase in global temperature of about 0.8° C (or 1.5° Fahrenheit). There is no question that man's activities—from burning of fossil fuels to changes in land use and industrial production—have contributed significantly to the warming. With that information, one might expect a consensus on what the world needs to do to avoid a change in climate that might be undesirable. But the difficulty in arriving at a consensus is due both to limitations in the science—long-term natural variations are not understood well enough—and

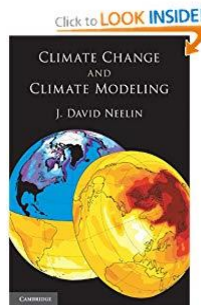
a conflict in values—socio-economic welfare versus maintaining the natural habitat. Science and technology has solved major problems that faced the world in the 20th century. With the right approach, it could do so again in the present century.

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

Meal: Corned Beef and Cabbage, Parsley potatoes, Green beans, served with garden salad, dressing, rolls and butter, dessert, including a small Fruit Plate, coffee, iced tea.

[>>>Download the Meeting Flyer Here<<](#)

Reservations: Purchase a ticket to this event by Credit card via PayPal, go to our [Registration Page](#)



Come out for a chance to win the door prize "[Climate Change and Climate Modeling](#)" By J. David Neelin

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This is the monthly newsletter for INCOSE Chesapeake, a local chapter of INCOSE International. We are a not-for-profit organization dedicated to providing a forum for professionals practicing the art and science of Systems Engineering in the Northern & Central Maryland & Southern Pennsylvania area.



Mark your Calendars with these upcoming events:

Wednesday, April 18, 2012
[Life after the Northeast Blackout of 2003](#)

Michael J. Kormos, senior vice president – Operations of PJM Interconnection

Presentation ONLY: FREE

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Saturday, 31 March 2012

System Architecture and the Systems Engineer



Instructor:
Richard
Taylor-
Evolver

Presentation: The seminar addresses the three system development life cycle technical processes for which the systems architect is primarily responsible. Within each of these processes, the critical decisions that must be made and the artifacts that record those decisions are presented. Those processes are: (1) *Stakeholder Requirements Definition* and (2) *The Requirements Analysis* (3) *The Architectural Design*.

Location: [Applied Physics Laboratory, Johns Hopkins University](#); 11100 Johns Hopkins Rd Laurel MD 20723 (Kossiakoff Center)

Cost: \$30 includes light continental breakfast.

[>>Download the Tutorial Flyer Here<<](#)

Registration: Paying online with PayPal, Go to our [Registration Page](#).

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Presidents POV

Everyone a Systems Engineer ... or at least a Systems Thinker?



My first job out of college was as a Mechanical Engineer. Although I was doing finite element analysis to calculate stresses for state of the art electromagnetic devices, I was told that “every engineer is a marketer”. Our mindset was to be such that we were all to be thinking about new business and growth opportunities for the company no matter what our role, be it technical or otherwise. I thought about my charge back then to think as a marketer

March 19-22, 2012:

[Conference on Systems Engineering Research \(CSER\)](#) in St. Louis

April 30-May 02, 2012:

[SETE/APCOSE 2012](#)

May 14-16, 2012: [1st Annual Systems Engineering in Washington DC](#)

[\(SEDC 2012\)](#)

July 9 -12, 2012: [22nd Annual](#)

[INCOSE International Symposium](#) in Rome

The Chesapeake Chapter is always looking for volunteers to speak at our upcoming meetings! Please contact our 2012 Programs Director, [Mr. Erik DeVito](#), if you would like the opportunity to speak or can recommend someone.

The Chesapeake Chapter of INCOSE is proud to recognize the following organizations for sponsoring our endeavors to expanding the understanding and appreciation of Systems Engineering in the local area:

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and want to draw an analogy to today where I believe that, in the context of the highly complex technical environment in which we function, everyone should be thinking as a systems engineer. Should everyone, be they a software developer, a database engineer, a tester, or even a program manager, function to some degree or at least be thinking as a systems engineer? Complex systems, system of systems, the cloud, spins, sprints, sustainability and more – the quagmire of interdependencies at times seems mind boggling. For example, if I deploy or upgrade this software or hardware, what is the effect, if any, on some downstream or interconnected system? Will I negatively impact performance or bring down a critical system? What systems touch or interact with what I'm doing and how? (The old N-squared Chart for you dyed-in-the-wool systems engineers.) So, I return to my "every engineer is a marketer" analogy. In order to function effectively in the midst of the complexities and interdependencies of today's technical world, should we adopt the slogan "everyone is a systems thinker"?

Regards, *Dr. Don York, CC President*, don.york@incose.org

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Announcements

Get involved with STEM

Anne Arundel County is holding their Public School Science & Engineering fair on Saturday, March 3rd 8-12:30. We are planning to offer judging & offering awards in our technical areas. Please contact Don Gantzer, Outreach Coordinator, if interested 410-956-1562 [dongantzer@comcast.net]. Other counties are also doing this. Please contact us if interested in others – dates will vary.

[>>Read more>>](#)

Feature Article from our Blog

Solving Systems Engineering problems on the back of a napkin

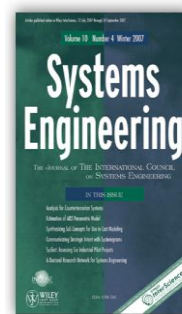
By *Paul Martin*



UMBC Training Centers | CENTER FOR SYSTEMS ENGINEERING TRAINING

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REGISTER TODAY!

The advertisement for the UMBC Center for Systems Engineering Training features a photograph of a modern building with a curved facade. The text is overlaid on a dark background, with a prominent red banner at the bottom containing the text "REGISTER TODAY!".

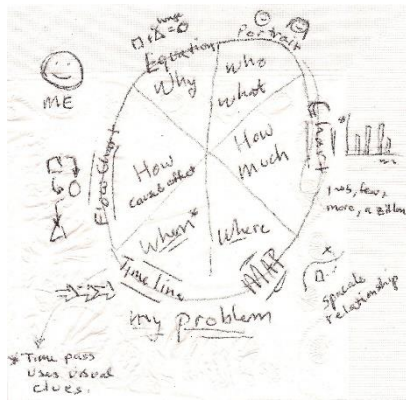
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The other day I was able to go to a lecture by [Dan Roam](#), the author of the wildly popular book, "[The Back of the Napkin: Solving Problems and Selling Ideas with Pictures.](#)" His topic was, "What to do when words don't work" and his seemingly outrageous claim the, "You can solve our problem with pictures." What problems? Any problem. And what pictures? Well you need just a few.

[>>>Read more at our blog>>](#)

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Did You Miss Last Month?

[BMD System Performance Assessment is a Wicked Problem](#)



Smithson shows the Functional View of the BMDS

The February 15, 2012 meeting of the INCOSE Chesapeake Chapter included a guest speaker, Clyde Smithson of JHU/APL, who began by defining the terms "System," "System of Systems," and "Complex System." The BMDS has characteristics of both a system of systems as well as complex systems on both a technical and a social level. The MDA considers the BMDS to be neither a system of systems nor a family of systems, but rather a complex, constantly evolving "integrated system."

Performing a comprehensive end-to-end performance assessment of the BMDS is an extremely difficult challenge.

[>>>Check out the complete write-up on the event as well as Clyde's presentation.>>](#)

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Newest Chapter Members

- Laura Cosentino *JHU/Applied Physics Laboratory*
- William Cumby III *Northrop Grumman*
- Brendan Gilligan *UMBC*
- Kirk Johnson *Concurrent Technologies Corporation (CTC)*
- Jessie Ryan *Northrop Grumman*

With Connect you can also download INSIGHT Dec 2011, Vol 14 - Issue 4 *Special Feature: Systems Engineering Research Challenges in French Universities*



Click on image above and Log-In today.

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- Nazanin Sharifi *Northrop Grumman/UMBC*

We welcome our latest new members. We look forward to seeing you at our meetings and tutorials.

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This Newsletter is to serve our members and is open to all for contributions. Do you have an interesting idea for an article? A review of a new book related to engineering? [Let us know.](#) We'd love to hear about. It may wind up in a future issue of our Newsletter.

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Keep up with the latest news and events. Find out about our new Board of Directors. Explore our extensive library of previous lectures from our Monthly Dinner Meetings. Learn of the Benefits of Joining INCOSE. Check out Systems Engineering education in the local area. All this and more awaits you at our [INCOSE Chesapeake Chapter Website.](#)

For any comments or suggestions about this newsletter please e-mail our [President, Don York](#) or our [Communications Officer, Paul Martin](#). We value your feedback.

Board of Director Officers, 2012

- President: Dr. Don York
- Past President: Dr. John Lewis
- President Elect: Dr. William Ewald
- Treasurer: Mr. David Alldredge
- Secretary: Mr. Mark Kaczmarek

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- Communications: Mr. Paul Martin
- Programs: Mr. Erik DeVito
- Membership Committee: Ms. Janet Deery

**Please use the Forward email link below so we can invite your friends to join our mailing list.
Thanks in advance.**

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