



International Council on Systems Engineering
Greater Philadelphia Chapter Meeting (Non-members welcome to attend)

Guest Speaker: Dr. Steven Dam – The Future of Systems Engineering and Innoslate

DATE: Wednesday Evening, November 13, 2019

Agenda: **6:00-6:30:** Arrival and Check-In
 6:30-6:45: Welcome to Drexel, Introductions (Including Student Groups) and Chapter Business
 6:45-7:00: Break
 7:00-8:15: Dr. S. Dam’s Presentation on SE Future and Innoslate
 8:15-8:30: Closing Remarks

Location:

Drexel University
Hagerty Library, Room L33
33rd & Market Streets (Located on the South Side of Market Street)

RESERVATIONS

RSVP by E-mail to one of the Contacts below no later than November 7th:

INCOSE Members and Nonmembers: Rick Grandrino rag28@drexel.edu
Drexel University Students Contact: Rick Grandrino rag28@drexel.edu
University of Penn Students Contact: Dr. Pete Scott scottp@seas.upenn.edu
Temple University Students Contact: Dr. Julie Drzymalski tuj24882@temple.edu

Meal Choices: Boxed sandwiches available, Served with Potato Chips, Whole Fruit and a Cookie. Indicate your selection when making Reservation

- 1) Smoked Turkey and Swiss Cheese
- 2) Ham and Swiss Cheese
- 3) Roasted Vegetables and Cheese

Cost: \$10 for INCOSE Members and Nonmembers; Students are Free (Just present your student ID)

Deadline for Reservations and Meal Choices is Thursday, November 7th



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Abstracts and Bios

Bio: Steven H. Dam, Ph.D., ESEP

Dr. Dam is the President and Founder of the Systems and Proposal Engineering Company (dba SPEC Innovations), based in Manassas, VA. He has been involved with structured analysis, software development, and system engineering for over 40 years. He participated in the development of C4ISR Architecture Framework (now DoDAF), the Business Enterprise Architecture (BEA), and Net-Centric Enterprise Services (NCES) architecture. He currently is applying system-engineering techniques to various DoD and DOE projects. Dr. Dam is the author of three systems engineering-based books: "Essential LML," "DoD Architecture Framework 2.0: A Guide to Applying System Engineering to Develop Integrated, Executable Architectures;" and "Proposal Engineering: A Guide to Developing Winning, Cost-Effective Proposals." He has also written a new book: "Real MBSE" slated for release in December 2019. Dr. Dam has a BS degree in Physics from George Mason University and a PhD. in Physics from the University of South Carolina. Dr. Dam is also an INCOSE certified Expert Systems Engineering Professional (ESEP).

Title: The Future of Systems Engineering and Innoslate®

Abstract: Currently, SysML has been identified as the "Industry Standard" for systems engineering. One of the primary rationales for SysML is to aid in the communication with software developers. But at the same time, interest in UML by the software developers has significantly waned since 2004 to the point where Computer Science programs in many universities have essentially stopped teaching it. The software engineering community has moved on to Agile or Scaled Agile Framework methodologies. These methodologies begin with functional requirements.

In a Spring 2018 Systems Engineering Forum, held by The Aerospace Corporation, one questioner stated, "SysML is the current systems engineering technique, but 10 years from now it's likely to be something else." That begs the question, "What is the future of systems engineering?" This presentation includes the new INCOSE Future of Systems Engineering (FuSE) initiative and how Innoslate® meets many of the future needs identified, today. It will address questions such as how to deal with artificial intelligence in our design activities, which require dynamic, non-deterministic and evolutionary approaches, and how to ensure that cybersecurity and assurance are integral to the system, not "bolt on?" The presentation will also discuss another INCOSE initiative, the Value Proposition Initiative. A recent return on investment (ROI) analysis for systems engineering and MBSE is presented.



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Meeting Location Directions and Parking:

There is a train station at 30th and Market Streets, a subway station at 34th and Market, and a trolley station at 33rd and Market. The Drexel Hagerty Library is located on the corner of 33rd and Market Streets (on the South Side of Market Street).

For those driving, you can park at the Drexel Parking Garage (Building 16 shown on map below); entrance located on Ludlow Street between 33rd and 34th Streets – Cost \$10

To get to the Hagerty Library from the parking garage, exit the parking garage at 34th and Market Streets. Walk 1 block East to the corner of 33rd and Market Streets where the Library is located (Building 15 Shown on map below). Enter the Library and ask the attendant directions to Room L33 which is located on the lower level. If you get lost on campus and / or need directions, call Rick Grandrino (856-723-1799)

