



2017 – BEACON ~ Medtronic Seminar #1



“Model-based Systems Engineering”

Presented by: George M. Bollas, PhD, UTC-IASE/CBE University of Connecticut

Systems Engineering (SE) is an interdisciplinary approach and means to enable the realization of successful systems. In the medical device world, SE ensures the input of the end user (the medical professional) and the end beneficiary (the patient) is taken into consideration when making the highest quality, useful and value-based device to restore health and extend life. With modern cyber-physical systems becoming “smarter” and more complex, there is a need for continuous monitoring, deep and cross-disciplinary understanding, and real time optimization. Model-based systems engineering, in the form of an integrated discipline that looks at the high-level system requirements and dives deep into their modeling, optimization, control and health monitoring, offers standardization to how system engineers can deploy well-established and novel technologies and methodologies to a wide variety of systems. In this presentation, systems of a variety of industries will be briefly presented, in an effort to showcase how the challenges, needs and potential benefits from application of model-based systems engineering are similar across domains and industries. This will enable a more detailed on smart manufacturing and model-based systems engineering as a platform for efficiency, yield and carbon footprint improvements therein.

Dr. George Bollas is a Chemical Engineer, PhD, Associate Professor with the Chemical & Biomolecular Department of the University of Connecticut. He is also the Director of the United Technologies Corporation Institute of Advanced Systems Engineering at UConn. His current research portfolio in the field of process systems engineering includes model-based analyses and optimization of power systems; robust system scale-up; model-based supervisory control of smart buildings; model-based fault detection and isolation of aircraft environmental control systems; and deterministic model reduction and hybrid modeling.

Wednesday, April 26, 2017

Networking Reception 5:30-6:30 PM Presentation 6:30-7:30 PM
Medtronic (formerly Covidien), 60 Middletown Avenue, North Haven, CT
Directions and parking information will be sent with each RSVP.

NO CHARGE TO ATTEND, BUT RSVP REQUIRED BY April 20th – No Exceptions!!

RSVP to: 860-547-1995 or toll free: 877-723-2266

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