# NAVAL SCIENCE AND TECHNOLOGY

# ENGR 3109: Navy STEM Professional Development Seminar

Wednesday, March 28, 2018 5:00 pm to 6:00 pm UConn, Storrs Campus – Laurel Hall 205

# "NAVY SCIENCE AND TECHNOLOGY: THE RACE TO...<u>UNDERSEA SUPERIORITY</u>"

#### **UNDERSEA WARFIGHTING DEVELOPMENT CENTER**

The UWDC develops and executes a coherent tactical development program to further develop and validate undersea warfare tactical procedures, advance undersea vehicle concepts and identify undersea tactical systems capability gaps.

## DR. ROBERT LAFRENIERE, DIRECTOR OF TACTICAL ANALYSIS GROUP

### **UNDERSEA WARFIGHTING DEVELOPMENT CENTER**

Dr. Robert LaFreniere joined the Undersea Warfare Development Center (UWDC) Tactical Analysis Group (TAG) in October 2015. Dr. LaFreniere's service as a Government Civilian spans 30 years and a variety of rewarding assignments at the Naval Undersea Warfare Center (NUWC) including: Structural Analysis, Director of Materials Science Laboratory, Periscope Chief Engineer, Program Manager for CLUSTER BIGHT and Program Manager for TOPGATE. Following to a move to NAVSEA 05N in 2012, he served as the Imaging and Electronic Warfare (I&EW) Technical Warrant Holder (TWH). As the Director of the UWDC TAG, Dr. LaFreniere is responsible for the technical content of submarine operations manuals as well as the development of new tactics and the introduction of the guidance for the use of new technologies into the submarine. Dr. LaFreniere holds a Bachelor's degree in mechanical Engineering from Rutgers University, a Master's degree in Mechanical Engineering from the University of Connecticut, and a Ph.D. in Applied Mechanics from the University of Connecticut.

### ROBERT MUSHEN, ONRG SCIENCE ADVISOR UNDERSEA WARFIGHTING DEVELOPMENT CENTER

Mr. Robert Mushen is currently serving as the Office of Naval Research Global (ONRG) Science Advisor to the (UWDC), in Groton, CT. In this role, he works with ONR, Academia, Industry and the Navy Research and Development Enterprise to implement UWDC Command Guidance and Priorities and apply Naval Science and Technology to UWDC goals. From 1995-2017 Mr. Mushen served as a scientist and engineering manager at NUWC, in Newport RI. His work at NUWC began with several environmental remediation projects resulting from EPA "Superfund" clean-up activities. He worked with the MK 48 torpedo in-service engineering community where he transitioned to the role of Project Manager, leading various teams of engineers and scientists. In 2006 Mr. Mushen served as Branch Head of the Heavyweight Torpedo Fleet Engineering Branch. In 2010 he served as Head of the Torpedo Production Branch, and in 2012 he was named In-Service Engineering Agent for the Heavyweight Torpedo program at NUWC. More recently, Mr. Mushen spent 5 years leading the Heavyweight Torpedo Armaments Cooperative Project with Australia. Mr. Mushen holds a B.S. in Environmental Science from the University of Massachusetts, Amherst. He is Level II certified at the Defense Acquisition University in Systems Planning, Research, Development and Engineering.





# Upcoming Distinguished Seminars

Priya Hicks Program Lead, Independent Research & Development GENERAL DYNAMICS ELECTRIC BOAT April 4th @ 5pm Laurel Hall 205

Art Colling Chief Engineer, Maritime Systems, ISR & Space Systems UNITED TECHNOLOGIES AEROSPACE SYSTEMS (UTAS) April 11th @ 5pm Laurel Hall 205

 Valery Godinez-<u>Azcuaga</u>
Vice President,
Engineering & Product
Development
MISTRAS GROUP, INC.
April 18th @ 5pm
Laurel Hall 205

WEBSITE: Coming Soon!

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