

NAVAL SCIENCE AND TECHNOLOGY

ENGR 3109: Navy STEM Professional Development Seminar

Wednesday, November 6, 2019

5:00 pm to 6:00 pm

UConn, ITE 336

“DID YOU HEAR THAT?!”

DESCRIPTION: The core enabling technology in many U.S. Navy systems is the conversion of underwater sound to a detectable electrical signal or generation of sound from an electrical power source. Basic sensing (receiver/passive) and source (transmitter/active) system architectures are reviewed. Examples of passive acoustic marine mammal signatures, active detection of dolphins and behavioral response acoustic source systems are presented.

BRUCE ABRAHAM, VICE PRESIDENT & CHIEF TECHNOLOGY OFFICER

GENERAL DYNAMICS APPLIED PHYSICAL SCIENCES CORP.
GROTON, CT

Bruce Abraham grew up in Old Lyme, CT, in a family of engineers where everyone (mom too) eventually earned an engineering degree. During undergraduate studies in Mechanical and Materials Engineering at UCONN he interned at the Naval Undersea Warfare Center (NUWC) in New London, CT. During 1990-2000 he worked at NUWC in New London and then Middletown, RI, in the Submarine Sonar Department supporting research and development in SONAR towed arrays focusing on flow noise sources and mitigation. He developed custom vector hydrophone sensors for towed arrays and modeling and tested their acoustic and flow noise performance. From 2000 to 2003 he performed structural acoustics and full-scale ship hydrodynamics modeling and testing. Since 2003 he has worked as an engineer at Applied Physical Sciences Corporation working on a wide variety of in-air and underwater systems including towed array vibration modeling and measurement, vector sensor design and fabrication, UUV passive and active acoustic sensor arrays, localization arrays, large low-frequency acoustic sources, lithium ion battery systems and special UUV payloads.

Upcoming Distinguished Seminars



David Bamford
NUWC

NOVEMBER 13TH @ 5PM
URI – Avedisian Hall 240



Steve Link
Director, Seabed
Systems Group
THAYERMAHAN

NOVEMBER 20TH @ 5PM
UConn – ITE 336



Lauren Marshall
Ph.D. Graduate Student
UConn
NUWC

DECEMBER 4TH @ 5PM
URI – Avedisian Hall 240

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