NPS Defense Energy Program Presents:

DEFENSE ENERGY SEMINAR

Research at the Special Technologies Laboratory: Highlights from High Explosive Signatures and UAV Detection

Tuesday, October 29, 2024 | 12:00–12:50 pm PST | ME Auditorium, Bldg #255

Dr. Thomas Myers

Program Manager for Proliferation Detection Nevada National Security Sites | Special Technologies Laboratory

Abstract

The Nevada Nuclear Security Sites Special Technologies Laboratory (NNSS-STL) performs innovative research and development for the Department of Energy across a wide range of missions including stockpile stewardship, physical security and nonproliferation. NNSS-STL is focused on development of special-purpose devices, measurement instruments, and analysis methods tailored to the needs of the end-user. Dr. Myers will speak to the capabilities of the laboratory as well as provide recent highlights. Recent progress towards characterizing explosive test articles from their optical and RF signals will be presented along with the development of an optical tracking technique for UAVs with inexpensive hardware and lightweight algorithms.

Biography

Dr. Thomas W. Myers is a program manager at the Nevada Nuclear Security Sites Special Technologies Laboratory within the proliferation detection group. Prior to joining STL, he was a staff scientist in the Lawrence Livermore National Laboratory and Los Alamos National Laboratory high explosives research groups. His current research focuses on the detection and characterization of optical and radio frequency signals from above and below ground high explosive events.



