

Spectrum Lecture Series 2016-2017

The Measurement Science of Trace Contraband Detection

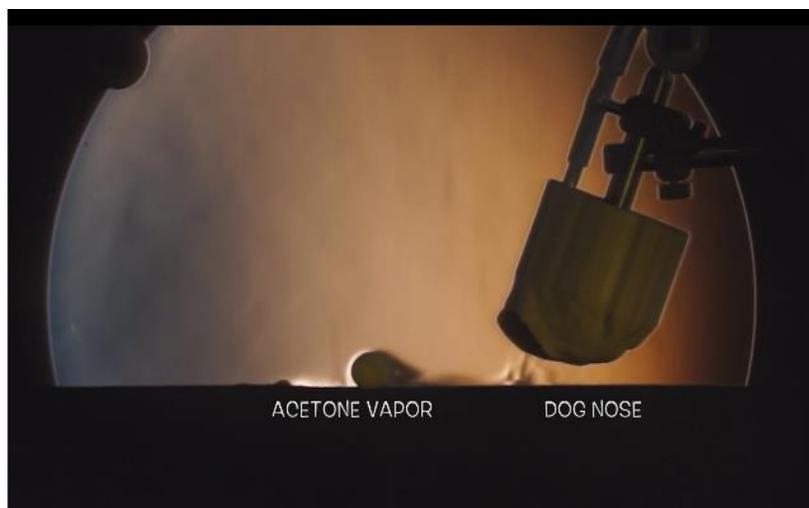
Wednesday, February 15th, 12:00

PM

Montgomery College
Germantown Campus

BE151

Matthew Staymates
Mechanical Engineer
National Institute of Standards
and Technology(NIST)
Gaithersburg, MD



The detection of trace explosives and narcotics has become a growing area of research and development within the scientific community, owing its status to the ever-increasing threat of terrorist activities around the world. In practical application, these detection methods are required to be very sensitive, as their effective implementation requires the detection of very small amounts of material. This presentation will provide an overview of a large research program at NIST that focuses on the measurement challenges associated with trace contraband detection and forensic science.

Biography: Matthew Staymates is a mechanical engineer and fluid dynamicist, and has been working at NIST for over 10 years. He received his BS in Mechanical Engineering from Penn State University in 2004. Following this, he continued his studies at Penn State, receiving an MS in Mechanical Engineering in 2006. After finishing his work at Penn State, he joined the Surface and Trace Analysis Group at NIST. His research interests during his time at NIST have focused on improving techniques for the evaluation of trace explosives and narcotic detection, using the methods and tools of fluid dynamics.

As always, Spectrum Lectures are appropriate for a general audience and admission is free. No tickets are required. For questions or to request accommodations for physical disability, please contact Rick Pires at Richard.Pires@montgomerycollege.edu or 240-567-7798. More information about Spectrum Lectures can be found at: <http://cms.montgomerycollege.edu/edu/departments.aspx?id=10883>

Sponsored by GT-STEP