Contact Information
Jimmie Oxley
Chemistry Department
University of Rhode Island
Kingston, RI 02881
joxley@chm.uri.edu

Stability, Compatibility and Surveillance, 2 days 1 instructor

OVERALL OBJECTIVES: The objective is that the students understand factors affecting thermal stability of energetic materials and issues related to surveillance. Students should leave the course knowing how to calculate critical temperature and understand its significance for storage life of a munition. Importance of scaled-up studies will be stressed.

LEARNING OBJECTIVES:

Each student should know how to:

- determine compatibility;
- quantify decomposition kinetics;
- use kinetics to determine critical temperature;
- relate critical temperature to shelf life;
- assess compatibility;
- recognize specific issues with certain energetics.

IMMEDIATE BENEFITS:

Each student who completes this course will gain an understanding of experimental techniques available for characterization thermal stability of explosive and transfer this knowledge to storage and surveillance of energetic materials. Scientist and engineers will be able to interpret lab data and use it to predict life-times

INSTRUCTORS:

The instructor for this course will be Dr. Jimmie Oxley, HERE, LLC, and Professor of Chemistry, University of Rhode Island. Dr. Oxley has 20 years experience in energetic materials: characterization, hazard analysis, homemade explosives, detection and terrorist opportunities.