

# 16th International Detonation Symposium

# **Topical Areas for Abstract Submissions**

Extended abstracts for oral and poster presentations are solicited for consideration for the 16<sup>th</sup> International Detonation Symposium. The International Detonation Symposium is devoted to the physics, chemistry, and detonation of explosives. The technical program will focus on the six topical areas listed below.

You will be asked to select at least one, and up to two, of these six primary topical areas when submitting your extended abstract. **Note** that any sub-topics listed below are provided as examples only, to further define the primary topic areas. You will not be asked to select any sub-topics.

### Remember:

- Abstracts will be competitively evaluated for their application to the science of explosives and detonation.
- Studies directly related to specific weapons systems are **NOT** appropriate for this symposium.

# **Topical Areas**

### ➤ Detonation and Sub-Detonative Phenomena

- Unreacted & reacted equations of state of explosives
- Detonation reaction mechanisms and kinetics
- Detonation transients, stability, and failure
- Shock to detonation transition
- Deflagration to detonation transition
- Safety-related properties and responses
- Sub-detonative responses

### ➤ Modeling

- Initiation and detonation modeling
- Hazards response modeling
- ° Sub-detonative response modeling

### ➤ Molecular and Meso-Scale Effects

- ° Chemical structure-detonation performance relationships
- Chemistry at high temperature and pressure
- ° Micro-structural effects

### New / Non-Traditional Materials

- ° Nano/reactive materials
- Composite and non-ideal explosives

## ➤ Advanced and novel experimental techniques

# ➤ Thermal and Mechanical Properties

- ° Static and dynamic mechanical properties
- ° Thermal and mechanical damage effects