

The US National Committee on Theoretical and Applied Mechanics is sponsoring the **16th US National Congress on Theoretical and Applied Mechanics (USNCTAM)\*** on **June 27 - July 2, 2010** at The Pennsylvania State University in University Park, PA.

#### 4-7 Structural Health Monitoring

##### Description

Structural Health Monitoring (SHM) is the continuous or regular monitoring of the condition of a structure or system using built-in or autonomous sensory systems, and any resultant intervention to preserve structural integrity. SHM enables condition-based maintenance and effective enterprise management and logistics. Advancement of SHM capabilities will improve public safety, reduce maintenance costs, improve readiness, and foster a paradigm shift in design. Both SHM systems/technologies and their applications are multidisciplinary. This symposium provides a forum to share advances in SHM technologies, modeling damage progression in materials and structures, prognostics, and their application throughout the aerospace, mechanical, and civil engineering fields.

##### Organizers

Cliff J. Lissenden, Penn State University  
lissenden@psu.edu

Douglas E. Adams, Purdue University  
deadams@purdue.edu

Authors should submit a draft 2-page abstract on the USNCTAM2010 website  
<http://www.asmeconferences.org/USNCTAM2010>  
Abstract Deadline: October 15, 2009

##### Objectives

Authors and presenters are invited to participate in this event to expand international cooperation, understanding and promotion of efforts and disciplines in the area of Structural Health Monitoring. Dissemination of knowledge by presenting research results, new developments, and novel concepts in Structural Health Monitoring will serve as the foundation upon which the conference program of this area will be developed.

# PENNSSTATE



\*The Congress, held every four years, is the premier American forum for networking and technical information exchange for researchers and students interested in mechanics. The Congress agenda consists of a welcome reception, plenary sessions, five days of up to 18 parallel technical sessions, lunches, and a banquet. Technical sessions will cover numerous topics on solid mechanics, fluid mechanics, dynamics, and bio-mechanics. Up to 1000 papers by colleagues from the United States and abroad are expected.