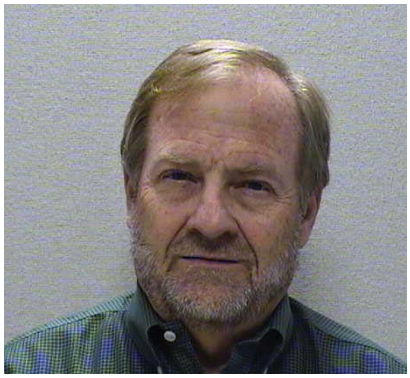
SAND2010-8455P



BIOGRAPHY

# John L. Mitchiner

*Senior Manager for Computational Science Research & Development*
*Sandia National Laboratories*

*University of California, Davis MS, Engineering*

Dr. John L. Mitchiner is the Senior Manager for the Computational Sciences Research and Development Group (CS R&D) at Sandia National Laboratories. John currently leads a group of 100 people, consisting primarily of physicists, chemists, cognitive scientists, and computer scientists with strong computational skills. His group develops computational tools to run on High Performance Computing platforms. Dr. Mitchiner received his BS/MS in Mechanical Engineering from the University of California, Davis, specializing in Systems and Control Theory. He received his PhD in Engineering Science from the Thayer School of Engineering, Dartmouth College with an emphasis in policy modeling using System Dynamics.

He is leading the modeling and simulation component of Sandia's climate change program. The goal is to develop tools and techniques to understand the national security aspects of climate change with a focus on the impacts of climate change on humans and their societies. This includes high fidelity regional modeling, uncertainty quantification, risk assessment/management and data gathering and analysis. He is also supporting the Greenhouse Gas Information System program development, a multi-lab initiative.

Previously, he was the Senior Manager for Sandia's Systems Engineering and Analysis Business Area (SEA BA), consisting primarily of modelers, infrastructure domain experts, and computer scientists with a budget of $40M. He also led Sandia's Critical Infrastructure Protection Program for Sandia's Department of Homeland Security and Defense Strategic Management Unit. He led the program in modeling, simulating and analyzing critical infrastructures, their interdependencies, system complexities, and consequences of disruptions. The primary sponsor is the Department of Homeland Security. The program is focused on developing a knowledge-based data and information environment that uses modeling and simulation tools for quantitative analysis of critical infrastructure disruptions.

Dr. Mitchiner served as a committee member on the NRC panel that wrote the report "Modeling and Simulation Enhancements for 21st Century Manufacturing and Acquisition". His research interests include modeling and simulation of complex systems, knowledge management, and artificial intelligence.

My interests in this meeting are to understand GM's interests and needs around information and cognitive sciences. This includes data intensive computing, human computer interface design, data mining, visualization, and automated concept formation from a corpus of text documents.

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