15th Annual George Mason University Conference on Atmospheric Transport and Dispersion Modeling

Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM)-Sponsored Session

JULY 12, 2011

AGENDA

1:30PM – 3:00PM	The OFCM report, *Federal Research and Development Needs and Priorities for Atmospheric Transport and Diffusion Modeling,* identified six pillars of research needs for Federal agencies and the research community to achieve "Quantifying the Uncertainty" of modeling efforts. Some measures have been taken to address these needs to enhance our capabilities and understanding of dispersion. Dispersion of hazards in multiple time and space domains was a key concern of the Joint Action Group developing the report. Session presentations will focus on the principal dispersion modeling employed in emergency management and dispersion assessments. The presenters will also provide their perspectives on current and proposed science-based, dispersion model improvements. Specifically, the presentations will address: • Recent experiences in applying dispersion models in operational scenarios • Lessons learned and related issues • Recent and proposed science-based, model improvements, such as (1) using observations to initialize the models, (2) coupling of ocean and atmospheric models, (3) using high resolution models and model ensembles, and (4) using new boundary layer parameterizations • Model evaluation procedures and measures • Ideas for improved interagency coordination A panel discussion will follow on the science issues seen as barriers to improved modeling capability. **Moderator: Dr. Walter D. Bach, Jr., Consulting Meteorologist, Chapel Hill, NC** **Panelists:** • **Dr. Paula Davidson**, DOC, NOAA, National Weather Service, Office of Science & Technology, Silver Spring, MD • **Mr. Mark Miller**, DOC, NOAA, National Ocean Service, Office of Response & Restoration, Emergency Response Division, Seattle, WA • **Mr. Jeffrey McQueen**, DOC, NOAA, National Weather Service, National Centers for Environmental Prediction, Environmental Modeling Center, Camp Springs, MD • **Dr. John Hannan**, DoD, Defense Threat Reduction Agency, Information & Analysis Division, Warning & Reporting Information & Analysis, Fort Belvoir, VA • **Dr. Gayle Sugiyama**, DOE, Lawrence Livermore National Laboratory (LLNL), Interagency Modeling and Atmospheric Assessment Center/National Atmospheric Release Advisory Center, Livermore, CA INVITED