

**EPA Workshop on Modeling & Reservoir Simulation for Geologic Carbon Storage
Workshop Agenda – Day One**

PRESENTATION	SPEAKER
DAY 1 – April 6, 2005	
Introductory Session Moderator: Robin Petrusak, ICF Consulting	
• Welcome and Workshop Goals	Anhar Karimjee, EPA Office of Air and Radiation
• EPA Geologic Carbon Storage Program	Anhar Karimjee, EPA Office of Air and Radiation
• Overview of DOE Research Goals for Modeling for Carbon Geologic Storage	Jay Braitsch, US DOE
• Update on BP-IEA-EPRI Wellbore Integrity Workshop	Charles Christopher, BP
• UIC No Migration Petition Modeling Overview	Brian Graves, Ken Johnson, Susan Lopez, EPA Reg. 6
• The Role of Modeling in a Regulatory Framework for Geological Sequestration of Carbon Dioxide – a Canadian Perspective	Stefan Bachu, Alberta Energy & Utilities Board
Session 1: Current Models; Reservoir Simulators for Geologic Carbon Storage Moderator: Robert Smith, EPA Office of Water UIC Program	
• Use of Models for Geosequestration	Neeraj Gupta, Battelle
• Hydrologic, Geochemical and Geomechanical Modeling for CO ₂ Sequestration	Chin-Fu Tsang, Lawrence Berkeley National Laboratory
• Improvements in Modeling CO ₂ Storage/Enhanced Coalbed Methane (ECBM) Recovery Processes	David Law, Alberta Research Council
DISCUSSION	
Session 2: Modeling for Site Characterization and Potential CO₂ Trapping Mechanisms Moderator: Brian Graves, EPA Region 6	
• Integrated Modeling and Field Studies for Frio Field Experiment on CO ₂ Sequestration	Susan Hovorka, Texas Bureau Economic Geology
• Role of Rock/ Fluid Characteristics in CO ₂ Storage and Modeling	Mahendra Verma, USGS
• Maximizing Permanent Trapping: Finding Optimal Target Aquifers and Injection Strategies via Simulation	Stephen Bryant, University of Texas at Austin
DISCUSSION	
Session 3: Modeling and Management of CO₂ Injection Operations Moderator: Brian Graves, EPA Region 6	
• Analytical Approaches Using Injection Planning to Avoid CO ₂ Exposure to Wells & Faults	Michael Celia, Princeton University
• Model Calibration Opportunities for Confidence Building	Steven Melzer, Melzer Consulting
DISCUSSION	
Session 4: Modeling and Long-Term Carbon Storage Moderator: Robert Smith, EPA Office of Ground Water & Drinking Water	
• System Level Assessment Modeling of Long-term CO ₂ Storage	Wei Zhou, Monitor Scientific
• Modeling the Integrated Processes and Isolation Performance of Geologic CO ₂ Storage	James W. Johnson, Lawrence Livermore Laboratory
DISCUSSION	

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PRESENTATION	SPEAKER
DAY 2 – April 7, 2005	
Session 5: Modeling and Risk Assessment Moderator: Wendy Cheung, EPA Region 8	
<ul style="list-style-type: none"> • Geologic Modeling and Risk Assessment- Public Perception Issues 	Granger Morgan, Carnegie Mellon University
<ul style="list-style-type: none"> • Qualitative Issues Concerning Risks of CO₂ Injection 	John Veil, Argonne National Laboratory
<ul style="list-style-type: none"> • Numerical Modeling for Risk Characterization 	Julio Friedmann, LLNL
DISCUSSION	
Session 6: Miscellaneous Modeling Issues: Data, Monitoring CO₂ Storage, Model Verification Moderator: Wendy Cheung, EPA Region 8	
<ul style="list-style-type: none"> • Calculations on Geologic Sequestration Leakage 	Larry Myer, LBNL
<ul style="list-style-type: none"> • Monitoring of Geologic Sequestration Using Geophysical Methods 	Larry Myer, LBNL
DISCUSSION	
Session 7: Modeling Questions/ Next Steps Moderator: Robin Petrusak, ICF Consulting	
<ul style="list-style-type: none"> • Challenges and Applications for Next- Generation Reactive Transport Models of Geologic CO₂ Storage 	James W. Johnson, LLNL
DISCUSSION	
Session 8: Panel Discussion: Modeling and Reservoir Simulation for Geologic Carbon Storage – Implications for Regulators, Site Operators and the Public Moderator: Robin Petrusak, ICF Consulting	
<ul style="list-style-type: none"> • Panelist 	Scott Imbus, ChevronTexaco Energy Technology Co.
<ul style="list-style-type: none"> • Panelist 	Julio Freidmann, LLNL
<ul style="list-style-type: none"> • Panelist 	Stefan Bachu, Alberta Energy & Utilities Board
DISCUSSION	