

NSF Workshop
Community Sedimentary Model for Carbonate Systems
February 27-29, 2008

Hosted by CSDMS (Community Surface Dynamics Modeling System)
University of Colorado, Boulder CO, USA

&

Convened at Colorado Energy Research Institute
Colorado School of Mines, Golden, CO, USA

Conveners

Dr. J. Frederick Sarg, CERI, Colorado School of Mines

Dr. Evan Franseen, University of Kansas & KGS

Dr. Gene Rankey, University of Miami

Day 1, Wednesday, February 27

9:00-9:20 am	Welcome, meeting logistics, & workshop introduction – Rick Sarg
9:20-10:20 am	Keynote: The CSDMS Vision-Collaborative Models – James Syvitski
10:20-10:40 am	Break
10:40-11:20 am	Keynote: What Do We Know – Carbonate Depositional Processes at different time & space scales – Gene Rankey
11:20-11:40 am	Discussion
11:40-12:40 pm	Lunch
12:40-1:20 pm	Keynote: What Do We Know - Diagenesis – Dave Budd
1:20-1:40 pm	Discussion
1:40-2:20 pm	Keynote: The Carbonate Modeling World – Peter Smart
2:20-2:40 pm	Discussion
2:40-3:00 pm	Break
3:00-3:30 pm	Keynote: Carbonate Fluxes during Earth History – Bill Hay
3:30-3:50pm	Discussion
3:50-5:00pm	Plenary Session – Posters and Breakout Session topics – Co-chairs - Evan Franseen & Gene Rankey
6:00 pm	Icebreaker – Golden Hotel, Golden

Day 2, Thursday, February 28

- 9:00-9:30 am Welcome & Recap – Rick Sarg
- 9:30-11:30 am Key Issues of Carbonate Research - Breakout Groups
Fundamental Research:
- 1) Physical Controls on Carbonate Deposition – (Tectonic, Climatic, Oceanographic), Knowledge Gaps & Needs – Co-chairs: Bob Demicco & Bill Morgan
 - 2) Biologic Controls on Carbonate Deposition – Knowledge Gaps & Needs – Co-chairs: Jody Webster & Pamela Hallock-Muller
 - 3) Tools/Approaches for Quantifying Controls and Increasing Resolution of Systems and Time Scales – Co-chairs: Linda Hinnov & Andre Droxler
- Numerical Modeling:
- 1) Modeling Strategies – What quantitative input parameters are needed? Can and should different processes that are operating at different time scales be coupled? Long-term averaging versus short-term, event-level approaches – Co-chairs: Bjarte Hannisdal & Cedric Griffiths
 - 2) Modeling Diagenesis – Approaches (e.g., reactive transport), quantification and timing of processes; how to couple with sedimentation modeling – Co-chairs: Gareth Jones & Dave Budd
- 11:30-12:30 pm Lunch
- 12:30-2:30 pm Key Issues of Carbonate Research – Breakout Groups cont'd
- 2:30-2:45 pm Break
- 2:45-4:45 pm Plenary Session - Breakout Groups Report
- 6:00 pm Group Dinner – Fossil Trace Country Club

Day 3, Friday, February 29

- 8:00-8:30 am Welcome & Recap – Gene Rankey
- 8:30-11:30 am Synthesis of Working Group Results into Rough Draft Framework Document - Formulation of Joint Research Agenda & Next Steps – Co-chairs, Rick Sarg, Gene Rankey, and Evan Franseen
- 11:30-12:30 pm Lunch, Workshop Adjourns