

The Application of Earth System Modelling to Exploration July 11th-13th 2006

PRELIMINARY SCHEDULE

DAY 1: Tuesday 11th July 2006

Session 1: Introduction & History

8:30am - Introduction and Welcome

8:45am - Huc, A.Y. & F.S.P. van Buchem (KEYNOTE)
Source rocks in a modelling perspective

Session 2: Modelling Background

9:35am - Valdes, P.J. (KEYNOTE)
TBA (an overview of coupled ocean-atmosphere modelling and what they can and cannot tell you)

10:25am - BREAK -----

10:40am - Wells, M.R., P.A. Allison, G.J. Hampson, M.D. Piggott, and C.C. Pain (KEYNOTE)
Modelling tides in present day geologically ancient seas using the Imperial College Ocean Model

11:30am – Markwick, P.J.
TBA (how model uncertainties influence facies predictions)

12:00 – LUNCH -----

Session 3: Lacustrine, Fluvial and Delta Systems

1:00pm - Bohacs, K.M., Fraticelli, C.M.
The critical role of contingency, scaling, and conditioning in applying earth-systems models to hydrocarbon play-element prediction in continental settings

1:30pm - Paola, C. (KEYNOTE)
TBA (fluvial systems and sediment transport)

2:20pm – Fraticelli, C.M.
The timing and efficacy of climate in modifying the fluvial response to eustacy

2:50pm - Frost, B.R., & R.C. Culotta
Passive Margin Deltas and Petroleum Systems

3:20pm - BREAK -----

4:00pm - Harris, N.B.

Application of a soil organic model to nutrient delivery and organic matter deposition in rift lakes

Session 4: Marine Systems

4:30pm - Karl Charvin, K., K. Gallagher, G. Hampson, J.A. Hegre, R. Labourdette

Environmental Parameters Inference, Facies Distribution Prediction and Uncertainties Assessment via Inverse Modelling of Shallow Marine Stratigraphy.

5:00pm - Lopez, S., M.-C. Cacas, F. van Buchem, R. Masson, E. Albouy

Calibrating advanced stratigraphic modeling parameters from simpler model inversion: application to mixed siliciclastic-carbonate series

5:30 – 6:30pm – DISCUSSION FORUM

DAY 2: Wednesday 12th July 2006

Session 4: Marine Systems contd.

8:30am - Tyson, R. (KEYNOTE)

Modelling the Total Organic Carbon content of marine source rocks: problems and prospects

9:20am - Macquaker, J. (KEYNOTE)

A comparison of the fundamental processes that control organic carbon sequestration in fine-grained organic-rich sediments deposited at low latitudes relative to those deposited at high latitudes.

10:10 - Keller, M.A. (INVITED)

The Potential of High-Resolution Mudstone Studies for Remodeling Models of the Earth's Depositional Systems: A Case Study of Arctic Alaska's Lower Cretaceous Succession

10:40am - BREAK -----

11:00am - Mitchell, N.

Morphologic modelling of continental slopes

11:30 - Salles, T., S. Lopez, M.-C. Cacas, T. Mulder & R. Eschard

Process-based modeling of turbidity currents over geological timescales

12:00am - LUNCH -----

14:00pm – DISCUSSION FORUM and BBQ/dinner: Can models really help explorationists?

How reliable are model results? What next?

DAY 3: Thursday 13th July 2006

Session 5: Other Factors

8:30am - Macquaker, J.

Depositional controls on organic matter mineralization during early diagenesis: A comparison of the Monterey Formation and the Oxford Clay.

9:00am - Clarke, S.M., Littler, S. D. Burley, G. D. Williams, D. Hughes, & S. Coogan

Modelling the effects of stratigraphical uncertainty on fault-seal and trap-fill in faulted structures

Session 6: Integrated Global Modelling

9:30am - ElFouly, A.A.,

Geo- information model integration of hydrocarbon exploration using multilayer adaptive expert system

10:00am - BREAK -----

10:15am – Scotese, C.R., T. Moore, H. Illich, & J. Zumberge

Do we need a wizard to find source rocks?

10:45am - Zumberge, J., H. Illich, & C. Scotese

Key Oil Biomarkers Confirm Paleogeographic/Paleoclimatic Upwelling Models for the Cretaceous and Permian

11:15am – Burggraf, D., J. Suter, et al.

TBA (predictive source rock methods)

12:00am – DISCUSSION

1:00pm - LUNCH -----

Poster Session

Posters will be available throughout the meeting, and many participants will be bringing poster materials to facilitate discussions during the various breaks. Titles include the following:

Thomas L. Moore, Martin A. Perlmutter, Christopher Scotese (POSTER)

Impact of High-Frequency Climate Cycles on Cretaceous and Permian Climate Systems

Martin R. Wells, Peter A. Allison, Gary J. Hampson, Matthew D. Piggott, and Chris C. Pain.

Investigating Paleo-tidality In Upper Carboniferous Epeiric Seas Using the Imperial College Ocean Model

Csaba Krézsek, Juergen Adam, Djordje Grujic

Structural Evolution Driven by Sedimentation: Experimental Insight in the Kinematics of Growth Fault/Rollover Systems

Lidia Dudek

Hydrocarbon Generation & Accumulation in Mesozoic-Paleozoic Structures of selected region in Carpathian Foredeep

Lowrie, A., & L. Jenkins

How does the northern Gulf of Mexico continental margin operate?