



# Salt Tectonics, Sediments and Prospectivity

20-22 January 2010

## PROGRAMME

<b>Wednesday 20 January</b>	
<b>Day One: Atlantic Margins</b>	
08:15	<b>Registration &amp; Coffee</b>
08:45	<b>Welcome and opening</b>
<b>Session One – Chair: Stuart Archer</b>	
09:00	<b>Keynote: Webster Mohriak,</b> Salt: Geology and Tectonics of Selected Brazilian Basins
09:35	<b>Jean-Pierre Brun,</b> The analysis of salt tectonics systems
10:00	<b>John Waldron,</b> Evaporite tectonics, transpression and transtension in the development of the Maritimes Basin, Atlantic Canada.
10:25	<b>Coffee Break &amp; Poster Session One</b>
<b>Session Two – Chair: Adrian Hartley</b>	
11:00	<b>Keynote: Katherine Giles,</b> Halokinetic Sequence Stratigraphy
11.35	<b>Jurgen Adam,</b> Basin-scale salt tectonic processes and sediment progradation in the slope and deepwater basin of the North-Central Scotian Margin
12.00	<b>Marta Guerra,</b> Interplay of salt tectonics and sediments in the Santos Basin, offshore Brazil
12:25	<b>Lunch &amp; Poster Session One</b>
<b>Session Three – Chair: Ian Alsop</b>	
13.15	<b>Keynote: Michael Hudec,</b> Influence of Deep Louann Structure on Evolution of the Deepwater Gulf of Mexico



13.50	<b>Mark Tomasso,</b> Linking halokinetic structure to the pre-evaporitic structural regime, evaporite facies, and the Albian carbonate platform succession, Campos Basin, Brazil.
14.15	<b>Markus Albertz,</b> Structural Styles Related to Salt Tectonics in the Scotian Basin, Eastern Canada
14.40	<b>Dave Quirk,</b> Salt tectonics in Santos and Campos basins, Brazil
15.05	<b>Coffee Break &amp; Poster Session One</b>
	<b>Session Four – Chair: Neil Grant</b>
15.40	<b>Keynote: Ian Davison,</b> Brazilian Salt Basin Development and Salt Tectonics: a study using Reverse Time Migrated Depth Imaging
16.15	<b>Joseph Fiduk,</b> Deformation of Layered Evaporites within the Santos Basin, Brazil
16.40	<b>Tiago Alves,</b> Faulting of salt-withdrawal basins during early halokinesis: An example of structural controls on reservoir distribution and potential fluid migration
17.05	<b>Keynote: Mike Bowman,</b> Gulf of Mexico Sub Salt Exploration, Appraisal and Field Development – Lessons Learned
17.40	<b>Closing Remarks</b>
17.50	<b>Wine Reception &amp; Poster Session One</b>
20.00	<b>Day One Ends</b>



## Thursday 21 January

### Day Two: Europe / North America

08:30	<b>Registration &amp; Poster Session Two</b>
	<b>Session One – Chair: Richard Hodgkinson</b>
09:00	<b>Keynote: Brad Prather,</b> Sediment Partitioning across Tectonically Active Cenozoic Continental Slopes
09:35	<b>Rachel Jamieson,</b> The role of buried salt-driven relief in controlling tertiary bathymetry, sediment dispersal and reservoir play fairways on the eastern flank of the Central North Sea
10:00	<b>Xavier Fort,</b> Kinematics of salt flow in the Gulf of Mexico
10:25	<b>Coffee &amp; Poster Session Two</b>
	<b>Session Two – Chair: Adrian Hartley</b>
11:00	<b>Keynote: Simon Stewart,</b> Salt intrusions in the North Sea
11:35	<b>Rachel Kieft,</b> Salt Influenced sedimentation within the Middle Jurassic Hugin Formation, South Viking Graben
12:00	<b>Anne Domzig,</b> 3D modelling of sand deposition patterns on restored palaeo-bathymetric surfaces: a case study from the South Viking Graben
12:25	<b>Piotr Krzywiec,</b> Mesozoic and Cenozoic evolution of salt structures within the Mid-Polish Trough
12:50	<b>Lunch &amp; Poster Session Two</b>
	<b>Session Three – Chair: Ian Alsop</b>
13:40	<b>Keynote: Rob Gawthorpe,</b> The response of slope channel complexes to salt-related folding and faulting
14:15	<b>Oliver Duffy,</b> The influence of basement fault growth and linkage and cover salt units upon syn-rift depocentre development: The Coffee-Soil Fault Zone, Danish North Sea



14.40	<b>Paul Wilson,</b> Tectono-stratigraphic evolution of an evaporite-detached normal fault system: the Bremstein fault system, eastern Halten Terrace, offshore Mid-Norway
15.05	<b>Emmanuelle Baudia,</b> Salt-related prospectivity of the Norwegian Central Graben; an integrated study of the Triassic
15.30	<b>Coffee &amp; Poster Session Two</b>
	<b>Session Four – Chair: Neil Grant</b>
16.05	<b>Keynote: Bruce Trudgill,</b> Evolution of Salt Structures in the Northern Paradox Basin: Controls on Evaporite Deposition, Salt Wall Growth and Supra-Salt Stratigraphic Architecture
16.40	<b>Laura Evenstar,</b> Architecture distribution and controls on preservation of fluvial systems within active salt regions - an example from the Triassic Chinle Formation Utah
17.05	<b>Sanjeev Gupta,</b> Kinematics of extensional fault block rotation above an evolving salt substrate from fluvial profile analysis
17.30	<b>Rod Graham,</b> Allochthonous salt in the sub-Alpine fold and thrust belt of Haute Provence.
17.55	<b>Closing Remarks</b>
18.00	<b>Wine Reception &amp; Poster Session Two</b>
20.00	<b>Day Two Ends</b>



## Friday 22 January

### Day Three: Modelling, Australia and the Rest of the World

09.00	<b>Registration &amp; Poster Session Three</b>
	<b>Session One – Chair: Stuart Archer</b>
09.35	<b>Mike Mayall,</b> The response of turbidite slope channels to topography
10.00	<b>Daniel Carruthers,</b> Using polygonal fault systems to reconstruct the state of stress of salt diapirs
10:25	<b>Coffee &amp; Poster Session Three</b>
	<b>Session Two – Chair: Ian Alsop</b>
11:00	<b>Keynote: Bruno Vendeville,</b> Implications of halite's low strength on forces, stresses, and strain rates associated with salt tectonics in nature and models
11.35	<b>Peter Kukla,</b> An integrated, multi-scale approach to salt dynamics
12.00	<b>Janos Urai,</b> Internal Dynamics of Salt Structures
12.25	<b>Joe Cartwright,</b> Role of multilayered salt in gravity-driven collapse of thick salt sheets
12:50	<b>Lunch &amp; Poster Session Three</b>
	<b>Session Three – Chair: Richard Hodgkinson</b>
13.40	<b>Keynote: Hemin Koyi,</b> The parameters which govern the rate of salt supply to a salt diapir
14.15	<b>Jean Letouzey</b> Salt Diapirism and Halokinesis in the Eastern Zagros Fold-Thrust Belt and Persian Gulf, Iran
14.40	<b>Ian Clark,</b> Fold growth in the salt-detached eastern Nile deepwater fold belt: influence on post-Messinian sedimentation processes.
15.05	<b>Mark Fischer,</b> Fracture-controlled paleohydrology of a secondary salt weld



15.30	<b>Coffee &amp; Poster Session Three</b>
	<b>Session Four – Chair: Neil Grant</b>
16.05	<b>Keynote: Mark Rowan,</b> Emplacement of allochthonous salt: a general model derived from field outcrops in South Australia and seismic and well data from the northern Gulf of Mexico
16.40	<b>Guillaume Backe,</b> Basement-involved deformation and geometry of salt diapirs in the Flinders Ranges, South Australia.
17.05	<b>Mirosław Slowakiewicz,</b> Halokinesis of Zechstein Oldest Salt (Na1) rocks and its influence on development of petroleum traps in the Main Dolomite carbonates – case studies from western part of the Fore-Sudetic Monocline
17.30	<b>Katrine Andresen,</b> Hydrocarbon plumbing system offshore Angola: salt tectonic controls on fluid flow
17.55	<b>Closing Remarks</b>
18.00	<b>Conference Ends</b>



## Poster Session One

### Atlantic Margins

**Alves, T. M.**

3D Volume Balance of Submarine Landslides on a Salt-Rich Passive Margin:  
Quantifying Seafloor Erosion and Post-Failure Structural Deformation in SE Brazil

**Andresen, K.**

Past and Present Fluid Flow From Reservoir to Surface Offshore Angola

**Andrie, J. R**

Halokinetic Sequence Stratigraphy and Structural Geometry off The Eocene Fluvial Carroza Formation Along the La Popa Salt Weld, La Popa Basin, Mexico

**Dooley, T. P.**

Roof Breakup and Extrusion of Shallow Salt Stocks During Lateral Shortening

**Ferrer, O.**

Kinematics of Inversion Salt Tectonics Along the Newfoundland – Bay of Biscay – Pyrenean Rift System: Comparison Between the Preserved Rift Segments and the Inverted Ones

**Kane, I. A.**

Active Salt Controls on Submarine Channel Evolution and Implications for Facies Architecture: Magnolia Field, Gulf of Mexico.

**Mertineit, M.**

Structures in an Anhydrite Layer Embedded in Halite Matrix: Results From Thermomechanical Experiments Under Bulk Plane Strain

**Oluboyo, A. P.**

Salt-Sediment Interaction and Tectonostratigraphic Evolution of the West African Margin: Mini-Basin to Domain Scale Halokinetic Controls

**Philippe, Y.**

Structure and Kinematics of Allochthonous Salt Domains in the Deepwater Gulf of Guinea And Gulf of Mexico: Local to Regional Observations and Implications.

**Platon, C. P.**

Influence of La Popa Salt Wall on the Depositional Patterns and Strata Architecture of the Shallow-Marine Siliciclastic Deposits of The Viento Formation, La Popa Basin, Mexico

**Sellier, N.**

Salt Tectonics in an Experimental Turbiditic Tank

**Storetvedt, K. M.**

Salt Basins and Hydrocarbons – Products of Planetary Degassing?



<b>Poster Session Two</b>
<b>Europe / North America</b>
<b>Alsop, I.</b> InSAR Mapping and Modelling of an Active Iranian Salt Extrusion
<b>Burliga, S.</b> Controls on Hydrocarbon Distribution and Migration in the Klodawa Salt Structure (Central Poland)
<b>Chemia, Z.</b> The Effect of the Salt Viscosity on the Evolution of Gorleben Salt Diapir, Germany
<b>Evrard, E</b> Physical Modelling of Thin-Skinned, Salt-Related Shallow Deformation in Response Basement Subsidence and Strike-Slip Movement: Example of The Rhodes Basin, Eastern Mediterranean
<b>Gaullier, V.</b> Interaction Between Salt Tectonics and Deep-Seated Tectonics, Part I: Examples From the Western Mediterranean
<b>Kilhams, B.</b> Controls on Andrew/Mey Sandstone Member Deposition in the Central North Sea: The Syn- and Post-Depositional Role of Halokinesis.
<b>Gaullier, V.</b> Interaction Between Salt Tectonics and Deep-Seated Tectonics, Part II: Examples From the Eastern Mediterranean
<b>Scheck-Wenderoth, M.</b> Role of Permian Salt in the Central European Basin System for the Deformation of Mesozoic to Cenozoic Strata
<b>Quintà, A.</b> Syn-Diapir Fracture Pattern in the Poza De La Sal Diapir (Western Pyrenees, Spain)
<b>Rubinat, M.</b> Squeezing and Reactivation of a Wall Salt Diapir Developed Over a Foreland Dipping Basement Fault: The Miocene Bicorn-Quesa Diapir (Eastern Prebetics, Spain)



## Poster Session Three

### Modelling, Australia and the Rest of the World

**Alsop, I.**

Sedimentary Slump Systems Adjacent to Salt in the Dead Sea Basin

**Becker, S.**

Halite Plugging: A Major Exploration Risk in the Ara Stringers of the South Oman Salt Basin

**Ben Slama, M. M.**

Peristaltic Salt Movements in the Tunisian Salt Province – Example From the Mesozoic of Northern Tunisia: Jebel Ech Cheid

**Engelhardt, H-J.**

The Bromine Distribution in the Staßfurt Formation (Zechstein): Experiences Made During Salt Diapir Exploration.

**Evenstar, L.**

Compressional Deformation, Salt Tectonics and Sedimentation in a Continental Forearc Basin: The Vilama Formation, Salar De Atacama, Chile

**Graham, R.**

Salt Related Structures on the Bristol Channel Coast?

**Harding, R.**

Multi Stage Evolution of Salt Diapirs in the Netherlands North Sea

**Hearon, T. E.**

Geology and Tectonics of Neoproterozoic Salt Diapirs and Salt Sheets in the Eastern Willouran Ranges, South Australia

**Kernen, R.**

Characteristics of a Tapered Composite Halokinetic Sequence Adjacent to the Ramping Patawarta Salt Sheet, Central Flinders Ranges, South Australia

**Kumar, D.**

Numerical Simulation and Experimental Investigation of Salt Diapirs

**Reuning, L.**

Burial History and Diagenesis of Carbonate Bodies Encased in Salt: An Example From the Surface Piecing Salt Domes of the Ghaba Salt Basin (Oman)

**ten Veen, J.**

Thick- Vs. Thin-Skinned Salt Tectonics – Examples From The Dutch North Sea