



Subsurface sediment remobilization and fluid flow in sedimentary basins

21-22 October 2008

Monday 20 October

18:00	Conference Icebreaker Council Room, Burlington House
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Tuesday 21 October

08:30	Registration + coffee
09:00	Welcome and opening
09:10	Svensen (University of Oslo) <u>KEYNOTE</u> : Sill emplacement, contact metamorphism, and gas venting in the Vøring Basin during formation of the North Atlantic Volcanic Province and the implications for the PETM climate change
Session 1 (Chair: Chris Jackson) Mixed Session	
09:50	Henry (Ifremer) Gas emissions and active tectonics within the submerged section of the North Anatolian Fault zone in the Sea of Marmara
10:10	Cartwright (University of Cardiff) Natural blow outs in sedimentary basins: evidence for supra-lithostatic pressure compartments?
10:30	Pegrum (RMP/DONG) The 'slump pump' – fluid flushing in the Møre basin, mid-Norway
11:10	Talukder (CSIRO) Two different plumbing systems of venting structures in active and passive margins
11:30	Tea / Coffee



Session 2 (Chair: Mads Huuse) Sand remobilisation – subsurface and outcrop observations	
12:00	Briedis (ExxonMobil) Structural and stratigraphic relationships of the Paleocene mounds of the Utsira High
12:20	Dmitrieva (Imperial College) Distribution and large-scale soft-sediment deformation of deep-water depositional systems: a 3D seismic case study from the Paleocene of the North Sea basin
12:40	Bryant (University of Toronto) Diverse products of near-surface sediment mobilization in an ancient aeolianite: outcrop features of the Early Jurassic Navajo Sandstone
13:00	Moretti (University of Bari) Criteria for identifying triggering mechanisms for soft-sediment deformation
13:20	Vigorito (University of Aberdeen) Regional and stratigraphic framework for the Panoche giant injection complex (Danian), California
13:40	Gamberi (Institute of Marine Sciences, Bologna) Subsurface sediment remobilization in the Tortonian Marnoso Arenacea turbidites (Northern Apennines)
14:00	Lunch <i>Lunch will be provided in the Lower Library.</i>
Session 3 (Chair: Richard Davies) Mud remobilisation (I) – Global Studies	
14:40	Deville (IFP) <u>KEYNOTE</u> : Mud volcano systems: an overview
15:20	Praeg (National Institute of Oceanography and Experimental Geophysics, Trieste) Targeted 2D/3D seismic imaging of mud volcanoes on the Calabrian Accretionary prism, Ionian Sea
15:40	Roberts (University of Durham) The search for intrusive mud systems: analogues for the subsurface
16:00	Van Rensbergen (Shell) Mud volcano activity in relation to source rock maturation
16:20	Vapnik (University of Negev) Geophysical characteristics of a fossil onshore mud volcano in the vicinity of the Dead Sea Rift, Israel
16:40	Tea / coffee



Session 4 (Chair: Pieter Van Rensbergen) Mud remobilisation (II) – Lusi	
17:00	Brumm (University of California, Berkeley) Did an earthquake trigger the eruption of the Lusi mud volcano?
17:20	Davies (University of Durham) Triggering of the Lusi mud eruption
17:40	Tingay (University of Adelaide) Triggering of the Lusi mud eruption: earthquakes versus drilling initiation
18:00	Swarbrick (Geopressure Technology) Estimating the longevity of the Lusi mud volcano
18:20	Istadi (Energi Mega Persada) Analysis & Recent Study Results on East Java Mud Volcano
18:40	Mazzini (University of Oslo) <u>KEYNOTE</u> : Causes and Triggers of the Lusi Mud Volcano, Indonesia
19.20	Wine Reception



Wednesday 22 October

08:30	Registration + coffee
09:00	Flemings (University of Texas at Austin) <u>KEYNOTE</u> : Mechanisms driving fluid venting in sedimentary basins
Session 5 (Chair: Mads Huuse) Gas hydrates and fluid flow	
09:40	Calves (University of Aberdeen) 3D seismic analysis of high-amplitude anomalies in the shallow subsurface of the Northern Indus Fan: sedimentary and/or fluid origin
10:00	Ussler (Monterey Bay Aquarium Research Institute) Morphological manifestations of seafloor fluid discharge
10:20	Tea / Coffee
Session 6 (Chair: Richard Dixon) Sediment remobilisation – applied aspects	
10:50	O'Brien (GeoScience Victoria) Understanding the dance between hydrocarbon and CO ₂ migration-charge and leakage-seepage rates, Otway Basin, south-eastern Australia
11:10	Svendsen (DONG) The most complex hydrocarbon reservoir in Denmark? – The Nini-Tyr Segment, Siri Fairway, Danish North Sea
11:30	Templeton (Maersk) Imaging and targeting sand injection 'wings': methodology and impact on production of the Gryphon Field
11:50	Swarbrick (Geopressure Technology) Hydraulic seal breach and hydrocarbon remigration
12:10	Moss (University of Cardiff) Giant fluid escape pipes imaged with 3D seismic data from the Namibian margin: implications for trap integrity
12:30	Lunch with Poster Presentations <i>Lunch will be provided in the Lower Library.</i>
Session 7 (Chair: Peter Flemings) Quantitative investigations of subsurface remobilisation	
13:50	Di Felice (University of Genova) <u>KEYNOTE</u> : The fluid dynamic behaviour of solid-liquid suspensions



14:30	Vétel (University of Cardiff) Spatial distribution and emplacement mechanics of sandstone intrusions
14:50	Jonk (ExxonMobil) Sandy injectites in the context of short and long-lived basinal fluid flow
15:10	Hustoft (University of Tromso) Integrated hydrological flow-modelling and 3D seismic analysis of the Nyegga pockmark-field at the mid-Norwegian margin constrain times of methane leakage
15:30	Szarawarska (University of Aberdeen) 3D seismic analysis and numerical modelling of large scale sand injectites
16:00	Tea/Coffee
Session 7 (Chair: Pieter Van Rensbergen) Gas Chimneys	
16:30	Exley (University of Birmingham) Structures that enable focussed fluid flow from the NW European continental margin
16:50	Ligtenberg (Shell) Indications for pressure release from Zechstein rafts during Late Cimmerian - implications for reducing drilling risks
17:10	Búnz (University of Tromso) High-resolution 3D seismic imaging of focussed fluid flow structures on the western Svalbard Margin
17:30	MacGregor (Ohm) What's in your chimney? Integrated EM and seismic characterisation of gas chimneys
17:50	Løseth (StatoilHydro) <u>KEYNOTE</u> : Gas chimneys and other hydrocarbon leakage anomalies interpreted on seismic data
18:30	Discussion and closure of meeting
After the conference there will be an informal gathering for a few hours to digest the key learnings. Please plan your travel accordingly. Location: TBC.	



Posters

Lawrence (University of Cardiff)

The formation of enigmatic craters offshore Norway

Hoesch (Morris Research Centre)

Sandstone dikes of the Colorado Front Range and their relation to petroleum exploration in the adjacent Denver Basin

Scott (University of Aberdeen)

Internal structures in sand injectites: keys to the process of sand fluidisation

Holbaek-Hansen (University of Tromso)

3D seismic analysis of large-scale sandstone intrusions in the Ormen Lange area on the mid-Norwegian margin

Huuse (University of Aberdeen)

Spatio-temporal occurrence of large-scale sandstone intrusions in the North Sea Cenozoic: implications for basin evolution and fluid flow

Jackson (Imperial College)

A growth model for clastic intrusions adjacent to sand-rich submarine channels based on 3D seismic data

Stanzione (University of Aberdeen)

Internal structures in sand injectites: keys to the process of sand fluidisation

Gamberi (University of Bologna)

Gravity sediment remobilization and mud diapirism in the rear of the Calabrian arc orogenic wedge

Huuse (University of Aberdeen)

Seismic imaging of fluid flow from reservoir to surface offshore West Africa

Poulsen (DONG)

Injected or in-situ? That's the question!

Svendsen (DONG)

Sediment remobilization and related fluid flow in the Siri Fairway, Danish North Sea – A pictorial guide over eight orders of magnitude

Reily (University of Texas at Austin)

Implications of seafloor expulsion features of the Auger Basin, deep-water Gulf of Mexico