

PROGRAMME

Wednesday 28 May	
08.30	Registration
09.00	Welcome and Introduction
09.05	Richard Worden (University of Liverpool): Challenges and Controversies in Petroleum Reservoir Quality Prediction
09.30	Session One: New Techniques and Approaches in Reservoir Quality <i>Session Chairs: Alan Butcher and Adrian Immenhauser</i>
09.30	Cedric John (Imperial College London) Clumped Isotopes Applied to Carbonate Reservoirs: An Overview
09.50	Adrian Immenhauser (Ruhr-University Bochum) The Magnesium Isotope ($d^{26}\text{Mg}$) Signature of Dolomite
10.10	Xiomara Marquez (Maersk Oil Research and Technology Centre) New Methods for Quantitative Diagenesis of Carbonate Reservoirs
10.30	Herman Lemmens (FEI) The Technology of Getting Representative Data at the Nanoscale in Shale
10.50	Break & Poster Session
11.20	Thomas Götte (Goethe-University Frankfurt) Implications from Trace Element Composition of Authigenic Quartz for Physicochemical Conditions during Diagenesis
11.40	Ehsan Daneshvar (Robertson UK Ltd) New Approaches for Understanding Provenance Controls on Feldspar Alteration in Sediments: Implications for Reservoir Quality
12.00	Luc Alberts (Lithicon Norway) 3-D Object-Based Modelling of Quartz Cementation
12.20	Aysen Ozkan (Shell Houston Technology Centre) Using Cathodoluminescence Imaging to Identify Forms of Quartz in the Middle Devonian Marcellus Formation, Pennsylvania, USA.
12.40	Lunch & Poster Session
13.40	Jean-Pierre Girard (Total) The Combined Use of Petroleum and Aqueous Fluid Inclusions to Reconstruct Paleo-Pressures in Reservoirs: Recent Advancement and Examples from the North Sea
14.00	David Orchard (ConocoPhillips) Petrophysical Discrimination of Gypsum- and Anhydrite-bearing Dolomite Reservoirs: A Case Example from Dune Grayburg-San Andres Field, Permian Basin, Texas
14.20	Aleksandra Hosa (University of Edinburgh) Pore-Scale Modelling of Early Calcite Cementation in 3D
14.40	Session One Discussion
15.00	Break & Poster Session
15.25	Session Two: Depositional Controls on Reservoir Quality in Clastic and Carbonate Systems <i>Session Chairs: Jenny Omma and James Churchill</i>
15.30	Sergio Andó (Università di Milano-Bicocca) Geodynamic Control on Heavy Mineral Populations: Implications for Reservoir Quality Assessment

Reservoir Quality of Clastic and Carbonate Rocks: Analysis, Modelling and Prediction

15.50	Shirley Dutton (The University of Texas at Austin) Origin and Properties of High-Reservoir-Quality Tertiary and Cretaceous Sandstones within Constant Temperature Intervals, Gulf of Mexico, USA
16.10	Joann E. Welton (Independent Consultant) Impact of Microbes on Reservoir Quality
16.30	Hans Machel (University of Alberta) Complex, Extensive Karstification of Pleistocene Carbonates of Barbados, West Indies - Lessons for Karstified Petroleum Reservoirs Elsewhere
16.50	George Pemberton (University of Alberta) The Role of Bioturbation in Low Permeability Gas Charged Reservoirs
17.10	Session Two Discussion
17.30 – 19.30	Wine & Canapé Reception

Thursday 29 May

08.45	Registration
09.05	Session Three: Structural Diagenesis <i>Session Chairs: Peter Armitage and Dave Healy</i>
09.10	Rob Lander (Geocosm LLC) A Model for Quartz Cementation in Fractured Sandstones
09.30	Alberto Riva (GE Plan Consulting) Structural Diagenesis in Carbonate Reservoirs: A Key for Diagenetic-Related Reservoir Modeling
09.50	Benjamin Busch (RWTH Aachen University) Evolution of Small-Scale Flow-Barriers in German Rotliegend Siliciclastics
10.10	Dave Healy (University of Aberdeen) Effects of Reservoir Quality on Geomechanical Risk
10.30	Anders Nermoen (International Research Institute of Stavanger) Insights from Long Term Tests of Compaction and Non-Equilibrium Water Flooding of Chalks
10.50	Break & Poster Session
11.20	Thomas Haines (University of Aberdeen) Porosity and Pore Network Modifications into Carbonate Hosted Normal Fault Zones and the Impact on Permeability
11.40	Jennie Cook (BP) Assessing the Impact of Sub-Seismic Deformation Bands on Reservoir Quality: A Case Study from Two Reservoirs
12.00	Mike Heap (University of Strasbourg) The Impact of Compaction Localization on Fluid Flow in Reservoirs
12.20	Hannah Watkins (University of Aberdeen) Influence of Structural Position on Fracture Connectivity in a Folded Tight Sandstone Reservoir Analogue
12.40	Session Three Discussion
13.00	Lunch & Poster Session
13.30	Meeting for Contributors to Special Publication
13.55	Session Four: Clay Diagenesis in Clastic and Carbonate Rocks <i>Session Chairs: Anita Csoma and Laura Ines Net</i>

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14.00	Paul Wright (PW Carbonate Geoscience Ltd & National Museum of Wales) Diagenetic Pathways Linked to Labile Mg Clays in Lacustrine Carbonate Reservoirs
14.20	Asefeh Golreihan (KU Leuven) Clay Mineral Development in Hydrothermal Dolomites and Their Effect on Reservoir Properties: The Pozalagua Outcrop Reservoir Analogue Study
14.40	Susanne Gier (University of Vienna) Comparing Clay Mineral Diagenesis in Interbedded Sandstones and Shales (Vienna Basin)
15.00	Robert Horton (California State University) Diagenesis of the Oligocene Vedder Formation, Greeley Oil Field, Southern San Joaquin Basin, California, USA
15.20	Richard Worden (University of Liverpool) Dynamic Permeability Increase during Flow of CO ₂ Saturated Water through Tight Sandstone: An Experimental and Analytical Approach
15.40	Break & Poster Session
16.10	Brita Vangdal & Ruth Elin Andersen Midtbø (Statoil) The Kaolinite to Dickite Transformation as a Geothermometer
16.30	Mark Wilkinson (University of Edinburgh) K-Ar Ages Dates of Authigenic Illite in Oilfield Sandstones – Are They Reliable?
16.50	Anders Dræge (Statoil) Temperature and Net Erosion from Rock Physics – A Link Between Rock Physics and Basin History
17.10	Session Four Discussion
17.30 – 19.30	Wine & Canapé Reception
18.00 – 19.00	Panel Discussion for Students Interested in a Career in Petroleum Geoscience: Career Opportunities for Petrographers and Diagenesis Specialists: Where do Reservoir Quality Specialists Make Impact in the HC Industry?

Friday 30 May

08.45	Registration
	Session Five: Inhibition of Diagenesis in Clastic and Carbonate Rocks <i>Session Chairs: Richard Worden and Sadoon Morad</i>
09.10	Linda Bonnell (Geocosm LLC) Prediction of the Formation of Grain Coating Chlorite by the In Situ Alteration of Volcanic Rock Fragments
09.30	Sadoon Morad (The Petroleum Institute Abu Dhabi) Recrystallization: The Hole Truth about Micro-Porosity in Cretaceous Reservoirs, Abu Dhabi
09.50	Christopher Saville (Durham University) Porosity Preservation through Precipitation of Calcite within the Triassic Skagerrak Formation, Norwegian North Sea
10.10	Zsofia Poros (ConocoPhillips) Diagenetic controls and reservoir quality modeling of fluvial sandstones within the Triassic Joanne Sandstone Member (Skagerrak Formation) of the HPHT Jasmine Field, UK Central North Sea
10.30	Cathy Hollis (University of Manchester) Controls on Porosity Modification in a Sour Gas Reservoir, UAE
10.50	Break & Poster Session

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11.20	Martin Wells (BP) Reservoir Quality controls in Ordovician Glacial deposits, Illizi Basin, Algeria
11.40	Mohammed Bukar (Liverpool University) Does Early Oil Emplacement Stop Quartz Cementation in Deeply Buried Sandstone Reservoirs? Evidences from Ula Field, Norwegian N. Sea
12.00	Rachel Wood (University of Edinburgh) Dynamics of Calcite Cementation: Evidence from Giant Carbonate Reservoirs
12.20	Shanvas Sathar (Durham University) Preservation of Anomalously High Porosities by Fluid Overpressure: Observations from the Garden Banks Block, Gulf of Mexico
12.40	Stephan Stricker (Durham University) Effects of Diagenesis on the Quality of Triassic Skagerrak Fluvial Reservoir Sandstones, Central North Sea, UK
13.00	Session Five Discussion
13.15	Lunch & Poster Session
14.15	Session Six: Open/Closed System Diagenesis <i>Session Chairs: Cathy Hollis and Gareth Jones</i>
14.20	Robert H. Goldstein (University of Kansas) Hydrothermal Fluid Flow: Structural and Stratigraphic Controls on Thermal Structure, Flow Rate, and Reservoir Properties
14.40	Gareth D. Jones (ExxonMobil) Flow-Based Effective Reservoir Properties of Sub-Seismic Karst
15.00	Julymar Morantes (ConocoPhillips) Integrating Petromod™ and Touchstone™ to Evaluate the Role of Allocthonous Salt Emplacement Timing on Reservoir Quality Prediction: An Example of Tertiary Reservoir in the DW-GOM
15.20	Break & Poster Session
15.50	Andrea Ortenzi (ENI) Reactive Transport Modeling of Silico-clastic Sediments Diagenesis: A Realistic Approach
16.10	Claudio Geloni (ENI) Reactive Transport Modeling of Compacting Silico-clastic Sediments During Burial Diagenesis
16.30	Andrew Barnett (BG Group) Distinguishing between Eogenetic, Unconformity-Related and Meosgenetic Dissolution: A Case Study from the Panna-Mukta Field, Offshore Mumbai, India
16.50	Session Six Discussion
17.10	Closing Remarks & Finish