



The  
Geological  
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# Geomechanical and Petrophysical Properties of Mudrocks

Monday 16 and Tuesday 17 November 2015

## Programme

Day 1 – 16 November

10.00	<b>Registration &amp; Tea and Coffee</b>
10.40	<b>Opening Remarks</b>
<b>Session 1: Hydraulic Fracture and Mech Properties</b>	
10.50	<b>KEYNOTE:</b> <b>Hydraulic Fracturing in Anisotropic Rock</b> Julia Gale (University of Texas, USA)
11.20	<b>Anisotropy and Fracture Propagation in Shale with Elevated Confining Pressures</b> Mike Chandler (University of Manchester, UK)
11.40	<b>Hydraulic Fracturing and the Basic Geomechanical Considerations of Shale Prospectivity</b> Tim Harper (Geosphere Limited, UK)
12.00	<b>Fracture Characterisation in Shales for Efficient Development</b> Susie Daniels (Geospatial Research Ltd, UK)
12.20	<b>The Architecture and Frictional Properties of Faults in Shale</b> Rosanne Murray (Durham University, UK)
12.40	<b>Discussion</b>
12.50	<b>Lunch and Poster Session</b>
14.10	<b>Geomechanics and Petrophysics of Whitby Mudstone</b> Auke Barnhoorn (Delft University, The Netherlands)
14.30	<b>The Effect of Acid and Brine on Mechanical Properties of Shale</b> Wyatt Wick (University of Oklahoma, USA)
14.50	<b>Creep Behaviour of Organic-rich Shales: Anisotropy and strain partitioning</b> Hiroki Sone (University of Wisconsin-Madison, USA)
15.10	<b>A Workflow for Deriving Geomechanical Model Parameters from Petrophysical Data</b> Famke Kraaijeveld (Shell Global Solutions International BV, The Netherlands)
15.30	<b>Discussion</b>
15.40	<b>Tea and Coffee Break</b>
<b>Session 2: Permeability and Gas Flow</b>	
16.10	<b>KEYNOTE:</b> <b>Gas Transport Through Water Saturated Mudrocks</b> Alexandra Amann-Hildenbrand (RWTH Aachen University, Germany)
16.40	<b>Pressure-sensitivity of Permeability of Shales, and Implications for Shale Gas Reservoir Evaluation and Production</b> Julian Mecklenburgh (University of Manchester, UK)
17.00	<b>Direct Visualisation of Gas Flow in Clay-rich Low Permeability Materials</b> Andrew Wiseall (British Geological Survey, UK)
17.20	<b>Discussion</b>
17.30	<b>Drinks Reception</b>

## Day 2 – 17 November

09.00	<b>Registration &amp; Tea and Coffee</b>
09.30	<b>Geomechanical Properties and Permeability of Mudrocks and the Effect of Inherent and Induced Anisotropy</b> Stephan Gehne (University of Portsmouth, UK)
09.50	<b>Dilatancy driven gas flow in the Callovo Oxfordian Claystone and other mudrocks</b> Jon Harrington (British Geological Survey, UK)
10.10	<b>How Permeable is the Whitby Mudstone?</b> Maartje Houben (Utrecht University, The Netherlands)
10.30	<b>Permeability of Faults in Shale-dominated Sequences</b> Yannick Kremer (University of Strathclyde, UK)
10.50	<b>Tea and Coffee Break</b>
<b>Session 3: Reservoir Properties</b>	
11.20	<b>KEYNOTE:</b> <b>The Importance of Illitic Minerals in Shale Instability and in Unconventional Hydrocarbon Reservoirs</b> Jeff Wilson (James Hutton Institute, UK)
11.50	<b>Integrating Microseismicity and Rock Mechanics in Shale Gas Development: Lessons for the UK</b> Rob Westaway (University of Glasgow, UK)
12.10	<b>Creating Synthetic Petrophysical and Rock Mechanical Logs from Geomechanical Data: Case studies in mudrocks and shale gas plays</b> Alex Finlay (Chemostrat Ltd, UK)
12.30	<b>Using Mineralogical and Sedimentological Data from Core and Cuttings Samples to Improve the Petrophysical Characterisation of Shale Reservoirs: Examples from recent industry studies</b> Scott Brindle (CGG, UK)
12.50	<b>Discussion</b>
13.00	<b>Lunch and Poster Session</b>
<b>Session 4: Porosity</b>	
14.00	<b>KEYNOTE:</b> <b>Pore Systems in Heterogeneous Shales</b> Andrew Aplin (Durham University, UK)
14.30	<b>What is the Porosity of Shale?</b> Andreas Busch (Shell Global Solutions International BV, The Netherlands)
14.50	<b>Water Vapour Sorption as a Tool to Assess the Pore Structure of Mudrocks</b> Pieter Bertier (RWTH Aachen University, Germany)
15.10	<b>The Influence of Petrophysical Variations on Modelling Gas in Place in Shale Gas Reservoirs</b> Jenny Inwood (University of Leicester, UK)
15.30	<b>Tea and Coffee Break</b>
16.00	<b>KEYNOTE:</b> <b>Multi-scale, multi-modal imaging of shales</b> Peter Lee (University of Manchester, UK)
16.30	<b>Multiscale Structural Characterisation of Natural Shales and Nanoporous Model Material</b> Leon Leu (Imperial College London, UK)
16.50	<b>Study on Elastic Response of Organic-rich Shales at Different Scales Using Experimental and Homogenization Methods</b> Majid Goodarzi (Newcastle University, UK)
17.10	<b>Closing Remarks</b>
17.20	<b>Conference End</b>