



Sediment Body Geometry and Heterogeneity: Analogue Studies for Modelling the Subsurface

22-23 October 2009

DRAFT PROGRAMME

| Thursday 22 October | |
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| 08:00 | Registration + coffee |
| 08:50 | Welcome and opening |
| 09:00 | Naess, A. (StatoilHydro) <u>KEYNOTE</u> : Application of outcrop analogue data in business units. Which types of sedimentological data are important - how are they used |
| 09:40 | Gardiner, A. (Heriot Watt University) Use of outcrop-based models of channelised turbidite systems in multidisciplinary reservoir studies |
| 10:05 | Pope (BP) Permeability populating of turbidite channel reservoir models from fine scale geological models devised by integrating core data with a conceptual geological model |
| 10:30 | Tea / Coffee |
| 11:00 | Howell, J. (CIPR) Empirical Understanding of Sedimentary Architecture |
| 11:25 | Legler, B. (Imperial College) Characterisation of tide-dominated heterolithic reservoir analogues: Eocene Qasr El Sagha Formation, Western Desert, Egypt |
| 11:50 | Howell, J. (CIPR) Impact of deltaic clinothems on reservoir performance: dynamic study of reservoir analogues from the Ferron Sandstone and Panther Tongues, Utah USA |



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| 12:15 | Rarity, F. (University of Manchester) Constraining 3D geometry and heterogeneity within synrift tidal-shallow marine facies using lidar-based digital outcrop data: Suez Rift |
| 12:40 | Lunch |
| 14:00 | Bloch, R. (ExxonMobil) Integrating observations from numerical models, physical experiments and outcrop of deepwater fans for improved reservoir modelling |
| 14:25 | Storms, J. (Delft) Physics-driven modelling as an alternative reservoir building tool |
| 14.50 | Hampson, G. (Imperial College London) High-resolution stratigraphic architecture in regressive and transgressive shallow-marine outcrop analogues |
| 15:15 | Tea / coffee |
| 15:45 | Ruvo, L. (Eni) Process Oriented Modelling for multi-scale data integration in the 3D reservoir modelling workflow |
| 16:10 | Donselaar, R. (Delft) Integrated modelling of the Ten Boer Claystone Member, Southern Permian Basin: a combined log correlation, outcrop analogue and numerical forward modelling study |
| 16:35 | Jackson, M. (Imperial College London) Three-dimensional modeling of the shoreface-shelf parasequence reservoir analogue: stratigraphic and sedimentological controls on fluid and hydrocarbon recovery |
| 17:00 | Hamon (IFP) Characterization and geostatistical modeling of facies and diagenesis in a mixed carbonate-siliciclastic reservoir analog . Example of the Ilerdian Alveolina Limestone, Serraduy, NE Spain |
| 17:25 | Wine Reception |



Friday 23 October

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| 08:30 | Registration + coffee |
| 09:00 | <p>Eschard, R. (IFP) KEYNOTE: Constraining Stochastic and process-based simulations with outcrop data-bases: the steps further</p> |
| 09:40 | <p>Gardiner, A. (Heriot Watt University) Discontinuous Shales and Their Impact on Reservoir Behaviour</p> |
| 10:05 | <p>Hodgetts, D. (University of Manchester) A new approach for outcrop characterization and quantitative fluvial-body analysis of a low-sinuosity fluvial-dominated succession using digital outcrop models: Upper Triassic Oukaimeden Sandstone Formation, central High Atlas, Morocco</p> |
| 10:30 | Tea / Coffee |
| 11:00 | <p>Thurmond, J. (StatoilHydro) Maximizing analogue data access and capturing user knowledge using off-the-shelf applications</p> |
| 11:25 | <p>Miller, J. (ExxonMobil) Unraveling and modeling heterogeneities in reservoirs using process based models</p> |
| 11:50 | <p>Hern, C. (Shell) The Impact of Architecture on Fluid Flow with an Aeolian Dune; an Example from the Wahiba Sands, Sultanate of Oman</p> |
| 12:15 | <p>Keogh, K. (StatoilHydro) Data capture for multi-scale modelling of the Lourinhã Formation, Lusitanian Basin, Portugal: an outcrop analogue for the Staffjord Formation, Norwegian North Sea</p> |
| 12:40 | Lunch |
| 14:00 | <p>Boucher, A. (Stanford University) A flexible and expandible design to generate training images for sedimentary environment</p> |
| 14:25 | <p>Reesink, A. (University of Brighton) The origin and sedimentology of large sandy mid-channel bars</p> |



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| 14:50 | Fugel, F. (University of Tübingen) 3-D modelling of cement resources: a case study in economic geology (Jurassic, S-Germany) |
| 15:15 | Tea / coffee |
| 15:45 | Skorstad, A. (Norwegian Computing Centre) An analysis on the ability of stochastic object and pixel-based models to reproduce the fluvial channel architecture of the Escanilla outcrop |
| 16:10 | Johnson, H. (Imperial College London) Fluvial Reservoir Analogues in the Malay Basin: Analysis of Shallow 3D Seismic Data of Pleistocene Rivers on the Sunda Shelf |
| 16:35 | Watkins, C. (Furgo) Complex attribution to add value to analogue geometry data: A case study of the large scale controls of fluvial channel geometry |
| 17:00 | Debek, L. (Geomodelling Tech Corp) Modeling of Heterogeneity within Hummocky Cross Stratification and its Impact on Vertical Permeability at the Geocellular Scale |
| 17:25 | Conference End |

POSTER PROGRAMME

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| Newell, A. (BGS) Calcrete as a source of heterogeneity in fluvial sheet sandstone reservoirs |
| Rittersbacher, A. (CIPR) Oblique Helicopter Lidar as a tool for the collection of “very large”, Virtual Outcrops: Examples from selected fluvial outcrops in Eastern Utah |
| van Lanen, X. (University of Manchester) High Resolution Quantitative Outcrop Analysis of a Fluvial depositional system: An example from the Late Triassic Wolfville Formation, Nova Scotia |
| Bartenback, M. (University of Tübingen) 3-D modelling of deeper ramp carbonate buildups – a reservoir analog study from the Upper Jurassic (SW-Germany) |
| Francke, J. (Shell) Imaging the internal architecture of an Aeolian Dune: Trials and Tribulations of GPR in the Desert Sands of the Sultanate of Oman |