

Technical Programme – Talks

Tuesday 13th January 2009

Venue: Geology Department, Meston 1

8.00 – 8.10 **Stephanie Davidson on behalf of convenors:** Welcome and opening remarks

<i>Session 1: An examination of the problems involved in transferring modern geomorphological knowledge to the sedimentary record, or “What not to do”!</i> <i>Chaired by Gary Nichols</i>	
8.10	KEYNOTE: Frank Ethridge Variability in modern alluvial rivers: is this variability recognized in ancient river deposits?
8.50	Greg Sambrook Smith et al. Which present is the key to the past? : new insights from the South Saskatchewan River, Canada, concerning flood magnitude, preservation potential and the resultant sedimentary architecture.
9.10	Stephen Tooth et al. Fluvial process-product linkages in the wetlands of the Okavango Delta, Botswana: can we recognize these in the geological record?
9.30	Darrel Long Architecture and depositional style of fluvial systems before land plants: a comparison of Precambrian and Modern river deposits.
9.50	Stephen Hasiotis Ichnopedologic characteristics of fluvial and floodplain deposits: A comparison of modern and ancient deposits.

10.10 – 10.40 *Coffee/ Tea and POSTER SESSION (Room 118)*

<i>Session 2: What is preserved in the rock record? Implications for reconstructing fluvial architecture.</i> <i>Chaired by Phil Ashworth</i>	
10.40	KEYNOTE: Martin Gibling Estimating width and thickness of fluvial channel bodies: a pragmatic approach from the rock record.
11.10	Russell Dubiel Facies Complexity in a Continental System – The Upper Triassic Chinle Formation, Colorado Plateau, U.S.A.
11.30	Alexander Whittaker et al. Where does sediment come from? Characterising the links between catchment erosion, sediment export and deposition in tectonically perturbed landscapes.
11.50	Pathasarathi Ghosh & S. Sarkar Pedologic and sedimentologic criteria for recognition of floodplain sub-environments in a Triassic anabranching river deposit.
12.10	Brian Williams et al. Pedogenic and non-pedogenic calcretes in the Devonian Ridgeway Conglomerate Formation of SW Wales, UK: a cautionary tale.

12.30 – 12.40 End of morning sessions: Discussion

12.40 – 13.40 LUNCH

<i>Session 3: What lessons can we learn from modern processes? How do we work back to the rock record?</i> Chaired by Stephen Tooth	
13.40	KEYNOTE: Gary Weissmann et al. The Distributary Fluvial System (DFS) Paradigm: Re-evaluating Fluvial Facies Models Based on Observations From Modern Continental Sedimentary Basins.
14.10	Adrian Hartley et al. Distributary Fluvial Systems: Characteristics, Distribution and Controls on Development
14.30	Gary Nichols et al. Sandstone body architecture in ancient distributary fluvial systems
14.50	Phil Ashworth et al. The dynamics and deposits of a big river: the Rio Paraná, Argentina.
15.10	Marianne Sandstrom et al. Developing a new classification scheme for mud-rich facies in drylands, Lake Eyre, central Australia.

15.30 – 15.50 Coffee/ Tea

<i>Session 4: Complicated fluvial architecture with a consideration of the autogenic and allogenic controls. The influence of medium-term processes on fluvial sedimentary architecture.</i> Chaired by Gary Hampson	
15.50	KEYNOTE: John Holbrook A persisting preference for progressive piling: Rock vs. river biases in the medium-term processes and architectural complexity of channel-belt stacking.
16.20	Annamária Nádor & Á. Tóth-Makk Correlation of large scale sedimentary cycles: controls on sediment supply and storage in the Pannonian Basin, Hungary
16.40	John A. Fisher & J.M. Hamer Evaluating the sedimentary response to climatic forces; an integrated approach from the Oligo-Miocene Huesca Fluvial Distributary System, Ebro Basin, Spain.
17.00	Esther Stouthamer & M.J.P. Gouw Avulsion and its implications for fluvio-deltaic stratigraphy
17.20	Marinus Donselaar & I.Overeem Gradual avulsion in the rock record: Outcrop example of the Huesca Fluvial Fan

17.40 – 17.50 End of afternoon sessions: Discussion

18.00 – 19.30 Wine reception and POSTER SESSION (Room 118)

19.30 – 22.00 Conference dinner (King's College)

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Wednesday 14th January 2009

Venue: Geology Department, Meston 1

<i>Session 5: Sequence stratigraphy and the interaction between fluvial and non marine sequences. The influence of long-term processes on fluvial sedimentary architecture.</i> <i>Chaired by Adrian Hartley</i>	
8.00	KEYNOTE: Ron Steel & Carolina Gomez Cretaceous Shoreline-Attached Fluvial Systems within Source-to-Sink Transects
8.30	Gary J. Hampson et al. Controls on sandbody distribution and stratigraphic architecture in coastal-plain strata, Blackhawk Formation, Wasatch Plateau, Utah
8.50	Peter P. Flaig et al. Alluvial architecture and fluvial facies of tidally influenced alluvial/delta plain deposits of the Late Cretaceous Prince Creek Formation: Colville Basin, North Slope, Alaska
9.10	Sylvie Bourquin Criteria of recognition and expression of stratigraphic cycles in fluvio-aeolian environment: impact of the arid climate on the preservation and the morphology of fluvial system.
9.30	Giovanni Monegato & C. Stefani Stratigraphy and evolution of the long-lived Tagliamento fluvial system in the southeastern Alps (NE Italy).
9.50	Rafat Zaki Fluvio-marine facies characteristics of the Quaternary rift Sediments between Wadi Um Gheig and Wadi Assal, South Quseir, North Red Sea Coast, Egypt.

10.10 – 10.30 Coffee/ Tea

<i>Session 6: The interaction of sediment and water in affecting incision or aggradation. The influence of short-term processes on fluvial sedimentary architecture.</i> <i>Chaired by Raymond Eilertsen</i>	
10.30	KEYNOTE: Suzanne LeClair Revising assumptions about short-term hydrosedimentary processes and the preservation of river dune deposits.
11.00	Marco Mancini et al. Allogenic and autogenic controls on the upper Pleistocene-Holocene fluvial deposits of the Tevere River, Roma, Italy.
11.20	Kim M. Cohen et al. Full Holocene Storage Budget of the Rhine-Delta Sediment Trap
11.40	Peter Clift et al. Drainage Reorganization and Erosional Changes in the Holocene of the Indus River under the Influence of a Variable Monsoon.

12.00 – 12.10 End of morning session: discussion

12.10 – 13.20 LUNCH (provided) and POSTER SESSION (Room 118)

<i>Session 7: Modelling river deposits and the petrophysical implications. Chaired by Isabelle Cojan</i>	
13.20	KEYNOTE: Penny E. Patterson Alluvial Hierarchy: Description of Alluvial Strata in the Rock Record
13.50	Christopher Saville et al. The morphology of fluvial systems draining orogenic plateaux.
14.10	Robert Duller et al. The response of the longitudinal grain-size profile to the spatial distribution of tectonic subsidence: an integrated model and field investigation.
14.30	Faisal Alqahtani et al. Fluvial Depositional Systems in the Malay Basin: Reconstructing Pliocene-Quaternary Rivers on the Sunda Shelf Using 3D Seismic Data.

14.50 – 15.10 Coffee/ Tea

<i>Session 8: The problems involved in interpreting fluvial reservoirs Chaired by John Fisher</i>	
15.10	KEYNOTE: Jean-Loup Rubino & Richard Labourdette The problems involved in interpreting fluvial reservoirs: bridging the gap between sedimentologists and reservoir engineers.
15.40	Tobias H.D. Payenberg et al. Causes of lateral and vertical facies variability in fluvial successions and their implications for exploration, appraisal and development of fluvial reservoirs.
16.00	Derald Smith Counter Point Bar Deposit Lithofacies Model and Reservoir Significance in Meandering Rivers, Alberta, Canada.
16.20	Tom McKie Dryland terminal fluvial reservoir architecture, Triassic Skagerrak Formation, UKCS.
16.40	Stuart Archer et al. Reservoir characterisation challenges in the Jasmine Field of the CNS, UKCS.

17.00 – 17.15 End of afternoon session: discussion

17.15 – 17.45 Open Forum discussion: end of conference summary and way forward

Technical Programme – Posters

Venue: Geology Department, Room 118

Neal Alexandrowicz & John Holbrook

Turning Barriers into Baffles: Fluvial Migration Processes within a Belt and the Potential for Amalgamation of Fluvial Deposits.

Kathryn J. Amos, Stephen T. Hasiotis, Carmen B.E. Krapf, Rachel A. Nanson, Jennifer L. Morris, Marianne L. Sandstrom, Joanna Morris

New observations from the Channel Country of central Australia.

Stephen A. Cain & **Nigel P. Mountney**

Sediment supply and accommodation as controls on fluvial behaviour and style of preservation in an ephemeral fluvial succession: the Permian Organ Rock Formation, SE Utah, USA.

Isabelle Cojan, J. Rivoirard & D. Renard

From outcrop to process-based reservoir modelling of fluvial meandering systems
The key issue of parameter choice.

Stephanie K. Davidson & Colin North

Modern analogues for ancient rivers: using regional curves to identify appropriate drainage area and hydrophysiographic region

Stephanie K. Davidson, Adrian Hartley and Gary Weissmann

Distributary fluvial system terminations in drylands : facies characterisation in cratonic and foreland basins

Raymond S. Eilertsen & Geoffrey D. Corner

The role of scouring in producing thick fluvial sequences; examples from a Holocene forced regressive river system and a present-day lake delta distributary.

Brady Z. Foreman & Paul Heller

Fluvial response to climate change at the 100 kyr timescale: A case study during the Paleocene-Eocene Thermal Maximum in the Clarks Fork Basin, NW Wyoming, U.S.A.

N. (Nathanaël) Geleynse, H.R.A.(Bert) Jagers, M.J.F.(Marcel) Stive, J.E.A.(Joep) Storms, D.J.R.(Dirk-Jan) Walstra & A.J.F.(Ad) van der Spek

Physics-based numerical modelling of a river-delta system.

Jean-François Ghienne, Julien Moreau, Flavia Girard & Jean-Loup Rubino

Upper Ordovician fluvio-glacial architectures and facies suites, from outbursts to estuaries.

Massimiliano Ghinassi

Chute channels and meander cutoff in the Holocene deposits of the Florence alluvial plain (Italy).

Martin R. Gibling, R. Sinha, S.K. Tandon & M. Jain

Monsoon-generated fluvial sequences: Climatic control on alluvial architecture in the Himalayan Foreland Basin of India during the late Quaternary.

Flavia Girard, Jean-François Ghienne, Julien Moreau & Jean-Loup Rubino
Anatomy of Late Ordovician channels into a fluvio-glacial outburst-related delta plain.

Marc J.P. Gouw
Alluvial architecture of two Holocene fluvio-deltaic sequences: the Rhine-Meuse delta (The Netherlands) and the lower Mississippi valley (USA).

Margaret J. Guccione
Variability of abandoned channel fills and the effect on sandstone connectivity.

Stephen T. Hasiotis, R. Bruce Ainsworth, Kathryn J. Amos, Boyan K. Vakerelov, Carmen B.E. Krapf, Marianne L. Sandstrom & Simon Lang
Continental traces in tidal deposits in an intracratonic playa lake: An example of how sedimentary facies might sway ichnologic interpretations.

Anne-Edwige Held & Isabelle Cojan
Paleohydrology: A tool for restitution of catchment area and climatic fluctuations. Case study from the Oligocene of South-eastern France.

Jens Hornung & Lutz Reinhardt
From Outcrop to Subsurface: An Analogue Study of a Terminal Alluvial Plain (Upper Triassic, Keuper, SW-Germany).

Jens Hornung, Rahman Ashraf, Li Jie, Miao Yuyan, Matthias Hinderer, Sun Ge & Volker Mosbrugger
Coal seams, coarse grained channels and lacustrine river mouths: A lesson in alluvial depositional dynamics (Junggar-Basin, NW-China, Upper Triassic).

Daniel P. Le Heron, M.M. Buslov, C. Davies, K. Richards & I. Safonova
Jurassic and Cretaceous continental sedimentation in the West Siberian Basin, Russia: evolving fluvial systems and their preservation in the rock record.

Sophie Leleu, Adrian J. Hartley & Brian P.J. Williams
Large-scale alluvial architecture and correlation within a Triassic pebbly braided river system (Fundy Basin, Canada).

Robert G. Macdonald & Jan Alexander
Hydraulic-jump unit bars: experimental architectures.

Middleton, Larry T. & Long, Joshua
Climatic controls on the fluvial sedimentology, architecture, and cyclicity of the Jurassic Kayenta Formation, northern Arizona, U.S.A.

Jennifer L. Morris, Kathryn J. Amos, V. Paul Wright & Stephen T. Hasiotis
Are the Channel Country rivers of central Australia a suitable modern analogue for the lower Old Red Sandstone, U.K.?

Joanna Morris, Stuart Jones, Ken McCaffrey, Neil Meadows, Stuart Archer, Jamie Middleton, Ricki Charles & Henrik Waage
Permo-Triassic low net to gross fluvial systems: An analogue for subsurface reservoirs.

Nigel P. Mountney, Stephen A. Cain, Oliver D. Jordan & Oliver J. Wakefield

Architecture of ephemeral fluvial successions and their interaction with distal aeolian dune fields: implications for reservoir characterisation.

Rachel Nanson, Bruce Ainsworth & Boyan Vakarelov

Genesis of the submarine Malita Valley: A closed-contour, tidally enhanced fluvial incision, Joseph Bonaparte Gulf, Australia.

Laurent Petitpierre & Jonathan Redfern

Distributary channels and/or incised valley fills: Interpretations for the fluvial facies of the Marar formation.

Ann Rowan, Merren Jones, Simon H. Brocklehurst & Stephen Covey-Crump

The influence of glacial-interglacial climatic variations on coarse-grained braided river deposits.

Susumu Tanabe & Yoshiro Ishihara

Fluvial response to stepwise sea-level rise: a case study from the latest Pleistocene to Holocene incised-valley fills under the Tokyo Lowland, central Japan.

András Uhrin, Gábor Csillag, Zoltán Hámori, Ildikó Selmeczi & Orsolya Sztanó

Pliocene rivers in the Pannonian Basin, Hungary.

S. van Asselen & E. Stouthamer

Peat compaction and formation, key processes controlling fluvial-deltaic architecture.

Xavier van Lanen, David Hodgetts, Jonathan Redfern, Brian Williams & Sophie Leleu

A Quantitative 3D Outcrop Model of a Late Triassic Gravel Dominated Braided Fluvial System (Minas Basin, Nova Scotia, Canada).

Dario Ventura

Hyperconcentrated alluvial facies of the Miocene Teruel Basin (Spain): Controls and implications for basin analysis.

G.S. Weissmann, A.J. Hartley, G.J. Nichols, L.A. Scuderi, M. Olson, H. Buehler, & R. Banteah

Where Do Meanderbelts Form in Modern Continental Sedimentary Basins?