



TECHINICAL SESSION PROGRAM

Draft March 6, 2020

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This is the current draft program of technical sessions – Day/Session/Presentation Title/Author(s). Some amount of change is expected.

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Monday morning—Oral Presentations

Siliciclastic and carbonate shelf-slope margin evolutions: Insights from modeling, modern and ancient systems I

- Timing and Base-level Phase of Major Siliciclastic Bypass into the Delaware Basin during the Permian
C. Kerans*, W. Fisher
- Exploring Linkages Between Shelf-to-Basin Geometry & Calciclastic Accumulation; Delaware Basin
G. Hurd*, E. Campbell, M. Miller, T. Perkes, M. Sullivan, J. Francis
- Progradational Slope Architecture and Sediment Partitioning in the Outcropping Mixed Siliciclastic-Carbonate Bone Spring Formation, Permian Basin, west Texas
W. Walker, Z. Jobe*, J.F. Sarg, L. Wood
- The impact of tectonism on the stratigraphic architecture of a mixed siliciclastic-carbonate shelf system: Insights from the southern Eastern Shelf of the Permian Basin
F. Palacios*
- Tidal Shelf-Edge Incisions for Sediment Delivery to Slope and Basin Floor: Jurassic Lajas – Los Molles System in Neuquen Basin, Argentina
C. Olariu*, R. Steel, E. Jung, F. Almeida Junior
- Depositional Variability in Deep-Sea Resedimented Carbonates: Outcrop Analogues from the Ionian Basin (Late Cretaceous, Albania)
A. Slooman*, J. Le Goff, J. Jaballah, A. Hairabian, J. Reijmer

New approaches towards understanding submarine canyon formation: From ancient outcrops to modern processes

- The Evolution of Quaternary Submarine Canyons and their Importance as Conduits for Sediment Movement to Deep Water
M. Sweet*, M. Blum, G. Gaillot
- A novel, database-informed analysis of submarine-canyon formation and evolution
L. Bührig*, L. Colombera, M. Patacci, N. Mountney, W. McCaffrey
- Time-lapse bathymetry reveals how infrequent, large events control submarine channel evolution and dictate the preservation potential of channel deposits
M. Heijnen*, M. Clare, P. Talling, M. Cartigny, C. Stacey, G. Lintern
- Direct observation reveal interaction between knickpoints in submarine channels and turbidity currents
M. Cartigny*, M. Heijnen, M. Clare, P. Talling, S. Hage, J. Eggenhuisen, J. Hughes Clarke, S. Acikalin, L. Bailey, M. Azpiroz-Zabala, N. Chapplow, Y. Chen, J. Gales, A. Hendry, C. Heerema, J. Hizzett, S. Hubbard, J. Hunt, C. McGhee, G. Lintern, D. Parsons, E. Pope, C. Stacey, S. Simmons, E. Sumner, A. Vellinga, D. Vendettuoli

- Mountain building, sediment supply and wave focusing link submarine canyons to shore: Evidence from Mendocino Triple Junction
M. Smith*, D. Buscombe, S. Joerger, N. Finnegan, E. Mueller, S. Werner
- Shelf-incised canyon filled by steeply-dipping clinothems (Karoo Basin, South Africa)
L.E. Gomis-Cartesio*, M. Poyatos-Moré, D. Hodgson, S. Flint

Linkages between geomorphology and the stratigraphic record I

- Dynamic facies models: Relating spatiotemporal varying depositional processes to preserved 3D facies patterns using computational stratigraphy
B. Willis*, T. Sun, B. Ainsworth
- Linking periodic sediment supply signals to delta morphology and stratigraphy
S. Toby*, R. Duller, K. Straub
- The Push and Pull of Abandoned Channels: How rivers act as both repulsors and attractors, and what that means for the stratigraphic record
H. Martin*, J. Valenza, D. Edmonds
- Recognizing the product of concave-bank sedimentary processes in fluvial meander belts
P. Durkin*, S. Hubbard, J. Holbrook
- Reconstructing river bar morphodynamics from ancient fluvial deposits
S. Alpheus*, E. Hajek, E. Greenberg, E. Chamberlin
- Automated mapping of remote sensing data to understand the morphology and stratigraphic record of rivers
Z. Sylvester*, P. Durkin, R. Sech, J. Covault
- Relating the Geomorphology and Stratigraphy of an Ancient Fluvial Avulsion Node: An example from the Cretaceous Cedar Mountain Formation, Eastern Utah, USA
C. Speed*, Z. Sylvester, P. Flaig, P. Durkin, T. Goudge

High latitude sedimentary systems

- Sequence Stratigraphic Forcing Factors - Insights from High & Low Latitude Comparisons
J. Suter*, C. Fraticelli
- Permian High Latitude Deposits of the Sydney Basin, Australia – A Glaciomarine Setting
C. Yu*, P. McCabe
- Sedimentology of overbank turbidity current deposits in a high-latitude channel-levee system, Hillary Canyon, Ross Sea (IODP Site U1524): Can turbidites be used as a proxy for bottom-water outflow?
N. Varela*, B. Romans, M. Patterson, J. Ash, D. Kulhanek, R. McKay
- Comparing Ichnopedologic signatures of high-to-low latitude continental deposits in the deep-time record: example from the late Paleozoic and Mesozoic
S. Hasiotis*, P. Flaig, D. van der Kolk, A. Fiorillo
- A High latitude tidal depositional model based on three fjord-head deltas tidal flats, Svalbard, Arctic Norway
M. Jensen*, M. Kvam, M. Rodenburg, D. Schou

- Sedimentological evolution of a thick Upper Cretaceous mudstone succession from the southern high latitudes – insights from IODP Site U1512, Bight Basin, Australia
C. Wainman*, G. Tagliaro, M. Jones, A. Charles, L. White, P. McCabe
- South Polar glaciation and the glacial-to-postglacial transition in the Permian: an example from the Pagoda Formation, Shackleton Glacier Region, Antarctica
L. Ives*, J. Isbell

Monday morning–Poster Presentations

Siliciclastic and carbonate shelf-slope margin evolutions: Insights from modeling, modern and ancient systems I

- Spatial and temporal evolution of deltaic shorelines: Paleocene-Eocene Lower Wilcox Guadalupe A delta, Gulf of Mexico
M. Olariu*
- Origin of Silica in the Woodford Shale in Oklahoma: Implication of the Continental Contribution of Sediments versus Biogenic Silica Contribution
A. Seyedolali*, B. Cardott, W. Full, J. Zang, B. Valentine
- Deciphering early post-rift deep-water facies distributions in the subsurface; insights from the Angel Formation, NW Shelf, Australia
T. Wigan*, C. Jackson, D. Hodgson, I. Kane, S. Flint
- Pro-Deltaic Turbidites in the Late Cretaceous Foreland Basin of NW Colorado, USA
A. Pulham*, J. Fiduk
- The Changing Clinof orm Architecture of the Paleo-Orinoco, Late Miocene Cruse Formation, Trinidad – A Story of Eustatic Sea-Level Changes and Tectonic Interaction
A. Osman*, R. Steel, R. Ramsook, C. Olariu, S. Chen

New approaches towards understanding submarine canyon formation: From ancient outcrops to modern processes

- Across the shoreline: Modeling effects of submarine canyons on littoral transport of coarse sediment, Northern California
S. Joerger*1 M. Smith, D. Buscombe, S. Werner
- Repeated degradation and progradation of a submarine slope over geological timescales
C. Jackson*, A. McAndrew, D. Hodgson, T. Dreyer
- The Schistes à blocs Formation of the southern French Alps: incision and mud-prone infilling of submarine canyons. An analogue of a combination stratigraphic-structural trap
L. Mercier*, C. Ravenne, S. Migeon, J.-L. Rubino, L. Daghdvirenian, R. Bousquet, M. Muller, A. Labeur

- Facies and architectural variability of slope channel fills in prograding clinofolds, Mid-Jurassic Neuquén Basin, Argentina
Y. Gan*, R. Steel, C. Olariu, F. De Almeida Jr.
- Impact of climate and sea level variations on the submarine canyons development in the Gulf of Lion (France) and the Ebro margin (Catalonia) during the Plio-Quaternary
M.-A. Mauffrey*, S. Berné, R. Urgeles Esclasans, J. Canning
- Discerning the submarine from the subaerial: New insights from the mid-Ediacaran Wonoka canyons, South Australia
S. Giles*, N. Christie-Blick, D. Lankford-Bravo

Linkages between geomorphology and the stratigraphic record I

- Meander-bend migration style controls distribution and preservation of depositional products in meandering rivers
P. Durkin*, Z. Sylvester, S. Hubbard
- Recognizing a continuum of avulsion styles and its implications for fluvial facies models
J. Valenza*, D. Edmonds, H. Martin
- Roles of mass extraction and sediment load dispersal in constructing stratigraphy: Untangling the Holocene sequence of the Ganges-Brahmaputra-Meghna River delta
J. Raff*, S. Goodbred
- Is there a Link between Discharge Variability and Fluvial Fan Formation?
M. Hansford*, P. Plink-Bjorklund
- Trends in sediment mixing across time-stratigraphic basins during the integration of the Plio-early Pleistocene ancestral Rio Grande river in central and southern New Mexico
S. Ridl*, B. Hampton, C. Keegan, G. Mack
- A Novel Methodology for Assessment and Prediction of Fluvial Point-Bar Architecture from Outcrop
C. Russell*, N. Mountney, D. Hodgson, L. Columbera
- Scaling relationships in fluvial systems and their application to the rock record
A. Hartley*, A. Owen, G. Weissmann
- System scale perspectives of meander bend characteristics
A. Owen*, T. Hoey, R. Williams, R. Mooney, A. Breasley, T. Burgess, D. Ronald, M. Prieur, L. Riddell, A. Hartley
- Quantifying Sandbody Connectivity in Distributive Fluvial Systems using Stratigraphic Forward Modelling
S. Worms*, J. Howell, C. Griffiths, A. Hartley, A. Owen
- Fluvial Deposits in the Carnarvon Basin, Northwest Australia
A. Eatmon*, E. Hajek

High latitude sedimentary systems

- New Models for High-Latitude Channel Systems: Examples from Paganzo Basin, Western Argentina, and offshore NE Greenland
C. Allen*, J. Peakall, D. Hodgson, L. Gomis-Cartesio, W. Bradbury
- A new depositional model for the high-latitude lower Permian Patchawarra Formation, Cooper Basin, South Australia: implications for reconstructing depositional

environments during the Late Paleozoic Icehouse

C. Wainman*, P. McCabe

- A perspective on the mid-Cretaceous from a dinosaurian high-latitude greenhouse ecosystem, North Slope, Alaska
A. Fiorillo*, P. McCarthy, G. Shimer, M. Suarez
- Sedimentological characterization of the Permo-Triassic boundary in high paleolatitude, coastal plain successions of eastern Australia
C. Fielding*, T. Frank, A. Tevyaw, K. Savatic, V. Vajda, S. McLoughlin, C. Mays, B. Nicoll, M. Bocking, J. Crowley
- Spatial development of the Antarctic Ice Sheet during the Eocene-Oligocene Transition from drillsites on the Antarctic continental margin
S. Passchier*, J. Castaldo, D. Cone, R. Joseph, V. Hojnacki, A. Lepp, J. Light, A. States
- Pedosedimentary history and development of a Late Cretaceous (Maastrichtian), anastomosing crevasse-splay complex near the Kikak-Tegoseak dinosaur bonebed, North Slope, Alaska
P. McCarthy*, A. Fiorillo, E. Brandlen, P. Flaig
- Sea-level change at the South Pole during the Devonian Period: Insights from siliciclastic depositional systems from South Africa
C. Penn-Clarke*
- A sequence stratigraphic framework based on sedimentology and high-resolution chemostratigraphy of the Hare Indian Formation, Central Mackenzie Valley, Northwest Territories, Canada
B. Harris*, M. LaGrange, S. Biddle, V. Terlaky, M. Gingras, K. Fiess
- Permo-Triassic Evolution of the Transantarctic Basin: Did Climate Change, Accommodation and/or Floral Extinction at the Permian-Triassic Boundary Drive Environmental Change and Landscape Evolution(?)
J. Isbell*, L. Ives, P. Flaig
- Sedimentology and morphodynamics of an arctic fluvial-tidal transition zone in Dicksonfjorden, Svalbard
K. Choi*, D. Kim, J. Jo, M. Jensen, S.-I. Nam
- Along-strike facies variability and depositional architecture in a shelf to coastal transition without coal: Karoo Basin, South Africa
L.E. Gomis-Cartesio*, M. Poyatos-Moré, R. Jerrett, D. Hodgson, S. Flint

Monday afternoon—Oral Presentations

Siliciclastic and carbonate shelf-slope margin evolutions: Insights from modeling, modern and ancient systems II

- Depositional evolution of delta-fed slope channels in the eastern Gulf of Mexico: the roles of sediment supply and slope failures
J. Covault*, Z. Sylvester, D. Dunlap

- Lateral variability of shelf-edge and basin-floor deposits, Santos Basin, offshore Brazil
M. Steventon*, D. Hodgson, C. Jackson, H. Johnson
- Controls on shelf-margin architecture and deep-water sand delivery in contrasted tectonic and climatic settings: Insights from quantitative 3D seismic stratigraphy
V. Paumard*, S. Lang, A. Gartrell, T. Lozada Tucci, T. Nguyen, J. Bourget
- Shelf edge character in the Tyrrhenian Sea: insights into erosional and depositional processes in a key region for continental margin evolution
F. Gamberi*
- Variety of shelf-edge sand bodies in the Gulf of Lions (western Mediterranean Sea)
S. Berné*
- Land-sea correlation of Plio-Quaternary seismic and sedimentary facies in the Roussillon Basin (NW Mediterranean Sea)
S. Laouenan, S. Berné, M.-A. Mauffrey*, C. Duvail, J. Lofi, Y. Caballero
- How Do Submarine Canyon-Channel Systems (Re)shape Continental Margins?
L. Pettinga*, Z. Jobe

Revisiting the carbonate factory: evolution of ideas through time

- A New Classification of Carbonate Factories: Re-Thinking Carbonates in Genetic Terms
M. Minzoni*, N. Van Ee
- Carbonate factories: Sediment production, export and platform development
J. Reijmer
- Carbonate source to sink pathways: the importance of currents in slope processes
C. Betzler*, G. Eberli, S. Lindhorst, T. Lüdmann
- Sea level change across OAE2 recorded in cyclic shallow-water carbonate successions of the Southern Apennine Platform, Italy
R. Forkner*, G. Frijia
- Depositional Evolution of Pre-Salt Stratigraphy, Santos Basin, Brazil
W. Mills*, M. Harrison, R. Harrison
- Aptian carbonate factories of the Santos Basin Pre-salt, Brazil
C. de Araújo*, V. Madrucci, P. Homewood, A. Spadini, C. dos Anjos, M. Mettraux
- Paleozoic Heterozoan Carbonates in the Illinois Basin: A Response to Increased Subsidence and Nutrient Supply
Z. Lasemi*
- Enigmatic and non-uniformitarian; The mud mounds and 300 km-wide carbonate shelves of the Early Carboniferous (Tournasian) Redwall Limestone, NE Arizona
G. Gianniny*, P. Dohm
- Impact of carbonate factory evolution following the end-Permian extinction on isolated platform architecture in south China
B. Kelley*, D.J. Lehrmann, M. Yu, M. Minzoni, X. Li, J. Payne

Future resilience from ancient marine transgressions, sedimentary archives of Quaternary coastal change

- Dune and coastal lake archives at the west coast of Jutland (Denmark) record Holocene storminess variation
L. Clemmensen*, J. Goslin
- Beach-ridge morphology and internal architecture influenced by wave regime and spit-building processes along the Virginia (USA) coast
J. Shawler*, C. Hein, J. Connell, C. Obara
- Preservation styles of paleo-Vertisols following marine transgression: insights from modern process studies and the deep-time sedimentary record
S. Driese*, S. Kogler
- Sedimentological and Biological Evidence of a Holocene Marine Transgression in Lake Izabal, Eastern Guatemala
J. Obrist-Farner*, J. Stone, L. Perez, M. Wojewódka, E. Duarte
- Quantitative analysis of the stratigraphic architecture of incised-valley fills: a global comparison of Quaternary systems
R. Wang*, L. Columbera, N. Mountney
- Quaternary Coastal Change - a Tale of Two Valleys
R. Boyd*, P. Roy, A. Walker, N. Bate2, S. McAleer, C. Murray-Wallace, T. Cohen
- Texas Holocene Coastal Evolution: Record of Coastal Response to Punctuated Sea-Level Rise and Implications for Future Change
J. Anderson*
- Late Quaternary sedimentological history of a submerged gravel barrier beach complex, southern Namibia
M. Runds*, E.M. Bordy, J. Pether

Monday afternoon—Poster Presentations

Revisiting the carbonate factory: evolution of ideas through time

- Acoustic Properties of Marine and Non-Marine Carbonates, Clastic and Mixed Sedimentary Systems
J. Reijmer*, L. Kleipool
- Controls on Large Scale Architecture and Facies Distribution of a Carbonate Shelf Margin, Nanpanjiang Basin, China: Implications for Exploration of the Jurassic Smackover Formation
S. Bhattacharjee*, M. Minzoni, S. White, D.J. Lehrmann, X. Li, B. Kelley, K. Lau, M. Yu, J. Payne, P. Enos
- Sedimentary magnesite formation through temperature and pH fluctuations
H. Xu, F. Hobbs*
- Carbonate Production System in a Mixed Carbonate-Siliciclastic Succession, the Cambrian Knox Group in the Illinois Basin
Y. Lasemi*

- Geochemical Changes in Mixed Siliciclastic-Carbonate Ramp Systems: A Comparative Analysis of the Jurassic Smackover and Cambrian Wilberns Formations
C. Atkins*, M. Minzoni, B. Prather, D.J. Lehrmann
- Comparing Modern Carbonate Deposition in Florida Bay and Santa Clara Bay, Cuba: Implications for Initiation and Evolution of Carbonate Mudbanks
L. Nibert*, M. Minzoni, P. Enos, R. Minzoni
- A 5,000 year record of Holocene nitrate source to the Great Barrier Reef lagoon, using the isotopic composition of calcareous macroalgae Halimeda
M. McNeil*, L. Nothdurft, D. Erler, J. Webster, Q. Hua
- From calcareous ooze to a naturally fractured reservoir: The Lower Cretaceous Valdemar Field, Danish North Sea
A.C. Glad*, M. Welch, F. Amour, H. Nick, O. Clausen
- A record of halokinetic influence on depositional setting in an intrashelf salt basin: Early Cretaceous Fairway Field, East Texas, USA
K. Hattori*, R. Loucks, C. Kerans

Mass-transported complexes, deposits or subaqueous landslides? - A terminological continuum of processes and architectures with a wide societal impact

- Mass Transport Deposit Morphometrics as an Indicator of Flow Rheology and Sediment Composition: Modern Seafloor Examples from the Gulf of Mexico
H. Deng*, L. Wood, Z. Jobe
- Accommodation Space and Fill on Mobile Mass Transport Deposit: Autocyclicity in MTCs of Prograding Slope Successions
A. Ayckbourn*, R. Jerrett, I. Kane, K. Taylor, M. Watkinson, M. Poyatos-More
- The role of deformation in the progressive homogenization of mass-transport deposits
M. Rodrigues*, B. Trzaskos, F. Vesely, G.I. Alsop
- Internal geometry of carbonate-slope Mass-Transport Deposits (MTDs): Great Bahama Bank and Apulian Carbonate Platform
J. Le Goff*, A. Slooman, T. Mulder, T. Cavailles, E. Ducassou, V. Hanquiez, J. Jaballah, J. Reijmer
- How erosive are submarine landslides?
H. Nugraha, C. Jackson*, H. Johnson, D. Hodgson, M. Clare
- Lithological, petrophysical and seal properties of mass-transport complexes (MTCs), northern Gulf of Mexico
N. Wu*, C. Jackson, H. Johnson, D. Hodgson
- 3D seismic and well log analysis of a large submarine landslide complex on the upper Mississippi Fan, northern Gulf of Mexico
G. Martinez*, D. Sawyer
- 3D Seismic Characterization of Deformation Styles, Morphologies, and Stacking Patterns of Mass Transport Deposits in a Salt-Controlled Minibasin, Gulf of Mexico
A. Wright*, L. Wood
- Modern and ancient MTCs from extensive collapses of continental margins: different perspectives for a better comprehension of the processes and the stratigraphy of basin-

wide sediment instability stages

F. Gamberi*, E. Scacchia, G. Dalla Valle, A. Mercorella

- Effects of Depositional Texture and Diagenetic Processes on Elastic Properties of Late Cretaceous Carbonate Outcrops (Albania)
J. Jaballah*, J. Le Goff, A. Slooman, A. Hairabian, J. Reijmer
- Folding and thrusting in an extensional basin: anatomy of gravity-driven deformed strata in the Early Cretaceous Recôncavo rift (NE Brazil)
F. Vesely*, M. Rodrigues, D. Silveira, L. Neves, N. Silva, B. Trzaskos, C. Guedes
- Submarine channels and lobes revealed inside mass-transport deposits in the northern Gulf of Mexico
M.R. Gani*, M. Arthur
- A new database of mass transport deposits in the Alboran Sea
W. Meservy*, E. Gracia, R. Urgeles Esclasans
- Investigating mass-transport complexes using high-resolution depth seismic measurements, Angoche Basin, offshore Mozambique
C. Abu*, C. Jackson, M. Francis
- Mixed carbonate and clastic mass failures: a study of the Green River, Uinta, and Bone Springs Formations, Uinta, Piceance, and Delaware Basins, Colorado and Texas
F. McFarlin*, L. Wood
- Impact of mass-transport deposits on the stratigraphic architecture of turbidite sandstones: insights from high resolution 3D seismic geomorphology
J. Bourget*, C. Larcher, J.-L. Rubino, L. Lucas, M. Bez, C. Benan

Future resilience from ancient marine transgressions, sedimentary archives of Quaternary coastal change

- Exploring drowned barrier deposits as archives of paleoenvironmental change
D. Ciarletta*, J. Lorenzo-Trueba, A. Ashton
- Morphodynamics of Flood-Tidal Deltas in the Khor Al-Adaid (Inland Sea), Qatar: Tidal Sedimentation in an Eolian Landscape
R. Dalrymple*, R. Yousif, J. Rivers
- Insights into the Sea-Level History of the South Shetland Islands from Ground Penetrating Radar on Livingston Island, Antarctica
C. Gernant*, A. Simms, R. DeWitt, C. Garcia, B. Theilen
- Dissecting the Cockburn Town Member reefs (Grotto Beach Formation) on San Salvador Island, Bahamas: What microbial bindstone facies and bedding patterns tell us about Mid-Eemian sea-level variations
D. Griffing*, B. Gluma², H.A. Curran
- Records of terrestrial climate change preserved within a sub-tropical coastal strandplain
C. Hein*, J. Krask, V. Galy, D. FitzGerald, A. Klein
- The imprint of cyclones and wind on the surface expression of dryland deltas
J. Holbrook*, P. Smith, S. Lang, S. Hasiotis, V. Paumard, V. Cousins, M. O'Leary, I. Goodwin
- Complex coastal evolution of San Salvador Island, Bahamas during the Last Interglacial: role of airborne lidar guided mapping and stratigraphic analysis for sea level

reconstructions

C. Kerans*, A. Nolting, S. Fullmer, P. Moore, D. Mohrig, J. Gulley

- Dryland Coastal Deltas of Western Australia - Reservoir Analogues for Mixed-influenced Fluvial-Deltaic Depositional Systems
S. Lang*, V. Paumard, M. O'Leary, V. Cousins, A. Jian, J. Holbrook, P. Smith III, S. Hasiotis, I. Goodwin, B. Vakarelov, C. Krapf
- Polar gravel beaches as archives of wave climate, sea level and accelerated glacier retreat (Antarctica)
S. Lindhorst*
- Cerithidea californica as a sea-level index tool for the Southern California coast
S. Nethercutt*, A. Simms, L. Reynolds, M. McInnis
- Controls on beach deposit characteristics on Joinville and Livingston Islands, Antarctica
B. Theilen*, A. Simms, C. Gernant, J. Zurbuchen, R. DeWitt, C. Garcia
- Turbid water reefs on the northern coast of Sumba, East Nusa Tenggara, Indonesia
J.-P. Zonneveld*, Y. Zaim, Y. Rizal, A. Aswan
- Ichnopedologic signatures of deltaic systems shaped by cyclonic events: marine, continental, and climatic interplay along the northwest coast of Australia
S. Hasiotis*, J. Holbrook, P. Smith III, S. Lang, V. Paumard, V. Cousins, M. O'Leary, I. Goodwin

Tuesday morning—Oral Presentations

Linkages between geomorphology and the stratigraphic record II

- Spatial and temporal evolution and sedimentary architecture of Holocene Halimeda bioherms in the Great Barrier Reef: an integrated geomorphological and numerical modelling approach
M. McNeil*, L. Nothdurft, J. Webster, R. Beaman, M. Adams, M. Vilas
- Geomorphology of Wolfcampian & Leonardian Mixed Carbonate & Siliciclastic Shelf-to-Slope Systems; Permian Basin
G. Hurd*, L. Febo, E. Campbell, M. Miller, I. Johnson
- Grain size fractionation and sediment mass balance: The keys to unlocking the stratigraphic archive in Source-to-Sink systems
C. Brewer*, G. Hampson, A. Whittaker, G. Roberts
- Quantifying Structural and Geomorphic Controls on Submarine Channel Stacking Patterns: Case Studies from the Niger Delta
H. Mitchell*, A. Whittaker, M. Mayall, L. Lonergan
- How to recognize crescentic bedforms formed by supercritical turbidity currents in the geologic record: Insights from active submarine channels
S. Hage*, M. Cartigny, M. Clare, E. Sumner, D. Vendettuoli, J. Hughes Clarke, S. Hubbard, P. Talling, G. Lintern, C. Stacey, R. Englert, M. Vardy, J. Hunt, M. Yokokawa, D. Parsons, J. Hizzett, M. Azpiroz-Zabala, A. Vellinga

- What processes control widely observed patterns in deep-water channel fill stratigraphy? Surprising results uncovered by integrating seafloor and outcrop data
S. Hubbard*, M. Heijnen, M. Cartigny, M. Clare, J. Eggenhuisen, R. Englert, B. Romans, B. Daniels, J. Hughes Clarke, C. Stacey, G. Lintern, P. Nesbit
- Reconstructing flow properties from Agadir Basin deep-water turbidites: Establishing quantitative links between process and product
C. Stevenson*, R. Dorrell

Anthropogenic impacts and accumulation of pollutants on sediments and sedimentary processes

- Plastic: a new sedimentary material
C. Russell*, S. Gabbott, R. Fernández, C. Burchell, J. Zalasiewicz, S. McLelland, D. Parsons
- Turbidity current transport, deposition and burial of microplastics
F. Pohl, J. Eggenhuisen*, I. Kane, M. Clare
- Human Impacts to River Sediment Fluxes to the Sea
J. Warrick*
- Recent Changes in Sediment Texture and Composition on the Monterey Bay Continental Shelf: Could Human Activities in the Watershed Have Altered Shelf Stratigraphy over the Past Several Decades?
J. Carlin*, J. Addison, A. Wagner, J. Hayward, K. Beener, V. Schwartz, M. Huscher, V. Severin
- Imprint of two centuries of management on coastal dune stratigraphy along the Aquitaine Atlantic Coast
N. Robin*, J. Billy, B. Castelle, P. Hesp, Q. Laporte-Laforet, A. Nicolae-Lema, V. Marieu, D. Rosebery, S. Bujan, B. Destribats, R. Michalet
- Coastal sedimentation rates averaged over different timescales reflect variations in physical and human impacts through time
L. Reynolds*, A. Simms, A. Ejarque, R.S. Anderson

Extreme and low frequency events in sedimentary records, mitigation for future hazard of tsunami, flood and storm surge I

- The use of fine-scale grading to differentiate sandy tsunami and storm deposits
B. Jaffe*, S. La Selle
- Coastal erosion and recovery from a Cascadia subduction zone earthquake and tsunami
A. Simms*, R. DeWitt, J. Zurbuchen, P. Vaughan
- Estuarine coastal environment changes caused by extreme earthquake/tsunami events in Minamisoma City, Fukushima Prefecture, Northeast Japan
S. Uchiyama*, J. Machida, K. Hoyanagi
- Ground penetrating radar (GPR) investigation of Storegga slide tsunami deposits
L. Buck*, C. Bristow
- Application of RFID (Radio Frequency Identification) Technology in Tracking Transport of Carbonate Boulders by Storm Waves Along Rocky Shorelines of San Salvador Island,

Bahamas

B. Glumac*, U. Miguel, H.A. Curran

- Constraining Properties of a Far-Field Storm Swell from the Landward Transport of both Boulders and Sand on Eleuthera, The Bahamas
K. Wilson*, D. Mohrig
- Geological impacts of Africa's most intense tropical cyclone
J. Pilarczyk*, A. Green, L. Pearson, A. Giang

Cretaceous source rocks from Texas to Alaska: Depositional systems and continental margin dynamics of the Western Interior Seaway

- Cenomanian-Turonian Depositional Systems of the Western Interior Seaway: British Columbia to Texas, Utah to Manitoba
B. Hart*, G. Plint, M. Nicolas
- Comparing organic-rich deposits: Alternative modes of preservation within the Cretaceous Western Interior Seaway
D. Synnott*, K. Dewing, P.K. Pedersen, H. Sanei
- Basin and global influences on Cretaceous organic richness in the Arctic Polar Sea: Zircon U-Pb and $\delta^{13}\text{C}_{\text{org}}$ chronostratigraphy of the Aptian-Maastrichtian Hue Shale, Alaska
R. Lease*, K. Whidden, D. Houseknecht, J. Dumoulin, A. Warden, A. Kylander-Clark, J. Self-Trail
- Compound specific isotope analyses provide unprecedented details of water-column depositional environment for Cenomanian-Turonian source rock systems
J. Moldowan*, R. Forkner, J. Dahl, S. Barbanti, M. Mello, A. Fildani
- The Stratigraphic and Paleoceanographic Record of the Cenomanian-Turonian Maness, Woodbine, and Eagle Ford of Central and East Texas
R. Denne*
- Cenomanian-Turonian Source Rocks of the Eagle Ford Group at the Southern Opening of the Western Interior Seaway
M. Pope*, A. Donovan, M. Wehner, A. Pramudito, M. Tice, R. Conte, E. Peavey

Tuesday morning—Poster Presentations

Linkages between geomorphology and the stratigraphic record II

- Feedbacks between seafloor morphology and bottom currents: New insights from extensive seafloor imaging and detailed flow monitoring
L. Bailey*, M. Clare, I. Haigh, E. Bonamini, M. Fonnesu, F. Contreras Aristizabal
- Lateral Heterogeneity of Distal Submarine Lobe Deposits, Point Loma Formation, California: Implications for Facies Prediction in Horizontal Wells
K. Kus*, Z. Jobe, F. Laugier, M. Sullivan
- Topographic influence on a stepped-slope fan system – the architecture and seismic geomorphology of extensive bypass-dominated zones and fans, Campos Basin, offshore

Brazil

J. Casagrande*, D. Hodgson, J. Peakall

- Lateral Heterogeneity of Basin-Plain Turbidites, Cloridorme Formation, Quebec, Canada: Implications for Horizontal Well Production
C. Seckinger*, Z. Jobe, T. Martin, K. Kus, L. Pettinga, L. Wood
- Fluvial kinematics predict submarine-channel evolution in the Gulf of Mexico
J. Covault*, Z. Sylvester, P. Morris, D. Dunlap
- How Turbidity Current Flow Properties and Channel Evolution Shape Submarine Levees
L. Pettinga*, Z. Jobe
- Insights Into Stratigraphic Preservation of Allogenic Signals from Coupled Erosional-Depositional Landscape Evolution Modeling
G. Sharman*, Z. Sylvester, J. Covault
- Sedimentology of a Prograding Distributary Channel Network
J. Shaw*, R. Mahon, S. Gilchrist
- Predictive Stratigraphy in Shallow Marine Environments
D. Armitage*, P. Flaig, A. Derewetzky
- Linking morphodynamics of deltaic distributary networks to stratigraphic connectivity of channel bodies
E. Steel*, C. Paola, P. Passalacqua, H. Michael, J. Hariharan, Z. Xu

Anthropogenic impacts and accumulation of pollutants on sediments and sedimentary processes

- Coastal overwash deposits in built settings
E. Goldstein*, L. Taylor, H. Williams, R. Chowdhury, D. Foster, M. Moretz, S.N. Rafique, J. Weber, S. Mohanty, E. Lazarus
- Inevitable Drowning of the Mississippi Delta from Global Sea-Level Rise and Sediment Starvation
M. Blum*, B. Frederick
- Is land loss of the Mississippi delta an inevitable natural process?
S. Toby*, D. Edmonds, C. Siverd
- Climate and human induced regime shift of suspended sediment concentration in the Yangtze Estuary
D. Fan*
- Effect of vegetation on the deposition of fine-grained sediment on the Wax Lake delta, southern Louisiana, USA
S. Trampush*, L. Larsen
- Acute morphodynamic changes in the Ganges-Brahmaputra tidal delta plain and channel network
S. Goodbred*, R. Hale, R. Bain, C. Wilson, K. Rogers
- Turbidity currents and seafloor: a relationship analysed through numerical simulations
M. Azpiroz-Zabala, J. Storms, H. van der Vegt, D.-J. Walstra, A. Obradors-Latre, A. Pontén, J. Eggenhuisen*
- Direct monitoring reveals initiation of turbidity currents from extremely dilute river plumes

S. Hage*, M. Cartigny, E. Sumner, M. Clare, J. Hughes Clarke, P. Talling, G. Lintern, S. Simmons, R. Silva Jacinto, A. Vellinga, J. Allin, M. Azpiroz-Zabala, J. Gales, J. Hizzett, J. Hunt, A. Mozzato, D. Parsons, E. Pope, C. Stacey, W. Symons, M. Vardy, C. Watts

- Flow dynamics and the influence of structurally-partitioned fold-thrust belt during recurrent mass-wasting events in Southwestern Orange Basin, South Africa
P. Amaechi*, K. Omosanya, M. Opuwari

Extreme and low frequency events in sedimentary records, mitigation for future hazard of tsunami, flood and storm surge I

- Detailed mapping and tsunami sediment transport modeling of the 1700 CE tsunami deposit in the Salmon River Estuary, OR
S. La Selle*, A. Nelson, S. Mahan, B. Jaffe, W. Walter
- Using coastal, lacustrine vibracore data to identify prehistoric tsunami events and constrain rupture recurrence intervals along the Cascadia Subduction Zone, Floras Lake, Oregon
B. Nasr*, S. La Selle, A. Nelson, T. Dura, R. Witter
- Event stratigraphy of pumice gravel layers of northern Taiwan: submarine eruptions and tsunamis in the NW Pacific
N.-T. Yu*
- Antidune bedforms in tsunami outflow deposits
C. Bristow*, R. Weiss, C. Gouramanis, A. Switzer
- Characterization of tropical cyclones and their deposits in shallow-marine strata in the Taiwan Strait
S. Dashtgard*, L. Löwemark, R. Vaucher, J. Pilarczyk, S. Castellort
- Sedimentary composition and organic carbon sources in southwestern Bengal Delta, Bangladesh: Implication for interpreting the flood-marine influence of late Holocene
M.M. Haque*, K. Hoyanagi
- Reconstruction of flooding process of the earthquake triggered massive flood in 888 AD in the Nagano Basin, central Japan
K. Hoyanagi*, S. Uchiyama

Cretaceous source rocks from Texas to Alaska: Depositional systems and continental margin dynamics of the Western Interior Seaway

- Paleoenvironmental and tectonic settings of two widespread bivalve-rich intervals in Cretaceous strata of northern Alaska
J. Dumoulin*, K. Whidden, R. Lease, D. Houseknecht
- Millennial-scale biotic turnover recorded during OAE2, Western Interior Seaway, USA
R. Forkner*, J. Dahl, J. Moldowan, S. Barbanti, A. Fildani
- Facies Architecture of Cenomanian-Turonian Mudstones of the Cretaceous Western Interior Seaway
E. Percy, P.K. Pedersen*

- Sea-Level Change, Shifting Facies Belts And Organic Preservation in the Western Interior Seaway
B. Hart*, P.K. Pedersen

Tuesday afternoon–Oral Presentations

The stratigraphic record of foreland basin systems

- The role of sediment recycling in interpreting basin-fill stratigraphic records from millennial to million-year timescales
B. Romans*, N. Auchter, S. Johnstone, C. Mason, S. Hubbard, T. Schwartz, J. Fosdick
- Paleogene unconformity development across the Magallanes-Austral foreland basin, Patagonian Andes
S. George*, S. Davis, R. Fernández, M. Leppe, B. Horton, J. Clarke
- Western Anatolia as a Counterpoint to Orogenic Models
M. Mueller*, A. Licht, F. Ocaloğlu, C. Campbell, M. Kaya, B. Kurtoglu, G. Aksit, M. Taylor, G. Metais, P. Coster, K.C. Beard
- Landscape Evolution of the Himalayan Foreland Basin: An Investigation from River Profiles and Numerical Modeling of the Central Siwalik, Nepal
N. Gani*, I. Bhattarai
- Common minerals and common Pb isotopes: Uncommon applications and new method development for detrital K-feldspar provenance analysis in the Late Cretaceous Cordilleran foreland basin
E. Reat*, C. Johnson, M. Stearns, D. Fernandez
- Deciphering provenance, sediment dispersal, detrital recycling, and timing of arc arrival in Cenomanian–Campanian nonmarine strata of the Cordilleran foreland basin, New Mexico
B. Hampton*, S. Bartnik, C. Stopka, G. Mack
- Untangling Provenance Signals: Source-Area Mixing in an Axial Drainage across the Southern Utah Cordilleran Foreland Basin
G. St. Pierre*, C. Johnson
- The stratigraphic record of continental-scale river capture in a low-accommodation, distal foreland setting, Lower Cretaceous, Western Canada Foreland Basin
Y. Peng*, S. Hubbard, C. Hagstrom, S. Horner, H. Martin, D. Leckie
- Early Cretaceous North American Sediment Routing from Detrital Zircons: The McMurray Paleoriver System of the Alberta Foreland Basin
M. Blum*, A. Wahbi, C. Nazworth

Aeolian systems: bedform dynamics, geomorphology, and preserved stratigraphy

- A Database of Aeolian Sedimentary Architecture for the quantitative characterization of modern and ancient aeolian sedimentary successions
G. Cosgrove*, N. Mountney, L. Columbera, N. Yan

- Unusual stratal architecture in the wet erg system of the Neoproterozoic Venkatpur Sandstone: implication for underlying controls and aeolian stratigraphic models
T. Chakraborty*, S. Taral, A. Debnath
- Low accommodation aeolian systems
J. Howell*, C. Pierce, H. Rieke
- Linear or Transverse: Investigating the impact of bedform type in the Norphlet reservoir at Ballymore Field, Deepwater Gulf of Mexico
L. Murray*, E. Gross, R. Grimm, R. Kaplan, J. Thompson, F. Laugier, A. Turner
- Exploring Environmental Controls on Coastal Dune Morphology using an Aeolian Surface Model: Insights from The Bahamas and Turks and Caicos Islands
K. Wilson*, D. Mohrig, T. Swanson, C. Kerans
- Aeolian-fluvial-lacustrine interactions within the Pliensbachian desert system of southern Africa (Clarens Formation, Karoo Supergroup)
H. Head*, E.M. Bordy
- A New, Unifying Hierarchical Classification of Bounding Surfaces in Eolian systems
S. Hasiotis*, M. Chan, J. Parrish
- Lab Experiments on Stratification of Finger-Mode Dunes, and a Search for their Deposits in the Harris Wash Member of the Page Sandstone, Utah
D. Rubin*, S. Courrech du Pont
- Controls on large-scale variation in eolian systems, lessons from the Cedar Mesa Sandstone, Colorado Plateau
R. Langford*

Supercritical-flow processes and fluvial paleohydraulics

- The role of supercritical-flow structures in fluvial successions and facies models
C. Fielding*, D. Ventra
- Inconsistencies in supercritical-flow studies: the need for common terminology to identify future challenges
A. Slotman*, M. Cartigny, A. Normandeau, D. Ventra, S. Hubbard
- Integrating Seafloor and Outcrop Observations of Supercritical Bedforms to Refine Paleoenvironmental Interpretations of Deep-Water Stratigraphy
R. Englert*, S. Hubbard, M. Cartigny, M. Clare, D. Coutts, S. Hage, J. Hughes Clarke, Z. Jobe, G. Lintern, C. Stacey, D. Vendettuoli
- 'Scour-and-fill' structures in deep-water sandstones, outcrop and cores. Evidence of supercritical flow processes during high energy deposition?
A. Pulham*, P. Haughton
- Centimeter-scale Froude supercritical flow structures?
P. Plink-Bjorklund*, C. Tan, K. Ono, J. Fedele
- Reconstructing alluvial processes via analysis of facies architectures and clast fabrics in rift-basin successions, Corinth Rift, Greece
D. Somerville*, N. Mountney, L. Colombera, R. Collier
- Quantifying river-floodplain water and sediment fluxes for a sand-bed meandering river
H. Hassenruck-Gudipati*, J. Mason, P. Passalacqua, D. Mohrig

- Quantifying the Imprint of System-Scale Mass Balance on Fluvial-Deltaic Sedimentary Architecture Using the Pikeville formation, Central Appalachian basin, USA
P. Wooldridge*, R. Jerrett, R. Duller, R. Dutt, K. Straub
- Paleohydraulic analysis of lowstand river systems: Mississippian and Pennsylvanian incised-valley fills from Britain and Ireland
R. Wang*, L. Columbera, N. Mountney, S. Budai

A quiet revolution: are analogue and numerical experiments changing how we understand stratigraphy?

- Challenging the A/S ratio: an alternative approach to interpretation and prediction of stratigraphic architecture tested with numerical modelling
B. Barrett*, D. Hodgson, R. Collier
- Simulating Galloway's famous triangle: Towards a predictive understanding of how rivers, waves, and tides control delta morphology and stratigraphy
D. Edmonds*, C. Broaddus
- Testing the ability of forward stratigraphic modelling to replicate tectono-sedimentary interactions in rift basins
E. O'Donnell*, P. Haughton, L. Amy, C. Childs, C. Griffiths
- Controls on plan-view fan delta geometry under sea-level variations and spatially variable water depth: Insights from a geomorphic enthalpy method
J. Lorenzo-Trueba*, W. Anderson, V. Voller, W. Kim, T. Muto
- Exploring the limits of signal preservation in strata using Lobyte3D
R. Duller*, P. Burgess
- Linking sedimentary processes, dynamics, and the creation of stratigraphic patterns through computation
T. Sun*, B. Willis
- Statistical Characterization of Submarine Fans Over a Wide Range of Hydrodynamic and Sediment-transport Parameters: A Numerical Campaign
A. Wahab*, D. Hoyal, M. Shringarpure, H. Sun, K. Straub
- Contributing to our understanding of the geological record with flume experiments
J. Eggenhuisen*, E.F.L. Eurotank Flume Laboratory Team
- Preferential preservation of bedform disequilibrium dynamics in fluvial cross strata
K. Leary*, V. Ganti
- Fluvio-Tidal Counter Point Bars – An Integrated Sedimentological and Ichnological Approach Coupled with Numerical Modelling
S. Fietz*, J. MacEachern, S. Dashtgard
- The role of bed clay on ripple dynamics under combined wave and current flow
X. Wu*, R. Fernández, D. Parsons, J. Baas, J. Malarkey, S. McLelland, S. Simmons, A. Baar, E. Bastianon, C. Roggatz, B. Murphy, H. Kassem

New workflows and methods

- Automated Lithology Prediction from Core Images Using Machine Learning Models: A Case Study from Paleocene Turbidites, Schiehallion Field, UK
T. Martin*, R. Meyer, Z. Jobe
- Automated Interpretation of Depositional Environments Using Graphic Logs and Machine-Learning Models: Implications for Lateral Heterogeneity Prediction
Z. Jobe*, R. Meyer, F. Laugier, T. Martin
- StraboSpot 1 launch for sedimentary geology: Embracing the digital revolution using a digital data system with standard vocabulary, community standards, and digital data collection
C. Duncan*, M. Chan, D. Kamola, E. Hajek, B. Tikoff, J. Good, N. Novak, J. Ash, J. Walker, N. Roberts

Tuesday afternoon—Poster Presentations

The stratigraphic record of foreland basin systems

- Variations in exhumation across the Pyrenees Orogen recorded in modern river detrital mineral geo- and thermochronology from Spain and France
T. Capaldi*, M. Odlum, D. Stockli
- Characterization of a clastic injectite network at the transition from deep-water channel-levee to incipient slope system strata: Implications for evolution of the Magallanes foreland basin, Chile
S. Kaempfe*, B. Romans, S. Hubbard, L. Stright, R. Englert, B. Daniels
- The Stratigraphic Evolution of Turbidite Lobes Deposited in a Confined Basin
A. Martinez-Donate*, D. Ostrellic, I. Kane, D. Hodgson, C. Jackson, S. Flint, E. Schwarz, D. Lee, E. Soutter
- Late Cretaceous-Paleogene Patagonian broken foreland: an end-member example of broken foreland settings
K. Butler*, B. Horton, P. Flaig
- Arabia–Eurasia collision and Miocene drainage of the Anatolian Block deduced from provenance examination of the Cyprian Kythrea flysch (Eastern Mediterranean Basin)
U. Shaanan, D. Avigad*, N. Morag, T. Güngör, A. Gerdes
- Diachronism in the onset of foreland basin deposition (Southern Central Andes): evidence from the Upper Cretaceous non-marine deposits, Neuquén Basin, Argentina (34-37°S)
R. Gómez*, M. Tunik, M. Pons, S. Casadio
- Upper Cretaceous deposits in Neuquén Basin, Argentina (34-35°S): an ancient Fluvial Fan System?
R. Gómez*, M. Tunik, L. Lothari, S. Casadio
- Systems tract controls on tight-gas reservoir quality and natural gas production; an analysis of Almond Formation reservoirs in the Vermillion Basin, southwest Wyoming
B. Greenhalgh*, M. May, J. DePrang, J. Kalbus, C. Johnson

- Repeated marine transgression in the Siwalik succession and its implication for the evolution of the Eastern Himalayan Foreland Basin: new evidence from Siji River Section, Eastern Arunachal Pradesh
A. Debnath*, T. Chakraborty, S. Taral
- Sedimentology, chemofacies, and stratigraphic architecture of the Lower Cretaceous Burro Canyon Formation, Ninemile Hill, Colorado
H. Morgan*, M. Pranter, R. Cole
- Sedimentology and Ichnology of the Lower Cretaceous (Aptian-Albian) Wabiskaw Member of Clearwater Formation northeast Alberta, Canada
W. Ahmad*, M. Gingras

Aeolian systems: bedform dynamics, geomorphology, and preserved stratigraphy

- Depositional influence on permeability of aeolian deposits of the Sergi Formation, Recôncavo Basin, northeastern Brazil
L.F. de Oliveira, J.P. Porto Barros*, E. Barroso
- Three-dimensional eolian bounding surface architecture of the Entrada Sandstone, Utah: Expanding our understanding of dune morphodynamics and ancient erg evolution
E. Gross*, M. Carr, Z. Jobe
- Investigating sediment recycling between fluvial and aeolian environments in the Permian Cutler Group, Paradox Basin, UT and CO
C. Findlay*, R. Ewing, N. Perez

Supercritical-flow processes and fluvial paleohydraulics

- Recognition and Implications of Supercritical Bedform Deposits in Heterolithic Deep-Water Channel Fill
R. Englert*, S. Hubbard, C. Stacey
- Supercritical Flow Signatures and Erosional Features in Juncal Formation Basin Floor-Fans, California, US
D. Sapardina*, P. Plink-Bjorklund
- Build-up-and-fill structures: The depositional signature of high-aggradation chute-and-pool bedforms
A. Slooman*, M. Cartigny, A. Vellinga
- Point-bar Complexity of the Triassic Chinle Formation, Petrified Forest, Arizona: Implications for Paleohydraulic and Paleoenvironmental Reconstruction
T. Martin*, Z. Jobe, P. Durkin
- Quantifying the Hydrological Setting of Upper Flow Regime Channels of the Triassic Dockum Group of West Texas
S. Walker*, J. Holbrook, A. Skaleski, S. Tetz
- Understanding the Triassic 'Megamonsoon' Climate Hypothesis through a Paleogeographic Reconstruction of the Triassic Dockum Group, West TX
A. Skaleski*, S. Walker, J. Holbrook
- Formative controls on upstream-migrating bedforms in submarine channels
A. Vellinga, M. Cartigny*, M. Clare, J. Eggenhuisen

- Stochastic model for the development of fluvial bedform cross set bounding surfaces
R. Mahon*, T. Ashley, V. Ganti, B. McElroy

A quiet revolution: are analogue and numerical experiments changing how we understand stratigraphy?

- 3D modelling of complex geometry: an unconventional approach
B. Burnham*, A. Hurst, A. Grippa, D. Hodgetts
- Linking channel lateral mobility and resulting stratigraphic architecture within a mass-extraction framework for mixed bed and suspended load systems
R. Dutt*, P. Wooldridge, R. Duller, K. Straub
- The role of organic matter accumulation and degradation on the evolution of a coastal-plain depositional system
N. Khosbaatar*, J. Lorenzo-Trueba
- Exploring the stratigraphic implications of organic deposition resulting from marshes on deltaic stratigraphy: A laboratory study
J. Silvestre*, K. Sanks, S. Zapp, J. Shaw, R. Dutt, K. Straub
- Modeling sedimentary structures generated during terminal sand transport by turbidity currents
T. Swanson*, R. Mahon, D. Mohrig
- An Experimental Model of the Influence from Obstructed Subaqueous Channels on Turbidity Current Deposition/Erosion and the Potential for Channel Avulsions
D. Dunlap*, J. Buttles, J. Covault, D. Mohrig
- A 3D numerical forward modelling-based investigation into alluvial response to precession-scale upstream forcing
Y. Wang*, J. Storms, A. Martinius, D. Karssenberg, H. Abels
- Sedimentological and Geometric Effects on Turbidite Pore Pressure Distribution
A. Welker*, A. Eckert, J. Obrist-Farner, C. Griffiths
- Quantifying the influence of mini-basin geometry on the depositional mechanics of turbidity currents
K. Reece*, K. Straub

New workflows and methods

- Predicting basin-floor lobe stratigraphy using supervised machine learning techniques; an example from the Tanqua depocentre, Karoo Basin, South Africa
D. Lee*, D. Hodgson

Wednesday morning—Oral Presentations

Delineating and quantifying the tectonic and climatic processes controlling the character and volume of siliciclastic sediments

- Identifying environmental signal propagation in deep-time: an example from the SE Permo-Triassic Germanic Basin
L. Caracciolo*, D. Chew, D. Ravidà, K. Lünsdorf, C. Ansberque, M. Janssen, H. Stollhofen
- Characterization of astronomically-paced alluvial cycles by integrated sedimentological and 3D stratigraphic analysis of the early Eocene Willwood Formation, Bighorn Basin, Wyoming, USA
Y. Wang*, T. Baars, H. Sahoo, J. Storms, A. Martinius, H. Abels
- Tectonic forcing and catchment evolution implemented in Caribbean Basin source-to-sink stratigraphic forward model as a means of quantifying sandstone porosity and compositional uncertainty
L.M. Duarte, E. López Ramos, B. Prather*
- Sediment mass-balance analysis of the Middle Jurassic Brent Delta sediment routing system, Northern North Sea, offshore UK and Norway
I. Okwara*, G. Hampson, A. Whittaker, G. Roberts
- How climate-rift interactions drive the stratigraphic record: Model results and subsurface observations from the Lake Malawi (Nyasa) Rift, East Africa
C. Scholz*, M. Tan, C. Zhang, L. Wright
- Can Sequence Stratigraphy Be Used to Recognize Major Climate Events?
C. Fraticelli*, J. Suter

Climate change in the sedimentary record I

- The Paradox of Polar Paleoprecipitation Proxies in Ancient Greenhouse Worlds
G. Ludvigson*, J. Ross, A. Diefendorf, M. Suarez, C. Schroder-Adams
- Response of terrestrial depositional systems to the Paleocene-Eocene Thermal Maximum: the Tresp Group (Pyrenees, Spain)
L. Colombera*, O. Arévalo, N. Mountney, G. Basilici, M. Soares
- Testing general circulation models of future climate change by reconstructing meridional changes in land mean annual temperatures across the Cretaceous-Paleogene of North America
R. Jerrett*, E. Dearing Crampton Flood, S. Lenggler, B. Van Dongen, G. Price
- Basin scale perspectives on fluvial response to the Paleocene-Eocene Thermal Maximum
A. Owen*, A. Hartley, T. Hoey, A. Ebinghaus, D. Jolley, G. Weissmann
- Nonlinear response of autogenic process rates to changes in flooding intensity
E. Barefoot*, J. Nittrouer, K. Straub
- River deposition spanning early Eocene hyperthermal events in the southern Bighorn Basin (Wyoming, U.S.A.)
G. Sutherland*, J. Welch, E. Sullivan, B. Foreman
- Lessons from a Pleistocene under-filled lake basin
D. Larsen*

- Quantifying sediment dynamics on alluvial fans as archives of past environmental change
A. Whittaker*, S. Brooke, M. D'Arcy
- Life in a transgressive systems tract: High resolution, continental-scale, predictive modelling of coastal sedimentation response to climate change
C. Griffiths*

Reconstructing Late Paleozoic land and sea scapes across North America

- Late Paleozoic (Late Mississippian–middle Permian) sediment provenance and dispersal in southern and western Laurentia
T. Lawton*, D. Stockli, L. Liu
- Early Pennsylvanian north-to-south sediment routing across eastern North America to the Ouachita basin based on detrital zircon U-Pb and Hf analysis
I. Allred*, M. Blum
- Detrital zircon grain-size control on cycloprovenance records in the Pennsylvanian-Permian Paradox and Eagle Basins
R. Leary*, M. Smith, P. Umhoefer
- A 3-D subsidence model for the late Paleozoic Rainsville trough in northern New Mexico: implications for ARM tectonics
N.U.M.K. Chowdhury*, D.E. Sweet
- Absence of evidence of climate-driven cycles in Carboniferous deposits of Joggins, NS, Canada: influence of salt withdrawal tectonics on deposition and pedogenesis
Y. Letourmy*, S. Driese, J. Sims
- Tectonic and eustatic controls on Lower Carboniferous (Mississippian) deposition in the Southern Midcontinent, USA
J. Bynum*, J. Pashin, C. Wethington
- High Resolution Stratigraphy of the Keeler Basin Reveals Late Paleozoic Eccentricity Signals and Insights into the Tectonics of the SW Laurentian Margin
P. Gannon*, M. Smith, P. Umhoefer
- Bioherm expression and influence on Pennsylvanian cyclostratigraphy of the Paradox Basin, Utah
M. Smith*, E. Johnson, G. Gianniny, P. Umhoefer

Geochemical and petrographic fingerprints of microbially-mediated carbonate precipitation and microbial carbonates and Metazoan reefs during recoveries from mass extinctions

- Phosphorite formation, diagenesis, and microbial taphonomy in epeiric seaways of the São Francisco Craton (ca. 648-542 Ma)
C. Sanders*, J. Grotzinger, J. Eiler
- Microbially-Mediated Carbonate Precipitation at Salt Domes
B. Brunner*, A. Labrado, K. Giles, J. Peckmann, S. Bernasconi
- The curious case of the Lakeside carbonates, Great Salt Lake, Utah
M. Mettraux*, P. Homewood, M. Vanden Berg, D. Newell, A. Foubert

- Environmental and Microbial Controls on Lake Chemistry and Dolomitization in the Green River Formation (Eocene), Uinta Basin, Utah
M. Pommer, J.F. Sarg*
- The longest delay: re-emergence of coral reef ecosystems after the Late Devonian extinctions
L. Yao*, M. Aretz, P.B. Wignall, J. Chen, D. Vachard, Y. Qi, S. Shen, X. Wang
- Stromatolite-dominated microbialites and sedimentary facies across a Permian–Triassic boundary from South Qinling Block, China
Q. Zheng*, X. Zhang, D. Yuan
- Benthic microbial-dominated communities after the end-Permian mass extinction in South China Block
X. Zhang*, Q. Zheng, Y. Li
- Role of microbe-dominated matground ecosystem in biotic recovery after the end-Permian Mass Extinction: evidence from microbially induced sedimentary structures from the Lower Triassic Kockatea Shale Formation, northern Perth Basin
M. Luo*, Z.-Q. Chen, G.-R. Shi
- The Cambrian Miaolingian Reef Distribution Following the Hawke Bay Extinction and ROECE $\delta^{13}\text{C}$ Excursion, Mila Formation of Northern Iran
Y. Lasemi*, H. Amin-Rasouli
- Does the divergence of habitats of *Amphistegina* (Foraminifera) from those of zooxanthellate corals in recent decades reveal compounding stressors?
P. Hallock*

Wednesday morning—Poster Presentations

Delineating and quantifying the tectonic and climatic processes controlling the character and volume of siliciclastic sediments

- Reconstructing tectonic and climatic controls on lake level and sediment supply from rift-basin fills
X. Hu*, E. Hajek
- Tectonic and Climate Controls on a Middle Miocene Alluvial Fan Progradation, Lower Horse Spring Formation, Western Lake Mead Domain, Nevada
B. Demircan*, P. Umhoefer, M. Smith
- The stratigraphic architecture and fluvial systems of an arid, continental rift basin: Santa Fe Formation, Española Basin, New Mexico, USA
L. Welcome*, L. Wood, G. Robert
- Tectonic and climatic impacts on large-scale stratigraphy within Laramide Basins: A comparison of the Bighorn, Piceance Creek, and Huerfano basins (Western Interior, U.S.A.)
B. Foreman*

- Tectonic variability and overprinting within the Cretaceous Western Interior Seaway, USA
O. Jordan*, R. Duller, P. Burgess
- Statistical Analysis of Autogenic and Allogenic Cyclicity in Alluvial Stratigraphy
K. Phillips*, B. Foreman, K. Straub, W. Clyde, W. Ward
- Field testing autogenic storage thresholds for environmental signals in the strata of the Mississippi delta
U. Mukherjee*, K. Straub
- Regional Evolution of Submarine Channel-Lobe Systems to Contractional Salt-cored Structures, Offshore Angola
D. Howlett*, R. Gawthorpe, Z. Ge, A. Rotevatn, C. Jackson
- Volumetric analysis of footwall degradation and hangingwall-fill for sediment input identification, northern Carnarvon Basin, NW Shelf, Australia
B. Barrett*, D. Hodgson, R. Collier
- Sediment Mass Balance between Transverse Source-to-Sink Systems in Marine Rift Basins: Dampier Sub-Basin, Northwest Shelf Australia
H. Chen, L. Wood*, R. Gawthorpe
- Sediment Dispersal and Source Terrane Exhumation Within the Laramide and Mexican Orogens from Detrital Zircon U-Pb-He Double Dating
C. Kortyna*, D. Stockli, J. Covault, T. Lawton
- Early Cretaceous sedimentary systems of the U.S. Atlantic passive margin: Insights into fluvial-to-submarine fan linkages from detrital zircons
A. Parent*, B. Romans, C. Mason, J. Covault, Z. Foster-Baril, D. Stockli
- Insights into Sedimentary Recycling and Sediment Routing using a Multi-Proxy Provenance Approach
M. Nauton-Fourteu*, S. Tyrrell, A. Morton, C. Mark, G. O'Sullivan, D. Chew
- Mixed Signals; Understanding dynamic sand supply to a Carboniferous deltaic system
B. Anders*, S. Tyrrell, J. Murray, J. Graham, C. Mark, D. Chew, E. Badenski
- Linking External Forcing Controls to Diagenesis: an example from the SE Permo-Triassic Germanic Basin
M. Janssen*, L. Caracciolo, D. Ravidà, H. Stollhofen
- Sedimentology of the Lajas Formation (Middle Jurassic) in Portada Covunco, Neuquén basin, Argentina
M.C. González Estebenet*, P.J. Pazos, M. Naipauer
- OH defects in detrital quartz: a proxy for reconstructing the tectonic environment of sedimentary deposits?
D. Jaeger*, R. Stalder, M. Strasser

Climate change in the sedimentary record I

- Continental weathering during snowball Earth deglaciation and the induced cap dolomite formation
Y. Fang*, H. Xu
- Stratigraphic architecture and deglaciation sequences of the Permo-Carboniferous Aquidauana Formation, western Paraná Basin, Brazil

E. Menozzo da Rosa*, J. Isbell, F. Vesely, A. Garcia, N. Griffis, I. Montañez, R. Mundil, N. Fedorchuk, B. Trzaskos, Q.-Z. Yin

- Climatic and palaeo-landscape changes during the Pliensbachian inferred from aeolian and fluvio-lacustrine volcano-sedimentary rocks in the main Karoo Basin of southern Africa
E.M. Bordy*, T. Haupt, M. Abrahams, H. Head
- Possible evidence for ephemeral freezing temperatures in equatorial regions of early Permian Pangaea
L. Pfeifer*, G. Soreghan, S. Voigt, B. Birkett, K. Oliver, S. Pochat, B. Small, J. Van Den Driessche
- Do fluvial deposits in the Raton Basin record climatic variation across the Cretaceous-Paleogene boundary?
T. Schwartz*, M. Dechesne, K. Zellman
- Coal – the ice core of the warm past: reconstructing high latitude climate change in the Paleocene of Svalbard, Arctic Norway
M. Jensen*, M. Jochmann, C. Marshall, A.S. Gudmundsdottir, D. Large, O. Lenz, E. Osaland, M. Weber
- Paleosol variability spanning early Eocene hyperthermal events in the southern Bighorn Basin (Wyoming, U.S.A.)
E. Lalor*, B. Foreman, E. Sullivan
- Evolution of central and eastern Texas rivers recorded in detrital zircon U-Pb age spectra of terraces and modern river deposits during the Late Pleistocene to Present
E.G. Gutierrez*, D. Stockli, J. Covault
- Fluvio-lacustrine sedimentation in a rift shoulder: Implications for early human colonization of Olduvai Gorge in Tanzania, East Africa
J. Umbaar*, P. Durkin, S. Hubbard, J. Mercader

Reconstructing Late Paleozoic land and sea scapes across North America

- A glimpse of an early Permian landscape colonized by arborescent lycopsids in western Gondwana
T. Mottin*, F. Vesely, R. Iannuzzi, L. Barão, R. Canata, A. Garcia, D. Delgado, L. Valore, I. Montañez, N. Griffis
- Detrital Zircon Geochronology of Upper Wolfcamp Sandstones in the Northern Delaware Basin: Implications for Permian Sediment Routing Patterns of Western Laurentia
J. Harrington*, E. Frost, G. Soto-Kerans
- Detrital Zircon Geochronology of basal Cambrian Strata in the Deep Illinois Basin, USA: Evidence for the Paleoproterozoic-Cambrian tectonic and sedimentary evolution of central Laurentia
D. Malone*, J. Freburg, L. Johnson
- Dynamic Depositional Systems near Salt: Coupled Deformation and Deposition of the Permian Cutler Formation at the Margin of the Onion Creek Diapir, Fisher Valley, Utah
D. Lankford-Bravo*, K. Giles, R. Langford

- Terrestrial paleoenvironments and transgressive history of the Devonian Temple Butte Formation in eastern Grand Canyon
M. Marshall*, N. Sharp, J. Warme
- Chemostratigraphy and Lithofacies of the Keeler Canyon Formation, Pennsylvanian-Permian of Southeastern California
K. Vote*, P. Gannon, M. Smith, P. Umhoefer

Geochemical and petrographic fingerprints of microbially-mediated carbonate precipitation and microbial carbonates and Metazoan reefs during recoveries from mass extinctions

- What controls giant stromatolite formation and cessation?
M. Ingalls*, A. Fetrow, C. Frantz, K. Snell, E. Trower
- The ability of *Synechococcus* 7002 to dissolve and precipitate calcium carbonate, and its implications for microbial mat-mediated sediment trapping and binding
T. Mahseredjian*, J. Artier, I. Overeem, J. Cameron, E. Trower
- Sedimentological characteristics of modern and ancient lacustrine microbial carbonates of the Iberian Peninsula
C. Doyle*
- Paragenetic history of multiple mineral phases in ooids from Great Salt Lake, UT
T. Lincoln*, E. Trower

Wednesday afternoon—Oral Presentations

Climate change in the sedimentary record II

- Direct and Indirect Effects of Explosive Volcanism on Climate of the Late Paleozoic Ice Age
G. Soreghan*, M. Soreghan, M. Sardar Abadi, N. Heavens
- The effect of global mean climate state on the response of sedimentary systems to orbital forcing
L. O'Connor*, J. Tierney, M. Jones, S. Batenburg, S. Robinson, H. Jenkyns
- Calcite Seas/Aragonite Seas: Reconciling Secular Variation in Ocean Mg/Ca with Mg/Ca Paleothermometry
F. Hasiuk*
- Geological and palaeoclimatic signals following the End-Permian Mass Extinction on Central Spitsbergen, Svalbard
V. Zuchuat*, A. Sleveland, E. van Soelen, R. Twitchett, H. Svensen, H. Turner, M. Jones, Ø. Hammer, B. Hauksson, H. Hafliðason, I. Midtkandal, S. Planke
- A Late Devonian (Frasnian), low-latitude record of astronomical insolation forcing: magnetic susceptibility reflects a global dust teleconnection, Guilmette Formation, Great Basin, U.S.A.
T. LaMaskin*, A. Perry, D. De Vleeschouwer, C. Lane, D.J. Over, B. Ellwood, K. Schantz

- Late Triassic climate change: cyclostratigraphy of the vertebrate-bearing lacustrine succession in the Jameson Land Basin, East Greenland
M. Mau*, L. Clemmensen
- Assessing the relative impact of climatic, eustatic and tectonic signals on the fill of deep-marine sedimentary basins: the Eocene-Oligocene Grès d'Annot, French Alps
E. Soutter*, I. Kane, A. Martinez-Doñate Gomez, A. Boyce
- Sedimentary processes offshore the Amundsen Sea, West Antarctica under different Pliocene climate states: first results from IODP Exp. 379
S. Passchier*, C.-D. Hillenbrand, T. Frederichs, O. Libman-Roshal, K. Gohl, J. Wellner, E. 379 Scientists

Extreme and low frequency events in sedimentary records, mitigation for future hazard of tsunami, flood and storm surge II

- On the Edge: Contourite Sands from Shelf to Slope
D. Stow*
- Early Phanerozoic shallow marine substrate evolution
L. Tarhan*
- Straits as current-dominated hotspots in the spectrum of shelf and deep-marine environments
R. Dalrymple*
- Utilizing ancient hummocky cross-stratified deposits to understand past ocean states, and to predict future sea and coastal conditions
L. Wood*, K. Arora
- Initiation, growth and decay of contouritic systems controlled by highly fluctuating climate cycle in rift basin – Example from the eastern part of the Gulf of Corinth (Greece)
S. Rohais*, R. Rubi, J.-C. Lecomte, D. Sakellariou
- Current Deposits on the Marion Plateau, Australia
S. Bashah*, G. Eberli
- Recent storm deposits in the Bahamas
G. Eberli*, K. Jackson, E. Rankey, S. Reeder

Sedimentation and evolution of convergent margin basins

- High-elevation hinterland “bobber” basins record lithospheric foundering beneath orogenic plateaux
P. DeCelles*, B. Carrapa, P. Kapp, B. Horton, C. Currie, H. Wang
- Constraining the Timing of the Sevier Orogeny in Southwestern Utah
J. Quick*, J. Hogan, J. Obrist-Farner, M. Wizevich, J. Crowley, J. Kaiser
- Evolution of the tectonic regime governing subsidence and deposition in the Anadarko basin and the Ouachita foreland
N. Hobbs*, J. van Wijk, G. Axen
- Western Pangean Tectonism during the Late Triassic and its Influence on the Depositional, Climatic and Biologic Evolution of the Southwestern USA: the Chinle

Formation at Petrified Forest National Park, Arizona

S. Atchley*, L. Nordt, S. Dworkin, J. Ramezani, W. Parker

- Detrital zircon mixture modeling demonstrates changing source terranes due to pre-Miocene strike-slip motion, Ventura Basin, California
J.C. Gilbert*, Z. Jobe, G. Sharman
- Diachronous deposition of the lower Nanaimo Group, Georgia Basin, British Columbia, Canada, and implications for resolution of the Baja B.C. hypothesis
C. Huang*, S. Dashtgard
- Linking the timing of slope-channel deposition to forearc basin processes – a high resolution chronostratigraphic framework of the upper Nanaimo Group, British Columbia, Canada
D. Coutts*, S. Hubbard, R. Englert, W. Matthews

Petrography, siliciclastic diagenesis and pore pressure prediction

- Petrographic characteristics of some shelf mudstones in the Late Cretaceous Western Interior Seaway: Implications for the provenance and depositional conditions of mudstones
Z. Li*, J. Schieber, P.K. Pedersen
- Fluid Inclusion study of the Smackover Formation, eastern Gulf Coast: Implications for dolomitization models
K. Gill*, M. Minzoni, B. Prather, R. Goldstein
- Evolution Of Low-Magnesium Calcite Microcrystals: Geochemical Zonation My Be The Key To Predicting Microcrystal Texture
C. Rinderknecht*, F. Hasiuk
- Depositional Setting, Diagenesis and Their Impact on the Reservoir Quality of the Visean-Gzhelien Carbonates in North Truva, the eastern margin of Pre-Caspian Basin, Kazakhstan
W. Li*, L. Mu, L. Zhao, S. wang, J. Li, D. Shao, C. Li

Wednesday afternoon—Poster Presentations

Climate change in the sedimentary record II

- Facies Distribution in Cryogenian Cap Carbonate Sequence, Naukluft Mountains, Namibia
D. Morris*, J. Grotzinger, C. Sanders, E. Henry
- Widespread late Cambrian Ocean Anoxia Implied by constant cerium anomaly across the Steptoean Positive Carbon Isotope Excursion (SPICE) in the Great Basin
C.C. Huan*, G. Jiang, S. Huang, J. Baker, A. Warren
- Ocean redox change across the Early Mississippian Kinderhookian–Osagean carbon isotope excursion
D. Morales*, G. Jiang, S. Huang, A. Warren, D. Maharjan

- Facies analysis and geochemical record across the OAE-2 in the shallow water platforms of the Tethys ocean
G. Frijia*, R. Forkner, M. Parente, M. Morsilli, A. Godet, U. Struck, T. Adatte, B. Bomou, S. Cardelli
- Evidence of loess transportation during the MIS22/MIS16 glaciations into Japan Sea/East Sea and implications for the mid-Pleistocene climate transition
M.A. Bassetti*, M. Courtillat, S. Toucanne, S. Cuven

Extreme and low frequency events in sedimentary records, mitigation for future hazard of tsunami, flood and storm surge II

- Integrated sedimentologic and ichnologic response to increasing tidal influence and decreasing fluvial-flood processes in select ancient delta deposits: Changing characteristics versus relative controls
P. Flaig*, S. Hasiotis, D. van der Kolk, T. Prather, R. Jones
- Combined-Flow Bedform Shape and Size in a Mixed Sand-Mud Tidal Flat Environment
J. Baas*, J. Malarkey, I. Lichtman, P. Thorne, D. Parsons
- The value of terrigenous grain-size information from contourite drifts: North Atlantic deep circulation history across the Eocene-Oligocene Transition, Newfoundland Ridges drift complex
A. Parent*, B. Romans, K. Chilton
- Biogenic reworking patterns in highly bioturbated shallow-marine transgressive successions (Jurassic, Neuquén Basin, Argentina)
M. Poyatos-Moré*, E. Schwarz, S. Boya, L.E. Gomis-Cartesio, I. Midtkandal
- Characteristics of Surface Topography and Sediments before and after the Typhoon Soulik in 2018, Gochang Open-Coast Intertidal Flat, Korea
W.H. Ryang*
- Bottom current deposits: Bridging the gap between the modern and the ancient sedimentary record
D. Beelen*, L. Wood

Sedimentation and evolution of convergent margin basins

- Resolving the Architecture and Position of Siliciclastic Inputs Into a Forearc Basin: Lower Nanaimo Group, Georgia Basin, Canada
K. Giroto*, S. Dashtgard, C. Huang, B. Kent
- Shortening of Inherited Salt Structures at the Aulet and Adons Diapirs, Spanish Pyrenees
C.E. Gannaway Dalton*, K. Giles, J. Anton Munoz, M. Rowan
- Inception and evolution of a trench-axial submarine channel system: the Hikurangi Channel
D. Tek*, A. McArthur, A. Crisostomo Figueroa, M. Patacci, W. McCaffrey
- Lateral variations of the Devonian-Carboniferous boundary unconformity across the Antler foreland basin in the southern Great Basin, western United States
A. Warren*, G. Jiang, C.C. Huan, D. Morales

- To spill or not to spill? Deep-water sedimentation patterns across the Hikurangi subduction margin, New Zealand
A. McArthur*, A. Wunderlich, A. Crisostomo Figueroa, A. Karvelas, W. McCaffrey
- Can Different Styles of Mass-Transport Deposits Help Unravel the Stratigraphic Development Of Confined Intra-Slope Basins (e.g., Trench-Slope Basins)?
B. Claussmann*, J. Bailleul, C. Chaptal, G. Mahieux, F. Chanier, A. McArthur, B. Vendeville
- Axial and transverse deep-water sediment supply interactions in rift basins: a synthesis of exhumed and subsurface systems
D. Hodgson*, B. Barrett, T. Cullen, L. Hansen, A. Privat, C. Jackson, A. Pontén, C. Thrana, R. Collier, G. Robert
- Paleo-Water Depth Analysis: Addressing conflicting data between foraminiferal biofacies and sedimentary textures in a forearc delta, Middle Eocene Coaledo Formation, Oregon
J. Armentrout*, K. McDougall

Petrography, siliciclastic diagenesis and pore pressure prediction

- Sediment-routing controls on sandstone texture and petrography across an ancient shelf
J. Lupin, G. Hampson*
- Petrographic Intricacies of Black Shale Reservoirs and their Implication in Physiochemical Depositional Interpretations: A Study of the Hare Indian and Canol Formations, Central Mackenzie Valley, Northwest Territories
S. Biddle*, M. LaGrange, B. Harris, M. Gingras

Sedimentary geology on Earth, Mars and beyond: from deposition through diagenesis

- Reconstructing paleo-topography from river deposits on Mars
B. Cardenas*, M. Lamb, A. Hayden, J. Dickson
- Significance of reversing bedforms on delta deposits in Gale crater, Mars
D. Rubin*, S. Gupta, A. Stevens, M. Lamb, J. Grotzinger, K. Lewis
- Autogenic progradation and retrogradation patterns in deltaic strata generated by the interplay between discharge and accommodation
L. Stodden*
- Preliminary Facies Models For Arid Distributive Fluvial Systems
A. Hartley*, A. Mather, C. Zhang, F. Wenjie
- Using Geochemical Proxies to Measure Preservation in the Marcellus Formation
S. Williams*, R. Koons, J. Williams
- Diagenesis of an Early Cretaceous Microporous Limestone Reservoir: comparison between the crest and flanks of oil field, Abu Dhabi, UAE
M. Alsuwaidi*, A. Alsuwaidi, S. Morad, J.F. Sarg