















57th BSRG Annual General Meeting 17-20th December 2018, Edinburgh

Programme Book







57th BSRG

Annual General Meeting 17-20th December 2018, Edinburgh

Conveners

Dorrik Stow (Chair)
Zeinab Smillie (Secretary)
Matthew Booth
Rachel Brackenridge
Jim Buckman
Tom Dodd
Onoriode Esegbue
Babette Hoogakker
Tim Kearsey
Helen Lever
Uisdean Nicholson
Romesh Palamakumbura
Heather Stewart
Dominic Tatum
Tom Wagner

Sponsors:











Programme

Monday 17th December: Field Trips and Workshops

- Field Trip 1: Siccar Point and Pease Bay (09.00-17.00) (meet Enterprise Building, Heriot-Watt University)
- Field Trip 2: Fluvial Geo-Modelling (09.00-17.00) (meet Enterprise Building, Heriot-Watt University)
- Field Trip 3: Building Stones of Edinburgh (16.30-18.30) (meet Scott Monument, Edinburgh City Centre)
- Workshop 1: Contourites (09.00-16.30) (meet Lyell Centre, Heriot-Watt University)
- Workshop 2: Sedimentary Structures (09.30-15.30) (meet Main Reception, Heriot-Watt University)

For meeting points – see maps overleaf

Monday 17th December: Ice Breaker (18.30-21.00) The Signet Library, Parliament Square, Royal Mile, Edinburgh, EH1 1RF (city centre – see map)

Tuesday 18th December: Talks and Posters (09.00-18.00)

James Watt Conference Centre, Heriot-Watt University, (Riccarton Campus). Access from 08.00 for poster set-up and coffee.

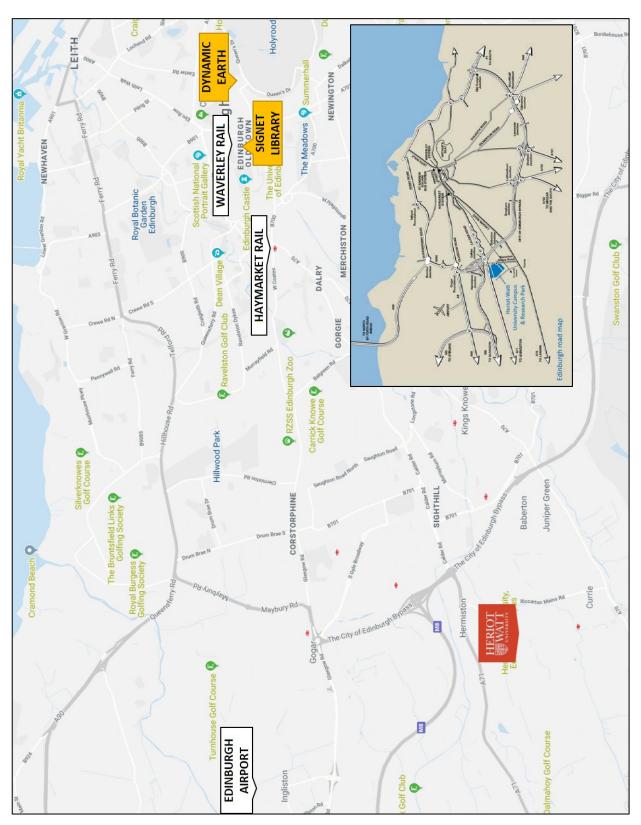
Tuesday 18th December: Dinner and Ceilidh (19.00-24.00) The Dynamic Earth, Holyrood Road, Edinburgh EH8 8AS Buses to Dynamic Earth from outside James Watt Conference Centre at 18.15 (or see map)

Wednesday 19th December: Talks and Posters (08.30-18.00) James Watt Conference Centre, Heriot-Watt University, (Riccarton Campus). Access from 08.00. Closing drinks from 17.00.

Thursday 20th December: Field Trip

Field Trip 4: Spireslack Quarry (09.00-16.00) (meet Enterprise Building, Heriot-Watt University)

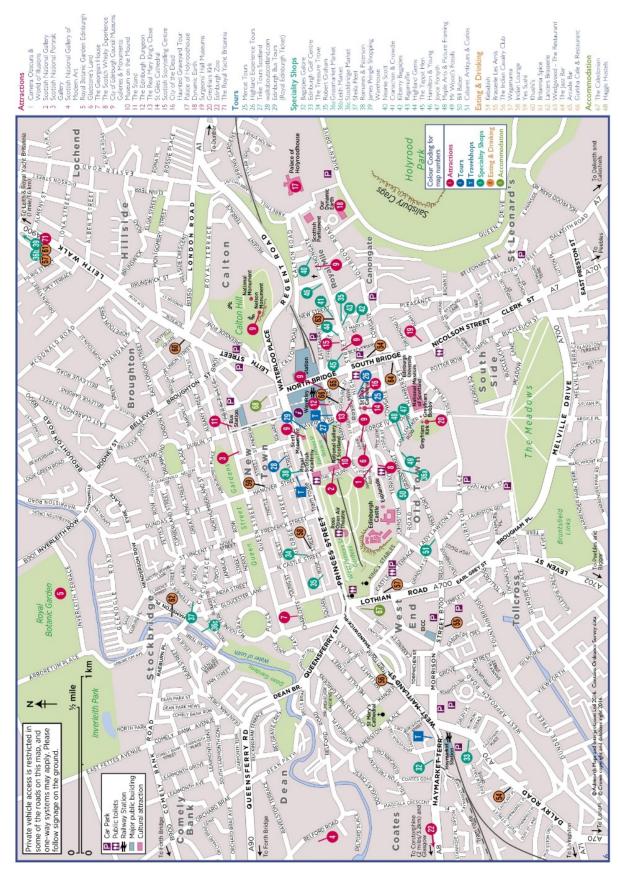
For meeting point – see maps overleaf



Key Conference Venues

Signet Library for Ice Breaker (17th Dec 18.30-21.00) – next to St Giles Cathedral Heriot-Watt University Riccarton Campus for Conference (18th/19th December 09.00-18.00) Our Dynamic Earth for Conference Dinner (18th Dec 19.00-24.00)

Note: Buses from city centre (nos. 25, 34) to Heriot-Watt Riccarton Campus run frequently (< 10 mins) and take 30-40 minutes. See *Maps & Directions* page for fare/ticket details.



Edinburgh City Centre map

Scott Monument for Building Stones Tour (17th Dec 1630-1830) (map 9)
Signet Library for Ice Breaker (17th Dec 18.30-21.00) – next to St Giles Cathedral (map 14)
Our Dynamic Earth for Conference Dinner (18th Dec 19.00-24.00) (map 18)
Note: Buses from city centre (nos. 25, 34) to Heriot-Watt Riccarton Campus run frequently (< 10 mins) and take 30-40 minutes. See Maps & Directions page for fare/ticket details.



Heriot-Watt University Riccarton Campus map

Enterprise Building for Fieldtrip departures (17th December 09.00-17.00) (map 26)

Lyell Centre for Workshop 1: Contourites (17th December 09.00-16.30)

(Meet: Lyell Centre map 33; Venue: Conoco Building map 32)

University Main Reception for Workshop 2: Flume/Core/SEM (17th December 09.30-15.30)

(Meet: Reception map 1; Venues: map 13, 34 & 32)

James Watt Study Hub for Conference (18th/19th December 09.00-18.00) (map 1)

Maps and directions to Heriot-Watt Riccarton Campus – for Conference Venue

Conference Venue: James Watt Centre - Heriot-Watt University, Edinburgh, EH14 4AS Building No. 1 on the <u>map of Edinburgh Campus</u>

The venue is about 6 miles (9.7km) from the city centre. It's well served by frequent local bus services and is also easy to access by car. The easiest way to plan your journey to the campus is to use the <u>Traveline Scotland Journey Planner</u>, which uses up-to-date public transport timetables.

Bus

<u>Lothian Buses</u> offers local bus services 25, X25, 34, 35, 45, 63 and N25/N34 (night bus) to the Edinburgh Campus. Service 25 is the most frequent, leaving the city centre every 10 minutes during the day, and every 15 minutes after 8.00pm. The journey takes about 30–40 minutes from the city centre, depending on what time of day you're travelling. Fares from the city cost £1.70 single/£4.00 day ticket. **Note that exact money is required for Lothian Buses** but you can pay for tickets using your <u>mobile phone</u>, if preferred. Regular travellers to the campus should consider getting a <u>Ridacard</u>.

Taxi

A number of taxi services, such as <u>Central Taxis</u>, are available at taxi ranks in the centre of Edinburgh, including Waverley and Haymarket rail stations and St Andrew Square bus station, as well as at Edinburgh airport. The journey to Heriot-Watt University takes about 20–30 minutes from the city centre, and about 10 minutes from Edinburgh airport.

Car

The Edinburgh Campus is easy to access by car from the centre of Edinburgh and from all major routes leading to the city. The University is half a mile from the Calder Junction of the A720 City of Edinburgh by-pass and the A71, and you'll see signs for Heriot-Watt University on your approach.

Visitor parking

You can find the location of the visitor car parks on the <u>map of Edinburgh Campus</u>.

Visitors to the University should use car park A, B, H or J.

Disabled visitors can use the accessible car park at Gait 10 next to the Centre for Sport & Exercise. Additional accessible parking spaces are available throughout the campus; you can contact us to reserve one.

Disabled access

Visit our pages on the <u>DisabledGo</u> website for details of disabled access features at our Edinburgh Campus. The guides describe your journey into and throughout the campus buildings - accommodation, library, catering, teaching spaces etc - and includes photographs of the features covered.

Summary Programme – Tuesday 18th December

	Room 1 - Main Auditorium	Room 2 - Main Hall	Room 3 - Craig Room	Room 4 - Wardlaw Room			
9.00- 9.15	Welcome						
9.15-10.00	Keynote 1 - Dick Kroon						
10.00-10.30	Posters and Coffee						
	Deepwater - channels	Continental - fluvial	Carbonates & Evaporites	Nearshore 1			
10.30-10.45	Allen	Gray	Peel	Poyatos-More			
10.45-11.00	Morris	Yan	Bastianini	Zimmer			
11.00-11.15	Odeh	Franzel	Murray	van der Vegt			
11.15-11.30	Bell	Prieur	Stanmore	Reynolds			
11.30-11.45	Pope	Russell	Corbett	Simon			
11.45-12.15	Poster session 1						
11.45-12.15	Fuhrmann	Ghinassi	Xi	Bilton			
	Mitchell	Goldring	Yang	Cosma			
	Heijnen	Mitten	Benjakul	Swindles			
	Bozetti	Dodd	Nadhem	Alshammari			
		Dodd	Nagnem				
	Eliassen			McMillan			
	Reynolds	+	+	Mounteney			
12 15-12 15	Lunch break						
13.15-14.00	Keynote 2 - Ru Smith						
13.13-14.00	Regible 2 - Ru Shilli						
	Deepwater - channels to lobes	Continental - pre-vegetation	Contourites & Mixed Systems 1	Nearshore 2			
14.00-14.15	Palm	McMahon	Rebesco	Sleveland			
14.15-14.30	Brooks	Bonsor	Smillie	van Yperen			
14.13-14.30	Heinen	Krabbendam	Fuhrmann	Phillips			
14.45-15.00	Lopez-Cabrera	Ganti	Nicholson	Jude			
15.00-15.15	Boulesteix	Banham	Koller	Zuchuat			
13.00-13.13	Boulesterx	Daliidiii	Kollei	Zuchuat			
15.15-15.45	Poster session 2 and coffee						
10.10 10.10	Pohl	Davies	Beelen	Emery			
	Bello	Le Heron	Ng	Elsayed			
	Lee	Tunwal	Hall	Healy			
	Martínez-Doñate	Shillito	Buckman	Wang			
	Cunningham-Gray	O'minto	de Weger	Trang			
	Halotel		as wege.				
	Caruso						
	Deepwater - confined systems	Continental -basins & glacial	Contourites & Mixed Systems 2	Carbonate Systems			
15.45-16.00	Howlett	Lyster	Brackenridge	van der Land			
16.00-16.15	Cumberpatch	Gilmullina	Mayer	Vallack			
16.15-16.30	Pizzi	Le Heron	de Castro	Buckman			
16.30-16.45	Kane	Kurjanski	Bankole	Hoogakker			
16.45-17.00	McArthur	Thuesen	Stow	Jacinto			
17.00-17.30	Poster session 3						
	Wigan	Papadopoulos	Rodrigues	Adlan			
	Tek	Allison	Pan	Pettigrew			
	Ostrelic	Verhagen	Kirby	Herlambang			
	Pinter	Roseby	Duarte	Buckman			
	Butler	Eaton	Rebesco				
	Johnson						
17.30-18.00	BSRG awards						
18 15-18 30	Buses to Dynamic Earth						

Summary Programme – Wednesday 19th December

	Room 1 - Main Auditorium	Room 2 - Main Hall	Room 3 - Craig Room	Room 4 - Wardlaw Room		
8.30-10.00		BSRG plenary				
0.00-10.45	Keynote 3 - Tom Wagner	· · · · ·				
0.45-11.15	Posters and Coffee					
	Deepwater - MTCs and triggering mech	Continental - aeolian & alluvial	Tape Recorders - provenance	Geochemistry & Diagenesis		
1.15-11.30	Wu	Priddy	Gough	Robertson		
1.30-11.45	Nugraha	Gu	Nauton-Fourteau	Barshep		
1.45-12.00	Steventon	Somerville	Blowick	Hendry		
2.00-12.15	Bailey	Sinclair	Anders	Worden		
2.15-12.30	Heerema	Hoey	Vincent	Paxton		
2.30-13.00	Poster session 4					
	Abu	Quick	Kearsey	Stancampiano		
	Wu	Pettigrew	McKenna	Okunuwadje		
	Nugraha	Würtzen	Ganti	Gundu		
	Ayckbourne	Burgess	O' Donnell	Beaumont		
	Chang	Nyberg		Wasielka		
	Harrald					
3.00-13.30	Lunch break					
	Keynote 4 - Esther Sumner					
0.00 10	Regione 4 - Laurer Guriller					
	Deepwater - monitoring & modelling 1	Sedimentology & Society	Tape Recorders - sediment routing	Geochemistry & Carbon burial		
4.15-14.30	Ferguson	Parsons	Brewer	Muhammed		
4.30-14.45	Baas	Emery	Roquette	Ма		
4.45-15.00	Spychala	Clare	Bertolini	Simmons		
5.00-15.15	Baker	Jerrett	Lavarini	Elson		
5.15-15.30	Tilston	Noad	Watkinson	Walker		
5.30-16.00	Poster session 5 and coffee					
	Xiaokaiti	Silva	Okwara	Clancy		
	de Vet	Rabab	Watkins	Hamlyn		
	Dorrell	Gatter	Lamb	Emmings		
	Patel	Vendettuoli		Charlaftis		
	ralei					
	Azpiroz-Zabala	Manville				
		Manville Rice-Birchall				
	Azpiroz-Zabala Walsh	Rice-Birchall				
	Azpiroz-Zabala	Rice-Birchall Liu				
	Azpiroz-Zabala Walsh	Rice-Birchall Liu Murphy				
	Azpiroz-Zabala Walsh	Rice-Birchall Liu				
	Azpiroz-Zabala Walsh Crisostomo Figueroa	Rice-Birchall Liu Murphy Noad	Tape Recorders - stratigraphy	Carbon burial		
6.00-16.15	Azpiroz-Zabala Walsh Crisostomo Figueroa Deepwater - monitoring & modelling 2	Rice-Birchall Liu Murphy Noad Sedimentology & Society	Tape Recorders - stratigraphy Brooke			
6.00-16.15 6 15-16 30	Azpiroz-Zabala Walsh Crisostomo Figueroa Deepwater - monitoring & modelling 2 Peakall	Rice-Birchall Liu Murphy Noad Sedimentology & Society Froude	Brooke	Atar		
6.15-16.30	Azpiroz-Zabala Walsh Crisostomo Figueroa Deepwater - monitoring & modelling 2 Peakall Soutter	Rice-Birchall Liu Murphy Noad Sedimentology & Society Froude Nyberg	Brooke Barrett	Atar Mertesdorf		
6.15-16.30 6.30-16.45	Azpiroz-Zabala Walsh Crisostomo Figueroa Deepwater - monitoring & modelling 2 Peakall Soutter Stevenson	Rice-Birchall Liu Murphy Noad Sedimentology & Society Froude Nyberg Richardson	Brooke Barrett Toby	Atar Mertesdorf Wang		
6.15-16.30 6.30-16.45 6.45-17.00	Azpiroz-Zabala Walsh Crisostomo Figueroa Deepwater - monitoring & modelling 2 Peakall Soutter Stevenson Simmons	Rice-Birchall Liu Murphy Noad Sedimentology & Society Froude Nyberg Richardson Hage	Brooke Barrett Toby Cullen	Atar Mertesdorf		
6.15-16.30 6.30-16.45	Azpiroz-Zabala Walsh Crisostomo Figueroa Deepwater - monitoring & modelling 2 Peakall Soutter Stevenson	Rice-Birchall Liu Murphy Noad Sedimentology & Society Froude Nyberg Richardson	Brooke Barrett Toby	Atar Mertesdorf Wang		

Tuesday 18th December 2018 – Keynote 1

James Watt Centre, Main Auditorium (Room 1)

09:00-09:15 Dorrik Stow (Heriot-Watt University) – Welcome

09:15-10:00 Dick Kroon (University of Edinburgh) – *Windows of Climate and Carbon Cycle Variability on Orbital Time Scales from the Late Cretaceous to Quaternary.*

Session 1.1 – Deepwater (Channels)

James Watt Centre, Main Auditorium (Room 1)

10:30-10:45 Charlotte Allen (University of Leeds) - *High latitude submarine channel-fills, levees, and terrace deposit architecture in palaeofjords and above MTCs*

10:45-11:00 Emma Morris (University College Dublin) - *Characterisation of thin-beds associated with submarine channels in Pennsylvanian Ross Sandstone Formation, Co Clare, western Ireland*

11:00-11:15 Isaac Odeh (Imperial College) - Geomorphic evolution of Miocene submarine channel systems and implications for stratigraphic architecture; Taranaki Basin, New Zealand.

11:15-11:30 Daniel Bell (University of Manchester) - Three dimensional architecture of an exhumed submarine channel system: implications for subsurface interpretations and sediment delivery to the deep-ocean

11:30-11:45 Edward Pope (Durham University) - *Controls on the formation of turbidity current channels associated with the Greenland ice sheet*

Poster Session 1 – Deepwater (Channels)

James Watt Centre, Main Auditorium (Room 1), 11:45-12:15

- Arne Fuhrmann (University of Manchester) The Variability of Reservoir Quality in Submarine Slope Channel Complexes: Insights from Outcrop Analogue, Tres Pasos Formation, Chilean Patagonia
- 2. William Mitchell (Imperial College) Quantifying the relationship between structural deformation and the morphology of submarine channels from shelf-edge to deep water: Case studies from the Niger Delta system
- 3. Maarten Heijnen (National Oceanography Centre, University of Southampton) *Upstream-migrating knickpoints and their controls on submarine channel evolution*
- 4. Guilherme Bozetti (University of Aberdeen) Stratigraphy and architecture of a coarse-grained deep-water system within the Cretaceous Cerro Toro Formation, Silla Syncline Area, southern Chile
- 5. Gauti Eliassen (University of Bergen) Climatically Influenced Progradation of a Deep-Water Turbidite Fan, Late Pliocene Syn-Rift Succession, Corinth Rift, Greece
- 6. Tony Reynolds (University of Aberdeen) Revisiting the Upper Carboniferous Westward Ho! Formation North Devon: a well-exposed slope system dominated by hyperpycnal underflows, and characterised by small channels interacting with major mass transport complexes

Session 1.2 – Continental (Fluvial)

James Watt Centre, Main Hall (Room 2)

10:30-10:45 Ewan Gray (University of Aberdeen) - *Quantitative reconstruction of continental Triassic fluvial systems of the North Sea*

10:45-11:00 Na Yan (University of Leeds) - Modelling Sedimentary Architecture and Heterogeneity of Meandering-River Successions in Half-Grabens

11:00-11:15 Maximilian Franzel (Durham University) - *The Permo-Triassic fluvial system of the Iberian Basin, NE Spain: Implications on fluvial architecture development and sand body geometry*

11:15-11:30 M. Prieur (University of Glasgow) - A system scale study of a plan view characterisation of meander deposits

11:30-11:45 Catherine Russell (University of Leicester) - Assessing and Predicting the Diversity of Fluvial Point-Bar Architecture from Outcrop, and the Morphometric Analysis of Meander Bends

Poster Session 1 – Continental (Fluvial)

James Watt Centre, Main Hall (Room 2), 11:45-12:15

- 7. Massimiliano Ghinassi (University of Padova) Downstream facies changes in fluvial meanders: upstream vs. downstream sedimentary facies from a mixed gravel and sand point bar of the Ombrone River (Southern Tuscany, Italy)
- 8. Thomas Goldring (University of Leicester) A Quantitative Sedimentological Analysis of Preserved Fluvial Architecture, Wealden Formation, Isle of Wight
- 9. Andy Mitten (Keele University) *Depositionally-conditioned training images for fluvial sandsheet reservoir models*
- 10. Thomas Dodd (British Geological Survey) Sedimentology and depositional environments of the Sentosa Group, Singapore: a fluvial to marine transition in a mature volcanic arc

Session 1.3 – Carbonates & Evaporites

James Watt Centre, Craig Room (Room 3)

- 10:30-10:45 Frank Peel (Bureau of Economic Geology, University of Texas at Austin) *Depositional model* for the Louann Salt Supergiant Evaporite: hellish, hot and fast
- 10:45-11:00 Laura Bastianini (University of Hull) What causes carbonates to form "shrubby" morphologies? An analog case study from hyperalkaline leachates.
- 11:00-11:15 John Murray (National University of Ireland Galway) *Geographic isolation of the Shannon Basin, western Ireland, during a late Viséan lowstand*
- 11:15-11:30 Elizabeth Stanmore (University of Bristol) *Understanding meteoric diagenesis in mixed carbonate-evaporite systems: hydrochemical evidence from modern groundwaters in the State of Qatar*
- 11:30-11:45 Patrick Corbett (Heriot-Watt University) *A review of petrophysical challenges in Pre-Salt carbonate rocks requiring sympathy, synergy and synthesis.*

Poster Session 1 – Carbonates & Evaporites

James Watt Centre, Craig Room (Room 3), 11:45-12:15

- 11. Haiwei Xi (University of Liverpool) Exploring carbonate platform heterogeneity: what is a depositional geobody and what controls geobody geometry
- 12. Zhe Yang (University of Bristol) Synsedimentary hydrothermal dolomites in a lacustrine rift basin: petrographic and geochemical evidence from the Lower Cretaceous Erlian Basin, Northern China
- 13. Rungroj Benjakul (University of Bristol) *Understanding Mg2+ sources and patterns of hydrothermal dolomitisation: insights from 3-D Reactive Transport Modelling of geothermal convection*
- 14. Kassabi Nadhem (University of Sfax) Interrelations of petrophysical and microstructural properties of el Gueria reservoir (ypresian, tunisia)

Session 1.4 – Nearshore Sedimentary Systems 1

James Watt Centre, Wardlaw Room (Room 4)

- 10:30-10:45 Miquel Poyatos-Moré (University of Oslo) Differential subsidence controlling sediment distribution and reservoir quality in transgressive shallow-marine systems: a case study from the Lower-Middle Jurassic Stø Fm (SW Barents Sea, Norway)
- 10:45-11:00 Eva Zimmer (University of Aberdeen) *Clinoform dip along strike as a key to delta characterisation*
- 11:00-11:15 Helena van der Vegt (Delft University of Technology) *The relationship between sediment supply composition and preserved deposits in fluvially dominated deltas*
- 11:15-11:30 Tony Reynolds (University of Aberdeen) *The Analysis of Grain-Size in Siliciclastic Systems a step Forward? Applications to Paralic Systems*
- 11:30-11:45 N. Simon (University of Liverpool) *Relationship between Grain Size Distribution and Sedimentary Environments in Modern Estuarine*

Poster Session 1 – Nearshore Sedimentary Systems 1

James Watt Centre, Wardlaw Room (Room 4), 11:45-12:15

- 15. J. Bilton (Keele University) The stratigraphic architecture and sequence stratigraphy of the Lower Limestone Coal Formation, Spireslack, Scotland.
- 16. Marta Cosma (University of Padova) Evolution of a hypertidal meandering channel in Mont Saint Michel Bay (France) through LiDAR time-series and core analysis
- 17. Graeme Swindles (University of Leeds) Sedimentary records of coastal storm surges: Evidence of the 1953 North Sea event
- 18. Bassam Alshammari (University of Leeds) Characterisation of sedimentation in the fluvial-tomarine transition zone: examples from the Dhruma Formation, Rub' Alkhali, Saudi Arabia
- 19. Conor McMillan (Royal Holloway University of London) Sedimentary provenance and depositional environments from the Oligocene formations in the north of the Salin sub-basin, onshore Myanmar
- 20. Ian Mounteney (British Geological Survey) Source to sink analysis of Cretaceous sediments along the Atlantic margin, Senegal

Tuesday 18th December 2018 – Keynote 2

James Watt Centre, Main Auditorium (Room 1)

13:15-14:00 Ru Smith (Shell) – Nature, Models, Business

Session 2.1 – Deepwater (Channels to Lobes)

James Watt Centre, Main Auditorium (Room 1)

- 14:00-14:15 Franziska Palm (University of Leeds) Width variation around submarine channel bends
- 14:15-14:30 Hannah Brooks (Chiba University) *Channel lobe transition zone dynamics: examples from active and passive continental margins.*
- 14:30-14:45 Maarten Heijnen (National Oceanography Centre, University of Southampton) *How is* sediment transported through submarine channels and onto the lobe? New insights from time-lapse bathymetry monitoring of an active channel
- 14:45-15:00 Javier Lopez-Cabrera (University College Dublin) *Measuring connectivity in hierarchical deep-water lobe rule-based models*
- 15:00-15:15 Kévin Boulesteix (University of Manchester) *Active fan sedimentation or regional system shutdown? Depositional processes in deep-water mudstones beyond sandstone pinchouts*

Poster Session 2 – Deepwater (Channels to Lobes)

James Watt Centre, Main Auditorium (Room 1), 15:15-15:45

- 21. Florian Pohl (Utrecht University) Erosive structures, sedimentary facies, and paleoflow distribution in an ancient channel-lobe transition zone: from bed-scale to a 500 m long mega scour.
- 22. Abdulwahab Bello (Durham University) Submarine fan systems: proximal to distal reservoir quality controls
- 23. David Lee (University of Leeds) Constraining basin-floor lobe architectures using well log data and artificial neural network models: Tanqua depocentre, Karoo Basin, South Africa
- 24. Ander Martínez-Doñate (University of Manchester) Contrasting mud-rich and mud-poor submarine lobes and their architecture in a post-rift setting
- 25. Amanda Cunningham-Gray (Heriot-Watt University) *Internal architecture and external geometry of sediment waves offshore Senegal*
- 26. Julie Halotel (Heriot-Watt University) Machine Learning for capturing uncertainty in facies classification a North Falkland Basin study
- 27. S. Caruso (University of Aberdeen) New insights on the progradation of the West of Shetland continental margin from 3D seismic data.

Session 2.2 – Continental (Pre-Vegetation)

James Watt Centre, Main Hall (Room 2)

- 14:00-14:15 William McMahon (Utrecht University) *Geological evidence for river behaviour in the absence of land plants*
- 14:15-14:30 Helen Bonsor (British Geological Survey) *Sedimentology a Grenvillian Neoproterozoic* foreland basin succession in northern Scotland: a new combined interpretation
- 14:30-14:45 Maarten Krabbendam (British Geological Survey) The evolution of the Grenvillian Foreland Basin in northern Scotland: detrital zircon and rutile dating in the Sleat and Torridon groups
- 14:45-15:00 Vamsi Ganti (University of California Santa Barbara) Sedimentological evidence for extremely low-sloping, deep rivers prior to greening of continents
- 15:00-15:15 Steven Banham (Imperial College) *A journey to the centre of an ancient extraterrestrial aeolian erg*

Poster Session 2 – Continental (Pre-Vegetation)

James Watt Centre, Main Hall (Room 2), 15:15-15:45

- 28. Neil Davies (University of Cambridge) Sedimentological context of a large Arthropleura fossil from the middle Carboniferous Stainmore Formation, Northumberland
- 29. Daniel Le Heron (University of Vienna) A frosty Cambrian Dawn?
- 30. Mohit Tunwal (University College Cork) Application of image analysis in textural characterisation of sedimentary grains
- 31. Anthony Shillito (University of Cambridge) *Shifts in ichnological character during the Late Palaeozoic evolution of the Maritimes Basin, Atlantic Canada*

Session 2.3 – Contourites & Mixed Systems 1

James Watt Centre, Craig Room (Room 3)

- 14:00-14:15 M. Rebesco (National Institute of Oceanography and Applied Geophysics, Italy) *The Odyssea drift (Ross Sea, Antarctica).*
- 14:15-14:30 Zeinab Smillie (Heriot-Watt University) *Deepwater dolomites and associated hiatuses in Gulf of Cadiz contourites.*
- 14:30-14:45 Arne Fuhrmann (University of Manchester) *The Diversity of Bottom-Current Influence on Submarine Slope Channel Complexes: Insights from Offshore Tanzania.*
- 14:45-15:00 Uisdean Nicholson (Heriot-Watt University) *The Falklands Sand Sheet: a record of bottom current erosion and deposition since the Early Oligocene.*
- 15:00-15:15 Débora Koller (Federal University of Rio Grande do Sul) *Bedforms generated by experimental turbidity currents and saline gravity currents.*

Poster Session 2 – Contourites & Mixed Systems 1

James Watt Centre, Craig Room (Room 3), 15:15-15:45

- 32. Daan Beelen (Colorado School of Mines) *An integrated study on the formation and dispersal of contourites.*
- 33. Zhi Ng (Royal Holloway University of London) Effects of Latest Miocene changes of the Mediterranean-Atlantic Gateway Exchange and the Messinian Salinity Crisis on the Neogene basins around the Gulf of Cádiz.
- 34. Jonathan Hall (University of Birmingham) The Neogene evolution of the NE Atlantic Basin.
- 35. Jim Buckman (Heriot-Watt University) Semi-automated permeability modelling of mudrock thin-sections, using scanning electron microscopy (SEM), image analysis, pore architecture reconstructing (PAR) and pore network modelling (PNM).
- 36. Wouter de Weger (Royal Holloway University of London) *Ancient sandy contourites and their sedimentological criteria case study from Upper Miocene outcrops in the Southern Riffian corridor, Morocco*.

Session 2.4 – Nearshore Sedimentary Systems 2

James Watt Centre, Wardlaw Room (Room 4)

- 14:00-14:15 Arve Sleveland (University of Oslo) Architecture of mixed-process mouth-bar deposits; compensational stacking in the Mulichinco Formation, Neuquén Basin, Argentina
- 14:15-14:30 Anna van Yperen (University of Oslo) *The "filtering" effect and internal delta-lobe variability in low-accommodation fluvial-marine transition zones: the Cretaceous Mesa Rica Sandstone (New Mexico, USA)*
- 14:30-14:45 Stephen Phillips (University of Aberdeen) *The Dakota Sandstone a transgressive shallow marine system of the San Rafael Swell region, Utah, U.S.A.*
- 14:45-15:00 Emma Jude (BP) Repeat surveillance data in hydrocarbon reservoirs as a tool for high-resolution sequence stratigraphy
- 15:00-15:15 Valentin Zuchuat (University of Oslo) Why you should care about neighbouring sedimentary systems: Overprinted allocyclic processes by tidal resonance in the Upper Jurassic Curtis Formation, Utah, USA.

Poster Session 2 – Nearshore Sedimentary Systems 2

James Watt Centre, Wardlaw Room (Room 4), 15:15-15:45

- 37. Andy Emery (University of Leeds) *Inherited topographic controls on barrier retreat and preservation: an example from Dogger Bank, North Sea*
- 38. Neveen Elsayed (University of Manchester) Sedimentological variability within the Lower Jurassic Redcar Mudstone Formation, Cleveland Basin: Implications for Mudstone Depositional Conditions
- 39. R.S. Healy (University of Leeds) Stratigraphic Transition from Deep-marine to Shallow-marine in a Single Clinothem
- 40. Ru Wang (University of Leeds) Database-driven quantitative analysis of the internal facies architecture of incised-valley fills

Session 3.1 – Deepwater (Confined Systems)

James Watt Centre, Main Auditorium (Room 1)

- 15:45-16:00 Danielle Howlett (University of Bergen) *Topographic Tug-of-War: Evolution of Submarine Channel-Lobe Systems with Salt-Influenced Topography, Offshore Angola*
- 16:00-16:15 Zoë Cumberpatch (University of Manchester) *The stratigraphic record of deep-water sediment gravity flows interacting with an active salt diapir*
- 16:15-16:30 Marco Pizzi (Imperial College) *Quantification of structural impact on the distribution and architecture of deep-water systems in the Niger Delta*
- 16:30-16:45 Ian Kane (University of Manchester) *Submarine canyon initiation at a convergent plate margin*
- 16:45-17:00 A.D. McArthur (University of Leeds) *Trapping of sustained turbidity currents in complex slope accommodation: outcrop and subsurface examples from the Hikurangi margin, New Zealand*

Poster Session 3 – Deepwater (Confined Systems)

James Watt Centre, Main Auditorium (Room 1), 17:00-17:30

- 41. Timothy Wigan (Imperial College) *Morphology and facies distribution in confined deep-water lobes: a seismic review.*
- 42. Daniel Tek (University of Leeds) Does fan-scale lateral confinement affect sedimentary organisation in deep- water channels?
- 43. Damjan Ostrelic (University of Leeds) Bed termination styles and hummock-like bedforms at onlaps in a post-rift setting
- 44. Patricia Pinter (CGG Robertson) Using deepwater sandstones to unravel basin configuration: a Numidian system (early Miocene, southern Italy) case of study
- 45. Rob Butler (University of Aberdeen) *Syn-kinematic deposition influences structural evolution in emergent thrust belts*
- 46. Kimberley Johnson (Royal Holloway University of London) *Categorising the Petroleum Play of the Miocene Deposits within the Salin Sub Basin, Myanmar*

Session 3.2 – Continental (Basins & Glacial)

James Watt Centre, Main Hall (Room 2)

15:45-16:00 Sinéad Lyster (Imperial College) - Predicting sediment discharges from the continents in deep time — examples from the Cenomanian and Turonian of North America

16:00-16:15 Albina Gilmullina (University of Bergen) - *Large-scale correlation and sedimentation rates throughout the Triassic Barents Sea mega-basin*

16:15-16:30 Daniel Le Heron (University of Vienna) - Were Ediacaran-Cambrian ice sheets in North China thin and sticky?

16:30-16:45 Bartosz Kurjanski (University of Aberdeen) - Cool deltas. Sedimentary environments of Salpausselka I and II moraine ridges near Lahti, Finland

16:45-17:00 Thomas Thuesen (University of Bergen) - *Source-to-sink in a western Norwegian fjord: How does landslides, floods and grinding glaciers influence sediment supply in the Holocene?*

Poster Session 3 – Continental (Basins & Glacial)

James Watt Centre, Main Hall (Room 2), 17:00-17:30

- 47. Max Papadopoulos (University of Birmingham) Palaeoenvironmental Reconstruction using Sedimentary Analysis of North-Eastern Iceland's Tjörnes Sequence
- 48. Matthew Allison (University of Birmingham) *The Structure and Architecture of the Tjörnes Group, NE Iceland.*
- 49. Iris Verhagen (University of Liverpool) Low temperature quartz overgrowths in Quaternary glacigenic sediments: an example from North Wales
- 50. Zoë Roseby (University of Southampton) Causes, timing and spatial extent of diatom bloom events within a deglacial record from the Anvers-Hugo Trough, western Antarctic Peninsula shelf
- 51. Stephen Eaton (University of Leeds) Palaeoenvironmental change in response to glacial/interglacial cycles: Middle and Upper Pleistocene stratigraphy of the southern North Sea

Session 3.3 – Contourites & Mixed Systems 2

James Watt Centre, Craig Room (Room 3)

15:45-16:00 Rachel Brackenridge (Heriot-Watt University) - *The textural characteristics of sand-rich contourite facies*.

16:00-16:15 Oliver Mayer (University of Greifswald) - Sedimentary characteristics of bottom-current controlled deposits on a pelagic carbonate platform. Erosional and depositional features of the Givetian-Frasnian limestones of the Tafilalt platform (Morocco).

16:15-16:30 Sandra de Castro (Royal Holloway University of London) - *Bottom current reworked sands:* sedimentological insights into a facies model with iodp 339 u1389 and u1388 sites.

16:30-16:45 Shereef Bankole (Heriot-Watt University) - *Mudrock microstructure: A proxy for distinguishing among deep-water fine grained sediments.*

16:45-17:00 Dorrik Stow (Heriot-Watt University) - The Contourite Sequence: A 21st Century Update.

Poster Session 3 – Contourites & Mixed Systems 2

James Watt Centre, Craig Room (Room 3), 17:00-17:30

- 52. Sara Rodrigues (Royal Holloway University of London) *Sedimentary Model for Mixed Depositional Systems: Conceptual Implications.*
- 53. Jiawei Pan (Heriot-Watt University) *Contourite facies and cyclicity: a geostatistical approach.*
- 54. Adam Kirby (Royal Holloway University of London) *Late Cretaceous contourite features on the West Iberian margin: implications for palaeoceanography and hydrocarbon exploration.*
- 55. Debora Duarte (Royal Holloway University of London) Evolution of Neogene basins in the Northern Gulf of Cádiz, SW Iberian Margin: Impacts of Tectonics and Diapirism on the Contourite Depositional Systems.
- 56. M. Rebesco (National Institute of Oceanography and Applied Geophysics, Italy) *Bottom* current-controlled Quaternary sedimentation at the base of the Malta escarpment.

Session 3.4 – Carbonate Systems: Record of Change

James Watt Centre, Wardlaw Room (Room 4)

- 15:45-16:00 Cees van der Land (Newcastle University) *Biosignatures in sabkha-associated microbial mats*
- 16:00-16:15 Hazel Vallack (University of Bristol) *Variations in modern carbonate hardground formation in Abu Dhabi in relation to associated biogeochemical drivers*
- 16:15-16:30 Jim Buckman (Heriot-Watt University) A simple effective method for the 3D modelling of cementation, fracturing and dissolution of carbonate rocks: Illustrated through oolitic limestone
- 16:30-16:45 Babette Hoogakker (Lyell Centre, Heriot-Watt University) *Glacial expansion of oxygen-depleted seawater in the eastern tropical Pacific*
- 16:45-17:00 Ricardo Silva Jacinto (Ifremer) Reconstruction of paleo-depths based on recent benthic foraminifera. A novel methodology applied to a 550,000 years long record on the East Corsica margin

Poster Session 3 – Carbonate Systems: Record of Change

James Watt Centre, Wardlaw Room (Room 4), 17:00-17:30

- 57. Qi Adlan (Imperial College) *The effect of Oxygen Plasma Ashing treatment on the carbonate clumped isotope parameter*
- 58. Ross Pettigrew (Keele University) Carbonate Microfacies of the Cedar Mesa Sandstone: Examples from a Mixed Clastic/Evaporitic Continental Sabkha.
- 59. Adhipa Herlambang (Imperial College) *Investigation of Microbial Activity using Clumped Isotope Thermometry along Carbonate Vein in Granite Host Rock*
- 60. Jim Buckman (Heriot-Watt University) Recognition of Carboniferous microboring within shelly substrates, through charge contrast imaging (CCI): significance for the Hosie (McDonald) Limestone, Spireslack, Ayrshire, Scotland

Wednesday 19th December 2018 – Keynote 3

James Watt Centre, Main Auditorium (Room 1)

10:00-10:45 Tom Wagner (Lyell Centre, Heriot-Watt University) – Carbon on the move

Session 4.1 – Deepwater (MTCs & Triggering Mechanisms)

James Watt Centre, Main Auditorium (Room 1)

- 11:15-11:30 Nan Wu (Imperial College) The role of mass-transport complexes (MTCs) in preconditioning subsequent failure events
- 11:30-11:45 Harya Nugraha (Imperial College) *Are mass-transport complexes (MTCs) strongly erosive? Insights from 3D seismic reflection data*
- 11:45-12:00 Michael Steventon (Imperial College) *Lateral variability in basin margin physiography as a control on clinoform trajectory: the Santos Basin, offshore Brazil*
- 12:00-12:15 Lewis Bailey (University of Southampton) *Can Powerful Turbidity Currents Initiate Without a Major Trigger? New insights from detailed measurements in Monterey Canyon*
- 12:15-12:30 Catharina Heerema (Durham University) *What determines submarine turbidity current runout distances?*

Poster Session 4 – Deepwater (MTCs & Triggering Mechanisms)

James Watt Centre, Main Auditorium (Room 1), 12:30-13:00

- 61. Clara Abu (Imperial College) Role of mass-transport complexes (MTCs) in controlling the distribution of deepwater sandstone reservoirs, Kwanza Basin, offshore Angola
- 62. Nan Wu (Imperial College) Petrophysical properties of basal shear zone of mass-transport complexes (MTCs); implication for hydrocarbon seal potential
- 63. Harya Nugraha (Imperial College) Kinematics of mass-transport complex (MTC) emplacement: evidence for intra-flow cells and shear from 3D seismic reflection data, Exmouth Plateau, offshore NW Australia
- 64. Ashley Ayckbourne (University of Manchester) Controls of mass wasting on sedimentation processes and heterogeneity in slope mudstone reservoirs: an example from the Ainsa Basin, Southern Pyrenees
- 65. Yu-Chun Chang (University of Manchester) The mechanism of mass transport deposits in the Southern South China implication from fault and carbonate structure analysis
- 66. Julie Harrald (Open University) The study of a complex sedimentological succession in a foreshore setting using a drone

Wednesday 19th December 2018 – AGM

James Watt Centre, Main Hall (Room 2)

08:30-10:00 BSRG Annual General Meeting

Session 4.2 – Continental (Aeolian & Alluvial)

James Watt Centre, Main Hall (Room 2)

- 11:15-11:30 Charlotte Priddy (Keele University) *A multi-scale approach to ephemeral fluvial-aeolian interactions: Implications for reservoir characterisation*
- 11:30-11:45 Zhidong Gu (Imperial College) *The formation and evolution of an intraplatform trough in the Sichuan Basin, China, during the Late Ediacaran to Early Cambrian*
- 11:45-12:00 David Somerville (University of Leeds) Depositional processes operating on footwall- and hangingwall-sourced alluvial fan systems: remotely sensed observations from active rift settings
- 12:00-12:15 Hugh Sinclair (University of Edinburgh) *Reciprocal Expansion and Contraction of Himalayan River Catchments: Implications for Sediment Routing to the Gangetic Plains*
- 12:15-12:30 Trevor Hoey (University of Glasgow) *Morphodynamics of a confluence complex at a tropical mountain front*

Poster Session 4 – Continental (Aeolian & Alluvial)

James Watt Centre, Main Hall (Room 2), 12:30-13:00

- 67. Laura Quick (University of Edinburgh) Conglomerate recycling in the Himalayan foreland basin; implications for river dynamics
- 68. Ross Pettigrew (Keele University) Allocyclic Controls upon Clastic/Evaporitic Interactions in Arid Continental Settings: Examples from the Cedar Mesa Sandstone
- 69. Camilla Würtzen (University of Oslo) Facies Analysis of the uppermost Devonian to Lower Carboniferous Billefjorden Group of Central Spitsbergen, Svalbard
- 70. Roger Burgess (University of Aberdeen) Correlation and Paleo-environmental reconstruction of the Central North Sea: New insights using palynology
- 71. Björn Nyberg (University of Bergen) Reconstructing Dimensions of Ancient Source-to-Sink Systems through First-Order Scaling Relationships

Session 4.3 – Sedimentary Tape Recorders (Provenance)

James Watt Centre, Craig Room (Room 3)

- 11:15-11:30 Amy Gough (Royal Holloway University of London) *Limitations of QFL plots as a provenance tool in tropical environments: A large dataset from SE Asia*
- 11:30-11:45 Martin Nauton-Fourteu (National University of Ireland Galway) *Heavy mineral variations* and polycyclic provenance in a deltaic cyclothem
- 11:45-12:00 Aoife Blowick (National University of Ireland Galway) Deciphering first-cycle versus polycyclic supply in the Scotian Basin, offshore Nova Scotia: A Multi-Proxy Provenance Approach
- 12:00-12:15 B. Anders (National University of Ireland Galway) *Mixed Signals Unravelling Cryptic Provenance of a Carboniferous Delta with Multiple Proxies*
- 12:15-12:30 Stephen Vincent (CASP, Cambridge) *Using Strontium Isotope Stratigraphy and subsidence modelling to infer the timing of rift events in the Black Sea region*

Poster Session 4 – Sedimentary Tape Recorders

James Watt Centre, Craig Room (Room 3), 12:30-13:00

- 72. Tim Kearsey (British Geological Survey) Decoding the evolution of the Carboniferous fluvial system using onshore-offshore correlation
- 73. Eamon McKenna (University of Glasgow) Constraining the thermal histories of the Carboniferous Midland Valley of Scotland: a potential resource for unconventional gas and shale oil?
- 74. Vamsi Ganti (University of California Santa Barbara) Sequence boundaries or autogenic erosional scours? Scaling backwater hydrodynamics in fluvio-deltaic stratigraphy
- 75. Eoin O' Donnell (University College Dublin) *Testing the ability of forward stratigraphic modelling to replicate tectono-sedimentary interactions in rift basins*

Session 4.4 – Geochemistry & Diagenesis

James Watt Centre, Wardlaw Room (Room 4)

- 11:15-11:30 Alastair Robertson (University of Edinburgh) *Unusual Messinian-aged stratiform* manganese deposition in NE Cyprus related to cyclical redox changes in a silled marginal-marine carbonate basin
- 11:30-11:45 D.V. Barshep (University of Liverpool) *Impact of diagenesis on the Jurassic Corallian sandstones from the Weald Basin*
- 11:45-12:00 Alison Hendry (Newcastle University) *Understanding the Origin and Basin-Scale Distribution of Clay-Coated Sand Grains in Siliciclastic Reservoirs: Insights from Experimental Studies and Modern Analogues*
- 12:00-12:15 Richard Worden (University of Liverpool) *How should we quantify minerals and cements in reservoir rocks?*
- 12:15-12:30 Richmal Paxton (University of East Anglia) *Taking the heat out of clumped isotope paleotemperatures from concretions*

Poster Session 4 – Geochemistry & Diagenesis

James Watt Centre, Wardlaw Room (Room 4), 12:30-13:00

- 76. Lavinia Stancampiano (Lyell Centre, Heriot-Watt University) Organic geochemistry of the Early Toarcian Oceanic Anoxic Event recovered in the Sogno Core (Lombardy Basin, northern Italy)
- 77. Sunday Okunuwadje (University of Aberdeen) Oil charging, diagenesis and varied hydraulic properties in the Dunlin Reservoir Sandstones, East Shetland Basin, North Sea
- 78. Stephen Gundu (Newcastle University) *The impact of hydrocarbon emplacement on carbonate reservoir diagenesis*
- 79. Hazel Beaumont (University of the West of England) Provenance of Lower Cretaceous quartz arenites from the northern Indian Plate: tropical weathering or a multi-cycled sediment source?
- 80. Natalia Wasielka (Durham University) Reconstruction of reservoir quality evolution in tight gas sandstones using x-ray micro tomography

Wednesday 19th December 2018 – Keynote 4

James Watt Centre, Main Auditorium (Room 1)

13:30-14:15 Esther Sumner (University of Southampton) – What do turbidity currents really look like?

Session 5.1 – Deepwater (Monitoring & Modelling 1)

James Watt Centre, Main Auditorium (Room 1)

- 14:15-14:30 Ross Ferguson (University of Manchester) *Autocyclic modulation of allocyclic signals in submarine channel-lobe systems: an experimental study*
- 14:30-14:45 Jaco Baas (Bangor University) *Is silt the new clay? Silt as driver of deep-marine gravity flows of extremely high density*
- 14:45-15:00 Y.T. Spychala (Utrecht University) *The dimensions of submarine lobe elements and the role of silt-prone distal deposits*
- 15:00-15:15 Megan Baker (Bangor University) Using the Rheological Properties of Mixed-Clay Sediment Gravity Flows to Understand Their Flow Behaviour and Deposits
- 15:15-15:30 Mike Tilston (Utrecht University) *Surficial (topography) matters: channel to lobe transition zone (CLTZ's) morphodynamics as a first order control onsubmarine lobe sedimentation patterns*

Poster Session 5 – Deepwater (Monitoring & Modelling 1)

James Watt Centre, Main Auditorium (Room 1), 15:30-16:00

- 81. Nilufan Xiaokaiti (University of Hull) Experimental study on the impact of the Coriolis force on density currents
- 82. Marijke de Vet (University of Hull) *Turbulent-laminar transitions in flows laden with cohesive sediment*
- 83. R.M. Dorrell (University of Hull) *Turbidity Currents: underwater rivers or seafloor jet streams?*
- 84. Urval Patel (Heriot-Watt University) *Grain-Scale Heterogeneity in Deep Water Massive Sands Implications for Depositional Processes and Reservoir Quality.*
- 85. M. Azpiroz-Zabala (Delft University of Technology) A 3-dymensional model of a low density turbidity current in the deep ocean: understanding turbidity currents (time) step by (time) step
- 86. Deirdre Walsh (University College Dublin) *Training image suitability for modelling poorly connected deep marine sequences.*
- 87. Adriana Crisostomo Figueroa (University of Leeds) Deepwater sediment bypass potential in a modern intra-slope system, East Coast Basin, New Zealand: implications for reservoir distribution and stratigraphic trap development

Session 5.2 – Sedimentology & Society 1

James Watt Centre, Main Hall (Room 2)

- 14:15-14:30 Daniel Parsons (University of Hull) *Microplastics in the natural environment challenges and opportunities for sedimentology*
- 14:30-14:45 Andy Emery (University of Leeds) Seismic stratigraphy of a proglacial lake: implications for deglaciation processes and engineering prediction of Dogger Bank, North Sea
- 14:45-15:00 Michael Clare (National Oceanography Centre, University of Southampton) How are turbidity currents triggered at offshore volcanic islands and what are the implications for Small Island Developing States?
- 15:00-15:15 Rhodri Jerrett (University of Manchester) *Reconstructing land mean annual temperatures in the ancient record: implications for future climate change, and understanding sediment budgets in the past.*
- 15:15-15:30 Jon Noad (Gran Tierra Energy) Welcome to the Thermocene: the potential impact of global warming on the sedimentary record

Poster Session 5 – Sedimentology & Society 1

James Watt Centre, Main Hall (Room 2), 15:30-16:00

- 88. Joana Silva (Utrecht University) *Influence of the embankment geometry during breaching failure*
- 89. Saba Rabab (Heriot-Watt University) *Influence of multiple flood events on river morphology* and sediment transport
- 90. Ricarda Gatter (University of Bremen) A multi-scaled approach towards weak layer characterisation, the AFEN submarine landslide complex (UK)
- 91. D. Vendettuoli (University of Southampton) *Controls on turbidity current flow modes: New insights from direct measurements worldwide*
- 92. Vern Manville (University of Leeds) What palaeohydrologists and geomorphologists get wrong about megafloods
- 93. Elliot Rice-Birchall (University of Liverpool) Geomechanical analysis of the Captain X Sandstone Member in relation to CO2 injection
- 94. Rui Liu (University of Edinburgh) *CO2 mineral trapping in natural analogues case studies from the Southern North Sea (UK) and the South China Sea (China)*
- 95. Amanda Murphy (University of Cambridge) Experimental investigation of sand production from the deep water sediments of the Daini Atsumi Knoll hydrate reservoir, Nankai Trough, Offshore Japan.
- 96. Jon Noad (Gran Tierra Energy) Geopareidolia: the world's best rock faces

Session 5.3 – Sedimentary Tape Recorders (Sediment Routing)

James Watt Centre, Craig Room (Room 3)

- 14:15-14:30 Chris Brewer (Imperial College) Source-to-Sink Analysis of Facies Distribution in Early-Eocene Sediment Routing Systems, northern North Sea
- 14:30-14:45 Emmanuel Roquette (University of Manchester) New constraints on source to sink systems of NW Africa: provenance analysis of the Mesozoic post-rift evolution of the Essaouira-Agadir Basin
- 14:45-15:00 Gabriel Bertolini (University of Aberdeen) *Tracking sediment pathways in a paleodesert, Cretaceous Botucatu Formation, northern Region, Cental Brazil*
- 15:00-15:15 C. Lavarini (University of Edinburgh) Distortion of the sedimentary tape recorder by abrasion
- 15:15-15:30 Matthew Watkinson (University of Plymouth) *Tectonostratigraphic Framework for NW Madagascan Basins: integrating field and subsurface data*

Poster Session 5 – Sedimentary Tape Recorders (Sediment Routing)

James Watt Centre, Craig Room (Room 3), 15:30-16:00

- 97. Ikenna Okwara (Imperial College) Sediment mass-balance constraints for the Middle Jurassic "Brent Delta" sediment routing system, Northern North Sea
- 98. Stephen Watkins (Imperial College) Straight from the source's mouth: controls on sediment export across the Corinth Rift, central Greece
- 99. M.P. Lamb (California Institute of Technology) Flood variability and the origin of a preferential avulsion node on lowland river deltas

Session 5.4 – Geochemistry & Carbon Burial

James Watt Centre, Wardlaw Room (Room 4)

- 14:15-14:30 D.D. Muhammed (University of Liverpool) *Sedimentary facies analysis based on multielement XRF analyses*
- 14:30-14:45 Lin Ma (University of Manchester) *Multi-scale 3D/4D imaging of organic matter and pore in shales*
- 14:45-15:00 Mike Simmons (Halliburton) *Hydrocarbon Exploration Insights from IODP and its Predecessors*
- 15:00-15:15 Amy Elson (National Oceanography Centre, University of Southampton) A Multi-Proxy Palaeoenvironmental Analysis During Deposition of the Mahogany Oil Shale Interval of Eocene Lake Uinta, Green River Formation, Utah
- 15:15-15:30 Jack Walker (Newcastle University) Geochemical Characterization of Mississippian Maximum Flooding Surfaces: A Case Study for Improved Correlation Within Carboniferous-aged Shale Gas Targets.

Poster Session 5 – Geochemistry & Carbon Burial

James Watt Centre, Wardlaw Room (Room 4), 15:30-16:00

- 100. Sarah Clancy (Newcastle University) Assessing and Monitoring the UK Shale Gas Landscape
- 101. Rhys Hamlyn (University of Manchester) Local-scale sedimentological, intraparasequence and parasequence variability in a mudstone-dominated shelf succession, Book Cliffs, Utah.
- 102. J. Emmings (British Geological Survey) *Understanding the Origin of Mud Intraclasts in a Mississippian Black Shale*
- 103. Dimitrios Charlaftis (Durham University) Assessing HPHT sandstone reservoir quality: Identifying the reality

Session 6.1 – Deepwater (Monitoring & Modelling 2)

James Watt Centre, Main Auditorium (Room 1)

- 16:00-16:15 Jeff Peakall (University of Leeds) Groovy soles: Why the Bouma sequence is wrong
- 16:15-16:30 Euan Soutter (University of Manchester) *Stratigraphic Evolution of Confined Deep-Water Basins: Insights from Physical Models and Outcrop Analogs*
- 16:30-16:45 Christopher Stevenson (University of Liverpool) *Reconstructing flow properties from Agadir Basin deep-water turbidites*
- 16:45-17:00 Steve Simmons (University of Hull) *Direct measurements show how turbidity currents with dense basal layers evolve in Monterey Canyon*
- 17:00-17:15 Donald Christie (University of Southampton) *Probabilistic Modelling of Gravity Flow Deposit Distribution in Complex Deep Marine Basins*

Session 6.2 – Sedimentology & Society 2

James Watt Centre, Main Hall (Room 2)

16:00-16:15 Melanie Froude (University of Sheffield) - *Preservation of floods and landslides in the sediment record*

16:15-16:30 Björn Nyberg (University of Bergen) - Sedimentary Systems in a State of Anthropogenically Induced Change: Surveying the Earth through 30 Years of Satellite Imagery

16:30-16:45 J.C. Richardson (University of Leeds) - *Muddying the picture? Identification of particulate sources, and forecasting sediment dispersal and concentration in catchments*

16:45-17:00 Sophie Hage (University of Southampton) - First observations of a non-hyperpycnal river generating an ignitive turbidity current

17:00-17:15 Mark Wilkinson (University of Edinburgh) - *Geological energy storage: new uses for old reservoirs?*

Session 6.3 – Sedimentary Tape Recorders (Stratigraphy)

James Watt Centre, Craig Room (Room 3)

- 16:00-16:15 Sam Brooke (Imperial College) *Modelling hydraulic and stratigraphic responses to rainfall variability in threshold landscapes*
- 16:15-16:30 Bonita Barrett (University of Leeds) Syn-rift deltaic interfans as basin evolution archives
- 16:30-16:45 Stephan Toby (University of Liverpool) *How much can a landscape take? Autogenic thresholds and the transfer of allogenic sediment supply signals to stratigraphy*
- 16:45-17:00 Timothy Cullen (University of Leeds) *Stratigraphic architecture on a mixed input deep-water syn-rift fault terrace: The West Xylokastro Fault Block, Gulf of Corinth, Greece*
- 17:00-17:15 Grace Cosgrove (University of Leeds) Shelf process regime change recorded as distinct grain character stratigraphy: a high resolution study of an individual clinothem offshore New Jersey, USA (IODP Expedition 313)

Session 6.4 – Carbon Burial

James Watt Centre, Wardlaw Room (Room 4)

16:00-16:15 Elizabeth Atar (Durham University) - *Atmospheric controls on large-scale source rock deposition: A case study for the Kimmeridge Clay Formation*

16:15-16:30 Melanie Mertesdorf (Lyell Centre, Heriot-Watt University) - *Exploring iron and sulphur speciation in the Cleveland Basin Kimmeridge Clay*

16:30-16:45 Jianpeng Wang (University of Manchester) - Carbon-isotope stratigraphy and geochemical signatures of the shallow carbonate platform in Pre-African Basin, Morocco: implication for the Cenomanian-Turonian organic carbon deposition

16:45-17:00 L.S. Narman (Lyell Centre, Heriot-Watt University) - Carbon Transfer into the South China Sea

BSRG 2018 Fieldtrips and Workshops

Monday 17th December

Fieldtrip 1: Siccar Point and Pease Bay Fieldtrip

Leader: Helen Lever

Exploring the Devonian-Carboniferous succession on the East Coast of Scotland, visiting Siccar Point, Pease Bay and Barns Ness for Hutton's Unconformity, Devonian Fluvial sediments, and Carboniferous cycles including a spectacular coralline limestone.

Fieldtrip 2: Fluvial Geomodelling Fieldtrip

Leader: Patrick Corbett

Field-based Geomodelling of Fluvial Reservoirs Analogues. This one-day workshop mirrors the reservoir modelling steps industry takes for simulation studies in fluvial reservoirs. In the field (Pease Bay) we consider reservoir properties at various scales - from centimetric core plug data up to decametric flow units over inter-well scales in various Devono-Carboniferous systems. Limitations of the various data used to constrain the models - cores, logs, well test and seismic - will be referenced.

Fieldtrip 3: Edinburgh Building Stones

Leaders: Luis Albornoz

A tour of the building stones used in Edinburgh buildings, ending at the drinks reception.

Workshop 1: Contourites: Seismic and Sediment characteristics Leaders: Dorrik Stow, Zeinab Smillie, Uisdean Nicholson

Contourites are a key component of deepwater sedimentary systems, but remain little known to many. This one-day workshop will present a state-of-the art synthesis of our current knowledge of contourites, in terms of their seismic attributes, seafloor morphology and sediment characteristics. It will combine brief lecture presentations with hands-on practical sessions, including seismic profiles, wireline logs, and core/outcrop photographs.

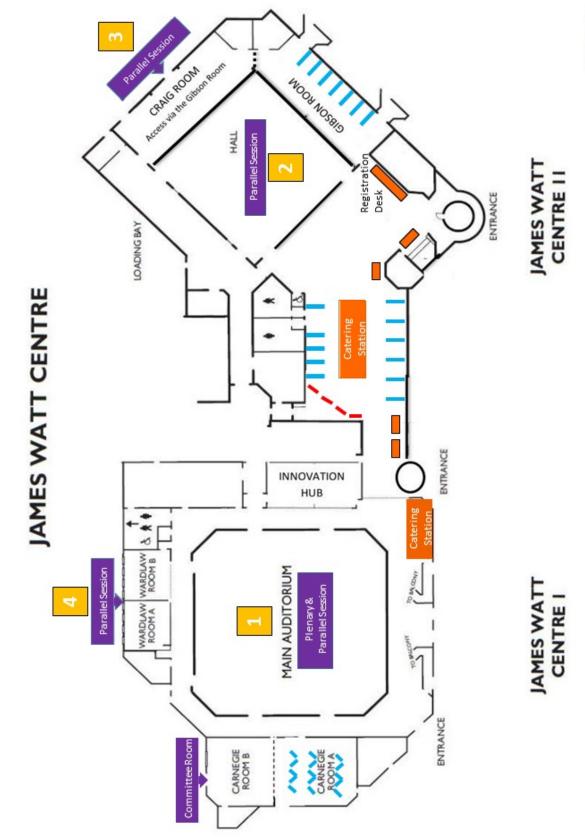
Workshop 2: Fluvial sedimentary structures rotating workshop (Flume/Core/SEM) Leaders: Dominic Tatum, Jim Buckman, Matt Booth, Andy Gardiner

A close-up examination of the study of fluvial sedimentary structures, the resulting textures and how they affect fluid flow. This workshop will look at flume tank experiments in creating sedimentary structures, examples in cores, details of examining samples using SEM techniques for details of the texture of the samples, and how research into pore-scale modelling is used to predict fluid flow.

Thursday 20th December

Fieldtrip 4: Spireslack Quarry Fieldtrip Leader: Graham Leslie, Dominic Tatum

A fieldtrip to Spireslack quarry site, which is being proposed for a Geopark. The excellently exposed geology includes deformed limestone layers, fluvial sands, coal layers and a view into some of the older underground mining techniques. The fluvial succession is capped by marine layers, and faulting and folding has created interesting structural deformation throughout the mine.













57th BSRG **Annual General Meeting** 17-20th December 2018, Edinburgh

