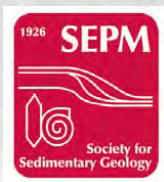


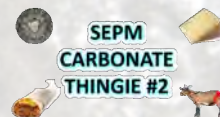
Day 1 Program, Sunday August 24, 2025

Understanding Carbonate Processes, Deposition, and Preservation: Breakthroughs and Challenges

August 24-25, 2025; George R. Brown Convention Center, Houston, TX



*We have an outstanding invited lineup of 20 speakers
and 28 poster presentations during this two-day event!*



Oral Session 1: Physical, biological & chemical process sedimentology of carbonates

Keynote Lizzy Trower (Univ. of Colorado): A world in a grain of sand: Learning to read the geological information preserved in ooids

Guillem Mateu Vicens (Univ. de les Illes Balears): Understanding carbonate factories through palaeoecological and sedimentological signals

Victorien Paumard (Univ. W. Australia): Seismic stratigraphy and geomorphology of mass-transport complexes in carbonate depositional environments: Insights from the Cenozoic margin of the Northern Carnarvon Basin (NWS, Australia)

Gregor Eberli (Univ. of Miami): Microbial Cementation from the Shallow to the Deep

Thomas Teillet (KAUST): Micritized Grains and Peloids: The Taphonomic Adventures of Carbonate Grains in Shallow Marine Settings

Oral Session 2: Mixed siliciclastic & lacustrine carbonate systems

Keynote Sam Purkis (Univ. of Miami): Climate Control of Mixed Siliciclastic-Carbonate Sedimentation in the Red Sea Rift

Ben Rendall (Univ. of Potsdam): Light at the end of the funnel: Building a new continental margin from reefs and rivers in the northern Red Sea

Gavin Dunbar (Victoria Univ. of Wellington): Plio-Pleistocene evolution of the Great Barrier Reef

Kristin Bergmann (Mass. Inst. of Tech.): The evolution and controls on lacustrine CO₂ systems of pre-salt Brazil

Maria Mutti (Univ. of Potsdam): Multi-Scale Properties of the Yacoraite Formation (Salta Basin, Argentina): A Unique Outcrop-Based Insight into a Lacustrine Carbonate System

Poster Presentations

Keynote Poster - Mitch Harris: Lessons Learned from an Invaluable Modern Analog – Joulter's Ooid Sandbody

Aubin Cosson (Eliis): Seismic stratigraphy and geomorphology of isolated carbonate build-ups and associated mass-transport complexes in the Vulcan Sub-basin, Bonaparte Basin, Australia: New insights from 3D seismic data

Tiffany Legg (Oklahoma Univ.): Predictive Modeling of Pedogenic Carbonate Dynamics: Towards a Global Understanding of Soil Inorganic Carbon Flux

Waleed AlGharbi (Imperial Univ.): Seismic Reflection Termination Attribute (SRT-AI): A Deep Learning Approach to Identify Seismic Reflection Terminations in Carbonate Systems

David Nworie (Colorado School of Mines): How do Carbonate Turbidity Currents Contribute to Carbon Sequestration?

Morgan Chakraborty (Univ. of Miami): Brine pool microbes enrich critical metals in mixed siliciclastic-carbonate salt-giant basins

Kevin Hatton (Stonybrook Univ.): Age and Temperature of Authigenic carbonates associated with Lithium-bearing illite clays at Thacker Pass, Nevada, USA

Andrew Hollenbach (Kansas Univ.): Long-lived hydrothermal alteration in structurally damaged carbonates: Implications of convection as opposed to gravity driven advection or fault pumping

Josie Bianco (Texas A&M): Mapping Dissolution Features to Predict Fluid Flow Directions of an Ooid Grainstone Deposit in Happy Spraberry Field, Garza County, Texas

Saikat Misra (ITT Gandhinagar): Sediment texture and component heterogeneity over south Andaman and Swaraj Dweep fringing reef

Wafaa Altyeb (Univ. of Potsdam): Sea level, climate, and ecological controls on mixed sediment routing system in the northern Red Sea

Bolton Howes (Washington Univ.): Ooids as recorders of ancient seawater chemistry: Three-dimensional reconstructions and databases reveal shifts in distribution, abundance, and size across time and space

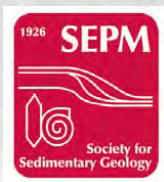
Ardiansyah Koeshidayatullah (KFUPM): Can Large Language Model Transform Education and Research in Carbonate Geosciences?

Francesca Giovenzana (KAUST): Assessing modern and past lagoon environments through geochemical variations in a large benthic foraminifera

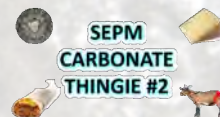
Day 2 Program, Monday August 25, 2025

Understanding Carbonate Processes, Deposition, and Preservation: Breakthroughs and Challenges

August 24-25, 2025; George R. Brown Convention Center, Houston, TX



***We have an outstanding invited lineup of 20 speakers
and 28 poster presentations during this two-day event!***



Oral Session 3: Carbonates as archives of Earth processes & changes

Keynote Kristin Bergmann (Massachusetts Inst. of Technology): Isotopic records from carbonates before and during glaciation

Charles Kerans (Univ. of Texas Austin-BEG): Comparative Anatomy of the Last Interglacial (MIS 5e) and Holocene (MIS 1) Highstands, Bahamas-Caicos Archipelago

Roger Creel (Texas A&M): Untangling the influence of glacial isostatic adjustment on carbonate records of Last Interglacial sea level

Brian Kelley (Penn State Univ.): The carbonate factory in an age of extreme warming: Triassic platform margin architecture and biogenic sedimentation modes from the surface ocean to the twilight zone

Rob Forkner (ConocoPhillips): Mixed Signals: The response of shallow water carbonate systems to Oceanic Anoxic Events

Oral Session 4: Integration of new applications with carbonate interpretation

Keynote Cedric John (Queen Mary Univ. of London): Sharper, Faster, Smarter: Revolutionizing Carbonate Sedimentology with Computer Vision

Haifa AlSalmi (Queen Mary Univ. of London): Enhancing Carbonate Atoll Interpretation Through Deep Learning-Based Seismic Reconstruction

Michelle Thompson (Shell): Integrating advanced technologies to characterize subsurface carbonate systems

Robin Domisse (BEG): Data Integration and AI for Carbonate Reservoir Modeling

Abkar Wicaksono (KAUST): What Drives Depositional Heterogeneities in Epeiric Carbonate Platforms? New Perspective from Paleo-Hydrodynamic Simulation

Poster Presentations

Keynote Poster - Mitch Harris: Lessons Learned from an Invaluable Modern Analog – Joulter Ooid Sandbody

Bosiljka Glumac (Smith College): Influence of microbial encrusters on porosity and permeability of Pleistocene coral-rich shallow-marine carbonate deposits from The Bahamas

Ander Martinez-Donate (BEG): The role of refluxing deep hypersaline brines and their impact on carbonate strata (Delaware Basin, USA)

Manuel Ariza-Fuentes (KAUST): Modern carbonate and siliciclastic mud distribution in Al Wajh platform lagoon (northern Red Sea, Saudi Arabia), a modern analogue for arid carbonate platforms

Brayton Keith (Texas Christian Univ.): Stratal architecture of a retreating mixed carbonate-siliciclastic ramp, Pennsylvanian Strawn Formation, southeast New Mexico and west Texas, USA

Arnoud Slootman (Colorado School of Mines): Depositional architecture of a prograding microbial-reef-rimmed carbonate slope, Lower Carboniferous, Bolshoi Karatau Mountains, Kazakhstan

Abdulah Eljalafi (Ovintiv): Channelized Slopes to Basin-Floor Fan Systems – Depositional Architecture and Evolution of Carbonate Deposits of the Early Permian “Wolfcamp”, Midland Basin TX

Asil Newigy (Univ. of Potsdam): The Littoral Blender – Mixing Point-sourced siliciclastics with shelf-derived carbonates by longshore sediment transport

Sebastian Patino (KAUST): Limestones are also fractured!

Robert Fröhder (Univ. of Potsdam): Faulting as a controlling factor of accommodation space, hydrodynamics and facies distribution in mixed systems, Maltese Archipelago

Pauline Falkenberg (KAUST): Polygonal Tepee structures of Arabia: Indicators of intertidal microbial cementation processes

Kai Hachmann (KAUST): Microbial stabilization of modern carbonates from the intertidal to the aphotic – a critical component of limestone lithification in the Red Sea

Abkar Wicaksono (KAUST): Quantitative Bathymetry Reconstruction of the Late Jurassic Arabian Intraself Basin

Amanda Oehlert (Univ. of Miami): Secular variation in seawater chemistry changes ichthyocarbonate production rate, composition, and fate

Cameron Sam (Univ. of Miami): Fractionation of stable carbon isotope ratios during the precipitation of magnesium-rich carbonate by marine bony fishes