

SEPM International Sedimentary Geosciences Congress II

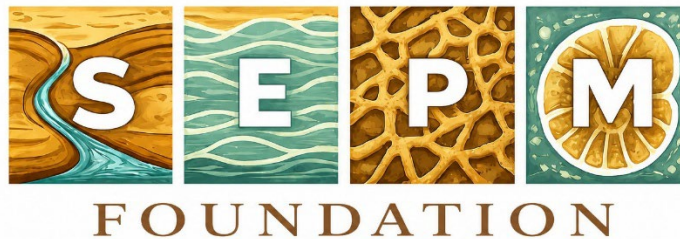


Defining the Critical Role and Impact of Sedimentology in a Sustainable Future

15–17 June 2026

Colorado School of Mines, Golden, Colorado, USA

Schedule and Technical Program



Schedule At A Glance

Saturday, 13 June 2026

- FT02—The Cretaceous–Paleocene Raton Basin
- SC01—Application Driven Core Analysis: Essentials of Core Description Using EasyCore—Berthoud 243

Sunday, 14 June 2026

- FT01—Paleolandscapes of the Colorado Front Range
- SC01—Application Driven Core Analysis: Essentials of Core Description Using EasyCore—Berthoud 243
- SC02—Exploration and development of geothermal energy in Sedimentary Basins—Berthoud 205
- Registration Opens: 12:00–4:00 pm—Friedhoff Lobby

Monday, 15 June 2026

- Registration Opens: 7:30 am–5:00 pm—Friedhoff Lobby

MAIN CONFERENCE

Monday, 15 June 2026

08:20–09:00	Lesli Wood Welcome Keynote—Friedhoff 1
09:00–10:00	Technical Sessions—various
10:00–10:20	Morning Break—Friedhoff 1
10:20–11:20	Technical Sessions—various
11:20–12:05	David Mohrig Plenary—Friedhoff 1
12:05–13:40	Lunch—Mines Market
13:40–15:00	Technical Sessions—various
15:00–15:20	Afternoon Break—Friedhoff 1
15:00–17:00	Student Poster Session—Friedhoff 2
17:00–20:00	Icebreaker and Scott Tinker Plenary—Friedhoff 1
18:00–19:00	Scott Tinker Presentation
19:00–20:00	Drawings for Fabulous Prizes

Tuesday, 16 June 2026

08:20–09:40	Technical Sessions—various
09:40–10:00	Morning Break—Friedhoff 1
10:00–11:20	Technical Sessions—various
11:20–12:05	Jeff Lukasik Plenary—Friedhoff 1
12:05–13:40	Lunch—Mines Market
13:40–15:00	Technical Sessions—various
15:00–15:20	Afternoon Break—Friedhoff 1
15:00–17:00	Early Career Poster Session—Friedhoff 2
17:00–18:00	Sedimentary Petrology Research Group—Green Center–Petroleum

Wednesday, 17 June 2026

08:20–09:40	Technical Sessions—various
09:40–10:00	Morning Break—Friedhoff 1
10:00–11:20	Technical Sessions—various
11:20–12:05	Lorena Moscardelli Plenary—Friedhoff 1
12:05–13:40	Lunch—Mines Market
13:40–15:00	Technical Sessions—various
15:00–15:20	Afternoon Break—Friedhoff 1
15:00–17:00	Professionals Poster Session—Friedhoff 2

Thursday, 18 June 2026

- SC03—From floccules to facies: Mudstones!—USGS Core Center
- SC05—Using sandstone petrology and petrography—Berthoud 401
- FT03—Green River Formation: Carbon Sequestration in an Eocene Hothouse

Lesli Wood Welcome Keynote

08:20–09:00 Monday, 15th June 2026

Advances in geomorphology and morpho-sedimentary analysis of modern and subsurface environments—modern analogs 1

09:00–10:00 Monday, 15th June 2026

Room: Green Center–Petroleum

Session Chairs: Juan Gutiérrez, Julien Bailleul, Julien Bourget, Zoltan Sylvester, Victorien Paumard

09:00–09:20 How frequently do submarine fans avulse? Insights from a new analytical model and global datasets

Ru Wang, Adam McArthur, Luca Colombera, Kyle M. Straub

09:20–09:40 High-resolution geomorphology of active rift margin submarine fans, Gulf of Corinth, Greece

Rob Gawthorpe, Martin Muravchik, Mohamed Mohamed, David Hodgson, Richard Collier, Petter Lågstad, Dimitris Sakellariou

09:40–10:00 Deep-water lobes, from pancakes to spaghetti: a wide spectrum of reservoir geometries and sand partitioning revealed by very-high resolution subsurface data

Julien Bourget, Francois Lafont, David Hodgson, Ian Kane, William Taylor, Cheikh Benan

Trace the pathways, storage, and fate of contaminants—including microplastics, PFAS, heavy metals, hydrocarbons, and other emerging pollutants

09:00–10:00 Monday, 15th June 2026

Room: Berthoud 241

Session Chairs: Ashley Ford, Rebecca VanderLeest

09:00–09:20 Decoding Molecular Fingerprints of the Anthropocene in Sedimentary Records

Jagos Radovic

09:20–09:40 Transport dynamics and bioturbation effects on microplastic retention in carbonate sediments

Drew Brown, Cathy Hollis, Ian Kane, Fiona Whitaker, Tom Kibblewhite

09:40–10:00 The influence of river and tidal processes and anthropogenic inputs on the distribution of microplastics in the lower Fraser River, Canada

Ana Lorenzetti Fortes, Shahin Dashtgard, Shuhuan Li, Matthew Ross, Hilary Corlett

CO₂ storage 1: Multi-scale play definition and characterization

09:00–10:00 Monday, 15th June 2026

Room: Green Center–Metals

Session Chairs: Rick Beaubouef, Anna Littlefield, John Holbrook

09:00–09:20 The Paleogene Wilcox sedimentary system, onshore Texas, USA: A potential play for carbon storage

Carlos Uroza, Mariana Olariu, Shuvajit Bhattacharya

09:20–09:40 Repurposing the Inyan Kara Group of the Northern Great Plains: Outcrop Studies for Reservoir Management in the Energy Transition

R.T. Beaubouef

MORNING BREAK—Friedhoff 1

10:00–10:20

Advances in geomorphology and morpho-sedimentary analysis of modern and subsurface environments—modern analogs 2

10:20–11:20 Monday, 15th June 2026

Room: Green Center–Petroleum

Session Chairs: Juan Gutiérrez, Julien Bailleul, Julien Bourget, Zoltan Sylvester, Victorien Paumard

10:20–10:40 Bottom Current Controlled Sedimentation on the Canterbury Margin Since the Pliocene: Seismic Evidence for the Development and Migration of Contourite Drifts

[Onyekachi Ibezim](#), Dorrik Stow, Uisdean Nicholson, Sara Rodrigues

10:40–11:00 Multiscale sediment dynamics and morphodynamics of a channelized open-coast tidal flat: Implications for facies models

Seolhui Bang¹, Joohee Jo, Dohyeong Kim, Seungyeon Sohn, [Kyungsik Choi](#)

11:00–11:20 Wind- and Wave-Driven Sedimentation Contrasts between the MIS 5e and MIS 1 in the Bahamas-Caicos Archipelago (BCA) and Western Caribbean

[Charles Kerans](#)

Unravelling physical and chemical processes during times of increased organic carbon preservation

10:20–11:20 Monday, 15th June 2026

Room: Berthoud 241

Session Chairs: Gabriela Velásquez, Joe Macquaker, Jason Flaum, Ryan Wilson

10:20–10:40 Challenging Persistent Water-Column Anoxia in Deep-Time Epicontinental Seaways: The Proof is in the Pudding (Mud)

[Ryan Wilson](#), Juergen Schieber, Joe MacQuaker

10:40–11:00 Evidence of surficial sediment and water column oxygenation through a carbon isotopic excursion in a high-latitude Early Cretaceous mudstone core in Arctic Alaska

Katherine Whidden, Richard Lease, [Joe Macquaker](#)

11:00–11:20 Calibrated log facies of the Eagle Ford Shale of the East Texas Basin and a revised regional evaluation of the depositional environments of Cenomanian – Turonian strata

[Jason Flaum](#), Justin Birdwell, Katherine French, Stanley Paxton, Scott Kinney, Katherine Whidden, Rand Gardner

CO₂ storage 2: Seal integrity, mass failures, and containment risks

10:20–11:20 Monday, 15th June 2026

Room: Green Center–Metals

Session Chairs: Rick Beaubouef, Anna Littlefield, John Holbrook

10:20–10:40 It really is about the Seal!

[Lesli Wood](#)

10:40–11:00 Mississippian-age submarine landslides are a risk for seal-failure in Devonian Chattanooga Shale, a potential CO₂ storage unit, Tennessee, U.S.A.

[C. Robertson Handford](#), Brant Logan

11:00–11:20 Diagenetic Controls on Elastic Properties and Brittleness of Carbonate Reservoirs: Implications for Geological CO₂ Sequestration

[Moaz Salih](#), Ammar El-Husseiny

David Mohrig Plenary

11:20–12:05 Monday, 15th June 2026—Friedhoff 1

LUNCH—Mines Market

12:05–13:40

Advances in geomorphology and morpho-sedimentary analysis of modern and subsurface environments—subsurface analogs

13:40–15:00 Monday, 15th June 2026

Room: Green Center–Petroleum

Session Chairs: Juan Gutiérrez, Julien Bailleul, Julien Bourget, Zoltan Sylvester, Victorien Paumard

13:40–14:00 Hydrodynamic Mineral and Carbon Sorting in Deepwater Systems: A Multi-Modal Study of the Brushy Canyon Formation, Texas

Zane R. Jobe, Christine Rossen, R.T. (Rick) Beaubouef, Brian S. Burnham

14:00–14:20 Building the Bight: Quantitative insights on shelf-to-basin sediment transfer mechanisms from the Hammerhead Shelf Margin

John W Shepherd, Victorien Paumard, Simon C Lang, Annette D George, Tristan Salles

14:20–14:40 Reservoir prediction and characterization in fluvio-deltaic and shelf-margin depositional environments: A quantitative approach using modern and subsurface analogues

Victorien Paumard¹, Simon Lang¹, John Shepherd¹, Alexander Sullivan¹, Andrew Winch¹, John Holbrook², Henry Henk², Matthew Kelly², Andrew Waltrip², Stephen Hasiotis³

14:40–15:00 Impact of Thrust-Ridge Development on Deepwater Sedimentary Systems as Illustrated by 3D Seismic Data Offshore NW Sabah

Tengku Mohd Syazwan Tengku Hassan, Julien Bailleul, Victorien Paumard, Barbara Claussmann, Azli Abu Bakar

Mudstone process sedimentology

13:40–15:00 Monday, 15th June, 2026

Room: Berthoud 241

Session Chairs: Gabriela Velásquez, Joe Macquaker, Jason Flaum, Ryan Wilson

13:40–14:00 Differentiating hyperpycnal, hypopycnal, and turbidity current deposits in late Pleistocene-early Holocene glaciogenic mud

Bill Arnott, Omar Al-Mufti

14:00–14:20 On the origin of angular bedforms using computed tomography and the deep-marine sedimentary record

Bill Arnott, Mike Tilston

14:20–14:40 Geochemical and petrographic characterization of a shallow drill core through the Pierre Shale and Niobrara Formation in the Denver-Julesburg Basin, Colorado

Michelle Johnston, Justin Birdwell, Jason Flaum, Kira Timm

14:40–15:00 The variability of tide and fluid mud driven sediment gravity flows on subaqueous deltas: examples from the Cook Formation, Norway, and paleo-Orinoco, Lower Morne L'Enfer Formation, Trinidad.

Ariana Osman, Ron Steel, Valentina Rossi, Cornel Olariu

CO₂ storage 3: Reservoir heterogeneity, diagenesis, and mineral trapping

13:40–15:00 Monday, 15th June 2026

Room: Green Center–Metals

Session Chairs: Rick Beaubouef, Anna Littlefield, John Holbrook

13:40–14:00 On the Fringe of Reservoir Potential: Distal Lobe Architecture and CO₂ Storage – learnings from the Skoorsteenberg Formation, South Africa

William Taylor, Ian Kane, David Hodgson, Lin Ma, Mia Hughes, Ed Keavney, Daniel Ronald, Stephen Flint

14:00–14:20 Submarine lobe complexes as CO₂ storage sites: the role of mineralogical heterogeneity and mineral trapping

Ian Kane, David Hodgson, Anna Pontén, Joshua Marsh, Daniel Ronald, Lin Ma, Will Taylor, Stephen Flint

14:20–14:40 Predicting CO₂ Storage Performance in Heterogeneous Shallow Marine Reservoirs Through Integrated Depositional and Diagenetic Controls

Muhammad Asif KHAN

AFTERNOON BREAK—Friedhoff 1

15:00–15:20

Student Poster Session

15:00–17:00 Monday, 15th June 2026

Room: Friedhoff 2

Subsurface Dynamics of Microplastics in the Land of Headwaters: A subsurface study of the spatial distribution and accumulation of microplastics near the headwaters of major U.S. rivers

Ashley Ford, Rebecca VanderLeest

Organic Carbon Distribution in Submarine Depositional Systems of the Lewis Shale, Greater Green River Basin, Wyoming

Jutamas Charoensuk, Mark Nell, Zane Jobe

Mudstone microfacies as a tool for resolving depositional ambiguities in fine-grained, deep-water successions: insights from the Taciba Formation (Itararé Group), Paraná Basin, Brazil.

Gabriela B. Velásquez, Fernando Farias Vesely, Sérgio Francisco Leon Dias

Wave-tide mixed-energy tidal bar at the Geum River estuary mouth, western coast of Korea: facies similarity to and distinction from open-coast tidal flat

U-Seong Kim, Hun Jun Ha, Tae Soo Chang

Faciological analysis of Triassic deposits in the Khemisset-Rommani basin (Moroccan Meseta)

Meriem Diouan, Rachid Essamoud

Basin Geometry and Sedimentary Geothermal Play Potential in Utah's Black Rock Desert

Alex Brettmann, Cari Johnson, Christian Hardwick, Lauren Reeher, Eugene Szymanski

A study of the Coll de Montllobar cliffs to understand the updip extent of transgressive-regressive events and how they effect transitional zones

Samuel Knox, John Holbrook, Anna Van Ypren, Miquel Poyatos More, Ivar Midtkandal

Temporal and paleoenvironmental reconstruction of the Claron Formation in Bryce Canyon National Park through calcite U-Pb geochronology and continental trace fossil characterization

Amanda Rea, Eric Roberts, Rhiannon Garrard

Chasing the Flood: Sediment Architecture of the Dryland De Grey River After a Tropical Cyclone in the Pilbara Region, Western Australia

Andrew Waltrip, John Holbrook, Stephen Hasiotis, Alex Sullivan, Simon Lang, Andrew Winch, Vaisakh Prathapan, Thomas Cattel, Victorien Paumard

A Retrospective Environmental Assessment of Metropolis Lake (Kentucky): Quantifying the Human Fingerprint on a Fluvio-lacustrine Depositional Environment Along the Ohio River

Mary Covell, Bailee N. Hodelka, John Dilworth, Glynn Beck, Bryce Flake, Jason Backus, Andrea Connor, Alan Fryer, Edward Woolery, Steven Hampson, Giliane G. Rasbold, Michael M. McGlue

Clotted Microbialites in Late Pleistocene Coral-rich, Shallow-marine Carbonates from the Bahamas: Identification, Distribution, and Abundance

[Dillon Smith](#), Bosiljka Glumac, H. Allen Curran, David Griffing

Comparative Porosity and Permeability Analyses of Pleistocene Carbonate Rocks from San Salvador Island, The Bahamas: Insights from X-Ray Micro-Computed Tomography (μ CT)

Han (Ashley) Zhang, [Hanna Wheeler](#), Bosiljka Glumac, H. Allen Curran, David Griffing

Eolianite versus Subtidal, Microbially Encrusted Coral Samples: Comparative Porosity and Permeability Analyses of Pleistocene Carbonate Rocks from San Salvador Island, The Bahamas

[Hanna Wheeler](#), Han (Ashley) Zhang, Bosiljka Glumac, H. Allen Curran, David Griffing

Early calcite cementation and its role in preserving a complex vertebrate track assemblage in the El Molino Formation, Torotoro National Park, Bolivia

[Saul Zuniga](#), Nelson Llempen, Kevin Nick, Raul Esperante

Microplastic and macroplastic dynamics along a barrier island: Matagorda Peninsula, TX

[Danielle Zaleski](#), Cornel Olariu

An idea: Modern triple oxygen isotope constraints on lake mass-balance in Big Pine Island Lake, Michigan.

[Delaney Novach](#), Ian Winkelstern

Geochemical characterization of the Salada Formation (Cenomanian – Turonian) in relation to Oceanic Anoxic Event 2, Colombia

[Jose Manuel Torres Parada](#), Florentin Maurrasse

Grain-size Fractionation Influence Recorded Lobe in the Deposits of the La Jolla Canyon-Fan System

[Cassandra Guzmán](#), Charles Paull, Jacob Covault, Zoltán Sylvester, Roberto Gwiazda, Eve Lundsten, David Caress, Andrea Fildani

Reworking and Filling of an Ephemeral Barrier Island Inlet Formed by Hurricane Beryl, 2024, Texas

[Cassandra Guzmán](#), David Mohrid, Zoltán Sylvester

Beach Sediment Properties in a Mixed System and Potential Effects on Nesting Loggerhead Sea Turtles (*Caretta caretta*) in Southwest Florida

[Kayla Brooks](#), Laura O'Connell, Alese Lissow, Matthew Ware

Facies variability and depositional systems of the Buda Limestone and Woodbine Formation, Hainesville Dome/Neuoff Field, Wood County, Texas

[Rosendo Saldana](#), Peter P. Flaig, Jason Berry

Submarine canyon morphology records river dynamics and seascape evolution, Pleistocene Mississippi canyons

[Juan Gutiérrez](#), Michael Sweet, Jacob Covault, Zoltán Sylvester, Jacob Margoshes

Sedimentology and Geochronology of Upper Cretaceous-Paleogene Strata in the Western Gobi Desert, Mongolia: resolving conflicting biostratigraphy and identifying the K-Pg and PETM Boundaries

[William Wolfe](#), Eric Roberts, Sarah Slotznick, Michael Novacek, Maureen O'Leary, Idersaikhan Damdinsuren

Harnessing AI-Driven Sedimentary Interpretation for High-Resolution Subsurface Modeling in Reservoirs

Muhammad Tamoor Malik, [Muhammad Bilal Malik](#), Muhammad Tallal Malik, Abdullah Ibrahim, Raja Mujahid Shahzad Rathore

High Precision U/Pb Age Dating and Correlation of Maastrichtian Bentonite Horizons in the North American Western Interior for Insight on Provenance and Volcanic Migration

[Dorian Gursky](#), Eric Roberts

Geochronology and Sedimentary Provenance Analysis of Upper Cretaceous Strata in the Antarctic Peninsula, with a Focus on the Santa Marta Formation

Zoë Bowers, Eric Roberts

Dual sediment transport pathways to a distal turbiditic system in the Early Cretaceous late-rift stage basin (Outer Carpathians, Poland)

Agata Kuźma, Alfred Uchman

Three-Dimensional facies architecture and estuary–delta transition in a Holocene tide-influenced system

Yechan Park, Dhong Il Lim, Jaesoo Lim, Jin Cheul Kim, Hyun Ho Yoon, Tae Soo Chang

Deepwater sediment flow pathways in a forearc basin: Nanaimo Group, Vancouver Island, B.C., Canada

Audra Tessman, Shahin Dashtgard, Francyne Amarante, Paul Glombick, James MacEachern

Tidal Controls on Delta Distributary Channels Morphology

Valina Paramita, Cornel Olariu

Scott Tinker Keynote and Icebreaker—Friedhoff 1

17:00–20:00 Monday, 15th June 2026

Tuesday, 16th June 2026

Advances in stratigraphic completeness and tectonostratigraphic evolution

08:20–09:40 Tuesday, 16th June, 2026

Room: Green Center–Petroleum

Session Chairs: Morgan Chakraborty, Cornel Olariu, Ciaran O'Byrne, Janok Bhattacharya

08:20–08:40 Size and scale of rivers versus valleys in ancient source to sink systems

Janok Bhattacharya

08:40–09:00 Delta double clinofolds facies model for sequences of the Upper Cretaceous Blackhawk Formation in the Western Interior Seaway, Utah, USA

Cornel Olariu, Ronald Steel

09:00–09:20 Lowstand systems of the Cretaceous Blackhawk Formation, Book Cliffs, Utah: New insights on location and preservation

Ciarán O'Byrne, Stephen Flint

09:20–09:40 Proximal to distal correlation of coal-clastic alluvial successions in the Paleocene of the Williston Basin (USA): new insights into forcing mechanisms

Gijs van Dijk, Hemmo Abels, Wout Krijgsman, Klaudia Kuiper

Distinguishing depositional from early diagenetic products

08:20–09:40 Tuesday, 16th June, 2026

Room: Berthoud 241

Session Chairs: Gabriela Velásquez, Joe Macquaker, Jason Flaum, Ryan Wilson

08:20–08:40 Depositional Environment and Facies as First-Order Controls on Unconventional Reservoir Properties: Examples from Siliciclastic, Carbonate, and Mixed Mudstone Systems

Lucy Tingwei Ko, Rieko Adriaens, Toti Larson, Priyanka Periwal, Rob Reed

08:40–09:00 Delineating silica sources in Cretaceous marine sedimentary systems

Katherine French, Jane Hearon, Jason Flaum, Justin Birdwell, Richard Lease, Katherine Whidden

09:00–09:20 Bottom Current Activity and Sediment Redistribution During Ocean Anoxic Event 1d Revealed from Late-Albian Black Shales and Carbonates

Minindu Mallawa, Juergen Schieber, Gabriele Gambacorta

09:20–09:40 New Stratigraphic and Geochemical Insights into the Mowry Shale in the Powder River Basin, Wyoming and Montana, USA

Jane Hearon, Katherine French

Microbial influence on carbonate diagenesis

08:20–09:40 Tuesday, 16th June 2026

Room: Green Center–Metals

Session Chairs: Iva Tomchovska, Rick Sarg

08:20–08:40 Microbial Boundstone Margins—Different Style of Carbonate Slope with Important Implications

Paul Mitch Harris

08:40–09:00 Lake-Stage Control on Lacustrine Microbialite Morphology Spanning the Early Eocene Climate Optimum, Uinta Basin USA

Abdulah Eljalafi, Rick Sarg

09:00–09:20 30 Petrographic Microfabrics of Upper Jurassic Smackover Thrombolites: Insights into Clot Formation

Iva Tomchovska, John P. Grotzinger

09:20–09:40 Distribution, Origin and Significance of Thick Microbial Encrusters on Corals: Pleistocene Examples from The Bahamas and Turks and Caicos Islands

Bosiljka Glumac, H. Allen Curran, David Griffing

MORNING BREAK—Friedhoff 1

09:40–10:00

Advances in stratigraphic completeness, tectonostratigraphic evolution

10:00–11:20 Tuesday, 16th June 2026

Room: Green Center–Petroleum

Session Chairs: Morgan Chakraborty, Cornel Olariu, Ciaran O'Byrne, Janok Bhattacharya

10:00–10:20 Siliciclastic Sediment Factories and the Index of Sediment Generation

Xiumian Hu, Xiaolong Dong, Wendong Liang, Eduardo Garzanti, Hugh Sinclair, Yani Najman, Feiyue Chu, Gaojun Li, Jun Chen, Cheng Wang

10:20–10:40 A Tectonically Loaded Margin: Brittle Slopes and Two Millennia of Seismically Triggered Failure in the Gulf of Aqaba

Sam Purkis, Ben Rendall, Bolton Howes, Morgan Chakraborty

10:40–11:00 Contrasting gravity-driven systems along submarine active margins: Examples from the Whareama and Castlepoint Basins (southern Hikurangi margin)

Barbara Claussmann, Julien Bailleul, Chanier Frank, Geoffroy Mahieux, Vincent Caron

11:00–11:20 Contrasting styles of sediment dispersal and environmental signal propagation in hyperarid mixed carbonate-siliciclastic-evaporite systems: Red Sea vs. Arabian Gulf

Ben Rendall, Alexander Petrovic, Georg Warrlich, Thomas Lüdmann, Sam Purkis, Volker Vahrenkamp

Sediment-hosted critical mineral deposits (CASERM host)

10:00–11:20 Tuesday, 16th June, 2026

Room: Berthoud 241

Session Chair: Lisa Stright, Carlos Uroza

10:00–10:20 The Bonnie Claire volcano-sedimentary Li-B deposit

Jeff Wilson

10:20–10:40 A New Clay Play: The First Halloysite-Hosted Ion-Adsorption REE Discovery in the United States

Rand Gardner, Justin Birdwell, Jason Flaum, Katharina Pfaff

10:40–11:00 Spatial geochemical trends across the coal-bearing Mesaverde Group, Colorado: critical minerals and rare earth elements

Haley Coe, Lauren Birgenheier, Diego Fernandez, Andrew Giebel, Ryan Gall, Michael Vanden Berg

Carbonate sediments through time

10:00–11:20 Tuesday, 16th June 2026

Room: Green Center–Metals

Session Chairs: Zhonghao Zhang, Matt Musso, Tracy Frank

10:20–10:40 Physical vs. biological disarticulation of two extant stalked crinoids: Implications for encrinite composition and depositional interpretation

Matthew Musso, Arnoud Slootman, Lesli Wood, Zane Jobe

10:40–11:00 The Role of Coccolithophore Deposition in Moving Suspensions: Importance of Flocculation and Its Implication for Modern and Ancient Calcareous Ooze (Chalk) Deposition

Zhonghao Zhang, Juergen Schieber, Zalmai Yawar, Minindu Gedara, Bei Liu

11:00–11:20 Shape-dependent settling velocity of skeletal carbonate grains: Implications for calciturbidites

Arnoud Slootman, Max de Kruijf, Guenther Glatz, Joris Eggenhuisen, John Reijmer

Jeff Lukasik Plenary

11:20–12:05 Tuesday, 16th June 2026—Friedhoff 1

LUNCH—Mines Market

12:05–13:40

Characterization of aquifer architecture, quantification of groundwater flow and recharge, and evaluation of sedimentary controls on hydrologic connectivity

13:40–15:00 Tuesday, 16th June 2026

Room: Green Center–Petroleum

Session Chairs: Delaney Novach, Kenn Ehman

13:40–14:00 The Perchlorate Site: A case study that put Environmental Sequence Stratigraphy (ESS) on the map

Kenneth Ehman, Richard Cramer

14:00–14:20 Insights into the Cretaceous Dakota Aquifer System of Central Kansas: Applying sequence stratigraphy to unravel hydrogeologic complexities

Kate Andrzejewski, Jay Kalbas, Jessica Meyer, Jackson Glaze, Megan Jenkins, Andreas Möller, Noah McLean, Joseph Andrew

14:20–14:40 Predicting Groundwater Contamination Risk for a Karstic Quarry in the Edwards Aquifer Recharge Zone: A GIS-Based Assessment of Post-Mining Land Use Scenarios

Kaitlyn Tran

14:40–15:00 Applying Petrophysical Technology to Groundwater Remediation Projects

Stone Urban, Colin Plank, Mike Shultz, Rick Cramer

Geothermal resources

13:40–15:00 Tuesday, 16th June, 2026

Room: Berthoud 241

Session Chairs: Justin Birdwell, Rand Gardner, Eric Stautberg

13:40–14:00 Geothermal Systems in Sedimentary Basins

Eric Stautberg, Steve Sonnenberg

14:00–14:20 Temperature–Depth Profiles in U.S. Sedimentary Basins

Stanley Paxton, Scott Kinney, Rand Gardner, Justin Birdwell

14:20–14:40 USGS Assessments of Subsurface Geothermal Resources in Sedimentary Basins: Overview of Methodology and 3D Temperature Modeling

Justin Birdwell, Erick Burns, Jacob DeAngelo, Rand Gardner, Sarah Gelman, Colin Williams

14:40–15:00 A 3-D Finite Element Numerical Model of the Piceance Basin

Rand Gardner, Justin Birdwell, Donald Sweetkind, Holger Petermann, Annaka Clement, Patrick Sullivan, James Hagadorn

Carbonate sediments through time

13:40–15:00 Tuesday, 16th June, 2026

Room: Green Center–Metals

Session Chairs: Michael Braunscheidel, Tracy Frank

13:40–14:00 Evolution of shallow-shelf mixed carbonate-siliciclastic systems in the rock record: Icehouse vs. greenhouse stratal architectures

Kelly Hattori, Peter Flaig, Ben Rendall

14:00–14:20 Muleshoe Mound Revisited

Katherine Giles

14:20–14:40 Emplacement and fill characteristics of carbonate mass failures across time, scale and depositional processes originating from the Central Basin Platform, Midland Basin, West Texas

Michael Braunscheidel, Lesli Wood, Ron Bianco

14:40–15:00 Temporal Influence of Carbonate Platforms on Deep-Water Siliciclastic Deposition, Permian of the Midland Basin, USA

Abdulah Eljalafi, Robert Holman, Alvin Bonilla-Rodriguez, Charles Harman, David Katz

AFTERNOON BREAK—Friedhoff 1

15:00–15:20

Early Career Poster Session

15:00–17:00 Tuesday, 16th June 2026

Room: Friedhoff 2

Cut, Fill, Preserve: Toward an integrated basin model for bedrock paleovalleys in orogenic settings

Theresa Schwartz

Fluvial Architectural Analysis and Longitudinal Variance of the Castlegate Sandstone, Book Cliffs, Utah

Brayton Keith, John Holbrook

High-frequency sequence stratigraphy of a mixed siliciclastic–carbonate system: the Pennsylvanian Strawn Group, Eastern Shelf of the Permian Basin, Texas

Eduardo Menozzo da Rosa, Peter Flaig, Kelly Hattori

The nature of non-evaporite intrasalt stringers in Witchelina salt diapir, Flinders Ranges, South Australia
[Sarah Giles](#), David Lankford-Bravo, Katherine Giles

Barberpole stratification: yet another example of heterolithic banding from the deep marine clastic realm
[David Lowe](#), R.W.C. Arnott, Celeste Cunningham, Gorman Sears

Cold-water Carbonates in The Great Land: Intertidal Carbonate Factories of Kachemak Bay, Alaska
[Laura O'Connell](#), Nicholas Riordan, Erin McKittrick, Thomas Peña

Seafloor bedforms associated with erosion by the Southland Current and fluid escape processes, Chatham Rise, SE New Zealand
[Onyekachi Ibezim](#), Dorrik Stow, Uisdean Nicholson

Fine-Grained Contourite Architecture and Cyclic Sedimentation in a Late Miocene–Pliocene Plastered Drift System, Canterbury Basin, New Zealand
[Onyekachi Ibezim](#), Dorrik Stow, Uisdean Nicholson

Stratigraphic Variability Along Windward and Leeward Slopes of an Isolated Carbonate Platform, Cretaceous of Central Mexico
[Abdulah Eljalafi](#), Charles Kerans

Are Laminated Siltstones Part of the Same Lobe System? An Architectural and Geochemical Test Using 1D Facies Successions in the Bone Spring Sands/Silts and Wolfcamp X & Y, Delaware Basin
[Lucy Tingwei Ko](#), Toti Larson, Rieko Adriaens, Priyanka Periwai

Ferron Sandstone coal-bearing coastal plain deposits as a source of Rare Earth Elements and Critical Minerals
[Emma Morris](#), Lauren Birgenheier, Peyton Fausett, Logan Ashurst-McGee, Diego Fernandez, Ryan Gall

Confined, High-Gradient Slope Channels in the Decie Ranch Member: A Reinterpretation of Wolfcamp A Deepwater Deposition in the Lenox Hills of Brewster County, Texas
[Conor Sullivan](#), Art Donovan, Mike Pope, Morgan Sullivan

Wednesday, 17th June 2026

Progress towards automated stratigraphy?

08:20–09:40 Wednesday, 17th June 2026

Room: Green Center–Petroleum

Session Chairs: Zoltan Sylvester, Cassandra Guzman, Eugene Rankey, Peter Burgess

08:20–08:40 Automating interpretations of fluvial facies sequences: machine-learning models based on geologic analogs

[Luca Colombera](#), Soma Budai, Nigel Mountney

08:40–09:00 From Pixels to Processes: Linking Automated Mapping of Rivers to Meander- and Bar Morphodynamics

[Zoltan Sylvester](#), Cole Speed, Jacob Covault

09:00–09:20 From Field Notebook to Machine Learning: Digitized Measured Sections for Predicting Deepwater Reservoir Architecture

[Lisa Stright](#), Brian Romans, Miquel Poyatos-More, Stephen Hubbard

09:20–09:40 Avulsion cycles and delta-plain channel mobility during coastal transgression

[Byong-suk Chun](#), Elisabeth Steel, Ron Steel

Sediment provenance and basin evolution

08:20–09:40 Wednesday, 17th June, 2026

Room: Berthoud 241

Session Chairs: Morgan Chakraborty, Marieke Dechesne, Bill Craddock, Jared Gooley

09:00–09:20 Chronostratigraphy of the Late Turonian System, Powder River Basin, WY: insights from integrated U-Pb geochronology, core-to-outcrop stratigraphy, and biostratigraphy.

Patrick Sullivan, Stephen Sonnenberg

09:20–09:40 Fingerprints of Tectonics and Climate Change in Sandy Turbidites of the Deep-Sea Bengal Fan Based on DZ U-Pb Analyses of Young Tibetan Magmatic Arc Grains

Mike Blum, Zuana Alam

Carbonate diagenesis and reservoir quality

08:20–09:40 Wednesday, 17th June, 2026

Room: Green Center–Metals

Session Chairs: Eric Hutton, Rick Sarg

08:20–08:40 Petrographic, Diagenetic, and Mineralogical Controls on Reservoir Quality in the Chinguetti Field, Coastal Basin of Mauritania

Bah Dahmane, Leila Aliouane

08:40–09:00 Preliminary hyperspectral imaging of diagenetic cements from the Ben Nevis Reservoir, Jeanne d'Arc Basin, offshore Newfoundland

Eric Hutton, Brette Harris, Noah Slaney, Jaimee Hodgson, Hilary Corlett, D.G. Lowe

09:00–09:20 Travertines in the pre-salt of the Santos Basin: Conceptual model

Flávia Carvalho, Marcelle Erthal, Lisie Falcão, Ovidio Junior, Adriana Silva, Reynaldo Filho, Bruno Carvalho, Milene Figueiredo

09:20–09:40 Climate, Chemistry, and Microbial Influence on Mineralogy and Diagenesis in an Ancient Lake, Green River Formation (Eocene), Utah and Colorado

J. F. (Rick) Sarg, Maxwell Pommer

MORNING BREAK—Friedhoff 1

09:40–10:00

Systems modeling: controls on morphology and signal preservation

10:00–11:20 Wednesday, 17th June 2026

Room: Green Center–Petroleum

Session Chairs: Zoltan Sylvester, Cassandra Guzman, Eugene Rankey, Peter Burgess

10:00–10:20 Shelf Regulation: Is Marine Shelf Width Partly Determined by Autogenic Processes?

Peter Burgess, Liu Xian

10:20–10:40 Sediment grain size as a carrier of climate and tectonic signals from orogenic topography to foreland basin stratigraphy

Xuesong Ding, Larry Syu-Heng Lai

10:40–11:00 Physical modeling of changing slope-to-basin morphology on the emplacement, erosion, and transport of sediment by along-slope continuous currents

Matthew Musso, Lesli Wood

11:00–11:20 Predicting deep-water depositional-element types on sedimentary logs using machine-learning algorithms trained on geological analogs

Soma Budai, Luca Colombera, Adam McArthur, Marco Patacci

Geochronology of global paleoclimate and paleoenvironmental events

10:00–11:20 Wednesday, 17th June 2026

Room: Berthoud 241

Session Chairs: Morgan Chakraborty, Marieke Dechesne, Bill Craddock, Jared Gooley

10:00–10:20 Sedimentology, paleoenvironmental variation and sequence stratigraphic context of the Cenomanian-Turonian Boundary Event (CTBE) in the southern margin of Tethys

Mabrouk Bachari, Rebone Ramadie, Dewet B arnard, Danièle Grosheny, Mohamed Hedi Negra, Eugene Bergh

10:20–10:40 Deep-Water Corals Record Abrupt Climate Variability in the Red Sea: Insights from $\delta^{234}\text{U}$ and U-Series Chronology

Morgan Chakraborty, Ali Pourmand, Peter Swart, Arash Sharifi, Francois Tissot, Haoyu Li, Sam Purkis

10:40–11:00 Recognition of cryptic bounding surfaces in macrotidal estuarine successions by multi-proxy based OSL-dated sequence stratigraphic analysis from SW Korea

Serin Lim, Jin Cheul Kim, Dhongll Lim, Yongmi Kim, Young Sook Baek, Tae Soo Chang

11:00–11:20 A high-resolution stratigraphic record of the Early Eocene Arctic continental shelf from the foreland of the Brooks Range, Alaska

William Craddock, Richard Lease, Jody Wycech, Mark Dreier, Michael Mohr, Debra Willard

Planetary sedimentology

10:00–11:20 Wednesday, 17th June 2026

Room: Green Center–Metals

Session Chairs: Tina Seeger, Matt Musso, Kirsten Siebach

10:00–10:20 The Mg Sulfate-Bearing Unit of Gale Crater, Mars from a ChemCam Perspective

Emmy Hughes, Frances Rivera-Hernández, William Rapin, Jeffrey Johnson, Kristin Rammelkamp, Olivier Forni, Patrick Gasda, Benjamin Tutolo, Alivia Eng, Elizabeth Sklute, Erwin Dehouck, Stéphane Le Mouélic, Pierre Beck, Olivier Gasnault, Nina Lanza

10:20–10:40 Sedimentology and Diagenesis of the Boxwork-Hosting Altadena Member, Gale Crater, Mars.

Christina Seeger, Kirsten Siebach, Claire Mondro, Catherine O'Connell-Cooper, Susanne Schwenzer, Patrick Gasda, Lucy Thompson, Bill Dietrich, Steve Banham, John Grotzinger, Sanjeev Gupta, Gwenael Caravaca, Louis Scuderi

10:40–11:00 Seeing a World in a Grain of Sand: Learning about Mars from Sand in River and Dune Deposits

Kirsten Siebach, Valerie Payré, Audrey Putnam, Eleanor Moreland, Jack Henry, Sarah Preston, Mathieu Lapôtre, Steven Banham, Sanjeev Gupta

11:00–11:20 Red Planet, Ancient Reservoirs: Martian Basin Architecture and In Situ Resource Systems

Rand Gardner, Eric Stautberg, Lesli Wood, Patrick Sullivan, Justin Birdwell, Shannon Hibbard

Lorena Moscardelli Plenary

11:20–12:05 Wednesday, 17th June 2026—Friedhoff 1

LUNCH—Mines Market

12:05–13:40

Carbonate and tidal systems

13:40–15:00 Wednesday, 17th June, 2026

Room: Green Center–Petroleum

Session Chairs: Zoltan Sylvester, Cassandra Guzman, Eugene Rankey, Peter Burgess

13:40–14:00 Carbonate Platform Drowning Geometries: Processes, Palaeoclimate and Prediction

Peter Burgess, Yang-Jun Wang, Gene Rankey

14:00–14:20 Applied Sedimentology in the 21st Century: Addressing the Challenges of Sustainability of Pacific Atoll Islands

Eugene Rankey, Tion Uriam

14:20–14:40 Abandoned tidal channels as rapidly infilling sedimentary reservoirs in a macrotidal flat with implications for blue carbon potential

Seungyeon Sohn, Seolhui Bang, Joohee Jo, Kyungsik Choi

14:40–15:00 Quantifying lateral carbon export from coastal wetlands using space-borne sensors and hydrodynamic modeling

Cecilia Lopez-Gamundi, Ignace Pelckmans, Marc Simard, Ali Payandeh, Alexandra Christensen, Nicholas Ward, Evan Heberlein

New advances in reservoir characterization to aid in evaluating sedimentary systems through time

13:40–15:00 Wednesday, 17th June 2026

Room: Berthoud 241

Session Chairs: Marsha French, Joann Welton

13:40–14:00 Making Rock Without a Sample: Petrology-Inspired Digital Twins for Reservoir Characterization

Robert Lander, Linda Bonnell

14:00–14:20 Integrating Provenance, Facies, and Diagenetic Modeling for Reservoir Quality Assessment in Cretaceous to Miocene-aged Gulf of Mexico Deep Water Deposits

Aysen Ozkan, Hugo Coumont, Marzena Jaminski, Thomas Heard, Neal Auchter, Andy Morton

14:20–14:40 Pore systems in oil-window mudrocks of lower Green River Formation (Castle Peak Shale through Lower Garden Gulch), Uinta Basin, Utah

Maxwell Pommer, Luke Fidler

14:40–15:00 *pyCoreRelator*: Automated Correlation of Data from Cores and Geophysical Logging

Larry Syu-Heng Lai, Zoltán Sylvester, Jacob Covault, Joan Gomberg, Nora Nieminski

Assessment of extreme flood impacts on fluvial channels, sedimentary records, and affected communities

13:40–15:00 Wednesday, 17th June 2026

Room: Green Center–Metals

Session Chairs: Lesli Wood, John Holbrook

13:40–14:00 The sedimentary record of a single extreme storm; a detailed look at the before and after effects of the Category 5 Cyclone Zelia on the dryland De Grey channel and delta, Western Australia

John Holbrook, Andrew Waltrip, Whitt Horton, Matt Kelly, Henry Henk, Jacinto Garza, Simon Lang, Victorien Paumard, Alex Sullivan, Andrew Winch, Vaisakh Prathapan Seema, John Shepherd, Stephen Hasiotis, Thomas Cattel

14:00–14:20 Long-term Monitoring of Storm Impacts on Coastlines of San Salvador Island, Bahamas: A Retrospective on October 2015 Hurricane Joaquin

Bosiljka Glumac, H. Allen Curran, Michael Savarese, Troy A. Dexter

14:20–14:40 Paleoflood Analysis along the North Concho and Guadalupe Rivers, central Texas; Improving riverine flood frequency estimates using paleoflood data and comparisons to July 2025 extreme flooding in Kerrville, Texas

Bryan Freymuth, Eric Van Vleet, Leigh Youngblood, Bryan Robinson, Keith Kelson

14:40–15:00 Recognizing and characterizing Froude supercritical flow deposits in the sedimentary record

Molly O'Halloran, Piret Plink-Björklund

AFTERNOON BREAK—Friedhoff 1

15:00–15:20

Professionals Poster Session

15:00–17:00 Wednesday, 17th June 2026

Room: Friedhoff

Dependency of heat transport on sedimentary heterogeneity: impacts of hierarchy, resolution and upscaling methods in fluvial low-enthalpy geothermal reservoirs

Hamed Aghaei, [Luca Colombera](#), Na Yan, Nigel Mountney, Odd Andersen, Andrea Di Giulio

The role of sedimentary architecture in controlling static connectivity and geothermal doublet performance (Mezőberény, SE Hungary)

[Soma Budai](#), Cees J.L. Willems, Luca Colombera, Robert Westaway

Avulsion, Inner bend bank failure, and lateral accretion: Holocene deep marine Lucia Chica channel Complex, offshore central California

[Tim McHargue](#), Marianne Coholich, Charles Paull, Steve Graham

Sensitivity Analysis of Sedimentological Controls and the Effects on Simulated CO₂ Plume Behavior during Dynamic Reservoir Modeling

[Jamar Bynum](#), Conn Wethington

Mapping submarine fan systems in the Bone Spring Formation, Delaware Basin, Texas and New Mexico

[Benjamin Johnson](#), Andrea Cicero

Sedimentation patterns around the Paleocene–Eocene Boundary in the Hanna Basin, Wyoming

[Marieke Dechesne](#), Brady Foreman, Ellen Currano, Regan Dunn, Sophia Scaccia, Will Clyd, Aaron Diefendorf

Glendonites and authigenic carbonates in Arctic Alaska from the Cretaceous to the present: Environmental and Climatic Significance

[John Counts](#), Richard Lease, Kate Whidden, Jared Gooley, Matt Jones, Sierra Petersen, Miquela Ingalls, Madeleine Vickers, Madalina Jaggi

Regional- and Outcrop-scale Distribution of Coarse-grained Fluvio-deltaic Facies of the Upper Cretaceous Tuluva Formation, Colville Foreland Basin, Northern Alaska

Josh Long, David Houseknecht, Rebecca Smith, [Jared Gooley](#)

The tectonic debates on the Western Qinling-Songpan-Yidun Terranes of Eastern Tibet: A Palaeotethyan Enigma

[Xiumian Hu](#), Yingdi Pan, Xiaolong Dong, Dingjun Wen, Eduardo Garzanti, Tao Deng, Anlin Ma

Sedimentology of Deep-Water Carbonate Diamictites in Baffin Bay

[Tracy Frank](#), Josef Hohensee, Elias Utterback, Katherine Burns

Can glacial-interglacial cycles impact microbially mediated early marine burial diagenesis?

[Theresa Nohl](#), Gerald Auer, Hildegard Westphal, David De Vleeschouwer, Hal Bradbury, Lars Reuning, Jeffrey Marlow, Jennifer Biddle, Uwe Balthasar

Asymmetric Channel Bodies and Evidence for Sinuosity at a Deepwater Base of Slope: Outcrop Examples from the Permian Upper Brushy Canyon (UBC), Central Delaware Mountains, West Texas

[Jesse Melick](#)

Integrating Brine Geochemistry and Basins Analysis to Identify Favorable Target Areas for Lithium Extraction from Brines in the Contiguous United States

[Rand Gardner](#), Justin Birdwell, Robert Zielinski

Tales from the Deep: A New National-Scale Analysis of Ultra-Overpressure in Sedimentary Basins

Rand Gardner, Justin Birdwell, Jenny Lagesse, Sean Brennan, Stanley Paxton, Jeffrey Pepin

Sediment Provenance and Correlation of the Upper Cretaceous–Cenozoic Colville Foreland Basin, North Slope, Alaska

Jared Gooley, Richard Lease, David Houseknecht, William Craddock

The Rukwa Rift Basin: a stratigraphic window into the last 150 million years of continental sedimentation and tectonics in the East African Rift System

Eric Roberts, Cassy Mtelela, Nancy Stevens, Patrick O'Connor