

GCSSEPM 41st Annual Perkins-Rosen Research Conference
17–19 November 2025, Houston, Texas

Cycles and Sequences, So What?

A 21st century perspective in memory of Peter Vail, Bob Weimer, and Larry Sloss

Monday, 17 November

- 7.30–8.00 Registration (breakfast)
- 8.00–8.30 **Keynote:** Surfaces, cycles, and the sequence stratigraphy family tree—*AD Donovan, KW Shanley, KM Bohacs, CA Yeilding*
- 8.30–8.50 The life, wisdom, accomplishments, and legacy of Larry Sloss—*Bob Mitchum, Art Donovan, Kevin Bohacs*
- 8.50–9.10 Animating the Phanerozoic geologic evolution of the United States: a view of the Sloss sequences in four dimensions from a paleo satellite—*Paul Weimer, James Adson, Vincent Matthews III*
- 9.10–9.30 Tectonic forcing and large-scale sedimentary cyclicity—*Kurt Rudolph, Magdalena Curry, Duncan Erratt*
- 9.30–10.00 Discussion—*Panel 1*
- 10.00–10.30 *Coffee Break and Posters*
- 10.30–10.50 Unconformities gone bad and other impacts of syn-sedimentary tectonics on sequence stratigraphic interpretation—*Lee Krystinik*
- 10.50–11.10 Sequence stratigraphic characterization of the tectonically active ridge basin, southern California: it is all about the kinematics—*Morgan Sullivan, Kenn Ehman*
- 11.10–11.30 Reconciling sequence stratigraphic interpretations between the Austin Chalk in Texas and the Niobrara Formation in the Western Interior Seaway—*Christine Griffith, Michael Pope, Arthur Donovan*
- 11.30–12.00 Discussion—*Panel 2*
- 12.00–13.00 lunch
- 13.00–13.30 Lunch with Bob Mitchum
- 13.30–13.50 Timing and stratigraphic architecture of the Greenhorn Cyclothem Transgression in central Kansas: new insights from high-resolution sedimentological analysis—*James Kalbas, Kate Andrzejewski*
- 13.50–14.10 Characteristics of syn-rift and post break-up sequences immediately above layered evaporites of the Gulf of Mexico, south Atlantic, and Red Sea—*Teunis Heyn, James Pindell, Ahmed Afifi, Joni Clark, Joshua Turner*
- 14.10–14.30 Regional geological correlation and synthesis—a decade of observations and insight from regional 2D seismic surveys—*Brian Horn*
- 14.30–15.00 Discussion—*Panel 3*
- 15.00–16.30 Exercise/Discussion—North Slope RCS 3—basin phases, play element distribution—*Jack Neal, Kevin Bohacs*

- 16.30–17.00 Wrap-Up
- 17.00–20.00 ***Icebreaker***

Tuesday, 18 November

- 7.30–8.00 Breakfast
- 8.00–8.30 **Keynote:** Vailian influences on careers and research direction—*Jack Neal*
- 8.30–8.50 The state of sequence stratigraphy: time for a renaissance or a recall?—*Katy Sementelli*
- 8.50–9.10 Relative sea level and inferred eustatic behavior for non-glacial times from the Cretaceous passive margin of northern South America—*Villamil, Erikson, Arango, Dewey, Markwick, Pitman, Rowley*
- 9.10–9.30 A historical perspective on testing sequence stratigraphic concepts and sea-level curves in modern environments, remote basins, non-marine sediments, and incised valleys—*Ron Boyd, Claus Diessel*
- 9.30–10.00 Discussion—*Panel 4*
- 10.00–10.30 *Coffee Break and Posters*
- 10.30–10.50 Reservoir characterization and stratigraphic framework of the Nargis Gas Discovery, offshore Egypt—*Esmeray-Senlet, Selen*
- 10.50–11.10 Shoreline to basin floor sequence stratigraphy of upper Pleistocene siliciclastics and carbonates, offshore eastern Borneo: details and deviations from Vail et al. models—*Arthur Saller*
- 11.10–11.30 Advancing sequence stratigraphy for mixed siliciclastic–carbonate margins: toward predictive frameworks linking processes and stratigraphy—*Laura Henrika Bührig, Maria Mutti*
- 11.30–12.00 Discussion—*Panel 5*
- 12.00–13.00 Lunch
- 13.00–13.30 Poster Session
- 13.30–13.50 Sequence stratigraphy applied to geological CO₂ storage (GCS) across many scales—*Coterill*
- 13.50–14.10 Sequence stratigraphy and seismic geomorphology applications for a new generation of carbon sequestration: insights into the L. Miocene, Gulf of Mexico—*Lesli J. Wood, Aldifa Afimanya*
- 14.10–14.30 Sequence stratigraphic context of recent discoveries in north Alaska—*Pemberton*
- 14.30–15.00 Discussion—*Panel 6*
- 15.00–16.30 Exercise/Discussion—North Slope Cretaceous–Paleogene—clinothem, sub fans, etc.
- 16.30–17.00 Wrap-Up

Wednesday, 19 November

- 7.30–8.00 Breakfast
- 8.00–8.30 **Keynote:** Review of sequence stratigraphy of the Muddy “J” Sandstone, Wattenberg Field, Denver Basin, Colorado—*Stephen A. Sonnenberg*

- 8.30–8.50 The Mowry Shale of the Powder River Basin: interpretation and evaluation of a mudrock reservoir in a sequence stratigraphic framework—*Jeffrey May, Alexa Socianu, Stephen Sonnenberg*
- 8.50–9.10 Parasequences and bedsets—quantification of parameters from the Book Cliffs of eastern Utah—*John Howell*
- 9.10–9.30 Lower Cretaceous type section of the Isle of Wight and Channel Subbasin and subsurface analogs of Atlantic Canada—*Grant Wach, Ricardo Silva*
- 9.30–10.00 Discussion—*Panel 7*
- 10.00–10.30 *Coffee Break and Posters*
- 10.30–10.50 The Green River Formation, Utah and Colorado—a story of climate, sequences, minerals, and organic richness—*JF (Rick) Sarg*
- 10.50–11.10 Hierarchical bounding surfaces for subdividing erg system strata: sequence stratigraphic implications for eolian and noneolian deposits in the Jurassic Navajo Sandstone, Utah—*Stephen Hasiotis, Marjorie Chan, Judith Parrish*
- 11.10–11.30 Continental sequence strat overview/state of the art—*Patterson, Shanley*
- 11.30–12.00 Discussion—*Panel 8*
- 12.00–13.00 Lunch
- 13.00–13.30 Poster Session
- 13.30–13.50 Application of sequence stratigraphy to optimize groundwater projects: history and impact—*Kenn Ehman, Richard Cramer*
- 13.50–14.10 Sequence stratigraphy of the Guyana discoveries: success factors—*Ardill, Neal*
- 14.10–14.30 The enduring legacy of sequence stratigraphy—*Stacy Atchley*
- 14.30–15.00 Discussion—*Panel 9*
- 15.00–16.30 Exercise/Discussion—Field-scale well-log cross section through an incised valley example
- 16.30–17.00 Conclusion of Conference

POSTER PRESENTATIONS (listed in alphabetical order)

Foundations of sequence stratigraphy—*Janok P. Bhattacharya*

Advances in sequence stratigraphy—insights from 40 years of studying the other 80% of the stratal record: mudstones, marine and continental, Earth and Mars—*Bohacs*

A quantitative definition of accommodation: implications for understanding and prediction of strata—*Peter Burgess, Bradford Prather, Ron Steel, Oriol Falivene*

Well log chronostratigraphic conversion of multi-basin formation units as requisite for 3D basin modeling in the Santos–Campos–Espírito Santo salt basin, Brazil—*Sharon Cornelius*

Sequence stratigraphy of the Upper Cretaceous Austin Chalk in south and central Texas—*Christine Griffith, Michael Pope, Arthur Donovan*

Ultra-high resolution core characterization leads to better constraints on vertical and lateral heterogeneity in subsurface reservoirs—*Zane Jobe*

Well-log correlations in a sequence (chrono-) stratigraphic vs. lithostratigraphic framework: so what?—*May*

Before the canyons: debris flows and subtle slope failures on the Miocene New Jersey shelf—*Aldiyar Mukhatzhanov, Kenneth G. Miller, Gregory S. Mountain, James V. Browning*

Stratigraphic analysis of XES02: implications for the sequence stratigraphic paradigm—*Bradford Prather, Oriol Falivene, Peter Burgess*

An insight into the complexity of parasequence-bounding flooding events—the K4 parasequence of the Blackhawk Formation, USA—*Leticia Rodriguez-Blanco, John Howell, Ivar Midtkandal, Ingrid Anell, Agustin Arguello-Scotti*

Characterization of a lowstand calciclastic deepwater system: organized channel stacking in the Decie Ranch Member, west Texas—*Conor Sullivan, Morgan Sullivan, Art Donovan, Mike Pope*

Method and features of the resistivity invasion profile volume of shale evaluation—*Robert K. Svec*

Beyond single-cause models: investigating variable pathways to submarine fan architectures in the Golo Fan system—*Ibrahim Tahiru, Peter Burgess, Chris Stevenson*

Surfing the waves of time: unveiling Scotian Basin mega-sequences through a novel Phanerozoic sea-level curve—*Douwe G. van der Meer*