## HGS General **Virtual Dinner Meeting**

Virtual Meeting via Zoom 6:00 - 7:00 p.m.

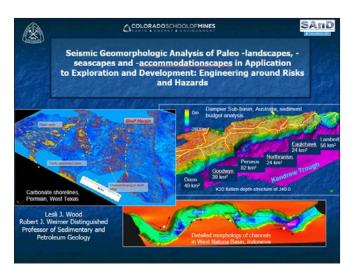
HGS Members \$10 Non-Members \$25 Students \$5 https://www.hgs.org/civicrm/event/info?id=2260

Registered Attendees: A confirmation email will be sent upon registration with meeting links. Event contact: Bryan Guzman - bryanguzman85@gmail.com

\*\*Non-Members can submit an application and pay their dues before registering to get the member price. Please call the HGS office at 713-463-9476 to be registered only AFTER your application and dues are submitted.\*\*

Dr. Leslie Wood Colorado School of Mines

## Analysis of Paleo -landscapes, -seascapes and -accommodationscapes in Application to Exploration and Development: Engineering around Risks and Hazards



The development in the 90s of seismic geomorphologic ▲ mapping of paleo-landscapes and -seascapes was truly an eyeopening revolution in the way we see the historic Earth and the processes that have shaped it. Likewise, recognition of the potential that seismic geomorphology brought to de-risking reservoir and seal, linking structural evolution to basin fill architecture and the toward understanding the magnitude of processes (volcanic, climatic and geomorphologic) that influence a basin's evolution led to the development of improved tools to image these landscapes and seascapes, such as Stratamagic, Geoprobe, and Paleo-Scan. Our ability to view these historic land-scapes and sea-scapes have evolved to mapping of accommodation-scapes (ie., the threedimensional distribution of conditions of accommodation that influence processes of erosion and sediment accumulation). This talk will document; using the amazing detailed seismic images of ancient surfaces, the advances in planet-surface process imagery through seismic geomorphologic and other technologies, and detail the revolution in our understanding of the earth's process history and the formation of our sister planets, born through the past 30 years of application of digital geomorphologic analysis of systems. Finally, we will talk about the importance of engineering for the future of life on this planet and beyond, through conditions that are revealed in our study of these ancient land-scapes, seascapes and accommodation-scapes.

## **Biographical Sketch**



DR. LESLIE WOOD joined the faculty at Colorado School of Mines in 2015 as the Robert J. Weimer Distinguished Chair and Professor in Sedimentary and Petroleum Geology, where she is Professor and Director of the Sedimentary Analogs Database and Research Program (SAnD). Prior to joining CSM, Dr. Wood held positions at The University of Texas

at Austin, Amoco Production Company and Arco. Dr. Wood specializes in quantitative seismic geomorphology of clastic basins, tectonics and sedimentary system interactions, submarine and sublacustrine mass failures, petroleum geology, shales tectonics and geomorphology of Mars. She has served as SEPM Society for Sedimentary Geology national Secretary-Treasurer, the GCSSEPM President and is active in AAPG. Dr. Wood has published widely on the nature of modern and ancient deep- to shallow-water systems around the world and she and her students have won numerous best paper and poster awards.