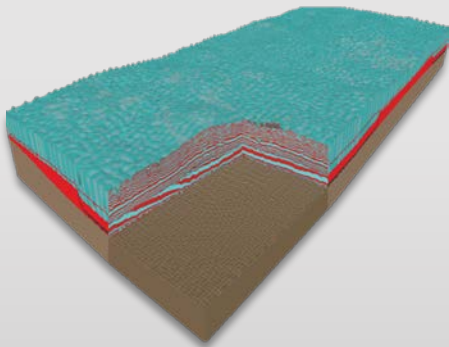


New Tools and Approaches in Carbonate Reservoir Quality Prediction

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Synopsis: Reservoir quality prediction has long been the ultimate goal of industry geologists, yet few have achieved this in a truly quantitative fashion. This workshop presents a new approach to reservoir quality prediction that involves the integration of a variety of modeling techniques to understand, quantify and predict the geological processes that control reservoir quality. Since initial reservoir quality is established at the time of deposition, numerical process models are used to predict initial reservoir quality; diagenetic process models are then used to modify these initial results and ultimately produce a quantitative and geologically-based prediction of present-day subsurface reservoir quality.



About the Presenter: Dave L. Cantrell has over 38 years of worldwide exploration and development experience in the oil industry. He graduated from the University of Tennessee with an MSc in Geology in 1982, and from the University of Manchester with a PhD in Geology in 2004. Dave began his industry career in 1982 with Exxon where he conducted numerous reservoir characterization and geological modeling studies on reservoirs in the Middle East; the Permian, Powder River, Williston, and Gulf of Mexico Basins of the USA; and the Maracaibo and Barinas Basins of Venezuela; among others. He has been responsible for several studies on large carbonate reservoirs since joining Saudi Aramco in 1997, and lead their geologic R&D groups from 2000-2008. In addition, he served for two years as an Associate Director at King Fahd University of Petroleum and Minerals (Dhahran, Saudi Arabia) and for 3 years (2017-2020) as an adjunct professor at Stanford University, where he lead various educational activities and advised graduate students. He is currently the owner and head janitor of Cantrell GeoLogic LLC.