

Half-day Short Course on the Micro- to Nano-scale Features of Mudrocks

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Abstract

Four lectures, of about 45 minutes each, cover grain assemblages and diagenesis (compaction, cementation, organic maturation, and fracturing) in the dominant rocks of the sedimentary record. The lectures focus on the petrographic data that are vital to understanding mudrock components at the scale of grains and pores. Implications for understanding mudrocks as reservoirs are integrated into each lecture. After each lecture 10 minutes are scheduled for questions and discussion. A 20 minute break is scheduled between Lectures 2 and 3.

Lecture 1. Grain assemblages in Muds and Mudrocks.

Lecture 2. Compaction.

Lecture 3. Cementation

Lecture 4a. Organic Maturation.

Lecture 4b. Fracturing.