

# GCAGS Journal

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**Cover:** Characterization of mudrock pore systems (see Loucks and Reed herein). (top) Ternary diagram showing end members of mudrock pore networks, whereby pore network can be combination of mineral pores, organic-matter pores in depositional organic matter, and organic-matter pores in migrated organic matter. The authors suggest that, as proportions of organic-matter pores in migrated organic matter and mineral pores increase, connectivity increases, resulting in better permeability pathways. (bottom left) SEM photomicrograph of organic matter interpreted to be depositional kerogen or byproduct. Organic matter shows no crystal growth between it and adjacent minerals. (bottom center) Photomicrograph of mineral pore where part of pore filled with solid bitumen or pyrobitumen containing bubbles that are interpreted to have formed by two-phase hydrocarbon inclusion. (bottom right) SEM photomicrograph of multichambered globigerinid with early calcite crystals followed by organic-matter emplacement. Middle chamber exhibits well developed calcite crystals that precipitated before formation of solid bitumen, which contains devolatilization cracks.

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