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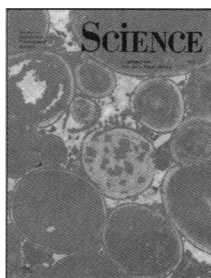
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**COVER** Photomicrograph taken under cathodoluminescent illumination of 30-micrometer-thick slice of limestone from Jurassic Smackover formation, east Texas at 3.2-kilometer depth. Calcite cements (bright yellow and dull orange) fill the pore spaces between round sand-sized ooids. Grain in center is about 0.5 millimeter in diameter. See page 261. [Photo courtesy of Stuart C. Williams, Exxon Production Research Co., Houston, TX 77001]

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