

# PREVIEWS

<b>Automatic prediction from core photos</b>	<i>This paper demonstrates and tests the use of a deep-learning workflow for the automated extraction of bioturbation data from a core photo data set. The resulting data set is used to train a deep-learning algorithm to automatically predict whether a core photo contains evidence of bioturbation. . . . .</i>	631
<b>A lookback on lookbacks</b>	<i>Performance tracking studies should be a regular part of managing an exploration and production portfolio, in order to ensure that the lessons learned from well results are regularly factored into new estimates as prospect generation continues. They were originally called lookbacks. . . . .</i>	639
<b>Veins near petroleum source rocks</b>	<i>This paper presents a review of bedding-parallel veins, also called “beef” veins, within foreland basins and discusses the development of natural hydraulic fracturing processes within this particular tectonic basin setting. . . . .</i>	647
<b>Fractures with burial and exhumation</b>	<i>Gas-charged porosity can drive natural hydraulic fractures during exhumation. In the foreland fringe of the Appalachian Basin, exhumation allowed the propagation of east-northeast-striking neotectonic joints. These joints appear at shallow depths where they facilitate leakage to form an underpressured gas column. . . . .</i>	669
<b>Frequently overlooked limitations</b>	<i>This work will examine some of the overlooked limitations of pyrolysis <math>T_{\max}</math> and bitumen reflectance, two commonly used thermal maturity indices, and their conversion to vitrinite reflectance equivalents. Researchers do not take into consideration analytical uncertainties or natural variability, and they ignore associated error. . . . .</i>	695
<b>A pioneer study of Kuwait</b>	<i>The aim of this study is to investigate and evaluate potential source rocks in Paleozoic formations in Kuwait in order to support Kuwait’s plans to increase production to 4.75 million barrels per day by 2040. Exploration to date has largely been confined to the Mesozoic. . . . .</i>	721
<b>Analyzing paleo-natural gases</b>	<i>Analyses of fluid inclusion gas were performed to seek direct evidence for the oil-prone, deep-water lacustrine Wenchang Formation source rock, constrain the gas charging time, determine the processes controlling oil and gas accumulations, and identify the active gas source rocks. . . . .</i>	749
<b>A new method to identify chemostratigraphic zones</b>	<i>This study highlights how principal component (PC) analysis can be used to establish links between elements and minerals and how PC profiles can identify geologic boundaries. By utilizing only a few PC curves, it is easier for nonexperts to identify correlative boundaries. . . . .</i>	785
<b>Environmental controls on organic richness</b>	<i>In Brazos Basin mudstones, significant chemical heterogeneities occur. Several key elements—Ca, Si, Mo, Mn, and Ni—were correlated to depositional conditions and used to determine chemofacies groups based on organic matter richness, mineralogy, and environmental conditions of deposition. . . . .</i>	809

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## SOUTHEASTERN (FL)

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## WASHINGTON (DC)

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C. Swezey

## WEST TEXAS

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S. Pollock  
M. Raines  
J. P. Welch

## WYOMING

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