

# **PALEOCLIMATOLOGY: A NEW DIMENSION IN OIL EXPLORATION**

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## **ABSTRACT**

As the global search for oil continues, new dimensions are needed to define areas with maximum potential for the accumulation of hydrocarbons.

Oil and gas are formed by organic material deposited under highly selective conditions. Climate affects all living organisms today, as it has throughout the geologic past. The climate at the time of deposition affects both the supply of oil-forming organisms and the associated sediments.

The climate of the earth depends on the heat received from the sun. Since the earth is nearly spherical, a temperature gradient must exist from the equator to the poles. These climatic zones control the environment of deposition and also the resulting incidence of oil accumulation.

Paleoclimatology, by revealing the distribution in space and time of its climates of the past, when correlated with known oil accumulation, provides a new dimension in oil exploration.