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**Shallow Deposits of Gas Hydrate on the Gulf of Mexico Slope:
A Natural Laboratory for Hydrate Research**

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The Gulf of Mexico is one of a several continental margins where gas hydrate deposits occur in the upper-most portion of the sediment column. The Gulf is a prolific hydrocarbon basin and has been extensively surveyed for energy exploration, thus providing diverse data to indicate the locations of hydrate deposits. Many of the hydrate settings are located in water depths of 500 to 600 m where they form part of a diverse benthic ecosystem characterized by chemosynthetic fauna and active oil and gas venting. Consequently, Gulf hydrates frequently comprise propane and higher hydrocarbon gases in a structure II lattice formation. They occlude oil and sediments and are an important substratum for microbial and metazoan life forms.

These circumstances make the Gulf hydrate deposits a natural laboratory for studying the dynamics of hydrate formation and persistence.