

DORIS MALKIN CURTIS
Biographical Review



Doris Malkin Curtis, a Staff Geologist, Basin Evaluations, International Ventures, Shell Oil Co., was educated at Brooklyn College where she received a B.A. degree in 1933, and at Columbia University where she received the M. A. and Ph. D. degrees in 1934 and 1949. Her professional career began as a geologist working on the Ellis and Messina Catalog of Foraminifera from 1937 to 1939. She worked for Carleton Speed from 1939 to 1940 and with The Fohs Oil Co. in 1941 and 1942. She began an association with Shell Oil Co. in 1942 as a paleontologist, stratigrapher and geologist. From 1950 to 1952 she taught at the University of Houston as Assistant and Associate Professor. She was Assistant Research Geologist from 1952 to 1954 with the Scripps Institute of

Oceanography. Dr. Curtis taught at the University of Oklahoma as Instructor, Assistant and Associate Professor from 1954 to 1959.

Returning to Shell Oil Co., New Orleans, in 1959, she worked with Miocene deltaic sediments until moving to Houston in 1972. Her current assignment involves regional geology of the Caribbean and Central America.

Dr. Curtis has published on deltaic sedimentation, transgressive and regressive sedimentation, biostratigraphy, ecology and paleoecology of Ostracoda, Gulf Coast Miocene refrigeration, and Mid-Miocene Lowered Sea Level.

Dr. Curtis is a member of the HGS, the AAPG and is a Fellow of the AAAS and the GSA. She has been a SEPM Honorary Member since April, 1974 and a member of various other scientific societies. Additionally, she is a Co-organizer of the AAPG Marine Geology Committee's Delta Exploration Workshop, Dallas Convention, April, 1975.

MIOCENE DELTAIC SEDIMENTATION AND HYDROCARBON ACCUMULATION: LOUISIANA GULF COAST

ABSTRACT

Stratigraphic and structural analysis of south Louisiana Miocene delta-complexes leads to several generalizations that can be used to project sand distribution in areas of sparse control, and possibly to predict hydrocarbon distribution in less-maturely explored deltas.

Composite delta patterns differ as rates of deposition and rates of subsidence vary. The geometry of a rapidly-prograding delta, in which rate of deposition exceeds rate of subsidence, is different from that of one in which rate of deposition is less than rate of subsidence, where marine processes predominate. Recognition of these patterns and relationships allows prediction of the presence or absence of possible downdip unexplored sands by projection from mapped sand distribution patterns.

Depocenters have migrated as basin-filling progressed. Sedimentation, depositional environment, and contemporaneous faulting are intimately related in space and time. Distribution of hydrocarbon accumulations is intimately related to location of depocenters, depositional environment, and contemporaneous faulting.
