

# The American Association of Petroleum Geologists

## Distinguished Lecture Tour

### GEOLOGY OF THE MIDDLE EAST

by  
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#### ABSTRACT

A coincidence of sedimentological, stratigraphic and structural conditions is the reason for the occurrence of more than ten super-giant petroleum fields in the Arab countries bordering the Gulf of Arabia. Sixty percent of the known petroleum reserves of the world are located in this large asymmetrical Mesozoic-Cenozoic basin northeast of the Arabian Shield. Marine shales, siltstones, sandstones, limestones, evaporites, including salt, dolomite, gypsum, and anhydrite, and non-marine strata make up a complex stratigraphic section ranging from Cambrian to Holocene. The large reserves of petroleum are in Mesozoic and Cenozoic sandstones and limestones where traps may be controlled both by sedimentary facies and structure. Faulting and folding of a wide variety have accompanied the making of the basin and of special note are the great overthrusts with large scale plastic deformation. Salt intrusions are abundant in the southern part of the Gulf of Arabia and in the southern Zagros Mountains.

The Gulf of Arabia is along the border and parallel to the edge of the Arabian Shield where it abuts the Tethys Fold Belt. Plate tectonic concepts suggest a squeezing together (compressing) of the Arabian Shield and the main mass of Asia. Possibly this particular structural, stratigraphic, and sedimentologic geologic model should be a guide to geologists seeking other such future petroleum provinces.

#### BIOGRAPHICAL SKETCH



#### Born:

July 1, 1914, Kansas City, Missouri

#### Academic Background:

1936 - B.S. - Geology & Geography, University of Kansas City.

1938-M.S. - Geology, University of Missouri.

1940-Ph.D. - Geology, University of Missouri.

#### Experience:

1936-1938 - Instructor of Geology, University of Missouri School of Mines and Metallurgy.  
1943-1944 - Assistant Professor of Geology, University of Missouri School of Mines and Metallurgy.

1944-1945 - Geologist, Stanolind Oil & Gas Company, Midland, Texas.

- 1945-1947 - Senior Geologist, Stanolind Oil & Gas Company, Midland, Texas.
- 1947-1948 - District Geologist, Stanolind Oil & Gas Company, Wichita Falls, Texas.
- 1948-Pres. - Professor of Geology, University of Texas at Austin.
- 1953-1956 - (Summers) Consultant to Shell Oil Company, Casper, Wyoming.
- 1957-1965 - (Summers) Consultant to Humble Oil & Refining Company, Houston.
- 1965-Pres. - (Summers) Consultant to Esso Production Research Company, Houston, Texas.

**Research and Publications:**

Micropaleontology, Petroleum Geology, Stratigraphy, Geological Educational problems, and Resource Geology.

**Memberships:**

American Association of Petroleum Geologists  
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 National Association of Geology Teachers  
 Society of Petroleum Engineers  
 American Association for Advancement of Science  
 American Institute of Professional Geologists

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