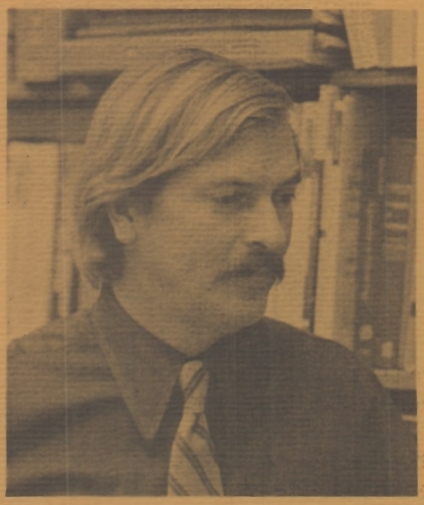

DR. JOHN E. WARME

John Edward Warme is a native Californian, living his first 18 years in Los Angeles and attending Hollywood High School. His bachelors degree is from Augustana College in Rock Island, Illinois, from which he returned to UCLA to earn his doctorate in 1966. Following a year as a Fulbright Fellow at the University of Edinburgh in Scotland, Warme came to Rice University where he has risen through the ranks to Professor of Geology.

An early interest in ecology and natural history led John into ecological and sedimentological studies of environments as varied as coastal lagoons, coral reefs and the deep sea. He uses SCUBA and special sampling techniques in shallow water, and large-volume box cores as well as research submersibles for deeper work. His maximum-depth dive thus far is 6700' (2000 m) in Lockheed's *Deep Quest.*

To apply knowledge gained from studies in modern environments, he has completed investigations on Pennsylvanian rocks in central Texas, Eocene and Cretaceous sequences in California, Jurassic limestones in Morocco, and DSDP cores.

In addition to membership in HGS, Dr. Warme is active in AAPG, SEPM, GSA, and the Paleontological Society; he has published 50 papers and abstracts.

STRUCTURAL FRAMEWORK AND CARBONATE FACIES MOSIAC IN THE JURASSIC HIGH ATLAS TROUGH, MOROCCO

The modern central and eastern High Atlas Mountains in southern Morocco coincide with a Jurassic trough 600 km long and 100 km wide, developed on the periphery of the Mesozoic Alpine System. A rift origin for the basin is evidenced by its elongate geometry, and its sedimentary sequence: abrupt marine flooding and carbonate deposition in the Lower Jurassic (Lias), over a Lower Mesozoic red bed-evaporite-basalt sequence, resting on Paleozoic phyllites. The Jurassic carbonates are expressed as a mosaic of shelf, slope and basinal facies, all superbly exposed owing to high relief, simple structure and desert weathering.

The central axis of the basin contains 3-4 km of section, including 400 m of "deepwater", micrite-rich, organic buildups of varying proportions and up to 50 m thick. In the Upper Lias they abruptly change to a thicker sequence of alternating micrites and marls, which grade into 1500 m of monotonous Middle Jurassic (Dogger) marls. The marls are punctuated by spectacular horizons of coral patch-reefs, which finally give way to continental beds.

To the north and south of the axial carbonates are trough-margin limestones with well-developed turbidites, channels and slumps, all containing shelf debris. Peripheral to them are shelf deposits, which on the southern margin contain coral reefs and bivalve biostromes, oolite bars, tidal flats and teepee structures all exposed in continuous outcrop. Continental beds interfinger from the southern margin, finally covering the whole basin.

Subsequent major deformation occurred as Alpine events in the Tertiary, with the developement of en echelon broken anticlines and intervening broad synclines, fitting a model of major compressive wrenching.

HOUSTON GEOLOGICAL SOCIETY

Speaker: Dr. John E. Warme
Rice University
Houston, Texas

Title: "Structural Framework and Carbonate Facies Mosiac in the Jurassic High Atlas Trough, Morocco"

Place: Museum of Natural Science
Hermann Park

Time: Monday, October 13, 1975
Cocktails: 5:30-6:30, $1.00
Dinner: 6:30-7:30, $6.00

I will attend and will have _____ guests.

Signed _____

Please mail by Thursday, October 9, 1975.

For late reservations or cancellations call 223-9309.

FIRST CLASS
PERMIT No. 6497
Houston, Texas

BUSINESS REPLY MAIL
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

—POSTAGE WILL BE PAID BY—
HOUSTON GEOLOGICAL SOCIETY
234 Esperson Building
Houston, Texas 77002