## HGS International Explorationists Dinner Meeting February 27, 1995

The Doubletree Hotel on Post Oak

## Structural Setting of the Oil Fields of SE Mexico (Chiapas-Tabasco-Campeche), Offshore and Onshore

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The Yucatan Platform bisects the NW-SE Sierra de Chiapas fold belt of SE Mexico at a right angle. The outcropping Sierra de Chiapas consists of Mesozoic platform carbonates, but their northwestern subsurface equivalents are mostly Mesozoic basinal and slope facies sediments in the Villahermosa folds and their offshore continuation, the Sonda de Campeche folds.

The main decollement level for the folds is a middle Jurassic evaporite sequence. The pre-salt "basement" of the

area is poorly defined but is estimated to dip from a depth of about 6 km in the north (Campeche offshore) to 13 km in the south (Sierra de Chiapas). The foldbelt was formed during upper Miocene time and is characterized by divergent SW-SE striking folds. The amount of shortening is estimated to be in the order of 45 to 65 km.

In the onshore and offshore subsurface, the folded belt is orthogonally superimposed by a late Neogene growth fault system that soles out near the base of the Neogene. This growth fault sys-

tem developed on the continental slope and intercepted salt diapirs that probably emanated from the core of deepseated folds. Much of the salt accumulated farther north in the large allochthonous mass of the Campeche salt domes.

The Neogene Sierra de Chiapas folded belt appears as a compressional transfer zone between a sinistral transtensional system underlying the Trans-Mexican volcanic belt and the sinistral Polochic-Motagua strike system.

## **Biographical Sketch**

Albert W. Bally is a native of The Hague, Netherlands. He received his Ph. D. in Geology from the University of Zurich in 1953. In 1954, he was employed by Shell Canada, where he was involved in exploration programs in the Rocky Mountains, the foothills of Alberta, Northwest Territories, and the Yukon. He transferred to Houston in 1966 to the Geological Research Division of Shell Development Company. From 1966-1981, he was involved in onshore and offshore exploration in the U.S. Since 1972, special emphasis has been on the study of global geology, as well as more detailed studies in the Western Cordillera and the sedimentary basins of the U.S.

In 1981, Bally was appointed Professor of Geology at Rice University, where he served as chairman of the Department of Geology until 1986. Dr. Bally's principal research interest is the structural interpretation of seismic reflection profiles. He is involved in projects of regional seismic grids in Peru, Venezuela, Mexico, the Gulf of Mexico, Hungary, Morocco, and Spain.