

AAPG Course on Pore Pressure: Fundamentals, General Ramifications and Implications for Structural Geology by Dr. P.E. Gretener.

This AAPG Continuing Education program was held at the Petronas Conference Hall, Kuala Lumpur from Dec 10 to Dec 12 1979. Such courses are now held regularly in many parts of the world but the staging of the course on 'Pore Pressure' marked the first time that such a course was held in the Southeast Asian Region. In order to enable as many interested members to benefit from this course, the Society did not impose any fees on the participants. About 40 participants mainly from the oil industry and the Universities, including students, attended this 3-day course. Petronas offered their full support in arranging the conference facilities as well as refreshments.

A number of reasons have been advanced for the existence of abnormal fluid pressures. In particular, the recent discussion in the AAPG Bulletin with regards to the relative importance of thermal versus load induced pressuring is far from academic. In order for abnormal pressures to exist, fluid movement must be impeded from a certain time onward. Depending on the model adopted, such a restriction may occur early or late in the history of a reservoir. Since this is fundamental with regards to the primary and secondary migration of oil and gas, an evaluation of the various models is basic to any discussion of pore pressure. Pore pressure affects many, if not all, physical rock properties. In particular, higher than normal fluid pressures in sedimentary rocks tend to cause lower than expected density, strength, sonic velocity and electrical resistivity. This in one way permits early recognition of such formations in exploration, but otherwise may adversely affect geological and geophysical exploration as well as drilling. High pore pressures extend the realm of brittle deformation, and fracture porosity and permeability may occur at greater than normal depths. Diapiric, growth fault, and thrust fault structures are in many cases related to high pore pressures. Hydrocarbon trapping mechanisms as well as geophysical and geological exploration in these structural provinces were discussed.

All the participants found this course to be greatly beneficial and several suggested that more of such courses be held in the future. Several people besides members of the Council assisted in entertaining Dr. and Mrs. Gretener during their week stay in Kuala Lumpur. The Society would like to record its appreciation to Dr. Gretener who beside giving the extra talk to the Society, also freely obliged to answer questions and discussed matters raised by the participants. In addition, Dr. Gretener declined to accept the AAPG standard fee for lecturers which would have to be paid by the Society and instead accepted a much smaller sum to cover his wife's expenses.

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