

- B.W. Sellwood: 1) Habitat of onshore oil accumulations in Southern England  
 2) Carbonate platform and platform-collapse facies in the Mesozoic Tethys

- 1) The habitat of onshore oil accumulations in Southern England

#### Abstract

*Onshore oil discoveries have been made in Southern England over the last twenty years but the last ten years have witnessed a dramatic increase in exploration activity. The most significant finds have been located in the Wessex Basin both adjacent to the English Channel and further to the north. Minor discoveries have been made in the Weald Basin due south of London. The most significant traps are tilted fault blocks that developed during the Jurassic. Reservoirs are provided by Triassic desert sands and conglomerates, early Jurassic marine sandstones, Mid-Jurassic marine carbonates and Late Jurassic marine sands. The Triassic red-beds accumulated in a N-S wrench graben which cuts the Hercynian basement. Later Mesozoic facies follow predominantly E-W trends. The prime source-rocks are late Triassic and early Jurassic black shales. Late Jurassic (Kimmeridge) shales, which are the main North Sea source-rocks, are not mature in Southern England.*

*Hydrocarbon generation and migration can be shown to have been initiated before the end of the early Cretaceous when regional heat-flow is thought to have been higher than present values. The regionally extensive Mid-Jurassic carbonates have suffered a long and complex diagenetic history involving both deeper burial diagenesis and palaeo-aquifer alteration.*