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Petroleum Geoscience – From Sedimentary Environments to Rock Physics

Petroleum geoscience comprises those geoscientific disciplines which are of greatest significance for the exploration and recovery of oil and gas. These include petroleum geology, of which sedimentary geology is the main foundation along with the contextual and modifying principles of regional, tectonic and structural geology. Additionally, biostratigraphy and micropalaeontology, organic geochemistry, and

geophysical exploration and production techniques are all important tools for petroleum geoscientists in the 21st century. This comprehensive textbook presents an overview of petroleum geoscience for geologists destined for the petroleum industry. It should also be useful for students interested in environmental geology, engineering geology and other aspects of sedimentary geology.



Knut Bjørlykke (1938) studied geology at the University of Oslo and received his Cand. Real. Degree in 1964 and his Dr. Philos degree in 1974. He was Associate Professor at the University of Oslo from 1965 and in 1976 he became Professor of Petroleum geology at the University of Bergen, Norway. From 1984 he has been professor at the University of Oslo and he has been visting professor at the University of California (Santa Barbara) and the Colorado School of Mines. His main field of research has been sedimentology and petroleum geology and recent publications are mainly in the field of clastic diagenesis / reservoir quality and rock physics. He has been in charge of major research projects in these fields. Bjørlykke has been AAPG Distinguished Lecturer for Europe and North America and received the Grover E. Murray Memorial Distinguished Educator Award for 2003 from the AAPG. He received Statoil's Research Prize for 1991.

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