

# Petroleum Engineering

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## Tectonic conditionality of abundantly oil-bearing lower cretaceous clinoforms of Western Siberia

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West Siberian Jurassic-Cretaceous sedimentary basin developed as a huge syncline, including (in the north-east) Yenisei-Khatanga regional trough within the ancient Siberian platform. In the lower part, the Cretaceous deposits of Western Siberia clinoforms are widely developed. In the 70s of the twentieth century, A A Naumov connected them with the nature of filling the sedimentation basin. In 1988, T F Kalmykov explained the formation of the inclined reflecting areas by tangential stresses during passage of this huge syncline through the chord of earth's ellipsoid. Possibly clinoforms were created due to the pressure of Taimyr folded zones on margin of the Siberian platform. In support of the tectonic conditioning of Lower Cretaceous clinoforms, there is evidence by clear manifestation of them on the western slopes of the numerous uplifts within the eastern part of the West Siberian basin. The amplitude of these uplifts is saved from Pre-Neocomian horizons to the roof of Neocomian that indicates their later formation. Explanation of conditions for the formation of Lower Cretaceous clinoforms ("oblique packs") in Western Siberia is essential for the prediction of their abundant oil content. When consedimentational genesis oblique lens of sandy rocks, potential reservoirs, are isolated in the argillite-siltstone matrix that make problematic filling with oil for them. When they are formed by the action of tectonic stress there created the conditions for slippage of different lithology lens on surfaces of disruption, which may be further used as hydrocarbon migration paths.

### Biography

V S Staroseltsev defended his PhD thesis in 1965, DSc thesis in 1982 and received the title of Professor in 1989. He is the Scientific Director of JSC SNIIGGIMS in Regional and Petroleum Geology, teaches at the Novosibirsk State University (Geological and Geophysical Faculty). He has published about 400 scientific papers in the field of tectonics, oil and ore geology, including articles and monographs. He is the Senior Associate Editor of the Journal, *Geology and Mineral Resources of Siberia*.

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