

## Geochemistry anomalies in the upper Jurassic oil and gas bearing deposits of West Siberian plate, Russia

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### Abstract

Correlations between organic carbon, type of the preserved organic material and concentrations of some macro-, microelements were studied in the Upper Jurassic deposits of West Siberia. Litho-facial reconstructions demonstrated that high-kerogen deposits formed in different parts of the sea bottom - in underwater depressions, organic banks and on the slopes of the seamounts. Petrochemical data shows no strong correlation between the content of organic carbon and the concentrations of a number of microelements, which is considered by many researchers to be. We note that the concentrations of V, Nb, Ni, Cd, Cu, As, and Zn significantly increase with the depth of sedimentation, these maximum number (Clarke exceed 100 or more times) are fixed in underwater depressions. Content of these elements on the slopes of the seamounts reduced sharply. The concentrations of Sc and Mo, conversely increases markedly. Quantity Ga, Ge, Be, U stable, perhaps, the accumulation of these elements in the deposits is not dependent on the facial genesis. Besides that, significant increase in the concentrations of Zr, Co, Y and Ag, to the total geochemical background was observed in the fractured shales of the Salym area. Usually, sharp changes are noted in the content of the same element in the cross-sectional and along strike. This locality may be associated with the zone gas thermal seepage. Anomalous concentrations of Ba, Si, Mg in rocks, as well as higher values of iron module and Fe-Mn indicator allow to suggest, the submarine hydrothermal participate in their formation. Seepage could trickle anywhere on the seabed surface.

### Biography

O N Zlobina has completed his PhD from Trofimuk Institute of Petroleum Geology and Geophysics in the specialty lithology. She is a Senior Research Assistant, IPGG Sedimentology laboratory. Over the past 5 years, she has published 26 scientific works, including 6 in reviewed journals, has participated with reports at 14 scientific conferences (including 7 international).

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