

711

On peculiarities of hydrocarbon-rich and hydrocarbon poor structures from the several regions, USSR

We present some different materials on the hydrocarbon-rich and hydrocarbon-poor structures of the former USSR, mainly Russia. There is a good understanding of tectonics, sedimentology etc. versus the very HC localization and general prognosis in many structures often. However, there are some problems due to very different factors.

Some conclusions could be briefly noted here due to hydrocarbons-tectonics-sedimentology .. relations:

- We have a proved correlation of hydrocarbons localization (including a mobile gas) with a general geology of the region, zone, HC field etc. due to a special complex geological analysis. Detailed analysis of different maps and stratigraphy helps in a general HC prognosis.
- HC localization is in a good agreement with geology, also with stratigraphic boundaries of different order including hidden ones. Detailed analysis of a stratigraphic column with TOC data etc. could understand main hydrocarbon way and the very localization (including one in the different stratigraphic levels of the one field) We can often lateral HC zonality meaning a definite role of lateral HC migration. J2-J3 interval is an economically very important interval in many regions including Tajikistan and Uzbekistan.
- There are obvious examples of HC non-organic nature on the Earth and other planets. However, no doubts about a large/very large role of organisms in a genesis discussed. So, orthodox, purely organic vs non-organic HC discussion are not quite effective.
- Interesting results on faulting process, e. x., were received by N.Koronovsky, M.Goncharov, G.Gogonenkov. A.Timurziev et al., Russia. Effective structural modeling have made by them (Koronovsky et al., 2008) Downthrow shift amplitude usually 30-40m, up to 100 m. and the palm-tree characteristic structures (because of fracture facilitation from pre-Jurassic basement to a sedimentary cover) are typical in West Siberia (Gogonenkov, Timurziev et al., 2005) Faults are rather fruitful than non-fruitful in our examples studies, excluding large deep faults, but this is under discussion.

We are very grateful to many, firstly, Russian, and other geologists and geophysicists including Vladimir Evstifeev, George Gogonenkov et al., Akhmet Timurziev, Alexander Lavrik, Phil Chtistie, Rick Tobin, and many others for consultations, lectures and discussions.