

POSITION OF AB IN GEOCHEMICAL INVESTIGATION COMPLEX

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More than 14 homological rows of alkylbenzols (AB) with alkyl chain of normal (L-AB) and isoprenoid structure (I-AB) of composition C_{10} - C_{30} and individual structure were determined and studied in oils. A number of transformations of initial bioorganic matter in entrails of the earth precede the presence of L(I)-AB in oils. As-formed aromatics contain in themselves both the information about composition of initial matter and the ways of its transformation at that. Stability of composition of the given compounds and good safety in time in respect to other biomarkers bring them to the number of high informative compounds.

Based on as-conducted laboratory modeling of AB forming, investigation of composition and structure of different types and deposits in oils as well as revealing of regularities of composition with natural conditions it was possible to work out a definite scheme of their use when solving basic geochemical tasks.

Comparative analysis of composition and structure of AB extracted from oil with the received by way of dehydration the saturated portion, pyrolysis of high-molecular aromatics, tars and kerogen lie in the basis of the scheme. As a result we have complete characteristics of the main portions of oil and organic matter (OB).

Presence of AB in oils and saturated analogues (received by way of dehydration) is used to determine paleotemperature. It shows the conformity of the existing temperature to the conditions of AB formation. It makes it possible to reconstruct the paleoconditions of sediment accumulation basin. Determination of genetic links of systems OB oil, oil oil, OB condensate, condensate oil.

Revealing of sources of oil and condensates as well as ways of their migration.

Each of the stated above points of the report is considered based on the results of certain deposits.