

**ESSAY TOPICS FOR APPLICANTS TO  
THE DOCTORAL PROGRAM OF THE GROUP OF EDUCATIONAL  
PROGRAMS 8D07208-«GEOLOGY AND EXPLORATION OF MINERAL DEPOSITS»**

1. The structural structure of the sedimentary cover. The North-Ustyurt zone. South Ustyurt zone.
2. Oil and gas potential of Mesozoic deposits of Northern Ustyurt.
3. Industrial accumulations of oil and gas on the territory of Ustyurt in Jurassic sediments.
4. Industrial oil and gas content of Jurassic, Cretaceous oil and gas content of Paleogene deposits.
5. Geochemical zonality of reservoir waters.
6. Study of hydrogeological conditions on the territory of Ustyurt.
7. To give the clearest and most distinct idea about the process of migration and oil formation.
8. Migration, differentiation, accumulation of hydrocarbons.
9. Patterns of oil and gas migration.
10. Geochemical correlation of productive horizons by oil composition.
11. Prospects of the subduction (subduction-obduction) regime of oil origin.
12. Natural reservoir. Types of natural reservoirs.
13. Tectonics of Mangyshlak and Ustyurt.
14. The structures of the south-western part of Southern Mangyshlak (the area of Cape Peschani - Kaundinskaya basin).
15. Tectonic scheme of Mesozoic deposits of Northern Mangyshlak.
16. Tectonics of the Ustyurt plateau.
17. The buried folded section of the Karpinsky line.
18. Tectonics of the Zhetybai-Ozenskaya monocline.
19. Cosmology, origin and general structure of the Earth.
20. The physical fields of the Earth and their informative value in the study of the deep structure of our planet.
21. Illogicality of existing judgments about the ways of metabolism between the deep layers of the Earth and its lithosphere (crust).
22. The relationship of asthenospheric activity and the development of tectonic structures in the lithosphere (Earth's crust). Features of plate tectonics in the history of the Earth.
23. The conventionality of the dismemberment of the Earth's crust and the lithospheric mantle of the Earth as the reason for the discrepancy in the essence of geological processes.
24. The main stages of thickening of the lithosphere (Earth's crust) from the position of plate tectonics.