

## **ECOLOGICAL GEOLOGY - THE NEW DIRECTION, ASKING INTERDISCIPLINARY APPROACH TO STUDY OF GEOLOGICAL PROBLEMS**

TROVIMOF V.T., ZILING D.G. and SOBOLEV R.N. Lomonosov Moscow State University, Moscow, Russia.

Ecological geology is the new direction in geology studying the lithosphere as one of the basic abiotic component of ecosystems. It investigates ecological functions (resource, geodynamic, geophysical, geochemical) of the lithosphere, objective laws of their formation and spatial-temporal changings under the influence natural and technogeneous causes.

We consider the ecological functions of the lithosphere as functions determining the role and the significance of the lithosphere (including underground waters, oil, gas, geophysical fields) and occur in it natural and antropogenic processes in life-support and evolution of the biota and the human society. Even now in the structure of ecological geology present: ecological resources history, ecological geodynamic, ecological geochemistry and ecological geophysics.

Ecological geology is also interdisciplinary science as multidisciplinary sphere of geological sciences as it is on the joint of the geology, medicine and biology.

All components of the lithosphere (its composition, including rocks, underground waters, oil, gas, energetic fields of different genesis and natural and antropogenic geological processes) have to be analysed by ecologic-geological investigations. Ecological properties and the state of this components also have to be studied from the point of view of relation between them and biota. Between above mentioned functional dependences are complex and many-sided relations, which ask complex interdisciplinary consideration. Geologists who are working in the field of ecological geology have to be in close contact with medics and biologists. One of the main task of the ecological geology is estimation the influence of the substance and energetic fields on biota and mankind.