

## **The Current Geoenvironmental Problems of Central Eurasia**

VARTANYAN, G.S. (Research Institute for Hydrogeology & Engineering Geology (VSEGINGEO), Moscow, Russia; VARTANYAN, G.S. (Research Institute for Hydrogeology & Engineering Geology (VSEGINGEO), Moscow, Russia); TAGIYEV, I. (Azerbaijangeologia, Baku, Azerbaijan)

The procedure elaborated at VSEGINGEO enabled compilation of a geoenvironmental map of the Central Eurasia.

The co-authors of the given report are: V.N.Ostrovsky & I.M.Tsykina (Russia); R.T.Akhmetov (Kazakhstan); R.I.Goldshtein (Uzbekistan); Yu.Zh.Zamanov (Azerbaijan); Yu.S.Malyshev (Kyrgyzstan); Lu Mingsong (China).

It has been established by the results of the investigations performed that: - the current geoenvironmental situation and the related problems in the region are determined by a complicated interaction of natural and anthropogenic factors; - the most serious geoenvironmental problems are induced by centuries-old agricultural irrigation, which has led to cardinal changes in the cycles of substance migration, development in time of salt-contaminated areas in soils and shallow groundwater, and formation of artificial ground-water systems; - a decrease of run-off in the downstreams of large rivers; dewatering of some water basins; - the mining activity brings a relief transformation, flowing of toxic groundwater to the surface; - in the oil- and gas-producing areas, alongside with contamination, an increased seismicity is also observed; - the considerable geoenvironmental problems occurred due to radioactive contamination; - the human activities have led to intensification of natural and origination of new environmentally hazardous geological processes. The anthropogenic impact on the geoenvironment has become a factor of regional scales.