

THE IMPORTANCE OF GEOLOGICAL SCIENCES TO STUDY MOUNTAINS NATURE AND ENVIRONMENT

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On the threshold of the twenty first century we realize, that the face of our planet has been changed by mankind activity. Among the problems there is a relationship between mankind and mountains. Artists and poets are inspired by the charms of mountains. Mountains attract tourists and mountain-climbers attention. Mountains preserve flora and fauna of the Earth. Almost a half of land surface (40%) have been occupied with mountains and uplifts. About 10% of the Earth population live in mountains and use mountain resources. Fresh waters are the main resource of the XXI st century. Upper reaches of the greatest rivers locate within mountains. And the mountains are called water-towers of the Earth. Thus mountains and uplifts are the greatest ecological system of our planet. The mountains Program have been approved in 1992 at Rio de Janeiro. UNO have been declared that 2002 will be the Mountain Year. Geological sciences study mountains, their origin, composition, structures, destruction processes. More than 50% of mines locate within mountains and uplifts. Mining and metallurgical plants impact negatively upon the surroundings. Increasing consumption of mineral raw resources has been upset environment. The application of sciences achievements and technology in mining industry has been created the problems of atmosphere, hydrosphere and lithosphere contamination. The most serious effects on the terrestrial and aquatic environments are the follows: changes in hydrogeological systems, transformation of surficial and underground flows, contamination of soils and water reservoirs, pollution of the atmosphere. The metallurgical industry in Uzbekistan is one of the largest in Central Asia. Mines and plants, which are located in the mountains, have caused large scale of surroundings contamination. Thus, heaps and tailings of bismuth-arsenic ores (Burchmulla deposit) are dangerous source of contamination of Charvak water collecting reservoir. There is radio-nuclides halo near Jangiabad uranium deposit, etc. The chief problems of geologists are: to conduct the necessary researches on surroundings contamination, to create database on pollutants, to work out of without wasting technologies. The great geochemist Vladimir I. Vernadsky said, that man himself and all mankind, from which he cannot be isolated, are inseparably linked with the planet where they live. And our chief task is to take care of this planet.