



**IASPEI, International Association of the Seismology and Physics of
the Earth Interior,
General Assembly, October 02-08, 2005, Santiago, Chile**

THE PROBLEM OF INDUCED SEISMICITY CONTROL

KERIMOV I.G., Kerimov S.I.

The problem of induced seismicity control is enormous issue that requires simultaneous efforts of many countries and existence of a global geophysical and seismologic network. We reckon that the intensive growth of strong earthquakes during the last 60 years leaves us no hope that the mankind can put up a resistance thereto using only seismic proof constructions and creation of various alerting systems. Such catastrophes are reflected with ever growing rate in anomalies that occur in various spheres of or planet. This led us to a conclusion a long time ago that one can not explain such catastrophes by only natural background. We have looked into questions of the influence of human activity on the medium and problems of related ecology and environment. Unlike approaches considering mechanical and chemical pollution, we consider this problem from the point of view of energetic pollution, accumulation of additional stress in the environment caused by non-controlled industrial activity. Such processes unfold with ever-increasing speed and intensity. The new approach to this problem is connected with understanding of the geophysical medium not as the static one, but which is very important as a dynamic one with permanently changing parameters and properties. For example, under repeated external influences even with very weak energy the medium manifests high dynamic activity. The obtained results allowed us to conclude that environmental problems are more complicated and delicate than seemed to be at first sight and that any large scale industrial activity should be controlled to avoid disturbance of natural balance. We analysed a range of issues during our research and experiments based on which we worked out the methods of analysis as well as the methods to control and manage of the medium state: Relationship between the seismicity of Caspian Sea and the intensity of the oil production therein as well as intensity of the geophysical works; Influence of explosions of various energy on manifestation of strong and weak seismicity; Influence of nuclear power explosions on seismicity of Middle Asia, Caucasus and Caspian Basin and military operations in different territories on microseisms field variations in the regional and global scales. We exhibit examples of the medium's stressed state rapid increase over territories of 500 sq km and 2,000 sq. km which took place as a direct result of vibrational influences done by us. **An international program and network which would cover the entire planet will help to monitor and locate most temporary sensitive regions, where if any influence, if applied to, may spread the negative effects to other territories. Such program would control and take measures to prevent these processes.**