



### **Some main results of the studies of medium's induced excitation by non-controlled human activities**

Seymur KERIMOV<sup>1</sup> and Ikram KERIMOV<sup>2\*</sup>

1 Seismotech Globe B.V., The Netherlands

2 Scientific Center of Seismology, Presidium of the National Academy of Sciences, Azerbaijan

The research of non-controlled human activity impacts to environment different aspects include an assessment of negative effects resulting from development of oil and gas fields, minerals and fossils production, construction and use of water reservoirs, industrial and civil construction, low and high power explosions, etc. The followings are the main results. The artificial activation of some territory after a certain time covers much larger areas and if strong would practically touched all spheres of medium - lithosphere, hydrosphere, atmosphere, ionosphere. At repeated low intensity external impacts that follow in certain consequence the medium can change its characteristics and show high dynamic activity and such reactions differ from natural by higher power. The external inducing impacts have power disparately low in comparison with the power of the earthquake itself. High power events can appear even in areas that earlier were considered as low-seismic or even a-seismic. The researches allowed to defined existence of tense sensitive points or sites and the geophysical equipment installed in such places are much effective. We invented the term "active fault", — conductors of seismic and deformation power and one of directions of their spreading can be considered as prior. The determined periodicity of changes in mosaic of active and inactive faults, caused by variations of natural processes intensities influencing on the whole picture of their space distribution. The analyses of the previous seismicity will help to define periodicity of activation of tectonic faults and limited by them system of blocks being in the active phase.