

## **SPATIAL-TIME INTERACTION OF EARTHQUAKE AND MUD VOLCANOES**

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Comparative analysis dealing with earthquakes and recorded mud volcanoes eruptions which occurred in Azerbaijan for the last two centuries was made. Genetic link between activation of mud volcanic activity and seismicity was revealed. Taking into account the magnitude of earthquakes, focus depth, energetic class, distance between epicenter and volcano it had been established that earthquakes play a role of triggering mechanism in the mud volcanic process. Conclusion that strong earthquakes provoke mud volcanoes eruptions is based on numerous facts. Thus, seismic waves of earthquakes 1842, 1872 and 1902 within Shemakha epicentral zone stipulated volcanoes eruptions in Marazy (1848), Marazy and Kalamadyn (1872), Shikhzagirli, Bozdag-Gezdek and Keireki in 1902. At the same time causal relationship is established when earthquake focus and mud volcano are located within one fault structure if volcano for a long period remained quite and accumulated a sufficient energy for paroxysm manifestation. According to the regime studies conducted on the mud volcanoes it had been established that during emergency of seismic events on volcanoes characterizing by gryphon-salse activity there occur abnormal changes in the composition of fluids as a result of their activation before the earthquake. All these manifestations were caused by tectonic tensions accumulated in the earth crust. Their interaction is stipulated by location of adjacent microplates either tectonic blocks within of which seismoactive layers are in the same or near geodynamic conditions, so that seismic waves which emerged in one of them would not be subjected to the extinction before they reach into adjacent microblock.