

## SEISMIC HAZARD ASSESSMENT OF THE KERCH STRAIGHT REGION BY ARCHEOSEISMOLOGY DATA

N.I. Vinokurov<sup>1</sup>, A.M. Korzhenkov<sup>2</sup>, M.V. Rodkin<sup>3</sup>

<sup>1</sup> Moscow State Pedagogic University, Moscow, Russia

<sup>2</sup> Schmidt Institute of Physics of the Earth, Russian Academy of Sciences, Moscow, Russia

<sup>3</sup> International Institute of Earthquake Forecast Theory and Mathematical Geophysics, Russian Academy of Sciences, Moscow, Russia

**Abstract.** A summary of published data on historical and archeoseismology of the Kerch straight region is presented. Materials of many years' field study by one of the authors are used. These results were parameterized and PGV values during strong historical earthquakes were calculated. These PVG values are in range of 1.3–1.7 m/s that corresponds to significant seismic shocks. Such seismic effect could cause to a total destruction of ancient constructions. The Kerch straight is near (to the south) of Southern Asov seismogenic zone, which stretches sublatitudinally along the Kerch peninsula coast. The Kerch straight itself coincides with Eastern Crimean (Kerch) seismogenic zone. Both seismogenic zones are responsible for occurrence of historical and paleoearthquakes of the region. Seismic potential of the zones is possibility of the crust earthquakes occurrence with  $M \geq 7.0$  and once in few hundred years. Seismic intensity of these earthquakes could reach  $I \geq 8$ .

**Keywords:** archeoseismology, Kerch straight, historical earthquakes, earthquake parameterization, PGV, Crimean peninsula, Taman' peninsula.