

# **Creating the regional accelerograms bank**

**O.O. Erteleva, F.F. Aptikaev**

Schmidt Institute of Physics of the Earth, Russian Academy of Sciences, Moscow, Russia

**Abstract.** The problem of creating the regional accelerograms bank for the design and construction purposes is discussed. The resolving methods of this problem are proposed. The main strong ground motions parameters are considered. The factors influencing regional features of the seismic treatments are defined. The choice of accelerograms in accordance with the prognostic parameters of the expected seismic treatments is considered. The simplest and more exact solution of the problem of creating the regional accelerograms bank is performance of the complex of works on the seismic zoning for the different regions.

**Keywords:** accelerogram, response spectrum, source, magnitude, epicentral distance, ground type, peak ground acceleration, predominant period, duration of ground motion, coefficient of dynamic amplification, logarithmic spectrum bandwidth.