Annotation

The object of research in this paper is the process of measuring the acceleration of gravity, and ***the subject*** is a two-channel piezoelectric gravimeter.

The accelerometer sensor is explored directly with the help of a set of theoretical and practical methods. The process of increasing the accuracy of measurements is carried out by creating a second measurement channel. For this, a sensitive element is made with two channels.

The purpose of this work is to increase the accuracy and speed of gravity acceleration measurements by improving the two-channel piezoelectric gravimeter of an automated gravimetric system. In order to achieve this goal, it is necessary to solve a number of problems, namely: to develop a mathematical model of two-channel GHG; solve the problem of improving the parameters of the output signal of two-channel GHG; to investigate the main external obstacles of the two-channel GHG and to propose ways to reduce them.

Structure and scope of work. This work consists of a lecture, an introduction, 4 main sections, a list of used literary sources. The work is located on 125 pages of the main text and contains 36 figures, 32 tables. The number of information sources contains 26 names.

Key words: acceleration of gravity, piezoelement, gravimetry, aviation gravimetric system, sensitive element.