

UDC, font size 11 with capital letters, left alignment

Initials, the surname of author(s) in capital letters; font size 11, separated with a comma (,) scientific degree, position, font size - 11)

Indicates place of work, left alignment

TITLE OF THE ARTICLE IN CAPITAL LETTERS, FONT SIZE -11, BOLD, NO HYPHENATION IN THE TITLE. NO POINT AT THE END OF THE TITLE

Abstract (250-to 300 words, 1800-2107 characters without spaces) is presented in Ukrainian, English and original languages and should contain the following elements: objective, methods, scientific novelty, practical significance, results, key words. The abstract should not repeat the article title. Font size - 9, indent - 0,7 cm.

Key words: 6-8 words

Article - font size 11, lean font, indent - 0,7 cm, line spacing-single. The text of the article is performed with shifts (ordered “automatically”).

If there is a list, then after a colon (:) start a new line without a dash, in small letters, at the end a semicolon (;), the second and other lines of this list served without indent.

Numbering lists are used only when the text is referenced on them. Use the letter *a; b ...* and then the numbers **1, 2** . Before any paragraph no marks are placed.

Links to used sources are given in square brackets [1], [1-3] or [1, p. 20].

The problem and its connection with scientific and practical tasks. Formulation of the problem in general and its connection with important scientific or practical tasks.

Analysis of recent achievements and publications. Analysis of recent achievements and publications revealing the basis for solving of this problem, which the author uses; allocation of the unsolved separate issues of the problem dedicated to this article.

Statement of the problem. Formulation of aims of the article (setting tasks).

Presentation and results. Full justification of scientific results.

For example:

Devices for geotechnical monitoring







	<p>Optical <i>Pluses:</i> reasonable price, simple use, reliable know-how, instructions for processing the measurements results <i>Minuses:</i> laboriousness of measurements, limited distance, high demands for weather conditions</p>		<p>Electronic tachymeter <i>Pluses:</i> high precision of measurements, continuous monitoring and handy record of information <i>Minuses:</i> weather conditions permits, high cost price, limited number of points of measurements</p>
	<p>Digital photo - grammetry <i>Pluses:</i> Simple use, wide enough radius of the monitored site. <i>Minuses:</i> High cost of large camera access, low data informative, obtained results have geometric, radiometric and radio locative errors.</p>		<p>Radar systems <i>Pluses:</i> High accuracy of the obtained data, errors no more than 1mm, system operates at any weather conditions, long distance of measurements. <i>Minuses:</i> Very high cost, difficult to use at a long term measurements.</p>
	<p>Laser scanners <i>Pluses:</i> Automated mode of operation, rate of tachometric measurements up to several th/min <i>Minuses:</i> Weather conditions permits, short distance and many errors of no reflected measurements, limited monitored site.</p>		<p>GPS <i>Pluses:</i> High frequency of measurements, automated system of coordinate's calculation; measurements are made according to geocentric coordinate system. <i>Minuses:</i> Lack of methodology of obtained data evaluation for stability issues, depending on weather conditions.</p>

Fig 1. Devices for engineering-geological conditions stability monitoring of open cast mining

$$I_{\lambda}^s(Z) = \frac{n\sigma_s}{4} e^{-\Sigma(\lambda)Z} I_{0,\lambda} \left\{ Z \ln \left(1 + \frac{a^2}{Z^2} \right) + 2a \cdot \arctg \frac{Z}{a} \right\}, \quad (1)$$

where a - radius of the disk ultrasound source

Table 1

Analysis of monitoring the effectiveness of the stability of the pit walls and dumps

Method	Method's advantages	Method's disadvantages	Characteristics of the method
Visual	Allows to estimate the field of use of the results of instrumental, geophysical and engineering, geological condition of slopes	Only part of the complex methodology of slopes conditions study	Fixation method is visible on the surface manifestations of abuse for slopes, the character of massif fracturing, water occurrence and effects of blasting
Surveying-geodetic	Gives a quantitative estimate of the slope deformation, reveals the nature of early strain that allows you to make prediction about its development over time	Requires special tracking station	Fixation method is to obtain quantitative and deformation patterns on the surface of slopes and deep massif on the results of measurements of horizontal and vertical displacement of sediments

Conclusions and direction for the further research. The findings of this research and prospects of the further development in this direction.

Literature

At the end of the article "References", font size 11, no indent, 5-6 pt from the upper and lower lines in italics, no colon at the end.

To start the bibliography with an indent, font size - 9, last name, initials - bold, single spaced, second and other lines of the list to submit without indent. The numbering of references is not automatic.