

## ANALYSIS OF LITERATURE ON THE CHARACTERISTICS, ASSORTMENT OF SPECIAL CLOTHING USED IN VARIOUS FIELDS, THE STATE OF THEIR PRODUCTION

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**Annotatsiya.** Ushbu maqolada turli sohadagi maxsus ish kiyimlari uchun materiallar to'plamini ishlab chiqish, kiyim paketlarini hususiyatlari, kiyimlarini qo'llanish sharoiti, maxsus ish kiyimlarini ishlab chiqarish ularning sifatini kompleks baholash bo'yicha desertatsiya ishlari tahlili olib borilgan.

**Kalit so'zlar:** maxsus kiyim, ishonchlilik, loyiha-konstruktorlik ishlari, "inson-kiyim-kechak-atrof-muhit", avtomatlashtirilgan dizayn, maxsus izolyatsiya, polimer kompozitsiyasi.

**Аннотация.** В данной статье проведен анализ диссертационных работ по разработке комплектов материалов для спецодежды различных отраслей промышленности, особенностям обмундирования, условиям применения спецодежды, комплексной оценке качества изготовления спецодежды.

**Ключевые слова:** специальная одежда, надежность, проектно-конструкторские работы, "человек-одежда-окружающая среда", автоматизированное проектирование, специальная изоляция, полимерный состав.

**Abstract.** This article analyzes dissertations on the development of sets of materials for workwear of various industries, the features of uniforms, the conditions of use of workwear, a comprehensive assessment of the quality of workwear manufacturing.

**Keywords:** special clothing, reliability, design work, "man-clothing-environment", computer-aided design, special insulation, polymer composition.

Scientific research is the process of developing new knowledge, one of the types of cognitive activity. It is characterized by objectivity, reliability, accuracy. When a scientific study is repeated in compliance with all the conditions, it should always give the same result, prove the issue under discussion. The main components of scientific research are: setting the topic, preliminary analysis of available information, conditions and methods in the field of research, scientific hypotheses, conducting an experiment, analyzing and summarizing the results obtained, testing the hypotheses based on the evidence obtained, presenting new facts and laws, conducting a scientific forecast. Methods and experiments of scientific research are widely used not only in science itself, but also in solving many economic and social issues.

Today, there is an increasing demand for Theoretical and practical research on the development of special clothing with high operational reliability. The solution of this issue requires the implementation of comprehensive theoretical and experimental scientific research on the creation of special clothing from gases with low penetrating properties, which are obtained as a result of chemical processing of domestic textile materials made from technologically natural fibers. Increasing the efficiency of the production of light industrial products is direct feeding with the efficient use of raw materials, increasing the range and improving the quality of manufactured products, increasing the productivity of sewing processes.

In order to facilitate the exchange of air under such clothes, the value of the shed insert is taken larger. In special clothing that protects against aggressive substances that affect certain areas of the human body, fabrics with various hygienic properties are used. In such clothes, plots exposed to aggressive influences are made from gases with less air permeability. Other areas may have higher air permeability. When conducting a scientific research work on special clothing, we will consider the following several research works.

Scientific research consists of three components: targeted activity, the subject of scientific labor and the means of scientific labor. The purposeful scientific activity of a person relies on the use of specific methods of cognition and scientific equipment , means of computational techniques, in achieving new knowledge about the object of research or the replenishment of existing knowledge about the object

Development or design work is the final part of a scientific study aimed at using the results of Applied Research, technical solutions to create and test experimental copies of machines, devices, materials, products, production technologies, to improve innovations. Maintaining a high level of servicemen's working capacity and the combat effectiveness of units in general is an important problem in the conditions of solving training and combat tasks. In such conditions, it is required not only to ensure the high security of military personnel, but also to minimize negative influences that prevent active tactical actions for a long time. Today, the study of special clothing of workers in the construction industry, ensuring the safety of workers by producing quality special clothing using new materials with their high physico-mechanical and chemical properties, is no doubt an urgent issue. In solving the issues of this direction, we will consider various research works.

In the scientific research work carried out by N. V Afanogentova, the technological characteristics of the special clothing of workers of the automobile industry are systematized, for which a special clothing model is looihed by developing a complex of priority indicators of the physical and mechanical properties of the special materials used. In the process of carrying out design work, an optimal combination of the main parameters of work clothes is proposed in the main action sections of the model structure.

M. L. Urvantseva developed methods for increasing the hygienic compatibility of clothing for mountain sports using rational structural and decorative elements to reduce human injuries. The mechanism of heat and moisture exchange of the human body during Mountain Sports has been studied and presented in detail. A methodology for studying the water-softening properties of modern volumetric materials used in the production of sportswear has been developed, experimental studies have been carried out on the process of drying the inner layer of sportswear, which protects against heat in wind conditions.

Kudryavtseva V. I. in his scientific work, a mathematical model of the thermal state of the "man-clothes-environment" system was developed, which allows you to assess the range of external conditions in which this clothing is used and study the dynamics of heat transfer to the environment through clothing from the deep layers of the human body. The use of the developed mathematical model allows you to reduce the number of experimental samples and eliminate the need for a number of experiments that are difficult to tolerate by a person. Taking into account the parameters and characteristics of the environment, the thermophysical properties of the material used in these conditions, the type of human activity, its heat loss and additional parameters, the growth values necessary for the creation of a new model were obtained.

In the scientific research work carried out by N. V Kurenova, the choice of effective materials for use in the development of a set of special oil-resistant clothing materials based on scientific oil-resistant insulated suit set and the need to use secondary aramid raw materials products for addition to thermal insulation clothing package to increase heat resistance, for automated design" human clothing-environment" thermophysical properties of materials as a result of the action of oil on heat-insulating clothing, taking into account geometric and changes, a special insulated model design is proposed.

In the scientific research work carried out by pulatova, a methodology for designing special clothing of workers of the agro-industrial complex was created, according to which the mathematical question of creating a special clothing that protects against high air temperatures was formulated, and a rational constructive solution of the "sleeve-our" constructive knot was developed, which combines national traditions and modern requirements that

K. M. Rasulova in the scientific research work created a method to ensure the thoroughness of the details of special work clothes made of local cotton fiber gaslama by applying textile materials, polymer-composite material, which increases the reliability of the operation of special clothes and prolongs the service life, and developed a technology to increase the operational reliability of special clothes made of cotton fiber.

#### Conclusion

An analysis of the data obtained showed that there are many studies aimed at the study and development of special-purpose products that protect against harmful environmental factors and maintain an optimal microclimate of the dressing area.

However, in extreme conditions, employees of a special purpose detachment perform special functional tasks that combine not only combat training, but also climbing skills, therefore, taking into account not only working conditions, but also the features of the actions of fighters, this type requires a special approach to the design of protective clothing.

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