SCIENTIFIC AND PRACTICAL SIGNIFICANCE OF DANGEROUS AND HARMFUL FACTORS IN THE TECHNOSPHERE

Khalmatov Musltiddin Mukhammatovich
Andijan Institute of Mechanical Engineering
Faculty of Transport and Logistics
Senior teacher of "Labor protection" bffd (PhD)
Email: mr.kholmatov1986@mail.ru Phone: +99890-384-80-20
Khodjakulov Mukhtorjon Nazarkulovich
Andijan Institute of Mechanical Engineering
Faculty of Transport and Logistics
Senior teacher of "Labor protection" department
xodjakulovmuxtorjon@gmail.com
https://doi.org/10.5281/zenodo.8049571

Abstract. In this article, the industrial enterprises of the developing countries and our Republic are currently paying great attention to improving the social condition of workers and employees, raising their standard of living, creating the basis of working conditions at the level of technical safety and sanitary requirements. Technosphere is the territory occupied by cities, fortresses, rural settlements, industrial and enterprise zones created by people with the help of technical means. In the process of life activity, a person is in constant contact not only with the natural environment, but also with people who are called social environment. The connection of a person with the social environment is used and formed in the continuation of birth, the exchange of knowledge and experiences, the satisfaction of his spiritual needs, and the improvement of intellectual abilities.

Keywords technical safety, sanitation, cities, fortifications, rural settlements, industry and enterprises, environment, production, environment, ecologically, women of childbearing age toxic substances

Currently, in our country, great attention is being paid to improving the social status of workers and employees, raising their standard of living, creating the basis of working conditions at the level of technical safety and sanitary requirements. The technosphere is the territory occupied by cities, fortresses, rural settlements, industrial and enterprise zones created by people with the help of technical means. In the course of life, a person is in continuous contact not only with the natural environment, but also with people, who are called the social environment [1]. The connection of a person with the social environment is used and formed in the continuation of birth, the exchange of knowledge, experiences, the satisfaction of his spiritual needs, and the improvement of intellectual abilities In the production environment, taking into account the impact of man on the environment, it is aimed at ensuring safety, achieving an accident-free state in production, preventing injuries, maintaining people's health, increasing work ability, and improving the quality of work [2]. For the technosphere, the flow of all kinds of raw materials and energies, the diversity of the flow of products and people; waste streams are characterized by waste discharged into the atmosphere, industrial and other dirty water discharged into water bodies, liquid and solid waste, various energetic effects For the technosphere, the flow of all kinds of raw materials

and energies, the diversity of the flow of products and people; waste streams are characterized by waste discharged into the atmosphere, industrial and other dirty water discharged into water bodies, liquid and solid waste, various energetic effects For the technosphere, the flow of all kinds of raw materials and energies, the diversity of the flow of products and people; waste streams are characterized by waste discharged into the atmosphere, industrial and other dirty water discharged into water bodies, liquid and solid waste, various energetic effects [3].

Air pollution is one of the main factors that have a negative impact on the health and life of the population related to the quality of the environment. In this regard, it is becoming increasingly important to assess the risk associated with atmospheric pollution and the assessment of the negative effects of the relevant pollutants on the population and other affected objects (animals, plants, trees and the biosphere in general). .

Currently, in almost all countries of the world and international organizations, the concept of risk assessment is considered as the main mechanism for the development and adoption of management decisions at the individual production, regional, state and international levels [4].

Social-hygienic monitoring as a state system for monitoring, analyzing, evaluating and predicting the state of public health and the environment, as well as determining the cause-and-effect relationship between the state of health and the influencing factors. he says. a management tool and a system that provides information on the actual concentration of chemicals in objects of the human environment, exposure factors, etc [5]. In this regard, the methodology of risk assessment can be considered as one of the main elements of social and hygienic monitoring.

Many studies show that the state of the immune system is one of the early and sensitive indicators of the harmful effects of OS factors on the body and can serve as a risk criterion for the development of non-specific diseases [6]. A decrease in immune reactivity is associated with an increase in the general population living in areas with high air pollution. After artificial interruption to study the effect of unsaturated hydrocarbons, which are part of various complex chemical compounds, such as formaldehyde, ammonia, carbon monoxide, resins, adhesives, varnishes, enamels, paints, etc., on the pregnancy process the obtained chorions were studied from 5 to 12 weeks of pregnancy [7]. Significant changes were detected in the placenta, which can be characterized as dystrophic changes: vacuolization, pyknosis of cells and fibrinoid deposits, necrosis of cells and villi. As a result of atmospheric air pollution, the following diseases develop more.

According to maternity neonatologists, fewer children are born healthy in industrial cities than in environmentally friendly cities (58.21% and 74.76%, respectively). Pathological conditions such as intrauterine and (or) intranatal hypoxia, cerebrovascular accident are the basis of the structure of the identified pathology, which are significantly more frequent in children of industrial cities. This was apparently due to the presence of iron deficiency anemia, preeclampsia, arterial hypertension in most of the women born in the city of Mytishchi [8].

In the neurological condition of children in the industrial city, the syndrome of depression of the central nervous system took the leading place, which is characterized by lethargy, hypodynamia, hyporeflexia and muscle hypotension.

In an environmentally disadvantaged city, the number of children with an initial loss of body weight exceeding 9% is 1.5 times higher than in Moscow [9].

Changes in the composition of the contingent of women of childbearing age, the nature of pregnancy and childbirth pathology, as well as the health status of the population of different ecological zones were evaluated. Comparison of the results of a comprehensive clinical and epidemiological study of two populations of women with an interval of 7 years, changes in the composition of the contingent of women of childbearing age, the nature of the pathology identified in them, the period of pregnancy and the period of childbirth. The extent of these changes was directly proportional to the environmental condition of the cities under study. During the analyzed period, the number of women with acute respiratory infections increased significantly (p.<0.05).

The average body weight of one-year-old children in "dirty" areas is 10165 ± 274 g, and in "clean" areas - 10876 ± 195 g (p.<0.05); po dline tela v vozraste odnogo goda v obsledovannyx gruppax detey statisticheski znachimoy raznitsy ne vyyavleno.

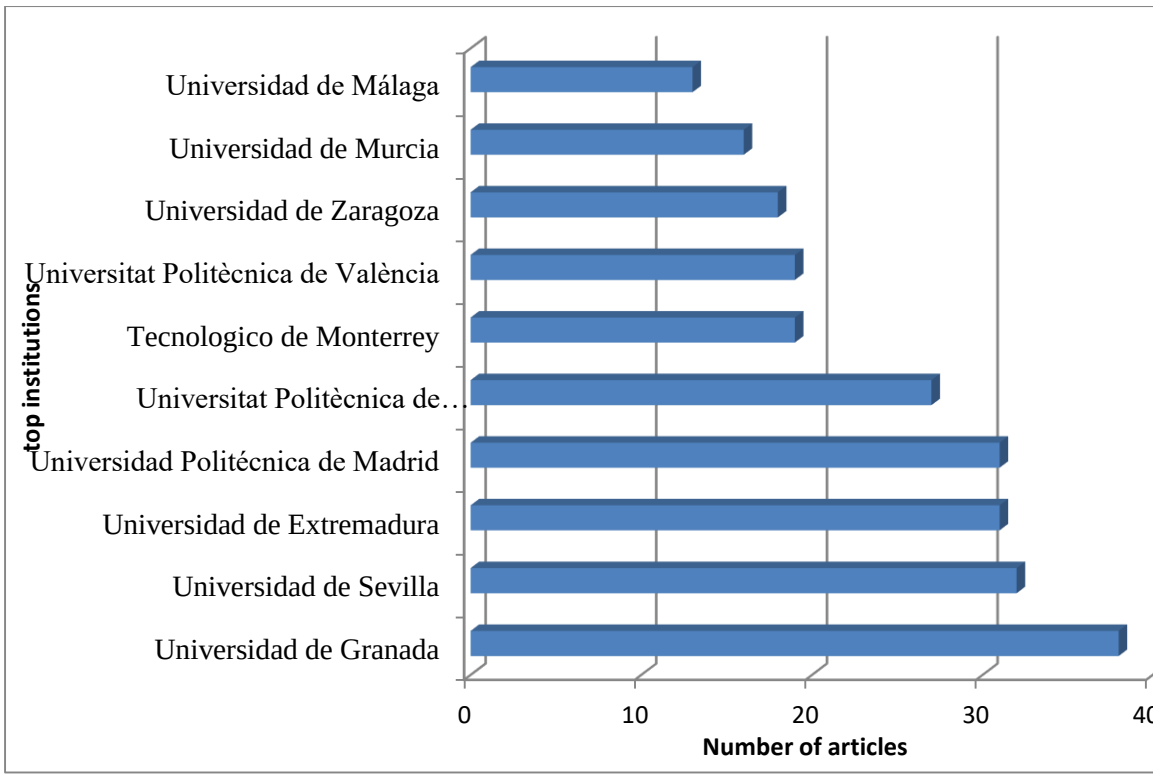
Therefore, the World Health Organization has developed permissible standard amounts of toxic chemicals. The widespread use of toxic chemicals poses many problems to the science of hygiene. Toxic chemicals are toxic by name. The effects of these substances are not only dangerous for animals, insects or plants, but also for humans. Pollution of the external environment with toxic chemicals, in turn, has a negative effect on the health of the population and all animals, therefore, it is necessary to prevent the harmful consequences of the large use of toxic chemicals in the public economy, as well as , atmospheric air, water and soil waste of enterprises, and devising ways to protect against waste water is one of the urgent problems. Issues related to the sanitary-hygienic assessment of toxic chemicals are managed by the Ministry of Health of the Republic [10].

According to the request of the Ministry of Health, it is not allowed to use the imported chemicals without studying the toxicological effects of the chemical substances. For each chemical substance applied to life and agriculture, it is required to have a special document, methodological instructions, instructions for their use, norms, information on first aid used in case of emergency poisoning. Khojaabad district, which has about one hundred and twenty thousand inhabitants, has many production enterprises that pollute the air. 637.6 thousand tons of harmful substances are produced annually in the technological processes of production, of which 97.2% are retained. The amount of harmful substances released into the atmosphere is 61.7 thousand tons. The efficiency of cleaning equipment is 93.9%. This indicator has increased by 1.9% compared to previous years. The main amount of harmful substances discharged (94%) corresponds to large production enterprises.

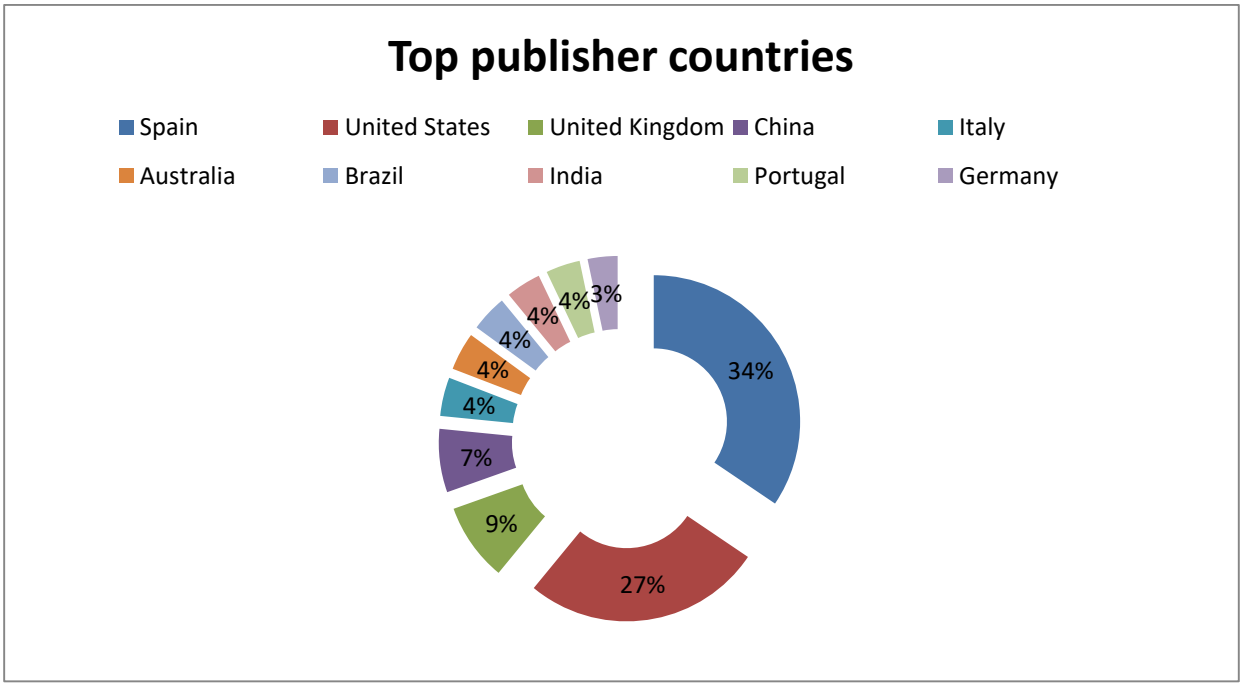
In recent years, special attention has been paid to the content of fine dust with particle sizes less than 2.5 microns (PM2.5) and 10 microns (PM10). According to WHO, these particles are the most dangerous for human health. Monitoring of small particles in the air is carried out both in Europe and in our country [11].

Universities working on toxic gases released into the environment.

Figure 1.



Countries that published articles on toxic gases released into the environment
Figure 2.



The analysis of the contribution of stationary sources to pollution showed that a significant part of the pollution of the urban atmosphere by construction industry enterprises is carried out by asphalt-concrete, reinforced concrete and ceramic plants.

In conclusion, the analysis showed that the state of the city's atmosphere is determined by a number of factors. Compliance with regulatory requirements for the

amount of harmful substances in the urban atmosphere requires consideration of dispersion characteristics.

References:

1.Халматов, М. М., Хожиматов, А., Хусанов, Д., & Исабоев, Т. (2017). ВЛИЯНИЕ ДЕРЕВЯННЫХ НАСАЖДЕНИЙ НА СОСТАВ И ЧИСТОТЫ ВОЗДУХА. In Научно-практические пути повышения экологической устойчивости и социально-экономическое обеспечение сельскохозяйственного производства (pp. 113-115).

2.Muhammato'vich, H. M., & Muxtorjonc, X. (2022). ELIMINATION OF POLLUTIONS IN THE ATMOSPHERIC AIR'RGANISH. American Journal of Interdisciplinary Research and Development, 6, 43-47.

3.Халматов, М. М., Исмаилходжаев, Б. Ш., Кабулова, Н. Ж., & Хусанов, Д. Д. (2021). ГЕОФИЗИЧЕСКОЕ МОДЕЛИРОВАНИЕ РАСПРЕДЕЛЕНИЯ АТМОСФЕРНЫХ ЗАГРЯЗНИТЕЛЕЙ В АНДИЖАНЕ НА ОСНОВЕ УРАВНЕНИЙ АЭРОДИНАМИКИ. Universum: химия и биология, (6-1 (84)), 30-34.

4.Halmatov, M. M., Ismayilkhodjaev, B. S., & Khamrakulov, A. G. (2019). GEOPHYSICAL MODELING OF THE DISTRIBUTION OF POLLUTANTS IN THE ATMOSPHERE OF ANDIJAN BASED ON THE AERODYNAMIC EQUATION. Scientific Bulletin of Namangan State University, 1(9), 70-77.

5.Халматов, М., Хожиматов, А., Хамракулов, А. Г., & Хусанов, Д. Д. (2018). РОЛЬ ЗЕЛЁНЫХ НАСАЖДЕНИЙ В УЛУЧШЕНИИ МИКРОКЛИМАТА АТМОСФЕРНОЙ СРЕДЫ. Наука и мир, 2(12), 20-23.

6.Халматов, М. М., Хожиматов, А., Содиков, К., & Солижонов, С. Э. (2017). ВЛИЯНИЕ АТМОСФЕРНОЙ ПОГОДЫ НА МИКРОКЛИМАТ ДЕРЕВЯННЫХ НАСАЖДЕНИЙ. In Научно-практические пути повышения экологической устойчивости и социально-экономическое обеспечение сельскохозяйственного производства (pp. 110-112).

7.Khalmatov, M., Khozhimatov, A., Khamrakulov, A. G., & Khusanov, D. D. (2013). THE ROLE OF GREEN SPACES IN IMPROVING THE MICROCLIMATE OF THE ATMOSPHERIC ENVIRONMENT. SCIENCE AND WORLD, 23

8.Ходжакулов, М. Н. (2022). ПРОБЛЕМЫ ПСИХОЛОГИЧЕСКОЙ ПОДГОТОВКИ НАСЕЛЕНИЯ К ДЕЙСТВИЯМ В ЧРЕЗВЫЧАЙНЫХ СИТУАЦИЯХ И ДРУГИХ ЭКСТРЕМАЛЬНЫХ УСЛОВИЯХ. Universum: технические науки, (6-1 (99)), 18-20.

9.Ходжакулов, М. Н. (2022). ПРОБЛЕМЫ ПСИХОЛОГИЧЕСКОЙ ПОДГОТОВКИ НАСЕЛЕНИЯ К ДЕЙСТВИЯМ В ЧРЕЗВЫЧАЙНЫХ СИТУАЦИЯХ И ДРУГИХ ЭКСТРЕМАЛЬНЫХ УСЛОВИЯХ. Universum: технические науки, (6-1 (99)), 18-20.

10.Ходжакулов, М. Н. (2021). ПРОБЛЕМЫ РАДИАЦИОННОЙ И ЭКОЛОГИЧЕСКОЙ БЕЗОПАСНОСТИ И ПУТИ ИХ РЕШЕНИЯ. Universum: технические науки, (5-1 (86)), 27-31.

11.Кабулова, Н. Д., Ходжакулов, М. Н., & Рахимов, Д. Б. (2021). АКТУАЛЬНОСТЬ ИСПОЛЬЗОВАНИЯ ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ (ПОИСКОВО-ИНФОРМАЦИОННАЯ КАРТОГРАФИЧЕСКАЯ СЛУЖБА, ГЕОЛОКАЦИЯ) В ПОДРАЗДЕЛЕНИЯХ МИНИСТЕРСТВА ПО ЧРЕЗВЫЧАЙНЫМ СИТУАЦИЯМ РЕСПУБЛИКИ УЗБЕКИСТАН. Universum: технические науки, (7-1 (88)), 14-17.

12.Khodjakulov Mukhtorjon, & Rakhimov Dilmurad (2022). PROPOSALS FOR AMENDMENTS TO REGULATORY DOCUMENTS FOR HIGH-RISE BUILDINGS. Universum: технические науки, (6-6 (99)), 51-54.
13.Yulchiyev, D. R. O. G. L., Khodjakulov, M. N., & Muxabbatxon, G. (2022). THE IMPORTANCE OF USING SOFTWARE (SEARCH AND INFORMATION MAP SERVICE, GEOLOCATION) IN FIRE VEHICLES IN THE REPUBLIC OF UZBEKISTAN. Scientific progress, 3(2), 82-89.
14.Ходжакулов, М. Н. (2020). Модель обучения «5+ 1» и его применение при подготовке специалистов в высших учебных заведениях. Universum: психология и образование, (9 (75)), 7-12.
15.Yakubova Barno Baxtiyorovna. (2023). FORMATION OF INDEPENDENT THINKING AMONG YOUNG PEOPLE – TODAY IS THE MOST RELEVANT DAY IN PEDAGOGY AS A FUNCTION. Proceedings of International Conference on Modern Science and Scientific Studies, 2(3), 143–148.
16.Яқубова, Б. Б. (2019). Теоретические основы организации самостоятельной работы студентов. In Психология в меняющемся мире: проблемы, гипотезы, исследования (pp. 291-295).
17.Bakhtiyarovna, Y. B. (2022). Independent Thinking in Graphic Education Application of Reinforced Interactive Methods. Eurasian Journal of Research, Development and Innovation, 15, 1-3.
18.Bakhtiyorovna, Y. B. (2021). Independent work of students through the internet pedagogical conditions of organization.
19.Bakhtiyarovna, Y. B. (2022). CREATIVENESS AND CREATIVENESS IN A PERSON THE NEED FOR THE DEVELOPMENT OF ADJECTIVES. Spectrum Journal of Innovation, Reforms and Development, 3, 56-58.
20.Madaminjonovich, Q. H. (2022). Aholi zich yashaydigan hududlar ekotizimlari boshqaruvi: qurilishda atrof-muhitni boshqarishning ekologik va iqtisodiy samaradorligi. Journal of new century innovations, 3.
21.Tadjiboev Bunyodbek Qosimjon o‘g‘li. (2023). MEHNATNI MUHOFAZA QILISH TAMOYILLARI. MODERN PROBLEMS IN EDUCATION AND THEIR SCIENTIFIC SOLUTIONS, 2(2), 42–51.
22.Мухиддинов, М. К. (2022). IMAGE OF THE PROPHET. ALISHER NAVOIY XALQARO JURNALI, 2(1).
23.Муҳиддинов, Муслиҳиддин Қутбиддинович (2023). “СЎЗ ГУҲАРИ...”. Oriental renaissance: Innovative, educational, natural and social sciences, 3 (5), 786-793.
24.Mukhiddinov, M. (2023). Wisdom in the Praises of the Epic" Saddi Iskandariy". Central Asian Journal of Literature, Philosophy and Culture, 4(5), 210-214.
25.MUHİDDİNOV, M., & ELTAZAROV, J. ALİ ŞÎR NEVÂYÎNİN ESERLERİNDE KÂMİL İNSAN KAVRAMININ YORUMU VE ONUN ÇAĞDAŞ «İNSANİ GELİŞİM» DÜŞÜNCESİYLE FELSEFİ-ESTETİK AÇIDAN BAĞLANTILARI 1. Giriş.
26.Muhiddinov, M. (2015). Komil inson–adabiyot ideali. Toshkent. Ma'naviyat.
27.Муҳиддинов, М. (1998). Ўн тўққиз чемпион. Т.: Юлдузча.
28.Муҳиддинов, М. (2007). Нурли қалблар гулшани. Т.: Фан.
29.Б МУҲИТДИНОВА (2022). МУНОСИБ ТУҲФА. ALISHER NAVOIY XALQARO JURNALI, 2(3), 167-169.
30.Badia Muhitdinova. A WORTHY GIFT. Alisher Navoi. 2022, vol. 2, issue 3, pp.167- 169.

31.Мухитдинова Б.М (2022). ПУБЛИЦИСТИЧЕСКАЯ ДЕЯТЕЛЬНОСТЬ САИДАХМАДА ВАСЛИ САМАРКАНДИ. КАЧЕСТВО ЖИЗНИ НАСЕЛЕНИЯ ПРОМЫШЛЕННЫХ ТЕРРИТОРИЙ В СТРАТЕГИИ «ОБЩЕСТВО 5.0» сборник материалов конференции. Том 1. Набережночелнинский институт Казанского Федерального университета. Казань, 158-161.

32.Мухитдинова, Б. М. (2021). THE IDEOLOGICAL DIRECTION AND MAIN ARTISTIC IMAGES OF DASTANS “KHUSRAV AND SHIRIN” AND “FARHOD AND SHIRIN”. ALISHER NAVOIY XALQARO JURNALI, 1(1).

33.Nazmiya, M. (2019). IDEALOGICAL-ARTISTIC CONCERN IN THE CREATION OF KHUSROW DEHLAVI AND ALISHER NAVOI. Глобус, (9 (42)), 43-45.

34.Muhitdinova, N. M. (2021). Interpretation of mystical themes in Mirhasan Sadoi and muhammad ghazi’s collection of poems. Asian Journal of Multidimensional Research (AJMR), 10(3), 538-548.

35.Muslihiddinovna, M. N., & Fatkhiddinovna, K. S. (2019). The comparative character analysis of farhad and majnun in epic poems by alisher navai. Test Engineering and Management, 81(11-12), 4198-4206.

36.Mukhitdinova, N. M. (2016). TRADITIONS OF BOBORAKHIM MASHRAB IN CREATIVE ACTIVITY OF KHOZHANAZAR KHUVAYDO. Международный научно-исследовательский журнал,(4 (46) Part 4), 61-64.

37.Мухитдинова, Н. (2021). SADOIY VA G ‘OZIY DEVONLARIDA ALISHER NAVOIY AN'ANALARI (HAMD, NA'T, MUNOJOT VA MANQABAT MAVZULARIDAGI G ‘AZALLAR MISOLIDA). ALISHER NAVOIY XALQARO JURNALI, 1(2).

38.Sh, S. B. (2023). ACTIVITIES OF THE ADVISORY COUNCIL (SUPREME COUNCIL) IN THE KOKAND KHANATE.

39.Шамшиддинов, Б. Ш. Ў. (2022). СОВЕТ ДАВЛАТИНИНГ ФАРҒОНА ВОДИЙСИГА МАЬМУРИЙ СОХАДА КИРИТГАН ЯНГИЛИКЛАРИ. Science and innovation, 1, 21-24.

40.S. Sulaymonov, Nurmatov Jo‘rabek Botirjon o‘g’li (2022) ANDIJON MEXANIKA ZAVODIDA ISH JOYLARINI YORITILGANLIGINI BAHOLASH. O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI 1(8), 482-484.