

PHRASEOLOGICAL UNITS WITH A NAME OF ANIMALS AND PLANTS FOCUS ON THE SCIENTIFIC RESEARCH

Khurshid Ubaydullayev
Researcher of Fergana State University

Sodikjon Muminov
Doctor of philology in Fergana State University
E-mail: xbond17@mail.ru

ABSTRACT:

Phraseological units with a name of animals and plants component are the focus of the given scientific research. The relevance of this study arouses little doubt, since zoo-phraseologisms are widely used among native speakers, but a person for whom German and English are foreign languages uses these units in his speech extremely rarely, as they are difficult to perceive, and their misuse can lead to failures in intercultural communication. In addition, this layer of language is considered not fully explored. In this regard, it is necessary to conduct a more detailed study considering phraseological units with phraseological units; the attempt is presented in the following article. As methods of research, discursive analysis, functional analysis, various methods of descriptive and comparative method have served.

Keywords: phraseological unit, a name of animals and plants, linguistic view of the world, idiom, phraseological fusions

INTRODUCTION:

Phraseology captures the vast experience of the people, reflects the ideas associated with the labor, life and cultural life of people. Phraseology is an important and integral part of any language. Over time, it accumulates phraseological units that allow us to look into the past of the people or to know

the culture of another country, since phraseological units describe the mentality, national character, lifestyle, as a rule, and much more. It should be noted that the study of phraseology as an independent science has been conducted for a long time by both foreign and Russian scientists, but the interest in this field of linguistics has not faded to this day. Semantic characteristics and features of phraseological units are the focus of works by P. Kühn, H. Burger, V.V. Vinogradov, N.M. Shanskii and many others. The development of this problematic seems promising for identifying the national and cultural characteristics of English phraseological units, which allows us to increase our vocabulary and, therefore, enrich our speech.[1] This article examines the semantic-pragmatic and connotatively evaluative relations of phraseological units based on animal images in English language. Animalistic phraseology is a huge layer of phraseological units and is one of the most common forms of the language nomination, because it is through comparing ourselves with the animal world that a person comprehends the reality surrounding him/her, and, to a certain extent, comprehends himself/herself in this reality. Phraseological units with the names of animals are of great prevalence and universality in many cultures. This is evidenced by the fact that in the languages around the world they are widely used as a characteristic of the image of man and possess high connotative potential. Phraseological units with a zoomorphic

component constitute a significant part of the dictionary stock of absolutely any language.

The picture of the world displayed by the phraseological means of the language and regarded as a linguistic phenomenon of the national and cultural heritage, is a phraseological picture of the world. In the phraseological picture of the world, the national uniqueness and uniqueness of the language is most clearly reflected, since phraseological units often include components of meaning that contain information about the nationally specific features of the people. Phraseological units are special units of the language, in which people's wisdom is displayed, the value-based picture of the world of ethnos, as well as representations and knowledge, both about the outer and inner world of the individual.

Thus, we can conclude that each specific language is a special system that affects the consciousness of people and shapes their picture of the world. The language picture of the world, in turn, reflects the complex of ideas about the world. It creates homogeneity of the linguistic essence, contributes to the consolidation of linguistic and cultural identity in the vision of the world and its designation by means of language. The linguistic view of the world exists in the homogeneous unique identity of the linguistic community and is the transforming power of a language that shapes the perception of the world around the human person through language as an "intermediate world" of the speakers of that language. The term "phraseological unit" denotes several semantically diverse types. Some researchers refer to it the following units of language: the idioms *das schwarze Schaf*, *ein weißer Rabe* / black sheep, they are joined by combinations-phraseoschemes, in which the syntactic structure and a certain part of the lexical composition are reassessed, and the rest is filled depending on the context; winged words

Buridans Esel, proverbs and sayings formed as a result of folk art and traditions. In order to distinguish the phraseological unit from other similar linguistic units, namely, from the word and free phrase, it is necessary to emphasize the characteristic features of phraseological units. [1,3]

Phraseology reflects the most characteristic and striking features of certain people and therefore quickly memorable. Phraseological units with the a name of animals and plants component are considered one of the most numerous and internally diverse groups of phraseological funds phraseological units reflect the centuries-old observations of a person over the appearance and habits and behavior of animals, show the attitude of a person to their "smaller brothers", thus being a cultural- informational fund in each language. A name of animals and plants are often used as part of phraseological expressions. Such a demand for animal images is due to the fact that the direct meanings of these lexical units have great opportunities for the formation of connotations. With each of the name of animals and plants a large number of ideas about the traits of human nature is associated, ostensibly inherent in animals. Man, trying to characterize his/her behavior and appearance, compared himself/herself with what was closest to him, familiar and similar to himself/herself - the world of animals. A name of animals and plants components in the German and English language view of the world are distinguished by a special mental natural association that unites people with the animal world, which is based on a deep connection between the evaluation semantics and biological signs of animals. The name of animals and plants in the phraseological unit is its semantic center (that is, zoomorphism), and it is in it where lies the basic metaphorical meaning that gives the meaning to the whole expression. The German and English phraseological units with a name of

animals and plants component fund are rich and diverse. The reference to the names of animals is considered natural and normal, since animals, like humans, have their own characteristic habits and peculiar features; each of them has its own way of life and has a unique type of behavior. Many animal names are currently set metaphors. In German, as well as in English, for example, the cow is stupid, the hare is wise, the fox is sly/traitor, the bear is clumsy and so on. Here are some examples: • da stehen wie die Kuh vom neuen Tor - stare like a stuck pig; • ein alter Hase sein - old sea dog; • dem Fuchs beichten - break a secret; • plump wie ein Bär - play the bear. The hyper theme Tier includes hyponyms Fish (fish) and Vogel (bird) and Haustier (pets), Nutztiere (livestock), Säugetier (mammals) and Weichtier (shellfish). Lexical-semantic group Insekten (insects) and Wurmer (worms) are presented in the following phraseology units: emsig wie eine Biene / the busy bee, zwei Fliegen mit einer Klappe schlagen / nail two birds with one stone. In most cases, zoomorphic phraseologisms contain names of pets, which can be explained by extra-linguistic factors, and, first of all, the peculiarities of the human relationship with its closest domestic environment. In German and English there are frequent phrases with components Schwein (pig), Katze (cat), Hund (dog), for example, Schwein haben / hog heaven; Wie Hund und Katze leben / live a cat-and-dog life; Wie die Katze um den heißen Brei herumgehen / like a cat round hot milk. Phraseological units with the name of animals and plants component as the name of a wild animal are also quite common. [3,5]

The main "heros" of such expressions are Hase (hare), Bär (bear), der Affe (monkey), der Pfau (peacock), e.g., sich wie ein Pfau speizen / strut like a peacock. The phraseological image is formed on the basis of a person's idea of an animal, and the animal's

name is sequentially associated with an object that has certain qualities and properties, and with its symbolic meaning. And this is natural, since the whole world around a person is perceived by him through the prism of mythological thinking. One can agree with the view of N.D. Petrova, who focuses on the symbolism of a name of animals and plants in the German language, mentioning that they have an element of symbolization. For example, the seme "rigidity, ruthlessness, rapacity" is characteristic of "wolf" in both the languages, for example, ein Wolf im Schlafpelz / wolf in sheep's clothing. Thus, it can be concluded that the names of animals are used as certain symbols. That is, the image or habits of a certain animal are transferred to a person or objects of the surrounding reality, and a name of animals and plants acquires a generally accepted associative meaning. Over time, the symbol-animal is filled with profound social and spiritual meaning, which is reflected in the phraseology.

METHODS:

The material was collected by the following groups of research methods: analysis, comparison, included observation, modeling method, continuous sampling method. With the use of modeling method the main characteristics of the phraseological units with a name of animals and plants component in the English and German languages has been introduced. The material for this study comprised 200 German and English phraseological units selected from authoritative German and English phraseological dictionaries: Der Grobe Duden, Redewendungen und Sprichwortliche Redensarten, The Contemporary Dictionary of the English Language. Russian linguist E.M. Galkina-Fedoruk understands the concept of expressiveness in a narrow sense. [2] If the lexicon expresses the name of an object, event,

fact, event, process, phraseological units express the emotions, feelings, mental state, qualities of a person. Phraseological units are linguistic phenomenon formed on the basis of the need to express figuratively, emotionally-expressive attitude to events. It is known that a name of animals and plants are distinguished by their imagery, emotionality and are widely used in oral speech, literary texts. Interestingly, a name of animals and plants can express the same meaning in different languages that are not similar. In some cases, however, a name of animals and plants itself may also reflect qualities that are contradictory in both languages. For example, in English, "dark horse" figuratively means negative connotation (for an unpopular person), while its German equivalent – *wie ein Pferdezaun* (for popular person) implies positive connotation. It should be noted that in the lexical-semantic layer of language it is difficult to find a group, as rich and complex in nature as a name of animals and plants. This is why; it is of great interest that they perform a wide range of functions in language.

RESULTS:

Phraseological units arise as a result of the crucial role of language units in the formation of linguistic cognition, understanding, knowing, evaluating various aspects of human intellectual life, ultimately, and alternative knowledge of the external world. At this point, fixed compounds that describe one or another way of perceiving a wide range of meanings to reflect mental situations are actively demonstrated by entering the phraseological realm of language. [4,7] Phraseology has always made a huge contribution to the formation of a figurative picture of the world of all languages. It is an integral part of the transmission of the cultural heritage of the people, with studying which you can get acquainted and study traditions,

customs, values, life of this or that nation. Phraseological units are characterized by features of a particular language, have different expressive color, capable of acquiring additional meaning when they are influenced by context.

From the presented diagram it follows that almost 2/3 of the selected phraseological units have an analogue in the English language. Analysis of these phraseological units allowed us to identify the following groups of idioms by the presence (or absence) of equivalents.

1. Full phraseological equivalents. Full equivalents are phraseological units that completely coincide with the set expressions of another language in the image, component composition, phraseological meaning and style. That is, phraseological units that completely coincide at the lexical and grammatical levels:

- *schwätzt wie eine Elster* - to be as garrulous as a magpie;
- *essen wie ein Spatz* - eat like a bird;

In the above equivalents, there is a coincidence of the seminal composition of the phraseological meaning of the matched phraseological units on both the connotative and the significative-denotative level, which leads to their functional and semantic equality. Partial equivalents are traditionally defined as phraseological units with the same or close image, close meaning, similar or slightly different component composition and structural and grammatical organization. In this study, we divided the partial equivalents into two groups.

2. Partial equivalents having the same meaning, but different a name of animals and plants:

- *wie ein Dachs arbeiten* - work like a horse;
- *gesund wie ein Bär* - as strong as a horse;

3. Partial equivalents without a name of animals and plants. The analogue in English carries the same meaning, but does not contain the zoocomponent:

- auf der Bärenhaut liegen - to be idle;
 - sich aufs hohe Pferd setzen - be haughty.
4. Nonequivalent phraseological units are phraseological units that have no similarity in grammatical structure and lexical (component) composition in different languages:
- um einen Lachs spielen - play for money;
 - ein toller Hecht- merryman. [7]

DISCUSSION:

The presence of nonequivalent phraseological units can be related to the following reasons. First of all the peculiarities of the geographical position and the prevalence of certain species of animals in connection with this. Long ago, the territory of Germany was inhabited by a huge number of hares and wild rabbits. In this connection, in German there are a considerable number of phraseological units with the name of this animal. Among men, hunting for these animals was popular, but hares were described as dodgy animals, which were difficult to catch even for the fastest hunting dogs. Hares double on their traces, making huge leaps in different directions. Hence, for example, there were such phraseologisms as "wissen wie der Hase läuft" (literally: to know how the rabbit runs); or "ein alter Hase" (old hare) / old hand. Secondly, it is not uncommon for phraseological units to arise as a result of etymological errors. For example, the phraseological unit Das kann kein Schwein lesen has nothing to do with the image of a pig. The history of this phraseology is related to the name Swyn. Once upon a time there lived a very intelligent Swyn family in Germany. But one day none of the members of this family could decipher the document, and therefore the peasants began to say: "Dat kann keen Swyn lesen". And this popular expression caught on, which, of course, can not have any analogue in other languages, including English. In German, nationally specific is the phraseological unit das geht auf keine Kuhhaut! / This does not

describe! (Literally: this can not be written on the parchment). Parchment was made from the skin of animals, and, quite often, from the skin of cows. Under the word "Kuhhaut" superstitious people understood the parchment with the list of sins, which Satan reads to the person at the time of his/her death. In English, the same meaning is conveyed by exclamatory sentences that are not phraseological. The reason for the occurrence of nonequivalent phraseological units can also be caused by history, folk games, customs, peculiarities of the life of peoples, rituals and many other features.

For example: a lone wolf — a person acting alone; a fox — selfish, dishonest businessman, a predator; The oldest domestic animal in almost all cultures it is the dog, that's why the comparison with the dog are the most numerous in both languages. Negative connotations bring ideas about the dog as a persecuted being, dependent from the person, sometimes living in the toughest conditions, designed for the protection of housing, hunting, etc. (lead a dog's life – to have been afflicted; treat like a dog – to be unkind to anyone; dressed up like a dog's dinner – dressed vulgar). At the same time, the British appreciated the loyalty, friendliness, endurance dog (die for one dog to be very loyal; funny dog – funny guy). Similarly, you can analyze features of zoomorphism "cat": has long being close to someone, the cat has earned the trust and love of man because of its softness, intelligence, prudence (as tame as a cat is quite tame; as wary as a cat – very careful), but, being wild animals by nature, cats are peculiar cunning, deceit (cat in the pan is a traitor; cat shuts its eyes when stealing cream to close their eyes to their sins). [1] As for Uzbek context, cat denote dubious, treacherous person. Phraseological component "horse" has mostly positive connotations, which is associated with the role of the horse

farm hand, his diligence and endurance (strong as a horse, willing horse – slogger), but there are also values associated with other areas of the horse's life, with both positive and negative interpretation, for example, jump (ride the fore horse is to be in front; a dark horse – "dark horse", about a man whose inner quality is not known). Similarly, we can analyze other phraseological units with names of animals having the dual nature of values. Stubbornness" in two languages is compared to a donkey, but a donkey for the British in the semantic plan primarily represents the stupidity, stubbornness — again. For example: act the ass — to fool around, to be an ass for one's pains — not to receive praise for their efforts; to stay in the cold, make an ass of oneself – to put yourself in a stupid position, to fool around, all asses wag their ears - fools inherent in the profound view, fools love to judge what you don't understand, an ass between two bundles of hay (an ass between two bundles (or bottles) of hay (Buridan's ass)) — Buridan's ass (the person, not daring to make a choice) (French philosopher of the XIV century attributed to Buridan follows the story of the donkey who died of hunger because he did not dare to make a choice between two identical bundles of hay). There are also zoomorphic images to denote exaggeration of anyone's influence, importance, unheard stories, stories, unreal temporary work: to have the wolf in the stomach to be hungry as a wolf; cock and bull story — an unbelievable story told to deceive someone; shoot (throw) the bull — to carry nonsense, to ramble; no room to swing a cat — no room to fall; enough to make a cat laugh — and the dead can laugh; very funny; shaggy-dog story — a long joke with an absurd ending. N.A. Klushin, on the other hand, studied a name of animals and plants descriptions of the individual in English. He compares a name of animals and plants in English and Russian. For example, "osel" in

Russian - stupid, ignorant man, "ass" in English - stupid, ignorant man - a stupid, obstinate person, "a pig" dirty, lowly man - dirty, greedy; ill-mannered person. Often when a name of animals and plants lexemes comes in their original sense, they have a specific boundary. In the figurative sense, it expresses emotional imagery and is actively used in oral speech, as well as in fiction, giving language figurativeness, expressiveness. Uzbek linguist O. Latipov comparatively analyzes the semantic structure of pet names in Russian, Uzbek and Tajik in his dissertation. In his work, he explains the specific semantic features of words in each language that represent exactly the same animal names in all three languages, and thus points out that some animal names can have the same meaning in all three languages. For example, the Uzbek a name of animals and plants "pig" and the Russian "scotina" have a negative connotation in both languages. The Russian a name of animals and plants "курица" is used in a more negative sense. Phraseological units with this word are explained by their connotative feature: —мокрая курица — a loose person, —писать как курица с лапой|| - to write ugly, —оёғи куйган товукдай|| - panic (negative meaning), —хўроз йигит|| - agile and brave guy, —хўроз гап|| - the main sentence, the plot of the sentence, —жўжахўроз|| is a proud boy, a young man. The research, which began with the study of a name of animals and plants words in different languages and their comparison, later moved to phraseology, and the structural-semantic and grammatical aspects of phraseologies containing animal names began to be studied separately. In comparing phraseological units, the methods and principles proposed by U. Yusupov have theoretical and practical significance. In his view, first the corresponding (equivalent) and inappropriate (non-equivalent, alternative) phraseological units are identified. [7]

CONCLUSION:

Representatives of different peoples noticed these features and, since people tend to compare themselves with the animal world, they made a parallel between themselves and them. So, phraseological units: *rot wie ein Krebs* / red as a lobster, *stark wie ein Pferd* / strength of a horse, *schwimmt wie ein Fisch* / swim like a fish - completely coincide in the two languages according to the meaning that they carry in themselves. The next reason for having equivalents is the common origin, that is, one source. An example is the phraseological unit *ein Wolf im Schafpelz* and its analogue in English - *wolf in sheep's clothing*. This expression became widely known thanks to the Bible. In the Gospel of Matthew there are these words: "Beware of false blamers: they come to you in sheep's clothing, but inside they are predatory wolves." In the course of the study it was found that some phraseological units of German and English have the same meaning, but they contain different zoo components. That is, to characterize the same phenomena, peoples resort to different names of animals. This can be explained by the fact that in one country one animal is more popular and more common, and in another country is another one. In addition, a single ethnic group can attach greater importance to specific qualities due to some national characteristics.

Despite the commonness of semantics, various inner forms begin existence, images that arise in the German and English linguistic consciousness on the basis of various associations. The fact that 1/3 of the phraseological units of German has an equivalent in English, but does not contain a name of animals and plants can be explained by the difference in views on the surrounding world. So, common for the considered cultures will be domestic animals, this is due to the relationship of man to the animals. [2,5] Phraseological units with a name of animals

and plants component also determine the traits of human character. This fact is also explained by cultural characteristics of the nation. Sources of national-specific features of phraseological units with names of animals can serve as differences of species, their lifestyles, working conditions, value system, historical conditions of language formation of a certain ethnic group, etc. The emotional and expressive element of naming a human with a name of animals and plants component is expressed by negative and positive connotations, which allow finding the ideal concept of external and internal characteristics of a person in the dialectal linguistic picture of the world.

REFERENCES:

- 1) Ahrorova, R. U. (2021). SEMANTIC ANALYSIS OF PHRASEOLOGICAL UNITS REPRESENTING "YOUTH" IN FRENCH AND UZBEK LANGUAGES. *Theoretical & Applied Science*, (7), 122-126.
- 2) Galkina-Fedoruk E.M. On expressiveness and emotionality in the language.- *Collection of articles on linguistics.-M., 1958*
- 3) Nazaralieva, M. A. (2021). Integration of Reading and Writing in Teaching English. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 2(12), 147-151.
- 4) Mamatov A.E. Problems of formation of phraseology of the Uzbek language. Abstract of the dissertation for the degree of Doctor of Philology. - Tashkent, 2000
Lyasota Yu. N. English zoosema. *Izd. Dalnovostochnogo university. - Vladivostok, 1984. - 116 p*
- 5) Kaharov, K. S. (2020). Formal and informal ways of conversation in the german and uzbek languages. *ACADEMICIA: An International Multidisciplinary Research Journal*, 10(9), 286-289.

- 6) Klushin N.A. Zoo and phytomorphic characteristics of man in English conversational speech: Author's abstract. kand. filol. science. - Nizhny Novgorod, 1991. - 22 p.
- 7) Latipov O.J. Analysis of the semantic structure of the thematic spaces of "domestic animals" in different languages (On the material of Russian, Uzbek and Tajik languages): Author. dis. kand. filol. science. - T., 1997. - 28 p
- 8) Alifirenko N.F. 2004. Teoriya yazyka. Vvodnyy kurs. -M. 368 s. Davletbayeva D.N., Larionova E.S., Bashkirova K.A. 2016.
- 9) Cultural interpretation of phraseological units in their occasional use // Modern Journal of Language Teaching methods. Special Issue (November). Pp. 164-169. Gavrin S.G.1963.
- 10) Izucheniye frazeologii russkogo yazyka v shkole. Posobiye dlya uchitelya. M. Uchpedgiz. 152 s. Kulkova M.A., Rakhimova A.E., Zinecker T.2015. Hermeneutical analysis of paroemiological texts with semantics of permission // Journal of Language and Literature. V. 6. № 1. Pp. 297-300.
- 11) Yusufjonova, S. (2021). CERTAIN LINGUISTIC PECULARITIES OF PHRASEOLOGICAL UNITS. Scientific Bulletin of Namangan State University, 2(2), 289-293.
- 12) Anarjanovna, N. M. (2021). Technology of formation of integrated reading competence in English. ACADEMICIA: An International Multidisciplinary Research Journal, 11(3), 666-672.
- 13) Nazaraliyeva, M. A., & Saydaliyeva, M. U. (2020). Developing reading skill in using integrated skills. Вестник педагогики: наука и практика, (51), 133-134.
- 14) Nazaraliyeva, M. A. (2020). BASE OF INTEGRATED SKILLS IN PSYCHOLOGICAL PRINCIPLES OF TEACHING ENGLISH. Scientific Bulletin of Namangan State University, 2(11), 213-218.
- 15) Allaberdieva, G. B. (2020). DEVELOPING STUDENTS VOCABULARY LEARNING STRATEGIES. Scientific Bulletin of Namangan State University, 2(11), 199-203.
- 16) NAZARALIEVA, M. (2018). The main effective strategies in teaching reading. Scientific journal of the Fergana State University, 1(5), 136-139.
- 17) Mukhtorovna, Y. S. (2021). Regularly used phrasal verbs German language. ACADEMICIA: An International Multidisciplinary Research Journal, 11(3), 673-680.
- 18) ABDULKHAEV, Z. E. (2021). Protection of Fergana City from Groundwater. Euro Afro Studies International Journal, 6, 70-81.
- 19) Erkinjonovich, A. Z., & Mamadaliyevich, M. M. (2021, May). WATER CONSUMPTION CONTROL CALCULATION IN HYDRAULIC RAM DEVICE. In E-Conference Globe (pp. 119-122).
- 20) Мадрахимов, М. М., & Абдулхаев, З. Э. (2019). Насос агрегатини ишга туширишда босимли сув узатгичлардаги ўтиш жараёнларини ҳисоблаш усуллари. Фарғона Политехника Инститuti Илмий-Техника Журнали, 23(3), 56-60.
- 21) АБДУЛХАЕВ, З., & МАДРАХИМОВ, М. (2020). Гидротурбиналар ва Насосларда Кавитация Ҳодисаси, Оқибатлари ва Уларни Бартараф Этиш Усуллари. Ўзбекгидроэнергетика” илмий-техник журнали, 4(8), 19-20.
- 22) Mamadalievich, M. M., & Erkinjonovich, A. Z. Principles of Operation and Account of Hydraulic Taran. JournalNX, 1-4.
- 23) Madraximov, M. M., Abdulkhaev, Z. E., & Orzimatov, J. T. (2021). GIDRAVLIK TARAN QURILMASINING GIDRAVLIK HISOBI. Scientific progress, 2(7), 377-383.

- 24) Arifjanov, A., Otaxonov, M., & Abdulkhaev, Z. (2021). Model of groundwater level control using horizontal drainage. Irrigation and Melioration, 2021(4), 21-26.
- 25) Мадрахимов, М. М., Абдулхаев, З. Э., & Ташпулатов, Н. Э. (2019). Фарғона Шаҳар Ер Ости Сизот Сувлари Сатҳини Пасайтириш. Фарғона Политехника Институти Илмий-Техника Журнали, 23(1), 54-58.
- 26) Usarov, M., Mamatisaev, G., Yarashov, J., & Toshmatov, E. (2019, December). Non-stationary oscillations of a box-like structure of a building. In Journal of Physics: Conference Series (Vol. 1425, No. 1, p. 012003). IOP Publishing.
- 27) Usarov, M., Mamatisaev, G., Ayubov, G., Usarov, D., & Khodzhaev, D. (2020, July). Dynamic calculation of boxed design of buildings. In IOP Conference Series: Materials Science and Engineering (Vol. 883, No. 1, p. 012186). IOP Publishing.
- 28) Xamdamaliyevich, S. A., & Rahmankulov, S. A. (2021, July). INVESTIGATION OF HEAT TRANSFER PROCESSES OF SOLAR WATER, AIR CONTACT COLLECTOR. In E-Conference Globe (pp. 161-165).
- 29) Abdulkhaev, Z. E., Abdurazaqov, A. M., & Sattorov, A. M. (2021). Calculation of the Transition Processes in the Pressurized Water Pipes at the Start of the Pump Unit. JournalNX, 7(05), 285-291.
- 30) Мадхадимов, М. М., Абдулхаев, З. Э., & Сатторов, А. Х. (2018). Регулирования работы центробежных насосов с изменением частота вращения. Актуальные научные исследования в современном мире, (12-1), 83-88.