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ASSOCIATE EDITORS

ARTICLES

- *CONSUMER PROTECTION: ON THE EXAMPLE OF UZBEKISTAN AND THE EUROPEAN UNION*

  Javlon Zoilboev, Damian Cyman

  1-8

  - PDF
- *THEORETICAL AND LEGAL ASPECTS OF ADMINISTRATIVE JUSTICE*

  Artikov Dilmurod Rakhmatillaevich

  9-16

  PDF
- *THE INVESTIGATION OF SYNTACTICAL EXPRESSIVE MEANS AND STYLISTIC DEVICES IN MODERN ENGLISH AND UZBEK*

  Turdubekova Iroda Oybek qizi, Pazilova Nasibaxon Muhammadqosimovna

  17-21

  - PDF
- *The biological effectiveness of the drug Entobronate 12% s.p. as a dressing agent for cotton seeds against gommosis on cotton crops in the conditions of the Andijan region*

  Aliev Shovvoz Karimovich

  22-25

  - PDF
- *THE INVESTIGATION OF TOPONYMY AND BASIC CONCEPTS OF SCIENTIFIC GEOGRAPHICAL TERMINOLOGY*

  Arabboyev Asliddin , Pazilova Nasibaxon Muhammadqosimovna

  26-31

  - PDF
- *CURRENT ISSUES OF ENERGY AND THEIR ELIMINATION*

  Jumanov Abbos Nabijonovich, Shodiyeva Nozina Shukhrat qizi, Rizayeva Magzuna Raim qizi, Haydarov Anvar Akram o‘g‘li

  32-35

  - PDF

- *EFFECTS OF LINGUISTIC KNOWLEDGE ON SPEECH PERCEPTION*

  S.O. Solijonov

  36-39

  - PDF
- *INFLUENCE OF INVOLUTION ON DIFFERENTIAL EQUATIONS WITH SECOND-ORDER CONSTANT COEFFICIENTS*

  Mahmudova Dilnoza; Abbasova Munira, Alixanov Olimjon

  40-44

  - PDF
- *USE OF MAIN PRODUCTION FACILITIES AND ECONOMIC ACTIVITIES OF FOREIGN TEXTILE ENTERPRISE*

  Teshabaeva Odina Nasridinovna, Temirova Aygul Anvar qizi

  45-52

  - PDF
- *Translation peculiarities of collocations*

  Nematova M

  53-55

  - PDF
- *Learner Corpora and Corpus-Informed Teaching Materials for Economy faculty students*

  Ismoilova Zarifa, Nasriddinova Nasiba

  56-57

  - PDF
- *FORMATION OF QUANTITATIVE REPRESENTATIONS IN THE SECONDARY GROUPS IN PRE-SCHOOL EDUCATIONAL ORGANIZATIONS*

  Saidova Nigora Olimovna, Rustamova Shoxsanam Shukhratjon kizi

  58-60

  - PDF
- *DIAGNOSIS OF STUDENTS PROFESSIONAL FOCUS*

  Omonturdiyeva Mahliyo Ochilovna

61-65

- PDF

- *MODELLING OF INDUCTION MOTOR WITH ANSYS MAXWELL RMXPRT PROGRAMM*

  M.K.Bobozhanov , F.N.Tuychiev , H.J.Achilov , KH. N. Mamadiyev, J.B Rajabov

  66-69

  - PDF

- *Solution of the energy equation of a two-phase medium taking into account heat transfer between phases*

  Komolova G.Sh, Djalilova T And.M.I. docent

  70-74

  - PDF

CONSUMER PROTECTION: ON THE EXAMPLE OF UZBEKISTAN AND THE EUROPEAN UNION

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Abstract: *Consumer protection is a very wide-ranging issue and needs to be given appropriate attention. It plays an important role in ensuring the proper functioning of free-market economies. A properly informed consumer, who takes rational decisions about the goods and services offered to him and equipped with appropriate procedures to enable him to assert his rights, protected by state institutions, is one of the pillars of a free and competitive market.*

The aim of this article is to present the key regulations falling within the scope of consumer protection in Uzbekistan and the European Union. The paper identifies the legal regulations aimed at protecting fundamental consumer rights, the way in which those rights are regulated, objectives and purpose of such arrangements.

Part one presents consumer protection in the legal system in Uzbekistan, taking into account legal changes and reforms aimed at broadening the scope of this protection. The second part presents how consumer protection is achieved in the European Union and the areas that have been identified as fundamental to achieving full and effective protection. The article ends with conclusions summarising the analyses carried out.

Key words: *Consumer protection, human rights, public policy, legislation, legal system, guarantees, distance contracts.*

Abbreviation

ADR- Alternative Dispute Resolution;
EUR- ISO 4217 code of the official currency of the European Union EURO;
LLC- Limited liability company.

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Method.

Primary Research methodology is comparative method of analysis. The specific procedures and techniques used to identify, select, process, and analyze data about this consumers protection rights topic. Additionally, in research paper several practical evidences were provided, in order to allow the reader to critically evaluate a study's overall validity and reliability.

Introduction.

Since then it has provided a basis for policy development by various supranational organisations including the European Union, the OECD and the United Nations (Harland 1987). Within frameworks for ethical and moral theories the idea of rights is clearly linked to other notions, in particular justice and duty (Rawls 1971), however, these concepts have not been considered in the context of consumer rights. Indeed, apart from a limited number of studies that have considered justice in the context of complaint behaviour and service recovery (e.g. Blodgett et al. 1997) and macromarketing (e.g. Laczniak and Murphy 2008), little real attention has been paid by business academics to concepts of justice in the marketplace. What research has been conducted, often comes from legal studies and political science. This is in stark contrast to organisational studies where there is an extensive body of literature that uses ideas on justice to examine exchanges and relationships within the firm (e.g. Colquitt et al. 2005; Greenberg 1987). Currently, the scope of law which should be considered is getting involved with immense amount of protective legal norms and documents. One of the vital aspect from these protective legislations is consumer rights protection. In accordance with United Nations international legal declarations the human rights must stand at the first stage over the other rights of human. In this article, the preliminary ruling in Uzbekistan and European Union is analysed in the context of how the content and enforcement of new consumer citizenship rights are evolving in liberalised network sectors. Consumer protection is not relatively young field of public policy. It has developed with the “ascendancy” of the activist state, and has undergone substantial changes on its decline. Consumer protection today, however, belongs to a set of well-established policies and has even reached the constitutional level.

Consumer Protection in Uzbekistan

Protection of consumer rights, protection of personal rights and freedoms of the individual, restoration of violated rights and, in this way, development of a sense of trust in the legislation and inviolability of citizens is an important legal process in developing countries. In 1985 the General Assembly of the United Nations unanimously adopted a set of eight consumer rights which underpinned their guidelines for consumer protection. The eight principles as defined by Consumers International (2009) are:

1. *Right to Safety;*
2. *Right to be Informed;*
3. *Right to Choose;*
4. *Right to be Heard;*
5. *Right to Satisfaction of Basic Needs;*
6. *Right to Redress;*
7. *Right to Consumer Education;*
8. *Right to Healthy & Sustainable Environment.*

As of today, a number of reforms are being carried out in the field of consumer rights protection in the Republic of Uzbekistan. In particular, the areas of application of consumer rights protection legislation are being further strengthened, competent state bodies are being established, punitive

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measures are being taken against those who committed violations, and, most importantly, consumer cultures are being upgraded. The main goal of these reforms is to ensure the mood of satisfaction, satisfaction from the way of life, and the power of the state in every citizen.

So, how are the rights of the workers of the Republic of Uzbekistan secured today?

According to the law of the Republic of Uzbekistan "On Consumer rights Protection" (adopted on 26 April 1996), consumers of the Republic have the following rights:

-get accurate and complete information about the goods (work, service), as well as about the manufacturer(performer, seller) ;

-free choice of a brand (work, Service) and its appropriate level of quality;

-be safe of goods (work, service);

-material damage caused by the wrongful act (inaction) of the producer (executor, seller), as well as the goods (work, service), which are dangerous defects for Life, Health, and property, the full compensation of moral damage;

-appeal to the court, other competent state bodies, asking for the protection of violated rights or interests protected by law;

-establishment of Public Associations of consumers[1].

For some groups of consumers included in the category of those in need of social protection, with the legislation, preferences and preferences can be established for trade, household services, and other types of services. The fact that these rights are defined within the framework of the law does not mean that they are fully secured. Consumer rights are protected on the basis of a certain legal mechanism. A number of reforms are being implemented in this direction, including the Federation of Consumer Protection Societies of Uzbekistan regularly conducts practical events. In addition, the Consumer Protection Agency under the Antimonopoly Committee was established[2]. The Agency develops and implements a unified state policy in the field of consumer protection and regulation of the advertising market. The Agency is granted such rights as protecting the rights and interests of consumers, applying to the court to take measures against persons who violated it. The agency can also carry out control purchases of goods and services at retail outlets and service points, organize their expertise.

In the direction of working with consumer problems, the agency has carried out the following effective work: over the past period, consumers have contacted the agency with 37,036 complaints about violations of their rights. 52 percent of appeals are for housing and communal services, transport services, 21 percent-for trade and catering, 14 percent -for communications, finance and social services, 13 percent -for advertising relations and other issues. 77% of the considered appeals were satisfied, 20% were provided with appropriate legal assistance, and 3% were sent to the competent authorities. During the consideration of appeals and conducted research, 9.6 million cases were considered, more than 184.9 billion US dollars have been restored and reimbursed. decisions have been made to compensate for damage in the amount of soums (in 2020, 21.4 thousand appeals were received, 4 million consumer rights were restored and investments in the amount of 54.7 billion US dollars were attracted). For 6 months of 2021, 15.6 thousand appeals were received, 5.7 million consumer rights were restored and 130.3 billion soums of losses were revealed).

As an example, we can cite the aspect on the basis of which consumer rights are protected. The consumer Protection Agency under the Antimonopoly Committee of the Republic of Uzbekistan was contacted by a consumer who was the victim of an unsuccessful operation in September 2021. In the summer of this year, the consumer decided to fix the nose with rhinoplasty, that is, plastic surgery. She turned to the doctor of the clinic of LLC "Beauty" about this. After surgery, a slope formed in the patient's nose. This led to an aesthetic deformity of the face. The patient repeatedly turns to the

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doctor who performed the plastic surgery with a request to return the money spent on this operation. When appeals do not bring results, she turns to the consumer protection agency. The letter to Beauty LLC was sent by the agency. According to the article 12 of the Law **"On Consumer rights Protection"** defined that: "the consumer's right to demand that the product (work, service) be safe". In it, the consumer has the right to indicate that the goods (work, service) purchased by him/her were produced or performed in compliance with sanitary and hygienic, including radiological, anti-epidemic requirements and other applicable norms and rules, and that his/her life, health, he/she has the right to demand that he/she be safe for the environment, and also guarantee that he will not damage his/her property[3]. Damage caused to the life, health or property of the consumer as a result of failure to ensure the safety of goods (work, services) is subject to compensation in accordance with Article 20 of this Law. As a result of the support of the Consumer Protection Agency, this issue was resolved in favor of the consumer, that is, more than 26 million soums were returned to the consumer. Separately, it should be noted that, in accordance with the legislation, damage caused to the life, health or property of the consumer is subject to compensation if it occurred during the service life (useful use) of the goods provided for by regulatory documents, and in the case when such a period is not established- within ten years from the date of manufacture of the goods (performance of works, acceptance of services). The seller (manufacturer, contractor) is released from liability if he proves that the damage was caused by force majeure or violation by the consumer of the established rules of use, storage or transportation.

Also, in another case, a consumer living in the city of Chirchik, Tashkent region, purchased a bedroom set for his newly renovated house for 13,000,000 soums in a store on the market. When delivering furniture to the house, it was found that the furniture has a number of defects, that is, the mechanism did not work, and also lost its aesthetic appearance due to the fact that one side deviated and had cracks. When the consumer contacted the seller about this, "they accused the furniture assembler of carelessly and incorrectly assembling the bedroom set, and denied other defects". The appeal was reviewed by employees of the territorial division of the Agency for Consumer Protection of the Tashkent region on the spot. Representatives of the store owned by LLC "Verona Lux", contacted and explained that in this situation the guarantees guaranteed by Article 13 of the Law are violated "On consumer rights protection" Consumer rights. The consumer's rights were restored within 5 days, and a sum of money in the amount of 13 million soums was returned by this store.

Summing up, we can say that in every situation where the consumer's rights are violated, it is necessary to protect his rights accordingly and compensate for the damage caused. In addition, if the consumer agrees and the product quality marks can be replaced with others, they should be replaced with others.

Consumer protection in the European Union

It is essential for the proper functioning of the single market in the European Union to establish adequate protection for market participants, with particular emphasis on the consumer, who is the most numerous market operator but is not organised. An effective consumer protection policy guarantees the proper and efficient functioning of the market and is part of a program to prevent economic crises [Law. S., *The Transformation of Consumer Law*…, p. 283]. It aims to protect consumers' rights vis-à-vis traders and to provide enhanced protection to vulnerable consumers. Adequate consumer protection rules can make markets fairer and the quality of competition may improve. It is part of a broader policy of protecting the consumer as the weaker economic party.

The primary objective of the regulation is not to favor the consumer, but to restore a balance in the information held by all market participants or to compensate for the lack of knowledge,

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experience, and information held by the consumer [Rösler H., *Protection of the Weaker Party*..., p. 729]. The EU contributes to the achievement of the consumer protection objectives by measures taken to approximate the provisions of the laws, regulations, and administrative provisions of the Member States of the European Union to complete the creation of the internal market. The purpose of implemented regulations is, through the achievement of a high level of consumer protection, to contribute to the proper functioning of the internal market by approximating certain aspects of the laws, regulations and administrative provisions of the Member States concerning contracts concluded between consumers and traders [Directive 2011/83/EU, Article 1].

Consumer protection focuses on several key areas. When analyzing legal regulations, the following areas of protection can be distinguished:

- provision of information allowing for proper assessment of the contract, mutual obligations of the parties and the manner of its performance, often referred to as protection by information.

- time to think about and rescind the contract without giving reasons and without suffering the consequences, especially if the contract is concluded in a place which is not the usual place for concluding contracts,

- the facilitation of redress by the consumer, the creation of a system of alternative, out-of-court dispute resolution bodies, shifting the burden of proof to the trader.

The provision of appropriate and comprehensible information to consumers is one of the most important safeguards for the protection of consumer rights [Ciacchi A. C., *Freedom of contract*..., p. 7]. The information should be sufficient to enable the average consumer to make an informed decision and to exercise that decision properly [Rutledge S. L., *Consumer Protection and Financial Literacy*..., p. 17]. Lack of information or misinformation is the cause of the so-called asymmetry of information. This leads to adverse selection and moral hazard, which means taking unfair advantage of one's information advantage to the detriment of the consumer.

Information addressed to consumers (including potential consumers) shall not be misleading. This is the case not only if the information is false, but also if it in any way, including overall presentation, deceives or is likely to deceive the average consumer, even if the information is factually correct, and in either case causes or is likely to cause him to take a transactional decision that he would not have taken otherwise [Directive 2005/29/EC, Article 6].

The information obligation is combined with the prohibition of unsolicited communications (commonly known as spam). Information relating to contracts on the market should therefore only be given with the consent of the consumer, who must have expressed interest in receiving it [Directive 2002/65, Article 10]. The consumer has the right to refuse such consent at any time.

The information provided to the consumer should indicate with whom he is entering into the contract, what the contract is about and what financial consequences it entails for him. Depending on the contract to be concluded, it should also refer to other elements, such as risks related to specific features of the contract, possible other costs (taxes or fees). An entrepreneur should also inform about the right of withdrawal (or the impossibility of withdrawal for some contracts) and the withdrawal procedure. The consumer should also be informed of the possibilities to assert his rights before judicial and extra-judicial authorities. The information provided to the consumer should, on the one hand, set out all the essential factors relevant to the conclusion and performance of the contract and, on the other hand, should not be excessive and should not create additional confusion for the consumer who would not be able to recognise its correct meaning due to its excessive length. It is especially important in the financial market, where agreements are often more complicated than in other markets and consumers are more susceptible to behavioral biases.

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The content of the information to be provided by the trader is determined by the various directives. However, the information should in any event be given clearly and legibly, in a language that the consumer understands. In the case of distance contracts, the information may be provided by means of voice telephony communications, but the consumer retains the right to receive the full information in writing [Directive 2002/65/EC, Article 3, Directive 93/13/EEC, Article 1].

The right of withdrawal is particularly important in the case of distance contracts. The way in which these contracts are concluded means that the consumer may enter into the contract impulsively, not based on rational considerations but based on a temporary emotion aroused in him by the seller [Lefevre A., Chapman M., *Behavioural economics and financial consumer protection*.., p. 27]. The legal regulations provide for a right to reflection, i.e. the possibility to withdraw from a contract without incurring costs and giving reasons, in the period immediately following the conclusion of the contract. This period is 14 calendar days but is extended to 30 calendar days for distance contracts concerning life insurance and private pensions. The exercise of the right of withdrawal must not have negative financial consequences for the consumer and the need to pay for the service must relate only to the service already provided. When the right of withdrawal does not apply because the consumer has expressly requested the performance of the contract, the supplier should inform the consumer of this fact. Similarly, the right of withdrawal from a consumer credit agreement is regulated, within 14 calendar days from the conclusion of the agreement or from the day on which the consumer was informed of his right [Directive 2008/48/EC, Article 14].

Legal regulations limit consumer liability in certain cases. In the case of card payments, the consumer may request the cancellation of the payment in case of unauthorised use of the payment card in connection with a distance contract and, in case of such unauthorised use of the card, for the amount paid to be rebooked or refunded. In addition, Directive 2015/2366 limits the liability of the payer (which is also the consumer) to EUR 50 if the damage resulted from the use of a lost or stolen payment instrument or the misappropriation of a payment instrument, and if the loss of the instrument is reported, its liability is waived [Directive 2015/2366 Article 74].

The legal regulations adopted by the European Union restrict the possibility of concluding a contract in the absence of an express will on the part of the consumer. Those regulations prohibit the supply of financial services to a consumer without a prior request on his part, where such supply includes a request for immediate or deferred payment. The consumer is not obliged to provide any service in case of unsolicited supply. They also accept that the consumer's failure to respond may not be treated as implied consent to the conclusion of the contract, except for the so-called tacit renewal of the contract where this is allowed under national law [Directive 2002/65, Article 9].

An important element in completing the internal market and ensuring an adequate level of consumer protection is the establishment of an accessible, quick, inexpensive, and efficient dispute resolution mechanism for disputes, especially those of a minor nature. Common jurisprudence, which in many Member States can be costly, lengthy and formal, is not capable of ensuring either effective legal protection or proper access to justice for individuals as required by the European Union. It does not always allow for the implementation of one of the principles of the European Union, introduced by the European Court of Justice's case law- the right to a valid remedy. The right to a court has a broad scope. It includes all kinds of measures, actions and procedures aimed at achieving substantive rights. This should encourage consumers to seek redress, even for minor issues. That is why many of the directives on consumer services pay close attention to the possibility of out-of-court settlement of consumer disputes (ADR- Alternative Dispute Resolution). This is particularly important for services, the complexity of which often requires in-depth knowledge of the legal provisions- like financial,

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medical services. In addition, some services are provided across borders, which may discourage consumers from asserting their rights because of the different language, legal systems and procedures.

The purpose of establishing ADR is to contribute to the smooth functioning of the internal market by ensuring that consumers can voluntarily submit complaints against the actions of traders to entities that offer independent, impartial, transparent, effective, rapid, and fair alternative dispute resolution. The institution of ADR is comprehensively regulated in Directive 2013/11/EU. The dispute resolution mechanism should be accessible and understandable to the consumer, especially in the case of cross-border services. The individuals responsible for the resolution should have the appropriate knowledge and background, as well as to conduct the proceedings impartially and objectively. Proceedings before ADR, despite their pro-consumer nature, are voluntary and the consumer may opt-out of them and ask for resolution by a common court. The out-of-court procedure to resolve consumer disputes should be characterised by independence, transparency, adversarial, efficiency, legality, freedom and representation.

Conclusions

Consumer protection is an important factor in ensuring the proper functioning of the market both in Uzbekistan and in the Member States of the European Union. Consumers, as the weaker market players, should be protected using a range of legal instruments. One of the most important obligations of traders is to provide consumers with adequate information to enable them to take a free and rational decision. The right of withdrawal should be provided for where goods or services have defects, as well as where the freedom of decision may have been affected in any way. It is also important to ensure an effective and efficient redress system.

We can see the growing importance of consumer protection both in the legal system of Uzbekistan and in the European Union. This should be welcomed, as it increases the competitiveness of the market and builds mutual trust among its participants. The legislator should constantly monitor the situation of consumers and adjust regulations to current economic conditions, especially with the development of new market sectors based on e-commerce and e-payments.

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THEORETICAL AND LEGAL ASPECTS OF ADMINISTRATIVE JUSTICE

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Abstract: *Administrative disputes arising in the relations of public administration between administrative body and the person are common in every state of the world. The administrative dispute resolution system is known as the "Administrative Justices" in theoretical and legal documents. However, the system of administrative justices has its own peculiarities in each country. Prompt, transparent and open implementation of the system serves to promote human rights in that country. Corruption that is rampant in some countries today can be prevented as a result of the perfect implementation of this system.*

Keywords: *administrative justices, administrative body, administrative dispute, individual, legal entity, the person concerned, administrative court, administrative procedures, public administration, complaint, administrative document, administrative process.*

I.INTRODUCTION

A state where human rights and interests are of high value must implement effective public administration for carrying out the high mission, set appropriate procedures and ensure compliance with these procedures. At the same time, the development of national economy and security in order to create decent living conditions for its citizens are also among the top priorities of public administration. Furthermore, the state forms a powerful management apparatus with enormous rights and powers for the successful implementation of its goals and objectives.

Thus, on the one hand, there is a public administration apparatus in the form of citizens united in a single territory and state on the basis of common goals and interests, and on the other hand, as public officials entrusted to them for the realization of these goals and interests. This creates a risk of further conflict of interest between the two parties, or in other words, the infringement of the rights and interests of the citizens by the misuse of their powers by the officials.

Legally speaking, there is a conflict between government officials and citizens. For the fair and prompt resolution of this dispute in accordance with the law, it is necessary to establish a special procedure for the resolution of disputes arising from public relations - effective implementation of the administrative justice system. In particular, the observance of laws and established procedures by officials in the course of public administration should be guaranteed by the effective establishment of the special procedure for dispute resolution in this area and the mechanism for the administration of justice.

II.LITERATURE REVIEW

A number of foreign and Uzbek scholars have done research on administrative justice. In particular, foreign scholars and practitioners Y.Starilov, Y. Pudelka, J. Deppe, M. Hartwig, J. Marku, E. Calcut, J. Vedel, N. Mamontov, D. Bahrax, E.Toller, E.Luparev, V.Radchenko, R.Difenbach,

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

M.Lesaj, B.Parmankulova, N.Salisheva, A.Solovyova, Y.Tikhomirov, N.Kuplevasky, N.Khamaneeva, Ch.A.Bashirov and others in their scientific works, they have prepared proposals on the scientific, theoretical and legal and practical bases of administrative justice, its organization, principles, procedure for pre-trial settlement of public disputes, and the specifics of the activity of judicial bodies in this area. Scientists from Uzbekistan L. Khvan, J. Nematov, E. Khodjiev, M. Akhmedov, G. Hakimov, A. Li, M. Doniyorov, U. Shokirov, I. Khammedov and others have also conducted various researches on administrative justice.

As for the concept of administrative justice directly, many foreign scientists have commented on this. In particular, "administrative justice means direct control over subjects of public law [1].

In addition, “administrative justice is a system of special judicial review and resolution of administrative and legal disputes arising from public administration relations between state bodies and officials, citizens and legal entities.” [2]

Administrative justice is aimed at annulment or invalidation of a certain legal fact [3].

Administrative justice is a system of judicial protection in the event of civil rights violations in public administration [4].

According to K.Belsky, administrative justice is a procedural relationship related to a special procedure for judicial review of citizens’ and officials' wrongful actions, as well as protection of civil rights by the repeal of an illegal management act[5].

According to G.Khakimov administrative justice is a system of special judicial review and resolution of administrative and legal disputes arising from public administration relations between state bodies and officials, citizens and legal entities. According to M. Adler, administrative justice is a system that ensures the correct decision-making by administrative bodies and promotes justice [6].

In our point of view, administrative justice is a mechanism of administrative and judicial resolution of administrative and legal disputes arising from the relations of public administration between state bodies and officials, citizens and legal entities. From the definitions given above, it should be noted that there is no single definition of administrative justice. However, it can be seen that these definitions have something in common. In particular, its common feature is that it is a dispute resolution mechanism. At this point, it is appropriate to dwell on the concept of administrative dispute and its peculiarities.

Administrative and legal disputes are a legal dispute arising on the fact of violation of subjective mass rights of individuals and legal entities between state bodies, local authorities, officials, on the other hand [7]. According to N.V.Sukhareva, administrative-legal dispute is an expression of dissatisfaction of one of the participants of a particular administrative relationship with the legal fact that caused the formation, change or termination of administrative legal relations. Administrative and legal disputes are disputes concerning the rights and obligations of the subjects of administrative law and they differ from other legal disputes in their content [8].

Summing up the points given above, we can say that administrative and legal disputes are the contradictions and conflicts arising from the rights and obligations of the participants of administrative legal relationship. These conflicts arise on the one hand between government bodies, their officials, and citizens on the other. In this regard, administrative and legal disputes are different from other types of legal disputes.

So, the subject of administrative justice is the administrative and legal relations arising as a result of citizens complaints on the government bodies and officials unlawful actions and decisions of to the courts. Administrative and legal character of disputes arising from the present administrative-legal relationship is defined by:

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

- this type of disputes arise in connection with the performance of public administration functions by state bodies;
- administrative disputes arise as a result of adoption of legal and administrative decisions in the framework of administrative and legal relations and discontent with the other party.

From the rules given above we can say that there are two types of disputes that make up the subject of administrative justice:

Firstly, administrative and legal disputes arising from the actions (inactions) of state bodies and officials violating the rights and freedoms of citizens;

Secondly, disputes arising as a result of the adoption of decrees by government agencies and officials that violate citizens rights and freedoms.

As we can see that controversial administrative and legal relations, which are the subject of administrative justice, arise between state bodies, officials and citizens. Also, these conflicts arise as a result of making decrees or taking actions based on the main task enshrined in the regulations governing the activities of public administration bodies and functions. In particular, the following are the main factors that cause conflict between them and citizens as a result actions (inaction) and decisions of public administration bodies and the officials:

Firstly, as a result of the unlawful actions (inaction) or inadmissible decisions taken by public administration bodies and officials;

Secondly, as a result of citizens' resistance, non-participation in actions (inactions) or decisions taken by public administration bodies or officials.

In the first case, a public administration body or official may, within the limits of its authority, perform certain actions in an unlawful manner or refrain from taking any action that is required by law. In other words, a public administration bodies or officials go beyond its authority or perform its functions against the interests of the individual and society-state, make decrees. This causes to discontent among citizens and leads to the emergence of administrative-legal dispute, which is the subject of administrative justice.

In the second case, actions and decisions taken by a public administration body or official may not be illegal. But, the actions carried out, the inaction prevented happening, the decision made cause dissatisfaction and nonparticipation in the citizen who is a party to the administrative-legal relationship. A citizen considers his rights and legitimate interests violated as a result of an action or decree made and applies to the court to restore his rights.

Another issue regarding the scientific theoretical basis of the concept of administrative justice is whether or not the concept of administrative justice is part of administrative law. A number of issues have been reported in the scientific sources. It is important to emphasize the need for reform in administrative law and administrative justice should also be included today as a subject of administrative law. This can be justified as follows:

Firstly, the subject of administrative law is the management relationship, that is, the activities of executive authorities. One of the main principles of the organization and functioning of the executive power is the observance of the rights and freedoms of citizens, ensuring their supremacy.

Secondly, citizens are considered as one of the main subjects of administrative law, that is, they have a specific legal status in the organization and functioning of executive power. Citizens have the right to participate in public administration; the right of every person to access the courts on illegal actions of state bodies and officials and their management acts is guaranteed by the State. So, judicial control over the activities of state bodies is of great importance.

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

Thirdly, one of the important institutes of administrative law is public service. The rights and interests of citizens can be harmed by actions and decisions of civil servants, officials in the exercise of their powers.

Fourthly, one of the main legal forms of public administration is the adoption of administrative acts. The administrative justice also maintains control over the legality of public administration acts.

Fifthly, the government by its bodies and officials imposes administrative penalties on individuals and legal entities. Administrative justice is the sole judicial protection in the event of improper application of administrative coercive measures by state bodies and officials.

Sixthly, the administrative justice is inextricably linked to the institution of administrative law, such as the administrative process.

III.DISCUSSION AND ANALYSIS

Today the legal framework for the administrative justice system in the Republic of Uzbekistan has been established. However, there are some problems with the mechanism of its implementation. This can be attributed to: Firstly, the legislation regulating public relations is not sufficiently regulated and there are drawbacks in their application. This is causing to have an increase in the number of administrative disputes. In particular, there are significant problems with the practical implementation of the Law of the Republic of Uzbekistan "On Administrative Procedures" accepted on January 8, 2018[9]. While administrative procedures and administrative justice are interconnected, they require each other. In this regard, J.Nematov said: "Administrative procedure refers primarily to pre-administrative procedures. Procedures after administrative decisions passed are subject to the administrative complaint examined in the administrative justice"[10]. It is known that administrative disputes arise as a result of misappropriation or misinterpretation of relevant legislation on administrative procedures. This causes the complaint mechanism to run. One of the important factors for reducing the number of administrative disputes is the regulation and comprehensive application of the legislation on public administration, which regulates the relations between the administrative body and the person concerned. Preventing administrative disputes cannot be solved only by the regulation of law on administrative procedures. In administrative proceedings administrative bodies are obliged to refer to the norms of administrative law. In this case, it is important to make decrees which do not create administrative conflicts and take actions (inactions). In this regard, it is important that the administrative body adhere to the principles of administrative procedures.

German scientist Y.Tsiko noted that the principles of administrative procedures should be used simply, expediently and fast[11]. When the concepts of "simple" and "expedient" are highlighted, we can understand:

Firstly, when making administrative documents it should be based on clear facts;

Secondly, there is no need to prove the evidence which is not related to the case;

Thirdly, the evidences justified in a written form do not have to be directly resolved in the presence of a citizen. The prompt application of the principles of administrative procedures means that it is necessary to implement it without wasting time.

K.Davidov emphasizes the following features of administrative procedures: the principles of administrative procedures are directly applied; the principles of administrative procedures are universal; the principles of administrative procedures are open; the principles of administrative procedures have the hierarchical character[12].

According to Lars Broker, the principles of administrative procedures have two objectives: - protecting the rights of the person concerned; - the decree taken by the administrative body should reflect the legitimacy of democracy[13].

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

One of the important principles is the principle of justice, and the origin of this principle goes back to the Anglo-Saxon legal system. As is well known, in the Roman-German legal system, are acted by written legislation. This may undermine the importance of the principle.

In other words, the clearly defined rules in the legislation determine the appropriate procedure. But the principle of justice can be applied when an analogue of the law arises[14]. The principle of proportionality holds a special place among the principles of administrative procedures. Moshe Cohen-Elia states that this principle has two features:

Firstly, the action taken by the administrative body must be commensurate with the attainable goal;

Secondly, the losses inflicted to an individual as a result of administrative procedures should be commensurate with the state's profits[15].

The administrative dispute arisen as a result of the failure to apply the principles of administrative procedures can be illustrated by the following practical example. Preventing administrative disputes is related to the regulation of legislation in the field of public administration. Secondly, there are factors that may adversely affect the resolution of administrative disputes in court. It is known that administrative courts, by their legal nature, consider two different categories of cases:

Administrative disputes on complaints and appeals against actions (decrees) of state bodies, citizens self-government bodies and their officials stemming from public relations - that is, initiator of the discussion - individuals and legal entities protecting their rights and interests;

In foreign countries, administrative disputes are handled by special administrative courts or general courts of law. For example, the contents of the provisions of Article 40 of the German Administrative Process Code, the jurisdictions of the German administrative courts constitute "mass legal disputes".

The French form of administrative justice is considered as the oldest administrative system. Consequently, France is the first country to introduce the practice of special bodies for the resolution of administrative and legal disputes.“In the system of judicial bodies of the French quasi of administrative justice, disputes are carried out by highly administrative-bureaucratic methods (the work is carried out in writing and in closed form)”. There are two types of courts in France: courts of general jurisdiction and administrative courts. The presence of administrative courts in the country does not exclude the general courts control over the administration, that is the general courts, together with the administrative courts, can also control the activities of government bodies.

Administrative-legal disputes in general courts are resolved on the basis of civil-procedural norms. Regarding the regulatory legal document on the legal regulation of administrative courts, the main legal document is the Code of Administrative Justice. This Code is a document aimed at regulating the activity of administrative courts. Article 1 of this Code sets out its objectives: This code has been adopted for administrative courts, administrative tribunals and the State Council. These institutions are the basis of the administrative courts in France, and the main administrative processes are carried out by these bodies. The first 10 articles of the Code are general provisions, including the followings. In Article 2, enforcement of judgments on behalf of the French people; In Article 6, holding negotiations in open court; Articles 8 and 9 specify that the judges negotiations are confidential.

According to this Code, “the State Council is the supreme body of administrative courts”[16]. The cases considered in the appellate instance are considered again and as a last instance. Different administrative courts and administrative tribunals address this body as a court of first instance or appellate instance. In our opinion based on the experience of foreign countries and with the opinion of many scholars, in administrative courts, it is important to consider only public-legal disputes.

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

IV.CONCLUSION

The followings are some of the key areas for the development of administrative justice law to address some of the problems described in the previous sections of the study:

First of all, it is important to improve the legislation aimed at regulating the relations of the public administration. The administrative justice system arises directly in the implementation of legislation on public administration. In this regard, it is important to implement the tasks outlined in the Concept of Administrative Reform of the Republic of Uzbekistan. Today, several legislative acts envisaged in the concept have not yet been adopted. For example, "On basics of public administration", "On public service", "On local public authorities" in the new edition and other legislation can be as examples for this. In our point of view, the adoption of these laws should not be delayed.

Secondly, it is necessary to address the problems that hinder the system of the resolution of administrative disputes and to develop legislation in the field. As noted in previous sections of the study, one of the obstacles to a qualitative review of administrative disputes in administrative courts is the handling of administrative offenses also by these courts.

It is important to pay special attention that every judge cannot have perfect knowledge and experience in all areas (pension, finance, labor, healthcare, etc.). If we look at the experience of advanced foreign countries, In France where the administrative justice system was the first to be established, there are also specialized structures such as the Court of Accounts, the Central Commission for Social Assistance, the Commission for Refugee Appeals and the Court on Economic and Disciplinary Disciplines as well as administrative tribunals and appellate administrative courts, which are administrative courts. Similarly, also in the Federal Republic of Germany, courts on money, labor, and social issues and general administrative courts operate together at the same time. Appointment of arbitrators of such tribunals is made by the Minister of the respective branch in consultation with the Committee on the Selection of Judges. In the U.S.A and the United Kingdom, administrative bodies have been established as quasi-judicial bodies with narrow specialties (on environment, land, pension, tax, etc.). For example, US quasi-judicial bodies include Federal Tribunal for International Trade, Federal Tax Tribunal, Securities Commission and Agents on Environment while in the U.K these include the Court of Railways, the Land Tribunal, and the Pension Court[17]. Another peculiarity is that in these countries competent officials on the field of public-legal disputes can be chosen not only from lawyers but also from representatives of other fields (healthcare, labor and so on). This specialization of the courts, in turn, plays an important role in the fair and proper resolution of cases by professional experts in the field.

Based on the given above, it is desirable to conduct specialization within the administrative courts in the relevant areas (economic, social, etc.). If necessary, it is appropriate to terminate the district administrative courts in order to further improve the quality of cases, the professional skill of judges and reduce the time for consideration of the cases and prevent additional costs while to specialize only by expanding the number of the staff of the regional administrative courts and the judges.

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THE INVESTIGATION OF SYNTACTICAL EXPRESSIVE MEANS AND STYLISTIC DEVICES IN MODERN ENGLISH AND UZBEK

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Abstract: *This article deals with the study of stylistic syntax which is one of the vital issue in text analysis. It discusses about syntactical expressive means and stylistic devices in Modern English and Uzbek.*

Keywords: *reduction, violation, syntax, ellipsis, rhetorical question, enumeration.*

The study of the texts in terms of their syntactical organization is regarded as one of the crucial issues in stylistic analysis, though the peculiarities of syntactical arrangement are not so conspicuous as the lexical and phraseological ones.[1]

Stylistic syntax deals with specific patterns of syntactic usage, i.e. syntactical expressive means (EM) and stylistic devices (SD). In stylistic syntax, EM are recognized by less rule-bound modeling of sentences. All the deviations from the stylistically unmarked sentence pattern (S - P - 0 - D) are treated as its transforms that may acquire stylistic connotations, in which cases they are regarded as EM, The transformation of the pattern in question into negative and interrogative sentences rarely leads to any stylistic changes. Other transformations might create stylistically marked sentence patterns.

According to the type of transformation of the neutral syntactical pattern, all EM in English fall into three groups:

1. EM based on the **reduction** of the syntactical pattern that results from the deliberate omission of some (s) of obligatory elementthe sentence structure. This group includes ellipsis, aposiopesis, nominative sentences, and asyndeton.
2. EM based on the **redundancy** of the syntactical pattern that results from the addition of some sentence elements or their deliberate repetition. To this group we refer repetition, enumeration, syntactic tautology, polysyndeton, emphatic constructions, parenthetical clauses or sentences.
3. EM based on the **violation** of the grammatically fixed word order within a sentence or a deliberate isolation of some parts of the sentence. Here belong stylistic inversion, syntactical split, and detachment.

The stylistic effect in syntax may be created not only due to the intrasentential relations (those

[1] (Методичні вказівки до семінарських та практичних занять зі стилістики англійської мови для студентів IV курсу. (Видання 2) . Уклад. Воробйова О.П., Бойцан Л.Ф., Ганецька Л.В. та інш. - К.: Вид.центр КНЛУ, 2001. - С. 22-28.)

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between the olornents of a sentence), but also due to the intersentential (i.e. the relations between several sentences) relations within paragraphs and other supraphrasal unities.

The stylistic effect in supersyntax may be achieved by the use of SD, i.e. stylistically marked means and patterns of combination of sentences within a larger context. SD may also be created due to the transposition of the syntactical meaning of a sentence in context. In this case a sentence acquires an additional meaning which is not typical of the corresponding syntactical structure.

Thus, taking into account the character of the relations between syntactical structures, possible transpositions of meanings in a context, and the means and types of connection within a sentence, we distinguish the following groups of syntactical SD:

1. SD based on the peculiar formal and semantic interaction of syntactical constructions within a sentential or suprasentential context: parallelism, chiasmus, anaphora, epiphora.
2. SD based on the transposition of the syntactical meaning in context: rhetorical questions.
3. SD based on the transformation of the types and means of connection within or between sentences: parcellation, subordination instead of coordination, and coordination instead of subordination.

Ellipsisthe omission from a syntactical construction of one or more words which might be clearly understood from context. Elliptical sentences are regularly employed in conversational English. Being used in fiction, they result in achieving some stylistic effect by:

1) giving, speech characteristics, e.g. *Not him, sir. Too pleased with himself. Some gentlemen can't act... Too stiff* (A. Christie);

2) emphasizing some fact(s), e.g. *The robbery. Long Ago. Very valuable emeralds... The lady's made and the tweeny* (A. Christie);

3) imitating spontaneity, e.g. *"Quick - in here," Poirot led the way into the nearest room..."And you - behind the curtain"* (A. Christie).

Aposiopesis is a break in speech, while the thought is not completed, which is caused by the speaker's inability or unwillingness to finish the utterance, e.g. *"Are you - are you and Paul...? " she stopped, squeezing my arm* (D. Hammett); *"It can be - you don't mean.."* (A. Christie).

Nominative sentences are one-member sentences with a noun, a prepositional noun-phrase, or an adverb. These verbless sentences are grammatically independent. In contrast with elliptical sentences, they have only one principal part, with or without words modifying it. Nominative sentences may produce the effect of:

1) increasing the dynamism of narration, e.g. *A remarkable woman - a dangerous woman. No waiting - no preparation. This afternoon - this very afternoon - with him here as witness...* (A. Christie);
2) acquainting the reader with the place or background of action, e.g. *Three blocks more... Another three blocks.* (D. Hammett).

Asyndeton is a deliberate avoidance of conjunctions used to connect sentences, clauses, or words. As far as its stylistic role is concerned, asyndeton creates a certain rhythmical arrangement, usually making the narrative measured, energetic, and tense, e.g. *That's all I'm to do, all I want to do* (D. Hammett);

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

Tree and hall rose peaceful under the night sky and dear full orb; pearly paleness gilded the building; mellow brown gloom bosomed it round; shadows of deep green brooded above its oak-wreathed roof (Ch. Bronte).

Repetition is a reiteration of the same word or phrase to lay an emphatic stress on certain parts of the sentence.
Various types of repetition can be found in fiction:

1) ordinary repetition, i.e. a repetition of a word in close succession, e.g. *She talked, in fact, and talked, and talked* (A. Berkley);
Ko'zlaridan yosh dumalayverdi, dumalayverdi.(S.A.)
Bog'lar, bu bo'stonlar, Vatan va davlat, Barisi sizniki, bari sizniki. (G'.G')
2) framing or ring repetition, i.e. a repetition in which the opening word or phrase is repeated at the end of the sentence or a group of sentences, e.g. *I cooledoff where Frank was concerned; he didn't notice, but I cooled off* (V. Pritchett);

3) anadiplosis, or catch repetition, i.e. a repetition of the last word in a sentence or clause at the beginning of the next one, e.g. *Yes, but I was afraid, afraid I'dgo to one who'd tell Paul. I didn't know who to go to, who I could trust* (D. Hammett);

4) chain repetition, i.e. a combination of catch repetitions, e.g. *A smile would come into Mr.Pickwick's face. The smile extended into laugh; the laugh into roar, the roar became general* (Ch. Dickens).
Enumerationis a repetition of homogeneous parts of the sentence, aimed at emphasizing the whole utterance, e.g. *I found butlers, secondmen,chauffeurs, COOKS, maids, upstairs girls, downstairs girls, and a raft of miscellaneous flunkies - he had enough servants to run a hotel* (D. Hammett).
Syntactical tautologyis a superfluous repetition of semantically identical words or phrases to lay stress on a certain part of the sentence e.g. *She's alwaysone for a change, Gladdie is...* (A. Christie).
Polysyndetonis a repetition of conjunctions in close succession which are used to connect sentences, clauses, or words and make the utterance more rhythmical, e.g. She had herself a rich ruby look, for what with eating and drinking, and shouting and laughing and singing her face was crimson and almost steaming (J. Priestley).

Emphatic constructions may intensity or contrast any part of the sentence, giving it an emotive charge. The emphatic construction with 'do' is used as a predicate intensifier. The construction "*it is smb/smth who/that*" intensifies the subject; the construction "*it is then that*" stresses the adverbial modifier of time; "*it is by/with/through smth that*" makes prominent the adverbial modifier of manner. "*It is to that/smth there that*" brings to the foreground the object of the sentence, e.g. *That evening it was Dave, who read to the boys their bed-time story* (D.Carter); *It was then that Poirot received a brief note from Sady Willard* (A. Christie); *I do know it!* (D. Hammett).
Parenthetical clauses are sentences or phrases inserted into a syntactical structure without being grammatically connected with it. The functions of parenthesis are those of exemplification, deliberation, or reference. Parenthetical clauses may produce various stylistic effects:
1) creating two layers of the narrative, e.g. *He tried to shake Wynant down by threat-ening to shoot him, bomb his house. Kidnap his children, cut his wife's throat - I don't know what all - if he didn't come across* (D. Hammett);

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2) emphasizing this or that fact, e.g. *He laughed - not loud but in complete delight - and stood up exclaiming: "Judith herself!"* (D. Hammett);

3) exemplifying certain points, e.g. *The dog – a shapeless monster in the night-buried itself at the other side of the gate and barked terrifically* (D. Hammett).

Inversionis the violation of the fixed word order within an English sentence. There are two major kinds of inversion:

1. that one which results in the change of the grammatical meaning of a syntactic struc-ture, i.e. grammatical inversion (exclamatory and interrogative sentences), and
2. that one which results in adding to a sentence an emotive and emphatic colouring, i.e. stylistic inversion, e.g. And the palm-trees I like them not (A. Christie).

Inversion may be of two types:

1) complete, i.e. comprising the principal parts of the sentence, e.g. *From behind me came Andrews voice* (S. Chaplin);

2) partial, i.e. influencing the secondary parts of the sentence, e.g. *Straight into the arms of the police they will go* (A. Christie).

Separation, or syntactical split, is the splitting of a noun phrase by the attribute adjunct which is removed from the word it modifies. Stylistically, syntactical split is used to emphasize the phrase which was separated, e.g. *He had never seen the truth before, about anything* (R. Warren).

Detachment is a separation of a secondary part of the sentence with the aim of emphasizing it, e.g. *Formidable and ponderous, counsel for the defence arose* (A. Christie).

Detachment is to be regarded as a special kind of inversion, when some parts of the sentence are syntactically separated from its other members with which they are grammatically and logically connected.

Parallelism is a repetition in close succession of the constructions formed by a similar syntactical pattern. Like inversion, parallelism may be complete and partial. Complete parallelism is observed when the syntactical pattern of the sentence that follows is completely similar to the proceeding one, e.g. *He door-bell didn't ring. His telephone-bell didn't ring* (D. Hammett).

Parallelism[2] is considered to be partial when either the beginning or the end of several neighbouring sentences are structurally similar, e.g. *I want to see theGorgensons together at home, I want to see Macawlay and I want to see Studsy Burke* (D. Hammett).

Chiasmus (reversed parallelism) is a kind of parallelism where the word order of the sentence or clause that follows becomes inverted, e.g. *He sat andwatched me, I sat and watched him* (D. Hammett).

The main stylistic function of chiasmus is to emphasize this or that part of the utterance, to break the rhythm and monotony of parallelism, e.g. Guild waited for me to say something, I waited for him (D. Hammett).

[2]Стилистика английского языка/ А.Н.Мороховский, О.П.Воробьева, Н.И.Лихошерсг, З.В.Тимошенко. - К.: Вища школа, 1991

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Anaphora is a repetition of words or phrases at the beginning of successive clauses or sentences, e.g. *Ergo, she didn't: Ergo, there never was such a bet.Ergo, Beresford was lying. Ergo, Beresford wanted to get hold of those chocolates for some reason other than he stated* (A. Berkley).

Inson tafakkuriga, inson jasoratiga, bugun yana ta'zimla, tashakkur deydi olam! (Z.D.) Anaphora contributes greatly to creating a certain rhythm of the narrative.

Epiphora is the repetition of the final words or word-groups in succeeding sentences or clauses, e.g. *I come to you on the level. Studsy says you are on thelevel. Be on the level* (D. Hammett).

Laylak kelar, yoz bo'lur, qanoti qog'oz bo'lur,
a'lochi o'quvchi qizning, ahloqi ham soz bo'lur. (G'G.)

Rhetorical questionsare negative or affirmative statements rather than questions, possible answers being implied by the question itself, e.g. *Is the day ofthe supernatural over?* (A. Christie).

Rhetorical questions can often be found in modern fiction in the descriptions of the character's inner state, his/her meditations and reflections, e.g. *And then,like a douche of cold water, came the horrible thought, was she right?* (A. Christie).

Qaysi ota o'z farzandini sevmaydi? (Sh.R)[3]

Nastarin shohida sayragan bulbul, nahotki ko'zingga begona bo'lsa (G'.G'.)

As we have seen that we have just studied the stylistic syntax and we have compared syntactical expressive means and stylistic devices in English and Uzbek with examples.

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The biological effectiveness of the drug Entobronate 12% s.p. as a dressing agent for cotton seeds against gommosis on cotton crops in the conditions of the Andijan region

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Abstract: *Under the influence of variable temperatures, the survival of bacteria decreases, and sharp fluctuations in temperature. At high environmental humidity, they cause their death not only in a pure culture, but also in the tissues of the remains of a diseased plant. Therefore, depending on the climatic features of winter in different cotton-growing regions, the role of infected plant residues in the overwintering of the pathogen may be different.*

Key words: *Dalbron 12% standard, Entobronate 12% s.p, Andijan - 35, growth and development, gommosis, yield.*

The rapid multiplication of bacteria and their spread in the intercellular spaces lead to the death of the cells of the affected tissue. Within the affected area, the tissue turns into a mucous gum containing bacteria. Pre-sowing treatment of seeds was carried out by repeated batchwise application of a suspension of the drug to the seeds and shoveling the layer. Seed dressing was carried out 1 month before sowing at the rate of 25 liters of working fluid per 1 ton of seeded seeds and 15 liters per ton of bare seeds. The experiments were carried out on the Andijan-35 variety.

Field studies have established that the 12% cotton seed disinfectant entobronat with doses was obtained in 1 variant, the remaining variant seedlings were observed at 64.9-72.5 percent. Pay attention to this data that the positive aspects of the new drug showed that its activity is stronger than the drug of the reference variant. It should be especially noted that the energy of their germination did not have a negative effect on the germination of seeds. This performance was always higher than the control variant without treatment. According to the data of phenological observations on the variants of the experiment, they indicate that in the experimental variants, the plant height of the 3rd variant is higher by 10.2 cm compared to the control variant.

According to the formation and accumulation of the fetus elements 1.9 pieces more than from the control. According to a set of boxes 5.5 pcs. more. During the observation and accounting showed that among the seedlings of cotton, obtained from treated seeds, the number of plants with gommosis on the 25th day after emergence in the control variant was 9.7%. In the variant at a dose of 7g/t 1.6%. In the reference variant, where the preparation Dalbron 12%

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was used, the susceptibility to gommosis was 1.7%; the biological effectiveness in all variants for the first 15 days was 100%.

The average yield values for repetitions were as follows: at a dose of 6 kg/t 36.4 c/ha. In the variant at a dose of 7 kg/t 37.2 kg/ha. In the reference variant, where the drug dalbron 12% p. was used, the yield was 35.6 q/ha. As a result, in the reference variant, 3.9 q/ha was obtained, in the variants with consumption rates of 6 and 7 kg/t, 44.7 and 5.5 q/ha of additional yield, respectively, relative to the control variant. In the control variant, the average yield for repetitions was 31.7 q/ha.

At the present stage of development of agricultural production in the Republic of Uzbekistan, improving the quality and productivity of agricultural crops, including cotton fiber, is a very important task.

However, cotton, like many crops, is susceptible to many diseases, the most dangerous of which are gommosis. Several methods of control are used against them.

But it should be noted that the most effective is the chemical method. In order to minimize the negative consequences of it, a competent approach is needed. One way to solve this problem is to select the most effective, less toxic, and fast acting drugs.

In the conditions of the Andijan region, gummosis does not appear too often, but is considered one of the most harmful diseases.

Under the influence of variable temperatures, the survival of bacteria decreases, and sharp fluctuations in temperature. At high humidity of the environment, they cause their death not only in pure culture, but also in the tissues of the remains of a diseased plant. Therefore, depending on the climatic features of winter in different cotton-growing areas, the role of infected plant residues in the overwintering of the pathogen may be different.

The spread of the causative agent of gommosis from plant to plant is usually carried out with the help of wind, which carries bacterial dust from small fragments of the affected plant tissue and pieces of hardened gum, where the bacteria are in a state of anabiosis. With precipitation or heavy dew, bacteria quickly become active. They enter the plant through the stomata into the substomatal air cavity. The rapid multiplication of bacteria and their spread in the intercellular spaces lead to the death of the cells of the affected tissue. Within the affected area, the tissue turns into a mucous gum containing bacteria. Speaking on the surface of gommous spots, the gum dries up and becomes a source of infection.

Less manifestation of gommosis is observed on early sowings than on late ones, which is explained by the difference in temperature and sowing of unnoticed seeds [1], further indicating that X.campestrispv malvacearum is a highly specialized parasite. It only infects cotton and has not been found on other plants[2]. That bacteria can enter the plant through damaged hairs, as well as through mechanical damage. Within a single plant, gommose lesions can be localized. Sometimes bacteria move along xylem vessels and then plants are affected diffusely, which often explains their penetration into seeds [3] .

Sometimes bacteria move through the vessels, and then diffuse damage to plants occurs, which often explains the penetration of infection into seeds [4].

Studied preparations Entobronat 12% w.p. carried out in a production environment using mechanized equipment.

The experiments were carried out on cotton crops of the educational farm of the State Unitary Enterprise "INFORMATION AND CONSULTATION CENTER (EXTESION Center)" at the Andijan Institute of Agriculture and Agrotechnologies.

Pre-sowing treatment of seeds was carried out by repeated portionwise application of the suspension of the preparation to the seeds and shoveling the layer. Seed dressing was carried out 1

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month before sowing at the rate of 25 liters of working fluid per 1 ton of seeded seeds and 15 liters per ton of bare seeds. The experiments were carried out on the Andijan-35 variety.

Table 1

Experience

№	Experience options	Disease	Consumption rate. Prepar. kg/ton
1	Control without processing	Gommoz	-
2	Dalbron12%p standard		7,0
3	Entobronat12%s.p		7,0
4	Entobronat12%d.p.		6,0

The size of the plots was 1 ha for each variant of the experiment in triplicate. Field studies have established that the 12% cotton seed disinfectant entobronate with doses received 1 variant, the remaining variant seedlings were observed 64.9-72.5 percent. Pay attention to this data that the positive aspects of the new drug showed that its activity is stronger than the drug of the reference variant. It should be especially noted that the energy of their germination did not have a negative effect on the germination of seeds. This performance was always higher than the control variant without treatment.

According to the data of phenological observations on the variants of the experiment, they indicate that in the experimental variants, the plant height of the 3rd variant is higher by 10.2 cm compared to the control variant.

According to the formation and accumulation of the fetus elements 1.9 pieces more than from the control. According to a set of boxes 5.5 pcs. more. When carrying out observations and records, it was shown that among the seedlings of cotton obtained from treated seeds, the number of plants with gum disease on the 25th day after emergence in the control variant was 9.7%. In the variant at a dose of 7g/t 1.6%. In the reference version, where the drug was used.

Conclusions

1. Field studies have established that the cotton seed disinfectant Entoborate 12% d.p., at doses of 6 and 7 kg/t, has a positive effect on the germination and development of the crop.

2. In variants where the drug Entobronat 12% s was used. in doses of 6-7 kg / t, the maximum biological efficiency was 81.4% and 83.5%, respectively. In the reference variant, where Dalbron 12% was used, the maximum biological efficiency was 82.4%.

3. In the course of experiments in the reference variant, 3.9 c/ha of additional yield was obtained. In the variants with consumption rates of 6 and 7 kg/t, 44.7 and 5.5 centners/ha of additional yield were obtained, respectively.

Concerning the control variant. In the control variant, the average yield per repetition was 31.7 c/ha.

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THE INVESTIGATION OF TOPONYMY AND BASIC CONCEPTS OF SCIENTIFIC GEOGRAPHICAL TERMINOLOGY

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Abstract: *This article studies the science of toponomy and the basic conceps of terminology. It deals with the problems of scientific geographical terminology.*

Key words: *toponomy, geographical features, onomastics, location.*

Toponymy, urban, toponym, ethnonym, hydronym, oronym, geographical objects - continental ocean, sea, bay, plain, mountain, city, village, country, region and other objects on the globe names are famous names, which are studied by the science of toponymy. In fact geographical objects have a specific meaning and their location which is specific feature as a word derived from a specific vernacular or a specific historical context or named in connection with reality. Geographical features of the globe the object of study of toponymy as a science. On geographical maps and toponyms of famous names of local objects not reflected in maps object of study.

The origin of names is their analysis and the subject of science. Toponymy depends on geographical terminology - terminology and lexicography formation of research and ideas in the field of Earth physics, directly related to the history of the development of astronomy, history, and the exact philosophical sciences.

Laws which are often different from any other science, uses phrases or individual terms. For example, a zone in geography. The climate of the region is similar to meteorology, atmosphere, landscape and geographical crust the terms represent a specific process event, law and concept. These are scientific terms or terms of geography, their meaning and knowing the content is a scientific terminology. Scientific terms sometimes can become a term in the name of famous equestrian geographical objects.

Each science has its own set of words, terms and phrases which describe specific concepts, rules and laws. A separate branch of toponymy is a basic concept which expresses its concepts and key words. There are words and terms.

The toponym is derived from the Latin tpos-place, ground, noma-name, noun, place name, geographical name - a well-known proper names which indicates the unique name of geographical object. A toponym is a collection of place names in a specific area.

Toponymy is the study of place names by the names of geographical objects which is a field of science. Anthroponym is a well-known name of any person, the nickname of their names. Geographical names can be derived from anthroponyms. The sea-desert mountain range is named after people and other geographical objects that are called potronyms. Examples of patronymics are

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the Barents Sea, the Bering, the Bafort, the Tasmanian Sea, Bolivia, Colombia, Washington, Delhi, Ho Chi Minh City and the Straits of Laperuza, Bering, Cook, Devisov and Torres.

Tribes and clans are generally called elats that geographical objects are called ethnonyms. A place formed from ethnonyms names will be ethnotoponyms. Such names of people in historical periods where they lived and interacted. In Central Asia, these names are ethno-toponyms derived from the names of indigenous people, most of which are Utah in the United States, Dakota Oregon in Michigan, and dozens of other states. (Russia, Turkey, England, Germany, Turkmenistan, Kyrgyzstan and others)The hydronymic watershed is a sea, a river, a lake, a stream, a spring, a ditch anhor, famous proper names of reservoirs. Local geographical terms is a word that describes the nature of a geographical object (Terakli, Beshqayragach, Karatag, etc.).

Normally local geographical terms are active in the formation of geographical names will participate. Qoshtegirmon village, Yangiarik district and others. Oronim - famous proper names of the terrain, mountains, ravines, valleys, swamps, mountains, hill names. Toponymic strategy means the layers of toponyms that are linguistically different at different ages. This expression in the context of stratification is derived from the science of geology, which helps to determine the meaning of a geographical name from the oldest to the upper strata used today through the placement of words in the lower middle and upper strata.

The semantics of a toponym is the lexical meaning of a geographical name. Kalka - (French version) is a full or partial translation of geographical names from other languages into Uzbek. Thus, Great, Salt, Lucky - a large salt lake New Zealand English beloe mori white sea, Novaya Zemliya - New Earth Island. The literal meaning of the translated word is kalka, which is pronounced in two different languages. Qizilsuv, Surkhob, Qorasuv-Siyahab, A toponymic formant is a suffix that is involved in the formation of geographical names and is not used as an independent geographical name. For example, Margiyona, Sogdiana, Uzbekistan, Yona, Stan which are considered as a topoformat, the Sogdian people of the Marg meadows serve as the basis for the Uzbek people. The base (topoasos) is the stem left after the suffix of the geographical name is removed. Onamastics is a branch of linguistics that analyzes all kinds of names.

Etymology is the science of the origin of geographical names. Ethnology is one of branches of toponomy which determines the reasons for the emergence of geographical names, for example, the name of the Kyzylkum Desert why the sand is not red identifying ethnology analyzes various evidentiary data. Transcription is the spelling of names, urbanim studies the names of the places and the names within the city.

It turns out that the terms used in toponymy are mostly geographical. Geographical names can be studied from different perspectives and perspectives. Toponyms can be studied from seven different perspectives. These are the type of geographical object of the name, the conditions and time of its appearance. In terms of language, content, ethnology, grammatical rules and norms should be appropriate.

The possibility of translation and distribution from one language to another can be studied in terms of its location and migration. The study of toponyms in such different directions is carried out using several methods. The method of historical analysis of names is used to determine the evolution of the origin of the toponym, the social environment in which the name is formed. The essence of this method is to determine the historical conditions and sources of geographical origin. Linguistic methods include the method of ethnology method formats and the method of lexical, semantic analysis

This involves a grammatical analysis of the geographical names to determine the meaning of the name. By studying the suffixes in the word that make up the name of the cartographic method

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names, the area of distribution of names is determined by the relationship of the name of the language to the natural and socio-economic phenomena and objects. For example, if a map of the distribution of water, rivers and streams is made, the names of hydronyms can be obtained from the Turkic language, the history of water use, the size of the hydraulic object.

The method of studying folk terms is the mountain in the geographical name which exists the information on the size, variability, height, depth, abundance and other natural features of the object under study. Thus, there are several research methods in toponymy, which are close to the research methods of linguistic history and geography.

Toponymy, the science of the meaning of the origin and distribution of geographical names which can be called a science of the geographical content and essence of toponymy because it studies the names that are the result of geographical events and processes in relation to a specific area. There are more than 17,000 villages and settlements in Uzbekistan, each with its own location and more than 5,000 wells their existence is taken into account and their meaning can only be sought cannot be studied.

The rules for naming places need to be studied by classifying them into groups. Only then is the explanation of the names You can create a dictionary. Geographical sciences ocean sea, mainland, mountain system, region, country names macro toponyms, armpits, bays, straits, lake swamps, glacial mountain range network river dividing into mesotoponyms and microtoponyms of local importance in the size of the names of medium-sized cities.

But it is also a classification relative and the importance of popularity as a historical event in terms of mesotoponyms, microtoponyms, microtoponyms mesotoponyms can be the Bermuda Islands, for example, cover only 53.3 square kilometers that are islands in the northwest of the Atlantic Ocean with a population of 62,000 is a microtoponym in part. Spanish in 1522 as part of the British Commonwealth, discovered by the traveler H. Bermudis because it is a state, it can be called a mesotoponym.

But the destructive waters known as the triangle Bermuda is well known as a popular microtoponym. All science a scientific term denoting specific concepts and laws of fields or terms are available. The essence of science cannot be expressed without these networks. In geography, the region, climate, landscape atmosphere, biosphere zoning economic zone, monsoon, fiyon, seclon, anticeclon, tropical, relief, mountain adyr tekilsik, ploto, flat mountain, 38 lowlands, straits, islands, and more than a thousand other words are used.

This adjectives are added to the nouns to indicate event, process, event, indicates the type. The Arctic region has a warm climate, high mountain sands and desert tropics cyclone, large economic zone, industrial hub, erosion relief, and so on. These and other geographical terms and expressions are possible in geography.

Terms derived from the languages of ancient Greek, Latin, and modern European peoples make up the majority.

Shelf English fiyon landscape - german, meteorite metioroilite - greek, meloration - latin, cadastre - artisan - french, plota, kryaj, uval-russian, words commonly accepted geography terms are such words. This is just a specific geographical landscape a science derived from a specific region to represent the relief of a side of reality there are many words and phrases that are accepted as terms.

Bedland – relief in the USA, compost (Portuguese) in the ruins of the Midwest shrub savanna Pampa- meadow, (Hindi) alpine relief, alpine meadow - Latin tundra - fincha - bare hills without forests, terraces - in the Himalayas swamps, tundra - the Gulf of Mexico in the southeastern United States A powerful typhoon that rises on the west coast of the Pacific Ocean strong tropical cyclone, taiga - temperate forest. The coniferous forests in the north of the zone are secretive - arid

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Australia from bushy eucalyptus thorny acacia and butyl-like trees in the ground consisting of evergreen groves consisting of reef winds and other landscape relief the number of geographical expressions that represent the uniqueness of a geographical event about a thousand, and they are derived from the languages of all peoples.

That's the word represents the specificity of the environmental nature of language. Uzbek language when the dictionary is translated into other languages too many terms. These are folk terms. The surface is adyr, angiz, chink, whirlpool, whirlpool, whirlwind, whirlwind takir, soy, kayir, koriz, kishlak, chol, kurgan, kir, sel, tugai, saline, ungir, sand, gray, steppe, storm, grass, desert, steppe, lalmi and others more than a hundred words have become geographical terms.

Famous geography academician L. Berg said, “There are endless riches in the vernacular which is a source of terminology expansion ”in Russian geographical terminology. When he wrote about this idea in 1915, he translated this idea into the languages of other peoples that may also have been applied to the Uzbek language. Actually, "Devonu lug'atit turk" has been a dictionary of Turkic peoples since the 11th century the composition is extremely rich in synonyms, homonyms, antonyms proved to the whole Muslim nation that really in the desert the word barkhan is used only to describe a moving hill shape and mechanism of formation, or in a certain direction; only the foothills of the foothills, which are covered with untouched meadow can be expressed by the term hills.

Scientific terms are formed from folk terms. Folk terms become toponyms - Karakum Kyzylkum Qarnobchol, Mirzachol, Badaytoqay, Yolbarstoqay, Qoplonqir, Qoraariq, The works of Ulugtag, Aktag and other geographical terms are in Russian and translated from other languages into Uzbek. There are some differences given the diversity of the confusion, H. Hasanov said that the word "Stan" is a desert translates and applies as erroneous and accidental. With the political movement of the scholar, the word sten is a correct translation of the word dasht would do. “It is correct to translate desert as desert, not desert will be Because in Uzbek “Kyzylkum desert Karakum desert Karshi used as a desert.

Everyone knows that the steppe zone in the north of Russia and Kazakhstan is a desert zone. The Barabi Desert is not called the Kulunda Desert. Barabi desert is called the Kulunda desert. Geographic and Russian zone step in Tajikistan the steppe zone is being used properly. If we look at history In Suleiman Bukhari's dictionary, "desert, wilderness, ruled by" Homun " used Sadriddin Ayni in an article on the Kyzylkum only Journal of the Earth Using the Word Desert, Issue 1-2, 1927, p. Botonic scientists have clearly written from the S. Sohabiddinov's league that the desert is a desert Academician Kadr Zokirov's “Geobotanical stages of Central Asia are desert, hill many are large because they use only folk terms such as mountain and pasture has been recognized by geobotanical researchers. Now the terms are independent in the textbooks. There are some examples of geographical terms and their translation in English, Russian and Uzbek.

Adir mintaqasi – Respublikamizda dengiz sathidan 400 m dan 1200 m bo’lgan baland qismiga aytiladi.	Адирский район - самая высокая часть республики на высоте от 400 м до 1200 м над уровнем моря.	Adir region is the highest part of the Republic from 400 m to 1200 m above sea level.

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Aborigenlar (lot – aborigines – avvaldan, azaldan) – biron-bir mamlakat yoki hududda qadimdan yashab kelgan tub aholi. Odatda mustamlakachilik davrida kelgindi mustamlakalardan farqlash uchun tub aholini shunday atash rasm bo'lgan. Qadimgi Rim rivoyatlariga ko'ra, Apennin tog'lari etagidagi Latsio viloyatida shu nomli qabila yashagan. Hozirgi paytda, asosan, Avstraliyaning tub xalqi Aborigenlar deyiladi.	Аборигены (лот - аборигены - раньше, испокон веков) - коренной народ, долгое время проживавший в какой-либо стране или регионе. В колониальный период было принято называть коренные народы, чтобы отличить их от чужих колоний. Согласно древнеримским легендам, одноименное племя проживало в провинции Лацио у подножия Апеннин. Сегодня большинство австралийцев называют аборигенами.	Aborigines (lot - aborigines - before, from time immemorial) - an indigenous people who have lived in any country or region for a long time. It was common in the colonial period to call indigenous peoples in order to distinguish them from foreign colonies. According to ancient Roman legends, a tribe of the same name lived in the province of Lazio at the foot of the Apennines. Today, most Australians are called Aborigines.
Absolyut miqdor – muayyan vaqtda va muayyan joyda sotsial-iqtisodiy xodisaning miqdorini yoki uning katta-kichikligini (darajasi, hajmini) bildiradigan son. Masalan, muayyan sanada mamlakat aholisining soni, sanoat korxonalarining soni, ishlab chiqarilgan sanoat mahssuloti hajmi, kolxozlarning bo'linmas fondlari absolyut miqdor bo'lib, massa, uzunlik, maydon, vaqt bilan qiymat birliklarida yoki donalar hisobida ifodalanadi.	Абсолютное количество - это число, которое указывает количество социально-экономического события или его величину (уровень, объем) в данное время и в данном месте. Например, численность населения страны на данную дату, количество промышленных предприятий, объем промышленного производства, неделимые фонды колхозов являются абсолютными величинами, выраженными в единицах массы, длины, площади, времени и стоимости, или по кусочкам.	**Absolute quantity** is a number that denotes the amount of a socio-economic worker at a certain time and in a certain place, or its large size (degree, size). For example, for a certain date, the number of the population of the country, the number of industrial enterprises, the volume of industrial production, the absolute amount of Indivisible funds of collective farms are expressed in units of value or in the account of grains by mass, length, area, time.

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Avtostrada (ital.) – 1) Har ikki tomonga avtomobillar qatnashi uchun mo'ljallangan keng yo'l; unga muayyan joylarda yon yo'llar kelib qo'shiladi yoki ajralib chiqadi. Odatda viaduklarda yoki tunnellarda Avtostrada ostidan yoki ustidan o'tadigan yo'llar bo'ladi; Germaniyada har ikkala yo'nalishda ikki qatorli mashinalar qatnovi uchun mo'ljallangan, orasiga daraxtlar ekilgan va mashinalar tezligi cheklanmagan yo'l; odatda bunday yo'llar bir yuzada bir-biri bilan kesishmaydi; 2) avtomobil yo'li – shosse, ya'ni faqat avtomobillar qatnovi uchun mo'ljallangan yo'l.	Шоссе (итальянское) - 1) Широкая дорога для машин с двух сторон; в некоторых местах он соединен или отделен проселочными дорогами. Обычно у виадуков или туннелей есть дороги, которые проходят под или над шоссе; В Германии есть двухполосная дорога в обоих направлениях, между которыми посажены деревья и ограничена скорость для автомобилей; обычно такие пути не пересекаются на одной поверхности; 2) Шоссе - автомагистраль, т.е. дорога, предназначенная только для движения.	Highway (Italian) - 1) A wide road for cars on both sides; it is joined or separated by side roads in certain places. Typically, viaducts or tunnels have roads that run under or over the highway; In Germany, the road is designed for two-lane traffic in both directions, with trees planted between them and unlimited parking; usually such paths do not intersect on the same surface; 2) Highway - a highway, ie the road intended only for traffic.

According to H. Hasanov, "folk terms historical geographical works and travelogues from ancient dictionary books it is necessary to obtain fiction from documents. However in other languages word substitution in Uzbek while translating geographical terms is also close to a terminal used in a other foreign language. In general, the choice of geographical terms is Uzbek the connection of thinking with nature by perceiving the natural phenomena of the people created from observation.

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CURRENT ISSUES OF ENERGY AND THEIR ELIMINATION

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Abstract: *The article analyzes the estimates of international organizations that due to economic development, the demand for energy will increase by more than 50% by 2030 compared to the beginning of the century, and the total demand will be very high, resulting in a negative impact on the environment.*

Keywords: *alternative energy sources, renewable energy, solar power, atmosphere, solar power plants, carbon dioxide, wind power plants*

According to international organizations, due to economic development, by 2030 the demand for energy will increase by more than 50% compared to the beginning of the century, and the total demand will be 23.27 billion tons of conventional fuel. This means that the negative impact on the environment is growing.

If such rates continue, it is estimated that the reserves of black gold on the planet will last only 55-60 years. This period is estimated at 70-75 years for natural gas and 150-160 years for coal. In addition, the sustainable use of hydrocarbon resources is degrading the environment and human health, climate change is being observed, and the ozone layer is being depleted. According to experts, 5 billion tons of carbon dioxide are released into the atmosphere every year. tons of carbon dioxide, about 300 million. tons of carbon monoxide. This is 3.5 times more than in the first half of the twentieth century.

Under these conditions, it is natural that the widespread use of alternative energy sources will be on the agenda. This is due to the fact that their types of solar, hydro and wind energy, as well as biomass, are almost unique and renewable, very relevant to the current era of innovative development, and the creation of new jobs. In addition, the equipment and technology working on this basis are environmentally friendly, environmentally friendly and do not lead to man-made disasters.

At present, 10.2% of all energy produced in the world comes from renewable energy sources. By 2050, its share in some species is expected to exceed 70%.

Under these conditions, it is natural that the widespread use of alternative energy sources will be on the agenda. This is due to the fact that their types of solar, hydro and wind energy, as well as biomass, are almost unique and renewable, very relevant to the current era of innovative development,

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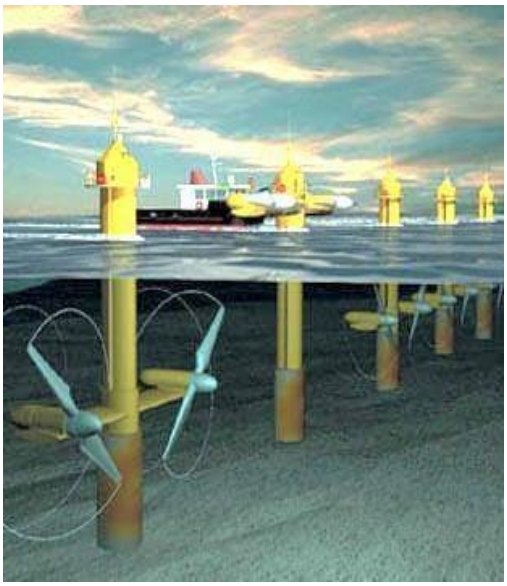
and the creation of new jobs. In addition, the equipment and technology working on this basis are environmentally friendly, environmentally friendly and do not lead to man-made disasters.

Map of solar flux to the surface According to the study, the solar flux per 1 m2 of land perpendicular to the center of the sun (at the time of entering the Earth's atmosphere) is 1367 W / m2 (when the sun is constant). As a result of the absorption of sunlight into the Earth's atmosphere, the high solar flux above sea level is equal to 1020 W / m2 (at the equator). However, at different times of the day, the angles of incidence of the sun's rays on the ground change slightly due to changes. In winter, this figure can be reduced by 2 times. Solar power plants have advantages and disadvantages, just as each process has advantages and disadvantages. Advantages of solar power plants: - Prospective, renewable source; - Environmentally friendly and cost-effective; - Renewability of fuel source; - Increased demand for alternative energy sources; - Minimum impact on environmental climate change.

Disadvantages of solar power plants: - Dependence on weather, seasons and time of day for power generation; - The need for additional traditional energy sources in the field of industrial production; - Regular dusting of the panel surface; - Occupying a lot of space. Figure 2. Solar photovoltaic device and consumers: 1 – photoelectric module (solar panel); 2 - inverter charging control device; 3 - rechargeable battery; 4– Consumers The world's demand for electricity has grown by about 50% over the last 5 years. By 2050, solar power plants will reduce carbon dioxide emissions to the environment by 20-25% of annual electricity. Converting only electricity from sunlight to heat energy is a useful example. The Sun alone sends so much heat to our planet every day that it is 20 times more energy consumed by the world's population year-round. Accordingly, last year, 120 billion solar cells were installed at solar stations around the world. More than kWh of electricity was generated. In a number of developed countries, including Germany, the share of non-conventional energy is planned to reach 15% by 2015 and 25% by 2020.

According to statistics from the Department of Energy, in 2001 (solar electricity) the energy received from solar collectors was $ 0.09–0.12 per kWh, and by 2015–2020 this value will reach $ 0.04–0.05 and increase economic efficiency. Currently, there are companies around the world that produce solar photovoltaic cells, including:



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China Yingli - 2300 MW, USA First Solar - 1800 MW, China Trina Solar - 1600 MW, Canada Canadian Solar - 1550 MW, China Suntech - 1500 MW, Japan Sharp - 1050 MW, China Jinko Solar - 900 MW, US SunPower - 850 MW, REC Group - 750 MW

Korea produces high-quality competitive solar photovoltaic cells Hanwha SolarOne - 750 MW

The share of wind and solar energy has more than doubled since the signing of the Paris Agreement on Climate Change in 2015. At that time, the figure was 4.6 percent.

In the first half of 2020, the volume of energy from fossil fuels, the most polluting fuel, decreased by 8.3%.

Analyzes show that many large countries, including China, the United States, India, Japan, Brazil and Turkey, get at least 10 percent of their total energy from wind and solar. Britain and the European Union deserve special praise, as they receive 21 and 33 percent of their energy from renewable sources, respectively.

According to the forecasts of the Global Wind Energy Council (GWEC), by 2030 the volume of offshore wind energy worldwide may increase from 29.1 GW in 2019 to 234 GW.

The world's largest sales turbine based on the principle of rise and fall. The turbine, which operates on the basis of the principle of the rise and fall of the water supply, converts the kinetic energy of the water flow into the electric current, which comes in the same direction as the wind turbine. The world's largest hydroelectric power plant near Northern Ireland has a capacity of 1.2 MW. It consists of 2 grain turbines with a diameter of more than 20 m. Due to the rotation of the turbine's turbine system, the turbine and the waves are adapted to each direction. To service the turbine, it may be lifted from the water.

The cost of 1 MW of installed power produced by such a system 5 million equal to a dollar. This is the cost of offshore wind turbines 30% more. However, in 2015, off the coast of South Korea, the cost of 820 million. It is planned to install a turbine operating on the principle of rising and falling water levels with a capacity of more than 1 MW. It is noteworthy that the widespread introduction of such "green technologies" in agriculture, energy, waste management, transport, education and science in our country will create more than 550,000 new jobs over the next ten years.

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EFFECTS OF LINGUISTIC KNOWLEDGE ON SPEECH PERCEPTION

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Abstract: *This article deals with the problems of phonology. It studies effects of linguistic knowledge on speech perception and the importance of teaching phonetics.*

Key words: *phoneme, speech perception, contextual variation, interpretation, phonological components.*

Speech signals are inherently variable, and one major source of speech variation is coarticulation. Coarticulation consists of universal biomechanical and language-specific phonological components: biomechanical constraints determine the direction of coarticulatory perturbations (e.g. /u/ is fronted in the context of alveolar consonants), and phonological knowledge guides the degree of coarticulation. Universal and language-specific components are also found in speech perception. Listeners‟ can generally compensate for systematic covariations of the acoustic properties of natural speech, but the degree of compensation varies systematically depending on listener's linguistic experience and listener expectation toward normative range of speech variation in certain linguistic contexts. There is a large body of experimental studies that examine the effects of context on the perception of target speech sounds.

In a commonly used methodology, an experimenter would create one or more acoustic continua, where the acoustic property of each sound is systematically altered along a relevant dimension such as VOT or formant frequency, so that the perceived phonemic category of each sound in a given continuum transforms, either gradually or abruptly, from one category into another. Each of these target sounds is embedded in a particular context, and subjects are asked to determine the phonemic identity of each target sound. The null hypothesis is that subjects‟ identification of the target sound will remain constant regardless of the context in which the sound occurs, and the alternative hypothesis is that subjects‟ identification of the target sound will vary in a way that demonstrates listener compensation for contextual effects.

Mann and Repp's study represents one of the early studies that used sound continua to examine listener compensation for coarticulation. They examined listener identification of synthetic fricative noise from an [s]-[ʃ] continuum when followed by either [a] or [u]. In natural speech production, fricative noise in /s/ is realized as a little more [ʃ]-like when followed by [u] because anticipatory lip protrusion for an upcoming round vowel lowers the center frequency of fricative noise. Thus, if the listener compensates for coarticulation, then the listener would identify an ambiguous fricative noise stimulus more often as [s] in the [u] context than in the [a] context. Mann and Repp‟s results showed this pattern. Their listeners‟ [s]-[ʃ] category boundary shifted toward the [s]-end in the [u] context relative to the boundary in the [a] context. Since then, numerous studies have shown converging results - perceptual category boundary shift—for

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consonant contexts and vowel targets, consonant contexts and consonant targets, and vowel contexts and vowel targets.

Compensatory perception occurs in the context of covarying features, as well. It has been repeatedly demonstrated that F0 tends to be lower for vowels immediately following voiced consonants than those following voiceless consonants, so if listeners compensate for this covariation, then they would more likely hear an ambiguous onset to be [+voice] when followed by a low-F0 vowel than a high-F0 vowel. Fujimura tested this hypothesis by using a synthesized stimulus series varying perceptually from [k] to [g]. For the ambiguous tokens from the middle of the continuum, listeners more often reported hearing [g] when the F0 of the following vowel is low. [1]

Further, compensatory effects can be triggered and the degree of the effects can be influenced by non-segmental contexts. For example, Ladefoged and Broadbent tested, among other things, listeners‟ identification of a synthesized /bVt/ word when played back after a precursor phrase, the F1 of which was shifted down from the standard precursor. The test word was identified as bit (/bɪt/) by 87% of the subjects when preceded by the standard precursor but the same word was identified as bet (/bɛt/) by 90% of the subjects when preceded by the precursor that had lower F1, presumably because listeners took the overall low- or high-F1 context into account when judging the height of the vowel in the test word. Later, Ohala and Shriberg showed that low-pass and high-pass filtering of the precursor phrase and the target vowel stimuli can alter listeners‟ perceptual judgments of the target vowels along the front-back dimension.

These findings offer two important insights. First, compensation and other contrastive context effects are closely related phenomena: compensation is achieved by a dynamic process involving both local-level adjustments of a target acoustic signal relative to the immediate context as well as larger-level adjustments of the perceptual scale. The second insight is that compensation is closely linked to listener knowledge about the various types of systematic and context-dependent surface variations found in day-to-day spoken communication. The next section reviews research on this second point—influence of linguistic knowledge on speech perception.[2]

Speech perception and word recognition involve interpreting acoustic signals in terms of phonemes and then to words. In addition, there is a rich body of evidence that higher-level knowledge such as semantics and lexical knowledge influence perceptual judgments on the lower-level linguistic unit such as phonemes and features. For example, Marslen-Wilson and Welsh have shown that listeners are able to shadow (i.e., repeat what they have just heard) faster when the sentences they were asked to repeat were both semantically and syntactically well-formed. Subjects were least successful in shadowing random meaningless sequences of words. For well-formed sentences, their subjects shadowed them with very short latencies, about 250 ms, or roughly the length of a single syllable.

This means that in polysyllabic words they were able to recognize and begin repeating a word even before it was presented completely. These results show that: 1) listeners start narrowing down lexical candidates the moment the speech signal starts; and 2) assuming lexical candidates expedite subsequent perceptual processing. In another study, Warren demonstrated that lexical knowledge causes the phoneme restoration effect. When a single segment within a word (i.e. /s/ in

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legislature) was replaced by a cough-like sound, his subjects recognized the word without any problem, and could not even tell which segment was replaced by the sound of cough, presumably due to restoration of the missing phoneme, which is guided by lexical knowledge. [3]

Later, Elman and McClelland showed that lexically restored phonemes can cause compensation for coarticulation. Prior to their study, Mann and Repp and Repp and Mann showed that American listeners shift perceptual phonemic category boundary location on a /t/-/k/ continuum toward the /k/-end (ambiguous sounds receive more /t/-responses) in a context of preceding /ʃ/ than in a context of preceding /s/, presumably because the listeners compensate for a coarticulatory retraction of /t/ when it is heard after /ʃ/. Elman and McClelland replicated this compensation effect by using a pair of words such as progress and abolish, for which the final phoneme is /s/ and /ʃ/, respectively, as contexts but with the final consonants replaced with a synthesized sound that is intermediate between [s] and [ʃ]. Their subjects tended to perceive the ambiguous final consonant as /s/ or /ʃ/ in a way to form a real word than a non- word context (e.g. progress is a real word but progresh is a non-word) and subsequently compensate for coarticulation on a target sound from a /t/-/k/ continuum.

Compensation for coarticulation is also induced by visual stimuli. For example, Fowler and her colleagues replicated Mann's (1980) finding for /da/ bias on /da/-/ga/ continuum when preceded by /ar/ but not /al/ (due to compensation for retraction and lowered F3 of /d/ after /r/) when the context syllable was perceptually ambiguous between /al/ and /ar/, but clearly disambiguated by a simultaneous video of a speaker hyperarticulating /alda/ or /arda/. Another type of listener knowledge that influences perceptual judgments of phoneme identity is the knowledge about gender variation in speech sounds. For example, in a vowel normalization study Johnson demonstrated that listeners actively adjust perceived vowel quality depending on perceived speaker identity. He used a hood-hud ([hʊd]-[hʌd]) continuum, and the target stimuli were embedded in a carrier sentence that had either a rising or falling F0 contour, ending at constant F0, which is same as target word‟s F0. These pitch contours were designed to mimic male speakers‟ interrogative (rising contour, starting with low F0) and female speakers‟ declarative (falling contour, starting with high F0) pitch contours. Listeners made more hood responses for the ambiguous tokens in the perceived female condition than in the perceived male condition. That the observed shift in perceptual judgment was not due to a formant shift in the precursor phrase as in the case of the Ladefoged and Broadbent highlights the role of listener expectation, in this case that male talkers tend to realize /ʊ/ as slightly lower variant, somewhat more similar to /ʌ/, than females.[4]

Evidence for the link between speech perception and phonological knowledge also comes from cross-linguistic studies on speech perception variation, which correlates with language- specific sound patterns. For example, velum lowering in Thai and American English vowel- nasal coda (VN) sequences starts during the vowel, but Thai exhibits less overlap than English. Consistent with this shorter duration of the nasal portion of the vowel, Thai listeners exhibit less compensation for nasalization in nasal contexts than English listeners; that is, Thai listeners perceive greater nasality from the nasalized vowels in [NVN] context than English listeners do. In addition, speakers of languages that differ in the degree of nasal overlap prefer different amounts of nasalization and

[3] Amos, J. (2007). Wadda boo‘iful place: an analysis of the variables (ju) and (t) in Mersea Island English. (Unpublished M.A. thesis). University of Essex.
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temporal
patterns of overlap when judging stimulus naturalness. These studies show a language-specific relationship between patterns of vowel nasalization and the perceptual judgments on nasalized vowels.[5]

One of the significant implications of these studies is that the knowledge about the language-specific degree of coarticulation also influences perceived degree of coarticulatory perturbation on the segments. Another aspect of speech perception where a cross-linguistic difference has been observed is weighting of acoustic cues. In a study on the acoustic cues for place of articulation of stops in Japanese and American English, Fujimura, Macchi, and Streeter showed, firstly, that CV release cues dominate over VC closure cues when these cues conflict. Thus, for example, a stimulus made up by splicing /ab/ (except for the release burst) onto /da/ (starting from the burst) was heard as /ada/, instead of /abda/. Secondly, and more importantly for the purpose of the present review, their study showed different response patterns that were influenced by the stress/accent patterns of the subjects‟ native languages.

Only American subjects showed an attenuation of the dominance of the CV release cue when the [VCCV] stimuli had a high pitch V1 and low pitch V2 pattern compared with the opposite pitch pattern. American subjects responded to the release cue more strongly when it was high-pitched than low-pitched, presumably because the American subjects interpreted high-pitched syllables as stresses syllables. This study suggested that in addition to any physical differences between VC and CV cues, listeners‟ linguistic experience dictates which cues they pay most attention to. Collectively, findings from these studies suggest that memorized sound patterns and articulatory configurations for speech sounds and sequences of these sounds that make up words influences what listeners think they hear as well as how the perceptual system processes incoming acoustic signals.

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INFLUENCE OF INVOLUTION ON DIFFERENTIAL EQUATIONS WITH SECOND-ORDER CONSTANT COEFFICIENTS

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Abstract: *The paper presents examples of solving simple differential equations with evolutionary properties and non-homogeneous second-order differential equations.*

Key words: *involution, simple differential equations and non-homogeneous ordinary differential equations with involution.*

DISCUSSION

As we know if the equation $f(f(x))=x$ is true when $f: R \to R$ *is reflected, this reflection is called involution.*

In the science of differential equations, we also encounter a number of differential equations that have the property of involution. The functions as $f(x)=\sqrt[n]{1-x^n}$, $n \epsilon N$, $f(x)=\frac{\alpha x+\beta}{\mu x-\lambda}$ composes involution.

We can distinguish some of these functions and apply them to differential equations. Let us consider the differential equation of the second-order variable coefficient as follows.

$$.y''\left(\frac{1}{x}\right)+ay'(x)=q(x) \qquad (1)$$

Here $a=const,\ q(x)$ –free koef.

Theorem: (1) The second order after the equations is the integration of the simple differential equation

Proof: if we do reflection for (1) equation as $f: x \to \frac{1}{x}$, the result will be as follows:

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$$y''(x) + ay'\left(\frac{1}{x}\right) = q\left(\frac{1}{x}\right) \qquad (2)$$

From (2) equation we find $y'\left(\frac{1}{x}\right) = \frac{1}{a}\left(q\left(\frac{1}{x}\right) - y''(x)\right)$ and find product by x. $y''\left(\frac{1}{x}\right) = \frac{x^2}{a}\left(\frac{1}{x^2}q'\left(\frac{1}{x}\right) + y'''(x)\right)$ we put this result to the (1) equation.

$\frac{x^2}{a}\left(\frac{1}{x^2}q'\left(\frac{1}{x}\right) + y'''(x)\right) + ay'(x) = q(x)$ and when we simplify it the result will be as follows:

$$y'''(x) + \frac{a^2}{x^2}y'(x) = \frac{a}{x}\,q(x) - \frac{1}{x}q'\left(\frac{1}{x}\right) (3)$$

We multiply two parts of (3) by x^3 and the result will be as follows:

$$x^3y'''(x) + a^2xy'(x) = g(x) (4)$$

$$\text{here} \quad x^2a\,q(x) - x^2q'\left(\frac{1}{x}\right) = g(x)$$

the equation (4) come to the problem of solving simple differential equation. ■

The equation (4) is also called Eyler problem. We consider it the general solution of homogeneity. In this case, we bring the linear differential equation with a variable coefficient to the linear equation with a variable coefficient. For this, we do change as $x = e^t$ and take the following result:

From $\frac{dx}{dt} = e^t$ it comes to $\frac{dt}{dx} = e^{-t}$

$$y'_x = \frac{dy}{dx} = \frac{dy}{dt}\cdot\frac{dt}{dx} = e^{-t}\cdot y'_t$$

$$y''_{xx} = \frac{d^2y}{dx^2} = \frac{d}{dx}\left(\frac{dy}{dx}\right) = \frac{d}{dx}\left(e^{-t}\cdot y'_t\right) = e^{-t}\cdot\frac{d}{dx}\left(\frac{dy}{dt}\right)$$

$$\frac{d}{dx}\left(\frac{dy}{dt}\right) = \frac{d}{dt}\left(\frac{dy}{dx}\right)$$

and it results

$$y''_{xx} = e^{-t}\cdot\frac{d}{dt}(y'_x) = e^{-t}\cdot\frac{d}{dt}\left(e^{-t}\cdot y'_t\right) = e^{-t}\left[-e^{-t}\frac{dy}{dt} + e^{-t}\cdot\frac{d^2y}{dt^2}\right] =$$

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

$$= e^{-t}\left[-e^{-t}\frac{dy}{dt} + e^{-t}\cdot\frac{d^2y}{dt^2}\right] = e^{-2t}\left[\frac{d^2y}{dt^2} - \frac{dy}{dt}\right]$$

From the above given, the following will be true:

$$y_x''' = e^{-3t}\cdot\left[\frac{d^3y}{dt^2} - 3\frac{d^2y}{dt^2} + 2\frac{dy}{dt}\right]$$

We put for the (4) equation amount of y_x', y''_{xx}, y_x''' The result will be as follows:

$$y_t''' - 3y_t'' + 2y_t' + a^2y_t' = g(e^t) \qquad (\mathbf{5})$$

(5) is a third-order differential equation with a constant coefficient of non-homogeneity.

The solution for (5) is as:

$$y = Y + Y_1 \qquad (\mathbf{5}')$$

Here Y is the solution for homogeneous part of the equation (5), and Y_1 is a particular solution.

Let us solve homogeneous part of the equation (5)

$$y_t''' - 3y_t'' + (a^2+2)y_t' = 0 \qquad (\mathbf{6})$$

Here (6) we do change as $y = e^{kt}$ and find characteristic equation.

$$k^3 - 3k^2 + (a^2+2)k = 0$$

$$k_1 = 0$$

$$k_{2,3} = \frac{3 \pm \sqrt{9 - 4(a^2+2)}}{2} = \frac{3 \pm \sqrt{1-4a^2}}{2}$$

From these

$$y_1 = c_1, y_2 = e^{\frac{3t}{2}}\left(c_2 cos\frac{\sqrt{1-4a^2}t}{2} + c_3 sin\frac{\sqrt{1-4a^2}t}{2}\right) \qquad (\mathbf{7})$$

and $x = e^t$ we put $t = lnx$ to the equation (7).

$$y_1 = c_1, y_2 = x^{\frac{3}{2}}(c_2 cos\frac{\sqrt{1-4a^2}lnx}{2} + c_3 sin\frac{\sqrt{1-4a^2}lnx}{2})$$

The solution of the homogeneous part is a combination of these lines:

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under Volume: 16 Issue: 01 in January-2022
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$$Y = c_1 + x^{\frac{3}{2}}(c_2 cos\frac{\sqrt{1-4a^2}lnx}{2} + c_3 sin\frac{\sqrt{1-4a^2}lnx}{2})$$

We find Y_1 according to $g(x)$

Example: Find the general solution for

$$y''\left(\frac{1}{x}\right) + y'(x) = x$$

Solution: Here we do reflection as $f: x \to \frac{1}{x}$ and the result as follows:

$y''(x) + y'\left(\frac{1}{x}\right) = \frac{1}{x}$ and from this we find $y'\left(\frac{1}{x}\right) = \frac{1}{x}$ and take once production:

$$y''\left(\frac{1}{x}\right) = x^2\left(y'''(x) + \frac{1}{x^2}\right)$$

$$y''\left(\frac{1}{x}\right) = x^2 y'''(x) + 1$$

$$x^2 y'''(x) + 1 + y'(x) = x/\,x$$

$$x^3 y''' + xy'(x) = x(x-1) \qquad (\mathbf{8})$$

If we change as $(8) x = e^t$ we get

$$y'''_t - 3y''_t + 3y'_t = e^t(e^t - 1) \qquad (\mathbf{8'})$$

As $a = 1$ in (8) the solution is as follows:

$$Y = x\sqrt{x}\left[c_1 \cos\frac{\sqrt{3}}{2}lnx + c_2 \sin\frac{\sqrt{3}}{2}lnx\right) + c_3$$

Let us find a particular solution for (8)

We search a particular solution for $(8')$ as

$$y_1(t) = Ae^{2t} + Be^t$$

$$y'_1(t) = 2Ae^{2t} + Be^t$$

$$y''_1(t) = 4Ae^{2t} + Be^t$$

$$y'''_1(t) = 8Ae^{2t} + Be^t$$

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

We put them to the $(8')$

$$(8A - 12A + 6A)e^{2t} + Be^{t} = e^{2t} - e^{t}$$

We equate the corresponding coefficients of the equation. The result is $A = \frac{1}{2}; B = -1$. From this it comes to

$$y_1(t) = \frac{1}{2}e^{2t} - e^{t}$$

The particular solution for (8):

$$Y_1 = \frac{1}{2}x^2 - x$$

So we find that the general solution of the equation derived from the above is :

$$y(x) = x\sqrt{x}(c_1 \cos\frac{\sqrt{3}}{2} lnx + c_2 \sin\frac{\sqrt{3}}{2} lnx) + c_3 + \frac{1}{2}x^2 - x$$

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USE OF MAIN PRODUCTION FACILITIES AND ECONOMIC ACTIVITIES OF FOREIGN TEXTILE ENTERPRISE

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Abstract: *In our country, great importance is attached to the modernization, diversification and rapid development of the textile industry. The textile industry is one of the most developed and highly profitable industries in Uzbekistan. The enterprises of the industry produce spun yarn, yarn, raw and finished fabrics, knitting and sewing enterprises produce clothes and household goods. The importance of developing this sector of the economy for Uzbekistan is primarily due to the availability of local raw materials (cotton, silk, wool), as well as the high labor intensity of the textile industry. This is also important in terms of finding solutions to problems such as employment and improving the living standards of the population.*

Keywords: *yarn, skein, raw and finished fabrics, knitwear, sewing, employment, living standards.*

Introduction. As a strategic sector of the Uzbek economy, light industry provides a high level of employment, contributes to the economic and industrial potential and the international prestige of our country. The light industry is developing year by year. The introduction of new production technologies, the use of high-efficiency, modern equipment, and at the same time effective management will ensure high labor efficiency in industrial enterprises, growth in industrial production. The republic, which for many years only exported cotton fiber, today has unlimited opportunities to become a leader not only as a supplier of cotton fiber, but also as an exporter of textiles, especially finished products, in the world textile market.

Methods. Attracting investments will play an important role in the further development of the textile industry and increase the economic potential of manufacturing enterprises. Attracting foreign investment in the economy will help solve important socio-economic problems, such as efficient use of idle production capacity, production of import-substituting and export-oriented products from local raw materials, and employment. This, in turn, requires the broad attraction of foreign investment in the national economy, the strengthening of a favorable environment, guarantees and incentives for them. Without the formation of a favorable investment climate and the active involvement of foreign investment in the national economy, countries transitioning to a market economy will not be able to successfully integrate into the world economic community. Therefore, the role and potential of the country in the world community is determined by its level of economic and social development, and

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the choice of rational ways to attract foreign investment in the national economy is one of the most pressing tasks for Uzbekistan.

Results and discussion. Uzbekistan is one of the largest producers of natural textile fibers, yarn and knitwear in the world. There are more than 7,000 textile enterprises in the country, with an annual capacity of:

Yarn made of 100% cotton - 650 thousand tons;
Fabric made of 100% cotton - 425 million sq.metr;
Knitted fabrics - 140.7 thousand tons;
Knitwear - 660 million dona;
Socks and socks - 132 million

It should be noted that cotton fiber is the national wealth of the country. Given the conditions created for the development of the industry, the industry faces a number of tasks to further deepen the processing of cotton fiber. In 2019, 988,000 tons of cotton were processed by cotton fiber processing enterprises. In addition, a number of practical measures were taken in 2019 to cultivate cotton in modern ways, process and create additional jobs, expand the integration of the textile industry with agriculture. In particular, on the area of 654.5 thousand hectares (63%) of the total cotton area of the republic by 73 cotton-textile organizers in 88 districts 1.7 million tons of raw cotton were grown by the "cluster" method. In order to produce high-quality, competitive, high-quality yarn, the enterprises of the system have modernized the existing technological equipment, created new capacities, and increased the processing capacity of 808,000 tons of cotton fiber to 988,000 tons by the end of the year.

2019 of the Cabinet of Ministers of the Republic of Uzbekistan In order to ensure the implementation of Resolution No.116 of 12 February, local cotton fiber processing enterprises used a total of 761,000 tons of cotton fiber in 2019 (143% compared to the previous year). In particular, 453 thousand tons of the harvest of 2017-2018, 28.0 thousand tons of the harvest of 2019, 280.0 thousand tons of cotton textile clusters consist of cotton fiber.

In 2019, a total of 608,000 tons of high-quality, competitive yarn was produced (148.1% compared to the previous year). In particular, 206.0 thousand tons (33.9%) of domestic enterprises and 402.0 thousand tons (66.1%) of foreign companies were directed to their own needs. In 2020, the capacity of cotton fiber processing enterprises will exceed 1.1 million tons, and it is planned to develop 945,000 tons of cotton fiber and produce 740,000 tons of yarn [7].

In addition, in 2019, 360 million square meters of cotton fabric, 112 thousand tons of knitted fabrics, 530 million pieces of sewing and knitting products, 220 million a pair of sock products was also produced [8].

Table 1

Production of industrial products in the Republic of Uzbekistan and its composition (billion sums)

Indicators	2017	Share, in percent	2018	Share, in percent	2019 January-November	Share,in percent
Manufacturing industry	117 736,	100,00	189 42,61	100,0	237 394,27	100,00
Food production	23 217,7	19,72	25 256,05	13,32	30 632,74	12,90
Manufacture of textile products	16 763,3	14,24	24 835,24	13,10	27 992,18	11,79

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

Manufacture of clothing	6 108,20	5,19	7 732,16	4,08	7 896,85	3,33
Production of coke and oil refining products	3 681,9	3,13	5 589,27	2,95	8 935,18	3,76
Manufacture of chemical products	9 893,8	8,40	15 078,45	7,95	17 322,57	7,30
Metallurgical industry	12 498,80	10,62	31 299,54	16,50	52 708,04	22,20
Manufacture of vehicles, trailers and semi-trailers	10 509,60	8,93	26 631,33	14,04	30 928,91	13,03
Others	35 062,90	29,78	53 220,56	28,06	60 977,79	25,69

The volume of industrial output in the gross domestic product of the Republic of Uzbekistan in 2017 amounted to 148816 billion sums, in 2018 - 235340.7 billion sums, in 2019, January-November 297815.5 billion sums. The volume of industrial output in the structure of industrial production in 2017 amounted to 117736 billion sums, in 2018 18964.61 billion sums, in 2019, January-November 237394.27 billion sums. The structure of the manufacturing industry includes food production, textile production, clothing production, coke and oil refining products, chemical products, metallurgy, motor vehicles, trailers and semi-trailers and other industries and we can see how the volume of production in these sectors changed in 2017, 2018 and 2019January-November (Table1).

According to Table 1, if we look at the changes in the volume of textile production, in 2017 it amounted to 16763.3 billion. Its share in the manufacturing industry was 14.24%. In 2018, the share of textile production amounted to 13.1%, while the volume of production increased in volume to 24835.24 billion sums. In the first 11 months of 2019, the production of textile products amounted to 27992.18 billion sums.

Table 2

Regions within the manufacturing industry of the Republic share,% 2019

		The Republic of Karakalpakstan	Andijan region	Bukhara region	Jizzakh region	Kashkadarya region	Navoi region	Namangan region	Samarkand region	Surkhandarya region	Syrdarya region	Tashkent region	Fergana region	Khorezm region	Tashkent city
Manufacturing industry, total	100	4,2	12,8	4,9	1,6	3,4	14	3,2	5,8	1,4	1,5	17,6	7,2	3,2	18,2
Food production	100	4,7	6,8	6,6	2,6	7,7	3,7	5,1	12,3	3,1	3,0	12,2	8,7	3,8	13,7
Manufacture of textile products	100	3,0	9,5	7,6	4,2	7,7	2,5	9,3	6,8	4,1	2,6	11,2	16,8	5,3	9,4
Manufacture of clothing	100	1,3	20,5	5,7	3,7	5,6	10,6	12,9	4,0	2,5	5,1	6,1	7,6	0,4	14,0

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under Volume: 16 Issue: 01 in January-2022
https://www.gejournal.net/index.php/IJRCIESS

Production of coke and oil refining products	100	0,1	0,0	62,2	0,0	0,0	0,2	0,1	0,1	4,1	0,0	0,5	29,6	0,0	3,1
Manufacture of chemical products	100	37,9	2,6	1,0	0,1	12,8	9,6	0,6	1,2	0,0	0,2	14,4	11,0	0,1	8,4
Manufacture of other mirror mineral products	100	4,0	2,7	5,4	3,9	2,5	13,5	2,5	4,5	2,4	3,8	20,5	13,5	2,4	18,5

If we look at the composition of the regions in the manufacturing industry of the country, we can see that the share of Fergana region in the production of textiles is 16.8%, with the highest share compared to other regions.

Production of industrial products in Fergana region in 2018 will reach 13618.2 billion sums. Of this, the share of manufacturing industry was 95.2%. By 2019, the total industrial output will reach 19490.5 billion sums, which is 143.2% more than in 2018. Of this, the share of manufacturing industry was 95.5%. The share of manufacturing industry here increased by 0.3% compared to 2018.

Table 3

Production and composition of industrial products in Fergana region in 2018-2019

Indicators	**2018**		**2019**		**Growth rate**	
	Manufactured products, billion. sum	Percentage of total production	manufactured products, billion. sum	Percentage of total production	quantity	percent
Manufacturing industry, total	12 966,90	100,00	18 614,10	100,00	5647,20	-
Food production	1 773,16	13,67	2 928,60	15,73	1155,44	2,06
Manufacture of textile products	3 674,56	28,34	5 067,30	27,22	1 392,74	- 1,12
Manufacture of clothing	551,70	4,25	652,40	3,50	100,70	- 0,75
Production of coke and oil refining products	2 308,30	17,80	3 052,00	16,40	743,70	- 1,41
Manufacture of chemical products	1 179,90	9,10	1 988,20	10,68	808,30	1,58
Manufacture of other mirror mineral products	1 633,10	12,59	2 088,30	11,22	455,20	- 1,38
Others	1 846,20	14,24	2 837,30	15,24	991,10	1,00

According to Table 3, the production of textile products in the industrial sector in 2018 amounted to 3674.6 billion sums, in 2019 - 5067.3 billion. sums. In other words, the production of textile products increased by 137.9% compared to 2018.

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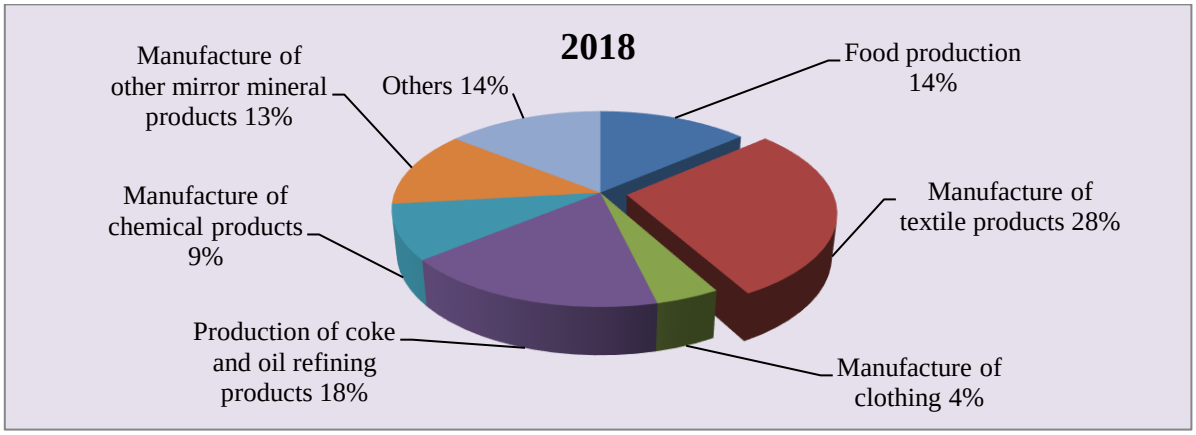
Summary: The following diagram1 clearly shows the share of textile production in the structure of industry in Fergana region in 2018.

Diagram 1

Industrial structure to be produced in Fergana region for 2018



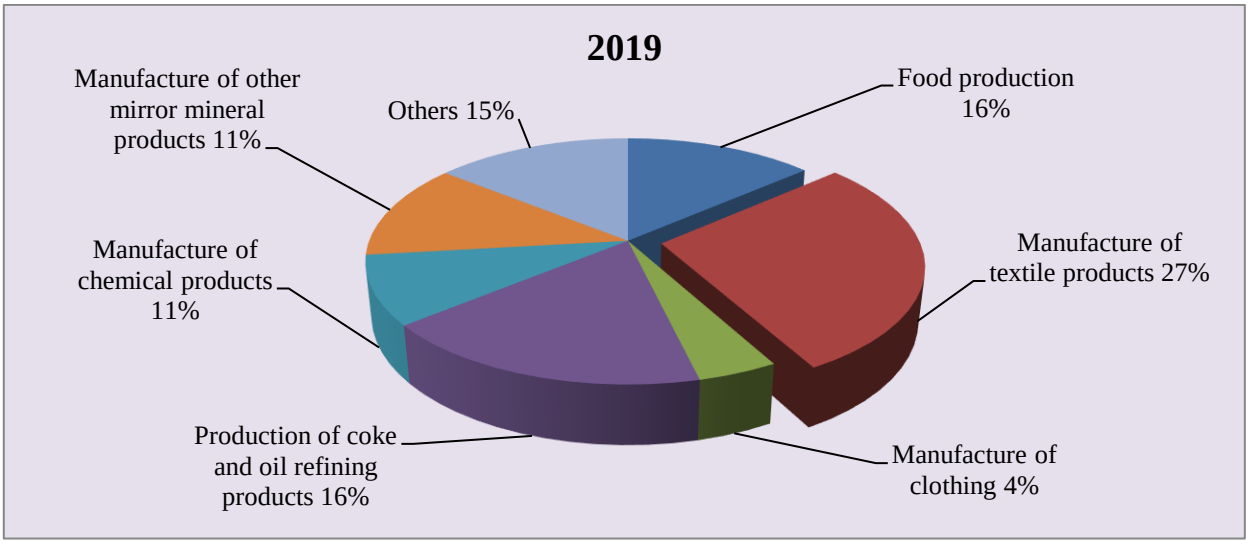
As can be seen from Figure 1, the share of textile production in the structure of industrial production in Fergana region for 2018 was the highest, i.e 28%.

Similarly, in 2019 we can see a change in the share of textile production in the structure of industry in the Fergana region (Diagram 2).

Diagram 2 shows that the share of textile production in 2019 decreased by 1% compared to 2018, but in terms of volume amounted to 1392.74 billion. increased by UZS. The share of food production increased from 14% to 16%. sums. The share of other mirrors, mineral products, vacuum products increased by 2%. Although the share of clothing production remained unchanged, in 2019 it increased by 100.7 billion compared to 2018. increased by UZS.

Diagram 2

The industrial structure of production in Fergana region for 2019



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In Fergana region, there are large textile enterprises such as "Fergana Turon Textile" LLC, "Kuva Textile" joint venture, "INDORAMA KOKAND TEXTILE" joint venture, foreign enterprise "POSCO International Textile", whose products have buyers in the world market (Table 4).

According to Table 4, textile products produced by Fergana Turon Tekstil LLC and Quva Tekstil JV in 2019 compared to 2018 decreased by 17.7 billion soums and 6.8 billion soums, respectively. The volume of textile production at the joint venture INDORAMA KOKAND TEXTILE and the foreign enterprise POSCO International Textile in 2019 compared to 2018 increased by 68.1 billion soums and 375 billion soums, respectively [12].

In textile enterprises, the increase or decrease in production volume, quality and competitiveness are greatly influenced by the level of fixed assets and working capital. Therefore, we will get acquainted with the activities of "POSCO International Textile" LLC, one of the largest modern, advanced enterprises in the production of textile products not only in the Fergana region, but also in the Republic of Uzbekistan and analyze the level of availability and use of fixed assets and working capital of the company. The foreign company Posco International Textile was acquired in April 1996 by South Korea's Daewoo International Corporation (later Posco Daewoo) for $ 150 million. It is based on an investment of US $. The foreign enterprise is a member of the Association of Textile Industry [9]. The legal address of the enterprise is 6 Toralar Street, Toshloq town, Fergana region.

Posco International Textile is located in the eastern part of the Fergana Valley and has manufacturing plants in the cities of Fergana and Bukhara, as well as in the town of Tashlak and the village of Kumtepa. The company has four manufacturing plants engaged in the production of spinning and textile products.

Table 4

Indicators of production of textile products by large industrial enterprises in Fergana region

Name of enterprises	2018		2019		Growth rate	
	Manufac-tured products, billion Sum	Percen-tage of total production	Manufac-tured products, billion sum	Percen-tage of total produc-tion	Quantity	Percentage
Manufacture of textile products	3674,6	100,00	5067,3	100,00	1392,7	0,00
"Fergana Turon	41,0	1,12	23,3	0,46	-17,7	-0,66
Tekstil" LLC	230,9	6,28	224,1	4,42	-6,8	-1,86
Quva Tekstil JV	845,5	23,01	913,6	18,03	68,1	-4,98
"Indorama Kokand Textile" joint venture	955,7	26,01	1 330,7	26,26	375,0	0,25
Other textile enterprises	1 601,5	43,6	2 575,5	50,8	974,0	7,24

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The yarn factories of Posco International Textile are Fergana, Toshloq and Bukhara, which produce high-quality unit and double yarn of different thicknesses, made of 100% cotton.

The volume of fixed assets and the level of their use in textile enterprises determine the size of the production capacity of the enterprise. It plays an important role in substantiating the production program and describes the potential of the enterprise to produce a defined range and quality products.

It follows that production capacity is the maximum level of products that can be produced over a period of time using advanced technology, advanced conditions of production and labor organization. It is, as a rule, determined in natural terms by the volume of products produced, by the ratio between the specialization of that enterprise and the particular types of products.

As can be seen from Table 7, the utilization rate of production capacity at the enterprise decreased by 93% in 2017 and 83.7% in 2018 to 9.3% per unit of yarn production. The production of binary yarn increased by 21.6% in 2018 compared to 2017 and amounted to 64.3%. Fabric production was 83% in 2017 and decreased by 4.5% in 2018 to 78.5%.

Table 7

Analysis of the utilization rate of production capacity at Posco International Textile [10]

Name of indicators	Average annual production capacity	2017		2018	
		Produced product quantity	Average annual production capacity utilization rate	Produced product quantity	Average annual production capacity utilization rate
Unit yarn (tons)	48629	45162	93	40 683,14	83,7
Binary yarn (tons)	6276	2681	42,7	4 033,13	64,3
Fabric (thousand m2)	68400	56 718	83	53 682,36	78,5
Total	123 305	104 561	84,8	98 398,63	79,8

This means that the overall utilization rate of production capacity in 2018 decreased by 5% compared to 2017.

The economy of the enterprise is greatly affected by the age of the fixed assets being exploited, primarily the age of machinery and equipment. Currently, the age grouping of machinery and industrial equipment is roughly based on the following terms: 5 years, 5 to 10 years, 10 to 15 years, 15 to 20 years, 20 to 25 years, and so on.

Table 8

Age structure of fixed assets of Posco International Textile, in%[10]

Name of indicators	Up to 3 years	4 to 5 years	6 to 10 years	More than 10 years
Age structure of fixed assets				
In 2017	15	3	3	79
In 2018	16	3	3	78

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The longer the service life of machinery and equipment, the lower the production capacity of the enterprise, the lower the quality of products, the higher downtime and losses, and vice versa. In addition, maintenance costs are also high when the enterprise equipment is used for a long period of time (Table 8).

As can be seen from the data in Table 8, the age of fixed assets at this foreign enterprise increased by 1% in 2018 compared to 2017. That is, fixed assets under 3 years of age increased by 1% compared to 2017, fixed assets over 10 years of age decreased by 1%. The age of fixed assets at the enterprise has contributed to the decline in the utilization rate of production capacity.

Conclusion. In conclusion, it can be said that in the textile and other light industries to ensure deeper processing of raw cotton, export of finished products such as dyed yarn, knitted fabrics and fabrics to foreign countries, and then, based on the active adoption of modern technology and design, finished textile products we can achieve tremendous efficiency in production.

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Translation peculiarities of collocations

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Abstract: *The importance of collocation in literary text arises from the fact that collocations are one of the fixed expressions that are used by authors or writers to express figurative meanings, traditions, religious beliefs ideology. This paper defines diverse features of translation of collocation. In this article there was given various ways of translating lexical units.*

Key words: *Collocations, literary texts, the importance of collocation, collocational structures.*

Collocations are considered as one of the essential cohesive devices in any text. In literary texts, collocations play a vital role in the text cohesion, in addition to the fact that collocations reflect a part of culture. According to Shunnaq, literary texts have an influence on the recipients due to the cultural, religious and translational principals they have. [7, P.12] Thus, paying more attention to the translation of literature is a must since it helps in bridging the gap between cultures. This important duty of translation requires have well-skilled translators who should be not only bilingual, but bicultural. The importance of collocation in literary text arises from the fact that collocations are one of the fixed expressions that are used by authors or writers to express figurative meanings, traditions, religious beliefs an ideology. The translation of the unqualified translators may result in mistranslate the collocation, meaning loss and producing a collocation that looks odd for the recipients. [8, P.18] By investigating the collocations in a literary work and its translation, the present study aims at discussing the reasons behind the translation errors of collocations that are committed by two translators. The study tends to apply the collocational errors model suggested by Baker, which reveals the reasons behind translation errors of collocations. [1, P.18]

A number of linguists, translators and interpreters have realized the concept of collocation as an obstacle or a problem; amongst those are Palmer, Hussein, Bahns&Eldaw, Baltova, Brashi, and so on. Collocational competence, which refers to the acquaintance and knowledge of collocation is unequivocally deemed a pivotal requirement for the purpose of foreign/second language mastery and therefore, for translation/interpreting. Speaking and writing a foreign/second language in the same way as that of its native speakers require observing collocations and applying them in the language production. Hence, collocational competence may well stand as a high linguistic level of language proficiency that translators/interpreters as well as foreign/second language learners should achieve.

The translation of collocations has long been a constant problem in the field of translation theory and practice. Translators encounter a real challenge in matching the appropriate nouns with the appropriate nouns, the appropriate adjectives with the appropriate nouns, the appropriate verbs with the appropriate nouns, etc. Such problem emanates from the fact that different languages realize and configure collocations in different ways. Furthermore, the equivalents of words that may collocate in a particular language may not necessarily collocate in another.

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A number of translation scholars have addressed the concept of collocation as a problematicarea in translation, amongst them are Beekman& Callow, Emery, Newmark, Hatim&Mason, Baker, Smadja and others. Newmark claims that realizing and recognizing a collocation are considered amongst the most pivotal problems in translating. He goes on to argue that translation is at times an ongoing struggle until the translator finds the appropriate collocations in the receptor language. [6, P.41]

Brashi claims that collocation can be viewed as a concept falling between syntax and lexis. [3, P.29] Such notion supports the view that language competence is best described as a process of interaction between syntax and lexis. Beekman& Callow view the translation of collocations as an appealing feature in the translators' work and a criterion against which the competence of the translators is assessed. [2, P.54] The translation of collocations usually demands deep knowledge as there is often no equivalence between collocational structures within different languages. Hatim& Mason assert that one crucial problem that often confronts the translators resides chiefly in the production of the appropriate collocations in the receptor language. [4, P.32]

They further add that the effect of the source language will always be there on the target text, even if produced by expert translators, a matter which would ultimately result in making unnatural collocations. Baker claims that collocations across languages are generally arbitrary. Heliel believes that collocations cause real problems in translating. [5, P.32] He goes on to explain that while free combinations are flexibly constructed, collocations pose a real challenge for translators when rendering texts from English into other languages and vice versa. Lexical items that collocate with many other words create obstacles for translators. Translators encounter major problems in finding the appropriate equivalent in the receptor language, which may not exist in ordinary bilingual dictionaries.

Finally, the present paper argues that the translation of English collocations into Uzbek can be a flexible practice if Uzbek possesses the equivalent collocation while the literal meaning of the whole English collocation is intended. The translator can still find an appropriate equivalent collocation in Uzbek, even if the literal meaning of the first word in the English collocation is not intended. This, however, requires the translator to find a word in Uzbek that conveys the intended meaning of the word in English and collocates with the other Uzbek word simultaneously.

All in all, that the translator may resort to make use of a free construction in Uzbek to stand for the English collocation concerned. This often takes place if Uzbek does not possess an equivalent collocation to the English collocation as the literal meaning of the latter is not the intended meaning, the verbs in the former and the latter differ in terms of type and function and/or the verb in the former can convey the intended meaning of the whole English collocation. This research paper has particularly addressed the translation of English verb plus object collocation and English adjective plus noun collocation into Uzbek. It has been restricted to deal with specific issues pertaining to the translation of these two types of English collocation into Uzbek. Further research is needed to examine the reversed process and whether or not the results will be similar to those of the present research. Important research is also required to investigate the translation of English collocations into other languages and vice versa.

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Learner Corpora and Corpus-Informed Teaching Materials for Economy faculty students

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Abstract: *to date, for languages such as English, large diversifications have been created fixed and representative annotated corpora for teaching students of Economy faculty. However, none the corps is unable to serve all purposes at once. Therefore, the creation on the basis universities of specialized methodologically-oriented language corpus is becoming a daily practice.*

Key words: *corpora, corpus, Second-Language, information technology, foreign language.*

Method-oriented the corpus of the subject area can help in solving problems of selecting content learning, including professional lexical minima. In addition, the development of corpus-based learning materials will allow the introduction world best practice in teaching a foreign language to the students of Economy faculty using corpus technologies. Examples of methodically oriented corpora are live resource LINGVATORIUM, created by the staff of the Center for Linguistics.

A.A. Khudyakov at the St. Petersburg State University of Economics, Corpus of Engineering Texts on the basis of the Tomsk Technical University (Shalamova, Filchenko 2004), multimedia corpus of oral texts and exercises ELISA (English Language Interview Corpus as a Second-Language Application created at the University of Tübingen, Germany; corpus of trainee errors, collected in the Russian State Pedagogical University. It can be assumed that hull projects are still gaining their critical mass, so they often remain on the websites of universities and do not always available to the general public. However, one cannot but agree with the opinion of E.N. Solovova that when sufficiently broad coverage at the level of theory, the introduction of new information technological technologies and more efficient use of old methods of proceeds unreasonably slowly. The author sees the reason in insufficient professional mobility and flexibility of teachers, lack of ready move away from stereotyped actions.

In domestic practice insufficient attention is paid to the development of teachers' skills of self - worthwhile work with the corpus, evaluation of corpus data, and also possibly the use of corpus resources. On the one hand, it is obvious that the start-up approach has great potential in teaching learning a foreign language while teaching different faculty students, however, the difficulties associated with the development of new computer technology seem insurmountable.

The researchers need to share their already existing experience and some training in order to use the linguodidactic potential of the corpus. With the development of society, the needs for support are constantly changing training of specialists who inevitably come into conflict with the already living education system. In this regard, it is required constant adjustment of existing teaching methods, improvement the process of selecting the content of training, the development of new teaching materials rail. In particular, the currently existing mass-produced my textbooks in a foreign language, which are used to sub-training of future specialists in the field of regional studies and other social political directions, have shortcomings no less serious than their advantages, since they do not reflect a highly specialized direction.

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Regional studies as an integral socio-economic discipline studies important problems of the formation, functioning and management of socio-economic complex of the region. Diploma Graduate a specialist in regional studies, performs regional analysis and accounting of historical cultural, natural resource, ethnic, religious, environmental, political physical, as well as within regional and interregional relations and is in demand eight as an expert in cooperation and making important decisions regarding research institutes of the studied region. Thus, the foreign language education of a regional studies student should rely on relevant linguodidactic materials and develop skills and skills necessary for conducting professional discourse.

Compilation regional studies corps, representing one of the types of professional discourse, which is carried out based on the needs of teaching a foreign language in economy faculty can be aimed at solving, by attracting corpus technologies, tasks for the selection of vocabulary in the composition of strictly selected texts professional orientation. However, such characteristics of linguistic of the computer corpus, as a linguistic and statistical visualization capacity, broad search capabilities, representation of various registers out features, statistical significance and diversity of corpus linguistic statistics, considered through the prism of methodical application, allow us to develop an effective model for the development of key foreign language competencies of a regional specialist based on a wide range of corpus opportunities.

All in all, one of the ways to overcome the mismatch between the quality of training of specialists in a foreign language and the goals and objectives of training, indicated in the state educational standards, may be the introduction of corpus technologies in the learning process.

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FORMATION OF QUANTITATIVE REPRESENTATIONS IN THE SECONDARY GROUPS IN PRE-SCHOOL EDUCATIONAL ORGANIZATIONS

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Abstract:*The early years of children's life are the most accelerated period of development. Preschool childhood is short for comparing the whole life of a person, but very meaningful for understanding everything in a new way. Life around brings a lot of information to the little one. When he makes a mistake, he finds answers to many questions, understands logic. In this article, an idea is made about the formation of quantitative representations in the secondary groups in preschool education organizations.*

Keywords: *Preschool education, organization, middle group, quantitative section, mathematical imagination, calculation.*

To achieve the successful development of the instructional material, various teaching methods, tools and techniques are used. The set goals and objectives affect the choice of training, the content of the material being studied, the stage of the lessons and the age of the children. At present, new approaches to the formation of cognitive interests in mathematics are used in preschool children. In the mastering of mathematical composition, the age characteristics of children have increased, the requirements for mathematical preparation of preschool children have increased, social conditions have changed, the attitude to the education and upbringing of children has changed. Teachers have great opportunities in choosing mathematical education programs for the use of various technologies and models for teaching preschool children.

Methodological methods applied to the formation of elementary mathematical imagination in children will help: practical and game activities, solving children's problematic - game and search situations. Increased difficulty, non-standard play, the need to solve the problem is of great interest to children of preschool age. In order to accelerate the formation and development of logical structures of thinking in children, teachers model logical and mathematical structures in the game, during which it is necessary to use mathematical knowledge, create favorable conditions for their independent and active use. Thus, interest in mathematical composition is formed in children. In mathematics, teachers use different methods: oral, visual, game. Other methods are also used: conversation, story, narration, explanation, question-answer, viewing pictures and objects, exercises, didactic and open games.

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The child compares them when working with objects through gaming activities. With this, the first acquaintance with mathematics begins. By the age of four, children easily reach the age of five and slightly older than ten, but they can be mistaken. By the age of six, children begin to understand when the numbers will increase and when they will decrease. Therefore, in order to increase the intelligence of the child, it is important to start systematic training in the kindergarten. One of the requirements for preschool education in modern society is the acquisition of mathematical knowledge and elementary ideas by children in kindergarten. In the process of development, preschool children receive the first elementary ideas about mathematics. Among preschool children, taking into account the gradual development of skills and skills in this direction, the existing techniques and tools have been developed for special age categories.

Mathematics is independent and is designed to develop skills based on the natural capabilities of preschool children. Its role in the development of primary competencies among preschool children is enormous. In the educational process, the child receives the first ideas about mathematical concepts by means of tools. The task of mathematics is the desire to train highly qualified personnel, having the prospect of the future from preschool children. In order to achieve the goal of upbringing in pre-school institutions, when developing targeted programs and methods of upbringing, it is necessary to take into account local and foreign advanced experience, recommendations for parents should be developed. If they share with other kindergartens and preschool institutions the methods and information of raising children, there will be a useful experience of teachers.

Mathematics is one of the few finite Sciences that covers different aspects of children's personality. In the process of formation and study of elementary mathematical imagination, all cognitive processes are actively developed in preschool children: speech, thinking, memory, perception, representation. If the frequency and sequence of development of cognitive processes in a child is taken into account, depending on the psychophysical development of each child in the organization of lessons, it will be effective. If the child has not reached the age at which he can understand mathematical processes, then classes do not play any role for his consciousness. The abilities of the child are determined by his psychology. In the modern world, innovative methods and tools are increasingly being introduced into preschool education programs. Some preschool institutions already use computer science lessons for preschool children in their educational activities. Now the whole world is connected with computer technology, they are gradually entering kindergartens. There are also didactic forms and tools of upbringing, in which visual aids for painting, games are used.

There are many approaches to the formation of elementary knowledge about the teaching of arithmetic and mathematical concepts in children. Children are taught to count, to indicate the different sides of the numbers: more, less, pairs, numbers. To achieve results, a variety of materials are used: counting sticks, natural materials, they are taught to count and recognize money. Children are taught to recognize geometric shapes: a circle, a square, a triangle, etc. Also, children need to absorb measured quantities: meters, centimeters, kilograms, grams, etc. When conducting lessons, children are taught not only exponential arithmetic, but also arithmetic in consciousness. They learn to find and compare things in everyday life, on the street and in nature. For example: three Birch under the window. Children who have graduated from kindergarten should be ready for the first class, and also adapt to an external independent life. After all, they do not always and everywhere walk hand in hand with their mother. Part of the time children spend on themselves and believe in their own skills - this is the process of development. In recent years, the practice introduced the concept of

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preparedness before mathematics. Preparation of the child and his cognitive world to the method of Mathematical Thinking. Different methods of formation of the cognitive sphere allow the child to prepare for the study - mathematics. In the organization of classes, the visual and memory of the preschool teacher affects the creative imagination, perception, self-attention. The task of such education is to activate the pre-school teacher's thinking, the desire to cope with difficulties, the need to solve all sorts of mental tasks. The abilities of a person can manifest themselves in different areas, and here, like others, mathematical abilities are manifested in the process of a preschool educator. The most favorable period for the development of abilities is considered preschool age.

Conclusion. Children of preschool age observe and imitate adults, they observe every movement and listen carefully to what the teacher says, and this is an important feature. It is necessary to teach children to act independently, to demonstrate their actions and to speak. It is necessary to offer children of preschool age to repeat after the teacher about the properties and qualities of the objects. In games with children, there must be mathematical actions. Through comparative actions, the children themselves must tell the teacher how this or that number differs from the other. If the child is difficult to answer, it means that his speech and perception are sufficiently developed, if the child does not want to answer, then he should not put pressure on him and do not demand much.

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DIAGNOSIS OF STUDENTS PROFESSIONAL FOCUS

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Abstract: *This article is about diagnosing career-oriented students.*

Keywords: *diagnosis of professional orientation, professional motivation, Harrison Assessments method, professional orientation.*

Introduction. It is known that the development, socio-political and economic stability of any society depends on the intellectual maturity and moral development of its citizens. One of the important conditions for the development of the Republic of Uzbekistan is the formation of a new system of training personnel based on the rich intellectual heritage of the people preserved for centuries and new achievements in culture, enlightenment, science and technology and the economy based on universal values.

A number of changes are being made in the field of education and science. These changes will directly help the next generation to become well-rounded individuals. The formation of literacy, knowledge, skills and competencies required for the continuation of general secondary education in students studying in educational institutions, the provision of knowledge, skills and abilities to students to create the necessary volume, in which all the conditions are created in order to develop the ability to think independently and analyze. The Law on Education also stipulates that in the framework of basic secondary education (after the seventh grade), students should be provided with professional diagnosis and training in order to form basic knowledge and skills in their professions. Measures will be taken to provide vocational guidance." Young people need to be trained in a specific field right from school. Professional diagnostics and career guidance measures are being taken to build basic knowledge and skills in the professions. In this regard, the "Center for Vocational Orientation and Psychological and Pedagogical Diagnosis" was established in the Republic. The center helps students to choose a profession that suits their interests, abilities and health, based on the needs of society and the requirements of the labor market, provided by the Constitution and laws of the Republic of Uzbekistan.

This center is responsible for the development and implementation of a unified state policy in the field of vocational guidance and psychological and pedagogical diagnosis of students, the organization of the Republican system of vocational guidance of the Ministry of Public Education of the Republic of Uzbekistan, was established for the purpose of scientific-methodical, informational and software support. Monitor the status of vocational guidance and psychological and pedagogical diagnostics, take measures to improve it, develop appropriate programs, regulations and recommendations; generalization, dissemination and implementation of best practices of our country and abroad; Development of measures for professional orientation of students at all levels and professional development of specialists in charge of vocational guidance in psychological and

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pedagogical regional diagnostic centers and educational institutions; One of the most important tasks of the Republican Diagnostic Center is to work with priority programs and problems in understanding the life and professional identity of secondary school students.

The main goal. Why do you need a career path? Of course, some parents decide for their children which university to go to, in which specialty to study, but such a decision of the parent may not always come true, because the future profession is still a definite one. an undecided child may not want to continue their studies, realizing that they are not interested in the specialty at all. Using a career guidance approach can help you avoid this situation and save your family budget and time spent on training.

Choosing a profession is the most important step in a person's life. Through interactive surveys and hands-on activities, students find answers to questions about career concepts and professions. They begin to have an idea of what they want to do in the future. The word "profession" also means occupation that serves as a source of income for people in their profession, type of activity, and way of life. If you enjoy this activity, you will definitely enjoy life. A profession is a consciously chosen activity. The professions chosen by students should be in line with their abilities, interests, and character traits. Because the chosen profession should benefit not only themselves, but also society. In his work, Y.A.Klimov defines: "Profession is a necessary and valuable field for society, in which a person requires physical and mental strength" - these forces are an important means of survival and development instead of the labor expended on it. appears as

Profession (Arabic profession - learning, possession, profit, profession, occupation). A profession is a type of human labor activity that, as a result of special training and work experience, acquires a set of theoretical knowledge, practical skills and abilities to carry out professional activities in a particular field, providing physical ability, mental ability and legal rights. A profession requires work, constant training, knowledge, skills and experience that allow you to perform the type of work competently. Practitioner psychologists currently working in general secondary schools conducted various surveys with schoolchildren on career choice and career guidance, such as “school occupations” and “my future”. , "Identification of occupational types" questionnaires, "chain of occupations". In addition, students are provided with information about their personal aptitudes, abilities, and required qualities for the chosen profession.

There are also a number of career guidance classes for high school students based on their age. Classes such as “Student Interests Questionnaire”, “Professions and Human Qualifications”, “School Student's Professional Identity”, and “Professional Alphabet” are conducted by school psychologists. skills are identified, and each student is individually engaged and given the necessary recommendations. There will be a seminar-training on "My future profession". The workshop will focus students on future careers. Students' opinions on professions will be heard. In addition, based on the results of pedagogical and psychological diagnoses of students' professional orientation, vocational guidance is being conducted among students who may be able to study in vocational schools in the future.

In the process of shaping the interest of adolescents in the profession under study, there are cases that describe the materials that express their attention. Special attention should be paid to the following in determining the components of the intellectual components that ensure the formation of interest in the profession (Figure 1).

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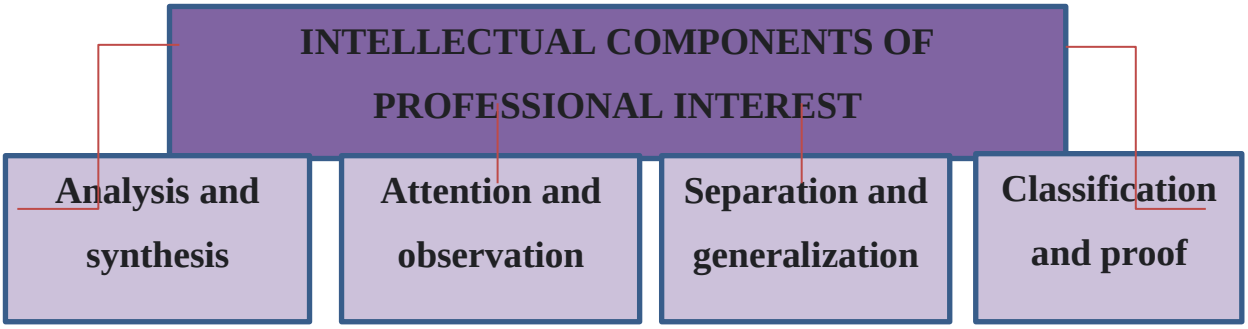

Figure 1. Components of the intellectual components of the formation of interest in the profession.

Currently, Harrison Assessments is the first and unique career guidance method in Uzbekistan that helps us determine which majors to choose and which strengths to develop for our children.

Using this test method, we can:

- We can analyze our strengths;
- We can know the list of professions that will be successful for us;
- We can analyze our leadership qualities;
- We can make a clear plan in advance in our lives;
- We save our lives from wasted time and money;
- We have individual interviews and consultations with psychologists and specialists.

Career guidance is a system of activities aimed at helping a professional self-identify. This practice is based on the idea that every child is talented and can apply their talents in a particular field. There are a variety of career guidance options - interviews with a teenager who is faced with a future career choice, discussions with professionals discussing his or her interests and hobbies, as well as standardized methods, the results of which allow you to understand strengths and weaknesses. One of them is the Harrisonn assessment method, which involves completing a test, the results of which reveal the student's advanced qualities, as well as areas of growth. This practice also includes an interview with a psychologist consultant who can help your child understand the results of this technique and create a developmental plan. The Harrison assessment career guidance method, based on a child's personal qualities and abilities, offers a list of the most appropriate occupations for your child.

What is so special about Harrison Assessments? The Harrison assessment method allows you to deeply analyze your interests, what tasks you prefer, your strengths, and what work environment you prefer. The survey measures 175 personal and work preference factors and compares them with behaviors and requirements to increase enjoyment and success in more than 650 occupations. In addition, after completing the questionnaire, you will be able to consult individually with a psychologist consultant to discuss your strengths, career list, and development plan. So, this style allows you to create a personal short list of the professions that you are most interested in and that will be most successful for you.

Harrison Assessments are used to identify:

• For professional research: helps you find the right profession for you and determine what level of education you need;
• Determining career prospects: identifies the most pleasurable and enjoyable aspects of your career;
• Career Choice: Identifies work items you may not like, which will save you years of trial and error;
• Analyze strengths and weaknesses: identify your strengths;

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• Interview preparation opportunities: By using test-based behavioral insights, you can make a successful and desired positive impact on the interviewer;
• Career Orientation: Using detailed career guidance reports, you can identify key points on how to develop your career.

The method of career assessment is very suitable for high school students over 14 years of age, college and high school students, those who have changed professions, parents, recruiters.

Conclusion. The process of vocational training of students, the development of attitudes to work, the formation of practical skills and competencies includes the comprehensive development and formation of the student's personality. must be an ideologically, principledly, politically mature and spiritually stable person. The profession should be chosen deliberately, taking into account all your pros and cons, taking into account your abilities, inner confidence, real potential. To choose the right profession, you need to know and understand your motives, needs and interests well. The ideal profession is a job that suits them perfectly; these are. then our needs and motives will be fully met and realized. But among the diversity of our needs — our motives — there is one thing we need to focus on in the first place. In general, the most important thing is to make the right professional choice.

Based on the above considerations, today we need to take a comprehensive approach to vocational training of students. In particular, by providing pedagogical and psychological assistance to secondary school students in choosing a profession, we will create a basis for professional motivation, training of professionals who are loyal to the profession and enjoy their work. Therefore, we recommend the following to guide students in their careers:
1. Organize free, creative roundtables to guide students in their careers;
2. To teach teachers to choose a profession in schools through the formation of spiritual education competencies such as humanity, patriotism, friendship, brotherhood;
3. The use of various pedagogical and psychological diagnostic methods appropriate to the age of students in the system of continuing education;
4. Formation of ethical competencies by increasing professional motivation;
5. To increase the interest of our ancestors in choosing a profession by using the scientific and spiritual heritage of our ancestors in educational hours;

Based on the above considerations, today we need to take a comprehensive approach to vocational training of students. In particular, by providing pedagogical and psychological assistance to secondary school students in choosing a profession, it is necessary to motivate them professionally, to create a basis for training professionals who are committed to the profession and enjoy their work. Professional motivation is a clear motivating action that leads to career choice. Therefore, a modern teacher is required to form professional motivation in students, try to develop in them a passion for their chosen profession through various methods, and be aware of advanced methods in this regard.

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MODELLING OF INDUCTION MOTOR WITH ANSYS MAXWELL RMXPRT PROGRAMM

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Abstract. *The article illustrated the design and modeling of an asynchronous electric motor by using the program Ansys Maxwell. Ansys Maxwell RMxprt is used in order to demonstrate the result of design and modeling of electrical machines. The advantages of using the program module Ansys Maxwell RMxprt for the design of electrical machines are revealed and the results of the analysis of their performance are showed. The results of the calculation of the operating characteristics are given in the data tables and in the form of graphical characteristics.*

Keywords: *asynchronous electric motor, stator, rotor, Ansys Maxwell RMxprt, performance characteristics, net power, power factor, efficiency.*

Asynchronous electric motors (AM) are used in almost all industries due to their simple design and ease of operation. Asynchronous electric motors consume about 65% of the electrical energy generated by the country's power plants [1].

The issues of design and simulation of asynchronous electric motors remain very acute, since the performance requirements of modern electric motors have increased significantly. Computer-aided design systems are often used to solve such problems, however, most of the models created in them are not interactive. In this regard, the use of the latest software products, in particular, the Ansys software module, is of considerable interest. Maxwell RMxprt [2]. Users only need to enter the initial data: the type of windings and the connection scheme, the properties of the stator and rotor materials, geometric parameters, data on power supply, load, fan, etc. At the same time, all Maxwell tools for parameterization and optimization calculation are available. Thus, this software tool allows you to significantly speed up the process of developing an electric machine with a standard configuration.

The Ansys package includes three software products with which you can implement the simulation of the electric drive system of various types of electric machines: RMxprt , Maxwell 2D / 3D and Simplorer . Moreover, the same model is launched in conjunction RMxprt - Simplorer , Maxwell 2 D /3 D - Simplorer at the same time [3]. RMxprt supports the following types of electrical machines: three-phase IM, single-phase IM, three-phase synchronous motors (SM) and generators, variable frequency SM and generators, permanent magnet DC motors, etc. [4].

The RMxprt program allows you to perform engineering calculations of electrical machines based on circuit theory. The developer can create a configuration in RMxprt , convert the model into

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a Maxwell task , where he can already make all the required changes. This will be much faster than designing a model from scratch.

As an example, consider the construction of a 4A80A4UZ engine model. To do this, enter in the control window (Project Manager) passport data of the engine 4A80A4UZ: P_{2nom} = 1.1 kW; U_1 \u003d 380 V; 2 p =4, the geometric dimensions of its active parts: D_{in} \u003d 131 mm; D = 84 mm; l_1 \u003d 78 mm; D_a \u003d 83.5 mm; D_v =22 mm, parameters of the stator slot: shape of the slot - semi-open trapezoidal; Z_1 =36; b_1 \u003d 4.4 mm; b_2 \u003d 6.1 mm; h = 12.1 mm; m = 2.5 mm; e =0.5 mm, parameters of the rotor slot: shape of the slot - half-open pear-shaped; Z_2 =28; b_1 \u003d 4.5 mm; b_2 \u003d 1.5 mm; h_p =16.4 mm; m =1.0 mm; e \u003d 0.5 mm, stator winding parameters: S_p \u003d 60; n =1; d = 0.67 mm; winding type - single-layer concentric.

Before running a software analysis of an electric motor, it is necessary to enter its general parameters, for example, power, voltage, operating temperature, number of poles, rated speed, power loss.

After that, verification (*Validate*) and calculation of the project (*Analyze All*). The calculation results in RMxprt are presented in the form of data (Table 1) and as a set of characteristics (Fig . 2). All results can be viewed by selecting the *Solution command Data* on the RMxprt toolbar , characteristics - via the *Curve command* .

Table 1

Performance data obtained using the RMxprt program

R_2, W	I_f, A	η, %	$cos\varphi$	M_2, N·m
0	2.38	0	0.08	0
270	2.39	64.5	0.25	1.73
400	2.43	72	0.33	2.57
540	2.45	76.4	0.42	3.49
640	2.56	78.3	0.47	4.15
700	2.6	79.1	0.51	4.54
900	2.78	80.5	0.61	5.88

Figure 2 shows the performance characteristics of the designed electric motor. Stator current versus motor power ($I_1 = f(P_2)$), efficiency versus motor power ($\eta = f(P_2)$), power factor versus motor power ($\cos\varphi = f(P_2)$) and the dependence of the torque on the power of the electric motor ($M_2 = f(P_2)$).

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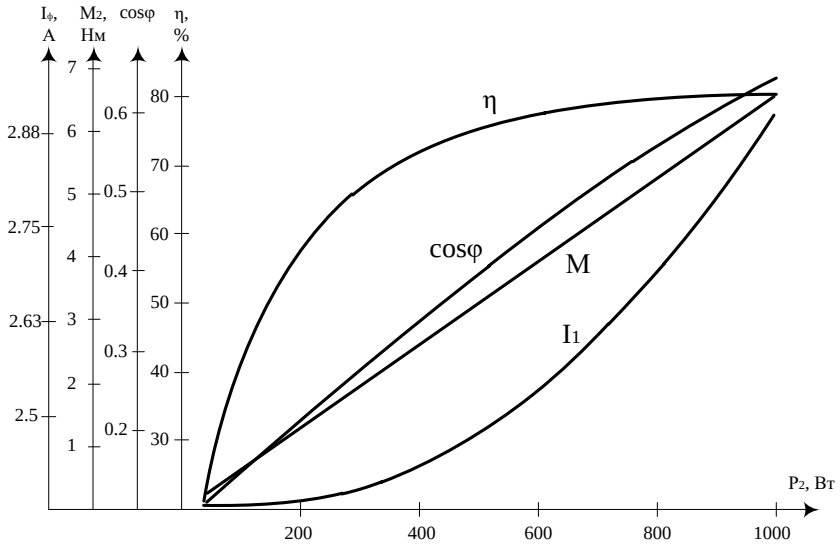

Rice. 2. Operating characteristics of the 4A80A4UZ asynchronous electric motor obtained using the module RMxprt

As shown by the results of the performance characteristics of the 4A80A4UZ asynchronous motor using the module RMxprt useful power reaches the value P_2=0.9 kW at η=80.5%, cos φ=0.61, I_1=2.78 A, M_2=5.88 Nm .

Experimental studies have been carried out to compare the accuracy of induction motor performance results obtained with the RMxprt software .

Experimental data for building the performance characteristics of an asynchronous motor are given in table. 2.

table 2

Experimental performance data

R_2, W	I_f, A	η, %	$cos\varphi$	M_2, $N{\cdot}m$
0	2.4	0	0.18	0
270	2.4	56.25	0.29	1.74
400.5	2.4	66.75	0.36	2.60
537.5	2.45	74.65	0.43	3.50
637.5	2.5	75.89	0.49	4.17
701.2	2.6	73.05	0.54	4.60
900	2.8	75.00	0.62	5.94

Figure 3 shows the experimental data on the performance characteristics of the electric motor in the form of graphically expressed dependences of the useful moment (torque on the shaft) M_2, efficiency . η , phase current I and power factor $cos\varphi$ for different values of useful power P_2 when operating at rated voltage and frequency .

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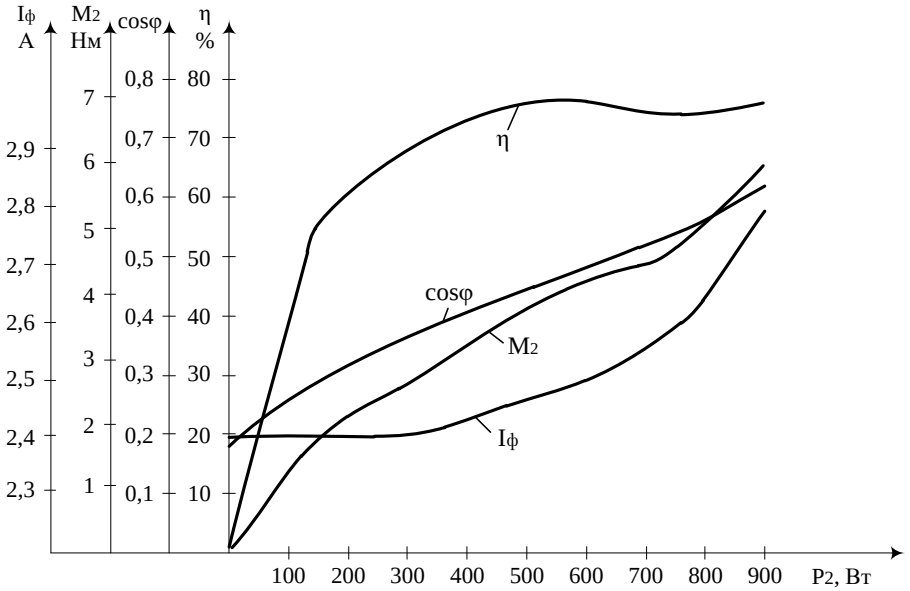

Rice. 3. Performance characteristics of asynchronous motor

As shown by the results of the experiment given with an asynchronous electric motor, the useful power reaches the value P_2 =0.9 kW at η=75%, cos φ=0.62, I_1 =2.8 A, M_2 =5.94 Nm .

When comparing the results obtained using the RMxprt program and the experiment with a useful power P_2 =0.9 kW , the efficiency error . 0.72%, power factor 6.8%, phase current 1.6%, shaft torque 1% respectively . This means that experimental studies were carried out on analog measuring instruments, which have errors.

An analysis of the main parameters of a three-phase asynchronous electric motor with a squirrel-cage rotor of a general industrial design allows us to notice that two different calculation methods give almost identical results with the same initial data when solving the problem of improving the energy efficiency of an electric machine, the calculation using the RMxprt module is most preferable , since it is simpler .

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Solution of the energy equation of a two-phase medium taking into account heat transfer between phases

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Abstract: *In this paper, we consider the problem of supersonic flow around a gas with solid particles. When studying the flow of gas with particles in the snot, a near-wall region of the light phase was found. In a specific example, numerical calculations are made and, on the basis of the results obtained, the shape of the surface of a curvilinear angle, the distribution of pressure and temperature of the flow along the surface at various values of the diameter and concentration of particles are constructed.*

Key words: *two-phase medium, supersonic flow, rarefaction wave, dynamic sliding, heat transfer, barotropic medium.*

In this work, the problem is solved with the involvement of the energy equation of both a single-phase and a two-phase medium, taking into account heat transfer between the phases. Using the interpenetrating model of a multivelocity continuum [1] and equation [2], the problem of flow around a “curvilinear angle” greater than 180° by a gas flow with solid particles at supersonic speed is solved (Fig. 1). In a barotropic medium [3], in the case of a rarefaction flow over the body surface, two regions are obtained: I - between the characteristic and the separation line (dashed line) and II - between the separation line and the solid surface (solid curve). When studying the flow of gas with particles in nozzles, a near-wall region of the light phase was found [4–8]. Without taking into account the volume occupied by particles, the supersonic two-phase flow around a thin airfoil was considered [9] and, in particular, the structure of the rarefaction wave and the near-wall region under dynamic phase slip were studied.

The article [13] analyzes the transfer of matter in inhomogeneous porous media, taking into account the inhomogeneous distribution of the velocity field.

In [14], the problem under consideration is of great importance for aviation and rocket and space technology. In the article, a comparative testing of the Chen k-ε, Sekundov γ_t-92 models and the turbulence model based on the dynamics of two fluids for an axisymmetric subsonic jet is carried out.

In contrast to [3,9], the above problem is solved using the energy equations of both a single-phase and a two-phase medium, taking into account heat transfer between the phases; the kinematic parameters of the gas in region II are determined from the solution of the corresponding boundary value problem, and the temperature is determined from the gas energy equation in finite differences. In a particular example, numerical calculations were made and, based on the results obtained, the shape of the surface of a curvilinear angle, the distribution of pressure and temperature of the flow along the surface were constructed for various values of the diameter and concentration of particles.

Let us consider the flow around a concave corner by a plane supersonic flow of a two-phase medium with an initial velocity U_0 . In this case, a rarefaction wave occurs, which in a linear setting

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degenerates into the characteristics x-ωy=0, and for a plane stationary flow of a mixture of gas and particles in the absence of external and heat flows, we have the equations of motion, continuity and energy [2] :

$$\left.\begin{aligned} u_n\frac{\partial u_n}{dx}+v_n\frac{\partial u_n}{dy}&=-\frac{1}{p_{ni}}\frac{\partial p}{\partial x}+\frac{K}{p_n}\sum_{j=1}^{2}(u_j-u_n)\\ u_n\frac{\partial v_n}{dx}+v_n\frac{\partial v_n}{dy}&=-\frac{1}{p_{ni}}\frac{\partial p}{\partial y}+\frac{K}{p_n}\sum_{j=1}^{2}(v_j-v_n)\end{aligned}\right\}. \quad (1)$$

$$\frac{\partial}{\partial x}(p_n u_n)+\frac{\partial}{\partial y}(p_n u_n)=0 \qquad (2)$$

$$\left.\begin{aligned} \overrightarrow{V_1}\nabla i_1-\frac{1}{p_{1i}}\overrightarrow{V_1}\nabla p+N=0, \overrightarrow{V_2}\nabla i_2-q=0\\ N=\frac{p_2}{p_1}\left[q+\frac{K}{p_2}(V_2-V_1)^2\right],\ V_n^2=u_n^2+v_n^2, n=1,2\end{aligned}\right\}. \quad (3)$$

Considering that here we consider a mixture of gas and solid incompressible particles, we supplement the system (1)-(3) with the equations of state of the phases [10]

$$p=R_1 p_{1i}T_1\,, p_{2i}=const, i_1=c_1T_1, i_2=c_2T_2\,, \quad (4)$$

expression for the function q of interfacial heat transfer

$$q=\gamma(T_1-T_2) \qquad (5)$$

and ratio

$$\frac{p_1}{p_{1i}}+\frac{p_2}{p_{2i}}=1; \qquad (6)$$

Here p −pressure,u_n, v_n − speed, T_n − temperature, p_{ni}, p_n − true and reduced densities $n-phase$, к, γ − the coefficients of interaction and heat transfer between the phases, which in this case are taken constant, depending on the diameter $d0$ and density $p00$ particles, $R1$ is the gas constant, $c1c2$ are the heat capacity coefficients.

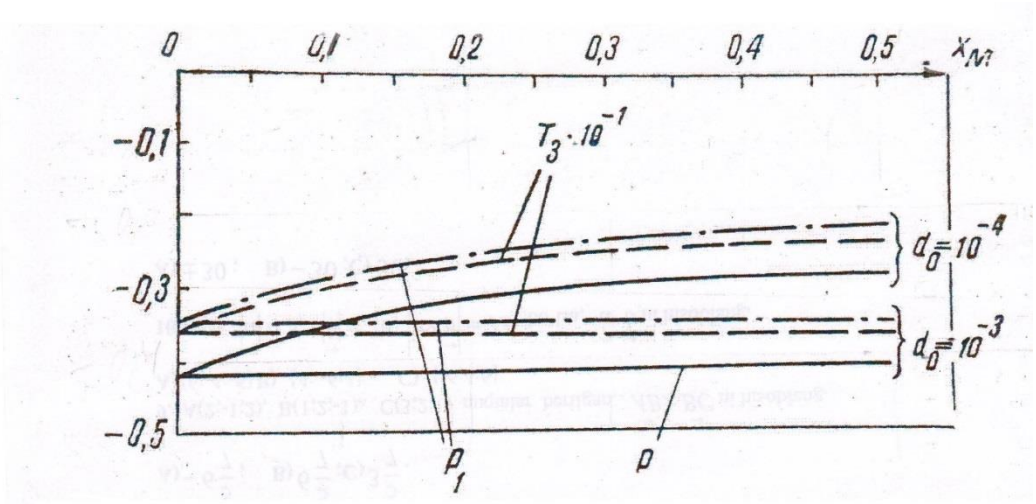

Fig.1. The contour of the flow around the angle is greater than 180° by the flow of gas with solid particles.

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To system $(1)-(6)$, *which is valid in region* I, *the linearization method is applied for*

$$\left.\begin{array}{c} u_n = u_0 + \grave{u_n}\,,\ \rho_n = \rho_{n0} + \delta_n\,, \rho_{1i} = \rho_0 + \varepsilon_1 \\ T_n = T_0 + \grave{T_n}\,, p = p_0 + \grave{p} \end{array}\right\}, \qquad (7)$$

where u_0, ρ_{n0}, p_0, ρ_0, T_0 are constants; $\grave{u_n}$, ε_n, δ_n, $\grave{T_n}$, $\grave{p}$-small values, indices 1 and 2 correspond to gas and particle parameters.

In the case of an irrotational potential flow (1)-(6), taking into account (7), they take the form

$$A_1\frac{\partial^3\varphi_1}{\partial x^3} + A_2\frac{\partial^3\varphi_1}{\partial x\partial y^2} + A_3\left(\frac{\partial^3\varphi_2}{\partial x^3} + \frac{\partial^3\varphi_2}{\partial x\partial y^2}\right) - A_4\frac{\partial^2\varphi_1}{\partial x^2} + A_5\frac{\partial^2\varphi_1}{\partial y^2} + A_6\frac{\partial^2\varphi_2}{\partial x^2} + A_7\frac{\partial^2\varphi_2}{\partial y^2} + A_8\left(\frac{\partial\varphi_2}{\partial x} - \frac{d\varphi_1}{dx}\right) = 0\ , \qquad (8)$$

$$B_1\frac{\partial\varphi_1}{\partial x} - B_2\frac{\partial\varphi_2}{\partial x} = -B_3(\varphi_1 - \varphi_2)\,; \qquad (9)$$

φ_1, φ_2 – speed potentials, $A_i(i = \overline{1,8}), B_j(j = \overline{1,3})$ – known constant coefficients depending on the Mach number in the gas, concentration and phase interaction coefficient. Since the near-wall region II is occupied by a gaseous medium, then for the velocity potential φ_3 of the perturbed flow

$\varphi_{3yy} = \mu^2\varphi_{3xx}(\mu^2 = M_1^2 - 1)$. (10)

The pressure and temperature of the flow on a solid surface are found by the Bernoulli and energy equations [11] in a finite difference. Such an approximation of the energy equation will be the more accurate, the smaller the thickness of the near-wall region II.

Let the phase separation line be given as a straight line and form an angle β_0 with the x-axis. It is obvious that this line is represented as a boundary streamline of particles through which the gas passes freely into region II. Therefore, for (8)-(10) we have boundary conditions at$y = 0$, $\varphi_{2y} = -u_0\beta_0$, $\varphi_{1y} = \varphi_{3y}$, $\varphi_{1x} = \varphi_{3x}$. (11)

We add that the speeds of a two-phase system at infinity are limited and on the characteristic

$\varphi_1 = \varphi_2 = 0$ (12)

On the solid boundary, the condition of flow around the gaseous medium is satisfied, at

$y = f(x), \varphi_{3y} = -u_0\beta(x), \left[\beta(x) = \frac{df(x)}{dx}\right]$; (13)

here β(x) is the angle of inclination of the tangents to the elements of the curvilinear side of the angle, which depends on the shape of the dividing line, the structure of the flow, is an unknown function and must be determined in the process of solving the problem.

Applying the Laplace transform [12] to (8), (9), it is easy to obtain solutions (8), (9) for X that satisfy the boundary conditions (11) и (12):

$$\varphi_1(x,y) = u_0\beta_0 e^{-a_0 y}\frac{\rho_{00}}{\rho_0}\sum_{v=0}^{\infty} b_v\left\{\frac{t^{*v+1}}{(v+1)!} + \sum_{x=1}^{\infty} c_x^0\frac{t^{*v+x+1}}{(v+x+1)!} - \frac{k}{\rho_{10}}\frac{\rho_0}{\rho_{20}}\left(\frac{\rho_{00}}{\rho_0} - 1\right)\left[\int_0^{t^*} f_1(t^*-\tau)f_3(\tau)d\tau + \sum_{x=1}^{\infty} c_x^0\int_0^{t^*} f_2(t^*-\tau)f_3(\tau)d\tau\right]\right\},$$

$$\varphi_2(x,y) = u_0\beta_0 e^{-a_0 y}\sum_{v=0}^{\infty} b_v\left[\frac{t^{*v+1}}{(v+1)!} + \sum_{x=1}^{\infty} c_x^0\frac{t^{*v+x+1}}{(v+x+1)!}\right], \qquad (14)$$

где

$$t^* = x - wy, w^2 = -\frac{A_1B_2 + A_3B_1}{A_2B_2 + A_3B_1},$$

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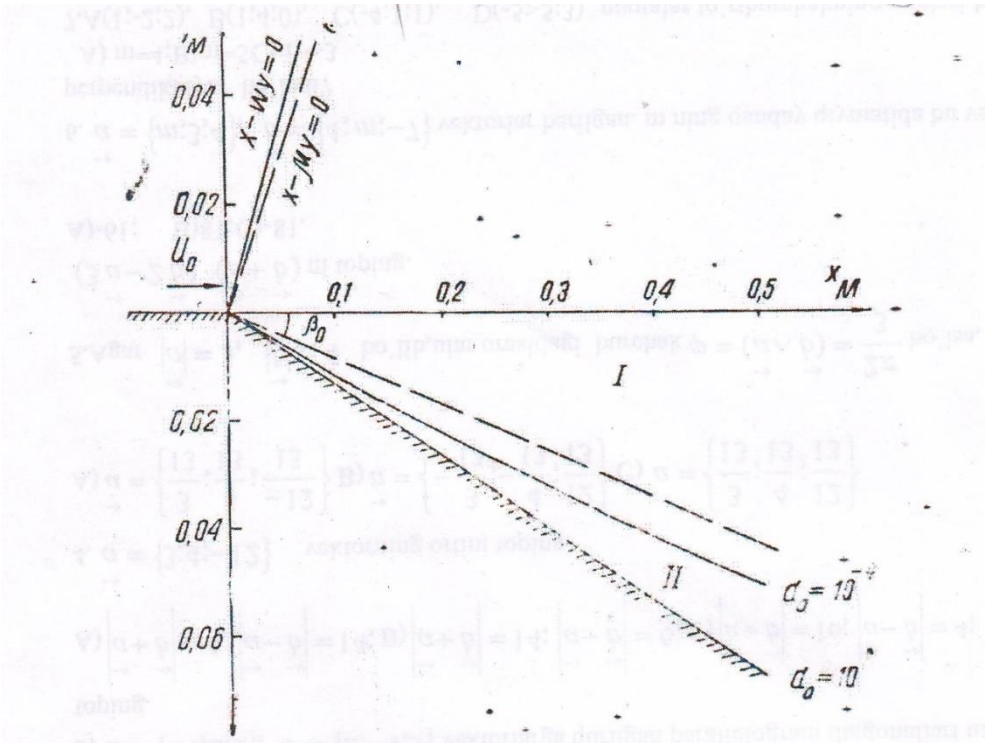
$$f_1(t^*) = \frac{t^{*\nu+1}}{(\nu+1)!},$$

$$f_2(t^*) = \frac{t^{*\nu+x+1}}{(\nu+x+1)!}$$

$$f_3(t^*) = e^{-\frac{B_3}{B_1}t^*},$$

$a_0, \alpha_1, \alpha_2, \beta_1, \beta_2, b_\nu, c_x^0$ – known constant coefficients. Now, taking into account (14) and the equations of motion and energy (1), (3), it is easy to obtain formulas for pressure and temperature at the phase separation line.



Rice. Fig. 2. Distribution of gas flow pressure and gas temperature (dashed line) in the flow region.

Equation (10) has a solution

$$\varphi_3(x, y) = f_1(x - \mu y) + f_2(x + \mu y) \quad ; \qquad (15)$$

the functions $f_1(x)$ and $f_2(x)$ taking into account (11), are known from the solution (14) in the flow region of a two-phase medium, are not given. Substituting (15) into (13), we obtain a first-order differential equation with respect to $f(x)$, which determines the shape of the solid surface.

The direct problem is solved similarly, i.e. for a given value of the angle β_{00} of the solid surface with the X axis, in the course of solving, the parameters of regions I, II and the shape of the surface of the phase separation line are found.

For a specific calculation, consider the case $v_0 = 0\,, x = 1$ and use the Stokes resistance law cd=24/Re to find the phase interaction coefficient. Then the results for the steam-water mixture [10] at $p_0 = 10$ atm, corresponding to the initial parameters

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$$T_0 = 481 \text{ град}, c_1 = 4{,}8 \cdot 10^3 \text{ м}^2/\text{сек}^2 \cdot \text{град},$$

$$c_2 = 4{,}4 \cdot 10^3 \text{ м}^2/\text{сек}^2 \cdot \text{град}, \beta_0 = 0{,}0875,$$

$$M_1 = 1{,}85\ ,\ \rho_{00}/\rho_0 = 1{,}8\ , \rho_0 = 0{,}5 \text{ кг} \cdot \text{сек}^2/\text{м}^4,$$

$$\rho_{00} = 0{,}9 \text{ кг} \cdot \text{сек}^2/\text{м}^4, \rho_{10} = 0{,}45 \text{ кг} \cdot \text{сек}^2/\text{м}^4$$

and coefficients K,γ for different values of the particle diameter d_0 are shown in Figs. 2. According to the calculations, the thickness of the near-wall region II depends on the concentration and diameter of the particles, i.e. the smaller the particle, the thinner the region II, and at $d_0 = 10^{-5} sm$ it almost disappears, then, apparently, the flow should be considered as single-velocity. The two-phase flow parameter is less than the pure gas parameter, therefore, the perturbed region I becomes wider than the perturbed region of pure gas.

The pressure increment curves of the mixture of gas and particles in fig. 2 is higher in absolute value than the corresponding single-phase flow curves p_1, and the gas temperature distribution curve $(T_3 = T_3^{`}/T_0)$ on a solid surface at $d_0 = 10^{-4} sm$ is concave relative to the x axis and is located above the corresponding direct line for $d_0 = 10^{-3} sm$ see

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