

ISSN 2181-8622

Manufacturing technology problems



Scientific and Technical Journal Namangan Institute of Engineering and Technology

INDEX  COPERNICUS
INTERNATIONAL

**Volume 8
Issue 4
2023**



SLIB.UZ
Scientific library of Uzbekistan

NamMTI ILMIY-TEXNIKA JURNALI

Tahrir hay'ati a'zolari:

Paxtani dastlabki ishlash, to'qimachilik va yengil sanoat

1. Axmadxodjayev X.T., t.f.d., prof. - NamMTI
2. Muradov R.M., t.f.d., prof. - NamMTI
3. Jumaniyozov Q., t.f.d., prof. - "Paxtasanoat ilmiy markazi" OAJ
4. Eshmatov A.B., t.f.d., prof. - Tojikiston Milliy Texnologiyalar Universiteti
5. Xoliqov Q., t.f.d., prof. - NamMTI
6. Ergashev J.S., t.f.d., dots - NamMTI
7. Obidov A.A., t.f.d., dots. - NamMTI

Qishloq xo'jaligi mahsulotlarini yetishtirish, saqlash, qayta ishlash va oziq-ovqat texnologiyalari

1. Toshev A., t.f.d., prof., akad. - Janubiy Ural davlat universiteti, Rossiya
2. Banu Yucel., q.x.f.d., prof. - Ege Universiteti, Turkiya
3. Alimov U., t.f.d. - O'zR FA UNKI
4. Xudayberdiyev A.A., t.f.d., prof. - NamMTI
5. Sherquziyev D.Sh., t.f.d., prof. - NamMTI
6. Merganov A., q.x.f.d., prof. - NamMTI
7. Mamatov Sh., t.f.d., prof. - Webster Universiteti

Kimyo va kimyoviy texnologiyalar

1. Namazov Sh.S., t.f.d., prof., akad. - O'zR FA UNKI
2. Botirov E.X., k.f.d., prof. - O'zR FA O'MKI
3. Akbarov H.I., k.f.d., prof. - O'zMU
4. Boymirzayev A., k.f.d., prof. - NamMTI
5. Nurmonov S.E., t.f.d., prof. - O'zMU
6. Salihanova D.S., t.f.d., prof. - O'zR FA UNKI
7. Kattayev N.T., k.f.d., prof. - O'zMU

Mexanika va mashinasozlik

1. Zaynobiddinov S., f.m.f.d., prof., akad. - ADU
2. Mardonov B., f.m.f.d., prof. - TTYSI
3. Usmanov P., f.m.f.d., dots. - NamMTI
4. Matkarimov P.J., t.f.d., prof. - NamMTI
5. Sharibayev N., f.m.f.d., prof. - NamMTI
6. Erkaboyev U.I., f.m.f.d., dots. - NamMTI
7. Musoyev S.S., t.f.n., prof. - BuxMTI

Ta'limda ilg'or pedagogik texnologiyalar

1. Goncharenko I.I., f.m.f.d., prof. - BMTU, Belorussiya
2. Hüseyin Kamal, t.f.d., prof. - Ege Universiteti, Turkiya
3. Ergashev Sh.T., t.f.n., dots. - NamMQI
4. Musayev J.P., p.f.d., prof. - IRV
5. Xoshimova D., f.f.d., prof. - NamMTI
6. Maxkamov A.M., t.f.d. - NamMTI

Iqtisodiyot

1. Maniki Tiagi, i.f.d. - KIET, Xindiston
2. Malcolm Ng Cher Herh., t.f.d. - INTI IUC, Malaysia
3. Soliyev A., i.f.d., prof. - NamMTI
4. Saidboyev Sh., i.f.d., prof. - NamMTI
5. Matkarimov K., i.f.n., prof. - NamMTI
6. Kadirova X.T., i.f.d., dots. - NamMTI
7. Bustonov M.M., i.f.d., dots. - NamMTI

Muharrirlar guruhi

S. Yusupov, O. Kazakov, B. Xolmirzayev, A. Mirzaev,
A. Tursunov, O. R. Qodirov (mas'ul muharrir)

12. Burov V.D. "Thermal power plants" Textbook. - 3rd ed., stereotype. - Moscow: MEI Publishing House, 2009. - 466 p.
13. Shidlovsky S.V. Automatic control. Perestraivaemye structure. – Tomsk: Tomsk State University, 2006. – 288 pp.
14. Kholkhodzhaev B.A. Algorithms for the synthesis of multifunctional state monitors for linear system.// "Technical science and innovation", №2/2020, Page: 92-96. Tashkent 2020.
15. Kholkhodzhaev B.A. Algorithms to restore the input effects of dynamic systems in conditions of uncertainty.// "Technical science and innovation", №4/2020, Page:150-154. Tashkent 2020.
16. Kholhodjaev B.A. Construction of a structural-mathematical model reservoirs / International Scientific and Practical Conference "Ecological problems of food security" Voronezh (EPFS 2022)

IMPROVING STUDENTS SPEAKING SKILLS IN PRACTICAL LESSONS

MAMADALIYEVA BURAYMA

Teacher of Namangan Institute of Engineering and Technology
E-mail.: reynamamadaliyeva@gmail.com, phone.: (+99897) 680 88-80

Abstract: This article focuses on improving students' speaking skills in practical English classes. According to the results of interviews conducted in order to obtain preliminary data on students' speaking skills, it was found that students face problems in speaking due to their insufficient knowledge of the language, which in turn makes students feel insecure about speaking. . Students were not familiar with different speaking activities that facilitate speaking. They read text to convey ideas and lack strategies when speaking. To help students, task-based learning is adapted through action research in courses. 15 students in these courses participate in this study. Data is collected from pre-test to post-test to interview. Findings show that using task-based learning helps students improve their speaking skills on four dimensions: accuracy, vocabulary, fluency, and comprehension. Students succeed in completing tasks by engaging in a variety of activities at three stages of learning: pre-task, task-cycle, and form-focus. They manage to improve their speaking skills and gain self-confidence. Students can assess their knowledge in pair and group work.

Keywords: pre-test, post-test, interview, speaking skills, task-cycle, form-focus, accuracy, vocabulary, fluency, comprehension.

Introduction. One of the most necessary skills for living in the twenty-first century is gaining the ability to know and use another language. In many areas of life, from business transactions to broadcasting television weather warnings, the demand for proficiency in a foreign language is growing. One of the most important skills to have in a foreign language is the ability to speak the language with native or non-native speakers of that language. A great number of foreign language learners most likely consider one of their primary language goals to be the ability to speak the

language at a high level of proficiency. Thus, oral proficiency has become an important focus in the foreign language classroom. Learners in a foreign language classroom are primarily exposed to four different communication skills: reading, writing, listening, and speaking. Of these four skills, speaking is generally regarded as the most difficult in which to attain proficiency due to its complex nature. Though each of the four language skills can be taught in conjunction with another of the skills, it is important to look at speaking here in isolation. Speaking is considered the most important skill compared to the

other three language skills: reading, listening and writing. When people speak a language, as it includes all other types of cognition, they can be called "speakers of the language" (Ur, 2012: 117). They use their linguistic knowledge and background knowledge to communicate ideas, discuss meaning, and explore ideas. They use words very skillfully and put them into appropriate sentences to create interesting conversations. As Bygate (2009) says, when we speak, we not only need to know vocabulary and grammar, but also to produce and adapt them to the situation. After the speaker acquires the knowledge and skills to use them, he quickly makes decisions, implements them smoothly, and adjusts the conversation to self-interaction. However, acquiring knowledge and using it in speech is not always easy for EFL and ESL students. Most students have difficulties in expressing grammatically correct sentences because there are significant differences between students' native language and EFL grammar (Manurung, 2015). Students have limited opportunities to experience speaking activities in class and Hamouda (2012) from Qassim University, Saudi Arabia conducted a study on the problems students face in speaking. The results showed that due to many factors such as low English proficiency, fear of speaking in front of others, negative evaluation, shyness, lack of self-confidence and preparation, and fear of making mistakes, many students in the EFL classroom students do not want to answer their teacher. . Similarly, EFL students who do not want to speak English in Indonesia experience similar factors and cultural issues affect their learning. Students speak Bahasa Indonesia while learning English in the classroom. They become "unquestioning minds" in their interactions because they believe that the teacher never makes mistakes (Marcellino, 2008). Students do not take much initiative in learning because they prefer to do what

their teacher tells them to do. A complex educational process affects students' speaking ability. During the interview to collect preliminary data on students' speaking skills for this study, the students mentioned that they are always assigned a group presentation task, which they prepare at home. In class speaking, they read texts to express ideas. They don't use strategy when they speak. Students are not familiar with the different speaking activities that can help them speak on their own. They are embarrassed because their friends laugh at them when they talk. Their pre-test results show that students' speaking skills are considered low. Accuracy is the lowest, followed by vocabulary and comprehension. Students need to be helped to improve their speaking skills, so the researcher decides to use task-based learning. Task-based learning emphasizes learning through the use of tasks in both instructional planning and classroom instruction (Richards, 2006; 30).

Methods. Teaching speaking in the foreign language classroom is vital and at times, complicated.

The methodology of foreign language teaching has changed a great deal through the 20 century, and though speech has been an integral part of language teaching in many historical methods, it was recently with the idea of communicative competence that speaking with the intent of true oral communication became important again. An important consideration to teaching speaking is what teaching approaches and activities best support the development of oral communication: how to teach the necessary skills for students to accurately produce speech forms (grammatical form, vocabulary, phonological patterns), and how to also enhance speaking fluency (Bums 1998 Hadley tells us in her text that "communicative competence" arose in the 1970s and 1980s and is still an important foreign language teaching methodology

today, and states that Hymes' theory of communicative competence may be defined simply as the underlying structural knowledge of language and the ability to use this knowledge in actual communication. Communicative competence incorporates the ability of the student to possess skills not only for the form of a language, but to also be able to use the language for communicative purposes, thus making the ability to use language to communicate effectively within different social contexts a crucial part of communicative language teaching (Bums 1997: 44). As described by Canale, communicative competence consists of four major components: grammatical, sociolinguistic, discourse, and strategic competence. Grammatical competence is the degree to which the speaker knows the rules of sentence structure, vocabulary, pronunciation, and spelling and thus contributes to the speaker's fluency. Sociolinguistic competence is the extent to which the speaker can use and understand the language appropriately in various contexts such as basic conversation, describing, narrating, persuading, and things similar. Discourse competence is the ability to coherently and cohesively connect words and phrases in order to convey knowledge and ideas, such as separating ideas, showing contrast, transitioning to a new topic, and indicating cause. Strategic competence is the ability to use communication strategies to help the speaker compensate for the specific things they do not know in a conversation, such as inferring the meaning of an unknown word based on surrounding context, or asking the other speaker to speak more slowly if not understood (Hadley 2001 and Savignon 2001). Communicative language teaching integrates all four skills (reading, writing, listening, speaking) and emphasizes mainly the ability to use the language for communication purposes. The focus is put on the learner, and a diverse array of classroom activities can

support the learner in learning how to use the language. The communicative curriculum, as stated by Savignon in her 2001 article "Communicative Language Teaching for the Twenty-First Century", consists of five components: Language analysis concentrates on the forms of language syntax, morphology, lexicon, and phonology through familiar drill, translation, and "workbook" exercises. Language experience focuses on the use of English for immediate communicative goals. Learner identity focuses on the learners' attitudes and motivations concerning the second language and explores self-expression in the new language. Theater Arts examines the sociocultural rules of communication appropriateness through role-play. Beyond the Classroom looks at the real-life situations in which learners will use the language outside of classroom instruction. This curriculum is just one example of how communicative competence takes shape in the classroom. Learning focuses on negotiating meaning, using the target language to communicate authentically and meaningfully (Richards, 2006). Negotiation of meaning aims to solve communication problems (Suzuki, 2018). Task-based learning allows students to learn to use form and communication (Larsen-Freeman and Anderson, 2011; 193). Form-oriented work functions as active skills because it is designed to develop skills and knowledge that facilitate the actual communication process (Nunan, 2004: 22). Activation skills are of two types: language exercises and communicative activities. Students are expected not only to understand language functions but also to use them (Branden, 2006; 6). It aims to improve linguistic accuracy in students' speech, even if there is no communication problem between them (Suzuki, 2018). Since the concept of task-based learning is learning by doing, students are expected to experience the language by completing tasks. Proponents of task-based learning

mention the types of tasks that are performed during the learning process. As Richards (2006) pointed out, pedagogical tasks and realistic tasks help students learn the language. Pedagogical tasks, for example, focus on information spaces, strategic interaction and the use of the language element (Nunan, 2004, Hossima and Tasud, 2014). However, a real-life task, such as an interview role, reflects language use outside the classroom. Pedagogical tasks are designed to activate students' speaking skills, not to train students to complete tasks (Nunan, 2004). Willis and Willis (2007) suggest seven task types: sorting, matching, comparing, project and creative tasks, sharing personal experiences, problem solving, and listing. J. Willis (1996) says that a task is a purposeful activity for students to use language to achieve a realistic result. They use target language resources to solve problems, do puzzles, play games or share and compare experiences. Nunan (2004; 35-37) presents principles for implementing task-based learning. They are (1) scaffolding in which lessons and materials should support learning and students are not expected to produce language they have not yet learned, (2) task dependence, meaning that one task should grow throughout the lesson. (3) language processing maximizes learning opportunities and activates "organic" learning, (4). active learning, students learn best through active use of the language they are learning, (5) integration, teaching students in ways that make clear the relationships between linguistic form, communicative function, and semantic meaning should, (6) motivate students to action. from reproductive language to creative use, (7) reflection, students should be given opportunities to think about what they have learned and how well they are doing. Research has shown the benefits of using task-based learning to improve students' speaking skills. The results of a

study by Namaziandost, Hashemifardnia, & Shafiee (2019) show that when students complete feedback, thinking-space, and information gaps through task-based learning compared to traditional learning then they can speak fluently. Similarly, Albino (2017) found that students could improve their speaking skills, especially in terms of grammar, after their teachers used reframing and prompting strategies in the task cycle. Focusing on form through task repetition can help students build their grammar knowledge from simple to complex forms as they receive feedback during the learning phase (Van de Guchte, Braaksma, Rijlaarsdam, & Bimmel, 2016). The more often students participate in different tasks, the better they rate their performance (Meng and Cheng, 2010). However, more emphasis should be placed on task-based teaching in EFL classes (Elsheykh Hago Elmahdi, 2016). The teacher can adapt the tasks set by the supporters of the assignments and create activities that help the students to complete the assignments.

Results. Speaking is defined by Anne Bums in her 1997 book, *Focus on Speaking*, as "an interactive process of constructing meaning that involves producing, receiving, and processing information" (14). In addition, it is a multi-level, hierarchical skill in which an individual must form and articulate thought processes under a wide range of conditions, suggests Bygate in his 2002 article entitled "Speaking". The form of spoken language and the meaning of the utterance depend on the context in which speaking occurs. According to Florez 2003, this context may be considered the speakers themselves, their experiences, the surrounding environment, and the reasons for speaking. Speaking is always a skill that involves interaction with another person, whether the speaker is conversing with someone else or formally presenting information to listeners in a speech. Florez also states that speaking is not always

predictable but is frequently "spontaneous, open-ended, and evolving" (1). Lazaraton 2001 and Grove 1999 state that speaking is the most demanding of the four language skills because of the variety of components involved. These components include things such as slang and idioms used in conversational speech, reduced forms of words and phrases, the pressure that can arise from interacting directly with another person and expressing a thought in real time, the spontaneous nature of speech, the sociolinguistics of the message, and the simultaneous demands imposed on the speaker.

Discussion. While speaking is a very necessary skill for daily communication between people, it is also a very complex process. Simply put, the process of speaking involves: 1) constructing a discourse plan to relay the speaker's intentions, 2) thinking through the specific message to be relayed, 3) forming the thought into grammatically correct utterances (a process that can be complicated and stressful due to the time constraints that accompany uttering a thought in the quick pace of conversation, explaining the difference between written and spoken language), 4) articulating the thought aloud using appropriate word choice for the situation and correct pronunciation, and 5) actively monitoring and correcting the spoken message (Bygate 29-32). Speakers must know how to produce specific and formulated parts of language such as grammar, pronunciation, and vocabulary, which is considered to be linguistic competence. Speakers must also understand the context in which they produce language and effectively exercise their linguistic competence when, why, and in what ways considered appropriate. This is sociolinguistic competence (Florez 1). Both of these competences are considered equally important: if a speaker lacks linguistic competence, his or her message of mixed up grammar and incorrect vocabulary may be misunderstood, and if a

speaker lacks sociolinguistic competence, his or her message and its intentions may be misunderstood. Certain skills that should be addressed while instructing speaking may include using grammar structures accurately, using correct suprasegmentals in the foreign language (stress, rhythm, tone, etc), using appropriate gestures and body language, and strategies for enhancing comprehensibility, among other things (Florez). Ultimately, speakers must be able to convey their message using intelligible words and phrases, and do so in a way that is appropriate to the discourse situation. There are a variety of different situations in which anyone who communicates orally will find himself or herself. Bums (1998) highlights these different communication genres, which include casual, polite, or formal interpersonal conversations, and factual or transactional pragmatic encounters (109). There are also other kinds of speech such as formal presentations. Just as there are such a wide variety of situations in which we can find ourselves speaking, there must be a variety of activity types for students learning a foreign language to practice these skills. Teachers must alert students to the different genres of speech, and be certain to practice these different oral communication genres, such as formal exchanges, conversational exchanges, and critical discourse (111). Students learning how to speak should be exposed to different practice situations involving: informal and formal conversations including telephone conversations, persuasion, arguing for or against a point, formal speeches, and all types of situations in which people talk.

Conclusion. In my foreign language classroom, I hope to someday successfully incorporate many of these ideas and strategies for teaching speaking. I believe that Communicative Competence is a strong and effective method to follow and I foresee my future language classroom

incorporating the various components of this methodology. I also believe in the viewpoints of errors being a natural by-product of learning a foreign language and that not every error should be corrected. Improvements in students' scores indicate that students' speaking skills are improving. This fact is confirmed by the attitude of students towards the use of task-based learning. They say that doing

different activities by working in pairs and groups will help you to speak English better. They can practice simple dialogues, turn taking, information gap, interview, discussion, short role play, simulation and mini-drama. Most importantly, they can assess their knowledge. A variety of learning experiences encourage students to improve their speaking skills in the future.

References

1. Albino, G. (2017). Improving Speaking Fluency in a Task-Based Language Teaching Approach: The Case of EFL Learners at PUNIV-Cazenga. *SAGE Open*, 7(2). <https://doi.org/10.1177/2158244017691077>
2. Alterio, M. (2008). Using storytelling to Enhance Student Learning. *The Higher Education Academy*, 28(3), 232–239. <https://doi.org/10.1016/j.nedt.2007.05.001>
3. Armansyah, R., Asbah, A., & Fauzi Bafadal, M. (2018). Violation of Conversation Rules in Turn Taking in the Second Step Class At Cec Mataram. *Pendekar: Jurnal Pendidikan Berkarakter*, 1(1), 1. <https://doi.org/10.31764/pendekar.v1i1.243>
4. Atas, M. (2015). The Reduction of Speaking Anxiety in EFL Learners through Drama Techniques. *Procedia - Social and Behavioral Sciences*, 176, 961–969. <https://doi.org/10.1016/j.sbspro.2015.01.565>
5. Branden, K. Van den. (2006). *Task-Based Language Education. From theory to practice* (First edit; H. M. Long & J. ack C. Richards, eds.). New York: Cambridge University Press.
6. Burn, A. (2016). Research and the Teaching of Speaking in the Second Language Classroom. In A. Burn (Ed.), *Teaching in the Second Language Classroom* (pp. 242–256).
7. Burns, A. (2009). Doing Action Research in English Language Teaching. In *Doing Action Research in English Language Teaching*. <https://doi.org/10.4324/9780203863466>
8. Bygate, M. (2009). *Speaking* (C. N. Candli & H. G. Widdowson, eds.). New York: Oxford University Press.
9. Castañeda, D. A. (2019). Improving conversational interactions with task-based activities in a Spanish as a second language class. *Computer Assisted Language Learning*, 0(0), 1–28. <https://doi.org/10.1080/09588221.2019.1666149>
10. Crookes, Graham. "Second Language Speech Production Research: A Methodologically Oriented Review." *Studies in Second Language Acquisition* 13 (1991): 113-132.
11. Dingli, S., Khalfey, S., & Leston-Bandeira, C. (2013). The Effectiveness of Incentive-Driven Role-Play. *European Political Science*, 12(3), 384–398. <https://doi.org/10.1057/eps.2013.19>
12. Elsheikh Hago Elmahdi, D. O. (2016). The Impact of Task-Based Approach on EFL Learner's Performance. *World Journal of Educational Research*, 3(2), 301. <https://doi.org/10.22158/wjer.v3n2p301>
13. Goodwin, Janet. "Teaching Pronunciation." *Teaching English as a Second or Foreign Language*. Ed. Marianne Celce-Murcia. Boston: Heinle & Heinle, 2001. 117-133.

14. Grove, Charles. "Focusing on Form in the Communicative Classroom: An output-centered model of instruction for oral skills development." *Hispania* 82.4 (1999): 817-829.
15. Hadley, Alice Omaggio. *Teaching Language in Context*. 3rd ed. Boston: Heinle & Heinle, 2001. 238-252.
16. Huber, Virginia P. "Teaching for Oral Proficiency at the Elementary School Level." *Hispania* 70 (1987): 658-662.
17. Scarcella, Robin C. "Socio-Drama for Social Interaction." *Methodology in TESOL*. Ed. M. Long and J. Richards. Boston: Heinle & Heinle, 1987. 208-213.
18. Scarcella, Robin C. and Rebecca L. Oxford. *The Tapestry of Language Learning: The Individual in the Communicative Classroom*. Boston: Heinle & Heinle, 1992. 153-168.
19. Smith, Amanda J. Activities from personal ideas and experiences to which I am unable to specifically credit one source. July- December 2003.
20. Ur, P. (2012). *A Course in English Language Teaching (Second)*. United Kingdom: Cambridge University Press.

A LEXICAL-SEMANTIC STUDY OF TERMS RELATED TO AGRICULTURAL TECHNOLOGY IN UZBEK AND ENGLISH LANGUAGES

RASULOVA GULMIRA

Teacher of Namangan institute of engineering and technology

Abstract:

Objective. This study conducts a thorough Lexical-Semantic analysis of terms related to agricultural technology in both Uzbek and English languages. Utilizing a comparative approach, the research explores linguistic nuances, cultural influences, and semantic variations in the lexicons of these languages within the context of agricultural technology. By examining specialized texts and employing semantic analysis tools, the study aims to unravel the intricate interplay between language, culture, and technological concepts.

Methods. The research employed a comparative analysis approach, utilizing a corpus of agricultural technology-related texts in both Uzbek and English. Specialized dictionaries, academic publications, and industry documents were examined to compile a comprehensive list of terms. Semantic analysis tools were then employed to discern the connotations and nuances associated with each term.

Results. The Uzbek language, with its Turkic roots, reveals a lexicon deeply intertwined with agricultural practices. Terms often reflect the region's rich agricultural history, emphasizing the significance of crops and farming techniques unique to Uzbekistan. The study identifies linguistic patterns and semantic shifts that distinguish Uzbek agricultural technology discourse. English, as a global lingua franca, showcases a diverse and dynamic lexicon in the realm of agricultural technology.

Conclusion. This Lexical-Semantic study provides valuable insights into the terms associated with agricultural technology in Uzbek and English. By unraveling the intricacies of language within this domain, the research contributes to a deeper understanding of how linguistic choices influence perceptions and communication in the field of agricultural technology.

Keywords: Lexical-Semantic, Agricultural Technology, Uzbek Language, English Language, Comparative Analysis, Semantic Variations, Cross-Cultural Communication.

Introduction. In the ever-evolving landscape of technological innovation, the field of agricultural technology stands as a crucial nexus where advancements intersect with the age-old practices of cultivating the land. Language, as a fundamental tool for communication and knowledge dissemination, plays a pivotal

CONTENTS

PRIMARY PROCESSING OF COTTON, TEXTILE AND LIGHT INDUSTRY	
N.Usmanova, M.Abdukarimova, Sh.Mahsudov	
Information modules for automation of the process of forming the structure of industrial collection of women's clothing.....	3
O.Turdiyeva, A.Khojiyev	
Research analysis of transformation new assortment development.....	10
M.Rasulova, Sh.Mamasoliyeva, G.Norboyeva	
Evaluation of heat conductivity of special clothing.....	15
D.Rayimberdiyeva, N.Nabidjanova, N.Ismailov	
Mathematical model of the influence of a gymnast's strength on clothing fabric.....	22
G.Gulyaeva	
Modeling of strength reliability and transformation of a knitted loop at the limit state of the structure.....	26
H.Diyorov	
Experimental determination of the cleaning efficiency of the fiber in the pipe..	31
S.Khashimov, R.Muradov	
Problems in cleaning cotton-seed and their solution.....	35
GROWING, STORAGE, PROCESSING AND AGRICULTURAL PRODUCTS AND FOOD TECHNOLOGIES	
N.Kurbanov, S.Bozorov	
Development prospects of the oil production industry in the republic of Uzbekistan and foreign countries.....	41
Sh.Rasulov, Kh.Djuraev, A.Usmanov, M.Khalikov	
Kinetics of drying process of tomato fruit.....	45
M.Sobirova, J.Farmonov	
Oil extraction studies from flax seeds.....	52
M.Meliboyev, G.Makhmudova, N.Muydinova	
Importance of potato powder extraction technology in production and industry.....	56
CHEMICAL TECHNOLOGIES	
E.Panoev, Kh.Dustov, J.Jamolov	
Research of corrosion and foaming processes in gas absorption purification and technology of their protection in inhibitors.....	61
U.Odamov, M.Komilov	
Assessment of the degradation process of solar photovoltaic plants in the climatic conditions of Uzbekistan.....	69
R.Dusanov, Kh.Turaev, P.Tojiev, D.Nabiev, KH.Eshankulov	
Physical-mechanical properties of composite materials based on vermiculite, bazalt, wollostanite, and polyethylene P-Y 342 and polyamide PA-6.....	77
Z.Voqqosov, M.Ikromova	
Bentonite and phosphorite production of organomineral fertilizers based on raw materials and nitrogen-fixing microorganisms ((CD:B:NFM=100:5:(0-4)), (CD:B:PF:NFM=100:5:5:(0-4))).....	81
D.Abdirashidov, Kh.Turaev, P.Tajiyev	

Studying the structure and properties of polypropylene filled with nitrogen, phosphorus, metal-containing oligomers.....	90
M.Khoshimkhodjaev, M.Khuramova	
Optimization of the method for instrumental neutron activation analysis (inaa) of natural objects.....	100
F.Rakhmatkariyeva, M.Koxxarov, Kh.Bakhronov	
Isotherm of ammonia adsorption in zeolite CaA (M-22).....	105
R.Kurbaniyazov, A.Reymov, B.Pirnazarov, Sh.Namazov, O.Badalova, B.Beglov	
Rheological properties of ammophosphate pulps obtained using phosphorite powder of the khodjakul deposit.....	111
F.Eshkurbonov, A.Rakhimov, J.Rakhmonkulov, E.Safarova, A.Ashurova, N.Izzatillayev, M.Bobokulova	
Investigation of the chemical-mineralogical composition of bentonite of the khaudag deposit and synthesis of wine fining agents based on its.....	117
J.Shukurov	
Modeling the production of dimethyl ether from natural gas.....	126
D.Makhkamova, Z.Turaev, M.Dedaboyeva	
Study of interaction of components in $ZnSO_4 - NH_4H_2PO_4 - H_2O$ system....	137
D.Akhunov	
Study of the problems of atmospheric waste water collection and green field irrigation.....	142
D.Jumaeva, R.Akhrorova, S.Barnoeva, O.Kodirov, U.Raximov	
Study of adsorption isotherms of polar and non-polar molecules on silica adsorbents.....	146
MECHANICS AND ENGINEERING	
E.Abdullaev, V.Zakirov	
Using parallel service techniques to control system load.....	154
E.Aliyev, A.Mamaxonov	
Development of efficient chain transmission construction based on analysis of constructive characteristics of chain drives of technological machines.....	161
S.Utaev, A.Turaev	
Results of a study of the influence of oil contamination on wear of the working surface of diesel cylinder lines.....	171
L.Tilloev, Kh.Dustov	
Separation of the polymer mass from the waste of the alkaline cleaning process of pyrogas by the extraction method.....	177
A.Mirzaalimov	
Effect of temperature on photoelectric parameters of three-way illuminated solar cells.....	183
Sh.Mamajanov, A.Qakhharov, Sh.Isaboyev	
On training of competitive personnel - on the basis of creating a new generation of teaching literature in the educational process (in the example of mechanical science).....	193
K.Ismanova	
Mathematical model and analytical solutions of the process of physics-chemical hydrodynamics.....	197
N.Sharibayev, B.Nasirdinov, G.Rasulova	

Microcontroller-based mechatronic system with heating and humidity sensor for silkworm eggs incubation.....	205
M.Rasulmuhamedov, K.Tashmetov, T.Tashmetov	
Methods of determining transport flows.....	210
J.Izzatillaev, U.Khudoyberdiev, X.Mamadiev	
Prospects for the application of vertical axis wind turbines in the Jizzakh region.....	218
Y.Asatillaev, N.Israilov	
Problems and possibilities of laser synthesis of metal powders in additive technologies.....	230
U.Meliboev, D.Atambaev	
Determination of acceptable values of the main factors affecting the production of twisted thread.....	237
N.Adilov	
Assessment of the technical condition of the weight checking wagon type 640-VPV-271.....	242
ADVANCED PEDAGOGICAL TECHNOLOGIES IN EDUCATION	
M.Ikromova	
Programming as one of the main approaches in the development of children's komputational thinking.....	247
A.Yuldashev	
Developing activities, the academy of public administration under president of the republic of Uzbekistan.....	253
B.Kholhodjaev, B.Kuralov, K.Daminov	
Block diagram and mathematical model of an invariant system.....	259
B.Mamadaliyeva	
Improving students speaking skills in practical lessons.....	267
G.Rasulova	
A lexical-semantic study of terms related to agricultural technology in Uzbek and English languages.....	273
ECONOMICAL SCIENCES	
M.Bustonov	
Digital economy and employment.....	279
M.Bustonov	
Econometric analysis of the activities of multi-sectoral farms.....	285
M.Rahimova	
Prospects for the development of small and medium business in Namangan region.....	292
A.Abdullayev, H.Djamalov	
Organizational structure of the internal control service for the fulfillment of tax obligations of enterprises.....	297
H.Djamalov, A.Abdullayev	
Issues of organizing internal control of fulfillment of tax obligations of enterprises.....	307
Sh.Maripova	
Specific features of management in small business enterprises.....	316
N.Abdieva, R.Abdullayeva, U.Rajabov	
The constituent elements and the need for state regulation of small business and private entrepreneurship.....	324