



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

№5



ISSN: 2992-8982

<https://yashil-iqtisodiyot-taraqqiyot.uz/>

2025



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Bosh muharrir:

Sharipov Kongiratbay Avezimbetovich

Bosh muharrir o'rinbosari:

Karimov Norboy G'aniyevich

Muharrir:

Qurbonov Sherzod Ismatillayevich

Elektron nashr. 1347 sahifa.

E'lon qilishga 2025-yil 1-mayda ruxsat etildi.

Tahrir hay'ati:

Salimov Oqil Umrzoqovich, O'zbekiston Fanlar akademiyasi akademigi
Abduraxmanov Kalandar Xodjayevich, O'zbekiston Fanlar akademiyasi akademigi
Sharipov Kongiratbay Avezimbetovich, texnika fanlari doktori (DSc), professor
Rae Kvon Chung, Janubiy Koreya, TDIU faxriy professori, "Nobel" mukofoti laureati
Osman Mesten, Turkiya parlamenti a'zosi, Turkiya – O'zbekiston do'stlik jamiyati rahbari
Axmedov Durbek Kudratillayevich, iqtisodiyot fanlari doktori (DSc), professor
Axmedov Sayfullo Normatovich, iqtisodiyot fanlari doktori (DSc), professor
Abduraxmanova Gulnora Kalandarovna, iqtisodiyot fanlari doktori (DSc), professor
Kalonov Muxiddin Baxritdinovich, iqtisodiyot fanlari doktori (DSc), professor
Siddiqova Sadoqat G'afforovna, pedagogika fanlari bo'yicha falsafa doktori (PhD)
Xudoyqulov Sadirdin Karimovich, iqtisodiyot fanlari doktori (DSc), professor
Maxmudov Nosir, iqtisodiyot fanlari doktori (DSc), professor
Yuldashev Mutallib Ibragimovich, iqtisodiyot fanlari doktori (DSc), professor
Samadov Asqarjon Nishonovich, iqtisodiyot fanlari nomzodi, professor
Slizovskiy Dimitriy Yegorovich, texnika fanlari doktori (DSc), professor
Mustafakulov Sherzod Igamberdiyevich, iqtisodiyot fanlari doktori (DSc), professor
Axmedov Ikrom Akramovich, iqtisodiyot fanlari doktori (DSc), professor
Eshtayev Alisher Abdug'aniyevich, iqtisodiyot fanlari doktori (DSc), professor
Xajiyev Baxtiyor Dushaboyevich, iqtisodiyot fanlari doktori (DSc), professor
Hakimov Nazar Hakimovich, falsafa fanlari doktori (DSc), professor
Musayeva Shoirazimovna, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), professor
Ali Konak (Ali Ko'nak), iqtisodiyot fanlari doktori (DSc), professor (Turkiya)
Cham Tat Huei, falsafa fanlari doktori (PhD), professor (Malayziya)
Foziljonov Ibrohimjon Sotvoldix'o'ja o'g'li, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dots.
Utayev Uktam Choriyevich, O'z.Respub. Bosh prokuraturasi boshqarma boshlig'i o'rinbosari
Ochilov Farkhod, O'zbekiston Respublikasi Bosh prokuraturasi IJQKD boshlig'i
Buzrukxonov Sarvarxon Munavvarxonovich, iqtisodiyot fanlari nomzodi, dotsent
Axmedov Javohir Jamolovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)
Toxirov Jaloliddin Ochil o'g'li, texnika fanlari bo'yicha falsafa doktori (PhD), katta o'qituvchi
Bobobekov Ergash Abdumalikovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), v.b. dots.
Djudi Smetana, pedagogika fanlari nomzodi, dotsent (AQSH)
Krissi Lyuis, pedagogika fanlari nomzodi, dotsent (AQSH)
Glazova Marina Viktorovna, Iqtisodiyot fanlari doktori (Moskva)
Nosirova Nargiza Jamoliddin qizi, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Sevil Piriyeva Karaman, falsafa fanlari doktori (PhD) (Turkiya)
Mirzaliyev Sanjar Makhamatjon o'g'li, TDIU ITI departamenti rahbari
Ochilov Bobur Baxtiyor o'g'li, TDIU katta o'qituvchisi
Golisheva Yelena Vyacheslavovna, Iqtisodiyot fanlari nomzodi, dotsent.



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Editorial board:

Salimov Okil Umrzokovich, Academician of the Academy of Sciences of Uzbekistan
Abdurakhmanov Kalandar Khodjayevich, Academician of the Academy of Sciences of Uzbekistan
Sharipov Kongiratbay Avezimbetovich, Doctor of Technical Sciences (DSc), Professor
Rae Kwon Chung, South Korea, Honorary Professor at TSUE, Nobel Prize Laureate
Osman Mesten, Member of the Turkish Parliament, Head of the Turkey–Uzbekistan Friendship Society
Akhmedov Durbek Kudratillayevich, Doctor of Economic Sciences (DSc), Professor
Akhmedov Sayfullo Normatovich, Doctor of Economic Sciences (DSc), Professor
Abdurakhmanova Gulnora Kalandarovna, Doctor of Economic Sciences (DSc), Professor
Kalonov Mukhiddin Bakhridinovich, Doctor of Economic Sciences (DSc), Professor
Siddikova Sadokat Gafforovna, Doctor of Philosophy (PhD) in Pedagogical Sciences
Khudoykulov Sadirdin Karimovich, Doctor of Economic Sciences (DSc), Professor
Makhmudov Nosir, Doctor of Economic Sciences (DSc), Professor
Yuldashev Mutallib Ibragimovich, Doctor of Economic Sciences (DSc), Professor
Samadov Askarjon Nishonovich, Candidate of Economic Sciences, Professor
Slizovskiy Dmitriy Yegorovich, Doctor of Technical Sciences (DSc), Professor
Mustafakulov Sherzod Igamberdiyevich, Doctor of Economic Sciences (DSc), Professor
Akhmedov Ikrom Akramovich, Doctor of Economic Sciences (DSc), Professor
Eshtayev Alisher Abduganiyevich, Doctor of Economic Sciences (DSc), Professor
Khajiyev Bakhtiyor Dushaboyevich, Doctor of Economic Sciences (DSc), Professor
Khakimov Nazar Khakimovich, Doctor of Philosophy (DSc), Professor
Musayeva Shoira Azimovna, Doctor of Philosophy (PhD) in Economic Sciences, Professor
Ali Konak, Doctor of Economic Sciences (DSc), Professor (Turkey)
Cham Tat Huei, Doctor of Philosophy (PhD), Professor (Malaysia)
Foziljonov Ibrokhimjon Sotvoldikhoja ugli, Doctor of Philosophy (PhD) in Economic Sciences, Associate Professor
Utayev Uktam Choriyevich, Deputy Head of Department, Prosecutor General's Office of Uzbekistan
Ochilov Farkhod, Head of DCEC, Prosecutor General's Office of Uzbekistan
Buzrukkhonov Sarvarkhon Munavvarkhonovich, Candidate of Economic Sciences, Associate Professor
Akhmedov Javokhir Jamolovich, Doctor of Philosophy (PhD) in Economic Sciences
Tokhirov Jaloliddin Ochil ugli, Doctor of Philosophy (PhD) in Technical Sciences, Senior Lecturer
Bobobekov Ergash Abdumalikovich, Doctor of Philosophy (PhD) in Economic Sciences, Acting Associate Professor
Judi Smetana, Candidate of Pedagogical Sciences, Associate Professor (USA)
Chrissy Lewis, Candidate of Pedagogical Sciences, Associate Professor (USA)
Glazova Marina Victorovna, Doctor of Sciences in Economics (Moscow)
Nosirova Nargiza Jamoliddin kizi, Doctor of Philosophy (PhD) in Economic Sciences, Associate Professor
Sevil Piriyeva Karaman, Doctor of Philosophy (PhD) (Turkey)
Mirzaliyev Sanjar Makhamatjon ugli, Head of the Department of Scientific Research and Innovations, TSUE
Ochilov Bobur Bakhtiyor ugli, Senior lecturer at TSUI
Golisheva Yelena Vyacheslavovna, Candidate of Economic Sciences, Associate Professor.

Ekspertlar kengashi:

Berkinov Bazarbay, iqtisodiyot fanlari doktori (DSc), professor
Po'latov Baxtiyor Alimovich, texnika fanlari doktori (DSc), professor
Aliyev Bekdavlal Aliyevich, falsafa fanlari doktori (DSc), professor
Isakov Janabay Yakubbayevich, iqtisodiyot fanlari doktori (DSc), professor
Xalikov Suyun Ravshanovich, iqtisodiyot fanlari nomzodi, dotsent
Rustamov Ilhomiddin, iqtisodiyot fanlari nomzodi, dotsent
Hakimov Ziyodulla Ahmadovich, iqtisodiyot fanlari doktori, dotsent
Kamilova Iroda Xusniddinovna, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)
G'afurov Doniyor Orifovich, pedagogika fanlari bo'yicha falsafa doktori (PhD)
Fayziyev Oybek Raximovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Tuxtabayev Jamshid Sharafetdinovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Xamidova Faridaxon Abdulkarim qizi, iqtisodiyot fanlari doktori, dotsent
Yaxshiboyeva Laylo Abdisattorovna, katta o'qituvchi
Babayeva Zuhra Yuldashevna, mustaqil tadqiqotchi

Board of Experts:

Berkinov Bazarbay, Doctor of Economic Sciences (DSc), Professor
Pulatov Bakhtiyor Alimovich, Doctor of Technical Sciences (DSc), Professor
Aliyev Bekdavlal Aliyevich, Doctor of Philosophy (DSc), Professor
Isakov Janabay Yakubbayevich, Doctor of Economic Sciences (DSc), Professor
Khalikov Suyun Ravshanovich, Candidate of Economic Sciences, Associate Professor
Rustamov Ilkhomiddin, Candidate of Economic Sciences, Associate Professor
Khakimov Ziyodulla Akhmadovich, Doctor of Economic Sciences, Associate Professor
Kamilova Iroda Xusniddinovna, Doctor of Philosophy (PhD) in Economics
Gafurov Doniyor Orifovich, Doctor of Philosophy (PhD) in Pedagogy
Fayziyev Oybek Raximovich, Doctor of Philosophy (PhD) in Economics, Associate Professor
Tukhtabayev Jamshid Sharafetdinovich, Doctor of Philosophy (PhD) in Economics, Associate Professor
Khamidova Faridaxon Abdulkarimovna, Doctor of Economic Sciences, Associate Professor
Yakhshiboyeva Laylo Abdisattorovna, Senior Lecturer
Babayeva Zuhra Yuldashevna, Independent Researcher

08.00.01 Iqtisodiyot nazariyasi
08.00.02 Makroiqtisodiyot
08.00.03 Sanoat iqtisodiyoti
08.00.04 Qishloq xo'jaligi iqtisodiyoti
08.00.05 Xizmat ko'rsatish tarmoqlari iqtisodiyoti
08.00.06 Ekonometrika va statistika
08.00.07 Moliya, pul muomalasi va kredit
08.00.08 Buxgalteriya hisobi, iqtisodiy tahlil va audit
08.00.09 Jahon iqtisodiyoti
08.00.10 Demografiya. Mehnat iqtisodiyoti
08.00.11 Marketing
08.00.12 Mintaqaviy iqtisodiyot
08.00.13 Menejment
08.00.14 Iqtisodiyotda axborot tizimlari va texnologiyalari
08.00.15 Tadbirkorlik va kichik biznes iqtisodiyoti
08.00.16 Raqamli iqtisodiyot va xalqaro raqamli integratsiya
08.00.17 Turizm va mehmonxona faoliyati

Muassis: "Ma'rifat-print-media" MChJ

Hamkorlarimiz: Toshkent davlat iqtisodiyot universiteti, O'zR Tabiat resurslari vazirligi, O'zR Bosh prokuraturasi huzuridagi IJQK departamenti.

Jurnalning ilmiyligi:

“Yashil” iqtisodiyot va taraqqiyot” jurnali

O'zbekiston Respublikasi
Oliy ta'lim, fan va innovatsiyalar
vazirligi huzuridagi Oliy
attestatsiya komissiyasi
rayosatining
2023-yil 1-apreldagi 336/3-
sonli qarori bilan ro'yxatdan
o'tkazilgan.



MUNDARIJA

“Zavur kollektor suvlarining kimyoviy tarkibi tahlili va ularni tozalash zarurati (Qoraqalpog‘iston Respublikasi misolida)”.....	20
Kungiratbay Sharipov, Ma‘ruf Nurmanov	
Forming demand and stimulating sales in Uzbekistan.....	26
Musayeva Shoirazimovna	
Членство в ВТО как драйвер развития: взгляд Узбекистана через призму опыта Вьетнама и Казахстана.....	30
Ж.Я.Нуриллаев	
Mamlakatimizda tizimli ahamiyatga molik banklarni aniqlash tartibi va ularning bank tizimi moliyaviy barqarorligiga ta'siri tahlili.....	37
Xolmamatov Farhodjon Kubaevich	
O'zbekiston respublikasida aholi bandligini ta'minlashdagi dolzarb masalalar	44
Ibragimov Elmurod Gulboynor o'g'li	
O'zbekiston respublikasida elektr energiyasi ta'minoti hajmini yalpi ichki mahsulot hajmiga ta'sirini ekonometrik tahlil qilish	48
Fayziyev Rabim Alikulovich	
Raqamli iqtisodiyot sharoitida tijorat banklarining xizmat turlarini takomillashtirish amaliyoti	60
Umurzoqova Adiba Ochilovna	
Qishloq xo'jaligi kooperativi boshqaruv tizimida buxgalteriya hisobini tashkil qilishning o'ziga xos xususiyatlari	67
Abduraxmanov Ramazon Abdullayevich	
O'zbekistonda qishloq xo'jaligi mahsulotlari umumiy hajmini prognozlashda ekonometrik modellar (yillik)	72
Qodirov Farxod Amirovich, Bo'riyeva Qundiz Muratbaevna	
Oziq-ovqat mahsulotlari xavfsizligi tizimini takomillashtirishning nazariy va amaliy jihatlari.....	77
Mahamatova Maftuna	
Xufiyona va yashirin iqtisodiyotning amaliy tahlili o'zbekiston miqyosida.....	83
Koshanov Abdimurat Azat uli	
Soliq tizimini barqarorligini belgilovchi omillar tahlili.....	87
Nurillayev Jasurbek Davronbekovich	
Mahalliy budjetlar daromad manbalarini mustahkamlash omillari.....	92
Soatova Nodira Boboxanovna	
Bank infratuzilmasining raqamli transformatsiyasi va resurslar bazasi shakllanishi: nazariy asoslar va texnologik yondashuvlar.....	97
Raxmatov Azizjon Jaloliddinovich, Jumayev Muzaffar Mahmud o'g'li	
Ichki auditning transformatsion potentsiali: tahliliy amallarni takomillashtirish orqali samaradorlikni oshirish.....	102
Misirov Akbarali Pardaboyevich, Ismoilov Asadbek Abdusamat o'g'li	
Xorijiy mamlakatlarda yashil moliyalashtirishni rivojlantirish yo'llari.....	110
Qorriyeva Shahnoza Safarbayevna	
Yashil moliya – iqtisodiy rivojlanish mexanizmi sifatida	117
Nodir Xidirov G'iyosaliyevich	
Xo'jalik yurituvchi subyektlarning likvidliligi va moliyaviy barqarorligini ta'minlashning xorij tajribasi va uning amaliy ahamiyati	122
Bauyetdinov M.J.	
Теоретические подходы к определениям агрессии социально - экономической и политической стабильности государства как фактор повышения рекреационных потребностей	128
Алимова Райхона Баходировна	
Innovatsion ta'lim texnologiyalari asosida talabalarning metodik tayyorgarligini shakllantirish.....	139
Komilov Umidjon Normurod o'g'li, Tulyaganova Gulnoza Olimjon qizi	



Kichik biznes subyektlarini moliyalashtirish manbalari	143
Nematulloyev Suxrob Sobirovich	
Bir qatlamli elastik asosda joylashgan to'sinning seysmik kuchlar ta'siridagi tebranishining V.Z. Vlasov usuli asosida analitik tadqiqi	148
Kamola Xaydarova	
"Sibir daryolarining burilishi" loyihasining tarixiy va retrospektiv tahlili	153
Mahmudov Nosir Mahmudovich	
Sarguzasht turizmini rivojlanishi va sarguzasht turlarda turistlarning xavfsizligini ta'minlashda instruktor-gidlarning roli	159
Tilovmurodov Dostonbek Furqat o'g'li	
Scientific-theoretical foundations of the use of ict in ensuring management efficiency and security in enterprises	165
Khalilov Bekzod Akhmatovich	
Tijorat banklarida kredit riskini boshqarish mexanizmlarini takomillashtirish yo'nalishlari.....	171
Mirtursunova Dinara Anvarovna	
O'zbekiston respublikasi tijorat banklarida masofaviy bank xizmatlarini joriy etishni takomillashtirish yo'llari.....	175
Tangriyev Izzat Raxmatullayevich	
Qashqadaryo viloyatida eko va etno turizmni rivojlantirishning istiqbollari va iqtisodiy samaradorligi.....	181
Erkayeva Barno, Xushvaqto'v Ramziddin	
O'zbekiston bank tizimida raqamli valyutalar va yashil investitsiyalar integratsiyasini takomillashtirish	186
Nodirov Azizxon Asrorovich	
Global energiya noaniqligining o'zgaruvchanligi ekonomertik modellari	192
Bexzod Qo'ziboev	
Экоцифра: цифровизация МСП для зеленого устойчивого роста	197
С.С. Убаева	
Qishloq xo'jaligini barqaror rivojlantirish va ekologik toza hududni yo'lga qo'yishning ahamiyati	201
Ergashov Ulug'bek Zoxidjonovich	
Statistika fanining shakllanish bosqichlari va rivojlanish tendensiyalari	206
Nabixodjaev Abbas Abdupattahovich, Umarova Mukaddas Abbasovna	
Hududlarning atmosferaga chiqaradigan zararli chiqindilar miqdorini sanoat mahsulotiga nisbati bo'yicha tahlili	210
Baqoyev Husan Nuriddinovich	
Qayta tiklanadigan vodorod narxlari strategiyasini o'rganish: xarajat noaniqliklarini bartaraf etish	216
Nuraliyeva Komila Sanakulovna	
Qishloq xo'jaligini "yashil" iqtisodiyot asosida rivojlantirishga o'tishning zarurligi va mohiyati	221
Yoldoshev Mutalib Ibrohimovich	
Mamlakat iqtisodiyotini rivojlantirishda "yashil investitsiyalar" dan foydalanishning xorij tajribalari	225
Ruzibayeva Nargiza Xakimovna, Rustamova Nasiba Arslanovna	
Ijtimoiy iqtisodiy ehtiyojlar va ularning iqtisodiy rivojlanishdagi o'rni.....	230
Raxmonova Feruza Musaqulovna	
Oliy ta'lim xizmatlarini ijtimoiy-iqtisodiy taraqqiyotda tutgan o'rni.....	234
Mirzaxajeva Shaxzoda Shuxratovna	
Tijorat banklari muammoli kreditlarining likvidlikka ta'siri.....	240
Karshiyev Adham Anvarovich	
Kichik firmalarning raqobatbardoshligini oshirishning nazariy metodologik jihatlari.....	245
Ruzmetov Davron Ibrogimovich, Aliyev Maqsudbek Erkinovich	
Xo'jalik yurituvchi subyektlarning moliyaviy resurslaridan samarali foydalanish imkoniyatlari.....	251
Talapova Nargiza Baxriddinovna	



“Deviant xulq-atvorli o’smirlarning ijtimoiy moslashuvining psixologik xususiyatlari”	255
Saidbekova Feruza Anvarbek qizi	
Aholi daromadlarini diversifikatsiya qilishda davlat siyosatining roli va imkoniyatlari	258
Nutfullayev Shohrux Mexli o’g’li, Qurbanov Ulug’bek Erkinovich	
Анализ показателей развития зелёной химии по всему миру и в узбекистане за последние десять лет	262
Фозилова Фирангиза Комиловна	
Tijorat banklarining o’zbekiston respublikasi iqtisodiyotiga ta’siri	270
Masharipov Rasulbek Jo’rabekovich	
Biznes birlashuvda buxgalteriya hisobi va auditni takomillashtirish yo’nalishlari	273
Hamroyeva Zuhra Amiral qizi, Xayitboyeva Laylo Oybekovna, Mirzarayimov Sardorbek Ravshanovich	
O’zbekiston respublikasida pul-kredit siyosatining maqsadi	277
Adilov Zuxriddin Marip o’g’li	
Qishloq xo’jaligi mahsulotlarining ishlab chiqarish va bozorlararo aloqalarining statistik o’zgarish tendensiyalari	281
Zakirova Umida Maxamadaminovna	
Iqtisodiy bilimlarni shakllanishi va rivojlanishi	286
Po’latov Abdulloh Xolxo’jayevich	
Теоретические основы эффективного управления финансовыми ресурсами предприятий с государственной долей (на примере узбекистана)	291
Ахмедов Дилшод Турсункулович	
Robototexnika asoslari va maktab ta’limida qo’llanilishi	298
Tuxliyev Muslimbek Sherzod o’g’li	
Sun’iy intellektlar yordamida o’quvchilarni hayotiy faoliyat ko’nikmasini shakllantirishi	303
Mirxasilova Zulfiya Kochkarovna, Abdurahmanova Ozoda Djo’rayevna, Kurbanov Azimjon Jo’raboy o’g’li	
Levi tengsizligi uchun A.N. Kolmogorov teoremlari	316
Saypiddinov Shukrullo Sadrdinovich, Baxramov Rustamjon Qambarali o’g’li	
Rivojlanayotgan mamlakatlar bank tizimida raqamli moliyaviy texnologiyalarni joriy etish afzalliklari	320
Xodjimamedov Akmal Ashurovich, Umedov Abdullo Umedovich	
O’zbekiston respublikasining mdh mamlakatlari bilan tashqi savdo faoliyati tahlili: o’zgarish tendensiyalari va istiqbollari	326
Ilyosov Asrorjon Axrorjon o’g’li, Abdullaev Alisher Maxmudovich, Tuxtasinova Muxayyo Mirzasultonovna	
Elektron tijoratni rivojlantirishning xorij tajribasi	330
Madieva Zuxra Iskandarbekovna	
Inson resurslarini o’rganishning asosiy yondashuvlari: mohiyat-ta’rifiy tahlil	336
Bakirov Qobiljon Mamatyusupovich	
Bandlikni ta’minlashda davlat tomonidan institutsional muhit yaratishning roli	340
Dilorom Tojiboyeva, Umida Ravshanovna Anvarova	
Mamlakatimizda islom moliyasini rivojlantirish maqsad va choralari	346
Xoliyorov Xomid Boynazarovich	
Разработка экспертной системы для оценки финансового состояния предприятия	352
Tajibayeva Kizlargul Ajiniyazovna	
Farg’ona vodiysi viloyatlarida kichik biznes ko’rsatkichlarining o’zgarishi: panel regressiya tahlili	362
Tojiyeva Muhabbatxon Mansurjon qizi	
O’zbekiston Respublikasida makroiqtisodiy ko’rsatkichlarni hisoblashdagi asosiy muammolar va ularning yechimlari	368
Farmonov Ilhomjon Iqboljon o’g’li	
Xorijiy tajriba asosida korxonalar innovatsion faolligini boshqarishni takomillashtirish	374
Hakimova Nozimaxon Sobirjon qizi	
Mahalliy davlat hokimiyati organlarida milliy kadrlar zaxirasini shakllantirish	380
G’aniev Elyor Sobirjonovich	
O’zbekistonda sirkulyar iqtisodiyotga o’tishning ahamiyati	386
Mirzayev Muzaffar Maxmudovich	



The role of international investments in greening and ecological rehabilitation of the aral sea region	392
Ospanova Feruza Bazarbaevna	
“Зеленое направление” совершенствования бухгалтерского учета	397
Ибрагимов Гайратжон Артикович	
Xarajatlarni kelib chiqish joylari va javobgarlik markazlari bo'yicha hisobga olishni takomillashtirish	403
Xamidova S.Ya.	
Mintaqalarni iqtisodiy rivojlantirishning metodologik asoslari va ularni takomillashtirish.....	409
Toshaliyeva Saodat Toxirovna	
O'zbekistonda kichik turar joy biznesini rivojlantirishda xorijiy tajribalar	414
Yo'ldashev Bekzodjon Sherzodjon o'g'li	
Tijorat banklarida davlat maqsadli dasturlarini moliyalashtirish yuzasidan ilmiy-nazariy qarashlar.....	419
Shodiyev Shuhrat Sunnat o'g'li	
Qandolat mahsulotlari bozorida marketing strategiyalaridan foydalanishning xorijiy mamlakatlar tajribasi.....	426
Azlarova Munira Muxammad-Amin qizi	
Risk management in commercial banks, methodological approaches and practical implementation	433
Baymuratova Zina Aqilbekovna, Jarilkapova Naubaxar Paraxat qizi	
The impact of competition on economic growth: evidence from uzbekistan's automotive industry.....	439
Saydaliyeva Dilrabo Baxriddin qizi	
Raqamli texnologiyalarning oliy talim xizmatlarini rivojlantirishdagi o'rni.....	444
Mirzaxadjayeva Shahzoda Shuxratovna	
Развитие производства сельскохозяйственной продукции путем развития цифровых технологий.....	450
Юсупов Мухиддин Соатович	
Tijorat banklarida loyihaviy moliyalashtirish risklarini boshqarish amaliyotini takomillashtirish	457
Berdiyev Akram O'ktamovich	
Iqtisodiy tarmoqlarni soliqqa tortish orqali investitsiya loyihalarini rivojlantirish.....	463
Sharipov Eldor Salohiddin o'g'li	
Iqtisodiyotda investitsiya va kredit salohiyatini bank faoliyatiga ta'siri.....	468
Ergashova Nilufar Sobirovna	
Qurilish materiallari sanoati korxonalarining raqobatbardoshlik salohiyatini boshqarishni takomillashtirish	473
Tashmukhamedova Karima Samatovna	
Ziyorat turizmini rivojlantirishning asosiy yo'nalishlari va istiqbollari.....	479
Kurbanova Mohinur Xabib qizi	
Xalqaro sayohat lug'ati va uning shakllanishi.....	487
Abduaxadova Zilola Djamoliddinovna	
Moliyaviy hisobotning xalqaro standartlari va uni o'zbekiston respublikasi hisob tizimini rivojlantirishdagi o'rni va ahamiyati.....	492
Quvvatov G'olibjon Baxtiyor o'g'li	
Kooperatsiyalarning tutgan o'rni va ahamiyati.....	501
Mirzayev Musurmon Umidullayevich, Ziyadullayev Ilhom Narkobilovich	
Использование методов математического моделирования при внедрении коммерческих автоматических систем	505
Курбанова Рахима, Ахмедов Мехрохжон	
Tijorat banklari kapitalidagi davlat ulushini kamaytirish yo'llari.....	511
Vasiyev Alisher Samiyevich	
Механизмы трансформации неформального сектора в официальную экономику на основе финансовых инструментов.....	515
Кошанов Абдимурат Азат ули, Муртазаев Шахрух Коньскайлиевич	



The impact of tourism on the economy of Uzbekistan	519
Xaydarova Marjona, Muxamedboyeva Muxlisa, Umarov Kamron, Usmanova Aziza	
Mintaqada gastroturizm rivojlanishining iqtisodiy asoslari va zamonaviy tendensiyalari	525
Masharipova Manzura Alimbayevna	
Tikuv-trikotaj korxonalari brend jozibadorligini oshirishning ilmiy-nazariy jihatlarini	535
O'rinov Akmaljon Axmadjonovich	
Bank tizimida hisobotlarni avtomatlashtirish texnologiyalari	542
Sodiqov Sanjar Saydullo o'g'li	
Engineering programs in Uzbekistan on the verge of fifth industrial revolution	547
Khasan Khankeldiyev	
Aksiyadorlik jamiyatlarining boshqaruvini yaxshilashda korporativ madaniyatning ahamiyati	551
Akramova Nazokat Israilovna	
Tadbirkorlik faoliyatining iqtisodiy taraqqiyotdagi o'rni	562
Amonov Mehridin Oromiddinovich	
O'zbekiston sanoat tarmoqlarida kooperatsiya asosida tayyor mahsulotlar ishlab chiqarishni mahalliyashtirish tizimini takomillashtirish yo'llari	572
Xalilova Sevaraxon Alijon qizi	
Moliyaviy barqarorlikning asosiy ko'rsatkichlari va ularning tahlili	578
Urmanbekova Iroda Farxodovna	
Tijorat banklarining mamlakat iqtisodiyotida tutgan o'rnini tahlil qilish	583
Kilicheva F.B., Mengnorov A.A., Bozorova O.R.	
Bog'dorchilik tarmog'ida klasterlarni joriy qilishda yevropa tajribasini qo'llash imkoniyatlari	591
Ergashov Ulug'bek Zoxidjonovich	
To'qimachilik klasterlarini boshqarishda xorijiy mamlakatlar tajribasi	598
Mansurov Saidxo'ja Kamalovich	
Barriers to tourism infrastructure development in uzbekistan: a critical analysis	605
Sarvinov Shodmonova	
Xalqaro bozorda qishloq xo'jaligi mahsulotlari raqobatbardoshligini oshirish	609
Mengnorov Almardon Abdirahmonovich	
O'zbekiston respublikasida infratuzilma loyihalarini amalga oshirishdagi risklarni boshqarish	620
Yusupova Zilola Ismoiljon qizi	
Korxonaning iqtisodiy barqarorligiga erishishning zamonaviy tendensiyalari	626
Iminova Nargizaxon Akramovna	
Qishloq joylari maishiy xizmat ko'rsatish sohasida axborot resurslaridan samarali foydalanish	631
Xamdamov Eldor Toshmurovich	
Meva-sabzavotlar eksportida transport koridorlari va vositalarini tanlash xususiyatlari	636
Yusupov Muxiddin Soatovich	
Рынок рабочей силы в узбекистане и ее воспроизводство	644
Шакиров Амаль Улугбекович, Камилова Наргиза Абдукахаровна	
Деньги и их функции в экономике	650
Мурадиллаев Мансур Мехроживич, Камилова Наргиза Абдукахаровна	
Развитие сельского хозяйства в узбекистане	654
Махмудов Алишер Мухтарович, Камилова Наргиза Абдукахаровна	
Инвестиции и инновации в химической промышленности узбекистана: современные тенденции и перспективы	658
Хусаинов Равшан Рахимович, Султанходжаев Аманулла Асадуллаевич	
Tijorat banklari aktivlarini boshqarishni takomillashtirish	666
Mardonova Shoxsanam Baxodirovna	
Definition of agritourism as a multifunctional development in rural areas	672
Aktamov Olimjon Abdugani ugli	
Kameral soliq tekshiruvida smart texnologiyalarini ma'lumotlarini soliq organlarining ma'lumotlar bazasida shakllanishi	680
Qurbonov Muxiddin Abdullaevich	
Проблемы регулирования государственно-частного партнерства и рекомендации по их решению (на примере безработицы в республике узбекистан)	687
С.Э. Холмуратов	



Автоматизация аудиторских процедур с использованием искусственного интеллекта.....	692
Ходжарахманова Назира Бахтияр кизи	
Past karbonli iqtisodiyotga o'tish zaruriyati va uning omillari.....	701
Valiyev Axliddin Aropitdinovich	
Yengil sanoatda zamonaviy tikuv mashina-kichik robotlarning mexanizmlarini mukammallashtirish	705
Sirojova Muxabbat Sodiq qizi, Kurbanov Fazliddin Aminovich	
Jismoniy shaxslar daromadlarini soliqqa tortish tizimining institutsional va iqtisodiy asoslari	710
Kuzieva Nargiza Ramazanovna, Bobomuratova Manzura Panji qizi	
Foyda solig'i bo'yicha bo'nak to'lovlarni to'lash tartibi	717
Yangieva N.S.	
Kichik biznes va tadbirkorlik subyektlarini soliqlar vositasi qo'llab-quvvatlashning amaldagi holati	722
Turanboyev Boburjon Qodirjon o'g'li	
Motivation, goal-setting, and organizational performance: a case study from uzbekistan's chemical industry	726
Mamataliev Anvar Ergashevich, Bobur Urinov	
Применение искусственного интеллекта при организации налогового администрирования узбекистана	733
Н.А. Артиков	
Ayollar tadbirkorligini rivojlantirish zaruriyatini keltirib chiqaruvchi omillar.....	737
Sharofiddinova Gulnoza Iloxmonovna	
Raqamli texnologiyalarning tijorat banklari samaradorligiga ta'siri	745
Maksudov Avazbek Ulug'bek o'g'li	
Suv tanqisligi sharoitida yashil iqtisodiyotni rivojlantirish asoslari	750
Qosimov Maxamatjon Sulaymanovich	
Rivojlanayotgan iqtisodiyotda raqamli va raqamli bo'lmagan korxonalar tahlili	761
Raxmonov Nodirjon Raxmonjon o'g'li	
Aholining o'rtacha umr ko'rish yoshini o'zgarishi sharoitida keksalarning ijtimoiy ta'minotiga xavflarning ortishi.....	767
Toyirov Shohboz Ziyodullo o'g'li	
Oliy ta'lim tizimida moliyaviy nazorat samaradorligini ta'minlash ichki nazorat xizmatlari	773
Xaydarov Baxrom Xolmuradovich	
Moliya bozorida xususiy banklar faolligini ta'minlash istiqbollari	777
Abduqahhorov Asilbek Ahror o'g'li	
Budjet daromadlari ijrosini ta'minlashda soliqlar hisobi va tahlilining ahamiyati	782
Abdullaev Abror Bozarboevich	
Aholi daromadini oshirish yo'llari.....	803
Shadmanov Baxodir Sherkulovich	
Tourism and regional identity in Uzbekistan: balancing heritage and development	808
Raximova Nilufar Aminovna, Abdukholikova Farida Erkinjon qizi	
O'zbekiston sanoat korxonalarning fond bozorida ishtiroki tahlil va muammolari.....	815
Igitov Jurabek Kuzibekovich	
O'zbekistonda davlat-xususiy sheriklik loyihalarini moliyalashtirish va amalga oshirish tahlili	823
Karabaev Sanjar Abdusamatovich	
Globalashuv sharoitida milliy korxonalarning eksport salohiyatini boshqarish masalalari	832
Qodirov Humoyun Tolibjon o'g'li	
Бизнес-планирование и прогнозирование деятельности организации.....	836
Алимов Бехзоджон Наврузжонович	
Farg'ona vodiysida ekoturizm – kambag'allikka qarshi kurashning yangi imkoniyatlari	840
Soliyeva Nilufar Muxtorjon qizi	
Aholi turmush darajasi baholash bo'yicha dasturiy ta'minot ishlab chiqishda horij tajribasini o'rganish	844
Tursunov Farxod Baxodir o'g'li	
Mintaqa aholi turmush farovonligiga ta'sir qiluvchi omillar tasnifini ishlab chiqish.....	848
Xodjaniyazov Shohruh Yuldashevich	
Xususiy oliy ta'lim muassasalari menejmentining nazariy jihatlar va o'ziga xos xususiyatlari.....	856
Karimov Ulug'bek Usmonovich	



Infratuzilma va bozor infratuzilmasi tushunchalarining nazariy tavsifi	861
G'aniyev Botir Baxtiyorovich	
Повышение инвестиционной привлекательности – важное условие повышения конкурентоспособности предприятий.....	865
Каримова Дилафруз Садирдин кизи	
Yevropa ittifoqi davlatlari tijorat banklarining soliq to'lovlarini amalga oshirish tartibi	870
Komolov Odiljon Sayfidinovich	
Boshqaruvda innovatsiyalarni hisobga olgan holda agrokorxonalarni davlat tomonidan rag'batlantirishning zamonaviy yondashuvlari	878
Shaniyazova Zamira	
Практические аспекты применения статистических методов контроля качества на предприятиях.....	883
Усманов Илхом Ачилович, Усманов Фарзод Шохрухович	
Yashil iqtisodiyot sharoitida iqtisodiy o'sishning yangi paradigmalarini shakllantirish: nazariy asoslar va amaliy talqinlar.....	891
Alimova Guzal Abduraximovna	
Xizmat ko'rsatish korxonalari faoliyati samaradorlik ko'rsatkichlarining nazariy va metodologik tahlili	895
Qo'ziyoyev Boxodir Azzamboy o'g'li	
Kutubxonalarda raqamli iqtisodiyot sharoitida biznes-modellarni ishlab chiqish.....	900
Ernaqulov Sunnatillo Nurali o'g'li	
To'g'ridan-to'g'ri sug'urtalash operatsiyalari bo'yicha xarajatlarni xalqaro standartlar asosida hisob va hisobotda aks ettirish uslubi-yatini takomillashtirish	905
X.A.Raximov	
Kameral soliq tekshiruvda smart texnologiyalarini ma'lumotlarini soliq organlarining ma'lumotlar bazasida shakllanishi.....	910
Ergashev Uyg'un Jabborovich	
Obligatsiya moliya bozori instrumenti sifatida, milliy obligatsiyalar bozori	916
Avezov Ibrohim Ilxomovich, Yaxshiboyev Jahongir Abdualimovich	
Barqaror rivojlanish doirasida ekologik, ijtimoiy va korporativ boshqaruv (ESG) ko'rsatkichlarining yashil texnologiyalar innovatsiyasiga ta'sirini baholash.....	921
Meliqo'zieva Dilrabo Muxitdin qizi	
Yashil iqtisodiyot – barqaror taraqqiyotga olib boruvchi yo'l.....	925
Xalilova Aziza Rustamovna	
Научно-теоретические основы экономической и эколого-экономической эффективности предприятий горнодобывающей промышленности.....	930
Раматов Зафарбек Жуманиязович	
Xitoyda eksport faoliyatini tashkil etishning o'ziga xos xususiyatlari.....	938
D.E.Qarshiev	
Kichik sanoat zonalarida investitsion jozibadorlikni oshirishni investitsion faollikka ta'siri.....	943
Mannapova Shaxnoza Elshodovna	
Mahalla institutining samaradorligi tahlili: so'rovnoma yondashuvi	947
Bahriddinov Viqorjon Akbar o'g'li	
Формирование человеческого капитала в условиях демографических изменений: опыт и перспективы для узбекистана.....	955
Дониерова Фотимабону Алишер кизи	
Farmasevtika kompaniyalari raqobatbardoshligini oshirishda marketing strategiyalaridan foydalanish yo'nalishlari	962
Baxrombek Bobojonov	
“Hududlarda sug'urtaga bo'lgan talabning ekonometrik tahlili” bekberganova mohira ravshonbekovna	967
O'zbekiston Milliy universiteti	
O'zbekiston va xalqaro amaliyotda raqamli marketing vositalaridan foydalanish: muammolar va yechimlar	973
Uzoqova Dilnoza Yusuf qizi	
Условия эксплуатации и экологическая безопасность автотранспортной системы на основе энергосберегающих технологий	978
Мамасалиева Мукаддас Ибадуллаевна	
O'zbekiston tibbiyot muassasalarida moliyaviy resurslardan foydalanishda xorijiy tajribalarni qo'llash.....	982
Elmurodov G'ayratjon Abdumurodovich	



Buxgalteriya hisobining samaradorligini oshirish yo'llarida zamonaviy yondashuvlar va innovatsiyalar	987
Sattorov Mirjahon	
Особенности маркетинговых стратегий в условиях ограниченных ресурсов и узкой потребительской аудитории	991
Дебердиев Анвар	
DEbitorlik va kreditorlik qarzlarini auditini rejalashtirish masalalari.....	995
Tulovov Erkinjon To'liqin o'g'li, Ibragimova Iroda Rashid qizi	
Инвестиционная программа узбекистана по привлечению иностранных инвестиций	1000
Камилова Наргиза Абдукажоровна, Бекмуратов Шухрат Даулетмуратович	
Turistik mahsulotni shakllantirishda turistlar hayoti xavfsizligini ta'minlash.....	1005
Raxmonov Siyovush Turob o'g'li	
Uglerodsiz energiyaga o'tishda o'zbekistonning yashil strategiya yo'l xaritasining integratsiyasi va ta'siri.....	1011
Nuraliyeva Komila Sanakulovna	
Цифровая устойчивость регионов: применение аналитики больших данных для оценки и управления экологическими рисками	1016
Маликов Шохрух Шокирович, Камалов Шухрат Камалович	
Разработка риск-ориентированной модели внутреннего контроля предприятия на этапе планирования налогов в условиях дистанционного налогового мониторинга	1024
Галеева Н.Н., Э.А.Халикова, Абдусаломова Гулчеҳра Мирзо кизи	
Анализ результатов инструментальных методов исследований у детей с врожденными пороками сердца	1029
Мухаммадиева Лола Атамурадовна	
Barqaror iqtisodiy o'sishni ta'minlashda monetar omillardan samarali foydalanish yo'nalishlari.....	1036
Uskenbaeva Dilnoza Boxodir qizi	
Факторы повышения эффективности управления в государственном секторе.....	1043
Махмудова Севара Улугбековна	
Soliq organlari va soliq to'lovchilar o'rtasidagi munosabatlarning yangi tizimi sharoitida soliq nazorati	1048
Rajabbaeva Dildora Zakirovna, Aripova Aziza Alisherovna	
Boshqaruv jarayonlarini tashkil etishning xorijiy mamlakatlar tajribasi.....	1053
Jo'rayeva Niginaxonim Xursand qizi	
Jahonda eksportni qo'llab-quvvatlash amaliyoti.....	1057
Xudoynazarov Sherzod Ismoilovich	
Raqamli moliyaviy texnologiyalarni korxona darajasida joriy etish orqali moliyaviy barqarorlikka erishish strategiyasi	1063
Soibov Nozimbek Faxridin o'g'li	
Применение методов PMBOK в управлении рисками проектов	1070
Гулираъно Носирова Абдулазиз кизи	
Tadbirkorlik faoliyatini rivojlantirishda aholi farovonligining o'rni va ahamiyati	1073
Bobaev Isroiljon Abdinabievich	
Вопросы инновационных инвестиций в контексте международной экономической интеграции	1078
Шарипов Бахтиёр Михлибаевич	
Yashil iqtisodiyotga o'tishning nazariy va amaliy jihatlar hamda tendensiyalari.....	1083
Samiyev Abdurashid Qaxramonovich, Shermuxammedov Begzodjon Usmonovich	
Tijorat banklarida muammoli kreditlar samaradorligini ta'minlash yo'llari.....	1087
Nazarov Qilich Xolmuradovich	
Improving the organizational and economic mechanisms for the development of tourism in the republic of karakalpakstan	1092
Tleumuratov Baxadir Genjemuratovich	
O'zbekistonda tumanlar barqaror iqtisodiy rivojlanishini ta'minlash yo'llari (Surxondaryo viloyati misolida).....	1097
Qosimova Nodira Saidovna	
Innovatsion iqtisodiyotni shakllantirishning asosi sifatida innovatsiyalar.....	1102
Azizova Maliha Farrux qizi	



Влияние инвестиций на инновационное развитие и повышение конкурентоспособности экономики узбекистана	1106
Максудова Шахзода	
Возможности снижения затрат на логистику за счет цифровых технологий	1112
Олимова Бахора Шухратовна	
Yashil texnologiyalar va ularning iqtisodiy tizimga ta'siri	1116
Sultonov Omon Juma o'g'li	
Iqtisodiy o'sishning makroiqtisodiy faktorlari va ularning ta'siri	1121
Zuvaydullaev Nematullo Oybek o'g'li	
Роль управления производством в условиях модернизации экономики	1125
Гулов Мухтор Очилович	
Iqtisodiyotni raqamlashtirish sharoitida sun'iy intellekt texnologiyalarining o'rni va ahamiyati	1129
To'rayev Shavkat Shuxratovich	
Роль цифрового маркетинга в продвижении туристических направлений	1136
Муродова Наргиза Уткировна	
Развитие финансовых рынков в странах снг: проблемы и перспективы	1140
Рузиев Зафар Икрамович, Каримов Ислон Ураз угли	
Современные инструменты продвижения бренда в условиях цифровой экономики	1145
Темирова Феруза Сагдуллаевна	
"Raqamli asrda axborot xavfsizligi: it texnologiyalar bilan xavfsizlikni ta'minlash yo'llari"	1149
Sherzod Rajabov	
Государственное регулирование инвестиционной деятельности: проблемы и направления совершенствования	1152
Шухрат Турсунов, Икромов Хасан Зафарович	
Economic incentives and barriers to sustainable transition in agribusiness: a comparative study of organic and conventional farming systems	1157
Mubina Toirova	
Цифровая трансформация банковской системы узбекистана: анализ внедрения fintech-решений в государственных банках	1162
Абдурахимова Дилора Каримовна	
Ta'lim muassasalaridagi ba'zi jihatlar	1167
A'zam Qutbiddin A'zam-zoda	
Klasterlar hisob siyosatida boshqaruv hisobining metodologik asoslari	1173
Toshpo'latov Azizbek Shermuxamadovich	
Egri soliqlarning mohiyati, genezisi va rivojlanish tendensiyalariga oid nazariy munozaralar xususida	1179
Shodiyev Olimjon Abduraxmonovich	
Ekologik mehmonhona faoliyatini rejalashtirish maqsadlari va vazifalari	1186
Abidova Dilfuza Igamberdievna	
Investitsiya loyihalarining iqtisodiy va moliyaviy samaradorligini oshirish istiqbollari	1200
Jo'rabekova Xumora Muzaffar qizi, Saidov Rasul Boltabayevich	
O'zbekistonda nodavlat notijorat tashkilotlarini moliyalashtirish manbalarining tahlili	1204
Aliyev Arslon Salom o'g'li	
O'zbekistonda turizm sohasining iqtisodiy ko'rsatkichlarini statistik tahlil qilish	1213
Jumanova Zilola Tuychiyevna	
Xorijiy davlatlarda boylik solig'i va uning ijtimoiy-iqtisodiy ahamiyati	1219
Ruziyev G'anisher Usarovich	
Yer fondi va undan samarali foydalanishning nazariy asoslari (Samarqand viloyati misolida)	1225
Xoshimova Sevara Baxromovna	
Iqtisodiy-ekologik tizimlarni boshqarishga ta'sir etuvchi omillarning ilmiy asoslari	1229
Kuldoshev Asliddin Tursunovich	
Влияние финтех-услуг на финансовую инклюзию в сельских регионах узбекистана	1236
Абдурахимова Дилора Каримовна	
Surxondaryo viloyati sanoat sohasining asosiy ko'rsatkichlari tahlili	1240
Kuvanchiyeva Mehriniso Davlyatgeldi qizi	
A critical evaluation of strategic management's role in promoting sustainable development in Uzbekistan	1245
Ismatova Mahliyo	



O'zbekistonda turizm xizmatlari eksportini oshirishda zamonaviy infratuzilma va texnologiyalarning integratsiyasi.....	1251
Akmal Bakhromov	
Trends and reforms of corporate governance in state-owned enterprises.....	1257
F.Djalilov	
Переоценка долгосрочных активов в нефтегазовой промышленности и определение финансового результата от переоценки.....	1269
Махкамова Саида Гайратова	
Oziq-ovqat mahsulotlari korxonalarini integratsiyalashuv jarayonlarini boshqarish samaradorligini oshirish.....	1275
Xojiev Ibroxim Ikramovich	
Sug'urta kompaniyalari moliyaviy barqarorligini ta'minlashning muhim shartlari.....	1280
Allanazarova B.K.	
P2P lending and crowdfunding as alternative sources of financing for small business in Uzbekistan.....	1286
Abdurakhimova Dilora Karimovna	
O'zbekistonda soliq nazoratining huquqiy va tashkiliy asoslarini takomillashtirish yo'llari.....	1290
Kuziyeva Nargiza Ramazanovna, Oymatova Gulnura Mirjamolovna	
Applications of hyperbolic geometry in physics and biology.....	1295
Khaknazarova Khurshidabonu Kenjaevna, Otakulova Rukhshona Akram kizi	
O'zbekiston temir yo'llari tizimining transformatsiyasi: modernizatsiya, raqamlashtirish va qayta tuzilish yo'nalishlari.....	1301
Nasrullayev Nurbek Baxtiyarovich	
The role of tourist product diversification in sustainable tourism development.....	1305
Raxmonov Shuxrat Shavkatovich, Alimova Mashhura Toirxonovna	
Temiryo'l transporti turi tavsifi.....	1310
Shodmonbekova Nodira Kamoljon qizi	
Namangan viloyatining turizm salohiyatini rivojlantirish istiqbollari: Hududiy raqobatbardoshlik va innovatsion yondashuvlar.....	1314
Khusniddin Egamnazarov	
Kiberxavfsizlik: it infratuzilmasini himoya qilishning zamonaviy usullari.....	1321
D. Sh. Usmanbayev	
Mahalliy budjetlar daromad bazasini tahlili.....	1325
Qurbonov Nuriddin Ro'ziqulovich	
Развитие цифровых финансовых услуги в банковской системе Республики Узбекистан.....	1333
Абдурахманова Матлуба Махамдаминовна	
Avariya rejimlarida kichik yuklamali elektr ta'minoti tizimlarining kabel izolyatsiyasi monitoringini avtomatlashtirishning zamonaviy yondashuvlari.....	1339
Mirzoyev Narzulla Nuriddinovich, Mamatqulov Toyir Chorshanbiyevich	
Analysis of increasing the speed of information exchange between the control interface and execution mechanisms in emergency mode in intelligent systems.....	1346
Azizbek Yusupbekov Nodirbekovich, Husniddin Esonov Mamarasul o'g'lu Assistant	



ANALYSIS OF INCREASING THE SPEED OF INFORMATION EXCHANGE BETWEEN THE CONTROL INTERFACE AND EXECUTION MECHANISMS IN EMERGENCY MODE IN INTELLIGENT SYSTEMS

Azizbek Yusupbekov Nodirbekovich

Doctor of Technical Sciences, Professor

Tashkent State Technical University

Abek71@mail.ru

+998(93)-398-46-14

Husniddin Esonov Mamarasul o'g'lu Assistant

Termez State University of Engineering and Agrotechnology

muhammadalizoda27@gmail.com

+998(99)-888-01-97

Annotatsiya: Hozirgi jadal rivojlangan texnika-texnologiyalar asrida ishlab chiqarish sa'noatini samarali boshqarish va avtomatlashtirish, ishlab chiqarilayotgan mahsulotlarni sifati va sonini standartlarga mos qilib ishlab chiqarish uchun intellektual tizimlarni yaratish va intellektual tizimlardagi texnologik parametrlarni avtomatik nazorat qilish uchun qo'llaniluvchi ijro mexanizmlarini qulay va tezkor boshqarishda neyron to'rlarni qo'llash dolzarb masalalardan biriga aylanmoqda.

Kalit so'zlar: Ishlab chiqarish, muhandislik sohasi, neyron to'rlar, intellektual tizmlar, texnologik jarayonlar, intellektual ijro mexanizmlari, klapanlar, matorlar, dvigatellar, nasoslar.

Abstract: In the current era of rapidly developing technologies, the use of neural networks in the creation of intelligent systems for effective management and automation of the manufacturing industry, the creation of intelligent systems for the production of products in accordance with the quality and quantity standards, and the use of neural networks for convenient and fast control of the execution mechanisms used for automatic control of technological parameters in intelligent systems is becoming one of the pressing issues.

Key words: Production, engineering, neural networks, intelligent systems, technological processes, intelligent execution mechanisms, valves, motors, engines, pumps.

Аннотация: В современную эпоху стремительно развивающихся технологий одним из актуальных вопросов становится использование нейронных сетей в эффективном управлении и автоматизации производственной отрасли, создание интеллектуальных систем для выпуска продукции в соответствии со стандартами по качеству и количеству, а также удобное и быстрое управление исполнительными механизмами, используемыми для автоматического регулирования технологических параметров в интеллектуальных системах.

Ключевые слова: Производство, инжиниринг, нейронные сети, интеллектуальные системы, технологические процессы, интеллектуальные исполнительные механизмы, клапаны, моторы, двигатели, насосы.

INTRODUCTION

From the assembly lines in manufacturing plants to the precision agriculture fields, automation technology has revolutionized traditional industries. Robots and automated systems enhance production efficiency, reduce human error, and perform tasks that are hazardous or tedious for humans. In countries like Japan and Germany, automation has been pivotal in maintaining competitive industrial sectors despite demographic challenges. The global healthcare sector has witnessed remarkable advancements due to automation. Automated diagnostic tools, robotic surgical systems, and AI-driven patient management systems are improving outcomes and



accessibility. In regions with limited medical personnel, such technologies are vital in bridging the gap between healthcare demands and services.

ANALYSIS OF LITERATURE ON THE TOPIC

In our country, academician N.R. Yusupbekov, academician Kh.Z. Igamberdiev, professor A.N. Yusupbekov, professor Sh.M. Gulyamov, professor Yu.Sh. Avazov and associate professor F.O. Kasimov conducted scientific research and studies on the improvement of executive elements, control systems, intellectual systems, mathematical modules of executive elements.

In the scientific research of these scientists, great attention was paid to the accuracy of executive mechanisms, and theoretical foundations of analytical calculations based on dynamic and static data were developed and developed to assess accuracy. In these scientific works, information and software support, models, structural schemes of effective management and control systems of executive mechanisms were proposed and implemented in production enterprises.

ANALYSIS AND RESULTS

Automation technology has also transformed the service industry, with AI and machine learning algorithms personalizing customer experiences from retail to banking. Automated chatbots and virtual assistants, serving a global clientele, offer 24/7 support, significantly enhancing customer service efficiency and satisfaction.

Agricultural Advancements:

In the agricultural sector, automated drones and machinery are revolutionizing farming practices worldwide, from the vast cornfields of the United States to the rice paddies of Asia. These technologies enable precision farming, which optimizes resource use and increases yields, crucial for feeding a growing global population.

Challenges and Opportunities:

While the proliferation of automation technology presents numerous opportunities, it also poses challenges, including the potential for job displacement and the need for workforce reskilling. However, it also opens avenues for new job creation in tech-driven sectors and emphasizes the importance of adapting educational systems to prepare individuals for an automated future.

Sector	Impact of Automation	Global Examples
Industry	Enhances production efficiency, reduces human error, handles hazardous tasks	Japan and Germany's competitive manufacturing sectors
Healthcare	Improves outcomes with automated diagnostics and robotic surgeries, enhances accessibility	Robotic surgical systems in the US, AI-driven patient management in remote areas
Service	Personalizes customer experiences through AI and ML, provides 24/7 support with automated systems	Global retail and banking sectors' use of chatbots and virtual assistants
Agriculture	Revolutionizes farming with drones and machinery for precision farming, optimizes resource use	Precision farming in the US, automated drones in Asian rice paddies
Challenges and Opportunities	Potential for job displacement, necessity for workforce reskilling, new job creation in tech-driven sectors, educational system adaptation	Global workforce and educational institutions

The purpose of the course "Technical Automation Tools" (TSA) is to study the elemental base of automatic process control systems. First, we present the basic concepts and definitions.

An element (device) is a structurally complete technical product designed to perform certain functions in automation systems (measurement, signal transmission, information storage, processing, generation of control commands, etc.).

Automatic control system (ACS) – a set of technical

devices and software and hardware interacting with each other in order to implement a certain control law (algorithm).

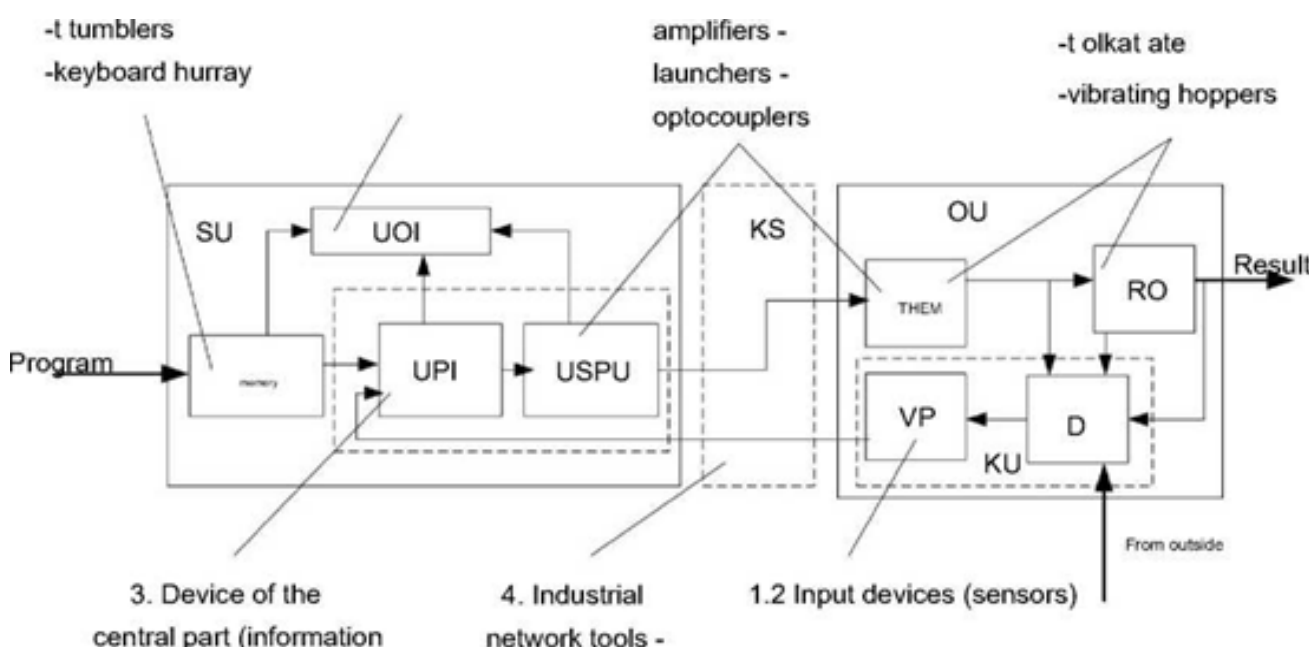
Automated process control system (APCS) is a system designed to develop and implement control actions on a technological control object and is a human machine system that provides automatic collection and

processing of information necessary to control this technological object in accordance with accepted criteria (technical, technological, economic).

Technological control object (TOU) is a set of technological equipment and the technological process implemented on it according to the relevant instructions and regulations.

When creating modern automated process control systems, global integration and unification of technical solutions is observed. The main requirement of modern automatic control systems is the openness of the system, when the data formats used and the procedural interface are defined and described for it, which allows connecting "external" independently developed devices and devices to it. In recent years, the TCA market has changed significantly, many domestic enterprises have been created that produce automation products and systems, and systems integrators have appeared. Since the early 90s, leading foreign manufacturers of TCA began to widely introduce their products into the CIS countries through sales offices, branches, joint ventures and dealer firms.

The intensive development and rapid dynamics of the market for modern control technology require the emergence of literature reflecting the current state TCA. Currently, the latest information about automation equipment from domestic and foreign companies is scattered and is mainly presented in periodicals or on the global Internet on the websites of manufacturing companies or on specialized information portals such as www.asutp.ru, www.mka.ru, www.industrialauto.ru. The purpose of this lecture notes is a systematic presentation of material about the elements and industrial complexes of TSA. The abstract is intended for students of the specialty "Automation of Technological Processes and action" studying the discipline "Technical Automation Tools".



6. Protection devices - interlocking - protection

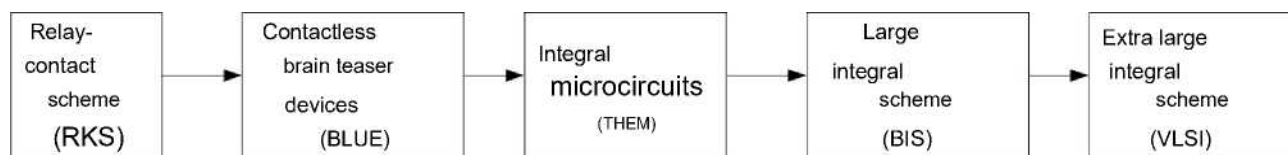
Classification of TSA by functional purpose in self-propelled guns In accordance with GOST 12997-84, the entire complex of TSA according to their functional purpose in self-propelled guns is divided into the following seven groups (Fig. 1).

- TCA development trends

Increased TCA functionality:

in the control function (from simple start/stop and automatic reverse to cyclic and numerical program and adaptive control); in the alarm function (from the simplest light bulbs to text and graphic displays); in the diagnostic function (from open circuit indication to software testing the entire automation system); in the function of communication with other systems (from wired communication to network industrial products).

Complication of the element base means a transition from relay contact circuits to contactless circuits on semiconductor individual elements, and from them to integrated circuits of an increasingly greater degree of integration (Fig. 2).



Rice. 2. Stages of development of electric vehicles

Transition from rigid (hardware, circuit) structures to flexible (reconfigurable, reprogrammable) structures.

4. Transition from manual (intuitive) TSA design methods to scientifically based machine, computer-aided design (CAD) systems
TCA imaging methods

In the process of studying this course, various methods of depicting and presenting TCAs and their components can be used. The most commonly used are the following:

The constructive method involves depicting instruments and devices using mechanical engineering drawing methods in the form of technical drawings, layouts, general views, projections (including axonometric ones), sections, sections, etc.

The circuit method involves, in accordance with GOST ESKD, representing the TSA with circuits of various types (electrical, pneumatic, hydraulic, kinematic) and types (structural, functional, fundamental, installation, etc.).

The mathematical model is used more often for software- implemented TSA and can be represented:

- transfer functions of typical dynamic links;
- differential equations of ongoing processes;
- logical functions for controlling outputs and transitions;
- state graphs, cycloramas, time diagrams ; – block diagrams of functioning algorithms (Fig. 40), etc.

Basic principles of TCA construction

To build modern automated process control systems, a variety of devices and elements are required. Satisfying the needs of control systems of such different quality and complexity for automation equipment with their individual development and production would make the problem of automation immense, and the range of instruments and automation devices almost limitless. [24]

At the end of the 50s in the USSR, the problem of creating a unified State System of Industrial Instruments and Automation Equipment (GSP) for the entire country was formulated - representing a rationally organized set of instruments and devices that satisfy the principles of typification, unification, aggregation, and intended for the construction of automated systems for measuring, monitoring, regulating and managing technological processes in various industries. And since the 70s, GSP has also covered non-industrial areas of human activity, such as scientific research, testing, medicine, etc.

Typification is a reasonable reduction of the variety of selected types, designs of machines, equipment, instruments, to a small number of the best samples from any point of view, which have significant qualitative characteristics. During the typification process, standard designs are developed and installed, containing basic elements and parameters common to a number of products, including promising ones. The typification process is equivalent to grouping, classifying some initial, given set of elements into a limited number of types, taking into account actual restrictions.

CONCLUSION AND SUGGESTIONS

Unification is the reduction of various types of products and means of their production to a rational minimum of standard sizes, brands, shapes, and properties. It brings uniformity to the basic parameters of standard TCA solutions and eliminates the unjustified variety of means of the same purpose and the heterogeneity of their parts. Devices, their blocks and modules, identical or different in their functional purpose, but derived from one basic design, form a unified series.

Aggregation is the development and use of a limited range of standard unified modules, blocks, devices and unified standard structures (UTC) to build a variety of complex problem-oriented systems and complexes. Aggregation allows you to create various modifications of products on the same basis, to produce TSA for the same purpose, but with different technical characteristics. The principle of aggregation is widely used in many branches of technology (for example, modular machines and modular industrial robots in mechanical engineering, IBM-compatible computers in control systems and automation of information processing, etc.).



References

1. Hale, J. (2019, January 1). "Clicker" Technology. *Journal of College Orientation, Transition, and Retention*, 16(1). <https://doi.org/10.24926/jcotr.v16i1.2706>
2. Web life: Particle Clicker. (2014, October). *Physics World*, 27(10), 51–51. <https://doi.org/10.1088/2058-7058/27/10/37>
3. Page, J. T. (1889, April 27). Clicker. *Notes and Queries*, s7-VII(174), 325–325. <https://doi.org/10.1093/nq/s7-vii.174.325c>
4. Hale, J. (2019, January 1). "Clicker" Technology. *Journal of College Orientation, Transition, and Retention*, 16(1). <https://doi.org/10.24926/jcotr.v16i1.2706>
5. Bergtrom, G. (2006). Clicker Sets as Learning Objects. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, 2, 105–110. <https://doi.org/10.28945/404>



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Ingliz tili muharriri: Feruz Hakimov

Musahhih: Zokir ALIBEKOV

Sahifalovchi va dizayner: Oloviddin Sobir o'g'li

2025. № 5

© Materiallar ko'chirib bosilganda "Yashil" iqtisodiyot va taraqqiyot" jurnali manba sifatida ko'rsatilishi shart. Jurnalda bosilgan material va reklamalardagi dalillarning aniqligiga mualliflar ma'sul. Tahririyat fikri har vaqt ham mualliflar fikriga mos kelamasligi mumkin. Tahririyatga yuborilgan materiallar qaytarilmaydi.

Mazkur jurnalda maqolalar chop etish uchun quyidagi havolalarga maqola, reklama, hikoya va boshqa ijodiy materiallar yuborishingiz mumkin.
Materiallar va reklamalar pullik asosda chop etiladi.

El.Pochta: sq143235@gmail.com

Bot: @iqtisodiyot_77

Tel.: 93 718 40 07

Jurnalga istalgan payt quyidagi rekvizitlar orqali obuna bo'lishingiz mumkin. Obuna bo'lgach, @iqtisodiyot_77 telegram sahifamizga to'lov haqidagi ma'lumotni skrinshot yoki foto shaklida jo'natishingizni so'raymiz. Shu asosda har oygi jurnal yangi sonini manzilingizga jo'natamiz.

"Yashil" iqtisodiyot va taraqqiyot" jurnali 03.11.2022-yildan O'zbekiston Respublikasi Prezidenti Adminstratsiyasi huzuridagi Axborot va ommaviy kommunikatsiyalar agentligi tomonidan №566955 reyestr raqami tartibi bo'yicha ro'yxatdan o'tkazilgan.

Litsenziya raqami: №046523. PNFL: 30407832680027

Manzilimiz: Toshkent shahar, Mirzo Ulug'bek tumani
Kumushkon ko'chasi, 26-uy.



Jurnal sayti: <https://yashil-iqtisodiyot-taraqqiyot.uz>
