



**ENVIRONMENTAL TECHNOLOGIES AND
ENGINEERING FOR SUSTAINABLE
DEVELOPMENT**

ETESD-2023

Conference

- Natural resources and environmental protection, biodiversity
- Innovative technologies of agriculture
- Technologies for cleaning up environmental damage and waste disposal
- Technologies and technical means for storage, processing and preservation of food
- Soil protection technologies and tillage technologies
- Water resources and water saving technologies
- Environmental technologies and techniques of energy and oil and gas industries
- Civil engineering and environmental research
- Earth space sensing systems

**Tashkent
Oktober 14, 2023**

INFORMATION LETTER
 on holding an international conference
**Environmental technologies and engineering for sustainable
 development (ETESD-2023)**
(Tashkent, October 14, 2023)

**National Research University “Tashkent Institute of Irrigation and
 Agricultural Mechanization Engineers” (NRU “TIAME”), Tashkent, Uzbekistan**

ONLINE/ONSITE

Languages: English, Uzbek, Russian (simultaneous translation)

PLATFORM: ZOOM <https://us06web.zoom.us/j/84579898131?pwd=iZqdx4UL0PMNib3MK9q61vfPvoxa0O.1>

ID conference: 845 7989 8131

Code: 123456

***All stated times are Tashkent time, UTC+5 (Islamabad, Karachi, Tashkent)**

Oktober 14, SATURDAY	
09:30	Icebreaker - Informal welcome/icebreaker/speaker registration/platform check
Oktober 14, SATURDAY	
OPENING CEREMONY 10:00-10:40	
10:00	Moderator: Akrom Turdibekov – Orientation: warm-up to ETESD-2023 live online/onsite Welcome Speeches:
10:05	Prof. Bakhadir MIRZAEV , Rector of NRU “TIAME”, Uzbekistan
10:10	Galibjan Sharipov – Associate Professor of Agricultural Engineering Institute, University of Hohenheim (German). Topic: Important rol - Environmental technologies and engineering for sustainable development
10:20	Pavel Vitliemov – Associate Professor, Head of Department, University of Ruse “Angel Kanchev”, (Bulgaria). Topic: The Challenges of Smart Manufacturing In the Area of Industry 4.0
10:30	Sarvar Khamidjonov – Department of Geography, Environment and Spatial Sciences, Michigan State University (USA). Topic: Analysis of a Sand and Dust Storm Event in Termez, Surkhandarya Region, Uzbekistan: Impacts and Insights
10:40	Takhir SULTANOV – Guidelines for the work of scientific sections, Vice-ректор NRU “TIAME”
Oktober 14, SATURDAY	
	Session: AGRICULTURAL MACHINERY AND POWER UNITS, GREEN ENERGY SYSTEMS, DIGITAL TECHNOLOGIES AND AUTOMATION IN AGRICULTURE Moderator: <u>Komil Astanakulov, NRU “TIAME”, Uzbekistan</u>
10:45	Influence of seed positioning during sowing on the amount of deviation of plant sprouts from the straightness of rows A A Akhmetov¹ , Sh A Akhmedov^{1*}, D U Kambarova¹, Sh S Ostanov¹ ¹ National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers", Tashkent, Uzbekistan
10:55	Mathematical modeling of small soil channel laboratory stand drive and evaluation of its energy state F A Alimova^{1*} ¹ Tashkent State Technical University, 2, University, Tashkent, 100095, Uzbekistan

11:05	<p align="center">Theoretical aspects of substantiating the parameters of the working body of an environmentally comfortable spraying unit</p> <p align="center">Kh D Irisov¹ I R Bekmurodov²</p> <p>¹ Tashkent State Agrarian University, University street 2, Qibray area, Tashkent reg, 100140, Uzbekistan ² University of Public Safety, Chorsu fortress, Zangiota district, Tashkent region, 100109, Uzbekistan</p>
11:15	<p align="center">Methodology for checking the seismic strength of buildings based on existing norms</p> <p align="center">Z A Abobakirova, Sh A Umarov, S M Mirzababayeva, H Sh Nasriddinov and A A Mahmudov</p> <p align="center">Fergana Polytechnic Institute, 86 Fergana str., Fergana 150107, Uzbekistan</p>
11:25	<p align="center">Scientific analysis of the optimization of labor protection measures in engineering work</p> <p align="center">A J Kurbonov², O R Yuldoshev¹ N J Saidxonova² S T Oblakulov² K A DJumakulova¹</p> <p>¹Professor of the Department of the Institute of Civil Protection at the Academy of the Ministry of Emergency Situations of the Republic of Uzbekistan, Candidate of Technical Sciences, Associate Professor Uzbekistan, Tashkent region, Kibraisky district, geophysicist village, Anaybulak str., house 3. ²National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" Uzbekistan, Tashkent, 39 Kori Niyazov str.</p>
11:35	<p align="center">Calculation of the deformation values of the ammortizer in the compound angle gear transmission</p> <p align="center">Djuraev A Dj¹, Abduvakhobov D A¹, Khabibullaev D H^{1*} and Ulmasov S A¹,</p> <p align="center">¹Namangan Engineering-Construction Institute, 12, Islam Karimov street, Namangan city, 160103, Uzbekistan Republic</p>
11:45	<p align="center">Interrelation of wear rates of accelerator gear teeth</p> <p align="center">B A Irgashev, N N Mirzaev, A Irgashev</p> <p align="center">Tashkent State Technical University, 100095, 2, Universitet str., Tashkent, Uzbekistan</p>
11:55	<p align="center">The influence of the front section teeth lengths on the agrotechnical and energy performance of a two-stage vibratory gear hardware for land</p> <p align="center">A X Umurzakov^{1*}, M X Imomov¹ F R Maxmudov¹ and S X Mamasoliyeva¹</p> <p align="center">¹Namangan Engineering-Construction Institute, 12, Islam Karimov street, Namangan city, 160103, Uzbekistan Republic</p>
12:05	<p align="center">Development of combined aggregate for improvement of meliorative condition of saline gypsum soils</p> <p align="center">Khajiyev M Kh, Atadjanova M M and Dusiyorov Zh Zh</p> <p align="center">Tashkent state technical university named after Islam Karimov</p>
12:15	<p align="center">Scientific analysis of optimization of labor protection measures aimed at improving workplace conditions</p> <p align="center">A J Kurbonov², N J Saidxonova² S T Oblakulov² K A DJumakulova¹, N N Nazarova¹</p> <p>¹Department of the Institute of Civil Protection at the Academy of the Ministry of Emergency Situations of the Republic of Uzbekistan, Candidate of Technical Sciences, Associate Professor Uzbekistan, Tashkent region, Kibraisky district, geophysicist village, Anaybulak str., house 3. ²National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" Uzbekistan, Tashkent, 39 Kori Niyazov str.</p>
12:25	<p align="center">Development constructive scheme and three "D" model of the smart corn-seed grader machine and base its positions</p> <p align="center">G G Fozilov</p> <p align="center">National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers", K.Niyazi str. 39, Tashkent, Uzbekistan</p>
12:35	<p align="center">Synthesis of the contour and dimensions of the guiding channel of an elliptical drum according to the operation conditions and kinematic regimes</p> <p align="center">Sh T Ravutov^{1*}, G I Ibragimov², S Sh Shokirov¹, Sh J Komilov¹</p> <p align="center"><i>1Tashkent State Technical University, Universitetskaya street-2, Tashkent, 700034, Uzbekistan.</i></p>

	<p align="center"><i>2Department of Dynamical Systems and Their Applications V.I.Romanovskiy Institute of Mathematics Academy of Sciences of Uzbekistan 100174, Tashkent, Uzbekistan.</i></p>
12:45	<p align="center">Development of a unit for pre-sowing strip milling of soil, laying of a drip irrigation hose and the possibility of sowing seeds</p> <p align="center">B P Shaymardanov^{1*}, P T Berdimuratov², D M Ruziev³ and A G Rakhimov³</p> <p>^{1,2,3} "Tashkent Institute of irrigation and agricultural mexanization engineers " National Research University, 39, Kari-Niyazi, Tashkent 100000, Respublika Uzbekistan ³PC "GSKB-Agromash" chief designer, 210, Mashxadiy, Tashkent 100000, Respublika Uzbekistan</p>
12:55	<p align="center">Feed dispenser discharge window parameters</p> <p align="center">K D Astanakulov¹, F M Maiviatov², F U Karshiev^{3*}, D Khudaynazarov⁴ and Sh G`apparov⁵</p> <p>¹National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers", 39, Street Kari Niyazi, Tashkent, 100000, Uzbekistan ²Karshi engineering-economics institute, 225, Mustakillik str., 180100, Karshi, Uzbekistan ³Termez State University, 43, Barkamol avlod str., 190111, Termiz, Uzbekistan ⁴Tashkent State Technical University, university str. 2, Tashkent 100095, Uzbekistan ⁵ Chirchiq Higher Tank Command and Engineering School, avenue Amir Temur, block of flats 1st, 15 , 111715, City: Chirchik, Uzbekistan</p>
13:05	<p align="center">The need for instrumental measurement of the traction force of the friction drive of the vertical spindles of the cotton harvesting machine</p> <p align="center">M Shoumarova, T Abdillayev and Sh A Yusupov</p> <p>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (National Research University), Tashkent, Uzbekistan</p>
13:15	<p align="center">Results of extensive tests of a hanging brush grade equipped with track softeners and field soft devices</p> <p align="center">A Tukhtakuziev¹, A R Rasuljonov¹ Sh N Barlibaev² and Sh.Kimsanov²</p> <p>¹Scientific-Research Institute of Agricultural Mechanization, Samarkand str. 41, Yangiyul dis., Tashkent reg., Uzbekistan ²Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, National Research University, K.Niyazi str. 39, Tashkent, Uzbekistan</p>
13:25	<p align="center">Environmental aspects of subsurface irrigation and development of a mathematical model of a double-circuit solar heating system</p> <p align="center">A T Tyemurkhanov¹, G N Tovarnyx² and S A Utaev¹</p> <p>¹Karshi State University, 17, Kuchabag. street, Karshi, 180103, Uzbekistan ²Moscow State Technical University named after N.E. Bauman, 2nd Baumanskaya st., 5, building 1, 105005, Moscow, Russia</p>
13:35	<p align="center">Study of the influence of oil consumption and changes in key indicators during the operation of diesel and gas engines</p> <p align="center">R K Musurmanov¹, S A Utaev^{2*}, A.K. Turaev³</p> <p>¹National University of Uzbekistan named after M. Ulugbek, 4, University street, Tashkent, 100174, Uzbekistan ²Karshi State University, 17, kucha-bag. street, Karshi, 180103, Uzbekistan, ³ National Research University Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Tashkent, Kori Niyoziy str., 39100000</p>
13:45	<p align="center">Modularization of wear and tear of tillage working tools of agricultural machines</p> <p align="center">S T Yunuskhodjaev</p> <p>Tashkent state technical university, 2 str. University, Tashkent, Uzbekistan</p>
13:55	<p align="center">Assessment of the physical properties of soils in uzbekistan</p> <p align="center">A K Igamberdiyev*, S Alikulov, E Usmonov, G F Usmanova, F E Ravshanov</p> <p align="center">National Recarch University TIAME</p>
14:05	<p align="center">Influence of liqorice growing on the salt composition of low-fertility soils of the Syrdarya region, Uzbekistan</p>

	<p>Sh Botirov*, R Kurvantaev *Gulistan State University, Gulistan, Uzbekistan</p>
14:15	<p align="center">Applied research on the hydraulic characteristics of semi-lined irrigation canal A Arifjanov¹, M Zelenakova^{1,2}, A Fatxulloev¹, D Allayorov^{1,2*}, M Otaxonov¹</p> <p>¹ Faculty of Hydromelioration, National Research University “Tashkent Institute of Irrigation and Agricultural Mechanization Engineers”, Kari Niyazov 39, 100000, Tashkent, Uzbekistan ² Institute of Environmental Engineering, Faculty of Civil Engineering, Technical University of Kosice, Vysokoskolska 4, 042 00, Kosice, Slovakia</p>
14:25	<p align="center">Distribution of river flow in the river bed Babajanov F K^{1*}, Xoshimov S N¹, Sultonov R¹</p> <p>¹ Faculty of Hydromelioration, National Research University “Tashkent Institute of Irrigation and Agricultural Mechanization Engineers”, Kari Niyazov 39, 100000, Tashkent, Uzbekistan</p>
14:35	<p align="center">Vibration analysis of the reflector of the cotton cleaner for fine litter Djuraev Anvar, Abduvakhobov Dilshod, Gofurjanov Ibrohimjon* and Madraximova Muyassar</p> <p>¹Namangan Engineering-Construction Institute, 12, Islam Karimov street, Namangan city, 160103, Uzbekistan Republic</p>
14:45	<p align="center">Drum dispenser of feed additives F M Maiviatov¹, E E Eshdavlatov^{1*}, A E Eshdalatov², A A Suyunov¹ and F F Yusupov²</p> <p>¹Karshi engineering-economics institute, 225, Mustakillik ave., 180100, Karshi, Uzbekistan ²Karshi Institute of Irrigation and Agro technologies of the National Research University Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, 180100, Karshi, Uzbekistan</p>
14:55	<p align="center">Theoretical and practical study of the process of transferring cotton by air to the pipes of the carrier device Olimjon Sarimsakov¹, Feruza Kadirova²</p> <p>¹Namangan Engineering and Technology Institute, ²Namangan engineering-construction institute, Namangan, 160103, Uzbekistan</p>
15:05	<p align="center">Regulation of the durability of cement concrete in aggressive environments N I Goncharova, Z A Abobakirova, Sh A Umarov, A R Muxamedzyanov and M M Mamadaliyev</p> <p>Fergana Polytechnic Institute, 86 Fergana str., Fergana 150107, Uzbekistan</p>
15:15	<p align="center">Study of the properties of asphalt concrete based on solid waste from cement production G B Ibrokhimov*, J L Shukurov*, Ch A Khasanov, S S Omondavlatov and I E Tovoshareva</p> <p>Termez Institute of Engineering and Technology, 288b, Islam Karimov Avenue, Termez, 190111, Uzbekistan</p>
15:25	<p align="center">Improving the Book Disinfection Device A A Yusupov, E X Safarov*, Z A Burxonov</p> <p>Andijan Machine-building institute, 56, Andijan, 170119, Uzbekistan</p>
15:35	<p align="center">Influence of supported filtration on channel safety (based on the example of swanley channel) M Ikramova¹, I Akhmedkhodjaeva^{2*}, M Otakhonov², Z Ishpulatov¹</p> <p>¹Scientific Research Institute of Irrigation and Water Problems, Karasu-4, 11, Tashkent, Uzbekistan ²National research university “TIAME” Kary-Niyazy str., 39, Tashkent, 100000, Uzbekistan.</p>
15:45	<p align="center">Theoretical substantiation of the angles of separation of seeds of agricultural crops from the drageeing drum U B Imomqulov^{1*}, S X Mamasoliyeva¹, D B Soataliyev¹, Sh B Imomqulov² and H A Idrisov³</p> <p>¹Namangan Engineering-Construction Institute, 12, Islam Karimov street, Namangan city, 160103, Uzbekistan Republic ²Namangan engineering technology institute, 12, Kosonsoy street, Namangan city, 160115, Uzbekistan Republic ³Ferghana state university, 19, Murabbiylar street Fergana city ,150100, Uzbekistan Republic</p>

15:55	<p>High softening performance indicators of plug-softener</p> <p>D B Irgashev^{1*}, Sh B Kurbanov¹, F M Mamato¹, I G Temirov¹ and S F Mamatov¹</p> <p>¹Karshi engineering-economics institute, 225, Mustakillik str., 180100, Karshi, Uzbekistan</p>
16:05	<p>Affects of particles formed as a result of wear of automobile brake mechanism particles on human health</p> <p>K Karimova^{1*}, K Ismailov², A Shermukhamedov³, Z Alimova³, U Rakhmatov¹ and I Baratov¹</p> <p>¹Jizzakh Polytechnic Institute, I.Karimov st.130100,Jizzakh, Uzbekistan ²Samarkand State Architectural and Civil Engineering Institute, Samarkand, 140108 Uzbekistan ³Professor, Tashkent State Transport University Tashkent, Uzbekistan</p>
16:15	<p>Issues of increasing the economic efficiency of manufacturing enterprises on the impact on the environment</p> <p>Keldiyarova Gulmira^{1*}, Boboeva Gulmira², Khusanova Ma'mura³, Samiev Luqmon⁴ Apakhodjaeva Tursunoy⁴</p> <p>¹Samarkand State University named after Sharof Rashidov, Samarkand, Uzbekistan ²M. Associate Professor of Samarkand State Institute of Architecture and Construction named after Ulugbek, Samarkand, Uzbekistan ³Teacher, the Department of Nursing at the Technical University of Public Health named after Abu Ali Ibn Sina, Kattakurgan, Samarkand, Uzbekistan ⁴Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" National Research University, Tashkent, Uzbekistan</p>
16:25	<p>History of lake sudochya and development perspective</p> <p>Kurbanbaev S E ^{1*}, Karimova O Yu¹, Turlibaev Z², Baimuratov R A³</p> <p>¹Karakalpak Regional Center of the Research Institute of Irrigation and Water Problems, Republic of Karakalpakstan, 8/2, Mukumiy street, Nukus, Karakalpakstan, Uzbekistan ²Karakalpak State University named after Berdakh, Republic of Karakalpakstan, 1, Ch.Abdirov street, Nukus, Karakalpakstan, Uzbekistan, ³Baltic Federal University named after. I. Kanta, Russia</p>
16:35	<p>Feed grinder rotor parameters</p> <p>F M Maiviatov¹, F U Karshiev^{2*}, Sh G`apparov³, A N Borotov⁴ and J Ulashev⁵</p> <p>¹Karshi engineering-economics institute, 225, Mustakillik str., 180100, Karshi, Uzbekistan ²Termez State University, 43, Barkamol avlod str., 190111, Termiz, Uzbekistan ³Chirchiq Higher Tank Command and Engineering School, avenue Amir Temur, block of flats 1st, 15 , 111715, City: Chirchik, Uzbekistan ⁴National research university "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers", 39, Street Kari Niyazi, Tashkent, 100000, Uzbekistan ⁵Toshken State Transport University, 1, Adilkhodjaeva street, 100067, Tashkent, Uzbekistan</p>
16:45	<p>Correction with polyphenols in conditions of experimental hepatitis</p> <p>M M Mallaeva¹, M A Mustafakulov^{2*}</p> <p>¹Samarkand State Medical University. Samarkand ²Jizzakh branch of the National University of Uzbekistan.</p>
16:55	<p>Parameters the disk angle of stepped plow</p> <p>F M Mamatov¹, D N Chorieva^{1*}, N Sh Rashidov¹, B R Mukimov² and M B Hafullah²</p> <p>¹Karshi engineering-economics institute, 225, Mustakillik str., 180100, Karshi, Uzbekistan ²Karshi Institute of Irrigation and Agro technologies of the National Research University Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, 180100, Karshi, Uzbekistan</p>
17:05	<p>Physical and geographical features of the toponyms of Uzbekistan</p> <p>M T Mirakmalov¹, R A Ibragimova¹, M M Avezov^{1*}, D K Okhunjonova¹</p> <p>¹National University of Uzbekistan named after Mirzo Ulugbek, 4, University Street, Tashkent, 100174, Uzbekistan</p>
17:15	<p>Using a wind generator to excite autonomous synchronous machines</p> <p>N B Pirmatov¹, M U Muminov², X E Yuldoshov², U N Berdiyrov³, U N Berdiyrov¹</p>

	<p>¹Tashkent State Technical University named after Islam Karimov, Uzbekistan, Tashkent, University St. 2A</p> <p>²Almalyk branch of Tashkent state technical university named after Islam Karimov Almalyk , 45 M.Ulugbek str.</p> <p>³Tashkent State Transport University Tashkent, Mirabad district, Temiryulchilar street, building 1</p>
17:25	<p align="center">Ecological characteristics of algoflora of lake khadicha and monitoring water quality</p> <p align="center">B B Kobulova¹, U T Yazdonov², K K Aitbayeva³ and Y Sh Tashpulatov^{2,4} *</p> <p>1Bukhara Institute of Natural Resources Management of the National Research University of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Uzbekistan; 2Samarkand Agroinnovations and Research University, Dagbet Str., Akdarya district, Samarkand, 140103, Uzbekistan; 3Berdakh Karakalpak State University, Garezsizlik street, 50, Nukus, 230100, Karakalpakstan; 4Samarkand University of Veterinary Medicine, Animal Husbandry and Biotechnology, Samarkand, 104100, Uzbekistan.</p>
17:35	<p align="center">Calculation of temperature deformations of reinforced concrete elements in dry hot climates</p> <p align="center">Bakhodir Rizayev¹, Umarov Isroil¹, Nuriddinov Jasurbek¹</p> <p>¹Namangan engineering-construction institute, Namangan, 160103, Uzbekistan</p>
17:45	<p align="center">Influence of crop rotations, crop rotation and cotton monoculture on cotton field weediness</p> <p align="center">M Tadjiev, K M Tadjiev</p> <p>Research Institute of Cotton Fiber Cotton (NIITC), Surkhandarya province Termez district</p>
17:55	<p align="center">Current state of biological resources of the mejdurechie reservoir of the republic of karakalpakstan</p> <p align="center">Temirbekov R^{1*}, Mirzambetov N¹, Musaev A¹, Israilova I¹, Kaipov I², Turlibaev Z³</p> <p>¹ Karakalpak Research Institute of Natural Sciences of the Academy of Sciences of the Republic of Uzbekistan, Nukus city, Republic of Karakalpakstan ²Doctoral student of the Karakalpak Institute of Agriculture and Agrotechnology, Abdanbetova street, Nukus, Karakalpakstan, Uzbekistan ³Karakalpak State University named after Berdakh, Republic of Karakalpakstan, 1, Ch.Abdirov street, Nukus, Karakalpakstan, Uzbekistan,</p>
	POSTER PRESENTATION
ETESD-2023 №1	<p align="center">The influence of the tread pattern on the performance of a tractor engine</p> <p align="center">M I Mamasalieva¹</p> <p>¹ Tashkent State Technical University, str.2 University, Tashkent, 100095, Uzbekistan</p>
ETESD-2023 №2	<p align="center">The influence of the shape of the disc slots of the seeder on the suction force of the vacuum</p> <p align="center">Mukhayyokhon Saidova¹, Feruza Alimova¹, Sarvar Tursunbaev¹, Dilshod Kulmuradov² and Mohichekhra Boltaeva³</p> <p>¹Tashkent State Technical University, University str., 2, Tashkent, Uzbekistan ² Jizzakh Polytechnic Institute, Jizzakh, Uzbekistan ³ Jizzakh branch of the National University of Uzbekistan, Jizzakh, Uzbekistan</p>
ETESD-2023 №3	<p align="center">Determination of acceptable values of the device parameters that measure the working depth of soil working machines</p> <p align="center">A Tukhtakoziev¹, N M Komilov², D A Abduvakhobov², A R Rasuljonov¹, K S Khaidarov^{2*} and K O Mukhammadjonov²</p> <p>¹Agricultural Mechanization Research Institute, 41, Samarkand street, Tashkent region city, 110800, Uzbekistan Republic ²Namangan Engineering-Construction Institute, 12, Islam Karimov street, Namangan city, 160103, Uzbekistan Republic</p>
ETESD-2023 №4	<p align="center">Determining the water permeability of poly-forming materials by determining their light reflecting properties</p> <p align="center">Adhamjon Khamidov*, Islombek Akhmedov, Jasur Nuritdinov and Muzaffar Mukhitdinov</p> <p>Namangan engineering-construction institute, Namangan, 160103, Uzbekistan</p>

<p>ETESD-2023 №5</p>	<p>Technological aspects of environmental problems of internal combustion engines Komiljon Sobirjonovich Narzullaev¹ ¹Namangan engineering-construction institute, Uzbekistan</p>
<p>ETESD-2023 №6</p>	<p>Study of physico-chemical properties of domestic AI-80 automobile gasoline and reduction of benzene content in gasoline F I Murtazayev¹, G B Rakhimov² ¹Karshi Institute of Engineering and Economics, Republic of Uzbekistan, Kashkadarya region st. Mustakillik, 225, 180100 ²Karshi Institute of Engineering and Economics, Republic of Uzbekistan, Kashkadarya region st. Mustakillik, 225, 180100</p>
<p>ETESD-2023 №7</p>	<p>Increasing the efficiency of heat exchange by changing the construction of a shell-tube heat exchanger G B Rakhimov¹, F I Murtazayev² ¹Karshi Institute of Engineering and Economics, Republic of Uzbekistan, Kashkadarya region st. Mustakillik, 225, 180100 ²Karshi Institute of Engineering and Economics, Republic of Uzbekistan, Kashkadarya region st. Mustakillik, 225, 180100</p>
<p>ETESD-2023 №8</p>	<p>Methodologies for calculating abrasive particle size in gear wear Kh K Ishmuratov¹, M I Mamasolieva¹, A E Abdurakhmanov¹ ¹Tashkent State Technical University, university str. 2, Tashkent 100095, Uzbekistan.</p>
<p>ETESD-2023 №9</p>	<p>Justification of parameters and operating modes of an elevator with combined rods S T Kodirov^{1*}, B A Khatamov, G K Payziev Namangan engineering-construction Institute, 12, I. Karimov Street, Namangan, 160103, Uzbekistan</p>
<p>ETESD-2023 №10</p>	<p>Physico-mechanical properties of potato crop G K Payziev*, B A Khatamov, S T Kodirov, Namangan engineering-construction Institute, 12, I. Karimov Street, Namangan, 160103, Uzbekistan</p>
<p>ETESD-2023 №11</p>	<p>Ways to improve the operational properties of hydraulic oils for agricultural machinery Z A Alimova¹, R Akhmatjanov¹, N A Kholikova², Z X Khafizova², I R Nuritov², F N Umarova² ¹Tashkent State Transport University, Tashkent, Uzbekistan ²Tashkent institute of irrigation and agricultural mechanization engineers, Kari Niyaziy 39, Tashkent, 100000</p>
<p>ETESD-2023 №12</p>	<p>Analysis of a Sand and Dust Storm Event in Termez, Surkhandarya Region, Uzbekistan: Impacts and Insights S K Khamidjonov^{1,2}, X S Doniyorova^{3,4} ¹ Department of Geography, Environment, and Spatial Sciences, Michigan State University, East Lansing, MI 48824, USA ² EcoGIS Center, National Research University “Tashkent Institute of Irrigation and Agricultural Mechanization Engineers” (NRU-TIIAME), Tashkent 100000, Uzbekistan ³ Regional Department of Ecology, Environmental Protection and Climate Change, Surkhandarya 190100, Uzbekistan ⁴ Termez Institute of Engineering and Technology, Surkhandarya 190100, Uzbekistan</p>
<p>ETESD-2023 №13</p>	<p>Selection of the Optimal Composition of Initial Metal Powders and Coating Applied to the Surface of their Particles to Create a New SMC-material Promising for Electrotechnical Applications A L Zhaludkevich¹, O F Demidenko¹, G A Govor¹, A R Normirzaev², M A Tukhtabayev^{2*}, O A Sidikov² ¹Scientific Practical Materials Research Centre of NAS of Belarus, Brovki st. 19 P. Minsk, 220072, Belarus ²Namangan Engineering-Construction Institute, I. Karimov avenue-12, Namangan, 160103, Uzbekistan</p>
<p>ETESD-2023</p>	<p>Research of clay raw materials of south kazakhstan for thermal insulating keramzit production E N Kocherov¹, A S Kolesnikov¹ and A D Mamitova¹</p>

№14	<p>¹ Life safety and environmental protection department, M.Auezov South Kazakhstan university , Tauke khan street 5, Shymkent, Kazakhstan</p>
ETESD-2023 №15	<p align="center">Influence of the surface composition emission properties of the alloy Mo-Zr</p> <p align="center">A K Sabirov¹, M I Sotivoldiyeva¹</p> <p>¹ Tashkent State Pedagogical University named after Nizami, 27 Bunyodkor ave., Tashkent 100070, Uzbekistan</p>
ETESD-2023 №16	<p align="center">Improvement of the technological scheme fan cotton sprayer OBX-600</p> <p align="center">B B Utepov¹, N J Saidhonova¹</p> <p>¹National Research University "TIAME", 39, Kari Niyaziy, Tashkent, 100000,Uzbekistan</p>
ETESD-2023 №17	<p align="center">Justification of the parameters of the vibration separating mechanism potato digger</p> <p align="center">Umidjon Goyipov¹, Sherzod Akbarov¹, Abror Alixonov¹</p> <p>¹NamECI, 12, I.Karimov, Namangan, Uzbekistan</p>
ETESD-2023 №18	<p align="center">Separate technology of preparation of concrete mixtures for hydraulic engineering construction</p> <p align="center">Adhamjon Khamidov¹, Sodiqjon Khakimov¹ and Farrukh Dadakhanov¹</p> <p>¹Namangan engineering-construction institute, Namangan, 160103, Uzbekistan</p>
ETESD-2023 №19	<p align="center">Strength and deformative properties of expanded clay concrete in dry hot climates</p> <p align="center">Sattor KHolmirzayev¹</p> <p>¹Namangan Engineering and Construction Institute</p>
ETESD-2023 №20	<p align="center">Determining the economic efficiency of the intelligent system in the water distribution network</p> <p align="center">A. Djalilov^{1*}, E. Sobirov¹, Tasheva², I. Allenova², J. Abdunabiyev³</p> <p>¹Department of Electrical Engineering and Mechatronics, "Tashkent institute of irrigation and agricultural mechanization engineers" national research university, 100000 Uzbekistan, Tashkent, st. Kori Niyazov, house 39.</p> <p>²Department of Languages, "Tashkent institute of irrigation and agricultural mechanization engineers" national research university, 100000 Uzbekistan, Tashkent, st. Kori Niyazov, house 39.</p> <p>³Department of Mathematics, Natural-Scientific and Professional Sciences "Kokand branch of Tashkent State Technical University" named after Islam Karimov, 150700 Uzbekistan, Kokand city, str. Usman Nasir, house 4.</p>
ETESD-2023 №21	<p align="center">Elastic Cotton Harvesting Machine Containers</p> <p align="center">S R Alikulov¹, A Z Kiyamov¹ and F E Begimkulov¹</p> <p>¹Karshi engineering-economics institute, 225, Mustakillik str., 180100, Karshi, Uzbekistan</p>
ETESD-2023 №22	<p align="center">Formation and justification of the parameters of the comb for laying the drip irrigation hose and sowing seeds</p> <p align="center">B P Shaymardanov^{1*}, P T Berdimuratov², D M Ruziev³ and A G Rakhimov³</p> <p>^{1,2,3} "Tashkent Institute of irrigation and agricultural mexanization engineers" National Research University " National Research University, 39, Kari-Niyaziy, Tashkent 100000, Respublika Uzbekistan</p> <p>³PC "GSKB-Agromash" chief designer, 210, Mashxadiy, Tashkent 100000, Respublika Uzbekistan</p>
ETESD-2023 №23	<p align="center">Use of Wide-Width Units in Cotton Growing</p> <p align="center">M A Tukhtabayev^{1*}, H M Soliev², Z I Isoqova³</p> <p>^{1,2,3} Namangan Engineering Construction Institute, I. Karimov avenue-12, Namangan, 160103, Uzbekistan</p>