

## Content

### **HYDROTECHNICAL CONSTRUCTION, WATER ENGINEERING AND WATER TECHNOLOGIES**

Volk P. P., Prykhodko N. V.	Efficiency of Agricultural Production on Reclaimed Lands in the Polesie Zone of Ukraine in the Conditions of Climate Change ..... 3
Fridrikhson V. L., Kryvonoh A. I., Kryvonoh V. V., Romanenko P. Yu.	Modeling the Effects of Wave Load on a Reverse Filter Made of Geotextile Materials ..... 13
Kholodenko V. S., Kholodenko A. O., Matus S. K.	Features of Groundwater Environmental Impact Assessment ..... 26

### **WATER SUPPLY AND WASTEWATER DISPOSAL**

Fylypchuk V. L., Prokopiev O. K., Karpukhin O. O.	Technological Characteristics of Sediment and Flotation Sludge Formed During Wastewater Treatment of Heavy Metals ..... 35
Kovalchuk V. A., Kobylko I. V.	Composition and Properties Features of Wastewaters From Milk Processing Enterprises ..... 52
Fylypchuk L. V., Matus S. K.	Modeling and Optimization of pH and Eh Regulation Processes in Hydraulic Reactors-Mixers as Control Objects ..... 63
Kvartenko O. M.	Organization Management of Water Supply and Water Distribution Systems of Settlements ..... 72

Protsenko S. B., Kizieiev M. D., Novytska O. S.	Increasing the Efficiency of Biological Wastewater Treatment In Aeration Tanks By Using the Nitrification-Denitrification Technology According to the Scheme of the Two-Stage Modified Ludzak-Ettinger Process ..... 80
---	---

### **ENVIRONMENTAL SECURITY**

Yatskov M. V., Korchyk N. M., Prorok O. A.	Research of the Chemical Parameters Sedimentation For the Highly Concentrated Ferrums Containing Liquid Waste to Obtain Sediments With the Specified Composition and Properties ..... 94
--	--

### **HEAT POWER ENGINEERING**

Taras B. I.	Universal Model of a Gas-Fired Hot Water Boiler For Assessing Its Dynamic Characteristics ..... 108
-------------	---

### **ARCHITECTURE, CONSTRUCTION AND CIVIL ENGINEERING**

Chovniuk Y. V., Cherednichenko P. P., Zolotar L. V., Shudra N. S.	Analysis and Optimization (Minimization) of Dynamic Loads in Elastic Elements of Hoisting Mechanism of Urban Cranes ..... 118
Naumuk Yu. S.	Permaculture Design For the Restoration of the Environment In the Destroyed Territories of Ukraine ..... 129
Halinska T. A., Ovsii D. M., Ovsii O. M.	Design of Rational Slabelements of Monolithic and Prefabricated-Monolithic Steel-Reinforced Concrete Floors ..... 140

Tryhub R. M., Kolomiets A. S.	Analysis of the State of the Real Estate (Housing) Market in Ukraine in the Pre- War Period and During the War ..... 166
Biloshytska N. I., Uvarov P. S., Biloshytskyi M. V., Lobko D. I.	Evolution of Architectural Solutions of Mass Housing Construction in Ukraine ..... 182
Kukhniuk O. M.	Approximation of Deflections of Flexible Reinforced Concrete Elements Under the Action of Concentrated Load ..... 201
Dovzhuk O. M.	Modern Problems of Architecture: Preservation of Cultural Heritage Objects 3d Models in Library Digital Archives of Ukraine ..... 214

### **CONSTRUCTION AND CIVIL ENGINEERING**

Sokolenko K. V.	Analysis of Tasks For Urban Renewal of Urbanized Territories In the Luhansk Region ..... 224
Tkachenko I. V., Lytvynenko T. P., Bondarenko R. A., Kupriienko B.	Analysis of the Territory of the Dykanka Community In Accordance With Suitability For Construction ..... 234
Sokolenko K. V., Sokolenko V. M., Rudniev Ye. S., Chernykh O. A.	Influence of Civil Buildings Typological Characteristics on the Feasibility of Reconstruction in the Cities of Eastern Ukraine ..... 245
Dovhan O. D.	Damage of Dispersed-Reinforced Decorative Composites ..... 256

Filonenko O. I., Tokar B. S.	Inclusiveness in Higher Education Dormitories ..... 276
Pilipaka L. M., Nychporuk R. V.	Development of Conceptual Approaches to Post-War Urban Reconstruction ..... 286
Shylova T. O.	Priority Development of Public Transport Is Vital to the Revival and Sustainable Development of Cities ..... 297
Uvarov P. E., Biloshytska N. I., Shparber M. E., Zhuvaka Y. H.	Features of Risk Management of Investment and Construction Projects During the Life Cycle ..... 305
Mykhailyk O. O.	Blue Lines of Limitation in Town Planning Documentation ..... 317
Tkachuk O. A., Sotnychuk S. O.	Assessment of Rainflow Regulation Methods With the Purpose of Preventing Underflooding and Flooding of Urban Areas ..... 327
Chovniuk Y. V., Pryimachenko O. V., Cherednichenko P. P.	Conceptual Framework of the Analysis of Life Cycle Costs of Real Estate, Investments in Urban Building and Household Assets Considering the Impact of Inflationary Processes ..... 337
Klymenko S. V., Nahornyi T. V.	Experience of Cycling Traffic Organization on At-Grade Intersections in Cities of Ukraine ..... 353
Lynnyk I. Y., Zavalnyi O. V., Vakulenko K. Y., Burko D. L.	Research of the Intensity of Traffic Flows on the Streets of the City of Kharkiv ..... 365

Shkrabyk Y. V., Atom in Building Materials Science ..... 382  
Kucherenko O. A.

Lipianin V. A., Reconstruction of Post-Production  
Bahniuk O. A. Territories ..... 391

### **GEODESY AND LAND SURVEY**

Bachyshyn B. D., Identification of Starting Points With  
Sosnovyi V. D., Error Coordinates in the Free Station  
Sheremet N. V. Method ..... 403

Bukhalska T. V., Spatial Planning as a Mechanism of  
Bukhalskyi V. O. Sustainable Territorial Development ..... 414

### **TRANSPORT TECHNOLOGIES AND ROAD TRANSPORT**

Pikula M. V. Efficiency of Dual Education in Process  
of Automobile Transport Specialists  
Training for Innovative Production  
Technologies ..... 430

Stadnyk O. S., Analysis of Used Electric Cars Price  
Hnieushev V. O., Dependence on Their Technical and  
Kliuiko V. A. Performance Indicators ..... 438

### **COMPUTER SCIENCES**

Zubyk L. V., Efficiency of Assemble Methods of  
Zubyk Y. Y. Machine Learning For Big Data  
Processing ..... 449

Shynkarchuk N. V. Intel Raptor Lake and AMD Zen 4  
Processor Architecture Concept ..... 462

## **EXPLOITATION of MINERAL DEPOSITS**

- Hryhoriev Y. I.,  
Hryhoriev I. Je.,  
Sliusar S. V.,  
Vlasenko V. A.                      Digitalization as a Tool for the Mining  
Adaptation in an Undetermined Dynamic  
Environment (on the Example of the  
Implementation of K-MINE) ..... 476
- Zaiets V. V.,  
Kalinichenko O. V.                      Improving the Release of Severely  
Depleted Ores at Kryvbas Mines ..... 485

## **ENGINEERING SCIENCE**

- Falko O. L.                                      Transportation in Production Conditions  
of Fluid Chemical and Food Masses To a  
Greater Height Level ..... 493
- Isupova M. I.                                      Architectural Image of 1945–1950s  
Residential Buildings in Western  
Ukraine Cities (on the Example of Rivne,  
Lutsk, Ternopil and Ivano-Frankivsk) ..... 504