

Content

HYDRAULIC ENGINEERING

Volk P. P., Rokochynskiy A. M., Tymeichuk O. Y.	Theoretical Aspects of System Optimization in the Creation and Operation of Drainage Systems on an Ecological and Economic Ba- sis 3
Dmytriv O. P., Prokopchuk A. V., Bi- letska M. I.	Control use of Agricultural Land by Means of the GIS Technologies on the Basis of the Earth Remote Sounding Data 22
Kunytskyi S. O., Pinchuk O. L.	Determination of Hydrochemical Indicators of Water Bodies Using EZODO 7200 Complex Water Quality Analyzers 31
Gerasimov I. G., Rokochynskiy A. M., Herasymov H. H.	Increasing Energy and Overall Efficiency of Closed Irrigation System in Accordance With Modern Conditions and Requirements 40

ENGINEERING SCIENCE

Kondratiuk O. M.	Ways of Improving the Reliability of Vibra- tion-Center Settings 54
Ihnatiuk R. M., Ryzhyi O. P., Pakharenko V. L., Holotiuk M. V., Natalia Nowosad	Study of Process Parameters of Plasma and Laser Metal Cutting 63
Strilets O. R.	Dynamic Model of Speed Control In a Device With a Multistage Gear Differential and Closed-Loop Hydraulic Systems Through Sun Gears 71

ARCHITECTURE AND CONSTRUCTION

Kosmii M. M.	Theoretical Approaches to Understanding the Intangible in Architecture and Urbanism	85
Potapchuk I. V., Bychkovska L. S.	Designing Preschool Education Institutions: Foreign Experience	89
Sholudko M. V., Sholudko M. M.	Functional Planning Principles of Reconstruction of a Secondary School in the Village of Karpylivka, Rokytnivsky District, Rivne Region	111
Isupova M. I.	Map of Soviet Neo-Historicism Buildings of Rivne	122
Trach R. V.	BIM and Big Data: the Perspective of Generating New Knowledge in Construction	136

MATERIALS SCIENCE

Kundrat M. M.	Axial Forces and Critical Length of a Inclusion of Changing the Character of Fracture ..	148
Shalai S. V., Chorna I. V., Safonov H. I.	Use of Fly Ash as a Microfiller in Cement Solutions	158

APPLIED MATHEMATICS, COMPUTER SCIENCE AND COMPUTER ENGINEERING

Boichura M. V.	Numerical Complex Analysis Methods for Modeling of Quasiideal Fields in the Presence of Thin Inclusions	169
Zhukovska N. A., Zhukovskyi V. V.	Mathematical Modeling of Multilayer Soil Massif Stress-Strain State Under Pollutants Filtration In Non-Isothermal Conditions	181

Bachyshyna L. D., Roshcheniuk A. M.	Use of Typescript and Angular Technologies in Development Web Service Converting Printed Text Into Audio 192
--	--

CONSTRUCTION AND CIVIL ENGINEERING

Shalai S. V., Sasovskyi T. A., Chorna I. V.	Mortar Mixtures as a Result a Composite Binder Using Dust-Carrying Out Clinker Burning Furnaces 204
Davydenko N. V., Davydenko V. A., Davydenko L. V.	Formalized Description of Typical Operation Conditions of the Water Supply Pumping Station Based on the Analysis of Profiles of Daily Charts of Water Consumption 217
Romaniuk V. V., Supruniuk V. V., Misiuk T. Y.	Problem of Local Stability of Shelves and Walls of Bending Perforated Elements 231
Kunytskyi S. O., Chorna I. V., Sasovskyi T. A.	Efficiency of Using Non-Fired Materials in Eco-Building 241
Shalai S. V., Sasovskyi T. A., Tsyhanenko I. V.	Automated Design Systems for Planning and Implementation of Design Solutions in Con- struction 253