

## Content

### HYDRAULIC ENGINEERING

Novachok O. M., Novachok A. R., Novachok I. O.	Hydroinformatics Software ..... 3
Filipovych Yu. Yu., Filipovych Ye. O.	Hydraulic Calculation of the Operation Modes of Defense Hydrotechnical Constructions ..... 16
Hurtyna L. H., Kharyn P. L., Khlapuk M. M., Shuminskyi V. D.	The Efficiency of the Structures From Soil Materials Reinforced With Geogrids, Taking Into Account Seismic Effects ..... 28
Gopchak I. V., Yatsyk A. V., Basiuk T. O., Semenko L. O.	Scientific Bases for Establishing Ecologically Acceptable Water Abstraction Levels From Small Rivers ..... 45
Volk P. P.	Scientific and Methodical Approaches to System Optimization of Technological and Structural Parameters of Polder Systems .... 57
Khlapuk M. M., Moshynskyi V. S., Bezusiak O. V., Volk L. R.	Flow Theory Development Analysis in the Pipes ..... 70
Tkachuk M. M., Tkachuk R. M., Biletskyi A. A.	Water Regulation of Drainage-Modular Systems on Dryed Land ..... 79
Herasymov H. H., Gerasimov Ie. H., Ivanov S. Yu.	Calculation of Cone Filter for Preliminary Water Cleaning ..... 92

## **WATER SUPPLY AND WASTEWATER DISPOSAL**

Tkachuk O. A., Yaruta Y. V.	Infiltration Basins With Gravel Loading and Vegetation Top Layer in Rainwater Sewerage Systems .....	112
--------------------------------	------------------------------------------------------------------------------------------------------------	-----

## **EXPLOITATION of MINERAL DEPOSITS**

Vilkul Yu. H., Skachkov A. A., Zhukov S. O.	Organizational and Technological Priorities of Solving Environmental and Industrial Problems of Kryvbas .....	127
Kalinichenko E. V.	Study of the Stress-Strain State of the Massif in Mining the Deposit Area With Subsequent Complete and Combined “Framework-Module” Backfilling .....	141

## **OCCUPATIONAL HEALTH**

Fylypchuk V. L., Kashliev M. S., Kuskovets S. L.	Load Lift Safety in Offshore Navy Ships .....	153
Shatalov O. S., Kuskovets S. L.	Methodological Bases of Evaluation of Fatal Occupational Injuries Social Consequences ..	166

## **PHYSICS AND CHEMISTRY**

Haievskiy V. R., Kochmarskiy V. Z., Haievskaya S. H., Potapchuk A. V., Kuba V. V., Soliak L. V.	Investigation of the Effectiveness of the Oxyethyldendiphosphonic Acid ( <i>OEDPA</i> ) Action on the Crystalization of Calcium Carbonate .....	176
Lapinskiy A. V., Kuzminchuk A. V., Astrelin I. M., Krymets H. V., Harashchenko O. V.	Exemplary Natural Waters and the Problem of Their Conservation In Water Bodies .....	183

## **ENERGETICS**

- Semeniuk V. V.,  
Okseniuk R. R.,  
Krupenko D. O.                      Perspectives for the Use of Renewable  
Energy Sources ..... 195
- Klymenko M. O.,  
Kukhniuk O. M.                      Investigation of the Twist Parameter in  
Generated Vortex Air Flows ..... 203

## **CONSTRUCTION AND ARCHITECTURE**

- Trach R. V.                              Modeling Project Organizational Structure ... 213

## **ENGINEERING SCIENCE**

- Lukianchuk O. P.                      Modeling of the Loosened Soil Structure  
After Exposure to a Curved Working Element  
of the Longline Deep-Ripper ..... 225
- Kolesnyk O. A.,  
Stadnyk O. S.                              Development of a Method for Reducing  
Toxicity of Exhaust of Diesel Busses with  
Diesel Engines..... 239