

## CONTENTS

### SECTION 1. INFORMATION SYSTEMS AND TECHNOLOGIES

Software for planning measures to increase the productivity of wells in underground gas storage facilities <b>Volovetskiy V. B., Romanyshyn Yu. L.</b> .....	5
Neural network-based optimization for domain-level computational linguistics <b>Dychka I. A., Potapova K. R., Meliukh V. V.</b> .....	9
Seamless mesh network functionality <b>Kyrychek H. H., Tiahunova M. Yu., Zui M. S.</b> .....	13
Integrated Environment for study of discipline: conceptual model of learning material representation <b>Otenko V. I.</b> .....	17

### SECTION 2. APPLIED MECHANICS

Bending of the ruled nondevelopable surfaces on the example of surfaces of the binormals of the slope lines <b>Kresan T. A., Pylypaka S. F., Demchuk I. O.</b> .....	22
--	----

### SECTION 3. MATERIALS SCIENCE

Influence of soil characteristic indicators on the causes of failure of working bodies of tillage agricultural units <b>Zakharov A. V.</b> .....	26
Resistance of carbon plastic based on phenylone C-2 <b>Chigvintseva O. P., Rula I. V., Boyko Yu. V.</b> .....	32

### SECTION 4. AVIATION, ROCKET AND SPACE EQUIPMENT

Ways of improving the efficiency of using unguided aviation missiles from combat helicopters with the cab mode <b>Berezanskyi V. G., Sosulin M. V., Voronin A. V.</b> .....	37
A comprehensive approach to improving the anti-icing system of the helicopter Mi-8MT <b>Klimishen O. O., Krasnorutskiy A. O.</b> .....	41

### SECTION 5. SHIPBUILDING

Artificial Intelligence in marine power-plant engineering <b>Avdiunin R. Yu., Poshyvai M. I., Vahin F. I.</b> .....	44
--	----

Methods of researching engineering problems  
**Syvash S. B., Sokolovska H. V., Sokolovskyi S. Yu.**..... 46

**SECTION 6. ELECTRIC POWER ENGINEERING, ELECTRIC ENGINEERING AND ELECTROMECHANICS**

Structural-functional model of a proactive control system  
 for a ship synchronous generator  
**Ushkarenko O. O.**..... 51

**SECTION 7. POWER ENGINEERING**

Use of a valve spool device for controlling valves  
 of the gas exchange system of motor vehicles  
**Avdiunin R. Yu., Prudnikov I. A., Huryn K. Yu.**..... 566

**SECTION 8. HEAT POWER ENGINEERING**

Technical limitations of power-to-heat technology implementation  
 in district heating systems of Ukraine  
**Derii V. O., Zgurovets O. V., Havrylenko Ya. V.**..... 61

**SECTION 9. AUTOMATION AND TOOL ENGINEERING**

Development and improvement of the system for automatic mixing  
 of sintering mixture in mixing drums  
**Pukhalska O. M., Chekryhin R. O., Chesnova H. O.**..... 655

**SECTION 10. FOOD TECHNOLOGIES**

Non-traditional composite flour mixtures in fresh dough technology  
**Danyiuk I. P., Strutynska L. T.**..... 70

**SECTION 11. ARCHITECTURE AND CONSTRUCTION**

General principles of formation and signs of development  
 of territorial recreation systems  
**Zyhun A. Yu., Pleshynets A. V.**..... 74

**SECTION 12. TRANSPORT**

Development of proposals for the creation of a military vehicle design  
 with the accumulation of rotational energy of the wheel propulsion  
**Petrov L. M., Kishianus I. V., Borysenko T. M.**..... 788

**SECTION 13. GENERAL ISSUES OF ENGINEERING SCIENCES**

On stability at the first approach solution of one problem  
 for the system of telegraph equations  
**Dejneka O. Yu.**..... 82