

## ABSTRACT&amp;REFERENCES

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## RESEARCH OF THE EXPOSURE IMPACT ON MYCOBACTERIA ULTRASTRUCTURE AND VARIABILITY

p. 6–14

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*Materials presented in the study show that small doses of radiation do not cause changes in the ultrastructure of Mycobacterium bovis and atypical mycobacteria, stimulate only their reproductive activity (Mycobacterium Intracellularae), but they lead to changes in the shape and electron optical density of the cytoplasm in Mycobacterium scrofulaceum. The dose at which mycobacteria acquire degenerative changes is 154,8 – 206,4 C/kg (600000 – 800000 R)*

**Keywords:** tuberculosis, strains, mycobacterium, *M. bovis*, *M. scrofulaceum*, *M. intracellularae*, electron microscopy, ionizing radiation

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#### ANALYSIS OF THE SPECIFICITY OF USE OF INNOVATIONS IN LOGISTIC PROCESSES OF MILITARY LOGISTICS OF THE NATIONAL GUARD OF UKRAINE

p. 15-17

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*In the article an analysis of features of the use of innovations in the logistic processes of the military logistics of units of the National Guard of Ukraine is proposed. Particular attention is paid to the efficient organization of work in warehouses of long-term storage. The key variants of cargo unit manipulation in warehouses are designed. The issue of computer simulation of logistic distribution of units of the National Guard of Ukraine is researched*

**Keywords:** military logistics, logistics, military unit, innovations, stocks, warehousing, distribution

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#### THE PROBLEM OF FOOD PROVIDING IN THE CONTEXT OF SOCIAL DEVELOPMENT OF THE UKRAINIAN INDEPENDENT VILLAGE (1991-2008)

p. 18-20

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*The issue of food providing in the context of social development of the Ukrainian independent village is analyzed. It is found out that during the agricultural crisis Ukraine was depended on the import of certain kinds of foodstuffs. It is determined that the problem of food providing needed a multipurpose solution. It is outlined that structural changes in food supply were influenced by income decrease of the population*  
**Keywords:** food providing, agricultural sector, peasants, social development, food, economy

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**PREVENTION OF N-GEPTAN GAS MIXTURES  
WITH THE HELP OF COMBINED SYSTEMS OF  
SHOCK WAVES AND VOLUME FIREFIGHTING  
SUBSTANCES**

**p. 21-24**

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*It is theoretically substantiated and experimentally con-  
firmed the possibility of using shock waves and volumetric  
extinguishants to prevent ignition of gas combustible media.  
It has been established that the proposed combined system  
provides effective prevention of ignition - phlegmatization of  
gas n-heptane-air mixture with simultaneous reduction of the  
concentration of aerosol and CO<sub>2</sub> or N<sub>2</sub> gases up to 4 times  
in comparison with their individual values*

**Keywords:** *gases phlegmatizers, combustion inhibitors, aero-  
sol fire extinguishing, shock waves, fire extinguishers*

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**METHODOLOGY OF ESTABLISHING  
ELECTRONIC RESOURCE FOR THE SPHERE OF  
THE BEAUTY INDUSTRY**

**p. 25-30**

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*The article presents the methodology of creating an electronic network resource for training professionals in the beauty industry. The emphasis is on the specifics of the justification of the choice of structural elements as actual and appropriate headings and themes from the field of beauty, and features of the choice of stylistic direction of the design of the resource interface. The stages of the methodology allow to make an informed decision regarding a plurality of topics in each of the headings and to determine the stylistic direction of developing the interface of this resource. The implementation of the stages is carried out with the help of the use of mathematical tools*

**Keywords:** *electronic resource, methodology, structural element, stylistic direction, experts, alternatives, criteria of choice*

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#### DEVELOPMENT OF METHODS OF SELECTION OF SYSTEMS OF INSTRUMENTAL PROTECTION OF PROJECT DESIGN OF PEDAGOGICAL DESIGN

p. 30-37

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*The hierarchical model of the choice of systems of instrumental support of the pedagogical scenario is proposed. The step-by-step method of quantitative evaluation of alternative variants of systems of instrumental support of e-learning is developed. For each cluster of the hierarchical model, templates of matrices of pair comparisons of the corresponding elements are presented and the procedure of their filling is considered – examples of typical questions to the expert and possible variants of his answers. The sensitivity of the model to relatively small changes in expert opinion is researched*  
**Keywords:** *hierarchical model, e-learning, pedagogical scenario, implementation, evaluation criteria, alternative variants*

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#### GENERAL PRINCIPLES OF STEEL STRUCTURES RISK OPERATION ESTIMATION AND assessment OF THEIR RESIDUAL life

p. 37-42

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*The research of the problems of operation of complex engineering systems, buildings and structures made of steel structures is carried out. Estimation and forecasting of the residual life, analysis of the risks of further exploitation of steel structures that were damaged during operation are proposed. It is suggested to take into account the development over time of the identified and carry out the accounting of defects and damage to steel structures not identified during the technical inspection. The developed algorithm for calculating the residual life of steel structures using probabilistic or deterministic methods is proposed*

**Keywords:** steel structures, defect, damage, residual life, technical conditions, risk, safety

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**EVALUATION OF THE ADEQUACY OF PROPOSED PREDICTION MATHEMATICAL MODEL ON THE ACTUAL DATA OF GROUNDWATER LEVEL MONITORING IN THE CENTRAL PART OF KHARKOV CITY**

p. 43-47

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*In connection with the problem of increasing the level of groundwater in the urban territories, the previously created mathematical model is tested for actual groundwater level monitoring data in the central part of Kharkov city. The results of calculations on the model give groundwater levels close to real monitoring values. This indicates the adequacy of the model created to real-life conditions*

**Keywords:** flooding, groundwater level, additional groundwater replenishment, mathematical modeling, prediction, water balance

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**RESEARCH OF DUST SUPPRESSION MEASURES ON GRAVEL ROADS**

p. 48-53

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*This article describes the problem of dust suppression measures on gravel roads. Calculations are given to describe the position and velocity of the particle at any moment. Measures for dust retention are considered by applying to the roadways of solutions based on chloride salts, as well as on bischofite. Comparison of the effectiveness of road dust retention between natural bischofite aqueous solution and solution of calcium chloride and water is examined. The influence of bischofite consumption on the intensity of dust release from the road is provided*

**Keywords.** Problems of dust suppression, dust particle, dust retention, aerosol particles, bischofite, open-pit mines

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#### LEXICAL FEATURES OF ARTISTIC REPRESENTATION OF THE LIBERATION MOVEMENT OF THE 20S OF THE TWENTIETH CENTURY IN THE WORKS OF GRYGORII KOSYNKA

p. 54-58

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*Lexical features of artistic representation of the liberation movement of the 20s of the twentieth century in the works of Grygorii Kosynka were analyzed in the article. It was found that the writer participated in the rebel movement and as a result he got some experience that allowed him to depict realities of the liberation movement of the 20s of the twentieth century in a truthful manner and to reproduce a dynamic, versatile image of a rebel of the Ukrainian Army*

**Keywords:** liberation movement, rebel, lexical features, lexeme, lexical meaning, artistic representation

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