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RESEARCH OF REINFORCED TWO-LAYER BEAMS MADE FROM CONVENTIONAL AND RUBBER CONCRETES

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ABSTRACT

Experimental results of the load bearing capacity and crack resistance of the two-layer bending reinforced concrete beams made from conventional concrete (a high layer) and rubber concrete (a low layer) are presented and discussed.

DURABILITY AND DEFORMABILITY OF REINFORCED CONCRETE BENDING STRUCTURES STRENGTHENED BY POLYMERIC COMPOSITES

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ABSTRACT

The paper is devoted to the experimental investigation of the actual behavior of reinforced concrete beams strengthened by polymeric composite materials in bending. Such technology allows to avoid the risk of ignition and fire in case of traditional methods of strengthening using welding.

CHOICE OF EFFECTIVE ORGANIZATIONAL AND TECHNOLOGICAL DECISIONS UNDER RECONSTRUCTION WITH CONSIDERATION FOR ECOLOGICAL MONITORING

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ABSTRACT

Classification of basic ecological risks parameters is suggested to provide urban reconstruction. Technology of its mapping is considered by example of Rostov-on-Don. The program "Ecological risk management" which allows to define a number of measures reducing ecological risk at the pre-investment stage is suggested. Information model of ecological risk management under reconstruction is offered.

MODELING OF GENERAL CONTRACTOR-SUBCONTRACTOR INTERACTION IN CONSTRUCTION

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ABSTRACT

Interaction of enterprises in the process of the joint activity is economic, which causes application of penalty provisions in case of breach of a contract. The main problem is determination of terms for granting the works to the subcontractor since the moment of completion of works can be calculated determined only with some degree of probability because of stochastic character of building production. We consider the problem of determination of rational terms in which subcontractor works is to be performed. The problem is considered for two cases. In the first case only one work is performed on the objects, in the second case the set of works is performed. The model is proposed which makes it possible to minimize the losses of the general contractor because of delayed granting of the works and takes into account random factors which influence the duration of work performance and make it a random value.

COMPARATIVE ANALYSIS OF RADIATOR HEATERS AND CENTRAL HEATING SYSTEM

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ABSTRACT

The article shows the results of the study and analysis of radiator heaters. It represents alternative solutions in order to increase operational parameters of radiator heaters by dint of using flat semiconductor resistance heating elements.

THE PROBLEM OF ANALYSIS OF ENVIRONMENTAL THREAT CRITERIA ON ASPHALT CONCRETE PLANTS

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ABSTRACT

While assessing an ecological threat of possible imminent disruption to the environment induced by industrial objects, such calculation methods should be used that aim at assessing a possible ecological threat to the environment and nature complexes of the area. Model of estimation of environmental threat coefficient has been developed on the basis of analysis of models of calculation of environmental risk parameters. Analytical dependence for estimation of parameter characterizing the degree of influence of enterprise on pollution of atmosphere by its emission point is described. The model has been tested at analysis of resulted in inventory experimental data of four agitators of coating plants.

ICE STORAGE SYSTEMS IN ISRAEL

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ABSTRACT

This article is aimed at review of existing types of Thermal Energy Storage Systems (TESS) based on well-known technologies and giving recommendations for their improving. The **article**

combines thermodynamic analysis, economical aspects and the quality comparison of the known TESS designs. Reasons to use TESS in Israel; recommendations for the immediate implementation of TESS for business and plant buildings, as well as profits of customer by usage of Israel Electrical company electricity tariff, are introduced. There is a detailed comparative calculation of Coefficient of Performance for improved TESS vs. the existing air-conditioning system at real working conditions.

DESIGN OF FOUNDATION
BY SOFTWARE PACKAGE "MivneCAD"

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ABSTRACT

The paper presents the new block "Design of Foundation" of software package MivneCAD which allows to efficiently design the foundation in automatic or interactive modes. Algorithm for calculation of pile, post and slab foundations and their combinations satisfies to most requirements of national and European Standards **.**