



**NATIONAL UNIVERSITY OF CIVIL
DEFENCE OF UKRAINE**

INTERNATIONAL SCIENTIFIC APPLIED CONFERENCE PROBLEMS OF EMERGENCY SITUATIONS (PES 2024)

**SELECTED PEER-REVIEWED FULL TEXT PAPERS FROM THE
INTERNATIONAL SCIENTIFIC APPLIED CONFERENCE
“PROBLEMS OF EMERGENCY SITUATIONS“
(PES 2024)**

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TRANS TECH PUBLICATIONS

**National University of Civil
Defence of Ukraine**

**International Scientific Applied
Conference Problems
of Emergency Situations
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International Scientific Applied Conference
"Problems of Emergency Situations" (PES 2024),
May 16, 2024, Kharkiv, Ukraine

Edited by

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Trans Tech Publications Ltd
Seestrasse 24c
CH-8806 Baech
Switzerland
<https://www.scientific.net>

Volume 156 of
Advances in Science and Technology
ISSN print 1662-8969
ISSN web 1662-0356

Full text available online at <http://www.scientific.net>

Distributed worldwide by

Trans Tech Publications Ltd
Seestrasse 24c
CH-8806 Baech
Switzerland

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Preface

The annual International Scientific Applied Conference "Problems of Emergency Situations" (PES) is organized by the National University of Civil Defence of Ukraine (Ukraine, Kharkiv). The representatives from the Odesa State Academy of Civil Engineering and Architecture (Ukraine, Odesa) were involved as partners in PES 2024.

More than 250 participants registered for this year's conference. Scientists from 11 countries took part in the meeting, including the Republic of Austria, Azerbaijanian Republic, Italy, Poland, Czech Republic, as well as the Swiss Confederation, the Kingdom of Spain, the United States of America, the United Kingdom of Great Britain and Northern Ireland, Ukraine, and Japan. More than 170 reports were submitted to the conference.

The purpose of the conference was to discuss issues related to the problems and prospects of introducing the latest developments and technologies aimed at preventing emergencies, minimizing their consequences in the field of civil defence, sharing experience and finding new facets of scientific cooperation, solving problems of recent emergencies that create a global threat to humanity.

Table of Contents

Preface

Chapter 1: Mechanics of Structures

Effective Application of Numerical Approaches and Green Functions for the Process of Modelling Spheres V. Pasternak, A. Ruban, O. Bilotil and D. Karpova	3
Use of the Boundary Element Method for Solving Problems of Predicting the Regularities of Formation of the Structure of Non-Isometric Components V. Pasternak, A. Ruban, O. Chernenko and O. Nadon	15
Special Features of Using Mathematical Modeling for the Study of Tetrahedral Elements V. Pasternak, A. Ruban, K. Pasynchuk and P. Polyanskyi	27
Justification of the Dynamics of Extra-Project Loads on Building Structures M. Nalysko, A. Makhinko, A. Sopilniak and Y. Cheberiachko	39

Chapter 2: Building Structures

Deformability and Crack Resistance of Reinforced Concrete and Fiber-Reinforced Concrete Cross-Beam Systems M. Surianinov, I. Aksyonova, A. Perperi and Z. Holovata	49
Comparative Analysis of the Load-Bearing Capacity and Crack Resistance of Reinforced Concrete and Fiber-Reinforced Concrete Airfield Slabs I. Korneeva, A.I. Kostiuk, O. Posternak and M. Surianinov	57
Modeling of Building Structures Resistance to Collapse Failure from Explosive Impact M. Barabash, N. Kostyra and V. Maksymenko	65
Analytical Calculation of Beams on Winkler's Variable Elastic Foundation Y. Krutii, M. Surianinov, V. Vakulenko, M. Soroka and N. Vasilieva	75

Chapter 3: Research and Design of Machines and Equipment

Ways to Reduce the Mass of Body Parts of Closed Gears I. Matsiuk, O. Tverdokhlib, D. Dovhal and B. Tsymbal	83
Investigation of Diffraction of Electromagnetic Microwaves on Explosive Materials A. Karpov, M. Kustov, O. Basmanov and O. Kulakov	91
Using of Hydrogen Sorbtion Storing Technology Based on Metal Hydrides for Cooling of High-Power Electric Generators with Steam Turbines K. Umerenkova, O. Kondratenko, H. Koloskova, O. Lytvynenko and V. Borysenko	103
Mathematical Model of the Dynamics of Spherical Elements V. Pasternak, A. Ruban, O. Holii and S. Vavreniuk	117
Computer Modelling of the Process of Separation of Heterogeneous Elements (Spheres) V. Pasternak, A. Ruban, Y. Horbachenko and S. Vavreniuk	127

Chapter 4: Waste Recycling and Waste Management

Multi-Criteria Analysis of Technology that Ensure Environmental Safety in Waste Incineration O. Krot, O. Pukhovoi, N. Kosenko and Y. Levashova	139
Development and Implementation of Environmentally Safe Biotechnologies for the Utilization of Aquatic Organisms Biomass S. Digtar, V. Nykyforov, M. Malovanyy, G. Krusir and S. Huhlych	147

Keyword Index

A

Airfield Slab	57
Alternative Motor Fuels	103
Analytical Method	75
Angles	15
Approximation	27

B

Beam	75
Bending Equation	75
Bio-Conversion	147
Bio-Fertilizer	147
Biotechnology	147
Blue-Green Algae	147
Boundaries	15
Boundary Conditions	117
Boundary Element Method	3, 15
Building Structure	39

C

Calculation Method	39
Closed Mechanical Transmission	83
Collapse Failure	65
Component Simulation	15
Constants	15
Convergence of Methods	27
Cooling	103
Correlation Dependencies	127
Crack Resistance	57, 65
Critical Loads	65
Cross-Beam System	49

D

Dielectric Loss Angle Tangent	91
Dielectric Permittivity	91
Diffraction	91
Dioxins	139
Discrete Element Method	117
Dynamics	15

E

Elastic Foundation	75
Electric Field	91

Electric Generators	103
Electromagnetic Microwave	91
Element Dynamics	3, 117, 127
Emergency Explosive Impact	65
Energy from Waste	139
Environment Protection Technologies	103
Environmental Safety	103
Equilibrium Equations	27
Errors	27
Eutrophication	147
Exact Solution	75
Experiment	49
Explosive Material	91
Extra-Project Load	39

F

Fiber-Reinforced Concrete	49, 57
Finite Element Method	3, 27, 65
Flue Gas Treatment	139
Force Redistribution	65

G

Gear Reducer	83
Geometric Parameters	27
Green's Theory	3

H

Hydrogen	103
----------	-----

I

Impact Dynamics	39
Initial Data	3
Interconnections	117
Iteration	27

L

Liapunov's Indices	127
LIRA-SAPR	65
Load-Bearing Capacity	57

M

Magnetic Field	91
----------------	----

Metal Hydrides	103		
Methanogenesis	147	V	
Modeling	27		
Modelling	3, 15, 117, 127	Variable Coefficient of Subgrade Resistance	75
Multi-Criteria Analysis	139	W	
Municipal Solid Waste	139		
N		Waste Incineration Plant	139
Nonlinear Calculation	65	Wave Length	91
		Wave Vector	91
		Winkler Hypothesis	75
P			
Physical and Mechanical Parameters	127		
Plastic Inserts	83		
Plastic Joints	65		
Point Vectors	3		
Polycyclic Aromatic Hydrocarbons	139		
Potential	3, 15		
R			
Reciprocating Internal Combustion Engines	103		
Reduction of Mass	83		
Reflection Coefficient	91		
S			
Separation	127		
Shock Air Wave	39		
Spheres	117, 127		
Stability	65		
Steam Turbines	103		
Storing Technologies	103		
Survivability	65		
System	127		
T			
Tetrahedral	27		
Thermocatalytic Treatment	139		
Three-Dimensional Model	117		
Three-Dimensional Space	3, 27		
Topological Optimization of Design	83		
Transmission Coefficient	91		
Turbochargers	103		

Author Index

A

Aksyonova, I. 49

B

Barabash, M. 65

Basmanov, O. 91

Bilotil, O. 3

Borysenko, V. 103

C

Cheberiachko, Y. 39

Chernenko, O. 15

D

Digtar, S. 147

Dovhal, D. 83

H

Holii, O. 117

Holovata, Z. 49

Horbachenko, Y. 127

Huhlych, S. 147

K

Karpov, A. 91

Karpova, D. 3

Koloskova, H. 103

Kondratenko, O. 103

Korneeva, I. 57

Kosenko, N. 139

Kostiuk, A.I. 57

Kostyra, N. 65

Krot, O. 139

Krusir, G. 147

Krutii, Y. 75

Kulakov, O. 91

Kustov, M. 91

L

Levashova, Y. 139

Lytvynenko, O. 103

M

Makhinko, A. 39

Maksymenko, V. 65

Malovanyy, M. 147

Matsiuk, I. 83

N

Nadon, O. 15

Nalysko, M. 39

Nykyforov, V. 147

P

Pasternak, V. 3, 15, 27, 117, 127

Pasynchuk, K. 27

Perperi, A. 49

Polyanskyi, P. 27

Posternak, O. 57

Pukhovoi, O. 139

R

Ruban, A. 3, 15, 27, 117, 127

S

Sopilniak, A. 39

Soroka, M. 75

Surianinov, M. 49, 57, 75

T

Tsymbal, B. 83

Tverdokhlib, O. 83

U

Umerenkova, K. 103

V

Vakulenko, V. 75

Vasilieva, N. 75

Vavreniuk, S. 117, 127