



ISSN 2522-9842 (online)



Public organization  
Ukrainian Scientific Community

*Journal of Scientific Papers*

# **Social Development and Security**

**Volume 10, Issue 4, August 2020**



<https://paperssds.eu/index.php/JSPSDS/>



**Electronic scientific edition**

Journal of Scientific Papers «Social development and Security»

**Vol. 10, №4**

August, 2020

Founded in 2017 by the Public Organization «Ukrainian Scientific Community»

**It comes out bimonthly****The editorial board***Editor of the publication***LYASHENKO Boris**

Prof, Dr. of Sciences, Ukraine;

*Deputy Editor-in-Chief***TKACH Ivan**

Prof, Dr. of Sciences, Ukraine;

*Members of the editorial board***ANTONYUK Victor**

Prof, Dr. of Sciences, Ukraine;

**BALLANDA Anatoly**

Prof, Dr. of Sciences, Ukraine;

**BARABASH Oleg**

Prof, Dr. of Sciences, Ukraine;

**BEGMA Vitaliy**

Prof, Dr. of Economics, Ukraine;

**BICHENKOV Vasyi**

Senior Researcher, Dr. of Sciences, Ukraine;

**BONDARENKO Svitlana**

Dr of Sciences, Odessa, Ukraine;

**BRITCHENKO Igor**

Prof., Dr. of Sciences, Poland;

**CHORNY Vitaliy**

Prof, Dr. of Philosophy, Ukraine;

**CUBICHEK Pavel**

Prof, Dr. of Law, Candidate of Law, Slovak Republic;

**DIVIZINYUK Mikhail**

Prof., Dr. of Sciences, Ukraine;

**DIKHTIEVSKY Petr**

Prof, Dr. of Law, Ukraine;

**DOLNYTSKY Bogdan**

Prof, Dr. of Law, Poland;

**IVANCHENKOVA Larysa**

Assoc. Prof., Dr. of Economics, Ukraine;

**FETTERLY Ross**

Dr. of Sciences, Canada;

**GAWLICZEK Piotr**

Associate Professor, PhD, Poland;

**GUZEWICZ Wojciech**

Rev. Prof. PhD, Poland;

**KIRYLENKO Volodymyr**

Prof, Dr. of Sciences, Ukraine;

**KOLODIY Anatoly**

Prof, Dr. of Law, Ukraine;

**KOROBCHYNSKYI Maksym**

Prof., Dr. of Sciences, Ukraine;

**KOROPATNIK Igor**

Assoc. Prof, Doctor of Law, Ukraine;

**KURSEEITOV Timur**

Prof, Dr of Sciences, Ukraine;

**LYZWA Aneta**

PhD, Poland

**Luís Frólén Ribeiro**

Dr. in Mechanical Engineering, Portugal;

**OPENKO Pavlo**

Ph.D, Ukraine;

**MARCO Ivan**

Prof, Dr. of Sciences, Ukraine;

**MATSKO Oleksander**

Prof., Candidate of Military Sciences, Ukraine;

**MIRNENKO Volodymyr**

Prof, Dr. of Sciences, Ukraine;

**PASHYNSKY Volodymyr**

Assoc. Prof, Candidate of Legal Sciences, Ukraine;

**PACEK Boguslaw**

Prof, Dr. of Law, Poland;

**SAGRADIAN Artak**

Prof, Dr. of Sciences, Armenia;

**SAMBERG Andre**

Professor of Practice, PhD (civil protection), Brussels, Belgium.

**SHEMAYEV Volodymyr**

Prof, Dr. of Sciences, Ukraine;

**SHEMAYEVA Lyudmila**

Prof, Dr. of Sciences, Ukraine;

**SHOPINA Iryna**

Prof., Dr. of Laws, Ukraine;

**SILVERSTEIN Steven**

USA;

**VOROBIOV Oleg**

Prof, Dr. of Sciences, Ukraine;

**VOLOSHENKO Antonina**

Assoc. Prof., Dr. of Sciences, Ukraine;

**YURKIV Nadia**

Prof, Dr. of Sciences, Ukraine;

*Technical Secretary of the publication***TKACH Mykola**

Candidate of Technical Sciences (Ph.D), Ukraine.

**FOUNDERS and PUBLISHER: Public Organization «Ukrainian Scientific Community» (Ukraine)**

Executive secretary of the editorial board of the magazine Journal of Scientific Papers "Social Development and Security" Mykola Tkach,

e-mail: [sjdsusc@gmail.com](mailto:sjdsusc@gmail.com); [tkachivan9@gmail.com](mailto:tkachivan9@gmail.com) <https://paperssds.eu/index.php/JSPSDS/>, тел. +38(093) 752-81-56

The authors of articles are responsible for the authenticity of facts, quotes, their own names, geographical names, names of enterprises, organizations, institutions and other information. Opinions expressed in these articles may not coincide with the point of view of the editorial board and do not impose any obligations on it.

| CONTENT |                                                                                                                                                                                                                                                                  |     |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 1       | <b>Evaluation (classification) of power elements by areas of technical condition using the statistical recognition method and the expert method</b><br>Maxim Strela, Oleg Dobridenko, George Gorokhov .....                                                      | 3   |
| 2       | <b>Methodical approach to the substantiation of the indicators of the anti-aircraft missile system (complex) fire power</b><br>Pavlo Open'ko, Vadym Lukyanchuk, Ivan Nikolaev, Igor Dzeverin, Pavlo Drannyk .....                                                | 12  |
| 3       | <b>Selection of effective filter respirators. Challenges and opportunities</b><br>Serhii Cheberiachko, Oleg Deryugin, Volodymyr Mirnenko, Nataliia Borodina .....                                                                                                | 23  |
| 4       | <b>Actualization and ways to improve of work culture in Ukraine</b><br>Andrii Bochkovskyi, Natalia Sapozhnikova .....                                                                                                                                            | 42  |
| 5       | <b>Mathematical model of prevention of terrorist emergencies by detecting masked fire and armored vehicles with radiation devices from aircraft</b><br>Mykhailo Divizynyuk, Yuri Lutsenko, Oleh Myroshnyk, Alexander Avramenko, Oleg Bass .....                  | 58  |
| 6       | <b>Development Economics and Re-construction of Developing Countries</b><br>Simant Shankar Bharti .....                                                                                                                                                          | 69  |
| 7       | <b>Problematic aspects of forest management on defense lands</b><br>Alexey Chernetsky, Anna Chernetskaya .....                                                                                                                                                   | 78  |
| 8       | <b>The view to nationalism – terminological issues and the evolution of the concept</b><br>Arkadiusz Meller .....                                                                                                                                                | 89  |
| 9       | <b>Early identification of threats as the means of fighting against hybrid warfare (with a focus on the south Caucasus)</b><br>Khayal Iskandarov, Piotr Gawliczek .....                                                                                          | 102 |
| 10      | <b>Methodical approach to assessing the effectiveness of combat training based on the s-shaped functions, taking into account the influence of the factor of sufficiency of funding</b><br>Oleg Semenenko, Ruslan Boiko, Liliya Semenenko, Igor Moskalenko ..... | 110 |
| 11      | <b>Media diplomacy in public administration: analysis of the effectiveness of Ukrainian national branding</b><br>Volodymyr Shypovskyi .....                                                                                                                      | 120 |
| 12      | <b>Formalization of problem and justification of the set of principles of construction of the system of restoration of weapons and military equipment</b><br>Volodymyr Dachkovskyi .....                                                                         | 128 |
| 13      | <b>Security education as a practical dimension of implementing sustainable development concept</b><br>Aleksander Sapiński, Ewelina Mączka, Anna Nastuła .....                                                                                                    | 139 |
| 14      | <b>Substantiation of the critical infrastructure essence on the example of foreign countries</b><br>Maryna Potetiuieva .....                                                                                                                                     | 146 |
| 15      | <b>Application of a systematic approach to determining the effectiveness of emergency rescue measures during the elimination of emergencies of natural and man-made nature</b><br>Valentin Romanyuk, Ivan Meshcheriakov, Olena Andriuk .....                     | 151 |
| 16      | <b>Specific structural and logical model of emergency management</b><br>Oleksandr Avramenko, Mykola Ilchenko, Kostiantyn Lysychenko, Oleksandr Farrakhov, Volodymyr Mirnenko, Olga Shevchenko .....                                                              | 161 |
| 17      | <b>Evaluation of the efficiency of enterprises in the transition to alternative (helio) energy sources</b><br>Svitlana Bondarenko, Iryna Perevozova, Tetiana Maksimenko .....                                                                                    | 174 |
| 18      | <b>Comprehensive methodology of research and formation of components of the military-economic potential of the state</b><br>Mykola Tkach .....                                                                                                                   | 192 |