

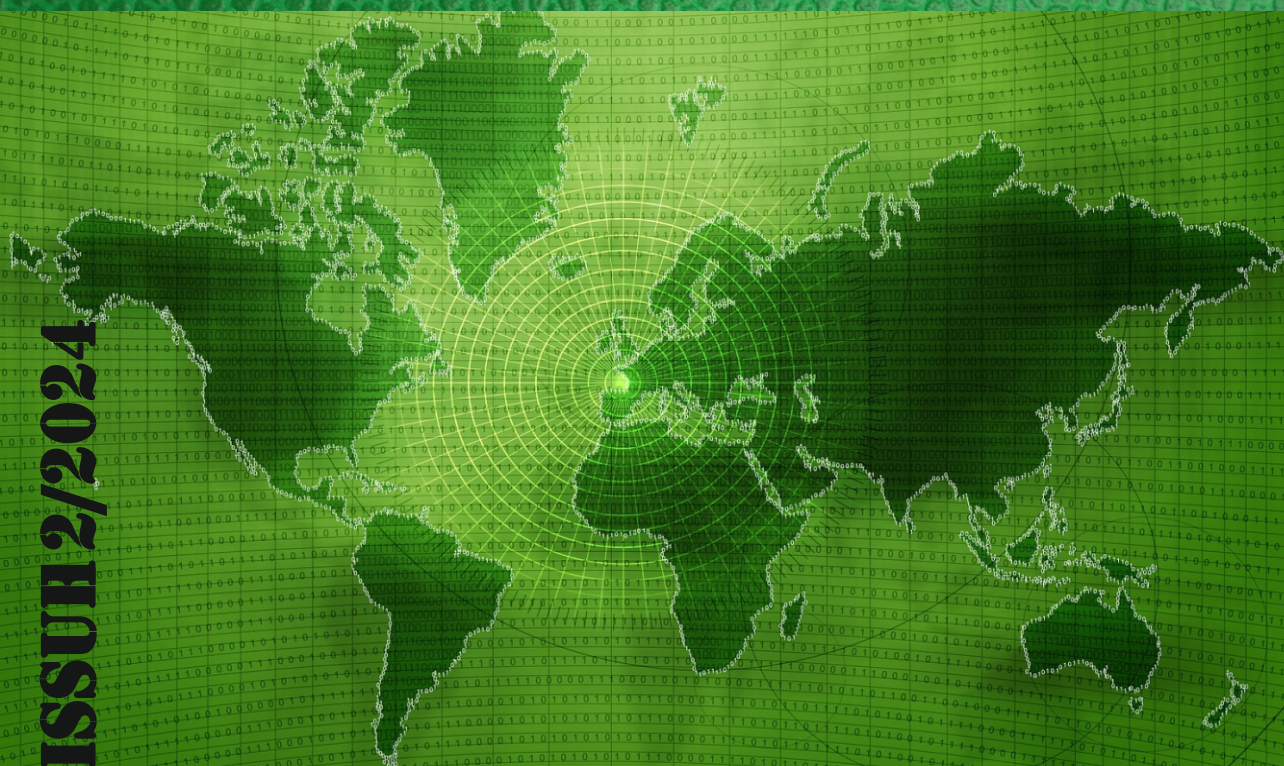
**INTERNATIONAL SCIENTIFIC JOURNAL**

# **SECURITY & FUTURE**

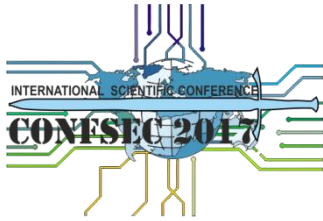
**ISSN: (PRINT) 2535-0668**

**ISSN: (ONLINE) 2535-082X**

**YEAR VII,  
ISSUE 2/2024**



**PUBLISHER SCIENTIFIC TECHNICAL UNION OF MECHANICAL ENGINEERING - INDUSTRY 4.0  
BULGARIA**



# INTERNATIONAL SCIENTIFIC JOURNAL SECURITY & FUTURE

PUBLISHER:

## SCIENTIFIC TECHNICAL UNION OF MECHANICAL ENGINEERING INDUSTRY-4.0

108, Rakovski Str., 1000 Sofia, Bulgaria  
tel. (+359 2) 987 72 90, tel./fax (+359 2) 986 22 40,  
[office@stumejournals.com](mailto:office@stumejournals.com),  
[www.stumejournals.com](http://www.stumejournals.com)

ISSN (PRINT) 2535-0668; ISSN (Online) 2535-082X  
YEAR VIII, ISSUE 2 / 2024

All articles are published after peer review by two independent reviewers.

### EDITORIAL BOARD

#### CHIEF EDITOR

Prof. Nikolay Radulov, New Bulgarian University, Sofia, BG

Members:		
Alexander Baranov, Prof.	Higher School of Economics	RU
Alexander Kurbatski, Prof.	Belarusian State University	BY
Alexander Troyanskiy, Assoc. Prof.	Odessa State Polytechnic University	UA
Andrzej Misiuk, Prof.	Warsaw University	PL
Ariana Bejleri, Assoc. Prof.	Polytechnic University of Tirana	AL
Galina Zhavoronkova, Prof.	National Aviation University, Kyiv	UA
Gudrun Biffel, Prof.	Donau University	AT
Dimitar Dimitrov, Prof.	Shumen University	BG
Dimitar Dimitrov, Assoc. Prof.	Institute of Metal Science – BAS, Sofia	BG
Evgeni Manev, Prof.	University of Library Studies and Information Technologies	BG
Hanáček Petr, Assoc. Prof.	Technical University of Brno	CZ
Iliyan Lilov, Prof., Col.	“Vasil Levski” National Military University	BG
Jaroslav Tureček, Assoc. Prof., Col.	Police Academy of the Czech Republic	CZ
Josef Reitšpís, Prof.	The University of Security Management in Kosice	SK
Juris Borzovs, Prof.	University of Latvia	LV
Kristiina Hakk, Assoc. Prof.	Estonian Information Technology College	EE
Leonid Vinogradov, Dr.sc.ing	Riga Technical University	LV
Lev Elisov, Prof.	Moscow State Technical University of Civil Aviation	RU
Milan Popović, Prof.	University of Montenegro	ME
Muhammed Ali Aydin, Assoc. Prof.	Istanbul University	TR
Nebojša Bojanić, Assoc. Prof.	University of Sarajevo	BA
Nikifor Stefanof, Prof.	University of Security and Economics - Plovdiv	BG
Ninoslav Marina, Prof.	University of Information Science and Technology - Ohrid	NM
Nurgali Zaurbekov, Prof.	Almaty Technological University	KZ
Oliver Bacanovic, Prof.	University "St. Kliment Ohridski" - Bitola	NM
Ognyan Ivanov, Assoc. Prof.	Institute of Solid State Physics, BAS - Sofia	BG
Piotr Majer, Prof.	University of Warmia and Mazury	PL
Razvan Rughinis, Prof.	Polytechnical University of Bucharest	RO
Sasa Mijalkovic, Prof.	Academy of Criminalistic and Police Studies, Belgrade	RS
Siniša Tatalović, Prof.	University of Zagreb	HR
Stoyan Denchev, Prof.	University of Library Studies and Information Technologies	BG
Tatyana Ejevskay, Prof.	Transbaikalian State University	RU
Valentin Todorov, Assoc. Prof.	Varna Free University „Chernorizets Hrabar“	BG
Vladimir Zakhmatov, Prof.	Academy of Ecological Safety, Kiev	UA
Zelimir Kesetovic, Prof.	University of Belgrade	RS

# CONTENTS

## **THEORETICAL FOUNDATIONS OF SECURITY**

<b>Critical infrastructure resilience through security systems development</b> Valeri Panevski .....	41
---------------------------------------------------------------------------------------------------------	----

## **NATIONAL AND INTERNATIONAL SECURITY**

<b>The effect of central bank digital currencies on asset confiscation</b> Kolarov Todor .....	45
<b>Demographic change as a risk for the pension system and the stability of the security forces - experience from the Czech Republic</b> Jan Urbanec, Dana Junkova .....	49
<b>IIoT and cyber security in industrial enterprises</b> Petar Georgiev, Krasimira Dimitrova .....	53

## **INFORMATION SECURITY**

<b>Automated Web Application Scanning with Wapiti, Selenium, and SQLMap</b> Zhaneta Savova, Stanislav Atanasov, Rosen Bogdanov .....	57
<b>Comparison between Monolithic and Microservices Architecture in Web Applications Built with Java</b> Ina Papadhopulli, Armada Alija .....	61
<b>Storage Virtualization: Optimizing Data Center Efficiency and Performance</b> Genka Slavova-Torres .....	65

## **TECHNICAL FACILITIES FOR ENSURING SECURITY**

<b>Experimental determination of fire resistance of steel elements (X-brace) protected with intumescent paint</b> Neli Simeonova .....	67
<b>Remote detection, recognition and tracking of objects in drones aircraft</b> Ivanova Eleonora, Stefanov Ivan .....	71